

Absolute encoders - modular bus covers

Solid shaft with clamping or synchro flange, stainless steel housing

Optical multiturn encoders 13 bit ST / 16 bit MT

CANopen® / DeviceNet / Profibus

GEMMW



GEMMW with modular bus cover

Features

- Encoder multiturn / bus cover
- Stainless steel design
- Optical sensing method
- Resolution: singleturn 13 bit, multiturn 16 bit
- Clamping or synchro flange
- CANopen®, DeviceNet, Profibus-DP
- Material: stainless steel 1.4305
- Maximum resistant against magnetic fields

Technical data - electrical ratings

Voltage supply	10...30 VDC
Reverse polarity protection	Yes
Consumption w/o load	≤100 mA (24 VDC)
Initializing time typ.	250 ms after power on
Interfaces	CANopen®, DeviceNet, Profibus-DPV0
Function	Multiturn
Device adress	Rotary switch in bus cover (type-specific)
Steps per revolution	≤8192 / 13 bit
Number of revolutions	≤65536 / 16 bit
Absolute accuracy	±0.025 °
Sensing method	Optical
Code	Binary
Code sequence	CW/CCW programmable
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Programmable parameters	Steps per revolution Number of revolutions Preset Scaling Rotating direction
Diagnostic functions	Position or parameter error Multiturn sensing
Approval	UL approval / E63076

Technical data - mechanical design

Size (flange)	ø58 mm
Shaft type	ø10 mm solid shaft (clamping flange) ø6 mm solid shaft (synchro flange)
Flange	Clamping or synchro flange
Protection DIN EN 60529	IP 67
Operating speed	≤10000 rpm (mechanical) ≤6000 rpm (electric)
Starting acceleration	≤1000 U/s ²
Starting torque	≤0.03 Nm (+25 °C, IP 67)
Rotor moment of inertia	20 gcm ²
Admitted shaft load	≤20 N axial ≤40 N radial
Materials	Housing: stainless steel 1.4305 Flange: stainless steel 1.4305 Bus cover: stainless steel 1.4305
Operating temperature	-25...+85 °C -40...+85 °C (optional)
Relative humidity	95 % non-condensing
Resistance	DIN EN 60068-2-6 Vibration 10 g, 16-2000 Hz DIN EN 60068-2-27 Shock 200 g, 6 ms
Weight approx.	900 g
Connection	Bus cover

