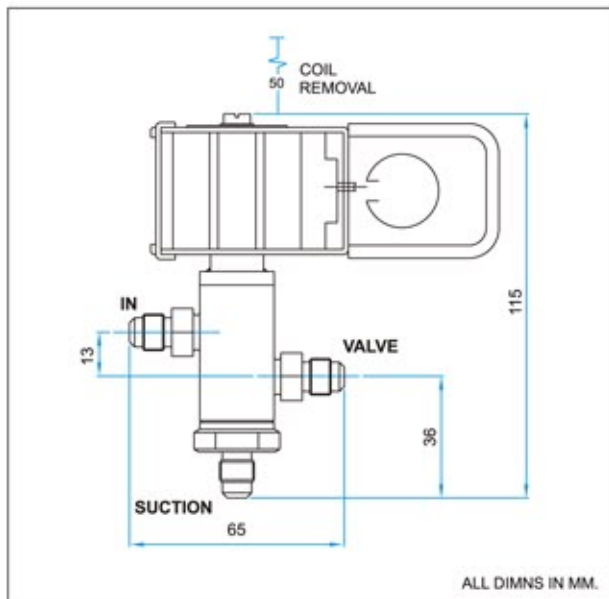
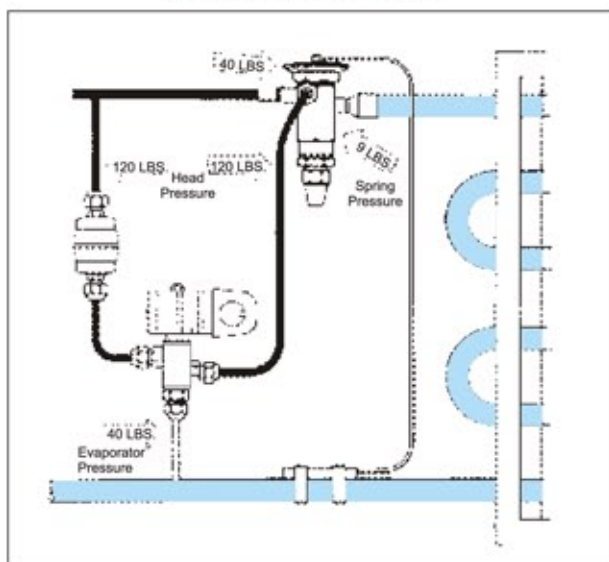


Pilot Solenoid Valve Type T-180



TOTAL VALVE ASSEMBLY T-180



Thermostatic Expansion Valve closed - High Pressure Port open - Low Pressure Port closed

INTRODUCTION

'SANLAN' Pilot Solenoid Valve Type T-180 is a special type of 3-way solenoid valve used in place of large capacity solenoid valves for positive closing of liquid lines. T-180 is available for refrigerants 12,22,134a and 502 as a supplementary device to thermostatic expansion valves.

The Pilot Solenoid Valve Type T-180 does not directly close the liquid line, but acts on the thermostatic expansion valve, causing the expansion valve to close tightly or operate normally, depending on whether the solenoid valve is energized or de-energized.

TECHNICAL INFORMATION

The valve has three ports, with 1/4" SAE external threading connections. These are **IN**, **VALVE** and **SUCTION** respectively which are marked accordingly.

1. IN- This is high-pressure liquid line Inlet port. This is normally open port.

2. VALVE - Valve port is the middle and common port. External equalizer of the thermostatic expansion valve is connected to this port.

3. SUCTION - Suction port, which should be connected to the suction line of the compressor, is at the bottom of the valve. This is normally closed port.

SPECIFICATIONS

Standard Coil Ratings: - 15W molded coil type **TKC-2** with cable connection. TKC-2 coil can be supplied with a wide choice for a.c. or d.c.

Maximum Opening Pressure Differential MOPD: - 21 bar/300psig.

Safe Working Pressure SWP: - 35bar/500psig.

Connections: - 1/4"SAE Flare External

Net Weight: - 650gm.

PRINCIPLES OF OPERATION

During energized condition of the solenoid valve T-180, the plunger moves upward sealing off the high-pressure port. With the high pressure excluded from the pilot control, true suction pressure acts on the underside of the expansion valve diaphragm through the equalizer line and the low-pressure port, allowing the expansion valve to operate normally.

When the solenoid valve is de-energized, the low-pressure port is closed, thereby closing the equalizer line from the valve to the suction line. The high-pressure port is open and liquid line pressure is applied to the underside of the thermostatic expansion valve diaphragm. This high side pressure instantly overcomes the bulb pressure and supplements the valve spring immediately closing the port of the expansion valve. **See Illustration.**

Catch-All Filter-Drier can be included with T-180 Pilot Control on special request.