

M12 Circular Connectors



Be certain. Belden.

M12 Circular Connectors

These connectors have been used routinely for decades worldwide to connect sensors/actuators with control cabinets or I/O modules. Protected against dust and moisture and resistant to many oils and chemical substances, the M12 connectors provide reliable, long-lasting wiring solutions.

Product Features

- Standardized connector formats, A-, B-, D-, U-, and X-coding
- Wide range of integrated connectors, field attachable and overmolded connectors – with and without LED function indicator, unshielded and shielded
- 3, 4, 5, 6, 8, and 12-pin versions
- Various cable versions
- Versions with degrees of protection IP65, IP67, IP68 to IP69K

Benefits

- Flexible and robust designs offer reliable solutions with a long service life
- Standardized M12 connector technology allows for quick assembly and wiring, increasing productivity
- Low installation workload and simplified maintenance (screwing on/screwing off) save time and money













































Applications

Sensor and actuator applications in automation technology in fields ranging from machine and system construction, and transport, to renewable energy and building automation.

Among others, connection of:

- Inductive/capacitive proximity switches
- Light barriers
- Rotary encoders/position encoders
- Valve clusters
- Servomotors
- Machine vision lighting and lamps
 - Communication interface for I/O modules
 - Field bus/network
 - Connection of cameras, information systems
 - Door control for superordinate unit

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
11363	RKT 4-3-06/2 M	3	PVC, orange	 
11364	RKT 4-3-06/5 M	3	PVC, orange	
11362	RKT 4-3-06/10 M	3	PVC, orange	
18170	RKT 4-3-224/2 M	3	PUR, halogen-free, black	   
15730	RKT 4-3-224/5 M	3	PUR, halogen-free, black	
15729	RKT 4-3-224/10 M	3	PUR, halogen-free, black	
71267	RKT 4-3-260/2 M	3	PUR, halogen-free, orange	    
71268	RKT 4-3-260/5 M	3	PUR, halogen-free, orange	
71269	RKT 4-3-260/10 M	3	PUR, halogen-free, orange	
303	RKT 4-3-294/2 M	3	PVC, black	 
8927	RKT 4-3-294/5 M	3	PVC, black	
304	RKT 4-3-294/10 M	3	PVC, black	
11348	RKT 4-07/2 M	4	PVC, orange	 
11349	RKT 4-07/5 M	4	PVC, orange	
11347	RKT 4-07/10 M	4	PVC, orange	
11355	RKT 4-225/2 M	4	PUR, halogen-free, black	   
11356	RKT 4-225/5 M	4	PUR, halogen-free, black	
18222	RKT 4-225/10 M	4	PUR, halogen-free, black	
11357	RKT 4-251/2 M	4	PUR, halogen-free, orange	    
11358	RKT 4-251/5 M	4	PUR, halogen-free, orange	
25703	RKT 4-251/10 M	4	PUR, halogen-free, orange	
53582	RKT 4-265/2 M	4	PUR, halogen-free, gray	 
58734	RKT 4-265/5 M	4	PUR, halogen-free, gray	
88351	RKT 4-265/10 M	4	PUR, halogen-free, gray	
393	RKT 4-295/2 M	4	PVC, black	 
76494	RKT 4-295/5 M	4	PVC, black	
76495	RKT 4-295/10 M	4	PVC, black	
699	RKT 4-500/2 M	4	PUR, halogen-free, black	      
700	RKT 4-500/5 M	4	PUR, halogen-free, black	
701	RKT 4-500/10 M	4	PUR, halogen-free, black	
52386	RKT 4-602/2 M	4	TPE, yellow	 
44836	RKT 4-602/5 M	4	TPE, yellow	
11159	RKT 4-602/10 M	4	TPE, yellow	
11381	RKT 5-56/2 M	5	PVC, orange	 
11382	RKT 5-56/5 M	5	PVC, orange	
11380	RKT 5-56/10 M	5	PVC, orange	
109187	RKT 5-72/2 M	5	PUR, black	  
28810	RKT 5-72/5 M	5	PUR, black	
86359	RKT 5-72/10 M	5	PUR, black	
13359	RKT 5-87/2 M	5	PUR, black	 
13357	RKT 5-87/5 M	5	PUR, black	
13358	RKT 5-87/10 M	5	PUR, black	

Special circuitry available upon request

The application of these products in harsh environments should always be checked before use.
 Technical modifications reserved.


















Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Standard Female Connectors *(continued)*

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
47084	RKT 5-226/2 P89	5	PUR, halogen-free, black	   
46973	RKT 5-226/5 P89	5	PUR, halogen-free, black	
934637156	RKT 5-226/10 P89	5	PUR, halogen-free, black	
11373	RKT 5-228/2 M	5	PUR, halogen-free, black	   
11374	RKT 5-228/5 M	5	PUR, halogen-free, black	
17046	RKT 5-228/10 M	5	PUR, halogen-free, black	
11378	RKT 5-259/2 M	5	PUR, halogen-free, orange	   
11379	RKT 5-259/5 M	5	PUR, halogen-free, orange	
30091	RKT 5-259/10 M	5	PUR, halogen-free, orange	
51487	RKT 5-289/2 M	5	PVC, black	 
51488	RKT 5-289/5 M	5	PVC, black	
51489	RKT 5-289/10 M	5	PVC, black	
4280	RKT 5-296/2 M	5	PVC, black	 
1177	RKT 5-296/5 M	5	PVC, black	
11158	RKT 5-296/10 M	5	PVC, black	
46898	RKT 8-6-268/2 M	6	PUR, halogen-free, orange	     
15718	RKT 8-6-268/5 M	6	PUR, halogen-free, orange	
15727	RKT 8-6-268/10 M	6	PUR, halogen-free, orange	
62977	RKT 8-6-337/2 M	6	PUR, halogen-free, black	   
62982	RKT 8-6-337/5 M	6	PUR, halogen-free, black	
62978	RKT 8-6-337/10 M	6	PUR, halogen-free, black	
11387	RKT 8-09/2 M	8	PUR, orange	 
11388	RKT 8-09/5 M	8	PUR, orange	
11386	RKT 8-09/10 M	8	PUR, orange	
47077	RKT 8-282/2 M	8	PUR, halogen-free, black	    
46772	RKT 8-282/5 M	8	PUR, halogen-free, black	
60548	RKT 8-282/10 M	8	PUR, halogen-free, black	
97356	RKT 8-344/2 M	8	PUR, halogen-free, black	  
97357	RKT 8-344/5 M	8	PUR, halogen-free, black	
80411	RKT 8-344/10 M	8	PUR, halogen-free, black	
105729	RKT 12-346/2 M	12	PUR, halogen-free, black	  
103590	RKT 12-346/5 M	12	PUR, halogen-free, black	
104142	RKT 12-346/10 M	12	PUR, halogen-free, black	

Special circuitry available upon request



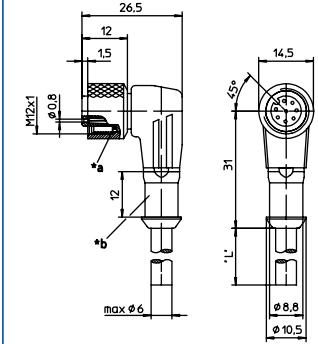
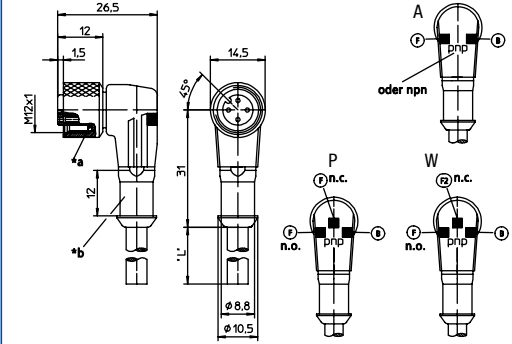
Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
11393	RKT/LED A 4-3-06/2 M	3	PVC, orange	 
11394	RKT/LED A 4-3-06/5 M	3	PVC, orange	
11392	RKT/LED A 4-3-06/10 M	3	PVC, orange	
43593	RKT/LED A 4-3-224/2 M	3	PUR, halogen-free, black	   
17615	RKT/LED A 4-3-224/5 M	3	PUR, halogen-free, black	
27451	RKT/LED A 4-3-224/10 M	3	PUR, halogen-free, black	
42752	RKT/LED A 4-3-260/2 M	3	PUR, halogen-free, orange	    
42753	RKT/LED A 4-3-260/5 M	3	PUR, halogen-free, orange	
71293	RKT/LED A 4-3-260/10 M	3	PUR, halogen-free, orange	
11402	RKT/LED F 4-07/2 M	4	PVC, orange	 
11403	RKT/LED F 4-07/5 M	4	PVC, orange	
11401	RKT/LED F 4-07/10 M	4	PVC, orange	
43741	RKT/LED F 4-225/2 M	4	PUR, halogen-free, black	   
43742	RKT/LED F 4-225/5 M	4	PUR, halogen-free, black	
43739	RKT/LED F 4-225/10 M	4	PUR, halogen-free, black	

LED A: PNP make contact, LED F: PNP break/make contact
 Special circuitry available upon request






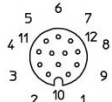
Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Standard Female Connectors

Technical Information





























































Product Description		
Order Designation	RKWT	RKWT/LED
		
Description	Actuator/sensor cordset, M12 overmolded female connector, angled, with self-locking screw coupling, 8 to 6-pin version: for connection to plug-in miniature sensor distribution unit type SBS	Actuator/sensor cordset, M12 overmolded female connector, angled, with LED operation and function indicators, self-locking screw coupling
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-40 °C to +90 °C, mind cable temperature range	
Housing Material/Grip	TPU	
Contact Holder Material	TPU	
Contact Material/Surface Finish	CuSn (8 and 12-pin CuZn), gold over nickel plating	CuSn, nickel underlay and gold-plated
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP65, IP67, IP68 (2 h at 10 bar; only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	3 to 4-pin 240 V, 5-pin 60 V, 6 to 12-pin 30 V	30 V
Rated Current	3 to 5-pin 4 A, 6 to 12-pin 2 A	4 A
Pollution Degree	3	
Technical Drawing		
		

*a = O-ring • *b = Protective sleeve assembly • B = Operation indicator (green) • F = Function indicator (yellow) • F2 = Function indicator (white) • L = Standard length of cable

Pin Assignment

3-pin	4-pin	5-pin	6-pin
 <p>1 = brown 2 = n.c. 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = green/yellow (RKT 5-56/...M = gray)</p>	 <p>1 = white 2 = green 3 = yellow 4 = gray 5 = brown 6 = n.c. 7 = blue 8 = n.c.</p>
8-pin	12-pin		
 <p>1 = white 2 = brown 3 = green 4 = yellow 5 = gray 6 = pink 7 = blue 8 = shield</p>	 <p>1 = brown 2 = blue 3 = white 4 = green 5 = pink 6 = yellow 7 = black 8 = gray 9 = red 10 = violet 11 = gray/pink 12 = red/blue</p>		























Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
11449	RKWT 4-3-06/2 M	3	PVC, orange	 
11450	RKWT 4-3-06/5 M	3	PVC, orange	 
11448	RKWT 4-3-06/10 M	3	PVC, orange	 
43595	RKWT 4-3-224/2 M	3	PUR, halogen-free, black	   
43597	RKWT 4-3-224/5 M	3	PUR, halogen-free, black	   
29165	RKWT 4-3-224/10 M	3	PUR, halogen-free, black	   
71290	RKWT 4-3-260/2 M	3	PUR, halogen-free, orange	   
71291	RKWT 4-3-260/5 M	3	PUR, halogen-free, orange	   
71292	RKWT 4-3-260/10 M	3	PUR, halogen-free, orange	   
11436	RKWT 4-07/2 M	4	PVC, orange	 
11437	RKWT 4-07/5 M	4	PVC, orange	 
11435	RKWT 4-07/10 M	4	PVC, orange	 
11441	RKWT 4-225/2 M	4	PUR, halogen-free, black	   
11442	RKWT 4-225/5 M	4	PUR, halogen-free, black	   
18158	RKWT 4-225/10 M	4	PUR, halogen-free, black	   
11443	RKWT 4-251/2 M	4	PUR, halogen-free, orange	   
11444	RKWT 4-251/5 M	4	PUR, halogen-free, orange	   
27094	RKWT 4-251/10 M	4	PUR, halogen-free, orange	   

Special circuitry available upon request

Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Standard Female Connectors *(continued)*

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
11463	RKWT 5-56/2 M	5	PVC, orange	   
11464	RKWT 5-56/5 M	5	PVC, orange	   
11462	RKWT 5-56/10 M	5	PVC, orange	   
40212	RKWT 5-228/2 M	5	PUR, halogen-free, black	   
29637	RKWT 5-228/5 M	5	PUR, halogen-free, black	   
17977	RKWT 5-228/10 M	5	PUR, halogen-free, black	   
10437	RKWT 5-259/2 M	5	PUR, halogen-free, orange	    
58901	RKWT 5-259/5 M	5	PUR, halogen-free, orange	    
5800	RKWT 5-259/10 M	5	PUR, halogen-free, orange	    
46899	RKWT 8-6-268/2 M	6	PUR, halogen-free, orange	    
17128	RKWT 8-6-268/5 M	6	PUR, halogen-free, orange	    
46900	RKWT 8-6-268/10 M	6	PUR, halogen-free, orange	    
62983	RKWT 8-6-337/2 M	6	PUR, halogen-free, black	  
62980	RKWT 8-6-337/5 M	6	PUR, halogen-free, black	  
62981	RKWT 8-6-337/10 M	6	PUR, halogen-free, black	  
13710	RKWT 8-09/2 M	8	PUR, orange	  
13709	RKWT 8-09/5 M	8	PUR, orange	  
13708	RKWT 8-09/10 M	8	PUR, orange	  
64546	RKWT 8-282/2 M	8	PUR, halogen-free, black	  
64547	RKWT 8-282/5 M	8	PUR, halogen-free, black	  
60551	RKWT 8-282/10 M	8	PUR, halogen-free, black	  

Special circuitry available upon request



Order Information

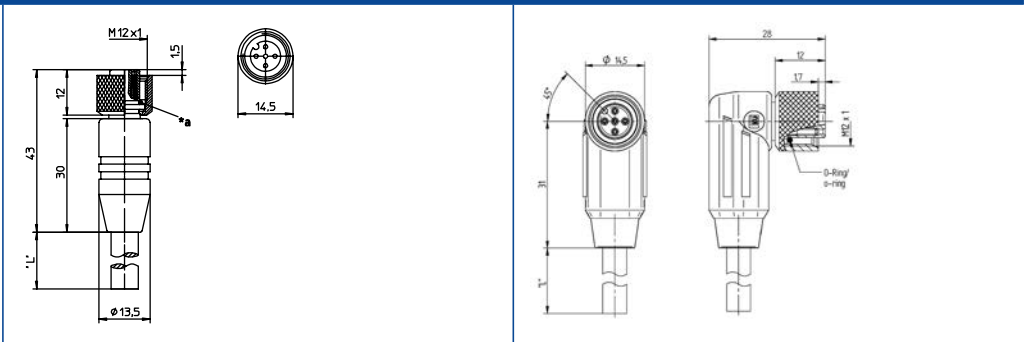
Order No.	Order Designation	No. of Pins	Jacket	Characteristics
11471	RKWT/LED A 4-3-06/2 M	3	PVC, orange	 
11472	RKWT/LED A 4-3-06/5 M	3	PVC, orange	 
11470	RKWT/LED A 4-3-06/10 M	3	PVC, orange	 
11477	RKWT/LED A 4-3-224/2 M	3	PUR, halogen-free, black	   
11478	RKWT/LED A 4-3-224/5 M	3	PUR, halogen-free, black	   
11475	RKWT/LED A 4-3-224/10 M	3	PUR, halogen-free, black	   
38795	RKWT/LED A 4-3-260/2 M	3	PUR, halogen-free, orange	    
17572	RKWT/LED A 4-3-260/5 M	3	PUR, halogen-free, orange	    
14157	RKWT/LED A 4-3-260/10 M	3	PUR, halogen-free, orange	    
11539	RKWT/LED P 4-07/2 M	4	PVC, orange	 
11540	RKWT/LED P 4-07/5 M	4	PVC, orange	 
11538	RKWT/LED P 4-07/10 M	4	PVC, orange	 
11544	RKWT/LED P 4-225/2 M	4	PUR, halogen-free, black	   
11545	RKWT/LED P 4-225/5 M	4	PUR, halogen-free, black	   
16978	RKWT/LED P 4-225/10 M	4	PUR, halogen-free, black	   
11547	RKWT/LED P 4-251/2 M	4	PUR, halogen-free, orange	    
11548	RKWT/LED P 4-251/5 M	4	PUR, halogen-free, orange	    
11546	RKWT/LED P 4-251/10 M	4	PUR, halogen-free, orange	    
75305	RKWT/LED W 4-265/2 M	4	PUR, halogen-free, black	   
75316	RKWT/LED W 4-265/5 M	4	PUR, halogen-free, black	   
85877	RKWT/LED W 4-265/10 M	4	PUR, halogen-free, black	   

Contact (yellow-green), LED P: PNP break/make contact (yellow-yellow-green antivalent), LED W: PNP break/make contact (yellow-white-green antivalent)
Special circuitry available upon request

Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Shielded Female Connectors




Technical Information

Product Description		
Order Designation	RKTS	RKWTS
		
Description	Actuator/sensor cordset, M12 overmolded female connector, straight, with screw coupling, shield connected to knurled nut	Actuator/sensor cordset, M12 overmolded female connector, 360° shield connected to knurled nut, angled, with screw coupling
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range	
Housing Material/Grip	TPU	
Contact Holder Material	PBT (8-pin TPU)	PBT
Contact Material/Surface Finish	CuSn (4 and 5-pin), CuZn (8-pin), gold over nickel plating	
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	IP67, IP68, IP69K (only when mated to associated counterparts)
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	4-pin 250 V, 5-pin 60 V, 8-pin 30 V	
Rated Current	4 and 5-pin 4 A, 8-pin 2 A	
Pollution Degree	3	
Technical Drawing		



*a = O-ring • L = Standard length of cable

Pin Assignment



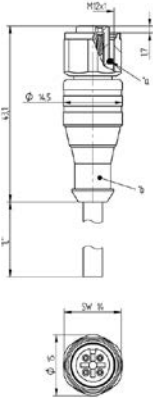
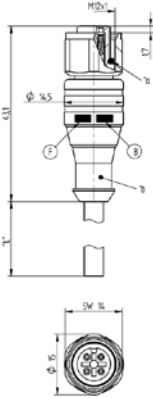
4-pin	5-pin	8-pin
 <ul style="list-style-type: none"> 1 = brown 2 = white 3 = blue 4 = black 	 <ul style="list-style-type: none"> 1 = brown 2 = white 3 = blue 4 = black 5 = gray 	 <ul style="list-style-type: none"> 1 = white 2 = brown 3 = green 4 = yellow 5 = gray 6 = pink 7 = blue 8 = red

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
11411	RKTS 4-182/2 M	4	PVC, orange	
11412	RKTS 4-182/5 M	4	PVC, orange	
11410	RKTS 4-182/10 M	4	PVC, orange	
49203	RKTS 4-288/2 M	4	PUR, halogen-free, black	   
49205	RKTS 4-288/5 M	4	PUR, halogen-free, black	
49202	RKTS 4-288/10 M	4	PUR, halogen-free, black	
11417	RKTS 5-183/2 M	5	PVC, orange	
11418	RKTS 5-183/5 M	5	PVC, orange	
11416	RKTS 5-183/10 M	5	PVC, orange	
49231	RKTS 5-298/2 M	5	PUR, halogen-free, black	   
49232	RKTS 5-298/5 M	5	PUR, halogen-free, black	
49230	RKTS 5-298/10 M	5	PUR, halogen-free, black	
11423	RKTS 8-184/2 M	8	PVC, orange	
11424	RKTS 8-184/5 M	8	PVC, orange	
11422	RKTS 8-184/10 M	8	PVC, orange	
49261	RKTS 8-299/2 M	8	PUR, halogen-free, black	   
49262	RKTS 8-299/5 M	8	PUR, halogen-free, black	
49260	RKTS 8-299/10 M	8	PUR, halogen-free, black	
934703004	RKWTS 4-182/2 M	4	PVC, orange	
934703007	RKWTS 4-182/5 M	4	PVC, orange	
934703002	RKWTS 4-182/10 M	4	PVC, orange	
934703011	RKWTS 4-288/2 M	4	PUR, halogen-free, black	   
934703014	RKWTS 4-288/5 M	4	PUR, halogen-free, black	
934703009	RKWTS 4-288/10 M	4	PUR, halogen-free, black	
934703017	RKWTS 5-183/2 M	5	PVC, orange	
934703018	RKWTS 5-183/5 M	5	PVC, orange	
934703016	RKWTS 5-183/10 M	5	PVC, orange	
934703022	RKWTS 5-298/2 M	5	PUR, halogen-free, black	   
934703025	RKWTS 5-298/5 M	5	PUR, halogen-free, black	
934703020	RKWTS 5-298/10 M	5	PUR, halogen-free, black	
934703026	RKWTS 8-184/2 M	8	PVC, orange	
934703027	RKWTS 8-184/5 M	8	PVC, orange	
9771	RKWTS 8-184/10 M	8	PVC, orange	
934703030	RKWTS 8-299/2 M	8	PUR, halogen-free, black	   
934703032	RKWTS 8-299/5 M	8	PUR, halogen-free, black	
934703028	RKWTS 8-299/10 M	8	PUR, halogen-free, black	



Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Female Connectors for Food & Beverage – PVC

Technical Information

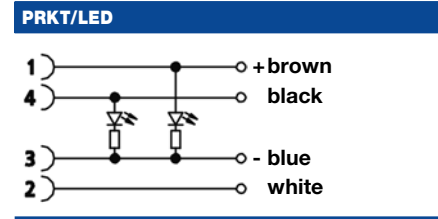
Product Description		
Order Designation	PRKT	PRKT/LED
		
Description	Actuator/sensor cordset, M12 overmolded female connector, straight, with self-locking screw coupling, stainless steel hexagonal nut	Actuator/sensor cordset, M12 overmolded female connector, straight, with self-locking screw coupling, with LED operation and function indicators, stainless steel hexagonal nut
Note	Especially suitable for use in the food & beverage industry.	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	–	
Technical Data		
Ambient Temperature	-25 °C to +70 °C, mind cable temperature range	
Housing Material/Grip	PVC	
Contact Holder Material	PVC	
Contact Material/Surface Finish	CuSn, gold over nickel plating	
Screw Coupling Material	Stainless steel	
Mechanical Data		
Degree of Protection	IP67, IP69K (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	4-pin 250 V, 5-pin 60 V	30 V
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		
		

*a = O-ring • *b = Protective sleeve assembly • L = Standard length of cable • B = Operation indicator (green) • F = Function indicator



















Pin Assignment

4-pin	5-pin
 <ul style="list-style-type: none"> 1 = brown 2 = white 3 = blue 4 = black 	 <ul style="list-style-type: none"> 1 = brown 2 = white 3 = blue 4 = black 5 = gray

Circuit Diagram





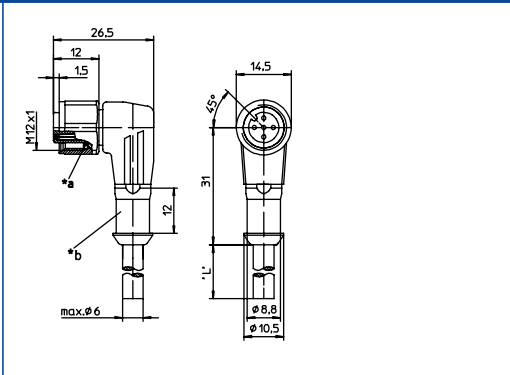
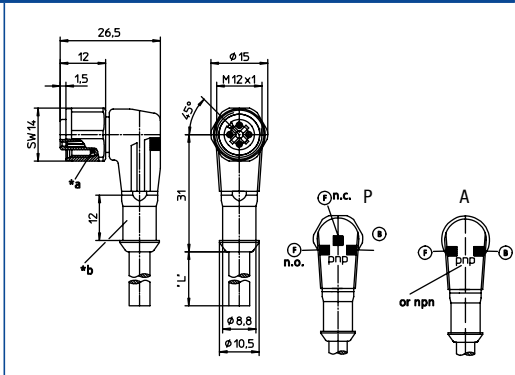
Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
53259	PRKT 4-07/2 M	4	PVC, orange	 
28336	PRKT 4-07/5 M	4	PVC, orange	 
13287	PRKT 4-07/10 M	4	PVC, orange	 
934637022	PRKT 5-56/2 M	5	PVC, orange	 
45340	PRKT 5-56/5 M	5	PVC, orange	 
46894	PRKT 5-56/10 M	5	PVC, orange	 
66786	PRKT/LED F 4-07/2 M	4	PVC, orange	 
105095	PRKT/LED F 4-07/5 M	4	PVC, orange	 
46990	PRKT/LED F 4-07/10 M	4	PVC, orange	 

LED F: PNP break/make contact
 Special circuitry available upon request




Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Female Connectors for Food & Beverage – PVC

Technical Information

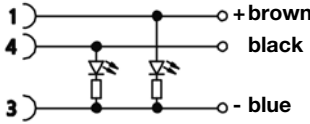
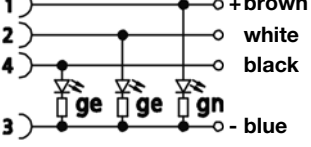
Product Description		
Order Designation	PRKWT	PRKWT/LED
		
Description	Actuator/sensor cordset, M12 overmolded female connector, angled, with self-locking screw coupling, stainless steel hexagonal nut	Actuator/sensor cordset, M12 overmolded female connector, angled, with LED and function indicators, self-locking screw coupling, stainless steel hexagonal nut
Note	Especially suitable for use in the food & beverage industry.	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	-	
Technical Data		
Ambient Temperature	-25 °C to +70 °C, mind cable temperature range	
Housing Material/Grip	PVC	
Contact Holder Material	PVC	
Contact Material/Surface Finish	CuSn, gold over nickel plating	
Screw Coupling Material	Stainless steel	
Mechanical Data		
Degree of Protection	IP67, IP69K (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	4-pin 250 V, 5-pin 60 V	30 V
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		
		

*a = O-ring • *b = Protective sleeve assembly • L = Standard length of cable • B = Operation indicator (green) • F = Function indicator (yellow)

























Pin Assignment

3-pin	4-pin	5-pin
 <p>1 = brown 2 = n.c. 3 = blue 4 = black</p>	 <p>1 = brown 2 = n.c. 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = gray</p>

Circuit Diagram

PRKWT/LED A4-3-06/...M	PRKWT/LED P4-07/...M
 <p>1) — + brown 4) — black 3) — - blue</p>	 <p>1) — + brown 2) — white 4) — black 3) — - blue</p>



Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
53263	PRKWT 4-07/2 M	4	PVC, orange	 
13601	PRKWT 4-07/5 M	4	PVC, orange	 
13584	PRKWT 4-07/10 M	4	PVC, orange	 
11157	PRKWT 5-56/2 M	5	PVC, orange	 
13635	PRKWT 5-56/5 M	5	PVC, orange	 
54711	PRKWT 5-56/10 M	5	PVC, orange	 
13863	PRKWT/LED A 4-3-06/2 M	3	PVC, orange	 
13862	PRKWT/LED A 4-3-06/5 M	3	PVC, orange	 
13864	PRKWT/LED A 4-3-06/10 M	3	PVC, orange	 
18021	PRKWT/LED P 4-07/5 M	4	PVC, orange	 
18026	PRKWT/LED P 4-07/10 M	4	PVC, orange	 
18027	PRKWT/LED P 4-07/25 M	4	PVC, orange	 

LED A: PNP make contact (yellow-green), LED P: PNP break/make contact (yellow-yellow-green antivalent)
Special circuitry available upon request

Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Female Connectors for Food & Beverage – Wash-Down

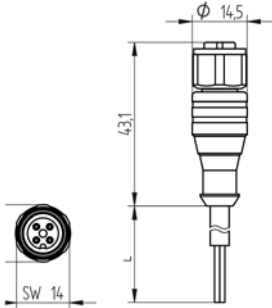
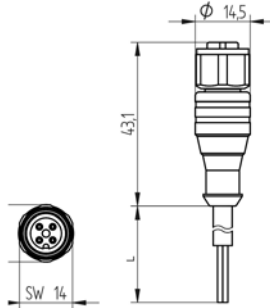
Technical Information

Product Description		
Order Designation	WRKT	WRKT/LED
		
Description	Actuator/sensor cordset, M12 overmolded female connector, straight, stainless steel hexagonal nut	Actuator/sensor cordset, M12 overmolded female connector, straight, LED operation and function indicators, stainless steel hexagonal nut
Note	Especially suitable for use in wash-down applications.	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL, ECOLAB	

Technical Data	
Ambient Temperature	-40 °C to +105 °C (UL: up to +90 °C), mind cable temperature range
Housing Material/Grip	PP
Contact Holder Material	PP
Contact Material/Surface Finish	CuSn (3, 4, and 5-pin), CuZn (8-pin), gold over nickel plating
Screw Coupling Material	Stainless steel





Mechanical Data	
Degree of Protection	IP67, IP68, IP69K (only when mated to associated counterparts)

Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V, 8-pin 30 V 30 V
Rated Current	3 and 5-pin 4 A, 8-pin 2 A
Pollution Degree	3

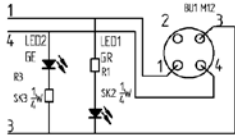
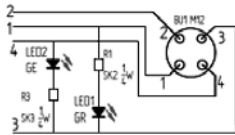
Technical Drawing	
	

L = Standard length of cable

Pin Assignment

3-pin	4-pin	5-pin	8-pin
 <p>1 = brown 2 = n.c. 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = gray</p>	 <p>1 = white 2 = brown 3 = green 4 = yellow 5 = gray 6 = pink 7 = blue 8 = red</p>

Circuit Diagram

WRKWT/LED A 4-3-520/...M (3-pin)	WRKWT/LED F 4-521/...M (4-pin)
	



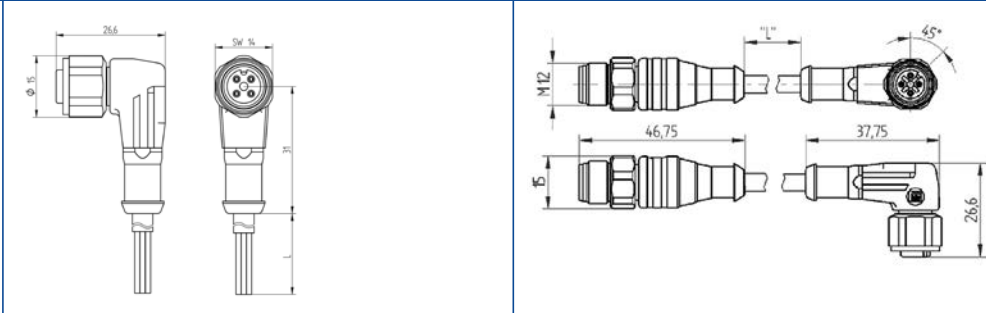
Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
934733001	WRKT 4-3-520/2 M	3	TPE, orange	ECO LAB, UL, RoHS, REACH
934733002	WRKT 4-3-520/5 M	3	TPE, orange	ECO LAB, UL, RoHS, REACH
934733003	WRKT 4-3-520/10 M	3	TPE, orange	ECO LAB, UL, RoHS, REACH
934733007	WRKT 4-521/2 M	4	TPE, orange	ECO LAB, UL, RoHS, REACH
934733008	WRKT 4-521/5 M	4	TPE, orange	ECO LAB, UL, RoHS, REACH
934733009	WRKT 4-521/10 M	4	TPE, orange	ECO LAB, UL, RoHS, REACH
934733013	WRKT 5-522/2 M	5	TPE, orange	ECO LAB, UL, RoHS, REACH
934733014	WRKT 5-522/5 M	5	TPE, orange	ECO LAB, UL, RoHS, REACH
934733015	WRKT 5-522/10 M	5	TPE, orange	ECO LAB, UL, RoHS, REACH
934733019	WRKT 8-523/2 M	8	TPE, orange	ECO LAB, UL, RoHS, REACH
934733020	WRKT 8-523/5 M	8	TPE, orange	ECO LAB, UL, RoHS, REACH
934733021	WRKT 8-523/10 M	8	TPE, orange	ECO LAB, UL, RoHS, REACH
9779	WRKT/LED A 4-3-520/2 M	3	TPE, orange	ECO LAB, UL, RoHS, REACH
9818	WRKT/LED A 4-3-520/5 M	3	TPE, orange	ECO LAB, UL, RoHS, REACH
9819	WRKT/LED A 4-3-520/10 M	3	TPE, orange	ECO LAB, UL, RoHS, REACH
9262	WRKT/LED F 4-521/2 M	4	TPE, orange	ECO LAB, UL, RoHS, REACH
9261	WRKT/LED F 4-521/5 M	4	TPE, orange	ECO LAB, UL, RoHS, REACH
9820	WRKT/LED F 4-521/10 M	4	TPE, orange	ECO LAB, UL, RoHS, REACH

LED A/LED F: PNP make contact
Special circuitry available upon request





Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Female Connectors for Food & Beverage – Wash-Down

Technical Information

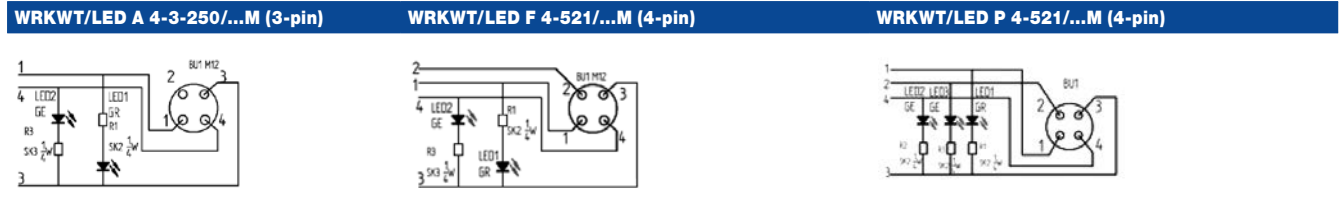
Product Description	
Order Designation	WRKWT
	
	WRKWT/LED
	
Description	Actuator/sensor cordset, M12 female connector, angled, stainless steel hexagonal nut
Note	Especially suitable for use in wash-down applications.
RoHS-compliant (2011/65/EU)	Yes
(Construction Type) Standard	IEC 61076-2-101
Approvals	UL, ECOLAB
Technical Data	
Ambient Temperature	-40 °C to +105 °C (UL: up to +90 °C), mind cable temperature range
Housing Material/Grip	PP
Contact Holder Material	PP
Contact Material/Surface Finish	CuSn (3, 4, and 5-pin), CuZn (8-pin), gold over nickel plating
Screw Coupling Material	Stainless steel
Mechanical Data	
Degree of Protection	IP67, IP68, IP69K (only when mated to associated counterparts)
Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V, 8-pin 30 V
Rated Current	3 and 5-pin 4 A, 8-pin 2 A
Pollution Degree	3
Technical Drawing	
	

L = Standard length of cable • B = Operation indicator (green) • F = Function indicator (yellow) • F2 = Function indicator (yellow)

Pin Assignment

3-pin	4-pin	5-pin	8-pin
 <ul style="list-style-type: none"> 1 = brown 2 = n.c. 3 = blue 4 = black 	 <ul style="list-style-type: none"> 1 = brown 2 = white 3 = blue 4 = black 	 <ul style="list-style-type: none"> 1 = brown 2 = white 3 = blue 4 = black 5 = gray 	 <ul style="list-style-type: none"> 1 = white 2 = brown 3 = green 4 = yellow 5 = gray 6 = pink 7 = blue 8 = red

Circuit Diagram





Order Information

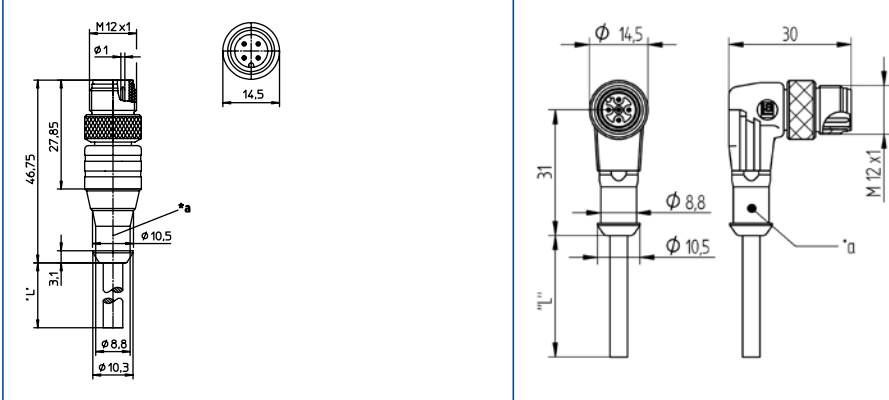
Order No.	Order Designation	No. of Pins	Jacket	Characteristics
934734001	WRKWT 4-3-520/2 M	4	TPE, orange	ECO LAB UL
934734002	WRKWT 4-3-520/5 M	4	TPE, orange	ECO LAB UL
934734003	WRKWT 4-3-520/10 M	4	TPE, orange	ECO LAB UL
934734007	WRKWT 4-521/2 M	4	TPE, orange	ECO LAB UL
934734008	WRKWT 4-521/5 M	4	TPE, orange	ECO LAB UL
934734009	WRKWT 4-521/10 M	4	TPE, orange	ECO LAB UL
934734013	WRKWT 5-522/2 M	5	TPE, orange	ECO LAB UL
934734014	WRKWT 5-522/5 M	5	TPE, orange	ECO LAB UL
934734015	WRKWT 5-522/10 M	5	TPE, orange	ECO LAB UL
934734019	WRKWT 8-523/2 M	8	TPE, orange	ECO LAB UL
934734020	WRKWT 8-523/5 M	8	TPE, orange	ECO LAB UL
934734021	WRKWT 8-523/10 M	8	TPE, orange	ECO LAB UL
9821	WRKWT/LED A 4-3-520/2 M	3	TPE, orange	ECO LAB UL
9824	WRKWT/LED A 4-3-520/5 M	3	TPE, orange	ECO LAB UL
9829	WRKWT/LED A 4-3-520/10 M	3	TPE, orange	ECO LAB UL
9830	WRKWT/LED F 4-521/2 M	4	TPE, orange	ECO LAB UL
9831	WRKWT/LED F 4-521/5 M	4	TPE, orange	ECO LAB UL
9832	WRKWT/LED F 4-521/10 M	4	TPE, orange	ECO LAB UL
9258	WRKWT/LED P 4-521/2 M	4	TPE, orange	ECO LAB UL
7319	WRKWT/LED P 4-521/5 M	4	TPE, orange	ECO LAB UL
10502	WRKWT/LED P 4-521/10 M	4	TPE, orange	ECO LAB UL

LED A/LED F: PNP make contact (yellow-green), LED P: PNP break/make contact (yellow-yellow-green)
 Special circuitry available upon request

Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Standard Male Connectors




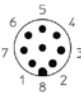
Technical Information

Product Description		
Order Designation	RST	RSWT
		
Description	Actuator/sensor cordset, M12 overmolded male connector, straight, with self-locking screw coupling	Actuator/sensor cordset, M12 overmolded male connector, angled, with self-locking screw coupling
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-40 °C to +90 °C, mind cable temperature range	
Housing Material/Grip	TPU	
Contact Holder Material	TPU	
Contact Material/Surface Finish	CuSn, gold over nickel plating	
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67, IP68 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V, 8-pin 30 V	
Rated Current	3 and 5-pin 4 A, 8-pin 2 A	
Pollution Degree	3	
Technical Drawing		



















































































*a = Protective sleeve assembly • L = Standard length of cable

Pin Assignment

3-pin	4-pin	5-pin	8-pin
 <p>1 = brown 3 = blue 4 = black</p> <p>Contact 1 leading</p>	 <p>1 = brown 2 = white 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = green/yellow</p> <p>Contact 5 leading</p>	 <p>1 = white 2 = brown 3 = green 4 = yellow 5 = gray 6 = pink 7 = blue 8 = shield</p>






























































































Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
11719	RST 3-06/2 M	3	PVC, orange	 
11720	RST 3-06/5 M	3	PVC, orange	 
11718	RST 3-06/10 M	3	PVC, orange	 
43703	RST 3-224/2 M	3	PUR, halogen-free, black	   
43704	RST 3-224/5 M	3	PUR, halogen-free, black	   
43702	RST 3-224/10 M	3	PUR, halogen-free, black	   
41731	RST 3-260/2 M	3	PUR, halogen-free, orange	    
71255	RST 3-260/5 M	3	PUR, halogen-free, orange	    
71266	RST 3-260/10 M	3	PUR, halogen-free, orange	    
9835	RST 3-294/2 M	3	PVC, black	 
3148	RST 3-294/5 M	3	PVC, black	 
3149	RST 3-294/10 M	3	PVC, black	 
11804	RST 4-07/2 M	4	PVC, orange	 
11805	RST 4-07/5 M	4	PVC, orange	 
11803	RST 4-07/10 M	4	PVC, orange	 
11809	RST 4-225/2 M	4	PUR, halogen-free, black	   
11810	RST 4-225/5 M	4	PUR, halogen-free, black	   
29618	RST 4-225/10 M	4	PUR, halogen-free, black	   
11811	RST 4-251/2 M	4	PUR, halogen-free, orange	    
11812	RST 4-251/5 M	4	PUR, halogen-free, orange	    
46902	RST 4-251/10 M	4	PUR, halogen-free, orange	    
91332	RST 4-265/2 M	4	PUR, halogen-free, gray	  
51939	RST 4-265/5 M	4	PUR, halogen-free, gray	  
81994	RST 4-265/10 M	4	PUR, halogen-free, gray	  

































































































The application of these products in harsh environments should always be checked before use. Technical modifications reserved.

Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Standard Male Connectors *(continued)*

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
693	RST 4-500/2 M	4	PUR, halogen-free, black	      
694	RST 4-500/5 M	4	PUR, halogen-free, black	      
695	RST 4-500/10 M	4	PUR, halogen-free, black	      
46615	RST 4-602/2 M	4	TPE, yellow	
26875	RST 4-602/5 M	4	TPE, yellow	
55304	RST 4-602/10 M	4	TPE, yellow	
12016	RST 5-56/2 M	5	PVC, orange	 
12017	RST 5-56/5 M	5	PVC, orange	 
12015	RST 5-56/10 M	5	PVC, orange	 
10436	RST 5-72/2 M	5	PUR, black	  
15274	RST 5-72/5 M	5	PUR, black	  
107305	RST 5-72/10 M	5	PUR, black	  
15792	RST 5-87/2 M	5	PUR, black	 
15794	RST 5-87/5 M	5	PUR, black	 
15795	RST 5-87/10 M	5	PUR, black	 
11890	RST 5-228/2 M	5	PUR, halogen-free, black	   
11891	RST 5-228/5 M	5	PUR, halogen-free, black	   
17061	RST 5-228/10 M	5	PUR, halogen-free, black	   
11895	RST 5-259/2 M	5	PUR, halogen-free, orange	    
11896	RST 5-259/5 M	5	PUR, halogen-free, orange	    
47018	RST 5-259/10 M	5	PUR, halogen-free, orange	    
51495	RST 5-289/2 M	5	PVC, black	 
51496	RST 5-289/5 M	5	PVC, black	 
51497	RST 5-289/10 M	5	PVC, black	 
10435	RST 5-296/2 M	5	PVC, black	 
934637790	RST 5-296/5 M	5	PVC, black	 
1222	RST 5-296/10 M	5	PVC, black	 
12084	RST 8-09/2 M	8	PUR, orange	  
12085	RST 8-09/5 M	8	PUR, orange	  
12083	RST 8-09/10 M	8	PUR, orange	  


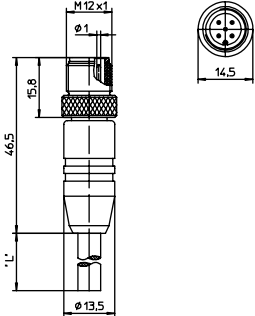
Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
47076	RST 8-282/2 M	8	PUR, halogen-free, black	   
64545	RST 8-282/5 M	8	PUR, halogen-free, black	   
64544	RST 8-282/10 M	8	PUR, halogen-free, black	   
97324	RST 8-344/2 M	8	PUR, halogen-free, black	  
97325	RST 8-344/5 M	8	PUR, halogen-free, black	  
108754	RST 8-344/10 M	8	PUR, halogen-free, black	  
9838	RST 12-346/2 M	12	PUR, halogen-free, black	  
105423	RST 12-346/5 M	12	PUR, halogen-free, black	  
934637041	RST 12-346/10 M	12	PUR, halogen-free, black	  
12106	RSWT 3-06/2 M	3	PVC, orange	 
12107	RSWT 3-06/5 M	3	PVC, orange	 
8816	RSWT 3-06/10 M	3	PVC, orange	 
934636133	RSWT 3-224/2 M	3	PUR, halogen-free, black	   
70397	RSWT 3-224/5 M	3	PUR, halogen-free, black	   
1028	RSWT 3-224/10 M	3	PUR, halogen-free, black	   
12112	RSWT 4-07/2 M	4	PVC, orange	 
12113	RSWT 4-07/5 M	4	PVC, orange	 
12111	RSWT 4-07/10 M	4	PVC, orange	 
46523	RSWT 4-225/2 M	4	PUR, halogen-free, black	   
44597	RSWT 4-225/5 M	4	PUR, halogen-free, black	   
46629	RSWT 4-225/10 M	4	PUR, halogen-free, black	   
934636116	RSWT 5-56/2 M	5	PVC, orange	 
9859	RSWT 5-56/5 M	5	PVC, orange	 
9870	RSWT 5-56/10 M	5	PVC, orange	 
44782	RSWT 5-228/2 M	5	PUR, halogen-free, black	   
50527	RSWT 5-228/5 M	5	PUR, halogen-free, black	   
58489	RSWT 5-228/10 M	5	PUR, halogen-free, black	   
15951	RSWT 8-09/2 M	8	PUR, orange	   
9882	RSWT 8-09/5 M	8	PUR, orange	   
934637356	RSWT 8-09/10 M	8	PUR, orange	   

The application of these products in harsh environments should always be checked before use.
Technical modifications reserved.




Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Shielded Male Connectors

Technical Information

















































Product Description	
Product Description	RSTS
	
Description	Actuator/sensor cordset, M12 overmolded male connector, straight, shielded, with screw coupling, 360° shield connected to knurled screw
RoHS-compliant (2011/65/EU)	Yes
(Construction Type) Standard	IEC 61076-2-101
Approvals	UL
Technical Data	
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range
Housing Material/Grip	TPU
Contact Holder Material	PBT (8-pin: TPU)
Contact Material/Surface Finish	CuSn (4 and 5-pin), CuZn (8-pin), gold over nickel plating
Screw Coupling Material	CuZn, nickel-plated
Mechanical Data	
Degree of Protection	IP67 (only when mated to associated counterparts)
Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	4-pin 250 V, 5-pin 60 V, 8-pin 30 V
Rated Current	4 to 5-pin 4 A, 8-pin 2 A
Pollution Degree	3
Technical Drawing	
	

*a = Protective sleeve assembly • L = Standard length of cable

Pin Assignment



4-pin	5-pin	8-pin
 <p>1 = brown 2 = white 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = gray</p>	 <p>1 = white 2 = brown 3 = green 4 = yellow 5 = gray 6 = pink 7 = blue 8 = red</p>
Contact 5 leading		

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
12087	RSTS 4-182/2 M	4	PVC, orange	   
12088	RSTS 4-182/5 M	4	PVC, orange	
12086	RSTS 4-182/10 M	4	PVC, orange	
49307	RSTS 4-288/2 M	4	PUR, halogen-free, black	   
49308	RSTS 4-288/5 M	4	PUR, halogen-free, black	   
49306	RSTS 4-288/10 M	4	PUR, halogen-free, black	   
12093	RSTS 5-183/2 M	5	PVC, orange	
12094	RSTS 5-183/5 M	5	PVC, orange	
12092	RSTS 5-183/10 M	5	PVC, orange	
49234	RSTS 5-298/2 M	5	PUR, halogen-free, black	   
49235	RSTS 5-298/5 M	5	PUR, halogen-free, black	   
49233	RSTS 5-298/10 M	5	PUR, halogen-free, black	   
12099	RSTS 8-184/2 M	8	PVC, orange	
12100	RSTS 8-184/5 M	8	PVC, orange	
12098	RSTS 8-184/10 M	8	PVC, orange	
49264	RSTS 8-299/2 M	8	PUR, halogen-free, black	   
49265	RSTS 8-299/5 M	8	PUR, halogen-free, black	   
49263	RSTS 8-299/10 M	8	PUR, halogen-free, black	   

Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Male Connectors for Food & Beverage – PVC

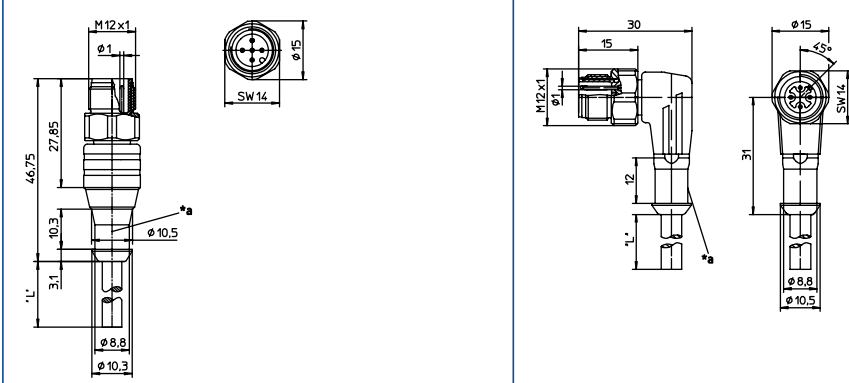
Technical Information

Product Description		
Order Designation	PRST	PRSWT
		
Description	Actuator/sensor cordset, M12 overmolded male connector, straight, with self-locking screw coupling, stainless steel hexagonal screw	Actuator/sensor cordset, M12 overmolded male connector, angled, with self-locking screw coupling, stainless steel hexagonal screw
Note	Especially suitable for use in the food & beverage industry.	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	-	

Technical Data	
Ambient Temperature	-25 °C to +70 °C, mind cable temperature range
Housing Material/Grip	PVC
Contact Holder Material	PVC
Contact Material/Surface Finish	CuZn, gold over nickel plating
Screw Coupling Material	Stainless steel

Mechanical Data	
Degree of Protection	IP67, IP69K (only when mated to associated counterparts)

Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	250 V, 5-pin 60 V
Rated Current	4 A
Pollution Degree	3

























Technical Drawing	
	

*a = Protective sleeve assembly • L = Standard length of cable

PRST Pin Assignment



4-pin		5-pin	
	1 = brown 2 = white 3 = blue 4 = black		1 = brown 2 = white 3 = blue 4 = black 5 = green/yellow

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
38298	PRST 4-07/2 M	4	PVC, orange	 
59202	PRST 4-07/5 M	4	PVC, orange	 
18230	PRST 4-07/10 M	4	PVC, orange	 
9884	PRST 5-56/2 M	5	PVC, orange	 
9894	PRST 5-56/5 M	5	PVC, orange	 
9895	PRST 5-56/10 M	5	PVC, orange	 
9901	PRSWT 4-07/2 M	4	PVC, orange	 
9904	PRSWT 4-07/5 M	4	PVC, orange	 
9909	PRSWT 4-07/10 M	4	PVC, orange	 
9910	PRSWT 5-56/2 M	5	PVC, orange	 
9911	PRSWT 5-56/5 M	5	PVC, orange	 
9912	PRSWT 5-56/10 M	5	PVC, orange	 

Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Male Connectors for Food & Beverage – Wash-Down

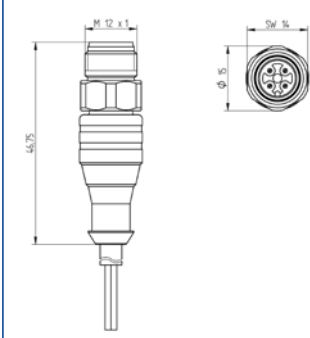
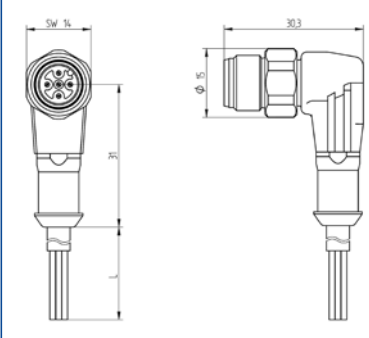
Technical Information

Product Description		
Order Designation	WRST	WRSWT
		
Description	Actuator/sensor cordset, M12 overmolded male, straight, stainless steel hexagonal screw	Actuator/sensor cordset, M12 overmolded male, angled, stainless steel hexagonal screw
Note	Especially suitable for use in wash-down applications.	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL, ECOLAB	

Technical Data	
Ambient Temperature	-40 °C to +105 °C (UL: up to +90 °C), mind cable temperature range
Housing Material/Grip	PP
Contact Holder Material	PP
Contact Material/Surface Finish	CuSn (3, 4, and 5-pin), CuZn (8-pin), nickel underlay and gold-plated
Screw Coupling Material	Stainless steel




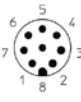
Mechanical Data	
Degree of Protection	IP67, IP68, IP69K (only when mated to associated counterparts)

Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V, 8-pin 30 V (3 to 5-pin UL 30 V AC/DC)
Rated Current	3 and 5-pin 4 A, 8-pin 2 A
Pollution Degree	3































































































Technical Drawing	
	

L = Standard length of cable

Pin Assignment

3-pin	4-pin	5-pin	8-pin
 <p>1 = brown 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = gray</p>	 <p>1 = white 2 = brown 3 = green 4 = yellow 5 = gray 6 = pink 7 = blue 8 = red</p>



Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
934735001	WRST 3-520/2 M	3	TPE, orange	   
934735002	WRST 3-520/5 M	3	TPE, orange	   
934735003	WRST 3-520/10 M	3	TPE, orange	   
934735007	WRST 4-521/2 M	4	TPE, orange	   
934735008	WRST 4-521/5 M	4	TPE, orange	   
934735009	WRST 4-521/10 M	4	TPE, orange	   
934735013	WRST 5-522/2 M	5	TPE, orange	   
934735014	WRST 5-522/5 M	5	TPE, orange	   
934735015	WRST 5-522/10 M	5	TPE, orange	   
934735019	WRST 8-523/2 M	8	TPE, orange	   
934735020	WRST 8-523/5 M	8	TPE, orange	   
934735021	WRST 8-523/10 M	8	TPE, orange	   
934736001	WRSWT 3-520/2 M	3	TPE, orange	   
934736002	WRSWT 3-520/5 M	3	TPE, orange	   
934736003	WRSWT 3-520/10 M	3	TPE, orange	   
934736007	WRSWT 4-521/2 M	4	TPE, orange	   
934736008	WRSWT 4-521/5 M	4	TPE, orange	   
934736009	WRSWT 4-521/10 M	4	TPE, orange	   
934736013	WRSWT 5-522/2 M	5	TPE, orange	   
934736014	WRSWT 5-522/5 M	5	TPE, orange	   
934736015	WRSWT 5-522/10 M	5	TPE, orange	   
934736019	WRSWT 8-523/2 M	8	TPE, orange	   
934736020	WRSWT 8-523/5 M	8	TPE, orange	   
934736021	WRSWT 8-523/10 M	8	TPE, orange	   

The application of these products in harsh environments should always be checked before use.
Technical modifications reserved.

Single-Ended Overmolded 1/2" UNF or M12 Cordsets for Actuators and Sensors – Female Connectors

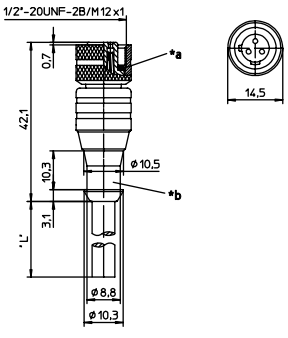
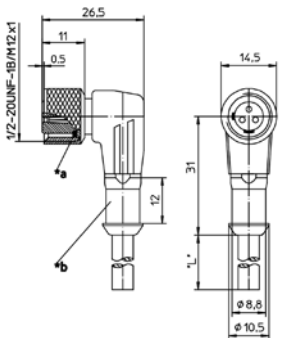
Technical Information

Product Description		
Order Designation	RKT 3U	RKWT 3U
		
Description	Actuator/sensor cordset, 1/2" UNF or M12 overmolded female connector, straight, C- (or U-)coding, with self-locking screw coupling, 3-pin	Actuator/sensor cordset, 1/2" UNF or M12 overmolded female connector, angled, C- (or U-)coding, with self-locking screw coupling, 3-pin
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	Based on IEC 61076-2-101	
Approvals	UL	

Technical Data	
Ambient Temperature	-20 °C to + 90 °C, mind cable temperature range
Housing Material/Grip	TPU
Contact Holder Material	TPU
Contact Material/Surface Finish	CuSn, gold-plated
Screw Coupling Material	CuZn, nickel-plated

Mechanical Data	
Degree of Protection	IP67, IP69K (only when mated to associated counterparts)

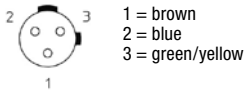
Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	250 V
Rated Current	4 A
Pollution Degree	3

Technical Drawing	
	































*a = O-ring • *b = Protective sleeve assembly • L = Standard length of cable

Pin Assignment

3-pin, U-coding


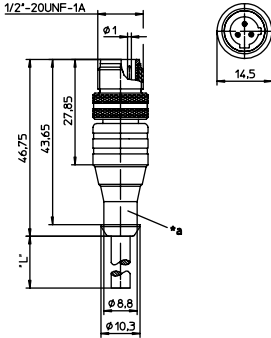


Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
11342	RKT 3U-12-19/2 M	3	PVC, orange	
11343	RKT 3U-12-19/5 M	3	PVC, orange	
9913	RKT 3U-12-19/10 M	3	PVC, orange	
11345	RKT 3U-18/2 M	3	PVC, yellow	 
11346	RKT 3U-18/5 M	3	PVC, yellow	 
11344	RKT 3U-18/10 M	3	PVC, yellow	 
91183	RKT 3U-226/2 M	3	PUR, halogen-free, black	   
54204	RKT 3U-226/5 M	3	PUR, halogen-free, black	   
76347	RKT 3U-226/10 M	3	PUR, halogen-free, black	   
11433	RKWT 3U-18/2 M	3	PVC, yellow	 
11434	RKWT 3U-18/5 M	3	PVC, yellow	 
11432	RKWT 3U-18/10 M	3	PVC, yellow	 
11430	RKWT 3U-12-19/2 M	3	PVC, orange	
11431	RKWT 3U-12-19/5 M	3	PVC, orange	
86075	RKWT 3U-12-19/10 M	3	PVC, orange	

Single-Ended Overmolded 1/2" UNF Connectors for Actuators and Sensors – Male Connectors

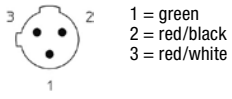
Technical Information

Product Description	
Order Designation	RST 3U
	
Description	Actuator/sensor cordset, 1/2" UNF overmolded male connector, straight, C- (or U)-coding, with self-locking screw coupling, 3-pin
RoHS-compliant (2011/65/EU)	Yes
(Construction Type) Standard	based on IEC 61076-2-101
Approvals	UL
Technical Data	
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range
Housing Material/Grip	TPU
Contact Holder Material	TPU
Contact Material/Surface Finish	CuZn, gold-plated
Screw Coupling Material	CuZn, nickel-plated
Mechanical Data	
Degree of Protection	IP67 (only when mated to associated counterparts)
Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	250 V
Rated Current	4 A
Pollution Degree	3
Technical Drawing	
	

*a = Protective sleeve assembly • L = Standard length of cable

Pin Assignment













3-pin, U-coding



- 1 = green
- 2 = red/black
- 3 = red/white




Contact 1 leading

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
74357	RST 3U-226/2 M	3	PUR, halogen-free, black	   
54921	RST 3U-226/5 M	3	PUR, halogen-free, black	   
9920	RST 3U-226/10 M	3	PUR, halogen-free, black	   

Single-Ended Overmolded M12 Data Cordsets – Industrial Ethernet

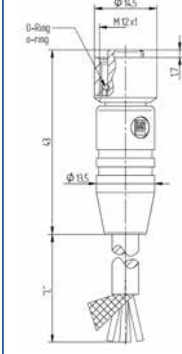
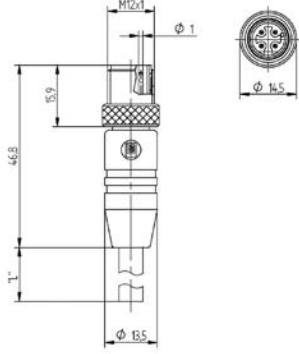
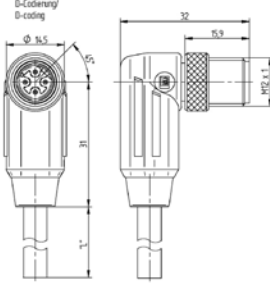
Technical Information

Product Description			
Order Designation	0985 342 118	0985 342 102	0985 342 130
			
Description	Industrial Ethernet cordset, M12 female connector, straight, with screw coupling, D-coding, 4-pin, 360° shield connected to knurled coupling nut	Industrial Ethernet cordset, M12 male connector, straight, with screw coupling, D-coding, 4-pin, 360° shield connected to knurled coupling nut	Industrial Ethernet cordset, M12 male connector, angled, with screw coupling, D-coding, 4-pin, 360° shield connected to knurled coupling nut
RoHS-compliant (2011/65/EU)	Yes		
(Construction Type) Standard	IEC 61076-2-101		
Approvals	UL		

Technical Data	
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range
Housing Material/Grip	TPU
Contact Holder Material	PBT
Contact Material/Surface Finish	CuSn, gold-plated
Screw Coupling Material	CuZn, nickel-plated

Mechanical Data	
Degree of Protection	IP67 (only when mated to associated counterparts)
	IP67, IP68, IP69K (only when mated to associated counterparts)

Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	250 V
Rated Current	4 A
Pollution Degree	3

Technical Drawing		
		

L = Standard length of cable

Pin Assignment

4-pin, D-coding	4-pin, D-coding
 <ul style="list-style-type: none"> 1 = yellow 2 = white 3 = orange 4 = blue 	 <ul style="list-style-type: none"> 1 = yellow 2 = white 3 = orange 4 = blue



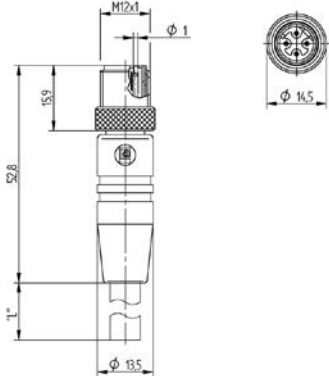
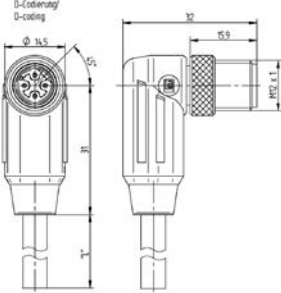
Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
9922	0985 342 118/0.3 M	4	PUR, halogen-free, shielded, green	
9923	0985 342 118/0.6 M	4	PUR, halogen-free, shielded, green	
934717002	0985 342 118/1 M	4	PUR, halogen-free, shielded, green	
934717003	0985 342 118/2 M	4	PUR, halogen-free, shielded, green	
2618	0985 342 118/3 M	4	PUR, halogen-free, shielded, green	
934717004	0985 342 118/5 M	4	PUR, halogen-free, shielded, green	
934717005	0985 342 118/10 M	4	PUR, halogen-free, shielded, green	
934717006	0985 342 118/15 M	4	PUR, halogen-free, shielded, green	
934717007	0985 342 118/20 M	4	PUR, halogen-free, shielded, green	
9924	0985 342 118/25 M	4	PUR, halogen-free, shielded, green	
9926	0985 342 102/0.3 M	4	PUR, halogen-free, shielded, green	
9927	0985 342 102/0.6 M	4	PUR, halogen-free, shielded, green	
934636933	0985 342 102/1 M	4	PUR, halogen-free, shielded, green	
75631	0985 342 102/2 M	4	PUR, halogen-free, shielded, green	
91037	0985 342 102/3 M	4	PUR, halogen-free, shielded, green	
75632	0985 342 102/5 M	4	PUR, halogen-free, shielded, green	
77830	0985 342 102/10 M	4	PUR, halogen-free, shielded, green	
934636134	0985 342 102/15 M	4	PUR, halogen-free, shielded, green	
2781	0985 342 102/20 M	4	PUR, halogen-free, shielded, green	
934636087	0985 342 102/25 M	4	PUR, halogen-free, shielded, green	
934636800	0985 342 130/0.3 M	4	PUR, halogen-free, shielded, green	
9929	0985 342 130/0.6 M	4	PUR, halogen-free, shielded, green	
2521	0985 342 130/1 M	4	PUR, halogen-free, shielded, green	
2374	0985 342 130/2 M	4	PUR, halogen-free, shielded, green	
2522	0985 342 130/3 M	4	PUR, halogen-free, shielded, green	
934726002	0985 342 130/5 M	4	PUR, halogen-free, shielded, green	
2524	0985 342 130/10 M	4	PUR, halogen-free, shielded, green	
2525	0985 342 130/15 M	4	PUR, halogen-free, shielded, green	
2375	0985 342 130/20 M	4	PUR, halogen-free, shielded, green	
9930	0985 342 130/25 M	4	PUR, halogen-free, shielded, green	

The application of these products in harsh environments should always be checked before use.
Technical modifications reserved.

Single-Ended Overmolded M12 Data Cordsets – Male Industrial Ethernet for Railway Applications

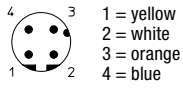
Technical Information

Product Description		
Order Designation	0985 508 120	0985 508 123
		
Description	Industrial Ethernet cordset with rail approval, Cat 5 (ProfiNet), M12 male connector, straight, 4-pin, D-coding	Industrial Ethernet cordset with rail approval, Cat 5 (ProfiNet), M12 male connector, angled, 4-pin, D-coding
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	IEC 61373, DIN EN 50467, DIN EN 45545-2, DIN 5510, based on EN 50155	
Technical Data		
Ambient Temperature	-40 °C to +85 °C, mind cable temperature range	
Housing Material/Grip	PA	
Contact Holder Material	PA	
Contact Material/Surface Finish	CuSn, gold-plated	
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	250 V	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		
		

L = Standard length of cable

Pin Assignment

4-pin, D-coding




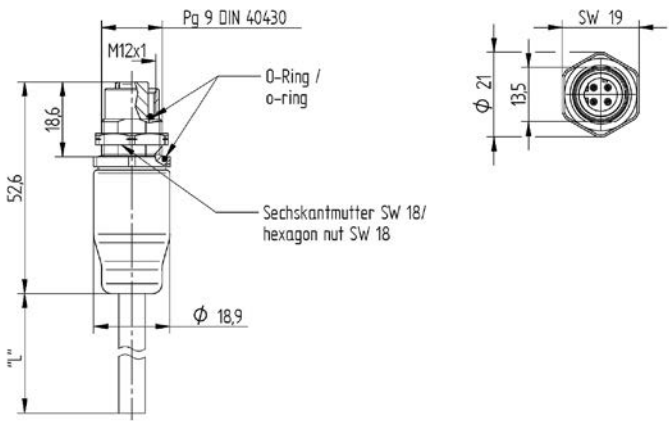
Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
9933	0985 508 120/0.3 M	4	X-FRNC, black	
9936	0985 508 120/0.6 M	4	X-FRNC, black	
934688015	0985 508 120/1 M	4	X-FRNC, black	
934688011	0985 508 120/2 M	4	X-FRNC, black	
9937	0985 508 120/3 M	4	X-FRNC, black	
934688012	0985 508 120/5 M	4	X-FRNC, black	
934688013	0985 508 120/10 M	4	X-FRNC, black	
934688014	0985 508 120/15 M	4	X-FRNC, black	
9942	0985 508 120/20 M	4	X-FRNC, black	
9946	0985 508 120/25 M	4	X-FRNC, black	
10413	0985 508 123/0.3 M	4	X-FRNC, black	
10417	0985 508 123/0.6 M	4	X-FRNC, black	
934802001	0985 508 123/1 M	4	X-FRNC, black	
934802002	0985 508 123/2 M	4	X-FRNC, black	
10418	0985 508 123/3 M	4	X-FRNC, black	
934802003	0985 508 123/5 M	4	X-FRNC, black	
934802004	0985 508 123/10 M	4	X-FRNC, black	
10424	0985 508 123/15 M	4	X-FRNC, black	
10425	0985 508 123/20 M	4	X-FRNC, black	
10427	0985 508 123/25 M	4	X-FRNC, black	

The application of these products in harsh environments should always be checked before use. Technical modifications reserved.

Single-Ended Overmolded M12 Data Cordsets – Female Industrial Ethernet for Railway Applications

Technical Information

Product Description	
Order Designation	0985 508 124
	
Description	Industrial Ethernet cordset with rail approval, Cat 5, M12 molded, receptacle, female, straight, 4-pin, D-coding
RoHS-compliant (2011/65/EU)	Yes
(Construction Type) Standard	IEC 61076-2-101
Approvals	IEC 61373, DIN EN 50467, DIN EN 45545-2, based on EN 50155
Technical Data	
Ambient Temperature	-40 °C to +85 °C, mind cable temperature range
Housing Material/Grip	PA
Contact Holder Material	PBT
Contact Material/Surface Finish	CuSn, gold-plated
Screw Coupling Material	CuZn, nickel-plated
Mechanical Data	
Degree of Protection	IP67 (only when mated to associated counterparts)
Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	250 V
Rated Current	4 A
Pollution Degree	3
Technical Drawing	
	

L = Standard length of cable




































Pin Assignment

4-pin, D-coding





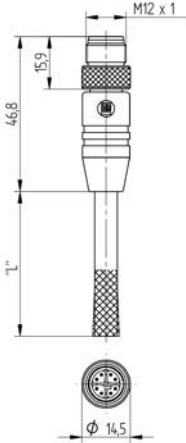
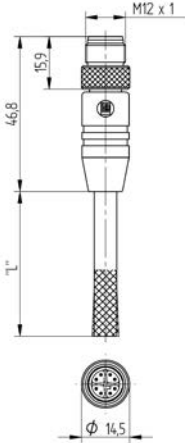
1 = yellow
2 = white
3 = orange
4 = blue

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
934803001	0985 508 124/1 M	4	X-FRNC, black	    
934803002	0985 508 124/2 M	4	X-FRNC, black	    
934803003	0985 508 124/5 M	4	X-FRNC, black	    
934803004	0985 508 124/10 M	4	X-FRNC, black	    
10379	0985 508 124/15 M	4	X-FRNC, black	    
10382	0985 508 124/20 M	4	X-FRNC, black	    
10383	0985 508 124/25 M	4	X-FRNC, black	    

Single-Ended Overmolded M12 Data Cordsets for Gigabit Applications – Male Connectors

Technical Information

Product Description		
Order Designation	RSTS 8X-478	BRSTS 8X-552
		
Description	Cat 6a single-ended molded data cordsets for Industrial Ethernet gigabit applications (supports data transmission rates of up to 10 gigabits), with M12 male connector, X-coding, 360° shield connected to knurled nut, 8-pin	Cat 6a single-ended molded data cordsets for Industrial Ethernet gigabit applications (supports data transmission rates of up to 10 gigabits), with M12 male connector, X-coding, 360° shield connected to knurled nut, 8-pin and rail approval
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-109 Cable: • ISO/IEC 11801 Cat 7 • EN 50173-1 • TIA/EIA-568-B.2 (May 2001)	IEC 61076-2-109 Cable: • ISO/IEC 11801 Cat 7 • EN 50173-1 • DIN 5510-2, EN 45545-2 • TIA/EIA-568-B.2 (May 2001)
Approvals	UL	DIN EN 45545-2, DIN EN 50467, DIN EN 61373, based on DIN EN 50155
Technical Data		
Ambient Temperature	-40 °C to +80 °C, mind cable temperature range	-40 °C to +85 °C, mind cable temperature range
Housing Material/Grip		PA
Contact Holder Material		PA
Contact Material/Surface Finish		CuZn, Cu/Au
Screw Coupling Material		CuZn, nickel-plated
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	48 V	
Rated Current	0.5 A	
Pollution Degree	3 as per DIN EN 60664-1 (VDE 0110)	
Technical Drawing		
		

L = Standard length of cable

Pin Assignment

8-pin, X-coding





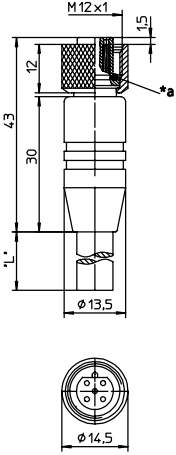
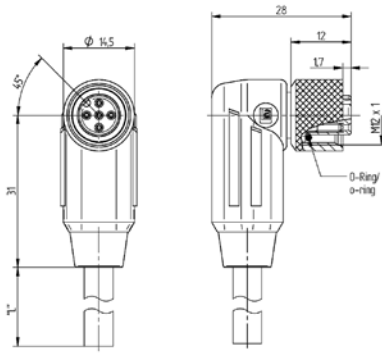
1 = white/orange	1 = white/brown
2 = orange	2 = brown
3 = white/green	3 = white/blue
4 = green	4 = blue

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
934809001	RSTS 8X-478/2 M	8	PUR, halogen-free, black	
934809002	RSTS 8X-478/5 M	8	PUR, halogen-free, black	
934809003	RSTS 8X-478/10 M	8	PUR, halogen-free, black	
934809004	RSTS 8X-478/15 M	8	PUR, halogen-free, black	
10391	RSTS 8X-478/20 M	8	PUR, halogen-free, black	
10396	RSTS 8X-478/25 M	8	PUR, halogen-free, black	
934809009	BRSTS 8X-552/2 M	8	PUR, halogen-free, black	
934809010	BRSTS 8X-552/5 M	8	PUR, halogen-free, black	
934809011	BRSTS 8X-552/10 M	8	PUR, halogen-free, black	
934809012	BRSTS 8X-552/15 M	8	PUR, halogen-free, black	
10384	BRSTS 8X-552/20 M	8	PUR, halogen-free, black	
10386	BRSTS 8X-552/25 M	8	PUR, halogen-free, black	

Single-Ended Overmolded M12 Data Cordsets – PROFIBUS® Female Connectors

Technical Information

Product Description		
Order Designation	0975 254 103	0975 254 131 (RKWTS 5B)
		
Description	PROFIBUS overmolded cordset, M12 female connector, straight, with screw coupling, B-coding, 5-pin	PROFIBUS overmolded cordset, M12 female connector, angled, with screw coupling, B-coding, 5-pin, 360° shield connected to knurled screw, conductor color coding as per Euro standard
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	–
Technical Data		
Ambient Temperature	-25 °C to +85 °C, mind cable temperature range	
Housing Material/Grip	TPU	
Contact Holder Material	TPU	PBT
Contact Material/Surface Finish	CuZn, gold-plated	
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	IP67, IP68, IP69K (only when mated to associated counterparts)
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	60 V	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		
		

L = Standard length of cable





































































Pin Assignment

5-pin, B-coding





- 1 = n.c.
- 2 = line A, green
- 3 = n.c.
- 4 = line B, red
- 5 = n.c.

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
55410	0975 254 103/0.3 M	5	PUR, halogen-free, shielded, violet	   
86913	0975 254 103/0.6 M	5	PUR, halogen-free, shielded, violet	   
12504	0975 254 103/1 M	5	PUR, halogen-free, shielded, violet	   
17047	0975 254 103/2 M	5	PUR, halogen-free, shielded, violet	   
12505	0975 254 103/3 M	5	PUR, halogen-free, shielded, violet	   
12506	0975 254 103/5 M	5	PUR, halogen-free, shielded, violet	   
34618	0975 254 103/10 M	5	PUR, halogen-free, shielded, violet	   
28404	0975 254 103/15 M	5	PUR, halogen-free, shielded, violet	   
50580	0975 254 103/20 M	5	PUR, halogen-free, shielded, violet	   
58900	0975 254 103/25 M	5	PUR, halogen-free, shielded, violet	   
9951	0975 254 131/0.3 M	5	PUR, halogen-free, shielded, violet	  
9952	0975 254 131/0.6 M	5	PUR, halogen-free, shielded, violet	  
9953	0975 254 131/1 M	5	PUR, halogen-free, shielded, violet	  
934728001	0975 254 131/2 M	5	PUR, halogen-free, shielded, violet	  
5220	0975 254 131/3 M	5	PUR, halogen-free, shielded, violet	  
934728002	0975 254 131/5 M	5	PUR, halogen-free, shielded, violet	  
934728003	0975 254 131/10 M	5	PUR, halogen-free, shielded, violet	  
9954	0975 254 131/15 M	5	PUR, halogen-free, shielded, violet	  
9955	0975 254 131/20 M	5	PUR, halogen-free, shielded, violet	  
9957	0975 254 131/25 M	5	PUR, halogen-free, shielded, violet	  

Single-Ended Overmolded M12 Data Cordsets – PROFIBUS® Male Connectors

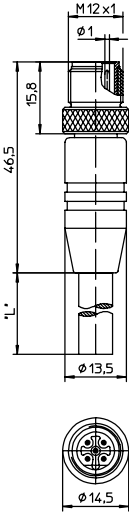
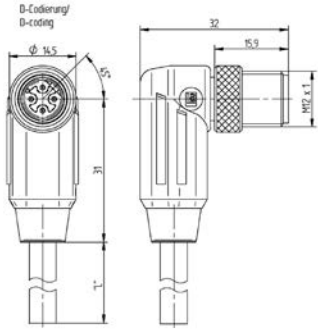
Technical Information

Product Description		
Order Designation	0975 254 102	0975 254 132 (RSWTS 5B)
		
Description	PROFIBUS overmolded cordset, M12 male connector, straight, with screw coupling, B-coding, 5-pin	PROFIBUS overmolded cordset, M12 male connector, angled, with screw coupling, B-coding, 5-pin, 360° shield connected to knurled screw, conductor color coding as per Euro standard
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	–

Technical Data		
Ambient Temperature	-25 °C to +85 °C, mind cable temperature range	
Housing Material/Grip	TPU	
Contact Holder Material	TPU	PBT
Contact Material/Surface Finish	CuZn, gold-plated	
Screw Coupling Material	CuZn, nickel-plated	

Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	IP67, IP68, IP69K (only when mated to associated counterparts)

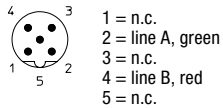
Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	60 V
Rated Current	4 A
Pollution Degree	3

Technical Drawing	
	
















































L = Standard length of cable

Pin Assignment

5-pin, B-coding





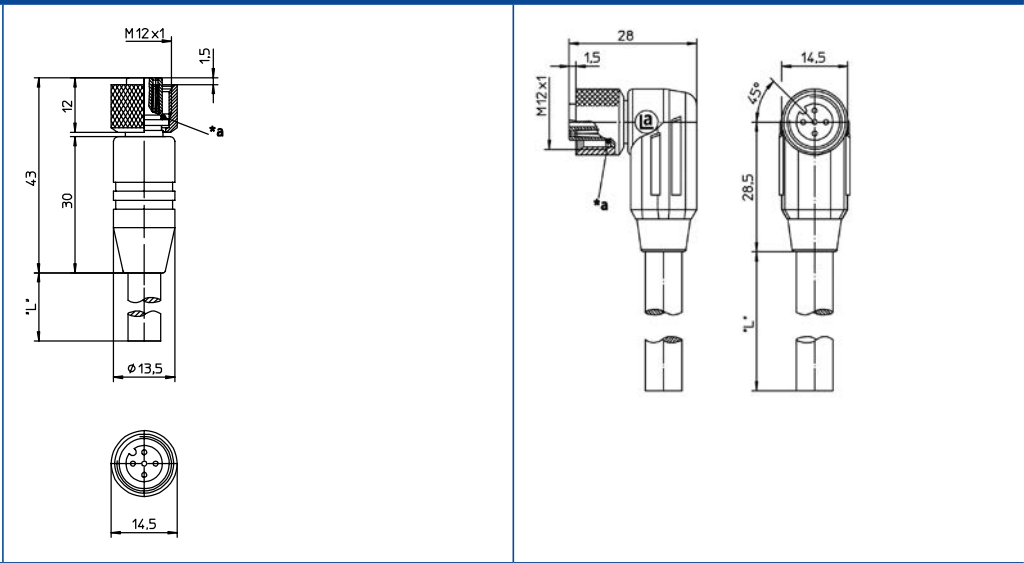
Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
63558	0975 254 102/0.3 M	5	PUR, halogen-free, shielded, violet	   
89452	0975 254 102/0.6 M	5	PUR, halogen-free, shielded, violet	   
12503	0975 254 102/1 M	5	PUR, halogen-free, shielded, violet	   
17062	0975 254 102/2 M	5	PUR, halogen-free, shielded, violet	   
12502	0975 254 102/3 M	5	PUR, halogen-free, shielded, violet	   
12501	0975 254 102/5 M	5	PUR, halogen-free, shielded, violet	   
34625	0975 254 102/10 M	5	PUR, halogen-free, shielded, violet	   
62291	0975 254 102/15 M	5	PUR, halogen-free, shielded, violet	   
47928	0975 254 102/20 M	5	PUR, halogen-free, shielded, violet	   
47929	0975 254 102/25 M	5	PUR, halogen-free, shielded, violet	   
9958	0975 254 132/0.3 M	5	PUR, halogen-free, shielded, violet	  
9959	0975 254 132/0.6 M	5	PUR, halogen-free, shielded, violet	  
9960	0975 254 132/1 M	5	PUR, halogen-free, shielded, violet	  
934726003	0975 254 132/2 M	5	PUR, halogen-free, shielded, violet	  
5221	0975 254 132/3 M	5	PUR, halogen-free, shielded, violet	  
934726001	0975 254 132/5 M	5	PUR, halogen-free, shielded, violet	  
934726004	0975 254 132/10 M	5	PUR, halogen-free, shielded, violet	  
9961	0975 254 132/15 M	5	PUR, halogen-free, shielded, violet	  
9962	0975 254 132/20 M	5	PUR, halogen-free, shielded, violet	  
9963	0975 254 132/25 M	5	PUR, halogen-free, shielded, violet	  

Single-Ended Overmolded M12 Data Cordsets – CANopen®/DeviceNet™ Female Connectors

Technical Information

Product Description		
Order Designation	0935 253 105	0935 253 106
		
Description	CANopen®/DeviceNet™ overmolded cordset, thin cable, M12 female connector, straight, with screw coupling, A-coding, 5-pin	CANopen®/DeviceNet™ overmolded cordset, thin cable, M12 female connector, angled, with screw coupling, A-coding, 5-pin
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	-
Technical Data		
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range	
Housing Material/Grip	TPU	
Contact Holder Material	TPU	
Contact Material/Surface Finish	CuSn, gold-plated	
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	60 V	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		



*a = O-ring • L = Standard length of cable

Pin Assignment

5-pin, A-coding





- 1 = shield, blank
- 2 = +24 V, red
- 3 = GND (0 V), black
- 4 = CAN_H, white
- 5 = CAN_L, blue

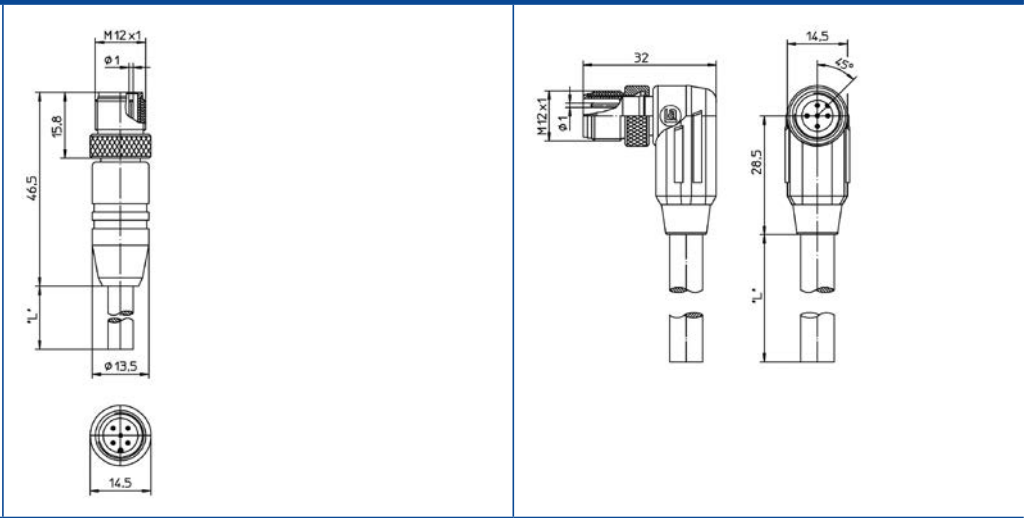
Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
4994	0935 253 105/0.3 M	5	PUR, halogen-free, black	
68012	0935 253 105/0.6 M	5	PUR, halogen-free, black	
10972	0935 253 105/1 M	5	PUR, halogen-free, black	
15735	0935 253 105/2 M	5	PUR, halogen-free, black	
10973	0935 253 105/3 M	5	PUR, halogen-free, black	
10974	0935 253 105/5 M	5	PUR, halogen-free, black	
15734	0935 253 105/10 M	5	PUR, halogen-free, black	
27310	0935 253 105/15 M	5	PUR, halogen-free, black	
18313	0935 253 105/20 M	5	PUR, halogen-free, black	
44339	0935 253 105/25 M	5	PUR, halogen-free, black	
9964	0935 253 106/0.3 M	5	PUR, halogen-free, black	
9965	0935 253 106/0.6 M	5	PUR, halogen-free, black	
72440	0935 253 106/1 M	5	PUR, halogen-free, black	
934637009	0935 253 106/2 M	5	PUR, halogen-free, black	
92496	0935 253 106/3 M	5	PUR, halogen-free, black	
72442	0935 253 106/5 M	5	PUR, halogen-free, black	
6660	0935 253 106/10 M	5	PUR, halogen-free, black	
11155	0935 253 106/15 M	5	PUR, halogen-free, black	
9968	0935 253 106/20 M	5	PUR, halogen-free, black	
9969	0935 253 106/25 M	5	PUR, halogen-free, black	

Single-Ended Overmolded M12 Data Cordsets – CANopen®/DeviceNet™ Male Connectors

Technical Information

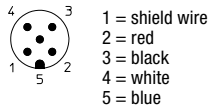
Product Description		
Order Designation	0935 253 104	0935 253 107
		
Description	CANopen®/DeviceNet™ overmolded cordset, thin cable, M12 male connector, straight, with screw coupling, A-coding, 5-pin	CANopen®/DeviceNet™ overmolded cordset, thin cable, M12 male connector, angled, with screw coupling, A-coding, 5-pin
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	-
Technical Data		
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range	
Housing Material/Grip	TPU	
Contact Holder Material	TPU	
Contact Material/Surface Finish	CuSn, nickel underlay and gold-plated	
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	60 V	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		



L = Standard length of cable

Pin Assignment

5-pin, A-coding


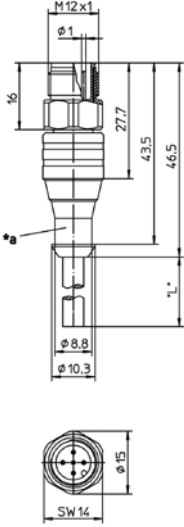


Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
934637388	0935 253 104/0.3 M	5	PUR, halogen-free, black	
83982	0935 253 104/0.6 M	5	PUR, halogen-free, black	
10969	0935 253 104/1 M	5	PUR, halogen-free, black	
30602	0935 253 104/2 M	5	PUR, halogen-free, black	
10970	0935 253 104/3 M	5	PUR, halogen-free, black	
10971	0935 253 104/5 M	5	PUR, halogen-free, black	
18314	0935 253 104/10 M	5	PUR, halogen-free, black	
27309	0935 253 104/15 M	5	PUR, halogen-free, black	
54879	0935 253 104/20 M	5	PUR, halogen-free, black	
107860	0935 253 104/25 M	5	PUR, halogen-free, black	
9970	0935 253 107/0.3 M	5	PUR, halogen-free, black	
9972	0935 253 107/0.6 M	5	PUR, halogen-free, black	
9975	0935 253 107/1 M	5	PUR, halogen-free, black	
9976	0935 253 107/2 M	5	PUR, halogen-free, black	
92481	0935 253 107/3 M	5	PUR, halogen-free, black	
268	0935 253 107/5 M	5	PUR, halogen-free, black	
9977	0935 253 107/10 M	5	PUR, halogen-free, black	
9978	0935 253 107/15 M	5	PUR, halogen-free, black	
9979	0935 253 107/20 M	5	PUR, halogen-free, black	
9980	0935 253 107/25 M	5	PUR, halogen-free, black	

Single-Ended Overmolded M12 Data Cordsets – AS Interface Male Connectors

Technical Information









































Product Description	
Order Designation	0915 340 102
	
Description	AS Interface cordset, M12 overmolded male connector, straight, with screw coupling, A-coding, 4-pin
RoHS-compliant (2011/65/EU)	Yes
(Construction Type) Standard	IEC 61076-2-101
Approvals	UL
Technical Data	
Ambient Temperature	-25 °C to +70 °C, mind cable temperature range
Housing Material/Grip	PVC
Contact Holder Material	PVC
Contact Material/Surface Finish	CuZn, nickel underlay and gold-plated
Screw Coupling Material	Stainless steel
Mechanical Data	
Degree of Protection	IP67, IP69K (only when mated to associated counterparts)
Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	250 V
Rated Current	4 A
Pollution Degree	3
Technical Drawing	
	

*a = O-ring supplied loose • L = Standard length of cable

Pin Assignment**4-pin, A-coding**



1 = brown
2 = white
3 = blue
4 = black

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
9981	0915 340 102/0.3 M	4	PVC, black	   
9982	0915 340 102/0.6 M	4	PVC, black	   
9983	0915 340 102/1 M	4	PVC, black	   
9985	0915 340 102/2 M	4	PVC, black	   
9986	0915 340 102/3 M	4	PVC, black	   
76305	0915 340 102/5 M	4	PVC, black	   
72243	0915 340 102/10 M	4	PVC, black	   
9987	0915 340 102/15 M	4	PVC, black	   
72245	0915 340 102/20 M	4	PVC, black	   
96142	0915 340 102/25 M	4	PVC, black	   

Field Attachable M12 Connectors for Actuators and Sensors – Standard Female Connectors

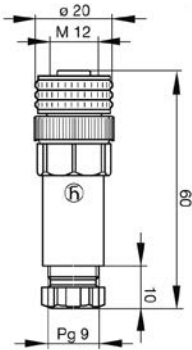
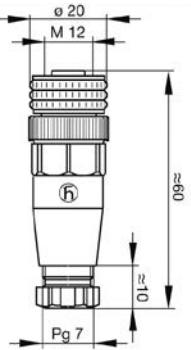
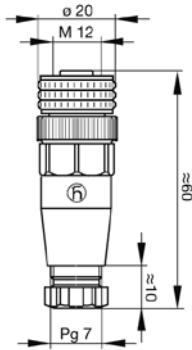
Technical Information

Product Description		
Order Designation	ELKA	ELKA... transparent
		
Description	Field attachable connector, M12 female connector, straight, with screw coupling, assembly using screw-type terminals, strain relief via clamping cage	Field attachable connector, M12 female connector, straight, with screw coupling, assembly using screw-type terminals, electronics unit for LED indicators can be mounted, strain relief via clamping cage
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	CSA	

Technical Data	
Ambient Temperature	-25 °C to +90 °C
Housing Material/Grip	PA
Contact Holder Material	PA
Contact Material/Surface Finish	CuZn, Sn (Au versions: CuZn, Au)
Screw Coupling Material	ZnAl/Ni (ELKA 4012 K PG 7: PA plastic)

Mechanical Data	
Degree of Protection	IP65, IP67 (only when mated to associated counterparts)



















Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	up to 4-pin 250 V, 5-pin 60 V
Rated Current	4 A
Pollution Degree	3

Technical Drawing		
		

Pin Assignment

4-pin	5-pin
 <p>1 = brown 2 = white 3 = blue 4 = black 5 = n.c.</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = n.c.</p>



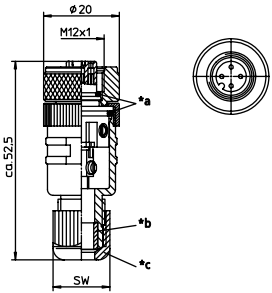
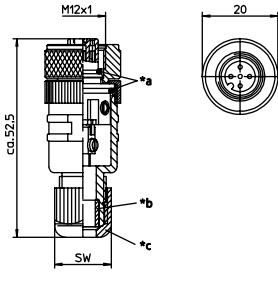
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Cable Range	Characteristics
933139100	ELKA 4012 PG 7	4	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (PG 7)	 
933725100	ELKA 4012 K PG 7	4	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (PG 7)	 
933139500	ELKA 4012 PG 7 Au	4	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (PG 7)	 
933169100	ELKA 4012 PG 9	4	screw	max. 0.75 mm ²	Ø 6.0 to 8.0 mm (PG 9)	 
933169500	ELKA 4012 PG 9 Au	4	screw	max. 0.75 mm ²	Ø 6.0 to 8.0 mm (PG 9)	 
933170100	ELKA 5012 PG 7	5	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (PG 7)	 
933171100	ELKA 5012 PG 9	5	screw	max. 0.75 mm ²	Ø 6.0 to 8.0 mm (PG 9)	 
933171500	ELKA 5012 PG 9 Au	5	screw	max. 0.75 mm ²	Ø 6.0 to 8.0 mm (PG 9)	 
933210199	ELKA 4012 PG 7 transparent	4	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (PG 7)	 

Conversion table mm² to AWG on page 20.

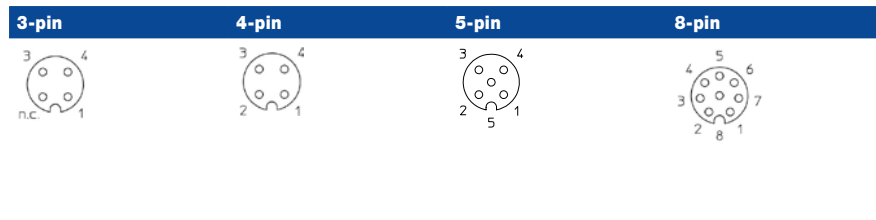
Field Attachable M12 Connectors for Actuators and Sensors – Standard Female Connectors

Technical Information

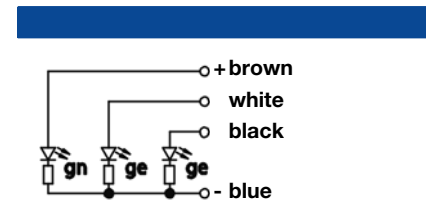
Product Description		
Order Designation	RKC	RKC/LED
		
Description	Field attachable connector, M12 female connector, straight, with screw coupling, assembly using screw-type terminals	Field attachable connector, M12 female connector, straight, with screw coupling and LED operation and function indicators, assembly using screw-type terminals, including printed circuit board
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-25 °C to +90 °C	
Housing Material/Grip	PBT	
Contact Holder Material	PBT	
Contact Material/Surface Finish	CuZn, copper underlay, CuSnZn (8-pin: CuZn, gold over nickel plating)	CuZn, copper underlay, CuSnZn
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	3 and 4-pin 250 V, 5-pin 60 V, 8-pin 30 V	30 V
Rated Current	4 A (8-pin 2 A)	4 A
Pollution Degree	3	
Technical Drawing		
		

*a = O-ring • *b = Seal • *c = Cap nut

Pin Assignment



Circuit Diagram





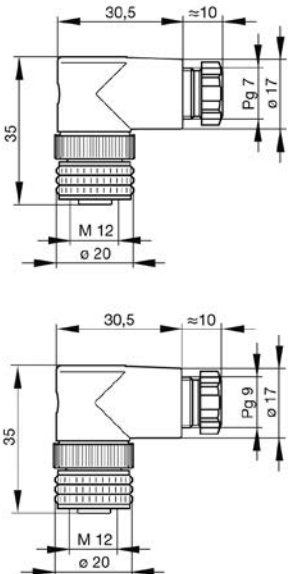
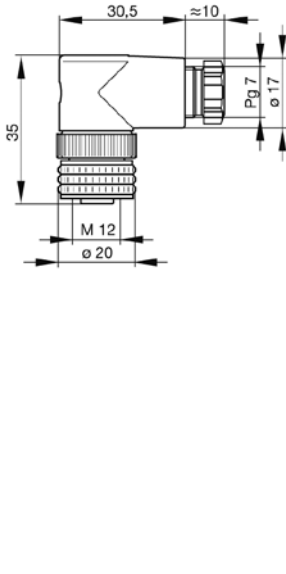
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Cable Range	Characteristics
11212	RKC 4/3/7	3	screw	max. 0.75 mm ²	∅ 3.0 to 6.5 mm (AF 15)	
11213	RKC 4/3/9	3	screw	max. 0.75 mm ²	∅ 4.0 to 8.0 mm (AF 19)	
11214	RKC 4/7	4	screw	max. 0.75 mm ²	∅ 3.0 to 6.5 mm (AF 15)	
11215	RKC 4/9	4	screw	max. 0.75 mm ²	∅ 4.0 to 8.0 mm (AF 19)	
11220	RKC 5/7	5	screw	max. 0.75 mm ²	∅ 3.0 to 6.5 mm (AF 15)	
11221	RKC 5/9	5	screw	max. 0.75 mm ²	∅ 4.0 to 8.0 mm (AF 19)	
44995	RKC 8/9	8	screw	max. 0.50 mm ²	∅ 4.0 to 8.0 mm (AF 19)	
69993	RKC/LED 4/7	4	screw	max. 0.75 mm ²	∅ 3.0 to 6.5 mm (AF 15)	
93983	RKC/LED 4/9	4	screw	max. 0.75 mm ²	∅ 4.0 to 8.0 mm (AF 19)	

Conversion table mm² to AWG on page 20.

Field Attachable M12 Connectors for Actuators and Sensors – Standard Female Connectors















Technical Information

Product Description		
Order Designation	ELWIKA	ELWIKA... transparent
		
Description	Field attachable connector, M12 female connector, angled, with screw coupling, assembly using screw-type terminals, strain relief via clamping cage	Field attachable connector, M12 female connector, angled, with screw coupling, assembly using screw-type terminals, electronics unit for LED indicators can be mounted, strain relief via clamping cage
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	CSA	
Technical Data		
Ambient Temperature	-25 °C to +90 °C	
Housing Material/Grip	PA	
Contact Holder Material	PA	
Contact Material/Surface Finish	CuZn/Sn (ELWIKA 5012 PG 9 Au: CuZn/Au)	
Screw Coupling Material	ZnAl/Ni (ELWIKA 4012 K PG 7: PA plastic)	
Mechanical Data		
Degree of Protection	IP65, IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 10 mΩ	
Rated Voltage	up to 4-pin 250 V, 5-pin 60 V	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		
		

Pin Assignment

4-pin	5-pin
 <p>1 = brown 2 = white 3 = blue 4 = black 5 = n.c.</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = n.c.</p>



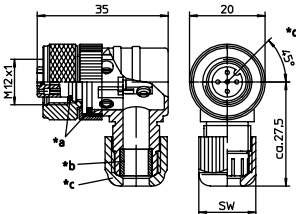
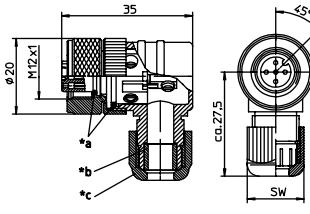
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Cable Range	Characteristics
933172100	ELWIK A 4012 PG 7	4	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (PG 7)	 
933726100	ELWIK A 4012 K PG 7	4	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (PG 7)	 
933174100	ELWIK A 4012 PG 9	4	screw	max. 0.75 mm ²	Ø 6.0 to 8.0 mm (PG 9)	 
933175100	ELWIK A 5012 PG 7	5	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (PG 7)	 
933176100	ELWIK A 5012 PG 9	5	screw	max. 0.75 mm ²	Ø 6.0 to 8.0 mm (PG 9)	 
933176500	ELWIK A 5012 PG 9 Au	5	screw	max. 0.75 mm ²	Ø 6.0 to 8.0 mm (PG 9)	 
933173199	ELWIK A 4012 PG 7 transparent	4	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (PG 7)	 

Conversion table mm² to AWG on page 20.

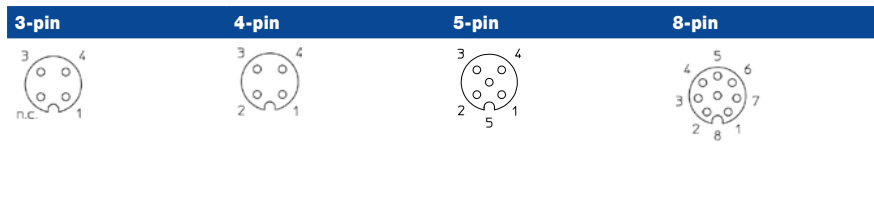
Field Attachable M12 Connectors for Actuators and Sensors – Standard Female Connectors

Technical Information

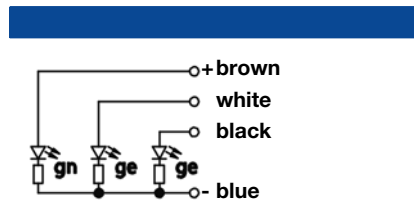
Product Description		
Order Designation	RKCW	RKCW/LED
		
Description	Field attachable connector, M12 female connector, angled, with screw coupling, assembly using screw-type terminals	Field attachable connector, M12 female connector, angled, with screw coupling and LED operation and function indicators, assembly using screw-type terminals, including printed circuit board
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-25 °C to +90 °C	
Housing Material/Grip	PBT	
Contact Holder Material	PBT	
Contact Material/Surface Finish	CuZn, copper underlay, CuSnZn (8-pin: CuZn, nickel underlay and gold-plated)	CuZn, copper underlay, CuSnZn
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V, 8-pin 30 V	30 V
Rated Current	4 A (8-pin 2 A)	4 A
Pollution Degree	3	
Technical Drawing		
		

*a = O-ring • *b = Seal • *c = Cap nut • *d = Insert can be rotated 90°

Pin Assignment



Circuit Diagram





Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Cable Range	Characteristics
11256	RKCW 4/3/7	3	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	
11257	RKCW 4/3/9	3	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	
11258	RKCW 4/7	4	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	
11259	RKCW 4/9	4	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	
11260	RKCW 5/7	5	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	
11261	RKCW 5/9	5	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	
45006	RKCW 8/9	8	screw	max. 0.50 mm ²	Ø 4.0 to 8.0 mm (AF 19)	
69994	RKCW/LED 4/7	4	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	
93984	RKCW/LED 4/9	4	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	

Conversion table mm² to AWG on page 20.

Field Attachable M12 Connectors for Actuators and Sensors – Shielded Female Connectors

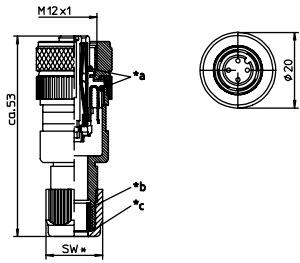
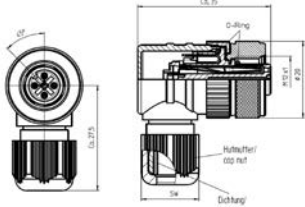
Technical Information

Product Description		
Order Designation	RKCC	RKCWQ
		
Description	Field attachable connector, M12 female connector, straight, with screw coupling, assembly using spring-type terminals	Field attachable connector, M12 female connector, angled, with screw coupling, assembly using spring-type terminals
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	-	

Technical Data	
Ambient Temperature	-25 °C to +90 °C
Housing Material/Grip	PBT
Contact Holder Material	PBT
Contact Material/Surface Finish	Stainless steel, silver-plated, gold-plated
Screw Coupling Material	CuZn, nickel-plated

Mechanical Data	
Degree of Protection	IP67 (only when mated to associated counterparts)

Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	250 V
Rated Current	4 A
Pollution Degree	3

Technical Drawing	
	

*a = O-ring • *b = Seal • *c = Cap nut



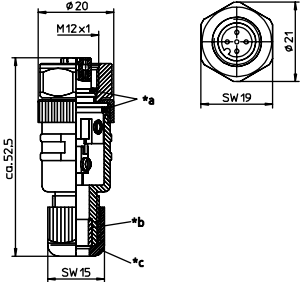
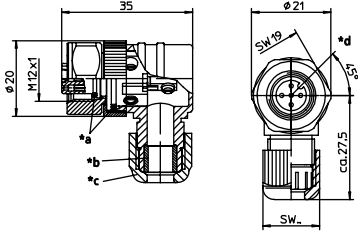
Pin Assignment**4-pin****Order Information**

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Cable Range	Characteristics
58836	RKCQ 4/7	4	spring	0.14 to 0.50 mm ² , 0.14 mm ² with ferrule	Ø 3.0 to 6.5 mm (AF 15)	
69507	RKCQ 4/9	4	spring	0.14 to 0.50 mm ² , 0.14 mm ² with ferrule	Ø 4.0 to 8.0 mm (AF 19)	
103747	RKCWQ 4/7	4	spring	0.14 to 0.50 mm ² , 0.14 mm ² with ferrule	Ø 4.0 to 6.5 mm (AF 15)	
103751	RKCWQ 4/9	4	spring	0.14 to 0.50 mm ² , 0.14 mm ² with ferrule	Ø 4.0 to 8.0 mm (AF 19)	

Conversion table mm² to AWG on page 20.

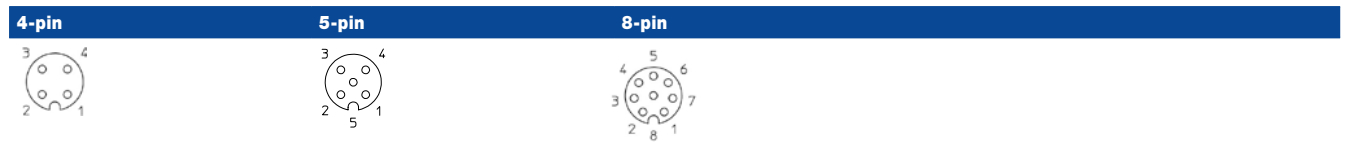
Field Attachable M12 Connectors for Actuators and Sensors – Female Connectors for Food & Beverage

Technical Information

Product Description		
Order Designation	RKCN	RKCWN
		
Description	Field attachable connector, M12 female connector, straight, with stainless steel hexagonal screw coupling, assembly using screw-type terminals	Field attachable connector, M12 female connector, angled, with stainless steel hexagonal screw coupling, assembly using screw-type terminals
Note	Especially suitable for use in the food processing equipment.	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-25 °C to +90 °C (8-pin -25 °C to +85 °C)	
Housing Material/Grip	PBT (8-pin: PA)	
Contact Holder Material	PBT (8-pin: PA)	
Contact Material/Surface Finish	CuZn, copper underlay, CuSnZn (8-pin: CuZn, gold over nickel plating)	
Screw Coupling Material	Stainless steel	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	4-pin 250 V, 5-pin 60 V, 8-pin 30 V	
Rated Current	4 to 5-pin 4 A, 8-pin 2 A	
Pollution Degree	3	
Technical Drawing		
		

*a = O-ring • *b = Seal • *c = Cap nut • *d = Insert can be rotated 90°

Pin Assignment






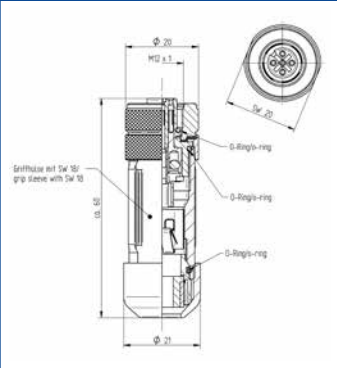
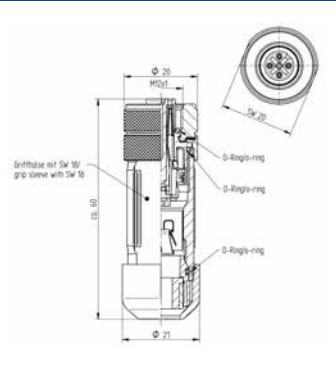
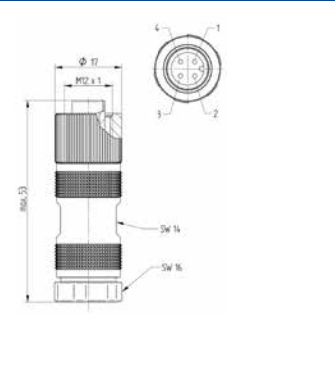
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Cable Range	Characteristics
18321	RKCN 4/7	4	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	
30544	RKCN 4/9	4	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	
46897	RKCN 5/7	5	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	
46594	RKCN 5/9	5	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	
51351	RKCN 8/9	8	screw	max. 0.50 mm ²	Ø 3.0 to 6.5 mm (AF 15)	
18322	RKCWN 4/7	4	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	
30545	RKCWN 4/9	4	screw	max. 0.50 mm ²	Ø 4.0 to 8.0 mm (AF 19)	
28331	RKCWN 5/7	5	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	
47735	RKCWN 5/9	5	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	

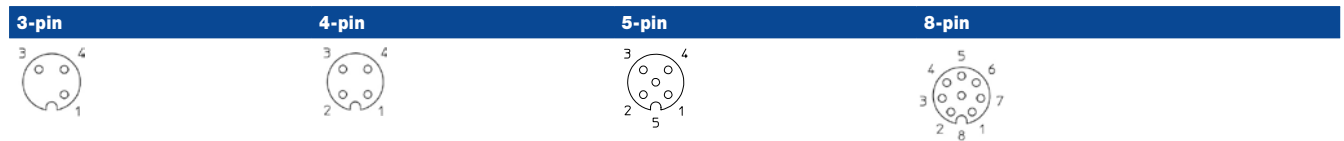
Conversion table mm² to AWG on page 20.

Field Attachable M12 Connectors for Actuators and Sensors – Shielded Female Connectors

Technical Information

Product Description			
Order Designation	RKCS	RKCQS	EF 12S...
			
Description	Field attachable connector, M12 female connector, with screw coupling, can be shielded, assembly using screw-type terminals, A-coding	Field attachable connector, M12 female connector, with screw coupling, can be shielded, assembly using spring-type terminals, A-coding	Field attachable connector, M12 female connector, with screw coupling, can be shielded, assembly using spring-type terminals
RoHS-compliant (2011/65/EU)	Yes		
(Construction Type) Standard	IEC 61076-2-101		
Approvals	-		UL
Technical Data			
Ambient Temperature	-25 °C to +90 °C		-25 °C to +85 °C
Housing Material/Grip	GD-ZnAl, nickel-plated		CuZn, nickel-plated
Contact Holder Material	PBT, RKCS 8/9: PA	PBT	PA
Contact Material/Surface Finish	CuZn, copper underlay, CuSnZn	Spring steel, silver-plated and gold-plated	CuSn, gold-plated
Screw Coupling Material	CuZn, nickel-plated		CuZn, nickel-plated
Mechanical Data			
Degree of Protection	IP67 (only when mated to associated counterparts)		
Electrical Data			
Contact Resistance	≤ 10 mΩ		
Rated Voltage	4-pin 250 V, 5-pin 60 V, 8-pin 30 V	250 V	2-pin 60 V, 4-pin 250 V, 5-pin 60 V
Rated Current	4 to 5-pin 4 A, 8-pin 2 A		4 A
Pollution Degree	3		
Technical Drawing			
			

Pin Assignment





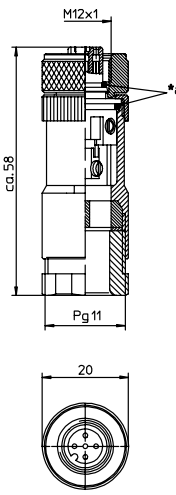
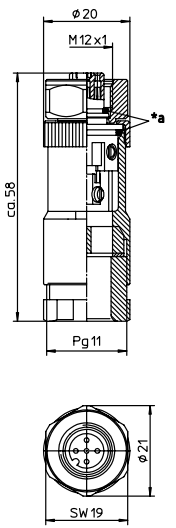
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Cable Range	Characteristics
7376	RKCS 4/7	4	screw	max. 0.75 mm ²	Ø 4.0 to 9.0 mm	
56437	RKCS 4/9	4	screw	max. 0.75 mm ²	Ø 4.0 to 9.0 mm	
56439	RKCS 5/9	5	screw	max. 0.75 mm ²	Ø 4.0 to 9.0 mm	
59923	RKCS 8/9	8	screw	max. 0.75 mm ²	Ø 4.0 to 9.0 mm	
11156	RKCQS 4/3/9	3	spring	max. 0.75 mm ²	Ø 4.0 to 9.0 mm	
69511	RKCQS 4/9	4	spring	max. 0.75 mm ²	Ø 4.0 to 9.0 mm	
934446003	EF 12S4A	4	spring	0.25 to 0.34 mm ²	Ø 6.0 to 8.0 mm	
934446004	EF 12S5A	5	spring	0.25 to 0.34 mm ²	Ø 6.0 to 8.0 mm	

Conversion table mm² to AWG on page 20.

Field Attachable M12 Duo Connectors for Actuators and Sensors – Duo Female Connectors

Technical Information

Product Description		
Order Designation	RKC... DUO	RKCN... DUO
		
Description	Field attachable connector, M12 Duo female connector, straight, with screw coupling, for connection of two cables, assembly using screw-type terminals	Field attachable connector, M12 Duo female connector, straight, with stainless steel hexagonal screw coupling, for connection of two cables, assembly using screw-type terminals
Note	–	Especially suitable for use in the food processing equipment.
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	–	
Technical Data		
Ambient Temperature	-25 °C to +90 °C	
Housing Material/Grip	PBT	
Contact Holder Material	PBT	
Contact Material/Surface Finish	CuZn, copper underlay, CuSnZn	
Screw Coupling Material	CuZn, nickel-plated	Stainless steel
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	4-pin 250 V, 5-pin 60 V, 8-pin 30 V	
Rated Current	4 and 5-pin 4 A, 8-pin 2 A	
Pollution Degree	3	
Technical Drawing		
		

*a = O-ring




Pin Assignment**Order Information**

Order No.	Order Designation	No. of Pins	Conductor Size	Cable Range	Characteristics
18235	RKC 4/DUO	4	max. 0.75 mm ²	2 x 3 mm/2 x 5 mm	
18234	RKC 5/DUO	5	max. 0.75 mm ²	2 x 3 mm/2 x 5 mm	
49913	RKC 8/DUO	8	max. 0.50 mm ²	2 x 3 mm/2 x 5 mm	
18237	RKCN 4/DUO	4	max. 0.75 mm ²	2 x 3 mm/2 x 5 mm	
42612	RKCN 5/DUO	5	max. 0.75 mm ²	2 x 3 mm/2 x 5 mm	

Conversion table mm² to AWG on page 20.

Field Attachable M12 Connectors for Actuators and Sensors – Standard Male Connectors

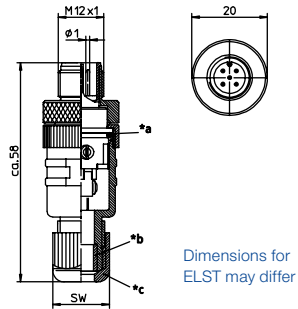
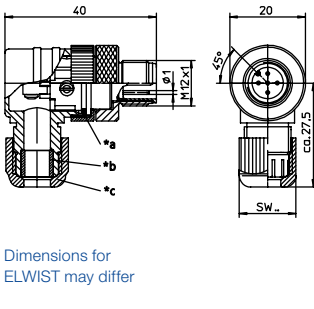
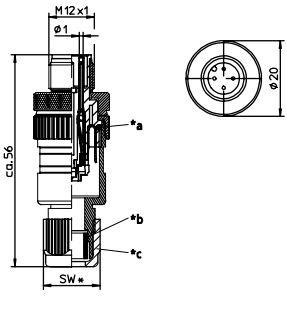
Technical Information

Product Description			
Order Designation	RSC/ELST	RSCW/ELWIST	RSCQ
			
Description	Field attachable connector, M12 male connector, straight, with screw coupling, assembly using screw-type terminals	Field attachable connector, M12 male connector, angled, with screw coupling, assembly using screw-type terminals	Field attachable connector, M12 male connector, straight, with screw coupling, assembly using spring-type terminals
RoHS-compliant (2011/65/EU)	Yes		
(Construction Type) Standard	IEC 61076-2-101		
Approvals	RSC/RSCW: UL (8-pin assembled: no UL approval) ELST/ELWIST: CSA		–

Technical Data			
Ambient Temperature	-25 °C to +90 °C		
Housing Material/Grip	PA 66		PBT
Contact Holder Material	PA 66		PBT
Contact Material/Surface Finish	CuZn, copper underlay, CuSnZn (8-pin: nickel underlay, gold-plated)		Stainless steel, silver-plated, gold-plated
Screw Coupling Material	ZnAl Cu		CuZn, nickel-plated





Mechanical Data	
Degree of Protection	IP67 (only when mated to associated counterparts)

Electrical Data	
Contact Resistance	≤ 10 mΩ
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V, 8-pin 30 V
Rated Current	3 and 5-pin 4 A, 8-pin 2 A
Pollution Degree	3

Technical Drawing			
			

*a = O-ring • *b = Seal • *c = Cap nut

Pin Assignment

3-pin	4-pin	5-pin	8-pin
			
		Contact 5 leading	



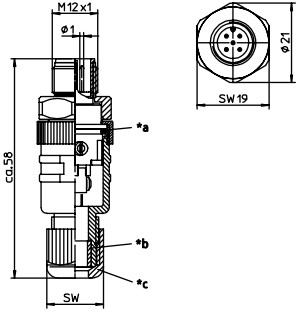
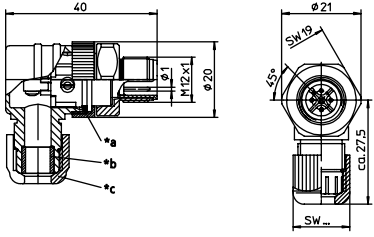
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Cable Range	Characteristics
933098100	ESLT 4012 PG 7	4	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (AF 15)	 
933727100	ELST 4012 K PG7	4	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (AF 15)	 
933098500	ELST 4012 PG 7 Au	4	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (AF 15)	 
933162100	ELST 4012 PG 9	4	screw	max. 0.75 mm ²	Ø 6.0 to 8.0 mm (AF 19)	 
933162500	ELST 4012 PG 9 Au	4	screw	max. 0.75 mm ²	Ø 6.0 to 8.0 mm (AF 19)	 
933163100	ELST 5012 PG 7	5	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (AF 15)	 
933164100	ELST 5012 PG 9	5	screw	max. 0.75 mm ²	Ø 6.0 to 8.0 mm (AF 19)	 
933164500	ELST 5012 PG 9 Au	5	screw	max. 0.75 mm ²	Ø 6.0 to 8.0 mm (AF 19)	 
11576	RSC 3/7	3	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	 
11577	RSC 3/9	3	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	 
11584	RSC 4/7	4	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	 
11585	RSC 4/9	4	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	 
11590	RSC 5/7	5	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	 
11591	RSC 5/9	5	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	 
44971	RSC 8/9	8	screw	max. 0.50 mm ²	Ø 4.0 to 8.0 mm (AF 19)	
933165100	ELWIST 4012 PG 7	4	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (AF 15)	 
933728100	ELWIST 4012 K PG 7	4	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (AF 15)	 
933166100	ELWIST 4012 PG 9	4	screw	max. 0.75 mm ²	Ø 6.0 to 8.0 mm (AF 19)	 
933167100	ELWIST 5012 PG 7	5	screw	max. 0.75 mm ²	Ø 4.0 to 6.0 mm (AF 15)	 
933168100	ELWIST 5012 PG 9	5	screw	max. 0.75 mm ²	Ø 6.0 to 8.0 mm (AF 19)	 
11599	RSCW 3/7	3	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	 
11600	RSCW 3/9	3	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	 
11603	RSCW 4/7	4	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	 
11604	RSCW 4/9	4	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	 
11605	RSCW 5/7	5	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	 
11606	RSCW 5/9	5	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	 
44994	RSCW 8/9	8	screw	max. 0.50 mm ²	Ø 4.0 to 8.0 mm (AF 19)	
71306	RSCQ 3/7	3	spring	0.14 to 0.50 mm ² , 0.14 mm ² with ferrule	Ø 3.0 to 6.5 mm (AF 15)	
71307	RSCQ 3/9	3	spring	0.14 to 0.50 mm ² , 0.14 mm ² with ferrule	Ø 4.0 to 8.0 mm (AF 19)	
58838	RSCQ 4/7	4	spring	0.14 to 0.50 mm ² , 0.14 mm ² with ferrule	Ø 3.0 to 6.5 mm (AF 15)	
69225	RSCQ 4/9	4	spring	0.14 to 0.50 mm ² , 0.14 mm ² with ferrule	Ø 4.0 to 8.0 mm (AF 19)	

Conversion table mm² to AWG on page 20.

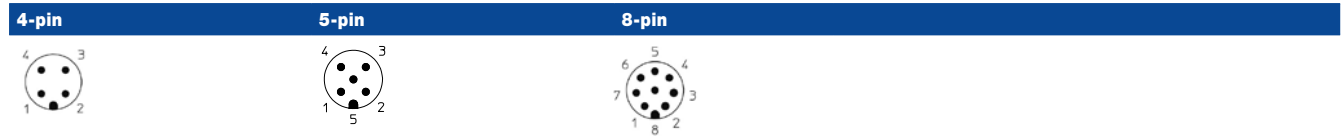
Field Attachable M12 Connectors for Actuators and Sensors – Male Connectors for Food & Beverage

Technical Information

Product Description		
Order Designation	RSCN	RSCWN
		
Description	Field attachable connector, M12 male connector, straight, with stainless steel hexagonal screw coupling, assembly using screw-type terminals	Field attachable connector, M12 male connector, angled, with stainless steel hexagonal screw coupling, assembly using screw-type terminals
Note	Especially suitable for use in the food processing equipment.	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-25 °C to +90 °C, 8-pin: -25 °C to +85 °C	-25 °C to +90 °C
Housing Material/Grip	PBT	
Contact Holder Material	PBT	
Contact Material/Surface Finish	CuZn, copper underlay, CuSnZn (8-pin: nickel underlay, gold-plated)	CuZn, copper underlay, CuSnZn
Screw Coupling Material	Stainless steel	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 10 mΩ	
Rated Voltage	4-pin 250 V, 5-pin 60 V, 8-pin 30 V	4-pin 250 V, 5-pin 60 V
Rated Current	4 to 5-pin 4 A, 8-pin 2 A	4 A
Pollution Degree	3	
Technical Drawing		
		

*a = O-ring • *b = Seal • *c = Cap nut

Pin Assignment






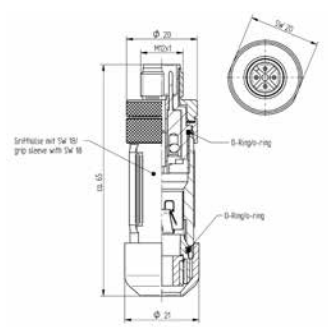
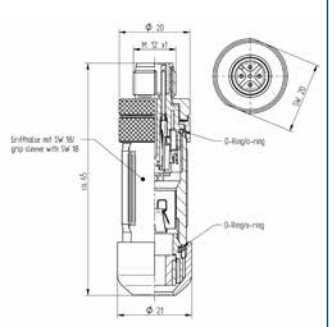
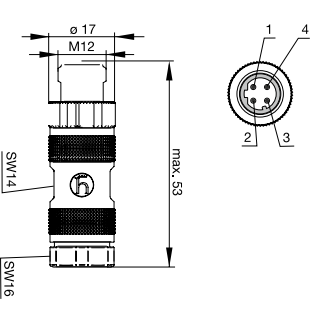
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Cable Range	Characteristics
18319	RSCN 4/7	4	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	
30542	RSCN 4/9	4	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	
28330	RSCN 5/7	5	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	
30546	RSCN 5/9	5	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	
51352	RSCN 8/9	8	screw	max. 0.50 mm ²	Ø 4.0 to 8.0 mm (AF 19)	
18320	RSCWN 4/7	4	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	
30543	RSCWN 4/9	4	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	
46901	RSCWN 5/7	5	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	
47756	RSCWN 5/9	5	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	

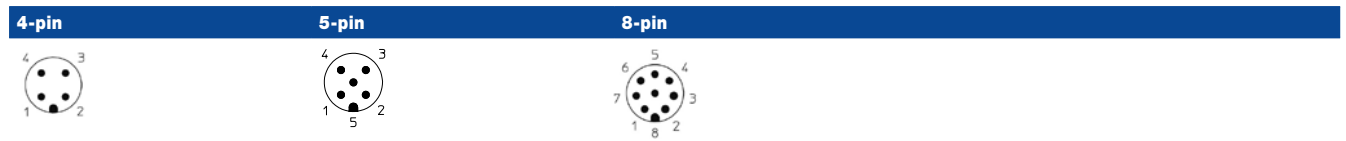
Conversion table mm² to AWG on page 20.

Field Attachable M12 Connectors for Actuators and Sensors – Shielded Male Connectors

Technical Information

Product Description			
Order Designation	RSCS	RSCQS	EM12S...
			
Description	Field attachable connector, M12 male connector, straight, with screw coupling, can be shielded, assembly using screw-type terminals, A-coding	Field attachable connector, M12 male connector, straight, with screw coupling, can be shielded, assembly using spring-type terminals, A-coding	Field attachable connector, M12 male connector, straight, with screw coupling, assembly using insulation displacement termination
RoHS-compliant (2011/65/EU)	Yes		
(Construction Type) Standard	IEC 61076-2-101		
Approvals	-		UL
Technical Data			
Ambient Temperature	-12 °C to +90 °C		-25 °C to +85 °C
Housing Material/Grip	GD-ZnAl, nickel-plated		CuZn, nickel-plated
Contact Holder Material	PBT, RSCS 8/9: PA	PBT	PA
Contact Material/Surface Finish	CuZn, copper underlay, CuSnZn	Stainless steel, silver-plated and gold-plated	CuSn, gold-plated
Screw Coupling Material	CuZn, nickel-plated		
Mechanical Data			
Degree of Protection	IP67 (only when mated to associated counterparts)		
Electrical Data			
Contact Resistance	≤ 5 mΩ		
Rated Voltage	4-pin 250 V, 5-pin 60 V, 8-pin 30 V	250 V	4-pin 250 V, 5-pin 60 V
Rated Current	4 to 5-pin 4 A, 8-pin 2 A		4 A
Pollution Degree	3		
Technical Drawing			
			

Pin Assignment





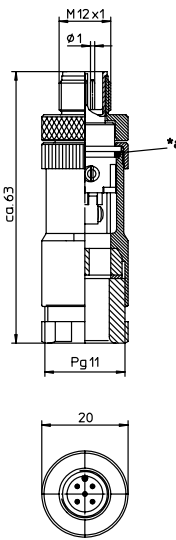
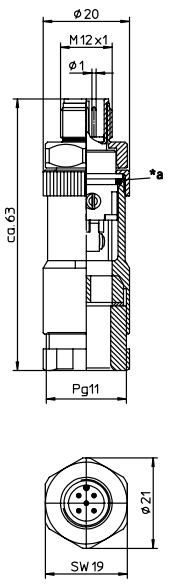
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Cable Range	Characteristics
56436	RSCS 4/9	4	screw	max. 0.75 mm ²	Ø 4.0 to 9.0 mm	
56438	RSCS 5/9	5	screw	max. 0.75 mm ²	Ø 4.0 to 9.0 mm	
59922	RSCS 8/9	8	screw	max. 0.75 mm ²	Ø 4.0 to 9.0 mm	
71308	RSCQS 3/9	3	screw	0.14 to 0.50 mm ² , 0.14 mm ² with ferrule	Ø 4.0 to 9.0 mm	
69509	RSCQS 4/9	4	screw	0.14 to 0.50 mm ² , 0.14 mm ² with ferrule	Ø 4.0 to 9.0 mm	
934445003	EM 12S4A	4	Insulation Displacement Termination	0.25 to 0.34 mm ²	Ø 6.0 to 8.0 mm	
934445004	EM 12S5A	5	Insulation Displacement Termination	0.25 to 0.34 mm ²	Ø 6.0 to 8.0 mm	

Conversion table mm² to AWG on page 20.

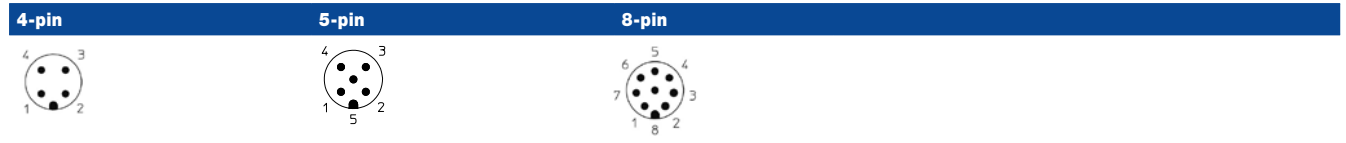
Field Attachable M12 Duo Connectors for Actuators and Sensors – Duo Male Connectors

Technical Information








Product Description		
Order Designation	RSC... DUO	RSCN... DUO
		
Description	Field attachable connector, M12 Duo male connector, straight, with screw coupling, for connection of two cables, assembly using screw-type terminals	Field attachable connector, M12 Duo male connector, straight, with stainless steel hexagonal screw coupling, for connection of two cables, assembly using screw-type terminals
Note	–	Especially suitable for use in the food processing equipment.
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	–	
Technical Data		
Ambient Temperature	-25 °C to +90 °C	
Housing Material/Grip	PBT	
Contact Holder Material	PA	PBT
Contact Material/Surface Finish	CuZn, copper underlay, CuSnZn	
Screw Coupling Material	CuZn, nickel-plated	Stainless steel
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	4-pin 250 V, 5-pin 60 V, 8-pin 30 V	
Rated Current	4 and 5-pin 4 A, 8-pin 2 A	
Pollution Degree	3	
Technical Drawing		
		

*a = O-ring

Pin Assignment





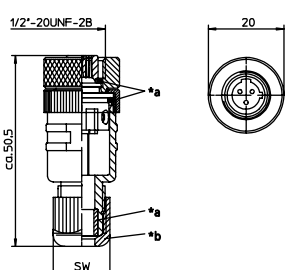
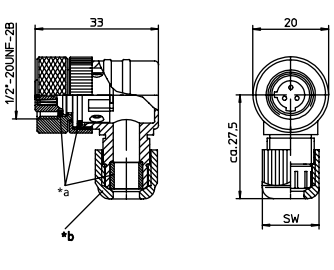
Order Information

Order No.	Order Designation	No. of Pins	Conductor Size	Cable Range	Characteristics
18236	RSC 4/DUO	4	max. 0.75 mm ²	2 x 3 mm/2 x 5 mm	
18233	RSC 5/DUO	5	max. 0.75 mm ²	2 x 3 mm/2 x 5 mm	
49569	RSC 8/DUO	8	max. 0.50 mm ²	2 x 3 mm/2 x 5 mm	
18323	RSCN 4/DUO	4	max. 0.75 mm ²	2 x 3 mm/2 x 5 mm	 
45491	RSCN 5/DUO	5	max. 0.75 mm ²	2 x 3 mm/2 x 5 mm	 

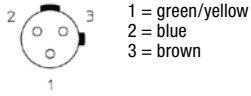
Conversion table mm² to AWG on page 20.









Field Attachable 1/2" UNF Connectors for Actuators and Sensors – Female Connectors

Technical Information

Product Description		
Order Designation	RKC 3U	RKCW 3U
		
Description	Field attachable connector, 1/2" UNF female connector, straight, C- or U-coding, with screw coupling, assembly using screw-type terminals, 3-pin	Field attachable connector, 1/2" UNF female connector, angled, C- or U-coding, with screw coupling, assembly using screw-type terminals, 3-pin
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	based on IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-25 °C to +90 °C	
Housing Material/Grip	PBT	
Contact Holder Material	PBT	
Contact Material/Surface Finish	CuZn, copper underlay, CuSnZn	
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	250 V	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		
		

* a = Seals • *b = Cap nut



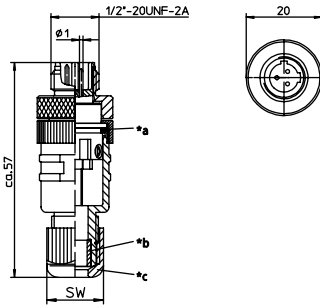
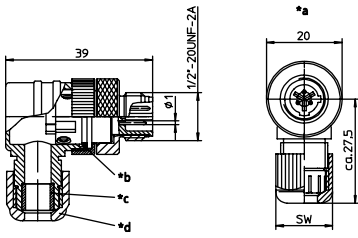
Pin Assignment**3-pin, U-coding****Order Information**

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Cable Range	Characteristics
11210	RKC 3U/7	3	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm	UL  
11211	RKC 3U/9	3	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm	UL  
11254	RKCW 3U/7	3	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm	UL  
11255	RKCW 3U/9	3	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm	UL  

Conversion table mm² to AWG on page 20.













Field Attachable 1/2" UNF Connectors for Actuators and Sensors – Male Connectors

Technical Information

Product Description		
Order Designation	RSC 3U	RSCW 3U
		
Description	Field attachable connector, 1/2" UNF male connector, straight, C- (or U-)coding, with screw coupling, assembly using screw-type terminals, 3-pin	Field attachable connector, 1/2" UNF male connector, angled, C- (or U-)coding, with screw coupling, assembly using screw-type terminals, 3-pin
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	based on IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-25 °C to +90 °C	
Housing Material/Grip	PBT	
Contact Holder Material	PBT	
Contact Material/Surface Finish	CuZn, copper underlay, CuSnZn	
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	250 V	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		
		

RSC 3U: *a = Insert can be rotated 90° • *b= O-ring • *c = Seal • *d = Cap nut
 RSCW 3U: *a = O-ring • *b = Seal • *c = Cap nut


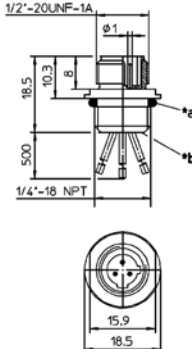
Pin Assignment**3-pin, U-coding****Order Information**

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Cable Range	Characteristics
11582	RSC 3U/7	3	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	UL   
11583	RSC 3U/9	3	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	UL   
11601	RSCW 3U/7	3	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	UL   
11602	RSCW 3U/9	3	screw	max. 0.75 mm ²	Ø 4.0 to 8.0 mm (AF 19)	UL   

Conversion table mm² to AWG on page 20.

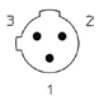
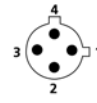
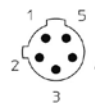
Field Attachable 1/2" UNF Connectors for Actuators and Sensors – Male Connectors

Technical Information










Product Description	
Order Designation	RSF ...U
	
Description	Receptacle connector, 1/2" UNF male connector, straight, C- (or U-)coding
RoHS-compliant (2011/65/EU)	Yes
(Construction Type) Standard	similar to IEC 61076-2-101
Approvals	UL
Technical Data	
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range
Housing Material/Grip	CuZn, nickel-plated
Contact Holder Material	PA
Contact Material	CuZn
Surface Finish	Nickel-plated and gold-plated
Mechanical Data	
Degree of Protection	IP67 (only when mated to associated counterparts)
Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	3 and 4-pin 250 V, 5-pin 60 V
Rated Current	4 A
Pollution Degree	3
Technical Drawing	
	

*a = O-ring • *b = Terminal area potted

Pin Assignment

3-pin, U-coding	4-pin, U-coding	5-pin, U-coding
 <p>1 = green 2 = red/black 3 = red/white</p>	 <p>1 = red/black 2 = red/white 3 = red 4 = green</p>	 <p>1 = red/white 2 = red 3 = green 4 = red/yellow 5 = red/black</p>



Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Cable Range	Characteristics
11626	RSF 3U/0.5 M	3	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	  
109638	RSF 4U/1 F	4	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	  
11637	RSF 5U/0.5 M	5	screw	max. 0.75 mm ²	Ø 3.0 to 6.5 mm (AF 15)	  

Conversion table mm² to AWG on page 20.

Field Attachable M12 Data Cordsets – Industrial Ethernet – Male Connectors

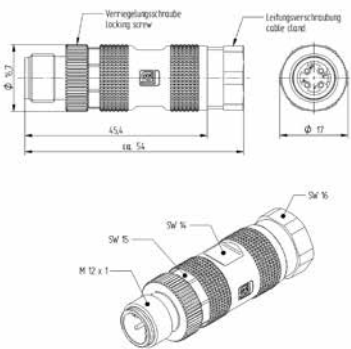
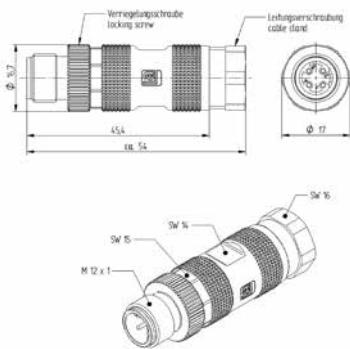
Technical Information

Product Description		
Order Designation	RSCIS 4D/9	BRSCIS 4D/9
		
Description	Field attachable connector, M12 male connector, with screw coupling, shielded, insulation displacement connection, 4-pin, D-coding	Field attachable connector, M12 male connector, with screw coupling, shielded, insulation displacement connection, 4-pin, D-coding
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	DIN EN 50155, DIN EN 45545-2, DIN EN 50467, DIN EN 61373

Technical Data	
Ambient Temperature	-40 °C to +85 °C
Housing Material/Grip	CuZn, nickel-plated
Contact Holder Material	PA
Contact Material/Surface Finish	CuZn, nickel/gold-plated
Screw Coupling Material	CuZn, nickel-plated

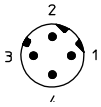
Mechanical Data	
Degree of Protection	IP65, IP67 (only when mated to associated counterparts)

Electrical Data	
Contact Resistance	≤ 10 mΩ
Rated Voltage	250 V
Rated Current	4 A
Pollution Degree	3









Technical Drawing	
	

Pin Assignment

4-pin, D-coding




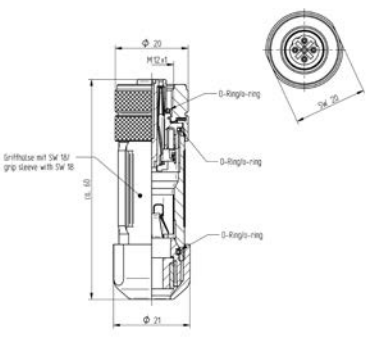
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Cable Range	Characteristics
934828002	RSCIS 4D/9	4	IDC	0.25 to 0.34 mm ²	PG 9: Ø 6.0 to 8.0 mm	   
934828001	BRSCIS 4D/9	4	IDC	0.25 to 0.34 mm ²	PG 9: Ø 6.0 to 8.0 mm	   

Conversion table mm² to AWG on page 20.

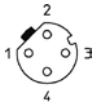
Field Attachable M12 Data Connectors – Industrial Ethernet – Female Connectors

Technical Information

Product Description	
Order Designation	0986 EFC 105
	
Description	Field attachable connector, M12 female connector, with screw coupling, shieldable, assembly using spring-type terminal, 4-pin, D-coding
Note	Transmission properties for Cat 5 and Cat 5e as per ISO IEC 11801 or TIA/EIA-568-B.2.
RoHS-compliant (2011/65/EU)	Yes
(Construction Type) Standard	IEC 61076-2-101
Approvals	–
Technical Data	
Ambient Temperature	-25 °C to +90 °C
Housing Material/Grip	GD-ZnAl, nickel-plated
Contact Holder Material	PBT
Contact Material/Surface Finish	Stainless steel, silver-plated and gold-plated
Screw Coupling Material	CuZn, nickel-plated
Mechanical Data	
Degree of Protection	IP67 (only when mated to associated counterparts)
Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	250 V
Rated Current	4 A
Pollution Degree	3
Technical Drawing	
	

Pin Assignment

4-pin, D-coding



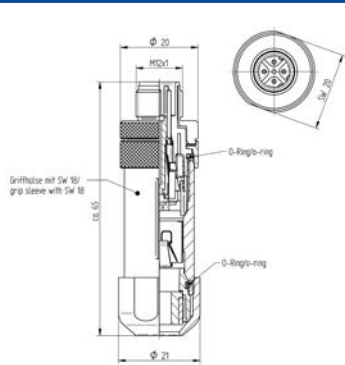
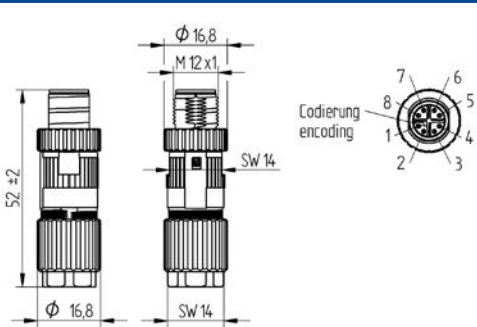


Order Information

Order No.	Order Designation	No. of Pins	Cable Range	Characteristics
104584	0986 EFC 105	4	Ø 4.0 to 9.0 mm	

Field Attachable M12 Data Connectors – Industrial Ethernet – Male Connectors



Technical Information

Product Description		
Order Designation	0986 EMC 102	0986 EMC 600
		
Description	Field attachable Industrial Ethernet connector, M12 male connector, with screw coupling, shielded, assembly using spring-type terminals, 4-pin, D-coding	Field attachable Industrial Ethernet connector, M12 male connector, with screw coupling, shielded, assembly using insulation displacement termination, 8-pin, X-coding
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	based on IEC 61076-2-101	E DIN EN 61076-2-109
Approvals	–	
Technical Data		
Ambient Temperature	-25 °C to +90 °C	-25 °C to +85 °C
Housing Material/Grip	GD-ZnAl, nickel-plated	
Contact Holder Material	PBT	PA
Contact Material/Surface Finish	Stainless steel, silver-plated and gold-plated	CuZn, gold-plated
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	≤ 10 mΩ
Rated Voltage	250 V	50 V AC/60 V DC
Rated Current	4 A	0.5 A
Pollution Degree	3	2
Technical Drawing		
		

Pin Assignment





Order Information

Order No.	Order Designation	No. of Pins	Cable Range	Characteristics
71327	0986 EMC 102	4	Ø 4.0 to 9.0 mm	
934637032	0986 EMC 600	8	Ø 4.0 to 9.0 mm	

Field Attachable M12 Data Connectors – Industrial Ethernet with Railway Authorities License

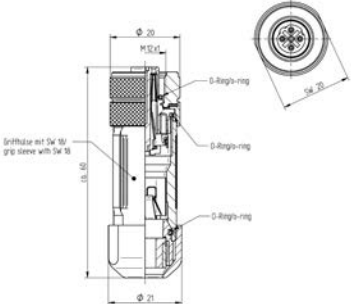
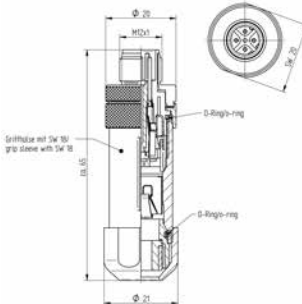
Technical Information

Product Description		
Order Designation	0986 EFC 107	0986 EMC 105
		
Description	Field attachable connector, M12 female connector, with screw coupling, shielded, assembly using spring-type terminal, 4-pin, D-coding	Field attachable connector, M12 male connector, with screw coupling, shielded, assembly using spring-type terminal, 4-pin, D-coding
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	IEC 61373, DIN EN 50467, DIN EN 45545-2, DIN 5510, based on EN 50155	

Technical Data	
Ambient Temperature	-40 °C to +90 °C
Housing Material/Grip	GD-ZnAl, nickel-plated
Contact Holder Material	PBT
Contact Material/Surface Finish	Stainless steel, silver-plated and gold-plated
Screw Coupling Material	CuZn, nickel-plated

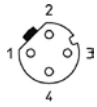
Mechanical Data	
Degree of Protection	IP67 (only when mated to associated counterparts)

Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	250 V
Rated Current	4 A
Pollution Degree	3

Technical Drawing	
	

0986 EFC 107 Pin Assignment

4-pin, D-coding



0986 EMC 105 Pin Assignment

4-pin, D-coding





Order Information

Order No.	Order Designation	No. of Pins	Cable Range	Characteristics
109969	0986 EFC 107	4	Ø 6.7 mm	
109471	0986 EMC 105	4	Ø 6.7 mm	

Field Attachable M12 Data Connectors (PROFIBUS®) – Female Connectors

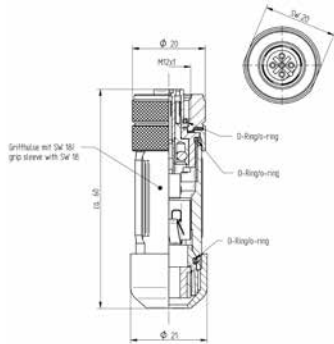
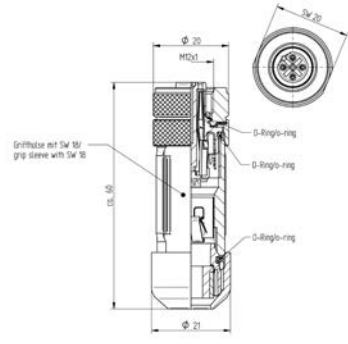
Technical Information

Product Description		
Order Designation	0976 PFC 101	0976 PFC 102
		
Description	Field attachable PROFIBUS connector, M12 female connector, with screw coupling, 5-pin, B-coding, shielded, assembly using screw-type terminals	Field attachable PROFIBUS connector, M12 female connector, with screw coupling, 4-pin, B-coding, shielded, assembly using spring-type terminals
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	based on IEC 61076-2-101
Approvals	-	

Technical Data		
Ambient Temperature	-25 °C to +90 °C	
Housing Material/Grip	GD-ZnAl, nickel-plated	
Contact Holder Material	PBT	
Contact Material/Surface Finish	CuZn, copper underlay, CuSnZn	Stainless steel, silver-plated and gold-plated
Screw Coupling Material	CuZn, nickel-plated	

Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	






Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	32 V	
Rated Current	4 A	
Pollution Degree	3	

Technical Drawing		
		

Pin Assignment



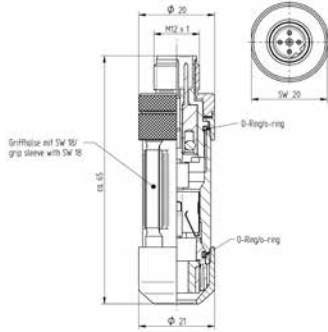
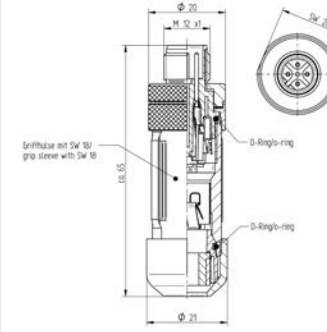
4-pin, B-coding	5-pin, B-coding
	

Order Information

Order No.	Order Designation	No. of Pins	Cable Range	Characteristics
66247	0976 PFC 101	5	Ø 4.0 to 9.0 mm	  
60120	0976 PFC 102	4	Ø 4.0 to 9.0 mm	 

Field Attachable M12 Data Connectors (PROFIBUS®) – Male Connectors





Technical Information

Product Description		
Order Designation	0976 PMC 101	0976 PMC 102
		
Description	Field attachable PROFIBUS connector, M12 male connector, with screw coupling, 5-pin, B-coding, shielded, assembly using screw-type terminals	Field attachable PROFIBUS connector, M12 male connector, with screw coupling, 4-pin, B-coding, shielded, assembly using spring-type terminals
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	–	
Technical Data		
Ambient Temperature	-25 °C to +90 °C	
Housing Material/Grip	GD-ZnAl, nickel-plated	
Contact Holder Material	PBT	
Contact Material/Surface Finish	CuZn, copper underlay, CuSnZn	Stainless steel, silver-plated, gold-plated
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	60 V	32 V
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		
		

Pin Assignment



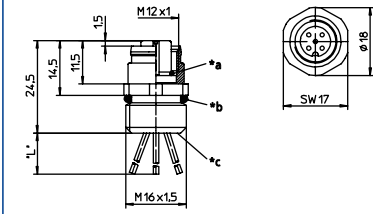
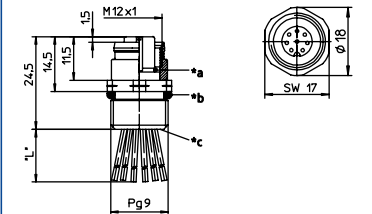
4-pin, B-coding	5-pin, B-coding
	

Order Information

Order No.	Order Designation	No. of Pins	Cable Range	Characteristics
66248	0976 PMC 101	5	Ø 4.0 to 9.0 mm	 
60121	0976 PMC 102	4	Ø 4.0 to 9.0 mm	 





M12 Receptacle Connectors for Actuators and Sensors – Standard Female Connectors with Stranded Hook-up Wire

Technical Information














































Product Description		
Order Designation	RKFM/0.5 M	RKF/0.5M
		
Description	Receptacle connector, M12 female connector, FIXCON-compatible, for front mounting, assembled with stranded hook-up wire, conductor terminal area potted, M16 x 1.5/M20 x 1.5 screw coupling at mounting side	Receptacle connector, M12 female connector, FIXCON-compatible, for front mounting, assembled with stranded hook-up wire, conductor terminal area potted, PG 9 screw coupling at mounting side
Note	Mounting using RSKFM 16 or RSKFM 20	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range	
Housing Material/Grip	CuZn, nickel-plated	
Contact Holder Material	TPU	
Contact Material/Surface Finish	CuSn, nickel underlay and gold-plated (3, 4, and 5-pin), CuZn, nickel underlay and gold-plated (8-pin)	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V, 8 to 12-pin 30 V	3 to 4-pin 250 V, 5-pin 60 V, 8-pin 30 V
Rated Current	3 to 5-pin 4 A, 8-pin 2 A, 12-pin 1.5 A	3 and 5-pin 4 A, 8-pin 2 A
Pollution Degree	3	
Technical Drawing		
		

*a = O-ring • *b = O-ring supplied loose • *c = Conductor terminal area potted • L = Standard length of cable

Pin Assignment

3-pin	4-pin	5-pin	8-pin
 <p>1 = brown 2 = n.c. 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = green/yellow</p>	 <p>1 = white 2 = brown 3 = green 4 = yellow 5 = gray 6 = pink 7 = blue 8 = red</p>



Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Characteristics
26130	RKFM 4-3/0.5 M	3	stranded hook-up wire	0.34 mm ²	  
26129	RKFM 4/0.5 M	4	stranded hook-up wire	0.34 mm ²	  
87470	RKFMN 4/0.5 M	4	stranded hook-up wire	0.34 mm ² , stainless steel design	  
26132	RKFM 5/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	  
64874	RKFM 5B/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	  
26134	RKFM 8/0.5 M	8	stranded hook-up wire	0.25 mm ²	  
86153	RKFM 12/0.5 M	12	stranded hook-up wire	0.34 mm ²	  
50575	RKFM 4/20/0.5 M	4	stranded hook-up wire	0.34 mm ²	  
50617	RKFM 5/20/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	  
50616	RKFM 8/20/0.5 M	8	stranded hook-up wire	0.25 mm ²	  
11266	RKF 4-3/0.5 M	4	stranded hook-up wire	0.34 mm ²	  
11267	RKF 4/0.5 M	4	stranded hook-up wire	0.34 mm ²	  
11270	RKF 5/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	  
52180	RKF 5B/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	  
11273	RKF 8/0.5 M	8	stranded hook-up wire	0.25 mm ²	  

Conversion table mm² to AWG on page 20.

M12 Receptacle Connectors for Actuators and Sensors – Standard Female Connectors with Stranded Hook-up Wire

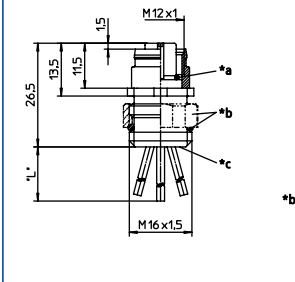
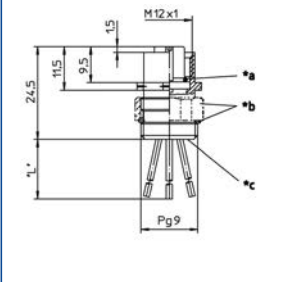
Technical Information

Product Description		
Order Designation	RKFPM/0.5 M	RKFP/0.5 M
		
Description	Receptacle connector, M12 female connector, FIXCON-compatible, for front mounting, adjustable, assembled with stranded hook-up wire, conductor terminal area potted, M16 x 1.5 screw coupling at mounting side	Receptacle connector, M12 female connector, FIXCON-compatible, for front mounting, assembled with stranded hook-up wire, conductor terminal area potted, PG 9 screw coupling at mounting side
Note	Mated with mounting nut RSKFM 16	Mated with mounting nut RSKF 9
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	

Technical Data	
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range
Housing Material/Grip	CuZn, nickel-plated
Contact Holder Material	PA
Contact Material/Surface Finish	CuZn, gold over nickel plating





Mechanical Data	
Degree of Protection	IP67 (only when mated to associated counterparts)

Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V, 8-pin 30 V
Rated Current	3 and 5-pin 4 A, 8-pin 2 A
Pollution Degree	3

























Technical Drawing	
	

*a = O-ring • *b = O-ring/adjusting nut supplied loose • *c = Conductor terminal area potted • L = Standard length of cable

RKFPM Pin Assignment

3-pin	4-pin	5-pin	8-pin
 <p>1 = brown 2 = n.c. 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = green/yellow</p>	 <p>1 = white 2 = brown 3 = green 4 = yellow 5 = gray 6 = pink 7 = blue 8 = red</p>




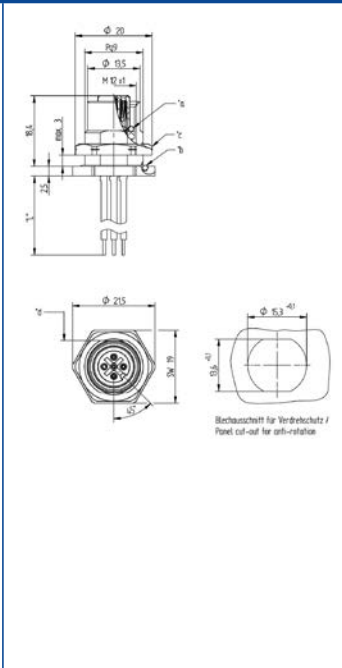
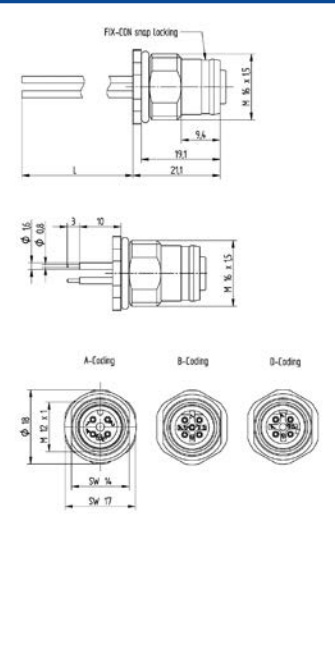
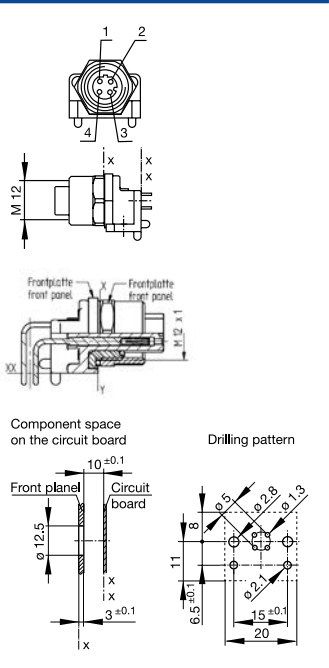
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Characteristics
26136	RKFPM 4-3/0.5 M	3	stranded hook-up wire	0.34 mm ²	  
26137	RKFPM 4/0.5 M	4	stranded hook-up wire	0.34 mm ²	  
26139	RKFPM 5/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	  
26141	RKFPM 8/0.5 M	8	stranded hook-up wire	0.25 mm ²	  
11274	RKFPM 4-3/0.5 M	3	stranded hook-up wire	0.34 mm ²	  
11275	RKFPM 4/0.5 M	4	stranded hook-up wire	0.34 mm ²	  
11276	RKFPM 5/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	  
17218	RKFPM 8/0.5 M	8	stranded hook-up wire	0.25 mm ²	  

Conversion table mm² to AWG on page 20.





M12 Receptacle Connectors for Actuators and Sensors – Female Connectors with Stranded Hook-up Wire/Printed Circuit Board Pins

Technical Information





























Product Description			
Order Designation	RKH/0.5 M	EF 12H...	EF 12L...
			
Description	Receptacle connector, M12 female connector, FIXCON-compatible, for rear panel mounting, assembled with stranded hook-up wire, conductor terminal area potted, PG 9 screw coupling at mounting side, with mounting nut AF 18	Receptacle connector, M12 female connector, FIXCON-compatible, for rear panel mounting, assembled with stranded hook-up wire, conductor terminal area potted, M16 x 1.5 screw coupling at mounting side	Receptacle connector, M12 female connector, for front and printed circuit board mounting, solder pin straight or angled
RoHS-compliant (2011/65/EU)	Yes		
(Construction Type) Standard	IEC 61076-2-101		
Approvals	UL	–	UL
Technical Data			
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range		-25 °C to +90 °C, mind cable temperature range
Housing Material/Grip	CuZn, nickel-plated		
Contact Holder Material	TPU	PA	
Contact Material/Surface Finish	CuSn, nickel underlay and gold-plated (4 and 5-pin, A-coding), CuZn, nickel underlay and gold-plated (5-pin, B-coding and 8-pin, A-coding)		CuZn, gold-plated
Mechanical Data			
Degree of Protection	IP67, IP69K (only when mated to associated counterparts)	IP67 (only when mated to associated counterparts)	
Electrical Data			
Contact Resistance	≤ 10 mΩ		
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V, 8-pin 30 V		4-pin 150 V, 5-pin 60 V
Rated Current	3 and 4-pin 4 A, 8-pin 2 A		
Pollution Degree	3		
Technical Drawing			
			

*a = O-ring • *b = O-ring supplied loose • *c = Nut (AF 18) supplied loose • *d = Anti-twist protection • L = Standard length of stranded hook-up wire

Pin Assignment

3-pin	4-pin	5-pin	8-pin
 1 = brown 2 = n.c. 3 = blue 4 = black	 1 = brown 2 = white 3 = blue 4 = black	 1 = brown 2 = white 3 = blue 4 = black 5 = green/yellow	 1 = white 2 = brown 3 = green 4 = yellow 5 = gray 6 = pink 7 = blue 8 = red




Order Information

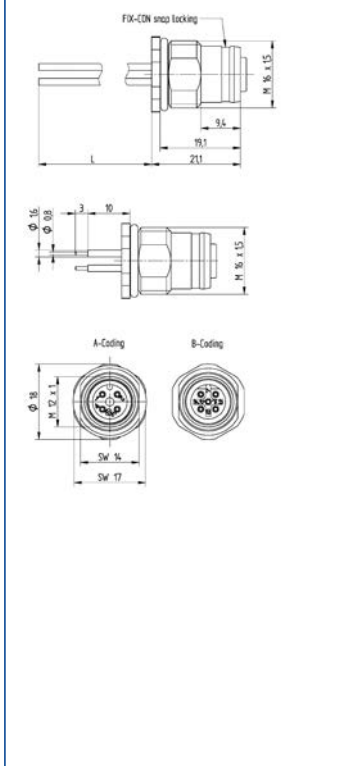
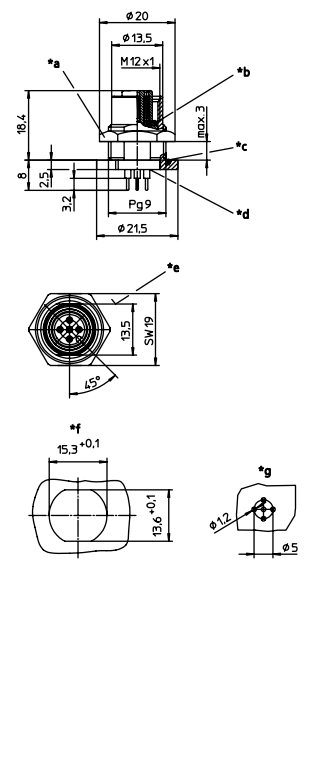
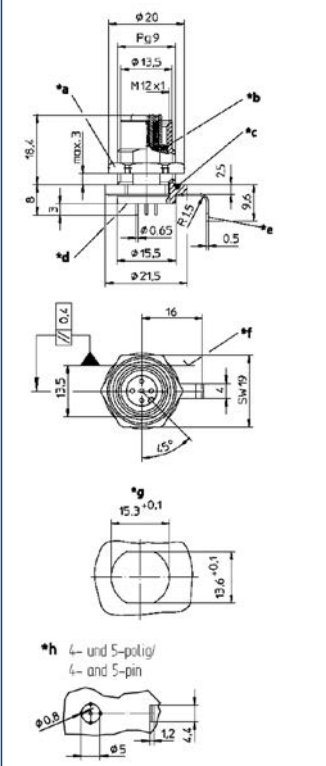
Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Characteristics
61486	RKH 4/0.5 M	4	stranded hook-up wire	0.34 mm ²	  
49228	RKH 5/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	  
62596	RKH 5B/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	  
68807	RKH 8/0.5 M	8	stranded hook-up wire	0.25 mm ²	  
934537001	EF12H4AFIX AU	4	stranded hook-up wire	0.34 mm ²	 
934537201	EF12H5AFIX AU	5	stranded hook-up wire	0.34 mm ²	 
933279200	EF12L4	4	PCB solder pin	–	  
933551200	EF12L5A AU	5	PCB solder pin	–	  
933395200	EF12LW4	4	PCB solder pin	–	  
933821200	EF12LW5A AU	5	PCB solder pin	–	  

Conversion table mm² to AWG on page 20.

M12 Receptacle Connectors for Actuators and Sensors – Female Connectors with Printed Circuit Board Pins

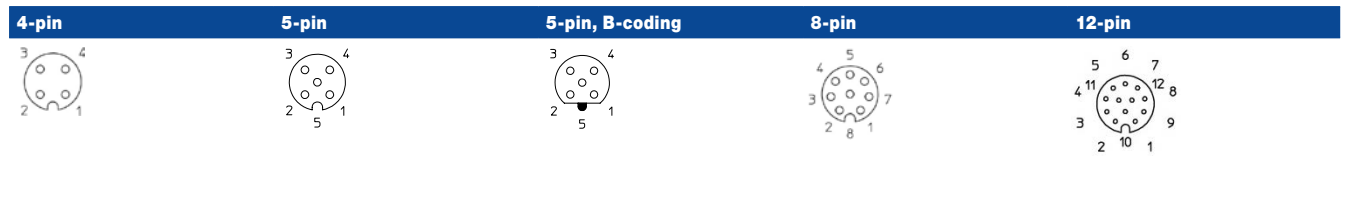
Technical Information

Product Description			
Order Designation	EF 12HL...	RKHL	RKHLS
			
Description	Receptacle connector, M12 female connector for rear panel mounting, PCB contacts, M16 x 1.5 screw coupling at mounting side	Receptacle connector, M12 female connector for rear panel mounting, PCB contacts, PG 9 screw coupling at mounting side	Receptacle connector, M12 female connector for rear panel mounting, with shield sheet, PCB contacts, PG 9 screw coupling at mounting side
Note	–	Mounting using RSKF 9	Mounting using RSKF 9
RoHS-compliant (2011/65/EU)	Yes		
(Construction Type) Standard	IEC 61076-2-101		
Approvals	–	UL	–
Technical Data			
Ambient Temperature	-25 °C to +90 °C	-25 °C to +80 °C	4 and 5-pin -30 °C to +80 °C, 8 and 12-pin -25 °C to +80 °C
Housing Material/Grip	CuZn, nickel-plated		
Contact Holder Material	PA	TPU	
Contact Material/Surface Finish	CuZn, gold-plated	CuZn, nickel underlay and gold-plated	
Screw Coupling Material	CuZn, nickel-plated		
Mechanical Data			
Degree of Protection	IP67, IP68 (24 h, 1 m; only when mated to associated counterparts)	IP67 (only when mated to associated counterparts)	
Electrical Data			
Contact Resistance	≤ 10 mΩ	≤ 5 mΩ	
Rated Voltage	4-pin 250 V, 5-pin 60 V, 8 to 12-pin 30 V		
Rated Current	4 to 5-pin 4 A, 8-pin 2 A, 12-pin 1.5 A		
Pollution Degree	3		

Technical Drawing			
			

RKHL: *a = Nut • *b = O-ring • *c = O-ring • *d = Conductor terminal area potted • *e = Anti-twist protection • *f = Installation hole for anti-twist protection • *g = Drill pattern in printed circuit board
 RKHLS: *a = Nut • *b = O-ring • *c = O-ring • *d = Conductor terminal area potted • *e = Terminal lug/solder terminal • *f = Anti-twist protection • *g = Installation hole for anti-twist protection • *h = Drill pattern in printed circuit board

Pin Assignment


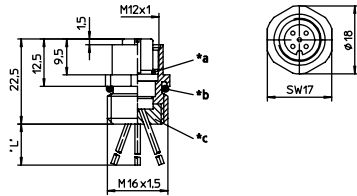


Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Characteristics
934537002	EF12HL4AFIX AU	4	PCB solder pin	
934537202	EF12HL5AFIX AU	5	PCB solder pin	
56334	RKHL 4/S 5.5	4	PCB solder pin	UL
56335	RKHL 5/S 5.5	5	PCB solder pin	UL
56347	RKHL 5B/S 5.5	5	PCB solder pin	UL
62075	RKHL 8/S 5.5	8	PCB solder pin	UL
104079	RKHL 12/S 5.5	12	PCB solder pin	UL
104091	RKHLS 4/S 5.5	4	PCB solder pin	
104092	RKHLS 5/S 5.5	5	PCB solder pin	
104093	RKHLS 8/S 5.5	8	PCB solder pin	
102735	RKHLS 12/S 5.5	12	PCB solder pin	




M12 Receptacle Connectors for Actuators and Sensors – Female Connectors with Stranded Hook-up Wire for Food & Beverage

Technical Information










Product Description	
Order Designation	PRKFM
	
Description	Receptacle connector, M12 female connector, for front mounting, stainless steel housing, assembled with stranded hook-up wire, conductor terminal area potted, M16 x 1.5 screw coupling at mounting side
Note	Mounting using RSKFM 16. Especially suitable for use in the food processing equipment.
RoHS-compliant (2011/65/EU)	Yes
(Construction Type) Standard	IEC 61076-2-101
Approvals	UL
Technical Data	
Ambient Temperature	-25 °C to +70 °C, mind cable temperature range
Housing Material/Grip	Stainless steel
Contact Holder Material	PBT
Contact Material/Surface Finish	CuSn, nickel underlay and gold-plated (4 and 5-pin), CuZn, nickel underlay and gold-plated (8-pin)
Mechanical Data	
Degree of Protection	IP67, IP69K (only when mated to associated counterparts)
Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	4-pin 250 V, 5-pin 60 V, 8-pin 30 V
Rated Current	4 to 5-pin 4 A, 8-pin 2 A
Pollution Degree	3
Technical Drawing	
	

*a = O-ring • *b = O-ring supplied loose • *c = Conductor terminal area potted • L = Standard length of stranded hook-up wire

Pin Assignment

4-pin	5-pin	8-pin
 <ul style="list-style-type: none"> 1 = brown 2 = white 3 = blue 4 = black 	 <ul style="list-style-type: none"> 1 = brown 2 = white 3 = blue 4 = black 5 = green/yellow 	 <ul style="list-style-type: none"> 1 = white 2 = brown 3 = green 4 = yellow 5 = gray 6 = pink 7 = blue 8 = red



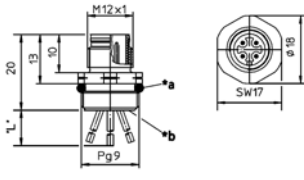
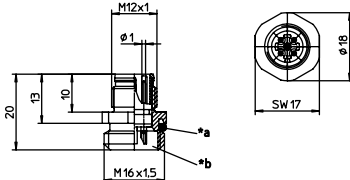
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Characteristics
45740	PRKFM 4/0.5 M	4	stranded hook-up wire	0.34 mm ²	  
45741	PRKFM 5/0.5 M	5	stranded hook-up wire	1 x 0.50/4 x 0.34 mm ²	  
49798	PRKFM 8/0.5 M	8	stranded hook-up wire	0.22 mm ²	  

Conversion table mm² to AWG on page 20.

M12 Receptacle Connectors for Actuators and Sensors – Standard Male Connectors with Printed Circuit Board Pins

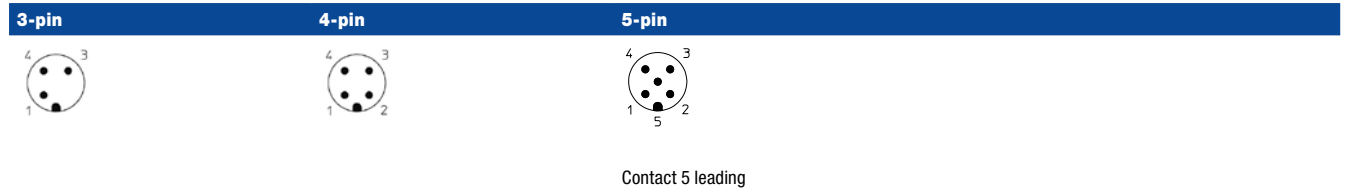
Technical Information

Product Description		
Order Designation	RSFM	RSF
		
Description	Receptacle connector, M12 male connectors, FIXCON-compatible, for front mounting, solder terminals, M16 x 1.5 screw coupling at mounting side RSF 3/12 and RSF 4/12: M12 screw coupling at mounting side	Receptacle connector, M12 male connectors, FIXCON-compatible, for front mounting, solder terminals, PG 9 screw coupling at mounting side
Note	Mounting using RSKFM 16	–
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-25 °C to +80 °C	-25 °C to +90 °C
Housing Material/Grip	CuZn, nickel-plated	
Contact Holder Material	PA	
Contact Material/Surface Finish	CuZn, nickel underlay and gold-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		
		

















*a = O-ring supplied loose

*b = Important note: To ensure the mechanical stability and leak-tightness, the conductor terminal area must be potted after the cable is assembled.

Pin Assignment





Order Information

Order No.	Order Designation	No. of Pins	Characteristics
26478	RSFM 3	3	UL  
25023	RSFM 4	4	UL  
26477	RSFM 5	5	UL  
11619	RSF 3	3	UL  
11627	RSF 4	4	UL  
11632	RSF 5	5	UL  
14252	RSF 3/12	3	UL  
14249	RSF 4/12	4	UL  

M12 Receptacle Connectors for Actuators and Sensors – Standard Male Connectors with Stranded Hook-up Wire

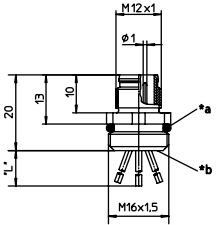
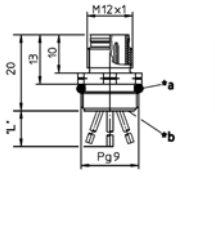
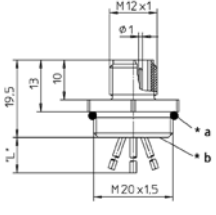
Technical Information

Product Description		
Order Designation	RSFM/0.5 M	RSF/0.5M
		
Description	Receptacle connector, M12 male connector, FIXCON-compatible, for front mounting, assembled with stranded hook-up wire, conductor terminal area potted, M16 x 1.5 or M20 x 1.5 screw coupling at mounting side	Receptacle connector, M12 male connector, FIXCON-compatible, for front mounting, assembled with stranded hook-up wire, conductor terminal area potted, PG 9 screw coupling at mounting side
Note	Mounting using RSKFM 16 or RSKFM 20	Mounting using RSKF 9
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	

Technical Data	
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range
Housing Material/Grip	CuZn, nickel-plated
Contact Holder Material	PA, TPU (8 and 12-pin)
Contact Material/Surface Finish	CuZn, nickel underlay and gold-plated
Screw Coupling Material	CuZn, nickel-plated






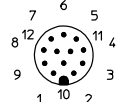
Technical Data	
Degree of Protection	IP67 (only when mated to associated counterparts)

Electrical Data	
Contact Resistance	≤ 5 mΩ
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V (UL 30 V AC/DC), 8-pin 30 V
Rated Current	3 to 5-pin 4 A, 8-pin 2 A, 12-pin 1.5 A
Pollution Degree	3

















































Technical Drawing	
	
	

*a = O-ring supplied loose • *b = Conductor terminal area potted • L = Standard length of cable

Pin Assignment

3-pin	4-pin	5-pin	5-pin, B-coding
 <p>1 = brown 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = green/yellow</p> <p>Contact 5 leading</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = green/yellow</p>
8-pin	12-pin		
 <p>1 = white 2 = brown 3 = green 4 = yellow 5 = gray 6 = pink 7 = blue 8 = shield</p>	 <p>1 = brown 2 = blue 3 = white 4 = green 5 = pink 6 = yellow 7 = black 8 = gray 9 = red 10 = violet 11 = gray/pink 12 = red/blue</p>		

Order Information

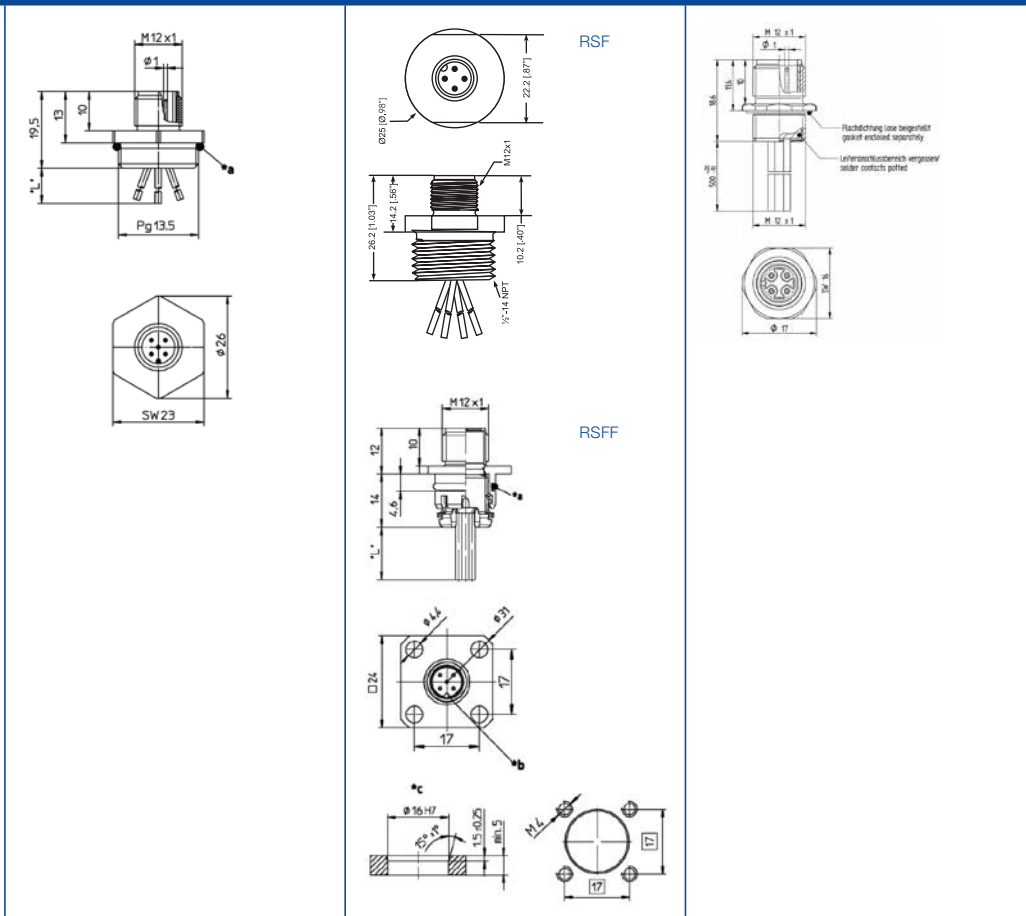
Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Characteristics
26142	RSFM 3/0.5 M	3	stranded hook-up wire	0.34 mm ²	  
26144	RSFM 4/0.5 M	4	stranded hook-up wire	0.34 mm ²	  
26146	RSFM 5/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	  
96551	RSFM 5B/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	  
26151	RSFM 8/0.5 M	8	stranded hook-up wire	0.25 mm ²	  
86154	RSFM 12/0.5 M	12	stranded hook-up wire	0.25 mm ²	  
26143	RSFM 3/20/0.5 M	3	stranded hook-up wire	0.34 mm ²	  
26145	RSFM 4/20/0.5 M	4	stranded hook-up wire	0.34 mm ²	  
26148	RSFM 5/20/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	  
26152	RSFM 8/20/0.5 M	8	stranded hook-up wire	0.25 mm ²	  
107475	RSFM 12/20/0.5 M	12	stranded hook-up wire	0.14 mm ²	  
11621	RSF 3/0.5 M	3	stranded hook-up wire	0.34 mm ²	  
11629	RSF 4/0.5 M	4	stranded hook-up wire	0.34 mm ²	  
11634	RSF 5/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	  
14320	RSF 5B/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	  
11638	RSF 8/0.5 M	8	stranded hook-up wire	0.25 mm ²	  

Conversion table mm² to AWG on page 20.

M12 Receptacle Connectors for Actuators and Sensors – Male Connectors with Stranded Hook-up Wire




Technical Information

Product Description			
Order Designation	RSF... 13.5/0.5 M	RSF... 1/2-14/0.5 M RSFF	RSF 4/12/0.5 M
Description	Receptacle connector, M12 male connector, for front mounting, assembled with stranded hook-up wire, conductor terminal area potted, PG 13.5 screw coupling at mounting side	Receptacle connector, M12 male connector, for front mounting, assembled with stranded hook-up wire, 1/2" 14NPT screw coupling at mounting side RSFF: with removable pre-assembled plug insert and square flange	Receptacle connector, M12 male connector, for front mounting, assembled with stranded hook-up wire, M12 screw coupling at mounting side
RoHS-compliant (2011/65/EU)	Yes		
(Construction Type) Standard	IEC 61076-2-101		
Approvals	–	UL	–
Technical Data			
Ambient Temperature	-25 °C to +80 °C (RSFF: -25 °C to +90 °C), mind cable temperature range		
Housing Material/Grip	CuZn, nickel-plated		
Contact Holder Material	PA		
Contact Material/Surface Finish	CuZn, gold-plated		
Mechanical Data			
Degree of Protection	IP67 (only when mated to associated counterparts)		
Electrical Data			
Contact Resistance	≤ 5 mΩ		
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V		
Rated Current	4 A		
Pollution Degree	3		
Technical Drawing			



















*a = O-ring supplied loose • *b = Position of coding for external surface of housing symmetrical and adjustable by 45° angle • *c = Installation hole

Pin Assignment

3-pin	4-pin	5-pin
 <p>1 = brown 3 = blue 4 = black</p>	 <p>1 = yellow 2 = brown 3 = white 4 = green</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = green/yellow</p>



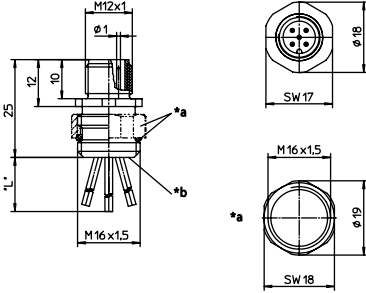
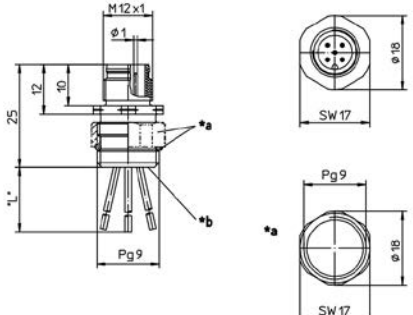
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Characteristics
11620	RSF 3-13.5/0.5 M	3	stranded hook-up wire	0.34 mm ²	 
11628	RSF 4-13.5/0.5 M	4	stranded hook-up wire	0.34 mm ²	 
11633	RSF 5-13.5/0.5 M	5	stranded hook-up wire	4 x 0.34/1 x 0.50 mm ²	 
2582	RSF 3-1/2-14/0.5 M	3	stranded hook-up wire	0.34 mm ²	  
2261	RSF 4-1/2-14/1 F	4	stranded hook-up wire	0.34 mm ²	  
30420	RSF 4/12/0.5 M	4	stranded hook-up wire	0.34 mm ²	 
934637371	RSFF 4/0.5 M	4	stranded hook-up wire	0.34 mm ²	 

Conversion table mm² to AWG on page 20.

M12 Receptacle Connectors for Actuators and Sensors – Male Connectors with Stranded Hook-up Wire

Technical Information

Product Description		
Order Designation	RSFPM/0.5M	RSFP/0.5 M
		
Description	Receptacle connector, M12 male connector, FIXCON-compatible, for front mounting, adjustable, assembled with stranded hook-up wire, conductor terminal area potted, M16 x 1.5 screw coupling at mounting side	Receptacle connector, M12 male connector, for front mounting, adjustable, assembled with stranded hook-up wire, conductor terminal area potted, PG 9 screw coupling at mounting side, B-coding
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range	
Housing Material/Grip	CuZn, nickel-plated	
Contact Holder Material	PA, TPU (RSFP 8/0.5M)	
Contact Material/Surface Finish	CuZn, nickel underlay and gold-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V, 8-pin 30 V	
Rated Current	3 and 5-pin 4 A, 8-pin 2 A	
Pollution Degree	3	
Technical Drawing		
		

*a = Adjusting nut and O-ring supplied loose • *b = Conductor terminal area potted • L = Standard length of cable

Pin Assignment

3-pin		4-pin		5-pin	
	1 = brown 3 = blue 4 = black		1 = brown 2 = white 3 = blue 4 = black		1 = brown 2 = white 3 = blue 4 = black 5 = green/yellow Contact 5 leading
5-pin, B-coding		8-pin			
	1 = brown 2 = green 3 = blue 4 = red 5 = green/yellow Contact 5 leading		1 = white 2 = brown 3 = green 4 = yellow	5 = gray 6 = pink 7 = blue 8 = red	



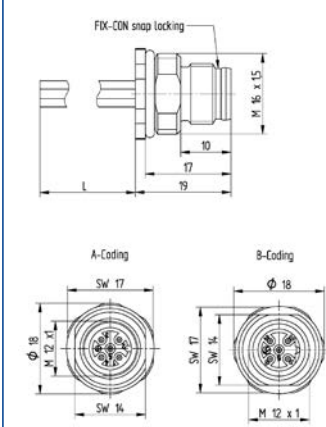
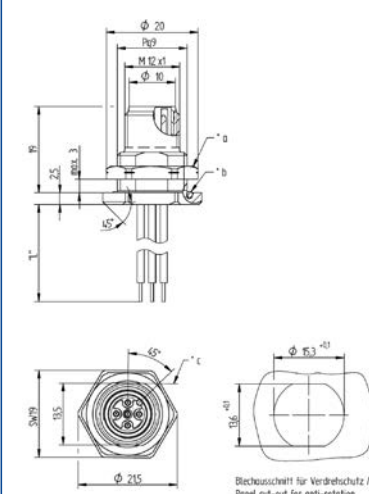
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Characteristics
26153	RSFPM 3/0.5 M	3	stranded hook-up wire	0.34 mm ²	
30616	RSFPM 4/0.5 M	4	stranded hook-up wire	0.34 mm ²	
26155	RSFPM 5/0.5 M	5	stranded hook-up wire	1 x 0.50/4 x 0.34 mm ²	
26157	RSFPM 8/0.5 M	8	stranded hook-up wire	0.25 mm ²	
11639	RSFP 3/0.5 M	3	stranded hook-up wire	0.34 mm ²	
11640	RSFP 4/0.5 M	4	stranded hook-up wire	0.34 mm ²	
11641	RSFP 5/0.5 M	5	stranded hook-up wire	1 x 0.50/4 x 0.34 mm ²	
14321	RSFP 5B/0.5 M	5	stranded hook-up wire	1 x 0.50/4 x 0.34 mm ²	
17219	RSFP 8/0.5 M	8	stranded hook-up wire	0.25 mm ²	

Conversion table mm² to AWG on page 20.





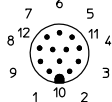
M12 Receptacle Connectors for Actuators and Sensors – Male Connectors with Stranded Hook-up Wire

Technical Information



















Product Description		
Order Designation	EM12H...	RSH/0.5M
		
Description	Receptacle connector, M12 male connector, FIXCON-compatible, for rear panel mounting, assembled with stranded hook-up wire, conductor terminal area potted, M16 x 1.5 screw coupling at mounting side	Receptacle connector, M12 male connector, for rear panel mounting, assembled with stranded hook-up wire, PG 9 screw coupling at mounting side
Note	Mounting nut M16 x 1.5	Mounting nut RSKF 9
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	UL (3, 4, 5, and 8-pin only)
Technical Data		
Ambient Temperature	-25 °C to +90 °C, mind cable temperature range	-25 °C to +80 °C, mind cable temperature range
Housing Material/Grip	CuZn, nickel-plated	
Contact Holder Material	PA 6 GF	PA
Contact Material/Surface Finish	CuZn, gold-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 10 mΩ	
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V, 8 and 12-pin 30 V	
Rated Current	3 to 5-pin 4 A, 8-pin 2 A, 12-pin 1.5 A	
Pollution Degree	3	
Technical Drawing		
		 <p>Rechenschritt für Verdrehschutz / Panel cut-out for anti-rotation</p>

*a = Nut supplied loose (AF 18) • *b = O-ring • *c = Anti-twist protection • L = Standard length of cable

Pin Assignment

3-pin	4-pin	5-pin
 <p>1 = brown 2 = n.c. 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = green/yellow</p>
8-pin	12-pin	
 <p>1 = white 2 = brown 3 = green 4 = yellow 5 = gray 6 = pink 7 = blue 8 = red</p>	 <p>1 = brown 2 = blue 3 = white 4 = green 5 = pink 6 = yellow 7 = black 8 = gray 9 = red 10 = violet 11 = gray/pink 12 = red/blue</p>	




Order Information

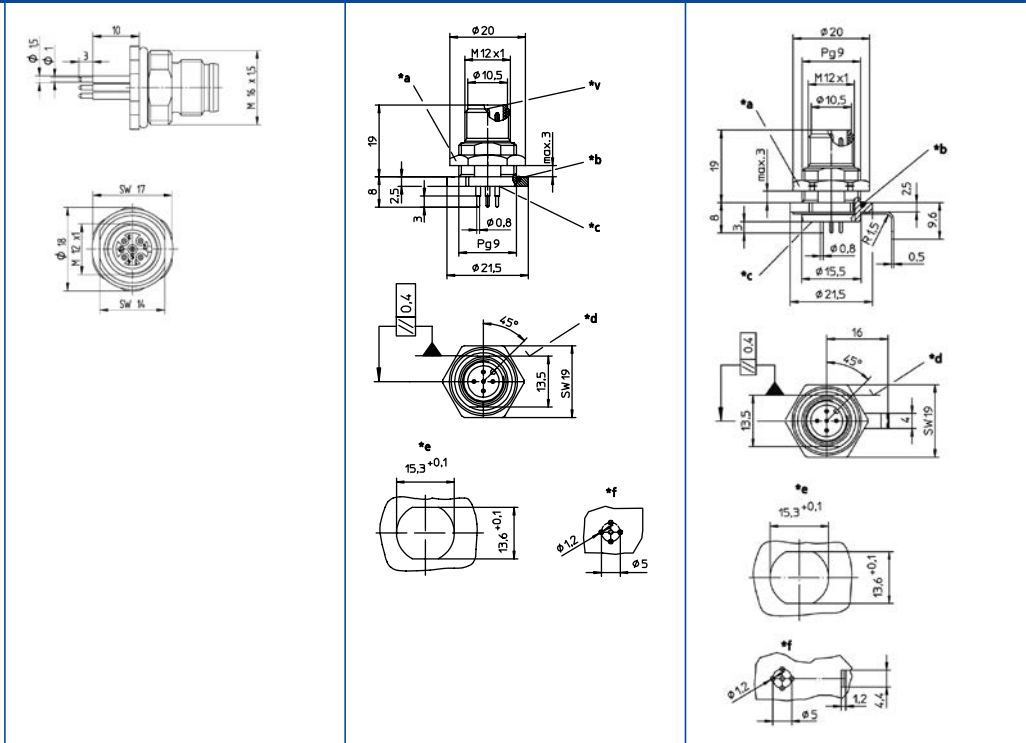
Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Characteristics
934536001	EM12H4AFIX AU	4	stranded hook-up wire	0.34 mm ²	 
934536201	EM12H5AFIX AU	5	stranded hook-up wire	0.34 mm ²	 
2496	RSH 3/0.5 M	3	stranded hook-up wire	0.34 mm ²	  
61488	RSH 4/0.5 M	4	stranded hook-up wire	0.34 mm ²	  
73852	RSH 5/0.5 M	5	stranded hook-up wire	0.34 mm ²	  
90245	RSH 8/0.5 M	8	stranded hook-up wire	1 x 0.50/4 x 0.34 mm ² /0.25 mm ²	  
3720	RSH 12/0.5 M	12	stranded hook-up wire	0.14 mm ²	 

Conversion table mm² to AWG on page 20.

M12 Receptacle Connectors for Actuators and Sensors – Male Connectors with Printed Circuit Board Pins

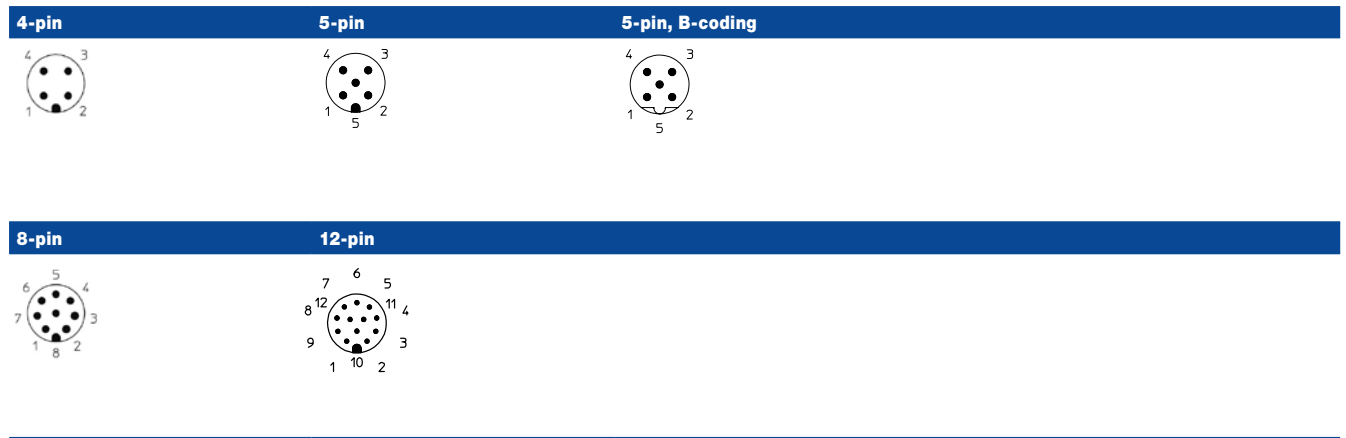
Technical Information

Product Description			
Order Designation	EM12HL...	RSHL	RSHLS
			
Description	Receptacle Connectors, M12 male connector for rear panel mounting, PCB contacts, M16 x 1.5 screw coupling at mounting side, with O-ring	Receptacle Connectors, M12 male connector for rear panel mounting, PCB contacts, PG 9 screw coupling at mounting side, with O-ring	Receptacle Connectors, M12 male connector for rear panel mounting, with shield sheet, PCB contacts, PG 9 screw coupling at mounting side, with O-ring
Note	Mounting nut M16 x 1.5	Mounting using RSKF 9	Mounting using RSKF 9
RoHS-compliant (2011/65/EU)	Yes		
(Construction Type) Standard	IEC 61076-2-101		
Approvals	–	UL	–
Technical Data			
Ambient Temperature	-25 °C to +90 °C		-25 °C to +80 °C
Housing Material/Grip	CuZn, nickel-plated		
Contact Holder Material	PA, 12-pin: TPU		
Contact Material/Surface Finish	CuZn, gold-plated		
Mechanical Data			
Degree of Protection	IP67 (only when mated to associated counterparts)		
Electrical Data			
Contact Resistance	≤ 10 mΩ		
Rated Voltage	4-pin 250 V, 5-pin 60 V, 8 to 12-pin 30 V (with encapsulated installation)		
Rated Current	4 to 5-pin 4 A, 8-pin 2 A, 12-pin 1.5 A		
Pollution Degree	3		
Technical Drawing			



*a = Nut • *b = O-ring • *c = Conductor terminal area potted • *d = Anti-twist protection
 *e = Installation hole for anti-twist protection • *f = Drill pattern in printed circuit board • *v = Middle contact leading

Pin Assignment



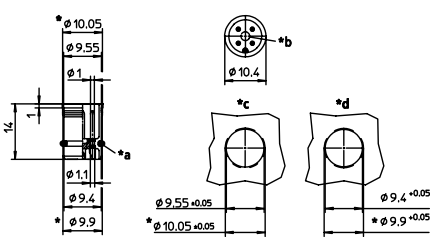
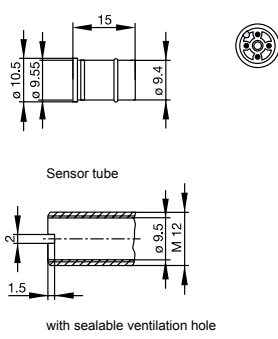


Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Characteristics
934536002	EM12HL4AFIX AU	4	PCB solder pin	
934536202	EM12HL5AFIX AU	5	PCB solder pin	
56332	RSHL 4/S 5.5	4	PCB solder pin	
56333	RSHL 5/S 5.5	5	PCB solder pin	
56346	RSHL 5B/S 5.5	5	PCB solder pin	
62136	RSHL 8/S 5.5	8	PCB solder pin	
107209	RSHL 12/S 5.5	12	PCB solder pin	
104094	RSHLS 4/S 5.5	4	PCB solder pin	
104095	RSHLS 5/S 5.5	5	PCB solder pin	
104097	RSHLS 8/S 5.5	8	PCB solder pin	
104098	RSHLS 12/S 5.5	12	PCB solder pin	

M12 Receptacle Connectors for Actuators and Sensors – Male Connectors for Sensors

Technical Information

Product Description		
Order Designation	RSE RSE0	ELST 400 RD/12
		
Description	Receptacle connector, M12 male connector for sensors, press-in tube mounting, with short terminal contacts, without anti-twist protection, A-coding, with/without ventilation hole, with O-ring RSE... L: with ventilation hole \varnothing 2.0 mm RSE0: for M12 initiators, pin 5 not leading RSE 8/0.5 M: with stranded hook-up wire	Receptacle connector, M12 male connector for sensors, press-in tube mounting, without anti-twist protection, A-coding, with O-ring, with lockable ventilation hole ELST 400... V: with anti-twist protection
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-25 °C to +85 °C	-25 °C to +90 °C
Housing Material/Grip		–
Contact Holder Material		PA
Contact Material/Surface Finish	CuZn, gold-plated	CuZn/Sn or CuZn/Au
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	$\leq 10 \text{ m}\Omega$	
Rated Voltage	3 to 4-pin 250 V, 5-pin 60 V, 8-pin 30 V (with encapsulated installation)	
Rated Current	4 A, 8-pin 2 A	
Pollution Degree	3	
Technical Drawing		
		

*a = O-ring supplied loose • *b = Ventilation hole • *c = Installation hole with O-ring • *d = Installation hole without O-ring

Pin Assignment

3-pin, A-coding	4-pin, A-coding	5-pin, A-coding	8-pin, A-coding



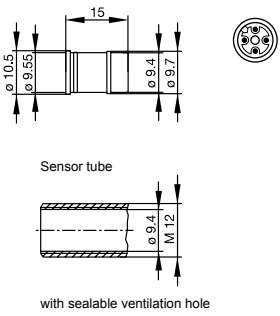
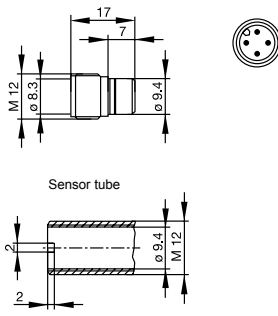
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Characteristics
14509	RSE 3	3	solder terminal	solid max. 0.75 mm ² , stranded conductor max. 0.50 mm ²	
11609	RSE 4	4	solder terminal	solid max. 0.75 mm ² , stranded conductor max. 0.50 mm ²	
11610	RSE 4 L	4	solder terminal	solid max. 0.75 mm ² , stranded conductor max. 0.50 mm ²	
26962	RSE 4 L Transparent	4	solder terminal	solid max. 0.75 mm ² , stranded conductor max. 0.50 mm ²	
11613	RSE 5	5	solder terminal	solid max. 0.75 mm ² , stranded conductor max. 0.50 mm ²	
46871	RSE0 5	5	solder terminal	solid max. 0.75 mm ² , stranded conductor max. 0.50 mm ²	
11614	RSE 5 L	5	solder terminal	solid max. 0.75 mm ² , stranded conductor max. 0.50 mm ²	
14210	RSE 8/0.5 M	8	stranded hook-up wire	solid max. 0.75 mm ² , stranded conductor max. 0.50 mm ²	
932559306	ELST 400 RD/12 093 AU	4	solder terminal	max. 0.50 mm ²	
932559406	ELST 400 RD/12 093 SN	4	solder terminal	max. 0.50 mm ²	
933442306	ELST 400 RD/12 V AU	4	solder terminal	max. 0.50 mm ²	
933442406	ELST 400 RD/12 V SN	4	solder terminal	max. 0.50 mm ²	

Conversion table mm² to AWG on page 20.

M12 Receptacle Connectors for Actuators and Sensors – Male Connectors for Sensors

Technical Information

Product Description		
Order Designation	ELST 400(L)/12	ELST 412
		
Description	Receptacle connector, M12 male connector for sensors, press-in tube mounting, A-coding, with sealing ribs, with and without ventilation hole ELST 400L....: with ventilation hole	Receptacle connector, M12 male connector for sensors (with threading), press-in tube mounting, A-coding, with O-ring
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-25 °C to +90 °C	
Housing Material/Grip	-	
Contact Holder Material	PA	
Contact Material/Surface Finish	CuZn/Au	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	IP68 (24 h, 1 m; only when mated to associated counterparts)
Electrical Data		
Contact Resistance	≤ 10 mΩ	
Rated Voltage	250 V	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		
	 <p>Sensor tube with sealable ventilation hole</p>	 <p>Sensor tube</p>

*a = O-ring supplied loose • *b = Ventilation hole • *c = Installation hole with O-ring • *d = Installation hole without O-ring

Pin Assignment

























4-pin, A-coding



5-pin, A-coding






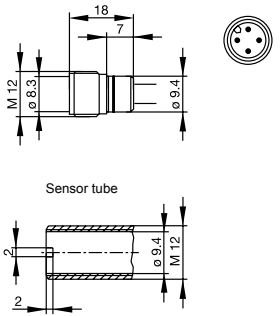
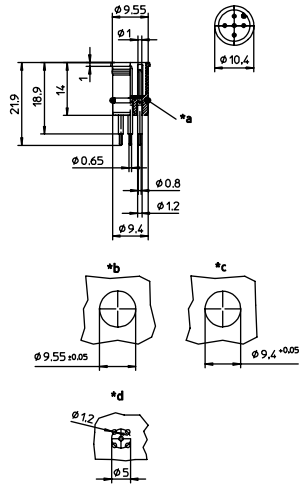
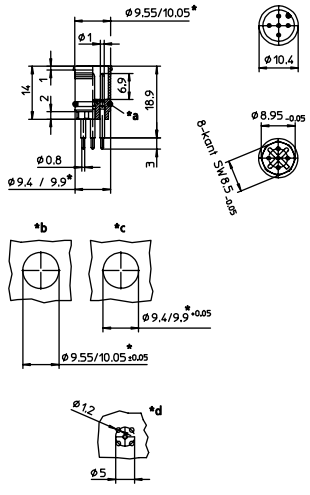
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Characteristics
932440106	ELST 400/12 093 AU	4	solder terminal	max. 0.50 mm ²	  
932440206	ELST 400/12 093 SN	4	solder terminal	max. 0.50 mm ²	  
934267106	ELST 500/12 093 AU	5	solder terminal	max. 0.50 mm ²	  
934267206	ELST 500/12 093 SN	5	solder terminal	max. 0.50 mm ²	  
932416106	ELST 400L/12 093 AU	4	solder terminal	max. 0.50 mm ²	  
932416206	ELST 400L/12 093 SN	4	solder terminal	max. 0.50 mm ²	  
931902106	ELST 412 AU GRAU (gray)	4	solder terminal	max. 0.50 mm ²	  
931902206	ELST 412 SN GRAU (gray)	4	solder terminal	max. 0.50 mm ²	  

Conversion table mm² to AWG on page 20.




M12 Receptacle Connectors for Actuators and Sensors – Male Connectors for Sensors

Technical Information


























Product Description			
Order Designation	ELST 412 LED	RSEL	RSELP
			
Description	Receptacle connector, M12 male connector for sensors (with threading), PCB contacts, press-in tube mounting, fitted with LED (red), O-ring ELST...YE: yellow LED	Receptacle connector, M12 male connector for sensors, press-in tube mounting, with long terminal contacts, for printed circuit board mounting, without anti-twist protection, A-coding, without ventilation hole	Receptacle connector, M12 male connector for sensors, press-in tube mounting, with long terminal contacts, for printed circuit board mounting, with anti-twist protection (octagonal shape), A-coding, without ventilation hole
RoHS-compliant (2011/65/EU)	Yes		
(Construction Type) Standard	IEC 61076-2-101		
Approvals	UL		-
Technical Data			
Ambient Temperature	-25 °C to +90 °C		-25 °C to +80 °C
Housing Material/Grip	-		
Contact Holder Material	PA		
Contact Material/Surface Finish	CuZn/Sn or Au	CuZn, nickel underlay and gold-plated	
Mechanical Data			
Degree of Protection	IP68 (only when locked and mated to associated counterparts)		
Electrical Data			
Contact Resistance	≤ 10 mΩ		
Rated Voltage	50 V	4-pin 250 V, 5-pin 60 V, 8-pin 30 V (with encapsulated installation)	
Rated Current	4 A (LED max. 10 mA)	4 to 5-pin 4 A, 8-pin 2 A	
Pollution Degree	3		
Technical Drawing			
			

*a = O-ring supplied loose • *b = Installation hole with O-ring • *c = Installation hole without O-ring • *d = Drill pattern in printed circuit board

Pin Assignment

4-pin	5-pin	8-pin
		
	Contact 5 leading	


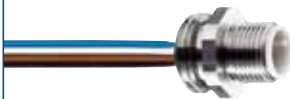
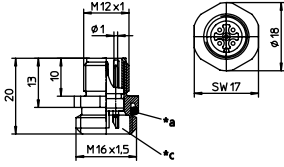
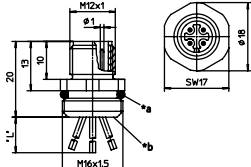
Bestellinformation

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Characteristics
932256112	ELST 412 LED AU	4	solder terminal	max. 0.50 mm ²	  
932256212	ELST 412 LED SN	4	solder terminal	max. 0.50 mm ²	  
933363112	ELST 412 LED YE AU	4	solder terminal	max. 0.50 mm ²	  
933363212	ELST 412 LED YE SN	4	solder terminal	max. 0.50 mm ²	  
30548	RSEL 4	4	solder terminal	max. 0.50 mm ²	  
30549	RSEL 5	5	solder terminal	max. 0.50 mm ²	  
30550	RSEL 8	8	solder terminal	max. 0.50 mm ²	  
934636458	RSELP 4	4	solder terminal	max. 0.50 mm ²	 
71089	RSELP 5	5	solder terminal	max. 0.50 mm ²	 

Conversion table mm² to AWG on page 20.

M12 Receptacle Connectors for Actuators and Sensors – Male Connectors with Printed Circuit Board Pins or Stranded Hook-up Wire for Food & Beverage

Technical Information




Product Description		
Order Designation	PRFSM	PRFSM .../0.5 M
		
Description	Receptacle connector, M12 male connector, for front mounting, stainless steel housing, solder terminals, conductor terminal area not potted, M16 x 1.5 screw coupling at mounting side	Receptacle connector, M12 male connector, for front mounting, stainless steel housing, assembled with stranded hook-up wire, conductor terminal area potted, M16 x 1.5 screw coupling at mounting side
Note	Mounting using RSKFM 16. Especially suitable for use in the food processing equipment.	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-10	
Approvals	UL	
Technical Data		
Ambient Temperature	-40 °C to +90 °C	
Housing Material/Grip	Stainless steel	
Contact Holder Material	PBT	
Contact Material/Surface Finish	CuZn, gold over nickel plating	
Mechanical Data		
Degree of Protection	IP67, IP69K (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	4-pin 250 V, 5-pin 60 V, 8-pin 30 V (with PCB design the conductor terminal area must be potted)	
Rated Current	4 and 5-pin 4 A, 8-pin 2 A	
Pollution Degree	3	
Technical Drawing		
		

*a = O-ring supplied loose
















*b = Important note: To ensure the mechanical stability and leak-tightness, the conductor terminal area must be potted after the cable is assembled.

*c = Conductor terminal area potted

Pin Assignment

4-pin	5-pin	8-pin
 <p>1 = brown 2 = white 3 = blue 4 = black</p>	 <p>1 = brown 2 = white 3 = blue 4 = black 5 = green/yellow</p>	 <p>1 = white 2 = brown 3 = green 4 = yellow 5 = gray 6 = pink 7 = blue 8 = red</p>
Contact 5 leading		



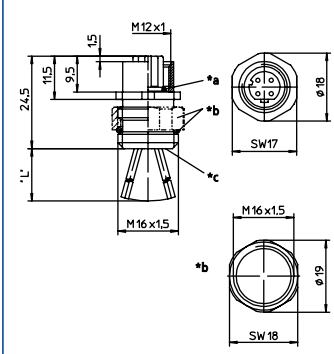
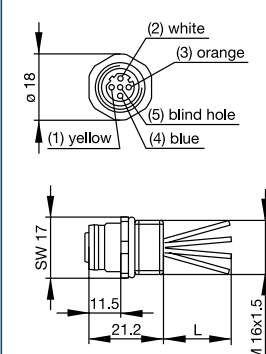
Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Characteristics
46477	PRSFM 4	4	PCB solder pin	–	UL   
46002	PRSFM 5	5	PCB solder pin	–	UL   
45703	PRSFM 4/0.5 M	4	stranded hook-up wire	0.34 mm ²	UL   
45704	PRSFM 5/0.5 M	5	stranded hook-up wire	1 x 0.50/4 x 0.34 mm ²	UL   
47297	PRSFM 8/0.5 M	8	stranded hook-up wire	0.22 mm ²	UL   

Conversion table mm² to AWG on page 20.

M12 Receptacle Connectors - Data - Industrial Ethernet - Female Connectors

Technical Information








Product Description		
Order Designation	0986 EFC... A	EF12M OCTOPUS
		
Description	Industrial Ethernet receptacle connector, M12 female connector, for front mounting, 4-pin, D-coding, assembled with stranded hook-up wire, conductor AWG 22, conductor terminal area potted, M16 x 1.5 screw coupling at mounting side 0986 EFC 151 A: adjustable 0986 EFC 153 A: not adjustable	Industrial Ethernet receptacle connector, M12 female connector, for front mounting, 4-pin, D-coding, adjustable, assembled with stranded hook-up wire, conductor terminal area potted, M16 x 1.5 screw coupling at mounting side
Note	Adjusting nut and O-ring supplied loose.	O-ring supplied loose; mounting nut ELST-M M16 must be ordered separately.
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	-	UL
Technical Data		
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range	-25 °C to +90 °C, mind cable temperature range
Housing Material/Grip	CuZn, nickel-plated	
Contact Holder Material	TPU	PA
Contact Material/Surface Finish	CuZn, gold-plated	
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP65, IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	≤ 10 mΩ
Rated Voltage	250 V	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		
		

*a = O-ring supplied loose • *b = Adjusting nut and O-ring supplied loose • *c = Conductor terminal area potted

Pin Assignment**4-pin, D-coding**



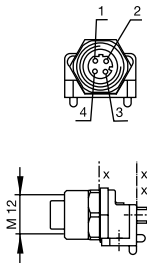
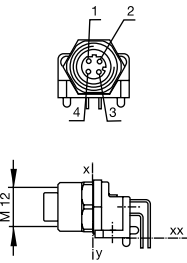
1 = yellow
 2 = white
 3 = orange
 4 = blue

Order Information







Order No.	Order Designation	No. of Pins	Characteristics
68836	0986 EFC 151 A	4	 
57761	0986 EFC 153 A	4	 
934450021	EF12M OCTOPUS	4	  

M12 Receptacle Connectors – Data – Industrial Ethernet – Female Connectors

Technical Information




Product Description		
Order Designation	EF12L OCTOPUS	EF12LW OCTOPUS
		
Description	Industrial Ethernet receptacle connector, M12 female connector, for front and printed circuit board mounting, 4-pin, D-coding, PCB contacts straight	Industrial Ethernet receptacle connector, M12 female connector, for front and printed circuit board mounting, 4-pin, D-coding, PCB contacts angled
Note	Adjusting nut and O-ring supplied loose.	O-ring supplied loose; mounting nut ELST-M M16 must be ordered separately.
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-25 °C to +90 °C	
Housing Material/Grip	CuZn, nickel-plated	
Contact Holder Material	PA	
Contact Material/Surface Finish	CuZn, nickel underlay and gold-plated	
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	150 V	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		
		

Order Information

Order No.	Order Designation	No. of Pins	Terminal Type	Characteristics
934451021	EF12L OCTOPUS	4	PCB solder pin	  
934451521	EF12LW OCTOPUS	4	PCB solder pin	  

M12 Receptacle Connectors – Data – Industrial Ethernet – Female Connectors

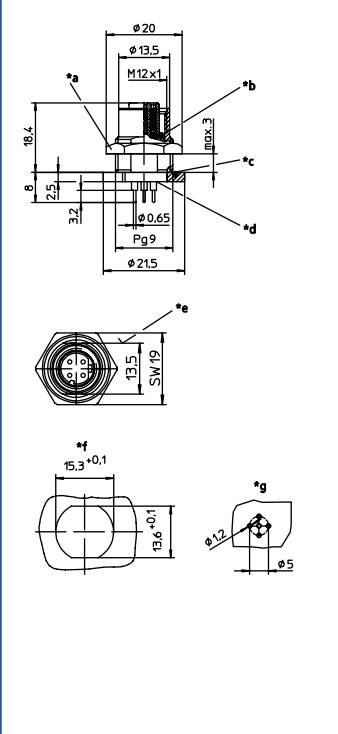
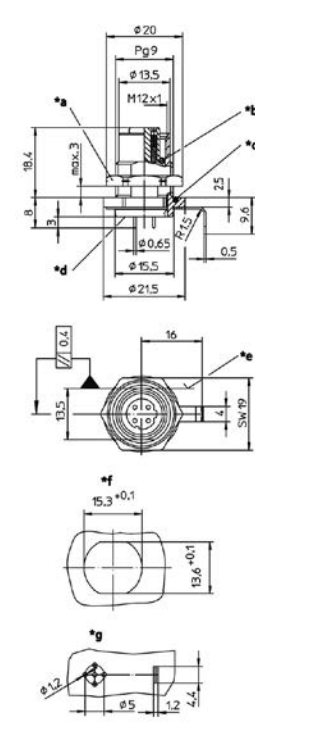
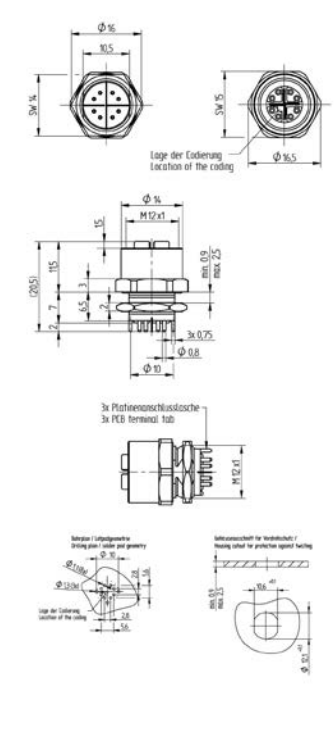
Technical Information

Product Description			
Order Designation	0986 EFC 152	0986 EFC 158	0986 EFC 651 (HAWA)
			
Description	Industrial Ethernet receptacle connector, M12 female connector for rear panel mounting, 4-pin, D-coding, PCB contacts, PG 9 screw coupling at mounting side	Industrial Ethernet receptacle connector, M12 female connector for rear panel mounting, with shield sheet, 4-pin, D-coding, PCB contacts, PG 9 screw coupling at mounting side	Industrial Ethernet receptacle connector, M12 female connector for front mounting, 8-pin, X-coding, PCB contacts, PG 9 screw coupling at mounting side
Note	Mounting using RSKF 9	–	–
RoHS-compliant (2011/65/EU)	Yes		
(Construction Type) Standard	IEC 61076-2-101		DIN EN 61076-2-109
Approvals	–		

Technical Data		
Ambient Temperature	-30 °C to +80 °C	
Housing Material/Grip	CuZn, nickel-plated	
Contact Holder Material	TPU	PA
Contact Material/Surface Finish	CuZn, gold-plated	
Screw Coupling Material	CuZn, nickel-plated	

Mechanical Data	
Degree of Protection	IP67 (only when mated to associated counterparts)

Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	250 V	48 V
Rated Current	4 A	0.5 A
Pollution Degree	3	3/2




Technical Drawing		
		

*a = Nut • *b = O-ring • *c = O-ring • *d = Conductor terminal area potted • *e = Anti-twist protection • *f = Installation hole for anti-twist protection
 • *g = Drill pattern in printed circuit board

Pin Assignment



4-pin, D-coding	8-pin, X-coding
 <p>1 = yellow 2 = white 3 = orange 4 = blue</p>	

Order Information

Order No.	Order Designation	No. of Pins	Characteristics
64161	0986 EFC 152	4	
104090	0986 EFC 158	4	
934637031	0986 EFC 651	8	

M12 Receptacle Connectors – Data (PROFIBUS®) – Female Connectors

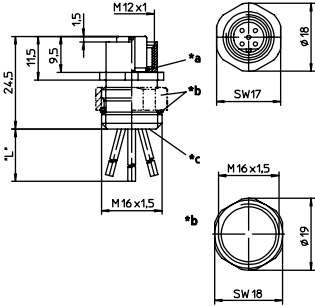
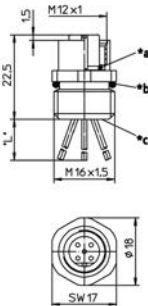
Technical Information

Product Description		
Order Designation	0976 PFC 151	0976 PFC 157
		
Description	Receptacle connector, for front mounting, assembled with stranded hook-up wire (0.5 m), conductor terminal area potted, with adjusting nut, 5-pin, B-coding: especially suitable for PROFIBUS, M12 female connector, M16 x 1.5 screw coupling at mounting side	PROFIBUS receptacle connector, for front mounting, M12 female connector, stainless steel, assembled with stranded hook-up wire (0.5 m), conductor terminal area potted, 5-pin, B-coding, M16 x 1.5 screw coupling at mounting side
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	-

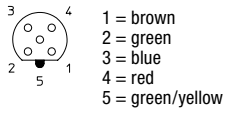
Technical Data		
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range	
Housing Material/Grip	CuZn, nickel-plated	Stainless steel
Contact Holder Material	TPU	
Contact Material/Surface Finish	CuZn, nickel underlay and gold-plated	
Screw Coupling Material	CuZn, nickel-plated	






Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	

Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	60 V	
Rated Current	4 A	
Pollution Degree	3	

Technical Drawing		
		

0976 PFC 151: *a = O-ring • *b = Adjusting nut and O-ring supplied loose • *c = Conductor terminal area potted • L = Standard length of stranded hook-up wire
 0976 PFC 157: *a = O-ring • *b = O-ring supplied loose • *c = Conductor terminal area potted • L = Standard length of stranded hook-up wire 0.5 m



Pin Assignment**5-pin, B-coding****Order Information**

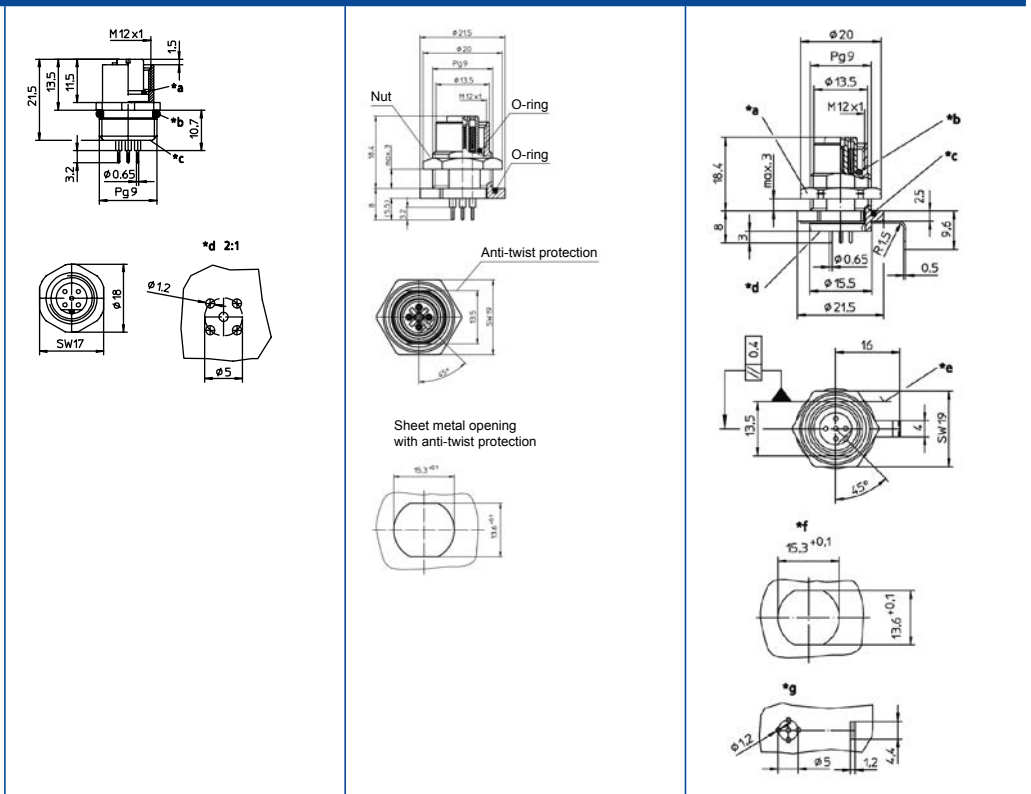
Order No.	Order Designation	No. of Pins	Terminal Type	Conductor Size	Characteristics
91458	0976 PFC 157	5	stranded wire	0.50 mm ²	 
18317	0976 PFC 151	5	stranded wire	0.50 mm ²	  

Conversion table mm² to AWG on page 20.

M12 Receptacle Connectors – Data (PROFIBUS®) – Female Connectors

Technical Information

Product Description			
Bestellbezeichnung	0976 PFC 152	0976 PFC 159	0976 PFC 160
			
Description	PROFIBUS receptacle connector, for front mounting, M12 female connector, 5-pin, B-coding, PCB contacts, PG 9 screw coupling at mounting side	PROFIBUS receptacle connector, for rear panel mounting, M12 female connector, 5-pin, B-coding, PCB contacts, PG 9 screw coupling at mounting side	PROFIBUS receptacle connector, for rear panel mounting, M12 female connector, with shield sheet, 5-pin, B-coding, PCB contacts, PG 9 screw coupling at mounting side
Note	Especially suitable for PROFIBUS	–	Mounting using RSKF 9
RoHS-compliant (2011/65/EU)	Yes		
(Construction Type) Standard	IEC 61076-2-101		
Approvals	UL	–	–
Technical Data			
Ambient Temperature	-25 °C to +90 °C	-25 °C to +80 °C	-30 °C to +80 °C
Housing Material/Grip		CuZn, nickel-plated	
Contact Holder Material		TPU	
Contact Material/Surface Finish		CuZn, gold-plated	
Screw Coupling Material		CuZn, nickel-plated	
Mechanical Data			
Degree of Protection	IP67 (only when mated to associated counterparts)		
Electrical Data			
Contact Resistance	≤ 5 mΩ		
Rated Voltage	60 V		
Rated Current	4 A		
Pollution Degree	3		
Technical Drawing			











0976 PFC 152: *a = O-ring • *b = O-ring supplied loose • *c = Conductor terminal area potted • L = Drill pattern in printed circuit board
 0976 PFC 160: *a = Nut • *b = O-ring • *c = O-ring • *d = Terminal area potted • *e = Anti-twist protection • *f = Installation hole for anti-twist protection • *g = Drill pattern in printed circuit board

Pin Assignment

5-pin, B-coding





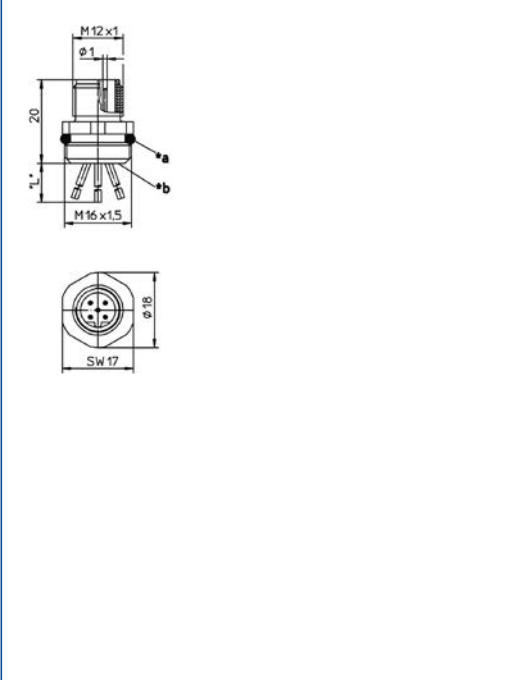
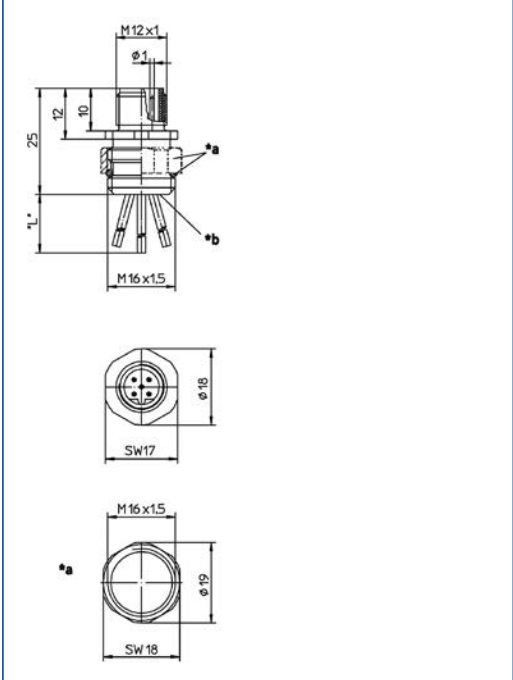
Order Information

Order No.	Order Designation	No. of Pins	Characteristics
25005	0976 PFC 152	5	  
103429	0976 PFC 159	5	 
104088	0976 PFC 160	5	  

M12 Receptacle Connectors – Data (PROFIBUS®) – Male Connectors

Technical Information

Product Description		
Order Designation	0976 PMC 151	0976 PMC 157
		
Description	PROFIBUS receptacle connector, for front mounting, M12 male connector, assembled with stranded hook-up wire (0.5 m), conductor terminal area potted, with adjusting nut, 5-pin, B-coding, M16 x 1.5 screw coupling at mounting side	PROFIBUS receptacle connector, for front mounting, M12 male connector, stainless steel design, assembled with stranded hook-up wire (0.5 m), conductor terminal area potted, with adjusting nut, 5-pin, B-coding, M16 x 1.5 screw coupling at mounting side
Note	Especially suitable for use in the food & beverage industry.	–
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	–
Technical Data		
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range	
Housing Material/Grip	CuZn, nickel-plated	Stainless steel
Contact Holder Material	TPU	
Contact Material/Surface Finish	CuZn, nickel underlay and gold-plated	
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	60 V	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		








0976 PMC 151: *a = Adjusting nut and O-ring supplied loose • *b = Conductor terminal area potted • L = Standard length of stranded hook-up wire
 0976 PMC 157: *a = O-ring supplied loose • *b = Conductor terminal area potted • L = 0.5 m

Pin Assignment**5-pin, B-coding**

- 1 = brown
- 2 = green
- 3 = blue
- 4 = red
- 5 = green/yellow

Contact 5 leading



Order Information

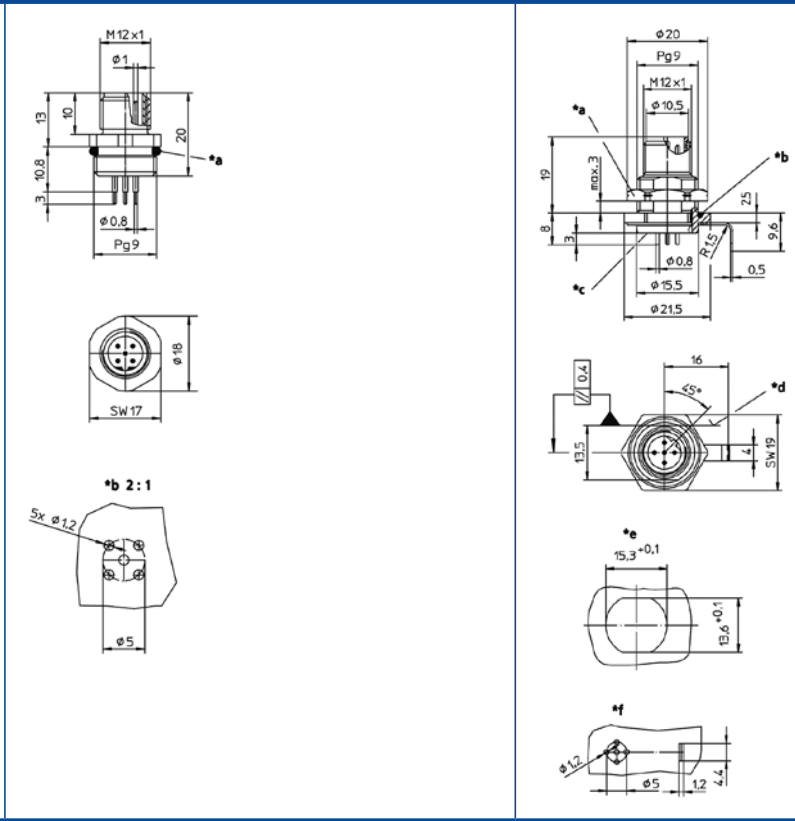
Order No.	Order Designation	No. of Pins	Conductor Size	Characteristics
18315	0976 PMC 151	5	1 x 0.50/4 x 0.34 mm ²	  
91459	0976 PMC 157	5	1 x 0.50/4 x 0.34 mm ²	 

Conversion table mm² to AWG on page 20.

M12 Receptacle Connectors - Data (PROFIBUS®) - Male Connectors

Technical Information

Product Description		
Order Designation	0976 PMC 152	0976 PMC 160
		
Description	PROFIBUS receptacle connector, for front mounting, M12 male connector, 5-pin, B-coding, PCB contacts, PG 9 screw coupling at mounting side	PROFIBUS receptacle connector, for rear panel mounting, M12 male connector, with shield sheet, 5-pin, B-coding, PCB contacts, PG 9 screw coupling at mounting side
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-10	
Approvals	UL	-
Technical Data		
Ambient Temperature	-25 °C to +90 °C	-30 °C to +80 °C
Housing Material/Grip	CuZn, nickel-plated	
Contact Holder Material	TPU	
Contact Material/Surface Finish	CuZn, gold-plated	
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	60 V	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		



0976 PMC 152: *a = O-ring supplied loose • *b = Conductor terminal area potted • L = 0.5 m
 0976 PMC 160: *a = nut • *b = O-ring • *c = Terminal area potted • *d = Anti-twist protection • *e = Installation hole for anti-twist protection • *f = Drill pattern in printed circuit board

Pin Assignment**5-pin, B-coding**

1 = brown
 2 = green
 3 = blue
 4 = red
 5 = green/yellow



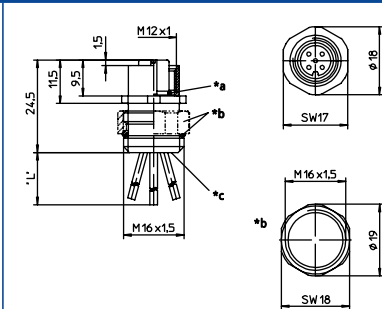
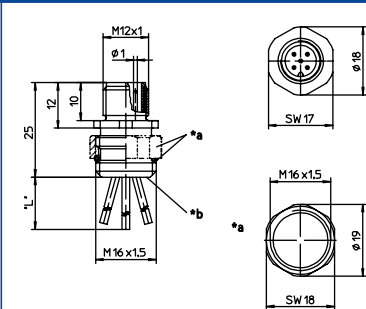
Contact 5 leading

Order Information

Order No.	Order Designation	No. of Pins	Characteristics
25006	0976 PMC 152	5	  
104089	0976 PMC 160	5	  

M12 Receptacle Connectors – Data (CANopen®/DeviceNet™) – Female/Male Connectors

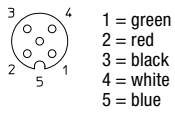
Technical Information

Product Description		
Order Designation	0936 DFC 351	0936 DMC 351
		
Description	Receptacle connector, M12 female connector, for front mounting, 5-pin, adjustable, assembled with stranded hook-up wire, conductor terminal area potted, M16 x 1.5 screw coupling at mounting side	Receptacle connector, M12 male connector, for front mounting, 5-pin, adjustable, assembled with stranded hook-up wire, conductor terminal area potted, M16 x 1.5 screw coupling at mounting side
Note	Especially suitable for DeviceNet™ and CANopen®.	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL	
Technical Data		
Ambient Temperature	-25 °C to +80 °C, mind cable temperature range	
Housing Material/Grip	CuZn, nickel-plated	
Contact Holder Material	TPU	
Contact Material/Surface Finish	CuSn, nickel underlay and gold-plated	CuZn, nickel underlay and gold-plated
Screw Coupling Material	CuZn, nickel-plated	
Mechanical Data		
Degree of Protection	IP67 (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	60 V (UL 30 V AC/DC)	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		
		

0936 DFC 351: *a = O-ring • *b = Adjusting nut and O-ring supplied loose • *c = Conductor terminal area potted
 0936 DMC 351: *a = Adjusting nut and O-ring supplied loose • *b = Conductor terminal area potted

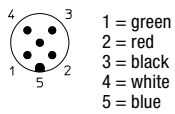
0936 DFC 351 Pin Assignment

5-pin









0936 DMC 351 Pin Assignment

5-pin



Contact 5 leading

Order Information

Order No.	Order Designation	No. of Pins	Conductor Size	Characteristics
26433	0936 DFC 351	5	0.22 mm ²	UL   
26432	0936 DMC 351	5	0.22 mm ²	UL   

Conversion table mm² to AWG on page 20.