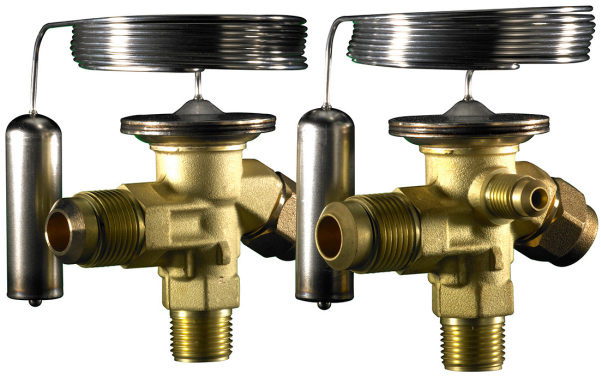
ENGINEERING
TOMORROW

Data Sheet

Thermostatic expansion valve Type **T 2** and **TE 2**

Thermostatic expansion valves maintain a constant superheat level at the evaporator outlet



Thermostatic expansion valves regulate the injection of refrigerant liquid into evaporators.

Injection is controlled by the refrigerant superheat.

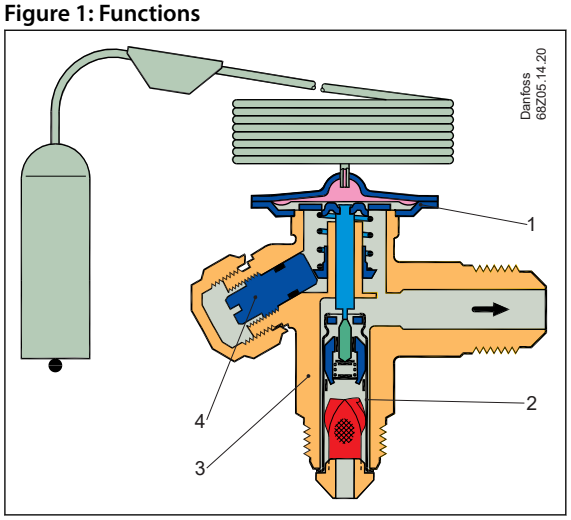
Therefore the valves are especially suitable for liquid injection in "dry" evaporators where the superheat at the evaporator outlet is proportional to the evaporator load.

Features

- Large temperature range
  - Equally applicable to freezing, refrigeration and air conditioning applications.
- Interchangeable orifice assembly
  - easy storage
  - easy capacity matching
  - better service.
  - easy cleaning and replacement of filter
- Rated capacities from 1 to 20.5 kW / 0.3 to 5.8 TR for R407C
- Can be supplied with MOP (Max. Operating Pressure).
  - Protects the compressor motor against excessive evaporating pressure during normal operation
- Stainless steel bulb and Danfoss patented bulb strap
  - Fast and easy to install
  - Good temperature transfer from pipe to bulb
- Valves for special temperature ranges can be supplied
- Design protected

Functions

Figure 1: Functions



1	Thermostatic element (diaphragm)
2	Interchangeable orifice assembly
3	Valve body
4	Superheat setting spindle (see instructions)

T2 and TE2 valves have an interchangeable orifice assembly.

The orifice assembly is suitable for all versions of valve body and refrigerants and in all evaporating temperature ranges.

The charge in the thermostatic element depends on the refrigerant and evaporating temperature range.

The valves are available with internal (T2) or external (TE2) pressure equalization.

External pressure equalization should always be used on systems with liquid distributors. The bulb gives fast and precise reaction to temperature changes in the evaporator. The bulb is fixed with a Danfoss patented bulb strap for quick, easy and reliable connection. The valves are able to withstand the effects that normally occur with hot gas defrosting.

To ensure long operating life, the valve cone and seat are made of a special alloy with particularly good wear qualities.

Product specification

Technical data

Max. temperature
Bulb, when valve is installed: 100 °C
Bulb, element not mounted: 60 °C

Min. temperature
T2 – TE2: -60 °C

Max. test pressure
PT = 38 bar

Max. working pressure
PS/MWP = 34 bar

Table 1: Technical data

Refrigerant	Range N -40 °C – 10 °C	Range NM -40 °C – -5 °C	Range NL -40 °C – -15 °C	Range B -60 °C – -25 °C
	MOP-point in evaporating temperature t_e and evaporating pressure p_e [1]			
	15 °C / 60 °F	0 °C / 32 °F	-10 °C / 15 °F	-20 °C / -4 °F
R22	100 psig / 6.9 bar (abs)	60 psig / 4.0 bar (abs)	35 psig / 2.4 bar (abs)	20 psig / 1.4 bar (abs)
R407C	95 psig / 6.6 bar (abs)	–	–	–
R134a	55 psig / 3.8 bar (abs)	30 psig / 2.0 bar (abs)	15 psig / 1.0 bar (abs)	–
R404A/R507	120 psig / 8.3 bar (abs)	75 psig / 5.2 bar (abs)	50 psig / 3.4 bar (abs)	30 psig / 2.1 bar (abs)

[1] Pe in bar gauge

Superheat
SS = static superheat
OS = opening superheat
SH = SS + OS = total superheat
Q_{nom} = rated capacity
Q_{max} = maximum capacity
Static superheat SS can be adjusted with setting spindle.
Standard superheat setting SS is 4K for all standard valves.
The opening superheat OS is 6 K from when opening begins to where the valve gives its rated capacity Q_{nom}.

Example
Static superheat SS = 5 K
Opening superheat OS = 6 K
Total superheat SH = 5 + 6 = 11 K

Table 2: Range N: -40 to 50 °F

Orifice no.	Rated capacity in tons (TR)											
	R22	R407C	R134a	R513A	R404A R507	R407A	R407F	R448A	R449A	R454C	R455A	R1234yf
0X	0.25	0.26	0.19	0.16	0.18	0.25	0.28	0.26	0.25	0.22	0.24	0.14
0	0.51	0.51	0.34	0.29	0.37	0.49	0.56	0.51	0.49	0.42	0.47	0.25
1	1	1	0.59	0.51	0.75	1	1.1	1	0.97	0.79	0.93	0.43
2	1.3	1.4	0.73	0.62	1	1.3	1.5	1.4	1.3	1	1.3	0.53
3	2.3	2.3	1.2	1	1.8	2.3	2.6	2.3	2.3	1.8	2.2	0.88
4	3.4	3.5	1.8	1.5	2.8	3.5	4.1	3.6	3.5	2.6	3.3	1.3
5	4.8	4.7	2.4	2	3.7	4.6	5.4	4.6	4.5	3.4	4.2	1.7
6	5.6	5.6	2.9	2.5	4.4	5.6	6.5	5.7	5.5	4.2	5.2	2.1

The rated capacity is based on:
Evaporating temperature te = 40 °F
Condensing temperature tc = 100 °F
Refrigerant temperature ahead of valve tl = 98 °F

Table 3: Range N: -40 to 10 °C

Orifice no.	Rated capacity in kW											
	R22	R407C	R134a	R513A	R404A R507	R407A	R407F	R448A	R449A	R454C	R455A	R1234yf
0X	0.9	0.92	0.68	0.58	0.64	0.88	1	0.9	0.88	0.77	0.86	0.49
0	1.8	1.8	1.2	1	1.3	1.7	2	1.8	1.7	1.5	1.7	0.87
1	3.5	3.5	2.1	1.8	2.6	3.4	3.9	3.5	3.4	2.8	3.3	1.5
2	4.7	4.8	2.6	2.2	3.7	4.7	5.4	4.8	4.6	3.6	4.4	1.8
3	8	8.1	4.3	3.7	6.3	8	9.2	8.1	7.9	6.2	7.6	3.1
4	12.1	12.4	6.4	5.4	9.9	12.4	14.3	12.6	12.1	9.3	11.5	4.6
5	16.7	16.5	8.4	6.9	13	16.3	19	16.3	15.7	11.8	14.7	5.9
6	19.7	19.7	10.1	8.6	15.5	19.6	22.9	19.8	19.1	14.8	18.3	7.3

The rated capacity is based on:
Evaporating temperature te = 4.4 °C
Condensing temperature tc = 38 °C
Refrigerant temperature ahead of valve tl = 37 °C

Valve selection based on capacity calculation

As for extended capacity calculations and valve selection based on capacities and refrigerants, please refer to Coolselector®2. Rated and extended capacities are calculated with the Coolselector®2 calculation engine to ARI standards with the ASEREP equations based on laboratory measurements of selected valves.

How to select a valve

Example:
Refrigerant = R407C
Q (capacity) = 1.1kW
Tcond (condensing temperature) = 25 °C
Tevap (evaporator temperature) = -30 °C
Tsub (subcooling temperature) = 2 K
Dpd (distributer pressure drop) = 1 bar
Q (capacity) = 1.1kW
fsub (subcooling correction factor) = 0.98
fp (distribution correction factor) = 0.96

$$\frac{Q}{fsub \times fp} = \text{selected capacity}$$

$$\frac{1.1}{0.98 \times 0.96} = 1.17 \text{ kW}$$

The selection will be: TE2 orifice 00 (1.21 kW > 1.17 kW)

Table 4: Capacity in kW, range N -40 °C to 10 °C. Opening superheat sh= 6 K

Valve type	Orifice no.	Cond. temp. [°C]	Evaporating [°C]			
			-40	-30	-20	-10
T2 / TE2	0X		0.76	0.83	0.88	0.9
T2 / TE2	**00**	**25**	0.99	**1.21**	1.42	1.6
T2 / TE2	1		1.41	1.8	2.27	2.77

Table 5: Subcooling correction factor 'fsub'

Subcooling [K]	2	4	10	15
Correction factor	**0.98**	1	1.07	1.12

Table 6: Distributer correction factor 'fp' *

Pressure drop [bar]		Evaporating [°C]			
		-40	-35	-30	-25
"Pressure drop [bar]"	0	1	1	1	1
	1	0.96	0.96	0.96	0.96
	1.5	0.94	0.94	0.94	0.94
	2	0.92	0.92	0.92	0.92

* Calculated at 32 °C condensing temperature

Dimensions and weights

Figure 2: Flare × flare (All dimentions are in mm)

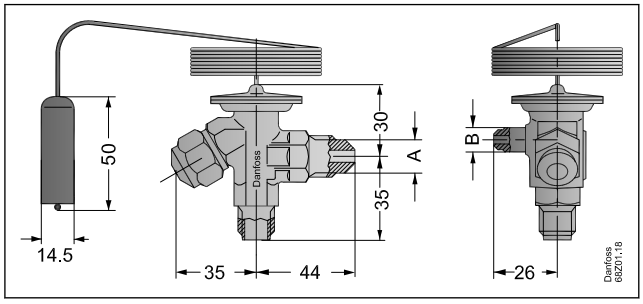


Figure 3: Flare × solder (All dimentions are in mm)

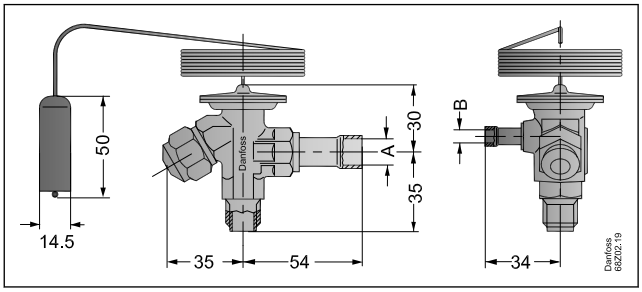


Table 7: Dimensions and weights

	Outlet	Equalization	Weight
	A	B	[kg / lb]
Flare × flare	1/2 " flare	1/4 " flare	0.3 / 0.7
Flare × solder	1/2 " solder 12 mm solder	1/4 " solder 6 mm solder	0.3 / 0.7

Figure 4: Solder adaptor

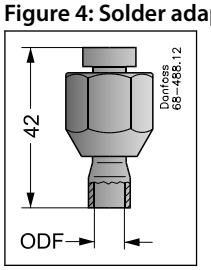
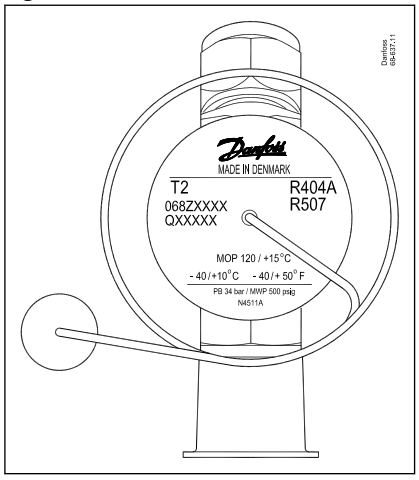


Table 8: Solder adaptor

Solder ODF		Weight
[in]	[mm]	[kg / lb]
1/4	6	0.05 / 0.11
3/8	10	0.05 / 0.11

Identification

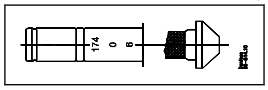
Figure 5: Identification



T2	internal equalization
TE2	external equalization
N	Nordborg, Denmark (BE = Wuqing, China)
45	week
11	2011
A	Monday

Production place and date N4511A
The thermostatic element has laser engraved data on top of the diaphragm. This engraving gives valve type (with code number), evaporating temperature range, MOP point, refrigerant, and max. working pressure. PS/MWP.

Figure 6: Orifice assembly and filter for flare x flare version for T2 and TE2



Orifice assembly for T2 and TE2
The orifice assembly is marked with the orifice size (e.g. 06) and week stamp + last number in the year (e.g. 174). The orifice assembly number is also given on the lid of its plastic container.

Figure 7: Capillary tube label for T2 and TE2



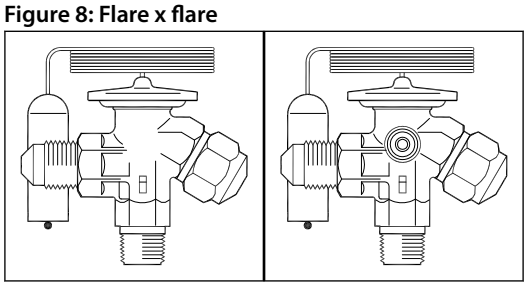
Capillary tube label for T2 and TE2
The label gives the orifice size (04) and consists of the lid of the orifice assembly plastic container. It can easily be fastened around the expansion valve capillary tube to clearly identify the valve size.

Ordering

T2/TE2 Thermostatic element with bulb strap

Flare x flare

Figure 8: Flare x flare



Capillary tube: 1.5 m
Range N = -40 – 10 °C
Range B = -60 – -25 °C
Range NM = -40 – -5 °C MOP 0 °C
Range NL = -40 – -15 °C MOP -10 °C

Table 9: Flare x flare

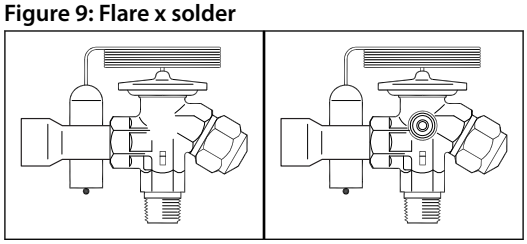
Refrigerant	Type	Range	MOP	Pressure equliza-tion Flare	Connection flare inlet × outlet		Code no. Multi pack
		[°C]	[°C]		[in]	[mm]	
R22/R407C [1]	T2	-40 – 10	–	–	3/8 × 1/2	10×12	068Z3206
	T2	-40 – 10	15	–	3/8 × 1/2	10×12	068Z3208
	T2	-40 – -5	0	–	3/8 × 1/2	10×12	068Z3224
	T2	-40 – -15	-10	–	3/8 × 1/2	10×12	068Z3226
	T2	-60 – -25	–	–	3/8 × 1/2	10×12	068Z3207
	T2	-60 – -25	-20	–	3/8 × 1/2	10×12	068Z3228
	TE2	-40 – 10	–	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3209
	TE2	-40 – 10	15	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3211
	TE2	-40 – -5	0	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3225
	TE2	-40 – -15	-10	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3227
	TE2	-60 – -25	–	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3210
	TE2	-60 – -25	-20	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3229
R407C	T2	-40 – 10	–	–	3/8 × 1/2	10×12	068Z3496
	T2	-40 – 10	15	–	3/8 × 1/2	10×12	068Z3516
	TE2	-40 – 10	–	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3501
	TE2	-40 – 10	15	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3517
R134a/R513A	T2	-40 – 10	–	–	3/8 × 1/2	10×12	068Z3346
	T2	-40 – 10	15	–	3/8 × 1/2	10×12	068Z3347
	T2	-40 – -5	0	–	3/8 × 1/2	10×12	068Z3393
	T2	-40 – -15	-10	–	3/8 × 1/2	10×12	068Z3369
	TE2	-40 – 10	–	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3348
	TE2	-40 – 10	15	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3349
	TE2	-40 – -5	0	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3392
	TE2	-40 – -15	-10	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3370

Refrigerant	Type	Range	MOP	Pressure equliza-tion Flare	Connection flare inlet × outlet		Code no. Multi pack
		[°C]	[°C]		[in]	[mm]	
R404A/R507	T2	-40 – 10	–	–	3/8 × 1/2	10×12	068Z3400
	T2	-40 – 10	15	–	3/8 × 1/2	10×12	068Z3402
	T2	-40 – -5	0	–	3/8 × 1/2	10×12	068Z3406
	T2	-40 – -15	-10	–	3/8 × 1/2	10×12	068Z3408
	T2	-60 – -25	–	–	3/8 × 1/2	10×12	068Z3401
	T2	-60 – -25	-20	–	3/8 × 1/2	10×12	068Z3410
	TE2	-40 – 10	–	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3403
	TE2	-40 – 10	15	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3405
	TE2	-40 – -5	0	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3407
	TE2	-40 – -15	-10	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3409
	TE2	-60 – -25	–	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3404
	TE2	-60 – -25	-20	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3411
R407F/R407A	T2	-40 – 10	–	–	3/8 × 1/2	10×12	068Z3715
	TE2	-40 – 10	–	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3714
R448A/R449A	T2	-40 – 10	–	–	3/8 × 1/2	10×12	068Z3727
	TE2	-40 – 10	–	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3728
	T2	-40 – -15	-10	–	3/8 × 1/2	10×12	068Z3675
	T2	-60 – -25	-20	–	3/8 × 1/2	10×12	068Z3735
	TE2	-60 – -25	-20	¼ in / 6 mm	3/8 × 1/2	10×12	068Z3736
R454C	T2	-40 – 10	-	–	3/8 × 1/2	10x12	068Z7483
	TE2	-40 – 10	-	¼ in / 6 mm	3/8 × 1/2	10x12	068Z7485
R455A	T2	-40 – 10	-	–	3/8 × 1/2	10x12	068Z7496
	TE2	-40 – 10	-	¼ in / 6 mm	3/8 × 1/2	10x12	068Z7499
R1234yf	T2	-40 – 10	-	–	3/8 × 1/2	10x12	068Z7487
	TE2	-40 – 10	-	¼ in / 6 mm	3/8 × 1/2	10x12	068Z7489

(1) For R407C plants. Please select valves from the dedicated R407C program

Flare x solder

Figure 9: Flare x solder



Capillary tube:1.5 m
Range N=-40 – 10 °C
Range NL = -40 – -15 °C
Range B= -60 – -25 °C

Table 10: Flare x solder

Refrigerant	Type	Range	MOP	Pressure equliza-tion Flare	Connection flare inlet × outlet		Code no. Multi pack
		[°C]	[°C]		[in]	[mm]	
R22/R407C[1]	T2	-40 – 10	–	–	3/8 × 1/2	–	068Z3281
	T2	-40 – 10	–	–	–	10×12	068Z3302
	T2	-40 – 10	15	–	3/8 × 1/2	–	068Z3287
	T2	-40 – 10	15	–	–	10×12	068Z3308
	T2	-40 – -15	-10	–	–	10×12	068Z3366
	T2	-60 – -25	–	–	3/8 × 1/2	–	068Z3357
	T2	-60 – -25	–	–	–	10×12	068Z3361
	T2	-60 – -25	-20	–	3/8 × 1/2	–	068Z3319
	TE2	-40 – 10	–	¼ in	3/8 × 1/2	–	068Z3284
	TE2	-40 – 10	–	6 mm	–	10×12	068Z3305
	TE2	-40 – 10	15	¼ in	3/8 × 1/2	–	068Z3290
	TE2	-40 – 10	15	6 mm	–	10×12	068Z3311
	TE2	-40 – -15	-10	6 mm	–	10×12	068Z3367
	TE2	-60 – -25	–	¼ in	3/8 × 1/2	–	068Z3359
	TE2	-60 – -25	–	6 mm	–	10×12	068Z3363
	TE2	-60 – -25	-20	¼ in	3/8 × 1/2	–	068Z3320
R407C	T2	-40 – 10	–	–	–	10×12	068Z3502
	T2	-40 – 10	15	–	3/8 × 1/2	–	068Z3329
	T2	-40 – 10	15	–	–	10×12	068Z3514
	TE2	-40 – 10	–	¼ in	3/8 × 1/2	–	068Z3446
	TE2	-40 – 10	–	6 mm	–	10×12	068Z3503
	TE2	-40 – 10	15	¼ in	3/8 × 1/2	–	068Z3447
	TE2	-40 – 10	15	6 mm	–	10×12	068Z3515
R134a/R513A	T2	-40 – 10	–	–	3/8 × 1/2	–	068Z3383
	T2	-40 – 10	–	–	–	10×12	068Z3384
	T2	-40 – 10	15	–	3/8 × 1/2	–	068Z3387
	T2	-40 – 10	15	–	–	10×12	068Z3388
	TE2	-40 – 10	–	¼ in	3/8 × 1/2	–	068Z3385
	TE2	-40 – 10	–	6 mm	–	10×12	068Z3386
	TE2	-40 – 10	15	¼ in	3/8 × 1/2	–	068Z3389
	TE2	-40 – 10	15	6 mm	–	10×12	068Z3390
R404A/R507	T2	-40 – 10	–	–	3/8 × 1/2	–	068Z3414
	T2	-40 – 10	–	–	–	10×12	068Z3435
	T2	-40 – 10	15	–	3/8 × 1/2	–	068Z3416
	T2	-40 – 10	15	–	–	10×12	068Z3423
	T2	-40 – -15	-10	–	3/8 × 1/2	–	068Z3429
	T2	-40 – -15	-10	–	–	10×12	068Z3436
	T2	-60 – -25	–	–	3/8 × 1/2	–	068Z3418
	T2	-60 – -25	–	–	–	10×12	068Z3425
	T2	-60 – -25	-20	–	3/8 × 1/2	–	068Z3420
	T2	-60 – -25	-20	–	–	10×12	068Z3427
	TE2	-40 – 10	–	¼ in	3/8 × 1/2	–	068Z3415
	TE2	-40 – 10	–	6 mm	–	10×12	068Z3422
	TE2	-40 – 10	15	6 mm	–	10×12	068Z3424
	TE2	-40 – 10	15	¼ in	3/8 × 1/2	–	068Z3417
	TE2	-40 – -15	-10	¼ in	3/8 × 1/2	–	068Z3430
	TE2	-40 – -15	-10	6 mm	–	10×12	068Z3437
	TE2	-60 – -25	–	¼ in	3/8 × 1/2	–	068Z3419
	TE2	-60 – -25	–	6 mm	–	10×12	068Z3426
	TE2	-60 – -25	-20	¼ in	3/8 × 1/2	–	068Z3421
	TE2	-60 – -25	-20	6 mm	–	10×12	068Z3428
R407F/R407A	T2	-40 – 10	–	–	3/8 × 1/2	–	068Z3716
	TE2	-40 – 10	–	¼ in	3/8 × 1/2	–	068Z3713

Refrigerant	Type	Range	MOP	Pressure equliza-tion Flare	Connection flare inlet × outlet		Code no. Multi pack
		[°C]	[°C]		[in]	[mm]	
R448A/R449A	T2	-40 – 10	–	–	3/8 × 1/2	–	068Z3729
	TE2	-40 – 10	–	¼ in	3/8 × 1/2	–	068Z3730
	T2	-40 – -15	-10	–	3/8 × 1/2	–	068Z3664
	T2	-60 – -25	-20	–	3/8 × 1/2	–	068Z3737
	TE2	-40 – -15	-10	¼ in	3/8 × 1/2	–	068Z3665
	TE2	-60 – -25	-20	¼ in	3/8 × 1/2	–	068Z3738
	T2	-40 – -15	-10	–	–	10×12	068Z3674
	TE2	-60 – -25	-20	6 mm	–	10×12	068Z3672
R452A	T2	-40 – 10	–	–	3/8 × 1/2	–	068Z3806
	TE2	-40 – 10	–	¼ in	3/8 × 1/2	–	068Z3807
	T2	-40 – 10	–	–	–	10×12	068Z3808
	TE2	-40 – 10	–	6 mm	–	10×12	068Z3809
R454C	T2	-40 – 10	–	–	3/8 × 1/2	–	068Z7490
	T2	-40 – 10	–	–	–	10x12	068Z7484
	TE2	-40 – 10	–	¼ in	3/8 × 1/2	–	068Z7492
	TE2	-40 – 10	–	6 mm	–	10x12	068Z7486
R455A	T2	-40 – 10	–	–	3/8 × 1/2	–	068Z7494
	T2	-40 – 10	–	–	–	10x12	068Z7498
	TE2	-40 – 10	–	¼ in	3/8 × 1/2	–	068Z7501
	TE2	-40 – 10	–	6 mm	–	10x12	068Z7500
R1234yf	T2	-40 – 10	–	–	3/8 × 1/2	–	068Z7491
	T2	-40 – 10	–	–	–	10x12	068Z7488
	TE2	-40 – 10	–	¼ in	3/8 × 1/2	–	068Z7493
	TE2	-40 – 10	–	6 mm	-	10x12	068Z7495

(1) For R407C plants, please select valves from the dedicated R407C program

Flare connections

Figure 10: Flare connections

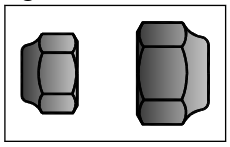


Table 11: Flare connections

Connection for copper tubing with outside diameter		Reducer for copper tubing with outside diameter		Code no.
[in]	[mm]	[in]	[mm]	
1/4	6	–	–	011L1101
3/8	10	–	–	011L1135
1/2	12	–	–	011L1103
–	–	1/4	6	011L1107

Example :
A TE2 thermostatic expansion valve consists of two parts + flare nuts if required:
- 1 thermostatic element
- 1 orifice assembly and flare nuts

When ordering one thermostatic expansion valve, TE2 with orifice 01, five code numbers are required:
- 1-off thermostatic element - 068Z3209
- 1-off orifice assembly 01 - 068-2010
- 1-off 3⁄8 in flare nut - 011L1135
- 1-off 1⁄2 in flare nut - 011L1103
- 1-off 1⁄4 in flare nut - 011L1101

Orifice assembly with filter

Figure 11: Orifice assembly with filter

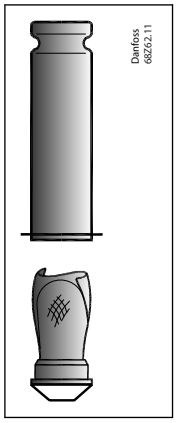


Table 12: Orifice assembly with filter

Orifice no.	Code no.
0X	068-2002
00	068-2003
01	068-2010
02	068-2015
03	068-2006
04	068-2007
05	068-2008
06	068-2009

Orifice assembly with filter for solder adaptor

Figure 12: Orifice assembly with filter for solder adaptor

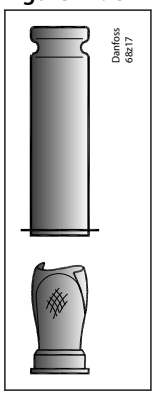


Table 13: Orifice assembly with filter for solder adaptor

Orifice no.	Code no.
0X	068-2089
00	068-2090
01	068-2091
02	068-2092
03	068-2093
04	068-2094
05	068-2095
06	068-2096

Filter

Figure 13: Filter

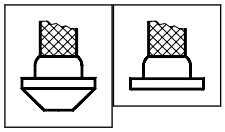
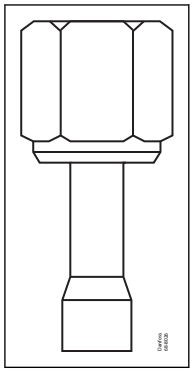


Table 14: Filter

Filter type	Code no. Multi pack
For flare connection	068-0003
For solder adaptor	068-0015

Solder adaptor

Figure 14: Solder adaptor



The adaptor is for use with thermostatic expansion valves T2 and TE2 with flare × solder connections. When the adaptor is fitted correctly it meets the sealing requirements of DIN 8964.

The adaptor offers the following advantages:
- The orifice assembly can be replaced.
- The filter can be cleaned or replaced.

When using the solder adapter, a special orifice assembly is required. Please use the following tables to select both the appropriate adapter and orifice asembly.

Only in this way can the sealing requirements of DIN 8964 be fulfilled.

Solder adaptor for filter drier (FSA) must not be used in the T2 inlet.

Table 15: Solder adaptor without orifice assembly and filter

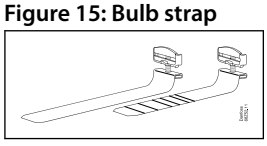
Connection ODF solder	Code no.
1⁄4 in	068-2062
6 mm	068-2063
3⁄8 in	068-2060
10 mm	068-2061

Table 16: Filter for solder adaptor

Description	Code no.
Filter excl. orifice assembly	068-0015

Bulb strap (Danfoss patented)

Figure 15: Bulb strap



Each valve is delivered with a Danfoss patented bulb strap. Spares can be ordered.

Table 17: Bulb strap (Danfoss patented)

Description	Pack mode	Quantity / pack	Code no.
Bulb strap 0.4 mm Max. 28 mm tube	I	45	068U3505
Bulb strap 0.4 mm Max. 50 mm tube	I	45	068U3506
Bulb strap 0.4 mm Max. 28 mm tube	M	25	068U3507
Bulb strap 0.4 mm Max. 50 mm tube	M	25	068U3508

Certificates, declarations, and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

Some approvals may change over time. You can check the most current status at danfoss.com or contact your local Danfoss representative if you have any questions.

Table 18: Certificates, declarations, and approvals

File name	Document type	Document topic	Approval_authority
EAC RU Д-DK.БЛ08.B.00191_18	EAC Declaration	Machinery & Equipment	EAC
Danfoss 068U9615.06	Manufacturers Declaration	PED/RoHS	Danfoss
Danfoss 068Z9620.00	Manufacturers Declaration	-	Danfoss
Danfoss 068-9601.00	Manufacturers Declaration	-	Danfoss
UA.089.D.00188-17	UA Declaration	PED	LLC CDC EURO TYSK
UA.TR-089.0993-17	Pressure - Safety Certificate	PED	LLC CDC EURO TYSK
Danfoss 068U9616.01	Manufacturers Declaration	China RoHS	Danfoss

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