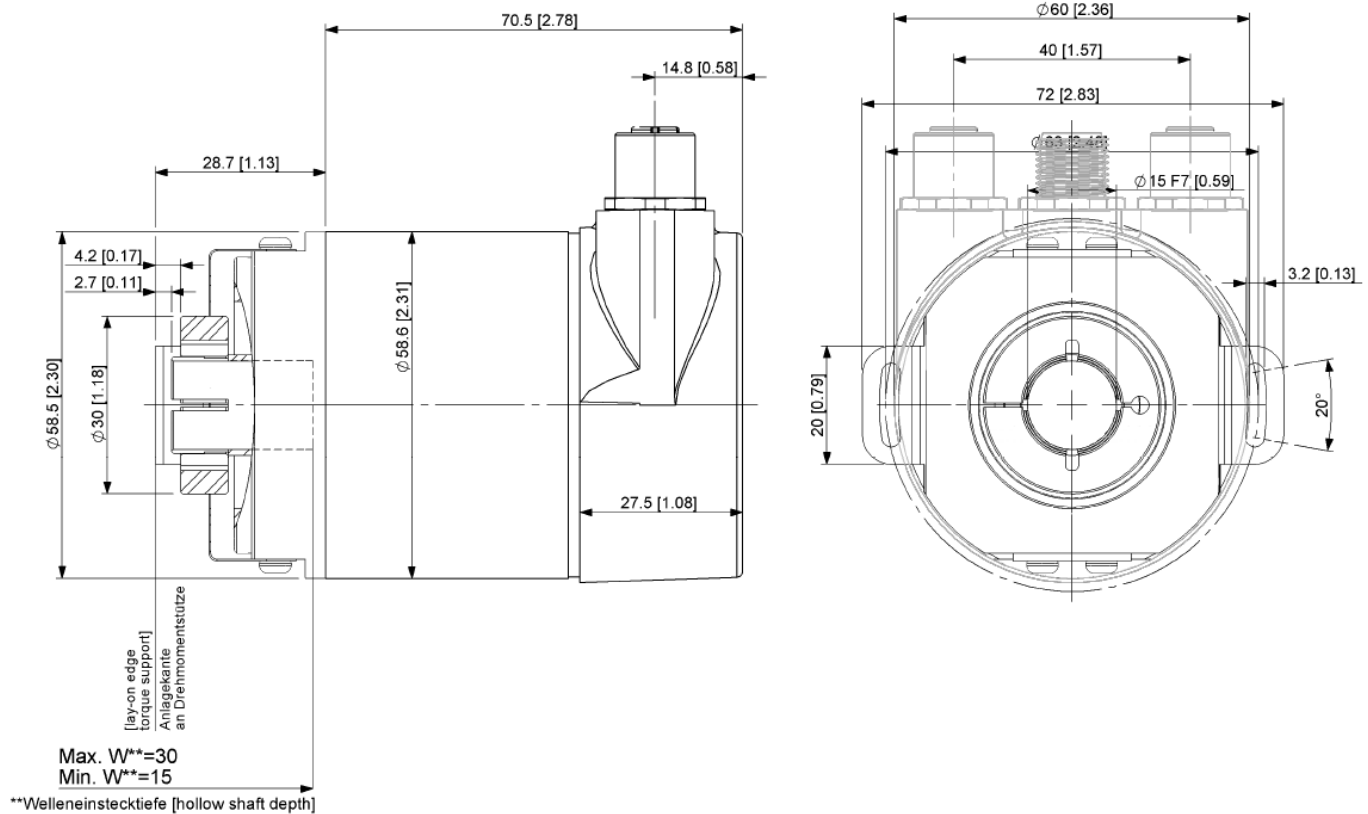


PROFINET ABSOLUTE MULTI-TURN ENCODER, MHK5 RANGE

- MHK5, standard encoder Ø58mm with Profinet interface:
- Robust and compact conception.
- Blind shaft version Ø 15 mm.
- Precision ball bearings with sealing flange.
- High temperatures performances -40°C...+85°C.
- Code disc made of unbreakable and durable plastic.
- Mechanical memorisation of the number of turns by gears.
- Resolution: 13 bits = 8192 steps/turn (max 16 bits).
- Number of turns: 12 bits = 4096 turns (max 14 bits).
- Polarity inversion and short circuit protection.
- Highly integrated circuit in SMD-technology.



MHK5 PROFINET DIMENSIONS



MECHANICAL DATA

Material (option stainless steel)	Cover : steel	Shocks (EN 60068-2-27)	≤ 100 g (half sine, 6 ms)
	Body : aluminum	Perm. shocks(EN 60028-2-29)	≤ 10 g (half sine, 16ms)
	Shaft: stainless steel	Vibration (EN 60068-2-6)	≤ 10 g (10Hz... 1 000Hz)
Max. shaft loading	Axial : 40 N	Weight	400 g
	Radial : 110 N	Operating temperature	- 40 ... + 85°C
Shaft Inertia	≤ 30 g.cm ²	Storage temperature	- 40 ... + 85°C
Torque	≤ 3 N.cm	Humidity	98 % without condensation
Speed (continuous)	12 000 RPM	Protection (EN 60529)	IP65

PROFINET ABSOLUTE MULTI-TURN ENCODER, MHK5 RANGE

SENSOR

Technology	Optical
Resolution Singleturn	13 bit
Resolution multiturn	12 bit
Multiturn technology	Mechanical gearing
Accuracy (INL)	± 0.0220° (14-16bit), ± 0.0439 (≤13bit)
Code	Binary

INTERFACE

Interface	Profinet
Profile	Profidrive Profil 4.x, Encoder profile 4.x
Diagnostics	Memory
Programming functions	Resolution, time base and filter for velocity, preset, counting direction, IP-Address
Transmission rate	10 / 100 Mbits
Interface cycle time	> 1ms

ELECTRICAL DATA

Supply voltage	10-30Vdc (on power supplies comply with EN50178)
Current consumption	≤ 230mA @ 10Vdc, ≤100mA @ 24Vdc
Power consumption	≤ 2.5 W
Start-up time	< 250 ms
Reverse polarity protection	Yes
Short circuit protection	Yes
EMC: Emitted Interference	DIN EN 61000-6-4
EMC: Noise immunity	DIN EN 61000-6-2
MTTF	65 years @ 60°C
Electrical lifetime	> 10 ⁵ h

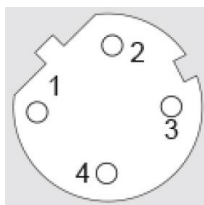
CONNECTION

Ethernet

4 pinouts, female, D coded

Pinout	Signal
1	Tx+
2	Rx+
3	Tx-
4	Rx-

Encoder view

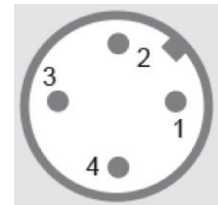


Power supply

4 pinouts male, A coded

Pinout	Signal
1	VS (10-30Vdc)
2	Not connected
3	GND
4	Not connected

Encoder view



ORDERING REFERENCE Contact the factory for special versions, ex: electronics, special flanges, connections...)

MHK5	EIB1	B	12	13	B	15	0	PRM
Absolute multiturn encoder	Profinet	Code : Binary	Number of turns 2 ¹² (4 096)	Resolution (pos./turn) 2 ¹³ (8 192)	Blind shaft	Shaft diameter : 15mm	Without mechanical option	M12 connection