

| | |
|-----------------------------|---------------------------------------|
| Permissible media: | R22, R134A, R404A, R407C, R410A, R507 |
| Operating pressure: | 0 - 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 |

Refrigerating

2/2-way

Solenoid Valves with soldering connection for tubes D 1/4" and 3/8"

| Connection Tube-D | KV ¹⁾ | Weight | Article Number (Solenoid valve incl. coil and connector) | |
|----------------------|------------------|---------|---|---------------|
| | | | normally closed | normally open |
| 1/4" | 0,3 | 0,20 kg | VAI50(*) | VAI53(*) |
| 3/8" | 0,4 | 0,24 kg | VAJ50(*) | VAJ53(*) |



Series: VA50

1) The KV-Value is the water flow in m/h³,
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.: VAJ501)

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" | 8 | 5,56 | 7,4 | 7,6 | | | | | 3,7 | 3,05 | 2,93 | 3,9 |

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

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

| | |
|-----------------------------|---------------------------------------|
| 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 |

Refrigerating

2/2-way

Solenoid Valves with flare connection for tubes D 1/4" - 7/8"



Series: VB10

| Connection Tube-D | KV ¹⁾ | Weight | Article Number (Solenoid valve incl. coil and connector) | |
|----------------------|------------------|---------|---|-----------------|
| | | | normally closed | normally open |
| 1/4" | 0,3 | 0,23 kg | VB10(*) | VB113(*) |
| 3/8" | 0,9 | 0,34 kg | VB110(*) | VB113(*) |
| 1/2" | 1,9 | 0,36 kg | VBK10(*) | VBK13(*) |
| 5/8" | 2,4 | 0,38 kg | VBL10(*) | VBL13(*) |
| 7/8" | 2,8 | 0,41 kg | VBM10(*) | VBM13(*) |

1) The KV-Value is the water flow in m/h³,
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.: VB1101)

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 $t_e = -10^\circ\text{C}$ liquid temperature ahead the valve $t_v = +25^\circ\text{C}$ and $D_p = 0,15$ bar.

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

| | |
|-----------------------------|---------------------------------------|
| 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 |

Truck Refrigerating

2/2-way

Solenoid Valves with thread connection for tubes D 3/8" - 7/8"



Series: VB20

| Connection Tube-D | KV ¹⁾ | Weight | Article Number (Solenoid valve incl. coil and connector) | |
|----------------------|------------------|---------|---|-----------------|
| | | | normally closed | normally open |
| 3/8" | 0,9 | 0,32 kg | VBJ20(*) | VBJ23(*) |
| 1/2" | 1,9 | 0,34 kg | VBK20(*) | VBK23(*) |
| 5/8" | 2,4 | 0,36 kg | VBL20(*) | VBL23(*) |
| 7/8" | 2,8 | 0,41 kg | VBM20(*) | VBM23(*) |

1) The KV-Value is the water flow in m/h³,
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 |
| 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 $t_e = -10^\circ\text{C}$ liquid temperature ahead the valve $t_v = +25^\circ\text{C}$ and $D_p = 0,15$ bar.

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

| | |
|----------------------|---------------------------------------|
| 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 |

Refrigerating

2/2-way

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



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 | VB150(*) | VB153(*) |
| 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/h³,
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 $t_e = -10^\circ\text{C}$ liquid temperature ahead the valve $t_v = +25^\circ\text{C}$ and $D_p = 0,15$ bar.

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

| | |
|-----------------------------|---------------------------------------|
| Permissible media: | R22, R134A, R404A, R407C, R410A, R507 |
| Operating pressure: | 0,1 - 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: | 10 Watt |
| Coil Connector: | DIN 43650 A PG9 |
| Coil Protection: | IP65 with connector |

Refrigerating

2/2-way

Solenoid Valves with soldering connection for tubes D 5/8" - 1 1/8"

| Connection Tube-D | KV ¹⁾ | Weight | Article Number (Solenoid valve incl. coil and connector) | |
|----------------------|------------------|---------|---|---------------|
| | | | normally closed | normally open |
| 5/8" | 4,5 | 0,65 kg | VCL50(*) | VCL53(*) |
| 7/8" | 5,5 | 0,70 kg | VCM50(*) | VCM53(*) |
| 1 1/8" | 6,5 | 0,75 kg | VCN50(*) | VCN53(*) |



Series: VC50

1) The KV-Value is the water flow in m/h³,
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.: VCM501)

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 |
| 5/8" | 90 | 62,55 | 83,7 | 85,5 | 9,9 | 9,0 | 7,2 | 9,45 | 41,4 | 33,8 | 32,9 | 43,5 |
| 7/8" | 110 | 76,45 | 102,3 | 104,5 | 12,1 | 11,0 | 8,8 | 11,55 | 50,6 | 41,3 | 40,2 | 53,1 |
| 1 1/8" | 130 | 90,35 | 120,9 | 123,5 | 14,3 | 13,0 | 10,4 | 13,65 | 59,8 | 48,8 | 47,5 | 62,8 |

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

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

| | |
|-----------------------------|---------------------------------------|
| Permissible media: | R22, R134A, R404A, R407C, R410A, R507 |
| Operating pressure: | 0,2 - 30 bar |
| Life span: | min. 5 mio. switchings |
| Ambient temperature: | -40 to +70°C |
| Media temperature: | -40 to +150°C |
| Material: | Brass, stainless steel, PTFE, EPDM |
| Magnetic capacity: | 10 Watt |
| Coil Connector: | DIN 43650 A PG9 |
| Coil Protection: | IP65 with connector |

Refrigerating

2/2-way

Solenoid Valves with soldering connection for tubes D 1 1/8" - 1 5/8"

| Connection Tube-D | KV ¹⁾ | Weight | Article Number (Solenoid valve incl. coil and connector) | |
|----------------------|------------------|---------|---|---------------|
| | | | normally closed | normally open |
| 1 1/8" | 12 | 0,95 kg | VDN01(*) | VDN04(*) |
| 1 3/8" | 13 | 1,10 kg | VDO01(*) | VDO04(*) |
| 1 5/8" | 14 | 1,25 kg | VDP01(*) | VDP04(*) |



Series: VD01

1) The KV-Value is the water flow in m/h³,
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.: VDP011)

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 1/8" | 240 | 166,8 | 223,2 | 228 | 26,4 | 24 | 19,2 | 25,2 | 110,4 | 90,0 | 87,6 | 116,1 |
| 1 3/8" | 260 | 180,7 | 241,8 | 247 | 28,6 | 26 | 20,8 | 27,3 | 119,6 | 97,5 | 94,9 | 125,7 |
| 1 5/8" | 280 | 194,6 | 260,4 | 266 | 30,8 | 28 | 22,4 | 29,4 | 128,8 | 105,0 | 102,2 | 135,4 |

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

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