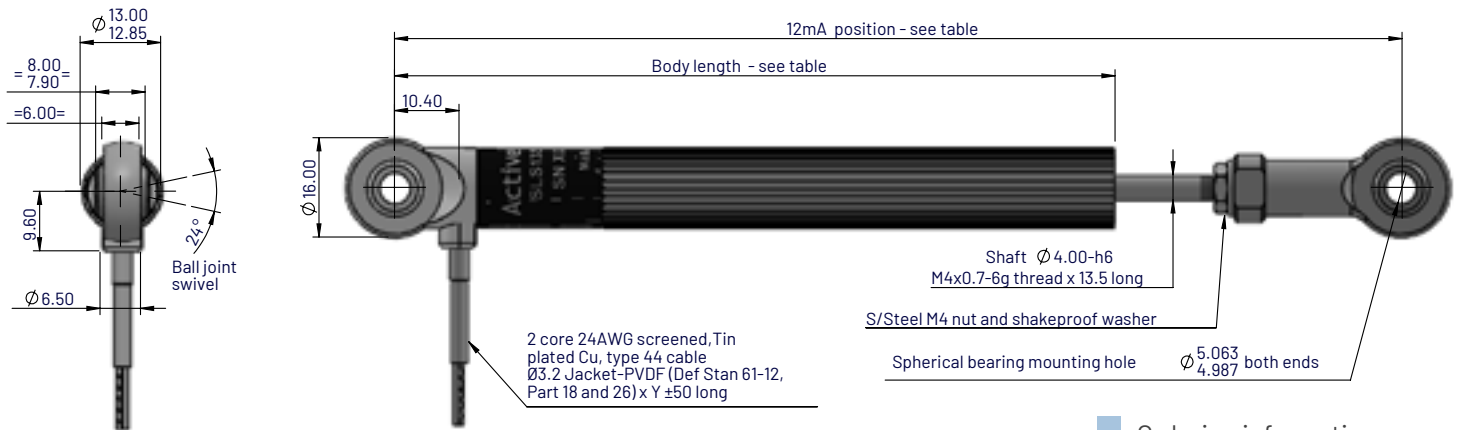


SLS1300AS Series - Linear potentiometer

2-wire, Current Output 4 - 20mA

Dimensions



Ordering information

SLS1322AS-XXX-Y

Measurement range in mm

Cable length 0 to 9

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

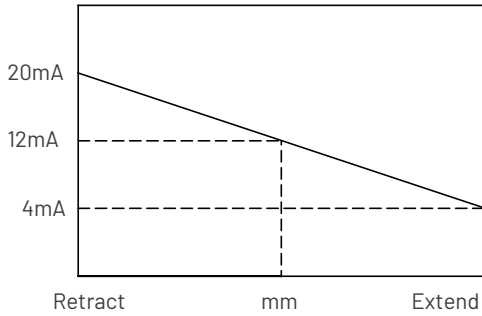
Electrical and mechanical specification

Parameters							Units	Notes
Mechanical specification								
Mechanical range	25	50	75	100	125	150	mm	
12mA position (mid-position)	162.5	200.0	237.5	275.0	312.5	350.0	mm	
Body length	116.2	141.2	166.	191.2	216.2	241.2	mm	
Mechanical range (± 0.5 mm)	Measurement range +1						mm	
Sensor weight (excluding cable)	64	70	76	82	88	94	grams	
Materials	Case - Anodised aluminium alloy; Shaft - Stainless steel 303; Rod ends - Body: GF Polymer, Spherical Ball: Nickel plated steel							
Performance specification								
Non-linearity	$< \pm 0.25$		$< \pm 0.15$				%FS	2, 3
Micro non-linearity (Nominal)	< 0.10		< 0.05				%FS	3
Thermal error	$< \pm 0.33$						%FS	3, 4
Maximum operating speed	< 10						m/s	
Hysteresis	< 10						μ m	3
Operating life (25mm at 3Hz)	> 20 million							
Shaft starting / running force	$< 180 / < 120$						grams	
Electrical specification								
Input (+Vs) Red lead	9 to 40						VDC	
Line regulation	< 0.10						%FS/V	3
Reverse polarity (max)(+Vs)	-100						VDC	
Output (Iout) Blue lead	+4 to +20						mA DC	
Sensitivity (Iout/mm)(2% to 98%) $\pm 1\%$	640	320	213	160	128	107	μ A/mm	2
Loop resistance (max)	(+Vs-7V)/0.02A						Ohms	6
Output noise and ripple	10						μ A RMS	
Electrical connections	2 core 24AWG screened, Tin plated Cu, type 44 cable $\varnothing 3.2$ Jacket-PVDF							
Cable length (max)	200						m	
Shaft velocity	< 10						m/s	
Environmental specification								
Operation temperature	-30 to +125						$^\circ$ C	
Shaft velocity	IP65							

Notes

1. Incorrect wiring may cause internal damage.
2. Non-linearity error and sensitivity is calculated from least squares best fit method at $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$.
3. FS is defined as sensitivity x measurement range (MR).
4. Average thermal drift over operating temperature range when mounted by R5 rod ends or by a body clamp (BC), at 50% of the sensor body length, on a stainless steel plate.
5. When $+V_s = +24\text{VDC} \pm 0.50\text{V}$ and $R_{\text{Load}} = 250\Omega$.
6. Includes all wiring between sensor + R_{Load} resistance.

VLP mA output schematic



Electrical connections (see note 1)

