

# ROTACOD

Absolute encoders with Fieldbus interface

Series

Hx58 FB • Hx58S FB • HxC58 FB

- High resolution Fieldbus encoders
- Single turn resolution 262144 cpr
- Multi turn resolution 65536 cpr x 16384 turns
- Roundloop function & velocity output
- Bus cover with M12 or PG outlet
- Precise & fast optical sensing
- Resistant against magnetic fields



HxC58 FB • Hx58S FB

## ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
Protection:	IP65 (with assembled connection cap)
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:	400x10 <sup>6</sup> rev. min. (10 <sup>9</sup> rev. min. with shaft loading of 20 N max.)
Electrical connections:	PG outlet or M12 plugs
Weight:	~ 300 g (10,5 oz)

## ELECTRICAL SPECIFICATIONS

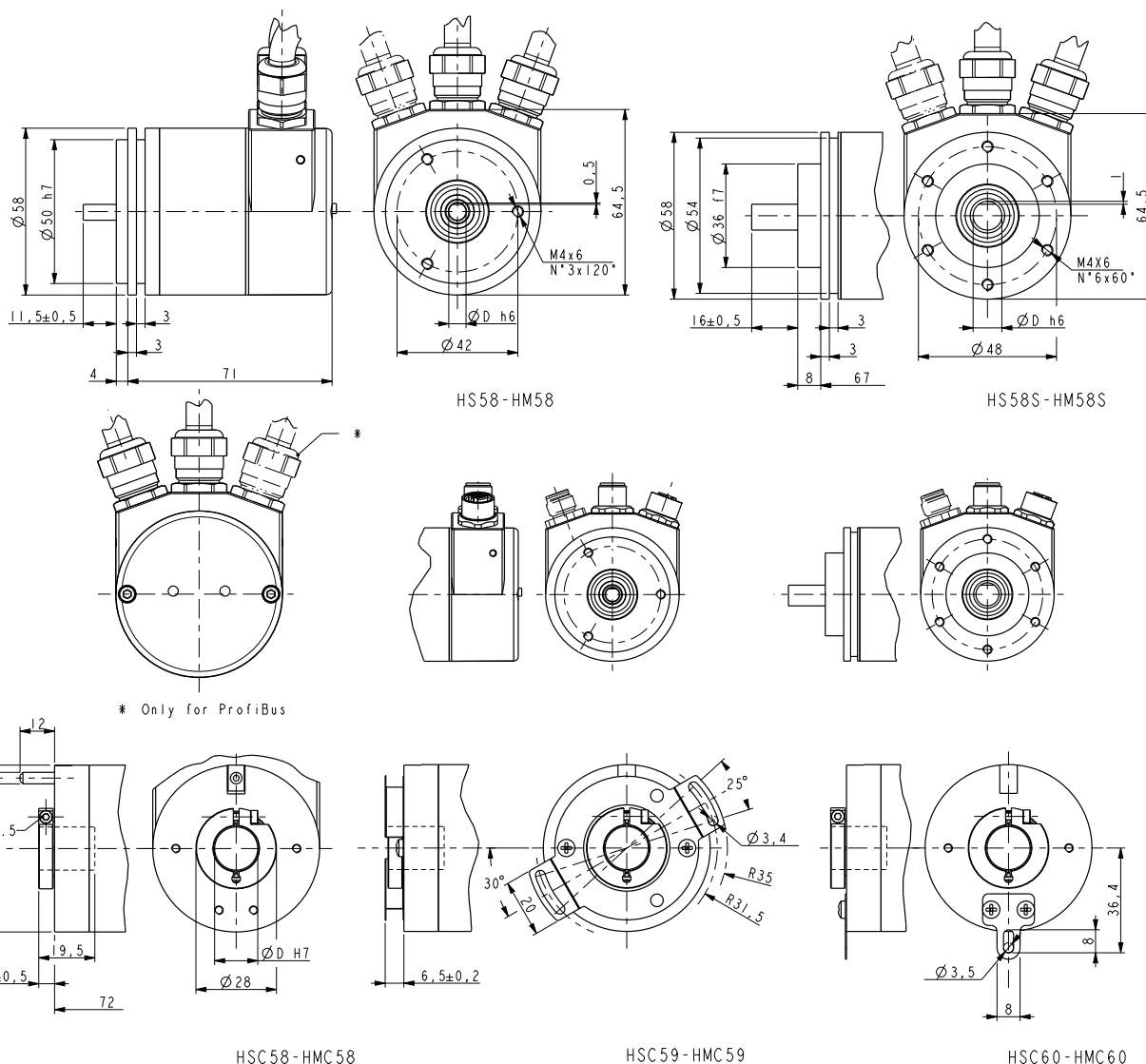
Resolution:	262144 cpr or 65536 cpr x 16384 turns
Accuracy:	± 0,007°
Counting frequency:	150 kHz max.
Power supply:	+10V +30V
Power consumption:	2,2 W
Interface:	Profibus-DP V0 CANopen DS301, DS406 CANlift DS301, DSP417 DeviceNet
Programmable parameters:	standard functions see user manual for each fieldbus • velocity output • round loop function
Baudrate:	programmable by Dip-switches
Device address:	programmable by Dip-switches
Bus connection:	galvanically separated by opto-couplers
Protection:	against inversion of polarity and short-circuit
EMC:	electro-magnetic immunity, EN 61000-4-2 EN 61000-4-4
Optoelectronic life:	100.000 h min.

## MATERIALS

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

## ACCESSORIES

BC-PB:	Profibus conn. cap with PG outlet
BC-PB-C:	Profibus conn. cap with M12 plugs
BC-CB:	CANopen conn. cap with PG outlet
BC-CB-C:	CANopen conn. cap with M12 plugs
BC-FDV:	DeviceNet conn. cap with PG outlet
BC-FDV-C:	DeviceNet conn. cap with M12 plugs
BC-I6:	CANlift conn. cap with PG outlet
BC-I6-C:	CANlift conn. cap with M12 plugs
EC-M12xx-LK-xx-xx:	M12 cordset with xx m cable
PAN/PGF:	flexible couplings
BR1:	reducing sleeves
LKM-386:	fixing clamps



Order code - Single turn

HS58	XX	/	FB	-	XX	/Sxxx
HS58S	Ⓐ	/	FB	-	Ⓑ	Ⓒ
HSC58						
HSC59						
HSC60						

Order code - Multi turn

HM58	XX/XXXXX	/	FB	-	XX	/Sxxx
HM58S	Ⓐ	/	FB	-	Ⓑ	Ⓒ
HMC58						
HMC59						
HMC60						

Ⓐ RESOLUTION  
 18 = 262144 cpr  
 10 = 10 mm  
 12 = 12 mm  
 14 = 14 mm (only HSCxx)  
 15 = 15 mm (only HSCxx)

Ⓑ SHAFT DIAMETER  
 6 = 6 mm  
 8 = 8 mm  
 P9 = 9.52 mm, 3/8"

Ⓒ CUSTOM VERSION

Ⓐ RESOLUTION  
 16/16384 = 65536 cpr x 16384 turns  
 10 = 10 mm  
 12 = 12 mm  
 14 = 14 mm (only HMCxx)  
 15 = 15 mm (only HMCxx)

Ⓑ SHAFT DIAMETER  
 6 = 6 mm  
 8 = 8 mm  
 P9 = 9.52 mm, 3/8"

Ⓒ CUSTOM VERSION

CONNECTION CAP (to be ordered separately)

BC	-	XX	-	X
		Ⓐ		Ⓑ

Ⓐ INTERFACE  
 PB = Profibus-DP V0  
 CB = CANopen DS301, DS406  
 FDV = DeviceNet  
 I6 = CANlift DS301, DSP417

Ⓑ CONNECTIONS  
 - = PG output  
 C = M12 connector output

Cordsets  
 (standard lengths, other on request)

EC-M12MC-LK-CB-5: CAN/DeviceNet M12 plug cordset with 5 m cable  
 EC-M12FC-LK-CB-5: CAN/DeviceNet M12 conn. cordset with 5 m cable  
 EC-M12MC-LK-CB-10: CAN/DeviceNet M12 plug cordset with 10 m cable  
 EC-M12FC-LK-CB-10: CAN/DeviceNet M12 conn. cordset with 10 m cable  
 EC-M12MP-LK-PB-5: Profibus M12 plug cordset with 5 m cable  
 EC-M12FP-LK-PB-5: Profibus M12 connector cordset with 5 m cable  
 EC-M12PP-LK-PBS-5: Profibus M12 power supply cordset with 5 m cable  
 EC-M12MP-LK-PB-10: Profibus M12 plug cordset with 10 m cable  
 EC-M12FP-LK-PB-10: Profibus M12 connector cordset with 10 m cable  
 EC-M12PP-LK-PBS-10: Profibus M12 pwr supply cordset with 10 m cable