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

-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:

Storage temperature

	CD115 OP OP					
Model						
CD115						
Measur	ement range					
3500	= 0 up to 3500 mm					
(Other	anges available on demand)					
Resolut	on					
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	ralues on demand)					
Supply	ind 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					
50.						
Linearit	1					
L05	= +/- 0.05% f.s.					
L01	= +/- 0.01% f.s. (optional)					
Connec	ion					
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 opti	ons					
AC	= Complete anodizing					

- AC = Complete anodizing BR = Cleaning brush for the cable
- **CP** = Fixing of the measuring cable with a clevis
- 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

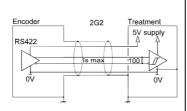


Tel:+33 (0)3 88 02 09 02 / Fax:+33 (0)3 88 02 09 03 / E-mail:info@ak-industries.com / Web:http://www.ak-industries.com

Output stage and power supply

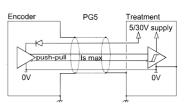
Electronic 2G2 (100°C, 300kHz)

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



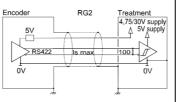
Electronic PG5 (100°C, 300kHz)

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



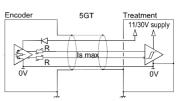
Electronic RG2 (100°C, 300kHz)

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



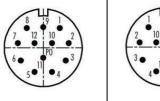
Electronic 5GT (70°C, 120kHz)

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



Standard connection

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





Sensor-side view



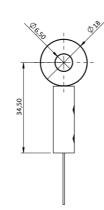
Sensor-side view

Tel:+33 (0)3 88 02 09 02 / Fax:+33 (0)3 88 02 09 03 / E-mail:info@ak-industries.com / Web:http://www.ak-industries.com

Cable attachment with a lug :

Standard

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



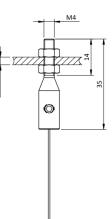
Cable attachment fitted with a M4 threaded rod:

<u>OP-M4</u>

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

Caution

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

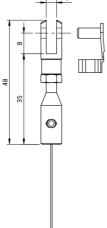


max.

Cable attachment with a clevis :

OP-CP

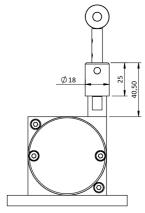
The attachment of the clevis is done using a pin (provided).



Cable cleaning brush:

OP-BR

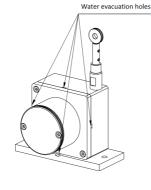
The cleaning brush wipes the cable in dusty or humid environments.



Water evacuation holes:

OP-TEV

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

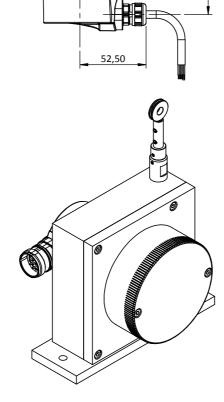




Tel:+33 (0)3 88 02 09 02 / Fax:+33 (0)3 88 02 09 03 / E-mail:info@ak-industries.com / Web:http://www.ak-industries.com

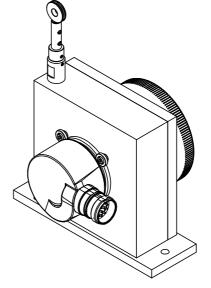


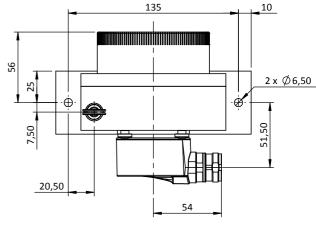
Tel:+33 (0)3 88 02 09 02 / Fax:+33 (0)3 88 02 09 03 / E-mail: info@ak-industries.com / Web: http://www.ak-industries.com



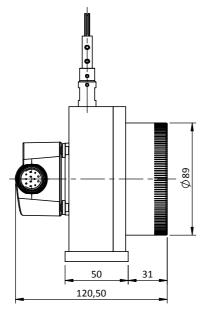
٠÷

51,50





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



With DHM5 encoder

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

٠.

ŧ

