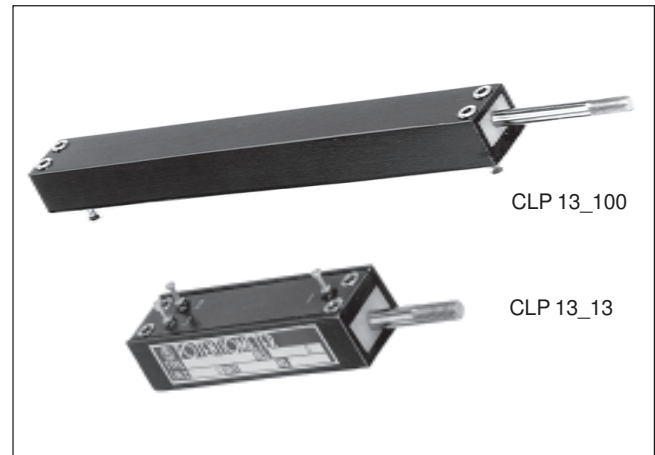
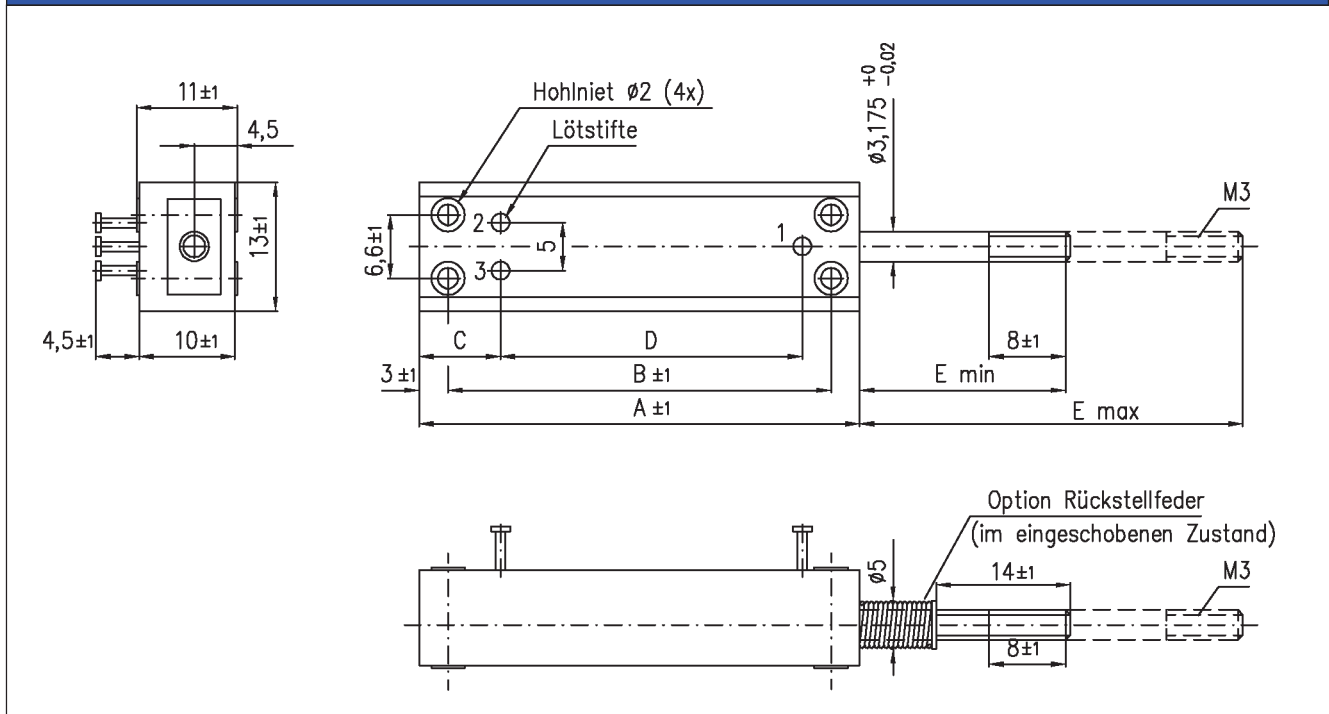


- High resolution (<0,01 mm) conductive plastic element
- Strokes from 13 mm to 100 mm
- Small dimensions
- Resistance value 500 Ohm to 20 kOhm
- Spring return device optional

A high resolution conductive plastic element is integrated in series CLP13. That guarantees a high life expectancy at well pricing and small dimensions.



Drawing



Dimensions in mm					Electrical Connetion
Typ	CLP 13-13	CLP 13-25	CLP 13-50	CLP 13-100	
A	38	51	76	127	<p>Diagram is equivalent to the shaft position in the above drawing</p>
B	32	45	70	121	
C	8,5	8,5	8,5	8,5	
D	23,5	36,5	61,5	112,5	
E min	19±1	19±1	19±1	19±1	
E max	31,7+3	44,4+3	69,8+3	120,6+3	
with spring return					
E min	30±1	35±1	40±1	50±1	
E max	42,7+3	60,4+3	90,8+3	151,6+3	

TIP: At lowest strokes, and if high resolution and life expectancy are required, we are recommending our inductive sensors with an internal electronic. They work with a direct d.c. voltage-input and -output.

Electrical Specifications	CLP 13-13	CLP 13-25	CLP 13-50	CLP 13-100
Electrical stroke [±0,5 mm]	12,7	25,4	50,8	101,6
Resistance value [kOhm]	0,5, 1, 2, 5, 10		1, 2, 5, 10, 20	
Standard resistance tol. [%]	±10			
Standard linearity tolerance [%]	±1	±0,7	±0,5	±0,3
improved linearity tolerance [%]	±0,5	±0,5	±0,3	±0,1
Best linearity tolerance [%]	---	±0,3	±0,1	---
Resolution [mm]	<0,01			
Max. Power at 40°C [W]	0,2	0,4	0,7	1,2
Max. operating voltage [V]	50			
Temperature coefficient /res. [ppm/K]	400			
Starting resistance [%]	<2			
Insulation resistance [MOhm]	>1000 bei 500 V DC			
Dielectric strength	500Veff./1 min.			
Max. wiper current [mA]	1			
Recommended wiper current [µA]	< 1 (Voltage divider)			

Mechanical Specifications				
Mechanical stroke [mm]	12,7+3	25,4+3	50,8+3	101,6+3
Max. operating friction [N]	0,4			
Max. starting friction [N]	<0,5			<1
Stopper strength statically [N]	ca. 20			
Weight [ca. g]	10	15	25	35
Bearing pushing rod	1 x sleeve bearing			
Max. displacement speed [m/s]	5			
Average lifetime (shaft movements)	40 Mio. / CLP R: 20 Mio.			
Gehäusematerial	Aluminium			
Pushing rod material	stainless steel			
Terminal material	gold-plated pins			

Environmental Specifications				
Operating temperature [° C]	-30...+105 (IP54 = -20...+70)			
Storage temperature [° C]	-40...+125			
Vibration	15 g / 10...2000 Hz			
Shock	50 g / 11ms			
Protection grade	IP40 opt. IP54 (dimension A = A+10 / not possible for CLP R13-100 . / oper.temp. = -20...+70)			

Options / Accessories / Subsequent Processing Devices

Mechanical options: – Special shaft (length, shape, bushing) – Spring return device (Gegenkraft ca. 5 N) lower life expectancy – Special stroke – Protection grade IP54 (Attention: other dimensions and oper. temp.)	Electrical Options: – Special resistance value – Tighter tolerances (linearity)
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Ordering Description

Series	Mech. version	Type	Stroke	Resistance value	Resistance tol.	Linearity tol.
CLP	R	13	100	R 10 kOhm	W ±10%	L ±0,3%
– = without spring return device R = with spring return device Ordering example: Potentiometric transducer type CLP 13, with spring return, stroke 100 mm, resistance value 10 kOhm, resistance tolerance ±10%, linearity tolerance ±0,3%						

The specifications and informations in this datasheet can not consider the special customer demands in his application. Any modification may affect the specification of our equipment.

