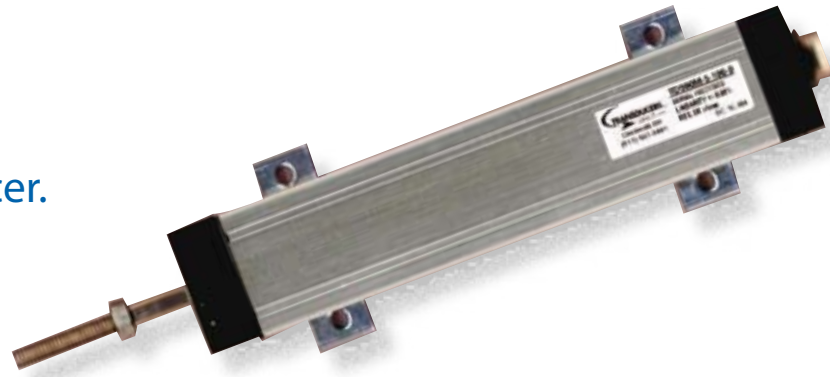


## Introducing the TD590 Series Linear Displacement Transducer.

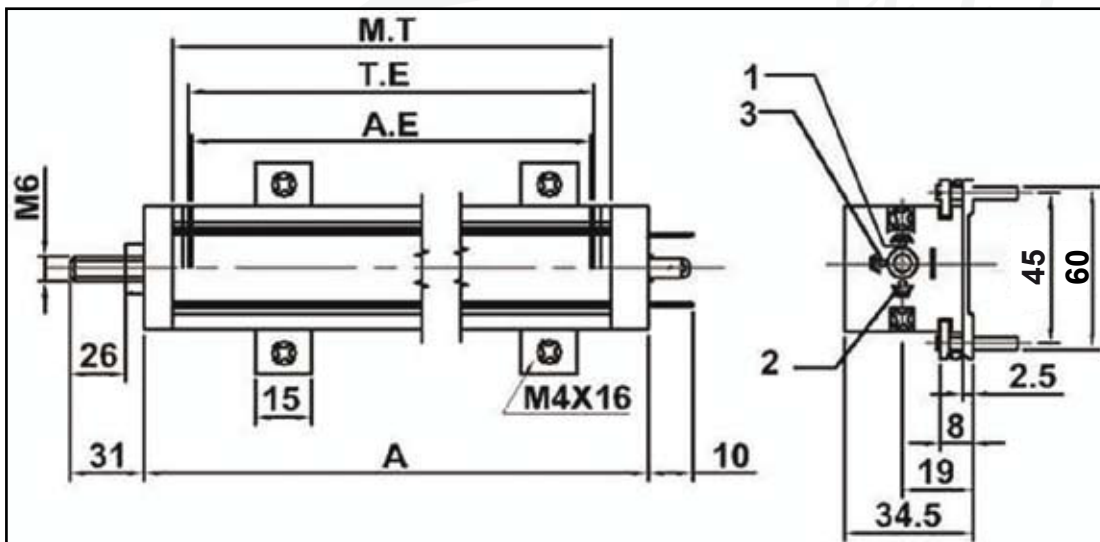


SERIES: TD590

### FEATURES

- 50 to 1000 mm stroke.
- Mechanical linkage using M6 thread
- Independent linearity  $\pm 0.3\%$
- Repeatability 0.01 mm.
- Infinite resolution
- No variation of electrical signal outside theoretical electrical stroke
- Displacement speed 10 m/s
- Working temperature: -55 to +125°C
- Electrical connections:
  - 4 pin connector DIN 43650 Large (18mm),
  - 5 pin connector DIN 43322
  - 4 pin connector mini DIN 43650 (9.4)
- Life duration: > 25x10<sup>6</sup> meters or > 100x10<sup>6</sup> operations whichever is the smaller
- Grade of protection for shaft: IP65

### DIMENSIONS



Dimensions In Inches And Are Reference Only.

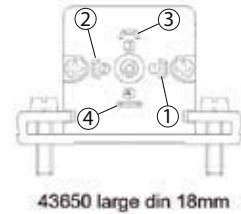
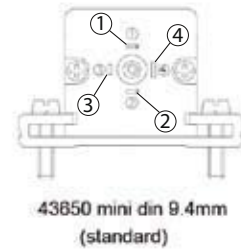
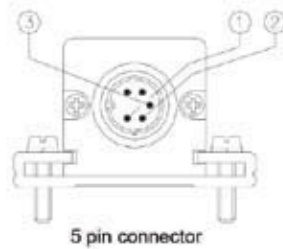
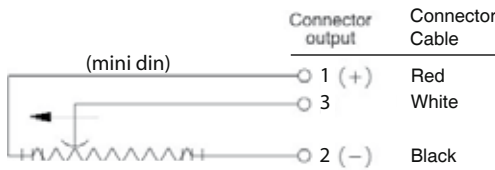
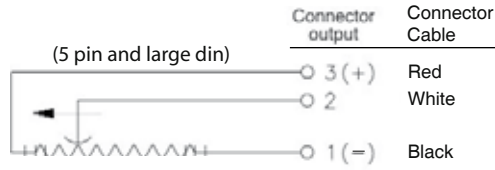
## SPECIFICATIONS

Useful electrical stroke (in mm)	50/75/100/130/150/175/200/225/250/275/300/350/375 400/425/450/500/550/600/650/700/750/800/900/1000
Independent linearity	± 0.3%
Displacement speed Standard	10m/s
Displacement force	10N for shaft IP65
Vibrations	5 to 2000Hz, Amax =0.75 mm amax. = 20 g
Shock	50 g, 11ms.
Operative acceleration	200 m/s <sup>2</sup> max (20g)
Tolerance on resistance	± 20%
Recommended cursor current	< 0.1 mA
Maximum cursor current	10mA
Maximum applicable voltage	60V
Electrical isolation	>100M at 500V~, 1bar, 2s
Dielectric strength	< 100 mA at 500V~, 50Hz, 2s, 1bar
Dissipation at 40°C (0W at 120°C)	3W
Temp. Coeff. of the resistance	-200 ± 200ppm/°C
Actual Temperature Coefficient of the output voltage	< 1.5ppm/°C
Working temperature	-55 to +125°C
Storage temperature	-50 to +120°C
Case material	40 Anodized aluminum Nylon 66 GF
Control rod material	Stainless steel AISI 303
Fixing	Brackets with variable longitudinal axis

## MECHANICAL / ELECTRICAL DATA

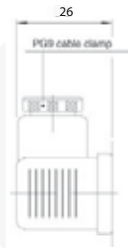
TD590 SERIES		50	75	100	130	150	175	200	225	250	275	300	350	375	400	425	450	500	550	600	650	700	750	800	900	1000	
Total Electrical Travel(T.E)	mm	51	76	102	132	152	177	202	229	254	279	305	355	381	405	430	457	507	557	610	660	710	762	812	914	1014	
Active Electrical Travel(A.E)	mm	51	75	100	130	150	175	200	226	253	276	302	352	378	403	428	455	505	555	607	657	707	759	809	912	1012	
Resistance+-20%	K ohm	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	5.0	10	10	10	10	10	10	
Linearity		0.3%												0.3%													
Mechanical Travel(M.T)	mm	58	79	104	135	155	179	204	231	256	281	307	357	384	404	429	460	506	508	612	662	712	765	815	917	1017	
Resolution		Infinite																									
Current	mA	<10																									
Temperature	°C	-55 -- +125																									
Dimension A	mm	114	139	164	195	215	241	266	291	316	341	367	417	444	467	494	520	570	622	672	722	772	825	875	977	1077	

## ELECTRICAL CONNECTIONS



## ACCESSORIES

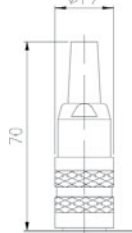
Includes 2 mounting feet w/M4x26 screws



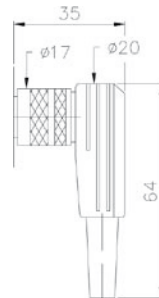
4 pin IP65  
TD4P9-00  
mini din



4 pin IP65  
TD4PL-00  
large din



TD5P-CS-00  
5 pin straight



TD5P-CR-00  
5 pin Right Angle

## ORDERING

Series	Connector	StrokeLength (in mm)
TD590M	D	150

D= 4 pin mini Din	50	350
4= 4 Pin Large Din	75	375
5= 5 Pin	100	400
	130	425
	150	450
	175	500
	200	550
	225	600
	250	650
	275	700
	300	750
		800
		900
		1000

\*\*= Consult factory for further options.

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REV: 6.10