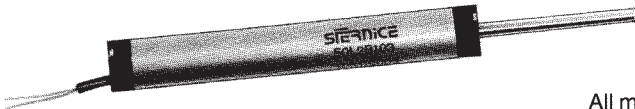




50 L 34 L

REC

precision linear transducer – conductive plastic

MIL-R-39023
NF C 93-255


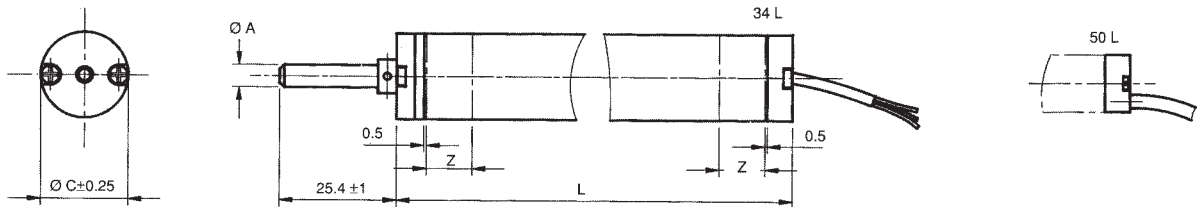
The 50L and 34L are compact, accurate and adaptable motion transducers for both industrial and military markets.

- MEASUREMENT RANGE 25 mm to 450 mm
- HIGH ACCURACY $\pm 1\%$ down to $\pm 0,025\%$
- ESSENTIALLY INFINITE RESOLUTION
- LONG LIFE
- SEALED - ON REQUEST.

All mechanical and electrical parameters can be adapted to meet your specifications.

Examples of custom applications (see reverse).

STANDARD MODEL



ELECTRICAL CONNECTIONS

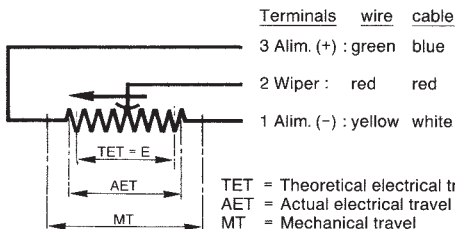


Table 1

TET = E	AET	Tolerance
25 mm to 275 mm	E + 1 mm	$\pm 0,5$ mm
300 mm to 450 mm	E + 1 mm	$\pm 0,8$ mm

Table 2

Dimensions	50 L	34 L
Shaft $\varnothing A$	- 0	- 0
Body $\varnothing C$	3,175 - 0,025	5 - 0,025
Body length L	E + 41	E + 63
Tightening zone Z	7	12

ELECTRICAL SPECIFICATIONS

	50 L	34 L
Theoretical electrical travel (TET = E)	25 mm	25 mm
in increments of 25 mm	300 mm	450 mm
Independent linearity (over TET)	$\leq \pm 1\%$; $\leq \pm 0,1\%$	
on request	$\leq \pm 0,05\%$ for E ≥ 100 mm $\leq \pm 0,025\%$ for E ≥ 200 mm	
Actual electrical travel (AET)	see table 1	
Ohmic values (R_T)	400 Ω /cm to 2 k Ω /cm	
on request	from 150 Ω /cm	
Resistance tolerance at 20°C	$\pm 20\%$	
Repeatability	$\leq 0,01\%$	
Maximum power rating	0,02 W/cm at 70°C 0 W at 125°C	
Wiper current	recommended : a few μA - 1 mA max. continuous	
Load resistance	minimum $10^3 \times R_T$	
Number of tracks	1; on request 2	
Insulation resistance	≥ 1000 M Ω 500 V DC	
Dielectric strength	≥ 500 VRMS	≥ 750 VRMS
	50 Hz	50 Hz

MECHANICAL SPECIFICATIONS

	50 L	34 L
Mechanical travel	TET + 2 mm min	
Housing	anodized aluminium	
Operating force	0,35 N typical	2,50 N typical
	(standard model)	(sealed model)
Shaft (free-rotation)	stainless steel	
Termination	3 wires PTFE AWG-30	
on request	L = 300 mm cable or connector	
Wiper	precious metal multifinger	
Sealing	IP65 on request	

PERFORMANCES

Operating life	100 millions cycles typical
Temperature range	-55°C, +125°C
Sine vibrations on 3 axes	1,5 mm peak to peak or 15 g - 10 Hz - 2000 Hz
Mechanical shocks on 3 axes	50 g - 11 ms - half sine
Speed (m/s)	10 max.

RESISTANT SEALING : IP65

OPTIONS

W3280 (34L)
W3242 (50L)

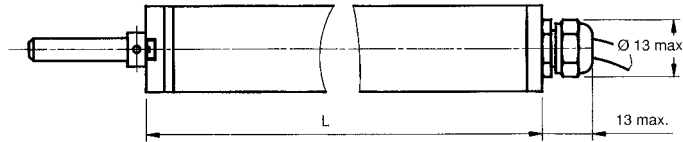
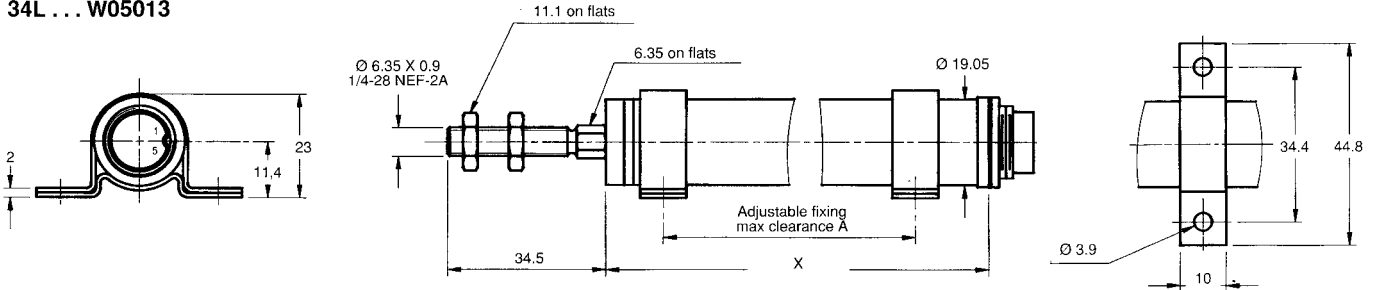


Table 3

Model	L
34L	TET +83,5
50L	TET +70,5

WITH MOVABLE CLAMPS

34L ... W05013



SPRING LOADED SHAFT ; OUTPUT BY SHIELDED CABLE

W1744 (34L)
W1743 (50L)

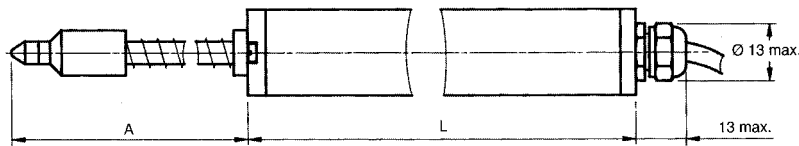


Table 4

	A	L
34 L1	61,4	TET +119,5
34 L2	93,6	
34 L3	125,8	
34 L4	158	
50 L1	70	TET +97,8
50 L2	116	
50 L3	162	
50 L4	208	

DOUBLE BALL JOINT

W3263 (34L)
W1565 (50L)

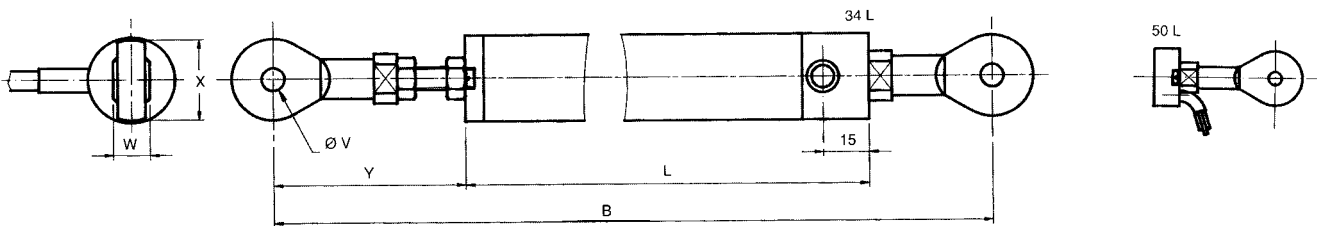


Table 5

MODEL CODE	B	L	Ø V	W	X	Y	TET
50 L W1565 L1 to L3	TET +108,5	TET + 57,5	3	6	12	30 ±2	25 to 75
L4 to L6	TET +133,5	TET + 82,5	3	6	12	30 ±2	100 to 150
34 L W3263 L1 to L5	TET +151,6	TET + 82,8	5	8	18	42 ±2	25 to 125
L6 to L10	TET +173,6	TET +104,8	5	8	18	42 ±2	150 to 250
L11 to L12	TET +230	TET +161,2	5	8	18	42 ±2	275 to 300

Dimensions in mm.
General tolerance ± 1 mm.

ORDERING PROCEDURE

