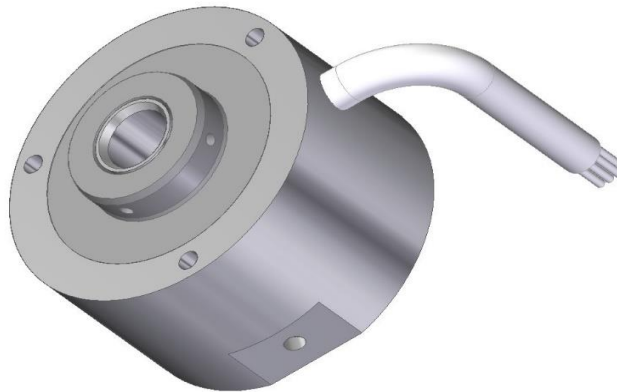


High-Resolution Absolute Angular Position Sensor

PHRAS 40

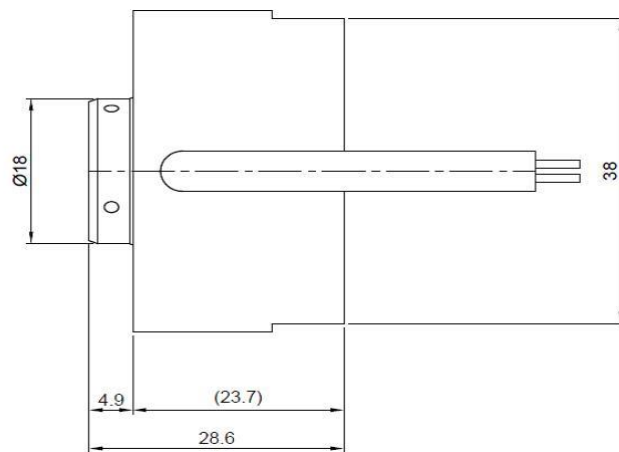
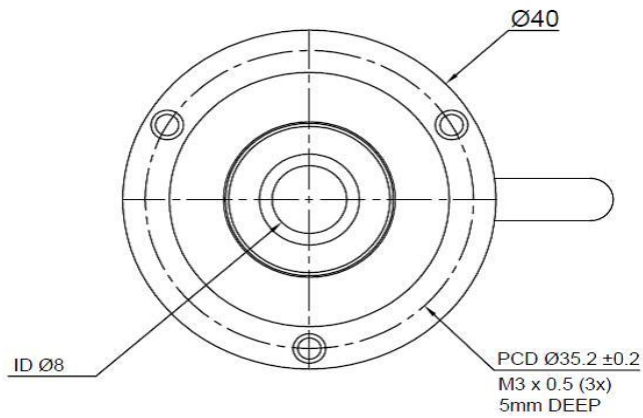


Main Characteristics

Parameter	Description
Mechanical angle	360 ° Continuous Pre-programmed
Supply Voltage	5 ± 0.5 Vdc
Current Consumption	25 mA
Max. Resolution (ADC)	14 bits (latency from 2.5 u-sec to 2.6 m-sec depending on filtering)
Max. Resolution (Analog)	Upto 65536 counts per rotation
Max. Accuracy	Absolute: 0.043 degrees (2LSB) Relative: 0.0054 degrees (1/4 LSB) Both upto 12000 RPM
Max. Operating Speed	24000 RPM
Shaft diameter	8 mm. shaft lockable with locking screw on sensor
Position data Output (Serial interface)	SSI, BiSS, SPI
Incremental encoder quadrature outputs	A,B,Z
Motor commutation signals	U,V,W

Connections (standard)	Red - Analog 5VDC
	Black - Analog ground
	Yellow - Digital supply 5V
	Blue - Digital ground
	Green - Serial 1 / A
More connections on request	White - Serial 2 / B
	Orange - Serial 3 / Z
	Purple - Serial 4 / index
	Grey - MTC (multiturn clock) / SCL
	Brown - MTD (multiturn data) / SDA

Operational Temperature	- 40°C to 110°C
Dielectric Strength	500 VDC
Insulation Resistance	10MΩ



Headquarter Switzerland:
Pewatron AG
Thurgauerstrasse 66
CH-8050 Zurich
Phone +41 44 877 35 00
info@pewatron.com

Office Germany:
Pewatron Deutschland GmbH
Edisonstraße 16
D-85716 Unterschleißheim
Phone +49 89 374 288 87 00
info.de@pewatron.com



PEWATRON
SENSORS · POWER SOLUTIONS

We are here for you. Addresses and Contacts.

Sales Germany & Austria

Geometrical sensors Other products

Kurt Stritzelberger
Phone +49 89 374 288 87 22
kurt.stritzelberger@pewatron.com

Pressure sensors Other products

Gerhard Vetter
Phone +49 89 374 288 87 26
gerhard.vetter@pewatron.com

Gas sensors and modules

Peter Felder
Phone +41 44 877 35 05
peter.felder@pewatron.com

Sales Switzerland & Liechtenstein

Postcode 3000 – 9999

Basil Frei
Phone +41 44 877 35 18
basil.frei@pewatron.com

Postcode 1000 – 2999

Christian Mohrenstecher
Phone +41 76 444 57 93
christian.mohrenstecher@pewatron.com

Sales International Key Accounts

Peter Felder
Phone +41 44 877 35 05
peter.felder@pewatron.com

Sales Other Countries / Product Management

Pressure Sensors Load Cells

Philipp Kistler
Phone +41 44 877 35 03
philipp.kistler@pewatron.com

Gas sensors Gas sensor modules

Dr. Thomas Clausen
Phone +41 44 877 35 13
thomas.clausen@pewatron.com

Flow / Level / Medical products

Dr. Adriano Pittarelli
Phone +49 89 374 288 87 67
adriano.pittarelli@pewatron.com

Power supplies

Sebastiano Leggio
Phone +41 44 877 35 06
sebastiano.leggio@pewatron.com

Linear position sensors Angle sensors

Eric Letsch
Phone +41 44 877 35 14
eric.letsch@pewatron.com

Accelerometers Sensor elements

Christoph Kleye
Phone +49 89 374 288 87 61
christoph.kleye@pewatron.com

Drive technology

CH Postcode 5000 – 9999 / DE

Roman Homa
Phone +41 76 444 00 86
roman.homa@pewatron.com

Drive technology

CH Postcode 1000 – 4999 / AT / IT / FR

Christian Mohrenstecher
Phone +41 76 444 57 93
christian.mohrenstecher@pewatron.com

Harald Thomas

Phone +49 89 374 288 87 23
harald.thomas@pewatron.com