

**18400 / 78400 Series
Pressure Drop Tables
(US) STANDARD**

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US STANDARD**

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18400 / 78400 Series Pressure Drop Tables (US)

Air to Close, Flow to Open

Unbalanced Trim

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

PTFE or LE Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure psi	Shutoff Pressure Drop psi
inches	DN	inches	mm	inches	mm					
1	25	0.7	17.78	0.25	6.35	87	6	6 - 14	40	1329
							6	6 - 14	60	3922
							10	6 - 14	40	4769
							10	6 - 14	60	6250
1.5	40	1	25.4	0.25	6.35	87	6	6 - 14	60	1397
							10	6 - 14	40	1642
							10	6 - 14	60	4396
2	50	1.5	38.1	0.38	9.652	87	10	6 - 17	60	1260
							16	6 - 17	40	891
							16	6 - 17	60	2777
3	80	2.25	57.15	0.62	15.748	87	16	6 - 16	60	963
							23	6 - 16	40	559
							23	6 - 16	60	1755
4	100	2.88	73.152	0.75	19.05	87	23	6 - 18	60	854
							52	12	10 - 11	80
						16		10 - 11	60	726
						16		10 - 11	80	1302
						20		10 - 11	40	652
						20		10 - 11	60	1573
						20		10 - 11	80	2486
						84	154	10 - 12	80	984
							314	10 - 12	40	714
							314	10 - 12	60	1709
314	10 - 12	80	2698							
6	150	4.12	104.65	1	25.4	52	20	10 - 12	60	588
							20	10 - 12	80	1034
						84	154	10 - 12	100	560
							314	12 - 14	60	628
							314	12 - 14	80	1100
8	200	5.38	136.65	1.25	31.75	52	20	10 - 12	100	683
						84	314	12 - 15	100	730

18400 / 78400 Series Pressure Drop Tables (US)

Air to Close, Flow to Open

Unbalanced Trim

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

Flexible Graphite Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure psi	Shutoff Pressure Drop psi
inches	DN	inches	mm	inches	mm					
1	25	0.7	17.78	0.25	6.35	87	6	6 - 14	40	913
							6	6 - 14	60	2787
							10	6 - 14	40	3388
							10	6 - 14	60	6250
1.5	40	1	25.4	0.25	6.35	87	6	6 - 14	60	1169
							10	6 - 14	40	1375
							10	6 - 14	60	3680
2	50	1.5	38.1	0.38	9.652	87	10	6 - 17	60	1062
							16	6 - 17	40	695
							16	6 - 17	60	2339
3	80	2.25	57.15	0.62	15.748	87	16	6 - 16	60	813
							23	6 - 16	60	1532
4	100	2.88	73.152	0.75	19.05	87	23	6 - 18	60	762
							52	16	10 - 11	60
						16		10 - 11	80	1196
						20		10 - 11	40	561
						20		10 - 11	60	1444
						20		10 - 11	80	2283
						84	154	10 - 12	80	893
							314	10 - 12	40	623
							314	10 - 12	60	1569
						6	150	4.12	104.65	1
20	10 - 12	80	980							
84	154	10 - 12	100	505						
	314	12 - 14	60	573						
	314	12 - 14	80	1053						
8	200	5.38	136.65	1.25	31.75	52	20	10 - 12	100	654
						84	314	12 - 15	100	701

18400 / 78400 Series Pressure Drop Tables (US)

Air to Open, Flow to Open

Unbalanced Trim

Leakage: Per IEC 534-4 and ANSI/FCI 70.2 Class V and VI
PTFE or LE Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure psi	Shutoff Pressure Drop psi	
inches	DN	inches	mm	inches	mm						
1	25	0.7	17.78	0.25	6.35	88	6	38 - 45	50	2885	
							10	38 - 45	50	6250	
1.5	40	1	25.4	0.25	6.35	88	6	38 - 45	50	896	
							10	38 - 45	50	3294	
2	50	1.5	38.1	0.38	9.652	88	10	34 - 45	50	718	
							16	34 - 45	50	1931	
3	80	2.25	57.15	0.62	15.748	88	16	35 - 45	50	580	
							23	35 - 45	50	1224	
4	100	2.88	73.152	0.75	19.05	88	23	33 - 45	50	520	
							53 ⁽¹⁾	16	25 - 28	40	663
						16		25 - 28	60	663	
						16		25 - 28	80	663	
						20		25 - 28	40	1100	
						85 ⁽¹⁾		154	25 - 28	40	555
								154	25 - 28	60	555
						154	25 - 28	80	555		
314	25 - 28	40	1194								
6	150	4.12	104.65	1	25.4	53 ⁽¹⁾	20	25 - 29	40	515	
							20	25 - 29	60	515	
						85 ⁽¹⁾	314	25 - 29	40	561	
							314	25 - 29	60	561	

Note 1: Double-acting actuator with spring return is required to achieve shutoff pressure drops indicated. Shutoff leakage will meet Class III requirements if there is air failure and no volume tank. Class V shutoff is achieved under all other conditions.

18400 / 78400 Series Pressure Drop Tables (US)

Air to Open, Flow to Open

Unbalanced Trim

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

Flexible Graphite Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure psi	Shutoff Pressure Drop psi
inches	DN	inches	mm	inches	mm					
1	25	0.7	17.78	0.25	6.35	88	6	38 - 45	50	2050
							10	38 - 45	50	5845
1.5	40	1	25.4	0.25	6.35	88	6	38 - 45	50	692
							10	38 - 45	50	2758
2	50	1.5	38.1	0.38	9.652	88	10	34 - 45	50	522
							16	34 - 45	50	1626
3	80	2.25	57.15	0.62	15.748	88	23	35 - 45	50	1069
4	100	2.88	73.152	0.75	19.05	53 ⁽¹⁾	16	25 - 28	40	572
							16	25 - 28	60	572
							16	25 - 28	80	572
							20	25 - 28	40	1010
							85 ⁽¹⁾	314	25 - 28	40
6	150	4.12	104.65	1	25.4	85 ⁽¹⁾	314	25 - 29	40	506
							314	25 - 29	60	506

Note 1: Double-acting actuator with spring return is required to achieve shutoff pressure drops indicated. Shutoff leakage will meet Class III requirements if there is air failure and no volume tank. Class V shutoff is achieved under all other conditions.

18400 / 78400 Series Pressure Drop Tables (US)

Air to Close, Flow to Open

Balanced Trim

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

PTFE or LE Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure psi	Shutoff Pressure Drop psi
inches	DN	inches	mm	inches	mm					
1.5	40	1	25.4	0.25	6.35	87	6	6 - 14	40	562
							6	6 - 14	60	5746
							10	6 - 14	40	6250
							10	6 - 14	60	6250
2	50	1.5	38.1	0.38	9.652	87	10	6 - 17	60	4931
							16	6 - 17	40	3505
							16	6 - 17	60	6250
3	80	2.25	57.15	0.62	15.748	87	16	6 - 16	60	4725
							23	6 - 16	40	2815
							23	6 - 16	60	6250
4	100	2.88	73.152	0.75	19.05	87	16	6 - 18	60	3300
							23	6 - 18	40	1110
							23	6 - 18	60	6250
						52	12	10 - 11	60	1739
							12	10 - 11	80	4720
							16	10 - 11	40	1360
							16	10 - 11	60	6134
							16	10 - 11	80	6250
							20	10 - 11	40	5528
							20	10 - 11	60	6250
							20	10 - 11	80	6250
						84	154	10 - 12	60	4186
							154	10 - 12	80	6250
							314	10 - 12	40	6032
314	10 - 12	60	6250							
314	10 - 12	80	6250							
6	150	4.12	104.65	1	25.4	87	23	6 - 18	60	3701
						52	12	10 - 12	80	1646
							12	10 - 12	100	3996
							16	10 - 12	60	2690
							16	10 - 12	80	6250
							20	10 - 12	40	2100
							20	10 - 12	60	6250
						84	20	10 - 12	80	6250
							154	10 - 12	60	1343
							154	10 - 12	80	4545
							154	10 - 12	100	6250
							314	12 - 14	40	2146
							314	12 - 14	60	6250
							314	12 - 14	80	6250
8	200	5.38	136.65	1.25	31.75		52	12	10 - 12	100
						16		10 - 12	80	6250
						16		10 - 12	100	6250
						20		10 - 12	60	6250
						20		10 - 12	80	6250
						20		10 - 12	100	6250
						84	154	10 - 12	80	5060
							154	10 - 12	100	6250
							314	12 - 15	60	6250
							314	12 - 15	80	6250
							314	12 - 15	100	6250

18400 / 78400 Series Pressure Drop Tables (US)

Air to Close, Flow to Open

Balanced Trim

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

Flexible Graphite Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure psi	Shutoff Pressure Drop psi
inches	DN	inches	mm	inches	mm					
1.5	40	1	25.4	0.25	6.35	87	6	6 - 14	60	3191
							10	6 - 14	40	3752
							10	6 - 14	60	6250
2	50	1.5	38.1	0.38	9.652	87	10	6 - 17	60	2848
							16	6 - 17	40	2024
							16	6 - 17	60	6250
3	80	2.25	57.15	0.62	15.748	87	16	6 - 16	60	2762
							23	6 - 16	40	1645
							23	6 - 16	60	5025
4	100	2.88	73.152	0.75	19.05	87	16	6 - 18	60	1890
							23	6 - 18	60	4111
							12	10 - 11	60	992
						52	12	10 - 11	80	2703
							16	10 - 11	40	525
							16	10 - 11	60	3513
							16	10 - 11	80	6248
							20	10 - 11	40	3166
							20	10 - 11	60	6250
							20	10 - 11	80	6250
						84	154	10 - 12	60	2398
							154	10 - 12	80	4724
							314	10 - 12	40	3445
314	10 - 12	60	6250							
314	10 - 12	80	6250							
6	150	4.12	104.65	1	25.4	87	23	6 - 18	60	2122
							12	10 - 12	80	880
						52	12	10 - 12	100	2291
							16	10 - 12	60	1542
							16	10 - 12	80	3700
							20	10 - 12	40	1204
							20	10 - 12	60	4661
							20	10 - 12	80	6250
						84	154	10 - 12	60	507
							154	10 - 12	80	2606
							154	10 - 12	100	4442
							314	12 - 14	40	1230
							314	12 - 14	60	4973
314	12 - 14	80	6250							
8	200	5.38	136.65	1.25	31.75	52	12	10 - 12	100	1356
							16	10 - 12	80	3466
							16	10 - 12	100	6250
							20	10 - 12	60	4905
							20	10 - 12	80	6250
							20	10 - 12	100	6250
						84	154	10 - 12	80	1828
							154	10 - 12	100	4576
							314	12 - 15	60	5092
							314	12 - 15	80	6250
							314	12 - 15	100	6250

18400 / 78400 Series Pressure Drop Tables (US)

Air to Open, Flow to Open

Balanced Trim

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

PTFE or LE Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure psi	Shutoff Pressure Drop psi
inches	DN	inches	mm	inches	mm					
1.5	40	1	25.4	0.25	6.35	88	6	38 - 45	50	3708
							10	38 - 45	50	6250
2	50	1.5	38.1	0.38	9.652	88	10	34 - 45	50	2862
							16	34 - 45	50	6250
3	80	2.25	57.15	0.62	15.748	88	16	35 - 45	50	2915
							23	35 - 45	50	5995
4	100	2.88	73.152	0.75	19.05	88	16	33 - 45	50	1401
							23	33 - 45	50	4447
						53 ⁽¹⁾	12	25 - 28	40	3377
							12	25 - 28	60	3377
							12	25 - 28	80	3377
							16	25 - 28	40	5619
							16	25 - 28	60	5619
							16	25 - 28	80	5619
						85 ⁽¹⁾	20	25 - 28	40	6250
							154	25 - 28	40	4729
							154	25 - 28	60	4729
							154	25 - 28	80	4729
314	25 - 28	40	6250							
6	150	4.12	104.65	1	25.4	88	23	33 - 45	50	1549
							53 ⁽¹⁾	12	25 - 29	40
						12		25 - 29	60	2540
						12		25 - 29	80	2540
						16		25 - 29	40	4307
						16		25 - 29	60	4307
						16		25 - 29	80	4307
						85 ⁽¹⁾	20	25 - 29	40	6250
							20	25 - 29	60	6250
							154	25 - 29	40	3606
							154	25 - 29	60	3606
							154	25 - 29	80	3606
							314	25 - 29	40	6250
						314	25 - 29	60	6250	
8	200	5.38	136.65	1.25	31.75	53 ⁽¹⁾	12	25 - 30	60	2918
							16	25 - 30	40	6250
							16	25 - 30	60	6250
							16	25 - 30	80	6250
							20	25 - 30	40	6250
							20	25 - 30	60	6250
						85 ⁽¹⁾	154	25 - 30	40	3919
							154	25 - 30	60	6250
							314	25 - 30	40	6250
							314	25 - 30	60	6250

Note 1: Double-acting actuator with spring return is required to achieve shutoff pressure drops indicated. Shutoff leakage will meet Class III requirements if there is air failure and no volume tank. Class V shutoff is achieved under all other conditions.

18400 / 78400 Series Pressure Drop Tables (US)

Air to Open, Flow to Open

Balanced Trim

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

Flexible Graphite Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure psi	Shutoff Pressure Drop psi
inches	DN	inches	mm	inches	mm					
1.5	40	1	25.4	0.25	6.35	88	6	38 - 45	50	2059
							10	38 - 45	50	6250
2	50	1.5	38.1	0.38	9.652	88	10	34 - 45	50	1653
							16	34 - 45	50	4362
3	80	2.25	57.15	0.62	15.748	88	16	35 - 45	50	1704
							23	35 - 45	50	3504
4	100	2.88	73.152	0.75	19.05	88	16	33 - 45	50	576
							23	33 - 45	50	2547
						53 ⁽¹⁾	12	25 - 28	40	1934
							12	25 - 28	60	1934
							12	25 - 28	80	1934
							16	25 - 28	40	3218
							16	25 - 28	60	3218
							16	25 - 28	80	3218
						85 ⁽¹⁾	20	25 - 28	40	5277
							154	25 - 28	40	2708
							154	25 - 28	60	2708
							154	25 - 28	80	2708
314	25 - 28	40	5730							
6	150	4.12	104.65	1	25.4	88	23	33 - 45	50	760
							53 ⁽¹⁾	12	25 - 29	60
						12		25 - 29	80	1456
						16		25 - 29	40	2469
						16		25 - 29	60	2469
						16		25 - 29	80	2469
						20		25 - 29	40	4094
						85 ⁽¹⁾	20	25 - 29	60	4094
							154	25 - 29	40	2067
							154	25 - 29	60	2067
							154	25 - 29	80	2067
						314	25 - 29	40	4451	
314	25 - 29	60	4451							
8	200	5.38	136.65	1.25	31.75	53 ⁽¹⁾	12	25 - 30	60	1054
							16	25 - 30	40	2982
							16	25 - 30	60	3567
							16	25 - 30	80	3567
							20	25 - 30	40	5999
							20	25 - 30	60	5999
						85 ⁽¹⁾	154	25 - 30	40	1415
							154	25 - 30	60	2965
							314	25 - 30	40	6250
							314	25 - 30	60	6250

Note 1: Double-acting actuator with spring return is required to achieve shutoff pressure drops indicated. Shutoff leakage will meet Class III requirements if there is air failure and no volume tank. Class V shutoff is achieved under all other conditions.

**18400 / 78400 Series
Pressure Drop Tables
(METRIC)**

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18400 / 78400 Series Pressure Drop Tables (METRIC)

Air to Close, Flow to Open

Unbalanced Trim

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

PTFE or LE Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure bar	Shutoff Pressure Drop bar
inches	DN	inches	mm	inches	mm					
1	25	0.7	17.78	0.25	6.35	87	6	6 - 14	40	92
							6	6 - 14	60	270
							10	6 - 14	40	329
							10	6 - 14	60	431
1.5	40	1	25.4	0.25	6.35	87	6	6 - 14	60	96
							10	6 - 14	40	113
							10	6 - 14	60	303
2	50	1.5	38.1	0.38	9.652	87	10	6 - 17	60	87
							16	6 - 17	40	61
							16	6 - 17	60	191
3	80	2.25	57.15	0.62	15.748	87	16	6 - 16	60	66
							23	6 - 16	40	39
							23	6 - 16	60	121
4	100	2.88	73.152	0.75	19.05	87	23	6 - 18	60	59
							12	10 - 11	80	38
						52	16	10 - 11	60	50
							16	10 - 11	80	90
							20	10 - 11	40	45
							20	10 - 11	60	108
							20	10 - 11	80	171
							154	10 - 12	80	68
						84	314	10 - 12	40	49
							314	10 - 12	60	118
314	10 - 12	80	186							
6	150	4.12	104.65	1	25.4	52	20	10 - 12	60	41
							20	10 - 12	80	71
						84	154	10 - 12	100	39
							314	12 - 14	60	43
							314	12 - 14	80	77
8	200	5.38	136.65	1.25	31.75	52	20	10 - 12	100	47
						84	314	12 - 15	100	50

18400 / 78400 Series Pressure Drop Tables (METRIC)

Air to Close, Flow to Open

Unbalanced Trim

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

Flexible Graphite Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure bar	Shutoff Pressure Drop bar						
inches	DN	inches	mm	inches	mm											
1	25	0.7	17.78	0.25	6.35	87	6	6 - 14	40	63						
							6	6 - 14	60	192						
							10	6 - 14	40	234						
							10	6 - 14	60	431						
1.5	40	1	25.4	0.25	6.35	87	6	6 - 14	60	81						
							10	6 - 14	40	95						
							10	6 - 14	60	254						
2	50	1.5	38.1	0.38	9.652	87	10	6 - 17	60	73						
							16	6 - 17	40	48						
							16	6 - 17	60	161						
3	80	2.25	57.15	0.62	15.748	87	16	6 - 16	60	56						
							23	6 - 16	60	106						
4	100	2.88	73.152	0.75	19.05	87	23	6 - 18	60	53						
							16	10 - 11	60	44						
						52	16	10 - 11	80	82						
							20	10 - 11	40	39						
							20	10 - 11	60	100						
							20	10 - 11	80	157						
							84	154	10 - 12	80	62					
								314	10 - 12	40	43					
						6	150	4.12	104.65	1	25.4	52	20	10 - 12	60	37
													20	10 - 12	80	68
84	154	10 - 12	100	35												
	314	12 - 14	60	40												
	314	12 - 14	80	73												
	314	12 - 14	80	73												
8	200	5.38	136.65	1.25	31.75							52	20	10 - 12	100	45
												84	314	12 - 15	100	48

18400 / 78400 Series Pressure Drop Tables (METRIC)

Air to Open, Flow to Open

Unbalanced Trim

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

PTFE or LE Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure bar	Shutoff Pressure Drop bar
inches	DN	inches	mm	inches	mm					
1	25	0.7	17.78	0.25	6.35	88	6	38 - 45	50	199
							10	38 - 45	50	431
1.5	40	1	25.4	0.25	6.35	88	6	38 - 45	50	62
							10	38 - 45	50	227
2	50	1.5	38.1	0.38	9.652	88	10	34 - 45	50	50
							16	34 - 45	50	133
3	80	2.25	57.15	0.62	15.748	88	16	35 - 45	50	40
							23	35 - 45	50	84
4	100	2.88	73.152	0.75	19.05	88	23	33 - 45	50	36
							53 ⁽¹⁾	16	25 - 28	40
						16		25 - 28	60	46
						16		25 - 28	80	46
						20		25 - 28	40	76
						85 ⁽¹⁾	154	25 - 28	40	38
							154	25 - 28	60	38
							154	25 - 28	80	38
314	25 - 28	40	82							
6	150	4.12	104.65	1	25.4	53 ⁽¹⁾	20	25 - 29	40	36
							20	25 - 29	60	36
						85 ⁽¹⁾	314	25 - 29	40	39
							314	25 - 29	60	39

Note 1: Double-acting actuator with spring return is required to achieve shutoff pressure drops indicated. Shutoff leakage will meet Class III requirements if there is air failure and no volume tank. Class V shutoff is achieved under all other conditions.

18400 / 78400 Series Pressure Drop Tables (METRIC)

Air to Open, Flow to Open

Unbalanced Trim

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

Flexible Graphite Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure bar	Shutoff Pressure Drop bar
inches	DN	inches	mm	inches	mm					
1	25	0.7	17.78	0.25	6.35	88	6	38 - 45	50	141
							10	38 - 45	50	403
1.5	40	1	25.4	0.25	6.35	88	6	38 - 45	50	48
							10	38 - 45	50	190
2	50	1.5	38.1	0.38	9.652	88	10	34 - 45	50	36
							16	34 - 45	50	112
3	80	2.25	57.15	0.62	15.748	88	23	35 - 45	50	74
4	100	2.88	73.152	0.75	19.05	53 ⁽¹⁾	16	25 - 28	40	39
							16	25 - 28	60	39
							16	25 - 28	80	39
							20	25 - 28	40	70
							85 ⁽¹⁾	314	25 - 28	40
6	150	4.12	104.65	1	25.4	85 ⁽¹⁾	314	25 - 29	40	35
							314	25 - 29	60	35

Note 1: Double-acting actuator with spring return is required to achieve shutoff pressure drops indicated. Shutoff leakage will meet Class III requirements if there is air failure and no volume tank. Class V shutoff is achieved under all other conditions.

18400 / 78400 Series Pressure Drop Tables (METRIC)

Air to Close, Flow to Open

Balanced Trim

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

PTFE or LE Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure bar	Shutoff Pressure Drop bar
inches	DN	inches	mm	inches	mm					
1.5	40	1	25.4	0.25	6.35	87	6	6 - 14	40	39
							6	6 - 14	60	396
							10	6 - 14	40	431
							10	6 - 14	60	431
2	50	1.5	38.1	0.38	9.652	87	10	6 - 17	60	340
							16	6 - 17	40	242
							16	6 - 17	60	431
3	80	2.25	57.15	0.62	15.748	87	16	6 - 16	60	326
							23	6 - 16	40	194
							23	6 - 16	60	431
4	100	2.88	73.152	0.75	19.05	87	16	6 - 18	60	228
							23	6 - 18	40	77
							23	6 - 18	60	431
						52	12	10 - 11	60	120
							12	10 - 11	80	325
							16	10 - 11	40	94
							16	10 - 11	60	423
							16	10 - 11	80	431
							20	10 - 11	40	381
							20	10 - 11	60	431
						84	20	10 - 11	80	431
							154	10 - 12	60	289
							154	10 - 12	80	431
							314	10 - 12	40	416
314	10 - 12	60	431							
6	150	4.12	104.65	1	25.4	87	23	6 - 18	60	255
							12	10 - 12	80	114
						52	12	10 - 12	100	276
							16	10 - 12	60	186
							16	10 - 12	80	431
							20	10 - 12	40	145
							20	10 - 12	60	431
							20	10 - 12	80	431
							84	154	10 - 12	60
						154		10 - 12	80	313
						154		10 - 12	100	431
						314		12 - 14	40	148
						314		12 - 14	60	431
						314		12 - 14	80	431
8	200	5.38	136.65	1.25	31.75	52	12	10 - 12	100	259
							16	10 - 12	80	431
							16	10 - 12	100	431
							20	10 - 12	60	431
							20	10 - 12	80	431
							20	10 - 12	100	431
						84	154	10 - 12	80	349
							154	10 - 12	100	431
							314	12 - 15	60	431
							314	12 - 15	80	431
							314	12 - 15	100	431

18400 / 78400 Series Pressure Drop Tables (METRIC)

Air to Close, Flow to Open

Balanced Trim

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

Flexible Graphite Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure bar	Shutoff Pressure Drop bar
inches	DN	inches	mm	inches	mm					
1.5	40	1	25.4	0.25	6.35	87	6	6 - 14	60	220
							10	6 - 14	40	259
							10	6 - 14	60	431
2	50	1.5	38.1	0.38	9.652	87	10	6 - 17	60	196
							16	6 - 17	40	140
							16	6 - 17	60	431
3	80	2.25	57.15	0.62	15.748	87	16	6 - 16	60	190
							23	6 - 16	40	113
							23	6 - 16	60	346
4	100	2.88	73.152	0.75	19.05	87	16	6 - 18	60	130
							23	6 - 18	60	283
							12	10 - 11	60	68
						52	12	10 - 11	80	186
							16	10 - 11	40	36
							16	10 - 11	60	242
							16	10 - 11	80	431
							20	10 - 11	40	218
							20	10 - 11	60	431
							20	10 - 11	80	431
							84	154	10 - 12	60
						154		10 - 12	80	326
						314		10 - 12	40	238
						314		10 - 12	60	431
314	10 - 12	80	431							
6	150	4.12	104.65	1	25.4	87	23	6 - 18	60	146
							12	10 - 12	80	61
						52	12	10 - 12	100	158
							16	10 - 12	60	106
							16	10 - 12	80	255
							20	10 - 12	40	83
							20	10 - 12	60	321
							20	10 - 12	80	431
						84	154	10 - 12	60	35
							154	10 - 12	80	180
							154	10 - 12	100	306
							314	12 - 14	40	85
							314	12 - 14	60	343
314	12 - 14	80	431							
8	200	5.38	136.65	1.25	31.75		52	12	10 - 12	100
						16		10 - 12	80	239
						16		10 - 12	100	431
						20		10 - 12	60	338
						20		10 - 12	80	431
						84	20	10 - 12	100	431
							154	10 - 12	80	126
							154	10 - 12	100	316
							314	12 - 15	60	351
							314	12 - 15	80	431
							314	12 - 15	100	431

18400 / 78400 Series Pressure Drop Tables (METRIC)

Air to Open, Flow to Open

Balanced Trim

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

PTFE or LE Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure bar	Shutoff Pressure Drop bar
inches	DN	inches	mm	inches	mm					
1.5	40	1	25.4	0.25	6.35	88	6	38 - 45	50	256
							10	38 - 45	50	431
2	50	1.5	38.1	0.38	9.652	88	10	34 - 45	50	197
							16	34 - 45	50	431
3	80	2.25	57.15	0.62	15.748	88	16	35 - 45	50	201
							23	35 - 45	50	413
4	100	2.88	73.152	0.75	19.05	88	16	33 - 45	50	97
							23	33 - 45	50	307
						53 ⁽¹⁾	12	25 - 28	40	233
							12	25 - 28	60	233
							12	25 - 28	80	233
							16	25 - 28	40	387
							16	25 - 28	60	387
							16	25 - 28	80	387
						85 ⁽¹⁾	20	25 - 28	40	431
							154	25 - 28	40	326
							154	25 - 28	60	326
							154	25 - 28	80	326
6	150	4.12	104.65	1	25.4	88	23	33 - 45	50	107
							12	25 - 29	40	89
						53 ⁽¹⁾	12	25 - 29	60	175
							12	25 - 29	80	175
							16	25 - 29	40	297
							16	25 - 29	60	297
							16	25 - 29	80	297
							20	25 - 29	40	431
						85 ⁽¹⁾	20	25 - 29	60	431
							154	25 - 29	40	249
							154	25 - 29	60	249
							154	25 - 29	80	249
8	200	5.38	136.65	1.25	31.75	53 ⁽¹⁾	12	25 - 30	60	201
							16	25 - 30	40	431
							16	25 - 30	60	431
							16	25 - 30	80	431
							20	25 - 30	40	431
							20	25 - 30	60	431
						85 ⁽¹⁾	154	25 - 30	40	270
							154	25 - 30	60	431
314	25 - 30	40	431							
	25 - 30	60	431							

Note 1: Double-acting actuator with spring return is required to achieve shutoff pressure drops indicated. Shutoff leakage will meet Class III requirements if there is air failure and no volume tank. Class V shutoff is achieved under all other conditions.

18400 / 78400 Series Pressure Drop Tables (METRIC)

Air to Open, Flow to Open

Balanced Trim

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

Flexible Graphite Packing

Valve Size		Orifice Diameter		Travel		Actuator Type	Actuator Size	Bench Range	Supply Pressure bar	Shutoff Pressure Drop bar
inches	DN	inches	mm	inches	mm					
1.5	40	1	25.4	0.25	6.35	88	6	38 - 45	50	142
							10	38 - 45	50	431
2	50	1.5	38.1	0.38	9.652	88	10	34 - 45	50	114
							16	34 - 45	50	301
3	80	2.25	57.15	0.62	15.748	88	16	35 - 45	50	117
							23	35 - 45	50	242
4	100	2.88	73.152	0.75	19.05	88	16	33 - 45	50	40
							23	33 - 45	50	176
						53 ⁽¹⁾	12	25 - 28	40	133
							12	25 - 28	60	133
							12	25 - 28	80	133
							16	25 - 28	40	222
							16	25 - 28	60	222
							16	25 - 28	80	222
						85 ⁽¹⁾	20	25 - 28	40	364
							154	25 - 28	40	187
							154	25 - 28	60	187
							154	25 - 28	80	187
6	150	4.12	104.65	1	25.4	88	23	33 - 45	50	52
							12	25 - 29	60	100
						53 ⁽¹⁾	12	25 - 29	80	100
							16	25 - 29	40	170
							16	25 - 29	60	170
							16	25 - 29	80	170
							20	25 - 29	40	282
							20	25 - 29	60	282
						85 ⁽¹⁾	154	25 - 29	40	143
							154	25 - 29	60	143
							154	25 - 29	80	143
							314	25 - 29	40	307
8	200	5.38	136.65	1.25	31.75	53 ⁽¹⁾	12	25 - 30	60	73
							16	25 - 30	40	206
							16	25 - 30	60	246
							16	25 - 30	80	246
							20	25 - 30	40	414
							20	25 - 30	60	414
						85 ⁽¹⁾	154	25 - 30	40	98
							154	25 - 30	60	204
							314	25 - 30	40	431
							314	25 - 30	60	431

Note 1: Double-acting actuator with spring return is required to achieve shutoff pressure drops indicated. Shutoff leakage will meet Class III requirements if there is air failure and no volume tank. Class V shutoff is achieved under all other conditions.