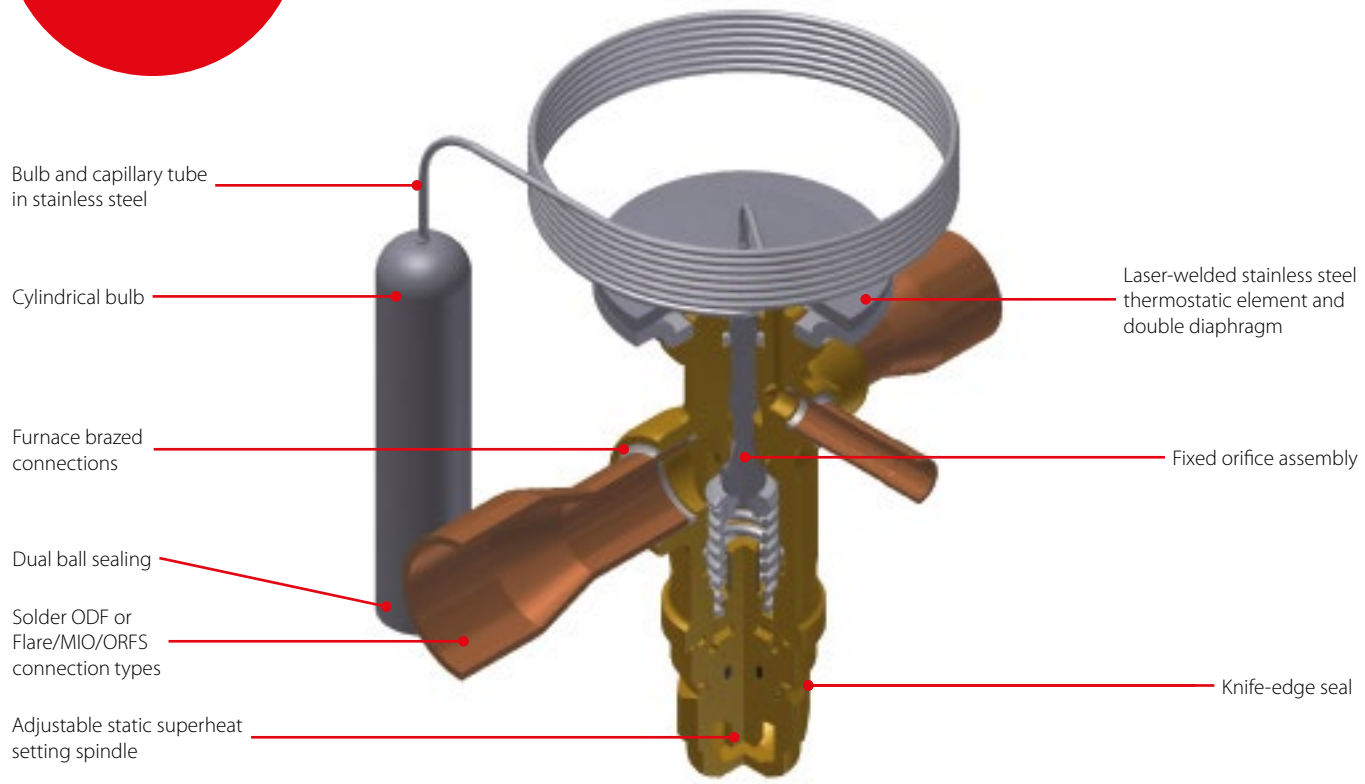
TGE, Thermostatic expansion valve

TGE is an innovatively designed series of thermostatic expansion valves for fluorinated refrigerants.
TGE has copper connections upgraded for high-pressure applications with tight soldering, and is available with a wide variety of connection types such as solder, flare, MIO, and ORFS, and a wide variety of connection sizes.



Facts

Applications:
- Water chillers
- Bus A/C
- Rooftop units
- Heat pumps
- Refrigerated containers
- Others A/C and refrigeration system

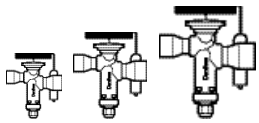
- Refrigerants: R410A, R32, R452B, R454B, R22,R134a, R1234ze, R407F, R407A,R404A, R507, R407C and R290

For a fully updated list of approved refrigerants, visit www.products.danfoss.com and search for individual code numbers,where refrigerants are listed as part of product specifications.
- Capacity range: 3.5 – 52 TR / 12 – 182 kW for R410A
- Balance port design
- Biflow with expansion in both directions
- Low hysteresis
- Long lifetime for heat pump applications
- Mechanical connections types solder ODF, flare, MIO, ORFS are available
- Laser welded, stainless steel power element, capillary tube, and bulb
- MOP (Max. Operating Pressure) function is available
- Optional bleed function
- PS / MWP (maximum working pressure): 46 bar/ 667 psig
- Straightway flow
- Adjustable superheat setting
- Cylindrical bulb and patented bulb strap design
- Compliance with ATEX hazard zone 2
- UL certified

Technical data and ordering

TGE - R22 / R407C

Thermostatic expansion valve with bulb strap
Range: -40 – 10 °C / -40 – 50 °F



Type	Orifice no.	Rated capacity [1]		Connections solder ODF				Capillary tube		Code no. Multi pack
				Inlet x Outlet		Pressure equalization				
		[kW]	[TR]	[mm]	[in]	[mm]	[in]	[m]	[in]	
TGE 10	3	10	3	–	3/8 x 5/8	–	1/4	1.5	59	067N2150
	3	10	3	–	1/2 x 5/8	–	1/4	1.5	59	067N2151
	4	14	4	–	1/2 x 7/8	–	1/4	1.5	59	067N2152
	6	20	6	–	1/2 x 5/8	–	1/4	1.5	59	067N2153
	6	20	6	–	1/2 x 7/8	–	1/4	1.5	59	067N2154
	6	20	6	12 × 22	–	6	–	1.5	59	067N2194
	6	20	6	16 × 16	–	6	–	1.5	59	067N2263
	6	20	6	–	5/8 x 7/8	–	1/4	1.5	59	067N2155
	8	27	7.5	–	5/8 x 7/8	–	1/4	1.5	59	067N2156
	8	27	7.5	16 × 22	–	6	–	1.5	59	067N2196
	9	32	9	–	5/8 x 7/8	–	1/4	1.5	59	067N2460
	9	32	9	16 x 22	–	6	–	1.5	59	067N2281
	11	38	11	–	5/8 x 7/8	–	1/4	1.5	59	067N2157
	11	38	11	16 × 22	–	6	–	1.5	59	067N2197
	11	38	11	–	5/8 x 1 1/8	–	1/4	1.5	59	067N2158
	11	38	11	16 × 28	–	6	–	1.5	59	067N2198
	12.5	43	12	–	5/8 x 7/8	–	1/4	1.5	59	067N2720
	16	50	14	–	5/8 x 1 1/8	–	1/4	1.5	59	067N2721
	16	50	14	–	7/8 x 1 1/8	–	1/4	1.5	59	067N2722
TGE 20	12.5	43	12	–	5/8 x 7/8	–	1/4	1.5	59	067N2159
	12.5	43	12	–	5/8 x 1 1/8	–	1/4	1.5	59	067N2160
	12.5	43	12	16 × 28	–	6	–	1.5	59	067N2200
	16	54	15	–	5/8 x 7/8	–	1/4	1.5	59	067N2255
	16	54	15	–	5/8 x 1 1/8	–	1/4	1.5	59	067N2161
	16	54	15	–	7/8 x 1 1/8	–	1/4	1.5	59	067N2162
	20	63	18	–	7/8 x 1 1/8	–	1/4	1.5	59	067N2163
	20	63	18	–	7/8 x 1 3/8	–	1/4	1.5	59	067N2164
TGE 40	26	92	26	–	7/8 x 1 1/8	–	1/4	3	118	067N2251
	26	92	26	–	7/8 x 1 3/8	–	1/4	3	118	067N2165
	30	104	30	–	7/8 x 1 3/8	–	1/4	3	118	067N2167
	30	104	30	–	1 1/8 x 1 3/8	–	1/4	3	118	067N2168
	40	134	38	–	1 1/8 x 1 3/8	–	1/4	3	118	067N2169
	42	148	42	–	1 1/8 x 1 3/8	–	1/4	3	118	067N2283

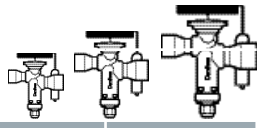
[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

For R407C plants, please select valves from the dedicated R407C program.

Technical data and ordering

TGE - R22 / R407C

Thermostatic expansion valve with bulb strap
Range: - 25 – 10 °C / -15 – 50 °F with MOP 100 psig / 6.9 bar



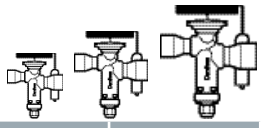
Type	Orifice no.	Rated capacity [1]		Connections solder ODF		Capillary tube		Code no. Multi pack
				Inlet x Outlet	Pressure equalization			
		[kW]	[TR]	[in]	[in]	[m]	[in]	
TGE 10	3	10	3	3/8 x 5/8	1/4	1.5	59	067N2000
	3	10	3	1/2 x 5/8	1/4	1.5	59	067N2001
	4	14	4	1/2 x 7/8	1/4	1.5	59	067N2002
	6	20	6	1/2 x 5/8	1/4	1.5	59	067N2003
	6	20	6	5/8 x 7/8	1/4	1.5	59	067N2005
	8	27	7.5	5/8 x 7/8	1/4	1.5	59	067N2006
	11	38	11	5/8 x 7/8	1/4	1.5	59	067N2007
	11	38	11	5/8 x 1 1/8	1/4	1.5	59	067N2008
	12.5	43	12	5/8 x 7/8	1/4	1.5	59	067N2700
	16	50	14	7/8 x 1 1/8	1/4	1.5	59	067N2701
TGE 20	12.5	43	12	5/8 x 7/8	1/4	1.5	59	067N2009
	12.5	43	12	5/8 x 1 1/8	1/4	1.5	59	067N2010
	16	54	15	5/8 x 1 1/8	1/4	1.5	59	067N2011
	16	54	15	7/8 x 1 1/8	1/4	1.5	59	067N2012
	20	63	18	7/8 x 1 1/8	1/4	1.5	59	067N2013
	20	63	18	7/8 x 1 3/8	1/4	1.5	59	067N2014
TGE 40	26	92	26	7/8 x 1 3/8	1/4	3	118	067N2015
	26	92	26	1 1/8 x 1 3/8	1/4	3	118	067N2016
	30	104	30	7/8 x 1 3/8	1/4	3	118	067N2017
	30	104	30	1 1/8 x 1 3/8	1/4	3	118	067N2018
	40	134	38	1 1/8 x 1 3/8	1/4	3	118	067N2019

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

For R407C plants, please select valves from the dedicated R407C program.

TGE - R22 / R407C

Thermostatic expansion valve with bulb strap
Range: -30 – 15 °C / -22 – 60 °F with anti hunting charge



Type	Orifice no.	Rated capacity [1]		Connections solder ODF		Capillary tube		Code no. Multi pack
				Inlet x Outlet	Pressure equalization			
		[kW]	[TR]	[in]	[in]	[m]	[in]	
TGE 10	6	20	6	1/2 x 7/8	1/4	1.5	59	067N9404
	8	27	7.5	5/8 x 7/8	1/4	1.5	59	067N9406
	11	38	11	5/8 x 1 1/8	1/4	1.5	59	067N9407
TGE 20	12.5	43	12	5/8 x 7/8	1/4	1.5	59	067N9409
	16	54	15	7/8 x 1 1/8	1/4	1.5	59	067N9412
	20	63	18	7/8 x 1 3/8	1/4	1.5	59	067N9413
TGE 40	26	92	26	7/8 x 1 3/8	1/4	3	118	067N9415
	30	104	30	1 1/8 x 1 3/8	1/4	3	118	067N9418
	40	134	38	1 1/8 x 1 3/8	1/4	3	118	067N9419

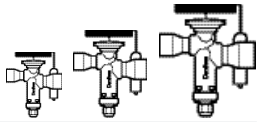
[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

For R407C plants, please select valves from the dedicated R407C program.

Technical data and ordering

TGE - R134a

Thermostatic expansion valve with bulb strap
Range: -40 – 10 °C / -40 – 50 °F

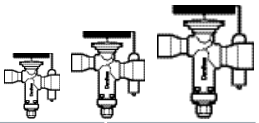


Type	Orifice no.	Rated capacity [1]		Connections solder ODF				Capillary tube		Code no. Multi pack
		[kW]	[TR]	Inlet x Outlet		Pressure equalization				
				[mm]	[in]	[mm]	[in]	[m]	[in]	
TGE 10	3	6	1.5	–	3/8 x 5/8	–	1/4	1.5	59	067N5150
	3	6	1.5	12 x 16	–	6	–	1.5	59	067N5191
	4	8	2.5	–	1/2 x 7/8	–	1/4	1.5	59	067N5152
	4	8	2.5	12 x 22	–	6	–	1.5	59	067N5192
	6	12	3.5	–	1/2 x 5/8	–	1/4	1.5	59	067N5153
	6	12	3.5	–	1/2 x 7/8	–	1/4	1.5	59	067N5154
	6	12	3.5	16 x 22	–	6	–	1.5	59	067N5195
	8	17	4.5	–	5/8 x 7/8	–	1/4	1.5	59	067N5156
	8	17	4.5	16 x 22	–	6	–	1.5	59	067N5196
	9	20	5.5	–	5/8 x 7/8	–	1/4	1.5	59	067N5260
	11	24	7	–	5/8 x 7/8	–	1/4	1.5	59	067N5157
	12.5	29	8	–	5/8 x 7/8	–	1/4	1.5	59	067N5720
	16	35	9.5	–	7/8 x 1 1/8	–	1/4	1.5	59	067N5721
TGE 20	12.5	29	8	–	5/8 x 7/8	–	1/4	1.5	59	067N5159
	16	37	10	–	5/8 x 1 1/8	–	1/4	1.5	59	067N5161
	16	37	10	–	7/8 x 1 1/8	–	1/4	1.5	59	067N5162
	20	44	12	–	7/8 x 1 1/8	–	1/4	1.5	59	067N5163
TGE 40	26	61	17	–	7/8 x 1 3/8	–	1/4	3	118	067N5165
	26	61	17	–	1 1/8 x 1 3/8	–	1/4	3	118	067N5166
	30	70	20	–	7/8 x 1 3/8	–	1/4	3	118	067N5167
	30	70	20	–	1 1/8 x 1 3/8	–	1/4	3	118	067N5168
	40	87	25	–	1 1/8 x 1 3/8	–	1/4	3	118	067N5169

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

TGE - R134a

Thermostatic expansion valve with bulb strap
Range: -25 – 10 °C / -15 – 50 °F with MOP 55 psig / 3.8 bar



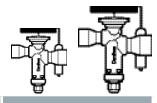
Type	Orifice no.	Rated capacity [1]		Connections solder ODF				Capillary tube		Code no. Multi pack
		[kW]	[TR]	Inlet x Outlet		Pressure equalization				
				[mm]	[in]	[mm]	[in]	[m]	[in]	
TGE 10	3	6	1.5	–	3/8 x 5/8	–	1/4	1.5	59	067N5000
	4	8	2.5	–	1/2 x 7/8	–	1/4	1.5	59	067N5002
	6	12	3.5	–	1/2 x 5/8	–	1/4	1.5	59	067N5003
	6	12	3.5	12 x 16	–	6	–	1.5	59	067N5043
	6	12	3.5	–	5/8 x 7/8	–	1/4	1.5	59	067N5005
	8	17	4.5	–	5/8 x 7/8	–	1/4	1.5	59	067N5006
	11	24	7	–	5/8 x 7/8	–	1/4	1.5	59	067N5007
	11	24	7	16 x 22	–	6	–	1.5	59	067N5047
	11	24	7	–	5/8 x 1 1/8	–	1/4	1.5	59	067N5008
	12.5	29	8	–	5/8 x 7/8	–	1/4	1.5	59	067N5700
TGE 20	12.5	29	8	–	5/8 x 7/8	–	1/4	1.5	59	067N5009
	16	37	10	–	5/8 x 1 1/8	–	1/4	1.5	59	067N5011
	20	44	12	–	7/8 x 1 1/8	–	1/4	1.5	59	067N5013
TGE 40	26	61	17	–	7/8 x 1 3/8	–	1/4	3	118	067N5015
	30	70	20	–	1 1/8 x 1 3/8	–	1/4	3	118	067N5018
	40	87	25	–	1 1/8 x 1 3/8	–	1/4	3	118	067N5019

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

Technical data and ordering

TGE - R134a

Thermostatic expansion valve with bulb strap
Range: -40 – 10 °C / -40 – 50 °F



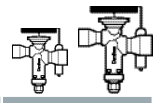
Type	Orifice no.	Rated capacity [1]		Connections Flare / MIO				Capillary tube		Code no. Multi pack
		[kW]	[TR]	Inlet x Outlet [in]		Pressure equalization [in]		[m]	[in]	
				Flare	MIO	Flare	MIO			
TGE 10	3	6	1.5	–	1/2 × 5/8	–	1/4	1.5	59	067N7150
	4	8	2.5	–	3/8 × 1/2	1/4	–	1.5	59	067N7153
	4	8	2.5	3/8 x 1/2	–	1/4	–	1.5	59	067N7154
	6	12	3.5	–	1/2 × 5/8	–	1/4	1.5	59	067N7171
	6	12	3.5	1/2 x 5/8	–	1/4	–	1.5	59	067N7157
	6	12	3.5	–	3/8 × 1/2	1/4	–	1.5	59	067N7158
	6	12	3.5	3/8 x 1/2	–	1/4	–	1.5	59	067N7160
	6	12	3.5	–	3/8 × 1/2	–	1/4	1.5	59	067N7177
	8	17	4.5	–	3/8 × 1/2	–	1/4	1.5	59	067N7176
	8	17	4.5	–	1/2 × 5/8	–	1/4	1.5	59	067N7161
	8	17	4.5	1/2 × 5/8	–	1/4	–	1.5	59	067N7163
	8	17	4.5	–	3/8 × 1/2	1/4	–	1.5	59	067N7164
	8	17	4.5	–	5/8 × 3/4	–	1/4	1.5	59	067N7165
	9	20	5.5	–	5/8 × 3/4	–	1/4	1.5	59	067N7181
	11	24	7	–	5/8 × 3/4	–	1/4	1.5	59	067N7166
	12.5	29	8	–	5/8 × 3/4	–	1/4	1.5	59	067N7200
	16	35	9.5	–	5/8 × 3/4	–	1/4	1.5	59	067N7201
	16	35	9.5	5/8 x 3/4	–	1/4	–	1.5	59	067N7203
TGE 20	12.5	29	8	–	5/8 × 3/4	–	1/4	1.5	59	067N7167
	16	37	10	–	5/8 × 3/4	–	1/4	1.5	59	067N7169
	16	37	10	5/8 x 3/4	–	1/4	–	1.5	59	067N7168
	20	44	12	–	5/8 × 3/4	–	1/4	1.5	59	067N7174

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

MIO: Male inserts O-ring

TGE - R134a

Thermostatic expansion valve with bulb strap
Range: -25 – 10 °C / -15 – 50 °F with MOP 55 psig / 3.8 bar



Type	Orifice no.	Rated capacity [1]		Connections Flare / MIO				Capillary tube		Code no. Multi pack
		[kW]	[TR]	Inlet x Outlet [in]		Pressure equalization [in]		[m]	[in]	
				Flare	MIO	Flare	MIO			
TGE 10	4	8	2.5	–	1/2 × 5/8	–	1/4	1.5	59	067N7002
	6	12	3.5	3/8 × 1/2	–	1/4	–	1.5	59	067N7003
	6	12	3.5	1/2 × 5/8	–	1/4	–	1.5	59	067N7004
	8	17	4.5	–	1/2 × 5/8	–	1/4	1.5	59	067N7010
	8	17	4.5	1/2 × 5/8	–	1/4	–	1.5	59	067N7008
	8	17	4.5	–	5/8 × 3/4	–	1/4	1.5	59	067N7012
	8	17	4.5	5/8 × 3/4	–	1/4	–	1.5	59	067N7013
	9	20	5.5	–	5/8 × 3/4	–	1/4	1.5	59	067N7046
	11	24	7	–	5/8 × 3/4	–	1/4	1.5	59	067N7015
	11	24	7	5/8 × 3/4	–	1/4	–	1.5	59	067N7016
	12.5	29	8	–	5/8 × 3/4	–	1/4	1.5	59	067N7210
	12.5	29	8	5/8 × 3/4	–	1/4	–	1.5	59	067N7212
	16	35	9.5	–	5/8 × 3/4	–	1/4	1.5	59	067N7211
TGE 20	12.5	29	8	–	5/8 × 3/4	–	1/4	1.5	59	067N7017
	12.5	29	8	5/8 × 3/4	–	1/4	–	1.5	59	067N7018
	16	37	10	–	5/8 × 3/4	–	1/4	1.5	59	067N7019
	16	37	10	5/8 × 3/4	–	1/4	–	1.5	59	067N7020
	20	44	12	5/8 × 3/4	–	1/4	–	1.5	59	067N7021

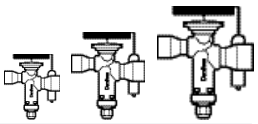
[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

MIO: Male inserts O-ring.

Technical data and ordering

TGE - R407C

Thermostatic expansion valve with bulb strap
Range: -40 – 10 °C / -40 – 50 °F



Type	Orifice no.	Rated capacity [1]		Connections solder ODF				Capillary tube		Code no. Multi pack
		[kW]	[TR]	Inlet x Outlet		Pressure equalization				
				[mm]	[in]	[mm]	[in]	[m]	[in]	
TGE 10	3	9	2.5	–	1/2 × 5/8	–	1/4	1.5	59	067N4151
	3	9	2.5	12 × 16	–	6	–	1.5	59	067N4191
	4	13	3.5	–	1/2 × 7/8	–	1/4	1.5	59	067N4152
	4	13	3.5	12 × 22	–	6	–	1.5	59	067N4192
	6	19	5	–	1/2 × 5/8	–	1/4	1.5	59	067N4153
	6	19	5	12 × 16	–	6	–	1.5	59	067N4193
	8	25	7	–	1/2 × 5/8	–	1/4	1.5	59	067N4236
	8	25	7	–	5/8 × 7/8	–	1/4	1.5	59	067N4156
	8	25	7	16 × 22	–	6	–	1.5	59	067N4196
	11	36	10	–	5/8 × 7/8	–	1/4	1.5	59	067N4157
	11	36	10	16 × 22	–	6	–	1.5	59	067N4197
	12.5	39	11	–	5/8 × 7/8	–	1/4	1.5	59	067N4410
	16	49	14	–	7/8 × 1 1/8	–	1/4	1.5	59	067N4411
TGE 20	12.5	42	12	–	5/8 × 7/8	–	1/4	1.5	59	067N4159
	16	53	15	–	5/8 × 1 1/8	–	1/4	1.5	59	067N4161
	16	53	15	–	7/8 × 1 1/8	–	1/4	1.5	59	067N4162
	20	62	18	–	7/8 × 1 1/8	–	1/4	1.5	59	067N4163
TGE 40	26	84	24	–	7/8 × 1 3/8	–	1/4	3	118	067N4165
	30	95	27	–	7/8 × 1 3/8	–	1/4	3	118	067N4167
	40	121	34	–	1 1/8 × 1 3/8	–	1/4	3	118	067N4169

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

TGE - R407C

Thermostatic expansion valve with bulb strap
Range: -40 – 10 °C / -40 – 50 °F

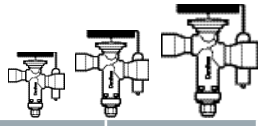
Type	Orifice no.	Rated capacity [1]		Connections MIO		Capillary tube		Code no. Multi pack
		[kW]	[TR]	Inlet x Outlet	Pressure equalization			
				[in]	[in]	[m]	[in]	
TGE 10	4	13	3.5	1/2 x 5/8	1/4	1.5	59	067N7400
	6	19	5	1/2 x 5/8	1/4	1.5	59	067N7401
	8	25	7	5/8 x 3/4	1/4	1.5	59	067N7402
	11	36	10	5/8 x 3/4	1/4	1.5	59	067N7403

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

Technical data and ordering

TGE - R407C

Thermostatic expansion valve with bulb strap
Range: -25 – 10 °C / -15 – 50 °F with MOP 95 psig / 6.6 bar



Type	Orifice no.	Rated capacity [1]		Connections solder ODF				Capillary tube		Code no. Multi pack
				Inlet x Outlet		Pressure equalization				
		[kW]	[TR]	[mm]	[in]	[mm]	[in]	[m]	[in]	
TGE 10	3	9	2.5	–	3/8 x 5/8	–	1/4	1.5	59	067N4000
	3	9	2.5	12 × 16	–	6	–	1.5	59	067N4041
	4	13	3.5	–	1/2 x 7/8	–	1/4	1.5	59	067N4002
	6	19	5	–	1/2 x 5/8	–	1/4	1.5	59	067N4003
	6	19	5	–	1/2 x 7/8	–	1/4	1.5	59	067N4004
	8	25	7	–	5/8 x 7/8	–	1/4	1.5	59	067N4006
	8	25	7	16 × 22	–	6	–	1.5	59	067N4046
	11	36	10	–	5/8 x 7/8	–	1/4	1.5	59	067N4007
	11	36	10	16 × 22	–	6	–	1.5	59	067N4047
	12.5	39	11	–	5/8 x 1 1/8	–	1/4	1.5	59	067N4400
	16	49	14	–	5/8 x 1 1/8	–	1/4	1.5	59	067N4401
TGE 20	12.5	42	12	–	5/8 x 7/8	–	1/4	1.5	59	067N4009
	12.5	42	12	–	5/8 x 1 1/8	–	1/4	1.5	59	067N4010
	16	53	15	–	5/8 x 1 1/8	–	1/4	1.5	59	067N4011
	20	62	18	–	7/8 x 1 1/8	–	1/4	1.5	59	067N4013
TGE 40	26	84	24	–	7/8 x 1 3/8	–	1/4	3	118	067N4015
	30	95	27	–	7/8 x 1 3/8	–	1/4	3	118	067N4017
	40	121	34	–	1 1/8 x 1 3/8	–	1/4	3	118	067N4019

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

TGE - R407F / R407A

Thermostatic expansion valve with bulb strap
Range: -40 – 10 °C / -40 – 50 °F

Type	Orifice no.	Rated capacity [1]				Connections solder ODF		Capillary tube		Code no. Multi pack
		R407F		R407A		Inlet x Outlet	Pressure equalization			
		[kW]	[TR]	[kW]	[TR]	[in]	[in]	[m]	[in]	
TGE 10	4	14	4	12	3.5	1/2 x 7/8	1/4	1.5	59	067N4700
	6	20	6	17	5	5/8 x 7/8	1/4	1.5	59	067N4701
	8	27	7.5	23	6.5	5/8 x 7/8	1/4	1.5	59	067N4702
	9	32	9	28	8	5/8 x 7/8	1/4	1.5	59	067N4703
	11	40	11	34	10	5/8 x 1 1/8	1/4	1.5	59	067N4704

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

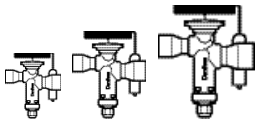
On systems charged with R407F, SS = 4.0°C / 7.2 °F,
On systems charged with R407A, SS = 2.7 °C / 4.9 °F.

Technical data and ordering

Only solder versions, connection size 28 mm / 1 1/8 in. or smaller are approved for flammable refrigerants.

TGE - R410A / R32

Thermostatic expansion valve with bulb strap
Range: -40 – 10 °C / -40 – 50 °F

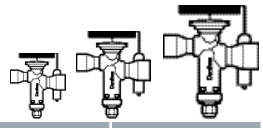


Type	Orifice no.	Rated capacity [1]				Connections solder ODF		Capillary tube		Code no. Multi pack
		R410A		R32		Inlet x Outlet	Pressure equalization			
		[kW]	[TR]	[kW]	[TR]	[in]	[in]	[m]	[in]	
TGE 10	3	12	3.5	18	5	3/8 x 5/8	1/4	1.5	59	067N3150
	3	12	3.5	18	5	1/2 x 5/8	1/4	1.5	59	067N3151
	4	16	4.5	24	7	1/2 x 7/8	1/4	1.5	59	067N3152
	6	24	6.5	35	10	1/2 x 5/8	1/4	1.5	59	067N3153
	6	24	6.5	35	10	1/2 x 7/8	1/4	1.5	59	067N3154
	6	24	6.5	35	10	5/8 x 7/8	1/4	1.5	59	067N3155
	8	32	9	47	13	1/2 x 5/8	1/4	1.5	59	067N3293
	8	32	9	47	13	5/8 x 7/8	1/4	1.5	59	067N3156
	9	37	11	54	15	5/8 x 7/8	1/4	1.5	59	067N3296
	11	45	13	68	19	5/8 x 7/8	1/4	1.5	59	067N3157
	12.5	50	14	74	21	5/8 x 7/8	1/4	1.5	59	067N3410
TGE 20	12.5	54	15	81	23	5/8 x 7/8	1/4	1.5	59	067N3159
TGE 40	26	110	31	165	47	1 1/8 x 1 1/8	1/4	3	118	067N3234

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

TGE - R410A

Thermostatic expansion valve with bulb strap
Range: -40 – 10 °C / -40 – 50 °F



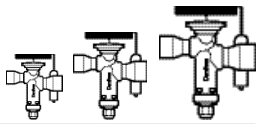
Type	Orifice no.	Rated capacity [1]		Connections solder ODF		Capillary tube		Code no. Multi pack
				Inlet x Outlet	Pressure equalization			
		[kW]	[TR]	[in]	[in]	[m]	[in]	
TGE 10	11	45	13	5/8 x 1 1/8	1/4	1.5	59	067N3158
	16	60	17	7/8 x 1 1/8	1/4	1.5	59	067N3411
TGE 20	12.5	54	15	5/8 x 1 1/8	1/4	1.5	59	067N3160
	12.5	54	15	7/8 x 7/8	1/4	1.5	59	067N3231
	12.5	54	15	7/8 x 1 1/8	1/4	1.5	59	067N3232
	16	68	19	5/8 x 1 1/8	1/4	1.5	59	067N3161
	16	68	19	7/8 x 1 1/8	1/4	1.5	59	067N3162
	20	79	23	7/8 x 1 1/8	1/4	1.5	59	067N3163
	20	79	23	7/8 x 1 3/8	1/4	1.5	59	067N3164
TGE 40	26	110	31	7/8 x 1 3/8	1/4	3	118	067N3165
	26	110	31	1 1/8 x 1 3/8	1/4	3	118	067N3166
	30	125	35	1 1/8 x 1 3/8	1/4	3	118	067N3168
	40	161	46	1 1/8 x 1 3/8	1/4	3	118	067N3169
	42	182	52	1 1/8 x 1 3/8	1/4	3	118	067N3400

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

Technical data and ordering

TGE - R410A

Thermostatic expansion valve with bulb strap
Range: -25 – 10 °C / -15 – 50 °F with MOP 165 psig / 11.4 bar

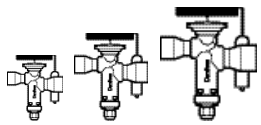


Type	Orifice no.	Rated capacity [1]		Connections solder ODF		Capillary tube		Code no. Multi pack
				Inlet x Outlet	Pressure equalization			
		[kW]	[TR]	[in]	[in]	[m]	[in]	
TGE 10	3	12	3.5	3/8 x 5/8	1/4	1.5	59	067N3000
	3	12	3.5	1/2 x 5/8	1/4	1.5	59	067N3001
	4	16	4.5	1/2 x 7/8	1/4	1.5	59	067N3002
	6	24	6.5	1/2 x 5/8	1/4	1.5	59	067N3003
	6	24	6.5	5/8 x 7/8	1/4	1.5	59	067N3005
	8	32	9	5/8 x 7/8	1/4	1.5	59	067N3006
	9	37	11	5/8 x 7/8	1/4	1.5	59	067N3340
	11	45	13	5/8 x 7/8	1/4	1.5	59	067N3007
	11	45	13	5/8 x 1 1/8	1/4	1.5	59	067N3008
	12.5	50	14	5/8 x 1 1/8	1/4	1.5	59	067N3402
	16	60	17	5/8 x 1 1/8	1/4	1.5	59	067N3401
TGE 20	12.5	54	15	5/8 x 7/8	1/4	1.5	59	067N3009
	12.5	54	15	5/8 x 1 1/8	1/4	1.5	59	067N3010
	16	68	19	5/8 x 1 1/8	1/4	1.5	59	067N3011
	16	68	19	7/8 x 1 1/8	1/4	1.5	59	067N3012
	20	79	23	7/8 x 1 1/8	1/4	1.5	59	067N3013
TGE 40	26	110	31	7/8 x 1 1/8	1/4	3	118	067N3135
	26	110	31	7/8 x 1 3/8	1/4	3	118	067N3015
	30	125	35	1 1/8 x 1 3/8	1/4	3	118	067N3018
	40	161	46	1 1/8 x 1 3/8	1/4	3	118	067N3019
	42	182	52	1 1/8 x 1 3/8	1/4	3	118	067N3341

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

TGE - R410A

Thermostatic expansion valve with bulb strap
Range: -30 – 15 °C / -22 – 60 °F with anti hunting charge



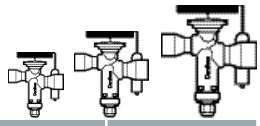
Type	Orifice no.	Rated capacity [1]		Connections solder ODF		Capillary tube		Code no. Multi pack
				Inlet x Outlet	Pressure equalization			
		[kW]	[TR]	[in]	[in]	[m]	[in]	
TGE 10	3	12	3.5	1/2 x 5/8	1/4	1.5	59	067N9201
	4	16	4.5	1/2 x 7/8	1/4	1.5	59	067N9202
	6	24	6.5	1/2 x 5/8	1/4	1.5	59	067N9203
	6	24	6.5	5/8 x 7/8	1/4	1.5	59	067N9200
	8	32	9	5/8 x 7/8	1/4	1.5	59	067N9206
	9	37	11	5/8 x 7/8	1/4	1.5	59	067N9287
	11	45	13	5/8 x 7/8	1/4	1.5	59	067N9207
	12.5	50	14	5/8 x 7/8	1/4	1.5	59	067N9509
	16	60	17	7/8 x 1 1/8	1/4	1.5	59	067N9512
TGE 20	12.5	54	15	5/8 x 7/8	1/4	1.5	59	067N9209
	12.5	54	15	5/8 x 1 1/8	1/4	1.5	59	067N9210
	16	68	19	7/8 x 1 1/8	1/4	1.5	59	067N9212
	20	79	23	7/8 x 1 1/8	1/4	1.5	59	067N9213
TGE 40	26	110	31	7/8 x 1 3/8	1/4	3	118	067N9215
	26	110	31	1 1/8 x 1 3/8	1/4	3	118	067N9216
	30	125	35	1 1/8 x 1 3/8	1/4	3	118	067N9218
	40	161	46	1 1/8 x 1 3/8	1/4	3	118	067N9219
	42	182	52	1 1/8 x 1 3/8	1/4	3	118	067N9289

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

Technical data and ordering

TGE - R404A/R507

Thermostatic expansion valve with bulb strap
Range: -40 – 10 °C / -40 –50 °F



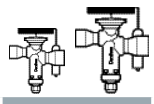
Type	Orifice no.	Rated capacity [1]		Connections solder ODF		Capillary tube		Code no. Multi pack
				Inlet x Outlet	Pressure equalization			
		[kW]	[TR]	[in]	[in]	[m]	[in]	
TGE 10	3	7	2	3/8 × 5/8	1/4	1.5	59	067N6170
	4	9	2.5	1/2 × 7/8	1/4	1.5	59	067N6172
	6	14	4	1/2 × 5/8	1/4	1.5	59	067N6173
	6	14	4	1/2 × 7/8	1/4	1.5	59	067N6151
	8	18	5	1/2 × 5/8	1/4	1.5	59	067N6175
	8	18	5	5/8 × 7/8	1/4	1.5	59	067N6150
	9	21	6	5/8 × 7/8	1/4	1.5	59	067N6167
	11	26	7.5	5/8 × 7/8	1/4	1.5	59	067N6154
	12.5	31	9	5/8 × 7/8	1/4	1.5	59	067N6300
	16	35	10	5/8 × 1 1/8	1/4	1.5	59	067N6301
TGE 20	12.5	31	9	5/8 × 7/8	1/4	1.5	59	067N6158
	16	39	11	5/8 × 1 1/8	1/4	1.5	59	067N6155
	16	39	11	1 1/8 × 1 3/8	1/4	1.5	59	067N6188
	16	39	11	7/8 × 1 1/8	1/4	1.5	59	067N6181
	20	45	13	7/8 × 1 1/8	1/4	1.5	59	067N6162
TGE 40	26	64	18	7/8 × 1 3/8	1/4	3	118	067N6161
	30	72	21	1 1/8 × 1 3/8	1/4	3	118	067N6186
	40	92	26	1 1/8 × 1 3/8	1/4	3	118	067N6187

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

Only solder versions, connection size 28 mm / 1 1/8 in. or smaller are approved for flammable refrigerants.

TGE - R290

Thermostatic expansion valve with bulb strap
Range: -40 – 10 °C / -40 – 50 °F



Type	Orifice no.	Rated capacity [1]		Connections solder ODF		Capillary tube		Code no. Multi pack
				Inlet x Outlet	Pressure equalization			
		[kW]	[TR]	[in]	[in]	[m]	[in]	
TGE 10	6	19	5	5/8 × 7/8	1/4	1.5	59	067N9100
	11	36	10	5/8 × 7/8	1/4	1.5	59	067N9103
TGE 20	12.5	44	12	5/8 × 7/8	1/4	1.5	59	067N9104
	16	54	15	7/8 × 7/8	1/4	1.5	59	067N9105
	20	63	18	7/8 × 7/8	1/4	1.5	59	067N9106

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

SS = 5K / 9°F (except 067N9100, 067N9103)

TGE - R290

Thermostatic expansion valve with bulb strap
Range: -25 – 10 °C / -15 – 50 °F

Type	Orifice no.	Rated capacity [1]		Connections solder ODF		Capillary tube		Code no. Multi pack
				Inlet x Outlet	Pressure equalization			
		[kW]	[TR]	[in]	[in]	[m]	[in]	
TGE 40	26	92	26	7/8 × 7/8	1/4	3	118	067N9107
	40	133	38	7/8 × 7/8	1/4	3	118	067N9109

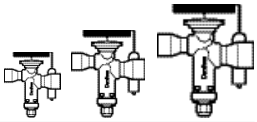
[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

Technical data and ordering

Only solder versions, connection size 28 mm / 1 1/8 in. or smaller are approved for flammable refrigerants.

TGE - R1234ze

Thermostatic expansion valve with bulb strap
Range: -30 – 10 °C / -22 – 50 °F



Type	Orifice no.	Rated capacity [1]		Connections solder ODF		Capillary tube		Code no. Multi pack
				Inlet x Outlet	Pressure equalization			
		[kW]	[TR]	[in]	[in]	[m]	[in]	
TGE 10	8	14	4	5/8 x 7/8	1/4	1.5	59	067N8001
	11	20	5.5	5/8 x 7/8	1/4	1.5	59	067N8002
	12.5	22	6	5/8 x 7/8	1/4	1.5	59	067N8003
TGE 20	20	31	8.5	7/8 x 1 1/8	1/4	1.5	59	067N8004
TGE 40	26	49	14	7/8 x 1 1/8	1/4	3	118	067N8005

[1]) The rated capacity is based on:
Evaporating temperature t_e = 4.4 °C / 40 °F
Condensing temperature t_c = 38 °C / 100 °F
Refrigerant temperature ahead of valve t_l = 37 °C / 98 °F

Bulb strap supplied separately as spare part

Max. diameter of suction line		Quantity / box	Code no. Industrial pack
[mm]	[in]		
22	7/8	40 pcs	067N0551
53	2 1/8	40 pcs	067N0557
78	3 1/8	40 pcs	067N0559