

Precision Linear Transducers, Conductive Plastic, up to 450 mm


FEATURES

- Measurement range 25 mm to 450 mm
- High accuracy $\pm 1\%$ down to $\pm 0.025\%$
- Essentially infinite resolution
- Long life
- Sealed on request


RoHS
COMPLIANT

The 34 L is a compact, accurate and adaptable motion transducer for both industrial and military markets.

ELECTRICAL SPECIFICATIONS	
Theoretical Electrical Travel (TET = E) in Increments of 25 mm	25 mm 450 mm
Independent Linearity (over TET) On Request	$\leq \pm 1\%$ - $\leq \pm 0.1\%$ $\leq \pm 0.05\%$ for E ≥ 100 mm $\leq \pm 0.025\%$ for E ≥ 200 mm
Actual Electrical Travel (AET)	See table 1
Ohmic Values (R_T)	From 400 Ω /cm to 2 k Ω /cm
Resistance Tolerance at 20 °C	$\pm 20\%$
Repeatability	$\leq 0.01\%$
Maximum Power Rating	0.05 W/cm at 70 °C, 0 W at 125 °C
Wiper Current	Recommended: a few μ A - 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	≥ 750 V _{RMS} , 50 Hz

MECHANICAL SPECIFICATIONS	
Mechanical Travel	TET + 2 mm min.
Housing	Anodized aluminum
Operating Force On Request	0.35 N typical (standard model) 2.50 N typical (sealed model)
Shaft (Free Rotation)	Stainless steel
Termination On Request	3 wires PTFE AWG-30 L = 300 mm cable or connector
Wiper	Precious metal multifinger
Sealing	IP65 on request

PERFORMANCE	
Operating Life	25 million cycles typical/1 Hz/T° = 20 °C \pm 5 °C/80 % TET
Temperature Range	- 55 °C to + 125 °C
Sine Vibration 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

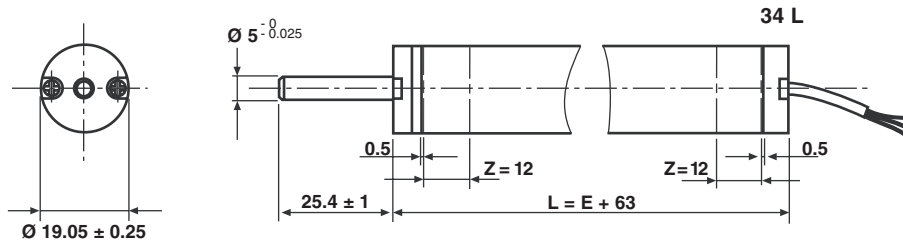
Series REC 34 L

Vishay Sfernice

Precision Linear Transducers, Conductive Plastic,
up to 450 mm

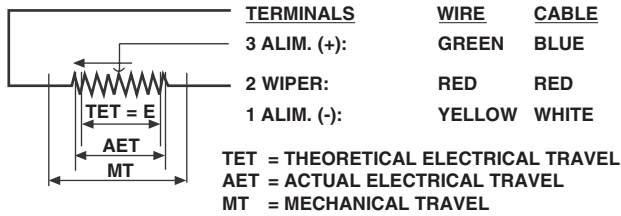


STANDARD MODEL DIMENSIONS in millimeters, general tolerance ± 1 mm



Z = TIGHTENING ZONE

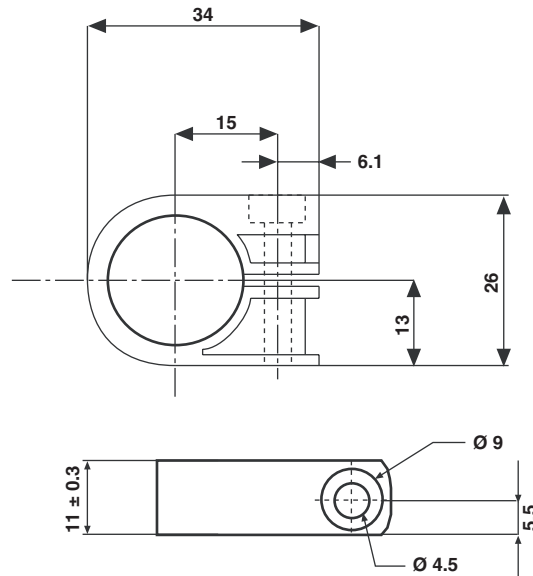
ELECTRICAL CONNECTIONS



TET = E	AET	TOL.
25 mm to 275 mm	E + 1 mm	± 0.5 mm
300 mm to 450 mm	E + 1 mm	± 0.8 mm

ACCESSORIES ON REQUEST - DIMENSIONS in millimeters, general tolerance ± 3 mm

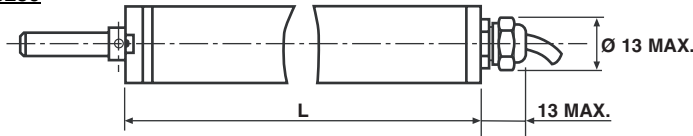
Clamp for 34L
Vishay Reference: CQ00051





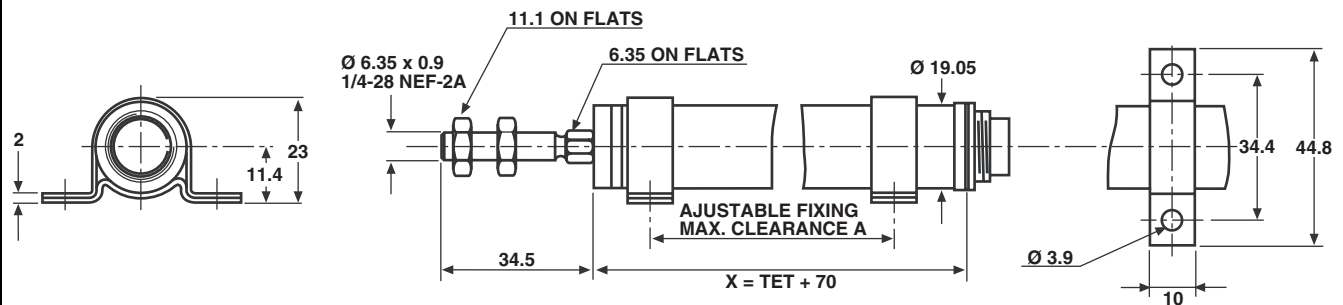
OPTIONS - DIMENSIONS in millimeters, general tolerance ± 1 mm

OPTION 1: SEALED (IP65): W03280

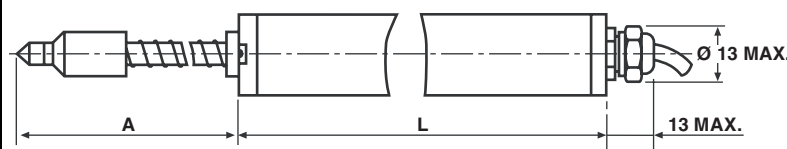


MODEL	CODE	L
34 L	W03280	TET + 83.5

OPTION 2: DELIVERED WITH CLAMPS AND BINDER CONNECTOR 680: W05013

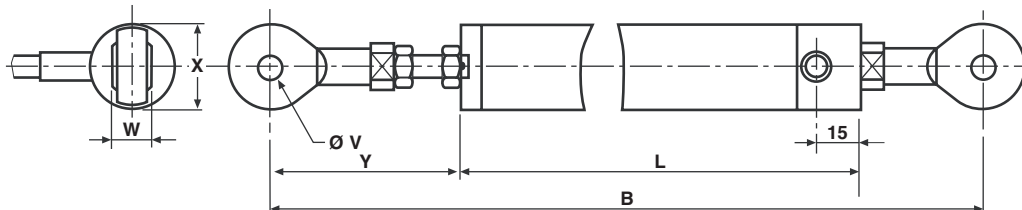


OPTION 3: SPRING LOADED SHAFT: OUTPUT BY SHIELDED CABLE: W01744



MODEL	CODE	A	L
34 L1	W01744	61.4	TET + 119.5
34 L2	W01744	93.6	
34 L3	W01744	125.8	
34 L4	W01744	158	

OPTION 4: DOUBLE BALL JOINT: W03263



MODEL CODE	B	L	$\varnothing V$	W	X	Y	TET
34 L W03263 L1 to L5	TET + 151.6	TET + 82.8	5	8	18	42 \pm 2	25 to 125
L6 to L10	TET + 173.6	TET + 104.8	5	8	18	42 \pm 2	150 to 250
L11 to L12	TET + 230	TET + 161.2	5	8	18	42 \pm 2	275 to 300

ORDERING INFORMATION/DESCRIPTION

REC	34	L	3	D	103	W...	e.
SERIES	MODEL	NUMBER OF TRACKS	THEORETICAL ELECTRICAL TRAVEL	LINEARITY	OHMIC VALUE	MODIFICATIONS	LEAD FINISH
		L = 1 track LL = 2 tracks	Times 25 mm	A: $\pm 1\%$ D: $\pm 0.1\%$ E: $\pm 0.05\%$ F: $\pm 0.025\%$	First 2 digits are significant numbers 3rd digit indicates number of zeros	Special feature code number	

SAP PART NUMBERING GUIDELINES

RE	34 L	3	D	103	W...
SERIES	MODEL	TET	LINEARITY	OHMIC VALUE	SPECIAL FEATURES



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