

Series RC13 - Potentiometric Linear Transducer

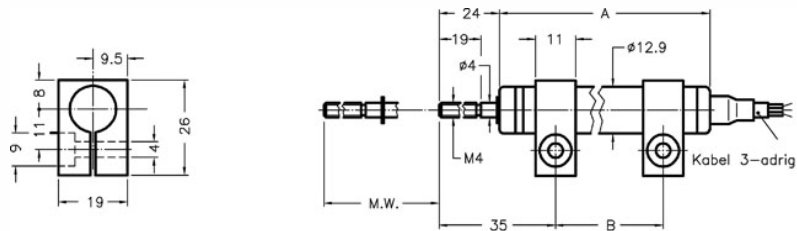
- Resolution quasi infinite
- Electrical travel from 25 to 150 mm
- Displacement speed up to 8 m/s
- Protection class IP60
- 3 mounting versions:
 - with Mounting Brackets (M)
 - with Ball Joints (G)
 - with Flange (F)



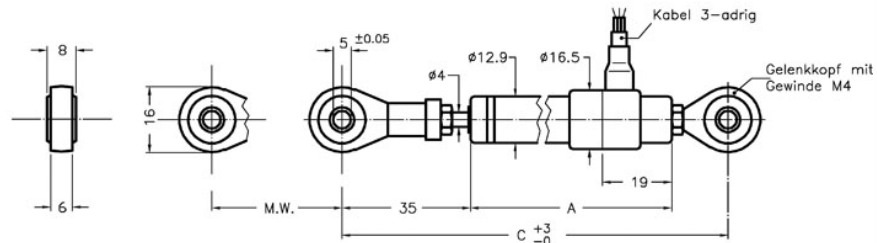
The RC13 transducers are particularly suited for applications in harsh environments. The robust aluminium housing, IP60 sealing, and various mounting versions offers wide fields of of application.

Drawing

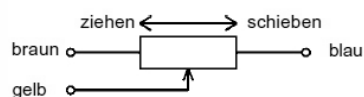
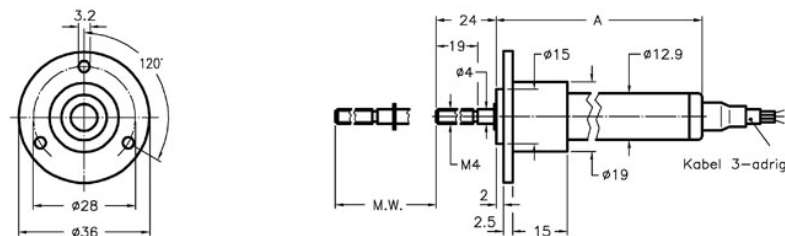
M = Mounting Brackets



G = Ball Joints



F = Flange



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Dimensions in mm

Series RC13	25	50	75	100	125	150	200	250
Electrical Travel + 1	25	50	75	100	125	150	200	250
Mechanical travel ± 1	30	55	80	105	130	155	205	255
Housing Length - M	75	100	125	150	175	200	250	300
Housing Length - G	102	127	152	177	202	227	277	327
Housing Length - F	75	100	125	150	175	200	250	300
Mounting Brackets Spacing, recomm.	42	67	92	117	142	167	217	267
Hole Spacing, retracted	153	178	203	228	253	278	328	378

Electrical Data

Series RC13	25	50	75	100	125	150	200	250
Resistance Value [kOhm]	1	2	3	4	5	6	8	6
Resistance Tolerance	$\pm 20\%$							
Indep. Linearity Tolerance [$\pm \%FS$]	0.2	0.1			0.05			
Power Rating at 40°C [W]	0.5	1	1.5	2	2.5	3		
Max. Operating Voltage [V]	20	40	60					
Temperature Coefficient Resistor	400 ppm/K							
Temperature Coefficient Voltage Divider Signal	5 ppm/K							
Insulation	> 100 MOhm (bei 500V DC)							
Dielectric Strength	< 500 Veff. (50Hz)							
Maximum Wiper Current	10 mA							
Recommended Wiper Current	< 0,1 μA (Voltage Divider Circuit)							

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Mechanical Data

Series RC13	25	50	75	100	125	150	200	250
Weight Design M	45	55	65	75	85	95	115	135
Weight Design G	70	80	90	100	110	120	140	160
Weight Design F	60	70	80	90	100	110	130	150
Maximum Operating Friction	0,5 N							
Maximum Displacement Speed	10 m/s							
Average Life	> 25 x 10 Mio Meter or 100 x 20 Mio Movements (the smaller value is currently in force)							
Housing Material	anodized Aluminium, Nylon 66 G25							
Rod Material	stainless Steel AISI303							

Ambient Conditions

Series RC13	25	50	75	100	125	150	200	250
Operating Temperature	-30 ... +100°C							
Storage Temperature	-45 ... +120°C							
Vibration	5...2000 Hz; Amax = 0,75mm; amax = 20g							
Shock	50 g, 11ms							
Protection Class	IP60							

Order Code

Series	RC13							
Stroke [mm]	25				W20% L0,2%			
	50				W20% L0,1%			
	75				W20% L0,1%			
	100				W20% L0,1%			
	125 (*)				R5k W20% L0,05%			
	150				W20% L0,05%			
	200 (*)				R8k W20% L0,05%			
	250 (*)				R6k W20% L0,05%			
Design:								
Mounting brackets								
Ball joints				M				
Flange				G				
Resistance value				F (*)				
Resistance tolerance								
Independent linearity tolerance						depends on the stroke (see above)		

"bold print = standard option"

short-term stock types can be found on: <http://www.megatron.de/en/stocklists/linear-sensors/lagerliste.html>

(*) = on request available for projects

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MEGATRON Elektronik GmbH & Co. KG

Hermann-Oberth-Str. 7 | D-85640 Putzbrunn / München

Tel.: 0049 (0)89/46094-0 | Fax: 0049 (0)89/46094-101 | e-mail:sales@megatron.de | www.megatron.de

