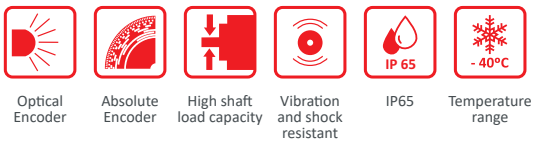
SERIE CS10/CM10

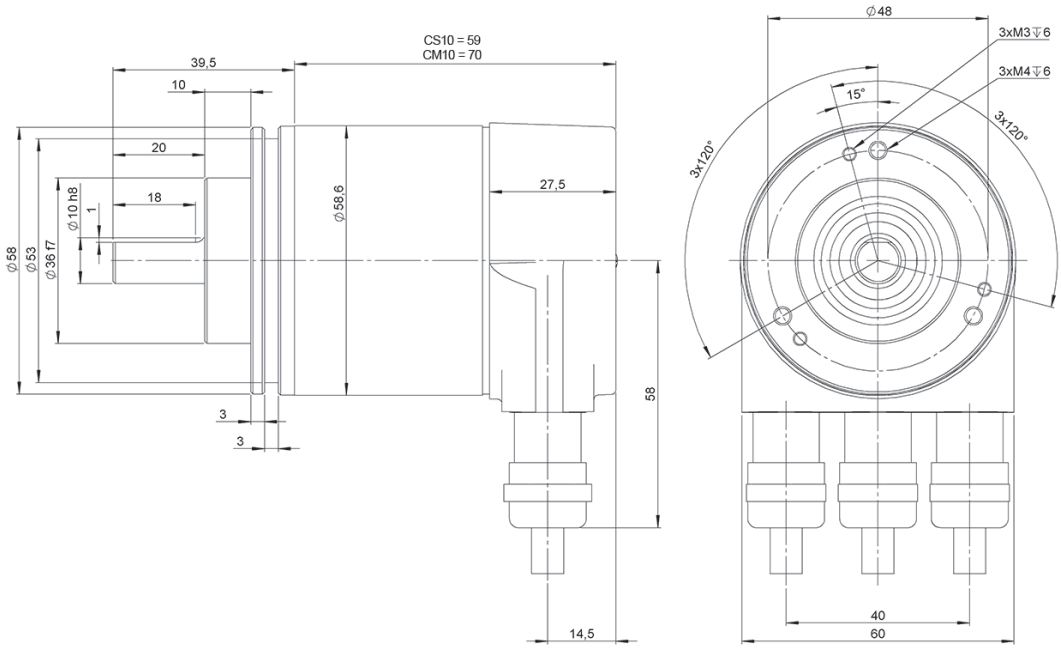
SINGLETURN AND MULTITURN ABSOLUTE SOLID SHAFT ENCODER

PROFIBUS

- Profibus DP
- Programmable up to 30 bits (65.536 points per turn, 16.384 turns)
- External diameter 58 mm
- Shaft Ø 6 or 10 mm
- Protection class IP65 according to DIN EN 60529
- Connection by cable or industrial connector 3 x M12



Optical Encoder | Absolute Encoder | High shaft load capacity | Vibration and shock resistant | IP65 | Temperature range



Drawing shaft type 2, connection type 1, clamping

REFERENCE

Reference example: CS10-1232-13 | CM10-2131-1312

Serie	Flange	Solid shaft	Interface	Connection	Singleturn resolution	Multiturn resolution	Special customer
CS10/CM10 -	☐	☐	☐	☐	-☐☐	☐☐	.☐☐
CS10. Singleturn **CM10.** Multiturn	**1.** Clamping **2.** Synchro	**1.** Ø 6x10 mm **2.** Ø 10x20 mm	**3.** Profibus DP	**1.** 3 x Cable Gland Terminal Box **2.** 3 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
service available in 24 h

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SINGLETURN AND MULTITURN ABSOLUTE SOLID SHAFT ENCODER

MECHANICAL SPECIFICATIONS

Materials	Housing: Aluminium Flange: Aluminium Shaft: Stainless Steel
Bearings	Ballraces
Bearings lifetime	$55x10^8$ rev. (Clamping) [40 N / 110 N] $150x10^8$ rev. (Clamping) [40 N / 60 N] $85x10^8$ rev. (Synchro) [40 N / 110 N] $195x10^8$ rev. (Synchro) [40 N / 60 N]
Shaft diameter	6 or 10 mm
Maximum number of revolutions permitted mechanically	≤ 12000 rpm
Protection according to DIN EN 60529	IP65
Rotor inertia moment	≤ 30 gcm^2
Starting torque at 20°C (68°F)	≤ 0,03 Nm
Maximum load permitted on axial shaft	40 N
Maximum load permitted on radial shaft	110 N
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^2 (10Hz...1000Hz)
Shock according to DIN EN 60068-2-27	1000 m/s^2 (6ms)
Radial connection	3 x Cable Gland (Terminal Box) 3 x M12 Connector **Mating connectors not included**

INTERFACE

Profile	DPV0, DPV1 and DPV2 Class 2 (EN50170 + EN50254)
Diagnostics	Memory
Programming functions	Resolution, gearing factor (physical resolution), velocity scaling + filter, preset (zero point), counting direction, limit switches , node number, teach-in, diagnosis
Manual functions	Address selector switch 0-99 and terminal resistor (with connection cap)
Features	Round axis
Transmission rate	≤ 12 Mbaud
Interface cycle time	≥ 1 ms

ELECTRICAL SPECIFICATIONS

Output Driver	Profibus Data Interface, galvanically isolated via opto-couplers
Power supply	10...30 VDC
Consumption	≤ 115 mA (10 VDC) ≤ 50 mA (30 VDC)
Power Consumption	≤ 1.5 W
Start time	< 1 s
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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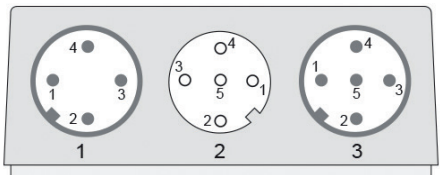
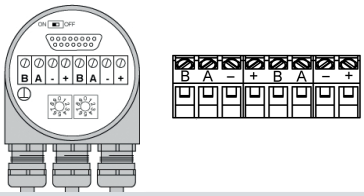
SINGLETURN AND MULTITURN ABSOLUTE SOLID SHAFT ENCODER

CONNECTION

Mating connectors not included





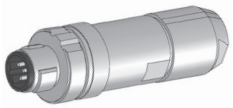
	M12 4p Male a coded	M12 5p Female b coded	M12 5p Male b coded	3 x Cable Gland Terminal Box*
VCC	1	-	-	(+)
GND	3	-	-	(-)
BUS Line A (Bus out)	-	2	-	A (right)
BUS Line B (Bus out)	-	4	-	B (right)
BUS Line A (Bus in)	-	-	2	A (left)
BUS Line B (Bus in)	-	-	4	B (left)
Not connected	2, 4	1, 3, 5	1, 3, 5	

(*) The power supply has to be connected once (no matter which clamps). If the terminating resistor is switched on, the outgoing bus lines are disconnected.

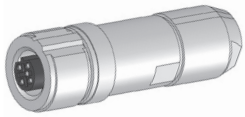
ACCESSORIES

90.9554
M12 4p
Female

90.9553
M12 5p
Male



90.9552
M12 5p
Female



FLANGE DIMENSIONS

Flange 2
Synchro

Connection 2
3 x M12