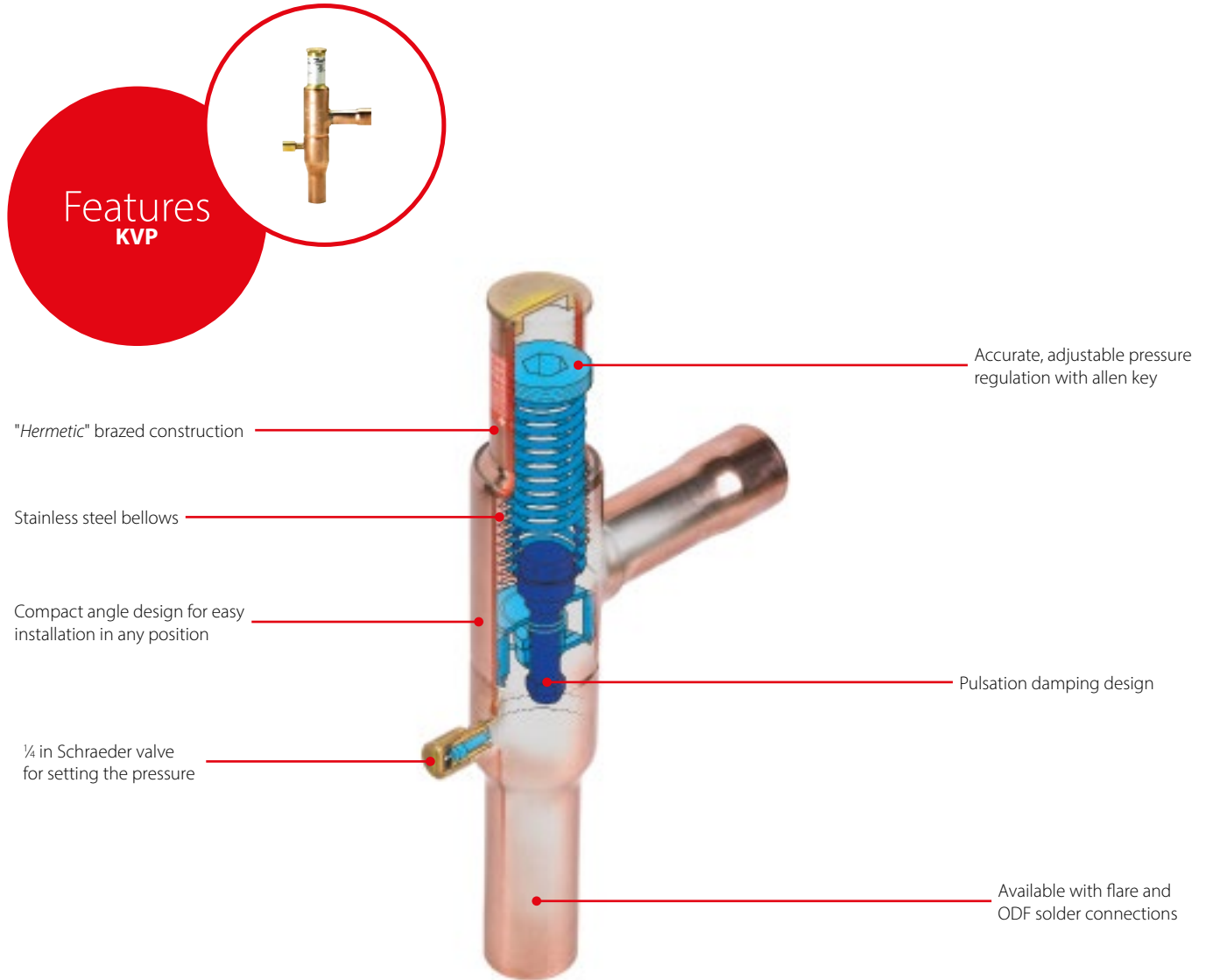


KVP, Evaporator pressure regulator

KVP evaporating pressure regulators are mounted in the suction line of refrigeration and air conditioning systems. They are used to maintain a constant pressure corresponding to a constant temperature on the evaporator.

They also protect against too low an evaporating pressure by throttling down when the pressure falls below the set value.



Facts

Application:

- Traditional refrigeration
- Air conditioning units
- Cold rooms
- Display cabinets

- The KVP can be used to differentiate the evaporating pressures in two or more evaporators in systems with one compressor
- Protection against a too low evaporating pressure: the regulator closes when the pressure in the evaporator falls below the set value
- Wide capacity and operating range

- Regulation range: 0 – 5.5 bar / 0 – 80 psig
- KVP 12 – 22: applicable to R22, R1270, R134a, R290, R404A, R407A, R407C, R407F, R448A, R449A, R450A, R452A, R507A, R513A, R600, R600a
- KVP 12 – 22: May be used in the following EX range: Category 3 (Zone 2)
- KVP 28 – 35: applicable to R22, R134a, R404A, R407A, R407C, R407F, R448A, R449A, R450A, R452A, R507A, R513A
- Maximum working pressure: PS / MWP = 18 bar / 260 psig

Technical data and ordering



KVP - Evaporator pressure regulator

Ordering

Type	Rated capacity in [kW] / [TR] ¹⁾								Connection type	Connection size		Code no.
	R22		R134a		R404A / R507		R407C			[in]	[mm]	
	[kW]	[TR]	[kW]	[TR]	[kW]	[TR]	[kW]	[TR]				
KVP 12	4.0	1.3	2.8	0.9	3.6	1.2	3.7	1.2	Flare ^{2) 3)}	½	12	034L0021
	4.0	1.3	2.8	0.9	3.6	1.2	3.7	1.2	Solder, ODF ³⁾	½	–	034L0023
	4.0	1.3	2.8	0.9	3.6	1.2	3.7	1.2	Solder, ODF ³⁾	–	12	034L0028
KVP 15	4.0	1.3	2.8	0.9	3.6	1.2	3.7	1.2	Flare ^{2) 3)}	¾	16	034L0022
	4.0	1.3	2.8	0.9	3.6	1.2	3.7	1.2	Solder, ODF ³⁾	¾	16	034L0029
KVP 22	4.0	1.3	2.8	0.9	3.6	1.2	3.7	1.2	Solder, ODF ³⁾	¾	22	034L0025
KVP 28	8.6	2.8	6.1	1.9	7.7	2.6	7.9	2.6	Solder, ODF ³⁾	1 ½	–	034L0026
	8.6	2.8	6.1	1.9	7.7	2.6	7.9	2.6	Solder, ODF ³⁾	–	28	034L0031
KVP 35	8.6	2.8	6.1	1.9	7.7	2.6	7.9	2.6	Solder, ODF ³⁾	1 ¾	35	034L0032

¹⁾ Rated capacity is the capacity of the regulator at

– Evaporating temperature $t_e = -10\text{ °C} / 14\text{ °F}$

– Condensing temperature $t_c = 25\text{ °C} / 100\text{ °F}$

– Pressure drop in regulator $\Delta p = 0.2\text{ bar} / 2\text{ psi}$, offset = 0.6 bar / 9 psi

²⁾ Supplied without flare nuts. Separate flare nuts can be supplied: ½ in / 12 mm - code no. 011L1103, ¾ in / 16 mm - code no. 011L1167.

³⁾ The connection dimensions chosen must not be too small, since gas velocities in excess of 40 m/s at the inlet of the regulator can give flow noise.

To select the product for other conditions or refrigerants, use Danfoss Coolselector*2.

Application example

