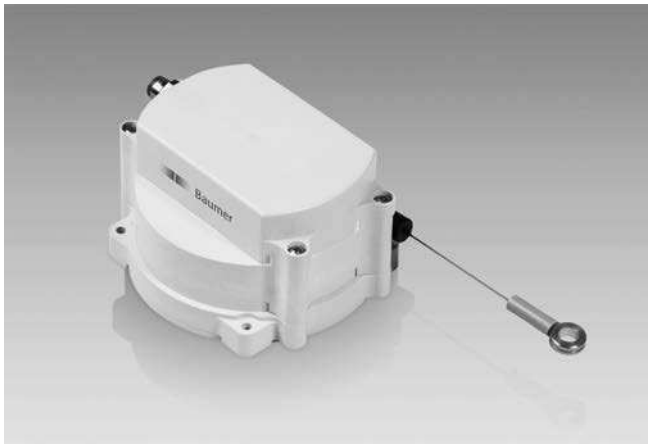
Cable transducer

Interface CANopen® redundant

Measuring length absolute up to 4.7 m

GCA5 - CANopen®



GCA5 CANopen®

Features

- **Interface CANopen® redundant**
- **Redundant sensing**
- **Measuring length 4.7 m**
- **Space saving design**
- **Designed for harsh enviromental conditions**
- **Removable stickers for drainage**

Technical data - electrical ratings

Voltage supply	10...30 VDC
Consumption w/o load	≤30 mA (24 VDC)
Initializing time typ.	12 ms after power on (depending on filter)
Interface	CANopen®
Function	Linear position feedback
Profile conformity	CANopen® CiA DS 301, DSP 305, DS 406
Resolution	0.3 mm/step
Linearity	±0.5 % full scale output (f.s.o.)
Absolute accuracy	±0.8 % f.s.o. (+25 °C) ±1.8 % f.s.o. (-40...+85 °C)
Number of steps	47000
Sensing method	Magnetic
Code	Binary
Code sequence	Programmable
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Programmable parameters	Operating modes Rotating direction Scaling Zero position Filter
Diagnostic function	Cable break detection

Technical data - mechanical design

Protection DIN EN 60529	IP 67 (housing, drainage holes closed), IP 54 (cable inlet)
Materials	Cable: Stainless steel cable sheathed with nylon Housing: plastic
Operating temperature	-40...+85 °C
Measuring length	4.7 m
Cable acceleration	≤50 m/s²
Cable diameter	0.9 mm
Pull-in force	>1.5 N (pull-in force reduced at low temperatures)
Pull-out force	≤8 N
Relative humidity	95 % temporary condensing
Resistance	DIN EN 60068-2-6 Vibration 10 g, 10-2000 Hz DIN EN 60068-2-27 Shock 50 g, 11 ms
Weight approx.	900 g
Connection	Flange connector M12, 5-pin
Instruction	Please consider the assembly instructions

GCA5 - CANopen®

Part number

GCA5-PM047.RA	**N**	**.C80.A**

Connection

N Flange connector M12, 5-pin, radial, male contacts, ccw

Accessories

Mounting accessories

Z 119.065	Idler pulley for cable thickness 0.8...1 mm

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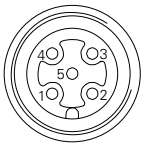
Terminal significance	
+Vs	Cable transducer supply voltage.
CAN_L	CAN bus signal (dominant Low).
CAN_H	CAN bus signal (dominant High).
CAN_GND	GND relating to CAN interface.

CANopen® features	
Bus protocol	CANopen®
Device profile	CANopen® - CiA DSP 406 (Device Class 2, CAN 2.0B)
Operating modes	Time-triggered Sync (cyclic)
Preset	Parameter for setting the cable transducer to a requested position value assigned to a defined position of the system. The offset of cable transducer zero point and mechanical zero point is stored in the cable transducer. It is possible to set the zero (for both channels at the same time).
Rotating direction	The direction in which there have to be ascending or descending position values can be defined.
Scaling	Parameter defining the steps.
Diagnosis	Cable break detection.
Node Monitoring	Heartbeat or Nodeguarding (upon request).
Default	Baud rate 250 kbit/s, Node ID 4

Terminal assignment	
Flange connector M12	
Connector	Assignment
Pin 1	CAN_GND
Pin 2	+Vs
Pin 3	CAN_GND
Pin 4	CAN_H
Pin 5	CAN_L



Dimensions

GCA5 with flange connector M12