Linear Position Sensor for Motorsports - ELPM Series

- Extremely robust and compact specifically for Motorsports
- Aluminium housing sealed to IP67
- · Elastomer damped wipers for shock and vibration durability
- Self-aligning pivot bearing mountings with optional snap-on version for quick installation/removal
- Extended 'S' sealing option for enhanced reliability and longer life
- Wide choice of options

The motorsports proven ELPM series linear position sensor provides long life and extremely reliable performance for harsh environment position measurement applications such as ride height, suspension and steering angle measurement. The compact 9.5 mm diameter sensor includes a conductive plastic resistance element technology with multi damped wipers that maintains complete and even contact with very low electrical noise, even under the most arduous physical and environmental conditions. The IP67 sealing system employed in the design may be enhanced with the extended 'S' sealing option for improved reliability and endurance where unpredictable wet and hostile environmental conditions exist. The ELPM series offers stroke lengths from 25 to 175 mm in convenient increments with self aligning pivot bearing mountings or optional snap-on mountings with the ELPM-Pop option for fast installation or removal. Further options include a spring return version as well as customer specified mounting and electrical connector options on request.

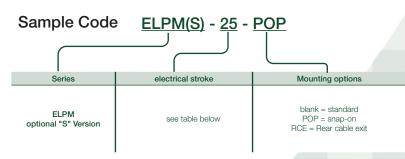
Specifications

Electrical stroke	25 to 175 mm (7 range options)	Mechanical life	> 25 x 10 ⁶ operations				
Mechanical stroke	As electrical stroke	Sealing	IP67 (optional 'S' version for extended IP67 performance)				
Independent linearity	Typically +/- 1%, Improved linearity upon request	Mounting	Standard version: Rod end bearings POP: snap on RCE: rear cable exit				
Max. voltage	24 V DC						
Recommended wiper current	< 10µA	Cable type /length	24 AWG Raychem 55M wire, FDR25 sleeve / 500 mm (alternatives on request)				
Power rating	0.25W at 40° C	Operational speed	10 m/sec max.				
Temperature range	ELPM + ELPM-RCE: -30° C to +150° C (175° C short term) ELPM-Pop: -30° C to +140° C						

Ordering information

Group

(Please use the characters in the chart below to construct your product code)



Custom options available on request

	Unit	ELPM and ELPMS extended sealing option						ELPM-Pop and ELPMS-Pop extended sealing option							
Order code		25	50	75	100	125	150	175	25	50	75	100	125	150	175
Electrical stroke	mm	25	50	75	100	125	150	175	25	50	75	100	125	150	175
Retracted mounting distance	mm	95	120	145	178	203	228	253	115	149	175	205	230	260	285
Body length	mm	75	100	125	153	178	203	228	88	113	138	173	198	228	253
Resistance +/- 20%	kΩ	2.5	5.0	7.5	10.0	10.0	10.0	10.0	2.5	5.0	7.5	10.0	10.0	10.0	10.0
Weight	gm	26	29	33	37	43	46	51	23	27	31	35	41	44	57



Variohm

Eurosensor

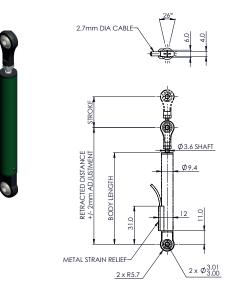


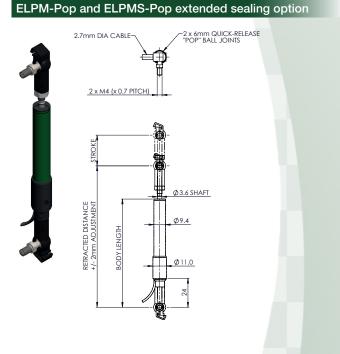
Eurosensor

Variohm

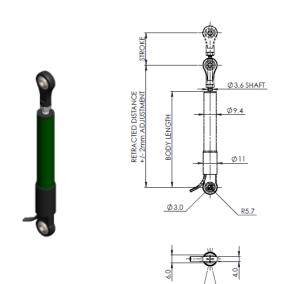
Dimensions (mm)

ELPM and ELPMS extended sealing option





ELPM-RCE Version



Wiring connections

Retracted end Red White Black Black: GND / 0V

Red: +VE Supply White: Signal out

BODY LENGTH RETRACTED STROKE

Ш

ELPM-SO Version with spring loaded shaft*

* Spring loaded shaft and custom options available on request



Variohm EuroSensor - Williams' Barn - Tiffield Road -Towcester - Northants -NN12 6HP - UK sales@variohm.com • www.variohm.com • +44 (0) 1327 351004