

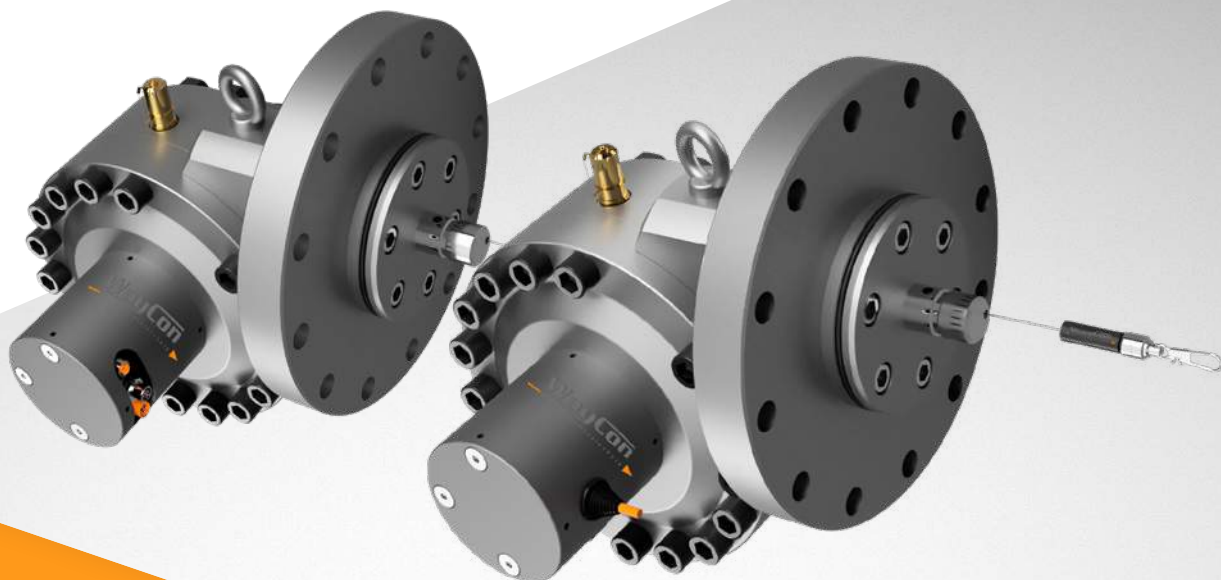
DRAW WIRE SENSOR

Links to further documents for this series:

[Installation guide](#)

[Manual](#)

[Catalogue](#)



SX300 SERIES

Key-Features:

- Measurement range up to 15 m
- Pressure-sealed up to 300 bar
- Output signals: 4...20 mA, SSI, CANopen, Profibus, EtherCAT, Profinet, further on request
- Alternative draw wire mechanics for encoder installation
- Unpressurised encoder

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TECHNICAL DATA MECHANICS

Measurement range	[m]	10 / 15
Linearity	[%]	±0.05 (depending on the used encoder)
Sheave circumference	[mm]	568.9
Operating temperature	[°C]	-20...+70
Hydraulic fluid		only non-hazardous fluids (non-flammable, non-toxic), no gaseous media
Operating pressure	[bar]	300 (30 MPa)
Testing pressure	[bar]	400 (40 MPa)
Pressure port		Minimes 1620
Piston travel speed	[m/s]	max. 2 (in air) ¹⁾
Rope tension	[N]	start of measurement range: 10...11.5 (13...16.5) end of measurement range: 29...31.5 (37...43)
Wire sag (calculated)	[mm]	<30
Connector orientation		adjustable in 90° steps
Weight	[kg]	61
Housing ²⁾		42CRMo4 (1.7228)
Draw wire		stainless steel 1.4301, Ø 0.69 mm
Encoder requirements	[mm]	flange with stator coupling Ø 58 pitch circle diameter for fixing screws 63 hollow shaft Ø 15

¹⁾ identified laboratory value without hydraulic fluid

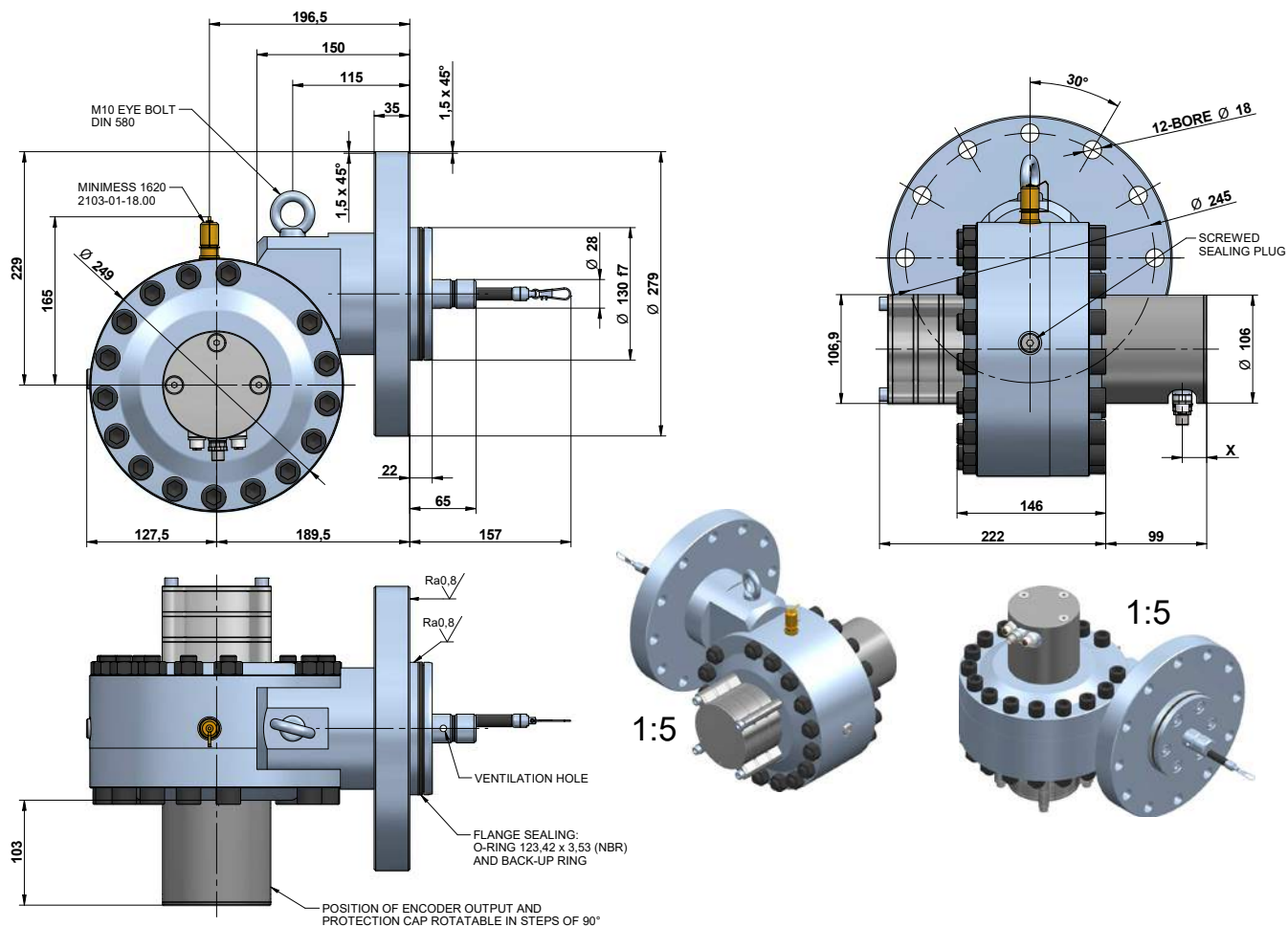
²⁾ In case of outdoor use we recommend to varnish the housing additionally. Attention: Do not varnish moving parts (encoder shaft, coupling...!)

TECHNICAL DATA ENCODER

Output signal		4...20 mA	SSI	CANopen	Profibus-DP	EtherCAT	Profinet
Encoder type		M36-SC-K-10-420A-SR12-IP67	8.5883.6624.G322	8.5888.6622.2123	8.5888.6632.3113	8.5888.66B2.B212	8.5888.66C2.C212
Linearity	[%]	±0.05 (independent of the measurement range)					
Resolution scalable (via Software)		no	yes				
Resolution standard	[Pulses/mm] [Bit]	- 12	14.4 13				
Sensor element		Multiturn-magnetic	Multiturn-Absolute-Encoder with optical disc				
Connection		connector M12, radial, 5 pins	connector M23, radial, 12 pins	2 x connector M12, radial	3 x connector M12, radial	3 x connector M12, radial, 4 pins	
Power supply	[VDC]	10...30, reverse polarity protection of the power supply					
Current consumption (no load, 24 VDC)	[mA]	max. 30	max. 50	max. 100	max. 120		max. 200
Protection class		IP67	IP67				
Humidity		-	max. 90 % relative, no condensation				
Temperature	[°C]	-40...+85	-40...+90	-40...+80			-40...+85
Special cables needed		no	yes				
Links to encoder files		data sheet manual	data sheet	data sheet manual EDS file	data sheet manual GSD file	data sheet manual XML file	data sheet manual GSDML file

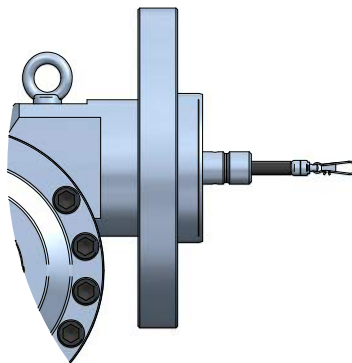
TECHNICAL DRAWING

Flange type F22 (piston sealing)



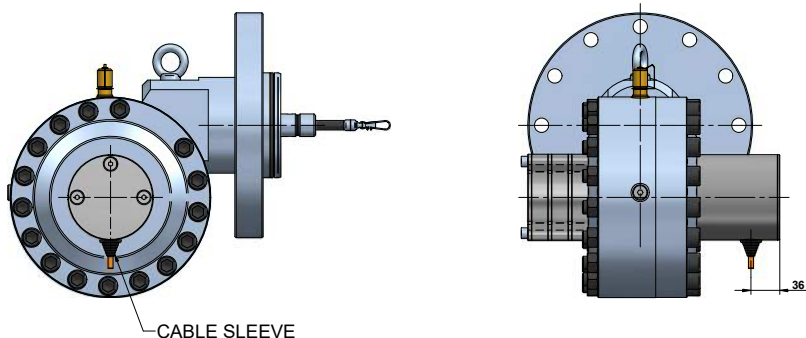
Signal	X [mm]
4...20 mA	36
SSI	51,8
CANopen	26,5
Profibus	26,5
EtherCAT	24
Profinet	24

Flange type F12 (rod sealing)



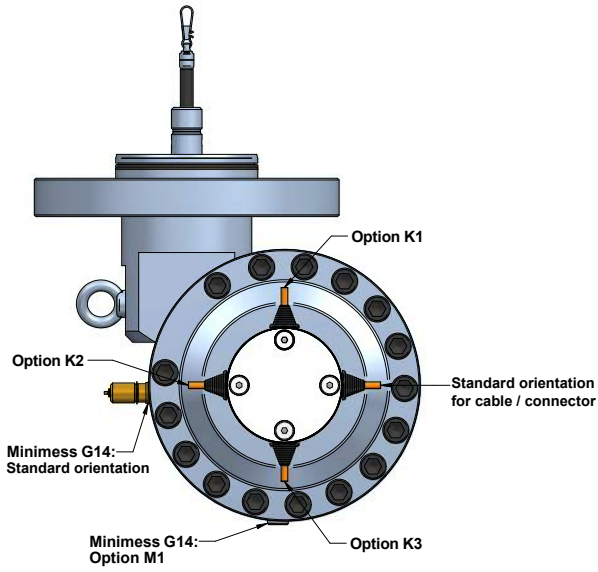
F12/F22 with new protection cap.
Old protection cap (F1/F2 on request).

Cable sleeve only for analogue output signal 4...20 mA with the combination of the cable K5P

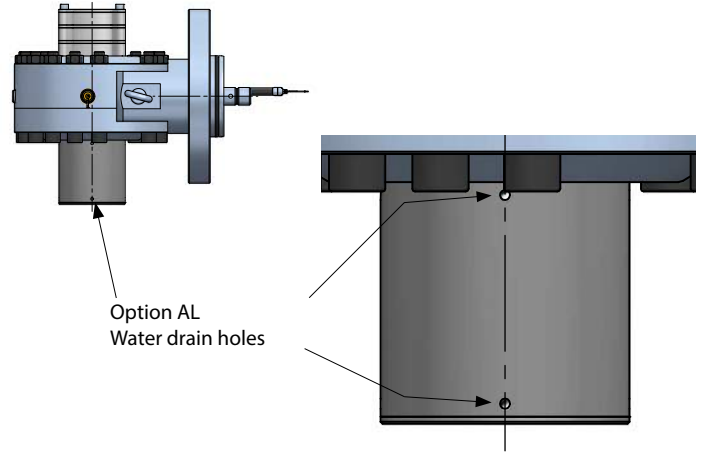


TECHNICAL DRAWING

Option K1/K2/K3/M1: Orientation cable/connector and Minimes



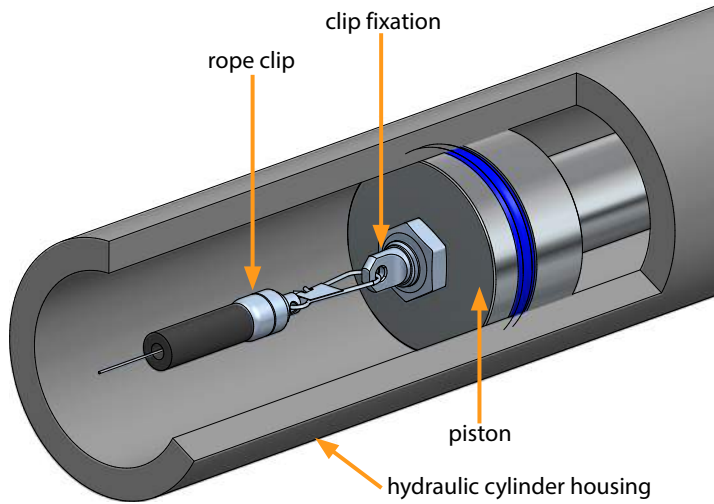
Option AL*: 8x Water drain holes (Ø 4.3 mm) AL*



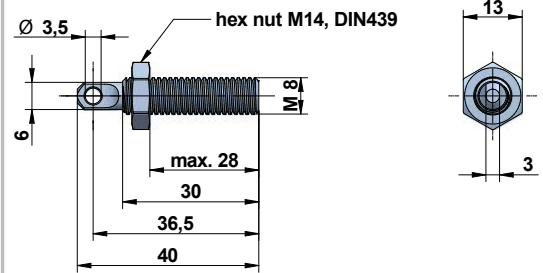
*In delivery included: 8 plugs

ACCESSORIES

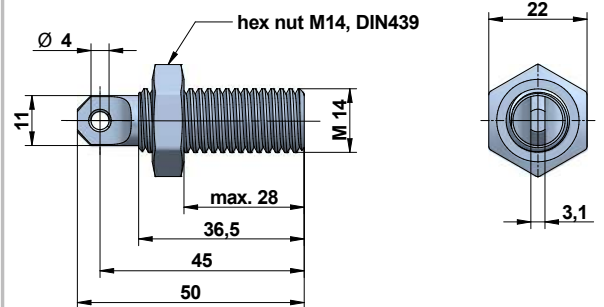
Piston wire fixation



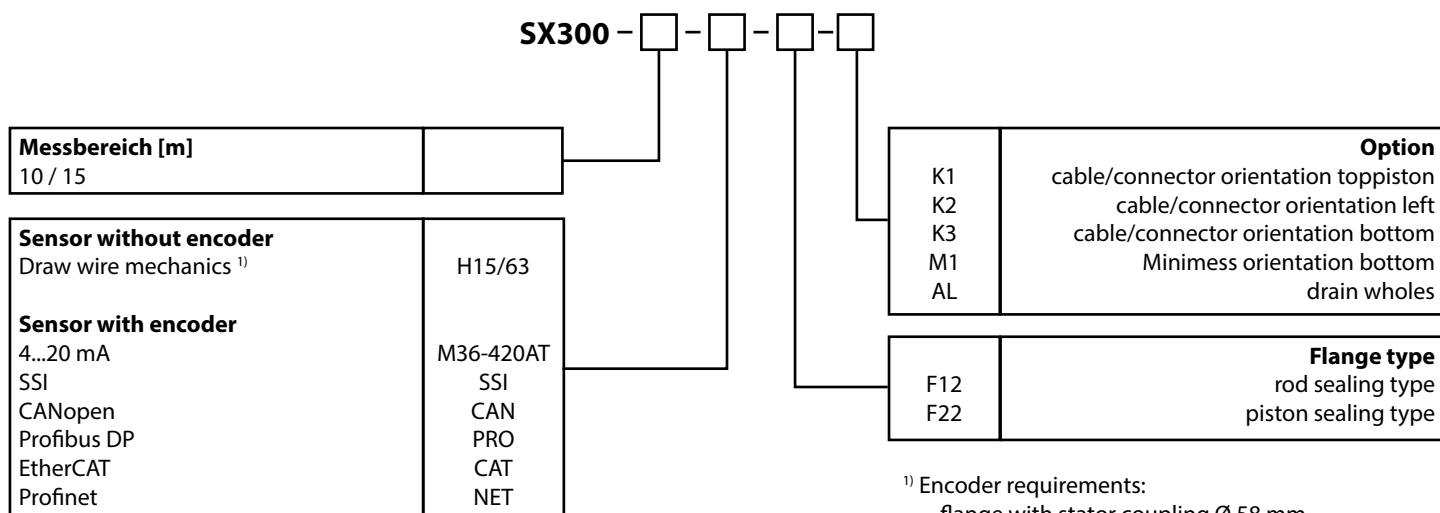
Clipfixation M8



Clipfixation M14



ORDER CODE



- ¹⁾ Encoder requirements:
- flange with stator coupling Ø 58 mm
 - pitch circle diameter fixing screws Ø 63 mm
 - hollow shaft Ø 15 mm

ACCESSORIES

Clipfixation M8	for fastening the measuring wire to the piston
Clipfixation M14	for fastening the measuring wire to the piston
AL-Plug	Plugs (10 pcs) for the water drain wholes

Cable with mating connector M12 (female), only for 4...20 mA	
K5P5M-S-M12	5 poles, shielded , 5 m
K5P10M-S-M12	5 poles, shielded , 10 m

Subject to change without prior notice.

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