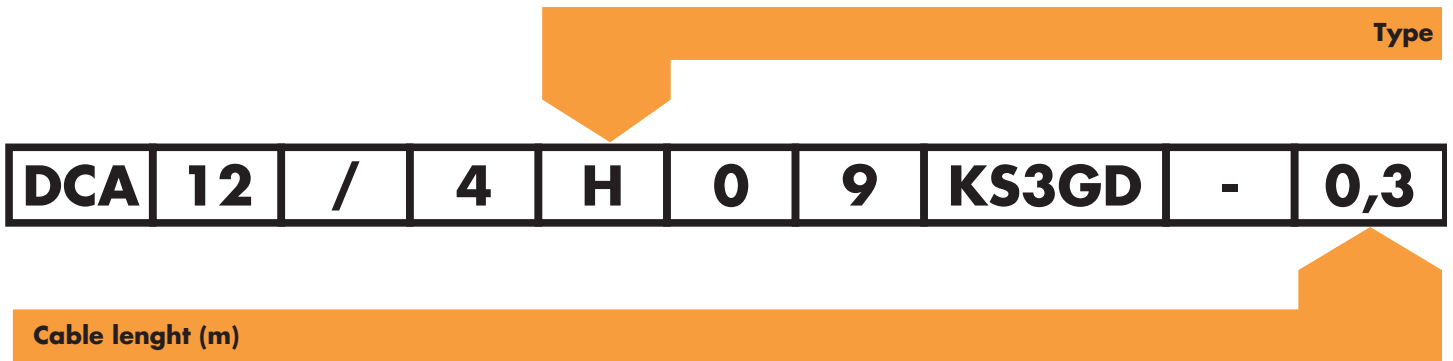


General informations:

This section presents sensors already cabled to male connectors for particular applications. Specific cable lengths are available upon request on all the products. BDC versions with rotating nut allow the direct connection to the connection boxes reducing the costs and improving the reliability of the plant. Other solutions with different products are possible according to customer specification. The suggested connectors have to be matched to the sensors according to the cable sections, indicated on the ordering references tables inside the catalogue.

HOW TO COMPOSE THE ORDERING REFERENCES



Type	Dimensions	Manufacturer	Series	Degree of protection	Suitable for cables diameter (mm)
H		BDC	M12 x 1 rotating nut	IP68	5

Note: more detailed technical data are available on specific manufacturers data sheets.

CONNECTORS MOULDED WITH CABLE

N° Connector:	8B	= right angled female M12 x 1 for d.c. sensors
	9	= straight male M12 x 1 for d.c. sensors
	9B	= right angled male M12 x 1 for d.c. sensors
	10	= straight female M12 x 1 for d.c. sensors

C	10	/	0	0	3	2	PV	A
----------	-----------	----------	----------	----------	----------	----------	-----------	----------

N° conductors:	2	= 2 wires
	3	= 3 wires
	4	= 4 wires
	5	= 5 wires
Cable length m.	2	= 2 m.
	5	= 5 m.
	10	= 10 m.
Cable material:	PV	= PVC (blue for 1GD; grey for 3GD)
	PR	= PUR (blue for 1GD; black for 3GD)
	T	= Thermoplastic grey rubber (-40° ÷ + 140° C)
Atex Versions:	A	= Category 1G-1D
	3GD	= Category 3G-3D

Note:

When using female connectors, please consider an insertion length inside the sensor, which is:

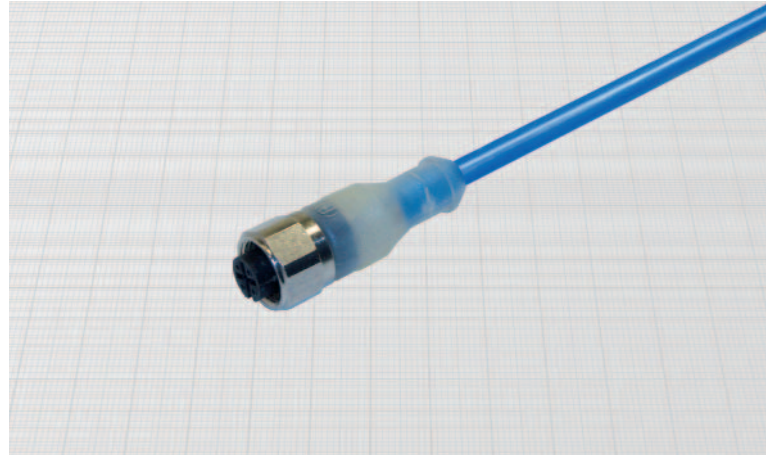
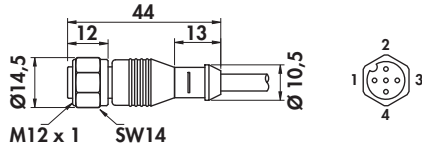
M12 connectors = 8 mm

I.E. Sensor DCA8/4309KS3GD total length = 60 mm
 Connector C8B/0032PV3GD total length = 29 mm
 Overall dimension sensor + connector = (60 + 29) - 8 = 81 mm.

For ATEX sensors •
 Degree of protection IP68 - Straight in d.c. •
 Moulded with cable •

According to 94/9/CE - EN60079-0 - EN 60947-5-2 •

Connector 10A



General features:

Female connectors of this section can be matched to the BDC ATEX proximity sensors according to the category as indicated on the table below. They must be separately ordered.

The 2-wire model is suitable for NAMUR sensors either on N.O. or N.C. version. It is possible to use it in zone 0 or 20 without additional protection against electrostatic charges.

Particular moulding processes assure the maximum sealing, making these products suitable even for heavy applications.

Note: use in hazardous area must be according to the instruction manual supplied together the sensors.

Technical data:

- Operating voltage: max 50 Vac/75 Vdc
- Maximum current: 4 A
- Contact resistance: ≤ 5 mΩ
- Contacts: CuZn, brass pre-nickel and gold plated (0,8 μm) self-locking in CuZn, nickel plated brass
- Locking nut: for PUR and PVC versions: - 25° ÷ + 90°C for HT versions: - 40° ÷ + 120°C
- Temperature range: for PUR and PVC versions: - 25° ÷ + 90°C for HT versions: - 40° ÷ + 120°C
- Degree of protection: IP68 with plug in fully locked position

* = HT, thermoplastic rubber - 40° ÷ + 140°C

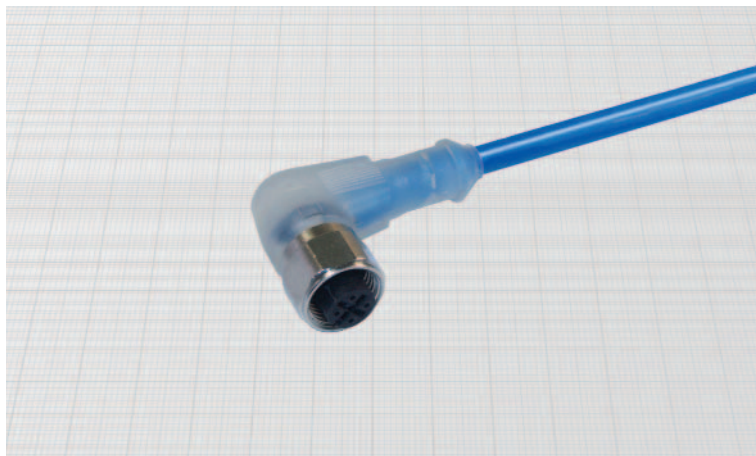
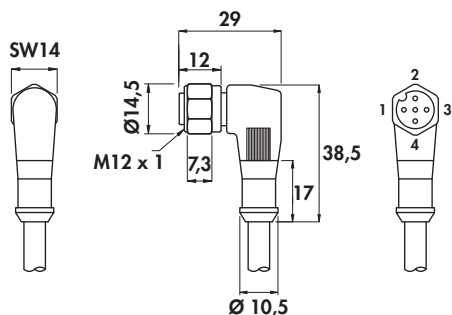
ORDERING REFERENCES

Connector n°	ORDERING REFERENCES				
	Category	1G-1D	3G-3D	3G-3D	
	Zone	0-20	2-22	2-22	
	Cap. cable pF/m	140	170	170	
	Indutt. cable μH/m	0,4	0,8	0,8	
	Cable	2-wires (blue)	3-wires (grey)	4-wires (grey)	
	Section	2 x 0,75 mm ² - ø ext. 5	3 x 0,50 mm ² - ø ext. 5	4 x 0,35 mm ² - ø ext. 5	
	Material	Length m.	Wiring Diagram		
10A	PVC	2	C10/0022PVA	C10/0032PV3GD	C10/0042PV3GD
10A	PVC	5	C10/0025PVA	C10/0035PV3GD	C10/0045PV3GD
10A	PVC	10	C10/00210PVA	C10/00310PV3GD	C10/00410PV3GD
10A	PUR	2	C10/0022PRA	C10/0032PR3GD	C10/0042PR3GD
10A	PUR	5	C10/0025PRA	C10/0035PR3GD	C10/0045PR3GD
10A	PUR	10	C10/00210PRA	C10/00310PR3GD	C10/00410PR3GD
10A	HT*	2	-	C10/0032T3GD	C10/0042T3GD
10A	HT*	5	-	C10/0035T3GD	C10/0045T3GD
10A	HT*	10	-	C10/00310T3GD	C10/00410T3GD

FEMALE CONNECTORS M12 x 1

- For ATEX sensors
- Right angled in d.c. - Degree of protection IP68
- Moulded with cable
- According to 94/9/CE - EN60079-0 - EN60947-5-2

Connector 8A



General features:

Female connectors of this section can be matched to the BDC ATEX proximity sensors according to the category as indicated on the table below. They must be separately ordered.

The 2-wire model is suitable for NAMUR sensors either on N.O. or N.C. version. It is possible to use it in zone 1 or 21 without additional protection against electrostatic charges.

Particular moulding processes assure the maximum sealing, making these products suitable even for heavy applications.

Note: use in hazardous area must be according to the instruction manual supplied together the sensors.

Technical data:

- Operating voltage: max 50 Vac/75 Vdc
- Maximum current: 4 A
- Contact resistance: $\leq 5 \text{ m}\Omega$
- Contacts: CuZn, brass pre-nickel and gold plated (0,8 μm)
- Locking nut: self-locking in CuZn, nickel plated brass
- Temperature range: for PUR and PVC versions: $-25^\circ \div +90^\circ\text{C}$
For HT versions: $-40^\circ \div +120^\circ\text{C}$
- Degree of protection: IP68 with plug in fully locked position

* = HT, thermoplastic $-40^\circ \div +140^\circ\text{C}$

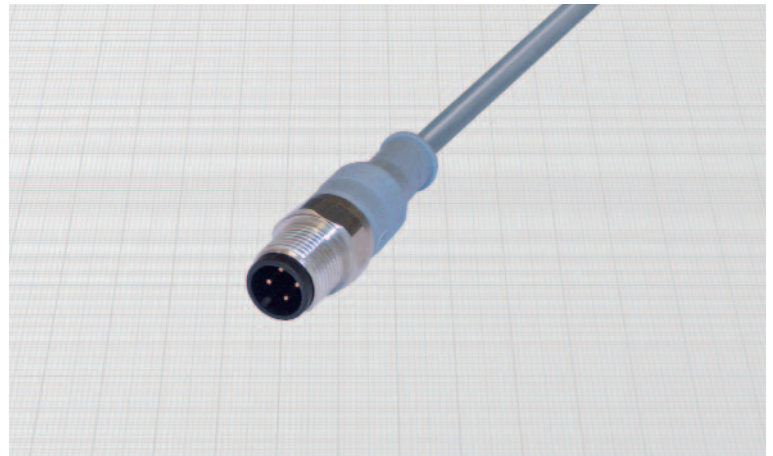
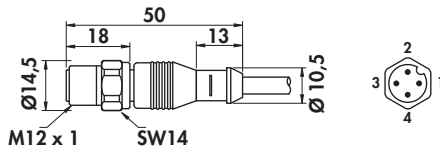
ORDERING REFERENCES

Connector n°	ORDERING REFERENCES														
	Category	2G-2D	3G-3D	3G-3D											
	Zone	1-21	2-22	2-22											
	Cap. cable pF/m	140	170	170											
	Indutt. cable $\mu\text{H}/\text{m}$	0,4	0,8	0,8											
	Cable	2-wires (blue)	3-wires (grey)	4-wires (grey)											
	Section	2 x 0,75 mm ² - \varnothing ext. 5	3 x 0,50 mm ² - \varnothing ext. 5	4 x 0,35 mm ² - \varnothing ext. 5											
Material	Length m.	<table border="0"> <tr> <td>1) brown +</td> <td>1) brown +</td> <td>1) brown +</td> </tr> <tr> <td>2) blue -</td> <td>4) black output NO</td> <td>4) black output NO</td> </tr> <tr> <td></td> <td>2) white output NC</td> <td>2) white output NC</td> </tr> <tr> <td></td> <td>3) blue -</td> <td>3) blue -</td> </tr> </table>		1) brown +	1) brown +	1) brown +	2) blue -	4) black output NO	4) black output NO		2) white output NC	2) white output NC		3) blue -	3) blue -
1) brown +	1) brown +	1) brown +													
2) blue -	4) black output NO	4) black output NO													
	2) white output NC	2) white output NC													
	3) blue -	3) blue -													
8A	PVC	2	C8B/0022PVA	C8B/0032PV3GD	C8B/0042PV3GD										
8A	PVC	5	C8B/0025PVA	C8B/0035PV3GD	C8B/0045PV3GD										
8A	PVC	10	C8B/00210PVA	C8B/00310PV3GD	C8B/00410PV3GD										
8A	PUR	2	C8B/0022PRA	C8B/0032PR3GD	C8B/0042PR3GD										
8A	PUR	5	C8B/0025PRA	C8B/0035PR3GD	C8B/0045PR3GD										
8A	PUR	10	C8B/00210PRA	C8B/00310PR3GD	C8B/00410PR3GD										
8A	HT*	2	-	C8B/0032T3GD	C8B/0042T3GD										
8A	HT*	5	-	C8B/0035T3GD	C8B/0045T3GD										
8A	HT*	10	-	C8B/00310T3GD	C8B/00410T3GD										

For ATEX applications •
 Straight in d.c. •
 Moulded with cable •

According to 94/9/CE - EN60079-0 - EN 60947-5-2 •

Connector 9A



General features:

Particular moulding processes assure the maximum sealing, making these products suitable even for heavy applications.

Note: use in hazardous area must be according to the instruction manual supplied together the sensors.

Technical data:

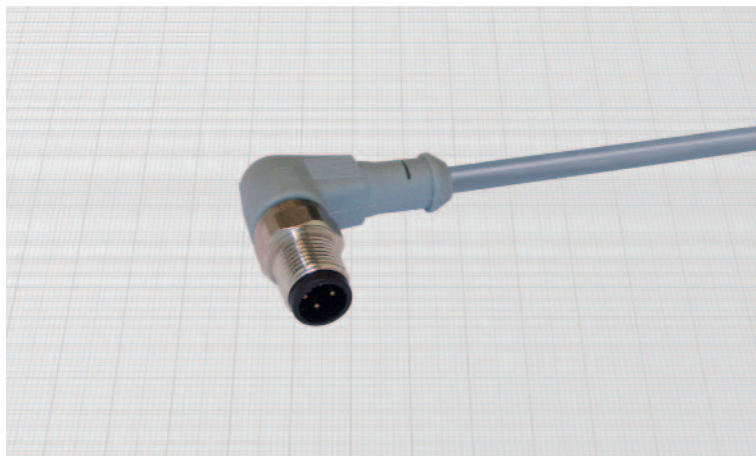
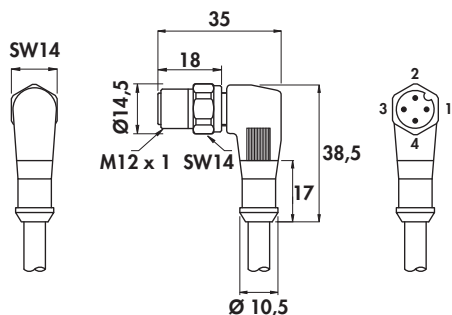
- Operating voltage: max 50 Vac/75 Vdc
- Maximum current: 4 A
- Contact resistance: $\leq 5 \text{ m}\Omega$
- Contacts: CuZn, brass pre-nickel and gold plated (0,8 μm)
- Locking nut: self-locking in CuZn, nickel plated brass
- Temperature range: $-25^\circ \div +90^\circ\text{C}$
- Degree of protection: IP68 with plug in fully locked position

			ORDERING REFERENCES	
Connector n°	Category		3G - 3D	3G - 3D
	Zone		2 - 22	2 - 22
	Cap. cable pF/m		170	170
	Indutt. cable $\mu\text{H}/\text{m}$		0,8	0,8
	Cable		3-wires (grey)	4-wires (grey)
	Section		3 x 0,50 mm ² - \varnothing ext. 5	4 x 0,35 mm ² - \varnothing ext. 5
	Material	Length m.	1 > brown + 4 > black output 3 > blue -	
		1 > brown + 4 > black output NO 2 > white output NC 3 > blue -		
9A	PVC	2	C9/0032PV3GD	C9/0042PV3GD
9A	PVC	5	C9/0035PV3GD	C9/0045PV3GD
9A	PVC	10	C9/00310PV3GD	C9/00410PV3GD
9A	PUR	2	C9/0032PR3GD	C9/0042PR3GD
9A	PUR	5	C9/0035PR3GD	C9/0045PR3GD
9A	PUR	10	C9/00310PR3GD	C9/00410PR3GD

MALE CONNECTORS M12 x 1

- For ATEX applications
- Right angled in d.c. - Degree of protection IP68
- Moulded with cable
- According to 94/9/CE - EN60079-0 - EN60947-5-2

Connector 9C



General features:

Note: use in hazardous area must be according to the instruction manual supplied together the sensors.

Technical data:

- Operating voltage: max 50 Vac/75 Vdc
- Maximum current: 4 A
- Contact resistance: $\leq 5 \text{ m}\Omega$
- Contacts: CuZn, brass pre-nickelated and gold plated (0,8 μm)
- Locking nut: selflocking in CuZn, nickel plated brass
- Temperature range: $-25^\circ \div +90^\circ\text{C}$
- Degree of protection: IP68 with plug in fully locked position

		ORDERING REFERENCES		
Connector n°	Category	3G - 3D	3G - 3D	
	Zone	2 - 22	2 - 22	
	Cap. cable pF/m	170	170	
	Indutt. cable $\mu\text{H}/\text{m}$	0,8	0,8	
	Cable	3-wires (grey)	4-wires (grey)	
	Section	3 x 0,50 mm ² - \varnothing ext. 5	4 x 0,35 mm ² - \varnothing ext. 5	
	Material	Length m.	1 > brown + 4 > black output 3 > blue -	1 > brown + 4 > black output NO 2 > white output NC 3 > blue -
9C	PVC	2	C9B/0032PV3GD	C9B/0042PV3GD
9C	PVC	5	C9B/0035PV3GD	C9B/0045PV3GD
9C	PVC	10	C9B/00310PV3GD	C9B/00410PV3GD
9C	PUR	2	C9B/0032PR3GD	C9B/0042PR3GD
9C	PUR	5	C9B/0035PR3GD	C9B/0045PR3GD
9C	PUR	10	C9B/00310PR3GD	C9B/00410PR3GD

MOULDED CONNECTING CABLES FOR ATEX SENSORS

N° Male connector:

**9
9B**

= straight M12 x 1
= right angled M12 x 1

N° Female connector:

**8B
10**

= right angled M12 x 1
= straight M12 x 1

C9	/	C10	/	00	2	-	0,6	PV	A
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00 = without LED

N° conductors:
2 = 2 wires
3 = 3 wires
4 = 4 wires

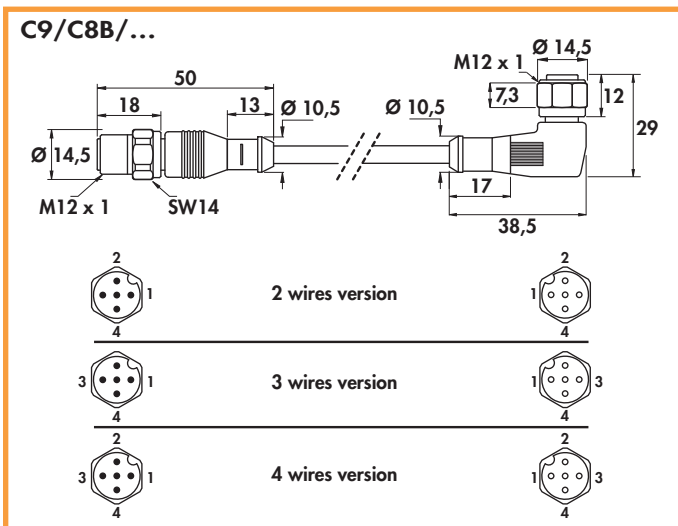
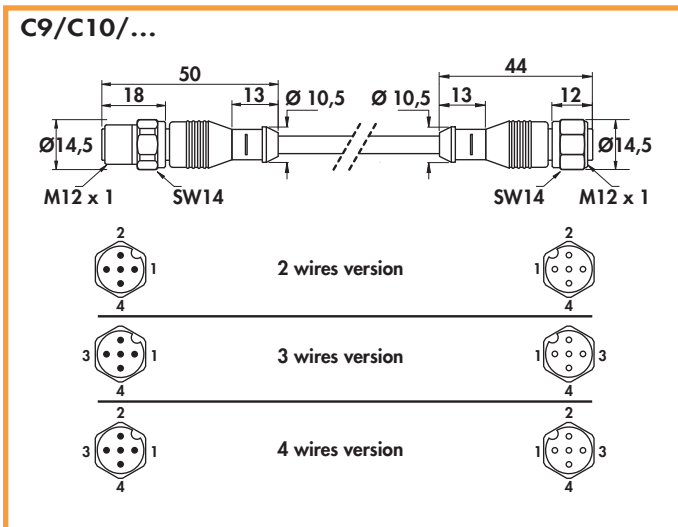
Cable length
0,6 = 0,6 m
1 = 1 m
2 = 2 m
 Other cable lengths upon request

Cable material:
PV = PVC
PR = PUR

Category:
A = 1G-1D or 2G-2D
3GD = 3G-3D

MALE M12 x 1 straight •
FEMALE M12 x 1 •

According to 94/9CE - EN60079-0 - EN60947-5-2 •



Technical data:

- Operating voltage: max 50 Vac/75 Vdc
- Maximum current: 4 A
- Contact resistance: ≤ 5 mΩ
- Contacts: CuZn, brass pre-nickel and gold plated (0,8 µm)
- Moulding: PUR
- Locking nut: self-locking in CuZn, nickel plated brass
- Temperature range: - 25 ÷ + 90°C
- Degree of protection: IP68 with plug in fully locked position

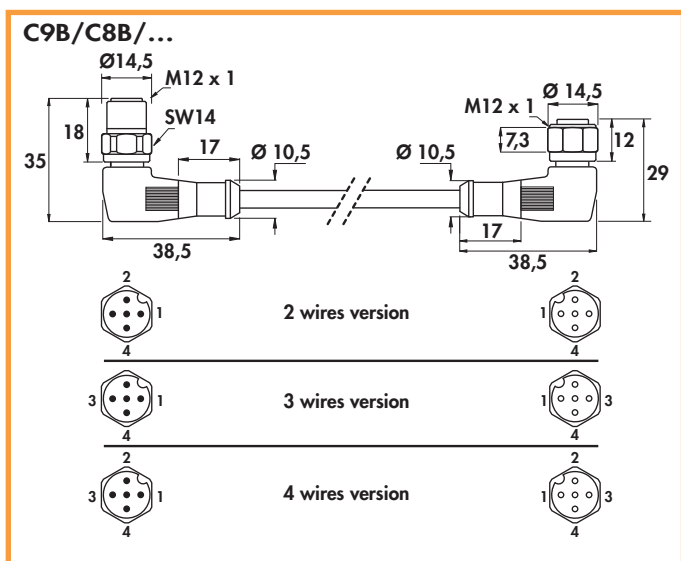
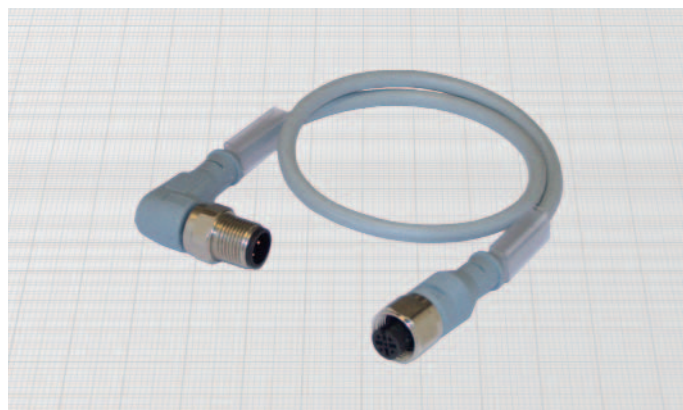
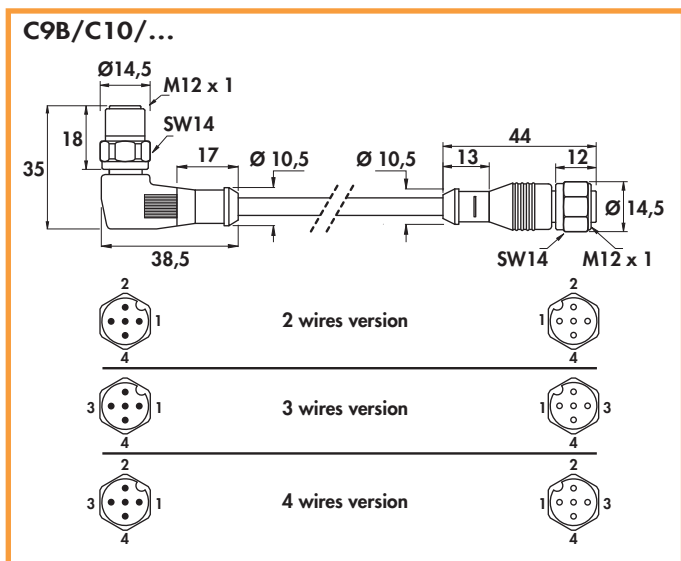
Note: use in hazardous area must be according to the instruction manual supplied together the sensors.

ORDERING REFERENCES

Category	1G - 1D	2G - 2D	3G - 3D	3G - 3D			
Zone	0 - 20	1 - 21	2 - 22	2 - 22			
Cap. cable pt/m	140		170	170			
Indutt. cable uH/m	0,4		0,8	0,8			
Cable	2-wires (blue)		3-wires (grey)	4-wires (grey)			
Section	2 x 0,75 mm ² - ø ext. 5		3 x 0,50 mm ² - ø ext. 5	4 x 0,35 mm ² - ø ext. 5			
Material	Length m.	1) brown + 2) output 4) -	1) brown + 4) black - output 3) blue -	1) brown + 4) black - output NO 2) white - output NC 3) blue -			
		• Male straight • Female straight	• Male straight • Female right angled	• Male straight • Female straight	• Male straight • Female right angled	• Male straight • Female straight	• Male straight • Female right angled
PVC	0,6	C9/C10/002-0,6PVA	C9/C8B/002-0,6PVA	C9/C10/003-0,6PV3GD	C9/C8B/003-0,6PV3GD	C9/C10/004-0,6PV3GD	C9/C8B/004-0,6PV3GD
PVC	1	C9/C10/002-1PVA	C9/C8B/002-1PVA	C9/C10/003-1PV3GD	C9/C8B/003-1PV3GD	C9/C10/004-1PV3GD	C9/C8B/004-1PV3GD
PVC	2	C9/C10/002-2PVA	C9/C8B/002-2PVA	C9/C10/003-2PV3GD	C9/C8B/003-2PV3GD	C9/C10/004-2PV3GD	C9/C8B/004-2PV3GD
PUR	0,6	C9/C10/002-0,6PRA	C9/C8B/002-0,6PRA	C9/C10/003-0,6PR3GD	C9/C8B/003-0,6PR3GD	C9/C10/004-0,6PR3GD	C9/C8B/004-0,6PR3GD
PUR	1	C9/C10/002-1PRA	C9/C8B/002-1PRA	C9/C10/003-1PR3GD	C9/C8B/003-1PR3GD	C9/C10/004-1PR3GD	C9/C8B/004-1PR3GD
PUR	2	C9/C10/002-2PRA	C9/C8B/002-2PRA	C9/C10/003-2PR3GD	C9/C8B/003-2PR3GD	C9/C10/004-2PR3GD	C9/C8B/004-2PR3GD

MOULDED CONNECTING CABLES FOR ATEX SENSORS

- **MALE M12 x 1 right angled**
- **FEMALE M12 x 1**
- According to 94/9/CE - EN60079-0 - EN 60947-5-2



Technical data:

- Operating voltage: max 50 Vac/75 Vdc
- Maximum current: 4 A
- Contact resistance: $\leq 5 \text{ m}\Omega$
- Contacts: CuZn, brass pre-nickel and gold plated (0,8 μm)
- Moulding: PUR
- Locking nut: self-locking in CuZn, nickel plated brass
- Temperature range: $-25 \div +90^\circ\text{C}$
- Degree of protection: IP68 with plug in fully locked position

Note: use in hazardous area must be according to the instruction manual supplied together the sensors.

ORDERING REFERENCES

		2G - 2D	3G - 3D	3G - 3D			
Category		2G - 2D	3G - 3D	3G - 3D			
Zone		1 - 21	2 - 22	2 - 22			
Cap.cable pf/m		140	170	170			
Indutt. cable uH/m		0,4	0,8	0,8			
Cable		2-wires (blue)	3-wires (grey)	4-wires (grey)			
Section		2 x 0,75 mm ² - \varnothing ext. 5	3 x 0,50 mm ² - \varnothing ext. 5	4 x 0,35 mm ² - \varnothing ext. 5			
Material	Length m.	1) brown + 2) blue - 4)		1) brown + 4) black output 3) blue -		1) brown + 4) black output NO 2) white output NC 3) blue -	
		<ul style="list-style-type: none"> • Male straight • Female straight 	<ul style="list-style-type: none"> • Male straight • Female right angled 	<ul style="list-style-type: none"> • Male straight • Female straight 	<ul style="list-style-type: none"> • Male straight • Female right angled 	<ul style="list-style-type: none"> • Male straight • Female straight 	<ul style="list-style-type: none"> • Male straight • Female right angled
PVC	0,6	C9B/C10/002-0,6PVA	C9B/C8B/002-0,6PVA	C9B/C10/003-0,6PV3GD	C9B/C8B/003-0,6PV3GD	C9B/C10/004-0,6PV3GD	C9B/C8B/004-0,6PV3GD
PVC	1	C9B/C10/002-1PVA	C9B/C8B/002-1PVA	C9B/C10/003-1PV3GD	C9B/C8B/003-1PV3GD	C9B/C10/004-1PV3GD	C9B/C8B/004-1PV3GD
PVC	2	C9B/C10/002-2PVA	C9B/C8B/002-2PVA	C9B/C10/003-2PV3GD	C9B/C8B/003-2PV3GD	C9B/C10/004-2PV3GD	C9B/C8B/004-2PV3GD
PUR	0,6	C9B/C10/002-0,6PRA	C9B/C8B/002-0,6PRA	C9B/C10/003-0,6PR3GD	C9B/C8B/003-0,6PR3GD	C9B/C10/004-0,6PR3GD	C9B/C8B/004-0,6PR3GD
PUR	1	C9B/C10/002-1PRA	C9B/C8B/002-1PRA	C9B/C10/003-1PR3GD	C9B/C8B/003-1PR3GD	C9B/C10/004-1PR3GD	C9B/C8B/004-1PR3GD
PUR	2	C9B/C10/002-2PRA	C9B/C8B/002-2PRA	C9B/C10/003-2PR3GD	C9B/C8B/003-2PR3GD	C9B/C10/004-2PR3GD	C9B/C8B/004-2PR3GD