

Accessories for sensors

5.1	Connectors and cables	183
5.2	Reflectors	193
5.3	Installation accessories	197

Connectors and cables

CD serie

M8, M12 plug connectors for sensors

184

5.1

SERIE

CD



M8, M12 plug connectors for sensors

- ◆ M8 standard miniature plug connectors available axial or right angle versions, in case a miniature plug connector with reduced dimensions is required
- ◆ M12 standard plug connectors axial, right angle versions, with or without tang, with or without LED
- ◆ D-plug system and junction box
- ◆ To be used either in AC or in DC
- ◆ Wide range of lengths and materials
- ◆ IP67 protection degree

ORDERING SYSTEM

Plug connectors

model ⁽¹⁾	LED	Nr. pin	Cable material	Conductors	Cable Ø	Length ⁽²⁾ (m)
CD08 / OA - ***A1	not present	3	CEI 2022 II	0,34 mm ²	5 mm	2 - 5 - 7 - 10
CD08 / OB - ***A1	not present	4	CEI 2022 II	0,25 mm ²	5 mm	2 - 5 - 7 - 10
CD08 / OA - ***C1	not present	3	CEI 2022 II	0,34 mm ²	5 mm	2 - 5 - 7 - 10
CD08 / OB - ***C1	not present	4	CEI 2022 II	0,25 mm ²	5 mm	2 - 5 - 7 - 10
CD12 M / AA - ***A1	not present (out NO)	3	CEI 2022 II	0,34 mm ²	5 mm	2 - 5 - 7 - 10
CD12 M / CA - ***A1 ⁽³⁾	not present (out NC)	3	CEI 2022 II	0,34 mm ²	5 mm	2 - 5 - 7 - 10
CD12 M / OB - ***A1	not present	4	CEI 2022 II	0,34 mm ²	5 mm	2 - 5 - 7 - 10
CD12 M / AA - ***C1	not present (out NO)	3	CEI 2022 II	0,34 mm ²	5 mm	2 - 5 - 7 - 10
CD12 M / CA - ***C1 ⁽³⁾	not present (out NC)	3	CEI 2022 II	0,34 mm ²	5 mm	2 - 5 - 7 - 10
CD12 M / OB - ***C1	not present	4	CEI 2022 II	0,25 mm ²	5 mm	2 - 5 - 7 - 10
CD12 M / NA - ***C1	2 LED NPN-NO	3	CEI 2022 II	0,34 mm ²	5 mm	2 - 5 - 7 - 10
CD12 M / PA - ***C1	2 LED PNP-NO	3	CEI 2022 II	0,34 mm ²	5 mm	2 - 5 - 7 - 10
CD12 M / RA - ***C1 ⁽³⁾	2 LED NPN-NC	3	CEI 2022 II	0,34 mm ²	5 mm	2 - 5 - 7 - 10
CD12 M / SA - ***C1 ⁽³⁾	2 LED PNP-NC	3	CEI 2022 II	0,34 mm ²	5 mm	2 - 5 - 7 - 10
CD12 M / TB - ***C1	2 LED NPN-NO/NC	4	CEI 2022 II	0,25 mm ²	5 mm	2 - 5 - 7 - 10
CD12 M / VB - ***C1	2 LED PNP-NO/NC	4	CEI 2022 II	0,25 mm ²	5 mm	2 - 5 - 7 - 10
CD12 M / DB - ***C1	1 Bi-LED DECOUT®	4	CEI 2022 II	0,25 mm ²	5 mm	2 - 5 - 7 - 10
WCD12 OOC2A	not present	5	CEI 2022 II	0,25 mm ²	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 ⁽¹⁾	LED	Nr. pin	Cable material	Conductors	Cable Ø	Length ⁽²⁾ (m)
CDP - G / OB - 02000 ⁽³⁾	not present	4	PVC	0,34 mm ²	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 ⁽¹⁾	LED	Nr. pin	Cable material	Conductors	Cable Ø	Lenght ⁽²⁾ (m)
CDP - E / OB - ***01	not present	4	CEI 2022 II	0,25 mm ²	5 mm	1 - 3
CDP - F / OB - ***01	not present	4	CEI 2022 II	0,25 mm ²	5 mm	1 - 3

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

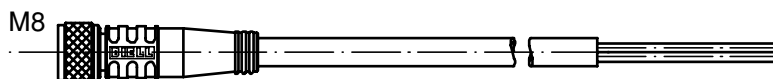
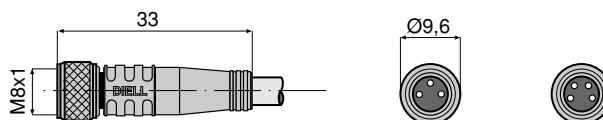
(2) Different cable lengths than standard are available upon request.

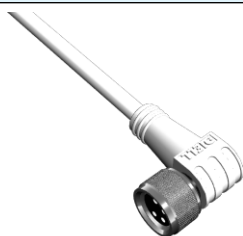
CONNECTORS			
M8 - 3 poles	M8 - 4 poles	M12 - 3 poles NO	M12 - 3 poles NC
Female plug	Female plug	Female plug	Female plug
M12 - 4 poles	CDP-* M12 - 4 poles	M12 - 5 poles	
Female plug	Male plug	Female plug	

MODEL CD08/0*-***A1

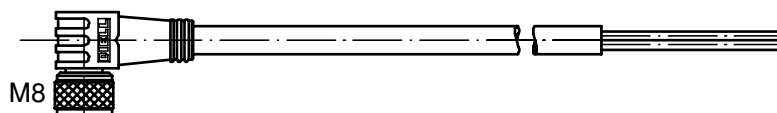
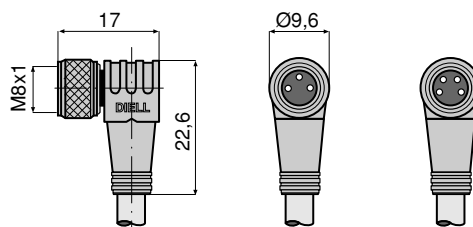
M8 axial plug (3 or 4 poles)

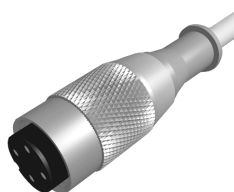

Nominal voltage	50 Vac / 75 Vdc
Contacts resistance	6 mΩ
Nominal current	4A
Protection degree	IEC IP67
Moulded body material	flame retarding ABS
Housing material	PUR
Contacts material	Cu Sn
Cable material	CEI 2022 II
Conductors section	0,34 / 0,25 mm ²
Ø outer cable	5 mm
temperature range	-25°....+80°C

DIMENSIONAL DRAWING

DIMENSIONAL DRAWING

MODEL CD08/**-***C1

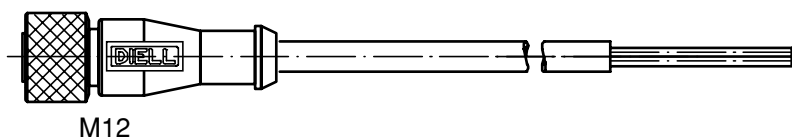
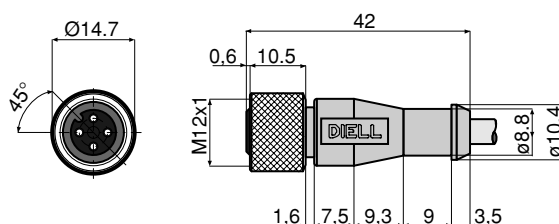
M8 right angle plug (3 or 4 poles)


Nominal voltage	50 Vac / 75 Vdc
Contacts resistance	6 mΩ
Nominal current	4A
Protection degree	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 ²
Ø outer cable	5 mm
Temperature range	-25°....+80°C

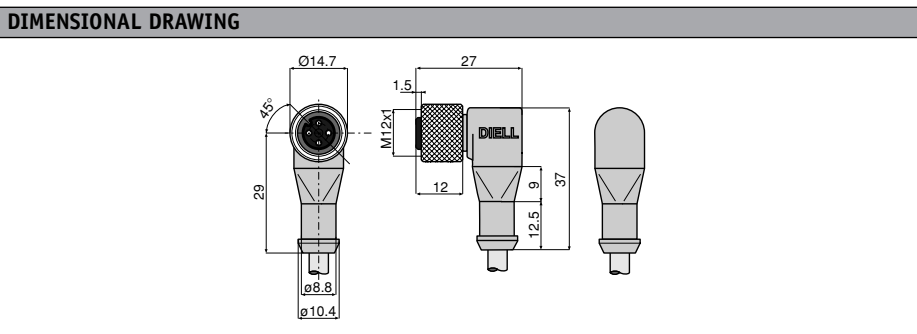
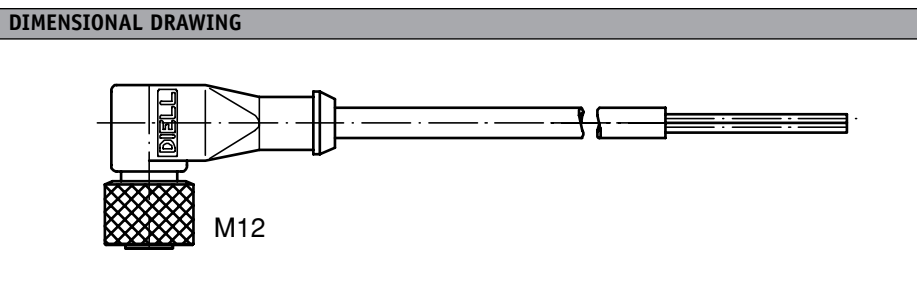
DIMENSIONAL DRAWING

DIMENSIONAL DRAWING

MODEL CD12M/**-***A1

M12 axial plug (3 or 4 poles)


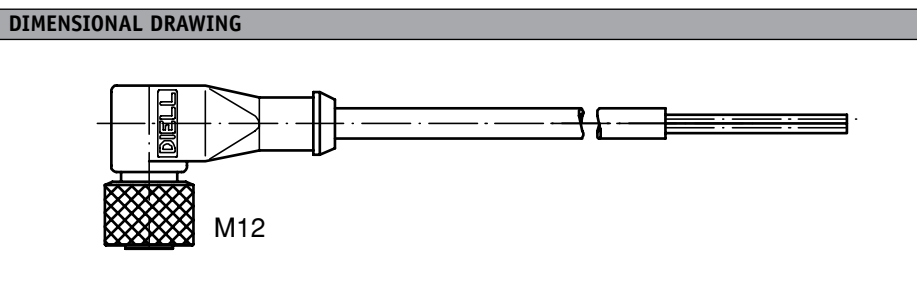
Nominal voltage	300Vac
Contacts resistance	6mΩ
Nominal current	4A
Protection degree	IEC IP67
Moulded body material	ABS
Housing material	PUR
Contacts material	Cu Sn
Cable material	CEI 2022 II
Conductors section	0,34/0,25 mm ²
Ø outer cable	5mm
temperature range	-25°....+80°C

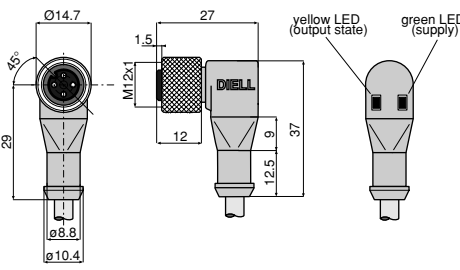
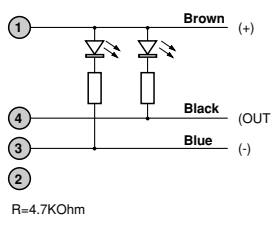
DIMENSIONAL DRAWING

DIMENSIONAL DRAWING


MODEL	CD12M/**-***C1
M12 right angle plug (3 or 4 poles)	
	
Nominal voltage	300 Vac
Contacts resistance	6 mΩ
Nominal current	4A
Protection degree	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 ²
Ø outer cable	5 mm
Temperature range	-25°....+80°C

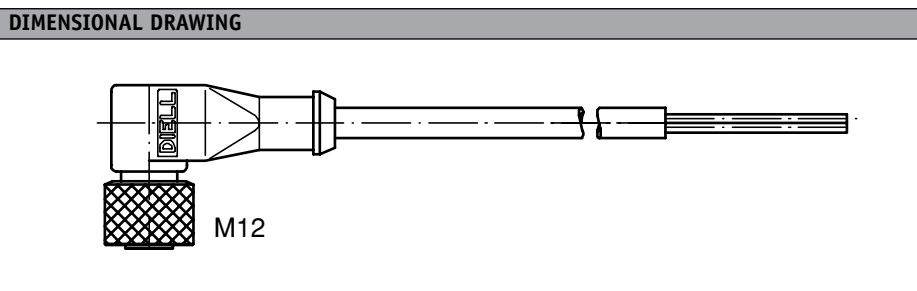


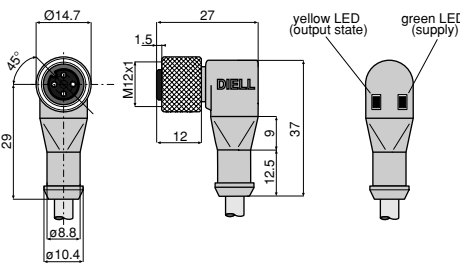
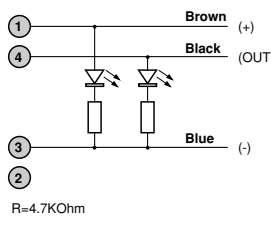
MODEL	CD12M/NA-***C1
M12 right angle plug w/LED NPN-NO (3 poles)	
	
Nominal voltage	10 - 30 Vdc
Contacts resistance	6 mΩ
Nominal current	4A
Protection degree	IEC IP67
To use with sensor	NPN-NO output
Housing material	transparent PUR
Contacts material	Cu S n
Cable material	CEI 2022 II
Conductors section	0,34 mm ²
Ø outer cable	5 mm
Temperature range	-25°....+80°C



DIMENSIONAL DRAWING	WIRING DIAGRAMS
	 R=4.7KOhm

MODEL	CD12M/PA-***C1
M12 right angle plug w/LED PNP-NO (3 poles)	
	
Nominal voltage	10 - 30 Vdc
Contacts resistance	6 mΩ
Nominal current	4A
Protection degree	IEC IP67
To use with sensor	PNP-NO output
Housing material	transparent PUR
Contacts material	Cu Sn
Cable material	CEI 2022 II
Conductors section	0,34 mm ²
Ø outer cable	5 mm
Temperature range	-25°....+80°C



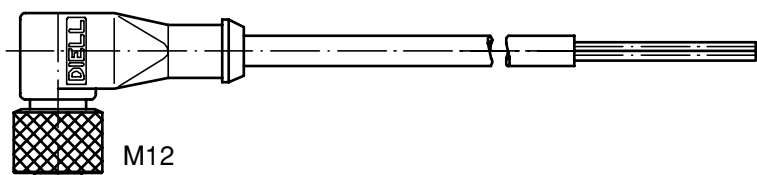
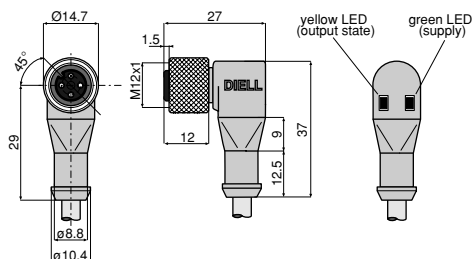
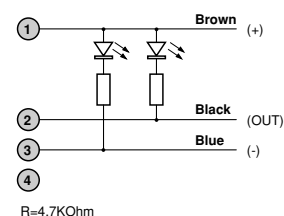
DIMENSIONAL DRAWING	WIRING DIAGRAMS
	 R=4.7KOhm

MODEL CD12M/RA-***C1

M12 right angle plug w/LED NPN-NC (3 poles)



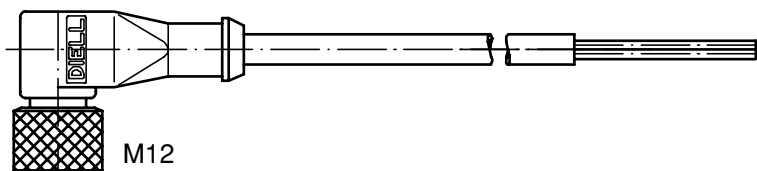
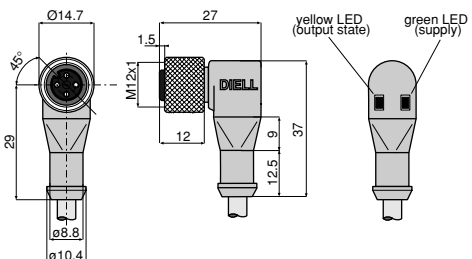
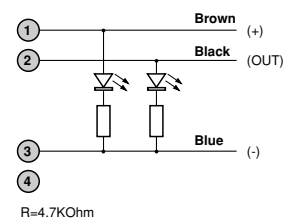
Nominal voltage	10 - 30 Vdc
Contacts resistance	6 mΩ
Nominal current	4A
Protection degree	IEC IP67
To use with sensor	NPN-NC output
Housing material	transparent PUR
Contacts material	Cu Sn
Cable material	CEI 2022 II
Conductors section	0,34 mm²
Ø outer cable	5 mm
Temperature range	-25°....+80°C

DIMENSIONAL DRAWING

DIMENSIONAL DRAWING

WIRING DIAGRAMS

MODEL CD12M/SA-***C1

M12 right angle plug w/LED PNP-NC (3 poles)



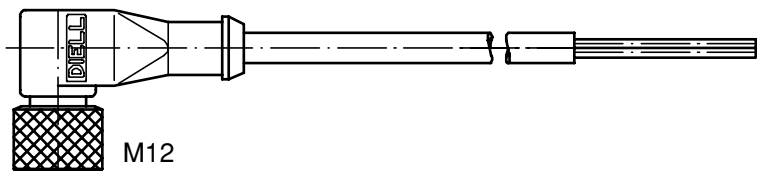
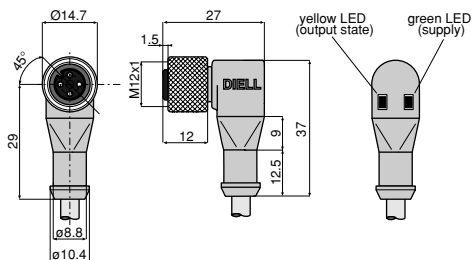
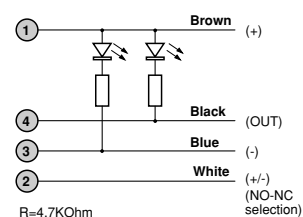
Nominal voltage	10 - 30 Vdc
Contacts resistance	6 mΩ
Nominal current	4A
Protection degree	IEC IP67
To use with sensor	PNP-NC output
Housing material	transparent PUR
Contacts material	Cu S n
Cable material	CEI 2022 II
Conductors section	0,34 mm²
Ø outer cable	5 mm
Temperature range	-25°....+80°C

DIMENSIONAL DRAWING

DIMENSIONAL DRAWING

WIRING DIAGRAMS

MODEL CD12M/TB-***C1

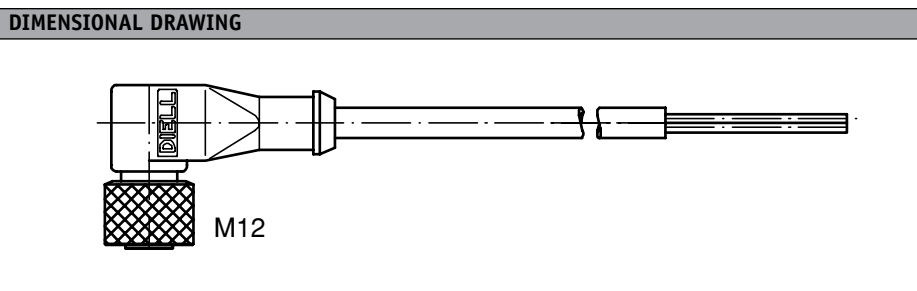
M12 right angle plug w/LED NPN-NO/NC (4 poles)



Nominal voltage	10 - 30 Vdc
Contacts resistance	6 mΩ
Nominal current	4A
Protection degree	IEC IP67
To use with sensor	NPN-NO/NC output
Housing material	transparent PUR
Contacts material	Cu Sn
Cable material	CEI 2022 II
Conductors section	0,25 mm²
Ø outer cable	5 mm
Temperature range	-25°....+80°C

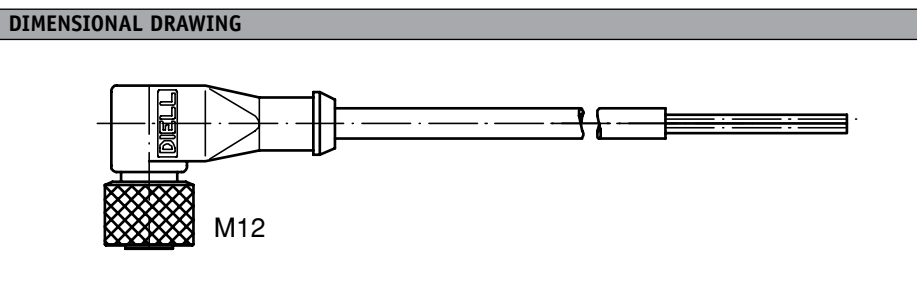
DIMENSIONAL DRAWING

DIMENSIONAL DRAWING

WIRING DIAGRAMS


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



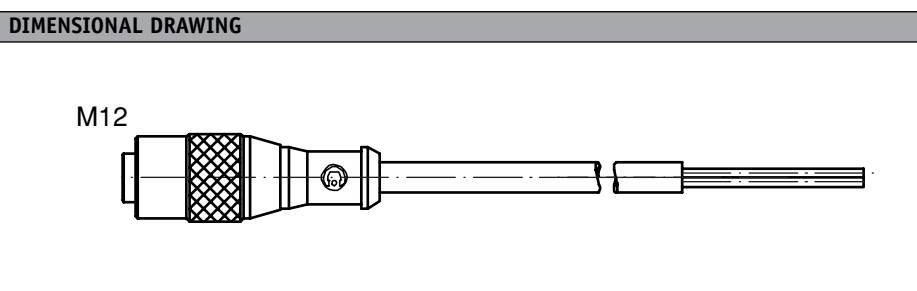
DIMENSIONAL DRAWING	WIRING DIAGRAMS

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



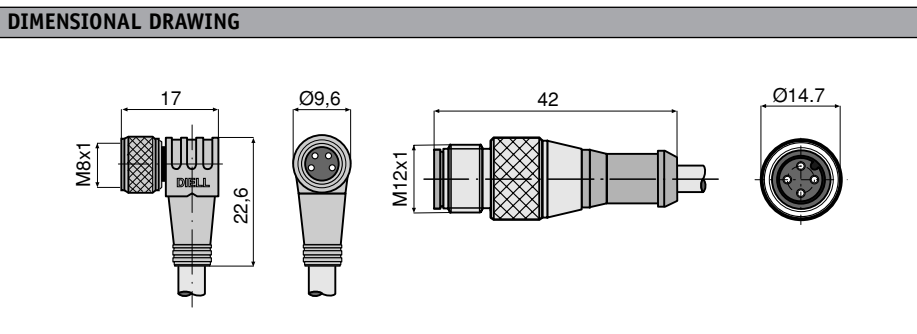
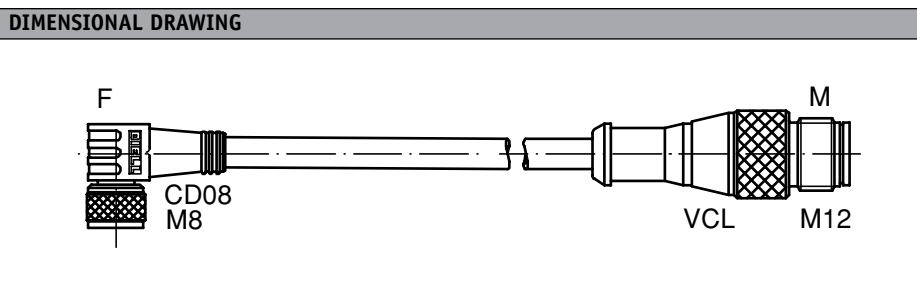
DIMENSIONAL DRAWING	WIRING DIAGRAMS

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

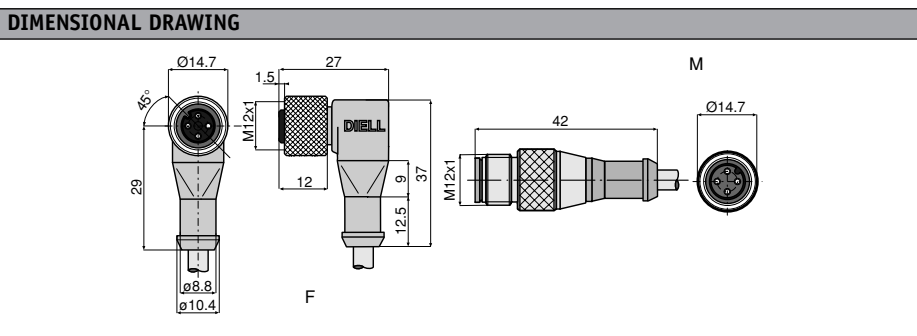
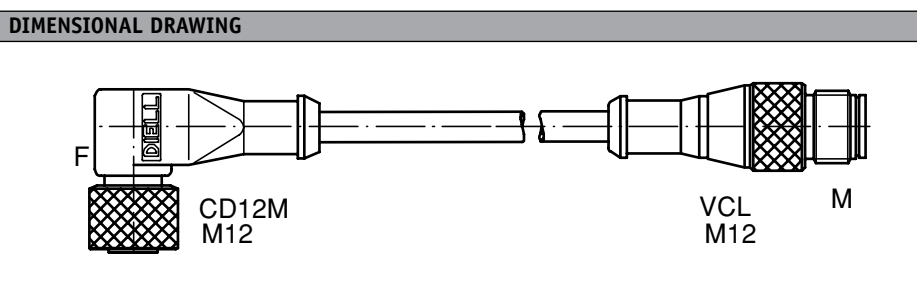


DIMENSIONAL DRAWING

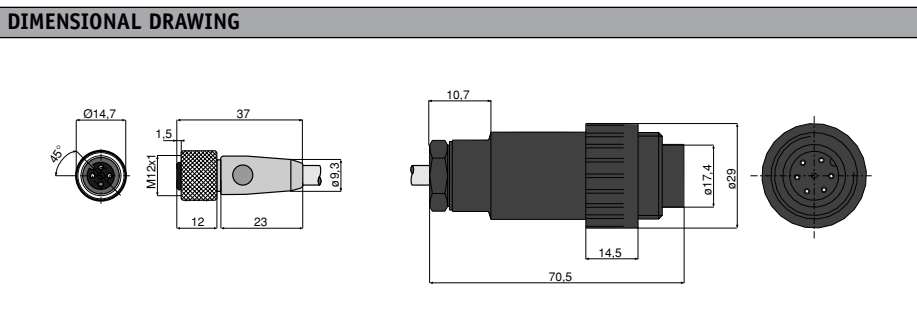
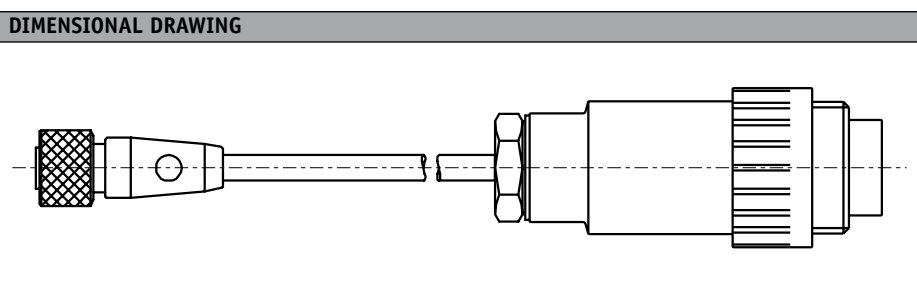
MODEL	CDP-E/OB-***01
D-plug 4 poles with metal ring	
	
Nominal voltage	50 Vac / 75 Vdc
Contacts resistance	6 mΩ
Nominal current	4A
Protection degree	IEC IP67
Moulded body material	flame retarding ABS
Housing material	PUR
Contacts material	CuSn (F) - CuZn (M)
Cable material	CEI 2022 II
Conductors section	0,25 mm ²
Ø outer cable	5 mm
Temperature range	-25°....+80°C

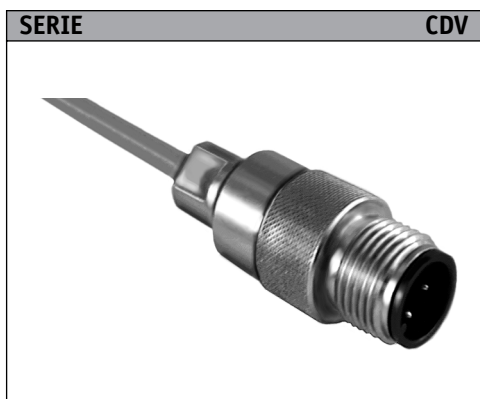


MODEL	CDP-F/OB-***01
D-plug 4 poles with metal ring	
	
Nominal voltage	300 Vac
Contacts resistance	6 mΩ
Nominal current	4A
Protection degree	IEC IP67
Moulded body material	flame retarding ABS
Housing material	PUR
Contacts material	CuSn (F) - CuZn (M)
Cable material	CEI 2022 II
Conductors section	0,25 mm ²
Ø outer cable	5mm
Temperature range	-25°....+80°C



MODEL	CDP-G/OB-02000
D-plug 4 poles	
	
Nominal voltage	300 Vac
Contacts resistance	6 mΩ
Nominal current	4A
Protection degree	IEC IP67
Moulded body material	ABS
Housing material	PUR
Contacts material	Cu Sn
Cable material	PVC
Conductors section	0,34 mm ²
Ø outer cable	5 mm
Temperature range	-25°....+80°C

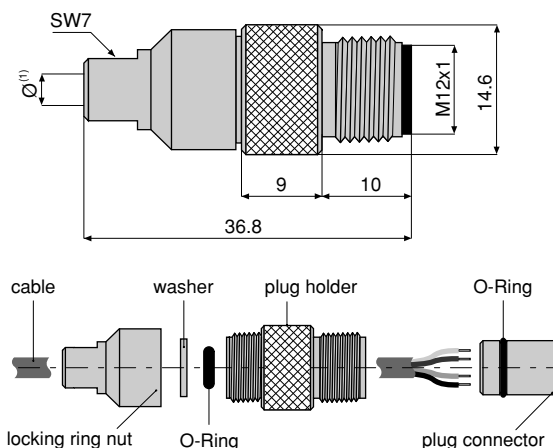




(1) For diameters and codes see "Ordering system" table



DIMENSIONAL DRAWING



ORDERING SYSTEM

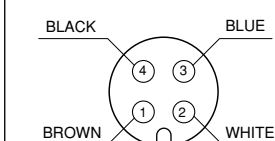
CDV - 37			
serie			model
M12 in-line plug connector	CDV	37	Ø3,75mm cable diameter
		47	Ø4,7mm cable diameter
		50	Ø5mm cable diameter
		55	Ø5,5mm cable diameter

SPECIFICATIONS

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

CONNECTORS

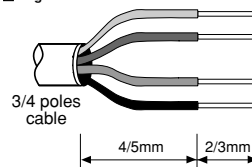
M12



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.

Fig. 1



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).

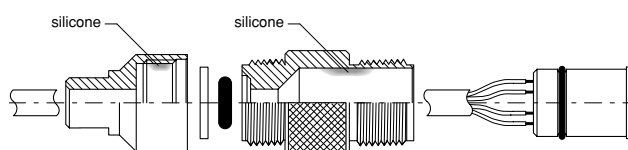


Fig. 2