

Measuring units ASDLP

Key features and type codes



Systematic safety in the process industry

The ASDLP measuring unit is optimised for the process industry and can be used for closed and open-loop control of gate slides, flat slide valves and weirs particularly in the area of water, sewage and silage technology and in the paper and bulk goods industry. The movement of the linear actuator DLP is, from a purely mechanical point

of view, sensed steplessly. The swivel angle is optimised with respect to the usability of various positioning controllers. The system offers the option of mounting the positioning controller normally used for quarter-turn actuators in the area of process automation directly onto the cylinder.

- Port pattern to Namur (VDI/VDE 3845) for direct assembly of conventional positioning controllers
- Purely mechanical conversion of the linear movement into a rotational movement to actuate the positioning controllers
- Unlimited use in explosive atmospheres
- Specially suited for use outdoors
- Sturdy and reliable, even in aggressive environments
- Highly corrosion resistant
- Clean, smooth surface thanks to its elegant design
- Swivel angle 36 ... 108°

Type codes

		ASDLP	–	120	–	120/140
Type						
ASDLP	Measuring unit for linear actuators DLP					
Piston Ø [mm]						
80	Corresponding piston Ø of the linear actuator					
100						
125						
160						
Stroke [mm]						

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Technical data



Interface to the linear actuator

The measuring unit is attached by clamping it into existing slots in the linear actuator DLP. Existing DLP linear actuators can thus be retrofitted with the measuring unit without requiring additional attachments.

Interface to the positioning controller

Port pattern to Namur VDI/VDE 3845



General technical data	
Assembly position	Any
Max. speed [m/s]	0.05

Rotation angle [°]			
Gearing for stroke [mm]	50 ... 100	100 ... 200	200 ... 600
Theoretical angle of rotation [°]	54 ... 108	50.5 ... 101	36 ... 108

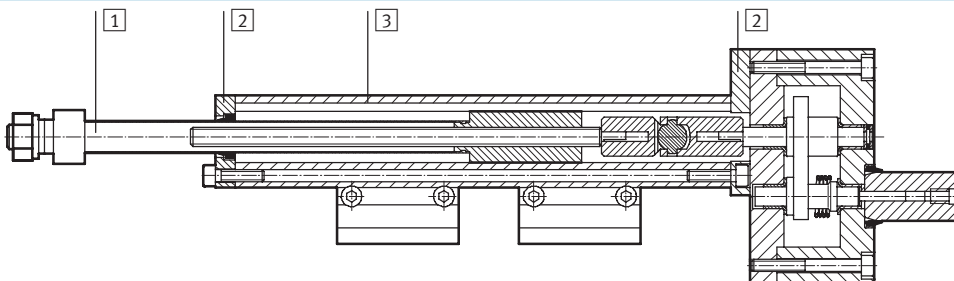
Operating and environmental conditions	
Ambient temperature ¹⁾ [°C]	-20 ... +80
Corrosion resistance class CRC ²⁾	3
CE marking (see declaration of conformity) → www.festo.com	In accordance with EU EMC directive
ATEX specification	II 2 GD c T6 T80°C
ATEX ambient temperature	-20°C ≤ Ta ≤ +80°C

- 1) Note operating range of positioning controllers
- 2) Corrosion resistance class 3 according to Festo standard 940 070
Components requiring higher corrosion resistance. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface

Weights [g]				
Size	80	100	125	160
Basic weight with 0 mm stroke	1,496	1,506	1,427	1,427
Additional weight per 10 mm stroke	23.9	23.9	23.9	23.9

Materials

Sectional view



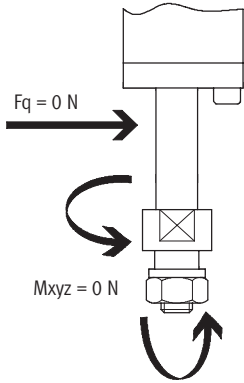
Measuring unit	
1) Piston rod	Smooth-rolled, high-alloy steel
2) Bearing cap	Extruded aluminium
3) Cylinder barrel	Smooth anodised aluminium
- External screws	Stainless steel
- Rod bearing	Smooth composite material
- Seals	Polyurethane, nitrile rubber

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Permissible loads on the measuring unit and on its telescopic measuring rod

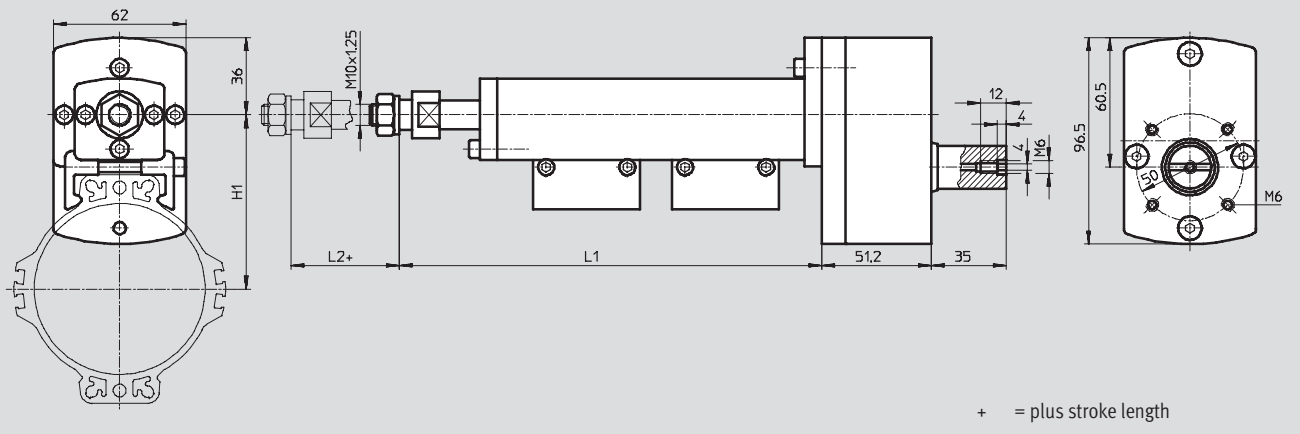


Permissible drive torque or resetting torque, as appropriate, of the positioning controller $M_{\text{driv. max}} = 2.5 \text{ Nm}$

Permissible lateral load on the telescopic measuring rod $F_q = 0 \text{ N}$

Permissible torques on the telescopic measuring rod $M_{xyz} = 0 \text{ Nm}$

Dimensions Download CAD data → www.festo.com/en/engineering



Size	H1	L1	L2
[mm]		±3.5	
ASDLP-80-50/90	81.5	285	43.8 ... 52.5
ASDLP-80-X		195+	
ASDLP-100-50/90	93	289	47.8 ... 56.5
ASDLP-100-90/110		309	
ASDLP-100-X		199+	
ASDLP-125-120/140	109	308	16.8 ... 25.5
ASDLP-125-X		168+	
ASDLP-160-140/170	127	338	16.8 ... 25.5
ASDLP-160-200/220		388	
ASDLP-160-250/270		438	
ASDLP-160-X		168+	

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1.1 Actuators
Linear actuators

Ordering data			
For DLP with piston Ø [mm]	Stroke [mm]	Part No.	Type
Kept in stock			
80	50 ... 90	529 085	ASDLP-80-50/90
100	50 ... 90	529 087	ASDLP-100-50/90
	90 ... 110	529 088	ASDLP-100-90/110
125	120 ... 140	529 090	ASDLP-125-120/140
160	140 ... 170	529 092	ASDLP-160-140/170
	200 ... 220	529 093	ASDLP-160-200/220
	250 ... 270	529 094	ASDLP-160-250/270
On request			
80	50 ... 600	529 084	ASDLP-80-X
100	50 ... 600	529 086	ASDLP-100-X
125	50 ... 600	529 089	ASDLP-125-X
160	50 ... 600	529 091	ASDLP-160-X