

# ELECTRICAL CONNECTORS

## Electrical connectors

- Co-molded or wired connectors for the connection of sensors and transducers.
- Available in various solutions with straight or angled cable output.
- Solutions with PVC and PUR cable.

**CFGM800225**



**3030146  
(CFGM800325)**



**3030148  
(CFGM800325P)**



**3030149  
(CFGM890325P)**



**CFGM800425P**



**CFGM890425P**



**CFGM890425PR**



**CMGM800310CFGM8003  
3030156  
(CMGM800320CFGM8003)**



**CMGM890310CFGM8003  
CMGM890320CFGM8003**



**CFGM1290225**



**CFGM1290325**



**CFGM1200430  
CFGM120041K**



**CFGM1290430**



**CFGM1200525P**



**3031158  
(CFGM1200825SP)**



**3031159  
(CFGM1290825SP)**



**CFGM1200825P**



**CFGM800300**



**CMGM800300**



**CFGM800400**





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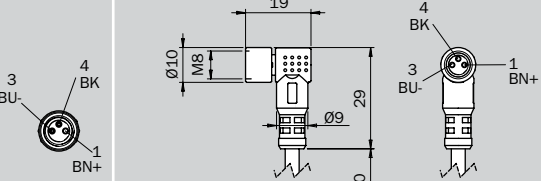
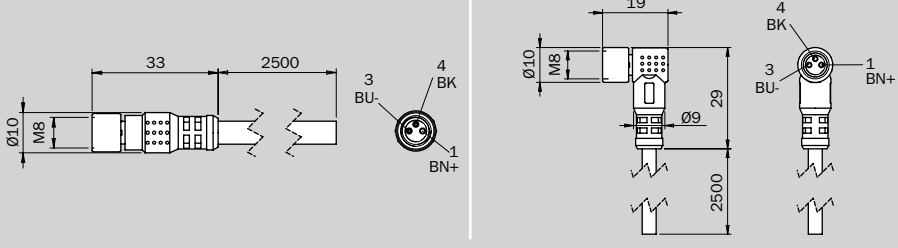
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Connector type	CFGM800225	3030146 (CFGM800325)
Description	M8 female connector with molded PVC cable	
Connector angle	straight 180°	
Protection rating	IP69K	
Dimensions (mm)		
PIN configuration		
	Brown (BN +); Blue (BU -); Black (BK OUT)	
Cable diameter (mm)	3	4
Cable material	PVC ( CEI2022 )	
Lead cross section	0.25 mm <sup>2</sup> (AWG 24)	
Number of leads	2	3
Cable length (m)	2.5	
Operating temperature (°C)	-25 ÷ 75	

Connector type	3030148 (CFGM800325P)	3030149 (CFGM890325P)
Description	M8 female connector with molded PVC cable	
Connector angle	straight 180°	angled 90°
Protection rating	IP69K	
Dimensions (mm)		
PIN configuration		
	Brown (BN +); Blue (BU -); Black (BK OUT)	
Cable diameter (mm)	4.3	
Cable material	PUR UL STYLE 21576	
Lead cross section	0.25 mm <sup>2</sup> (AWG 24)	
Number of leads	3	
Cable length (m)	2.5	
Operating temperature (°C)	-25 ÷ 75	

Connector type	CFGM800425P	CFGM890425P	CFGM890425PR
Description	M8 female connector with molded PVC cable		
Connector angle	straight 180°	angled 90°	angled 90° not standard
Protection rating	IP69K		
Dimensions (mm)			
PIN configuration	Brown (BN +); Blue (BU -); Black (BK OUT)		
Cable diameter (mm)	5.3		
Cable material	PUR UL style 21576		
Lead cross section	0.34 mm <sup>2</sup> (AWG 22)		
Number of leads	4		
Cable length (m)	2.5		
Operating temperature (°C)	-25 ÷ 75		
Connector type	CFGM800825P	CFGM800850P	CMGM800803P
Description	M8 female connector with molded PUR cable		M8 male connector with molded PUR cable
Connector angle	straight 180°		
Protection rating	IP69K		
Dimensions (mm)			
PIN configuration	Brown (BN +); Blue (BU -); Black (BK OUT); White (WH OUT); Green GN; Yellow YE; Grey GY; Pink PK; Red RD		
Cable diameter (mm)	5.2		
Cable material	PUR (CEI2022)		
Lead cross section	0.14 mm <sup>2</sup> (AWG 26)		
Number of leads	8		
Cable length (m)	2.5	5	0.3
Operating temperature (°C)	-25 ÷ 75		

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Connector type	CMGM800310CFGM8003	3030156 (CMGM800320CFGM8003)
Description	Extension with M8 male-female connectors with molded cable	
Connector angle	male straight 180° / female straight 180°	
Protection rating	IP69K	
Dimensions (mm)		
PIN configuration	Brown (BN +); Blue (BU -); Black (BK OUT)	
Cable diameter (mm)	4	
Cable material	PVC ( CEI2022 )	
Lead cross section	0.25 mm <sup>2</sup> (AWG 24)	
Number of leads	3	
Cable length (m)	1	2
Operating temperature (°C)	-25 ÷ 75	

Connector type	CMGM890310CFGM8003	CMGM890320CFGM8003
Description	Extension with M8 male-female connectors with molded cable	
Connector angle	male straight 90° / female straight 90°	
Protection rating	IP69K	
Dimensions (mm)		
PIN configuration	Brown (BN +); Blue (BU -); Black (BK OUT)	
Cable diameter (mm)	4	
Cable material	PVC ( CEI2022 )	
Lead cross section	0.25 mm <sup>2</sup> (AWG 24)	
Number of leads	3	
Cable length (m)	1	2
Operating temperature (°C)	-25 ÷ 75	

Connector type	CFGM1290225	CFGM1290325
Description	M12 female connector with molded PVC cable	
Connector angle	angled 90°	
Protection rating	IP69K	
Dimensions (mm)		
PIN configuration	Brown BN (+); Blue BU (-); Black BK (OUT) NC not connected	
Cable diameter (mm)	3	4
Cable material	PVC ( CEI2022 )	
Lead cross section	0.25 mm <sup>2</sup> (AWG 24)	
Number of leads	2	3
Cable length (mm)	2.5	
Operating temperature (°C)	-25 ÷ 75	

Connector type	CFGM120041K	CFGM1200430	CFGM1290430
Description	M12 female connector with molded PVC cable		
Connector angle	straight 180°		angled 90°
Protection rating	IP69K		
Dimensions (mm)			
PIN configuration	Brown BN (+); Blue BU (-); Black BK (OUT); White WH (OUT)		
Cable diameter (mm)	5.1		
Cable material	PVC ( CEI2022 )		
Lead cross section	0.34 mm <sup>2</sup> (AWG 22)		
Number of leads	4		
Cable length (m)	10	3	
Operating temperature (°C)	-25 ÷ 75		

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Connector type	CFGM1200525P	3031157 (CFGM1200825P)
Description	M12 female connector with molded PUR cable	
Connector angle	straight 180°	
Protection rating	IP69K	
Dimensions (mm)		
PIN configuration		
	Brown BN (+); Blue BU (-); Black BK (OUT); White WH (OUT); Green GN; Yellow YE; Grey GY; Pink PK; Red RD	
Cable diameter (mm)	6.4	6.5
Cable material	PUR UL STYLE	PUR
Lead cross section	-	0.25 mm <sup>2</sup> (AWG 24)
Number of leads	5	8
Cable length (m)	2.5	
Operating temperature (°C)	-25 ÷ 75	

Connector type	3031158 (CFGM1200825SP)	3031159 (CFGM1290825SP)
Description	M12 female connector with shielded molded PUR cable	
Connector angle	straight 180°	angled 90°
Protection rating	IP69K	
Dimensions (mm)		
PIN configuration		
	Brown BN (+); Blue BU (-); Black BK (OUT); White WH (OUT); Green GN; Yellow YE; Grey GY; Pink PK; Red RD	
Cable diameter (mm)	7	
Cable material	PUR	
Lead cross section	0.25 mm <sup>2</sup> (AWG 24)	
Number of leads	8	
Cable length (m)	2.5	
Operating temperature (°C)	-25 ÷ 75	

Connector type	CFGM800300	CMGM800300
Description	M8 female connector to be wired	M8 male connector to be wired
Number of poles	3	
Wiring method	Screw connector	
Protection rating	IP67	
Dimensions (mm)		
PIN configuration		
Maximum cable diameter (mm)	5.5	
Connector type	CFGM800400	CMGM800400
Description	M8 Female connector to cable	M8 Male connector to cable
Number of poles	4	
Wiring method	Screw connection	
Protection rating	IP67	
Dimensions (mm)		
PIN configuration		
Maximum cable diameter (mm)	5.5	
Connector type	CFGM800800	CMGM800800
Description	M8 female connector to be soldered	M8 male connector to be soldered
Number of contacts	8	
Wiring mode	Solder connection	
Protection class	IP67	
Dimensions (mm)		
PIN configuration		
Max cable diameter (mm)	5.5	

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Connector type	CFSM890225	CFSM890325
Description	M18 SNAP female connector with molded PVC cable	
Connector angle	angled 90°	
Protection rating	IP69K	
Dimensions (mm)		
PIN configuration	Brown BN (+); Blue BU (-); Black BK (OUT); Not connected NC	
Cable diameter (mm)	3.6	4.3
Cable material	PVC ( CEI2022 )	
Lead cross section	0.25 mm <sup>2</sup> (AWG 24)	
Number of leads	2	3
Cable length (m)	2.5	
Operating temperature (°C)	-25 ÷ 75	

Connector type	CFGM800425PC	CFGM890425PC
Description	M8 female connector with molded PVC cable	
Connector angle	straight 180°	angled 90°
Protection rating	IP69K	
Dimensions (mm)		
PIN configuration	Brown BN (+); Blue BU (-); Black BK (OUT); White WH (OUT)	
Cable diameter (mm)	2.5	
Cable material	PUR	
Lead cross section	0.096 mm <sup>2</sup>	
Number of leads	4	
Cable length (m)	2.5	
Operating temperature (°C)	-25 ÷ 75	

Connector type	CM800303CF8003P	CM800305CF8003P	CM800312CF8003P
Description	Extension with M8 male-female connectors with molded cable		
Connector angle	male straight 180° / female straight 180°		
Protection rating	IP69K		
Dimensions (mm)			
PIN configuration	<p>Brown BN (+); Blue BU (-); Black BK (OUT)</p>		
Cable diameter (mm)	2.2		
Cable material	PUR		
Lead cross section	0.096 mm <sup>2</sup>		
Number of leads	3		
Cable length (m)	L*	0.3	0.5
Operating temperature (°C)	-25 +75		

Connector type	CFGM800325PSB	CFGM890325PSB
Description	M8 female connector with molded PVC cable	
Connector angle	straight 180°	angled 90°
Protection rating	IP69K	
Dimensions (mm)		
PIN configuration	<p>Brown BN (+); Blue BU (-); Black BK (OUT)</p>	
Cable diameter (mm)	2.2	
Cable material	PUR	
Lead cross section	0.096 mm <sup>2</sup>	
Number of leads	3	
Cable length (m)	2.5	
Operating temperature (°C)	-25 + 75	

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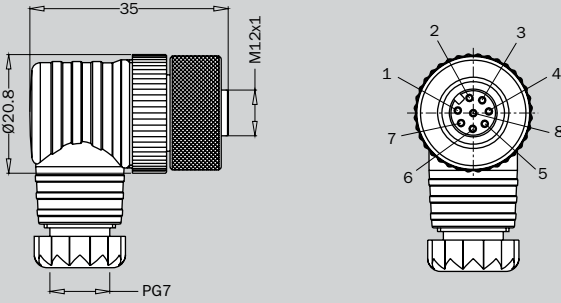
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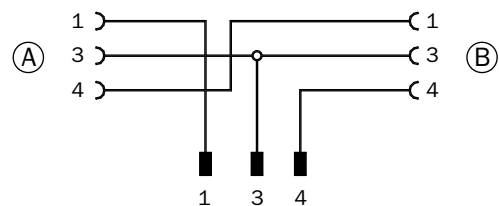
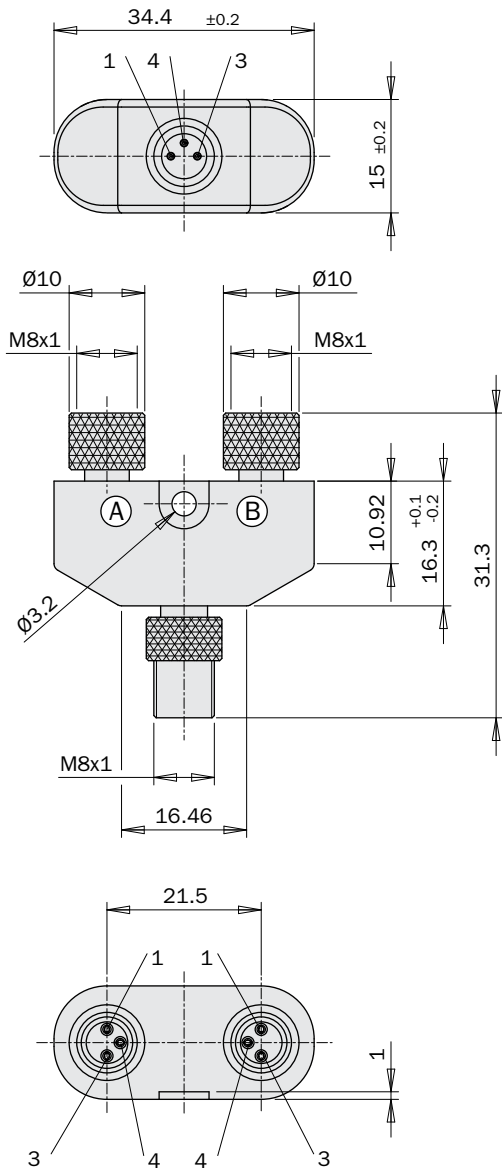
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Connector type	CFGM1290800C
Contact type	Female
Number of contacts	8
Case material	PA66 +30% fiberglass
Angle	90°
Case color	Black
Dimensions (mm) PIN configuration	
Cable gland	PG7
Rated voltage	30V AC/DC
Rated current	2A
Contact material	phosphor bronze
Contact treatment	Gold-plated nickel +0.45 µm
Contact treatment	Zn Al/Ni
O-ring	NBR
Protection rating	IP67
Operating temperature	-25°C ÷ +90°C

**M8, 3-pole Y-coupler**

This coupler can be used to create the logic series of the outputs of two normally-open (NO) PNP or REED sensors.

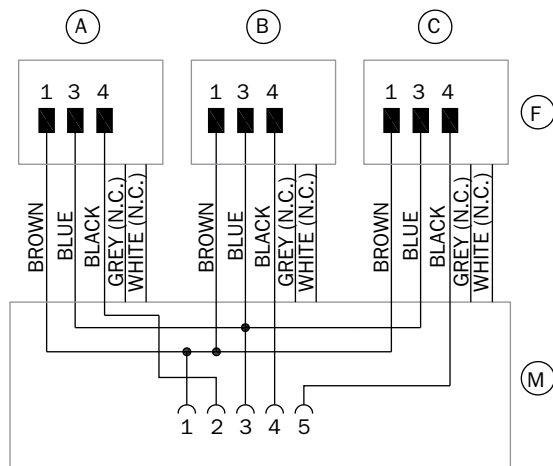
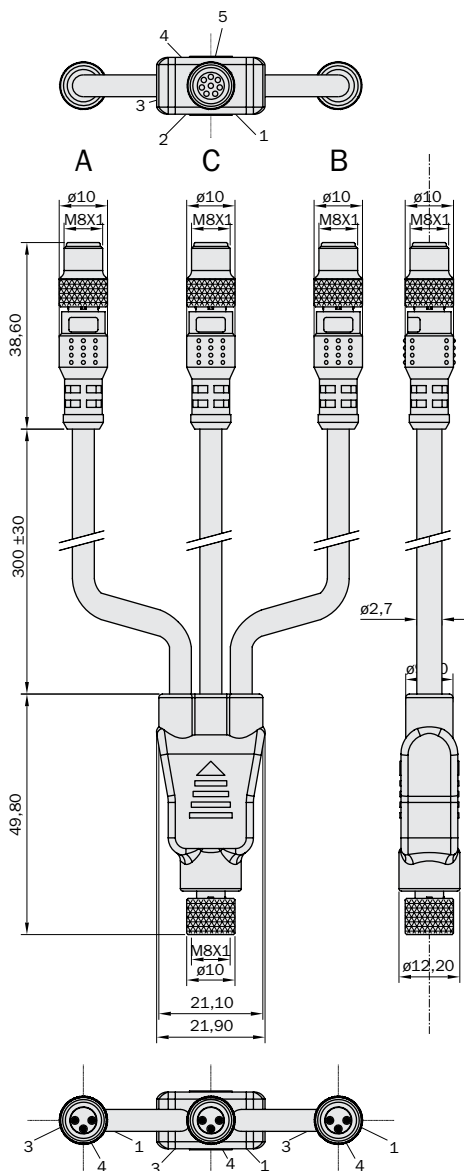
	<b>CMGM8CFGM8X2Y</b>
Case material	Polypropylene
Contacts material	Gold-plated
Lock nut material	Brass
Circuit type	PNP/Reed 2-sensor logic series
Rated voltage	60 V AC/DC
Rated current	4 A
Protection rating	IP67 (EN60529)
Voltage drop	max 3 V



## 8-pole M8 Y-coupler

This coupler can be used combined with PRO-SS/PRO-SN sensors (with M8 output) for precise connection, jointly with the SENSOR BOX (SBM) modular version.

CFGM8CMGM8X3Y	
Case material	Polypropylene
Contacts material	Gold-plated
Lock nut material	Brass
Circuit type	1xM8: 8 poles female / 3xM8: 3 poles male
Rated voltage	30 V AC/DC
Rated current	1.5 A
Protection rating	IP69K



Connector type	CFGM1200500	CMGM1200500
Description	M8 female connector to be wired	M8 male connector to be wired
Number of poles	5	
Wiring method	Screw connector	
Protection rating	IP67	
Dimensions (mm)		
PIN configuration		
Maximum cable diameter (mm)	8.6	

Connector type	CFGM1200800	CMGM1200800
Description	M8 Female connector to cable	M8 Male connector to cable
Number of poles	8	
Wiring method	Screw connection	
Protection rating	IP67	
Dimensions (mm)		
PIN configuration		
Maximum cable diameter (mm)	6	

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Connector type	CM12CF12-4-15
Description	Extension with M12 male-female connectors with molded cable
Connector angle	straight 180°
Protection rating	IP69K
Dimensions (mm)	<p>Technical drawing showing a side view of the connector with a total length of 1500 mm. The cable length is 49.5 mm, and the connector length is 45.5 mm. The cable diameter is Ø14 mm. The connector has an M12x1 thread. The pin configuration is shown as follows: 3 OG(-), 4 BU(chb), 2 WH(cha), 5 N.C., 1 YE(+).</p>
PIN configuration	<p>Blue BU (-); White WH; Yellow YE; Orange OG</p>
Cable diameter (mm)	6.6
Cable material	PUR UL style 21576 BUS CAT.5E
Lead cross section	0.34 mm <sup>2</sup> (AWG 22)
Number of leads	4
Cable length (m)	1.5
Operating temperature (°C)	-25 ÷ 75

Connector type	CM12CF12CF8T4	CM1200400TERM
Description	M12 electric connector with M8-4 poles molded cable	M12 terminal connector
Connector angle	straight 180°	
Protection rating	IP69K	
Dimensions (mm)	<p>Technical drawing showing a side view of the connector with a total length of 250 mm. The cable length is 33 mm, and the connector length is 49.5 mm. The cable diameter is Ø10 mm. The connector has an M8x1 thread. The pin configuration is shown as follows: 3 BU, 2 WH, 4 BK, 1 BN, 1 BN, 2 WH, 4 BK, 3 BU.</p>	<p>Technical drawing showing a side view of the connector with a total length of 49.5 mm. The cable diameter is Ø14 mm. The connector has an M12x1 thread. The pin configuration is shown as follows: 4, 3, 1, 2.</p>
PIN configuration	Brown BN (+); Blue BU (-); Black BK (OUT); White WH (OUT)	
Cable diameter (mm)	5	-
Cable material	PUR	-
Lead cross section	0.34 mm	-
Number of leads	4	-
Cable length (m)	2.5	-
Operating temperature (°C)	-25 ÷ 75	