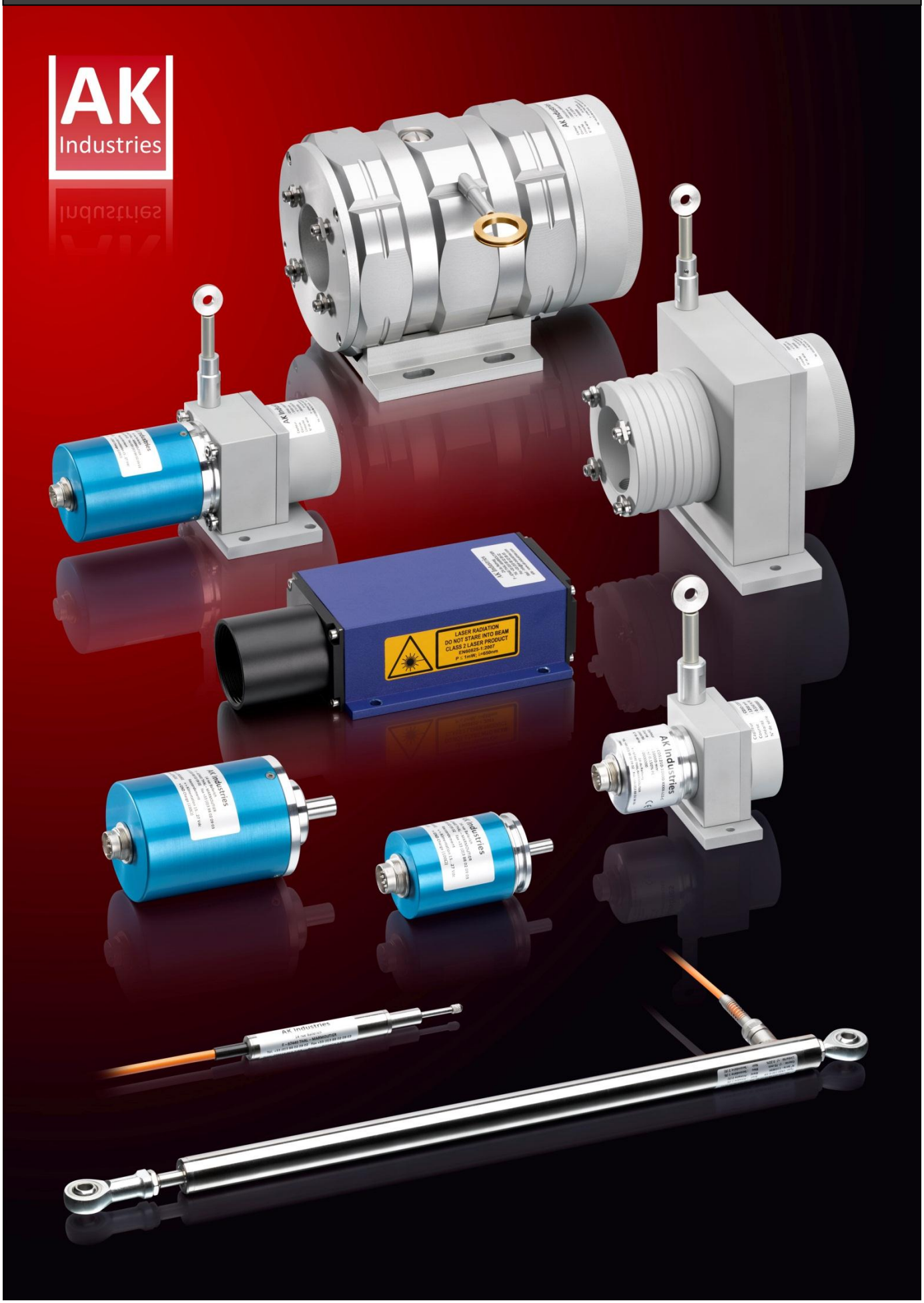
Linear displacement sensors



Selection guide

Model	Measurement range	Output	Page
CD50 	Up to 1250 mm	Potentiometer (1kΩ)	4 - 5
		Analog (0…10V / 4…20mA / 0…20mA)	6 - 7
		Incremental	8 - 9
CD60 	Up to 1500 mm	Potentiometer (1kΩ)	10 - 11
		Analog (0…10V / 4…20mA / 0…20mA)	12 - 13
		Incremental	14 - 15
		Absolute (SSI / Profibus / CANopen / DeviceNet)	16 - 17
CD80 	Up to 2000 mm	Potentiometer (1kΩ)	18 - 19
		Analog (0…10V / 4…20mA / 0…20mA)	20 – 21
	Up to 2500 mm	Incremental	22 – 23
		Absolute (SSI / Profibus / CANopen / DeviceNet)	24 - 25
		Mechanical devices (MEC)	26 - 27
CD115 	Up to 3000 mm	Potentiometer (1kΩ)	28 - 29
		Analog (0…10V / 4…20mA / 0…20mA)	30 - 31
	Up to 3500 mm	Incremental	32 - 33
		Absolute (SSI / Profibus / CANopen / DeviceNet)	34 - 35
		Mechanical devices (MEC)	36 - 37
CD150 	Up to 6000 mm	Potentiometer (1kΩ)	38 - 39
		Analog (0…10V / 4…20mA / 0…20mA)	40 – 41
		Incremental	42 – 43
		Absolute (SSI / Profibus / CANopen / DeviceNet)	44 – 45
		Mechanical devices (MEC)	46 - 47
AS40 	90° to 3600°	Potentiometer (1kΩ)	48 - 49
		Analog (0…10V / 4…20mA / 0…20mA)	50 - 51
AS58 	90° to 3600°	Potentiometer (1kΩ)	52 - 53
		Analog (0…10V / 4…20mA / 0…20mA)	54 - 55

Linear displacement sensor

Selection guide

Model	Measurement range	Output	Page
CDS1210 	Up to 10 000 mm	Potentiometer (1kΩ)	56 - 57
		Analog (0...10V / 4...20mA / 0...20mA)	58 – 59
		Mechanical devices (MEC)	60 – 61
CDS1215 	Up to 15 000 mm	Potentiometer (1kΩ)	62 – 63
		Analog (0...10V / 4...20mA / 0...20mA)	64 – 65
		Mechanical devices (MEC)	66 – 67
CDS1820 	Up to 20 000 mm	Potentiometer (1kΩ)	68 - 69
		Analog (0...10V / 4...20mA / 0...20mA)	70 – 71
		Mechanical devices (MEC)	72 -73
CDS1830 	Up to 30 000 mm	Potentiometer (1kΩ)	74 - 75
		Analog (0...10V / 4...20mA / 0...20mA)	76 - 77
		Mechanical devices (MEC)	78 - 79
CDS1840 	Up to 40 000 mm	Potentiometer (1kΩ)	80 - 81
		Analog (0...10V / 4...20mA / 0...20mA)	82 - 83
		Mechanical devices (MEC)	84 - 85
CDS1850 	Up to 50 000 mm	Potentiometer (1kΩ)	86 - 87
		Analog (0...10V / 4...20mA / 0...20mA)	88 - 89
		Mechanical devices (MEC)	90 - 91

CD50 potentiometric output – Measurement range up to 1250 mm

Specifications:

Measurement range	0 up to 1250 mm
Output signal	1kΩ Potentiometer (other values on demand)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS) Measuring cable – Stainless steel
Cable diameter	0,51 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – DIN 3 pin Male connector M12 – 4 pin PVC cable – 4 wires
Standard linearity	+/- 0,25% f.s. – stroke ≤500mm +/- 0,15% f.s. – stroke >500mm +/- 0,10% f.s. – stroke >500mm (option)
Protection class	IP54 (option IP67)
Max. Velocity	10 M/S
Max. Acceleration	40 M/S^2 (before cable deformation)
Weight	≈ 700 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
50	≈ 6,40 N	≈ 6,50 N
100	≈ 6,30 N	≈ 6,50 N
250	≈ 6,00 N	≈ 6,50 N
500	≈ 5,50 N	≈ 6,50 N
750	≈ 5,00 N	≈ 6,50 N
1000	≈ 4,50 N	≈ 6,50 N
1200	≈ 4,00 N	≈ 6,50 N
1250	≈ 4,00 N	≈ 6,50 N

Ordering reference:

CD50					OP	

Model

CD50

Measurement range

0050 = 0 up to 50 mm
0100 = 0 up to 100 mm
0250 = 0 up to 250 mm
0500 = 0 up to 500 mm
0750 = 0 up to 750 mm
1000 = 0 up to 1000 mm
1200 = 0 up to 1200 mm
1250 = 0 up to 1250 mm
(Other range available on demand)

Output signal

R01K = 1kΩ output
(Other values on demand)

Linearity

L25 = +/- 0.25% f.s. (standard for measuring range from 0 to 500mm)
L15 = +/- 0.15% f.s. (standard for measuring range greater than 500 mm)
(option for measuring range from 0 to 500mm)
L10 = +/- 0.10% f.s. (option for measuring range greater than 500 mm)

Connection

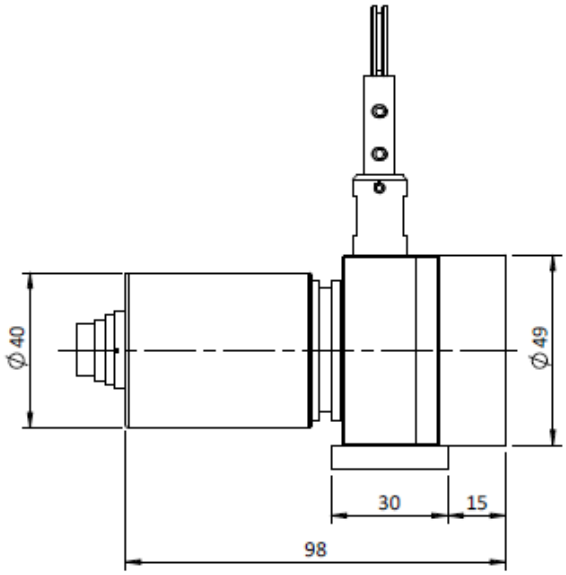
C = Male connector M16 – DIN 3 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

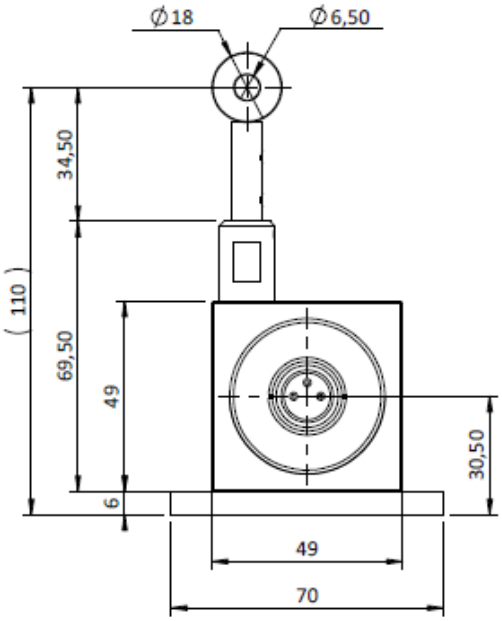
OP Options

AC = Complete anodizing
BT = Low temperature (down to -30°C)
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 IP67
M4 = Fixing of the measuring cable with a M4 threaded rod
RAC = Cable dust wiper
TEV = Water evacuation holes

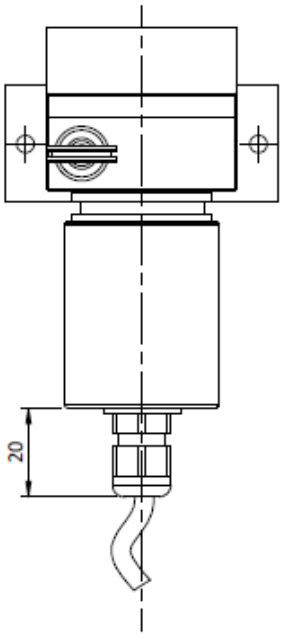
Reference example: CD50-0750-R01R-L15-K02-OP-AC-EM

Dimensional drawing

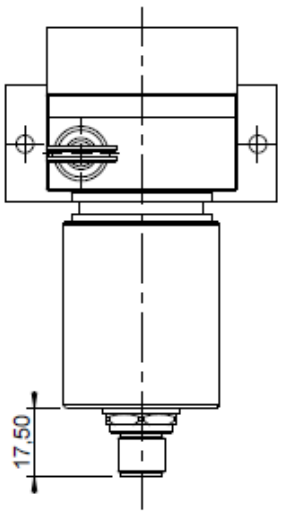




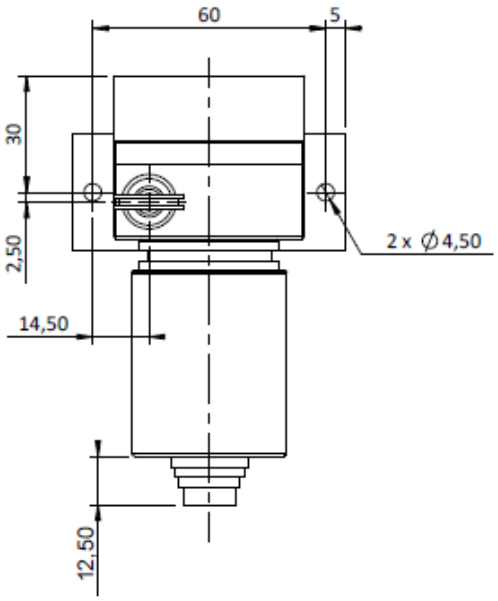
K connection
(PVC cable - 4 wires)

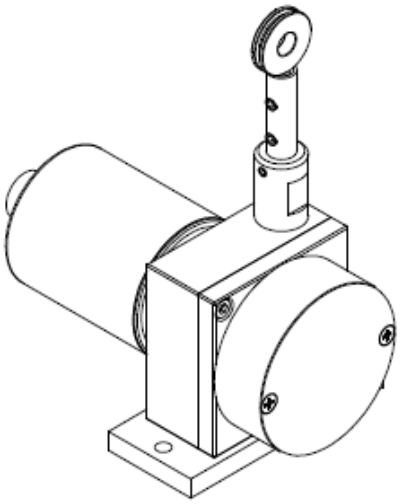


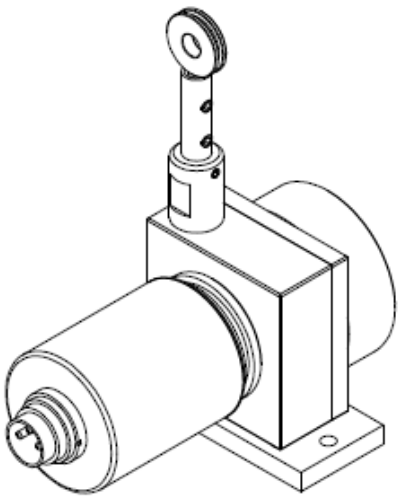
L4 connection
(connector M12 - 4 pin)



C connection
(Connector M16 - DIN 3 pin)







CD50 analog output – Measurement range 0 up to 1250 mm

Specifications:

Measurement range	0 up to 1250 mm
Output signal	0…10V (galvanic isolation) 4…20mA current loop 4…20mA current generator (galvanic isolation) 0…20mA current generator (galvanic isolation)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - aluminium (RohS) Measuring cable – Stainless steel
Cable diameter	0,51 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – DIN 8 pin Male connector M12 – 4 pin PVC cable – 4 wires
Standard linearity	+/- 0,25% f.s. – stroke ≤500mm +/- 0,15% f.s. – stroke >500mm +/- 0,10% f.s. – stroke >500mm (option)
Protection class	IP54 (option IP67)
Max. Velocity	10 M/S
Max. Acceleration	40 M/S^2 (before cable deformation)
Weight	≈ 700 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
50	≈ 6,40 N	≈ 6,50 N
100	≈ 6,30 N	≈ 6,50 N
250	≈ 6,00 N	≈ 6,50 N
500	≈ 5,50 N	≈ 6,50 N
750	≈ 5,00 N	≈ 6,50 N
1000	≈ 4,50 N	≈ 6,50 N
1200	≈ 4,00 N	≈ 6,50 N
1250	≈ 4,00 N	≈ 6,50 N

Ordering reference:

CD50					OP	

Model

CD50

Measurement range

0050 = 0 up to 50 mm
0100 = 0 up to 100 mm
0250 = 0 up to 250 mm
0500 = 0 up to 500 mm
0750 = 0 up to 750 mm
1000 = 0 up to 1000 mm
1200 = 0 up to 1200 mm
1250 = 0 up to 1250 mm
(Other range available on demand)

Output signal

U010 = 0…10V
I420 = 4…20mA (current loop)
I420G = 4…20mA (current generator)
I020G = 0…20mA (current generator)

Linearity

L25 = +/- 0.25% f.s. (standard for measuring range from 0 up to 500mm)
L15 = +/- 0.15% f.s. (standard for measuring range greater than 500 mm)
(option for measuring range from 0 up to 500mm)
L10 = +/- 0.10% f.s. (option for measuring range greater than 500 mm)

Connection

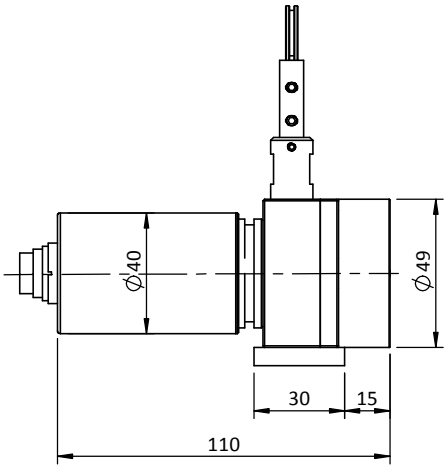
C = Male connector M16 – DIN 8 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

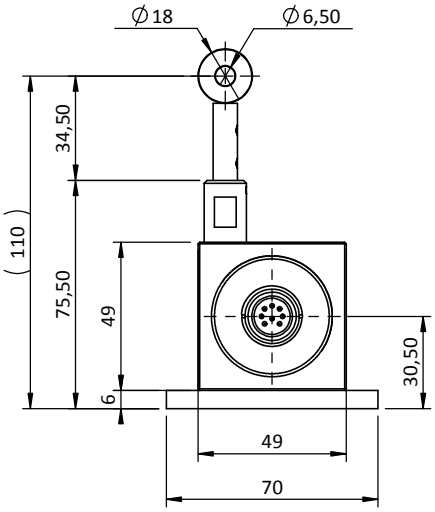
OP Options

AC = Complete anodizing
BT = Low temperature (down to -30°C)
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 IP67
M4 = Fixing of the measuring cable with a M4 threaded rod
RAC = Cable dust wiper
TEV = Water evacuation holes

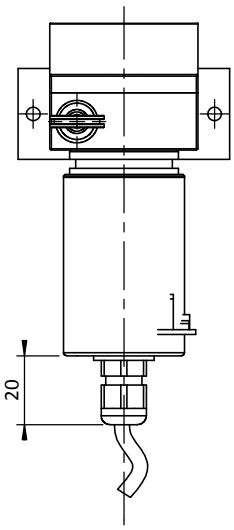
Reference example: CD50-0750-U010-L15-K02-OP-AC-EM

Dimensional Drawing

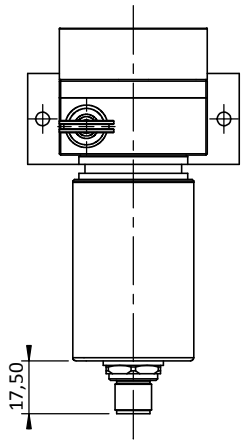




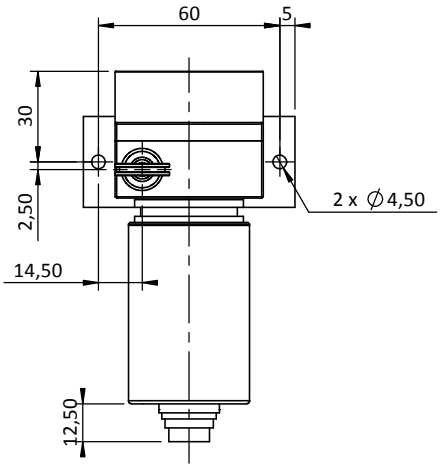
K Connection
(PVC cable - 4 wires)

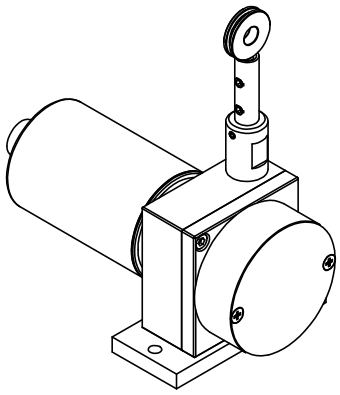


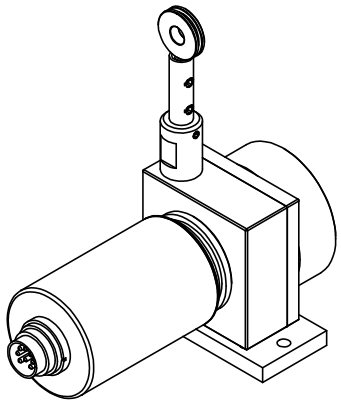
L4 connection
(connector M12 - 4 pin)



C connection
(Connector M16 - DIN 8 pin)







CD50 incremental output - Measurement range 0 to 1250 mm

Specifications:

Measurement range	0 up to 1250 mm
Sensing device	Incremental encoder
Supply and output signal	2G2 (5Vdc – Driver 5Vdc RS422) 5G5 (11 to 30Vdc – Push-pull) 9G5 (5 to 24Vdc – Push-pull) PG5 (5 to 30Vdc – Push-pull)
Resolution	1 – 5 – 10 – 20 or 25 pulses per mm
Material	Body and cover - aluminium (RohS) Measuring cable – Stainless steel
Cable diameter	0,51 mm
Connection	Male connector M16 – DIN 8 pin Male connector M16 – DIN 5 pin PVC cable – 8 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP54
Max. Velocity	10 M/S
Max. Acceleration	40 M/S^2 (before cable deformation)
Weight	≈ 700 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°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						OP	

Model

CD50

Measurement range

1250 = 0 à 1250 mm
(Or other ranges between 0 and 1250 mm)

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 range available on demand)

Supply and 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

Linearity

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

Connection

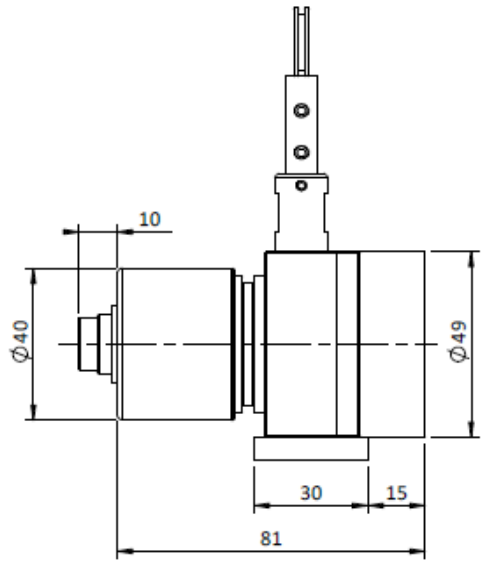
GDA = Male connector M16 – DIN 8 pin
G2A = Male connector M16 – DIN 5 pin
G3R = PVC cable - 8 wires - radial + ex: **020** for cable 2 meters long
G3A = PVC cable - 8 wires - axial + ex: **020** for cable 2 meters long

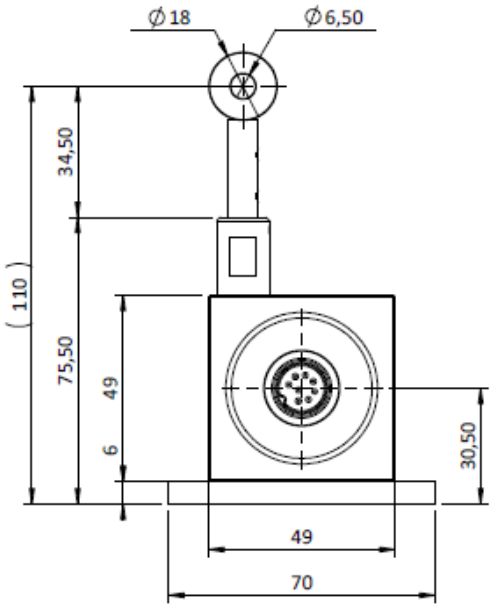
OP options

AC = Complete anodizing
BT = Low temperature (down to -30°C)
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
RAC = Cable dust wiper
TEV = Water evacuation holes

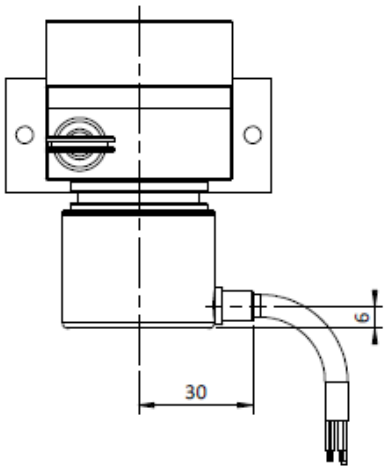
Reference example: CD50-1250-05-PG5-L05-GDA-OP-AC-EM

Dimensional drawing

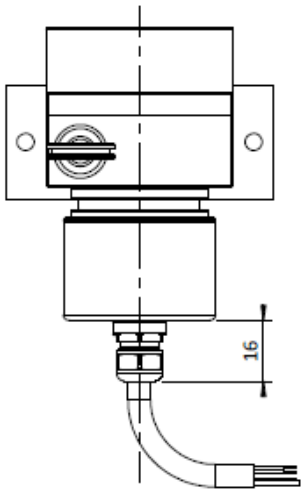




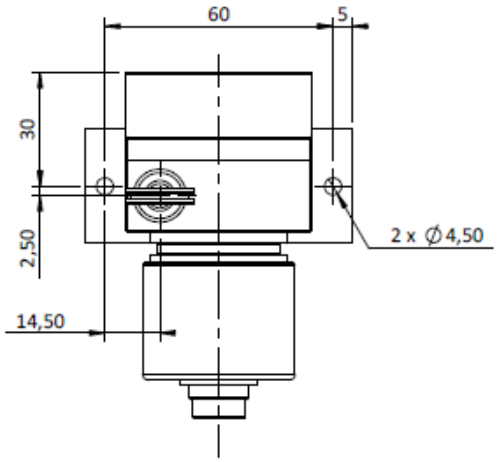
G3R connection
(PVC cable - 8 wires - radial)

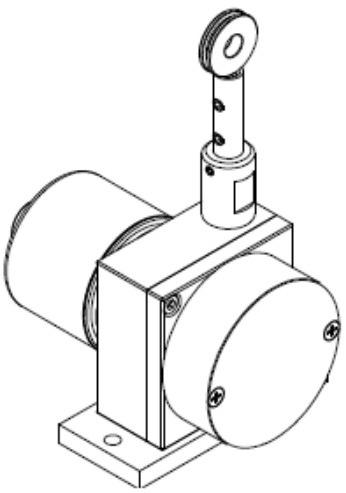


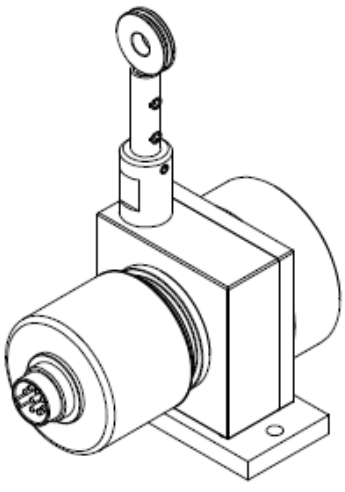
G3A connection
(PVC cable - 8 wires - axial)



GDA/G2A connection
(Connector M16 - DIN 5 or 8 pin)







CD60 potentiometric output – Measurement range 0 up to 1500 mm

Specifications:

Measurement range	0 up to 1500 mm
Output signal	1kΩ potentiometer (other values on demand)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS) Measuring cable – Stainless steel
Cable diameter	0,60 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – DIN 3 pin Male connector M12 – 4 pin PVC cable – 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP54 (option IP67)
Max. Velocity	10 m/s
Max. Acceleration	20 m/s^2 (before cable deformation)
Weight	≈ 1000 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°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 up to 1500 mm
(Other ranges available on demand)

Output signal

R01K = 1kΩ output
(Other values on demand)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

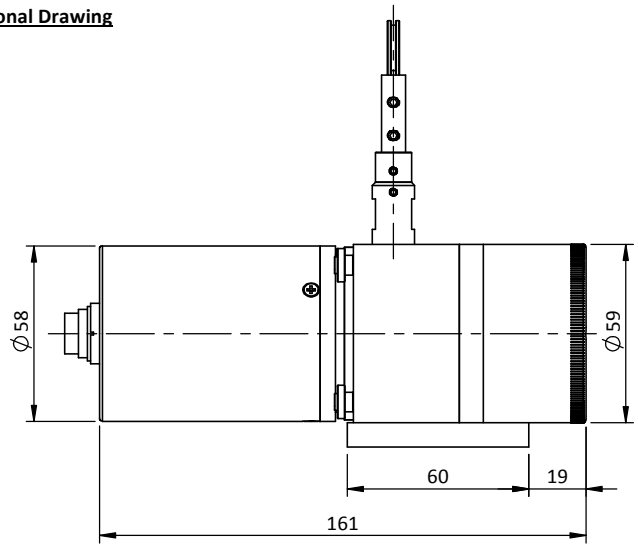
C = Male connector M16 – DIN 3 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

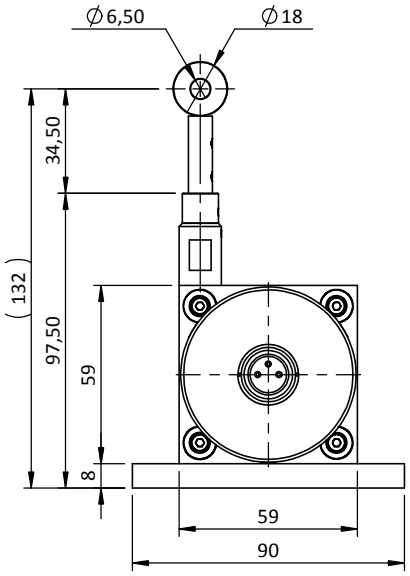
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
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 IP67
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

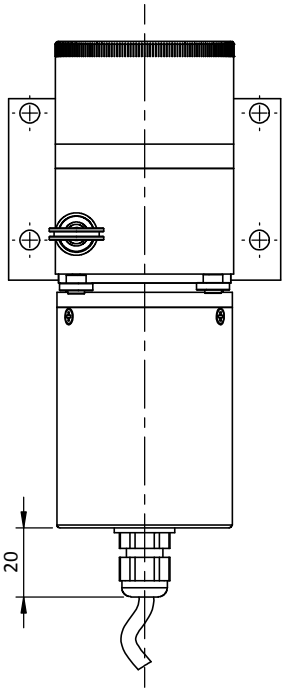
Reference example: CD60-1500-R01K-L15-K02-OP-AC-EM

Dimensional Drawing

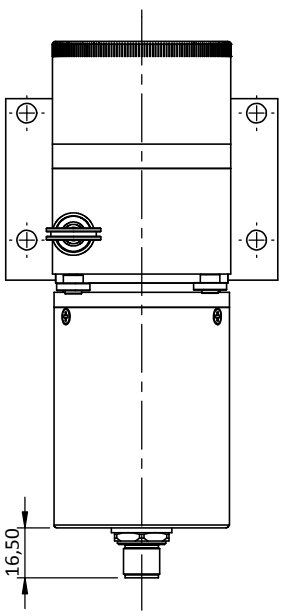




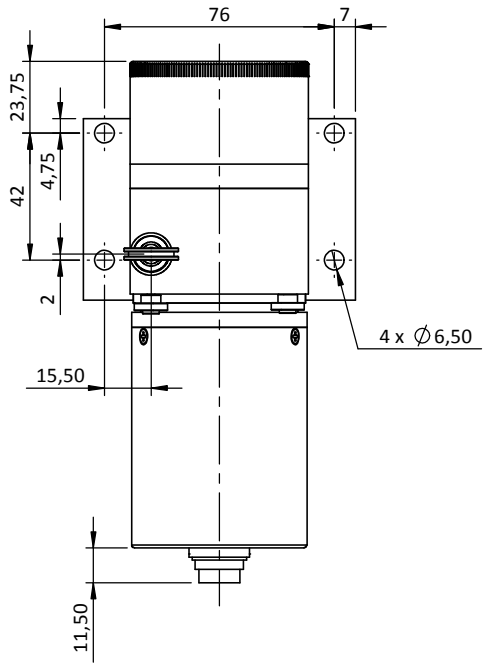
K connection
(PVC cable - 4 wires)

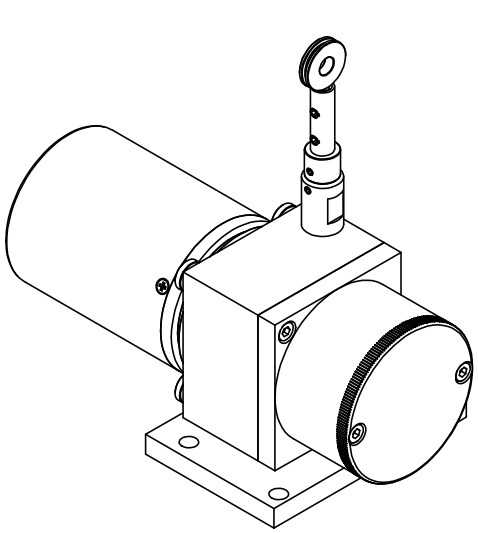


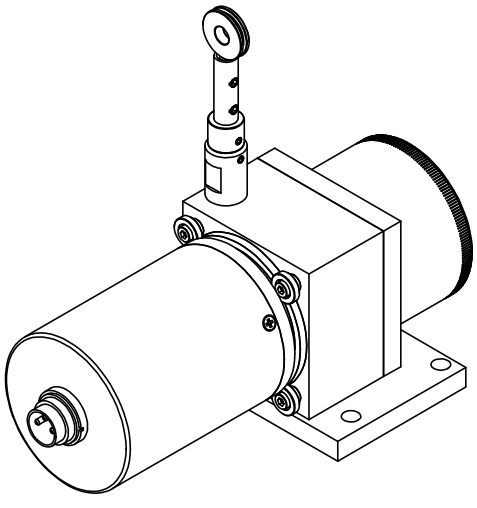
L4 connection
(connector M12 - 4 pin)



C connection
(Connector M16 - DIN 3 pin)







CD60 analog output – Measurement range 0 up to 1500 mm

Specifications:

Measurement range	0 up to 1500 mm
Output signal	0…10V (galvanic isolation)
	4…20mA current loop
	4…20mA current generator (galvanic isolation)
	0…20mA current generator (galvanic isolation)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - aluminium (RohS)
	Measuring cable – Stainless steel
Cable diameter	0,60 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – DIN 8 pin
	Male connector M12 – 4 pin
	PVC cable – 4 wires
Standard linearity	+/- 0,15% f.s.
	+/- 0,10% f.s. (optional)
Protection class	IP54 (option IP67)
Max. Velocity	10 m/s
Max. Acceleration	20 m/s^2 (before cable deformation)
Weight	≈ 1000 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°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 up to 1500 mm
(Other ranges available on demand)

Output signal

U010 = 0…10V
I420 = 4…20mA (current loop)
I420G = 4…20mA (current generator)
I020G = 0…20mA (current generator)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

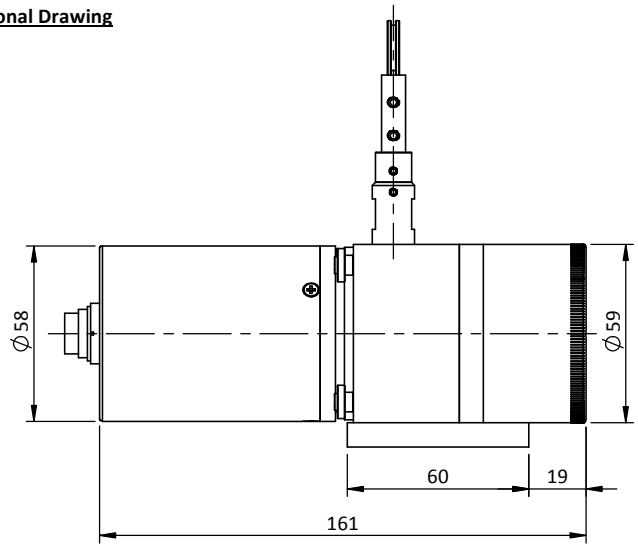
C = Male connector M16 – DIN 8 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

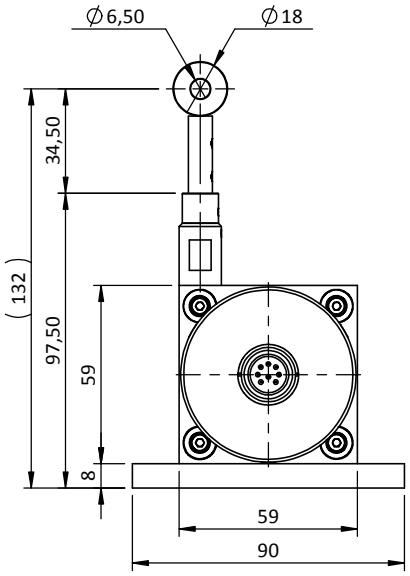
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
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 IP67
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

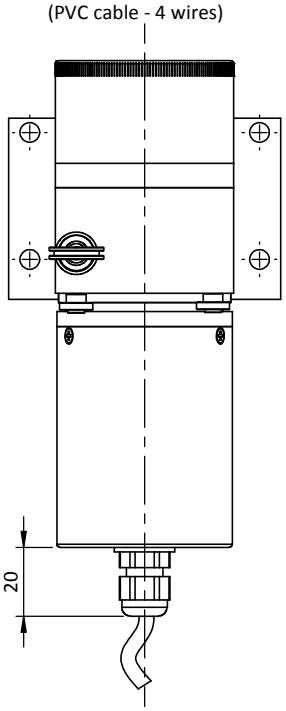
Reference example: CD60-1500-U010-L15-K02-OP-AC-EM

Dimensional Drawing

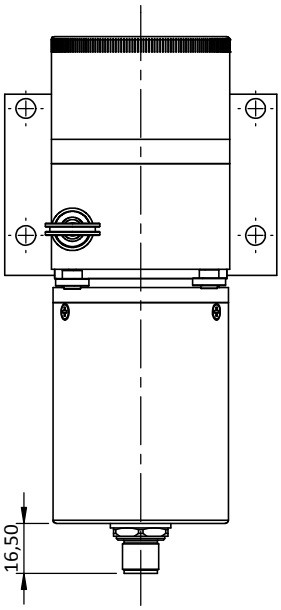




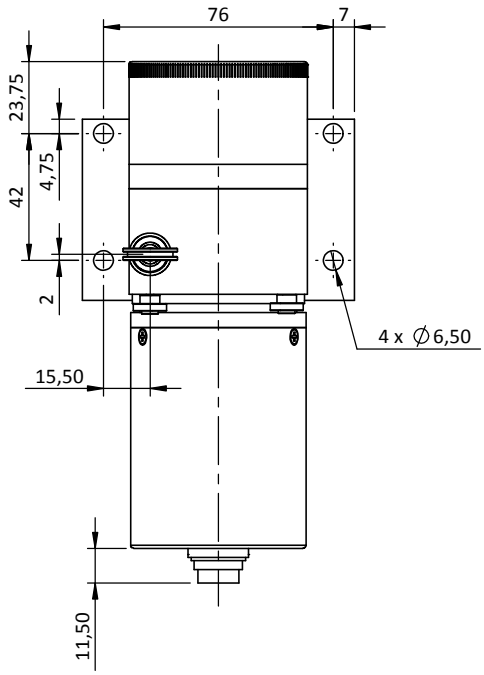
K connection
(PVC cable - 4 wires)

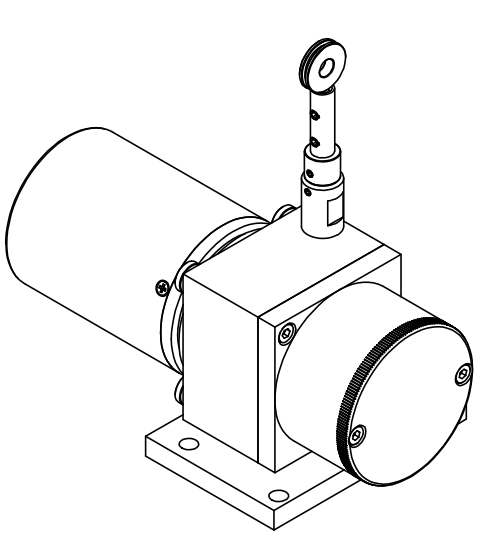


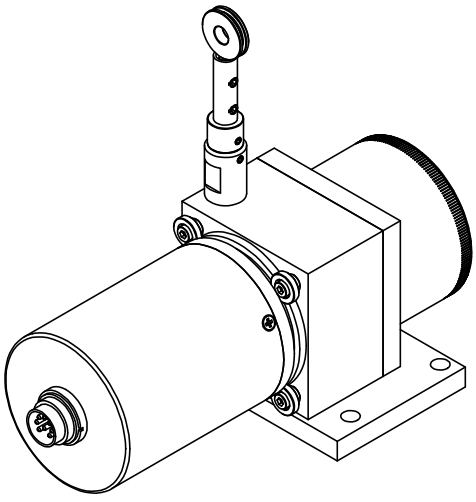
L4 connection
(connector M12 - 4 pin)



C connection
(Connector M16 - DIN 8 pin)







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

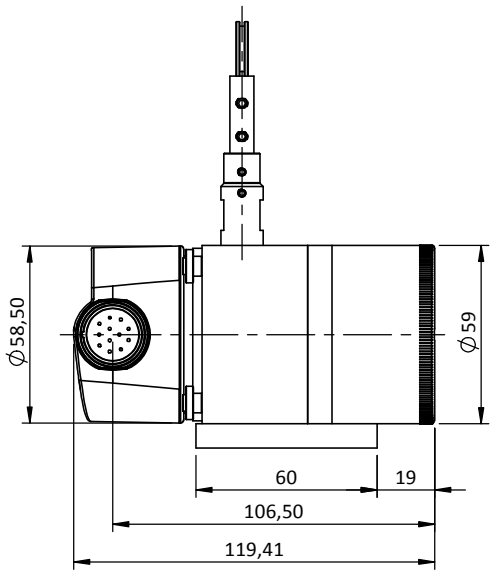
G6R = Male connector M23 – 12 pin CW
G8R = Male connector M23 – 12 pin CCW
GP = PUR cable - 12 wires + ex: **R020** for cable radial 2 meters long
G3 = PVC cable - 8 wires + ex: **R020** for cable radial 2 meters long

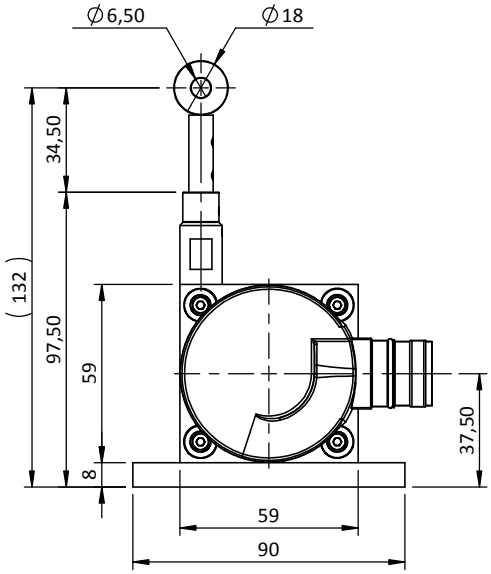
OP options

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

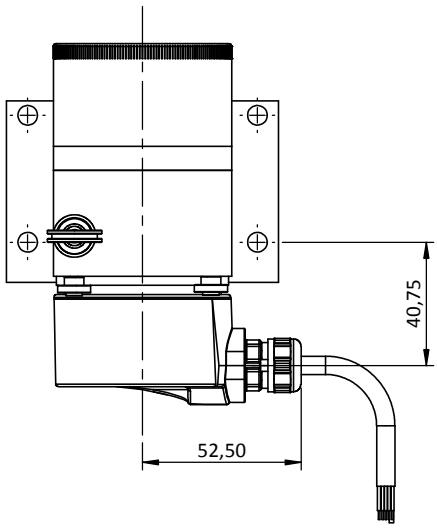
Reference example: CD60-1500-05-PG5-L05-G6R-OP-AC-EM

Dimensional Drawing

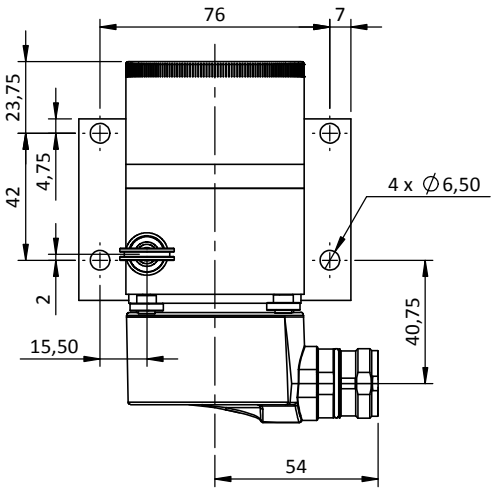


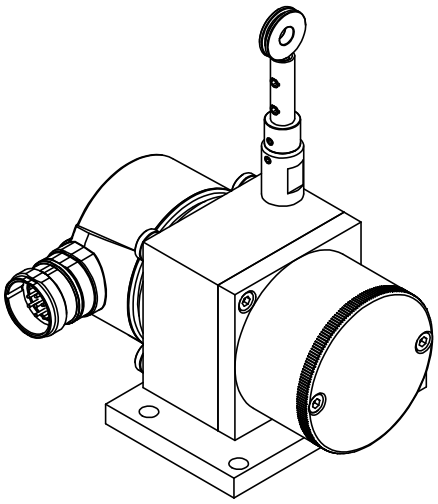


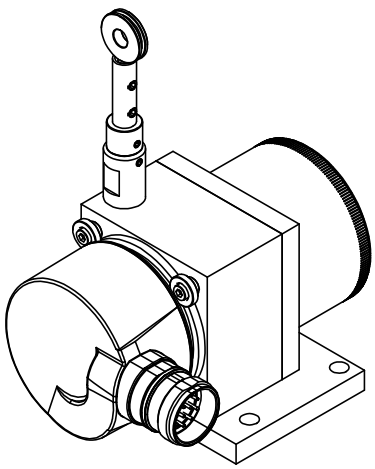
With DHM5 encoder
GPR or G3R connection
(PUR cable - 12 wires or PVC cable - 8 wires)



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







CD60 absolute output - Measurement range 0 up to 1500 mm

Specifications:

Measurement range	0 up to 1500 mm
Sensing device	Absolute encoder (PHM5 or MHM5 series)
Supply	10 - 30Vdc (MHM5)
	5 - 30Vdc (PHM5)
Interface	SSI
	Profibus
	CANopen
	DeviceNet
Resolution	13 bits = 8192steps/turns
Distance per turns	150 mm
	152,4 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
	Terminal box
Standard linearity	+/- 0,05% f.s.
	+/- 0,01% f.s. (optional)
Protection class	IP64
Max. Velocity	10 m/s
Max. Acceleration	20 m/s² (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)

Distance per turns

150 = 150 mm
152 = 152,4 mm

Interface

SSI/1 = MHM5 Serial transmission (SSI)
SSI/2 = PHM5 Serial transmission (SSI)
PROF = MHM5 Profibus transmission
CAN = MHM5 CANopen transmission
DEV = MHM5 DeviceNet transmission

Linearity

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

Connection

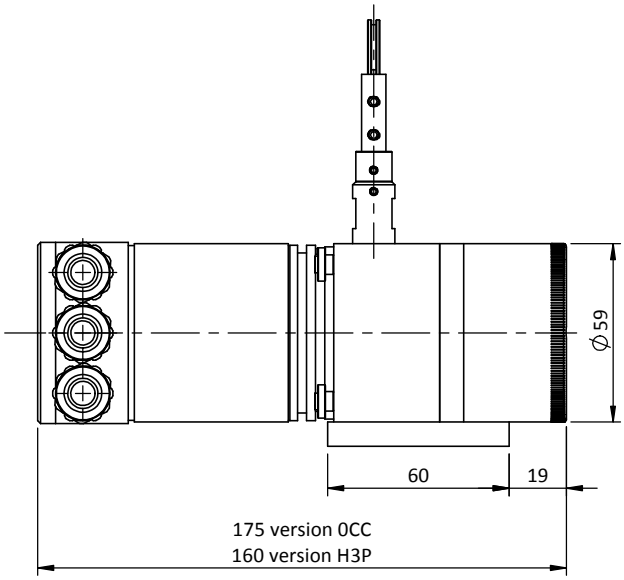
H3P = Terminal box (only for MHM5 Profibus and CANopen)
0CC = Terminal box (only for MHM5 DeviceNet)
PRL = 12 pins M23 connector - counter-clockwise (only on MHM5 SSI)
S6R = 12 pins M23 connector - clockwise (only on PHM5 SSI)
S8R = 12 pins M23 connector - counter-clockwise (only on PHM5 SSI)

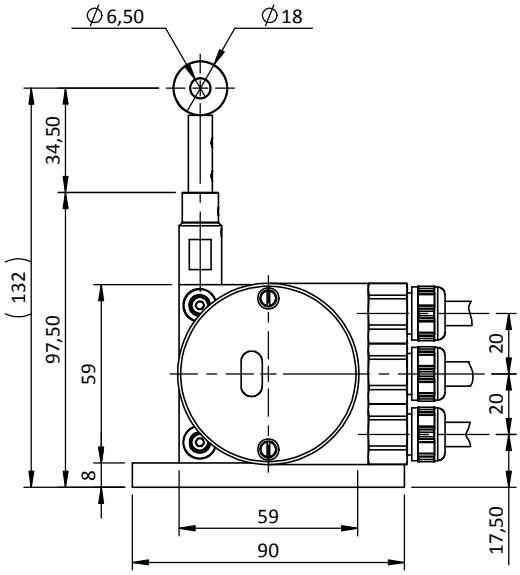
OP options

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

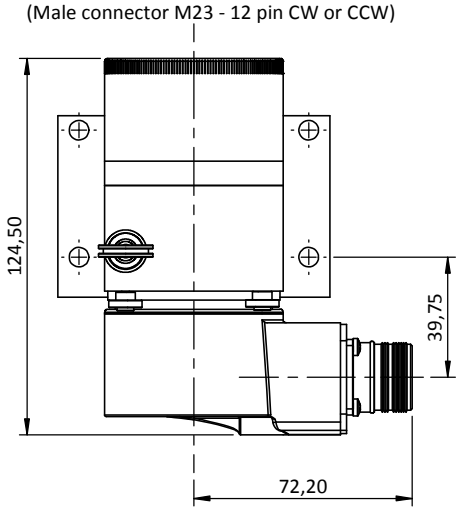
Reference example: CD60-1500-152-PROF-L05-H3P-OP-AC-EM

Dimensional Drawing

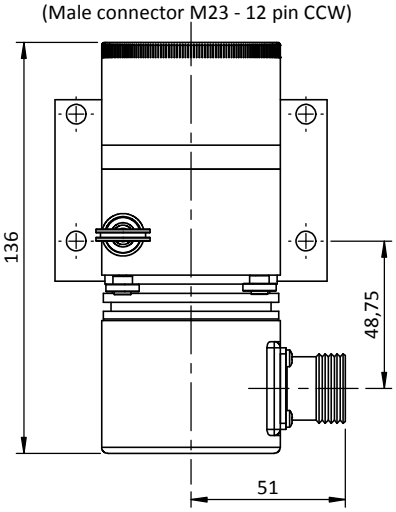




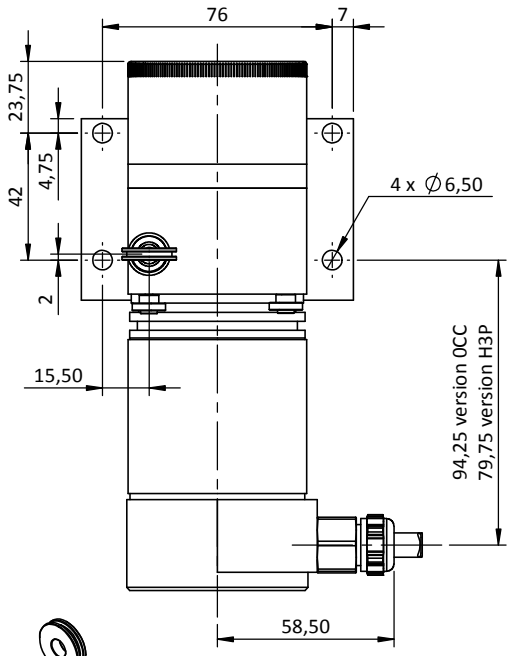
With PHM5 - SSI encoder
S6R or S8R connection
(Male connector M23 - 12 pin CW or CCW)

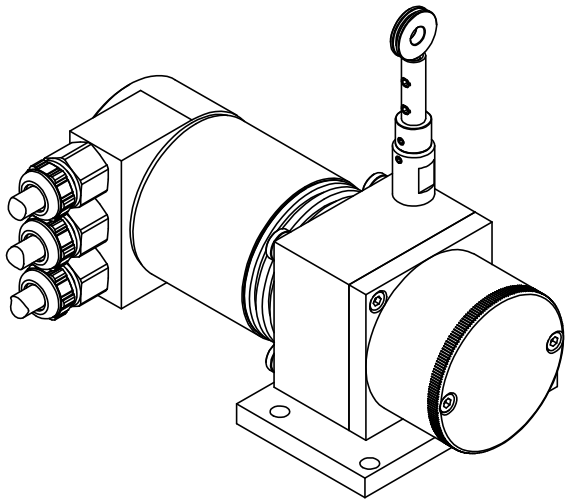


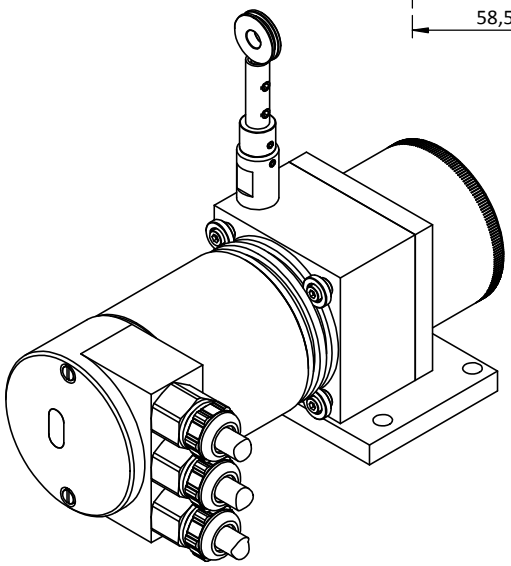
With MHM5 - SSI encoder
PRL connection
(Male connector M23 - 12 pin CCW)



With MHM5 - PROF/CANO/DNET encoder
0CC or H3P connection
(Terminal box)







CD80 potentiometric output – Measurement range 0 up to 2000 mm

Specifications:

Measurement range	0 up to 2000 mm
Output signal	1kΩ potentiometer (other values on demand)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS) Measuring cable – Stainless steel
Cable diameter	0,60 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – DIN 3 pin Male connector M12 – 4 pin PVC cable – 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP54 (option IP67)
Max. Velocity	10 m/s
Max. Acceleration	8 m/s^2 (before cable deformation)
Weight	≈ 1500 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
2000	≈ 8,00 N	≈ 11,00 N

Ordering reference:

CD80					OP	

Model

CD80

Measurement range

2000 = 0 up to 2000 mm
(Other ranges available on demand)

Output signal

R01K = 1kΩ output
(Other values on demand)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

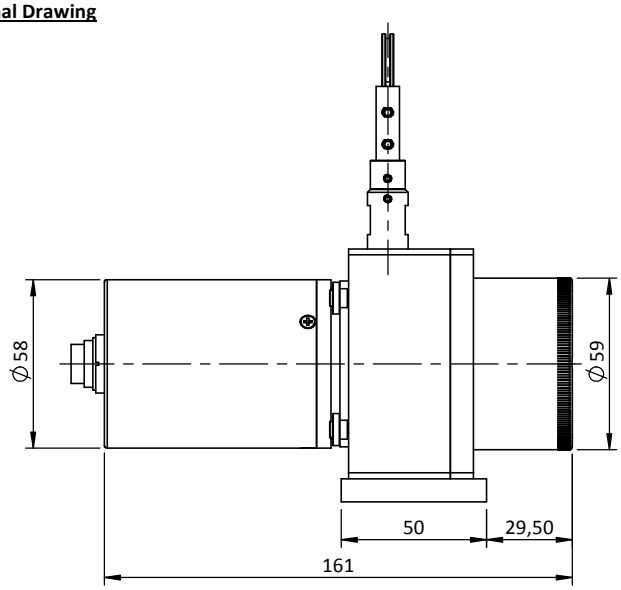
C = Male connector M16 – DIN 3 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

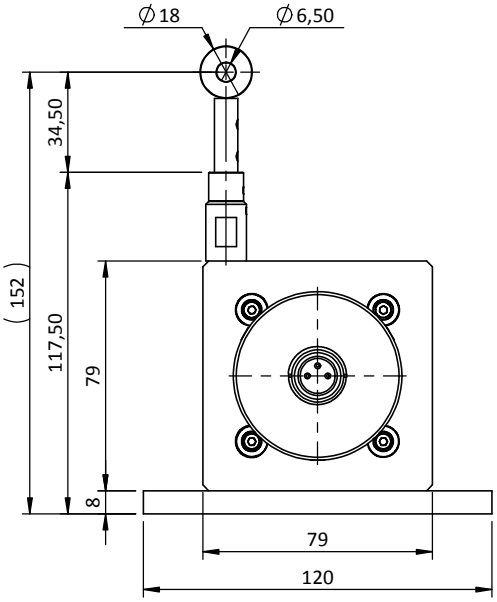
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
EM = Fixing of the measuring cable with a clip
IP67 = Protection class IP67
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

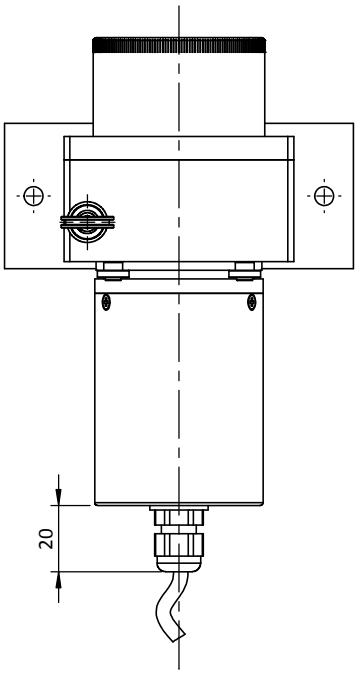
Reference example: CD80-2000-R01K-L15-K02-OP-AC-EM

Dimensional Drawing

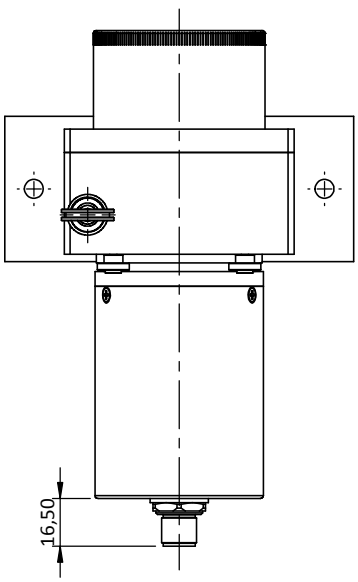




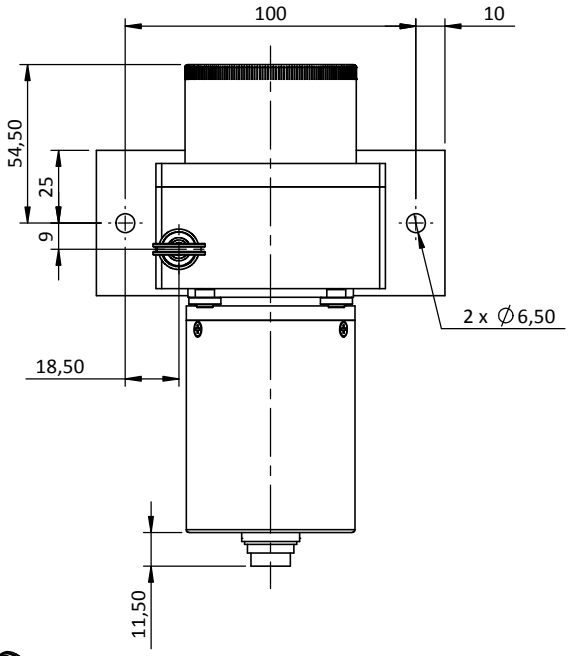
K connection
(PVC cable - 4 wires)

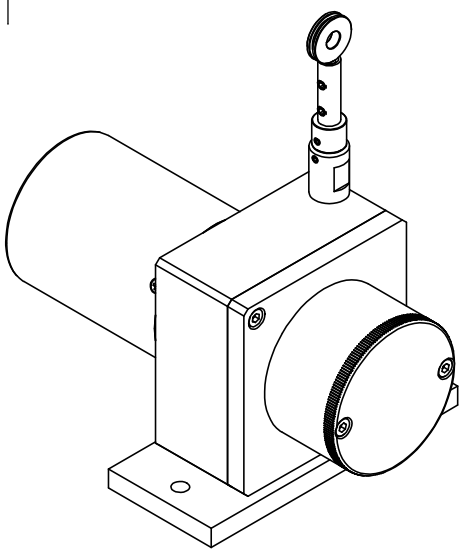


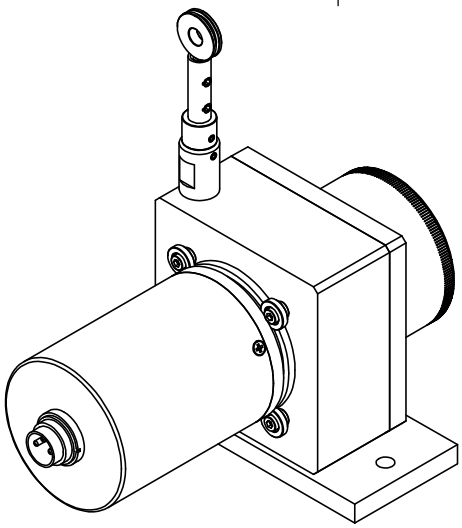
L4 connection
(connector M12 - 4 pin)



C connection
(Connector M16 - DIN 3 pin)







CD80 analog output – Measurement range 0 up to 2000 mm

Specifications:

Measurement range	0 up to 2000 mm
Output signal	0…10V (galvanic isolation) 4…20mA current loop 4…20mA current generator (galvanic isolation) 0…20mA current generator (galvanic isolation)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - aluminium (RohS) Measuring cable – Stainless steel
Cable diameter	0,60 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – DIN 8 pin Male connector M12 – 4 pin PVC cable – 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP54 (option IP67)
Max. Velocity	10 m/s
Max. Acceleration	8 m/s^2 (before cable deformation)
Weight	≈ 1500 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
2000	≈ 8,00 N	≈ 11,00 N

Ordering reference:

CD80					OP	

Model

CD80

Measurement range

2000 = 0 up to 2000 mm
(Other range available on demand)

Output signal

U010 = 0…10V
I420 = 4…20mA (current loop)
I420G = 4…20mA (current generator)
I020G = 0…20mA (current generator)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

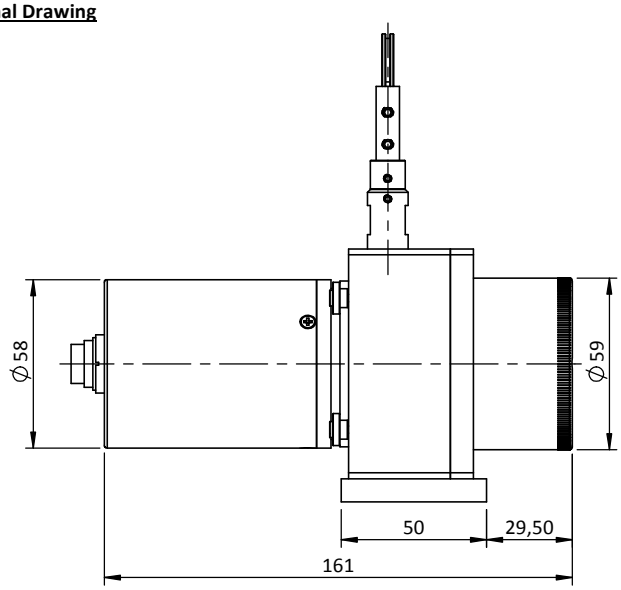
C = Male connector M16 – DIN 8 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

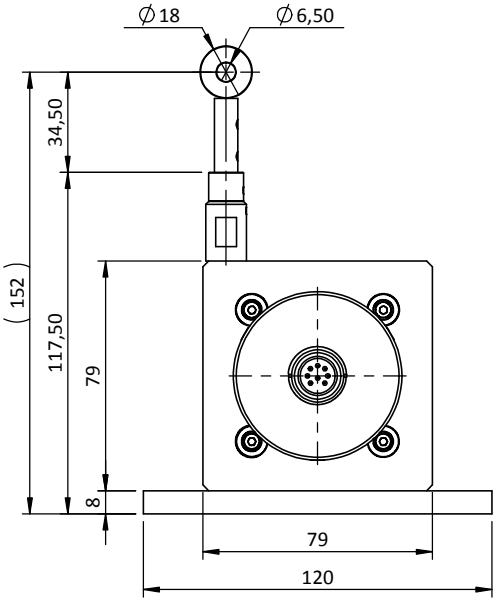
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
EM = Fixing of the measuring cable with a clip
IP67 = Protection class IP67
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

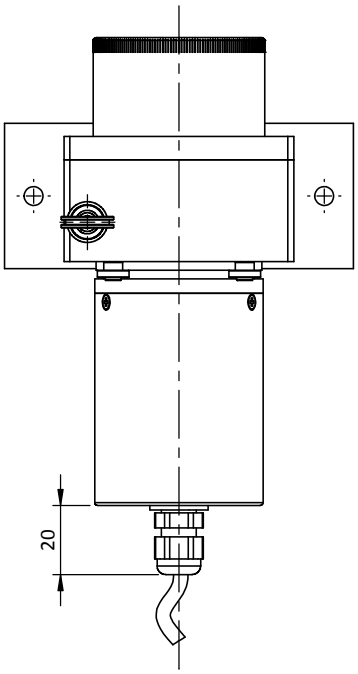
Reference example: CD80-2000-U010-L15-K02-OP-AC-EM

Dimensional Drawing

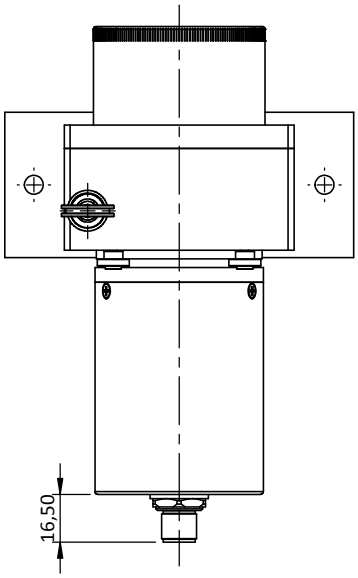




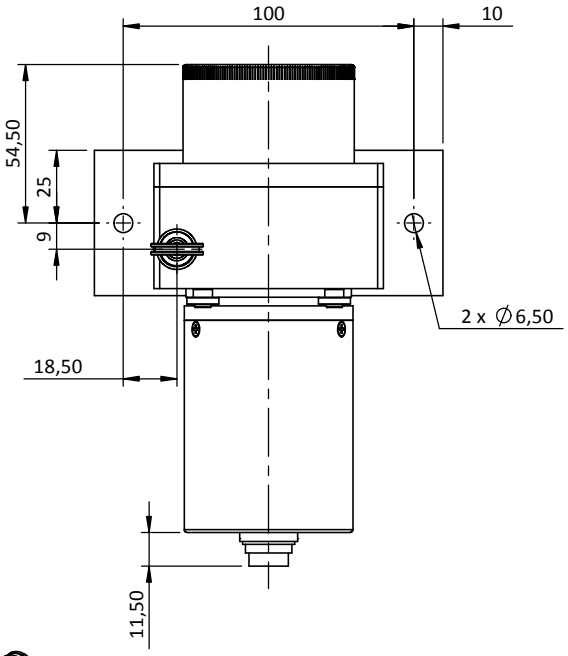
K connection
(PVC cable - 4 wires)

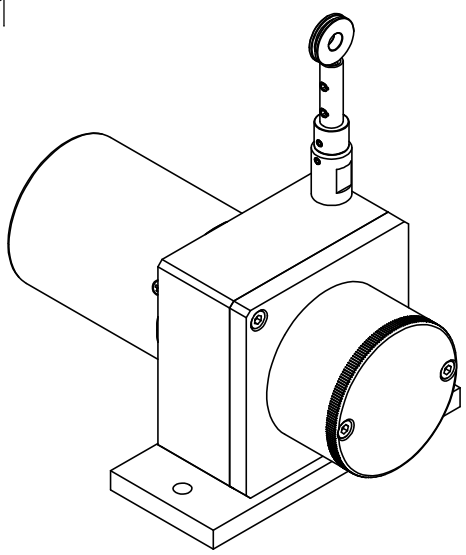


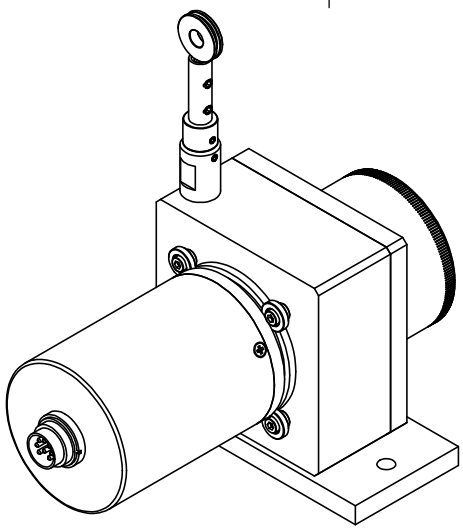
L4 connection
(connector M12 - 4 pin)



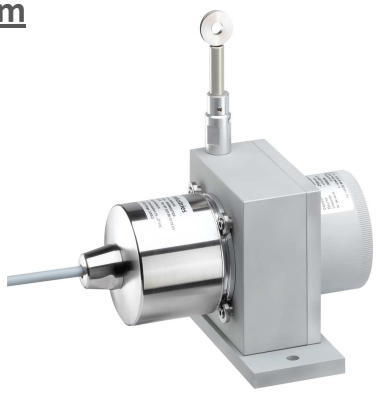
C connection
(Connector M16 - DIN 8 pin)







CD80 incremental output - Measurement range 0 up to 2500 mm



Specifications:

Measurement range	0 up to 2500 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	8 m/s^2 (before cable deformation)
Weight	≈ 1500 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
2500	≈ 7,50 N	≈ 11,00 N

Ordering reference:

CD80						OP	

Model

CD80

Measurement range

2500 = 0 up to 2500 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

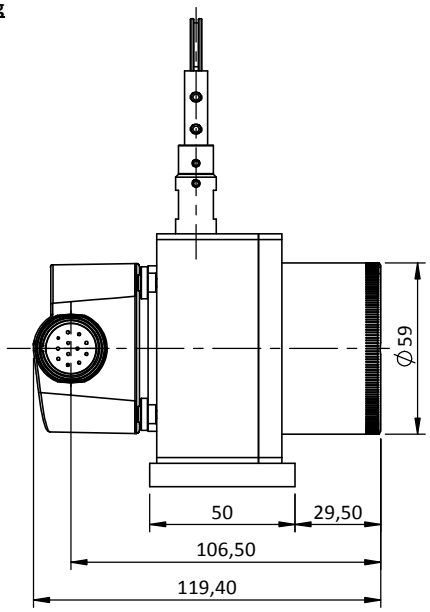
G6R = Male connector M23 – 12 pin CW
G8R = Male connector M23 – 12 pin CCW
GP = PUR cable - 12 wires + ex: **R020** for cable radial 2 meters long
G3 = PVC cable - 8 wires + ex: **R020** for cable radial 2 meters long

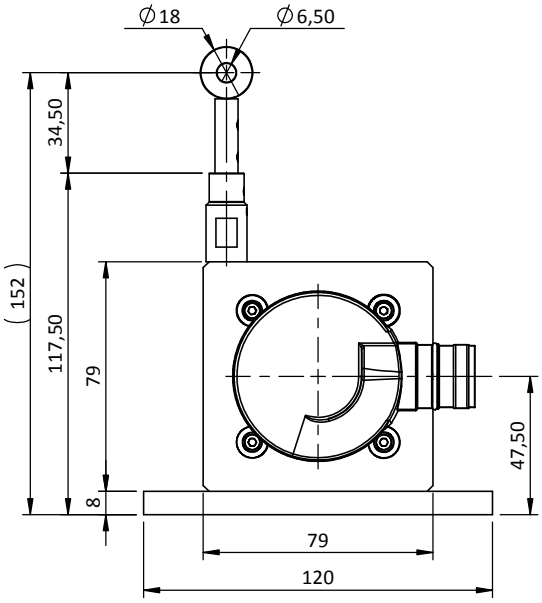
OP options

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
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

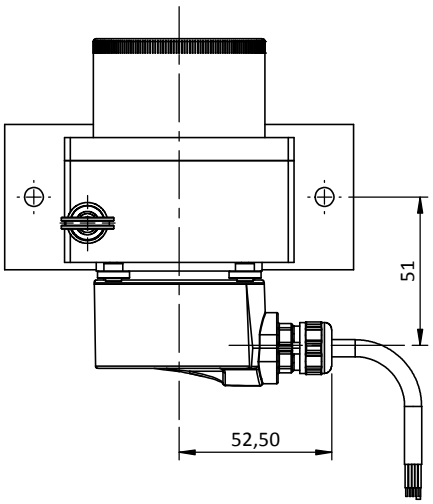
Reference example: CD80-2500-05-PG5-L05-G6R-OP-AC-EM

Dimensional Drawing

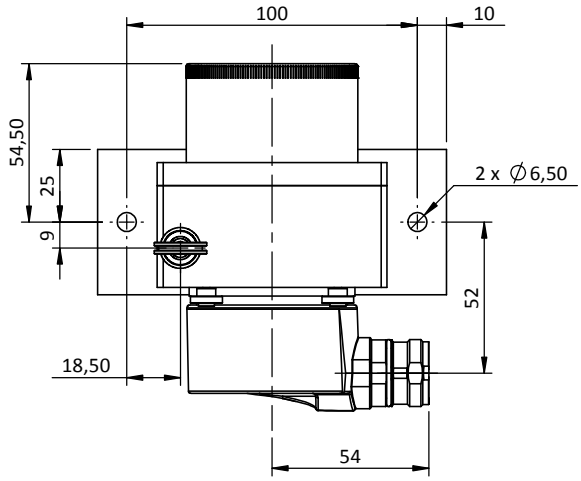


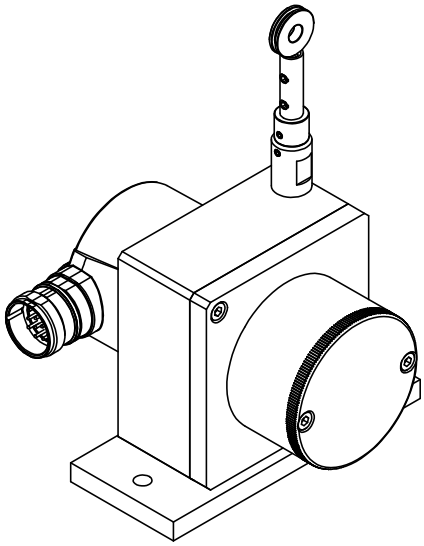


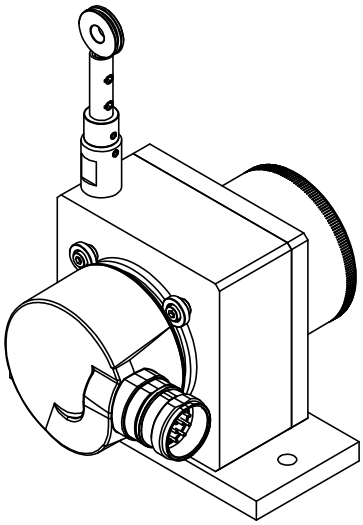
With DHM5 encoder
GPR or G3R connection
(PUR cable - 12 wires or PVC cable - 8 wires)



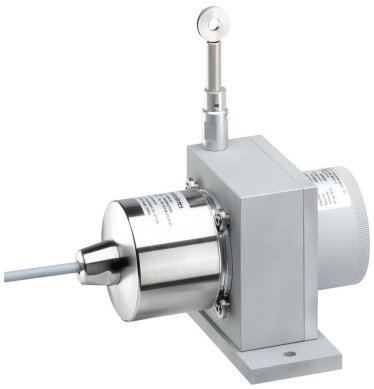
With DHM5 encoder
G6R or G8R connection
(Male connector M23 - 12 pin CW or CCW)







CD80 absolute output - Measurement range 0 up to 2500 mm



Specifications:

Measurement range	0 up to 2500 mm
Sensing device	Absolute encoder (PHM5 or MHM5 series)
Supply	10 - 30Vdc (MHM5)
	5 - 30Vdc (PHM5)
Interface	SSI
	Profibus
	CANopen
	DeviceNet
Resolution	13 bits = 8192steps/turns
Distance per turns	200 mm
	204,8 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
	Terminal box
Standard linearity	+/- 0,05% f.s.
	+/- 0,01% f.s. (optional)
Protection class	IP64
Max. Velocity	10 m/s
Max. Acceleration	8 m/s^2 (before cable deformation)
Weight	≈ 1500 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
2500	≈ 7,50 N	≈ 11,00 N

Ordering reference:

CD80						OP	

Model

CD80

Measurement range

2500 = 0 à 2500 mm
(Other ranges available on demand)

Distance per turns

200 = 200 mm
204 = 204,8 mm

Interface

SSI/1 = MHM5 Serial transmission (SSI)
SSI/2 = PHM5 Serial transmission (SSI)
PROF = MHM5 Profibus transmission
CAN = MHM5 CANopen transmission
DEV = MHM5 DeviceNet transmission

Linearity

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

Connection

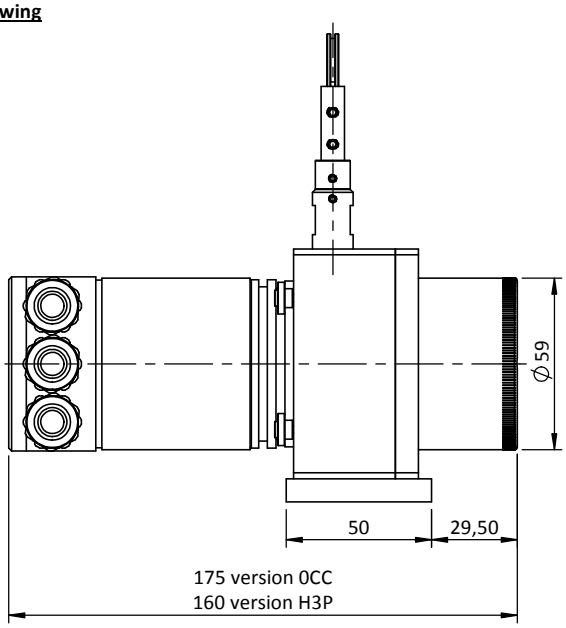
H3P = Terminal box (only for MHM5 Profibus and CANopen)
0CC = Terminal box (only for MHM5 DeviceNet)
PRL = 12 pins M23 connector - counter-clockwise (only on MHM5 SSI)
S6R = 12 pins M23 connector - clockwise (only on PHM5 SSI)
S8R = 12 pins M23 connector - counter-clockwise (only on PHM5 SSI)

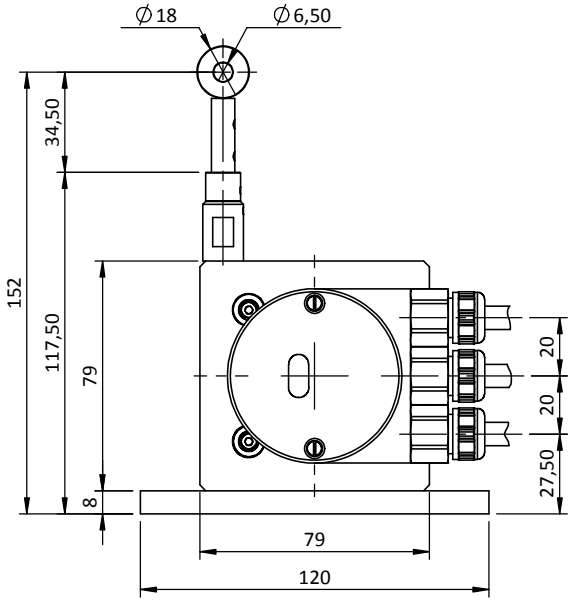
OP options

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
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

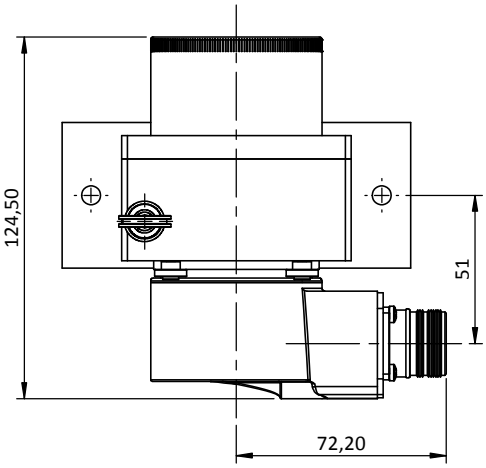
Reference example: CD80-2500-204-PROF-L05-H3P-OP-AC-EM

Dimensional Drawing

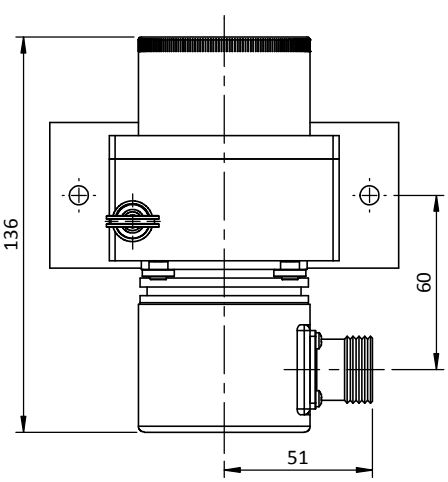




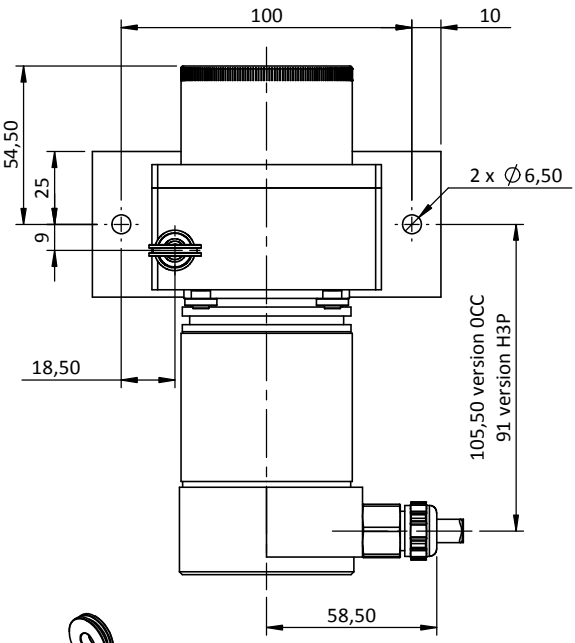
With PHM5 - SSI encoder
S6R or S8R connection
(Male connector M23 - 12 pin CW or CCW)

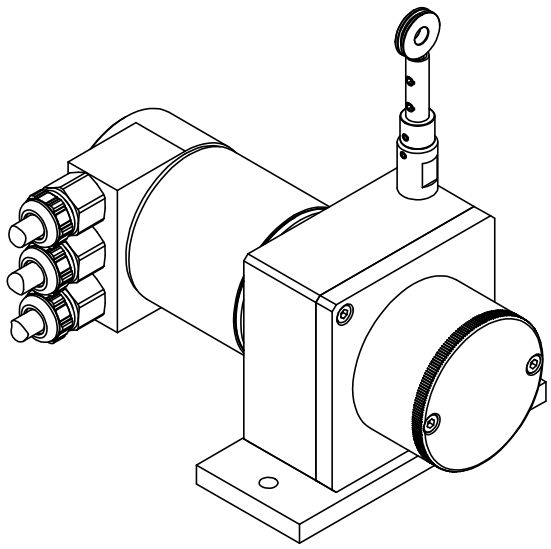


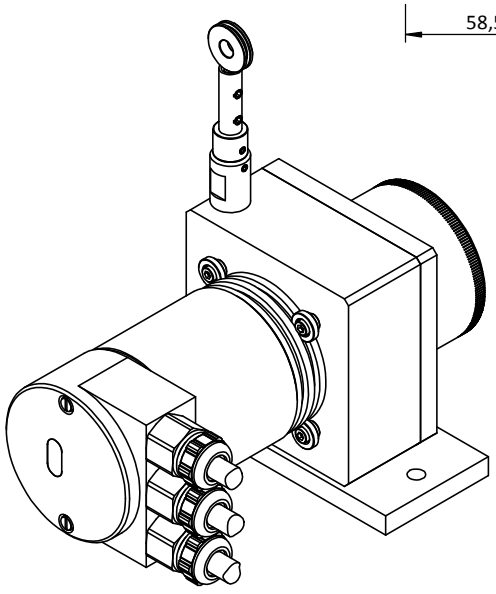
With MHM5 - SSI encoder
PRL connection
(Male connector M23 - 12 pin CCW)



With MHM5 - PROF/CANO/DNET encoder
H3P or 0CC connection
(Terminal box)







CD80-MEC mechanical devices - Measurement range 0 up to 2500 mm

Specifications:

Measurement range	0 up to 2500 mm
Circumference drum	200 mm/turn
	204,8 mm/turn
Sensing device	Adaptable with all our incremental or absolute encoders
Material	Body and cover - aluminium (RohS)
	Measuring cable – Stainless steel
Cable diameter	0,60 mm
Standard linearity	+/- 0,05% f.s.
	+/- 0,01% f.s. (optional)
Max. Velocity	10 m/s
Max. Acceleration	8 m/s^2 (before cable deformation)
Weight	≈ 1500 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
2500	≈ 7,50 N	≈ 11,00 N

Ordering reference:

CD80	MEC				OP	

Model

CD80-MEC

Measurement range

2500 = 0 up to 2500 mm
(Other range available on demand)

Drum circumference

200 = 200 mm/turn
204 = 204,8 mm/turn

Linearity

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

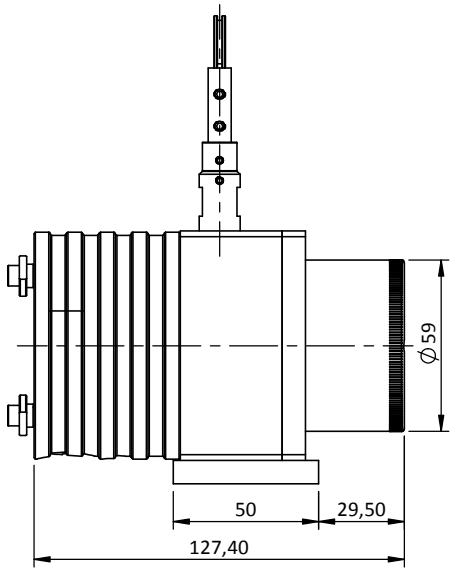
OP options

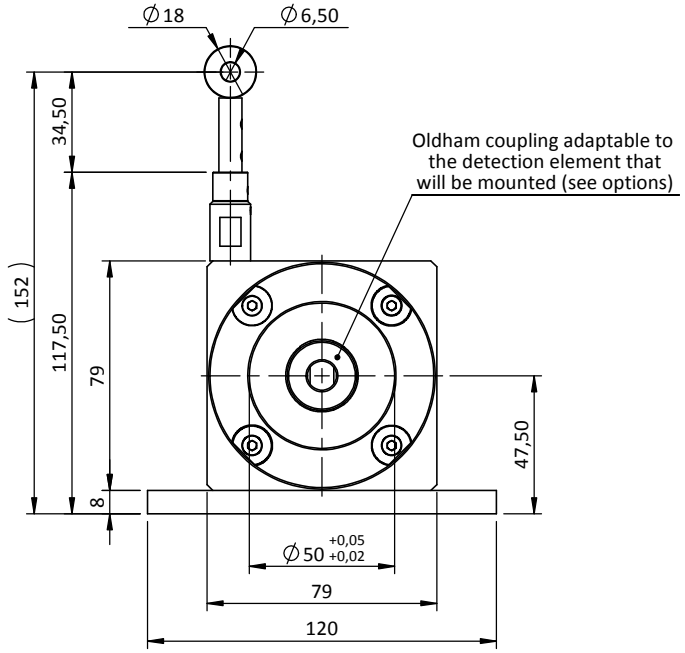
06 = Adapter flange for Ø58 encoder with Ø6 axis (**06A** for the provision of a Ø6 coupling device without flange)
10 = Adapter flange for Ø58 encoder with Ø10 axis
12 = Adapter flange for Ø90 encoder with Ø12 axis (**12A** for the provision of a Ø6 coupling device without flange)
AC = Complete anodizing
BR = Cleaning brush for the cable
CP = Fixing of the measuring cable with a clevis
EM = Fixing of the measuring cable with a clip
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

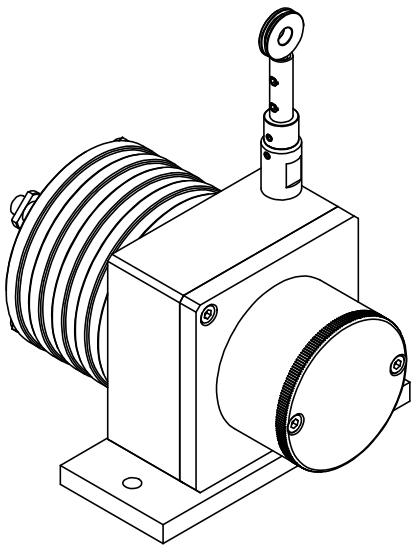
If no option is specified for the adapter flange, the draw-wire sensor will be supplied as standard with a Ø10 coupling brace without a flange.
For the adaptation of an encoder or other sensor device which does not belong to our range, please contact us.

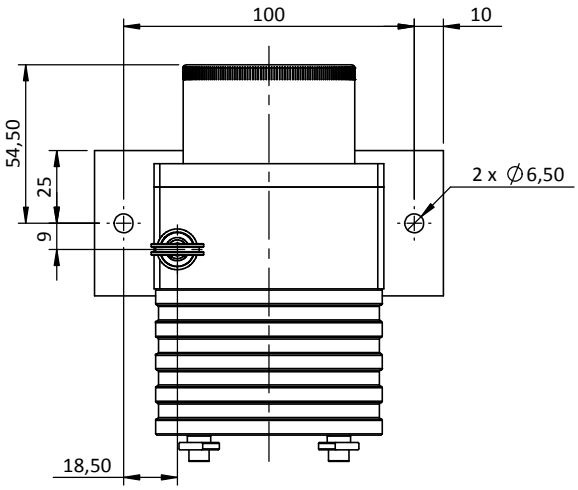
Reference example: CD80-MEC-2500-200-L05-OP-10-AC

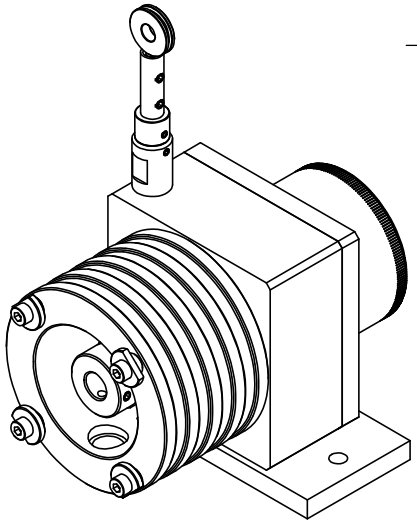
Dimensional Drawing











CD115 potentiometric output – Measurement range 0 up to 3000 mm

Specifications:

Measurement range	0 up to 3000 mm
Output signal	1kΩ potentiometer (other values on demand)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS) Measuring cable – Stainless steel
Cable diameter	0,60 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – DIN 3 pin Male connector M12 – 4 pin PVC cable – 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP54 (option IP67)
Max. Velocity	10m/s
Max. Acceleration	7 m/s^2 (before cable deformation)
Weight	≈ 2000 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
3000	≈ 13,50 N	≈ 18,00 N

Ordering reference:

CD115					OP	

Model
CD115

Measurement range
3000 = 0 up to 3000 mm
(Other ranges available on demand)

Output signal
R01K = 1kΩ output
(Other values on demand)

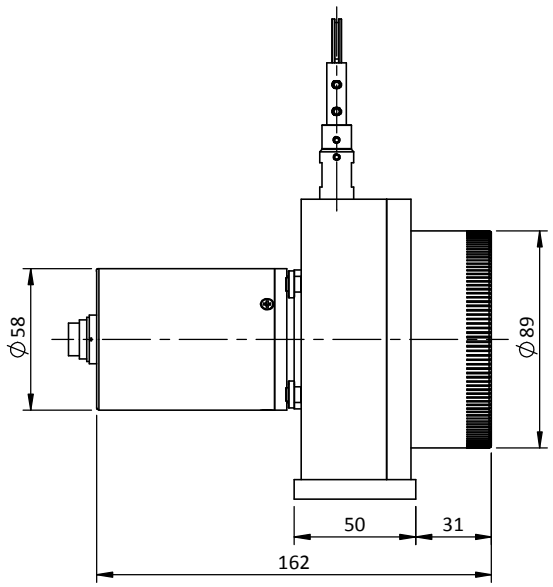
Linearity
L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

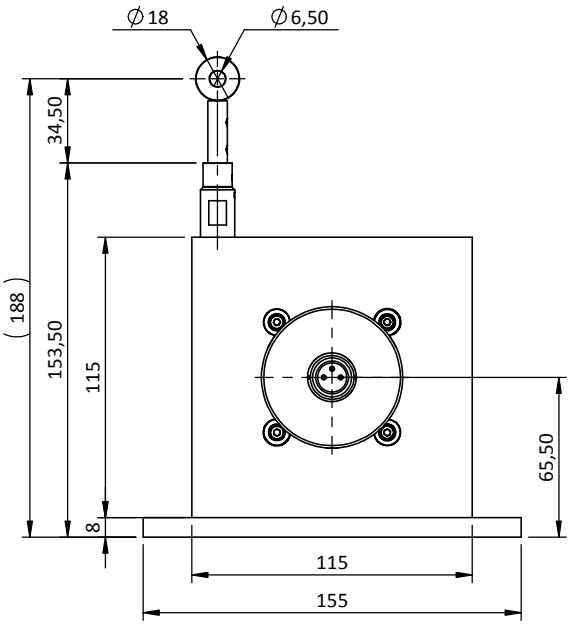
Connection
C = Male connector M16 – DIN 3 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

OP Options
AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes
BR = Cleaning brush for the cable

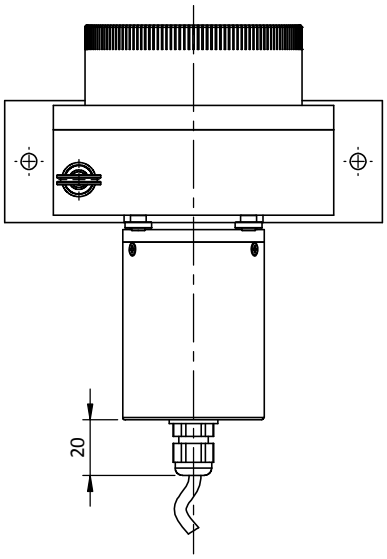
Reference example: CD115-3000-R01K-L15-K02-OP-AC-M4

Dimensional Drawing

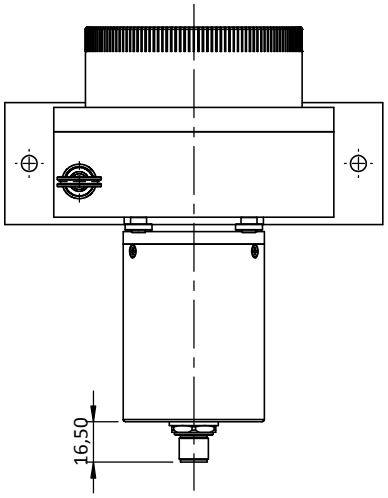




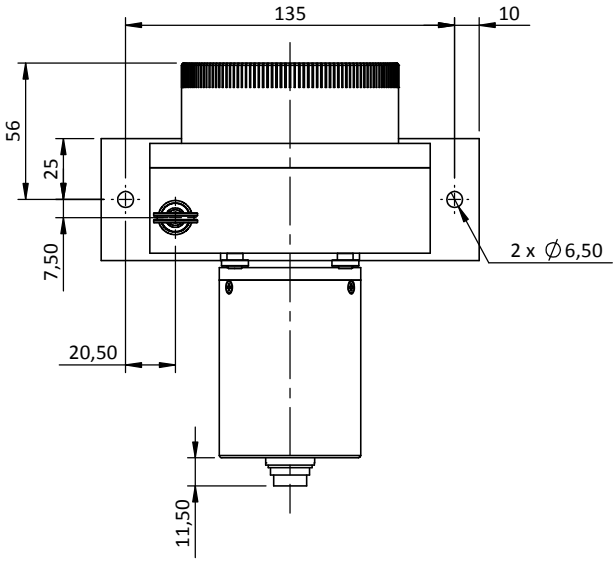
K connection
(PVC cable - 4 wires)

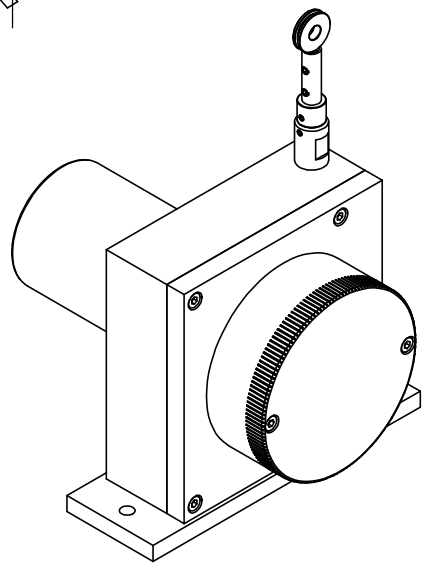


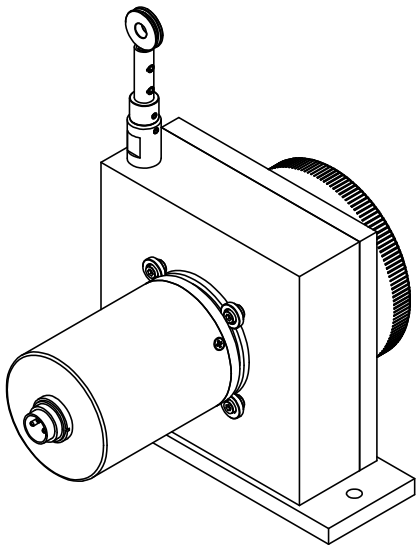
L4 connection
(connector M12 - 4 pin)



C connection
(Connector M16 - DIN 3 pin)







CD115 analog output – Measurement range 0 up to 3000 mm

Specifications:

Measurement range	0 up to 3000 mm
Output signal	0…10V (galvanic isolation) 4…20mA current loop 4…20mA current generator (galvanic isolation) 0…20mA current generator (galvanic isolation)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - aluminium (RohS) Measuring cable – Stainless steel
Cable diameter	0,61 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – DIN 8 pin Male connector M12 – 4 pin PVC cable – 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP54 (option IP67)
Max. Velocity	10 M/S
Max. Acceleration	7 M/S^2 (before cable deformation)
Weight	≈ 2000 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
3000	≈ 13,50 N	≈ 18,00 N

Ordering reference:

CD115					OP	

Model

CD115

Measurement range

3000 = 0 up to 3000 mm
(Other range available on demand)

Output signal

U010 = 0…10V
I420 = 4…20mA (current loop)
I420G = 4…20mA (current generator)
I020G = 0…20mA (current generator)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

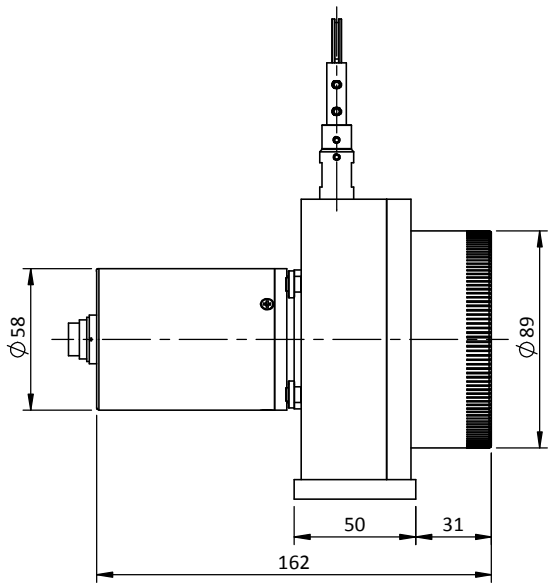
C = Male connector M16 – DIN 8 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

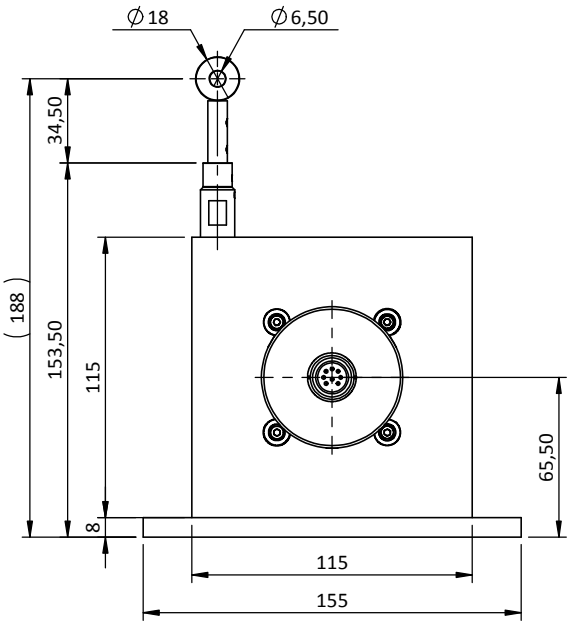
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

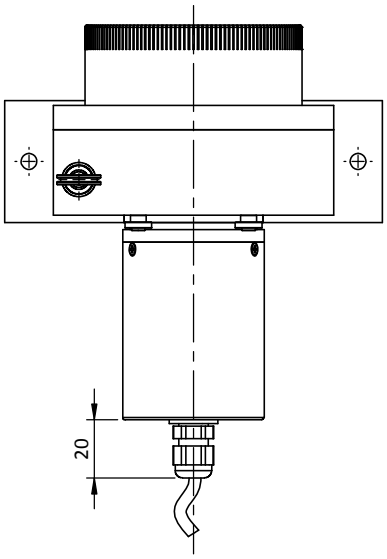
Reference example: CD115-3000-U010-L15-K02-OP-AC-M4

Dimensional Drawing

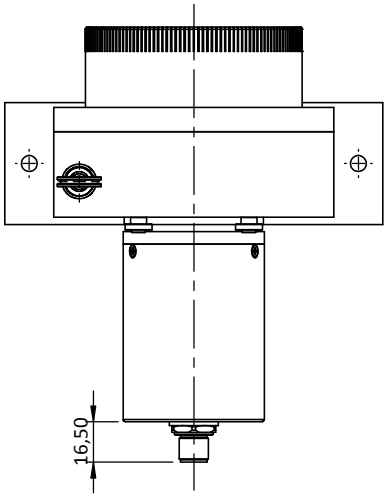




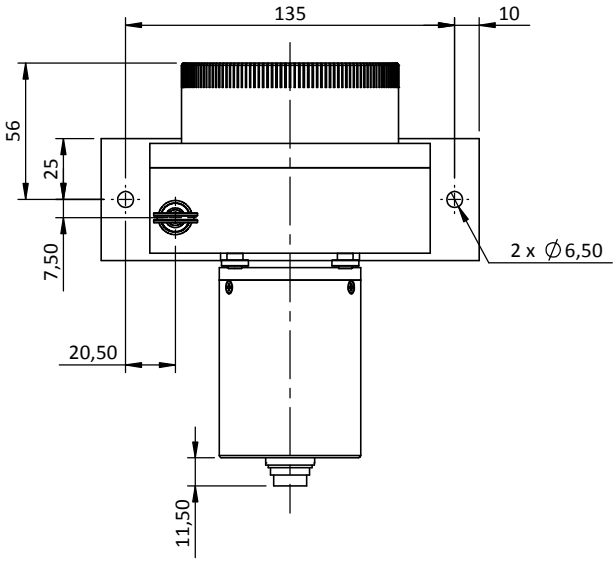
K connection
(PVC cable - 4 wires)

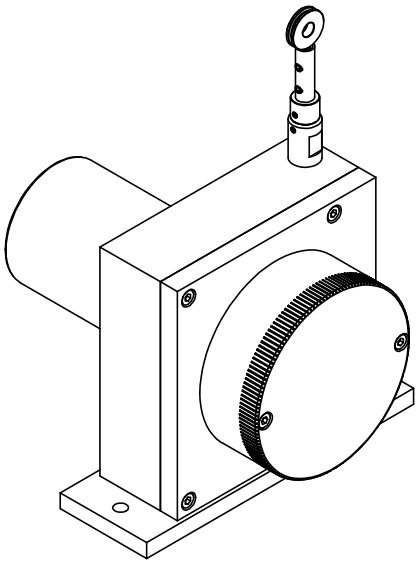


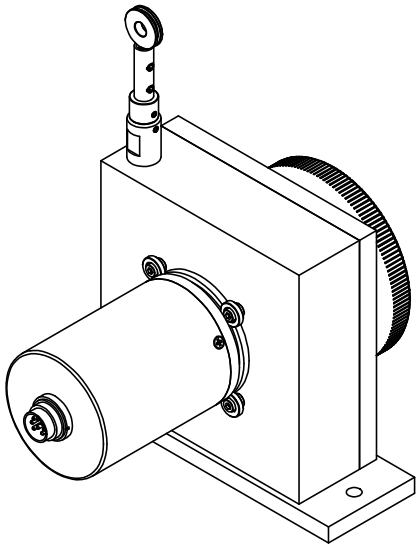
L4 connection
(connector M12 - 4 pin)



C connection
(Connector M16 - DIN 8 pin)







CD115 incremental output - Measurement range 0 up to 3500 mm

Specifications:

Measurement range	0 up to 3500 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	+/- 0,15% f.s.
	+/- 0,10% f.s. (optional)
Protection class	IP65
Max. Velocity	10 m/s
Max. Acceleration	7 m/s^2 (before cable deformation)
Weight	≈ 2000 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
3500	≈ 13,00 N	≈ 18,00 N

Ordering reference:

CD115						OP	

Model

CD115

Measurement range

3500 = 0 up to 3500 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

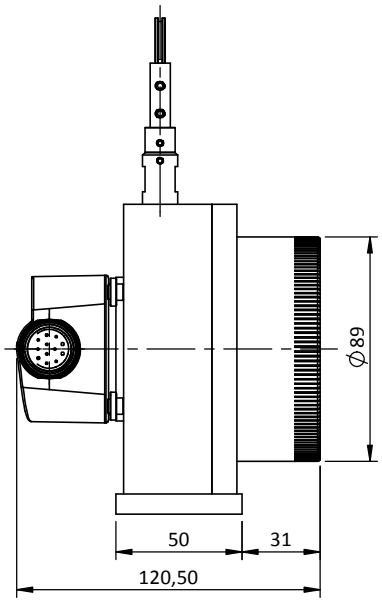
G6R = Male connector M23 – 12 pin CW
G8R = Male connector M23 – 12 pin CCW
GP = PUR cable - 12 wires + ex: **R020** for cable radial 2 meters long
G3 = PVC cable - 8 wires + ex: **R020** for cable radial 2 meters long

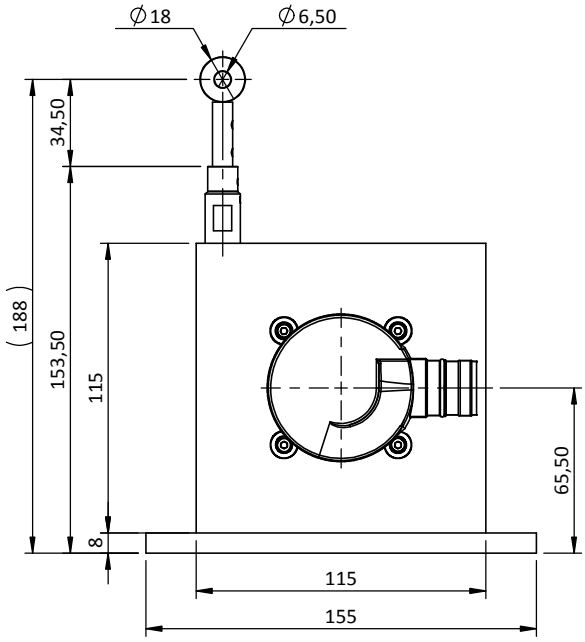
OP options

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

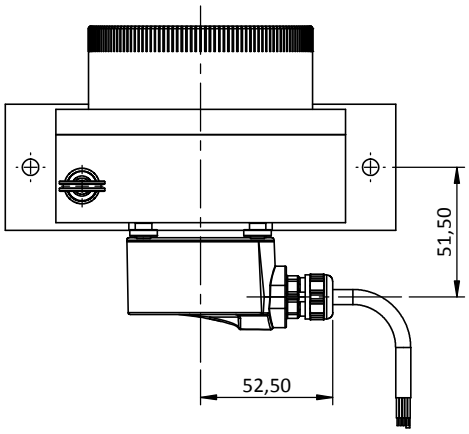
Reference example: CD115-3500-05-PG5-L05-G6R-OP-AC-M4

Dimensional Drawing

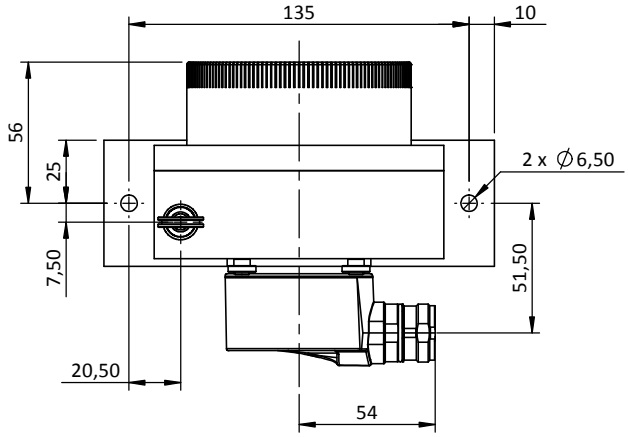


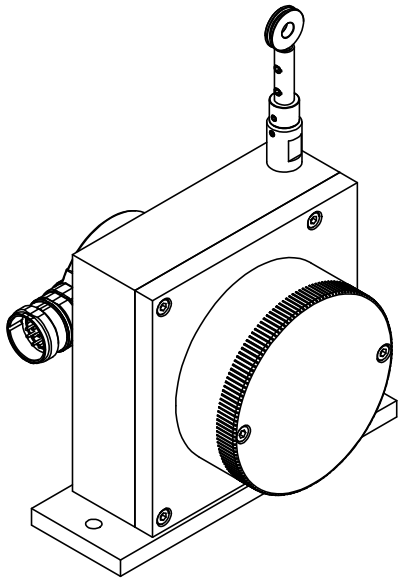


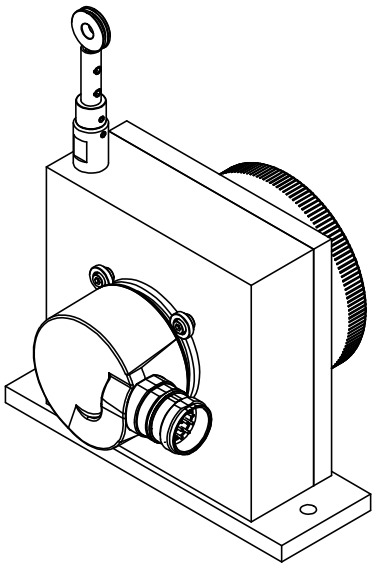
With DHM5 encoder
GPR or G3R connection
(PUR cable - 12 wires or PVC cable - 8 wires)



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







CD115 absolute output - Measurement range 0 up to 3500 mm

Specifications:

Measurement range	0 up to 3500 mm
Sensing device	Absolute encoder (PHM5 or MHM5 series)
Supply	10 - 30Vdc (MHM5) 5 - 30Vdc (PHM5)
Interface	SSI Profibus CANopen DeviceNet
Resolution	13 bits = 8192steps/turns
Distance per turns	300 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 Terminal box
Standard linearity	+/- 0,05% f.s. +/- 0,01% f.s. (optional)
Protection class	IP64
Max. Velocity	10 M/S
Max. Acceleration	7 M/S^2 (before cable deformation)
Weight	≈ 2000 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
3500	≈ 13,00 N	≈ 18,00 N

Ordering reference:

CD115						OP	

Model

CD115

Measurement range

3500 = 0 à 3500 mm
(Other range available on demand)

Distance per turns

300 = 300 mm

Interface

SSI/1 = MHM5 Serial transmission (SSI)
SSI/2 = PHM5 Serial transmission (SSI)
PROF = MHM5 Profibus transmission
CAN = MHM5 CANopen transmission
DEV = MHM5 DeviceNet transmission

Linearity

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

Connection

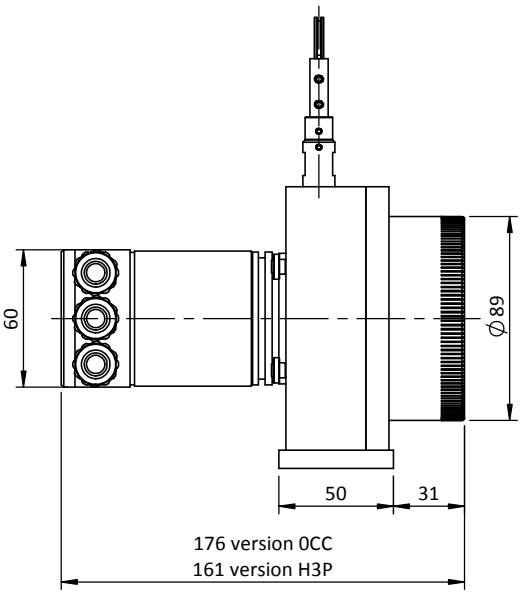
H3P = Terminal box (only for MHM5 Profibus and CANopen)
0CC = Terminal box (only for MHM5 DeviceNet)
PRL = 12 pins M23 connector - counter-clockwise (only on MHM5 SSI)
S6R = 12 pins M23 connector - clockwise (only on PHM5 SSI)
S8R = 12 pins M23 connector - counter-clockwise (only on PHM5 SSI)

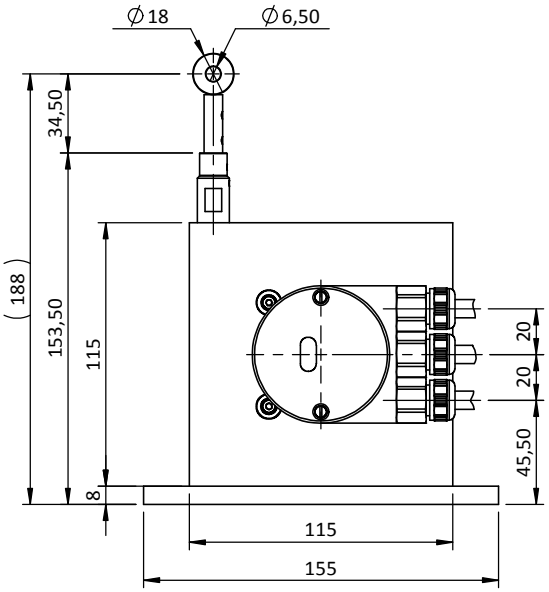
OP options

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

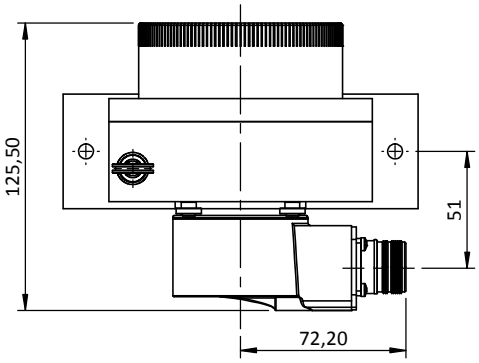
Reference example: CD115-3500-300-PROF-L05-H3P-OP-AC-M4

Dimensional Drawing

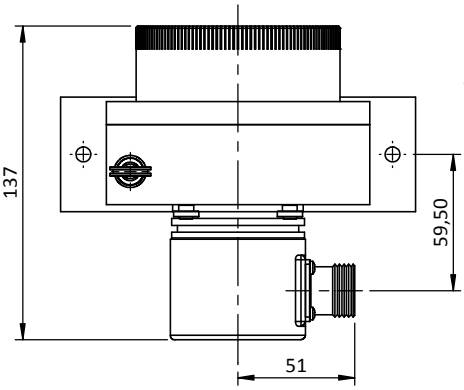




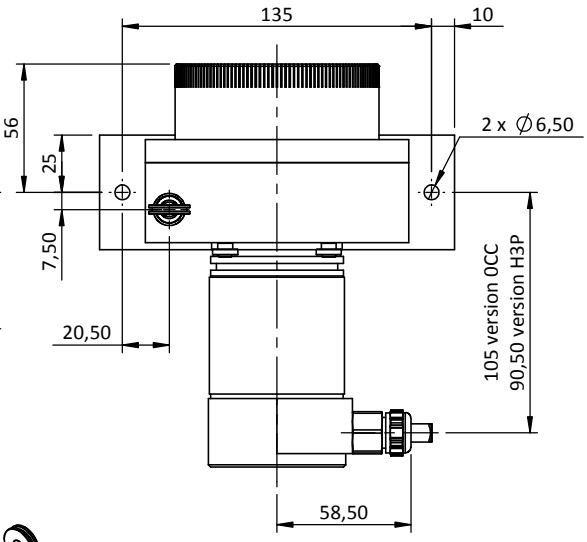
With PHM5 - SSI encoder
S6R or S8R connection
(Male connector M23 - 12 pin CW or CCW)

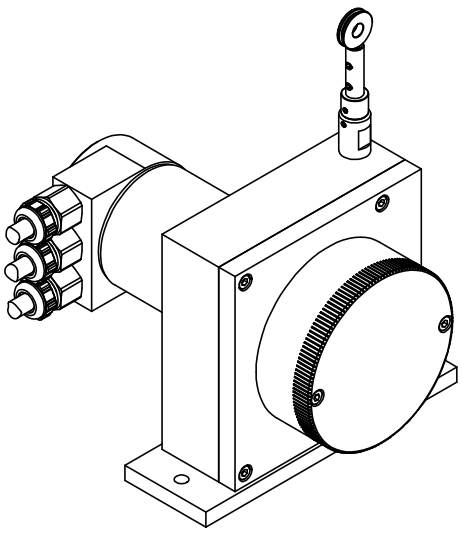


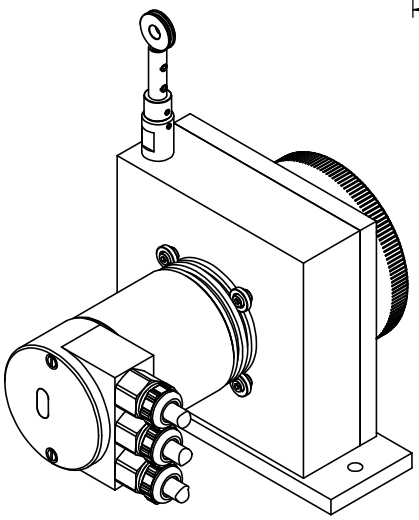
With MHM5 - SSI encoder
PRL connection
(Male connector M23 - 12 pin CCW)



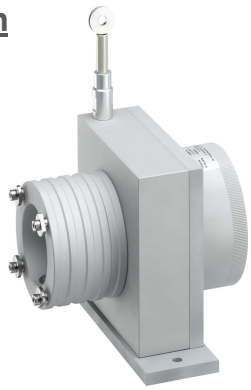
With MHM5 - PROF/CANO/DNET encoder
0CC or H3P connection
(Terminal box)







CD115-MEC mechanical devices - Measurement range 0 up to 3500 mm



Specifications:

Measurement range	0 up to 3500 mm
Circumference drum	300 mm/turn
Sensing device	Adaptable with all our incremental or absolute encoders
Material	Body and cover - aluminium (RohS)
	Measuring cable – Stainless steel
Cable diameter	0,60 mm
Standard linearity	+/- 0,05% f.s.
	+/- 0,01% f.s. (optional)
Max. Velocity	10 m/s
Max. Acceleration	7 m/s^2 (before cable deformation)
Weight	≈ 2000 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
3500	≈ 13,00 N	≈ 18,00 N

Ordering reference:

CD115	MEC				OP	

Model

CD115-MEC

Measurement range

3500 = 0 up to 3500 mm
(Other ranges available on demand)

Drum circumference

300 = 300 mm/turn

Linearity

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

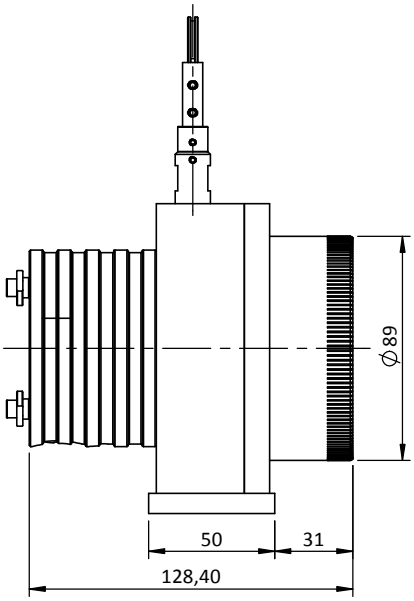
OP options

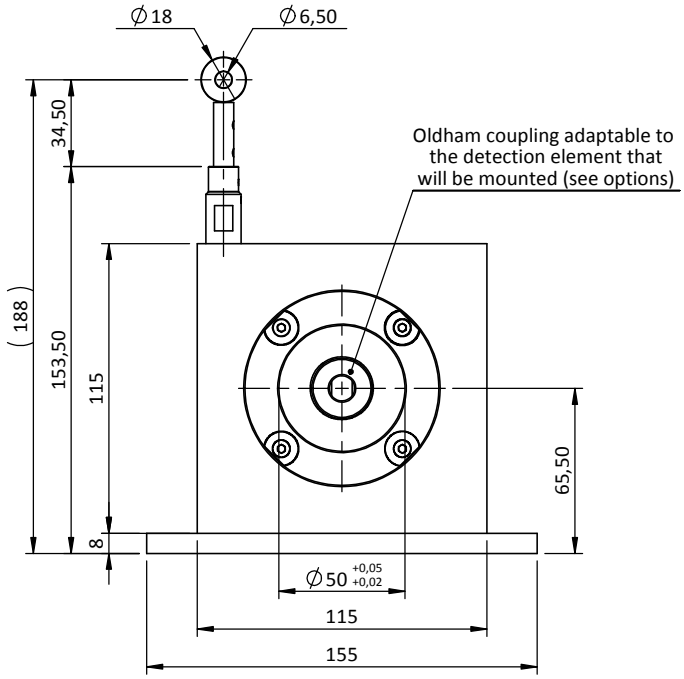
06 = Adapter flange for Ø58 encoder with Ø6 axis (**06A** for the provision of a Ø6 coupling device without flange)
10 = Adapter flange for Ø58 encoder with Ø10 axis
12 = Adapter flange for Ø90 encoder with Ø12 axis (**12A** for the provision of a Ø6 coupling device without flange)
AC = Complete anodizing
BR = Cleaning brush for the cable
CP = Fixing of the measuring cable with a clevis
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

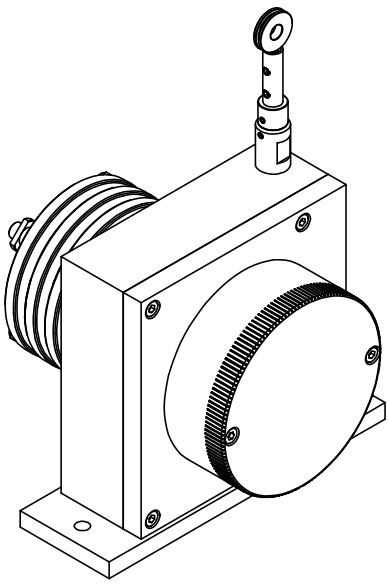
If no option is specified for the adapter flange, the draw-wire sensor will be supplied as standard with a Ø10 coupling brace without a flange.
For the adaptation of an encoder or other sensor device which does not belong to our range, please contact us.

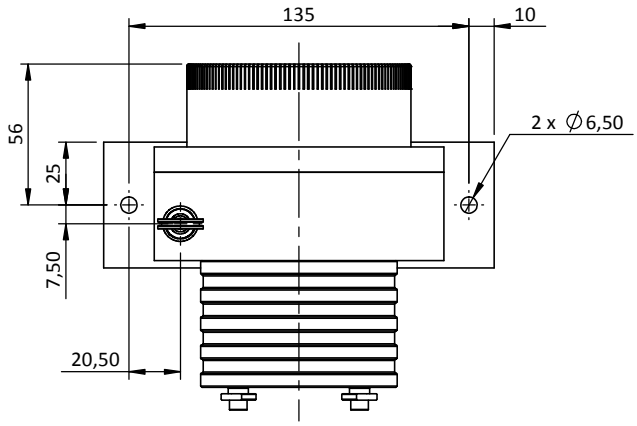
Reference example: CD115-MEC-3500-300-L05-OP-10-AC

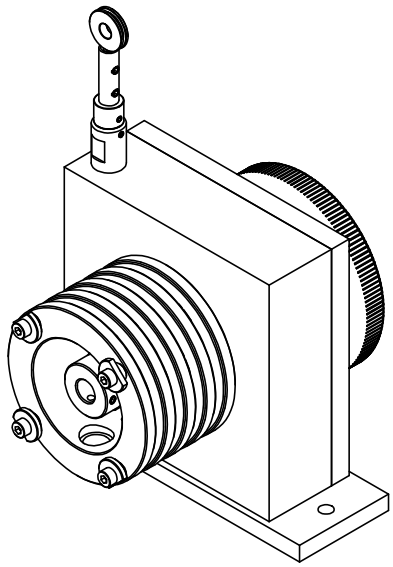
Dimensional Drawing











CD150 potentiometric output – Measurement range 0 up to 6000 mm

Specifications:

Measurement range	0 up to 6000 mm
Output signal	1kΩ potentiometer (other values on demand)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS) Measuring cable – Stainless steel
Cable diameter	0,60 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – DIN 3 pin Male connector M12 – 4 pin PVC cable – 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP54 (option IP67)
Max. Velocity	10 m/s
Max. Acceleration	5 m/s^2 (before cable deformation)
Weight	≈ 3000 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
4000	≈ 11,00 N	≈ 13,50 N
6000	≈ 10,00 N	≈ 13,50 N

Ordering reference:

CD150					OP	

Model

CD150

Measurement range

4000 = 0 up to 4000 mm
6000 = 0 up to 6000 mm
(Other ranges available on demand)

Output signal

R01K = 1kΩ output
(Other values on demand)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

C = Male connector M16 – DIN 3 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

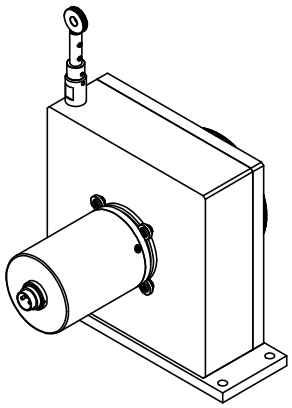
OP Options

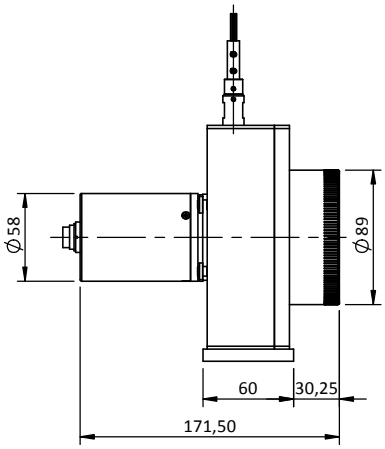
AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

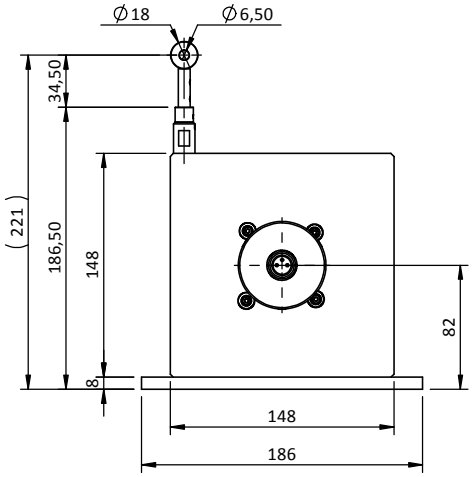
Reference example: CD150-4000-R01K-L15-K02-OP-AC-M4

Dimensional Drawing

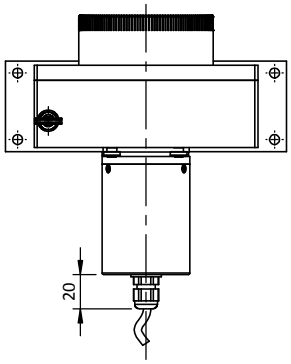
Measurement range up to 4000 mm



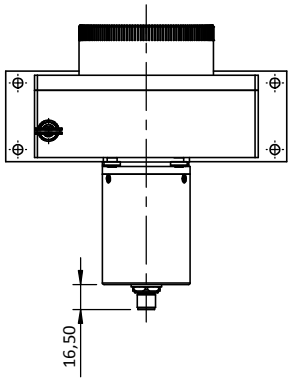




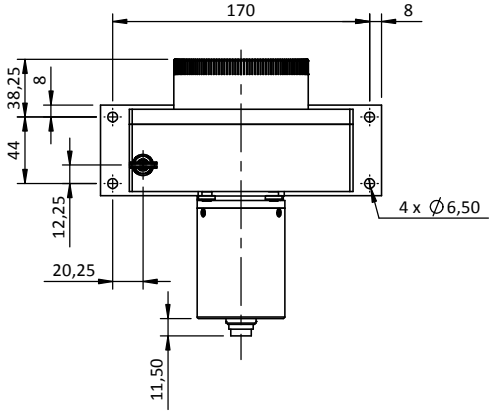
K connection
(PVC cable - 4 wires)



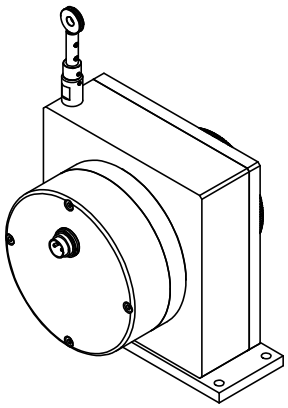
L4 connection
(connector M12 - 4 pin)

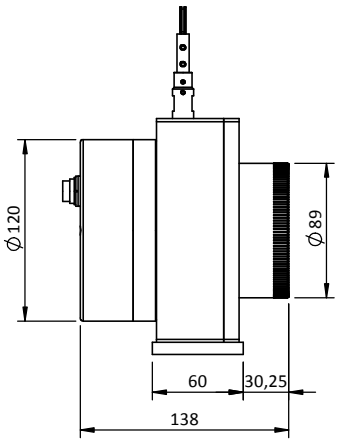


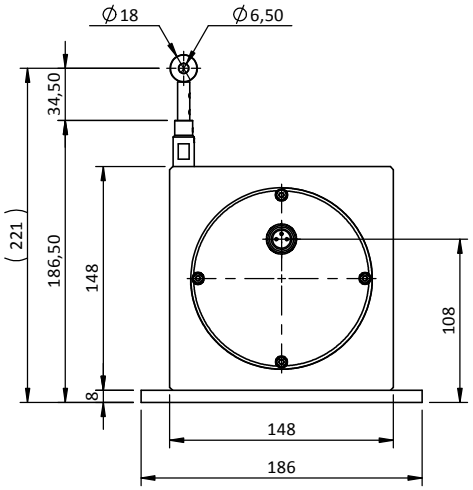
C connection
(Connector M16 - DIN 3 pin)



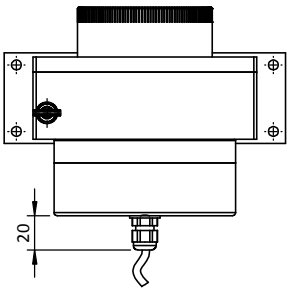
Measuring range greater than 4000 mm up to 6000 mm



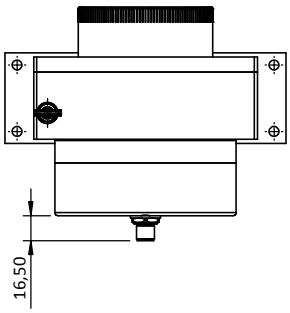




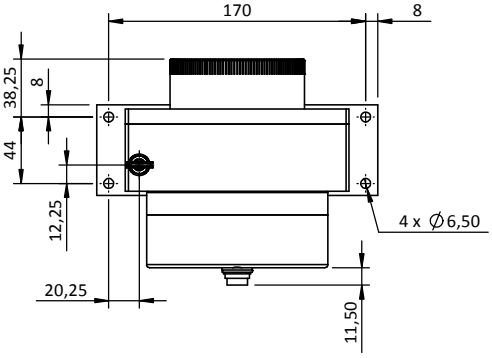
K connection
(PVC cable - 4 wires)



L4 connection
(connector M12 - 4 pin)



C connection
(Connector M16 - DIN 3 pin)



CD150 analog output – Measurement range 0 up to 6000 mm

Specifications:

Measurement range	0 up to 6000 mm
Output signal	0…10V (galvanic isolation) 4…20mA current loop 4…20mA current generator (galvanic isolation) 0…20mA current generator (galvanic isolation)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - aluminium (RohS) Measuring cable – Stainless steel
Cable diameter	0,60 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – DIN 8 pin Male connector M12 – 4 pin PVC cable – 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP54 (option IP67)
Max. Velocity	10 m/s
Max. Acceleration	5 m/s^2 (before cable deformation)
Weight	≈ 3000 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
4000	≈ 11,00 N	≈ 13,50 N
6000	≈ 10,00 N	≈ 13,50 N

Ordering reference:

CD150					OP	

Model

CD150

Measurement range

4000 = 0 up to 4000 mm
6000 = 0 up to 6000 mm
(Other ranges available on demand)

Output signal

U010 = 0…10V
I420 = 4…20mA (current loop)
I420G = 4…20mA (current generator)
I020G = 0…20mA (current generator)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

C = Male connector M16 – DIN 8 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

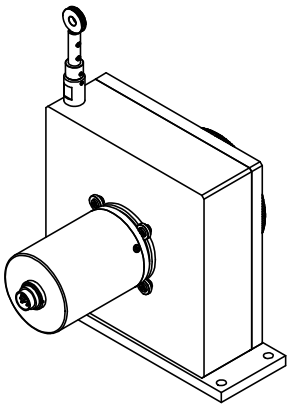
OP Options

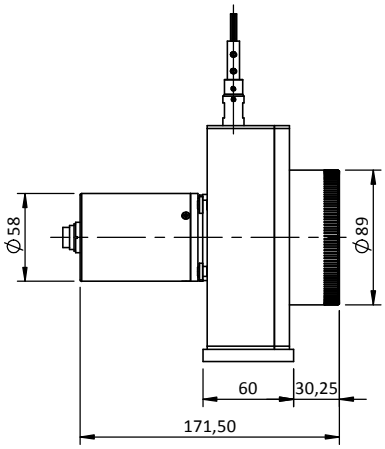
AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

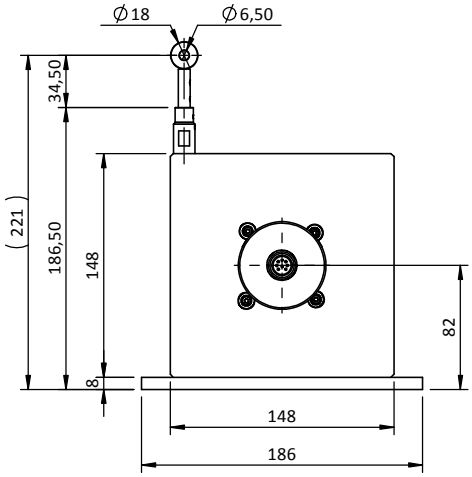
Reference example: CD150-4000-U010-L15-K02-OP-AC-M4

Dimensional Drawing

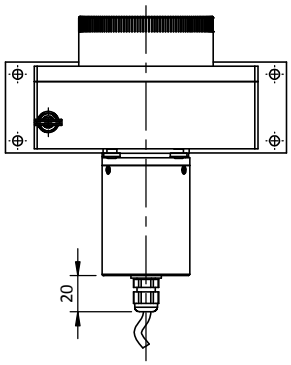
Measurement range up to 4000 mm



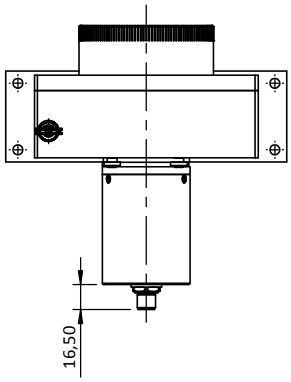




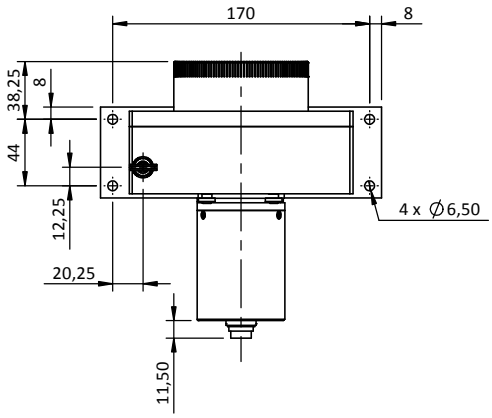
K connection
(PVC cable - 4 wires)



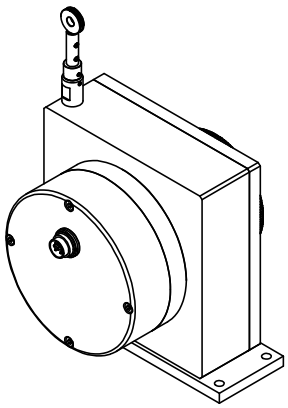
L4 connection
(connector M12 - 4 pin)

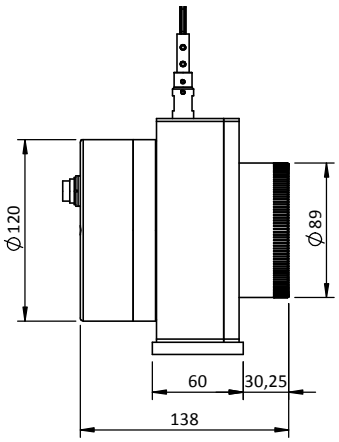


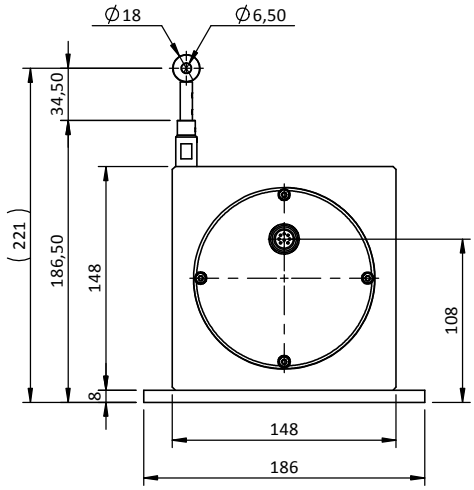
C connection
(Connector M16 - DIN 8 pin)



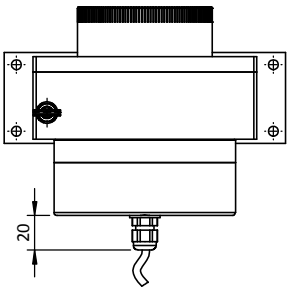
Measuring range greater than 4000 mm up to 6000 mm



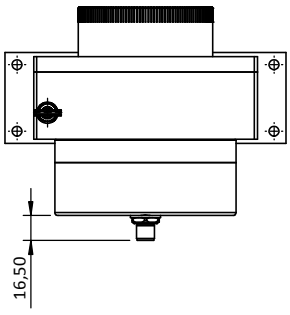




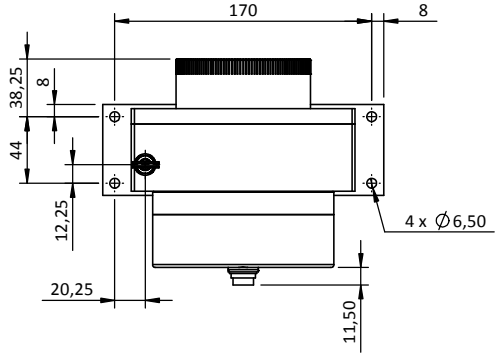
K connection
(PVC cable - 4 wires)



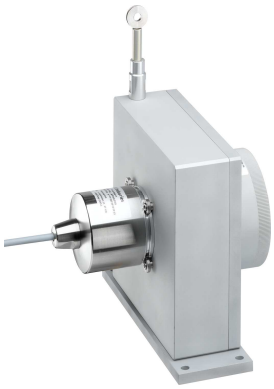
L4 connection
(connector M12 - 4 pin)



C connection
(Connector M16 - DIN 8 pin)



CD150 incremental output - Measurement range 0 up to 6000 mm



Specifications:

Measurement range	0 up to 6000 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
	12-wires PUR cable
	8-wires PVC cable
Standard linearity	+/- 0,15% f.s.
	+/- 0,10% f.s. (optional)
Protection class	IP65
Max. Velocity	10 M/S
Max. Acceleration	5 M/S^2 (before cable deformation)
Weight	≈ 3000 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
6000	≈ 10,00 N	≈ 13,50 N

Ordering reference:

CD150						OP	

Model

CD150

Measurement range

6000 = 0 up to 6000 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

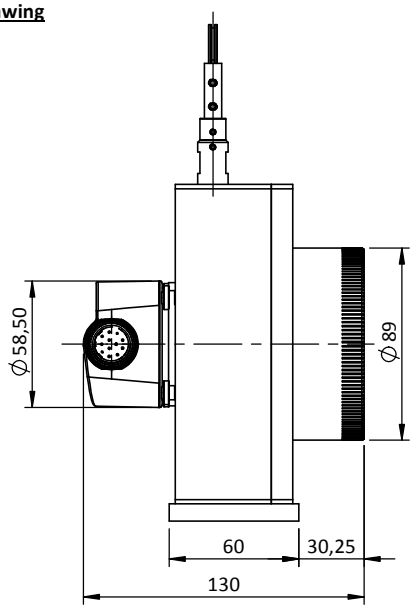
G6R = Male connector M23 – 12 pin CW
G8R = Male connector M23 – 12 pin CCW
GP = PUR cable - 12 wires + ex: **R020** for cable radial 2 meters long
G3 = PVC cable - 8 wires + ex: **R020** for cable radial 2 meters long

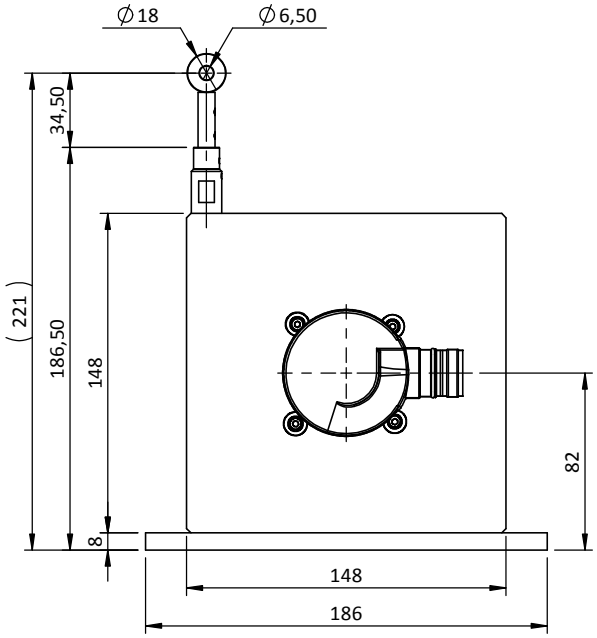
OP options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

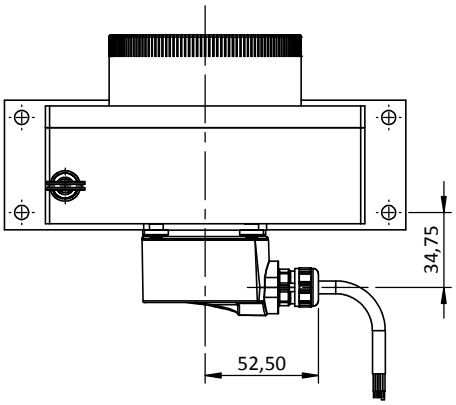
Reference example: CD150-6000-05-PG5-L05-G6R-OP-AC-M4

Dimensional Drawing

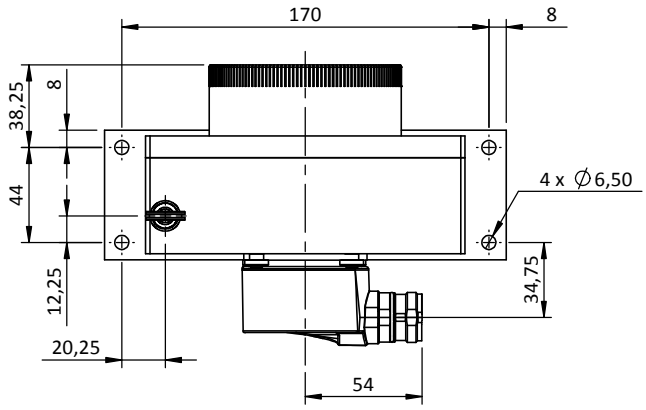


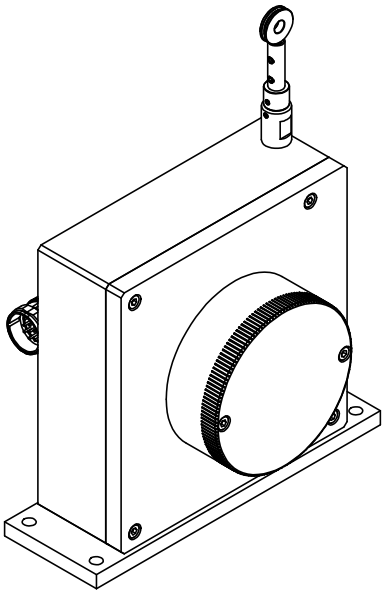


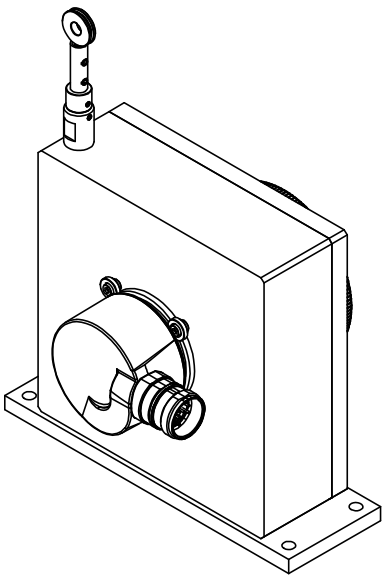
With DHM5 encoder
GPR or G3R connection
(PUR cable - 12 wires or PVC cable - 8 wires)



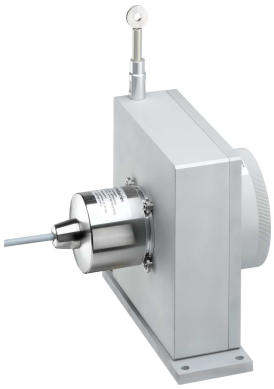
With DHM5 encoder
G6R or G8R connection
(Male connector M23 - 12 pin CW or CCW)







CD150 absolute output - Measurement range 0 up to 6000 mm



Specifications:

Measurement range	0 up to 6000 mm
Sensing device	Absolute encoder (PHM5 or MHM5 series)
Supply	10 - 30Vdc (MHM5) 5 - 30Vdc (PHM5)
Interface	SSI Profibus CANopen DeviceNet
Resolution	13 bits = 8192steps/turns
Distance per turns	409,6 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 Terminal box
Standard linearity	+/- 0,05% f.s. +/- 0,01% f.s. (optional)
Protection class	IP64
Max. Velocity	10 M/S
Max. Acceleration	5 M/S^2 (before cable deformation)
Weight	≈ 3000 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
6000	≈ 10,00 N	≈ 13,50 N

Ordering reference:

CD150						OP	

Model

CD150

Measurement range

6000 = 0 à 6000 mm
(Other ranges available on demand)

Distance per turns

409 = 409,6 mm

Interface

SSI/1 = MHM5 Serial transmission (SSI)
SSI/2 = PHM5 Serial transmission (SSI)
PROF = MHM5 Profibus transmission
CAN = MHM5 CANopen transmission
DEV = MHM5 DeviceNet transmission

Linearity

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

Connection

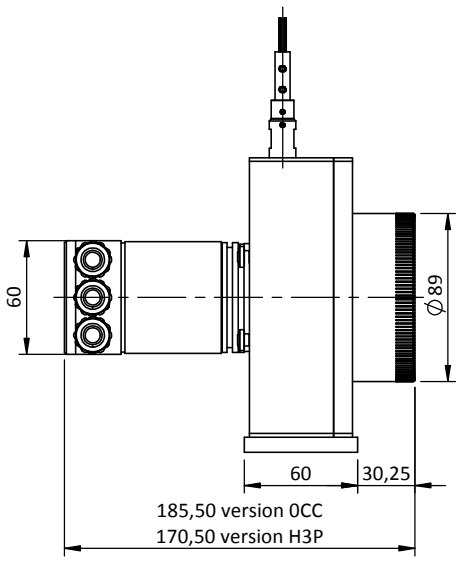
H3P = Terminal box (only for MHM5 Profibus and CANopen)
0CC = Terminal box (only for MHM5 DeviceNet)
PRL = 12 pins M23 connector - counter-clockwise (only on MHM5 SSI)
S6R = 12 pins M23 connector - clockwise (only on PHM5 SSI)
S8R = 12 pins M23 connector - counter-clockwise (only on PHM5 SSI)

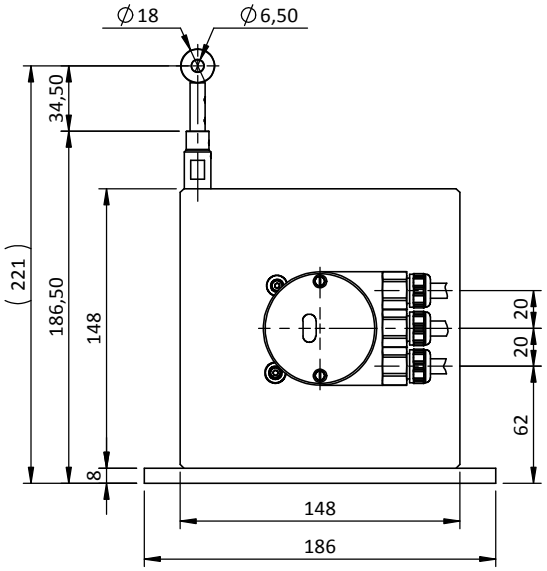
OP options

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

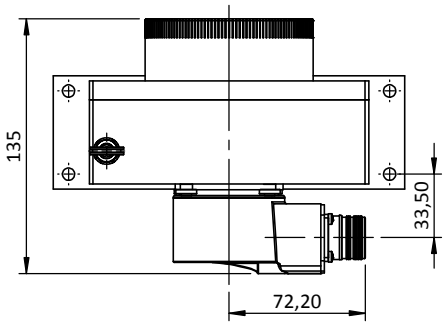
Reference example: CD150-6000-409-PROF-L05-H3P-OP-AC-M4

Dimensional Drawing

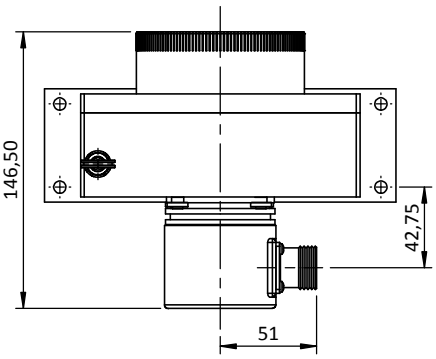




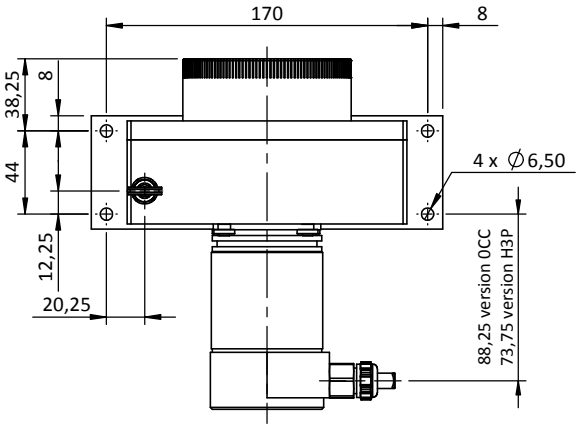
With PHM5 - SSI encoder
S6R or S8R connection
(Male connector M23 - 12 pin CW or CCW)

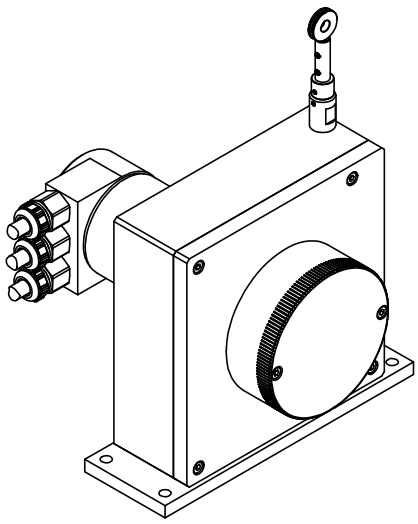


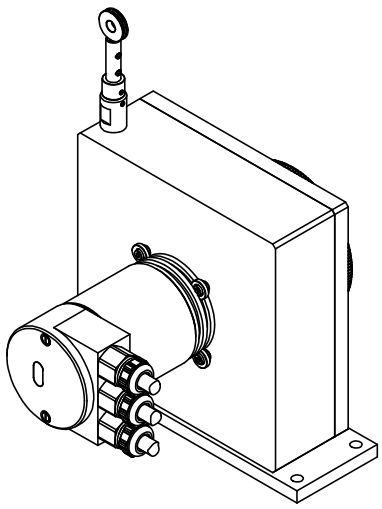
With MHM5 - SSI encoder
PRL connection
(Male connector M23 - 12 pin CCW)



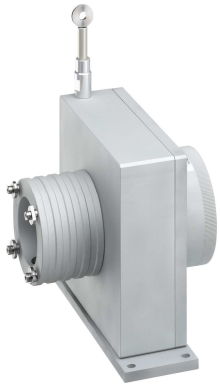
With MHM5 - PROF/CANO/DNET encoder
0CC or H3P connection
(Terminal box)







CD150-MEC mechanical devices - Measurement range 0 up to 6000 mm



Specifications:

Measurement range	0 up to 6000 mm
Circumference drum	409,6 mm/turn
Sensing device	Adaptable with all our incremental or absolute encoders
Material	Body and cover - aluminium (RohS)
	Measuring cable – Stainless steel
Cable diameter	0,60 mm
Standard linearity	+/- 0,05% f.s.
	+/- 0,01% f.s. (optional)
Max. Velocity	10 m/s
Max. Acceleration	5 m/s^2 (before cable deformation)
Weight	≈ 3000 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
6000	≈ 10,00 N	≈ 13,50 N

Ordering reference:

CD150	MEC				OP	

Model

CD150-MEC

Measurement range

6000 = 0 up to 6000 mm
(Other ranges available on demand)

Drum circumference

409 = 409,6 mm/turn

Linearity

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

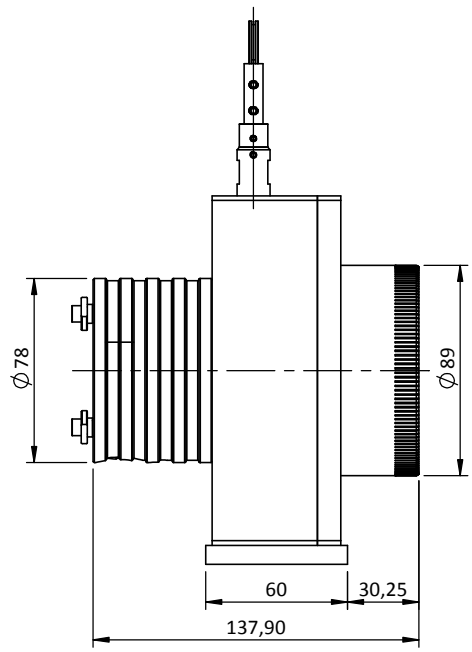
OP options

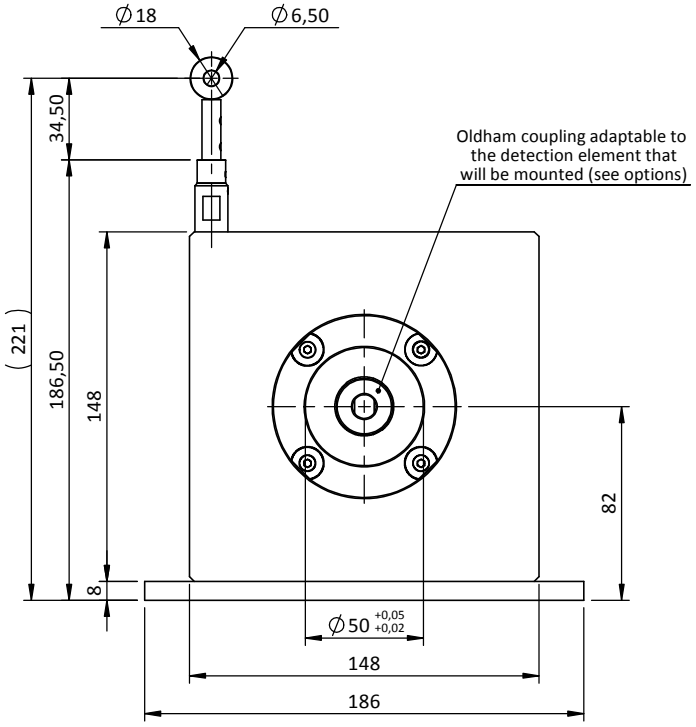
06 = Adapter flange for Ø58 encoder with Ø6 axis (**06A** for the provision of a Ø6 coupling device without flange)
10 = Adapter flange for Ø58 encoder with Ø10 axis
12 = Adapter flange for Ø90 encoder with Ø12 axis (**12A** for the provision of a Ø6 coupling device without flange)
AC = Complete anodizing
BR = Cleaning brush for the cable
CP = Fixing of the measuring cable with a clevis
M4 = Fixing of the measuring cable with a M4 threaded rod
TEV = Water evacuation holes

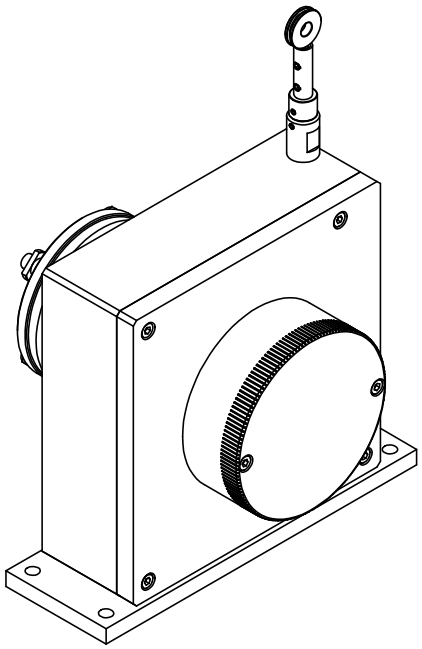
If no option is specified for the adapter flange, the draw-wire sensor will be supplied as standard with a Ø10 coupling brace without a flange.
For the adaptation of an encoder or other sensor device which does not belong to our range, please contact us.

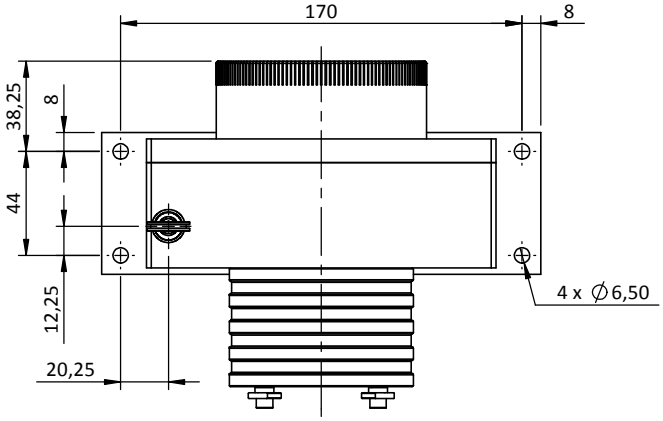
Reference example: CD150-MEC-6000-409-L05-OP-10-AC

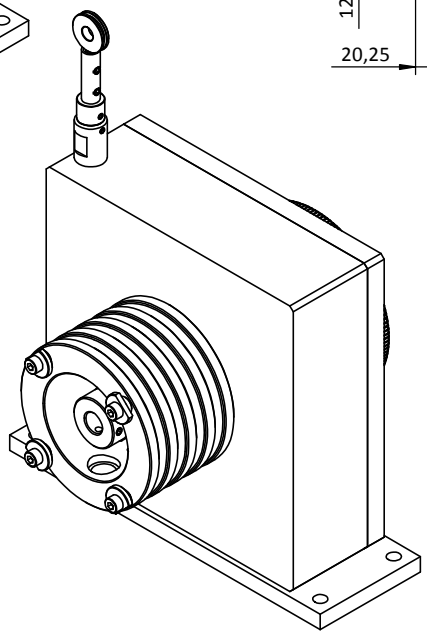
Dimensional Drawing











CDS1210 potentiometric output – Measurement range 0 up to 10 000 mm

Specifications:

Measurement range	0 up to 10 000 mm
Output signal	1kΩ potentiometer (other values on demand)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS) Measuring cable - Stainless steel
Cable diameter	0,90 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 - DIN 3 pin Male connector M12 - 4 pin PVC cable - 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP65
Max. Velocity	10 m/s
Max. Acceleration	5 m/s^2 (before cable deformation)
Weight	≈ 6 kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
10 000	≈ 10,50 N	≈ 15,00 N

Ordering reference:

CDS1210					OP	

Model

CDS1210

Measurement range

10000 = 0 up to 10 000 mm
(Other ranges available on demand)

Output signal

R01K = 1kΩ output
(Other values on demand)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

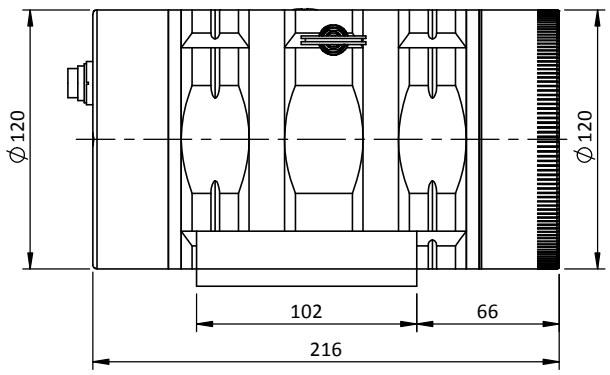
C = Male connector M16 - DIN 3 pin
L4 = Male connector M12 - 4 pin
K = PVC cable - 4 wires + ex: **02** for cable 2 meters long

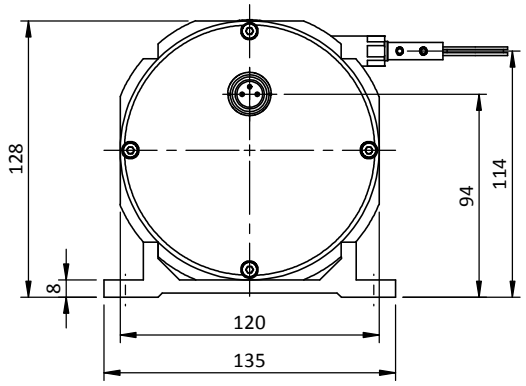
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

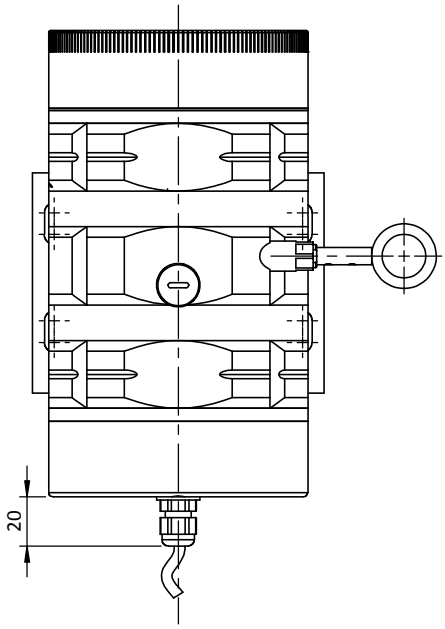
Reference example: CDS1210-10000-R01K-L15-K02-OP-AC-M6

Dimensional Drawing

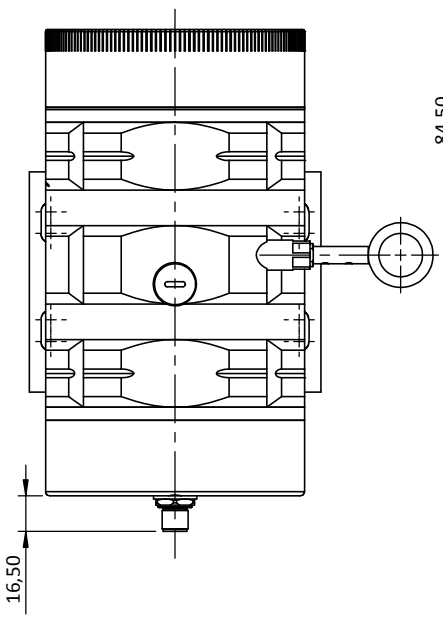




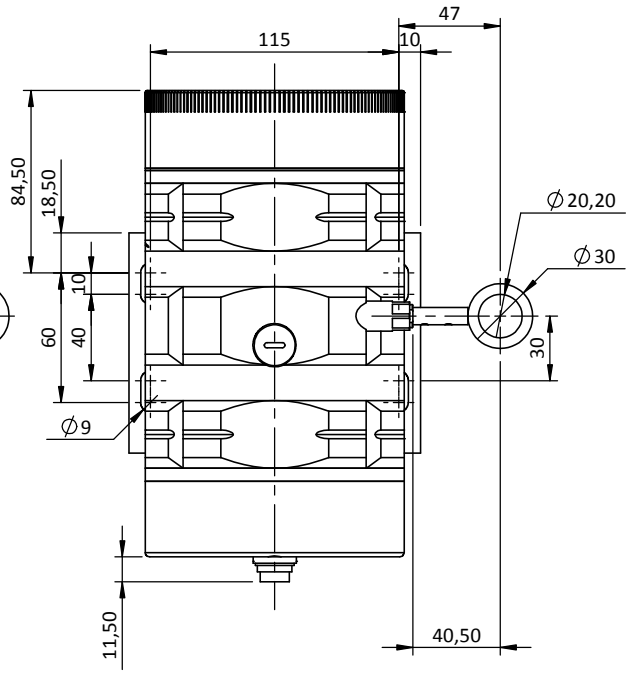
K connection
(PVC cable - 4 wires)



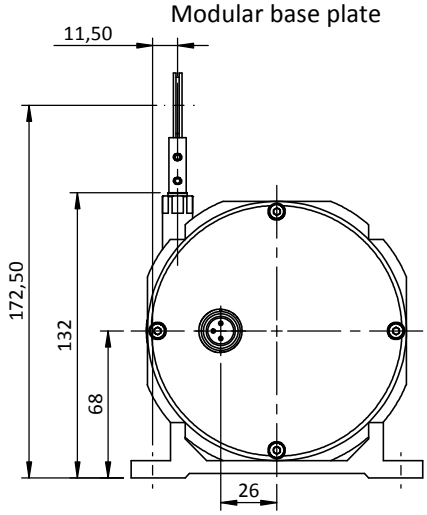
L4 connection
(connector M12 - 4 pin)

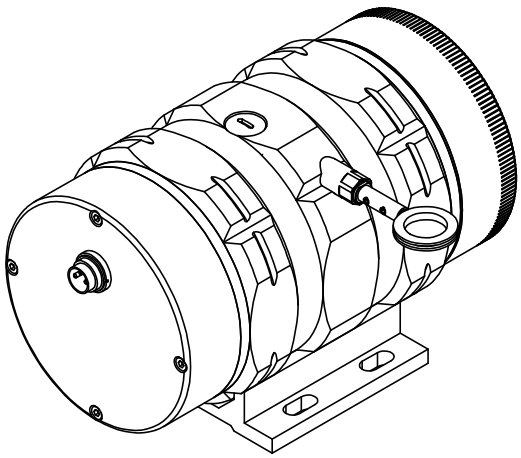


C connection
(Connector M16 - DIN 3 pin)



Modular base plate





CD1210 analog output – Measurement range 0 up to 10 000 mm

Specifications:

Measurement range	0 up to 10 000 mm
Output signal	0…10V (galvanic isolation) 4…20mA current loop 4…20mA current generator (galvanic isolation) 0…20mA current generator (galvanic isolation)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - aluminium (RohS) Measuring cable - Stainless steel
Cable diameter	0,90 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 - DIN 8 pin Male connector M12 - 4 pin PVC cable - 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP65
Max. Velocity	10 M/S
Max. Acceleration	5 M/S^2 (before cable deformation)
Weight	≈ 6 kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
10 000	≈ 11,00 N	≈ 13,50 N

Ordering reference:

CDS1210					OP	

Model

CDS1210

Measurement range

10000 = 0 up to 10 000 mm
(Other ranges available on demand)

Output signal

U010 = 0…10V
I420 = 4…20mA (current loop)
I420G = 4…20mA (current generator)
I020G = 0…20mA (current generator)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

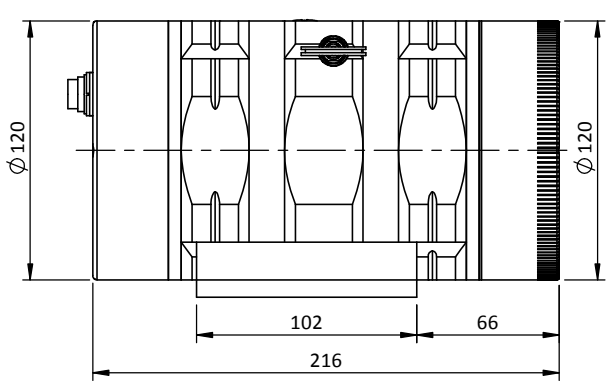
C = Male connector M16 - DIN 8 pin
L4 = Male connector M12 - 4 pin
K = PVC cable - 4 wires + ex: **02** for cable 2 meters long

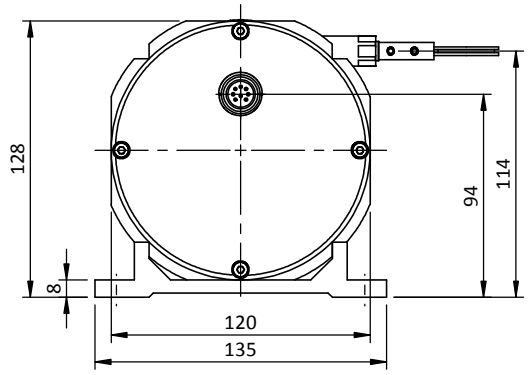
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

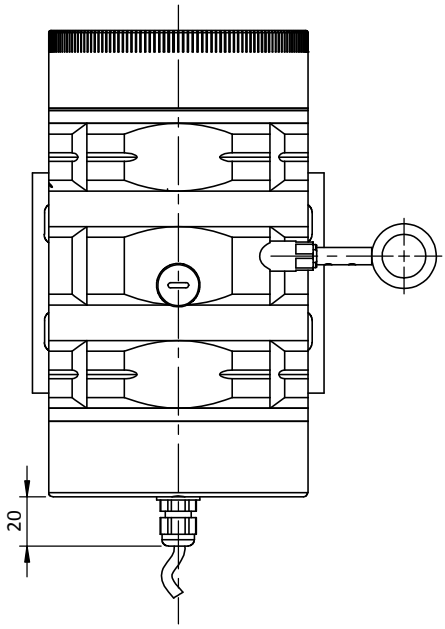
Reference example: CDS1210-10000-U010-L15-K02-OP-AC-M6

Dimensional Drawing

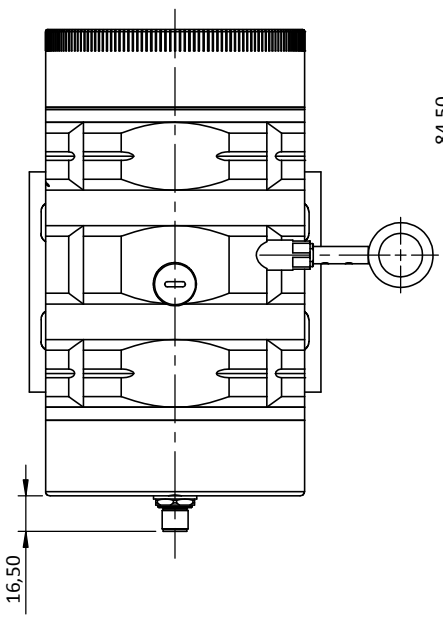




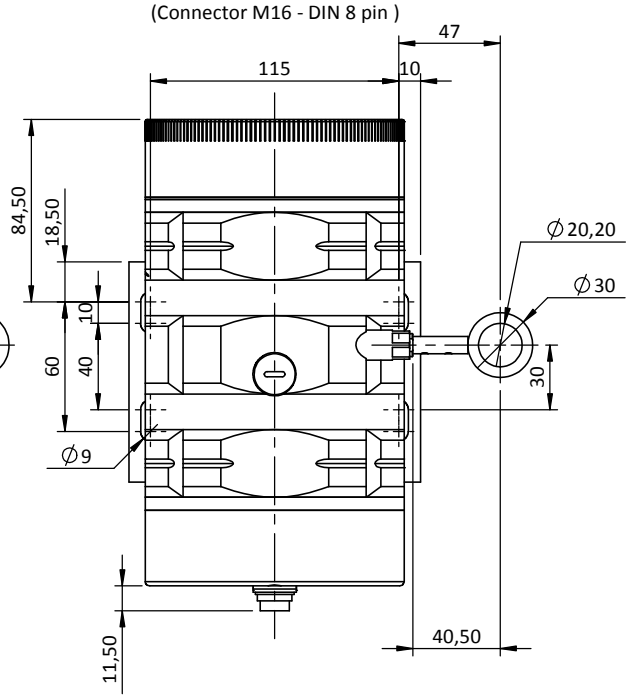
K connection
(PVC cable - 4 wires)



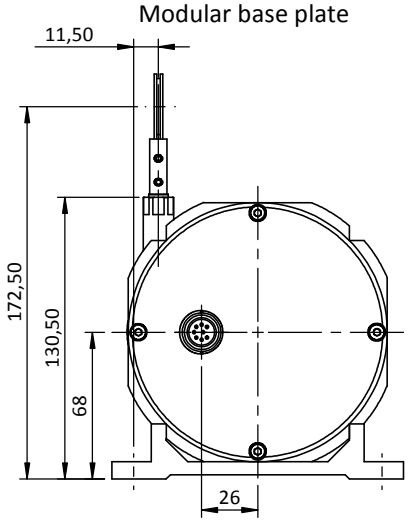
L4 connection
(connector M12 - 4 pin)

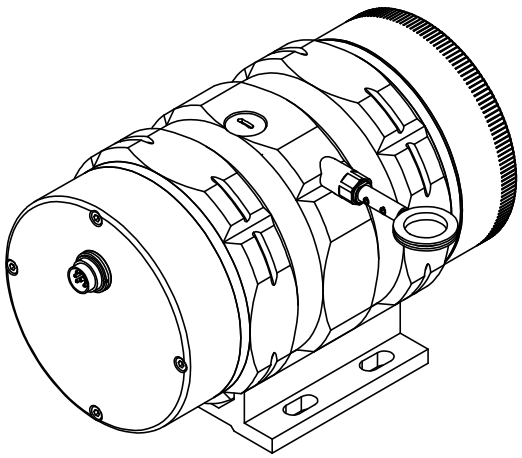


C connection
(Connector M16 - DIN 8 pin)



Modular base plate





CDS1210-MEC mechanical devices - Measurement range 0 up to 10 000 mm

Specifications:

Measurement range	0 up to 10 000 mm
Circumference drum	300 mm/turn
Sensing device	Adaptable with all our incremental or absolute encoders
Material	Body and cover - aluminium (RohS)
	Measuring cable – Stainless steel
Cable diameter	0,90 mm
Standard linearity	+/- 0,05% f.s.
	+/- 0,01% f.s. (optional)
Max. Velocity	10 m/s
Max. Acceleration	5 m/s^2 (before cable deformation)
Weight	≈ 6kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
10 000	≈ 10,50 N	≈ 15,00 N

Ordering reference:

CDS1210	MEC				OP	

Model

CDS1210-MEC

Measurement range

10000 = 0 up to 10 000 mm
(Other ranges available on demand)

Drum circumference

300 = 300 mm/turn

Linearity

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

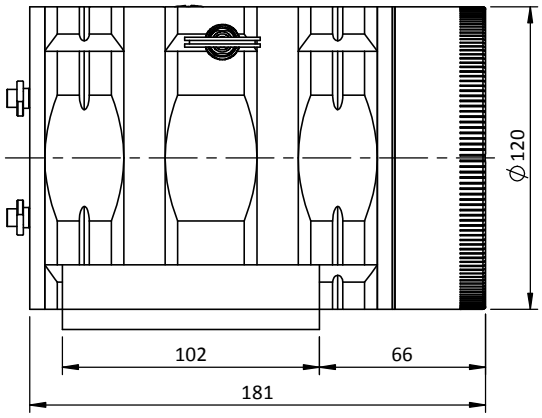
OP options

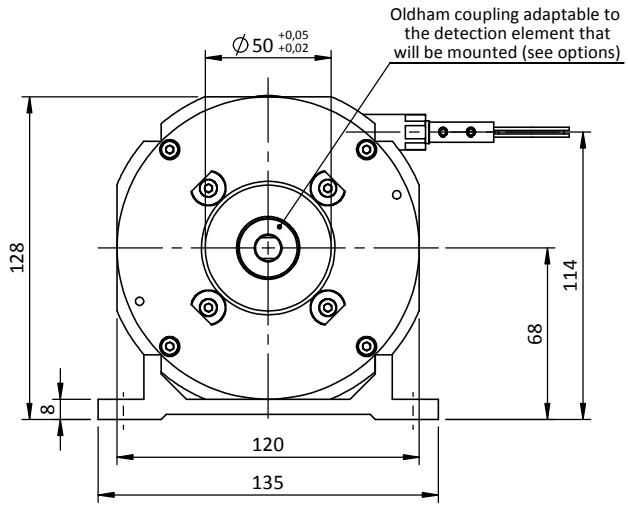
06 = Adapter flange for Ø58 encoder with Ø6 axis (**06A** for the provision of a Ø6 coupling device without flange)
10 = Adapter flange for Ø58 encoder with Ø10 axis
12 = Adapter flange for Ø90 encoder with Ø12 axis (**12A** for the provision of a Ø6 coupling device without flange)
AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

If no option is specified for the adapter flange, the draw-wire sensor will be supplied as standard with a Ø10 coupling brace without a flange.
For the adaptation of an encoder or other sensor device which does not belong to our range, please contact us.

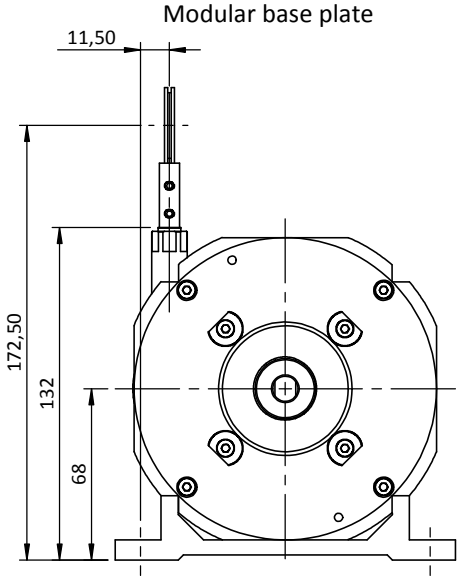
Reference example: CDS1210-MEC-10000-300-L05-OP-10-AC

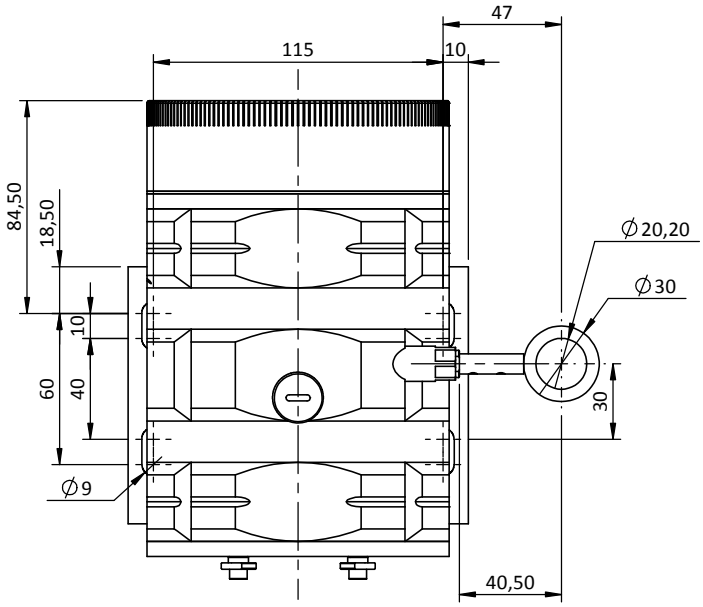
Dimensional Drawing

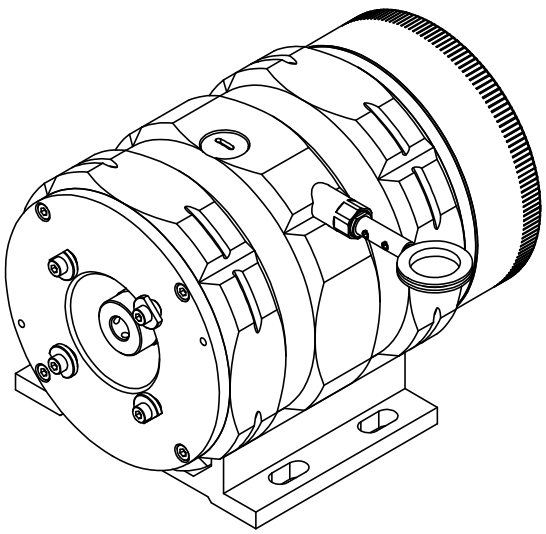




Modular base plate







CDS1215 potentiometric output – Measurement range 0 up to 15 000 mm

Specifications:

Measurement range	0 up to 15 000 mm
Output signal	1kΩ potentiometer (other values on demand)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS) Measuring cable - Stainless steel
Cable diameter	0,90 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 - DIN 3 pin Male connector M12 - 4 pin PVC cable - 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP65
Max. Velocity	10 m/s
Max. Acceleration	4 m/s^2 (before cable deformation)
Weight	≈ 8 kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
15 000	≈ 10,50 N	≈ 15,00 N

Ordering reference:

CDS1215					OP	

Model

CDS1215

Measurement range

15000 = 0 up to 15 000 mm
(Other ranges available on demand)

Output signal

R01K = 1kΩ output
(Other values on demand)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

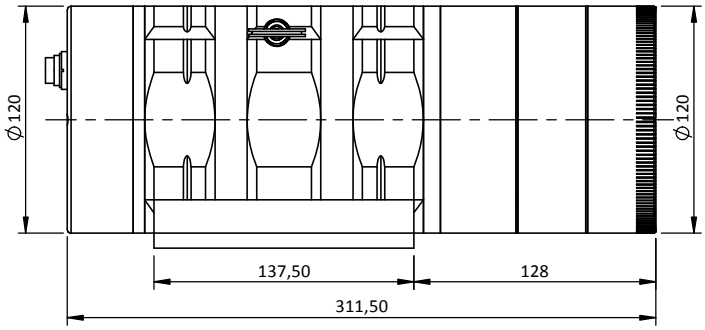
C = Male connector M16 - DIN 3 pin
L4 = Male connector M12 - 4 pin
K = PVC cable - 4 wires + ex: **02** for cable 2 meters long

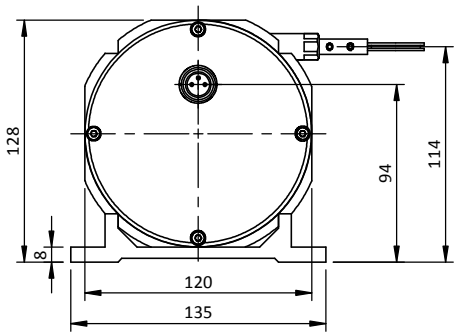
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

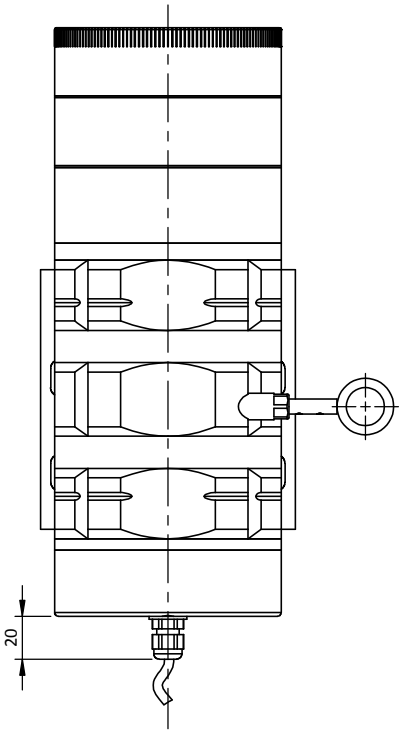
Reference example: CDS1215-15000-R01K-L15-K02-OP-AC-M6

Dimensional Drawing

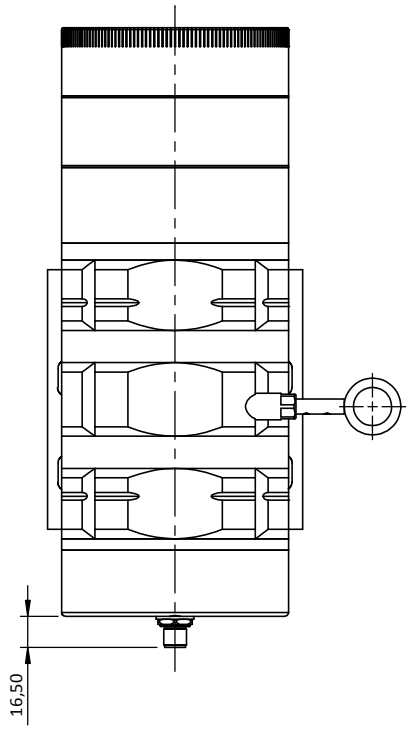




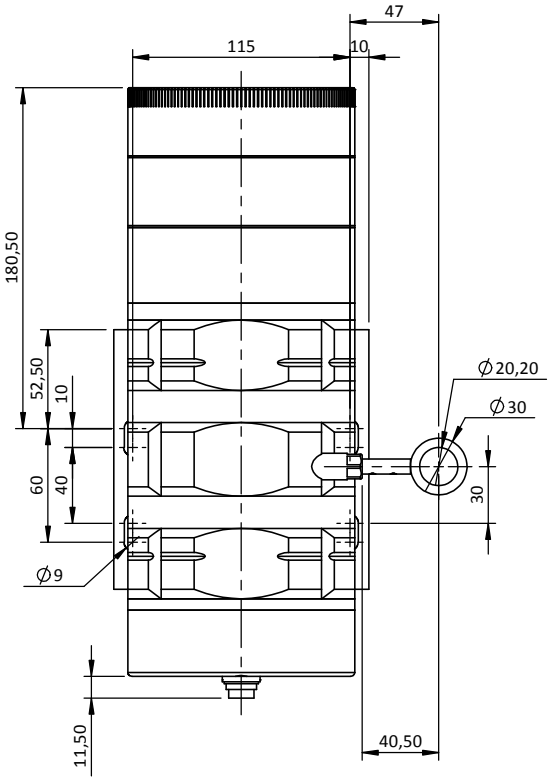
K connection
(PVC cable - 4 wires)



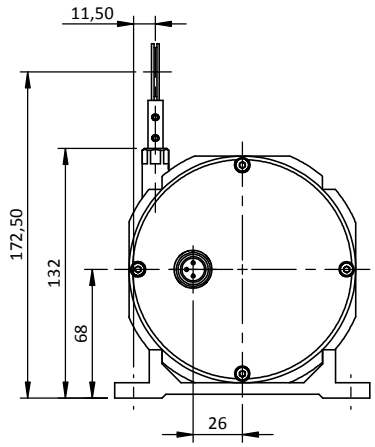
L4 connection
(connector M12 - 4 pin)

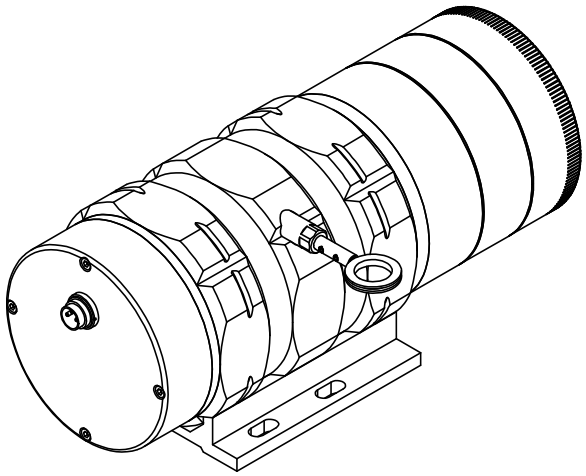


C connection
(Connector M16 - DIN 3 pin)



Modular base plate





CD1215 analog output – Measurement range 0 up to 15 000 mm

Specifications:

Measurement range	0 up to 15 000 mm
Output signal	0…10V (galvanic isolation) 4…20mA current loop 4…20mA current generator (galvanic isolation) 0…20mA current generator (galvanic isolation)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - aluminium (RohS) Measuring cable - Stainless steel
Cable diameter	0,90 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 - DIN 8 pin Male connector M12 - 4 pin PVC cable - 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP65
Max. Velocity	10 m/s
Max. Acceleration	4 m/s^2 (before cable deformation)
Weight	≈ 8 kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
15 000	≈ 10,50 N	≈ 15,00 N

Ordering reference:

CDS1215					OP	

Model

CDS1215

Measurement range

15000 = 0 up to 15 000 mm
(Other ranges available on demand)

Output signal

U010 = 0…10V
I420 = 4…20mA (current loop)
I420G = 4…20mA (current generator)
I020G = 0…20mA (current generator)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

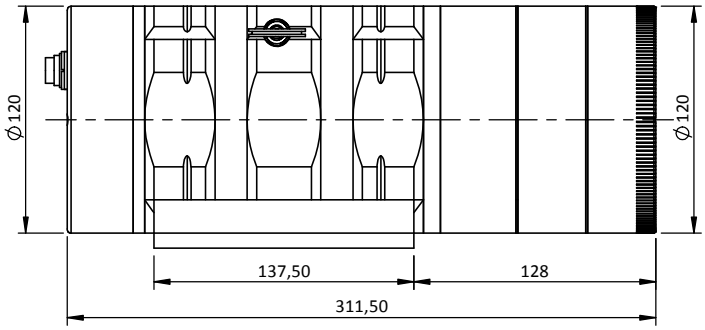
C = Male connector M16 - DIN 8 pin
L4 = Male connector M12 - 4 pin
K = PVC cable - 4 wires + ex: **02** for cable 2 meters long

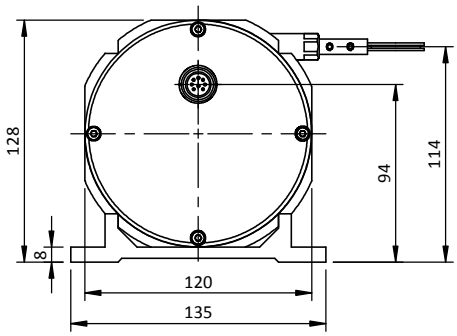
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

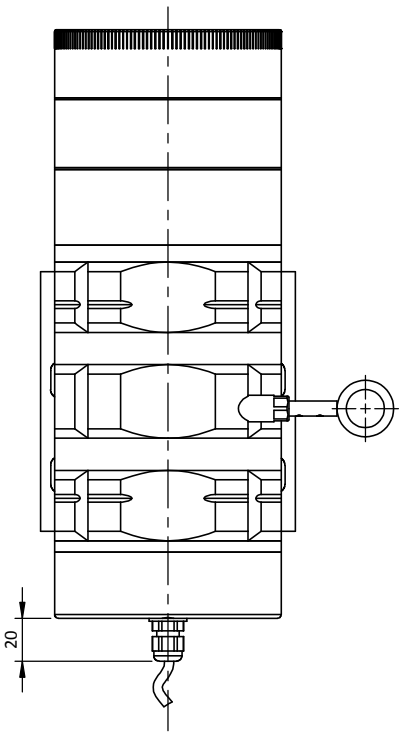
Reference example: CDS1215-15000-U010-L15-K02-OP-AC-M6

Dimensional Drawing

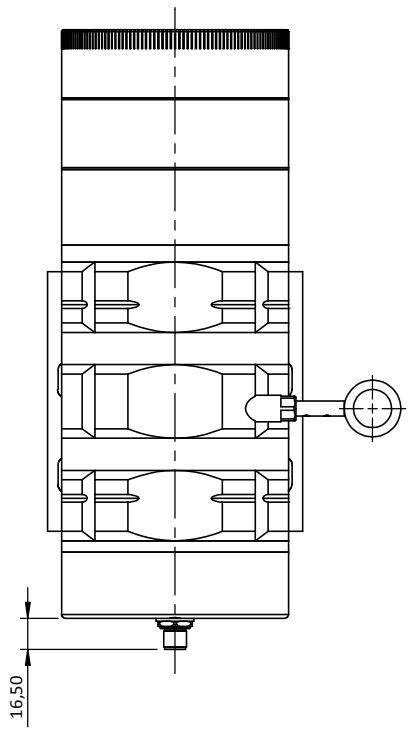




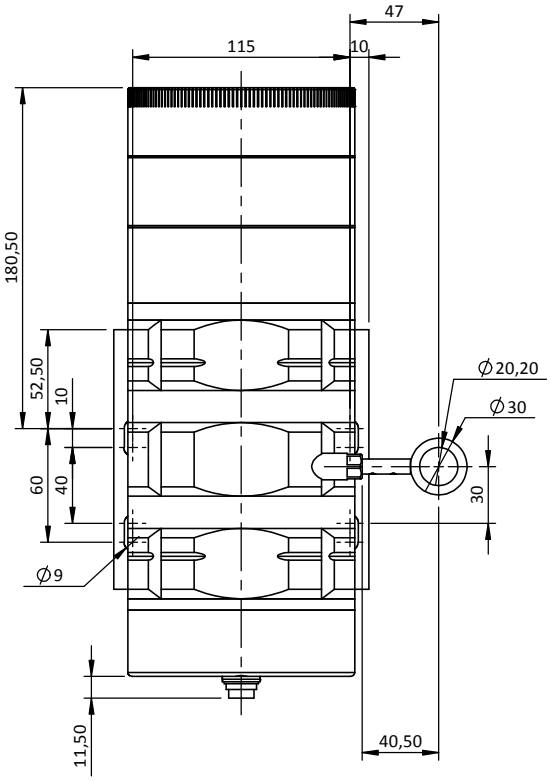
K connection
(PVC cable - 4 wires)



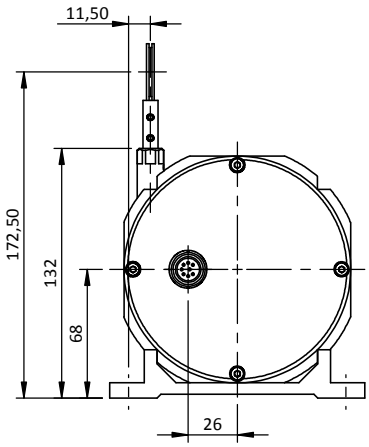
L4 connection
(connector M12 - 4 pin)

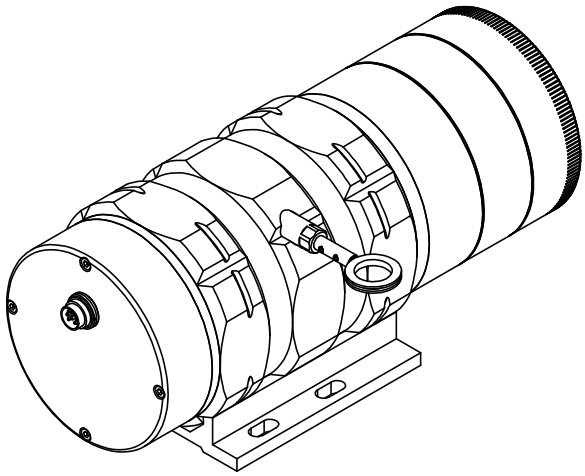


C connection
(Connector M16 - DIN 8 pin)



Modular base plate





CDS1215-MEC mechanical devices - Measurement range 0 up to 15 000 mm

Specifications:

Measurement range	0 up to 15 000 mm
Circumference drum	300 mm/turn
Sensing device	Adaptable with all of our incremental or absolute encoders
Material	Body and cover - aluminium (RohS)
	Measuring cable - Stainless steel
Cable diameter	0,90 mm
Standard linearity	+/- 0,05% f.s.
	+/- 0,01% f.s. (optional)
Max. Velocity	10 m/s
Max. Acceleration	4 m/s² (before cable deformation)
Weight	≈ 8kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
15 000	≈ 10,50 N	≈ 15,00 N

Ordering reference:

CDS1215	MEC				OP	

Model

CDS1215-MEC

Measurement range

15000 = 0 up to 15 000 mm
(Other ranges available on demand)

Drum circumference

300 = 300 mm/turn

Linearity

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

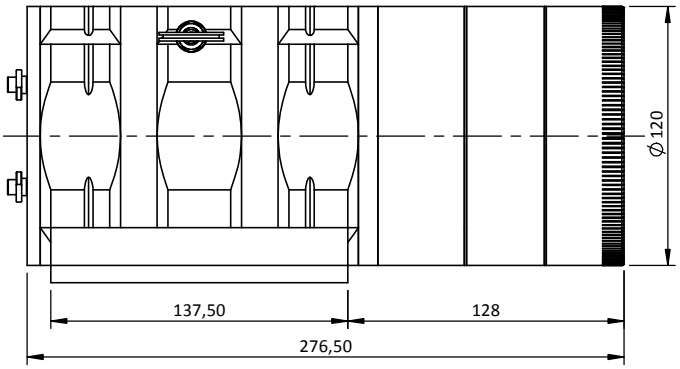
OP options

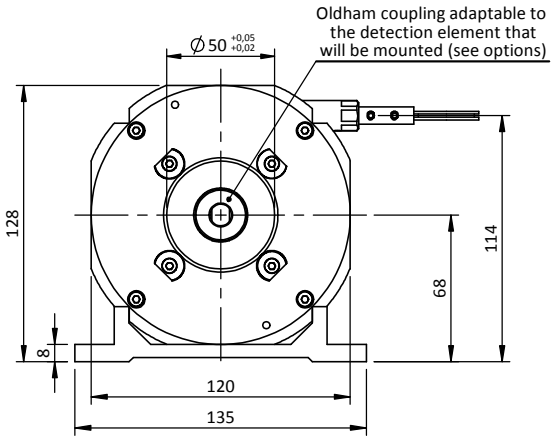
06 = Adapter flange for Ø58 encoder with Ø6 axis (**06A** for the provision of a Ø6 coupling device without flange)
10 = Adapter flange for Ø58 encoder with Ø10 axis
12 = Adapter flange for Ø90 encoder with Ø12 axis (**12A** for the provision of a Ø6 coupling device without flange)
AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

If no option is specified for the adapter flange, the draw-wire sensor will be supplied as standard with a Ø10 coupling brace without a flange.
For the adaptation of an encoder or other sensor device which does not belong to our range, please contact us.

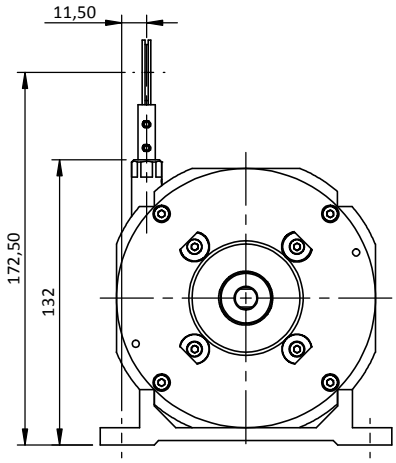
Reference example: CDS1215-MEC-15000-300-L05-OP-10-AC

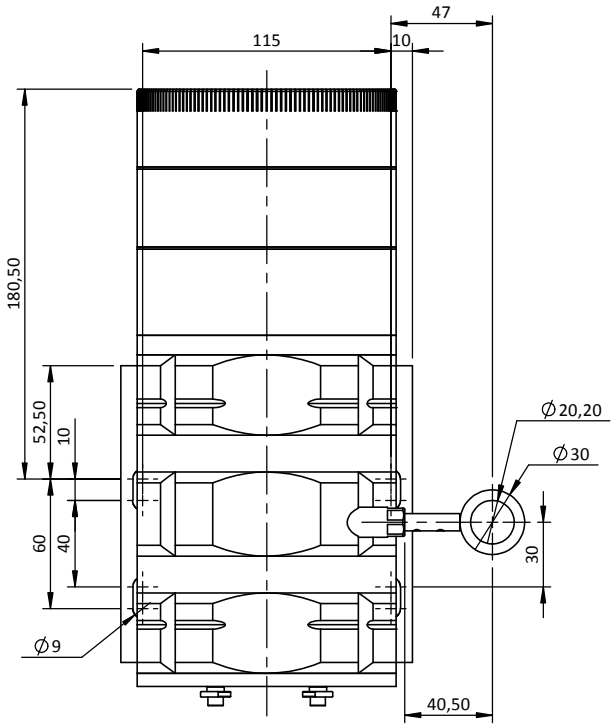
Dimensional Drawing

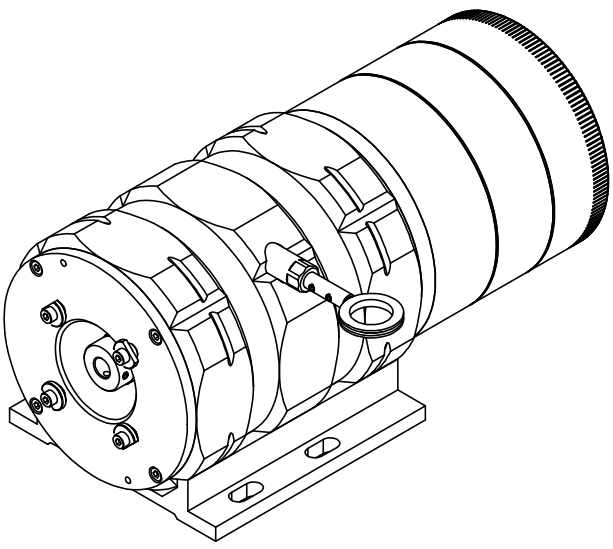




Modular base plate







CDS1820 potentiometric output – Measurement range 0 up to 20 000 mm

Specifications:

Measurement range	0 up to 20 000 mm
Output signal	1kΩ potentiometer (other values on demand)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS) Measuring cable - Stainless steel
Cable diameter	0,90 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 - DIN 3 pin Male connector M12 - 4 pin PVC cable - 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP65
Max. Velocity	10 m/s
Max. Acceleration	2 m/s^2 (before cable deformation)
Weight	≈ 12 kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
20 000	≈ 15,00 N	≈ 30,00 N

Ordering reference:

CDS1820					OP	

Model

CDS1820

Measurement range

20000 = 0 up to 20 000 mm
(Other ranges available on demand)

Output signal

R01K = 1kΩ output
(Other values on demand)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

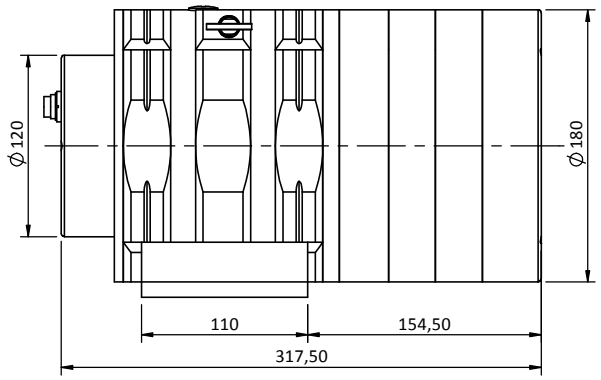
C = Male connector M16 - DIN 3 pin
L4 = Male connector M12 - 4 pin
K = PVC cable - 4 wires + ex: **02** for cable 2 meters long

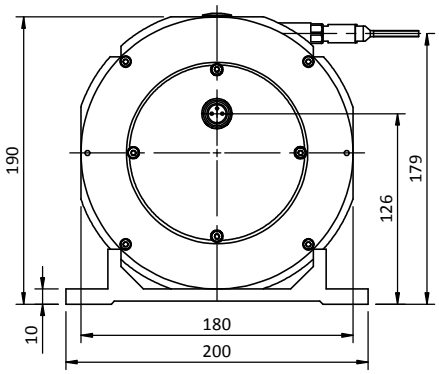
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

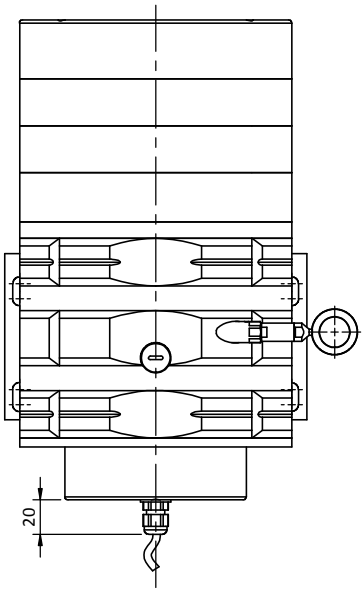
Reference example: CDS1820-20000-R01K-L15-K02-OP-AC-M6

Dimensional Drawing

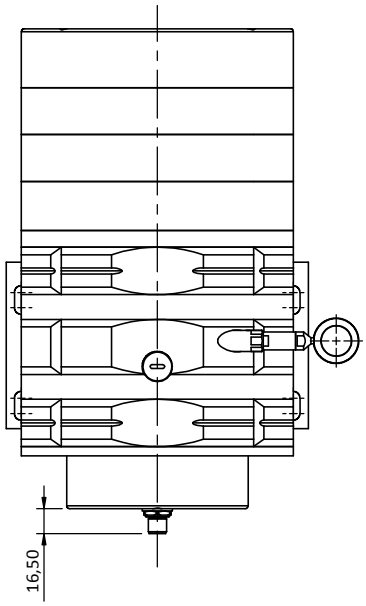




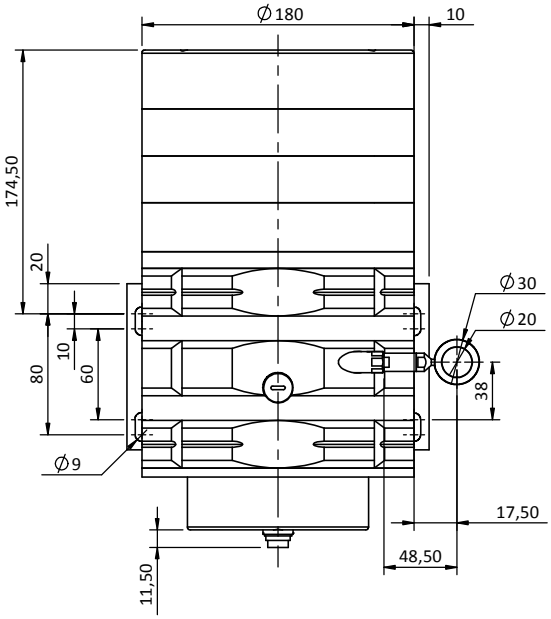
K connection
(PVC cable - 4 wires)



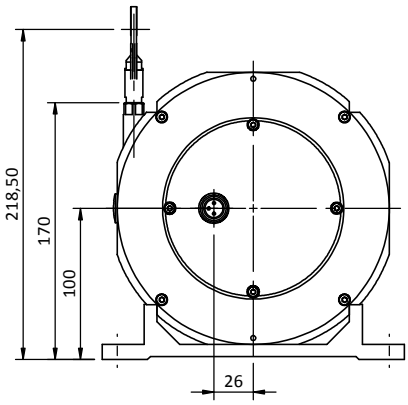
L4 connection
(connector M12 - 4 pin)

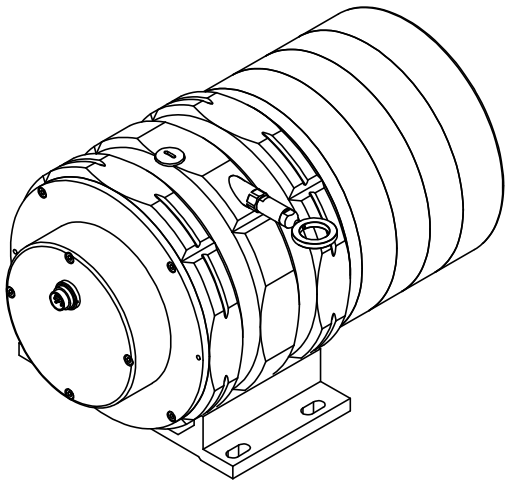


C connection
(Connector M16 - DIN 3 pin)



Modular base plate





CD1820 analog output – Measurement range 0 up to 20 000 mm

Specifications:

Measurement range	0 up to 20 000 mm
Output signal	0…10V (galvanic isolation) 4…20mA current loop 4…20mA current generator (galvanic isolation) 0…20mA current generator (galvanic isolation)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - aluminium (RohS) Measuring cable - Stainless steel
Cable diameter	0,90 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 - DIN 8 pin Male connector M12 - 4 pin PVC cable - 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP65
Max. Velocity	10 m/s
Max. Acceleration	2 m/s^2 (before cable deformation)
Weight	≈ 12 kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
20 000	≈ 15,00 N	≈ 30,00 N

Ordering reference:

CDS1820					OP	

Model

CDS1820

Measurement range

20000 = 0 up to 20 000 mm
(Other ranges available on demand)

Output signal

U010 = 0…10V
I420 = 4…20mA (current loop)
I420G = 4…20mA (current generator)
I020G = 0…20mA (current generator)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

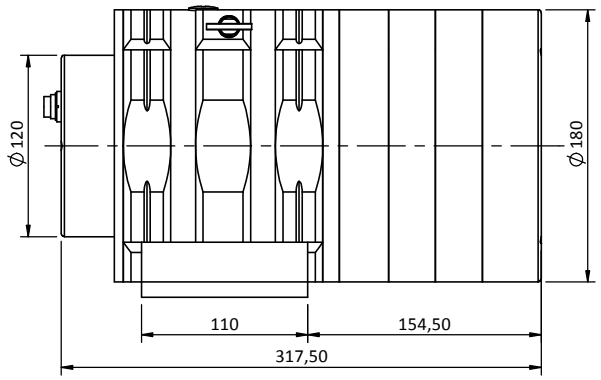
C = Male connector M16 - DIN 8 pin
L4 = Male connector M12 - 4 pin
K = PVC cable - 4 wires + ex: **02** for cable 2 meters long

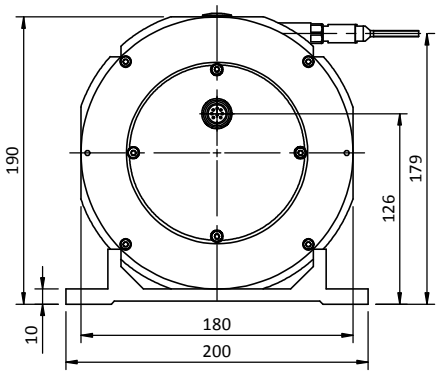
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

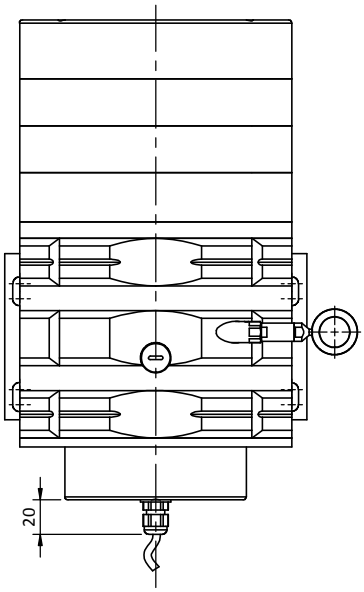
Reference example: CDS1820-20000-U010-L15-K02-OP-AC-M6

Dimensional Drawing

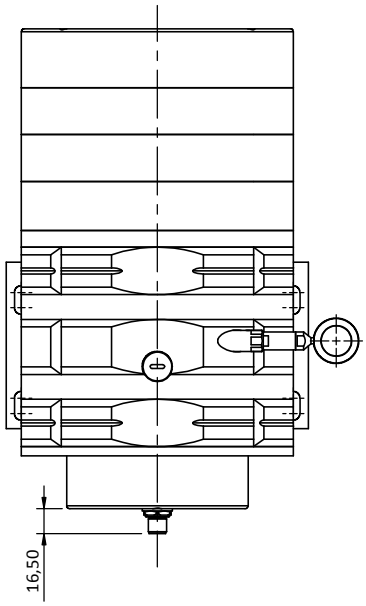




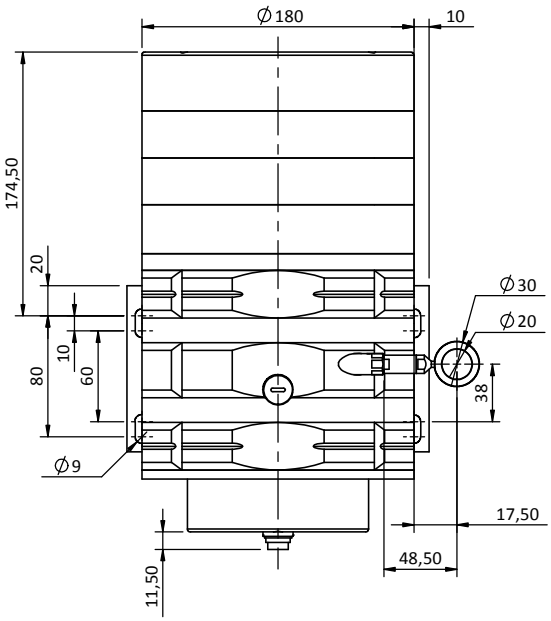
K connection
(PVC cable - 4 wires)



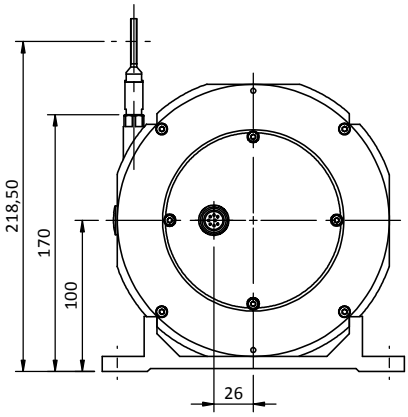
L4 connection
(connector M12 - 4 pin)

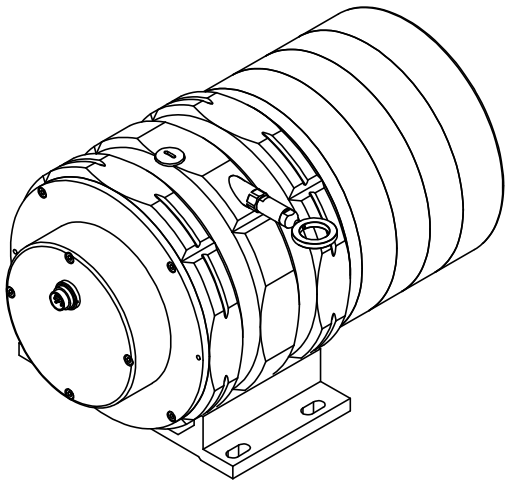


C connection
(Connector M16 - DIN 3 pin)



Modular base plate





CDS1820-MEC mechanical devices - Measurement range 0 up to 20 000 mm

Specifications:

Measurement range	0 up to 20 000 mm
Circumference drum	500 mm/turn
Sensing device	Adaptable with all of our incremental or absolute encoders
Material	Body and cover - aluminium (RohS)
	Measuring cable - Stainless steel
Cable diameter	0,90 mm
Standard linearity	+/- 0,05% f.s.
	+/- 0,01% f.s. (optional)
Max. Velocity	10 m/s
Max. Acceleration	2 m/s^2 (before cable deformation)
Weight	≈ 12kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
20 000	≈ 15,00 N	≈ 30,00 N

Ordering reference:

CDS1820	MEC				OP	

Model

CDS1820-MEC

Measurement range

20 000 = 0 up to 20 000 mm
(Other ranges available on demand)

Drum circumference

500 = 500 mm/turn

Linearity

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

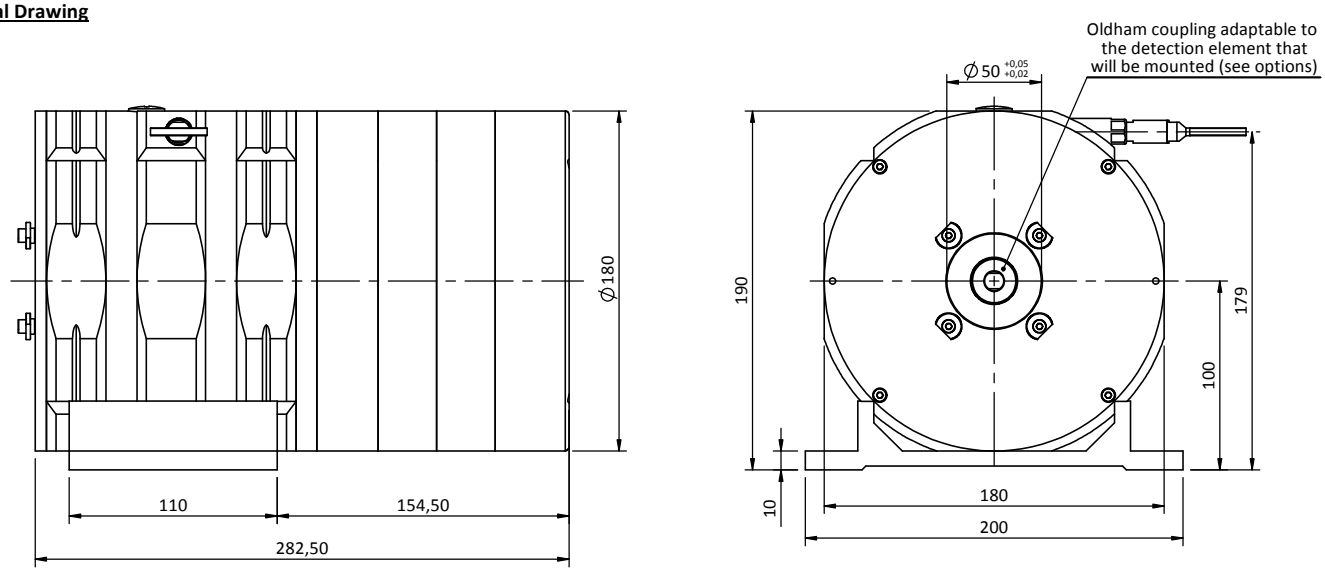
OP options

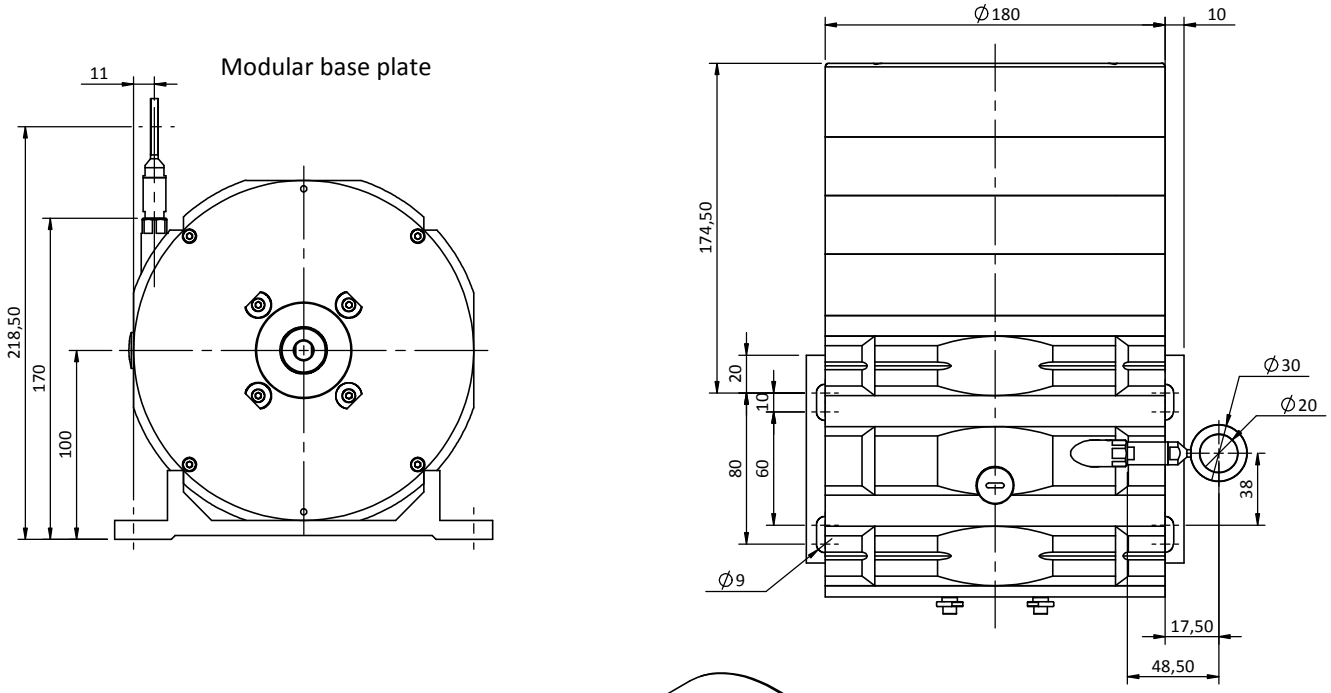
06 = Adapter flange for Ø58 encoder with Ø6 axis (**06A** for the provision of a Ø6 coupling device without flange)
10 = Adapter flange for Ø58 encoder with Ø10 axis
12 = Adapter flange for Ø90 encoder with Ø12 axis (**12A** for the provision of a Ø6 coupling device without flange)
AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

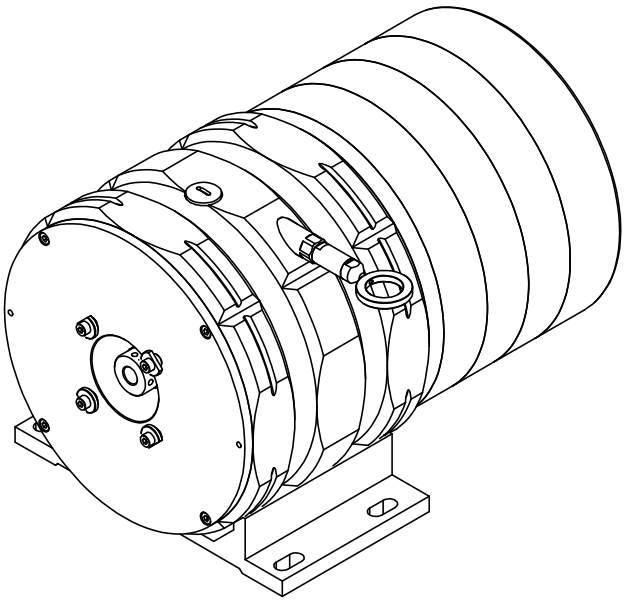
If no option is specified for the adapter flange, the draw-wire sensor will be supplied as standard with a Ø10 coupling brace without a flange.
For the adaptation of an encoder or other sensor device which does not belong to our range, please contact us.

Reference example: CDS1820-MEC-20000-500-L05-OP-10-AC

Dimensional Drawing







CDS1830 potentiometric output – Measurement range 0 up to 30 000 mm

Specifications:

Measurement range	0 up to 30 000 mm
Output signal	1kΩ potentiometer (other values on demand)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS) Measuring cable - Stainless steel
Cable diameter	0,90 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 - DIN 3 pin Male connector M12 - 4 pin PVC cable - 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP65
Max. Velocity	10 m/s
Max. Acceleration	2 m/s^2 (before cable deformation)
Weight	≈ 15 kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
30 000	≈ 15,00 N	≈ 30,00 N

Ordering reference:

CDS1830					OP	

Model

CDS1830

Measurement range

30000 = 0 up to 30 000 mm
(Other ranges available on demand)

Output signal

R01K = 1kΩ output
(Other values on demand)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

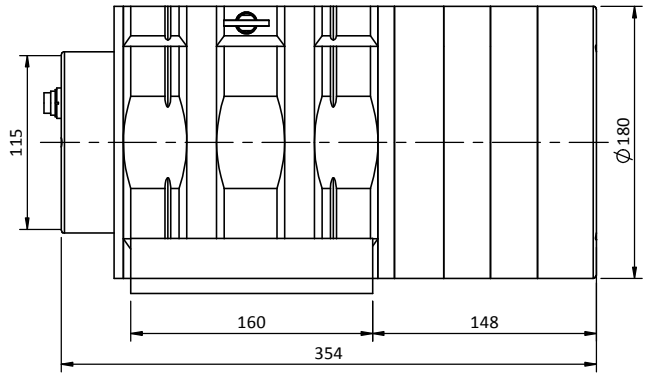
C = Male connector M16 - DIN 3 pin
L4 = Male connector M12 - 4 pin
K = PVC cable - 4 wires + ex: **02** for cable 2 meters long

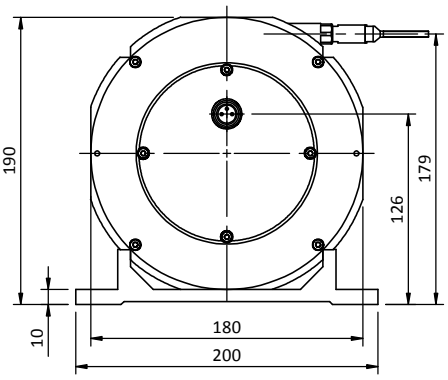
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

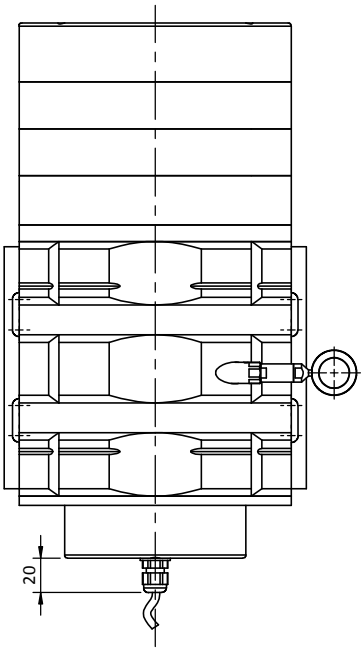
Reference example: CDS1830-30000-R01K-L15-K02-OP-AC-M6

Dimensional Drawing

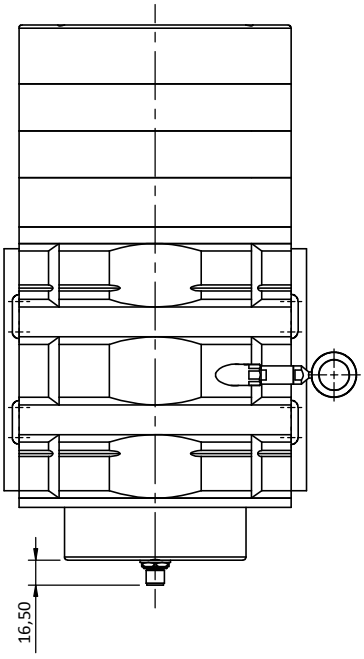




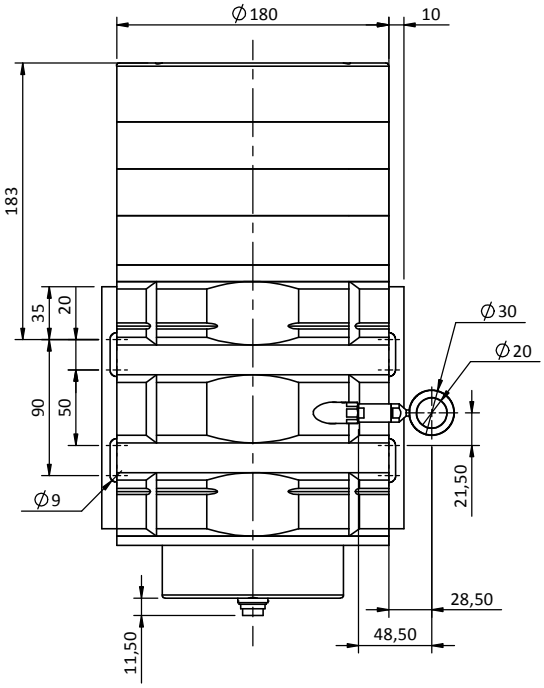
K connection
(PVC cable - 4 wires)



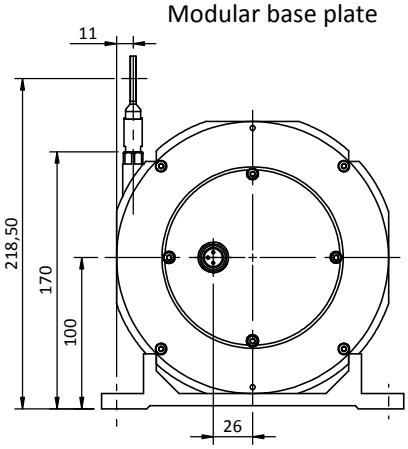
L4 connection
(connector M12 - 4 pin)

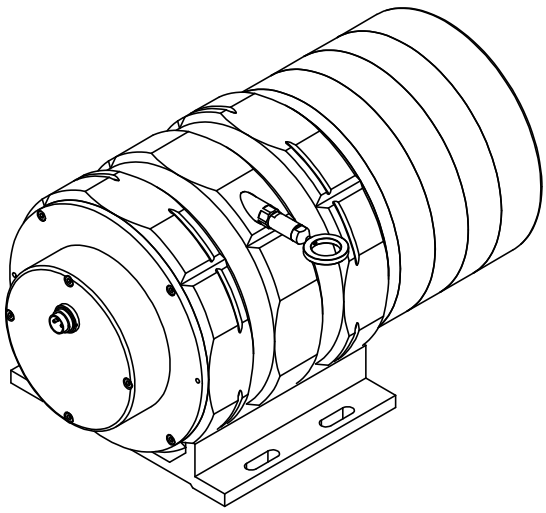


C connection
(Connector M16 - DIN 3 pin)



Modular base plate





CD1830 analog output – Measurement range 0 up to 30 000 mm

Specifications:

Measurement range	0 up to 30 000 mm
Output signal	0…10V (galvanic isolation)
	4…20mA current loop
	4…20mA current generator (galvanic isolation)
	0…20mA current generator (galvanic isolation)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - aluminium (RohS)
	Measuring cable - Stainless steel
Cable diameter	0,90 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 - DIN 8 pin
	Male connector M12 - 4 pin
	PVC cable - 4 wires
Standard linearity	+/- 0,15% f.s.
	+/- 0,10% f.s. (optional)
Protection class	IP65
Max. Velocity	10 m/s
Max. Acceleration	2 m/s^2 (before cable deformation)
Weight	≈ 15 kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
30 000	≈ 15,00 N	≈ 30,00 N

Ordering reference:

CDS1830					OP	

Model

CDS1830

Measurement range

30000 = 0 up to 30 000 mm
(Other ranges available on-demand)

Output signal

U010 = 0…10V
I420 = 4…20mA (current loop)
I420G = 4…20mA (current generator)
I020G = 0…20mA (current generator)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

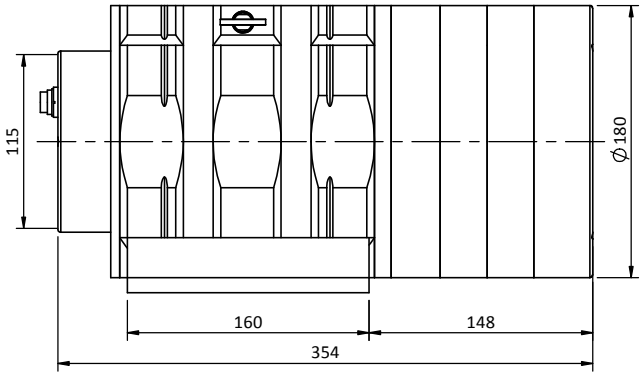
C = Male connector M16 - DIN 8 pin
L4 = Male connector M12 - 4 pin
K = PVC cable - 4 wires + ex: **02** for cable 2 meters long

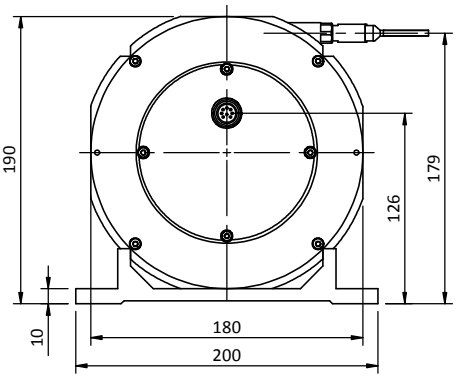
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

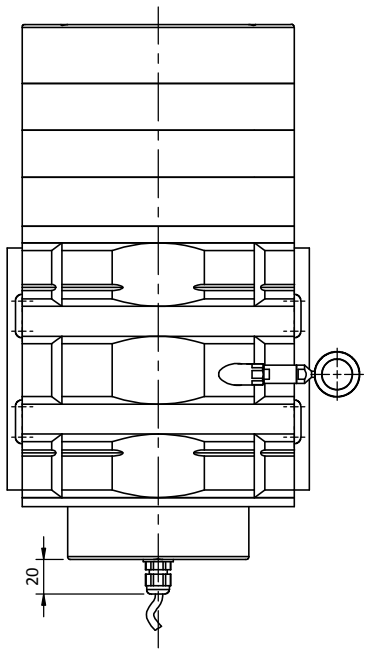
Reference example: CDS1830-30000-U010-L15-K02-OP-AC-M6

Dimensional Drawing

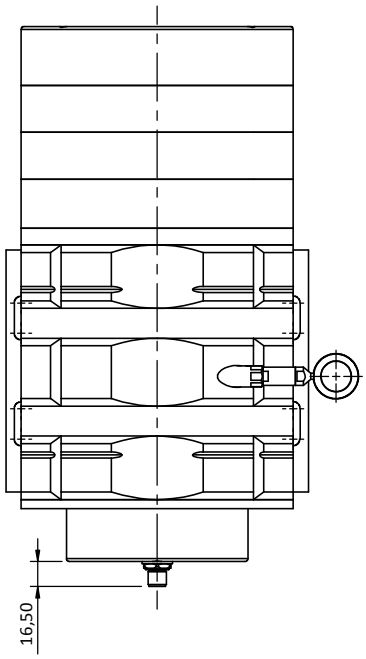




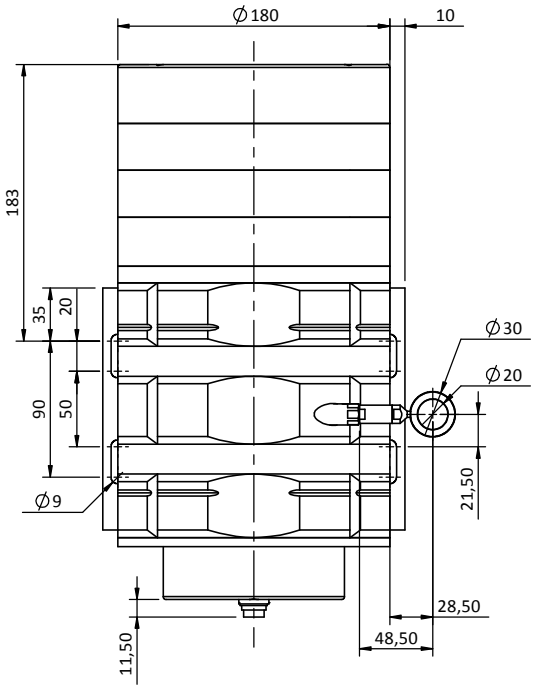
K connection
(PVC cable - 4 wires)



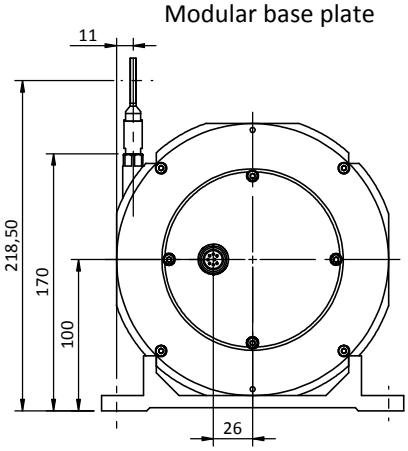
L4 connection
(connector M12 - 4 pin)

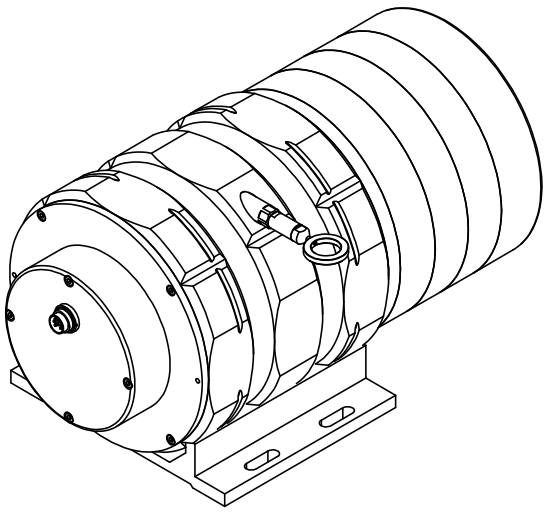


C connection
(Connector M16 - DIN 3 pin)



Modular base plate





CDS1830-MEC mechanical devices - Measurement range 0 up to 30 000 mm

Specifications:

Measurement range	0 up to 30 000 mm
Circumference drum	500 mm/turn
Sensing device	Adaptable with all our incremental or absolute encoders
Material	Body and cover - aluminium (RohS)
	Measuring cable - Stainless steel
Cable diameter	0,90 mm
Standard linearity	+/- 0,05% f.s.
	+/- 0,01% f.s. (optional)
Max. Velocity	10 m/s
Max. Acceleration	2 m/s^2 (before cable deformation)
Weight	≈ 15kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
30 000	≈ 15,00 N	≈ 30,00 N

Ordering reference:

CDS1830	MEC				OP	

Model

CDS1830-MEC

Measurement range

30 000 = 0 up to 30 000 mm
(Other ranges available on demand)

Drum circumference

500 = 500 mm/turn

Linearity

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

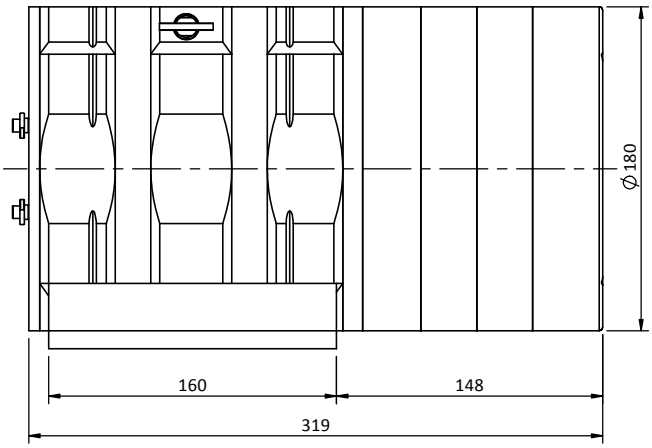
OP options

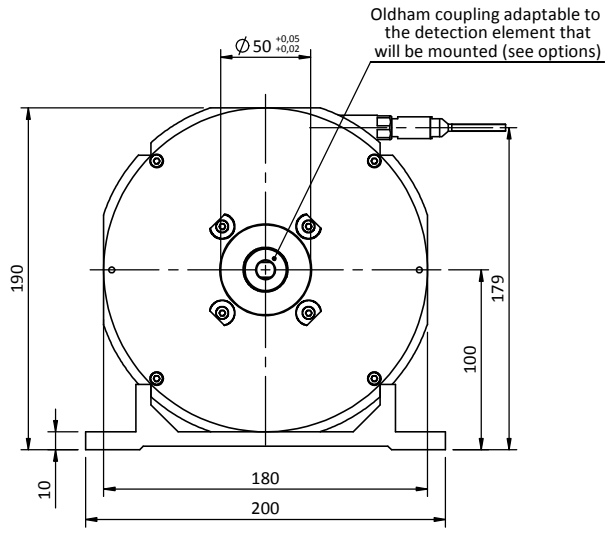
06 = Adapter flange for Ø58 encoder with Ø6 axis (**06A** for the provision of a Ø6 coupling device without flange)
10 = Adapter flange for Ø58 encoder with Ø10 axis
12 = Adapter flange for Ø90 encoder with Ø12 axis (**12A** for the provision of a Ø6 coupling device without flange)
AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

If no option is specified for the adapter flange, the draw-wire sensor will be supplied as standard with a Ø10 coupling brace without a flange.
For the adaptation of an encoder or other sensor device which does not belong to our range, please contact us.

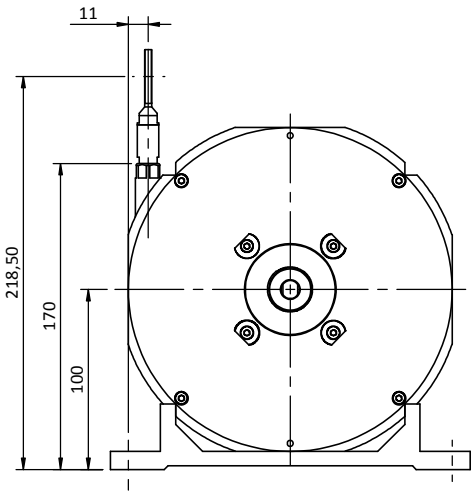
Reference example: CDS1830-MEC-30000-500-L05-OP-10-AC

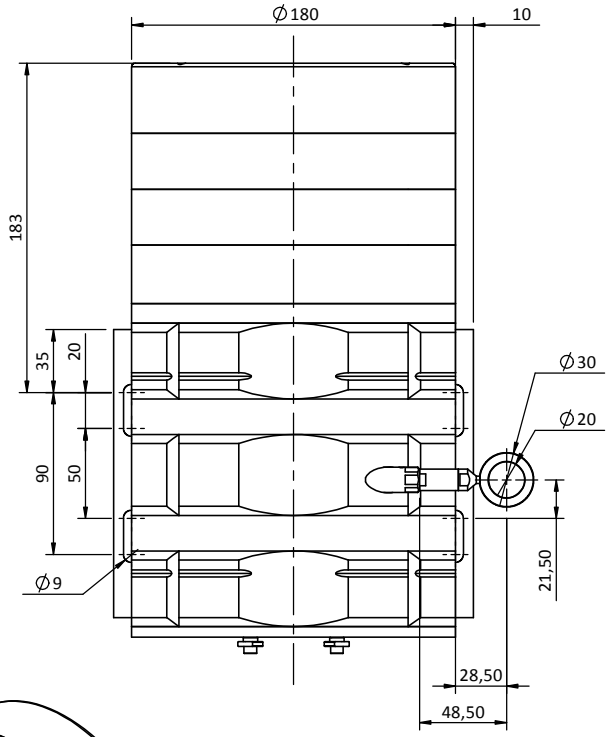
Dimensional Drawing

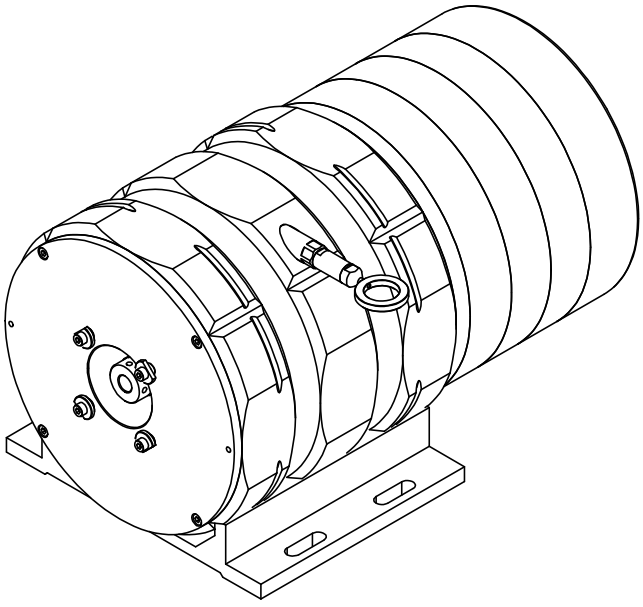




Modular base plate







CDS1840 potentiometric output – Measurement range 0 up to 40 000 mm

Specifications:

Measurement range	0 up to 40 000 mm
Output signal	1kΩ potentiometer (other values on demand)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS) Measuring cable - Stainless steel
Cable diameter	0,90 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 - DIN 3 pin Male connector M12 - 4 pin PVC cable - 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP65
Max. Velocity	10 m/s
Max. Acceleration	1 m/s^2 (before cable deformation)
Weight	≈ 20 kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
40 000	≈ 15,00 N	≈ 30,00 N

Ordering reference:

CDS1840					OP	

Model

CDS1840

Measurement range

40000 = 0 up to 40 000 mm
(Other ranges available on demand)

Output signal

R01K = 1kΩ output
(Other values on demand)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

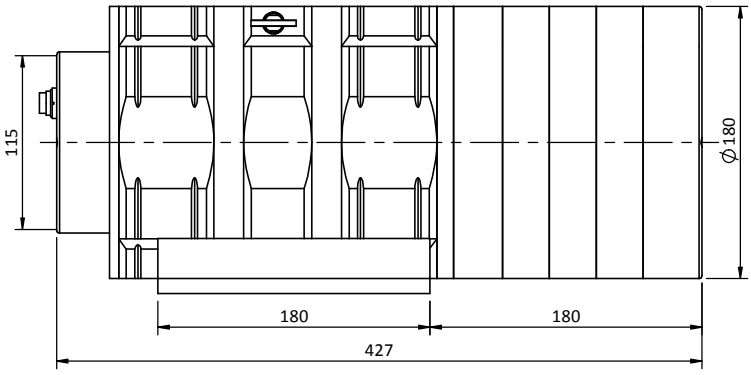
C = Male connector M16 - DIN 3 pin
L4 = Male connector M12 - 4 pin
K = PVC cable - 4 wires + ex: **02** for cable 2 meters long

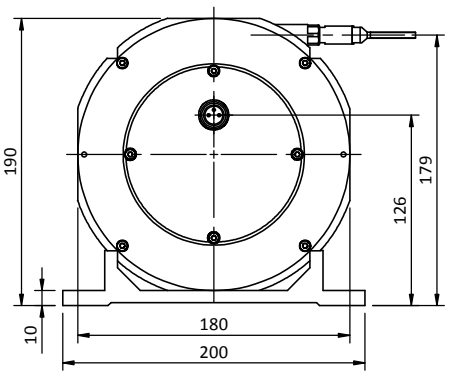
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

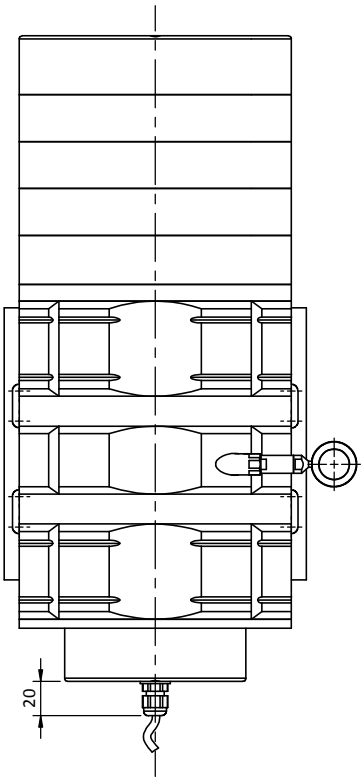
Reference example: CDS1840-40000-R01K-L15-K02-OP-AC-M6

Dimensional Drawing

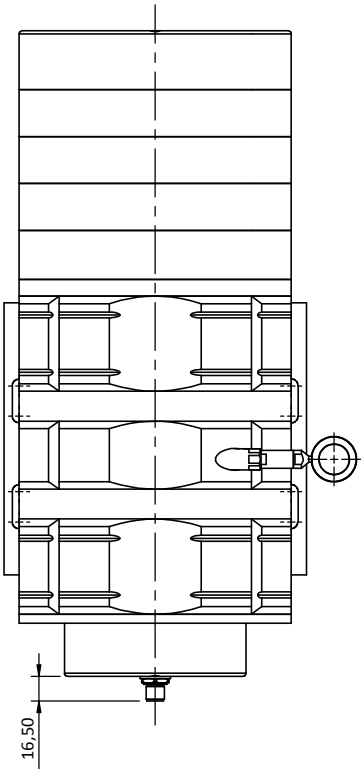




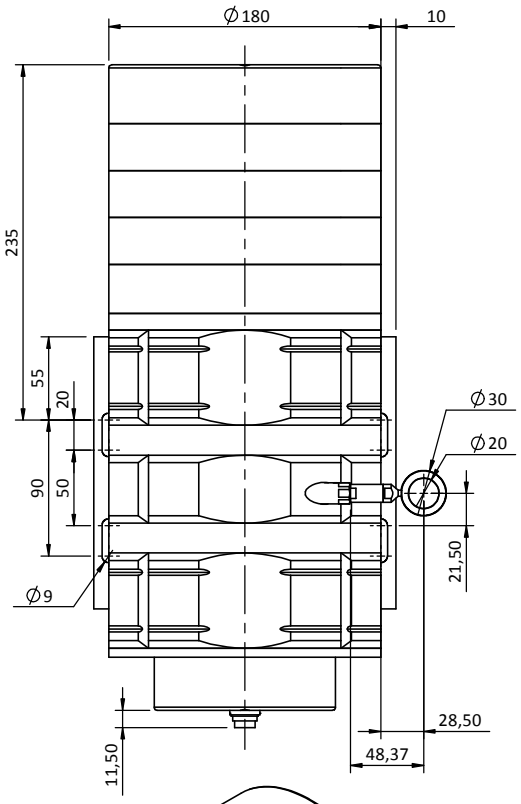
K connection
(PVC cable - 4 wires)



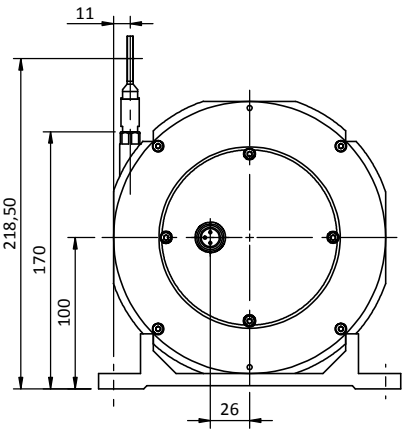
L4 connection
(connector M12 - 4 pin)

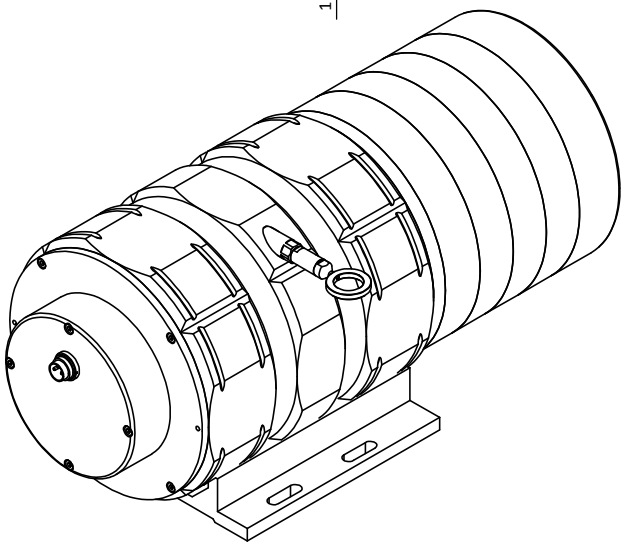


C connection
(Connector M16 - DIN 3 pin)



Modular base plate





CD1840 analog output – Measurement range 0 up to 40 000 mm

Specifications:

Measurement range	0 up to 40 000 mm
Output signal	0…10V (galvanic isolation) 4…20mA current loop 4…20mA current generator (galvanic isolation) 0…20mA current generator (galvanic isolation)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - aluminium (RohS) Measuring cable - Stainless steel
Cable diameter	0,90 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – DIN 8 pin Male connector M12 – 4 pin PVC cable – 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP65
Max. Velocity	10 m/s
Max. Acceleration	1 m/s^2 (before cable deformation)
Weight	≈ 20 kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
40 000	≈ 15,00 N	≈ 30,00 N

Ordering reference:

CDS1840					OP	

Model

CDS1840

Measurement range

40000 = 0 up to 40 000 mm
(Other ranges available on demand)

Output signal

U010 = 0…10V
I420 = 4…20mA (current loop)
I420G = 4…20mA (current generator)
I020G = 0…20mA (current generator)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

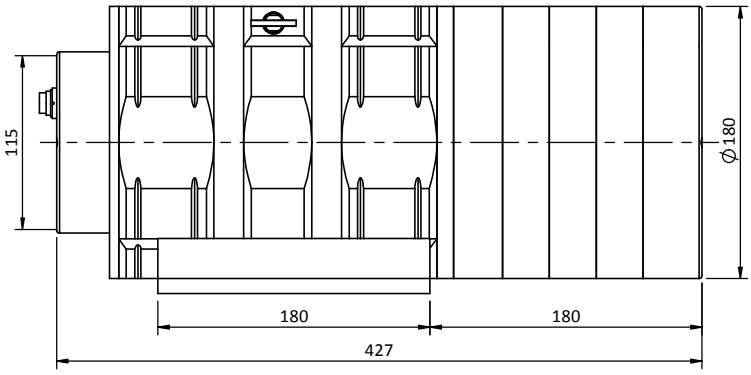
C = Male connector M16 – DIN 8 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

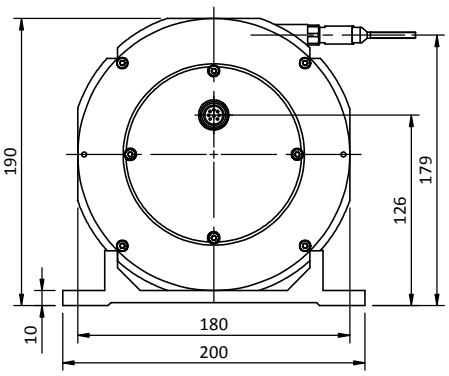
OP Options

AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

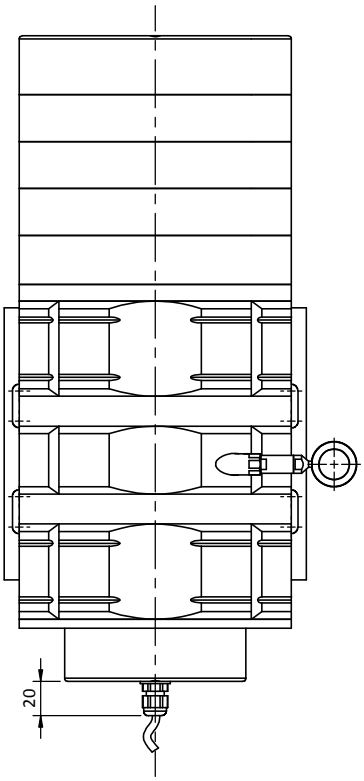
Reference example: CDS1840-40000-U010-L15-K02-OP-AC-M6

Dimensional Drawing

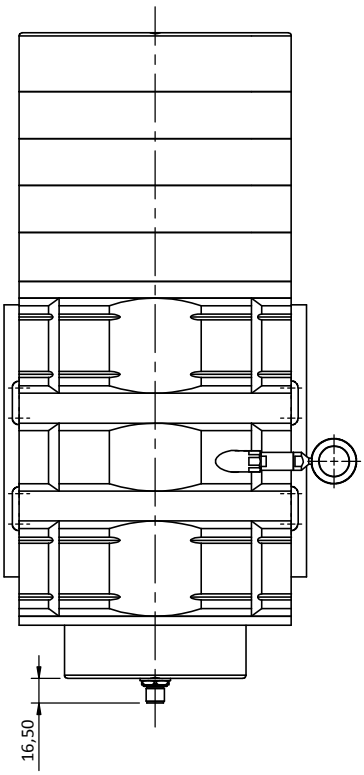




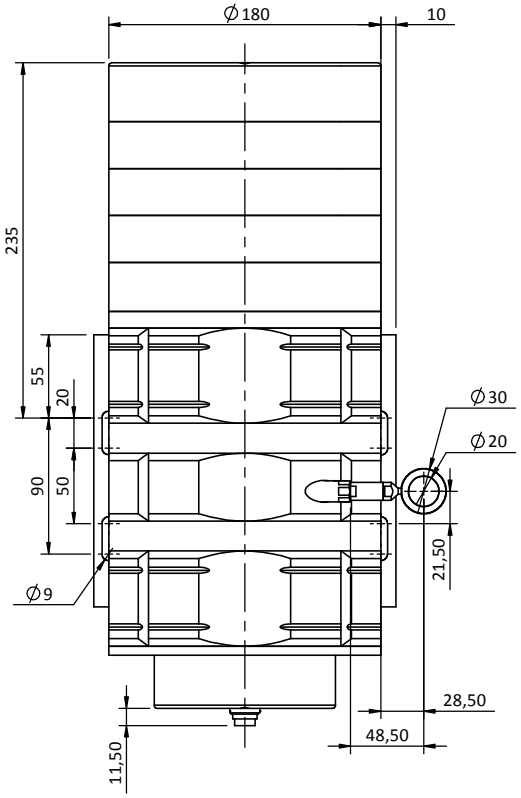
K connection
(PVC cable - 4 wires)



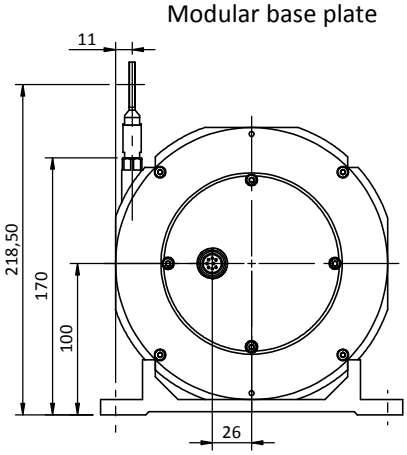
L4 connection
(connector M12 - 4 pin)

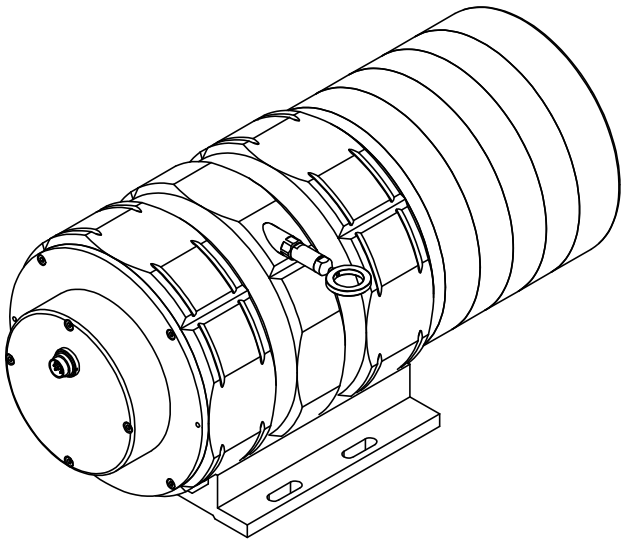


C connection
(Connector M16 - DIN 8 pin)



Modular base plate





CDS1840-MEC mechanical devices - Measurement range 0 up to 40 000 mm

Specifications:

Measurement range	0 up to 40 000 mm
Circumference drum	500 mm/turn
Sensing device	Adaptable with all our incremental or absolute encoders
Material	Body and cover - aluminium (RohS)
	Measuring cable - Stainless steel
Cable diameter	0,90 mm
Standard linearity	+/- 0,05% f.s.
	+/- 0,01% f.s. (optional)
Max. Velocity	10 m/s
Max. Acceleration	1 m/s^2 (before cable deformation)
Weight	≈ 20kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
40 000	≈ 15,00 N	≈ 30,00 N

Ordering reference:

CDS1840	MEC				OP	

Model

CDS1840-MEC

Measurement range

40 000 = 0 up to 40 000 mm
(Other ranges available on demand)

Drum circumference

500 = 500 mm/turn

Linearity

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

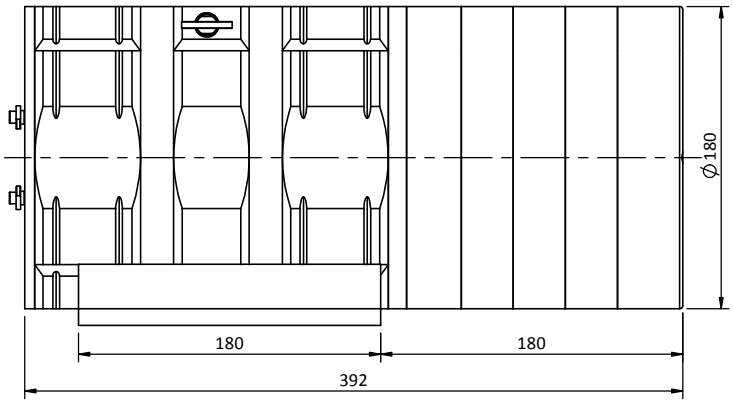
OP options

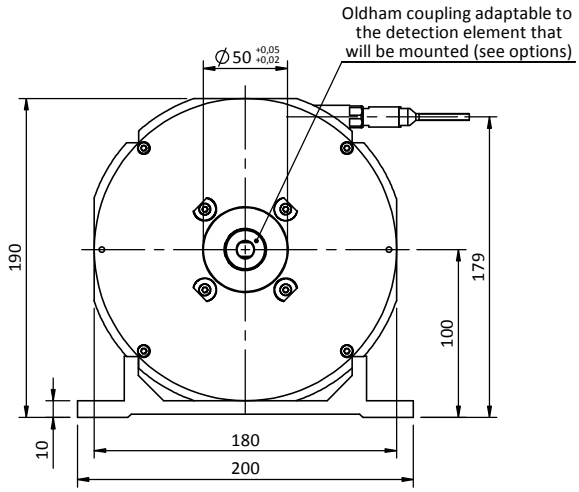
06 = Adapter flange for Ø58 encoder with Ø6 axis (**06A** for the provision of a Ø6 coupling device without flange)
10 = Adapter flange for Ø58 encoder with Ø10 axis
12 = Adapter flange for Ø90 encoder with Ø12 axis (**12A** for the provision of a Ø6 coupling device without flange)
AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

If no option is specified for the adapter flange, the draw-wire sensor will be supplied as standard with a Ø10 coupling brace without a flange.
For the adaptation of an encoder or other sensor device which does not belong to our range, please contact us.

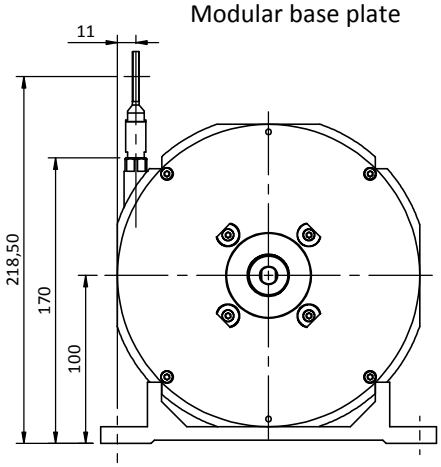
Reference example: CDS1840-MEC-40000-500-L05-OP-10-AC

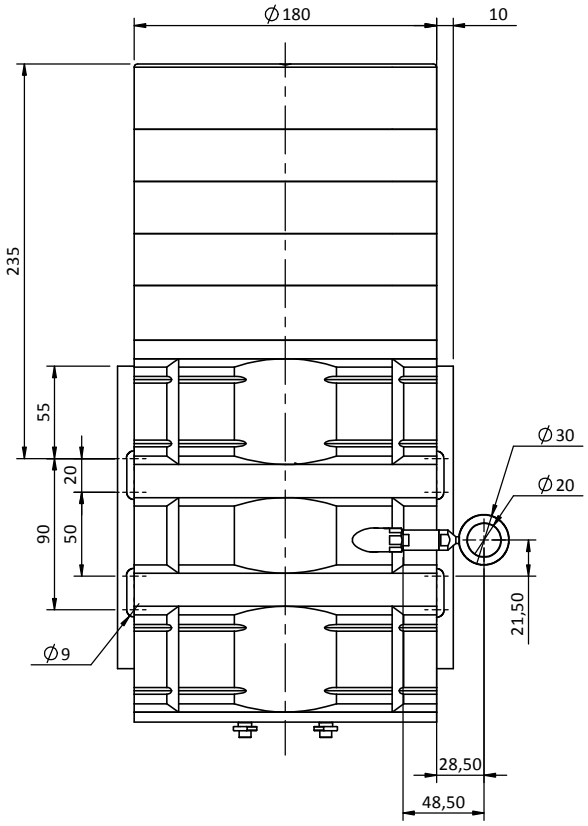
Dimensional Drawing

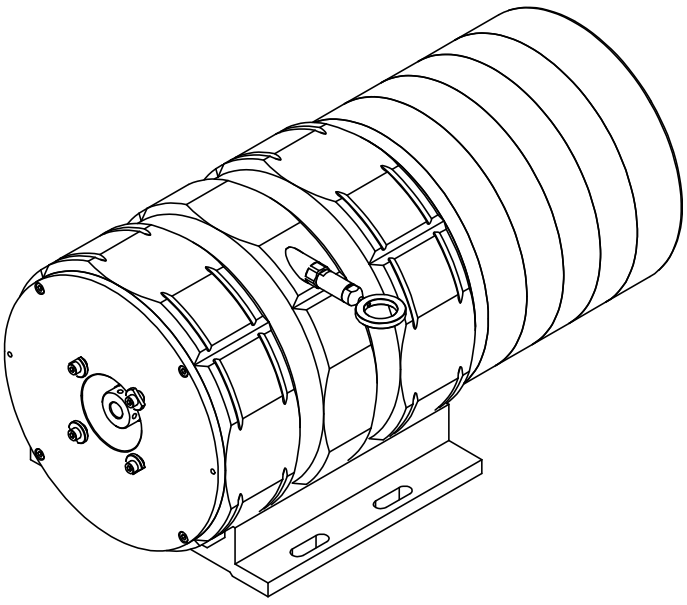




Modular base plate







CDS1850 potentiometric output – Measurement range 0 up to 50 000 mm

Specifications:

Measurement range	0 up to 50 000 mm
Output signal	1kΩ potentiometer (other values on demand)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS) Measuring cable - Stainless steel
Cable diameter	0,90 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 - DIN 3 pin Male connector M12 - 4 pin PVC cable - 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP65
Max. Velocity	10 m/s
Max. Acceleration	1 m/s^2 (before cable deformation)
Weight	≈ 23 kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
50 000	≈ 15,00 N	≈ 30,00 N

Ordering reference:

CDS1850					OP	

Model

CDS1850

Measurement range

50000 = 0 up to 50 000 mm
(Other ranges available on demand)

Output signal

R01K = 1kΩ output
(Other values on demand)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

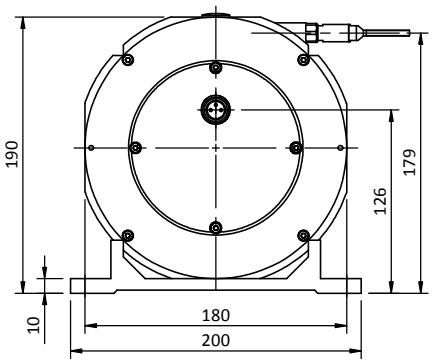
C = Male connector M16 - DIN 3 pin
L4 = Male connector M12 - 4 pin
K = PVC cable - 4 wires + ex: **02** for cable 2 meters long

OP Options

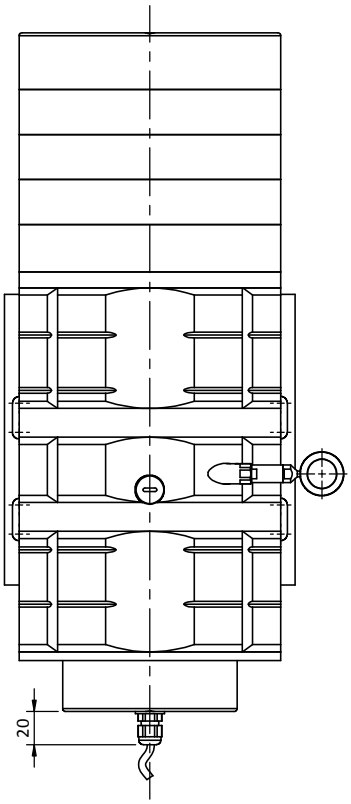
AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

Reference example: CDS1850-50000-R01K-L15-K02-OP-AC-M6

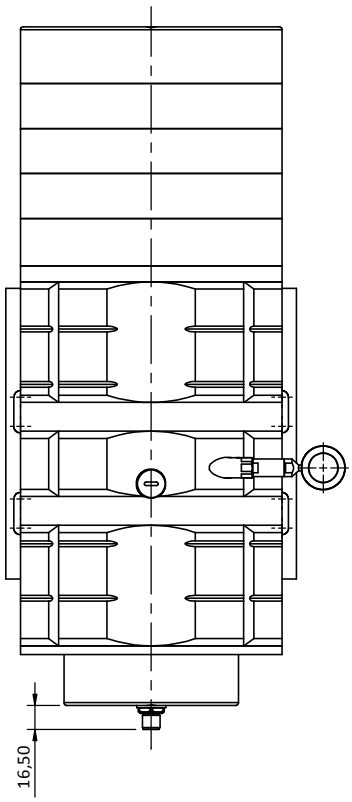
Dimensional Drawing



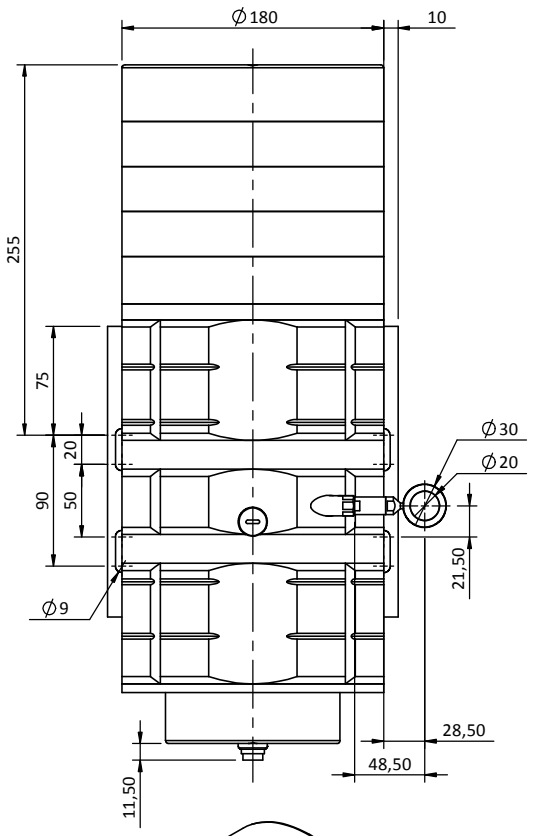
K connection
(PVC cable - 4 wires)



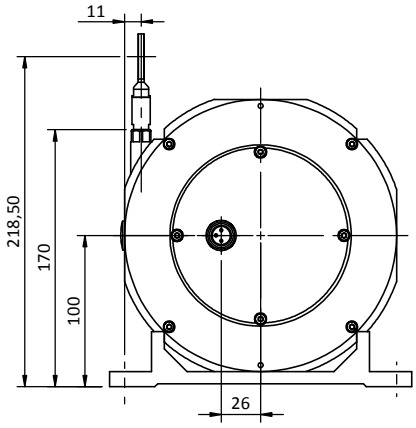
L4 connection
(connector M12 - 4 pin)

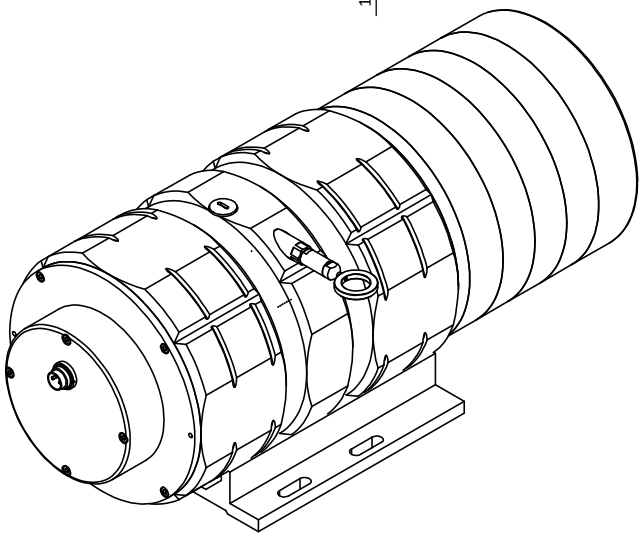


C connection
(Connector M16 - DIN 3 pin)



Modular base plate





CD1850 analog output – Measurement range 0 up to 50 000 mm

Specifications:

Measurement range	0 up to 50 000 mm
Output signal	0…10V (galvanic isolation) 4…20mA current loop 4…20mA current generator (galvanic isolation) 0…20mA current generator (galvanic isolation)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - aluminium (RohS) Measuring cable - Stainless steel
Cable diameter	0,90 mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – DIN 8 pin Male connector M12 – 4 pin PVC cable – 4 wires
Standard linearity	+/- 0,15% f.s. +/- 0,10% f.s. (optional)
Protection class	IP65
Max. Velocity	10 m/s
Max. Acceleration	1 m/s^2 (before cable deformation)
Weight	≈ 23 kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
50 000	≈ 15,00 N	≈ 30,00 N

Ordering reference:

CDS1850					OP	

Model

CDS1850

Measurement range

50000 = 0 up to 50 000 mm
(Other ranges available on demand)

Output signal

U010 = 0…10V
I420 = 4…20mA (current loop)
I420G = 4…20mA (current generator)
I020G = 0…20mA (current generator)

Linearity

L15 = +/- 0.15% f.s.
L10 = +/- 0.10% f.s. (optional)

Connection

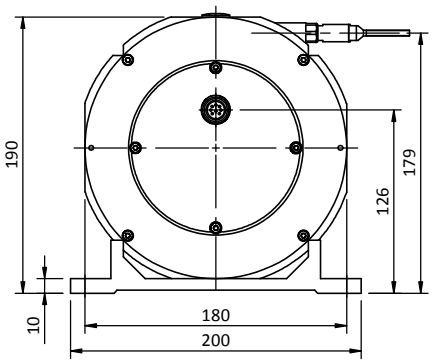
C = Male connector M16 – DIN 8 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

OP Options

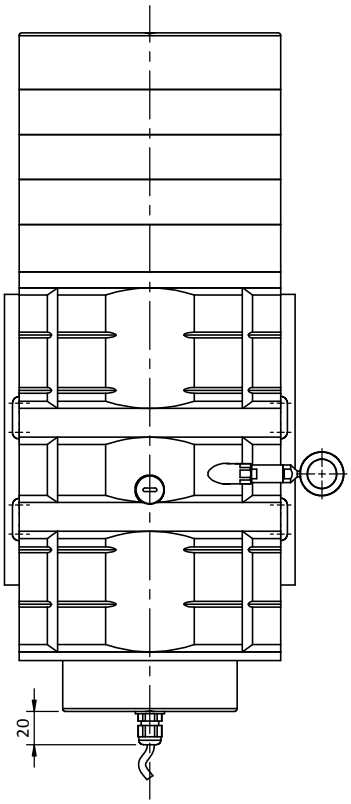
AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
IP67 = Protection class IP67
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

Reference example: CDS1850-50000-U010-L15-K02-OP-AC-M6

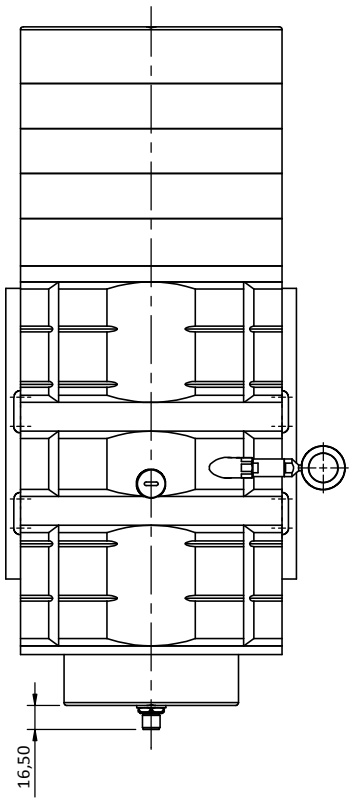
Dimensional Drawing



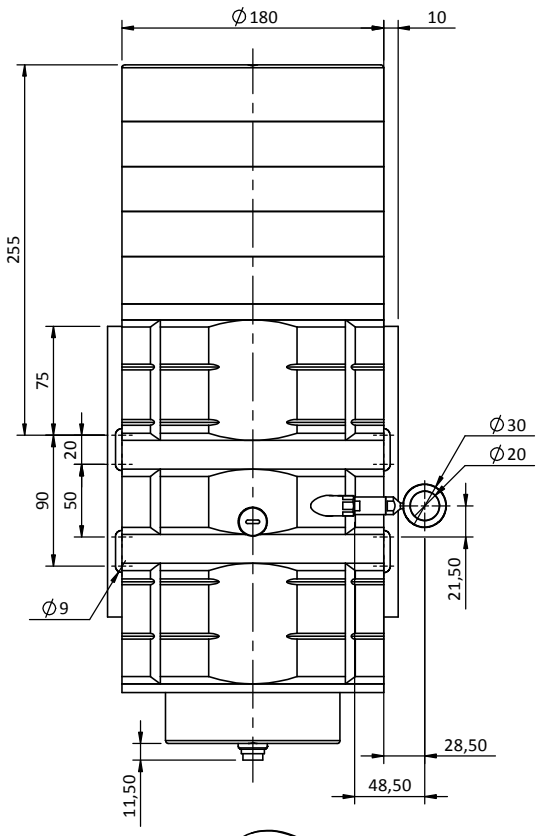
K connection
(PVC cable - 4 wires)



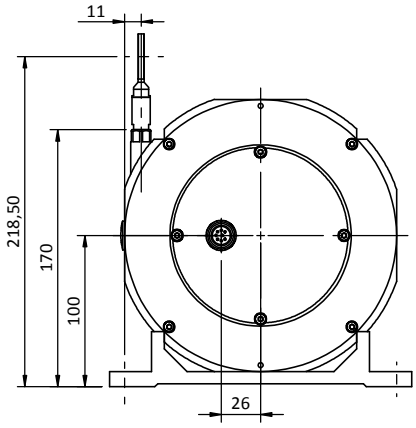
L4 connection
(connector M12 - 4 pin)

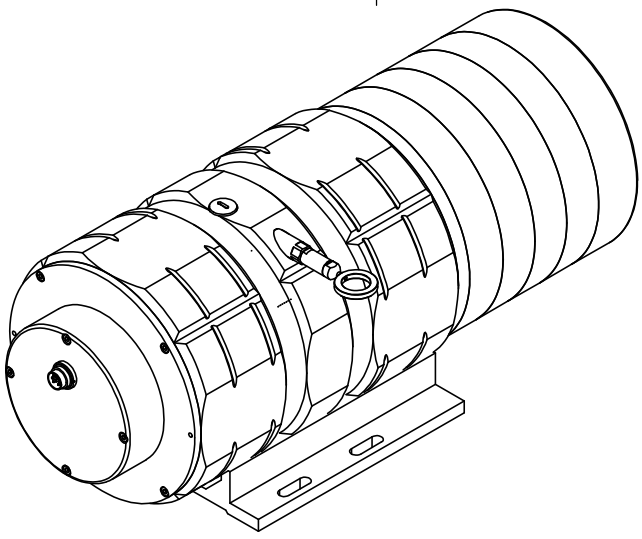


C connection
(Connector M16 - DIN 8 pin)



Modular base plate





CDS1850-MEC mechanical devices - Measurement range 0 up to 50 000 mm

Specifications:

Measurement range	0 up to 50 000 mm
Circumference drum	500 mm/turn
Sensing device	Adaptable with all our incremental or absolute encoders
Material	Body and cover - aluminium (RohS)
	Measuring cable - Stainless steel
Cable diameter	0,90 mm
Standard linearity	+/- 0,05% f.s.
	+/- 0,01% f.s. (optional)
Max. Velocity	10 m/s
Max. Acceleration	1 m/s^2 (before cable deformation)
Weight	≈ 23kg
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Cable forces:

Measurement range in mm	Min. pull-out force	Max. pull-out force
50 000	≈ 15,00 N	≈ 30,00 N

Ordering reference:

CDS1850	MEC				OP	

Model

CDS1850-MEC

Measurement range

50 000 = 0 up to 50 000 mm
(Other ranges available on demand)

Drum circumference

500 = 500 mm/turn

Linearity

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

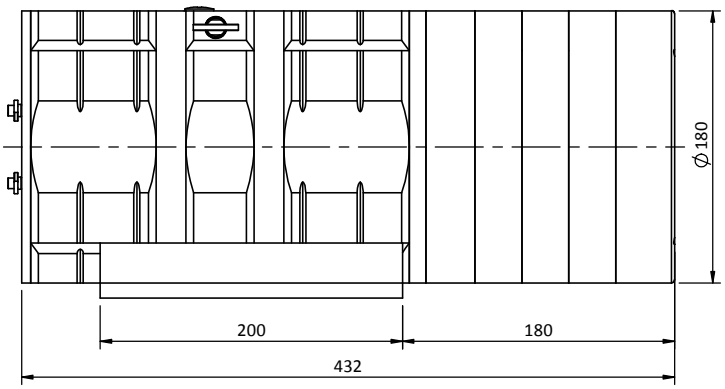
OP options

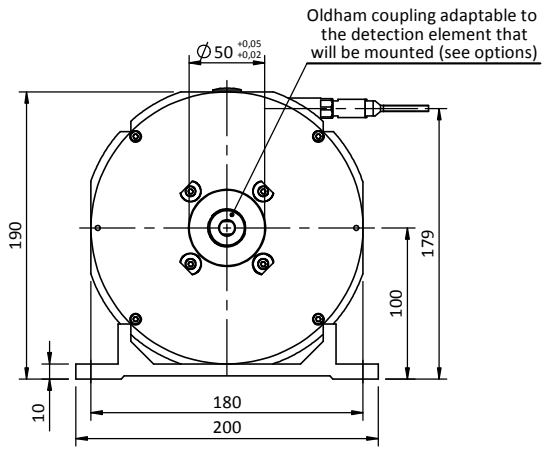
06 = Adapter flange for Ø58 encoder with Ø6 axis (**06A** for the provision of a Ø6 coupling device without flange)
10 = Adapter flange for Ø58 encoder with Ø10 axis
12 = Adapter flange for Ø90 encoder with Ø12 axis (**12A** for the provision of a Ø6 coupling device without flange)
AC = Complete anodizing
BR = Cleaning brush for the cable
BT = Low temperature (down to -30°C)
CP = Fixing of the measuring cable with a clevis
M6 = Fixing of the measuring cable with a M6 threaded rod
TEV = Water evacuation holes + ex. **180** for 180° holes (see the options page for further details)

If no option is specified for the adapter flange, the draw-wire sensor will be supplied as standard with a Ø10 coupling brace without a flange.
For the adaptation of an encoder or other sensor device which does not belong to our range, please contact us.

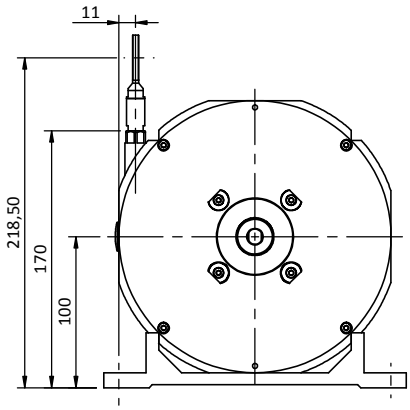
Reference example: CDS1850-MEC-50000-500-L05-OP-10-AC

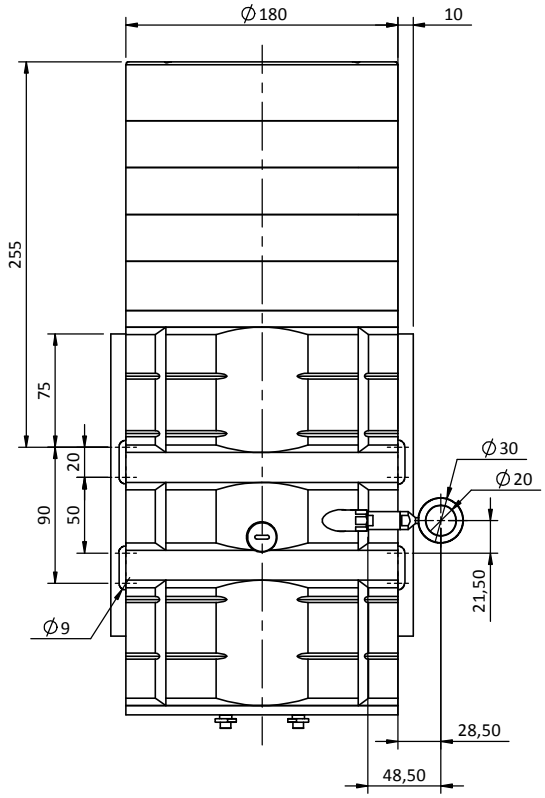
Dimensional Drawing

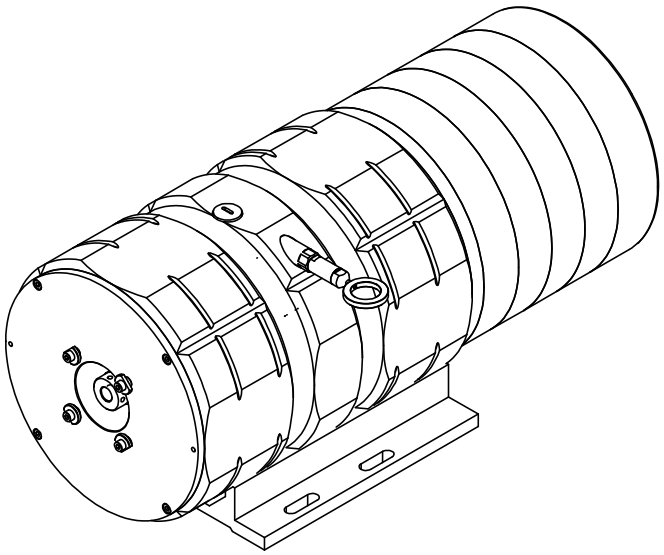




Modular base plate







AS40 potentiometric output – Measurement range from 90 to 3600°

Specifications:

Measurement range	90 to 3600°
Output signal	1kΩ Potentiometer (other values on demand)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS)
	Measuring cable – Stainless steel 303
Axis diameter	10mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – DIN 3 pin
	Male connector M12 – 4 pin
	PVC cable – 4 wires
Linearity	+/- 0,25% fs (other values on demand)
Shock resistance	≤ 300m.s^{-2} (11 ms)
Vibration resistance	≤ 100m.s^{-2} (10 … 500 Hz)
Protection class	IP65 (other on demand)
Weight	≈ 200 g
Operating temperature	-10° to +70°C
Storage temperature	-20° to +100°C

Ordering reference:

AS40						OP	

Model

AS40

Measurement range

0090 = 90°
0180 = 180°
0340 = 340°
1800 = 1800°
3600 = 3600°
(other values on demand)

Output signal

R01K = 1kΩ output
(Other values on demand)

Output sense

H = CW
A = CCW

Linearity

L50 = +/- 0.50% FS (standard for ranges up to 340°)
L25 = +/- 0.25% FS (standard for ranges superior than 340°)
(optional for ranges up to 340°)
L15 = +/- 0.15% FS (optional for ranges superior than 340°)

Connection

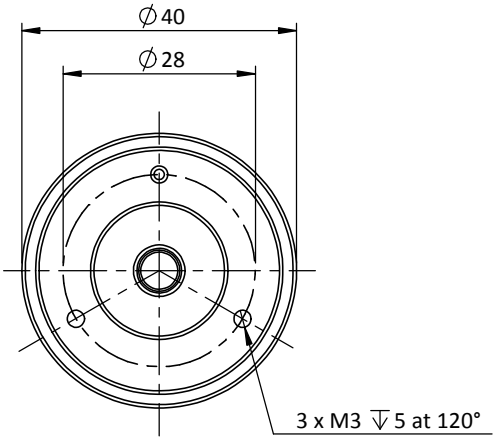
C = Male connector M16 – DIN 3 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

OP Options

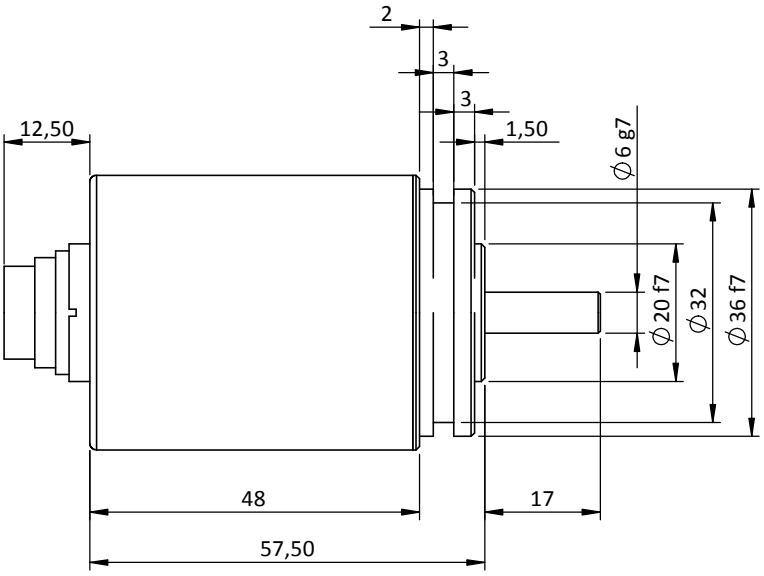
IP67 = Protection class IP67

Reference example: AS40-3600-R01K-H-L25-K02-OP-IP67

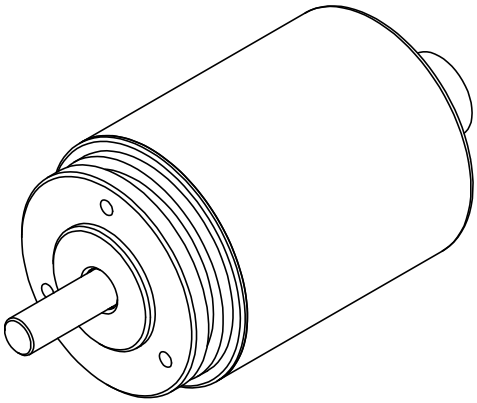
Dimensional Drawing

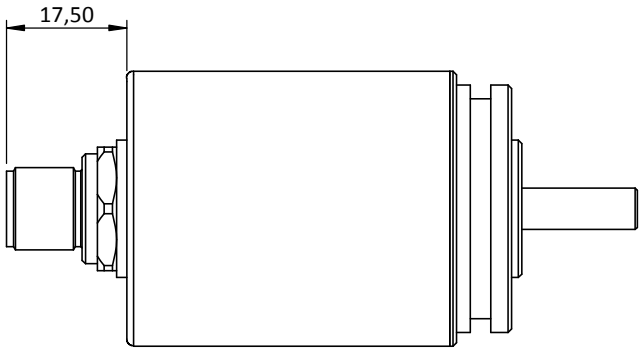


C connection
(Connector M16 - DIN 3 pin)

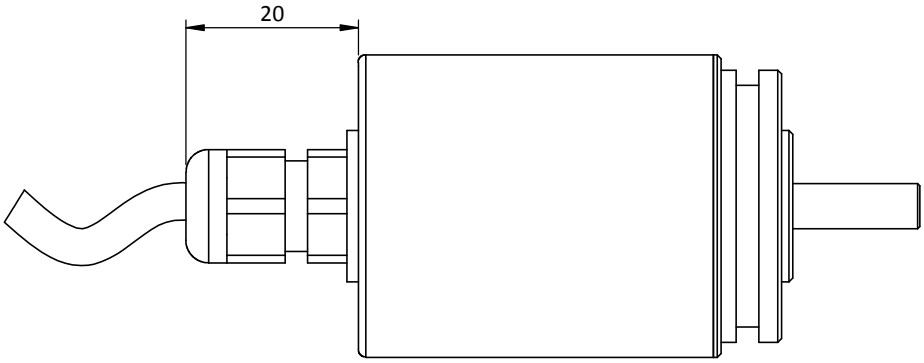


L4 connection
(connector M12 - 4 pin)





K connection
(PVC cable - 4 wires)



AS40 Analog output – Measurement range from 90 to 3600°

Specifications:

Measurement range	90 to 3600°
Output signal	- 0…10V - 4…20mA Current loop - 4…20mA Current generator - 0…20mA Current generator
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS) Measuring cable – Stainless steel 303
Axis diameter	10mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – 8 pin Male connector M12 – 4 pin PVC cable – 4 wires
Linearity	+/- 0,25% fs (other values on demand)
Shock resistance	≤ 300m.s^{-2} (11 ms)
Vibration resistance	≤ 100m.s^{-2} (10 … 500 Hz)
Protection class	IP65 (other on demand)
Weight	≈ 200 g
Operating temperature	-10° to +70°C
Storage temperature	-20° to +100°C

Ordering reference:

AS40						OP	

Model

AS40

Measurement range

0090 = 90°
0180 = 180°
0340 = 340°
1800 = 1800°
3600 = 3600°
(other values on demand)

Output signal

U010 = Output 0…10V
I420 = Output 4…20mA (2-wires current loop)
I420G = Output 4…20mA (current generator)
I020G = Output 0…20mA (current

Output sense

H = CW
A = CCW

Linearity

L50 = +/- 0.50% FS (standard for ranges up to 340°)
L25 = +/- 0.25% FS (standard for ranges superior than 340°)
(optional for ranges up to 340°)
L15 = +/- 0.15% FS (optional for ranges superior than 340°)

Connection

C = Male connector M16 – 8 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

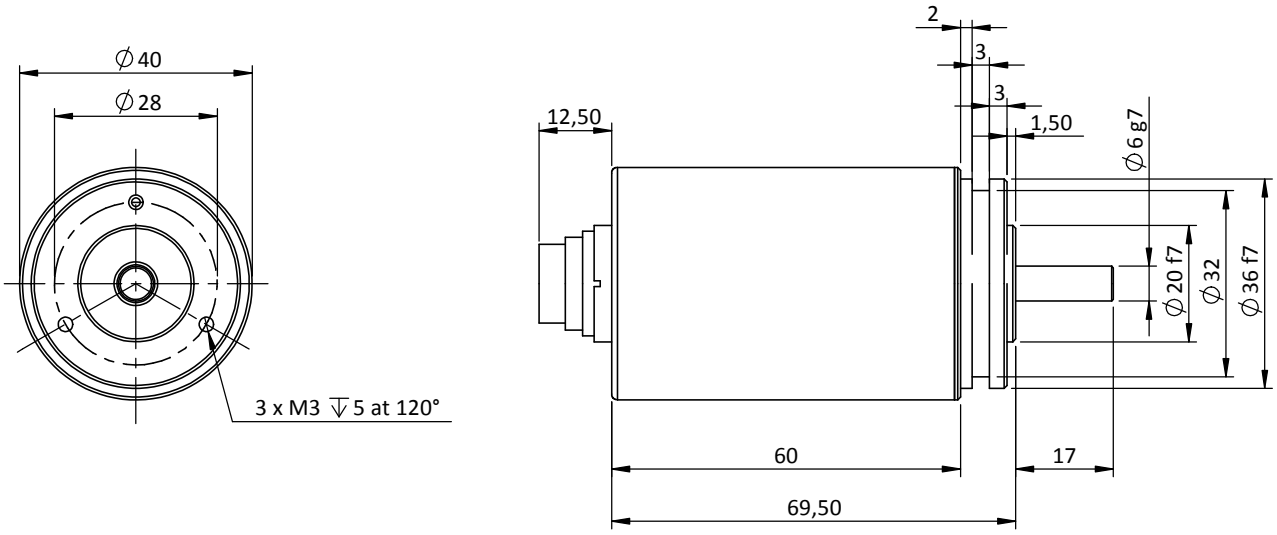
OP Options

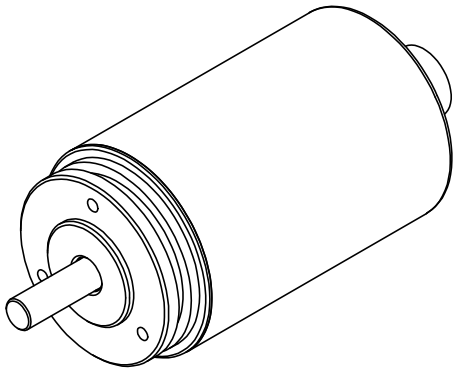
IP67 = Protection class IP67

Reference example: AS40-3600-i420-H-L25-K02-OP-IP67

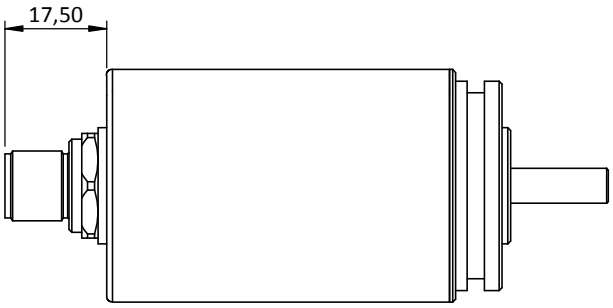
Dimensional Drawing

C connection
(Connector M16 - DIN 8 pin)

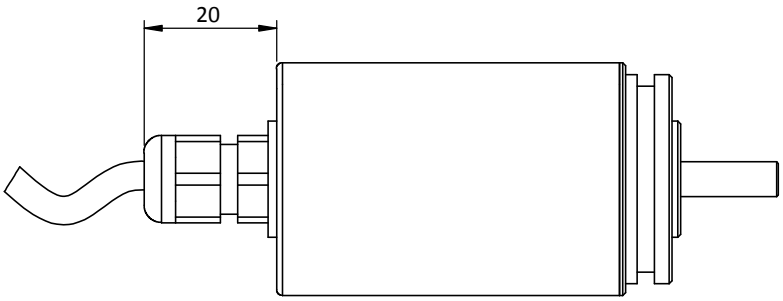




L4 connection
(connector M12 - 4 pin)



K connection
(PVC cable - 4 wires)



AS58 potentiometric output – Measurement range from 90 to 3600°

Specifications:

Measurement range	90 to 3600°
Output signal	1kΩ Potentiometer (other values on demand)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS) Measuring cable – Stainless steel 303
Axis diameter	10mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 – DIN 3 pin Male connector M12 – 4 pin PVC cable – 4 wires
Linearity	+/- 0,50% fs – Range from 340° and 1080° +/- 0,25% fs – Range from 1800° and 3600° Range from 340° and 1080° (optional) +/- 0,15% fs – Range from 1800° and 3600° (optional)
Shock resistance	≤ 500m.s^{-2} (6 ms)
Vibration resistance	≤ 100m.s^{-2} (55 … 2 000 Hz)
Protection class	IP54 (option IP67)
Weight	≈ 300 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Ordering reference:

CD50					OP	

Model

CD50

Measurement range

0340 = 0 to 340°
1080 = 0 to 1080°
1800 = 0 to 1800°
3600 = 0 to 3600°

Output signal

R01K = 1kΩ output
(Other values on demand)

Linearity

L50 = +/- 0.50% fs (standard for range from 340° and 1080°)
L25 = +/- 0.25% fs (standard for range from 1800° and 3600°)
(optional for range from 340° and 1080°)
L15 = +/- 0.15% fs (optional for range from 1800° and 3600°)

Connection

C = Male connector M16 – DIN 3 pin
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

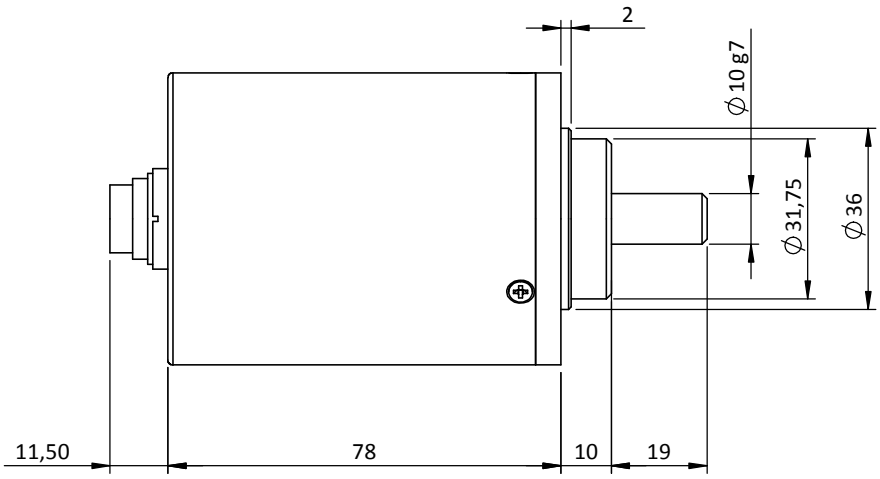
OP Options

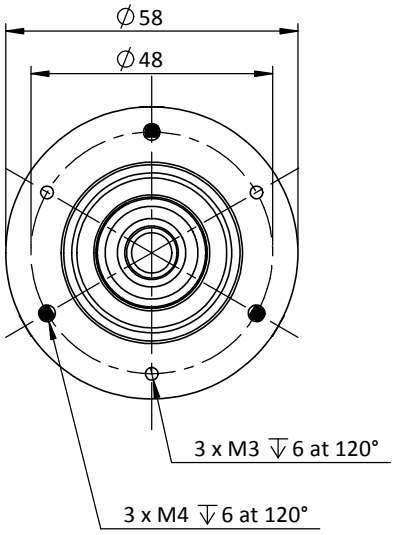
AC = Complete anodizing
BT = Low temperature (down to -30°C)
IP67 = Protection class IP67

Reference example: AS58-3600-R01K-H-L25-K02-OP-IP67

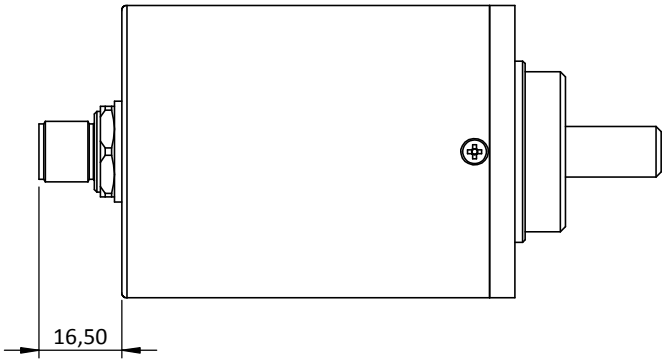
Dimensional Drawing

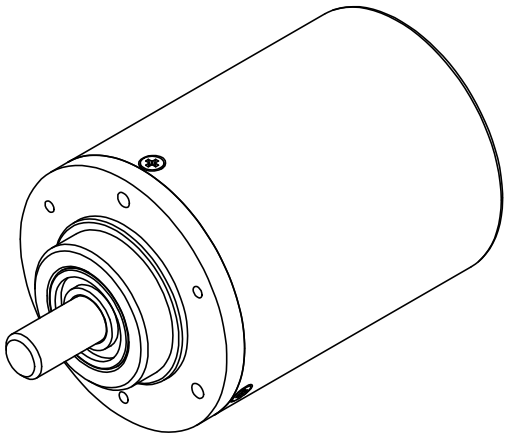
C connection
(Connector M16 - DIN 3 pin)



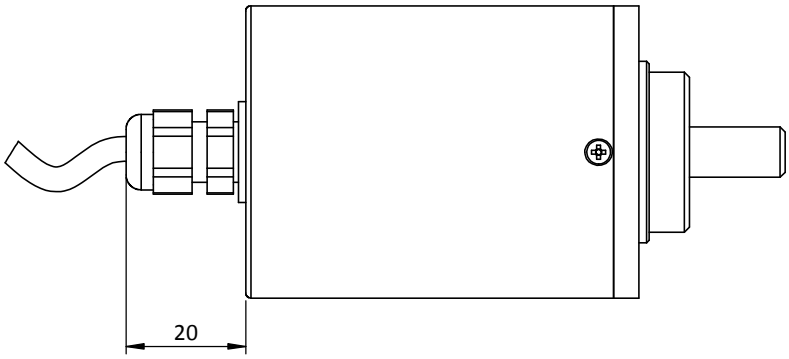


L4 connection
(connector M12 - 4 pin)





K connection
(PVC cable - 4 wires)



AS58 Analog output – Measurement range from 90 to 3600°

Specifications:

Measurement range	90 to 3600°
Output signal	0…10V (galvanic isolation) 4…20mA ; 2 wires technique 4…20mA ; 4 wires technique (galvanic isolation) 0…20mA ; 4 wires technique (galvanic isolation)
Resolution	Quasi infinite (depends on the operating system)
Material	Body and cover - Aluminium (RohS) Measuring cable – Stainless steel 303
Axis diameter	10mm
Detection element	Multi-turn Hybrid potentiometer
Connection	Male connector M16 –8 pin Male connector M12 – 4 pin PVC cable – 4 wires
Linearity	+/- 0,50% fs – Range ≤ 340° +/- 0,25% fs – Range > 340° Range ≤ 340° (optional) +/- 0,15% fs – Range > 340° (optional)
Shock resistance	≤ 500m.s^{-2} (6 ms)
Vibration resistance	≤ 100m.s^{-2} (55 … 2 000 Hz)
Protection class	IP54 (option IP67)
Weight	≈ 700 g
Operating temperature	-20° to +80°C
Storage temperature	-30° to +80°C

Ordering reference:

AS58					OP	

Model

AS58

Measurement range

0340 = 0 to 340°
1080 = 0 to 1080°
1800 = 0 to 1800°
3600 = 0 to 3600°
(Other values on demand)

Output signal

U010 = 0…10V
I420 = 4…20mA (2 wires technique)
I420G = 4…20mA (4 wires technique)
I020G = 0…20mA (4 wires technique)

Linearity

L50 = +/- 0.50% fs (standard for ranges from 340° to 1080°)
L25 = +/- 0.25% fs (standard for ranges from 1800° to 3600°)
(optional for ranges from 340° to 1080°)
L15 = +/- 0.15% fs (optional for ranges from 1800° to 3600°)

Connection

C = Male connector M16 – DIN 8
L4 = Male connector M12 – 4 pin
K = PVC cable – 4 wires + ex: **02** for cable 2 meters long

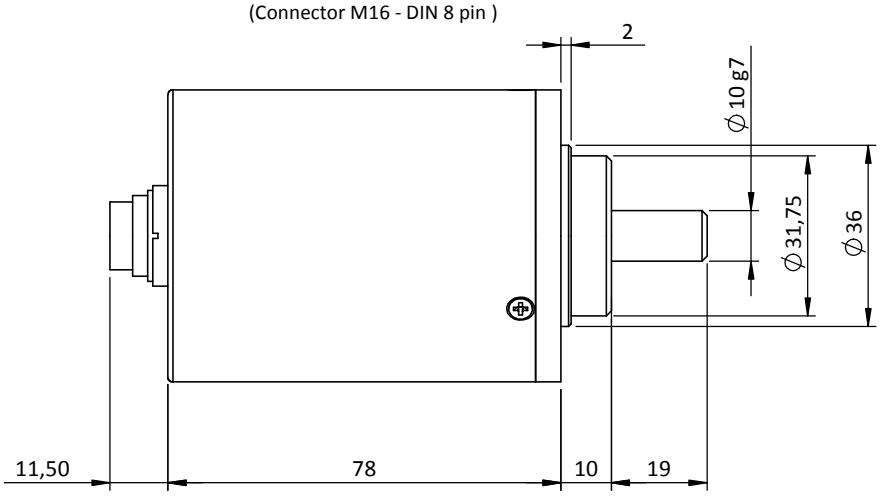
OP Options

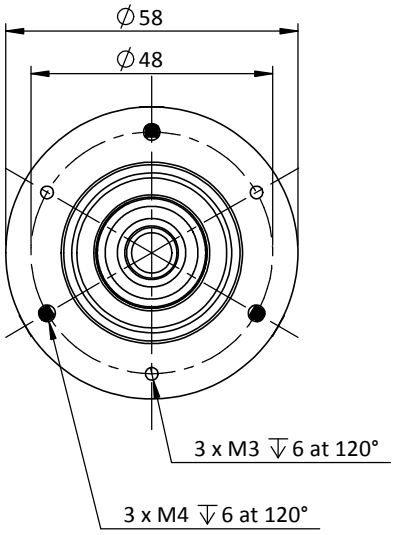
AC = Complete anodizing
BT = Low temperature (down to -30°C)
IP67 = Protection class IP67

Reference example: AS58-3600-U010-H-L25-K02-OP-IP67

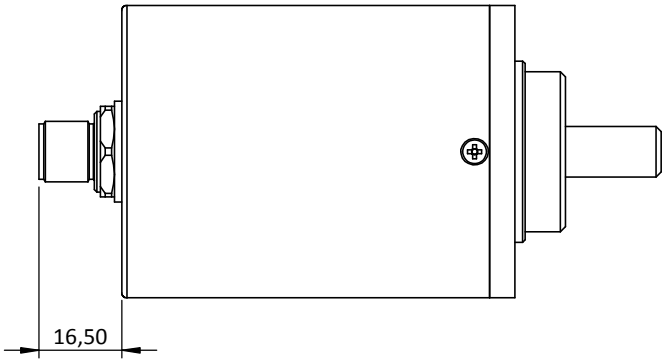
Dimensional Drawing

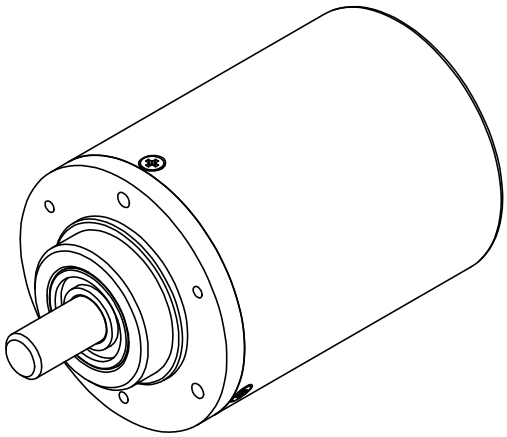
C connection
(Connector M16 - DIN 8 pin)



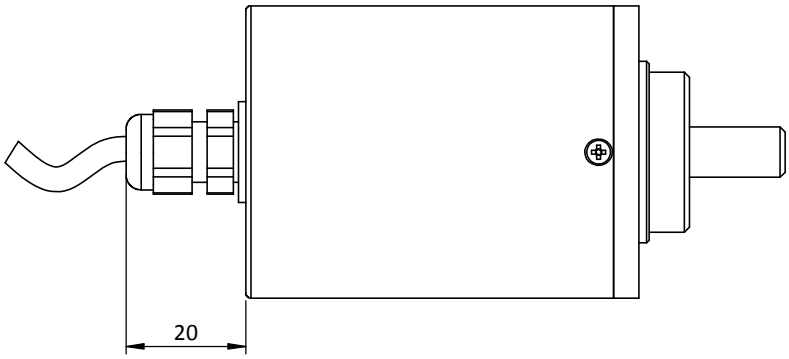


L4 connection
(connector M12 - 4 pin)





K connection
(PVC cable - 4 wires)

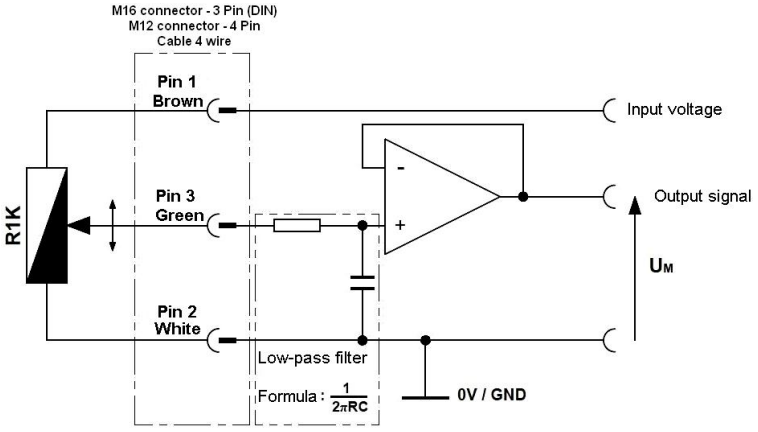


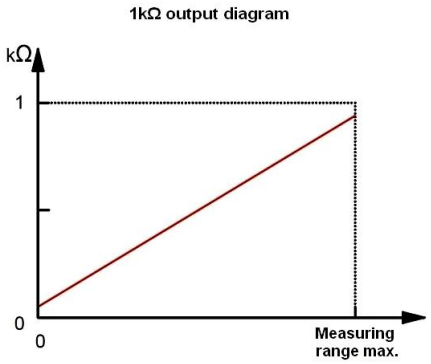
Electrical characteristics for draw-wire sensors with potentiometric output

Potentiometric version 1 KΩ : (other values on demand)

Temperature drift +/-50 ppm/°C

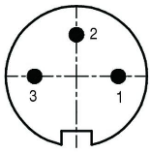
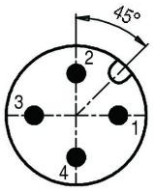
Example of wiring diagram with input stage :





To ensure a good linearity, wire the potentiometer as a voltage divider and never as a rheostat.
The input resistance of the operating system must be very high (greater than 10MΩ)

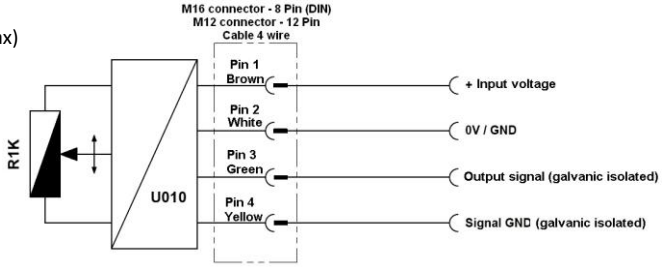
Connection :

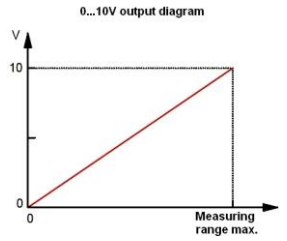
Male connector M16 3 pin (DIN)	Male connector M12 4 pin (DIN)	PVC cable 4 wire	R01K
1	1	Brown	Input voltage +
2	2	White	Input voltage GND
3	3	Green	Signal +
 Sensor side view	 Sensor side view		

Electrical characteristics for draw-wire sensors with analog output

Analog version 0 … 10V :

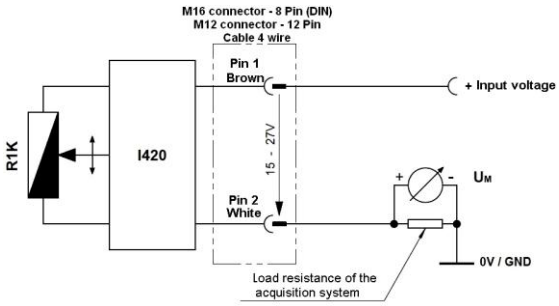
Input voltage	15 to +27 Vdc (52mA max)
Output voltage	0 to 10 Vdc
Output current	10mA max
Galvanic isolation	3KV
Protection	- Short circuit
	- Polarity reversal
Temperature drift	+/-100 ppm/°C

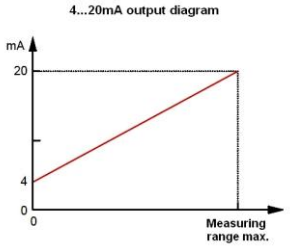




Analog version 4 … 20mA : (Two-wires current loop)

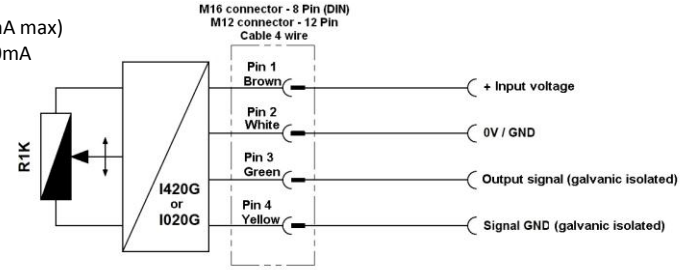
Input voltage	+15 to +27 Vdc (32mA max)
Output current	4 to 20mA
Protection	- Short circuit
	- Polarity reversal
Temperature drift	+/-100 ppm/°C

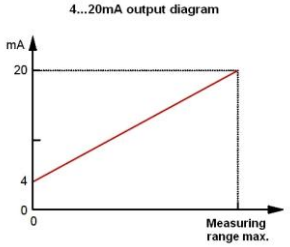




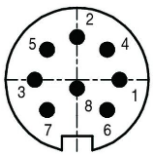
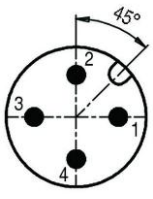
Analog version 4…20mA or 0…20mA : (Current generator)

Input voltage	+15 to +27 Vdc (75mA max)
Output current	4 to 20mA or 0 to 20mA
Output current	22 mA max.
Galvanic isolation	3KV
Protection	- Short circuit
	- Polarity reversal
Temperature drift	+/-100 ppm/°C





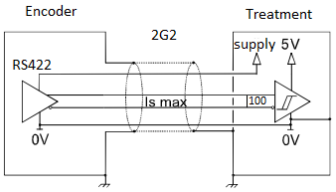
Connection :

Male connector M16 8 pin (DIN)	Male connector M12 4 pin (DIN)	PVC cable 4 wire	010V	I420 (current loop)	I420G or I020G (current generator)
1	1	Brown	Input voltage +	Signal +	Input voltage +
2	2	White	Input voltage GND	Signal -	Input voltage GND
3	3	Green	Signal +		Signal +
4	4	Yellow	Signal GND		Signal GND
 Sensor side view	 Sensor side view				

Electrical characteristics for draw-wire sensors with incremental output

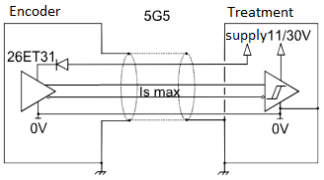
Electronic 2G2 (100kHz) (for CD50)

Supply : 5Vdc ± 10%
Cons. without load : 100mA max
Current per channel: 40mA max
0 max (Is=20mA) : V_{ol} = 0,5Vdc
1 min (Is=20mA) : V_{oh} = 2,5Vdc



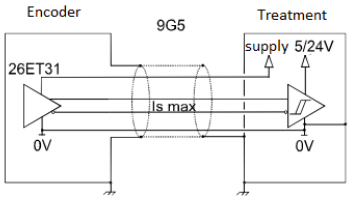
Electronic 5G5 (100kHz)

Supply: 11 à 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-3Vdc



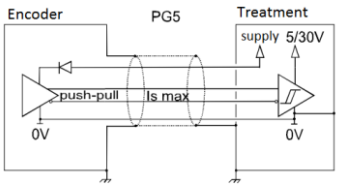
Electronic 9G5 (100kHz)

Supply: 5 à 24Vdc
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-3Vdc



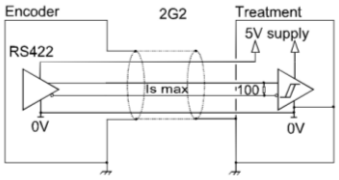
Electronic PG5 (100kHz) (for CD50)

Supply: 5 à 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-3Vdc



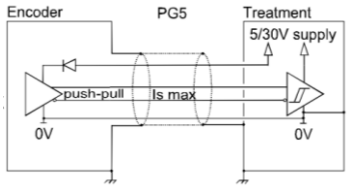
Electronic 2G2 (100°C, 300kHz)

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



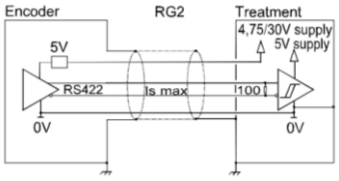
Electronic PG5 (100°C, 300kHz)

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



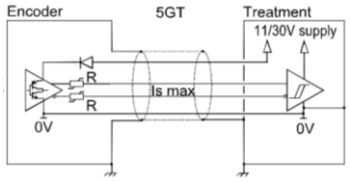
Electronic RG2 (100°C, 300kHz)

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

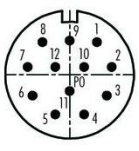
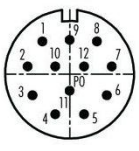
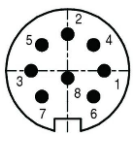
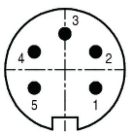


Electronic 5GT (70°C, 120kHz)

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



Connection:

Male connector M23 12 Pin - CW	Male connector M23 12 Pin - CCW	Male connector M16 8 pin (DIN)	Male connector M16 5 pin (DIN)	PVC cable 8 wire	PUR cable 12 wire	Standard connection
1	10 + 11	1	1	White	White + White/Green	Supply -
2	2 + 12	2	2	Brown	Brown + Brown/Green	Supply +
3	8	3	3	Green	Grey	A
4	5	4	4	Yellow	Brown	B
5	3	5	5	Grey	Red	0
6	1	6	/	Pink	Pink	A/
7	6	7	/	Blue	Green	B/
8	4	8	/	Red	Black	0/
 Sensor side view	 Sensor side view	 Sensor side view	 Sensor side view			

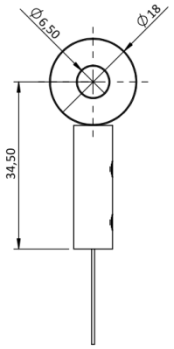
Options for draw-wire sensors, CD Series

Cable attachment with a lug :

Standard

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

Available for : CD50, CD60, CD80, CD115, CD150

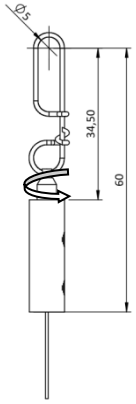


Cable attachment with a clip :

OP-EM

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

Available for : CD50, CD60, CD80



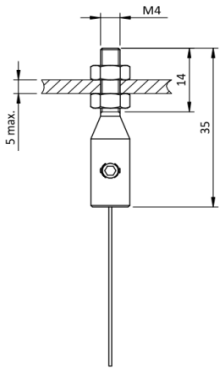
Cable attachment fitted with a M4 threaded rod:

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.

Available for : CD50, CD60, CD80, CD115, CD150

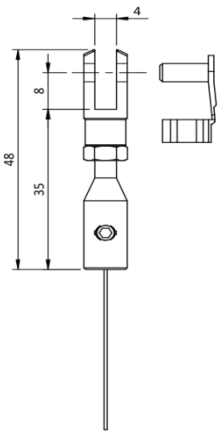


Cable attachment with a clevis :

OP-CP

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

Available for : CD50, CD60, CD80, CD115, CD150

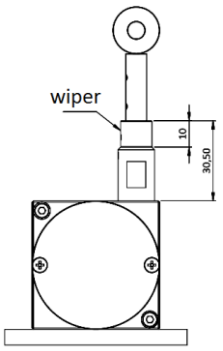


Cable dust wiper

OP-RAC

The dust wiper cleans the cable in dusty or humid environments.

Available for : CD50

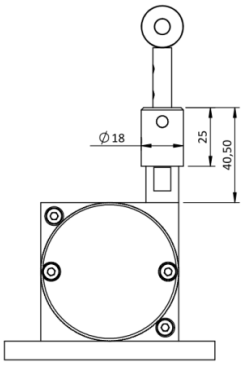


Cable cleaning brush:

OP-BR

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

Available for : CD60, CD80, CD115, CD150

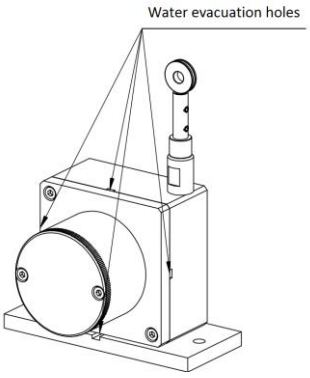


Water evacuation holes:

OP-TEV

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

Available for : CD50, CD60, CD80, CD115, CD150



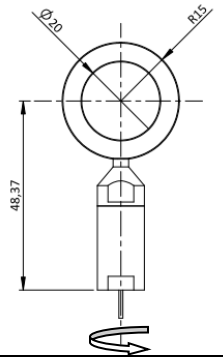
Options for draw-wire sensors, CDS Series

Cable attachment with a lug :

Standard

Measuring cable attachment with a lug.
The attachment mounted on ball bearings allows a free rotation relative to the measurement cable.

Available for : CDS1210, CDS1215, CDS1820, CDS1830, CDS1840, CDS1850

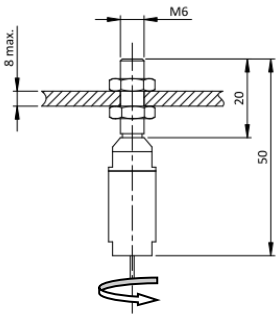


Cable attachment fitted with a M6 threaded rod:

OP-M6

The rod attachment uses a threaded rod with 2 nuts (provided).
The required thickness of the plate does not exceed 8mm.
The attachment mounted on ball bearings allows a free rotation relative to the measurement cable.

Available for : CDS1210, CDS1215, CDS1820, CDS1830, CDS1840, CDS1850

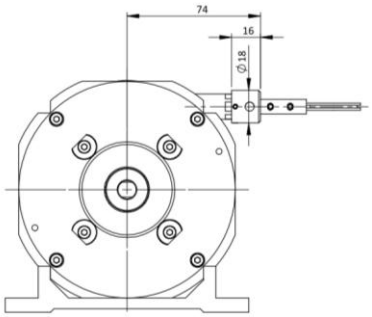


Cable cleaning brush:

OP-BR

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

Available for : CDS1210, CDS1215, CDS1820, CDS1830, CDS1840, CDS1850

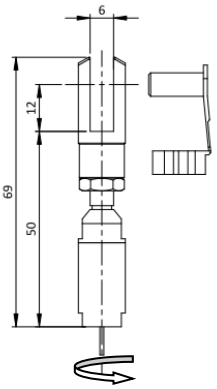


Cable attachment with a clevis :

OP-CP

The attachment of the clevis is done using a pin (provided).
The attachment mounted on ball bearings allows a free rotation relative to the measurement cable.

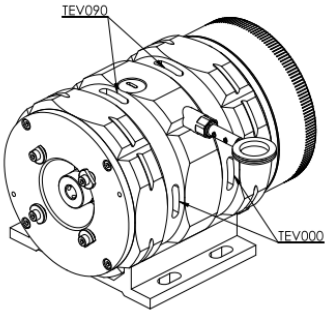
Available for : CDS1210, CDS1215, CDS1820, CDS1830, CDS1840, CDS1850



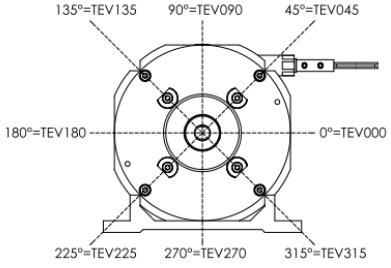
Water evacuation holes:

OP-TEV

The holes allow the natural flow of fluids out of the sensor in order to avoid their accumulation in the system.
Available for : CDS1210, CDS1215, CDS1820, CDS1830, CDS1840, CDS1850



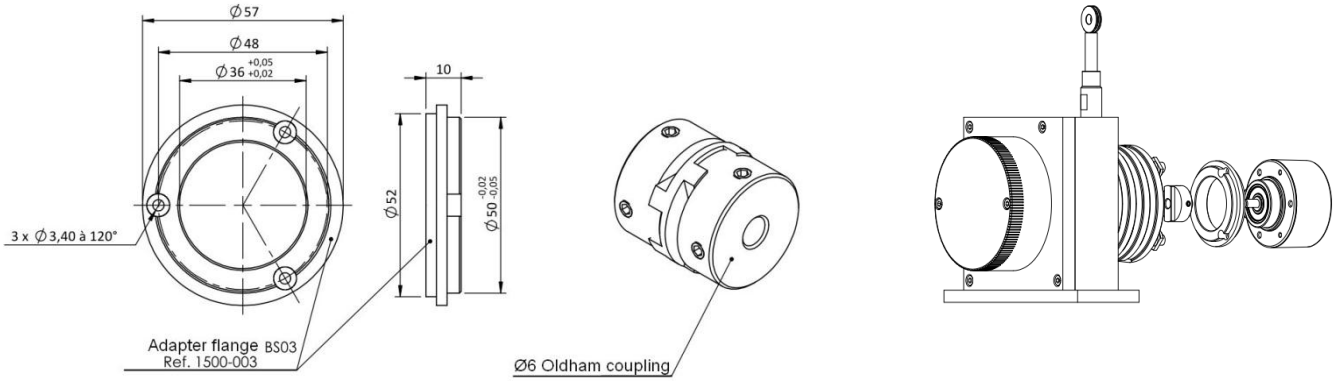
Please specify the implantation angle of the drain holes on the drawing below.
(All value between 0 and 360°)



Adapter flanges

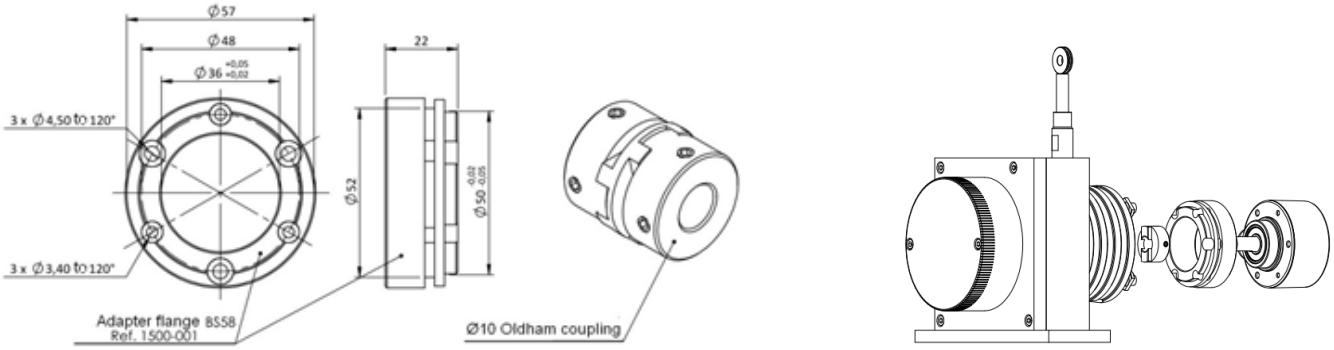
Adaptation for an encoder of diameter 58mm, and shaft diameter 6mm

OP-06: Adaptation flange + Ø6 Oldham coupling
OP-06A: Ø6 Oldham coupling without adaptation flange



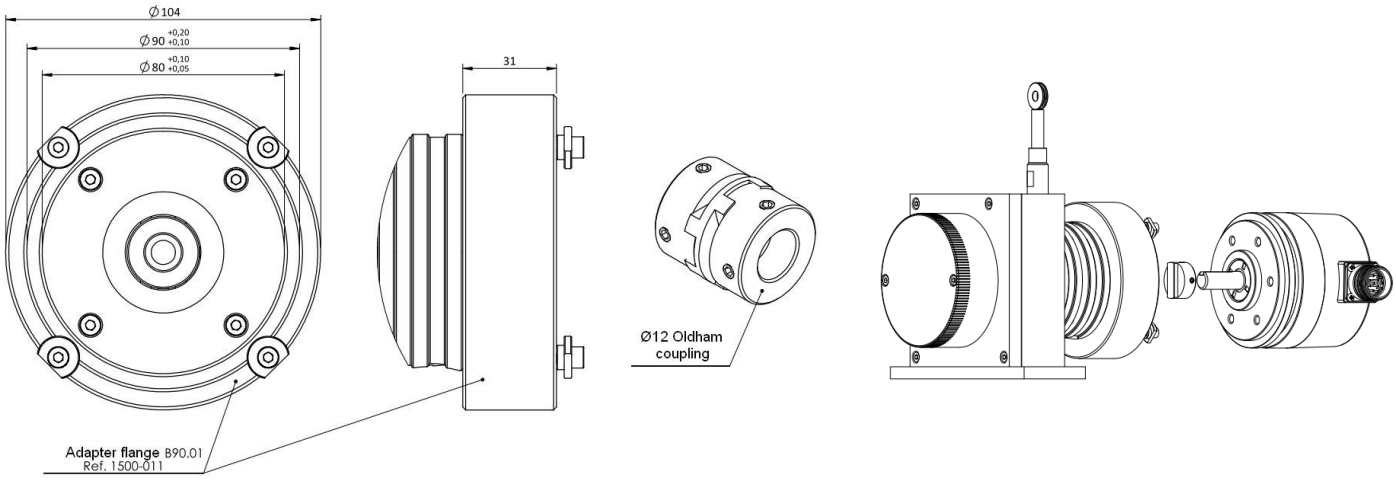
Adaptation for an encoder of diameter 58mm, and shaft diameter 10mm

OP-10: Adaptation flange + Ø10 Oldham coupling
Without specification, a MEC series draw-wire sensor will always be delivered with an Oldham coupling Ø10 without adaptation flange.



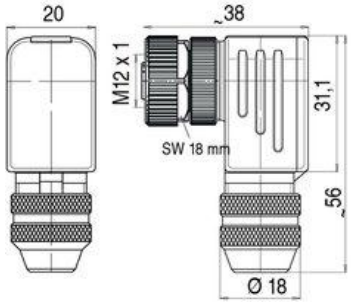
Adaptation for an encoder of diameter 90mm, and shaft diameter 12mm

OP-12: Adaptation flange + Ø12 Oldham coupling
OP-12A: Ø12 Oldham coupling without adaptation flange

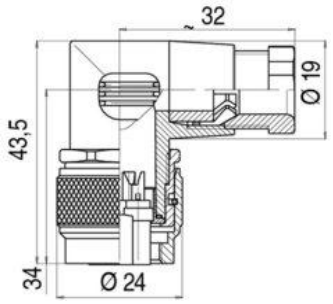


Female connectors

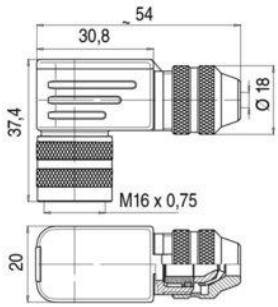
M12 4-Pins Female connector
For M-connection
Ø of the cable: 4 to 6 mm
Ref : 5100-020



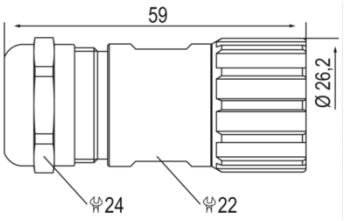
M16 Female connector - DIN
For C-connection (3-Pins)
Ø of the cable: 4 to 6 mm
Ref: 5100-007



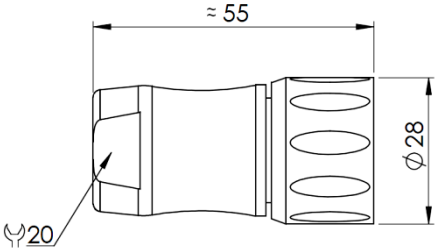
M16 Female connector - DIN
For C-connection (8-Pins)
Ø of the cable: 4 to 6 mm
Ref: 5100-008



M23 CCW female connector
For G6-connection (mounting on CW baseplate)
Ø of the cable: 6 to 8 mm
Ref: 5100-006

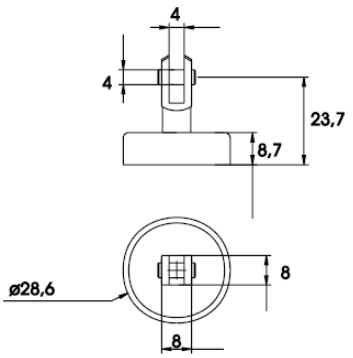


M23 CW female connector
For G8-connection (mounting on CCW baseplate)
Ø of the cable: 6 to 8 mm
Ref: 5100-005

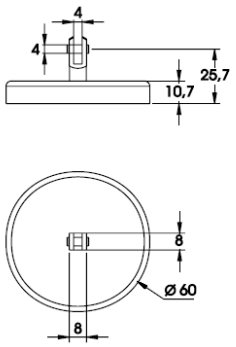


Mounting accessories

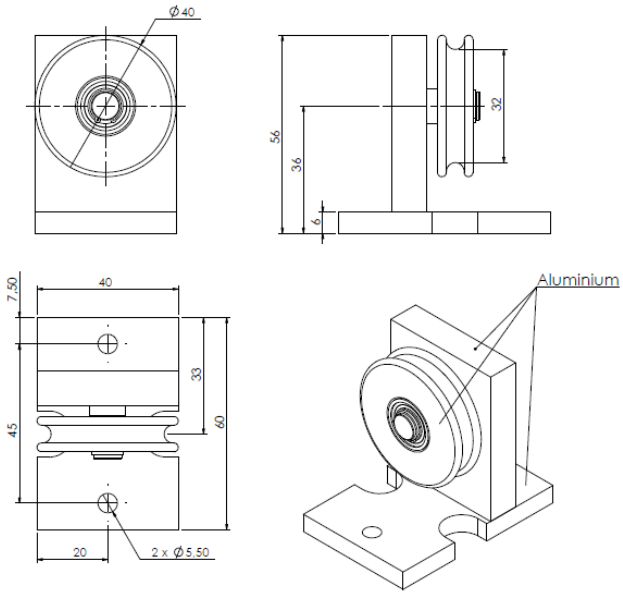
Magnet clamp FAIM-5 (for CD50)



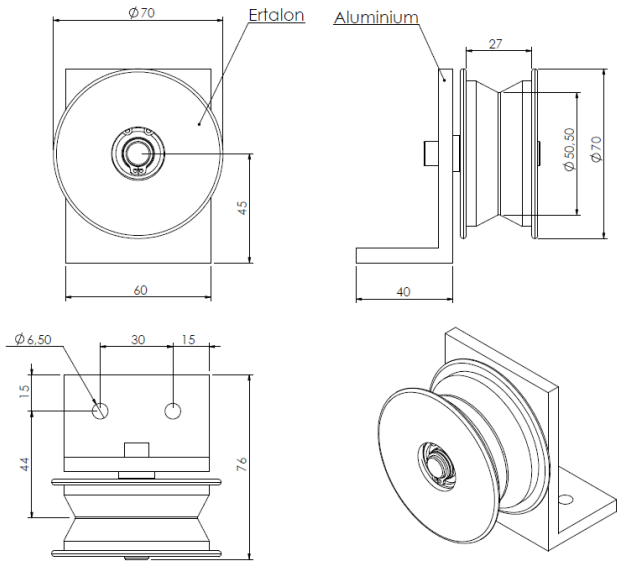
Magnet clamp FAIM-25 (for CD115 and CD150)



Pulley PR01 (for CD50)

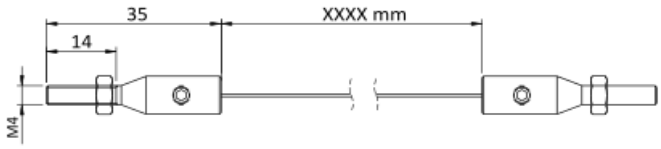


Pulley PR03

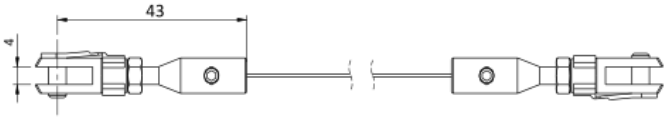


Cable extension

- M4 cable plugs on both ends. Ref. : RL-XXXX-M4/M4



- Attachment heads on both ends. Ref. : RL-XXXX-CP/CP



- Cable lugs on both ends. Ref. : RL-XXXX-CO/CO

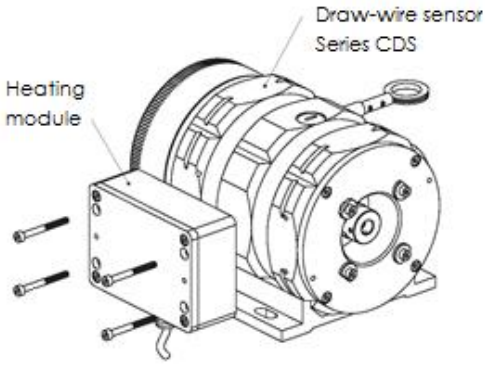
Other possibilities:
RL-XXXX-M4/CO (M4 screw at one end – lug on the other)
RL-XXXX-M4/CP (M4 screw at one end – attachment head on the other)
RL-XXXX-CO/CP (Lug at one end – attachment head on the other

Possibility to integrate directly the cable extension into the sensor

Heating module for draw-wire sensors, series CDS

The heating module prevents the sensor to freeze under negative operating temperature.

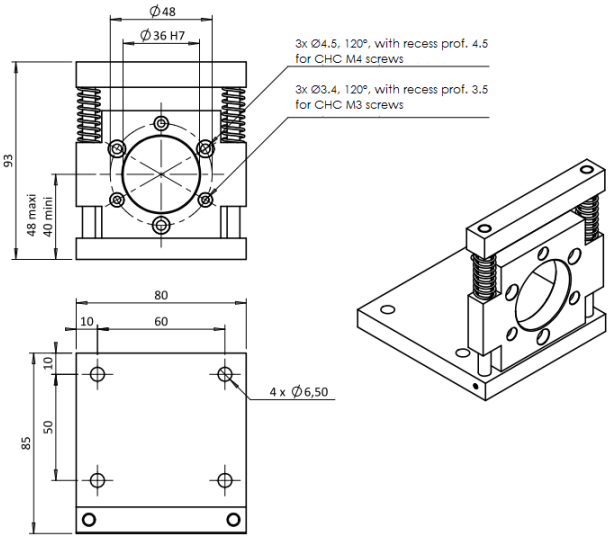
Don't hesitate to contact us for any further information



Accessories

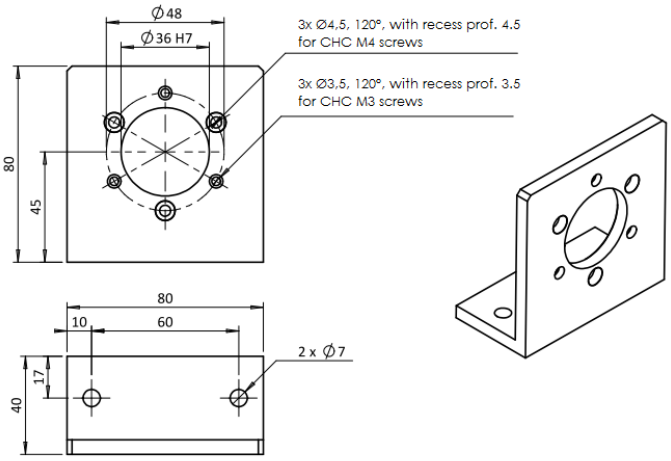
Clearance compensation angle

Ref : ERJ40-002



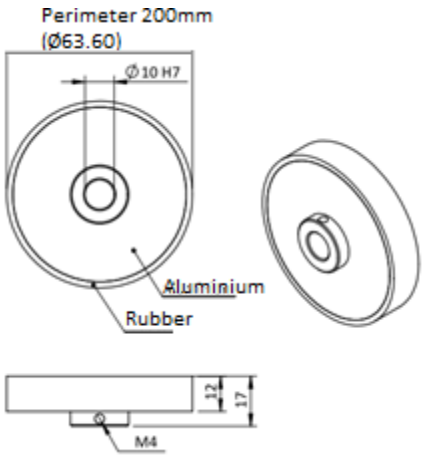
Fixation angle

Ref : EF058-001

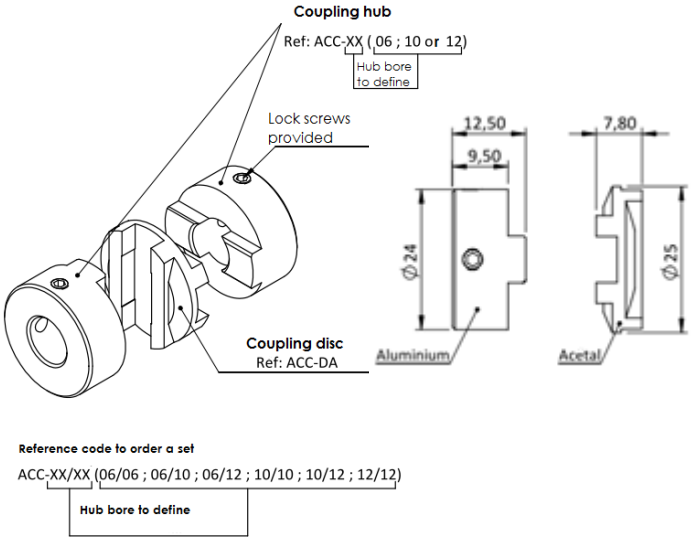


Measuring wheel

Ref : RM200-001



Oldham coupling



Reference code to order a set

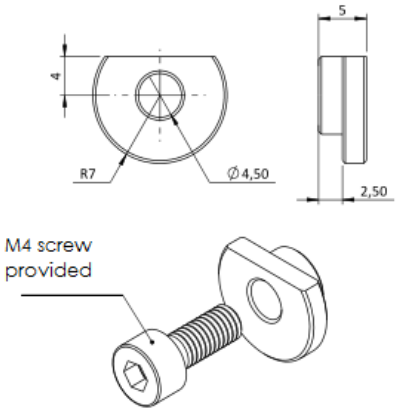
ACC-XX/XX (06/06 ; 06/10 ; 06/12 ; 10/10 ; 10/12 ; 12/12)

Hub bore to define

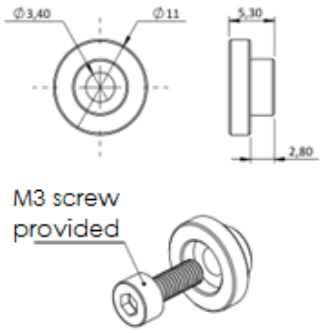
Cylindrical eccentric (to mount angular sensors and optical encoders)

Provided with a set of 4 eccentrics + 4 screws

Ref : EXC-001



Ref : EXC-002



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