

## PY Extreme Environment Non-Contact Displacement Transducer

- High radiation resistance
- High temperature survival
- Submersible
- Stainless steel
- Infinite resolution
- Non-contact



The PY non-contact displacement transducer measures the distance between its front face and a target made from a ferritic material. A ferritic material is one which is attracted by a magnet.

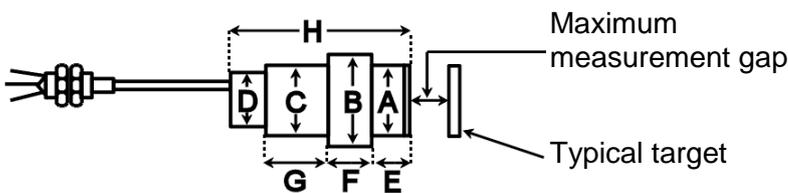
This sensor is appropriate for high temperature, high pressure and high nuclear radiation position measurement applications. Many applications in turbines, in nuclear power stations and in research labs are appropriate for this sensor.

There are two types of PY transducer, a single coil version (which must be used in pairs) and a double coil version which can be used alone.

As the output of the PY is not linear, linearisation may be necessary depending on the application. Our 615 amplifier is designed for this.

### Single coil version.

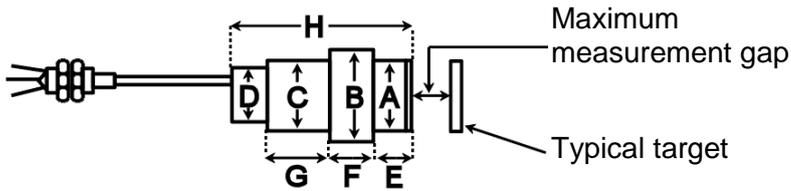
The single coil displacement transducer version must be used in pairs for example one on each side of a rotation shaft.



Type	Maximum measurement gap	Operating temperature range	Maximum radiation dose	A	B	C	D	E	F	G	H
PY102	0.06"	-364°F to 428°F	100M Rad	0.47"	0.55"	0.47"	0.47"	0.33"	0.10"	0.49"	1.12"
PY106	0.06"	-364°F to 1112°F	100G Rad	0.47"	0.55"	0.47"	0.47"	0.33"	0.10"	0.49"	1.12"
PY152	0.12"	-364°F to 428°F	100M Rad	0.59"	0.71"	0.59"	0.51"	0.35"	0.20"	0.59"	1.50"
PY156	0.12"	-364°F to 1112°F	100G Rad	0.59"	0.71"	0.59"	0.51"	0.35"	0.20"	0.59"	1.50"
PY252	0.24"	-364°F to 428°F	100M Rad	0.98"	1.10"	0.98"	0.79"	0.35"	0.20"	0.59"	1.46"
PY256	0.24"	-364°F to 1112°F	100G Rad	0.98"	1.10"	0.98"	0.79"	0.35"	0.20"	0.59"	1.46"

## Double coil version.

The double coil transducer version can be used to measure the gap between a single PY and a suitable target.



Type	Maximum measurement gap	Operating temperature range	Maximum radiation dose	A	B	C	D	E	F	G	H
PY102C	0.06"	-364°F to 428°F	100M Rad	0.47"	0.55"	0.47"	0.47"	0.37"	0.20"	0.71"	1.48"
PY106C	0.06"	-364°F to 1112°F	100G Rad	0.47"	0.55"	0.47"	0.47"	0.37"	0.20"	0.71"	1.48"
PY152C	0.12"	-364°F to 428°F	100M Rad	0.59"	0.71"	0.59"	0.51"	0.59"	0.39"	0.59"	1.93"
PY156C	0.12"	-364°F to 1112°F	100G Rad	0.59"	0.71"	0.59"	0.51"	0.59"	0.39"	0.59"	1.93"
PY252C	0.24"	-364°F to 428°F	100M Rad	0.98"	1.10"	0.98"	0.79"	0.59"	0.39"	0.59"	1.89"
PY256C	0.24"	-364°F to 1112°F	100G Rad	0.98"	1.10"	0.98"	0.79"	0.59"	0.39"	0.59"	1.89"

Specification	
Temperature coefficient (combined zero and span)	±0.03% F.S. /°F (typical)
Electrical termination	6.6ft (integral cable) Longer available to order.
Maximum static pressure	2901psi (212°F maximum)

Due to our policy of on-going development, specifications may change without notice. Any modification may affect some or all of the specifications for our equipment.

All dimensions and specifications are nominal.

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