















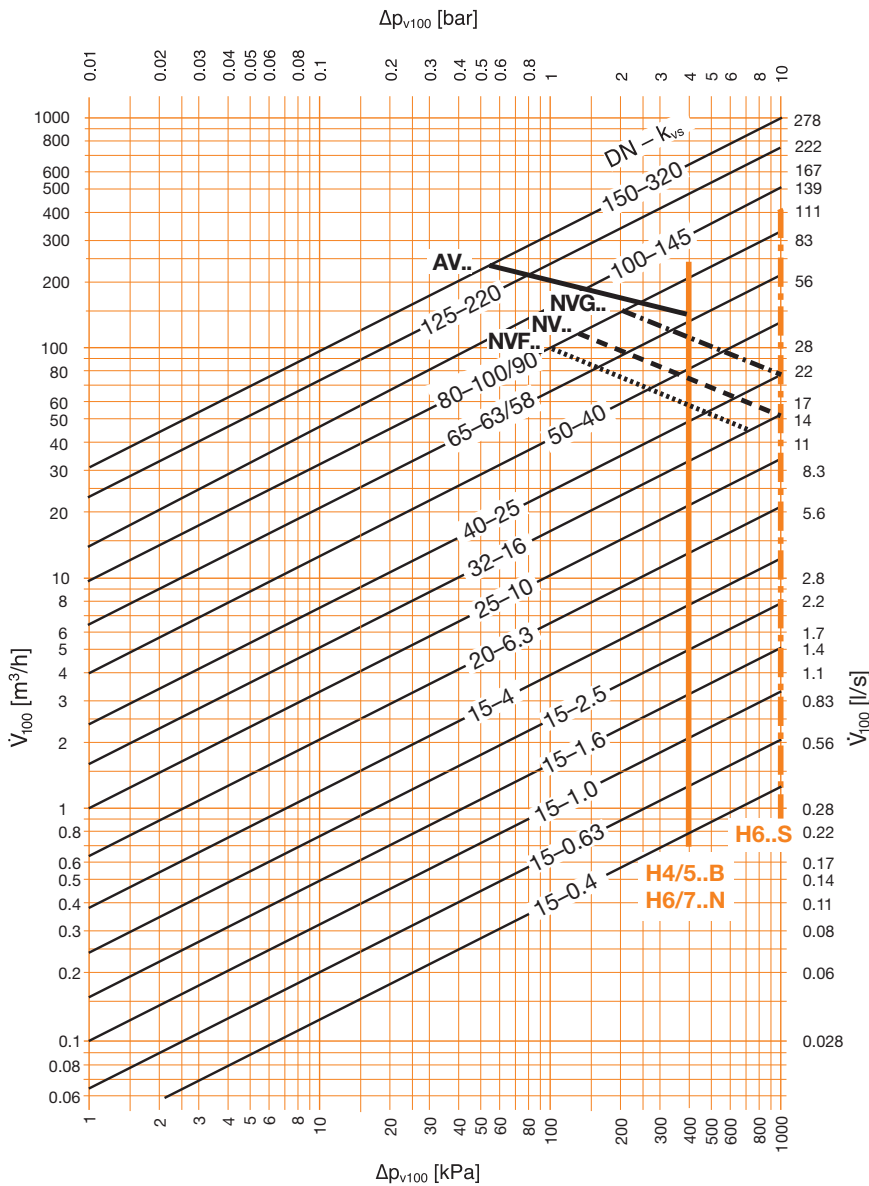
Maximum closing and differential pressures

					20 mm	20 mm	20mm	50 mm			
					800 N	1000 N ²⁾	1600 N	2000 N			
					NVF	NV..	NVG..	AV..			
											
Fast running	Emergency control f.	24 V AC / DC	230 V AC	Control	3-point		Modulating, multifunctional				
					•	•	•	•	•	•	•
					3P	3P	NV24-3	NV230-3	AV24-3	AV230-3	
					0...10 V	0...10 V	NV24-MFT	NVY24-MFT	NVG24-MFT	AV24-MFT	AVY24-MFT
					0...10 V	0...10 V	NVF24-MFT(-E)				
PN 16		H4..B	H5..B								
External thread (ISO 228)											
(-10°C) ¹⁾ +5°C...120°C											
DN	k _{vs}			Δp _s	Δp _{max}	Δp _s	Δp _{max}	Δp _s	Δp _{max}		
[mm]	[m ³ /h]			[kPa]	[kPa]	[kPa]	[kPa]	[kPa]	[kPa]		
15	0,63	H411B	H511B	1600	400	1600	400	1600	400		
15	1	H412B	H512B	1600	400	1600	400	1600	400		
15	1.6	H413B	H513B	1600	400	1600	400	1600	400		
15	2.5	H414B	H514B	1600	400	1600	400	1600	400		
15	4	H415B	H515B	1600	400	1600	400	1600	400		
20	6.3	H420B	H520B	1320	400	1600	400	1600	400		
25	10	H425B	H525B	1080	400	1350	400	1600	400		
32	16	H432B	H532B	800	400	1000	400	1600	400		
40	25	H440B	H540B	440	400	550	400	980	400		
50	40	H450B	H550B	280	280	350	350	600	400		
PN 16		H6..N	H7..N								
Flange (ISO 7005)											
(-10°C) ¹⁾ +5°C...120°C											
DN	k _{vs}			Δp _s	Δp _{max}	Δp _s	Δp _{max}	Δp _s	Δp _{max}	Δp _s	Δp _{max}
[mm]	[m ³ /h]			[kPa]	[kPa]	[kPa]	[kPa]	[kPa]	[kPa]	[kPa]	[kPa]
15	0.63	H611N	H711N	1600	400	1600	400	1600	400		
15	1,6	H613N	H713N	1600	400	1600	400	1600	400		
15	4	H615N	H715N	1600	400	1600	400	1600	400		
20	6.3	H620N	H720N	1320	400	1600	400	1600	400		
25	10	H625N	H725N	1080	400	1350	400	1600	400		
32	16	H632N	H732N	800	400	1000	400	1600	400		
40	25	H640N	H740N	440	400	550	400	980	400		
50	40	H650N	H750N	280	280	350	350	600	400		
65	58	H664N	H764N	160	160	200	200	320	320		
65	63	H665N	H765N							400	400
80	90	H679N	H779N	100	100	135	135	210	210		
80	100	H680N	H780N							270	270
100	145	H6100N	H7100N							160	160
125	220		H7125N							90	90
150	320		H7150N							60	60
PN 16		H6..S									
Flange (ISO 7005)											
+5°C...150°C											
DN	k _{vs}			Δp _s	Δp _{max}	Δp _s	Δp _{max}	Δp _s	Δp _{max}	Δp _s	Δp _{max}
[mm]	[m ³ /h]			[kPa]	[kPa]	[kPa]	[kPa]	[kPa]	[kPa]	[kPa]	[kPa]
15	0.4	H610S		1600	1000	1600	1000	1600	1000		
15	0.63	H611S		1600	1000	1600	1000	1600	1000		
15	1	H612S		1600	1000	1600	1000	1600	1000		
15	1.6	H613S		1600	1000	1600	1000	1600	1000		
15	2.5	H614S		1600	1000	1600	1000	1600	1000		
15	4	H615S		1600	1000	1600	1000	1600	1000		
20	4	H619S		1320	1000	1600	1000	1600	1000		
20	6.3	H620S		1320	1000	1600	1000	1600	1000		
25	6.3	H624S		1080	1000	1350	1000	1600	1000		
25	10	H625S		1080	1000	1350	1000	1600	1000		
32	16	H632S		800	800	1000	1000	1600	1000		
40	25	H640S		440	440	550	550	980	980		
50	40	H650S		280	280	350	350	600	600		
65	58	H664S		150	150	200	200	320	320		
65	63	H665S								400	400
80	100	H680S								270	270
100	145	H6100S								160	160
125	220	H6125S								90	90
150	320	H6150S								50	50

¹⁾ -10 °C with stem heating on request

²⁾ 1000 N closing force / 800 N inhibiting force

Sizing diagram for globe valves



Legend

Δp_{MAX}
Maximum permitted pressure difference for long service life across control path A-AB, referred to the whole range of opening.

Δp_{V100}
Differential pressure with globe valve fully open

\dot{V}_{100}
Nominal flow rate for Δp_{V100}

Formula for k_{VS}

$$k_{VS} = \frac{\dot{V}_{100}}{\sqrt{\frac{\Delta p_{V100}}{100}}}$$

k_{VS} [m³/h]
 \dot{V}_{100} [m³/h]
 Δp_{V100} [kPa]

Definition of Δp_s

Closing pressure at which the linear actuator can still seal the valve tightly allowing for the appropriate leakage rate.

Δp_{max} of valves

- H4..B / H5..B / H6..N / H7..N
- - - H6..S

Δp_s H4/5..B, H6/7..N, H6..S

- NVF.. linear actuators with an actuating force of 800 N
- - - NV.. linear actuators with an actuating force of 1000 N
- - - NVG.. linear actuators with an actuating force of 1600 N
- AV.. linear actuators with an actuating force of 2000 N

Selecting globe valves

kv		Technical characteristics of globe valves for the modulating control of cold, warm and hot water																				
		Charact.: equal-percentage Rated pressure: 1600 kPa (PN16)																				
		For more technical data, refer to pages 12-16																				
k_{VS} [m³/h]		0.4	0.63	1	1.6	2.5	4	4	6.3	6.3	10	16	25	40	58	90	63	100	145	220	320	
DN [mm]		15	15	15	15	15	15	20	20	25	25	32	40	50	65	80	65	80	100	125	150	
Connection		External thread (ISO 228)																				
2-way		-	H411B	H412B	H413B	H414B	H415B	-	H420B	-	H425B	H432B	H440B	H450B								
3-way		-	H511B	H512B	H513B	H514B	H515B	-	H520B	-	H525B	H532B	H540B	H550B								
Connection		Flange (ISO 7005-2)												Flange (ISO 7005-2)								
2-way		-	H611N	-	H613N	-	H615N	-	H620N	-	H625N	H632N	H640N	H650N	H664N	H679N	H665N	H680N	H6100N			
3-way		-	H711N	-	H713N	-	H715N	-	H720N	-	H725N	H732N	H740N	H750N	H764N	H779N	H765N	H780N	H7100N	H7125N	H7150N	
Connection		Flange (ISO 7005-2)												Flange (ISO 7005-2)								
2-way		H610S	H611S	H612S	H613S	H614S	H615S	H619S	H620S	H624S	H625S	H632S	H640S	H650S	H664S	-	H665S	H680S	H6100S	H6125S	H6150S	