

Robust Draw Wire Adapters SL3001 - SL3030



- Robust ALU housing
- Fitted with dust bellow and brushes as standard
- For mounting encoders with 58 mm synchro or clamping flange
- Backlash-free encoder coupling
- Also available in a version with stainless steel drum, 1.4404 (316L)
- Can also be supplied with offshore coating

Description:

The draw wire adapter enables reliable measurements of linear displacements, for example in industrial automation, machine engineering or measurement setups. The robust design ensures a long lifetime, even under demanding conditions.

It works on the principle of a retractable cable (draw wire), which converts linear movements of an object into a rotational movement. This draw wire adapter is specifically designed to be compatible with a rotary encoder, which can be mounted on the shaft.

The draw wire adapters are available for encoders with 2 types of flanges.

- 1) 58 mm clamping flange with a 10 mm shaft.
- 2) 58 mm synchro flange with a 6 mm shaft.

Especially for offshore applications, there are versions with a stainless-steel drum. Here the entire set (after mounting the encoder) can optionally be provided with offshore coating.

Technical data SL3001 ... SL3003 (GS80)

	SL3001	SL3002	SL3003
Gegevens			
Measuring length	1 m	2 m	3 m
Drum circumference	200,0 ± 0,1 mm		
Linearity error	0,1 %		
Meetdraad			
Diameter	1,35 mm		
Material	Stainless steel 1.4401 (316L)		
Weight	7,1 g/m		
Min. bending radius	17 mm		
Max. extension angle	± 3,0 °		
Algemeen			
Housing	ALU, anodized		
Max. velocity	8 m/s		
Max. acceleration	40 m/s²		
Shock resistance	25 g		
Spring force	5-15 N		
Temperature range	-20...70°C		
Lifespan	≤ 1 mln. load cycles		
Protection class	IP 64		
Dust bellows	Yes		
Brush chamber + brushes	Yes		
Weight	0,9 kg	1,1 kg	1,5 kg

Technical data SL3005 ... SL3030 (GS130)

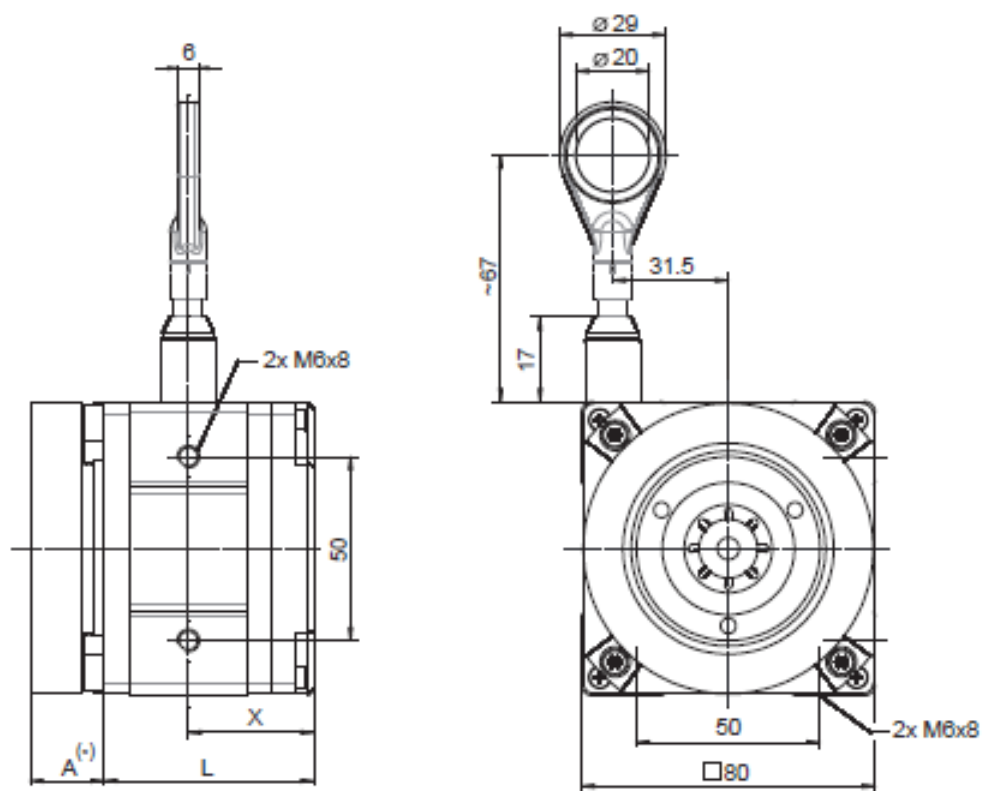
	SL3005	SL3010	SL3015	SL3020	SL3025	SL3030
Gegevens						
Measuring length	5 m	10 m	15 m	20 m	25 m	30 m
Drum circumference	334,1 ± 0,1 mm					
Linearity error	0,1 %					
Meetdraad						
Diameter	1,35 mm					
Material	Stainless steel 1.4401 (316L)					
Weight	7,1 g/m					
Min. bending radius	17 mm					
Max. extension angle	± 3,0 °					
Algemeen						
Housing	ALU, anodized					
Max. velocity	8 m/s					
Max. acceleration	40 m/s²					
Shock resistance	25 g					
Spring force	10-21 N					
Temperature range	-30...70°C					
Lifespan	≤ 1 mln. load cycles					
Protection class	IP 64					
Dust bellows	Yes					
Brush chamber + brushes	Yes					
Weight	2,5 kg	3,5 kg	5,0 kg	6,0 kg	7,5 kg	8,5 kg

Mounting

The wire inlet must not be mounted upright. This can cause water to run along the wire into the housing. Due to the twisted construction of the wire, there is no smooth surface and 100% sealing is not possible. With a guide roller (see accessories) the draw wire adapter can be mounted in other desired positions.

The maximum pull-out angle is ± 3.0°. If the wire is pulled out at an angle, it is better to mount a guide roller.

Dimensions SL3001 ... SL3003



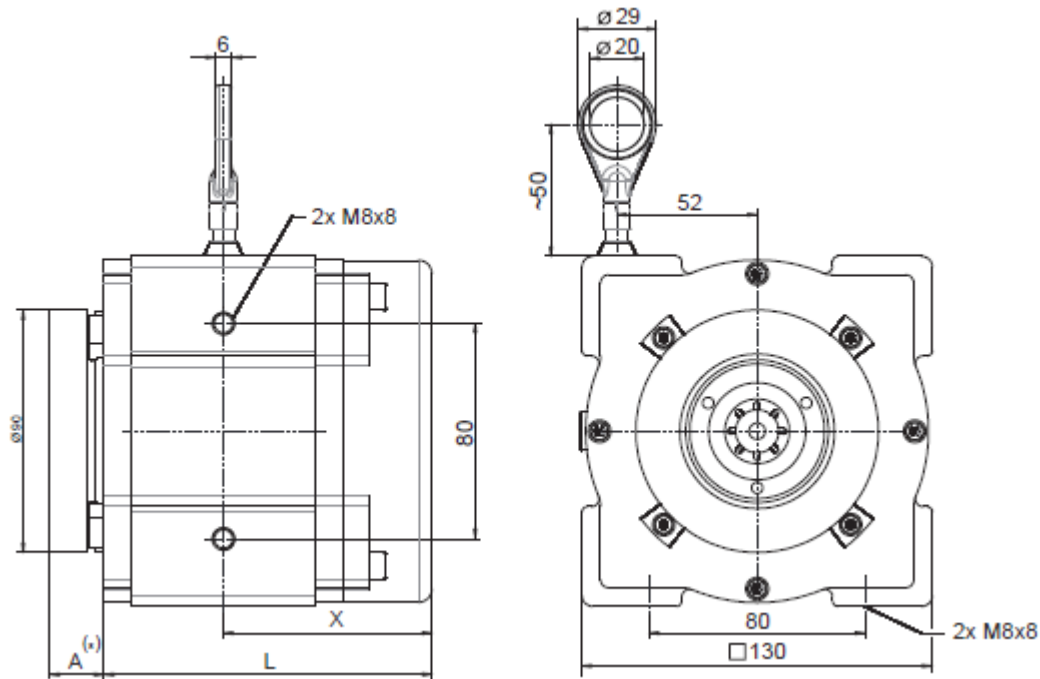
Dimensions in mm

Dimensions SL3001 ... SL3003 (GS80)

Serie	Measuring length	Distance L	Distance X
SL3001	1 m	57,0 mm	34,0 mm
SL3002	2 m	72,0 mm	41,5 mm
SL3003	3 m	97,0 mm	59,0 mm

(*) Distance A depends on the mounted flange (20 mm for synchro flange X1, 36,6 mm for clamping flange X2)

Dimensions AL3005 ... SL3030



Dimensions in mm

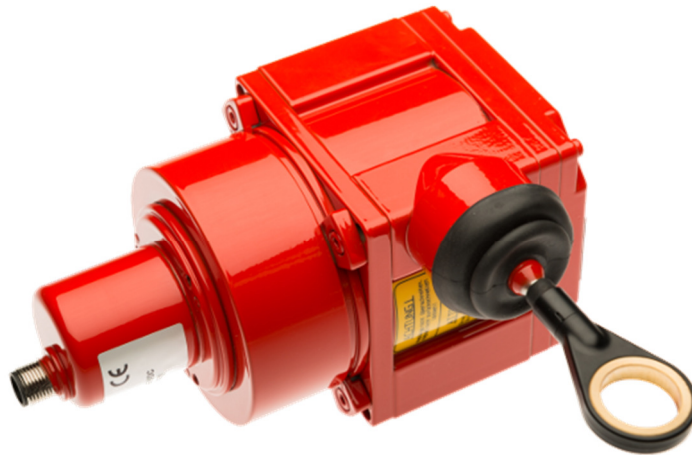
Dimensions SL3005 ... SL3030 (GS130)

Serie	Measuring length	Distance L	Distance X
SL3005	5 m	121,7 mm	77,4 mm
SL3010	10 m	166,7 mm	99,9 mm
SL3015	15 m	235,7 mm	146,4 mm
SL3020	20 m	280,7 mm	168,9 mm
SL3025	25 m	349,7 mm	215,4 mm
SL3030	30 m	394,7 mm	237,9 mm

(*) Distance A depends on the mounted flange (20 mm for synchro flange X1, 36,6 mm for clamping flange X2)

Offshore coating

The draw wire adapters can be provided with offshore coating. This involves applying a paint system that complies with the IEC standard 60068-2-52 grade 1 (28d). This extra layer protects the draw wire adapter against moisture and sea salt and thus significantly extends its lifespan. In fact, it is a complete 'coating system, built up from various layers, with each layer fulfilling its own function.



Order information synchro flange (X1)

	Artikel	Meetlengte	Trommel
FSL3001-001	SL3001/GS80/X1	1 m	ALU
FSL3002-002	SL3002/GS80/X1	2 m	ALU
FSL3003-001	SL3003/GS80/X1	3 m	ALU
FSL3003-005	SL3003/GS80/X1/T/V4A	3 m	Stainless steel 1.4401 (316L)
FSL3005-001	SL3005/GS130/X1	5 m	ALU
FSL3005-003	SL3005/GS130/X1/T/V4A	5 m	Stainless steel 1.4401 (316L)
FSL3010-001	SL3010/GS130/X1	10 m	ALU
FSL3010-003	SL3010/GS130/X1/T/V4A	10 m	Stainless steel 1.4401 (316L)
FSL3015-001	SL3015/GS130/X1	15 m	ALU
FSL3015-003	SL3015/GS130/X1/T/V4A	15 m	Stainless steel 1.4401 (316L)
FSL3020-001	SL3020/GS130/X1	20 m	ALU
FSL3020-003	SL3020/GS130/X1/T/V4A	20 m	Stainless steel 1.4401 (316L)
FSL3025-001	SL3025/GS130/X1	25 m	ALU
FSL3025-003	SL3025/GS130/X1/T/V4A	25 m	Stainless steel 1.4401 (316L)
FSL3030-001	SL3030/GS130/X1	30 m	ALU
FSL3030-004	SL3030/GS130/X1/T/V4A	30 m	Stainless steel 1.4401 (316L)

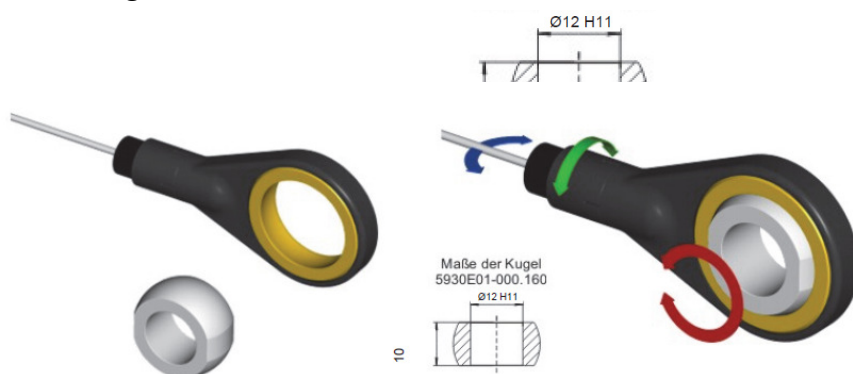
Order information clamping flange (X2)

	Artikel	Meetlengte	Trommel
FSL3001-002	SL3001/GS80/X2	1 m	ALU
FSL3002-003	SL3002/GS80/X2	2 m	ALU
FSL3003-002	SL3003/GS80/X2	3 m	ALU
FSL3003-006	SL3003/GS80/X2/T/V4A	3 m	Stainless steel 1.4401 (316L)
FSL3005-002	SL3005/GS130/X2	5 m	ALU
FSL3005-004	SL3005/GS130/X2/T/V4A	5 m	Stainless steel 1.4401 (316L)
FSL3010-002	SL3010/GS130/X2	10 m	ALU
FSL3010-004	SL3010/GS130/X2/T/V4A	10 m	Stainless steel 1.4401 (316L)
FSL3015-002	SL3015/GS130/X2	15 m	ALU
FSL3015-004	SL3015/GS130/X2/T/V4A	15 m	Stainless steel 1.4401 (316L)
FSL3020-002	SL3020/GS130/X2	20 m	ALU
FSL3020-004	SL3020/GS130/X2/T/V4A	20 m	Stainless steel 1.4401 (316L)
FSL3025-002	SL3025/GS130/X2	25 m	ALU
FSL3025-004	SL3025/GS130/X2/T/V4A	25 m	Stainless steel 1.4401 (316L)
FSL3030-002	SL3030/GS130/X2	30 m	ALU
FSL3030-003	SL3030/GS130/X2/T/V4A	30 m	Stainless steel 1.4401 (316L)

Accessories

Various accessories are available for the draw wire adapter.

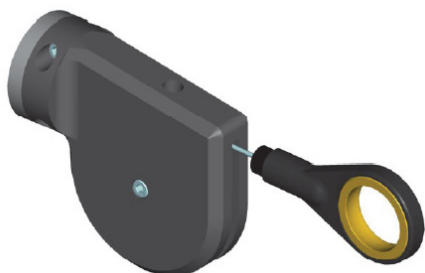
Mounting ball SL3xxx/Ball



This enables the draw wire to be mounted to the moving object and compensates for misalignments or angular deviations.

Guide roller SL3xxx/GSxx/RoI

This guide roller allows for a change in direction of the draw wire to be achieved and can be supplied as an accessory and can be mounted afterwards.



Order information accessories

	Artikel	Trommel
FSLG-001	SL3xxx/Ball	Mounting ball
FSLGS80-004	SL3xxx/GS80/RoI	Guide roller for SL30xx/GS80/xx
FSLGS130-004	SL3xxx/GS130/RoI	Guide roller for SL30xx/GS130/xx
FSLG-008	SL3xxx/Brush	Brush for replacement (4x per SL30xx unit)



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