

## Product category information

# TUB/TUBE



TUB/TUBE stainless steel thermostatic expansion valves are used for liquid injection into evaporators on both refrigeration and air conditioning systems using fluorinated refrigerants. TUB/TUBE valves are compact in design, light weight and have steel / copper bi-metal connections for fast soldering. TUB/TUBE have a fixed orifice and adjustable superheat.

### TUB/TUBE, angleway, R134a

Temperature range -40 - 10°C.  
Max. working pressure 34.0 bar.  
The rated capacity is based on:  
Evaporating temperature  $t_e = +5^\circ\text{C}$   
Condensing temperature  $t_c = +32^\circ\text{C}$   
Refrigerant liquid temperature  $t_l = +28^\circ\text{C}$   
Opening superheat OS = 4 K

External equalization connection size, TUBE versions with mm-connections: 6 mm, versions with in.-connections: 1/4 in.

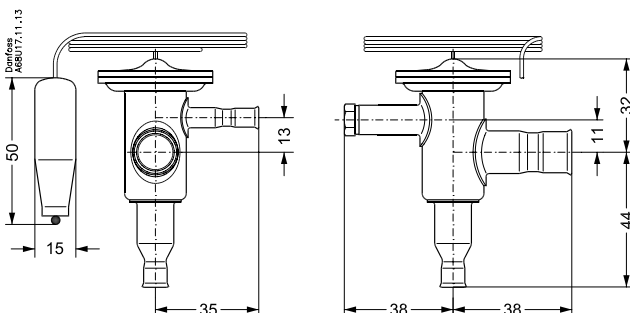
## Features

- Made of stainless steel.
- Available in angleway and straightway versions.
- Especially suitable for refrigeration systems in the food industry.
- Adjustable superheat.
- Bi-metal connections: removes the need to 'wet rag' braze.
- Available with MOP (Max. Operating Pressure).
- Biflow function (orifice 1 - 8).
- Fast and easy to install.
- Good temperature transfer from pipe to bulb.
- Filter with high dirt retention capacity.

## Technical data

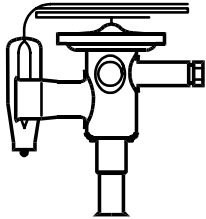
Characteristic	Value
Max. test pressure (excl. R410A) [bar]	37,5 bar
Max. test pressure (R410A) [bar]	47 bar
Max. valve body temperature [°C]	120 °C
Max. valve body temperature, short-lived peak [°C]	150 °C
Max. working pressure (excl. R410A) [bar]	34 bar
Max. working pressure (R410A) [bar]	42,5bar

## Dimensions



Code number information

Code no.: 068U2017



Characteristic	Value
Type	TUBE
Direction	Angleway
Inlet size [mm]	10 mm
Outlet size [mm]	12 mm
Equalization size [mm]	6 mm
Capillary tube length [mm]	800 mm
Capillary tube length [Ft]	2,5 ft
Refrigerants	R134a
Temperature range [°C]	-40 - 10 °C
Temperature range [°F]	-40 - 50 °F
Orifice size	9
Orifice capacities [KW]	12,00 kW
Orifice capacities [TR]	3,50 TR
Static Superheat (SS) [°C]	5,0
Static Superheat (SS) [°F]	9,00 °F
Max. Working Pressure [bar] ef	34,0 bar
Max. Working Pressure [psig]	500 psig
Packing format	Multi pack
Quantity per packing format	24 pc

Capacity in kW for range N (-40 - +10°C) and opening superheat OS = 4 K

Δp [bar]	2	4	6	8	10	12	14	16
te [C]								
10	10,2	13,1	14,6	15,5	15,9	16		
0	8,3	10,4	11,5	12,2	12,4	12,5		
-10	6,3	7,9	8,7	9,1	9,3	9,3		
-20		5,7	6,2	6,5	6,6	6,6		
-30		4	4,3	4,5	4,5	4,5		
-40		2,7	2,9	3	3	3		

Correction factors for subcooling Δtsub

	4	10	15	20	25	30	35	40	45	50
R134a	1	1,08	1,13	1,19	1,25	1,31	1,37	1,42	1,48	1,54