

## 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.

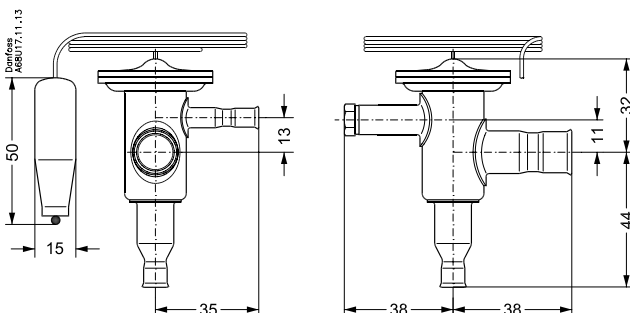
## Features

- 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

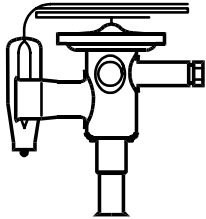
## Dimensions



**Code number information**

**Data Sheet**

**Code no.: 068U2031**



Characteristic	Value
Type	TUB
Direction	Angleway
Inlet size [in]	1/4 in
Outlet size [in]	1/2 in
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	5
Orifice capacities [KW]	2,70 kW
Orifice capacities [TR]	0,78 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	2,3	2,9	3,3	3,5	3,6	3,6		
0	1,8	2,3	2,6	2,7	2,8	2,8		
-10	1,4	1,8	2	2,1	2,1	2,1		
-20		1,3	1,4	1,5	1,5	1,5		
-30		0,9	0,98	1,02	1,03	1		
-40		0,61	0,66	0,68	0,68	0,68		

**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