TARGET TYPE FLOW SENSOR, Model FL

The FL model high performance sensor measures fluid flow by sensing its impact force on a static target. The force is measured using a non–contact sensor insulated from the fluid by a solid stainless steel wall, avoiding the thin wall elastic elements required for the strain gage types. Its much higher sensitivity enables the use of small size targets, for reduced pressure drop and the measurement of slow fluid flows.

FEATURES:

- RELIABILITY – No moving or stress – sensitive parts, sturdy construction for long unattended life.
- CORROSSION RESISTANCE – One place stainless steel, no joints, welds seals.
- TARGET SIZE – Small target for low pressure drop, and capable to measure high solid content fluids.
- FLEXIBILITY –Small size housing and target fit wide range of pipe diameters. Measurement range can be adjusted electronically, or changing the target size and its position.
- EASY TEST AND CALIBRATION – Sensor can be field tested and calibrated using a set of weights.
- FAST RESPONSE
- BIDIRECTIONAL FLOW MEASUREMENT

SPECIFICATIONS:

RANGE:	Up to 100 ft/s of water flow rate full scale.
CONFORMITY:	0.5% FS maximum deviation from the ideal square function.
HYSTERESIS:	0.1% typical for unidirectional flow.
RESPONSE TIME:	20 ms response to step input.
LINE PRESURE:	3,000 psi. maximum
TEMPERATURE RANGE:	-30 to 90 ºC, operating. -55 to 125 ºC, storage.
TEMPERATURE COEFFICIENT OF ZERO:	0.02%FS/ºC typ.
TEMPERATURE COEFFICIENT OF SPAN:	0.02%FS/ºC typ.
MATERIALS IN CONTACT WITH THE FLUID:	#316 stainless steel, PH 17-4.
EXCITATION:	±15VDC @ 15mA, unregulated (±10%). Others available
OUTPUT:	0 to ±5VDC @ 10mA max. Others available

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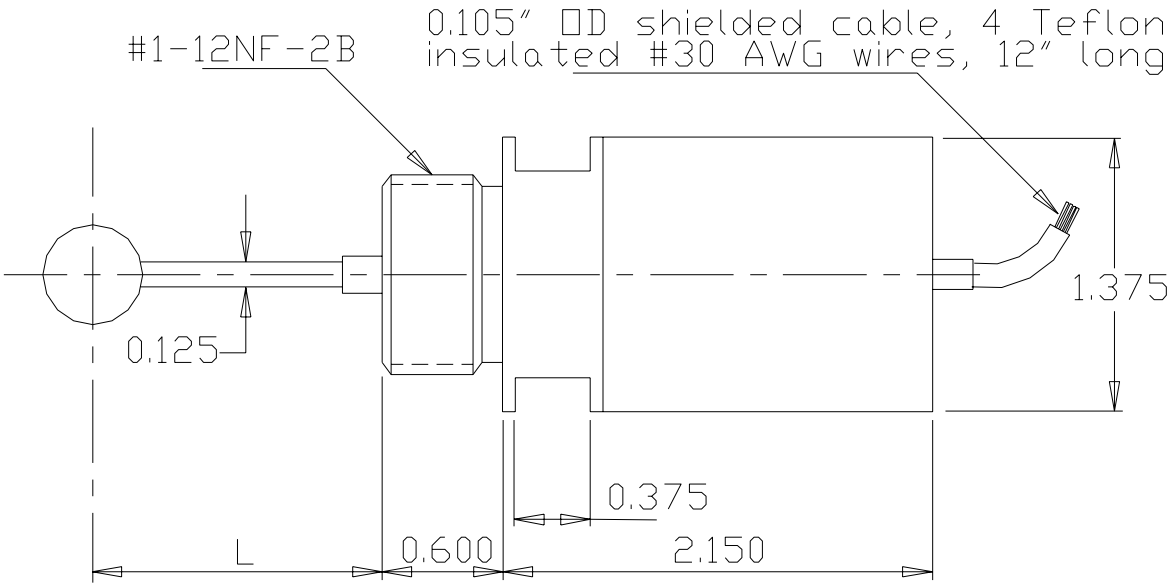
OPTIONS:

1	INPUT:	Any voltage from 10 VDC to 24 VDC.
2	OUTPUT	Any voltage to 10 VDC F.S., 4 to 20 mA current output, linearized output frequency modulated output.
3	SWITH	Adjustable single or double set-point, contact or voltage output.
4	SIGNAL CONDITIONER:	Line powered or battery, digital display & output.

DIMENSIONS (in):



REMARKS:

1 Target rod length L to vary with specified pipe diameter and target position.
2 Housing dimensions will increase for some options.
3 Wiring details will change for some options.

WIRING (BASIC UNIT):

RED	+15 VDC
WHITE	COMMON
BLACK	-15 VDC
YELLOW	OUTPUT

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