

Magnetic absolute multi-turn shaftencoder

BCD258J15N24P13/16P8CR

Profibus-Dp

Features

- ◆ Multi-turn encoder/Profibus-DP
- ◆ Magnetic principle, hermetically sealed
- ◆ Resolution: single-turn 13 bit and multi-turn 16 bit
- ◆ Integrated fieldbus
- ◆ High shock- and vibration-resistance
- ◆ resolution and zero-point programmable
- ◆ Protection class IP69K

CE



General data

Voltage supply	10-30VDC
Max. supply current no load	Type. 100mA (at 24VDC)
Bus protocol	Profibus-DP
Profibus Features	Device class 1 und 2
Default setting	user address 03
Max. resolution single-turn	13 bit (1 step=2'38")
Multi-turn	16 bit (65'536 revolutions)
Max. error limit	+1°
Repeatability	0,3°
Direction of rotation	Looking at the flange, position counts up as the shaft rotates Clockwise (CW), programmable

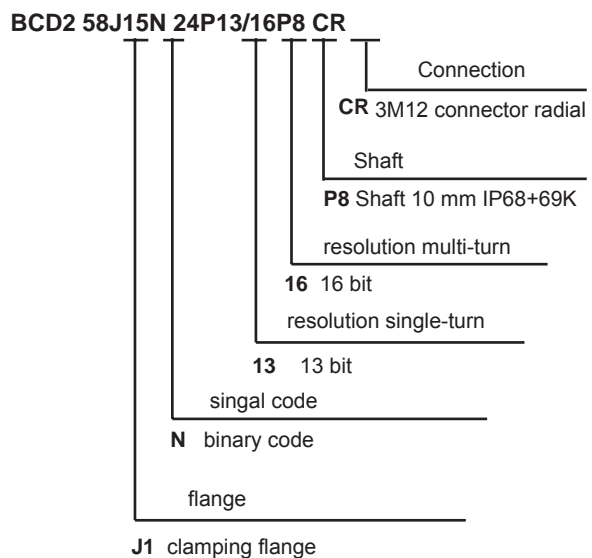
Mechanical data

Max. revolutions	6'000 rpm
Moment of inertia	typ. 20×10^{-7} kgm ²
Torque	Typ. 3,1 cNm (3'000 rpm/20°C)
Max. shaft load	axial: 120N radial: 280N (Combined) axial: 270N (single load)
Storage life	Depending on ambient conditions (Typ. 10^9 revolutions)
protection class	IP68 + IP 69K (IP68: water 20°C, 1m, 24h)
Material	high grade steel 1,4305 ¹
Weight	approx. 900g
Explosion protection	EXII3d txx°C (Zone 22) ¹

Ambient conditons

temperature range	-40...+85°C
Vibration	IEC 60068-2-6 (≤ 3000 m/s ² /10-2'000 Hz)
Shock	IEC 60068-2-6 (≤ 3000 m/s ² /6 ms)
Noise immunity	EN 61000-6-2
Emitted interference	EN 6100-6-3

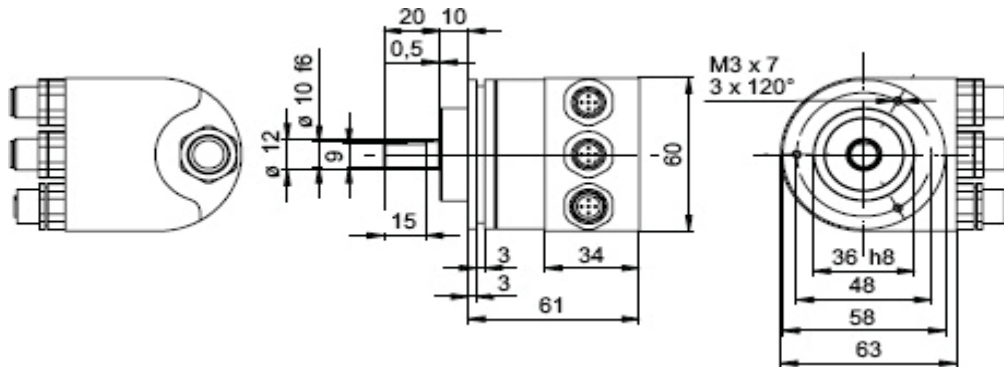
Order designation BCD2 58K



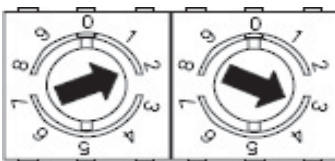
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dimension

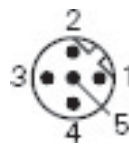


Setting of user address for profibus-dp



Address can be set with rotary switch.
Example: User address 23

assignment M12 Bus-IN male



pin nr.singal	description
1 n.c	-
2 A line green	Cable green/Profibus-DP
3 n.c	-
4 B line red	Cable red/profibus-Dp
5 n.c	-
B-coded	

Setting of terminating resistors for profibus-DP



ON=Last User
OFF=User X

assignment M12 Bus-OUT female



pin nr.singal	description
1 +VsDP	VP Profibus+5VDC1)
2 A line green	Cable green/Profibus-DP
3 0VDP	DGND Profibus1)
4 B line red	Cable red/profibus-Dp
5 n.c	-
B-coded	

Accessories

CD-ROM With GSD-/EDS-/XML- part nr.847362 files and manuals

Cable with M12 connector female assembled on one side for power supply

connector straight 2m part nr. 832540

connector angled 2m part.nr. 827803

Cable with M12 connector male and M12 connector female assembled for bus-IN,bus-OUT

connector male/female straight 2m part nr.857909
2m part nr.857910

connector male/female angled 2m part nr.857911

connector male/female angled 6m part nr.857912

Spring clamp set part nr.852773

couplings and mounting adapters see chapter accessories

assignment M12 supply voltage

pin nr. signal	description
1 +Vs	voltage supply
2 n.c	-
3 0V	voltage supply
4 0V	voltage supply
5 n.c	-
A-coded	

1) for optional external terminating resistor