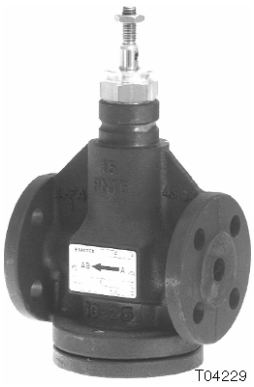
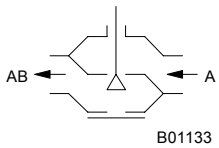
V6F, V6G, V6S: Through flanged valves (nominal pressure 16, 25, 40 bar)

For continuous control of hot, warm and cold water or of air (V6G, V6S also for steam). Valve body of grey cast iron (GG25), ductile cast iron (GGG40.3) or cast steel (GSC25); spindle, seat and plug of stainless steel, metallic sealing. Stuffing box with Teflon seal. Valve curve is either equal percentage or linear. When spindle is extracted, passage A-AB is closed.





		Grey cast iron PN 16		Ductile cast iron PN 25		Cast steel PN 40	
Nom. dia. DN	k_{vs}-value m^3/h	Type	Wt. kg	Type	Wt. kg	Type	Wt. kg
15	0.16	**V6F 15 F374**	4.7	**V6G 15 F374**	4.9	**V6S 15 F375**	4.9
15	0.25	**V6F 15 F364**	4.7	**V6G 15 F364**	4.9	**V6S 15 F365**	4.9
15	0.4	**V6F 15 F354**	4.7	**V6G 15 F354**	4.9	**V6S 15 F355**	4.9
15	0.63	**V6F 15 F344**	4.7	**V6G 15 F344**	4.9	**V6S 15 F345**	4.9
15	1	**V6F 15 F334**	4.7	**V6G 15 F334**	4.9	**V6S 15 F335**	4.9
15	1.6	**V6F 15 F324**	4.7	**V6G 15 F324**	4.9	**V6S 15 F325**	4.9
15	2.5	**V6F 15 F314**	4.7	**V6G 15 F314**	4.9	**V6S 15 F315**	4.9
15	4	**V6F 15 F304**	4.7	**V6G 15 F304**	4.9	**V6S 15 F305**	4.9
20	6.3	**V6F 20 F304**	6	**V6G 20 F304**	6	**V6S 20 F305**	6.6
25	4	**V6F 25 F924**	6.9	**V6G 25 F924**	7	**V6S 25 F925**	7.7
25	6.3	**V6F 25 F914**	6.9	**V6G 25 F914**	7	**V6S 25 F915**	7.7
25	10	**V6F 25 F304**	6.9	**V6G 25 F304**	7	**V6S 25 F305**	7.7
32	16	**V6F 32 F304**	8.9	**V6G 32 F304**	8.9	**V6S 32 F305**	9.5
40	25	**V6F 40 F304**	11.7	**V6G 40 F304**	12.6	**V6S 40 F305**	12.6
50	16	**V6F 50 F924**	15.6			**V6S 50 F925**	16.4
50	25	**V6F 50 F914**	15.6			**V6S 50 F915**	16.4
50	40	**V6F 50 F304**	15.6	**V6G 50 F304**	16.8	**V6S 50 F305**	16.4
65	63	**V6F 65 F304**	25			**V6S 65 F305**	26
80	40	**V6F 80 F924**	36.4			**V6S 80 F925**	43
80	63	**V6F 80 F914**	36.4			**V6S 80 F915**	43
80	100	**V6F 80 F304**	36.4			**V6S 80 F305**	43
100	160	**V6F 100 F304**	52			**V6S 100**	58
125	250	**V6F 125 F304**	75			**V6S 125**	85
150	340	**V6F 150 F304**	100			**V6S 150**	109
		Operating temp. [1]: –15...180 °C Operating pressure: up to 120 °C 16 bar up to 180 °C 13 bar Stuffing box brass/Teflon		Operating temp. [1]: –15...240 °C Operating pressure: up to 120 °C 25 bar up to 240 °C 20 bar Stuffing box brass/Teflon		Operating temp. [1]: –40...240 °C Operating pressure: up to 120 °C 40 bar up to 240 °C 32 bar Stuffing box stainl. steel/Teflon	

Valve curve:	equal-percentage or linear	Dimension drawing	7M102, 7M103
Control ratio:	50 (typical)	Fitting instructions	
Leakage rate [2]	≤ 0.05% of k_{vs}-value	Valve	MV 505146
		Complete unit	MV 43190
Valve stroke (DN 15...50)	14 mm	Assembly AV 43...45	MV 40.136
Valve stroke (DN 65...150)	40 mm	Assembly AVP142	MV 505766

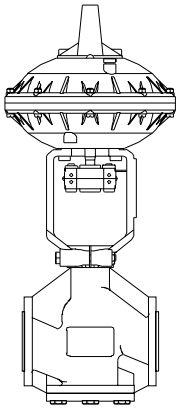
Variants

F2 . . With linear curve (F9 . . availabel with equal-percent. only)

Accessories

0217268 . . . Stuffing-box heating 15 W, for media below 0 °C, DN 15...50, MV 505498
0217639 . . . Stuffing-box heating 15 W, for media below 0 °C, DN 65...150, MV 505498
Specify when ordering: 24 V = /001, 230 V = /004
0360715 000 Stuffing box of stainl. steel/Teflon for DN 15...50; spare part, MV 505245
0360718 000 Stuffing box of stainl. steel/Teflon for DN 65...150; spare part, MV 505245
0361259 000 Intermediate piece for DN 15...50 with AVP142 valve drive.
Required for media above 130 °C. Assembled as per MV 505495
0361 . . . /. . . Soft sealing for DN 15...50 (see table on page 76.18 or 76.526/5)
0361316 . . . Counter flange for V6F (see table on page 76.18 or 76.526/5)
0360390 . . . Counter flange for V6G and V6S (see table on page 76.18 or 76.526/5)
0378034 001 Valve with packing box, silicon-free; synthetic lubricant; max. 130 °C
0378034 002 Valve with packing box, grease-free; max. 240 °C

1) At temp. under 0 °C, use stuffing-box heating (accessory); over 130 °C, use intermediate piece (accessory)
2) With soft seal: leakage rate < 0,0001% of k_{vs}, available as accessory for DN 15...50, (not for Type F9 . .)



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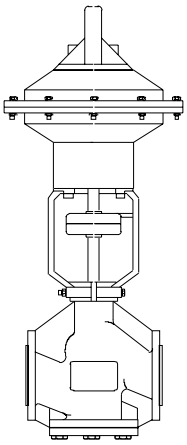


B01538

Combination: V6F, PN 16 with pneumatic drive AVP142...AV45

Drive Max. press. p_{stat} Running time [1]	AVP142 F001 [2] ≤ 10 bar 10 s			AV43 P15 ≤ 16 bar 14 s			AV43 P10 [2] ≤ 16 bar 14 s			AV44 P10 ≤ 16 bar 20 s		
Valve	Δp_{max}	Δp_s		Δp_{max}	Δp_s		Δp_{max}	Δp_s		Δp_{max}	Δp_s	
V6F 15 F304	10.0	22.3		10	16		10	16		–	–	
V6F 20 F304	10.0	13.6		10	16		10	16		–	–	
V6F 25 F304	7.5	7.5		10	10		10	16		10	16	
V6F 32 F304	7.5	7.5		10	10		10	16		10	16	
V6F 40 F304	3.6	3.6		5	5		9.0	10		9	16	
V6F 50 F304	2.3	2.3		3	3		6.5	6.5		8	13	

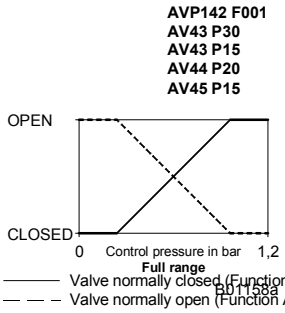
Drive Max. press. p_{stat} Running time [1]	AV43 P30 ≤ 16 bar 24 s			AV44 P20 ≤ 16 bar 40 s			AV45 P15 ≤ 16 bar 90 s			AV45 P10 ≤ 16 bar 90 s		
Valve	Δp_{max}	Δp_s		Δp_{max}	Δp_s		Δp_{max}	Δp_s		Δp_{max}	Δp_s	
V6F 65 F304	2.5	2.5		4.5	4.5		4.5	9.0		4.5	16	
V6F 80 F304	1.5	1.5		3.0	3.0		3.5	6.0		3.5	12	
V6F 100 F304	1.0	1.0		2.0	2.0		3.0	3.5		3	7	
V6F 125 F304	0.6	0.6		1.2	1.2		2.0	2.5		2	5	
V6F 150 F304	0.4	0.4		0.8	0.8		1.0	1.5		1	3	

1) Based on the Centair air capacity (400 l_n/h) and on a line of 20 m in length and 4 mm in diameter

2) Unsuitable for use with XSP 31 or 31G positioners (due to static friction in the Teflon packing box).

Pressure-stroke curve (with valve fitted)

Complete type designation: Valve and drive each with F-variant.



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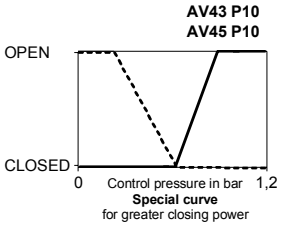
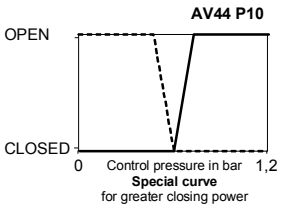


B01159



B01160

Valve: F-variant, technical data and accessories, see valve type table.
Drive: F-variant, technical data, accessories and fitting position, see Sect. 71.
Example: V6F 15 F304/AVP142 F001

Δp_{max}[bar]= Max. permissible pressure difference across the valve at which the drive can still safely open and close the valve.

Δp_s [bar]= Max. permissible pressure difference across the valve during malfunction at which the drive can still close the valve.

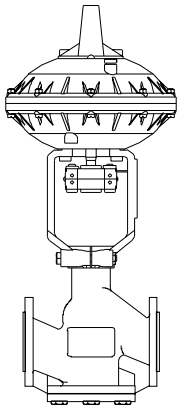
p_{stat} [bar]= Dormant press. at valve when pump is inactive. Fluidic level of the plant and the press. increase caused by the press. tank or the steam pressure should be taken into account.

Combination: V6G, PN 25 with pneumatic drive AVP142...AV44

Drive Max. press. p_{stat} Running time [1]	AVP142 F001 [2] ≤ 10 bar 10 s			AV43 P15 ≤ 25 bar 14 s			AV43 P10 [2] ≤ 25 bar 14 s			AV44 P10 ≤ 25 bar 20 s		
Valve	Δp_{max}	Δp_s		Δp_{max}	Δp_s		Δp_{max}	Δp_s		Δp_{max}	Δp_s	
V6G 15 F304	16.0	22.3		16	25		16	25		–	–	
V6G 20 F304	13.6	13.6		16	19		16	25		–	–	
V6G 25 F304	7.5	7.5		10	10		16	21		16	25	
V6G 32 F304	7.5	7.5		10	10		16	21		16	25	
V6G 40 F304	3.6	3.6		5	5		10	10		16	20	
V6G 50 F304	2.3	2.3		3	3		6.5	6.5		13	13	

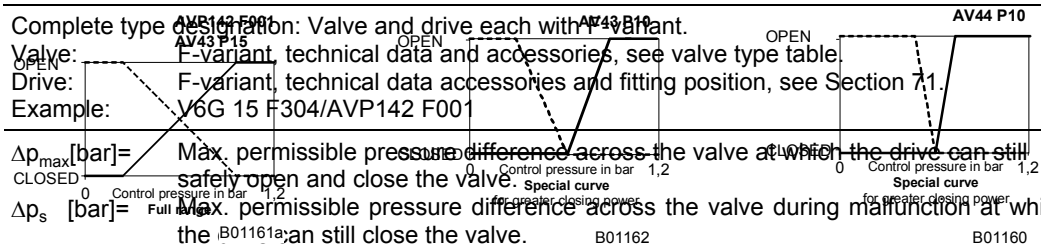
1) Based on the Centair air capacity (400 l_n/h) and on a line of 20 m in length and 4 mm in diameter

2) Unsuitable for use with XSP 31 or 31G positioners (due to static friction in the Teflon packing box).



B09797

Pressure-stroke curve (with valve fitted)



Complete type designation: Valve and drive each with F-variant.

Valve: F-variant, technical data and accessories, see valve type table.

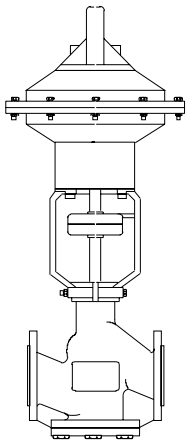
Drive: F-variant, technical data accessories and fitting position, see Section 71.

Example: V6G 15 F304/AVP142 F001

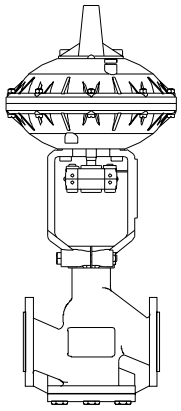
Δp_{max} [bar]= Max. permissible pressure difference across the valve at which the drive can still safely open and close the valve.

Δp_s [bar]= Max. permissible pressure difference across the valve during malfunction at which the drive can still close the valve.

P_{stat} [bar]= Dormant press. at valve when pump is inactive. Fluidic level of the plant and the press. increase caused by the press. tank or the steam pressure should be taken into account.



B01539



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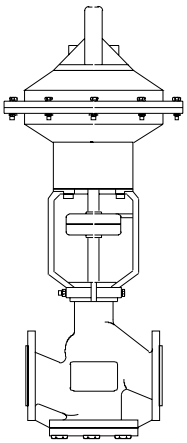


B01539

Combination: V6S, PN 40 with pneumatic drive AVP142...AV45

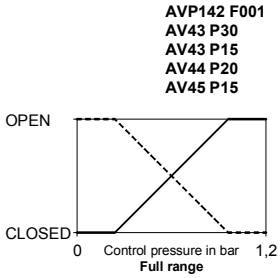
Drive Max. press. p_{stat} Running time [1]	AVP142 F001 [2] ≤ 10 bar 10 s			AV43 P15 ≤ 25 bar 14 s			AV43 P10 [2] ≤ 25 bar 14 s			AV44 P10 ≤ 25 bar 20 s		
Valve	Δp_{max}	Δp_s		Δp_{max}	Δp_s		Δp_{max}	Δp_s		Δp_{max}	Δp_s	
V6S 15 F305	16.0	22.3		16	25		16	25		–	–	
V6S 20 F305	13.6	13.6		16	19		16	25		–	–	
V6S 25 F305	7.5	7.5		10	10		16	21		16	25	
V6S 32 F305	7.5	7.5		10	10		16	21		16	25	
V6S 40 F305	3.6	3.6		5	5		10	10		16	20	
V6S 50 F305	2.3	2.3		3	3		6.5	6.5		13	13	

Drive Max. press. p_{stat} Running time [1]	AV43 P30 ≤ 16 bar 24 s			AV44 P20 ≤ 40 bar 40 s			AV45 P15 ≤ 40 bar 90 s			AV45 P10 ≤ 40 bar 90 s		
Valve	Δp_{max}	Δp_s		Δp_{max}	Δp_s		Δp_{max}	Δp_s		Δp_{max}	Δp_s	
V6S 65 F305	2.5	2.5		4.5	4.5		9.0	9.0		10	16	
V6S 80 F305	1.5	1.5		3.0	3.0		6.0	6.0		7.0	12	
V6S 100 F305	1.0	1.0		2.0	2.0		3.5	3.5		4.5	7	
V6S 125 F305	0.6	0.6		1.2	1.2		2.5	2.5		3.0	5	
V6S 150 F305	0.4	0.4		0.8	0.8		1.5	1.5		2.0	3	

1) Based on the Centair air capacity (400 l_n/h) and on a line of 20 m in length and 4 mm in diameter

2) Unsuitable for use with XSP 31 or 31G positioners (due to static friction in the Teflon packing box).

Pressure-stroke curve (with valve fitted)



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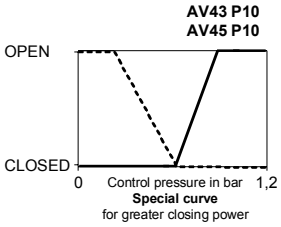

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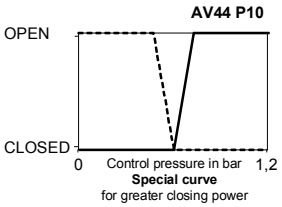


B01160

——— Valve normally closed (Function E, as delivered ex works)
— — — Valve normally open (Function A)

Complete type designation: Valve and drive each with F-variant.

Valve: F-variant, technical data and accessories, see valve type table.

Drive: F-variant, technical data, accessories and fitting position, see Section 71.

Example: V6S 15 F305/AVP142 F001

Δp_{max}[bar]= Max. permissible pressure difference across the valve at which the drive can still safely open and close the valve.

Δp_s [bar]= Max. permissible pressure difference across the valve during malfunction at which the drive can still close the valve.

p_{stat} [bar]= Dormant press. at valve when pump is inactive. Fluidic level of the plant and the press. increase caused by the press. tank or the steam pressure should be taken into account.

Accessory for flange valves V6F, G, S and B6F, G, S

0361. . . / . . . Plug and spindle, complete, with soft seal, fitted ex works in valve, for through flange valve V6F, V6G, V6S and for three-way flange valve B6F, B6G, B6S of nominal diameters DN 15...50.
Leakage rate for control flow A-AB < 0,0001% of k_{vs}-value,
Plug with glass-fibre-reinforced PTFE sealing ring.
Max. operating temperature: 180 °C for V6F, B6F
Max. operating temperature: 240 °C for V6G, V6S, B6G, B6S

Marked „W“ on the type plate

Nom. dia. DN	k_{vs}-value m^3/h	Plug/spindle for equal-perc. curve	Valve F-variant	Plug/spindle for linear curve	Valve F-variant	
15	0.16	0361397 000 [1]	F37 .	0361402 000 [1]	F27 .	
15	0.25	0361396 000 [1]	F36 .	0361401 000 [1]	F26 .	
15	0.4	0361395 000 [1]	F35 .	0361400 000 [1]	F25 .	
15	0.63	0361394 000 [1]	F34 .	0361399 000 [1]	F24 .	
15	1	0361393 000 [1]	F33 .	0361398 000 [1]	F23 .	
15	1.6	0361319 000	F32 .	0361322 000	F22 .	
15	2.5	0361318 000	F31 .	0361321 000	F21 .	
15	4	0361317 000	F30 .	0361320 000	F20 .	
20	6.3	0361323 000	F30 .	0361324 000	F20 .	
25	10	0361325 000	F30 .	0361326 000	F20 .	
32	16	0361327 000	F30 .	0361328 000	F20 .	
40	25	0361329 000	F30 .	0361330 000	F20 .	
50	40	0361331 000	F30 .	0361332 000	F20 .	

[1] Only for through flange valve

Specify when ordering: e.g. through valve: V6F 50 F304+0361331 000
or three-way valve: B6F 50 F304+0361331 000

Counter flange for through and three-way valves

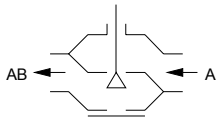
0360390 . . . Counter flange, smooth, for PN 25 and PN 40 incl. asbestos-free seal.
2 pieces required for through valve, 3 pieces for three-way valve.
DN 15 20 25 32 40 50 65 80 100 125 150

361316 . . . Counter flange, smooth, for PN 10 and PN 16 incl. asbestos-free seal.
2 pieces required for through valve, 3 pieces for three-way valve.
DN 15 20 25 32 40 50 65 80 100 125 150

Specify when ordering: DN 25 = /025, DN 40 = /040 etc.

Operation
Using a pneumatic drive, the valve can be moved to any position.
When the spindle is extracted, control passage A-AB is closed. Where pneumatic drives are used, the valves should not close with the pressure, otherwise pressure surges ensue.

Closing against the operating pressure



Engineering and fitting notes
Can be fitted in any position, except facing downwards, for temperatures up to 240 °C.
If the temperature of the medium is above 180 °C, the unit should be fitted horizontally. The adaptor 361259 should be used for the combination with the AVP142 F001 valve drive when the temperature is above 130 °C. The adaptor can also be used as an extension when the pipe insulation is very thick.
The ingress of condensate, dripping water etc., along the stem and into the drive should be prevented.
When fitting the drive to the valve, care must be taken not to turn the valve plug on the two stops (seat), thus damaging the seal.
The drive can be equipped with the XSP 31 or XSP 31G positioner should any of the following be demanded: a split range; an improvement in the setting accuracy; an increase in positional speed or air capacity; reversible direction of action (see Section 79).

Additional technical details

Type	Δp_v
V6F 15 F. 74	10
V6F 15 F. 64	10
V6F 15 F. 54	10
V6F 15 F. 44	10
V6F 15 F. 34	10
V6F 15 F. 24	10
V6F 15 F. 14	10
V6F 15 F. 04	10
V6F 20 F. 04	10
V6F 25 F. 04	10
V6F 32 F. 04	10
V6F 40 F. 04	9
V6F 50 F. 04	8
V6F 65 F. 04	4.5
V6F 80 F. 04	3.5
V6F 100 F. 04	3
V6F 125 F. 04	2
V6F 150 F. 04	1

Type	Δp_v
V6G 15 F. 74	16
V6G 15 F. 64	16
V6G 15 F. 54	16
V6G 15 F. 44	16
V6G 15 F. 34	16
V6G 15 F. 24	16
V6G 15 F. 14	16
V6G 15 F. 04	16
V6G 20 F. 04	16
V6G 25 F. 04	16
V6G 32 F. 04	16
V6G 40 F. 04	16
V6G 50 F. 04	16

Type	Δp_v
V6S 15 F. 75	16
V6S 15 F. 65	16
V6S 15 F. 55	16
V6S 15 F. 45	16
V6S 15 F. 35	16
V6S 15 F. 25	16
V6S 15 F. 15	16
V6S 15 F. 05	16
V6S 20 F. 05	16
V6S 25 F. 05	16
V6S 32 F. 05	16
V6S 40 F. 05	16
V6S 50 F. 05	16
V6S 65 F. 05	10
V6S 80 F. 05	7
V6S 100 F. 05	4.5
V6S 125 F. 05	3
V6S 150 F. 05	2

Δp_v in bar = max. pressure difference across the valve in any stroke position, limited by the noise level and erosion (max. values without being limited by the force of the drive).

Additional details on accessories

0217268 . . .	Heating for stuffing box 15 W; housing of light metal; connecting cable 3 × 0,75 mm², earth connection, 1 m in length, cable end sleeves; degree of protection IP 54
0217639 . . .	Heating for stuffing box 15 W; housing of light metal; connecting cable 3 × 0,75 mm², earth connection, 1 m in length, cable end sleeves; degree of protection IP 54
0360715 000	Stuffing box of stainless steel / Teflon for V6F, B6F and V6G, B6G valve, DN 15...50, marked "N" on the specification plate
0360718 000	Stuffing "box" of stainless steel / Teflon for V6F, B6F and V6G, B6G valve DN 65...150, marked" N" on the specification plate

Additional details on model types

Valve body for V6F valve of gray cast iron GG25; for V6G valve of ductile cast iron GGG40.3; for V6S valve of cast steel GS-C 25N with smooth bored flanges as per DIN 2501, VSM 18643. Valve fitting width as per DIN 3202. Flat seal of copper and asbestos-free material at the body of the valve. Stuffing box of brass with Teflon packing for V6F and V6G valves; of stainless steel with Teflon packing for V6S valve. Valve body is coloured anthracite grey (RAL 7016) and is matt.

Material numbers as per DIN

	Type	Material no.	Description	DIN norm
Valve body	V6F	EN-JL 1040	EN-GJL-250 (GG25)	EN 1561
Valve body	V6G	EN-JS 1025	EN-GJS-400-18-LT (GGG 40.3)	EN 1563
Valve body	V6S	1.0619	GP 240 GH (GS-C 25 N)	EN 10213-2
Valve seat	V6F, V6G, V6S	1.4021	X 20 Cr 13	EN 10088-3
Spindle - plug	V6F, V6G, V6S	1.4305	X 8 CrNiS 18 9	EN 10088-3
Stuffing box	V6F, V6G	2.0401	Cu Zn 39 Pb3	17 660
Stuffing box	V6S	1.4021	X 20 Cr 13	EN 10088-3

Explanation of terms used

Δp_v:

Maximum permissible pressure difference across the valve in any stroke position, limited by the noise level and erosion.

The valve as a traversed element is defined by this parameter specifically in its hydraulic behaviour. By monitoring cavitation, erosion and the noise thus produced, improvements can be achieved in both life expectancy and durability.

Δp_{max}:

Maximum permissible pressure difference across the valve at which the drive (control pressure 0 or 1.2 bar) can firmly open and close the valve.

Static pressure and fluidic influences are taken into account. This value helps to maintain smooth stroke action and valve sealing. In doing so, the valve's Δp_v value is not exceeded.

Δp_s:

Maximum permissible pressure difference across the valve in the event of a malfunction (e.g. loss of supply pressure, excess temperature and pressure, burst pipe) at which the drive can firmly close the valve and, if necessary, hold the full operating pressure against atmospheric pressure. Since this is a safety function with `fast' stroke, Δp_s can be larger than Δp_{max} or, respectively, Δp_v. This value is valid only when the drive is fitted with either a relay (RUEP) or converter (XUEP). The resultant fluidic disturbances are soon overcome and play a minor role here.

On the three-way valves, the values apply only for the control passage.

Δp_{stat}:

Line pressure behind the valve. This corresponds largely to the dead pressure when the pump is switched off, e.g. due to the level of liquid in the plant, an increase in pressure via the pressure store, steam pressure etc.

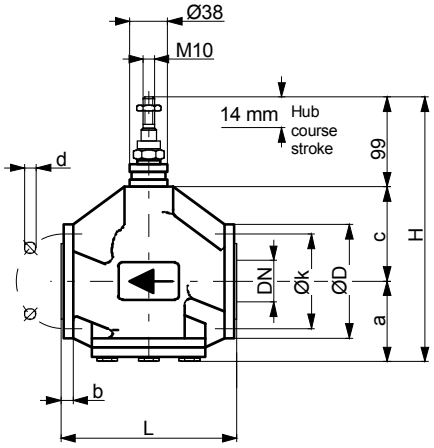
Where the valves close with the pressure, the static pressure plus the pump pressure should be used.

Technical information

- Pressure and temperature specifications — DIN 2401
- Flow parameters — VDI/VDE 2173
- Sauter slide rule for valve sizing — 7 090011 003
- Slide rule manual — 7 000129 003
- PC program "Valvedim" for Sauter valve sizing — 7 000675 003
- Technical manual "Manipulating units" — 7 000477 003
  Parameters, Notes on installation, Control, Pneumatic manipulating units, General information

Dimension drawings 7M102

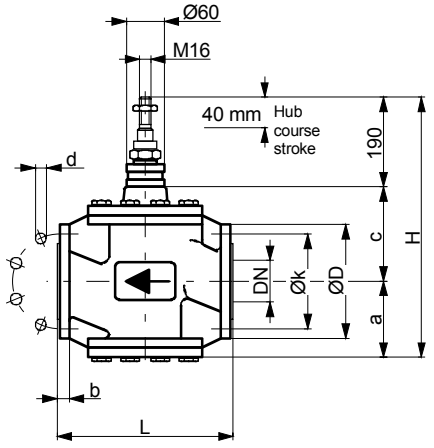
V6F, DN 15...50



DN	a	c	H	L	D	k	d	b
15	73	73	245	130	95	65	14 (4x)	14
20	80	80	259	150	105	75	14 (4x)	16
25	80	83	262	160	115	85	14 (4x)	16
32	89	90	278	180	140	100	18 (4x)	18
40	102	99	300	200	150	110	18 (4x)	18
50	117	104	320	230	165	125	18 (4x)	20

M360900c

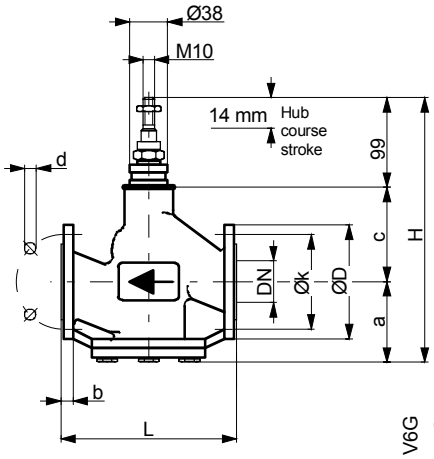
V6F, DN 65...150



DN	a	c	H	L	D	k	d	b
65	127	139	456	290	185	145	18 (4x)	20
80	140	148	478	310	200	160	18 (8x)	22
100	160	168	518	350	220	180	18 (8x)	24
125	186	192	568	400	250	210	18 (8x)	26
150	217	222	629	480	285	240	22 (8x)	26

M360830a

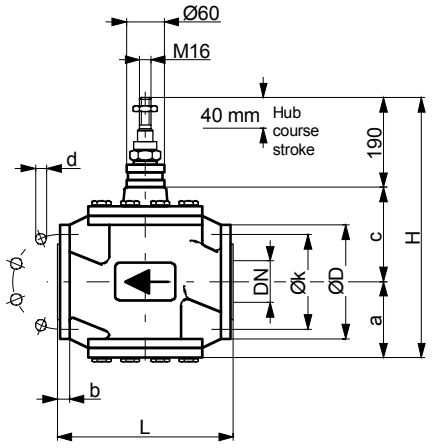
V6G, V6S, DN 15...50



DN	a	c	H	L	D	k	d	V6G b	V6S b
15	73	73	245	130	95	65	14 (4x)	16	16
20	80	80	259	150	105	75	14 (4x)	18	18
25	80	83	262	160	115	85	14 (4x)	18	18
32	89	90	278	180	140	100	18 (4x)	20	18
40	102	99	300	200	150	110	18 (4x)	20	18
50	117	104	320	230	165	125	18 (4x)	22	20

M360902c

V6S, DN 65...150

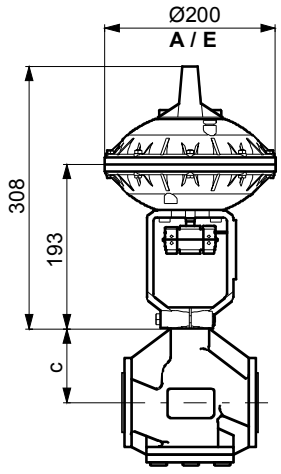


DN	a	c	H	L	D	k	d	b
65	127	139	456	290	185	145	18 (8x)	22
80	140	148	478	310	200	160	18 (8x)	24
100	160	168	518	350	235	190	22 (8x)	24
125	186	192	568	400	270	220	26 (8x)	26
150	217	222	629	480	300	250	26 (8x)	28

M360831a

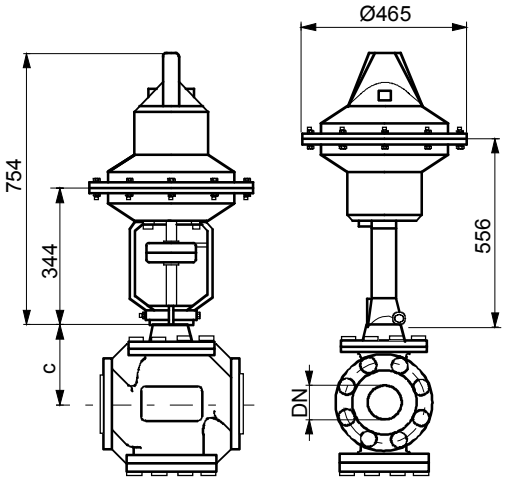
Dimension drawings 7M103
Valves V6F, V6G, V6S with reversible pneumatic drives

AV42



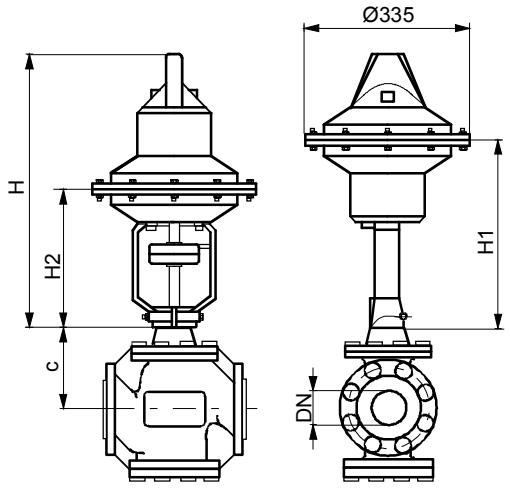
B09798

AV45



B01201

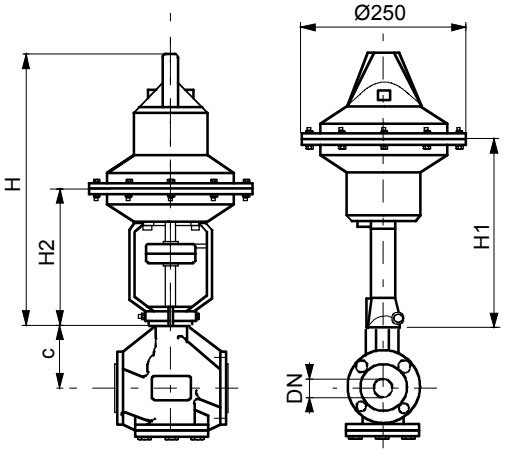
AV43



Type	H	H1	H2	Hub Course Stroke
AV44 P10	446	326	192	14
AV44 P20	556	416	282	40

B01200

AV44



Type	H	H1	H2	Hub Course Stroke
AV43 P10, P15	417	288	191	14
AV43 P30	507	378	281	40

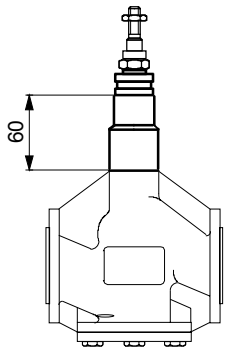
B01199

Fitting width:

Take measurement ‘c' and number of flange holes from valve dimension drawing.

Note increase in length of 60 mm due to intermediate insulating piece.
(accessory no. 0361259)

Intermediate piece.



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