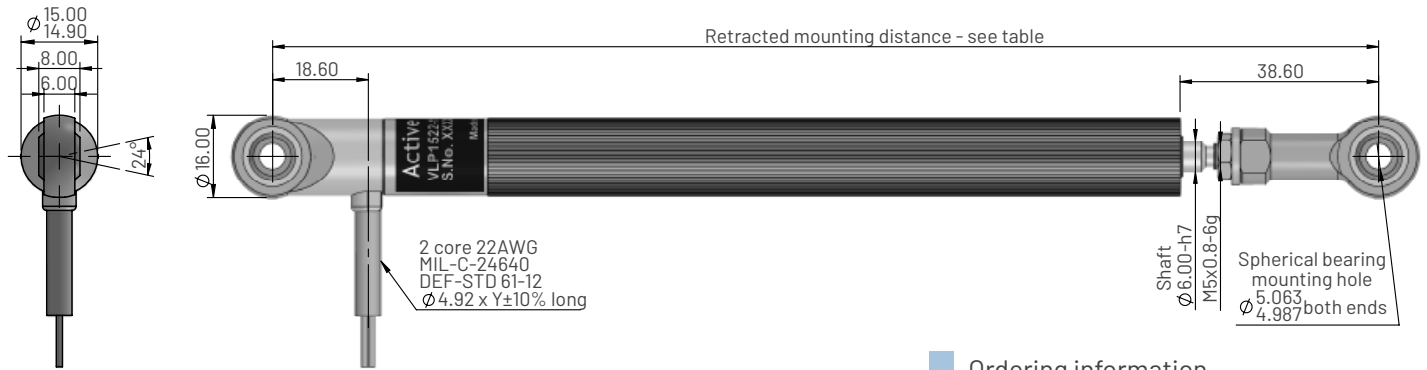


VLP1500 Series - Linear potentiometer

2-wire, Current Output 4 - 20mA

Dimensions



Ordering information

VLP1522-11-XXX-Y-RA1

Measurement range in mm _____
 Cable length 0 to 9 _____
 0 = 0.5m, 1 = 1m ... 9 = 9m
 Output increasing _____
 R = retracted
 Output signal _____
 A1 = 4-20mA

Electrical and mechanical specification

Parameters	Values														Units	Notes	
Mechanical specification																	
Mechanical range	25	50	75	100	125	150	175	200	225	250	275	300	325	350	mm		
Retracted Mounting Distance (Dim A)	165	190	215	240	265	290	315	340	365	390	415	440	465	490	mm		
Sensor weight (excluding cable)	86	96	106	116	126	136	146	156	166	176	186	196	206	216	grams		
Materials	Case - Anodised aluminium alloy 6063-T5, Shaft - Stainless Steel 303,																
Performance specification																	
Non-linearity	$\leq \pm 0.5$														%FS	2	
Resolution	Infinite																
Thermal drift	$\pm 0.01 \text{ TBD}$														%FS/°C		
Electrical specification																	
Input voltage (+Vs)	12 to 40														VDC		
Line regulation	<math>< 0.002</math>														%FS/V	6	
Reverse polarity (max)(+Vs)	-60														VDC		
Output current (Iout) (see graph)	2 wire 4-20														mA		
Sensitivity $\leq \pm 2\%$	0.64	0.32	0.213	0.16	0.128	0.107	0.091	0.08	0.071	0.064	0.058	0.053	0.049	0.046	mA/mm	2	
Loop resistance (max)	$(+Vs-8V)/0.02A$														ohms	7	
Output noise and ripple	<math>< 0.05</math>														%FS RMS		
Electrical connections	2 core x 22AWG (screened) Zerohal jacket																
Cable length (max)	0.5 to 9.0														m	8	
Environmental specification																	
Operation temperature	-30 to +105														°C		
Shaft velocity	<math>< 1000</math>														mm/sec		
Environmental	IP66																
Materials	Sensor	Case: Anodised aluminium 6063 T5, Shaft: Stainless steel 303															
	Rod-ends	Body: Anodised aluminium 6026, Ball: Nickel plated steel															

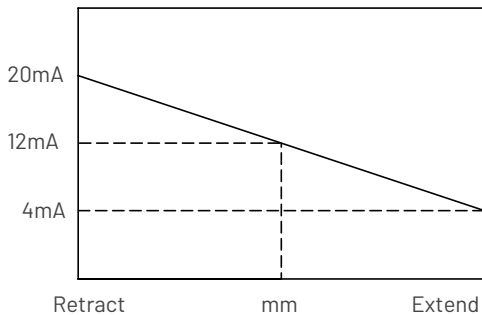
VLP1500 Series - Linear potentiometer

2-wire, Current Output 4 - 20mA

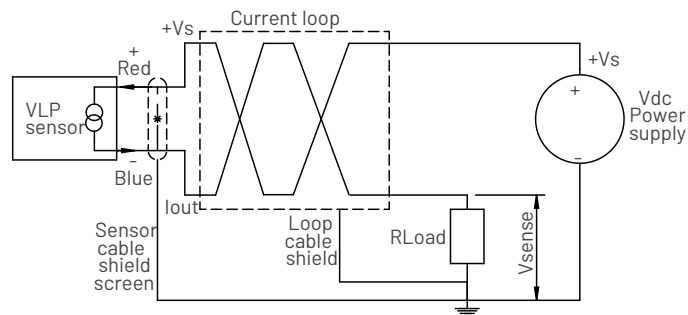
Notes

1. Incorrect wiring may cause internal damage.
2. Non-linearity error and sensitivity is calculated from least squares best fit method.
3. Average thermal drift over operating temperature range.
4. Nominal bandwidth (-3dB) with a 1st order (-20dB/decade) roll-off.
5. Within 20 seconds of power on condition and over 30 minutes period. (Whilst delta temperature sensor $<2^{\circ}\text{C}$)
6. When $+V_s = +12\text{VDC}$ to $+30\text{VDC}$.
7. Includes all wiring resistance and R_{Load} resistance.
8. Includes all wiring between sensor and R_{Load} .
9. General dimension tolerance is $+0.25\text{mm}$.

VLP mA output schematic



Electrical connections (see note 1)



Europe

Active Sensors Ltd,
Unit 12, Wilverley Road,
Christchurch, Dorset,
BH23 3RU, UK

North America

Active Sensors Inc,
8520 Allison Pointe Blvd, Suite 220,
Indianapolis,
IN 46250, USA