

# 21000 Series

Pressure Drop Tables - PH1080

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US Units

# 21000 Series Pressure Drop Tables - PH1080

02/02

Note: Allowable Pressure Drop Tables provided in both US Units (psi) and Metric Units (bar) in separate sections but on corresponding page numbers.

## Standard Construction ANSI Class 150 to 600

<b>21100</b>	
Contoured Trim	Page
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	1
Air to Open .....	2
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	3
Air to Open .....	4
<b>21600</b>	
<b>Contoured Trim with Soft Seat</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	5
Air to Open .....	6
<b>21700</b>	
<b>Single Stage Lo-dB Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	7
Air to Open .....	8
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	10
Air to Open .....	11
<b>Single Stage Anti-Cavitation Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Close	
Air to Close and Air to Open .....	9
<b>Flexible Graphite</b>	
Flow to Close	
Air to Close and Air to Open .....	12
<b>21800</b>	
<b>Double Stage Anti-Cavitation Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Close	
Air to Close and Air to Open .....	13
<b>Flexible Graphite</b>	
Flow to Close	
Air to Close and Air to Open .....	14
<b>21900</b>	
<b>Double Stage Lo-dB Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	15
Air to Open .....	16
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	17
Air to Open .....	18

## High Pressure Construction ANSI Class 900 to 2500

<b>21100</b>	
Contoured Trim	Page
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	19
Air to Open .....	20
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	21
Air to Open .....	22
<b>21600</b>	
<b>Contoured Trim with Soft Seat</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	23
Air to Open .....	24
<b>21700</b>	
<b>Single Stage Lo-dB Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close and Air to Open .....	25
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close and Air to Open .....	27
<b>Single Stage Anti-Cavitation Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Close	
Air to Close and Air to Open .....	26
<b>Flexible Graphite</b>	
Flow to Close	
Air to Close and Air to Open .....	28
<b>21800</b>	
<b>Double Stage Anti-Cavitation Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Close	
Air to Close and Air to Open .....	29
<b>Flexible Graphite</b>	
Flow to Close	
Air to Close and Air to Open .....	30
<b>21900</b>	
<b>Double Stage Lo-dB Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	31
Air to Open .....	32
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	33
Air to Open .....	34

## Bellows Seal Construction ANSI Class 150 to 300

<b>21100 BS</b>	
Contoured Trim	Page
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	35
Air to Open .....	36
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	37
Air to Open .....	38
<b>21600 BS</b>	
<b>Contoured Trim with Soft Seat</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	39
Air to Open .....	40
<b>21700 BS</b>	
<b>Single Stage Lo-dB Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	41
Air to Open .....	42
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	43
Air to Open .....	44
<b>21900 BS</b>	
<b>Double Stage Lo-dB Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	45
Air to Open .....	46
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	47
Air to Open .....	48



**Masoneilan**

# Allowable Pressure Drops for 21100 Series (US)

## Air to Close, Flow to Open

### Contoured Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

PTFE or LE® Packing

Bench Range: 3 - 15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>V</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	12	3	42	—	621	30	1200	609	1500	1189	1500	1500
		12	6	331	—	1490	899	1500	1500	1500	1500	1500	1500
		6	3	260	—	1500	828	1500	1500	1500	1500	1500	1500
		6	6	1024	64	1500	1500	1500	1500	1500	1500	1500	1500
		3.8	3	569	—	1500	1500	1500	1500	1500	1500	1500	1500
		3.8	6	1500	647	1500	1500	1500	1500	1500	1500	1500	1500
		1.7	3	1500	—	1500	1500	1500	1500	1500	1500	1500	1500
		1.7	6	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
1.5	0.8	35	3	—	—	118	—	263	—	407	112	552	257
		35	6	46	—	335	40	624	329	914	618	1203	908
		35	10	142	—	624	329	1107	811	1500	1293	1500	1500
		25	3	—	—	228	—	473	89	717	333	962	578
		25	6	106	—	595	211	1084	700	1500	1189	1500	1500
		25	10	269	—	1084	700	1500	1500	1500	1500	1500	1500
		13	3	42	—	621	30	1200	609	1500	1189	1500	1500
		13	6	331	—	1490	899	1500	1500	1500	1500	1500	1500
		6	3	260	—	1500	828	1500	1500	1500	1500	1500	1500
		6	6	1024	64	1500	1500	1500	1500	1500	1500	1500	1500
		3.8	3	569	—	1500	1500	1500	1500	1500	1500	1500	1500
		3.8	6	1500	647	1500	1500	1500	1500	1500	1500	1500	1500
1.7	3	1500	—	1500	1500	1500	1500	1500	1500	1500	1500		
1.7	6	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500		
2	0.8	46	3	—	—	118	—	263	—	407	112	552	257
		46	6	46	—	335	40	624	329	914	618	1203	908
		46	10	142	—	624	329	1107	811	1500	1293	1500	1500
		26	3	—	—	228	—	473	89	717	333	962	578
		26	6	106	—	595	211	1084	700	1500	1189	1500	1500
		26	10	269	—	1084	700	1500	1500	1500	1500	1500	1500
		15	3	42	—	621	30	1200	609	1500	1189	1500	1500
		15	6	331	—	1490	899	1500	1500	1500	1500	1500	1500
		6	3	260	—	1500	828	1500	1500	1500	1500	1500	1500
		6	6	1024	64	1500	1500	1500	1500	1500	1500	1500	1500
		3.8	3	569	—	1500	1500	1500	1500	1500	1500	1500	1500
		3.8	6	1500	647	1500	1500	1500	1500	1500	1500	1500	1500
1.7	3	1500	—	1500	1500	1500	1500	1500	1500	1500	1500		
1.7	6	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500		
3	1.5	110	10	37	—	222	39	407	224	591	409	776	593
		110	16	93	—	388	205	684	501	—	—	—	—
		47	10	142	—	624	329	1107	811	1500	1293	1500	1500
		47	16	287	—	1058	763	1500	1500	—	—	—	—
		31	10	269	—	1084	700	1500	1500	1500	1500	1500	1500
		—	—	—	—	—	—	—	—	—	—	—	—
4	1.5	195	10	12	—	116	—	220	83	324	187	428	291
		195	16	43	—	210	73	376	239	—	—	—	—
		113	10	37	—	222	39	407	224	591	409	776	593
		113	16	93	—	388	205	684	501	—	—	—	—
		49	10	142	—	624	329	1107	811	1500	1293	1500	1500
		49	16	287	—	1058	763	1500	1500	—	—	—	—
6	2.0	400	16	12	—	94	—	175	79	256	160	338	242
		400	23	30	—	147	51	264	168	381	285	498	402
		208	16	39	—	205	68	372	234	538	401	704	567
		208	23	75	—	314	177	553	416	793	655	1032	894
		126	16	84	—	380	197	676	493	971	789	1267	1084
		126	23	149	—	574	391	999	816	1424	1241	1500	1500

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.

2. Use pressure drops noted for C<sub>V</sub> = 1.7 when applying low flow (C<sub>V</sub> = .6, .3 or .11) designs.

17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21100 Series (US) Air to Open, Flow to Open

## Contoured Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

PTFE or LE<sup>®</sup> Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3 - 15		6 - 30		11 - 23		21 - 45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	12	3	—	—	100	—	389	—	969	378
		12	6	100	—	447	—	1027	435	1500	1500
		12	10	331	—	911	320	1500	1285	1500	1500
		6	3	—	—	413	—	1177	217	1500	1500
		6	6	413	—	1329	369	1500	1500	1500	1500
		6	10	1024	64	1500	1500	1500	1500	1500	1500
		3.8	3	26	—	840	—	1500	919	1500	1500
		3.8	6	840	—	1500	1190	1500	1500	1500	1500
		1.7	3	297	—	1500	211	1500	1500	1500	1500
		1.7	6	1500	211	1500	1500	1500	1500	1500	1500
1.5	0.8	35	3	—	—	—	—	60	—	205	—
		35	6	—	—	75	—	219	—	509	213
		35	10	46	—	190	—	432	136	914	618
		25	3	—	—	8	—	131	—	375	—
		25	6	8	—	155	—	400	16	889	505
		25	10	106	—	351	—	758	374	1500	1189
		13	3	—	—	100	—	389	—	969	378
		13	6	100	—	447	—	1027	435	1500	1500
		13	10	331	—	911	320	1500	1285	1500	1500
		6	3	—	—	413	—	1177	217	1500	1500
		6	6	413	—	1329	369	1500	1500	1500	1500
		6	10	1024	64	1500	1500	1500	1500	1500	1500
		3.8	3	26	—	840	—	1500	919	1500	1500
		3.8	6	840	—	1500	1190	1500	1500	1500	1500
1.7	3	297	—	1500	211	1500	1500	1500	1500		
1.7	6	1500	211	1500	1500	1500	1500	1500	1500		
2	0.8	46	3	—	—	—	—	60	—	205	—
		46	6	—	—	75	—	219	—	509	213
		46	10	46	—	190	—	432	136	914	618
		26	3	—	—	8	—	131	—	375	—
		26	6	8	—	155	—	400	16	889	505
		26	10	106	—	351	—	758	374	1500	1189
		15	3	—	—	100	—	389	—	969	378
		15	6	100	—	447	—	1027	435	1500	1500
		15	10	331	—	911	320	1500	1285	1500	1500
		6	3	—	—	413	—	1177	217	1500	1500
		6	6	413	—	1329	369	1500	1500	1500	1500
		6	10	1024	64	1500	1500	1500	1500	1500	1500
		3.8	3	26	—	840	—	1500	919	1500	1500
		3.8	6	840	—	1500	1190	1500	1500	1500	1500
1.7	3	297	—	1500	211	1500	1500	1500	1500		
1.7	6	1500	211	1500	1500	1500	1500	1500	1500		
3	1.5	110	10	—	—	56	—	148	—	333	150
		110	16	33	—	122	—	270	87	566	383
		110	23	72	—	200	17	412	229	—	—
		47	10	46	—	190	—	432	136	914	618
		47	16	133	—	364	69	750	454	1500	1226
		31	10	106	—	351	—	758	374	1500	1189
		31	16	253	—	644	260	1296	912	1500	1500
		195	10	—	—	23	—	75	—	179	42
4	1.5	195	16	10	—	60	—	143	—	310	172
		195	23	32	—	104	—	223	86	—	—
		113	10	—	—	56	—	148	—	333	150
		113	16	33	—	122	—	270	87	566	383
		113	23	72	—	200	17	412	229	—	—
		49	10	46	—	190	—	432	136	914	618
		49	16	133	—	364	69	750	454	1500	1226
		400	23	6	—	41	—	100	—	217	121
6	2.0	208	16	6	—	56	—	139	—	305	168
		208	23	28	—	99	—	219	82	458	321
		126	16	25	—	114	—	262	79	558	375
		126	23	64	—	192	—	404	221	829	646
		126	23	64	—	192	—	404	221	829	646

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.

2. Use pressure drops noted for C<sub>v</sub> = 1.7 when applying low flow (C<sub>v</sub> = .6, .3 or .11) designs.

17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21100 Series (US)

## Air to Close, Flow to Open

### Contoured Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

Flexible Graphite Packing

Spring Range: 3 - 15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	12	3	-	-	221	-	800	209	1379	788	1500	1368
		12	6	-	-	1090	499	1500	1500	1500	1500	1500	1500
		6	3	-	-	732	-	1500	1300	1500	1500	1500	1500
		6	6	-	-	1500	1500	1500	1500	1500	1500	1500	1500
		3.8	3	-	-	1408	128	1500	1500	1500	1500	1500	1500
		3.8	6	50	-	1500	1500	1500	1500	1500	1500	1500	1500
		1.7	3	-	-	1500	1487	1500	1500	1500	1500	1500	1500
		1.7	6	352	-	1500	1500	1500	1500	1500	1500	1500	1500
1.5	0.8	35	3	-	-	18	-	163	-	307	12	452	157
		35	6	-	-	235	-	524	229	814	518	1103	808
		35	10	42	-	524	229	1007	711	1489	1193	1500	1500
		25	3	-	-	59	-	304	-	548	164	793	409
		25	6	-	-	426	42	915	531	1404	1020	1500	1500
		25	10	100	-	915	531	1500	1346	1500	1500	1500	1500
		13	3	-	-	221	-	800	209	1379	788	1500	1368
		13	6	-	-	1090	499	1500	1500	1500	1500	1500	1500
		6	3	-	-	732	-	1500	1300	1500	1500	1500	1500
		6	6	-	-	1500	1500	1500	1500	1500	1500	1500	1500
		3.8	3	-	-	1408	128	1500	1500	1500	1500	1500	1500
		3.8	6	50	-	1500	1500	1500	1500	1500	1500	1500	1500
		1.7	3	-	-	1500	1487	1500	1500	1500	1500	1500	1500
		1.7	6	352	-	1500	1500	1500	1500	1500	1500	1500	1500
2	0.8	46	3	-	-	18	-	163	-	307	12	452	157
		46	6	-	-	235	-	524	229	814	518	1103	808
		46	10	42	-	524	229	1007	711	1489	1193	1500	1500
		26	3	-	-	59	-	304	-	548	164	793	409
		26	6	-	-	426	42	915	531	1404	1020	1500	1500
		26	10	100	-	915	531	1500	1346	1500	1500	1500	1500
		15	3	-	-	221	-	800	209	1379	788	1500	1368
		15	6	-	-	1090	499	1500	1500	1500	1500	1500	1500
		6	3	-	-	732	-	1500	1300	1500	1500	1500	1500
		6	6	-	-	1500	1500	1500	1500	1500	1500	1500	1500
		3.8	3	-	-	1408	128	1500	1500	1500	1500	1500	1500
		3.8	6	50	-	1500	1500	1500	1500	1500	1500	1500	1500
		1.7	3	-	-	1500	1487	1500	1500	1500	1500	1500	1500
		1.7	6	352	-	1500	1500	1500	1500	1500	1500	1500	1500
3	1.5	110	10	-	-	184	-	368	185	553	370	738	555
		110	16	54	-	350	167	646	463	-	-	-	-
		47	10	42	-	524	229	1007	711	1489	1193	1500	1500
		47	16	187	-	958	663	1500	1434	-	-	-	-
		31	10	100	-	915	531	1500	1346	1500	1500	1500	1500
		195	10	-	-	95	-	199	61	303	165	406	269
		195	16	22	-	188	51	355	217	-	-	-	-
4	1.5	113	10	-	-	184	-	368	185	553	370	738	555
		113	16	54	-	350	167	646	463	-	-	-	-
		49	10	42	-	524	229	1007	711	1489	1193	1500	1500
		49	16	187	-	958	663	1500	1434	-	-	-	-
		400	16	-	-	74	-	155	59	237	141	318	222
6	2.0	400	23	10	-	127	31	245	149	362	266	479	383
		208	16	-	-	166	28	332	195	498	361	664	527
		208	23	36	-	275	138	514	377	753	616	992	855
		126	16	14	-	310	127	605	422	901	718	1197	1014
		126	23	79	-	504	321	929	746	1354	1171	1500	1500

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4 PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21100 Series (US)

## Air to Open, Flow to Open

### Contoured Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

Flexible Graphite Packing

Supply Pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3 - 15		6 - 30		11 - 23		21 - 45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	12	3	-	-	-	-	-	-	568	-
		12	6	-	-	47	-	626	35	1500	1194
		12	10	-	-	510	-	1476	885	1500	1500
		6	3	-	-	-	-	121	-	1500	689
		6	6	-	-	273	-	1500	841	1500	1500
		6	10	-	-	1496	536	1500	1500	1500	1500
		3.8	3	-	-	-	-	321	-	1500	1500
		3.8	6	-	-	593	-	1500	1500	1500	1500
		1.7	3	-	-	-	-	963	-	1500	1500
1.7	6	-	-	1500	-	1500	1500	1500	1500		
1.5	0.8	35	3	-	-	-	-	-	-	105	-
		35	6	-	-	-	-	119	-	409	113
		35	10	-	-	90	-	332	36	814	518
		25	3	-	-	-	-	-	-	206	-
		25	6	-	-	-	-	231	-	720	336
		25	10	-	-	182	-	589	205	1404	1020
		13	3	-	-	-	-	-	-	568	-
		13	6	-	-	47	-	626	35	1500	1194
		13	10	-	-	510	-	1476	885	1500	1500
		6	3	-	-	-	-	121	-	1500	689
		6	6	-	-	273	-	1500	841	1500	1500
		6	10	-	-	1496	536	1500	1500	1500	1500
		3.8	3	-	-	-	-	321	-	1500	1500
		3.8	6	-	-	593	-	1500	1500	1500	1500
		1.7	3	-	-	-	-	963	-	1500	1500
1.7	6	-	-	1500	-	1500	1500	1500	1500		
2	0.8	46	3	-	-	-	-	-	-	105	-
		46	6	-	-	-	-	119	-	409	113
		46	10	-	-	90	-	332	36	814	518
		26	3	-	-	-	-	-	-	206	-
		26	6	-	-	-	-	231	-	720	336
		26	10	-	-	182	-	589	205	1404	1020
		15	3	-	-	-	-	-	-	568	-
		15	6	-	-	47	-	626	35	1500	1194
		15	10	-	-	510	-	1476	885	1500	1500
		6	3	-	-	-	-	121	-	1500	689
		6	6	-	-	273	-	1500	841	1500	1500
		6	10	-	-	1496	536	1500	1500	1500	1500
		3.8	3	-	-	-	-	321	-	1500	1500
		3.8	6	-	-	593	-	1500	1500	1500	1500
		1.7	3	-	-	-	-	963	-	1500	1500
1.7	6	-	-	1500	-	1500	1500	1500	1500		
3	1.5	110	10	-	-	17	-	110	-	294	112
		110	16	-	-	84	-	232	49	527	344
		110	23	34	-	161	-	374	191	-	-
		47	10	-	-	90	-	332	36	814	518
		47	16	33	-	264	-	650	354	1421	1126
		31	10	-	-	182	-	589	205	1404	1020
		31	16	84	-	475	91	1127	743	1500	1500
		195	10	-	-	-	-	53	-	157	20
4	1.5	195	16	-	-	39	-	122	-	288	151
		195	23	10	-	82	-	202	65	-	-
		113	10	-	-	17	-	110	-	294	112
		113	16	-	-	84	-	232	49	527	344
		113	23	34	-	161	-	374	191	-	-
		49	10	-	-	90	-	332	36	814	518
		49	16	33	-	264	-	650	354	1421	1126
		400	23	-	-	22	-	81	-	198	102
6	2.0	208	16	-	-	16	-	99	-	265	128
		208	23	-	-	60	-	179	42	418	281
		126	16	-	-	44	-	191	8	487	304
		126	23	-	-	121	-	334	151	759	576

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4 PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21600 Series (US)

## Air to Close, Flow to Open

### Contoured Soft Seat Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class VI

PTFE or LE® Packing

Bench Range: 3 - 15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)				
				20	30	40	50	60
				CL VI	CL VI	CL VI	CL VI	CL VI
.75 & 1	0.8	12	3	–	523	1000	1000	1000
		12	6	233	1000	1000	1000	1000
		12	10	619	1000	1000	1000	1000
		6	3	100	1000	1000	1000	1000
		6	6	864	1000	1000	1000	1000
		6	10	1000	1000	1000	1000	1000
		3.8	3	355	1000	1000	1000	1000
		3.8	6	1000	1000	1000	1000	1000
		1.7	3	1000	1000	1000	1000	1000
		1.7	6	1000	1000	1000	1000	1000
1.5	0.8	35	3	–	69	214	358	503
		35	6	–	286	575	864	1000
		35	10	93	575	1000	1000	1000
		25	3	–	164	409	653	898
		25	6	42	531	1000	1000	1000
		25	10	205	1000	1000	1000	1000
		13	3	–	523	1000	1000	1000
		13	6	233	1000	1000	1000	1000
		13	10	619	1000	1000	1000	1000
		6	3	100	1000	1000	1000	1000
		6	6	864	1000	1000	1000	1000
		6	10	1000	1000	1000	1000	1000
		3.8	3	355	1000	1000	1000	1000
		3.8	6	1000	1000	1000	1000	1000
1.7	3	1000	1000	1000	1000	1000		
1.7	6	1000	1000	1000	1000	1000		
2	0.8	46	3	–	69	214	358	503
		46	6	–	286	575	864	1000
		46	10	93	575	1000	1000	1000
		26	3	–	164	409	653	898
		26	6	42	531	1000	1000	1000
		26	10	205	1000	1000	1000	1000
		15	3	–	523	1000	1000	1000
		15	6	233	1000	1000	1000	1000
		15	10	619	1000	1000	1000	1000
		6	3	100	1000	1000	1000	1000
		6	6	864	1000	1000	1000	1000
		6	10	1000	1000	1000	1000	1000
		3.8	3	355	1000	1000	1000	1000
		3.8	6	1000	1000	1000	1000	1000
1.7	3	1000	1000	1000	1000	1000		
1.7	6	1000	1000	1000	1000	1000		
3	1.5	110	10	–	191	376	561	746
		110	16	62	358	653	–	–
		47	10	93	575	1000	1000	1000
		31	10	205	1000	1000	1000	1000
4	1.5	195	10	–	93	197	301	405
		195	16	21	187	353	–	–
		113	10	–	191	376	561	746
		113	16	62	358	653	–	–
		49	10	93	575	1000	1000	1000
6	2.0	400	16	–	77	159	240	322
		400	23	–	131	250	365	482
		208	16	–	182	349	515	681
		208	23	52	292	531	770	1000
		126	16	54	350	645	941	1000
		126	23	119	544	969	1000	1000

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21600 Series (US)

## Air to Open, Flow to Open

### Contoured Soft Seat Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class VI

PTFE or LE® Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)			
				3 - 15	6 - 30	11 - 23	21 - 45
				CL VI	CL VI	CL VI	CL VI
.75 & 1	0.8	12	3	—	—	291	870
		12	6	—	349	928	1000
		12	10	233	812	1000	1000
		6	3	—	253	1000	1000
		6	6	253	1000	1000	1000
		6	10	864	1000	1000	1000
		3.8	3	—	627	1000	1000
		3.8	6	627	1000	1000	1000
		1.7	3	—	1000	1000	1000
1.7	6	1000	1000	1000	1000		
1.5	0.8	35	3	—	—	—	156
		35	6	—	26	170	459
		35	10	—	141	382	864
		25	3	—	—	67	311
		25	6	—	91	336	825
		25	10	42	287	694	1000
		13	3	—	—	291	870
		13	6	—	349	928	1000
		13	10	233	812	1000	1000
		6	3	—	253	1000	1000
		6	6	253	1000	1000	1000
		6	10	864	1000	1000	1000
		3.8	3	—	627	1000	1000
		3.8	6	627	1000	1000	1000
		1.7	3	—	1000	1000	1000
1.7	6	1000	1000	1000	1000		
2	0.8	46	3	—	—	—	156
		46	6	—	26	170	459
		46	10	—	141	382	864
		26	3	—	—	67	311
		26	6	—	91	336	825
		26	10	42	287	694	1000
		15	3	—	—	291	870
		15	6	—	349	928	1000
		15	10	233	812	1000	1000
		6	3	—	253	1000	1000
		6	6	253	1000	1000	1000
		6	10	864	1000	1000	1000
		3.8	3	—	627	1000	1000
		3.8	6	627	1000	1000	1000
		1.7	3	—	1000	1000	1000
1.7	6	1000	1000	1000	1000		
3	1.5	110	10	—	25	117	302
		110	16	—	92	239	535
		10	23	42	169	382	—
		47	10	—	141	382	864
		47	16	83	315	701	1000
		31	10	42	287	694	1000
		—	—	—	—	—	—
4	1.5	195	10	—	—	52	156
		195	16	—	37	120	287
		195	23	—	81	200	—
		113	10	—	25	117	302
		113	16	—	92	239	535
		113	23	42	169	382	—
		49	10	—	141	382	864
49	16	83	315	701	1000		
6	2.0	400	23	—	25	84	201
		208	16	—	33	116	282
		208	23	—	76	196	435
		126	16	—	84	231	527
		126	23	34	161	374	799

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required



# Allowable Pressure Drops for 21700 Series (US)

## Air to Close, Flow to Open

### Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

PTFE or LE® Packing

Bench Range: 3 - 15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	8 / 4	3	42	–	621	30	1200	609	1500	1189	1500	1500
		8 / 4	6	331	–	1490	899	1500	1500	1500	1500	1500	1500
		8 / 4	10	718	127	1500	1500	1500	1500	1500	1500	1500	1500
1.5	0.8	15 / 8	3	–	–	228	–	473	89	717	333	962	578
		15 / 8	6	106	–	595	211	1084	700	1500	1189	1500	1500
		15 / 8	10	269	–	1084	700	1500	1500	1500	1500	1500	1500
2	0.8	15 / 8	3	–	–	228	–	473	89	717	333	962	578
		15 / 8	6	106	–	595	211	1084	700	1500	1189	1500	1500
		15 / 8	10	269	–	1084	700	1500	1500	1500	1500	1500	1500
		25	3	–	–	118	–	263	–	407	112	552	257
		25	6	46	–	335	40	624	329	914	618	1203	908
25	10	142	–	624	329	1107	811	1500	1293	1500	1500		
3	1.5	75 / 48	10	37	–	222	39	407	224	591	409	776	593
		75 / 48	16	93	–	388	205	684	501	–	–	–	–
4	1.5	100	10	12	–	116	–	220	83	324	187	428	291
		100	16	44	–	210	73	376	239	–	–	–	–
		63	10	37	–	222	39	407	224	591	409	776	593
		63	16	93	–	388	205	684	501	–	–	–	–
6	2.0	200 / 150	16	12	–	93	–	175	79	256	160	338	242
		200 / 150	23	30	–	147	51	264	168	381	285	498	402

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ 17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21700 Series (US) Air to Open, Flow to Open

### Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

PTFE or LE® Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3 - 15		6 - 30		11 - 23		21 - 45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	8 / 4	3	-	-	100	-	389	-	969	378
		8 / 4	6	100	-	447	-	1027	435	1500	1500
		8 / 4	10	331	-	911	320	1500	1285	1500	1500
1.5	0.8	15 / 8	3	-	-	-	-	131	-	375	-
		15 / 8	6	-	-	155	-	400	16	889	505
		15 / 8	10	106	-	351	-	758	374	1500	1189
2	0.8	15 / 8	3	-	-	-	-	131	-	375	-
		15 / 8	6	-	-	155	-	400	16	889	505
		15 / 8	10	106	-	351	-	758	374	1500	1189
		25	3	-	-	-	-	60	-	205	-
		25	6	-	-	75	-	219	-	509	213
		25	10	46	-	190	-	432	136	914	618
3	1.5	75 / 48	16	33	-	122	-	270	87	566	383
		75 / 48	23	72	-	200	17	412	229	-	-
4	1.5	100	10	-	-	23	-	75	-	179	41
		100	16	10	-	60	-	143	6	310	172
		100	23	32	-	104	-	223	86	-	-
		63	10	-	-	56	-	148	-	333	150
		63	16	33	-	122	-	270	87	566	383
6	2.0	200 / 150	16	-	-	20	-	61	-	142	46
		200 / 150	23	-	-	41	-	100	-	217	121

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ 17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21700 Series (US) Air to Close and Air to Open, Flow to Close

## Single Stage Anti-Cavitation Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

PTFE or LE<sup>®</sup> Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>V</sub>	Actuator Size	Bench Range (psi)			
				Air to Close		Air to Open	
				3-15	6-30	11-23	21-45
.75 & 1	0.8	8	3	409	818	409	818
		8	6	818	1500	818	1500
		8	10	1364	1500	1364	1500
		8	16	1500	1500	1500	1500
		8	3	409	818	409	818
		4	6	818	1500	818	1500
		4	10	1364	1500	1364	1500
		4	16	1500	1500	1500	1500
1.5	0.8	15	3	155	310	155	310
		15	6	310	621	310	621
		15	10	517	1034	517	1034
		15	16	828	1500	828	1500
		8	3	155	310	155	310
		8	6	310	621	310	621
		8	10	517	1034	517	1034
		8	16	828	1500	828	1500
2	0.8	25	3	79	158	79	158
		25	6	158	316	158	316
		25	10	263	526	263	526
		25	16	421	842	421	842
		15	3	155	310	155	310
		15	6	310	621	310	621
		15	10	517	1034	517	1034
		15	16	828	1500	828	1500
		8	3	155	310	155	310
		8	6	310	621	310	621
		8	10	517	1034	517	1034
		8	16	828	1500	828	1500
3	1.5	75	10	82	165	82	165
		75	16	132	264	132	264
		75	23	190	379	190	379
		48	10	82	165	82	165
		48	16	132	264	132	264
		48	23	190	379	190	379
4	1.5	100	10	44	87	44	87
		100	16	70	140	70	140
		100	23	101	201	101	201
		63	10	82	165	82	165
		63	16	132	264	132	264
6	2.0	150	16	77	154	77	154
		150	23	110	221	110	221
		200	16	34	69	34	69
		200	23	49	99	49	99

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.

2. Consult Masoneilan for specific applicability on Class V service.

# Allowable Pressure Drops for 21700 Series (US)

## Air to Close, Flow to Open

### Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

Flexible Graphite Packing

Spring Range: 3 - 15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
<b>.75 &amp; 1</b>	0.8	8 & 4	3	-	-	221	-	800	209	1379	788	1500	1368
		8 & 4	6	-	-	1090	499	1500	1500	1500	1500	1500	1500
		8 & 4	10	317	-	1500	1500	1500	1500	1500	1500	1500	1500
<b>1.5</b>	0.8	15 & 8	3	-	-	59	-	304	-	548	164	793	409
		15 & 8	6	-	-	426	42	915	531	1404	1020	1500	1500
		15 & 8	10	100	-	915	531	1500	1346	1500	1500	1500	1500
<b>2</b>	0.8	15 & 8	3	-	-	59	-	304	-	548	164	793	409
		15 & 8	6	-	-	426	42	915	531	1404	1020	1500	1500
		15 & 8	10	100	-	915	531	1500	1346	1500	1500	1500	1500
		25	3	-	-	18	-	163	-	307	12	452	157
		25	6	-	-	235	-	524	229	814	518	1103	808
25	10	42	-	524	229	1007	711	1489	1193	1500	1500		
<b>3</b>	1.5	75 & 48	10	-	-	184	-	368	185	553	370	738	555
		75 & 48	16	54	-	350	167	646	463	-	-	-	-
<b>4</b>	1.5	100	10	-	-	95	-	199	61	303	165	406	269
		100	16	22	-	188	51	355	217	-	-	-	-
		63	10	-	-	184	-	368	185	553	370	738	555
		63	16	54	-	350	167	646	463	-	-	-	-
<b>6</b>	2	200 & 150	16	-	-	74	-	155	59	237	141	318	222
		200 & 150	23	10	-	127	31	245	149	362	266	479	383

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ 17-4 PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21700 Series (US) Air to Open, Flow to Open

## Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

Flexible Graphite Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	8 & 4	3	-	-	-	-	-	-	568	-
		8 & 4	6	-	-	47	-	626	35	1500	1194
		8 & 4	10	-	-	510	-	1476	885	1500	1500
1.5	0.8	15 & 8	3	-	-	-	-	-	-	206	-
		15 & 8	6	-	-	-	-	231	-	720	336
		15 & 8	10	-	-	182	-	589	205	1404	1020
2	0.8	15 & 8	3	-	-	-	-	-	-	206	-
		15 & 8	6	-	-	-	-	231	-	720	336
		15 & 8	10	-	-	182	-	589	205	1404	1020
		25	3	-	-	-	-	-	-	105	-
		25	6	-	-	-	-	119	-	409	113
		25	10	-	-	90	-	332	36	814	518
3	1.5	75 & 48	16	-	-	84	-	232	49	527	344
		75 & 48	23	34	-	161	-	374	191	-	-
		100	10	-	-	-	-	53	-	157	20
4	1.5	100	16	-	-	39	-	122	-	288	151
		100	23	10	-	82	-	202	65	-	-
		63	10	-	-	17	-	110	-	294	112
		63	16	-	-	84	-	232	49	527	344
		63	23	34	-	161	-	374	191	-	-
6	2	200 & 150	16	-	-	-	-	41	-	123	27
		200 & 150	23	-	-	22	-	81	-	198	102

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4 PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21700 Series (US) Air to Close and Air to Open, Flow to Close

## Single Stage Anti-Cavitation Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

Flexible Graphite Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)			
				Air to Close		Air to Open	
				3-15	6-30	11-23	21-45
.75 & 1	0.8	8	3	–	818	–	307
		8	6	818	1500	365	1500
		8	10	1364	1500	1214	1500
		8	16	1500	1500	1500	1500
		8	3	–	818	–	307
		4	6	818	1500	365	1500
		4	10	1364	1500	1214	1500
		4	16	1500	1500	1500	1500
1.5	0.8	15	3	–	310	–	129
		15	6	310	621	154	621
		15	10	517	1034	512	1034
		15	16	828	1500	828	1500
		8	3	–	310	–	129
		8	6	310	621	154	621
		8	10	517	1034	512	1034
		8	16	828	1500	828	1500
2	0.8	25	3	–	158	–	77
		25	6	158	316	91	316
		25	10	263	526	263	526
		25	16	421	842	421	842
		15	3	–	310	–	129
		15	6	310	621	154	621
		15	10	517	1034	512	1034
		15	16	828	1500	828	1500
		8	3	–	310	–	129
		8	6	310	621	154	621
		8	10	517	1034	512	1034
		8	16	828	1500	828	1500
3	1.5	75	10	82	165	82	165
		75	16	132	264	132	264
		75	23	190	379	190	379
		48	10	82	165	82	165
		48	16	132	264	132	264
		48	23	190	379	190	379
4	1.5	100	10	44	87	44	87
		100	16	70	140	70	140
		100	23	101	201	101	201
		63	10	82	165	82	165
		63	16	132	264	132	264
6	2.0	150	16	77	154	66	147
		150	23	110	221	105	221
		200	16	34	69	34	69
		200	23	49	99	49	99

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.

2. Consult Masoneilan for specific applicability on Class V service.

## Allowable Pressure Drops for 21800 Series (US) Air to Close and Air to Open, Flow to Close

### Double Stage Anti-Cavitation Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

PTFE or LE<sup>®</sup> Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)			
				Air to Close		Air to Open	
				3-15	6-30	11-23	21-45
.75 & 1	0.8	4.5	3	409	818	409	818
		4.5	6	818	1500	818	1500
		4.5	10	1364	1500	1364	1500
		2.3	3	409	818	409	818
		2.3	6	818	1500	818	1500
		2.3	10	1364	1500	1364	1500
1.5	0.8	8.5	3	155	310	155	310
		8.5	6	310	621	310	621
		8.5	10	517	1034	517	1034
		8.5	16	828	1500	828	1500
		4.5	3	155	310	155	310
		4.5	6	310	621	310	621
		4.5	10	517	1034	517	1034
		4.5	16	828	1500	828	1500
		2.3	3	409	818	409	818
		2.3	6	818	1500	818	1500
		2.3	10	1364	1500	1364	1500
		2.3	16	1500	1500	1500	1500
2	0.8	14	3	79	158	79	158
		14	6	158	316	158	316
		14	10	263	526	263	526
		14	16	421	842	421	842
		8.5	3	155	310	155	310
		8.5	6	310	621	310	621
		8.5	10	517	1034	517	1034
		8.5	16	828	1500	828	1500
		4.5	3	155	310	155	310
		4.5	6	310	621	310	621
		4.5	10	517	1034	517	1034
		4.5	16	828	1500	828	1500
		2.3	3	155	310	155	310
		2.3	6	310	621	310	621
		2.3	10	517	1034	517	1034
		2.3	16	828	1500	828	1500
3	1.5	42	10	82	165	82	165
		42	16	132	264	132	264
		42	23	190	379	190	379
		29	10	82	165	82	165
		29	16	132	264	132	264
		29	23	190	379	190	379
4	1.5	62	10	44	87	44	87
		62	16	70	140	70	140
		62	23	101	201	101	201
		40	10	82	165	82	165
		40	16	132	264	132	264
		40	23	190	379	190	379

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.  
2. Consult Masoneilan for specific applicability on Class V service.

# Allowable Pressure Drops for 21800 Series (US)

## Air to Close and Air to Open, Flow to Close

### Double Stage Anti-Cavitation Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

Flexible Graphite Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)			
				Air to Close		Air to Open	
				3-15	6-30	11-23	21-45
.75 & 1	0.8	4.5	3	–	818	–	307
		4.5	6	818	1500	365	1500
		4.5	10	1364	1500	1214	1500
		2.3	3	–	818	–	307
		2.3	6	818	1500	365	1500
		2.3	10	1364	1500	1214	1500
1.5	0.8	8.5	3	–	310	–	129
		8.5	6	310	621	154	621
		8.5	10	517	1034	512	1034
		8.5	16	828	1500	828	1500
		4.5	3	–	310	–	129
		4.5	6	310	621	154	621
		4.5	10	517	1034	512	1034
		4.5	16	828	1500	828	1500
		2.3	3	–	349	–	129
		2.3	6	349	1083	154	643
		2.3	10	838	1500	512	1327
		2.3	16	1500	1500	1050	1500
2	0.8	14	3	–	158	–	77
		14	6	158	316	91	316
		14	10	263	526	263	526
		14	16	421	842	421	842
		8.5	3	–	310	–	129
		8.5	6	310	621	154	621
		8.5	10	517	1034	512	1034
		8.5	16	828	1500	828	1500
		4.5	3	–	310	–	129
		4.5	6	310	621	154	621
		4.5	10	517	1034	512	1034
		4.5	16	828	1500	828	1500
		2.3	3	–	310	–	129
		2.3	6	310	621	154	621
		2.3	10	517	1034	512	1034
2.3	16	828	1500	828	1500		
3	1.5	42	10	82	165	82	165
		42	16	132	264	132	264
		42	23	190	379	190	379
		29	10	82	165	82	165
		29	16	132	264	132	264
		29	23	190	379	190	379
4	1.5	62	10	44	87	44	87
		62	16	70	140	70	140
		62	23	101	201	101	201
		40	10	82	165	82	165
		40	16	132	264	132	264
		40	23	190	379	190	379

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.  
 2. Consult Masoneilan for specific applicability on Class V service.



# Allowable Pressure Drops for 21900 Series (US)

## Air to Close, Flow to Open

### Double Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE® Packing

Bench range: 3-15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	5.7	3	42	–	621	30	1200	609	1500	1189	1500	1500
		5.7	6	331	–	1490	899	1500	1500	1500	1500	1500	1500
		5.7	10	718	127	1500	1500	1500	1500	1500	1500	1500	1500
		3.5	3	331	–	1490	899	1500	1500	1500	1500	1500	1500
		3.5	6	331	–	1490	899	1500	1500	1500	1500	1500	1500
		3.5	10	718	127	1500	1500	1500	1500	1500	1500	1500	1500
1.5	0.8	13	3	–	–	228	–	473	89	717	333	962	578
		13	6	106	–	595	211	1084	700	1500	1189	1500	1500
		13	10	269	–	1084	700	1500	1500	1500	1500	1500	1500
		7	3	–	–	228	–	473	89	717	333	962	578
		7	6	106	–	595	211	1084	700	1500	1189	1500	1500
		7	10	269	–	1084	700	1500	1500	1500	1500	1500	1500
2	0.8	21	3	–	–	118	–	263	–	407	112	552	257
		21	6	46	–	335	40	624	329	914	618	1203	908
		21	10	142	–	624	329	1107	811	1500	1293	1500	1500
		21	16	287	–	1058	763	1500	1500	–	–	–	–
		21	23	456	160	1500	1269	–	–	–	–	–	–
		13	3	–	–	228	–	473	89	717	333	962	578
		13	6	106	–	595	211	1084	700	1500	1189	1500	1500
		13	10	269	–	1084	700	1500	1500	1500	1500	1500	1500
		13	16	514	130	1500	1433	1500	1500	–	–	–	–
		13	23	799	415	1500	1500	–	–	–	–	–	–
3	1.5	63/40	10	37	–	222	40	407	224	591	409	776	593
			16	93	–	388	205	684	501	–	–	–	–
			23	157	–	582	399	–	–	–	–	–	–
4	1.5	83	10	–	–	116	–	220	83	324	187	428	291
		83	16	43	–	210	73	376	239	–	–	–	–
		83	23	80	–	319	182	–	–	–	–	–	–
		53	10	37	–	222	39	407	224	591	409	776	593
		53	16	93	–	388	205	684	501	–	–	–	–
		53	23	157	–	582	399	–	–	–	–	–	–
6	2.0	125	16	–	–	93	–	175	79	256	160	338	242
		125	23	30	–	147	51	264	168	381	285	498	402

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21900 Series (US)

## Air to Open, Flow to Open

### Double Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE® Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	5.7	3	–	–	100	–	389	–	969	378
		5.7	6	100	–	447	–	1027	435	1500	1500
		5.7	10	331	–	911	320	1500	1285	1500	1500
		3.5	3	–	–	100	–	389	–	969	378
		3.5	6	100	–	447	–	1027	435	1500	1500
		3.5	10	331	–	911	320	1500	1285	1500	1500
1.5	0.8	13	3	–	–	–	–	131	–	375	–
		13	6	–	–	155	–	400	16	889	505
		13	10	106	–	351	–	758	374	1500	1189
		7	3	–	–	–	–	131	–	375	–
		7	6	–	–	155	–	400	16	889	505
		7	10	106	–	351	–	758	374	1500	1189
2	0.8	21	3	–	–	–	–	60	–	205	–
		21	6	–	–	75	–	219	–	509	213
		21	10	46	–	190	–	432	136	914	618
		21	16	133	–	364	69	750	454	1500	1226
		21	23	234	–	567	271	1121	826	–	–
		13	3	–	–	–	–	131	–	375	–
		13	6	–	–	155	–	400	16	889	505
		13	10	106	–	351	–	758	374	1500	1189
		13	16	253	–	644	260	1296	912	1500	1500
		13	23	424	40	986	602	1500	1500	–	–
3	1.5	63 & 40	10	–	–	56	–	148	–	333	150
			16	33	–	122	–	270	87	566	383
			23	72	–	200	17	412	229	–	–
4	1.5	83	10	–	–	23	–	75	–	179	41
		83	16	10	–	60	–	143	–	310	172
		83	23	32	–	104	–	223	86	–	–
		53	10	–	–	56	–	148	–	333	150
		53	16	33	–	122	–	170	87	566	383
		53	23	72	–	200	17	412	229	–	–
6	2.0	125	16	–	–	20	–	61	–	142	46
		125	23	–	–	41	–	100	–	217	21

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21900 Series (US)

## Air to Close, Flow to Open

### Double Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Spring Range: 3-15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	5.7	3	-	-	221	-	800	209	1379	788	1500	1368
		5.7	6	-	-	1090	499	1500	1500	1500	1500	1500	1500
		5.7	10	317	-	1500	1500	1500	1500	1500	1500	1500	1500
		3.5	3	-	-	221	-	800	209	1379	788	1500	1368
		3.5	6	-	-	1090	499	1500	1500	1500	1500	1500	1500
		3.5	10	317	-	1500	1500	1500	1500	1500	1500	1500	1500
1.5	0.8	13	3	-	-	59	-	304	-	548	164	793	409
		13	6	-	-	426	42	915	531	1404	1020	1500	1500
		13	10	100	-	915	531	1500	1346	1500	1500	1500	1500
		7	3	-	-	59	-	304	-	548	164	793	409
		7	6	-	-	426	42	915	531	1404	1020	1500	1500
		7	10	100	-	915	531	1500	1346	1500	1500	1500	1500
2	0.8	21	3	-	-	18	-	163	-	307	12	452	157
		21	6	-	-	235	-	524	229	814	518	1103	808
		21	10	42	-	524	229	1007	711	1489	1193	1500	1500
		21	16	187	-	958	663	1500	1434	-	-	-	-
		21	23	356	60	1465	1169	-	-	-	-	-	-
		13	3	-	-	59	-	304	-	548	164	793	409
		13	6	-	-	426	42	915	531	1404	1020	1500	1500
		13	10	100	-	915	531	1500	1346	1500	1500	1500	1500
		13	16	345	-	1500	1264	1500	1500	-	-	-	-
		13	23	630	246	1500	1500	-	-	-	-	-	-
3	1.5	63 & 40	10	-	-	184	-	368	185	553	370	738	555
			16	54	-	350	167	646	463	-	-	-	-
			23	119	-	544	361	-	-	-	-	-	-
4	1.5	83	10	-	-	95	-	199	61	303	165	406	269
		83	16	22	-	188	51	355	217	-	-	-	-
		83	23	58	-	297	160	-	-	-	-	-	-
		53	10	-	-	184	-	368	185	553	370	738	555
		53	16	54	-	350	167	646	463	-	-	-	-
		53	23	119	-	544	361	-	-	-	-	-	-
6	2	125	16	-	-	74	-	155	59	237	141	318	222
		125	23	10	-	127	31	245	149	362	266	479	383

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4 PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21900 Series (US) Air to Open, Flow to Open

### Double Stage Lo-dB®Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	5.7	3	-	-	-	-	-	-	568	-
		5.7	6	-	-	47	-	626	35	1500	1194
		5.7	10	-	-	510	-	1476	885	1500	1500
		3.5	3	-	-	-	-	-	-	568	-
		3.5	6	-	-	47	-	626	35	1500	1194
		3.5	10	-	-	510	-	1476	885	1500	1500
1.5	0.8	13	3	-	-	-	-	-	-	206	-
		13	6	-	-	-	-	231	-	720	336
		13	10	-	-	182	-	589	205	1404	1020
		7	3	-	-	-	-	-	-	206	-
		7	6	-	-	-	-	231	-	720	336
		7	10	-	-	182	-	589	205	1404	1020
2	0.8	21	3	-	-	-	-	-	-	105	-
		21	6	-	-	-	-	119	-	409	113
		21	10	-	-	90	-	332	36	814	518
		21	16	33	-	264	-	650	354	1421	1126
		21	23	134	-	467	171	1021	726	-	-
		13	3	-	-	-	-	-	-	206	-
		13	6	-	-	-	-	231	-	720	336
		13	10	-	-	182	-	589	205	1404	1020
		13	16	84	-	475	91	1127	743	1500	1500
		13	23	255	-	817	433	1500	1370	-	-
3	1.5	63 & 40	10	-	-	17	-	110	-	294	112
			16	-	-	84	-	232	49	527	344
			23	34	-	161	-	374	191	-	-
4	1.5	83	10	-	-	-	-	53	-	157	20
		83	16	-	-	39	-	122	-	288	151
		83	23	10	-	82	-	202	65	-	-
		53	10	-	-	17	-	110	-	294	112
		53	16	-	-	84	-	232	49	527	344
		53	23	34	-	161	-	374	191	-	-
6	2	125	16	-	-	-	-	41	-	123	27
		125	23	-	-	22	-	81	-	198	102

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4 PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21100 Series (US)

## Air to Close, Flow to Open

### Contoured Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE Packing and Standard Bonnet

Spring Range: 3-15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	12	3	42	–	621	30	1200	609	1780	1189	2359	1768
		12	6	331	–	1490	899	2649	2058	3807	3216	4966	4375
		6	3	260	–	1788	828	3316	2356	4844	3884	6250	5411
		6	6	1024	64	4080	3120	6250	6175	6250	6250	6250	6250
		3.8	3	569	–	3285	2005	6001	4721	6250	6250	6250	6250
		3.8	6	1927	647	6250	6079	6250	6250	6250	6250	6250	6250
		1.7	3	1520	–	6250	5711	6250	6250	6250	6250	6250	6250
		1.7	6	4576	2656	6250	6250	6250	6250	6250	6250	6250	6250
1.5	0.8	35	3	–	–	118	–	263	–	407	112	552	257
		35	6	46	–	335	40	624	329	914	618	1203	908
		35	10	142	–	624	329	1107	811	1589	1293	2071	1776
		25	3	–	–	228	–	473	89	717	333	962	578
		25	6	106	–	595	211	1084	700	1573	1189	2062	1678
		25	10	269	–	1084	700	1899	1515	2714	2330	3529	3145
		13	3	42	–	621	30	1200	609	1780	1189	2359	1768
		13	6	331	–	1490	899	2649	2058	3807	3216	4966	4375
		6	3	260	–	1788	828	3316	2356	4844	3884	6250	5411
		6	6	1024	64	4080	3120	6250	6175	6250	6250	6250	6250
		3.8	3	569	–	3285	2005	6001	4721	6250	6250	6250	6250
		3.8	6	1927	647	6250	6079	6250	6250	6250	6250	6250	6250
		1.7	3	1520	–	6250	5711	6250	6250	6250	6250	6250	6250
1.7	6	4576	2656	6250	6250	6250	6250	6250	6250	6250	6250		
2	0.8	46	3	–	–	118	–	263	–	407	112	552	257
		46	6	46	–	335	40	624	329	914	618	1203	908
		46	10	142	–	624	329	1107	811	1589	1293	2071	1776
		26	3	–	–	228	–	473	89	717	333	962	578
		26	6	106	–	595	211	1084	700	1573	1189	2062	1678
		26	10	269	–	1084	700	1899	1515	2714	2330	3529	3145
		15	3	42	–	621	30	1200	609	1780	1189	2359	1768
		15	6	331	–	1490	899	2649	2058	3807	3216	4966	4375
		6	3	260	–	1788	828	3316	2356	4844	3884	6250	5411
		6	6	1024	64	4080	3120	6250	6175	6250	6250	6250	6250
		3.8	3	569	–	3285	2005	6001	4721	6250	6250	6250	6250
		3.8	6	1927	647	6250	6079	6250	6250	6250	6250	6250	6250
		1.7	3	1520	–	6250	5711	6250	6250	6250	6250	6250	6250
1.7	6	4576	2656	6250	6250	6250	6250	6250	6250	6250	6250		

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ 17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21100 Series (US)

## Air to Open, Flow to Open

### Contoured Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE Packing and Standard Bonnet

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	12	3	-	-	100	-	389	-	969	378
		12	6	100	-	447	-	1027	435	2185	1594
		12	10	331	-	911	320	1876	1285	3807	3216
		6	3	-	-	413	-	1177	217	2705	1745
		6	6	413	-	1329	369	2857	1897	5913	4953
		6	10	1024	64	2552	1592	5098	4138	6250	6250
		3.8	3	26	-	840	-	2199	919	4915	3635
		3.8	6	840	-	2470	1190	5186	3906	6250	6250
		1.7	3	297	-	2131	211	5187	3267	6250	6250
1.7	6	2131	211	5798	3878	6250	6250	6250	6250		
1.5	0.8	35	3	-	-	-	-	60	-	205	-
		35	6	-	-	75	-	219	-	509	213
		35	10	46	-	190	-	432	136	914	618
		25	3	-	-	8	-	131	-	375	-
		25	6	8	-	155	-	400	16	889	505
		25	10	106	-	351	-	758	374	1573	1189
		13	3	-	-	100	-	389	-	969	378
		13	6	100	-	447	-	1027	435	2185	1594
		13	10	331	-	911	320	1876	1285	3807	3216
		6	3	-	-	413	-	1177	217	2705	1745
		6	6	413	-	1329	369	2857	1897	5913	4953
		6	10	1024	64	2552	1592	5098	4138	6250	6250
		3.8	3	26	-	840	-	2199	919	4915	3635
3.8	6	840	-	2470	1190	5186	3906	6250	6250		
1.7	3	297	-	2131	211	5187	3267	6250	6250		
1.7	6	2131	211	5798	3878	6250	6250	6250	6250		
2	0.8	46	3	-	-	-	-	60	-	205	-
		46	6	-	-	75	-	219	-	509	213
		46	10	46	-	190	-	432	136	914	618
		26	3	-	-	8	-	131	-	375	-
		26	6	8	-	155	-	400	16	889	505
		26	10	106	-	351	-	758	374	1573	1189
		15	3	-	-	100	-	389	-	969	378
		15	6	100	-	447	-	1027	435	2185	1594
		15	10	331	-	911	320	1876	1285	3807	3216
		6	3	-	-	413	-	1177	217	2705	1745
		6	6	413	-	1329	369	2857	1897	5913	4953
		6	10	1024	64	2552	1592	5098	4138	6250	6250
		3.8	3	26	-	840	-	2199	919	4915	3635
3.8	6	840	-	2470	1190	5186	3906	6250	6250		
1.7	3	297	-	2131	211	5187	3267	6250	6250		
1.7	6	2131	211	5798	3878	6250	6250	6250	6250		

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

# Allowable Pressure Drops for 21100 Series (US)

## Air to Close, Flow to Open

### Contoured Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Spring Range: 3-15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	12	3	-	-	221	-	800	209	1379	788	1959	1368
		12	6	-	-	1090	499	2248	1657	3407	2816	4566	3974
		6	3	-	-	732	-	2260	1300	3788	2828	5315	4355
		6	6	-	-	3024	2064	6079	5119	6250	6250	6250	6250
		3.8	3	-	-	1408	128	4124	2844	6250	5560	6250	6250
		3.8	6	50	-	5482	4202	6250	6250	6250	6250	6250	6250
		1.7	3	-	-	3407	1487	6250	6250	6250	6250	6250	6250
		1.7	6	352	-	6250	6250	6250	6250	6250	6250	6250	6250
1.5	0.8	35	3	-	-	18	-	163	-	307	12	452	157
		35	6	-	-	235	-	524	229	814	518	1103	808
		35	10	42	-	524	229	1007	711	1489	1193	1971	1676
		25	3	-	-	59	-	304	-	548	164	793	409
		25	6	-	-	426	42	915	531	1404	1020	1893	1509
		25	10	100	-	915	531	1730	1346	2545	2161	3360	2976
		13	3	-	-	221	-	800	209	1379	788	1959	1368
		13	6	-	-	1090	499	2248	1657	3407	2816	4566	3974
		6	3	-	-	732	-	2260	1300	3788	2828	5315	4355
		6	6	-	-	3024	2064	6079	5119	6250	6250	6250	6250
		3.8	3	-	-	1408	128	4124	2844	6250	5560	6250	6250
		3.8	6	50	-	5482	4202	6250	6250	6250	6250	6250	6250
		1.7	3	-	-	3407	1487	6250	6250	6250	6250	6250	6250
1.7	6	352	-	6250	6250	6250	6250	6250	6250	6250	6250		
2	0.8	46	3	-	-	18	-	163	-	307	12	452	157
		46	6	-	-	235	-	524	229	814	518	1103	808
		46	10	42	-	524	229	1007	711	1489	1193	1971	1676
		26	3	-	-	59	-	304	-	548	164	793	409
		26	6	-	-	426	42	915	531	1404	1020	1893	1509
		26	10	100	-	915	531	1730	1346	2545	2161	3360	2976
		15	3	-	-	221	-	800	209	1379	788	1959	1368
		15	6	-	-	1090	499	2248	1657	3407	2816	4566	3974
		6	3	-	-	732	-	2260	1300	3788	2828	5315	4355
		6	6	-	-	3024	2064	6079	5119	6250	6250	6250	6250
		3.8	3	-	-	1408	128	4124	2844	6250	5560	6250	6250
		3.8	6	50	-	5482	4202	6250	6250	6250	6250	6250	6250
		1.7	3	-	-	3407	1487	6250	6250	6250	6250	6250	6250
1.7	6	352	-	6250	6250	6250	6250	6250	6250	6250	6250		

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4 PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21100 Series (US)

## Air to Open, Flow to Open

### Contoured Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	12	3	-	-	-	-	-	-	568	-
		12	6	-	-	47	-	626	35	1785	1194
		12	10	-	-	510	-	1476	885	3407	2816
		6	3	-	-	-	-	121	-	1649	689
		6	6	-	-	273	-	1801	841	4857	3897
		6	10	-	-	1496	536	4042	3082	6250	6250
		3.8	3	-	-	-	-	321	-	3037	1757
		3.8	6	-	-	593	-	3309	2029	6250	6250
		1.7	3	-	-	-	-	963	-	6250	5154
1.7	6	-	-	1574	-	6250	5765	6250	6250		
1.5	0.8	35	3	-	-	-	-	-	-	105	-
		35	6	-	-	-	-	119	-	409	113
		35	10	-	-	90	-	332	36	814	518
		25	3	-	-	-	-	-	-	206	-
		25	6	-	-	-	-	231	-	720	336
		25	10	-	-	182	-	589	205	1404	1020
		13	3	-	-	-	-	-	-	568	-
		13	6	-	-	47	-	626	35	1785	1194
		13	10	-	-	510	-	1476	885	3407	2816
		6	3	-	-	-	-	121	-	1649	689
		6	6	-	-	273	-	1801	841	4857	3897
		6	10	-	-	1496	536	4042	3082	6250	6250
		3.8	3	-	-	-	-	321	-	3037	1757
3.8	6	-	-	593	-	3309	2029	6250	6250		
1.7	3	-	-	-	-	963	-	6250	5154		
1.7	6	-	-	1574	-	6250	5765	6250	6250		
2	0.8	46	3	-	-	-	-	-	-	105	-
		46	6	-	-	-	-	119	-	409	113
		46	10	-	-	90	-	332	36	814	518
		26	3	-	-	-	-	-	-	206	-
		26	6	-	-	-	-	231	-	720	336
		26	10	-	-	182	-	589	205	1404	1020
		15	3	-	-	-	-	-	-	568	-
		15	6	-	-	47	-	626	35	1785	1194
		15	10	-	-	510	-	1476	885	3407	2816
		6	3	-	-	-	-	121	-	1649	689
		6	6	-	-	273	-	1801	841	4857	3897
		6	10	-	-	1496	536	4042	3082	6250	6250
		3.8	3	-	-	-	-	321	-	3037	1757
3.8	6	-	-	593	-	3309	2029	6250	6250		
1.7	3	-	-	-	-	963	-	6250	5154		
1.7	6	-	-	1574	-	6250	5765	6250	6250		

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.



# Allowable Pressure Drops for 21600 Series (US)

## Air to Close, Flow to Open

### Contoured Trim with Soft Seat

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class VI

PTFE Packing and Standard Bonnet

Spring Range: 3 - 15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)				
				20	30	40	50	60
				CL VI	CL VI	CL VI	CL VI	CL VI
.75 & 1	0.8	12	3	–	523	1000	1000	1000
		12	6	233	1000	1000	1000	1000
		12	10	619	1000	1000	1000	1000
		6	3	100	1000	1000	1000	1000
		6	6	864	1000	1000	1000	1000
		6	10	1000	1000	1000	1000	1000
		3.8	3	355	1000	1000	1000	1000
		3.8	6	1000	1000	1000	1000	1000
		1.7	3	1000	1000	1000	1000	1000
		1.7	6	1000	1000	1000	1000	1000
1.5	0.8	35	3	–	69	214	358	503
		35	6	–	286	575	864	1000
		35	10	93	575	1000	1000	1000
		25	3	–	164	409	653	898
		25	6	42	531	1000	1000	1000
		25	10	205	1000	1000	1000	1000
		13	3	–	523	1000	1000	1000
		13	6	233	1000	1000	1000	1000
		13	10	619	1000	1000	1000	1000
		6	3	100	1000	1000	1000	1000
		6	6	864	1000	1000	1000	1000
		6	10	1000	1000	1000	1000	1000
		3.8	3	355	1000	1000	1000	1000
		3.8	6	1000	1000	1000	1000	1000
1.7	3	1000	1000	1000	1000	1000		
1.7	6	1000	1000	1000	1000	1000		
2	0.8	46	3	–	69	214	358	503
		46	6	–	286	575	864	1000
		46	10	93	575	1000	1000	1000
		26	3	–	164	409	653	898
		26	6	42	531	1000	1000	1000
		26	10	205	1000	1000	1000	1000
		15	3	–	523	1000	1000	1000
		15	6	233	1000	1000	1000	1000
		15	10	619	1000	1000	1000	1000
		6	3	100	1000	1000	1000	1000
		6	6	864	1000	1000	1000	1000
		6	10	1000	1000	1000	1000	1000
		3.8	3	355	1000	1000	1000	1000
		3.8	6	1000	1000	1000	1000	1000
		1.7	3	1000	1000	1000	1000	1000
		1.7	6	1000	1000	1000	1000	1000

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21600 Series (US) Air to Open, Flow to Open

### Contoured Trim with Soft Seat

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class VI

PTFE Packing and Standard Bonnet

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)			
				3 - 15	6 - 30	11 - 23	21 - 45
				CL VI	CL VI	CL VI	CL VI
.75 & 1	0.8	12	3	–	–	291	870
		12	6	–	349	928	1000
		12	10	233	812	1000	1000
		6	3	–	253	1000	1000
		6	6	253	1000	1000	1000
		6	10	864	1000	1000	1000
		3.8	3	–	627	1000	1000
		3.8	6	627	1000	1000	1000
		1.7	3	–	1000	1000	1000
		1.7	6	1000	1000	1000	1000
1.5	0.8	35	3	–	–	11	156
		35	6	–	26	170	459
		35	10	–	141	382	864
		25	3	–	–	67	311
		25	6	–	91	336	825
		25	10	42	287	694	1000
		13	3	–	–	291	870
		13	6	–	349	928	1000
		13	10	233	812	1000	1000
		6	3	–	253	1000	1000
		6	6	253	1000	1000	1000
		6	10	864	1000	1000	1000
		3.8	3	–	627	1000	1000
		3.8	6	627	1000	1000	1000
		1.7	3	–	1000	1000	1000
1.7	6	1000	1000	1000	1000		
2	0.8	46	3	–	–	11	156
		46	6	–	26	170	459
		46	10	–	141	382	864
		26	3	–	–	67	311
		26	6	–	91	336	825
		26	10	42	287	694	1000
		15	3	–	–	291	870
		15	6	–	349	928	1000
		15	10	233	812	1000	1000
		6	3	–	253	1000	1000
		6	6	253	1000	1000	1000
		6	10	864	1000	1000	1000
		3.8	3	–	627	1000	1000
		3.8	6	627	1000	1000	1000
		1.7	3	–	1000	1000	1000
1.7	6	1000	1000	1000	1000		

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

## Allowable Pressure Drops for 21700 Series (US) Air to Close, Flow to Open

### Single Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

PTFE Packing and Standard Bonnet

Spring Range: 3 - 15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	8 & 4	3	42	–	621	30	1200	609	1780	1189	2359	1768
		8 & 4	6	331	–	1490	899	2649	2058	3807	3216	4966	4375
		8 & 4	10	718	127	2649	2058	4580	3989	6250	5920	6250	6250
1.5	0.8	15 & 8	3	–	–	228	–	473	89	717	333	962	578
		15 & 8	6	106	–	595	211	1084	700	1573	1189	2062	1678
		15 & 8	10	269	–	1084	700	1899	1515	2714	2330	3529	3145
2	0.8	15 & 8	3	–	–	228	–	473	89	717	333	962	578
		15 & 8	6	106	–	595	211	1084	700	1573	1189	2062	1678
		15 & 8	10	269	–	1084	700	1899	1515	2714	2330	3529	3145
		25	3	–	–	118	–	263	–	407	112	552	257
		25	6	46	–	335	40	624	329	914	618	1203	908
		25	10	142	–	624	329	1107	811	1589	1293	2071	1776

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21700 Series (US) Air to Open, Flow to Open

### Single Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

PTFE Packing and Standard Bonnet

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3 - 15		6 - 30		11 - 23		21 - 45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	8 & 4	3	–	–	100	–	389	–	969	378
		8 & 4	6	100	–	447	–	1027	435	2185	1594
		8 & 4	10	331	–	911	320	1876	1285	3807	3216
1.5	0.8	15 & 8	3	–	–	8	–	131	–	375	–
		15 & 8	6	8	–	155	–	400	16	889	505
		15 & 8	10	106	–	351	–	758	374	1573	1189
2	0.8	15 & 8	3	–	–	8	–	131	–	375	–
		15 & 8	6	8	–	155	–	400	16	889	505
		15 & 8	10	106	–	351	–	758	374	1573	1189
		25	3	–	–	–	–	60	–	205	–
		25	6	–	–	75	–	219	–	509	213
		25	10	46	–	190	–	432	136	914	618
25	16	133	–	364	69	750	454	1521	1226		

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21700 Series (US) Air to Close and Air to Open, Flow to Close

### Single Stage Anti-Cavitation Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

PTFE Packing and Standard Bonnet

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)			
				Air to Close		Air to Open	
				3-15	6-30	11-23	21-45
.75 & 1	0.8	8	3	409	818	409	818
		8	6	818	1636	818	1636
		8	10	1364	2727	1364	2727
		8	16	2182	4364	2182	4364
		8	3	409	818	409	818
		4	6	818	1636	818	1636
		4	10	1364	2727	1364	2727
		4	16	2182	4364	2182	4364
1.5	0.8	15	3	155	310	155	310
		15	6	310	621	310	621
		15	10	517	1034	517	1034
		15	16	828	1655	828	1655
		8	3	155	310	155	310
		8	6	310	621	310	621
		8	10	517	1034	517	1034
		8	16	828	1655	828	1655
2	0.8	25	3	79	158	79	158
		25	6	158	316	158	316
		25	10	263	526	263	526
		25	16	421	842	421	842
		15	3	155	310	155	310
		15	6	310	621	310	621
		15	10	517	1034	517	1034
		15	16	828	1655	828	1655
		8	3	155	310	155	310
		8	6	310	621	310	621
		8	10	517	1034	517	1034
		8	16	828	1655	828	1655

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.  
2. Consult Masoneilan for specific applicability on Class V service.

## Allowable Pressure Drops for 21700 Series (US) Air to Close, Flow to Open

### Single Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

Flexible Graphite Packing

Spring Range: 3 - 15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	8 & 4	3	-	-	221	-	800	209	1379	788	1959	1368
		8 & 4	6	-	-	1090	499	2248	1657	3407	2816	4566	3974
		8 & 4	10	317	-	2248	1657	4179	3588	6110	5519	6250	6250
1.5	0.8	15 & 8	3	-	-	59	-	304	-	548	164	793	409
		15 & 8	6	-	-	426	42	915	531	1404	1020	1893	1509
		15 & 8	10	100	-	915	531	1730	1346	2545	2161	3360	2976
2	0.8	15 & 8	3	-	-	59	-	304	-	548	164	793	409
		15 & 8	6	-	-	426	42	915	531	1404	1020	1893	1509
		15 & 8	10	100	-	915	531	1730	1346	2545	2161	3360	2976
		25	3	-	-	18	-	163	-	307	12	452	157
		25	6	-	-	235	-	524	229	814	518	1103	808
		25	10	42	-	524	229	1007	711	1489	1193	1971	1676

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4 PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21700 Series (US) Air to Open, Flow to Open

### Single Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

Flexible Graphite Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3 - 15		6 - 30		11 - 23		21 - 45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	8 & 4	3	-	-	-	-	-	-	568	-
		8 & 4	6	-	-	47	-	626	35	1785	1194
		8 & 4	10	-	-	510	-	1476	885	3407	2816
1.5	0.8	15 & 8	3	-	-	-	-	-	-	206	-
		15 & 8	6	-	-	-	-	231	-	720	336
		15 & 8	10	-	-	182	-	589	205	1404	1020
2	0.8	15 & 8	3	-	-	-	-	-	-	206	-
		15 & 8	6	-	-	-	-	231	-	720	336
		15 & 8	10	-	-	182	-	589	205	1404	1020
		25	3	-	-	-	-	-	-	105	-
		25	6	-	-	-	-	119	-	409	113
		25	10	-	-	90	-	332	36	814	518
		25	16	33	-	264	-	650	354	1421	1126

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4 PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21700 Series (US) Air to Close and Air to Open, Flow to Close

## Single Stage Anti-Cavitation Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

Flexible Graphite Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)			
				Air to Close		Air to Open	
				3-15	6-30	11-23	21-45
.75 & 1	0.8	8	3	–	818	–	307
		8	6	818	1636	365	1523
		8	10	1364	2727	1214	2727
		8	16	2182	4364	2182	4364
		8	3	–	818	–	307
		4	6	818	1636	365	1523
		4	10	1364	2727	1214	2727
		4	16	2182	4364	2182	4364
1.5	0.8	15	3	–	310	–	129
		15	6	310	621	154	621
		15	10	517	1034	512	1034
		15	16	828	1655	828	1655
		8	3	–	310	–	129
		8	6	310	621	154	621
		8	10	517	1034	512	1034
		8	16	828	1655	828	1655
2	0.8	25	3	–	158	–	77
		25	6	158	316	91	316
		25	10	263	526	263	526
		25	16	421	842	421	842
		15	3	–	310	–	129
		15	6	310	621	154	621
		15	10	517	1034	512	1034
		15	16	828	1655	828	1655
		8	3	–	310	–	129
		8	6	310	621	154	621
		8	10	517	1034	512	1034
		8	16	828	1655	828	1655

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.  
2. Consult Masoneilan for specific applicability on Class V service.

# Allowable Pressure Drops for 21800 Series (US)

## Air to Close and Air to Open, Flow to Close

### Double Stage Anti-Cavitation Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

PTFE Packing and Standard Bonnet

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>V</sub>	Actuator Size	Bench Range (psi)			
				Air to Close		Air to Open	
				3-15	6-30	11-23	21-45
.75 & 1	0.8	4.5	3	409	818	409	818
		4.5	6	818	1636	818	1636
		4.5	10	1364	2727	1364	2727
		2.3	3	409	818	409	818
		2.3	6	818	1636	818	1636
		2.3	10	1364	2727	1364	2727
1.5	0.8	8.5	3	155	310	155	310
		8.5	6	310	621	310	621
		8.5	10	517	1034	517	1034
		8.5	16	828	1655	828	1655
		4.5	3	155	310	155	310
		4.5	6	310	621	310	621
		4.5	10	517	1034	517	1034
		4.5	16	828	1655	828	1655
		2.3	3	290	657	192	437
		2.3	6	657	1390	461	950
		2.3	10	1146	2368	820	1634
		2.3	16	1879	3835	1357	2661
2	0.8	14	3	79	158	79	158
		14	6	158	316	158	316
		14	10	263	526	263	526
		14	16	421	842	421	842
		8.5	3	155	310	155	310
		8.5	6	310	621	310	621
		8.5	10	517	1034	517	1034
		8.5	16	828	1655	828	1655
		4.5	3	155	310	155	310
		4.5	6	310	621	310	621
		4.5	10	517	1034	517	1034
		4.5	16	828	1655	828	1655
		2.3	3	155	310	155	310
		2.3	6	310	621	310	621
		2.3	10	517	1034	517	1034
		2.3	16	828	1655	828	1655

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.  
 2. Consult Masoneilan for specific applicability on Class V service.

## Allowable Pressure Drops for 21800 Series (US) Air to Close and Air to Open, Flow to Close

### Double Stage Anti-Cavitation Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

Flexible Graphite Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)			
				Air to Close		Air to Open	
				3-15	6-30	11-23	21-45
.75 & 1	0.8	4.5	3	—	818	—	307
		4.5	6	818	1636	365	1523
		4.5	10	1364	2727	1214	2727
		2.3	3	—	818	—	307
		2.3	6	818	1636	365	1523
		2.3	10	1364	2727	1214	2727
1.5	0.8	8.5	3	—	310	—	129
		8.5	6	310	621	154	621
		8.5	10	517	1034	512	1034
		8.5	16	828	1655	828	1655
		4.5	3	—	310	—	129
		4.5	6	310	621	154	621
		4.5	10	517	1034	512	1034
		4.5	16	828	1655	828	1655
		2.3	3	—	349	—	129
		2.3	6	349	1083	154	643
		2.3	10	838	2061	512	1327
		2.3	16	1572	3527	1050	2354
2	0.8	14	3	—	158	—	77
		14	6	158	316	91	316
		14	10	263	526	263	526
		14	16	421	842	421	842
		8.5	3	—	310	—	129
		8.5	6	310	621	154	621
		8.5	10	517	1034	512	1034
		8.5	16	828	1655	828	1655
		4.5	3	—	310	—	129
		4.5	6	310	621	154	621
		4.5	10	517	1034	512	1034
		4.5	16	828	1655	828	1655
		2.3	3	—	310	—	129
		2.3	6	310	621	154	621
		2.3	10	517	1034	512	1034
		2.3	16	828	1655	828	1655

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.  
2. Consult Masoneilan for specific applicability on Class V service.



# Allowable Pressure Drops for 21900 Series (US)

## Air to Close, Flow to Open

### Double Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE Packing and Standard Bonnet

Spring Range: 3-15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	5.7	3	42	–	621	30	1200	609	1780	1189	2359	1768
		5.7	6	331	–	1490	899	2649	2058	3807	3216	4966	4375
		5.7	10	718	127	2649	2058	4580	3989	6250	5920	6250	6250
		3.5	3	42	–	621	30	1200	609	1780	1189	2359	1768
		3.5	6	331	–	1490	899	2649	2058	3807	3216	4966	4375
		3.5	10	718	127	2649	2058	4580	3989	6250	5920	6250	6250
1.5	0.8	13	3	–	–	228	–	473	89	717	333	962	578
		13	6	106	–	595	211	1084	700	1573	1189	2062	1678
		13	10	269	–	1084	700	1899	1515	2714	2330	3529	3145
		7	3	–	–	228	–	473	89	717	333	962	578
		7	6	106	–	595	211	1084	700	1573	1189	2062	1678
		7	10	269	–	1084	700	1899	1515	2714	2330	3529	3145
2	0.8	21	3	–	–	118	–	263	–	407	112	552	257
		21	6	46	–	335	40	624	329	914	618	1203	908
		21	10	142	–	624	329	1107	811	1589	1293	2071	1776
		21	16	287	–	1058	763	1830	1534	–	–	–	–
		21	23	456	160	1565	1269	–	–	–	–	–	–
		13	3	–	–	228	–	473	89	717	333	962	578
		13	6	106	–	595	211	1084	700	1573	1189	2062	1678
		13	10	269	–	1084	700	1899	1515	2714	2330	3529	3145
		13	16	514	130	1817	1433	3121	2737	–	–	–	–
		13	23	799	415	2673	2289	–	–	–	–	–	–

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21900 Series (US)

## Air to Open, Flow to Open

### Double Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE Packing and Standard Bonnet

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	5.7	3	–	–	100	–	389	–	969	378
		5.7	6	100	–	447	–	1027	435	2185	1594
		5.7	10	331	–	911	320	1876	1285	3807	3216
		3.5	3	–	–	100	–	389	–	969	378
		3.5	6	100	–	447	–	1027	435	2185	1594
		3.5	10	331	–	911	320	1876	1285	3807	3216
1.5	0.8	13	3	–	–	8	–	131	–	375	–
		13	6	8	–	155	–	400	16	889	505
		13	10	106	–	351	–	758	374	1573	1189
		7	3	–	–	8	–	131	–	375	–
		7	6	8	–	155	–	400	16	889	505
2	0.8	21	3	–	–	–	–	60	–	205	–
		21	6	–	–	75	–	219	–	509	213
		21	10	46	–	190	–	432	136	914	618
		21	16	133	–	364	69	750	454	1521	1226
		21	23	234	–	567	271	1121	826	–	–
		13	3	–	–	8	–	131	–	375	–
		13	6	8	–	155	–	400	16	889	505
		13	10	106	–	351	–	758	374	1573	1189
		13	16	253	–	644	260	1296	912	2600	2216
		13	23	424	40	986	602	1923	1539	–	–

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ 17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21900 Series (US)

## Air to Close, Flow to Open

### Double Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Spring Range: 3-15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	5.7	3	-	-	221	-	800	209	1379	788	1959	1368
		5.7	6	-	-	1090	499	2248	1657	3407	2816	4566	3974
		5.7	10	317	-	2248	1657	4179	3588	6110	5519	6250	6250
		3.5	3	-	-	221	-	800	209	1379	788	1959	1368
		3.5	6	-	-	1090	499	2248	1657	3407	2816	4566	3974
		3.5	10	317	-	2248	1657	4179	3588	6110	5519	6250	6250
1.5	0.8	13	3	-	-	59	-	304	-	548	164	793	409
		13	6	-	-	426	42	915	531	1404	1020	1893	1509
		13	10	100	-	915	531	1730	1346	2545	2161	3360	2976
		7	3	-	-	59	-	304	-	548	164	793	409
		7	6	-	-	426	42	915	531	1404	1020	1893	1509
		7	10	100	-	915	531	1730	1346	2545	2161	3360	2976
2	0.8	21	3	-	-	18	-	163	-	307	12	452	157
		21	6	-	-	235	-	524	229	814	518	1103	808
		21	10	42	-	524	229	1007	711	1489	1193	1971	1676
		21	16	187	-	958	663	1730	1434	-	-	-	-
		21	23	356	60	1465	1169	-	-	-	-	-	-
		13	3	-	-	59	-	304	-	548	164	793	409
		13	6	-	-	426	42	915	531	1404	1020	1893	1509
		13	10	100	-	915	531	1730	1346	2545	2161	3360	2976
		13	16	345	-	1648	1264	2952	2568	-	-	-	-
		13	23	630	246	2504	2120	-	-	-	-	-	-

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4 PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21900 Series (US) Air to Open, Flow to Open

## Double Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	5.7	3	-	-	-	-	-	-	568	-
		5.7	6	-	-	47	-	626	35	1785	1194
		5.7	10	-	-	510	-	1476	885	3407	2816
		3.5	3	-	-	-	-	-	-	568	-
		3.5	6	-	-	47	-	626	35	1785	1194
		3.5	10	-	-	510	-	1476	885	3407	2816
1.5	0.8	13	3	-	-	-	-	-	-	206	-
		13	6	-	-	-	-	231	-	720	336
		13	10	-	-	182	-	589	205	1404	1020
		7	3	-	-	-	-	-	-	206	-
		7	6	-	-	-	-	231	-	720	336
		7	10	-	-	182	-	589	205	1404	1020
2	0.8	21	3	-	-	-	-	-	-	105	-
		21	6	-	-	-	-	119	-	409	113
		21	10	-	-	90	-	332	36	814	518
		21	16	33	-	264	-	650	354	1421	1126
		21	23	134	-	467	171	1021	726	-	-
		13	3	-	-	-	-	-	-	206	-
		13	6	-	-	-	-	231	-	720	336
		13	10	-	-	182	-	589	205	1404	1020
		13	16	84	-	475	91	1127	743	2431	2047
		13	23	255	-	817	433	1754	1370	-	-

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ 17-4 PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21100 BS Series (US)

## Air to Close, Flow to Open

### Bellows Seal with Contoured Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE® Packing

Bench Range: 3-15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	12	3	-	-	249	-	523	243	750	517	750	750
		12	6	111	-	660	380	750	750	750	750	750	750
		6	3	-	-	390	146	750	535	750	750	750	750
		6	6	196	-	750	729	750	750	750	750	750	750
		3.8	3	19	-	456	250	750	688	750	750	750	750
		3.8	6	238	31	750	750	750	750	750	750	750	750
		1.7	3	39	-	520	369	750	750	750	750	750	750
		1.7	6	280	129	750	750	750	750	750	750	750	750
1.5	0.8	35	3	-	-	74	-	239	-	383	88	528	233
		35	6	17	-	244	12	470	239	697	465	750	692
		35	10	92	-	470	239	750	616	750	750	-	-
		25	3	-	-	128	-	432	48	677	293	750	537
		25	6	45	-	378	116	750	449	750	750	750	750
		25	10	156	-	710	449	750	750	750	750	-	-
		13	3	-	-	249	-	523	243	750	517	750	750
		13	6	111	-	660	380	750	750	750	750	750	750
		6	3	-	-	390	146	750	535	750	750	750	750
		6	6	196	-	750	729	750	750	750	750	750	750
		3.8	3	19	-	456	250	750	688	750	750	750	750
		3.8	6	238	31	750	750	750	750	750	750	750	750
		1.7	3	39	-	520	369	750	750	750	750	750	750
		1.7	6	280	129	750	750	750	750	750	750	750	750
2	0.8	46	3	-	-	74	-	187	-	300	69	413	182
		46	6	17	-	244	12	470	239	697	465	750	692
		46	10	92	-	470	239	750	616	750	750	-	-
		26	3	-	-	128	-	294	33	461	199	627	366
		26	6	45	-	378	116	710	449	750	750	750	750
		26	10	156	-	710	449	750	750	750	750	-	-
		15	3	-	-	249	-	523	243	750	517	750	750
		15	6	111	-	660	380	750	750	750	750	750	750
		6	3	-	-	390	146	750	535	750	750	750	750
		6	6	196	-	750	729	750	750	750	750	750	750
		3.8	3	19	-	456	250	750	688	750	750	750	750
		3.8	6	238	31	750	750	750	750	750	750	750	750
		1.7	3	39	-	520	369	750	750	750	750	750	750
		1.7	6	280	129	750	750	750	750	750	750	750	750
3	1.5	110	10	25	-	192	27	359	194	526	361	-	-
		110	16	75	-	343	177	610	445	-	-	-	-
		47	10	92	-	470	239	750	616	750	750	-	-
		47	16	206	-	750	579	750	750	-	-	-	-
		31	10	156	-	710	449	750	750	750	750	-	-
4	1.5	195	10	7	-	105	-	203	73	301	172	-	-
		195	16	36	-	193	64	350	221	-	-	-	-
		113	10	25	-	192	27	359	194	526	361	-	-
		113	16	75	-	343	177	610	445	-	-	-	-
		49	10	92	-	470	239	750	616	750	750	-	-
		49	16	206	-	810	579	750	750	-	-	-	-
6	2	400	16	11	-	90	-	169	76	248	155	-	-
		400	23	28	-	142	48	256	162	-	-	-	-
		208	16	35	-	192	62	349	219	506	376	-	-
		208	23	69	-	295	165	520	391	-	-	-	-
		126	16	73	-	340	175	608	442	750	710	-	-
		126	23	132	-	516	350	750	735	-	-	-	-

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ Hastelloy C Stem Required

# Allowable Pressure Drops for 21100 BS Series (US)

## Air to Open, Flow to Open

### Bellows Seal with Contoured Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE<sup>®</sup> Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	12	3	-	-	-	-	139	-	413	133
		12	6	-	-	166	-	441	161	750	710
		12	10	111	-	386	106	750	563	750	750
		6	3	-	-	40	-	235	-	624	379
		6	6	40	-	274	29	663	418	750	750
		6	10	196	-	585	340	750	750	750	750
		3.8	3	-	-	62	-	281	75	719	513
		3.8	6	62	-	325	119	750	557	750	750
		1.7	3	-	-	87	-	328	177	750	658
		1.7	6	87	-	376	225	750	706	750	750
1.5	0.8	35	3	-	-	-	-	28	-	142	-
		35	6	-	-	40	-	153	-	379	148
		35	10	17	-	130	-	319	88	697	465
		25	3	-	-	-	-	61	-	228	-
		25	6	-	-	78	-	244	-	577	316
		25	10	45	-	211	-	489	227	750	750
		13	3	-	-	-	-	139	-	413	133
		13	6	-	-	166	-	441	161	750	710
		13	10	111	-	386	106	750	563	750	750
		6	3	-	-	40	-	235	-	624	379
		6	6	40	-	274	29	663	418	750	750
		6	10	196	-	585	340	750	750	750	750
		3.8	3	-	-	62	-	281	75	719	513
		3.8	6	62	-	325	119	750	557	750	750
1.7	3	-	-	87	-	328	177	750	658		
1.7	6	87	-	376	225	750	706	750	750		
2	0.8	46	3	-	-	-	-	28	-	142	-
		46	6	-	-	40	-	153	-	379	148
		46	10	17	-	130	-	319	88	697	465
		26	3	-	-	-	-	61	-	228	-
		26	6	-	-	78	-	244	-	577	316
		26	10	45	-	211	-	489	227	750	750
		15	3	-	-	-	-	139	-	413	133
		15	6	-	-	166	-	441	161	750	710
		15	10	111	-	386	106	750	563	750	750
		6	3	-	-	40	-	235	-	624	379
		6	6	40	-	274	29	663	418	750	750
		6	10	196	-	585	340	750	750	750	750
		3.8	3	-	-	62	-	281	75	719	513
		3.8	6	62	-	325	119	750	557	750	750
1.7	3	-	-	87	-	328	177	750	658		
1.7	6	87	-	376	225	750	706	750	750		
3	1.5	110	10	-	-	42	-	125	-	292	127
		110	16	22	-	102	-	236	70	503	338
		110	23	57	-	172	7	364	199	-	-
		47	10	17	-	130	-	319	88	697	465
		47	16	85	-	266	35	568	337	750	750
		31	10	45	-	211	-	489	227	750	750
		31	16	144	-	411	149	750	593	750	750
		195	10	-	-	17	-	66	-	164	34
4	1.5	195	16	-	-	52	-	130	-	287	158
		195	23	25	-	93	-	206	76	-	-
		113	10	-	-	42	-	125	-	292	127
		113	16	22	-	102	-	236	70	503	338
		113	23	57	-	172	7	364	199	-	-
		49	10	17	-	130	-	319	88	697	465
		49	16	85	-	266	35	568	337	750	750
		400	23	-	-	39	-	96	-	210	117
6	2	208	16	-	-	51	-	129	-	286	157
		208	23	24	-	92	-	205	75	430	301
		126	16	20	-	100	-	233	68	501	335
		126	23	55	-	170	-	362	197	746	581

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

Hastelloy C Stem Required

# Allowable Pressure Drops for 21100 BS Series (US)

## Air to Close, Flow to Open

### Bellows Seal with Contoured Trim

Body Rating: ANSI Class 150 to 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Spring Range: 3-15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	12	3	-	-	59	-	333	53	608	328	750	602
		12	6	-	-	471	190	750	740	750	750	750	750
		6	3	-	-	121	-	510	266	750	655	750	750
		6	6	-	-	705	461	750	750	750	750	750	750
		3.8	3	-	-	154	-	592	385	750	750	750	750
		3.8	6	-	-	750	604	750	750	750	750	750	750
		1.7	3	-	-	188	37	669	518	750	750	750	750
		1.7	6	-	-	750	750	750	750	750	750	750	750
1.5	0.8	35	3	-	-	-	-	109	-	222	-	335	104
		35	6	-	-	165	-	392	160	618	387	750	613
		35	10	14	-	392	160	750	538	750	750	-	-
		25	3	-	-	13	-	179	-	346	84	512	251
		25	6	-	-	262	-	595	334	750	667	750	750
		25	10	41	-	595	334	750	750	750	750	-	-
		13	3	-	-	59	-	333	53	608	328	750	602
		13	6	-	-	471	190	750	740	750	750	750	750
		6	3	-	-	121	-	510	266	750	655	750	750
		6	6	-	-	705	461	750	750	750	750	750	750
		3.8	3	-	-	154	-	592	385	750	750	750	750
		3.8	6	-	-	750	604	750	750	750	750	750	750
		1.7	3	-	-	188	37	669	518	750	750	750	750
1.7	6	-	-	750	750	750	750	750	750	750	750		
2	0.8	46	3	-	-	-	-	109	-	222	-	335	104
		46	6	-	-	165	-	392	160	618	387	750	613
		46	10	14	-	392	160	750	538	750	750	-	-
		26	3	-	-	13	-	179	-	346	84	512	251
		26	6	-	-	262	-	595	334	750	667	750	750
		26	10	41	-	595	334	750	750	750	750	-	-
		15	3	-	-	59	-	333	53	608	328	750	602
		15	6	-	-	471	190	750	740	750	750	750	750
		6	3	-	-	121	-	510	266	750	655	750	750
		6	6	-	-	705	461	750	750	750	750	750	750
		3.8	3	-	-	154	-	592	385	750	750	750	750
		3.8	6	-	-	750	604	750	750	750	750	750	750
		1.7	3	-	-	188	37	669	518	750	750	750	750
1.7	6	-	-	750	750	750	750	750	750	750	750		
3	1.5	110	10	-	-	158	-	325	159	492	326	-	-
		110	16	41	-	308	143	575	410	-	-	-	-
		47	10	14	-	392	160	750	538	750	750	-	-
		47	16	127	-	732	500	750	750	-	-	-	-
		31	10	41	-	595	334	750	750	750	750	-	-
4	1.5	195	10	-	-	84	-	183	53	281	151	-	-
		195	16	16	-	173	43	330	200	-	-	-	-
		113	10	-	-	158	-	325	159	492	326	-	-
		113	16	41	-	308	143	575	410	-	-	-	-
		49	10	14	-	392	160	750	538	750	750	-	-
49	16	127	-	732	500	750	750	-	-	-	-		
6	2	400	16	-	-	73	-	151	59	229	137	-	-
		400	23	12	-	124	32	236	144	-	-	-	-
		208	16	-	-	156	30	308	182	461	335	-	-
		208	23	36	-	256	130	475	349	-	-	-	-
		126	16	18	-	273	115	528	370	750	625	-	-
126	23	74	-	440	283	750	649	-	-	-	-		

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ Hastelloy C Stem Required

# Allowable Pressure Drops for 21100 BS Series (US)

## Air to Open, Flow to Open

### Bellows Seal with Contoured Trim

Body Rating: ANSI Class 150 to 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	12	3	-	-	-	-	-	-	224	-
		12	6	-	-	-	-	251	-	750	520
		12	10	-	-	196	-	654	374	750	750
		6	3	-	-	-	-	-	-	355	110
		6	6	-	-	-	-	394	149	750	750
		6	10	-	-	316	72	750	720	750	750
		3.8	3	-	-	-	-	-	-	417	210
		3.8	6	-	-	23	-	460	254	750	750
		1.7	3	-	-	-	-	-	-	476	325
		1.7	6	-	-	44	-	524	373	750	750
1.5	0.8	35	3	-	-	-	-	-	-	63	-
		35	6	-	-	-	-	75	-	301	70
		35	10	-	-	52	-	241	9	618	387
		25	3	-	-	-	-	-	-	113	-
		25	6	-	-	-	-	129	-	462	201
		25	10	-	-	96	-	373	112	750	667
		13	3	-	-	-	-	-	-	224	-
		13	6	-	-	-	-	251	-	750	520
		13	10	-	-	196	-	654	374	750	750
		6	3	-	-	-	-	-	-	355	110
		6	6	-	-	-	-	394	149	750	750
		6	10	-	-	316	72	750	720	750	750
		3.8	3	-	-	-	-	-	-	417	210
		3.8	6	-	-	23	-	460	254	750	750
1.7	3	-	-	-	-	-	-	476	325		
1.7	6	-	-	44	-	524	373	750	750		
2	0.8	46	3	-	-	-	-	-	-	63	-
		46	6	-	-	-	-	75	-	301	70
		46	10	-	-	52	-	241	9	618	387
		26	3	-	-	-	-	-	-	113	-
		26	6	-	-	-	-	129	-	462	201
		26	10	-	-	96	-	373	112	750	667
		15	3	-	-	-	-	-	-	224	-
		15	6	-	-	-	-	251	-	750	520
		15	10	-	-	196	-	654	374	750	750
		6	3	-	-	-	-	-	-	355	110
		6	6	-	-	-	-	394	149	750	750
		6	10	-	-	316	72	750	720	750	750
		3.8	3	-	-	-	-	-	-	417	210
		3.8	6	-	-	23	-	460	254	750	750
1.7	3	-	-	-	-	-	-	476	325		
1.7	6	-	-	44	-	524	373	750	750		
3	1.5	110	10	-	-	7	-	91	-	258	93
		110	16	-	-	67	-	201	36	468	303
		110	23	22	-	138	-	330	164	-	-
		47	10	-	-	52	-	241	9	618	387
		47	16	7	-	188	-	490	259	750	750
		31	10	-	-	96	-	373	112	750	667
		31	16	29	-	296	34	740	478	750	750
		195	10	-	-	-	-	45	-	143	14
4	1.5	195	16	-	-	31	-	110	-	267	137
		195	23	5	-	73	-	185	56	-	-
		113	10	-	-	7	-	91	-	258	93
		113	16	-	-	67	-	201	36	468	303
		113	23	22	-	138	-	330	164	-	-
		49	10	-	-	52	-	241	9	618	387
		49	16	7	-	188	-	490	259	750	750
6	2	400	23	-	-	23	-	79	-	191	99
		208	16	-	-	18	-	95	-	247	121
		208	23	-	-	58	-	168	42	387	262
		126	16	-	-	44	-	171	13	426	268
		126	23	-	-	111	-	294	136	660	503

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ Hastelloy C Stem Required



# Allowable Pressure Drops for 21600 BS Series (US)

## Air to Close, Flow to Open

### Bellows Seal with Soft Seat Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class VI

PTFE or LE® Packing

Bench Range: 3-15 (psi)

Valve Size (inches)	Travel (inches)	Rated Cv	Actuator Size	Supply Pressure (psi)				
				20	30	40	50	60
				CL VI	CL VI	CL VI	CL VI	CL VI
.75 & 1	0.8	12	3	–	202	476	750	750
		12	6	65	614	750	750	750
		12	10	248	750	750	750	–
		6	3	–	350	739	750	750
		6	6	155	750	750	750	750
		6	10	414	750	750	750	–
		3.8	3	–	422	750	750	750
		3.8	6	203	750	750	750	750
		1.7	3	14	495	750	750	750
		1.7	6	255	750	750	750	750
1.5	0.8	35	3	–	35	148	262	375
		35	6	–	205	431	658	750
		35	10	54	431	750	750	–
		25	3	–	84	251	417	584
		25	6	–	334	667	750	750
		25	10	112	667	750	750	–
		13	3	–	202	476	750	750
		13	6	65	614	750	750	750
		13	10	248	750	750	750	–
		6	3	–	350	739	750	750
		6	6	155	750	750	750	750
		6	10	414	750	750	750	–
		3.8	3	–	422	750	750	750
		3.8	6	203	750	750	750	750
1.7	3	14	495	750	750	750		
1.7	6	255	750	750	750	750		
2	0.8	46	3	–	35	148	262	375
		46	6	–	205	431	658	750
		46	10	54	431	750	750	–
		26	3	–	84	251	417	584
		26	6	–	334	667	750	750
		26	10	112	667	750	750	–
		15	3	–	202	476	750	750
		15	6	65	614	750	750	750
		15	10	248	750	750	750	–
		6	3	–	350	739	750	750
		6	6	155	750	750	750	750
		6	10	414	750	750	750	–
		3.8	3	–	422	750	750	750
		3.8	6	203	750	750	750	750
1.7	3	14	495	750	750	750		
1.7	6	255	750	750	750	750		
3	1.5	110	10	–	165	332	499	–
		110	16	48	315	582	–	–
		47	10	54	431	750	750	–
		31	10	112	667	750	750	–
4	1.5	195	10	–	83	181	279	–
		195	16	15	171	328	–	–
		113	10	–	165	332	499	–
		113	16	48	315	582	–	–
		49	10	54	431	750	750	–
6	2	400	16	–	74	153	233	–
		400	23	12	126	240	–	–
		208	16	13	170	327	484	–
		208	23	48	273	499	–	–
		126	16	46	313	580	750	–
		126	23	104	488	750	–	–

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

**Hastelloy C Stem Required**

# Allowable Pressure Drops for 21600 BS Series (US)

## Air to Open, Flow to Open

### Bellows Seal with Soft Seat Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class VI

PTFE or LE® Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)			
				3-15	6-30	11-23	21-45
				CL VI	CL VI	CL VI	CL VI
.75 & 1	0.8	12	3	—	—	92	367
		12	6	—	120	394	750
		12	10	65	339	750	750
		6	3	—	—	194	583
		6	6	—	233	622	750
		6	10	155	544	750	750
		3.8	3	—	28	247	685
		3.8	6	28	291	728	750
		1.7	3	—	62	303	750
		1.7	6	62	351	750	750
1.5	0.8	35	3	—	—	—	103
		35	6	—	—	114	341
		35	10	—	92	280	658
		25	3	—	—	18	184
		25	6	—	34	201	534
		25	10	—	167	445	750
		13	3	—	—	92	367
		13	6	—	120	394	750
		13	10	65	339	750	750
		6	3	—	—	194	583
		6	6	—	233	622	750
		6	10	155	544	750	750
		3.8	3	—	28	247	685
		3.8	6	28	291	728	750
1.7	3	—	62	303	750		
1.7	6	62	351	750	750		
2	0.8	46	3	—	—	—	103
		46	6	—	—	114	341
		46	10	—	92	280	658
		26	3	—	—	18	184
		26	6	—	34	201	534
		26	10	—	167	445	750
		15	3	—	—	92	367
		15	6	—	120	394	750
		15	10	65	339	750	750
		6	3	—	—	194	583
		6	6	—	233	622	750
		6	10	155	544	750	750
		3.8	3	—	28	247	685
		3.8	6	28	291	728	750
1.7	3	—	62	303	750		
1.7	6	62	351	750	750		
3	1.5	110	10	—	14	98	265
		110	16	—	74	208	475
		110	23	29	145	337	—
		47	10	—	92	280	658
		47	16	46	228	530	750
		31	10	—	167	445	750
		—	—	—	—	—	—
4	1.5	195	10	—	—	44	142
		195	16	—	30	109	266
		195	23	—	71	184	—
		113	10	—	14	98	265
		113	16	—	74	208	475
		113	23	29	145	337	—
		49	10	—	92	280	658
49	16	46	228	530	750		
6	2	400	23	—	24	81	194
		208	16	—	29	107	264
		208	23	—	70	183	409
		126	16	—	72	206	473
		126	23	27	142	335	719

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

Hastelloy C Stem Required

# Allowable Pressure Drops for 21700 BS Series (US)

## Air to Close, Flow to Open

### Bellows Seal with Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE® Packing

Bench Range: 3-15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	8 / 4	3	-	-	249	-	523	243	750	517	750	750
		8 / 4	6	111	-	660	380	750	750	750	750	750	750
		8 / 4	10	294	14	750	750	750	750	750	750	-	-
1.5	0.8	15 / 8	3	-	-	128	-	294	33	461	199	627	366
		15 / 8	6	45	-	378	116	710	449	750	750	750	750
		15 / 8	10	156	-	710	449	750	750	750	750	-	-
2	0.8	15 / 8	3	-	-	128	-	294	33	461	199	627	366
		15 / 8	6	45	-	378	116	710	449	750	750	750	750
		15 / 8	10	156	-	710	449	750	750	750	750	-	-
		25	3	-	-	74	-	187	-	300	69	413	182
		25	6	17	-	244	12	470	239	697	465	750	692
3	1.5	75 / 48	10	25	-	192	27	359	194	526	361	-	-
		75 / 48	16	75	-	343	177	610	445	-	-	-	-
		100	10	7	-	105	-	203	73	301	172	-	-
4	1.5	100	16	36	-	193	64	350	221	-	-	-	-
		63	10	25	-	192	27	359	194	526	361	-	-
		63	16	75	-	343	177	610	445	-	-	-	-
6	2	200 / 150	16	11	-	90	-	169	76	248	155	-	-
		200 / 150	23	28	-	142	48	256	162	-	-	-	-

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

Hastelloy C Stem Required

# Allowable Pressure Drops for 21700 BS Series (US)

## Air to Open, Flow to Open

### Bellows Seal with Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE® Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>V</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	8 / 4	3	-	-	-	-	139	-	413	133
		8 / 4	6	-	-	166	-	441	161	750	710
		8 / 4	10	111	-	386	106	750	563	750	750
1.5	0.8	15 / 8	3	-	-	-	-	61	-	228	-
		15 / 8	6	-	-	78	-	244	-	577	316
		15 / 8	10	45	-	211	-	489	227	750	750
2	0.8	15 / 8	3	-	-	-	-	61	-	228	-
		15 / 8	6	-	-	78	-	244	-	577	316
		15 / 8	10	45	-	211	-	489	227	750	750
		25	3	-	-	-	-	28	-	142	-
		25	6	-	-	40	-	153	-	379	148
		25	10	17	-	130	-	319	88	697	465
3	1.5	75 / 48	16	22	-	102	-	236	70	503	338
		75 / 48	23	57	-	172	7	364	199	-	-
		100	10	-	-	17	-	66	-	164	34
4	1.5	100	16	-	-	52	-	130	-	287	158
		100	23	25	-	93	-	206	76	-	-
		63	10	-	-	42	-	125	-	292	127
		63	16	22	-	102	-	236	70	503	338
		63	23	57	-	172	7	364	199	-	-
6	2	200 / 150	16	-	-	19	-	58	-	137	44
		200 / 150	23	-	-	39	-	96	-	210	117

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

Hastelloy C Stem Required

# Allowable Pressure Drops for 21700 BS Series (US)

## Air to Close, Flow to Open

### Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Spring Range: 3 - 15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	8 & 4	3	-	-	59	-	333	53	608	328	750	602
		8 & 4	6	-	-	471	190	750	740	750	750	750	750
		8 & 4	10	105	-	750	740	750	750	750	750	-	-
1.5	0.8	15 & 8	3	-	-	13	-	179	-	346	84	512	251
		15 & 8	6	-	-	262	-	595	334	750	667	750	750
		15 & 8	10	41	-	595	334	750	750	750	750	-	-
2	0.8	15 & 8	3	-	-	13	-	179	-	346	84	512	251
		15 & 8	6	-	-	262	-	595	334	750	667	750	750
		15 & 8	10	41	-	595	334	750	750	750	750	-	-
		25	3	-	-	-	-	109	-	222	-	335	104
		25	6	-	-	165	-	392	160	618	387	750	613
3	1.5	75 & 48	10	-	-	158	-	325	159	492	326	-	-
		75 & 48	16	41	-	308	143	575	410	-	-	-	-
4	1.5	100	10	-	-	84	-	183	53	281	151	-	-
		100	16	16	-	173	43	330	200	-	-	-	-
		63	10	-	-	158	-	325	159	492	326	-	-
		63	16	41	-	308	143	575	410	-	-	-	-
6	2	200 & 150	16	-	-	74	-	153	60	232	139	-	-
		200 & 150	23	12	-	126	32	239	146	-	-	-	-

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ Hastelloy C Stem Required

# Allowable Pressure Drops for 21700 BS Series (US) Air to Open, Flow to Open

## Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	8 & 4	3	-	-	-	-	-	-	224	-
		8 & 4	6	-	-	-	-	251	-	750	520
		8 & 4	10	-	-	196	-	654	374	750	750
1.5	0.8	15 & 8	3	-	-	-	-	-	-	113	-
		15 & 8	6	-	-	-	-	129	-	462	201
		15 & 8	10	-	-	96	-	373	112	750	667
2	0.8	15 & 8	3	-	-	-	-	-	-	113	-
		15 & 8	6	-	-	-	-	129	-	462	201
		15 & 8	10	-	-	96	-	373	112	750	667
		25	3	-	-	-	-	-	-	63	-
		25	6	-	-	-	-	75	-	301	70
		25	10	-	-	52	-	241	9	618	387
3	1.5	75 & 48	16	-	-	67	-	201	36	468	303
		75 & 48	23	22	-	138	-	330	164	-	-
		100	10	-	-	-	-	45	-	143	14
4	1.5	100	16	-	-	31	-	110	-	267	137
		100	23	-	-	73	-	185	56	-	-
		63	10	-	-	7	-	91	-	258	93
		63	16	-	-	67	-	201	36	468	303
		63	23	22	-	138	-	330	164	-	-
6	2	200 & 150	16	-	-	-	-	42	-	121	28
		200 & 150	23	-	-	23	-	80	-	194	101

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

  Hastelloy C Stem Required

# Allowable Pressure Drops for 21900 BS Series (US)

## Air to Close, Flow to Open

### Bellows Seal with Double Stage Lo-dB® Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE® Packing

Bench Range: 3-15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	5.7	3	-	-	249	-	523	243	750	517	750	750
		5.7	6	111	-	660	380	750	750	750	750	750	750
		5.7	10	294	14	750	750	750	750	750	750	-	-
		3.5	3	-	-	249	-	523	243	750	517	750	750
		3.5	6	111	-	660	380	750	750	750	750	750	750
		3.5	10	294	14	750	750	750	750	750	750	-	-
1.5	0.8	13	3	-	-	128	-	294	33	461	199	627	366
		13	6	45	-	378	116	710	449	750	750	750	750
		13	10	156	-	710	449	750	750	750	750	-	-
		7	3	-	-	128	-	294	33	461	199	627	366
		7	6	45	-	378	116	710	449	750	750	750	750
		7	10	156	-	710	449	750	750	750	750	-	-
2	0.8	21	3	-	-	74	-	187	-	300	69	413	182
		21	6	17	-	244	12	470	239	697	465	750	692
		21	10	92	-	470	239	750	616	750	750	-	-
		21	16	206	-	750	579	750	750	-	-	-	-
		21	23	338	107	750	750	-	-	-	-	-	-
		13	3	-	-	128	-	294	33	461	199	627	366
		13	6	45	-	378	116	710	449	750	750	750	750
		13	10	156	-	710	449	750	750	750	750	-	-
		13	16	322	61	750	750	750	750	-	-	-	-
		13	23	516	255	750	750	-	-	-	-	-	-
3	1.5	63 / 40	10	25	-	192	27	359	194	526	361	-	-
			16	75	-	343	177	610	445	-	-	-	-
			23	134	-	518	353	-	-	-	-	-	-
4	1.5	83	10	7	-	105	-	203	73	301	172	-	-
			16	36	-	193	64	350	221	-	-	-	-
			23	70	-	296	167	-	-	-	-	-	-
			10	25	-	192	27	359	194	526	361	-	-
			16	75	-	343	177	610	445	-	-	-	-
			23	134	-	518	353	-	-	-	-	-	-
6	2	125	16	11	-	90	-	169	76	248	155	-	-
			23	28	-	142	48	256	162	-	-	-	-

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

Hastelloy C Stem Required

# Allowable Pressure Drops for 21900 BS Series (US)

## Air to Open, Flow to Open

### Bellows Seal with Double Stage Lo-dB® Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE® Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	5.7	3	-	-	-	-	139	-	413	133
		5.7	6	-	-	166	-	441	161	750	710
		5.7	10	111	-	386	106	750	563	750	750
		3.5	3	-	-	-	-	139	-	413	133
		3.5	6	-	-	166	-	441	161	750	710
		3.5	10	111	-	386	106	750	563	750	750
1.5	0.8	13	3	-	-	-	-	61	-	228	-
		13	6	-	-	78	-	244	-	577	316
		13	10	45	-	211	-	489	227	750	750
		7	3	-	-	-	-	61	-	228	-
		7	6	-	-	78	-	244	-	577	316
		7	10	45	-	211	-	489	227	750	750
2	0.8	21	3	-	-	-	-	28	-	142	-
		21	6	-	-	40	-	153	-	379	148
		21	10	17	-	130	-	319	88	697	465
		21	16	85	-	266	35	568	337	750	750
		21	23	164	-	425	193	750	628	-	-
		13	3	-	-	-	-	61	-	228	-
		13	6	-	-	78	-	244	-	577	316
		13	10	45	-	211	-	489	227	750	750
		13	16	144	-	411	149	750	593	750	750
		13	23	261	-	644	382	750	750	-	-
3	1.5	63 / 40	10	-	-	42	-	125	-	292	127
			16	22	-	102	-	236	70	503	338
			23	57	-	172	7	364	199	-	-
4	1.5	83	10	-	-	17	-	66	-	164	34
		83	16	-	-	52	-	130	-	287	158
		83	23	25	-	93	-	206	76	-	-
		53	10	-	-	42	-	125	-	292	127
		53	16	22	-	102	-	236	70	503	338
		53	23	57	-	172	7	364	199	-	-
6	2	125	16	-	-	19	-	58	-	137	44
		125	23	-	-	39	-	96	-	210	117

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ Hastelloy C Stem Required



# Allowable Pressure Drops for 21900 BS Series (US)

## Air to Close, Flow to Open

### Bellows Seal with Double Stage Lo-dB® Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Spring Range: 3-15 (psi)

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)									
				20		30		40		50		60	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	5.7	3	-	-	59	-	333	53	608	328	750	602
		5.7	6	-	-	471	190	750	740	750	750	750	750
		5.7	10	105	-	750	740	750	750	750	750	-	-
		3.5	3	-	-	59	-	333	53	608	328	750	602
		3.5	6	-	-	471	190	750	740	750	750	750	750
		3.5	10	105	-	750	740	750	750	750	750	-	-
1.5	0.8	13	3	-	-	13	-	179	-	346	84	512	251
		13	6	-	-	262	-	595	334	750	667	750	750
		13	10	41	-	595	334	750	750	750	750	-	-
		7	3	-	-	13	-	179	-	346	84	512	251
		7	6	-	-	262	-	595	334	750	667	750	750
		7	10	41	-	595	334	750	750	750	750	-	-
2	0.8	21	3	-	-	-	-	109	-	222	-	335	104
		21	6	-	-	165	-	392	160	618	387	750	613
		21	10	14	-	392	160	750	538	750	750	-	-
		21	16	127	-	732	500	750	750	-	-	-	-
		21	23	260	28	750	750	-	-	-	-	-	-
		13	3	-	-	13	-	179	-	346	84	512	251
		13	6	-	-	262	-	595	334	750	667	750	750
		13	10	41	-	595	334	750	750	750	750	-	-
		13	16	207	-	750	750	750	750	-	-	-	-
13	23	401	140	750	750	-	-	-	-	-	-		
3	1.5	63 & 40	10	-	-	158	-	325	159	492	326	-	-
		63 & 40	16	41	-	308	143	575	410	-	-	-	-
		63 & 40	23	99	-	483	318	-	-	-	-	-	-
4	1.5	83	10	-	-	84	-	183	53	281	151	-	-
		83	16	16	-	173	43	330	200	-	-	-	-
		83	23	50	-	276	146	-	-	-	-	-	-
		53	10	-	-	158	-	325	159	492	326	-	-
		53	16	41	-	308	143	575	410	-	-	-	-
		53	23	99	-	483	318	-	-	-	-	-	-
6	2	125	16	-	-	74	-	153	60	232	139	-	-
		125	23	12	-	126	32	239	146	-	-	-	-

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

Hastelloy C Stem Required

## Allowable Pressure Drops for 21900 BS Series (US) Air to Open, Flow to Open

### Bellows Seal with Double Stage Lo-dB® Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Supply pressure is 5 psi over bench range

Valve Size (inches)	Travel (inches)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
.75 & 1	0.8	5.7	3	-	-	-	-	-	-	224	-
		5.7	6	-	-	-	-	251	-	750	520
		5.7	10	-	-	196	-	654	374	750	750
		3.5	3	-	-	-	-	-	-	224	-
		3.5	6	-	-	-	-	251	-	750	520
		3.5	10	-	-	196	-	654	374	750	750
1.5	0.8	13	3	-	-	-	-	-	-	113	-
		13	6	-	-	-	-	129	-	462	201
		13	10	-	-	96	-	373	112	750	667
		7	3	-	-	-	-	-	-	113	-
		7	6	-	-	-	-	129	-	462	201
		7	10	-	-	96	-	373	112	750	667
2	0.8	21	3	-	-	-	-	-	-	63	-
		21	6	-	-	-	-	75	-	301	70
		21	10	-	-	52	-	241	9	618	387
		21	16	-	-	188	-	490	259	750	750
		21	23	86	-	346	115	750	549	-	-
		13	3	-	-	-	-	-	-	113	-
		13	6	-	-	-	-	129	-	462	201
		13	10	-	-	96	-	373	112	750	667
		13	16	29	-	296	34	740	478	750	750
		13	23	146	-	529	267	750	750	-	-
3	1.5	63 & 40	10	-	-	7	-	91	-	258	93
			16	-	-	67	-	201	36	468	303
			23	22	-	138	-	330	164	-	-
4	1.5	83	10	-	-	-	-	45	-	143	14
		83	16	-	-	31	-	110	-	267	137
		83	23	-	-	73	-	185	56	-	-
		53	10	-	-	7	-	91	-	258	93
		53	16	-	-	67	-	201	36	468	303
		53	23	22	-	138	-	330	164	-	-
6	2	125	16	-	-	-	-	42	-	121	28
		125	23	-	-	23	-	80	-	194	101

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

**Hastelloy C Stem Required**

# 21000 Series

Pressure Drop Tables - PH1080

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**Metric Units**

# 21000 Series Pressure Drop Tables - PH1080

02/02

Note: Allowable Pressure Drop Tables provided in both US Units (psi) and Metric Units (bar) in separate sections but on corresponding page numbers.

## Standard Construction ANSI Class 150 to 600

<b>21100</b>	
Contoured Trim	Page
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	1
Air to Open .....	2
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	3
Air to Open .....	4
<b>21600</b>	
<b>Contoured Trim with Soft Seat</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	5
Air to Open .....	6
<b>21700</b>	
<b>Single Stage Lo-dB Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	7
Air to Open .....	8
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	10
Air to Open .....	11
<b>Single Stage Anti-Cavitation Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Close	
Air to Close and Air to Open .....	9
<b>Flexible Graphite</b>	
Flow to Close	
Air to Close and Air to Open .....	12
<b>21800</b>	
<b>Double Stage Anti-Cavitation Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Close	
Air to Close and Air to Open .....	13
<b>Flexible Graphite</b>	
Flow to Close	
Air to Close and Air to Open .....	14
<b>21900</b>	
<b>Double Stage Lo-dB Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	15
Air to Open .....	16
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	17
Air to Open .....	18

## High Pressure Construction ANSI Class 900 to 2500

<b>21100</b>	
Contoured Trim	Page
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	19
Air to Open .....	20
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	21
Air to Open .....	22
<b>21600</b>	
<b>Contoured Trim with Soft Seat</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	23
Air to Open .....	24
<b>21700</b>	
<b>Single Stage Lo-dB Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close and Air to Open .....	25
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close and Air to Open .....	27
<b>Single Stage Anti-Cavitation Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Close	
Air to Close and Air to Open .....	26
<b>Flexible Graphite</b>	
Flow to Close	
Air to Close and Air to Open .....	28
<b>21800</b>	
<b>Double Stage Anti-Cavitation Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Close	
Air to Close and Air to Open .....	29
<b>Flexible Graphite</b>	
Flow to Close	
Air to Close and Air to Open .....	30
<b>21900</b>	
<b>Double Stage Lo-dB Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	31
Air to Open .....	32
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	33
Air to Open .....	34

## Bellows Seal Construction ANSI Class 150 to 300

<b>21100 BS</b>	
Contoured Trim	Page
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	35
Air to Open .....	36
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	37
Air to Open .....	38
<b>21600 BS</b>	
<b>Contoured Trim with Soft Seat</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	39
Air to Open .....	40
<b>21700 BS</b>	
<b>Single Stage Lo-dB Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	41
Air to Open .....	42
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	43
Air to Open .....	44
<b>21900 BS</b>	
<b>Double Stage Lo-dB Trim</b>	
<b>PTFE or LE Packing</b>	
Flow to Open	
Air to Close .....	45
Air to Open .....	46
<b>Flexible Graphite</b>	
Flow to Open	
Air to Close .....	47
Air to Open .....	48



**Masoneilan**

# Allowable Pressure Drops for 21100 Series (Metric) Air to Close, Flow to Open

## Contoured Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

PTFE or LE® Packing

Bench Range: 3 - 15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	12	3	3	–	43	2	83	42	103	82	103	103
		12	6	23	–	103	103	103	103	103	103	103	103
		6	3	18	–	103	57	103	103	103	103	103	103
		6	6	71	4.2	103	103	103	103	103	103	103	103
		3.8	3	39	–	103	103	103	103	103	103	103	103
		3.8	6	103	44	103	103	103	103	103	103	103	103
		1.7	3	103	–	103	103	103	103	103	103	103	103
		1.7	6	103	103	103	103	103	103	103	103	103	103
40	20.3	35	3	–	–	8	–	18	–	28	8	38	18
		35	6	3.2	–	23	2.7	43	23	63	43	83	63
		35	10	9.9	–	43	23	76	56	103	89	103	103
		25	3	–	–	16	–	33	6	49	23	66	40
		25	6	7.4	–	41	15	75	48	103	82	103	103
		25	10	19	–	75	48	103	103	103	103	103	103
		13	3	3	–	43	2	83	42	103	82	103	103
		13	6	23	–	103	62	103	103	103	103	103	103
		6	3	18	–	103	57	103	103	103	103	103	103
		6	6	71	4.2	103	103	103	103	103	103	103	103
		3.8	3	39	–	103	103	103	103	103	103	103	103
		3.8	6	103	44	103	103	103	103	103	103	103	103
1.7	3	103	–	103	103	103	103	103	103	103	103		
1.7	6	103	103	103	103	103	103	103	103	103	103		
50	20.3	46	3	–	–	8	–	18	–	28	8	38	18
		46	6	3.2	–	23	2.7	43	23	63	43	83	63
		46	10	9.9	–	43	23	76	56	103	89	103	103
		26	3	–	–	16	–	33	6	49	23	66	40
		26	6	7.4	–	41	15	75	48	103	82	103	103
		26	10	19	–	75	48	103	103	103	103	103	103
		15	3	3	–	43	2	83	42	103	82	103	103
		15	6	23	–	103	62	103	103	103	103	103	103
		6	3	18	–	103	57	103	103	103	103	103	103
		6	6	71	4.2	103	103	103	103	103	103	103	103
		3.8	3	39	–	103	103	103	103	103	103	103	103
		3.8	6	103	44	103	103	103	103	103	103	103	103
1.7	3	103	–	103	103	103	103	103	103	103	103		
1.7	6	103	103	103	103	103	103	103	103	103	103		
80	38.1	110	10	2.6	–	15	2.7	28	15	41	28	54	41
		110	16	6.4	–	27	14	47	35	–	–	–	–
		47	10	9.9	–	43	23	76	56	103	89	103	103
		47	16	20	–	73	53	103	103	–	–	–	–
		31	10	19	–	75	48	103	103	103	103	103	103
100	38.1	195	10	0.8	–	8	–	15	5.7	22	13	30	20
		195	16	3.0	–	15	5.0	26	17	–	–	–	–
		113	10	2.6	–	15	2.7	28	15	41	28	54	41
		113	16	6.4	–	27	14	47	35	–	–	–	–
		49	10	9.9	–	43	23	76	56	103	89	103	103
		49	16	20	–	73	53	103	103	–	–	–	–
150	50.8	400	16	0.8	–	6.5	–	12	5.4	18	11	23	17
		400	23	2.0	–	10	3.5	18	12	26	20	34	28
		208	16	2.7	–	14	4.7	26	16	37	28	49	39
		208	23	5.2	–	22	12	38	29	55	45	71	62
		126	16	5.8	–	26	14	47	34	67	54	88	75
		126	23	10	–	40	27	69	56	98	86	10	103

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.

2. Use pressure drops noted for C<sub>v</sub> = 1.7 when applying low flow (C<sub>v</sub> = .6, .3 or .11) designs.

17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21100 Series (Metric) Air to Open, Flow to Open

## Contoured Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

PTFE or LE® Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3 - 15		6 - 30		11 - 23		21 - 45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	12	3	-	-	7	-	27	-	67	26
		12	6	6.9	-	31	-	71	30	103	103
		12	10	23	-	63	22	103	89	103	103
		6	3	-	-	28	-	81	15	103	103
		6	6	29	-	92	25	103	103	103	103
		6	10	71	4.2	103	103	103	103	103	103
		3.8	3	2	-	58	-	103	63	103	103
		3.8	6	58	-	103	82	103	103	103	103
		1.7	3	21	-	103	15	103	103	103	103
		1.7	6	103	14	103	103	103	103	103	103
40	20.3	35	3	-	-	-	-	4	-	14	-
		35	6	-	-	5.2	-	15	-	35	15
		35	10	3.2	-	13	-	30	9.4	63	43
		25	3	-	-	1	-	9	-	26	-
		25	6	0.6	-	11	-	28	1.0	61	35
		25	10	7.4	-	24	-	52	26	103	82
		13	3	-	-	7	-	27	-	67	26
		13	6	6.9	-	31	-	71	30	103	103
		13	10	23	-	63	22	103	89	103	103
		6	3	-	-	28	-	81	15	103	103
		6	6	29	-	92	25	103	103	103	103
		6	10	71	4.2	103	103	103	103	103	103
		3.8	3	2	-	58	-	103	63	103	103
		3.8	6	58	-	103	82	103	103	103	103
1.7	3	21	-	103	15	103	103	103	103		
1.7	6	103	14	103	103	103	103	103	103		
50	20.3	46	3	-	-	-	-	4	-	14	-
		46	6	-	-	5.2	-	15	-	35	15
		46	10	3.2	-	13	-	30	9.4	63	43
		26	3	-	-	1	-	9	-	26	-
		26	6	0.6	-	11	-	28	1.0	61	35
		26	10	7.4	-	24	-	52	26	103	82
		15	3	-	-	7	-	27	-	67	26
		15	6	6.9	-	31	-	71	30	103	103
		15	10	23	-	63	22	103	89	103	103
		6	3	-	-	28	-	81	15	103	103
		6	6	29	-	92	25	103	103	103	103
		6	10	71	4.2	103	103	103	103	103	103
		3.8	3	2	-	58	-	103	63	103	103
		3.8	6	58	-	103	82	103	103	103	103
1.7	3	21	-	103	15	103	103	103	103		
1.7	6	103	14	103	103	103	103	103	103		
80	38.1	110	10	-	-	3.9	-	10	-	23	10
		110	16	2.3	-	8.5	-	19	6.0	39	26
		110	23	5.0	-	14	1.1	29	16	-	-
		47	10	3.2	-	13	-	30	9.4	63	43
		47	16	9.2	-	25	4.7	52	31	103	85
		31	10	7.4	-	24	-	52	26	103	82
		31	16	18	-	45	18	90	63	103	103
100	38.1	195	10	-	-	1.6	-	5.2	-	12	2.8
		195	16	0.7	-	4.2	-	9.9	-	21	12
		195	23	2.2	-	7.2	-	15	5.9	-	-
		113	10	-	-	3.9	-	10	-	23	10
		113	16	2.3	-	8.5	-	19	6.0	39	26
		113	23	5.0	-	14	1.1	29	16	-	-
		49	10	3.2	-	13	-	30	9.4	63	43
49	16	9.2	-	25	4.7	52	31	103	85		
150	50.8	400	23	0.4	-	2.9	-	6.9	-	15	8.3
		208	16	0.4	-	3.9	-	9.6	-	21	12
		208	23	1.9	-	6.9	-	15	5.6	32	22
		126	16	1.8	-	7.9	-	18	5.4	39	26
		126	23	4.5	-	13	-	28	15	57	45

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.

2. Use pressure drops noted for C<sub>v</sub> = 1.7 when applying low flow (C<sub>v</sub> = .6, .3 or .11) designs.

17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21100 Series (Metric) Air to Close, Flow to Open

## Contoured Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

Flexible Graphite Packing

Spring Range: 3 - 15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	12	3	-	-	15	-	55	14	95	54	103	94
		12	6	-	-	75	34	103	103	103	103	103	103
		6	3	-	-	50	-	103	90	103	103	103	103
		6	6	-	-	103	103	103	103	103	103	103	103
		3.8	3	-	-	97	9	103	103	103	103	103	103
		3.8	6	3	-	103	103	103	103	103	103	103	103
		1.7	3	-	-	103	103	103	103	103	103	103	103
		1.7	6	24	-	103	103	103	103	103	103	103	103
40	20.3	35	3	-	-	1	-	11	-	21	1	31	11
		35	6	-	-	16	-	36	16	56	36	76	56
		35	10	3	-	36	16	69	49	103	82	103	103
		25	3	-	-	4	-	21	-	38	11	55	28
		25	6	-	-	29	3	63	37	97	70	103	103
		25	10	7	-	63	37	103	93	103	103	103	103
		13	3	-	-	15	-	55	14	95	54	103	94
		13	6	-	-	75	34	103	103	103	103	103	103
		6	3	-	-	50	-	103	90	103	103	103	103
		6	6	-	-	103	103	103	103	103	103	103	103
		3.8	3	-	-	97	9	103	103	103	103	103	103
		3.8	6	3	-	103	103	103	103	103	103	103	103
		1.7	3	-	-	103	103	103	103	103	103	103	103
1.7	6	24	-	103	103	103	103	103	103	103	103	103	
50	20.3	46	3	-	-	1	-	11	-	21	1	31	11
		46	6	-	-	16	-	36	16	56	36	76	56
		46	10	3	-	36	16	69	49	103	82	103	103
		26	3	-	-	4	-	21	-	38	11	55	28
		26	6	-	-	29	3	63	37	97	70	103	103
		26	10	7	-	63	37	103	93	103	103	103	103
		15	3	-	-	15	-	55	14	95	54	103	94
		15	6	-	-	75	34	103	103	103	103	103	103
		6	3	-	-	50	-	103	90	103	103	103	103
		6	6	-	-	103	103	103	103	103	103	103	103
		3.8	3	-	-	97	9	103	103	103	103	103	103
		3.8	6	3	-	103	103	103	103	103	103	103	103
		1.7	3	-	-	103	103	103	103	103	103	103	103
1.7	6	24	-	103	103	103	103	103	103	103	103	103	
80	38.1	110	10	-	-	13	-	25	13	38	26	51	38
		110	16	4	-	24	12	45	32	-	-	-	-
		47	10	3	-	36	16	69	49	103	82	103	103
		47	16	13	-	66	46	103	99	-	-	-	-
		31	10	7	-	63	37	103	93	103	103	103	103
		195	10	-	-	7	-	14	4	21	11	28	19
100	38.1	195	16	2	-	13	4	24	15	-	-	-	-
		113	10	-	-	13	-	25	13	38	26	51	38
		113	16	4	-	24	12	45	32	-	-	-	-
		49	10	3	-	36	16	69	49	103	82	103	103
		49	16	13	-	66	46	103	99	-	-	-	-
		400	16	-	-	5	-	11	4	16	10	22	15
150	50.8	400	23	1	-	9	2	17	10	25	18	33	26
		208	16	-	-	11	2	23	13	34	25	46	36
		208	23	2	-	19	9	35	26	52	42	68	59
		126	16	1	-	21	9	42	29	62	50	83	70
		126	23	5	-	35	22	64	51	93	81	103	103

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21100 Series (Metric) Air to Open, Flow to Open

## Contoured Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

Flexible Graphite Packing

Supply Pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3 - 15		6 - 30		11 - 23		21 - 45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	12	3	-	-	-	-	-	-	39	-
		12	6	-	-	3	-	43	2	103	82
		12	10	-	-	35	-	102	61	103	103
		6	3	-	-	-	-	8	-	103	47
		6	6	-	-	19	-	103	58	103	103
		6	10	-	-	103	37	103	103	103	103
		3.8	3	-	-	-	-	22	-	103	103
		3.8	6	-	-	41	-	103	103	103	103
		1.7	3	-	-	-	-	66	-	103	103
		1.7	6	-	-	103	-	103	103	103	103
40	20.3	35	3	-	-	-	-	-	-	7	-
		35	6	-	-	-	-	8	-	28	8
		35	10	-	-	6	-	23	2	56	36
		25	3	-	-	-	-	-	-	14	-
		25	6	-	-	-	-	16	-	50	23
		25	10	-	-	13	-	41	14	97	70
		13	3	-	-	-	-	-	-	39	-
		13	6	-	-	3	-	43	2	103	82
		13	10	-	-	35	-	102	61	103	103
		6	3	-	-	-	-	8	-	103	47
		6	6	-	-	19	-	103	58	103	103
		6	10	-	-	103	37	103	103	103	103
		3.8	3	-	-	-	-	22	-	103	103
		3.8	6	-	-	41	-	103	103	103	103
1.7	3	-	-	-	-	66	-	103	103		
1.7	6	-	-	103	-	103	103	103	103		
50	20.3	46	3	-	-	-	-	-	-	7	-
		46	6	-	-	-	-	8	-	28	8
		46	10	-	-	6	-	23	2	56	36
		26	3	-	-	-	-	-	-	14	-
		26	6	-	-	-	-	16	-	50	23
		26	10	-	-	13	-	41	14	97	70
		15	3	-	-	-	-	-	-	39	-
		15	6	-	-	3	-	43	2	103	82
		15	10	-	-	35	-	102	61	103	103
		6	3	-	-	-	-	8	-	103	47
		6	6	-	-	19	-	103	58	103	103
		6	10	-	-	103	37	103	103	103	103
		3.8	3	-	-	-	-	22	-	103	103
		3.8	6	-	-	41	-	103	103	103	103
1.7	3	-	-	-	-	66	-	103	103		
1.7	6	-	-	103	-	103	103	103	103		
80	38.1	110	10	-	-	1	-	8	-	20	8
		110	16	-	-	6	-	16	3	36	24
		110	23	2	-	11	-	26	13	-	-
		47	10	-	-	6	-	23	2	56	36
		47	16	2	-	18	-	45	24	98	78
		31	10	-	-	13	-	41	14	97	70
		31	16	6	-	33	6	78	51	103	103
		195	10	-	-	-	-	4	-	11	1
100	38.1	195	16	-	-	3	-	8	-	20	10
		195	23	1	-	6	-	14	4	-	-
		113	10	-	-	1	-	8	-	20	8
		113	16	-	-	6	-	16	3	36	24
		113	23	2	-	11	-	26	13	-	-
		49	10	-	-	6	-	23	2	56	36
		49	16	2	-	18	-	45	24	98	78
150	50.8	400	23	-	-	2	-	6	-	14	7
		208	16	-	-	1	-	7	-	18	9
		208	23	-	-	4	-	12	3	29	19
		126	16	-	-	3	-	13	1	34	21
		126	23	-	-	8	-	23	10	52	40

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required



# Allowable Pressure Drops for 21600 Series (Metric)

## Air to Close, Flow to Open

### Contoured Soft Seat Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class VI

PTFE or LE<sup>®</sup> Packing

Bench Range: 3 - 15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)				
				1.4	2.1	2.8	3.4	4.1
				CL VI	CL VI	CL VI	CL VI	CL VI
20 & 25	20.3	12	3	–	36	69	69	69
		12	6	16	69	69	69	69
		12	10	43	69	69	69	69
		6	3	7	69	69	69	69
		6	6	52	69	69	69	69
		6	10	69	69	69	69	69
		3.8	3	25	69	69	69	69
		3.8	6	69	69	69	69	69
		1.7	3	69	69	69	69	69
		1.7	6	69	69	69	69	69
40	20.3	35	3	–	5	15	25	35
		35	6	–	20	40	60	69
		35	10	6	40	69	69	69
		25	3	–	11	28	45	62
		25	6	3	37	69	69	69
		25	10	14	69	69	69	69
		13	3	–	36	69	69	69
		13	6	16	69	69	69	69
		13	10	43	69	69	69	69
		6	3	7	69	69	69	69
		6	6	52	69	69	69	69
		6	10	69	69	69	69	69
		3.8	3	25	69	69	69	69
		3.8	6	69	69	69	69	69
		1.7	3	69	69	69	69	69
1.7	6	69	69	69	69	69		
50	20.3	46	3	–	5	15	25	35
		46	6	–	20	40	60	69
		46	10	6	40	69	69	69
		26	3	–	11	28	45	62
		26	6	3	37	69	69	69
		26	10	14	69	69	69	69
		15	3	–	36	69	69	69
		15	6	16	69	69	69	69
		15	10	43	69	69	69	69
		6	3	7	69	69	69	69
		6	6	52	69	69	69	69
		6	10	69	69	69	69	69
		3.8	3	25	69	69	69	69
		3.8	6	69	69	69	69	69
		1.7	3	69	69	69	69	69
1.7	6	69	69	69	69	69		
80	38.1	110	10	–	13	26	39	51
		110	16	4	25	45	–	–
		47	10	6	40	69	69	69
		31	10	14	69	69	69	69
100	38.1	195	10	–	6	14	21	28
		195	16	1	13	24	–	–
		113	10	–	13	26	39	51
		113	16	4	25	45	–	–
		49	10	6	40	69	69	69
150	50.8	400	16	–	5	11	17	22
		400	23	–	9	17	25	33
		208	16	–	13	24	36	47
		208	23	4	20	37	53	69
		126	16	4	24	44	65	69
		126	23	8	38	67	69	69

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21600 Series (Metric) Air to Open, Flow to Open

### Contoured Soft Seat Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class VI

PTFE or LE® Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)			
				3 - 15	6 - 30	11 - 23	21 - 45
				CL VI	CL VI	CL VI	CL VI
20 & 25	20.3	12	3	—	—	20	60
		12	6	—	24	64	69
		12	10	16	56	69	69
		6	3	—	17	69	69
		6	6	17	69	69	69
		6	10	60	69	69	69
		3.8	3	—	43	69	69
		3.8	6	43	69	69	69
		1.7	3	—	69	69	69
		1.7	6	69	69	69	69
40	20.3	35	3	—	—	—	11
		35	6	—	2	12	32
		35	10	—	10	26	60
		25	3	—	—	5	21
		25	6	—	6	23	57
		25	10	3	20	48	69
		13	3	—	—	20	60
		13	6	—	24	64	69
		13	10	16	56	69	69
		6	3	—	17	69	69
		6	6	17	69	69	69
		6	10	60	69	69	69
		3.8	3	—	43	69	69
		3.8	6	43	69	69	69
1.7	3	—	69	69	69		
1.7	6	69	69	69	69		
50	20.3	46	3	—	—	—	11
		46	6	—	2	12	32
		46	10	—	10	26	60
		26	3	—	—	5	21
		26	6	—	6	23	57
		26	10	3	20	48	69
		15	3	—	—	20	60
		15	6	—	24	64	69
		15	10	16	56	69	69
		6	3	—	17	69	69
		6	6	17	69	69	69
		6	10	60	69	69	69
		3.8	3	—	43	69	69
		3.8	6	43	69	69	69
1.7	3	—	69	69	69		
1.7	6	69	69	69	69		
80	38.1	110	10	—	2	8	21
		110	16	—	6	16	37
		110	23	3	12	26	—
		47	10	—	10	26	60
		47	16	6	22	48	69
		31	10	3	20	48	69
100	38.1	195	10	—	—	4	11
		195	16	—	3	8	20
		195	23	—	6	14	—
		113	10	—	2	8	21
		113	16	—	6	16	37
		113	23	3	12	26	—
		49	10	—	10	26	60
		49	16	6	22	48	69
150	50.8	400	23	—	2	6	14
		208	16	—	2	8	19
		208	23	—	5	14	30
		126	16	—	6	16	36
		126	23	2	11	26	55

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21700 Series (Metric) Air to Close, Flow to Open

## Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

PTFE or LE® Packing

Bench Range: 3 - 15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	8 / 4	3	3	–	43	2	83	42	103	82	103	103
		8 / 4	6	23	–	103	62	103	103	103	103	103	103
		8 / 4	10	49	8.0	103	103	103	103	103	103	103	103
40	20.3	15 / 8	3	–	–	16	–	33	6	49	23	66	40
		15 / 8	6	7.4	–	41	15	75	48	103	82	103	103
		15 / 8	10	19	–	75	48	103	103	103	103	103	103
50	20.3	15 / 8	3	–	–	16	–	33	6	49	23	66	40
		15 / 8	6	7.4	–	41	15	75	48	103	81	103	103
		15 / 8	10	19	–	75	48	103	103	103	103	103	103
		25	3	–	–	8	–	18	–	28	8	38	18
		25	6	3.2	–	23	2.7	43	23	63	43	83	63
25	10	9.9	–	43	23	76	56	103	89	103	103		
80	38.1	75 / 48	10	2.6	–	15	2.7	28	15	41	28	54	41
		75 / 48	16	6.4	–	27	14	47	35	–	–	–	–
100	38.1	100	10	0.8	–	8.0	–	15	5.7	22	13	30	20
		100	16	3.0	–	15	5.0	26	17	–	–	–	–
		63	10	2.6	–	15	2.7	28	15	41	28	54	41
		63	16	6.4	–	27	14	47	35	–	–	–	–
150	50.8	200 / 150	16	0.8	–	6.5	–	12	5.4	18	11	23	17
		200 / 150	23	2.0	–	10	3.5	18	12	26	20	34	28

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21700 Series (Metric) Air to Open, Flow to Open

### Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

PTFE or LE® Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3 - 15		6 - 30		11 - 23		21 - 45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	8 / 4	3	-	-	6.9	-	27	-	67	2
		8 / 4	6	6.9	-	31	-	71	30	103	103
		8 / 4	10	23	-	63	22	103	89	103	103
40	20.3	15 / 8	3	-	-	-	-	9	-	26	-
		15 / 8	6	-	-	11	-	28	1.0	61	35
		15 / 8	10	7.4	-	24	-	52	26	103	82
50	20.3	15 / 8	3	-	-	-	-	9	-	26	-
		15 / 8	6	-	-	11	-	28	1.0	61	35
		15 / 8	10	7.4	-	24	-	52	26	103	82
		25	3	-	-	-	-	4.2	-	14	-
		25	6	-	-	5	-	15	-	35	15
		25	10	3.2	-	13	-	30	9.4	63	43
80	38.1	75 / 48	16	2.3	-	8.5	-	19	6.0	39	26
		75 / 48	23	5.0	-	14	1.1	29	16	-	-
100	38.1	100	10	-	-	1.6	-	5.2	-	12	2.8
		100	16	-	-	4.2	-	9.9	0.4	21	12
		100	23	2.2	-	7.2	-	15	5.9	-	-
		63	10	-	-	3.9	-	10	-	23	10
		63	16	2.3	-	8.5	-	19	6.0	39	26
150	50.8	200 / 150	16	-	-	1.4	-	4.2	-	9.8	3.2
		200 / 150	23	-	-	2.9	-	6.9	-	15	8.3

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21700 Series (Metric) Air to Close and Air to Open, Flow to Close

### Single Stage Anti-Cavitation Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

PTFE or LE<sup>®</sup> Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)			
				Air to Close		Air to Open	
				3-15	6-30	11-23	21-45
20 & 25	20.3	8	3	28	56	28	56
		8	6	56	103	56	103
		8	10	94	103	94	103
		8	16	103	103	103	103
		8	3	28	56	28	56
		4	6	56	103	56	103
		4	10	94	103	94	103
		4	16	103	103	103	103
40	20.3	15	3	11	21	11	21
		15	6	21	43	21	43
		15	10	36	71	36	71
		15	16	57	103	57	103
		8	3	11	21	11	21
		8	6	21	43	21	43
		8	10	36	71	36	71
		8	16	57	103	57	103
50	20.3	25	3	5	11	5	11
		25	6	11	22	11	22
		25	10	18	36	18	36
		25	16	29	58	29	58
		15	3	11	21	11	21
		15	6	21	43	21	43
		15	10	36	71	36	71
		15	16	57	103	57	103
		8	3	11	21	11	21
		8	6	21	43	21	43
		8	10	36	71	36	71
		8	16	57	103	57	103
80	38.1	75	10	6	11	6	11
		75	16	9	18	9	18
		75	23	13	26	13	26
		48	10	6	11	6	11
		48	16	9	18	9	18
		48	23	13	26	13	26
100	38.1	100	10	3	6	3	6
		100	16	5	10	5	10
		100	23	7	14	7	14
		63	10	6	11	6	11
		63	16	9	18	9	18
150	50.8	150	16	5	11	5	11
		150	23	8	15	8	15
		200	16	2	5	2	5
		200	23	3	7	3	7

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.  
2. Consult Masoneilan for specific applicability on Class V service.

# Allowable Pressure Drops for 21700 Series (Metric) Air to Close, Flow to Open

## Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

Flexible Graphite Packing

Spring Range: 3 - 15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	8 & 4	3	-	-	15	-	55	14	95	54	103	94
		8 & 4	6	-	-	75	34	103	103	103	103	103	103
		8 & 4	10	22	-	103	103	103	103	103	103	103	103
40	20.3	15 & 8	3	-	-	4	-	21	-	38	11	55	28
		15 & 8	6	-	-	29	3	63	37	97	70	103	103
		15 & 8	10	7	-	63	37	103	93	103	103	103	103
50	20.3	15 & 8	3	-	-	4	-	21	-	38	11	55	28
		15 & 8	6	-	-	29	3	63	37	97	70	103	103
		15 & 8	10	7	-	63	37	103	93	103	103	103	103
		25	3	-	-	1	-	11	-	21	1	31	11
		25	6	-	-	16	-	36	16	56	36	76	56
		25	10	3	-	36	16	69	49	103	82	103	103
80	38.1	75 & 48	10	-	-	13	-	25	13	38	26	51	38
		75 & 48	16	4	-	24	12	45	32	-	-	-	-
100	38.1	100	10	-	-	7	-	14	4	21	11	28	19
		100	16	2	-	13	4	24	15	-	-	-	-
		63	10	-	-	13	-	25	13	38	26	51	38
		63	16	4	-	24	12	45	32	-	-	-	-
150	50.8	200 & 150	16	-	-	5	-	11	4	16	10	22	15
		200 & 150	23	1	-	9	2	17	10	25	18	33	26

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ 17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21700 Series (Metric) Air to Open, Flow to Open

### Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

Flexible Graphite Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	8 & 4	3	-	-	-	-	-	-	39	-
		8 & 4	6	-	-	3	-	43	2	103	82
		8 & 4	10	-	-	35	-	102	61	103	103
40	20.3	15 & 8	3	-	-	-	-	-	-	14	-
		15 & 8	6	-	-	-	-	16	-	50	23
		15 & 8	10	-	-	13	-	41	14	97	70
50	20.3	15 & 8	3	-	-	-	-	-	-	14	-
		15 & 8	6	-	-	-	-	16	-	50	23
		15 & 8	10	-	-	13	-	41	14	97	70
		25	3	-	-	-	-	-	-	7	-
		25	6	-	-	-	-	8	-	28	8
		25	10	-	-	6	-	23	2	56	36
80	38.1	75 & 48	16	-	-	6	-	16	3	36	24
		75 & 48	23	2	-	11	-	26	13	-	-
		100	10	-	-	-	-	4	-	11	1
100	38.1	100	16	-	-	3	-	8	-	20	10
		100	23	1	-	6	-	14	4	-	-
		63	10	-	-	1	-	8	-	20	8
		63	16	-	-	6	-	16	3	36	24
		63	23	2	-	11	-	26	13	-	-
150	50.8	200 & 150	16	-	-	-	-	3	-	8	2
		200 & 150	23	-	-	2	-	6	-	14	7

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21700 Series (Metric) Air to Close and Air to Open, Flow to Close

### Single Stage Anti-Cavitation Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

Flexible Graphite Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (bar)			
				Air to Close		Air to Open	
				3-15	6-30	11-23	21-45
20 & 25	20.3	8	3	–	56	–	21
		8	6	56	103	25	103
		8	10	94	103	84	103
		8	16	103	103	103	103
		8	3	–	56	–	21
		4	6	56	103	25	103
		4	10	94	103	84	103
		4	16	103	103	103	103
40	20.3	15	3	–	21	–	9
		15	6	21	43	11	43
		15	10	36	71	35	71
		15	16	57	103	57	103
		8	3	–	21	–	9
		8	6	21	43	11	43
		8	10	36	71	35	71
		8	16	57	103	57	103
50	20.3	25	3	–	11	–	5
		25	6	11	22	6	22
		25	10	18	36	18	36
		25	16	29	58	29	58
		15	3	–	21	–	9
		15	6	21	43	11	43
		15	10	36	71	35	71
		15	16	57	103	57	103
		8	3	–	21	–	9
		8	6	21	43	11	43
		8	10	36	71	35	71
		8	16	57	103	57	103
80	38.1	75	10	6	11	6	11
		75	16	9	18	9	18
		75	23	13	26	13	26
		48	10	6	11	6	11
		48	16	9	18	9	18
		48	23	13	26	13	26
100	38.1	100	10	3	6	3	6
		100	16	5	10	5	10
		100	23	7	14	7	14
		63	10	6	11	6	11
		63	16	9	18	9	18
150	50.8	150	16	5	11	5	10
		150	23	8	15	7	15
		200	16	2	5	2	5
		200	23	3	7	3	7

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.

2. Consult Masoneilan for specific applicability on Class V service.



## Allowable Pressure Drops for 21800 Series (Metric) Air to Close and Air to Open, Flow to Close

### Double Stage Anti-Cavitation Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

PTFE or LE<sup>®</sup> Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)			
				Air to Close		Air to Open	
				3-15	6-30	11-23	21-45
20 & 25	20.3	4.5	3	28	56	28	56
		4.5	6	56	103	56	103
		4.5	10	94	103	94	103
		2.3	3	28	56	28	56
		2.3	6	56	103	56	103
		2.3	10	94	103	94	103
40	20.3	8.5	3	11	21	11	21
		8.5	6	21	43	21	43
		8.5	10	36	71	36	71
		8.5	16	57	103	57	103
		4.5	3	11	21	11	21
		4.5	6	21	43	21	43
		4.5	10	36	71	36	71
		4.5	16	57	103	57	103
		2.3	3	28	56	28	56
		2.3	6	56	103	56	103
		2.3	10	94	103	94	103
		2.3	16	103	103	103	103
50	20.3	14	3	5	11	5	11
		14	6	11	22	11	22
		14	10	18	36	18	36
		14	16	29	58	29	58
		8.5	3	11	21	11	21
		8.5	6	21	43	21	43
		8.5	10	36	71	36	71
		8.5	16	57	103	57	103
		4.5	3	11	21	11	21
		4.5	6	21	43	21	43
		4.5	10	36	71	36	71
		4.5	16	57	103	57	103
		2.3	3	11	21	11	21
		2.3	6	21	43	21	43
		2.3	10	36	71	36	71
2.3	16	57	103	57	103		
80	38.1	42	10	6	11	6	11
		42	16	9	18	9	18
		42	23	13	26	13	26
		29	10	6	11	6	11
		29	16	9	18	9	18
		29	23	13	26	13	26
100	38.1	62	10	3	6	3	6
		62	16	5	10	5	10
		62	23	7	14	7	14
		40	10	6	11	6	11
		40	16	9	18	9	18
40	23	13	26	13	26		

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.  
2. Consult Masoneilan for specific applicability on Class V service.

## Allowable Pressure Drops for 21800 Series (Metric) Air to Close and Air to Open, Flow to Close

### Double Stage Anti-Cavitation Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

Flexible Graphite Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (bar)			
				Air to Close		Air to Open	
				3-15	6-30	11-23	21-45
20 & 25	20.3	4.5	3	–	56	–	21
		4.5	6	56	103	25	103
		4.5	10	94	103	84	103
		2.3	3	–	56	–	21
		2.3	6	56	103	25	103
		2.3	10	94	103	84	103
40	20.3	8.5	3	–	21	–	9
		8.5	6	21	43	11	43
		8.5	10	36	71	35	71
		8.5	16	57	103	57	103
		4.5	3	–	21	–	9
		4.5	6	21	43	11	43
		4.5	10	36	71	35	71
		4.5	16	57	103	57	103
		2.3	3	–	24	–	9
		2.3	6	24	75	11	44
		2.3	10	58	103	35	92
		2.3	16	103	103	72	103
50	20.3	14	3	–	11	–	5
		14	6	11	22	6	22
		14	10	18	36	18	36
		14	16	29	58	29	58
		8.5	3	–	21	–	9
		8.5	6	21	43	11	43
		8.5	10	36	71	35	71
		8.5	16	57	103	57	103
		4.5	3	–	21	–	9
		4.5	6	21	43	11	43
		4.5	10	36	71	35	71
		4.5	16	57	103	57	103
		2.3	3	–	21	–	9
		2.3	6	21	43	11	43
		2.3	10	36	71	35	71
2.3	16	57	103	57	103		
80	38.1	42	10	6	11	6	11
		42	16	9	18	9	18
		42	23	13	26	13	26
		29	10	6	11	6	11
		29	16	9	18	9	18
		29	23	13	26	13	26
100	38.1	62	10	3	6	3	6
		62	16	5	10	5	10
		62	23	7	14	7	14
		40	10	6	11	6	11
		40	16	9	18	9	18
40	23	13	26	13	26		

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.  
2. Consult Masoneilan for specific applicability on Class V service.

# Allowable Pressure Drops for 21900 Series (Metric) Air to Close, Flow to Open

## Double Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE® Packing

Bench Range: 3-15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	5.7	3	2.9	–	43	2.1	83	42	103	82	103	103
		5.7	6	23	–	103	62	103	103	103	103	103	103
		5.7	10	50	9	103	103	103	103	103	103	103	103
		3.5	3	23	–	103	62	103	103	103	103	103	103
		3.5	6	23	–	103	62	103	103	103	103	103	103
		3.5	10	50	9	103	103	103	103	103	103	103	103
40	20.3	13	3	–	–	16	–	33	6.1	49	23	66	40
		13	6	7	–	41	15	75	48	103	82	103	103
		13	10	19	–	75	48	103	103	103	103	103	103
		7	3	–	–	16	–	33	6.1	49	23	66	40
		7	6	7	–	41	15	75	48	103	82	103	103
		7	10	19	–	75	48	103	103	103	103	103	103
50	20.3	21	3	–	–	8.1	–	18	–	28	7.7	38	18
		21	6	3	–	23	3	43	23	63	43	83	63
		21	10	10	–	43	23	76	56	103	89	103	103
		21	16	20	–	73	53	103	103	–	–	–	–
		21	23	31	11	103	88	–	–	–	–	–	–
		13	3	–	–	16	–	33	6.1	49	23	66	40
		13	6	7	–	41	15	75	48	103	82	103	103
		13	10	19	–	75	48	103	103	103	103	103	103
		13	16	35	9	103	99	103	103	–	–	–	–
		13	23	55	29	103	103	–	–	–	–	–	–
80	38.1	63 / 40	10	3	–	15	3	28	15	41	28	54	41
			16	6	–	27	14	47	35	–	–	–	–
			23	11	–	40	28	–	–	–	–	–	–
100	38.1	83	10	–	–	8	–	15	6	22	13	30	20
		83	16	3	–	14	5	26	16	–	–	–	–
		83	23	6	–	22	13	–	–	–	–	–	–
		53	10	3	–	15	3	28	15	41	28	54	41
		53	16	6	–	27	14	47	35	–	–	–	–
		53	23	11	–	40	28	69	57	99	86	103	–
150	50.8	125	16	–	–	6.4	–	12	5	18	11	23	17
		125	23	2	–	10	4	18	12	26	20	34	28

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ 17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21900 Series (Metric) Air to Open, Flow to Open

### Double Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE® Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	5.7	3	–	–	6.9	–	27	–	67	26
		5.7	6	7	–	31	–	71	30	103	103
		5.7	10	23	–	63	22	103	89	103	103
		3.5	3	–	–	6.9	–	27	–	67	26
		3.5	6	7	–	31	–	71	30	103	103
		3.5	10	23	–	63	22	103	89	103	103
40	20.3	13	3	–	–	–	–	9	–	26	–
		13	6	–	–	11	–	28	1	61	35
		13	10	7	–	24	–	52	26	103	82
		7	3	–	–	–	–	9	–	26	–
		7	6	–	–	11	–	28	1	61	35
		7	10	7	–	24	–	52	26	103	82
50	20.3	21	3	–	–	–	–	4.1	–	14	–
		21	6	–	–	5	–	15	–	35	15
		21	10	3	–	13	–	30	9	63	43
		21	16	9	–	25	5	52	31	103	85
		21	23	16	–	39	19	77	57	–	–
		13	3	–	–	–	–	9	–	26	–
		13	6	–	–	11	–	28	1	61	35
		13	10	7	–	24	–	52	26	103	82
		13	16	17	–	44	18	89	63	103	103
		13	23	29	3	68	42	103	103	–	–
80	38.1	63 / 40	10	–	–	4	–	10	–	23	10
			16	2	–	8	–	19	6	39	26
			23	5	–	14	1	28	16	–	–
100	38.1	83	10	–	–	2	–	5	–	12	3
		83	16	1	–	4	–	10	–	21	12
		83	23	2	–	7	–	15	6	–	–
		53	10	–	–	4	–	10	–	23	10
		53	16	2	–	8	–	12	6	39	26
		53	23	5	–	14	1	28	16	–	–
150	50.8	125	16	–	–	1	–	4	–	10	3
		125	23	–	–	3	–	7	–	15	1

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21900 Series (Metric) Air to Close, Flow to Open

## Double Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Spring Range: 3-15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	5.7	3	–	–	15	–	55	14	95	54	103	94
		5.7	6	–	–	75	34	103	103	103	103	103	103
		5.7	10	22	–	103	103	103	103	103	103	103	103
		3.5	3	–	–	15	–	55	14	95	54	103	94
		3.5	6	–	–	75	34	103	103	103	103	103	103
		3.5	10	22	–	103	103	103	103	103	103	103	103
40	20.3	13	3	–	–	4	–	21	–	38	11	55	28
		13	6	–	–	29	3	63	37	97	70	103	103
		13	10	7	–	63	37	103	93	103	103	103	103
		7	3	–	–	4	–	21	–	38	11	55	28
		7	6	–	–	29	3	63	37	97	70	103	103
		7	10	7	–	63	37	103	93	103	103	103	103
50	20.3	21	3	–	–	1	–	11	–	21	1	31	11
		21	6	–	–	16	–	36	16	56	36	76	56
		21	10	3	–	36	16	69	49	103	82	103	103
		21	16	13	–	66	46	103	99	–	–	–	–
		21	23	25	4	101	81	–	–	–	–	–	–
		13	3	–	–	4	–	21	–	38	11	55	28
		13	6	–	–	29	3	63	37	97	70	103	103
		13	10	7	–	63	37	103	93	103	103	103	103
		13	16	24	–	103	87	103	103	–	–	–	–
		13	23	43	17	103	103	–	–	–	–	–	–
80	38.1	63 & 40	10	–	–	13	–	25	13	38	26	51	38
			16	4	–	24	12	45	32	–	–	–	–
			23	8	–	38	25	–	–	–	–	–	–
100	38.1	83	10	–	–	7	–	14	4	21	11	28	19
		83	16	2	–	13	4	24	15	–	–	–	–
		83	23	4	–	21	11	–	–	–	–	–	–
		53	10	–	–	13	–	25	13	38	26	51	38
		53	16	4	–	24	12	45	32	–	–	–	–
		53	23	8	–	38	25	–	–	–	–	–	–
150	50.8	125	16	–	–	5	–	11	4	16	10	22	15
		125	23	1	–	9	2	17	10	25	18	33	26

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ 17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21900 Series (Metric) Air to Open, Flow to Open

### Double Stage Lo-dB®Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	5.7	3	-	-	-	-	-	-	39	-
		5.7	6	-	-	3	-	43	2	103	82
		5.7	10	-	-	35	-	102	61	103	103
		3.5	3	-	-	-	-	-	-	39	-
		3.5	6	-	-	3	-	43	2	103	82
		3.5	10	-	-	35	-	102	61	103	103
40	20.3	13	3	-	-	-	-	-	-	14	-
		13	6	-	-	-	-	16	-	50	23
		13	10	-	-	13	-	41	14	97	70
		7	3	-	-	-	-	-	-	14	-
		7	6	-	-	-	-	16	-	50	23
		7	10	-	-	13	-	41	14	97	70
50	20.3	21	3	-	-	-	-	-	-	7	-
		21	6	-	-	-	-	8	-	28	8
		21	10	-	-	6	-	23	2	56	36
		21	16	2	-	18	-	45	24	98	78
		21	23	9	-	32	12	70	50	-	-
		13	3	-	-	-	-	-	-	14	-
		13	6	-	-	-	-	16	-	50	23
		13	10	-	-	13	-	41	14	97	70
		13	16	6	-	33	6	78	51	103	103
		13	23	18	-	56	30	103	95	-	-
80	38.1	63 & 40	10	-	-	1	-	8	-	20	8
			16	-	-	6	-	16	3	36	24
			23	2	-	11	-	26	13	-	-
100	38.1	83	10	-	-	-	-	4	-	11	1
		83	16	-	-	3	-	8	-	20	10
		83	23	1	-	6	-	14	4	-	-
		53	10	-	-	1	-	8	-	20	8
		53	16	-	-	6	-	16	3	36	24
		53	23	2	-	11	-	26	13	-	-
150	50.8	125	16	-	-	-	-	3	-	8	2
		125	23	-	-	2	-	6	-	14	7

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ 17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21100 Series (Metric) Air to Close, Flow to Open

### Contoured Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE Packing and Standard Bonnet

Spring Range: 3-15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	12	3	3	–	43	2	83	42	123	82	163	122
		12	6	23	–	103	62	183	142	263	222	342	302
		6	3	18	–	123	57	229	162	334	268	431	373
		6	6	71	4	281	215	431	426	431	431	431	431
		3.8	3	39	–	227	138	414	326	431	431	431	431
		3.8	6	133	45	431	419	431	431	431	431	431	431
		1.7	3	105	–	431	394	431	431	431	431	431	431
		1.7	6	316	183	431	431	431	431	431	431	431	431
40	20.3	35	3	–	–	8	–	18	–	28	8	38	18
		35	6	3	–	23	3	43	23	63	43	83	63
		35	10	10	–	43	23	76	56	110	89	143	122
		25	3	–	–	16	–	33	6	49	23	66	40
		25	6	7	–	41	15	75	48	108	82	142	116
		25	10	19	–	75	48	131	104	187	161	243	217
		13	3	3	–	43	2	83	42	123	82	163	122
		13	6	23	–	103	62	183	142	263	222	342	302
		6	3	18	–	123	57	229	162	334	268	431	373
		6	6	71	4	281	215	431	426	431	431	431	431
		3.8	3	39	–	227	138	414	326	431	431	431	431
		3.8	6	133	45	431	419	431	431	431	431	431	431
		1.7	3	105	–	431	394	431	431	431	431	431	431
1.7	6	316	183	431	431	431	431	431	431	431	431		
50	20.3	46	3	–	–	8	–	18	–	28	8	38	18
		46	6	3	–	23	3	43	23	63	43	83	63
		46	10	10	–	43	23	76	56	110	89	143	122
		26	3	–	–	16	–	33	6	49	23	66	40
		26	6	7	–	41	15	75	48	108	82	142	116
		26	10	19	–	75	48	131	104	187	161	243	217
		15	3	3	–	43	2	83	42	123	82	163	122
		15	6	23	–	103	62	183	142	263	222	342	302
		6	3	18	–	123	57	229	162	334	268	431	373
		6	6	71	4	281	215	431	426	431	431	431	431
		3.8	3	39	–	227	138	414	326	431	431	431	431
		3.8	6	133	45	431	419	431	431	431	431	431	431
		1.7	3	105	–	431	394	431	431	431	431	431	431
1.7	6	316	183	431	431	431	431	431	431	431	431		

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21100 Series (Metric) Air to Open, Flow to Open

### Contoured Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE Packing and Standard Bonnet

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	12	3	-	-	7	-	27	-	67	26
		12	6	7	-	31	-	71	30	151	110
		12	10	23	-	63	22	129	89	263	222
		6	3	-	-	28	-	81	15	187	120
		6	6	28	-	92	25	197	131	408	342
		6	10	71	4	176	110	352	285	431	431
		3.8	3	2	-	58	-	152	63	339	251
		3.8	6	58	-	170	82	358	269	431	431
		1.7	3	21	-	147	15	358	225	431	431
1.7	6	147	15	400	267	431	431	431	431		
40	20.3	35	3	-	-	-	-	4	-	14	-
		35	6	-	-	5	-	15	-	35	15
		35	10	3	-	13	-	30	9	63	43
		25	3	-	-	1	-	9	-	26	-
		25	6	1	-	11	-	28	1	61	35
		25	10	7	-	24	-	52	26	108	82
		13	3	-	-	7	-	27	-	67	26
		13	6	7	-	31	-	71	30	151	110
		13	10	23	-	63	22	129	89	263	222
		6	3	-	-	28	-	81	15	187	120
		6	6	28	-	92	25	197	131	408	342
		6	10	71	64	176	110	352	285	431	431
		3.8	3	2	-	58	-	152	63	339	251
		3.8	6	58	-	170	82	358	269	431	431
1.7	3	21	-	147	15	358	225	431	431		
1.7	6	147	211	400	267	431	431	431	431		
50	20.3	46	3	-	-	-	-	4	-	14	-
		46	6	-	-	5	-	15	-	35	15
		46	10	3	-	13	-	30	9	63	43
		26	3	-	-	1	-	9	-	26	-
		26	6	1	-	11	-	28	1	61	35
		26	10	7	-	24	-	52	26	108	82
		15	3	-	-	7	-	27	-	67	26
		15	6	7	-	31	-	71	30	151	110
		15	10	23	-	63	22	129	89	263	222
		6	3	-	-	28	-	81	15	187	120
		6	6	28	-	92	25	197	131	408	342
		6	10	71	4	176	110	352	285	431	431
		3.8	3	2	-	58	-	152	63	339	251
		3.8	6	58	-	170	82	358	269	431	431
1.7	3	21	-	147	15	358	225	431	431		
1.7	6	147	15	400	267	431	431	431	431		

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.



# Allowable Pressure Drops for 21100 Series (Metric)

## Air to Close, Flow to Open

### Contoured Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Spring Range: 3-15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	12	3	-	-	15	-	55	14	95	54	135	94
		12	6	-	-	75	34	155	114	235	194	315	274
		6	3	-	-	50	-	156	90	261	195	367	300
		6	6	-	-	209	142	419	353	431	431	431	431
		3.8	3	-	-	97	9	284	196	431	383	431	431
		3.8	6	3	-	378	290	431	431	431	431	431	431
		1.7	3	-	-	235	103	431	431	431	431	431	431
		1.7	6	24	-	431	431	431	431	431	431	431	431
40	20.3	35	3	-	-	1	-	11	-	21	1	31	11
		35	6	-	-	16	-	36	16	56	36	76	56
		35	10	3	-	36	16	69	49	103	82	136	116
		25	3	-	-	4	-	21	-	38	11	55	28
		25	6	-	-	29	3	63	37	97	70	131	104
		25	10	7	-	63	37	119	93	176	149	232	205
		13	3	-	-	15	-	55	14	95	54	135	94
		13	6	-	-	75	34	155	114	235	194	315	274
		6	3	-	-	50	-	156	90	261	195	367	300
		6	6	-	-	209	142	419	353	431	431	431	431
		3.8	3	-	-	97	9	284	196	431	383	431	431
		3.8	6	3	-	378	290	431	431	431	431	431	431
		1.7	3	-	-	235	103	431	431	431	431	431	431
1.7	6	24	-	431	431	431	431	431	431	431	431		
50	20.3	46	3	-	-	1	-	11	-	21	1	31	11
		46	6	-	-	16	-	36	16	56	36	76	56
		46	10	3	-	36	16	69	49	103	82	136	116
		26	3	-	-	4	-	21	-	38	11	55	28
		26	6	-	-	29	3	63	37	97	70	131	104
		26	10	7	-	63	37	119	93	176	149	232	205
		15	3	-	-	15	-	55	14	95	54	135	94
		15	6	-	-	75	34	155	114	235	194	315	274
		6	3	-	-	50	-	156	90	261	195	367	300
		6	6	-	-	209	142	419	353	431	431	431	431
		3.8	3	-	-	97	9	284	196	431	383	431	431
		3.8	6	3	-	378	290	431	431	431	431	431	431
		1.7	3	-	-	235	103	431	431	431	431	431	431
1.7	6	24	-	431	431	431	431	431	431	431	431		

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21100 Series (Metric) Air to Open, Flow to Open

### Contoured Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	12	3	-	-	-	-	-	-	39	-
		12	6	-	-	3	-	43	2	123	82
		12	10	-	-	35	-	102	61	235	194
		6	3	-	-	-	-	8	-	114	47
		6	6	-	-	19	-	124	58	335	269
		6	10	-	-	103	37	279	213	431	431
		3.8	3	-	-	-	-	22	-	209	121
		3.8	6	-	-	41	-	228	140	431	431
		1.7	3	-	-	-	-	66	-	431	355
1.7	6	-	-	109	-	431	398	431	431		
40	20.3	35	3	-	-	-	-	-	-	7	-
		35	6	-	-	-	-	8	-	28	8
		35	10	-	-	6	-	23	2	56	36
		25	3	-	-	-	-	-	-	14	-
		25	6	-	-	-	-	16	-	50	23
		25	10	-	-	13	-	41	14	97	70
		13	3	-	-	-	-	-	-	39	-
		13	6	-	-	3	-	43	2	123	82
		13	10	-	-	35	-	102	61	235	194
		6	3	-	-	-	-	8	-	114	47
		6	6	-	-	19	-	124	58	335	269
		6	10	-	-	103	37	279	213	431	431
		3.8	3	-	-	-	-	22	-	209	121
3.8	6	-	-	41	-	228	140	431	431		
1.7	3	-	-	-	-	66	-	431	355		
1.7	6	-	-	109	-	431	398	431	431		
50	20.3	46	3	-	-	-	-	-	-	7	-
		46	6	-	-	-	-	8	-	28	8
		46	10	-	-	6	-	23	2	56	36
		26	3	-	-	-	-	-	-	14	-
		26	6	-	-	-	-	16	-	50	23
		26	10	-	-	13	-	41	14	97	70
		15	3	-	-	-	-	-	-	39	-
		15	6	-	-	3	-	43	2	123	82
		15	10	-	-	35	-	102	61	235	194
		6	3	-	-	-	-	8	-	114	47
		6	6	-	-	19	-	124	58	335	269
		6	10	-	-	103	37	279	213	431	431
		3.8	3	-	-	-	-	22	-	209	121
3.8	6	-	-	41	-	228	140	431	431		
1.7	3	-	-	-	-	66	-	431	355		
1.7	6	-	-	109	-	431	398	431	431		

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

## Allowable Pressure Drops for 21600 Series (Metric) Air to Close, Flow to Open

### Contoured Trim with Soft Seat

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class VI

PTFE Packing and Standard Bonnet

Spring Range: 3 - 15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)				
				1.4	2.1	2.8	3.4	4.1
				CL VI	CL VI	CL VI	CL VI	CL VI
20 & 25	20.3	12	3	–	36	69	69	69
		12	6	16	69	69	69	69
		12	10	43	69	69	69	69
		6	3	7	69	69	69	69
		6	6	60	69	69	69	69
		6	10	69	69	69	69	69
		3.8	3	25	69	69	69	69
		3.8	6	69	69	69	69	69
		1.7	3	69	69	69	69	69
		1.7	6	69	69	69	69	69
40	20.3	35	3	–	5	15	25	35
		35	6	–	20	40	60	69
		35	10	6	40	69	69	69
		25	3	–	11	28	45	62
		25	6	3	37	69	69	69
		25	10	14	69	69	69	69
		13	3	–	36	69	69	69
		13	6	16	69	69	69	69
		13	10	43	69	69	69	69
		6	3	7	69	69	69	69
		6	6	60	69	69	69	69
		6	10	69	69	69	69	69
		3.8	3	25	69	69	69	69
		3.8	6	69	69	69	69	69
		1.7	3	69	69	69	69	69
1.7	6	69	69	69	69	69		
50	20.3	46	3	–	5	15	25	35
		46	6	–	20	40	60	69
		46	10	6	40	69	69	69
		26	3	–	11	28	45	62
		26	6	3	37	69	69	69
		26	10	14	69	69	69	69
		15	3	–	36	69	69	69
		15	6	16	69	69	69	69
		15	10	43	69	69	69	69
		6	3	7	69	69	69	69
		6	6	60	69	69	69	69
		6	10	69	69	69	69	69
		3.8	3	25	69	69	69	69
		3.8	6	69	69	69	69	69
		1.7	3	69	69	69	69	69
1.7	6	69	69	69	69	69		

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21600 Series (Metric) Air to Open, Flow to Open

### Contoured Trim with Soft Seat

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class VI

PTFE Packing and Standard Bonnet

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)			
				3 - 15	6 - 30	11 - 23	21 - 45
				CL VI	CL VI	CL VI	CL VI
20 & 25	20.3	12	3	–	–	20	60
		12	6	–	24	64	69
		12	10	16	56	69	69
		6	3	–	17	69	69
		6	6	17	69	69	69
		6	10	60	69	69	69
		3.8	3	–	43	69	69
		3.8	6	43	69	69	69
		1.7	3	–	69	69	69
		1.7	6	69	69	69	69
40	20.3	35	3	–	–	1	11
		35	6	–	2	12	32
		35	10	–	10	26	60
		25	3	–	–	5	21
		25	6	–	6	23	57
		25	10	3	20	48	69
		13	3	–	–	20	60
		13	6	–	24	64	69
		13	10	16	56	69	69
		6	3	–	17	69	69
		6	6	17	69	69	69
		6	10	60	69	69	69
		3.8	3	–	43	69	69
		3.8	6	43	69	69	69
1.7	3	–	69	69	69		
1.7	6	69	69	69	69		
50	20.3	46	3	–	–	1	11
		46	6	–	2	12	32
		46	10	–	10	26	60
		26	3	–	–	5	21
		26	6	–	6	23	57
		26	10	3	20	48	69
		15	3	–	–	20	60
		15	6	–	24	64	69
		15	10	16	56	69	69
		6	3	–	17	69	69
		6	6	17	69	69	69
		6	10	60	69	69	69
		3.8	3	–	43	69	69
		3.8	6	43	69	69	69
		1.7	3	–	69	69	69
		1.7	6	69	69	69	69

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

## Allowable Pressure Drops for 21700 Series (Metric) Air to Close, Flow to Open

### Single Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

PTFE Packing and Standard Bonnet

Spring Range: 3 - 15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	8 & 4	3	3	–	43	2	83	42	123	82	163	122
		8 & 4	6	23	–	103	62	183	142	263	222	342	302
		8 & 4	10	49	9	183	142	316	275	431	408	431	431
40	20.3	15 & 8	3	–	–	16	–	33	6	49	23	66	40
		15 & 8	6	7	–	41	15	75	48	108	82	142	116
		15 & 8	10	19	–	75	48	131	104	187	161	243	217
50	20.3	15 & 8	3	–	–	16	–	33	6	49	23	66	40
		15 & 8	6	7	–	41	15	75	48	108	82	142	116
		15 & 8	10	19	–	75	48	131	104	187	161	243	217
		25	3	–	–	8	–	18	–	28	8	38	18
		25	6	3	–	23	3	43	23	63	43	83	63
		25	10	10	–	43	23	76	56	110	89	143	122

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21700 Series (Metric) Air to Open, Flow to Open

### Single Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

PTFE Packing and Standard Bonnet

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3 - 15		6 - 30		11 - 23		21 - 45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	8 & 4	3	–	–	7	–	27	–	67	26
		8 & 4	6	7	–	31	–	71	30	151	110
		8 & 4	10	23	–	63	22	129	89	263	222
40	20.3	15 & 8	3	–	–	1	–	9	–	26	–
		15 & 8	6	1	–	11	–	28	1	61	35
		15 & 8	10	7	–	24	–	52	26	108	82
50	20.3	15 & 8	3	–	–	1	–	9	–	26	–
		15 & 8	6	1	–	11	–	28	1	61	35
		15 & 8	10	7	–	24	–	52	26	108	82
		25	3	–	–	–	–	4	–	14	–
		25	6	–	–	5	–	15	–	35	15
		25	10	3	–	13	–	30	9	63	43
25	16	9	–	25	5	52	31	105	85		

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21700 Series (Metric) Air to Close and Air to Open, Flow to Close

### Single Stage Anti-Cavitation Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

PTFE Packing and Standard Bonnet

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (bar)			
				Air to Close		Air to Open	
				3-15	6-30	11-23	21-45
<b>20 &amp; 25</b>	20.3	8	3	28	56	28	56
		8	6	56	113	56	113
		8	10	94	188	94	188
		8	16	150	301	150	301
		8	3	28	56	28	56
		4	6	56	113	56	113
		4	10	94	188	94	188
		4	16	150	301	150	301
<b>40</b>	20.3	15	3	11	21	11	21
		15	6	21	43	21	43
		15	10	36	71	36	71
		15	16	57	114	57	114
		8	3	11	21	11	21
		8	6	21	43	21	43
		8	10	36	71	36	71
		8	16	57	114	57	114
<b>50</b>	20.3	25	3	5	11	5	11
		25	6	11	22	11	22
		25	10	18	36	18	36
		25	16	29	58	29	58
		15	3	11	21	11	21
		15	6	21	43	21	43
		15	10	36	71	36	71
		15	16	57	114	57	114
		8	3	11	21	11	21
		8	6	21	43	21	43
		8	10	36	71	36	71
		8	16	57	114	57	114

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.  
2. Consult Masoneilan for specific applicability on Class V service.

## Allowable Pressure Drops for 21700 Series (Metric) Air to Close, Flow to Open

### Single Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

Flexible Graphite Packing

Spring Range: 3 - 15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	8 & 4	3	-	-	15	-	55	14	95	54	135	94
		8 & 4	6	-	-	75	34	155	114	235	194	315	274
		8 & 4	10	22	-	155	114	288	247	421	381	431	431
40	20.3	15 & 8	3	-	-	4	-	21	-	38	11	55	28
		15 & 8	6	-	-	29	3	63	37	97	70	131	104
		15 & 8	10	7	-	63	37	119	93	176	149	232	205
50	20.3	15 & 8	3	-	-	4	-	21	-	38	11	55	28
		15 & 8	6	-	-	29	3	63	37	97	70	131	104
		15 & 8	10	7	-	63	37	119	93	176	149	232	205
		25	3	-	-	1	-	11	-	21	1	31	11
		25	6	-	-	16	-	36	16	56	36	76	56
		25	10	3	-	36	16	69	49	103	82	136	116

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21700 Series (Metric) Air to Open, Flow to Open

### Single Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and Class V

Flexible Graphite Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3 - 15		6 - 30		11 - 23		21 - 45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	8 & 4	3	-	-	-	-	-	-	39	-
		8 & 4	6	-	-	3	-	43	2	123	82
		8 & 4	10	-	-	35	-	102	61	235	194
40	20.3	15 & 8	3	-	-	-	-	-	-	14	-
		15 & 8	6	-	-	-	-	16	-	50	23
		15 & 8	10	-	-	13	-	41	14	97	70
50	20.3	15 & 8	3	-	-	-	-	-	-	14	-
		15 & 8	6	-	-	-	-	16	-	50	23
		15 & 8	10	-	-	13	-	41	14	97	70
		25	3	-	-	-	-	-	-	7	-
		25	6	-	-	-	-	8	-	28	8
		25	10	-	-	6	-	23	2	56	36
		25	16	2	-	18	-	45	24	98	78

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21700 Series (Metric) Air to Open and Air to Close, Flow to Close

### Single Stage Anti-Cavitation Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

Flexible Graphite Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (bar)			
				Air to Open		Air to Close	
				3-15	6-30	11-23	21-45
20 & 25	20.3	8	3	28	56	28	56
		8	6	56	113	56	113
		8	10	94	188	94	188
		8	16	150	301	150	301
		8	3	28	56	28	56
		4	6	56	113	56	113
		4	10	94	188	94	188
		4	16	150	301	150	301
40	20.3	15	3	11	21	11	21
		15	6	21	43	21	43
		15	10	36	71	36	71
		15	16	57	114	57	114
		8	3	11	21	11	21
		8	6	21	43	21	43
		8	10	36	71	36	71
		8	16	57	114	57	114
50	20.3	25	3	5	11	5	11
		25	6	11	22	11	22
		25	10	18	36	18	36
		25	16	29	58	29	58
		15	3	11	21	11	21
		15	6	21	43	21	43
		15	10	36	71	36	71
		15	16	57	114	57	114
		8	3	11	21	11	21
		8	6	21	43	21	43
		8	10	36	71	36	71
		8	16	57	114	57	114

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.  
2. Consult Masoneilan for specific applicability on Class V service.



## Allowable Pressure Drops for 21800 Series (Metric) Air to Close, Air to Open, Flow to Close

### Double Stage Anti-Cavitation Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

PTFE Packing and Standard Bonnet

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (bar)			
				Air to Close		Air to Open	
				3-15	6-30	11-23	21-45
20 & 25	20.3	4.5	3	28	56	28	56
		4.5	6	56	113	56	113
		4.5	10	94	188	94	188
		2.3	3	28	56	28	56
		2.3	6	56	113	56	113
		2.3	10	94	188	94	188
40	20.3	8.5	3	11	21	11	21
		8.5	6	21	43	21	43
		8.5	10	36	71	36	71
		8.5	16	57	114	57	114
		4.5	3	11	21	11	21
		4.5	6	21	43	21	43
		4.5	10	36	71	36	71
		4.5	16	57	114	57	114
		2.3	3	20	45	13	30
		2.3	6	45	96	32	66
		2.3	10	79	163	57	113
		2.3	16	130	264	94	184
50	20.3	14	3	5	11	5	11
		14	6	11	22	11	22
		14	10	18	36	18	36
		14	16	29	58	29	58
		8.5	3	11	21	11	21
		8.5	6	21	43	21	43
		8.5	10	36	71	36	71
		8.5	16	57	114	57	114
		4.5	3	11	21	11	21
		4.5	6	21	43	21	43
		4.5	10	36	71	36	71
		4.5	16	57	114	57	114
		2.3	3	11	21	11	21
		2.3	6	21	43	21	43
		2.3	10	36	71	36	71
		2.3	16	57	114	57	114

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.  
2. Consult Masoneilan for specific applicability on Class V service.

## Allowable Pressure Drops for 21800 Series (Metric) Air to Close and Air to Open, Flow to Close

### Double Stage Anti-Cavitation Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV (Class V optional)<sup>2</sup>

Flexible Graphite Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (bar)			
				Air to Open		Air to Close	
				3-15	6-30	11-23	21-45
20 & 25	20.3	4.5	3	–	56	–	21
		4.5	6	56	113	25	105
		4.5	10	94	188	84	188
		2.3	3	–	56	–	21
		2.3	6	56	113	25	105
		2.3	10	94	188	84	188
40	20.3	8.5	3	–	21	–	9
		8.5	6	21	43	11	43
		8.5	10	36	71	35	71
		8.5	16	57	114	57	114
		4.5	3	–	21	–	9
		4.5	6	21	43	11	43
		4.5	10	36	71	35	71
		4.5	16	57	114	57	114
		2.3	3	–	24	–	9
		2.3	6	24	75	11	44
		2.3	10	58	142	35	92
		2.3	16	108	243	72	162
50	20.3	14	3	–	11	–	5
		14	6	11	22	6	22
		14	10	18	36	18	36
		14	16	29	58	29	58
		8.5	3	–	21	–	9
		8.5	6	21	43	11	43
		8.5	10	36	71	35	71
		8.5	16	57	114	57	114
		4.5	3	–	21	–	9
		4.5	6	21	43	11	43
		4.5	10	36	71	35	71
		4.5	16	57	114	57	114
		2.3	3	–	21	–	9
		2.3	6	21	43	11	43
		2.3	10	36	71	35	71
2.3	16	57	114	57	114		

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.  
2. Consult Masoneilan for specific applicability on Class V service.

## Allowable Pressure Drops for 21900 Series (Metric) Air to Close, Flow to Open

### Double Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE Packing and Standard Bonnet

Spring Range: 3-15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	5.7	3	3	–	43	2	83	42	123	82	163	122
		5.7	6	23	–	103	62	183	142	263	222	342	302
		5.7	10	49	9	183	142	316	275	431	408	431	431
		3.5	3	3	–	43	2	83	42	123	82	163	122
		3.5	6	23	–	103	62	183	142	263	222	342	302
		3.5	10	49	9	183	142	316	275	431	408	431	431
40	20.3	13	3	–	–	16	–	33	6	49	23	66	40
		13	6	7	–	41	15	75	48	108	82	142	116
		13	10	19	–	75	48	131	104	187	161	243	217
		7	3	–	–	16	–	33	6	49	23	66	40
		7	6	7	–	41	15	75	48	108	82	142	116
		7	10	19	–	75	48	131	104	187	161	243	217
50	20.3	21	3	–	–	8	–	18	–	28	8	38	18
		21	6	3	–	23	3	43	23	63	43	83	63
		21	10	10	–	43	23	76	56	110	89	143	122
		21	16	20	–	73	53	126	106	–	–	–	–
		21	23	31	11	108	88	–	–	–	–	–	–
		13	3	–	–	16	–	33	6	49	23	66	40
		13	6	7	–	41	15	75	48	108	82	142	116
		13	10	19	–	75	48	131	104	187	161	243	217
		13	16	35	9	125	99	215	189	–	–	–	–
		13	23	55	29	184	158	–	–	–	–	–	–

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ 17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21900 Series (Metric) Air to Open, Flow to Open

### Double Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE Packing and Standard Bonnet

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	5.7	3	-	-	7	-	27	-	67	26
		5.7	6	7	-	31	-	71	30	151	110
		5.7	10	23	-	63	22	129	89	263	222
		3.5	3	-	-	7	-	27	-	67	26
		3.5	6	7	-	31	-	71	30	151	110
		3.5	10	23	-	63	22	129	89	263	222
40	20.3	13	3	-	-	1	-	9	-	26	-
		13	6	1	-	11	-	28	1	61	35
		13	10	7	-	24	-	52	26	108	82
		7	3	-	-	1	-	9	-	26	-
		7	6	1	-	11	-	28	1	61	35
		7	10	7	-	24	-	52	26	108	82
50	20.3	21	3	-	-	-	-	4	-	14	-
		21	6	-	-	5	-	15	-	35	15
		21	10	3	-	13	-	30	9	63	43
		21	16	9	-	25	5	52	31	105	85
		21	23	16	-	39	19	77	57	-	-
		13	3	-	-	1	-	9	-	26	-
		13	6	1	-	11	-	28	1	61	35
		13	10	7	-	24	-	52	26	108	82
		13	16	17	-	44	18	89	63	179	153
		13	23	29	3	68	42	133	106	-	-

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21900 Series (Metric) Air to Close, Flow to Open

### Double Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Spring Range: 3-15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	5.7	3	–	–	15	–	55	14	95	54	135	94
		5.7	6	–	–	75	34	155	114	235	194	315	274
		5.7	10	22	–	155	114	288	247	421	381	431	431
		3.5	3	–	–	15	–	55	14	95	54	135	94
		3.5	6	–	–	75	34	155	114	235	194	315	274
		3.5	10	22	–	155	114	288	247	421	381	431	431
40	20.3	13	3	–	–	4	–	21	–	38	11	55	28
		13	6	–	–	29	3	63	37	97	70	131	104
		13	10	7	–	63	37	119	93	176	149	232	205
		7	3	–	–	4	–	21	–	38	11	55	28
		7	6	–	–	29	3	63	37	97	70	131	104
		7	10	7	–	63	37	119	93	176	149	232	205
50	20.3	21	3	–	–	1	–	11	–	21	1	31	11
		21	6	–	–	16	–	36	16	56	36	76	56
		21	10	3	–	36	16	69	49	103	82	136	116
		21	16	13	–	66	46	119	99	–	–	–	–
		21	23	25	4	101	81	–	–	–	–	–	–
		13	3	–	–	4	–	21	–	38	11	55	28
		13	6	–	–	29	3	63	37	97	70	131	104
		13	10	7	–	63	37	119	93	176	149	232	205
		13	16	24	–	114	87	204	177	–	–	–	–
		13	23	43	17	173	146	–	–	–	–	–	–

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ 17-4PH or A638 Gr 660 Stem Required

## Allowable Pressure Drops for 21900 Series (Metric) Air to Open, Flow to Open

### Double Stage Lo-dB® Trim

Body Rating: ANSI Class 900 to 2500

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V  
Flexible Graphite Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	5.7	3	-	-	-	-	-	-	39	-
		5.7	6	-	-	3	-	43	2	123	82
		5.7	10	-	-	35	-	102	61	235	194
		3.5	3	-	-	-	-	-	-	39	-
		3.5	6	-	-	3	-	43	2	123	82
		3.5	10	-	-	35	-	102	61	235	194
40	20.3	13	3	-	-	-	-	-	-	14	-
		13	6	-	-	-	-	16	-	50	23
		13	10	-	-	13	-	41	14	97	70
		7	3	-	-	-	-	-	-	14	-
		7	6	-	-	-	-	16	-	50	23
		7	10	-	-	13	-	41	14	97	70
50	20.3	21	3	-	-	-	-	-	-	7	-
		21	6	-	-	-	-	8	-	28	8
		21	10	-	-	6	-	23	2	56	36
		21	16	2	-	18	-	45	24	98	78
		21	23	9	-	32	12	70	50	-	-
		13	3	-	-	-	-	-	-	14	-
		13	6	-	-	-	-	16	-	50	23
		13	10	-	-	13	-	41	14	97	70
		13	16	6	-	33	6	78	51	168	141
		13	23	18	-	56	30	121	95	-	-

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

17-4PH or A638 Gr 660 Stem Required

# Allowable Pressure Drops for 21100 BS Series (Metric) Air to Close, Flow to Open

## Bellows Seal with Contoured Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE<sup>®</sup> Packing

Bench Range: 3-15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	12	3	-	-	17	-	36	17	52	36	52	52
		12	6	8	-	46	26	52	52	52	52	52	52
		6	3	-	-	27	10	52	37	52	52	52	52
		6	6	14	-	52	50	52	52	52	52	52	52
		3.8	3	1.3	-	31	17	52	47	52	52	52	52
		3.8	6	16	2	52	52	52	52	52	52	52	52
		1.7	3	2.7	-	36	25	52	52	52	52	52	52
		1.7	6	19	9	52	52	52	52	52	52	52	52
40	20.3	35	3	-	-	5	-	16	-	26	6	36	16
		35	6	1	-	17	1	32	16	48	32	52	48
		35	10	6	-	32	16	52	42	52	52	-	-
		25	3	-	-	9	-	30	3.3	47	20	52	37
		25	6	3	-	26	8	52	31	52	52	52	52
		25	10	11	-	49	31	52	52	52	52	-	-
		13	3	-	-	17	-	36	17	55	36	52	52
		13	6	8	-	46	26	52	52	52	52	52	52
		6	3	-	-	27	10	52	37	52	52	52	52
		6	6	14	-	52	50	52	52	52	52	52	52
		3.8	3	1.3	-	31	17	52	47	52	52	52	52
		3.8	6	16	2	52	52	52	52	52	52	52	52
1.7	3	2.7	-	36	25	52	52	52	52	52	52		
1.7	6	19	9	52	52	52	52	52	52	52	52		
50	20.3	46	3	-	-	5	-	13	-	21	4.7	29	13
		46	6	1	-	17	1	32	16	48	32	52	48
		46	10	6	-	32	16	52	43	52	52	-	-
		26	3	-	-	8.8	-	20	2.3	32	14	43	25
		26	6	3	-	26	8	49	31	52	52	52	52
		26	10	11	-	49	31	52	52	52	52	-	-
		15	3	-	-	17	-	36	17	52	36	52	52
		15	6	8	-	46	26	52	52	52	52	52	52
		6	3	-	-	27	10	52	37	52	52	52	52
		6	6	14	-	52	50	52	52	52	52	52	52
		3.8	3	1.3	-	31	17	52	47	52	52	52	52
		3.8	6	16	2	52	52	52	52	52	52	52	52
1.7	3	2.7	-	36	25	52	52	52	52	52	52		
1.7	6	19	9	52	52	52	52	52	52	52	52		
80	38.1	110	10	2	-	13	2	25	13	36	25	-	-
		110	16	5	-	24	12	42	31	-	-	-	-
		47	10	6	-	32	16	52	43	52	52	-	-
		47	16	14	-	52	40	52	52	-	-	-	-
		31	10	11	-	49	31	52	52	52	52	-	-
100	38.1	195	10	0.5	-	7	-	14	5	21	12	-	-
		195	16	2	-	13	4	24	15	-	-	-	-
		113	10	2	-	13	2	25	13	36	25	-	-
		113	16	5	-	24	12	42	31	-	-	-	-
		49	10	6	-	32	16	52	43	52	52	-	-
		49	16	14	-	52	40	52	52	-	-	-	-
150	50.8	400	16	1	-	6	-	12	5	17	11	-	-
		400	23	2	-	10	3	18	11	-	-	-	-
		208	16	2	-	13	4	24	15	35	26	-	-
		208	23	5	-	20	11	36	27	-	-	-	-
		126	16	5	-	23	12	42	31	52	49	-	-
		126	23	9	-	36	24	52	51	-	-	-	-

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

  Hastelloy C Stem Required

# Allowable Pressure Drops for 21100 BS Series (Metric) Air to Open, Flow to Open

## Bellows Seal with Contoured Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE® Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	12	3	-	-	-	-	10	-	29	9.2
		12	6	-	-	11	-	30	11	52	49
		12	10	8	-	27	7	52	39	52	52
		6	3	-	-	2.8	-	16	-	43	26
		6	6	3	-	19	2	46	29	52	52
		6	10	14	-	40	23	52	52	52	52
		3.8	3	-	-	4.3	-	19	5.2	50	35
		3.8	6	4	-	22	8	52	38	52	52
		1.7	3	-	-	6	-	23	12	56	45
		1.7	6	6	-	26	16	52	49	52	52
40	20.3	35	3	-	-	-	-	2.0	-	10	-
		35	6	-	-	3	-	11	-	26	10
		35	10	1	-	9	-	22	6	48	32
		25	3	-	-	-	-	4.2	-	16	-
		25	6	-	-	5	-	17	-	40	22
		25	10	3	-	15	-	34	16	52	52
		13	3	-	-	-	-	10	-	29	9.2
		13	6	-	-	11	-	30	11	52	49
		13	10	8	-	27	7	52	39	52	52
		6	3	-	-	2.8	-	16	-	43	26
		6	6	3	-	19	2	46	29	52	52
		6	10	14	-	40	23	52	52	52	52
		3.8	3	-	-	4.3	-	19	5.2	50	35
		3.8	6	4	-	22	8	52	38	52	52
		1.7	3	-	-	6	-	23	12	52	45
1.7	6	6	-	26	16	52	49	52	52		
50	20.3	46	3	-	-	-	-	2.0	-	10	-
		46	6	-	-	3	-	11	-	26	10
		46	10	1	-	9	-	22	6	48	32
		26	3	-	-	-	-	4.2	-	16	-
		26	6	-	-	5	-	17	-	40	22
		26	10	3	-	15	-	34	16	52	52
		15	3	-	-	-	-	10	-	29	9.2
		15	6	-	-	11	-	30	11	52	49
		15	10	8	-	27	7	52	39	52	52
		6	3	-	-	2.8	-	16	-	43	26
		6	6	3	-	19	2	46	29	52	52
		6	10	14	-	40	23	52	52	52	52
		3.8	3	-	-	4.3	-	19	5.2	50	35
		3.8	6	4	-	22	8	52	38	52	52
		1.7	3	-	-	6	-	23	12	52	45
1.7	6	6	-	26	16	52	49	52	52		
80	38.1	110	10	-	-	3	-	9	-	20	9
		110	16	2	-	7	-	16	5	35	23
		110	23	4	-	12	0.5	25	14	-	-
		47	10	1	-	9	-	22	6	48	32
		47	16	6	-	18	2	39	23	52	52
		31	10	3	-	15	-	34	16	52	52
		31	16	10	-	28	10	52	41	52	52
		195	10	-	-	1	-	5	-	11	2
100	38.1	195	16	-	-	4	-	9	-	20	11
		195	23	2	-	6	-	14	5	-	-
		113	10	-	-	3	-	9	-	20	9
		113	16	2	-	7	-	16	5	35	23
		113	23	4	-	12	0.5	25	14	-	-
		49	10	1	-	9	-	22	6	48	32
		49	16	6	-	18	2	39	23	52	52
		400	23	-	-	3	-	7	-	14	8
150	50.8	208	16	-	-	3	-	9	-	20	11
		208	23	2	-	6	-	14	5	30	21
		126	16	1	-	7	-	16	5	35	23
		126	23	4	-	12	-	25	14	51	40

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

Hastelloy C Stem Required



# Allowable Pressure Drops for 21100 BS Series (Metric) Air to Close, Flow to Open

## Bellows Seal with Contoured Trim

Body Rating: ANSI Class 150 to 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Spring Range: 3-15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	12	3	-	-	4	-	23	4	42	23	52	42
		12	6	-	-	32	13	52	51	52	52	52	52
		6	3	-	-	8	-	35	18	52	45	52	52
		6	6	-	-	49	32	52	52	52	52	52	52
		3.8	3	-	-	11	-	41	27	52	52	52	52
		3.8	6	-	-	52	42	52	52	52	52	52	52
		1.7	3	-	-	13	3	46	36	52	52	52	52
		1.7	6	-	-	52	52	52	52	52	52	52	52
40	20.3	35	3	-	-	-	-	7	-	15	-	23	7
		35	6	-	-	11	-	27	11	43	27	52	42
		35	10	1	-	27	11	52	-	52	52	-	-
		25	3	-	-	1	-	12	-	24	6	35	17
		25	6	-	-	18	-	41	23	52	46	52	52
		25	10	3	-	41	23	52	52	52	52	-	-
		13	3	-	-	4	-	23	4	42	23	52	42
		13	6	-	-	32	13	52	51	52	52	52	52
		6	3	-	-	8	-	35	18	52	45	52	52
		6	6	-	-	49	32	52	52	52	52	52	52
		3.8	3	-	-	11	-	41	27	52	52	52	52
		3.8	6	-	-	52	42	52	52	52	52	52	52
		1.7	3	-	-	13	3	46	36	52	52	52	52
1.7	6	-	-	52	52	52	52	52	52	52	52		
50	20.3	46	3	-	-	-	-	7	-	15	-	23	7
		46	6	-	-	11	-	27	11	43	27	52	42
		46	10	1	-	27	11	52	-	52	52	-	-
		26	3	-	-	1	-	12	-	24	6	35	17
		26	6	-	-	18	-	41	23	52	46	52	52
		26	10	3	-	41	23	52	52	52	52	-	-
		15	3	-	-	4	-	23	4	42	23	52	42
		15	6	-	-	32	13	52	51	52	52	52	52
		6	3	-	-	8	-	35	18	52	45	52	52
		6	6	-	-	49	32	52	52	52	52	52	52
		3.8	3	-	-	11	-	41	27	52	52	52	52
		3.8	6	-	-	52	42	52	52	52	52	52	52
		1.7	3	-	-	13	3	46	36	52	52	52	52
1.7	6	-	-	52	52	52	52	52	52	52	52		
80	38.1	110	10	-	-	11	-	22	11	34	23	-	-
		110	16	3	-	21	10	40	28	-	-	-	-
		47	10	1	-	27	11	52	37	52	52	-	-
		47	16	9	-	50	34	52	52	-	-	-	-
		31	10	3	-	41	23	52	52	52	52	-	-
100	38.1	195	10	-	-	6	-	13	4	19	10	-	-
		195	16	1	-	12	3	23	14	-	-	-	-
		113	10	-	-	11	-	22	11	34	23	-	-
		113	16	3	-	21	10	40	28	-	-	-	-
		49	10	1	-	27	11	52	37	52	52	-	-
49	16	9	-	50	34	52	52	-	-	-	-		
150	50.8	400	16	-	-	5	-	10	4	16	9	-	-
		400	23	1	-	9	2	16	10	-	-	-	-
		208	16	-	-	11	2	21	13	32	23	-	-
		208	23	3	-	18	9	33	24	-	-	-	-
		126	16	1	-	19	8	36	26	52	43	-	-
126	23	5	-	30	20	52	45	-	-	-	-		

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ Hastelloy C Stem Required

# Allowable Pressure Drops for 21100 BS Series (Metric) Air to Open, Flow to Open

## Bellows Seal with Contoured Trim

Body Rating: ANSI Class 150 to 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	12	3	-	-	-	-	-	-	15	-
		12	6	-	-	-	-	17	-	52	36
		12	10	-	-	14	-	45	26	52	52
		6	3	-	-	-	-	-	-	24	8
		6	6	-	-	-	-	27	10	52	52
		6	10	-	-	22	5	52	50	52	52
		3.8	3	-	-	-	-	-	-	29	14
		3.8	6	-	-	2	-	32	18	52	52
		1.7	3	-	-	-	-	-	-	33	22
		1.7	6	-	-	3	-	36	26	52	52
40	20.3	35	3	-	-	-	-	-	-	4	-
		35	6	-	-	-	-	5	-	21	5
		35	10	-	-	4	-	17	1	43	27
		25	3	-	-	-	-	-	-	8	-
		25	6	-	-	-	-	9	-	32	14
		25	10	-	-	7	-	26	8	52	46
		13	3	-	-	-	-	-	-	15	-
		13	6	-	-	-	-	17	-	52	36
		13	10	-	-	14	-	45	26	52	52
		6	3	-	-	-	-	-	-	24	8
		6	6	-	-	-	-	27	10	52	52
		6	10	-	-	22	5	52	50	52	52
		3.8	3	-	-	-	-	-	-	29	14
		3.8	6	-	-	2	-	32	18	52	52
1.7	3	-	-	-	-	-	-	33	22		
1.7	6	-	-	3	-	36	26	52	52		
50	20.3	46	3	-	-	-	-	-	-	4	-
		46	6	-	-	-	-	5	-	21	5
		46	10	-	-	4	-	17	1	43	27
		26	3	-	-	-	-	-	-	8	-
		26	6	-	-	-	-	9	-	32	14
		26	10	-	-	7	-	26	8	52	46
		15	3	-	-	-	-	-	-	15	-
		15	6	-	-	-	-	17	-	52	36
		15	10	-	-	14	-	45	26	52	52
		6	3	-	-	-	-	-	-	24	8
		6	6	-	-	-	-	27	10	52	52
		6	10	-	-	22	5	52	50	52	52
		3.8	3	-	-	-	-	-	-	29	14
		3.8	6	-	-	2	-	32	18	52	52
1.7	3	-	-	-	-	-	-	33	22		
1.7	6	-	-	3	-	36	26	52	52		
80	38.1	110	10	-	-	1	-	6	-	18	6
		110	16	-	-	5	-	14	2	32	21
		110	23	2	-	9	-	23	11	-	-
		47	10	-	-	4	-	17	1	43	27
		47	16	-	-	13	-	34	18	52	52
		31	10	-	-	7	-	26	8	52	46
		31	16	2	-	20	34	51	33	52	52
		195	10	-	-	-	-	3	-	10	1
100	38.1	195	16	-	-	2	-	8	-	18	9
		195	23	-	-	5	-	13	4	-	-
		113	10	-	-	1	-	6	-	18	6
		113	16	-	-	5	-	14	2	32	21
		113	23	2	-	9	-	23	11	-	-
		49	10	-	-	4	-	17	1	43	27
		49	16	-	-	13	-	34	18	52	52
150	50.8	400	23	-	-	2	-	5	-	13	7
		208	16	-	-	1	-	7	-	17	8
		208	23	-	-	4	-	12	3	27	18
		126	16	-	-	3	-	12	1	29	19
		126	23	-	-	8	-	20	9	46	35

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ Hastelloy C Stem Required

## Allowable Pressure Drops for 21600 BS Series (Metric) Air to Close, Flow to Open

### Bellows Seal with Soft Seat Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class VI

PTFE or LE® Packing

Bench Range: 3-15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)				
				1.4	2.1	2.8	3.4	4.1
				CL VI	CL VI	CL VI	CL VI	CL VI
20 & 25	20.3	12	3	–	14	33	52	52
		12	6	4	42	52	52	52
		12	10	17	52	52	52	–
		6	3	–	24	51	52	52
		6	6	11	52	52	52	52
		6	10	29	52	52	52	–
		3.8	3	–	29	52	52	52
		3.8	6	14	52	52	52	52
		1.7	3	1	34	52	52	52
1.7	6	18	52	52	52	52		
40	20.3	35	3	–	2.4	10	18	26
		35	6	–	14	30	45	52
		35	10	4	30	56	52	–
		25	3	–	5.8	17	29	40
		25	6	–	23	46	52	52
		25	10	8	46	52	52	–
		13	3	–	14	33	52	52
		13	6	4	42	52	52	52
		13	10	17	52	52	52	–
		6	3	–	24	51	52	52
		6	6	11	52	52	52	52
		6	10	29	52	52	52	–
		3.8	3	–	29	52	52	52
		3.8	6	14	52	52	52	52
1.7	3	1	34	52	52	52		
1.7	6	18	52	52	52	52		
50	20.3	46	3	–	2.4	10	18	26
		46	6	–	14	30	45	52
		46	10	4	30	52	52	–
		26	3	–	5.8	17	29	40
		26	6	–	23	46	52	52
		26	10	8	46	52	52	–
		15	3	–	14	33	52	52
		15	6	4	42	52	52	52
		15	10	17	52	52	52	–
		6	3	–	24	51	52	52
		6	6	11	52	52	52	52
		6	10	29	52	52	52	–
		3.8	3	–	29	52	52	52
		3.8	6	14	52	52	52	52
1.7	3	1	34	52	52	52		
1.7	6	18	52	52	52	52		
80	38.1	110	10	–	11	23	34	–
		110	16	3	22	40	–	
		47	10	4	30	52	52	–
		31	10	8	46	52	52	–
100	38.1	195	10	–	6	13	19	–
		195	16	1	12	23	–	
		113	10	–	11	23	34	–
		113	16	3	22	40	–	
		49	10	4	30	52	52	–
150	50.8	400	16	–	5	11	16	–
		400	23	1	9	17	–	
		208	16	1	12	23	33	–
		208	23	3	19	34	–	
		126	16	3	22	40	52	–
		126	23	7	34	52	–	

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

  **Hastelloy C Stem Required**

# Allowable Pressure Drops for 21600 BS Series (Metric) Air to Open, Flow to Open

## Bellows Seal with Soft Seat Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class VI

PTFE or LE® Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (psi)			
				3-15	6-30	11-23	21-45
				CL VI	CL VI	CL VI	CL VI
20 & 25	20.3	12	3	—	—	6.3	25
		12	6	—	8	27	52
		12	10	4	23	52	52
		6	3	—	—	13	40
		6	6	—	16	43	52
		6	10	11	38	52	52
		3.8	3	—	2	17	47
		3.8	6	2	20	50	52
		1.7	3	—	4.3	21	54
		1.7	6	4	24	52	52
40	20.3	35	3	—	—	—	7
		35	6	—	—	8	24
		35	10	—	6	19	45
		25	3	—	—	1.2	13
		25	6	—	2	14	37
		25	10	—	12	31	52
		13	3	—	—	6.3	25
		13	6	—	8	27	52
		13	10	4	23	52	52
		6	3	—	—	13	40
		6	6	—	16	43	52
		6	10	11	38	52	52
		3.8	3	—	2	17	47
		3.8	6	2	20	50	52
		1.7	3	—	4.3	21	52
		1.7	6	4	24	52	52
50	20.3	46	3	—	—	—	7
		46	6	—	—	8	24
		46	10	—	6	19	45
		26	3	—	—	1.2	13
		26	6	—	2	14	37
		26	10	—	12	31	52
		15	3	—	—	6.3	25
		15	6	—	8	27	52
		15	10	4	23	52	52
		6	3	—	—	13	40
		6	6	—	16	43	52
		6	10	11	38	52	52
		3.8	3	—	2	17	47
		3.8	6	2	20	50	52
		1.7	3	—	4.3	21	52
		1.7	6	4	24	52	52
80	38.1	110	10	—	1	7	18
		110	16	—	5	14	33
		110	23	2	10	23	-
		47	10	—	6	19	45
		47	16	3	16	37	52
		31	10	—	12	31	52
100	38.1	195	10	—	—	3	10
		195	16	—	2	7	18
		195	23	—	5	13	-
		113	10	—	1	7	18
		113	16	—	5	14	33
		113	23	2	10	23	-
		49	10	—	6	19	45
		49	16	3	16	37	52
150	50.8	400	23	—	2	6	13
		208	16	—	2	7	18
		208	23	—	5	13	28
		126	16	—	5	14	33
		126	23	2	10	23	50

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

  Hastelloy C Stem Required

# Allowable Pressure Drops for 21700 BS Series (Metric) Air to Close, Flow to Open

## Bellows Seal with Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE® Packing

Bench Range: 3-15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	8 / 4	3	-	-	17	-	36	17	52	36	52	52
		8 / 4	6	8	-	46	26	52	52	52	52	52	52
		8 / 4	10	20	1	52	52	52	52	52	52	-	-
40	20.3	15 / 8	3	-	-	8.8	-	20	2.3	32	14	43	25
		15 / 8	6	3	-	26	8	49	31	52	52	52	52
		15 / 8	10	11	-	49	31	52	52	52	52	-	-
50	20.3	15 / 8	3	-	-	8.8	-	20	2.3	32	14	43	25
		15 / 8	6	3	-	26	8	49	31	52	52	52	52
		15 / 8	10	11	-	49	31	52	52	52	52	-	-
		25	3	-	-	5	-	13	-	21	4.7	29	13
		25	6	1	-	17	1	32	16	48	32	52	48
80	38.1	75 / 48	10	2	-	13	2	25	13	36	25	-	-
		75 / 48	16	5	-	24	12	42	31	-	-	-	-
		100	10	0.5	-	7	-	14	5	21	12	-	-
100	38.1	100	16	2	-	13	4	24	15	-	-	-	-
		63	10	2	-	13	2	25	13	36	25	-	-
		63	16	5	-	24	12	42	31	-	-	-	-
		200 / 150	16	1	-	6	-	12	5	17	11	-	-
150	50.8	200 / 150	23	2	-	10	3	18	11	-	-	-	-

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

Hastelloy C Stem Required

## Allowable Pressure Drops for 21700 BS Series (Metric) Air to Open, Flow to Open

### Bellows Seal with Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE® Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	8 / 4	3	-	-	-	-	10	-	29	9.2
		8 / 4	6	-	-	11	-	30	11	52	49
		8 / 4	10	8	-	27	7	52	39	52	52
40	20.3	15 / 8	3	-	-	-	-	4.2	-	16	-
		15 / 8	6	-	-	5	-	17	-	40	22
		15 / 8	10	3	-	15	-	34	16	52	52
50	20.3	15 / 8	3	-	-	-	-	4.2	-	16	-
		15 / 8	6	-	-	5	-	17	-	40	22
		15 / 8	10	3	-	15	-	34	16	52	52
		25	3	-	-	-	-	2	-	10	-
		25	6	-	-	2.7	-	11	-	26	10
		25	10	1	-	9	-	22	6	48	32
80	38.1	75 / 48	16	2	-	7	-	16	5	35	23
		75 / 48	23	4	-	12	0.5	25	14	-	-
		100	10	-	-	1	-	5	-	11	2
100	38.1	100	16	-	-	4	-	9	-	20	11
		100	23	2	-	6	-	14	5	-	-
		63	10	-	-	3	-	9	-	20	9
		63	16	2	-	7	-	16	5	35	23
		63	23	4	-	12	0.5	25	14	-	-
150	50.8	200 / 150	16	-	-	1	-	4	-	9	3
		200 / 150	23	-	-	3	-	7	-	14	8

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

 Hastelloy C Stem Required

# Allowable Pressure Drops for 21700 BS Series (Metric) Air to Close, Flow to Open

## Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Spring Range: 3 - 15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	8 & 4	3	-	-	4	-	23	4	42	23	52	42
		8 & 4	6	-	-	32	13	52	51	52	52	52	52
		8 & 4	10	7	-	52	51	52	52	52	52	-	-
40	20.3	15 & 8	3	-	-	1	-	12	-	24	6	35	17
		15 & 8	6	-	-	18	-	41	23	52	46	52	52
		15 & 8	10	3	-	41	23	52	52	52	52	-	-
50	20.3	15 & 8	3	-	-	1	-	12	-	24	6	35	17
		15 & 8	6	-	-	18	-	41	23	52	46	52	52
		15 & 8	10	3	-	41	23	52	52	52	52	-	-
		25	3	-	-	-	-	7	-	15	-	23	7
		25	6	-	-	11	-	27	11	43	27	52	42
		25	10	1	-	27	11	52	37	52	52	-	-
80	38.1	75 & 48	10	-	-	11	-	22	11	34	23	-	-
		75 & 48	16	3	-	21	10	40	28	-	-	-	-
100	38.1	100	10	-	-	6	-	13	4	19	10	-	-
		100	16	1	-	12	3	23	14	-	-	-	-
		63	10	-	-	11	-	22	11	34	23	-	-
		63	16	3	-	21	10	40	28	-	-	-	-
150	50.8	200 & 150	16	-	-	5	-	11	4	16	10	-	-
		200 & 150	23	1	-	9	2	17	10	-	-	-	-

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ Hastelloy C Stem Required

# Allowable Pressure Drops for 21700 BS Series (Metric) Air to Open, Flow to Open

## Single Stage Lo-dB® Trim

Body Rating: ANSI Class 150 to 600

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	8 & 4	3	-	-	-	-	-	-	15	-
		8 & 4	6	-	-	-	-	17	-	52	36
		8 & 4	10	-	-	14	-	45	26	52	52
40	20.3	15 & 8	3	-	-	-	-	-	-	8	-
		15 & 8	6	-	-	-	-	9	-	32	14
		15 & 8	10	-	-	7	-	26	8	52	46
50	20.3	15 & 8	3	-	-	-	-	-	-	8	-
		15 & 8	6	-	-	-	-	9	-	32	14
		15 & 8	10	-	-	7	-	26	8	52	46
		25	3	-	-	-	-	-	-	4	-
		25	6	-	-	-	-	5	-	21	5
		25	10	-	-	4	-	17	1	43	27
80	38.1	75 & 48	16	-	-	5	-	14	2	32	21
		75 & 48	23	2	-	9	-	23	11	-	-
		100	10	-	-	-	-	3	-	10	1
100	38.1	100	16	-	-	2	-	8	-	18	9
		100	23	-	-	5	-	13	4	-	-
		63	10	-	-	1	-	6	-	18	6
		63	16	-	-	5	-	14	2	32	21
		63	23	2	-	9	-	23	11	-	-
150	50.8	200 & 150	16	-	-	-	-	3	-	8	2
		200 & 150	23	-	-	2	-	6	-	13	7

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

Hastelloy C Stem Required



## Allowable Pressure Drops for 21900 BS Series (Metric) Air to Close, Flow to Open

### Bellows Seal with Double Stage Lo-dB® Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE® Packing

Bench Range: 3-15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	5.7	3	-	-	17	-	36	17	55	36	52	52
		5.7	6	8	-	46	26	52	52	52	52	52	52
		5.7	10	20	1	52	52	52	52	52	52	-	-
		3.5	3	-	-	17	-	36	17	52	36	52	52
		3.5	6	8	-	46	26	52	52	52	52	52	52
		3.5	10	20	1	52	52	52	52	52	52	-	-
40	20.3	13	3	-	-	8.8	-	20	2.3	32	14	43	25
		13	6	3	-	26	8	49	31	52	52	52	52
		13	10	11	-	49	31	52	52	52	52	-	-
		7	3	-	-	8.8	-	20	2.3	32	14	43	25
		7	6	3	-	26	8	49	31	52	52	52	52
		7	10	11	-	49	31	52	52	52	52	-	-
50	20.3	21	3	-	-	5	-	13	-	21	4.7	29	13
		21	6	1	-	17	1	32	16	48	32	52	48
		21	10	6	-	32	16	52	43	52	52	-	-
		21	16	14	-	52	40	52	52	-	-	-	-
		21	23	23	7	52	52	-	-	-	-	-	-
		13	3	-	-	8.8	-	20	2.3	32	14	43	25
		13	6	3	-	26	8	49	31	52	52	52	52
		13	10	11	-	49	31	52	52	52	52	-	-
		13	16	22	4	52	52	52	52	-	-	-	-
13	23	36	18	52	52	-	-	-	-	-	-		
80	38.1	63 / 40	10	2	-	13	2	25	13	36	25	-	-
			16	5	-	24	12	42	31	-	-	-	-
			23	9	-	36	24	-	-	-	-	-	-
100	38.1	83	10	0.5	-	7	-	14	5	21	12	-	-
		83	16	2	-	13	4	24	15	-	-	-	-
		83	23	5	-	20	11	-	-	-	-	-	-
		53	10	2	-	13	2	25	13	36	25	-	-
		53	16	5	-	24	12	42	31	-	-	-	-
		53	23	9	-	36	24	-	-	-	-	-	-
150	50.8	125	16	1	-	6	-	12	5	17	11	-	-
		125	23	2	-	10	3	18	11	-	-	-	-

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

Hastelloy C Stem Required

## Allowable Pressure Drops for 21900 BS Series (Metric) Air to Open, Flow to Open

### Bellows Seal with Double Stage Lo-dB® Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

PTFE or LE® Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	5.7	3	–	–	–	–	10	–	29	9.2
		5.7	6	–	–	11	–	30	11	52	49
		5.7	10	8	–	27	7	52	39	52	52
		3.5	3	–	–	–	–	10	–	29	9.2
		3.5	6	–	–	11	–	30	11	52	49
		3.5	10	8	–	27	7	52	39	52	52
40	20.3	13	3	–	–	–	–	4.2	–	16	–
		13	6	–	–	5	–	17	–	40	22
		13	10	3	–	15	–	34	16	52	52
		7	3	–	–	–	–	4.2	–	16	–
		7	6	–	–	5	–	17	–	40	22
		7	10	3	–	15	–	34	16	52	52
50	20.3	21	3	–	–	–	–	2	–	10	–
		21	6	–	–	3	–	11	–	26	10
		21	10	1	–	9	–	22	6	48	32
		21	16	6	–	18	2	39	23	52	52
		21	23	11	–	29	13	52	43	–	–
		13	3	–	–	–	–	4.2	–	16	–
		13	6	–	–	5	–	17	–	40	22
		13	10	3	–	15	–	34	16	52	52
		13	16	10	–	28	10	52	41	52	52
		13	23	18	–	44	26	52	52	–	–
80	38.1	63 / 40	10	–	–	3	–	9	–	20	9
			16	2	–	7	–	16	5	35	23
			23	4	–	12	0.5	25	14	–	–
100	38.1	83	10	–	–	1	–	5	–	11	2
		83	16	–	–	4	–	9	–	20	11
		83	23	2	–	6	–	14	5	–	–
		53	10	–	–	3	–	9	–	20	9
		53	16	2	–	7	–	16	5	35	23
		53	23	4	–	12	0.5	25	14	–	–
150	50.8	125	16	–	–	1	–	4	–	9	3
		125	23	–	–	3	–	7	–	14	8

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ Hastelloy C Stem Required

# Allowable Pressure Drops for 21900 BS Series (Metric) Air to Close, Flow to Open

## Bellows Seal with Double Stage Lo-dB® Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Spring Range: 3-15 (psi)

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Supply Pressure (bar)									
				1.4		2.1		2.8		3.4		4.1	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	5.7	3	-	-	4	-	23	4	42	23	52	42
		5.7	6	-	-	32	13	52	51	52	52	52	52
		5.7	10	7	-	52	51	52	52	52	52	-	-
		3.5	3	-	-	4	-	23	4	42	23	52	42
		3.5	6	-	-	32	13	52	51	52	52	52	52
		3.5	10	7	-	52	51	52	52	52	52	-	-
40	20.3	13	3	-	-	1	-	12	-	24	6	35	17
		13	6	-	-	18	-	41	23	52	46	52	52
		13	10	3	-	41	23	52	52	52	52	-	-
		7	3	-	-	1	-	12	-	24	6	35	17
		7	6	-	-	18	-	41	23	52	46	52	52
		7	10	3	-	41	23	52	52	52	52	-	-
50	20.3	21	3	-	-	-	-	7	-	15	-	23	7
		21	6	-	-	11	-	27	11	43	27	52	42
		21	10	1	-	27	11	52	37	52	52	-	-
		21	16	9	-	50	34	52	52	-	-	-	-
		21	23	18	2	52	52	-	-	-	-	-	-
		13	3	-	-	1	-	12	-	24	6	35	17
		13	6	-	-	18	-	41	23	52	46	52	52
		13	10	3	-	41	23	52	52	52	52	-	-
		13	16	14	-	52	52	52	52	-	-	-	-
		13	23	28	10	52	52	-	-	-	-	-	-
80	38.1	63 & 40	10	-	-	11	-	22	11	34	23	-	-
			16	3	-	21	10	40	28	-	-	-	-
			23	7	-	33	22	-	-	-	-	-	-
100	38.1	83	10	-	-	6	-	13	4	19	10	-	-
		83	16	1	-	12	3	23	14	-	-	-	-
		83	23	3	-	19	10	-	-	-	-	-	-
		53	10	-	-	11	-	22	11	34	23	-	-
		53	16	3	-	21	10	40	28	-	-	-	-
		53	23	7	-	33	22	-	-	-	-	-	-
150	50.8	125	16	-	-	5	-	11	4	16	10	-	-
		125	23	1	-	9	2	17	10	-	-	-	-

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

■ Hastelloy C Stem Required

# Allowable Pressure Drops for 21900 BS Series (Metric) Air to Open, Flow to Open

## Bellows Seal with Double Stage Lo-dB® Trim

Body Rating: ANSI Class 150 and 300

Leakage: Per IEC 534-4 and ANSI/FCI 70.2, Class IV and V

Flexible Graphite Packing

Supply pressure is 0.4 bar over bench range

Valve Size (mm)	Travel (mm)	Rated C <sub>v</sub>	Actuator Size	Bench Range (psi)							
				3-15		6-30		11-23		21-45	
				CL IV	CL V	CL IV	CL V	CL IV	CL V	CL IV	CL V
20 & 25	20.3	5.7	3	-	-	-	-	-	-	15	-
		5.7	6	-	-	-	-	17	-	52	36
		5.7	10	-	-	14	-	45	26	52	52
		3.5	3	-	-	-	-	-	-	15	-
		3.5	6	-	-	-	-	17	-	52	36
		3.5	10	-	-	14	-	45	26	52	52
40	20.3	13	3	-	-	-	-	-	-	8	-
		13	6	-	-	-	-	9	-	32	14
		13	10	-	-	7	-	26	8	52	46
		7	3	-	-	-	-	-	-	8	-
		7	6	-	-	-	-	9	-	32	14
		7	10	-	-	7	-	26	8	52	46
50	20.3	21	3	-	-	-	-	-	-	4	-
		21	6	-	-	-	-	5	-	21	5
		21	10	-	-	4	-	17	1	43	27
		21	16	-	-	13	-	34	18	52	52
		21	23	6	-	24	8	52	38	-	-
		13	3	-	-	-	-	-	-	8	-
		13	6	-	-	-	-	9	-	32	14
		13	10	-	-	7	-	26	8	52	46
		13	16	2	-	20	2	51	33	52	52
		13	23	10	-	36	18	52	52	-	-
80	38.1	63 & 40	10	-	-	1	-	6	-	18	6
			16	-	-	5	-	14	2	32	21
			23	2	-	9	-	23	11	-	-
100	38.1	83	10	-	-	-	-	3	-	10	1
		83	16	-	-	2	-	8	-	18	9
		83	23	-	-	5	-	13	4	-	-
		53	10	-	-	1	-	6	-	18	6
		53	16	-	-	5	-	14	2	32	21
		53	23	2	-	9	-	23	11	-	-
150	50.8	125	16	-	-	-	-	3	-	8	2
		125	23	-	-	2	-	6	-	13	7

Note: Inlet pressure must not exceed the ANSI rating for the selected pressure class.

  Hastelloy C Stem Required