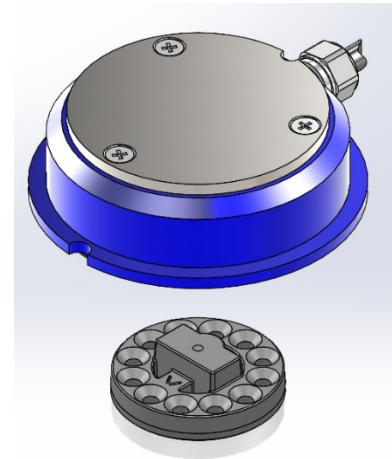


Special features

- 360° measuring range
- Contactless measuring principle
- CAN 2.0b (ISO 11898-2)
- 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
- Two-part design for direct integration into bearing arrangements
- Extremely robust construction
- Long service life
- High resolution
- Available in different housing versions (see order code)



Electrical data

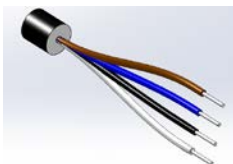
Measuring range	360°
Interface	CAN 2.0b (ISO 11898-2)
Protocol	CANopen device profile for encoders CiA 406
Supply voltage	+9 ... +34 VDC
Power consumption	max. 35 mA at 24 V
Resolution	14 bit
Repeatability	< 0.1°
Linearity	< 1°
Node number	64 (default setting), 1 ... 64 adjustable via object dictionary
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 entry	IP6K6K / IP6K8 (1m;12h) / IP6K9K (deviations possible depending on housing design.)
Operating temperature	-40 °C to +85 °C (deviations possible depending on the cable/connector used)
Storage temperature	-40 °C to +85 °C (deviations possible depending on the cable/connector used)
Vibration resistance	(in preparation)
Random vibrations	10 ... 2000 Hz average acceleration 57.9 m/s ²
Sinusoidal oscillations	35 Hz, 100 ... 300 m/s ²
Shock resistance	500 m/s ² Half sine 6 ms (in preparation)

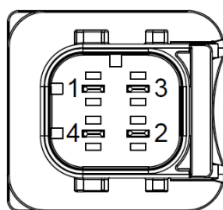
Electrical connection

4 core cable with open end



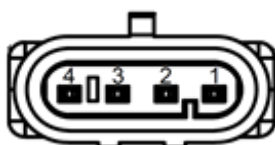
Wire color	Assignment
brown	Supply +UB
black	CAN-High
white	CAN-Low
blue	Ground GND

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



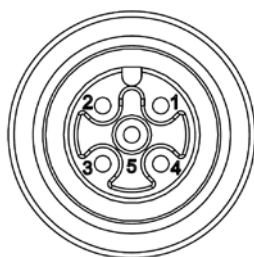
Pin	Assignment
1	Ground GND
2	CAN-High
3	Supply +UB
4	CAN-Low

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



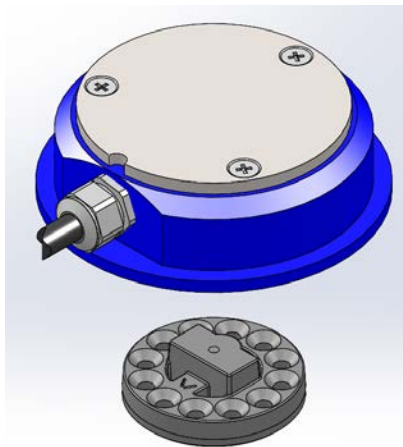
Pin	Assignment
1	Supply +UB
2	CAN-High
3	CAN-Low
4	Ground GND

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

**2-part design for integration in bearing arrangements
without grease lubrication pressure**



Housing Ø66 mm

Mechanical data

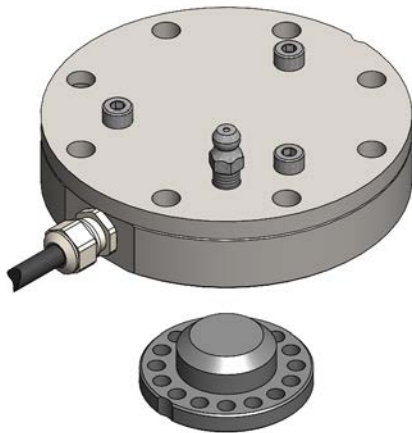
Lifetime	Wear-free
Mechanical setting angle	360° rotatable
Corrosion resistance	
Magnetic carrier:	Plastic
Housing:	Aluminium alloy, anodised
Cover:	Stainless steel
Cable gland:	Brass, nickel-plated
Installation area	The angle transducers are not suitable for installation areas with grease lubrication pressure!

Definition of rotational direction

View on the back side of the transducer and steady magnet carrier unit, clockwise rotation of the transducer results in an increasing angle of the transducer (settable via Object Dictionary).



2-part design for integration in steering knuckle bearing arrangements with grease lubrication pressure



Housing Ø85 mm



Housing Ø55 mm

Mechanical data

Lifetime	Wear-free
Mechanical setting angle	360° rotatable
Corrosion resistance	
Magnetic carrier:	Aluminium alloy
Housing:	Stainless steel
Cover:	Stainless steel
Cable gland:	Brass, nickel-plated
Installation area	The angle transducers are suitable for installation areas with grease pressure of up to 80 bar.

Definition of rotational direction

View on the back side of the transducer and steady magnet carrier unit, clockwise rotation of the transducer results in an increasing angle of the transducer (settable via Object Dictionary).



Order code

533 72W		-			-					-		
Housing designs / installation spaces												
Bearing arrangements without grease pressure (special vehicles or functions)												
Ø66mm with plastic magnet carrier Ø34mm						A	A					
Steering knuckle bearing arrangements with grease pressure (road vehicles)												
Ø85mm with aluminium magnet carrier Ø40mm						K	K					
Ø55mm for Kessler installation space 10.9271 with aluminium magnet carrier Ø37mm						L	L					
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, for 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			
Signal output												
						CANopen device profile for encoders CiA, 406 node number 64, 250kbits/s						X
						CANopen device profile for encoders CiA, 406 node number 64, 250kbits/s with CAN terminating resistor						R
Customized special version												
Standard 0												

This data sheet describes the typical values and properties of the series. Deviations are possible 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.