

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

M5, front/rear mounting	224
M8, front mounting	225
M8, rear mounting	226
M12, front mounting	232
M12, rear mounting	242
M12, rear mounting, two-piece	252
M12, for fieldbus systems	260
M12, plastic	263
M12, control cabinet feed-throughs	264
M12, stainless steel	268
7/8", front mounting	265
7/8", rear mounting	266

Sensor/actuator plug-in connectors for assembly

M8 plug-in connectors	272
M12 plug-in connectors	275
7/8" plug-in connectors	285

M12 power plug-in connectors

Device plug-in connectors with litz wires	286
Two-piece device plug-in connectors for reflow processes	288
Plug-in connectors for assembly	289
SPEEDCON power cable	290

Accessories

Pin assignments	298
-----------------	-----

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

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

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

Ordering data

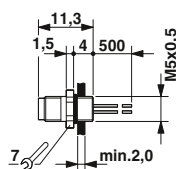
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.	
1530647	20	1530650	20
1530621	20	1530634	20

Accessories

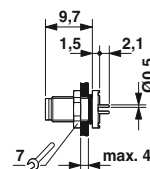
Flat nut, with:
M5 thread

SACC-E-MU-M 5	1535901	100
----------------------	---------	-----

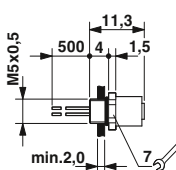
Accessories



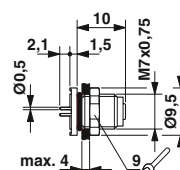
M5 flush-type plug



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



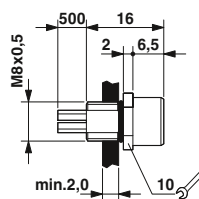
Technical data			
6-pos.	8-pos.		
General data			
M8 circular plug-in connector according to:	IEC 61076-2-104	IEC 61076-2-104	-
Pollution degree	3	3	-
Degree of protection	IP67	IP67	-
Connection method	Individual wires	Individual wires	-
Electrical data			
Rated voltage	30 V	30 V	-
Rated current	2 A	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

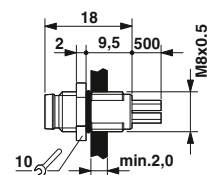
Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
6-pos.		8-pos.			
1542677	1	1424231	1		
1542664	1	1424232	1		

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	

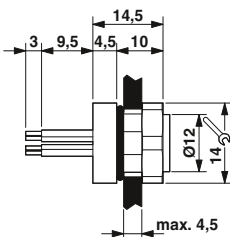


Technical data			
6-pos.		8-pos.	
IEC 61076-2-104		IEC 61076-2-104	
3		3	
IP67		IP67	
Solder pins		Solder pins	
30 V		30 V	
1.5 A		1.5 A	
≤ 3 mΩ		≤ 3 mΩ	
CuSn / Au		CuSn / Au	
PA 66		PA 66	
HB		HB	
-25 ... 85		-25 ... 85	

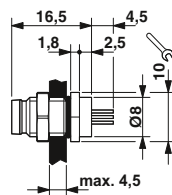
Ordering data	
Description	Coding
Device plug-in connectors	
Socket	A - standard
Plug	A - standard

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

Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
6-pos.		8-pos.	
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

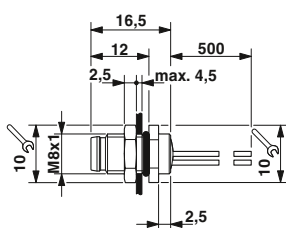
Accessories		
Flat nut, with: M8 thread	SACC-E-MU-M 8	1504071 100



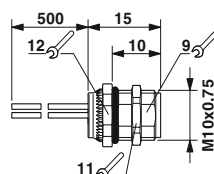
Technical data		
	6-pos.	8-pos.
General data		
M8 circular plug-in connector according to:	IEC 61076-2-104	IEC 61076-2-104
Pollution degree	3	3
Degree of protection	IP67	IP67
Connection method	Individual wires	Individual wires
Electrical data		
Rated voltage	30 V	30 V
Rated current	2 A	1.5 A
Volume resistance	≤ 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.	
6-pos.		8-pos.	
1453494		1	
1456103		1	
1453465		1	

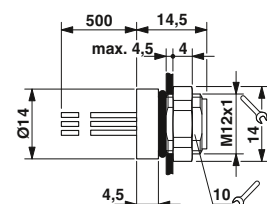
Accessories		
Flat nut, with: M8 thread	SACC-E-MU-M 8	1504071 100



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**

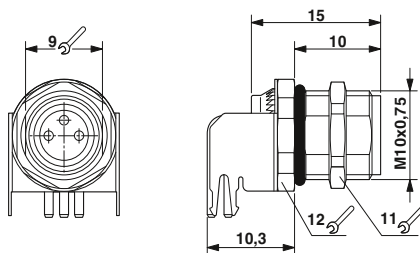


Angled, 3, 4-pos.

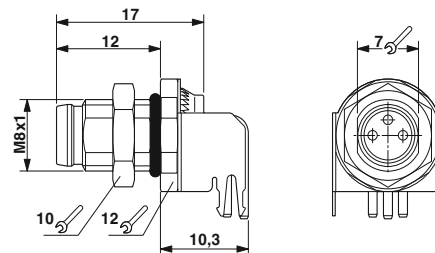


Angled, 5, 6-pos.

		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

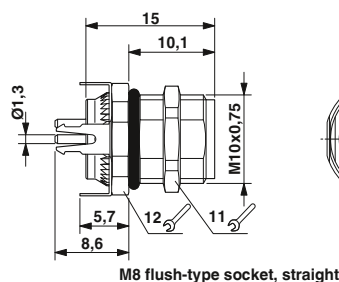
Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.	
1456116	20	1456129	20
1455997	20	1456019	20
		1424241	20
		1424242	20



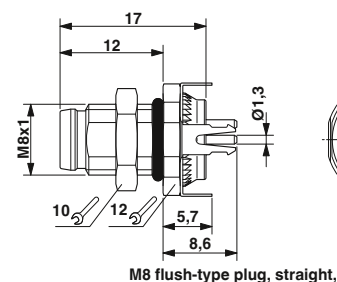
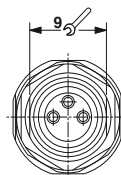
Technical data			
6-pos.	8-pos.		
General data			
IEC 61076-2-104	IEC 61076-2-104	-	-
3	3	-	-
IP67	IP67	-	-
Solder pins	Solder pins	-	-
Electrical data			
30 V	30 V	-	-
1.5 A	1.5 A	-	-
$\leq 3 \text{ m}\Omega$	$\leq 3 \text{ m}\Omega$	-	-
Material data			
Cu alloy / Au	Cu alloy / Au	- / -	-
PA 66	PA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



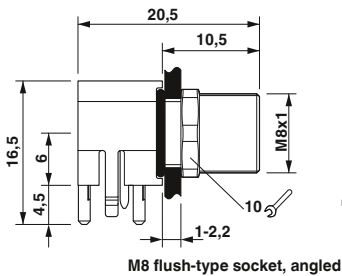
Straight, 3, 4-pos.



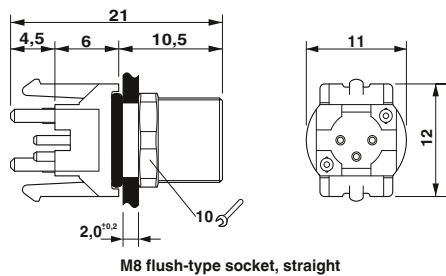
Technical data			
3-pos.		4-pos.	
IEC 61076-2-104		IEC 61076-2-104	
3		3	
IP67		IP67	
Solder pins		Solder pins	
60 V		30 V	
4 A		4 A	
≤ 3 mΩ		≤ 3 mΩ	
CuSn / Au		CuSn / Au	
PA 66		PA 66	
HB		HB	
-25 ... 85		-25 ... 85	
Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.	
1524788	20	1526169	20
1440070	20	1440096	20



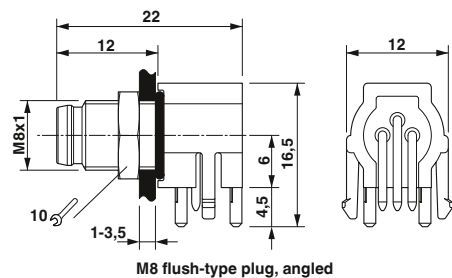
Technical data			
3-pos.		4-pos.	
IEC 61076-2-104		IEC 61076-2-104	
3		3	
IP67		IP67	
Solder pins		Solder pins	
60 V		30 V	
4 A		4 A	
≤ 3 mΩ		≤ 3 mΩ	
CuSn / Au		CuSn / Au	
PA 66		PA 66	
HB		HB	
-25 ... 85		-25 ... 85	
Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.	
1524776	20	1524789	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			
	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	PA66	PA66	PA66
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					
Description	Coding	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
		4-pos.		5-pos.	
Device plug-in connectors					
Socket	A - standard	1693788	1	1671098	1
Plug	A - standard	1693762	1	1671111	1
Socket	B - inverse			1513774	1
Plug	B - inverse				

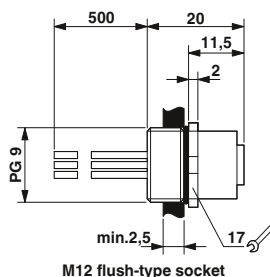
Accessories			
Flat nut, with: Pg9 thread	SACC-E-MU-PG9	1504084	100



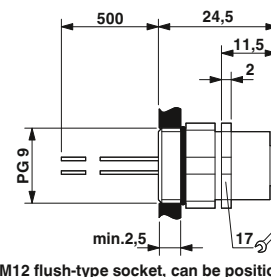
Technical data			
	4-pos.	5-pos.	8-pos.
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Individual wires	Individual wires	Individual wires
Electrical data			
Rated 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	PA66	PA66	PA66
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					
Description	Coding	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
		4-pos.		5-pos.	
Device plug-in connectors					
Socket	A - standard	1693791	1	1671108	1
Plug	A - standard	1693775	1	1671124	1
Socket	B - inverse			1515044	1
Plug	B - inverse			1515057	1

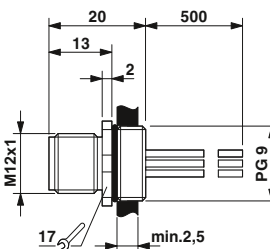
Accessories			
Flat nut, with: Pg9 thread			



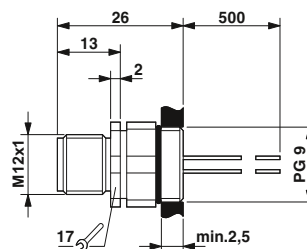
M12 flush-type socket



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
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

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

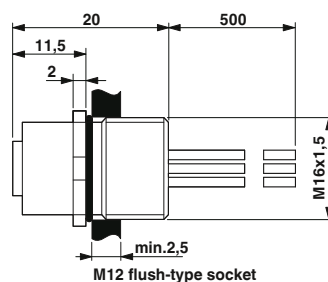
Accessories		
Order No.	Pcs. / Pkt.	Order No.
SACC-E-MU-M16	1504097	100



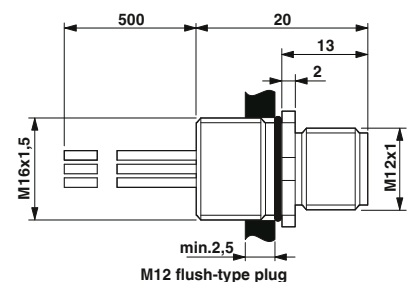
Technical data		
12-pos.	17-pos.	
General data		
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3
Degree of protection	IP67	IP67
Connection method	Individual wires	Individual wires
Electrical data		
Rated voltage	30 V	30 V
Rated current	1.5 A	1.5 A
Volume 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.
12-pos.	17-pos.	
1556252	1	1556294
1556265	1	1556304

Accessories		
Order No.	Pcs. / Pkt.	Order No.
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

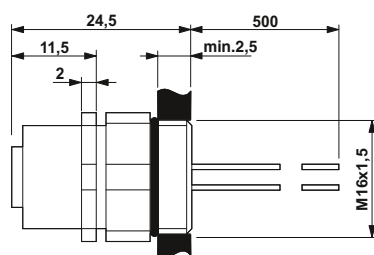
Ordering data

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

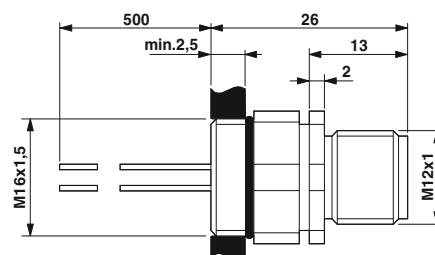
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.	
1523447	1	1520042	1
1523463	1	1520068	1
1535215	1		
1552256	1		
		1519998	1
		1520026	1

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



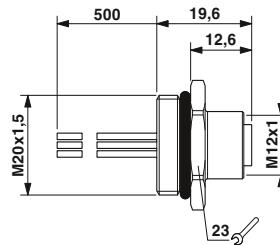
4, 5, 8-pos.

Technical data

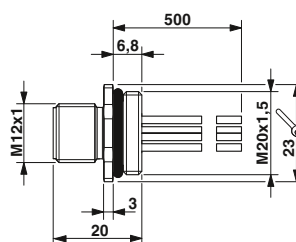
	4-pos.	5-pos.	8-pos.
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3	3
Degree of protection	IP67/IP69K	IP67/IP69K	IP67/IP69K
Connection method	Individual wires	Individual wires	Individual wires
Electrical data			
Rated 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



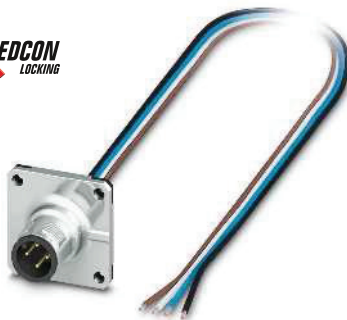
M12 flush-type plug

M5 to M12 circular plug-in connectors

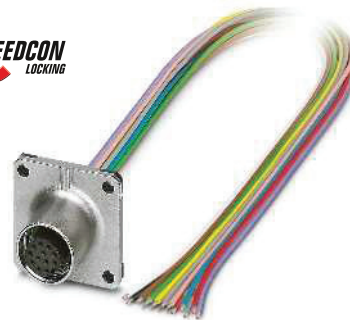
M12 sensor/actuator device plug-in connectors, front mounting

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

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	PA 66
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
PA 66	PA 66	PA 66
V0	V0	V0
TPE litz wire	TPE litz wire	TPE litz wire
-25 ... 85	-25 ... 85	-25 ... 85



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	-

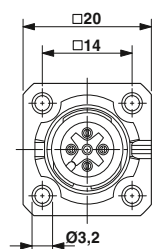
Ordering data

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

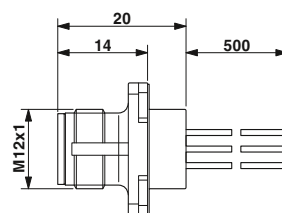
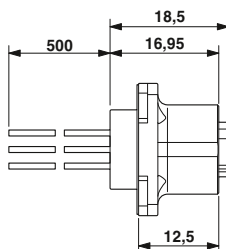
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1419797	1	1441655	1	1441697	1
1419784	1	1441642	1	1441684	1
1441639	1				
1441626	1				
		1441671	1		
		1441668	1		

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		



M12 flush-type socket, square flange



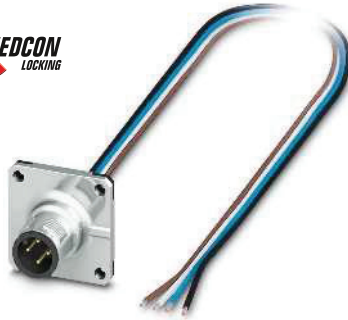
M12 flush-type plug, square flange

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

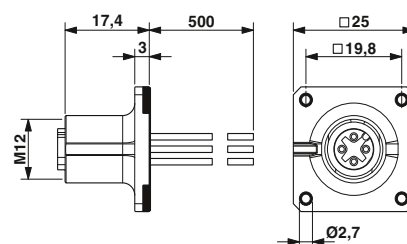


Technical data		
12-pos.	17-pos.	
General data		
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3
Degree of protection	IP67	IP67
Connection method	Individual wires	Individual wires
Electrical data		
Rated voltage	30 V	30 V
Rated current	1.5 A	1.5 A
Volume 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

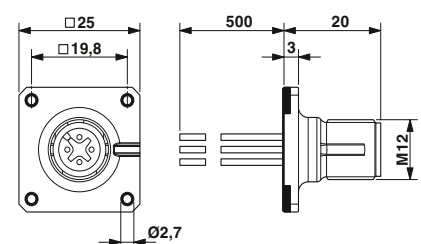
Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1420003	1	1440986	1	1441574	1
1419991	1	1440973	1	1441561	1
1440960	1				
1440957	1				
		1441558	1		
		1440999	1		

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**

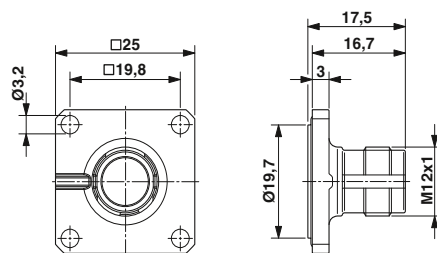


Technical data

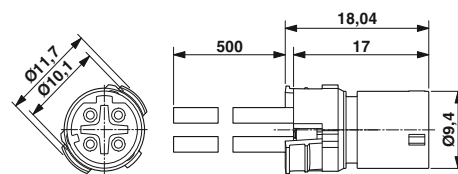
4-pos.	5-pos.	8-pos.
IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
3	3	3
IP67	IP67	IP67
Crimp contacts	Crimp contacts	Crimp contacts
250 V	60 V	30 V
4 A	4 A	2 A
≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
CuZn / Au	CuZn / Au	CuZn / Au
PA 66	PA 66	PA 66
-	-	-
V0	V0	V0
TPE litz wire	TPE litz wire	TPE litz wire
-25 ... 85	-25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

M5 to M12 circular plug-in connectors

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

Modular, 25 mm square flange,
for free assembly



Flange housing,
housing bore holes 3.2 mm



Contact carriers
and insulating bodies for assembly



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			
Contact carrier material	-	-	-
Cable gland material	Zinc die-cast, nickel-plated	-	-
Inflammability class according to UL 94	-	-	-
Temperature data			
Plug / socket	-25 ... 85	-	-

Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
1419959	10				

--	--	--

Accessories		

--	--	--



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	
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.	
1440931	10	1419988	10	1440928	10
1440944	10	1440915	10		

1452356	100	1452356	100		
				1452372	100

Accessories		
CRIMPFOX-TC MP	1212510	1

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

Square flange housing, with O-ring

Contact carriers and insulating bodies

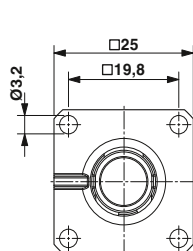
Plug	A - standard
Plug	D - data
Plug	B - inverse

Crimp contacts, for 4 and 5-pos. contact carriers, contact material: CuZn, surface: gold-plated, connection cross section: 0.08 mm² ... 0.34 mm²

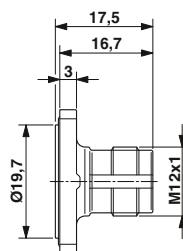
Contact Ø: 1.0 mm

Crimp contacts, for 8-pos. contact carriers, contact material: CuZn, surface: gold-plated, connection cross section: 0.08 mm² ... 0.34 mm²
Contact Ø: 0.8 mm

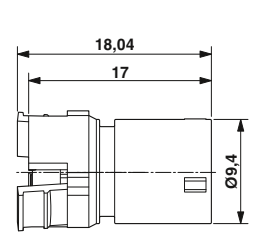
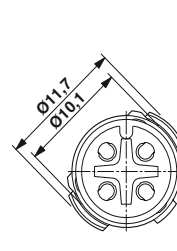
Crimping pliers



M12 square flange housing



M12 contact carrier



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

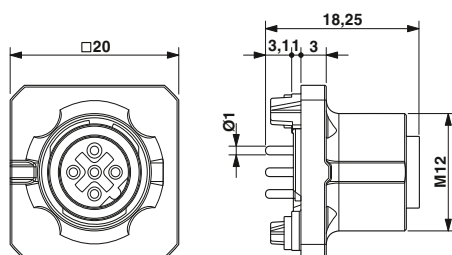


4, 5-pos.

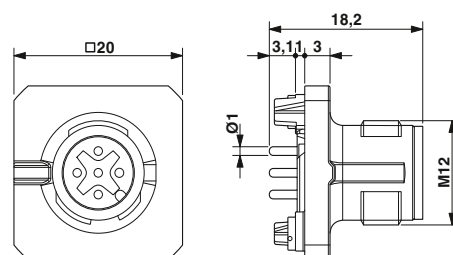


8-pos.

		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		≤ 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	-
		[°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			
M12 circular plug-in connector according to:		IEC 61076-2-101	
Pollution degree		3	
Degree of protection		IP67	
Connection method		Solder cup	
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	
Cable type		-	
Temperature data			
Plug / socket		-25 ... 85	
Cable, fixed installation		-	

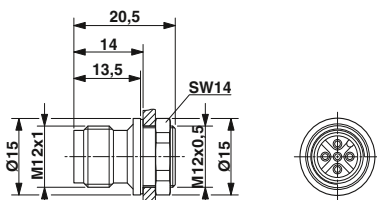
Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
5-pos.		8-pos.	
1436398	20	1436408	20
1436437	20	1436440	20



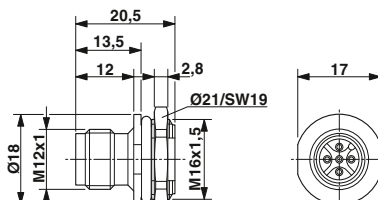
Technical data			
5-pos.		8-pos.	
General data			
M12 circular plug-in connector according to:		IEC 61076-2-101	
Pollution degree		3	
Degree of protection		IP67	
Connection method		Individual wires	
Electrical data			
Rated voltage		60 V	
Rated current		4 A	
Volume resistance		≤ 3 mΩ	
Material data	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

Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
5-pos.		8-pos.	
1436411	1	1436424	1

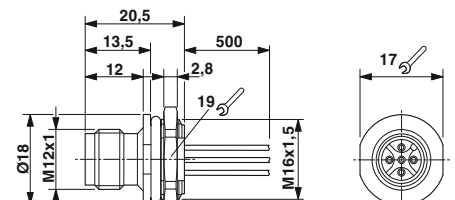
Description	Coding
Flush-type plug-in connector, M16 fastening thread	
Plug	A - standard
Flush-type plug-in connector, M12 fastening thread	
Plug	A - standard



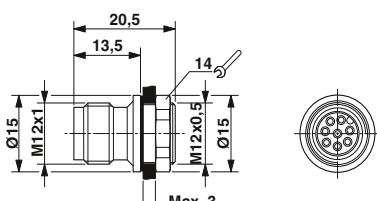
M12 pin, M12 fastening thread, solder cups



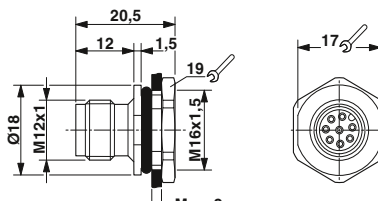
M12 pin, M16 fastening thread, solder cups



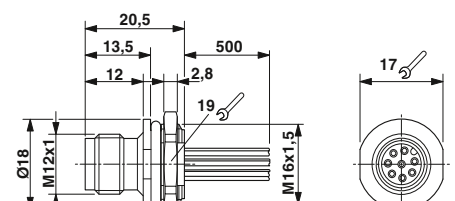
M12 pin, M16 fastening thread



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

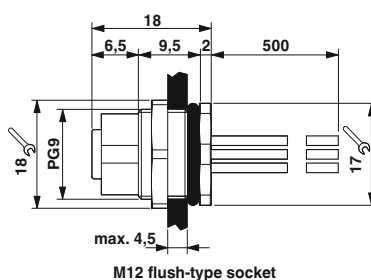


Technical data			
	12-pos.	17-pos.	
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	-
Pollution degree	3	3	-
Degree of protection	IP67	IP67	-
Connection method	Individual wires	Individual wires	-
Electrical data			
Rated voltage	30 V	30 V	-
Rated current	1.5 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	-

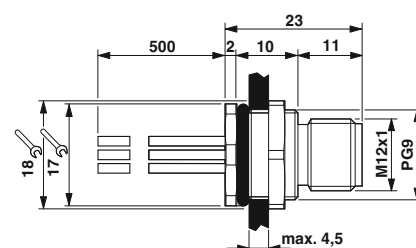
Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1556621	1	1542729	1	1542732	1
1556618	1	1542703	1	1542716	1
1551529	1				
1551532	1				
		1543676	1		
		1543663	1		

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]

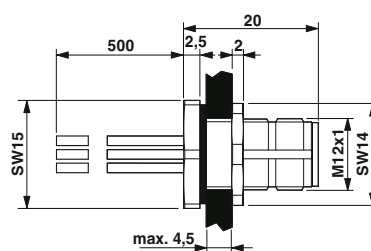


Technical data			
12-pos.	17-pos.		
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	-
Pollution degree	3	3	-
Degree of protection	IP67	IP67	-
Connection method	Individual wires	Individual wires	-
Electrical data			
Rated voltage	30 V	30 V	-
Rated current	1.5 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		

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



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]

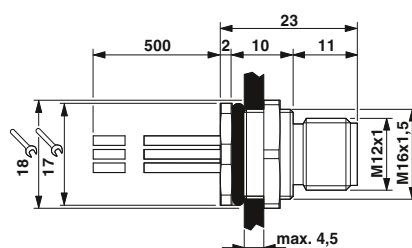


Technical data			
	12-pos.	17-pos.	
General data			
M12 circular plug-in connector According to:	IEC 61076-2-101	IEC 61076-2-101	-
Pollution degree	3	3	-
Degree of protection	IP67	IP67	-
Connection method	Individual wires	Individual wires	-
Electrical data			
Rated voltage	30 V	30 V	-
Rated current	1.5 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]	-

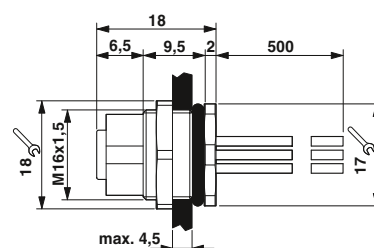
Ordering data			
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.	
1419632	1	1419658	1
1419629	1	1419645	1
1419616	1	1419687	1
1419603	1		
		1419674	1
		1419661	1

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**

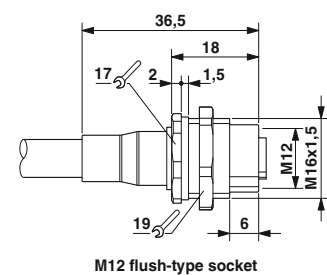
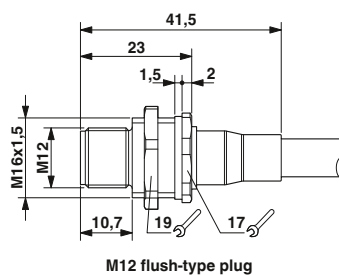


PUR cable, 4, 5, 8-pos., shielded



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		



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

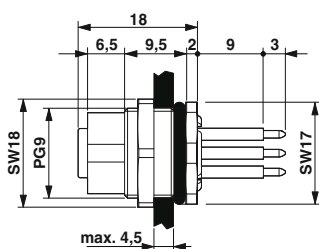
Ordering data		
Order No.	Pcs. / Pkt.	Order No.
4-pos.	5-pos.	8-pos.
1553462	20	1542761
1553459	20	1542745
1551503	20	1542758
1551516	20	
	1543650	20
	1543647	20
	1552285	20
	1552311	20
1552272	20	1408770
1552308	20	
	1552298	20
	1552324	20



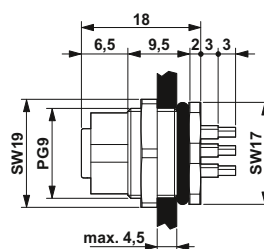
Technical data		
12-pos.	17-pos.	
IEC 61076-2-101	IEC 61076-2-101	-
3	3	-
IP67	IP67	-
Solder pins	Solder pins	-
30 V	30 V	-
1.5 A	1.5 A	-
≤ 3 mΩ	≤ 3 mΩ	-
CuZn / Au	CuZn / Au	- / -
PA 66	PA 66	-
V0	V0	-
-25 ... 85	-25 ... 85	-

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

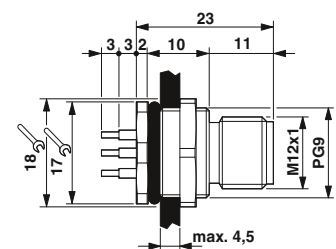
Description	Coding
Device plug-in connector, solder pin length: 6 mm	
Socket	A - standard
Plug	A - standard
Socket	D - data
Plug	D - data
Socket	B - inverse
Plug	B - inverse
Device plug-in connector, solder pin length: 12 mm	
Socket	A - standard
Plug	A - standard
Socket	D - data
Plug	D - data
Socket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

Device plug-in connector, solder pin length: 6 mm			
Socket	A - standard	1556841	20
Plug	A - standard	1553019	20
Socket	D - data	1553006	20
Plug	D - data	1553035	20
Socket	B - inverse	1553022	20
Plug	B - inverse	1553051	20
Device plug-in connector, solder pin length: 12 mm			
Socket	A - standard	1558522	20
Plug	A - standard	1558535	20
Socket	D - data	1558506	20
Plug	D - data	1558519	20
Socket	B - inverse	1558564	20
Plug	B - inverse	1558577	20

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

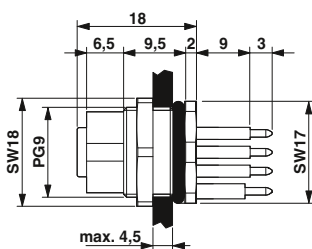


Technical data		
12-pos.	17-pos.	
General data		
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3
Degree of protection	IP67	IP67
Connection method	Solder pins	Solder pins
Electrical data		
Rated voltage	30 V	30 V
Rated current	1.5 A	1.5 A
Volume resistance	≤ 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

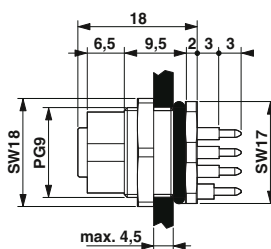
Ordering data		
Order No.	Pcs. / Pkt.	Order No.
12-pos.	17-pos.	

Device plug-in connector, solder pin length: 6 mm			
Socket	A - standard	1436770	20
Plug	A - standard	1436783	20
Socket	D - data	1436806	20
Plug	D - data	1436819	20
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		

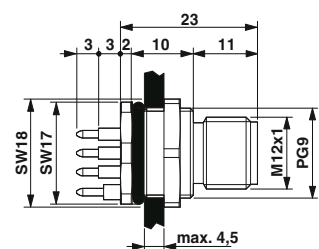
Accessories		
SACC-PG9-KD-NUT-SH	1440177	10



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		
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

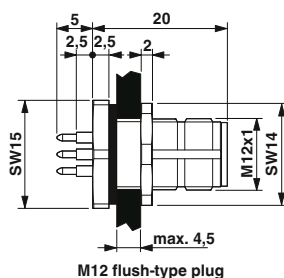
Ordering data		
Order No.	Pcs. / Pkt.	Order No.
4-pos.	5-pos.	8-pos.
1551820	20	1551833
1551859	20	1551862
		1551846



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.	
1559945	20	1559974

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



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

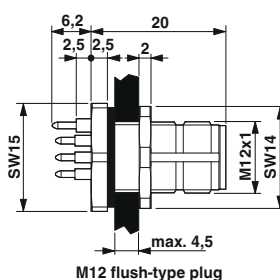
Accessories		
SACC-M12-KD-NUT-SH	1440151	10



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		
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



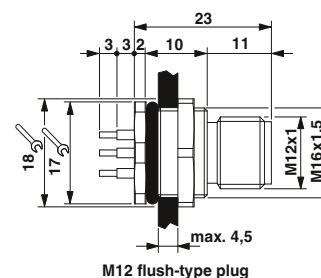
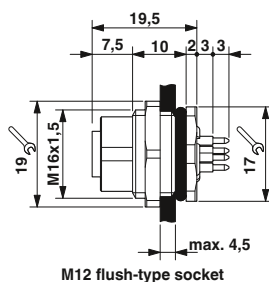
Straight, 4, 5, 8-pos.



Straight, 12, 17-pos.



Technical data			Technical data		
4-pos.			12-pos.		
5-pos.			17-pos.		
8-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	-25 ... 85	-25 ... 85	-25 ... 85	-25 ... 85	-
	[°C]				
Ordering data			Ordering data		
4-pos.			12-pos.		
5-pos.			17-pos.		
8-pos.					
Description	Coding	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
Device plug-in connectors					
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



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	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

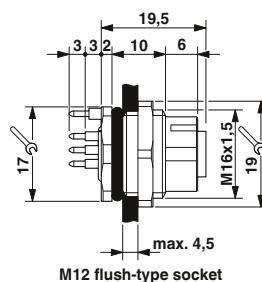
Ordering data					
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1419771	20	1441891	20	1441930	20
1419768	20	1441888	20	1441927	20
1441875	20				
1441862	20				
		1441914	20		
		1441901	20		

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

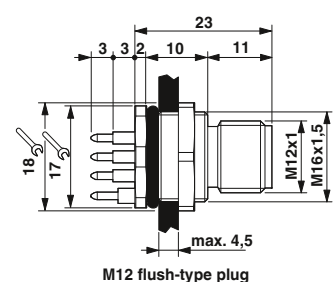
Technical data			
12-pos.	17-pos.		
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	-
Pollution degree	3	3	-
Degree of protection	IP67	IP67	-
Connection method	Solder pins	Solder pins	-
Electrical data			
Rated voltage	30 V	30 V	-
Rated current	1.5 A	1.5 A	-
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.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
12-pos.		17-pos.			
1441956	20	1441972	20		
1441943	20	1441969	20		

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

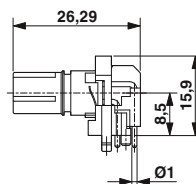
Accessories	
See page 258 onwards	



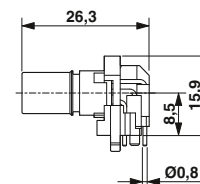
Technical data			
	4-pos.	5-pos.	8-pos.
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Solder pins	Solder pins	Solder pins
Electrical data			
Rated voltage	250 V	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

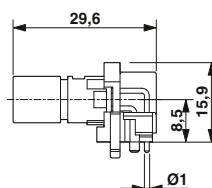
Accessories	
See page 258 onwards	



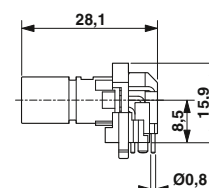
M12 socket contact carrier, angled, 4, 5-pos.



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

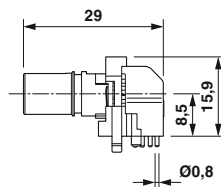


Angled, 12, 17-pos.

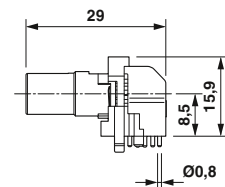


Angled, shielded, 12, 17-pos.

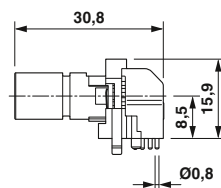
	Technical data			Technical data			
	12-pos.	17-pos.		12-pos.	17-pos.		
General data							
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	-	IEC 61076-2-101	IEC 61076-2-101	-	
Pollution degree	3	3	-	3	3	-	
Degree of protection	IP67	IP67	-	IP67	IP67	-	
Connection method	Solder 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		



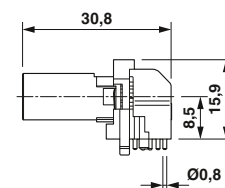
M12 socket contact carrier, angled, 12-pos.



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]		

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

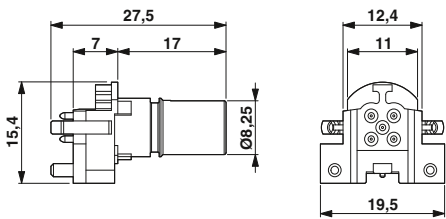
See page 258 onwards



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	-

Ordering data			
4-pos.		5-pos.	
Order No.		Pcs. / Pkt.	
1551480		20	
		1551477	20

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

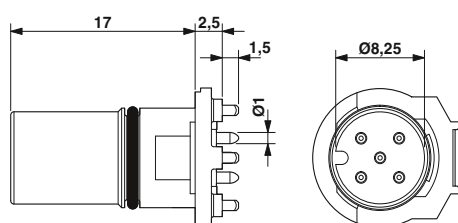
Accessories		
See page 258 onwards		



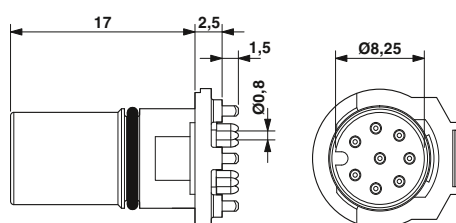
Technical data		
12-pos.	17-pos.	
IEC 61076-2-101	IEC 61076-2-101	-
3	3	-
IP67	IP67	-
THR solder connection	THR solder connection	-
30 V	30 V	-
1.5 A	1.5 A	-
≤ 3 mΩ	≤ 3 mΩ	-
CuZn / Au	CuZn / Au	- / -
PPA	PPA	-
V0	V0	-
-25 ... 85	-25 ... 85	-

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

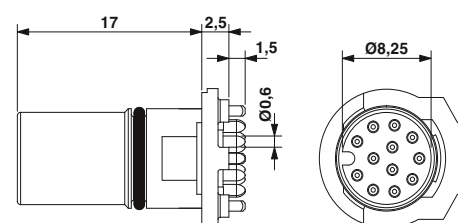
Accessories		
See page 258 onwards		



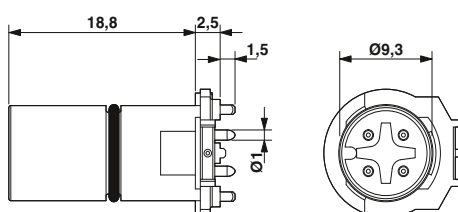
M12 socket contact carrier, straight, 4, 5-pos.



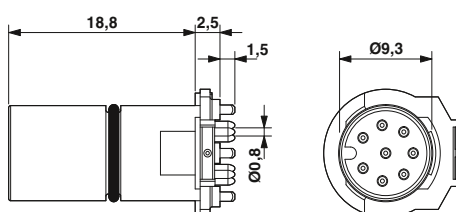
M12 socket contact carrier, straight, 8-pos.



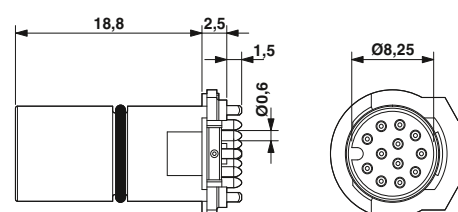
M12 socket contact carrier, straight, 12, 17-pos.



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



M12 plug contact carrier, straight, 8-pos.



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

M5 to M12 circular plug-in connectors

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

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



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	THR solder connection	THR solder connection	THR solder connection
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	PPA	PPA	PPA
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.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1439955	60	1432363	60	1551422	60
1439939	60	1432350	60	1557581	60
1551451	60				
1552214	60				
		1551435	60		
		1552230	60		
1457623	100	1457652	100	1457681	100
1457500	100	1457539	100	1457568	100
1457636	100				
1457513	100				
		1457665	100		
		1457542	100		

Accessories	
See page 258 onwards	



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

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

Accessories	
See page 258 onwards	

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

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

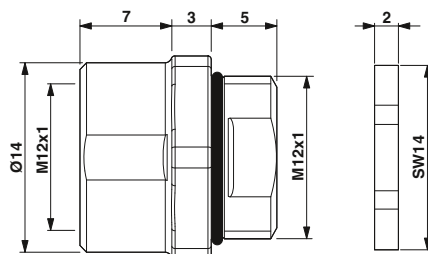


Technical data		
Zinc die-cast (nickel-plated)		
-25 °C ... 85 °C		
Ordering data		
Type	Order No.	Pcs. / Pkt.
SACC-M12-SCO NUT	1552243	60
SACC-M12-SCO PLUG	1551493	60

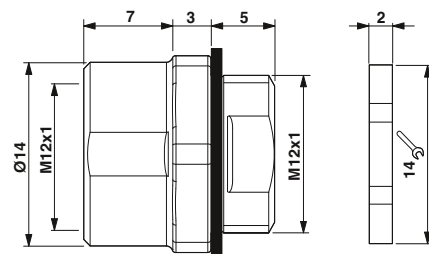


Technical data		
Zinc die-cast (nickel-plated)		
-25 °C ... 85 °C		
Ordering data		
Type	Order No.	Pcs. / Pkt.
SACC-M12-SCO NUT L 90	1432460	10
SACC-M12-SCO PLUG L90	1436709	10

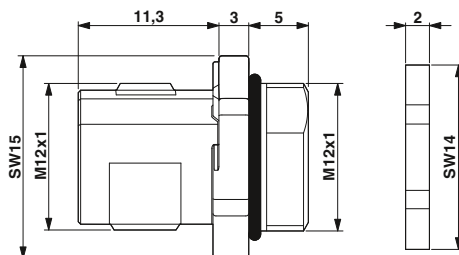
Material data	
Material	
Temperature data	
Ambient temperature (operation)	
Description	Housing screw connections, SPEEDCON screw versions for all two-piece THR and wave soldering contact carriers
Socket	
Plug	



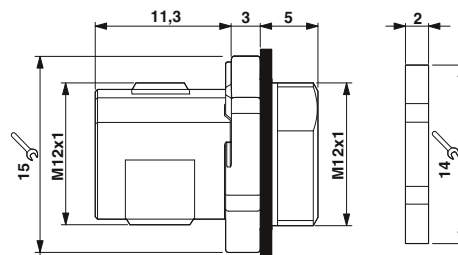
Socket housing screw connection, with O-ring



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

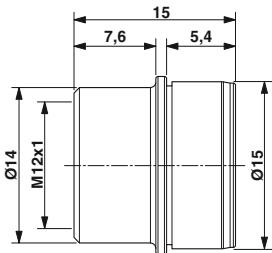


Technical data

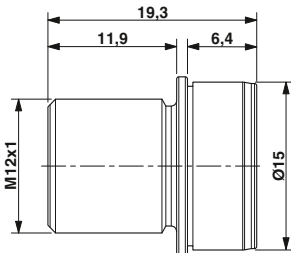
CuZn (nickel-plated)
-25 °C ... 85 °C

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



Sercos
the automation bus



Ethernet

260 | PHOENIX CONTACT

M12 flush-type plug-in connector, solder connection


CAT6_A, X-coded

Ethernet



CAT5e, Y-coded

		Technical data		Technical data			
		SACC-DSI-FSX-8CON...		VS-08-DSIV-L180-HYB SCO			
Electrical data							
Nominal voltage U _N		48 V		30 V (Data)			
Rated current		0.5 A		0.5 A (Data) / 6 A (Power)			
Transmission characteristics (category)		CAT6 _A		CAT5 (IEC 11801:2002), CAT5e (TIA 568B:2001)			
Contact material		CuZn		CuZn			
Material of grip body		Zinc die-cast, nickel-plated		Zinc die-cast, nickel-plated			
Inflammability class according to UL 94		V0		V0			
No. of pos.		8		8			
Insertion/withdrawal cycles		≥ 100		≥ 100			
Temperature data							
Plug / socket		[°C] -40 ... 85		-40 ... 85			
		Ordering data		Ordering data			
Description		Type	Order No.	Pcs. / Pkt.	Type	Order No.	Pcs. / Pkt.
Flush-type socket , CAT6 _A , Ethernet, one-piece, 8-pos., M12 SPEEDCON, with straight solder connection, rear/screw mounting with: M16 fastening thread Pg9 fastening thread		SACC-DSI-FSX-8CON-M16-L180 SCO	1424177	20			
Hybrid flush-type plug-in connector for the reflow soldering process , with straight solder connection, 4 x power contacts, 4 x signal contacts, rear mounting, SPEEDCON		SACC-DSI-FSX-8CON-PG9-L180 SCO	1404741	20			
Socket					VS-08-DSIV-L180-HYB SCO	1456666	20
Hybrid flush-type plug-in connector for the wave soldering process , with straight solder connection, 4 x power contacts, 4 x signal contacts, rear mounting, SPEEDCON							
Socket					SACC-DSI-FSY-8CON-M16-L180 SCO	1407503	20
Contact carrier, two-piece , CAT6 _A , Ethernet, 8-pos., rear mounting, with angled solder connection							
Hybrid contact carrier, two-piece , Ethernet, 8-pos., rear/screw mounting, with angled solder connection		SACC-CI-M12FSX-8CON-L90	1424180	20			
					SACC-CI-M12FSY-8CON-L90	1424193	20
		Accessories		Accessories			
Housing screw connection , SPEEDCON, for all two-piece THR and wave soldering contact carriers		See page 258 onwards		See page 258 onwards			

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



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	-	-

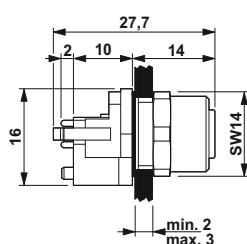
Ordering data

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

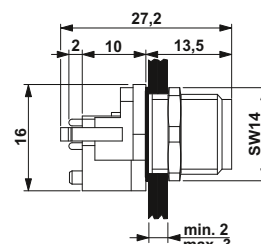
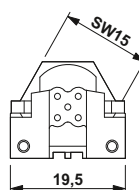
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
		1694237	10	1556854	10
		1694211	10		
1534627	10	1515934	10		
		1514883	10		

Ordering data

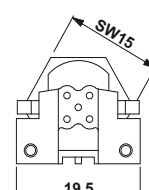
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
5-pos.					
1437193	10				
1437180	10				
1437203	10				



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

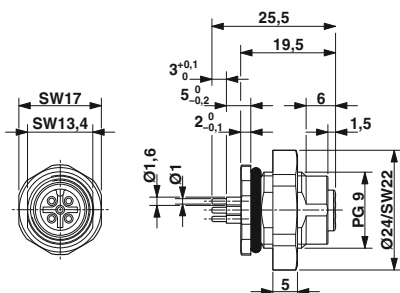
Ordering data

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

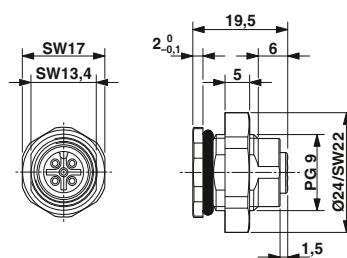
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
5-pos.		8-pos.	
1436330	20	1436343	20
1436314	20	1436327	20

Ordering data

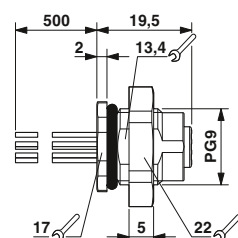
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
5-pos.		8-pos.	
1436356	1	1436369	1



M12, Pg9 fastening thread, solder pins



M12 socket, Pg9 fastening thread, solder cups

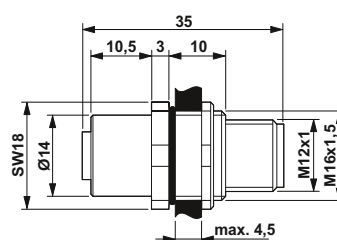
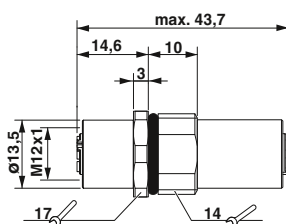


M12 socket, Pg9 fastening thread, with litz wires

Control cabinet feed-through



		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	
Electrical data					
Rated voltage		60 V	24 V	24 V	
Rated current		4 A	4 A	1.5 A	
Volume resistance		≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ	
Material data					
Contact material		CuZn	CuZn	CuZn	
Contact surface material		Au	Au	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					
Description		Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
		4-pos.		5-pos.	8-pos.
Control cabinet feed-through, M16 fastening thread					
Plug on socket		A - standard		1551671	1
Plug on socket		B - inverse		1551684	1
Socket to socket		D - data	1424326	1	



Control cabinet feed-through, socket to pin on both sides

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.
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
--	--	------------------	---------	-----



Technical data

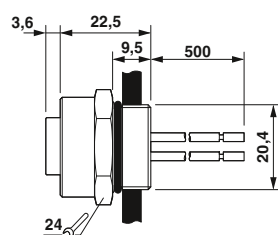
	5-pos.	
General data		
Pollution degree	3	-
Degree of protection	IP67	-
Connection method	Individual wires	-
Electrical data		
Rated voltage	250 V	-
Rated current	9 A	-
Volume resistance	≤ 5 mΩ	-
Surge voltage category	II	-
Material data		
Material contact / contact surface	CuZn / Au	- / -
Contact carrier 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

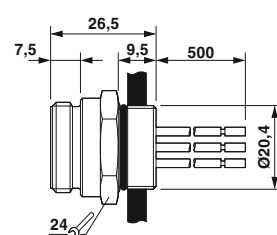
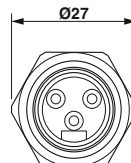
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
5-pos.			
1521449	1		
1521452	1		

Accessories

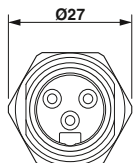
SACC-E-MU-PG13,5	1539143	100
-------------------------	---------	-----



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.
Flush-type plug-in connector, M26 fastening thread		
Socket	1453782	1
Flush-type plug-in connector, 7/8" fastening thread		
Plug		

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.		5-pos.	

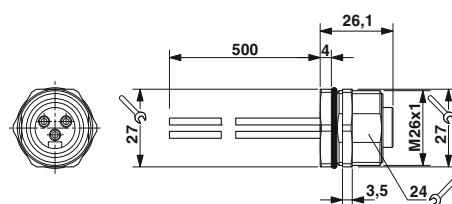


Technical data

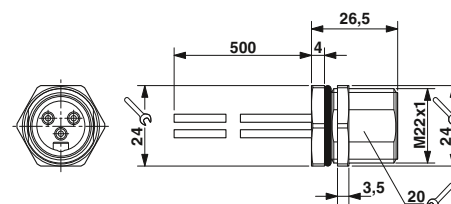
		3-pos.	4-pos.	5-pos.
General data				
Pollution degree		3	3	3
Degree of protection		IP67	IP67	IP67
Connection method		Individual wires	Individual wires	Individual wires
Electrical data				
Rated voltage		250 V	250 V	250 V
Rated current		12 A	9 A	9 A
Volume resistance		≤ 5 mΩ	≤ 5 mΩ	≤ 5 mΩ
Surge voltage 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

Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
3-pos.		4-pos.		5-pos.	



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.



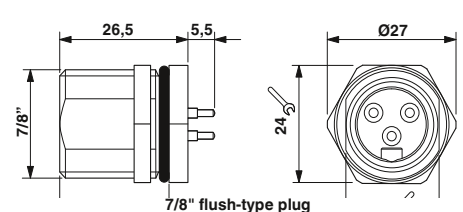
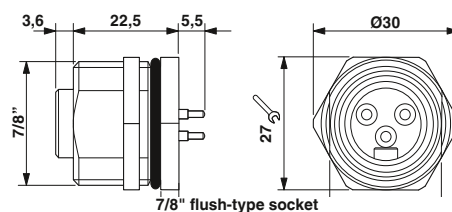
Technical data			
	3-pos.	4-pos.	5-pos.
General data			
Pollution degree	3	3	3
Degree of protection	IP67	IP67	IP67
Connection method	Solder pins	Solder pins	Solder pins
Electrical data			
Rated voltage	250 V	250 V	250 V
Rated current	12 A	9 A	9 A
Volume resistance	≤ 5 mΩ	≤ 5 mΩ	≤ 5 mΩ
Surge voltage category	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.
3-pos.					
4-pos.					
5-pos.					
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.
3-pos.					
4-pos.					
5-pos.					
Socket	A - standard	1457830	1	1457843	1
Flush-type plug-in connector, 7/8" fastening thread					
Plug	A - standard				



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

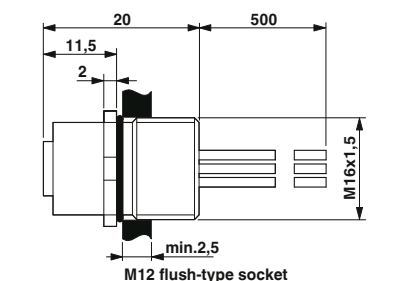
1555448	1	1699863	1	1554607	1
1554555	1	1554568	1	1554571	1

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

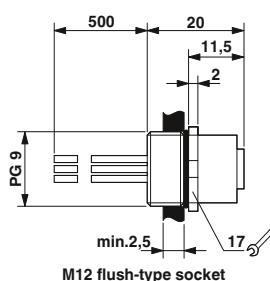
Device plug-in connector, M16 fastening thread

Socket	A - standard
Plug	A - standard

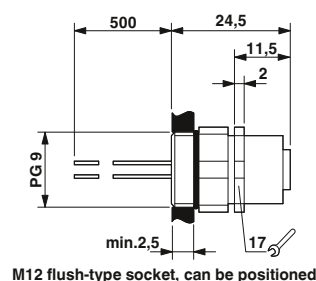
1458855	1	1458871	1	1458842	1
1405233	1	1458868	1	1405221	1



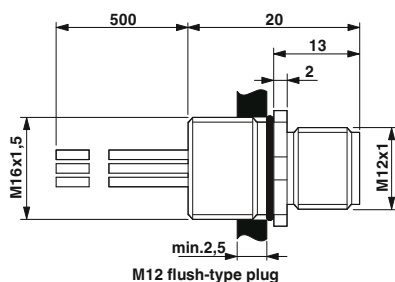
M12 flush-type socket



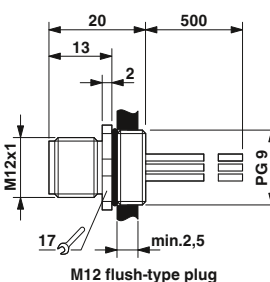
M12 flush-type socket



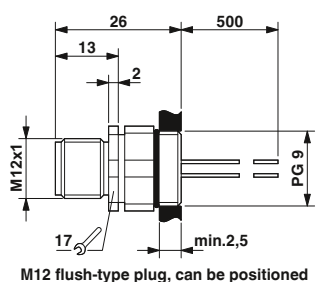
M12 flush-type socket, can be positioned



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

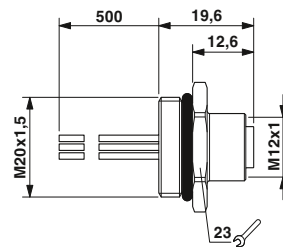


4, 5, 8-pos.

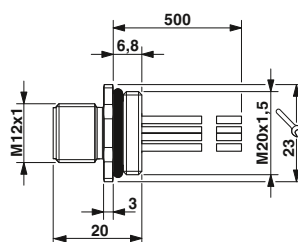
Technical data			
	4-pos.	5-pos.	8-pos.
General data			
M12 circular plug-in connector according to:	IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
Pollution degree	3	3	3
Degree of protection	IP67/IP69K	IP67/IP69K	IP67/IP69K
Connection method	Individual wires	Individual wires	Individual wires
Electrical 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	-25 ... 85	-25 ... 85	-25 ... 85

Ordering data					
Order No.		Pcs. / Pkt.	Order No.		Pcs. / Pkt.
4-pos.			5-pos.		
1408416		1	1452071		1
1408415		1	1452068		1
			1452097		1
			1452084		1

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

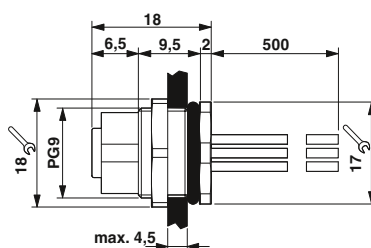


Technical data

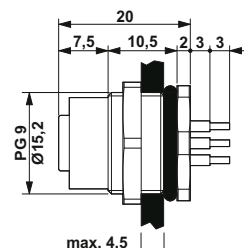
4-pos.	5-pos.	8-pos.
IEC 61076-2-101	IEC 61076-2-101	IEC 61076-2-101
3	3	3
IP67/IP69K	IP67/IP69K	IP67/IP69K
Solder pins	Solder pins	Solder pins
250 V	60 V	30 V
4 A	4 A	2 A
≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
CuZn / Au	CuZn / Au	CuZn / Au
PA 66	PA 66	PA 66
V0	V0	V0
-	-	-
-25 ... 85	-25 ... 85	-25 ... 85

Ordering data

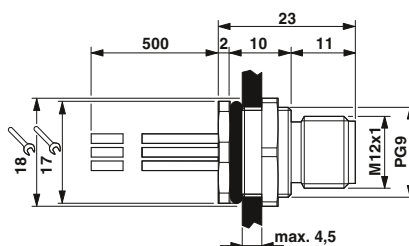
Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
4-pos.		5-pos.		8-pos.	
1404974	20	1554733	20	1529797	20
1404979	20	1554746	20	1529807	20



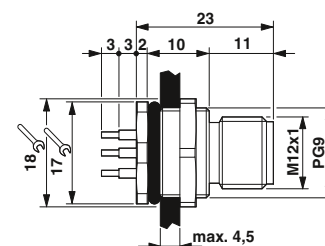
M12 flush-type socket



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:		
2.5 mm ... 3.5 mm	SACC-M 8-SET/2,2-3,5	1436945 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:		
2.5 mm ... 3.5 mm	SACC-M 8-SET/2,2-3,5	1436945 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
----------------------	---------	---



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

--	--	--

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
Temperature data
Ambient temperature (operation)

48 V
0.5 A
CAT6 _A
CuSn / Ni/Au
Zinc die-cast, nickel-plated
V0
8
Piercecon®
26
≥ 100
-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
----------------------	---------	---

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
-40 °C ... 85 °C

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
----------------------	---------	---

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	SACC-M12FS-4QO-0,34	1641701
Plug, straight	SACC-M12MS-4QO-0,34	1641714
Plug-in connector , with metal knurl, SPEEDCON		
Socket, straight	SACC-FS-4QO-0,34-M SCO	1521588
Plug, straight	SACC-MS-4QO-0,34-M SCO	1521575
Plug-in connector , with metal knurl		
Socket, straight	SACC-M12FS-4QO-0,34-M	1641688
Plug, straight	SACC-M12MS-4QO-0,34-M	1641691
Plug-in connector , with stainless steel knurl		
Socket, straight	SACC-M12FS-4QO-0,34-VA	1440766
Plug, straight	SACC-M12MS-4QO-0,34-VA	1440753



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	SACC-M12FS-4QO-0,75	1641756
Plug, straight	SACC-M12MS-4QO-0,75	1641769
Plug-in connector , with metal knurl, SPEEDCON		
Socket, straight	SACC-FS-4QO-0,75-M SCO	1521601
Plug, straight	SACC-MS-4QO-0,75-M SCO	1521591
Plug-in connector , with metal knurl		
Socket, straight	SACC-M12FS-4QO-0,75-M	1641772
Plug, straight	SACC-M12MS-4QO-0,75-M	1641785
Plug-in connector , with stainless steel knurl		
Socket, straight	SACC-M12FS-4QO-0,75-VA	1440782
Plug, straight	SACC-M12MS-4QO-0,75-VA	1440779

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:		
Pollution degree		
Degree of protection		
Connection method		
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		

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

Accessories		
Order No.	Pcs. / Pkt.	Order No.
SACC-M12-SET/2,5-3,5	1436505	5



Technical data		
4-pos.	5-pos.	
General data		
M12 circular plug-in connector according to:		
Pollution degree		
Degree of protection		
Connection method		
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		

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

Accessories		
Order No.	Pcs. / Pkt.	Order No.
SACC-M12-SET/2,5-3,5	1436505	5

Description	Coding
Plug-in connector, with Pg7 screw connection, cable diameter: 4 mm ... 6 mm	
Socket, angled	A - standard
Plug, angled	A - standard
Socket, straight	A - standard
Plug, straight	A - standard
Plug-in connector, with Pg9 screw connection, cable diameter: 6 mm ... 8 mm	
Socket, angled	A - standard
Plug, angled	A - standard
Socket, straight	A - standard
Plug, straight	A - standard
Power plug-in connector, with Pg11 screw connection, cable diameter: 8 mm ... 10 mm, rated current: up to 8 A (5th pos. max. 2 A) with 1.5 mm² wires/litz wires	
Socket, straight	A - standard
Plug, straight	A - standard

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.

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			SACC-M12FST-3PECON-PG11-M		
	1404642			1404644		
Plug-in connector, with Pg11 screw connection, cable diameter: 8 mm ... 10 mm			1			1
Socket, straight	SACC-M12MSS-3PECON-PG11-M	1404641	1	SACC-M12MST-3PECON-PG11-M	1404643	1
Plug, straight						

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:

Pollution degree

Degree of protection

Connection method

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]

Ordering data

Description

Coding

Plug-in connector, with Pg11 DUO screw connection,
cable diameter: 2 x 3 mm ... 5.2 mm

Socket, straight

Plug, straight

Plug, angled

A - standard

A - standard

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.

IEC 61076-2-101

3

IP67

Screw connection

0.25 mm² ... 0.75 mm²

60 V

4 A

≤ 8 mΩ

≥ 100 MΩ

CuZn / CuSnZn

PA 66

V0

-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

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.
	3	
	IP67	
	Screw connection	
	0.34 mm ² ... 1.5 mm ²	
	22 ... 16	
	250 V	
12 A		9 A
	≤ 5 mΩ	
	≥ 100 MΩ	
	CuZn / Au	
	PUR / PA66	
	HB	
	-25 ... 85	



Technical data		
5-pos.		
3		-
IP67		-
Screw connection		-
0.34 mm² ... 2.5 mm²	- ... -	-
22 ... 14	- ... -	-
250 V		-
9 A		-
≤ 5 mΩ		-
≥ 100 MΩ		-
CuZn / Au		- / -
PUR / PA66		-
HB		-
-25 ... 85		-

Description	Ordering data						Ordering data					
	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
	3-pos.		4-pos.		5-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	1456284	1				
Plug, straight	1521290	1	1521339	1	1521371	1	1456213	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				

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.
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				
Plug			1424129	1
			1424130	1

M5 to M12 circular plug-in connectors

M12 power plug-in connectors

M12, power device plug-in connector, two-piece, for reflow processes, rear mounting

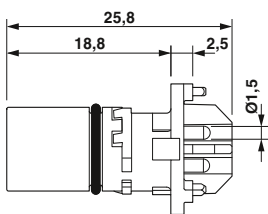


S-coded, 3-pos. + PE

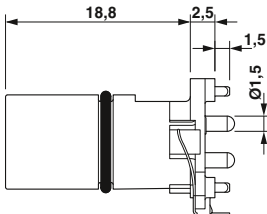


T-coded, 4-pos.

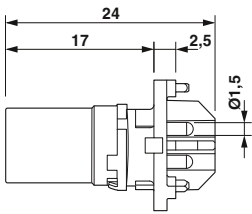
	Technical data		Technical data	
	Plug	Socket	Plug	Socket
General data				
Pollution degree	3	3	3	3
Degree of protection	IP67	IP67	IP67	IP67
Connection method	THR solder connection	THR solder connection	THR solder connection	THR solder connection
Electrical data				
Rated voltage	630 V	630 V	60 V	60 V
Rated current	12 A	12 A	12 A	12 A
Volume resistance	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ	≤ 3 mΩ
Surge voltage category	III	III	III	III
Material data				
Material contact / contact surface	CuZn / Au	CuZn / Au	CuZn / Au	CuZn / Au
Contact carrier material	PA4T	PA4T	PA4T	PA4T
Inflammability class according to UL 94	V0	V0	V0	V0
Temperature data				
Plug / socket	[°C] -40 ... 85	-40 ... 85	-40 ... 85	-40 ... 85
	Ordering data		Ordering data	
Description	Order No.	Pcs. / Pkt.	Order No.	Pcs. / Pkt.
	Plug	Socket	Plug	Socket
Contact carrier, for reflow processes	1406410	20	1406409	20
Contact carrier, shielded, for reflow processes			1406396	60
			1406411	60
			1406397	60
			1406412	60
	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	



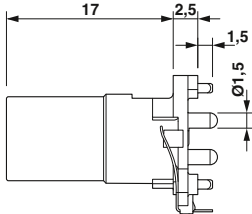
M12 flush-type plug



M12 flush-type plug



M12 flush-type socket



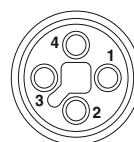
M12 flush-type socket



			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



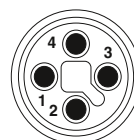
**Pin assignment of M12 socket, 4-pos., S-coded,
view of socket side**



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



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

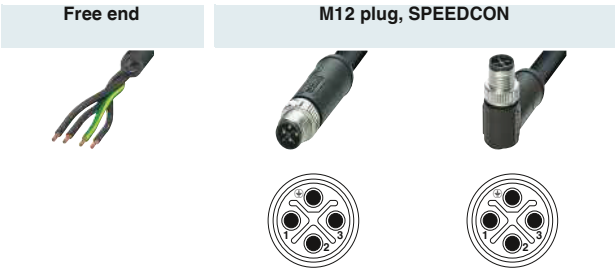


**Pin assignment of M12 plug, 4-pos., T-coded,
view of plug side**

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
	3 m	1424105	3 m
	5 m	1424245	5 m
	10 m	1424107	10 m

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

PUR, halogen-free - orange

Cable type

PUR

Color coding

BK1	1
BK2	2
BK3	3
GNYE	PE

Pin assignment

1
2
3
PE

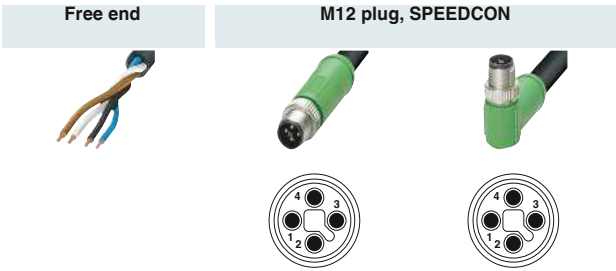
Technical data

	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

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 tooting, for all flush-type plug-in connectors with: ①			
M12 fastening thread	SACC-M12-KD-NUT-SH	1440151	10
EMC hexagonal nuts with fine tooting, 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



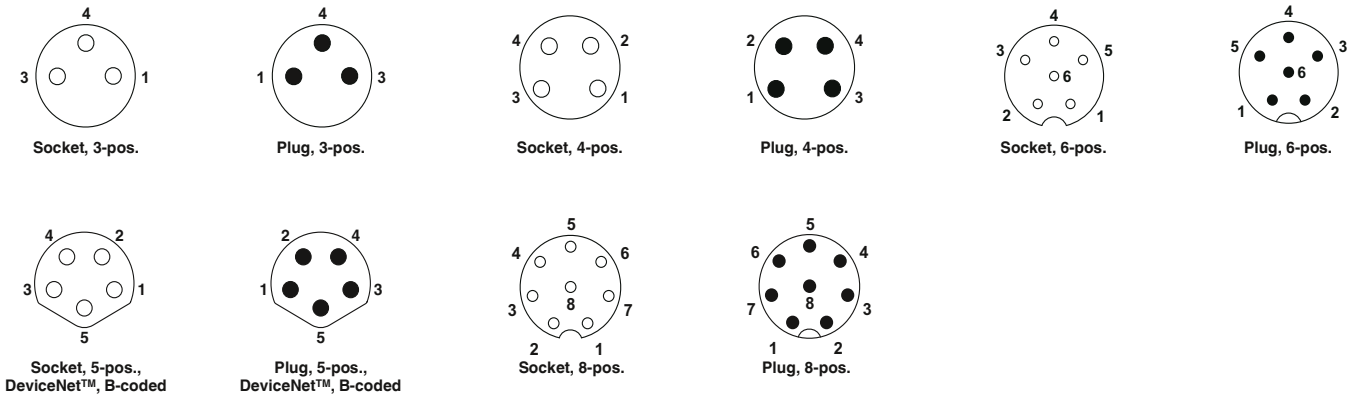
Litz wire colors

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	

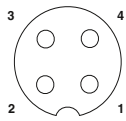
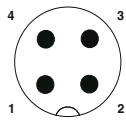
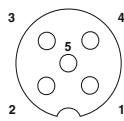
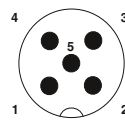
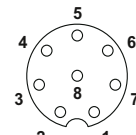
Assignment: M8 flush-type plugs/sockets

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

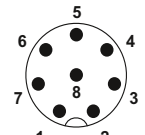
Assignment: CANopen®/DeviceNet™

M12 flush-type plug-in connectors

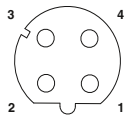
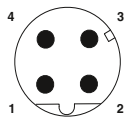
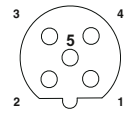
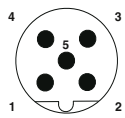
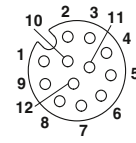
Pin assignments

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

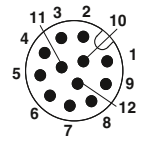
Socket, 8-pos.



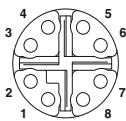
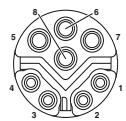
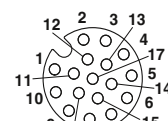
Plug, 8-pos.

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

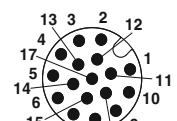
Socket, 12-pos.



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



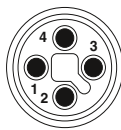
Socket, S-coded, 3+PE



Plug, A-coded, 3+PE



Socket, T-coded, 4-pos.



Plug, T-coded, 4-pos.

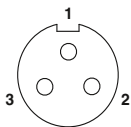
Litz wire colors

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

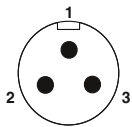
Assignment: M12 flush-type plugs/sockets

7/8" flush-type plug-in connectors

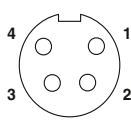
Pin assignments



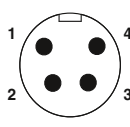
Socket, 3-pos.



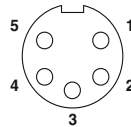
Plug, 3-pos.



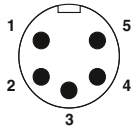
Socket, 4-pos.



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
------------------	----------

