PCM & KTF
LINEAR MOTION POSITION SENSORS

- Very long life >100 x 10^6 cycles
  > 25 x 10^6 m
- Smooth Low Noise Output from Conductive Plastic track
- Outstanding Linearity ± 0.07%
- Excellent repeatability < ± 0.013mm
- Infinite resolution
- Rodless and Control Rod Operation
- Anodised Aluminium Housing
- DIN 43650 ISO 4400 Connector
- Wide Range of Applications
- Durable bearings and slider
- Rugged construction for use in demanding applications

Aplications examples inclides industrial and process controls such as injection moulding machines, printing presses and woodworking machines.

The KTC and KTF sensors are potentiometric sensors with a long lasting conductive track for absolute position sensing in control and measurement applications.

The sensors are available in stroke lengths up to 900mm in the KTC range and 1000mm in the KTF range. The conductive plastic track with the high precision precious metal wiper provides a very smooth signal with minimum noise and long life. The sensors give exceptional resolution with repeatability of ±0.13mm and outstanding linearity of ±0.07% maximum. The extruded aluminium body has carrier guides along the whole length of the sensor. Fixing feet are available which slide into the guides and allow easy and robust mounting.

The KTC series has has a solid stainless steel shaft with long bearings in the housing for a robust and smooth operation with long life. The KTF series is a rodless version which provides minimum installation length. The slide has a ball coupling which reduces the effects of misalignment with the actuating part.

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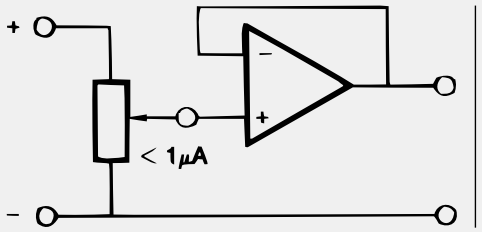
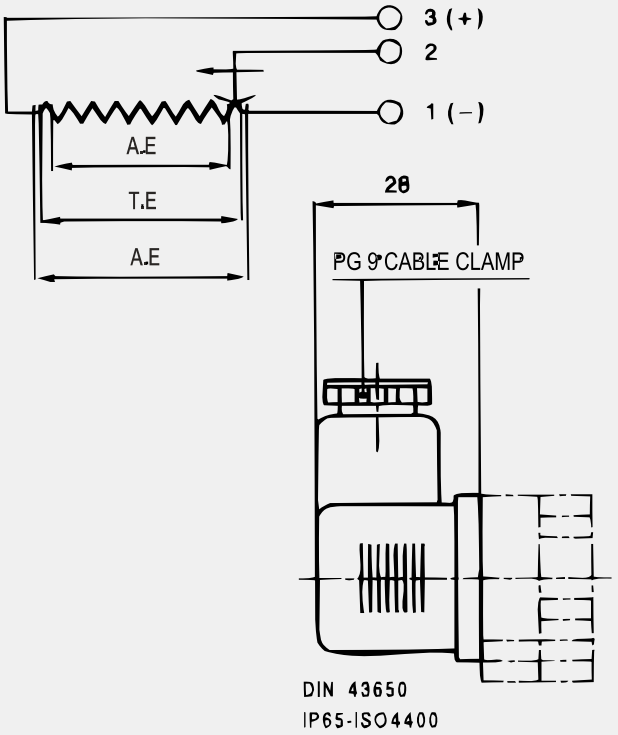
RECOMMENDED MEASUREMENT CIRCUIT



Important:
The published technical data are applicable only when the transducer is used correctly, and in accordance with the user manual / instructions. The KTF & KTC linear Position transducers must be used as voltage dividers with a maximum current in the wiper contact of 1 μ A. should the system downstream require more current, further circuitry will be required.

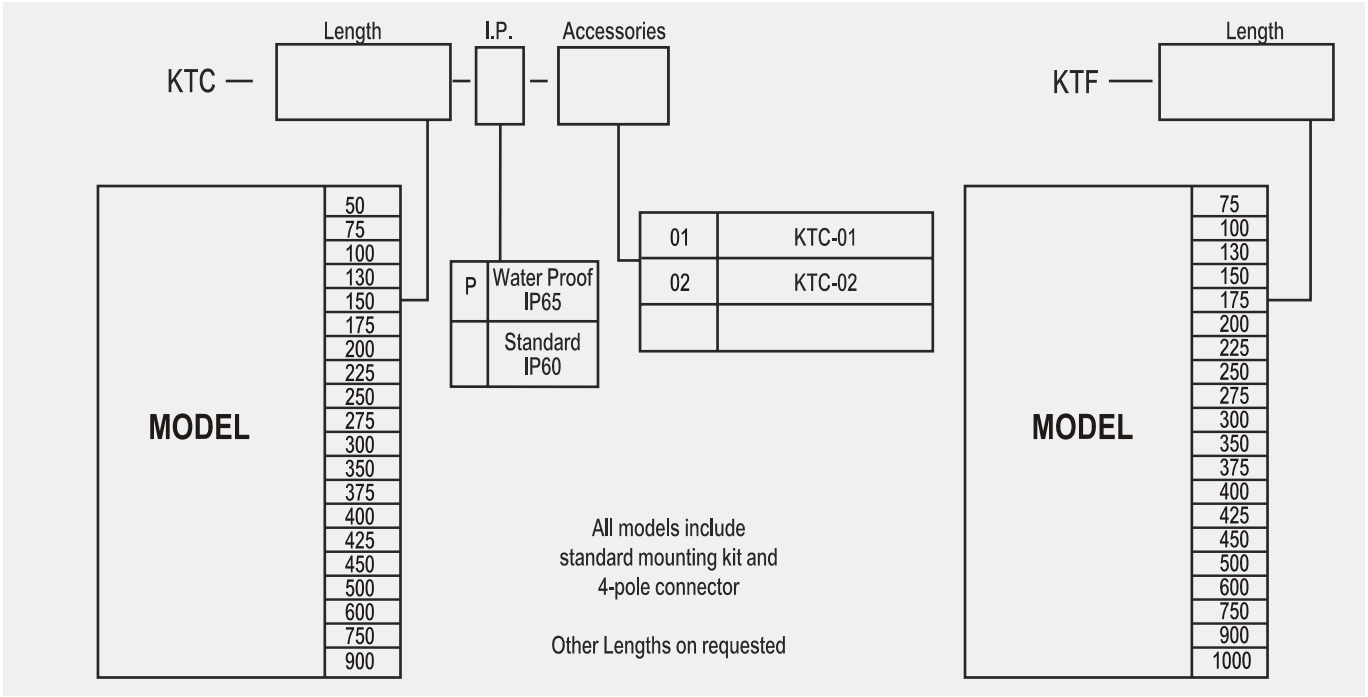
ELECTRICAL CONNECTIONS



ENVIRONMENTAL SPECIFICATIONS

Operating temperature		-55 to +125°C	Max. Power dissipation	3W - 10W
Sealing - KTC		IP60	Output Smoothness	< ±0.1% against input voltage
Sealing - KTC-P		IP65	Input Voltage	60 V Max
Sealing - KTF		IP50	Insultation Voltage	500V-1 min Residue < 5 μ A
Repeatablity		0.013mm	Life	> 100 x 10^6 Cycles
Current	Resistance	≦10mA	Operating Speed	10m/s max
	Wiper	≦ 1mA	Vibration	IEC 68-2-6:1982 10g
Operating Force		≦ 2N (KTC & KTF) ≦ 10N (KTC-P)	Shock	IEC 68-2-29:1968 40g

ORDER CODE



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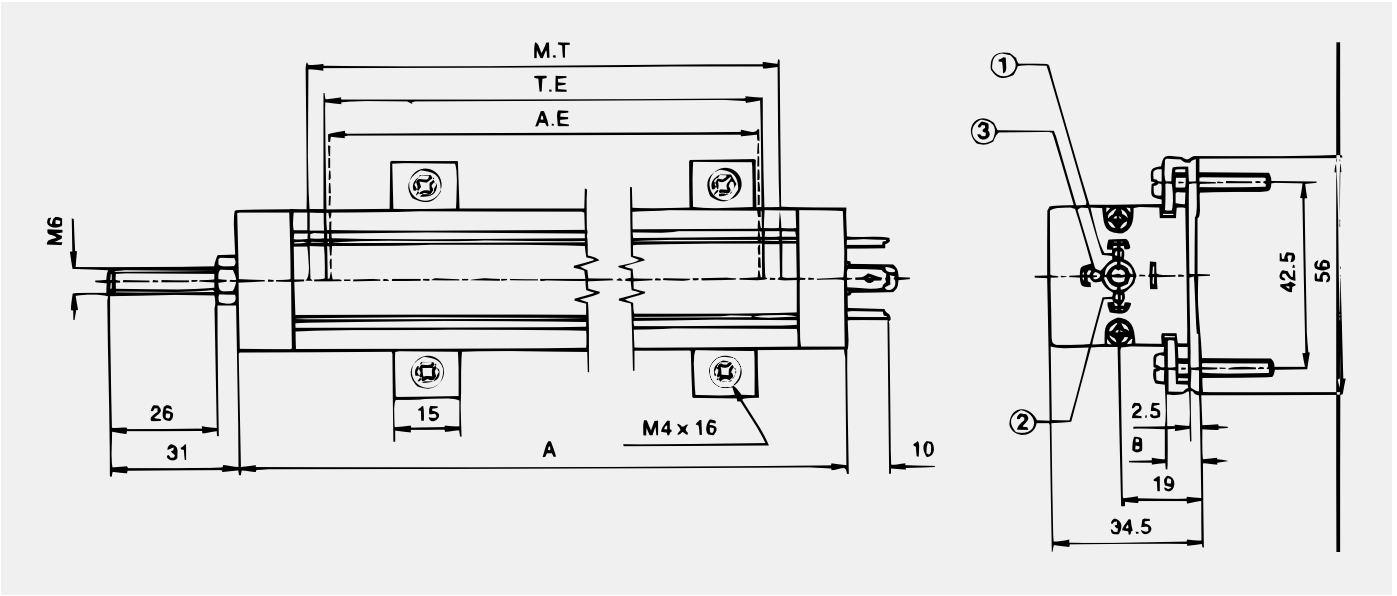
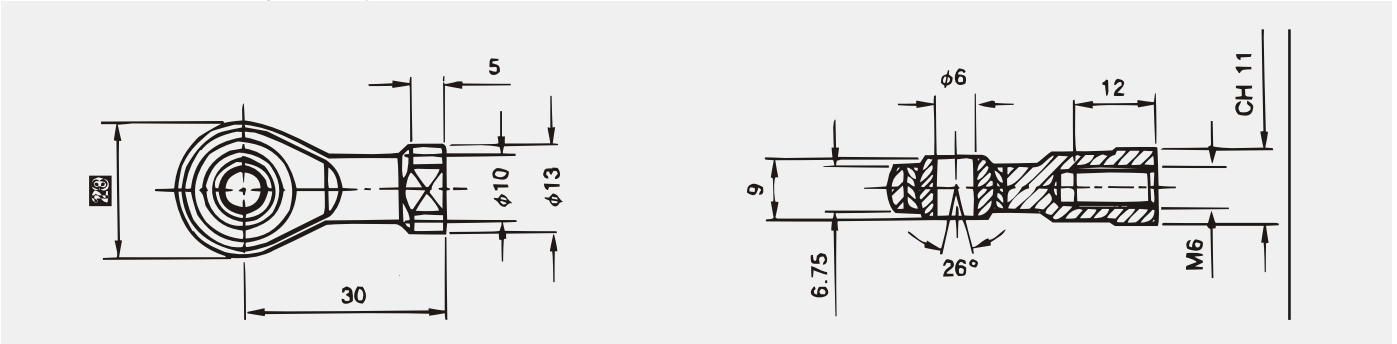
KTC series		50	75	100	130	150	175	200	225	250	275	300	350	375	400	425	450	500	600	750	900
Total Electrical Travel (T.E)	mm	51	76	102	132	152	177	202	229	254	279	305	355	381	405	430	457	507	610	762	914
Active Electrical Travel (A.E)	mm	51	75	100	130	150	175	200	226	253	276	302	352	378	403	428	455	505	607	759	912
Resistance ±20%	kΩ	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0	10.0
Independent Linearity	±%	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Mechanical Travel (M.T)	mm	58	79	104	135	155	179	204	231	256	281	307	357	384	404	429	460	506	612	765	917
Resolution		infinite																			
Recommended Wiper Current	μA	< 1																			
Temperature Range	˚C	-55 - +125																			
Dimension (A)	mm	114	139	164	195	215	241	266	291	316	341	367	417	444	469	494	520	570	672	825	977

* Dimensions for reference only

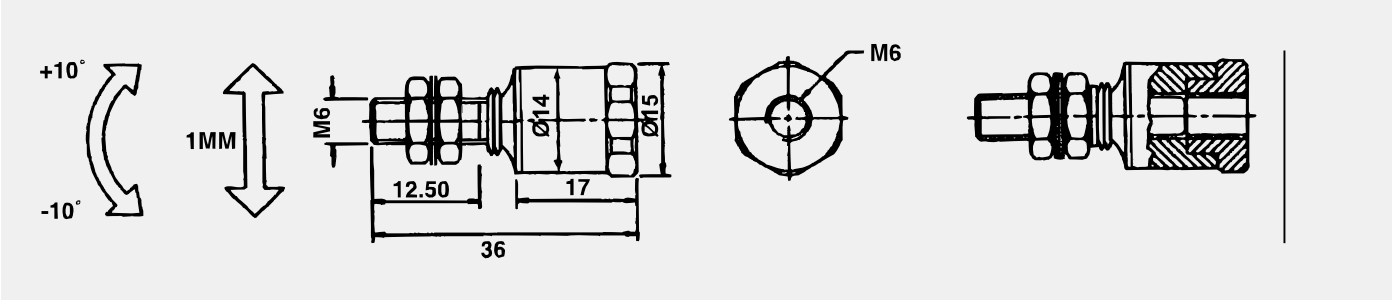
MECHANICAL DIMENSIONS KTC



ROD END BEARING (KTC-01)



LINK BALL (KTC-02)



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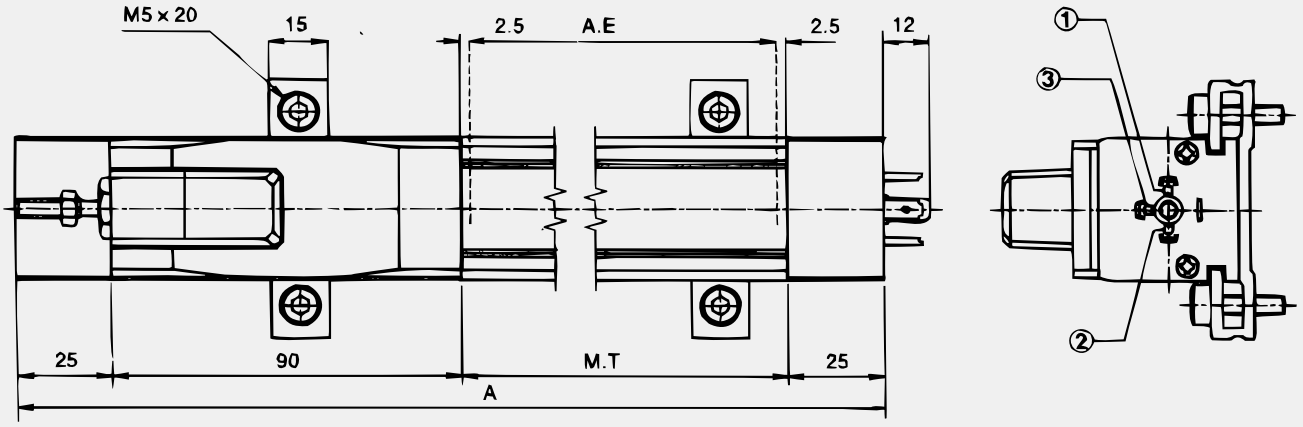
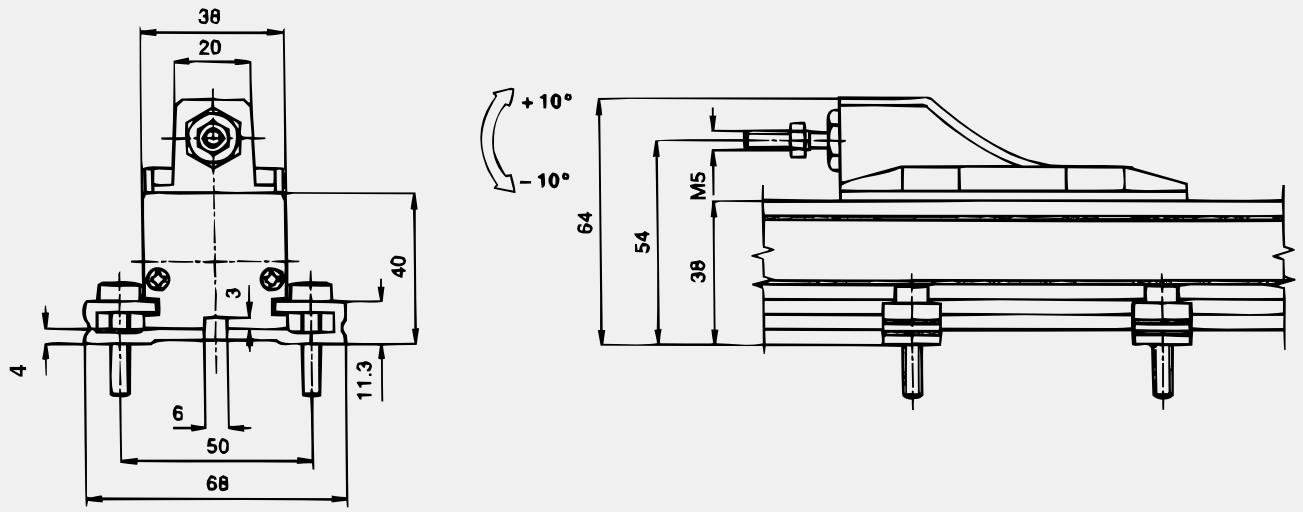
KTF series		75	100	130	150	175	200	225	250	275	300	350	375	400	425	450	500	600	750	900	1000
Total Electrical Travel (T.E)	mm	76	102	132	152	177	202	229	254	279	305	355	381	405	430	457	507	610	762	914	1014
Active Electrical Travel (A.E)	mm	75	100	130	150	175	200	226	253	276	302	352	378	403	428	455	505	607	759	912	1013
Resistance ±20%	kΩ	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0	10.0	10.0
Independent Linearity	±%	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Mechanical Travel (M.T)	mm	79	104	135	155	179	204	231	256	281	307	357	384	404	429	460	506	612	765	917	1017
Resolution		infinite																			
Recommended Cursor Current	μA	< 1																			
Temperature Range	˚C	-55 - +125																			
Dimension (A)	mm	216	241	271	292	317	343	368	393	418	444	494	521	538	563	597	638	738	888	1038	1138

* Dimensions for reference only

MECHANICAL DIMENSIONS KTF



COUPLING JOINT



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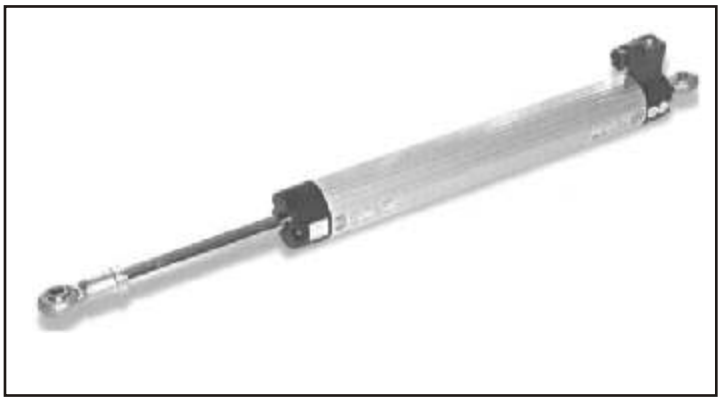
PCM
LINEAR MOTION POSITION SENSORS
35 Section, STANDARD 50-900mm

Pulling Rod Type



The sensor is built for easy mounting by double built in connectors, enable a large angle of misalignment and without back-lashes. A built- in connector system that is designed of raliability and safety contributes to excellent performance.

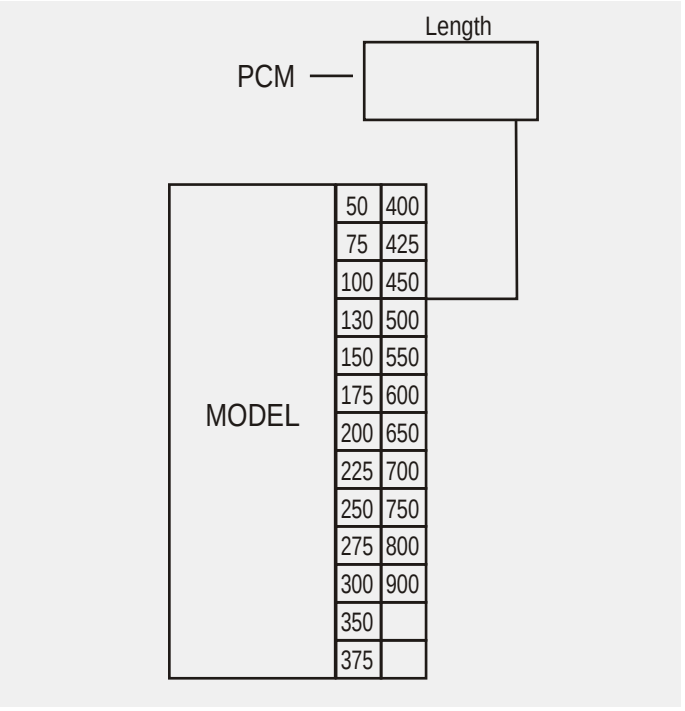
These series can be used in a wide range of aplications in mechanical and vehicle engineering industrias as well as in automation and robotics technologies, combining remarkable robustness with high accuracy.

Unique Features

- Anodized aluminium housing
- Stroke lengths from 50 to 900mm
- Twin-bearing actuating rod
- Excellent linearity to ±0.05%
- Repeatubility better than 0.01mm
- Smooth Low noise Output from Conductive Plastic tack
- Very Long life..... >100x10^6 Cycles
  >25x10^6 m
- Stroke..... : 50-90mm
- Outstanding Linearity..... : ±0.05%
- High resolution..... : Infinite
- Excellent repeatability..... : ± 0.01mm
- Max . Operating speed..... : 5m/s ma.
- C193 4-PIN Connector..... :
- Fuse protected optional..... :
- Operating temperature..... : -30 100ºC
- Storage Temperature..... : -50 120ºC

Technical Specifications		
Sealing - PCM		IP65
Current	Resistance	≦ 10mA
	Wiper	≦ 1mA
Operating Force		≦ 10N
Power Consumption		3W-10W
Output Smoothness		< ± 0.1% against input voltage
Input Voltage		60 V Max
Insulation Voltage		500V-1 min Residue < 5 μA
Vibration		IEC 68-2-6:1982 10g
Shock		IEC 68-2-29:1968 40g

ORDER CODE



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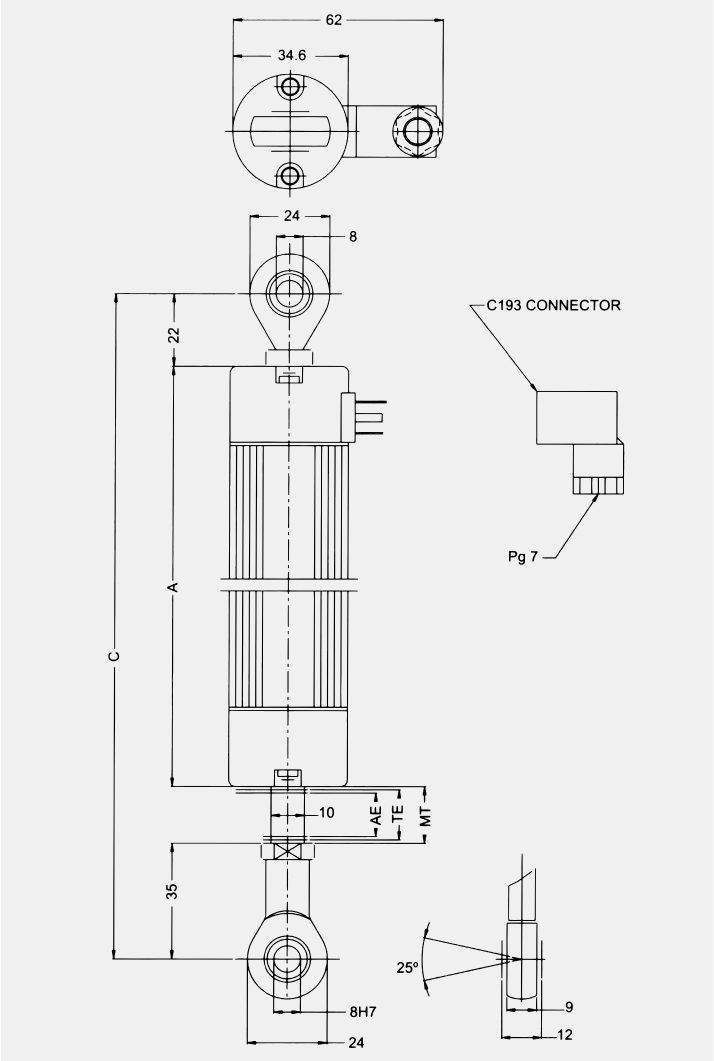
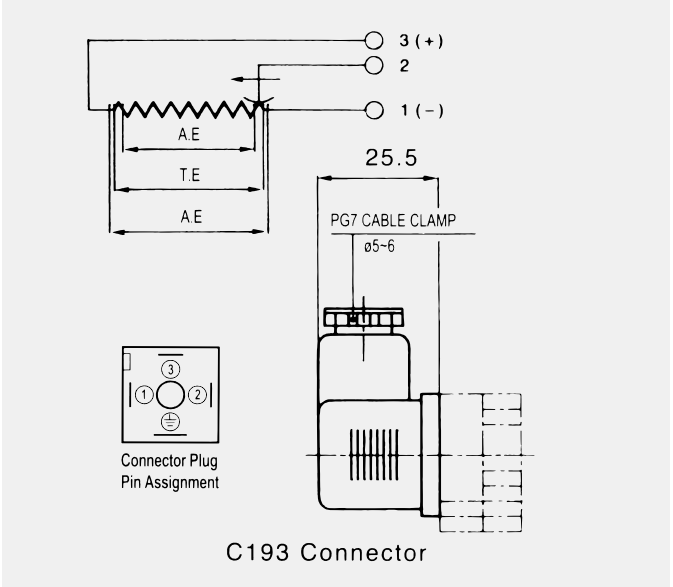
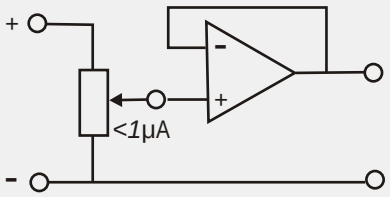
PCM
LINEAR MOTION POSITION SENSORS
35 Section, STANDARD 50-900mm



ELECTRICAL CONNECTIONS



RECOMMENDED MEASUREMENT CIRCUIT



Important:
The published technical data are applicable only when the transducer is used correctly, and in accordance with the user manual / instructions. The PCM linear Position transducers must be used as voltage dividers with a maximum xurrent in the wiper contact of 1 µ A: should the system downstream require more current further circuitry will be required.

PCM series		50	75	100	130	150	175	200	225	250	275	300	350	375	400	425	450	500	550	600	650	700	750	800	900
Total Electrical Travel (T.E)	mm	53	78	103	133	153	178	204	229	254	279	304	354	380	406	432	457	508	558	609	659	710	762	812	914
Active Electrical Travel (A.E)	mm	51	76	101	131	151	176	202	227	252	277	302	352	378	404	430	455	506	556	607	657	708	760	810	912
Resistance ± 20%	kΩ	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	10	10	10	10	10
Independent Linearity	±%	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Mechanical Travel (M.T)	mm	59	84	109	139	159	184	210	235	260	285	310	360	386	412	437	463	518	568	619	669	720	772	822	924
Resolution		Infinite																							
Recommended Cursor Current	µA	< 1																							
Temperature Range	˚C	-30 to +100																							
Dimension (A)	mm	166	191	216	246	266	291	318	343	368	393	419	484	509	534	561	609	673	732	799	849	899	983	1054	1174
Dimension (B)	mm	223	248	273	303	323	348	375	400	425	450	476	541	566	591	618	666	730	780	856	906	956	1040	1111	1231

* Dimensions for reference only

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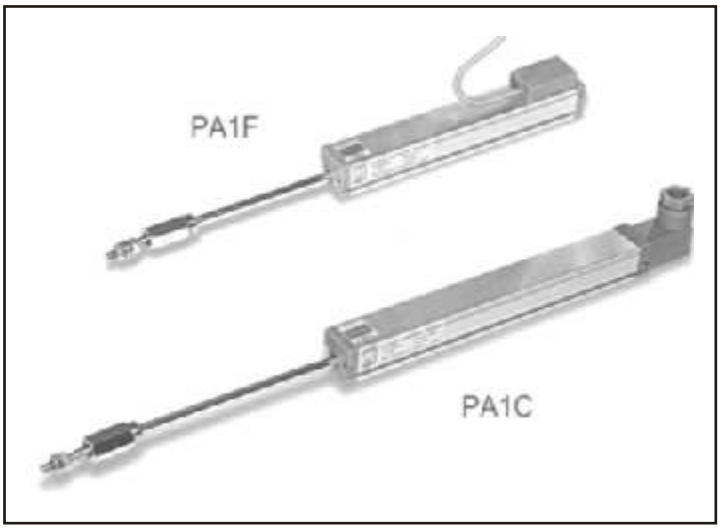
PA1
LINEAR MOTION POSITION SENSORS
Mini Series □ Section, STANDARD 10-450mm

Pulling Rod Type



This mini position transducer is designer for direct absolute measurement and available in stroke length up to 450mm. The mini design is suitable for mounting instruments or machines winth limited space.

An improved technique for making connection to resistance track (Double Trimming Technique) ensures the higher degrees of reliability and linearity, while multi-fingers wipers stabilize output signals, even in the most adverse working conditions.

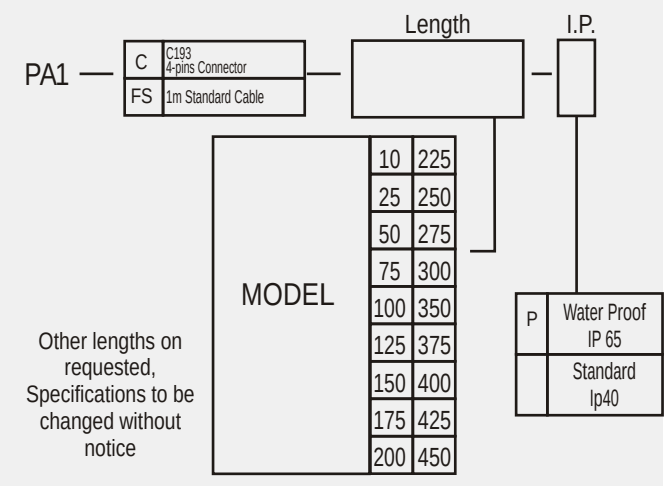
The fixing feet are adjustable to the desired positions.

Unique Features

- Mini design for limited space
- Anodised Aluminium Housing
- Double slide and bearing
- Standard Coupling joints
- Very Long life >100x10⁶ Cycles >25x10⁶m
- Stroke length : 10-450mm
- Outstanding Linearity up to : ±0.05%
- High resolution : Infinite
- Excellent repeatability : ± 0.01mm
- Max . Operating speed. : 5m/s max.
- PA1C - 4-pin C193 connector
- PA1FS - standard 1m cable
- Sealing IP40 standard (IP 65) :
- Fuse protected optional :
- Operating temperature : -30 100ºC
- Storage Temperature : -50 120ºC

Technical Specifications		
Sealing - PA1C/PA1F		IP40
Sealing - optional		IP65
Current	Resistance	≦ 10mA
	Wiper	≦ 1mA
Operating Force		≦ 1.2N (IP40)
		≦ 5N (IP65)
Power Consumption		3W-10W
Output Smoothness		<± 0.1% against input voltage
Input Voltage		60 V Max
Insulation Voltage		500V-1 min Residue < 5 μA
Vibration		IEC 68-2-6:1982 10g
Shock		IEC 68-2-29:1968 40g

ORDER CODE



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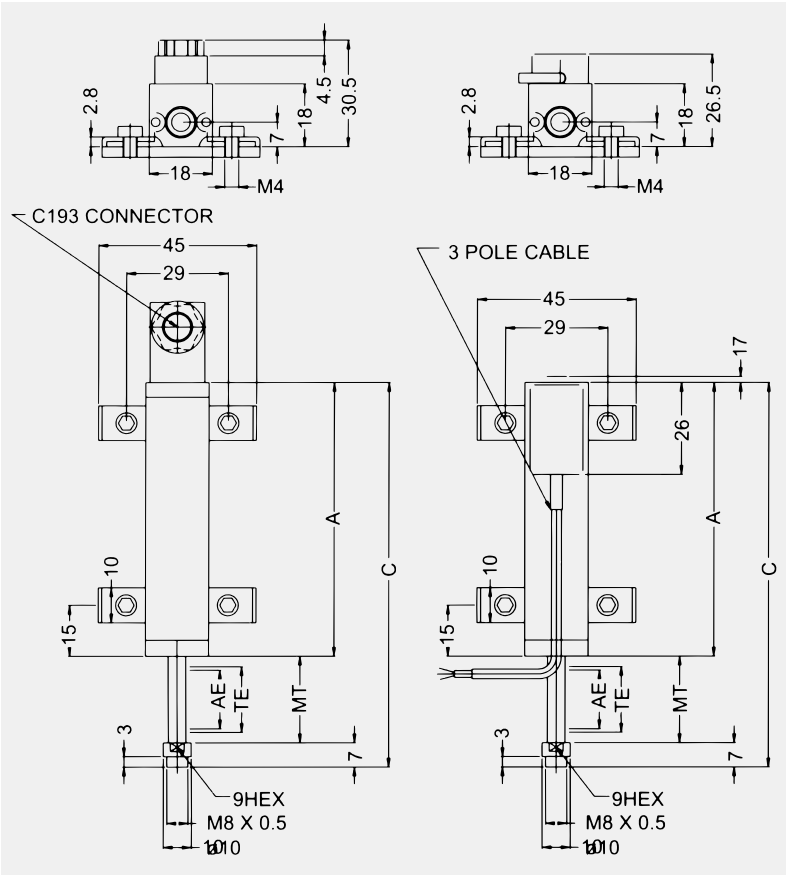
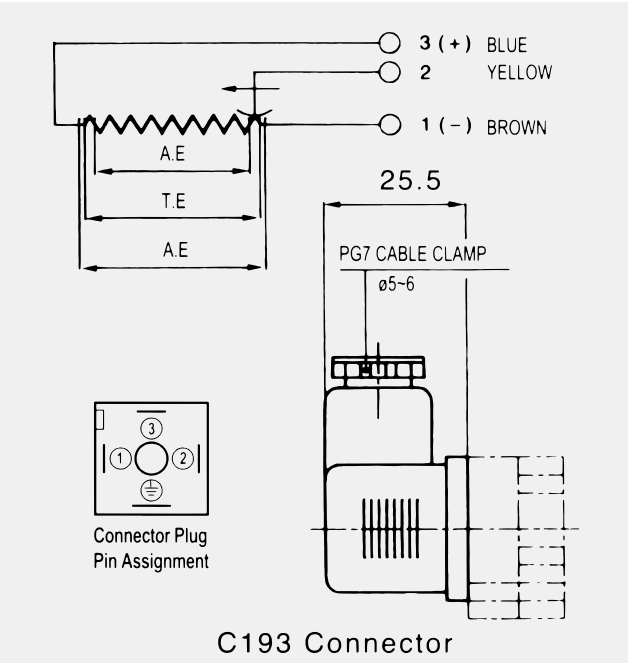
PA1
LINEAR MOTION POSITION SENSORS
Mini Series □ Section, STANDARD 10-450mm

ELECTRICAL CONNECTIONS





PA1 series		10	25	50	75	100	125	150	175	200	225	250	275	300	350	375	400	425	450
Total Electrical Travel (T.E)	mm	11	26	51	76	101	126	151	177	202	227	252	277	302	353	378	403	428	453
Active Electrical Travel (A.E)	mm	10	25	50	75	100	125	150	176	201	226	251	276	301	352	374	402	427	452
Resistance ± 20%	kΩ	1	1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Independent Linearity	±%	0.3	0.2	0.1	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Mechanical Travel (M.T)	mm	15	30	55	80	105	130	155	180	205	230	255	280	305	355	380	405	430	455
Resolution		Infinite																	
Recommended Cursor Current	μA	< 1																	
Temperature Range	˚C	-30 to +100																	
Dimension (A)	mm	59.5	74.5	149.5	124.5	149.5	174.5	199.5	224.5	249.5	274.5	299.5	324.5	349.5	399.5	424.5	449.5	474.5	499.5
Dimension (B)	mm	83.2	113.2	263.2	213.2	263.2	313.2	363.2	413.2	463.2	513.2	563.2	613.2	663.2	763.2	813.2	863.2	913.2	963.2

*Dimensions for reference only

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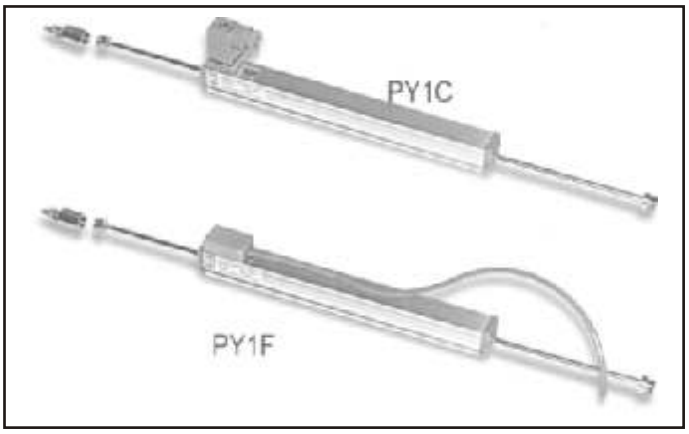
PY1
LINEAR MOTION POSITION SENSORS
Mini Series ☐ 18 Section, STANDARD 10-450mm

Pull & Push Rod Type



This mini position transducer is designer for direct absolute measurement and available in stroke length up to 450mm. The mini design is suitable for mounting instruments or machines with limited space.

An improved technique for making connection to resistance track (Double Trimming Technique) ensures the higher degrees of reliability and linearity, while multi-fingers wipers stabilize output signals, even in the most adverse working conditions.

The fixing feet are adjustable to the desired positions.

The pull & Push rod mounting in 2 ways directions enables more stable movement, and extra low operating forces.

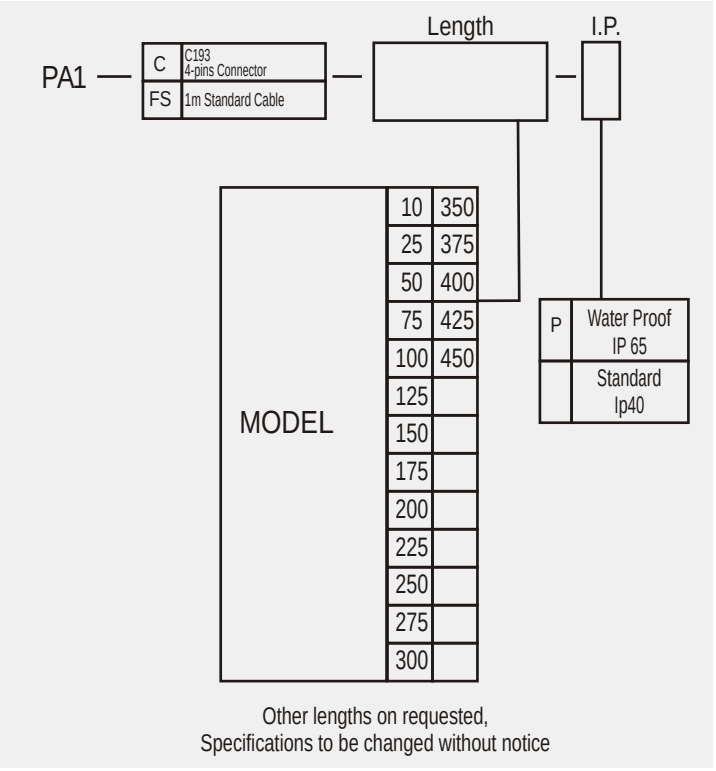
Unique Features

- Mini design for limited space
- Anodised Aluminium Housing
- Double slide and bearing
- Standard Coupling joints
- Very Long life >100x10^6 Cycles >25x10^6 m
- Stroke length : 10-450mm
- Outstanding Linearity up to : ±0.05%
- High resolution : Infinite
- Excellent repeatability : ± 0.01mm
- Max . Operating speed. : 5m/s max.
- PY1C - 4-pin C193 connector
- PY1FS - standard 1m cable
- Sealing IP40 standard (IP 65)

- Fuse protected optional
- "Pull" and "Push" Rod Type
- Operating temperature : -30 100ºC
- Storage Temperature : -50 120ºC

Technical Specifications		
Sealing - PY1C/PY1F		IP40
Sealing - optional		IP65
Current	Resistance	≦ 10mA
	Wiper	≦ 1mA
Operating Force		≦ 1.2N (IP40) ≦ 5N (IP65)
Power Consumption		3W-10W
Output Smoothness		<± 0.1% against input voltage
Input Voltage		60 V Max
Insulation Voltage		500V-1 min Residue < 5 μA
Vibration		IEC 68-2-6:1982 10g
Shock		IEC 68-2-29:1968 40g

ORDER CODE



Other lengths on requested,
Specifications to be changed without notice

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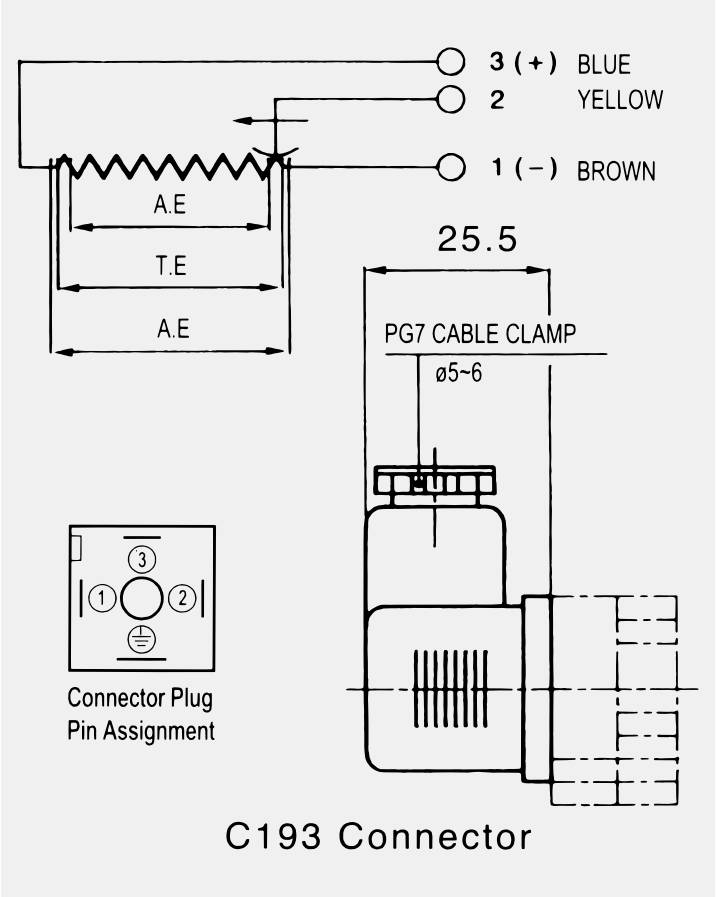
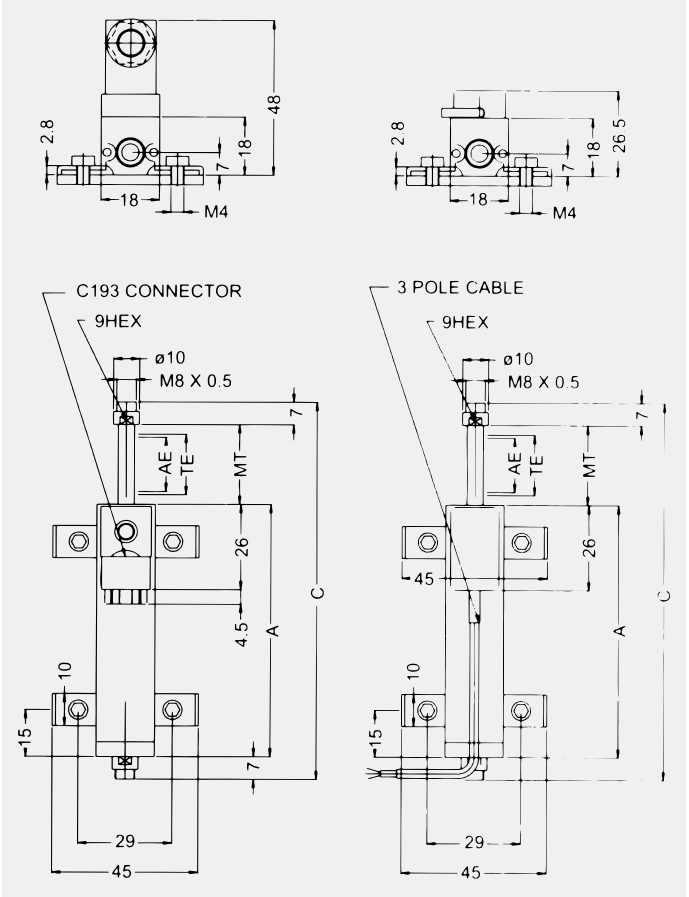
PY1
LINEAR MOTION POSITION SENSORS
Mini Series ☐ 18 Section, STANDARD 10-450mm

ELECTRICAL CONNECTIONS





PY1 series		10	25	50	75	100	125	150	175	200	225	250	275	300	350	375	400	425	450
Total Electrical Travel (T.E)	mm	11	26	51	76	101	126	151	177	202	227	252	277	302	353	378	403	428	453
Active Electrical Travel (A.E)	mm	10	25	50	75	100	125	150	176	201	226	251	276	301	352	374	402	427	452
Resistance ± 20%	kΩ	1	1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Independent Linearity	±%	0.3	0.2	0.1	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Mechanical Travel (M.T)	mm	15	30	55	80	105	130	155	180	205	230	255	280	305	355	380	405	430	455
Resolution		Infinite																	
Recommended Cursor Current	μA	< 1																	
Temperature Range	˚C	-30 to +100																	
Dimension (A)	mm	48	63	88	113	138	163	183	213	238	263	288	313	338	388	413	438	463	488
Dimension (B)	mm	77	107	157	207	257	307	357	407	457	507	557	607	357	757	807	857	905	957

*Dimensions for reference only

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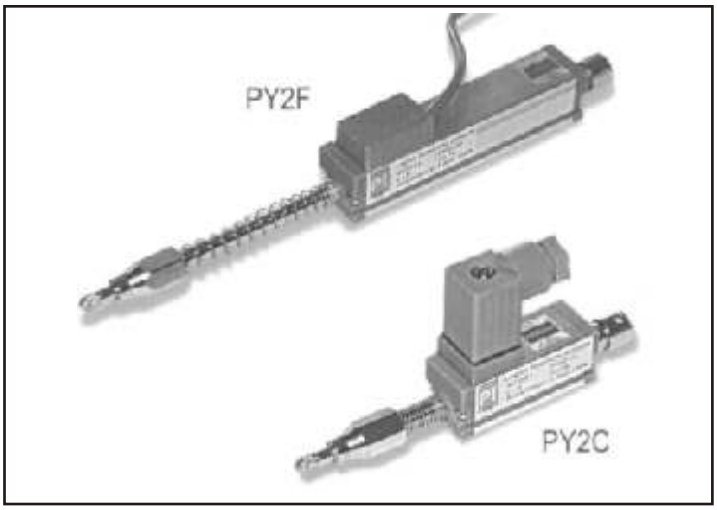
PY2
LINEAR MOTION POSITION SENSORS
Mini Series □ 18 Section, STANDARD 10-50mm

Ball Head Pre-loaded Spring Type



This mini position transducer is designer for direct absolute measurement and available in stroke length up to 50mm. The mini design is suitable for mounting instruments or machines with limited space and specially design for cam-followin application.

An improved technique for making connection to resistance track (Double Trimming Technique) ensures the higher degrees of reliability and linearity, while multi-fingers wipers stabilize output signals, even in the most adverse working conditions.

The fixing feet are adjustable to the desired positions.

Unique Features

- Harden steel ball head for measurement of cam-following application
- Mini design for limited space
- Anodised Aluminium Housing
- Double slide and bearing
- Very Long life >100x10^6 Cycles >25x10^{6}m
- Stroke : 10-50mm
- Outstanding Linearity up to : ±0.01%
- High resolution : Infinite
- Excellent repeatability : ± 0.01mm
- Max . Operating speed. : 5m/s max.
- PY2C - 4-pin C193 connector
- PY2FS - standard 1m cable
- Sealing IP40 standard (IP 65)
- Fuse protect optional
- Anti-rotating shaft device optional

Technical Specifications		
Sealing - PY2C/PY2FS		IP40
Sealing - optional		IP65
Current	Resistance	≦ 10mA
	Wiper	≦ 1mA
Operating Force		≦ 1.2N (IP40)
		≦ 5N (IP65)
Power Consumption		3W-10W
Output Smoothness		<± 0.1% against input voltage
Input Voltage		60 V Max
Insulation Voltage		500V-1 min Residue < 5 μA
Vibration		IEC 68-2-6:1982 10g
Shock		IEC 68-2-29:1968 40g

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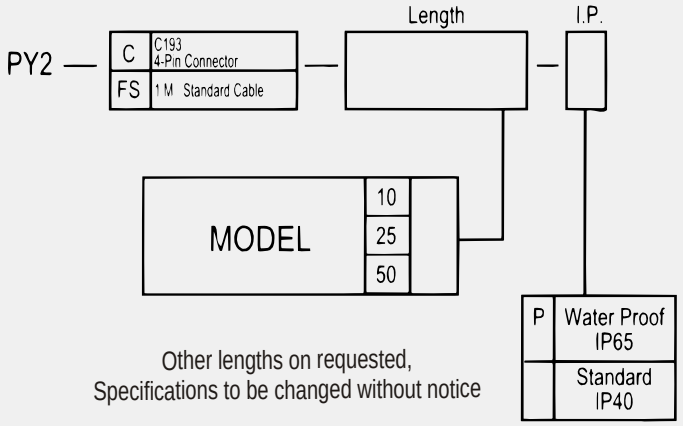
PY2

LINEAR MOTION POSITION SENSORS

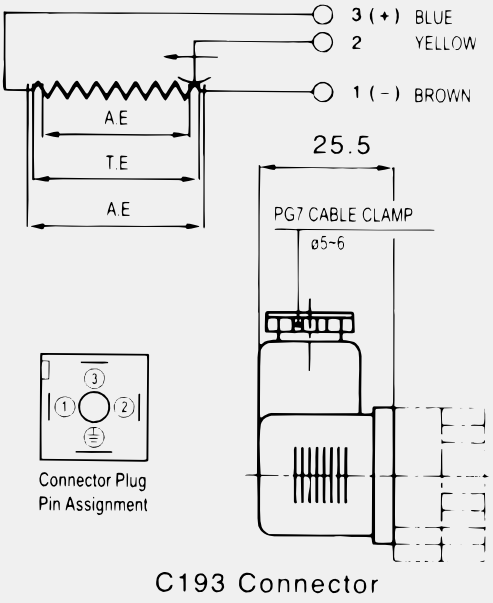
Mini Series ☐ 18 Section, STANDARD 10-50mm

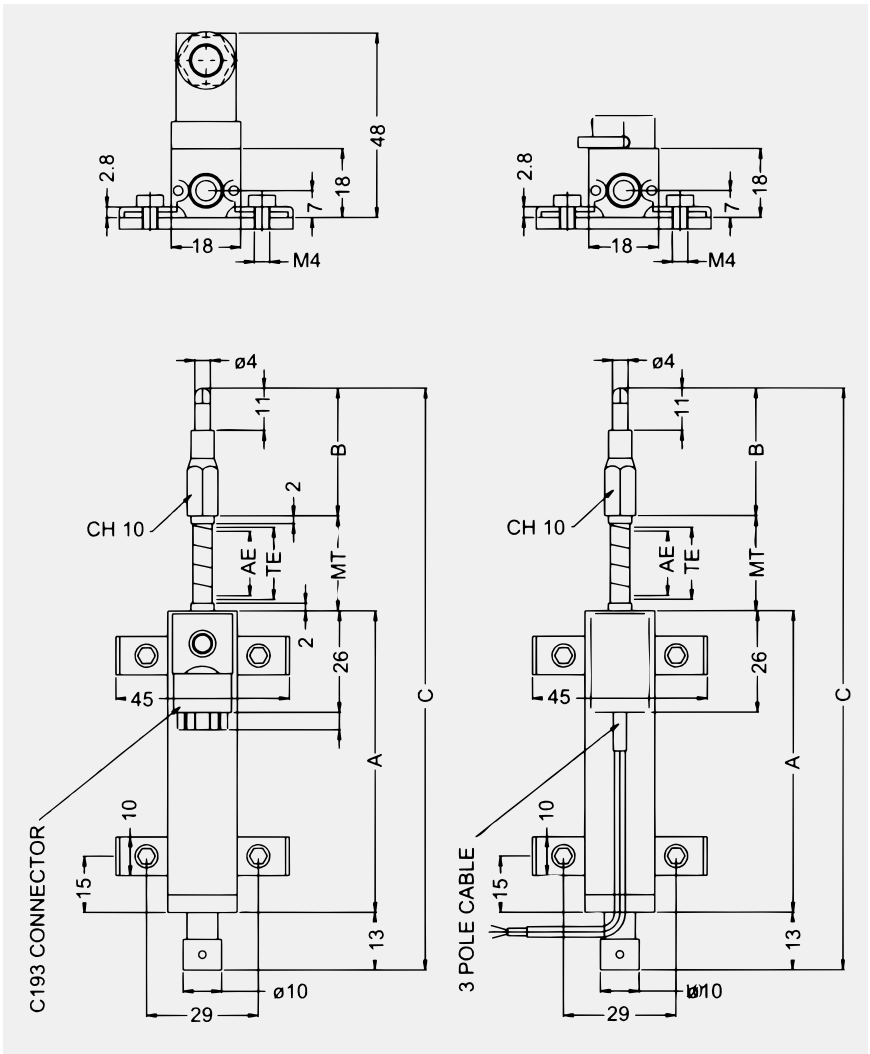
Ball Head Pre-loaded Spring Type

ORDER CODE



ELECTRICAL CONNECTIONS





PY2 series		10	25	50
Total Electrical Travel (T.E)	mm	11	26	51
Active Electrical Travel (A.E)	mm	10	25	50
Resistance ± 20%	kΩ	1	1	5
Independent Linearity	±%	0.3	0.2	0.1
Mechanical Travel (M.T)	mm	15	30	55
Resolution		Infinite		
Recommended Cursor Current	μA	< 1		
Temperature Range	˚C	-30 to +100		
Dimension (A)	mm	48	63	88
Dimension (B)	mm	32	32	40
Dimension (C)	mm	108	138	196

*Dimensions for reference only

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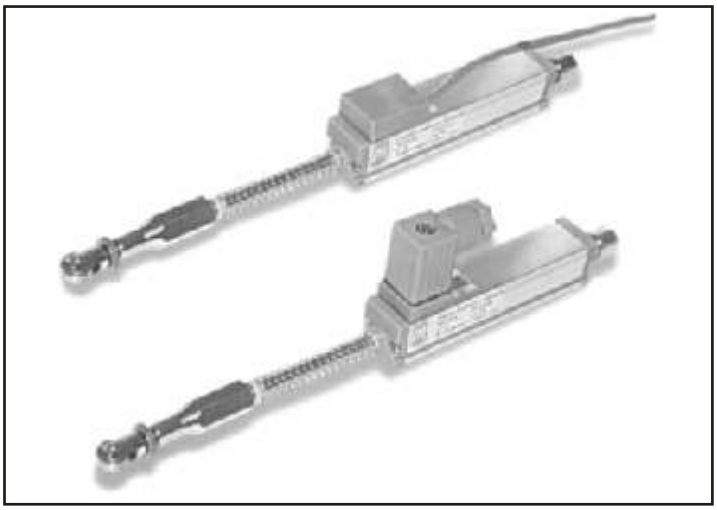
PY3
LINEAR MOTION POSITION SENSORS
Mini Series □ 18 Section, STANDARD 10-50mm

Roller Head Pre-loaded Spring Type



This mini position transducer is designer for direct absolute measurement and available in stroke length up to 50mm. The mini design is suitable for mounting instruments or machines with limited space and specially design for moving stock application.

An improved technique for making connection to resistance track (Double Trimming Technique) ensures the higher degrees of reliability and linearity, while multi-fingers wipers stabilize output signals, even in the most adverse working conditions.

The fixing feet are adjustable to the desired positions.

The nbearing roller is suitable for measurement of moving pile stock thickness along moving direction

Unique Features

- Harden steel ball head for measurement of moving pile stock thickness
- Mini design for limited space
- Anodised Aluminium Housing
- Double slide and bearing
- Very Long life >100x10^6 Cycles >25x10^{6}m
- Stroke : 10-450mm
- Outstanding Linearity up to : ±0.01%
- High resolution : Infinite
- Excellent repeatability : ± 0.01mm
- Max . Operating speed. : 5m/s max.
- PY3C - 4-pin C193 connector
- PY3FS - standard 1m cable
- Sealing IP40 standard (IP 65)
- Fuse protect optionall

Technical Specifications		
Sealing - PY3C/PY3FS		IP40
Sealing - optional		IP65
Current	Resistance	≦ 10mA
	Wiper	≦ 1mA
Operating Force		≦ 1.2N (IP40)
		≦ 5N (IP65)
Power Consumption		3W-10W
Output Smoothness		<± 0.1% against input voltage
Input Voltage		60 V Max
Insulation Voltage		500V-1 min Residue < 5 μA
Vibration		IEC 68-2-6:1982 10g
Shock		IEC 68-2-29:1968 40g

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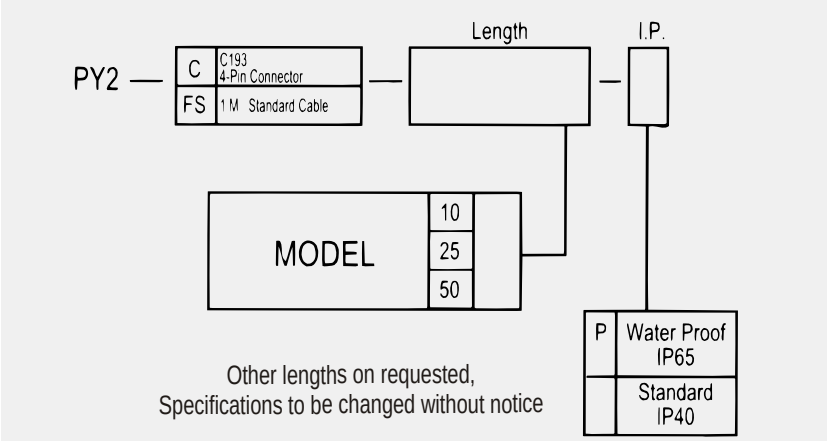
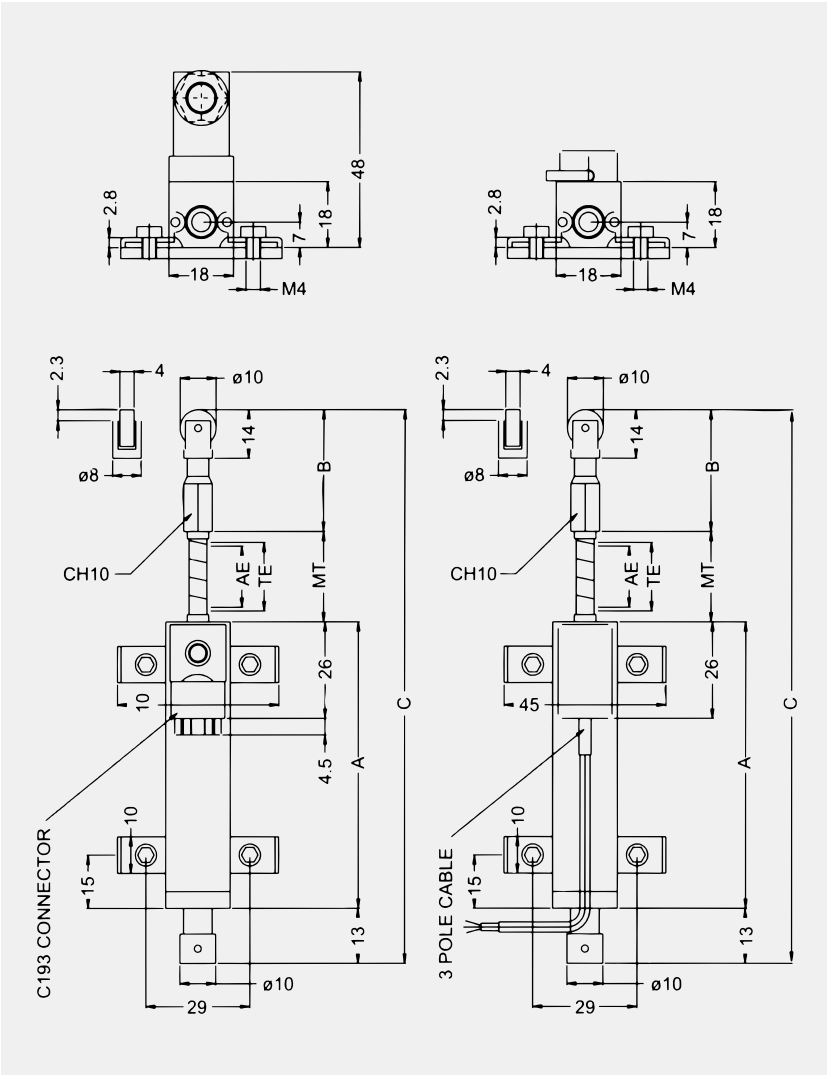
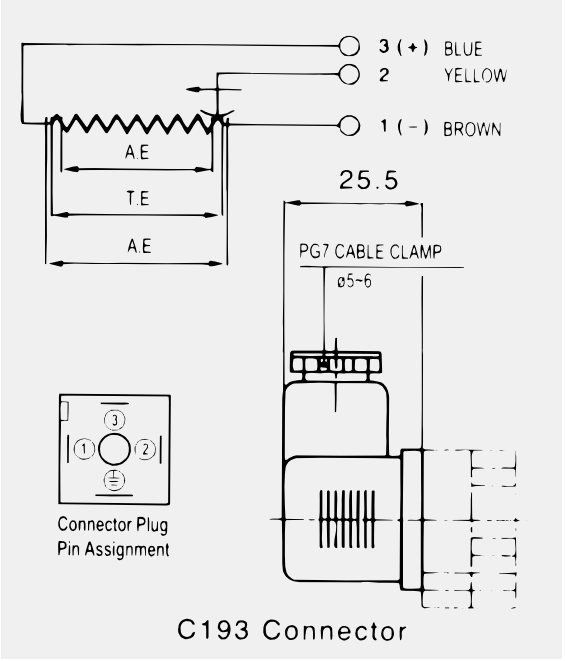
PY3
LINEAR MOTION POSITION SENSORS
Mini Series □ 18 Section, STANDARD 10-50mm

ORDER CODE





ELECTRICAL CONNECTIONS



PY3 series		10	25	50
Total Electrical Travel (T.E)	mm	11	26	51
Active Electrical TraVel (A.E)	mm	10	25	50
Resistance ± 20%	kΩ	1	1	5
Independent Linearity	±%	0.3	0.2	0.1
Mechanical Travel (M.T)	mm	15	30	55
Resolution		Infinite		
Recommended Cursor Current	μA	< 1		
Temperature Range	˚C	-30 to +100		
Dimension (A)	mm	48	63	88
Dimension (B)	mm	43	43	51
Dimension (C)	mm	114	149	207

*Dimensions for reference only

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PZ12 Series
LINEAR MOTION POSITION SENSORS
12.9 Section, STANDARD 10-150mm

Pulling Rod Type

This mini position transducer is designer for direct absolute measurement and available in stroke length up to 150mm. The mini design is suitable for mounting instruments or machines with limited space.

An improved technique for making connection to resistance track (Double Trimming Technique) ensures the higher degrees of reliability and linearity, while multi-fingers wipers stabilize output signals, even in the most adverse working conditions.

There are three ways of mountings to suit different applications.

PZ12S can be mounted by two adjustable breackets.

PZ12A can be mounted by self-aligning ball joints.

PZ12F can be flange mounted

Unique Features

- Mini design for limited space
- Anodised Aluminium Housing
- Three mounting methods
- Very Long life >100x10^6 Cycles >25x10^6 m
- Stroke : 10-150mm
- Outstanding Linearity up to : ±0.05%
- High resolution : Infinite
- Excellent repeatability : ± 0.01mm
- Max . Operating speed. : 5m/s max.
- PZ12S - two adjustable brackets
- PZ12A - two self-aligning ball joints
- PZ12F - flange mounted
- Sealing IP60 standard (IP 65 optional)
- Fuse protected optional
- Operating temperature : -30 100ºC
- Storage Temperature : -50 120ºC

Technical Specifications		
Sealing - PZ12S/PZ12A/PZ12F		IP60
Sealing - optional		IP65
Current	Resistance	≦ 10mA
	Wiper	≦ 1mA
Operating Force		≦ 0.5N (IP60)
		≦ 5N (IP65)
Power Consumption		3W-10W
Output Smoothness		<± 0.1% against input voltage
Input Voltage		60 V Max
Insulation Voltage		500V-1 min Residue < 5 μA
Vibration	IEC 68-2-6:1982 10g	
Shock	IEC 68-2-29:1968 40g	

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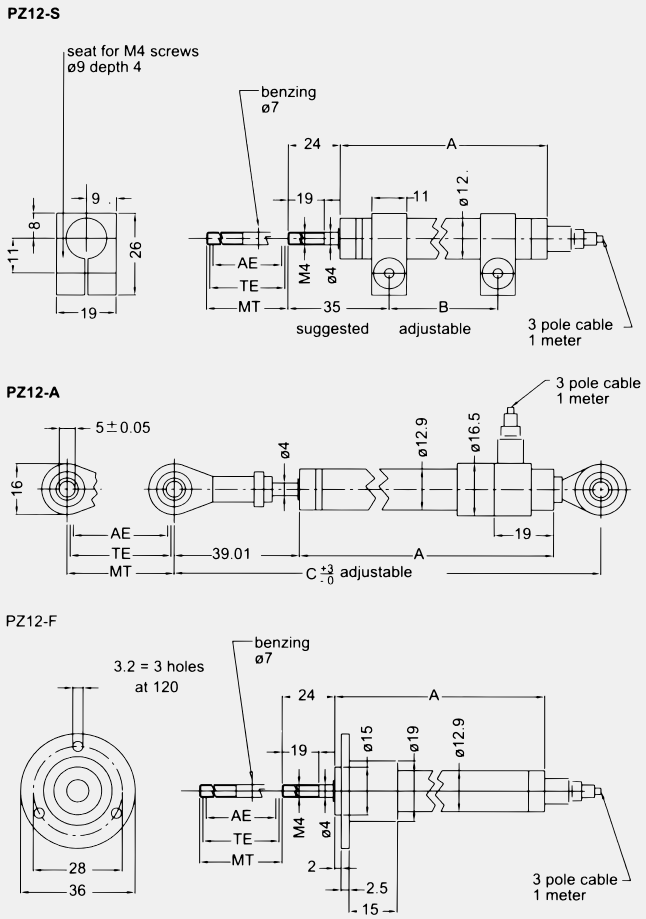
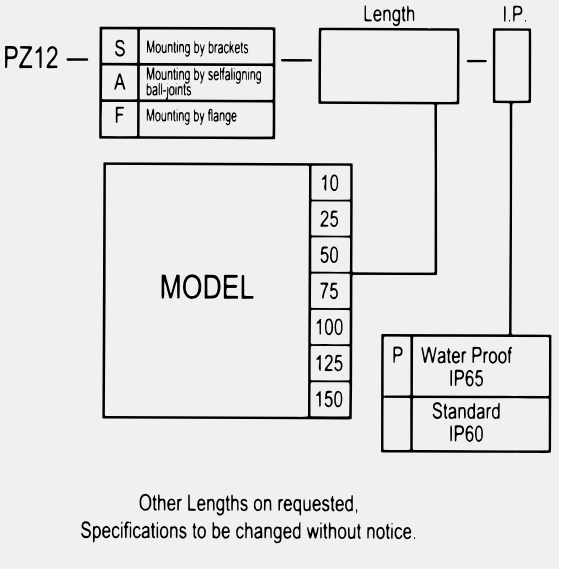
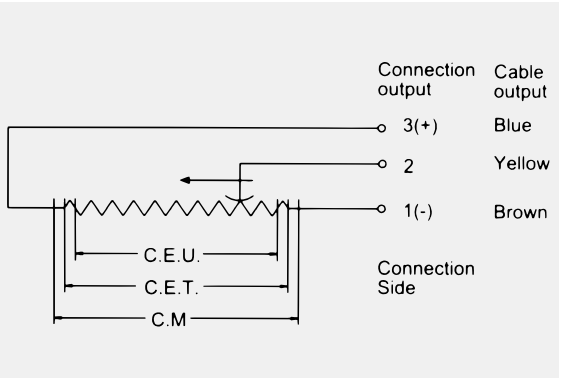
PZ12 Series
LINEAR MOTION POSITION SENSORS
12.9 Section, STANDARD 10-150mm

ELECTRICAL CONNECTIONS



ORDER CODE



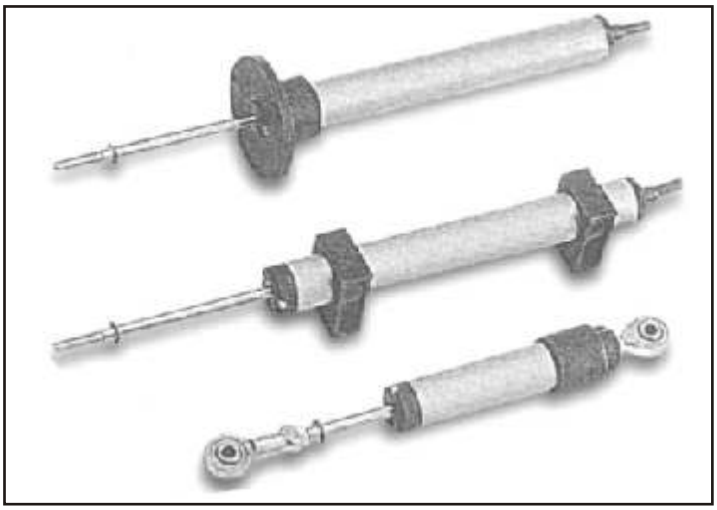


PZ12 series		10	25	50	75	100	125	150
Total Electrical Travel (T.E)	mm	11	26	51	76	101	126	151
Active Electrical Travel (A.E)	mm	10	25	50	75	100	125	150
Resistance ± 20%	kΩ	1	1	5	5	5	5	5
Independent Linearity	±%	0.3	0.2	0.1	0.1	0.1	0.05	0.05
Mechanical Travel (M.T)	mm	15	30	55	80	105	130	155
Resolution		Infinite						
Recommended Cursor Current	µA	< 1						
Temperature Range	˚C	-30 to +100						
Dimension (A) PZ12-S	mm	59.5	74.5	99.5	124.5	149	174.5	199.5
Dimension (A) PZ12-A	mm	87	102	127	152	177	202	227
Dimension (A) PAZ12-F	mm	59.5	74.5	99.5	124.5	149.5	174.5	199.5
Dimension (B)	mm	27	42	67	92	117	142	167
Dimension (C)	mm	138	153	178	203	228	253	278
Net Weight PZ12-S	gm	30	45	55	65	75	85	95
Net Weight PZ12-A	gm	55	70	80	90	100	110	120
Net Weight PAZ12-F	gm	45	60	70	80	90	100	110

*Dimensions for reference only

PZ34 Series
LINEAR MOTION POSITION SENSORS
19 Section, STANDARD 10-250mm

Pulling Rod Type



This mini position transducer is designer for direct absolute measurement and available in stroke length up to 150mm. The mini design is suitable for mounting instruments or machines with limited space.

An improved technique for making connection to resistance track (Double Trimming Technique) ensures the higher degrees of reliability and linearity, while multi-fingers wipers stabilize output signals, even in the most adverse working conditions.

There are three ways of mountings to suit different applications.

PZ34S can be mounted by two adjustable breackets.

PZ34A can be mounted by self-aligning ball joints.

PZ34F can be flange mounted

Unique Features

- Mini design for limited space
- Anodised Aluminium Housing
- Very Long life >100x10^6 Cycles >25x10^6 m
- Stroke : 10-250mm
- Outstanding Linearity up to : ±0.05%
- High resolution : Infinite
- Excellent repeatability : ± 0.01mm
- Max . Operating speed. : 5m/s max.
- Three mounting methods
- PZ34S - two adjustable brackets
- PZ34A - two self-aligning ball joints
- PZ34F - flange mounted
- Sealing IP60 standard (IP 65 optional)
- Fuse protected optional
- Operating temperature : -30 100ºC
- Storage Temperature : -50 120ºC

Technical Specifications		
Sealing - PZ34S/PZ34A/PZ34F		IP60
Sealing - optional		IP65
Current	Resistance	≦ 10mA
	Wiper	≦ 1mA
Operating Force		≦ 0.5N (IP60)
		≦ 5N (IP65)
Power Consumption		3W-10W
Output Smoothness		<± 0.1% against input voltage
Input Voltage		60 V Max
Insulation Voltage		500V-1 min Residue < 5 µA
Vibration	IEC 68-2-6:1982 10g	
Shock	IEC 68-2-29:1968 40g	

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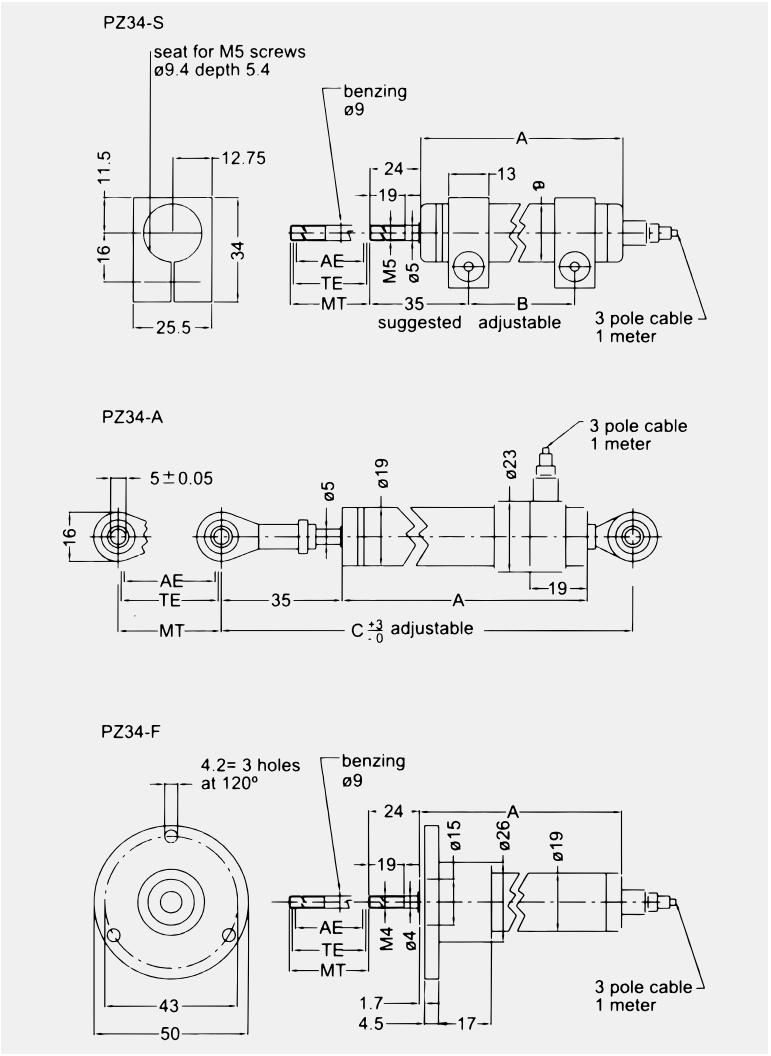
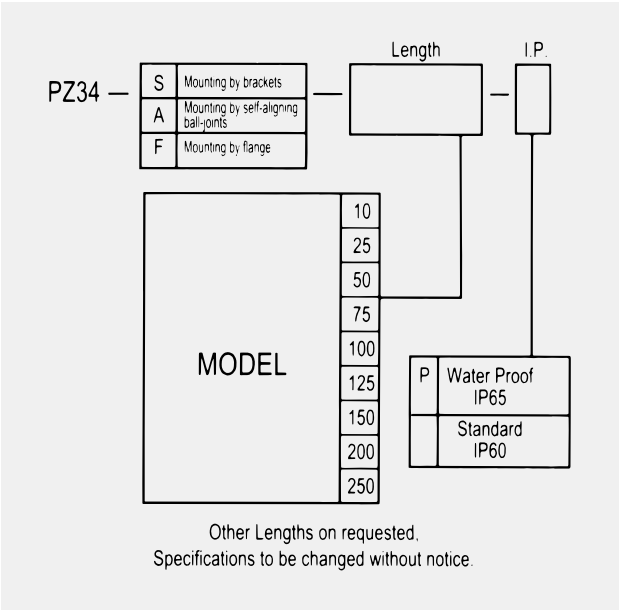
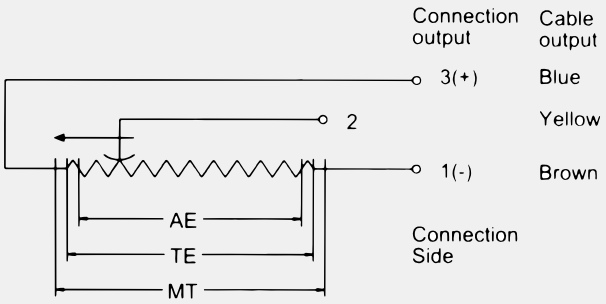
PZ34 Series
LINEAR MOTION POSITION SENSORS
19 Section, STANDARD 10-250mm

ELECTRICAL CONNECTIONS



ORDER CODE

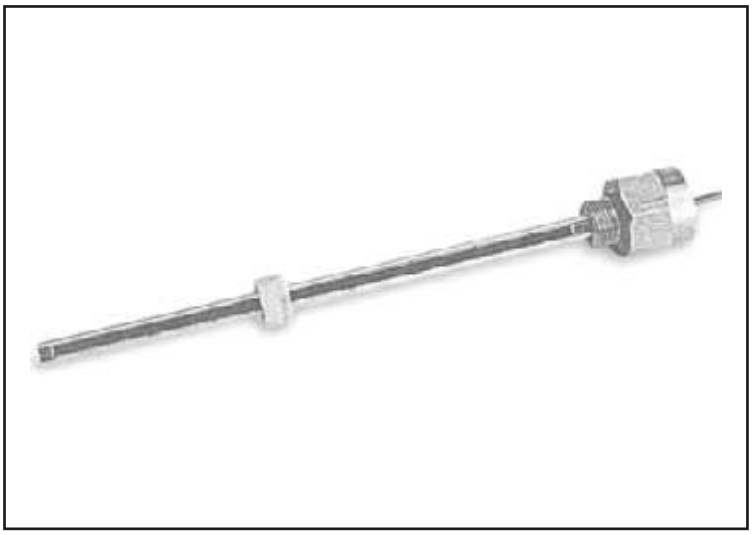




PZ34 series		10	25	50	75	100	125	150	200	250
Total Electrical Travel (T.E)	mm	11	26	51	76	101	126	151	201	251
Active Electrical Travel (A.E)	mm	10	25	50	75	100	125	150	200	250
Resistance ± 20%	kΩ	1	1	5	5	5	5	5	8	10
Independent Linearity	±%	0.3	0.2	0.1	0.1	0.1	0.05	0.05	0.05	0.05
Mechanical Travel (M.T)	mm	15	30	55	80	105	130	155	205	255
Resolution		Infinite								
Recommended Cursor Current	µA	< 1								
Temperature Range	˚C									
Dimension (A) PZ34-S	mm	68.5	38.5	108.5	133.5	158.5	183.5	208.5	258.5	308.5
Dimension (A) PZ34-A	mm	95	110	135	160	185	235	235	285	335
Dimension (A) PZ34-F	mm	68.5	83.5	108.5	133.5	158.5	183.5	208.5	258.5	308.5
Dimension (B)	mm	32	47	72	97	122	147	172	222	272
Dimension (C)	mm	148	163	188	213	238	263	288	338	388
Net Weight PZ34-S	gm	70	90	105	130	160	175	190	215	245
Net Weight PZ34-A	gm	90	110	125	150	180	195	210	235	260
Net Weight PAZ34-F	gm	80	100	115	140	170	185	200	225	255

*Dimensions for reference only

IC Series
Conductive Plastic Element
For Mounting Inside Hydraulic or Pneumatic Cylinder
STANDARD 25-900mm



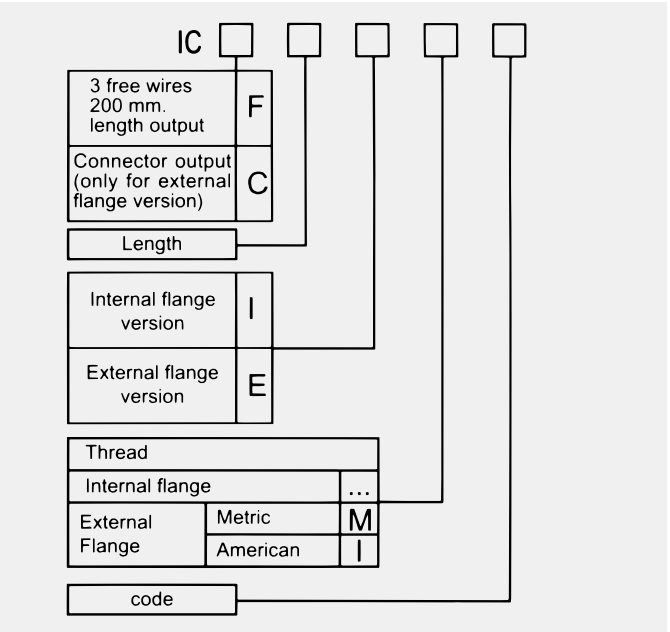
This IC Conductive Plastic Element is suitable to be installed in high pressure chamber of small cylinders or large cylinders.

The Standard range of this element is 25 900mm. Longer range and special sizes are available on tequest. This element can be mechanically fixed by internal or external flange. It is suitable to be used in explosive enviroments with presence of groups IIA, IIB, IIC, gas and combustible powders if the element is correctly perfectly sealed

Unique Features

- easy mechanical mounting
- Anodised Aluminium stem material
- Very Long life >100x10^6 Cycles >25x10^6 m
- Stroke : 25-900mm
- Outstanding Linearity up to : ±0.05%
- High resolution : Infinite
- Excellent repeatability : ± 0.01mm
- Max . Operating speed. : 5m/s max.
- ICC: 6 pole connector
- ICF: 3 free wires (200mm length)
- Fuse protected optional
- Operating temperature : -30 100ºC
- Storage Temperature : -50 120ºC
- Stainless steel AISI 303 Flange material
- Internal or external flange version

Technical Specifications		
Independent linearity		± 0.1%, ±0.05%
Current	Resistance	≦ 10mA
	Wiper	≦ 1mA
Recommended cursor current		< 0.1 μA
Electrical isolation		>100MΩ at 500V~. 1bar. 2s
Dielectric strength		<100 μA at 500V~.50Hz. 2s. 1bar
Working temperature		-30~100 C
Storage temperature		-50~120 C
Operating Force		≦ 1N



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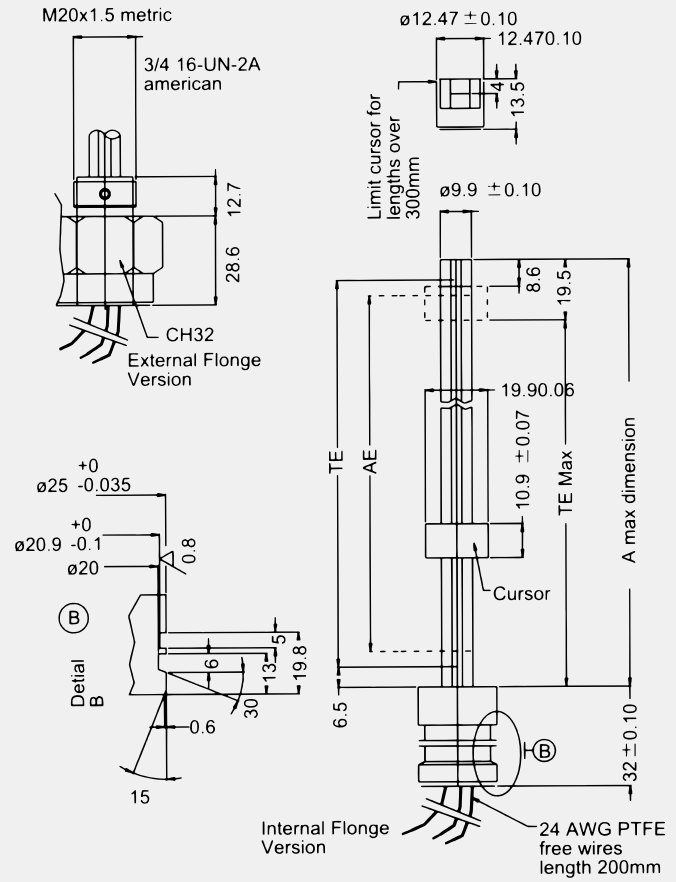
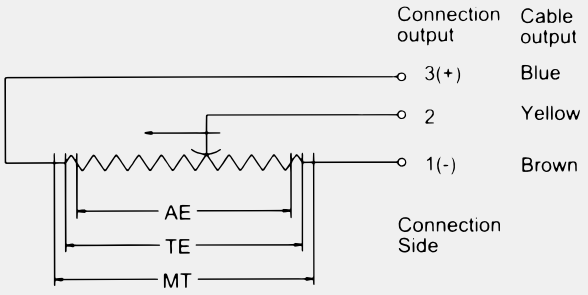
Web Site. Http://www.controlfr.com

IC Series
Conductive Plastic Element
For Mounting Inside Hydraulic or Pneumatic Cylinder
STANDARD 25-900mm

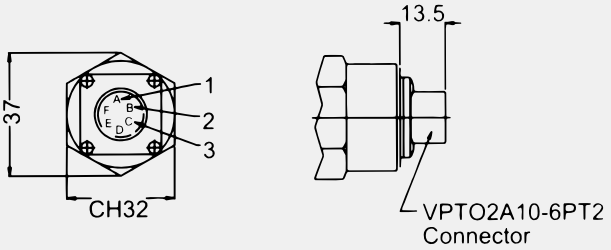
MECHANICAL DIMENSIONS



ELECTRICAL CONNECTIONS



EXT. FLANGE VERSION / CONNECTIONS



IC series		25	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	900
Total Electrical Travel (T.E)	mm	35	60	110	160	210	260	310	360	410	460	510	560	610	660	710	760	810	910
Active Electrical Tracel (A.E)	mm	29	54	104	154	204	254	304	354	404	454	504	554	604	654	704	754	804	904
Resistance ± 20%	kΩ	5	5	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Independent Linearity	±%	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Mechanical Travel (M.T)	mm	29	54	104	154	204	254	304	354	404	454	504	554	604	654	704	754	804	904
Resolution		Infinite																	
Recommended Cursor Current	µA	< 1																	
Temperature Range	˚C	-30 to +100																	
Dimension (A)	mm	48.5	73.5	123.5	173.5	223.5	273.5	323.5	373.5	423.5	473.5	523.5	573.5	623.5	673.5	723.5	773.5	823	923.5

Dimensions for reference only

Si usted requiere mayor información sobre estos u otros productos, contactenos y expónganos sus necesidades y con gusto lo atenderemos

Control FR S.A. de C.V.

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