

The refrigeration capacity refers to applications using ammonia.

Product number	DN	k_{vs} [m ³ /h]	k_{vs} reduced [m ³ /h]	Δp_{max} [MPa]	Q_0 E [kW]	Q_0 H [kW]	Q_0 D [kW]	S_{NA} [VA]	P_{med} [W]
MVS661.25-016N	25	0,16	0,10	2,5	95	10	2	22	12
MVS661.25-0.4N	25	0,40	0,25		245	26	5		
MVS661.25-1.0N	25	1,0	0,63		610	64	12		
MVS661.25-2.5N	25	2,5	1,6		1530	159	29		
MVS661.25-6.3N	25	6,3	4,0		3850	402	74		

k_{vs} = Nominal flow rate of refrigerant through the fully open valve (H_{100}) at a differential pressure of 100 kPa (1 bar) to VDI 2173

If required k_{vs} -value and refrigeration capacity Q_0 can be reduced to 63 %, refer to « k_{vs} reduction» on page 3

Δp_{max} = Maximum permissible differential pressure across the control path A → AB of the valve, valid for the entire actuating range of the motorized valve

Q_0 E = Refrigeration capacity in expansion applications

Q_0 H = Refrigeration capacity in hot-gas bypass applications

Q_0 D = Refrigeration capacity in suction throttle applications and $\Delta p = 0.5$ bar

S_{NA} = nominal apparent power for selecting the transformer

P_{med} = typical power consumption

The pressure drop across evaporator and condenser is assumed to be 0.3 bar each, and 1.6 bar upstream of the evaporator (e.g. spider).

The capacities specified are based on superheating by 6 K and subcooling by 2 K.

Accessories

Valve insert ASR..N

Product number	DN	k_{vs} [m ³ /h]	Q_0 E [kW]	Q_0 H [kW]	Q_0 D [kW]
ASR0.16N	25	0,16	95	10	2
ASR0.4N	25	0,40	245	26	5
ASR1.0N	25	1,0	610	64	12
ASR2.5N	25	2,5	1530	159	29
ASR6.3N	25	6,3	3850	402	74

The refrigeration capacity for various refrigerants and operating conditions can be calculated for the 3 types of application using the tables starting from page 10.

For accurate valve sizing, the valve selection program "Refrigeration VASP" is recommended.

Ordering

Valve body and magnetic actuator form one integral unit and cannot be separated.

Example:

Product number	Stock number	Designation	Quantity
MVS661.25-0.4N	MVS661.25-0.4N	Refrigerant valve	1

Spare parts

Replacement electronics ASR61

Should the valve's electronics become faulty, the entire electronics housing is to be replaced by spare part ASR61, which is supplied complete with Mounting Instructions (74 319 0270 0).

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See table on page 16.

Valve insert ASR..N

If plant is resized, or should excessive wear impact the valve's performance, a new valve insert ASR...N will restore the valve's characteristics to its original specifications.

The valve insert is supplied complete with Mounting Instructions (74 319 0486 0).

