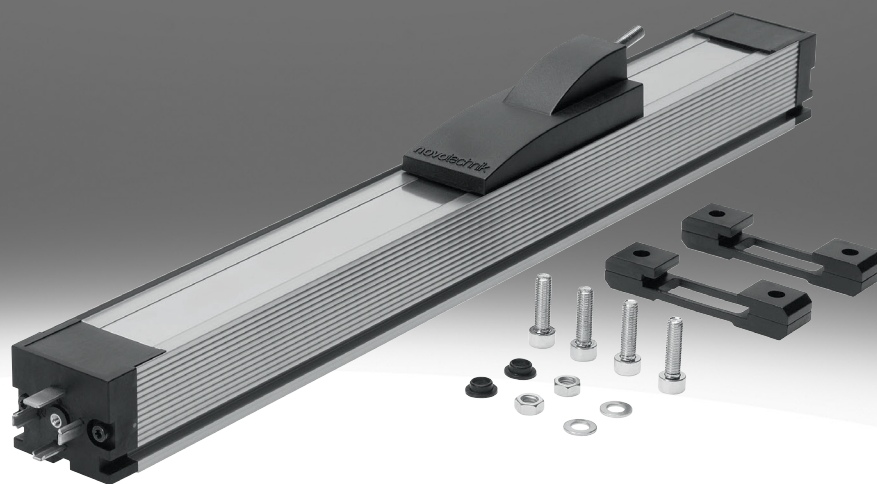


# Displacement encoder MLO-POT-TLF

**FESTO**



Type code

001	Series
MLO	Displacement encoder
002	Measuring principle
POT	Potentiometric

003	Stroke [mm]
225	225
300	300
360	360
450	450
500	500
600	600
750	750
1000	1000
1250	1250
1500	1500
1750	1750
2000	2000
004	Version
TLF	Profile

## Datasheet

General technical data						
Stroke	225 mm	300 mm	360 mm	450 mm	500 mm	600 mm
Design	With cover strip, With moving slide, Open profile					
Displacement resolution	0.01 mm					
Max. travel speed	10 m/s					
Max. travel acceleration	200 m/s <sup>2</sup>					
Mounting position	optional					
Angle offset of driver	± 1°					
Electrical connection	4-pin, Type A, Plugs, To DIN 43650, Square design					
Product weight	900 g	1,000 g	1,100 g	1,200 g	1,300 g	1,500 g

General technical data						
Stroke	750 mm	1,000 mm	1,250 mm	1,500 mm	1,750 mm	2,000 mm
Design	With cover strip, With moving slide, Open profile					
Displacement resolution	0.01 mm					
Max. travel speed	10 m/s					
Max. travel acceleration	200 m/s <sup>2</sup>					
Mounting position	optional					
Angle offset of driver	± 1°					
Electrical connection	4-pin, Type A, Plugs, To DIN 43650, Square design					
Product weight	1,800 g	2,200 g	2,500 g	3,000 g	3,500 g	3,900 g

Electrical data						
Stroke	225 mm	300 mm	360 mm	450 mm	500 mm	600 mm
Nominal operating voltage DC	10 V					
Permissible voltage fluctuations	< 1%					
Max. operating voltage DC	42 V					
Max. current consumption	4 mA					
Recommended wiper current	1 µA					
Max. wiper current, short-time <sup>1)</sup>	10 mA					
Connection resistance	5 kOhm					
Connection resistance tolerance	20%					
Non-dependent linearity	0.07%	0.06	0.05%			
Temperature coefficient	5 ppm/K					
Functional principle of measuring system	Analogue					

<sup>1)</sup> Only permissible for a short period in the event of a fault.

Electrical data						
Stroke	750 mm	1,000 mm	1,250 mm	1,500 mm	1,750 mm	2,000 mm
Nominal operating voltage DC	10 V					
Permissible voltage fluctuations	< 1%					
Max. operating voltage DC	42 V					
Max. current consumption	4 mA					
Recommended wiper current	1 µA					
Max. wiper current, short-time <sup>1)</sup>	10 mA					
Connection resistance	10 kOhm			20 kOhm		
Connection resistance tolerance	20%					
Non-dependent linearity	0.04%		0.03%		0.02%	
Temperature coefficient	5 ppm/K					
Functional principle of measuring system	Analogue					

<sup>1)</sup> Only permissible for a short period in the event of a fault.

## Datasheet

### Operating and environmental conditions

Ambient temperature	-30 ... 100°C
Functional principle of measuring system <sup>1)</sup>	Analogue
Vibration resistance to DIN/IEC 68 Part 2-6	Tested to severity level 2
Continuous shock resistance to DIN/IEC 68 Part 2-82	Tested to severity level 2

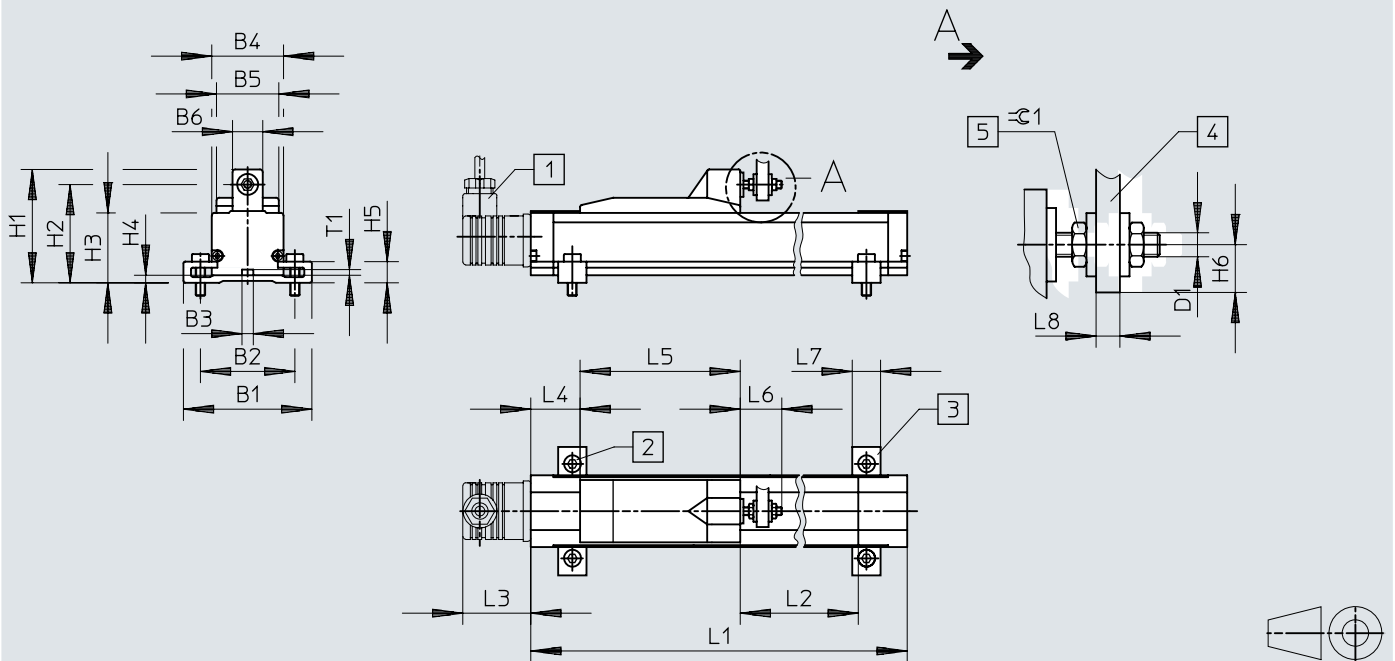
1) Please note the temperature range of the individual components for a complete system solution.

### Materials

Material housing	Wrought aluminium alloy, Anodised
Material cover	Polymer
Material slide housing	Die-cast aluminium, Polymer
Material slide coupling	Steel
Material covering	Steel
Material mounting clips	PEI

## Dimensions

Dimensions – Displacement encoders MLO-POT, analogue

Download CAD data → [www.festo.com](http://www.festo.com)

- [1] Plug socket, 4-pin according to DIN 43 650, insert can be turned 90° (not included in the scope of delivery)
- [2] Moment compensator (not included in the scope of delivery)
- [3] Retaining screw M5x18
- [4] M5 hex nut
- [5] Sliding mounting brackets are supplied

## Dimensions


	B1	B2	B3	B4	B5	B6	D1	H1
MLO-POT-225-TLF	68	50	6	38	33	16	M5	60
MLO-POT-300-TLF								
MLO-POT-360-TLF								
MLO-POT-450-TLF								
MLO-POT-500-TLF								
MLO-POT-600-TLF								
MLO-POT-750-TLF								
MLO-POT-1000-TLF								
MLO-POT-1250-TLF								
MLO-POT-1500-TLF								
MLO-POT-1750-TLF								
MLO-POT-2000-TLF								

	H2	H3	H4	H5	H6 max.	L1	L2 <sup>1)</sup>	L3
MLO-POT-225-TLF	52	37	4	11,2	10	376	23 4/228	36
MLO-POT-300-TLF						452	31 0/304	
MLO-POT-360-TLF						514	37 2/366	
MLO-POT-450-TLF						605	46 3/457	
MLO-POT-500-TLF						656	51 4/508	
MLO-POT-600-TLF						758	61 6/610	
MLO-POT-750-TLF						910	76 8/762	
MLO-POT-1000-TLF						1164	102 2/1016	
MLO-POT-1250-TLF						1418	127 6/1270	
MLO-POT-1500-TLF						1668	152 6/1520	
MLO-POT-1750-TLF						1918	177 6/1770	
MLO-POT-2000-TLF						2168	202 6/2020	

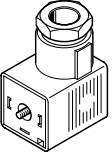
	L4	L5	L6	L7	L8		T1	⌀ 1
					min.	max.		
MLO-POT-225-TLF	26	90	22	15	4	8	3	8
MLO-POT-300-TLF								
MLO-POT-360-TLF								
MLO-POT-450-TLF								
MLO-POT-500-TLF								
MLO-POT-600-TLF								
MLO-POT-750-TLF								
MLO-POT-1000-TLF								
MLO-POT-1250-TLF								
MLO-POT-1500-TLF								
MLO-POT-1750-TLF								
MLO-POT-2000-TLF								

1) Mechanical/electrical stroke

## Ordering data

Ordering data			
	Stroke	Part no.	Type
	225 mm	152625	MLO-POT-225-TLF
	300 mm	152626	MLO-POT-300-TLF
	360 mm	152627	MLO-POT-360-TLF
	450 mm	152628	MLO-POT-450-TLF
	500 mm	152629	MLO-POT-500-TLF
	600 mm	152630	MLO-POT-600-TLF
	750 mm	152631	MLO-POT-750-TLF
	1,000 mm	152632	MLO-POT-1000-TLF
	1,250 mm	152633	MLO-POT-1250-TLF
	1,500 mm	152634	MLO-POT-1500-TLF
	1,750 mm	152635	MLO-POT-1750-TLF
	2,000 mm	152636	MLO-POT-2000-TLF

Accessories

Plug socket MSSD			
	Material housing	Part no.	Type
	Polymer	171157	MSSD-C-4P