

SLS1500AP Series - Linear potentiometer

2-wire, Current Output 4 - 20mA

Dimensions



Ordering information

SLS1522AP-XXX-Y

Measurement range in mm

Cable length 0 to 9

0 = 0.5m, 1 = 1m ... 9 = 9m

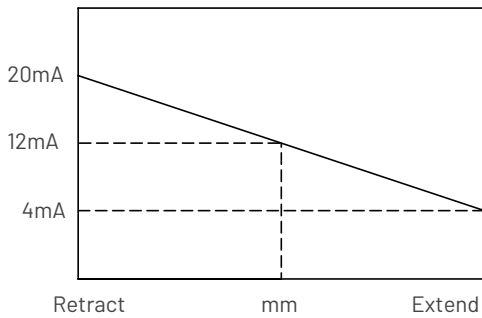
Electrical and mechanical specification

Parameters													Units	Notes	
Mechanical specification															
Mechanical range	75	100	125	150	175	200	225	250	275	300	325	350	mm		
Retracted Mounting Distance (Dim A)	224	249	274	299	324	349	374	399	424	449	474	499	mm		
Mechanical range (+0.5mm)	Measurement range +1												mm		
Sensor weight (excluding cable)	106	116	126	136	146	156	166	176	186	196	206	216	grams		
Maximum shaft operating force	200												grams		
Materials	Case - Anodised aluminium alloy 6063-T5, Shaft - Stainless steel 303														
Performance specification															
Non-linearity	<±0.15												%FS	2	
Resolution	Infinite														
Thermal drift	±0.01 TBD												%FS/°C		
Electrical specification															
Input voltage (+Vs)	9 to 40												VDC		
Line regulation	<0.002												%FS/V	6	
Reverse polarity (max)(+Vs)	-100												VDC		
Output current (Iout) (see graph)	2 wire 4-20												mA		
Sensitivity <±2%	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	<0.05												%FS RMS		
Electrical connections	2 core 24AWG screened, Tin plated Cu, type 44 cable Ø3.2 Jacket-PVDF														
Cable length (max)	0.5 to 9.0												m	8	
Environmental specification															
Operation temperature	-30 to +105												°C		
Shaft velocity	<1000												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													

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 <math><2^{\circ}\text{C}</math>)
6. When $+V_s = +12\text{VDC}$ to $+30\text{VDC}$.
7. Includes all wiring resistance and RLoad resistance.
8. Includes all wiring between sensor and RLoad.
9. General dimension tolerance is $+0.25\text{mm}$.

SLS mA output schematic



Electrical connections (see note 1)

