

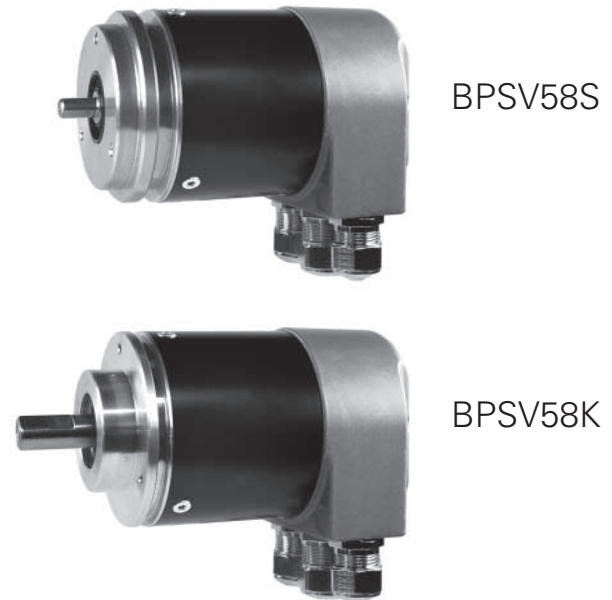
Absolute single-turn shaft encoders

BPSV flexible – ProCoder

Profibus-DP, CANopen, DeviceNet, EtherCAT

features

- single-turn encoders up to 13 bit
- modular bus cover
- simple mounting via servo flange
- programmable bus parameters
- programmable resolution and preset values



general data

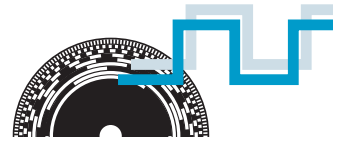
| | |
|---------------------------|---|
| voltage supply | 10 - 30 VDC with reverse polarity protection |
| supply current no load | max. 100 mA (at 24 VDC) |
| code signal | binary |
| max. resolution | 13 bit (1 step = 2' 38") |
| code switching frequency | max. 800 kHz |
| max. error limit | ±0,05° |
| preset | value programmable within resolution range |
| address | selectable via dip switches |
| baud rate | selectable via dip switches |
| direction of rotation | looking at the flange, position counts up as the shaft rotates clockwise (CW), programmable |

mechanical data

| | |
|-----------------------|--|
| max. revolution | mech. 10'000 rpm mech. 6'000 rpm (IP 65) electr. 6'000 rpm |
| moment of inertia | 2 x 10 ⁻⁶ kgm ² |
| starting torque | ≤ 0,015 Nm |
| max. shaft load | axial: < 20 N radial: < 40 N |
| product life | depending on ambient conditions (typ. 10 ⁹ rev.) |
| max. protection class | shaft: IP 65 housing: IP 65 |
| material | housing/flange: aluminium bus cover: zinc die cast |
| weight | approx. 680 g |

ambient conditions

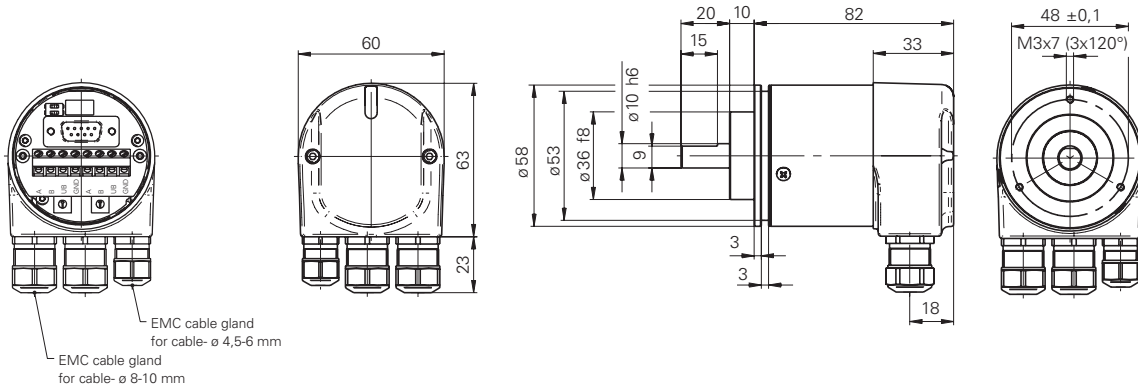
| | |
|----------------------|--|
| temperature range | -25...+85 °C |
| vibration | DIN EN 60068-2-6 (≤ 100 m/s ² / 16 - 2'000 Hz) |
| shock | DIN EN 60068-2-27 (≤ 2'000 m/s ² / 6 ms) |
| noise immunity | DIN EN 61000-6-2 |
| emitted interference | DIN EN 61000-6-4 |



Profibus-DP, CANopen, DeviceNet, EtherCAT

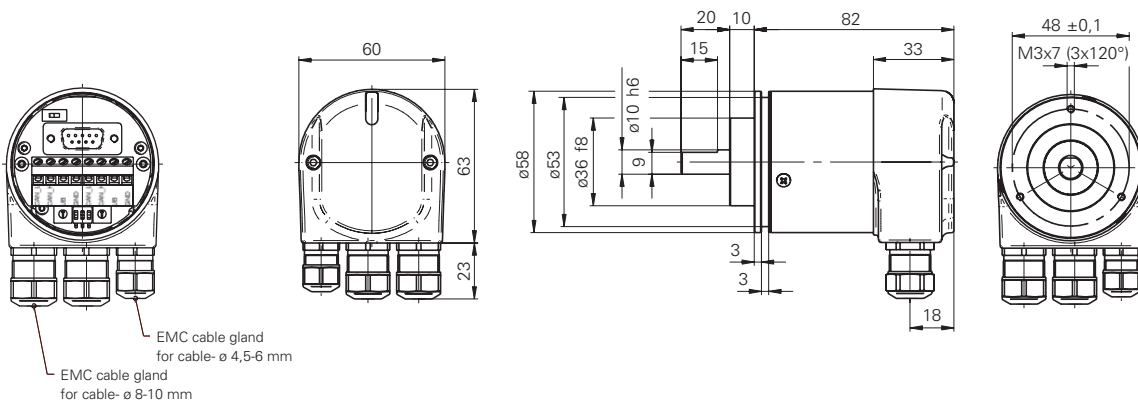
dimensions

BPSV-Profibus



2

BPSV-CANopen



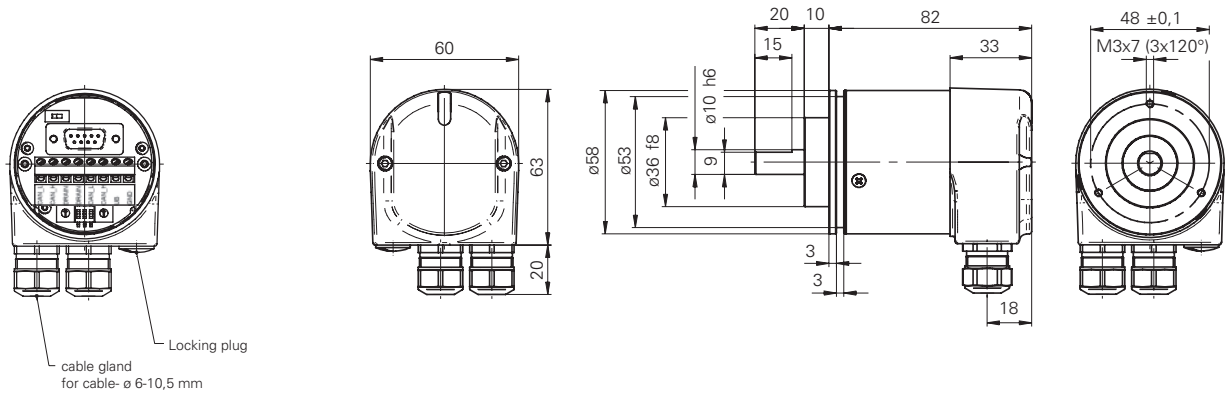
Absolute single-turn shaft encoders

BPSV flexible – ProCoder

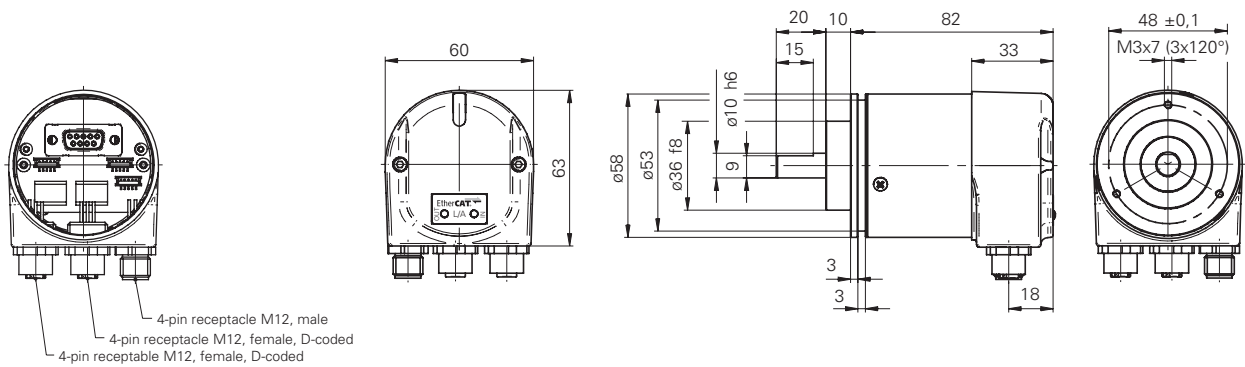
Profibus-DP, CANopen, DeviceNet, EtherCAT

dimensions

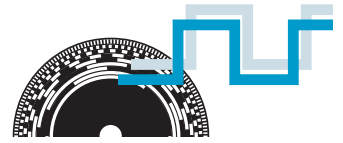
BPSV-DeviceNET



BPSV-EtherCAT



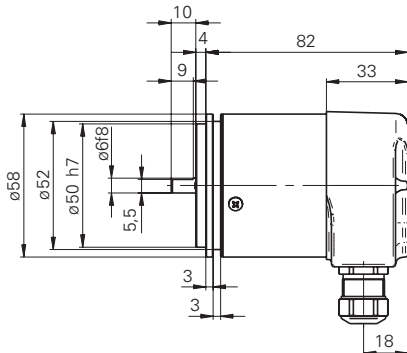
Profibus-DP, CANopen, DeviceNet, EtherCAT



2

dimensions

BPSV servo flange



order designation

| | | | | | | | |
|----------------|--------------------------|-------------|--------------------------|---------------|--------------------------|--------------------------|--|
| BPSV 58 | <input type="checkbox"/> | 1P24 | <input type="checkbox"/> | C13/00 | <input type="checkbox"/> | G | base encoder without bus cover |
| BPSV 58 | <input type="checkbox"/> | 1P24 | <input type="checkbox"/> | 13/00 | <input type="checkbox"/> | <input type="checkbox"/> | complete encoder |
| | | | | | | | connection |
| | | | | | | | D bus cover with PG radial (for Interface B,D,P) |
| | | | | | | | E bus cover with connector M12 radial (for Interface E) |
| | | | | | | | shaft |
| | | | | | | | C6 shaft 6 mm IP 65 (servo flange) |
| | | | | | | | C0 shaft 10 mm IP 65 (clamping flange) |
| | | | | | | | resolution |
| | | | | | | | 13 bit |
| | | | | | | | interface |
| | | | | | | | B CANopen |
| | | | | | | | D DeviceNet |
| | | | | | | | P Profibus-DP |
| | | | | | | | E EtherCAT |
| | | | | | | | housing |
| | | | | | | | S servo flange |
| | | | | | | | K clamping flange |

accessories

| | |
|--|--|
| spring washer coupling | |
| hole 6 mm / 10 mm | part nr. 141132 |
| hole 6 mm / 6 mm | part nr. 141131 |
| hole 10 mm / 10 mm | part nr. 141133 |
| CD-ROM with GSD-/EDS-/XML- files and manuals | part nr. 147362 |
| bus cover for Profibus-DP | see chapter accessories part nr. 140831 |
| CANopen | part nr. 140832 |
| DeviceNet | part nr. 140833 |
| EtherCAT | part nr. 159110 |
| cable EtherCAT M12 male-male, d-coded M12 straight, 5 m | part nr. 160565 |
| type BPMV 58S servo flange | |
| mounting | part nr. 125051 |
| screws and servo clamps | part nr. 117668 |
| type BPMV 58S clamping flange | |
| mounting bracket | part nr. 117698 |