

TFE R-410A Series

R-410A

Thermal Expansion Valves

The TFE R-410A series is designed for large tonnage heat pump, air conditioning, and commercial refrigeration applications.

Features

- Stainless steel power element eliminates corrosion and prevents valve failure
- Replaceable power element
- External superheat adjustment
- ODF connections
- Balanced port construction compensates for changes in operating pressures due to varying ambients, or widely varying evaporator loads
- Bi-Flow capability for heat pump applications
- External equalizer
- ZAA charge for R-410A systems



Specifications

- Maximum working pressure: 630 psig

TFE Nominal* Capacity Table in Tons

Model	Typical System Application
TFE 12	10-13 Tons
TFE 16	14-17 Tons
TFE 20	18-20 Tons

*See Extended Capacity Tables for ratings at a wide range of conditions per ARI standard 750

Nomenclature example: TFES 16 ZAA 5/8 x 7/8 ODF S/T

TF	E	S	16	Z	AA	5/8 x 7/8	ODF	S/T
Valve Series Balanced Port, Replaceable Power Assembly	Equalizer E=External 1/2" ODF	Connection Type S = solder	Capacity Nominal Rating in Tons	Refrigerant Code Z = R-410A	Charge Code AA = wide range	Inlet x Outlet Connection Sizes (See ordering information table below)	Connection Type ODF=solder	Configuration S/T = Straight- thru

Ordering Information

Refrigerant	Tons	Bleed	Inlet x Outlet	Sensing Bulb Capillary Tube Length	PCN
R-410A	12	-	5/8 ODF x 7/8 ODF	5 ft.	066146
		15%	5/8 ODF x 7/8 ODF	5 ft.	066147
		-	7/8 ODF x 1-1/8 ODF	10 ft.	066148
	16	-	5/8 ODF x 7/8 ODF	5 ft.	066149
		15%	5/8 ODF x 7/8 ODF	5 ft.	066150
		-	7/8 ODF x 1-1/8 ODF	10 ft.	066151
	20	-	5/8 ODF x 7/8 ODF	5 ft.	066152
		15%	5/8 ODF x 7/8 ODF	5 ft.	066153
		-	7/8 ODF x 1-1/8 ODF	10 ft.	066154

Inlet/Outlet Fittings Dimensional Data (in)

Connections		Inlet		Outlet	
Inlet	Outlet	A	B MIN	C	D MIN.
1/2 ODF	1/2ODF	0.50	0.37	0.50	0.37
	5/8 ODF	0.50	0.37	0.63	0.50
	7/8ODF	0.50	0.37	0.88	0.76
5/8 ODF	5/8 ODF	0.63	0.50	0.63	0.50
	7/8ODF	0.63	0.50	0.88	0.76
	1-1/8 ODF	0.63	0.50	1.13	0.91
7/8 ODF	7/8ODF	0.88	0.76	0.88	0.76
	1-1/8 ODF	0.88	0.76	1.13	0.91

Replacement Parts

Description	PCN
R-410A Power Assembly (10 ft.)*	066155*
Seal Nut	058707

*Approved for use only on TFE-Series R-410A valves (with ZAA charge)

Dimensional Data (in)

