

ROTACOD

Absolute encoders with Powerlink interface

Series

EM58 xx • HS58xx • HM58xx PL

ETHERNET
POWERLINK



- Single & multi turn Powerlink encoders
- Fast and precise optical sensing
- Resistant against magnetic fields
- 100 Mbit/s half duplex operation
- Integrated hub
- EM58 series general purpose encoder;
HS/HM58 for high-end applications
- M12 connections
- Integrated Dip-switches for node setting



ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
Protection:	IP65
Operating temperature range:	-25°C +85°C (-13°F +185°F)
Storage temperature range:	-40°C +100°C (-40°F +212°F) (98% R.H.without condensation)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft diameter:	Ø 6, 8, 9.52, 10, 12 mm
Hollow shaft diameter:	Ø 14, 15 mm
Reducing sleeves BR1-xx from Ø 15 mm to:	Ø 6, 8, 9.52, 10, 11, 12 mm
Shaft loading (axial, radial):	40 N max.
Shaft rotational speed:	6000 rpm max.
Bearings life:	400 x 10 ⁶ rev. min. (10 ⁹ rev. min. with shaft loading of 20 N max.)
Weight:	~ 350 g (12,3 oz)

ELECTRICAL SPECIFICATIONS

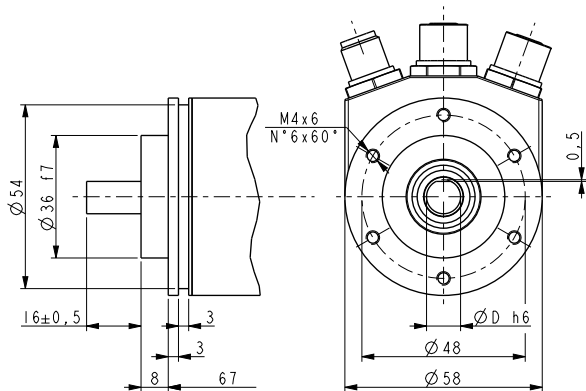
Resolution:	HS58xx: 262144 cpr EM58xx: 8192 cpr x 16384 turns HM58xx: 65536 cpr x 16384 turns
Accuracy:	HS58xx, HM58xx: ± 0,007° - EM58xx: ± 0,5°
Counting frequency:	150 kHz max.
Power supply:	+10V +30V
Power consumption:	3 W max.
Interface:	Ethernet Powerlink V2.0, Profile 1.2.0 CIA DS406
Programmable parameters:	see user manual
Communication modes:	Sync-mode, Ring redundancy, Segment SDO transfer, Multiplexing
Cycle time:	≥ 200 µs
Protection:	against inversion of polarity and short-circuit
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4
Optoelectronic life:	100.000 h min.

MATERIALS

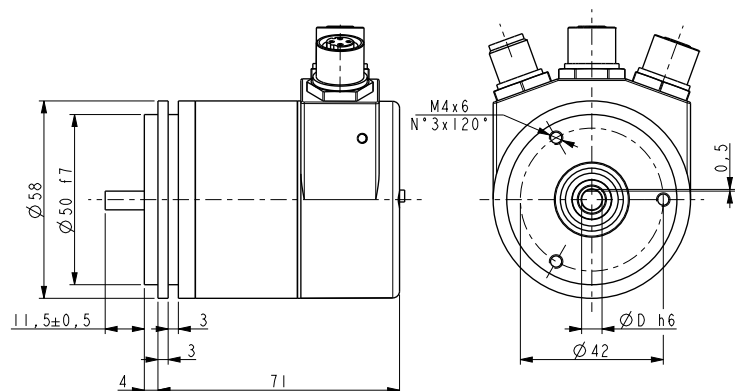
Flange:	anticorodal, UNI EN AW-6082
Housing:	anticorodal, UNI EN AW-6082
Bearings:	ABEC 5
Shaft:	stainless steel, non magnetic, UNI EN 4305
Light source:	GaAl diodes

ACCESSORIES

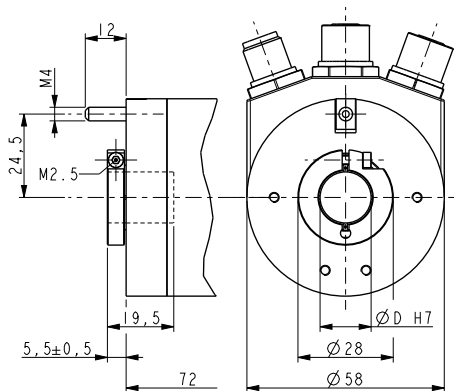
PAN/PGF:	flexible couplings
BR1:	reducing sleeves
LKM-386:	fixing clamps
EC-M12ME-EC-GN-5:	M12 bus in/out cordset 5 m
EC-M12ME-EC-GN-10:	M12 bus in/out cordset 10 m
EXC-M12ME-EC-GN-5-RJ:	M12 + RJ bus in/out cordset 5 m
EXC-M12ME-EC-GN-10-RJ:	M12 + RJ bus in/out cordset 10 m
EC-M12PP-LK-PBS-5:	M12 Pwr cordset 5 m
EC-M12PP-LK-PBS-10:	M12 Pwr cordset 10 m
E-M12FC:	M12 connector (power supply)
E-M12MEC:	M12 connector (bus IN/OUT)



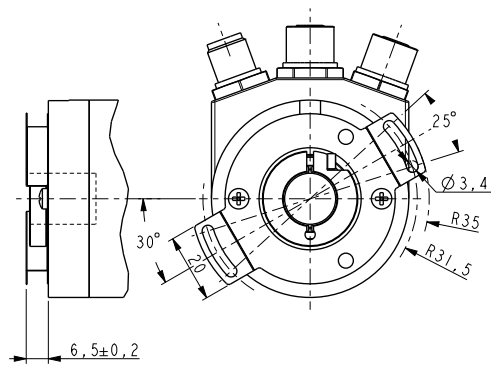
EM5801 • HS5801 • HM5801 PL



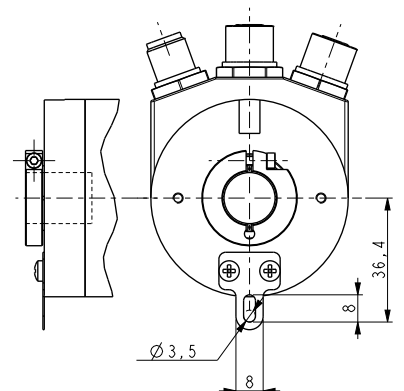
EM5802 • HS5802 • HM5802 PL



EM5803A • HS5803A • HM5803A PL



EM5803B • HS5803B • HM5803B PL



EM5803C • HS5803C • HM5803C PL

Order code - Single turn

HS58xx	XX	/	PL	-	XX	/Sxxx
	(a)				(b)	(c)

(a) RESOLUTION
18 = 262144 cpr

(b) SHAFT DIAMETER
6 = 6 mm
8 = 8 mm
P9 = 9.52 mm, 3/8"
10 = 10 mm
12 = 12 mm
14 = 14 mm (HS5803x)
15 = 15 mm (HS5803x)

© CUSTOM VERSION

Order code - Multi turn

EM58xx HM58xx	XX/XXXXX	PL	-	XX	/Sxxx
	(a)			(b)	(c)

(a) RESOLUTION
13/16384 = 8192 cpr x 16384 turns (EM58xx)
16/16384 = 65536 cpr x 16384 turns (HM58xx)

10 = 10 mm
12 = 12 mm
14 = 14 mm (EM5803x, HM5803x)
15 = 15 mm (EM5803x, HM5803x)

(b) SHAFT DIAMETER
6 = 6 mm
8 = 8 mm
P9 = 9.52 mm, 3/8"

© CUSTOM VERSION