

M5 to M12 circular plug-in connectors

Sensor/actuator device plug-in connectors

A comprehensive range of M5, M8, and M12 flush-type plug-in connectors and panel feed-throughs has emerged as a result of the various requirements for sensor/actuator device connection technology in industrial environments. Customer-specific developments enable optimum adaptation to individual device concepts.

Sensor/actuator plug-in connectors for assembly

Safe and efficient assembly is of utmost importance in field wiring. The 5 selection options of the connection technology enable precise adaptation to the respective application or requirements in the field. The plug-in connectors for assembly are available in various versions, unshielded and EMC-compliant.

Sensor/actuator device plug-in connectors

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M5 to M12 circular plug-in connectors

M5/M8 sensor/actuator device plug-in connectors

M5, front/rear mounting

Notes:

Flat nut recommended for housing wall thicknesses < 2.5 mm.



Front mounting,
with 0.5 m long litz wires



Rear mounting, one-piece, straight,
for wave soldering processes



Technical data

General data	
M5 circular plug-in connector according to:	
Pollution degree	3
Degree of protection	IP67
Connection method	Individual wires
Electrical data	
Rated voltage	60 V
Rated current	1 A
Volume resistance	≤ 3 mΩ
Material data	
Material contact / contact surface	CuSn / Au
Contact carrier material	PA 66
Inflammability class according to UL 94	HB
Cable type	TPE litz wire
Temperature data	
Plug / socket	[-25 ... 85] °C

Technical data	
3-pos.	4-pos.
IEC 61076-2-105	IEC 61076-2-105
3	3
IP67	IP67
Individual wires	Individual wires
60 V	60 V
1 A	1 A
≤ 3 mΩ	≤ 3 mΩ
CuSn / Au	CuSn / Au
PA 66	PA 66
HB	HB
TPE litz wire	TPE litz wire
-25 ... 85	-25 ... 85



Technical data

Technical data	
3-pos.	4-pos.
IEC 61076-2-105	IEC 61076-2-105
3	3
IP67	IP67
Solder pins	Solder pins
60 V	60 V
1 A	1 A
≤ 3 mΩ	≤ 3 mΩ
CuSn / Au	CuSn / Au
PA 66	PA 66
HB	HB
-	-
-25 ... 80	-25 ... 85

Ordering data

Description	Coding
Device plug-in connectors	
Socket	A - standard
Plug	A - standard

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.	
1530605	1	1530618	1
1530582	1	1530595	1

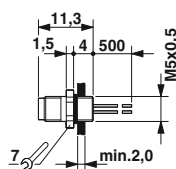
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.	
1530647	20	1530650	20
1530621	20	1530634	20

Accessories

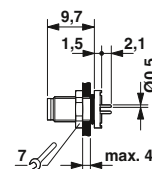
Flat nut, with:
M5 thread

SACC-E-MU-M 5	1535901	100
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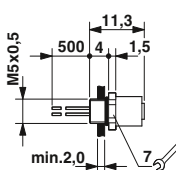
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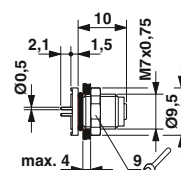
M5 flush-type plug



M5 flush-type plug, one-piece



M5 flush-type socket



M5 flush-type socket, one-piece

M5 to M12 circular plug-in connectors

M5/M8 sensor/actuator device plug-in connectors

**M8, front mounting,
with 0.5 m long litz wires**



M8, 3, 4, 5-pos.



M8, 6, 8-pos.



Technical data			
3-pos.	4-pos.	5-pos.	
General data			
M8 circular plug-in connector according to:	IEC 61076-2-104	IEC 61076-2-104	IEC 61076-2-104
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Individual wires	Individual wires	Individual wires
Electrical data			
Rated voltage	60 V	30 V	30 V
Rated current	4 A	4 A	3 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
Material data			
Material contact / contact surface	Cu alloy / Au	Cu alloy / Au	Cu alloy / Au
Contact carrier material	PA 66	PA 66	PA 66
Inflammability class according to UL 94	HB	HB	HB
Cable type	TPE litz wire	TPE litz wire	PVC litz wire
Temperature data			
Plug / socket	-25 ... 85	-25 ... 85	-25 ... 85



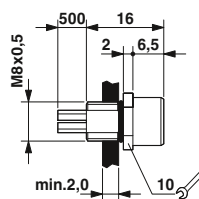
Technical data			
6-pos.	8-pos.		
General data			
M8 circular plug-in connector according to:	IEC 61076-2-104	IEC 61076-2-104	-
Pollution degree	3	3	-
Degree of protection	IP67	IP67	-
Connection method	Individual wires	Individual wires	-
Electrical data			
Rated voltage	30 V	30 V	-
Rated current	2 A	1.5 A	-
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	-
Material data			
Material contact / contact surface	Cu alloy / Au	Cu alloy / Au	- / -
Contact carrier material	PA 66	PA 66	-
Inflammability class according to UL 94	HB	HB	-
Cable type	TPE litz wire	PVC litz wire	-
Temperature data			
Plug / socket	-25 ... 85	-25 ... 85	-

Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.		5-pos.	
1500350	1	1500363	1		
1500334	1	1500347	1		
				1424233	1
				1424234	1

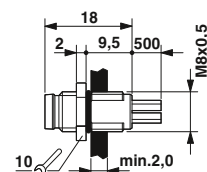
Ordering data					
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6-pos.		8-pos.			
1542677	1	1424231	1		
1542664	1	1424232	1		

Accessories			
SACC-E-MU-M 8	1504071	100	

Accessories			
SACC-E-MU-M 8	1504071	100	



M8 flush-type socket



M8 flush-type plug

M5 to M12 circular plug-in connectors

M5/M8 sensor/actuator device plug-in connectors

M8, rear mounting, one-piece, straight, for wave soldering processes



M8, 3, 4-pos.



M8, 6, 8-pos.



General data	
M8 circular plug-in connector according to:	
Pollution degree	3
Degree of protection	IP67
Connection method	Solder pins
Electrical data	
Rated voltage	60 V
Rated current	4 A
Volume resistance	≤ 3 mΩ
Material data	
Material contact / contact surface	CuSn / Au
Contact carrier material	PA 66
Inflammability class according to UL 94	HB
Temperature data	
Plug / socket	[°C]

Technical data			
3-pos.		4-pos.	
IEC 61076-2-104		IEC 61076-2-104	
3		3	
IP67		IP67	
Solder pins		Solder pins	
60 V		30 V	
4 A		4 A	
≤ 3 mΩ		≤ 3 mΩ	
CuSn / Au		CuSn / Au	
PA 66		PA 66	
HB		HB	
-25 ... 85		-25 ... 85	

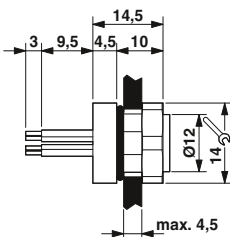


Technical data			
6-pos.		8-pos.	
IEC 61076-2-104		IEC 61076-2-104	
3		3	
IP67		IP67	
Solder pins		Solder pins	
30 V		30 V	
1.5 A		1.5 A	
≤ 3 mΩ		≤ 3 mΩ	
CuSn / Au		CuSn / Au	
PA 66		PA 66	
HB		HB	
-25 ... 85		-25 ... 85	

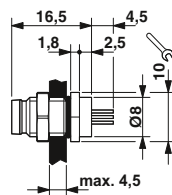
Ordering data	
Description	Coding
Device plug-in connectors	
Socket	A - standard
Plug	A - standard

Ordering data			
3-pos.		4-pos.	
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
1694363	20	1694376	20
1694334	20	1694347	20

Ordering data			
6-pos.		8-pos.	
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
1436534	20	1424237	20
1436521	20	1424238	20



M8 flush-type socket



M8 flush-type plug

M5 to M12 circular plug-in connectors

M5/M8 sensor/actuator device plug-in connectors

**M8, rear mounting,
with 0.5 m long litz wires**



3, 4-pos.



6, 8-pos.



Technical data		
	3-pos.	4-pos.
General data		
M8 circular plug-in connector according to:	IEC 61076-2-104	IEC 61076-2-104
Pollution degree	3	3
Degree of protection	IP67	IP67
Connection method	Individual wires	Individual wires
Electrical data		
Rated voltage	60 V	30 V
Rated current	4 A	4 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ
Material data		
Material contact / contact surface	Cu alloy / Au	Cu alloy / Au
Contact carrier material	PUR / PA66	PUR / PA66
Inflammability class according to UL 94	HB	HB
Cable type	TPE litz wire	TPE litz wire
Temperature data		
Plug / socket	[-25 ... 85 °C]	[-25 ... 85 °C]
Cable, fixed installation	[-25 ... 90 °C]	[-25 ... 90 °C]

Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.	
1453478	1	1453481	1
1456080	1	1456093	1
1453449	1	1453452	1

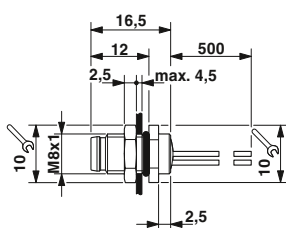
Accessories		
Flat nut, with: M8 thread	SACC-E-MU-M 8	1504071 100



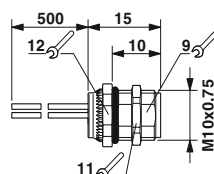
Technical data		
	6-pos.	8-pos.
General data		
M8 circular plug-in connector according to:	IEC 61076-2-104	IEC 61076-2-104
Pollution degree	3	3
Degree of protection	IP67	IP67
Connection method	Individual wires	Individual wires
Electrical data		
Rated voltage	30 V	30 V
Rated current	2 A	1.5 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ
Material data		
Material contact / contact surface	Cu alloy / Au	Cu alloy / Au
Contact carrier material	PUR / PA66	PUR / PA66
Inflammability class according to UL 94	HB	HB
Cable type	TPE litz wire	PVC litz wire
Temperature data		
Plug / socket	[-25 ... 85 °C]	[-25 ... 85 °C]
Cable, fixed installation	[-25 ... 90 °C]	[-25 ... 85 °C]

Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
6-pos.		8-pos.	
1453494	1	1424230	1
1456103	1	1424229	1
1453465	1		

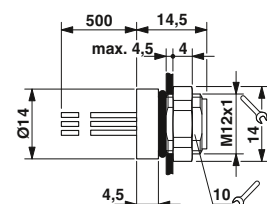
Accessories		
Flat nut, with: M8 thread	SACC-E-MU-M 8	1504071 100



M8 flush-type plug, M8 fastening thread



M8 flush-type socket, M10 fastening thread



M8 flush-type socket, M12 fastening thread

M5 to M12 circular plug-in connectors

M5/M8 sensor/actuator device plug-in connectors

**M8, rear mounting, two-piece,
for wave soldering processes, shielded**

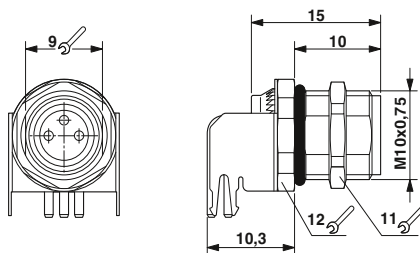


Angled, 3, 4-pos.

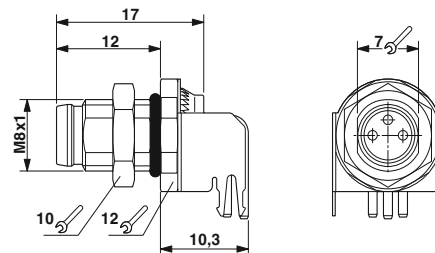


Angled, 5, 6-pos.

		Technical data		Technical data		
		3-pos.	4-pos.	5-pos.	6-pos.	
General data						
M8 circular plug-in connector according to:		IEC 61076-2-104	IEC 61076-2-104	IEC 61076-2-104	IEC 61076-2-104	
Pollution degree		3	3	3	3	
Degree of protection		IP67	IP67	IP67	IP67	
Connection method		Solder pins	Solder pins	Solder pins	Solder pins	
Electrical data						
Rated voltage		30 V	30 V	30 V	30 V	
Rated current		4 A	4 A	3 A	1.5 A	
Volume resistance		≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ	
Material data						
Material contact / contact surface		Cu alloy / Au	Cu alloy / Au	Cu alloy / Au	Cu alloy / Au	
Contact carrier material		PA 66	PA 66	PA 66	PA 66	
Inflammability class according to UL 94		HB	HB	HB	HB	
Temperature data						
Plug / socket		[°C]				
		-25 ... 85	-25 ... 85	-25 ... 85	-25 ... 85	
		Ordering data		Ordering data		
		Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	
		Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	
		3-pos.	4-pos.	5-pos.	6-pos.	
Device plug-in connectors						
Socket	A - standard	1456145	20		1424243	20
Plug	A - standard	1456035	20		1424244	20
Socket	B - inverse			1424239	20	
Plug	B - inverse			1424240	20	



M8 flush-type socket, angled



M8 flush-type plug, angled

M5 to M12 circular plug-in connectors

M5/M8 sensor/actuator device plug-in connectors

**M8, rear mounting, two-piece,
for wave soldering processes, shielded**



Straight, 3, 4, 5-pos.



Straight, 6, 8-pos.



Technical data			
3-pos.	4-pos.	5-pos.	
General data			
M8 circular plug-in connector according to:	IEC 61076-2-104	IEC 61076-2-104	IEC 61076-2-104
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Solder pins	Solder pins	Solder pins
Electrical data			
Rated voltage	60 V	30 V	30 V
Rated current	4 A	4 A	3 A
Volume resistance	$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$
Material data			
Material contact / contact surface	Cu alloy / Au	Cu alloy / Au	Cu alloy / Au
Contact carrier material	PA 66	PA 66	PA 66
Inflammability class according to UL 94	HB	HB	HB
Temperature data			
Plug / socket	-25 ... 85	-25 ... 85	-25 ... 85

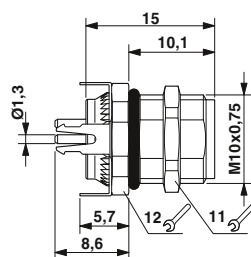
Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.	
1456116	20	1456129	20
1455997	20	1456019	20
		1424241	20
		1424242	20



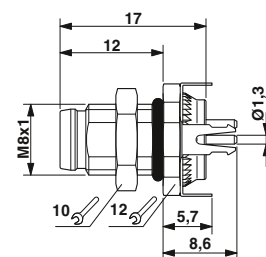
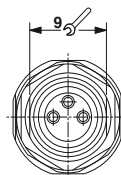
Technical data			
6-pos.	8-pos.		
General data			
IEC 61076-2-104	IEC 61076-2-104	-	-
3	3	-	-
IP67	IP67	-	-
Solder pins	Solder pins	-	-
Electrical data			
30 V	30 V	-	-
1.5 A	1.5 A	-	-
$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$	-	-
Material data			
Cu alloy / Au	Cu alloy / Au	- / -	-
PA 66	PA 66	-	-
HB	HB	-	-
Temperature data			
-25 ... 85	-25 ... 85	-	-

Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
6-pos.		8-pos.	
1456132	20	1424235	20
1456022	20	1424236	20

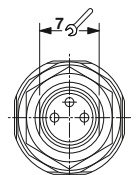
Description	Coding
Device plug-in connectors	
Socket	A - standard
Plug	A - standard
Socket	B - inverse
Plug	B - inverse



M8 flush-type socket, straight



M8 flush-type plug, straight,



M5 to M12 circular plug-in connectors

M5/M8 sensor/actuator device plug-in connectors

M8, rear mounting, two-piece,
for wave soldering processes,
unshielded



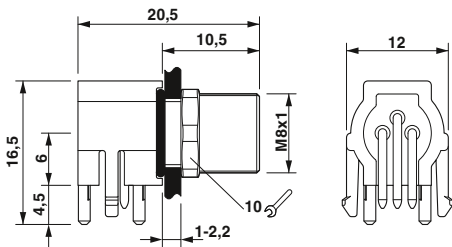
Angled, 3, 4-pos.



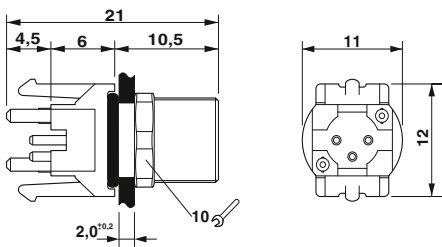
Straight, 3, 4-pos.



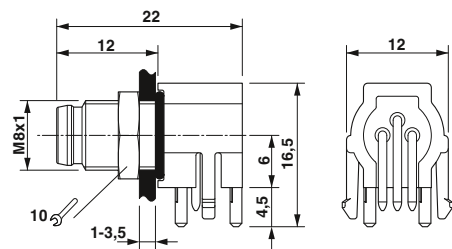
Technical data			Technical data		
3-pos.		4-pos.	3-pos.		4-pos.
General data			General data		
M8 circular plug-in connector according to:		IEC 61076-2-104	M8 circular plug-in connector according to:		IEC 61076-2-104
Pollution degree		3	Pollution degree		3
Degree of protection		IP67	Degree of protection		IP67
Connection method		Solder pins	Connection method		Solder pins
Electrical data			Electrical data		
Rated voltage		60 V	Rated voltage		30 V
Rated current		4 A	Rated current		4 A
Volume resistance		≤ 3 mΩ	Volume resistance		≤ 3 mΩ
Material data			Material data		
Material contact / contact surface		CuSn / Au	Material contact / contact surface		CuSn / Au
Contact carrier material		PA 66	Contact carrier material		PA 66
Inflammability class according to UL 94		HB	Inflammability class according to UL 94		HB
Temperature data			Temperature data		
Plug / socket		-25 ... 85	Plug / socket		-25 ... 85
		[°C]			
Ordering data			Ordering data		
Order No.		Pcs. / Pkt.	Order No.		Pcs. / Pkt.
3-pos.			3-pos.		
Device plug-in connectors			Device plug-in connectors		
Socket		A - standard	Socket		A - standard
Plug		A - standard	Plug		A - standard
1524788		20	1524776		20
1440070		20	1524789		20
1526169		20	1440096		20



M8 flush-type socket, angled



M8 flush-type socket, straight



M8 flush-type plug, angled

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, front mounting

**Pg9 fastening thread,
with 0.5 m long litz wires**



4, 5, 8-pos.



Can be positioned, 4, 5, 8-pos.



Technical data

General data	
M12 circular plug-in connector according to:	IEC 61076-2-101
Pollution degree	3
Degree of protection	IP67
Connection method	Individual wires
Electrical data	
Rated voltage	250 V
Rated current	4 A
Volume resistance	≤ 3 mΩ
Material data	
Material contact / contact surface	CuZn / Ni/Au
Contact carrier material	PA66
Inflammability class according to UL 94	V0
Cable type	TPE litz wire
Temperature data	
Plug / socket	[-25 ... 85] °C

4-pos.	5-pos.	8-pos.
IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
3	3	3
IP67	IP67	IP67
Individual wires	Individual wires	Individual wires
250 V	60 V	30 V
4 A	4 A	2 A
≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
CuZn / Ni/Au	CuZn / Ni/Au	CuZn / Ni/Au
PA66	PA66	PA66
V0	V0	V0
TPE litz wire	TPE litz wire	TPE litz wire
-25 ... 85	-25 ... 85	-25 ... 85



Technical data

4-pos.	5-pos.	8-pos.
IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
3	3	3
IP67	IP67	IP67
Individual wires	Individual wires	Individual wires
250 V	60 V	30 V
4 A	4 A	2 A
≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
CuZn / Ni/Au	CuZn / Ni/Au	CuZn / Ni/Au
PA66	PA66	PA66
V0	V0	V0
TPE litz wire	TPE litz wire	TPE litz wire
-25 ... 85	-25 ... 85	-25 ... 85

Ordering data

Description	Coding
Device plug-in connectors	
Socket	A - standard
Plug	A - standard
Socket	B - inverse
Plug	B - inverse

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1693788	1	1671098	1	1513758	1
1693762	1	1671111	1	1513774	1

Ordering data

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1693791	1	1671108	1	1513761	1
1693775	1	1671124	1	1513787	1
		1515044	1		
		1515057	1		

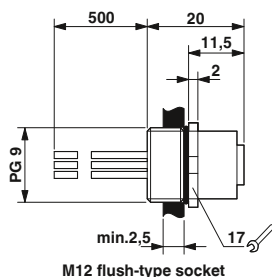
Accessories

Flat nut, with:
Pg9 thread

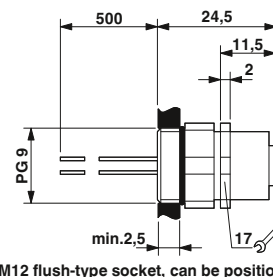
SACC-E-MU-PG9	1504084	100
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Accessories

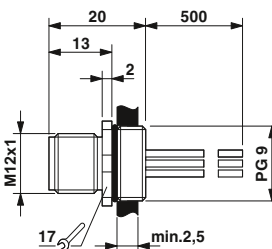
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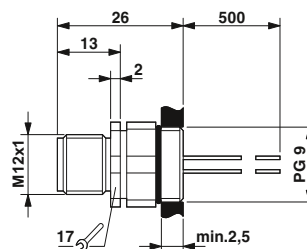
M12 flush-type socket



M12 flush-type socket, can be positioned



M12 flush-type plug



M12 flush-type plug, can be positioned

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, front mounting

**M16 fastening thread,
with 0.5 m long litz wires**



4, 5, 8-pos.



12, 17-pos.



Technical data			
4-pos.	5-pos.	8-pos.	
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Individual wires	Individual wires	Individual wires
Electrical data			
Rated voltage	250 V	60 V	30 V
Rated current	4 A	4 A	2 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
Material data			
Material contact / contact surface	CuZn / Ni/Au	CuZn / Ni/Au	CuZn / Ni/Au
Contact carrier material	PA 66	PA 66	PA 66
Inflammability class according to UL 94	V0	V0	V0
Cable type	TPE litz wire	TPE litz wire	TPE litz wire
Temperature data			
Plug / socket	-25 ... 85	-25 ... 85	-25 ... 85

Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1523434	1	1520039	1	1523476	1
1523450	1	1520055	1	1523492	1
1535202	1				
1551558	1				
		1520000	1		
		1520013	1		

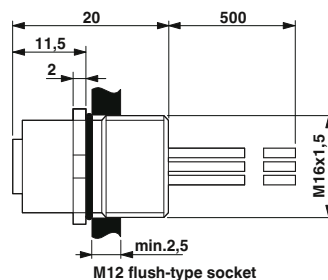
Accessories		
SACC-E-MU-M16	1504097	100



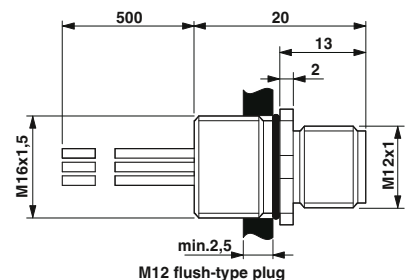
Technical data			
12-pos.	17-pos.		
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	-
Pollution degree	3	3	-
Degree of protection	IP67	IP67	-
Connection method	Individual wires	Individual wires	-
Electrical data			
Rated voltage	30 V	30 V	-
Rated current	1.5 A	1.5 A	-
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	-
Material data			
Material contact / contact surface	CuZn / Ni/Au	CuZn / Ni/Au	- / -
Contact carrier material	PA 66	PA 66	-
Inflammability class according to UL 94	V0	V0	-
Cable type	TPE litz wire	TPE litz wire	-
Temperature data			
Plug / socket	-25 ... 85	-25 ... 85	-

Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
12-pos.		17-pos.			
1556252	1	1556294	1		
1556265	1	1556304	1		

Accessories		
SACC-E-MU-M16	1504097	100



M12 flush-type socket



M12 flush-type plug

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, front mounting

M16 fastening thread,
with 0.5 m long litz wires,
can be positioned



Can be positioned, 4, 5-pos.



Can be positioned, 8-pos.



Technical data

General data	
M12 circular plug-in connector according to:	
Pollution degree	3
Degree of protection	IP67
Connection method	Individual wires
Electrical data	
Rated voltage	250 V
Rated current	4 A
Volume resistance	≤ 3 mΩ
Material data	
Material contact / contact surface	CuZn / Ni/Au
Contact carrier material	PA 66
Inflammability class according to UL 94	V0
Cable type	TPE litz wire
Temperature data	
Plug / socket	[-25 ... 85] [°C]

4-pos.

IEC 61076-2-101
3
IP67
Individual wires

5-pos.

IEC 61076-2-101
3
IP67
Individual wires



Technical data

General data	
M12 circular plug-in connector according to:	
Pollution degree	3
Degree of protection	IP67
Connection method	Individual wires
Electrical data	
Rated voltage	30 V
Rated current	2 A
Volume resistance	≤ 3 mΩ
Material data	
Material contact / contact surface	CuZn / Ni/Au
Contact carrier material	PA 66
Inflammability class according to UL 94	V0
Cable type	TPE litz wire
Temperature data	
Plug / socket	[-25 ... 85] [°C]

8-pos.

IEC 61076-2-101
3
IP67
Individual wires

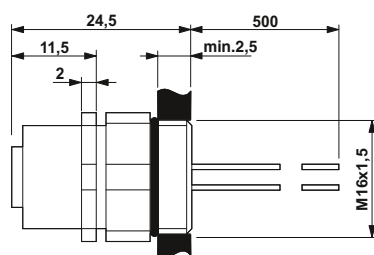
Ordering data

Description	Coding
Device plug-in connectors	
Socket	A - standard
Plug	A - standard
Socket	D - data
Plug	D - data
Socket	B - inverse
Plug	B - inverse

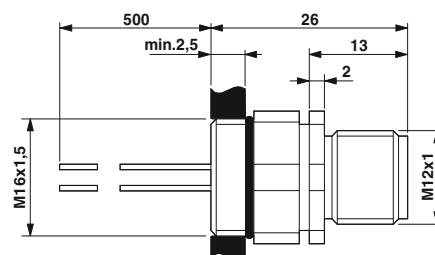
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.	
1523447	1	1520042	1
1523463	1	1520068	1
1535215	1		
1552256	1		
		1519998	1
		1520026	1

Ordering data

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
8-pos.			
1523489	1		
1523502	1		



M12 flush-type socket, can be positioned



M12 flush-type plug, can be positioned

**M20 fastening thread,
with 0.5 m long litz wires**

– Housing material: brass, nickel-plated

N



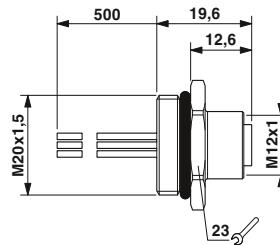
4, 5, 8-pos.

Technical data

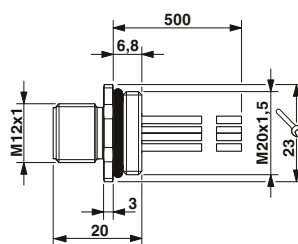
	4-pos.	5-pos.	8-pos.
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3	3
Degree of protection	IP67/IP69K	IP67/IP69K	IP67/IP69K
Connection method	Individual wires	Individual wires	Individual wires
Electrical data			
Rated voltage	250 V	60 V	30 V
Rated current	4 A	4 A	2 A
Volume resistance	$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$
Material data			
Material contact / contact surface	CuZn / Au	CuZn / Au	CuZn / Au
Contact carrier material	PA 66	PA 66	PA 66
Inflammability class according to UL 94	V0	V0	V0
Cable type	TPE litz wire	TPE litz wire	TPE litz wire
Temperature data			
Plug / socket	[°C]	[°C]	[°C]
Cable, fixed installation	-25 ... 85	-25 ... 85	-25 ... 85
	-25 ... 90	-25 ... 90	-25 ... 90

Ordering data

Description	Coding	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
		4-pos.		5-pos.		8-pos.	
Device plug-in connectors							
Socket	A - standard	1408436	1	1408454	1	1408453	1
Plug	A - standard	1408451	1	1408446	1	1408442	1



M12 flush-type socket



M12 flush-type plug

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, front mounting

One-piece, 20 mm square flange,
with 0.5 m long litz wires

- 4 x fixing hole, 3.2 mm
- With form seal for M3 screws



4, 5, 8-pos.



12, 17-pos.



Technical data

4-pos.	5-pos.	8-pos.
IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
3	3	3
IP67	IP67	IP67
Individual wires	Individual wires	Individual wires
250 V	60 V	30 V
4 A	4 A	2 A
≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
CuZn / Ni/Au	CuZn / Ni/Au	CuZn / Ni/Au
PA 66	PA 66	PA 66
V0	V0	V0
TPE litz wire	TPE litz wire	TPE litz wire
-25 ... 85	-25 ... 85	-25 ... 85

Ordering data

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1419797	1	1441655	1	1441697	1
1419784	1	1441642	1	1441684	1
1441639	1				
1441626	1				
		1441671	1		
		1441668	1		

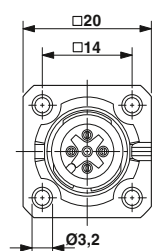
Technical data

12-pos.	17-pos.	
IEC 61076-2-101	IEC 61076-2-101	-
3	3	-
IP67	IP67	-
Individual wires	Individual wires	-
30 V	30 V	-
1.5 A	1.5 A	-
≤ 3 mΩ	≤ 3 mΩ	-
CuZn / Ni/Au	CuZn / Ni/Au	- / -
PA 66	PA 66	-
V0	V0	-
TPE litz wire	TPE litz wire	-
-25 ... 85	-25 ... 85	-

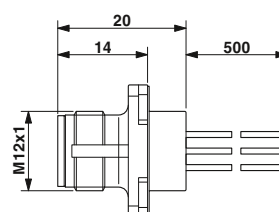
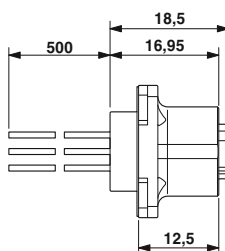
Ordering data

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
12-pos.		17-pos.			
1441710	1	1441736	1		
1441707	1	1441723	1		

Description	Coding
Device plug-in connectors	
Socket	A - standard
Plug	A - standard
Socket	D - data
Plug	D - data
Socket	B - inverse
Plug	B - inverse



M12 flush-type socket, square flange



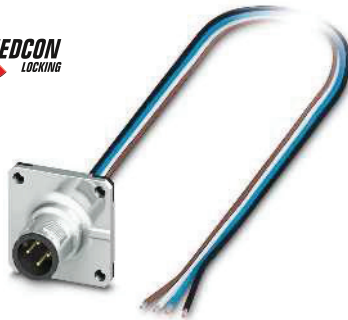
M12 flush-type plug, square flange

M5 to M12 circular plug-in connectors

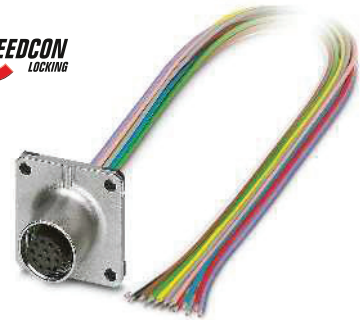
M12 sensor/actuator device plug-in connectors, front mounting

One-piece, 25 mm square flange,
with 0.5 m long litz wires

- 4 x fixing hole, 2.7 mm
- With form seal for M2.5 screws



4, 5, 8-pos.



12, 17-pos.



Technical data		
4-pos.	5-pos.	8-pos.
General data		
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3
Degree of protection	IP67	IP67
Connection method	Individual wires	Individual wires
Electrical data		
Rated voltage	250 V	60 V
Rated current	4 A	4 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ
Material data		
Material contact / contact surface	CuZn / Ni/Au	CuZn / Ni/Au
Contact carrier material	PA 66	PA 66
Inflammability class according to UL 94	V0	V0
Cable type	TPE litz wire	TPE litz wire
Temperature data		
Plug / socket	-25 ... 85	-25 ... 85

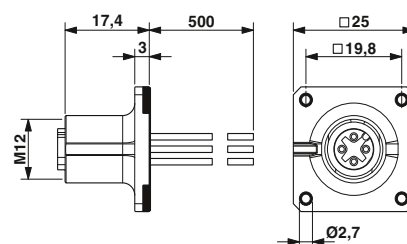


Technical data		
12-pos.	17-pos.	
General data		
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3
Degree of protection	IP67	IP67
Connection method	Individual wires	Individual wires
Electrical data		
Rated voltage	30 V	30 V
Rated current	1.5 A	1.5 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ
Material data		
Material contact / contact surface	CuZn / Ni/Au	CuZn / Ni/Au
Contact carrier material	PA 66	PA 66
Inflammability class according to UL 94	V0	V0
Cable type	TPE litz wire	TPE litz wire
Temperature data		
Plug / socket	-25 ... 85	-25 ... 85

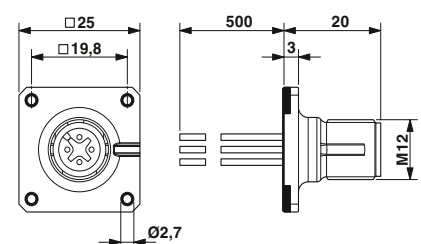
Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1420003	1	1440986	1	1441574	1
1419991	1	1440973	1	1441561	1
1440960	1				
1440957	1				
		1441558	1		
		1440999	1		

Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
12-pos.		17-pos.			
1441590	1	1441613	1		
1441587	1	1441600	1		

Description	Coding
Device plug-in connectors	
Socket	A - standard
Plug	A - standard
Socket	D - data
Plug	D - data
Socket	B - inverse
Plug	B - inverse



M12 flush-type socket, square flange



M12 flush-type plug, square flange

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, front mounting

**Modular, 25 mm square flange,
pre-assembled**



**Flange housing,
housing bore holes 3.2 mm**



Technical data

General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	-	-
Pollution degree	-	-	-
Degree of protection	-	-	-
Connection method	-	-	-
Electrical data			
Rated voltage	-	-	-
Rated current	-	-	-
Volume resistance	-	-	-
Material data			
Material contact / contact surface	- / -	- / -	- / -
Contact carrier material	-	-	-
Cable gland material	Zinc die-cast, nickel-plated	-	-
Inflammability class according to UL 94	-	-	-
Cable type	-	-	-
Temperature data			
Plug / socket	[-25 ... 85	-	-
Cable, fixed installation	[-25 ... 85	-	-

Ordering data

Description	Coding	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
Square flange housing, with O-ring		1419959	10				
Assembled contact carrier and insulating body, with 0.5 m litz wires and crimp contacts							
Plug	A - standard						
Plug	D - data						
Plug	B - inverse						



**With 0.5 m long litz wires,
assembled contact carrier
and insulating body**

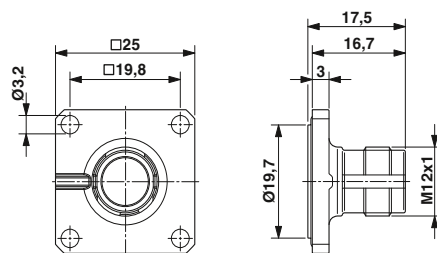


Technical data

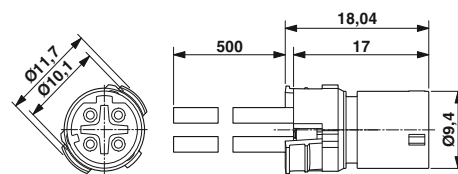
4-pos.	5-pos.	8-pos.
IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
3	3	3
IP67	IP67	IP67
Crimp contacts	Crimp contacts	Crimp contacts
250 V	60 V	30 V
4 A	4 A	2 A
≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
CuZn / Au	CuZn / Au	CuZn / Au
PA 66	PA 66	PA 66
-	-	-
V0	V0	V0
TPE litz wire	TPE litz wire	TPE litz wire
-25 ... 85	-25 ... 85	-25 ... 85
-25 ... 85	-25 ... 85	-25 ... 85

Ordering data

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1440805	1	1440818	1	1457827	1
1440821	1	1440759	1		



M12 square flange housing



M12 contact carrier, with litz wires

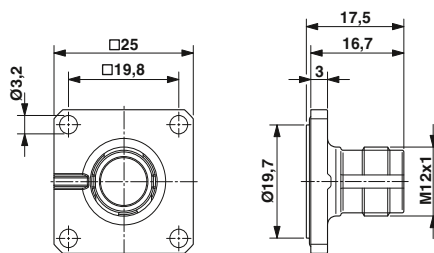
M12 sensor/actuator device plug-in connectors, front mounting



SPEEDCON
LOCKING



CRIMPFOX-TC MP	1212510	1
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The technical drawing shows two views of the ball bearing:

- Front View (Left):** A circular cross-section showing four balls arranged in a square pattern. The outer diameter is labeled as $\varnothing 17$. The inner hole has a diameter of $\varnothing 10,1$.
- Side View (Right):** A longitudinal section showing the internal structure and the balls. The total width of the bearing is labeled as 18,04. The distance between the two main rings (the space where the balls sit) is labeled as 17. The height of the bearing from the base to the top of the rings is labeled as $\varnothing 9,4$.

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M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, front mounting

One-piece, 20 mm square flange,
for wave soldering processes

- M12 PCB connector for direct soldering
with integrated torsion protection and
shield connection

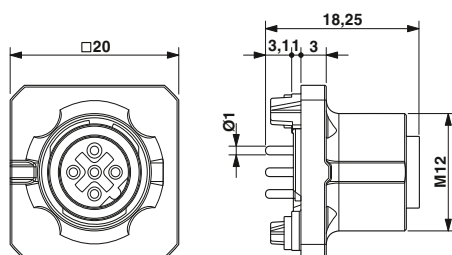


4, 5-pos.

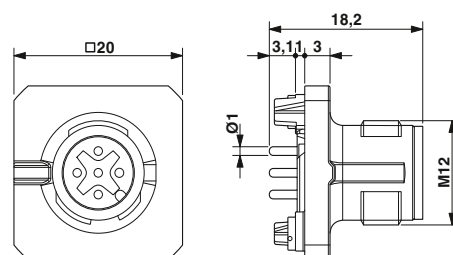


8-pos.

		Technical data		Technical data	
		4-pos.	5-pos.	8-pos.	
General data					
M12 circular plug-in connector according to:		IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101	-
Pollution degree		3	3	3	-
Degree of protection		IP67	IP67	IP67	-
Connection method		Solder pins	Solder pins	Solder pins	-
Electrical data					
Rated voltage		250 V	60 V	30 V	-
Rated current		4 A	4 A	2 A	-
Volume resistance		$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$	-
Material data					
Material contact / contact surface		CuZn / Au	CuZn / Au	CuZn / Au	- / -
Contact carrier material		PA 66	PA 66	PA 66	-
Inflammability class according to UL 94		V0	V0	V0	-
Temperature data					
Plug / socket		-25 ... 85	-25 ... 85	-25 ... 85	-
		[°C]			
		Ordering data		Ordering data	
		Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
		4-pos.	5-pos.	8-pos.	
Device plug-in connectors					
Socket	A - standard	1456420	10	1456446	10
Plug	A - standard	1456417	10	1456433	10
Socket	D - data	1456404	10		
Plug	D - data	1456394	10		
Socket	B - inverse		1456462		10
Plug	B - inverse		1456459		10



M12 flush-type socket, square flange (4/5-pos. version)



M12 flush-type plug, square flange (4/5-pos. version)

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, front mounting

Contact carrier, plastic,
with solder cups or with litz wires



Solder connection, 5, 8-pos.



With 0.5 m long litz wires, 5, 8-pos.



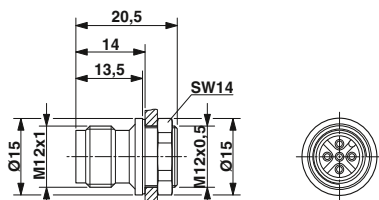
Technical data			
5-pos.		8-pos.	
General data		General data	
M12 circular plug-in connector according to:		IEC 61076-2-101	
Pollution degree		3	
Degree of protection		IP67	
Connection method		Solder cup	
Electrical data		Electrical data	
Rated voltage		60 V	
Rated current		4 A	
Volume resistance		≤ 3 mΩ	
Material data		Material data	
Material contact / contact surface		CuZn / Au	
Contact carrier material		PA 66	
Inflammability class according to UL 94		HB	
Cable type		-	
Temperature data		Temperature data	
Plug / socket		-25 ... 85	
Cable, fixed installation		-	

Ordering data			
Order No.		Pcs. / Pkt.	
5-pos.		8-pos.	
Flush-type plug-in connector, M16 fastening thread		1436398	
Plug		20	
Flush-type plug-in connector, M12 fastening thread		1436408	
Plug		20	
Flush-type plug-in connector, M12 fastening thread		1436437	
Plug		20	

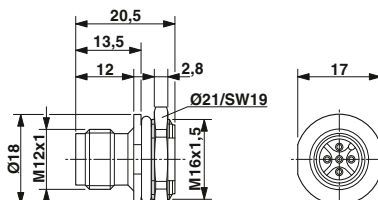


Technical data			
5-pos.		8-pos.	
General data		General data	
M12 circular plug-in connector according to:		IEC 61076-2-101	
Pollution degree		3	
Degree of protection		IP67	
Connection method		Individual wires	
Electrical data		Electrical data	
Rated voltage		60 V	
Rated current		4 A	
Volume resistance		≤ 3 mΩ	
Material data		Material data	
Material contact / contact surface		CuZn / Au	
Contact carrier material		PA 66	
Inflammability class according to UL 94		HB	
Cable type		TPE litz wire	
Temperature data		Temperature data	
Plug / socket		-25 ... 85	
Cable, fixed installation		-25 ... 90	

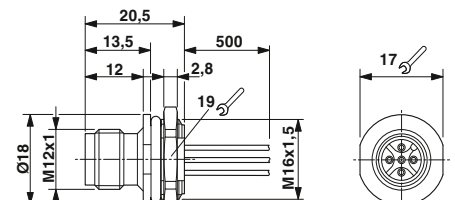
Ordering data			
Order No.		Pcs. / Pkt.	
5-pos.		8-pos.	
Flush-type plug-in connector, M16 fastening thread		1436411	
Plug		1	
Flush-type plug-in connector, M12 fastening thread		1436424	
Plug		1	



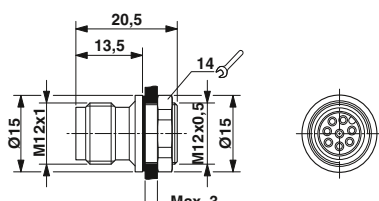
M12 pin, M12 fastening thread, solder cups



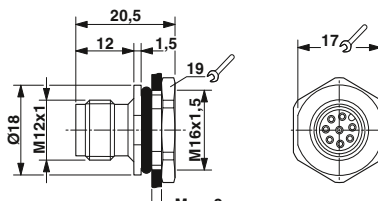
M12 pin, M16 fastening thread, solder cups



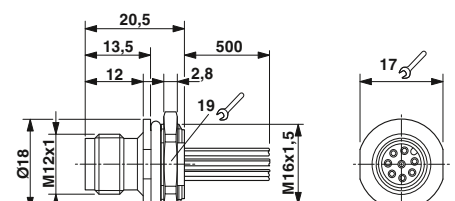
M12 pin, M16 fastening thread



M12 pin, M12 fastening thread, solder cups



M12 pin, M16 fastening thread, solder cups



M12 pin, M16 fastening thread

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, rear mounting

Pg9 fastening thread,
with 0.5 m long litz wires



4, 5, 8-pos.



12, 17-pos.



Technical data			
	4-pos.	5-pos.	8-pos.
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Individual wires	Individual wires	Individual wires
Electrical data			
Rated voltage	250 V	60 V	30 V
Rated current	4 A	4 A	2 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
Material data			
Material contact / contact surface	CuZn / Au	CuZn / Au	CuZn / Au
Contact carrier material	PA 66	PA 66	PA 66
Inflammability class according to UL 94	V0	V0	V0
Cable type	TPE litz wire	TPE litz wire	TPE litz wire
Temperature data			
Plug / socket [°C]	-25 ... 85	-25 ... 85	-25 ... 85
Cable, fixed installation [°C]	-25 ... 85	-25 ... 85	-25 ... 85

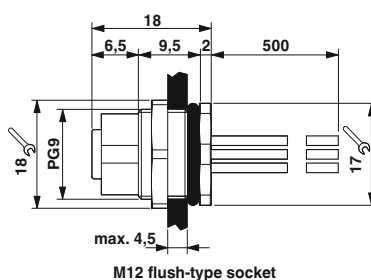


Technical data			
	12-pos.	17-pos.	
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	-
Pollution degree	3	3	-
Degree of protection	IP67	IP67	-
Connection method	Individual wires	Individual wires	-
Electrical data			
Rated voltage	30 V	30 V	-
Rated current	1.5 A	1.5 A	-
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	-
Material data			
Material contact / contact surface	CuZn / Au	CuZn / Au	- / -
Contact carrier material	PA 66	PA 66	-
Inflammability class according to UL 94	V0	V0	-
Cable type	TPE litz wire	TPE litz wire	-
Temperature data			
Plug / socket [°C]	-25 ... 85	-25 ... 85	-
Cable, fixed installation [°C]	-25 ... 85	-25 ... 85	-

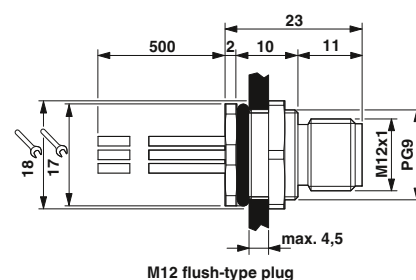
Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1556621	1	1542729	1	1542732	1
1556618	1	1542703	1	1542716	1
1551529	1				
1551532	1				
		1543676	1		
		1543663	1		

Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
12-pos.		17-pos.			
1430446	1	1430462	1		
1430459	1	1430475	1		

Description	Coding
Device plug-in connectors	
Socket	A - standard
Plug	A - standard
Socket	D - data
Plug	D - data
Socket	B - inverse
Plug	B - inverse



M12 flush-type socket



M12 flush-type plug

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, rear mounting

**M12 fastening thread,
with 0.5 m long litz wires**



4, 5, 8-pos.



12, 17-pos.



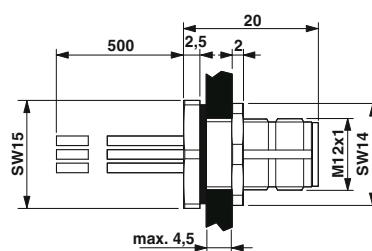
Technical data			
4-pos.	5-pos.	8-pos.	
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Individual wires	Individual wires	Individual wires
Electrical data			
Rated voltage	250 V	60 V	30 V
Rated current	4 A	4 A	2 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
Material data			
Material contact / contact surface	CuZn / Au	CuZn / Au	CuZn / Au
Contact carrier material	PA 66	PA 66	PA 66
Inflammability class according to UL 94	V0	V0	V0
Cable type	TPE litz wire	TPE litz wire	TPE litz wire
Temperature data			
Plug / socket	[-25 ... 85 °C]	[-25 ... 85 °C]	[-25 ... 85 °C]
Cable, fixed installation	[-25 ... 85 °C]	[-25 ... 85 °C]	[-25 ... 85 °C]



Technical data			
12-pos.	17-pos.		
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	-
Pollution degree	3	3	-
Degree of protection	IP67	IP67	-
Connection method	Individual wires	Individual wires	-
Electrical data			
Rated voltage	30 V	30 V	-
Rated current	1.5 A	1.5 A	-
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	-
Material data			
Material contact / contact surface	CuZn / Au	CuZn / Au	- / -
Contact carrier material	PA 66	PA 66	-
Inflammability class according to UL 94	V0	V0	-
Cable type	TPE litz wire	TPE litz wire	-
Temperature data			
Plug / socket	[-25 ... 85 °C]	[-25 ... 85 °C]	-
Cable, fixed installation	[-25 ... 85 °C]	[-25 ... 85 °C]	-

Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1551875	1	1551888	1	1551914	1
1551901	1				
		1551891	1		

Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
12-pos.		17-pos.			
1437122	1	1437135	1		



M12 flush-type plug, M12 fastening thread

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, rear mounting

**M16 fastening thread,
with 0.5 m long litz wires**



4, 5, 8-pos.



12, 17-pos.



Technical data			
	4-pos.	5-pos.	8-pos.
General data			
M12 circular plug-in connector According to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Individual wires	Individual wires	Individual wires
Electrical data			
Rated voltage	250 V	60 V	30 V
Rated current	4 A	4 A	2 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
Material data			
Material contact / contact surface	CuZn / Au	CuZn / Au	CuZn / Au
Contact carrier material	PA 66	PA 66	PA 66
Inflammability class according to UL 94	V0	V0	V0
Cable type	TPE litz wire	TPE litz wire	TPE litz wire
Temperature data			
Plug / socket	[-25 ... 85 °C]	[-25 ... 85 °C]	[-25 ... 85 °C]
Cable, fixed installation	[-25 ... 85 °C]	[-25 ... 85 °C]	[-25 ... 85 °C]

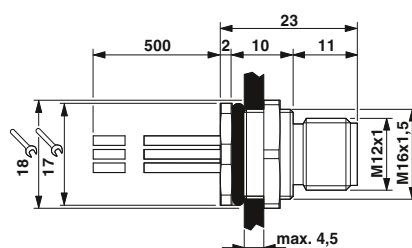


Technical data			
	12-pos.	17-pos.	
General data			
M12 circular plug-in connector According to:	IEC 61076-2-101	IEC 61076-2-101	-
Pollution degree	3	3	-
Degree of protection	IP67	IP67	-
Connection method	Individual wires	Individual wires	-
Electrical data			
Rated voltage	30 V	30 V	-
Rated current	1.5 A	1.5 A	-
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	-
Material data			
Material contact / contact surface	CuZn / Au	CuZn / Au	- / -
Contact carrier material	PA 66	PA 66	-
Inflammability class according to UL 94	V0	V0	-
Cable type	TPE litz wire	TPE litz wire	-
Temperature data			
Plug / socket	[-25 ... 85 °C]	[-25 ... 85 °C]	-
Cable, fixed installation	[-25 ... 85 °C]	[-25 ... 85 °C]	-

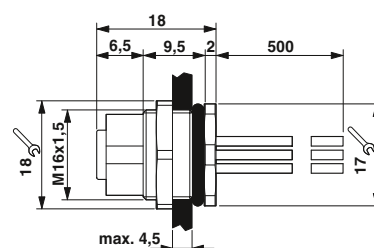
Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.	
1419632	1	1419658	1
1419629	1	1419645	1
1419616	1		
1419603	1		
		1419674	1
		1419661	1

Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
12-pos.		17-pos.	
1419713	1	1419739	1
1419700	1	1419726	1

Description	Coding
Device plug-in connectors	
Socket	A - standard
Plug	A - standard
Socket	D - data
Plug	D - data
Socket	B - inverse
Plug	B - inverse



M12 flush-type plug



M12 flush-type socket

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, rear mounting

**M16 fastening thread,
with assembled cable, shielded**

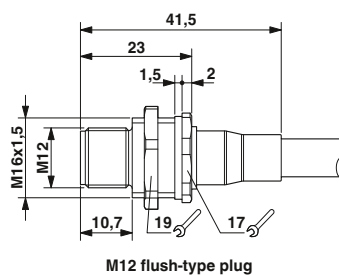


PUR cable, 4, 5, 8-pos., shielded

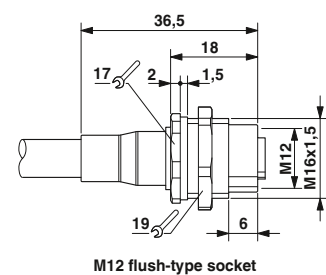


PVC cable, 12, 17-pos., shielded

		Technical data						Technical data					
		4-pos.		5-pos.		8-pos.		12-pos.		17-pos.			
General data													
M12 circular plug-in connector according to:		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		-	
Pollution degree		3		3		3		3		3		-	
Degree of protection		IP67		IP67		IP67		IP67		IP67		-	
Connection method		Free cable end		Free cable end		Free cable end		Free cable end		Free cable end		-	
Electrical data													
Rated voltage		60 V		60 V		30 V		30 V		30 V		-	
Rated current		4 A		4 A		2 A		1.5 A		1.5 A		-	
Volume resistance		≤ 3 mΩ		≤ 3 mΩ		≤ 3 mΩ		≤ 3 mΩ		≤ 3 mΩ		-	
Material data													
Material contact / contact surface		CuZn / Au		CuZn / Au		CuZn / Au		CuZn / Au		CuZn / Au		- / -	
Contact carrier material		PA 66		PA 66		PA 66		PA 66		PA 66		-	
Inflammability class according to UL 94		V0		V0		V0		V0		V0		-	
Cable type		PUR halogen-free black		PUR halogen-free black		PUR halogen-free black		PVC black		PVC black		-	
Temperature data													
Plug / socket		[°C]		-25 ... 85		-25 ... 85		-25 ... 85		-25 ... 85		-	
Cable, fixed installation		[°C]		-30 ... 85		-30 ... 85		-30 ... 85		-30 ... 85		-	
		Ordering data						Ordering data					
Description		Cable length		Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
				4-pos.		5-pos.		8-pos.		12-pos.		17-pos.	
Flush-type plug-in connector, A-coded													
Socket	1 m	1419302	1	1419328	1	1419357	1	1442188	1	1442269	1		
Plug	1 m	1419399	1	1419409	1	1419425	1	1442227	1	1442308	1		
Socket	2 m	1419315	1	1419331	1	1419344	1	1442191	1	1442272	1		
Plug	2 m	1419386	1	1419412	1	1419438	1	1442230	1	1442311	1		



M12 flush-type plug



M12 flush-type socket

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, rear mounting

Pg9 fastening thread, one-piece, for wave soldering processes



Straight, 4, 5, 8-pos.



Straight, 12, 17-pos.



Technical data		
4-pos.	5-pos.	8-pos.
IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
3	3	3
IP67	IP67	IP67
Solder pins	Solder pins	Solder pins
250 V	60 V	30 V
4 A	4 A	2 A
≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
CuZn / Au	CuZn / Au	CuZn / Au
PA 66	PA 66	PA 66
V0	V0	V0
-25 ... 85	-25 ... 85	-25 ... 85

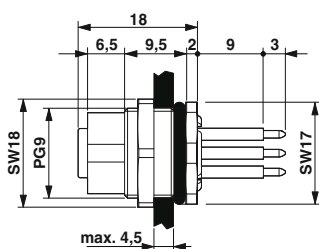
Ordering data		
Order No.	Pcs. / Pkt.	Order No.
4-pos.	5-pos.	8-pos.
1553462	20	1542761
1553459	20	1542745
1551503	20	1542758
1551516	20	
	1543650	20
	1543647	20
	1552285	20
	1552311	20
1552272	20	1408770
1552308	20	
	1552298	20
	1552324	20



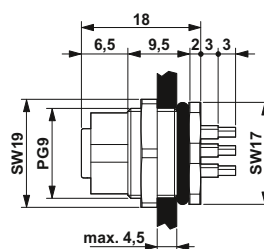
Technical data		
12-pos.	17-pos.	
IEC 61076-2-101	IEC 61076-2-101	-
3	3	-
IP67	IP67	-
Solder pins	Solder pins	-
30 V	30 V	-
1.5 A	1.5 A	-
≤ 3 mΩ	≤ 3 mΩ	-
CuZn / Au	CuZn / Au	- / -
PA 66	PA 66	-
V0	V0	-
-25 ... 85	-25 ... 85	-

Ordering data		
Order No.	Pcs. / Pkt.	Order No.
12-pos.	17-pos.	
1559929	20	1559958
1559932	20	1559961

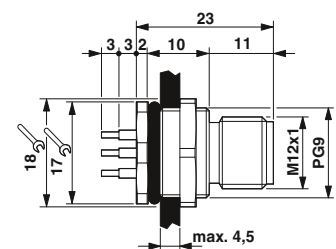
Description	Coding
Device plug-in connector, solder pin length: 6 mm	
Socket	A - standard
Plug	A - standard
Socket	D - data
Plug	D - data
Socket	B - inverse
Plug	B - inverse
Device plug-in connector, solder pin length: 12 mm	
Socket	A - standard
Plug	A - standard
Socket	D - data
Plug	D - data
Socket	B - inverse
Plug	B - inverse



M12 flush-type socket, contact length: 12 mm



M12 flush-type socket, contact length: 6 mm



M12 flush-type plug, contact length: 6 mm

Pg9 fastening thread, one-piece, for wave soldering processes, shielded



Ethernet



Straight, 4, 5, 8-pos.



Straight, 12, 17-pos.



Technical data			
4-pos.	5-pos.	8-pos.	
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Solder pins	Solder pins	Solder pins
Electrical data			
Rated voltage	250 V	60 V	30 V
Rated current	4 A	4 A	2 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
Material data			
Material contact / contact surface	CuZn / Au	CuZn / Au	CuZn / Au
Contact carrier material	PA 66	PA 66	PA 66
Inflammability class according to UL 94	V0	V0	V0
Temperature data			
Plug / socket	-25 ... 85	-25 ... 85	-25 ... 85

Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.	

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
1556841	20	1553019	20	1553860	20
		1553048	20	1553873	20
1553006	20				
1553035	20				
		1553022	20		
		1553051	20		
1558522	20	1558548	20	1408771	20
1558535	20	1558551	20		
1558506	20				
1558519	20				
		1558564	20		
		1558577	20		



Technical data			
12-pos.	17-pos.		
General data			
IEC 61076-2-101	IEC 61076-2-101	-	-
3	3	-	-
IP67	IP67	-	-
Solder pins	Solder pins	-	-
Electrical data			
30 V	30 V	-	-
1.5 A	1.5 A	-	-
≤ 3 mΩ	≤ 3 mΩ	-	-
Material data			
CuZn / Au	CuZn / Au	- / -	-
PA 66	PA 66	-	-
V0	V0	-	-
Temperature data			
-25 ... 85	-25 ... 85	-	-

Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
12-pos.		17-pos.	

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
1436770	20	1436806	20		
1436783	20	1436819	20		

Description	Coding
-------------	--------

Device plug-in connector, solder pin length: 6 mm

Socket	A - standard
Plug	A - standard
Socket	D - data
Plug	D - data
Socket	B - inverse
Plug	B - inverse

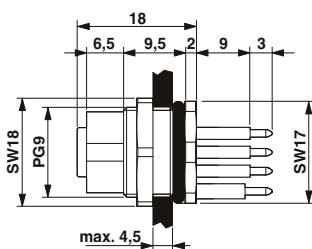
Device plug-in connector, solder pin length: 12 mm

Socket	A - standard
Plug	A - standard
Socket	D - data
Plug	D - data
Socket	B - inverse
Plug	B - inverse

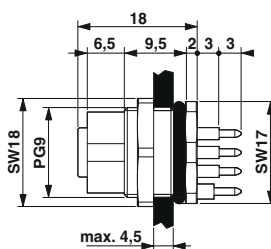
EMC hexagonal nuts with fine toothing, for all flush-type plug-in connectors with:
Pg9 fastening thread

Accessories		
SACC-PG9-KD-NUT-SH	1440177	10

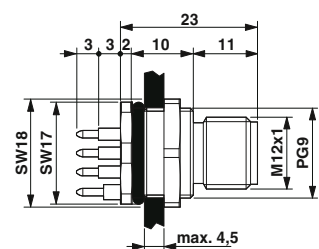
Accessories		
SACC-PG9-KD-NUT-SH	1440177	10



M12 flush-type socket, contact length: 12 mm



M12 flush-type socket, contact length: 6 mm



M12 flush-type plug, contact length: 6 mm

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, rear mounting

M12 fastening thread, one-piece,
for wave soldering processes



Straight, 4, 5, 8-pos.



Straight, 12, 17-pos.



Technical data

General data	
M12 circular plug-in connector according to:	IEC 61076-2-101
Pollution degree	3
Degree of protection	IP67
Connection method	Solder pins
Electrical data	
Rated voltage	250 V
Rated current	4 A
Volume resistance	≤ 3 mΩ
Material data	
Material contact / contact surface	CuZn / Au
Contact carrier material	PA 66
Inflammability class according to UL 94	V0
Temperature data	
Plug / socket	-25 ... 85 [°C]

4-pos.	5-pos.	8-pos.
IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
3	3	3
IP67	IP67	IP67
Solder pins	Solder pins	Solder pins
250 V	60 V	30 V
4 A	4 A	2 A
≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
CuZn / Au	CuZn / Au	CuZn / Au
PA 66	PA 66	PA 66
V0	V0	V0
-25 ... 85	-25 ... 85	-25 ... 85



Technical data

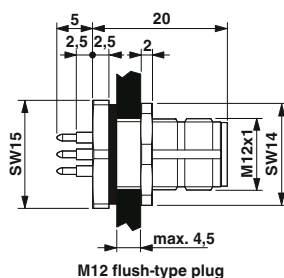
12-pos.	17-pos.	
IEC 61076-2-101	IEC 61076-2-101	-
3	3	-
IP67	IP67	-
Solder pins	Solder pins	-
30 V	30 V	-
1.5 A	1.5 A	-
≤ 3 mΩ	≤ 3 mΩ	-
CuZn / Au	CuZn / Au	- / -
PA 66	PA 66	-
V0	V0	-
-25 ... 85	-25 ... 85	-

Ordering data

Description	Coding
Device plug-in connectors	
Plug	A - standard
Plug	D - data
Plug	B - inverse

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1551820	20	1551833	20	1551862	20
1551859	20				
		1551846	20		

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
12-pos.		17-pos.			
1559945	20	1559974	20		



M12 flush-type plug

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, rear mounting

M12 fastening thread, one-piece,
for wave soldering processes, shielded



Straight, 4, 5, 8-pos.



Straight, 12, 17-pos.



Technical data		
4-pos.	5-pos.	8-pos.
General data		
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3
Degree of protection	IP67	IP67
Connection method	Solder pins	Solder pins
Electrical data		
Rated voltage	250 V	60 V
Rated current	4 A	4 A
Volume resistance	$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$
Material data		
Material contact / contact surface	CuZn / Au	CuZn / Au
Contact carrier material	PA 66	PA 66
Inflammability class according to UL 94	V0	V0
Temperature data		
Plug / socket	-25 ... 85	-25 ... 85

Ordering data		
Order No.	Pcs. / Pkt.	Order No.
4-pos.	5-pos.	8-pos.
1552955	20	1552968
1552984	20	1552997
		1552971

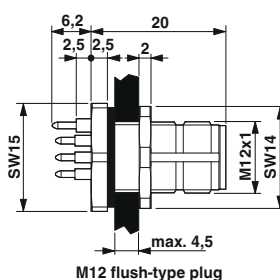
Accessories		
Order No.	Pcs. / Pkt.	Order No.
SACC-M12-KD-NUT-SH	1440151	10



Technical data		
12-pos.	17-pos.	
General data		
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3
Degree of protection	IP67	IP67
Connection method	Solder pins	Solder pins
Electrical data		
Rated voltage	30 V	30 V
Rated current	1.5 A	1.5 A
Volume resistance	$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$
Material data		
Material contact / contact surface	CuZn / Au	CuZn / Au
Contact carrier material	PA 66	PA 66
Inflammability class according to UL 94	V0	V0
Temperature data		
Plug / socket	-25 ... 85	-25 ... 85

Ordering data		
Order No.	Pcs. / Pkt.	Order No.
12-pos.	17-pos.	
1437106	20	1437119

Accessories		
Order No.	Pcs. / Pkt.	Order No.
SACC-M12-KD-NUT-SH	1440151	10



M12 flush-type plug

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, rear mounting

M16 fastening thread, one-piece,
for wave soldering processes



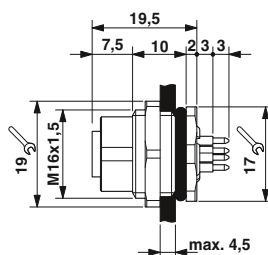
Straight, 4, 5, 8-pos.



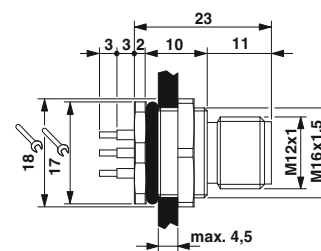
Straight, 12, 17-pos.



Technical data			Technical data		
4-pos.	5-pos.	8-pos.	12-pos.	17-pos.	
General data					
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101	-
Pollution degree	3	3	3	3	-
Degree of protection	IP67	IP67	IP67	IP67	-
Connection method	Solder pins	Solder pins	Solder pins	Solder pins	-
Electrical data					
Rated voltage	250 V	60 V	30 V	30 V	-
Rated current	4 A	4 A	2 A	1.5 A	-
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ	-
Material data					
Material contact / contact surface	CuZn / Au	CuZn / Au	CuZn / Au	CuZn / Au	- / -
Contact carrier material	PA 66	PA 66	PA 66	PA 66	-
Inflammability class according to UL 94	V0	V0	V0	V0	-
Temperature data					
Plug / socket [°C]	-25 ... 85	-25 ... 85	-25 ... 85	-25 ... 85	-
Ordering data			Ordering data		
Description	Coding	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
Device plug-in connectors		4-pos.	5-pos.	8-pos.	12-pos.
Socket	A - standard	1419755	20	1441778	20
Plug	A - standard	1419742	20	1441765	20
Socket	D - data	1441752	20	1441804	20
Plug	D - data	1441749	20		
Socket	B - inverse		1441794	20	
Plug	B - inverse		1441781	20	



M12 flush-type socket



M12 flush-type plug

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, rear mounting

M16 fastening thread, one-piece, for wave soldering processes, shielded



Straight, 4, 5, 8-pos.



Straight, 12, 17-pos.



Technical data		
4-pos.	5-pos.	8-pos.
General data		
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3
Degree of protection	IP67	IP67
Connection method	Solder pins	Solder pins
Electrical data		
Rated voltage	250 V	60 V
Rated current	4 A	4 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ
Material data		
Material contact / contact surface	CuZn / Au	CuZn / Au
Contact carrier material	PA 66	PA 66
Inflammability class according to UL 94	V0	V0
Temperature data		
Plug / socket	-25 ... 85	-25 ... 85

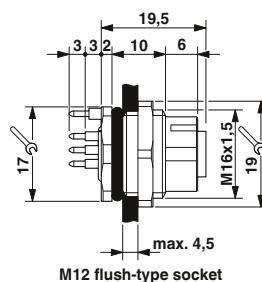
Ordering data		
Order No.	Pcs. / Pkt.	Order No.
4-pos.	5-pos.	8-pos.
1419771	20	1441891
1419768	20	1441888
1441875	20	1441930
1441862	20	1441927
		1441914
		1441901

Accessories		
SACC-M16-KD-NUT-SH	1440164	10

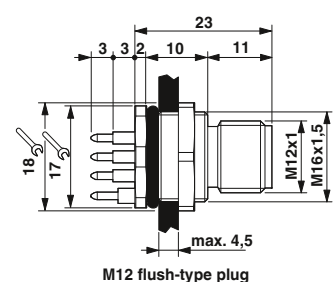
Technical data		
12-pos.	17-pos.	
General data		
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3
Degree of protection	IP67	IP67
Connection method	Solder pins	Solder pins
Electrical data		
Rated voltage	30 V	30 V
Rated current	1.5 A	1.5 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ
Material data		
Material contact / contact surface	CuZn / Au	CuZn / Au
Contact carrier material	PA 66	PA 66
Inflammability class according to UL 94	V0	V0
Temperature data		
Plug / socket	-25 ... 85	-25 ... 85

Ordering data		
Order No.	Pcs. / Pkt.	Order No.
12-pos.	17-pos.	
1441956	20	1441972
1441943	20	1441969

Accessories		
SACC-M16-KD-NUT-SH	1440164	10



M12 flush-type socket



M12 flush-type plug

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, rear mounting

Contact carrier, two-piece, angled,
for wave soldering processes



Angled, 4, 5, 8-pos.



Angled, shielded, 4, 5, 8-pos.



Technical data			
	4-pos.	5-pos.	8-pos.
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Solder pins	Solder pins	Solder pins
Electrical data			
Rated voltage	250 V	60 V	30 V
Rated current	4 A	4 A	2 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
Material data			
Material contact / contact surface	CuZn / Au	CuZn / Au	CuZn / Au
Contact carrier material	PA 66	PA 66	PA 66
Inflammability class according to UL 94	V0	V0	V0
Temperature data			
Plug / socket [°C]	-25 ... 85	-25 ... 85	-25 ... 85

Ordering data					
Order No.		Pcs. / Pkt.	Order No.		Pcs. / Pkt.
4-pos.			5-pos.		
1436628		20	1436644		20
1436660		20	1436686		20
			1436990		20
			1436987		20

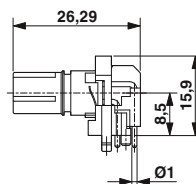
Accessories	
See page 258 onwards	



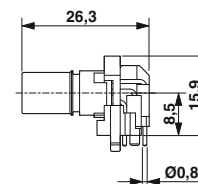
Technical data			
	4-pos.	5-pos.	8-pos.
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Solder pins	Solder pins	Solder pins
Electrical data			
Rated voltage	250 V	60 V	30 V
Rated current	4 A	4 A	2 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
Material data			
Material contact / contact surface	CuZn / Au	CuZn / Au	CuZn / Au
Contact carrier material	PA 66	PA 66	PA 66
Inflammability class according to UL 94	V0	V0	V0
Temperature data			
Plug / socket [°C]	-25 ... 85	-25 ... 85	-25 ... 85

Ordering data					
Order No.		Pcs. / Pkt.	Order No.		Pcs. / Pkt.
4-pos.			5-pos.		
1432444		20	1432431		20
1439887		20	1439890		20
1432457		20	1437009		20
1436673		20	1437038		20
			1432512		20
			1436699		20

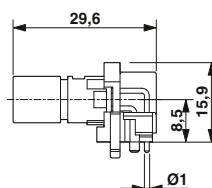
Accessories	
See page 258 onwards	



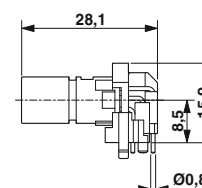
M12 socket contact carrier, angled, 4, 5-pos.



M12 socket contact carrier, angled, 8-pos.



M12 pin contact carrier, angled, 4, 5-pos.



M12 pin contact carrier, angled, 8-pos.

Contact carrier, two-piece, angled,
for wave soldering processes

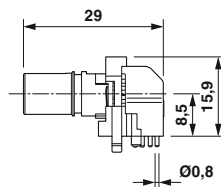


Angled, 12, 17-pos.

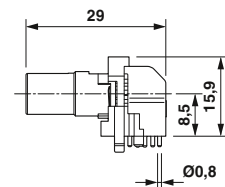


Angled, shielded, 12, 17-pos.

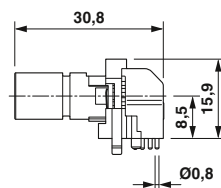
	Technical data			Technical data			
	12-pos.	17-pos.		12-pos.	17-pos.		
General data							
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	-	IEC 61076-2-101	IEC 61076-2-101	-	
Pollution degree	3	3	-	3	3	-	
Degree of protection	IP67	IP67	-	IP67	IP67	-	
Connection method	Solder pins	Solder pins	-	Solder pins	Solder pins	-	
Electrical data							
Rated voltage	30 V	30 V	-	30 V	30 V	-	
Rated current	1.5 A	1.5 A	-	1.5 A	1.5 A	-	
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	-	≤ 3 mΩ	≤ 3 mΩ	-	
Material data							
Material contact / contact surface	CuZn / Au	CuZn / Au	- / -	CuZn / Au	CuZn / Au	- / -	
Contact carrier material	PA6T	PA6T	-	PA6T	PA6T	-	
Inflammability class according to UL 94	V0	V0	-	V0	V0	-	
Temperature data							
Plug / socket	[°C]	-25 ... 85	-25 ... 85	-	-25 ... 85	-25 ... 85	-
	Ordering data			Ordering data			
Description	Coding	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
		12-pos.	17-pos.			12-pos.	17-pos.
Device plug-in connectors							
Socket	A - standard	1424195	20	1424197	20	1424199	20
Plug	A - standard	1424194	20	1424196	20	1424198	20
		Accessories			Accessories		
Housing screw connections, SPEEDCON screw versions and press-in versions, for all two-piece THR and wave soldering contact carriers		See page 258 onwards			See page 258 onwards		



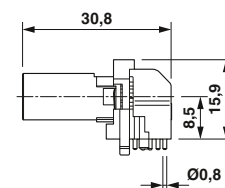
M12 socket contact carrier, angled, 12-pos.



M12 socket contact carrier, angled, 17-pos.



M12 pin contact carrier, angled, 12-pos.



M12 pin contact carrier, angled, 17-pos.

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, rear mounting

Contact carrier, two-piece,
for wave soldering processes



Straight, 5-pos.



Straight, shielded, 4, 5-pos.



Technical data			
5-pos.			
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	-	-
Pollution degree	3	-	-
Degree of protection	IP67	-	-
Connection method	Solder pins	-	-
Electrical data			
Rated voltage	60 V	-	-
Rated current	4 A	-	-
Volume resistance	≤ 3 mΩ	-	-
Material data			
Material contact / contact surface	CuZn / Au	- / -	- / -
Contact carrier material	PA 66	-	-
Inflammability class according to UL 94	V0	-	-
Temperature data			
Plug / socket	-25 ... 85	-	-
	[°C]		

Description	Coding
Contact carrier	
Socket	A - standard
Socket	D - data
Socket	B - inverse

Housing screw connections, SPEEDCON screw versions and press-in versions, for all two-piece THR and wave soldering contact carriers

Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
5-pos.					
1551464	20				

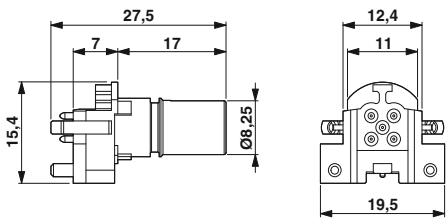
Accessories	
See page 258 onwards	



Technical data			
4-pos.		5-pos.	
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	-
Pollution degree	3	3	-
Degree of protection	IP67	IP67	-
Connection method	Solder pins	Solder pins	-
Electrical data			
Rated voltage	250 V	60 V	-
Rated current	4 A	4 A	-
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	-
Material data			
Material contact / contact surface	CuZn / Au	CuZn / Au	- / -
Contact carrier material	PA 66	PA 66	-
Inflammability class according to UL 94	V0	V0	-
Temperature data			
Plug / socket	-25 ... 85	-25 ... 85	-

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.					
1551480	20				
		1551477	20		

Accessories	
See page 258 onwards	



M12 socket contact carrier, straight, 4, 5-pos.

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, rear mounting

Two-piece, for reflow processes,
tray packaging, tape-on-reel packing



Straight, 4, 5, 8-pos.



Straight, 12, 17-pos.



Technical data		
4-pos.	5-pos.	8-pos.
IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
3	3	3
IP67	IP67	IP67
THR solder connection	THR solder connection	THR solder connection
250 V	60 V	30 V
4 A	4 A	2 A
≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
CuZn / Au	CuZn / Au	CuZn / Au
PPA	PPA	PPA
V0	V0	V0
-25 ... 85	-25 ... 85	-25 ... 85

Ordering data		
Order No.	Pcs. / Pkt.	Order No.
4-pos.	5-pos.	8-pos.
1439942	60	1551448
1437164	60	1552227
1457610	100	1457649
1457490	100	1457526

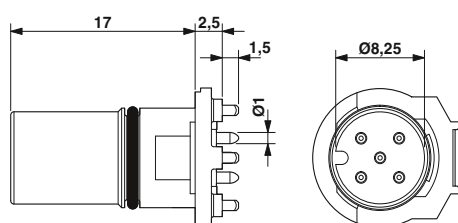
Accessories		
See page 258 onwards		



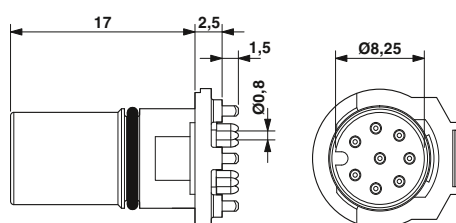
Technical data		
12-pos.	17-pos.	
IEC 61076-2-101	IEC 61076-2-101	-
3	3	-
IP67	IP67	-
THR solder connection	THR solder connection	-
30 V	30 V	-
1.5 A	1.5 A	-
≤ 3 mΩ	≤ 3 mΩ	-
CuZn / Au	CuZn / Au	- / -
PPA	PPA	-
V0	V0	-
-25 ... 85	-25 ... 85	-

Ordering data		
Order No.	Pcs. / Pkt.	Order No.
12-pos.	17-pos.	
1441970	60	1441998
1441985	60	1442007
1457694	100	1457717
1457571	100	1457597

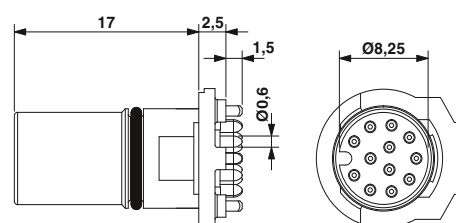
Accessories		
See page 258 onwards		



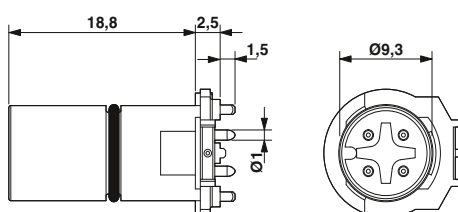
M12 socket contact carrier, straight, 4, 5-pos.



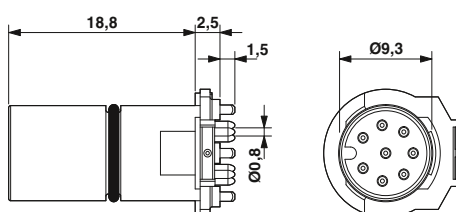
M12 socket contact carrier, straight, 8-pos.



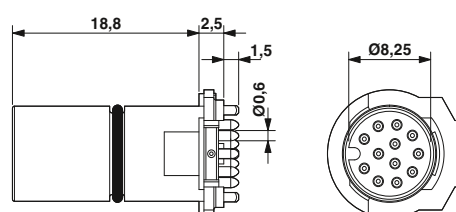
M12 socket contact carrier, straight, 12, 17-pos.



M12 plug contact carrier, straight, 4, 5-pos.



M12 plug contact carrier, straight, 8-pos.



M12 plug contact carrier, straight, 12, 17-pos.

M12 sensor/actuator device plug-in connectors, rear mounting

RL

Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
12-pos.		17-pos.	
1442052	60	1442078	60
1442065	60	1442081	60
1457704		1457720	
1457584		1457607	

Accessories
See page 258 onwards

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, rear mounting

Housing screw connections, screw versions

- For two-piece M12 device plug-in connectors



With O-ring



With flat gasket

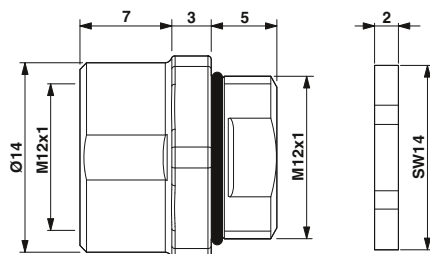


Technical data		
Zinc die-cast (nickel-plated)		
-25 °C ... 85 °C		
Ordering data		
Type	Order No.	Pcs. / Pkt.
SACC-M12-SCO NUT	1552243	60
SACC-M12-SCO PLUG	1551493	60

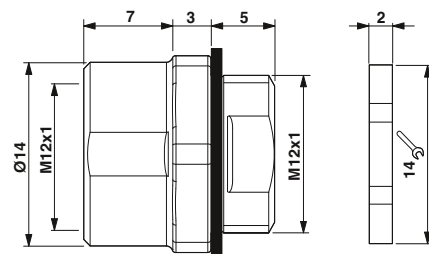


Technical data		
Zinc die-cast (nickel-plated)		
-25 °C ... 85 °C		
Ordering data		
Type	Order No.	Pcs. / Pkt.
SACC-M12-SCO NUT L 90	1432460	10
SACC-M12-SCO PLUG L90	1436709	10

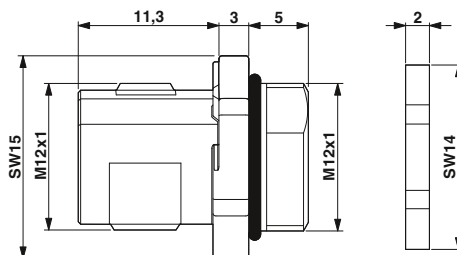
Material data	
Material	
Temperature data	
Ambient temperature (operation)	
Description	Housing screw connections, SPEEDCON screw versions for all two-piece THR and wave soldering contact carriers
Socket	
Plug	



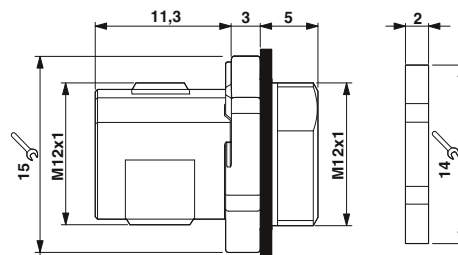
Socket housing screw connection, with O-ring



Socket housing screw connection, with flat gasket



Pin housing screw connection, with O-ring



Pin housing screw connection, with flat gasket

Housing screw connections, press-in versions

- For two-piece M12 device plug-in connectors



M12 socket



M12 pin



Technical data

Material data
Material
Temperature data
Ambient temperature (operation)

CuZn (nickel-plated)
-25 °C ... 85 °C

Ordering data

Description
Housing screw connection , for all two-piece THR and wave soldering contact carriers
Socket
Plug

Type	Order No.	Pcs. / Pkt.
SACC-M12 NUT PRESS	1437889	10

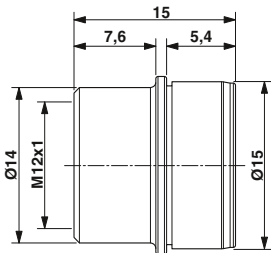


Technical data

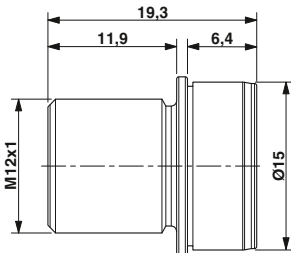
CuZn (nickel-plated)
-25 °C ... 85 °C

Ordering data

Type	Order No.	Pcs. / Pkt.
SACC-M12 PLUG PRESS	1437892	10



Socket housing screw connection



Pin housing screw connection

M12 sensor/actuator device plug-in connectors, rear mounting

EtherCAT
Technologies Group



Sercos
the automation bus

**CAT5/CAT5e**260 | PHOENIX CONTACT

CAT5e, Y-coded

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, rear mounting

**M12, two-piece,
for wave soldering processes**

Ethernet

**PROFI
NET**



Straight, 4, 5, 8-pos.



Straight, shielded, 5-pos.



Technical data

General data	
M12 circular plug-in connector according to:	IEC 61076-2-101
Pollution degree	3
Degree of protection	IP67
Connection method	Solder pins
Electrical data	
Rated voltage	250 V
Rated current	4 A
Volume resistance	≤ 3 mΩ
Material data	
Material contact / contact surface	CuZn / Au
Contact carrier material	PA 66
Inflammability class according to UL 94	HB
Temperature data	
Plug / socket	[-25 ... 85] [°C]

4-pos.	5-pos.	8-pos.
IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
3	3	3
IP67	IP67	IP67
Solder pins	Solder pins	Solder pins
250 V	60 V	30 V
4 A	4 A	2 A
≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
CuZn / Au	CuZn / Au	CuZn / Au
PA 66	PA 66	PA 66
HB	HB	HB
-25 ... 85	-25 ... 85	-25 ... 85

Ordering data

Description	Coding
Flush-type plug-in connector, straight	
Socket	A - standard
Plug	A - standard
Socket	D - data
Socket	B - inverse
Plug	B - inverse

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
		1694237	10	1556854	10
		1694211	10		
1534627	10	1515934	10		
		1514883	10		

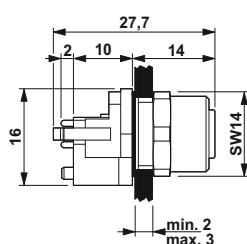


Technical data

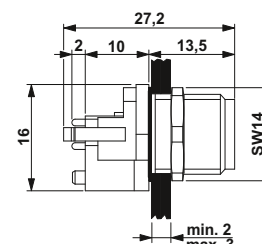
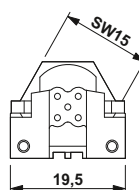
5-pos.		
IEC 61076-2-101	-	-
3	-	-
IP67	-	-
Solder pins	-	-
60 V	-	-
4 A	-	-
≤ 3 mΩ	-	-
CuZn / Au	- / -	- / -
PA 66	-	-
HB	-	-
-25 ... 85	-	-

Ordering data

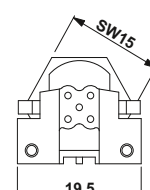
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
5-pos.					
1437193	10				
1437180	10				
1437203	10				



M12 flush-type socket, straight,



M12 flush-type plug, straight,



Pg9 fastening thread, plastic



Solder connection, 5, 8-pos.



With 0.5 m long litz wires, 5, 8-pos.



Technical data

General data	
M12 circular plug-in connector according to:	
Pollution degree	3
Degree of protection	IP67
Electrical data	
Rated voltage	60 V
Rated current	4 A
Volume resistance	≤ 3 mΩ
Material data	
Material contact / contact surface	CuZn / Au
Contact carrier material	PA 66
Inflammability class according to UL 94	HB
Temperature data	
Plug / socket	[°C]
Cable, fixed installation	[°C]

5-pos.	8-pos.
IEC 61076-2-101	IEC 61076-2-101
3	3
IP67	IP67
60 V	30 V
4 A	2 A
≤ 3 mΩ	≤ 3 mΩ
CuZn / Au	CuZn / Au
PA 66	PA 66
HB	HB
-25 ... 85	-25 ... 85
-	-



Technical data

5-pos.	8-pos.
IEC 61076-2-101	IEC 61076-2-101
3	3
IP67	IP67
60 V	30 V
4 A	2 A
≤ 3 mΩ	≤ 3 mΩ
CuZn / Au	CuZn / Au
PA 66	PA 66
HB	HB
-25 ... 85	-25 ... 85
-25 ... 85	-25 ... 85

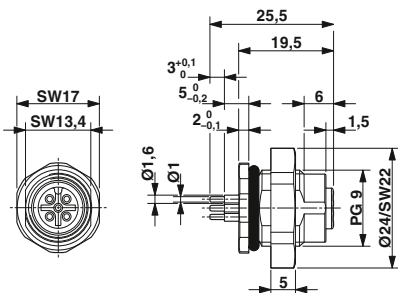
Ordering data

Description	Coding
Flush-type plug-in connector, with solder pins	
Socket	A - standard
Flush-type plug-in connector, with solder cups	
Socket	A - standard
Flush-type plug-in connector, with litz wires	
Socket	A - standard

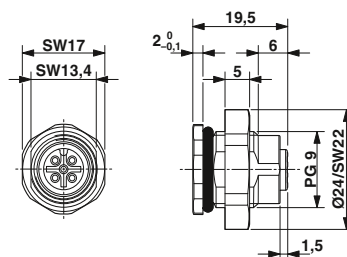
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
5-pos.		8-pos.	
1436330	20	1436343	20
1436314	20	1436327	20

Ordering data

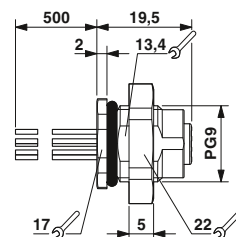
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
5-pos.		8-pos.	
1436356	1	1436369	1



M12, Pg9 fastening thread, solder pins



M12 socket, Pg9 fastening thread, solder cups



M12 socket, Pg9 fastening thread, with litz wires

Control cabinet feed-through

M5 to M12 circular plug-in connectors

7/8" sensor/actuator device plug-in connectors, front mounting

Front mounting,
Pg13.5 fastening thread,
with 0.5 m long litz wires

Notes:

Flat nut recommended for housing wall thicknesses < 2.5 mm.



3, 4-pos.



5-pos.



Technical data

	3-pos.	4-pos.
General data		
Pollution degree	3	3
Degree of protection	IP67	IP67
Connection method	Individual wires	Individual wires
Electrical data		
Rated voltage	250 V	250 V
Rated current	12 A	9 A
Volume resistance	≤ 5 mΩ	≤ 5 mΩ
Surge voltage category	II	II
Material data		
Material contact / contact surface	CuZn / Au	CuZn / Au
Contact carrier material	PUR	PUR
Inflammability class according to UL 94	HB	HB
Cable type	PVC litz wire	PVC litz wire
Temperature data		
Plug / socket	[°C]	[°C]
Cable, fixed installation	-40 ... 85	-40 ... 85

Ordering data

Description	Coding	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
		3-pos.		4-pos.	
Device plug-in connectors					
Socket	A - standard	1521407	1	1521423	1
Plug	A - standard	1521410	1	1521436	1

Accessories

Flat nut, with: Pg13.5 thread	SACC-E-MU-PG13,5	1539143	100
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Technical data

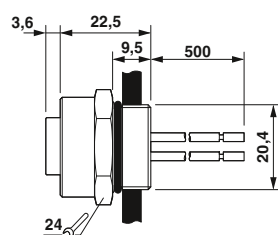
	5-pos.	
General data		
Pollution degree	3	-
Degree of protection	IP67	-
Connection method	Individual wires	-
Electrical data		
Rated voltage	250 V	-
Rated current	9 A	-
Volume resistance	≤ 5 mΩ	-
Surge voltage category	II	-
Material data		
Material contact / contact surface	CuZn / Au	- / -
Contact carrier material	PUR	-
Inflammability class according to UL 94	HB	-
Cable type	PVC litz wire	-
Temperature data		
Plug / socket	-40 ... 85	-
Cable, fixed installation	-40 ... 85	-

Ordering data

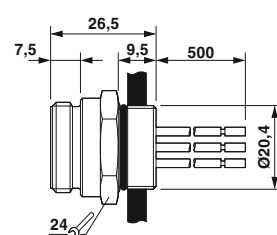
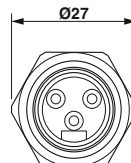
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
		5-pos.	
1521449	1		
1521452	1		

Accessories

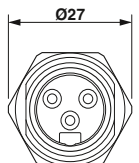
SACC-E-MU-PG13,5	1539143	100
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7/8" flush-type socket



7/8" flush-type plug



M5 to M12 circular plug-in connectors

7/8" sensor/actuator device plug-in connectors, rear mounting

7/8", with 1.0 m long litz wires



3, 4, 5-pos.



3, 4, 5-pos.



Technical data

	3-pos.	4-pos.	5-pos.
General data			
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Individual wires	Individual wires	Individual wires
Electrical data			
Rated voltage	250 V	250 V	250 V
Rated current	12 A	9 A	9 A
Volume resistance	≤ 5 mΩ	≤ 5 mΩ	≤ 5 mΩ
Surge voltage category	II	II	II
Material data			
Contact material	CuZn	CuZn	CuZn
Contact surface material	Au	Au	Au
Contact carrier material	PUR	PUR	PUR
Inflammability class according to UL 94	HB	HB	HB
Temperature data			
Plug / socket [°C]	-40 ... 85	-40 ... 85	-40 ... 85
Cable, fixed installation [°C]	-40 ... 85	-40 ... 85	-40 ... 85

Ordering data

Description	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
	3-pos.		4-pos.		5-pos.	
Socket	1453782	1	1453795	1	1453805	1
Plug						

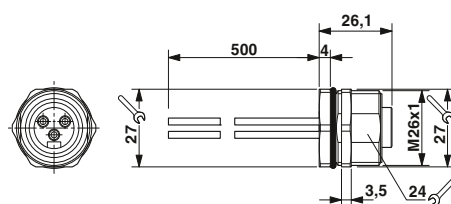


Technical data

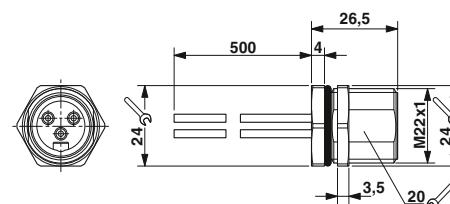
	3-pos.	4-pos.	5-pos.
General data			
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Individual wires	Individual wires	Individual wires
Electrical data			
Rated voltage	250 V	250 V	250 V
Rated current	12 A	9 A	9 A
Volume resistance	≤ 5 mΩ	≤ 5 mΩ	≤ 5 mΩ
Surge voltage category	II	II	II
Material data			
Contact material	CuZn	CuZn	CuZn
Contact surface material	Au	Au	Au
Contact carrier material	PUR	PUR	PUR
Inflammability class according to UL 94	HB	HB	HB
Temperature data			
Plug / socket [°C]	-40 ... 85	-40 ... 85	-40 ... 85
Cable, fixed installation [°C]	-40 ... 85	-40 ... 85	-40 ... 85

Ordering data

Description	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
	3-pos.		4-pos.		5-pos.	
Socket	1453782	1	1453795	1	1453805	1
Plug	1453753	1	1453766	1	1453799	1



7/8" flush-type socket



7/8" flush-type plug

M5 to M12 circular plug-in connectors

7/8" sensor/actuator device plug-in connectors, rear mounting

7/8" rear mounting,
for wave soldering processes



3, 4, 5-pos.



3, 4, 5-pos.



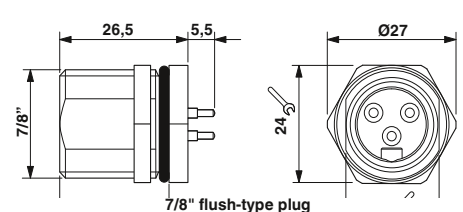
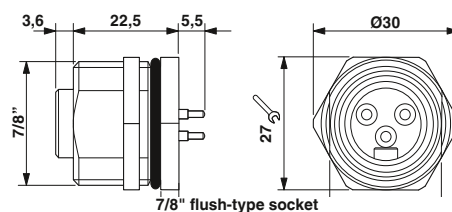
Technical data			
	3-pos.	4-pos.	5-pos.
General data			
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Solder pins	Solder pins	Solder pins
Electrical data			
Rated voltage	250 V	250 V	250 V
Rated current	12 A	9 A	9 A
Volume resistance	≤ 5 mΩ	≤ 5 mΩ	≤ 5 mΩ
Surge voltage category	II	II	II
Material data			
Contact material	CuZn	CuZn	CuZn
Contact surface material	Au	Au	Au
Contact carrier material	PUR	PUR	PUR
Inflammability class according to UL 94	HB	HB	HB
Temperature data			
Plug / socket	-40 ... 85	-40 ... 85	-40 ... 85

Ordering data					
Description	Coding	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
Flush-type plug-in connector, M26 fastening thread					
Socket	A - standard	1457830	1	1457843	1
Flush-type plug-in connector, 7/8" fastening thread					
Plug	A - standard				



Technical data			
	3-pos.	4-pos.	5-pos.
General data			
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Solder pins	Solder pins	Solder pins
Electrical data			
Rated voltage	250 V	250 V	250 V
Rated current	12 A	9 A	9 A
Volume resistance	≤ 5 mΩ	≤ 5 mΩ	≤ 5 mΩ
Surge voltage category	II	II	II
Material data			
Contact material	CuZn	CuZn	CuZn
Contact surface material	Au	Au	Au
Contact carrier material	PUR	PUR	PUR
Inflammability class according to UL 94	HB	HB	HB
Temperature data			
Plug / socket	-40 ... 85	-40 ... 85	-40 ... 85

Ordering data					
Description	Coding	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
Flush-type plug-in connector, M26 fastening thread					
Socket	A - standard	1457830	1	1457843	1
Flush-type plug-in connector, 7/8" fastening thread					
Plug	A - standard	1455007	1	1455010	1



M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, stainless steel versions

**Front mounting,
Pg9/M16 fastening thread,
with 0.5 m long litz wires**

– Housing material, stainless steel 1.4404



4, 5, 8-pos.



Can be positioned, 4, 5, 8-pos.



Technical data		
4-pos.	5-pos.	8-pos.
IEC 61076-2-101 3 IP67/IP69K Individual wires	IEC 61076-2-101 3 IP67/IP69K Individual wires	IEC 61076-2-101 3 IP67/IP69K Individual wires
250 V 4 A ≤ 3 mΩ	60 V 4 A ≤ 3 mΩ	30 V 2 A ≤ 3 mΩ
CuZn / Au PA66 GF V0 TPE litz wire	CuZn / Au PA66 GF V0 TPE litz wire	CuZn / Au PA66 GF V0 TPE litz wire
-25 ... 85	-25 ... 85	-25 ... 85

Ordering data		
Order No.	Pcs. / Pkt.	Order No.
4-pos.	5-pos.	8-pos.

General data
M12 circular plug-in connector according to:
Pollution degree
Degree of protection
Connection method
Electrical data
Rated voltage
Rated current
Volume resistance
Material data
Material contact / contact surface
Contact carrier material
Inflammability class according to UL 94
Cable type
Temperature data
Plug / socket



Technical data		
4-pos.	5-pos.	8-pos.
IEC 61076-2-101 3 IP67/IP69K Individual wires	IEC 61076-2-101 3 IP67/IP69K Individual wires	IEC 61076-2-101 3 IP67/IP69K Individual wires
250 V 4 A ≤ 3 mΩ	60 V 4 A ≤ 3 mΩ	30 V 2 A ≤ 3 mΩ
CuZn / Au PA66 GF V0 TPE litz wire	CuZn / Au PA66 GF V0 TPE litz wire	CuZn / Au PA66 GF V0 TPE litz wire
-25 ... 85	-25 ... 85	-25 ... 85

Ordering data		
Order No.	Pcs. / Pkt.	Order No.
4-pos.	5-pos.	8-pos.

Device plug-in connector, Pg9 fastening thread

Socket	A - standard
Plug	A - standard

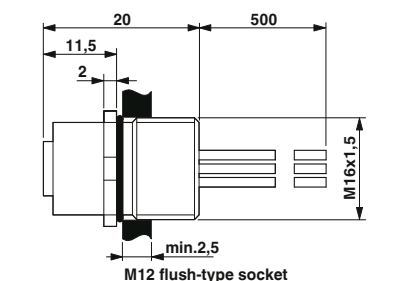
1555448	1	1699863	1	1554607	1
1554555	1	1554568	1	1554571	1

1554649	1	1554652	1	1554665	1
1554610	1	1554623	1	1554636	1

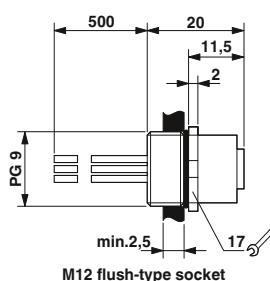
Device plug-in connector, M16 fastening thread

Socket	A - standard
Plug	A - standard

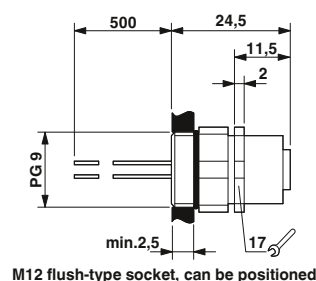
1458855	1	1458871	1	1458842	1
1405233	1	1458868	1	1405221	1



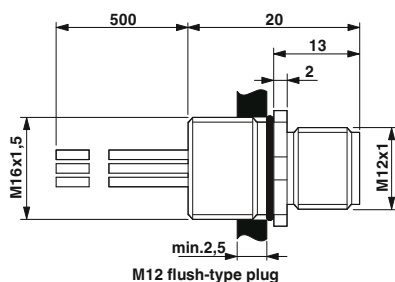
M12 flush-type socket



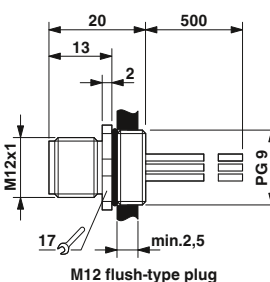
M12 flush-type socket



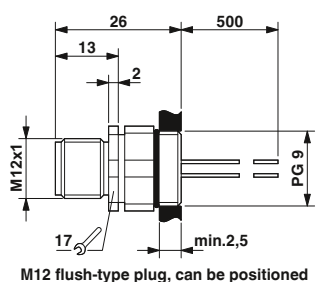
M12 flush-type socket, can be positioned



M12 flush-type plug



M12 flush-type plug



M12 flush-type plug, can be positioned

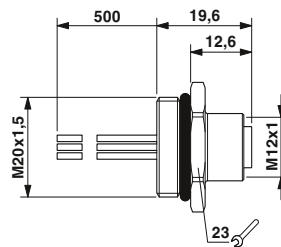
**Front mounting,
M20 fastening thread,
with 0.5 m long litz wires**

– Housing material, stainless steel 1.4404

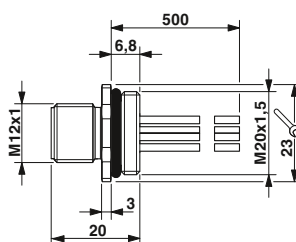


4, 5, 8-pos.

		Technical data							
		4-pos.		5-pos.		8-pos.			
General data									
M12 circular plug-in connector according to:		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101			
Pollution degree		3		3		3			
Degree of protection		IP67/IP69K		IP67/IP69K		IP67/IP69K			
Connection method		Individual wires		Individual wires		Individual wires			
Electrical data									
Rated voltage		250 V		60 V		30 V			
Rated current		4 A		4 A		2 A			
Volume resistance		≤ 3 mΩ		≤ 3 mΩ		≤ 3 mΩ			
Material data									
Material contact / contact surface		CuZn / Au		CuZn / Au		CuZn / Au			
Contact carrier material		PA 66		PA 66		PA 66			
Inflammability class according to UL 94		V0		V0		V0			
Cable type		TPE litz wire		TPE litz wire		TPE litz wire			
Temperature data									
Plug / socket		[°C]		-25 ... 85		-25 ... 85			
		Ordering data							
Description		Coding		Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
				4-pos.		5-pos.		8-pos.	
Device plug-in connectors									
Socket	A - standard	1408416	1	1452071	1	1452110	1		
Plug	A - standard	1408415	1	1452068	1	1452107	1		
Socket	B - inverse			1452097	1				
Plug	B - inverse			1452084	1				



M12 flush-type socket



M12 flush-type plug

M5 to M12 circular plug-in connectors

M12 sensor/actuator device plug-in connectors, stainless steel versions

Device plug-in connector, rear mounting

– Housing material, stainless steel 1.4404



With 0.5 m long litz wires, 4, 5, 8-pos.



For wave soldering processes, 4, 5, 8-pos.



Technical data

General data	
M12 circular plug-in connector according to:	
Pollution degree	
Degree of protection	
Connection method	
Electrical data	
Rated voltage	
Rated current	
Volume resistance	
Material data	
Material contact / contact surface	
Contact carrier material	
Inflammability class according to UL 94	
Cable type	
Temperature data	
Plug / socket	[°C]

4-pos.	5-pos.	8-pos.
IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
3	3	3
IP67/IP69K	IP67/IP69K	IP67/IP69K
Individual wires	Individual wires	Individual wires
250 V	60 V	30 V
4 A	4 A	2 A
≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
CuZn / Au	CuZn / Au	CuZn / Au
PA 66	PA 66	PA 66
V0	V0	V0
TPE litz wire	TPE litz wire	TPE litz wire
-25 ... 85	-25 ... 85	-25 ... 85

Ordering data

Description	Coding
Device plug-in connectors	
Socket	A - standard
Plug	A - standard

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1405240	1	1554717	1	1554720	1
1405239	1	1554681	1	1554694	1

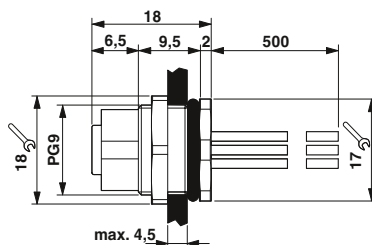


Technical data

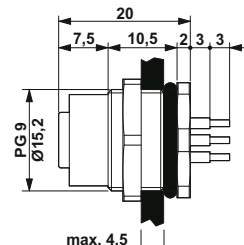
4-pos.	5-pos.	8-pos.
IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
3	3	3
IP67/IP69K	IP67/IP69K	IP67/IP69K
Solder pins	Solder pins	Solder pins
250 V	60 V	30 V
4 A	4 A	2 A
≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
CuZn / Au	CuZn / Au	CuZn / Au
PA 66	PA 66	PA 66
V0	V0	V0
-	-	-
-25 ... 85	-25 ... 85	-25 ... 85

Ordering data

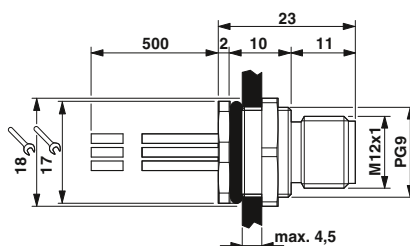
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1404974	20	1554733	20	1529797	20
1404979	20	1554746	20	1529807	20



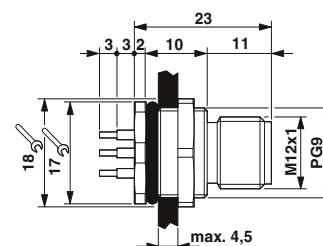
M12 flush-type socket



M12 flush-type socket



M12 flush-type plug



M12 flush-type plug

M5 to M12 circular plug-in connectors

Sensor/actuator plug-in connectors for assembly

M8, insulation displacement connection



0.08 mm² - 0.25 mm², 3, 4-pos.



0.25 mm² - 0.5 mm², 3, 4-pos.



Technical data

General data	
M8 circular plug-in connector according to:	
Pollution degree	
Degree of protection	
Connection method	
Cable diameter	
Electrical data	
Rated voltage	
Rated current	
Volume resistance	
Insulation resistance	
Material data	
Material contact / contact surface	
Contact carrier material	
Inflammability class according to UL 94	
Temperature data	
Plug / socket	[°C]

3-pos.	4-pos.
IEC 61076-2-104	
3	
IP65/67	
Insulation displacement connection	
2.5 mm ... 5 mm ± 0.2 mm	
60 V	30 V
	4 A
	≤ 5 mΩ
	≥ 100 MΩ
CuSn / Ni/Au	
TPU GF	
HB	
-25 ... 80	

Ordering data

Description
Plug-in connector
Socket, straight
Plug, straight

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.	
1441040	1	1441053	1
1441008	1	1441011	1



Technical data

3-pos.	4-pos.
IEC 61076-2-104	
3	
IP65/67	
Insulation displacement connection	
2.5 mm ... 5 mm ± 0.2 mm	
60 V	30 V
	4 A
	≤ 5 mΩ
	≥ 100 MΩ
CuSn / Ni/Au	
TPU GF	
HB	
-25 ... 80	

Ordering data

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.	
1441066	1	1441079	1
1441024	1	1441037	1

M5 to M12 circular plug-in connectors

Sensor/actuator plug-in connectors for assembly

M8, screw connections



Unshielded, 3, 4-pos.



Shielded, 3, 4-pos.



Technical data	
3-pos.	4-pos.
IEC 61076-2-104	
3	
IP67	
Screw connection	
3.5 mm ... 5 mm	
0.14 mm ² ... 0.5 mm ²	
60 V	30 V
4 A	
≤ 3 mΩ	
≥ 100 MΩ	
CuZn / Au	
PA	
HB	
-40 ... 85	

Ordering data			
Order No.		Pcs. / Pkt.	
3-pos.		4-pos.	
1506888	1	1506891	1
1501252	1	1501265	1
1407582	1	1407584	1
1407583	1	1407585	1

Accessories			
Pressure screw and seal, for cable diameters:		Pcs. / Pkt.	
2.5 mm ... 3.5 mm		5	



Technical data	
3-pos.	4-pos.
IEC 61076-2-104	
3	
IP67	
Screw connection	
3.5 mm ... 5.5 mm	
0.14 mm ² ... 0.5 mm ²	
60 V	30 V
4 A	
≤ 3 mΩ	
≥ 100 MΩ	
CuSn / Au	
PUR / PA66	
HB	
-40 ... 85	

Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.	
1542907	1	1542910	1
1542884	1	1542897	1

Accessories			
Pressure screw and seal, for cable diameters:		Pcs. / Pkt.	
2.5 mm ... 3.5 mm		5	

M5 to M12 circular plug-in connectors

Sensor/actuator plug-in connectors for assembly

M8, solder connection



Unshielded, 3, 4-pos.



Shielded, 3, 4-pos.



Technical data

General data	
M8 circular plug-in connector according to:	
Pollution degree	
Degree of protection	
Connection method	
Cable diameter	
Connection cross section [mm²]	
Electrical data	
Rated voltage	
Rated current	
Volume resistance	
Insulation resistance	
Material data	
Material contact / contact surface	
Contact carrier material	
Inflammability class according to UL 94	
Temperature data	
Plug / socket	[°C]

3-pos.	4-pos.
IEC 61076-2-104	
3	
IP67	
Solder connection	
3.5 mm ... 5 mm	
0.08 mm² ... 0.25 mm²	
60 V	30 V
4 A	
≤ 3 mΩ	
≥ 100 MΩ	
CuSn / Au	
PUR / PA66	
V0	
-40 ... 85	

Ordering data

Description
Plug-in connector
Socket, angled
Plug, angled
Socket, straight
Plug, straight

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.	
1529399	1	1513444	1
1699902	1	1554209	1
1681172	1	1681185	1
1681156	1	1681169	1

Accessories

Pressure screw and seal, for cable diameters:
2.5 mm ... 3.5 mm

SACC-M 8-SET/2,2-3,5	1436945	5
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Technical data

3-pos.	4-pos.
IEC 61076-2-104	
3	
IP67	
Solder connection	
3.5 mm ... 5 mm	
0.08 mm² ... 0.25 mm²	
60 V	30 V
4 A	
≤ 3 mΩ	
≥ 100 MΩ	
CuSn / Au	
PUR / PA66	
HB	
-40 ... 85	

Ordering data

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.	
1436479	1	1436482	1
1436453	1	1436466	1
1506927	1	1506930	1
1506901	1	1506914	1

Accessories

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M5 to M12 circular plug-in connectors

Sensor/actuator plug-in connectors for assembly

M12, solder and Piercecon® connection



Solder connection, 12-pos.



Piercecon® connection, 12, 17-pos.



		Technical data						Technical data			
		Unshielded		Shielded				12-pos.		17-pos.	
General data											
M12 circular plug-in connector according to:		IEC 61076-2-101						IEC 61076-2-101			
Pollution degree		3						3			
Degree of protection		IP67						IP67			
Connection method		Solder connection						Piercecon® fast connection			
Cable diameter		6 mm ... 8 mm						5.4 mm ... 8.2 mm			
Electrical data											
Rated voltage		30 V						30 V			
Rated current		1 A						1.5 A			
Volume resistance		≤ 3 mΩ						≤ 5 mΩ			
Insulation resistance		> 10 GΩ						≥ 100 MΩ			
Material data											
Material contact / contact surface		CuSn / Au						CuZn / Ni/Au			
Contact carrier material		PA						PA			
Inflammability class according to UL 94		-						V0			
Temperature data											
Plug / socket	[°C]	-25 ... 85						-25 ... 85			
		Ordering data						Ordering data			
Description	Coding	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.			Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
		Unshielded		Shielded				12-pos.		17-pos.	
Plug-in connector											
Socket, straight	A - standard	1404420	1	1404411	1			1559631	1	1559644	1
Plug, straight	A - standard	1404419	1	1404410	1			1559592	1	1559602	1
Socket, angled	A - standard	1404423	1	1404413	1						
Plug, angled	A - standard	1404421	1	1404412	1						

M5 to M12 circular plug-in connectors

Sensor/actuator plug-in connectors for assembly

M12 plug-in connector, for assembly

Ethernet



M12 plug-in connector, 10 Gbps, Piercecon® connection

Ethernet



M12 plug-in connector, 100 Mbps, screw connection



Technical data

VS-08-M12...-10G-P SCO

Electrical data

Nominal voltage U_N
Rated current
Transmission characteristics (category)
Material contact / contact surface
Material of grip body
Inflammability class according to UL 94
No. of pos.
Connection method
Connection cross section AWG
Insertion/withdrawal cycles

48 V
0.5 A
CAT6_A
CuSn / Ni/Au
Zinc die-cast, nickel-plated
V0
8
Piercecon®
26
≥ 100

Temperature data

Ambient temperature (operation)

-40 °C ... 85 °C

Ordering data

Type	Order No.	Pcs. / Pkt.
VS-08-M12MS-10G-P SCO	1417430	1
VS-08-M12MR-10G-P SCO	1417443	1

Accessories

VS-CABLE-STRIP-VARIO	1657407	1
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Technical data

SACC-M12MSD-4CON-...-SH

60 V
4 A
CAT5 (IEC 11801:2002), CAT5e (TIA 568B:2001)
CuZn / Au
Zinc die-cast, nickel-plated
HB
4
Screw connection
24 ... 18
≥ 100

Ordering data

Type	Order No.	Pcs. / Pkt.
SACC-M12MSD-4CON-PG 7-SH	1521258	1
SACC-M12MSD-4CON-PG 9-SH	1521261	1

Accessories

VS-CABLE-STRIP-VARIO	1657407	1
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Description

Plug-in connector, CAT6_A, plug, 8-pos., shielded, X-coded, **cable diameter: 4 mm ... 8 mm**

Straight
Angled

Plug-in connector, Pg7 screw connection, 4-pos., D-coded, **cable diameter: 4 mm ... 6 mm**

Plug, straight

Plug-in connector, Pg9 screw connection, 4-pos., D-coded, **cable diameter: 4 mm ... 8 mm**

Plug, straight

Stripping tool, for multiple-stage repositioning of shielded conductors

M5 to M12 circular plug-in connectors

Sensor/actuator plug-in connectors for assembly

M12, insulation displacement connection



0.14 mm² ... 0.34 mm²



0.34 mm² ... 0.75 mm²



Technical data

4-pos.
IEC 61076-2-101
3
IP65/67
Insulation displacement connection
3.5 mm ... 6 mm
125 V
4 A
≤ 5 mΩ
≥ 100 MΩ

General data
M12 circular plug-in connector according to:
Pollution degree
Degree of protection
Connection method
Cable diameter
Electrical data
Rated voltage
Rated current
Volume resistance
Insulation resistance
Material data
Material contact / contact surface
Contact carrier material
Inflammability class according to UL 94
Temperature data
Plug / socket

[°C]

Ordering data

Type	Order No.	Pcs. / Pkt.
Plug-in connector , with plastic knurl		
Socket, straight	A - standard	
Plug, straight	A - standard	
Plug-in connector , with metal knurl, SPEEDCON		
Socket, straight	A - standard	
Plug, straight	A - standard	
Plug-in connector , with metal knurl		
Socket, straight	A - standard	
Plug, straight	A - standard	
Plug-in connector , with stainless steel knurl		
Socket, straight	A - standard	
Plug, straight	A - standard	



Technical data

4-pos.
IEC 61076-2-101
3
IP65/67
Insulation displacement connection
4 mm ... 8 mm
250 V
4 A
≤ 5 mΩ
≥ 100 MΩ

CuSn / Ni/Au
TPU
V0

-25 ... 80

Ordering data

Type	Order No.	Pcs. / Pkt.
Plug-in connector , with plastic knurl		
Socket, straight	A - standard	
Plug, straight	A - standard	
Plug-in connector , with metal knurl, SPEEDCON		
Socket, straight	A - standard	
Plug, straight	A - standard	
Plug-in connector , with metal knurl		
Socket, straight	A - standard	
Plug, straight	A - standard	
Plug-in connector , with stainless steel knurl		
Socket, straight	A - standard	
Plug, straight	A - standard	

M5 to M12 circular plug-in connectors

Sensor/actuator plug-in connectors for assembly

M12, spring-cage connections



Unshielded, 4, 5-pos.



Shielded, 4, 5-pos.



Technical data	
4-pos.	5-pos.
General data	
M12 circular plug-in connector according to:	
IEC 61076-2-101	
3	
Degree of protection	
IP67	
Connection method	
Spring-cage conn.	
Cable diameter	
4 mm ... 8 mm	
Connection cross section [mm ²]	
0.14 mm ² ... 0.5 mm ²	
Electrical data	
Rated voltage	
250 V	60 V
Rated current	
4 A	
Volume resistance	
≤ 8 mΩ	
Insulation resistance	
≥ 100 MΩ	
Material data	
Material contact / contact surface	
CuSn / Ni/Au	
Contact carrier material	
TPU	
Inflammability class according to UL 94	
V0	
Temperature data	
Plug / socket	
-40 ... 85	

Ordering data			
4-pos.		5-pos.	
Description	Coding	Order No.	Pcs. / Pkt.
Plug-in connector, terminal marking: standard color coding and numbering			
Socket, angled	A - standard	1432622	1
Plug, angled	A - standard	1432606	1
Socket, straight	A - standard	1432619	1
Plug, straight	A - standard	1432635	1



Technical data	
4-pos.	5-pos.
General data	
M12 circular plug-in connector according to:	
IEC 61076-2-101	
3	
Degree of protection	
IP67	
Connection method	
Spring-cage conn.	
Cable diameter	
4 mm ... 8 mm	
Connection cross section [mm ²]	
0.14 mm ² ... 0.5 mm ²	
Electrical data	
Rated voltage	
60 V	
Rated current	
4 A	
Volume resistance	
≤ 8 mΩ	
Insulation resistance	
≥ 100 MΩ	
Material data	
Material contact / contact surface	
CuSn / Ni/Au	
Contact carrier material	
TPU	
Inflammability class according to UL 94	
V0	
Temperature data	
Plug / socket	
-40 ... 85	

Ordering data			
4-pos.		5-pos.	
Description	Coding	Order No.	Pcs. / Pkt.
Plug-in connector, terminal marking: standard color coding and numbering			
Socket, angled	A - standard	1432758	1
Plug, angled	A - standard	1432732	1
Socket, straight	A - standard	1432745	1
Plug, straight	A - standard	1432729	1

M5 to M12 circular plug-in connectors

Sensor/actuator plug-in connectors for assembly

M12, screw connections



Plastic knurl, 4, 5-pos.



Metal knurl, SPEEDCON, 4, 5-pos.



	Technical data		
	4-pos.	5-pos.	
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	-	
Pollution degree	3	-	
Degree of protection	IP67	-	
Connection method	Screw connection	-	
Connection cross section [mm²]	0.25 mm² ... 0.75 mm²	- ... -	
Electrical data			
Rated voltage	250 V	60 V	-
Rated current	4 A	-	-
Volume resistance	≤ 8 mΩ	-	-
Insulation resistance	≥ 100 MΩ	-	-
Material data			
Material contact / contact surface	CuZn / CuSnZn	- / -	
Contact carrier material	PA 66	-	
Inflammability class according to UL 94	HB	-	
Temperature data			
Plug / socket [°C]	-40 ... 85	-	



	Technical data		
	4-pos.	5-pos.	
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	-	
Pollution degree	3	-	
Degree of protection	IP67	-	
Connection method	Screw connection	-	
Connection cross section [mm²]	0.25 mm² ... 0.75 mm²	- ... -	
Electrical data			
Rated voltage	250 V	60 V	-
Rated current	4 A	-	-
Volume resistance	≤ 8 mΩ	-	-
Insulation resistance	≥ 100 MΩ	-	-
Material data			
Material contact / contact surface	CuZn / CuSnZn	- / -	
Contact carrier material	PA 66	-	
Inflammability class according to UL 94	HB	-	
Temperature data			
Plug / socket [°C]	-40 ... 85	-	

Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.			
1681130	1	1662308	1		
1681091	1	1662269	1		
1681114	1	1662298	1		
1681088	1	1662256	1		
		1500790	1		
		1513431	1		
		1500787	1		
		1500774	1		

Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.			
1543058	1	1543061	1		
1542981	1	1542994	1		
1543029	1	1543032	1		
1542952	1	1542965	1		
		1543414	1		
		1543003	1		
		1543045	1		
		1542978	1		

Socket, straight	A - standard
Plug, straight	A - standard

Accessories			
Pressure screw and seal, for cable diameters:			
2.5 mm ... 3.5 mm	SACC-M12-SET/2,5-3,5	1436505	5

Accessories			
Pressure screw and seal, for cable diameters:			
2.5 mm ... 3.5 mm	SACC-M12-SET/2,5-3,5	1436505	5

M5 to M12 circular plug-in connectors

Sensor/actuator plug-in connectors for assembly



Metal knurl, 4, 5, 8-pos.



Metal knurl, 4, 5-pos., with SKINTOP® screw connection



Stainless steel knurl, 4, 5-pos.



Technical data		
4-pos.	5-pos.	8-pos.
IEC 61076-2-101		
3		
IP67		
Screw connection		
0.25 mm ² ... 0.75 mm ²	0.25 mm ² ... 0.5 mm ²	
250 V	60 V	30 V
4 A		2 A
≤ 8 mΩ		≤ 3 mΩ
	≥ 100 MΩ	
CuZn / CuSnZn		CuZn / Au
PA 66		
HB		
-40 ... 85		

Technical data		
4-pos.	5-pos.	
IEC 61076-2-101		
3		
IP67		
Screw connection		
0.25 mm ² ... 0.75 mm ²	- ... -	
250 V	125 V	-
4 A		-
≤ 8 mΩ		-
≥ 100 MΩ		-
CuZn / CuSnZn		- / -
PA 66		-
HB		-
-20 ... 80		

Technical data		
4-pos.	5-pos.	
IEC 61076-2-101		
3		
IP67/IP69K		
Screw connection		
0.25 mm ² ... 0.75 mm ²	- ... -	
250 V	60 V	-
4 A		-
≤ 3 mΩ		-
≥ 100 MΩ		-
CuZn / Au		- / -
PA 66		-
V0		-
-40 ... 85		

Ordering data		
Order No.	Pcs. / Pkt.	Order No.
4-pos.	5-pos.	8-pos.
1681143	1	1662984
1681101	1	1663129
1681127	1	1662968
1662528	1	1663116
	1681499	1
	1681473	1
	1681486	1
	1681460	1
		1513347
		1513334

Ordering data		
Order No.	Pcs. / Pkt.	Order No.
4-pos.	5-pos.	
1430381	1	1559000
1556870	1	1456466
	1556812	1
	1561742	1
	1556838	1
	1556825	1

Ordering data		
Order No.	Pcs. / Pkt.	Order No.
4-pos.	5-pos.	
1553284	1	1553297
1553200	1	1553213
1553242	1	1553255
1553161	1	1553187
	1553307	1
1553226	1	1553239
1553268	1	1553271
1553174	1	1553190

1404416	1	1404418	1
1404415	1	1404417	1

Accessories		
SACC-M12-SET/2,5-3,5	1436505	5

Accessories		

Accessories		

M12, screw connection, shielded



Stainless steel housing, 5-pos.

Technical data			Technical data		
General data	4-pos.	5-pos.	8-pos.	5-pos.	
M12 circular plug-in connector according to:		IEC 61076-2-101		IEC 61076-2-101	-
Pollution degree		3		3	-
Degree of protection		IP67		IP67/IP69K	-
Connection method		Screw connection		Screw connection	-
Connection cross section [mm²]		0.25 mm² ... 0.75 mm²		0.25 mm² ... 0.75 mm²	- ... -
Electrical data					
Rated voltage	60 V		30 V	60 V	-
Rated current	4 A		2 A	4 A	-
Volume resistance		≤ 3 mΩ		≤ 3 mΩ	-
Insulation resistance		≥ 100 MΩ		≥ 100 MΩ	-
Material data					
Material contact / contact surface		CuZn / Au		CuZn / Au	- / -
Contact carrier material		PA 66		PA 66	-
Inflammability class according to UL 94		HB		V0	-
Temperature data					
Plug / socket	[-40 ... 85 °C]			-40 ... 85	-
Ordering data			Ordering data		
Description	Coding	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
		4-pos.	5-pos.	8-pos.	5-pos.
Plug-in connector, with Pg7 screw connection, cable diameter: 4 mm ... 6 mm					
Plug, angled	A - standard	1694279	1	1693429	1
Socket, straight	A - standard	1694295	1	1694305	1
Plug, straight	A - standard	1693830	1	1693416	1
Plug-in connector, with Pg9 screw connection, cable diameter: 6 mm ... 8 mm					
Socket, angled	A - standard		1430433	1	
Plug, angled	A - standard		1694282	1	
Socket, straight	A - standard	1515170	1	1694318	1
Plug, straight	A - standard	1501540	1	1694266	1
Plug-in connector, with Pg9 screw connection, cable diameter: 6 mm ... 8.5 mm					
Socket, straight	A - standard		1508365	1	
Plug, straight	A - standard		1508352	1	
Plug-in connector, with M16 screw connection, cable diameter: 3 mm ... 5.5 mm					
Socket, straight	A - standard				1440038
Plug, straight	A - standard				1440012
Plug-in connector, with M16 screw connection, cable diameter: 5.5 mm ... 8.6 mm					
Socket, straight	A - standard				1440041
Plug, straight	A - standard				1440025

M5 to M12 circular plug-in connectors

Sensor/actuator plug-in connectors for assembly

M12, power plug-in connector, screw connection



Metal knurl, 3-pos. + PE, S-coded



Metal knurl, 4-pos., T-coded

	Technical data			Technical data		
	3-pos. + PE			4-pos.		
General data						
Pollution degree	3			3		
Degree of protection	IP67			IP67		
Connection method	Screw connection			Screw connection		
Connection cross section [mm²]	0.75 mm² ... 1.5 mm²			0.75 mm² ... 1.5 mm²		
Electrical data						
Rated voltage	630 V			60 V		
Rated current	12 A			12 A		
Volume resistance	≤ 3 mΩ			≤ 3 mΩ		
Insulation resistance	> 10 GΩ			> 10 GΩ		
Material data						
Material contact / contact surface	CuZn / Au			CuZn / Au		
Contact carrier material	PA 46			PA 46		
Inflammability class according to UL 94	V0			V0		
Temperature data						
Plug / socket	[°C]	-40 ... 85		-40 ... 85		
Ordering data						
Description	Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
	SACC-M12FSS-3PECON-PG11-M	1404642	1	SACC-M12FST-3PECON-PG11-M	1404644	1
	SACC-M12MSS-3PECON-PG11-M	1404641	1	SACC-M12MST-3PECON-PG11-M	1404643	1

M5 to M12 circular plug-in connectors

Sensor/actuator plug-in connectors for assembly

M12, DUO plug-in connector, screw connection

Notes:

SPEEDCON and plastic knurls without key areas.



Metal knurl, 4, 5-pos.



SPEEDCON metal knurl/plastic knurl, 5 pos.



Technical data

	4-pos.	5-pos.
General data		
M12 circular plug-in connector according to:	IEC 61076-2-101	
Pollution degree	3	
Degree of protection	IP67	
Connection method	Screw connection	
Connection cross section [mm ²]	0.25 mm ² ... 0.75 mm ²	
Electrical data		
Rated voltage	250 V	60 V
Rated current	4 A	
Volume resistance	≤ 8 mΩ	
Insulation resistance	≥ 100 MΩ	
Material data		
Material contact / contact surface	CuZn / CuSnZn	
Contact carrier material	PA 66	
Inflammability class according to UL 94	V0	
Temperature data		
Plug / socket	-40 ... 85	

Ordering data

Description	Coding
Plug-in connector, with Pg11 DUO screw connection, cable diameter: 2 x 3 mm ... 5.2 mm	
Socket, straight	A - standard
Plug, straight	A - standard
Plug, angled	A - standard

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.	
1507052	1	1662748	1



Technical data

	Metal knurl, SPEEDCON, 5-pos.	Plastic knurl, 5-pos.
General data		
IEC 61076-2-101		
Pollution degree	3	
Degree of protection	IP67	
Connection method	Screw connection	
Connection cross section [mm ²]	0.25 mm ² ... 0.75 mm ²	
Electrical data		
Rated voltage	60 V	
Rated current	4 A	
Volume resistance	≤ 8 mΩ	
Insulation resistance	≥ 100 MΩ	
Material data		
Material contact / contact surface	CuZn / CuSnZn	
Contact carrier material	PA 66	
Inflammability class according to UL 94	V0	
Temperature data		
Plug / socket	-40 ... 85	-25 ... 85

Ordering data

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
Metal knurl, SPEEDCON, 5-pos.		Plastic knurl, 5-pos.	
1543016	1	1694596	1
		1662285	1
		1531044	1

M5 to M12 circular plug-in connectors

Sensor/actuator plug-in connectors for assembly

7/8", screw connection



Connection cross section:
1.5 mm², 3, 4, 5-pos.



Connection cross section:
2.5 mm², 5-pos.



Technical data			
3-pos.	4-pos.	5-pos.	
General data			
Pollution degree	3		
Degree of protection	IP67		
Connection method	Screw connection		
Connection cross section	0.34 mm ² ... 1.5 mm ²		
Connection cross section AWG	22 ... 16		
Electrical data			
Rated voltage	250 V		
Rated current	12 A	9 A	
Volume resistance	≤ 5 mΩ		
Insulation resistance	≥ 100 MΩ		
Material data			
Material contact / contact surface	CuZn / Au		
Contact carrier material	PUR / PA66		
Inflammability class according to UL 94	HB		
Temperature data			
Plug / socket	-25 ... 85		[°C]



Technical data			
5-pos.			
General data			
Pollution degree	3	-	
Degree of protection	IP67	-	
Connection method	Screw connection	-	
Connection cross section	0.34 mm ² ... 2.5 mm ²	- ... -	-
Connection cross section AWG	22 ... 14	- ... -	-
Electrical data			
Rated voltage	250 V	-	
Rated current	9 A	-	
Volume resistance	≤ 5 mΩ	-	
Insulation resistance	≥ 100 MΩ	-	
Material data			
Material contact / contact surface	CuZn / Au	- / -	
Contact carrier material	PUR / PA66	-	
Inflammability class according to UL 94	HB	-	
Temperature data			
Plug / socket	-25 ... 85		-

Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.		5-pos.	
Plug-in connector, with Pg9 screw connection, cable diameter: 6 mm ... 8 mm					
Socket, angled	1521478 1	1521494 1	1521517 1		
Plug, angled	1521465 1	1521481 1	1521504 1		
Socket, straight	1521300 1	1521342 1	1521384 1		
Plug, straight	1521287 1	1521326 1	1521668 1		
Plug-in connector, with Pg11 screw connection, cable diameter: 8 mm ... 10 mm					
Socket, angled			1456297 1		
Plug, angled			1456242 1		
Socket, straight			1456271 1		
Plug, straight			1456226 1		
Plug-in connector, with Pg13.5 screw connection, cable diameter: 10 mm ... 12 mm					
Socket, angled			1456307 1		
Plug, angled			1456255 1		
Socket, straight	1521313 1	1521355 1	1521397 1		
Plug, straight	1521290 1	1521339 1	1521371 1		
Plug-in connector, with Pg16 screw connection, cable diameter: 12 mm ... 14 mm					
Socket, straight			1559071 1	1456268 1	
Plug, straight			1559039 1	1456239 1	

Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
5-pos.					
Plug-in connector, with Pg9 screw connection, cable diameter: 6 mm ... 8 mm					
Socket, angled					
Plug, angled					
Socket, straight					
Plug, straight					
Plug-in connector, with Pg11 screw connection, cable diameter: 8 mm ... 10 mm					
Socket, angled					
Plug, angled					
Socket, straight					
Plug, straight					
Plug-in connector, with Pg13.5 screw connection, cable diameter: 10 mm ... 12 mm					
Socket, angled					
Plug, angled					
Socket, straight					
Plug, straight					
Plug-in connector, with Pg16 screw connection, cable diameter: 12 mm ... 14 mm					
Socket, straight					
Plug, straight					

M5 to M12 circular plug-in connectors

M12 power plug-in connectors

M12 power flush-type plug-in connectors, with 0.5 m long litz wires



S-coded, 3-pos. + PE



T-coded, 4-pos.

	Technical data					Technical data			
	Front mounting		Rear mounting			Front mounting		Rear mounting	
General data									
Pollution degree	3		3			3		3	
Degree of protection	IP67		IP67			IP67		IP67	
Connection method	Individual wires		Individual wires			Individual wires		Individual wires	
Electrical data									
Rated voltage	630 V		630 V			60 V		60 V	
Rated current	12 A		12 A			12 A		12 A	
Volume resistance	≤ 3 mΩ		≤ 3 mΩ			≤ 3 mΩ		≤ 3 mΩ	
Insulation resistance	≥ 100 MΩ		≥ 100 MΩ			≥ 100 MΩ		≥ 100 MΩ	
Surge voltage category	III		III			III		III	
Material data									
Material contact / contact surface	CuZn / Au		CuZn / Au			CuZn / Au		CuZn / Au	
Contact carrier material	PA6		PA6			PA6		PA6	
Cable type	PP litz wire		PP litz wire			PP litz wire		PP litz wire	
Temperature data									
Plug / socket	[°C]		-25 ... 85			-25 ... 85		-25 ... 85	
Cable, fixed installation	[°C]		-40 ... 90			-40 ... 90		-40 ... 90	
	Ordering data					Ordering data			
Description	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.		Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
	Front mounting		Rear mounting			Front mounting		Rear mounting	
Flush-type plug-in connector, M16 fastening thread									
Socket	1424137	1	1424133	1		1424138	1	1424134	1
Plug	1424139	1	1424132	1		1424140	1	1424136	1
	Accessories					Accessories			
Flat nut, with: M16 thread	SACC-E-MU-M16		1504097	100		SACC-E-MU-M16		1504097	100

M12 power flush-type plug-in connectors, modular, 25 mm square flange, pre-assembled



Flange housing, 2.7 mm housing bore holes

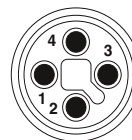
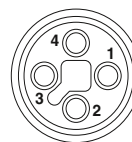


Pre-assembled contact carrier and insulating body with 0.5 m long litz wires

	Technical data		Technical data	
			S-coded, 3-pos. + PE	T-coded, 4-pos.
General data				
Pollution degree	-	-	3	3
Degree of protection	-	-	IP67	IP67
Connection method	-	-	Individual wires	Individual wires
Electrical data				
Rated voltage	-	-	630 V	60 V
Rated current	-	-	12 A	12 A
Volume resistance	-	-	≤ 3 mΩ	≤ 3 mΩ
Surge voltage category	-	-	III	III
Material data				
Material contact / contact surface	- / -	- / -	CuZn / Au	CuZn / Au
Contact carrier material	-	-	PA6	PA6
Cable gland material	Zinc die-cast, nickel-plated	-	-	-
Cable type	-	-	PP litz wire	PP litz wire
Temperature data				
Plug / socket	[°C]	-40 ... 85	-25 ... 85	-25 ... 85
Cable, fixed installation	[°C]	-	-40 ... 90	-40 ... 90
	Ordering data		Ordering data	
	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
Description			S-coded, 3-pos. + PE	T-coded, 4-pos.
Square flange housing, with flat gasket	1424131	10		
Assembled contact carrier and insulating body, with 0.5 m litz wires and crimp contacts			1424129	1
Plug				1424130 1



			Technical data			Technical data		
General data								
Pollution degree			3			3		
Degree of protection			IP67			IP67		
Connection method			Screw connection			Screw connection		
Cable diameter			8 mm ... 10 mm			8 mm ... 10 mm		
Connection cross section [mm²]			0.75 mm² ... 1.5 mm²			0.75 mm² ... 1.5 mm²		
Electrical data								
Rated voltage			630 V			60 V		
Rated current			12 A			12 A		
Volume resistance			≤ 3 mΩ			≤ 3 mΩ		
Surge voltage category			III			III		
Material data								
Material contact / contact surface			CuZn / Au			CuZn / Au		
Contact carrier material			PA 46			PA 46		
Temperature data								
Plug / socket			-40 ... 85			-40 ... 85		
			Ordering data			Ordering data		
Description			Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Plug-in connector , with Pg11 screw connection, cable diameter: 8 mm ... 10 mm								
Socket, straight			SACC-M12FSS-3PECON-PG11-M	1404642	1	SACC-M12FST-3PECON-PG11-M	1404644	1
Plug, straight			SACC-M12MSS-3PECON-PG11-M	1404641	1	SACC-M12MST-3PECON-PG11-M	1404643	1

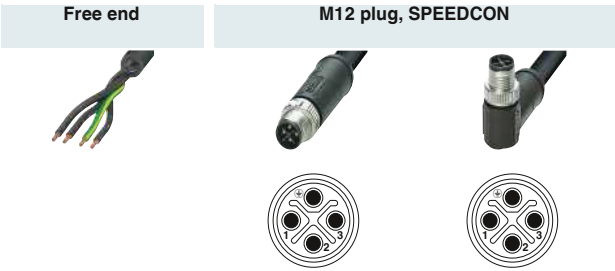


**Pin assignment of M12 plug, 4-pos., T-coded,
view of plug side**

M5 to M12 circular plug-in connectors

M12 power plug-in connectors

M12-SPEEDCON power cable,
3-pos.+PE, S-coded,
unshielded



Ordering data		Ordering data		Ordering data	
Free end	Order No.	Order No.	Order No.	Order No.	Order No.
		1 m	1408835	1 m	1408839
		2 m	1408836	2 m	1408840
		5 m	1408837	5 m	1408841
		10 m	1408838	10 m	1408842
M12 socket, SPEEDCON, straight					
	1 m	1408843			
	2 m	1408844			
	5 m	1408845			
	10 m	1408846			
M12 socket, SPEEDCON, angled					
	1 m	1408848			
	2 m	1408852			
	5 m	1408853			
	10 m	1408854			

Cable description	Cable type	Color coding		Pin assignment
PUR, halogen-free - black	PUR	BK1	1	1
		BK2	2	2
		BK3	3	3
		GNYE		PE

Technical data		
M12		
Rated voltage	[V]	630
Rated current	[A]	12
Volume resistance		≤ 3 mΩ
Material contact M12		CuZn
Material contact surface M12		Au
Material handle M12		TPU, hardly inflammable, self-extinguishing
Material, knurls		Zinc die-cast, nickel-plated
Degree of protection		IP65 / IP67
Temperature data		
Plug / socket	[°C]	-25 ... 85

**M12-SPEEDCON power cable,
3-pos.+PE, S-coded,
shielded**

Free end



M12 plug, SPEEDCON,
360° shielded



Ordering data

Ordering data

Ordering data

Free end

Order No.

Order No.

Order No.



1.5 m

1424104

1.5 m

1424108

3 m

1424105

3 m

1424109

5 m

1424245

5 m

1424110

10 m

1424107

10 m

1424111

M12 socket, SPEEDCON, straight, 360° shielded



1.5 m

1424096

3 m

1424097

5 m

1424098

10 m

1424099

M12 socket, SPEEDCON, angled, 360° shielded



1.5 m

1424100

3 m

1424101

5 m

1424102

10 m

1424103

Cable description

Cable type

Color coding

Pin assignment

PUR, halogen-free - orange

PUR

BK1

1

1

BK2

2

2

BK3

3

3

GNYE

PE

Technical data

Rated voltage

[V]

630

Rated current

[A]

12

Volume resistance

≤ 3 mΩ

Material contact M12

CuZn

Material contact surface M12

Au

Material handle M12

TPU, hardly inflammable,

self-extinguishing

Material, knurls

Zinc die-cast, nickel-plated

Degree of protection

IP65 / IP67

Temperature data

Plug / socket

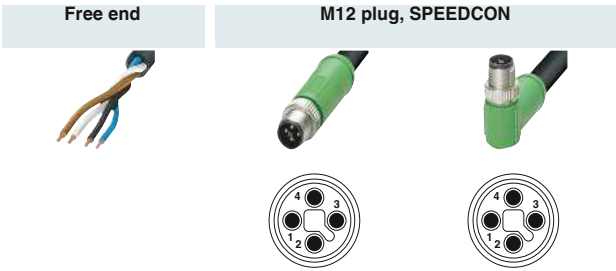
[°C]

-25 ... 85

M5 to M12 circular plug-in connectors

M12 power plug-in connectors

M12-SPEEDCON power cable, 4-pos., T-coded, unshielded



Ordering data		Ordering data		Ordering data	
Free end	Order No.	Order No.	Order No.	Order No.	Order No.
	1 m	1408812	1 m	1408816	
	2 m	1408813	2 m	1408819	
	5 m	1408814	5 m	1408820	
	10 m	1408815	10 m	1408822	
M12 socket, SPEEDCON, straight	1 m	1408823	1 m	1408808	
	2 m	1408824	2 m	1408809	
	5 m	1408825	5 m	1408810	
	10 m	1408826	10 m	1408811	
M12 socket, SPEEDCON, angled	1 m	1408827			
	2 m	1408828			
	5 m	1408829			
	10 m	1408830			

Cable description	Cable type	Color coding	Pin assignment
PUR, halogen-free - black	PUR	BN 	1
		WH 	2
		BK 	4
		BU 	3

Technical data		
M12		
Rated voltage	[V]	60
Rated current	[A]	12
Volume resistance		≤ 3 mΩ
Material contact M12		CuZn
Material contact surface M12		Au
Material handle M12		TPU, hardly inflammable, self-extinguishing
Material, knurls		Zinc die-cast, nickel-plated
Degree of protection		IP65 / IP67
Temperature data		
Plug / socket	[°C]	-25 ... 85

**M12-SPEEDCON power cable,
4-pos., T-coded, shielded**

Free end



M12 plug, SPEEDCON
360° shielded



Ordering data

Ordering data

Ordering data

Free end

Order No.

Order No.

Order No.



1.5 m
3 m
5 m
10 m

1424120
1424121
1424122
1424123

1.5 m
3 m
5 m
10 m

1424124
1424125
1424126
1424127

M12 socket, SPEEDCON, straight, 360° shielded



1.5 m
3 m
5 m
10 m

1424112
1424113
1424114
1424115

M12 socket, SPEEDCON, angled, 360° shielded



1.5 m
3 m
5 m
10 m

1424116
1424117
1424118
1424128

Cable description

Cable type

Color coding

Pin assignment

PUR, halogen-free - black

PUR

BN
WH
BK
BU

1
2
4
3

Technical data

M12

Rated voltage

[V]

60

Rated current

[A]

12

Volume resistance

≤ 3 mΩ

Material contact M12

CuZn

Material contact surface M12

Au

Material handle M12

TPU, hardly inflammable,

self-extinguishing

Material, knurls

Zinc die-cast, nickel-plated

Degree of protection

IP65 / IP67

Temperature data

Plug / socket

[°C]

-25 ... 85

M5 to M12 circular plug-in connectors

Accessories

Sealing elements

During transport or in the field, unoccupied plug-in connections must be protected or closed. The screw plugs, sealing caps and closing caps made of plastic or metal are suitable for this purpose. IP65/IP67 protection as well as IP69K protection is thereby achieved.



Description	Ordering data		
	Type	Order No.	Pcs. / Pkt.
M5 screw plug ① For unoccupied M5 sockets of the sensor/actuator cables, boxes and flush-type plug-in connectors	PROT-M5	1533288	10
M8 screw plug ② For unoccupied M8 sockets of the sensor/actuator cables, boxes and flush-type plug-in connectors	PROT-M8	1682540	5
M12 screw plug ③ For the unused M12 sockets of the sensor/actuator cables, boxes and flush-type plug-in connectors	PROT-M12	1680539	5
M12 screw plug with SPEEDCON quick locking ④ For unoccupied M12 sockets of the sensor/actuator cables, boxes and flush-type plug-in connectors	PROT-MS SCO	1553129	5
M12 sealing cap ⑤ For unoccupied M12 plugs of the sensor/actuator cables, flush-type plug-in connectors and I/O devices in the field	PROT-M12 FS	1560251	5
M12 screw plug, metal ⑥ For unoccupied M12 sockets of the shielded sensor/actuator cables, boxes and flush-type plug-in connectors	PROT-M12 SH	1503302	5
M12 sealing cap, metal ⑦ For unoccupied M12 plugs of the sensor/actuator cables, flush-type plug-in connectors and I/O devices in the field	PROT-M12 FS-M	1430488	10
M12 screw plug, stainless steel ⑧ For unused M12 sockets of the sensor/actuator cables, boxes, and flush-type plug-in connectors in the food and outdoor range	PROT-M12 FB	1555538	5
Closing cap ⑨ For Pg9/ Pg11, to close unoccupied connections	Q-PROT 9/11	1670235	10
M16 locking screw ⑩ With flat nut for oval housing cutouts	SACC-M16-SEALING PLUG SET	1453368	10

Sealing elements with holding band or fixing chain

All IP67 interfaces can be closed tightly using the screw plugs and sealing caps in sizes M8, M12 and 7/8". The holding bands are fastened on the cable or the housing and are thus held captive.

The M12 metal protective cap with fixing chain is suitable for all pin versions. It is used in harsh industrial environments or for EMC applications.



Description	Ordering data		
	Type	Order No.	Pcs. / Pkt.
Screw plug made from plastic with retaining strap, for sealing unused sockets ①			
M8 for SAC cables	PROT-M 8 MS-PA-CHAIN	1430860	10
M8 with 3 mm fastening eye	PROT-M 8 MS-PA-CHAIN-EYE-DM3	1441105	10
M8 with 12 mm fastening eye	PROT-M 8 MS-PA-CHAIN-EYE	1441095	10
M12 for SAC cables	PROT-M12 MS-PA-CHAIN	1430899	5
M12 with 15 mm fastening eye	PROT-M12 MS-PA-CHAIN-EYE-DM14	1456200	5
7/8" for SAC cables	PROT-MINMS-PA-CHAIN	1430925	10
Plastic sealing cap with holding band, for closing unoccupied connectors ②			
M8 for SAC cables	PROT-M 8 FS-PA-CHAIN	1430857	10
M8 with 8 mm fastening eye	PROT-M 8 FS-PA-CHAIN-EYE	1441082	10
M12 for SAC cables	PROT-M12 FS-PA-CHAIN	1430873	5
M12 with 12 mm fastening eye	PROT-M12 FS-PA-CHAIN-EYE-DM12	1456187	5
M12 with 15 mm fastening eye	PROT-M12 FS-PA-CHAIN-EYE-DM14	1456190	5
7/8" for SAC cables	PROT-MINFS-PA-CHAIN	1430912	10
Metal sealing cap with fixing chain, for closing unoccupied connectors ③			
M12 with 16 mm fastening eye	PROT-M12 FS-M-CHAIN	1430491	10

M5 to M12 circular plug-in connectors

Accessories

Accessories for flush-type plug-in connectors

Special fixing nuts are available for EMC-compliant installation of M12 flush-type plug-in connectors on coated or varnished housing surfaces. When tightened, these cut through the surface coating, thus establishing contact between the housing and the connector.

Alternatively, flat gaskets can be used as the seal between the housing panel and the device plug. Flat gaskets are recommended for thin panels, as the housing cutouts do not have to be chamfered.



Description	Ordering data		
	Type	Order No.	Pcs. / Pkt.
EMC hexagonal nuts with fine tothing, for all flush-type plug-in connectors with: ①			
M12 fastening thread	SACC-M12-KD-NUT-SH	1440151	10
EMC hexagonal nuts with fine tothing, for all flush-type plug-in connectors with: ②			
M16 fastening thread	SACC-M16-KD-NUT-SH	1440164	10
Pg9 fastening thread	SACC-PG9-KD-NUT-SH	1440177	10
Flat gasket for all flush-type plug-in connectors with: ③			
M16 fastening thread	SACC-M16-SEAL CLM	1430394	10
Pg9 fastening thread	SACC-PG9-SEAL CLM	1556320	10

Assembly tools for sensor/actuator cables

To achieve tight plug-in connections, we recommend using assembly tools. M12 and 7/8" circular plug-in connectors can be assembled using a torque screwdriver and plug attachment.

The benefits of the plug attachment become particularly clear when connecting the connectors to the distributor boxes. Thanks to the open design, it enables quick adjustment and installation even when space is at a premium.

The version for M12 connectors with hexagonal stainless steel knurl is also made from stainless steel. This prevents the connector knurls from being contaminated by corrosive materials.

For greater flexibility, screwdrivers with adjustable torque are also available. When used in conjunction with the adapter insert, they can also be used to accommodate the available plug attachments.



Ordering data			
Description	Type	Order No.	Pcs. / Pkt.
Torque screwdriver ① With a preset torque of 0.8 Nm and a 4 mm hexagonal drive	TSD 08 SAC	1212597	1
Nut ② For assembling 7/8" plug-in connectors, with 4 mm hexagonal drive	SAC BIT MIN-D25	1212512	1
Torque screwdriver ③ With preset torque of 0.4 Nm and 4 mm hexagonal drive	TSD 04 SAC	1208429	1
Nut ④ For mounting M12 plug-in connectors with hexagonal stainless steel knurl, wrench size 14, with 4 mm hexagonal drive	SAC BIT M12-W14	1212513	1
Torque screwdriver , accuracy according to standard EN ISO 6789 ⑤ Adjustable from 0.3 - 1.2 Nm Adjustable from 1.2 - 3 Nm Adjustable from 3 - 6 Nm	TSD-M 1,2NM TSD-M 3NM TSD-M 6NM	1212224 1212225 1212226	1 1 1
Adapter insert ⑥ For torque screwdrivers with adjustable torque, for accommodating plug attachments with 4 mm hexagonal drive	TSD-M SAC-BIT ADAPTER	1212600	1

M5 to M12 circular plug-in connectors

Pin assignments

M5 flush-type plug-in connectors

Pin assignments



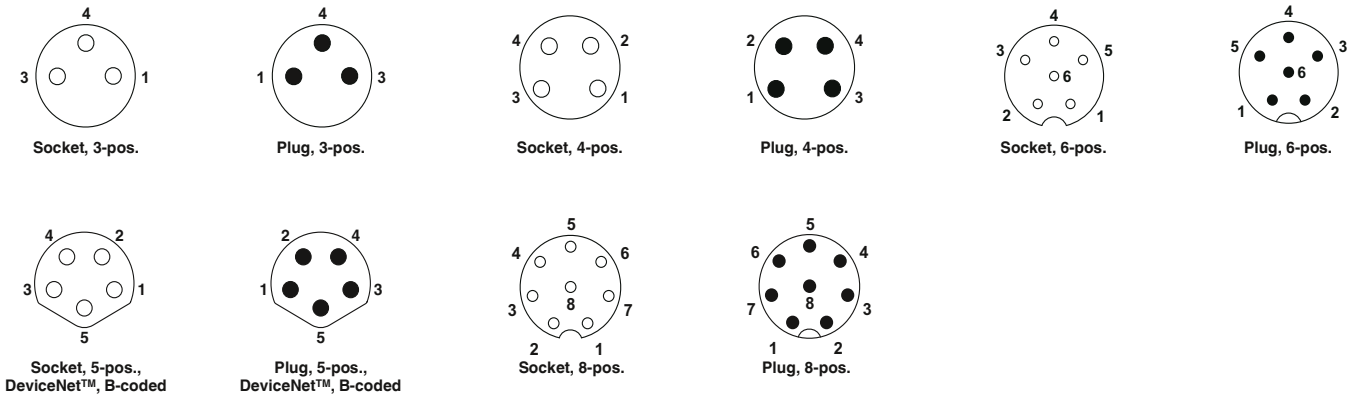
Litz wire colors

Pin	Wire color			
	3-pos.		4-pos.	
1	BN		BN	
2	–		WH	
3	BU		BU	
4	BK		BK	

Assignment: M5 flush-type plugs/sockets

M8 flush-type plug-in connectors

Pin assignments



Litz wire colors

Pin	Wire color							
	3-pos.		4-pos.		6-pos.		8-pos.	
1	BN		BN		BN		WH	
2	–		WH		WH		BN	
3	BU		BU		BU		GN	
4	BK		BK		BK		YE	
5	–		–		GY		GY	
6	–		–		PK		PK	
7	–		–		–		BU	
8	–		–		–		RD	

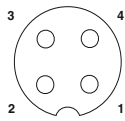
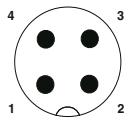
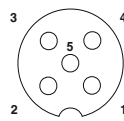
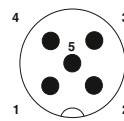
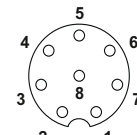
Assignment: M8 flush-type plugs/sockets

Pin	Wire color	Signal DeviceNet™
1	Shield	Drain
2	RD	V+
4	BK	V–
3	WH	CAN_H
5	BU	CAN_L

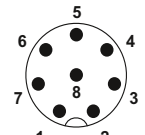
Assignment: CANopen®/DeviceNet™

M12 flush-type plug-in connectors

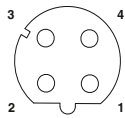
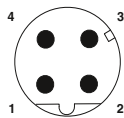
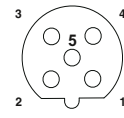
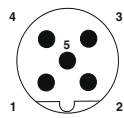
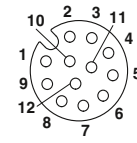
Pin assignments

Socket, 4-pos.,
A-codedPlug, 4-pos.,
A-codedSocket, 5-pos.,
A-codedPlug, 5-pos.,
A-coded

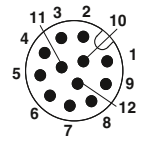
Socket, 8-pos.



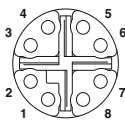
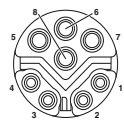
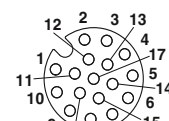
Plug, 8-pos.

Socket, 4-pos.,
D-codedPlug, 4-pos.,
D-codedSocket, 5-pos.,
B-codedPlug, 5-pos.,
B-coded

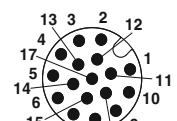
Socket, 12-pos.



Plug, 12-pos.

Socket, 8-pos.,
X-codedSocket, 8-pos.,
Y-coded

Socket, 17-pos.



Plug, 17-pos.

Litz wire colors

Pin	4-pos., A-coded	4-pos., D-coded
1	BN	YE
2	WH	WH
3	BU	OG
4	BK	BU
–	–	–

Assignment: M12 flush-type plugs/sockets

Pin	5-pos., A-coded	5-pos., B-coded
1	BN	BN
2	WH	WH
3	BU	BU
4	BK	BK
5	GY	GY

Assignment: M12 flush-type plugs/sockets

Pin	8-pos.	12-pos.
1	WH	BN
2	BN	BU
3	GN	WH
4	YE	GN
5	GY	PK
6	PK	YE
7	BU	BK
8	RD	GY
9	–	RD
10	–	VT
11	–	GYPK
12	–	RDBU

Assignment: M12 flush-type plugs/sockets

Pin	Wire color	Signal PROFIBUS
1	–	–
2	GN	A cable
3	–	–
4	RD	B cable
5	Filler litz wire	–

Shield on housing

Assignment: PROFIBUS

Pin	Wire color	Signal CANopen®
1	Shield	–
2	RD	–
3	BK	CAN_GND
4	WH	CAN_H
5	BU	CAN_L

Shield on housing

Assignment: CANopen®

Pin	Wire color	Signal DeviceNet™
1	Shield	Drain
2	RD	V+
3	BK	V-
4	WH	CAN_H
5	BU	CAN_L

Shield on housing

Assignment: DeviceNet™

Pin	Wire color	Signal Ethernet
1	WHOG	TD+
2	WHGN	RD+
3	OG	TD-
4	GN	RD-

Shield on housing

Assignment: Ethernet

Pin	Wire color	Signal INTERBUS
1	YE	DO
2	GN	DI
3	GY	DI
4	PK	DI
5	BN	COM
–	WH	NC

Shield on housing

Assignment: INTERBUS

Pin	Wire color	Signal Ethernet
1	WH	D1+
2	OG	D1-
3	WH	D2+
4	GN	D2-
5	WH	D4+
6	BN	D4-
7	WH	D3-
8	BU	D3+

Assignment: Ethernet CAT6_A

Pin	17-pos.
1	BN
2	BU
3	WH
4	GN
5	PK
6	YE
7	BK
8	GY
9	RD
10	VT
11	GYPK
12	RDBU
13	WHGN
14	BNGN
15	WHYE
16	YEBN
17	WHGY

Assignment: M12 flush-type plugs/sockets

M5 to M12 circular plug-in connectors

Pin assignments

M12 power flush-type plug-in connectors

Pin assignments



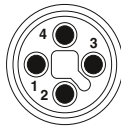
Socket, S-coded, 3+PE



Plug, A-coded, 3+PE



Socket, T-coded, 4-pos.



Plug, T-coded, 4-pos.

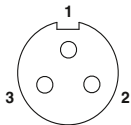
Litz wire colors

Pin	3+PE, S-cod.	Pin	4-pos, T-cod.
1	BK1	1	BN
2	BK2	2	WH
3	BK3	3	BU
PE	GNYE	4	BK

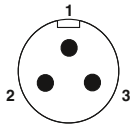
Assignment: M12 flush-type plugs/sockets

7/8" flush-type plug-in connectors

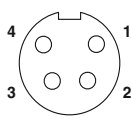
Pin assignments



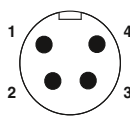
Socket, 3-pos.



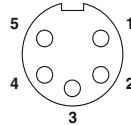
Plug, 3-pos.



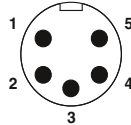
Socket, 4-pos.



Plug, 4-pos.



Socket, 5-pos.



Plug, 5-pos.

Litz wire colors

Pin	3-pos.	4-pos.	5-pos.
1	BK	BK	BK
2	BN	BU	BU
3	BU	BN	GNYE
4	-	WH	BN
5	-	-	WH

Assignment: 7/8" flush-type plugs/sockets

THR processing notes

Information for THR processing

PCB thickness	Max. 1.6 mm
Residual ring	Recommended: 0.5 mm
Overprinting on soldering mold	Residual ring diameter: 0.2 mm
Soldering mold thickness	150 µm
Soldering profile	IEC 61760-3

Further information

RoHS conformance	Attained
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