



Product Data





We provide high performance, long life, reliable 10mm to 250mm stroke sensors.

Position Sensors Ltd.

Position Sensors Ltd. is a leading UK manufacturer of linear sensors for motorsport, autosport and mechatronics.



Our standard and custom linear sensors equip teams in the past and current Formula 1, World Touring Car Championships, World Rally Championships, Moto GP and Superbike arenas. With the ability to supply throughout Europe efficiently, we are in the position to serve race teams of all sizes.

Position Sensors' engineers have more than 40 years experience in this sector. Superior technology, design and development are an integral part of the supply process. We provide high performance, long life, reliable 10mm to 250mm sensors. Testing, build accuracy and quality control ensure our premium sensors meet expectations.

Position Sensors Ltd. was established by CEO Richard Hussey in 2003, a senior electronics engineer with years of development experience of real life sensor application in the motorsport and autosport industries. The company fulfilled a requirement to supply streamlined, efficient products to race teams across the globe. Today the company continues this at the Position Sensors technology base in the UK where Richard leads a highly skilled development team who are looking forward to working with you.



Track printing processes and ink technology improvements in 2017 now yields "as printed" linearity errors of less than +/- 0.5%". With correction error now less than +/- 0.2%,

We provide sensors for...

- Motorsport
- Autosport
- Mechatronics
- Industrial Applications
- Animatronics
- Robotronics



We can offer custom linear sensors

ie. Rodends at one end, pop joint the other end plus custom stroke lengths between 10mm and 250mm. Also we can sometimes reduce the retracted distance to make the sensor shorter. Longer retracted lengths are easier with either a longer rod and/or an extended case. Cables exit for the rodend C95M can be reversed to be the same as the Pop version. Just ask. We will do our best to help.



PS C95M with reverse cable position.
Order as PS C95M XX RC.

PS C15M with reverse cable position.
Order as PS C15M XX RC.



We have been making sensors with reverse cable position for some time, data now included on our website and in this product data book.

PS-C95 Series Linear Potentiometer

The PS-C95 Series of Linear Potentiometers are designed to provide linear measurement solutions for a variety of applications. Using proven 'conductive plastic' technology, the sensors offer high performance and reliability.

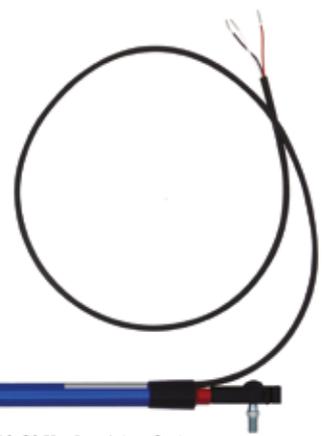
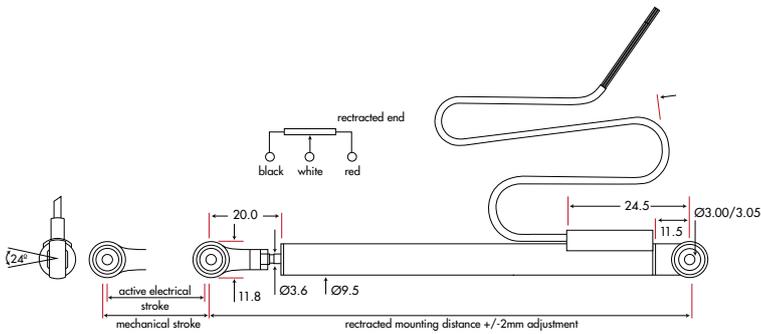


Image : PS C95P - Pop Joints Option

Technical Data



PS-C95M

Active Electrical Stroke (mm)	12.5	25	50	75	100	125	150	175
Retracted Mounting Distance (mm)*	82.5	95	120	145	178	203	228	253
Weight (g)	24	26	29	33	37	43	46	50
Resistance (KOhms +/-20%)	1.0	2.0	4.0	6.0	7.5	9.5	11.5	13.5

Features

- Rugged construction
- Excellent linearity
- Sealed to IP67
- Long life
- Miniature design
- Shaft (lip seal) as option
- Shaft 2 compressed O rings as standard

Option: Reverse cable position.
Order PS C95M XX RC.



PS-C95M

Specifications

Maximum Supply Voltage	40 VDC
Resolution	Essentially Infinite
Repeatability	≤0.01mm
Operational Speed	10 M/s max
Mechanical Life	> 25 Million Cycles
Temperature Range	-30 to +150°C
Environmental Sealing	IP67 : C95M & C95P / IP66 : C95
Linearity Error	less than 0.5%, (typical 0.25%)
Cable Type*	Raychem 55A0111-24 DR25 Jacket (nominal OD 2.8mm 24/26 AWG 55M as option 55M is high strength copper silver plated
Cable Length*	350mm (extra length cost plus)
Track Technology	Conductive Plastic
Housing Material	Aluminium
Mechanical Fixings	Spherical Bearings, Alloy Body. Mounting Hole Ø3.0mm. Or Pop Joints (2 x mating Ball Pins supplied with each sensor).

PS-C95P Pop Joints

Active Electrical Stroke (mm)	12.5	25	50	75	100	125	150	175
Retracted Mounting Distance (mm)*	102.5	115	149	175	205	230	260	285
Weight (g)	20	23	27	32	36	42	45	49
Resistance (KOhms +/-20%)	1.0	2.0	4.0	6.0	7.5	9.5	11.5	13.5

Ordering Information

- PS C95M Stroke length (eg. PS C95M 125)
 - PS C95P Stroke length (eg. PS C95P 75)
- If your application requires a low force to move the shaft please add LF to the product code.

tel. +44(0)1202 064834

email sales@position-sensors.co.uk

We can supply sensors fitted with Binder type 719 male connectors. A matching female connector is supplied for the customer to attach to the loom.

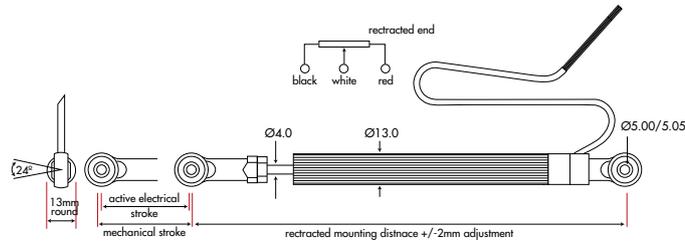


Specifications are subject to change, without notice. Warranty: The PS-C95 series are backed by a 1 year warranty. The user is responsible for correct installation and application suitability. Since the suitability of these products depends upon a wide range of factors not in our control, the manufacturer expects and understands that you will conduct the testing and evaluation necessary to determine that these products are suitable for your application. Whilst every effort is made to ensure the above details are correct at the time of printing, the manufacturer reserves the right to make material changes, and or technical changes without notification. * Custom options are available on request.

PS-C13 Series Linear Potentiometer

The PS-C13 series of Linear Potentiometers are designed to withstand the harsh environment of industrial and motorsport applications. Using proven 'conductive plastic' technology, these sensors offer high performance and reliability.

Technical Data

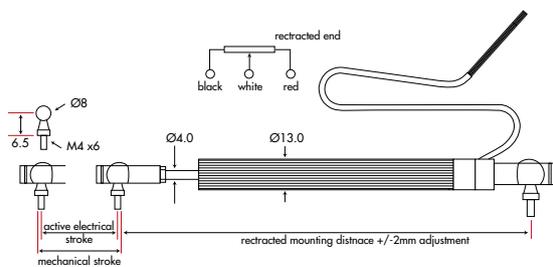


PS-C13

Active Electrical Stroke (mm)	25	50	75	100	125	150	175
Retracted Mounting Distance (mm)*	173.5	198.5	223.5	248.5	273.5	298.5	318.5
Mechanical Stroke (mm)*	27	52	77	102	127	152	177
Weight Approximate (g)	49	55	61	67	73	79	85
Resistance (KOhms +/-20%)	2.0	4.0	6.0	7.5	9.5	11.5	13.5

PS-C13C Compact

Active Electrical Stroke (mm)	25	50	75	100	125	150	175
Retracted Mounting Distance (mm)*	148.5	173.5	198.5	223.5	248.5	273.5	298.5
Mechanical Stroke (mm) *	25	52	77	102	127	152	177
Weight Approximate (g)	46	52	58	64	70	76	82
Resistance (KOhms +/-20%)	2.0	4.0	6.0	7.5	9.5	11.5	13.5



PS-C13P Pop Joints

Active Electrical Stroke (mm)	25	50	75	100	125	150	175
Retracted Mounting Distance (mm)*	148.5	173.5	198.5	223.5	248.5	273.5	298.5
Mechanical Stroke (mm)*	27	52	77	102	127	152	177
Weight Approximate (g)	38	44	50	56	62	68	76
Resistance (KOhms +/-20%)	2.0	4.0	6.0	7.5	9.5	11.5	13.5

Ordering Information

- PS C13 Stroke length (eg. PS C13 100)
- PS C13C Stroke length (eg. PS C13C 125)
- PS C13P Stroke length (eg. PS C13P 75)

If your application requires a low force to move the shaft please add LF to the product code. NOTE: We will remove the shaft seal in LF versions.

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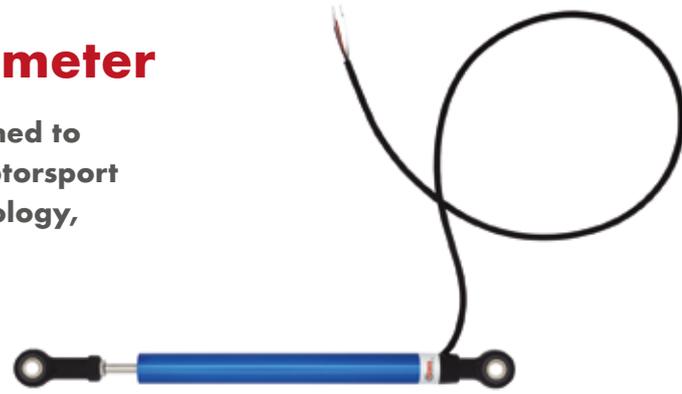


Image : PS C13 - Mounting Hole Ø5.0mm.

Features

- Low cost
- Rugged construction
- Excellent linearity
- Sealed to IP67
- Long life
- Compact design
- Dual track option
- Shaft (lip seal) as standard

We can supply sensors fitted with Binder type 719 male connectors. A matching female connector is supplied for the customer to attach to the loom.



Specifications

Maximum Supply Voltage	40 VDC
Resolution	Essentially Infinite
Repeatability	±0.01mm
Operational Speed	10 M/s max
Mechanical Life	> 25 Million Cycles
Temperature Range	-30 to +125°C
Environmental Sealing	IP67
Linearity Error	± +/- 0.5%
Cable Type*	Raychem 44A0111-24 Raychem Thermorad Jacket nominal OD 3.4mm 24/26 AWG 55A option 55M is high strength copper silver plated
Cable Length*	350mm (extra length cost plus)
Track Technology	Conductive Plastic
Housing Material	Aluminium
Shaft Material	Stainless Steel
Mechanical Fixings	Spherical Bearings, Alloy Body. Mounting Hole Ø5.0mm. Or Pop Joints (2 x mating Ball Pins supplied with each sensor).

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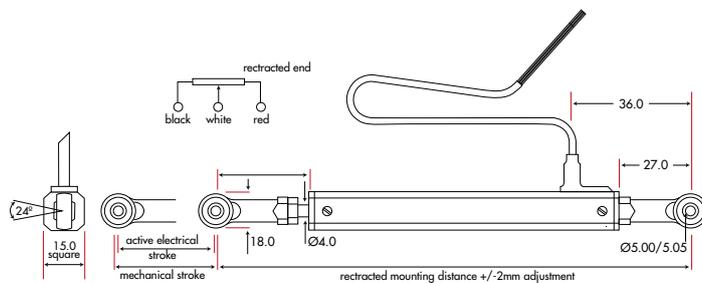
PS-C15 Series Linear Potentiometer

The PS-C15 Series of Linear Potentiometers are designed to provide linear measurement solutions for a variety of applications. Using proven 'conductive plastic' technology, the sensors offer high performance and reliability.



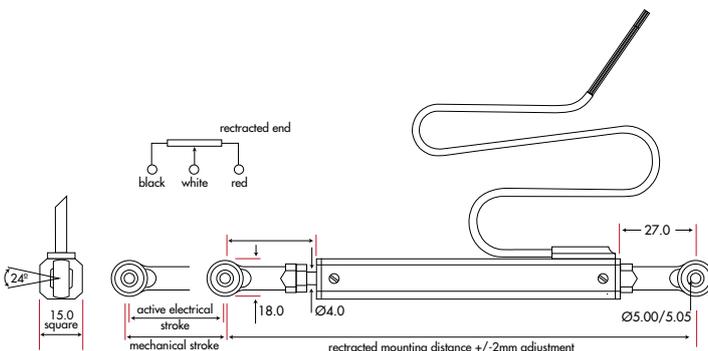
Image : PS C15M - Mounting Hole Ø5.0mm.

Technical Data



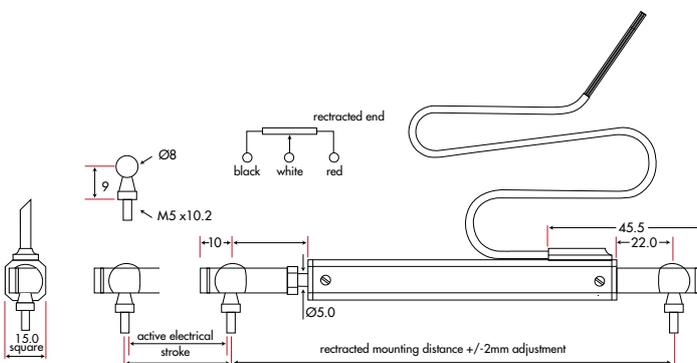
PS-C15

Active Electrical Stroke (mm)	25	50	75	100	150	200	250
Retracted Mounting Distance (mm)*	173	198	223	248	298	351	401
Resistance (KOhms +/-20%)	2.5	5	7.5	10	10	10	10



PS-C15M

Active Electrical Stroke (mm)	25	50	75	100	150	200	250
Retracted Mounting Distance (mm)*	173	198	223	248	298	351	401
Resistance (KOhms +/-20%)	2.5	5	7.5	10	10	10	10



PS-C15MP Pop Joints

Active Electrical Stroke (mm)	25	50	75	100	150	200	250
Retracted Mounting Distance (mm)*	165	190	215	240	290	340	390
Resistance (KOhms +/-20%)	2.5	5	7.5	10	10	10	10

Features

- Rugged construction
- Excellent linearity
- Sealed to IP65
- Long life
- Shaft (lip seal) as option
- Shaft 2 compressed O rings as standard

Option: Reverse cable position.
Order PS C15M XX RC.

PS-C15M



Specifications

Maximum Supply Voltage	40 VDC
Resolution	Essentially Infinite
Repeatability	≤0.01mm
Operational Speed	10 M/s max
Mechanical Life	> 25 Million Cycles
Temperature Range	-40 to +125°C
Environmental Sealing	IP65
Linearity Error	less than 0.5%, (typical 0.25%)
Cable Type*	Raychem 44A0111-24 Raychem Thermorad Jacket nominal OD 3.4mm 24/26 AWG 55A option 55M is high strength copper silver plated
Cable Length*	350mm (extra length cost plus)
Track Technology	Conductive Plastic
Housing Material	Aluminium
Mechanical Fixings	Spherical Bearings, Alloy Body. Mounting Hole Ø5.0mm. Or Pop Joints (2 x mating Ball Pins supplied with each sensor).

Ordering Information

- PS C15 Stroke length (eg. PS C15 100)
- PS C15M Stroke length (eg. PS C15M 150)
- PS C15P Stroke length (eg. PS C15P 75)

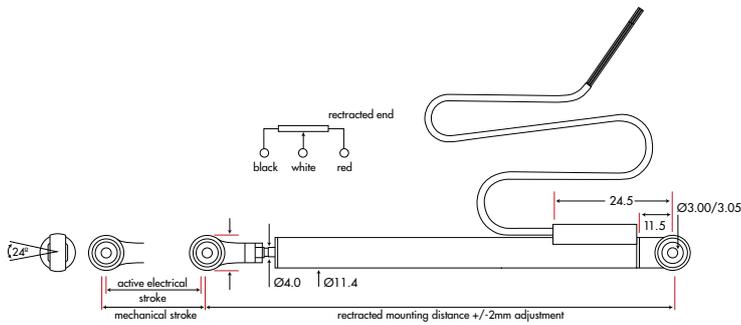
If your application requires a low force to move the shaft please add LF to the product code.

Specifications are subject to change, without notice. Warranty: The PS-C15 series are backed by a 1 year warranty. The user is responsible for correct installation and application suitability. Since the suitability of these products depends upon a wide range of factors not in our control, the manufacturer expects and understands that you will conduct the testing and evaluation necessary to determine that these products are suitable for your application. Whilst every effort is made to ensure the above details are correct at the time of printing, the manufacturer reserves the right to make material changes, and or technical changes without notification. * Custom options are available on request.

PS-C11.5 Series Linear Potentiometer

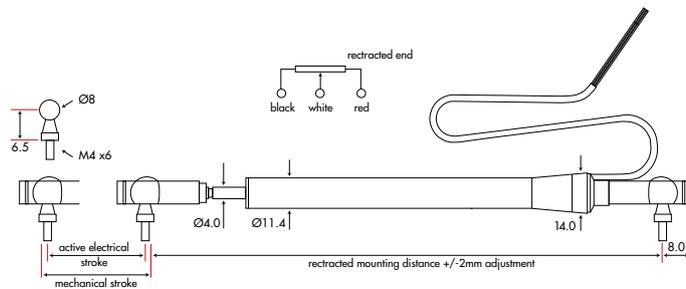
The PS-C11.5 series of Linear Potentiometers are designed to withstand the harsh environment of industrial and motorsport applications. Using proven 'conductive plastic' technology, these sensors offer high performance and reliability.

Technical Data



PS-C11.5M

Active Electrical Stroke (mm)	25	50	75	100	125	150	175
Retracted Mounting Distance (mm)*	95	120	145	178	203	228	253
Weight Approximate (g)	30	33	38	42	49	53	57
Resistance (KOhms +/-20%)	2.0	4.0	6.0	7.5	9.5	11.5	13.5



PS-C11.5P Pop Joints

Active Electrical Stroke (mm)	25	50	75	100	125	150	175
Retracted Mounting Distance (mm)*	95	120	145	178	203	228	253
Weight Approximate (g)	30	33	38	42	49	53	57
Resistance (KOhms +/-20%)	2.0	4.0	6.0	7.5	9.5	11.5	13.5

Ordering Information

- PS C11.5M Stroke length (eg. PS C11.5M 125)
 - PS C11.5P Stroke length (eg. PS C11.5P 75)
- If your application requires a low force to move the shaft please add LF to the product code.

tel. +44(0)1202 064834

email sales@position-sensors.co.uk

Features

- Rugged construction
- Excellent linearity
- Sealed to IP67
- Long life
- Compact design
- Shaft (lip seal) as option
- Shaft 2 compressed O rings as standard

We can supply sensors fitted with Binder type 719 male connectors. A matching female connector is supplied for the customer to attach to the loom.



Specifications

Maximum Supply Voltage	40 VDC
Resolution	Essentially Infinite
Repeatability	≤0.01mm
Operational Speed	10 M/s max
Mechanical Life	> 25 Million Cycles
Temperature Range	-30 to +150°C
Environmental Sealing	IP67
Linearity Error	≤ +/- 0.25%
Cable Type*	Raychem 55A0111-24 DR25 Jacket (nominal OD 2.8mm 24/26 AWG 55M as option 55M is high strength copper silver plated
Cable Length*	350mm (extra length cost plus)
Track Technology	Conductive Plastic
Housing Material	Aluminium
Shaft Material	Stainless Steel
Mechanical Fixings	Spherical Bearings, Alloy Body. Mounting Hole Ø3.0mm. Or Pop Joints (2 x mating Ball Pins supplied with each sensor).

Specifications are subject to change, without notice. Warranty: The PS-C11.5M series are backed by a 1 year warranty. The user is responsible for correct installation and application suitability. Since the suitability of these products depends upon a wide range of factors not in our control, the manufacturer expects and understands that you will conduct the testing and evaluation necessary to determine that these products are suitable for your application. Whilst every effort is made to ensure the above details are correct at the time of printing, the manufacturer reserves the right to make material changes, and or technical changes without notification. * Custom options are available on request.



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MADE FOR COMPETITION

Standard or custom linear sensors 10mm to 250mm offering reliability, long life, performance and value.

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Position Sensors Ltd

Unit 6, Holloways, Bessemer Close, Ebblake Industrial Estate,
Verwood. BH31 6AZ United Kingdom