

LWF series

Linear Potentiometer



Features:

- Better resolution than 0.01mm
- Linear excellence up to 0.05% F.S.
- Maximum working range up to 1420mm
- Strong temperature stability, built-in conversion module
- Output signal can be: potentiometer, 0-10/5VDC, 4-20mA, RS485/232
- The output signal refresh time is usually 50 ms

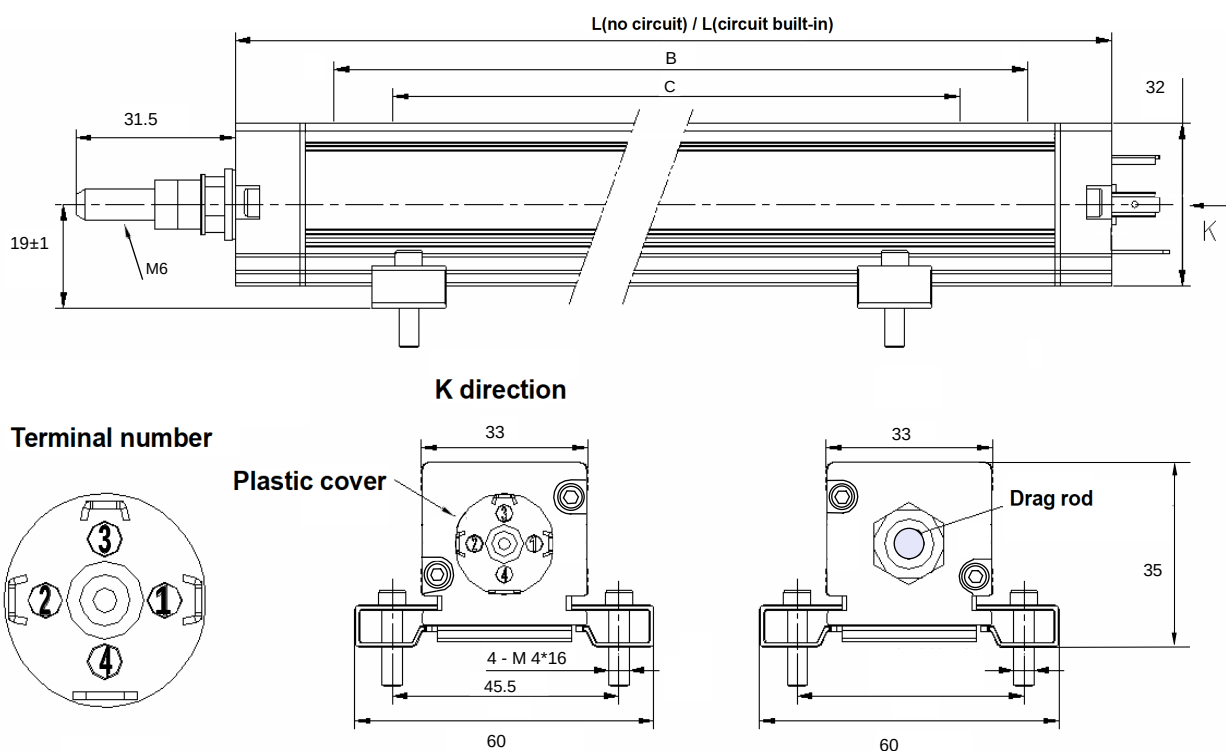
Details:

- Aluminum alloy outer shell, bright surface drawing treatment
- Pull rod stainless steel, rotary M6 external thread
- shaft bearing flexible buffer bearing
- High precision conductive plastics for resistance components
- Brush assembly A pair of multi-touch alloy brush,
- Electrical connection 5-pin M16 round aviation plug DIN 43 650 Standard plugs and sockets Straight out shielded cable

Usage:

- Injection molding machine, extraction machine
- Experimental equipment, actuator, cylinder matching
- Sluice control, woodworking machinery, hydraulic machinery, etc

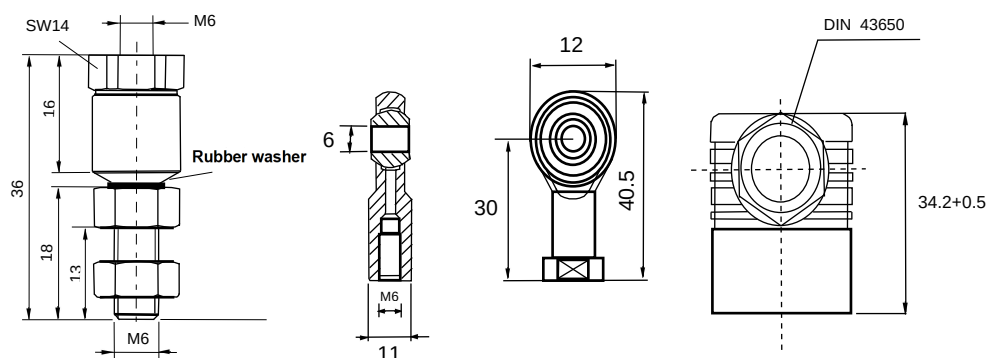
Dimensions:



- Connecting rod ball and socket universal joint

fisheye joint

wiring angled joint



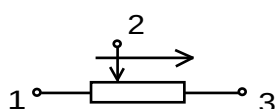
Note: Connecting rod ball and socket universal joint standard/fish eye joint optional order need to note, wiring Hersman elbow standard

Parameters:

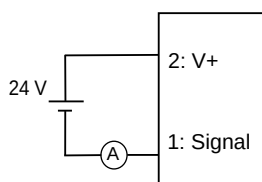
Parameters	unit	Details
Test range (A)	mm	50 75 100 130 150 175 200 225 250 275 300 350 375 400 425 450 500 550 600 650 700
Electrical range (B)	mm	51 76 102 132 152 177 202 228 254 279 304 355 380 405 430 457 507 557 610 660 710
Effective range (C)	mm	51 75 100 130 150 175 200 226 253 276 302 352 378 403 428 455 505 555 607 657 707
housing length (resistant L)	mm	116 141 166 197 217 243 268 293 318 343 369 419 446 469 496 522 572 624 674 724 774
(circuit built-in L)	mm	L + 38
Mechanical Range (+/-1.0)	mm	A + 10
standard resistant	KΩ	5 10
resistant tolarent	± %	20
linearity	± %	0.1 0.05
repeatability	± %	0.01 F.S
working current	uA	<1
Drive force (Horizontal/vertical)	N	all below 10
output signal type		resistant、(0-5)V DC、(0-10)V DC、(4-20)mA、RS485 / RS232 (Modbus RTU)
working temperature	℃	resistant signal: -45 - 125, analog signal: -10 - 80
antivibration standard frequency	Hz	5...2000
amplitude	mm	Max= 1.5
acceleration	g	aMax= 15
antishock standard time	ms	
force	g	11 50
working life	times	> 20 x 10 ⁶
protection level		IP 54 (DIN EN 60529)
working voltage Max	V	resistant output: 42, analog signal: 18 - 30
Temperature drift coefficient	ppm/K	normally 30
insulation resistance	MΩ	>100 (500VDC)
dielectric strength	uA	<100 (500VAC , 50Hz)

Parameters	unit	details								
Measure range (A)	mm	750	800	900	1000	1100	1220	1250	1420	
Electrical range (B)	mm	762	812	914	1014	1114	1234	1264	1435	
Effective range (C)	mm	759	809	912	1012	1112	1232	1263	1432	
Housing length (no circuit L)	mm	827	877	979	1079	1179	1299	1329	1499	
(circuit built-in L)	mm						L + 38			
Mechanical range (+/-1.0)	mm						A + 15			
standard resistant	KΩ	10					20			

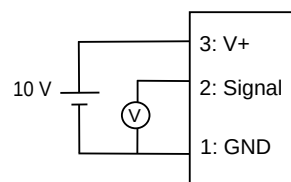
wirings diagram:



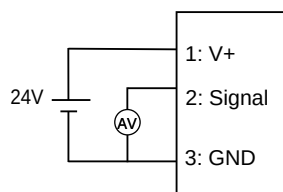
2-wire system current



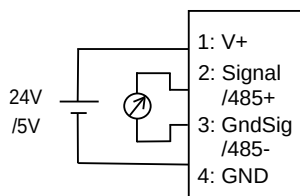
3-wire system potentiometer



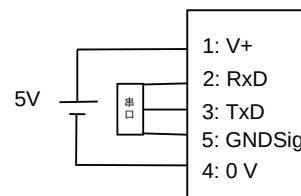
3-wire system current/voltage



4-wire system voltage/current/RS485



5 poles shielding direct cable RS232



instructions:

LWF - XXX - XXX - XXX

series

measure range

50 = 50 mm
75 = 75 mm

200 = 200 mm
300 = 300 mm

1000 = 1000 mm
1420 = 1420 mm

None: standard black Hersman angled connector
SXZ: four-wire system standard angled connector
S01: aviation connector interface
P65: direct cable

output signal

none: resistant value
A1: 4 - 20 mA two-wire
V1: 0 - 10 V three-wire
V2: 0 - 5 V three-wire
R5: RS485 Modbus RTU
R2: RS232 Modbus RTU
(only for S01 & P65)

standard hersman joint



S01: aviation connector



P65: direct cable

