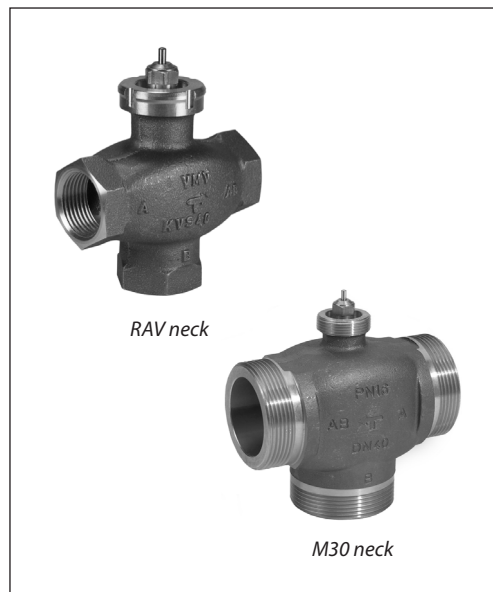


Data sheet

3-way seated valve VMV (PN 16)

- version with RAV neck, internal thread
- version with M30 neck, external thread

Description



VMV is 3-way seated mixing valve primarily use for flow temperature control.

It can be combined with:

- AMV(E) 10, 13 electrical actuator
- AMV 150 + AMV(E) 130/140 electrical actuator
- ABV thermohydraulic actuator *
- *NC version only for DN15 and DN20
- VMV DN 15 and DN 20 can additionally be combined with self-acting thermostatic actuators RAVK

Main data:

- DN 15-40
- k_{vs} 2.5-12 m³/h
- PN 16
- Temperature:
 - Circulation water / glycolic water up to 30 %: 2 ... 120 °C
- Connections:
 - Internal (RAV neck) and external thread (M30 neck)

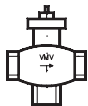
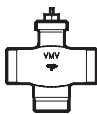
Ordering

Example:
3-way seated valve, DN 15, k_{vs} 2.5;
PN 16, T_{max} 120 °C, ext. thread

- 1x VMV DN 15 valve
Code No: **065F6015**

Option:
- 1x Ext. thread tailpieces
Code No: **065Z7010**

VMV valve

Picture	DN	k_{vs} (m ³ /h)	Connection		Actuator connection	Code No.
	15	2.5	Internal thread acc. to ISO 7/1	$R_p 1/2$	RAV neck	065F0015
	20	4.0		$R_p 3/4$		065F0020
	25	6.3		$R_p 1$		065F0025
	32	10		$R_p 1 1/4$		065F0032
	40	12		$R_p 1 1/2$		065F0040
	15	2.5	Cylindrical external thread acc. to ISO 228/1	$G 3/4 A$	M30 neck	065F6015
	20	4.0		$G 1 A$		065F6020
	25	6.3		$G 1 1/4 A$		065F6025
	32	10		$G 1 1/2 A$		065F6032
	40	12		$G 2 A$		065F6040

Accessories

Type	Type designations	DN	Code No.
VMVH ¹⁾	Manual operation unit		065F0005
External thread tailpieces ²⁾		15	065Z7010
		20	065Z7011
		25	065Z7012
		32	065Z7013
		40	065Z7014
Adapter RAV / M30 neck			065Z7018

¹⁾ Only for valves with RAV neck

²⁾ Only for valves with external thread (M30 neck); incl. 3 tailpieces per code number

Service kits

Type designations	Code No.
Valve stuffing box	065F0006¹⁾

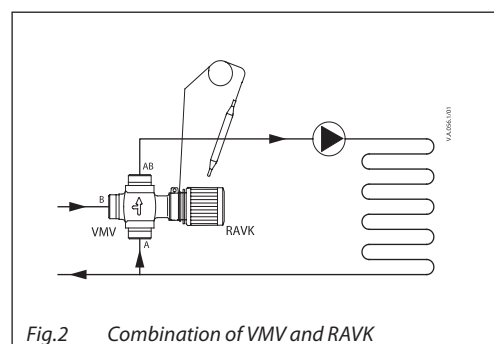
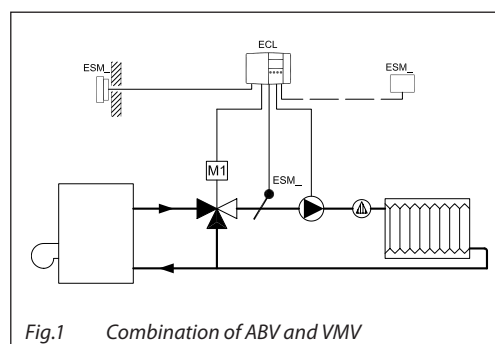
¹⁾ The products can only be ordered in multiple packing containing 10 pieces each

Technical data

VMV valve

Nominal diameter	DN	15	20	25	32	40
k _{vs} value	m³/h	2.5	4.0	6.3	10	12
Stroke	mm	2.0	2.1	2.6	3.1	3.3
Control ratio		1:50				
Control characteristic		Approximately linear				
Cavitation factor z		≥ 0.5				
Leakage acc. to standard IEC 534		A-AB ≤ 0.05 % of k _{vs}				
		B-AB ≤ 0.1 % of k _{vs}				
Nominal pressure	PN	16				
Medium		Circulation water / glycolic water up to 30 %				
Medium pH		Min. 7, max. 10				
Medium temperature	°C	2 ... 120				
Connections		Int. and ext. thread				
Materials						
Valve body		Red bronze CuSn5ZnPb (Rg5)				
Valve seat		Red bronze CuSn5ZnPb (Rg5)				
Valve cone		EPDM				
Spindle		Stainless steel				

Application principles



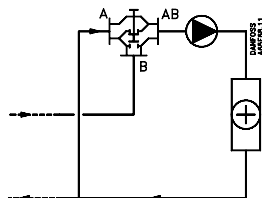
Installation

VMV must always be installed as a mixing valve (two inlet ports-one outlet port), according to flow direction arrows cast into the valve body. VMV closes across main ports A-AB on rising spindle travel.

Combination of VMV and RAVK (see "Application principles", Fig.2): Inlet must be on port A and port B, return on port AB.

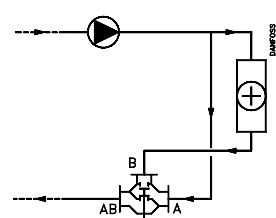
NC (normally closed)

RAVK (only VMV DN 15, 20)
ABV-NC



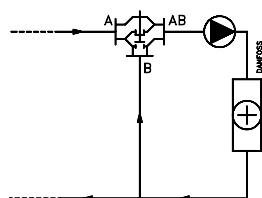
NC (normally closed)

RAVK (only VMV DN 15, 20)
ABV-NC



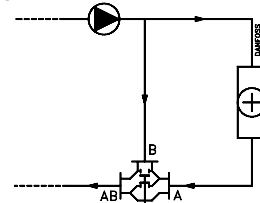
NO (normally open)

ABV-NO

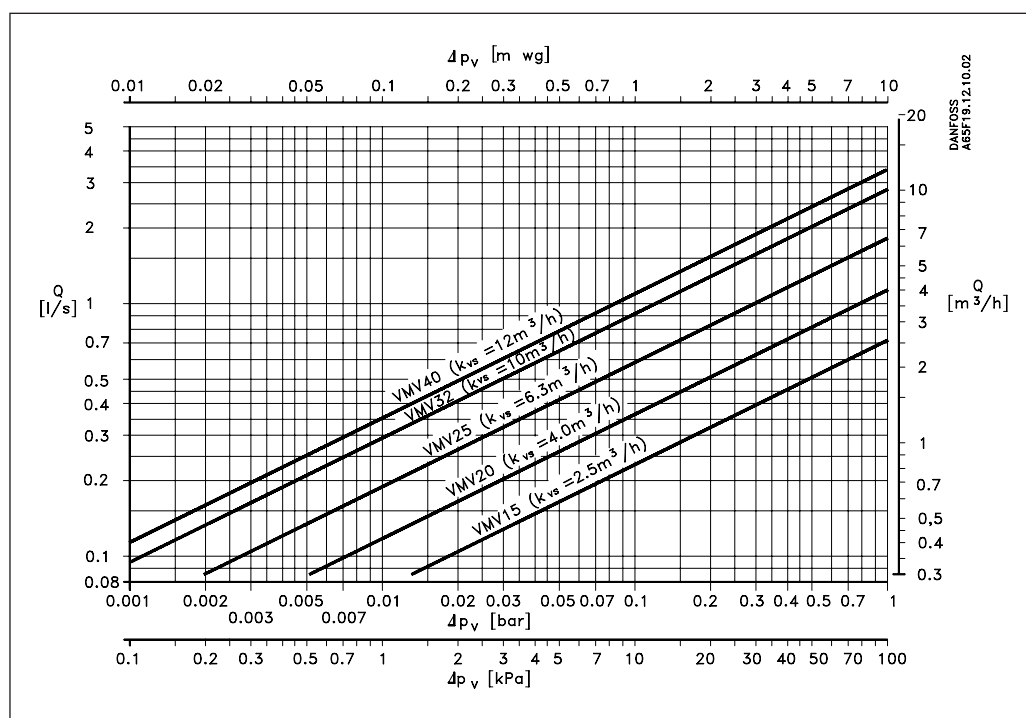


NO (normally open)

ABV-NO



Sizing



$$Q = k_{VS} \sqrt{\Delta p_v}$$

Q - actual flow in valve in m³/h

k_{VS} - flow in valve in m³/h with $\Delta p_v = 1$ bar

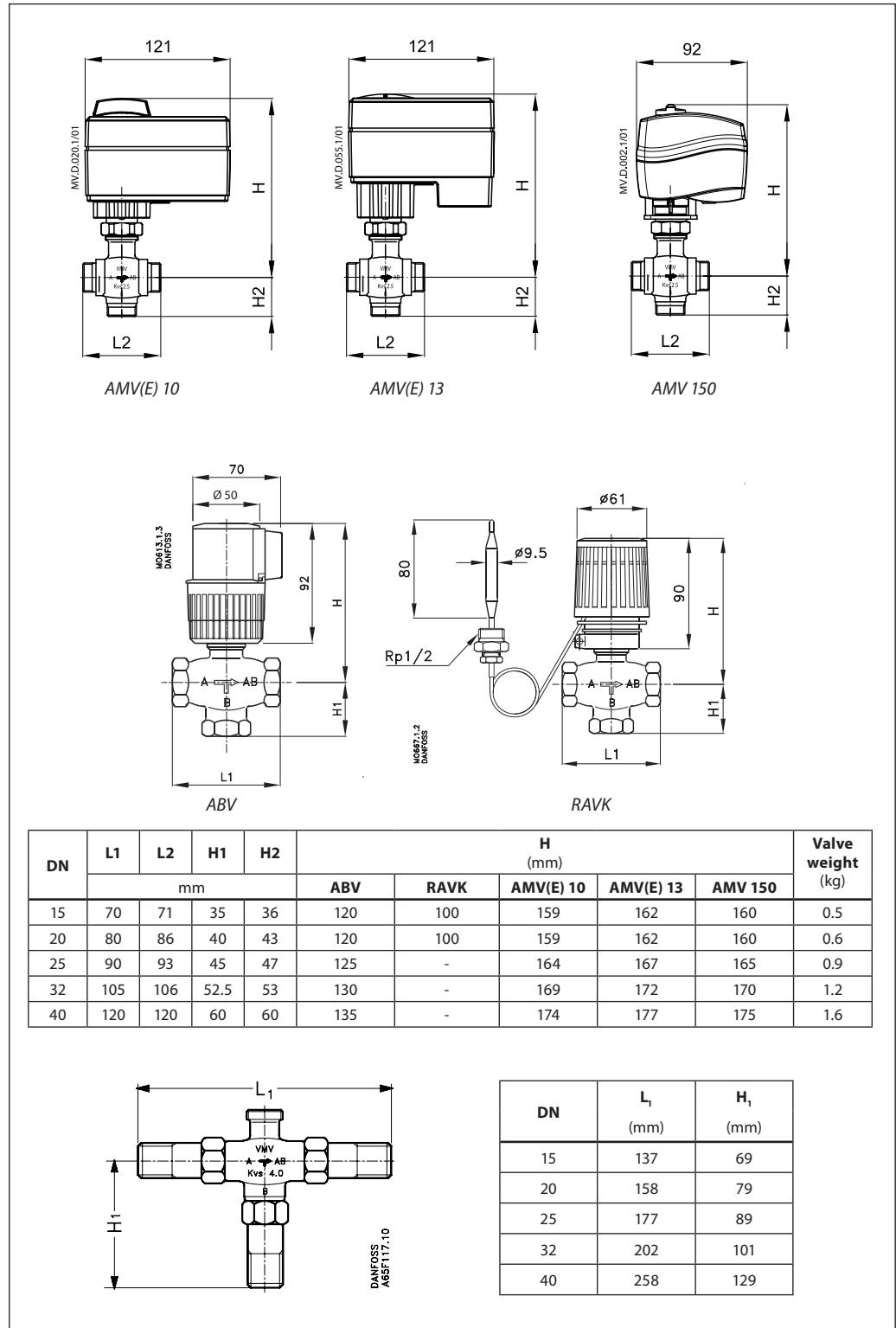
Δp_v - differential pressure across valve (bar)

Type	Max Δp_v
VMV 15	0.6 bar
VMV 20	0.5 bar
VMV 25	0.3 bar
VMV 32	0.2 bar
VMV 40	0.2 bar

Data sheet

3-way seated valve VMV (PN 16)

Dimensions



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