

MCRT[®] 48550V & 48551V Non-Contact DC OPERATED TORQUEMETERS

With Spline Drive per AND 10262 & AND 20002

CE



- ✓ Hardened to EMI From Adjustable Speed Drives
- ✓ Dual ± 5 Volt Outputs
- ✓ Single Supply Operation
- ✓ Corrosion Resistant
- ✓ Ferrite-free Rotary Transformer
- ✓ Remote, NIST Traceable Cal*

Interface Directly To PC and PLC Controllers and Data Acquisition Systems

*NIST traceable calibration performed in our accredited laboratory (NVLAP Lab Code 200487-0). For details visit www.himmelstein.com or follow the accreditation link at www.nist.gov

Description

When installed between a driver and load, MCRT[®] 48550V/48551V sensors *measure static and dynamic shaft torque and speed* (an option). A strain gaged, 15-5 PH stainless shaft senses torque and cancels bending and thrust. *Robust, ferrite-free rotary transformers* connect torque sensing gages to an *integral, noise immune, carrier amplifier*. Rotary transformers don't generate noise or wear, and are immune to vibration, lubricants and other hostile environments. Unlike ferrite transformers, Himmelstein ferrite-free units aren't susceptible to cracking and impact induced damage.

These torque meters mate with and support test components meeting the specified spline standards; see overleaf. Their overload torque rating is twice the full scale range. Standard models operate from stall to $\pm 15,000$ rpm; higher speed versions can be supplied on special order – if higher speeds are needed, please consult the factory. Both standard and zero velocity speed pickups are optional. *All versions incorporate advanced, noise reduction technology that hardens these sensors to EMI generated by IGBT-based adjustable speed drives (ASD's).*

MCRT [®] Model	Torque Range (lbf-in)	Torque Overload (lbf-in)	Max Speed (rpm)	Stiffness ¹ (lbf-in/radian)	Inertia ¹ (ozf-in sec ²)	Max. Wt. (lbs.)
48550V(5-1)	50	100	0 to $\pm 15,000$	5,570	0.15	13
48550V(1-2)	100	200	0 to $\pm 15,000$	15,000	0.15	13
48550V(2-2)	200	400	0 to $\pm 15,000$	54,500	0.15	13
48550V(5-2)	500	1,000	0 to $\pm 15,000$	94,500	0.15	13
48550V(1-3)	1,000	2,000	0 to $\pm 15,000$	145,000	0.15	13
48551V(1-3)	1,000	2,000	0 to $\pm 10,000$	247,000	0.16	14
48551V(2-3)	2,000	4,000	0 to $\pm 10,000$	428,000	0.16	14
48551V(5-3)	5,000	10,000	0 to $\pm 10,000$	486,000	0.16	14
48551V(1-4)	10,000	20,000	0 to $\pm 10,000$	613,000	0.17	14

1. Both stiffness and inertia are conservatively rated from shaft end-to-end.

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