



In-Cylinder Linear Transducers

ICT800/820 Analog or CAN Output

- Robust design based on inductive technology
- Small length to stroke ratio
- 8mm transducer body diameter
- Internal or external threaded flange options
- Sleeve or threaded core options
- Measurement range 25-1000mm
- CAN Output (ICT820) – SAE J1939
- Analog Output (ICT800) – 0.5-4.5Vdc or 0.2-4.8Vdc
- Connector (IP67) or flying-lead (IP69K) options
- Integrated signal conditioning electronics



The ICT800 & 820 range of Contactless In-Cylinder Linear Transducers offer an unmatched combination of ruggedness and long life. The non-contacting, inductive sensing design provides superior resistance to shock and vibration that other technologies, such as magnetostrictive, simply can't match; as well as eliminating the potential reliability issues related to contacting parts used in potentiometer based products.

Careful mechanical design eases accommodation of the sensor into cylinders where space is at a premium, while a range of stroke options with choices down to 5mm increments mean the ICT800 & 820 can be made to suit almost any hydraulic or pneumatic system. The sensor body is constructed from high grade stainless steel and can operate in working system pressures to 670 bar (10,000 psi).

The signal conditioning electronics are integrated into the mounting flange and provide analog or CAN SAE J1939 output options. The CAN models have multiple Node ID, Baud Rate and Frame Rate configurations.

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Product Specifications

Electrical	
Supply voltage	5Vdc (regulated) or 8-30Vdc (unregulated)
Supply current	< 80mA
Output – ICT800	0.5-4.5Vdc or 0.2-4.8Vdc
Output – ICT820	CANbus SAE J1939
Non-Linearity	< ±0.1%
Resolution	ICT800 -12 bits; ICT820 – 13 bits

Mechanical	
Measurement range	25 to 1000mm
Transducer body diameter	8mm
Life	Contactless - no limitation to transducer life
Maximum velocity	2m/s in hydraulic applications (ISO VG 32 mineral oil)
Working pressure	670 Bar (10,000 psi)

Environmental	
Operating temperature	-40 to +125 °C
Storage temperature	-40 to +125 °C
Working fluid	Tested for compatibility with a wide range of hydraulic fluids. Ask for more details.
EMC	Meets Directive 2004/10/EC

Options	
Mounting	Internal or External flange styles can be specified
Core configurations	Threaded or sleeved core to suit your cylinder rod mounting preference
Electrical connections	M12 Connector (IP67); Cable through gland (IP69K); Individual flyleads (IP66)

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