ENGINEERING TOMORROW

Data sheet

Receiver pressure regulator
Type KVD

KVD is a modulating receiver pressure regulator. It opens on falling receiver pressure and bypasses hot gas to maintain the receiver pressure at the regulator setting (adjustable).

KVD and KVR form a regulating system, used to maintain constant and adequately high condensing and receiver pressure in plant with heat-recovery, and in refrigeration and air conditioning plant with air-cooled condensers.

Features

- Accurate, adjustable pressure regulation
- Wide capacity and operating range
- Pulsation damping design
- Stainless steel bellows
- Compact angle design for easy installation in any position
- "Hermetic" brazed construction
- 1/4 in. Schrader valve for pressure testing
- Available with flare and ODF solder connections
- Can be used as a relief valve from high pressure to suction side
- Compliant with ATEX hazard zone 2

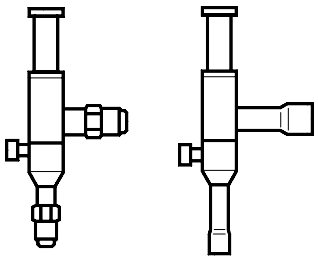
Approvals

UL LISTED, file SA7200
EAC

Technical data

Refrigerants	HCFC, HFC and HC
Regulating range	3 – 20 bar
	Factory setting = 10 bar
Max. working pressure	PS / MWP = 28 bar
Max. test pressure	Pe = 31 bar
Medium temperature range	-45 – 130 °C

Ordering



Type	k_v value [1]	Flare connection [2]		Code no.	Solder connection		Code no.
	[m^3 / h]	[in.]	[mm]		[in.]	[mm]	
KVD 12	1.75	1/2	12	**034L0171**	1/2	–	**034L0173**
	1.75	–	–	–	–	12	**034L0176**
KVD 15	1.75	5/8	16	**034L0172**	5/8	16	**034L0177**

[1]) The k_v value is the flow of water in [m^3 / h] at a pressure drop across valve of 1 bar, ρ = 1000 kg / m^3

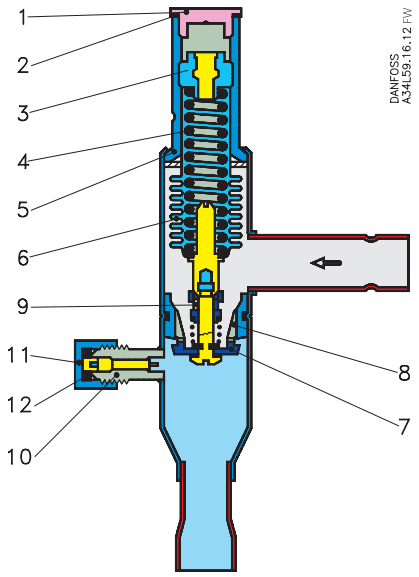
[2]) KVD is supplied without flare nuts. Separate flare nuts can be supplied:
1/2 in. / 12 mm, code no. **011L1103**
5/8 in. / 16 mm, code no. **011L1167**

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.

Design / Function

1. Protective cap
2. Gasket
3. Setting screw
4. Main spring
5. Valve body
6. Equalization bellows
7. Valve plate
8. Valve seat
9. Damping device
10. Pressure gauge connection
11. Cap
12. Gasket

KVD



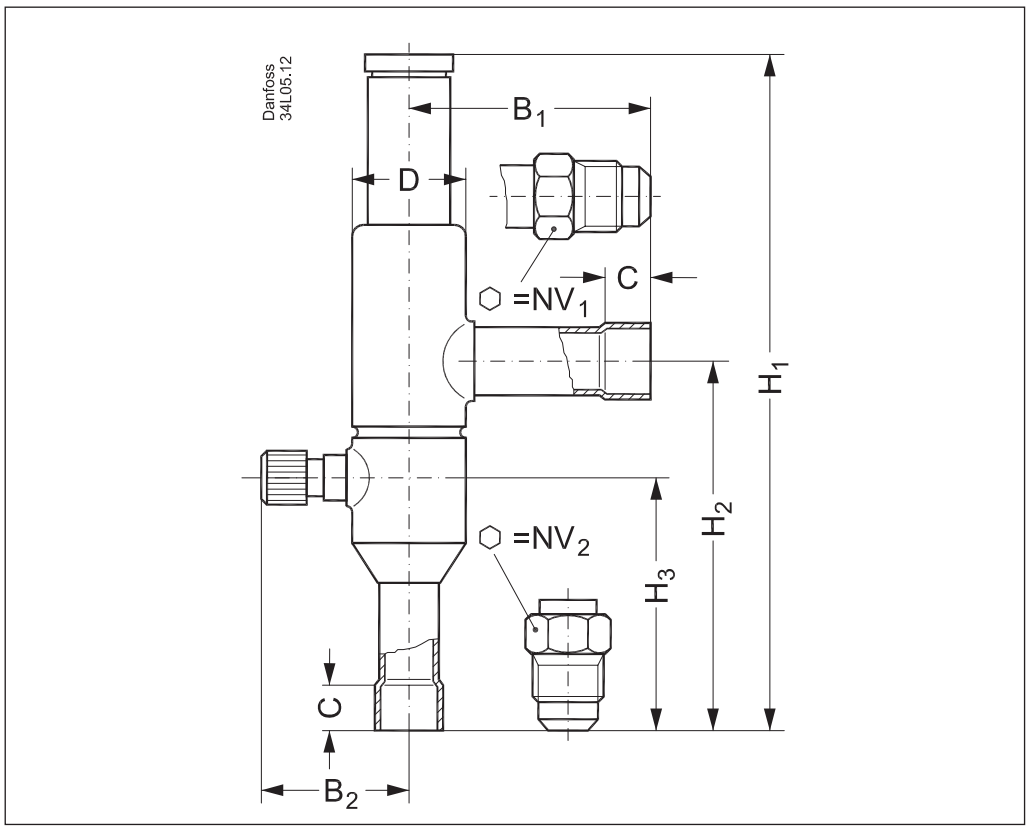
The receiver pressure regulator KVD opens at a fall in pressure on the outlet side, i.e. when the pressure in the receiver falls below the set value.

KVD regulates only in dependence on the outlet pressure. Pressure variations on the inlet side of the regulator do not affect the degree of opening since KVD is equipped with an equalization bellows (6). This bellows has an effective area corresponding to that of the valve seat.

The KVD regulator is also equipped with an effective damping device (9) against pulsations which can normally arise in a refrigeration plant.

The damping device helps to ensure long life for the regulator without impairing regulation accuracy.

Dimensions and weights



Type	Connection				NV_1	NV_2	H_1	H_2	H_3	B_1	B_2	C solder	øD	Net weight
	Flare		Solder ODF											
	[in.]	[mm]	[in.]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[Kg]
KVD 12	1/2	12	1/2	12	19	24	179	99	66	64	41	10	30	0.4
KVD 15	5/8	16	5/8	16	24	24	179	99	66	64	41	12	30	0.4