

Closing Pressure with DP

Max. permissible closing pressure for both seat position on flow-to-open $P_2 = 0$

Spring closes port A -> AB or Spring closes port B -> AB

Spring closes on air failure															
Mixing function AB←A B		DN		15	20	25	32	40	50	65	80	100	125	150	
		Seat - ØA/B (mm)		21/20	21/25	27/27	31/32	41/40	51/50	66/60	81/75	101/95	120/120	140/140	
		Standard Kvs-Values		4	6.3	10	16	25	40	63	100	160	250	320	
		Reduced Kvs Values)		2.5	4	6.3	10	16	25	40	63	100	160	250	
		Travel (mm)		20						30			50		
Actuator DP 32	control signal (bar)	Air supply pressure min. (bar)	1.2	I	5.5	3.3	2.6	1.4	-	-	-	-	-	-	
				II	2.3	1	-	-	-	-	-	-	-	-	
				III	-	-	-	-	-	-	-	-	-	-	
			1.6	I	18.6	12.6	10.7	7.2	3.9	2.2	-	-	-	-	-
				II	15.4	10.3	8.7	5.8	3	1.6	-	-	-	-	-
				III	8.6	8	7.1	4.6	1.7	-	-	-	-	-	-
			3.2	I	40	31.4	26.8	18.8	11	6.8	3.7	2.2	1.2	-	-
				II	40	29.1	24.8	17.4	10.2	6.3	3.2	1.9	1	-	-
				III	26.4	25.7	23.2	16.2	8.9	5.4	2.9	1.7	-	-	-
			4.0	I	-	40	40	39.1	23.5	15	-	-	-	-	-
				II	-	40	40	37.7	22.7	14.4	-	-	-	-	-
				III	40	40	40	36.5	21.4	13.6	-	-	-	-	-
			5.3	I	-	-	-	40	32.5	20.8	-	-	-	-	-
				II	-	-	-	40	31.6	20.2	-	-	-	-	-
				III	-	-	-	40	30.3	19.4	-	-	-	-	-
Actuator DP 33	control signal (bar)	Air supply pressure min. (bar)	1.2	I	13.3 ^{c4)}	8.8 ^{c4)}	7.4 ^{c4)}	4.9 ^{c4)}	2.4 ^{c4)}	1.2 ^{c4)}	-	-	-	-	
				II	10.1 ^{c4)}	6.5 ^{c4)}	5.4 ^{c4)}	3.4 ^{c4)}	1.6 ^{c4)}	-	-	-	-	-	
				III	5 ^{a4)}	4.3 ^{a4)}	3.8 ^{a4)}	2.2 ^{a4)}	-	-	-	-	-	-	
			1.6	I	34.2 ^{c4)}	23.7 ^{c4)}	20.2 ^{c4)}	14.1 ^{c4)}	8.1 ^{c4)}	4.9 ^{c4)}	2.5 ⁴⁾	1.4 ⁴⁾	-	-	-
				II	31 ^{c4)}	21.4 ^{c4)}	18.3 ^{c4)}	12.7 ^{c4)}	7.3 ^{c4)}	4.4 ^{c4)}	2.1 ⁴⁾	1.1 ⁴⁾	-	-	-
				III	19.1 ^{a4)}	18.5 ^{a4)}	16.6 ^{a4)}	11.5 ^{a4)}	5.9 ^{a4)}	3.5 ^{a4)}	1.8 ^{a4)}	-	-	-	-
			3.2	I	40 ^{a4)}	40 ^{a4)}	40 ^{a4)}	32.5 ^{a4)}	19.5 ^{a4)}	12.3 ^{a4)}	7 ⁴⁾	4.4 ⁴⁾	2.6 ⁴⁾	-	-
				II	40 ^{a4)}	40 ^{a4)}	40 ^{a4)}	31.1 ^{a4)}	18.6 ^{a4)}	11.8 ^{a4)}	6.5 ⁴⁾	4.1 ⁴⁾	2.4 ⁴⁾	-	-
				III	40 ⁴⁾	40 ⁴⁾	40 ⁴⁾	29.9 ⁴⁾	17.3 ⁴⁾	10.9 ⁴⁾	6.2 ⁴⁾	3.9 ⁴⁾	2.3 ⁴⁾	-	-
			4.5	I	-	-	-	-	-	-	14.8	9.6	6	-	-
				II	-	-	-	-	-	-	14.3	9.3	5.8	-	-
				III	-	-	-	-	-	-	14	9.1	5.7	-	-
			4.4	I	-	-	-	40 ^{a)}	40 ^{a)}	29 ^{a)}	-	-	-	-	-
				II	-	-	-	40 ^{a)}	40 ^{a)}	28.4 ^{a)}	-	-	-	-	-
				III	-	-	-	40	40	27.6	-	-	-	-	-
6.0 (6.0) (2.3 - 3.7)	I	-	-	-	-	-	(40)	20.3	13.3	8.4	-	-			
	II	-	-	-	-	-	(39.5)	19.9	12.9	8.2	-	-			
	III	-	-	-	-	-	(38.7)	19.6	12.8	8.1	-	-			
Actuator DP 34	control signal (bar)	Air supply pressure min. (bar)	1.2	I	-	-	-	-	-	2.5 ^{b)}	1.5 ^{b)}	-	-	-	
				II	-	-	-	-	-	2.1 ^{b)}	1.2 ^{b)}	-	-	-	
				III	-	-	-	-	-	1.8 ^{e)}	1 ^{e)}	-	-	-	
			1.6	I	-	-	-	-	-	-	7 ^{b)}	4.4 ^{b)}	2.7 ^{b)}	1.8	1.2
				II	-	-	-	-	-	-	6.6 ^{b)}	4.1 ^{b)}	2.5 ^{b)}	1.6	1.1
				III	-	-	-	-	-	-	6.3 ^{d)}	3.9 ^{d)}	2.3 ^{d)}	1.4 ^{a)}	-
			3.2	I	-	-	-	-	-	-	16	10.4	6.5	4.5	3.2
				II	-	-	-	-	-	-	15.5	10.1	6.3	4.3	3.1
				III	-	-	-	-	-	-	15.2 ^{b)}	9.9 ^{b)}	6.2 ^{b)}	4.1	3
			4.5 (5.1)	I	-	-	-	-	-	-	(40)	(29.7)	(19)	9.3	6.7
				II	-	-	-	-	-	-	(40)	(29.4)	(18.8)	9.1	6.6
				III	-	-	-	-	-	-	-	-	-	8.9	6.5
			6.0 (6.0) (2.4 - 3.6)	I	-	-	-	-	-	-	-	(34.2)	(21.9)	12.7	9.2
				II	-	-	-	-	-	-	-	(33.9)	(21.7)	12.5	9.1
				III	-	-	-	-	-	-	-	-	-	12.3	9

I. Fig. 450 : PTFE-V-ring unit II. Fig. 450 : PTFE-/ pure graphite-packing III. Fig. 451 : Bellows seal

Air supply pressure max. of pneumatic actuators DP: 6 bar

Air supply pressure max. limit of control valve : a) 5 bar / b) 4.5 bar / c) 4 bar / d) 3.5 bar / e) 3 bar

3) Kvs-value reducible on request (2 screwed seat rings required) 4) At mixing function and spring closes direction A->AB, the max. permissible air supply pressure is 3,5 bar

*last updated 10/16

