

# Accessories for sensors

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# Connectors and cables

**CD serie**

**M8, M12 plug connectors for sensors**

**184**

SERIE	CD
	<b>M8, M12 plug connectors for sensors</b>
	<ul style="list-style-type: none"> <li>◆ M8 standard miniature plug connectors available axial or right angle versions, in case a miniature plug connector with reduced dimensions is required</li> </ul>
	<ul style="list-style-type: none"> <li>◆ M12 standard plug connectors axial, right angle versions, with or without tang, with or without LED</li> </ul>
	<ul style="list-style-type: none"> <li>◆ D-plug system and junction box</li> </ul>
	<ul style="list-style-type: none"> <li>◆ To be used either in AC or in DC</li> </ul>
	<ul style="list-style-type: none"> <li>◆ Wide range of lengths and materials</li> <li>◆ IP67 protection degree</li> </ul>

ORDERING SYSTEM						Plug connectors	
model <sup>(1)</sup>	LED	Nr. pin	Cable material	Conductors	Cable Ø	Lenght <sup>(2)</sup> (m)	
CD08 / OA - ***A1	not present	3	CEI 2022 II	0,34 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD08 / OB - ***A1	not present	4	CEI 2022 II	0,25 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD08 / OA - ***C1	not present	3	CEI 2022 II	0,34 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD08 / OB - ***C1	not present	4	CEI 2022 II	0,25 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD12 M / AA - ***A1	not present (out NO)	3	CEI 2022 II	0,34 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD12 M / CA - ***A1 <sup>(3)</sup>	not present (out NC)	3	CEI 2022 II	0,34 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD12 M / OB - ***A1	not present	4	CEI 2022 II	0,34 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD12 M / AA - ***C1	not present (out NO)	3	CEI 2022 II	0,34 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD12 M / CA - ***C1 <sup>(3)</sup>	not present (out NC)	3	CEI 2022 II	0,34 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD12 M / OB - ***C1	not present	4	CEI 2022 II	0,25 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD12 M / NA - ***C1	2 LED NPN-NO	3	CEI 2022 II	0,34 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD12 M / PA - ***C1	2 LED PNP-NO	3	CEI 2022 II	0,34 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD12 M / RA - ***C1 <sup>(3)</sup>	2 LED NPN-NC	3	CEI 2022 II	0,34 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD12 M / SA - ***C1 <sup>(3)</sup>	2 LED PNP-NC	3	CEI 2022 II	0,34 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD12 M / TB - ***C1	2 LED NPN-NO/NC	4	CEI 2022 II	0,25 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD12 M / VB - ***C1	2 LED PNP-NO/NC	4	CEI 2022 II	0,25 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
CD12 M / DB - ***C1	1 Bi-LED DECOUT®	4	CEI 2022 II	0,25 mm <sup>2</sup>	5 mm	2 - 5 - 7 - 10	
WCD12 00C2A	not present	5	CEI 2022 II	0,25 mm <sup>2</sup>	5 mm		

(1) To complete code replacing \*\*\* with requested cable lengths : 020,050,070,100 ( respectively 2,5,7 and 10m).

(2) Different cable lengths than standard are available upon request.

(3) To use with 3 wire inductive and capacitive proximity sensors only.

ORDERING SYSTEM						Double plug connectors + junction box	
model <sup>(1)</sup>	LED	Nr. pin	Cable material	Conductors	Cable Ø	Lenght <sup>(2)</sup> (m)	
CDP - G / OB - 02000 <sup>(3)</sup>	not present	4	PVC	0,34 mm <sup>2</sup>	4x1,5 mm		

(1) To complete code replacing \*\*\* with requested cable lengths : 010,030 ( respectively 1 and 3m).

(2) Different cable lengths than standard are available upon request.

(3) To use with contrast scanners only.

ORDERING SYSTEM		Double plug connectors with metal ring + junction box				
model <sup>(1)</sup>	LED	Nr. pin	Cable material	Conductors	Cable Ø	Lenght <sup>(2)</sup> (m)
CDP - E / OB - ***01	not present	4	CEI 2022 II	0,25 mm <sup>2</sup>	5 mm	1 - 3
CDP - F / OB - ***01	not present	4	CEI 2022 II	0,25 mm <sup>2</sup>	5 mm	1 - 3

(1) To complete code replacing \*\*\* with requested cable lengths : 010,030 ( respectively 1 and 3m).

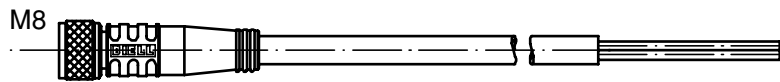
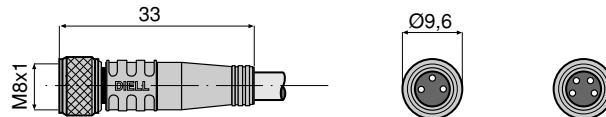
(2) Different cable lengths than standard are available upon request.

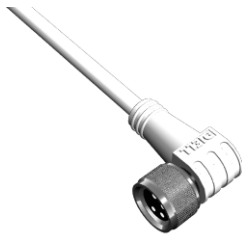
CONNECTORS			
M8 - 3 poles	M8 - 4 poles	M12 - 3 poles NO	M12 - 3 poles NC
<p style="text-align: center;">Female plug</p>	<p style="text-align: center;">Female plug</p>	<p style="text-align: center;">Female plug</p>	<p style="text-align: center;">Female plug</p>
M12 - 4 poles	CDP-* M12 - 4 poles	M12 - 5 poles	
<p style="text-align: center;">Female plug</p>	<p style="text-align: center;">Male plug</p>	<p style="text-align: center;">Female plug</p>	

**MODEL** CD08/0\*\_\*\*A1

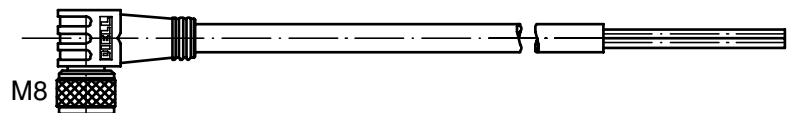
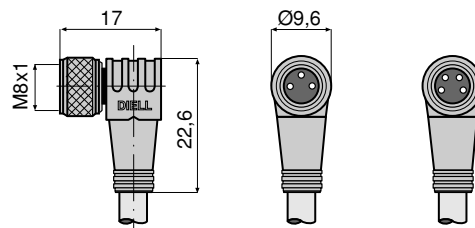
**M8 axial plug (3 or 4 poles)**

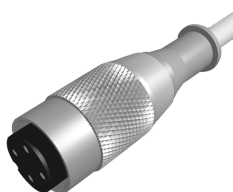

<b>Nominal voltage</b>	50 Vac / 75 Vdc
Contacts resistance	6 mΩ
Nominal current	4A
<b>Protection degree</b>	IEC IP67
Moulded body material	flame retarding ABS
Housing material	PUR
Contacts material	Cu Sn
Cable material	CEI 2022 II
Conductors section	0,34 / 0,25 mm <sup>2</sup>
∅ outer cable	5 mm
temperature range	-25°....+80°C

**DIMENSIONAL DRAWING**

**DIMENSIONAL DRAWING**

**MODEL** CD08/\*\*\_\*\*C1

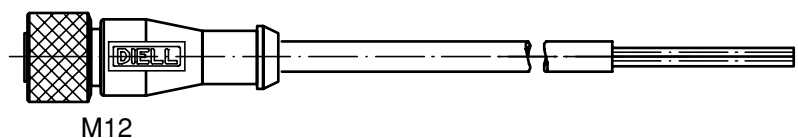
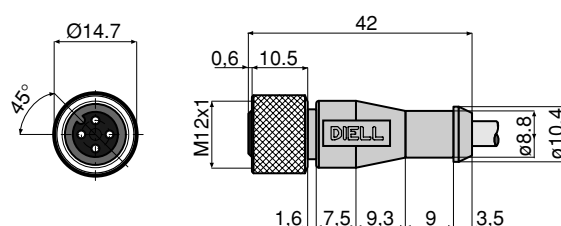
**M8 right angle plug (3 or 4 poles)**


<b>Nominal voltage</b>	50 Vac / 75 Vdc
Contacts resistance	6 mΩ
Nominal current	4A
<b>Protection degree</b>	IEC IP67
Moulded body material	flame retarding ABS
Housing material	PUR
Contacts material	Cu Sn
Cable material	CEI 2022 II
Conductors section	0,34 / 0,25 mm <sup>2</sup>
∅ outer cable	5 mm
Temperature range	-25°....+80°C

**DIMENSIONAL DRAWING**

**DIMENSIONAL DRAWING**

**MODEL** CD12M/\*\*\_\*\*A1

**M12 axial plug (3 or 4 poles)**


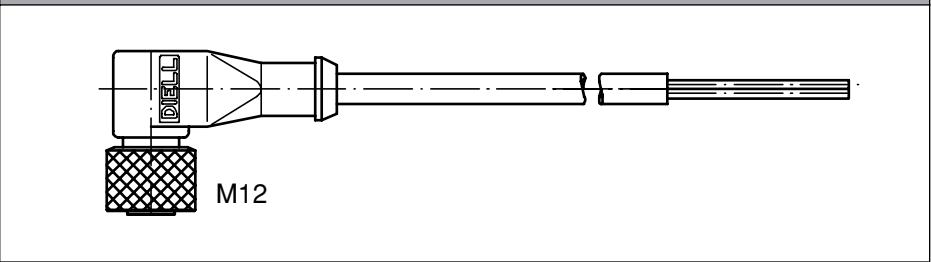
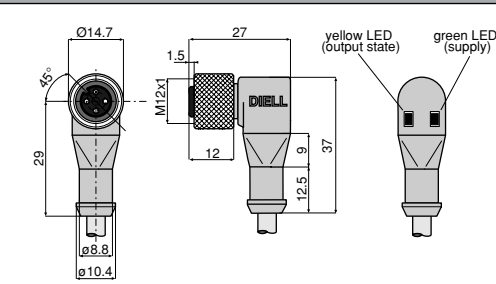
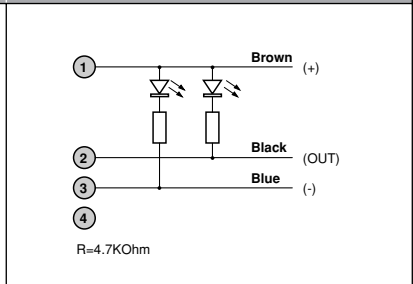
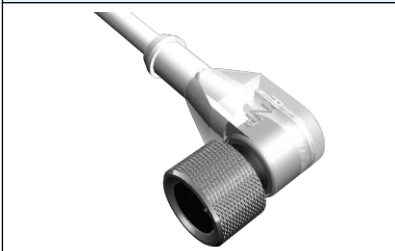
<b>Nominal voltage</b>	300Vac
Contacts resistance	6mΩ
Nominal current	4A
<b>Protection degree</b>	IEC IP67
Moulded body material	ABS
Housing material	PUR
Contacts material	Cu Sn
Cable material	CEI 2022 II
Conductors section	0,34/0,25 mm <sup>2</sup>
∅ outer cable	5mm
temperature range	-25°....+80°C

**DIMENSIONAL DRAWING**

**DIMENSIONAL DRAWING**


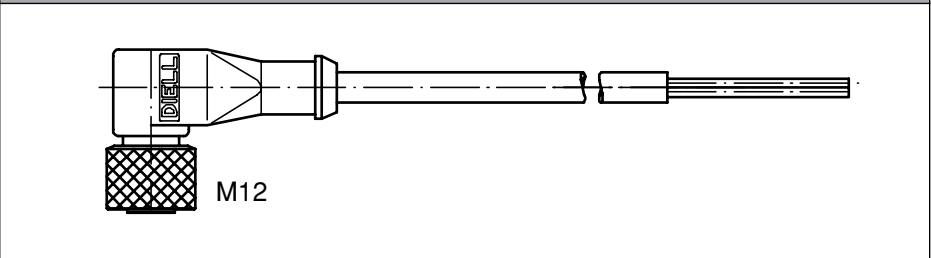
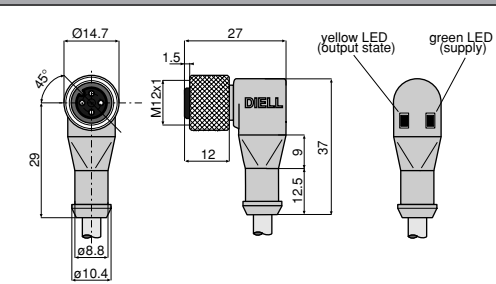
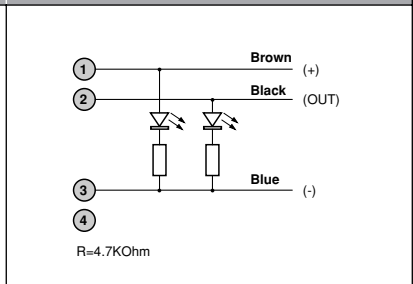
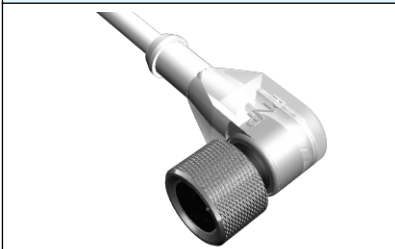



**MODEL CD12M/RA-\*\*\*C1**
**M12 right angle plug w/LED NPN-NC (3 poles)**

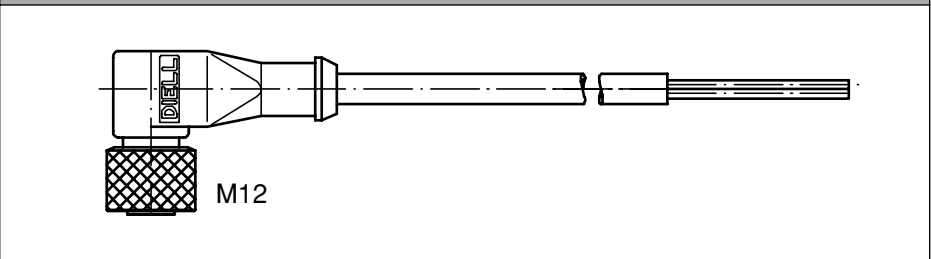
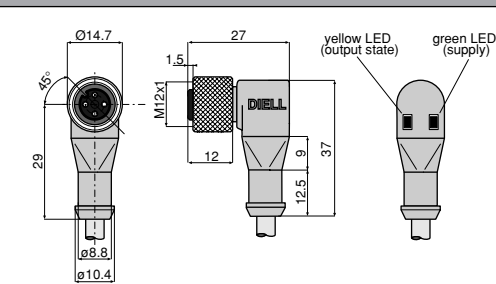
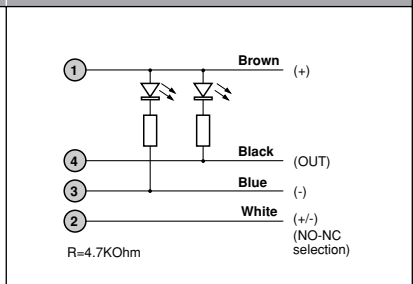

<b>Nominal voltage</b>	10 - 30 Vdc
<b>Contacts resistance</b>	6 mΩ
<b>Nominal current</b>	4A
<b>Protection degree</b>	IEC IP67
<b>To use with sensor</b>	<b>NPN-NC output</b>
<b>Housing material</b>	transparent PUR
<b>Contacts material</b>	Cu Sn
<b>Cable material</b>	CEI 2022 II
<b>Conductors section</b>	0,34 mm <sup>2</sup>
<b>Ø outer cable</b>	5 mm
<b>Temperature range</b>	-25°....+80°C

**DIMENSIONAL DRAWING**

**DIMENSIONAL DRAWING**

**WIRING DIAGRAMS**

**MODEL CD12M/SA-\*\*\*C1**
**M12 right angle plug w/LED PNP-NC (3 poles)**


<b>Nominal voltage</b>	10 - 30 Vdc
<b>Contacts resistance</b>	6 mΩ
<b>Nominal current</b>	4A
<b>Protection degree</b>	IEC IP67
<b>To use with sensor</b>	<b>PNP-NC output</b>
<b>Housing material</b>	transparent PUR
<b>Contacts material</b>	Cu S n
<b>Cable material</b>	CEI 2022 II
<b>Conductors section</b>	0,34 mm <sup>2</sup>
<b>Ø outer cable</b>	5 mm
<b>Temperature range</b>	-25°....+80°C

**DIMENSIONAL DRAWING**

**DIMENSIONAL DRAWING**

**WIRING DIAGRAMS**

**MODEL CD12M/TB-\*\*\*C1**
**M12 right angle plug w/LED NPN-NO/NC (4 poles)**


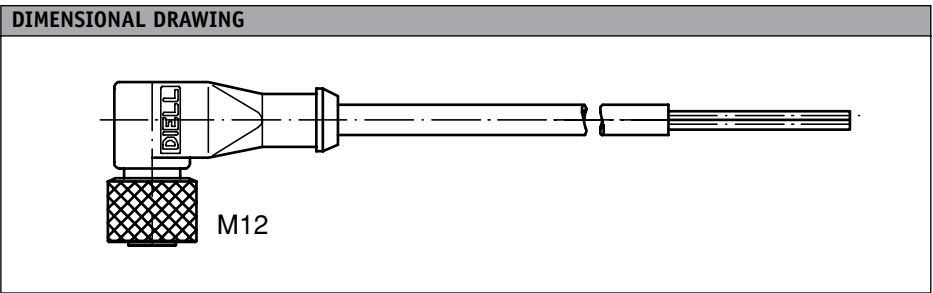
<b>Nominal voltage</b>	10 - 30 Vdc
<b>Contacts resistance</b>	6 mΩ
<b>Nominal current</b>	4A
<b>Protection degree</b>	IEC IP67
<b>To use with sensor</b>	<b>NPN-NO/NC output</b>
<b>Housing material</b>	transparent PUR
<b>Contacts material</b>	Cu Sn
<b>Cable material</b>	CEI 2022 II
<b>Conductors section</b>	0,25 mm <sup>2</sup>
<b>Ø outer cable</b>	5 mm
<b>Temperature range</b>	-25°....+80°C

**DIMENSIONAL DRAWING**

**DIMENSIONAL DRAWING**

**WIRING DIAGRAMS**


5.1

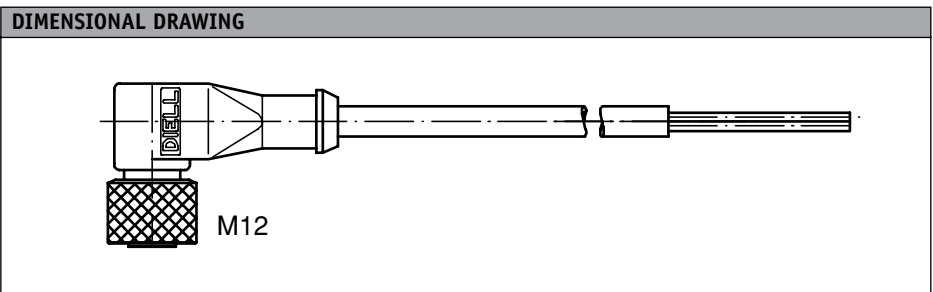


<b>MODEL</b> CD12M/VB-***C1	
<b>M12 right angle plug w/LED PNP-NO/NC (4 poles)</b>	
<b>Nominal voltage</b>	10 - 30 Vdc
<b>Contacts resistance</b>	6 mΩ
<b>Nominal current</b>	4A
<b>Protection degree</b>	IEC IP67
<b>To use with sensor</b>	<b>PNP-NO/NC output</b>
<b>Housing material</b>	transparent PUR
<b>Contacts material</b>	Cu Sn
<b>Cable material</b>	CEI 2022 II
<b>Conductors sectioni</b>	0,25 mm <sup>2</sup>
<b>Ø outer cable</b>	5 mm
<b>Temperature range</b>	-25°....+80°C



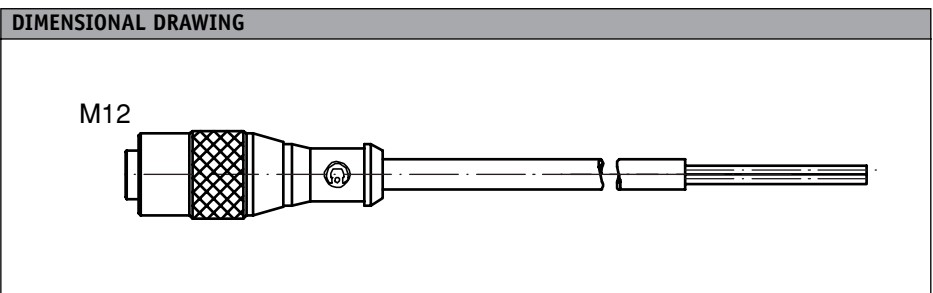
<b>DIMENSIONAL DRAWING</b>		<b>WIRING DIAGRAMS</b>
		<p>R=4.7KOhm</p>

<b>MODEL</b> CD12M/DB-***C1	
<b>M12 right angle plug w/BI-LED DECOU<sup>®</sup> (4 poles)</b>	
<b>Nominal voltage</b>	10 - 30 Vdc
<b>Contacts resistance</b>	6 mΩ
<b>Nominal current</b>	4A
<b>Protection degree</b>	IEC IP67
<b>To use with sensor</b>	<b>DECOU<sup>®</sup></b>
<b>Housing material</b>	transparent PUR
<b>Contacts material</b>	Cu S n
<b>Cable material</b>	CEI 2022 II
<b>Conductors section</b>	0,25 mm <sup>2</sup>
<b>Ø outer cable</b>	5 mm
<b>Temperature range</b>	-25°....+80°C

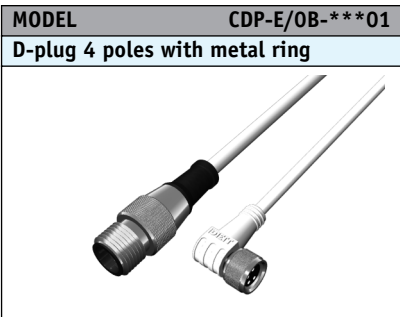


<b>DIMENSIONAL DRAWING</b>		<b>WIRING DIAGRAMS</b>
		<p>R=4.7KOhm</p>

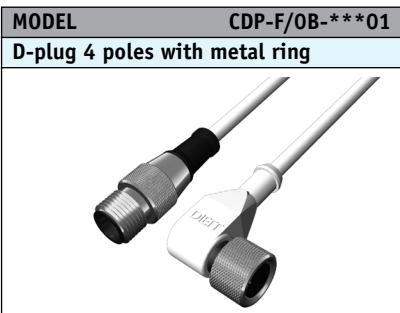
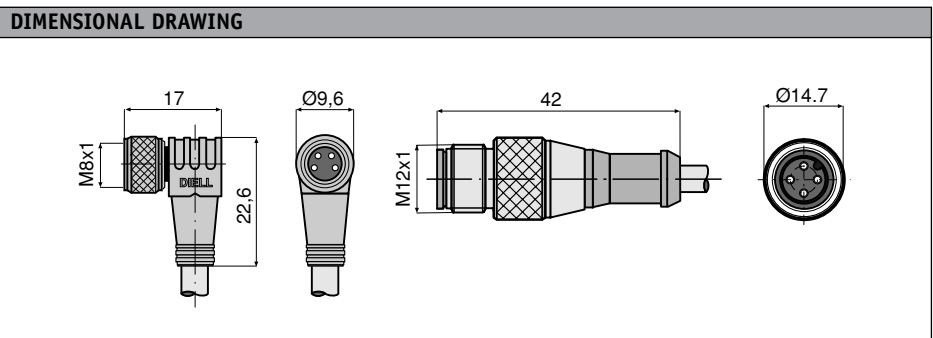
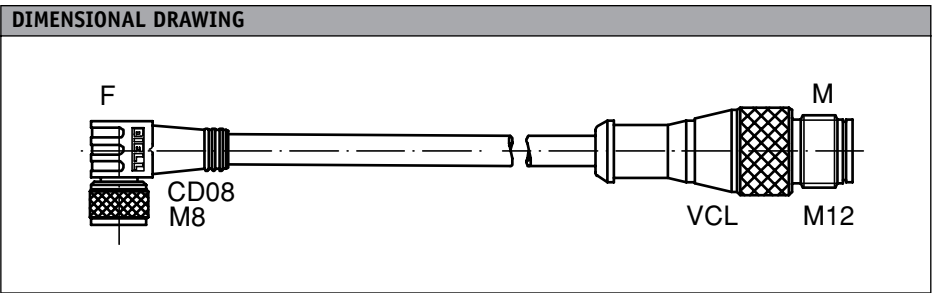
<b>MODEL</b> WCL1200C2A	
<b>M12 axial plug (5 poles)</b>	
<b>Nominal voltage</b>	12-30Vdc
<b>Contacts resistance</b>	6mΩ
<b>Nominal current</b>	4A
<b>Protection degree</b>	IEC IP67
<b>Moulded body material</b>	ABS
<b>Housing material</b>	PUR
<b>Contacts material</b>	Cu Sn
<b>Cable material</b>	CEI 2022 II
<b>Conductors section</b>	0,25 mm <sup>2</sup>
<b>Ø outer cable</b>	5,6mm
<b>temperature range</b>	-25°...+80°C



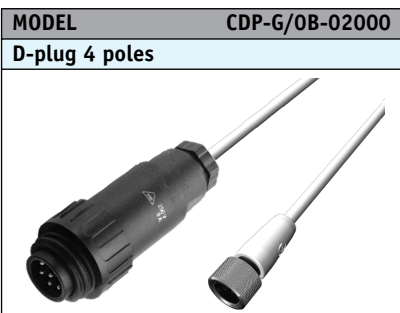
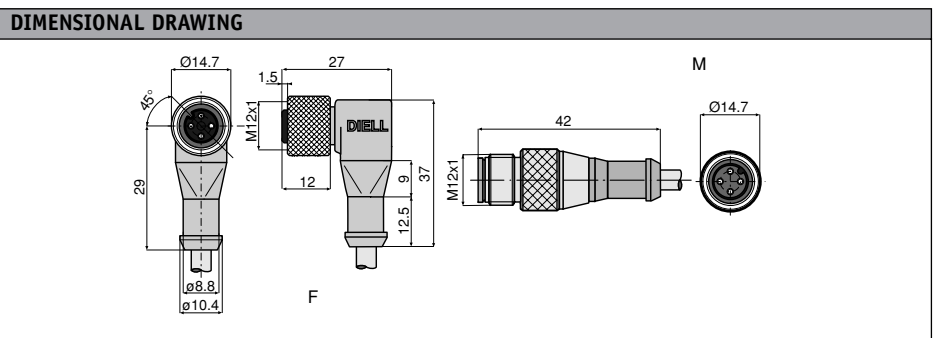
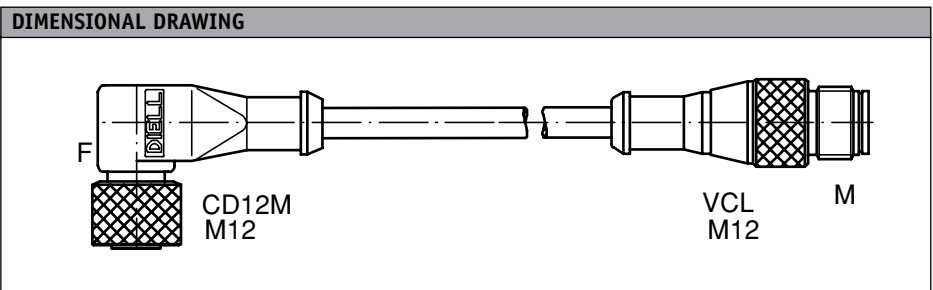
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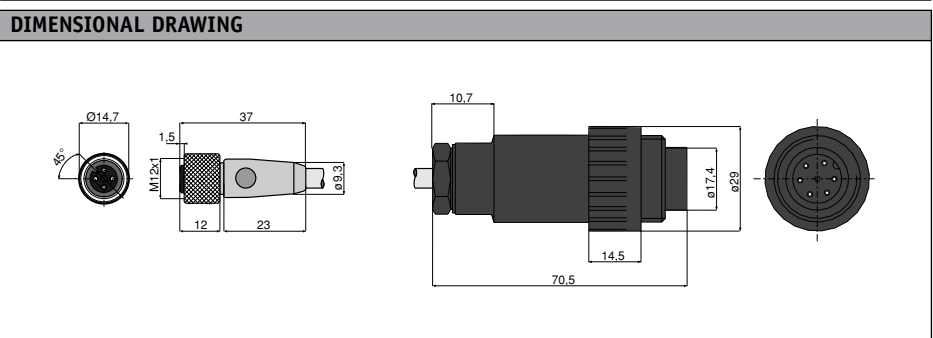
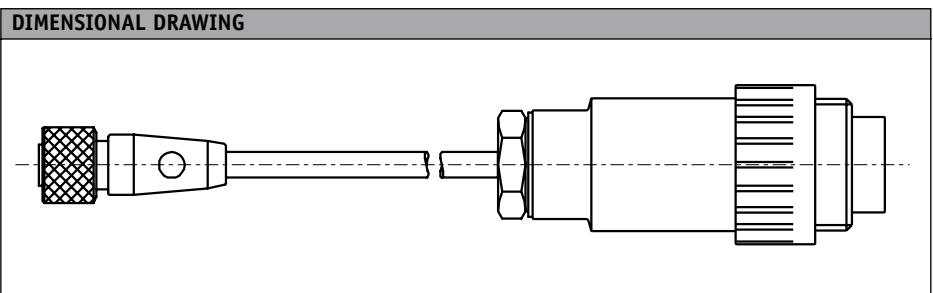
<b>Nominal voltage</b>	50 Vac / 75 Vdc
Contacts resistance	6 mΩ
Nominal current	4A
<b>Protection degree</b>	IEC IP67
Moulded body material	flame retarding ABS
Housing material	PUR
Contacts material	CuSn (F) - CuZn (M)
Cable material	CEI 2022 II
Conductors section	0,25 mm <sup>2</sup>
∅ outer cable	5 mm
Temperature range	-25°....+80°C

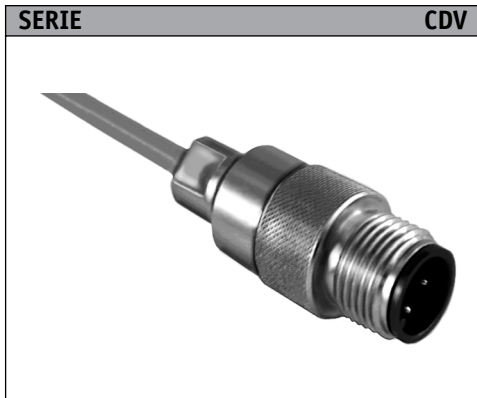


<b>Nominal voltage</b>	300 Vac
Contacts resistance	6 mΩ
Nominal current	4A
<b>Protection degree</b>	IEC IP67
Moulded body material	flame retarding ABS
Housing material	PUR
Contacts material	CuSn (F) - CuZn (M)
Cable material	CEI 2022 II
Conductors section	0,25 mm <sup>2</sup>
∅ outer cable	5mm
Temperature range	-25°....+80°C

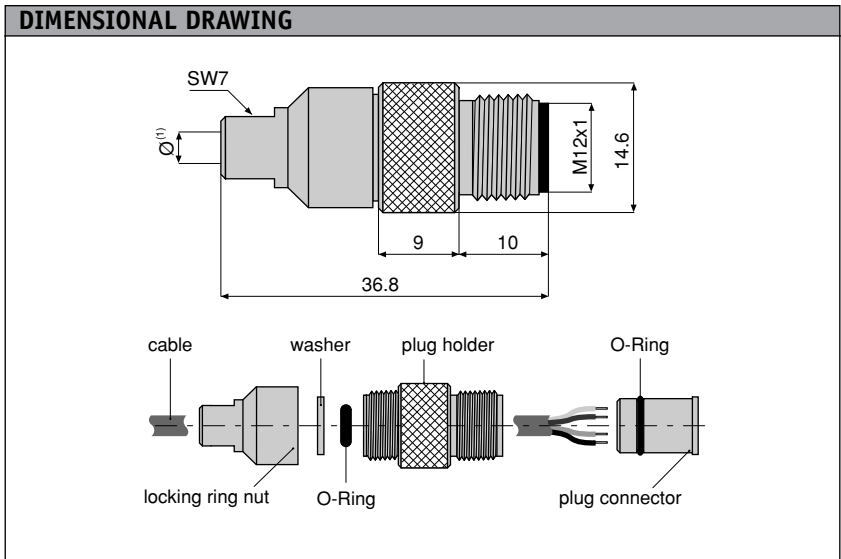


<b>Nominal voltage</b>	300 Vac
Contacts resistance	6 mΩ
Nominal current	4A
<b>Protection degree</b>	IEC IP67
Moulded body material	ABS
Housing material	PUR
Contacts material	Cu Sn
Cable material	PVC
Conductors section	0,34 mm <sup>2</sup>
∅ outer cable	5 mm
Temperature range	-25°....+80°C





(1) For diameters and codes see "Ordering system" table



**ORDERING SYSTEM**

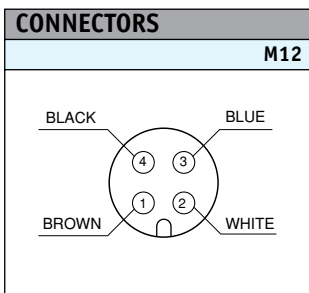
**CDV - 37**

serie	CDV	37	model
M12 in-line plug connector			Ø3,75mm cable diameter
		47	Ø4,7mm cable diameter
		50	Ø5mm cable diameter
		55	Ø5,5mm cable diameter

**SPECIFICATIONS**

Model	CDV-37	CDV-47	CDV-50	CDV-55
<b>Diameter of hole (cable Ø)</b>	3,75 mm	4,7 mm	5 mm	5,5 mm
<b>Connections</b>	to solder			
<b>Nominal voltage</b>	60 Vdc - 48 Vac			
<b>Nominal current</b>	4 A			
<b>Protection degree</b>	IEC IP65			
<b>Housing material</b>	nickel-plated brass			
<b>Plug connector material</b>	polyamide 66 GV, V0 UL94			
<b>Contacts material</b>	nickel-plated brass with surface gold-plating			
<b>O-Ring material</b>	NBR 72			

5.1



**NOTES ON CORRECT INSTALLATION**

- 1) Remove the sheath from the wiring according to the figure 1 and tinplate the extremities. Make soldering of the wires trying to avoid excess of solder. Check the integrity of the insulating material on the single wire after soldering.
- 2) Wires will be connected according to the colours as per "Connectors" table, different colouring excepted.
- 3) For the final locking, use a SW7 key. The key must be tightened until the ring nut rests at the plug holder.
- 4) In case a permanent fastening of the assembled parts is desired, let in some silicone drops in the plug holder as well as in the locking ring nut (see figure 2).

**Fig. 1**

**Fig. 2**