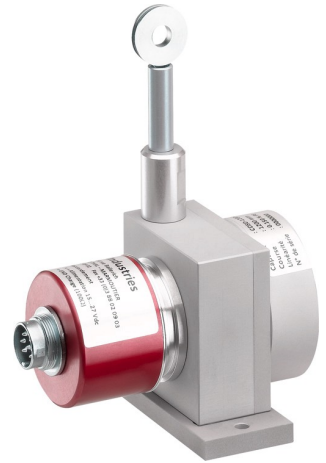


CD50 – INCREMENTAL OUTPUT – MEASUREMENT RANGE 0 TO 1250 MM

Specifications:

Measurement range	0 up to 1250 mm
Sensing device	Incremental encoder
Output signal	Push-Pull - RS422 compatible
Supply	5Vdc
	8 ... 30 Vdc
Resolution	1 to 100 pulses/mm
Material	Body and cover – Aluminium (RohS)
	Measuring cable – Stainless steel
Cable diameter	0,51 mm
Connection	Male connector M16 – DIN 8 pins
	Male connector M12 – 8 pins – A coding
	Shielded PVC cable – 8 x 0,14mm ² (LIYCY)
Linearity	+/- 0,05% fs (+/- 0,01% fs in option)
Protection class	IP65 (IP67 in option)
Max. Velocity	10 M/S
Max. Acceleration	40 M/S ² (before cable deformation)
Weight	≈ 750 g
Operating temperature	-20° to +100°C
Storage temperature	-40° 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 – 1250 – 010 – PPCAO – L05 – DA1 – OP – AC – ...

Model	CD50
Measurement range	1250 = 0 to 1250 mm <i>Or other ranges between 0 and 1250mm</i>
Resolution	001 = 1 pulse/mm ↓ 100 = 100 pulses/mm <i>All resolution between 1 and 100 pulses/mm</i>
Output stage	PP = Push-Pull output, RS422 compatible
Supply	A = 5Vdc C = 8 ... 30 Vdc
Output signals	A = A ; A/ ; B ; B/ ; 0 ; 0/ (0 calibrated on A and B) <i>Other output signals available on demand</i>
Technology	O = Optical
Linearity	L05 = +/- 0.05% f.s. L01 = +/- 0.01% f.s. (option)
Connections	D = Male connector M16 – DIN 8 pins F = Male connector M12 – 8 pins (A coding) G = PVC cable - 8 wires <i>Other output termination available on demand</i>
Orientation	A = Axial R = Radial (only available with cable output)
Connection type	1 = Standard (refer to the connection table on page 2) <i>Other connection available on demand</i>
Cable length if output connection G	/xx = example /03 for 3 meters of cable
Options OP	AC = Complete anodizing CP = Fixing of the measuring cable with a clevis EM = Fixing of the measuring cable with a clip EN = Measuring cable coated with polyamide IP67 = Protection class of electronics IP67 M4 = Fixing of the measuring cable with a M4 threaded rod RAC = Cable dust wiper TEV = Water evacuation holes

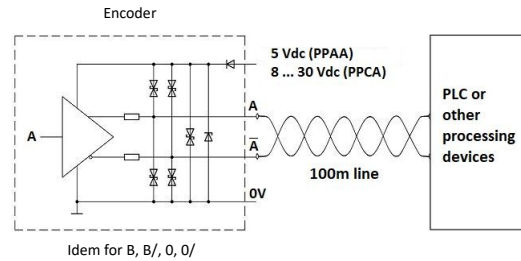
Electrical characteristics

PPCA electronics

Output stage: Push-Pull – compatible RS422
 Power supply: 8 ... 30Vdc
 Consumption without load:
 at 8Vdc = 80 mA
 at 12Vdc = 50 mA
 at 24Vdc = 25 mA
 at 30Vdc = 20 mA
 Protected against over-voltage, polarity inversion and overcurrent

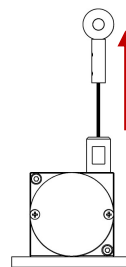
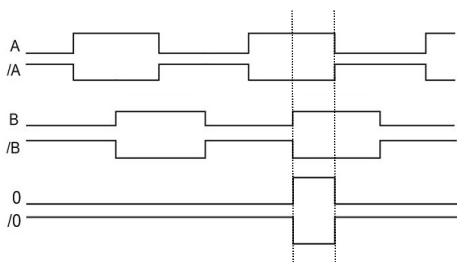
PPAA electronics

Output stage: Push-Pull – compatible RS422
 Power supply: 5Vdc
 Consumption without load at 5Vdc = 50 mA
 Protected against over-voltage, polarity inversion and overcurrent



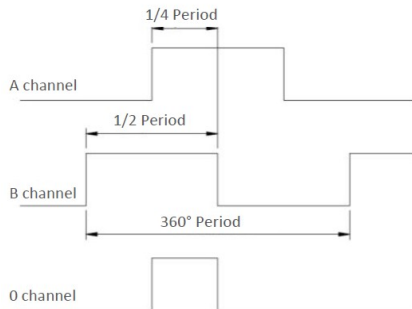
Output signals

0 calibrated to A and B



A channel (rising edge) before B channel when the measuring cable is pulled.

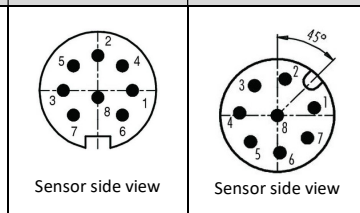
Signals tolerance



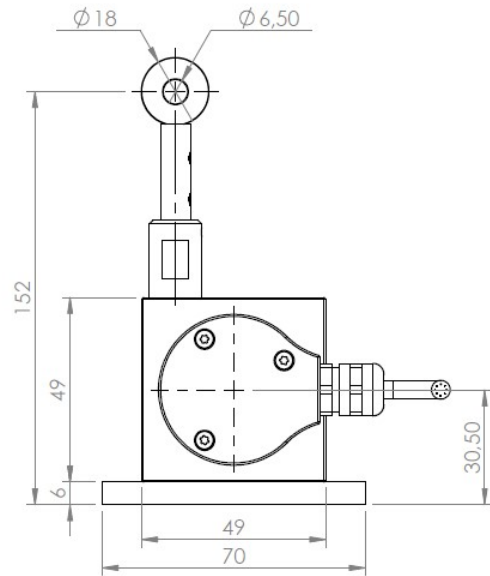
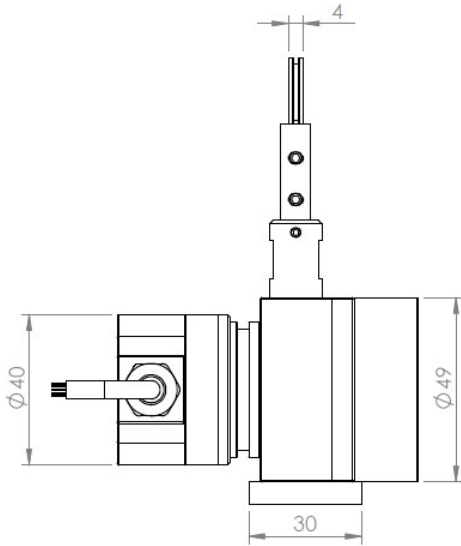
Period : 360° (electrical)
 Duty cycle : 180° ± 10%
 Phase shift : 90° ± 25%
 Starting time : less than 100ms

Standard connections (Typ 1)

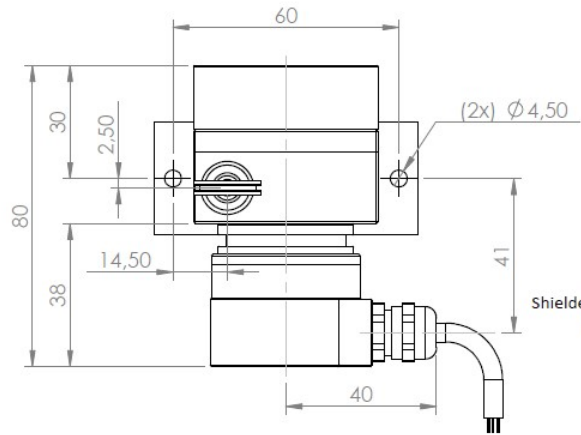
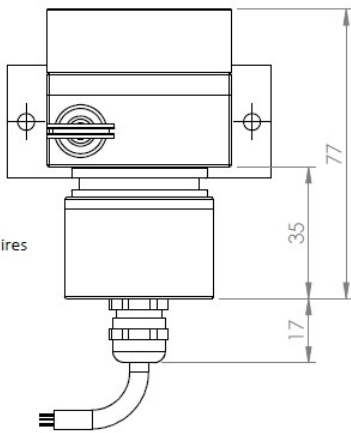
Standard connection	Male connector M16 8 pins (DIN)	Male connector M12 8 pins	PVC cable 8 wires
Supply -	1	1	White
Supply +	2	2	Brown
A Channel	3	3	Green
B Channel	4	4	Yellow
0 Channel	5	5	Grey
A/ Channel	6	6	Pink
B/ Channel	7	7	Blue
0/ Channel	8	8	Red



Technical drawing

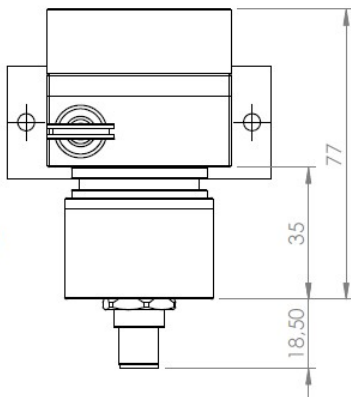


Shielded PVC cable - 8 wires
Axial output
(GA)

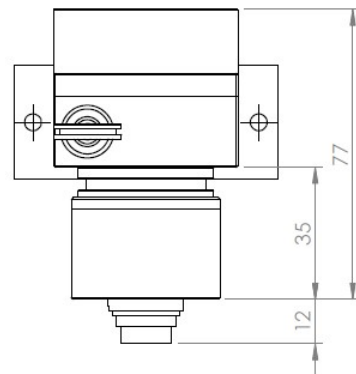


Shielded PVC cable - 8 wires
Radial output
(GR)

Male connector M12
8 pins
Axial output
(FA)



Male connector M16
8 pins DIN
Axial output
(DA)

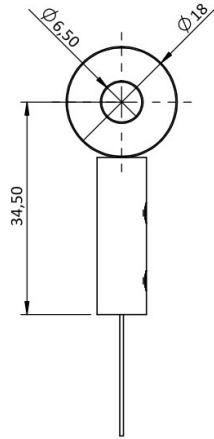


Options :

Cable attachment with a lug :

Standard

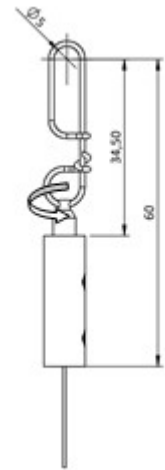
The attachment lug is fixed with a M6 screw or a clevis.



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.



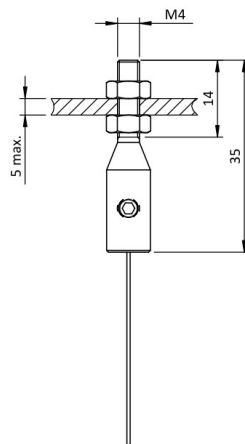
Cable attachment fitted with a M4 threaded rod:

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

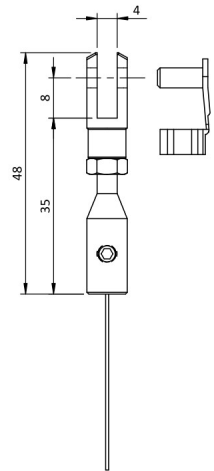
Never screw the threaded rod into a fixed nut, a twist of the measurement cable would damage it.



Cable attachment with a clevis :

OP-CP

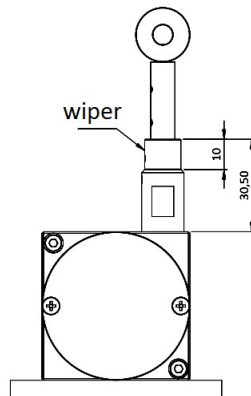
The attachment of the clevis is done using a pin (provided).



Cable 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.

