6000 SERIES INTERNAL POSITION TRANSDUCERS

6300 Series Internal Position Sensors provide an immediate solution to external mounting limitations and environmental hazards, including operating temperature ranges of -40° to 125°C. Ideal for high-velocity cylinder applications exceeding 2000mm/second (hydraulic) or 5000mm/second (pneumatic). Mechanical life exceeds one million meters, depending on fluid. Compactly designed with a maximum cross-section of 1" dia. (removable contact assembly) and rigid I-beam design. Six interface styles including pressure and non-pressure headers, leadwire or connector are available. Contact factory for detailed specifications.

ELECTRICAL SPECIFICATIONS

50-1000mm (2.0" - 40.0") Standard Electrical Travel (Stroke)

Resistance Tolerance: +20%

Power Rating at 70°C:

0.5 watts per 50mm of electrical travel (Derated to 0 watts at 125°C)

Output Smoothness: 0.1% of total applied voltage Insulation Resistance at 250VDC: 50 megohms min. Temperature Range: -40° to +125°C Dielectric:

250VDC
MECHANICAL SPECIFICATIONS

Actuation Force: 0.56 Newtons max.

Repeatability: Within 0.13mm

Life (Meters of Contact Travel): 1.0 x 10⁶

Model	6301	6303	6305	6308	6312	6316	6320
Total Electrical Travel (mm)*	50	150	250	400	600	800	1,000
Resistance K Ω (±20%)	4	12	20	32	48	64	80
inearity Over Active Electrical Travel (±%)	0.75	0.25	0.15	0.10	0.065	0.047	0.038

*Other standard electrical travels available in 50mm increments.