

<b>Permissible media:</b>	R22, R134A, R404A, R407C, R507
<b>Operating pressure:</b>	0,05 - 30 bar
<b>Life span:</b>	min. 20 mio. switchings (oiled media)
<b>Ambient temperature:</b>	-40 to +70°C
<b>Media temperature:</b>	-40 to +150°C
<b>Material:</b>	Brass, stainless steel, PTFE, EPDM
<b>Magnetic capacity:</b>	6 Watt at DC / 9VA at AC
<b>Coil Connector:</b>	DIN 43650 A - PG 11 (PG9)
<b>Coil Protection:</b>	IP65 with connector

## Refrigerating

### 2/2-way Solenoid Valves with flare connection for tubes D 1/4" - 5/8"

Connection Tube-D	KV <sup>1)</sup>	Weight	Article Number (Solenoid valve incl. coil and connector)	
			normally closed	normally open
1/4"	0,3	0,23 kg	<b>VB110*</b>	<b>VB113*</b>
3/8"	0,9	0,34 kg	<b>VBJ10*</b>	<b>VBJ13*</b>
1/2"	1,9	0,36 kg	<b>VBK10*</b>	<b>VBK13*</b>
5/8"	2,4	0,38 kg	<b>VBL10*</b>	<b>VBL13*</b>



## Series: VB10

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

\*  
**Voltage code:** 0 = without coil  
1 = 230V 50/60 HZ  
2 = 024V DC  
3 = 024V 50/60 HZ  
4 = 012V DC

The voltage code is the end number of the  
valve article number. (e.g.: VBK103)

### FEATURES

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

Connection Tube-D	Nominal Refrigeration Capacity (KW) <sup>2)</sup>											
	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

2)  
The nominal liquid and suction steam capacity is  
based on the evaporation temperature  $t_0 = -10^\circ\text{C}$   
liquid temperature ahead the valve  $t_v = +25^\circ\text{C}$   
and  $\Delta p = 0,15$  bar.

The nominal hot gas capacity is based on the  
liquefying temperature  $t_k = +40^\circ\text{C}$ , pressure drop  
across the Valve  $\Delta p = 0,8$  bar, hot gas  $t_h = +65^\circ\text{C}$   
and subcooling of refrigerant liquid  $\Delta t_u = 4$  K.