

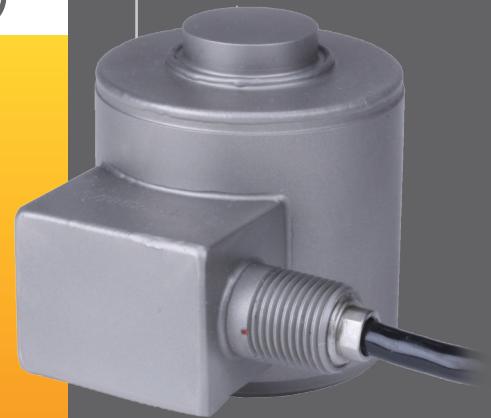


Precision Canister Load Cell

QA Series

The QA Series is a high performance, compact, strain gage load cell constructed of stainless steel. The QA Series is designed to accurately measure compression forces ranging from 0-10,000 lbs. to 0-500,000 lbs.

The QA Series is a high performance, compact, bonded foil strain gage load cell constructed of stainless steel. The QA Series is designed to accurately measure compression forces in capacities ranging from 0-10,000 lbs. to 0-500,000 lbs. The multiple column sensing design and precision ground base combine to produce excellent performance in a very compact size, with reduced sensitivity to eccentric and side loading effects.) This load cell is available as Harsh Environment Sealed (IP67-Limited Immersion) and Hostile Environment Sealed (IP66-High Pressure Jets) by virtue of proprietary, multi-redundant barriers uniquely integrated to protect all internal components. The QA is electro-polished for corrosion resistance. The attached cable is a durable polyurethane-jacketed cable with a tinned-copper braided shield for mechanical protection and to minimize the effects of RFI and EMI. Optional cable assemblies are available with mating connectors, including durable polyurethane or Teflon® jacketed cables. Options include surface ground mounting plates and weigh module assemblies. The attributes of the QA Series make it ideal for weight measurements where a rugged, low profile precision load cell solution is needed.



APPLICATIONS

- Compression Measurements
- Washdown/Corrosive Environments
- Process Control Weighing
- Vehicle Scales
- Tank Weighing
- Reactor, Mixer and Blender Weighing

FEATURES

- 10,000 lbs To 500,00 lbs Capacities
- Compact Size
- 0.03% Accuracy Class
- Stainless Steel Design
- Welded, Hermetic Sealing
- Environmentally Sealed-IP66/67
- Companion Weigh Modules
- Two Year Warranty



For more information call **1-888-545-8988**

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QA Series Specifications

Innovative Measurement Solutions



PERFORMANCE

Rated Capacities ⁽¹⁾ (lbs.)	10K, 25K, 50K, 100K, 200K, 300K, 500K
Rated Output (FSO)	2 mV/V
Output Tolerance	± 1 % R.O.
Combined Error Band	≤ 0.05 % FSO
Non-Linearity	≤ 0.05 % FSO
Hysteresis	≤ 0.05 % FSO
Non-Repeatability	≤ 0.01 % FSO
Zero Balance	± 1.0 % FSO
Creep (20 Minutes)	0.03 % of Load

⁽¹⁾ ("K" = thousand)

MECHANICAL

Material	17-4 Stainless Steel
Finish	Electro-polished
Safe overload	Compression 150 % FSO Side Load 10% FSO
Ultimate overload	Compression 300% FSO Side Load: 20% FSO
Deflection	See Dimensions Table
Weight	See Dimensions Table
Mounting Bolt Torque	Torque Table

ELECTRICAL

Input Impedance	450 ± 5 ohms
Output Impedance	480 ± 5 ohms
Insulation Resistance	>5000 Megohms
Excitation Voltage	10 V AC/DC (15 V maximum)
Cable Color Code	+ Excitation (green) - Excitation (black) + Signal (white) - Signal (red) Shield (orange)
Cable Type	4-conductor, 22 AWG, Polyurethane Jacket, Tinned Copper Braid, Diameter: 0.295"
Cable Length	See Dimensions Table
Cable Termination	Finished Conductors
Cable Seal	Compression Gland Fitting w/1/2-14 NPT-Conduit Adapter

ENVIRONMENTAL

Temperature, Operating	-65 to +200 °F (-54 to +93°C)
Temperature, Compensated	14 to +104 °F (-10 to +40°C)
Temperature, Storage	-65 to +200 °F (-54 to +93°C)
Temperature Effects	Zero < 0.015% FSO/°F < 0.0026% FSO/°C
Temperature Effects	Output < 0.0008% of Rdg./°F < 0.0014% Rdg./°C
Sealing	IP66, Multi-redundant; High Pressure Resistant IP68; Multi-redundant; Continuous Immersion Tolerance

QA Typical System Configuration

SENSING LOAD CELL(S)



SIGNAL CONDITIONING

Analog Transmitters



Serial Transmitters



Digital Indication



Process Control



Batch Control

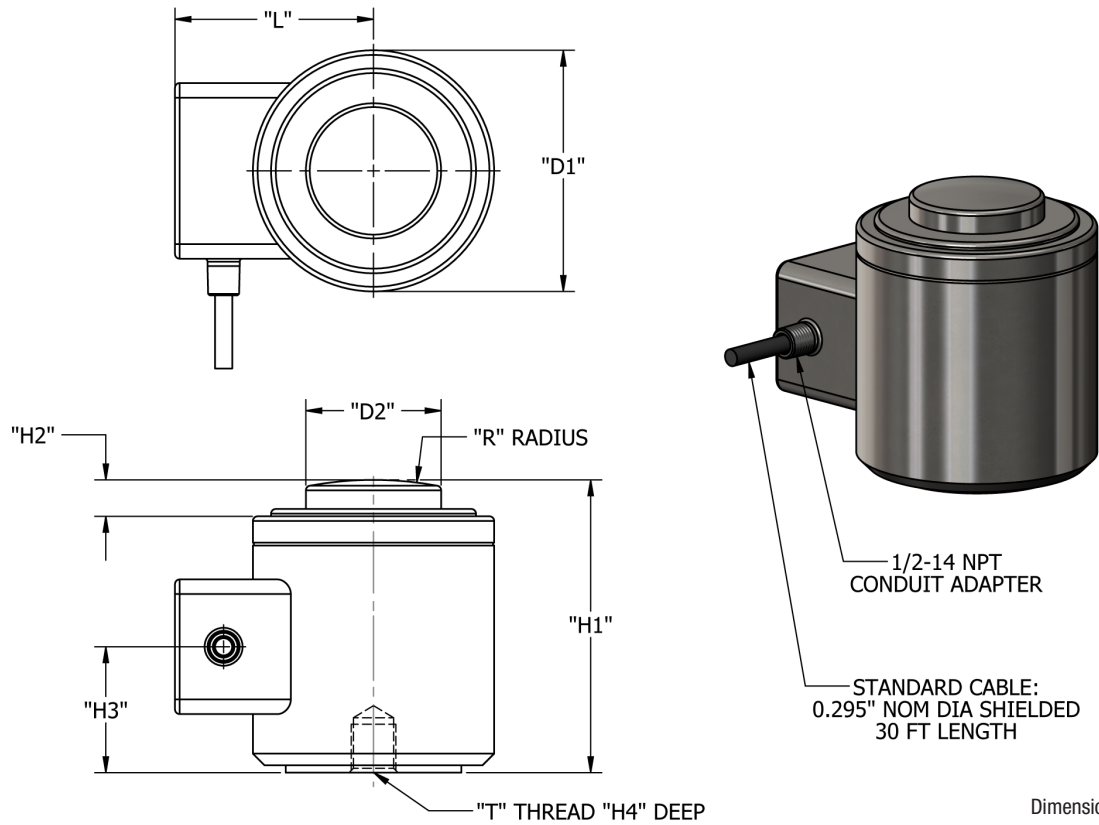


Data Acquisition



OUTPUT OPTIONS

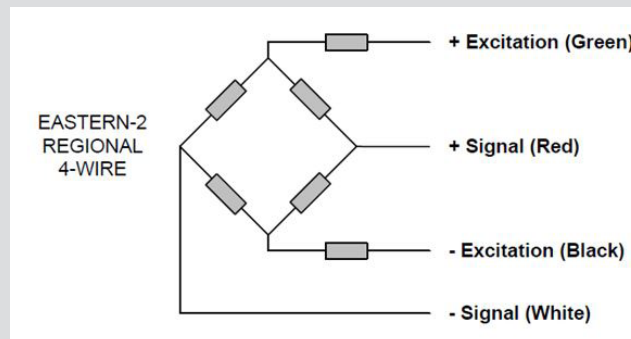
0-5 VDC
0-10VDC
±5 VDC
±10 VDC
4-20 mA
0-20 mA
RS-232
RS-422
RS-485
20 mA Serial Loop
Ethernet
Profibus DP
DeviceNet
CANOpen
ControlNet
Modbus RTU
Wireless



Dimensions in Inches

Capacity (LB)	H1	H2	H3	H4	L	D1	D2	R	T	Deflect	Weight
DIMENSIONS (INCHES)											
10K, 25K, 50K	3.25	.040	1.28	0.38	2.51	2.88	1.25	6.00	1/2-20 UNF-2B	0.003"	9.0 LBS
100K	5.00	0.51	2.15	0.56	3.39	4.12	2.31	6.00	3/4-16 UNF-2B	0.006"	20.0 LBS
200K, 300K	7.25	1.04	3.63	0.75	4.26	6.00	3.13	17.00	3/4-16 UNF-2B	0.006"	60.0 LBS
500K	9.00	0.56	4.34	0.75	4.59	6.50	3.69	17.00	3/4-16 UNF-2B	0.009"	120.0 LBS

QA Wiring Diagram



Legal Disclaimer



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