

Solid State Sensors
Digital Position Sensors

103SR Series



FEATURES

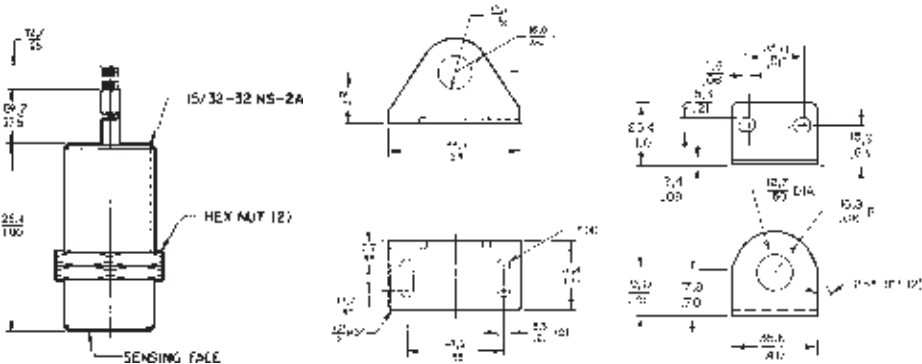
- Current sinking or current sourcing output
- Rugged, sealed threaded aluminum housing NEMA 3, 3R, 3S, 4, 12 and 13 requirements\*\*
- 20 gauge, 6 inch stranded leadwires, color coded, or 1 meter jacketed cable
- Adjustable mounting

NOTE: For analog sensors, see page 24.

MOUNTING DIMENSIONS (For reference only)

1SR15 Mounting Bracket

1SR15HD Mounting Bracket



Leadwire color code:
Red Vs (+)
Black Ground (-)
Blue, Green, or White Output

103SR ORDER GUIDE

Catalog Listings*	103SR11A-1	103SR12A-1	103SR13A-1	103SR14A-1	103SR17A-1	103SR18-1
Supply Voltage (VDC)	4.5 to 5.5	6 to 24	4.5 to 24	4.5 to 24	4.5 to 24	4.5 to 24
Supply Current (mA max.)	4	10	10	10	10	10
Output Type	Source	Source	Sink	Sink	Sink	Sink
Output Voltage (V max.)	(Vs-1.5)	(Vs-1.5)	0.4	0.4	0.4	0.4
Output Current (mA max.)	20	20	20	20	20	20
Magnetics Type	Unipolar	Unipolar	Unipolar	Unipolar	Bipolar	Latching
Magnetic Char. & Temp.	G mT	G mT	G mT	G mT	G mT	G mT
0 to 70°C						
Max. Op.	735 73.5	495 49.5	475 47.5	— —	180 18.0	90 9.0
Min. Rel.	25 2.5	120 12.0	135 13.5	— —	-180 -18.0	- 90 - 9.0
Min. Dif.	50 5.0	40 4.0	40 4.0	— —	40 4.0	40 4.0
-40 to 100°C						
Max. Op.	— —	— —	495 49.5	160 16.0	205 20.5	120 12.0
Min. Rel.	— —	— —	200 20.0	5 0.5	-205 -20.5	-120 -12.0
Min. Dif.	— —	— —	35 3.5	8 0.8	35 3.5	40 4.0
25°C Typ.						
Typ. Op.	350 35.0	350 35.0	400 40.0	90 9.0	50 5.0	50 5.0
Typ. Rel.	215 21.5	245 24.5	250 25.0	45 4.5	- 50 - 5.0	- 50 - 5.0
Typ. Dif.	135 13.5	85 8.5	85 8.5	45 4.5	100 10.0	80 8.0

\* To order 1 meter jacketed leads, replace the 1 at the end of the catalog listing with a 2. Example 103SR13A-2.
\*\* Stainless steel housing available for applications requiring compliance to NEMA 4X. Contact the 800 number.
G = Gauss
mT = milliTesla

Magnets page 25.

Unipolar: sensor has plus maximum operate point, plus minimum release point. One magnetic pole (South) is required to operate and release a unipolar sensor.

Bipolar sensor has plus (south pole) operate point and minus (north pole) minimum release point. Operate and release points can be both positive or both negative. Latching cannot be guaranteed. Ring magnets are usually used with bipolar sensors.

LEADWIRE TYPE

Type 1	22 gage stranded, teflon insulated
Type 2	22 gage PVC insulated conductor with black molded PVC jacket
Type 3	22 gage insulated conductors with yellow thermo-plastic polyurethane jacket
Type 4	24 gage irradiated polyethylene