# CD50 incremental output - Measurement range 0 to 1250 mm

## Specifications:

Measurement range Sensing device Supply and output signal

#### Resolution Material

Cable diameter Connection

Standard linearity

Protection class Max. Velocity Max. Acceleration Weight Operating temperature Storage temperature

0 up to 1250 mm Incremental encoder 2G2 (5Vdc - Driver 5Vdc RS422) 5G5 (11 to 30Vdc - Push-pull) 9G5 (5 to 24Vdc - Push-pull) PG5 (5 to 30Vdc - Push-pull) 1-5-10-20 or 25 pulses per mm Body and cover - aluminium (RohS) Measuring cable – Stainless steel 0,51 mm Male connector M16 – DIN 8 pin Male connector M16 – DIN 5 pin PVC cable - 8 wires +/- 0,15% f.s. +/- 0,10% f.s. (optional) IP54 10 M/S 40  $M/S^2$  (before cable deformation) ≈ 700 g -20° to +70°C -30° to +100°C



## Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
1250	≈ 4,00 N	≈ 6,50 N

#### Ordering reference:

	CD50	ОР	
Model			
CD50			
Measu	ment range		
1250	= 0 à 1250 mm		
(or oth	ranges between 0 and 1250 mm)		
Resolut	n la		
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	nge available on demand)		
Supply	nd output stage		
2G2	= 5Vdc – Driver 5Vdc RS422		
5G5	= 11 to 30Vdc – Push-pull		
9G5	= 5 to 24Vdc – Push-pull		
PG5	= 5 to 30Vdc – Push-pull		
Linearit			
L05	= +/- 0.05% f.s.		
L01	= +/- 0.01% f.s.		
Connec	on		
GDA	= Male connector M16 – DIN 8 pin		
G2A	= Male connector M16 – DIN 5 pin		
G3R	= PVC cable - 8 wires - radial + ex: 02 for cable 2 meters long		
G3A	= PVC cable - 8 wires - axial + ex: <b>02</b> for cable 2 meters long		
<b>OP</b> opti	ns		
AC	= Complete anodizing		

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вт	= Low temperature (down to -30°C)		
EM	= Cable clip		
EN	= Measuring cable coated with polyamide		
M4	= M4 cable fixing		
RAC	= Measuring cable dust wiper		
TEV	= Water evacuation holes		

Reference example: CD50-1250-05-PG5-L05-GDA-OP-AC-EM



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## Output stage and power supply

## Electronic 2G2 (100°C, 300kHz)

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



## 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 - CCW	PVC cable 8 wire	PUR cable 12 wire	Standard connection
10 + 11	White	White + White/Green	Supply -
2 + 12	Brown	Brown + Brown/Green	Supply +
8	Green	Grey	A
5	Yellow	Brown	В
3	Grey	Red	0
1	Pink	Pink	A/
6	Blue	Green	В/
4	Red	Black	0/
	Male connector M23   12 Pin - CCW   10 + 11   2 + 12   8   5   3   1   6   4	Male connector M23 12 Pin - CCWPVC cable 8 wire10 + 11White2 + 12Brown8Green5Yellow3Grey1Pink6Blue4Red	Male connector M23 12 Pin - CCWPVC cable 8 wirePUR cable 12 wire10 + 11WhiteWhite + White/Green2 + 12BrownBrown + Brown/Green8GreenGrey5YellowBrown3GreyRed1PinkPink6BlueGreen4RedBlack





Sensor-side view



Sensor-side view

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#### 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 with a M4 threaded rod:

#### <u>OP-M4</u>

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 dust wiper:

## OP-RAC

The dust wiper cleans 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.





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## **Dimensional Drawing**





G3R connection (PVC cable - 8 wires - radial)





G3A connection (PVC cable - 8 wires - axial)







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