

# SERIE HS10/HM10

## SINGLETURN AND MULTITURN ABSOLUTE BLIND HOLLOW SHAFT ENCODER

CANopen®



- CANOpen
- Programmable up to 30 bits (65.536 points per turn, 16.384 turns)
- External diameter 58 mm
- Blind hollow shaft  $\varnothing$  10 or 12 mm
- Protection class IP65 according to DIN EN 60529
- Connection by industrial connector 2 x M12



Optical Encoder



Absolute Encoder



High shaft load capacity



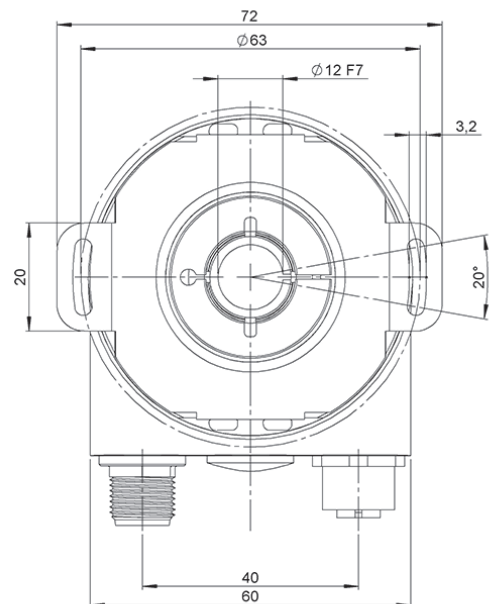
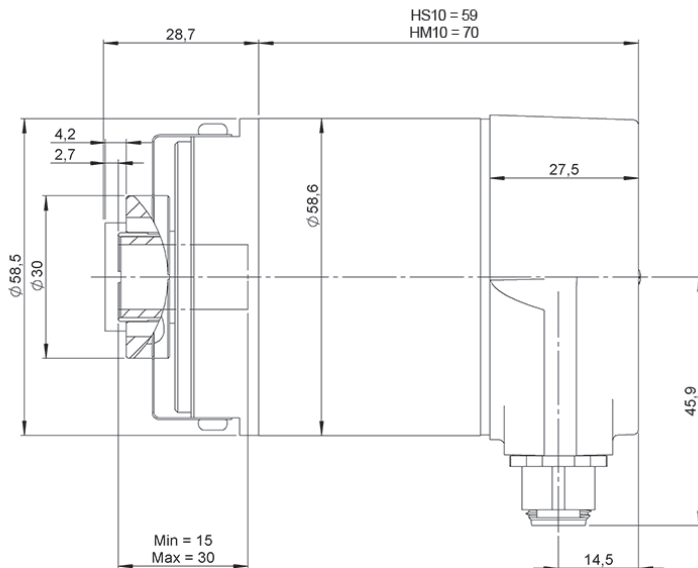
Vibration and shock resistant



IP65



Temperature range



Drawing blind hollow shaft type 4, connection type 2

### REFERENCE

Reference example: HS10-4322-13 | HM10-4422-1312

Serie	Flange	Blind-Hollow shaft	Interface	Connection	Singleturn resolution	Multiturn resolution	Special customer
HS10/HM10 -	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
HS10. Singleturn HM10. Multiturn	4. Blind-Hollow shaft	3. $\varnothing$ 10 mm 4. $\varnothing$ 12 mm	2. CANOpen	2. 2 x M12 Connector	up to 16 bits (Standard: 13 bits)	up to 14 bits (Standard: 12 bits)	

Order your reference  
Step file 3D

[info@encoderhohner.com](mailto:info@encoderhohner.com)

service available in 24 h



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## SINGLETURN AND MULTITURN ABSOLUTE BLIND HOLLOW SHAFT ENCODER



### MECHANICAL SPECIFICATIONS

Materials	Housing: Aluminium Flange: Aluminium Shaft: Stainless Steel
Bearings	Ballraces
Blind hollow shaft diameter	10 or 12 mm
Maximum number of revolutions permitted mechanically	≤ 12000 rpm
Protection according to DIN EN 60529	IP65
Rotor inertia moment	≤ 30 gcm <sup>2</sup>
Starting torque at 20°C (68°F)	≤ 0,03 Nm
Weight aprox.	475 g
Operating temperature range	-40°C to +85°C
Storage temperature range	-40°C to +85°C
Humidity	98% RH, not condensed
Vibration according to DIN EN 60068-2-6	100 m/s <sup>2</sup> (10Hz...1000Hz)
Shock according to DIN EN 60068-2-27	1000 m/s <sup>2</sup> (6ms)
Radial connection	2 x M12 Connector <b>Mating connectors not included</b>

### INTERFACE



Profile	DS-406
Programming functions	Resolution, preset, 2 limit switches, 8 CAMS, baud rate, CAN-Identifier, bootloader, transmission modes (polled, cyclic, sync)
Manual functions	Address selector switch 0-99 and terminal resistor (with connection cap)
Features	Round axis
Transmission rate	min. 20 kBaud max. 1 MBaud
Interface cycle time	≥ 1 ms

### ELECTRICAL SPECIFICATIONS

Output Driver	Transceiver (ISO 11898), Galvanically Isolated by Opto-Couplers
Power supply	10...30 VDC
Consumption	≤ 230 mA (10 VDC) ≤ 100 mA (24 VDC)
Power Consumption	≤ 2.5 W
Start time	< 250 ms
Singleturn resolution	up to 16 bits
Multiturn resolution	up to 14 bits
Accuracy (INL)	±0.0220° (14 – 16 bits) ±0.0439° (≤13 bits)
Code	Binary
Short circuit protection	Yes
Protection polarity inversion	Yes
EMC: Emitted interference	DIN EN 61000-6-4
EMC: Noise immunity	DIN EN 61000-6-2
MTTF	13,5 years

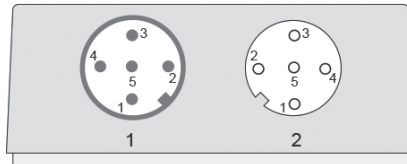
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## CONNECTION

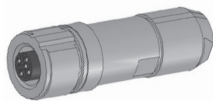
Mating connectors not included



	M12 5p Male a coded	M12 5p Female a coded	
VCC	2	2	
GND	3	3	
CAN High	4	4	
CAN Low	5	5	
CAN GND	1	1	

## ACCESSORIES

**90.9550**  
M12 5p  
Female



**90.9551**  
M12 5p  
Male

