

Solid State Sensors

Digital Position Sensors

103SR Series

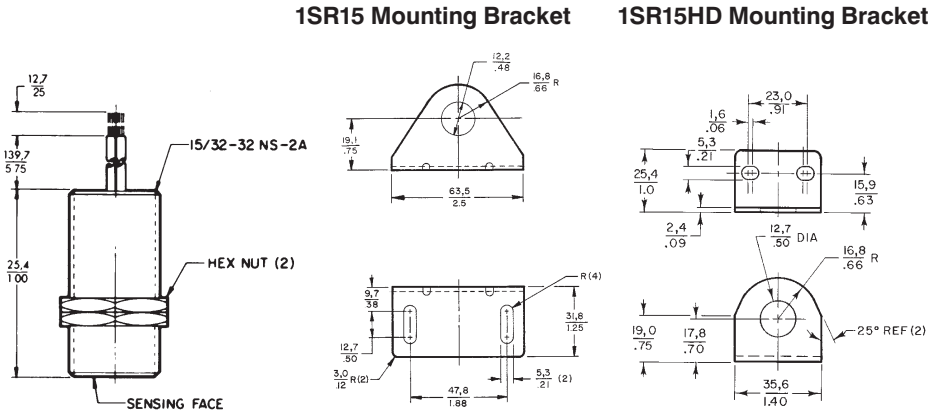


FEATURES

- 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)



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				
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