

Tension & Compression Force Transducer



3540 SERIES

- Available in a variety of sizes and shapes to fit almost any application
- Measuring ranges from 0 kN to 1 kN through 0 kN to 500 kN
- Several outputs are available in both amplified and unamplified to interface with most electrical systems
- 316 stainless steel construction on many versions provides corrosion-resistance and durability - ideal for harsh environments
- Sputtered thin film sensor for maximum repeatability and stability

APPLICATIONS

- Cable or rod tension
- Weight measurement
- Overload protection
- Clamping force
- Fill level measurement

SPECIFICATIONS

Series	3540								
Nominal load	kN	2	5	10	20	30	50	100	500
	lb _f	450	1124	2248	4496	6744	11240	22481	112404
Limit load	150% full scale								
Fracture load	>300% full scale								
Permissible oscillation	±50% full scale according to DIN 50100								
Output signal	4 mA to 20 mA, 2-wire or 3-wire; 0 Vdc to 10 Vdc, 3-wire								
Accuracy	<±0.2% F.S.								
Hysteresis	<±0.1% F.S.								
Stability	<±0.1% F.S. at F _{nom}								
Ambient temperature range	-4 °F to 176 °F (-20 °C to 80 °C)								
Storage temperature range	-4 °F to 212 °F (-20 °C to 100 °C)								
Temperature effect	-span	<±0.01% F _{nom} / °F							
	-zero	<±0.01% F _{nom} / °F							
Vibration effect	20 g, 100h, 50 Hz to 150 Hz according to IEC68-2-6-Fc								
Environmental protection	IP 67 according to EN 60 529 /IEC 529								
Electrical connection	M12 x 1 or cable								
Power supply	10 Vdc to 30 Vdc for 4 mA to 20 mA output								
	14 Vdc to 30 Vdc for 0 Vdc to 10 Vdc output								
Current consumption	4 mA to 20 mA, signal 0 to 10 Vdc, 8 mA								
Response time	<1 ms (within 10% to 90% F _{nom})								
Noise protection	CE compliant; RFI, EMI and ESD protected according to EN 61326								
Electrical protection	Short circuit, overvoltage and reverse polarity protection								
Material	17-4PH Stainless steel								

ORDERING INFORMATION				
SERIES	3540			
FORCE TYPES	T Tension	C Compression	TC Tension/compression*	
MEASURING RANGES	1K 0 kN to 1 kN	10K 0 kN to 10 kN	50K 0 kN to 50 kN	300K 0 kN to 300 kN
	2K 0 kN to 2 kN	20K 0 kN to 20 kN	100K 0 kN to 100 kN	500K 0 kN to 500 kN
	5K 0 kN to 5 kN	30K 0 kN to 30 kN	200K 0 kN to 200 kN	
ACCURACY	1 ±0.2% full scale			
OUTPUT SIGNALS	1 4 mA to 20 mA		5 0 Vdc to 10 Vdc	
ELECTRICAL CONNECTION	25 M12 x 1 (4-pin)			

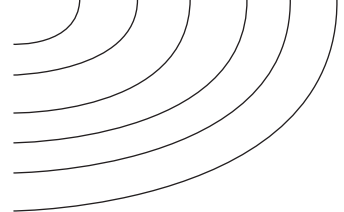
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

* Please specify measuring range for both tension and compression.

EXAMPLE

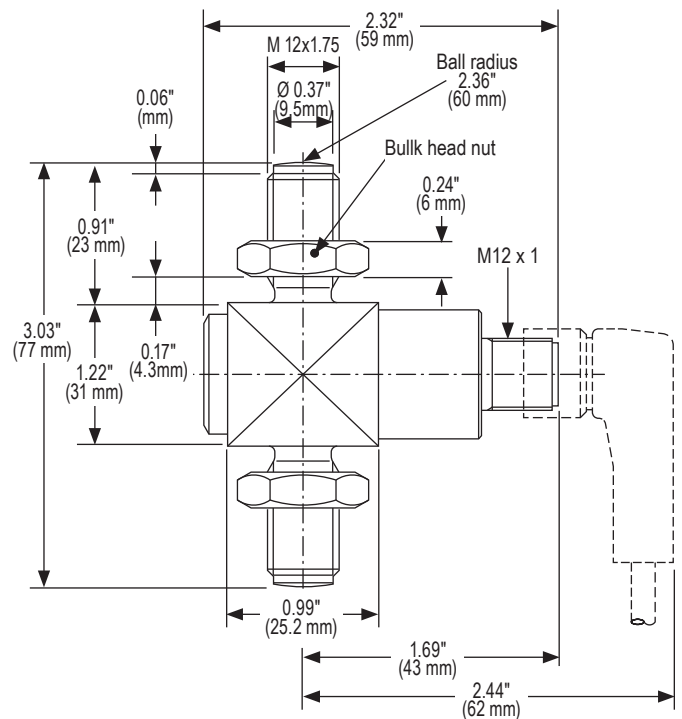
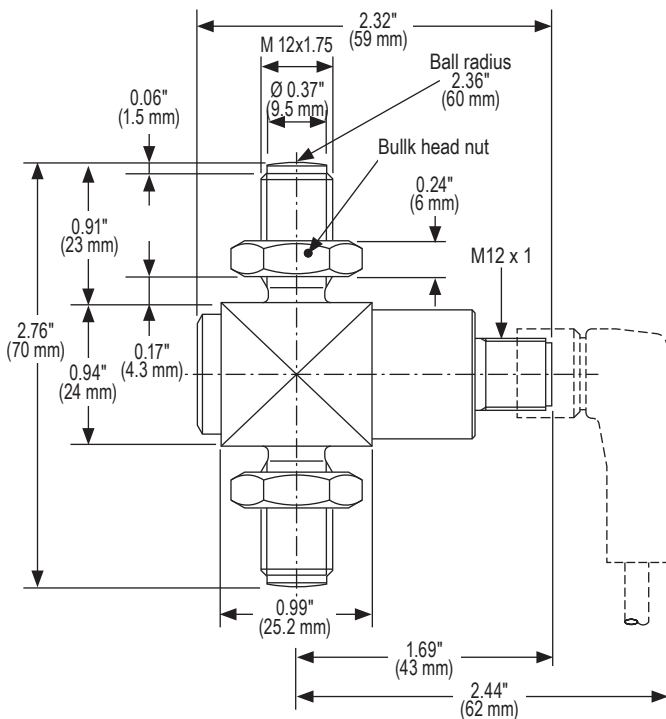
Series 3540 Series
 Force type Tension
 Measuring range 0 kN to 50 kN
 Accuracy ±0.2% full scale
 Output signal 4 mA to 20 mA
 Electrical connection M12 x 1 (4-pin)

3540 - T - 50K - 1 - 1 - 25



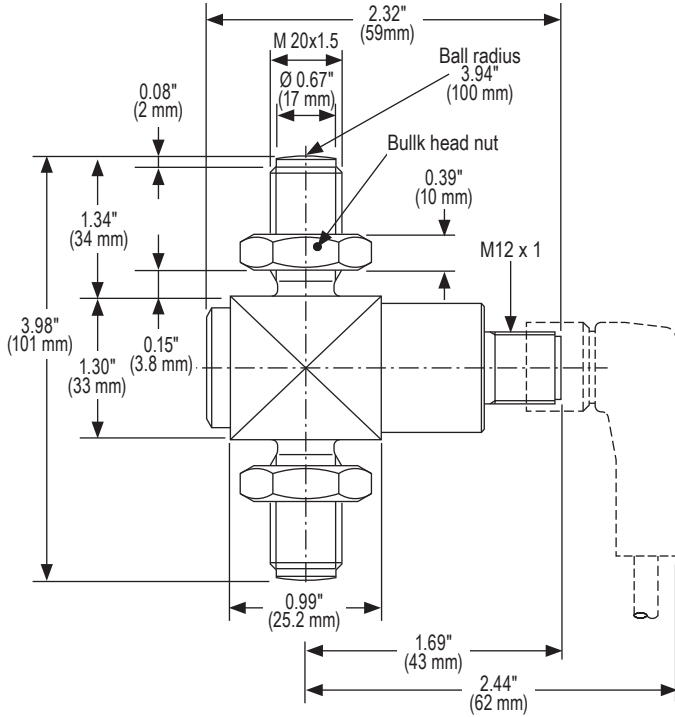
1 kN to 5 kN

10 kN

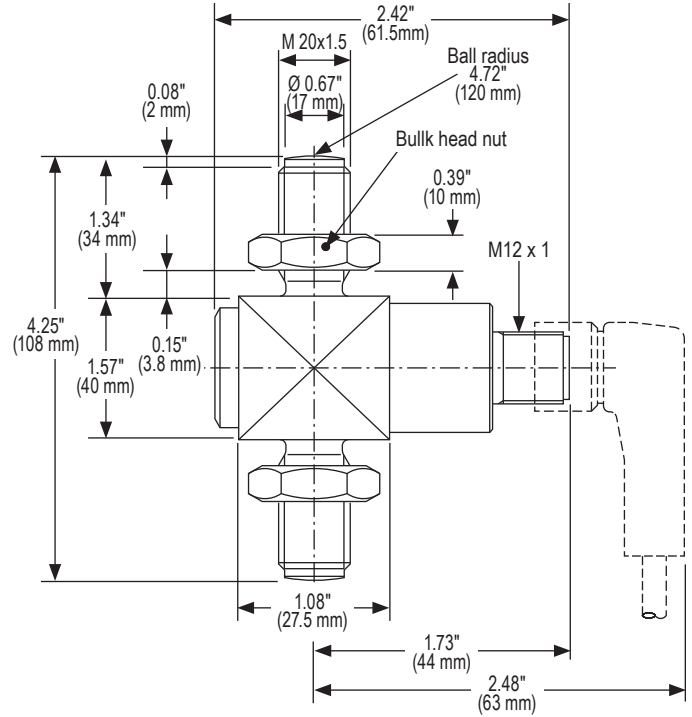


Dimensions

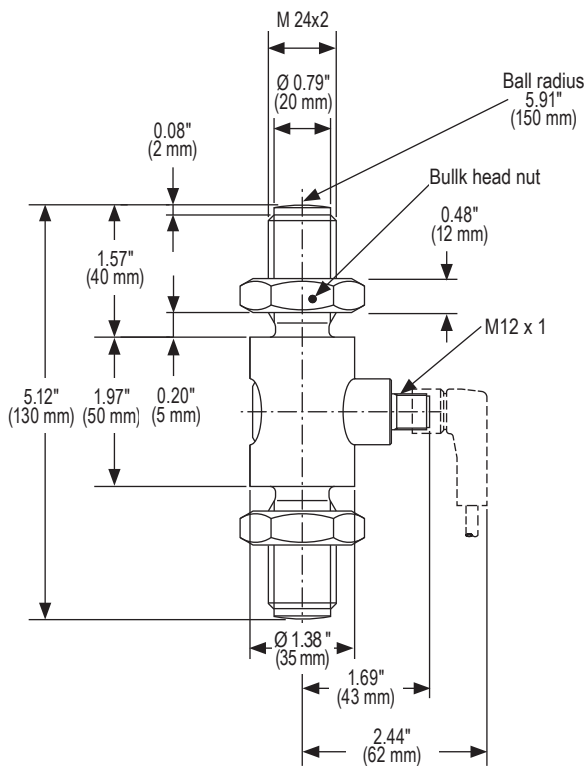
20 kN



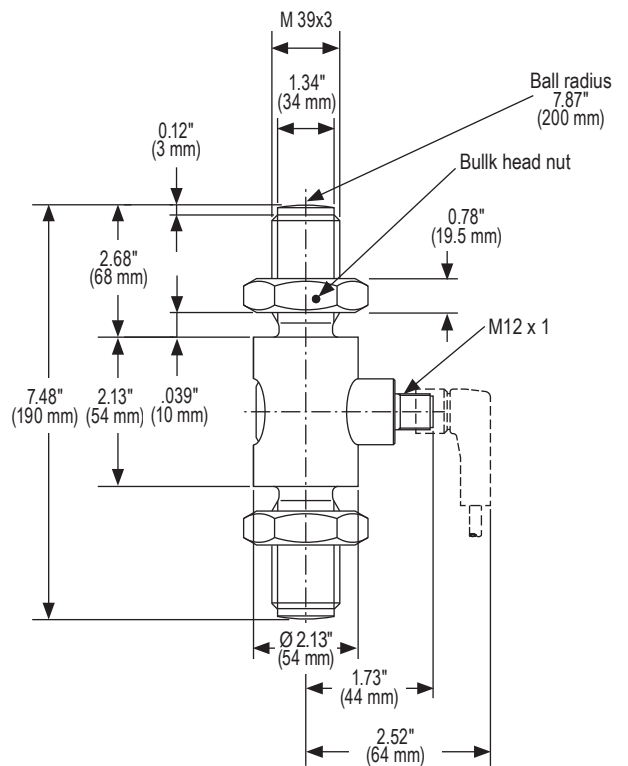
30 kN



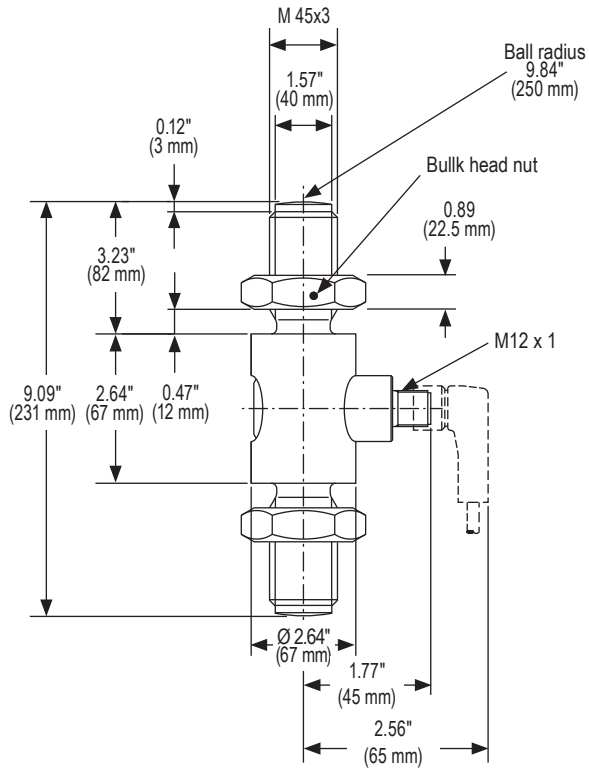
50 kN



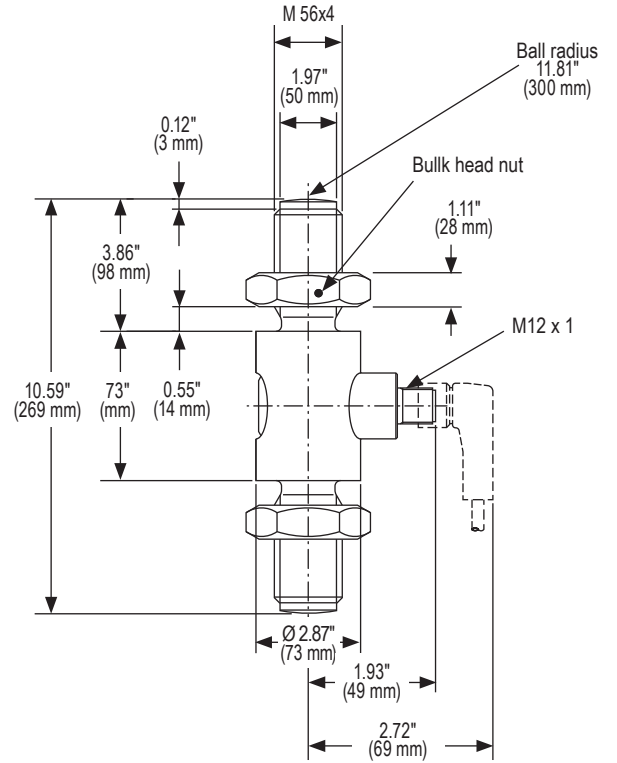
100 kN



200 kN



300 kN



500 kN

