

SERVICE INSTRUCTIONS MODEL 58L LOW LIMIT RELAY

DESCRIPTION (See Figure 1)

The Model 58L Low Limit Relay maintains an output pressure equal to the input pressure except when the input pressure decreases below the setting of the adjusting screw.

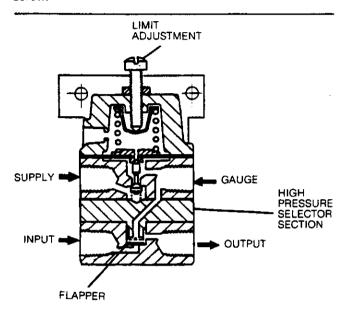


FIGURE 1 Schematic

The Low Limit Relay consists of a pressure regulator and a high pressure selector. The pressure regulator provides the low limit setting pressure to the top of the flapper; the input pressure is applied to the bottom of the flapper. The high pressure selector chooses the higher of these pressures as the output. When the input pressure is higher than the lower limit setting pressure, it will pass directly to the output. When the low limit setting pressure is higher than the input pressure, the regulator supplies the output equal to the low limit setting.

GENERAL SPECIFICATIONS

Normal Input and

Output Range: 3-15 psi

Maximum

Input Pressure: 30 psig (Input pressures above 30

psig and to a maximum of 50 psi

require Teflon flapper)

Supply Pressure: Normal — 20 psi

Minimum — 1 psi above limit setting

Maximum — 100 psi

Limit Adjustment

Range: 0.5 to 16 psi

Ambient Temp.

Limits:.... - 40°F to 180°F

INSTALLATION

Refer to Figure 2 for mounting dimensions and connections.

All connections are 1/4" N.P.T. Use pipe sealant sparingly, and then only on the male threads. A non-hardening sealant is strongly recommended.

Blow down all lines and connect the relay to a source of clean, dry, oil-free instrument air. Refer to the Instrument Society of America's "Quality Standard for Instrument Air" (ISA-S7.3).

MAINTENANCE

The only maintenance normally required is an occasional application of grease to the adjusting screw threads. No other lubrication is recommended.

To clean the flapper, the plunger and their seating surfaces, the relay must be disassembled. Refer to the Parts List for parts orientation when disassembling and assembling the relay. Use a non-abrasive solvent for cleaning metal parts. (i.e., plunger and seats) and an approved solvent for use on the neoprene flapper.

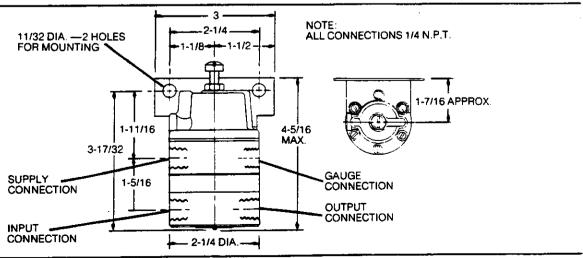
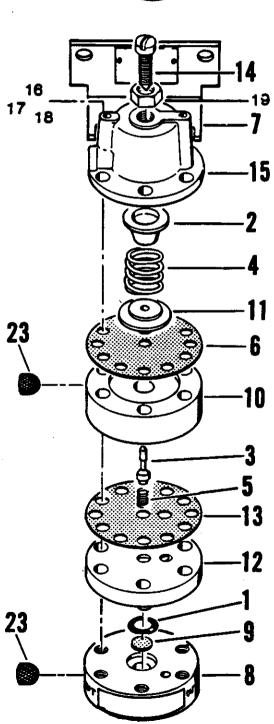


FIGURE 2 Installation



Drawing No. 12570-25PL





ITEM	PART NO.	DESCRIPTION	QTY.
*1	2938-18	O-Ring	1
2	6750-6	Plated Spring Seat	1
• 3	6750-21	Pilot Plunger	1
4	6750-39	Range Spring	. 1
5	6937-26	Plunger Spring	· 1
• 6	10963-6	Diaphragm	1
7	10963-73	Surface Mounting Bracket	1
8	12530-11	Bottom Housing	1
* 9a	12530-13	Flapper (Models 58L & 58L(M21))	1
* 9b	12530-17	Flapper (Model 58L (M17) only)	1
10	12570-4	Pilot Ring	1
11	12570-5	Spring Seat	1
12	12570-6	Center Ring	1
*13	12570-7	Gasket	1
14a	12570-8	Adjusting Screw	1
14b	6754-14	Adjusting Screw (Model 58L (M21) only)	1
15a	12570-9	Top Housing	1
15b	6755-4	Top Housing (Model 58L (M21) only)	1
16	1-2770	10-32 x 2 Fl	6
17	1-7288	10 Med, Lwr.	6
18	1-7445	10 Med. Flwr.	2
19a	1-7744	1/4 - 20 Hx Jant	1
19b	1-7770	1/4 - 32 Hx Jant (Model 58L (M21) only)	1
23	2155-225	Filter Screen	4

^{*} Recommended On-Hand Spare Parts. Always Specify Range. Senal No., or Other Nameplate Information When Ordering Spare Parts.