



TLQ / TLQA Rotary Torque Transducer

Slip ring, square-drive in-line rotary torque transducer.

The TLQ and TLQA rotary torque transducers provide accurate and cost-effective in-line rotary torque measurement with a square drive input and output.

The TLQ series incorporates silver slip rings and silver-graphite brush-gear for strain gauge bridge power and signal transmission.

The TLQ series of transducers have a high accuracy of 0.1% of full scale. A range of digital readouts and amplifiers are also available for these units.

Typical applications for the TLQ series includes assembly technology, process measurement and control, tool engineering and special mechanical engineering.

For pricing, availability or for further technical information about the TLQ and TLQA series, contact us via our website at www.crane-electronics.com or via email at sales@crane-electronics.com.

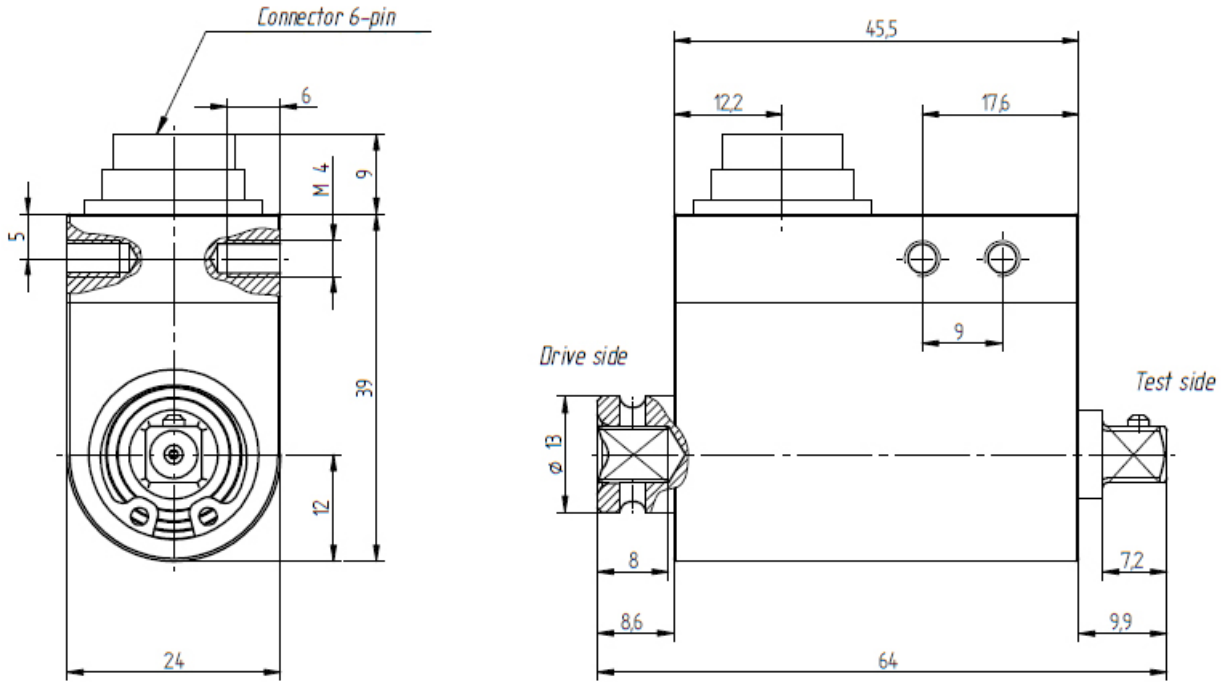
Technical Specification

Accuracy Class:	0.1
Sensitivity (1 Nm):	0.5 mV/V
Sensitivity (other ratings):	1 mV/V
Repeatability:	±0.05% fs
Excitation Voltage:	2 to 12Vdc
Bridge Resistance:	350 ohms
Nominal Temp:	-10 to +60°C
Overload Capacity:	150% fs
Durability of Brushes:	5 x 10 ⁷ .rev
Protection:	IP50

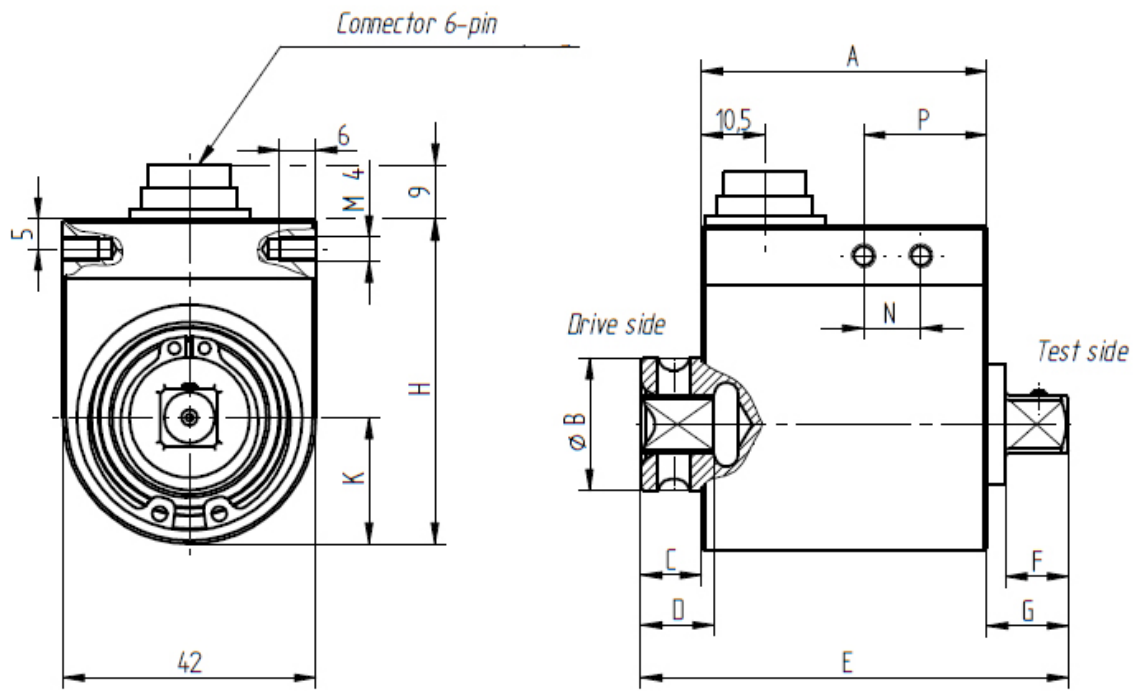
Model TLQ	Rated Torque (Nm)	Square Size	Max Speed (rpm)	Torsional Stiffness (Nm/rad)	Limit Thrust Load (N)	Limit Shear Force (N)
1	1	¼"	2000	2.1 x 10 ²	200	3.7
2	2	¼"	2000	2.1 x 10 ²	200	3.7
5	5	¼"	2000	5.5 x 10 ²	350	9.5
12	12	¼"	2000	6,9 x 10 ²	420	12.5
25	25	3/8"	1500	4.7 x 10 ³	1100	50
63	63	3/8"	1500	1.1 x 10 ⁴	1900	120
100	100	½"	1500	1.8 x 10 ⁴	2500	170
160	160	½"	1500	1,9 x 10 ⁴	2700	180
200	200	½"	1500	1.9 x 10 ⁴	2700	180
500	500	¾"	1000	1.1 x 10 ⁵	7000	450
1000	1000	1"	1000	1,2 x 10 ⁵	8000	500
2000	2000	1 1/2"	500	3.9 x 10 ⁵	17000	950
5000	5000	1 1/2"	500	4.7 x 10 ⁵	23000	1450

Limit axial thrust and shear force are for unsupported shaft.

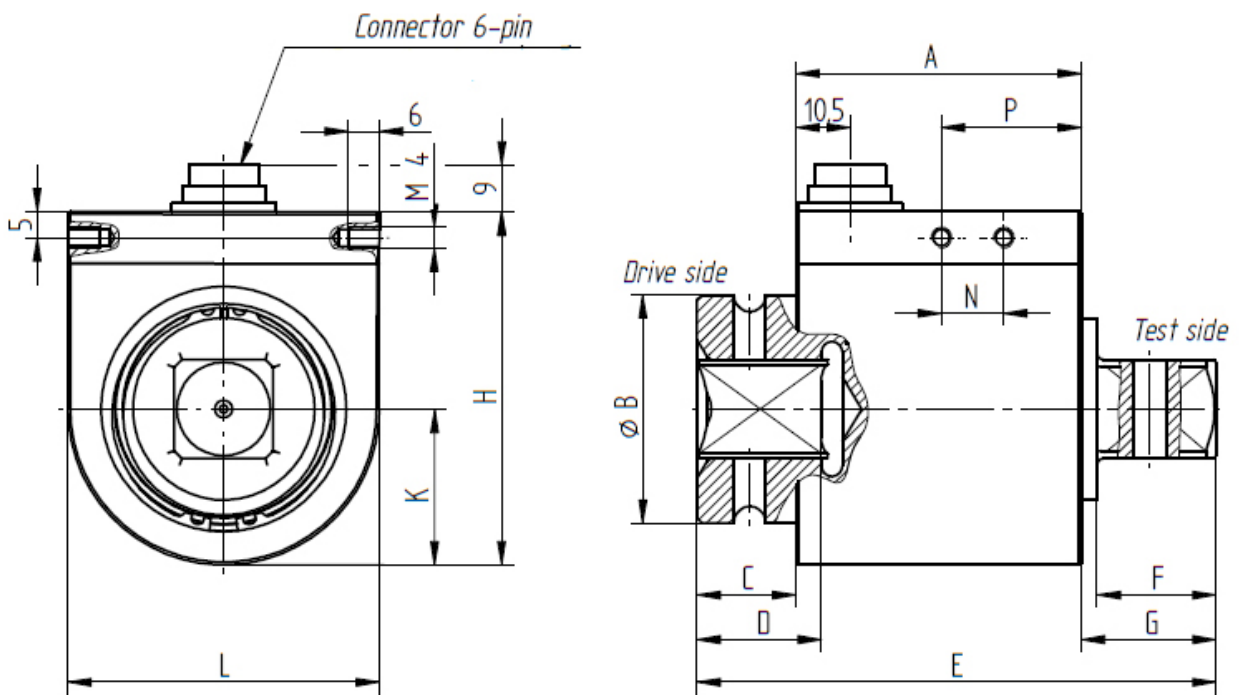
Dimensions



Measuring Range (Nm)	Square Size
1	¼"
2	¼"
5	¼"
12	¼"

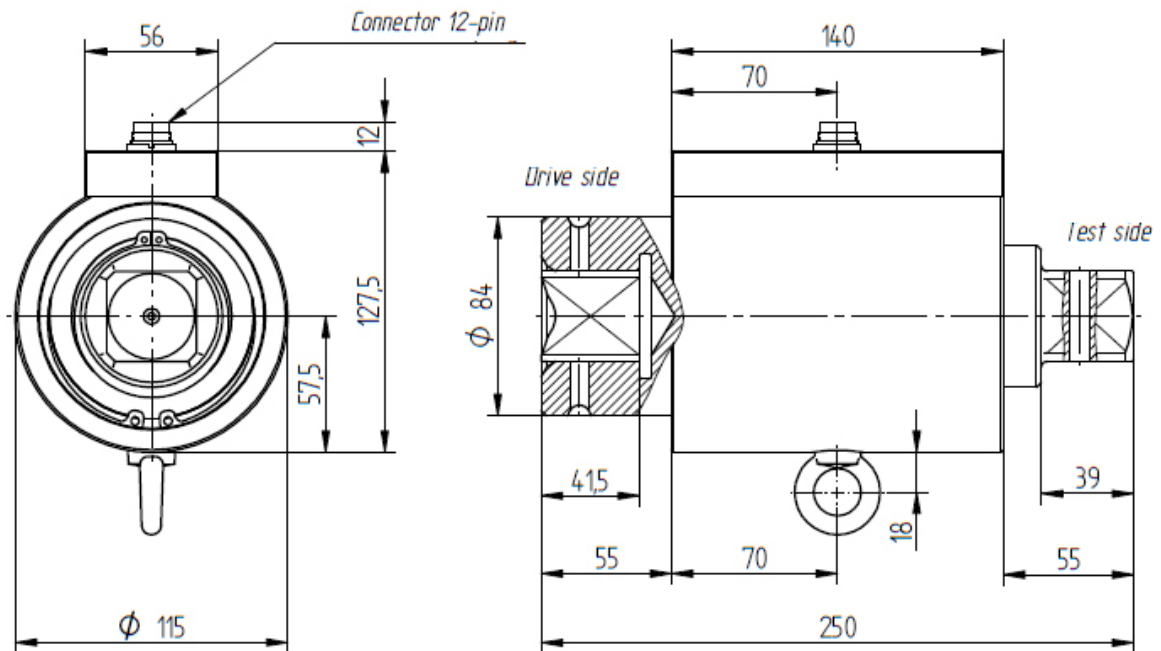


Measuring Range (Nm)	Square Size	A	B	C	D	E	F	G	H	K	L	N	P
25/ 63	3/8"	47.7	22	10.1	12.2	71	10.4	13.5	54	21	42	9.5	20.5
100 / 160 / 200	1/2"	47.4	29.8	10.7	15	76	15.1	17.9	54	21	42	9.5	20.5



Measuring Range (Nm)	Square Size	A	B	C	D	E	F	G	H	K	L	N	P
500	3/4"	55	44	19	24	100	22.9	26	68	30	60	12	27
1000	1"	55	54	33	27	132	27.4	44	68	30	60	12	27

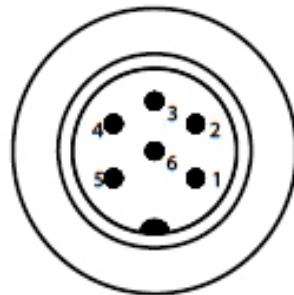
All dimensions are in mm. Details may change without notice.



Measuring Range (Nm)	Square Size
2000	1 ½"
5000	1 ½"

Wiring Details

PIN	Designation
1	Excitation (-)
2	Excitation (+)
3	Shield
4	Signal (+)
5	Signal (GND)
6	Control signal (option)



Locations

UK - Watling Drive, Hinckley, Leicestershire LE10 3EY, UK
 USA - 1260 11th Street West, Milan, Illinois 61264, USA
 Germany - Im Rank 5, 73655 Plüderhausen, Germany

