

R.B.DENISON

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PROXSWITCH®

SERVICE BULLETIN 900 March, 1977

Supersedes and replaces Service Bulletin 900, dated April, 1976

METAL SENSING & CAPACITIVE PROXIMITY LIMIT SWITCHES



RING SENSORS



These sensors detect the presence of metal within the ring

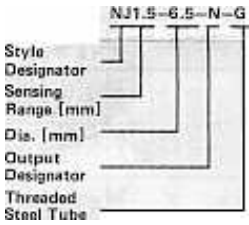
SLOT SENSORS



These sensors detect the presence of metal in the slot

MODEL NUMBERING

PROBE STYLE



Style
Designator
Sensing
Range [mm]
Dia. [mm]
Threaded Metal [GM] Threaded Plastic [GK]
Output
Designator

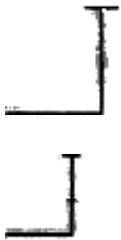
NJ5-18GM-E2 ~



SURFACE MOUNTED
STYLE

NJ4-F-WS

Style Designator ~ Sensing Range [m~
Surface Mounted*
Output Designator
*C -Type C Limit Switch Hsg.
50 -Dia. of Sensing Area

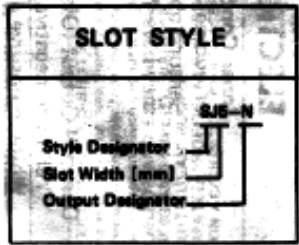
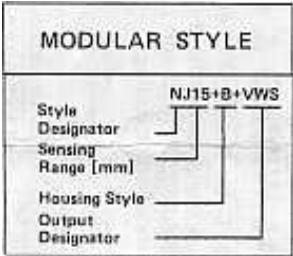


RING STYLE

RJ43-E

Style Designator JT Ring Dia. [mm] ~
Output Designator





The ~. model number is incomplete without an electrical output designator. The chart to the right shows the different styles of electrical outputs. The table on the inside shows wiring and electrical ratings for the Sensors with these electrical output designators.

For more complete information concerning application, dimensional and electrical specifications, write or call for Bulletin PR.

OUTPUT DESIGNATOR TABLE

- N -Connects to Transistor Relay ~
- E -NPN Transistor for 3-wire DC current sinking, *N/O*
- E1 -NPN Transistor for 3-wire DC current sinking, *N/C*
- E2 -PNP Transistor for 3-wire DC current sourcing, *N/O*
- E3 -PNP Transistor for 3-wire DC current sourcing, *N/C*
- A -Dual NPN Transistor for 4-wire DC current sinking, one *N/O* and one *N/C*
- WS -Thyristor semiconductor for 2-wire AC, *N/O*
- WO- Thyristor semiconductor for 2-wire AC, *N/C*

NOTE: Modular Sensors have the Output Designator preceded by the letter V. This denotes a replaceable electrical module.

REPLACEMENT PARTS

ELECTRICAL MODULES

Module Style Sensors have replaceable Electrical Modules and Indicator Lights

Part No

- VE -NPN Transistor -24 VDC 12VE -NPN Transistor -12 VDC VE2 -PNP Transistor -24 VDC 12VE2 -PNP Transistor -12 VDC VA -NPN Transistor -24 VDC
- I V A2 -PNP Transistor. -24 VDC
- 12V A-2 -PNP Transistor -12 V DC VN -to Transistor Relay
- VWS 80 -250 V AC -400mA Fused VWO 80 -250 V AC -400mA Fused

7220 7221 7293 7294 ,7295 7296 : 7298 7299
I' 7377 7378

DESCRIPTION

HOUSINGS

Modular Style Sensors may be ordered as a complete assembly, without Electrical Module

Part No.	DESCRIPTION
7354	NJ15+B Assembly [less Module]
7355	NJ20+B Assembly [less Module]
7356	NJ40-F Assembly [less Module]
7357	NJ50-F Assembly [less Module]

PARTS & ACCESSORIES

PART NO. BF6.5

BF8

BF11 BF12 BF18 4-341 4-342 BF30 7319

7319-1 7319-2

7372 7387 7353 7224 7292 7361 7352 7349

10-4000-3 10-4000-6

10-4000-12

- Mtg. Hojder for 6.5mm Dia. Sensor
- Mtg. Holder for Bmm Dia. Sensor
- Mtg. Holder for 11 mm D ia. Sensor
- Mtg. Holder for 12mm D ia. Sensor
- Mtg. Holder for 1Bmm Dia. Sensor
- Mtg. Holder for 22mm Dia. Sensor [N]
- Mtg. Holder for 22mm Dia. Sensor [E, A, W]
- Mtg. Holder for 30mm Dia. Sensor
- Locking Nuts [2] for Bmm Dia. Sensor
- Locking Nuts [2] for 1Bmm Dia. Sensor
- Locking Nuts [2] for 30mm Dia. Sensor
- Base for SK Series Transistor Relay
- Base for T Series Transistor Relay
- Mtg. Track for WE,74 Series Transistor Relay
- Neon Cover Light, 120 V AC, Module Sensors
- LED Cover Light, 24 VDC, Module Sensors
- 2.5A Fuse for VWS & VWQ Modules
- Cable Grip for NJ40.F and NJ50cF Module Sensors Voltage Surge Protector
- Plug and 3' Cable for 546 Receptacle
- Plug and 6' Cable for 546 Receptacle
- PI ug and 12' Cable for 546 Receptacle

DESCRIPTION

RBDCAI"SON/103 Broadway. Bedford,Ohio 44146 ..1:-1 V ,~ INC./Telephone: 216/232-8200. Telex: 98-5424

~ ~

Design E, E1, E2 & E3 Output (Old Style):
Black to negative (-)
Red to positive (+)
White to Load

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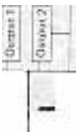
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SURFACE
MOUNTED
STYLE
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N4-F...
N5+C...
N6-F...
N25-50

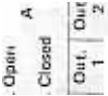
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**WARNING:-- FOR AC OUTPUT SWITCHES** — Do not check with an incandescent light bulb tester. This is an all solid state electronic switch.

**TO BENCH CHECK** — Connect a 20,000 ohm per volt VOM across switch leads (or terminals). Use RX 10,000 scale. Reading should be within 95 to 150 thousand ohms.

Should be within 95 to 150 thousand ohms. Use R.A. 10,000 scale. Reading

#### WARRANTY AND LIMITATION OF LIABILITY

R. B. DENISON, INC. warrants the goods sold hereunder to be free from defects in material and workmanship under normal and proper use for a period of one year from the date of shipment to the original purchaser, and will repair or replace without charge any such products it finds to be so defective upon return to it. THIS WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER REPRESENTATIONS. AND IS IN LIEU OF ALL EXPRESS AND IMPLIED WARRANTIES INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL R. B. DENISON, INC. BE LIABLE FOR ANTICIPATED PROFITS. FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. OR FOR DAMAGES ON ACCOUNT OF PURCHASER'S NEGLIGENCE OR MISUSE OF THE GOODS.

#### UNAUTHORIZED SERVICING AND REPAIR

Warranty does not apply to goods serviced, repaired or modified by other than authorized factory personnel at R. B. DENISON, INC., Bedford, Ohio.

This symbol on the product's nameplate 1~.

U' \ means it is Listed by L . UNDERWRITERS LABORATORIES INC. '~-4!

Products that are field serviced, repaired or otherwise modified, may nullify the UL listing.