

Position Indicator 82653 Series

GENERAL DESCRIPTION

The No. 82653 Series Position Indicator is a simple pneumatically-actuated position or sequence indicator which shows the condition of a measured variable or the position of a valve, pressure switch, damper, etc.

SPECIFICATIONS

Construction:

- Mounting plate* 316 stainless steel
- Body* Cast aluminum
- Springs* Stainless steel
- Diaphragm* Neoprene covered nylon
- Escutcheon* Delrin

Supply Pressure: 20 - 50 psi (137.90-344.74kPa)

Operating Medium: Air, natural gas (dry sweet) or an inert gas

Pressure required at Port "T" to transfer relay:

Pressure ON Indication: 14-20 psi (96.53-137.90 kPa)

Pressure OFF Indication: 5-14 psi (34.48-96.53 kPa)

Mounting: Panel

Net Weight: 12 oz.

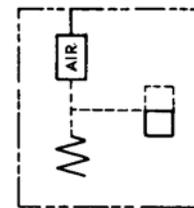
Dimensions: See Figure 1

Connections: 1/8" - 27 NPT

Panel Mounting Hole: 1 3/4" (44.5 mm) diameter

Min. Recommended Centerline Spacing: 3" (76.2 mm)

Panel Thickness: 3/8" (9.53 mm) maximum



J.I.C. Symbol

Models Available:

MODEL NO.	INDICATION	
	Pressure ON	Pressure OFF
82653-B1	Green	Red
82653-B2	On	Off
82653-B3	Open	Closed
82653-B4	Closed	Open
82653-B5	Open	White
82653-B6	Closed	White
82653-B7	Green	Red Striped
82653-B8	Red	Green
82653-B9	Red Striped	Green

ORDERING INFORMATION:

SPECIFY:

Model No.

INSTALLATION

General

Tubing and fittings used to connect relay must be free of chips, dirt, moisture or other foreign matter. If thread compound or shellac is used, apply it only above second or third male thread in moderate amounts. Do not allow compound to be deposited inside indicator.

For continuous, trouble-free operation, the air supply to the relay must be clean and dry.

Mounting

When installing the No. 82653 Series Position Indicator, care must be taken to prevent foreign matter from entering ports.

For panel mounting, provide a 1-3/4 (44.5 mm) diameter hole. Remove escutcheon, insert relay through hole in panel, replace escutcheon and tighten by hand until escutcheon bottoms against the relay housing. To prevent damage to escutcheon, do not use sharp-toothed tools, etc. Rotate mounting plate to a position where the screws are readily accessible. Tighten screws to lock relay in place.

Connections

Consult system schematic for proper connections. Typical Application, Port T is used as signal input.

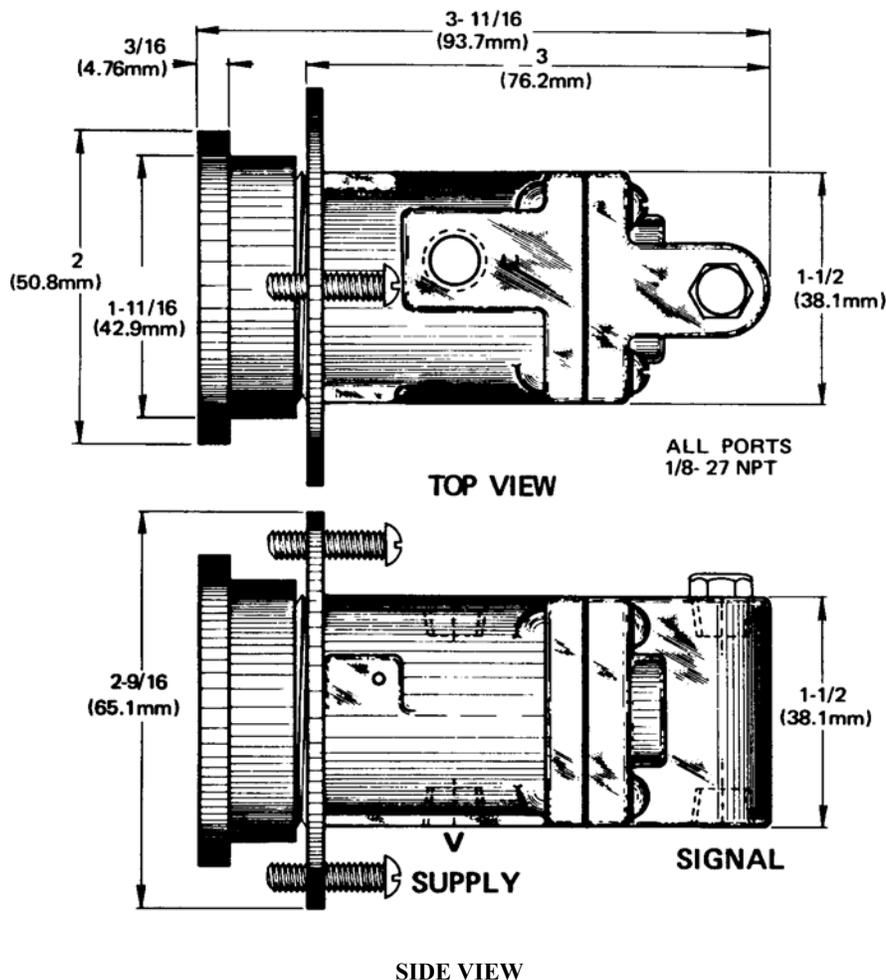
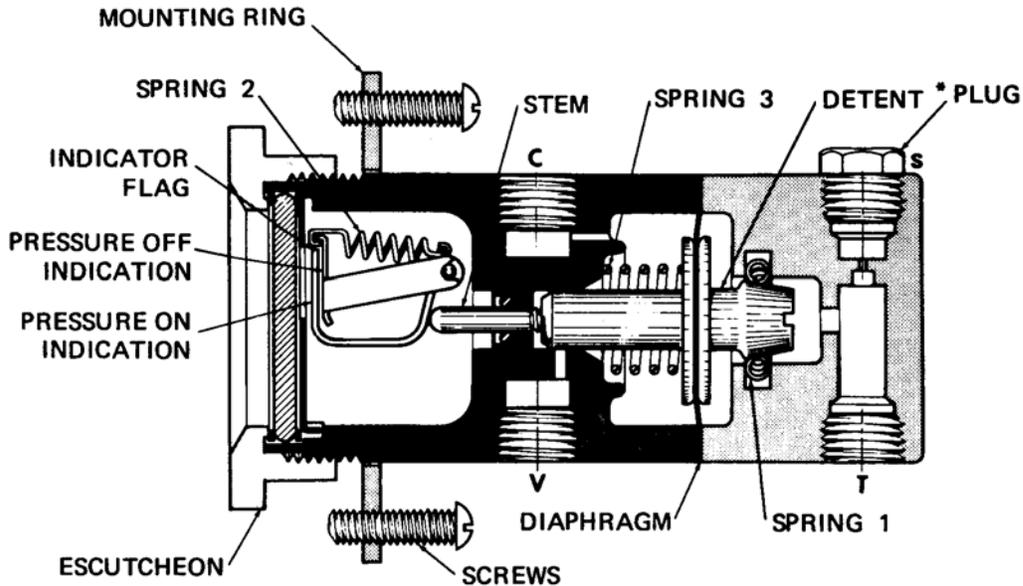


FIGURE 1

OPERATION

Pressure introduced at the supply Port "T" positions the indicator flag to correspond with position or condition of measured variable. Spring 2 holds the indicator flag against the plunger and assures instantaneous indication of position or condition. When pressure is removed from Port "T" Spring 3 forces detent back allowing the opposite flag to appear.



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NOTE:

The plug in port "S" may be removed and the supply to the indicator may also be used as an orificed supply to sensing devices, etc. (orifice size is .028" (.711 mm) dia.) in this case, supply is connected to port "S" and port "T" is connected to the sensing device. When the sensing device vents the air signal, pressure downstream of the orifice is vented allowing the indicator to move to the "Pressure Off position."

Figure 2

MAINTENANCE

- A. If indicator does not function properly due to contamination by foreign matter, disassemble and clean all metal parts with non-flammable cleaning fluid and dry thoroughly.
- B. After reassembly, check for external leakage. Retighten assembly screws as necessary. Gasket cement should not be used to seal leaks due to the possibility of plugging passages, or possible damage which might change the operating characteristics of the diaphragm.

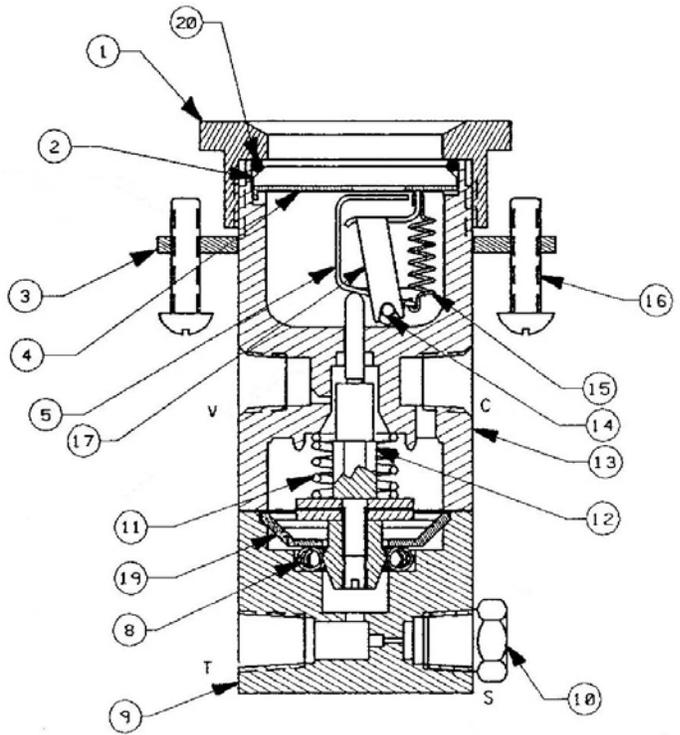
CAUTION:

If cleaning is required, do not subject O-Ring, Quad-Ring, or gasket to cleaning fluid, acetone, or any halogenated hydrocarbon such as degrease liquids, etc. Clean only with a soft dry cloth.

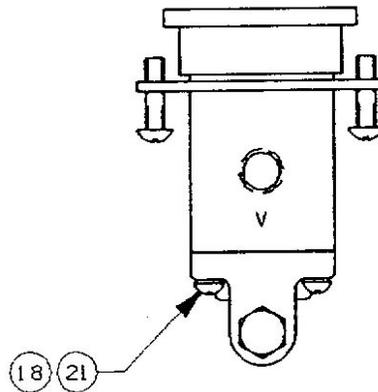
Upon reassembly, the O-Ring is to be lubricated with a non-drying silicone-type lubricant. Do not permit lubricant to get on poppet or valve seat.

PARTS LIST

Detail No.	No. Req'd	Description	Part No.
1	1	Escutcheon	30201-C1
2	1	Lens	30443-B1
3	1	Mounting Plate	30444-B1
4	1	Window	30440-A1
5	1	Flag	See table below
6			
7			
8	1	Garter Spring	30445-A1
9	1	Cover	30330-B1
10	1	Plug	30310-G1
11	1	Spring	26805-A1
12	1	Stem Assembly	82665-A12
13	1	Housing	30331-A2
14	1	Roll Pin	36606-A7
15	1	Spring	30441-A1
16	2	Screw	33716-A1710
17	1	Insert	See table below
18	4	Cover Screw	33173-J1310
19	1	Detent Plate	36352-A1
20	1	O-Ring	36240-N0122
21	4	Lock Washer	36600-L0609



Model No.	INDICATION		DETAIL	
	Pressure On	Pressure Off	No. 5	No. 17
82653-B1	Green	Red	30439-A1	30941-A1
82653-B2	On	Off	83137-A1	83136-A1
82653-B3	Open	Closed	83137-A2	83136-A2
82653-B4	Closed	Open	83137-A3	83136-A3
82653-B5	Open	White	83137-A2	30941-D1
82653-B6	Closed	White	83137-A3	30941-D1
82653-B7	Green	Red Striped	30439-A1	83136-B1
82653-B8	Red	Green	30439-B1	30941-B1
82653-B9	Red Striped	Green	83137-B1	30941-B1



Robertshaw