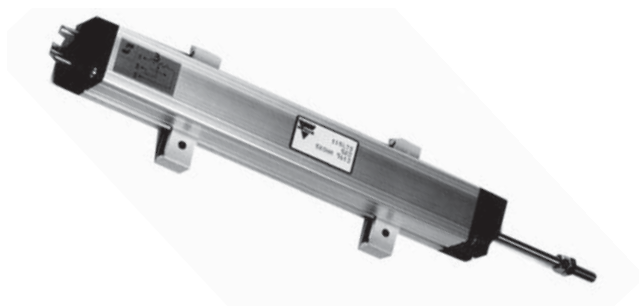


精密直线位移传感器,导电塑料,可变电阻器 Precision Linear Transducers, Conductive Plastic



特性 FEATURES

- 测量范围: 25 mm ~ 1000 mm
- 高线性精度: $\pm 1\%$ ~ $\pm 0.025\%$
- 优良的可重复精度
- 理论上无限分辨率
- 不受温度变化的干扰
- 材料分类认证 (compliance): 认证规格定义和产品标签说明请参见 www.vishay.com/doc?99912



RoHS
COMPLIANT

DESIGN SUPPORT TOOLS 三维设计工具

click logo to get started 点击3D开始



115L系列, 安装简单, 坚固, 高线性精度
工业直线位移传感器。

QUICK REFERENCE DATA

传感器类型	线性位移, 导电塑料技术
信号输出	电气插头 DIN 43650
市场应用	工业自动化 industrial
尺寸 (公制 mm)	L x 31.7 mm x 34.8 mm (长度 L = TET + 75 mm)

电气参数 ELECTRICAL SPECIFICATIONS

测量电气行程 范围 (TET) = E	25 mm ~ 1000 mm, 每 25 mm 电气行程递增
独立线性精度 (在 TET 测量范围) 可以客户定制	$\leq \pm 1\% \leq \pm 0.1\%$ $\leq \pm 0.05\%$ 对于 $E \geq 100$ mm; $\leq \pm 0.025\%$ 对于 $E \geq 200$ mm
实际电气行程 (AET)	AET = TET + 1.5 mm min. 最小
电阻阻值 Ohmic values (R_T)	400 Ω /cm ~ 2 k Ω /cm
电阻值误差 (在 20 °C 环境下)	$\pm 20\%$
重复线性精度	$\leq \pm 0.01\%$
最大额定功率 (W:瓦)	0.05 W/cm 在 70 °C, 0 W 在 125 °C
电刷触点电流 Wiper current	推荐: μA - 1 mA max. 最大 (连续 continuous) 计量单位: A 安倍
负载阻抗 Load resistance	minimum 最小 $10^3 \times R_T$
绝缘电阻 Insulation resistance	≥ 1000 M Ω , 500 V _{DC}
介电强度 Dielectric strength	≥ 1000 V _{RMS} , 50 Hz
保护电阻 Protection resistor	传感器内部含有保护电阻, 防止信号脚接错 (短路), 引起电刷电流过载。

机械参数 MECHANICAL SPECIFICATIONS

机械行程 Mechanical travel	$E + 8 \pm 2$ mm
外壳材料 Housing	氧化铝 Anodized aluminum
移动力 Operating force	7.5 N typica (常规 7.5牛顿力) I
移动拉杆 Shaft (自由径向旋转)	Stainless steel 不锈钢 I
信号输出连结 Termination	液压类型电气插头 Hydraulic type connector 符合 DIN 43650 标准
电阻接触电刷 Wiper	精密镍合金多点触头 Precious metal multifinger
固定安装 Mounting	可移动的三块铝合金安装夹 Movable brackets

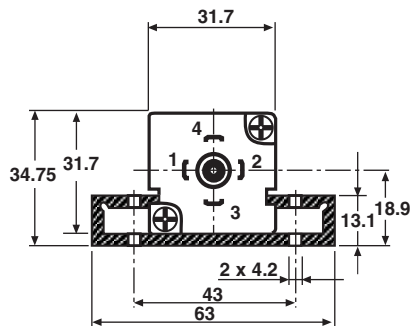
应用参数 PERFORMANCE

使用寿命 Operating life	4 千万往复周期 (通常) / 使用条件: 1 Hz/T° = 20 °C \pm 5 °C/80 % TET
温度范围 Temperature range	-55 °C ~ +125 °C
三维正弦振动 Sine vibration on 3 axes	1.5 mm 峰值 peak ~ 峰值 peak 0 Hz ~ 10 Hz 15 g - 10 Hz - 2000 Hz
三维机械震动 Mechanical shocks on 3 axes	50 g - 11 ms - half sine 半正弦
最大移动速度 Speed (max.)	8 m/s for $f < 2$ Hz; 3 m/s for $f < 5$ Hz; 8 /秒 频率 $f < 2$ Hz; 3 米/秒 频率 $f < 5$ Hz

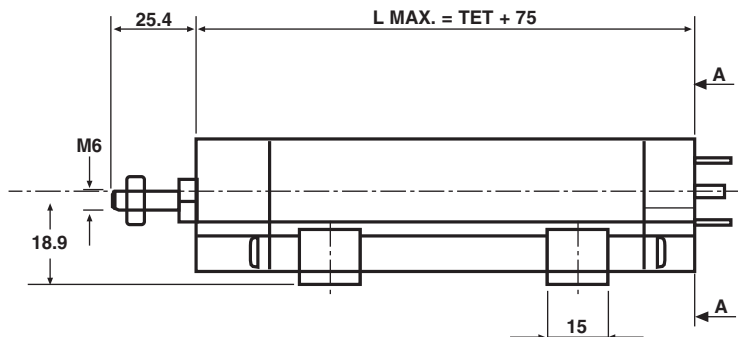
Note

- Nothing stated herein shall be construed as a guarantee of quality or durability. 本文所述内容不得解释为质量或耐久性的保证。

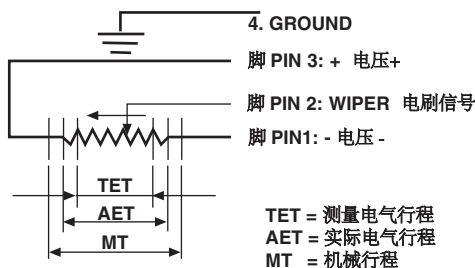
尺寸公制mm 误差±1 mm; **DIMENSIONS** in millimeters, general tolerance ± 1 mm



VIEW A-A

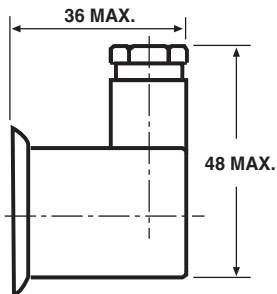


电气插头脚定义 ELECTRICAL CONNECTIONS

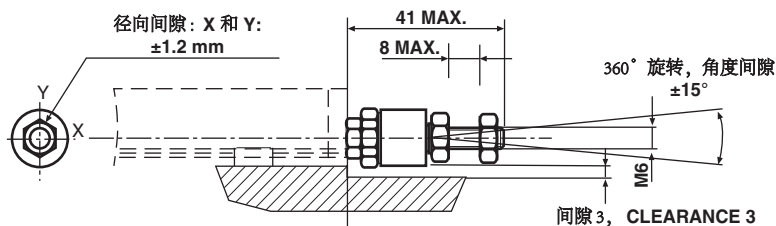


附件可客户定制 公制mm, 误差:±1 mm, **ACCESSORIES ON REQUEST DIMENSIONS** tolerance± 1 mm

1) FEMALE CONNECTOR 电气插头
Vishay's Reference: 3248610 订货参考号



2) 连接移动拉杆的万向节 SPECIAL BALL JOINT ON SHAFT
Vishay's reference: 323655 订货参考号



订购 型号描述 ORDERING INFORMATION/DESCRIPTION

REC	115	L	23	D	103	W...	e.
SERIES 系列	MODEL	电阻轨迹	测量电气行程 TET	线性精度 LINEARITY	电阻值 OHMIC VALUE	型号后缀代码 SPECIAL FEATURES	LEAD FINISH
		L = 1	25 mm倍数 23 x 25=575mm	A: ± 1 % D: ± 0.1 % E: ± 0.05 % F: ± 0.025 %	前二位有效数, 第三位表示添加'0'的个数。如: 502 =5000 Ω	特别特性代码 Special feature code number	

SAP 订购型号 (系列号不同, 其他与上述相同)

SAP PART NUMBERING GUIDELINES

RE	115 L	23	D	103	W...
SERIES	MODEL	TET	LINEARITY	OHMIC VALUE	SPECIAL FEATURES



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