CD60 incremental output - Measurement range 0 up to 1500 mm

Specifications:

Measurement range	0 up to 1500 mm
Sensing device	Incremental encoder
Supply and output stage	2G2 (5Vdc - Driver 5Vdc RS422)
	PG5 (5 to 30Vdc - Push-pull 5-30Vdc)
	RG2 (4.75 to 30Vdc - Driver 5Vdc RS422)
	5GT (11 to 30Vdc - Transistorized push-pull 11-30Vdc)
Resolution	1 - 5 - 10 - 20 or 25 pulses per mm
Material	Body and cover - aluminium (RohS)
	Measuring cable – Stainless steel
Cable diameter	0,60 mm
Connection	Male connector M23 – 12 pin CW
	Male connector M23 – 12 pin CCW
	PUR cable – 12 wires
	PVC cable – 8 wires
Standard linearity	+/- 0,05% f.s.
	+/- 0,01% f.s. (optional)
Protection class	IP64
Max. Velocity	10 M/S
Max. Acceleration	20 M/S^2 (before cable deformation)
Weight	≈ 1000 g
Operating temperature	-20° to +85°C
Storage temperature	-40° to +85°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
1500	≈ 9,00 N	≈ 12,00 N

Ordering reference:

CD60						OP	

Model

CD60

Measurement range

1500 = 0 to 1500 mm
(Other ranges available on demand)

Resolution

01 = 1 pulses per mm
05 = 5 pulses per mm
10 = 10 pulses per mm
20 = 20 pulses per mm
25 = 25 pulses per mm
(Other values on demand)

Supply and output stage

2G2 = 5Vdc - Driver 5Vdc RS422
PG5 = 5 to 30Vdc - Push-pull 5-30Vdc
RG2 = 4.75 to 30Vdc - Driver 5Vdc RS422
5GT = 11 to 30Vdc - Transistorized push-pull 11-30Vdc

Linearity

L05 = +/- 0.05% f.s.
L01 = +/- 0.01% f.s. (optional)

Connection

G6R = Male connector M23 – 12 pin CW
G8R = Male connector M23 – 12 pin CCW
GP = PUR cable - 12 wires + ex: **R020** for cable radial 2 meters long
G3 = PVC cable - 8 wires + ex: **R020** for cable radial 2 meters long

OP options

AC = Complete anodizing
BR = Cleaning brush for the cable
CP = Fixing of the measuring cable with a clevis
EM = Fixing of the measuring cable with a clip
EN = Measuring cable coated with polyamide
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

Reference example: CD60-1500-05-PG5-L05-G6R-OP-AC-EM

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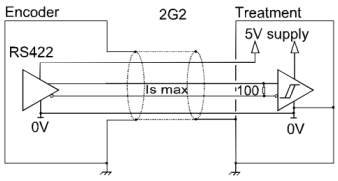
Electrical characteristics

Output stage and power supply

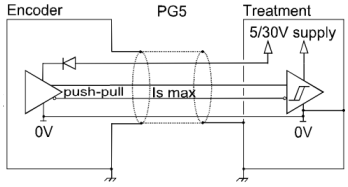
Electronic 2G2 (100°C, 300kHz)

Supply : 5Vdc ± 10%
Cons. without load : 75mA max
Current per channel : 40mA max
0 max (Is=20mA) : V_{ol} = 0,5Vdc
1 min (Is=20mA) : V_{oh} = 4Vdc



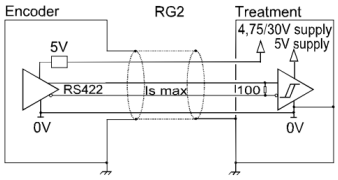
Electronic PG5 (100°C, 300kHz)

Supply : 5 to 30Vdc
Cons. without load : 75mA max
Current per channel : 40mA max
0 max (Is=20mA) : V_{ol} = 0,5Vdc
1 min (Is=20mA) : V_{oh} = Vcc-2,5Vdc



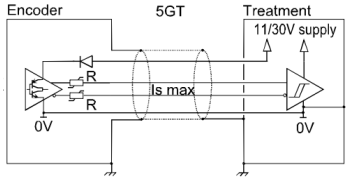
Electronic RG2 (100°C, 300kHz)

Supply : 4,75 to 30Vdc
Cons. without load : 75mA max
Current per channel : 40mA max
0 max (Is=20mA) : V_{ol} = 0,5Vdc
1 min (Is=20mA) : V_{oh} = 4Vdc

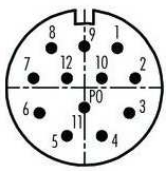
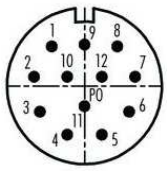


Electronic 5GT (70°C, 120kHz)

Supply : 11 to 30Vdc
Cons. without load : 75mA max
Current per channel : 40mA max
0 max (Is=20mA) : V_{ol} = 1,5Vdc
1 min (Is=20mA) : V_{oh} = Vcc-2,5Vdc



Standard connection

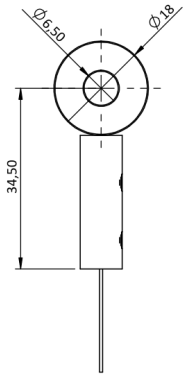
Male connector M23 12 Pin - CW	Male connector M23 12 Pin - CCW	PVC cable 8 wire	PUR cable 12 wire	Standard connection
1	10 + 11	White	White + White/Green	Supply -
2	2 + 12	Brown	Brown + Brown/Green	Supply +
3	8	Green	Grey	A
4	5	Yellow	Brown	B
5	3	Grey	Red	0
6	1	Pink	Pink	A/
7	6	Blue	Green	B/
8	4	Red	Black	0/
 Sensor-side view	 Sensor-side view			

Options :

Cable attachment with a lug :

Standard

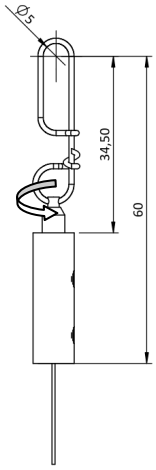
The attachment lug is fixed with a M6 screw or a clevis.



Cable attachment with a clip :

OP-EM

This fastening system allows a rotation about its axis.
The clip is fixed with a M4 screw or a clevis.

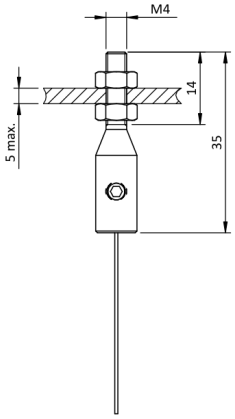


Cable attachment fitted with a M4 threaded rod:

OP-M4

The rod attachment uses a threaded rod with 2 nuts (provided).
The required thickness of the plate does not exceed 5 mm.

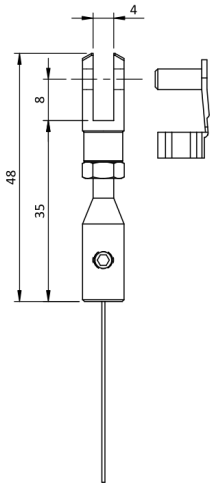
Caution
Never screw the threaded rod into a fixed nut, a twist of the measurement cable would damage it.



Cable attachment with a clevis :

OP-CP

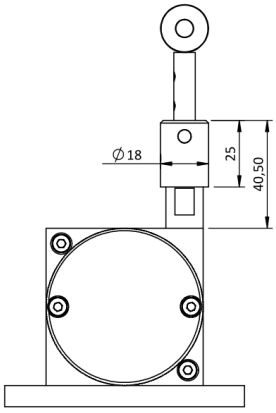
The attachment of the clevis is done using a pin (provided).



Cable cleaning brush:

OP-BR

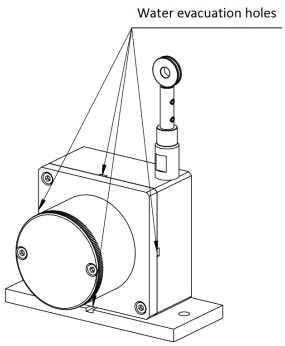
The cleaning brush wipes the cable in dusty or humid environments.



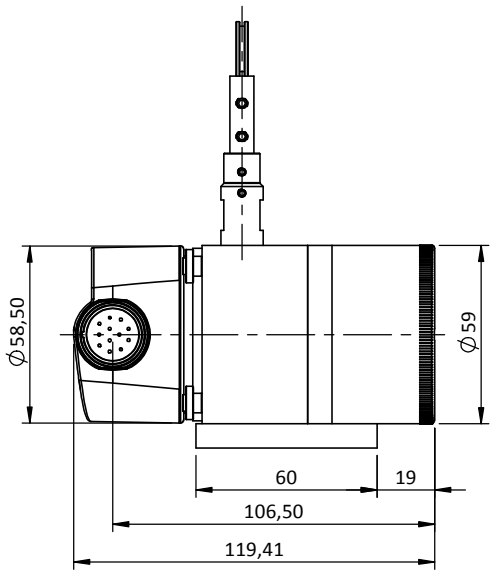
Water evacuation holes:

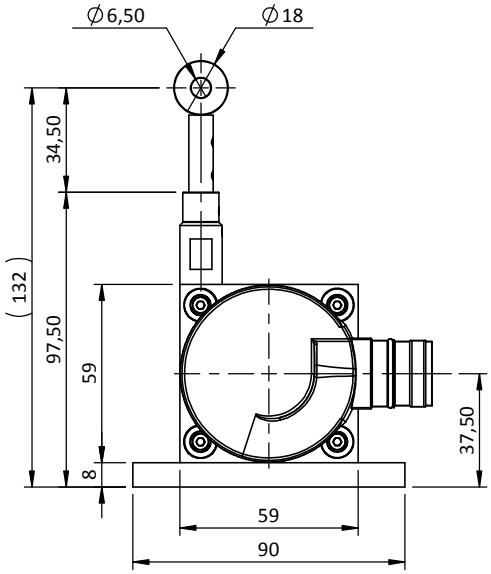
OP-TEV

The holes allow the natural flow of fluids out of the sensor in order to avoid their accumulation in the system.

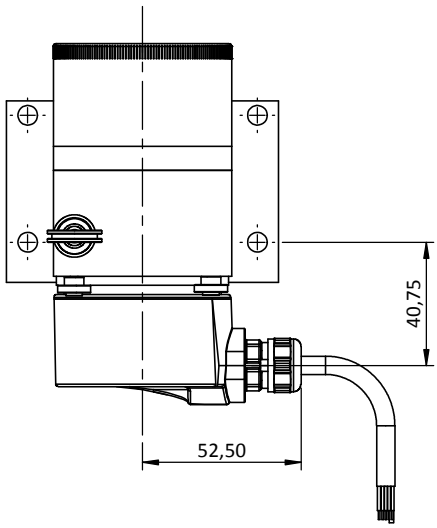


Dimensional Drawing





With DHM5 encoder
GPR or G3R connection
(PUR cable - 12 wires or PVC cable - 8 wires)



With DHM5 encoder
G6R or G8R connection
(Male connector M23 - 12 pin CW or CCW)