Baumer
Passion for Sensors

Cable transducer - absolute

GCA8 - analog

Analog output

Measuring length absolute up to 8 m

Overview

- Analog interface
- Potentiometer sensing measuring method
- Operating temperature -40...+85 °C
- Protection IP 65
- Flange connector M12 or cable
- Removable stickers for drainage
- Isolation voltage 3 kV

Technical data

Technical data - electrical ratings	
Voltage supply	8...30 VDC 12...30 VDC
Reverse polarity protection	Yes
Short-circuit proof	Yes
Consumption typ.	30 mA (24 VDC, w/o load, current output) 10 mA (24 VDC, w/o load, voltage output)
Initializing time	≤ 100 ms after power on
Interface	Analog 0...10 V / 0.5...4.5 V / 4...20 mA
Load resistor	Between Out/0 V ≥3 kΩ / voltage output 270 Ω at 10 VDC (500 Ω at 15 VDC) / current output
Function	Linear position feedback
Resolution	Essentially infinite
Linearity	±1.5 % FS
Absolute accuracy	±2 % FS
Sensing method	Potentiometer
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Technical data - mechanical design	
Protection EN 60529	IP 65 (housing, drainage holes closed) IP 54 (cable inlet)

Technical data - mechanical design	
Material	Cable: stainless steel cable AISI 316 coated with nylon PA12 Housing: plastic
Operating temperature	-40...+85 °C
Measuring length	8 m
Cable diameter	0.7 mm
Cable fastening	Eyelet Height: 5 mm Internal diameter: 5 mm Outer diameter: 10 mm
Pull-in force	>2.5 N
Pull-out force	≤8 N
Relative humidity	95 % non-condensing
Resistance	EN 60068-2-6 Vibration 10 g, 10-2000 Hz EN 60068-2-27 Shock 50 g, 11 ms
Weight approx.	775 g
Connection	Cable 2 m, radial Flange connector M12, 5-pin Flange connector M12, 8-pin
Instruction	Please consider the assembly instructions

Optional

- Redundant potentiometer position sensing

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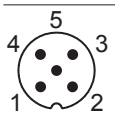
Terminal assignment

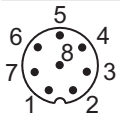
Flange connector M12, male, 5-pin

Pin	Signals	Description
1	0 V	Ground connection relating to +Vs
2	+Vs	Voltage supply
3	Uout/Iout	Output
4	n.c.	Do not use
5	n.c.	Do not use



Flange connector M12, male, 8-pin, redundant version

Pin	Signals	Description
1	0 V1	Ground connection relating to +Vs1
2	+Vs1	Voltage supply 1
3	Uout1/Iout1	Output 1
4	0 V2	Ground connection relating to +Vs2
5	+Vs2	Voltage supply 2
6	Uout2/Iout2	Output 2
7	n.c.	Do not use
8	n.c.	Do not use



Cable

Core colour	Signals	Description
white	0 V	Ground connection relating to +Vs
brown	+Vs	Voltage supply
green	Uout/Iout	Output
Cable data: 3 x 0.5 mm², 2 m		

Cable redundant version

Core colour	Signals	Description
white	0 V1+2	Ground connection relating to +Vs1 and +Vs2
brown	+Vs1	Voltage supply 1
green	Uout1/Iout1	Output 1
yellow	+Vs2	Voltage supply 2
grey	Uout2/Iout2	Output 2
Cable data: 5 x 0.5 mm², 2 m		

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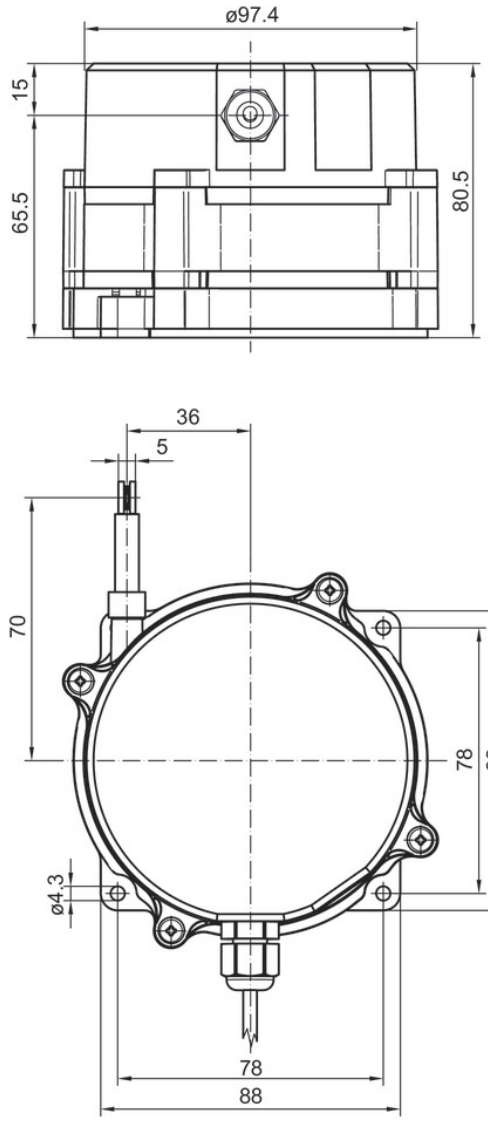
Dimensions



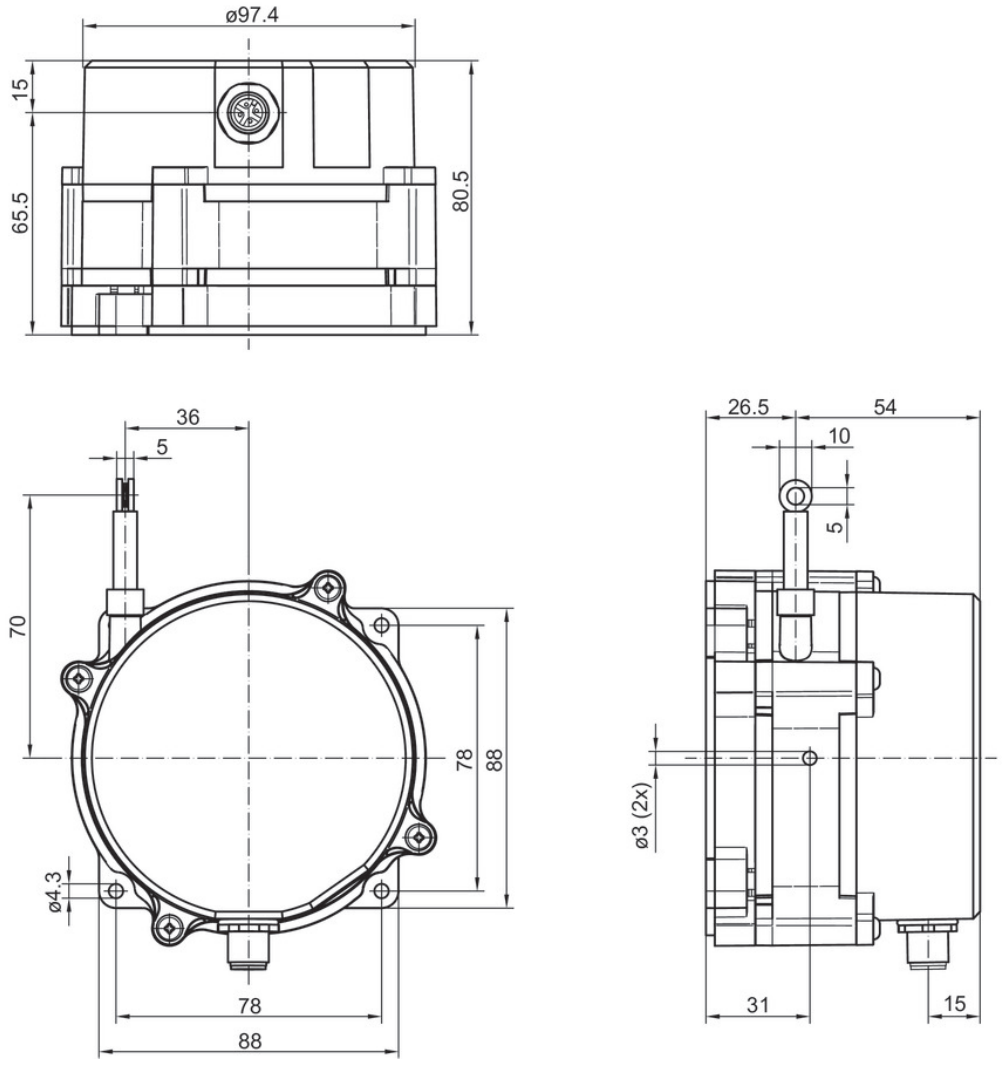
GCA8 with cable

GCA8 - analog

Analog output

Measuring length absolute up to 8 m

Dimensions



GCA8 with flange connector (male) M12

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Ordering reference

	GCA8-PP	###	.	R	C	#	.	##	0	.	A
Product											
	GCA8-PP										
Measuring range											
6 m		060									
8 m		080									
Measuring wire fixation											
Mount with retaining ring				R							
Measuring wire diameter											
0.70 mm					C						
Connection											
Cable radial, 2 m						L					
Flange connector M12, 5-pin, radial, male contacts, CCW						N					
Flange connector M12, 8-pin, radial, male contact, CCW redundant						B					
Voltage supply / interface											
8...30 VDC / Analog 0.5...4.5 VDC								V3			
12...30 VDC / Analog 0...10 VDC								V6			
12...30 VDC / Analog 4...20 mA								C0			
8...30 VDC / Analog 0.5...4.5 VDC redundant								R3			
12...30 VDC / Analog 0...10 VDC redundant								R6			
12...30 VDC / Analog 4...20 mA redundant								R0			
Resolution supplement											
No option									0		
Operating temperature											
-40...+85 °C											A