OFFENWANGER
fluid components

Refrigerating

2/2-way Solenoid Valves

with soldering connection for tubes D 1/4" - 7/8"

Permissible media:	R22, R134A, R404A, R407C, R410A, R507
Operating pressure:	0,05 - 30 bar
Life span:	min. 20 mio. switchings
Ambient temperature:	-40 to +70°C
Media temperature:	-40 to +150°C
Material:	Brass, stainless steel, PTFE, EPDM
Magnetic capacity:	6 Watt
Coil Connector:	DIN 43650 A PG9
Coil Protection:	IP65 with connector

Series: VB50

Connection Tube-D	KV [1]	Weight	Article Number (Solenoid valve incl. coil and connector) normally closed	normally open
1/4"	0,3	0,30 kg	***VBI50(*)***	***VBI53(*)***
3/8"	0,9	0,32 kg	***VBJ50(*)***	***VBJ53(*)***
1/2"	1,9	0,34 kg	***VBK50(*)***	***VBK53(*)***
5/8"	2,4	0,36 kg	***VBL50(*)***	***VBL53(*)***
7/8"	2,8	0,41 kg	***VBM50(*)***	***VBM53(*)***

1) The KV-Value is the water flow in m/h^3, at pressure drop across the valve of 1 bar.

(*) Voltage code: 0 = without coil
1 = 230V DC/AC
2 = 024V DC/AC
4 = 012V DC/AC
5 = 110V DC/AC

The voltage code is the end number of the valve article number. (e.g.: VBK501)

FEATURES

- **low noise switching**
- **high switching frequency**
- **compact design**
- **low energy consumption**

Connection Tube-D	Nominal Refrigeration Capacity (KW) [2]											
	Liquid				Suction Steam				Hot Gas			
	R22	R404A R507	R134A	R407C	R22	R404A R507	R134A	R407C	R22	R404A R507	R134A	R407C
1/4"	6	4,17	5,6	5,7					2,8	2,3	2,2	2,94
3/8"	18	12,5	16,7	17,1	2,0	1,8	1,5	1,85	8,3	6,8	6,6	8,7
1/2"	38	26,4	35,3	36,1	4,3	3,9	3,2	4,0	17,5	14,3	13,9	18,4
5/8"	48	33,4	44,6	45,6	5,4	4,9	4,0	5,0	22,1	18,0	17,6	23,2
7/8"	56	38,9	52,1	53,2	6,3	5,7	4,6	5,85	25,8	21,0	20,5	27,1

2) The nominal liquid and suction steam capacity is based on the evaporation temperature t_0 = -10°C liquid temperature ahead the valve t_v = +25°C and Dp = 0,15 bar.

The nominal hot gas capacity is based on the liquefying temperature t_k = +40°C,pressure drop across the Valve Dp = 0,8 bar, hot gas t_h = +65°C and subcooling of refrigerant liquid Dt_u = 4 K.

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