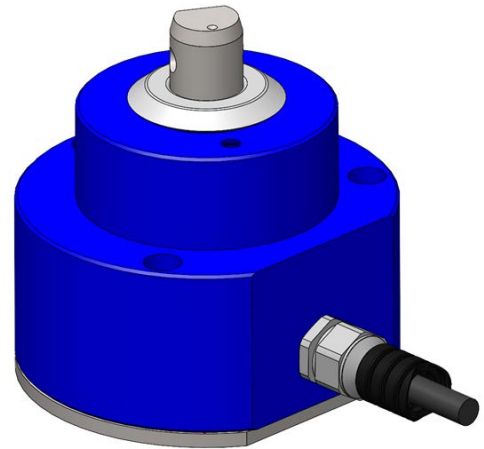


Special features

- 360° measuring range
- contactless measuring principle
- CAN 2.0b (ISO 11898-2)
- Optionally with terminating resistor
- Certification according to SIL 3 (IEC 61508), ASIL D (ISO 26262) and PL e, Category 3 (ISO 13849)
DEKRA - Certificate number: ZP/C024/23
- Approval according to ECE-R10
- Compact housing
- Extremely robust design
- Long lifetime
- High resolution
- Available in numerous versions (see order code), customized versions on request



Electrical data

Measuring range	360°
Interface	CAN 2.0b (ISO 11898-2)
Protocol	CANopen device profile for encoders CiA 406
Supply voltage	+9 ... +34 VDC
Current consumption	max. 35 mA bei 24 V
Resolution	14 Bit
Repeat accuracy	< 0,1°
Linearity	< 1°
Node number	64 (default setting), 1 ... 64 adjustable via Object Dictionary
Baud rate	250 kbit/s (default setting), 20/50/100/125/250/500/800/1000 kbit/s adjustable via Object Dictionary
CAN bus terminating resistor	Optional

Environmental properties (ISO16750)

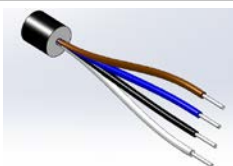
Protection class (ISO 20653) Housing/cable inlet	IP6K6K / IP6K8 (1m;12h) / IP6K9K
Operating temperature	-40 °C bis +85 °C (Deviations possible depending on the cable/connector used)
Storage temperature	-40 °C bis +85 °C (Deviations possible depending on the cable/connector used)
Vibration resistance	(in preparation)
Broadband noise	10 ... 2000 Hz average acceleration 57.9 m/s²
Sinusoidal oscillations	35 Hz, 100 ... 300 m/s²
Shock resistance	500 m/s² half sine 6 ms (in preparation)

Mechanical data

Shaft diameter	12 mm
Maximum axial load	200 N
Maximum radial load	400 N
Maximum moment	6 Nm
Lifetime	wear-free
Mechanical function angle	360° rotatable
Corrosion resistance	
Shaft:	Stainless steel
Housing:	Aluminum alloy, anodized (stainless steel on request)
Cover:	Stainless steel
Cable gland:	Brass, nickel plated

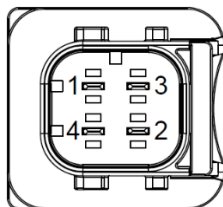
Electrical connection

4 core cable with open end



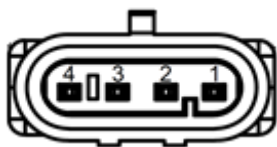
Wire color	Assignment
brown	Supply +UB
black	CAN-High
white	CAN-Low
blue	Ground GND

4-pin HDSCS connector (TE Connectivity 2-1703818-1, contacts tin plated)



Pin	Assignment
1	Ground GND
2	CAN-High
3	Supply +UB
4	CAN-Low

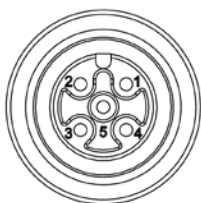
4-pole connector AMP-Superseal (1.5 Series 282106-1, contacts tin plated) (operating temperature -30°C ... +85°C)



Pin	Assignment
1	Supply +UB
2	CAN-High
3	CAN-Low
4	Ground GND

5-pole M12 connector

(ESCHA Type: WAS5, A-coding, shield not connected with thread, contacts gold plated)
(operating temperature -30°C ... +85°C)

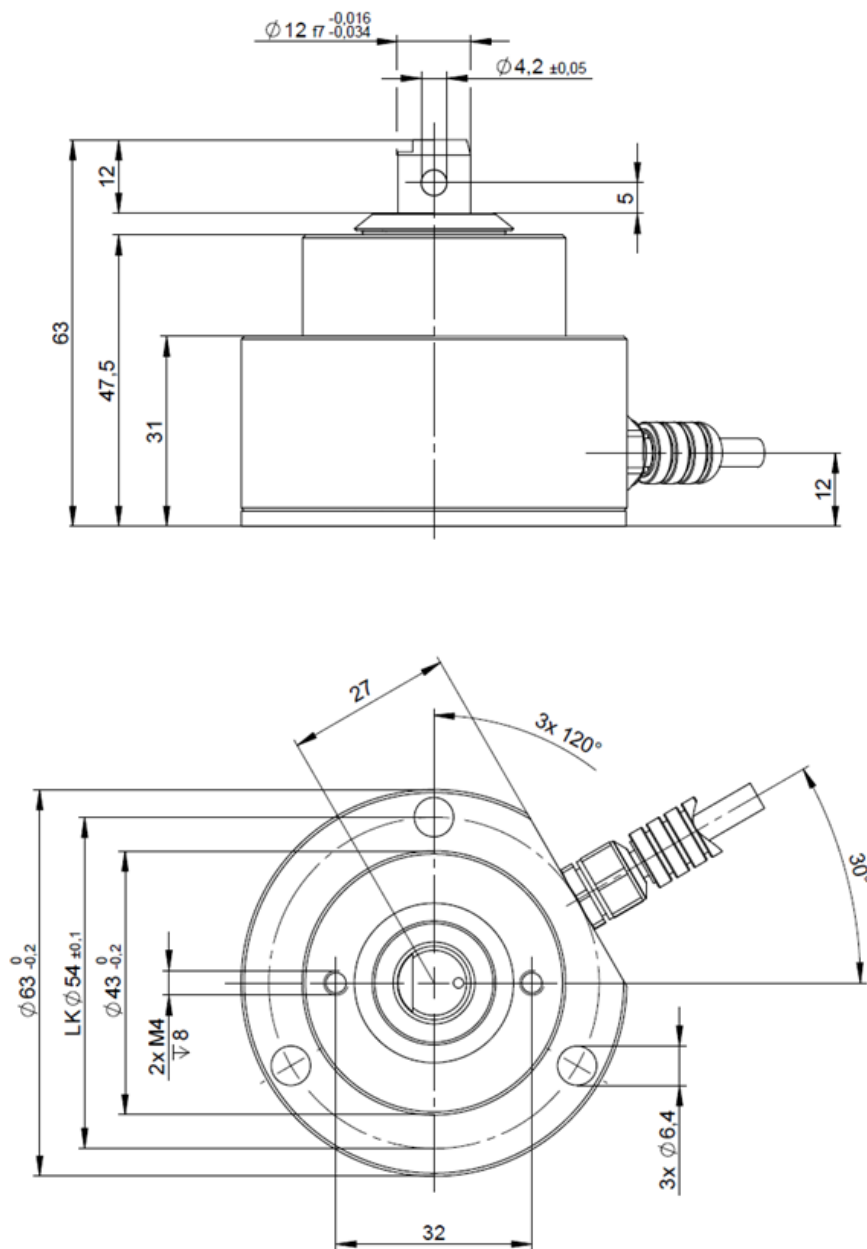


Pin	Belegung
1	Shield
2	Supply +UB
3	Ground GND
4	CAN-High
5	CAN-Low

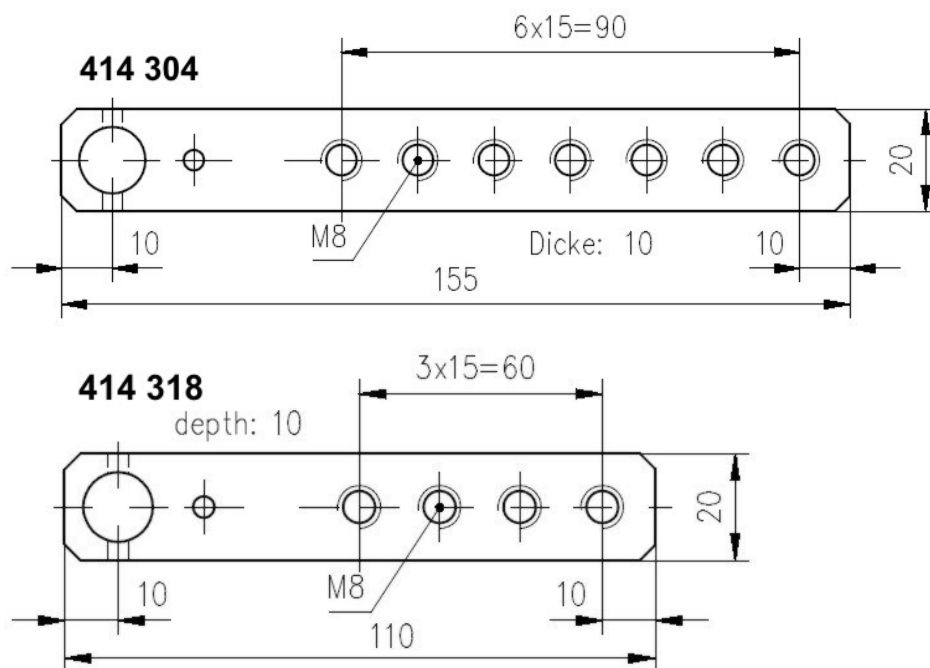
Order code

Mechanical design (housing)										
Standard (Aluminium)		0								
Connector / cable type / length										
without connector, 4x0,34 PUR unshielded for flexible use, cable length 1.0 m		A	1	0	E					
without connector, 4x0.34 PUR unshielded for flexible use, cable length 4.0 m		A	4	0	E					
5-pin M12x1 cable plug, 2x2x0.34 PUR shielded, twisted pair, flexible use, cable length 0.3 m		K	0	3	M					
4-pin HDSCS plug, 4x0.34 PUR unshielded, flex. use, cable length 1.5m + corrugated tube		E	1	5	F					
4-pin AMP Superseal, 4x0.34 PUR unshielded for flexible use, cable length 0.5m		S	0	5	E					
CAN terminating resistor										
		without 0								
		with 1								
Signal output										
CANopen device profile for encoders CiA, 406 node number 64, 250kbits/s										X
Customized special version										
		Standard								0
Lever variants										
		Type:								
		without -								
		155 mm / 7 x M8 414 304								
		110 mm / 4 x M8 414 318								

Dimensional drawing



Lever (pre-assembled)



Definition of rotational direction:

When looking at the shaft, a clockwise rotation of the shaft leads to an increasing angle of the encoder (adjustable via Object Dictionary).



This data sheet describes the typical values and properties of the series. Deviations are possible here depending on the product. For product-specific values and properties, please refer to the product data sheet.

Technical changes due to further technical development reserved.