



Cordsets and connectors for North America

PHOENIX CONTACT – Your partner around the world

Phoenix Contact is a leading manufacturer of electrical connection and industrial automation technology. Founded more than 80 years ago, the company now has 12,300 employees worldwide. In the USA, a sales network of 63 distributor partners, 110 system integrators, four manufacturing rep firms and over 100 direct sales engineers serves our local customers.

The product range includes high-grade components, systems and services across a wide variety of applications. The selection ranges from modular terminal blocks to interface technology, PCB connection systems and solutions for surge protection up to hardware and software solutions for the automation of industrial systems.



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Service commitment to our customers

Our high level of customer service includes fast response, quick delivery via local inventory as well as live technical support and on-line tools to aid in your product selection process.



Speedy TranSACTION

Fast delivery and factory inventory of catalog products. Just look for the Speedy Transaction logo on the following product pages to identify which items are factory stocked in the USA. These items can be shipped from our logistics center in Harrisburg, Pennsylvania within 1–5 days and there are no minimum order requirements.

SOLUTION
CENTER

Our value added services can increase your productivity. Our Solution Center can provide kitting, packaging, wire labeling, cable marking, cable spooling, and wire preparation such as strip lengths, ferrules, tinned ends etc.

Convenient product selection tools available 24/7. Use a filtered search from the product listing on our “Sensor cables and Connectors” webpage at www.phoenixcontact.com, or an online tool at www.phoenixcontact.com/SACconfiguratortool and choose the features that are important in selecting the right products for your application.

If you don't see it in the catalog, just ask us and we'll build to your specifications. We can assemble our cables and connectors with your specified components to create a custom solution. Upon qualification of the assembly typical lead-time for production is 3-4 weeks, in minimum order quantities of 25 pieces.



Quality begins with development

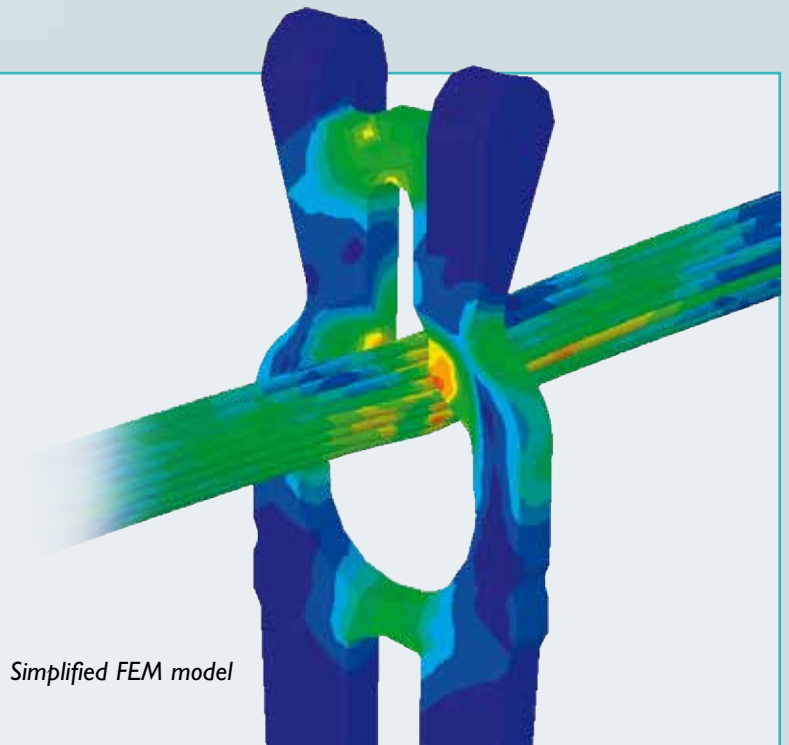
The latest simulation tools are used in Phoenix Contact's technology lab to streamline the development process and enhance the quality of our products from the start.

Phoenix Contact places great importance on in-house competence and expertise: The design and development departments continuously implement innovative product ideas and deliver specific solutions to meet customer requirements. Numerous patents stand witness to the fact that many products from Phoenix Contact are a result of our in-house developments.



Computer-simulation

Based on the FEM simulation/analysis (FEM = Finite Element Method), an evaluation can be made to determine if the materials and geometries selected for a product are sufficient for the high demands of industrial use. Improvements can be carried out on the products during the first phases of the development. Since complex connector systems generally consist of several components, their functional interaction must be defined in advance. The FEM analysis allows the simulation of the operation by the user as well as the verification of the desired long-term behavior.

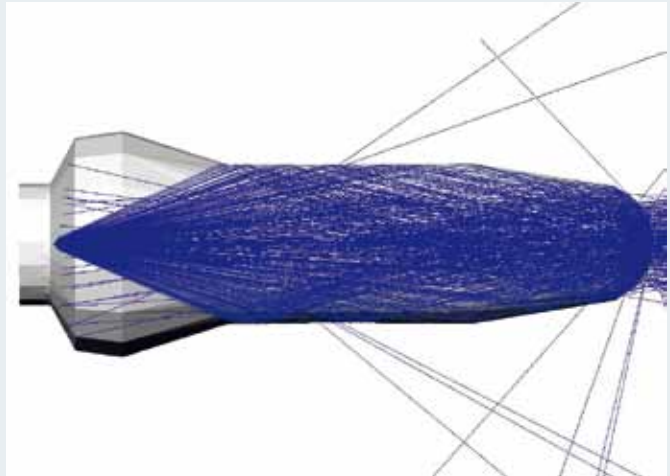


Simplified FEM model

Optical simulation tools

Optical signal devices, such as LEDs have increasingly gained importance in conjunction with fiber optics in the device connection field. The design of matching diodes and fiber optics provides optical simulation tools that guarantee a safe function and visual perception in the industrial environment.

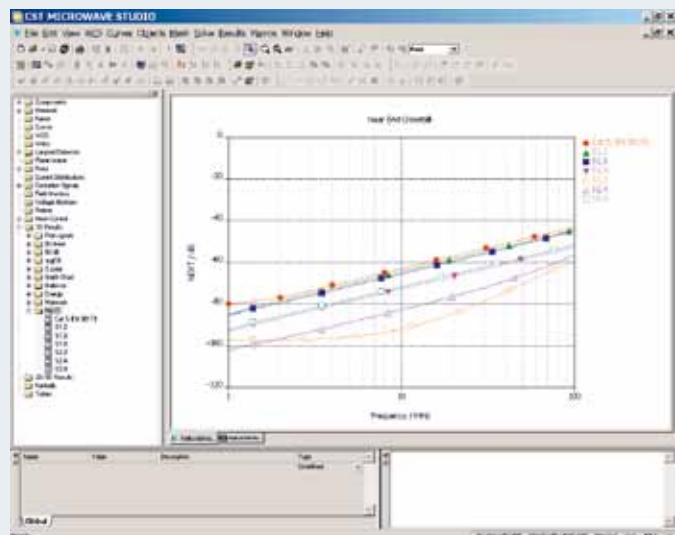
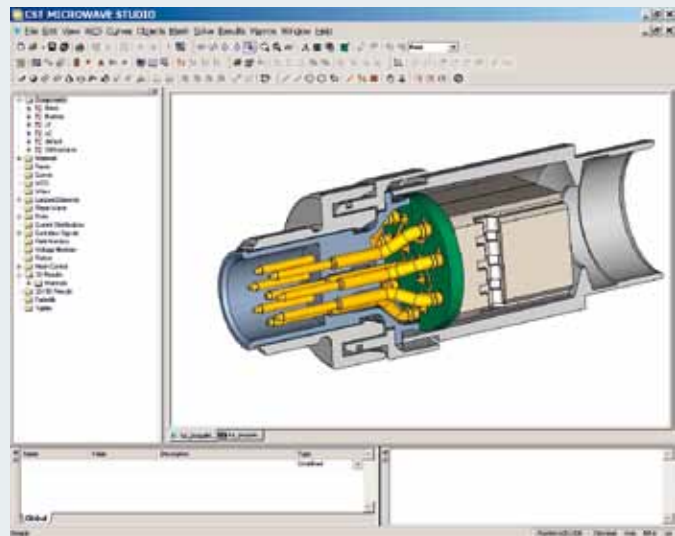
Phoenix Contact increases the efficiency of connecting fiber optics to electro-optical transmit and receive devices in connectors by using computer-aided simulation tools.



High-frequency simulation

The production sectors of modern industrial companies are interconnected for the exchange of data. The increasing complexity of technical production processes results in higher data volumes that must be transmitted at faster speeds. The transmission characteristics of connectors can be determined by a high frequency simulation during the development phase and an improvement of the technical transmission performance can be carried out.

The requirements, such as CAT 5 or CAT 6 (IEC 50173) can be achieved even in industrial connectors by a targeted adjustment of design and material.



Quality is our top priority

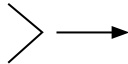
Fully automatic inspections of all critical parameters during production and comprehensive qualification tests prior to production release ensure that our products fulfill the highest quality requirements.

Development process – the journey from an idea to a series

Prelim. clarification



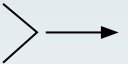
Concept release



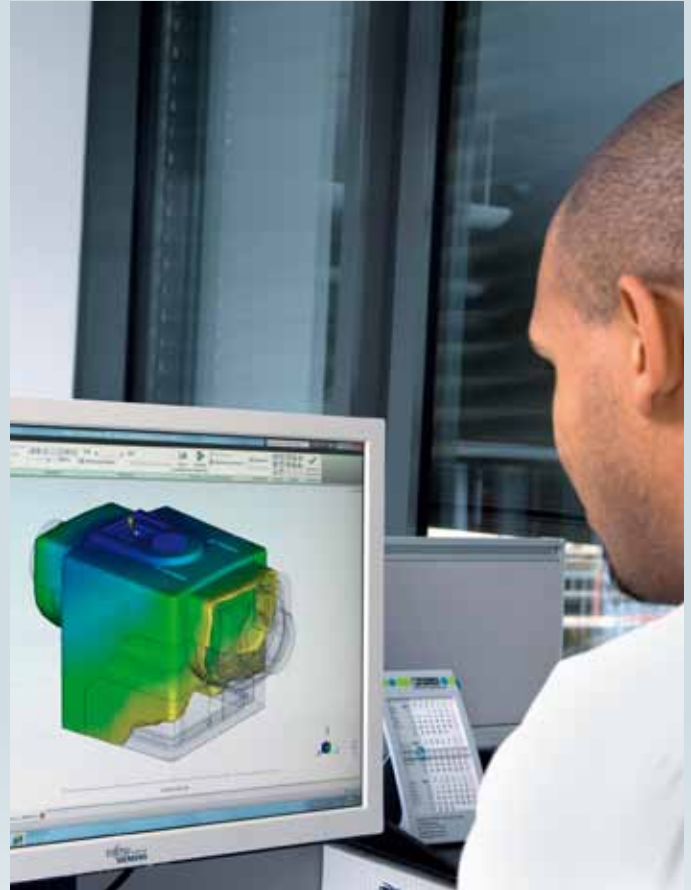
Design



Design release



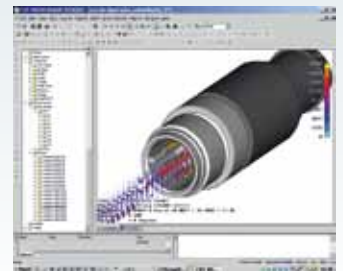
Feasibility studies are supported with the latest simulation processes.



... through simulation



X-ray accommodation of the correct conductor seat in a spring-cage terminal block.



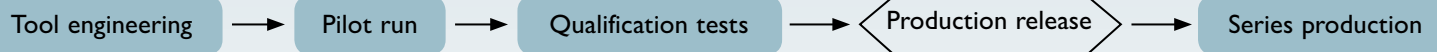
Simulation of the high frequency behavior of an M12 connector.



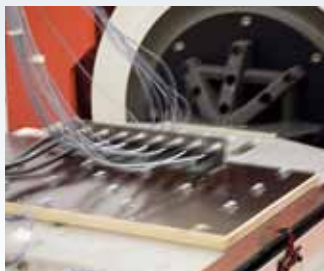
... through qualification tests



... through process control



Durability test under extreme climate conditions.



Mechanical load tests through vibration test.



Including the employees in the **continuous quality improvement process**.



Fully automated testing during the manufacturing process.

Material tests

Materials used by Phoenix Contact are subjected to extensive testing in addition to the computer-aided simulation, in order to evaluate their suitability, and in particular their endurance. This guarantees that only materials that satisfy the highest demands in reference to reliability and durability are used.



Differential heat flow calorimetry



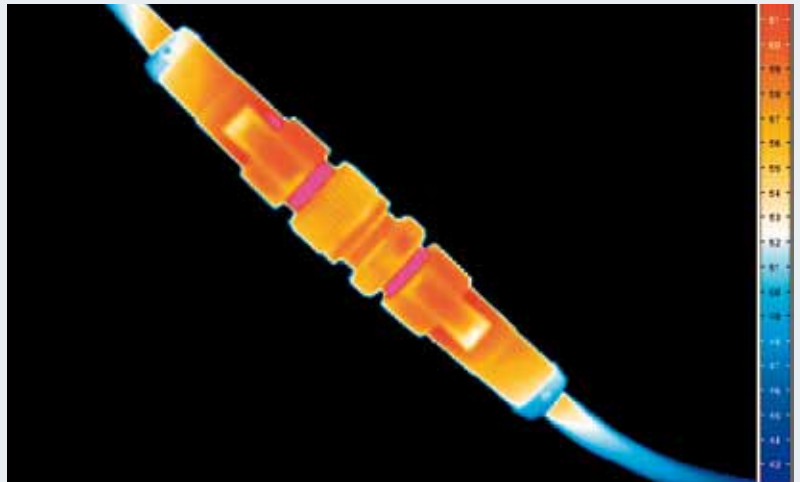
Differential scanning calorimetry (DSC) is one of the thermal analysis processes used in plastics engineering. The transformation temperatures, such as glass transition temperature and melting point or the crystallization and breakdown of plastics can be determined at controlled temperature changes with DSC.

The DSC measurement can also provide information of the thermal case history of molded parts. DSC requires only very small sample quantities (5 - 10 mg) for a measurement. A sample can therefore be easily removed from the molded part or the molding material. A reproducible material quality is then tested and guaranteed.

Thermography recordings

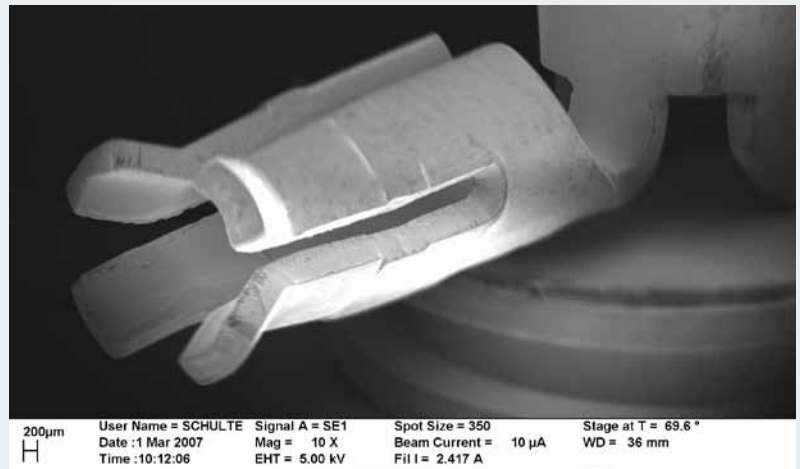
The electrical and thermal response of a material or product can be visualized and quantitatively evaluated by thermography pictures.

The heat management can be fine-tuned with the appropriately detailed recordings of the component during the application. Optimizations can be easily applied to the respective heat sources and hot spots.



Scanning electron microscopy

Scanning electron microscopy allows high-resolution material and topography analyses up to the element definition and the chemical make-up of a sample. These results support the development process especially in the area of miniaturized components and guarantee material properties within the scope of preventive quality assurance.



X-ray CT

Computer tomography facilitates a fast and precise analysis particularly in respect to increasingly complex modules.

A non-destructive three dimensional function analysis of components in a sealed housing can serve to quickly solve specific technological questions.

A non-destructive cut through all elements of the component or device can therefore be carried out, allowing the objective visualization of installation conditions of all individual parts, at any random point.



Continuous testing for 100 percent quality

From product development to the production series, the highest Phoenix Contact quality is secured by consistent testing in accordance with uniform guidelines and in-house standards.

Test plan for SAC cordsets

IEC 61076

Test group BP mechanical – endurance

BP2	Mechanical operation
BP3.1	Corrosion industrial atmosphere

Test group CP electrical – load

CP1	Rapid change of temperature
CP3	Electrical load and temperature

Test group AP dynamic/climatic

AP3	Vibration
AP4	Shock
AP5	Rapid change of temperature
AP6.1	Dry heat
AP6.2	Damp heat
AP7.1/2	IP code, protection against dust and water

Test group special

	Strain relief
	Jacket retention

Mechanical tests

- Flexion test and bending test
- Detent of electrical contacts
- Insertion and withdrawal force
- Bending test
- Insertion/withdrawal cycles
- Shock protection
- Polarization/coding
- Shock test
- Polished sections

Electrical tests

- Cyclic overload test
(heat cycling test according to UL 1059)
- Cyclic aging test
- Thermostability
- Insulation resistance
- Contact resistance
- High voltage test
- Surge voltage test
- Air and creepage distances

Environmental and durability tests

- Vibration tests
 - Sinusoidal vibrations
 - Resonance search
 - Mechanical shock
 - Broadband noise
- Corrosion conditioning:
 - Salt spray test
 - Kesternich test (SO₂)
 - Condensation climate
 - Flowing mixed gas
- Climate conditioning:
 - Heat
 - Cold
 - Humidity
 - Temperature shock
- Tests for degree of protection (IP classification)

Certification and special tests

- Relaxation
- Bending value
- Stress corrosion cracking
- Inflammability classification
- Glow-wire test
- RoHS conformity
- Industry and country-specific certifications
- Strain relief
- Jacket retention

Mechanical tests

Test passed

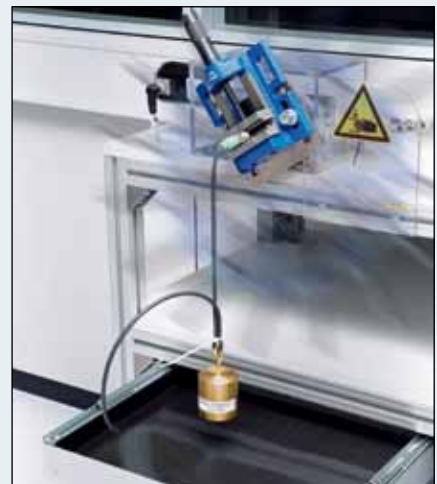
- ▶ Conductor connection capacity
- ▶ Insertion and extraction force
- ▶ Torque/bending test
- ▶ Insertion/withdrawal cycles
- ▶ Shock protection
- ▶ Polarization/coding
- ▶ Polished sections
- ▶ Jacket retention
- ▶ Strain relief
- ▶ Pull-out force

Flexion test/twist test

▶ UL 2238

Test according to the standard UL 2238 “Cable Assemblies and Fittings for Industrial Control and Signal Distribution”. The cable sample for the Jacket Retention Test is prepared with a 50 mm longitudinal cut in the jacket. The minimum distance from the cut to the connector is 152 mm. All single strands, as well as all inner components (shield etc.) have to be cut. The prepared cable sample is passed through a drilling hole of a diameter adapted to the diameter of the cable. The drilling hole is in a horizontally mounted plate and fixes the sample for the test. A

tensile force of 67 N is applied to the lower end of the cable for 2 minutes. Secondly, a weight of 13.7 N is rotated 360° about the horizontal axis of the cable exit.



Pull-out force

► IEC 60352-2

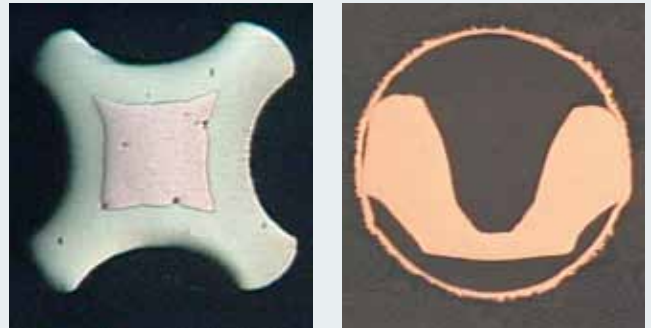
The movable head of the tensile test machine must apply a pulling force to the test object at a rate between 25 mm/min and 50 mm/min until the cable is either pulled out of the crimp sleeve or the wire is torn out of the test object.



Embedding

► IEC 60352-2

The quality features of crimping connections are inspected via embedding. This guarantees a reliable electrical connection over the entire life cycle of a cordset.



Torque test

► IEC 60999-1

Comprehensive mechanical tests are performed to check loads that occur during connection and operation of eletrotechnical products.



Strain relief

► UL 2238

Test according to the standard UL 2238 "Cable Assemblies and Fittings for Industrial Control and Signal Distribution". The cable of the cordset, which is subject to the Strain Relief Test, is passed through a drilling hole of a diameter adapted to the diameter of the cable. The drilling hole is in a horizontally mounted plate

and fixes the sample for the test. A specified weight is applied to the lower end of the cable. During a testing time of 1 minute the cable has to withstand the tensile load and the cable may not slip out of the cordset's overmolded head.



Electrical tests

Test passed

- ▶ Heat cycling
- ▶ Contact resistance
- ▶ Temperature rise
- ▶ Air and creepage distances
- ▶ Surge voltage test
- ▶ High voltage test
- ▶ Contact resistance
- ▶ Derating curve
- ▶ Insulation resistance
- ▶ Thermostability
- ▶ Cyclic overload test

High voltage test

▶ IEC 60512-4-1

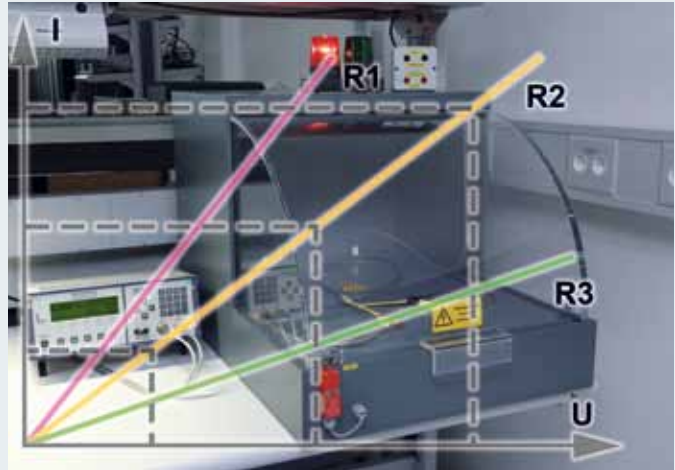
During this test, each contact is tested against each neighboring contact or potential by applying a defined test voltage. The measuring and test procedure for the connectors for electronic installations is in accordance with IEC 60512-4-1.



Insulation resistance

► IEC 60512-3-1

During this test, every contact is tested against every neighboring contact or potential according to procedure A in IEC 60512-3-1. The Insulation Resistance Test consists of measuring the insulation resistance of a device under test, where the measured resistance has to be higher than the indicated limit from the international standards.



Impulse withstand voltage test

► IEC 60664-1

Verification of adequately large air and creepage distances between the two adjacent potentials is provided by the impulse withstand voltage test.

The amount of the test voltage depends on the rated surge voltage of the component. Flashovers may not occur during three power surges (1.2/50 μ s) per polarity. The reliable use of the components is confirmed by this test.

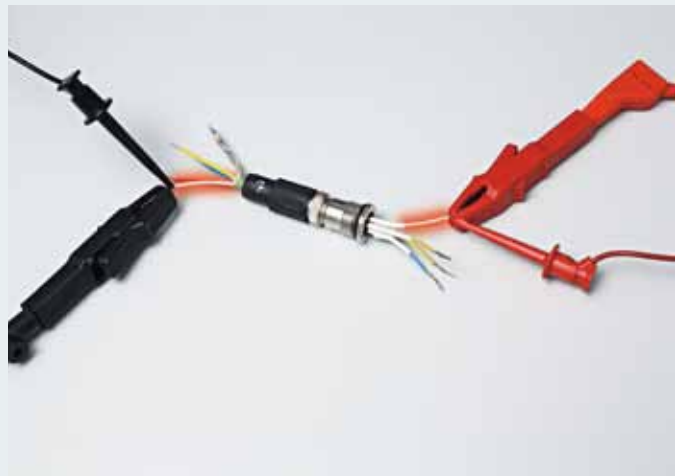
The oscilloscope shows the shape of the surge voltage impulse.



Contact resistance

► IEC 60512-2-1

The contact resistance is measured by applying the Millivolt level method. The test is based on IEC 60512-2-1. The object of this test is to define a standard test method to measure the electrical resistance across a pair of mated contacts or a contact with a measuring gauge. The contact resistance is considered a benchmark for the quality of a cordset. By measuring before and after testing, the reliability of the contact is verified according to the requirements of the standard.



Environmental and durability tests

Test passed

- ▶ Tests for degree of protection (IP class)
- ▶ Climate conditioning
- ▶ Climatic stress
- ▶ Damp heat
- ▶ Heat
- ▶ Cold
- ▶ Humidity
- ▶ Temperature shock
- ▶ Corrosion conditioning
- ▶ Kesternich
- ▶ Industrial atmosphere
- ▶ Flowing mixed gas
- ▶ Vibration tests
- ▶ Sinusoidal vibrations
- ▶ Resonance search
- ▶ Mechanical shock
- ▶ Broadband noise

Tests for Ingress protection (IP)

▶ DIN EN 60529



First char. num.	Short description
1	Protected against access to hazardous parts with the back of the hand. Protected against solid foreign bodies 50 mm in diameter and above.
2	Protected against access to hazardous parts with a finger. Protected against solid foreign bodies 12.5 mm in diameter and above.
3	Protected against access to hazardous parts with a tool. Protected against solid foreign bodies 2.5 mm in diameter and above.
4	Protected against access to hazardous parts with a wire. Protected against solid foreign bodies 1.0 mm in diameter and above.
5	Protected against access to hazardous parts with a wire. Protected against dust
6	Protected against access to hazardous parts with a wire. Dust-proof

Second char. num.	Short description
1	Protected against dripping water.
2	Protected against dripping water if the housing is inclined at an angle of up to 15°.
3	Protected against spray-water.
4	Protected against splash-water.
4K	Protected against splash-water with increased pressure.
5	Protected against jet-water.
6	Protected against strong jet-water.
6K	Protected against strong splash-water with increased pressure.
7	Protected against the effects of temporary submersion in water.
8	Protected against the effects of permanent submersion in water.
9K	Protected against water during high-pressure/ jet-stream cleaning.

Rapid change of temperature

► IEC 60512-11-4

The test is performed to find out whether components are able to withstand a rapid air temperature change as could occur during storage, transporting and when in use.



Vibration tests

► IEC 60068-2-6

The vibration of an electrical connection is verified with this test. Various vibrations are applied to the test object to simulate rotating, pulsating or oscillating forces.

The test objects are subjected to different, high frequencies and accelerations forces in all three dimensions (xyz).

The test objects may not incur any damages that would inhibit any further use or the constant electrical values.



Climatic test - cold

► IEC 60512-11-10

Components need to be reliable in extremely cold environments. For that reason, this test is performed to determine how well components are able to endure cold conditions.



Connection technology – Faster installation with innovative connection methods from Phoenix Contact

When you need a specific length cordset or want to make your own cable assemblies in the field, we can supply the connectors and bulk cable. With fast connection technology from Phoenix Contact you can make assemblies quickly and reliably. Our patented QUICKON and Piercecon® technologies are efficient, user friendly wiring methods for I/O and data connections. While screw and spring are traditional wiring methods for I/O, fieldbus and power connections.



Piercecon

The Piercecon® connection system enables simple and reliable assembly of M8 and M12 connectors. The electrical connection is made by axial piercing of a contact pin into the individual wires. In doing so, the contact forms the copper strands into an adapted contact area. Piercecon® eliminates the need for time-consuming solder or screw solutions. All versions meet the requirements of IP67 protection.



Spring-cage

The M12 connector with spring-cage connection guarantees simple and reliable termination of solid and stranded wires, and can be used with or without ferrules. The connector shell made of metal is particularly designed for EMC shielding requirements.



QUICKON - IDC

QUICKON provides the fastest connection for M8 and M12 connectors. Individual wires do not need to be stripped or prepared. In the termination area an insulation displacement contact cuts through the wire insulation and makes a vibration resistant, gas-tight connection. The connectors are available with metal or plastic coupling nuts.



Screw connection

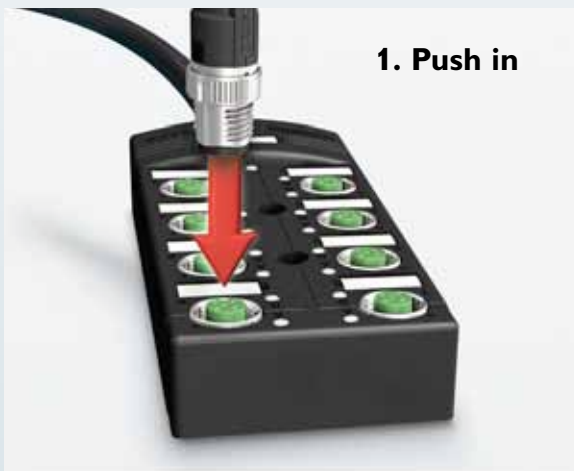
M8 and M12 connectors with screw termination are considered as the classic connection technology. A variety of wire sizes and cable materials can be assembled on-the-job site safely and without errors.



SPEEDCON – backwards and future compatibility

SPEEDCON is the next generation of M12 connectors, which have been an industrial standard for many years. With a simple “plug and ½ turn” SPEEDCON provides a time savings of 90% over the traditional M12 screw thread. The SPEEDCON coupling features a tactile stop to ensure proper alignment and guarantees a perfect connection in the field.

Connecting is simple...



Safe and reliable

Just ask our customers...

Amphenol

BERNSTEIN
safe solutions

binder

BIZERBA

CONINVERS
A Company of the Phoenix Contact Group



FESTO

INTER
CONTROL

LITZE

Leuze electronic



menerga
KLIMATECHNOLOGIE

Mercedes-Benz

Miele

NUMATICS

PEPPERL+FUCHS

p-u-l-s-o-t-r-o-n-i-c

Rexroth
Bosch Group

SCHUBERT

SEW
EURODRIVE

SICK
Sensor Intelligence.
SIEMENS

SMC

TRUMPF

ThyssenKrupp Fahrtreppen
Ein Unternehmen von ThyssenKrupp Elevator
ThyssenKrupp

Compatibility

M12 SPEEDCON is 100 percent backwards compatible with all M12 plug connectors. Due to the modified thread segment you will only need to “Plug & Turn” to make a fully mated connection.



Fast assembly

Installation time is greatly reduced, by 90%, when compared to the standard M12 connector. Just a half turn and SPEEDCON makes a vibration proof, secure seal.



Safe and reliable

M12 SPEEDCON has all the same electrical and mechanical properties as the standard M12 plug connector:

- Pin assignment, requirements and testing in accordance with IEC 61076-2-101
- IP class IP65/67/69K in accordance with EN 60529
- Vibration and shock resistance according to IEC 60512-6d



Application guide – We can recommend the right cable material for your application.

Materials used by Phoenix Contact are subjected to extensive testing. This guarantees that only materials that satisfy the highest demands from reliability to durability are used.



Conveyor/Packaging machines

- Indoor, moderate temp
- Light-to-medium wear and abrasion
- Static
- Polyvinyl chloride cables
- Type 400, 410, 420, 535, 542



Machine tool

- Cutting fluids, oil, grease
- Abrasion
- Flexing/bending
- Flammability, free of halogens
- Polyurethane cables
- Type PUR, 240, 400, 410, 420, 535, 542



Food and beverage

- Corrosion from harsh chemicals
- High pressure jet cleaning
- FDA approved materials
- Polypropylene cables
- Type 600
- Non-food contact areas – Types 535, 542



Robotic welding

- High temperatures
- Welding sparks
- Repetitive torsional flexing
- Polyurethane or TPE cables
- Type 800



Hazardous areas

- Flammable gases, vapors or liquids
- Exposed runs outside of cable tray
- UL Class 1, Zone 2, and Division II certifications
- PVC/PLTC cables
- Type 542



Heavy equipment

- Extreme temperatures
- Dry or moist heat
- UV and ozone exposure
- Outdoor use
- Cross linked polyethylene cables
- Type 28X



Reliable and robust – even in extreme conditions

Circular connectors have established themselves as the standard for compact water-tight connections in industrial automation. Our broad circular product offering provides a “plug and play” solution for system wiring via cordsets, sensor boxes, field-wired connectors, adapters, panel feed-through connectors and H-, Y- and T-distributors.



Products

M8 products	26
M12 products	50
MINI 7/8-inch products	88
Valve plug products	102
Ethernet products	116
DeviceNet™ products	130
Food and beverage products	150
Commercial/industrial vehicle products	166
Accessories	176

M8 sensor/actuator cordsets, boxes and connectors

Save installation time while eliminating wiring errors using our industry standard (IEC 61076-2-104) 8 mm screw threaded connectors, sensor boxes and molded cordsets.

The PVC cordsets for North America can be used in a wide variety of applications. Additional cable types are available from stock with our configurable ordering system.





M8 SENSOR/ACTUATOR CORDSETS

3-pos. M8	Page 28
3-pos. M8 to M12	Page 30
3-pos. Shielded M8	Page 32
3-pos. Shielded M8 to M12	Page 34
4-pos. M8	Page 35
4-pos. M8 to M12	Page 37
4-pos. Shielded M8	Page 39
4-pos. Shielded M8 to M12	Page 41

M8 SENSOR/ACTUATOR BOXES

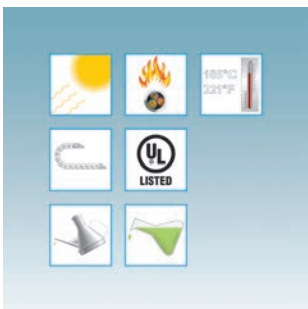
M8 thread with LEDs for pnp sensors	Page 42
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M8 SENSOR/ACTUATOR CONNECTORS

M8 Y-distributors and adapters	Page 44
M8 field-wired	Page 46
M8 panel feed-through with flying leads	Page 48

M8 sensor/actuator cordsets and cables

3-pos. M8 sensor/actuator cordsets



M8 3-pos. cordsets

3-pos. M8 cordsets and extension cables are assembled with 3x24 AWG stranded copper conductors and follow the typical sensor wire color code of brown (pos. 1), blue (pos. 3), and black (pos. 4). The cable jacket is constructed of semirigid PVC, UL AWM style 2517. The cable is sunlight resistant and rated for ambient temperatures of -30 to +105°C.

3-pos. M8 socket, straight or angled, to open end, PVC, yellow, 105°C



Common technical data

Certification	UL
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	60 V
Cable diameter	4.1 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-3P- 2,0-542/M8 FS BK

SAC-3P- 2,0-542/M8 FR BK

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M8	2 m	SAC-3P- 2,0-542/M8 FS BK	1406318
Free conductor end -> Socket, straight M8	5 m	SAC-3P- 5,0-542/M8 FS BK	1406317
Free conductor end -> Socket, straight M8	10 m	SAC-3P-10,0-542/M8 FS BK	1406316
Free conductor end -> Socket, angled M8	2 m	SAC-3P- 2,0-542/M8 FR BK	1406321
Free conductor end -> Socket, angled M8	5 m	SAC-3P- 5,0-542/M8 FR BK	1406320
Free conductor end -> Socket, angled M8	10 m	SAC-3P-10,0-542/M8 FR BK	1406319

Configurable cordsets

	Type	Order No.
Free conductor end -> Socket, straight M8	SAC-3P-M 8FS BK/.../...	1405956
Free conductor end -> Socket, angled M8	SAC-3P-M 8FR BK/.../...	1405957
Configuration options for cable type and length are shown on page 29	-	-

3-pos. M8 plug, straight or angled, to open end, PVC, yellow, 105°C



SAC-3P-M8MS/ 2,0-542 BK

SAC-3P-M8MR/ 2,0-542 BK

Common technical data

Certification	UL
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	60 V
Cable diameter	4.1 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Plug straight M8 -> Free conductor end	2 m	SAC-3P-M8MS/ 2,0-542 BK	1406281
Plug straight M8 -> Free conductor end	5 m	SAC-3P-M8MS/ 5,0-542 BK	1406280
Plug straight M8 -> Free conductor end	10 m	SAC-3P-M8MS/10,0-542 BK	1406279
Plug angled M8 -> Free conductor end	2 m	SAC-3P-M8MR/ 2,0-542 BK	1406293
Plug angled M8 -> Free conductor end	5 m	SAC-3P-M8MR/ 5,0-542 BK	1406292
Plug angled M8 -> Free conductor end	10 m	SAC-3P-M8MR/10,0-542 BK	1406291

Configurable cordsets

	Type	Order No.
Plug straight M8 -> Free conductor end	SAC-3P-M 8MS BK/.../...	1405939
Plug angled M8 -> Free conductor end	SAC-3P-M 8MR BK/.../...	1405944
Configuration options for cable type and length are shown on page 29	-	-

3-pos. M8 plug, straight, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	60 V
Cable diameter	4.1 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-3P-M8MS/ 0,5-542/M8 FS BK SAC-3P-M8MS/ 0,5-542/M8 FR BK

Assembly	Cable length	Type	Order No.
Plug straight M8 -> Socket, straight M8	0.5 m	SAC-3P-M8MS/ 0,5-542/M8 FS BK	1406272
Plug straight M8 -> Socket, straight M8	1.5 m	SAC-3P-M8MS/ 1,5-542/M8 FS BK	1406271
Plug straight M8 -> Socket, angled M8	0.5 m	SAC-3P-M8MS/ 0,5-542/M8 FR BK	1406274
Plug straight M8 -> Socket, angled M8	1.5 m	SAC-3P-M8MS/ 1,5-542/M8 FR BK	1406273

Configurable cordsets	Type	Order No.
Plug straight M8 -> Socket, straight M8	SAC-3P-M 8MS-M 8FS BK/.../...	1405935
Plug straight M8 -> Socket, angled M8	SAC-3P-M 8MS-M 8FR BK/.../...	1405936
Configuration options for cable type and length are shown on page 29		-

3-pos. M8 plug, angled, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	60 V
Cable diameter	4.1 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-3P-M8MR/ 0,5-542/M8 FS BK SAC-3P-M8MR/ 0,5-542/M8 FR BK

Assembly	Cable length	Type	Order No.
Plug angled M8 -> Socket, straight M8	0.5 m	SAC-3P-M8MR/ 0,5-542/M8 FS BK	1406283
Plug angled M8 -> Socket, straight M8	1.5 m	SAC-3P-M8MR/ 1,5-542/M8 FS BK	1406282
Plug angled M8 -> Socket, angled M8	0.5 m	SAC-3P-M8MR/ 0,5-542/M8 FR BK	1406285
Plug angled M8 -> Socket, angled M8	1.5 m	SAC-3P-M8MR/ 1,5-542/M8 FR BK	1406284

Configurable cordsets	Type	Order No.
Plug angled M8 -> Socket, straight M8	SAC-3P-M 8MR-M 8FS BK/.../...	1405940
Plug angled M8 -> Socket, angled M8	SAC-3P-M 8MR-M 8FR BK/.../...	1405941
Configuration options for cable type and length are shown on page 29		-

Ordering information for configurable 3-pos. M8 sensor/actuator cordsets

Configurable order no./cable type/length	Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m. <i>Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.</i>
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Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	24 AWG	UL AWM2517	General industrial
535	PVC black 105°C	24 AWG	UL AWM2517	General industrial
240	PUR yellow 80°C	0.25 mm ²	UL	General industrial
PUR	PUR black 80°C	0.25 mm ²	UL	General industrial
800	TPE gray 120°C	0.25 mm ²	UL	Robotic, hi-flex

Example		
Order No.	Type	Length
1405935	240	4.5
3-pos. M8 straight plug to M8 straight socket	cable type "240" (PUR yellow 80°C)	cable length of 4.5 m

M8 sensor/actuator cordsets and cables

3-pos. M8 to M12 sensor/actuator cordsets

3-pos. M8 plug, straight, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	4.1 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-3P-M8MS/ 0,5-542/FS SCO BK SAC-3P-M8MS/ 0,5-542/FR SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M8 -> Socket, straight M12-SPEEDCON	0.5 m	SAC-3P-M8MS/ 0,5-542/FS SCO BK	1406276
Plug straight M8 -> Socket, straight M12-SPEEDCON	1.5 m	SAC-3P-M8MS/1,5-542/FS SCO BK	1406275
Plug straight M8 -> Socket, angled M12-SPEEDCON	0.5 m	SAC-3P-M8MS/ 0,5-542/FR SCO BK	1406278
Plug straight M8 -> Socket, angled M12-SPEEDCON	1.5 m	SAC-3P-M8MS/ 1,5-542/FR SCO BK	1406277

Configurable cordsets

Configurable cordsets	Type	Order No.
Plug straight M8 -> Socket, straight M12-SPEEDCON	SAC-3P-M 8MS-FS SCO BK/.../...	1405937
Plug straight M8 -> Socket, angled M12-SPEEDCON	SAC-3P-M 8MS-FR SCO BK/.../...	1405938
Configuration options for cable type and length are shown on page 31	-	-

3-pos. M8 plug, angled, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	4.1 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-3P-M8MR/ 0,5-542/FS SCO BK SAC-3P-M8MR/ 0,5-542/FR SCO BK

Assembly	Cable length	Type	Order No.
Plug angled M8 -> Socket, straight M12-SPEEDCON	0.5 m	SAC-3P-M8MR/ 0,5-542/FS SCO BK	1406287
Plug angled M8 -> Socket, straight M12-SPEEDCON	1.5 m	SAC-3P-M8MR/ 1,5-542/FS SCO BK	1406286
Plug angled M8 -> Socket, angled M12-SPEEDCON	0.5 m	SAC-3P-M8MR/ 0,5-542/FR SCO BK	1406290
Plug angled M8 -> Socket, angled M12-SPEEDCON	1.5 m	SAC-3P-M8MR/ 1,5-542/FR SCO BK	1406288

Configurable cordsets

Configurable cordsets	Type	Order No.
Plug angled M8 -> Socket, straight M12-SPEEDCON	SAC-3P-M 8MR-FS SCO BK/.../...	1405942
Plug angled M8 -> Socket, angled M12-SPEEDCON	SAC-3P-M 8MR-FR SCO BK/.../...	1405943
Configuration options for cable type and length are shown on page 31	-	-

3-pos. M8 socket, straight, to M12 plug, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	4.1 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-3P-MS/0,5-542/M8 FS SCO BK SAC-3P-MR/0,5-542/M8 FS SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-3P-MS/0,5-542/M8 FS SCO BK	1406295
Plug straight M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-3P-MS/1,5-542/M8 FS SCO BK	1406294
Plug angled M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-3P-MR/0,5-542/M8 FS SCO BK	1406306
Plug angled M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-3P-MR/1,5-542/M8 FS SCO BK	1406305

Configurable cordsets

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	SAC-3P-MS-M8FS SCO BK/.../...	1405945
Plug angled M12-SPEEDCON -> Socket, straight M8	SAC-3P-MR-M8FS SCO BK/.../...	1405951
Configuration options for cable type and length are shown on page 31	-	-

3-pos. M8 socket, angled, to M12 plug, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	4.1 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-3P-MS/0,5-542/M8 FR SCO BK SAC-3P-MR/0,5-542/M8 FR SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-3P-MS/0,5-542/M8 FR SCO BK	1406297
Plug straight M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-3P-MS/1,5-542/M8 FR SCO BK	1406296
Plug angled M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-3P-MR/0,5-542/M8 FR SCO BK	1406308
Plug angled M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-3P-MR/1,5-542/M8 FR SCO BK	1406307

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, angled M8	SAC-3P-MS-M8FR SCO BK/.../...	1405946
Plug angled M12-SPEEDCON -> Socket, angled M8	SAC-3P-MR-M8FR SCO BK/.../...	1405952
Configuration options for cable type and length are shown on page 31		-

Ordering information for configurable 3-pos. M8 to M12 sensor/actuator cordsets

Configurable order no./cable type/length

Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m.

Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.

Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	24 AWG	UL AWM2517	General industrial
535	PVC black 105°C	24 AWG	UL AWM2517	General industrial
240	PUR yellow 80°C	0.25 mm ²	UL	General industrial
PUR	PUR black 80°C	0.25 mm ²	UL	General industrial
800	TPE gray 120°C	0.25 mm ²	UL	Robotic, hi-flex

Example		
Order No.	Type	Length
1405937	240	4.5
3-pos. M8 straight plug to M12 straight socket	cable type "240" (PUR yellow 80°C)	cable length of 4.5 m

M8 sensor/actuator cordsets and cables

3-pos. shielded M8 sensor/actuator cordsets

3-pos. shielded M8 socket, straight or angled, to open end, PVC, yellow, 105°C



Common technical data	
Certification	Ⓜ
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	4.7 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-3P- 2,0-542/M8 FS SH BK SAC-3P- 2,0-542/M8 FR SH BK

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M8	2 m	SAC-3P- 2,0-542/M8 FS SH BK	1406063
Free conductor end -> Socket, straight M8	5 m	SAC-3P- 5,0-542/M8 FS SH BK	1406062
Free conductor end -> Socket, straight M8	10 m	SAC-3P-10,0-542/M8 FS SH BK	1406061
Free conductor end -> Socket, angled M8	2 m	SAC-3P- 2,0-542/M8 FR SH BK	1406066
Free conductor end -> Socket, angled M8	5 m	SAC-3P- 5,0-542/M8 FR SH BK	1406065
Free conductor end -> Socket, angled M8	10 m	SAC-3P-10,0-542/M8 FR SH BK	1406064

Configurable cordsets	Type	Order No.
Free conductor end -> Socket, straight M8	SAC-3P-M 8FS SH BK/.../...	1405834
Free conductor end -> Socket, angled M8	SAC-3P-M 8FR SH BK/.../...	1405835
Configuration options for cable type and length are shown on page 33	-	-

3-pos. shielded M8 plug, straight or angled, to open end, PVC, yellow, 105°C



Common technical data	
Certification	Ⓜ
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	4.7 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-3P-M8MS/ 2,0-542 SH BK SAC-3P-M8MR/ 2,0-542 SH BK

Assembly	Cable length	Type	Order No.
Plug straight M8 -> Free conductor end	2 m	SAC-3P-M8MS/ 2,0-542 SH BK	1406048
Plug straight M8 -> Free conductor end	5 m	SAC-3P-M8MS/ 5,0-542 SH BK	1406047
Plug straight M8 -> Free conductor end	10 m	SAC-3P-M8MS/10,0-542 SH BK	1406046
Plug angled M8 -> Free conductor end	2 m	SAC-3P-M8MR/ 2,0-542 SH BK	1406060
Plug angled M8 -> Free conductor end	5 m	SAC-3P-M8MR/ 5,0-542 SH BK	1406059
Plug angled M8 -> Free conductor end	10 m	SAC-3P-M8MR/10,0-542 SH BK	1406058

Configurable cordsets	Type	Order No.
Plug straight M8 -> Free conductor end	SAC-3P-M 8MS SH BK/.../...	1405830
Plug angled M8 -> Free conductor end	SAC-3P-M 8MR SH BK/.../...	1405833
Configuration options for cable type and length are shown on page 33	-	-

3-pos. shielded M8 plug, straight, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓜ
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	4.7 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-3P-M8MS/0,5-542/M8FS SH BK SAC-3P-M8MS/0,5-542/M8FR SH BK

Assembly	Cable length	Type	Order No.
Plug straight M8 -> Socket, straight M8	0.5 m	SAC-3P-M8MS/0,5-542/M8FS SH BK	1406043
Plug straight M8 -> Socket, straight M8	1.5 m	SAC-3P-M8MS/1,5-542/M8FS SH BK	1406042
Plug straight M8 -> Socket, angled M8	0.5 m	SAC-3P-M8MS/0,5-542/M8FR SH BK	1406045
Plug straight M8 -> Socket, angled M8	1.5 m	SAC-3P-M8MS/1,5-542/M8FR SH BK	1406044

Configurable cordsets	Type	Order No.
Plug straight M8 -> Socket, straight M8	SAC-3P-M 8MS-M 8FS SH BK/.../...	1405828
Plug straight M8 -> Socket, angled M8	SAC-3P-M 8MS-M 8FR SH BK/.../...	1405829
Configuration options for cable type and length are shown on page 33	-	-

3-pos. shielded M8 plug, angled, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	4.7 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-3P-M8MR/0,5-542/M8FS SH BK SAC-3P-M8MR/0,5-542/M8FR SH BK

Assembly	Cable length	Type	Order No.
Plug angled M8 -> Socket, straight M8	0.5 m	SAC-3P-M8MR/0,5-542/M8FS SH BK	1406054
Plug angled M8 -> Socket, straight M8	1.5 m	SAC-3P-M8MR/1,5-542/M8FS SH BK	1406049
Plug angled M8 -> Socket, angled M8	0.5 m	SAC-3P-M8MR/0,5-542/M8FR SH BK	1406057
Plug angled M8 -> Socket, angled M8	1.5 m	SAC-3P-M8MR/1,5-542/M8FR SH BK	1406055

Configurable cordsets	Type	Order No.
Plug angled M8 -> Socket, straight M8	SAC-3P-M 8MR-M 8FS SH BK/.../...	1405831
Plug angled M8 -> Socket, angled M8	SAC-3P-M 8MR-M 8FR SH BK/.../...	1405832
Configuration options for cable type and length are shown on page 33		-

Ordering information for configurable 3-pos. shielded M8 sensor/actuator cordsets

Configurable order no./cable type/length

Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m.

Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.

Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	24 AWG	UL AWM2517	General industrial
535	PVC black 105°C	24 AWG	UL AWM2517	General industrial
240	PUR yellow 80°C	0.25 mm ²	UL	General industrial
PUR	PUR black 80°C	0.25 mm ²	UL	General industrial

Example		
Order No.	Type	Length
1405828	240	0.4
3-pos. M8 straight plug to M8 straight socket, shielded	cable type "240" (PUR yellow 80°C)	cable length of 0.4 m

M8 sensor/actuator cordsets and cables

3-pos. shielded M8 to M12 sensor/actuator cordsets

3-pos. shielded M8 socket, straight, to M12 plug, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	60 V
Cable diameter	4.7 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-3P-MS/0,5-542/M8FSSH SCOBK SAC-3P-MR/0,5-542/M8FSSH SCOBK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-3P-MS/0,5-542/M8FSSH SCOBK	1406023
Plug straight M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-3P-MS/1,5-542/M8FSSH SCOBK	1406022
Plug angled M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-3P-MR/0,5-542/M8FSSH SCOBK	1406027
Plug angled M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-3P-MR/1,5-542/M8FSSH SCOBK	1406026

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	SAC-3P-MS-M 8FS SH SCO BK/.../...	1405824
Plug angled M12-SPEEDCON -> Socket, straight M8	SAC-3P-MR-M 8FS SH SCO BK/.../...	1405826
Configuration options for cable type and length are shown on page 34		-

3-pos. shielded M8 socket, angled, to M12 plug, straight or angled, PVC, yellow, 105°C



Common technical data	
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	60 V
Cable diameter	4.7 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-3P-MS/0,5-542/M8FRSH SCOBK SAC-3P-MR/0,5-542/M8FRSH SCOBK

Certification	Assembly	Cable length	Type	Order No.
UL	Plug straight M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-3P-MS/0,5-542/M8FRSH SCOBK	1406025
-	Plug straight M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-3P-MS/1,5-542/M8FRSH SCOBK	1406024
UL	Plug angled M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-3P-MR/0,5-542/M8FRSH SCOBK	1406029
UL	Plug angled M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-3P-MR/1,5-542/M8FRSH SCOBK	1406028

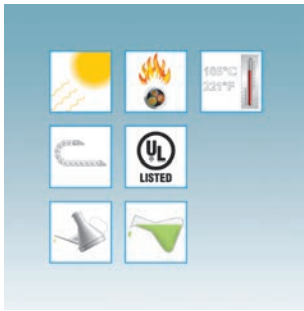
Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, angled M8	SAC-3P-MS-M 8FR SH SCO BK/.../...	1405825
Plug angled M12-SPEEDCON -> Socket, angled M8	SAC-3P-MR-M 8FR SH SCO BK/.../...	1405827
Configuration options for cable type and length are shown on page 34		-

Ordering information for configurable 3-pos. shielded M8 to M12 sensor/actuator cordsets

Configurable order no./cable type/length	Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m. <i>Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.</i>
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Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	24 AWG	UL AWM2517	General industrial
535	PVC black 105°C	24 AWG	UL AWM2517	General industrial
240	PUR yellow 80°C	0.25 mm ²	UL	General industrial
PUR	PUR black 80°C	0.25 mm ²	UL	General industrial

Example		
Order No.	Type	Length
1405824	240	0.4
3-pos. M8 straight socket to M12 straight plug, shielded	cable type "240" (PUR yellow 80°C)	cable length of 0.4 m



M8 4-pos. cordsets

4-pos. M8 cordsets and extension cables are assembled with 4x24 AWG stranded copper conductors and follow the typical sensor wire color code of brown (pos. 1), white (pos. 2), blue (pos. 3) and black (pos. 4). The cable jacket is constructed of semirigid PVC, UL AWM style 2517. The cable is sunlight resistant and rated for ambient temperatures of -30 to 105°C.

4-pos. M8 socket, straight or angled, to open end, PVC, yellow, 105°C



SAC-4P- 2,0-542/M8 FS BK

SAC-4P- 2,0-542/M8 FR BK

Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	4.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M8	2 m	SAC-4P- 2,0-542/M8 FS BK	1406240
Free conductor end -> Socket, straight M8	5 m	SAC-4P- 5,0-542/M8 FS BK	1406239
Free conductor end -> Socket, straight M8	10 m	SAC-4P-10,0-542/M8 FS BK	1406238
Free conductor end -> Socket, angled M8	2 m	SAC-4P- 2,0-542/M8 FR BK	1406243
Free conductor end -> Socket, angled M8	5 m	SAC-4P- 5,0-542/M8 FR BK	1406242
Free conductor end -> Socket, angled M8	10 m	SAC-4P-10,0-542/M8 FR BK	1406241

Configurable cordsets	Type	Order No.
Free conductor end -> Socket, straight M8	SAC-4P-M 8FS BK/.../...	1405923
Free conductor end -> Socket, angled M8	SAC-4P-M 8FR BK/.../...	1405924
Configuration options for cable type and length are shown on page 36	-	-

4-pos. M8 plug, straight or angled, to open end, PVC, yellow, 105°C



SAC-4P-M8MS/ 2,0-542 BK

SAC-4P-M8MR/ 2,0-542 BK

Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	4.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Plug straight M8 -> Free conductor end	2 m	SAC-4P-M8MS/ 2,0-542 BK	1406203
Plug straight M8 -> Free conductor end	5 m	SAC-4P-M8MS/ 5,0-542 BK	1406202
Plug straight M8 -> Free conductor end	10 m	SAC-4P-M8MS/10,0-542 BK	1406201
Plug angled M8 -> Free conductor end	2 m	SAC-4P-M8MR/ 2,0-542 BK	1406214
Plug angled M8 -> Free conductor end	5 m	SAC-4P-M8MR/ 5,0-542 BK	1406213
Plug angled M8 -> Free conductor end	10 m	SAC-4P-M8MR/10,0-542 BK	1406212

Configurable cordsets	Type	Order No.
Plug straight M8 -> Free conductor end	SAC-4P-M 8MS BK/.../...	1405906
Plug angled M8 -> Free conductor end	SAC-4P-M 8MR BK/.../...	1405911
Configuration options for cable type and length are shown on page 36	-	-

M8 sensor/actuator cordsets and cables

4-pos. M8 sensor/actuator cordsets

4-pos. M8 plug, straight, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	30 V
Cable diameter	4.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-M8MS/ 0,5-542/M8 FS BK SAC-4P-M8MS/ 0,5-542/M8 FR BK

Assembly	Cable length	Type	Order No.
Plug straight M8 -> Socket, straight M8	0.5 m	SAC-4P-M8MS/ 0,5-542/M8 FS BK	1406194
Plug straight M8 -> Socket, straight M8	1.5 m	SAC-4P-M8MS/ 1,5-542/M8 FS BK	1406193
Plug straight M8 -> Socket, angled M8	0.5 m	SAC-4P-M8MS/ 0,5-542/M8 FR BK	1406196
Plug straight M8 -> Socket, angled M8	1.5 m	SAC-4P-M8MS/ 1,5-542/M8 FR BK	1406195

Configurable cordsets	Type	Order No.
Plug straight M8 -> Socket, straight M8	SAC-4P-M 8MS-M 8FS BK/.../...	1405902
Plug straight M8 -> Socket, angled M8	SAC-4P-M 8MS-M 8FR BK/.../...	1405903
Configuration options for cable type and length are shown on page 36		-

4-pos. M8 plug, angled, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	30 V
Cable diameter	4.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-M8MR/ 0,5-542/M8 FS BK SAC-4P-M8MR/ 0,5-542/M8 FR BK

Assembly	Cable length	Type	Order No.
Plug angled M8 -> Socket, straight M8	0.5 m	SAC-4P-M8MR/ 0,5-542/M8 FS BK	1406205
Plug angled M8 -> Socket, straight M8	1.5 m	SAC-4P-M8MR/ 1,5-542/M8 FS BK	1406204
Plug angled M8 -> Socket, angled M8	0.5 m	SAC-4P-M8MR/ 0,5-542/M8 FR BK	1406207
Plug angled M8 -> Socket, angled M8	1.5 m	SAC-4P-M8MR/ 1,5-542/M8 FR BK	1406206

Configurable cordsets	Type	Order No.
Plug angled M8 -> Socket, straight M8	SAC-4P-M 8MR-M8FS BK/.../...	1405907
Plug angled M8 -> Socket, angled M8	SAC-4P-M 8MR-M8FR BK/.../...	1405908
Configuration options for cable type and length are shown on page 36		-

Ordering information for configurable 4-pos. M8 sensor/actuator cordsets

Configurable order no./cable type/length	Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m. <i>Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.</i>
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Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	24 AWG	Ⓢ AWM2517	General industrial
535	PVC black 105°C	24 AWG	Ⓢ AWM2517	General industrial
240	PUR yellow 80°C	0.25 mm ²	Ⓢ	General industrial
PUR	PUR black 80°C	0.25 mm ²	Ⓢ	General industrial
800	TPE gray 120°C	0.25 mm ²	Ⓢ	Robotic, hi-flex

Example		
Order No.	Type	Length
1405902	240	4.5
4-pos. M8 straight plug to M8 straight socket	cable type "240" (PUR yellow 80°C)	cable length of 4.5 m

4-pos. M8 plug, straight, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	4.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-M8MS/ 0,5-542/FS SCO BK SAC-4P-M8MS/ 0,5-542/FR SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M8 -> Socket, straight M12-SPEEDCON	0.5 m	SAC-4P-M8MS/ 0,5-542/FS SCO BK	1406198
Plug straight M8 -> Socket, straight M12-SPEEDCON	1.5 m	SAC-4P-M8MS/ 1,5-542/FS SCO BK	1406197
Plug straight M8 -> Socket, angled M12-SPEEDCON	0.5 m	SAC-4P-M8MS/ 0,5-542/FR SCO BK	1406200
Plug straight M8 -> Socket, angled M12-SPEEDCON	1.5 m	SAC-4P-M8MS/ 1,5-542/FR SCO BK	1406199

Configurable cordsets	Type	Order No.
Plug straight M8 -> Socket, straight M12-SPEEDCON	SAC-4P-M 8MS-FS SCO BK/.../...	1405904
Plug straight M8 -> Socket, angled M12-SPEEDCON	SAC-4P-M 8MS-FR SCO BK/.../...	1405905
Configuration options for cable type and length are shown on page 38	-	-

4-pos. M8 plug, angled, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	4.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-M8MR/ 0,5-542/FS SCO BK SAC-4P-M8MR/ 0,5-542/FR SCO BK

Assembly	Cable length	Type	Order No.
Plug angled M8 -> Socket, straight M12-SPEEDCON	0.5 m	SAC-4P-M8MR/ 0,5-542/FS SCO BK	1406209
Plug angled M8 -> Socket, straight M12-SPEEDCON	1.5 m	SAC-4P-M8MR/ 1,5-542/FS SCO BK	1406208
Plug angled M8 -> Socket, angled M12-SPEEDCON	0.5 m	SAC-4P-M8MR/ 0,5-542/FR SCO BK	1406211
Plug angled M8 -> Socket, angled M12-SPEEDCON	1.5 m	SAC-4P-M8MR/ 1,5-542/FR SCO BK	1406210

Configurable cordsets	Type	Order No.
Plug angled M8 -> Socket, straight M12-SPEEDCON	SAC-4P-M 8MR-FS SCO BK/.../...	1405909
Plug angled M8 -> Socket, angled M12-SPEEDCON	SAC-4P-M 8MR-FR SCO BK/.../...	1405910
Configuration options for cable type and length are shown on page 38	-	-

4-pos. M8 socket, straight, to M12 plug, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	4.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-MS/0,5-542/M8 FS SCO BK SAC-4P-MR/0,5-542/M8 FS SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-4P-MS/0,5-542/M8 FS SCO BK	1406216
Plug straight M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-4P-MS/1,5-542/M8 FS SCO BK	1406215
Plug angled M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-4P-MR/0,5-542/M8 FS SCO BK	1406228
Plug angled M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-4P-MR/1,5-542/M8 FS SCO BK	1406227

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	SAC-4P-MS-M8FS SCO BK/.../...	1405912
Plug angled M12-SPEEDCON -> Socket, straight M8	SAC-4P-MR-M8FS SCO BK/.../...	1405917
Configuration options for cable type and length are shown on page 38	-	-

M8 sensor/actuator cordsets and cables
4-pos. M8 to M12 sensor/actuator cordsets

4-pos. M8 socket, angled, to M12 plug, straight or angled, PVC, yellow, 105°C



Common technical data

Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	30 V
Cable diameter	4.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-MS/0,5-542/M8 FR SCO BK SAC-4P-MR/0,5-542/M8 FR SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-4P-MS/0,5-542/M8 FR SCO BK	1406219
Plug straight M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-4P-MS/1,5-542/M8 FR SCO BK	1406217
Plug angled M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-4P-MR/0,5-542/M8 FR SCO BK	1406230
Plug angled M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-4P-MR/1,5-542/M8 FR SCO BK	1406229

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, angled M8	SAC-4P-MS-M8FR SCO BK/.../...	1405913
Plug angled M12-SPEEDCON -> Socket, angled M8	SAC-4P-MR-M8FR SCO BK/.../...	1405918
Configuration options for cable type and length are shown on page 38		-

Ordering information for configurable 4-pos. M8 to M12 sensor/actuator cordsets

Configurable order no./cable type/length	Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m. <i>Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.</i>
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Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	24 AWG	UL AWM2517	General industrial
535	PVC black 105°C	24 AWG	UL AWM2517	General industrial
240	PUR yellow 80°C	0.25 mm ²	UL	General industrial
PUR	PUR black 80°C	0.25 mm ²	UL	General industrial
800	TPE gray 120°C	0.25 mm ²	UL	Robotic, hi-flex

Example		
Order No.	Type	Length
1405904	240	4.5
4-pos. M8 straight plug to M12 straight socket	cable type "240" (PUR yellow 80°C)	cable length of 4.5 m

4-pos. shielded M8 socket, straight or angled, to open end, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	4.9 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-4P- 2,0-542/M8 FS SH BK SAC-4P- 2,0-542/M8 FR SH BK

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M8	2 m	SAC-4P- 2,0-542/M8 FS SH BK	1406018
Free conductor end -> Socket, straight M8	5 m	SAC-4P- 5,0-542/M8 FS SH BK	1406017
Free conductor end -> Socket, straight M8	10 m	SAC-4P-10,0-542/M8 FS SH BK	1406016
Free conductor end -> Socket, angled M8	2 m	SAC-4P- 2,0-542/M8 FR SH BK	1406021
Free conductor end -> Socket, angled M8	5 m	SAC-4P- 5,0-542/M8 FR SH BK	1406020
Free conductor end -> Socket, angled M8	10 m	SAC-4P-10,0-542/M8 FR SH BK	1406019

Configurable cordsets	Type	Order No.
Free conductor end -> Socket, straight M8	SAC-4P-M 8FS SH BK/.../...	1405822
Free conductor end -> Socket, angled M8	SAC-4P-M 8FR SH BK/.../...	1405823
Configuration options for cable type and length are shown on page 40	-	-

4-pos. shielded M8 plug, straight or angled, to open end, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	4.9 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-4P-M8MS/ 2,0-542 SH BK SAC-4P-M8MR/ 2,0-542 SH BK

Assembly	Cable length	Type	Order No.
Plug straight M8 -> Free conductor end	2 m	SAC-4P-M8MS/ 2,0-542 SH BK	1406007
Plug straight M8 -> Free conductor end	5 m	SAC-4P-M8MS/ 5,0-542 SH BK	1406006
Plug straight M8 -> Free conductor end	10 m	SAC-4P-M8MS/10,0-542 SH BK	1406005
Plug angled M8 -> Free conductor end	2 m	SAC-4P-M8MR/ 2,0-542 SH BK	1406015
Plug angled M8 -> Free conductor end	5 m	SAC-4P-M8MR/ 5,0-542 SH BK	1406013
Plug angled M8 -> Free conductor end	10 m	SAC-4P-M8MR/10,0-542 SH BK	1406012

Configurable cordsets	Type	Order No.
Plug straight M8 -> Free conductor end	SAC-4P-M 8MS SH BK/.../...	1405818
Plug angled M8 -> Free conductor end	SAC-4P-M 8MR SH BK/.../...	1405821
Configuration options for cable type and length are shown on page 40	-	-

4-pos. shielded M8 plug, straight, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	4.9 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-4P-M8MS/0,5-542/M8FS SH BK SAC-4P-M8MS/0,5-542/M8FR SH BK

Assembly	Cable length	Type	Order No.
Plug straight M8 -> Socket, straight M8	0.5 m	SAC-4P-M8MS/0,5-542/M8FS SH BK	1406002
Plug straight M8 -> Socket, straight M8	1.5 m	SAC-4P-M8MS/1,5-542/M8FS SH BK	1406001
Plug straight M8 -> Socket, angled M8	0.5 m	SAC-4P-M8MS/0,5-542/M8FR SH BK	1406004
Plug straight M8 -> Socket, angled M8	1.5 m	SAC-4P-M8MS/1,5-542/M8FR SH BK	1406003

Configurable cordsets	Type	Order No.
Plug straight M8 -> Socket, straight M8	SAC-4P-M 8MS-M 8FS SH BK/.../...	1405810
Plug straight M8 -> Socket, angled M8	SAC-4P-M 8MS-M 8FR SH BK/.../...	1405817
Configuration options for cable type and length are shown on page 40	-	-

M8 sensor/actuator cordsets and cables
4-pos. shielded M8 sensor/actuator cordsets

4-pos. shielded M8 plug, angled, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data
Certification
Number of positions
Conductor cross section (AWG)
Nominal current I_N
Nominal voltage U_N (UL)
Nominal voltage U_N (IEC)
Cable diameter
Degree of protection

SAC-4P-M8MR/0,5-542/M8FS SH BK SAC-4P-M8MR/0,5-542/M8FR SH BK

Table with 4 columns: Assembly, Cable length, Type, Order No.
Rows include configurations for Plug angled M8 to Socket, straight M8 and Plug angled M8 to Socket, angled M8.

Configurable cordsets
Plug angled M8 -> Socket, straight M8
Plug angled M8 -> Socket, angled M8
Configuration options for cable type and length are shown on page 40

Ordering information for configurable 4-pos. shielded M8 sensor/actuator cordsets

Configurable order no./cable type/length
Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m.
Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.

Table with 5 columns: Cable type, Description, Size, Approvals, Usage area
Rows include PVC yellow 105°C, PVC black 105°C, PUR yellow 80°C, and PUR black 80°C.

Example
Order No.
Type
Length
4-pos. M8 straight plug to M8 straight socket, shielded
cable type "240" (PUR yellow 80°C)
cable length of 0.4 m

4-pos. shielded M8 socket, straight, to M12 plug, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	4.9 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-4P-MS/0,5-542/M8FSSH SCOBK SAC-4P-MR/0,5-542/M8FSSH SCOBK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-4P-MS/0,5-542/M8FSSH SCOBK	1405994
Plug straight M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-4P-MS/1,5-542/M8FSSH SCOBK	1405993
Plug angled M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-4P-MR/0,5-542/M8FSSH SCOBK	1405998
Plug angled M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-4P-MR/1,5-542/M8FSSH SCOBK	1405997

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	SAC-4P-MS-M8FS SH SCO BK/.../...	1405800
Plug angled M12-SPEEDCON -> Socket, straight M8	SAC-4P-MR-M8FS SH SCO BK/.../...	1405806
Configuration options for cable type and length are shown on page 41	-	-

4-pos. shielded M8 socket, angled, to M12 plug, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	4.9 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-4P-MS/0,5-542/M8FRSH SCOBK SAC-4P-MR/0,5-542/M8FRSH SCOBK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-4P-MS/0,5-542/M8FRSH SCOBK	1405996
Plug straight M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-4P-MS/1,5-542/M8FRSH SCOBK	1405995
Plug angled M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-4P-MR/0,5-542/M8FRSH SCOBK	1406000
Plug angled M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-4P-MR/1,5-542/M8FRSH SCOBK	1405999

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, angled M8	SAC-4P-MS-M8FR SH SCO BK/.../...	1405805
Plug angled M12-SPEEDCON -> Socket, angled M8	SAC-4P-MR-M8FR SH SCO BK/.../...	1405809
Configuration options for cable type and length are shown on page 41	-	-

Ordering information for configurable 4-pos. shielded M8 to M12 sensor/actuator cordsets

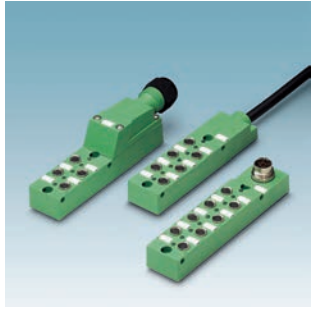
Configurable order no./cable type/length	Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m. <i>Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.</i>
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Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	24 AWG	UL AWM2517	General industrial
535	PVC black 105°C	24 AWG	UL AWM2517	General industrial
240	PUR yellow 80°C	0.25 mm ²	UL	General industrial
PUR	PUR black 80°C	0.25 mm ²	UL	General industrial

Example		
Order No.	Type	Length
1405800	240	0.4
4-pos. M8 straight socket to M12 straight plug, shielded	cable type "240" (PUR yellow 80°C)	cable length of 0.4 m

M8 sensor/actuator boxes

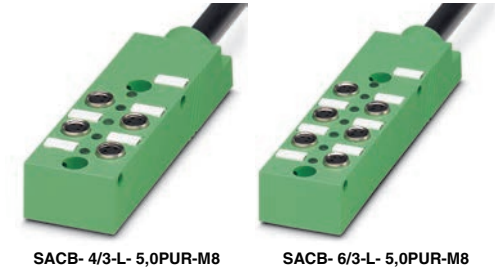
M8 thread with LEDs, for pnp sensors



M8 SAC boxes

Machine mounted sensor boxes are replacing the time consuming and error prone marshalling cabinet for field I/O. The M8 IP65/67 box can be mounted directly on the machine, offering the fastest connection for sensor wires. The use of a sensor box eliminates many of the issues with marshalling cabinets, i.e., wiring errors, high installation costs and long downtimes to replace failed sensor wiring. The PLC is connected to the sensor box via a master cable that is supplied either pre-molded or for field wiring to length. M8 boxes are available with either 4, 6, 8 or 10 slots.

3-pos. M8 sensor boxes (pnp) with LEDs, molded master cable



Common technical data	
Certification	
Number of positions	3
Signal type	pnp
I/O per slot	Single
Status indication (LED)	Yes
Nominal current I_N per I/O slot (IEC)	2 A
Nominal voltage U_N (IEC)	24 V DC
Master cable type	PUR/PVC black
Degree of protection	IP65/67

SACB- 4/3-L- 5,0PUR-M8

SACB- 6/3-L- 5,0PUR-M8

Number of slots	Master cable length	Type	Order No.	Pcs. / Pkt.
4	5 m	SACB- 4/3-L- 5,0PUR-M8	1516014	1
4	10 m	SACB- 4/3-L-10,0PUR-M8	1516027	1
6	5 m	SACB- 6/3-L- 5,0PUR-M8	1516030	1
6	10 m	SACB- 6/3-L-10,0PUR-M8	1516043	1
8	5 m	SACB- 8/3-L- 5,0PUR-M8	1516056	1
8	10 m	SACB- 8/3-L-10,0PUR-M8	1516069	1
10	5 m	SACB-10/3-L- 5,0PUR-M8	1516072	1
10	10 m	SACB-10/3-L-10,0PUR-M8	1516085	1

Configurable sensor/actuator boxes	Type	Order No.	Pcs. / Pkt.
4 slots	SACB 4-3 L M8 PUR/	1516137	1
6 slots	SACB 6-3 L M8 PUR/	1516140	1
8 slots	SACB 8-3 L M8 PUR/	1516153	1
10 slots	SACB 10-3 L M8 PUR/	1516166	1
Configuration options for cable length are shown on page 43		-	-

3-pos. M8 sensor boxes (pnp) with LEDs, top hat with pluggable terminal blocks (no cable)



Common technical data	
Certification	
Number of positions	3
Signal type	pnp
I/O per slot	Single
Status indication (LED)	Yes
Nominal current I_N per I/O slot (IEC)	2 A
Nominal voltage U_N (IEC)	24 V DC
Degree of protection	IP65/67

Number of slots	Type	Order No.	Pcs. / Pkt.
4	SACB- 4/3-L-C-M8	1503412	1
6	SACB- 6/3-L-C-M8	1503425	1
8	SACB- 8/3-L-C-M8	1511750	1
10	SACB-10/3-L-C-M8	1503438	1

4-pos. M8 sensor boxes (pnp) with LEDs, molded master cable



Common technical data	
Certification	UL
Number of positions	4
Number of slots	8
Signal type	pnp
I/O per slot	Double
Status indication (LED)	Yes
Nominal current I_N per I/O slot (IEC)	2 A
Nominal voltage U_N (IEC)	24 V DC
Master cable type	PUR/PVC black
Degree of protection	IP65/67

Master cable length	Type	Order No.	Pcs. / Pkt.
5 m	SACB- 8/4-L- 5.0PUR-M8	1516111	1
10 m	SACB- 8/4-L-10.0PUR-M8	1516124	1
Configurable sensor/actuator boxes	Type	Order No.	Pcs. / Pkt.
-	SACB 8-4 L M8 PUR/	1516179	1
Configuration options for cable length are shown on page 43			
	-	-	-

4-pos. M8 sensor boxes (pnp) with LEDs, top hat with pluggable terminal blocks (no cable)



Technical data	
Certification	UL
Number of positions	4
Number of slots	8
Signal type	pnp
I/O per slot	Double
Status indication (LED)	Yes
Nominal current I_N per I/O slot (IEC)	2 A
Nominal voltage U_N (IEC)	24 V DC
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SACB- 8/4-L-C-M8	1503467	1

Ordering information for 3-pos. and 4-pos. M8 configurable sensor/actuator boxes

Configurable order no./length	Configurable order numbers allow selection of master cable length, from 0.5 m to 50 m. <i>Note: When measuring length, only the cable material is considered, i.e., not the sensor box. Lengths from 0.5 to 50 m are available in increments of 0.5 m.</i>
-------------------------------	---

Example	
Order No.	Length
1516153	4.5
3-pos. M8 sensor box (pnp) with LEDs and eight slots	cable length of 4.5 m

M8 sensor box master cable for field-terminated sensor boxes

Sensor box order number	Sensor box description	Bulk cable order number	Bulk cable description	Length
1503412	3-pos., 4 slots	1517576	6-pos., PUR, black, 4x0.34 mm ² and 2x0.75 mm ²	50 m
1503425	3-pos., 6 slots	1517589	8-pos., PUR, black, 6x0.34 mm ² and 2x0.75 mm ²	50 m
1511750	3-pos., 8 slots	1517592	10-pos., PUR, black, 8x0.34 mm ² and 2x0.75 mm ²	50 m
1503438	3-pos., 10 slots	1517602	12-pos., PUR, black, 10x0.34 mm ² and 2x0.75 mm ²	50 m
1503467	4-pos., 8 slots	1539350	18-pos., PUR, black, 16x0.34 mm ² and 2x0.75 mm ²	50 m

M8 sensor/actuator connectors
M8 Y distributors and adapters

M8 Y distributors and adapters

Sometimes the ideal cabling topology for a system requires the use of Y adapters, or thread converters. Y distributors allow a system to bring two lines of I/O into one receptacle slot. For sensors with a pre-molded M8 or M12 connector that is not the same size as a receptacle, thread adapters allow the user to increase or decrease the thread size.

3-pos. M8 Y distributors, parallel

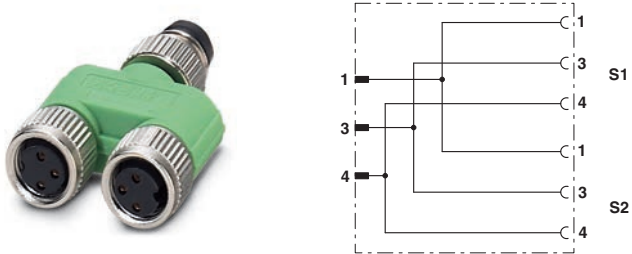


Table with 2 columns: Common technical data, Value. Rows include Certification, Number of positions (3), Nominal current I_N (IEC) (4 A), Nominal voltage U_N (IEC) (60 V), and Degree of protection (IP65/67).

Table with 4 columns: Design, Type, Order No., Pcs. / Pkt. Rows describe plug/ socket configurations for M8 and M12 connectors.

3-pos., M8 to M12 adapters



Table with 2 columns: Common technical data, Value. Rows include Certification, Number of positions (3), Nominal current I_N (IEC) (4 A), Nominal voltage U_N (IEC) (60 V), and Degree of protection (IP65/67).

Table with 4 columns: Design, Type, Order No., Pcs. / Pkt. Rows describe plug/ socket configurations for M8 to M12 adapters.

4-pos. M8 Y distributors, parallel

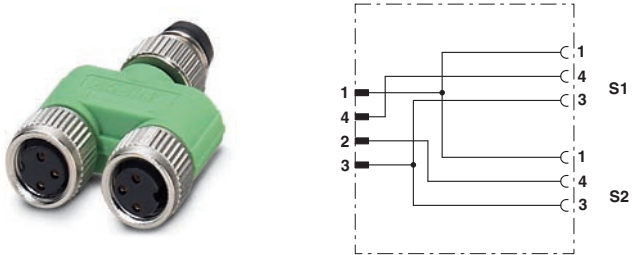


Table with 2 columns: Common technical data, Value. Rows include Certification, Number of positions (3), Nominal current I_N (IEC) (4 A), and Degree of protection (IP65/67).

Table with 4 columns: Design, Nominal voltage U_N (IEC), Type, Order No., Pcs. / Pkt. Rows describe plug/ socket configurations for 4-pos. M8 Y distributors.

4-pos., M8 to M12 adapters



Common technical data	
Certification	
Number of positions	4
Nominal current I_N (IEC)	4 A
Nominal voltage U_N (IEC)	30 V
Degree of protection	IP65/67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M8 -> Socket, straight M12	SAC-4P-M 8MS-M12FS	1519736	5
Plug straight M12 -> Socket, straight M8	SAC-4P-M12MS-M 8FS	1519765	5
Plug straight M12 -> Socket, straight M8 Snap-In	SAC-4P-M12MS-M 8SIFS	1519778	5

M8 sensor/actuator connectors

M8 field-wired connectors



M8 field-wired connectors

An extensive range of field-wired connectors ensures that a safe and efficient M8 connection can be made to any suitable sensor cable. Screw connection offers a classic and well-known technology, while IDC connection provides the fastest field-wiring method on the market. For areas with high electromagnetic interference (EMI) a shielded version is available.

3-pos. M8 field-wired connectors, straight, IDC connection



SACC-M 8MS-3QO-0,25-M



SACC-M 8FS-3QO-0,25-M

Common technical data

Certification	UL
Number of positions	3
Outer cable diameter range (mm)	2.5 mm ... 5 mm
Nominal voltage U_N (IEC)	60 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP65/67

Design	Conductor cross section [mm ²]	Conductor cross section (AWG)	Type	Order No.	Pcs. / Pkt.
Plug straight M8	0.08 mm ² ... 0.25 mm ²	28 ... 24	SACC-M 8MS-3QO-0,25-M	1441008	1
Plug straight M8	0.25 mm ² ... 0.5 mm ²	24 ... 20	SACC-M 8MS-3QO-0,5-M	1441024	1
Socket, straight M8	0.08 mm ² ... 0.25 mm ²	28 ... 24	SACC-M 8FS-3QO-0,25-M	1441040	1
Socket, straight M8	0.25 mm ² ... 0.5 mm ²	24 ... 20	SACC-M 8FS-3QO-0,5-M	1441066	1

3-pos. M8 field-wired connectors, straight, screw connection



SACC-M 8MS-3CON-M-SW



SACC-M 8FS-3CON-M-SW

Common technical data

Certification	CE
Number of positions	3
Conductor cross section [mm ²]	0.14 mm ² ... 0.5 mm ²
Conductor cross section (AWG)	26 ... 20
Outer cable diameter range (mm)	3.5 mm ... 5 mm
Nominal voltage U_N (IEC)	60 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M8	SACC-M 8MS-3CON-M-SW	1501252	1
Socket, straight M8	SACC-M 8FS-3CON-M-SW	1506888	1

3-pos. shielded M8 field-wired connectors, straight, screw connection



SACC-M 8MS-3CON-M-0,34-SH



SACC-M 8FS-3CON-M-0,34-SH

Common technical data

Certification	CE
Number of positions	3
Conductor cross section [mm ²]	0.14 mm ² ... 0.5 mm ²
Conductor cross section (AWG)	26 ... 20
Outer cable diameter range (mm)	3.5 mm ... 5.5 mm
Nominal voltage U_N (IEC)	60 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M8	SACC-M 8MS-3CON-M-0,34-SH	1542884	1
Socket, straight M8	SACC-M 8FS-3CON-M-0,34-SH	1542907	1

4-pos. M8 field-wired connectors, straight, IDC connection



SACC-M 8MS-4QO-0,25-M

SACC-M 8FS-4QO-0,25-M

Common technical data

Certification	UL, CE
Number of positions	4
Outer cable diameter range (mm)	2.5 mm ... 5 mm
Nominal voltage U_N (IEC)	30 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP65/67

Design	Conductor cross section [mm ²]	Conductor cross section (AWG)	Type	Order No.	Pcs. / Pkt.
Plug straight M8	0.08 mm ² ... 0.25 mm ²	28 ... 24	SACC-M 8MS-4QO-0,25-M	1441011	1
Plug straight M8	0.25 mm ² ... 0.5 mm ²	24 ... 20	SACC-M 8MS-4QO-0,5-M	1441037	1
Socket, straight M8	0.08 mm ² ... 0.25 mm ²	28 ... 24	SACC-M 8FS-4QO-0,25-M	1441053	1
Socket, straight M8	0.25 mm ² ... 0.5 mm ²	24 ... 20	SACC-M 8FS-4QO-0,5-M	1441079	1

4-pos. M8 field-wired connectors, straight, screw connection



SACC-M 8MS-4CON-M-SW

SACC-M 8FS-4CON-M-SW

Common technical data

Certification	CE
Number of positions	4
Conductor cross section [mm ²]	0.14 mm ² ... 0.5 mm ²
Conductor cross section (AWG)	26 ... 20
Outer cable diameter range (mm)	3.5 mm ... 5 mm
Nominal voltage U_N (IEC)	30 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M8	SACC-M 8MS-4CON-M-SW	1501265	1
Socket, straight M8	SACC-M 8FS-4CON-M-SW	1506891	1

4-pos. shielded M8 field-wired connectors, straight, screw connection



SACC-M 8MS-4CON-M-0,34-SH

SACC-M 8FS-4CON-M-0,34-SH

Common technical data

Certification	CE
Number of positions	4
Conductor cross section [mm ²]	0.14 mm ² ... 0.5 mm ²
Conductor cross section (AWG)	26 ... 20
Outer cable diameter range (mm)	3.5 mm ... 5.5 mm
Nominal voltage U_N (IEC)	30 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M8	SACC-M 8MS-4CON-M-0,34-SH	1542897	1
Socket, straight M8	SACC-M 8FS-4CON-M-0,34-SH	1542910	1

M8 sensor/actuator connectors

M8 panel feed-through connectors with flying leads



M8 panel feed-through connectors

M8 panel feed-through connectors allow a pluggable, water-tight connection between the inside of a panel or device to the outside environment. For front-mount connectors, the leads are passed from the outside of the panel or device into the enclosure. Then the connector is held in place with a locknut on the inside. For rear-mount connectors, the leads can be pre-terminated to the system - the connector body is pushed through from the inside of the enclosure and held in place by a locknut on the outside.

Alternatively, a locknut is not needed for a front- or rear-mounted connector, if the enclosure is tapped with the appropriate thread rather than simply drilled out.

3-pos. M8, front mount, 8 mm mounting thread



SACC-E-M 8MS-3CON-M8/0,5 SACC-E-M 8FS-3CON-M8/0,5

Common technical data

Certification	UL, CE
Number of positions	3
Mounting thread	M8 x 0.5
Nominal voltage U_N (IEC)	60 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP67

Design

Flush-type plug, straight M8
Flush-type socket, straight M8

Type

SACC-E-M 8MS-3CON-M8/0,5
SACC-E-M 8FS-3CON-M8/0,5

Order No.

1500334
1500350

Pcs. / Pkt.

1
1

Accessories

M8 locking nut, for flush-type plugs and sockets with M8 fastening thread
The locking nut is not included with the assembly.

Type

SACC-E-MU-M 8
-

Order No.

1504071
-

Pcs. / Pkt.

100
-

3-pos. M8, rear mount, 8 or 12 mm mounting thread

The locking nut is included with the assembly.



SACC-DSI-M 8MS-3CON-M 8/0,5 SACC-DSI-M 8FS-3CON-M12/0,5

Common technical data

Number of positions	3
Nominal voltage U_N (IEC)	60 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP67

Certification



Design

Flush-type plug, straight M8
Flush-type socket, straight M8

Mounting thread

M8 x 1
M12 x 1

Type

SACC-DSI-M 8MS-3CON-M 8/0,5
SACC-DSI-M 8FS-3CON-M12/0,5

Order No.

1453478
1453449

Pcs. / Pkt.

1
1

4-pos. M8, front mount, 8 mm mounting thread



SACC-E-M 8MS-4CON-M8/0,5 SACC-E-M 8FS-4CON-M8/0,5

Common technical data

Certification	UL, CE
Number of positions	4
Mounting thread	M8 x 0.5
Nominal voltage U_N (IEC)	30 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP67

Design

Flush-type plug, straight M8
Flush-type socket, straight M8

Type

SACC-E-M 8MS-4CON-M8/0,5
SACC-E-M 8FS-4CON-M8/0,5

Order No.

1500347
1500363

Pcs. / Pkt.

1
1

Accessories

M8 locking nut, for flush-type plugs and sockets with M8 fastening thread
The locking nut is not included with the assembly.

Type

SACC-E-MU-M 8
-

Order No.

1504071
-

Pcs. / Pkt.

100
-

4-pos. M8, rear mount, 8 or 12 mm mounting thread

The locking nut is included with the assembly.



Common technical data	
Number of positions	4
Nominal voltage U _N (IEC)	30 V
Nominal current I _N (IEC)	4 A
Degree of protection	IP67

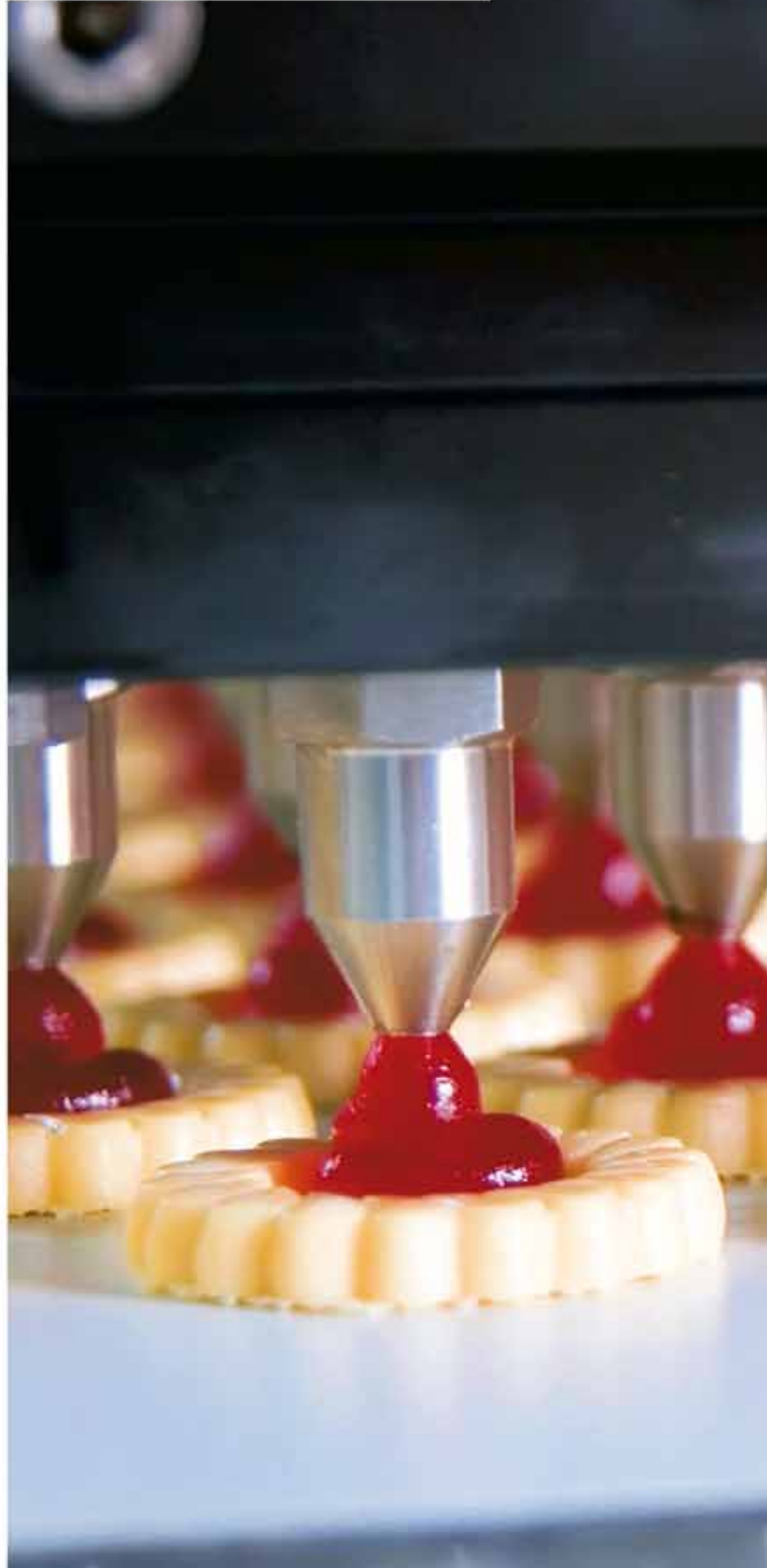
SACC-DSI-M 8MS-4CON-M 8/0,5 SACC-DSI-M 8FS-4CON-M12/0,5

Certification	Design	Mounting thread	Type	Order No.	Pcs. / Pkt.
	Flush-type plug, straight M8	M8 x 1	SACC-DSI-M 8MS-4CON-M 8/0,5	1453481	1
	Flush-type socket, straight M8	M12 x 1	SACC-DSI-M 8FS-4CON-M12/0,5	1453452	1

M12 SPEEDCON sensor/actuator cordsets, boxes and connectors

We offer a broad product range for passive field cabling applications using an industry standard 12 mm screw thread (IEC 61076-2-101). Our M12 SPEEDCON connectors reduce your installation time by 90 percent.

The cordsets for North America are dual rated PVC/PLTC and suited for a wide variety of applications. Additional cable types are available from stock with our configurable ordering system.





M12 SPEEDCON SENSOR/ACTUATOR CORDSETS

3-pos. M12	Page 52
3-pos. M12 to M8	Page 54
3-pos. Shielded M12	Page 56
3-pos. Shielded M12 to M8	Page 58
4-pos. M12	Page 59
4-pos. M12 to M8	Page 61
4-pos. Shielded M12	Page 63
4-pos. Shielded M12 to M8	Page 65
5-pos. M12	Page 66
5-pos. Shielded M12	Page 68
8-pos. M12	Page 70
8-pos. Shielded M12	Page 72

M12 SPEEDCON SENSOR/ACTUATOR BOXES

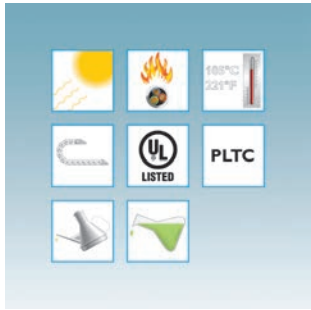
M12 with LED's, for pnp sensors	Page 74
M12 with LED's, for npn sensors	Page 76
M12 (no LED), for pnp or npn sensors	Page 78

M12 SPEEDCON SENSOR/ ACTUATOR CONNECTORS

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M12 panel feed-through with flying leads	Page 85

M12 sensor/actuator cordsets and cables

3-pos. M12 sensor/actuator cordsets



M12 3-pos. cordsets

3-pos. M12 cordsets and extension cables are assembled with 3x22 AWG stranded copper conductors and follow the typical sensor wire color code of brown (pos. 1), blue (pos. 3), and black (pos. 4). The cable jacket is constructed of semirigid PVC, UL AWM style 2517. The PLTC rating allows the cable to be used in horizontal and vertical cable trays, or raceways in accordance with NEC Articles 725 and 727. The cable is sunlight resistant and rated for ambient temperatures of -30 to +105°C.

3-pos. M12 socket, straight or angled, to open end, PVC, yellow, 105°C



SAC-3P- 2,0-542/ FS SCO BK SAC-3P- 2,0-542/ FR SCO BK

Common technical data	
Certification	®
Number of positions	3
Conductor cross section (AWG)	22
Nominal current I_N	4 A
Nominal voltage U_N (UL)	300 V
Nominal voltage U_N (IEC)	250 V
Cable diameter	4.7 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	2 m	SAC-3P- 2,0-542/ FS SCO BK	1406324
Free conductor end -> Socket, straight M12-SPEEDCON	5 m	SAC-3P- 5,0-542/ FS SCO BK	1406323
Free conductor end -> Socket, straight M12-SPEEDCON	10 m	SAC-3P-10,0-542/ FS SCO BK	1406322
Free conductor end -> Socket, angled M12-SPEEDCON	2 m	SAC-3P- 2,0-542/ FR SCO BK	1406327
Free conductor end -> Socket, angled M12-SPEEDCON	5 m	SAC-3P- 5,0-542/ FR SCO BK	1406326
Free conductor end -> Socket, angled M12-SPEEDCON	10 m	SAC-3P-10,0-542/ FR SCO BK	1406325

Configurable cordsets	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	SAC-3P-FS SCO BK/.../...	1405958
Free conductor end -> Socket, angled M12-SPEEDCON	SAC-3P-FR SCO BK/.../...	1405959
Configuration options for cable type and length are shown on page 53	-	-

3-pos. M12 plug, straight or angled, to open end, PVC, yellow, 105°C



SAC-3P-MS/ 2,0-542 SCO BK SAC-3P-MR/ 2,0-542 SCO BK

Common technical data	
Certification	®
Number of positions	3
Conductor cross section (AWG)	22
Nominal current I_N	4 A
Nominal voltage U_N (UL)	300 V
Nominal voltage U_N (IEC)	250 V
Cable diameter	4.7 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	2 m	SAC-3P-MS/ 2,0-542 SCO BK	1406304
Plug straight M12-SPEEDCON -> Free conductor end	5 m	SAC-3P-MS/ 5,0-542 SCO BK	1406303
Plug straight M12-SPEEDCON -> Free conductor end	10 m	SAC-3P-MS/10,0-542 SCO BK	1406302
Plug angled M12-SPEEDCON -> Free conductor end	2 m	SAC-3P-MR/ 2,0-542 SCO BK	1406315
Plug angled M12-SPEEDCON -> Free conductor end	5 m	SAC-3P-MR/ 5,0-542 SCO BK	1406314
Plug angled M12-SPEEDCON -> Free conductor end	10 m	SAC-3P-MR/10,0-542 SCO BK	1406313

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	SAC-3P-MS SCO BK/.../...	1405949
Plug angled M12-SPEEDCON -> Free conductor end	SAC-3P-MR SCO BK/.../...	1405955
Configuration options for cable type and length are shown on page 53	-	-

3-pos. M12 plug, straight, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data

Certification	UL
Number of positions	3
Conductor cross section (AWG)	22
Nominal current I _N	4 A
Nominal voltage U _N (UL)	300 V
Nominal voltage U _N (IEC)	250 V
Cable diameter	4.7 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-3P-MS/ 0,5-542/ FS SCO BK SAC-3P-MS/ 0,5-542/ FR SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-3P-MS/ 0,5-542/ FS SCO BK	1406299
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-3P-MS/ 1,5-542/ FS SCO BK	1406298
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-3P-MS/ 0,5-542/ FR SCO BK	1406301
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-3P-MS/ 1,5-542/ FR SCO BK	1406300

Configurable cordsets

Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON
 Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON
 Configuration options for cable type and length are shown on page 53

Type	Order No.
SAC-3P-MS-FS SCO BK/.../...	1405947
SAC-3P-MS-FR SCO BK/.../...	1405948
-	-

3-pos. M12 plug, angled, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data

Certification	UL
Number of positions	3
Conductor cross section (AWG)	22
Nominal current I _N	4 A
Nominal voltage U _N (UL)	300 V
Nominal voltage U _N (IEC)	250 V
Cable diameter	4.7 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-3P-MR/ 0,5-542/ FS SCO BK SAC-3P-MR/ 0,5-542/ FR SCO BK

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-3P-MR/ 0,5-542/ FS SCO BK	1406310
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-3P-MR/ 1,5-542/ FS SCO BK	1406309
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-3P-MR/ 0,5-542/ FR SCO BK	1406312
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-3P-MR/ 1,5-542/ FR SCO BK	1406311

Configurable cordsets

Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON
 Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON
 Configuration options for cable type and length are shown on page 53

Type	Order No.
SAC-3P-MR-FS SCO BK/.../...	1405953
SAC-3P-MR-FR SCO BK/.../...	1405954
-	-

Ordering information for configurable 3-pos. M12 sensor/actuator cordsets

Configurable order no./cable type/length

Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m.

Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.

Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	22 AWG	UL ITC/PLTC sunlight resistant, CMX-CMG, MSHA	General industrial
535	PVC black 105°C	22 AWG	UL ITC/PLTC sunlight resistant, CMX-CMG, MSHA	General industrial
240	PUR yellow 80°C	0.34 mm ²	UL	General industrial
PUR	PUR black 80°C	0.34 mm ²	UL	General industrial
800	TPE gray 120°C	0.34 mm ²	UL	Robotic, hi-flex

Example		
Order No.	Type	Length
1405947	240	4.5
3-pos. M12 straight plug to M12 straight socket	cable type "240" (PUR yellow 80°C)	cable length of 4.5 m

M12 sensor/actuator cordsets and cables

3-pos. M12 to M8 sensor/actuator cordsets

3 pos. M12 socket, straight, to M8 plug, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	4.1 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-3P-M8MS/ 0,5-542/FS SCO BK SAC-3P-M8MR/ 0,5-542/FS SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M8 -> Socket, straight M12-SPEEDCON	0.5 m	SAC-3P-M8MS/ 0,5-542/FS SCO BK	1406276
Plug straight M8 -> Socket, straight M12-SPEEDCON	1.5 m	SAC-3P-M8MS/1,5-542/FS SCO BK	1406275
Plug angled M8 -> Socket, straight M12-SPEEDCON	0.5 m	SAC-3P-M8MR/ 0,5-542/FS SCO BK	1406287
Plug angled M8 -> Socket, straight M12-SPEEDCON	1.5 m	SAC-3P-M8MR/ 1,5-542/FS SCO BK	1406286

Configurable cordsets	Type	Order No.
Plug straight M8 -> Socket, straight M12-SPEEDCON	SAC-3P-M 8MS-FS SCO BK/.../...	1405937
Plug angled M8 -> Socket, straight M12-SPEEDCON	SAC-3P-M 8MR-FS SCO BK/.../...	1405942
Configuration options for cable type and length are shown on page 55	-	-

3-pos. M12 socket, angled, to M8 plug, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	4.1 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-3P-M8MS/ 0,5-542/FR SCO BK SAC-3P-M8MR/ 0,5-542/FR SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M8 -> Socket, angled M12-SPEEDCON	0.5 m	SAC-3P-M8MS/ 0,5-542/FR SCO BK	1406278
Plug straight M8 -> Socket, angled M12-SPEEDCON	1.5 m	SAC-3P-M8MS/ 1,5-542/FR SCO BK	1406277
Plug angled M8 -> Socket, angled M12-SPEEDCON	0.5 m	SAC-3P-M8MR/ 0,5-542/FR SCO BK	1406290
Plug angled M8 -> Socket, angled M12-SPEEDCON	1.5 m	SAC-3P-M8MR/ 1,5-542/FR SCO BK	1406288

Configurable cordsets	Type	Order No.
Plug straight M8 -> Socket, angled M12-SPEEDCON	SAC-3P-M 8MS-FR SCO BK/.../...	1405938
Plug angled M8 -> Socket, angled M12-SPEEDCON	SAC-3P-M 8MR-FR SCO BK/.../...	1405943
Configuration options for cable type and length are shown on page 55	-	-

3-pos. M12 plug, straight, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	4.1 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-3P-MS/0,5-542/M8 FS SCO BK SAC-3P-MS/0,5-542/M8 FR SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-3P-MS/0,5-542/M8 FS SCO BK	1406295
Plug straight M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-3P-MS/1,5-542/M8 FS SCO BK	1406294
Plug straight M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-3P-MS/0,5-542/M8 FR SCO BK	1406297
Plug straight M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-3P-MS/1,5-542/M8 FR SCO BK	1406296

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	SAC-3P-MS-M8FS SCO BK/.../...	1405945
Plug straight M12-SPEEDCON -> Socket, angled M8	SAC-3P-MS-M8FR SCO BK/.../...	1405946
Configuration options for cable type and length are shown on page 55	-	-

3-pos. M12 plug, angled, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	60 V
Cable diameter	4.1 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-3P-MR/0,5-542/M8 FS SCO BK SAC-3P-MR/0,5-542/M8 FR SCO BK

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-3P-MR/0,5-542/M8 FS SCO BK	1406306
Plug angled M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-3P-MR/1,5-542/M8 FS SCO BK	1406305
Plug angled M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-3P-MR/0,5-542/M8 FR SCO BK	1406308
Plug angled M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-3P-MR/1,5-542/M8 FR SCO BK	1406307

Configurable cordsets	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M8	SAC-3P-MR-M8FS SCO BK/.../...	1405951
Plug angled M12-SPEEDCON -> Socket, angled M8	SAC-3P-MR-M8FR SCO BK/.../...	1405952
Configuration options for cable type and length are shown on page 55		-

Ordering information for configurable 3-pos. M12 to M8 sensor/actuator cordsets

Configurable order no./cable type/length

Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m.

Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.

Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	24 AWG	UL AWM2517	General industrial
535	PVC black 105°C	24 AWG	UL AWM2517	General industrial
240	PUR yellow 80°C	0.25 mm ²	UL	General industrial
PUR	PUR black 80°C	0.25 mm ²	UL	General industrial
800	TPE gray 120°C	0.25 mm ²	UL	Robotic, hi-flex

Example		
Order No.	Type	Length
1405945	240	4.5
3-pos. M12 straight plug to M8 straight socket	cable type "240" (PUR yellow 80°C)	cable length of 4.5 m

M12 sensor/actuator cordsets and cables

3-pos. shielded M12 sensor/actuator cordsets

3-pos. shielded M12 socket, straight or angled, to open end, PVC, yellow, 105°C



Common technical data	
Certification	Ⓜ
Number of positions	3
Conductor cross section (AWG)	22
Nominal current I_N	4 A
Nominal voltage U_N (UL)	300 V
Nominal voltage U_N (IEC)	250 V
Cable diameter	5.2 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-3P- 2,0-542/ FS SH SCO BK SAC-3P- 2,0-542/ FR SH SCO BK

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	2 m	SAC-3P- 2,0-542/ FS SH SCO BK	1406267
Free conductor end -> Socket, straight M12-SPEEDCON	5 m	SAC-3P- 5,0-542/ FS SH SCO BK	1406266
Free conductor end -> Socket, straight M12-SPEEDCON	10 m	SAC-3P-10,0-542/ FS SH SCO BK	1406265
Free conductor end -> Socket, angled M12-SPEEDCON	2 m	SAC-3P- 2,0-542/ FR SH SCO BK	1406270
Free conductor end -> Socket, angled M12-SPEEDCON	5 m	SAC-3P- 5,0-542/ FR SH SCO BK	1406269
Free conductor end -> Socket, angled M12-SPEEDCON	10 m	SAC-3P-10,0-542/ FR SH SCO BK	1406268

Configurable cordsets	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	SAC-3P-FS SH SCO BK/.../...	1405933
Free conductor end -> Socket, angled M12-SPEEDCON	SAC-3P-FR SH SCO BK/.../...	1405934
Configuration options for cable type and length are shown on page 57	-	-

3-pos. shielded M12 plug, straight or angled, to open end, PVC, yellow, 105°C



Common technical data	
Certification	Ⓜ
Number of positions	3
Conductor cross section (AWG)	22
Nominal current I_N	4 A
Nominal voltage U_N (UL)	300 V
Nominal voltage U_N (IEC)	250 V
Cable diameter	5.2 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-3P-MS/ 2,0-542 SH SCO BK SAC-3P-MR/ 2,0-542 SH SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	2 m	SAC-3P-MS/ 2,0-542 SH SCO BK	1406257
Plug straight M12-SPEEDCON -> Free conductor end	5 m	SAC-3P-MS/ 5,0-542 SH SCO BK	1406256
Plug straight M12-SPEEDCON -> Free conductor end	10 m	SAC-3P-MS/10,0-542 SH SCO BK	1406255
Plug angled M12-SPEEDCON -> Free conductor end	2 m	SAC-3P-MR/ 2,0-542 SH SCO BK	1406264
Plug angled M12-SPEEDCON -> Free conductor end	5 m	SAC-3P-MR/ 5,0-542 SH SCO BK	1406263
Plug angled M12-SPEEDCON -> Free conductor end	10 m	SAC-3P-MR/10,0-542 SH SCO BK	1406262

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	SAC-3P-MS SH SCO BK/.../...	1405929
Plug angled M12-SPEEDCON -> Free conductor end	SAC-3P-MR SH SCO BK/.../...	1405932
Configuration options for cable type and length are shown on page 57	-	-

3-pos. shielded M12 plug, straight, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓜ
Number of positions	3
Conductor cross section (AWG)	22
Nominal current I_N	4 A
Nominal voltage U_N (UL)	300 V
Nominal voltage U_N (IEC)	250 V
Cable diameter	5.2 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-3P-MS/0,5-542/ FSSH SCO BK SAC-3P-MS/0,5-542/ FRSH SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-3P-MS/0,5-542/ FSSH SCO BK	1406252
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-3P-MS/1,5-542/ FSSH SCO BK	1406251
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-3P-MS/0,5-542/ FRSH SCO BK	1406254
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-3P-MS/1,5-542/ FRSH SCO BK	1406253

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-3P-MS-FS SH SCO BK/.../...	1405927
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-3P-MS-FR SH SCO BK/.../...	1405928
Configuration options for cable type and length are shown on page 57	-	-

3-pos. shielded M12 plug, angled, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data

Certification	UL
Number of positions	3
Conductor cross section (AWG)	22
Nominal current I _N	4 A
Nominal voltage U _N (UL)	300 V
Nominal voltage U _N (IEC)	250 V
Cable diameter	5.2 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-3P-MR/0,5-542/ FSSH SCO BK SAC-3P-MR/0,5-542/ FRSH SCO BK

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-3P-MR/0,5-542/ FSSH SCO BK	1406259
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-3P-MR/1,5-542/ FSSH SCO BK	1406258
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-3P-MR/0,5-542/ FRSH SCO BK	1406261
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-3P-MR/1,5-542/ FRSH SCO BK	1406260

Configurable cordsets

Configurable cordsets	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-3P-MR-FS SH SCO BK/.../...	1405930
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-3P-MR-FR SH SCO BK/.../...	1405931
Configuration options for cable type and length are shown on page 57	-	-

Ordering information for configurable 3-pos. shielded M12 sensor/actuator cordsets

Configurable order no./cable type/length	Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m. <i>Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.</i>
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Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	22 AWG	UL ITC/PLTC sunlight resistant, CMX-CMG, MSHA	General industrial
535	PVC black 105°C	22 AWG	UL ITC/PLTC sunlight resistant, CMX-CMG, MSHA	General industrial
240	PUR yellow 80°C	0.34 mm ²	UL	General industrial
PUR	PUR black 80°C	0.34 mm ²	UL	General industrial

Example		
Order No.	Type	Length
1405927	240	0.4
3-pos. M12 straight plug to M12 straight socket, shielded	cable type "240" (PUR yellow 80°C)	cable length of 0.4 m

M12 sensor/actuator cordsets and cables

3-pos. shielded M12 to M8 sensor/actuator cordsets

3-pos. shielded M12 plug, straight, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	60 V
Cable diameter	4.7 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-3P-MS/0,5-542/M8FSSH SCOBK SAC-3P-MS/0,5-542/M8FRSH SCOBK

Certification	Assembly	Cable length	Type	Order No.
Ⓢ	Plug straight M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-3P-MS/0,5-542/M8FSSH SCOBK	1406023
Ⓢ	Plug straight M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-3P-MS/1,5-542/M8FSSH SCOBK	1406022
Ⓢ	Plug straight M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-3P-MS/0,5-542/M8FRSH SCOBK	1406025
-	Plug straight M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-3P-MS/1,5-542/M8FRSH SCOBK	1406024

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	SAC-3P-MS-M 8FS SH SCO BK/.../...	1405824
Plug straight M12-SPEEDCON -> Socket, angled M8	SAC-3P-MS-M 8FR SH SCO BK/.../...	1405825
Configuration options for cable type and length are shown on page 58	-	-

3-pos. shielded M12 plug, angled, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	3
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	60 V
Cable diameter	4.7 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-3P-MR/0,5-542/M8FSSH SCOBK SAC-3P-MR/0,5-542/M8FRSH SCOBK

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-3P-MR/0,5-542/M8FSSH SCOBK	1406027
Plug angled M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-3P-MR/1,5-542/M8FSSH SCOBK	1406026
Plug angled M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-3P-MR/0,5-542/M8FRSH SCOBK	1406029
Plug angled M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-3P-MR/1,5-542/M8FRSH SCOBK	1406028

Configurable cordsets	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M8	SAC-3P-MR-M 8FS SH SCO BK/.../...	1405826
Plug angled M12-SPEEDCON -> Socket, angled M8	SAC-3P-MR-M 8FR SH SCO BK/.../...	1405827
Configuration options for cable type and length are shown on page 58	-	-

Ordering information for configurable 3-pos. shielded M12 to M8 sensor/actuator cordsets

Configurable order no./cable type/length	Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m. <i>Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.</i>
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Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	24 AWG	Ⓢ AWM2517	General industrial
535	PVC black 105°C	24 AWG	Ⓢ AWM2517	General industrial
240	PUR yellow 80°C	0.25 mm ²	Ⓢ	General industrial
PUR	PUR black 80°C	0.25 mm ²	Ⓢ	General industrial

Example		
Order No.	Type	Length
1405824	240	0.4
3-pos. M12 straight plug to M8 straight socket, shielded	cable type "240" (PUR yellow 80°C)	cable length of 0.4 m

M12 4-pos. cordsets

4-pos. M12 cordsets and extension cables are assembled with 4x22 AWG stranded copper conductors and follow the typical sensor wire color code of brown (pos. 1), white (pos. 2), blue (pos. 3) and black (pos. 4). The cable jacket is constructed of semirigid PVC, UL AWM style 2517. The PLTC rating allows the cable to be used in horizontal and vertical cable trays, or raceways in accordance with NEC Articles 725 and 727. The cable is sunlight resistant and rated for ambient temperatures of -30 to 105°C.

4-pos. M12 socket, straight or angled, to open end, PVC, yellow, 105°C



SAC-4P-2,0-542/ FS SCO BK SAC-4P- 2,0-542/ FR SCO BK

Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	22
Nominal current I_N	4 A
Nominal voltage U_N (UL)	300 V
Nominal voltage U_N (IEC)	250 V
Cable diameter	5 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	2 m	SAC-4P-2,0-542/ FS SCO BK	1406246
Free conductor end -> Socket, straight M12-SPEEDCON	5 m	SAC-4P- 5,0-542/ FS SCO BK	1406245
Free conductor end -> Socket, straight M12-SPEEDCON	10 m	SAC-4P-10,0-542/ FS SCO BK	1406244
Free conductor end -> Socket, angled M12-SPEEDCON	2 m	SAC-4P- 2,0-542/ FR SCO BK	1406250
Free conductor end -> Socket, angled M12-SPEEDCON	5 m	SAC-4P- 5,0-542/ FR SCO BK	1406249
Free conductor end -> Socket, angled M12-SPEEDCON	10 m	SAC-4P-10,0-542/ FR SCO BK	1406248

Configurable cordsets	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	SAC-4P-FS SCO BK/.../...	1405925
Free conductor end -> Socket, angled M12-SPEEDCON	SAC-4P-FR SCO BK/.../...	1405926
Configuration options for cable type and length are shown on page 60	-	-

4-pos. M12 plug, straight or angled, to open end, PVC, yellow, 105°C



SAC-4P-MS/ 2,0-542 SCO BK SAC-4P-MR/ 2,0-542 SCO BK

Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	22
Nominal current I_N	4 A
Nominal voltage U_N (UL)	300 V
Nominal voltage U_N (IEC)	250 V
Cable diameter	5 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	2 m	SAC-4P-MS/ 2,0-542 SCO BK	1406226
Plug straight M12-SPEEDCON -> Free conductor end	5 m	SAC-4P-MS/ 5,0-542 SCO BK	1406225
Plug straight M12-SPEEDCON -> Free conductor end	10 m	SAC-4P-MS/10,0-542 SCO BK	1406224
Plug angled M12-SPEEDCON -> Free conductor end	2 m	SAC-4P-MR/ 2,0-542 SCO BK	1406237
Plug angled M12-SPEEDCON -> Free conductor end	5 m	SAC-4P-MR/ 5,0-542 SCO BK	1406236
Plug angled M12-SPEEDCON -> Free conductor end	10 m	SAC-4P-MR/10,0-542 SCO BK	1406235

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	SAC-4P-MS SCO BK/.../...	1405916
Plug angled M12-SPEEDCON -> Free conductor end	SAC-4P-MR SCO BK/.../...	1405922
Configuration options for cable type and length are shown on page 60	-	-

M12 sensor/actuator cordsets and cables

4-pos. M12 sensor/actuator cordsets

4-pos. M12 plug, straight, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	4
Conductor cross section (AWG)	22
Nominal current I _N	4 A
Nominal voltage U _N (UL)	300 V
Nominal voltage U _N (IEC)	250 V
Cable diameter	5 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-MS/ 0,5-542/ FS SCO BK SAC-4P-MS/ 0,5-542/ FR SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-4P-MS/ 0,5-542/ FS SCO BK	1406221
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-4P-MS/ 1,5-542/ FS SCO BK	1406220
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-4P-MS/ 0,5-542/ FR SCO BK	1406223
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-4P-MS/ 1,5-542/ FR SCO BK	1406222

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-4P-MS-FS SCO BK/.../...	1405914
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-4P-MS-FR SCO BK/.../...	1405915
Configuration options for cable type and length are shown on page 60		-

4-pos. M12 plug, angled, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	4
Conductor cross section (AWG)	22
Nominal current I _N	4 A
Nominal voltage U _N (UL)	300 V
Nominal voltage U _N (IEC)	250 V
Cable diameter	5 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-MR/ 0,5-542/ FS SCO BK SAC-4P-MR/ 0,5-542/ FR SCO BK

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-4P-MR/ 0,5-542/ FS SCO BK	1406232
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-4P-MR/ 1,5-542/ FS SCO BK	1406231
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-4P-MR/ 0,5-542/ FR SCO BK	1406234
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-4P-MR/ 1,5-542/ FR SCO BK	1406233

Configurable cordsets	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-4P-MR-FS SCO BK/.../...	1405919
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-4P-MR-FR SCO BK/.../...	1405920
Configuration options for cable type and length are shown on page 60		-

Ordering information for configurable 4-pos. M12 sensor/actuator cordsets

Configurable order no./cable type/length	Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m. <i>Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.</i>
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Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	22 AWG	Ⓢ ITC/PLTC sunlight resistant, CMX-CMG, MSHA	General industrial
535	PVC black 105°C	22 AWG	Ⓢ ITC/PLTC sunlight resistant, CMX-CMG, MSHA	General industrial
240	PUR yellow 80°C	0.34 mm ²	Ⓢ	General industrial
PUR	PUR black 80°C	0.34 mm ²	Ⓢ	General industrial
800	TPE gray 120°C	0.34 mm ²	Ⓢ	Robotic, hi-flex

Example		
Order No.	Type	Length
1405914	240	4.5
4-pos. M12 straight plug to M12 straight socket	cable type "240" (PUR yellow 80°C)	cable length of 4.5 m

4-pos. M12 socket, straight, to M8 plug, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	4.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-M8MS/ 0,5-542/FS SCO BK SAC-4P-M8MR/ 0,5-542/FS SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M8 -> Socket, straight M12-SPEEDCON	0.5 m	SAC-4P-M8MS/ 0,5-542/FS SCO BK	1406198
Plug straight M8 -> Socket, straight M12-SPEEDCON	1.5 m	SAC-4P-M8MS/ 1,5-542/FS SCO BK	1406197
Plug angled M8 -> Socket, straight M12-SPEEDCON	0.5 m	SAC-4P-M8MR/ 0,5-542/FS SCO BK	1406209
Plug angled M8 -> Socket, straight M12-SPEEDCON	1.5 m	SAC-4P-M8MR/ 1,5-542/FS SCO BK	1406208

Configurable cordsets

Configurable cordsets	Type	Order No.
Plug straight M8 -> Socket, straight M12-SPEEDCON	SAC-4P-M 8MS-FS SCO BK/.../...	1405904
Plug angled M8 -> Socket, straight M12-SPEEDCON	SAC-4P-M 8MR-FS SCO BK/.../...	1405909
Configuration options for cable type and length are shown on page 62	-	-

4-pos. M12 socket, angled, to M8 plug, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	4.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-M8MS/ 0,5-542/FR SCO BK SAC-4P-M8MR/ 0,5-542/FR SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M8 -> Socket, angled M12-SPEEDCON	0.5 m	SAC-4P-M8MS/ 0,5-542/FR SCO BK	1406200
Plug straight M8 -> Socket, angled M12-SPEEDCON	1.5 m	SAC-4P-M8MS/ 1,5-542/FR SCO BK	1406199
Plug angled M8 -> Socket, angled M12-SPEEDCON	0.5 m	SAC-4P-M8MR/ 0,5-542/FR SCO BK	1406211
Plug angled M8 -> Socket, angled M12-SPEEDCON	1.5 m	SAC-4P-M8MR/ 1,5-542/FR SCO BK	1406210

Configurable cordsets

Configurable cordsets	Type	Order No.
Plug straight M8 -> Socket, angled M12-SPEEDCON	SAC-4P-M 8MS-FR SCO BK/.../...	1405905
Plug angled M8 -> Socket, angled M12-SPEEDCON	SAC-4P-M 8MR-FR SCO BK/.../...	1405910
Configuration options for cable type and length are shown on page 62	-	-

4-pos. M12 plug, straight, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	4.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-MS/0,5-542/M8 FS SCO BK SAC-4P-MS/0,5-542/M8 FR SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-4P-MS/0,5-542/M8 FS SCO BK	1406216
Plug straight M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-4P-MS/1,5-542/M8 FS SCO BK	1406215
Plug straight M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-4P-MS/0,5-542/M8 FR SCO BK	1406219
Plug straight M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-4P-MS/1,5-542/M8 FR SCO BK	1406217

Configurable cordsets

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	SAC-4P-MS-M8FS SCO BK/.../...	1405912
Plug straight M12-SPEEDCON -> Socket, angled M8	SAC-4P-MS-M8FR SCO BK/.../...	1405913
Configuration options for cable type and length are shown on page 62	-	-

M12 sensor/actuator cordsets and cables

4-pos. M12 to M8 sensor/actuator cordsets

4-pos. M12 plug, angled, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	30 V
Cable diameter	4.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-MR/0,5-542/M8 FS SCO BK SAC-4P-MR/0,5-542/M8 FR SCO BK

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-4P-MR/0,5-542/M8 FS SCO BK	1406228
Plug angled M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-4P-MR/1,5-542/M8 FS SCO BK	1406227
Plug angled M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-4P-MR/0,5-542/M8 FR SCO BK	1406230
Plug angled M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-4P-MR/1,5-542/M8 FR SCO BK	1406229

Configurable cordsets	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M8	SAC-4P-MR-M8FS SCO BK/.../...	1405917
Plug angled M12-SPEEDCON -> Socket, angled M8	SAC-4P-MR-M8FR SCO BK/.../...	1405918
Configuration options for cable type and length are shown on page 62		-

Ordering information for configurable 4-pos. M12 to M8 sensor/actuator cordsets

Configurable order no./cable type/length	Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m. <i>Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.</i>
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Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	24 AWG	Ⓢ AWM2517	General industrial
535	PVC black 105°C	24 AWG	Ⓢ AWM2517	General industrial
240	PUR yellow 80°C	0.25 mm ²	Ⓢ	General industrial
PUR	PUR black 80°C	0.25 mm ²	Ⓢ	General industrial
800	TPE gray 120°C	0.25 mm ²	Ⓢ	Robotic, hi-flex

Example		
Order No.	Type	Length
1405912	240	4.5
4-pos. M12 straight plug to M8 straight socket	cable type "240" (PUR yellow 80°C)	cable length of 4.5 m

4-pos. shielded M12 socket, straight or angled, to open end, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	22
Nominal current I_N	4 A
Nominal voltage U_N (UL)	300 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	5.5 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P- 2,0-542/ FS SH SCO BK SAC-4P- 2,0-542/ FR SH SCO BK

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	2 m	SAC-4P- 2,0-542/ FS SH SCO BK	1406189
Free conductor end -> Socket, straight M12-SPEEDCON	5 m	SAC-4P- 5,0-542/ FS SH SCO BK	1406188
Free conductor end -> Socket, straight M12-SPEEDCON	10 m	SAC-4P-10,0-542/ FS SH SCO BK	1406187
Free conductor end -> Socket, angled M12-SPEEDCON	2 m	SAC-4P- 2,0-542/ FR SH SCO BK	1406192
Free conductor end -> Socket, angled M12-SPEEDCON	5 m	SAC-4P- 5,0-542/ FR SH SCO BK	1406191
Free conductor end -> Socket, angled M12-SPEEDCON	10 m	SAC-4P-10,0-542/ FR SH SCO BK	1406190

Configurable cordsets

Free conductor end -> Socket, straight M12-SPEEDCON	Type	Order No.
Free conductor end -> Socket, angled M12-SPEEDCON	SAC-4P-FS SH SCO BK/.../...	1405900
Configuration options for cable type and length are shown on page 64	SAC-4P-FR SH SCO BK/.../...	1405901

4-pos. shielded M12 plug, straight or angled, to open end, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	22
Nominal current I_N	4 A
Nominal voltage U_N (UL)	300 V
Nominal voltage U_N (IEC)	250 V
Cable diameter	5.5 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-MS/ 2,0-542 SH SCO BK SAC-4P-MR/ 2,0-542 SH SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	2 m	SAC-4P-MS/ 2,0-542 SH SCO BK	1406179
Plug straight M12-SPEEDCON -> Free conductor end	5 m	SAC-4P-MS/ 5,0-542 SH SCO BK	1406178
Plug straight M12-SPEEDCON -> Free conductor end	10 m	SAC-4P-MS/10,0-542 SH SCO BK	1406177
Plug angled M12-SPEEDCON -> Free conductor end	2 m	SAC-4P-MR/ 2,0-542 SH SCO BK	1406186
Plug angled M12-SPEEDCON -> Free conductor end	5 m	SAC-4P-MR/ 5,0-542 SH SCO BK	1406185
Plug angled M12-SPEEDCON -> Free conductor end	10 m	SAC-4P-MR/10,0-542 SH SCO BK	1406184

Configurable cordsets

Plug straight M12-SPEEDCON -> Free conductor end	Type	Order No.
Plug angled M12-SPEEDCON -> Free conductor end	SAC-4P-MS SH SCO BK/.../...	1405896
Configuration options for cable type and length are shown on page 64	SAC-4P-MR SH SCO BK/.../...	1405899

4-pos. shielded M12 plug, straight, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	22
Nominal current I_N	4 A
Nominal voltage U_N (UL)	300 V
Nominal voltage U_N (IEC)	250 V
Cable diameter	5.5 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-MS/0,5-542/ FSSH SCO BK SAC-4P-MS/0,5-542/ FRSH SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-4P-MS/0,5-542/ FSSH SCO BK	1406174
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-4P-MS/1,5-542/ FSSH SCO BK	1406173
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-4P-MS/0,5-542/ FRSH SCO BK	1406176
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-4P-MS/1,5-542/ FRSH SCO BK	1406175

Configurable cordsets

Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-4P-MS-FS SH SCO BK/.../...	1405894
Configuration options for cable type and length are shown on page 64	SAC-4P-MS-FR SH SCO BK/.../...	1405895

M12 sensor/actuator cordsets and cables

4-pos. shielded M12 sensor/actuator cordsets

4-pos. shielded M12 plug, angled, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	4
Conductor cross section (AWG)	22
Nominal current I _N	4 A
Nominal voltage U _N (UL)	300 V
Nominal voltage U _N (IEC)	250 V
Cable diameter	5.5 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-4P-MR/0,5-542/ FSSH SCO BK SAC-4P-MR/0,5-542/ FRSH SCO BK

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-4P-MR/0,5-542/ FSSH SCO BK	1406181
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-4P-MR/1,5-542/ FSSH SCO BK	1406180
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-4P-MR/0,5-542/ FRSH SCO BK	1406183
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-4P-MR/1,5-542/ FRSH SCO BK	1406182

Configurable cordsets	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-4P-MR-FS SH SCO BK/.../...	1405897
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-4P-MR-FR SH SCO BK/.../...	1405898
Configuration options for cable type and length are shown on page 64		-

Ordering information for configurable 4-pos. shielded M12 sensor/actuator cordsets

Configurable order no./cable type/length	Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m. <i>Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.</i>
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Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	22 AWG	Ⓢ ITC/PLTC sunlight resistant, CMX-CMG, MSHA	General industrial
535	PVC black 105°C	22 AWG	Ⓢ ITC/PLTC sunlight resistant, CMX-CMG, MSHA	General industrial
240	PUR yellow 80°C	0.34 mm ²	Ⓢ	General industrial
PUR	PUR black 80°C	0.34 mm ²	Ⓢ	General industrial

Example		
Order No.	Type	Length
1405894	240	0.4
4-pos. M12 straight plug to M12 straight socket, shielded	cable type "240" (PUR yellow 80°C)	cable length of 0.4 m

M12 sensor/actuator cordsets and cables

4-pos. shielded M12 to M8 sensor/actuator cordsets

4-pos. shielded M12 plug, straight, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	30 V
Cable diameter	4.9 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-4P-MS/0,5-542/M8FSSH SCOBK SAC-4P-MS/0,5-542/M8FRSH SCOBK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-4P-MS/0,5-542/M8FSSH SCOBK	1405994
Plug straight M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-4P-MS/1,5-542/M8FSSH SCOBK	1405993
Plug straight M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-4P-MS/0,5-542/M8FRSH SCOBK	1405996
Plug straight M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-4P-MS/1,5-542/M8FRSH SCOBK	1405995

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M8	SAC-4P-MS-M8FS SH SCO BK/.../...	1405800
Plug straight M12-SPEEDCON -> Socket, angled M8	SAC-4P-MS-M8FR SH SCO BK/.../...	1405805
Configuration options for cable type and length are shown on page 65	-	-

4-pos. shielded M12 plug, angled, to M8 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	4
Conductor cross section (AWG)	24
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	30 V
Cable diameter	4.9 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-4P-MR/0,5-542/M8FSSH SCOBK SAC-4P-MR/0,5-542/M8FRSH SCOBK

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M8	0.5 m	SAC-4P-MR/0,5-542/M8FSSH SCOBK	1405998
Plug angled M12-SPEEDCON -> Socket, straight M8	1.5 m	SAC-4P-MR/1,5-542/M8FSSH SCOBK	1405997
Plug angled M12-SPEEDCON -> Socket, angled M8	0.5 m	SAC-4P-MR/0,5-542/M8FRSH SCOBK	1406000
Plug angled M12-SPEEDCON -> Socket, angled M8	1.5 m	SAC-4P-MR/1,5-542/M8FRSH SCOBK	1405999

Configurable cordsets	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M8	SAC-4P-MR-M8FS SH SCO BK/.../...	1405806
Plug angled M12-SPEEDCON -> Socket, angled M8	SAC-4P-MR-M8FR SH SCO BK/.../...	1405809
Configuration options for cable type and length are shown on page 65	-	-

Ordering information for configurable 4-pos. shielded M12 to M8 sensor/actuator cordsets

Configurable order no./cable type/length	Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m. <i>Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.</i>
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Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	24 AWG	UL AWM2517	General industrial
535	PVC black 105°C	24 AWG	UL AWM2517	General industrial
240	PUR yellow 80°C	0.25 mm ²	UL	General industrial
PUR	PUR black 80°C	0.25 mm ²	UL	General industrial

Example		
Order No.	Type	Length
1405800	240	4.5
4-pos. M12 straight plug to M8 straight socket, shielded	cable type "240" (PUR yellow 80°C)	cable length of 4.5 m

M12 sensor/actuator cordsets and cables

5-pos. M12 sensor/actuator cordsets



M12 5-pos. cordsets

5-pos. M12 cordsets and extension cables are assembled with 5x22 AWG stranded copper conductors and follow the typical sensor wire color code of brown (pos. 1), white (pos. 2), blue (pos. 3), black (pos. 4) and gray (pos. 5). The cable jacket is constructed of PLTC rated, semirigid PVC, UL AWM style 2517. The PLTC rating allows the cable to be used in horizontal and vertical cable trays, or raceways in accordance with NEC Articles 725 and 727. The cable is sunlight resistant and rated for ambient temperatures of -30 to 105°C.

5-pos. M12 socket, straight or angled, to open end, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	5
Conductor cross section (AWG)	22
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	5.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-5P- 2,0-542/ FS SCO BK SAC-5P- 2,0-542/ FR SCO BK

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	2 m	SAC-5P- 2,0-542/ FS SCO BK	1406169
Free conductor end -> Socket, straight M12-SPEEDCON	5 m	SAC-5P- 5,0-542/ FS SCO BK	1406168
Free conductor end -> Socket, straight M12-SPEEDCON	10 m	SAC-5P-10,0-542/ FS SCO BK	1406167
Free conductor end -> Socket, angled M12-SPEEDCON	2 m	SAC-5P- 2,0-542/ FR SCO BK	1406172
Free conductor end -> Socket, angled M12-SPEEDCON	5 m	SAC-5P- 5,0-542/ FR SCO BK	1406171
Free conductor end -> Socket, angled M12-SPEEDCON	10 m	SAC-5P-10,0-542/ FR SCO BK	1406170

Configurable cordsets

	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	SAC-5P-FS SCO BK/.../...	1405892
Free conductor end -> Socket, angled M12-SPEEDCON	SAC-5P-FR SCO BK/.../...	1405893
Configuration options for cable type and length are shown on page 67		-

5-pos. M12 plug, straight or angled, to open end, PVC, yellow, 105°C



Common technical data	
Certification	Ⓢ
Number of positions	5
Conductor cross section (AWG)	22
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	5.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-5P-MS/ 2,0-542 SCO BK SAC-5P-MR/ 2,0-542 SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	2 m	SAC-5P-MS/ 2,0-542 SCO BK	1406159
Plug straight M12-SPEEDCON -> Free conductor end	5 m	SAC-5P-MS/ 5,0-542 SCO BK	1406158
Plug straight M12-SPEEDCON -> Free conductor end	10 m	SAC-5P-MS/10,0-542 SCO BK	1406157
Plug angled M12-SPEEDCON -> Free conductor end	2 m	SAC-5P-MR/ 2,0-542 SCO BK	1406166
Plug angled M12-SPEEDCON -> Free conductor end	5 m	SAC-5P-MR/ 5,0-542 SCO BK	1406165
Plug angled M12-SPEEDCON -> Free conductor end	10 m	SAC-5P-MR/10,0-542 SCO BK	1406164

Configurable cordsets

	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	SAC-5P-MS SCO BK/.../...	1405888
Plug angled M12-SPEEDCON -> Free conductor end	SAC-5P-MR SCO BK/.../...	1405891
Configuration options for cable type and length are shown on page 67		-

5-pos. M12 plug, straight, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	5
Conductor cross section (AWG)	22
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	5.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-5P-MS/ 0,5-542/ FS SCO BK SAC-5P-MS/ 0,5-542/ FR SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-5P-MS/ 0,5-542/ FS SCO BK	1406154
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-5P-MS/ 1,5-542/ FS SCO BK	1406153
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-5P-MS/ 0,5-542/ FR SCO BK	1406156
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-5P-MS/ 1,5-542/ FR SCO BK	1406155

Configurable cordsets

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-5P-MS-FS SCO BK/.../...	1405886
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-5P-MS-FR SCO BK/.../...	1405887
Configuration options for cable type and length are shown on page 67	-	-

5-pos. M12 plug, angled, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	5
Conductor cross section (AWG)	22
Nominal current I_N	4 A
Nominal voltage U_N (UL)	125 V
Nominal voltage U_N (IEC)	60 V
Cable diameter	5.4 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-5P-MR/ 0,5-542/ FS SCO BK SAC-5P-MR/ 0,5-542/ FR SCO BK

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-5P-MR/ 0,5-542/ FS SCO BK	1406161
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-5P-MR/ 1,5-542/ FS SCO BK	1406160
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-5P-MR/ 0,5-542/ FR SCO BK	1406163
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-5P-MR/ 1,5-542/ FR SCO BK	1406162

Configurable cordsets

Configurable cordsets	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-5P-MR-FS SCO BK/.../...	1405889
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-5P-MR-FR SCO BK/.../...	1405890
Configuration options for cable type and length are shown on page 67	-	-

Ordering information for configurable 5-pos. M12 sensor/actuator cordsets

Configurable order no./cable type/length

Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m.

Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.

Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	22 AWG	UL ITC/PLTC sunlight resistant, CMX-CMG, MSHA	General industrial
535	PVC black 105°C	22 AWG	UL ITC/PLTC sunlight resistant, CMX-CMG, MSHA	General industrial
240	PUR yellow 80°C	0.34 mm ²	UL	General industrial
PUR	PUR black 80°C	0.34 mm ²	UL	General industrial
800	TPE gray 120°C	0.34 mm ²	UL	Robotic, hi-flex

Example		
Order No.	Type	Length
1405886	240	4.5
5-pos. M12 straight plug to M12 straight socket	cable type "240" (PUR yellow 80°C)	cable length of 4.5 m

M12 sensor/actuator cordsets and cables

5-pos. shielded M12 sensor/actuator cordsets

5-pos. shielded M12 socket, straight or angled, to open end, PVC, yellow, 105°C



Common technical data	
Certification	Ⓜ
Number of positions	5
Conductor cross section (AWG)	22
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	60 V
Cable diameter	5.9 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-5P- 2,0-542/ FS SH SCO BK SAC-5P- 2,0-542/ FR SH SCO BK

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	2 m	SAC-5P- 2,0-542/ FS SH SCO BK	1406149
Free conductor end -> Socket, straight M12-SPEEDCON	5 m	SAC-5P- 5,0-542/ FS SH SCO BK	1406148
Free conductor end -> Socket, straight M12-SPEEDCON	10 m	SAC-5P-10,0-542/ FS SH SCO BK	1406147
Free conductor end -> Socket, angled M12-SPEEDCON	2 m	SAC-5P- 2,0-542/ FR SH SCO BK	1406152
Free conductor end -> Socket, angled M12-SPEEDCON	5 m	SAC-5P- 5,0-542/ FR SH SCO BK	1406151
Free conductor end -> Socket, angled M12-SPEEDCON	10 m	SAC-5P-10,0-542/ FR SH SCO BK	1406150

Configurable cordsets	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	SAC-5P-FS SH SCO BK/.../...	1405884
Free conductor end -> Socket, angled M12-SPEEDCON	SAC-5P-FR SH SCO BK/.../...	1405885
Configuration options for cable type and length are shown on page 69	-	-

5-pos. shielded M12 plug, straight or angled, to open end, PVC, yellow, 105°C



Common technical data	
Certification	Ⓜ
Number of positions	5
Conductor cross section (AWG)	22
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	60 V
Cable diameter	5.9 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-5P-MS/ 2,0-542 SH SCO BK SAC-5P-MR/ 2,0-542 SH SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	2 m	SAC-5P-MS/ 2,0-542 SH SCO BK	1406139
Plug straight M12-SPEEDCON -> Free conductor end	5 m	SAC-5P-MS/ 5,0-542 SH SCO BK	1406138
Plug straight M12-SPEEDCON -> Free conductor end	10 m	SAC-5P-MS/10,0-542 SH SCO BK	1406136
Plug angled M12-SPEEDCON -> Free conductor end	2 m	SAC-5P-MR/ 2,0-542 SH SCO BK	1406146
Plug angled M12-SPEEDCON -> Free conductor end	5 m	SAC-5P-MR/ 5,0-542 SH SCO BK	1406145
Plug angled M12-SPEEDCON -> Free conductor end	10 m	SAC-5P-MR/10,0-542 SH SCO BK	1406144

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	SAC-5P-MS SH SCO BK/.../...	1405879
Plug angled M12-SPEEDCON -> Free conductor end	SAC-5P-MR SH SCO BK/.../...	1405883
Configuration options for cable type and length are shown on page 69	-	-

5-pos. shielded M12 plug, straight, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	Ⓜ
Number of positions	5
Conductor cross section (AWG)	22
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	60 V
Cable diameter	5.9 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-5P-MS/0,5-542/ FSSH SCO BK SAC-5P-MS/0,5-542/ FRSH SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-5P-MS/0,5-542/ FSSH SCO BK	1406133
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-5P-MS/1,5-542/ FSSH SCO BK	1406132
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-5P-MS/0,5-542/ FRSH SCO BK	1406135
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-5P-MS/1,5-542/ FRSH SCO BK	1406134

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-5P-MS-FS SH SCO BK/.../...	1405877
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-5P-MS-FR SH SCO BK/.../...	1405878
Configuration options for cable type and length are shown on page 69	-	-

5-pos. shielded M12 plug, angled, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data

Certification	UL
Number of positions	5
Conductor cross section (AWG)	22
Nominal current I _N	4 A
Nominal voltage U _N (UL)	125 V
Nominal voltage U _N (IEC)	60 V
Cable diameter	5.9 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-5P-MR/0,5-542/ FSSH SCO BK SAC-5P-MR/0,5-542/ FRSH SCO BK

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-5P-MR/0,5-542/ FSSH SCO BK	1406141
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-5P-MR/1,5-542/ FSSH SCO BK	1406140
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-5P-MR/0,5-542/ FRSH SCO BK	1406143
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-5P-MR/1,5-542/ FRSH SCO BK	1406142

Configurable cordsets

Configurable cordsets	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-5P-MR-FS SH SCO BK/.../...	1405880
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-5P-MR-FR SH SCO BK/.../...	1405881
Configuration options for cable type and length are shown on page 69	-	-

Ordering information for configurable 5-pos. shielded M12 sensor/actuator cordsets

Configurable order no./cable type/length

Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m.

Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.

Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	22 AWG	UL ITC/PLTC sunlight resistant, CMX-CMG, MSHA	General industrial
535	PVC black 105°C	22 AWG	UL ITC/PLTC sunlight resistant, CMX-CMG, MSHA	General industrial
240	PUR yellow 80°C	0.34 mm ²	UL	General industrial
PUR	PUR black 80°C	0.34 mm ²	UL	General industrial

Example		
Order No.	Type	Length
1405877	240	0.4
5-pos. M12 straight plug to M12 straight socket, shielded	cable type "240" (PUR yellow 80°C)	cable length of 0.4 m

M12 sensor/actuator cordsets and cables

8-pos, M12 sensor/actuator cordsets



M12 8-pos. cordsets

8-pos. M12 cordsets and extension cables are assembled with 8x24 AWG stranded copper conductors and follow the typical sensor wire color code of white (pos. 1), brown (pos. 2), green (pos. 3), yellow (pos. 4), gray (pos. 5), pink (pos. 6), blue (pos. 7) and red (pos. 8). The cable jacket is constructed of a semirigid PVC, UL AWM style 2517. The cable is sunlight resistant and rated for ambient temperatures of -30 to 105°C.

8-pos. M12 socket, straight or angled, to open end, PVC, yellow, 105°C



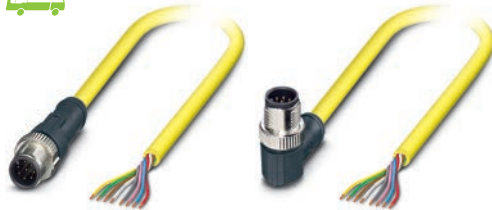
SAC-8P- 2,0-542/ FS SCO BK SAC-8P- 2,0-542/ FR SCO BK

Common technical data	
Certification	•UL•
Number of positions	8
Conductor cross section (AWG)	24
Nominal current I_N	2 A
Nominal voltage U_N (UL)	30 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	5.7 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	2 m	SAC-8P- 2,0-542/ FS SCO BK	1406105
Free conductor end -> Socket, straight M12-SPEEDCON	5 m	SAC-8P- 5,0-542/ FS SCO BK	1406104
Free conductor end -> Socket, straight M12-SPEEDCON	10 m	SAC-8P-10,0-542/ FS SCO BK	1406103
Free conductor end -> Socket, angled M12-SPEEDCON	2 m	SAC-8P- 2,0-542/ FR SCO BK	1406108
Free conductor end -> Socket, angled M12-SPEEDCON	5 m	SAC-8P- 5,0-542/ FR SCO BK	1406107
Free conductor end -> Socket, angled M12-SPEEDCON	10 m	SAC-8P-10,0-542/ FR SCO BK	1406106

Configurable cordsets	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	SAC-8P-FS SCO BK/.../...	1405851
Free conductor end -> Socket, angled M12-SPEEDCON	SAC-8P-FR SCO BK/.../...	1405852
Configuration options for cable type and length are shown on page 71		-

8-pos. M12 plug, straight or angled, to open end, PVC, yellow, 105°C



SAC-8P-MS/ 2,0-542 SCO BK SAC-8P-MR/ 2,0-542 SCO BK

Common technical data	
Certification	•UL•
Number of positions	8
Conductor cross section (AWG)	24
Nominal current I_N	2 A
Nominal voltage U_N (UL)	30 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	5.7 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	2 m	SAC-8P-MS/ 2,0-542 SCO BK	1406094
Plug straight M12-SPEEDCON -> Free conductor end	5 m	SAC-8P-MS/ 5,0-542 SCO BK	1406093
Plug straight M12-SPEEDCON -> Free conductor end	10 m	SAC-8P-MS/10,0-542 SCO BK	1406092
Plug angled M12-SPEEDCON -> Free conductor end	2 m	SAC-8P-MR/ 2,0-542 SCO BK	1406102
Plug angled M12-SPEEDCON -> Free conductor end	5 m	SAC-8P-MR/ 5,0-542 SCO BK	1406101
Plug angled M12-SPEEDCON -> Free conductor end	10 m	SAC-8P-MR/10,0-542 SCO BK	1406100

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	SAC-8P-MS SCO BK/.../...	1405847
Plug angled M12-SPEEDCON -> Free conductor end	SAC-8P-MR SCO BK/.../...	1405850
Configuration options for cable type and length are shown on page 71		-

8-pos. M12 plug, straight, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	8
Conductor cross section (AWG)	24
Nominal current I_N	2 A
Nominal voltage U_N (UL)	30 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	5.7 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-8P-MS/ 0,5-542/ FS SCO BK SAC-8P-MS/ 0,5-542/ FR SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-8P-MS/ 0,5-542/ FS SCO BK	1406089
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-8P-MS/ 1,5-542/ FS SCO BK	1406088
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-8P-MS/ 0,5-542/ FR SCO BK	1406091
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-8P-MS/ 1,5-542/ FR SCO BK	1406090

Configurable cordsets

	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-8P-MS-FS SCO BK/.../...	1405845
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-8P-MS-FR SCO BK/.../...	1405846
Configuration options for cable type and length are shown on page 71	-	-

8-pos. M12 plug, angled, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data	
Certification	UL
Number of positions	8
Conductor cross section (AWG)	24
Nominal current I_N	2 A
Nominal voltage U_N (UL)	30 V
Nominal voltage U_N (IEC)	30 V
Cable diameter	5.7 mm ± 0.2 mm
Degree of protection	IP65/IP67/IP68

SAC-8P-MR/ 0,5-542/ FS SCO BK SAC-8P-MR/ 0,5-542/ FR SCO BK

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-8P-MR/ 0,5-542/ FS SCO BK	1406096
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-8P-MR/ 1,5-542/ FS SCO BK	1406095
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-8P-MR/ 0,5-542/ FR SCO BK	1406099
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-8P-MR/ 1,5-542/ FR SCO BK	1406097

Configurable cordsets

	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-8P-MR-FS SCO BK/.../...	1405848
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-8P-MR-FR SCO BK/.../...	1405849
Configuration options for cable type and length are shown on page 71	-	-

Ordering information for configurable 8-pos. M12 sensor/actuator cordsets

Configurable order no./cable type/length

Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m.

Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.

Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	24 AWG	UL AWM2517	General industrial
535	PVC black 105°C	24 AWG	UL AWM2517	General industrial
240	PUR yellow 80°C	0.25 mm ²	UL	General industrial
PUR	PUR black 80°C	0.25 mm ²	UL	General industrial
800	TPE gray 120°C	0.25 mm ²	UL	Robotic, hi-flex

Example		
Order No.	Type	Length
1405845	240	4.5
8-pos. M12 straight plug to M12 straight socket	cable type "240" (PUR yellow 80°C)	cable length of 4.5 m

M12 sensor/actuator cordsets and cables

8-pos, shielded M12 sensor/actuator cordsets

8-pos. shielded M12 socket, straight or angled, to open end, PVC, yellow, 105°C



Common technical data

Certification	Ⓢ
Number of positions	8
Conductor cross section (AWG)	24
Nominal current I _N	2 A
Nominal voltage U _N (UL)	30 V
Nominal voltage U _N (IEC)	30 V
Cable diameter	6.3 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-8P- 2,0-542/ FS SH SCO BK SAC-8P- 2,0-542/ FR SH SCO BK

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	2 m	SAC-8P- 2,0-542/ FS SH SCO BK	1406083
Free conductor end -> Socket, straight M12-SPEEDCON	5 m	SAC-8P- 5,0-542/ FS SH SCO BK	1406082
Free conductor end -> Socket, straight M12-SPEEDCON	10 m	SAC-8P-10,0-542/ FS SH SCO BK	1406081
Free conductor end -> Socket, angled M12-SPEEDCON	2 m	SAC-8P- 2,0-542/ FR SH SCO BK	1406087
Free conductor end -> Socket, angled M12-SPEEDCON	5 m	SAC-8P- 5,0-542/ FR SH SCO BK	1406086
Free conductor end -> Socket, angled M12-SPEEDCON	10 m	SAC-8P-10,0-542/ FR SH SCO BK	1406084

Configurable cordsets

Configurable cordsets	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	SAC-8P-FS SH SCO BK/.../...	1405843
Free conductor end -> Socket, angled M12-SPEEDCON	SAC-8P-FR SH SCO BK/.../...	1405844
Configuration options for cable type and length are shown on page 73	-	-

8-pos. shielded M12 plug, straight or angled, to open end, PVC, yellow, 105°C



Common technical data

Certification	Ⓢ
Number of positions	8
Conductor cross section (AWG)	24
Nominal current I _N	2 A
Nominal voltage U _N (UL)	30 V
Nominal voltage U _N (IEC)	30 V
Cable diameter	6.3 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-8P-MS/ 2,0-542 SH SCO BK SAC-8P-MR/ 2,0-542 SH SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	2 m	SAC-8P-MS/ 2,0-542 SH SCO BK	1406073
Plug straight M12-SPEEDCON -> Free conductor end	5 m	SAC-8P-MS/ 5,0-542 SH SCO BK	1406072
Plug straight M12-SPEEDCON -> Free conductor end	10 m	SAC-8P-MS/10,0-542 SH SCO BK	1406071
Plug angled M12-SPEEDCON -> Free conductor end	2 m	SAC-8P-MR/ 2,0-542 SH SCO BK	1406080
Plug angled M12-SPEEDCON -> Free conductor end	5 m	SAC-8P-MR/ 5,0-542 SH SCO BK	1406079
Plug angled M12-SPEEDCON -> Free conductor end	10 m	SAC-8P-MR/10,0-542 SH SCO BK	1406078

Configurable cordsets

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	SAC-8P-MS SH SCO BK/.../...	1405839
Plug angled M12-SPEEDCON -> Free conductor end	SAC-8P-MR SH SCO BK/.../...	1405842
Configuration options for cable type and length are shown on page 73	-	-

8-pos. shielded M12 plug, straight, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data

Certification	Ⓢ
Number of positions	8
Conductor cross section (AWG)	24
Nominal current I _N	2 A
Nominal voltage U _N (UL)	30 V
Nominal voltage U _N (IEC)	30 V
Cable diameter	6.3 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-8P-MS/0,5-542/ FSSH SCO BK SAC-8P-MS/0,5-542/ FRSH SCO BK

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-8P-MS/0,5-542/ FSSH SCO BK	1406068
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-8P-MS/1,5-542/ FSSH SCO BK	1406067
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-8P-MS/0,5-542/ FRSH SCO BK	1406070
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-8P-MS/1,5-542/ FRSH SCO BK	1406069

Configurable cordsets

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-8P-MS-FS SH SCO BK/.../...	1405836
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-8P-MS-FR SH SCO BK/.../...	1405838
Configuration options for cable type and length are shown on page 73	-	-

M12 sensor/actuator cordsets and cables

8-pos, shielded M12 sensor/actuator cordsets

8-pos. shielded M12 plug, angled, to M12 socket, straight or angled, PVC, yellow, 105°C



Common technical data

Certification	UL
Number of positions	8
Conductor cross section (AWG)	24
Nominal current I _N	2 A
Nominal voltage U _N (UL)	30 V
Nominal voltage U _N (IEC)	30 V
Cable diameter	6.3 mm ± 0.2 mm
Degree of protection	IP65/67

SAC-8P-MR/0,5-542/ FSSH SCO BK SAC-8P-MR/0,5-542/ FRSH SCO BK

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-8P-MR/0,5-542/ FSSH SCO BK	1406075
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-8P-MR/1,5-542/ FSSH SCO BK	1406074
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-8P-MR/0,5-542/ FRSH SCO BK	1406077
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-8P-MR/1,5-542/ FRSH SCO BK	1406076

Configurable cordsets

Configurable cordsets	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-8P-MR-FS SH SCO BK/.../...	1405840
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-8P-MR-FR SH SCO BK/.../...	1405841
Configuration options for cable type and length are shown on page 73	-	-

Ordering information for configurable 8-pos. shielded M12 sensor/actuator cordsets

Configurable order no./cable type/length

Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m.

Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.

Cable type	Description	Size	Approvals	Usage area
542	PVC yellow 105°C	24 AWG	UL AWM2517	General industrial
535	PVC black 105°C	24 AWG	UL AWM2517	General industrial
240	PUR yellow 80°C	0.25 mm ²	UL	General industrial
PUR	PUR black 80°C	0.25 mm ²	UL	General industrial

Example		
Order No.	Type	Length
1405836	240	0.4
8-pos. M12 straight plug to M12 straight socket, shielded	cable type "240" (PUR yellow 80°C)	cable length of 0.4 m

M12 sensor/actuator boxes

M12 thread with LEDs, for pnp sensors



M12 SAC boxes

Machine mounted sensor boxes are replacing the time consuming and error prone marshalling cabinet for field I/O. The M12 IP65/67 box can be mounted directly on the machine, offering the fastest connection for sensor wires. The use of a sensor box eliminates many of the issues with marshalling cabinets, i.e., wiring errors, high installation costs and long downtimes to replace failed sensor wiring. The PLC is connected to the sensor box via a master cable that is supplied either pre-molded or for field wiring to length. M12 boxes are available with either 4, 6 or 8 slots with integrated SPEEDCON threads. Single-occupied boxes allow one point of I/O to be connected to each slot, while double-occupied boxes allow two points of I/O to be connected to each slot when used in conjunction with a Y-distributor.

M12 sensor boxes (pnp) with LEDs, single occupancy, molded master cable



Common technical data	
Certification	
Number of positions	4
Signal type	pnp
I/O per slot	Single
Status indication (LED)	Yes
Nominal current I _N per I/O slot (IEC)	4 A
Nominal voltage U _N (IEC)	24 V DC
Master cable type	PUR/PVC black
Degree of protection	IP65/67

SACB-4/ 4-L- 5,0PUR SCO P

SACB-8/ 8-L- 5,0PUR SCO P

Number of slots	Master cable length	Type	Order No.	Pcs. / Pkt.
4	5 m	SACB-4/ 4-L- 5,0PUR SCO P	1452576	1
4	10 m	SACB-4/ 4-L-10,0PUR SCO P	1452589	1
6	5 m	SACB-6/ 6-L- 5,0PUR SCO P	1452631	1
6	10 m	SACB-6/ 6-L-10,0PUR SCO P	1452644	1
8	5 m	SACB-8/ 8-L- 5,0PUR SCO P	1452699	1
8	10 m	SACB-8/ 8-L-10,0PUR SCO P	1452709	1

Configurable sensor/actuator boxes	Type	Order No.	Pcs. / Pkt.
4 slots	SACB-4/ 4-L SCO P PUR/	1401376	1
6 slots	SACB-6/ 6-L SCO P PUR/	1401379	1
8 slots	SACB-8/ 8-L SCO P PUR/	1401382	1
Configuration options for cable length are shown on page 75	-	-	-

M12 sensor boxes (pnp) with LEDs, single occupancy, top hat with pluggable terminal blocks (no cable)



SACB-4/ 4-L-C SCO P

SACB-8/ 8-L-C SCO P

Common technical data	
Certification	
Number of positions	4
Signal type	pnp
I/O per slot	Single
Status indication (LED)	Yes
Nominal current I _N per I/O slot (IEC)	4 A
Nominal voltage U _N (IEC)	24 V DC
Degree of protection	IP65/67

Number of slots	Type	Order No.	Pcs. / Pkt.
4	SACB-4/ 4-L-C SCO P	1452806	1
6	SACB-6/ 6-L-C SCO P	1452822	1
8	SACB-8/ 8-L-C SCO P	1452848	1

M12 sensor boxes (pnp) with LEDs, double occupancy, molded master cable



Common technical data

Certification	
Number of positions	5
Signal type	pnp
I/O per slot	Double
Status indication (LED)	Yes
Nominal current I_N per I/O slot (IEC)	4 A
Nominal voltage U_N (IEC)	24 V DC
Master cable type	PUR/PVC black
Degree of protection	IP65/67

SACB-4/ 8-L- 5,0PUR SCO P

SACB-8/16-L- 5,0PUR SCO P

Number of slots	Master cable length	Type	Order No.	Pcs. / Pkt.
4	5 m	SACB-4/ 8-L- 5,0PUR SCO P	1452602	1
4	10 m	SACB-4/ 8-L-10,0PUR SCO P	1452615	1
6	5 m	SACB-6/12-L- 5,0PUR SCO P	1452660	1
6	10 m	SACB-6/12-L-10,0PUR SCO P	1452673	1
8	5 m	SACB-8/16-L- 5,0PUR SCO P	1452725	1
8	10 m	SACB-8/16-L-10,0PUR SCO P	1452738	1

Configurable sensor/actuator boxes

Configurable sensor/actuator boxes	Type	Order No.	Pcs. / Pkt.
4 slots	SACB-4/ 8-L SCO P PUR/	1401419	1
6 slots	SACB-6/12-L SCO P PUR/	1401380	1
8 slots	SACB-8/16-L SCO P PUR/	1401383	1
Configuration options for cable length are shown on page 75	-	-	-

M12 sensor boxes (pnp) with LEDs, double occupancy, top hat with pluggable terminal blocks (no cable)



SACB-4/ 8-L-C SCO P

SACB-8/16-L-C SCO P

Common technical data

Certification	
Number of positions	5
Signal type	pnp
I/O per slot	Double
Status indication (LED)	Yes
Nominal current I_N per I/O slot (IEC)	4 A
Nominal voltage U_N (IEC)	24 V DC
Degree of protection	IP65/67

Number of slots	Type	Order No.	Pcs. / Pkt.
4	SACB-4/ 8-L-C SCO P	1452819	1
6	SACB-6/12-L-C SCO P	1452835	1
8	SACB-8/16-L-C SCO P	1452851	1

Ordering information for configurable M12, single or double occupancy sensor/actuator boxes

Configurable order no./length

Configurable order numbers allow selection of cable type and length, from 0.5 m to 50 m.

Note: When measuring length, only the cable material is considered, i.e., not the sensor box. Lengths from 0.5 to 50 m are available in increments of 0.5 m.

Example	
Order No.	Length
1401382	34.5
M12 sensor box (pnp) with LEDs, single occupancy and eight slots	cable length of 34.5 m

M12 sensor/actuator boxes
M12 thread with LEDs, for npn sensors

M12 sensor boxes (npn) with LEDs, single occupancy, molded master cable



Common technical data

Certification	UL
Number of positions	4
Signal type	npn
I/O per slot	Single
Status indication (LED)	Yes
Nominal current I _N per I/O slot (IEC)	4 A
Nominal voltage U _N (IEC)	24 V DC
Master cable type	PUR/PVC black
Degree of protection	IP65/67

SACB-4/ 4-L- 5,0PUR SCO P NPN SACB-8/ 8-L- 5,0PUR SCO P NPN

Number of slots	Master cable length	Type	Order No.	Pcs. / Pkt.
4	5 m	SACB-4/ 4-L- 5,0PUR SCO P NPN	1405678	1
4	10 m	SACB-4/ 4-L-10,0PUR SCO P NPN	1405687	1
6	5 m	SACB-6/ 6-L- 5,0PUR SCO P NPN	1405733	1
6	10 m	SACB-6/ 6-L-10,0PUR SCO P NPN	1405734	1
8	5 m	SACB-8/ 8-L- 5,0PUR SCO P NPN	1405737	1
8	10 m	SACB-8/ 8-L-10,0PUR SCO P NPN	1405738	1

M12 sensor boxes (npn) with LEDs, double occupancy, molded master cable



Common technical data

Certification	UL
Number of positions	5
Signal type	npn
I/O per slot	Double
Status indication (LED)	Yes
Nominal current I _N per I/O slot (IEC)	4 A
Nominal voltage U _N (IEC)	24 V DC
Master cable type	PUR/PVC black
Degree of protection	IP65/67

SACB-4/ 8-L- 5,0PUR SCO P NPN SACB-8/16-L- 5,0PUR SCO P NPN

Number of slots	Master cable length	Type	Order No.	Pcs. / Pkt.
4	5 m	SACB-4/ 8-L- 5,0PUR SCO P NPN	1405713	1
4	10 m	SACB-4/ 8-L-10,0PUR SCO P NPN	1405732	1
6	5 m	SACB-6/12-L- 5,0PUR SCO P NPN	1405735	1
6	10 m	SACB-6/12-L-10,0PUR SCO P NPN	1405736	1
8	5 m	SACB-8/16-L- 5,0PUR SCO P NPN	1405739	1
8	10 m	SACB-8/16-L-10,0PUR SCO P NPN	1405740	1

M12 sensor boxes (universal) without LEDs, single occupancy, molded master cable



SACB-4/ 4- 5,0PUR SCO P



SACB-8/ 8- 5,0PUR SCO P

Common technical data

Certification	
Number of positions	4
Signal type	Universal
I/O per slot	Single
Status indication (LED)	No
Nominal current I_N per I/O slot (IEC)	4 A
Nominal voltage U_N (IEC)	120 V
Master cable type	PUR/PVC black
Degree of protection	IP65/67

Number of slots	Master cable length	Type	Order No.	Pcs. / Pkt.
4	5 m	SACB-4/ 4- 5,0PUR SCO P	1452398	1
4	10 m	SACB-4/ 4-10,0PUR SCO P	1452408	1
6	5 m	SACB-6/ 6- 5,0PUR SCO P	1452453	1
6	10 m	SACB-6/ 6-10,0PUR SCO P	1452466	1
8	5 m	SACB-8/ 8- 5,0PUR SCO P	1452518	1
8	10 m	SACB-8/ 8-10,0PUR SCO P	1452521	1

M12 sensor boxes (universal) without LEDs, single occupancy, top hat with pluggable terminal blocks (no cable)



SACB-4/ 4-C SCO P



SACB-8/ 8-C SCO P

Common technical data

Certification	
Number of positions	4
Signal type	Universal
I/O per slot	Single
Status indication (LED)	No
Nominal current I_N per I/O slot (IEC)	4 A
Nominal voltage U_N (IEC)	120 V
Degree of protection	IP65/67

Number of slots	Type	Order No.	Pcs. / Pkt.
4	SACB-4/ 4-C SCO P	1452741	1
6	SACB-6/ 6-C SCO P	1452767	1
8	SACB-8/ 8-C SCO P	1452783	1

M12 sensor boxes (universal) without LEDs, double occupancy, molded master cable



SACB-4/ 8- 5,0PUR SCO P



SACB-8/16- 5,0PUR SCO P

Common technical data

Certification	
Number of positions	5
Signal type	Universal
I/O per slot	Double
Status indication (LED)	No
Nominal current I_N per I/O slot (IEC)	4 A
Nominal voltage U_N (IEC)	120 V
Master cable type	PUR/PVC black
Degree of protection	IP65/67

Number of slots	Master cable length	Type	Order No.	Pcs. / Pkt.
4	5 m	SACB-4/ 8- 5,0PUR SCO P	1452424	1
4	10 m	SACB-4/ 8-10,0PUR SCO P	1452437	1
6	5 m	SACB-6/12- 5,0PUR SCO P	1452482	1
6	10 m	SACB-6/12-10,0PUR SCO P	1452495	1
8	5 m	SACB-8/16- 5,0PUR SCO P	1452547	1
8	10 m	SACB-8/16-10,0PUR SCO P	1452550	1

M12 sensor/actuator boxes

M12 thread without LEDs, for pnp or npn sensors

M12 sensor boxes (universal) without LEDs, double occupancy, top hat with pluggable terminal blocks (no cable)



Common technical data

Certification	
Number of positions	5
Signal type	Universal
I/O per slot	Double
Status indication (LED)	No
Nominal current I _N per I/O slot (IEC)	4 A
Nominal voltage U _N (IEC)	120 V
Degree of protection	IP65/67

Number of slots	Type	Order No.	Pcs. / Pkt.
4	SACB-4/ 8-C SCO P	1452754	1
6	SACB-6/12-C SCO P	1452770	1
8	SACB-8/16-C SCO P	1452796	1

M12 sensor box master cable for field-terminated sensor boxes

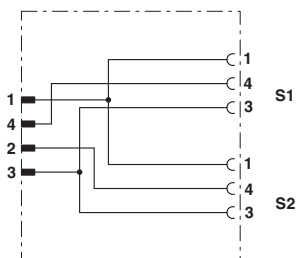
Sensor box order number	Sensor box description	Bulk cable order number	Bulk cable description	Length
1452806 1452741	4 slots, single occupancy	1503328	7-pos., PUR, black, 4x0.34 mm ² and 3x0.75 mm ²	50 m
1452822 1452767	6 slots, single occupancy	1503331	9-pos., PUR, black, 6x0.34 mm ² and 3x0.75 mm ²	50 m
1452848 1452783	8 slots, single occupancy	1503344	11-pos., PUR, black, 8x0.34 mm ² and 3x0.75 mm ²	50 m
1452819 1452754	4 slots, double occupancy	1503357	11-pos., PUR, black, 8x0.5 mm ² and 3x1 mm ²	50 m
1452835 1452770	6 slots, double occupancy	1503360	15-pos., PUR, black, 12x0.5 mm ² and 3x1 mm ²	50 m
1452851 1452796	8 slots, double occupancy	1503373	19-pos., PUR, black, 16x0.5 mm ² and 3x1 mm ²	50 m



M12 T and Y distributors

Sometimes the ideal cabling topology for a system requires the use of T and Y adapters, or thread converters. Y distributors allow a system to bring two lines of I/O into one receptacle slot. Additionally, T distributors are used when a drop is required off a trunk line. Finally, for sensors with a premolded M8 or M12 connector that is not the same thread size as a receptacle, adapters allow the user to increase or decrease the thread size.

3-pos. M12 to M8 Y distributor



Common technical data

Certification	
Number of positions	3
Nominal current I_N (IEC)	4 A
Nominal voltage U_N (IEC)	60 V
Degree of protection	IP65/67

Design

Plug straight M12-SPEEDCON -> Socket, straight M8
Plug straight M12 -> Socket, straight M8

Type

SAC-3P-Y/2XM 8FS SCO
SAC-3P-M12Y/2XM 8FS

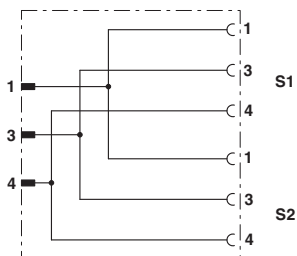
Order No.

1523984
1683471

Pcs. / Pkt.

5
5

3-pos., M12 to M8 Y distributor, parallel



Technical data

Certification	
Design	Plug straight M12 -> Socket, straight M8
Number of positions	3
Nominal current I_N (IEC)	4 A
Nominal voltage U_N (IEC)	60 V
Degree of protection	IP65/67

Type

SAC-3P-M12Y/2XM 8FS VP

Order No.

1683549

Pcs. / Pkt.

5

3-pos., M12 to M8 adapters



SAC-3P-M 8MS-M12FS



SAC-3P-M12MS-M 8FS

Common technical data

Certification	
Number of positions	3
Nominal current I_N (IEC)	4 A
Nominal voltage U_N (IEC)	60 V
Degree of protection	IP65/67

Design

Plug straight M8 -> Socket, straight M12
Plug straight M12 -> Socket, straight M8
Plug straight M12 -> Socket, straight M8 Snap-In

Type

SAC-3P-M 8MS-M12FS
SAC-3P-M12MS-M 8FS
SAC-3P-M12MS-M 8SIFS

Order No.

1519749
1519752
1519781

Pcs. / Pkt.

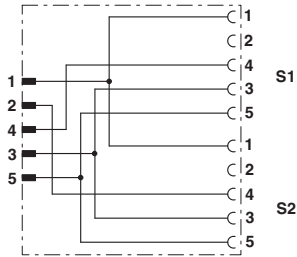
5
5
5

M12 sensor/actuator adapters

M12 T and Y distributors

3-pos. + PE, M12 Y distributors

1511789 is 3 mm wider than the other articles and is intended for field-wired connectors

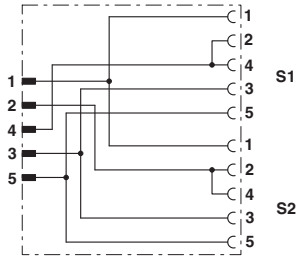


Common technical data	
Certification	
Number of positions	3
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	60 V
Degree of protection	IP65/67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-3P-Y/2XFS PE SCO	1523971	5
Plug straight M12 -> Socket, straight M12	SAC-3P-M12Y/2XM12FS PE	1683455	5
Plug straight M12 -> Socket, straight M12	SAC-3P-M12Y/2XM12FS PE S21	1511789	5

3-pos. + PE, M12 Y distributors and T distributor, bridged

1514016 is 3 mm wider than the other articles and is intended for field-wired connectors



Common technical data	
Certification	
Number of positions	3
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	60 V
Degree of protection	IP65/67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-3P-Y/2XFS B PE SCO	1523968	5
Plug straight M12 -> Socket, straight M12	SAC-3P-M12Y/2XM12FS B PE	1683413	5
Plug straight M12 -> Socket, straight M12	SAC-3P-M12Y/2XM12FS B PE S21	1514016	5
Plug straight M12 -> Socket, straight M12	SAC-3P-M12T/2XM12 B PE	1519723	1

4-pos., M12 to M8 adapters



SAC-4P-M 8MS-M12FS



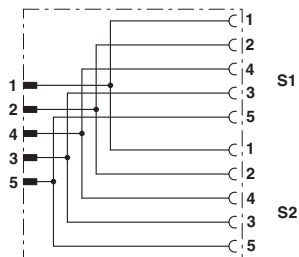
SAC-4P-M12MS-M 8FS

Common technical data	
Certification	
Number of positions	4
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	30 V
Degree of protection	IP65/67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M8 -> Socket, straight M12	SAC-4P-M 8MS-M12FS	1519736	5
Plug straight M12 -> Socket, straight M8	SAC-4P-M12MS-M 8FS	1519765	5
Plug straight M12 -> Socket, straight M8 Snap-In	SAC-4P-M12MS-M 8SIFS	1519778	5

5-pos. M12 Y distributors and T distributor, parallel

1514029 is 3 mm wider than the other articles and is intended for field-wired connectors



Common technical data

Certification	
Number of positions	5
Nominal current I_N (IEC)	4 A
Nominal voltage U_N (IEC)	60 V
Degree of protection	IP65/67

Design

Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON
Plug straight M12 -> Socket, straight M12
Plug straight M12 -> Socket, straight M12
Plug straight M12 -> Socket, straight M12

Type

SAC-5P-Y/2XFS VP SCO
SAC-5P-M12Y/2XM12FS VP
SAC-5P-M12Y/2XM12FS VP S21
SAC-5P-M12T/2XM12 VP

Order No.

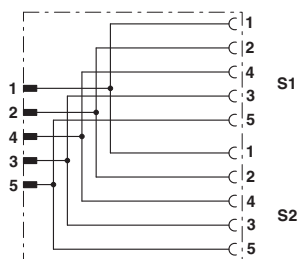
1546068
1683468
1514029
1541186

Pcs. / Pkt.

5
5
5
1

5-pos. shielded M12 Y distributors, parallel

The following items can be used in conjunction with field-wired connectors or cordsets



Common technical data

Certification	
Number of positions	5
Nominal current I_N (IEC)	4 A
Nominal voltage U_N (IEC)	60 V
Degree of protection	IP65/67

Design

Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON
Socket, straight M12-SPEEDCON -> Plug, straight M12-SPEEDCON
Socket, straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON

Type

SAC-5PY-M/2XF VP SH
SAC-5PY-M/F-M VP SH
SAC-5PY-F/2XM VP SH
SAC-5PY-F/M-F VP SH

Order No.

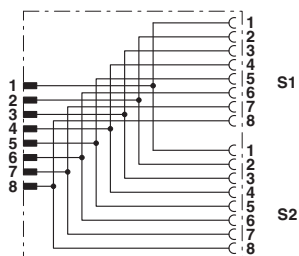
1419920
1438079
1419946
1419933

Pcs. / Pkt.

5
5
5
5

8-pos. M12 Y distributor, parallel

The following items can be used in conjunction with field-wired connectors or cordsets



Technical data

Certification	
Design	Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON
Number of positions	8
Nominal current I_N (IEC)	2 A
Nominal voltage U_N (IEC)	30 V
Degree of protection	IP65/67

Type

SAC-8PY-M/2XF VP

Order No.

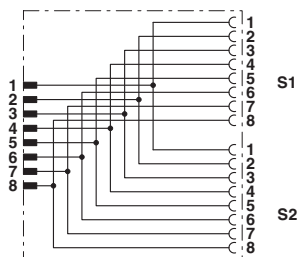
1454972

Pcs. / Pkt.

5

8-pos. shielded M12 Y distributor, parallel

The following items can be used in conjunction with field-wired connectors or cordsets



Technical data

Certification	
Design	Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON
Number of positions	8
Nominal current I_N (IEC)	2 A
Nominal voltage U_N (IEC)	30 V
Degree of protection	IP65/67

Type

SAC-8PY-M/2XF VP SH

Order No.

1454969

Pcs. / Pkt.

5

M12 sensor/actuator connectors

M12 field-wired connectors



M12 field-wired connectors

An extensive range of field-wired connectors ensures that a safe and efficient M12 connection can be made to any suitable sensor cable. Screw connection offers a classic and well-known technology, spring connection offers time savings with fast wire connection, while IDC connection provides the fastest field-wiring method on the market. For areas with high electromagnetic interference (EMI) a shielded version is available.

4-pos. M12 field-wired connectors, straight, IDC connection



SACC-MS-4QO-0,34-M SCO



SACC-MS-4QO-0,75-M SCO

Common technical data

Certification	UL
Number of positions	4
Nominal current I_N (IEC)	4 A
Degree of protection	IP65/67

Design	Conductor cross section [mm ²]	Conductor cross section (AWG)	Outer cable diameter range (mm)	Nominal voltage U_N (IEC)	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON	0.14 mm ² ... 0.34 mm ²	26 ... 22	3.5 mm ... 6 mm	125 V	SACC-MS-4QO-0,34-M SCO	1521575	1
Plug straight M12-SPEEDCON	0.34 mm ² ... 0.75 mm ²	22 ... 18	4 mm ... 8 mm	250 V	SACC-MS-4QO-0,75-M SCO	1521591	1
Socket, straight M12-SPEEDCON	0.14 mm ² ... 0.34 mm ²	26 ... 22	3.5 mm ... 6 mm	125 V	SACC-FS-4QO-0,34-M SCO	1521588	1
Socket, straight M12-SPEEDCON	0.34 mm ² ... 0.75 mm ²	22 ... 18	4 mm ... 8 mm	250 V	SACC-FS-4QO-0,75-M SCO	1521601	1

4-pos. M12 field-wired connectors, straight or angled, screw connection



SACC-MS-4CON-PG 7-M SCO



SACC-FR-4CON-PG 7-M SCO

Common technical data

Certification	CE
Number of positions	4
Conductor cross section [mm ²]	0.25 mm ² ... 0.75 mm ²
Conductor cross section (AWG)	24 ... 18
Outer cable diameter range (mm)	4 mm ... 6 mm
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON	SACC-MS-4CON-PG 7-M SCO	1542952	1
Socket, straight M12-SPEEDCON	SACC-FS-4CON-PG 7-M SCO	1543029	1
Plug angled M12-SPEEDCON	SACC-MR-4CON-PG 7-M SCO	1542981	1
Socket, angled M12-SPEEDCON	SACC-FR-4CON-PG 7-M SCO	1543058	1

4-pos. M12 field-wired connectors, straight or angled, spring connection



SACC-MS-4SC M SCO



SACC-FR-4SC M SCO

Common technical data

Certification	UL
Number of positions	4
Conductor cross section [mm ²]	0.14 mm ² ... 0.5 mm ²
Conductor cross section (AWG)	26 ... 20
Outer cable diameter range (mm)	4 mm ... 8 mm
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP65/67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON	SACC-MS-4SC M SCO	1432635	1
Socket, straight M12-SPEEDCON	SACC-FS-4SC M SCO	1432619	1
Plug angled M12-SPEEDCON	SACC-MR-4SC M SCO	1432606	1
Socket, angled M12-SPEEDCON	SACC-FR-4SC M SCO	1432622	1

4-pos. shielded M12 field-wired connectors, straight or angled, spring connection



SACC-MS-4SC SH SCO



SACC-FR-4SC SH SCO

Common technical data

Certification	
Number of positions	4
Conductor cross section [mm²]	0.14 mm² ... 0.5 mm²
Conductor cross section (AWG)	26 ... 20
Outer cable diameter range (mm)	4 mm ... 8 mm
Nominal voltage U _N (IEC)	60 V
Nominal current I _N (IEC)	4 A
Degree of protection	IP65/67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON	SACC-MS-4SC SH SCO	1432729	1
Socket, straight M12-SPEEDCON	SACC-FS-4SC SH SCO	1432745	1
Plug angled M12-SPEEDCON	SACC-MR-4SC SH SCO	1432732	1
Socket, angled M12-SPEEDCON	SACC-FR-4SC SH SCO	1432758	1

5-pos. M12 field-wired connectors, straight or angled, screw connection



SACC-MS-5CON-PG 7-M SCO



SACC-FR-5CON-PG 9-M SCO

Common technical data

Certification	
Number of positions	5
Conductor cross section [mm²]	0.25 mm² ... 0.75 mm²
Conductor cross section (AWG)	24 ... 18
Nominal voltage U _N (IEC)	60 V
Nominal current I _N (IEC)	4 A
Degree of protection	IP67

Design	Outer cable diameter range (mm)	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON	4 mm ... 6 mm	SACC-MS-5CON-PG 7-M SCO	1542965	1
Plug straight M12-SPEEDCON	6 mm ... 8 mm	SACC-MS-5CON-PG 9-M SCO	1542978	1
Socket, straight M12-SPEEDCON	4 mm ... 6 mm	SACC-FS-5CON-PG 7-M SCO	1543032	1
Socket, straight M12-SPEEDCON	6 mm ... 8 mm	SACC-FS-5CON-PG 9-M SCO	1543045	1
Plug angled M12-SPEEDCON	4 mm ... 6 mm	SACC-MR-5CON-PG 7-M SCO	1542994	1
Plug angled M12-SPEEDCON	6 mm ... 8 mm	SACC-MR-5CON-PG 9-M SCO	1543003	1
Socket, angled M12-SPEEDCON	4 mm ... 6 mm	SACC-FR-5CON-PG 7-M SCO	1543061	1
Socket, angled M12-SPEEDCON	6 mm ... 8 mm	SACC-FR-5CON-PG 9-M SCO	1543414	1

5-pos. M12 field-wired connectors, straight or angled, spring connection



SACC-MS-5SC M SCO



SACC-FR-5SC M SCO

Common technical data

Certification	
Number of positions	5
Conductor cross section [mm²]	0.14 mm² ... 0.5 mm²
Conductor cross section (AWG)	26 ... 20
Outer cable diameter range (mm)	4 mm ... 8 mm
Nominal voltage U _N (IEC)	60 V
Nominal current I _N (IEC)	4 A
Degree of protection	IP65/67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON	SACC-MS-5SC M SCO	1432567	1
Socket, straight M12-SPEEDCON	SACC-FS-5SC M SCO	1432583	1
Plug angled M12-SPEEDCON	SACC-MR-5SC M SCO	1432570	1
Socket, angled M12-SPEEDCON	SACC-FR-5SC M SCO	1432596	1

M12 sensor/actuator connectors

M12 field-wired connectors

5-pos. shielded M12 field-wired connectors, straight or angled, spring connection



SACC-MS-5SC SH SCO



SACC-FR-5SC SH SCO

Common technical data

Certification	
Number of positions	5
Conductor cross section [mm²]	0.14 mm² ... 0.5 mm²
Conductor cross section (AWG)	26 ... 20
Outer cable diameter range (mm)	4 mm ... 8 mm
Nominal voltage U _N (IEC)	60 V
Nominal current I _N (IEC)	4 A
Degree of protection	IP65/67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON	SACC-MS-5SC SH SCO	1432648	1
Socket, straight M12-SPEEDCON	SACC-FS-5SC SH SCO	1432664	1
Plug angled M12-SPEEDCON	SACC-MR-5SC SH SCO	1432651	1
Socket, angled M12-SPEEDCON	SACC-FR-5SC SH SCO	1432677	1

8-pos. M12 field-wired connectors, straight, screw connection



SACC-M12MS-8CON-PG9-M



SACC-M12FS-8CON-PG9-M

Common technical data

Certification	
Number of positions	8
Conductor cross section [mm²]	0.25 mm² ... 0.5 mm²
Conductor cross section (AWG)	24 ... 20
Outer cable diameter range (mm)	6 mm ... 8 mm
Nominal voltage U _N (IEC)	30 V
Nominal current I _N (IEC)	2 A
Degree of protection	IP67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M12	SACC-M12MS-8CON-PG9-M	1513334	1
Socket, straight M12	SACC-M12FS-8CON-PG9-M	1513347	1

8-pos. shielded M12 field-wired connectors, straight, screw connection



SACC-M12MS-8CON-PG 9-SH



SACC-M12FS-8CON-PG 9-SH

Common technical data

Certification	
Number of positions	8
Conductor cross section [mm²]	0.25 mm² ... 0.75 mm²
Conductor cross section (AWG)	24 ... 18
Outer cable diameter range (mm)	6 mm ... 8 mm
Nominal voltage U _N (IEC)	30 V
Nominal current I _N (IEC)	2 A
Degree of protection	IP67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M12	SACC-M12MS-8CON-PG 9-SH	1511857	1
Socket, straight M12	SACC-M12FS-8CON-PG 9-SH	1511860	1



M12 panel feed-through connectors

M12 panel feed-through connectors allow a pluggable, water-tight connection between the inside of a panel or device to the outside environment. For front-mount connectors, the leads are passed from the outside of the panel or device into the enclosure. Then the connector is held in place with a locknut on the inside. For rear mount connectors, the leads can be pre-terminated to the system - the connector body is pushed through from the inside of the enclosure and held in place by a locknut on the outside. Alternatively, a locknut is not needed for a front- or rear-mounted connector, if the enclosure is tapped with the appropriate thread rather than simply drilled out.

4-pos. M12, front mount, 16 mm or Pg9 mounting thread



Common technical data	
Certification	
Number of positions	4
Conductor cross section (AWG)	
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP67

SACC-E-MS-4CON-M16/0,5 SCO SACC-E-M12FS-4CON-PG9/0,5

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12-SPEEDCON	SACC-E-MS-4CON-M16/0,5 SCO	1523450	1
Flush-type socket, straight M12-SPEEDCON	SACC-E-FS-4CON-M16/0,5 SCO	1523434	1
Flush-type plug, straight M12	SACC-E-M12MS-4CON-PG9/0,5	1693762	1
Flush-type socket, straight M12	SACC-E-M12FS-4CON-PG9/0,5	1693788	1

Accessories	Type	Order No.	Pcs. / Pkt.
M16 locking nut , for flush-type plugs and sockets with M16 fastening thread	SACC-E-MU-M16	1504097	100
Pg9 locking nut , for flush-type plugs and sockets with Pg9 fastening thread	SACC-E-MU-PG9	1504084	100
The locking nut is not included with the assembly.	-	-	-

4-pos. M12, rear mount, 16 mm or Pg9 mounting thread

The locking nut is included with the assembly.



Common technical data	
Certification	
Number of positions	4
Conductor cross section (AWG)	
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	4 A

SACC-DSI-M12MS-4CON-M16/0,5 SACC-DSI-FS-4CON-PG9/0,5 SCO

Design	Degree of protection	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12-SPEEDCON	IP65/67	SACC-DSI-M12MS-4CON-M16/0,5	1419629	1
Flush-type socket, straight M12-SPEEDCON	IP65/67	SACC-DSI-M12FS-4CON-M16/0,5	1419632	1
Flush-type plug, straight M12-SPEEDCON	IP67	SACC-DSI-MS-4CON-PG9/0,5 SCO	1556618	1
Flush-type socket, straight M12-SPEEDCON	IP67	SACC-DSI-FS-4CON-PG9/0,5 SCO	1556621	1

M12 sensor/actuator connectors

M12 panel feed-through connectors with flying leads

5-pos. M12, front mount, 16 mm or Pg9 mounting thread



Common technical data	
Certification	CE UL
Number of positions	5
Conductor cross section (AWG)	
Nominal voltage U _N (IEC)	60 V
Nominal current I _N (IEC)	4 A
Degree of protection	IP67

SACC-E-MS-5CON-M16/0,5 SCO SACC-E-M12FS-5CON-PG9/0,5

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12-SPEEDCON	SACC-E-MS-5CON-M16/0,5 SCO	1520055	1
Flush-type socket, straight M12-SPEEDCON	SACC-E-FS-5CON-M16/0,5 SCO	1520039	1
Flush-type plug, straight M12	SACC-E-M12MS-5CON-PG9/0,5	1671111	1
Flush-type socket, straight M12	SACC-E-M12FS-5CON-PG9/0,5	1671098	1

Accessories	Type	Order No.	Pcs. / Pkt.
M16 locking nut, for flush-type plugs and sockets with M16 fastening thread	SACC-E-MU-M16	1504097	100
Pg9 locking nut, for flush-type plugs and sockets with Pg9 fastening thread	SACC-E-MU-PG9	1504084	100
The locking nut is not included with the assembly.	-	-	-

5-pos. M12, rear mount, 16 mm or Pg9 mounting thread

The locking nut is included with the assembly.



Common technical data	
Certification	CE UL
Number of positions	5
Conductor cross section (AWG)	
Nominal voltage U _N (IEC)	60 V
Nominal current I _N (IEC)	4 A

SACC-DSI-M12MS-5CON-M16/0,5 SACC-DSI-FS-5CON-PG 9/0,5 SCO

Design	Degree of protection	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12-SPEEDCON	IP65/67	SACC-DSI-M12MS-5CON-M16/0,5	1419645	1
Flush-type socket, straight M12-SPEEDCON	IP65/67	SACC-DSI-M12FS-5CON-M16/0,5	1419658	1
Flush-type plug, straight M12-SPEEDCON	IP67	SACC-DSI-MS-5CON-PG 9/0,5 SCO	1542703	1
Flush-type socket, straight M12-SPEEDCON	IP67	SACC-DSI-FS-5CON-PG 9/0,5 SCO	1542729	1

8-pos. M12, front mount, 16 mm or Pg9 mounting thread



Common technical data	
Certification	CE UL
Number of positions	8
Conductor cross section (AWG)	
Nominal voltage U _N (IEC)	30 V
Nominal current I _N (IEC)	2 A
Degree of protection	IP67

SACC-E-MS-8CON-M16/0,5 SCO SACC-E-M12FS-8CON-PG9/0,5

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12-SPEEDCON	SACC-E-MS-8CON-M16/0,5 SCO	1523492	1
Flush-type socket, straight M12-SPEEDCON	SACC-E-FS-8CON-M16/0,5 SCO	1523476	1
Flush-type plug, straight M12	SACC-E-M12MS-8CON-PG9/0,5	1513774	1
Flush-type socket, straight M12	SACC-E-M12FS-8CON-PG9/0,5	1513758	1

Accessories	Type	Order No.	Pcs. / Pkt.
M16 locking nut, for flush-type plugs and sockets with M16 fastening thread	SACC-E-MU-M16	1504097	100
Pg9 locking nut, for flush-type plugs and sockets with Pg9 fastening thread	SACC-E-MU-PG9	1504084	100
The locking nut is not included with the assembly.	-	-	-

8-pos. M12, rear mount, 16 mm or Pg9 mounting thread

The locking nut is included with the assembly.



Common technical data	
Certification	 
Number of positions	8
Conductor cross section (AWG)	
Nominal voltage U _N (IEC)	30 V
Nominal current I _N (IEC)	2 A

SACC-DSI-M12MS-8CON-M16/0,5 SACC-DSI-FS-8CON-PG 9/0,5 SCO

Design	Degree of protection	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12-SPEEDCON	IP65/67	SACC-DSI-M12MS-8CON-M16/0,5	1419687	1
Flush-type socket, straight M12-SPEEDCON	IP65/67	SACC-DSI-M12FS-8CON-M16/0,5	1419690	1
Flush-type plug, straight M12-SPEEDCON	IP67	SACC-DSI-MS-8CON-PG 9/0,5 SCO	1542716	1
Flush-type socket, straight M12-SPEEDCON	IP67	SACC-DSI-FS-8CON-PG 9/0,5 SCO	1542732	1

MINI 7/8-inch 16UNF sensor/actuator cordsets and connectors

Our industry compatible MINI 7/8-inch 16UNF screw threaded connector and cordset product range allows you to quickly connect sensors, switches and other devices in the field.

MINI 7/8-inch cordsets supply power up to 13 Amps and are available in three color coded schemes (IEC, US, and Automotive).





MINI 7/8-INCH SENSOR/ ACTUATOR CORDSETS

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MINI 7/8-INCH SENSOR/ ACTUATOR CONNECTORS

MINI 7/8 T-distributors
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MINI 7/8 panel feed-through
with flying leads **Page 100**

Mini 7/8" sensor/actuator cordsets and cables

3-pos. 7/8" sensor/actuator cordsets



3-pos. 7/8" sensor/actuator cordsets

3-pos. Mini 7/8" cordsets are offered in three color codes: IEC, US and automotive. The IEC cordsets are manufactured with PVC cable containing 3x0.75 mm² stranded copper conductors. The US and automotive cordsets are manufactured with STOOW cable containing 3x1.5 mm² stranded copper conductors. The cable jacket for all types are rated for ambient temperatures of -10 to 105°C.

3-pos. 7/8" socket, straight or angled, to open end, PVC yellow, 105°C, IEC color code

IEC color code is black (pos. 1), brown (pos. 2) and blue (pos. 3).



SAC-3P- 2,0-400/MINFS

SAC-3P- 2,0-400/MINFR

Common technical data	
Certification	®
Number of positions	3
Conductor cross section	0.75 mm ²
AWG (approximately)	18
Nominal current I _N	10 A
Nominal voltage U _N	300 V
Cable type	PVC yellow IEC color code
Cable diameter	5.8 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight 7/8"-16UNF	2 m	SAC-3P- 2,0-400/MINFS	1531989
Free conductor end -> Socket, straight 7/8"-16UNF	4 m	SAC-3P- 4,0-400/MINFS	1531992
Free conductor end -> Socket, straight 7/8"-16UNF	6 m	SAC-3P- 6,0-400/MINFS	1532001
Free conductor end -> Socket, angled 7/8"-16UNF	2 m	SAC-3P- 2,0-400/MINFR	1532108
Free conductor end -> Socket, angled 7/8"-16UNF	4 m	SAC-3P- 4,0-400/MINFR	1532111
Free conductor end -> Socket, angled 7/8"-16UNF	6 m	SAC-3P- 6,0-400/MINFR	1532124

3-pos. 7/8" plug, straight or angled, to open end, PVC yellow, 105°C, IEC color code

IEC color code is black (pos. 1), brown (pos. 2) and blue (pos. 3).



SAC-3P-MINMS/ 2,0-400

SAC-3P-MINMR/ 2,0-400

Common technical data	
Certification	®
Number of positions	3
Conductor cross section	0.75 mm ²
AWG (approximately)	18
Nominal current I _N	10 A
Nominal voltage U _N	300 V
Cable type	PVC yellow IEC color code
Cable diameter	5.8 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Free conductor end	2 m	SAC-3P-MINMS/ 2,0-400	1531743
Plug straight 7/8" 16UNF -> Free conductor end	4 m	SAC-3P-MINMS/ 4,0-400	1531756
Plug straight 7/8" 16UNF -> Free conductor end	6 m	SAC-3P-MINMS/ 6,0-400	1531769
Plug angled 7/8" 16UNF -> Free conductor end	2 m	SAC-3P-MINMR/ 2,0-400	1531866
Plug angled 7/8" 16UNF -> Free conductor end	4 m	SAC-3P-MINMR/ 4,0-400	1531879
Plug angled 7/8" 16UNF -> Free conductor end	6 m	SAC-3P-MINMR/ 6,0-400	1531882

3-pos. 7/8" socket, straight or angled, to open end, STOOW yellow, 105°C, US color code

US color code is green (pos. 1), black (pos. 2) and white (pos. 3).



SAC-3P- 2,0-410/MINFS

SAC-3P- 2,0-410/MINFR

Common technical data	
Certification	®
Number of positions	3
Conductor cross section	1.5 mm ²
AWG (approximately)	16
Nominal current I _N	13 A
Nominal voltage U _N	600 V
Cable type	PVC yellow U.S. color code
Cable diameter	10.24 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight 7/8"-16UNF	2 m	SAC-3P- 2,0-410/MINFS	1532467
Free conductor end -> Socket, straight 7/8"-16UNF	4 m	SAC-3P- 4,0-410/MINFS	1532470
Free conductor end -> Socket, straight 7/8"-16UNF	6 m	SAC-3P- 6,0-410/MINFS	1532483
Free conductor end -> Socket, angled 7/8"-16UNF	2 m	SAC-3P- 2,0-410/MINFR	1532580
Free conductor end -> Socket, angled 7/8"-16UNF	4 m	SAC-3P- 4,0-410/MINFR	1532593
Free conductor end -> Socket, angled 7/8"-16UNF	6 m	SAC-3P- 6,0-410/MINFR	1532603

3-pos. 7/8" plug, straight or angled, to open end, ST00W yellow, 105°C, US color code

US color code is green (pos. 1), black (pos. 2) and white (pos. 3).



SAC-3P-MINMS/ 2,0-410

SAC-3P-MINMR/ 2,0-410

Common technical data

Certification	UL
Number of positions	3
Conductor cross section	1.5 mm ²
AWG (approximately)	16
Nominal current I _N	13 A
Nominal voltage U _N	600 V
Cable type	PVC yellow U.S. color code
Cable diameter	10.24 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Free conductor end	2 m	SAC-3P-MINMS/ 2,0-410	1532221
Plug straight 7/8" 16UNF -> Free conductor end	4 m	SAC-3P-MINMS/ 4,0-410	1532234
Plug straight 7/8" 16UNF -> Free conductor end	6 m	SAC-3P-MINMS/ 6,0-410	1532247
Plug angled 7/8" 16UNF -> Free conductor end	2 m	SAC-3P-MINMR/ 2,0-410	1532344
Plug angled 7/8" 16UNF -> Free conductor end	4 m	SAC-3P-MINMR/ 4,0-410	1532357
Plug angled 7/8" 16UNF -> Free conductor end	6 m	SAC-3P-MINMR/ 6,0-410	1532360

3-pos. 7/8" socket, straight or angled, to open end, ST00W yellow, 105°C, automotive color code

Automotive color code is green (pos. 1), red/black (pos. 2) and red/white (pos. 3).



SAC-3P- 2,0-420/MINFS

SAC-3P- 2,0-420/MINFR

Common technical data

Certification	UL
Number of positions	3
Conductor cross section	1.5 mm ²
AWG (approximately)	16
Nominal current I _N	13 A
Nominal voltage U _N	600 V
Cable type	PVC yellow Auto color code
Cable diameter	10.24 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight 7/8"-16UNF	2 m	SAC-3P- 2,0-420/MINFS	1532946
Free conductor end -> Socket, straight 7/8"-16UNF	4 m	SAC-3P- 4,0-420/MINFS	1532959
Free conductor end -> Socket, straight 7/8"-16UNF	6 m	SAC-3P- 6,0-420/MINFS	1532962
Free conductor end -> Socket, angled 7/8"-16UNF	2 m	SAC-3P- 2,0-420/MINFR	1533068
Free conductor end -> Socket, angled 7/8"-16UNF	4 m	SAC-3P- 4,0-420/MINFR	1533071
Free conductor end -> Socket, angled 7/8"-16UNF	6 m	SAC-3P- 6,0-420/MINFR	1533084

3-pos. 7/8" plug, straight or angled, to open end, ST00W yellow, 105°C, automotive color code

Automotive color code is green (pos. 1), red/black (pos. 2) and red/white (pos. 3).



SAC-3P-MINMS/ 2,0-420

SAC-3P-MINMR/ 2,0-420

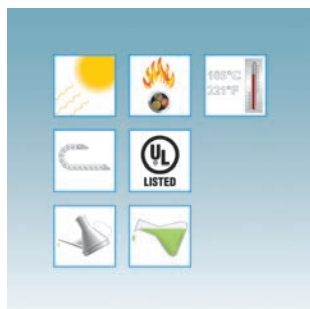
Common technical data

Certification	UL
Number of positions	3
Conductor cross section	1.5 mm ²
AWG (approximately)	16
Nominal current I _N	13 A
Nominal voltage U _N	600 V
Cable type	PVC yellow Auto color code
Cable diameter	10.24 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Free conductor end	2 m	SAC-3P-MINMS/ 2,0-420	1532700
Plug straight 7/8" 16UNF -> Free conductor end	4 m	SAC-3P-MINMS/ 4,0-420	1532713
Plug straight 7/8" 16UNF -> Free conductor end	6 m	SAC-3P-MINMS/ 6,0-420	1532726
Plug angled 7/8" 16UNF -> Free conductor end	2 m	SAC-3P-MINMR/ 2,0-420	1532823
Plug angled 7/8" 16UNF -> Free conductor end	4 m	SAC-3P-MINMR/ 4,0-420	1532836
Plug angled 7/8" 16UNF -> Free conductor end	6 m	SAC-3P-MINMR/ 6,0-420	1532849

Mini 7/8" sensor/actuator cordsets and cables

4-pos. 7/8" sensor/actuator cordsets



4-pos. 7/8" sensor/actuator cordsets

4-pos. Mini 7/8" cordsets are offered in three color codes: IEC, US and automotive. The IEC cordsets are manufactured with PVC cable containing 4x0.75 mm² stranded copper conductors. The US and automotive cordsets are manufactured with STOOW cable containing 4x1.5 mm² stranded copper conductors. The cable jacket for all types are rated for ambient temperatures of -10 to 105°C

4-pos. 7/8" socket, straight or angled, to open end, PVC yellow, 105°C, IEC color code

IEC color code is black (pos. 1), blue (pos. 2), brown (pos. 3) and white (pos. 4).



Common technical data	
Certification	•UL•
Number of positions	4
Conductor cross section	0.75 mm ²
AWG (approximately)	18
Nominal current I _N	7 A
Nominal voltage U _N	300 V
Cable type	PVC yellow IEC color code
Cable diameter	6.3 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight 7/8"-16UNF	2 m	SAC-4P- 2,0-400/MINFS	1532027
Free conductor end -> Socket, straight 7/8"-16UNF	4 m	SAC-4P- 4,0-400/MINFS	1532030
Free conductor end -> Socket, straight 7/8"-16UNF	6 m	SAC-4P- 6,0-400/MINFS	1532043
Free conductor end -> Socket, angled 7/8"-16UNF	2 m	SAC-4P- 2,0-400/MINFR	1532140
Free conductor end -> Socket, angled 7/8"-16UNF	4 m	SAC-4P- 4,0-400/MINFR	1532153
Free conductor end -> Socket, angled 7/8"-16UNF	6 m	SAC-4P- 6,0-400/MINFR	1532166

4-pos. 7/8" plug, straight or angled, to open end, PVC yellow, 105°C, IEC color code

IEC color code is black (pos. 1), blue (pos. 2), brown (pos. 3) and white (pos. 4).



Common technical data	
Certification	•UL•
Number of positions	4
Conductor cross section	0.75 mm ²
AWG (approximately)	18
Nominal current I _N	7 A
Nominal voltage U _N	300 V
Cable type	PVC yellow IEC color code
Cable diameter	6.3 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Free conductor end	2 m	SAC-4P-MINMS/ 2,0-400	1531785
Plug straight 7/8" 16UNF -> Free conductor end	4 m	SAC-4P-MINMS/ 4,0-400	1531798
Plug straight 7/8" 16UNF -> Free conductor end	6 m	SAC-4P-MINMS/ 6,0-400	1531808
Plug angled 7/8" 16UNF -> Free conductor end	2 m	SAC-4P-MINMR/ 2,0-400	1531905
Plug angled 7/8" 16UNF -> Free conductor end	4 m	SAC-4P-MINMR/ 4,0-400	1531918
Plug angled 7/8" 16UNF -> Free conductor end	6 m	SAC-4P-MINMR/ 6,0-400	1531921

4-pos. 7/8" socket, straight or angled, to open end, STOOW yellow, 105°C, US color code

US color code is black (pos. 1), white (pos. 2), red (pos. 3) and green (pos. 4).



Common technical data	
Certification	•UL•
Number of positions	4
Conductor cross section	1.5 mm ²
AWG (approximately)	16
Nominal current I _N	10 A
Nominal voltage U _N	600 V
Cable type	PVC yellow U.S. color code
Cable diameter	10.67 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight 7/8"-16UNF	2 m	SAC-4P- 2,0-410/MINFS	1532506
Free conductor end -> Socket, straight 7/8"-16UNF	4 m	SAC-4P- 4,0-410/MINFS	1532519
Free conductor end -> Socket, straight 7/8"-16UNF	6 m	SAC-4P- 6,0-410/MINFS	1532522
Free conductor end -> Socket, angled 7/8"-16UNF	2 m	SAC-4P- 2,0-410/MINFR	1532629
Free conductor end -> Socket, angled 7/8"-16UNF	4 m	SAC-4P- 4,0-410/MINFR	1532632
Free conductor end -> Socket, angled 7/8"-16UNF	6 m	SAC-4P- 6,0-410/MINFR	1532645

4-pos. 7/8" plug, straight or angled, to open end, ST00W yellow, 105°C, US color code

US color code is black (pos. 1), white (pos. 2), red (pos. 3) and green (pos. 4).



SAC-4P-MINMS/ 2,0-410

SAC-4P-MINMR/ 2,0-410

Common technical data

Certification	UL
Number of positions	4
Conductor cross section	1.5 mm ²
AWG (approximately)	16
Nominal current I _N	10 A
Nominal voltage U _N	600 V
Cable type	PVC yellow U.S. color code
Cable diameter	10.67 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Free conductor end	2 m	SAC-4P-MINMS/ 2,0-410	1532263
Plug straight 7/8" 16UNF -> Free conductor end	4 m	SAC-4P-MINMS/ 4,0-410	1532276
Plug straight 7/8" 16UNF -> Free conductor end	6 m	SAC-4P-MINMS/ 6,0-410	1532289
Plug angled 7/8" 16UNF -> Free conductor end	2 m	SAC-4P-MINMR/ 2,0-410	1532386
Plug angled 7/8" 16UNF -> Free conductor end	4 m	SAC-4P-MINMR/ 4,0-410	1532399
Plug angled 7/8" 16UNF -> Free conductor end	6 m	SAC-4P-MINMR/ 6,0-410	1532409

4-pos. 7/8" socket, straight or angled, to open end, ST00W yellow, 105°C, automotive color code

Automotive color code is red/black (pos. 1), red/white (pos. 2), red (pos. 3) and green (pos. 4).



SAC-4P- 2,0-420/MINFS

SAC-4P- 2,0-420/MINFR

Common technical data

Certification	UL
Number of positions	4
Conductor cross section	1.5 mm ²
AWG (approximately)	16
Nominal current I _N	10 A
Nominal voltage U _N	600 V
Cable type	PVC yellow Auto color code
Cable diameter	10.67 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight 7/8"-16UNF	2 m	SAC-4P- 2,0-420/MINFS	1532988
Free conductor end -> Socket, straight 7/8"-16UNF	4 m	SAC-4P- 4,0-420/MINFS	1532991
Free conductor end -> Socket, straight 7/8"-16UNF	6 m	SAC-4P- 6,0-420/MINFS	1533000
Free conductor end -> Socket, angled 7/8"-16UNF	2 m	SAC-4P- 2,0-420/MINFR	1533107
Free conductor end -> Socket, angled 7/8"-16UNF	4 m	SAC-4P- 4,0-420/MINFR	1533110
Free conductor end -> Socket, angled 7/8"-16UNF	6 m	SAC-4P- 6,0-420/MINFR	1533123

4-pos. 7/8" plug, straight or angled, to open end, ST00W yellow, 105°C, automotive color code

Automotive color code is red/black (pos. 1), red/white (pos. 2), red (pos. 3) and green (pos. 4).



SAC-4P-MINMS/ 2,0-420

SAC-4P-MINMR/ 2,0-420

Common technical data

Certification	UL
Number of positions	4
Conductor cross section	1.5 mm ²
AWG (approximately)	16
Nominal current I _N	10 A
Nominal voltage U _N	600 V
Cable type	PVC yellow Auto color code
Cable diameter	10.67 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Free conductor end	2 m	SAC-4P-MINMS/ 2,0-420	1532742
Plug straight 7/8" 16UNF -> Free conductor end	4 m	SAC-4P-MINMS/ 4,0-420	1532755
Plug straight 7/8" 16UNF -> Free conductor end	6 m	SAC-4P-MINMS/ 6,0-420	1532768
Plug angled 7/8" 16UNF -> Free conductor end	2 m	SAC-4P-MINMR/ 2,0-420	1532865
Plug angled 7/8" 16UNF -> Free conductor end	4 m	SAC-4P-MINMR/ 4,0-420	1532878
Plug angled 7/8" 16UNF -> Free conductor end	6 m	SAC-4P-MINMR/ 6,0-420	1532881

Mini 7/8" sensor/actuator cordsets and cables

5-pos. 7/8" sensor/actuator cordsets



5-pos. 7/8" sensor/actuator cordsets

5-pos. Mini 7/8" cordsets are offered in three color codes: IEC, US and automotive. The IEC cordsets are manufactured with PVC cable containing 5x0.75 mm² stranded copper conductors. The US and automotive cordsets are manufactured with STOOW cable containing 5x1.5 mm² stranded copper conductors. The cable jacket for all types are rated for ambient temperatures of -10 to 105°C

5-pos. 7/8" socket, straight or angled, to open end, PVC yellow, 105°C, IEC color code

IEC color code is black (pos. 1), blue (pos. 2), green/yellow (pos. 3), brown (pos. 4) and white (pos. 5).



SAC-5P- 2,0-400/MINFS

SAC-5P- 2,0-400/MINFR

Common technical data

Certification	®
Number of positions	5
Conductor cross section	0.75 mm ²
AWG (approximately)	18
Nominal current I _N	5.6 A
Nominal voltage U _N	300 V
Cable type	PVC yellow IEC color code
Cable diameter	6.8 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight 7/8"-16UNF	2 m	SAC-5P- 2,0-400/MINFS	1532069
Free conductor end -> Socket, straight 7/8"-16UNF	4 m	SAC-5P- 4,0-400/MINFS	1532072
Free conductor end -> Socket, straight 7/8"-16UNF	6 m	SAC-5P- 6,0-400/MINFS	1532085
Free conductor end -> Socket, angled 7/8"-16UNF	2 m	SAC-5P- 2,0-400/MINFR	1532182
Free conductor end -> Socket, angled 7/8"-16UNF	4 m	SAC-5P- 4,0-400/MINFR	1532195
Free conductor end -> Socket, angled 7/8"-16UNF	6 m	SAC-5P- 6,0-400/MINFR	1532205

5-pos. 7/8" plug, straight or angled, to open end, PVC yellow, 105°C, IEC color code

IEC color code is black (pos. 1), blue (pos. 2), green/yellow (pos. 3), brown (pos. 4) and white (pos. 5).



SAC-5P-MINMS/ 2,0-400

SAC-5P-MINMR/ 2,0-400

Common technical data

Certification	®
Number of positions	5
Conductor cross section	0.75 mm ²
AWG (approximately)	18
Nominal current I _N	5.6 A
Nominal voltage U _N	300 V
Cable type	PVC yellow IEC color code
Cable diameter	6.8 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Free conductor end	2 m	SAC-5P-MINMS/ 2,0-400	1531824
Plug straight 7/8" 16UNF -> Free conductor end	4 m	SAC-5P-MINMS/ 4,0-400	1531837
Plug straight 7/8" 16UNF -> Free conductor end	6 m	SAC-5P-MINMS/ 6,0-400	1531840
Plug angled 7/8" 16UNF -> Free conductor end	2 m	SAC-5P-MINMR/ 2,0-400	1531947
Plug angled 7/8" 16UNF -> Free conductor end	4 m	SAC-5P-MINMR/ 4,0-400	1531950
Plug angled 7/8" 16UNF -> Free conductor end	6 m	SAC-5P-MINMR/ 6,0-400	1531963

5-pos. 7/8" socket, straight or angled, to open end, ST00W yellow, 105°C, US color code

US color code is white (pos. 1), red (pos. 2), green (pos. 3), orange (pos. 4) and black (pos. 5).



SAC-5P- 2,0-410/MINFS

SAC-5P- 2,0-410/MINFR

Common technical data

Certification	UL
Number of positions	5
Conductor cross section	1.5 mm ²
AWG (approximately)	16
Nominal current I _N	8 A
Nominal voltage U _N	600 V
Cable type	PVC yellow U.S. color code
Cable diameter	12.58 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight 7/8"-16UNF	2 m	SAC-5P- 2,0-410/MINFS	1532548
Free conductor end -> Socket, straight 7/8"-16UNF	4 m	SAC-5P- 4,0-410/MINFS	1532551
Free conductor end -> Socket, straight 7/8"-16UNF	6 m	SAC-5P- 6,0-410/MINFS	1532564
Free conductor end -> Socket, angled 7/8"-16UNF	2 m	SAC-5P- 2,0-410/MINFR	1532661
Free conductor end -> Socket, angled 7/8"-16UNF	4 m	SAC-5P- 4,0-410/MINFR	1532674
Free conductor end -> Socket, angled 7/8"-16UNF	6 m	SAC-5P- 6,0-410/MINFR	1532687

5-pos. 7/8" plug, straight or angled, to open end, ST00W yellow, 105°C, US color code

US color code is white (pos. 1), red (pos. 2), green (pos. 3), orange (pos. 4) and black (pos. 5).



SAC-5P-MINMS/ 2,0-410

SAC-5P-MINMR/ 2,0-410

Common technical data

Certification	UL
Number of positions	5
Conductor cross section	1.5 mm ²
AWG (approximately)	16
Nominal current I _N	8 A
Nominal voltage U _N	600 V
Cable type	PVC yellow U.S. color code
Cable diameter	12.58 mm
Degree of protection	IP65/IP67/IP68

Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Free conductor end	2 m	SAC-5P-MINMS/ 2,0-410	1532302
Plug straight 7/8" 16UNF -> Free conductor end	4 m	SAC-5P-MINMS/ 4,0-410	1532315
Plug straight 7/8" 16UNF -> Free conductor end	6 m	SAC-5P-MINMS/ 6,0-410	1532328
Plug angled 7/8" 16UNF -> Free conductor end	2 m	SAC-5P-MINMR/ 2,0-410	1532425
Plug angled 7/8" 16UNF -> Free conductor end	4 m	SAC-5P-MINMR/ 4,0-410	1532438
Plug angled 7/8" 16UNF -> Free conductor end	6 m	SAC-5P-MINMR/ 6,0-410	1532441

5-pos. 7/8" socket, straight or angled, to open end, ST00W yellow, 105°C, automotive color code

Automotive color code is red/white (pos. 1), red (pos. 2), green (pos. 3), red/orange (pos. 4) and red/black (pos. 5).



SAC-5P- 2,0-420/MINFS

SAC-5P- 2,0-420/MINFR

Common technical data

Certification	UL
Number of positions	5
Conductor cross section	1.5 mm ²
AWG (approximately)	16
Nominal current I _N	8 A
Nominal voltage U _N	600 V
Cable type	PVC yellow Auto color code
Cable diameter	12.58 mm
Degree of protection	IP65/IP67/IP68

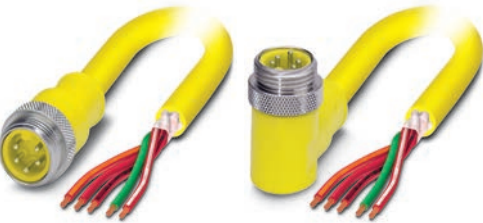
Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight 7/8"-16UNF	2 m	SAC-5P- 2,0-420/MINFS	1533026
Free conductor end -> Socket, straight 7/8"-16UNF	4 m	SAC-5P- 4,0-420/MINFS	1533039
Free conductor end -> Socket, straight 7/8"-16UNF	6 m	SAC-5P- 6,0-420/MINFS	1533042
Free conductor end -> Socket, angled 7/8"-16UNF	2 m	SAC-5P- 2,0-420/MINFR	1533149
Free conductor end -> Socket, angled 7/8"-16UNF	4 m	SAC-5P- 4,0-420/MINFR	1533152
Free conductor end -> Socket, angled 7/8"-16UNF	6 m	SAC-5P- 6,0-420/MINFR	1533165

Mini 7/8" sensor/actuator cordsets and cables

5-pos. 7/8" sensor/actuator cordsets

5-pos. 7/8" plug, straight or angled, to open end, ST00W yellow, 105°C, automotive color code

Automotive color code is red/white (pos. 1), red (pos. 2), green (pos. 3), red/orange (pos. 4) and red/black (pos. 5).



Common technical data	
Certification	CE
Number of positions	5
Conductor cross section	1.5 mm²
AWG (approximately)	16
Nominal current I _N	8 A
Nominal voltage U _N	600 V
Cable type	PVC yellow Auto color code
Cable diameter	12.58 mm
Degree of protection	IP65/IP67/IP68

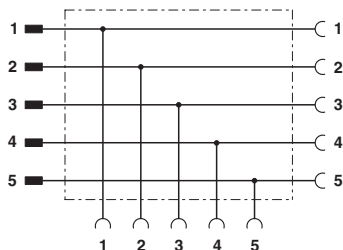
Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Free conductor end	2 m	SAC-5P-MINMS/ 2,0-420	1532784
Plug straight 7/8" 16UNF -> Free conductor end	4 m	SAC-5P-MINMS/ 4,0-420	1532797
Plug straight 7/8" 16UNF -> Free conductor end	6 m	SAC-5P-MINMS/ 6,0-420	1532807
Plug angled 7/8" 16UNF -> Free conductor end	2 m	SAC-5P-MINMR/ 2,0-420	1532904
Plug angled 7/8" 16UNF -> Free conductor end	4 m	SAC-5P-MINMR/ 4,0-420	1532917
Plug angled 7/8" 16UNF -> Free conductor end	6 m	SAC-5P-MINMR/ 6,0-420	1532920

7/8" T distributors and termination resistor



Sometimes the ideal cabling topology for a system requires the use of a T distributor. T distributors are used when a drop is required off a trunk line. The T distributor/adaptor allows Mini 7/8" trunk lines with M12 drops. A termination resistor is used to ground data signals, eliminating data reflection on the main trunk line.

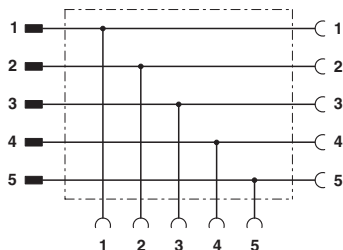
5-pos. 7/8" T distributor, parallel



Technical data	
Certification	
Design	Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF
Number of positions	5
Nominal current I_N (IEC)	10 A
Nominal voltage U_N (IEC)	250 V
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SAC-5P-MINT/2XMIN VP	1543977	1

5-pos. 7/8" to M12 T distributor/adaptor, parallel



Technical data	
Certification	
Design	->
Number of positions	5
Nominal current I_N (IEC)	4 A
Nominal voltage U_N (IEC)	60 V
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SAC-5P-M12T/2XMIN DN	1401028	1

5-pos. 7/8" or M12 termination resistor



SAC-5P-MINMS TR-DN



SAC-5P-M12MS CAN TR

Common technical data	
Number of positions	5
Degree of protection	IP65/67

Certification	Design	Nominal current I_N (IEC)	Nominal voltage U_N (IEC)	Type	Order No.	Pcs. / Pkt.
	Plug straight 7/8" 16UNF -> Free conductor end	-	300 V DC	SAC-5P-MINMS TR-DN	1434701	1
	Plug straight M12 ->	4 A	60 V	SAC-5P-M12MS CAN TR	1507816	5

Mini 7/8" sensor/actuator connectors

7/8" field-wired connectors



7/8" field-wired connectors

Field-wired connectors ensure that a safe and efficient Mini 7/8" connection can be field installed to any suitable sensor cable. Screw connection offers a classic and well-known termination technology. The 5-pos. connector is offered with numerous gland sizes to accommodate a wide range of cable diameters.

3-pos. 7/8" field-wired connectors, straight or angled, screw connection



SACC-MINMS-3CON-PG 9



SACC-MINFR-3CON-PG 9

Common technical data	
Certification	
Number of positions	3
Conductor cross section [mm²]	0.34 mm² ... 1.5 mm²
Conductor cross section (AWG)	22 ... 16
Outer cable diameter range (mm)	6 mm ... 8 mm
Nominal voltage U _N (IEC)	250 V
Nominal current I _N (IEC)	12 A
Degree of protection	IP67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight 7/8" 16UNF	SACC-MINMS-3CON-PG 9	1521287	1
Socket, straight 7/8" 16UNF	SACC-MINFS-3CON-PG 9	1521300	1
Plug angled 7/8" 16UNF	SACC-MINMR-3CON-PG 9	1521465	1
Socket, angled 7/8" 16UNF	SACC-MINFR-3CON-PG 9	1521478	1

4-pos. 7/8" field-wired connectors, straight or angled, screw connection



SACC-MINMS-4CON-PG 9



SACC-MINFR-4CON-PG 9

Common technical data	
Certification	
Number of positions	4
Conductor cross section [mm²]	0.34 mm² ... 1.5 mm²
Conductor cross section (AWG)	22 ... 16
Outer cable diameter range (mm)	6 mm ... 8 mm
Nominal voltage U _N (IEC)	250 V
Nominal current I _N (IEC)	9 A
Degree of protection	IP67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight 7/8" 16UNF	SACC-MINMS-4CON-PG 9	1521326	1
Socket, straight 7/8" 16UNF	SACC-MINFS-4CON-PG 9	1521342	1
Plug angled 7/8" 16UNF	SACC-MINMR-4CON-PG 9	1521481	1
Socket, angled 7/8" 16UNF	SACC-MINFR-4CON-PG 9	1521494	1

5-pos. 7/8" field-wired connectors, straight or angled, screw connection



Common technical data	
Number of positions	5
Conductor cross section (AWG)	22 ... 16
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	9 A
Degree of protection	IP67

SACC-MINMS-5CON-PG 9

SACC-MINFR-5CON-PG11/2,5

Certification	Design	Conductor cross section [mm²]	Outer cable diameter range (mm)	Type	Order No.	Pcs. / Pkt.
 	Plug straight 7/8" 16UNF	0.34 mm² ... 1.5 mm²	6 mm ... 8 mm	SACC-MINMS-5CON-PG 9	1521668	1
 	Plug straight 7/8" 16UNF	0.34 mm² ... 2.5 mm²	8 mm ... 10 mm	SACC-MINMS-5CON-PG11/2,5	1456226	1
 	Plug straight 7/8" 16UNF	0.34 mm² ... 1.5 mm²	10 mm ... 12 mm	SACC-MINMS-5CON-PG13	1521371	1
 	Plug straight 7/8" 16UNF	0.34 mm² ... 1.5 mm²	12 mm ... 14 mm	SACC-MINMS-5CON-PG16	1559039	1
 	Socket, straight 7/8" 16UNF	0.34 mm² ... 1.5 mm²	6 mm ... 8 mm	SACC-MINFS-5CON-PG 9	1521384	1
 	Socket, straight 7/8" 16UNF	0.34 mm² ... 2.5 mm²	8 mm ... 10 mm	SACC-MINFS-5CON-PG11/2,5	1456271	1
 	Socket, straight 7/8" 16UNF	0.34 mm² ... 1.5 mm²	10 mm ... 12 mm	SACC-MINFS-5CON-PG13	1521397	1
 	Socket, straight 7/8" 16UNF	0.34 mm² ... 1.5 mm²	12 mm ... 14 mm	SACC-MINFS-5CON-PG16	1559071	1
 	Plug angled 7/8" 16UNF	0.34 mm² ... 1.5 mm²	6 mm ... 8 mm	SACC-MINMR-5CON-PG 9	1521504	1
 	Plug angled 7/8" 16UNF	0.34 mm² ... 2.5 mm²	8 mm ... 10 mm	SACC-MINMR-5CON-PG11/2,5	1456242	1
 	Socket, angled 7/8" 16UNF	0.34 mm² ... 1.5 mm²	6 mm ... 8 mm	SACC-MINFR-5CON-PG 9	1521517	1
 	Socket, angled 7/8" 16UNF	0.34 mm² ... 2.5 mm²	8 mm ... 10 mm	SACC-MINFR-5CON-PG11/2,5	1456297	1

Mini 7/8" sensor/actuator connectors

7/8" panel feed-through connectors with flying leads



7/8" panel feed-through connectors

Mini 7/8" panel feed-through connectors provide a pluggable, water-tight connection between the inside of a panel or device to the outside environment. For front-mount connectors, the leads are passed from the outside of the panel or device into the enclosure. Then the connector is held in place with a locknut on the inside. For rear-mount connectors, the leads can be pre-terminated to the system - the connector body is pushed through from the inside of the enclosure and held in place by a locknut on the outside. Alternatively, a locknut is not needed for a front- or rear-mounted connector, if the enclosure is tapped with the appropriate thread rather than simply drilled out.

3-pos. 7/8", front mount, Pg13.5 mounting thread



Common technical data	
Certification	UL PC
Number of positions	3
Mounting thread	Pg13.5
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	12 A
Degree of protection	IP67

SACC-E-MINMS-3CON-PG13/0,5 SACC-E-MINFS-3CON-PG13/0,5

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight 7/8" 16UNF	SACC-E-MINMS-3CON-PG13/0,5	1521410	1
Flush-type socket, straight 7/8" 16UNF	SACC-E-MINFS-3CON-PG13/0,5	1521407	1

Accessories	Type	Order No.	Pcs. / Pkt.
Pg13.5 locking nut , for flush-type plugs and sockets with Pg13.5 fastening thread The locking nut is not included with the assembly.	SACC-E-MU-PG13,5	1539143	100
	-	-	-

3-pos. 7/8", rear mount, 26 mm or 7/8" mounting thread

The locking nut is included with the assembly.



Common technical data	
Certification	UL PC
Number of positions	3
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	12 A
Degree of protection	IP67

SACC-DSI-MINMS-3CON-UNF/1,0 SACC-DSI-MINFS-3CON-M26/1,0

Design	Mounting thread	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight 7/8" 16UNF	7/8"	SACC-DSI-MINMS-3CON-UNF/1,0	1453753	1
Flush-type socket, straight 7/8" 16UNF	M26	SACC-DSI-MINFS-3CON-M26/1,0	1453782	1

4-pos. 7/8", front mount, Pg13.5 mounting thread



Common technical data	
Certification	UL PC
Number of positions	4
Mounting thread	Pg13.5
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	9 A
Degree of protection	IP67

SACC-E-MINMS-4CON-PG13/0,5 SACC-E-MINFS-4CON-PG13/0,5

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight 7/8" 16UNF	SACC-E-MINMS-4CON-PG13/0,5	1521436	1
Flush-type socket, straight 7/8" 16UNF	SACC-E-MINFS-4CON-PG13/0,5	1521423	1

Accessories	Type	Order No.	Pcs. / Pkt.
Pg13.5 locking nut , for flush-type plugs and sockets with Pg13.5 fastening thread The locking nut is not included with the assembly.	SACC-E-MU-PG13,5	1539143	100
	-	-	-

4-pos. 7/8", rear mount, 26 mm or 7/8" mounting thread

The locking nut is included with the assembly.



Common technical data

Certification	UL
Number of positions	4
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	9 A
Degree of protection	IP67

SACC-DSI-MINMS-4CON-UNF/1,0 SACC-DSI-MINFS-4CON-M26/1,0

Design	Mounting thread	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight 7/8" 16UNF	7/8"	SACC-DSI-MINMS-4CON-UNF/1,0	1453766	1
Flush-type socket, straight 7/8" 16UNF	M26	SACC-DSI-MINFS-4CON-M26/1,0	1453795	1

5-pos. 7/8", front mount, Pg13.5 mounting thread



Common technical data

Certification	UL
Number of positions	5
Mounting thread	Pg13.5
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	9 A
Degree of protection	IP67

SACC-E-MINMS-5CON-PG13/0,5 SACC-E-MINFS-5CON-PG13/0,5

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight 7/8" 16UNF	SACC-E-MINMS-5CON-PG13/0,5	1521452	1
Flush-type socket, straight 7/8" 16UNF	SACC-E-MINFS-5CON-PG13/0,5	1521449	1

Accessories

Pg13.5 locking nut, for flush-type plugs and sockets with Pg13.5 fastening thread
The locking nut is included with the assembly.

Type	Order No.	Pcs. / Pkt.
SACC-E-MU-PG13,5	1539143	100
-	-	-

5-pos. 7/8", rear mount, 26 mm or 7/8" mounting thread

The locking nut is included with the assembly.



Common technical data

Certification	UL
Number of positions	5
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	9 A
Degree of protection	IP67

SACC-DSI-MINMS-5CON-UNF/1,0 SACC-DSI-MINFS-5CON-M26/1,0

Design	Mounting thread	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight 7/8" 16UNF	7/8"	SACC-DSI-MINMS-5CON-UNF/1,0	1453799	1
Flush-type socket, straight 7/8" 16UNF	M26	SACC-DSI-MINFS-5CON-M26/1,0	1453805	1

Valve plug cordsets and connectors

The valve plugs meet international standard EN 175301-803 and provide a pluggable connection for pneumatic and hydraulic valve control.

The plugs are supplied with an embedded LED, integrated seal and follow industry standard pin spacing in types A, AD, B, BI, C, and CI. Protective circuitry such as a Zener diode, varistor, or freewheeling diode are optional. LED for status indication is also optional.





VALVE PLUG CORDSETS

Type A	Page 104
Type B	Page 105
Type BI	Page 107
Type C	Page 108
Type CI	Page 109
Type AD (pressure switch)	Page 110

VALVE PLUG CONNECTORS

Valve plug with M12 connector	Page 111
Valve plug field-wired	Page 113



Valve plug cordsets

Cordsets for valve plugs can be used to connect field devices, such as solenoid valves and limit switches. Our uniquely designed cordsets offer the benefit of a translucent membrane molding with embedded LEDs, integrated gasket and marker carrier. For high-density valve banks, double-headed valve plugs consolidate wiring by connecting two valves per cordset.

Type A (2+PE) with Z diode, 18 mm pin spacing, to open end, PUR black 80°C (single head)



Common technical data	
Certification	
Assembly	Free conductor end -> Valve plug A
Number of positions	3
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	24 V
Conductor cross section	3x 0.5 mm ²
AWG	20
Cable type	PUR halogen-free black
Cable diameter	4.5 mm ± 0.2 mm
Status indication (LED)	1 LED
Protective circuit	Z diode
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SAC-3P- 1,5-PUR/A-1L-Z	1434989	1
SAC-3P- 3,0-PUR/A-1L-Z	1434992	1
SAC-3P- 5,0-PUR/A-1L-Z	1435001	1
SAC-3P-10,0-PUR/A-1L-Z	1435014	1

Configurable sensor/actuator cable	Type	Order No.	Pcs. / Pkt.
Free conductor end -> Valve plug A	SAC-3P-A-1L-Z/.../...	1435027	1
Configuration options for cable type and length are shown on page 105	-	-	-

Type A (2+PE) with Z diode, 18 mm pin spacing to M12 plug, PUR black 80°C (single head)



Common technical data	
Certification	
Assembly	Plug straight M12-SPEEDCON -> Valve plug A
Number of positions	3
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	24 V
Conductor cross section	3x 0.5 mm ²
AWG	20
Cable type	PUR halogen-free black
Cable diameter	4.5 mm ± 0.2 mm
Status indication (LED)	1 LED
Protective circuit	Z diode
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SAC-3P-MS/ 0,3-PUR/A-1L-Z SCO	1434882	1
SAC-3P-MS/ 0,6-PUR/A-1L-Z SCO	1434895	1
SAC-3P-MS/ 1,5-PUR/A-1L-Z SCO	1434905	1
SAC-3P-MS/ 3,0-PUR/A-1L-Z SCO	1434918	1

Configurable sensor/actuator cable	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON -> Valve plug A	SAC-3P-MS-A-1L-Z SCO/.../...	1434921	1
Configuration options for cable type and length are shown on page 105	-	-	-

Type A (2+PE) with Z diode, 18 mm pin spacing, to open end, PUR/PVC black 80°C (double head)



Common technical data

Assembly	Free conductor end -> Valve plug A
Number of positions	4
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	24 V AC/DC
Conductor cross section	4x 0.75 mm ²
AWG	18
Cable type	PUR/PVC black
Cable diameter	6.3 mm ± 0.2 mm
Status indication (LED)	1 LED
Protective circuit	Z diode
Degree of protection	IP65/67

Distance between double plugs	Type	Order No.	Pcs. / Pkt.
0.1 m	SAC- 1,5/0,1-116/2XA-1L-Z	1457982	1
0.15 m	SAC- 1,5/0,15-116/2XA-1L-Z	1458020	1
0.2 m	SAC- 1,5/0,2-116/2XA-1L-Z	1458062	1
0.1 m	SAC- 3,0/0,1-116/2XA-1L-Z	1457995	1
0.15 m	SAC- 3,0/0,15-116/2XA-1L-Z	1458033	1
0.2 m	SAC- 3,0/0,2-116/2XA-1L-Z	1458075	1
0.1 m	SAC- 5,0/0,1-116/2XA-1L-Z	1458004	1
0.15 m	SAC- 5,0/0,15-116/2XA-1L-Z	1458046	1
0.2 m	SAC- 5,0/0,2-116/2XA-1L-Z	1458088	1
0.1 m	SAC-10,0/0,1-116/2XA-1L-Z	1458017	1
0.15 m	SAC-10,0/0,15-116/2XA-1L-Z	1458059	1
0.2 m	SAC-10,0/0,2-116/2XA-1L-Z	1458091	1

Ordering information for configurable type A (2+PE) sensor/actuator cordsets

Configurable order no./cable type/length

Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m.

Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.

Cable type	Description	Size	Approvals	Usage area
PUR	PUR black 80°C	0.5 mm ²	UL	General industrial
121	PUR black 80°C	1.0 mm ²	UL	General industrial
240	PUR yellow 80°C	0.5 mm ²	UL	General industrial
280	PUR gray 105°C	0.5 mm ²	UL	General industrial
150	PUR orange 80°C	0.5 mm ²	UL	Robotic
116	PUR/PVC black 80°C	0.75 mm ²	UL	General industrial
117	PUR/PVC gray 80°C	0.75 mm ²	UL	General industrial
PVC	PVC black 80°C	0.5 mm ²	UL	General industrial
534	PVC black 80°C	0.75 mm ²	UL	General industrial
800	TPE gray 120°C	0.34 mm ²	UL	Robotic, hi-flex

Example		
Order No.	Type	Length
1434921	240	4.5
Type A (2+PE) valve plug to M12 straight plug	cable type "240" (PUR yellow 80°C)	cable length of 4.5 m

Sensor/actuator cordsets and cables

Valve plug cordsets

Type B with Z diode, 10 mm pin spacing, to open end, PUR black 80°C (single head)



Common technical data	
Certification	
Assembly	Free conductor end -> Valve plug B (10 mm)
Number of positions	3
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	24 V
Conductor cross section	3x 0.5 mm ²
AWG	20
Cable type	PUR halogen-free black
Cable diameter	4.5 mm ± 0.2 mm
Status indication (LED)	1 LED
Protective circuit	Z diode
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SAC-3P- 1,5-PUR/B-1L-Z	1435386	1
SAC-3P- 3,0-PUR/B-1L-Z	1435399	1
SAC-3P- 5,0-PUR/B-1L-Z	1435409	1
SAC-3P-10,0-PUR/B-1L-Z	1435412	1

Configurable sensor/actuator cable	Type	Order No.	Pcs. / Pkt.
Free conductor end -> Valve plug B (10 mm)	SAC-3P-B-1L-Z/.../...	1435425	1
Configuration options for cable type and length are shown on page 109	-	-	-

Type B with Z diode, 10 mm pin spacing, to M12 plug, straight, PUR black 80°C (single head)



Common technical data	
Certification	
Assembly	Plug straight M12-SPEEDCON -> Valve plug B (10 mm)
Number of positions	3
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	24 V
Conductor cross section	3x 0.5 mm ²
AWG	20
Cable type	PUR halogen-free black
Cable diameter	4.5 mm ± 0.2 mm
Status indication (LED)	1 LED
Protective circuit	Z diode
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SAC-3P-MS/ 0,3-PUR/B-1L-Z SCO	1435289	1
SAC-3P-MS/ 0,6-PUR/B-1L-Z SCO	1435292	1
SAC-3P-MS/ 1,5-PUR/B-1L-Z SCO	1435302	1
SAC-3P-MS/ 3,0-PUR/B-1L-Z SCO	1435315	1

Configurable sensor/actuator cable	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON -> Valve plug B (10 mm)	SAC-3P-MS-B-1L-Z SCO/.../...	1435328	1
Configuration options for cable type and length are shown on page 109	-	-	-

Type B with Z diode, 10 mm pin spacing, to open end, PUR/PVC black 80°C (double head)

Available with 10, 15 and 20 cm spacing between heads.



Common technical data	
Assembly	Free conductor end -> Valve plug B (10 mm)
Number of positions	4
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	24 V AC/DC
Conductor cross section	4x 0.75 mm ²
AWG	18
Cable type	PUR/PVC black
Cable diameter	6.3 mm ± 0.2 mm
Status indication (LED)	1 LED
Protective circuit	Z diode
Degree of protection	IP65/67

Distance between double plugs	Type	Order No.	Pcs. / Pkt.
0.1 m	SAC- 1,5/0,1-116/2XB-1L-Z	1458169	1
0.15 m	SAC- 1,5/0,15-116/2XB-1L-Z	1458208	1
0.2 m	SAC- 1,5/0,2-116/2XB-1L-Z	1458240	1
0.1 m	SAC- 3,0/0,1-116/2XB-1L-Z	1458172	1
0.15 m	SAC- 3,0/0,15-116/2XB-1L-Z	1458211	1
0.2 m	SAC- 3,0/0,2-116/2XB-1L-Z	1458253	1
0.1 m	SAC- 5,0/0,1-116/2XB-1L-Z	1458185	1
0.15 m	SAC- 5,0/0,15-116/2XB-1L-Z	1458224	1
0.2 m	SAC- 5,0/0,2-116/2XB-1L-Z	1458266	1
0.1 m	SAC-10,0/0,1-116/2XB-1L-Z	1458198	1
0.15 m	SAC-10,0/0,15-116/2XB-1L-Z	1458237	1
0.2 m	SAC-10,0/0,2-116/2XB-1L-Z	1458279	1

Type BI with Z diode, 11 mm pin spacing, to open end, PUR black 80°C (single head)



Common technical data	
Certification	PC
Assembly	Free conductor end -> Valve plug B (11 mm)
Number of positions	3
Nominal current I_N (IEC)	4 A
Nominal voltage U_N (IEC)	24 V
Conductor cross section	3x 0.5 mm ²
AWG	20
Cable type	PUR halogen-free black
Cable diameter	4.5 mm ± 0.2 mm
Status indication (LED)	1 LED
Protective circuit	Z diode
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SAC-3P- 1,5-PUR/BI-1L-Z	1435234	1
SAC-3P- 3,0-PUR/BI-1L-Z	1435247	1
SAC-3P- 5,0-PUR/BI-1L-Z	1435250	1
SAC-3P-10,0-PUR/BI-1L-Z	1435263	1

Configurable sensor/actuator cable	Type	Order No.	Pcs. / Pkt.
Free conductor end -> Valve plug B (11 mm)	SAC-3P-BI-1L-Z/.../...	1435276	1
Configuration options for cable type and length are shown on page 109	-	-	-

Type BI with Z diode, 11 mm pin spacing, to M12 plug, PUR black 80°C (single head)



Common technical data	
Certification	PC
Assembly	Plug straight M12-SPEEDCON -> Valve plug B (11 mm)
Number of positions	3
Nominal current I_N (IEC)	4 A
Nominal voltage U_N (IEC)	24 V
Conductor cross section	3x 0.5 mm ²
AWG	20
Cable type	PUR halogen-free black
Cable diameter	4.5 mm ± 0.2 mm
Status indication (LED)	1 LED
Protective circuit	Z diode
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SAC-3P-MS/ 0,3-PUR/BI-1L-Z SCO	1435137	1
SAC-3P-MS/ 0,6-PUR/BI-1L-Z SCO	1435140	1
SAC-3P-MS/ 1,5-PUR/BI-1L-Z SCO	1435153	1
SAC-3P-MS/ 3,0-PUR/BI-1L-Z SCO	1435166	1

Configurable sensor/actuator cable	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON -> Valve plug B (11 mm)	SAC-3P-MS-BI-1L-Z SCO/.../...	1435179	1
Configuration options for cable type and length are shown on page 109	-	-	-

Type BI with Z diode, 11 mm pin spacing, to open end, PUR/PVC black 80°C (double head)



Common technical data	
Assembly	Free conductor end -> Valve plug B (11 mm)
Number of positions	4
Nominal current I_N (IEC)	4 A
Nominal voltage U_N (IEC)	24 V AC/DC
Conductor cross section	4x 0.75 mm ²
AWG	18
Cable type	PUR/PVC black
Cable diameter	6.3 mm ± 0.2 mm
Status indication (LED)	1 LED
Protective circuit	Z diode
Degree of protection	IP65/67

Distance between double plugs	Type	Order No.	Pcs. / Pkt.
0.1 m	SAC- 1,5/0,1-116/2XBI-1L-Z	1458347	1
0.15 m	SAC- 1,5/0,15-116/2XBI-1L-Z	1458389	1
0.2 m	SAC- 1,5/0,2-116/2XBI-1L-Z	1458428	1
0.1 m	SAC- 3,0/0,1-116/2XBI-1L-Z	1458350	1
0.15 m	SAC- 3,0/0,15-116/2XBI-1L-Z	1458392	1
0.2 m	SAC- 3,0/0,2-116/2XBI-1L-Z	1458431	1
0.1 m	SAC- 5,0/0,1-116/2XBI-1L-Z	1458363	1
0.15 m	SAC- 5,0/0,15-116/2XBI-1L-Z	1458402	1
0.2 m	SAC- 5,0/0,2-116/2XBI-1L-Z	1458444	1
0.1 m	SAC-10,0/0,1-116/2XBI-1L-Z	1458376	1
0.15 m	SAC-10,0/0,15-116/2XBI-1L-Z	1458415	1
0.2 m	SAC-10,0/0,2-116/2XBI-1L-Z	1458457	1

Sensor/actuator cordsets and cables

Valve plug cordsets

Type C with Z diode, 8 mm pin spacing, to open end, PUR black 80°C (single head)



Common technical data

Certification	
Assembly	Free conductor end -> Valve plug C (8 mm)
Number of positions	3
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	24 V
Conductor cross section	3x 0.5 mm ²
AWG	20
Cable type	PUR halogen-free black
Cable diameter	4.5 mm ± 0.2 mm
Status indication (LED)	1 LED
Protective circuit	Z diode
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SAC-3P- 1,5-PUR/C-1L-Z	1435535	1
SAC-3P- 3,0-PUR/C-1L-Z	1435548	1
SAC-3P- 5,0-PUR/C-1L-Z	1435551	1
SAC-3P-10,0-PUR/C-1L-Z	1435564	1

Configurable sensor/actuator cable

Free conductor end -> Valve plug C (8 mm)

Configuration options for cable type and length are shown on page 109

Type	Order No.	Pcs. / Pkt.
SAC-3P-C-1L-Z/.../...	1435726	1
-	-	-

Type C with Z diode, 8 mm pin spacing, to M12 plug, PUR black 80°C (single head)



Common technical data

Certification	
Assembly	Plug straight M12-SPEEDCON -> Valve plug C (8 mm)
Number of positions	3
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	24 V
Conductor cross section	3x 0.5 mm ²
AWG	20
Cable type	PUR halogen-free black
Cable diameter	4.5 mm ± 0.2 mm
Status indication (LED)	1 LED
Protective circuit	Z diode
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SAC-3P-MS/ 0,3-PUR/C-1L-Z SCO	1435438	1
SAC-3P-MS/ 0,6-PUR/C-1L-Z SCO	1435441	1
SAC-3P-MS/ 1,5-PUR/C-1L-Z SCO	1435454	1
SAC-3P-MS/ 3,0-PUR/C-1L-Z SCO	1435467	1

Configurable sensor/actuator cable

Plug straight M12-SPEEDCON -> Valve plug C (8 mm)

Configuration options for cable type and length are shown on page 109

Type	Order No.	Pcs. / Pkt.
SAC-3P-MS-C-1L-Z SCO/.../...	1435629	1
-	-	-

Type CI with Z diode, 9.4 mm pin spacing, to open end, PUR black 80°C (single head)



Common technical data	
Certification	PC
Assembly	Free conductor end -> Valve plug C (9,4 mm)
Number of positions	3
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	24 V
Conductor cross section	3x 0.5 mm ²
AWG	20
Cable type	PUR halogen-free black
Cable diameter	4.5 mm ± 0.2 mm
Status indication (LED)	1 LED
Protective circuit	Z diode
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SAC-3P- 1,5-PUR/CI-1L-Z	1435687	1
SAC-3P- 3,0-PUR/CI-1L-Z	1435690	1
SAC-3P- 5,0-PUR/CI-1L-Z	1435700	1
SAC-3P-10,0-PUR/CI-1L-Z	1435713	1

Configurable sensor/actuator cable	Type	Order No.	Pcs. / Pkt.
Free conductor end -> Valve plug C (9,4 mm)	SAC-3P-CI-1L-Z/.../...	1435577	1
Configuration options for cable type and length are shown on page 109	-	-	-

Type CI with Z diode, 9.4 mm pin spacing, to M12 plug, PUR black 80°C (single head)



Common technical data	
Certification	PC
Assembly	Plug straight M12-SPEEDCON -> Valve plug C (9,4 mm)
Number of positions	3
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	24 V
Conductor cross section	3x 0.5 mm ²
AWG	20
Cable type	PUR halogen-free black
Cable diameter	4.5 mm ± 0.2 mm
Status indication (LED)	1 LED
Protective circuit	Z diode
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SAC-3P-MS/ 0,3-PUR/CI-1L-Z SCO	1435580	1
SAC-3P-MS/ 0,6-PUR/CI-1L-Z SCO	1435593	1
SAC-3P-MS/ 1,5-PUR/CI-1L-Z SCO	1435603	1
SAC-3P-MS/ 3,0-PUR/CI-1L-Z SCO	1435616	1

Configurable sensor/actuator cable	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON -> Valve plug C (9,4 mm)	SAC-3P-MS-CI-1L-Z SCO/.../...	1435470	1
Configuration options for cable type and length are shown on page 109	-	-	-

Ordering information for configurable type B, BI, C and CI sensor/actuator cordsets

Configurable order no./cable type/length	Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m. <i>Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.</i>
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Cable type	Description	Size	Approvals	Usage area
PUR	PUR black 80°C	0.5 mm ²	UL	General industrial
240	PUR yellow 80°C	0.5 mm ²	UL	General industrial
280	PUR gray 105°C	0.5 mm ²	UL	General industrial
150	PUR orange 80°C	0.5 mm ²	UL	Robotic
116	PUR/PVC black 80°C	0.75 mm ²	UL	General industrial
117	PUR/PVC gray 80°C	0.75 mm ²	UL	General industrial
PVC	PVC black 80°C	0.5 mm ²	UL	General industrial
534	PVC black 80°C	0.75 mm ²	UL	General industrial
800	TPE gray 120°C	0.34 mm ²	UL	Robotic, hi-flex

Example		
Order No.	Type	Length
1435328	240	4.5
Type B valve plug to M12 straight plug	cable type "240" (PUR yellow 80°C)	cable length of 4.5 m

Sensor/actuator cordsets and cables

Valve plug cordsets

Type AD (pressure switch), 18 mm pin spacing, to open end, PUR black 80°C (single head)



Common technical data	
Certification	PC
Assembly	Free conductor end -> Valve plug A (pressure switch)
Number of positions	5
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	24 V
Conductor cross section	5x 0.5 mm ²
AWG	20
Cable type	PUR halogen-free black
Cable diameter	5.3 mm ±0.02 mm
Status indication (LED)	2 LEDs
Protective circuit	Unwired
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SAC-5P- 1,5-PUR/AD-2L	1435085	1
SAC-5P- 3,0-PUR/AD-2L	1435098	1
SAC-5P- 5,0-PUR/AD-2L	1435108	1
SAC-5P-10,0-PUR/AD-2L	1435111	1

Configurable sensor/actuator cable	Type	Order No.	Pcs. / Pkt.
Free conductor end -> Valve plug A (pressure switch)	SAC-5P-AD-2L/.../...	1435124	1
Configuration options for cable type and length are shown on page 110	-	-	-

Type AD (pressure switch) plug, 18 mm pin spacing, to M12 plug, PUR black 80°C (single head)



Common technical data	
Certification	PC
Assembly	Plug straight M12-SPEEDCON -> Valve plug A (pressure switch)
Number of positions	5
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	24 V
Conductor cross section	5x 0.5 mm ²
AWG	20
Cable type	PUR halogen-free black
Cable diameter	5.3 mm ±0.02 mm
Status indication (LED)	2 LEDs
Protective circuit	Unwired
Degree of protection	IP65/67

Type	Order No.	Pcs. / Pkt.
SAC-5P-MS/ 0,3-PUR/AD-2L SCO	1435030	1
SAC-5P-MS/ 0,6-PUR/AD-2L SCO	1435043	1
SAC-5P-MS/ 1,5-PUR/AD-2L SCO	1435056	1
SAC-5P-MS/ 3,0-PUR/AD-2L SCO	1435069	1

Configurable sensor/actuator cable	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON -> Valve plug A (pressure switch)	SAC-5P-MS-AD-2L SCO/.../...	1435072	1
Configuration options for cable type and length are shown on page 110	-	-	-

Ordering information for configurable type AD sensor/actuator cordsets

Configurable order no./cable type/length

Configurable order numbers allow selection of cable type and length, from 0.2 m to 40 m.

Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.

Cable type	Description	Size	Approvals	Usage area
PUR	PUR black 80°C	0.5 mm ²	UL	General industrial
240	PUR yellow 80°C	0.5 mm ²	UL	General industrial
280	PUR gray 105°C	0.5 mm ²	UL	General industrial
150	PUR orange 80°C	0.5 mm ²	UL	Robotic
116	PUR/PVC black 80°C	0.75 mm ²	UL	General industrial
PVC	PVC black 80°C	0.5 mm ²	UL	General industrial
534	PVC black 80°C	0.75 mm ²	UL	General industrial
800	TPE gray 120°C	0.34 mm ²	UL	Robotic, hi-flex

Example		
Order No.	Type	Length
1435072	240	4.5
Type AD (pressure switch) valve plug to M12 straight plug	cable type "240" (PUR yellow 80°C)	cable length of 4.5 m

Valve plug with M12 adapter



M12 adapters for valve plug heads offer a quick-connect option for devices, such as solenoid valves and limit switches. Our uniquely designed adapters offer the benefit of a translucent membrane molding with embedded LEDs, integrated gasket and a marker carrier. For high-density valve banks, double-headed valve plugs consolidate wiring by connecting two valves per adapter. Once the M12 adapter is connected, a standard cordset can be used to connect the adapter head to the control system.

Type A, B, BI, straight or angled (single head)



SAC-3P-MS/A-1L-Z SCO



SAC-3P-MR/B-1L-Z SCO

Common technical data	
Certification	®
Number of positions	3
Nominal current I_N (IEC)	4 A
Nominal voltage U_N (IEC)	24 V AC/DC
Status indication (LED)	Yellow LED
Protective circuit	Z diode
Degree of protection	IP65/67

Assembly	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON -> Valve plug A	SAC-3P-MS/A-1L-Z SCO	1458525	1
Plug angled M12-SPEEDCON -> Valve plug A	SAC-3P-MR/A-1L-Z SCO	1458538	1
Plug straight M12 -> Valve plug B (10 mm)	SAC-3P-MS/B-1L-Z SCO	1458541	1
Plug angled M12 -> Valve plug B (10 mm)	SAC-3P-MR/B-1L-Z SCO	1458554	1
Plug straight M12 -> Valve plug B (11 mm)	SAC-3P-MS/BI-1L-Z SCO	1458567	1
Plug angled M12 -> Valve plug B (11 mm)	SAC-3P-MR/BI-1L-Z SCO	1458570	1

Type AD, straight or angled (single head)



SAC-5P-MS/AD-2L SCO



SAC-5P-MR/AD-2L SCO

Common technical data	
Certification	®
Number of positions	5
Nominal current I_N (IEC)	4 A
Nominal voltage U_N (IEC)	24 V AC/DC
Status indication (LED)	2 LEDs
Degree of protection	IP65/67

Assembly	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON -> Valve plug A (pressure switch)	SAC-5P-MS/AD-2L SCO	1458596	1
Plug angled M12-SPEEDCON -> Valve plug A (pressure switch)	SAC-5P-MR/AD-2L SCO	1458606	1

M12 sensor/actuator adapters

Valve plug with M12 adapter

Type A, B and BI plugs, straight or angled (double head)

Available with 10, 15 and 20 cm spacing between heads.



Common technical data	
Number of positions	4
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	24 V AC/DC
Conductor cross section	3x 0.75 mm ² (signal line)
AWG	18
Cable type	PUR/PVC black
Degree of protection	IP65/67

SAC-MS/0,1-116/2XA-1L-Z SCO SAC-MR/0,15-116/2XB-1L-Z SCO

Assembly	Distance between double plugs	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON -> Valve plug A	0.1 m	SAC-MS/0,1-116/2XA-1L-Z SCO	1458101	1
Plug straight M12-SPEEDCON -> Valve plug A	0.15 m	SAC-MS/0,15-116/2XA-1L-Z SCO	1458114	1
Plug straight M12-SPEEDCON -> Valve plug A	0.2 m	SAC-MS/0,2-116/2XA-1L-Z SCO	1458127	1
Plug angled M12-SPEEDCON -> Valve plug A	0.1 m	SAC-MR/0,1-116/2XA-1L-Z SCO	1458130	1
Plug angled M12-SPEEDCON -> Valve plug A	0.15 m	SAC-MR/0,15-116/2XA-1L-Z SCO	1458143	1
Plug angled M12-SPEEDCON -> Valve plug A	0.2 m	SAC-MR/0,2-116/2XA-1L-Z SCO	1458156	1
Plug straight M12-SPEEDCON -> Valve plug B (10 mm)	0.1 m	SAC-MS/0,1-116/2XB-1L-Z SCO	1458282	1
Plug straight M12-SPEEDCON -> Valve plug B (10 mm)	0.15 m	SAC-MS/0,15-116/2XB-1L-Z SCO	1458295	1
Plug straight M12-SPEEDCON -> Valve plug B (10 mm)	0.2 m	SAC-MS/0,2-116/2XB-1L-Z SCO	1458305	1
Plug angled M12-SPEEDCON -> Valve plug B (10 mm)	0.1 m	SAC-MR/0,1-116/2XB-1L-Z SCO	1458318	1
Plug angled M12-SPEEDCON -> Valve plug B (10 mm)	0.15 m	SAC-MR/0,15-116/2XB-1L-Z SCO	1458321	1
Plug angled M12-SPEEDCON -> Valve plug B (10 mm)	0.2 m	SAC-MR/0,2-116/2XB-1L-Z SCO	1458334	1
Plug straight M12-SPEEDCON -> Valve plug B (11 mm)	0.1 m	SAC-MS/0,1-116/2XBI-1L-Z SCO	1458460	1
Plug straight M12-SPEEDCON -> Valve plug B (11 mm)	0.15 m	SAC-MS/0,15-116/2XBI-1L-Z SCO	1458473	1
Plug straight M12-SPEEDCON -> Valve plug B (11 mm)	0.2 m	SAC-MS/0,2-116/2XBI-1L-Z SCO	1458486	1
Plug angled M12-SPEEDCON -> Valve plug B (11 mm)	0.1 m	SAC-MR/0,1-116/2XBI-1L-Z SCO	1458499	1
Plug angled M12-SPEEDCON -> Valve plug B (11 mm)	0.15 m	SAC-MR/0,15-116/2XBI-1L-Z SCO	1458509	1
Plug angled M12-SPEEDCON -> Valve plug B (11 mm)	0.2 m	SAC-MR/0,2-116/2XBI-1L-Z SCO	1458512	1



Valve plugs for field wiring

A full line of field-wired connectors with or without protective circuits are offered for valve plug heads. These connectors ensure that a safe and water-tight IP65 connection can be made to any suitable valve plug cable. Screw connection offers a classic and well-known termination technology.

Type A, B, BI, Z diode, screw connection



Common technical data	
Certification	PC
Number of positions	3
Nominal current I_N (IEC)	4 A
Nominal voltage U_N (IEC)	24 V
Status indication (LED)	Yellow LED
Protective circuit	Z diode
Degree of protection	IP65

Assembly	Type	Order No.	Pcs. / Pkt.
Valve plug A ->	SACC-V-3CON-PG9/A-1L-S	1671137	1
Valve plug type B (10 mm) ->	SACC-V-3CON-PG9/B-1L-S	1671153	5
BI valve connector (11 mm) ->	SACC-V-3CON-PG9/BI-1L-S	1671140	5

Type A, B, BI, C, CI, varistor for 24, 110 or 230 V, screw connection



Common technical data	
Certification	PC
Number of positions	3
Nominal current I_N (IEC)	1.5 A
Status indication (LED)	Yellow LED
Protective circuit	Varistor
Degree of protection	IP65

Assembly	Nominal voltage U_N (IEC)	Type	Order No.	Pcs. / Pkt.
Valve plug A ->	24 V AC/DC	SACC-VB-3CON-M16/A-1L-SV 24V	1452149	1
Valve plug A ->	110 V AC/DC	SACC-VB-3CON-M16/A-1L-SV 110V	1452152	1
Valve plug A ->	230 V AC/DC	SACC-VB-3CON-M16/A-1L-SV 230V	1452165	1
Valve plug type B (10 mm) ->	24 V	SACC-VB-3CON-M16/B-1L-SV 24V	1452204	1
Valve plug type B (10 mm) ->	110 V	SACC-VB-3CON-M16/B-1L-SV 110V	1452217	1
Valve plug type B (10 mm) ->	230 V	SACC-VB-3CON-M16/B-1L-SV 230V	1452220	1
BI valve connector (11 mm) ->	24 V	SACC-VB-3CON-M16/BI-1L-SV 24V	1452233	1
BI valve connector (11 mm) ->	110 V	SACC-VB-3CON-M16/BI-1L-SV 110V	1452246	1
BI valve connector (11 mm) ->	230 V	SACC-VB-3CON-M16/BI-1L-SV 230V	1452259	1
Valve plug C (8 mm) ->	24 V	SACC-VB-3CON-M12/C-1L-SV 24V	1452262	1
Valve plug C (8 mm) ->	110 V	SACC-VB-3CON-M12/C-1L-SV 110V	1452275	1
Valve plug C (8 mm) ->	230 V	SACC-VB-3CON-M12/C-1L-SV 230V	1452288	1
CI valve connector (9.4 mm) ->	24 V	SACC-VB-3CON-M12/CI-1L-SV 24V	1452291	1
CI valve connector (9.4 mm) ->	110 V	SACC-VB-3CON-M12/CI-1L-SV 110V	1452301	1
CI valve connector (9.4 mm) ->	230 V	SACC-VB-3CON-M12/CI-1L-SV 230V	1452314	1

M12 sensor/actuator connectors

Valve plugs for field wiring

Type A, AD, without protective circuit, screw connection



Common technical data	
Certification	
Protective circuit	Unwired
Degree of protection	IP65

Assembly	Number of positions	Nominal current I _N (IEC)	Nominal voltage U _N (IEC)	Status indication (LED)	Type	Order No.	Pcs. / Pkt.
Valve plug A ->	3	10 A	230 V AC/DC	-	SACC-VB-3CON-M16/A	1452123	1
Valve plug A ->	4	10 A	230 V AC/DC	-	SACC-VB-4CON-M16/A	1452136	1
AD valve connector (pressure switch) ->	5	1.5 A	24 V	2 LEDs	SACC-VB-5CON-M16/AD-2L 24V	1457908	1

M12 SPEEDCON cordsets and connectors for Ethernet communication



Ethernet/IP is widely used to transfer and collect data quickly; network many devices; update software; and to extend the company IT network to the plant floor.

Phoenix Contact offers a wide range of connectivity products from M12 SPEEDCON cordsets and connectors to switches and bus couplers.





ETHERNET CORDSETS AND CABLES

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M12 panel feed-through
with shielded cable **Page 128**

M12 Ethernet cordsets and cables

4-pos. D-code shielded Ethernet cordsets (up to 100 Mbps)



D-code shielded Ethernet cordsets (up to 100 Mbps)

D-code M12 Ethernet cordsets and extension cables are assembled with two twisted pairs of 26 AWG stranded copper conductors and follow the typical Ethernet wire color code of white/orange, (pos. 1), white/green (pos. 2), orange (pos. 3) and green (pos. 4). The D-code M12 connector has become the factory standard for IP65/IP67 CAT5e transmission. With two twisted pairs, the cordset can communicate at up to 100 Mbps. The cable is SF/UTP, which signifies there is braided shield and foil shield between the cable jacket and two twisted pairs.

4-pos. D-code shielded Ethernet, M12 plug, straight or angled, to open end, PUR, teal, 70°C



Common technical data	
Number of positions	4
Conductor cross section (AWG)	26
Nominal current I_N	4 A
Nominal voltage U_N (IEC)	250 V
Conductor cross section	2x 2x 0.14 mm ²
Cable diameter	6.4 mm ± 0.2 mm
Degree of protection	IP65/67

NBC-MSD/ 2,0-93E SCO US

NBC-MRD/ 2,0-93E SCO US

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	2 m	NBC-MSD/ 2,0-93E SCO US	1406131
Plug straight M12-SPEEDCON -> Free conductor end	5 m	NBC-MSD/ 5,0-93E SCO US	1408727
Plug straight M12-SPEEDCON -> Free conductor end	10 m	NBC-MSD/ 10,0-93E SCO US	1408728
Plug angled M12-SPEEDCON -> Free conductor end	2 m	NBC-MRD/ 2,0-93E SCO US	1406126
Plug angled M12-SPEEDCON -> Free conductor end	5 m	NBC-MRD/ 5,0-93E SCO US	1408734
Plug angled M12-SPEEDCON -> Free conductor end	10 m	NBC-MRD/ 10,0-93E SCO US	1408735

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	NBC-MSD SCO US/93E/...	1405876
Plug angled M12-SPEEDCON -> Free conductor end	NBC-MRD SCO US/93E/...	1405871
-	-	-

4-pos. D-code shielded Ethernet, M12 socket, straight or angled, to open end, PUR, teal, 70°C



Common technical data	
Number of positions	4
Conductor cross section (AWG)	26
Nominal current I_N	4 A
Nominal voltage U_N (IEC)	250 V
Conductor cross section	2x 2x 0.14 mm ²
Cable diameter	6.4 mm ± 0.2 mm
Degree of protection	IP65/67

NBC- 2,0-93E/FSD SCO US

NBC- 2,0-93E/FRD SCO US

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	2 m	NBC- 2,0-93E/FSD SCO US	1406130
Free conductor end -> Socket, straight M12-SPEEDCON	5 m	NBC- 5,0-93E/FSD SCO US	1408729
Free conductor end -> Socket, straight M12-SPEEDCON	10 m	NBC- 10,0-93E/FSD SCO US	1408730
Free conductor end -> Socket, angled M12-SPEEDCON	2 m	NBC- 2,0-93E/FRD SCO US	1406125
Free conductor end -> Socket, angled M12-SPEEDCON	5 m	NBC- 5,0-93E/FRD SCO US	1408736
Free conductor end -> Socket, angled M12-SPEEDCON	10 m	NBC- 10,0-93E/FRD SCO US	1408738

Configurable cordsets	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	NBC-FSD SCO US/93E/...	1405875
Free conductor end -> Socket, angled M12-SPEEDCON	NBC-FRD SCO US/93E/...	1405870
-	-	-

4-pos. D-code shielded Ethernet, M12 plug, straight, to M12 plug or socket, straight, PUR, teal, 70°C



Common technical data	
Number of positions	4
Conductor cross section (AWG)	26
Nominal current I_N	4 A
Nominal voltage U_N (IEC)	250 V
Conductor cross section	2x 2x 0.14 mm ²
Cable diameter	6.4 mm ± 0.2 mm
Degree of protection	IP65/67

NBC-MSD/ 0,5-93E/MSD SCO US NBC-MSD/ 0,5-93E/FSD SCO US

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Plug, straight M12-SPEEDCON	0.5 m	NBC-MSD/ 0,5-93E/MSD SCO US	1408732
Plug straight M12-SPEEDCON -> Plug, straight M12-SPEEDCON	2 m	NBC-MSD/ 2,0-93E/MSD SCO US	1406128
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	NBC-MSD/ 0,5-93E/FSD SCO US	1408731
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	2 m	NBC-MSD/ 2,0-93E/FSD SCO US	1406129

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Plug, straight M12-SPEEDCON	NBC-MSD-MSD SCO US/93E/...	1405873
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	NBC-MSD-FSD SCO US/93E/...	1405874
-	-	-

4-pos. D-code shielded Ethernet, M12 plug, angled, to M12 plug or socket, angled, PUR, teal, 70°C



Common technical data	
Number of positions	4
Conductor cross section (AWG)	26
Nominal current I_N	4 A
Nominal voltage U_N (IEC)	250 V
Conductor cross section	2x 2x 0.14 mm ²
Cable diameter	6.4 mm ± 0.2 mm
Degree of protection	IP65/67

NBC-MRD/ 0,5-93E/MRD SCO US NBC-MRD/ 0,5-93E/FRD SCO US

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Plug, angled M12-SPEEDCON	0.5 m	NBC-MRD/ 0,5-93E/MRD SCO US	1408741
Plug angled M12-SPEEDCON -> Plug, angled M12-SPEEDCON	2 m	NBC-MRD/ 2,0-93E/MRD SCO US	1406123
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	NBC-MRD/ 0,5-93E/FRD SCO US	1408739
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	2 m	NBC-MRD/ 2,0-93E/FRD SCO US	1406124

Configurable cordsets	Type	Order No.
Plug angled M12-SPEEDCON -> Plug, angled M12-SPEEDCON	NBC-MRD-MRD SCO US/93E/...	1405868
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	NBC-MRD-FRD SCO US/93E/...	1405869
-	-	-

4-pos. D-code shielded Ethernet, M12 plug, straight or angled, to RJ45, straight, PUR, teal, 70°C



Common technical data	
Number of positions	4
Conductor cross section (AWG)	26
Nominal current I_N	1 A
Nominal voltage U_N (IEC)	50 V
Conductor cross section	2x 2x 0.14 mm ²
Cable diameter	6.4 mm ± 0.2 mm
Degree of protection	IP67/IP20

NBC-MSD/ 0,5-93E/R4AC SCO US NBC-MRD/ 0,5-93E/R4AC SCO US

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Plug, straight	0.5 m	NBC-MSD/ 0,5-93E/R4AC SCO US	1408733
Plug straight M12-SPEEDCON -> Plug, straight	2 m	NBC-MSD/ 2,0-93E/R4AC SCO US	1406127
Plug angled M12-SPEEDCON -> Plug, straight	0.5 m	NBC-MRD/ 0,5-93E/R4AC SCO US	1408742
Plug angled M12-SPEEDCON -> Plug, straight	2 m	NBC-MRD/ 2,0-93E/R4AC SCO US	1406122

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Plug, straight	NBC-MSD-R4AC SCO US/93E/...	1405872
Plug angled M12-SPEEDCON -> Plug, straight	NBC-MRD-R4AC SCO US/93E/...	1405867
-	-	-

M12 Ethernet cordsets and cables

8-pos. shielded Ethernet cordsets (up to 1 Gbps)



8-pos. shielded Ethernet cordsets (up to 1 Gbps)

8-pos. M12 Ethernet cordsets and extension cables are assembled with four twisted pairs of 26 AWG stranded copper conductors and follow the typical Ethernet wire color code of white/blue, (pos. 1), white/brown (pos. 2), brown (pos. 3), orange (pos. 4), white/green (pos. 5), white/orange (pos. 6), blue (pos. 7) and green (pos. 8). With four twisted pairs, the cordset can communicate at up to 1 Gbps and deliver power-over-Ethernet technology. The cable is SF/UTP, which signifies there is a braided shield and foil shield between the cable jacket and the four twisted pairs.

8-pos. shielded Ethernet, M12 plug, straight or angled, to open end, PUR, teal, 70°C



NBC-MS/ 2,0-94B SCO US

NBC-MR/ 2,0-94B SCO US

Common technical data	
Number of positions	8
Conductor cross section (AWG)	26
Nominal current I_N	2 A
Nominal voltage U_N (IEC)	30 V
Conductor cross section	4x 2x 0.14 mm ²
Cable diameter	6.4 mm ± 0.2 mm
Degree of protection	IP65/67

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	2 m	NBC-MS/ 2,0-94B SCO US	1406121
Plug straight M12-SPEEDCON -> Free conductor end	5 m	NBC-MS/ 5,0-94B SCO US	1408743
Plug straight M12-SPEEDCON -> Free conductor end	10 m	NBC-MS/ 10,0-94B SCO US	1408744
Plug angled M12-SPEEDCON -> Free conductor end	2 m	NBC-MR/ 2,0-94B SCO US	1406116
Plug angled M12-SPEEDCON -> Free conductor end	5 m	NBC-MR/ 5,0-94B SCO US	1408751
Plug angled M12-SPEEDCON -> Free conductor end	10 m	NBC-MR/ 10,0-94B SCO US	1408752

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	NBC-MS SCO US/94B/...	1405865
Plug angled M12-SPEEDCON -> Free conductor end	NBC-MR SCO US/94B/...	1405860
-	-	-

8-pos. shielded Ethernet, M12 socket, straight or angled, to open end, PUR, teal, 70°C



NBC- 2,0-94B/FS SCO US

NBC- 2,0-94B/FR SCO US

Common technical data	
Number of positions	8
Conductor cross section (AWG)	26
Nominal current I_N	2 A
Nominal voltage U_N (IEC)	30 V
Conductor cross section	4x 2x 0.14 mm ²
Cable diameter	6.4 mm ± 0.2 mm
Degree of protection	IP65/67

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	2 m	NBC- 2,0-94B/FS SCO US	1406120
Free conductor end -> Socket, straight M12-SPEEDCON	5 m	NBC- 5,0-94B/FS SCO US	1408745
Free conductor end -> Socket, straight M12-SPEEDCON	10 m	NBC- 10,0-94B/FS SCO US	1408746
Free conductor end -> Socket, angled M12-SPEEDCON	2 m	NBC- 2,0-94B/FR SCO US	1406115
Free conductor end -> Socket, angled M12-SPEEDCON	5 m	NBC- 5,0-94B/FR SCO US	1408754
Free conductor end -> Socket, angled M12-SPEEDCON	10 m	NBC- 10,0-94B/FR SCO US	1408755

Configurable cordsets	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	NBC-FS SCO US/94B/...	1405864
Free conductor end -> Socket, angled M12-SPEEDCON	NBC-FR SCO US/94B/...	1405859
-	-	-

8-pos. shielded Ethernet, M12 plug, straight, to M12 plug or socket, straight, PUR, teal, 70°C



Common technical data	
Number of positions	8
Conductor cross section (AWG)	26
Nominal current I_N	2 A
Nominal voltage U_N (IEC)	30 V
Conductor cross section	4x 2x 0.14 mm ²
Cable diameter	6.4 mm ± 0.2 mm
Degree of protection	IP65/67

NBC-MS/ 0,5-94B/MS SCO US NBC-MS/ 0,5-94B/FS SCO US

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Plug, straight M12-SPEEDCON	0.5 m	NBC-MS/ 0,5-94B/MS SCO US	1408748
Plug straight M12-SPEEDCON -> Plug, straight M12-SPEEDCON	2 m	NBC-MS/ 2,0-94B/MS SCO US	1406118
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	NBC-MS/ 0,5-94B/FS SCO US	1408747
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	2 m	NBC-MS/ 2,0-94B/FS SCO US	1406119

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Plug, straight M12-SPEEDCON	NBC-MS-MS SCO US/94B/...	1405862
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	NBC-MS-FS SCO US/94B/...	1405863
-	-	-

8-pos. shielded Ethernet, M12 plug, angled, to M12 plug or socket, angled, PUR, teal, 70°C



Common technical data	
Number of positions	8
Conductor cross section (AWG)	26
Nominal current I_N	2 A
Nominal voltage U_N (IEC)	30 V
Conductor cross section	4x 2x 0.14 mm ²
Cable diameter	6.4 mm ± 0.2 mm
Degree of protection	IP65/67

NBC-MR/ 0,5-94B/MR SCO US NBC-MR/ 0,5-94B/FR SCO US

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Plug, angled M12-SPEEDCON	0.5 m	NBC-MR/ 0,5-94B/MR SCO US	1408757
Plug angled M12-SPEEDCON -> Plug, angled M12-SPEEDCON	2 m	NBC-MR/ 2,0-94B/MR SCO US	1406113
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	NBC-MR/ 0,5-94B/FR SCO US	1408756
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	2 m	NBC-MR/ 2,0-94B/FR SCO US	1406114

Configurable cordsets	Type	Order No.
Plug angled M12-SPEEDCON -> Plug, angled M12-SPEEDCON	NBC-MR-MR SCO US/94B/...	1405857
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	NBC-MR-FR SCO US/94B/...	1405858
-	-	-

8-pos. shielded Ethernet, M12 plug, straight or angled, to RJ45, straight, PUR, teal, 70°C



Common technical data	
Number of positions	8
Conductor cross section (AWG)	26
Nominal current I_N	1 A
Nominal voltage U_N (IEC)	30 V
Conductor cross section	4x 2x 0.14 mm ²
Cable diameter	6.4 mm ± 0.2 mm
Degree of protection	IP67/IP20

NBC-MS/ 0,5-94B/R4AC SCO US NBC-MR/ 0,5-94B/R4AC SCO US

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Plug, straight	0.5 m	NBC-MS/ 0,5-94B/R4AC SCO US	1408749
Plug straight M12-SPEEDCON -> Plug, straight	2 m	NBC-MS/ 2,0-94B/R4AC SCO US	1406117
Plug angled M12-SPEEDCON -> Plug, straight	0.5 m	NBC-MR/ 0,5-94B/R4AC SCO US	1408758
Plug angled M12-SPEEDCON -> Plug, straight	2 m	NBC-MR/ 2,0-94B/R4AC SCO US	1406112

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Plug, straight	NBC-MS-R4AC SCO US/94B/...	1405861
Plug angled M12-SPEEDCON -> Plug, straight	NBC-MR-R4AC SCO US/94B/...	1405856
-	-	-

M12 Ethernet cordsets and cables

8-pos. X-code shielded Ethernet cordsets (up to 10 Gbps)



8-pos. X-code shielded Ethernet cordsets (up to 10 Gbps)

X-code M12 Ethernet cordsets and extension cables are assembled with four twisted pairs of 26 AWG stranded copper conductors and follow the typical Ethernet wire color code of white/orange, (pos. 1), orange (pos. 2), white/green (pos. 3), green (pos. 4), white/brown (pos. 5), brown (pos. 6), white/blue (pos. 7) and blue (pos. 8). With four twisted pairs that are fully shielded through the connector to reduce NEXT, the cordset can communicate at up to 10 Gbps. The cable is S/FTP, which signifies there is a braided shield between the cable jacket and the conductors with a foil shield over the four twisted pairs.

8-pos. X-code shielded Ethernet, M12 plug, straight, to open end, PUR, teal, 70°C



Common technical data	
Certification	UL
Assembly	Plug straight M12-SPEEDCON
Number of positions	8
Conductor cross section (AWG)	26
Nominal current I _N	0.5 A
Nominal voltage U _N (IEC)	48 V
Conductor cross section	4x 2x 0.14 mm ²
Cable diameter	6.4 mm ± 0.2 mm
Degree of protection	IP65/67

Nominal voltage U _N (UL)	Cable length	Type	Order No.
30 V	1 m	VS-M12MSS-OE-94F/ 1,0/10G	1440533
-	2 m	VS-M12MSS-OE-94F/ 2,0/10G	1440546
30 V	5 m	VS-M12MSS-OE-94F/ 5,0/10G	1440559
30 V	10 m	VS-M12MSS-OE-94F/10,0/10G	1440562
30 V	15 m	VS-M12MSS-OE-94F/15,0/10G	1440575
30 V	20 m	VS-M12MSS-OE-94F/20,0/10G	1440588

Configurable cordsets	Type	Order No.
-	-	-

8-pos. X-code shielded Ethernet, M12 plug, straight, to M12 plug, straight, PUR, teal, 70°C



Common technical data	
Certification	UL
Assembly	Plug straight M12-SPEEDCON -> Plug, straight M12-SPEEDCON
Number of positions	8
Conductor cross section (AWG)	26
Nominal current I _N	0.5 A
Nominal voltage U _N (UL)	30 V
Nominal voltage U _N (IEC)	48 V
Conductor cross section	4x 2x 0.14 mm ²
Cable diameter	6.4 mm ± 0.2 mm
Degree of protection	IP65/67

Cable length	Type	Order No.
0.5 m	VS-M12MSS-M12MSS-94F/ 0,5/10G	1440465
1 m	VS-M12MSS-M12MSS-94F/ 1,0/10G	1440478
2 m	VS-M12MSS-M12MSS-94F/ 2,0/10G	1440481
5 m	VS-M12MSS-M12MSS-94F/ 5,0/10G	1440494
10 m	VS-M12MSS-M12MSS-94F/10,0/10G	1440504
15 m	VS-M12MSS-M12MSS-94F/15,0/10G	1440517
20 m	VS-M12MSS-M12MSS-94F/20,0/10G	1440520

Configurable cordsets	Type	Order No.
-	-	-

M12 Ethernet cordsets and cables

8-pos. X-code shielded Ethernet cordsets (up to 10 Gbps)

8-pos. X-code shielded Ethernet, M12 plug, straight, to RJ45, straight, PUR, teal, 70°C



Common technical data	
Certification	UL
Assembly	Plug straight M12-SPEEDCON -> Plug, straight
Number of positions	8
Conductor cross section (AWG)	26
Nominal current I_N	0.5 A
Nominal voltage U_N (UL)	30 V
Nominal voltage U_N (IEC)	48 V
Conductor cross section	4x 2x 0.14 mm ²
Cable diameter	6.4 mm ± 0.2 mm
Degree of protection	IP67/IP20

Cable length	Type	Order No.
0.5 m	VS-M12MSS-IP20-94F/ 0,5/10G	1440591
1 m	VS-M12MSS-IP20-94F/ 1,0/10G	1440601
2 m	VS-M12MSS-IP20-94F/ 2,0/10G	1440614
5 m	VS-M12MSS-IP20-94F/ 5,0/10G	1440627
10 m	VS-M12MSS-IP20-94F/10,0/10G	1440630
15 m	VS-M12MSS-IP20-94F/15,0/10G	1440643
20 m	VS-M12MSS-IP20-94F/20,0/10G	1440656

Configurable cordsets	Type	Order No.
-	-	-



Ethernet switches and bus couplers

Managed and unmanaged switches are used in any topology to distribute data efficiently and reliably. The right switch exists for every requirement, in IP20 or IP67, from simple network expansion to highly complex automation backbones.

Modular Ethernet I/O provides a fast and cost-effective solution for your I/O needs. The bus coupler can be IP20 or IP67 and provides a connection to the network, while the local I/O can be tailored to meet every automation task. These local I/O devices come in many variations, including digital and analog, and with common functions that range in voltage levels and channel densities.

5-port M12 D-code Ethernet switch - IP67



Technical data	
Number of Ethernet ports	5 (M12 socket)
Transmission speed	10/100 MBit/s
Ethernet connection type	M12
Basic functions	Unmanaged switch / autonegotiation, complies with IEEE 802.3, store and forward switching mode
Supply voltage	24 V DC (M12 plug-in connector)
Supply voltage range	18 V DC ... 32 V DC
Ambient temperature (operation)	-40 °C ... 70 °C
Certification	CE

	Type	Order No.	Pcs. / Pkt.
	FL SWITCH 1605 M12	2700200	1
Accessories	Type	Order No.	Pcs. / Pkt.
Free conductor end -> Socket, straight M12-SPEEDCON	SAC-5P- 5,0-542/ FS SCO BK	1406168	1
Free conductor end -> Socket, angled M12-SPEEDCON	SAC-5P- 5,0-542/ FR SCO BK	1406171	1
Screw cap for the M12 socket side of the sensor/actuator cables, boxes, and flush-type plug-in connectors	PROT-M12	1680539	5

Ethernet/IP bus coupler with eight M12 inputs - IP67



Technical data	
Fieldbus system	Ethernet
Digital inputs/outputs	8
Supply voltage	24 V DC
Width	70 mm
Ambient temperature (operation)	-25 °C ... 60 °C

	Type	Order No.	Pcs. / Pkt.
	FLM BK EIP M12 DI 8 M12-2TX	2773322	1
Accessories	Type	Order No.	Pcs. / Pkt.
Free conductor end -> Socket, straight M12-SPEEDCON	SAC-5P- 5,0-542/ FS SCO BK	1406168	1
Free conductor end -> Socket, angled M12-SPEEDCON	SAC-5P- 5,0-542/ FR SCO BK	1406171	1
Plug, straight M12-SPEEDCON -> Free conductor end	SAC-5P-MS/ 5,0-542 SCO BK	1406158	1
Plug, angled M12-SPEEDCON -> Free conductor end	SAC-5P-MR/ 5,0-542 SCO BK	1406165	1
Screw cap for the M12 socket side of the sensor/actuator cables, boxes, and flush-type plug-in connectors	PROT-M12	1680539	5

Ethernet/Modbus® TCP bus switch with eight M12 inputs - IP67



Technical data	
Fieldbus system	Ethernet
Digital inputs/outputs	8
Supply voltage	24 V DC
Width	70 mm
Ambient temperature (operation)	-25 °C ... 60 °C

	Type	Order No.	Pcs. / Pkt.
	FLM BK ETH M12 DI 8 M12-2TX	2736916	1
Accessories	Type	Order No.	Pcs. / Pkt.
Free conductor end -> Socket, straight M12-SPEEDCON	SAC-5P- 5,0-542/ FS SCO BK	1406168	1
Free conductor end -> Socket, angled M12-SPEEDCON	SAC-5P- 5,0-542/ FR SCO BK	1406171	1
Plug, straight M12-SPEEDCON -> Free conductor end	SAC-5P-MS/ 5,0-542 SCO BK	1406158	1
Plug, angled M12-SPEEDCON -> Free conductor end	SAC-5P-MR/ 5,0-542 SCO BK	1406165	1
Screw cap for the M12 socket side of the sensor/actuator cables, boxes, and flush-type plug-in connectors			
	PROT-M12	1680539	5

Ethernet switch - IP20



FL SWITCH SFN 5TX



FL SWITCH SFN 8TX

Common technical data

Transmission speed	10/100 MBit/s
Ethernet connection type	RJ45
Basic functions	Unmanaged switch / autonegotiation, complies with IEEE 802.3, store and forward switching mode
Supply voltage	24 V DC
Supply voltage range	9 V DC ... 30.2 V DC
Ambient temperature (operation)	0 °C ... 60 °C

Number of Ethernet ports

5 (RJ45 ports)

8 (RJ45 ports)

Type

FL SWITCH SFN 5TX

FL SWITCH SFN 8TX

Order No.

2891152

2891929

Pcs. / Pkt.

1

1

Ethernet/IP bus coupler - IP20



Technical data

Fieldbus system	Lokalbus
Digital inputs/outputs	8 / 4
Supply voltage	24 V DC
Current consumption, maximum	0.98 A
Width	80 mm
Ambient temperature (operation)	-25 °C ... 55 °C

Type

IL EIP BK DI8 DO4 2TX-PAC

Order No.

2897758

Pcs. / Pkt.

1

Ethernet/Modbus® bus coupler - IP20



Technical data

Fieldbus system	Lokalbus
Digital inputs/outputs	8 / 4
Supply voltage	24 V DC (via Inline plug)
Current consumption, maximum	0.98 A
Width	80 mm
Ambient temperature (operation)	-25 °C ... 55 °C

Type

IL ETH BK DI8 DO4 2TX-PAC

Order No.

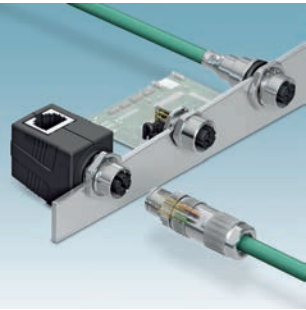
2703981

Pcs. / Pkt.

1

M12 Ethernet connectors

M12 and RJ45 bulkheads



M12 and RJ45 bulkheads

The M12 to M12 Ethernet bulkheads allow a cordset to be connected on both sides of an enclosure wall. The M12 to RJ45 bulkhead adapters are a cost-effective way to convert a water-tight M12 cordset on the outside of an enclosure to a standard RJ45 patch cable on the inside.

M12 to M12 bulkhead



SACC-4P-DSI-M12FSD/FSD-M16 SACC-8P-DSI-M12MS/FS-M16

Design	Number of positions	Nominal voltage U _N (IEC)	Nominal current I _N (IEC)	Type	Order No.	Pcs. / Pkt.
Socket, straight M12	4	60 V	4 A	SACC-4P-DSI-M12FSD/FSD-M16	1424326	1
Plug straight M12	8	24 V	1.5 A	SACC-8P-DSI-M12MS/FS-M16	1551697	1

Common technical data	
Certification	
Mounting thread	M16 x 1.5
Degree of protection	IP67

M12 to RJ45 bulkhead adapters



VS-BH-M12FSD-RJ45/90 VS-BH-M12FS-8CON-RJ45/ 90

Transmission properties	Number of positions	Design	Type	Order No.	Pcs. / Pkt.
CAT5 (IEC 11801:2002), CAT5e (TIA 568B:2001)	4	Angled	VS-BH-M12FSD-RJ45/90	1657261	1
CAT5 (IEC 11801:2002), CAT5e (TIA 568B:2001)	4	Straight	VS-BH-M12FSD-RJ45/180	1657494	1
CAT5 (IEC 11801:2002), CAT5e (TIA 568B:2001)	8	Angled	VS-BH-M12FS-8CON-RJ45/ 90	1405057	1
CAT5 (IEC 11801:2002), CAT5e (TIA 568B:2001)	8	Straight	VS-BH-M12FS-8CON-RJ45/180	1405060	1
CAT6 _A	8	Angled	VS-BH-M12FSX-10G-RJ45/90	1404548	1

Common technical data	
Degree of protection	IP65/67
Contact material	Copper alloy
Ambient temperature (operation)	-25 °C ... 85 °C



Ethernet



A robust range of field-wired connectors ensures that a safe and efficient M12 Ethernet connection can be made in the field. The IDC connection provides the fastest field-wiring method on the market. The metal body provides shielding against high electromagnetic interference (EMI), while a compression spring ensures proper connection between the cable jacket and connector.

D-code shielded Ethernet, M12 field-wired connectors, straight or angled, IDC connection



SACC-M12MSD-4Q SH

SACC-M12FRD-4Q SH

Common technical data	
Certification	PC
Number of positions	4
Conductor cross section [mm ²]	0.14 mm ² ... 0.34 mm ²
Conductor cross section (AWG)	26 ... 22
Outer cable diameter range (mm)	4 mm ... 8 mm
Nominal voltage U _N (IEC)	60 V
Nominal current I _N (IEC)	1.75 A
Degree of protection	IP67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M12	SACC-M12MSD-4Q SH	1543223	1
Socket, straight M12	SACC-M12FSD-4Q SH	1553611	1
Plug angled M12	SACC-M12MRD-4Q SH	1553624	1
Socket, angled M12	SACC-M12FRD-4Q SH	1553637	1

8-pos. shielded Ethernet, M12 field-wired connectors, straight or angled, IDC connection



SACC-M12MS-8Q SH

SACC-M12FR-8Q SH

Common technical data	
Certification	PC
Number of positions	8
Conductor cross section [mm ²]	0.14 mm ² ... 0.34 mm ²
Conductor cross section (AWG)	26 ... 22
Outer cable diameter range (mm)	4 mm ... 8 mm
Nominal voltage U _N (IEC)	30 V
Nominal current I _N (IEC)	1.75 A
Degree of protection	IP67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M12	SACC-M12MS-8Q SH	1543236	1
Socket, straight M12	SACC-M12FS-8Q SH	1553640	1
Plug angled M12	SACC-M12MR-8Q SH	1553653	1
Socket, angled M12	SACC-M12FR-8Q SH	1553666	1

X-code shielded Ethernet, M12 field-wired connectors, straight or angled, Piercecon connection



VS-08-M12MS-10G-P SCO

VS-08-M12MR-10G-P SCO

Common technical data	
Certification	NA
Number of positions	8
Conductor cross section [mm ²]	0.14 mm ²
Conductor cross section (AWG)	26
Outer cable diameter range (mm)	4 mm ... 8 mm
Nominal voltage U _N (IEC)	48 V
Nominal current I _N (IEC)	0.5 A
Degree of protection	IP65/67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON	VS-08-M12MS-10G-P SCO	1417430	1
Plug angled M12-SPEEDCON	VS-08-M12MR-10G-P SCO	1417443	1

M12 Ethernet connectors

M12 panel feed-through connectors with shielded cable



M12 panel feed-through connectors with shielded cable

M12 Ethernet panel feed-through connectors allow a pluggable water-tight connection between the inside of a panel or device to the outside environment. For front-mount connectors, the shielded cable is passed from the outside of the panel or device into the enclosure. Then the connector is held in place with a locknut on the inside. For rear-mount connectors, the shielded cable can be pre-terminated to the system – the connector body is pushed through from the inside of the enclosure and held in place by a locknut on the outside.

Alternatively, a locknut is not needed for a front- or rear-mounted connector, if the enclosure is tapped with the appropriate thread rather than simply drilled out.

D-code shielded Ethernet, M12 front mount, 16 mm mounting thread



Technical data		
Assembly	Flush-type socket, straight M12-SPEEDCON -> Free conductor end	
Number of positions	4	
Conductor cross section	2x 2x 0.14 mm²	
AWG (approximately)	26	
Cable length	2 m	
Nominal current I _N	4 A	
Nominal voltage U _N	250 V	
Cable type	Ethernet	
Cable diameter	6.7 mm	
Degree of protection	IP65/67	

Type	Order No.
VS-M12FSEC-OE-93E-LI/2,0	1405837

Configurable cordsets

The locking nut is not included with the assembly.

Type	Order No.
-	-

D-code shielded Ethernet, M12 rear mount, 16 mm mounting thread

The locking nut is included with the assembly.



Technical data		
Assembly	Flush-type socket, straight M12-SPEEDCON -> Free conductor end	
Number of positions	4	
Conductor cross section	2x 2x 0.14 mm²	
AWG (approximately)	26	
Cable length	2 m	
Nominal current I _N	4 A	
Nominal voltage U _N	250 V	
Cable type	Ethernet	
Cable diameter	6.7 mm	
Degree of protection	IP65/67	

Type	Order No.
VS-M12FSBP-OE-93E-LI/2,0	1405866

8-pos. shielded Ethernet, M12 rear mount, 16 mm mounting thread

The locking nut is included with the assembly.



Common technical data		
Assembly	Flush-type socket, straight M12-SPEEDCON -> Free conductor end	
Number of positions	8	
Nominal current I _N	2 A	
Nominal voltage U _N	30 V	
Degree of protection	IP65/67	

Cable length	Type	Order No.
2 m	VS-M12FSBP-OE-94C-LI/2,0	1412820
5 m	VS-M12FSBP-OE-94B-LI/5,0	1407877

X-code shielded Ethernet, M12 rear mount, 16 mm mounting thread

The locking nut is included with the assembly.



Common technical data	
Assembly	Flush-type socket, straight M12-SPEEDCON -> Free conductor end
Number of positions	8
Conductor cross section	4x 2x 0.14 mm ²
AWG (approximately)	26
Nominal current I _N	0.5 A
Nominal voltage U _N	48 V
Cable type	Ethernet
Cable diameter	6.4 mm ± 0.2 mm
Degree of protection	IP65/67

Cable length	Type	Order No.
0.5 m	VS-FSBPXS-OE-94F/0,5	1424135
1 m	VS-FSBPXS-OE-94F/1,0	1424148
2 m	VS-FSBPXS-OE-94F/2,0	1424151
5 m	VS-FSBPXS-OE-94F/5,0	1424164

M12 SPEEDCON and MINI 7/8-inch cordsets and connectors for DeviceNet communication



Users of a DeviceNet bus system can collect and manage I/O signals, control machines and processes all over one network cabling structure. The advantages are minimized hard wiring, reliable communication, and intelligent device addressing.





DEVICENET CORDSETS AND CABLES

M12 cordsets **Page 132**

MINI 7/8 trunk cables **Page 138**

MINI 7/8 drop cables **Page 140**

POWER CORDSETS AND CABLES

MINI 7/8-inch **Page 142**

DEVICENET BUS COUPLERS

Bus coupler IP67 **Page 144**

Bus coupler IP20 **Page 144**

DEVICENET CONNECTORS

Y-distributor cordsets **Page 145**

T- distributors and terminators **Page 146**

Field-wired and bulkhead **Page 147**

Panel feed-through
with shielded cable **Page 148**

DeviceNet™ cordsets and cables

M12 DeviceNet cordsets



DeviceNet™ cordsets

DeviceNet™ cordsets and extension cables are assembled with stranded copper conductors according to the DeviceNet standard color code of drain wire (pos. 1), red (pos. 2), black (pos. 3), white (pos. 4) and blue (pos. 5). There are various options for wire size and cable material, depending on the application requirements.

DeviceNet™, shielded, M12 socket, straight or angled, to open end, PVC, gray, 75°C

Cable construction: 2x2x22 AWG + drain wire, foil shield



Common technical data	
Number of positions	5
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	CAN Bus/DeviceNet gray
Cable diameter	6.9 mm ±0.13 mm
Degree of protection	IP65/67

Certification	Assembly	Cable length	Type	Order No.
-	Free conductor end -> Socket, straight M12-SPEEDCON	2 m	SAC-5P- 2,0-924/FS SCO	1405986
-	Free conductor end -> Socket, straight M12-SPEEDCON	5 m	SAC-5P- 5,0-924/FS SCO	1405985
UL	Free conductor end -> Socket, straight M12-SPEEDCON	10 m	SAC-5P-10,0-924/FS SCO	1405987
-	Free conductor end -> Socket, angled M12-SPEEDCON	2 m	SAC-5P- 2,0-924/FR SCO	1405983
UL	Free conductor end -> Socket, angled M12-SPEEDCON	5 m	SAC-5P- 5,0-924/FR SCO	1405982
-	Free conductor end -> Socket, angled M12-SPEEDCON	10 m	SAC-5P-10,0-924/FR SCO	1405984

Configurable cordsets

Free conductor end -> Socket, straight M12-SPEEDCON	Type	Order No.
Free conductor end -> Socket, angled M12-SPEEDCON	SAC-5P-FS SCO /924/...	1405796
Configuration options for cable length are shown on page 133	SAC-5P-FR SCO /924/...	1405795
	-	-

DeviceNet™, shielded, M12 plug, straight or angled, to open end, PVC, gray, 75°C

Cable construction: 2x2x22 AWG + drain wire, foil shield



Common technical data	
Number of positions	5
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	CAN Bus/DeviceNet gray
Cable diameter	6.9 mm ±0.13 mm
Degree of protection	IP65/67

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	2 m	SAC-5P-MS/ 2,0-924 SCO	1405981
Plug straight M12-SPEEDCON -> Free conductor end	5 m	SAC-5P-MS/ 5,0-924 SCO	1405980
Plug straight M12-SPEEDCON -> Free conductor end	10 m	SAC-5P-MS/10,0-924 SCO	1405979
Plug angled M12-SPEEDCON -> Free conductor end	2 m	SAC-5P-MR/ 2,0-924 SCO	1405978
Plug angled M12-SPEEDCON -> Free conductor end	5 m	SAC-5P-MR/ 5,0-924 SCO	1405977
Plug angled M12-SPEEDCON -> Free conductor end	10 m	SAC-5P-MR/10,0-924 SCO	1405976

Configurable cordsets

Plug straight M12-SPEEDCON -> Free conductor end	Type	Order No.
Plug angled M12-SPEEDCON -> Free conductor end	SAC-5P-MS SCO /924/...	1405794
Configuration options for cable length are shown on page 133	SAC-5P-MR SCO /924/...	1405793
	-	-

DeviceNet™, shielded, M12 plug, straight, to M12 socket, straight or angled, PVC, gray, 75°C

Cable construction: 2x2x22 AWG + drain wire, foil shield



SAC-5P-MS/ 0,5-924/FS SCO SAC-5P-MS/ 0,5-924/FR SCO

Common technical data

Number of positions	5
Nominal current I_N	4 A
Nominal voltage U_N	60 V
Cable type	CAN Bus/DeviceNet gray
Cable diameter	6.9 mm ±0.13 mm
Degree of protection	IP65/67

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-5P-MS/ 0,5-924/FS SCO	1405989
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-5P-MS/ 1,5-924/FS SCO	1405988
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-5P-MS/ 0,5-924/FR SCO	1405991
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-5P-MS/ 1,5-924/FR SCO	1405990

Configurable cordsets

Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON
Configuration options for cable length are shown on page 133

Type

SAC-5P-MS-FS SCO /924/...
SAC-5P-MS-FR SCO /924/...

Order No.

1405797
1405799
-

DeviceNet™, shielded, M12 plug, angled, to M12 socket, straight or angled, PVC, gray, 75°C

Cable construction: 2x2x22 AWG + drain wire, foil shield



SAC-5P-MR/ 0,5-924/FS SCO SAC-5P-MR/ 0,5-924/FR SCO

Common technical data

Number of positions	5
Nominal current I_N	4 A
Nominal voltage U_N	60 V
Cable type	CAN Bus/DeviceNet gray
Cable diameter	6.9 mm ±0.13 mm
Degree of protection	IP65/67

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-5P-MR/ 0,5-924/FS SCO	1405973
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1.5 m	SAC-5P-MR/ 1,5-924/FS SCO	1405972
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-5P-MR/ 0,5-924/FR SCO	1405975
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1.5 m	SAC-5P-MR/ 1,5-924/FR SCO	1405974

Configurable cordsets

Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON
Configuration options for cable length are shown on page 133

Type

SAC-5P-MR-FS SCO /924/...
SAC-5P-MR-FR SCO /924/...

Order No.

1405791
1405792
-

Ordering information for configurable DeviceNet™ cordsets

Configurable order no./length

Configurable order numbers allow selection of cable length, from 0.2 m to 40 m.

Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.

Example	
Order No.	Length
1405797	4.5
DeviceNet™ shielded, M12 plug, straight, to M12 socket, straight	cable length of 4.5 m

DeviceNet™ cordsets and cables

M12 DeviceNet cordsets

DeviceNet™, shielded, M12 socket, straight or angled, to open end, PUR, gray, 80°C

Cable construction: 2x22 AWG, 2x24 AWG + drain wire, braided shield



Common technical data	
Certification	
Number of positions	5
Conductor cross section	2x 0.2 mm ² (signal line) / 2x 0.32 mm ² (Power supply) / 1x 0.32 mm ² (Drain wire)
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	CAN Bus/DeviceNet
Degree of protection	IP65/67

SAC-5P- 2,0-923/FS CAN SCO SAC-5P- 2,0-923/FR CAN SCO

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	2 m	SAC-5P- 2,0-923/FS CAN SCO	1419081
Free conductor end -> Socket, straight M12-SPEEDCON	5 m	SAC-5P- 5,0-923/FS CAN SCO	1419030
Free conductor end -> Socket, straight M12-SPEEDCON	10 m	SAC-5P-10,0-923/FS CAN SCO	1419031
Free conductor end -> Socket, straight M12-SPEEDCON	15 m	SAC-5P-15,0-923/FS CAN SCO	1419032
Free conductor end -> Socket, straight M12-SPEEDCON	20 m	SAC-5P-20,0-923/FS CAN SCO	1419033
Free conductor end -> Socket, angled M12-SPEEDCON	2 m	SAC-5P- 2,0-923/FR CAN SCO	1419034
Free conductor end -> Socket, angled M12-SPEEDCON	5 m	SAC-5P- 5,0-923/FR CAN SCO	1419035
Free conductor end -> Socket, angled M12-SPEEDCON	10 m	SAC-5P-10,0-923/FR CAN SCO	1419036
Free conductor end -> Socket, angled M12-SPEEDCON	15 m	SAC-5P-15,0-923/FR CAN SCO	1419037
Free conductor end -> Socket, angled M12-SPEEDCON	20 m	SAC-5P-20,0-923/FR CAN SCO	1419038

DeviceNet™, shielded, M12 plug, straight or angled, to open end, PUR, gray, 80°C

Cable construction: 2x22 AWG, 2x24 AWG + drain wire, braided shield



Common technical data	
Certification	
Number of positions	5
Conductor cross section	2x 0.2 mm ² (signal line) / 2x 0.32 mm ² (Power supply) / 1x 0.32 mm ² (Drain wire)
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	CAN Bus/DeviceNet
Degree of protection	IP65/67

SAC-5P-MS/ 2,0-923 CAN SCO SAC-5P-MR/ 2,0-923 CAN SCO

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	2 m	SAC-5P-MS/ 2,0-923 CAN SCO	1419039
Plug straight M12-SPEEDCON -> Free conductor end	5 m	SAC-5P-MS/ 5,0-923 CAN SCO	1419040
Plug straight M12-SPEEDCON -> Free conductor end	10 m	SAC-5P-MS/10,0-923 CAN SCO	1419041
Plug straight M12-SPEEDCON -> Free conductor end	15 m	SAC-5P-MS/15,0-923 CAN SCO	1419042
Plug straight M12-SPEEDCON -> Free conductor end	20 m	SAC-5P-MS/20,0-923 CAN SCO	1419043
Plug angled M12-SPEEDCON -> Free conductor end	2 m	SAC-5P-MR/ 2,0-923 CAN SCO	1419044
Plug angled M12-SPEEDCON -> Free conductor end	5 m	SAC-5P-MR/ 5,0-923 CAN SCO	1419045
Plug angled M12-SPEEDCON -> Free conductor end	10 m	SAC-5P-MR/10,0-923 CAN SCO	1419046
Plug angled M12-SPEEDCON -> Free conductor end	15 m	SAC-5P-MR/15,0-923 CAN SCO	1419047
Plug angled M12-SPEEDCON -> Free conductor end	20 m	SAC-5P-MR/20,0-923 CAN SCO	1419048

DeviceNet™, shielded, M12 plug, straight, to M12 socket, straight or angled, PUR, gray, 80°C

Cable construction: 2x22 AWG, 2x24 AWG + drain wire, braided shield



Common technical data	
Certification	
Number of positions	5
Conductor cross section	2x 0.2 mm ² (signal line) / 2x 0.32 mm ² (Power supply) / 1x 0.32 mm ² (Drain wire)
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	CAN Bus/DeviceNet
Degree of protection	IP65/67

SAC-5P-MS/ 0,3-923/FS CAN SCO SAC-5P-MS/ 0,3-923/FR CAN SCO

Assembly	Cable length	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.3 m	SAC-5P-MS/ 0,3-923/FS CAN SCO	1419049
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-5P-MS/ 0,5-923/FS CAN SCO	1419050
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1 m	SAC-5P-MS/ 1,0-923/FS CAN SCO	1419051
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	2 m	SAC-5P-MS/ 2,0-923/FS CAN SCO	1419052
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	5 m	SAC-5P-MS/ 5,0-923/FS CAN SCO	1419053
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	10 m	SAC-5P-MS/10,0-923/FS CAN SCO	1419054
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	15 m	SAC-5P-MS/15,0-923/FS CAN SCO	1419055
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	20 m	SAC-5P-MS/20,0-923/FS CAN SCO	1419056
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.3 m	SAC-5P-MS/ 0,3-923/FR CAN SCO	1419065
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-5P-MS/ 0,5-923/FR CAN SCO	1419066
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1 m	SAC-5P-MS/ 1,0-923/FR CAN SCO	1419067
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	2 m	SAC-5P-MS/ 2,0-923/FR CAN SCO	1419068
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	5 m	SAC-5P-MS/ 5,0-923/FR CAN SCO	1419069
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	10 m	SAC-5P-MS/10,0-923/FR CAN SCO	1419070
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	15 m	SAC-5P-MS/15,0-923/FR CAN SCO	1419071
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	20 m	SAC-5P-MS/20,0-923/FR CAN SCO	1419072

DeviceNet™, shielded, M12 plug, angled, to M12 socket, straight or angled, PUR, gray, 80°C

Cable construction: 2x22 AWG, 2x24 AWG + drain wire, braided shield



Common technical data	
Certification	
Number of positions	5
Conductor cross section	2x 0.2 mm ² (signal line) / 2x 0.32 mm ² (Power supply) / 1x 0.32 mm ² (Drain wire)
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	CAN Bus/DeviceNet
Degree of protection	IP65/67

SAC-5P-MR/ 0,3-923/FS CAN SCO SAC-5P-MR/ 0,3-923/FR CAN SCO

Assembly	Cable length	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.3 m	SAC-5P-MR/ 0,3-923/FS CAN SCO	1419057
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	0.5 m	SAC-5P-MR/ 0,5-923/FS CAN SCO	1419058
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	1 m	SAC-5P-MR/ 1,0-923/FS CAN SCO	1419059
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	2 m	SAC-5P-MR/ 2,0-923/FS CAN SCO	1419060
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	5 m	SAC-5P-MR/ 5,0-923/FS CAN SCO	1419061
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	10 m	SAC-5P-MR/10,0-923/FS CAN SCO	1419062
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	15 m	SAC-5P-MR/15,0-923/FS CAN SCO	1419063
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	20 m	SAC-5P-MR/20,0-923/FS CAN SCO	1419064
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.3 m	SAC-5P-MR/ 0,3-923/FR CAN SCO	1419073
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	0.5 m	SAC-5P-MR/ 0,5-923/FR CAN SCO	1419074
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	1 m	SAC-5P-MR/ 1,0-923/FR CAN SCO	1419075
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	2 m	SAC-5P-MR/ 2,0-923/FR CAN SCO	1419076
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	5 m	SAC-5P-MR/ 5,0-923/FR CAN SCO	1419077
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	10 m	SAC-5P-MR/10,0-923/FR CAN SCO	1419078
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	15 m	SAC-5P-MR/15,0-923/FR CAN SCO	1419079
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	20 m	SAC-5P-MR/20,0-923/FR CAN SCO	1419080

DeviceNet™ cordsets and cables

M12 DeviceNet cordsets

DeviceNet™, shielded, M12 socket, straight or angled, to open end, PUR, purple, 80°

Cable construction: 2x22 AWG, 2x24 AWG + drain wire, braided shield



Common technical data	
Certification	PC
Assembly	Free conductor end -> Socket, straight M12-SPEEDCON
Number of positions	5
Conductor cross section	2x 0.25 mm ² (signal line) / 2x 0.34 mm ² (Power supply) / 1x 0.34 mm ² (Drain wire)
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	CAN Bus/DeviceNet
Cable diameter	6.7 mm ±0.3 mm
Degree of protection	IP65/67

Cable length	Type	Order No.
2 m	SAC-5P- 2,0-920/FS SCO	1518216
5 m	SAC-5P- 5,0-920/FS SCO	1518229
10 m	SAC-5P-10,0-920/FS SCO	1518232
15 m	SAC-5P-15,0-920/FS SCO	1518245

Configurable cordsets	Type	Order No.
Free conductor end -> Socket, straight M12-SPEEDCON	SAC-5P-FS SCO/920/...	1538131
Free conductor end -> Socket, angled M12-SPEEDCON	SAC-5P-FR SCO/920/...	1433294
Configuration options for cable length are shown on page 137	-	-

DeviceNet™, shielded, M12 plug, straight or angled, to open end, PUR, purple, 80°

Cable construction: 2x22 AWG, 2x24 AWG + drain wire, braided shield



Common technical data	
Certification	PC
Assembly	Plug straight M12-SPEEDCON -> Free conductor end
Number of positions	5
Conductor cross section	2x 0.25 mm ² (signal line) / 2x 0.34 mm ² (Power supply) / 1x 0.34 mm ² (Drain wire)
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	CAN Bus/DeviceNet
Cable diameter	6.7 mm ±0.3 mm
Degree of protection	IP65/67

Cable length	Type	Order No.
2 m	SAC-5P-MS/ 2,0-920 SCO	1518177
5 m	SAC-5P-MS/ 5,0-920 SCO	1518180
10 m	SAC-5P-MS/10,0-920 SCO	1518193
15 m	SAC-5P-MS/15,0-920 SCO	1518203

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Free conductor end	SAC-5P-MS SCO/920/...	1538115
Plug angled M12-SPEEDCON -> Free conductor end	SAC-5P-MR SCO/920/...	1433281
Configuration options for cable length are shown on page 137	-	-

DeviceNet™, shielded, M12 plug, straight, to M12 socket, straight or angled, PUR, purple, 80°

Cable construction: 2x22 AWG, 2x24 AWG + drain wire, braided shield



Common technical data	
Certification	PC
Assembly	Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON
Number of positions	5
Conductor cross section	2x 0.25 mm ² (signal line) / 2x 0.34 mm ² (Power supply) / 1x 0.34 mm ² (Drain wire)
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	CAN Bus/DeviceNet
Cable diameter	6.7 mm ±0.3 mm
Degree of protection	IP65/67

Cable length	Type	Order No.
0.3 m	SAC-5P-MS/ 0,3-920/FS SCO	1518258
0.5 m	SAC-5P-MS/ 0,5-920/FS SCO	1518261
1 m	SAC-5P-MS/ 1,0-920/FS SCO	1518274
2 m	SAC-5P-MS/ 2,0-920/FS SCO	1518287
5 m	SAC-5P-MS/ 5,0-920/FS SCO	1518290
10 m	SAC-5P-MS/10,0-920/FS SCO	1518300
15 m	SAC-5P-MS/15,0-920/FS SCO	1518313

Configurable cordsets	Type	Order No.
Plug straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-5P-MS-FS SCO/920/...	1538157
Plug straight M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-5P-MS-FR SCO/920/...	1433304
Configuration options for cable length are shown on page 137	-	-

DeviceNet™, shielded, M12 socket, angled, to M12 socket, straight or angled, PUR, purple, 80°

Cable construction: 2x22 AWG, 2x24 AWG + drain wire, braided shield



SAC-5P-MR-FS SCO/920/...

SAC-5P-MR-FR SCO/920/...

Common technical data

Number of positions	5
Conductor cross section	2x 0.25 mm ² (signal line) / 2x 0.34 mm ² (Power supply) / 1x 0.34 mm ² (Drain wire)
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	CAN Bus/DeviceNet
Cable diameter	6.7 mm ±0.3 mm
Degree of protection	IP65/67

Assembly	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-5P-MR-FS SCO/920/...	1433317
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-5P-MR-FR SCO/920/...	1433320

Configurable cordsets	Type	Order No.
Plug angled M12-SPEEDCON -> Socket, straight M12-SPEEDCON	SAC-5P-MR-FS SCO/920/...	1433317
Plug angled M12-SPEEDCON -> Socket, angled M12-SPEEDCON	SAC-5P-MR-FR SCO/920/...	1433320
Configuration options for cable length are shown on page 137	-	-

Ordering information for configurable DeviceNet™ cordsets

Configurable order no./length

Configurable order numbers allow selection of cable length, from 0.2 m to 40 m.

Note: When measuring length, only the cable material is considered, i.e., not the connector ends. Lengths from 0.2 to 3 m are available in increments of 0.1 m. Lengths from 3 to 40 m are available in increments of 0.5 m.

Example	
Order No.	Length
1538157	4.5
DeviceNet™ shielded, M12 plug, straight, to M12 socket, straight	cable length of 4.5 m

DeviceNet™ cordsets and cables

Mini 7/8" DeviceNet cordsets, trunk cables

DeviceNet™, shielded, 7/8" socket, straight or angled, to open end, PUR, gray, 80°C

Cable construction: 2x15 AWG, 2x18 AWG + drain wire, braided shield



Common technical data	
Certification	
Number of positions	5
Nominal current I _N	5.2 A
Nominal voltage U _N	30 V
Cable type	DeviceNet™
Cable diameter	12.2 mm
Degree of protection	IP65/67

SAC-5P- 2,0-928/MINFS DN

SAC-5P- 2,0-928/MINFR DN

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight 7/8"-16UNF	2 m	SAC-5P- 2,0-928/MINFS DN	1417456
Free conductor end -> Socket, straight 7/8"-16UNF	5 m	SAC-5P- 5,0-928/MINFS DN	1417469
Free conductor end -> Socket, straight 7/8"-16UNF	10 m	SAC-5P-10,0-928/MINFS DN	1417472
Free conductor end -> Socket, straight 7/8"-16UNF	15 m	SAC-5P-15,0-928/MINFS DN	1417485
Free conductor end -> Socket, straight 7/8"-16UNF	20 m	SAC-5P-20,0-928/MINFS DN	1417498
Free conductor end -> Socket, angled 7/8"-16UNF	2 m	SAC-5P- 2,0-928/MINFR DN	1417508
Free conductor end -> Socket, angled 7/8"-16UNF	5 m	SAC-5P- 5,0-928/MINFR DN	1417511
Free conductor end -> Socket, angled 7/8"-16UNF	10 m	SAC-5P-10,0-928/MINFR DN	1417524
Free conductor end -> Socket, angled 7/8"-16UNF	15 m	SAC-5P-15,0-928/MINFR DN	1417537
Free conductor end -> Socket, angled 7/8"-16UNF	20 m	SAC-5P-20,0-928/MINFR DN	1417540

DeviceNet™, shielded, 7/8" plug, straight or angled, to open end, PUR, gray, 80°C

Cable construction: 2x15 AWG, 2x18 AWG + drain wire, braided shield



Common technical data	
Certification	
Number of positions	5
Nominal current I _N	5.2 A
Nominal voltage U _N	30 V
Cable type	DeviceNet™
Cable diameter	12.2 mm
Degree of protection	IP65/67

SAC-5P-MINMS/ 2,0-928 DN

SAC-5P-MINMR/ 2,0-928 DN

Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Free conductor end	2 m	SAC-5P-MINMS/ 2,0-928 DN	1417553
Plug straight 7/8" 16UNF -> Free conductor end	5 m	SAC-5P-MINMS/ 5,0-928 DN	1417566
Plug straight 7/8" 16UNF -> Free conductor end	10 m	SAC-5P-MINMS/10,0-928 DN	1417579
Plug straight 7/8" 16UNF -> Free conductor end	15 m	SAC-5P-MINMS/15,0-928 DN	1417582
Plug straight 7/8" 16UNF -> Free conductor end	20 m	SAC-5P-MINMS/20,0-928 DN	1417595
Plug angled 7/8" 16UNF -> Free conductor end	2 m	SAC-5P-MINMR/ 2,0-928 DN	1417605
Plug angled 7/8" 16UNF -> Free conductor end	5 m	SAC-5P-MINMR/ 5,0-928 DN	1417618
Plug angled 7/8" 16UNF -> Free conductor end	10 m	SAC-5P-MINMR/10,0-928 DN	1417621
Plug angled 7/8" 16UNF -> Free conductor end	15 m	SAC-5P-MINMR/15,0-928 DN	1417634
Plug angled 7/8" 16UNF -> Free conductor end	20 m	SAC-5P-MINMR/20,0-928 DN	1417647

DeviceNet™, shielded, 7/8" plug, straight, to 7/8" socket, straight or angled, PUR, gray, 80°C

Cable construction: 2x15 AWG, 2x18 AWG + drain wire, braided shield



Common technical data

Certification	UL, CE
Number of positions	5
Nominal current I _N	5.2 A
Nominal voltage U _N	30 V
Cable type	DeviceNet™
Cable diameter	12.2 mm
Degree of protection	IP65/67

SAC-5P-MINMS/ 0,3-928/MINFS DN SAC-5P-MINMS/ 0,3-928/MINFR DN

Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	0.3 m	SAC-5P-MINMS/ 0,3-928/MINFS DN	1417650
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	0.5 m	SAC-5P-MINMS/ 0,5-928/MINFS DN	1417663
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	1 m	SAC-5P-MINMS/ 1,0-928/MINFS DN	1417676
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	2 m	SAC-5P-MINMS/ 2,0-928/MINFS DN	1417689
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	5 m	SAC-5P-MINMS/ 5,0-928/MINFS DN	1417692
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	10 m	SAC-5P-MINMS/10,0-928/MINFS DN	1417702
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	15 m	SAC-5P-MINMS/15,0-928/MINFS DN	1417715
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	20 m	SAC-5P-MINMS/20,0-928/MINFS DN	1417728
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	0.3 m	SAC-5P-MINMS/ 0,3-928/MINFR DN	1417812
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	0.5 m	SAC-5P-MINMS/ 0,5-928/MINFR DN	1417825
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	1 m	SAC-5P-MINMS/ 1,0-928/MINFR DN	1417838
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	2 m	SAC-5P-MINMS/ 2,0-928/MINFR DN	1417841
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	5 m	SAC-5P-MINMS/ 5,0-928/MINFR DN	1417854
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	10 m	SAC-5P-MINMS/10,0-928/MINFR DN	1417867
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	15 m	SAC-5P-MINMS/15,0-928/MINFR DN	1417870
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	20 m	SAC-5P-MINMS/20,0-928/MINFR DN	1417883

DeviceNet™, shielded, 7/8" plug, angled, to 7/8" socket, straight or angled, PUR, gray, 80°C

Cable construction: 2x15 AWG, 2x18 AWG + drain wire, braided shield



Common technical data

Certification	UL, CE
Number of positions	5
Nominal current I _N	5.2 A
Nominal voltage U _N	30 V
Cable type	DeviceNet™
Cable diameter	12.2 mm
Degree of protection	IP65/67

SAC-5P-MINMR/ 0,3-928/MINFS DN SAC-5P-MINMR/ 0,3-928/MINFR DN

Assembly	Cable length	Type	Order No.
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	0.3 m	SAC-5P-MINMR/ 0,3-928/MINFS DN	1417731
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	0.5 m	SAC-5P-MINMR/ 0,5-928/MINFS DN	1417744
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	1 m	SAC-5P-MINMR/ 1,0-928/MINFS DN	1417757
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	2 m	SAC-5P-MINMR/ 2,0-928/MINFS DN	1417760
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	5 m	SAC-5P-MINMR/ 5,0-928/MINFS DN	1417773
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	10 m	SAC-5P-MINMR/10,0-928/MINFS DN	1417786
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	15 m	SAC-5P-MINMR/15,0-928/MINFS DN	1417799
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	20 m	SAC-5P-MINMR/20,0-928/MINFS DN	1417809
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	0.3 m	SAC-5P-MINMR/ 0,3-928/MINFR DN	1417896
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	0.5 m	SAC-5P-MINMR/ 0,5-928/MINFR DN	1417906
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	1 m	SAC-5P-MINMR/ 1,0-928/MINFR DN	1417919
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	2 m	SAC-5P-MINMR/ 2,0-928/MINFR DN	1417922
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	5 m	SAC-5P-MINMR/ 5,0-928/MINFR DN	1417935
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	10 m	SAC-5P-MINMR/10,0-928/MINFR DN	1417948
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	15 m	SAC-5P-MINMR/15,0-928/MINFR DN	1417951
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	20 m	SAC-5P-MINMR/20,0-928/MINFR DN	1417964

DeviceNet™ cordsets and cables

Mini 7/8" DeviceNet cordsets, drop cables

DeviceNet™, shielded, 7/8" socket, straight or angled, to open end, PUR, gray, 80°C

Cable construction: 2x22 AWG, 2x24 AWG + drain wire, braided shield



Common technical data	
Certification	
Number of positions	5
Conductor cross section	2x 0.2 mm² (signal line) / 2x 0.32 mm² (Power supply) / 1x 0.32 mm² (Drain wire)
Nominal current I _N	5.2 A
Nominal voltage U _N	30 V
Cable type	CAN Bus/DeviceNet
Degree of protection	IP65/67

SAC-5P- 2,0-923/MINFS DN

SAC-5P- 2,0-923/MINFR DN

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight 7/8"-16UNF	2 m	SAC-5P- 2,0-923/MINFS DN	1418426
Free conductor end -> Socket, straight 7/8"-16UNF	5 m	SAC-5P- 5,0-923/MINFS DN	1418439
Free conductor end -> Socket, straight 7/8"-16UNF	10 m	SAC-5P-10,0-923/MINFS DN	1418442
Free conductor end -> Socket, straight 7/8"-16UNF	15 m	SAC-5P-15,0-923/MINFS DN	1418455
Free conductor end -> Socket, straight 7/8"-16UNF	20 m	SAC-5P-20,0-923/MINFS DN	1418468
Free conductor end -> Socket, angled 7/8"-16UNF	2 m	SAC-5P- 2,0-923/MINFR DN	1418471
Free conductor end -> Socket, angled 7/8"-16UNF	5 m	SAC-5P- 5,0-923/MINFR DN	1418484
Free conductor end -> Socket, angled 7/8"-16UNF	10 m	SAC-5P-10,0-923/MINFR DN	1418497
Free conductor end -> Socket, angled 7/8"-16UNF	15 m	SAC-5P-15,0-923/MINFR DN	1418507
Free conductor end -> Socket, angled 7/8"-16UNF	20 m	SAC-5P-20,0-923/MINFR DN	1418510

DeviceNet™, shielded, 7/8" plug, straight or angled, to open end, PUR, gray, 80°C

Cable construction: 2x22 AWG, 2x24 AWG + drain wire, braided shield



Common technical data	
Certification	
Number of positions	5
Conductor cross section	2x 0.2 mm² (signal line) / 2x 0.32 mm² (Power supply) / 1x 0.32 mm² (Drain wire)
Nominal current I _N	5.2 A
Nominal voltage U _N	30 V
Cable type	CAN Bus/DeviceNet
Degree of protection	IP65/67

SAC-5P-MINMS/ 2,0-923 DN

SAC-5P-MINMR/ 2,0-923 DN

Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Free conductor end	2 m	SAC-5P-MINMS/ 2,0-923 DN	1418523
Plug straight 7/8" 16UNF -> Free conductor end	5 m	SAC-5P-MINMS/ 5,0-923 DN	1418536
Plug straight 7/8" 16UNF -> Free conductor end	10 m	SAC-5P-MINMS/10,0-923 DN	1418549
Plug straight 7/8" 16UNF -> Free conductor end	15 m	SAC-5P-MINMS/15,0-923 DN	1418552
Plug straight 7/8" 16UNF -> Free conductor end	20 m	SAC-5P-MINMS/20,0-923 DN	1418565
Plug angled 7/8" 16UNF -> Free conductor end	2 m	SAC-5P-MINMR/ 2,0-923 DN	1418578
Plug angled 7/8" 16UNF -> Free conductor end	5 m	SAC-5P-MINMR/ 5,0-923 DN	1418581
Plug angled 7/8" 16UNF -> Free conductor end	10 m	SAC-5P-MINMR/10,0-923 DN	1418594
Plug angled 7/8" 16UNF -> Free conductor end	15 m	SAC-5P-MINMR/15,0-923 DN	1418604
Plug angled 7/8" 16UNF -> Free conductor end	20 m	SAC-5P-MINMR/20,0-923 DN	1418617

DeviceNet™, shielded, 7/8" plug, straight, to 7/8" socket, straight or angled, PUR, gray, 80°C

Cable construction: 2x22 AWG, 2x24 AWG + drain wire, braided shield



Common technical data	
Certification	
Number of positions	5
Conductor cross section	2x 0.2 mm ² (signal line) / 2x 0.32 mm ² (Power supply) / 1x 0.32 mm ² (Drain wire)
Nominal current I _N	5.2 A
Nominal voltage U _N	30 V
Cable type	CAN Bus/DeviceNet
Degree of protection	IP65/67

SAC-5P-MINMS/ 0,3-923/MINFS DN SAC-5P-MINMS/ 0,3-923/MINFR DN

Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	0.3 m	SAC-5P-MINMS/ 0,3-923/MINFS DN	1418620
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	0.5 m	SAC-5P-MINMS/ 0,5-923/MINFS DN	1418633
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	1 m	SAC-5P-MINMS/ 1,0-923/MINFS DN	1418646
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	2 m	SAC-5P-MINMS/ 2,0-923/MINFS DN	1418659
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	5 m	SAC-5P-MINMS/ 5,0-923/MINFS DN	1418662
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	10 m	SAC-5P-MINMS/10,0-923/MINFS DN	1418675
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	15 m	SAC-5P-MINMS/15,0-923/MINFS DN	1418688
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	20 m	SAC-5P-MINMS/20,0-923/MINFS DN	1418691
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	0.3 m	SAC-5P-MINMS/ 0,3-923/MINFR DN	1418785
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	0.5 m	SAC-5P-MINMS/ 0,5-923/MINFR DN	1418798
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	1 m	SAC-5P-MINMS/ 1,0-923/MINFR DN	1418808
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	2 m	SAC-5P-MINMS/ 2,0-923/MINFR DN	1418811
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	5 m	SAC-5P-MINMS/ 5,0-923/MINFR DN	1418824
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	10 m	SAC-5P-MINMS/10,0-923/MINFR DN	1418837
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	15 m	SAC-5P-MINMS/15,0-923/MINFR DN	1420029
Plug straight 7/8" 16UNF -> Socket, angled 7/8"-16UNF	20 m	SAC-5P-MINMS/20,0-923/MINFR DN	1420032

DeviceNet™, shielded, 7/8" plug, angled, to 7/8" socket, straight or angled, PUR, gray, 80°C

Cable construction: 2x22 AWG, 2x24 AWG + drain wire, braided shield



Common technical data	
Certification	
Number of positions	5
Conductor cross section	2x 0.2 mm ² (signal line) / 2x 0.32 mm ² (Power supply) / 1x 0.32 mm ² (Drain wire)
Nominal current I _N	5.2 A
Nominal voltage U _N	30 V
Cable type	CAN Bus/DeviceNet
Degree of protection	IP65/67

SAC-5P-MINMR/ 0,3-923/MINFS DN SAC-5P-MINMR/ 0,3-923/MINFR DN

Assembly	Cable length	Type	Order No.
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	0.3 m	SAC-5P-MINMR/ 0,3-923/MINFS DN	1418701
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	0.5 m	SAC-5P-MINMR/ 0,5-923/MINFS DN	1418714
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	1 m	SAC-5P-MINMR/ 1,0-923/MINFS DN	1418727
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	2 m	SAC-5P-MINMR/ 2,0-923/MINFS DN	1418730
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	5 m	SAC-5P-MINMR/ 5,0-923/MINFS DN	1418743
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	10 m	SAC-5P-MINMR/10,0-923/MINFS DN	1418756
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	15 m	SAC-5P-MINMR/15,0-923/MINFS DN	1418769
Plug angled 7/8" 16UNF -> Socket, straight 7/8"-16UNF	20 m	SAC-5P-MINMR/20,0-923/MINFS DN	1418772
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	0.3 m	SAC-5P-MINMR/ 0,3-923/MINFR DN	1420045
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	0.5 m	SAC-5P-MINMR/ 0,5-923/MINFR DN	1420058
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	1 m	SAC-5P-MINMR/ 1,0-923/MINFR DN	1420061
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	2 m	SAC-5P-MINMR/ 2,0-923/MINFR DN	1420074
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	5 m	SAC-5P-MINMR/ 5,0-923/MINFR DN	1420087
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	10 m	SAC-5P-MINMR/10,0-923/MINFR DN	1420090
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	15 m	SAC-5P-MINMR/15,0-923/MINFR DN	1420100
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	20 m	SAC-5P-MINMR/20,0-923/MINFR DN	1420113

Mini 7/8" power cordsets and cables

5-pos. Mini 7/8" 16 AWG and 14 AWG PVC cordsets



5-pos. 7/8" PVC cordsets

Mini 7/8" power cordsets provide power to output devices that require a separate power line, assuring your DeviceNet™ network is not exposed to spikes, dropouts or other noise from the device.

5-pos. 16 AWG, 7/8" socket, straight or angled, to open end, PVC, gray, 90°C



Common technical data	
Certification	
Number of positions	5
Conductor cross section	1.5 mm²
AWG (approximately)	16
Nominal current I _N	10 A
Nominal voltage U _N	600 V
Cable type	PVC gray
Cable diameter	10 mm
Degree of protection	IP65/67

SAC-5P- 1,5-430/MINFS PWR SAC-5P- 1,5-430/MINFR PWR

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight 7/8"-16UNF	1.5 m	SAC-5P- 1,5-430/MINFS PWR	1443307
Free conductor end -> Socket, straight 7/8"-16UNF	3 m	SAC-5P- 3,0-430/MINFS PWR	1443310
Free conductor end -> Socket, straight 7/8"-16UNF	5 m	SAC-5P- 5,0-430/MINFS PWR	1443323
Free conductor end -> Socket, straight 7/8"-16UNF	7.5 m	SAC-5P- 7,5-430/MINFS PWR	1443336
Free conductor end -> Socket, straight 7/8"-16UNF	10 m	SAC-5P-10,0-430/MINFS PWR	1443349
Free conductor end -> Socket, angled 7/8"-16UNF	1.5 m	SAC-5P- 1,5-430/MINFR PWR	1443352
Free conductor end -> Socket, angled 7/8"-16UNF	3 m	SAC-5P- 3,0-430/MINFR PWR	1443365
Free conductor end -> Socket, angled 7/8"-16UNF	5 m	SAC-5P- 5,0-430/MINFR PWR	1443378
Free conductor end -> Socket, angled 7/8"-16UNF	7.5 m	SAC-5P- 7,5-430/MINFR PWR	1443381
Free conductor end -> Socket, angled 7/8"-16UNF	10 m	SAC-5P-10,0-430/MINFR PWR	1443394

5-pos. 14 AWG, 7/8" socket, straight or angled, to open end, PVC, gray, 90°C



Common technical data	
Certification	
Number of positions	5
Conductor cross section	2.5 mm²
AWG (approximately)	14
Nominal current I _N	13 A
Nominal voltage U _N	600 V
Cable type	PVC gray
Cable diameter	10.8 mm
Degree of protection	IP65/67

SAC-5P- 1,5-431/MINFS PWR SAC-5P- 1,5-431/MINFR PWR

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight 7/8"-16UNF	1.5 m	SAC-5P- 1,5-431/MINFS PWR	1443501
Free conductor end -> Socket, straight 7/8"-16UNF	3 m	SAC-5P- 3,0-431/MINFS PWR	1443514
Free conductor end -> Socket, straight 7/8"-16UNF	5 m	SAC-5P- 5,0-431/MINFS PWR	1443527
Free conductor end -> Socket, straight 7/8"-16UNF	7.5 m	SAC-5P- 7,5-431/MINFS PWR	1443530
Free conductor end -> Socket, straight 7/8"-16UNF	10 m	SAC-5P-10,0-431/MINFS PWR	1443543
Free conductor end -> Socket, angled 7/8"-16UNF	1.5 m	SAC-5P- 1,5-431/MINFR PWR	1443556
Free conductor end -> Socket, angled 7/8"-16UNF	3 m	SAC-5P- 3,0-431/MINFR PWR	1443569
Free conductor end -> Socket, angled 7/8"-16UNF	5 m	SAC-5P- 5,0-431/MINFR PWR	1443572
Free conductor end -> Socket, angled 7/8"-16UNF	7.5 m	SAC-5P- 7,5-431/MINFR PWR	1443585
Free conductor end -> Socket, angled 7/8"-16UNF	10 m	SAC-5P-10,0-431/MINFR PWR	1443598

5-pos. 16 AWG, 7/8" plug, straight or angled, to socket, straight or angled, PVC, gray, 90°C



Common technical data	
Certification	
Number of positions	5
Conductor cross section	1.5 mm ²
AWG (approximately)	16
Nominal current I _N	10 A
Nominal voltage U _N	600 V
Cable type	PVC gray
Cable diameter	10 mm
Degree of protection	IP65/67

SAC-5P-MINMS/0,3-430/MINFS PWR SAC-5P-MINMR/0,3-430/MINFR PWR

Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	0.3 m	SAC-5P-MINMS/0,3-430/MINFS PWR	1443404
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	0.6 m	SAC-5P-MINMS/0,6-430/MINFS PWR	1443417
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	1 m	SAC-5P-MINMS/1,0-430/MINFS PWR	1443420
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	1.5 m	SAC-5P-MINMS/1,5-430/MINFS PWR	1443433
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	2 m	SAC-5P-MINMS/2,0-430/MINFS PWR	1443446
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	0.3 m	SAC-5P-MINMR/0,3-430/MINFR PWR	1443459
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	0.6 m	SAC-5P-MINMR/0,6-430/MINFR PWR	1443462
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	1 m	SAC-5P-MINMR/1,0-430/MINFR PWR	1443475
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	1.5 m	SAC-5P-MINMR/1,5-430/MINFR PWR	1443488
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	2 m	SAC-5P-MINMR/2,0-430/MINFR PWR	1443491

5-pos. 14 AWG, 7/8" plug, straight or angled, to socket, straight or angled, PVC, gray, 90°C



Common technical data	
Certification	
Number of positions	5
Conductor cross section	2.5 mm ²
AWG (approximately)	14
Nominal current I _N	13 A
Nominal voltage U _N	600 V
Cable type	PVC gray
Cable diameter	10.8 mm
Degree of protection	IP65/67

SAC-5P-MINMS/0,3-431/MINFS PWR SAC-5P-MINMR/0,3-431/MINFR PWR

Assembly	Cable length	Type	Order No.
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	0.3 m	SAC-5P-MINMS/0,3-431/MINFS PWR	1443608
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	0.6 m	SAC-5P-MINMS/0,6-431/MINFS PWR	1443611
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	1 m	SAC-5P-MINMS/1,0-431/MINFS PWR	1443624
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	1.5 m	SAC-5P-MINMS/1,5-431/MINFS PWR	1443637
Plug straight 7/8" 16UNF -> Socket, straight 7/8"-16UNF	2 m	SAC-5P-MINMS/2,0-431/MINFS PWR	1443640
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	0.3 m	SAC-5P-MINMR/0,3-431/MINFR PWR	1443653
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	0.6 m	SAC-5P-MINMR/0,6-431/MINFR PWR	1443666
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	1 m	SAC-5P-MINMR/1,0-431/MINFR PWR	1443679
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	1.5 m	SAC-5P-MINMR/1,5-431/MINFR PWR	1443682
Plug angled 7/8" 16UNF -> Socket, angled 7/8"-16UNF	2 m	SAC-5P-MINMR/2,0-431/MINFR PWR	1443695

DeviceNet™ bus couplers

Modular DeviceNet™ I/O provides a fast and cost-effective solution for your I/O needs. The bus coupler can be IP20 or IP67 and provides a connection to the network while the local I/O can be tailored to meet every automation task. These local I/O devices come in many variations, including digital and analog, and with common functions that range in voltage levels and channel densities.

DeviceNet™ bus coupler - IP67



Technical data	
Fieldbus system	DeviceNet™
Fieldbus connection type	M12 plug-in connector, A-coded
Transmission speed	125 kBaud, 250 kBaud, 500 kBaud automatic detection
Supply voltage	24 V DC
Supply voltage range	18 V DC ... 30 V DC IEC 61131-2 (including ripple)
Supply connection type	M12 male plug-in connector
Number of inputs	8
Inputs/outputs connection type	M12 male plug-in connector
Width	70 mm
Degree of protection	IP65/67
Ambient temperature (operation)	-25 °C ... 60 °C

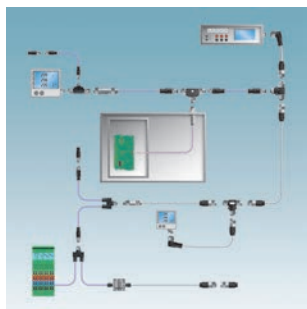
Type	Order No.	Pcs. / Pkt.
FLM BK DN M12 DI 8 M12	2736343	1

DeviceNet™ bus coupler - IP20



Technical data	
Fieldbus system	Lokalbus
Digital inputs/outputs	8 / 4
Supply voltage	24 V DC (via Inline plug)
Current consumption, maximum	0.9 A
Width	80 mm
Ambient temperature (operation)	-25 °C ... 55 °C

Type	Order No.	Pcs. / Pkt.
IL DN BK DI8 DO4-PAC	2897211	1



M12 and 7/8" Y and T distributors

Sometimes the ideal cabling topology for a system requires the use of a Y cable or T distributor. T distributors are used when a drop is required off a trunk line. The T distributor/adaptor allows for a Mini 7/8" trunk line with M12 drops. A termination resistor is used to ground data signals, eliminating data reflection on the main trunk line.

DeviceNet™ Y distributor, shielded head, M12 socket, to M12 socket and plug, straight, PUR, gray, 80°C



Common technical data	
Certification	
Assembly	Socket, straight M12-SPEEDCON -> Socket, straight M12-SPEEDCON
Number of positions	5
Conductor cross section	2x 0.25 mm ² (signal line) / 2x 0.34 mm ² (Power supply) / 1x 0.34 mm ² (Drain wire)
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	CAN Bus/DeviceNet
Cable diameter	6.7 mm ±0.3 mm
Degree of protection	IP65/67

Cable length	Type	Order No.
0.3 m	SAC-5PY-F/2X 0,3-920-MS-FS	1436013
0.5 m	SAC-5PY-F/2X 0,5-920-MS-FS	1436026
1 m	SAC-5PY-F/2X 1,0-920-MS-FS	1436039
2 m	SAC-5PY-F/2X 2,0-920-MS-FS	1436042
5 m	SAC-5PY-F/2X 5,0-920-MS-FS	1436055
10 m	SAC-5PY-F/2X10,0-920-MS-FS	1436068
15 m	SAC-5PY-F/2X15,0-920-MS-FS	1436071

DeviceNet™ Y distributor, shielded head, M12 socket or plug, to open ends, PUR, gray, 80°C



Common technical data	
Certification	
Number of positions	5
Conductor cross section	2x 0.25 mm ² (signal line) / 2x 0.34 mm ² (Power supply) / 1x 0.34 mm ² (Drain wire)
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	CAN Bus/DeviceNet
Cable diameter	6.7 mm ±0.3 mm
Degree of protection	IP65/67

Assembly	Cable length	Type	Order No.
Socket, straight M12-SPEEDCON -> Free conductor end	2 m	SAC-5PY-F/2X 2,0-920	1436123
Socket, straight M12-SPEEDCON -> Free conductor end	5 m	SAC-5PY-F/2X 5,0-920	1436136
Socket, straight M12-SPEEDCON -> Free conductor end	10 m	SAC-5PY-F/2X10,0-920	1436149
Socket, straight M12-SPEEDCON -> Free conductor end	15 m	SAC-5PY-F/2X15,0-920	1436152
Plug straight M12-SPEEDCON -> Free conductor end	2 m	SAC-5PY-M/2X 2,0-920	1436084
Plug straight M12-SPEEDCON -> Free conductor end	5 m	SAC-5PY-M/2X 5,0-920	1436097
Plug straight M12-SPEEDCON -> Free conductor end	10 m	SAC-5PY-M/2X10,0-920	1436107
Plug straight M12-SPEEDCON -> Free conductor end	15 m	SAC-5PY-M/2X15,0-920	1436110

DeviceNet™ M12 H and T distributor



SAC-5PH-M-F/2XF SH1 SCO SAC-5P-M12T/2XM12 VP

Common technical data	
Certification	
Number of positions	5
Nominal current I _N (IEC)	4 A
Nominal voltage U _N (IEC)	60 V
Degree of protection	IP65/67

Design	Type	Order No.	Pcs. / Pkt.
->	SAC-5PH-M-F/2XF SH1 SCO	1417414	1
Plug straight M12 -> Socket, straight M12	SAC-5P-M12T/2XM12 VP	1541186	1

DeviceNet™ Mini 7/8" T distributors



Common technical data	
Certification	
Design	->
Number of positions	5
Degree of protection	IP65/67

Nominal current I _N (IEC)	Nominal voltage U _N (IEC)	Type	Order No.	Pcs. / Pkt.
4 A	60 V	SAC-5P-M12T/2XMIN DN	1401028	1
10 A	250 V	SAC-5P-MINT/2XMIN DN	1401029	1

DeviceNet™ termination resistors



Common technical data	
Number of positions	5
Degree of protection	IP65/67

Certification	Design	Nominal voltage U _N (IEC)	Nominal current I _N (IEC)	Type	Order No.	Pcs. / Pkt.
	Plug straight M12	60 V	4 A	SAC-5P-M12MS CAN TR	1507816	5
	Socket, straight M12	60 V	4 A	SAC-5P-M12FS CAN TR	1529344	5
	Plug straight 7/8" 16UNF	300 V DC	-	SAC-5P-MINMS TR-DN	1434701	1

DeviceNet™ field-wired connectors, straight or angled, spring connection



SACC-MS-5SC SH DN SCO

SACC-FR-5SC SH DN SCO

Common technical data	
Certification	
Number of positions	5
Conductor cross section [mm²]	0.14 mm² ... 0.5 mm²
Conductor cross section (AWG)	26 ... 20
Outer cable diameter range (mm)	4 mm ... 8 mm
Nominal voltage U _N (IEC)	60 V
Nominal current I _N (IEC)	4 A
Degree of protection	IP65/67

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M12-SPEEDCON	SACC-MS-5SC SH DN SCO	1432761	1
Socket, straight M12-SPEEDCON	SACC-FS-5SC SH DN SCO	1432787	1
Plug angled M12-SPEEDCON	SACC-MR-5SC SH DN SCO	1432774	1
Socket, angled M12-SPEEDCON	SACC-FR-5SC SH DN SCO	1432790	1

DeviceNet™ M12 to M12 bulkhead connector



Technical data	
Certification	
Design	Plug straight M12
Number of positions	5
Nominal voltage U _N (IEC)	24 V
Nominal current I _N (IEC)	4 A
Degree of protection	IP67

Type	Order No.	Pcs. / Pkt.
SACC-5P-DSI-M12MS/FS-M16	1551671	1

DeviceNet™ connectors

M12 panel feed-through with shielded cable

DeviceNet™ front mount, 16 mm mounting thread



Common technical data

Certification	PC
Number of positions	5
Conductor cross section (AWG)	
Nominal voltage U_N (IEC)	60 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP67

SACCEC-M12MS-5CON-M16/ 0,5-920 SACCEC-M12FS-5CON-M16/ 0,5-920

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12	SACCEC-M12MS-5CON-M16/ 0,5-920	1525623	1
Flush-type plug, straight M12	SACCEC-M12MS-5CON-M16/ 1,0-920	1525636	1
Flush-type plug, straight M12	SACCEC-M12MS-5CON-M16/ 2,0-920	1525649	1
Flush-type plug, straight M12	SACCEC-M12MS-5CON-M16/ 5,0-920	1525652	1
Flush-type socket, straight M12	SACCEC-M12FS-5CON-M16/ 0,5-920	1525678	1
Flush-type socket, straight M12	SACCEC-M12FS-5CON-M16/ 1,0-920	1525681	1
Flush-type socket, straight M12	SACCEC-M12FS-5CON-M16/ 2,0-920	1525694	1
Flush-type socket, straight M12	SACCEC-M12FS-5CON-M16/ 5,0-920	1525704	1

Accessories	Type	Order No.	Pcs. / Pkt.
M16 locking nut, for flush-type plugs and sockets with M16 fastening thread	SACC-E-MU-M16	1504097	100
Depending on panel thickness, a locking nut may be required. It is not included with the assembly.	-	-	-

DeviceNet™ rear mount, 16 mm mounting thread

The locking nut is included with the assembly.



Common technical data

Certification	PC
Number of positions	5
Conductor cross section (AWG)	
Nominal voltage U_N (IEC)	60 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP67

SACCBP-M12MS-5CON-M16/0,5-920 SACCBP-M12FS-5CON-M16/0,5-920

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12	SACCBP-M12MS-5CON-M16/0,5-920	1534423	1
Flush-type plug, straight M12	SACCBP-M12MS-5CON-M16/1,0-920	1534436	1
Flush-type plug, straight M12	SACCBP-M12MS-5CON-M16/2,0-920	1534449	1
Flush-type plug, straight M12	SACCBP-M12MS-5CON-M16/5,0-920	1534452	1
Flush-type socket, straight M12	SACCBP-M12FS-5CON-M16/0,5-920	1534465	1
Flush-type socket, straight M12	SACCBP-M12FS-5CON-M16/1,0-920	1534478	1
Flush-type socket, straight M12	SACCBP-M12FS-5CON-M16/2,0-920	1534481	1
Flush-type socket, straight M12	SACCBP-M12FS-5CON-M16/5,0-920	1534494	1

M12 special applications

Food and beverage manufacturing equipment

M12 connectors for this industry must meet specific guidelines for safety and hygiene. Our metal components therefore are made of high grade stainless steel (1.4404) to prevent corrosion during wash down with chemicals. The smooth surfaces of our connectors provide neither a foothold nor a breeding ground for bacteria. All connector products carry an IP69K rating especially for protection from high pressure jetted water and steam.





M12 SENSOR/ACTUATOR CORDSETS

4-pos. M12 – washdown design **Page 152**

5-pos. M12 – washdown design **Page 154**

4-pos. M12 – hygienic design **Page 156**

4-pos. M12 shielded –
hygienic design **Page 158**

5-pos. M12 – hygienic design **Page 159**

M12 SENSOR/ACTUATOR BOXES

M12 with LEDs for pnp sensors **Page 161**

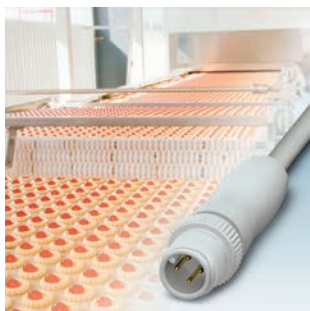
M12 SENSOR/ACTUATOR CONNECTORS

M12 field-wired **Page 162**

M12 panel feed-through
with flying leads **Page 163**

Special applications – Food and beverage

4-pos. M12 sensor/actuator cordsets - washdown design



Cordsets for washdown environments

The washdown design M12 cordsets are equipped with a plastic coupling nut and have a particularly smooth and easy-to-clean surface. The cable and plastic materials are specifically selected for the special requirements in the spray zone.

4-pos. M12 socket, straight or angled, to open end, PP, gray, 105°C - washdown design



Common technical data

Number of positions	4
Conductor cross section	4x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	250 V
Cable type	Halogen-free PP gray
Cable diameter	4.7 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

SAC-4P-1,5-600/M12FS FB

SAC-4P-1,5-600/M12FR FB

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12	1.5 m	SAC-4P-1,5-600/M12FS FB	1404010
Free conductor end -> Socket, straight M12	3 m	SAC-4P-3,0-600/M12FS FB	1404011
Free conductor end -> Socket, straight M12	5 m	SAC-4P-5,0-600/M12FS FB	1404012
Free conductor end -> Socket, straight M12	10 m	SAC-4P-10,0-600/M12FS FB	1404013
Free conductor end -> Socket, angled M12	1.5 m	SAC-4P-1,5-600/M12FR FB	1404014
Free conductor end -> Socket, angled M12	3 m	SAC-4P-3,0-600/M12FR FB	1404015
Free conductor end -> Socket, angled M12	5 m	SAC-4P-5,0-600/M12FR FB	1404017
Free conductor end -> Socket, angled M12	10 m	SAC-4P-10,0-600/M12FR FB	1404018

4-pos. M12 socket, with LED, angled, to open end, PP, gray, 105°C - washdown design



Common technical data

Assembly	Free conductor end -> Socket, angled M12
Number of positions	4
Conductor cross section	4x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	24 V
Cable type	Halogen-free PP gray
Cable diameter	4.7 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
1.5 m	SAC-4P-1,5-600/M12FR-3L FB	1404019
3 m	SAC-4P-3,0-600/M12FR-3L FB	1404020
5 m	SAC-4P-5,0-600/M12FR-3L FB	1404021
10 m	SAC-4P-10,0-600/M12FR-3L FB	1404022

4-pos. M12 plug, straight or angled, to open end, PP, gray, 105°C - washdown design



Common technical data

Number of positions	4
Conductor cross section	4x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	250 V
Cable type	Halogen-free PP gray
Cable diameter	4.7 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

SAC-4P-M12MS/1,5-600 FB

SAC-4P-M12MR/1,5-600 FB

Assembly	Cable length	Type	Order No.
Plug straight M12 -> Free conductor end	1.5 m	SAC-4P-M12MS/1,5-600 FB	1404002
Plug straight M12 -> Free conductor end	3 m	SAC-4P-M12MS/3,0-600 FB	1404003
Plug straight M12 -> Free conductor end	5 m	SAC-4P-M12MS/5,0-600 FB	1404004
Plug straight M12 -> Free conductor end	10 m	SAC-4P-M12MS/10,0-600 FB	1404005
Plug angled M12 -> Free conductor end	1.5 m	SAC-4P-M12MR/1,5-600 FB	1404006
Plug angled M12 -> Free conductor end	3 m	SAC-4P-M12MR/3,0-600 FB	1404007
Plug angled M12 -> Free conductor end	5 m	SAC-4P-M12MR/5,0-600 FB	1404008
Plug angled M12 -> Free conductor end	10 m	SAC-4P-M12MR/10,0-600 FB	1404009

4-pos. M12 plug, straight, to M12 socket, straight or angled, PP, gray, 105°C - washdown design



Common technical data	
Number of positions	4
Conductor cross section	4x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	250 V
Cable type	Halogen-free PP gray
Cable diameter	4.7 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

SAC-4P-M12MS/0,3-600/M12FS FB SAC-4P-M12MS/0,3-600/M12FR FB

Assembly	Cable length	Type	Order No.
Plug straight M12 -> Socket, straight M12	0.3 m	SAC-4P-M12MS/0,3-600/M12FS FB	1404023
Plug straight M12 -> Socket, straight M12	0.6 m	SAC-4P-M12MS/0,6-600/M12FS FB	1404024
Plug straight M12 -> Socket, straight M12	1.5 m	SAC-4P-M12MS/1,5-600/M12FS FB	1404025
Plug straight M12 -> Socket, straight M12	3 m	SAC-4P-M12MS/3,0-600/M12FS FB	1404026
Plug straight M12 -> Socket, angled M12	0.3 m	SAC-4P-M12MS/0,3-600/M12FR FB	1404027
Plug straight M12 -> Socket, angled M12	0.6 m	SAC-4P-M12MS/0,6-600/M12FR FB	1404028
Plug straight M12 -> Socket, angled M12	1.5 m	SAC-4P-M12MS/1,5-600/M12FR FB	1404030
Plug straight M12 -> Socket, angled M12	3 m	SAC-4P-M12MS/3,0-600/M12FR FB	1404031

4-pos. M12 plug, straight, to M12 socket, with LED, angled, PP, gray, 105°C - washdown design



Common technical data	
Assembly	Plug straight M12 -> Socket, angled M12
Number of positions	4
Conductor cross section	4x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	24 V
Cable type	Halogen-free PP gray
Cable diameter	4.7 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
0.3 m	SAC-4P-MS/0,3-600/M12FR-3L FB	1404033
0.6 m	SAC-4P-MS/0,6-600/M12FR-3L FB	1404034
1.5 m	SAC-4P-MS/1,5-600/M12FR-3L FB	1404035
3 m	SAC-4P-MS/3,0-600/M12FR-3L FB	1404036

Special applications – Food and beverage

5-pos. M12 sensor/actuator cordsets - washdown design

5-pos. M12 socket, straight or angled, to open end, PP, gray, 105°C - washdown design



Common technical data

Number of positions	5
Conductor cross section	5x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	Halogen-free PP gray
Cable diameter	5 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

SAC-5P-1,5-600/M12FS FB

SAC-5P-1,5-600/M12FR FB

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12	1.5 m	SAC-5P-1,5-600/M12FS FB	1404083
Free conductor end -> Socket, straight M12	3 m	SAC-5P-3,0-600/M12FS FB	1404084
Free conductor end -> Socket, straight M12	5 m	SAC-5P-5,0-600/M12FS FB	1404085
Free conductor end -> Socket, straight M12	10 m	SAC-5P-10,0-600/M12FS FB	1404086
Free conductor end -> Socket, angled M12	1.5 m	SAC-5P-1,5-600/M12FR FB	1404088
Free conductor end -> Socket, angled M12	3 m	SAC-5P-3,0-600/M12FR FB	1404089
Free conductor end -> Socket, angled M12	5 m	SAC-5P-5,0-600/M12FR FB	1404091
Free conductor end -> Socket, angled M12	10 m	SAC-5P-10,0-600/M12FR FB	1404092

5-pos. M12 socket, with LED, angled, to open end, PP, gray, 105°C - washdown design



Common technical data

Assembly	Free conductor end -> Socket, angled M12
Number of positions	5
Conductor cross section	5x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	24 V
Cable type	Halogen-free PP gray
Cable diameter	5 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
1.5 m	SAC-5P-1,5-600/M12FR-3L FB	1404093
3 m	SAC-5P-3,0-600/M12FR-3L FB	1404094
5 m	SAC-5P-5,0-600/M12FR-3L FB	1404095
10 m	SAC-5P-10,0-600/M12FR-3L FB	1404096

5-pos. M12 plug, straight or angled, to open end, PP, gray, 105°C - washdown design



Common technical data

Number of positions	5
Conductor cross section	5x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	Halogen-free PP gray
Cable diameter	5 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

SAC-5P-M12MS/1,5-600 FB

SAC-5P-M12MR/1,5-600 FB

Assembly	Cable length	Type	Order No.
Plug straight M12 -> Free conductor end	1.5 m	SAC-5P-M12MS/1,5-600 FB	1404075
Plug straight M12 -> Free conductor end	3 m	SAC-5P-M12MS/3,0-600 FB	1404076
Plug straight M12 -> Free conductor end	5 m	SAC-5P-M12MS/5,0-600 FB	1404077
Plug straight M12 -> Free conductor end	10 m	SAC-5P-M12MS/10,0-600 FB	1404078
Plug angled M12 -> Free conductor end	1.5 m	SAC-5P-M12MR/1,5-600 FB	1404079
Plug angled M12 -> Free conductor end	3 m	SAC-5P-M12MR/3,0-600 FB	1404080
Plug angled M12 -> Free conductor end	5 m	SAC-5P-M12MR/5,0-600 FB	1404081
Plug angled M12 -> Free conductor end	10 m	SAC-5P-M12MR/10,0-600 FB	1404082

5-pos. M12 plug, straight, to M12 socket, straight or angled, PP, gray, 105°C - washdown design



Common technical data	
Number of positions	5
Conductor cross section	5x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	Halogen-free PP gray
Cable diameter	5 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

SAC-5P-M12MS/0,3-600/M12FS FB SAC-5P-M12MS/0,3-600/M12FR FB

Assembly	Cable length	Type	Order No.
Plug straight M12 -> Socket, straight M12	0.3 m	SAC-5P-M12MS/0,3-600/M12FS FB	1404097
Plug straight M12 -> Socket, straight M12	0.6 m	SAC-5P-M12MS/0,6-600/M12FS FB	1404098
Plug straight M12 -> Socket, straight M12	1.5 m	SAC-5P-M12MS/1,5-600/M12FS FB	1404099
Plug straight M12 -> Socket, straight M12	3 m	SAC-5P-M12MS/3,0-600/M12FS FB	1404101
Plug straight M12 -> Socket, angled M12	0.3 m	SAC-5P-M12MS/0,3-600/M12FR FB	1404102
Plug straight M12 -> Socket, angled M12	0.6 m	SAC-5P-M12MS/0,6-600/M12FR FB	1404103
Plug straight M12 -> Socket, angled M12	1.5 m	SAC-5P-M12MS/1,5-600/M12FR FB	1404104
Plug straight M12 -> Socket, angled M12	3 m	SAC-5P-M12MS/3,0-600/M12FR FB	1404105

5-pos. M12 plug, straight, to M12 socket, with LED, angled, PP, gray, 105°C - washdown design

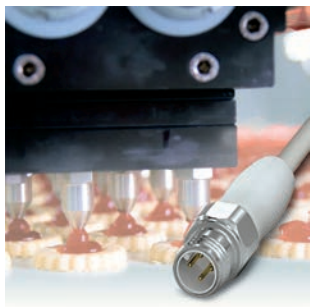


Common technical data	
Assembly	Plug straight M12 -> Socket, angled M12
Number of positions	5
Conductor cross section	5x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	24 V
Cable type	Halogen-free PP gray
Cable diameter	5 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
0.3 m	SAC-5P-MS/0,3-600/M12FR-3L FB	1404106
0.6 m	SAC-5P-MS/0,6-600/M12FR-3L FB	1404107
1.5 m	SAC-5P-MS/1,5-600/M12FR-3L FB	1404108
3 m	SAC-5P-MS/3,0-600/M12FR-3L FB	1404109

Special applications – Food and beverage

4-pos. M12 sensor/actuator cordsets - hygienic design



Cordsets for hygienic environments

The hygienic design M12 cordsets are equipped with a stainless steel (1.4404) coupling nut and are intended for use in areas where contact with the product is probable, known as the product contact zone. This design makes it impossible for residual food material to accumulate as it is completely free of potential dirt pockets. Shielded versions are available for areas subject to high levels of electromagnetic interference.

4-pos. M12 socket, straight or angled, to open end, PP, gray, 105°C - hygienic design



Common technical data	
Number of positions	4
Conductor cross section	4x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	250 V
Cable type	Halogen-free PP gray
Cable diameter	4.7 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

SAC-4P-1,5-600/M12FS HD

SAC-4P-1,5-600/M12FR HD

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12	1.5 m	SAC-4P-1,5-600/M12FS HD	1403956
Free conductor end -> Socket, straight M12	3 m	SAC-4P-3,0-600/M12FS HD	1403957
Free conductor end -> Socket, straight M12	5 m	SAC-4P-5,0-600/M12FS HD	1403958
Free conductor end -> Socket, straight M12	10 m	SAC-4P-10,0-600/M12FS HD	1403959
Free conductor end -> Socket, angled M12	1.5 m	SAC-4P-1,5-600/M12FR HD	1403960
Free conductor end -> Socket, angled M12	3 m	SAC-4P-3,0-600/M12FR HD	1403961
Free conductor end -> Socket, angled M12	5 m	SAC-4P-5,0-600/M12FR HD	1403962
Free conductor end -> Socket, angled M12	10 m	SAC-4P-10,0-600/M12FR HD	1403963

4-pos. M12 socket, with LED, angled, to open end, PP, gray, 105°C - hygienic design



Common technical data	
Assembly	Free conductor end -> Socket, angled M12
Number of positions	4
Conductor cross section	4x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	24 V
Cable type	Halogen-free PP gray
Cable diameter	4.7 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
1.5 m	SAC-4P-1,5-600/M12FR-3L HD	1403964
3 m	SAC-4P-3,0-600/M12FR-3L HD	1403965
5 m	SAC-4P-5,0-600/M12FR-3L HD	1403966
10 m	SAC-4P-10,0-600/M12FR-3L HD	1403967

4-pos. M12 plug, straight or angled, to open end, PP, gray, 105°C - hygienic design



SAC-4P-M12MS/1,5-600 HD

SAC-4P-M12MR/1,5-600 HD

Common technical data	
Number of positions	4
Conductor cross section	4x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	250 V
Cable type	Halogen-free PP gray
Cable diameter	4.7 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

Assembly	Cable length	Type	Order No.
Plug straight M12 -> Free conductor end	1.5 m	SAC-4P-M12MS/1,5-600 HD	1403947
Plug straight M12 -> Free conductor end	3 m	SAC-4P-M12MS/3,0-600 HD	1403948
Plug straight M12 -> Free conductor end	5 m	SAC-4P-M12MS/5,0-600 HD	1403949
Plug straight M12 -> Free conductor end	10 m	SAC-4P-M12MS/10,0-600 HD	1403951
Plug angled M12 -> Free conductor end	1.5 m	SAC-4P-M12MR/1,5-600 HD	1403952
Plug angled M12 -> Free conductor end	3 m	SAC-4P-M12MR/3,0-600 HD	1403953
Plug angled M12 -> Free conductor end	5 m	SAC-4P-M12MR/5,0-600 HD	1403954
Plug angled M12 -> Free conductor end	10 m	SAC-4P-M12MR/10,0-600 HD	1403955

4-pos. M12 plug, straight, to M12 socket, straight or angled, PP, gray, 105°C - hygienic design



Common technical data	
Number of positions	4
Conductor cross section	4x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	250 V
Cable type	Halogen-free PP gray
Cable diameter	4.7 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

SAC-4P-M12MS/0,3-600/M12FS HD SAC-4P-M12MS/0,3-600/M12FR HD

Assembly	Cable length	Type	Order No.
Plug straight M12 -> Socket, straight M12	0.3 m	SAC-4P-M12MS/0,3-600/M12FS HD	1403968
Plug straight M12 -> Socket, straight M12	0.6 m	SAC-4P-M12MS/0,6-600/M12FS HD	1403969
Plug straight M12 -> Socket, straight M12	1.5 m	SAC-4P-M12MS/1,5-600/M12FS HD	1403970
Plug straight M12 -> Socket, straight M12	3 m	SAC-4P-M12MS/3,0-600/M12FS HD	1403971
Plug straight M12 -> Socket, angled M12	0.3 m	SAC-4P-M12MS/0,3-600/M12FR HD	1403972
Plug straight M12 -> Socket, angled M12	0.6 m	SAC-4P-M12MS/0,6-600/M12FR HD	1403973
Plug straight M12 -> Socket, angled M12	1.5 m	SAC-4P-M12MS/1,5-600/M12FR HD	1403974
Plug straight M12 -> Socket, angled M12	3 m	SAC-4P-M12MS/3,0-600/M12FR HD	1403975

4-pos. M12 plug, straight, to M12 socket, with LED, angled, PP, gray, 105°C - hygienic design



Common technical data	
Assembly	Plug straight M12 -> Socket, angled M12
Number of positions	4
Conductor cross section	4x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	24 V
Cable type	Halogen-free PP gray
Cable diameter	4.7 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
0.3 m	SAC-4P-MS/0,3-600/M12FR-3L HD	1403976
0.6 m	SAC-4P-MS/0,6-600/M12FR-3L HD	1403977
1.5 m	SAC-4P-MS/1,5-600/M12FR-3L HD	1403978
3 m	SAC-4P-MS/3,0-600/M12FR-3L HD	1403979

Special applications – Food and beverage

4-pos. shielded M12 sensor/actuator cordsets - hygienic design

4-pos. shielded M12 socket, straight, to open end, PP, gray, 105°C - hygienic design



Common technical data

Assembly	Free conductor end -> Socket, straight M12
Number of positions	4
Conductor cross section	4x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	250 V
Cable type	Halogen-free PP gray shielded
Cable diameter	5.55 mm ± 0.2 mm
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
1.5 m	SAC-4P-1,5-600/M12FS SH HD	1403985
3 m	SAC-4P-3,0-600/M12FS SH HD	1403986
5 m	SAC-4P-5,0-600/M12FS SH HD	1403987
10 m	SAC-4P-10,0-600/M12FS SH HD	1403989

4-pos. shielded M12 plug, straight, to open end, PP, gray, 105°C - hygienic design



Common technical data

Assembly	Plug straight M12 -> Free conductor end
Number of positions	4
Conductor cross section	4x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	250 V
Cable type	Halogen-free PP gray shielded
Cable diameter	5.55 mm ± 0.2 mm
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
1.5 m	SAC-4P-M12MS/1,5-600 SH HD	1403981
3 m	SAC-4P-M12MS/3,0-600 SH HD	1403982
5 m	SAC-4P-M12MS/5,0-600 SH HD	1403983
10 m	SAC-4P-M12MS/10,0-600 SH HD	1403984

4-pos. shielded M12 plug, straight, to M12 socket, straight, PP, gray, 105°C - hygienic design



Common technical data

Assembly	Plug straight M12 -> Socket, straight M12
Number of positions	4
Conductor cross section	4x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	250 V
Cable type	Halogen-free PP gray shielded
Cable diameter	5.55 mm ± 0.2 mm
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
0.3 m	SAC-4P-M12MS/0,3-600/FS SH HD	1403990
0.6 m	SAC-4P-M12MS/0,6-600/FS SH HD	1403991
1.5 m	SAC-4P-M12MS/1,5-600/FS SH HD	1403992
3 m	SAC-4P-M12MS/3,0-600/FS SH HD	1403993

5-pos. M12 socket, straight or angled, to open end, PP, gray, 105°C - hygienic design



SAC-5P-1,5-600/M12FS HD

SAC-5P-1,5-600/M12FR HD

Common technical data

Number of positions	5
Conductor cross section	5x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	Halogen-free PP gray
Cable diameter	5 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

Assembly	Cable length	Type	Order No.
Free conductor end -> Socket, straight M12	1.5 m	SAC-5P-1,5-600/M12FS HD	1404049
Free conductor end -> Socket, straight M12	3 m	SAC-5P-3,0-600/M12FS HD	1404050
Free conductor end -> Socket, straight M12	5 m	SAC-5P-5,0-600/M12FS HD	1404051
Free conductor end -> Socket, straight M12	10 m	SAC-5P-10,0-600/M12FS HD	1404052
Free conductor end -> Socket, angled M12	1.5 m	SAC-5P-1,5-600/M12FR HD	1404053
Free conductor end -> Socket, angled M12	3 m	SAC-5P-3,0-600/M12FR HD	1404054
Free conductor end -> Socket, angled M12	5 m	SAC-5P-5,0-600/M12FR HD	1404055
Free conductor end -> Socket, angled M12	10 m	SAC-5P-10,0-600/M12FR HD	1404056

5-pos. M12 socket, with LED, angled, to open end, PP, gray, 105°C - hygienic design



Common technical data

Assembly	Free conductor end -> Socket, angled M12
Number of positions	5
Conductor cross section	5x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	24 V
Cable type	Halogen-free PP gray
Cable diameter	5 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
1.5 m	SAC-5P-1,5-600/M12FR-3L HD	1404057
3 m	SAC-5P-3,0-600/M12FR-3L HD	1404059
5 m	SAC-5P-5,0-600/M12FR-3L HD	1404060
10 m	SAC-5P-10,0-600/M12FR-3L HD	1404062

5-pos. M12 plug, straight or angled, to open end, PP, gray, 105°C - hygienic design



SAC-5P-M12MS/1,5-600 HD

SAC-5P-M12MR/1,5-600 HD

Common technical data

Number of positions	5
Conductor cross section	5x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	Halogen-free PP gray
Cable diameter	5 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

Assembly	Cable length	Type	Order No.
Plug straight M12 -> Free conductor end	1.5 m	SAC-5P-M12MS/1,5-600 HD	1404039
Plug straight M12 -> Free conductor end	3 m	SAC-5P-M12MS/3,0-600 HD	1404041
Plug straight M12 -> Free conductor end	5 m	SAC-5P-M12MS/5,0-600 HD	1404042
Plug straight M12 -> Free conductor end	10 m	SAC-5P-M12MS/10,0-600 HD	1404043
Plug angled M12 -> Free conductor end	1.5 m	SAC-5P-M12MR/1,5-600 HD	1404044
Plug angled M12 -> Free conductor end	3 m	SAC-5P-M12MR/3,0-600 HD	1404046
Plug angled M12 -> Free conductor end	5 m	SAC-5P-M12MR/5,0-600 HD	1404047
Plug angled M12 -> Free conductor end	10 m	SAC-5P-M12MR/10,0-600 HD	1404048

Special applications – Food and beverage

5-pos. M12 sensor/actuator cordsets - hygienic design

5-pos. M12 plug, straight, to M12 socket, straight or angled, PP, gray, 105°C - hygienic design



Common technical data	
Number of positions	5
Conductor cross section	5x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	60 V
Cable type	Halogen-free PP gray
Cable diameter	5 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

SAC-5P-M12MS/0,3-600/M12FS HD SAC-5P-M12MS/0,3-600/M12FR HD

Assembly	Cable length	Type	Order No.
Plug straight M12 -> Socket, straight M12	0.3 m	SAC-5P-M12MS/0,3-600/M12FS HD	1404063
Plug straight M12 -> Socket, straight M12	0.6 m	SAC-5P-M12MS/0,6-600/M12FS HD	1404064
Plug straight M12 -> Socket, straight M12	1.5 m	SAC-5P-M12MS/1,5-600/M12FS HD	1404065
Plug straight M12 -> Socket, straight M12	3 m	SAC-5P-M12MS/3,0-600/M12FS HD	1404066
Plug straight M12 -> Socket, angled M12	0.3 m	SAC-5P-M12MS/0,3-600/M12FR HD	1404067
Plug straight M12 -> Socket, angled M12	0.6 m	SAC-5P-M12MS/0,6-600/M12FR HD	1404068
Plug straight M12 -> Socket, angled M12	1.5 m	SAC-5P-M12MS/1,5-600/M12FR HD	1404069
Plug straight M12 -> Socket, angled M12	3 m	SAC-5P-M12MS/3,0-600/M12FR HD	1404070

5-pos. M12 plug, straight, to M12 socket, with LED, angled, PP, gray, 105°C - hygienic design



Common technical data	
Assembly	Plug straight M12 -> Socket, angled M12
Number of positions	5
Conductor cross section	5x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	24 V
Cable type	Halogen-free PP gray
Cable diameter	5 mm ±0.15 mm
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
0.3 m	SAC-5P-MS/0,3-600/M12FR-3L HD	1404071
0.6 m	SAC-5P-MS/0,6-600/M12FR-3L HD	1404072
1.5 m	SAC-5P-MS/1,5-600/M12FR-3L HD	1404073
3 m	SAC-5P-MS/3,0-600/M12FR-3L HD	1404550

M12 sensor boxes (pnp) with LED, double occupancy, molded master cable



Common technical data	
Certification	PC
Number of positions	5
Number of slots	8
Signal type	pnp
I/O per slot	Double
Nominal current I_N per I/O slot (IEC)	4 A
Nominal voltage U_N (IEC)	24 V DC
Degree of protection	IP65/IP67/IP69K

Master cable length	Type	Order No.	Pcs. / Pkt.
5 m	SACB-8/16-L- 5,0PVC FB	1555541	1
10 m	SACB-8/16-L-10,0PVC FB	1555554	1

Special applications – Food and beverage

M12 field-wired connectors

4-pos. M12 field-wired connectors, straight or angled, screw connection



SACC-M12MS-4CON-PG 7-VA SACC-M12MR-4CON-PG 9-VA

Common technical data	
Certification	PC
Number of positions	4
Conductor cross section [mm²]	0.25 mm² ... 0.75 mm²
Conductor cross section (AWG)	24 ... 18
Nominal voltage U _N (IEC)	250 V
Nominal current I _N (IEC)	4 A
Degree of protection	IP65/IP67/IP69K

Design	Outer cable diameter range (mm)	Type	Order No.	Pcs. / Pkt.
Plug straight M12	4 mm ... 6 mm	SACC-M12MS-4CON-PG 7-VA	1553161	1
Socket, straight M12	4 mm ... 6 mm	SACC-M12FS-4CON-PG 7-VA	1553242	1
Plug straight M12	6 mm ... 8 mm	SACC-M12MS-4CON-PG 9-VA	1553174	1
Socket, straight M12	6 mm ... 8 mm	SACC-M12FS-4CON-PG 9-VA	1553268	1
Plug angled M12	4 mm ... 6 mm	SACC-M12MR-4CON-PG 7-VA	1553200	1
Socket, angled M12	4 mm ... 6 mm	SACC-M12FR-4CON-PG 7-VA	1553284	1
Plug angled M12	6 mm ... 8 mm	SACC-M12MR-4CON-PG 9-VA	1553226	1

5-pos. M12 field-wired connectors, straight or angled, screw connection



SACC-M12MS-5CON-PG 7-VA SACC-M12FR-5CON-PG 9-VA

Common technical data	
Certification	PC
Number of positions	5
Conductor cross section [mm²]	0.25 mm² ... 0.75 mm²
Conductor cross section (AWG)	24 ... 18
Nominal voltage U _N (IEC)	60 V
Nominal current I _N (IEC)	4 A
Degree of protection	IP65/IP67/IP69K

Design	Outer cable diameter range (mm)	Type	Order No.	Pcs. / Pkt.
Plug straight M12	4 mm ... 6 mm	SACC-M12MS-5CON-PG 7-VA	1553187	1
Socket, straight M12	4 mm ... 6 mm	SACC-M12FS-5CON-PG 7-VA	1553255	1
Plug straight M12	6 mm ... 8 mm	SACC-M12MS-5CON-PG 9-VA	1553190	1
Socket, straight M12	6 mm ... 8 mm	SACC-M12FS-5CON-PG 9-VA	1553271	1
Plug angled M12	4 mm ... 6 mm	SACC-M12MR-5CON-PG 7-VA	1553213	1
Socket, angled M12	4 mm ... 6 mm	SACC-M12FR-5CON-PG 7-VA	1553297	1
Plug angled M12	6 mm ... 8 mm	SACC-M12MR-5CON-PG 9-VA	1553239	1
Socket, angled M12	6 mm ... 8 mm	SACC-M12FR-5CON-PG 9-VA	1553307	1

5-pos. shielded M12 field-wired connectors, straight, screw connection



SACC-M12MS-5CON-DM 3-5 SH VA SACC-M12FS-5CON-DM 5-8 SH VA

Common technical data	
Number of positions	5
Conductor cross section [mm²]	0.25 mm² ... 0.75 mm²
Conductor cross section (AWG)	24 ... 18
Nominal voltage U _N (IEC)	60 V
Nominal current I _N (IEC)	4 A
Degree of protection	IP65/IP67/IP69K

Certification	Design	Outer cable diameter range (mm)	Type	Order No.	Pcs. / Pkt.
PC	Plug straight M12	3 mm ... 5.5 mm	SACC-M12MS-5CON-DM 3-5 SH VA	1440012	1
PC	Socket, straight M12	3 mm ... 5.5 mm	SACC-M12FS-5CON-DM 3-5 SH VA	1440038	1
PC, A	Plug straight M12	5.5 mm ... 8.6 mm	SACC-M12MS-5CON-DM 5-8 SH VA	1440025	1
PC, A	Socket, straight M12	5.5 mm ... 8.6 mm	SACC-M12FS-5CON-DM 5-8 SH VA	1440041	1



M12 panel feed-through connectors

M12 panel feed-through connectors allow a pluggable, water-tight connection between the inside of a panel or device to the outside environment. For front-mount connectors, the leads are passed from the outside of the panel or device into the enclosure. Then the connector is held in place with a locknut on the inside. For rear mount connectors, the leads can be pre-terminated to the system – the connector body is pushed through from the inside of the enclosure and held in place by a locknut on the outside. Alternatively, a locknut is not needed for a front- or rear-mounted connector, if the enclosure is tapped with the appropriate thread rather than simply drilled out.

4-pos. M12, front mount, Pg9 mounting thread

Fixed mounting thread cannot be oriented for angled cordsets.



Common technical data	
Certification	CE RoHS
Number of positions	4
Mounting thread	Pg9
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP65/IP67/IP69K

SACC-E-M12MS-4CON-PG 9/0,5 VA SACC-E-M12FS-4CON-PG 9/0,5 VA

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12	SACC-E-M12MS-4CON-PG 9/0,5 VA	1554555	1
Flush-type socket, straight M12	SACC-E-M12FS-4CON-PG 9/0,5 VA	1555448	1

Accessories	Type	Order No.	Pcs. / Pkt.
Pg9 locking nut , for flush-type plugs and sockets with Pg9 fastening thread The locking nut is not included with the assembly.	SACC-E-MU-PG9	1504084	100
	-	-	-

4-pos. M12, front mount, Pg9 mounting thread - can be oriented

Adjustable mounting thread can be oriented for angled cordsets.



Common technical data	
Certification	CE RoHS
Number of positions	4
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP65/IP67/IP69K

SACC-EC-M12MS-4CON-PG 9/0,5 VA SACC-EC-M12FS-4CON-PG 9/0,5 VA

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12	SACC-EC-M12MS-4CON-PG 9/0,5 VA	1554610	1
Flush-type socket, straight M12	SACC-EC-M12FS-4CON-PG 9/0,5 VA	1554649	1

Accessories	Type	Order No.	Pcs. / Pkt.
Pg9 locking nut , for flush-type plugs and sockets with Pg9 fastening thread Depending on panel thickness, a locking nut may be required. It is not included with the assembly.	SACC-E-MU-PG9	1504084	100
	-	-	-

5-pos. M12, front mount, Pg9 mounting thread

Fixed mounting thread cannot be oriented for angled cordsets.



Common technical data	
Certification	CE RoHS
Number of positions	5
Nominal voltage U_N (IEC)	60 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP65/IP67/IP69K

SACC-E-M12MS-5CON-PG 9/0,5 VA SACC-E-M12FS-5CON-PG9/0,5 V2A

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12	SACC-E-M12MS-5CON-PG 9/0,5 VA	1554568	1
Flush-type socket, straight M12	SACC-E-M12FS-5CON-PG9/0,5 V2A	1699863	1

Accessories	Type	Order No.	Pcs. / Pkt.
Pg9 locking nut , for flush-type plugs and sockets with Pg9 fastening thread The locking nut is not included with the assembly.	SACC-E-MU-PG9	1504084	100
	-	-	-

Special applications – Food and beverage

M12 panel feed-through connectors with flying leads

5-pos. M12, front mount, Pg9 mounting thread - can be oriented

Adjustable mounting thread can be oriented for angled cordsets.



Common technical data	
Certification	CE, VDE
Number of positions	5
Nominal voltage U _N (IEC)	60 V
Nominal current I _N (IEC)	4 A
Degree of protection	IP65/IP67/IP69K

SACC-EC-M12MS-5CON-PG 9/0,5 VA SACC-EC-M12FS-5CON-PG 9/0,5 VA

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12	SACC-EC-M12MS-5CON-PG 9/0,5 VA	1554623	1
Flush-type socket, straight M12	SACC-EC-M12FS-5CON-PG 9/0,5 VA	1554652	1

Accessories	Type	Order No.	Pcs. / Pkt.
Pg9 locking nut , for flush-type plugs and sockets with Pg9 fastening thread	SACC-E-MU-PG9	1504084	100
Depending on panel thickness, a locking nut may be required. It is not included with the assembly.	-	-	-

5-pos. M12, rear mount, Pg9 mounting thread

The locking nut is included with the assembly.



Common technical data	
Certification	CE, VDE
Number of positions	5
Mounting thread	Pg9
Nominal voltage U _N (IEC)	60 V
Nominal current I _N (IEC)	4 A
Degree of protection	IP65/IP67/IP69K

SACC-DSI-M12MS-5CON-PG9/0,5 VA SACC-DSI-M12FS-5CON-PG9/0,5 VA

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12	SACC-DSI-M12MS-5CON-PG9/0,5 VA	1554681	1
Flush-type socket, straight M12	SACC-DSI-M12FS-5CON-PG9/0,5 VA	1554717	1

M12 special applications

Commercial/industrial vehicles and Equipment

M12 connectors for this industry must perform reliably even in harsh outdoor environments. Our connectors and cordsets are proven to be resistant to UV radiation, ozone pollution, dry or humid heat, temperatures below freezing, mechanical stress, vibration and shock. They have been rigorously tested and will provide a long service life in the field.





M12 SENSOR/ACTUATOR CORDSETS

4-pos. M12 **Page 168**

4-pos. M12 shielded **Page 169**

4-pos. D-code M12 Ethernet **Page 170**

M12 SENSOR/ACTUATOR BOXES

M12 thread for pnp or
npn sensors **Page 171**

M12 SENSOR/ACTUATOR CONNECTORS

M12 field-wired **Page 173**

M12 panel feed-through with
flying leads **Page 174**

Special applications – Commercial/industrial vehicle industry

4-pos. M12 sensor/actuator cordsets



4-pos. M12 sensor/actuator cordsets

The M12 connector system from Phoenix Contact is the ideal solution here. Ozone and UV radiation can adversely affect the elastic properties of plastics and the seal of connections made from standard TPU/ PUR mixtures. We use materials such as cables with cross-linked special polymer outer sheaths from the solar sector, seals made from fluorine rubber and corrosion-resistant metals, such as stainless steel. This combination provides the user with a reliable connection for a long service life, eliminating expensive downtimes and difficult servicing.

4-pos. M12 socket, straight, to open end, PE-X, black, 105°C



Common technical data		
Certification		
Assembly	Free conductor end -> Socket, straight M12	
Number of positions	4	
Conductor cross section	4x 0.5 mm ² (signal line)	
AWG (approximately)	20	
Nominal current I _N	4 A	
Nominal voltage U _N	250 V	
Cable type	PE-X black	
Cable diameter	5.2 mm ± 0.2 mm	
Degree of protection	IP65/IP68/IP69K	

Cable length	Type	Order No.
2 m	SAC-4P- 2,0-28X/M12FS OD	1454079
5 m	SAC-4P- 5,0-28X/M12FS OD	1454082
10 m	SAC-4P-10,0-28X/M12FS OD	1454095

4-pos. M12 plug, straight, to open end, PE-X, black, 105°C



Common technical data		
Certification		
Assembly	Plug straight M12 -> Free conductor end	
Number of positions	4	
Conductor cross section	4x 0.5 mm ² (signal line)	
AWG (approximately)	20	
Nominal current I _N	4 A	
Nominal voltage U _N	250 V	
Cable type	PE-X black	
Cable diameter	5.2 mm ± 0.2 mm	
Degree of protection	IP65/IP68/IP69K	

Cable length	Type	Order No.
2 m	SAC-4P-M12MS/ 2,0-28X OD	1454040
5 m	SAC-4P-M12MS/ 5,0-28X OD	1454053
10 m	SAC-4P-M12MS/10,0-28X OD	1454066

4-pos. M12 plug, straight, to M12 socket, straight, PE-X, black, 105°C



Common technical data		
Certification		
Assembly	Plug straight M12 -> Socket, straight M12	
Number of positions	4	
Conductor cross section	4x 0.5 mm ² (signal line)	
AWG (approximately)	20	
Nominal current I _N	4 A	
Nominal voltage U _N	250 V	
Cable type	PE-X black	
Cable diameter	5.2 mm ± 0.2 mm	
Degree of protection	IP65/IP68/IP69K	

Cable length	Type	Order No.
2 m	SAC-4P-M12MS/2,0-28X/M12FS OD	1454105
5 m	SAC-4P-M12MS/5,0-28X/M12FS OD	1454118

4-pos. shielded M12 socket, straight, to open end, PE-X, black, 105°C



Common technical data	
Certification	PC
Assembly	Free conductor end -> Socket, straight M12
Number of positions	4
Conductor cross section	4x 0.5 mm ² (signal line)
AWG (approximately)	20
Nominal current I _N	4 A
Nominal voltage U _N	250 V
Cable type	PE-X black
Cable diameter	6.8 mm ± 0.2 mm
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
2 m	SAC-4P- 2,0-28X/M12FS SH OD	1454150
5 m	SAC-4P- 5,0-28X/M12FS SH OD	1454163
10 m	SAC-4P-10,0-28X/M12FS SH OD	1454176

4-pos. shielded M12 plug, straight, to open end, PE-X, black, 105°C



Common technical data	
Certification	PC
Assembly	Plug straight M12 -> Free conductor end
Number of positions	4
Conductor cross section	4x 0.5 mm ² (signal line)
AWG (approximately)	20
Nominal current I _N	4 A
Nominal voltage U _N	250 V
Cable type	PE-X black
Cable diameter	6.8 mm ± 0.2 mm
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
2 m	SAC-4P-M12MS/ 2,0-28X SH OD	1454121
5 m	SAC-4P-M12MS/ 5,0-28X SH OD	1454134
10 m	SAC-4P-M12MS/10,0-28X SH OD	1454147

4-pos. shielded M12 plug, straight, to M12 socket, straight, PE-X, black, 105°C



Common technical data	
Certification	PC
Assembly	Plug straight M12 -> Socket, straight M12
Number of positions	4
Conductor cross section	4x 0.5 mm ² (signal line)
AWG (approximately)	20
Nominal current I _N	4 A
Nominal voltage U _N	250 V
Cable type	PE-X black
Cable diameter	6.8 mm ± 0.2 mm
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
2 m	SAC-4P-M12MS/2,0-28X/M12FSSHOD	1454189
5 m	SAC-4P-M12MS/5,0-28X/M12FSSHOD	1454192

Special applications – Commercial/industrial vehicle industry

4-pos. shielded M12 Ethernet/PROFINET cordsets

4-pos. Ethernet, M12 plug, straight, to open end, PE-X, black, 105°C



Common technical data

Assembly	Plug straight M12 -> Free conductor end
Number of positions	4
Conductor cross section	3x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	250 V
Cable type	Ethernet
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
2 m	VS-M12MSD/ 2,0-93X OD	1454202
5 m	VS-M12MSD/ 5,0-93X OD	1454215
10 m	VS-M12MSD/10,0-93X OD	1454228

4-pos. Ethernet, M12 plug, straight, to M12 plug, straight, PE-X, black, 105°C



Common technical data

Assembly	Plug straight M12 -> Plug, straight M12
Number of positions	4
Conductor cross section	3x 0.34 mm ² (signal line)
AWG (approximately)	22
Nominal current I _N	4 A
Nominal voltage U _N	250 V
Cable type	Ethernet
Degree of protection	IP65/IP68/IP69K

Cable length	Type	Order No.
5 m	VS-M12MSD/5,0-93X/M12MSDOD	1454244
2 m	VS-M12MSD/2,0-93X/M12MSDOD	1454231

Special applications – Commercial/industrial vehicle industry

Sensor boxes - M12 thread, without LEDs, for pnp or npn sensors

M12 sensor boxes (universal) without LEDs, double occupancy, molded master cable



Common technical data	
Certification	PC
Signal type	Universal
Slot assignment	Double
Signal slots	8
Connection method	Fixed connection
Cable type	PUR/PVC black
Rated voltage	120 V
Rated current for each I/O signal	2 A
Rated current per slot	4 A
Rated current, total	12 A
Ambient temperature (operation)	-30 °C ... 90 °C

Cable length	Type	Order No.	Pcs. / Pkt.
5 m	SACB-8/16- 5,0PUR OD	1457364	1
10 m	SACB-8/16-10,0PUR OD	1457377	1

M12 sensor boxes (universal) without LEDs, double occupancy, top hat with pluggable terminal blocks (no cable)



Technical data	
Certification	PC, CE
Signal type	Universal
Slot assignment	Double
Signal slots	8
Connection method	Pluggable screw connection
Rated voltage	120 V
Rated current for each I/O signal	2 A
Rated current per slot	4 A
Rated current, total	10 A
Rated current, total	2x 8 A (For electrical isolation)
Connection cross section	0.14 mm² ... 1.5 mm²
AWG	26 ...
Ambient temperature (operation)	-30 °C ... 80 °C

Type	Order No.	Pcs. / Pkt.
SACB-8/16-C OD	1457380	1

Accessories	Type	Order No.	Pcs. / Pkt.
Plug for unused slots on sensor box	-	-	-

M12 sensor box - 50 or 200 m cable rings



Common technical data	
Description	19-pos., PUR, black, 16 x 0.5 mm² and 3 x 1 mm²
External cable diameter	11.6 mm
Rated voltage	300 V

Cable length	Type	Order No.	Pcs. / Pkt.
50 m	SACB-16X0,5/ 3X1,0-50,0 PUR	1503373	1
200 m	SACB-16X0,5/ 3X1,0-200,0 PUR	1559893	1

Torque screwdriver for cordsets and connectors



TSD 04 SAC



SAC BIT M12-W14

Technical data	
Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive	
Certification	PC
Color	black

Type	Order No.	Pcs. / Pkt.
TSD 04 SAC	1208429	1

Accessories	Type	Order No.	Pcs. / Pkt.
Nut for assembling M12 cordsets and field-wired connectors with stainless steel coupling nuts	SAC BIT M12-W14	1212513	1

Special applications – Commercial/industrial vehicle industry

Sensor boxes - M12 thread, without LEDs, for pnp or npn sensors

Torque screwdriver for sensor/actuator box cable gland

For tightening cable gland on top hat with pluggable terminal block.



TSD 25 SAC



SAC BIT HOOD-W 24

Technical data	
Certification	
Color	black

Torque screwdriver, with preset torque of 2.5 Nm and 4 mm hexagonal drive

		Type	Order No.	Pcs. / Pkt.
		TSD 25 SAC	1212315	1
Accessories		Type	Order No.	Pcs. / Pkt.
Nut for assembling the cable gland on field-terminated sensor boxes		SAC BIT HOOD-W 24	1212486	1

4-pos. M12 field-wired connectors, straight, IDC connection



SACC-M12MS-4QO-0,34-VA SACC-M12FS-4QO-0,75-VA

Common technical data	
Design	Plug straight M12
Number of positions	4
Nominal current I_N (IEC)	4 A
Degree of protection	IP65/67

Certification	Conductor cross section [mm ²]	Conductor cross section (AWG)	Outer cable diameter range (mm)	Nominal voltage U_N (IEC)	Type	Order No.	Pcs. / Pkt.
CE	0.14 mm ² ... 0.34 mm ²	26 ... 22	3.5 mm ... 6 mm	125 V	SACC-M12MS-4QO-0,34-VA	1440753	1
CE	0.14 mm ² ... 0.34 mm ²	26 ... 22	3.5 mm ... 6 mm	125 V	SACC-M12FS-4QO-0,34-VA	1440766	1
CE	0.34 mm ² ... 0.75 mm ²	22 ... 18	4 mm ... 8 mm	250 V	SACC-M12MS-4QO-0,75-VA	1440779	1
CE	0.34 mm ² ... 0.75 mm ²	22 ... 18	4 mm ... 8 mm	250 V	SACC-M12FS-4QO-0,75-VA	1440782	1

5-pos. shielded M12 field-wired connectors, straight, screw connection



SACC-M12MS-5CON-DM 5-8 SH VA SACC-M12FS-5CON-DM 5-8 SH VA

Common technical data	
Certification	CE
Number of positions	5
Conductor cross section [mm ²]	0.25 mm ² ... 0.75 mm ²
Conductor cross section (AWG)	24 ... 18
Outer cable diameter range (mm)	5.5 mm ... 8.6 mm
Nominal voltage U_N (IEC)	60 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP65/IP67/IP69K

Design	Type	Order No.	Pcs. / Pkt.
Plug straight M12	SACC-M12MS-5CON-DM 5-8 SH VA	1440025	1
Socket, straight M12	SACC-M12FS-5CON-DM 5-8 SH VA	1440041	1

Special applications – Commercial/industrial vehicle industry

M12 panel feed-through connectors with flying leads



M12 panel feed-through connectors

M12 panel feed-through connectors allow a pluggable, water-tight connection between the inside of a panel or device to the outside environment. For front-mount connectors, the leads are passed from the outside of the panel or device into the enclosure. Then the connector is held in place with a locknut on the inside. For rear mount connectors, the leads can be pre-terminated to the system – the connector body is pushed through from the inside of the enclosure and held in place by a locknut on the outside. Alternatively, a locknut is not needed for a front- or rear-mounted connector, if the enclosure is tapped with the appropriate thread rather than simply drilled out.

4-pos. M12, front mount, Pg9 mounting thread

Fixed mounting thread cannot be oriented for angled cordsets.



Common technical data

Certification	CE VDE
Number of positions	4
Mounting thread	Pg9
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP65/IP67/IP69K

SACC-E-M12MS-4CON-PG 9/0,5 VA SACC-E-M12FS-4CON-PG 9/0,5 VA

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12	SACC-E-M12MS-4CON-PG 9/0,5 VA	1554555	1
Flush-type socket, straight M12	SACC-E-M12FS-4CON-PG 9/0,5 VA	1555448	1

Accessories	Type	Order No.	Pcs. / Pkt.
Pg9 locking nut , for flush-type plugs and sockets with Pg9 fastening thread The locking nut is not included with the assembly.	SACC-E-MU-PG9	1504084	100
	-	-	-

4-pos. M12, front mount, Pg9 mounting thread - can be oriented

Adjustable mounting thread can be oriented for angled cordsets.



Common technical data

Certification	CE VDE
Number of positions	4
Nominal voltage U_N (IEC)	250 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP65/IP67/IP69K

SACC-EC-M12MS-4CON-PG 9/0,5 VA SACC-EC-M12FS-4CON-PG 9/0,5 VA

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12	SACC-EC-M12MS-4CON-PG 9/0,5 VA	1554610	1
Flush-type socket, straight M12	SACC-EC-M12FS-4CON-PG 9/0,5 VA	1554649	1

Accessories	Type	Order No.	Pcs. / Pkt.
Pg9 locking nut , for flush-type plugs and sockets with Pg9 fastening thread Depending on panel thickness, a locking nut may be required. It is not included with the assembly.	SACC-E-MU-PG9	1504084	100
	-	-	-

5-pos. M12, rear mount, Pg9 mounting thread

The locking nut is included with the assembly.



Common technical data

Certification	CE VDE
Number of positions	5
Mounting thread	Pg9
Nominal voltage U_N (IEC)	60 V
Nominal current I_N (IEC)	4 A
Degree of protection	IP65/IP67/IP69K

SACC-DSI-M12MS-5CON-PG9/0,5 VA SACC-DSI-M12FS-5CON-PG9/0,5 VA

Design	Type	Order No.	Pcs. / Pkt.
Flush-type plug, straight M12	SACC-DSI-M12MS-5CON-PG9/0,5 VA	1554681	1
Flush-type socket, straight M12	SACC-DSI-M12FS-5CON-PG9/0,5 VA	1554717	1

Accessories

The most common tools and accessories related to sensor/actuator cordsets, boxes and connectors are shown on the following pages.

If you need additional information contact our technical service department at **1-800-322-3225** or visit our website at **www.phoenixcontact.com**.





Cutting and stripping tools



Torque screwdrivers



Cover caps



Locking nuts, screws and gaskets



Marking and labeling

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TORQUE SCREWDRIVERS

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MARKING AND LABELING

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THERMOMARK card printer and material **Page 187**

Card material for marking sensor boxes and valve plugs **Page 187**

Accessories

Cable/wire cutters and strippers

Cable/wire cutters and strippers

TOOL fox products offer ergonomically-designed hand tools for cutting, stripping and wire preparation. Professional tools include features like specially hardened steel for cutters and stripping tools that adapt automatically to the conductor cross section.



Cable cutters



CUTFOX 12



CUTFOX 18

Common technical data

Certification



One-hand cable cutter, for Cu and Al conductors, cutting capacity up to 12 mm Ø (up to 35 mm²)

Type

CUTFOX 12

Order No.

1212128

Pcs. / Pkt.

1

One-hand cable cutter, angled, for Cu and Al conductors, cutting capacity up to 18 mm Ø (up to 50 mm²)

CUTFOX 18

1212129

1

Cable jacket strippers - best for standard cordsets



WIREFOX SAC



WIREFOX 16-1

Common technical data

Color

black

Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from 4.4 mm to 7 mm diameter, any stripping length

Certification



Conductor

-

Type

WIREFOX SAC

Order No.

1212623

Pcs. / Pkt.

1

Stripping pliers, for cables and conductors with a cross section of 6 - 16 mm², self-adjusting, any stripping length, also suitable for sensor/actuator cables



6 mm² ... 16 mm²

WIREFOX 16-1

1212157

1

Accessories

-

Type

WIREFOX 16-1/SB

Order No.

1204944

Pcs. / Pkt.

1

Cable jacket strippers - best for shielded Ethernet and DeviceNet™ cordsets



WIREFOX-D 11



WIREFOX-D 40

Common technical data

Certification



Color

black

Stripping tool, for stripping multicore signal, control and fiberglass wires of 2.5 - 11 mm Ø, insulation thickness up to 1 mm

Type

WIREFOX-D 11

Order No.

1212160

Pcs. / Pkt.

1

Stripping tool, for stripping cables with 4.5 mm - 40 mm Ø, insulation thickness of up to 4.5 mm, swivel blade for round, lengthwise, and spiral cuts

WIREFOX-D 40

1212161

1

Accessories

-

Type

WIREFOX-D 11/SB

Order No.

1212312

Pcs. / Pkt.

1

-

WIREFOX-D 40/SB

1212313

1

Wire cutters (snips) - best for cutting individual wires for IDC connectors



MICROFOX-SP



MICROFOX-SP-1

Common technical data

Certification



	Type	Order No.	Pcs. / Pkt.
Electronic diagonal cutter, tapered head, angled (21°), without chamfer, with opening spring	MICROFOX-SP	1212488	1
Electronic diagonal cutter, tapered head, without chamfer, with opening spring, non-reflective phosphate-treated surface, punched version	MICROFOX-SP-1	1212487	1

Wire strippers



WIREFOX 2,5



WIREFOX 10

Common technical data

Certification



	Conductor	Color	Type	Order No.	Pcs. / Pkt.
Stripping tool, for conductors and cables with a conductor cross-section from 0.08 mm ² - 2.5 mm ² . Stripping length adjustable up to 15 mm, cutting capacity up to 6 mm ² stranded/ 1.5 mm ² solid.	0.08 mm ² ... 2.5 mm ²	black	WIREFOX 2,5	1212368	1
Stripping tool, for cables and conductors (specifically also intended for rubber and other kinds of special insulation) with a cross section of 0.1 - 4 mm ² , self-adjusting, stripping length of up to 18 mm, cutting capacity: solid up to 1.5 mm ² , stranded up to 10 mm ²	0.1 mm ² ... 4 mm ²	Black/green	WIREFOX 4	1212156	1
Stripping tool, for cables and conductors from 0.02 - 10 mm ² , self-adjusting, stripping lengths up to 18 mm, cutting capacity: solid up to 1.5 mm ² , flexible up to 10 mm ²	0.02 mm ² ... 10 mm ²	Black/green	WIREFOX 10	1212150	1

Accessories	Type	Order No.	Pcs. / Pkt.
Spare knife	WIREFOX 2,5/SB	1212369	1
Spare knife	WIREFOX 4/SB	1212151	1
Spare knife	WIREFOX 10/SB	1212152	10

Accessories

Torque screwdrivers and bits



Torque screwdrivers and bits

Torque screwdrivers are offered to ensure proper water-tight connections are made with 100% reliability. Specially created bits are designed for every part of our cordset and connector family. Therefore, whether you are tightening the gland on an IDC connector, connecting a sensor box master cable or threading the coupling nut of a cordset, you can be assured that the correct torque is applied in every circumstance.

Torque screwdriver and bits for standard M8 cordsets and connectors

Use 1208461 for molded cordsets; 1208474 for field-wired connectors.



TSD 02 SAC



SAC BIT M8-D10

Technical data

Certification
Color

Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive

PC
black

Type	Order No.	Pcs. / Pkt.
TSD 02 SAC	1208487	1

Accessories

Nut for assembling SAC M8 cables, for 4 mm hexagonal screwdriver

Nut for assembling all M8 field-wired connectors, except IDC (QUICKON)

Type

SAC BIT M8-D10

SACC BIT M8-D12

Order No.

1208461

1208474

Pcs. / Pkt.

1

1

Torque screwdriver and bits for standard M12 cordsets and connectors

Use 1208432 for molded cordsets; 1208445 for field-wired connectors



TSD 04 SAC



SACC BIT M12-D20

Technical data

Certification
Color

Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive

PC
black

Type	Order No.	Pcs. / Pkt.
TSD 04 SAC	1208429	1

Accessories

Nut to mount SAC M12 cables and M12 QUICKON connectors, for 4 mm hexagonal screwdriver

Nut for assembling all M12 field-wired connectors, except IDC (QUICKON)

Type

SAC BIT M12-D15

SACC BIT M12-D20

Order No.

1208432

1208445

Pcs. / Pkt.

1

1

Torque screwdriver and bits for special application M12 cordsets and connectors



TSD 04 SAC



SAC BIT M12-W14

Technical data

Certification
Color

Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive

PC
black

Type	Order No.	Pcs. / Pkt.
TSD 04 SAC	1208429	1

Accessories

Nut for assembling M12 cordsets and field-wired connectors with stainless steel coupling nuts

Type

SAC BIT M12-W14

Order No.

1212513

Pcs. / Pkt.

1

Torque screwdriver and bit for Mini 7/8" cordsets



TSD 08 SAC



SAC BIT MIN-D25

Technical data

Certification

Color

Torque screwdriver, with preset torque of 0.8 Nm and 4 mm hexagonal drive



black

Type	Order No.	Pcs. / Pkt.
TSD 08 SAC	1212597	1

Accessories

Nut for assembling MINI 7/8" cordsets and field-wired connectors

Type

SAC BIT MIN-D25

Order No.

1212512

Pcs. / Pkt.

1

Torque screwdriver and bit for M8 and M12 sensor box cable gland

For tightening cable gland on top hat with pluggable terminal block.



TSD 25 SAC



SAC BIT HOOD-W 24

Technical data

Certification

Color

Torque screwdriver, with preset torque of 2.5 Nm and 4 mm hexagonal drive



black

Type	Order No.	Pcs. / Pkt.
TSD 25 SAC	1212315	1

Accessories

Nut for assembling the cable gland on field-terminated sensor boxes

Type

SAC BIT HOOD-W 24

Order No.

1212486

Pcs. / Pkt.

1

Screwdriver set



Technical data

Certification

Screwdriver set with quick-action chuck, 89 mm long slotted/cross-head (PZ and PH)/hex/Torx® bits, 17 pieces, in folding belt pouch. Contents: PH 1,2,3 x 89; PZ 1,2,3 x 89; SL 1.5 x 5.5 x 89; TX 10-30 x 89; SW 3,4,5,6 x 89



Type	Order No.	Pcs. / Pkt.
SF-M SET	1212543	1

Accessories

Cover caps

Cover caps



Cover caps, in either plastic or metal, ensure that unoccupied connections are protected from dirt and water during transport or in their final installation. Offered with or without a retaining cord, these caps can offer protection up to IP65/IP67/IP69K, depending on the design.

Cover caps for socket cordsets, cables, boxes and connectors



PROT-M8



PROT-M12 FB

Common technical data

Assembly

	Certification	Degree of protection	Type	Order No.
Plastic cap to seal M8 sockets	PC	IP67	PROT-M8	1682540
Plastic cap to seal M12-SPEEDCON sockets	-	IP67	PROT-MS SCO	1553129
Plastic cap to seal M12 sockets	PC	IP67	PROT-M12	1680539
Metal cap to seal shielded M12 sockets	PC	IP67	PROT-M12 SH	1503302
Stainless steel cap to seal stainless steel M12 sockets	-	IP65/IP67/IP69K	PROT-M12 FB	1555538

Cover caps with retaining cord for socket cordsets, cables and connectors

Common technical data

Assembly



PROT-M 8 MS-PA-CHAIN



PROT-M12 MS-PA-CHAIN

	Degree of protection	Type	Order No.
Plastic cap with cable tie to seal M8 sockets	IP65/67	PROT-M 8 MS-PA-CHAIN	1430860
Plastic cap with 3.0 mm fixing eye to seal M8 sockets	IP65/67	PROT-M 8 MS-PA-CHAIN-EYE-DM3	1441105
Plastic cap with 11.5 mm fixing eye to seal M8 sockets	IP65/67	PROT-M 8 MS-PA-CHAIN-EYE	1441095
Plastic cap with cable tie to seal M12 sockets	IP65/67	PROT-M12 MS-PA-CHAIN	1430899
Plastic cap with 14.5 mm fixing eye to seal M12 sockets	IP67	PROT-M12 MS-PA-CHAIN-EYE-DM14	1456200
Plastic cap with cable tie to seal MINI 7/8" sockets	IP65/67	PROT-MINMS-PA-CHAIN	1430925

Cover caps for plug cordsets, cables, boxes and connectors



PROT-M12 FS



PROT-M12 FS-M

Common technical data

Assembly

	Degree of protection	Type	Order No.
Plastic cap to seal M12 plugs	IP67	PROT-M12 FS	1560251
Metal cap to seal shielded M12 plugs	IP65/IP67/IP69K	PROT-M12 FS-M	1430488

Cover caps with retaining cord for plug cordsets, cables and connectors

Common technical data

Assembly



PROT-M 8 FS-PA-CHAIN

PROT-M12 FS-M-CHAIN

	Degree of protection	Type	Order No.
Plastic cap with cable tie to seal M8 plugs	IP65/67	PROT-M 8 FS-PA-CHAIN	1430857
Plastic cap with 7.5 mm fixing eye to seal M8 plugs	IP65/67	PROT-M 8 FS-PA-CHAIN-EYE	1441082
Plastic cap with cable tie to seal M12 plugs	IP65/67	PROT-M12 FS-PA-CHAIN	1430873
Plastic cap with 12.0 mm fixing eye to seal M12 plugs	IP67	PROT-M12 FS-PA-CHAIN-EYE-DM12	1456187
Plastic cap with 14.5 mm fixing eye to seal M12 plugs	IP67	PROT-M12 FS-PA-CHAIN-EYE-DM14	1456190
Plastic cap with cable tie to seal MINI 7/8" plugs	IP65/67	PROT-MINFS-PA-CHAIN	1430912
Metal cap with 16.0 mm fixing eye to seal shielded M12 plugs	IP65/IP67/IP69K	PROT-M12 FS-M-CHAIN	1430491

Accessories

Locking nuts, screws and flat gaskets

Locking nuts, screws and flat gaskets



Locking nuts are available for standard or EMC-compliant installation of panel feed-through connectors. When tightened, an EMC lock nut cuts through the surface coating on an enclosure, establishing contact between the connector and enclosure. Different screw heads are available for valve plug heads to accommodate most valves. Flat gaskets can be used to help create a water-tight seal on an enclosure with thin panel walls, as the cutouts do not need to be beveled.

Locking nuts for non-shielded or shielded panel feed-through connectors



SACC-E-MU-M 8

SACC-M16-KD-NUT-SH

Common technical data

Certification



	Assembly	Type	Order No.
Locking nut with 8 mm thread	M8	SACC-E-MU-M 8	1504071
Locking nut with 16 mm thread	M16	SACC-E-MU-M16	1504097
Locking nut with Pg9 thread		SACC-E-MU-PG9	1504084
EMC hexagonal nuts for all flush-type connectors with M16 fastening thread, includes teeth to cut through cabinet coating		SACC-M16-KD-NUT-SH	1440164
EMC hexagonal nuts for all flush-type connectors with Pg9 fastening thread, includes teeth to cut through cabinet coating		SACC-PG9-KD-NUT-SH	1440177

Locking screws for valve plugs



Common technical data

Assembly

	Type	Order No.
M3 screw with plastic knurled head for valve plugs, except design C	SAC-V-SCREW-M3-29 KNURL	1403779
M3 screw with plastic knurled head for valve plugs, except design C, 100 pieces	VALVE SCREW-M3X29 VPE100	1404667

Flat gaskets for M12 panel feed-through connectors



Common technical data

Certification



Assembly

	Type	Order No.
Flat gasket, for all flush-type connectors with M16 fastening thread	SACC-M16-SEAL CLM	1430394
Flat gasket for all flush-type connectors with Pg9 fastening thread	SACC-PG9-SEAL CLM	1556320



Thermal transfer printers and marking material

The THERMOMARK ROLL thermal transfer printer is for printing material off roll and other continuous media. It produces high-quality printed shrink sleeves and cable wraps for cordsets. The THERMOMARK CARD thermal transfer printer can be used to print marking materials supplied in card format. It produces high-quality printed markers for sensor boxes and valve plugs. These compact and portable printers are offered as a bundle with a laptop or as standalone printers.

Thermal transfer printer set

Includes thermal transfer card printer, thermal transfer roll printer and laptop with preloaded software.



MARKING BOX EN

THERMOMARK-RIBBON 110

Common technical data

Temperature range	5 °C ... 35 °C
Print resolution	300 dpi
Interfaces	10/100 Mbps Ethernet / USB 2.0
Power supply	100 V AC ... 240 V AC / 50 Hz ... 60 Hz
Operating systems	MS Windows XP SP3, MS Windows Vista, MS Windows 7 (32/64-bit), MS Windows 8 (32/64-bit)

Width / Length / Height	Weight	Print width	Max. printing	Print method	Type	Order No.	Pcs. / Pkt.
-	-	-	-	Thermal transfer for rolls, sheets, and cards	MARKING BOX EN	5147101	1
253.00 mm / 320.00 mm / 189.00 mm	6.00 kg	104.00 mm	140.00 mm	Thermal transfer for sheets and cards	THERMOMARK CARD SET EN	5147201	1

Accessories

Accessories	Type	Order No.	Pcs. / Pkt.
Ink ribbon, length:300 m, width:110 mm, printing color:black	THERMOMARK-RIBBON 110	5145384	1
Ink ribbon, length: 300 m, width: 110 mm, printing color: blue	THERMOMARK-RIBBON 110 BU	0829544	1
Ink ribbon, length: 300 m, width: 110 mm, printing color: green	THERMOMARK-RIBBON 110 GN	0829542	1
Ink ribbon, length: 300 m, width: 110 mm, printing color: red	THERMOMARK-RIBBON 110 RD	0829543	1
Ink ribbon, specifically for shrink sleeves; length: 300 m, width: 110 mm, printing color: black	THERMOMARK-RIBBON 110-WMSU	0801358	1
Ink ribbon, specifically for shrink sleeves; length: 300 m, width: 110 mm, printing color: white	THERMOMARK-RIBBON 110-WMSU WH	0801359	1

Thermal transfer roll printer



THERMOMARK ROLL

THERMOMARK ROLL-ERH

Technical data

Width / Length / Height	253.00 mm / 320.00 mm / 189.00 mm
Weight	3.80 kg
Temperature range	5 °C ... 40 °C
Print resolution	300 dpi
Print width	104.00 mm
Max. printing length	1000.00 mm
Print method	Thermal transfer for rolls
Interfaces	10/100 Mbps Ethernet / USB 2.0
Power supply	100 V AC ... 240 V AC / 50 Hz ... 60 Hz
Operating systems	MS Windows XP SP3, MS Windows Vista, MS Windows 7 (32/64-bit), MS Windows 8 (32/64-bit)

Type	Order No.	Pcs. / Pkt.
THERMOMARK ROLL	5146477	1

Accessories

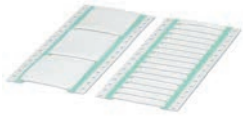
Accessories	Type	Order No.	Pcs. / Pkt.
External media hub, for roll diameters of 150 mm to 305 mm	THERMOMARK ROLL-ERH	5146448	1
Cutter, can be retrofitted, for precise cutting of continuous media into required lengths	THERMOMARK ROLL-CUTTER	5146422	1
Perforator, can be retrofitted, for perforating continuous media	THERMOMARK ROLL-CUTTER/P	5146435	1

Accessories

Marking and labeling

Shrink sleeve material for marking cordsets and wires - ladder style on roll

Yellow sleeves are also available.



Common technical data

Color	white
Material	Polyolefine
Ambient temperature (operation)	-55 °C ... 135 °C
Wipe resistance	DIN EN 61010-1 (VDE 0411-1)
Components	Halogen-free

Length	Width	Conductor diameter range	Type	Order No.	Pcs. / Pkt.
15 mm	4 mm	0.8 mm ... 2.4 mm	WMS 2,4 (15X4)R	0800379	1
30 mm	4 mm	0.8 mm ... 2.4 mm	WMS 2,4 (30X4)R	0800373	1
60 mm	4 mm	0.8 mm ... 2.4 mm	WMS 2,4 (60X4)R	0800363	1
15 mm	5 mm	1 mm ... 3.2 mm	WMS 3,2 (15X5)R	0800380	1
30 mm	5 mm	1 mm ... 3.2 mm	WMS 3,2 (30X5)R	0800374	1
60 mm	5 mm	1 mm ... 3.2 mm	WMS 3,2 (60X5)R	0800364	1
15 mm	9 mm	1.6 mm ... 4.8 mm	WMS 4,8 (15X9)R	0800382	1
30 mm	9 mm	1.6 mm ... 4.8 mm	WMS 4,8 (30X9)R	0800375	1
60 mm	9 mm	1.6 mm ... 4.8 mm	WMS 4,8 (60X9)R	0800366	1
30 mm	10 mm	2.1 mm ... 6.4 mm	WMS 6,4 (30X10)R	0800376	1
60 mm	10 mm	2.1 mm ... 6.4 mm	WMS 6,4 (60X10)R	0800367	1
30 mm	16 mm	3.2 mm ... 9.5 mm	WMS 9,5 (30X16)R	0800377	1
60 mm	16 mm	3.2 mm ... 9.5 mm	WMS 9,5 (60X16)R	0800368	1
60 mm	20 mm	4.2 mm ... 12.7 mm	WMS 12,7 (60X20)R	0800369	1
60 mm	30 mm	6.4 mm ... 19.1 mm	WMS 19,1 (60X30)R	0800370	1

Shrink sleeve material for marking cordsets and wires - continuous roll

Yellow and black sleeves are also available.



Common technical data

Color	white
Material	Polyolefine
Ambient temperature (operation)	-55 °C ... 135 °C
Wipe resistance	DIN EN 61010-1 (VDE 0411-1)
Components	Halogen-free

Certification	Length	Width	Conductor diameter range	Type	Order No.	Pcs. / Pkt.
UL	30 m	4 mm	0.8 mm ... 2.4 mm	WMS 2,4 (EX4)R	0800289	1
-	120 m	4 mm	0.8 mm ... 2.4 mm	WMS 2,4 (EX4)RL	0800319	1
-	30 m	5 mm	1 mm ... 3.2 mm	WMS 3,2 (EX5)R	0800290	1
-	120 m	5 mm	1 mm ... 3.2 mm	WMS 3,2 (EX5)RL	0800320	1
UL	30 m	9 mm	1.6 mm ... 4.8 mm	WMS 4,8 (EX9)R	0800291	1
-	120 m	9 mm	1.6 mm ... 4.8 mm	WMS 4,8 (EX9)RL	0800321	1
-	25 m	10 mm	2.1 mm ... 6.4 mm	WMS 6,4 (EX10)R	0800292	1
-	100 m	10 mm	2.1 mm ... 6.4 mm	WMS 6,4 (EX10)RL	0800322	1
UL	20 m	16 mm	3.2 mm ... 9.5 mm	WMS 9,5 (EX16)R	0800293	1
-	80 m	16 mm	3.2 mm ... 9.5 mm	WMS 9,5 (EX16)RL	0800324	1
-	20 m	20 mm	4.2 mm ... 12.7 mm	WMS 12,7 (EX20)R	0800294	1
-	80 m	20 mm	4.2 mm ... 12.7 mm	WMS 12,7 (EX20)RL	0800325	1
-	20 m	30 mm	6.4 mm ... 19.1 mm	WMS 19,1 (EX30)R	0800295	1
-	80 m	30 mm	6.4 mm ... 19.1 mm	WMS 19,1 (EX30)RL	0800326	1

Cable wrap material for marking cordsets and wires - continuous roll

For THERMOMARK ROLL printer



Common technical data

Color	white
Material	PVC
Ambient temperature (operation)	-50 °C ... 110 °C
Wipe resistance	DIN EN 61010-1 (VDE 0411-1)
Components	Silicone-free

	Length	Width	Conductor diameter range	Type	Order No.	Pcs. / Pkt.
5000 labels, up to 3 mm Ø	19 mm	12.7 mm	... 3 mm	WML 3 (13X10)R	0800073	1
3000 labels, up to 5 mm Ø	25.4 mm	2.4 mm	... 5 mm	WML 5 (25X10)R	0817523	1
7000 labels, up to 6 mm Ø	31.75 mm	12.7 mm	... 6 mm	WML 6 (13X13)R	0816252	1
4000 labels, up to 7.5 mm Ø	36.5 mm	12.7 mm	... 7.5 mm	WML 7,5 (13X13)R	0800074	1
2100 labels, up to 7.5 mm Ø	36.5 mm	25.4 mm	... 7.5 mm	WML 7,5 (25X13)R	0800075	1
1000 labels, up to 12 mm Ø	57.15 mm	25.4 mm	... 12 mm	WML 12 (25X19)R	0800076	1
1500 labels, up to 14 mm Ø	63.5 mm	25.4 mm	... 14 mm	WML 14 (25X19)R	0817536	1
1000 labels, up to 14 mm Ø	63.5 mm	38.1 mm	... 14 mm	WML 14 (38X19)R	0817552	1

Thermal transfer card printer



THERMOMARK CARD



THERMOMARK-RIBBON 110-TC

Technical data	
Width / Length / Height	253.00 mm / 320.00 mm / 189.00 mm
Weight	6.00 kg
Temperature range	5 °C ... 35 °C
Print resolution	300 dpi
Print width	104.00 mm
Max. printing length	140.00 mm
Print method	Thermal transfer for sheets and cards
Interfaces	10/100 Mbps Ethernet / USB 2.0
Power supply	100 V AC ... 240 V AC / 50 Hz ... 60 Hz
Operating systems	MS Windows XP SP3, MS Windows Vista, MS Windows 7 (32/64-bit), MS Windows 8 (32/64-bit)

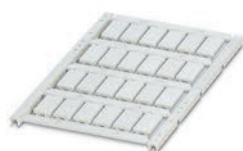
Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD	5146464	1

Accessories

Ink ribbon, length: 300 m, width: 110 mm

Type	Order No.	Pcs. / Pkt.
THERMOMARK-RIBBON 110-TC	0801371	1

Card material for marking sensor boxes



UCT-EM (17,5X9)



THERMOMARK CARD-UCT-MAG16

Technical data	
Length	17.5 mm
Width	9 mm
Color	white
Material	PC
Inflammability class according to UL 94	V0
Ambient temperature (operation)	-40 °C ... 120 °C
Wipe resistance	DIN EN 61010-1 (VDE 0411-1)
Components	free from silicone and halogen

Type	Order No.	Pcs. / Pkt.
UCT-EM (17,5X9)	0801491	10

Accessories

Magazine, for THERMOMARK CARD, for accommodating: UCT-EM (17X9)

Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG16	0830403	1

Card material for marking valve plug cordsets



UCT-EM (20X9)



THERMOMARK CARD-UCT-MAG15

Technical data	
Length	20 mm
Width	9 mm
Color	white
Material	PC
Inflammability class according to UL 94	V0
Ambient temperature (operation)	-40 °C ... 120 °C
Wipe resistance	DIN EN 61010-1 (VDE 0411-1)
Components	free from silicone and halogen

Type	Order No.	Pcs. / Pkt.
UCT-EM (20X9)	0801471	10

Accessories

Magazine, for THERMOMARK CARD, for accommodating: UCT-EM (20 x 9)

Type	Order No.	Pcs. / Pkt.
THERMOMARK CARD-UCT-MAG15	0830402	1

Card material for marking valve plug adapters and second head of double head cordsets

Card can only be printed on a BlueMark® printer or plotter.



UC1-TM 8



THERMOMARK CARD-UCT-MAG1

Technical data	
Width	8 mm
Color	white
Material	PA
Inflammability class according to UL 94	V2
Ambient temperature (operation)	-40 °C ... 120 °C
Wipe resistance	DIN EN 61010-1 (VDE 0411-1)
Components	free from silicone and halogen

Type	Order No.	Pcs. / Pkt.
UC1-TM 8	0821739	10

Cable selection guide

FEATURES	CABLE TYPES FOR STANDARD SENSOR/ACTUATOR APPLICATIONS							
	PUR	240	400	410	420	535	542	800
Jacket material	PUR	PUR	PVC	PVC	PVC	PVC	PVC	TPE
Jacket color	Black	Yellow	Yellow	Yellow	Yellow	Black	Yellow	Gray
Temperature, flexed	-25°C – 80°C	-25°C – 80°C	-5°C – 105°C	-5°C – 105°C	-5°C – 105°C	-5°C – 105°C	-5°C – 105°C	-30°C – 90°C
Temperature, fixed	-40°C – 80°C	-40°C – 80°C	-10°C – 105°C	-10°C – 105°C	-10°C – 105°C	-30°C – 105°C	-30°C – 105°C	-40°C – 90°C
Abrasion resistance	Excellent	Excellent	Fair/Good	Fair/Good	Fair/Good	Fair/Good	Fair/Good	Excellent
Torsional/twist resistance	No	No	No	No	No	No	No	Yes
UV resistance	Good	No	Fair	Fair	Fair	Good/Excellent	Good/Excellent	No
Sunlight resistance	Good	No	Fair	Fair	Fair	Excellent	Excellent	No
Halogen-free	Yes	Yes	No	No	No	No	No	Yes
Welding spark resistance	No	No	No	No	No	No	No	Yes
Oil resistance	Good/Excellent	Good/Excellent	Fair/Good	Fair/Good	Fair/Good	Fair/Good	Fair/Good	Good/Excellent
Chemical resistance	Good/Excellent	Good/Excellent	Fair/Good	Fair/Good	Fair/Good	Fair/Good	Fair/Good	Good/Excellent
Relative cost	\$\$	\$\$	\$\$	\$\$	\$\$	\$	\$	\$\$\$

	CORDSET SERIES							
	M8 Sensor/actuator	M12 Sensor/actuator	MINI 7/8-inch Sensor/actuator					
	✓	✓				✓	✓	✓
	✓	✓				✓	✓	✓
			✓	✓	✓			

CABLE TYPES FOR DEVICENET, ETHERNET AND SPECIAL APPLICATIONS

FEATURES	923	924	928	93E	94B	94F	600	28X
Jacket material	PUR	PUR	PUR	PUR	PUR	PUR	EPDM-PP	PE-X
Jacket color	Gray	Gray	Gray	Teal blue	Teal blue	Teal blue	Gray	Black
Temperature, flexed	-25°C – 80°C	-25°C – 80°C	-25°C – 80°C	-10°C – 50°C	-10°C – 50°C	-10°C – 50°C	-25°C – 105°C	-15°C – 105°C
Temperature, fixed	-40°C – 80°C	-40°C – 80°C	-40°C – 80°C	-40°C – 70°C	-40°C – 70°C	-40°C – 70°C	-40°C – 105°C	-40°C – 105°C
Abrasion resistance	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Good	Good
Torsional/twist resistance	No	No	No	No	No	No	No	No
UV resistance	No	No	No	No	No	No	No	Excellent
Sunlight resistance	No	No	No	No	No	No	No	Excellent
Halogen-free	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Welding spark resistance	No	No	No	No	No	No	No	Yes
Oil resistance	Good/ Excellent	Good/ Excellent	Good/ Excellent	Good/ Excellent	Good/ Excellent	Good/ Excellent	Good/ Excellent	Good/ Excellent
Chemical resistance	Good/ Excellent	Good/ Excellent	Good/ Excellent	Good/ Excellent	Good/ Excellent	Good/ Excellent	Good/ Excellent	Good
Relative cost	\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$\$\$	\$\$\$	\$\$\$\$

CORDSET SERIES

M12 Ethernet				✓	✓	✓		
M12 DeviceNet	✓	✓						
MINI 7/8-inch DeviceNet			✓					
Food and Beverage							✓	
Commercial/industrial vehicle industry								✓

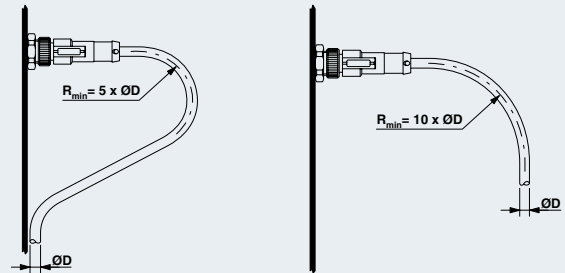
Cable installation guidelines

Please take care to follow recommended installation practices for industrial applications. Described on these pages are both appropriate and inappropriate installation practices for sensor/actuator cables. Following these recommendations will guarantee you long service life and reduce maintenance costs.



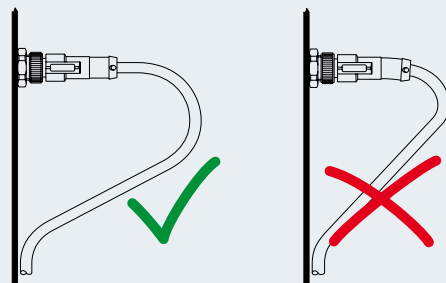
Bending radius

Ensure a sufficient bending radius. This is important since a greater bending radius will better absorb energy that results from cable movement. In fixed installations the minimum bending radius of 5 x diameter and for flexing/moving installations a minimum of 10 x diameter is recommended.



Strain relief

A sufficient cable loop at the connection point can prevent the cable jacket and inner conductors from stress and premature wear. In applications with stress loops sufficient clearance is needed for additional energy to be absorbed.





Moving and continuously flexed installations

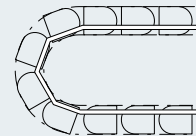
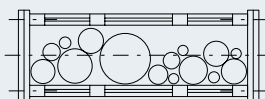
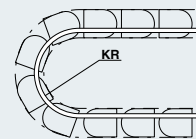
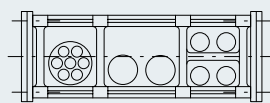
In the case of linear or torsional flexing installations, the cable length should be sufficient to provide adequate slack for absorbing tensile stress. This can be achieved using mechanical supports and cable loops.



Cable track installation

Cables should be laid individually and loosely next to each other within drag chains. Those cables with very different diameters should be isolated with bridges. If bridges cannot be used we recommend our cables with an outside diameter $< 10\text{ mm}$ should be laid loose within a guide tube in the cable track.

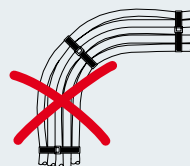
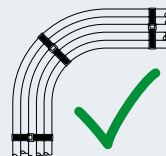
Arrange heavy cables on the outer side of the track and light weight cables, such as our SAC cables, laid inwards. They should have adequate strain relief at both ends. A distance of 20 to 30 times the outside diameter of the cable is recommended between the connection point and where the bending motion ends.



Observe the information provided by the cable track manufacturer for laying cables.

Cable bundling

When bundling cables together always ensure that they can move freely within the bundle. If the bundle is too tight the cables could be pinched and stressed.



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	IL EIP BK DI8 DO4 2TX-PAC	2897758	125	NBC-MSD/ 2,0-93E/MSD SCO US	1406128	119	SAC-3P- 2,0-410/MINFS	1532467	90	SAC-3P-M 8MS-M 8FR SH BK/.....	1405829	32
	IL ETH BK DI8 DO4 2TX-PAC	2703981	125	NBC-MSD/ 2,0-93E/R4AC SCO US	1406127	119	SAC-3P- 2,0-420/MINFR	1533068	91	SAC-3P-M 8MS-M 8FS BK/.....	1405935	29
				NBC-MSD/ 5,0-93E SCO US	1408727	118	SAC-3P- 2,0-420/MINFS	1532946	91	SAC-3P-M 8MS-M 8FS SH BK/.....	1405828	32
						SAC-3P- 2,0-542/ FR SCO BK	1406327	52	SAC-3P-M 8MS-M12FS	1519749	44	
						SAC-3P- 2,0-542/ FR SH SCO BK	1406270	56	SAC-3P-M 8Y/2XM 8FS	1696183	44	
						SAC-3P- 2,0-542/ FS SCO BK	1406324	52	SAC-3P-M 8Y/2XM 8FS VP	1696222	44	
						SAC-3P- 2,0-542/ FS SH SCO BK	1406267	56	SAC-3P-M12MS-M 8FS	1519752	44	
M	MARKING BOX EN	5147101	185	PROT-M 8 FS-PA-CHAIN	1430857	183	SAC-3P- 2,0-542/M8 FR BK	1406321	28	SAC-3P-M12MS-M 8SIFS	1519781	44
	MICROFOX-SP	1212488	179	PROT-M 8 FS-PA-CHAIN-EYE	1441082	183	SAC-3P- 2,0-542/M8 FR SH BK	1406066	32	SAC-3P-M12T/2XM12 B PE	1519723	80
	MICROFOX-SP-1	1212487	179	PROT-M 8 MS-PA-CHAIN	1430860	182	SAC-3P- 2,0-542/M8 FS BK	1406318	28	SAC-3P-M12Y/2XM 8FS	1683471	79
				PROT-M 8 MS-PA-CHAIN-EYE	1441095	182	SAC-3P- 2,0-542/M8 FS SH BK	1406063	32	SAC-3P-M12Y/2XM 8FS VP	1683549	44
			PROT-M 8 MS-PA-CHAIN-EYE-DM3	1441105	182	SAC-3P- 3,0-PUR/A-1L-Z	1434992	104	SAC-3P-M12Y/2XM12FS B PE	1683413	80	
			PROT-M12	1680539	124	SAC-3P- 3,0-PUR/B-1L-Z	1435399	106	SAC-3P-M12Y/2XM12FS B PE S21	1514016	80	
			PROT-M12 FB	1555538	182	SAC-3P- 3,0-PUR/BI-1L-Z	1435247	107	SAC-3P-M12Y/2XM12FS PE	1683455	80	
			PROT-M12 FS	1560251	182	SAC-3P- 3,0-PUR/C-1L-Z	1435548	108	SAC-3P-M12Y/2XM12FS PE S21	1511789	80	
N	NBC- 10,0-93E/FRD SCO US	1408738	118	PROT-M12 FS-M	1430488	182	SAC-3P- 3,0-PUR/CI-1L-Z	1435690	109	SAC-3P-M8MR/ 0,5-542/FR SCO BK	1406290	30
	NBC- 10,0-93E/FSD SCO US	1408730	118	PROT-M12 FS-M-CHAIN	1430491	183	SAC-3P- 4,0-400/MINFR	1532111	90	SAC-3P-M8MR/ 0,5-542/FS SCO BK	1406287	30
	NBC- 10,0-94B/FR SCO US	1408755	120	PROT-M12 FS-PA-CHAIN	1430873	183	SAC-3P- 4,0-400/MINFS	1531992	90	SAC-3P-M8MR/ 0,5-542/M8 FR BK	1406285	29
	NBC- 10,0-94B/FS SCO US	1408746	120	PROT-M12 FS-PA-CHAIN-EYE-DM1	1456187	183	SAC-3P- 4,0-410/MINFR	1532593	90	SAC-3P-M8MR/ 0,5-542/M8 FS BK	1406283	29
			PROT-M12 FS-PA-CHAIN-EYE-DM1	1456190	183	SAC-3P- 4,0-410/MINFS	1532470	90	SAC-3P-M8MR/ 1,5-542/FR SCO BK	1406288	30	
			PROT-M12 MS-PA-CHAIN	1430899	182	SAC-3P- 4,0-420/MINFR	1533071	91	SAC-3P-M8MR/ 1,5-542/FS SCO BK	1406286	30	
			PROT-M12 MS-PA-CHAIN-EYE-DM1	1456200	182	SAC-3P- 4,0-420/MINFS	1532959	91	SAC-3P-M8MR/ 1,5-542/M8 FR BK	1406284	29	
			PROT-M12 SH	1503302	182	SAC-3P- 5,0-542/ FR SCO BK	1406326	52	SAC-3P-M8MR/ 2,0-542 BK	1406293	28	
			PROT-M8	1682540	182	SAC-3P- 5,0-542/ FR SH SCO BK	1406269	56	SAC-3P-M8MR/ 2,0-542 SH BK	1406060	32	
			PROT-MINFS-PA-CHAIN	1430912	183	SAC-3P- 5,0-542/ FS SCO BK	1406323	52	SAC-3P-M8MR/ 5,0-542 BK	1406292	28	
			PROT-MINMS-PA-CHAIN	1430925	182	SAC-3P- 5,0-542/ FS SH SCO BK	1406266	56	SAC-3P-M8MR/ 5,0-542 SH BK	1406059	32	
			PROT-MS SCO	1553129	182	SAC-3P- 5,0-542/M8 FR BK	1406320	28	SAC-3P-M8MR/0,5-542/M8FR SH BK	1406057	33	
						SAC-3P- 5,0-542/M8 FR SH BK	1406065	32	SAC-3P-M8MR/0,5-542/M8FS SH BK	1406054	33	
						SAC-3P- 5,0-542/M8 FS BK	1406317	28	SAC-3P-M8MR/1, 5-542/M8 FS BK	1406282	29	
						SAC-3P- 5,0-542/M8 FS SH BK	1406062	32	SAC-3P-M8MR/1, 5-542/M8FR SH BK	1406055	33	
						SAC-3P- 5,0-PUR/A-1L-Z	1435001	104	SAC-3P-M8MR/1, 5-542/M8FS SH BK	1406049	33	
						SAC-3P- 5,0-PUR/B-1L-Z	1435409	106	SAC-3P-M8MR/10,0-542 BK	1406291	28	
						SAC-3P- 5,0-PUR/BI-1L-Z	1435250	107	SAC-3P-M8MR/10,0-542 SH BK	1406058	32	
						SAC-3P- 5,0-PUR/C-1L-Z	1435551	108	SAC-3P-M8MS/ 0,5-542/FR SCO BK	1406278	30	
						SAC-3P- 5,0-PUR/CI-1L-Z	1435700	109	SAC-3P-M8MS/ 0,5-542/FS SCO BK	1406276	30	
						SAC-3P- 6,0-400/MINFR	1532124	90	SAC-3P-M8MS/ 0,5-542/M8 FR BK	1406274	29	
						SAC-3P- 6,0-400/MINFS	1532001	90	SAC-3P-M8MS/ 0,5-542/M8 FS BK	1406272	29	
						SAC-3P- 6,0-410/MINFR	1532603	90	SAC-3P-M8MS/ 1,5-542/FR SCO BK	1406277	30	
						SAC-3P- 6,0-410/MINFS	1532483	90	SAC-3P-M8MS/ 1,5-542/M8 FR BK	1406273	29	
						SAC-3P- 6,0-420/MINFR	1533084	91	SAC-3P-M8MS/ 1,5-542/M8 FS BK	1406271	29	
						SAC-3P- 6,0-420/MINFS	1532962	91	SAC-3P-M8MS/ 2,0-542 BK	1406281	28	
						SAC-3P-10,0-542/ FR SCO BK	1406325	52	SAC-3P-M8MS/ 2,0-542 SH BK	1406048	32	
						SAC-3P-10,0-542/ FR SH SCO BK	1406268	56	SAC-3P-M8MS/ 5,0-542 BK	1406280	28	
						SAC-3P-10,0-542/ FS SCO BK	1406322	52	SAC-3P-M8MS/ 5,0-542 SH BK	1406047	32	
						SAC-3P- 10,0-542/ FS SH SCO BK	1406265	56	SAC-3P-M8MS/ 0,5-542/M8FR SH BK	1406045	32	
						SAC-3P-10,0-542/M8 FR BK	1406319	28	SAC-3P-M8MS/0,5-542/M8FS SH BK	1406043	32	
						SAC-3P-10,0-542/M8 FR SH BK	1406064	32	SAC-3P-M8MS/1,5-542/FS SCO BK	1406275	30	
						SAC-3P-10,0-542/M8 FS BK	1406316	28	SAC-3P-M8MS/1,5-542/M8FR SH BK	1406044	32	
						SAC-3P-10,0-542/M8 FS SH BK	1406061	32	SAC-3P-M8MS/1,5-542/M8FR SH BK	1406042	32	
						SAC-3P-10,0-PUR/A-1L-Z	1435014	104	SAC-3P-M8MS/10,0-542 BK	1406279		

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SAC-3P-MINMR/ 4,0-420	1532836	91	SAC-3P-MS/ 1,5-PUR/C-1L-Z SCO	1435454	108	SAC-4P-10,0-542/ FS SH SCO BK	1406187	63	SAC-4P-M12MS/1,5-600/M12FR FB	1404300	153
SAC-3P-MINMR/ 6,0-400	1531882	90	SAC-3P-MS/ 1,5-PUR/CI-1L-Z SCO	1435603	109	SAC-4P-10,0-542/M8 FR BK	1406241	35	SAC-4P-M12MS/10,0-28X SH OD	1403974	157
SAC-3P-MINMR/ 6,0-410	1532360	91	SAC-3P-MS/ 2,0-542 SCO BK	1406304	52	SAC-4P-10,0-542/M8 FR SH BK	1406019	39	SAC-4P-M12MS/1,5-600/M12FS FB	1404025	153
SAC-3P-MINMR/ 6,0-420	1532849	91	SAC-3P-MS/ 2,0-542 SH SCO BK	1406257	56	SAC-4P-10,0-542/M8 FS BK	1406238	35	SAC-4P-M12MS/1,5-600/M12FS HD	1403970	157
SAC-3P-MINMS/ 2,0-400	1531743	90	SAC-3P-MS/ 3,0-PUR/A-1L-Z SCO	1434918	104	SAC-4P-10,0-542/M8 FS SH BK	1406016	39	SAC-4P-M12MS/10,0-28X OD	1454066	168
SAC-3P-MINMS/ 2,0-410	1532221	91	SAC-3P-MS/ 3,0-PUR/B-1L-Z SCO	1435315	106	SAC-4P-10,0-600/M12FR FB	1404018	152	SAC-4P-M12MS/10,0-28X SH OD	1454067	169
SAC-3P-MINMS/ 2,0-420	1532700	91	SAC-3P-MS/ 3,0-PUR/BI-1L-Z SCO	1435166	107	SAC-4P-10,0-600/M12FR HD	1403963	156	SAC-4P-M12MS/10,0-600 FB	1404005	152
SAC-3P-MINMS/ 4,0-400	1531756	90	SAC-3P-MS/ 3,0-PUR/C-1L-Z SCO	1435467	108	SAC-4P-10,0-600/M12FR-3L FB	1404022	152	SAC-4P-M12MS/10,0-600 HD	1403951	156
SAC-3P-MINMS/ 4,0-410	1532234	91	SAC-3P-MS/ 3,0-PUR/CI-1L-Z SCO	1435616	109	SAC-4P-10,0-600/M12FR-3L HD	1403967	156	SAC-4P-M12MS/10,0-600 SH HD	1403984	158
SAC-3P-MINMS/ 4,0-420	1532713	91	SAC-3P-MS/ 5,0-542 SCO BK	1406303	52	SAC-4P-10,0-600/M12FS FB	1404013	152	SAC-4P-M12MS/2,0-28X/M12FS OD	1454105	168
SAC-3P-MINMS/ 6,0-400	1531769	90	SAC-3P-MS/ 5,0-542 SH SCO BK	1406256	56	SAC-4P-10,0-600/M12FS HD	1403959	156	SAC-4P-M12MS/2,0-28X/M12FSSHOD/1454189	1454189	169
SAC-3P-MINMS/ 6,0-410	1532247	91	SAC-3P-MS/0,5-542/ FRSH SCO BK	1406254	56	SAC-4P-10,0-600/M12FS SH HD	1403989	159	SAC-4P-M12MS/3,0-600 FB	1404003	152
SAC-3P-MINMS/ 6,0-420	1532726	91	SAC-3P-MS/0,5-542/ FSSH SCO BK	1406252	56	SAC-4P-2,0-542/ FS SCO BK	1406246	58	SAC-4P-M12MS/3,0-600 HD	1403948	156
SAC-3P-MR SCO BK/.....	1405955	52	SAC-3P-MS/0,5-542/M8 FR SCO BK	1406297	31	SAC-4P-3,0-600/M12FR FB	1404015	152	SAC-4P-M12MS/3,0-600 SH HD	1403982	158
SAC-3P-MR SH SCO BK/.....	1405932	56	SAC-3P-MS/0,5-542/M8 FS SCO BK	1406295	30	SAC-4P-3,0-600/M12FR HD	1403961	152	SAC-4P-M12MS/3,0-600/FS SH HD	1403993	158
SAC-3P-MR-FR SCO BK/.....	1405954	53	SAC-3P-MS/0,5-542/M8FRSH SCOBK1406025	34	SAC-4P-3,0-600/M12FR-3L FB	1404020	152	SAC-4P-M12MS/3,0-600/M12FR FB	1404031	153	
SAC-3P-MR-M8 FR SH SCO BK/.....	1405931	57	SAC-3P-MS/0,5-542/M8FSSH SCOBK1406023	34	SAC-4P-3,0-600/M12FR-3L HD	1403965	156	SAC-4P-M12MS/3,0-600/M12FR HD	1403975	157	
SAC-3P-MR-FS SCO BK/.....	1405953	53	SAC-3P-MS/1,5-542/ FRSH SCO BK	1406253	56	SAC-4P-3,0-600/M12FS FB	1404011	152	SAC-4P-M12MS/3,0-600/M12FS FB	1404026	153
SAC-3P-MR-FS SH SCO BK/.....	1405930	57	SAC-3P-MS/1,5-542/ FSSH SCO BK	1406251	56	SAC-4P-3,0-600/M12FS HD	1403957	152	SAC-4P-M12MS/3,0-600/M12FS HD	1403971	157
SAC-3P-MR-M 8FR SH SCO BK/.....	1405827	34	SAC-3P-MS/1,5-542/M8 FR SCO BK	1406296	31	SAC-4P-3,0-600/M12FS SH HD	1403986	158	SAC-4P-M12MS/5,0-28X/M12FS OD	1454118	168
SAC-3P-MR-M 8FR SH SCO BK/.....	1405826	34	SAC-3P-MS/1,5-542/M8 FR SCO BK	1406294	30	SAC-4P-3,0-600/M12FS FB	1404017	152	SAC-4P-M12MS/5,0-28X/M12FSSHOD/1454192	1454192	169
SAC-3P-MR-M8FR SCO BK/.....	1405952	31	SAC-3P-MS/1,5-542/M8FRSH SCOBK1406024	34	SAC-4P-5,0-600/M12FR HD	1403962	156	SAC-4P-M12MS/5,0-600 FB	1404004	152	
SAC-3P-MR-M8FS SCO BK/.....	1405951	30	SAC-3P-MS/1,5-542/M8FSSH SCOBK1406022	34	SAC-4P-5,0-600/M12FR-3L FB	1404021	152	SAC-4P-M12MS/5,0-600 HD	1403949	156	
SAC-3P-MR/ 0,5-542/ FR SCO BK	1406312	53	SAC-3P-MS/10,0-542 SCO BK	1406302	52	SAC-4P-5,0-600/M12FR-3L HD	1403966	156	SAC-4P-M12MS/5,0-600 SH HD	1403983	158
SAC-3P-MR/ 0,5-542/ FS SCO BK	1406310	53	SAC-3P-MS/10,0-542 SH SCO BK	1406255	56	SAC-4P-5,0-600/M12FS FB	1404012	152	SAC-4P-M8MR/ 0,5-542/FR SCO BK	1406211	37
SAC-3P-MR/ 1,5-542/ FR SCO BK	1406311	53	SAC-3P-MS/A-1L-Z SCO	1458525	111	SAC-4P-5,0-600/M12FS HD	1403958	156	SAC-4P-M8MR/ 0,5-542/FS SCO BK	1406209	37
SAC-3P-MR/ 1,5-542/ FS SCO BK	1406309	53	SAC-3P-MS/B-1L-Z SCO	1458541	111	SAC-4P-5,0-600/M12FS SH HD	1403987	158	SAC-4P-M8MR/ 0,5-542/M8 FR BK	1406207	36
SAC-3P-MR/ 2,0-542 SCO BK	1406315	52	SAC-3P-MS/BI-1L-Z SCO	1458567	111	SAC-4P-FR SCO BK/.....	1405926	59	SAC-4P-M8MR/ 0,5-542/M8 FS BK	1406205	36
SAC-3P-MR/ 2,0-542 SH SCO BK	1406284	56	SAC-3P-Y/2XFS B PE SCO	1523968	80	SAC-4P-FR SH SCO BK/.....	1405901	63	SAC-4P-M8MR/ 1,5-542/FR SCO BK	1406210	37
SAC-3P-MR/ 5,0-542 SCO BK	1406314	52	SAC-3P-Y/2XFS PE SCO	1523971	80	SAC-4P-FS SCO BK/.....	1405925	59	SAC-4P-M8MR/ 1,5-542/FS SCO BK	1406208	37
SAC-3P-MR/ 5,0-542 SH SCO BK	1406263	56	SAC-3P-Y/2XMF 8FS SCO	1523984	44	SAC-4P-FS SH SCO BK/.....	1405900	63	SAC-4P-M8MR/ 1,5-542/M8 FR BK	1406206	36
SAC-3P-MR/0,5-542/ FRSH SCO BK	1406261	57	SAC-4P- 2,0-28X/M12FS OD	1454079	168	SAC-4P-M 8FR BK/.....	1405924	35	SAC-4P-M8MR/ 1,5-542/M8 FS BK	1406204	36
SAC-3P-MR/0,5-542/ FSSH SCO BK	1406259	57	SAC-4P- 2,0-28X/M12FS SH OD	1454150	169	SAC-4P-M 8FR SH BK/.....	1405823	39	SAC-4P-M8MR/ 2,0-542 BK	1406214	35
SAC-3P-MR/0,5-542/M8 FR SCO BK	1406308	31	SAC-4P- 2,0-400/MINFR	1532140	92	SAC-4P-M 8FS BK/.....	1405923	35	SAC-4P-M8MR/ 2,0-542 SH BK	1406015	39
SAC-3P-MR/0,5-542/M8 FS SCO BK	1406306	30	SAC-4P- 2,0-400/MINFS	1532027	92	SAC-4P-M 8FS SH BK/.....	1405822	39	SAC-4P-M8MR/ 2,0-542 SH BK	1406213	35
SAC-3P-MR/0,5-542/M8FRSH SCOBK1406029	34	SAC-4P- 2,0-410/MINFR	1532629	92	SAC-4P-M 8MR BK/.....	1405911	35	SAC-4P-M8MR/ 5,0-542 SH BK	1406013	39	
SAC-3P-MR/0,5-542/M8FSSH SCOBK1406027	34	SAC-4P- 2,0-410/MINFS	1532506	92	SAC-4P-M 8MR SH BK/.....	1405821	39	SAC-4P-M8MR/0,5-542/M8FR SH BK1406011	1406011	40	
SAC-3P-MR/1,5-542/ FRSH SCO BK	1406260	57	SAC-4P- 2,0-420/MINFR	1533107	93	SAC-4P-M 8MR-FR SCO BK/.....	1405910	37	SAC-4P-M8MR/0,5-542/M8FS SH BK1406009	1406009	40
SAC-3P-MR/1,5-542/ FSSH SCO BK	1406258	57	SAC-4P- 2,0-420/MINFS	1532988	93	SAC-4P-M 8MR-FS SCO BK/.....	1405909	37	SAC-4P-M8MR/1,5-542/M8FR SH BK1406010	1406010	40
SAC-3P-MR/1,5-542/M8 FR SCO BK	1406307	31	SAC-4P- 2,0-542/ FR SCO BK	1406250	59	SAC-4P-M 8MR-M 8FR SH BK/.....	1405820	40	SAC-4P-M8MR/1,5-542/M8FS SH BK1406008	1406008	40
SAC-3P-MR/1,5-542/M8 FS SCO BK	1406305	30	SAC-4P- 2,0-542/ FR SH SCO BK	1406192	63	SAC-4P-M 8MR-M 8FS SH BK/.....	1405819	40	SAC-4P-M8MR/10,0-542 BK	1406212	35
SAC-3P-MR/1,5-542/M8FRSH SCOBK1406028	34	SAC-4P- 2,0-542/ FS SH SCO BK	1406189	63	SAC-4P-M 8MR-M8FR BK/.....	1405908	36	SAC-4P-M8MR/10,0-542 SH BK	1406012	39	
SAC-3P-MR/1,5-542/M8FSSH SCOBK1406026	34	SAC-4P- 2,0-542/M8 FR BK	1406243	35	SAC-4P-M 8MR-M8FS BK/.....	1405907	36	SAC-4P-M8MS/ 0,5-542/FR SCO BK	1406200	37	
SAC-3P-MR/10,0-542 SCO BK	1406313	52	SAC-4P- 2,0-542/M8 FR SH BK	1406021	39	SAC-4P-M 8MS BK/.....	1405906	35	SAC-4P-M8MS/ 0,5-542/FS SCO BK	1406198	37
SAC-3P-MR/10,0-542 SH SCO BK	1406262	56	SAC-4P- 2,0-542/M8 FS BK	1406240	35	SAC-4P-M 8MS SH BK/.....	1405818	39	SAC-4P-M8MS/ 0,5-542/M8 FR BK	1406196	36
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SAC-4P-MS/0,5-542/M8FSSH SCO BK	1405994	41	SAC-5P- 1,5-600/M12FR-3L FB	1404093	154	SAC-5P-M12MS/1,5-600 FB	1404075	154	SAC-5P-MINMR/20,0-928/MINFS DN	1417809	139
SAC-4P-MS/0,6-600/M12FR-3L FB	1404034	153	SAC-5P- 1,5-600/M12FR-3L HD	1404057	159	SAC-5P-M12MS/1,5-600 HD	1404039	159	SAC-5P-MINMS TR-DN	1434701	97
SAC-4P-MS/0,6-600/M12FR-3L HD	1403977	157	SAC-5P- 1,5-600/M12FS FB	1404083	154	SAC-5P-M12MS/1,5-600/M12FR FB	1404104	155	SAC-5P-MINMS/ 0,3-923/MINFR DN	1418785	141
SAC-4P-MS/1,5-542/ FRSH SCO BK	1406175	63	SAC-5P- 1,5-600/M12FS HD	1404049	159	SAC-5P-M12MS/1,5-600/M12FR HD	1404069	160	SAC-5P-MINMS/ 0,3-923/MINFS DN	1418620	141
SAC-4P-MS/1,5-542/ FSSH SCO BK	1406173	63	SAC-5P-10,0-430/MINFR PWR	1443394	142	SAC-5P-M12MS/1,5-600/M12FS FB	1404099	155	SAC-5P-MINMS/ 0,3-928/MINFR DN	1417812	139
SAC-4P-MS/1,5-542/M8 FR SCO BK	1406217	38	SAC-5P-10,0-430/MINFS PWR	1443349	142	SAC-5P-M12MS/3,0-600 HD	1404065	160	SAC-5P-MINMS/ 0,5-928/MINFS DN	1417650	139
SAC-4P-MS/1,5-542/M8 FS SCO BK	1406215	37	SAC-5P-10,0-431/MINFR PWR	1443598	142	SAC-5P-M12MS/10,0-600 FB	1404078	154	SAC-5P-MINMS/ 0,5-923/MINFR DN	1418798	141
SAC-4P-MS/1,5-542/M8FRSH SCO BK	1405995	41	SAC-5P-10,0-431/MINFS PWR	1443543	142	SAC-5P-M12MS/10,0-600 HD	1404043	159	SAC-5P-MINMS/ 0,5-923/MINFS DN	1418633	141
SAC-4P-MS/1,5-542/M8FSSH SCO BK	1405993	41	SAC-5P-10,0-542/ FR SCO BK	1406170	66	SAC-5P-M12MS/3,0-600 FB	1404076	154	SAC-5P-MINMS/ 0,5-928/MINFR DN	1417825	139
SAC-4P-MS/ 0,5-542/ FR SCO BK	1404035	153	SAC-5P-10,0-542/ FR SH SCO BK	1406150	68	SAC-5P-M12MS/3,0-600 HD	1404041	159	SAC-5P-MINMS/ 0,5-928/MINFS DN	1417663	139
SAC-4P-MS/ 1,5-600/M12FR-3L HD	1403978	157	SAC-5P-10,0-542/ FS SCO BK	1406167	66	SAC-5P-M12MS/3,0-600/M12FR FB	1404105	155	SAC-5P-MINMS/ 1,0-923/MINFR DN	1418808	141
SAC-4P-MS/10,0-542 SCO BK	1406224	59	SAC-5P-10,0-542/ FS SH SCO BK	1406147	68	SAC-5P-M12MS/3,0-600/M12FR HD	1404070	160	SAC-5P-MINMS/ 1,0-923/MINFS DN	1418646	141
SAC-4P-MS/10,0-542 SH SCO BK	1406177	63	SAC-5P-10,0-600/M12FR FB	1404092	154	SAC-5P-M12MS/3,0-600/M12FS FB	1404101	155	SAC-5P-MINMS/ 1,0-928/MINFR DN	1417838	139
SAC-4P-MS/3,0-600/M12FR-3L FB	1404036	153	SAC-5P-10,0-600/M12FR HD	1404056	159	SAC-5P-M12MS/3,0-600/M12FS HD	1404066	160	SAC-5P-MINMS/ 1,0-928/MINFS DN	1417676	139
SAC-4P-MS/3,0-600/M12FR-3L HD	1403979	157	SAC-5P-10,0-600/M12FR-3L FB	1404096	154	SAC-5P-M12MS/5,0-600 FB					

Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page	Type	Order No.	Page
SAC-5P-MINMS/ 4,0-410	1532315	95	SAC-5P-MR/0,5-542/ FSSH SCO BK	1406141	69	SAC-5P-MS/10,0-923 CAN SCO	1419041	134	SAC-8P-MS/ 1,5-542/ FR SCO BK	1406090	71
SAC-5P-MINMS/ 4,0-420	1532797	96	SAC-5P-MR/1, 5-542/ FRSH SCO BK	1406142	69	SAC-5P-MS/10,0-923/FR CAN SCO	1419070	135	SAC-8P-MS/ 1,5-542/ FS SCO BK	1406088	71
SAC-5P-MINMS/ 5,0-923 DN	1418536	140	SAC-5P-MR/1, 5-542/ FSSH SCO BK	1406140	69	SAC-5P-MS/10,0-923/FS CAN SCO	1419054	135	SAC-8P-MS/ 2,0-542 SCO BK	1406094	70
SAC-5P-MINMS/ 5,0-923/MINFR DN	1418824	141	SAC-5P-MR/10,0-542 SCO BK	1406164	66	SAC-5P-MS/10,0-924 SCO	1405979	132	SAC-8P-MS/ 2,0-542 SH SCO BK	1406073	72
SAC-5P-MINMS/ 5,0-923/MINFS DN	1418662	141	SAC-5P-MR/10,0-542 SH SCO BK	1406144	68	SAC-5P-MS/15,0-920 SCO	1518203	136	SAC-8P-MS/ 5,0-542 SCO BK	1406093	70
SAC-5P-MINMS/ 5,0-928 DN	1417566	138	SAC-5P-MR/10,0-923 CAN SCO	1419046	134	SAC-5P-MS/15,0-920/FS SCO	1518313	136	SAC-8P-MS/ 5,0-542 SH SCO BK	1406072	72
SAC-5P-MINMS/ 5,0-928/MINFR DN	1417854	139	SAC-5P-MR/10,0-923/FR CAN SCO	1419078	135	SAC-5P-MS/15,0-923 CAN SCO	1419042	134	SAC-8P-MS/0,5-542/ FRSH SCO BK	1406070	72
SAC-5P-MINMS/ 5,0-928/MINFS DN	1417692	139	SAC-5P-MR/10,0-923/FS CAN SCO	1419062	135	SAC-5P-MS/15,0-923/FR CAN SCO	1419071	135	SAC-8P-MS/0,5-542/ FSSH SCO BK	1406068	72
SAC-5P-MINMS/ 6,0-400	1531840	94	SAC-5P-MR/10,0-924 SCO	1405976	132	SAC-5P-MS/15,0-923/FS CAN SCO	1419055	135	SAC-8P-MS/1, 5-542/ FRSH SCO BK	1406069	72
SAC-5P-MINMS/ 6,0-410	1532328	95	SAC-5P-MR/15,0-923 CAN SCO	1419047	134	SAC-5P-MS/20,0-923 CAN SCO	1419043	134	SAC-8P-MS/1, 5-542/ FSSH SCO BK	1406067	72
SAC-5P-MINMS/ 6,0-420	1532807	96	SAC-5P-MR/15,0-923/FR CAN SCO	1419079	135	SAC-5P-MS/20,0-923/FR CAN SCO	1419072	135	SAC-8P-MS/10,0-542 SCO BK	1406092	70
SAC-5P-MINMS/0,3-430/MINFS PWR1443404	143	143	SAC-5P-MR/15,0-923/FS CAN SCO	1419063	135	SAC-5P-MS/20,0-923/FS CAN SCO	1419056	135	SAC-8P-MS/10,0-542 SH SCO BK	1406071	72
SAC-5P-MINMS/0,3-431/MINFS PWR1443608	143	143	SAC-5P-MR/20,0-923 CAN SCO	1419048	134	SAC-5P-MS/3,0-600/M12FR-3L FB	1404109	155	SAC-8PY-M/2XF VP	1454972	81
SAC-5P-MINMS/0,6-430/MINFS PWR1443431	143	143	SAC-5P-MR/20,0-923/FR CAN SCO	1419080	135	SAC-5P-MS/3,0-600/M12FR-3L HD	1404550	160	SAC-8PY-M/2XF VP SH	1454969	81
SAC-5P-MINMS/0,6-431/MINFS PWR1443611	143	143	SAC-5P-MR/20,0-923/FS CAN SCO	1419064	135	SAC-5P-MS/AD-2L SCO	1458596	111	SAC-MR/0, 1-116/2XA-1L-Z SCO	1458130	112
SAC-5P-MINMS/1,0-430/MINFS PWR1443420	143	143	SAC-5P-MR/AD-2L SCO	1458606	111	SAC-5P-Y/2XF VP SCO	1546068	81	SAC-MR/0, 1-116/2XB-1L-Z SCO	1458318	112
SAC-5P-MINMS/1,0-431/MINFS PWR1443624	143	143	SAC-5P-MS SCO /924/...	1405794	132	SAC-5PH-M-F/2XF SH1 SCO	1417414	145	SAC-MR/0, 1-116/2XB1-1L-Z SCO	1458499	112
SAC-5P-MINMS/1,5-430/MINFS PWR1443433	143	143	SAC-5P-MS SCO BK/...	1405888	66	SAC-5PY-F/2X 0,3-920-MS-FS	1436013	145	SAC-MR/0, 1-116/2XA-1L-Z SCO	1458143	112
SAC-5P-MINMS/1,5-431/MINFS PWR1443637	143	143	SAC-5P-MS SCO/920/...	1538115	136	SAC-5PY-F/2X 0,5-920-MS-FS	1436026	145	SAC-MR/0, 15-116/2XB-1L-Z SCO	1458321	112
SAC-5P-MINMS/10,0-923 DN	1418549	140	SAC-5P-MS SH SCO BK/...	1405879	68	SAC-5PY-F/2X 1,0-920-MS-FS	1436039	145	SAC-MR/0, 15-116/2XB1-1L-Z SCO	1458509	112
SAC-5P-MINMS/10,0-923/MINFR DN	1418837	141	SAC-5P-MS-AD-2L SCO/...	1435072	110	SAC-5PY-F/2X 2,0-920	1436123	145	SAC-MR/0,2-116/2XA-1L-Z SCO	1458156	112
SAC-5P-MINMS/10,0-923/MINFS DN	1418675	141	SAC-5P-MS-FR SCO /924/...	1405799	133	SAC-5PY-F/2X 2,0-920-MS-FS	1436042	145	SAC-MR/0,2-116/2XB1-1L-Z SCO	1458334	112
SAC-5P-MINMS/10,0-928 DN	1417579	138	SAC-5P-MS-FR SCO BK/...	1405887	67	SAC-5PY-F/2X 5,0-920	1436136	145	SAC-MR/0,2-116/2XB1-1L-Z SCO	1458512	112
SAC-5P-MINMS/10,0-928/MINFR DN	1417867	139	SAC-5P-MS-FR SCO/920/...	1433304	136	SAC-5PY-F/2X 5,0-920-MS-FS	1436055	145	SAC-MS/0, 1-116/2XA-1L-Z SCO	1458101	112
SAC-5P-MINMS/10,0-928/MINFS DN	1417702	139	SAC-5P-MS-FR SH SCO BK/...	1405878	68	SAC-5PY-F/2X10,0-920	1436149	145	SAC-MS/0, 1-116/2XB-1L-Z SCO	1458282	112
SAC-5P-MINMS/15,0-923 DN	1418552	140	SAC-5P-MS-FS SCO /924/...	1405797	133	SAC-5PY-F/2X10,0-920-MS-FS	1436068	145	SAC-MR/0, 1-116/2XB1-1L-Z SCO	1458460	112
SAC-5P-MINMS/15,0-923/MINFR DN	1420029	141	SAC-5P-MS-FS SCO BK/...	1405886	67	SAC-5PY-F/2X15,0-920	1436152	145	SAC-MS/0, 15-116/2XA-1L-Z SCO	1458114	112
SAC-5P-MINMS/15,0-923/MINFS DN	1418688	141	SAC-5P-MS-FS SCO/920/...	1538157	136	SAC-5PY-F/2X15,0-920-MS-FS	1436071	145	SAC-MS/0, 15-116/2XB1-1L-Z SCO	1458295	112
SAC-5P-MINMS/15,0-928 DN	1417582	138	SAC-5P-MS-FS SH SCO BK/...	1405877	68	SAC-5PY-F/2X1M VP SH	1419946	81	SAC-MS/0, 15-116/2XB1-1L-Z SCO	1458473	112
SAC-5P-MINMS/15,0-928/MINFR DN	1417870	139	SAC-5P-MS/ 0,3-920/FS SCO	1518258	136	SAC-5PY-F/M-F VP SH	1419933	81	SAC-MS/0,2-116/2XA-1L-Z SCO	1458127	112
SAC-5P-MINMS/15,0-928/MINFS DN	1417715	139	SAC-5P-MS/ 0,3-923/FR CAN SCO	1419065	135	SAC-5PY-M/2X 2,0-920	1436084	145	SAC-MS/0,2-116/2XB-1L-Z SCO	1458305	112
SAC-5P-MINMS/2,0-430/MINFS PWR1443446	143	143	SAC-5P-MS/ 0,3-923/FS CAN SCO	1419049	135	SAC-5PY-M/2X 5,0-920	1436097	145	SAC-MS/0,2-116/2XB1-1L-Z SCO	1458486	112
SAC-5P-MINMS/2,0-431/MINFS PWR1443640	143	143	SAC-5P-MS/ 0,3-PUR/AD-2L SCO	1435030	110	SAC-5PY-M/2X10,0-920	1436107	145	SAC-V-SCREW-M3-29 KNURL	1403779	184
SAC-5P-MINMS/20,0-923 DN	1418565	140	SAC-5P-MS/ 0,5-542/ FR SCO BK	1406156	67	SAC-5PY-M/2X15,0-920	1436110	145	SACB 10-3 L M8 PUR/	1516166	42
SAC-5P-MINMS/20,0-923/MINFR DN	1420032	141	SAC-5P-MS/ 0,5-542/ FS SCO BK	1406154	67	SAC-5PY-M/2XF VP SH	1419920	81	SACB 4-3 L M8 PUR/	1516137	42
SAC-5P-MINMS/20,0-923/MINFS DN	1418691	141	SAC-5P-MS/ 0,5-542/ FS SCO	1518261	136	SAC-5PY-M/F-M VP SH	1438079	81	SACB 6-3 L M8 PUR/	1516140	42
SAC-5P-MINMS/20,0-928 DN	1417595	138	SAC-5P-MS/ 0,5-923/FR CAN SCO	1419066	135	SAC-8P- 2,0-542/ FR SCO BK	1406108	70	SACB 8-3 L M8 PUR/	1516153	42
SAC-5P-MINMS/20,0-928/MINFR DN	1417883	139	SAC-5P-MS/ 0,5-923/FS CAN SCO	1419050	135	SAC-8P- 2,0-542/ FR SH SCO BK	1406087	72	SACB 8-4 L M8 PUR/	1516179	43
SAC-5P-MINMS/20,0-928/MINFS DN	1417728	139	SAC-5P-MS/ 0,5-924/FR SCO	1405991	133	SAC-8P- 2,0-542/ FS SCO BK	1406105	70	SACB- 4/3-L 5,0PUR-M8	1516014	42
SAC-5P-MINT/2XMIN DN	1401029	146	SAC-5P-MS/ 0,5-924/FS SCO	1405989	133	SAC-8P- 2,0-542/ FS SH SCO BK	1406083	72	SACB- 4/3-L 10,0PUR-M8	1516027	42
SAC-5P-MINT/2XMIN VP	1543977	97	SAC-5P-MS/ 0,6-PUR/AD-2L SCO	1435043	110	SAC-8P- 5,0-542/ FR SCO BK	1406107	70	SACB- 4/3-L-C-M8	1503412	42
SAC-5P-MR SCO /924/...	1405793	132	SAC-5P-MS/ 1,0-920/FS SCO	1518274	136	SAC-8P- 5,0-542/ FR SH SCO BK	1406086	72	SACB- 6/3-L 5,0PUR-M8	1516030	42
SAC-5P-MR SCO BK/...	1405891	66	SAC-5P-MS/ 1,0-923/FR CAN SCO	1419067	135	SAC-8P- 5,0-542/ FS SCO BK	1406104	70	SACB- 6/3-L 10,0PUR-M8	1516043	42
SAC-5P-MR SCO/920/...	1433281	136	SAC-5P-MS/ 1,0-923/FS CAN SCO	1419051	135	SAC-8P- 5,0-542/ FS SH SCO BK	1406082	72	SACB- 6/3-L-C-M8	1503425	42
SAC-5P-MR SH SCO BK/...	1405883	68	SAC-5P-MS/ 1,5-542/ FR SCO BK	1406155	67	SAC-8P-10,0-542/ FR SCO BK	1406106	70	SACB- 8/3-L 5,0PUR-M8	1516056	42
SAC-5P-MR-FR SCO /924/...	1405792	133	SAC-5P-MS/ 1,5-542/ FS SCO BK	1406153	67	SAC-8P-10,0-542/ FR SH SCO BK	1406084	72	SACB- 8/3-L 10,0PUR-M8	1516069	42
SAC-5P-MR-FR SCO BK/...	1405890	67	SAC-5P-MS/ 1,5-924/FR SCO	1405990	133	SAC-8P-10,0-542/ FS SCO BK	1406103	70	SACB- 8/3-L-C-M8	1511750	42
SAC-5P-MR-FR SCO/920/...	1433320	137	SAC-5P-MS/ 1,5-924/FS SCO	1405988	133	SAC-8P-10,0-542/ FS SH SCO BK	1406081	72	SACB- 8/4-L 5,0PUR-M8	1516111	43
SAC-5P-MR-FR SH SCO SCO BK/...	1405881	69	SAC-5P-MS/ 1,5-PUR/AD-2L SCO	1435056	110	SAC-8P-FR SCO BK/...	1405852	70	SACB- 8/4-L 10,0PUR-M8	1516124	43
SAC-5P-MR-FS SCO /924/...	1405791	133	SAC-5P-MS/ 2,0-542 SCO BK	1406159	66	SAC-8P-FR SH SCO BK/...	1405844	72	SACB- 8/4-L-C-M8	1503467	43
SAC-5P-MR-FS SCO BK/...	1405889	67	SAC-5P-MS/ 2,0-542 SH SCO BK	1406139	68	SAC-8P-FS SCO BK/...	1405851	70	SACB-10/3-L 5,0PUR-M8	1516072	42
SAC-5P-MR-FS SCO/920/...	1433317	137	SAC-5P-MS/ 2,0-920 SCO	1518177	136	SAC-8P-FS SH SCO BK/...	1405843	72	SACB-10/3-L 10,0PUR-M8	1516085	42
SAC-5P-MR-FS SH SCO BK/...	1405880	69	SAC-5P-MS/ 2,0-920/FS SCO	1518287	136	SAC-8P-MR SCO BK/...	1405850	70	SACB-10/3-L-C-M8	1503438	42
SAC-5P-MR/ 0,3-923/FR CAN SCO	1419073	135	SAC-5P-MS/ 2,0-923 CAN SCO	1419039	134	SAC-8P-MR SH SCO BK/...	1405842	72	SACB-16X0, 5/ 3X1, 0-200,0 PUR	1559893	171
SAC-5P-MR/ 0,3-923/FS CAN SCO	1419057	135	SAC-5P-MS/ 2,0-923/FR CAN SCO	1419068	135	SAC-8P-MR-FR SCO BK/...	1405849	71	SACB-16X0, 5/ 3X1, 0-50,0 PUR	1503373	171
SAC-5P-MR/ 0,5-542/ FR SCO BK	1406163	67	SAC-5P-MS/ 2,0-923/FS CAN SCO	1419052	135	SAC-8P-MR-FR SH SCO BK/...	1405841	73	SACB-4/ 4- 5,0PUR SCO P	1452398	77
SAC-5P-MR/ 0,5-542/ FS SCO BK	1406161	67	SAC-5P-MS/ 2,0-924 SCO	1405981	132	SAC-8P-MR-FS SCO BK/...	1405848	71	SACB-4/ 4-10,0PUR SCO P	1452408	77
SAC-5P-MR/ 0,5-923/FR CAN SCO	1419074	135	SAC-5P-MS/ 3,0-PUR/AD-2L SCO	1435069	110	SAC-8P-MR-FS SH SCO BK/...	1405840	73	SACB-4/ 4-C SCO P	1452741	77
SAC-5P-MR/ 0,5-923/FS CAN SCO	1419058	135	SAC-5P-MS/ 5,0-542 SCO BK	1406158	66	SAC-8P-MR/ 0,5-542/ FR SCO BK	1406099	71	SACB-4/ 4-L SCO P PUR/	1401376	74
SAC-5P-MR/ 0,5-924/FR SCO	1405975	133	SAC-5P-MS/ 5,0-542 SH SCO BK	1406138	68	SAC-8P-MR/ 0,5-542/ FS SCO BK	1406096	71	SACB-4/ 4-L 5,0PUR SCO P	1452576	74
SAC-5P-MR/ 0,5-924/FS SCO	1405973	133	SAC-5P-MS/ 5,0-920 SCO	1518180	136	SAC-8P-MR/ 1,5-542/ FR SCO BK	1406097	71	SACB-4/ 4-L 5,0PUR SCO P NPN	1405678	76
SAC-5P-MR/ 1,0-923/FR CAN SCO	1419075	135	SAC-5P-MS/ 5,0-920/FS SCO	1518290	136	SAC-8P-MR/ 1,5-542/ FS SCO BK	1406095	71	SACB-4/ 4-L 10,0PUR SCO P	1452589	74
SAC-5P-MR/ 1,0-923/FS CAN SCO	1419059	135	SAC-5P-MS/ 5,0-923 CAN SCO	1419040	134	SAC-8P-MR/ 2,0-542 SCO BK	1406102	70	SACB-4/ 4-L 10,0PUR SCO P NPN	1405687	76
SAC-5P-MR/ 1,5-542/ FR SCO BK	1406162	67	SAC-5P-MS/ 5,0-923/FR CAN SCO	1419069	135	SAC-8P-MR/ 2,0-542 SH SCO BK	1406080	72	SACB-4/ 4-L-C SCO P	1452806	74
SAC-5P-MR/ 1,5-542/ FS SCO BK	1406160	67	SAC-5P-MS/ 5,0-923/FS CAN SCO	1419053	135	SAC-8P-MR/ 5,0-542 SCO BK	1406101	70	SACB-4/ 8- 5,0PUR SCO P	1452424	77
SAC-5P-MR/ 1,5-924/FR SCO	1405974	133	SAC-5P-MS/ 5,0-924 SCO	1405980	132	SAC-8P-MR/ 5,0-542 SH SCO BK	1406079	72	SACB-4/ 8-10,0PUR SCO P	1452437	77
SAC-5P-MR/ 1,5-924/FS SCO	1405972	133	SAC-5P-MS/ 3,0-600/M12FR-3L FB	1404106	155	SAC-8P-MR/0,5-542/ FRSH SCO BK	1406077	73	SACB-4/ 8-C SCO P	1452754	78
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0800370 WMS 19,1 (60X30)R	186	1403962 SAC-4P-5,0-600/M12FR HD	156	1404056 SAC-5P-10,0-600/M12FR HD	159	1405819 SAC-4P-M 8MR-M 8FS SH BK/.....	40
0800373 WMS 2,4 (30X4)R	186	1403963 SAC-4P-10,0-600/M12FR HD	156	1404057 SAC-5P-1,5-600/M12FR-3L HD	159	1405820 SAC-4P-M 8MR-M 8FR SH BK/.....	40
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0800377 WMS 9,5 (30X16)R	186	1403967 SAC-4P-10,0-600/M12FR-3L HD	156	1404063 SAC-5P-M12MS/0,3-600/M12FS HD	160	1405824 SAC-3P-MS-M 8FS SH SCO BK/.....	34
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0800380 WMS 3,2 (15X5)R	186	1403969 SAC-4P-M12MS/0,6-600/M12FS HD	157	1404065 SAC-5P-M12MS/1,5-600/M12FS HD	160	1405826 SAC-3P-MR-M 8FS SH SCO BK/.....	34
0800382 WMS 4,8 (15X9)R	186	1403970 SAC-4P-M12MS/1,5-600/M12FS HD	157	1404066 SAC-5P-M12MS/3,0-600/M12FS HD	160	1405827 SAC-3P-MR-M 8FR SH SCO BK/.....	34
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0801359 THERMOMARK-RIBBON 110-WMSU WH	185	1403972 SAC-4P-M12MS/0,3-600/M12FR HD	157	1404068 SAC-5P-M12MS/0,6-600/M12FR HD	160	1405829 SAC-3P-M 8MS-M 8FR SH BK/.....	32
0801371 THERMOMARK-RIBBON 110-TC	187	1403973 SAC-4P-M12MS/0,6-600/M12FR HD	157	1404069 SAC-5P-M12MS/1,5-600/M12FR HD	160	1405830 SAC-3P-M 8MS SH BK/.....	32
0801471 UCT-EM (20X9)	187	1403974 SAC-4P-M12MS/1,5-600/M12FR HD	157	1404070 SAC-5P-M12MS/3,0-600/M12FR HD	160	1405831 SAC-3P-M 8MR-M 8FS SH BK/.....	33
0801491 UCT-EM (17,5X9)	187	1403975 SAC-4P-M12MS/3,0-600/M12FR HD	157	1404071 SAC-5P-MS/0,3-600/M12FR-3L HD	160	1405832 SAC-3P-M 8MR-M 8FR SH BK/.....	33
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0817523 WML 5 (25X10)R	186	1403977 SAC-4P-MS/0,6-600/M12FR-3L HD	157	1404073 SAC-5P-MS/1,5-600/M12FR-3L HD	160	1405834 SAC-3P-M 8FS SH BK/.....	32
0817536 WML 14 (25X19)R	186	1403978 SAC-4P-MS/1,5-600/M12FR-3L HD	157	1404074 SAC-5P-M12MS/1,5-600 FB	154	1405835 SAC-3P-M 8FR SH BK/.....	32
0817552 WML 14 (38X19)R	186	1403979 SAC-4P-MS/3,0-600/M12FR-3L HD	157	1404075 SAC-5P-M12MS/3,0-600 FB	154	1405836 SAC-8P-MS-FS SH SCO BK/.....	72
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0829542 THERMOMARK-RIBBON 110 GN	185	1403982 SAC-4P-M12MS/3,0-600 SH HD	158	1404077 SAC-5P-M12MS/10,0-600 FB	154	1405838 SAC-8P-MS-FR SH SCO BK/.....	72
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0829544 THERMOMARK-RIBBON 110 BU	185	1403984 SAC-4P-M12MS/10,0-600 SH HD	158	1404079 SAC-5P-M12MR/1,5-600 FB	154	1405840 SAC-8P-MR-FS SH SCO BK/.....	73
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1208432 SAC BIT M12-D15	180	1403989 SAC-4P-5,0-600/M12FS SH HD	158	1404084 SAC-5P-3,0-600/M12FS FB	154	1405845 SAC-8P-MS-FS SCO BK/.....	71
1208445 SACC BIT M12-D20	180	1403990 SAC-4P-M12MS/0,3-600/FS SH HD	158	1404085 SAC-5P-5,0-600/M12FS FB	154	1405846 SAC-8P-MS-FR SCO BK/.....	71
1208461 SAC BIT M8-D10	180	1403991 SAC-4P-M12MS/0,6-600/FS SH HD	158	1404086 SAC-5P-10,0-600/M12FS FB	154	1405847 SAC-8P-MS SCO BK/.....	70
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1208487 TSD 02 SAC	180	1403993 SAC-4P-M12MS/3,0-600/FS SH HD	158	1404089 SAC-5P-3,0-600/M12FR FB	154	1405849 SAC-8P-MR-FR SCO BK/.....	71
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1212150 WIREFOX 10	179	1404002 SAC-4P-M12MS/1,5-600 FB	152	1404093 SAC-5P-1,5-600/M12FR-3L FB	154	1405852 SAC-8P-FR SCO BK/.....	70
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1212494 MICROFOX-SP-1	179	1404022 SAC-4P-1,5-600/M12FR-3L FB	152	1405678 SACB-4/ 4-L- 5,0PUR SCO P NPN	76	1405875 NBC-FSD SCO US/93E/...	118
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1208429	TSD 04 SAC	171	1403993	SAC-4P-M12MS/3,0-600/FS SH HD	158	1404093	SAC-5P-1,5-600/M12FR-3L FB	154	1405851	SAC-8P-FS SCO BK/.....	70
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1208445	SACC BIT M12-D20	180	1404003	SAC-4P-M12MS/3,0-600 FB	152	1404095	SAC-5P-5,0-600/M12FR-3L FB	154	1405856	NBC-MR-R4AC SCO US/94B/...	121
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1212151	WIREFOX 4/SB	179	1404010	SAC-4P-1,5-600/M12FS FB	152	1404103	SAC-5P-M12MS/0,6-600/M12FR FB	155	1405863	NBC-MS-FS SCO US/94B/...	121
1212152	WIREFOX 10/SB	179	1404011	SAC-4P-3,0-600/M12FS FB	152	1404104	SAC-5P-M12MS/1,5-600/M12FR FB	155	1405864	NBC-MS SCO US/94B/...	120
1212156	WIREFOX 4	179	1404012	SAC-4P-5,0-600/M12FS FB	152	1404105	SAC-5P-M12MS/3,0-600/M12FR FB	155	1405865	NBC-FS SCO US/94B/...	120
1212157	WIREFOX 16-1	178	1404013	SAC-4P-10,0-600/M12FS FB	152	1404106	SAC-5P-MS/0,3-600/M12FR-3L FB	155	1405866	VS-M12FSBP-OE-93E-LI/2,0	128
1212160	WIREFOX-D 11	178	1404014	SAC-4P-1,5-600/M12FR FB	152	1404107	SAC-5P-MS/0,6-600/M12FR-3L FB	155	1405867	NBC-MRD-R4AC SCO US/93E/...	119
1212161	WIREFOX D 40	178	1404015	SAC-4P-3,0-600/M12FR-3L FB	152	1404108	SAC-5P-MS/1,5-600/M12FR-3L FB	155	1405868	NBC-MRD-MRD SCO US/93E/...	119
1212312	WIREFOX-D 11/SB	178	1404017	SAC-4P-5,0-600/M12FR FB	152	1404109	SAC-5P-MS/3,0-600/M12FR-3L FB	155	1405869	NBC-MRD-FRD SCO US/93E/...	119
1212313	WIREFOX-D 40/SB	178	1404018	SAC-4P-10,0-600/M12FR FB	152	1404548	VS-BH-M12FSX-10G-RJ45/90	126	1405870	NBC-FRD SCO US/93E/...	118
1212315	TSD 25 SAC	172	1404019	SAC-4P-1,5-600/M12FR-3L FB	152	1404550	SAC-5P-MS/3,0-600/M12FR-3L HD	160	1405871	NBC-MRD SCO US/93E/...	118
1212368	WIREFOX 2,5	179	1404020	SAC-4P-3,0-600/M12FR-3L FB	152	1404667	VALVE SCREW-M3X29 VPE100	184	1405872	NBC-MRD-R4AC SCO US/93E/...	119
1212369	WIREFOX 2,5/SB	179	1404021	SAC-4P-5,0-600/M12FR-3L FB	152	1405057	VS-BH-M12FS-8CON-RJ45/ 90	126	1405873	NBC-MSD-MSD SCO US/93E/...	119
1212486	SAC BIT HOOD-W 24	172	1404022	SAC-4P-10,0-600/M12FR-3L FB	152	1405060	VS-BH-M12FS-8CON-RJ45/180	126	1405874	NBC-MSD-FSD SCO US/93E/...	119
1212487	MICROFOX-SP-1	179	1404023	SAC-4P-M12MS/0,3-600/M12FS FB	153	1405678	SACB-4/- 4-L- 5.0PUR SCO P NPN	76	1405875	NBC-FSD SCO US/93E/...	118
1212488	MICROFOX-SP	179	1404024	SAC-4P-M12MS/0,6-600/M12FS FB	153	1405687	SACB-4/- 4-L-10,0PUR SCO P NPN	76	1405876	NBC-MSD SCO US/93E/...	118

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1405878 SAC-5P-MS-FR SH SCO BK/.....	68	1405973 SAC-5P-MR/0,5-924/FS SCO	133	1406072 SAC-8P-MS/5,0-542 SH SCO BK	72	1406158 SAC-5P-MS/5,0-542 SCO BK	66
1405879 SAC-5P-MS SH SCO BK/.....	68	1405974 SAC-5P-MR/1,5-924/FR SCO	133	1406073 SAC-8P-MR/0,5-542/FRSH SCO BK	72	1406159 SAC-5P-MS/2,0-542 SCO BK	66
1405880 SAC-5P-MR-FS SH SCO BK/.....	69	1405975 SAC-5P-MR/0,5-924/FR SCO	133	1406074 SAC-8P-MR/1,5-542/FRSH SCO BK	73	1406160 SAC-5P-MR/1,5-542/FR SCO BK	67
1405881 SAC-5P-MR-FR SH SCO BK/.....	69	1405976 SAC-5P-MR/10,0-924 SCO	132	1406075 SAC-8P-MR/0,5-542/FRSH SCO BK	73	1406161 SAC-5P-MR/0,5-542/FR SCO BK	67
1405883 SAC-5P-MR SH SCO BK/.....	68	1405977 SAC-5P-MR/5,0-924 SCO	132	1406076 SAC-8P-MR/1,5-542/FRSH SCO BK	73	1406162 SAC-5P-MR/1,5-542/FR SCO BK	67
1405884 SAC-5P-FS SH SCO BK/.....	68	1405978 SAC-5P-MR/2,0-924 SCO	132	1406077 SAC-8P-MR/0,5-542/FRSH SCO BK	73	1406163 SAC-5P-MR/0,5-542/FR SCO BK	67
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1405887 SAC-5P-MS-FR SCO BK/.....	67	1405981 SAC-5P-MS/2,0-924 SCO	132	1406080 SAC-8P-MR/2,0-542 SH SCO BK	72	1406166 SAC-5P-MR/2,0-542 SCO BK	66
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1405889 SAC-5P-MR-FS SCO BK/.....	67	1405983 SAC-5P-2,0-924/FR SCO	132	1406082 SAC-8P-5,0-542/FRSH SCO BK	72	1406168 SAC-5P-5,0-542/FR SCO BK	66
1405890 SAC-5P-MR-FR SCO BK/.....	67	1405984 SAC-5P-10,0-924/FR SCO	132	1406083 SAC-8P-2,0-542/FRSH SCO BK	72	1406169 SAC-5P-2,0-542/FR SCO BK	66
1405891 SAC-5P-MR SCO BK/.....	66	1405985 SAC-5P-5,0-924/FS SCO	132	1406084 SAC-8P-10,0-542/FRSH SCO BK	72	1406170 SAC-5P-10,0-542/FR SCO BK	66
1405892 SAC-5P-FS SCO BK/.....	66	1405986 SAC-5P-2,0-924/FS SCO	132	1406086 SAC-8P-5,0-542/FRSH SCO BK	72	1406171 SAC-5P-5,0-542/FR SCO BK	66
1405893 SAC-5P-FR SCO BK/.....	66	1405987 SAC-5P-10,0-924/FS SCO	132	1406087 SAC-8P-2,0-542/FRSH SCO BK	72	1406172 SAC-5P-2,0-542/FR SCO BK	66
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1405895 SAC-4P-MS-FR SH SCO BK/.....	63	1405989 SAC-5P-MS/0,5-924/FS SCO	133	1406089 SAC-8P-MS/0,5-542/FRSCO BK	71	1406174 SAC-4P-MS/0,5-542/FRSCO BK	63
1405896 SAC-4P-MS SH SCO BK/.....	63	1405990 SAC-5P-MS/1,5-924/FR SCO	133	1406090 SAC-8P-MS/1,5-542/FRSCO BK	71	1406175 SAC-4P-MS/1,5-542/FRSCO BK	63
1405897 SAC-4P-MR-FS SH SCO BK/.....	64	1405991 SAC-5P-MS/0,5-924/FR SCO	133	1406091 SAC-8P-MS/0,5-542/FRSCO BK	71	1406176 SAC-4P-MS/0,5-542/FRSCO BK	63
1405898 SAC-4P-MR-FR SH SCO BK/.....	64	1405993 SAC-4P-MS/1,5-542/M8FSSH SCOBK	41	1406092 SAC-8P-MS/10,0-542 SCO BK	70	1406177 SAC-4P-MS/10,0-542 SH SCO BK	63
1405899 SAC-4P-MR SH SCO BK/.....	63	1405994 SAC-4P-MS/0,5-542/M8FSSH SCOBK	41	1406093 SAC-8P-MS/0,5-542 SCO BK	70	1406178 SAC-4P-MS/0,5-542 SH SCO BK	63
1405900 SAC-4P-FS SH SCO BK/.....	63	1405995 SAC-4P-MS/1,5-542/M8FRSH SCOBK	41	1406094 SAC-8P-MS/2,0-542 SCO BK	70	1406179 SAC-4P-MS/2,0-542 SH SCO BK	63
1405901 SAC-4P-FR SH SCO BK/.....	63	1405996 SAC-4P-MS/0,5-542/M8FRSH SCOBK	41	1406095 SAC-8P-MR/1,5-542/FRSCO BK	71	1406180 SAC-4P-MR/1,5-542/FRSCO BK	64
1405902 SAC-4P-M 8MS-M 8FS BK/.....	36	1405997 SAC-4P-MR/1,5-542/M8FSSH SCOBK	41	1406096 SAC-8P-MR/0,5-542/FRSCO BK	71	1406181 SAC-4P-MR/0,5-542/FRSCO BK	64
1405903 SAC-4P-M 8MS-M 8FR BK/.....	36	1405998 SAC-4P-MR/0,5-542/M8FSSH SCOBK	41	1406097 SAC-8P-MR/1,5-542/FRSCO BK	71	1406182 SAC-4P-MR/1,5-542/FRSCO BK	64
1405904 SAC-4P-M 8MS-FS SCO BK/.....	37	1405999 SAC-4P-MR/1,5-542/M8FRSH SCOBK	41	1406099 SAC-8P-MR/0,5-542/FRSCO BK	71	1406183 SAC-4P-MR/0,5-542/FRSCO BK	64
1405905 SAC-4P-M 8MS-FR SCO BK/.....	37	1406000 SAC-4P-MR/0,5-542/M8FRSH SCOBK	41	1406100 SAC-8P-MR/10,0-542 SCO BK	70	1406184 SAC-4P-MR/10,0-542 SH SCO BK	63
1405906 SAC-4P-M 8MS BK/.....	35	1406001 SAC-4P-M8MS/1,5-542/M8FS SH BK	39	1406101 SAC-8P-MR/5,0-542 SCO BK	70	1406185 SAC-4P-MR/5,0-542 SH SCO BK	63
1405907 SAC-4P-M 8MR-M8FS BK/.....	36	1406002 SAC-4P-M8MS/0,5-542/M8FS SH BK	39	1406102 SAC-8P-MR/2,0-542 SCO BK	70	1406186 SAC-4P-MR/2,0-542 SH SCO BK	63
1405908 SAC-4P-M 8MR-M8FR BK/.....	36	1406003 SAC-4P-M8MS/1,5-542/M8FR SH BK	39	1406103 SAC-8P-10,0-542/FRSCO BK	70	1406187 SAC-4P-10,0-542/FRSH SCO BK	63
1405909 SAC-4P-M 8MR-FS SCO BK/.....	37	1406004 SAC-4P-M8MS/0,5-542/M8FR SH BK	39	1406104 SAC-8P-5,0-542/FRSCO BK	70	1406188 SAC-4P-5,0-542/FRSH SCO BK	63
1405910 SAC-4P-M 8MR-FR SCO BK/.....	37	1406005 SAC-4P-M8MS/10,0-542 SH BK	39	1406105 SAC-8P-2,0-542/FRSCO BK	70	1406189 SAC-4P-2,0-542/FRSH SCO BK	63
1405911 SAC-4P-M 8MR BK/.....	35	1406006 SAC-4P-M8MS/5,0-542 SH BK	39	1406106 SAC-8P-10,0-542/FRSCO BK	70	1406190 SAC-4P-10,0-542/FRSH SCO BK	63
1405912 SAC-4P-MS-M8FS SCO BK/.....	37	1406007 SAC-4P-M8MS/2,0-542 SH BK	39	1406107 SAC-8P-5,0-542/FRSCO BK	70	1406191 SAC-4P-5,0-542/FRSH SCO BK	63
1405913 SAC-4P-MS-M8FR SCO BK/.....	38	1406008 SAC-4P-M8MR/1,5-542/M8FS SH BK	40	1406108 SAC-8P-2,0-542/FRSCO BK	70	1406192 SAC-4P-2,0-542/FRSH SCO BK	63
1405914 SAC-4P-MS-FS SCO BK/.....	60	1406009 SAC-4P-M8MR/0,5-542/M8FS SH BK	40	1406112 NBC-MR/2,0-94B/R4AC SCO US	121	1406193 SAC-4P-M8MS/1,5-542/M8FS BK	36
1405915 SAC-4P-MS-FR SCO BK/.....	60	1406010 SAC-4P-M8MR/1,5-542/M8FR SH BK	40	1406113 NBC-MR/2,0-94B/MR SCO US	121	1406194 SAC-4P-M8MS/0,5-542/M8FS BK	36
1405916 SAC-4P-MS SCO BK/.....	59	1406011 SAC-4P-M8MR/0,5-542/M8FR SH BK	40	1406114 NBC-MR/2,0-94B/FR SCO US	121	1406195 SAC-4P-M8MS/1,5-542/M8FR BK	36
1405917 SAC-4P-MS-M8FS SCO BK/.....	37	1406012 SAC-4P-M8MR/10,0-542 SH BK	39	1406115 NBC-MR/2,0-94B/FR SCO US	120	1406196 SAC-4P-M8MS/0,5-542/M8FR BK	36
1405918 SAC-4P-MR-M8FR SCO BK/.....	38	1406013 SAC-4P-M8MR/5,0-542 SH BK	39	1406116 NBC-MR/2,0-94B SCO US	120	1406197 SAC-4P-M8MS/1,5-542/FRSCO BK	37
1405919 SAC-4P-MR-FS SCO BK/.....	60	1406015 SAC-4P-M8MR/2,0-542 SH BK	39	1406117 NBC-MS/2,0-94B/R4AC SCO US	121	1406198 SAC-4P-M8MS/0,5-542/FRSCO BK	37
1405920 SAC-4P-MR-FR SCO BK/.....	60	1406016 SAC-4P-10,0-542/M8FS SH BK	39	1406118 NBC-MS/2,0-94B/MS SCO US	121	1406199 SAC-4P-M8MS/1,5-542/FRSCO BK	37
1405922 SAC-4P-MR SCO BK/.....	59	1406017 SAC-4P-5,0-542/M8FS SH BK	39	1406119 NBC-MS/2,0-94B/FRSCO US	121	1406200 SAC-4P-M8MS/0,5-542/FRSCO BK	37
1405923 SAC-4P-M 8FS BK/.....	35	1406018 SAC-4P-2,0-542/M8FS SH BK	39	1406120 NBC-2,0-94B/FRSCO US	120	1406201 SAC-4P-M8MS/10,0-542 BK	35
1405924 SAC-4P-M 8FR BK/.....	35	1406019 SAC-4P-10,0-542/M8FR SH BK	39	1406121 NBC-MS/2,0-94B SCO US	120	1406202 SAC-4P-M8MS/0,5-542 BK	35
1405925 SAC-4P-FS SCO BK/.....	59	1406020 SAC-4P-5,0-542/M8FR SH BK	39	1406122 NBC-MRD/2,0-93E/R4AC SCO US	119	1406203 SAC-4P-M8MS/2,0-542 BK	35
1405926 SAC-4P-FR SCO BK/.....	59	1406021 SAC-4P-2,0-542/M8FR SH BK	39	1406123 NBC-MRD/2,0-93E/MRD SCO US	119	1406204 SAC-4P-M8MR/1,5-542/M8FS BK	36
1405927 SAC-3P-MS-FS SH SCO BK/.....	56	1406022 SAC-3P-MS/1,5-542/M8FSSH SCOBK	34	1406124 NBC-MRD/2,0-93E/FRD SCO US	119	1406205 SAC-4P-M8MR/0,5-542/M8FS BK	36
1405928 SAC-3P-MS-FR SH SCO BK/.....	56	1406023 SAC-3P-MS/0,5-542/M8FSSH SCOBK	34	1406125 NBC-2,0-93E/FRD SCO US	118	1406206 SAC-4P-M8MR/1,5-542/M8FR BK	36
1405929 SAC-3P-MS SH SCO BK/.....	56	1406024 SAC-3P-MS/1,5-542/M8FRSH SCOBK	34	1406126 NBC-MRD/2,0-93E SCO US	118	1406207 SAC-4P-M8MR/0,5-542/M8FR BK	36
1405930 SAC-3P-MR-FS SH SCO BK/.....	57	1406025 SAC-3P-MS/0,5-542/M8FRSH SCOBK	34	1406127 NBC-MSD/2,0-93E/R4AC SCO US	119	1406208 SAC-4P-M8MR/1,5-542/FRSCO BK	37
1405931 SAC-3P-MR-FR SH SCO BK/.....	57	1406026 SAC-3P-MR/1,5-542/M8FSSH SCOBK	34	1406128 NBC-MSD/2,0-93E/MSD SCO US	119	1406209 SAC-4P-M8MR/0,5-542/FRSCO BK	37
1405932 SAC-3P-MR SH SCO BK/.....	56	1406027 SAC-3P-MR/0,5-542/M8FSSH SCOBK	34	1406129 NBC-MSD/2,0-93E/FRD SCO US	119	1406210 SAC-4P-M8MR/1,5-542/FRSCO BK	37
1405933 SAC-3P-FS SH SCO BK/.....	56	1406028 SAC-3P-MR/1,5-542/M8FRSH SCOBK	34	1406130 NBC-2,0-93E/FRD SCO US	118	1406211 SAC-4P-M8MR/0,5-542/FRSCO BK	37
1405934 SAC-3P-FR SH SCO BK/.....	56	1406029 SAC-3P-MR/0,5-542/M8FRSH SCOBK	34	1406131 NBC-MSD/2,0-93E SCO US	118	1406212 SAC-4P-M8MR/10,0-542 BK	35
1405935 SAC-3P-M 8MS-M 8FS BK/.....	29	1406042 SAC-3P-M8MS/1,5-542/M8FS SH BK	32	1406132 SAC-5P-MS/1,5-542/FRSH SCO BK	68	1406213 SAC-4P-M8MR/5,0-542 BK	35
1405936 SAC-3P-M 8MS-M 8FR BK/.....	29	1406043 SAC-3P-M8MS/0,5-542/M8FS SH BK	32	1406133 SAC-5P-MS/0,5-542/FRSH SCO BK	68	1406214 SAC-4P-M8MR/2,0-542 BK	35
1405937 SAC-3P-M 8MS-FS SCO BK/.....	30	1406044 SAC-3P-M8MS/1,5-542/M8FR SH BK	32	1406134 SAC-5P-MS/1,5-542/FRSH SCO BK	68	1406215 SAC-4P-MS/1,5-542/M8FS SCO BK	37
1405938 SAC-3P-M 8MS-FR SCO BK/.....	30	1406045 SAC-3P-M8MS/0,5-542/M8FR SH BK	32	1406135 SAC-5P-MS/0,5-542/FRSH SCO BK	68	1406216 SAC-4P-MS/0,5-542/M8FS SCO BK	37
1405939 SAC-3P-M 8MS BK/.....	28	1406046 SAC-3P-M8MS/10,0-542 SH BK	32	1406136 SAC-5P-MS/10,0-542 SH SCO BK	68	1406217 SAC-4P-MS/1,5-542/M8FR SCO BK	38
1405940 SAC-3P-M 8MR-M 8FS BK/.....	29	1406047 SAC-3P-M8MR/5,0-542 SH BK	32	1406138 SAC-5P-MS/5,0-542 SH SCO BK	68	1406219 SAC-4P-MS/0,5-542/M8FR SCO BK	38
1405941 SAC-3P-M 8MR-M 8FR BK/.....	29	1406048 SAC-3P-M8MS/2,0-542 SH BK	32	1406139 SAC-5P-MS/2,0-542 SH SCO BK	68	1406220 SAC-4P-MS/1,5-542/FRSCO BK	60
1405942 SAC-3P-M 8MR-FS SCO BK/.....	30	1406049 SAC-3P-M8MR/1,5-542/M8FS SH BK	33	1406140 SAC-5P-MR/1,5-542/FRSH SCO BK	69	1406221 SAC-4P-MS/0,5-542/FRSCO BK	60
1405943 SAC-3P-M 8MR-FR SCO BK/.....	28	1406054 SAC-3P-M8MR/0,5-542/M8FS SH BK	33	1406141 SAC-5P-MR/0,5-542/FRSH SCO BK	69	1406222 SAC-4P-MS/1,5-542/FRSCO BK	60
1405944 SAC-3P-M 8MR BK/.....	30	1406055 SAC-3P-M8MR/1,5-542/M8FR SH BK	33	1406142 SAC-5P-MR/1,5-542/FRSH SCO BK	69	1406223 SAC-4P-MS/0,5-542/FRSCO BK	60
1405945 SAC-3P-MS-M8FS SCO BK/.....	30	1406057 SAC-3P-M8MR/0,5-542/M8FR SH BK	33	1406143 SAC-5P-MR/0,5-542/FRSH SCO BK	69	1406224 SAC-4P-MS/10,0-542 SCO BK	59
1405946 SAC-3P-MS-M8FR SCO BK/.....	31	1406058 SAC-3P-M8MR/10,0-542 SH BK	32	1406144 SAC-5P-MR/10,0-542 SH SCO BK	68	1406225 SAC-4P-MS/5,0-542 SCO BK	59
1405947 SAC-3P-MS-FS SCO BK/.....	53	1406059 SAC-3P-M8MR/5,0-542 SH BK	32	1406145 SAC-5P-MR/5,0-542 SH SCO BK	68	1406226 SAC-4P-MS/2,0-542 SCO BK	59
1405948 SAC-3P-MS-FR SCO BK/.....	53	1406060 SAC-3P-M8MR/2,0-542 SH BK	32	1406146 SAC-5P-MR/2,0-542 SH SCO BK	68	1406227 SAC-4P-MS/1,5-542/M8FS SCO BK	37
1405949 SAC-3P-MS SCO BK/.....	52	1406061 SAC-3P-10,0-542/M8FS SH BK	32	1406147 SAC-5P-10,0-542/FRSH SCO BK	68	1406228 SAC-4P-MR/0,5-542/M8FS SCO BK	37
1405951 SAC-3P-MR-M8FS SCO BK/.....	30	1406062 SAC-3P-5,0-542/M8FS SH BK	32	1406148 SAC-5P-5,0-542/FRSH SCO BK	68	1406229 SAC-4P-MR/1,5-542/M8FR SCO BK	38
1405952 SAC-3P-MR-M8FR SCO BK/.....	31	1406063 SAC-3P-2,0-542/M8FS SH BK	32	1406149 SAC-5P-2,0-542/FRSH SCO BK	68	1406230 SAC-4P-MR/0,5-542/M8FR SCO BK	38
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1405955 SAC-3P-MR SCO BK/.....	52	1406066 SAC-3P-2,0-542/M8FR SH BK	32	1406152 SAC-5P-2,0-542/FRSH SCO BK	68	1406233 SAC-4P-MR/1,5-542/FRSCO BK	60
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1406246	SAC-4P-2,0-542/ FS SCO BK		59	1407877	VS-M12FSBP-OE-94B-LI/5,0		128	1417922	SAC-5P-MINMR/ 2,0-928/MINFR DN		139	1419063	SAC-5P-MR/15,0-923/FS CAN SCO		135
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1406249	SAC-4P- 5,0-542/ FR SCO BK		59	1408728	NBC-MSD/ 10,0-93E SCO US		118	1417948	SAC-5P-MINMR/10,0-928/MINFR DN		139	1419065	SAC-5P-MS/ 0,3-923/FR CAN SCO		135
1406250	SAC-4P- 2,0-542/ FR SCO BK		59	1408729	NBC- 5,0-93E/FSD SCO US		118	1417951	SAC-5P-MINMR/15,0-928/MINFR DN		139	1419066	SAC-5P-MS/ 0,5-923/FR CAN SCO		135
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1406253	SAC-3P-MS/1,5-542/ FRSH SCO BK		56	1408732	NBC-MSD/ 0,5-93E/MSD SCO US		119	1418439	SAC-5P- 5,0-923/MINFS DN		140	1419069	SAC-5P-MS/ 5,0-923/FR CAN SCO		135
1406254	SAC-3P-MS/0,5-542/ FRSH SCO BK		56	1408733	NBC-MSD/ 0,5-93E/R4AC SCO US		119	1418442	SAC-5P-10,0-923/MINFS DN		140	1419070	SAC-5P-MS/10,0-923/FR CAN SCO		135
1406255	SAC-3P-MS/10,0-542 SH SCO BK		56	1408734	NBC-MRD/ 5,0-93E SCO US		118	1418455	SAC-5P-15,0-923/MINFS DN		140	1419071	SAC-5P-MS/15,0-923/FR CAN SCO		135
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1406261	SAC-3P-MR/0,5-542/ FRSH SCO BK		57	1408742	NBC-MRD/ 0,5-93E/R4AC SCO US		119	1418510	SAC-5P-20,0-923/MINFR DN		140	1419077	SAC-5P-MR/ 5,0-923/FR CAN SCO		135
1406262	SAC-3P-MR/10,0-542 SH SCO BK		56	1408743	NBC-MS/ 5,0-94B SCO US		120	1418523	SAC-5P-MINMS/ 2,0-923 DN		140	1419078	SAC-5P-MR/10,0-923/FR CAN SCO		135
1406263	SAC-3P-MR/ 5,0-542 SH SCO BK		56	1408744	NBC-MS/ 10,0-94B SCO US		120	1418536	SAC-5P-MINMS/ 5,0-923 DN		140	1419079	SAC-5P-MR/15,0-923/FR CAN SCO		135
1406264	SAC-3P-MR/ 2,0-542 SH SCO BK		56	1408745	NBC- 5,0-94B/FS SCO US		120	1418549	SAC-5P-15,0-923/MINFS DN		140	1419080	SAC-5P-MR/20,0-923/FR CAN SCO		135
1406265	SAC-3P-10,0-542/ FS SH SCO BK		56	1408746	NBC- 10,0-94B/FS SCO US		120	1418552	SAC-5P-MINMS/15,0-923 DN		140	1419081	SAC-5P- 2,0-923/FS CAN SCO		134
1406266	SAC-3P- 5,0-542/ FS SH SCO BK		56	1408747	NBC-MS/ 0,5-94B/FS SCO US		121	1418565	SAC-5P-MINMS/20,0-923 DN		140	1419629	SACC-DSI-M12MS-4CON-M16/0,5		85
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1406268	SAC-3P-10,0-542/ FR SH SCO BK		56	1408749	NBC-MS/ 0,5-94B/R4AC SCO US		121	1418581	SAC-5P-MINMR/ 5,0-923 DN		140	1419645	SACC-DSI-M12MS-5CON-M16/0,5		86
1406269	SAC-3P- 5,0-542/ FR SH SCO BK		56	1408751	NBC-MR/ 5,0-94B SCO US		120	1418594	SAC-5P-MINMR/10,0-923 DN		140	1419658	SACC-DSI-M12FS-5CON-M16/0,5		86
1406270	SAC-3P- 2,0-542/ FR SH SCO BK		56	1408752	NBC-MR/ 10,0-94B SCO US		120	1418604	SAC-5P-MINMR/15,0-923 DN		140	1419687	SACC-DSI-M12MS-8CON-M16/0,5		87
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1406272	SAC-3P-M8MS/ 0,5-542/M8 FS BK		29	1408755	NBC- 10,0-94B/FR SCO US		120	1418620	SAC-5P-MINMS/ 0,3-923/MINFS DN		141	1419920	SAC-5PY-M/2XF VP SH		81
1406273	SAC-3P-M8MS/ 1,5-542/M8 FR BK		29	1408756	NBC-MR/ 0,5-94B/FR SCO US		121	1418633	SAC-5P-MINMS/ 0,5-923/MINFS DN		141	1419933	SAC-5PY-F/FM-F VP SH		81
1406274	SAC-3P-M8MS/ 0,5-542/M8 FR BK		29	1408757	NBC-MR/ 5,0-94B/MR SCO US		121	1418646	SAC-5P-MINMS/ 1,0-923/MINFS DN		141	1419946	SAC-5PY-F/F2XM VP SH		81
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1406276	SAC-3P-M8MS/ 0,5-542/FS SCO BK		30	1412820	VS-M12FSBP-OE-94C-LI/2,0		128	1418662	SAC-5P-MINMS/ 5,0-923/MINFS DN		141	1420032	SAC-5P-MINMS/20,0-923/MINFR DN		141
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1406278	SAC-3P-M8MS/ 0,5-542/FR SCO BK		30	1417430	VS-08-M12MS-10G-P SCO		127	1418688	SAC-5P-MINMS/15,0-923/MINFS DN		141	1420058	SAC-5P-MINMR/ 5,0-923/MINFR DN		141
1406279	SAC-3P-M8MS/10,0-542 BK		28	1417443	VS-08-M12MR-10G-P SCO		127	1418691	SAC-5P-MINMS/20,0-923/MINFS DN		141	1420061	SAC-5P-MINMR/ 1,0-923/MINFR DN		141
1406280	SAC-3P-M8MS/ 5,0-542 BK		28	1417456	SAC-5P- 2,0-928/MINFS DN		138	1418701	SAC-5P-MINMR/ 0,3-923/MINFS DN		141	1420074	SAC-5P-MINMR/ 2,0-923/MINFR DN		141
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1406284	SAC-3P-M8MR/ 1,5-542/M8 FR BK		29	1417498	SAC-5P-20,0-928/MINFS DN		138	1418743	SAC-5P-MINMR/ 5,0-923/MINFS DN		141	1420113	SAC-5P-MINMR/20,0-923/MINFR DN		141
1406285	SAC-3P-M8MR/ 0,5-542/M8 FR BK		29	1417508	SAC-5P- 2,0-928/MINFR DN		138	1418756	SAC-5P-MINMR/10,0-923/MINFS DN		141	1424135	VS-FSBPXS-OE-94F/0,5		129
1406286	SAC-3P-M8MR/ 1,5-542/FS SCO BK		30	1417511	SAC-5P- 5,0-928/MINFR DN		138	1418769	SAC-5P-MINMR/15,0-923/MINFS DN		141	1424148	VS-FSBPXS-OE-94F/1,0		129
1406287	SAC-3P-M8MR/ 0,5-542/FS SCO BK		30	1417524	SAC-5P-10,0-928/MINFR DN		138	1418772	SAC-5P-MINMR/20,0-923/MINFS DN		141	1424151	VS-FSBPXS-OE-94F/2,0		129
1406288	SAC-3P-M8MR/ 1,5-542/FR SCO BK		30	1417537	SAC-5P-15,0-928/MINFR DN		138	1418785	SAC-5P-MINMS/ 0,3-923/MINFR DN		141	1424164	VS-FSBPXS-OE-94F/5,0		129
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1434882 SAC-3P-MS/0,3-PUR/A-1L-Z SCO	104	1440164 SACC-M16-KD-NUT-SH	184	1452152 SACC-VB-3CON-M16/A-1L-SV 110V	113	1454244 VS-M12MSD/5,0-93X/M12MSDOD	170
1434895 SAC-3P-MS/0,6-PUR/A-1L-Z SCO	104	1440177 SACC-PG9-KD-NUT-SH	184	1452165 SACC-VB-3CON-M16/A-1L-SV 230V	113	1454969 SAC-8PY-M/2XF VP SH	81
1434905 SAC-3P-MS/1,5-PUR/A-1L-Z SCO	104	1440465 VS-M12MSS-M12MSS-94F/0,5/10G	122	1452204 SACC-VB-3CON-M16/B-1L-SV 24V	113	1454972 SAC-8PY-M/2XF VP	81
1434918 SAC-3P-MS/3,0-PUR/A-1L-Z SCO	104	1440478 VS-M12MSS-M12MSS-94F/1,0/10G	122	1452217 SACC-VB-3CON-M16/B-1L-SV 110V	113	1456187 PROT-M12 FS-PA-CHAIN-EYE-DM12	183
1434921 SAC-3P-MS-A-1L-Z SCO/.....	104	1440481 VS-M12MSS-M12MSS-94F/2,0/10G	122	1452220 SACC-VB-3CON-M16/B-1L-SV 230V	113	1456190 PROT-M12 FS-PA-CHAIN-EYE-DM14	183
1434989 SAC-3P-1,5-PUR/A-1L-Z	104	1440494 VS-M12MSS-M12MSS-94F/5,0/10G	122	1452233 SACC-VB-3CON-M16/Bi-1L-SV 24V	113	1456200 PROT-M12 MS-PA-CHAIN-EYE-DM14	182
1434992 SAC-3P-3,0-PUR/A-1L-Z	104	1440504 VS-M12MSS-M12MSS-94F/10,0/10G	122	1452246 SACC-VB-3CON-M16/Bi-1L-SV 110V	113	1456226 SACC-MINMS-5CON-PG11/2,5	99
1435001 SAC-3P-5,0-PUR/A-1L-Z	104	1440517 VS-M12MSS-M12MSS-94F/15,0/10G	122	1452259 SACC-VB-3CON-M16/Bi-1L-SV 230V	113	1456242 SACC-MINMR-5CON-PG11/2,5	99
1435014 SAC-3P-10,0-PUR/A-1L-Z	104	1440520 VS-M12MSS-M12MSS-94F/20,0/10G	122	1452262 SACC-VB-3CON-M12/C-1L-SV 24V	113	1456271 SACC-MINFS-5CON-PG11/2,5	99
1435027 SAC-3P-A-1L-Z/.....	104	1440533 VS-M12MSS-OE-94F/1,0/10G	122	1452275 SACC-VB-3CON-M12/C-1L-SV 110V	113	1456297 SACC-MINFR-5CON-PG11/2,5	99
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1435056 SAC-5P-MS/1,5-PUR/AD-2L SCO	110	1440562 VS-M12MSS-OE-94F/10,0/10G	122	1452301 SACC-VB-3CON-M12/Ci-1L-SV 110V	113	1457380 SACB-8/16-C OD	171
1435069 SAC-5P-MS/3,0-PUR/AD-2L SCO	110	1440575 VS-M12MSS-OE-94F/15,0/10G	122	1452314 SACC-VB-3CON-M12/Ci-1L-SV 230V	113	1457908 SACC-VB-5CON-M16/AD-2L 24V	114
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1435700 SAC-3P-5,0-PUR/Ci-1L-Z	109	1443501 SAC-5P-1,5-431/MINFS PWR	142	1453795 SACC-DSI-MINFS-4CON-M26/1,0	101	1458415 SAC-10,0/0,15-116/2XB-1L-Z	107
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1503373 SACB-16X0,5/ 3X1,0-50,0 PUR	171	1523434 SACC-FS-4QO-0,34-M SCO	82	1532548 SAC-5P- 2,0-410/MINFS	95	1543223 SACC-M12MSD-4Q SH	127
1503412 SACB- 4/3-L-C-M8	42	1521591 SACC-MS-4QO-0,75-M SCO	82	1532551 SAC-5P- 4,0-410/MINFS	95	1543236 SACC-M12MS-8Q SH	127
1503425 SACB- 6/3-L-C-M8	42	1521601 SACC-FS-4QO-0,75-M SCO	82	1532564 SAC-5P- 6,0-410/MINFS	95	1543414 SACC-FR-5CON-PG 9-M SCO	83
1503438 SACB- 10/3-L-C-M8	42	1521668 SACC-MINMS-5CON-PG 9	99	1532580 SAC-3P- 2,0-410/MINFR	90	1543977 SAC-5P-MINT/2XMIN VP	97
1503467 SACC- 8/4-L-C-M8	43	1523434 SACC-E-FS-4CON-M16/0,5 SCO	85	1532593 SAC-3P- 4,0-410/MINFR	90	1546068 SACC-5P-Y/2XFS VP SCO	81
1504071 SACC-E-MU-M 8	48	1523450 SACC-E-MS-4CON-M16/0,5 SCO	85	1532603 SAC-3P- 6,0-410/MINFR	90	1551671 SACC-5P-DSI-M12MS/FS-M16	147
1504084 SACC-E-MU-PG9	85	1523476 SACC-E-FS-8CON-M16/0,5 SCO	86	1532629 SAC-4P- 2,0-410/MINFR	92	1551697 SACC-8P-DSI-M12MS/FS-M16	126
1504097 SACC-E-MU-M16	85	1523492 SACC-E-MS-8CON-M16/0,5 SCO	86	1532632 SAC-4P- 4,0-410/MINFR	92	1553129 PROT-MS SCO	182
1506888 SACC-M 8FS-3CON-M-SW	46	1523968 SAC-3P-Y/2XFS B PE SCO	80	1532645 SAC-4P- 6,0-410/MINFR	92	1553161 SACC-M12MS-4CON-PG 7-VA	162
1506891 SACC-M 8FS-4CON-M-SW	47	1523971 SAC-3P-Y/2XFS PE SCO	80	1532661 SAC-5P- 2,0-410/MINFR	95	1553174 SACC-M12MS-4CON-PG 9-VA	162
1507816 SAC-5P-M12MS CAN TR	97	1523984 SAC-3P-Y/2XM 8FS SCO	44	1532674 SAC-5P- 4,0-410/MINFR	95	1553187 SACC-M12MS-5CON-PG 7-VA	162
1511750 SACB- 8/3-L-C-M8	42	1525623 SACCEC-M12MS-5CON-M16/ 0,5-920 148	148	1532687 SAC-5P- 6,0-410/MINFR	92	1553190 SACC-M12MS-5CON-PG 9-VA	162
1511789 SACC-3P-M12Y/2XM12FS PE S21	80	1525636 SACCEC-M12MS-5CON-M16/ 1,0-920 148	148	1532700 SAC-3P-MINMS/ 2,0-420	91	1553200 SACC-M12MS-4CON-PG 7-VA	162
1511857 SACC-M12MS-8CON-PG 9-SH	84	1525649 SACCEC-M12MS-5CON-M16/ 2,0-920 148	148	1532713 SAC-3P-MINMS/ 4,0-420	91	1553213 SACC-M12MR-5CON-PG 7-VA	162
1511860 SACC-M12FS-8CON-PG 9-SH	84	1525652 SACCEC-M12MS-5CON-M16/ 5,0-920 148	148	1532726 SAC-3P-MINMS/ 6,0-420	91	1553226 SACC-M12MR-4CON-PG 9-VA	162
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1513758 SACC-E-M12FS-8CON-PG9/0,5	86	1525694 SACCEC-M12FS-5CON-M16/ 2,0-920 148	148	1532768 SAC-4P-MINMS/ 6,0-420	93	1553255 SACC-M12FS-5CON-PG 9-VA	162
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1514016 SAC-3P-M12Y/2XM12FS B PE S21	80	1529344 SAC-5P-M12FS CAN TR	146	1532797 SAC-5P-MINMS/ 4,0-420	96	1553271 SACC-M12FS-5CON-PG 9-VA	162
1514029 SAC-5P-M12Y/2XM12FS VP S21	81	1531743 SAC-3P-MINMS/ 2,0-400	90	1532807 SAC-5P-MINMS/ 6,0-420	96	1553284 SACC-M12FR-4CON-PG 7-VA	162
1516014 SACB- 4/3-L- 5,0PUR-M8	42	1531756 SAC-3P-MINMS/ 4,0-400	90	1532823 SAC-3P-MINMR/ 2,0-420	91	1553297 SACC-M12FR-5CON-PG 7-VA	162
1516027 SACB- 4/3-L-10,0PUR-M8	42	1531769 SAC-3P-MINMS/ 6,0-400	90	1532836 SAC-3P-MINMR/ 4,0-420	91	1553307 SACC-M12FR-5CON-PG 9-VA	162
1516030 SACB- 6/3-L- 5,0PUR-M8	42	1531785 SAC-4P-MINMS/ 2,0-400	92	1532849 SAC-3P-MINMR/ 6,0-420	91	1553611 SACC-M12FSD-4Q SH	127
1516043 SACB- 6/3-L-10,0PUR-M8	42	1531798 SAC-4P-MINMS/ 4,0-400	92	1532865 SAC-4P-MINMR/ 2,0-420	93	1553624 SACC-M12MRD-4Q SH	127
1516056 SACB- 8/3-L- 5,0PUR-M8	42	1531808 SAC-4P-MINMS/ 6,0-400	92	1532878 SAC-4P-MINMR/ 4,0-420	93	1553637 SACC-M12FRD-4Q SH	127
1516069 SACB- 8/3-L-10,0PUR-M8	42	1531824 SAC-5P-MINMS/ 2,0-400	94	1532881 SAC-4P-MINMR/ 6,0-420	93	1553640 SACC-M12FS-8Q SH	127
1516072 SACB-10/3-L- 5,0PUR-M8	42	1531837 SAC-5P-MINMS/ 4,0-400	94	1532904 SAC-5P-MINMR/ 2,0-420	96	1553653 SACC-M12MR-8Q SH	127
1516085 SACB-10/3-L-10,0PUR-M8	42	1531840 SAC-5P-MINMS/ 6,0-400	94	1532917 SAC-5P-MINMR/ 4,0-420	96	1553666 SACC-M12FR-8Q SH	127
1516111 SACB- 8/4-L- 5,0PUR-M8	43	1531866 SAC-3P-MINMR/ 2,0-400	90	1532920 SAC-5P-MINMR/ 6,0-420	96	1554555 SACC-E-M12MS-4CON-PG 9/0,5 VA	163
1516124 SACB- 8/4-L-10,0PUR-M8	43	1531879 SAC-3P-MINMR/ 4,0-400	90	1532946 SAC-3P- 2,0-420/MINFS	91	1554568 SACC-E-M12MS-5CON-PG 9/0,5 VA	163
1516137 SACB 4-3 L M8 PUR/	42	1531882 SAC-3P-MINMR/ 6,0-400	90	1532959 SAC-3P- 4,0-420/MINFS	91	1554610 SACC-EC-M12MS-4CON-PG 9/0,5 VA	163
1516140 SACB 6-3 L M8 PUR/	42	1531905 SAC-4P-MINMR/ 2,0-400	92	1532962 SAC-3P- 6,0-420/MINFS	93	1554623 SACC-EC-M12MS-5CON-PG 9/0,5 VA	164
1516153 SACB 8-3 L M8 PUR/	42	1531918 SAC-4P-MINMR/ 4,0-400	92	1532988 SAC-4P- 2,0-420/MINFS	91	1554649 SACC-EC-M12FS-4CON-PG 9/0,5 VA	163
1516166 SACB 10-3 L M8 PUR/	42	1531921 SAC-4P-MINMR/ 6,0-400	92	1532991 SAC-4P- 4,0-420/MINFS	93	1554652 SACC-EC-M12FS-5CON-PG 9/0,5 VA	164
1516179 SACB 8-4 L M8 PUR/	43	1531947 SAC-5P-MINMR/ 2,0-400	94	1533000 SAC-4P- 6,0-420/MINFS	93	1554681 SACC-DSI-M12MS-5CON-PG9/0,5 VA	164
1518177 SAC-5P-MS/ 2,0-920 SCO	136	1531950 SAC-5P-MINMR/ 4,0-400	94	1533026 SAC-5P- 2,0-420/MINFS	95	1554717 SACC-DSI-M12FS-5CON-PG9/0,5 VA	164
1518180 SAC-5P-MS/ 5,0-920 SCO	136	1531963 SAC-5P-MINMR/ 6,0-400	94	1533039 SAC-5P- 4,0-420/MINFS	95	1555448 SACC-E-M12FS-4CON-PG 9/0,5 VA	163
1518193 SAC-5P-MS/10,0-920 SCO	136	1531989 SAC-3P- 2,0-400/MINFS	90	1533042 SAC-5P- 6,0-420/MINFS	95	1555538 PROT-M12 FB	182
1518203 SAC-5P-MS/15,0-920 SCO	136	1531992 SAC-3P- 4,0-400/MINFS	90	1533068 SAC-3P- 2,0-420/MINFR	91	1555541 SACB-8/16-L- 5,0PVC FB	161
1518216 SAC-5P- 2,0-920/FS SCO	136	1532001 SAC-3P- 6,0-400/MINFS	90	1533071 SAC-3P- 4,0-420/MINFR	91	1555554 SACB-8/16-L-10,0PVC FB	161
1518229 SAC-5P- 5,0-920/FS SCO	136	1532027 SAC-4P- 2,0-400/MINFS	92	1533084 SAC-3P- 6,0-420/MINFR	91	1556320 SACC-PG9-SEAL CLM	184
1518232 SAC-5P-10,0-920/FS SCO	136	1532030 SAC-4P- 4,0-400/MINFS	92	1533107 SAC-4P- 2,0-420/MINFR	93	1556618 SACC-DSI-MS-4CON-PG9/0,5 SCO	85
1518245 SAC-5P-15,0-920/FS SCO	136	1532043 SAC-4P- 6,0-400/MINFS	92	1533110 SAC-4P- 4,0-420/MINFR	93	1556621 SACC-DSI-FS-4CON-PG9/0,5 SCO	85
1518258 SAC-5P-MS/ 0,3-920/FS SCO	136	1532069 SAC-5P- 2,0-400/MINFS	94	1533123 SAC-4P- 6,0-420/MINFR	93	1559039 SACC-MINMS-5CON-PG16	99
1518261 SAC-5P-MS/ 0,5-920/FS SCO	136	1532072 SAC-5P- 4,0-400/MINFS	94	1533149 SAC-5P- 2,0-420/MINFR	95	1559071 SACC-MINFS-5CON-PG16	99
1518274 SAC-5P-MS/ 1,0-920/FS SCO	136	1532085 SAC-5P- 6,0-400/MINFS	94	1533152 SAC-5P- 4,0-420/MINFR	95	1559893 SACB-16X0,5/ 3X1,0-200,0 PUR	171
1518287 SAC-5P-MS/ 2,0-920/FS SCO	136	1532108 SAC-3P- 2,0-400/MINFR	90	1533165 SAC-5P- 6,0-420/MINFR	95	1560251 PROT-M12 FS	182
1518290 SAC-5P-MS/ 5,0-920/FS SCO	136	1532111 SAC-3P- 4,0-400/MINFR	90	1534423 SACCBP-M12MS-5CON-M16/0,5-920 148	148	1657261 VS-BH-M12FSD-RJ45/80	126
1518300 SAC-5P-MS/10,0-920/FS SCO	136	1532124 SAC-3P- 6,0-400/MINFR	90	1534436 SACCBP-M12MS-5CON-M16/1,0-920 148	148	1657494 VS-BH-M12FSD-RJ45/180	126
1518313 SAC-5P-MS/15,0-920/FS SCO	136	1532140 SAC-4P- 2,0-400/MINFR	92	1534449 SACCBP-M12MS-5CON-M16/2,0-920 148	148	1671098 SACC-E-M12FS-5CON-PG9/0,5	86
1519723 SAC-3P-M12T/2XM12 B PE	80	1532153 SAC-4P- 4,0-400/MINFR	92	1534452 SACCBP-M12MS-5CON-M16/5,0-920 148	148	1671111 SACC-E-M12MS-5CON-PG9/0,5	86
1519736 SAC-4P-M 8MS-M12FS	45	1532166 SAC-4P- 6,0-400/MINFR	92	1534465 SACCBP-M12FS-5CON-M16/0,5-920 148	148	1671137 SACC-V-3CON-PG9/A-1L-S	113
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1519781 SAC-3P-M12MS-M 8SIFS	44	1532234 SAC-3P-MINMS/ 4,0-410	91	1538131 SAC-5P-FS SCO/920/...	136	1683413 SAC-3P-M12Y/2XM12FS B PE	80
1520039 SACC-E-FS-5CON-M16/0,5 SCO	86	1532247 SAC-3P-MINMS/ 6,0-410	91	1538157 SAC-5P-MS-FS SCO/920/...	136	1683455 SAC-3P-M12Y/2XM12FS PE	80
1520055 SACC-E-MS-5CON-M16/0,5 SCO	86	1532263 SAC-4P-MINMS/ 2,0-410	93	1539143 SACC-E-MU-PG13,5	100	1683468 SAC-5P-M12Y/2XM12FS VP	71
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1521326 SACC-MINMS-4CON-PG 9	98	1532302 SAC-5P-MINMS/ 2,0-410	95	1542716 SACC-DSI-MS-8CON-PG 9/0,5 SCO	87	1693762 SACC-E-M12MS-4CON-PG9/0,5	85
1521342 SACC-MINFS-4CON-PG 9	98	1532315 SAC-5P-MINMS/ 4,0-410	95	1542729 SACC-DSI-FS-5CON-PG 9/0,5 SCO	86	1693788 SACC-E-M12FS-4CON-PG9/0,5	85
1521371 SACC-MINMS-5CON-PG13	99	1532328 SAC-5P-MINMS/ 6,0-410	95	1542732 SACC-DSI-FS-8CON-PG 9/0,5 SCO	87	1696183 SAC-3P-M 8Y/2XM 8FS	84
1521384 SACC-MINFS-5CON-PG 9	99	1532344 SAC-3P-MINMR/ 2,0-410	91	1542884 SACC-M 8MS-3CON-M-0,34-SH	46	1696222 SAC-3P-M 8Y/2XM 8FS VP	44
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