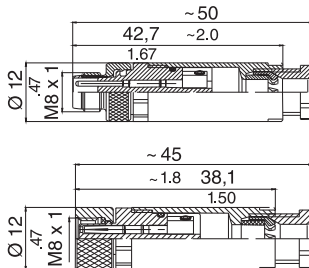


Actuator sensor interface · M8 - connector

field wireable connector, M8 straight
 Male / female
 Screw terminal

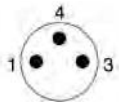


Dimensions



PIN assignment

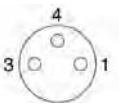
490035



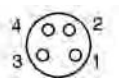
490057



490037



490059



Description		Part-No.	Type	PU
Male				
Number of terminations	3	490035	STGK-M8 3POL SK	1
	4	490057	STGK-M8 4POL SK	1
Female				
Number of terminations	3	490037	KUGK-M8 3POL SK	1
	4	490059	KUGK-M8 4POL SK	1
Technical data				
		Male	Female	
Nominal voltage			AC/DC 24 V	
Nominal voltage range			max. 60 V	
Rated current			4 A	
Number of terminations	3	4	3	4
Cable length	-			
Status Indication	-			
Current Consumption per LED	-			
Coding	-			
Shielding	-			
General				
Termination	Screw terminal 0.14 – 0.5 mm ²			
Form	M8 × 1, male		M8 × 1, female	
Contact material	CuZn, gold-plated			
Gasket	-		NBR	
Test voltage			1.5 kV	
Pollution degree			3	
Insulation resistance			>10 ¹⁰ Ω	
Contact resistance			<3 mΩ	
Class of flammability according to UL 94			V0	
Protection class			IP 67, in screwed condition	
Housing material			PBT black	
Thread material			CuSn nickel plated	
Cable construction	-			
Cable jacket	-			
Conductor insulation	-			
Cable diameter			3.5 – 5 mm	
Bending radius	-			
Storage temperature range			-40 °C – 90 °C	
Temperature range connector			-25 °C – 85 °C	
Mechanical service life			>100 insertion cycles	
Weight (kg/piece)			0.040	
Approvals	-			

Actuator sensor interface · M8 - connector

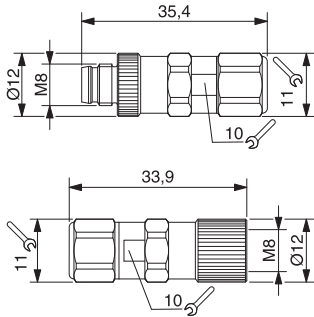
field wireable connector, M8 straight

Male / female

Fast connection method

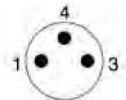


Dimensions



PIN assignment

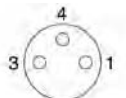
490055



490093



490096



490097



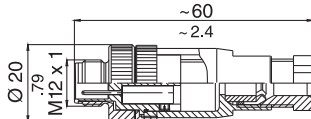
Description	Part-No.	Type	PU	
Male				
Number of terminations	3	490055	STGK-M8 3POL PCON	1
	4	490093	STGK-M8 4POL PCON	1
Female				
Number of terminations	3	490096	KUGK-M8 3POL PCON	1
	4	490097	KUGK-M8 4POL PCON	1
Technical data				
		Male	Female	
Nominal voltage	AC/DC 24 V			
Nominal voltage range	max. 30 V	max. 60 V	max. 30 V	max. 60 V
Rated current	4 A			
Number of terminations	3	4	3	4
Cable length	-			
Status Indication	-			
Current Consumption per LED	-			
Coding	-			
Shielding	-			
General				
Termination	0.14 – 0.34 mm ² ; AWG 22/26			
Form	M8 × 1, male	M8 × 1, female		
Contact material	CuZn, gold-plated			
Gasket	-	NBR		
Test voltage	1.2 kV			
Pollution degree	3			
Insulation resistance	≥100 MΩ			
Contact resistance	≤ 3 mΩ			
Class of flammability according to UL 94	V0			
Protection class	IP 68, in screwed condition			
Housing material	PA 66 black			
Thread material	CuSn nickel plated			
Cable construction	-			
Cable jacket	-			
Conductor insulation	-			
Cable diameter	3 – 5 mm			
Bending radius	-			
Storage temperature range	-40 °C – 90 °C			
Temperature range connector	-25 °C – 90 °C			
Mechanical service life	>100 insertion cycles			
Weight (kg/piece)	0.140			
Approvals	-			

Actuator sensor interface · M12 - connector

field wireable connector, M12 straight
Male - A coded
 Screw terminal

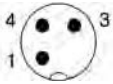


Dimensions

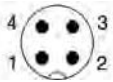


PIN assignment

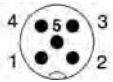
490016



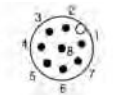
490017



490018



490070



Description	Part-No.	Type	PU	
Male				
Number of terminations	3	490016	STGK-M12 3POL SK	1
	4	490017	STGK-M12 4POL SK	1
	5	490018	STGK-M12 5POL SK	1
	8	490070	STGK-M12 8POL SK	1

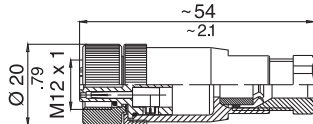
Technical data		Male		
Nominal voltage		AC/DC 24 V		
Nominal voltage range	250 V	125 V	60 V	
Rated current	4 A	2 A		
Number of terminations	3	4	5	8
Cable length	-			
Status Indication	-			
Current Consumption per LED	-			
Coding	A			
Shielding	-			
General				
Form	M12 × 1, male			
Test voltage	2.95 kV	1.75 kV	910 V	
Pollution degree	3			
Insulation resistance	>10 ¹⁰ Ω			
Contact resistance	<3 mΩ			
Class of flammability according to UL 94	V0			
Protection class	IP 67, in screwed condition			
Housing material	PBT black			
Contact material	CuZn, gold-plated			
Thread material	CuSn nickel plated			
Gasket	-			
Cable construction	-			
Cable jacket	-			
Conductor insulation	-			
Cable diameter	4 – 6 mm	6 – 8 mm		
Bending radius	-			
Storage temperature range	-40 °C – 90 °C			
Temperature range connector	-25 °C – 85 °C			
Termination	Screw terminal			
Gauge	max. 0.75 mm ²	max. 0.5 mm ²		
Mechanical service life	>100 insertion cycles			
Weight (kg/piece)	0.040			
Approvals	-			

Actuator sensor interface · M12 - connector

field wireable connector, M12 straight
Female - A coded
Screw terminal

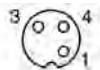


Dimensions

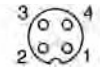


PIN assignment

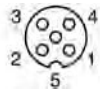
490010



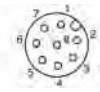
490011



490012



490071



Description	Part-No.	Type	PU	
Female				
Number of terminations	3	490010	KUGK-M12 3POL SK	1
	4	490011	KUGK-M12 4POL SK	1
	5	490012	KUGK-M12 5POL SK	1
	8	490071	KUGK-M12 8POL SK	1

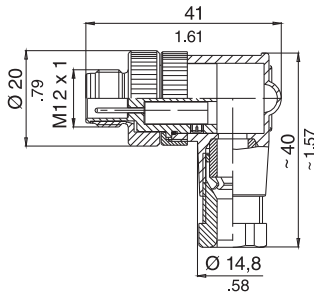
Technical data		Female		
Nominal voltage		AC/DC 24 V		
Nominal voltage range	250 V	125 V	60 V	
Rated current	4 A	2 A		
Number of terminations	3	4	5	8
Cable length	-			
Status Indication	-			
Current Consumption per LED	-			
Coding	A			
Shielding	-			
General				
Form	M12 × 1, female			
Test voltage	2.95 kV	1.75 kV	910 V	
Pollution degree	3			
Insulation resistance	>10 ¹⁰ Ω			
Contact resistance	<3 mΩ			
Class of flammability according to UL 94	V0			
Protection class	IP 67, in screwed condition			
Housing material	PBT black			
Contact material	CuZn, gold-plated			
Thread material	CuSn nickel plated			
Gasket	-			
Cable construction	-			
Cable jacket	-			
Conductor insulation	-			
Cable diameter	4 – 6 mm	6 – 8 mm		
Bending radius	-			
Storage temperature range	-40 °C – 90 °C			
Temperature range connector	-25 °C – 85 °C			
Termination	Screw terminal			
Gauge	max. 0.75 mm ²	max. 0.5 mm ²		
Mechanical service life	>100 insertion cycles			
Weight (kg/piece)	0.040			
Approvals	-			

Actuator sensor interface · M12 - connector

field wireable connector, M12 angled
Male - A coded
 Screw terminal

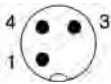


Dimensions

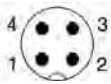


PIN assignment

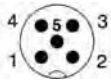
490019



490020



490021



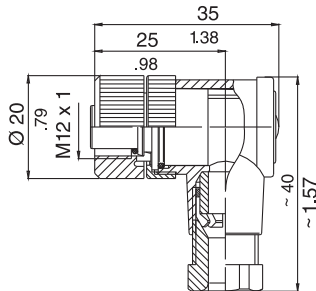
Description		Part-No.	Type	PU
Male				
Number of terminations	3	490019	STWK-M12 3POL SK	1
	4	490020	STWK-M12 4POL SK	1
	5	490021	STWK-M12 5POL SK	1
Technical data				
			Male	
Nominal voltage	AC/DC 24 V			
Nominal voltage range	250 V			60 V
Rated current	4 A			
Number of terminations	3	4	5	
Cable length	-			
Status Indication	-			
Current Consumption per LED	-			
Coding	A			
Shielding	-			
General				
Form	M12 × 1, male, angled			
Test voltage	2.5 kV	2.95 kV	1.75 kV	
Pollution degree	3			
Insulation resistance	>10 ¹⁰ Ω			
Contact resistance	<3 mΩ			
Class of flammability according to UL 94	V0			
Protection class	IP 67, in screwed condition			
Housing material	PBT black			
Contact material	CuZn, gold-plated			
Thread material	CuSn nickel plated			
Gasket	-			
Cable construction	-			
Cable jacket	-			
Conductor insulation	-			
Cable diameter	4 – 6 mm			
Bending radius	-			
Storage temperature range	-40 °C – 90 °C			
Temperature range connector	-25 °C – 85 °C			
Termination	Screw terminal			
Gauge	max. 0.75 mm ²			
Mechanical service life	>100 insertion cycles			
Weight (kg/piece)	0.040			
Approvals	-			

Actuator sensor interface · M12 - connector

field wireable connector, M12 angled
Female - A coded
Screw terminal



Dimensions

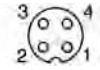


PIN assignment

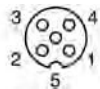
490013



490014



490015



Description	Part-No.	Type	PU	
Female				
Number of terminations	3	490013	KUWK-M12 3POL SK	0
	4	490014	KUWK-M12 4POL SK	0
	5	490015	KUWK-M12 5POL SK	0
Technical data				
		Female		
Nominal voltage	AC/DC 24 V			
Nominal voltage range	250 V	60 V		
Rated current	4 A			
Number of terminations	3	4	5	
Cable length	-			
Status Indication	-			
Current Consumption per LED	-			
Coding	A			
Shielding	-			
General				
Form	M12 × 1, female angled			
Test voltage	2.5 kV	2.95 kV	1.75 kV	
Pollution degree	3			
Insulation resistance	>10 ¹⁰ Ω			
Contact resistance	<3 mΩ			
Class of flammability according to UL 94	V0			
Protection class	IP 67, in screwed condition			
Housing material	PBT black			
Contact material	CuZn, gold-plated			
Thread material	CuSn nickel plated			
Gasket	NBR			
Cable construction	-			
Cable jacket	-			
Conductor insulation	-			
Cable diameter	4 – 6 mm			
Bending radius	-			
Storage temperature range	-40 °C – 90 °C			
Temperature range connector	-25 °C – 85 °C			
Termination	Screw terminal			
Gauge	max. 0.75 mm ²			
Mechanical service life	>100 insertion cycles			
Weight (kg/piece)	0.040			
Approvals	-			

Actuator sensor interface · M12 - connector

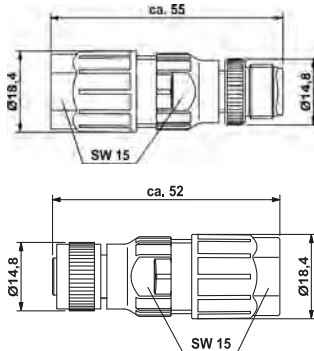
field wireable connector, M12 straight

Male / female - A coded

Fast connection method; IDC method of termination

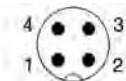


Dimensions



PIN assignment

490028



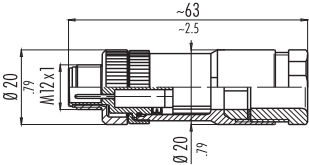
490029



Description		Part-No.	Type	PU
Male				
Number of terminations	4	490028	STGK-M12 4POL SNK	1
Female				
Number of terminations	4	490029	KUGK-M12 4POL SNK	1
Technical data				
		Male	Female	
Nominal voltage			AC/DC 24 V	
Nominal voltage range			250 V	
Rated current			4 A	
Number of terminations			4	
Cable length			–	
Status Indication			–	
Current Consumption per LED			–	
Coding			A	
Shielding			–	
General				
Form		M12 × 1, male	M12 × 1, female	
Test voltage			2.5 kV	
Pollution degree			3	
Insulation resistance			>10 ⁹ Ω	
Contact resistance			<5 mΩ	
Class of flammability according to UL 94			V0	
Protection class			IP 67, in screwed condition	
Housing material			PBT black	
Contact material			CuZn, gold-plated	
Thread material			CuSn nickel plated	
Gasket		–	NBR	
Cable construction			–	
Cable jacket			–	
Conductor insulation			–	
Cable diameter			4 – 7.5 mm	
Bending radius			–	
Storage temperature range			-40 °C – 90 °C	
Temperature range connector			-25 °C – 80 °C	
Termination			IDC method of termination	
Gauge			0.34–0.75 mm ²	
Mechanical service life			>100 insertion cycles	
Weight (kg/piece)			0.030	
Approvals			–	

Actuator sensor interface

Duo-plug M12 4-pole / 5-pole Screw terminal blocks

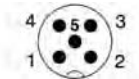


PIN assignment

490047

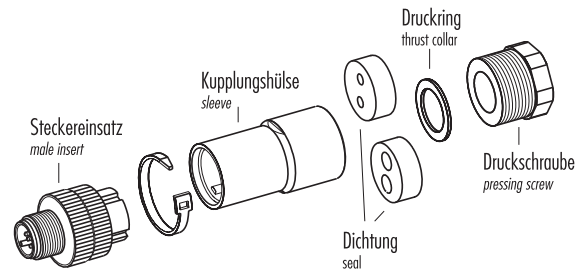


490048



Description		Part-No.	Type	PU
Number of terminations	4	490047	STGD4 - M 12	10
	5	490048	STGD5 - M 12	10
Technical data				
Nominal voltage			AC/DC 24 V	
Nominal voltage range	250 V		125 V	
Rated current			4 A	
Number of terminations	4		5	
Coding			A	
General				
Form			M12 × 1, male	
Test voltage	2.95 kV		1.75 kV	
Pollution degree			3	
Insulation resistance			$\geq 10^{10} \Omega$	
Contact resistance			$\leq 8 \text{ m}\Omega$	
Class of flammability according to UL 94			HB	
Protection class			IP 67	
Housing material			PA 66 black	
Contact material			CuZn	
Thread material			CuSn nickel plated	
Gasket			-	
Cable diameter			$2 \times 2.1 - 3 \text{ mm}$ or $4 - 5 \text{ mm}$	
Storage temperature range			$-40 - 90 \text{ }^\circ\text{C}$	
Operation temperature range			$-25 - 85 \text{ }^\circ\text{C}$	
Termination			Screw terminal	
Gauge			max. 0.75 mm^2	
Mechanical service life			>50 insertion cycles	
Weight (kg/piece)		0.0400		0.0420
Approvals			-	

Mounting diagram

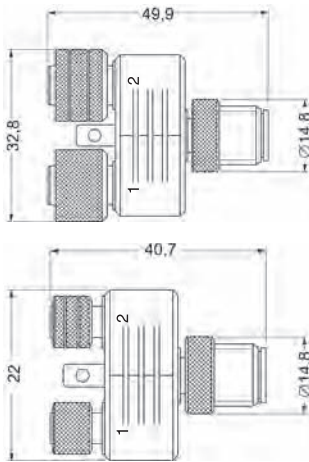


Actuator sensor interface

T piece

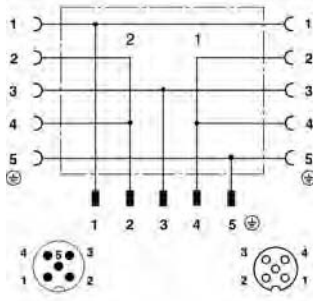
Plug M12 to 2x socket M12, 3-pole distributor PIN 2+4 used +PE

Plug M12 to 2x socket M8, 3-pole distributor

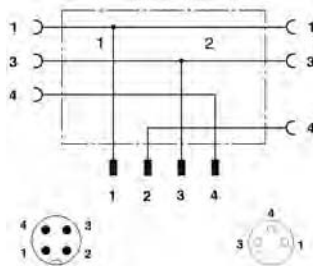


PIN assignment

490026



490038



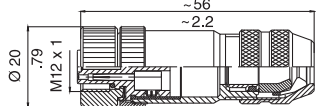
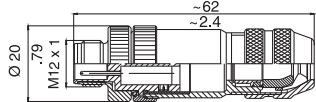
Description		Part-No.	Type	PU
Number of terminations	5	490026	AST M 12/2xM 12	10
	3	490038	AST M 12/2xM 8	10
Technical data		490026	490038	
Nominal voltage			AC/DC 24 V	
Nominal voltage		DC 60V		DC 30V
Rated current		4 A		3 A
Number of terminations		5		3
Coding			A	
General				
Termination			M12	
Rated insulation voltage (EN 50178)			100 V	
Test voltage			1.5 kV	
Pollution degree			3	
Insulation resistance			≥ 10GΩ	
Resistor			≤ 5mΩ	
Class of flammability according to UL 94			HB	
Protection class			IP 65/ IP 67	
Housing material			TPU black	
Contact material			CuZn	
Thread material			CuSn nickel plated	
Gasket			NBR	
Storage temperature range			-25 – 90 °C	
Operation temperature range			-25 – 90 °C	
Weight (kg/piece)		0.0290		0.0140
Approvals			-	
Accessories		Article number	Type	PU
Dynamometric key M12		490091	DM-SET M12	1

Actuator sensor interface · M12 - connector

field wireable connector, M12 straight shielded
 Male / female - A coded (CAN)
 Screw terminal

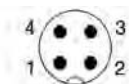


Dimensions

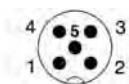


PIN assignment

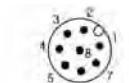
490050



490051



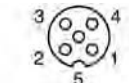
490054



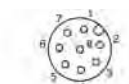
490052



490053



490077



Description	Part-No.		Type		PU	
Male						
Number of terminations	4	490050	STGK4-M12 (C)-A		1	
	5	490051	STGK5-M12 (C)-A		1	
	8	490054	STGK8-M12 (C)-A		1	
Female						
Number of terminations	4	490052	KUGK4-M12 (C)-A		1	
	5	490053	KUGK5-M12 (C)-A		1	
	8	490077	KUGK8-M12 (C)-A		1	
Technical data						
	Male			Female		
Nominal voltage	AC/DC 24 V					
Nominal voltage range	250 V	60 V	30 V	250 V	60 V	30 V
Rated current	4 A		2 A	4 A		2 A
Number of terminations	4	5	8	4	5	8
Cable length	-					
Status Indication	-					
Current Consumption per LED	-					
Coding	A					
Shielding	360°					
General						
Form	M12 × 1, male			M12 × 1, female		
Test voltage	2.5 kV	1.5 kV	800 V	2.5 kV	1.5 kV	800 V
Pollution degree	3					
Insulation resistance	>10 ¹⁰ Ω					
Contact resistance	<3 mΩ					
Class of flammability according to UL 94	V0					
Protection class	IP 67, in screwed condition					
Housing material	zinc diecast, nickel plated					
Contact material	CuZn, gold-plated					
Thread material	CuSn nickel plated					
Gasket	-			NBR		
Cable construction	-					
Cable jacket	-					
Conductor insulation	-					
Cable diameter	6 – 8 mm					
Bending radius	-					
Storage temperature range	-40 °C – 90 °C					
Temperature range connector	-25 °C – 85 °C					
Termination	Screw terminal					
Gauge	max. 0.75 mm ²		max. 0.5 mm ²	max. 0.75 mm ²		max. 0.5 mm ²
Mechanical service life	>100 insertion cycles					
Weight (kg/piece)	0.050					
Approvals	-					

Comments

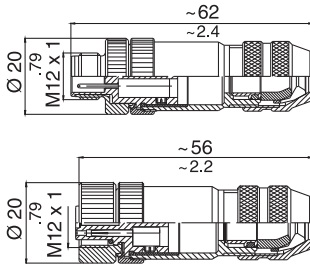
5-pole variant for device - network suitable

Actuator sensor interface · M12 - connector

field wireable connector, M12 straight shielded
 Male / female - B coded (Profibus, Interbus)
 Screw terminal

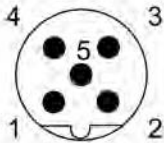


Dimensions

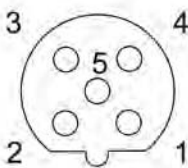


PIN assignment

490072



490073



Description		Part-No.	Type	PU
Male				
Number of terminations	5	490072	STGK5-M12 (C)-B	1
Female				
Number of terminations	5	490073	KUGK5-M12 (C)-B	1
Technical data				
		Male	Female	
Nominal voltage			AC/DC 24 V	
Nominal voltage range			max. 60 V	
Rated current			4 A	
Number of terminations			5	
Cable length			–	
Status Indication			–	
Current Consumption per LED			–	
Coding			B	
Shielding			360°	
General				
Form		M12 × 1, male	M12 × 1, female	
Test voltage			1.5 kV	
Pollution degree			3	
Insulation resistance			>10 ¹⁰ Ω	
Contact resistance			<3 mΩ	
Class of flammability according to UL 94			V0	
Protection class			IP 67, in screwed condition	
Housing material			Zinc diecast, nickel plated	
Contact material		CuZn, gold-plated	CuSn, gold-plated	
Thread material			CuSn nickel plated	
Gasket			–	
Cable construction			–	
Cable jacket			–	
Conductor insulation			–	
Cable diameter			6 – 8 mm	
Bending radius			–	
Storage temperature range			-40 °C – 90 °C	
Temperature range connector			-25 °C – 85 °C	
Termination			Screw terminal	
Gauge			max. 0.75 mm ²	
Mechanical service life			>100 insertion cycles	
Weight (kg/piece)			0.040	
Approvals			–	

Comments

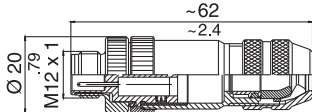
suitable for Profibus and Interbus.

Actuator sensor interface · M12 - connector

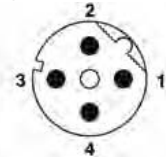
field wireable connector, M12 straight shielded
 Male / female - D coded (Ethernet)
 Screw terminal



Dimensions



PIN assignment



Description	Part-No.	Type	PU	
Male				
Number of terminations	4	490074	STGK4-M12 (C)-D	1
Technical data				
		Male		
Nominal voltage	AC/DC 24 V			
Nominal voltage range	max. 60 V			
Rated current	4 A			
Number of terminations	4			
Cable length	-			
Status Indication	-			
Current Consumption per LED	-			
Coding	D			
Shielding	360°			
General				
Form	M12 × 1, male			
Test voltage	2.95 kV			
Pollution degree	3			
Insulation resistance	>10 ¹⁰ Ω			
Contact resistance	<3 mΩ			
Class of flammability according to UL 94	V0			
Protection class	IP 67, in screwed condition			
Housing material	zinc diecast, nickel plated			
Contact material	CuZn, gold-plated			
Thread material	CuSn nickel plated			
Gasket	-			
Cable construction	-			
Cable jacket	-			
Conductor insulation	-			
Cable diameter	6 – 8 mm			
Bending radius	-			
Storage temperature range	-40 °C – 90 °C			
Temperature range connector	-25 °C – 85 °C			
Termination	Screw terminal			
Gauge	0.14–0.75 mm ²			
Mechanical service life	>100 insertion cycles			
Weight (kg/piece)	0.050			
Approvals	-			

Comments

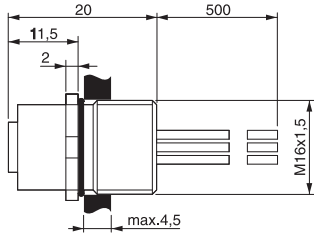
Ethernet suitable

Actuator sensor interface - M12 panel jack

M12 connectors panel mounted using M16 thread Male / female - A coded 0.5 m TPE wire

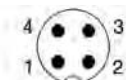


Dimensions

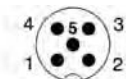


PIN assignment

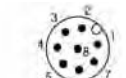
490067



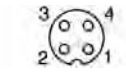
490068



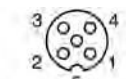
490069



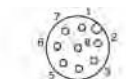
490064



490065



490066



Description	Part-No.	Type	PU	
Male				
Number of terminations	4	490067	STGE4-M12 0,5m	1
	5	490068	STGE5-M12 0,5m	1
	8	490069	STGE8-M12 0,5m	1
Female				
Number of terminations	4	490064	KUGE4-M12 0,5m	1
	5	490065	KUGE5-M12 0,5m	1
	8	490066	KUGE8-M12 0,5m	1

Technical data	Male			Female		
Nominal voltage	AC/DC 24 V					
Nominal voltage range	max. 250 V	max. 60 V	max. 30 V	max. 250 V	max. 60 V	max. 30 V
Rated current	4 A		2 A	4 A		2 A
Number of terminations	4	5	8	4	5	8
Cable length	0.5					
Status Indication	-					
Current Consumption per LED	-					
Coding	A					
Shielding	-					
General						
Form	M12 × 1, male			M12 × 1, female		
Test voltage	2.5 kV	1.5 kV	800 V	2.5 kV	1.5 kV	800 V
Pollution degree	3					
Insulation resistance	>10 ¹⁰ Ω					
Contact resistance	<3 mΩ					
Class of flammability according to UL 94	V0					
Protection class	IP 67, in screwed condition					
Housing material	Zinc diecast, nickel plated					
Contact material	CuZn, gold-plated					
Thread material	CuSn nickel plated					
Gasket	-			NBR		
Cable construction	4×0.34 mm ²	5×0.34 mm ²	8×0.25 mm ²	4×0.34 mm ²	5×0.34 mm ²	8×0.25 mm ²
Cable jacket	-					
Conductor insulation	TPE-wire, coloured					
Cable diameter	-					
Bending radius	-					
Storage temperature range	-40 °C – 90 °C					
Temperature range connector	-25 °C – 85 °C					
Termination	Thread M16					
Gauge	0.5 mm ²					
Mechanical service life	>100 insertion cycles					
Weight (kg/piece)	0.022	0.023	0.025	0.022	0.023	0.025

Accessories	Article number	Type	PU
Counter nut M16	600361	GMS M 16 × 1.5	100

Comments

Connection assignment

Pole / wire color:

- 1/ BN (brown)
- 2/ WH (white)
- 3/ BU (blue)
- 4/ BK (black)

- 1/ BN (brown)
- 2/ WH (white)
- 3/ BU (blue)
- 4/ BK (black)
- 5/ GY (grey)

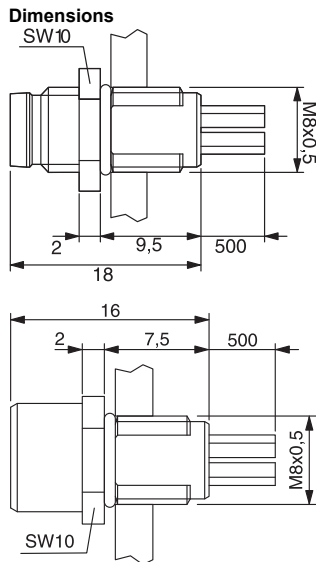
- 1/ WH (white)
- 2/ BN (brown)
- 3/ GN (green)
- 4/ YE (yellow)
- 5/ GY (grey)
- 6/ PK (pink)
- 7/ BU (blue)
- 8/ RD (red)

Actuator sensor interface · M8 panel jack

M8 panel connectors using M8 thread

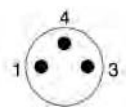
Male / female

0,5M TPE wire



PIN assignment

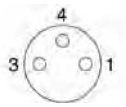
490062



490063



490060



490061



Description	Part-No.		Type		PU
Male					
Number of terminations	3	490062	STGE3-M8 0,5m		1
	4	490063	STGE4-M8 0,5m		1
Female					
Number of terminations	3	490060	KUGE3-M8 0,5m		1
	4	490061	KUGE4-M8 0,5m		1
Technical data					
	Male		Female		
Nominal voltage	AC/DC 24 V				
Nominal voltage range	max. 30 V				
Rated current	3 A				
Number of terminations	3	4	3	4	
Cable length	0.5				
Status Indication	-				
Current Consumption per LED	-				
Coding	-				
Shielding	-				
General					
Form	M8 × 1, male		M8 × 1, female		
Test voltage	1.5 kV	0.8 kV	1.5 kV	0.8 kV	
Pollution degree	3				
Insulation resistance	>10 ¹⁰ Ω				
Contact resistance	<3 mΩ				
Class of flammability according to UL 94	HB				
Protection class	IP 67, in screwed condition				
Housing material	zinc diecast, nickel plated				
Contact material	CuZn, gold-plated				
Thread material	CuSn nickel plated				
Gasket	-		NBR		
Cable construction	3×0.25 mm ²	4×0.25 mm ²	3×0.25 mm ²	4×0.25 mm ²	
Cable jacket	-				
Conductor insulation	TPE-wire, coloured				
Cable diameter	-				
Bending radius	-				
Storage temperature range	-40 °C – 90 °C				
Temperature range connector	-25 °C – 85 °C				
Termination	Thread M8				
Gauge	0.5 mm ²				
Mechanical service life	>100 insertion cycles				
Weight (kg/piece)	0.012	0.014	0.012	0.014	
Approvals	-				

Comments

Included in scope of delivery: M8 lock nut

Connection assignment

Pole / wire colour:

1/ BN (brown)

3/ BU (blue)

4/ BK (black)

1/ BN (brown)

2/ WH (white)

3/ BU (blue)

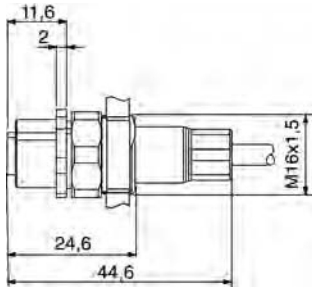
4/ BK (black)

Actuator sensor interface · M12 - panel jack ETHERNET

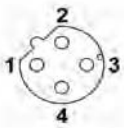
M12 panel connector using M16 thread Including Ethernet Cable Female - Ethernet D coded Dial cable, shielded



Dimensions



PIN assignment



Description	Part-No.	Type	PU	
Female				
Cable length	0.5	490082	KUGE4-M12 /ET 0,5m PUR	10
	1.0	490083	KUGE4-M12 /ET 1,0m PUR	10
	2.0	490084	KUGE4-M12 /ET 2,0m PUR	10
	5.0	490085	KUGE4-M12 /ET 5,0m PUR	10

Technical data		Female		
Nominal voltage		AC/DC 24 V		
Nominal voltage range		max. 30 V		
Rated current		4 A		
Number of terminations		4		
Cable length	0.5	1.0	2.0	5.0
Status Indication		-		
Current Consumption per LED		-		
Coding		D		
Shielding		360°		
General				
Form		M12 × 1, female		
Test voltage		2.5 kV		
Pollution degree		3		
Insulation resistance		>10 ¹⁰ Ω		
Contact resistance		<3 mΩ		
Class of flammability according to UL 94		HB		
Protection class		IP 67, in screwed condition		
Housing material		Zinc diecast, nickel plated		
Contact material		CuZn, gold-plated		
Thread material		CuSn nickel plated		
Gasket		NBR		
Cable construction		2 × 2 × AWG 26/7		
Cable jacket		-		
Conductor insulation		Ethernet-cable		
Cable diameter		6.7 mm		
Bending radius		15 x cable diameter		
Storage temperature range		-40 °C – 80 °C		
Temperature range connector		-25 °C – 80 °C		
Temperature range cable fixed				
Temperature range cable moving				
Weight (kg/piece)	0.055	0.078	0.133	0.281
Approvals		-		
Accessories		Article number	Type	PU
Counter nut M16		600361	GMS M 16 × 1.5	100
Comments				

Connection assignment

Pole / wire colour:

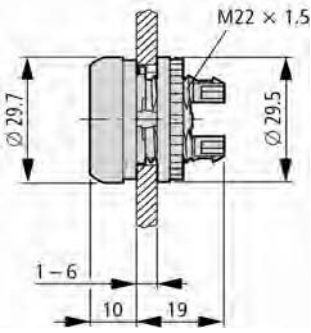
- 1/ YE (yellow)
- 2/ WH (white)
- 3/ OG (orange)
- 4/ BU (blue)

Actuator sensor interface · USB-panel connector

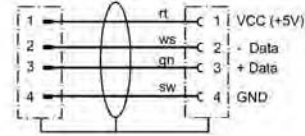
USB-panel connector for front installation with M22 thread
 USB connector Typ A on straight USB plug Type A with PVC cable
 Type: UBS-2.0 A/A



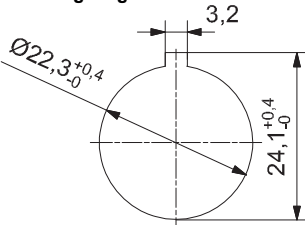
Dimensions



PIN assignment



Mounting diagram



Description	Part-No.	Type	PU
USB			
Cable length	0.3	499991	USB-2.0 A/A 0,3m PVC
	0.6	499992	USB-2.0 A/A 0,6m PVC
	0.8	490076	USB-2.0 A/A 0,8m PVC
	1.5	490078	USB-2.0 A/A 1,5m PVC
	2.0	490079	USB-2.0 A/A 2,0m PVC
	3.0	490080	USB-2.0 A/A 3,0m PVC
	5.0	490081	USB-2.0 A/A 5,0m PVC

Technical data		USB					
Nominal voltage		AC/DC 5 V					
Nominal voltage range		max. 30 V					
Rated current		500 mA					
Number of terminations		4					
Cable length	0.3 0.6 0.8 1.5 2.0 3.0 5.0						
Transfer rate		max. 480 Mbit/s					
USB standard		2.0					
Contact type		1 : 1					
Shielding		yes					
General		USB-A					
Form		USB-A					
Test voltage		-					
Pollution degree		3					
Insulation resistance		>10 ¹⁰ Ω					
Contact resistance		<30 mΩ					
Class of flammability according to UL 94		V0					
Protection class		IP 65 in closed and IP 20 in inserted condition					
Housing material		Connector: PA; plug: PBT, cover: TPU					
Contact material		CuSn, gold-plated					
Field installation		Front plate cutout D=22.5mm					
Cable construction		Supply: 2×AWG24; Data: 2×AWG28					
Cable jacket		PVC					
Cable diameter		4.4 mm					
Bending radius		20 x cable diameter					
Storage temperature range		-25 °C – 80 °C					
Operation temperature range		0 °C – 70 °C					
Temperature range connector		-					
Mechanical service life		>100 insertion cycles					
Dimension		(D×T) 29.5 × 29 mm, installation depth appr. 70 mm					
Weight (kg/piece)	0.035 0.040 0.055 0.060 0.065 0.090 0.110						
Approvals		-					

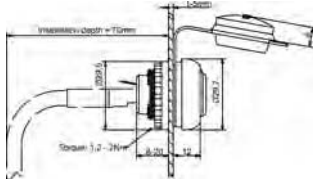
Comments
 Included in the delivery: captive safety cap

Actuator sensor interface - RJ45 panel connector

**RJ45 panel connector for front installation 22.5 mm female/female 1:1
Category 5e/6**

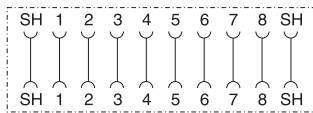


Dimensions

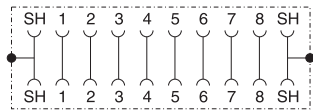


Circuit diagram

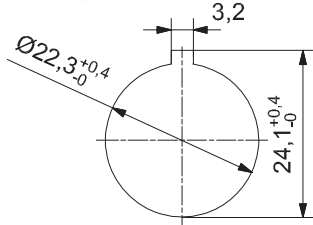
492075



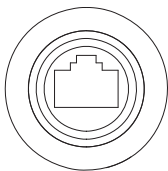
491075



Mounting diagram



front view:



Description	Part-No.	Type	PU
Category			
Cat. 5e	492075	RJ45 F/F 8/8 Cat.5e	1
Cat 6	491075	RJ45 F/F 8/8 Cat.6	1

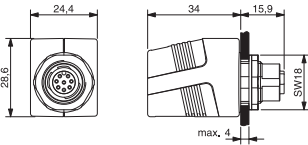
Technical data	492075	491075
Nominal voltage		AC 24 V
Nominal voltage range		AC 150 V
Rated current		1.5 A
Number of terminations		8
Cable length		–
Transmission frequency	100 MHz	250 MHz
Category	5e	6
USB standard		–
Contact type		1 : 1
Shielding	shield connected through	360° shielding
General		
Form		RJ45
Test voltage		–
Pollution degree		3
Insulation resistance		>500 MΩ
Contact resistance		< 30 mΩ
Class of flammability according to UL 94		V0
Protection class		IP 65 in closed and IP 20 in inserted condition
Housing material		PA-GF25; PBT Gf20; cover TPU
Contact material		CuSn
Field installation		Front plate cutout D=22.5mm
Cable construction		8 (4-pair)
Cable jacket		–
Cable diameter		–
Bending radius		–
Storage temperature range		-25 °C – 85 °C
Operation temperature range		-25 °C – 70 °C
Temperature range connector		–
Mechanical service life		<750 insertion cycles
Dimension		(D×T) 29.5 × 29 mm, installation depth appr. 70 mm
Weight (kg/piece)		0.022
Approvals		–

Actuator sensor interface · RJ45 panel connector

Control cabinet bushing M12 - RJ45 female/female 1:1 Category 5e

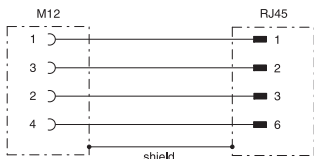


Dimensions

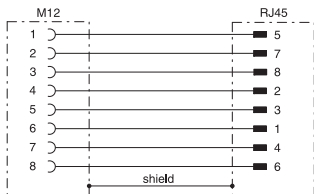


Circuit diagram

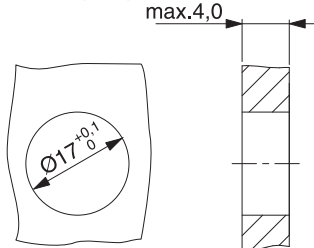
490105, 490106



490107, 490108



Mounting diagram



Description	Part-No.	Type	PU
4 pole 90°	490105	M12-R45 F/F 90° 4/4 Cat.5e PROFINET	1
4 pole 180°	490106	M12-R45 F/F 180° 4/4 Cat.5e PROFINET	1
8 pole 90°	490107	M12-R45 F/F 90° 8/8 Cat.5e	1
8 pole 180°	490108	M12-R45 F/F 180° 8/8 Cat.5e	1

Technical data	490105	490106	490107	490108
Nominal voltage			24 V	
Nominal voltage range			50 V	
Rated current			max. 1 A per contact	
Number of terminations	4			8
Cable length			-	
Transfer rate	100 Mbit/s			1 Gbit/s
Category			5e	
USB standard			-	
Contact type			1 : 1	
Shielding			360° shielding	
General				
Form			RJ45 / M12 x 1	
Test voltage			-	
Pollution degree			3	
Insulation resistance			>500 MΩ	
Contact resistance			< 30 mΩ	
Class of flammability according to UL 94			V0	
Protection class			IP 67 in screwed condition	
Housing material			PA	
Contact material			Phosphor bronze, gold-plated	
Field installation			-	
Cable construction			-	
Cable jacket			-	
Cable diameter			-	
Bending radius			-	
Storage temperature range			-25 °C – 85 °C	
Operation temperature range			-25 °C – 85 °C	
Temperature range connector			-	
Mechanical service life			≥ 750 insertion cycles	
Dimension			(Ø×D) 29.5 × 29 mm	
Weight (kg/piece)			0.037	
Approvals			-	
Standards		PROFINET		-

Accessories	Article number	Type	PU
Protective cover M12	499994	SK M12	50

Actuator sensor interface

Protective cover
M8, M12
Colour: black



Description	Part-No.	Type	PU	
Colour	black	499989	SK M 8	50
	black	499994	SK M 12	50
General	499989	499994		
Housing material		PVC		
Colour		black		
Class of flammability according to UL 94		V0		
Surface		-		
Termination	M8 × 1		M12 × 1	
Storage temperature range		-20 – 80 °C		
Operation temperature range		-20 – 80 °C		
Dimensions (w × h × d)				
Weight (kg/piece)		0.0020		
Wire		-		

Actuator sensor interface

Designation unit for M8, M12 cables
 Designation plate, designation sleeve
 Colour: white, transparent



Description	Part-No.	Type	PU	
Colour	white	499988	LB M 8//M12 4x23 mm	200
	transparent	499993	LBT M 8//M12 D/2-4 mm	500
	transparent	499995	LBT M 8//M12 D/4-7 mm	500
General	499988	499993	499995	
Housing material	Ultradur B4520		PVC	
Colour	white		transparent	
Class of flammability according to UL 94	V2		V0	
Surface		smooth		
Termination		-		
Storage temperature range		-50 – 80 °C		
Operation temperature range		-50 – 80 °C		
Dimensions (w × h × d)	4.0 × 23.0 mm		8.0 × 23.5 × 13.0 mm	
Weight (kg/piece)	0.0050		0.0030	
Wire	-	∅ 2-4mm	∅ 4-7mm	

Dimensions

