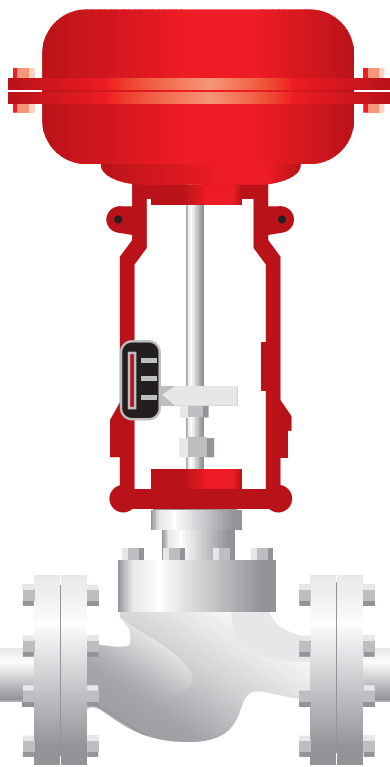


Pressure Drop Tables



DRESSER
Flow Control

Masonite[®]

41005 Series Pressure Drop Tables - PH3000

03/02

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 1500

41305

Pressure Energized PTFE Seal Ring	Page(s)
Standard, Single/Multi-Stage Lo-dB Trim	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Open	
Leakage Class IV	1 - 4
Leakage Class V	5 - 6

41405

Models 41415 & 41425

Pilot Balanced Construction - Leakage Class IV (Class V Optional)	
Standard Trim	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Close	7 - 8
Flexible Graphite Packing	
Air to Open and Air to Close, Flow to Close	12 - 13
Standard Trim with 37/38 Spring-Diaphragm & 84/85/86 Cylinder Actuators	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Close	10
Flexible Graphite Packing	
Air to Open and Air to Close, Flow to Close	15

Models 41435 & 41445

Pilot Balanced Construction - Leakage Class IV (Class V Optional)	
Single Stage Lo-dB/Anti-Cavitation Trim (including Diffuser)	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Close	9
Flexible Graphite Packing	
Air to Open and Air to Close, Flow to Close	14
Single Stage Lo-dB/Anti-Cavitation Trim (including Diffuser) with 37/38 Spring Diaphragm & 84/85/86 Cylinder Actuators	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Close	11
Flexible Graphite Packing	
Air to Open and Air to Close, Flow to Close	16

41505

Metal Seal Ring - Leakage Class II & III	Page(s)
Standard, Single/Multi-Stage Lo-dB Trim	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Open	17 - 20
Flexible Graphite	
Air to Open and Air to Close, Flow to Open	21 - 24

41605

PTFE Seal Ring - Leakage Class IV	
Standard, Single/Multi-Stage Lo-dB Trim	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Open	25 - 28

41905

Graphite Seal Ring - Leakage Class III & IV	
Standard, Single/Multi-Stage Lo-dB Trim	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Open	29 - 32
Flexible Graphite Packing	
Air to Open and Air to Close, Flow to Open	33 - 36

Allowable pressure drops represent shutoff capability. Consult Masoneilan for appropriate actuator selection for Fail Open action in Air to Close configurations with Flexible Graphite Packing.

Allowable Pressure Drops for 41305 Series (US) Air to Open and Air to Close, Flow to Open

Pressure Energized PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE					
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P		
inches	mm	psi							psi	psi			psi			
2	50	600			25											
3x2 4x2	80x50 100x50	1500	30 75	26 65	32	30 43 53	10	6 - 30	40	1392	10	3 - 15	25	2741		
					43			11 - 23	35	3321		3 - 15	30	3750		
					58			21 - 45	55	3750		6 - 30	40	1813		
					72			-	-	-		6 - 30	45	3750		
2	50	1500	16 40	14 35	10	12 19 24	6	-	-	-	6	3 - 15	35	3626		
					13			6 - 30	40	638		3 - 15	40	3750		
					17			11 - 23	35	1914		6 - 30	50	3205		
					23		21 - 45	55	3750	6 - 30	55	3750				
					30		3 - 15	25	348	10	-	-	-			
							6 - 30	40	1682		-	-	-			
	11 - 23	35	3669	-	-	-										
3 4x3 6x3	80 100x80 150x80	1500	60 155	56 140	40	50 75 95	16	3 - 15	25	189	16	3 - 15	25	2495		
					54			6 - 30	40	1492		3 - 15	30	3750		
					72			11 - 23	35	3423		6 - 30	40	1914		
					95		21 - 45	55	3750	6 - 30	45	3750				
					125		3 - 15	25	812	23	3 - 15	20	1175			
							6 - 30	40	2524		3 - 15	25	3750			
	11 - 23	35	3750	6 - 30	40	3133										
							-	-	-		6 - 30	45	3750			
4 6x4 8x4	100 150x100 200x100	1500	95 240	90 225	65	72 105 130	16	-	-	-	16	3 - 15	25	2248		
					85			6 - 30	40	1262		3 - 15	30	3750		
					110			11 - 23	35	3162		6 - 30	45	3582		
					150		21 - 45	55	3750	6 - 30	50	3750				
					195		3 - 15	25	551	23	3 - 15	25	3698			
							6 - 30	40	2277		3 - 15	30	3750			
	11 - 23	35	3750	6 - 30	40	2872										
							21 - 45	55	3750		6 - 30	45	3750			
6 8x6 10x6	150 200x150 250x150	1500	400	144 360	100	96 150 190	16	-	-	-	16	3 - 15	25	1392		
					130			6 - 30	40	667		3 - 15	30	2669		
					175			11 - 23	35	2002		6 - 30	50	3568		
					230		21 - 45	55	3750	6 - 30	55	3750				
					300		3 - 15	25	160	23	3 - 15	25	2408			
							6 - 30	40	1407		3 - 15	30	3750			
	11 - 23	35	3249	6 - 30	40	1914										
							21 - 45	55	3750		6 - 30	45	3750			

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41305 Series (US)

Air to Open and Air to Close, Flow to Open

Pressure Energized PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE						
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P			
psi	psi	psi							psi								
inches	mm																
8 10x8 12x8	200 250x200 300x200	1500	415 640	230 575	165 220 290 380	155 250	16	-	-	-	16	3 - 15	25	638			
								6 - 30	40	174		3 - 15	30	1436			
								11 - 23	35	1030		6 - 30	50	1973			
								21 - 45	55	2509		6 - 30	55	2712			
								-	-	-		3 - 15	25	1262			
								6 - 30	40	638		3 - 15	30	2335			
					11 - 23	35	1755	6 - 30	50	3118							
					21 - 45	55	3750	6 - 30	55	3750							
					8 - 30	35	1291	3 - 13	20	580							
					15 - 50	55	2930	3 - 13	25	1523							
					-	-	-	6 - 27	45	1697							
					-	-	-	6 - 27	50	2567							
			15 - 22	35	1593	40	1998										
			25 - 37	55	3212	60	3750										
			12 - 18	35	3126	50	1189										
			25 - 37	55	3750	60	2807										
			-	-	-	40	3750										
			-	-	-	50	3291										
			-	-	-	60	3750										
			10 250	250	1500	510	-	225 290 390	230	16	6 - 30	40	29	16	3 - 15	25	479
											11 - 23	35	870		3 - 15	30	1276
											21 - 45	55	2350		6 - 30	50	1813
											-	-	-		6 - 30	55	2553
											6 - 30	40	479		3 - 15	25	1117
11 - 23	35	1595									3 - 15	30	2161				
21 - 45	55	3263						6 - 30	50	2944							
-	-	-						6 - 30	55	3750							
8 - 30	35	1146						3 - 13	20	421							
15 - 50	55	2756						3 - 13	25	1363							
-	-	-						6 - 27	45	1537							
-	-	-						6 - 27	50	2408							
15 - 22	35	1461				40	1870										
25 - 37	55	3096				60	3750										
12 - 18	35	3009				50	1052										
25 - 37	55	3750				60	2687										
-	-	-				40	3750										
-	-	-				50	3176										
-	-	-				60	3750										
6 - 30	35	624				25	943										
15 - 50	55	2756				30	1784										
-	-	-				40	1784										
-	-	-				50	2611										
15 - 24	35	1461				40	1666										
25 - 40	55	3096				60	3750										
12 - 19	35	3009				50	712										
25 - 40	55	3750				60	2347										
-	-	-				40	3750										
-	-	-				50	2482										
-	-	-				60	3750										

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

2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.

3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41305 Series (US) Air to Open and Air to Close, Flow to Open

Pressure Energized PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE							
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P				
psi	psi	psi							psi									
inches	mm																	
12 16x12	300 400x300	1500	770	-	480	375	16	11 - 23	35	682	16	3 - 15	25	305				
								21 - 45	55	2147		3 - 15	30	1117				
								-	-	-		6 - 30	50	1740				
							-	-	-	6 - 30	55	2350						
							23	6 - 30	40	305	23	3 - 15	25	943				
								11 - 23	35	1421		3 - 15	30	1973				
					21 - 45	55		3481	6 - 30	50		2741						
					-	-	-	-	6 - 30	55	3750							
					1400	500 1260	-	-	-	-	18	6 - 27	35	450	18	3 - 14	25	870
												10 - 33	40	1436		3 - 14	30	1682
												-	-	-		6 - 27	40	1204
											-	-	-	6 - 27	45	1987		
			154	15 - 24							35	1203	154	15 - 24	40	1298		
				25 - 40							55	2731		60	3750			
				12 - 19					35	2650	25 - 40	50		343				
			314	25 - 40					55	3750	314	60	1870					
				-					-	-		12 - 19	40	3750				
				-					-	-		25 - 40	50	1830				
			-	-					-	-	60	3750						
			-	-					840	600	-	-	18	6 - 30	35	450	18	3 - 15
					12 - 30	35	1885	3 - 15						30	1305			
					-	-	-	6 - 30						45	1305			
					-	-	-	6 - 30					50	2016				
					154	15 - 25	35	1203					154	15 - 25	40	1203		
25 - 42	55	2731				60	3750											
12 - 20	35	2650				25 - 42	50	184										
314	25 - 42	55			3750	314	60	1712										
	-	-			-		12 - 20	40			3750							
	-	-			-		25 - 42	50			1506							
-	-	-			-	60	3750											
-	-	1100			725	-	-	154			15 - 27	35	1203	154	15 - 27	40	821	
			25 - 46	55					2731	60	3750							
			12 - 22	35					2650	25 - 46	60	1076						
			314	25 - 46				55	3750	314	-	-						
				-				-	-		12 - 22	40	3750					
				-				-	-		25 - 46	50	210					
			-	-		-	-	60	3326									

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41305 Series (US) Air to Open and Air to Close, Flow to Open

Pressure Energized PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE							
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P				
psi	psi	psi							psi									
inches	mm																	
16	400	1500	1280	-	780	500	16	11 - 23	35	421	16	3 - 15	25	44				
								21 - 45	55	1900		3 - 15	30	856				
								-	-	-		6 - 30	50	1392				
								-	-	-		6 - 30	55	2089				
							23	6 - 30	40	44	23	3 - 15	25	667				
								11 - 23	35	1175		3 - 15	30	1726				
								21 - 45	55	3191		6 - 30	45	1465				
								-	-	-		6 - 30	50	2466				
							2000	-	1030 1360	800	18	6 - 30	35	189	18	3 - 15	25	261
												12 - 30	35	1624		3 - 15	30	1073
												-	-	-		6 - 30	45	1059
												-	-	-		6 - 30	50	1769
			154	15 - 25	35	992					154	15 - 25	50	2669				
				25 - 42	55	2669						60	3750					
				12 - 20	35	2580						25 - 42	60	1550				
				25 - 42	55	3750						-	-	-				
			314	-	-	-					314	12 - 20	40	3750				
				-	-	-						25 - 42	50	1325				
				-	-	-						60	3750					
				-	-	-						-	-	-				
			2500	900	-	-	154	15 - 28	35	992	154	15 - 28	50	2250				
								25 - 46	55	2669		60	3750					
								12 - 22	35	2580		25 - 46	60	853				
								25 - 46	55	3750		-	-	-				
314	-	-					-	314	12 - 22	40	3750							
	-	-					-		25 - 46	60	3322							
	-	-					-		-	-	-							
	-	-					-		-	-	-							
-	-	1800	1105	154	15 - 30	35	992	154	15 - 30	50	1831							
					25 - 50	55	2669		60	3508								
					12 - 24	35	2580		25 - 50	60	153							
					25 - 50	55	3750		-	-	-							
				314	-	-	-	314	12 - 24	40	3750							
					-	-	-		25 - 50	60	1896							
					-	-	-		-	-	-							
					-	-	-		-	-	-							

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41305 Series (US) Air to Open and Air to Close, Flow to Open

Pressure Energized PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE				
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P	
psi	psi	psi							psi						
inches	mm														
2	50	600	30	26	25	30	10	21 - 45	55	3727	10	3 - 15	35	2799	
3x2	80x50	1500			32			43	11 - 23	35		2350	3 - 15	40	3750
4x2	100x50				58			72	21 - 45	55		3750	6 - 30	50	2219
												6 - 30	55	3750	
2	50	1500	16	14	10	12	6	21 - 45	55	1668	6	3 - 15	45	3394	
					13					3 - 15		50	3750		
					17					6 - 30		60	2959		
					23		10	11 - 23	35	1044	10	3 - 15	30	1929	
					30			21 - 45	55	3750		3 - 15	35	3750	
										6 - 30		50	3205		
3	80	1500	60	56	40	50	16	11 - 23	35	189	16	3 - 15	35	3263	
					54			21 - 45	55	3750		3 - 15	40	3750	
					72					6 - 30		50	2683		
					95		23	11 - 23	35	2219	23	3 - 15	30	3669	
					125			21 - 45	55	3750		3 - 15	35	3750	
										6 - 30		45	2828		
4	100	1500	95	90	65	72	16	21 - 45	55	3133	16	3 - 15	35	2219	
					85					3 - 15		40	3750		
					110					6 - 30		50	1653		
					150		23	11 - 23	35	1189	23	3 - 15	30	2611	
					195			21 - 45	55	3750		3 - 15	35	3750	
												6 - 30	45	1784	
6	150	1500	400	144	100	96	16	21 - 45	55	1479	16	3 - 15	35	841	
					130					3 - 15		40	2147		
					175					6 - 30		50	392		
					230		23	11 - 23	35	15	23	3 - 15	35	3071	
					300			21 - 45	55	3750		3 - 15	40	3750	
										6 - 30		50	2538		
8	200	1500	640	230	165	155	16	21 - 45	55	131	16	3 - 15	40	595	
					220					3 - 15		45	1392		
					290					6 - 30		50	-		
					380		23	21 - 45	55	1624	23	3 - 15	35	1146	
										3 - 15		40	2205		
										6 - 30		50	841		
							18				18	6 - 30	55	1929	
								20 - 50	55	1856		3 - 13	40	1900	
												6 - 27	55	2074	
							24	21 - 45	50	3750	24	3 - 15	40	3750	
												6 - 30	55	3750	
	314	25 - 37	55	2748	314	15 - 22	60	568							
							40	1957							
							60	3750							
							25 - 37	60	1924						

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

2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.

3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41305 Series (US) Air to Open and Air to Close, Flow to Open

Pressure Energized PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE					
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P		
psi	psi	psi							psi							
inches	mm															
10	250	1500	510	-	225 290 390	230	23	-	-	-	23	16	3 - 15	50	1465	
								21 - 45	55	957		3 - 15	40	1537		
								-	-	-		3 - 15	45	2582		
								-	-	-		6 - 30	50	87		
								-	-	-		6 - 30	55	1262		
								-	-	-		6 - 30	55	1262		
			1000	360 900	-	-	-	-	18	20 - 50	55	1189	18	3 - 13	45	2103
									-	-	-	6 - 27	55	1407		
									24	21 - 45	50	3750	24	3 - 15	40	3481
									-	-	-	6 - 30	55	3481		
									314	25 - 37	55	1542	314	12 - 18	40	542
									-	-	-	60	3750			
-	-	-	-	-	-	-	-	-	-	18	3 - 15	40	667			
						-	-	-	3 - 15	45	1537					
						24	19 - 46	55	3750	24	6 - 30	50	1842			
						-	-	-	6 - 30	55	3162					
						314	25 - 40	55	1542	314	12 - 19	40	208			
						-	-	-	60	3750						
12 16x12	300 400x300	1500	770	-	480 630	375	23	-	-	-	23	16	3 - 15	55	1407	
								21 - 45	55	102		3 - 15	40	740		
								-	-	-		3 - 15	45	1798		
								-	-	-		6 - 30	55	435		
								-	-	-		3 - 14	50	1552		
								-	-	-		6 - 27	55	189		
			1400	500 1260	-	-	-	-	-	-	-	-	18	3 - 14	50	1552
									-	-	-	6 - 27	55	189		
									24	16 - 45	50	2016	24	6 - 28	55	2698
									314	25 - 41	55	87	314	12 - 19	50	1801
									-	-	-	60	3750			
									-	-	-	60	3750			
-	-	-	-	-	-	-	-	-	-	18	3 - 15	45	58			
						-	-	-	3 - 15	55	1610					
						24	18 - 50	55	2785	24	3 - 15	40	2002			
						-	-	-	3 - 15	45	3205					
						314	25 - 42	55	87	314	12 - 20	50	1645			
						-	-	-	60	3750						
16	400	1500	1280	-	780	500	16	21 - 45	55	-	16	3 - 15	55	-		
							21 - 45	55	-	3 - 15	45	406				
							-	-	-	3 - 15	50	1494				
							-	-	-	6 - 30	55	-				
							24	15 - 50	55	218	24	-	-	-		
							22 - 50	55	2944	-	-	-				
			2000	-	-	-	-	-	-	-	-	-	18	3 - 15	50	-
									-	-	-	3 - 15	55	203		
									24	18 - 50	55	1450	24	3 - 15	40	682
									-	-	-	3 - 15	45	1871		
									-	-	-	314	12 - 20	60	2485	
									-	-	-	314	12 - 22	60	1801	
2500	900	-	-	-	-	-	-	-	-	314	12 - 22	60	1801			
						-	-	-	-	-	-					
						-	-	-	-	-	-					
						-	-	-	-	-	-					
						-	-	-	-	-	-					
						-	-	-	-	-	-					
-	-	-	-	-	-	-	-	-	-	314	12 - 24	60	1117			
						-	-	-	-	-	-					
						-	-	-	-	-	-					
						-	-	-	-	-	-					
						-	-	-	-	-	-					
						-	-	-	-	-	-					

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41405 Series (US)

Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Standard Trim

Models 41415 and 41425

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

VALVE						ACTUATOR SIZE	AIR TO OPEN			AIR TO CLOSE								
SIZE inches (mm)		Travel inches	LIN C _v factor		= % C _v factor		Bench range	SUPPLY psi	Allow. Delta P psi	Bench range	SUPPLY psi	Allow. Delta P psi						
ANSI class	150/600		900/1500	1	0.4								1	0.4				
-	2 (50)	0.8	40	-	35	14	6	11 - 23	29	421	3 - 15	27	421					
								21 - 45	56	827	6 - 30	44	827					
							10	11 - 23	28	696	3 - 15	24	696					
								21 - 45	55	1392	6 - 30	40	1392					
			16	6 - 30	39	2219	3 - 15	22	1117									
				11 - 23	28	1117	6 - 30	39	2219									
			23	6 - 30	39	3191	-	-	-									
				11 - 23	28	1595	-	-	-									
		-	2 (50)	1.5	75	-	65	26	10	11 - 23	29	464	3 - 15	26	464			
										21 - 45	56	928	6 - 30	42	928			
									16	11 - 23	28	740	3 - 15	23	740			
										21 - 45	56	1479	6 - 30	40	1479			
					23	6 - 30	39	2132	3 - 15	22	1059							
						11 - 23	28	1059	6 - 30	38	2132							
					-	2 (50)	1.5	30	-	-	-	10	11 - 23	29	450	3 - 15	26	450
													21 - 45	56	899	6 - 30	42	899
16	11 - 23	28	711	3 - 15								23	711					
	21 - 45	55	1436	6 - 30								40	1436					
23	6 - 30	39	2060	3 - 15	22	1030												
	11 - 23	28	1030	6 - 30	38	2060												
-	-	-	-	-	-	-	-	-	-	21 - 45	55	2060						
3 (80)	3 (80)	2	155	-	140	56	16	21 - 45	55	1015	3 - 15	28	508					
								-	-	-	6 - 30	45	1015					
			23	11 - 23	28	740	3 - 15	25	740									
				21 - 45	55	1465	6 - 30	42	1465									
		-	3 (80)	2	60	-	-	-	16	21 - 45	55	972	3 - 15	28	493			
										-	-	-	6 - 30	45	972			
		23	11 - 23	28	696	3 - 15	25	696										
			21 - 45	55	1407	6 - 30	42	1407										
4 (100)	4 (100)	2	240	-	225	90	16	21 - 45	56	870	3 - 15	28	435					
								-	-	-	6 - 30	45	870					
			23	11 - 23	29	624	3 - 15	25	624									
				21 - 45	56	1247	6 - 30	42	1247									
		-	4 (100)	2	95	-	-	-	16	11 - 23	-	-	3 - 15	28	406			
										21 - 45	56	812	6 - 30	45	812			
		23	21 - 45	56	1175	3 - 15	25	580										
			-	-	-	6 - 30	42	1175										
		-	-	-	-	-	-	-	-	-	-	21 - 45	59	1175				

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
2. Allowable pressure drops are based on dynamic stability calculations.
3. See CH3000 for orifice size to obtain rated C_v.
4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (US)

Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Standard Trim

Models 41415 and 41425

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

VALVE						ACTUATOR SIZE	AIR TO OPEN			AIR TO CLOSE				
SIZE inches (mm)		Travel in	LIN C _v factor		= % C _v factor		Bench range	SUPPLY psi	Allow. Delta P psi	Bench range	SUPPLY psi	Allow. Delta P psi		
ANSI class			1	0.4	1								0.4	
150/600	900/1500													
6 (150)	6 (150)	2	400	-	360	144	16	21 - 45	60	1030	3 - 15	29	290	
								-	-	-	6 - 30	45	667	
							23	11 - 23	32	870	3 - 15	26	450	
			21 - 45	60	1479	6 - 30	42	986						
			21 - 45	-	-	3 - 15	34	58						
			-	-	-	11 - 23	43	290						
		1.5	-	165	-	-	10	21 - 45	60	406	3 - 15	29	116	
							-	-	-	11 - 23	38	493		
							23	11 - 23	40	870	3 - 15	26	174	
							-	-	-	11 - 23	35	711		
							-	-	-	3 - 15	33	174		
							-	-	-	6 - 30	49	421		
8 (200)	8 (200)	2.5	640	-	575	230	16	21 - 45	60	537	3 - 15	29	290	
								-	-	-	6 - 30	45	653	
							23	21 - 45	60	1015	3 - 15	29	290	
			-	-	-	6 - 30	45	653						
			1.5	-	415	-	-	16	21 - 45	60	131	3 - 15	33	58
								-	-	-	11 - 23	42	319	
		23						21 - 45	60	392	3 - 15	29	102	
		-						-	-	11 - 23	37	464		
		-						-	-	3 - 15	33	44		
		-						-	-	6 - 30	49	102		
	10 (250)	10 (250)	1.5	-	510	-	-	16	21 - 45	60	87	3 - 15	33	44
									-	-	-	6 - 30	49	102
								-	-	-	11 - 23	42	203	
			23	-	-	-	-	23	21 - 45	60	131	3 - 15	29	73
								-	-	-	6 - 30	45	160	
								-	-	-	11 - 23	37	305	
		21 - 45						60	44	6 - 30	49	73		
		-						-	-	11 - 23	42	145		
		-						-	-	6 - 30	45	102		
12 (300)		12 (300)	2	-	770	-	-	16	21 - 45	60	87	6 - 30	45	102
									-	-	-	11 - 23	37	203
									-	-	-	6 - 30	45	102
			23	-	-	-	-	23	21 - 45	60	29	6 - 30	45	58
								-	-	-	11 - 23	37	116	
								-	-	-	6 - 30	45	102	

- Notes:
1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Allowable pressure drops are based on dynamic stability calculations.
 3. See CH3000 for orifice size to obtain rated C_v.
 4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (US)

Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Single Stage Lo-dB/Anti-Cavitation Trim (including Diffuser)

Models 41435 and 41445

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

VALVE			C _v Lo-dB	ACTUATOR SIZE	AIR TO OPEN			AIR TO CLOSE			
SIZE inches (mm)		Travel inches			Bench range	SUPPLY	Allow. Delta P	Bench range	SUPPLY	Allow. Delta P	
ANSI class											psi
150/600	900/1500										
-	2 (50)	0.8	10 13 17 23 30	6	11 - 23	28	406	11 - 23	36	406	
					21 - 45	54	812	6 - 30	44	812	
				10	11 - 23	28	682	3 - 15	24	682	
					21 - 45	54	1363	6 - 30	40	1363	
					16	6 - 30	37	1088	3 - 15	22	1088
						11 - 23	27	2176	6 - 30	39	2176
2 (50)	-	1.5	25 32 43 58 72	10	11 - 23	29	450	3 - 15	26	450	
					21 - 45	56	899	6 - 30	42	899	
				16	11 - 23	28	725	3 - 15	23	725	
					21 - 45	56	1450	6 - 30	40	1450	
					23	6 - 30	39	1044	3 - 15	22	1044
						11 - 23	28	1500	6 - 30	38	1500
3 (80)	3 (80)	2.0	40 54 72 95 125	16	21 - 45	55	986	3 - 15	28	493	
					-	-	-	21 - 45	61	986	
				23	11 - 23	28	711	3 - 15	25	711	
					21 - 45	55	1421	6 - 30	42	1421	
4 (100)	4 (100)	2.0	65 85 110 150 195	16	21 - 45	56	841	3 - 15	28	421	
					-	-	-	6 - 30	45	841	
				23	11 - 23	29	595	3 - 15	25	595	
					21 - 45	56	1204	6 - 30	42	1204	
6 (150)	6 (150)	2.5	100 130 175 230 300	16	21 - 45	59	1204	3 - 15	29	377	
					-	-	-	11 - 23	38	595	
				23	-	-	-	6 - 30	45	870	
					11 - 23	30	856	3 - 15	26	595	
					21 - 45	59	1726	11 - 23	35	856	
					-	-	-	6 - 30	42	1262	
8 (200)	8 (200)	2.5	165 220 290 380	16	21 - 45	60	870	3 - 15	33	232	
					-	-	-	11 - 23	42	435	
				23	-	-	-	6 - 30	49	580	
					11 - 23	-	-	3 - 15	29	377	
					21 - 45	59	1247	11 - 23	37	624	
					-	-	-	6 - 30	45	870	
10 (250)	10 (250)	2.5	225 290 390	16	21 - 45	60	566	3 - 15	33	145	
					-	-	-	11 - 23	42	392	
				23	-	-	-	6 - 30	49	348	
					11 - 23	-	-	3 - 15	29	232	
					21 - 45	60	841	11 - 23	37	551	
					-	-	-	6 - 30	45	537	
12 (300)	12 (300)	2.5	480 630	16	21 - 45	60	363	3 - 15	33	87	
					-	-	-	11 - 23	42	421	
				23	-	-	-	6 - 30	49	218	
					21 - 45	60	551	3 - 15	29	145	
					-	-	-	11 - 23	37	609	
					-	-	-	6 - 30	45	348	
16 (400)	16 (400)	2.5	780	16	21 - 45	60	218	3 - 15	33	58	
					-	-	-	11 - 23	42	261	
				23	-	-	-	6 - 30	49	131	
					21 - 45	60	319	3 - 15	29	87	
					-	-	-	11 - 23	37	392	
					-	-	-	6 - 30	45	203	

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

2. Allowable pressure drops are based on dynamic stability calculations.

3. See CH3000 for orifice size to obtain rated C_v.

4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (US)

Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Standard Trim with 37/38 Spring-Diaphragm & 84/85/86 Cylinder Actuators

Models 41415 and 41425

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

VALVE					ACTUATOR SIZE	AIR TO OPEN			ACTUATOR SIZE	AIR TO CLOSE							
SIZE inches (mm)		Travel inches	LIN C _v	% C _v		Bench range	SUPPLY psi	Allow. Delta P psi		Bench range	SUPPLY psi	Allow. Delta P psi					
150/600	900/1500																
ANSI class																	
10 (250)	10 (250)	3.0	1000	900	18	9 - 41	59	754	18	7 - 38	56	653					
						10 - 50	60	218		4 - 45	60	377					
					24	9 - 44	60	957	24	6 - 40	55	798					
						6 - 40	59	1247		4 - 50	60	522					
					154	15 - 22	60	1107	154	15 - 22	60	844					
						25 - 37	60	1247		25 - 37	60	1027					
					314	12 - 18	60	1339	314	12 - 18	60	1407					
						25 - 37	60	2215		25 - 37	60	1877					
					12 (300)	12 (300)	3.75	1400	1260	18	9 - 28	40	276	18	6 - 27	44	348
											-	-	-		3 - 45	60	174
										24	11 - 50	60	203	24	6 - 28	42	493
											6 - 28	42	522		3 - 25	38	232
154	15 - 24	60	916	154						15 - 24	60	570					
	25 - 40	60	832							25 - 40	60	855					
314	12 - 19	60	1785	314						12 - 19	60	949					
	25 - 40	53	1376							25 - 40	53	1569					
16 (400)	16 (400)	4.0	2000	-						154	15 - 25	60	605	154	15 - 25	60	364
											25 - 42	60	517		25 - 42	60	567
										314	12 - 20	60	1179	314	12 - 20	60	606
											25 - 42	53	856		25 - 42	53	1042
					154	15 - 28	60	636	154	15 - 28	60	403					
						25 - 46	60	518		25 - 46	60	612					
		314	12 - 22	60	1236	314	12 - 22	60	669								
			25 - 46	53	856		25 - 46	53	1130								
		16 (400)	16 (400)	5.0	2500	2250	154	15 - 28	60	636	154	15 - 28	60	403			
								25 - 46	60	518		25 - 46	60	612			
							314	12 - 22	60	1236	314	12 - 22	60	669			
								25 - 46	53	856		25 - 46	53	1130			

- Notes:
1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Allowable pressure drops are based on dynamic stability calculations.
 3. See CH3000 for orifice size to obtain rated C_v.
 4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (US)

Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Single Stage Lo-dB/Anti-Cavitation Trim (including Diffuser)
with 37/38 Spring-Diaphragm & 84/85/86 Cylinder Actuators
Models 41435 and 41445

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

VALVE				ACTUATOR SIZE	AIR TO OPEN			ACTUATOR SIZE	AIR TO CLOSE		
SIZE inches (mm)		Travel inches	C _v Lo-dB		Bench range	SUPPLY	Allow. Delta P		Bench range	SUPPLY	Allow. Delta P
ANSI class											
150/600	900/1500										
8 (200)	8 (200)	3.0	500	18	9 - 41	55	1001	18	5 - 46	60	943
					10 - 40	53	914		10 - 43	60	1030
				24	6 - 40	55	1668	24	6 - 40	55	1537
					15 - 22	60	1562		15 - 22	60	1171
				154	25 - 37	60	1759	154	25 - 37	60	1449
					12 - 18	60	3054		12 - 18	60	1952
				314	25 - 37	53	3075	314	25 - 37	53	2648
					14 - 30	38	261		18	6 - 30	47
10 (250)	10 (250)	3.5	650 520	18	13 - 27	34	218	18		5 - 43	60
					9 - 30	40	638		6 - 30	44	798
				24	12 - 48	60	653	24	7 - 28	42	653
					15 - 24	60	893		15 - 24	60	1225
				154	25 - 40	60	1141	154	25 - 40	60	1339
					12 - 19	60	1488		12 - 19	60	2391
				314	25 - 40	53	2089	314	25 - 40	53	2215
					12 - 30	41	276		18	6 - 30	48
12 (300)	12 (300)	4.0	840	18	10 - 34	49	435	18		-	-
					6 - 30	45	638		6 - 30	45	624
				24	15 - 25	60	986	24	15 - 25	60	586
					25 - 42	60	832		25 - 42	60	925
		154	12 - 20	60	1920	154	12 - 20	60	974		
			25 - 42	53	1376		25 - 42	53	1698		
		5.0	1100	154	15 - 27	60	1078	154	15 - 27	60	647
					25 - 46	60	832		25 - 46	60	1098
314	12 - 22			60	2215	314	12 - 22	60	1075		
	25 - 46			53	1376		25 - 46	53	2026		
16 (400)	16 (400)	4.0	1030 1360	18	12 - 30	42	189	18	6 - 30	48	261
					10 - 34	51	305		-	-	-
				24	6 - 30	47	464	24	6 - 30	45	363
					15 - 25	60	523		15 - 25	60	364
		154	25 - 42	60	518	154	25 - 42	60	571		
			12 - 20	60	606		12 - 20	60	486		
		314	25 - 42	53	606	314	25 - 42	53	486		
			15 - 30	60	663		154	15 - 30	60	441	
154	25 - 50	60	518	154	25 - 50	60		714			
	12 - 24	60	762		314	12 - 24	60	604			
314	25 - 50	53	762	314		25 - 50	53	604			

- Notes:
1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Allowable pressure drops are based on dynamic stability calculations.
 3. See CH3000 for orifice size to obtain rated C_v.
 4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (US)

Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Standard Trim

Models 41415 and 41425

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE						Actuator Size	AIR TO OPEN			AIR TO CLOSE							
SIZE inches (mm)		Travel inches	LIN C _v factor		Equal % C _v factor		Bench range	Supply psi	Allow. Delta P psi	Bench range	Supply psi	Allow. Delta P psi					
ANSI class			1	0.4	1								0.4				
150/600	900/1500																
-	2 (50)	0.8	40	-	35	14	6	11 - 23	33	421	3 - 15	-	-				
								21 - 45	59	827	6 - 30	44	334				
							10	11 - 23	30	696	3 - 15	23	131				
			-	16	-	16	-	-	-	21 - 45	58	1392	6 - 30	41	1073		
										6 - 30	42	2219	3 - 15	22	725		
										11 - 23	30	1117	6 - 30	39	1726		
		-			23	-	16	-	-	-	6 - 30	42	3190	-	-	-	
											11 - 23	30	1595	-	-	-	
											6	11 - 23	32	406	3 - 15	-	-
		2 (50)	-	1.5	75	-	65	26	10	11 - 23	30	464	3 - 15	26	73		
										21 - 45	58	928	6 - 30	42	682		
									-	30	-	-	-	-	-	11 - 23	30
16	21 - 45				58	1479	6 - 30	39								1262	
	6 - 30				41	2132	3 - 15	22								856	
-	16				-	30	-	-	-	10	11 - 23	30	450	3 - 15	26	73	
				21 - 45							58	899	6 - 30	42	682		
				-						23	-	30	-	-	-	11 - 23	30
					16	21 - 45	58	1436	6 - 30							39	1262
						6 - 30	41	2059	3 - 15							22	856
				3 (80)	3 (80)	2.0	155	-	140	56	16	21 - 45	58	1015	3 - 15	28	160
-	-											-	6 - 30	45	856		
-	60	-	-								-	-	-	11 - 23	30	740	3 - 15
							23	21 - 45	58	1465				6 - 30	42	1305	
								16	21 - 45	57				972	3 - 15	28	189
-	16	-	60				-	-	-	23	11 - 23	29	696	3 - 15	25	551	
						21 - 45					57	1407	6 - 30	42	1407		
						-				95	-	-	-	-	-	16	21 - 45
		-	-				-	6 - 30	45								667
		-	23				-	95	-							-	-
						16				21 - 45	58	1247	6 - 30	42	1102		
11 - 23	-									-	3 - 15	28	131				
4 (100)	4 (100)	2.0	-	225	90	-	23	21 - 45	58	812	6 - 30	45	667				
								21 - 45	57	1175	3 - 15	25	363				
							-	95	-	-	-	-	-	16	-	-	-
		-	-	-	21 - 45	58									1175		

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
2. Allowable pressure drops are based on dynamic stability calculations.
3. See CH3000 for orifice size to obtain rated C_v.
4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (US)

Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Standard Trim

Models 41415 and 41425

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE							Actuator Size	AIR TO OPEN			AIR TO CLOSE			
SIZE inches (mm)		Travel	LIN C _v factor		Equal % C _v factor			Bench range	Supply	Allow. Delta P	Bench range	Supply	Allow. Delta P	
ANSI class			inches	1	0.4	1								0.4
150/600	900/1500	1		0.4	1	0.4								
6 (150)	6 (150)	2.0	400	-	360	144	16	21 - 45	59	812	3 - 15	-	-	
								-	-	-	6 - 30	45	363	
							23	11 - 23	33	870	3 - 15	26	160	
								21 - 45	59	1160	6 - 30	42	696	
		1.5	-	165	-	-	-	10	21 - 45	-	-	3 - 15	-	-
									-	-	-	11 - 23	44	189
								16	21 - 45	59	377	3 - 15	-	-
									-	-	-	11 - 23	38	377
23	11 - 23	42	870	3 - 15	26	58								
	-	-	-	11 - 23	35	609								
8 (200)	8 (200)	2.5	640	-	575	230	16	21 - 45	59	218	3 - 15	-	-	
								-	-	-	6 - 30	49	102	
							23	21 - 45	59	783	3 - 15	-	-	
								-	-	-	6 - 30	45	319	
		1.5	-	415	-	-	-	16	21 - 45	59	15	3 - 15	-	-
									-	-	-	11 - 23	42	203
								23	21 - 45	59	348	3 - 15	-	-
									-	-	-	11 - 23	38	348
10 (250)	10 (250)	1.5	-	510	-	-	16	21 - 45	-	-	3 - 15	-	-	
								-	-	-	6 - 30	49	29	
							23	21 - 45	59	58	3 - 15	-	-	
								-	-	-	6 - 30	45	87	
		-	-	-	-	-	-	-	-	-	-	11 - 23	38	232
									-	-	-	-	-	-
								16	21 - 45	-	-	6 - 30	49	15
									-	-	-	11 - 23	42	87
23	21 - 45	59	29	6 - 30	45	58								
	-	-	-	11 - 23	38	160								
16 (400)	16 (400)	2.5	-	1280	-	-	23	21 - 45	-	-	6 - 30	45	29	
								-	-	-	11 - 23	38	87	

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
2. Allowable pressure drops are based on dynamic stability calculations.
3. See CH3000 for orifice size to obtain rated C_v.
4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (US)

Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Single Stage Lo-dB/Anti-Cavitation Trim (including Diffuser)

Models 41435 and 41445

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE			ACTUATOR SIZE	AIR TO OPEN			AIR TO CLOSE						
SIZE inches (mm)		Travel inches		C _v Lo-dB	Bench range	SUPPLY	Allow. Delta P	Bench range	SUPPLY	Allow. Delta P			
150/600	900/1500					psi	psi		psi	psi			
-	2 (50)	0.8	10	6	11 - 23	32	406	11 - 23	36	406			
					21 - 45	58	812	6 - 30	44	493			
				10	11 - 23	30	682	3 - 15	23	203			
					21 - 45	58	1363	11 - 23	32	682			
					-	-	-	6 - 30	41	1320			
					6 - 30	41	2175	3 - 15	22	1044			
			16	11 - 23	29	1088	6 - 30	39	2103				
				-	-	-	-	-	-				
			2 (50)	-	1.5	25	10	11 - 23	30	450	3 - 15	26	73
								21 - 45	58	899	11 - 23	35	450
							16	-	-	-	6 - 30	42	682
								11 - 23	30	725	3 - 15	23	435
21 - 45	58	1450						11 - 23	32	725			
-	-	-						6 - 30	39	1262			
23	6 - 30	41				2074	3 - 15	22	856				
	11 - 23	29				1044	11 - 23	30	1044				
3 (80)	3 (80)	2.0				40	16	-	-	-	6 - 30	39	1827
								21 - 45	57	986	3 - 15	28	160
							23	-	-	-	11 - 23	36	493
								-	-	-	21 - 45	61	986
			11 - 23	29	711			3 - 15	25	551			
			21 - 45	58	1421			11 - 23	33	711			
			-	-	-	-	6 - 30	42	1421				
				-	-	-	-	-	-				
			4 (100)	4 (100)	2.0	65	16	21 - 45	58	841	3 - 15	28	131
								-	-	-	11 - 23	36	421
							23	-	-	-	6 - 30	45	667
								11 - 23	30	595	3 - 15	25	363
21 - 45	58	1204						11 - 23	33	595			
-	-	-						6 - 30	42	1102			
6 (150)	6 (150)	2.5				100	16	21 - 45	59	972	11 - 23	38	595
								-	-	-	6 - 30	45	479
							23	11 - 23	32	856	3 - 15	26	203
								21 - 45	58	1407	11 - 23	35	856
								-	-	-	6 - 30	42	899
								21 - 45	59	479	11 - 23	42	435
			8 (200)	8 (200)	2.5	165	16	-	-	-	6 - 30	49	145
								21 - 45	59	957	6 - 30	45	435
							23	11 - 23	-	-	11 - 23	38	624
								21 - 45	59	957	6 - 30	45	435
								-	-	-	-	-	-
								21 - 45	59	290	11 - 23	42	392
10 (250)	10 (250)	2.5				225	16	-	-	-	6 - 30	49	87
								11 - 23	-	-	11 - 23	38	551
							23	21 - 45	59	682	6 - 30	45	276
								-	-	-	-	-	-
								21 - 45	59	189	11 - 23	42	276
								-	-	-	6 - 30	49	58
			12 (300)	12 (300)	2.5	480	16	21 - 45	59	189	11 - 23	42	276
								-	-	-	6 - 30	49	58
							23	21 - 45	59	479	11 - 23	38	493
								-	-	-	6 - 30	45	174
								-	-	-	-	-	-
								21 - 45	59	116	11 - 23	42	160
16 (400)	16 (400)	2.5				780	16	-	-	-	6 - 30	49	29
								21 - 45	59	218	11 - 23	38	290
							23	-	-	-	6 - 30	45	102
								-	-	-	-	-	-
								21 - 45	59	218	11 - 23	38	290
								-	-	-	6 - 30	45	102

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

2. Allowable pressure drops are based on dynamic stability calculations.

3. See CH3000 for orifice size to obtain rated C_v.

4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (US)

Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Standard Trim with 37/38 Spring-Diaphragm & 84/85/86 Cylinder Actuators

Models 41415 and 41425

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE						Actuator Size	AIR TO OPEN			AIR TO CLOSE				
SIZE inches (mm)		Travel	LIN C _v factor		Equal % C _v factor		Bench range	Supply	Allow. Delta P	Bench range	Supply	Allow. Delta P		
ANSI class			inches	1	0.4								1	0.4
150/600	900/1500													
10 (250)	10 (250)	3.0	1000	-	900	360	18	9 - 41	60	609	7 - 38	57	435	
								10 - 50	-	-	4 - 45	60	160	
							24	9 - 44	60	783	6 - 40	55	580	
								6 - 40	60	1102	4 - 50	60	305	
							154	15 - 22	60	1102	15 - 22	60	653	
								25 - 37	60	1146	25 - 37	60	1030	
							314	12 - 18	60	2161	12 - 18	60	1218	
								25 - 37	60	2016	25 - 37	60	1871	
12 (300)	12 (300)	3.75	1400	-	1260	500	18	9 - 28	44	276	6 - 27	44	218	
								-	-	-	3 - 45	60	44	
							24	11 - 50	60	73	6 - 28	42	363	
								6 - 28	45	522	3 - 25	38	102	
							154	15 - 24	60	914	15 - 24	60	450	
								25 - 40	60	711	25 - 40	60	856	
							314	12 - 19	60	1784	12 - 19	60	827	
								25 - 40	54	1262	25 - 40	54	1566	
16 (400)	16 (400)	4.0	2000	-	-	-	154	15 - 25	60	595	15 - 25	60	290	
								25 - 42	60	450	25 - 42	60	551	
							314	12 - 20	60	1175	12 - 20	60	537	
								25 - 42	54	783	25 - 42	54	1044	
		5.0	2500	-	2250	-	900	154	15 - 28	60	595	15 - 28	60	334
									25 - 46	60	450	25 - 46	60	609
								314	12 - 22	60	1175	12 - 22	60	595
									25 - 46	54	783	25 - 46	54	1131

- Notes:
1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Allowable pressure drops are based on dynamic stability calculations.
 3. See CH3000 for orifice size to obtain rated C_v.
 4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (US) Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Single Stage Lo-dB/Anti-Cavitation Trim (including Diffuser)
with 37/38 Spring-Diaphragm & 84/85/86 Cylinder Actuators
Models 41435 and 41445

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE			Actuator Size	AIR TO OPEN			AIR TO CLOSE			
SIZE inches (mm)		Travel		C _v Lo-dB	Bench range	Supply	Allow. Delta P	Bench range	Supply	Allow. Delta P
ANSI class										
150/600	900/1500	psi		psi	psi					
8 (200)	8 (200)	3.0	500	18	9 - 41	58	1001	5 - 46	60	508
					10 - 40	57	914	10 - 43	60	1030
				24	6 - 40	58	1668	6 - 40	55	1102
					15 - 22	60	1146	15 - 22	60	899
				314	25 - 37	60	1479	25 - 37	60	1450
					12 - 18	60	1233	12 - 18	60	1682
10 (250)	10 (250)	3.5	520 650	18	14 - 30	42	261	6 - 30	48	421
					13 - 27	38	218	5 - 43	60	305
				24	9 - 30	42	638	6 - 30	44	711
					12 - 48	60	522	7 - 28	42	653
				154	15 - 24	60	1218	15 - 24	60	696
					25 - 40	60	1146	25 - 40	60	1146
12 (300)	12 (300)	4.0	840	18	12 - 30	45	276	6 - 30	48	261
					10 - 34	52	435	-	-	-
				24	6 - 30	48	638	6 - 30	45	450
					15 - 25	60	957	15 - 25	60	464
				154	25 - 42	60	711	25 - 42	60	870
					12 - 20	60	1914	12 - 20	60	856
16 (400)	16 (400)	5.0	1100	154	25 - 42	54	1262	25 - 42	54	1697
					15 - 27	60	957	15 - 27	60	522
				314	25 - 46	60	711	25 - 46	60	972
					12 - 22	60	2219	12 - 22	60	957
				18	25 - 46	54	1262	25 - 46	54	2030
					12 - 30	46	189	6 - 30	48	160
1030 1360	4.0	1800	1800	18	10 - 34	55	305	-	-	-
					6 - 30	51	464	6 - 30	45	261
				24	15 - 25	60	522	15 - 25	60	290
					25 - 42	60	450	25 - 42	60	551
				154	12 - 20	60	609	12 - 20	60	493
					25 - 42	54	609	25 - 42	54	493
1800	6.0	1800	1800	154	15 - 30	60	595	15 - 30	60	363
					25 - 50	60	450	25 - 50	60	667
				314	12 - 24	60	769	12 - 24	60	609
					25 - 50	54	769	25 - 50	54	609

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
2. Allowable pressure drops are based on dynamic stability calculations.
3. See CH3000 for orifice size to obtain rated C_v.
4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41505 Series (US) Air to Open and Air to Close, Flow to Open

Metal Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE					
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P		
psi	psi	psi							psi							
inches	mm															
2	50	600														
3x2 4x2	80x50 100x50	1500	30 75	26 65	25 32 43 58 72	30 43 53	10	3 - 15	25	73	10	3 - 15	20	218		
	6 - 30							40	798	3 - 15		25	1392			
11 - 23	35	2031	6 - 30	40	1073											
21 - 45	55	3750	6 - 30	45	2147											
							16	3 - 15	25	508	16	3 - 15	20	740		
						16		6 - 30	40	1595		3 - 15	25	2495		
								16	11 - 23	35		3321	6 - 30	40	1973	
									16	21 - 45		55	3750	6 - 30	45	3698
2	50	1500	16 40	14 35	10 13 17 23 30		12 19 24			10	3 - 15	25	276	10	3 - 15	20
						6 - 30					40	1204	3 - 15		25	1813
11 - 23	35	2582	6 - 30	45	2683											
21 - 45	55	3750	6 - 30	50	2292											
							16	3 - 15	25	841	16	3 - 15	20	943		
						16		6 - 30	40	2176		3 - 15	25	3133		
								16	11 - 23	35		3750	6 - 30	40	2350	
									16	21 - 45		55	3750	6 - 30	45	3750
3 4x3 6x3	80 100x80 150x80	1500	60 155	56 140	40 54 72 95 125		50 75 95			16	3 - 15	25	160	16	3 - 15	20
	6 - 30					40					957	3 - 15	25		1581	
11 - 23	35	2147	6 - 30	40	1218											
21 - 45	55	3750	6 - 30	50	2408											
							23	3 - 15	25	508	23	3 - 15	20	740		
						23		6 - 30	40	1595		6 - 30	40	2480		
								23	11 - 23	35		3292	6 - 30	40	1973	
									23	21 - 45		55	3750	6 - 30	45	3669
4 6x4 8x4	100 150x100 200x100	1500	95 240	90 225	65 85 110 150 195		72 105 130			16	3 - 15	25	15	16	3 - 15	20
	6 - 30					40					566	3 - 15	25		1030	
11 - 23	35	1465	6 - 30	40	769											
21 - 45	55	3118	6 - 30	45	1624											
							23	3 - 15	25	261	23	3 - 15	20	421		
						23		6 - 30	40	1044		3 - 15	25	1668		
								23	11 - 23	35		2350	6 - 30	40	1305	
									23	21 - 45		55	3750	6 - 30	45	2524
6 8x6 10x6	150 200x150 250x150	1500	400	144 360	100 130 175 230 300		96 150 190			16	3 - 15	25	-	16	3 - 15	20
	6 - 30					40					290	3 - 15	25		595	
11 - 23	35	870	6 - 30	40	421											
21 - 45	55	2045	6 - 30	45	1001											
							23	3 - 15	25	102	23	3 - 15	20	218		
						23		6 - 30	40	609		3 - 15	25	1059		
								23	11 - 23	35		1450	6 - 30	40	841	
									23	21 - 45		55	2988	6 - 30	45	1639

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41505 Series Leakage: Class II (2" to 4") and Class III (6" to 16").

Allowable Pressure Drops for 41505 Series (US) Air to Open and Air to Close, Flow to Open

Metal Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE						
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply psi	Shutoff Delta P psi	Actuator size	Bench range	Supply psi	Shutoff Delta P psi			
inches	mm																
8 10x8 12x8	200 250x200 300x200	1500	640	230 575	165 220 290 380	155 250	16	3 - 15	25	—	16	3 - 15	20	—			
								6 - 30	40	116		3 - 15	25	334			
								11 - 23	35	522		6 - 30	40	232			
								21 - 45	55	1320		6 - 30	45	638			
							23	3 - 15	25	—	3 - 15	20	58				
								6 - 30	40	334	3 - 15	25	653				
			10	250	1500	—	—	500	300	18	6 - 48	55	406	18	3 - 13	20	305
											15 - 50	55	1552		3 - 35	50	1088
										24	6 - 40	45	943	24	6 - 40	50	1175
											—	—	—		6 - 40	55	1900
										154	15 - 22	35	711	154	15 - 22	40	892
											25 - 37	55	1434		60	2337	
314	12 - 18	35				1395	314	25 - 37	50	531							
	25 - 37	55				3311		60	1253								
	—	—				—		30	1395								
	—	—				—		50	3750								
—	—	—				—	—	50	1469								
—	—	—				—	—	60	2942								
10	250	1500	510	—	225 290 390	230	16	6 - 30	40	44	16	3 - 15	20	—			
								11 - 23	35	421		3 - 15	25	247			
								21 - 45	55	1146		6 - 30	40	145			
							23	—	—	—	6 - 30	45	522				
								6 - 30	40	247	3 - 15	20	—				
								11 - 23	35	769	3 - 15	25	522				
			1000	360 900	—	—	—	—	18	6 - 48	55	305	18	3 - 13	25	653	
										15 - 50	55	1334		3 - 35	50	914	
										24	6 - 40	45		783	6 - 40	50	1001
									154	—	—	—	154	6 - 40	55	1668	
										15 - 22	35	571		15 - 22	50	1376	
										25 - 37	55	1215		60	2019		
									314	12 - 18	35	1180	314	25 - 37	50	410	
										25 - 37	55	2886		60	1054		
										—	—	—		30	1180		
										—	—	—		50	3750		
										—	—	—		50	1246		
										—	—	—		60	2558		
			18	6 - 30	35	305	18	3 - 15	25	450							
				—	—	—		6 - 30	45	870							
				24	13 - 50	55		2089	6 - 30	40	943						
				—	—	—		6 - 30	45	1566							
				154	15 - 24	35		571	154	15 - 24	50	1295					
					25 - 40	55		1215		60	1938						
12 - 19	35	1180	25 - 40		50	277											
314	25 - 40	55	2886	314	60	920											
	—	—	—		30	1049											
	—	—	—		60	3750											
	—	—	—		50	973											
	—	—	—		60	2285											
	—	—	—		—	—											

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

2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.

3. See CH3000 for orifice size and travel required to obtain rated C_v.

4. 41505 Series Leakage: Class II (2" to 4") and Class III (6" to 16").

Allowable Pressure Drops for 41505 Series (US)

Air to Open and Air to Close, Flow to Open

Metal Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE					
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P		
psi	psi	psi							psi							
inches	mm															
12 16x12	300 400x300	1500	770	-	480 630	375	16	11 - 23	35	218	16	3 - 15	20	-		
								21 - 45	55	696		3 - 15	25	116		
								-	-	-		6 - 30	40	58		
							-	-	-	6 - 30		45	290			
							23	6 - 30	40	116		3 - 15	20	-		
								11 - 23	35	450		3 - 15	25	305		
			21 - 45	55	1131	6 - 30		40	203							
			1400	500 1260	-	-	-	-	18	6 - 27	35	160	18	3 - 14	25	276
										-	-	-		3 - 30	45	493
									24	6 - 28	35	464	24	6 - 28	40	711
										-	-	-		-	-	-
									154	15 - 24	35	325	154	15 - 24	50	763
		25 - 40								55	738	60		1176		
		314							12 - 19	35	716	25 - 40		50	93	
									25 - 40	55	1810	60		505		
									-	-	-	40	1431			
									-	-	-	60	3114			
		314							-	-	-	314	25 - 40	50	495	
									-	-	-		60	1336		
			-	-	-	-	-									
			-	-	-	-	-									
			-	-	-	-	-									
			-	-	-	-	-									
		-	-	840	600	-	-	18	10 - 34	40	464	18	3 - 15	25	174	
-	-								-	6 - 30	45		421			
24	6 - 30							35	464	24	3 - 15	40	1697			
	-							-	-		6 - 30	45	914			
154	15 - 25							35	325	154	15 - 25	50	738			
	25 - 42							55	738		60	1151				
314	12 - 20							35	716		25 - 42	50	50			
	25 - 42							55	1810		60	463				
	-							-	-	40	1390					
	-							-	-	60	3072					
314	-							-	-	314	25 - 42	50	407			
	-							-	-		60	1249				
	-	-	-	-	-											
	-	-	-	-	-											
	-	-	-	-	-											
	-	-	-	-	-											
154	-	-	1100	725	-	154	15 - 27	35	325	154	15 - 27	50	635			
							25 - 46	55	738		60	1047				
						314	12 - 22	35	716	314	25 - 46	60	291			
							25 - 46	55	1810		-	-				
							-	-	-		40	1221				
							-	-	-		60	2904				
-	-	-	-	-												
-	-	-	-	-												

- Notes:
1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41505 Series Leakage: Class II (2" to 4") and Class III (6" to 16").

Allowable Pressure Drops for 41505 Series (US)

Air to Open and Air to Close, Flow to Open

Metal Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE							
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P				
psi	psi	psi							psi									
inches	mm																	
16	400	1500	1280	-	780	500	16	11 - 23	35	131	16	3 - 15	25	44				
								21 - 45	55	508		3 - 15	30	232				
								-	-	-		6 - 30	40	-				
							23	6 - 30	40	44	23	3 - 15	20	-				
								11 - 23	35	319		3 - 15	25	189				
								21 - 45	55	856		6 - 30	40	116				
							2000	-	1030 1360	800	18	10 - 34	40	319	18	3 - 15	30	276
												-	-	-		6 - 30	45	276
												6 - 30	35	319		24	3 - 15	25
											-	-	-	6 - 30	45		682	
											154	15 - 25	35	200	154		15 - 25	50
												25 - 42	55	539		60	878	
			12 - 20	35	521	25 - 42						60	313					
			314	25 - 42	55	1419					314	-	-	-				
				-	-	-						12 - 20	40	1074				
				-	-	-						60	2455					
			2500	900	-	-					154	15 - 28	35	200	154	15 - 28	50	454
												25 - 46	55	539		60	793	
							12 - 22	35	521	25 - 46		60	172					
							314	25 - 46	55	1419	314	-	-	-				
								-	-	-		12 - 22	40	935				
								-	-	-		60	2317					
							154	15 - 30	35	200	154	15 - 30	50	370				
								25 - 50	55	539		60	708					
12 - 24	35	521						25 - 50	60	31								
314	25 - 50	55					1419	314	-	-	-							
	-	-					-		12 - 24	40	797							
	-	-					-		60	2179								
-	-	1800	1105	154	15 - 30	35	200	154	15 - 30	50	370							
					25 - 50	55	539		60	708								
					12 - 24	35	521		25 - 50	60	31							
-	-	-	-	-	25 - 50	55	1419	-	-	-	-							
					-	-	-		12 - 24	40	797							
					-	-	-		60	2179								
-	-	-	-	-	-	-	-	-	25 - 50	60	383							
					-	-	-		-	-								
					-	-	-		-	-								

- Notes:
1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41505 Series Leakage: Class II (2" to 4") and Class III (6" to 16").

Allowable Pressure Drops for 41505 Series (US)

Air to Open and Air to Close, Flow to Open

Metal Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE							
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply	Allow. Delta P	Actuator Size	Bench range	Supply	Allow. Delta P				
inches	mm							psi	psi			psi	psi					
8 10 x 8 12 x 8	200 250 x 200 300 x 200	1500	640	230 575	165 220 290 380	155 250	16	3 - 15	25	—	16	3 - 15	20	—				
								6 - 30	40	—		3 - 15	25	—				
								11 - 23	35	—		6 - 30	40	—				
								21 - 45	55	1015		6 - 30	45	305				
							23	3 - 15	25	—	23	3 - 15	20	—				
								6 - 30	40	—		3 - 15	25	319				
								11 - 23	35	595		6 - 30	40	160				
								21 - 45	55	1552		6 - 30	45	754				
			—	—	500	300	18	6 - 48	55	73	18	3 - 13	25	—				
								15 - 50	55	1189		3 - 35	55	1175				
								6 - 40	45	609		6 - 40	50	856				
								—	—	—		6 - 40	55	1450				
							24	15 - 22	35	363	154	15 - 22	40	537				
								25 - 37	55	1073		60	1987					
								12 - 18	35	1044		50	174					
								25 - 37	55	2958		60	899					
314	—	—	—	314	30	1044												
	—	—	—		12 - 18	50	3750											
	—	—	—		50	1117												
	—	—	—		25 - 37	60	2596											
10	250	1500	510	—	225 290 390	230	16	—	—	—	16	3 - 15	20	—				
								6 - 30	40	—		3 - 15	25	—				
								11 - 23	35	—		6 - 30	40	218				
								21 - 45	55	841		6 - 30	45	580				
							23	—	—	—	23	3 - 15	20	—				
								6 - 30	40	—		3 - 15	25	232				
								11 - 23	35	479		6 - 30	40	87				
								21 - 45	55	1392		6 - 30	45	624				
							18	360 900	—	—	18	6 - 48	55	—	18	3 - 13	25	—
												15 - 50	55	1044		3 - 35	55	1044
												6 - 40	45	493		6 - 40	50	711
												—	—	—		6 - 40	55	1305
											24	15 - 22	35	261	154	40	1059	
												25 - 37	55	899		60	1711	
												12 - 18	35	870		50	102	
												25 - 37	55	2581		60	740	
			314	—	—	—	314	30	870									
				—	—	—		12 - 18	50	3495								
				—	—	—		50	928									
				—	—	—		25 - 37	60	2248								
			—	—	520 650	350 420	18	6 - 30	35	—	18	3 - 15	25	—				
								—	—	—		6 - 30	45	566				
								13 - 50	55	1639		6 - 30	40	638				
								—	—	—		6 - 30	45	1233				
							24	15 - 24	35	261	154	50	986					
								25 - 40	55	899		60	1624					
								12 - 19	35	870		25 - 40	60	609				
								25 - 40	55	2581		—	—	—				
							314	—	—	—	314	30	740					
								—	—	—		12 - 19	60	3750				
								—	—	—		50	667					
								—	—	—		25 - 40	60	1972				

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

2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.

3. See CH3000 for orifice size and travel required to obtain rated C_v.

4. 41505 Series Leakage: Class II (2" to 4") and Class III (6" to 16").

Allowable Pressure Drops for 41505 Series (US)

Air to Open and Air to Close, Flow to Open

Metal Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE									
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply psi	Allow. Delta P psi	Actuator Size	Bench range	Supply psi	Allow. Delta P psi						
inches	mm																			
12 16 x 12	300 400 x 300	1500	770	-	480 630	375	16	-	-	-	16	3 - 15	20	-						
								-	-	-		3 - 15	25	-						
								11 - 23	35	-		6 - 30	45	102						
								21 - 45	55	508		6 - 30	50	334						
							23	-	-	-	23	3 - 15	20	-						
								6 - 30	40	-		3 - 15	25	102						
								11 - 23	35	261		6 - 30	40	15						
								21 - 45	55	943		6 - 30	45	363						
							1400	500 1260	-	-	18	-	18	6 - 27	35	-	18	3 - 14	25	-
														-	-	-		3 - 30	45	290
													24	6 - 28	35	276	24	6 - 28	40	508
														-	-	-		-	-	-
			154	15 - 24	35	116					154	15 - 24	50	566						
				25 - 40	55	537						60	972							
				12 - 19	35	508						25 - 40	60	305						
				25 - 40	55	1610						-	-							
			314	-	-	-					314	12 - 19	40	1233						
				-	-	-						60	2915							
				-	-	-						25 - 40	50	290						
				-	-	-						60	1131							
			-	-	840	600	18	-	18	10 - 34	40	261	18	3 - 15	30	-				
										-	-	-		6 - 30	45	218				
									24	6 - 30	35	276	24	3 - 15	40	1436				
										-	-	-		6 - 30	45	725				
154	15 - 25	35					116	154	15 - 25	50	537									
	25 - 42	55					537		60	943										
	12 - 20	35					508		25 - 42	60	261									
	25 - 42	55					1610		-	-										
314	-	-					-	314	12 - 20	40	1189									
	-	-					-		60	2871										
	-	-					-		25 - 42	50	203									
	-	-					-		60	1044										
-	-	1100	725	154	-	154	15 - 27	35	116	154	15 - 27	50	435							
							25 - 46	55	537		60	841								
						12 - 22	35	508	25 - 46	60	87									
						25 - 46	55	1610	-	-										
				314	-	-	-	314	12 - 22	40	1015									
					-	-	-		60	2697										
					-	-	-		25 - 46	60	696									
					-	-	-		-	-										

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41505 Series Leakage: Class II (2" to 4") and Class III (6" to 16").

Allowable Pressure Drops for 41505 Series (US)

Air to Open and Air to Close, Flow to Open

Metal Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE				
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply psi	Allow. Delta P psi	Actuator Size	Bench range	Supply psi	Allow. Delta P psi	
inches	mm														
16	400	1500	1280	-	780	500	16	-	-	-	16	3 - 15	25	-	
								-	-	-		3 - 15	60	-	
								11 - 23	35	-		6 - 30	45	29	
								21 - 45	55	348		6 - 30	50	218	
							23	-	-	-	23	3 - 15	25	29	
								6 - 30	40	-		3 - 15	30	305	
			11 - 23	35	160	6 - 30		40	-						
			21 - 45	55	696	6 - 30		45	232						
			2000	-	1030 1360	800	18	18	10 - 34	40	160	18	3 - 15	30	-
									-	-	-		6 - 30	50	319
							24	24	6 - 30	35	160	24	3 - 15	25	203
									-	-	-		6 - 30	45	522
		154					154	15 - 25	35	29	154	15 - 25	50	377	
								25 - 42	55	377		60	711		
			12 - 20	35	348	25 - 42		60	145						
			25 - 42	55	1247	-		-							
		314	314	-	-	-	314	12 - 20	40	914					
				-	-	-		60	2291						
				-	-	-		25 - 42	50	102					
				-	-	-		60	798						
		2500	900	-	-	154	154	15 - 28	35	29	154	15 - 28	50	290	
								25 - 46	55	377		60	624		
						314	314	12 - 22	35	348	314	25 - 46	-	-	
								25 - 46	55	1247		-	-		
-	-							-	12 - 22	40		769			
-	-							-	60	2146					
-	-	1800	1105	154	154	15 - 30	35	29	154	15 - 30	50	203			
						25 - 50	55	377		60	537				
				314	314	12 - 24	35	348	314	25 - 50	-	-			
						25 - 50	55	1247		-	-				
						-	-	-		12 - 24	40	638			
						-	-	-		60	2016				
-	-	-	-	-	-	25 - 50	60	218							

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41505 Series Leakage: Class II (2" to 4") and Class III (6" to 16").

Allowable Pressure Drops for 41605 Series (US) Air to Open and Air to Close, Flow to Open

PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE												
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P									
inches	mm	psi							psi	psi			psi										
2	50	600	30 75	26 65	25 32 33 43 58 72	30 43 53	10	3 - 15	25	29	10	3 - 15	20	218									
3x2 4x2	80x50 100x50	1500						6 - 30	40	972		3 - 15	25	1682									
								11 - 23	35	2335		6 - 30	45	2640									
								21 - 45	55	3750		6 - 30	50	3750									
							16	3 - 15	25	580	16	3 - 15	20	885									
								6 - 30	40	1929		3 - 15	25	3046									
								11 - 23	35	3750		6 - 30	40	2408									
21 - 45	55	3742					6 - 30	45	3742														
2	50	1500					16 40	14 35	10 13 17 23 30	12 19 24	6	3 - 15	25	-	6	3 - 15	25	1001					
												6 - 30	40	508		3 - 15	30	1958					
			11 - 23	35	1537	6 - 30						50	2567										
			21 - 45	55	3437	6 - 30						55	3524										
			10	3 - 15	25	276					10	3 - 15	25	2060									
				6 - 30	40	1349						3 - 15	30	3640									
				11 - 23	35	2944						6 - 30	45	3075									
				21 - 45	55	3742						6 - 30	50	3750									
				3 4x3 6x3	80 100x80 150x80	1500						60 155	56 140	40 54 72 95 125	50 75 95	16	3 - 15	25	145	16	3 - 15	20	348
																	6 - 30	40	1146		3 - 15	25	1900
11 - 23	35	2611	6 - 30				45	2930															
21 - 45	55	3750	6 - 30				50	3750															
23	3 - 15	25	595				23	3 - 15	20	885													
	6 - 30	40	1929					3 - 15	25	3017													
	11 - 23	35	3750					6 - 30	40	2393													
	21 - 45	55	3750					6 - 30	45	3750													
	4 6x4 8x4	100 150x100 200x100	1500					95 240	90 225	65 85 110 150 195	72 105 130					16	3 - 15	25	-	16	3 - 15	20	131
																	6 - 30	40	725		3 - 15	25	1349
11 - 23				35	1885	6 - 30	40					1001											
21 - 45				55	3750	6 - 30	45					2147											
23				3 - 15	25	305	23					3 - 15	20	522									
				6 - 30	40	1363						3 - 15	25	2219									
				11 - 23	35	3002						6 - 30	40	1726									
				21 - 45	55	3750						6 - 30	45	3365									
				6 8x6 10x6	150 200x150 250x150	1500						400	144 360	100 130 175 230 300	96 150 190	16	3 - 15	25	-	16	3 - 15	20	-
																	6 - 30	40	363		3 - 15	25	798
11 - 23	35	1175	6 - 30				40	551															
21 - 45	55	2669	6 - 30				45	1334															
23	3 - 15	25	87				23	3 - 15	20	261													
	6 - 30	40	812					3 - 15	25	1407													
	11 - 23	35	1900					6 - 30	40	1131													
	21 - 45	55	3750					6 - 30	45	2205													

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41605 Series (US) Air to Open and Air to Close, Flow to Open

PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE						
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply psi	Shutoff Delta P psi	Actuator size	Bench range	Supply psi	Shutoff Delta P psi			
inches	mm																
8 10x8 12x8	200 250x200 300x200	1500	640	230 575	165 220 290 380	155 250	16	3 - 15	25	—	16	3 - 15	20	—			
								6 - 30	40	116		3 - 15	25	421			
								11 - 23	35	682		6 - 30	45	827			
								21 - 45	55	1711		6 - 30	50	1349			
							23	3 - 15	25	—	23	3 - 15	20	44			
								6 - 30	40	421		3 - 15	25	856			
			10 10x8 12x8	250 250x200 300x200	1500	—	—	500	300	18	6 - 48	55	522	18	3 - 13	25	1044
											15 - 50	55	2002		3 - 35	55	2002
										24	6 - 40	45	1218	24	6 - 40	50	1523
											—	—	—		6 - 40	55	2480
										154	15 - 22	35	966	154	15 - 22	40	1211
											25 - 37	55	1947		60	3174	
314	12 - 18	35				1895	314	25 - 37	50		721						
	25 - 37	55				3750		60	1702								
16	6 - 30	40				29	16	3 - 15	20	—							
	11 - 23	35				537		3 - 15	25	305							
	21 - 45	55				1523		6 - 30	45	682							
	—	—				—		6 - 30	50	1175							
	23	6 - 30	40	305	23	3 - 15		20	—								
		11 - 23	35	1044		3 - 15		25	696								
10	250	1500	510	—	225 290 390	230	18	6 - 48	55	392	18	3 - 13	25	870			
								15 - 50	55	1784		3 - 35	55	1784			
							24	6 - 40	45	1059	24	6 - 40	50	1334			
								—	—	—		6 - 40	55	2234			
							154	15 - 22	35	809	154	15 - 22	40	1035			
								25 - 37	55	1713		60	2844				
			314	12 - 18	35	1665		314	25 - 37	50		582					
				25 - 37	55	3750			60	1487							
			18	6 - 30	35	392	18	3 - 15	25	580							
				—	—	—		6 - 30	45	1160							
				24	13 - 50	55		2814	24	6 - 30	35	348					
					—	—		—		6 - 30	40	1247					
154	15 - 24	35		809	154	15 - 24		40	922								
	25 - 40	55		1713		60		2731									
	314	12 - 19	35	1665		314	25 - 40	50	394								
		25 - 40	55	3750			60	1298									
16	6 - 30	40	29	16	3 - 15	20	—										
	11 - 23	35	537		3 - 15	25	305										
	21 - 45	55	1523		6 - 30	45	682										
	—	—	—		6 - 30	50	1175										
	23	6 - 30	40		305	23	3 - 15	20	—								
		11 - 23	35		1044		3 - 15	25	696								
10	250	1500	1000	360 900	—	—	18	6 - 48	55	392	18	3 - 13	25	870			
								15 - 50	55	1784		3 - 35	55	1784			
							24	6 - 40	45	1059	24	6 - 40	50	1334			
								—	—	—		6 - 40	55	2234			
							154	15 - 22	35	809	154	15 - 22	40	1035			
								25 - 37	55	1713		60	2844				
			314	12 - 18	35	1665		314	25 - 37	50		582					
				25 - 37	55	3750			60	1487							
			18	6 - 30	35	392	18	3 - 15	25	580							
				—	—	—		6 - 30	45	1160							
				24	13 - 50	55		2814	24	6 - 30	35	348					
					—	—		—		6 - 30	40	1247					
154	15 - 24	35		809	154	15 - 24		40	922								
	25 - 40	55		1713		60		2731									
	314	12 - 19	35	1665		314	25 - 40	50	394								
		25 - 40	55	3750			60	1298									
16	6 - 30	40	29	16	3 - 15	20	—										
	11 - 23	35	537		3 - 15	25	305										
	21 - 45	55	1523		6 - 30	45	682										
	—	—	—		6 - 30	50	1175										
	23	6 - 30	40		305	23	3 - 15	20	—								
		11 - 23	35		1044		3 - 15	25	696								

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

2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.

3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41605 Series (US) Air to Open and Air to Close, Flow to Open

PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE									
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P						
inches	mm	psi							psi	psi			psi							
12 16x12	300 400x300	1500	770	-	480 630	375	16	11 - 23	35	305	16	3 - 15	25	145						
								21 - 45	55	1015		3 - 15	30	493						
								-	-	-		6 - 30	40	44						
								-	-	-		6 - 30	45	406						
							23	6 - 30	40	131	23	3 - 15	20	-						
								11 - 23	35	653		3 - 15	25	421						
								21 - 45	55	1639		6 - 30	40	276						
								-	-	-		6 - 30	45	798						
							1400	500 1260	-	-	-	-	18	6 - 27	35	203	18	3 - 14	25	377
														-	-	-		3 - 30	45	696
													24	6 - 28	35	667	24	6 - 28	40	1030
														-	-	-		-	-	-
			154	15 - 24	35	492							154	15 - 24	40	530				
				25 - 40	55	1116								60	1779					
				12 - 19	35	1083								25 - 40	50	140				
				25 - 40	55	2738								60	765					
			314	-	-	-							314	12 - 19	40	2165				
				-	-	-								60	3750					
				-	-	-								25 - 40	50	748				
				-	-	-								60	2021					
			-	-	840	600	-	-	18	10 - 34	40	653	18	3 - 15	25	232				
										-	-	-		6 - 30	45	595				
									24	6 - 30	35	667	24	3 - 15	25	740				
										-	-	-		6 - 30	45	1320				
154	15 - 25	35							492	154	15 - 25	40	492							
	25 - 42	55							1116		60	1741								
	12 - 20	35							1083		25 - 42	50	75							
	25 - 42	55							2738		60	700								
314	-	-							-	314	12 - 20	40	2101							
	-	-							-		60	3750								
	-	-							-		25 - 42	50	616							
	-	-							-		60	1889								
-	-	1100	725	-	-	154	15 - 27	35	492	154	15 - 27	40	336							
							25 - 46	55	1116		60	1584								
						314	12 - 22	35	1083	314	25 - 46	60	440							
							25 - 46	55	2738		-	-								
							-	-	-		12 - 22	40	1847							
							-	-	-		60	3750								
-	-	-	-	-	-	-	25 - 46	50	86											
-	-	-	-	-	-	-	-	60	1359											

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41605 Series (US) Air to Open and Air to Close, Flow to Open

PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE							
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P				
inches	mm	psi							psi	psi			psi					
16	400	1500	1280	-	780	500	16	11 - 23	35	160	16	3 - 15	25	29				
								21 - 45	55	754		3 - 15	30	319				
								-	-	-		6 - 30	45	247				
								-	-	-		6 - 30	50	551				
							23	6 - 30	40	29	23	3 - 15	20	-				
								11 - 23	35	450		3 - 15	25	261				
								21 - 45	55	1305		6 - 30	40	145				
								-	-	-		6 - 30	45	580				
							2000	-	1030 1360	800	18	10 - 34	40	464	18	3 - 15	30	406
												-	-	-		6 - 30	45	406
											24	6 - 30	35	464	24	3 - 15	25	522
												-	-	-		6 - 30	45	1044
			154	15 - 25	35	318					154	15 - 25	40	318				
				25 - 42	55	857						60	1395					
				12 - 20	35	828						25 - 42	60	498				
				25 - 42	55	2255						-	-					
			314	-	-	-					314	12 - 20	40	1706				
				-	-	-						60	3750					
				-	-	-						25 - 42	50	425				
				-	-	-						60	1523					
			2500	900	-	-	154	15 - 28	35	318	154	15 - 28	40	184				
								25 - 46	55	857		60	1260					
							314	12 - 22	35	828	314	25 - 46	60	274				
								25 - 46	55	2255		-	-					
-	-	-						12 - 22	40	1486								
-	-	-						60	3681									
-	-	1800					1105	154	15 - 30	35	318	154	15 - 30	50	587			
									25 - 50	55	857		60	1126				
			314	12 - 24	35	828		314	25 - 50	60	49							
				25 - 50	55	2255			-	-								
				-	-	-			12 - 24	40	1267							
				-	-	-			60	3462								
			-	-	-	-		-	-	-	25 - 50	60	608					

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41905 Series (US)

Air to Open and Air to Close, Flow to Open

Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE											
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P								
inches	mm	psi							psi	psi			psi									
2	50	600	30 75	26 65	25	30	10	3 - 15	25	102	10	3 - 15	20	305								
3x2	80x50	1500			32			43	6 - 30	40		1102	3 - 15	25	1740							
	4x2				100x50			43	53	11 - 23		35	1740	6 - 30	45	1740						
					58			72	16	3 - 15		25	696	16	3 - 15	20	1015					
								6 - 30	40	1740		3 - 15	25	1740								
2	50	1500	16 40	14 35	10	12	6	6 - 30	40	580	6	3 - 15	30	1740								
					13			19	11 - 23	35		1653	6 - 30	50	1740							
					17			24	10	3 - 15		25	348	10	3 - 15	25	1740					
					23			30	16	6 - 30		40	1450		-	-	-					
								11 - 23	35	1740		-	-	-								
3	80	1500	60 155	56 140	40	50	16	3 - 15	25	218	16	3 - 15	20	435								
					54			75	6 - 30	40		1262	3 - 15	25	2740							
					72			95	11 - 23	35		1740		-	-	-						
					95			125	23	3 - 15		25	696	23	3 - 15	20	1015					
								6 - 30	40	1740		3 - 15	25	1740								
4	100	1500	95 240	90 225	65	72	16	3 - 15	25	29	16	3 - 15	20	203								
					85			105	6 - 30	40		870	3 - 15	25	1537							
					110			130	11 - 23	35		1740	6 - 30	40	1160							
					150			195	21 - 45	55		1740	6 - 30	45	1740							
					6x4		150x100						23	3 - 15	25	406	23	3 - 15	20	638		
					8x4		200x100							6 - 30	40	1552		3 - 15	25	1740		
														11 - 23	35	1740		6 - 30	40	1740		
														21 - 45	55	1740		-	-	-		
6	150	1500	400	144 360	100	96	16	3 - 15	25	-	16	-	-	-								
					130			150	6 - 30	40		464	3 - 15	25	928							
					175			190	11 - 23	35		1334	6 - 30	40	653							
					230			300	21 - 45	55		1740	6 - 30	45	1523							
					8x6		200x150							23	3 - 15	25	145	23	3 - 15	20	334	
					10x6		250x150								6 - 30	40	943		3 - 15	25	1595	
																11 - 23	35	1740		6 - 30	40	1291
																21 - 45	55	1740		6 - 30	45	1740

- Notes:
1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41905 Series Leakage: Class III (2" to 4") and Class IV (6" to 16").
 5. Consult Masoneilan for applications with Shutoff Pressure Drops above 1740 psi.

Allowable Pressure Drops for 41905 Series (US) Air to Open and Air to Close, Flow to Open

Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE											
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P								
psi	psi	psi							psi													
inches	mm																					
12 16x12	300 400x300	1500	770	-	480 630	375	16	11 - 23	35	392	16	3 - 15	25	203								
								21 - 45	55	1189		3 - 15	30	609								
								-	-	-		6 - 30	40	87								
								-	-	-		6 - 30	45	508								
							23	6 - 30	40	203	23	-	-	-								
								11 - 23	35	783		3 - 15	25	508								
								21 - 45	55	1740		6 - 30	40	363								
								-	-	-		6 - 30	45	943								
							1400	500 1260	-	-	-	-	18	6 - 27	35	276	18	3 - 14	25	479		
														-	-	-		3 - 30	45	841		
													24	6 - 28	35	798	24	6 - 28	40	1204		
														-	-	-		-	-	-		
			154	15 - 24	35	564							154	15 - 24	40	608						
				25 - 40	55	1280								60	1740							
			314	12 - 19	35	1242							314	25 - 40	50	161						
				25 - 40	55	1740								60	877							
				-	-	-								12 - 19	30	1023						
				-	-	-								40	1740							
			-	-	840	600							-	-	18	10 - 34	40	783	18	3 - 15	25	305
																-	-	-		6 - 30	45	711
							24	6 - 30	35	798	24	3 - 15			25	885						
								-	-	-		6 - 30			45	1537						
							154	15 - 25	35	564	154	15 - 25			40	564						
								25 - 42	55	1280		60			1740							
314	12 - 20	35					1242	314	25 - 42	50	86											
	25 - 42	55					1740		60	802												
	-	-					-		12 - 20	30	950											
	-	-					-		40	1740												
154	15 - 27	35					564	154	15 - 27	40	385											
	25 - 46	55					1280		60	1740												
314	12 - 22	35	1242	314	25 - 46	60	505															
	25 - 46	55	1740		-	-																
	-	-	-		12 - 22	30	658															
	-	-	-		40	1740																
-	-	1100	725	-	-	154	15 - 27	35	564	154	15 - 27	40	385									
							25 - 46	55	1280		60	1740										
						314	12 - 22	35	1242	314	25 - 46	60	505									
							25 - 46	55	1740		-	-										
-	-	-	-	-	-	154	15 - 27	35	564	154	15 - 27	40	385									
							25 - 46	55	1280		60	1740										
						314	12 - 22	35	1242	314	25 - 46	60	505									
							25 - 46	55	1740		-	-										

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
3. See CH3000 for orifice size and travel required to obtain rated C_v.
4. 41905 Series Leakage: Class III (2" to 4") and Class IV (6" to 16").
5. Consult Masoneilan for applications with Shutoff Pressure Drops above 1740 psi.

Allowable Pressure Drops for 41905 Series (US) Air to Open and Air to Close, Flow to Open

Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE							
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply psi	Shutoff Delta P psi	Actuator size	Bench range	Supply psi	Shutoff Delta P psi				
inches	mm																	
16	400	1500	1280	-	780	500	16	11 - 23	35	232	16	3 - 15	25	73				
								21 - 45	55	928		3 - 15	30	421				
								-	-	-		6 - 30	45	334				
								-	-	-		6 - 30	50	682				
								-	-	-		3 - 15	20	-				
								-	-	-		3 - 15	25	348				
							23	6 - 30	40	73	6 - 30	40	218					
								11 - 23	35	580	6 - 30	45	725					
								21 - 45	55	1552	-	-	-					
								-	-	-	18	10 - 34	40	580				
								-	-	-	24	6 - 30	35	595				
								-	-	-	24	-	-	-				
			2000	-	1030 1360	800	18	10 - 34	40	580	18	3 - 15	30	522				
								-	-	-		6 - 30	45	522				
								6 - 30	35	595		3 - 15	25	667				
								-	-	-		6 - 30	45	1262				
								154	15 - 25	35		373	154	15 - 25	40	373		
								25 - 42	55	1004		25 - 42		60	1636			
							12 - 20	35	971	25 - 42	60	583						
							25 - 42	55	1740	-	-	-						
							-	-	-	314	12 - 20	30		713				
							-	-	-	314	12 - 20	40		1740				
							2500	900	-	-	154	15 - 28	35	373	154	15 - 28	40	215
												25 - 46	55	1004		15 - 28	60	1478
12 - 22	35	971	25 - 46	60	321													
25 - 46	55	1740	-	-	-													
-	-	-	314	12 - 22	30	456												
-	-	-	314	12 - 22	40	1740												
314	-	-	-	25 - 46	60	1250												
	-	-	-	-	-	-												
	-	-	-	154	15 - 30	40					58							
	-	-	-	154	15 - 30	60					1320							
	-	-	-	314	25 - 50	60					58							
	-	-	-	314	25 - 50	-					-							
-	-	1800	1105	154	15 - 30	35	373	154	12 - 24	40	1486							
					25 - 50	55	1004		25 - 50	50	1740							
					12 - 24	35	971		-	-	-							
					25 - 50	55	1740		-	-	-							
					-	-	-		314	12 - 24	40	1486						
					-	-	-		314	12 - 24	50	1740						

- Notes:
- Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 - Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 - See CH3000 for orifice size and travel required to obtain rated C_v.
 - 41905 Series Leakage: Class III (2" to 4") and Class IV (6" to 16").
 - Consult Masoneilan for applications with Shutoff Pressure Drops above 1740 psi.

Allowable Pressure Drops for 41905 Series (US)

Air to Open and Air to Close, Flow to Open

Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE			
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply	Allow. Delta P	Actuator Size	Bench range	Supply	Allow. Delta P
inches	mm							psi	psi			psi	psi	
2	50	600			25									
3 x 2 4 x 2	80 x 50 100 x 50	1500	30 75	26 65	32	30 43 53	10	3 - 15	25	-	10	3 - 15	25	1131
					32			6 - 30	40	363		6 - 30	45	1740
					43			11 - 23	35	1552		-	-	-
					53			21 - 45	55	1740		-	-	-
				58		16	3 - 15	25	-	16	3 - 15	20	261	
		72		6 - 30	40		1291	3 - 15	25		1740			
				11 - 23	35		1740	-	-		-			
2	50	1500	16 40	14 35	10	12 19 24	10	3 - 15	25	-	10	3 - 15	20	-
					13			6 - 30	40	653		3 - 15	25	1262
					17			11 - 23	35	1740		6 - 30	45	1740
					19			21 - 45	55	1740		-	-	-
			23			16	3 - 15	25	160	16	3 - 15	20	290	
		30		6 - 30	40		1523	3 - 15	25		1740			
				11 - 23	35		1740	-	-		-			
3 4 x 3 6 x 3	80 100 x 80 150 x 80	1500	60 155	56 140	40	50 75 95	16	3 - 15	25	-	16	3 - 15	20	-
					54			6 - 30	40	595		3 - 15	25	1291
					72			11 - 23	35	1740		6 - 30	45	1740
					95			21 - 45	55	1740		-	-	-
			125			23	3 - 15	25	-	23	3 - 15	20	305	
				6 - 30	40		1305	3 - 15	25		1740			
				11 - 23	35		1740	6 - 30	40		1624			
				-	-		-	6 - 30	45		1740			
4 6 x 4 8 x 4	100 150 x 100 200 x 100	1500	95 240	90 225	65	72 105 130	16	3 - 15	25	-	16	3 - 15	20	-
					85			6 - 30	40	319		3 - 15	25	1030
					110			11 - 23	35	1436		6 - 30	40	624
					150			21 - 45	55	1740		6 - 30	45	1624
			195			23	3 - 15	25	-	23	3 - 15	20	102	
				6 - 30	40		1044	3 - 15	25		1682			
				11 - 23	35		1740	6 - 30	40		1305			
				21 - 45	55		1740	6 - 30	45		1740			
6 8 x 6 10 x 6	150 200 x 150 250 x 150	1500	400	144 360	100	96 150 190	16	3 - 15	25	-	16	3 - 15	20	-
					130			6 - 30	40	-		3 - 15	25	464
					175			11 - 23	35	899		6 - 30	40	189
					230			21 - 45	55	1740		6 - 30	45	1073
			300			23	3 - 15	25	-	23	3 - 15	20	-	
				6 - 30	40		464	3 - 15	25		1117			
				11 - 23	35		1508	6 - 30	40		841			
				21 - 45	55		1740	6 - 30	45		1740			

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41905 Series Leakage: Class III (2" to 4") and Class IV (6" to 16").
 5. Consult Masoneilan for applications with Shutoff Pressure Drops above 1740 psi.

Allowable Pressure Drops for 41905 Series (US)

Air to Open and Air to Close, Flow to Open

Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE				
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply	Allow. Delta P	Actuator Size	Bench range	Supply	Allow. Delta P	
inches	mm							psi	psi			psi	psi		
8 10 x 8 12 x 8	200 250 x 200 300 x 200	1500	640	230 575	165 220 290 380	155 250	16	3 - 15	25	—	16	3 - 15	20	—	
								6 - 30	40	—		3 - 15	25	—	
								11 - 23	35	—		6 - 30	45	450	
								21 - 45	55	1320		6 - 30	50	1044	
							23	3 - 15	25	—	23	3 - 15	20	—	
								6 - 30	40	—		3 - 15	25	479	
								11 - 23	35	870		6 - 30	40	247	
								21 - 45	55	1740		6 - 30	45	1088	
			18	6 - 48	55	102	18	3 - 13	25	—					
				15 - 50	55	1537		3 - 35	55	1537					
			24	6 - 40	45	899	24	6 - 40	50	1175					
				—	—	—		6 - 40	55	1740					
			154	15 - 22	35	1059	154	15 - 22	40	798					
				25 - 37	55	1740			60	1740					
				314	12 - 18	35		1740	25 - 37	50	261				
					25 - 37	55		1740		60	1349				
314	—	—	—	314	12 - 18	40	1740								
	—	—	—			50	1668								
	—	—	—		25 - 37	60	1740								
	—	—	—			60	1740								
10	250	1500	510	—	225 290 390	230	16	—	—	—	16	3 - 15	25	—	
								6 - 30	40	—		3 - 15	30	—	
								11 - 23	35	—		6 - 30	45	334	
								21 - 45	55	1204		6 - 30	50	899	
							23	—	—	—	23	3 - 15	20	—	
								6 - 30	40	—		3 - 15	25	348	
								11 - 23	35	740		6 - 30	40	145	
								21 - 45	55	1740		6 - 30	45	957	
							18	6 - 48	55	15	18	3 - 13	25	—	
								15 - 50	55	1421		3 - 35	55	1407	
							24	6 - 40	45	754	24	6 - 40	50	1073	
								—	—	—		6 - 40	55	1740	
							154	15 - 22	35	406	154	15 - 22	40	653	
								25 - 37	55	1421			60	1740	
								314	12 - 18	35		1363	25 - 37	50	160
									25 - 37	55		1740		60	1160
			314	—	—	—	314	12 - 18	30	1363					
				—	—	—			40	1740					
				—	—	—		25 - 37	50	1465					
				—	—	—			60	1740					
			18	6 - 30	35	15	18	3 - 15	25	—					
				—	—	—		6 - 30	45	870					
			24	13 - 50	55	1740	24	6 - 30	40	1001					
				—	—	—		6 - 30	45	1668					
			154	15 - 24	35	406	154	15 - 24	40	537					
				25 - 40	55	1421			60	1740					
				314	12 - 19	35		1363	25 - 40	60	957				
					25 - 40	55		1740		—	—				
			314	—	—	—	314	12 - 19	30	1160					
				—	—	—			40	1740					
				—	—	—		25 - 40	50	1030					
				—	—	—			60	1740					

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

2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.

3. See CH3000 for orifice size and travel required to obtain rated C_v.

4. 41905 Series Leakage: Class III (2" to 4") and Class IV (6" to 16").

5. Consult Masoneilan for applications with Shutoff Pressure Drops above 1740 psi.

Allowable Pressure Drops for 41905 Series (US)

Air to Open and Air to Close, Flow to Open

Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE								
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply psi	Allow. Delta P psi	Actuator Size	Bench range	Supply psi	Allow. Delta P psi					
inches	mm																		
12 16 x 12	300 400 x 300	1500	770	-	480 630	375	16	-	-	-	16	3 - 15	25	-					
								-	-	-		3 - 15	30	-					
								11 - 23	35	-		6 - 30	45	174					
								21 - 45	55	870		6 - 30	50	580					
							23	-	-	-	23	3 - 15	20	-					
								6 - 30	40	-		3 - 15	25	174					
								11 - 23	35	450		6 - 30	40	29					
								21 - 45	55	1450		6 - 30	45	609					
							1400	500 1260	-	-	18	18	6 - 27	35	-	18	3 - 14	25	-
													-	-	-		3 - 30	45	508
											24	24	6 - 28	35	464	24	6 - 28	40	885
													-	-	-		-	-	-
			154	154	15 - 24	35					566	154	15 - 24	40	261				
					25 - 40	55					1276		60	1697					
					12 - 19	35					1247		60	522					
					25 - 40	55					1740		-	-					
			314	314	-	-					-	314	12 - 19	30	667				
					-	-					-		40	1740					
					-	-					-		50	508					
					-	-					-		60	1740					
			-	-	840	600	18	18	10 - 34	40	450	18	3 - 15	30	-				
									-	-	-		6 - 30	50	798				
							24	24	6 - 30	35	464	24	3 - 15	25	551				
									-	-	-		6 - 30	45	1175				
154	154	15 - 25					35	566	154	40	218								
		25 - 42					55	1276		60	1653								
		12 - 20					35	1247		60	450								
		25 - 42					55	1740		-	-								
314	314	-					-	-	314	12 - 20	30	595							
		-					-	-		40	1740								
		-					-	-		50	363								
		-					-	-		60	1740								
154	154	15 - 27	35	566	154	15 - 27	50	754											
		25 - 46	55	1276		60	1465												
		12 - 22	35	1247		60	160												
		25 - 46	55	1740		-	-												
		-	-	-		-	-												
		-	-	-		-	-												
314	314	-	-	-	314	12 - 22	30	305											
		-	-	-		40	1740												
		-	-	-		60	1204												
		-	-	-		-	-												
		-	-	-		-	-												
		-	-	-		-	-												

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41905 Series Leakage: Class III (2" to 4") and Class IV (6" to 16").
 5. Consult Masoneilan for applications with Shutoff Pressure Drops above 1740 psi.

Allowable Pressure Drops for 41905 Series (US) Air to Open and Air to Close, Flow to Open

Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE								
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply psi	Allow. Delta P psi	Actuator Size	Bench range	Supply psi	Allow. Delta P psi					
inches	mm																		
16	400	1500	1280	-	780	500	16	-	-	-	16	3 - 15	25	-					
								-	-	-		3 - 15	30	-					
								11 - 23	35	-		6 - 30	45	44					
								21 - 45	55	653		6 - 30	50	392					
							23	-	-	-	23	3 - 15	25	58					
								6 - 30	40	-		3 - 15	30	566					
								11 - 23	35	290		6 - 30	40	-					
								21 - 45	55	1233		6 - 30	45	435					
			2000	-	1030 1360	800	18	18	10 - 34	40	290	18	3 - 15	30	-				
									-	-	-		6 - 30	50	580				
							24	24	6 - 30	35	305	24	3 - 15	25	377				
									-	-	-		6 - 30	45	972				
							154	-	1030 1360	800	154	154	15 - 25	35	58	154	15 - 25	50	769
													25 - 42	55	696		60	1479	
													12 - 20	35	667		60	305	
													25 - 42	55	1740		-	-	
			314	-	1030 1360	800	314	314	-	-	-	314	12 - 20	30	450				
									-	-	-		40	1740					
									-	-	-		50	218					
									-	-	-		60	1639					
			2500	900	-	-	154	154	15 - 28	35	58	154	15 - 28	50	595				
									25 - 46	55	696		60	1305					
							314	-	-	-	314	314	12 - 22	35	667	314	25 - 46	-	-
													25 - 46	55	1740		-	-	
-	-	-											40	1595					
-	-	-											50	1740					
-	-	-					1105	154	154	15 - 30	35	58	154	15 - 30	50	421			
										25 - 50	55	696		60	1117				
			314	-	-	1105		314	314	12 - 24	35	667	314	25 - 50	-	-			
										25 - 50	55	1740		-	-				
										-	-	-		40	1305				
										-	-	-		50	1740				
			-	-	-	-		-	-	-	-	-	60	450					

- Notes:
1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41905 Series Leakage: Class III (2" to 4") and Class IV (6" to 16").
 5. Consult Masoneilan for applications with Shutoff Pressure Drops above 1740 psi.

41005 Series Pressure Drop Tables - PH3000

03/02

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 1500

41305

Pressure Energized PTFE Seal Ring	Page(s)
Standard, Single/Multi-Stage Lo-dB Trim	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Open	
Leakage Class IV	1 - 4
Leakage Class V	5 - 6

41405

Models 41415 & 41425

Pilot Balanced Construction - Leakage Class IV (Class V Optional)	
Standard Trim	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Close	7 - 8
Flexible Graphite Packing	
Air to Open and Air to Close, Flow to Close	12 - 13
Standard Trim with 37/38 Spring-Diaphragm & 84/85/86 Cylinder Actuators	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Close	10
Flexible Graphite Packing	
Air to Open and Air to Close, Flow to Close	15

Models 41435 & 41445

Pilot Balanced Construction - Leakage Class IV (Class V Optional)	
Single Stage Lo-dB/Anti-Cavitation Trim (including Diffuser)	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Close	9
Flexible Graphite Packing	
Air to Open and Air to Close, Flow to Close	14
Single Stage Lo-dB/Anti-Cavitation Trim (including Diffuser) with 37/38 Spring Diaphragm & 84/85/86 Cylinder Actuators	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Close	11
Flexible Graphite Packing	
Air to Open and Air to Close, Flow to Close	16

41505

Metal Seal Ring - Leakage Class II & III	Page(s)
Standard, Single/Multi-Stage Lo-dB Trim	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Open	17 - 20
Flexible Graphite	
Air to Open and Air to Close, Flow to Open	21 - 24

41605

PTFE Seal Ring - Leakage Class IV	
Standard, Single/Multi-Stage Lo-dB Trim	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Open	25 - 28

41905

Graphite Seal Ring - Leakage Class III & IV	
Standard, Single/Multi-Stage Lo-dB Trim	
PTFE or LE Packing	
Air to Open and Air to Close, Flow to Open	29 - 32
Flexible Graphite Packing	
Air to Open and Air to Close, Flow to Open	33 - 36

Allowable pressure drops represent shutoff capability. Consult Masoneilan for appropriate actuator selection for Fail Open action in Air to Close configurations with Flexible Graphite Packing.

Allowable Pressure Drops for 41305 Series (Metric) Air to Open and Air to Close, Flow to Open

Pressure Energized PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE			
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P
psi	bar	psi							bar					
2	50	600	30	26	25	30	10	6 - 30	40	96	10	3 - 15	25	189
3x2 4x2	80x50	1500			32			43	11 - 23	35		229	3 - 15	30
	100x50		58	53	21 - 45	55		258	6 - 30	40		125		
			72					-	-	-			6 - 30	45
2	50	1500	16	14	10	12	6	-	-	-	6	3 - 15	35	250
					13			6 - 30	40	44		3 - 15	40	258
					17			11 - 23	35	132		6 - 30	50	221
					19			21 - 45	55	258		6 - 30	55	258
					23		10	3 - 15	25	24	10	-	-	-
					30			6 - 30	40	116		-	-	-
								11 - 23	35	253		-	-	-
3 4x3 6x3	80 100x80 150x80	1500	60 155	56 140	40	50	16	3 - 15	25	13	16	3 - 15	25	172
					54			6 - 30	40	103		3 - 15	30	258
					72			11 - 23	35	236		6 - 30	40	132
					95			21 - 45	55	258		6 - 30	45	258
					125		23	3 - 15	25	56	23	3 - 15	20	81
								6 - 30	40	174		3 - 15	25	258
								11 - 23	35	258		6 - 30	40	216
								-	-	-		6 - 30	45	258
4 6x4 8x4	100 150x100 200x100	1500	95 240	90 225	65	72	16	3 - 15	25	-	16	3 - 15	25	155
					85			6 - 30	40	87		3 - 15	30	258
					110			11 - 23	35	218		6 - 30	45	247
					150			21 - 45	55	258		6 - 30	50	258
					195		23	3 - 15	25	38	23	3 - 15	25	255
								6 - 30	40	157		3 - 15	30	258
								11 - 23	35	258		6 - 30	40	198
								21 - 45	55	258		6 - 30	45	258
6 8x6 10x6	150 200x150 250x150	1500	400	144 360	100	96	16	3 - 15	25	-	16	3 - 15	25	96
					130			6 - 30	40	46		3 - 15	30	184
					175			11 - 23	35	138		6 - 30	50	246
					230			21 - 45	55	258		6 - 30	55	258
					300		23	3 - 15	25	11	23	3 - 15	25	166
								6 - 30	40	97		3 - 15	30	258
								11 - 23	35	224		6 - 30	40	132
								21 - 45	55	258		6 - 30	45	258

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41305 Series (Metric) Air to Open and Air to Close, Flow to Open

Pressure Energized PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE						
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P			
psi	bar	psi							bar								
inches	mm																
8	200	1500	415 640	230 575	165 220 290 380	155 250	16	3 - 15	25	—	16	3 - 15	25	44			
								6 - 30	40	12		3 - 15	30	99			
								11 - 23	35	71		6 - 30	50	136			
								21 - 45	55	173		6 - 30	55	187			
							23	3 - 15	25	—	23	3 - 15	25	87			
								6 - 30	40	44		3 - 15	30	161			
								11 - 23	35	121		6 - 30	50	215			
								21 - 45	55	258		6 - 30	55	258			
							18	8 - 30	35	89	18	3 - 13	20	40			
								15 - 50	55	202		3 - 13	25	105			
								—	—	—		6 - 27	45	117			
								—	—	—		6 - 27	50	177			
			154	15 - 22	35	110	154	15 - 22	40	138							
				25 - 37	55	222		60	258								
				314	12 - 18	35		216	25 - 37	50	82						
					25 - 37	55		258	60	194							
			314	—	—	—	314	12 - 18	40	258							
				—	—	—		25 - 37	50	227							
				—	—	—		60	258								
				—	—	—		—	—	—							
			10	250	1500	510	—	225 290 390	230	16	6 - 30	40	2	16	3 - 15	25	33
											11 - 23	35	60		3 - 15	30	88
											21 - 45	55	162		6 - 30	50	125
											—	—	—		6 - 30	55	176
23	6 - 30	40								33	23	3 - 15	25	77			
	11 - 23	35								110		3 - 15	30	149			
	21 - 45	55								255		6 - 30	50	203			
	—	—								—		6 - 30	55	258			
18	8 - 30	35								79	18	3 - 13	20	29			
	15 - 50	55								190		3 - 13	25	94			
	—	—								—		6 - 27	45	106			
	—	—								—		6 - 27	50	166			
154	15 - 22	35				101	154	15 - 22	40	129							
	25 - 37	55				214		60	258								
	314	12 - 18				35		208	25 - 37	50	73						
		25 - 37				55		258	60	185							
314	—	—				—	314	12 - 18	40	258							
	—	—				—		25 - 37	50	219							
	—	—				—		60	258								
	—	—				—		—	—	—							
18	6 - 30	35				43	18	3 - 15	25	65							
	15 - 50	55				190		3 - 15	30	123							
	—	—				—		6 - 30	40	123							
	—	—				—		6 - 30	50	180							
154	15 - 22	35				101	154	15 - 24	40	115							
	25 - 37	55				214		60	258								
	314	12 - 18				35		208	25 - 40	50	49						
		25 - 37				55		258	60	162							
314	—	—				—	314	12 - 19	40	258							
	—	—				—		25 - 40	50	171							
	—	—				—		60	258								
	—	—				—		—	—	—							

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

2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.

3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41305 Series (Metric) Air to Open and Air to Close, Flow to Open

Pressure Energized PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE			
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P
psi	bar	psi							bar					
12 16x12	300 400x300	1500	770	-	480 630	375	16	11 - 23	35	47	16	3 - 15	25	21
								21 - 45	55	148		3 - 15	30	77
-	-							-	6 - 30	50		120		
-	-						-	6 - 30	55	162				
23	6 - 30						40	21	23	3 - 15		25	65	
	11 - 23						35	98		3 - 15		30	136	
	21 - 45		55	240	6 - 30	50	189							
-	-		-	6 - 30	55	258								
18	6 - 27		35	31	18	3 - 14	25	60						
	10 - 33		40	99		3 - 14	30	116						
	-		-	-		6 - 27	40	83						
-	-		-	6 - 27		45	137							
154	15 - 24		35	83		154	15 - 24	40	90					
	25 - 40		55	188			60	258						
314	12 - 19		35	183	314		25 - 40	50	24					
	25 - 40		55	258			60	129						
	-		-	-			12 - 19	40	258					
-	-		-	25 - 40			50	126						
-	-		-	60		258								
-	-		-	6 - 30		35	31	18	3 - 15	25	36			
18	12 - 30		35	130	18	3 - 15	30		90					
	-		-	-		6 - 30	45		90					
-	-		-	6 - 30		50	139							
154	15 - 25		35	83		154	15 - 25		40	83				
	25 - 42	55	188	60			258							
314	12 - 20	35	183	314			25 - 42	50	13					
	25 - 42	55	258		60		118							
	-	-	-		12 - 20		40	258						
-	-	-	25 - 42		50		104							
-	-	-	60		258									
154	15 - 27	35	83		154	15 - 27	40	57						
	25 - 46	55	188	60		258								
314	12 - 22	35	183	314		25 - 46	60	74						
	25 - 46	55	258			-	-							
	-	-	-			12 - 22	40	258						
-	-	-	25 - 46			50	14							
-	-	-	60		229									

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41305 Series (Metric) Air to Open and Air to Close, Flow to Open

Pressure Energized PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE			
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P
psi	bar	psi							bar					
16	400	1500	1280	-	780	500	16	11 - 23	35	29	16	3 - 15	25	3
								21 - 45	55	131		3 - 15	30	59
								-	-	-		6 - 30	50	96
								-	-	-		6 - 30	55	144
								6 - 30	40	3		3 - 15	25	46
								11 - 23	35	81		3 - 15	30	119
							23	21 - 45	55	220	6 - 30	45	101	
								-	-	-	6 - 30	50	170	
								6 - 30	35	13	3 - 15	25	18	
								12 - 30	35	112	3 - 15	30	74	
								-	-	-	6 - 30	45	73	
								-	-	-	6 - 30	50	122	
			2000	-	1030 1360	800	18	15 - 25	35	68	154	15 - 25	50	184
								25 - 42	55	184		25 - 42	60	258
								12 - 20	35	178		12 - 20	60	107
								25 - 42	55	258		-	-	-
								-	-	-		12 - 20	40	258
								-	-	-		25 - 42	50	91
							314	-	-	-	60	258		
								-	-	-	50	91		
								-	-	-	60	258		
								15 - 28	35	68	15 - 28	50	155	
								25 - 46	55	184	60	258		
								12 - 22	35	178	60	59		
154	900	-	-	-	-	314	25 - 46	55	258	154	25 - 46	-	-	
							-	-	-		12 - 22	40	258	
							-	-	-		25 - 46	60	229	
							-	-	-		15 - 30	50	126	
							15 - 30	35	68		60	242		
							25 - 50	55	184		60	11		
314	-	-	1800	1105	-	-	12 - 24	35	178	154	25 - 50	-	-	
							25 - 50	55	258		12 - 24	40	258	
							-	-	-		25 - 50	60	131	
							-	-	-		-	-	-	
							-	-	-		-	-	-	
							-	-	-		-	-	-	

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41305 Series (Metric) Air to Open and Air to Close, Flow to Open

Pressure Energized PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE				
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P	
inches	mm							psi	bar			psi	bar		
2	50	600	30	26	25	30	10	21 - 45	55	257	10	3 - 15	35	193	
3x2	80x50	1500			32			43	11 - 23	35		162	3 - 15	40	258
4x2	100x50				58			72	21 - 45	55		258	6 - 30	50	153
								–	–	–		6 - 30	55	258	
2	50	1500	16	14	10	12	6	21 - 45	55	115	6	3 - 15	45	234	
					13			–	–	–		3 - 15	50	258	
					17			–	–	–		6 - 30	60	204	
					19			–	–	–		3 - 15	30	133	
					23			11 - 23	35	72		3 - 15	35	258	
					30			21 - 45	55	258		6 - 30	50	221	
								–	–	–		6 - 30	50	221	
3	80	1500	60	56	40	50	16	11 - 23	35	13	16	3 - 15	35	225	
					54			21 - 45	55	258		3 - 15	40	258	
					72			–	–	–		6 - 30	50	185	
					95			–	–	–		6 - 30	55	258	
					125			11 - 23	35	153		3 - 15	30	253	
								21 - 45	55	258		3 - 15	35	258	
								–	–	–		6 - 30	50	258	
4	100	1500	95	90	65	72	16	21 - 45	55	216	16	3 - 15	35	153	
					85			–	–	–		3 - 15	40	258	
					110			–	–	–		6 - 30	50	114	
					150			–	–	–		6 - 30	55	245	
					195			11 - 23	35	82		3 - 15	30	180	
								21 - 45	55	258		3 - 15	35	258	
								–	–	–		6 - 30	45	123	
								–	–	–		6 - 30	50	258	
6	150	1500	400	144	100	96	16	21 - 45	55	102	16	3 - 15	35	58	
					130			–	–	–		3 - 15	40	148	
					175			–	–	–		6 - 30	50	27	
					230			–	–	–		6 - 30	55	122	
					300			11 - 23	35	1		3 - 15	35	208	
								21 - 45	55	258		3 - 15	40	258	
								–	–	–		6 - 30	50	175	
								–	–	–		6 - 30	55	258	
8	200	1500	640	230	165	155	16	21 - 45	55	9	16	3 - 15	40	41	
					220			–	–	–		3 - 15	45	96	
					290			–	–	–		6 - 30	50	–	
					380			–	–	–		6 - 30	55	26	
								21 - 45	55	112		3 - 15	35	79	
								–	–	–		3 - 15	40	152	
							–	–	–	6 - 30	50	58			
							–	–	–	6 - 30	55	133			
							20 - 50	55	128	3 - 13	40	131			
							–	–	–	6 - 27	55	143			
							21 - 45	50	258	3 - 15	40	258			
							–	–	–	6 - 30	55	258			
	25 - 37	55	190	15 - 22	60	39									
	–	–	–	–	–	–									
	–	–	–	–	–	–									
	–	–	–	–	–	–									
								–	–	–		12 - 18	40	135	
												60	258		
												60	133		

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41305 Series (Metric) Air to Open and Air to Close, Flow to Open

Pressure Energized PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE																
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P													
inches	mm	psi							bar	psi			bar														
10	250	1500	510	-	225 290 390	230	23	-	-	-	16	3 - 15	50	101													
													23	21 - 45	55	66	23	3 - 15	40	106							
																			23	3 - 15	45	178					
																					6 - 30	50	6				
																			6 - 30	55		87	18	3 - 13	45	145	
													6 - 27	55	97												
			1000	360 900	-	-	18	24	20 - 50	55	82	18		3 - 15	40	240											
													24		21 - 45	50	258	24	6 - 30	55	240						
																				314	25 - 37	55	106	314	12 - 18	40	37
																										60	258
																				60	49	18	3 - 15	40	46		
													3 - 15		45	106											
-	-	520 650	350 420	24	314	19 - 46	55	258	24	6 - 30	50	127															
											24	21 - 45	50	258	24	6 - 30	55	218									
																	314	25 - 40	55	106	314	12 - 19	40	14			
																							60	258			
																	60	258	12	300	1500	770		-	480 630	375	23
											23	21 - 45	55	7	23	3 - 15							40				
23	3 - 15	45	124																								
		6 - 30	55	30																							
1400	500 1260		-	-	18	24	-	-	18	3 - 14							50	107									
		24									16 - 45	50	139	24	6 - 28	55	186										
																314	25 - 41	55	6	314		12 - 19	50	124			
																							60	258			
																60	258	18	3 - 15	45		4					
		3 - 15									55	111															
-	-		840	600	24	314	18 - 50	55	192	24	3 - 15	40	138														
		24										-	-	-	24	3 - 15	45	221									
																	314	25 - 42	55	6	314	12 - 20	50	113			
																							60	258			
																	60	258	314	25 - 46	55	6		314	12 - 22	50	70
		60										258															
16	400		1500	1280	-	780	500	16	21 - 45	55	-	16	3 - 15	55	-												
		23												21 - 45	55	-	23	3 - 15	45	28							
																			23	3 - 15	50	103					
																					6 - 30	55	-				
																			24	15 - 50		55	15	24	-	-	-
		22 - 50												55	203	-	-	-									
				2000	-	1030 1360	800	18	24	-	-	-	18				3 - 15	50	-								
		24												18 - 50	55	100		24	3 - 15	55	14						
																				314	-	-	-	314	12 - 20	60	171
																										60	124
																				60	124	314	-	-	-		-
		314												12 - 22	60	77											
-	-		1800	1105	-	-	-	-	-	314	12 - 24	-	-														
		-										-	-	-	-	-	-	-	-	-	-						

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41405 Series (Metric) Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Standard Trim

Models 41415 and 41425

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

VALVE						ACTUATOR SIZE	AIR TO OPEN			AIR TO CLOSE								
SIZE inches (mm) ANSI class		Travel inches	LIN C _v factor		= % C _v factor		Bench range	SUPPLY	Allow. Delta P	Bench range	SUPPLY	Allow. Delta P						
150/600	900/1500		1	0.4	1								0.4	psi	bar	psi	bar	
-	2 (50)	0.8	40	-	35	14	6	11 - 23	29	29	3 - 15	27	29					
								21 - 45	56	57		6 - 30	44	57				
							10	11 - 23	28	48	3 - 15	24	48					
								21 - 45	55	96	6 - 30	40	96					
			16	6 - 30	39	153	3 - 15	22	77									
				11 - 23	28	77	6 - 30	39	153									
			23	6 - 30	39	220	-	-	-									
				11 - 23	28	110	-	-	-									
		-	-	-	16	-	-	-	6	11 - 23	28	28	3 - 15	27	28			
										21 - 45	54	56		6 - 30	44	56		
									10	11 - 23	28	46	3 - 15	24	46			
										21 - 45	54	93	6 - 30	40	93			
					16	6 - 30	37	148	3 - 15	22	74							
						11 - 23	27	74	6 - 30	39	148							
					2 (50)	-	1.5	75	-	65	26	10	11 - 23	29	32	3 - 15	26	32
													21 - 45	56	64		6 - 30	42
16	11 - 23	28	51	3 - 15								23	51					
	21 - 45	56	102	6 - 30								40	102					
23	6 - 30	39	147	3 - 15				22	73									
	11 - 23	28	73	6 - 30				38	147									
-	-	-	30	-				-	-	10	11 - 23	29	31	3 - 15	26	31		
											21 - 45	56	62		6 - 30	42	62	
							16			11 - 23	28	49	3 - 15	23	49			
										21 - 45	55	99	6 - 30	40	99			
			23	6 - 30			39	142	3 - 15	22	71							
				11 - 23			28	71	6 - 30	38	142							
			-	-			-	-	-	-	-	21 - 45	55	142	-	-		
			3 (80)	3 (80)			2	155	-	140	56	16	21 - 45	55	70	3 - 15	28	35
-	-	-											6 - 30	45	70			
23	11 - 23	28						51	3 - 15	25	51							
	21 - 45	55			101	6 - 30		42	101									
16	21 - 45	55			67	3 - 15	28	34										
	-	-			-	6 - 30	45	67										
23	11 - 23	28			48	3 - 15	25	48										
	21 - 45	55			97	6 - 30	42	97										
4 (100)	4 (100)	2	240	-	225	90	16	21 - 45	56	60	3 - 15	28	30					
								-	-	-		6 - 30	45	60				
							23	11 - 23	29	43	3 - 15	25	43					
			21 - 45	56	86	6 - 30		42	86									
			16	11 - 23	-	-	3 - 15	28	28									
				21 - 45	56	56	6 - 30	45	56									
		21 - 45		56	81	3 - 15	25	40										
		23	-	-	-	6 - 30	42	81										
			-	-	-	21 - 45	59	81										
			-	-	-	-	-	-										

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
2. Allowable pressure drops are based on dynamic stability calculations.
3. See CH3000 for orifice size to obtain rated C_v.
4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (Metric) Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Standard Trim

Models 41415 and 41425

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

VALVE							ACTUATOR SIZE	AIR TO OPEN			AIR TO CLOSE			
SIZE inches (mm)		Travel in	LIN C _v factor		= % C _v factor			Bench range	SUPPLY	Allow. Delta P	Bench range	SUPPLY	Allow. Delta P	
150/600	900/1500		1	0.4	1	0.4								psi
6 (150)	6 (150)	2	400	-	360	144	16	21 - 45	60	71	3 - 15	29	20	
								-	-	-	6 - 30	45	46	
							23	11 - 23	32	60	3 - 15	26	31	
								21 - 45	60	102	6 - 30	42	68	
			1.5	-	165	-	-	10	21 - 45	-	-	3 - 15	34	4
								-	-	-	11 - 23	43	20	
		16						21 - 45	60	28	3 - 15	29	8	
								-	-	-	11 - 23	38	34	
		23						11 - 23	40	60	3 - 15	26	12	
								-	-	-	11 - 23	35	49	
8 (200)	8 (200)	2.5	640	-	575	230	16	21 - 45	60	37	3 - 15	33	12	
								-	-	-	6 - 30	49	29	
							23	21 - 45	60	70	3 - 15	29	20	
								-	-	-	6 - 30	45	45	
			1.5	-	415	-	-	16	21 - 45	60	9	3 - 15	33	4
								-	-	-	11 - 23	42	22	
		23						21 - 45	60	27	3 - 15	29	7	
								-	-	-	11 - 23	37	32	
10 (250)	10 (250)	1.5	-	510	-	-	16	21 - 45	60	6	3 - 15	33	3	
								-	-	-	6 - 30	49	7	
								-	-	-	11 - 23	42	14	
							23	21 - 45	60	9	3 - 15	29	5	
								-	-	-	6 - 30	45	11	
								-	-	-	11 - 23	37	21	
12 (300)	12 (300)	2	-	770	-	-	16	21 - 45	60	3	6 - 30	49	5	
								-	-	-	11 - 23	42	10	
							23	21 - 45	60	6	6 - 30	45	7	
								-	-	-	11 - 23	37	14	
16 (400)	16 (400)	2.5	-	1280	-	-	23	21 - 45	60	2	6 - 30	45	4	
								-	-	-	11 - 23	37	8	

- Notes:
1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Allowable pressure drops are based on dynamic stability calculations.
 3. See CH3000 for orifice size to obtain rated C_v.
 4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (Metric) Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Single Stage Lo-dB/Anti-Cavitation Trim (including Diffuser)

Models 41435 and 41445

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

VALVE			C _v Lo-dB	ACTUATOR SIZE	AIR TO OPEN			AIR TO CLOSE			
SIZE inches (mm)		Travel inches			Bench range	SUPPLY	Allow. Delta P	Bench range	SUPPLY	Allow. Delta P	
ANSI class											psi
150/600	900/1500										
-	2 (50)	0.8	10 13 17 23 30	6	11 - 23	28	28	11 - 23	36	28	
					21 - 45	54	56	6 - 30	44	56	
				10	11 - 23	28	47	3 - 15	24	47	
					21 - 45	54	94	6 - 30	40	94	
					16	6 - 30	37	150	3 - 15	22	75
						11 - 23	27	75	6 - 30	39	150
2 (50)	-	1.5	25 32 43 58 72	10	11 - 23	29	31	3 - 15	26	31	
					21 - 45	56	62	6 - 30	42	62	
				16	11 - 23	28	50	3 - 15	23	50	
					21 - 45	56	100	6 - 30	40	100	
					23	6 - 30	39	143	3 - 15	22	72
						11 - 23	28	72	6 - 30	38	143
3 (80)	3 (80)	2.0	40 54 72 95 125	16	21 - 45	55	68	3 - 15	28	34	
					-	-	-	21 - 45	61	68	
				23	11 - 23	28	49	3 - 15	25	49	
					21 - 45	55	98	6 - 30	42	98	
4 (100)	4 (100)	2.0	65 85 110 150 195	16	21 - 45	56	58	3 - 15	28	29	
					-	-	-	6 - 30	45	58	
				23	11 - 23	29	41	3 - 15	25	41	
					21 - 45	56	83	6 - 30	42	83	
6 (150)	6 (150)	2.5	100 130 175 230 300	16	21 - 45	59	83	3 - 15	29	26	
					-	-	-	11 - 23	38	41	
				23	-	-	-	6 - 30	45	60	
					11 - 23	30	59	3 - 15	26	41	
					21 - 45	59	119	11 - 23	35	59	
					-	-	-	6 - 30	42	87	
8 (200)	8 (200)	2.5	165 220 290 380	16	21 - 45	60	60	3 - 15	33	16	
					-	-	-	11 - 23	42	30	
				23	-	-	-	6 - 30	49	40	
					11 - 23	-	-	3 - 15	29	26	
					21 - 45	59	86	11 - 23	37	43	
					-	-	-	6 - 30	45	60	
10 (250)	10 (250)	2.5	225 290 390	16	21 - 45	60	39	3 - 15	33	10	
					-	-	-	11 - 23	42	27	
				23	-	-	-	6 - 30	49	24	
					11 - 23	-	-	3 - 15	29	16	
					21 - 45	60	58	11 - 23	37	38	
					-	-	-	6 - 30	45	37	
12 (300)	12 (300)	2.5	480 630	16	21 - 45	60	25	3 - 15	33	6	
					-	-	-	11 - 23	42	29	
				23	-	-	-	6 - 30	49	15	
					21 - 45	60	38	3 - 15	29	10	
					-	-	-	11 - 23	37	42	
					-	-	-	6 - 30	45	24	
16 (400)	16 (400)	2.5	780	16	21 - 45	60	15	3 - 15	33	4	
					-	-	-	11 - 23	42	18	
				23	-	-	-	6 - 30	49	9	
					12 - 45	60	22	3 - 15	29	6	
					-	-	-	11 - 23	37	27	
					-	-	-	6 - 30	45	14	

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

2. Allowable pressure drops are based on dynamic stability calculations.

3. See CH3000 for orifice size to obtain rated C_v.

4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (Metric) Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Standard Trim with 37/38 Spring-Diaphragm & 84/85/86 Cylinder Actuators

Models 41415 and 41425

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

VALVE					ACTUATOR SIZE	AIR TO OPEN			ACTUATOR SIZE	AIR TO CLOSE							
SIZE inches (mm)		Travel inches	LIN C _v	% C _v		Bench range	SUPPLY psi	Allow. Delta P bar		Bench range	SUPPLY psi	Allow. Delta P bar					
150/600	900/1500																
ANSI class																	
10 (250)	10 (250)	3.0	1000	900	18	9 - 41	59	52	18	7 - 38	56	45					
						10 - 50	60	15		4 - 45	60	26					
					24	9 - 44	60	66	24	6 - 40	55	55					
						6 - 40	59	86		4 - 50	60	36					
					154	15 - 22	60	76	154	15 - 22	60	58					
						25 - 37	60	86		25 - 37	60	71					
					314	12 - 18	60	92	314	12 - 18	60	97					
						25 - 37	60	153		25 - 37	60	129					
					12 (300)	12 (300)	3.75	1400	1260	18	9 - 28	40	19	18	6 - 27	44	24
											-	-	-		3 - 45	60	12
										24	11 - 50	60	14	24	6 - 28	42	34
											6 - 28	42	36		3 - 25	38	16
154	15 - 24	60	63	154						15 - 24	60	39					
	25 - 40	60	57							25 - 40	60	59					
314	12 - 19	60	123	314						12 - 19	60	65					
	25 - 40	53	95							25 - 40	53	108					
16 (400)	16 (400)	4.0	2000	-						154	15 - 25	60	42	154	15 - 25	60	25
											25 - 42	60	36		25 - 42	60	39
					314	12 - 20	60	81	314	12 - 20	60	42					
						25 - 42	53	59		25 - 42	53	72					
		5.0	2500	2250	154	15 - 28	60	44	154	15 - 28	60	28					
						25 - 46	60	36		25 - 46	60	42					
					314	12 - 22	60	85	314	12 - 22	60	46					
						25 - 46	53	59		25 - 46	53	78					

- Notes:
1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Allowable pressure drops are based on dynamic stability calculations.
 3. See CH3000 for orifice size to obtain rated C_v.
 4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (Metric) Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Single Stage Lo-dB/Anti-Cavitation Trim (including Diffuser)
with 37/38 Spring-Diaphragm & 84/85/86 Cylinder Actuators
Models 41435 and 41445

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

VALVE				ACTUATOR SIZE	AIR TO OPEN			ACTUATOR SIZE	AIR TO CLOSE		
SIZE inches (mm)		Travel inches	C _v Lo-dB		Bench range	SUPPLY	Allow. Delta P		Bench range	SUPPLY	Allow. Delta P
150/600	900/1500										
ANSI class											
8 (200)	8 (200)	3.0	500	18	9 - 41	55	69	18	5 - 46	60	65
					10 - 40	53	63		10 - 43	60	71
				24	6 - 40	55	115	24	6 - 40	55	106
					15 - 22	60	108		15 - 22	60	81
				154	25 - 37	60	121	154	25 - 37	60	100
					12 - 18	60	211		12 - 18	60	135
				314	25 - 37	53	212	314	25 - 37	53	183
10 (250)	10 (250)	3.5	650 520	18	14 - 30	38	18	18	6 - 30	47	39
					13 - 27	34	15		5 - 43	60	40
				24	9 - 30	40	44	24	6 - 30	44	55
					12 - 48	60	45		7 - 28	42	45
				154	15 - 24	60	62	154	15 - 24	60	84
					25 - 40	60	79		25 - 40	60	92
				314	12 - 19	60	103	314	12 - 19	60	165
					25 - 40	53	144		25 - 40	53	153
12 (300)	12 (300)	4.0	840	18	12 - 30	41	19	18	6 - 30	48	30
					10 - 34	49	30		-	-	-
				24	6 - 30	45	44	24	6 - 30	45	43
					15 - 25	60	68		15 - 25	60	40
				154	25 - 42	60	57	154	25 - 42	60	64
		12 - 20	60		132	12 - 20	60		67		
		5.0	1100	154	15 - 27	60	74	154	15 - 27	60	45
					25 - 46	60	57		25 - 46	60	76
				314	12 - 22	60	153	314	12 - 22	60	74
					25 - 46	53	95		25 - 46	53	140
16 (400)	16 (400)	4.0	1030 1360	18	12 - 30	42	13	18	6 - 30	48	18
					10 - 34	51	21		-	-	-
				24	6 - 30	47	33	24	6 - 30	45	25
					15 - 25	60	36		15 - 25	60	25
				154	25 - 42	60	36	154	25 - 42	60	39
		12 - 20	60		42	12 - 20	60		34		
		6.0	1800	154	15 - 30	60	46	154	15 - 30	60	30
					25 - 50	60	36		25 - 50	60	49
				314	12 - 24	60	53	314	12 - 24	60	42
					25 - 50	53	53		25 - 50	53	42

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
2. Allowable pressure drops are based on dynamic stability calculations.
3. See CH3000 for orifice size to obtain rated C_v.
4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (Metric) Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Standard Trim

Models 41415 and 41425

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE						Actuator Size	AIR TO OPEN			AIR TO CLOSE						
SIZE inches (mm)		Travel	LIN C _v factor		Equal % C _v factor		Bench range	Supply	Allow. Delta P	Bench range	Supply	Allow. Delta P				
ANSI class			inches	1	0.4								1	0.4	psi	bar
150/600	900/1500	1		0.4	1		0.4									
-	2 (50)	0.8	40	-	35	14	6	11 - 23	33	29	3 - 15	-	-			
								21 - 45	59	57	6 - 30	44	23			
							10	11 - 23	30	48	3 - 15	23	9			
								21 - 45	58	96	6 - 30	41	74			
							16	6 - 30	42	153	3 - 15	22	50			
								11 - 23	30	77	6 - 30	39	119			
			23	6 - 30	42	220	-	-	-							
				11 - 23	30	110	-	-	-							
			-	-	-	16	-	-	-	6	11 - 23	32	28	3 - 15	-	-
											21 - 45	58	56	6 - 30	44	34
										10	11 - 23	30	46	3 - 15	23	14
											21 - 45	57	93	6 - 30	41	91
16	6 - 30	41								148	3 - 15	22	72			
	11 - 23	29								74	6 - 30	39	145			
2 (50)	-	1.5	75	-	65	26	10	11 - 23	30	32	3 - 15	26	5			
								21 - 45	58	64	6 - 30	42	47			
							16	11 - 23	30	51	3 - 15	23	30			
								21 - 45	58	102	6 - 30	39	87			
							23	6 - 30	41	147	3 - 15	22	59			
								11 - 23	29	73	6 - 30	39	126			
			-	-	-	30	-	-	-	10	11 - 23	30	31	3 - 15	26	5
											21 - 45	58	62	6 - 30	42	47
										16	11 - 23	30	49	3 - 15	23	30
											21 - 45	58	99	6 - 30	39	87
										23	6 - 30	41	142	3 - 15	22	59
											11 - 23	29	71	6 - 30	39	126
3 (80)	3 (80)	2.0	155	-	140	56	16	21 - 45	58	70	3 - 15	28	11			
								-	-	-	6 - 30	45	59			
							23	11 - 23	30	51	3 - 15	25	32			
								21 - 45	58	101	6 - 30	42	90			
							16	21 - 45	57	67	3 - 15	28	13			
								-	-	-	6 - 30	45	67			
			23	11 - 23	29	48	3 - 15	25	38							
				21 - 45	57	97	6 - 30	42	97							
			4 (100)	4 (100)	2.0	240	-	225	90	16	21 - 45	58	60	3 - 15	28	9
											-	-	-	6 - 30	45	46
										23	11 - 23	30	43	3 - 15	25	25
											21 - 45	58	86	6 - 30	42	76
16	11 - 23	-								-	3 - 15	28	9			
	21 - 45	58								56	6 - 30	45	46			
23	21 - 45	57				81	3 - 15	25	25							
	-	-				-	6 - 30	42	76							
-	-	-				-	21 - 45	58	81							

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
2. Allowable pressure drops are based on dynamic stability calculations.
3. See CH3000 for orifice size to obtain rated C_v.
4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (Metric) Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Standard Trim

Models 41415 and 41425

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE							Actuator Size	AIR TO OPEN			AIR TO CLOSE			
SIZE inches (mm)		Travel	LIN C _v factor		Equal % C _v factor			Bench range	Supply	Allow. Delta P	Bench range	Supply	Allow. Delta P	
ANSI class			inches	1	0.4	1								0.4
150/600	900/1500	1		0.4	1	0.4								
6 (150)	6 (150)	2.0	400	-	360	144	16	21 - 45	59	56	3 - 15	-	-	
								-	-	-	6 - 30	45	25	
							23	11 - 23	33	60	3 - 15	26	11	
								21 - 45	59	80	6 - 30	42	48	
		1.5	-	165	-	-	-	10	21 - 45	-	-	3 - 15	-	-
									-	-	-	11 - 23	44	13
								16	21 - 45	59	26	3 - 15	-	-
									-	-	-	11 - 23	38	26
23	11 - 23	42	60	3 - 15	26	4								
	-	-	-	11 - 23	35	42								
8 (200)	8 (200)	2.5	640	-	575	230	16	21 - 45	59	15	3 - 15	-	-	
								-	-	-	6 - 30	49	7	
							23	21 - 45	59	54	3 - 15	-	-	
								-	-	-	6 - 30	45	22	
		1.5	-	415	-	-	-	16	21 - 45	59	1	3 - 15	-	-
									-	-	-	11 - 23	42	14
								23	21 - 45	59	24	3 - 15	-	-
									-	-	-	11 - 23	38	24
10 (250)	10 (250)	1.5	-	510	-	-	16	21 - 45	-	-	3 - 15	-	-	
								-	-	-	6 - 30	49	2	
							23	21 - 45	59	4	3 - 15	-	-	
								-	-	-	6 - 30	45	6	
		-	-	-	-	-	-	-	-	-	-	11 - 23	38	16
									-	-	-	-	-	-
								16	21 - 45	-	-	6 - 30	49	1
									-	-	-	11 - 23	42	6
23	21 - 45	59	2	6 - 30	45	4								
	-	-	-	11 - 23	38	11								
16 (400)	16 (400)	2.5	-	1280	-	-	23	21 - 45	-	-	6 - 30	45	2	
								-	-	-	11 - 23	38	6	

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
2. Allowable pressure drops are based on dynamic stability calculations.
3. See CH3000 for orifice size to obtain rated C_v.
4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (Metric) Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Single Stage Lo-dB/Anti-Cavitation Trim (including Diffuser)

Models 41435 and 41445

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE			ACTUATOR SIZE	AIR TO OPEN			AIR TO CLOSE						
SIZE inches (mm)		Travel inches		C _v Lo-dB	Bench range	SUPPLY	Allow. Delta P	Bench range	SUPPLY	Allow. Delta P			
150/600	900/1500					psi			bar		psi	bar	
ANSI class													
-	2 (50)	0.8	10	6	11 - 23	32	28	11 - 23	36	28			
					21 - 45	58	56	6 - 30	44	34			
				10	11 - 23	30	47	3 - 15	23	14			
					21 - 45	58	94	11 - 23	32	47			
					-	-	-	6 - 30	41	91			
					6 - 30	41	150	3 - 15	22	72			
			16	11 - 23	29	75	6 - 30	39	145				
				-	-	-	-	-	-				
			2 (50)	-	1.5	25	10	11 - 23	30	31	3 - 15	26	5
								21 - 45	58	62	11 - 23	35	31
							16	-	-	-	6 - 30	42	47
								11 - 23	30	50	3 - 15	23	30
21 - 45	58	100						11 - 23	32	50			
-	-	-						6 - 30	39	87			
23	6 - 30	41				143	3 - 15	22	59				
	11 - 23	29				72	11 - 23	30	72				
3 (80)	3 (80)	2.0				40	16	-	-	-	6 - 30	39	126
								21 - 45	57	68	3 - 15	28	11
							23	-	-	-	11 - 23	36	34
								11 - 23	29	49	3 - 15	25	38
			21 - 45	58	98			11 - 23	33	49			
			-	-	-			6 - 30	42	98			
			54	72	95	125	16	-	-	-	11 - 23	36	34
								21 - 45	57	68	3 - 15	28	11
							23	-	-	-	11 - 23	36	34
								11 - 23	29	49	3 - 15	25	38
								21 - 45	58	98	11 - 23	33	49
								-	-	-	6 - 30	42	98
4 (100)	4 (100)	2.0	65	16	-	-	-	11 - 23	36	34			
					21 - 45	58	58	3 - 15	28	9			
				23	-	-	-	11 - 23	36	34			
					11 - 23	30	41	3 - 15	25	25			
					21 - 45	58	83	11 - 23	33	41			
					-	-	-	6 - 30	42	76			
			85	110	150	195	16	-	-	-	11 - 23	36	34
								21 - 45	58	58	3 - 15	28	9
							23	-	-	-	11 - 23	36	34
								11 - 23	30	41	3 - 15	25	25
								21 - 45	58	83	11 - 23	33	41
								-	-	-	6 - 30	42	76
6 (150)	6 (150)	2.5	100	16	-	-	-	11 - 23	36	34			
					21 - 45	59	67	3 - 15	26	14			
				23	-	-	-	11 - 23	36	34			
					11 - 23	32	59	3 - 15	26	14			
					21 - 45	58	97	11 - 23	35	59			
					-	-	-	6 - 30	42	62			
			130	175	230	300	16	-	-	-	11 - 23	36	34
								21 - 45	59	67	3 - 15	26	14
							23	-	-	-	11 - 23	36	34
								11 - 23	32	59	3 - 15	26	14
								21 - 45	58	97	11 - 23	35	59
								-	-	-	6 - 30	42	62
8 (200)	8 (200)	2.5	165	16	-	-	-	11 - 23	36	34			
					21 - 45	59	66	3 - 15	26	14			
				23	-	-	-	11 - 23	36	34			
					11 - 23	-	-	11 - 23	38	43			
					21 - 45	59	66	6 - 30	45	30			
					-	-	-	6 - 30	45	30			
			220	290	380	-	16	-	-	-	11 - 23	36	34
								21 - 45	59	66	3 - 15	26	14
							23	-	-	-	11 - 23	36	34
								11 - 23	-	-	11 - 23	38	43
								21 - 45	59	66	6 - 30	45	30
								-	-	-	6 - 30	45	30
10 (250)	10 (250)	2.5	225	16	-	-	-	11 - 23	36	34			
					21 - 45	59	20	3 - 15	27	19			
				23	-	-	-	11 - 23	36	34			
					11 - 23	-	-	11 - 23	38	43			
					21 - 45	59	47	6 - 30	45	19			
					-	-	-	6 - 30	45	19			
			290	390	-	-	16	-	-	-	11 - 23	36	34
								21 - 45	59	20	3 - 15	27	19
							23	-	-	-	11 - 23	36	34
								11 - 23	-	-	11 - 23	38	43
								21 - 45	59	47	6 - 30	45	19
								-	-	-	6 - 30	45	19
12 (300)	12 (300)	2.5	480	16	-	-	-	11 - 23	36	34			
					21 - 45	59	13	3 - 15	27	19			
				23	-	-	-	11 - 23	36	34			
					11 - 23	-	-	11 - 23	38	43			
					21 - 45	59	33	6 - 30	45	12			
					-	-	-	6 - 30	45	12			
			630	-	-	-	16	-	-	-	11 - 23	36	34
								21 - 45	59	13	3 - 15	27	19
							23	-	-	-	11 - 23	36	34
								11 - 23	-	-	11 - 23	38	43
								21 - 45	59	33	6 - 30	45	12
								-	-	-	6 - 30	45	12
16 (400)	16 (400)	2.5	780	16	-	-	-	11 - 23	36	34			
					21 - 45	59	8	3 - 15	27	19			
				23	-	-	-	11 - 23	36	34			
					11 - 23	-	-	11 - 23	38	43			
					21 - 45	59	15	6 - 30	45	20			
					-	-	-	6 - 30	45	20			
			-	-	-	-	16	-	-	-	11 - 23	36	34
								21 - 45	59	8	3 - 15	27	19
							23	-	-	-	11 - 23	36	34
								11 - 23	-	-	11 - 23	38	43
								21 - 45	59	15	6 - 30	45	20
								-	-	-	6 - 30	45	20

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
2. Allowable pressure drops are based on dynamic stability calculations.

3. See CH3000 for orifice size to obtain rated C_v.
4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (Metric) Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Standard Trim with 37/38 Spring-Diaphragm & 84/85/86 Cylinder Actuators

Models 41415 and 41425

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE						Actuator Size	AIR TO OPEN			AIR TO CLOSE			
SIZE inches (mm)		Travel	LIN C _v factor		Equal % C _v factor		Bench range	Supply	Allow. Delta P	Bench range	Supply	Allow. Delta P	
ANSI class			1	0.4	1								0.4
150/600	900/1500	inches											
10 (250)	10 (250)	3.0	1000	-	900	360	18	9 - 41	60	42	7 - 38	57	30
								10 - 50	-	-	4 - 45	60	11
							24	9 - 44	60	54	6 - 40	55	40
								6 - 40	60	76	4 - 50	60	21
							154	15 - 22	60	76	15 - 22	60	45
								25 - 37	60	79	25 - 37	60	71
							314	12 - 18	60	149	12 - 18	60	84
								25 - 37	60	139	25 - 37	60	129
12 (300)	12 (300)	3.75	1400	-	1260	500	18	9 - 28	44	19	6 - 27	44	15
								-	-	-	3 - 45	60	3
							24	11 - 50	60	5	6 - 28	42	25
								6 - 28	45	36	3 - 25	38	7
							154	15 - 24	60	63	15 - 24	60	31
								25 - 40	60	49	25 - 40	60	59
							314	12 - 19	60	123	12 - 19	60	57
								25 - 40	54	87	25 - 40	54	108
16 (400)	16 (400)	4.0	2000	-	-	-	154	15 - 25	60	41	15 - 25	60	20
								25 - 42	60	31	25 - 42	60	38
							314	12 - 20	60	81	12 - 20	60	37
								25 - 42	54	54	25 - 42	54	72
		5.0	2500	-	2250	900	154	15 - 28	60	41	15 - 28	60	23
								25 - 46	60	31	25 - 46	60	42
							314	12 - 22	60	81	12 - 22	60	41
								25 - 46	54	54	25 - 46	54	78

- Notes:
1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Allowable pressure drops are based on dynamic stability calculations.
 3. See CH3000 for orifice size to obtain rated C_v.
 4. Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41405 Series (Metric) Air to Open and Air to Close, Flow to Close

Pilot Balanced Construction

Single Stage Lo-dB/Anti-Cavitation Trim (including Diffuser)
with 37/38 Spring-Diaphragm & 84/85/86 Cylinder Actuators
Models 41435 and 41445

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE			C _v Lo-dB	Actuator Size	AIR TO OPEN			AIR TO CLOSE		
SIZE inches (mm)		Travel			Bench range	Supply	Allow. Delta P	Bench range	Supply	Allow. Delta P
ANSI class										
150/600	900/1500									
8 (200)	8 (200)	3.0	500	18	9 - 41	58	69	5 - 46	60	35
					10 - 40	57	63	10 - 43	60	71
				24	6 - 40	58	115	6 - 40	55	76
					15 - 22	60	79	15 - 22	60	62
				314	25 - 37	60	102	25 - 37	60	100
					12 - 18	60	85	12 - 18	60	116
					25 - 37	54	85	25 - 37	54	183
10 (250)	10 (250)	3.5	520 650	18	14 - 30	42	18	6 - 30	48	29
					13 - 27	38	15	5 - 43	60	21
				24	9 - 30	42	44	6 - 30	44	49
					12 - 48	60	36	7 - 28	42	45
				154	15 - 24	60	84	15 - 24	60	48
					25 - 40	60	79	25 - 40	60	79
				314	12 - 19	60	165	12 - 19	60	89
					25 - 40	54	139	25 - 40	54	144
12 (300)	12 (300)	4.0	840	18	12 - 30	45	19	6 - 30	48	18
					10 - 34	52	30	-	-	-
				24	6 - 30	48	44	6 - 30	45	31
					15 - 25	60	66	15 - 25	60	32
				154	25 - 42	60	49	25 - 42	60	60
					12 - 20	60	132	12 - 20	60	59
		5.0	1100	154	25 - 42	54	87	25 - 42	54	117
					15 - 27	60	66	15 - 27	60	36
				314	25 - 46	60	49	25 - 46	60	67
					12 - 22	60	153	12 - 22	60	66
					25 - 46	54	87	25 - 46	54	140
16 (400)	16 (400)	4.0	1030 1360	18	12 - 30	46	13	6 - 30	48	11
					10 - 34	55	21	-	-	-
				24	6 - 30	51	32	6 - 30	45	18
					15 - 25	60	36	15 - 25	60	20
				154	25 - 42	60	31	25 - 42	60	38
					12 - 20	60	42	12 - 20	60	34
		6.0	1800	154	25 - 42	54	42	25 - 42	54	34
					15 - 30	60	41	15 - 30	60	25
				314	25 - 50	60	31	25 - 50	60	46
					12 - 24	60	53	12 - 24	60	42
					25 - 50	54	53	25 - 50	54	42

- Notes:
- Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 - Allowable pressure drops are based on dynamic stability calculations.
 - See CH3000 for orifice size to obtain rated C_v.
 - Allowable pressure drops are applicable for both Class IV and Class V leakage.

Allowable Pressure Drops for 41505 Series (Metric) Air to Open and Air to Close, Flow to Open

Metal Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE					
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply psi	Shutoff Delta P bar	Actuator size	Bench range	Supply psi	Shutoff Delta P bar		
inches	mm															
8 10x8 12x8	200 250x200 300x200	1500	640	230 575	165 220 290 380	155 250	16	3 - 15	25	—	16	3 - 15	20	—		
								6 - 30	40	8		3 - 15	25	23		
								11 - 23	35	36		6 - 30	40	16		
								21 - 45	55	91		6 - 30	45	44		
								3 - 15	25	—		3 - 15	20	4		
								6 - 30	40	23		3 - 15	25	45		
			23	11 - 23	35	64	6 - 30	40	35							
				21 - 45	55	141	6 - 30	45	75							
				18	6 - 48	55	28	18	3 - 13	20	21					
					15 - 50	55	107		3 - 35	50	75					
				24	6 - 40	45	65	24	6 - 40	50	81					
					—	—	—		6 - 40	55	131					
154	15 - 22	35	49	154	15 - 22	40	62									
	25 - 37	55	99		60	161										
	314	12 - 18	35		96	314	25 - 37	50	37							
		25 - 37	55		228		60	86								
314	—	—	—	314	12 - 18	30	96									
	—	—	—		50	259										
	—	—	—		50	101										
	—	—	—		60	203										
10 250	1500	1000	510	—	225 290 390	230	16	6 - 30	40	3	16	3 - 15	20	—		
								11 - 23	35	29		3 - 15	25	17		
								21 - 45	55	79		6 - 30	40	10		
								—	—	—		6 - 30	45	36		
								23	6 - 30	40		17	23	3 - 15	20	—
									11 - 23	35		53		3 - 15	25	36
			23	21 - 45	55	123	23	6 - 30	40	27						
				—	—	—		6 - 30	45	64						
			18	6 - 48	55	21	18	3 - 13	25	45						
				15 - 50	55	92		3 - 35	50	63						
			24	6 - 40	45	54	24	6 - 40	50	69						
				—	—	—		6 - 40	55	115						
		154	15 - 22	35	39	154	15 - 22	50	95							
			25 - 37	55	84		60	139								
			314	12 - 18	35		81	314	25 - 37	50	28					
				25 - 37	55		199		60	73						
		314	—	—	—	314	12 - 18	30	81							
			—	—	—		50	259								
			—	—	—		50	86								
			—	—	—		60	176								
		18	6 - 30	35	21	18	3 - 15	25	31							
			—	—	—		6 - 30	45	60							
		24	13 - 50	55	144	24	6 - 30	40	65							
			—	—	—		6 - 30	45	108							
154	15 - 24	35	39	154	15 - 24	50	89									
	25 - 40	55	84		60	134										
	314	12 - 19	35		81	314	25 - 40	50	19							
		25 - 40	55		199		60	63								
314	—	—	—	314	12 - 19	30	72									
	—	—	—		60	259										
	—	—	—		50	67										
	—	—	—		60	158										
314	—	—	—	314	—	—	—									
	—	—	—		—	—	—									
	—	—	—		—	—	—									
	—	—	—		—	—	—									

Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.

3. See CH3000 for orifice size and travel required to obtain rated C_v.
4. 41505 Series Leakage: Class II (2" to 4") and Class III (6" to 16").

Allowable Pressure Drops for 41505 Series (Metric) Air to Open and Air to Close, Flow to Open

Metal Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE			
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P
psi	bar	psi							bar					
inches	mm													
12 16x12	300 400x300	1500	770	-	480 630	375	16	11 - 23	35	15	16	3 - 15	20	-
								21 - 45	55	48		3 - 15	25	8
								-	-	-		6 - 30	40	4
								-	-	-		6 - 30	45	20
								-	-	-		3 - 15	20	-
								-	-	-		3 - 15	25	21
							23	6 - 30	40	8	23	6 - 30	40	14
								11 - 23	35	31		6 - 30	45	38
								21 - 45	55	78		3 - 15	25	19
								-	-	-		3 - 30	45	34
								-	-	-		6 - 28	40	49
								-	-	-		15 - 24	50	53
			18	6 - 27	35	11	18	3 - 14	25	19				
				-	-	-		3 - 30	45	34				
				6 - 28	35	32		24	6 - 28	40	49			
				15 - 24	35	22		154	15 - 24	60	81			
				25 - 40	55	51			25 - 40	50	6			
				12 - 19	35	49			25 - 40	60	35			
			25 - 40	55	125	314	12 - 19		40	99				
			-	-	-		12 - 19		60	215				
			-	-	-		314		25 - 40	50	34			
			-	-	-			25 - 40	60	92				
			-	-	-			18	3 - 15	25	12			
			-	-	-				18	6 - 30	45	29		
-	-	-	24	3 - 15	40	117								
-	-	-		24	6 - 30	45				63				
-	-	-			154	15 - 25	50			51				
-	-	-				154	60			79				
-	-	-					314	25 - 42		50	3			
-	-	-						314	60	32				
-	-	-	314						12 - 20	40	96			
-	-	-		314					60	212				
-	-	-			314				25 - 42	50	28			
-	-	-				314			60	86				
-	-	-					154		15 - 27	50	44			
-	-	-						154	60	72				
-	-	-	154						60	20				
-	-	-		314					25 - 46	-	-			
-	-	-			314				40	84				
-	-	-				314			60	200				
-	-	-					314		50	4				
-	-	-						314	60	62				
-	-	-	154						15 - 27	35	22			
-	-	-		154					25 - 46	55	51			
-	-	-			314				12 - 22	35	49			
-	-	-				314			25 - 46	55	125			
-	-	-					314		-	-	-			
-	-	-						314	-	-	-			
-	-	-	314						-	-	-			
-	-	-		314					-	-	-			
-	-	-			314				-	-	-			

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41505 Series Leakage: Class II (2" to 4") and Class III (6" to 16").

Allowable Pressure Drops for 41505 Series (Metric) Air to Open and Air to Close, Flow to Open

Metal Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE								
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P					
psi	bar	psi							bar										
inches	mm																		
16	400	1500	1280	-	780	500	16	11 - 23	35	9	16	3 - 15	25	3					
								21 - 45	55	35		3 - 15	30	16					
								-	-	-		6 - 30	40	-					
							23	6 - 30	40	3	23	3 - 15	20	-					
								11 - 23	35	22		3 - 15	25	13					
								21 - 45	55	59		6 - 30	40	8					
							2000	-	1030 1360	800	18	10 - 34	40	22	18	3 - 15	30	19	
												-	-	-		6 - 30	45	19	
												6 - 30	35	22		3 - 15	25	25	
											24	-	-	-	24	6 - 30	45	47	
												15 - 25	35	14		154	15 - 25	50	37
												25 - 42	55	37			25 - 42	60	61
			12 - 20	35	36	25 - 42					60	22							
			314	25 - 42	55	98					314	-	-	-					
				-	-	-						12 - 20	40	74					
				-	-	-						60	169						
			2500	900	-	-					154	15 - 28	35	14	154	15 - 28	50	31	
												25 - 46	55	37		60	55		
							12 - 22	35	36	25 - 46		60	12						
							314	25 - 46	55	98	314	-	-	-					
								-	-	-		12 - 22	40	64					
								-	-	-		60	160						
							154	15 - 30	35	14	154	15 - 30	50	26					
								25 - 50	55	37		60	49						
12 - 24	35	36						25 - 50	60	2									
314	25 - 50	55					98	314	-	-	-								
	-	-					-		12 - 24	40	55								
	-	-					-		60	150									
-	-	1800	1105	-	-	-	-	25 - 50	60	26									

- Notes:
1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41505 Series Leakage: Class II (2" to 4") and Class III (6" to 16").

Allowable Pressure Drops for 41505 Series (Metric) Air to Open and Air to Close, Flow to Open

Metal Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE											
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply	Allow. Delta P	Actuator Size	Bench range	Supply	Allow. Delta P								
inches	mm	psi							bar	psi			bar									
2	50	600	30 75	26 65	25 32 43 58 72	30 43 53	10	3 - 15	25	-	10	3 - 15	20	-								
3 x 2 4 x 2	80 x 50 100 x 50	1500						6 - 30	40	18		3 - 15	25	62								
								11 - 23	35	89		6 - 30	40	36								
								21 - 45	55	191		6 - 30	45	100								
							16	3 - 15	25	-	3 - 15	20	13									
								6 - 30	40	74	3 - 15	25	116									
								11 - 23	35	155	6 - 30	40	92									
21 - 45	55	258					6 - 30	45	172													
2	50	1500					16 40	14 35	10 13 17 23 30	12 19 24	10	3 - 15	25	-	10	3 - 15	20	-				
												6 - 30	40	36		3 - 15	25	78				
			11 - 23	35	111	6 - 30						40	116									
			21 - 45	55	229	6 - 30						45	175									
			16	3 - 15	25	9					3 - 15	20	16									
				6 - 30	40	93					3 - 15	25	135									
				11 - 23	35	187	6 - 30	40	195													
				21 - 45	55	258	6 - 30	45	258													
			3 4 x 3 6 x 3	80 100 x 80 150 x 80	1500	60 155	56 140	40 54 72 95 125	50 75 95	16	3 - 15	25	-	16	3 - 15	20	-					
											6 - 30	40	30		3 - 15	25	75					
											11 - 23	35	101		6 - 30	40	50					
											21 - 45	55	213		6 - 30	45	114					
23	3 - 15	25								-	3 - 15	20	15									
	6 - 30	40								75	3 - 15	25	117									
	11 - 23	35								156	6 - 30	40	93									
	21 - 45	55								258	6 - 30	45	174									
	4 6 x 4 8 x 4	100 150 x 100 200 x 100								1500	95 240	90 225	65 85 110 150 195	72 105 130	16	3 - 15	25	-	16	3 - 15	20	-
																6 - 30	40	14		3 - 15	25	47
11 - 23			35	75	6 - 30	40	28															
21 - 45			55	162	6 - 30	45	84															
23			3 - 15	25	-	3 - 15	20	4														
			6 - 30	40	48	3 - 15	25	87														
			11 - 23	35	117	6 - 30	40	67														
			21 - 45	55	243	6 - 30	45	131														
6 8 x 6 10 x 6			150 200 x 150 250 x 150	1500	400	144 360	100 130 175 230 300	96 150 190	16						3 - 15	25	-	16	3 - 15	20	-	
															6 - 30	40	-		3 - 15	25	20	
															11 - 23	35	39		6 - 30	40	8	
															21 - 45	55	107		6 - 30	45	48	
	23	3 - 15							25	-	3 - 15	20	-									
		6 - 30							40	21	3 - 15	25	52									
		11 - 23							35	76	6 - 30	40	37									
		21 - 45							55	161	6 - 30	45	88									

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

2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.

3. See CH3000 for orifice size and travel required to obtain rated C_v.

4. 41505 Series Leakage: Class II (2" to 4") and Class III (6" to 16").

Allowable Pressure Drops for 41505 Series (Metric) Air to Open and Air to Close, Flow to Open

Metal Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE						
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply	Allow. Delta P	Actuator Size	Bench range	Supply	Allow. Delta P			
inches	mm							psi	bar			psi	bar				
8 10 x 8 12 x 8	200 250 x 200 300 x 200	1500	640	230 575	165 220 290 380	155 250	16	3 - 15	25	-	16	3 - 15	20	-			
								6 - 30	40	-		3 - 15	25	-			
								11 - 23	35	-		6 - 30	40	-			
								21 - 45	55	70		6 - 30	45	21			
							23	3 - 15	25	-	23	3 - 15	20	-			
								6 - 30	40	-		3 - 15	25	22			
	11 - 23		35	41	6 - 30	40		11									
	21 - 45		55	107	6 - 30	45		52									
	10 x 8 12 x 8		250 x 200 300 x 200	1500	-	-	500	300	18	6 - 48	55	5	18	3 - 13	25	-	
										15 - 50	55	82		3 - 35	55	81	
									24	6 - 40	45	42	24	6 - 40	50	59	
										-	-	-		6 - 40	55	100	
		154							15 - 22	35	25	154	15 - 22	40	37		
									25 - 37	55	74		60	137			
	12 - 18		35		72	25 - 37	50	12									
	25 - 37		55		204	60	62										
314	-	-	-		314	12 - 18	30	72									
	-	-	-			50	258										
	-	-	-			25 - 37	50	77									
	-	-	-			60	179										
10	250	1500	510	-	225 290 390	230	16	-	-	-	16	3 - 15	20	-			
								6 - 30	40	-		3 - 15	25	-			
								11 - 23	35	-		6 - 30	40	15			
								21 - 45	55	58		6 - 30	45	40			
							23	-	-	-	23	3 - 15	20	-			
								6 - 30	40	-		3 - 15	25	16			
			11 - 23	35	33	6 - 30		40	6								
			21 - 45	55	96	6 - 30		45	43								
			1000	360 900	1500	-	-	-	-	18	6 - 48	55	-	18	3 - 13	25	-
											15 - 50	55	72		3 - 35	55	72
										24	6 - 40	45	34	24	6 - 40	50	49
											-	-	-		6 - 40	55	90
	154	15 - 22								35	18	154	15 - 22	40	73		
		25 - 37								55	62		60	118			
		12 - 18	35	60		25 - 37	50	7									
		25 - 37	55	178		60	51										
	314	-	-	-		314	12 - 18	30	60								
		-	-	-			50	241									
		-	-	-			25 - 37	50	64								
		-	-	-			60	155									
	250	1500	1500	-	-	520 650	350 420	18	6 - 30	35	-	18	3 - 15	25	-		
									-	-	-		6 - 30	45	39		
								24	13 - 50	55	113	24	6 - 30	40	44		
									-	-	-		6 - 30	45	85		
154								15 - 24	35	18	154	15 - 24	50	68			
								25 - 40	55	62		60	112				
				12 - 19	35	60	25 - 40	60	42								
				25 - 40	55	178	-	-									
314				-	-	-	314	12 - 19	30	51							
				-	-	-		60	258								
				-	-	-		25 - 40	50	46							
				-	-	-		60	136								

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

2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.

3. See CH3000 for orifice size and travel required to obtain rated C_v.

4. 41505 Series Leakage: Class II (2" to 4") and Class III (6" to 16").

Allowable Pressure Drops for 41505 Series (Metric) Air to Open and Air to Close, Flow to Open

Metal Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE									
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply	Allow. Delta P	Actuator Size	Bench range	Supply	Allow. Delta P						
inches	mm							psi	bar			psi	bar							
12 16 x 12	300 400 x 300	1500	770	-	480 630	375	16	-	-	-	16	3 - 15	20	-						
								-	-	-		3 - 15	25	-						
								11 - 23	35	-		6 - 30	45	7						
								21 - 45	55	35		6 - 30	50	23						
							23	-	-	-	23	3 - 15	20	-						
								6 - 30	40	-		3 - 15	25	7						
								11 - 23	35	18		6 - 30	40	1						
								21 - 45	55	65		6 - 30	45	25						
							1400	500 1260	-	-	18	-	18	6 - 27	35	-	18	3 - 14	25	-
														-	-	-		3 - 30	45	20
														6 - 28	35	19		6 - 28	40	35
														-	-	-		-	-	-
			154	-	-	-					154	-	154	15 - 24	35	8	154	15 - 24	50	39
														25 - 40	55	37		60	67	
														12 - 19	35	35		25 - 40	60	21
														25 - 40	55	111		-	-	
			314	-	-	-					314	-	314	-	-	-	314	12 - 19	40	85
														-	-	-		60	201	
														-	-	-		25 - 40	50	20
														-	-	-		60	78	
			-	-	840	600	18	-	18	10 - 34	40	18	18	3 - 15	30	-				
										-	-	-		6 - 30	45	15				
										6 - 30	35	19		3 - 15	40	99				
										-	-	-		6 - 30	45	50				
154	-	-					-	154	-	154	15 - 25	35	8	154	15 - 25	50	37			
											25 - 42	55	37		60	65				
											12 - 20	35	35		25 - 42	60	18			
											25 - 42	55	111		-	-				
314	-	-					-	314	-	314	-	-	-	314	12 - 20	40	82			
											-	-	-		60	198				
											-	-	-		25 - 42	50	14			
											-	-	-		60	72				
-	-	1100	725	154	-	154	15 - 27	35	8	154	15 - 27	50	30							
							25 - 46	55	37		60	58								
							12 - 22	35	35		25 - 46	60	6							
							25 - 46	55	111		-	-								
				314	-	-	-	314	-	314	-	-	-	314	12 - 22	40	70			
											-	-	-		60	186				
											-	-	-		25 - 46	60	48			
											-	-	-		-	-				

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41505 Series Leakage: Class II (2" to 4") and Class III (6" to 16").

Allowable Pressure Drops for 41505 Series (Metric) Air to Open and Air to Close, Flow to Open

Metal Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE				
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply	Allow. Delta P	Actuator Size	Bench range	Supply	Allow. Delta P	
inches	mm							psi	bar			psi	bar		
16	400	1500	1280	-	780	500	16	-	-	-	16	3 - 15	25	-	
								-	-	-		3 - 15	60	-	
								11 - 23	35	-		6 - 30	45	2	
								21 - 45	55	24		6 - 30	50	15	
							23	-	-	-	23	3 - 15	25	2	
								6 - 30	40	-		3 - 15	30	21	
			11 - 23	35	11	6 - 30		40	-						
			21 - 45	55	48	6 - 30		45	16						
			2000	-	1030 1360	800	18	18	10 - 34	40	11	18	3 - 15	30	-
									-	-	-		6 - 30	50	22
							24	24	6 - 30	35	11	24	3 - 15	25	14
									-	-	-		6 - 30	45	36
		154					154	15 - 25	35	2	154	15 - 25	50	26	
								25 - 42	55	26		60	49		
			12 - 20	35	24	25 - 42		60	10						
			25 - 42	55	86	-		-							
		314	314	-	-	-	314	12 - 20	40	63					
				-	-	-		60	158						
				-	-	-		25 - 42	50	7					
				-	-	-		60	55						
		2500	900	-	-	154	154	15 - 28	35	2	154	15 - 28	50	20	
								25 - 46	55	26		60	43		
						314	314	12 - 22	35	24	314	25 - 46	-	-	
								25 - 46	55	86		-	-		
-	-							-	12 - 22	40		53			
-	-							-	60	148					
-	-	1800	1105	154	154	15 - 30	35	2	154	15 - 30	50	14			
						25 - 50	55	26		60	37				
				314	314	12 - 24	35	24	314	25 - 50	-	-			
						25 - 50	55	86		-	-				
						-	-	-		12 - 24	40	44			
						-	-	-		60	139				
-	-	-	-	-	-	-	25 - 50	60	15						

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41505 Series Leakage: Class II (2" to 4") and Class III (6" to 16").

Allowable Pressure Drops for 41605 Series (Metric) Air to Open and Air to Close, Flow to Open

PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE												
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P									
psi	bar	psi							bar														
inches	mm																						
2	50	600	30 75	26 65	25 32 43 58 72	30 43 53	10	3 - 15	25	2	10	3 - 15	20	15									
3x2 4x2	80x50 100x50	1500						6 - 30	40	67		3 - 15	25	116									
								11 - 23	35	161		6 - 30	45	182									
								21 - 45	55	258		6 - 30	50	258									
							16	3 - 15	25	40	16	3 - 15	20	61									
								6 - 30	40	133		3 - 15	25	210									
								11 - 23	35	258		6 - 30	40	166									
															6 - 30	45	258						
2	50	1500					16 40	14 35	10 13 17 23 30	12 19 24	6	3 - 15	25	-	6	3 - 15	25	69					
												6 - 30	40	35		3 - 15	30	135					
			11 - 23	35	106	6 - 30						50	177										
			21 - 45	55	237	6 - 30						55	243										
			10	3 - 15	25	19					10	3 - 15	25	142									
				6 - 30	40	93						3 - 15	30	251									
				11 - 23	35	203						6 - 30	45	212									
				21 - 45	55	258						6 - 30	50	258									
				3 4x3 6x3	80 100x80 150x80	1500						60 155	56 140	40 54 72 95 125	50 75 95	16	3 - 15	25	10	16	3 - 15	20	24
																	6 - 30	40	79		3 - 15	25	131
11 - 23	35	180	6 - 30				45	202															
21 - 45	55	258	6 - 30				50	258															
23	3 - 15	25	41				23	3 - 15	20	61													
	6 - 30	40	133					3 - 15	25	208													
	11 - 23	35	258					6 - 30	40	165													
	21 - 45	55	258					6 - 30	45	258													
	4 6x4 8x4	100 150x100 200x100	1500					95 240	90 225	65 85 110 150 195	72 105 130					16	3 - 15	25	-	16	3 - 15	20	9
																	6 - 30	40	50		3 - 15	25	93
11 - 23				35	130	6 - 30	40					69											
21 - 45				55	258	6 - 30	45					148											
23				3 - 15	25	21	23					3 - 15	20	36									
				6 - 30	40	94						3 - 15	25	153									
				11 - 23	35	207						6 - 30	40	119									
				21 - 45	55	258						6 - 30	45	232									
				6 8x6 10x6	150 200x150 250x150	1500						400	144 360	100 130 175 230 300	96 150 190	16	3 - 15	25	-	16	3 - 15	20	-
																	6 - 30	40	25		3 - 15	25	55
11 - 23	35	81	6 - 30				40	38															
21 - 45	55	184	6 - 30				45	92															
23	3 - 15	25	6				23	3 - 15	20	18													
	6 - 30	40	56					3 - 15	25	97													
	11 - 23	35	131					6 - 30	40	78													
	21 - 45	55	258					6 - 30	45	152													

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41605 Series (Metric) Air to Open and Air to Close, Flow to Open

PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE						
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P			
psi	bar	psi							bar								
8 10x8 12x8	200 250x200 300x200	1500	640	230 575	165 220 290 380	155 250	16	3 - 15	25	—	16	3 - 15	20	—			
								6 - 30	40	8		3 - 15	25	29			
								11 - 23	35	47		6 - 30	45	57			
								21 - 45	55	118		6 - 30	50	93			
							23	3 - 15	25	—	23	3 - 15	20	3			
								6 - 30	40	29		3 - 15	25	59			
			18	11 - 23	35	83	18	6 - 30	40	44							
				21 - 45	55	183		6 - 30	45	97							
			10x8 12x8	250x200 300x200	1500	—	—	500	300	18	6 - 48	55	36	18	3 - 13	25	72
											15 - 50	55	138		3 - 35	55	138
										24	6 - 40	45	84	24	6 - 40	50	105
											—	—	—		6 - 40	55	171
314	15 - 22	35								67	314	15 - 22	40	84			
	25 - 37	55								134		25 - 37	60	219			
	12 - 18	35	131	25 - 37	50	50											
	25 - 37	55	258	25 - 37	60	117											
314	—	—	—	314	12 - 18	40	258										
	—	—	—		25 - 37	50	138										
314	—	—	—	314	25 - 37	60	258										
	—	—	—		—	—	—	—									
10	250	1500	510	—	225 290 390	230	16	6 - 30	40	2	16	3 - 15	20	—			
								11 - 23	35	37		3 - 15	25	21			
								21 - 45	55	105		6 - 30	45	47			
								—	—	—		6 - 30	50	81			
							23	6 - 30	40	21	23	3 - 15	20	—			
								11 - 23	35	72		3 - 15	25	48			
								21 - 45	55	165		6 - 30	40	35			
								—	—	—		6 - 30	45	85			
							18	6 - 48	55	27	18	3 - 13	25	60			
								15 - 50	55	123		3 - 35	55	123			
							24	6 - 40	45	73	24	6 - 40	50	92			
								—	—	—		6 - 40	55	154			
			314	15 - 22	35	56	314	15 - 22	40	71							
				25 - 37	55	118		25 - 37	60	196							
				12 - 18	35	115		25 - 37	50	40							
				25 - 37	55	258		25 - 37	60	103							
			314	—	—	—	314	12 - 18	30	115							
				—	—	—		12 - 18	50	258							
				—	—	—		25 - 37	50	121							
				—	—	—		25 - 37	60	248							
			18	6 - 30	35	27	18	3 - 15	25	40							
				—	—	—		6 - 30	45	80							
			24	13 - 50	55	194	24	6 - 30	35	24							
				—	—	—		6 - 30	40	86							
314	15 - 24	35	56	314	15 - 24	40	64										
	25 - 40	55	118		25 - 40	60	188										
	12 - 19	35	115		25 - 40	50	27										
	25 - 40	55	258		25 - 40	60	90										
314	—	—	—	314	12 - 19	30	102										
	—	—	—		12 - 19	50	258										
	—	—	—		25 - 40	50	95										
	—	—	—		25 - 40	60	222										

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

2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.

3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41605 Series (Metric) Air to Open and Air to Close, Flow to Open

PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE											
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply psi	Shutoff Delta P bar	Actuator size	Bench range	Supply psi	Shutoff Delta P bar								
inches	mm																					
12 16x12	300 400x300	1500	770	-	480 630	375	16	11 - 23	35	21	16	3 - 15	25	10								
								21 - 45	55	70		3 - 15	30	34								
								-	-	-		6 - 30	40	3								
								-	-	-		6 - 30	45	28								
							23	6 - 30	40	9	23	3 - 15	20	-								
								11 - 23	35	45		3 - 15	25	29								
								21 - 45	55	113		6 - 30	40	19								
								-	-	-		6 - 30	45	55								
							1400	500 1260	-	-	-	-	18	6 - 27	35	14	18	3 - 14	25	26		
														-	-	-		3 - 30	45	48		
													24	6 - 28	35	46	24	6 - 28	40	71		
														-	-	-		-	-	-		
			154	15 - 24	35	34							154	15 - 24	40	37						
				25 - 40	55	77								60	123							
			314	12 - 19	35	75							314	25 - 40	50	10						
				25 - 40	55	189								60	53							
				-	-	-								12 - 19	40	149						
				-	-	-								60	258							
			-	-	840	600							-	-	18	10 - 34	40	45	18	3 - 15	25	16
																-	-	-		6 - 30	45	41
							24	6 - 30	35	46	24	3 - 15			25	51						
								-	-	-		6 - 30			45	91						
							154	15 - 25	35	34	154	15 - 25			40	34						
								25 - 42	55	77		60			120							
314	12 - 20	35					75	314	25 - 42	50	5											
	25 - 42	55					189		60	48												
	-	-					-		12 - 20	40	145											
	-	-					-		60	258												
-	-	1100					725	-	-	154	15 - 27	35			34	154	15 - 27	40	23			
											25 - 46	55			77		60	109				
			314	12 - 22	35	75				314	25 - 46	60	30									
				25 - 46	55	189					-	-										
				-	-	-					12 - 22	40	127									
				-	-	-					60	258										
			-	-	-	-				-	-	-	-	-	-	25 - 46	50	6				
													-	-		-	60	94				

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41605 Series (Metric) Air to Open and Air to Close, Flow to Open

PTFE Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE							
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply psi	Shutoff Delta P bar	Actuator size	Bench range	Supply psi	Shutoff Delta P bar				
inches	mm																	
16	400	1500	1280	-	780	500	16	11 - 23	35	11	16	3 - 15	25	2				
								21 - 45	55	52		3 - 15	30	22				
								-	-	-		6 - 30	45	17				
								-	-	-		6 - 30	50	38				
							23	6 - 30	40	2	23	3 - 15	20	-				
								11 - 23	35	31		3 - 15	25	18				
								21 - 45	55	90		6 - 30	40	10				
								-	-	-		6 - 30	45	40				
							2000	-	1030 1360	800	18	10 - 34	40	32	18	3 - 15	30	28
												-	-	-		6 - 30	45	28
											24	6 - 30	35	32	24	3 - 15	25	36
												-	-	-		6 - 30	45	72
			154	15 - 25	35	22					154	15 - 25	40	22				
				25 - 42	55	59						60	96					
				12 - 20	35	57						25 - 42	60	34				
				25 - 42	55	156						-	-					
			314	-	-	-					314	12 - 20	40	118				
				-	-	-						60	258					
				-	-	-						25 - 42	50	29				
				-	-	-						60	105					
			2500	900	-	-	154	15 - 28	35	22	154	15 - 28	40	13				
								25 - 46	55	59		60	87					
							314	12 - 22	35	57	314	25 - 46	60	19				
								25 - 46	55	156		-	-					
-	-	-						12 - 22	40	102								
-	-	-						60	254									
-	-	1800					1105	154	15 - 30	35	22	154	15 - 30	50	40			
									25 - 50	55	59		60	78				
			314	12 - 24	35	57		314	25 - 50	60	3							
				25 - 50	55	156			-	-								
-	-	-	-	314	12 - 24	40	87											
-	-	-	-		60	239												
-	-	-	-	-	-	-	-	25 - 50	60	42								

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.

Allowable Pressure Drops for 41905 Series (Metric) Air to Open and Air to Close, Flow to Open

Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE				
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P	
inches	mm	psi							bar	psi			bar		
2	50	600	30 75	26 65	25	30	10	3 - 15	25	7	10	3 - 15	20	21	
3x2 4x2	80x50 100x50	1500			32			43	6 - 30	40		76	3 - 15	25	120
					43			53	11 - 23	35		120	6 - 30	45	120
					58			72	16	3 - 15		25	48	16	3 - 15
								6 - 30	40	120		3 - 15	25	120	
2	50	1500	16 40	14 35	10	12	6	6 - 30	40	40	6	3 - 15	30	120	
					13			11 - 23	35	114		6 - 30	50	120	
					17			3 - 15	25	24		10	3 - 15	25	120
					23			6 - 30	40	100			-	-	-
30	11 - 23	35	120	-	-	-									
3 4x3 6x3	80 100x80 150x80	1500	60 155	56 140	40	50	16	3 - 15	25	15	16	3 - 15	20	30	
					54			6 - 30	40	87		3 - 15	25	120	
					72			11 - 23	35	120		-	-	-	
					95			3 - 15	25	48		23	3 - 15	20	70
125	6 - 30	40	120	3 - 15	25	120									
4 6x4 8x4	100 150x100 200x100	1500	95 240	90 225	65	72	16	3 - 15	25	2	16	3 - 15	20	14	
					85			6 - 30	40	60		3 - 15	25	106	
					110			11 - 23	35	120		6 - 30	40	80	
					150			21 - 45	55	120		6 - 30	45	120	
					195		3 - 15	25	28	23	3 - 15	20	44		
							6 - 30	40	107		3 - 15	25	120		
							11 - 23	35	120		6 - 30	40	120		
							21 - 45	55	120		-	-	-		
6 8x6 10x6	150 200x150 250x150	1500	400	144 360	100	96	16	3 - 15	25	-	16	-	-	-	
					130			6 - 30	40	32		3 - 15	25	64	
					175			11 - 23	35	92		6 - 30	40	45	
					230			21 - 45	55	120		6 - 30	45	105	
					300		3 - 15	25	10	23	3 - 15	20	23		
							6 - 30	40	65		3 - 15	25	110		
							11 - 23	35	120		6 - 30	40	89		
							21 - 45	55	120		6 - 30	45	120		

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41905 Series Leakage: Class III (2" to 4") and Class IV (6" to 16").
 5. Consult Masoneilan for applications with Shutoff Pressure Drops above 120 bar.

Allowable Pressure Drops for 41905 Series (Metric) Air to Open and Air to Close, Flow to Open

Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE			
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P
inches	mm							psi	bar			psi	bar	
8 10x8 12x8	200 250x200 300x200	1500	640	230 575	165 220 290 380	155 250	16	6 - 30	40	12	16	3 - 15	25	35
								11 - 23	35	54		6 - 30	45	66
								21 - 45	55	120		6 - 30	50	104
							23	3 - 15	25	-	23	3 - 15	20	6
								6 - 30	40	34		3 - 15	25	67
								11 - 23	35	92		6 - 30	45	108
			18	21 - 45	55	120	18	6 - 30	50	120				
				6 - 48	55	42		3 - 13	25	80				
				15 - 50	55	120		3 - 35	55	120				
			24	6 - 40	45	94	24	6 - 40	50	116				
				-	-	-		6 - 40	55	120				
				15 - 22	35	73		15 - 22	40	92				
154	25 - 37	55	120	154	25 - 37	50	120							
	12 - 18	35	120		25 - 37	50	55							
	25 - 37	55	120		25 - 37	60	120							
314	-	-	-	314	12 - 18	30	120							
	-	-	-		25 - 37	50	120							
	-	-	-		25 - 37	60	120							
10	250	1500	510	-	225 290 390	230	16	6 - 30	40	5	16	3 - 15	25	26
								11 - 23	35	44		3 - 15	30	66
								21 - 45	55	118		6 - 30	45	55
							23	-	-	-	23	6 - 30	50	92
								6 - 30	40	26		-	-	-
								11 - 23	35	82		3 - 15	25	57
			18	21 - 45	55	120	18	6 - 30	45	96				
				6 - 48	55	33		3 - 13	25	70				
				15 - 50	55	120		3 - 35	55	120				
			24	6 - 40	45	83	24	6 - 40	50	104				
				-	-	-		6 - 40	55	120				
				15 - 22	35	62		15 - 22	40	79				
			154	25 - 37	55	120	154	25 - 37	50	120				
				12 - 18	35	120		25 - 37	50	45				
				25 - 37	55	120		25 - 37	60	114				
			314	-	-	-	314	12 - 18	30	120				
				-	-	-		25 - 37	50	101				
				-	-	-		25 - 37	60	120				
			18	6 - 30	35	33	18	3 - 15	25	48				
				-	-	-		6 - 30	45	90				
				13 - 50	55	120		6 - 30	40	98				
			24	-	-	-	24	6 - 30	45	120				
				15 - 24	35	62		15 - 24	40	71				
				25 - 40	55	120		15 - 24	50	120				
154	12 - 19	35	120	154	25 - 40	60	100							
	25 - 40	55	120		-	-	-							
	-	-	-		12 - 19	30	114							
314	-	-	-	314	12 - 19	40	120							
	-	-	-		25 - 40	50	105							
	-	-	-		25 - 40	60	120							
520	-	650	350 420	-	-	-	18	6 - 30	35	33	18	3 - 15	25	48
								-	-	-		6 - 30	45	90
								13 - 50	55	120		6 - 30	40	98
24	-	-	-	24	6 - 30	45	120							
	15 - 24	35	62		15 - 24	40	71							
	25 - 40	55	120		15 - 24	50	120							
154	12 - 19	35	120	154	25 - 40	60	100							
	25 - 40	55	120		-	-	-							
	-	-	-		12 - 19	30	114							
314	-	-	-	314	12 - 19	40	120							
	-	-	-		25 - 40	50	105							
	-	-	-		25 - 40	60	120							

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
3. See CH3000 for orifice size and travel required to obtain rated C_v.
4. 41905 Series Leakage: Class III (2" to 4") and Class IV (6" to 16").
5. Consult Masoneilan for applications with Shutoff Pressure Drops above 120 bar.

Allowable Pressure Drops for 41905 Series (Metric) Air to Open and Air to Close, Flow to Open

Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE							
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply	Shutoff Delta P	Actuator size	Bench range	Supply	Shutoff Delta P				
inches	mm	psi							bar	psi			bar					
12 16x12	300 400x300	1500	770	-	480	375	16	11 - 23	35	27	16	3 - 15	25	14				
								21 - 45	55	82		3 - 15	30	42				
								-	-	-		6 - 30	40	6				
							23	6 - 30	40	14	23	-	-	-				
								11 - 23	35	54		3 - 15	25	35				
								21 - 45	55	120		6 - 30	40	25				
					1400	500 1260	-	-	18	-	18	6 - 27	35	19	18	3 - 14	25	33
												-	-	-		3 - 30	45	58
												24	6 - 28	35		55	24	6 - 28
									154	15 - 24	35	39	154	15 - 24	40	42		
										25 - 40	55	88		60	120			
										12 - 19	35	86		25 - 40	50	11		
			314	25 - 40			55	120	314	60	60							
				-			-	-		12 - 19	30	71						
				-			-	-		40	120							
			-	-			840	600	18	-	18	10 - 34	40	54	18	3 - 15	25	21
												-	-	-		6 - 30	45	49
												24	6 - 30	35		55	24	3 - 15
					154	15 - 25			35	39	154	6 - 30	45	106				
						25 - 42			55	88		15 - 25	40	39				
						12 - 20			35	86		60	120					
					314	25 - 42	55	120	314	25 - 42	50	6						
						-	-	-		60	55							
						-	-	-		12 - 20	30	66						
-	-	1100			725	154	-	154	15 - 27	35	39	154	15 - 27	40	27			
									25 - 46	55	88		60	120				
									12 - 22	35	86		25 - 46	60	35			
		314	25 - 46	55	120	314	-	-										
			-	-	-		12 - 22	30	45									
			-	-	-		40	120										
-	-	-	-	-	-	-	25 - 46	50	7									
-	-	-	-	-	-	-	-	60	108									

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41905 Series Leakage: Class III (2" to 4") and Class IV (6" to 16").
 5. Consult Masoneilan for applications with Shutoff Pressure Drops above 120 bar.

Allowable Pressure Drops for 41905 Series (Metric) Air to Open and Air to Close, Flow to Open

Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

PTFE Packing

Valve size		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE							
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator size	Bench range	Supply psi	Shutoff Delta P bar	Actuator size	Bench range	Supply psi	Shutoff Delta P bar				
inches	mm																	
16	400	1500	1280	-	780	500	16	11 - 23	35	16	16	3 - 15	25	5				
								21 - 45	55	64		3 - 15	30	29				
								-	-	-		6 - 30	45	23				
								-	-	-		6 - 30	50	47				
							23	6 - 30	40	5	23	3 - 15	20	-				
								11 - 23	35	40		3 - 15	25	24				
								21 - 45	55	107		6 - 30	40	15				
								-	-	-		6 - 30	45	50				
							2000	-	1030 1360	800	18	10 - 34	40	40	18	3 - 15	30	36
												-	-	-		6 - 30	45	36
											24	6 - 30	35	41	24	3 - 15	25	46
												-	-	-		6 - 30	45	87
			154	15 - 25	35	26					154	15 - 25	40	26				
				25 - 42	55	69						60	113					
				12 - 20	35	67						25 - 42	60	40				
				25 - 42	55	120						-	-					
			314	-	-	-					314	12 - 20	30	49				
				-	-	-						40	120					
				-	-	-						25 - 42	50	34				
				-	-	-						60	120					
			2500	900	-	-	154	15 - 28	35	26	154	15 - 28	40	15				
								25 - 46	55	69		60	102					
							314	12 - 22	35	67	314	25 - 46	60	22				
								25 - 46	55	120		-	-					
-	-	-						12 - 22	30	31								
-	-	-						40	120									
-	-	1800					1105	154	15 - 30	35	26	154	15 - 30	40	4			
									25 - 50	55	69		60	91				
			314	12 - 24	35	67		314	25 - 50	60	4							
				25 - 50	55	120			-	-								
-	-	-	-	314	12 - 24	40	102											
-	-	-	-		50	120												
-	-	-	-	-	-	-	-	25 - 50	60	49								

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
3. See CH3000 for orifice size and travel required to obtain rated C_v.
4. 41905 Series Leakage: Class III (2" to 4") and Class IV (6" to 16").
5. Consult Masoneilan for applications with Shutoff Pressure Drops above 120 bar.

Allowable Pressure Drops for 41905 Series (Metric) Air to Open and Air to Close, Flow to Open

Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE			
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply	Allow. Delta P	Actuator Size	Bench range	Supply	Allow. Delta P
inches	mm							psi	bar			psi	bar	
2	50	600			25									
3 x 2 4 x 2	80 x 50 100 x 50	1500	30 75	26 65	32	30 43 53	10	3 - 15	25	—	10	3 - 15	25	78
					43			6 - 30	40	25		6 - 30	45	120
					58			11 - 23	35	107		—	—	—
					72			21 - 45	55	120		—	—	—
						16	3 - 15	25	—	16	3 - 15	20	18	
							6 - 30	40	89		3 - 15	25	120	
							11 - 23	35	120		—	—	—	
2	50	1500	16 40	14 35	10	12 19 24	10	3 - 15	25	—	10	3 - 15	20	—
					13			6 - 30	40	45		3 - 15	25	87
					17			11 - 23	35	120		6 - 30	45	120
					23			21 - 45	55	120		—	—	—
				30		16	3 - 15	25	11	16	3 - 15	20	20	
							6 - 30	40	105		3 - 15	25	120	
							11 - 23	35	120		—	—	—	
3 4 x 3 6 x 3	80 100 x 80 150 x 80	1500	60 155	56 140	40	50 75 95	16	3 - 15	25	—	16	3 - 15	20	—
					54			6 - 30	40	41		3 - 15	25	89
					72			11 - 23	35	120		6 - 30	45	120
					95			21 - 45	55	120		—	—	—
				125		23	3 - 15	25	—	23	3 - 15	20	21	
							6 - 30	40	90		3 - 15	25	120	
							11 - 23	35	120		6 - 30	40	112	
							—	—	—		6 - 30	45	120	
4 6 x 4 8 x 4	100 150 x 100 200 x 100	1500	95 240	90 225	65	72 105 130	16	3 - 15	25	—	16	3 - 15	20	—
					85			6 - 30	40	22		3 - 15	25	71
					110			11 - 23	35	99		6 - 30	40	43
					150			21 - 45	55	120		6 - 30	45	112
				195		23	3 - 15	25	—	23	3 - 15	20	7	
							6 - 30	40	72		3 - 15	25	116	
							11 - 23	35	120		6 - 30	40	90	
							21 - 45	55	120		6 - 30	45	120	
6 8 x 6 10 x 6	150 200 x 150 250 x 150	1500	400	144 360	100	96 150 190	16	3 - 15	25	—	16	3 - 15	20	—
					130			6 - 30	40	—		3 - 15	25	32
					175			11 - 23	35	62		6 - 30	40	13
					230			21 - 45	55	120		6 - 30	45	74
				300		23	3 - 15	25	—	23	3 - 15	20	—	
							6 - 30	40	32		3 - 15	25	77	
							11 - 23	35	104		6 - 30	40	58	
							21 - 45	55	120		6 - 30	45	120	

- Notes: 1. Inlet pressure must not exceed the ANSI rating for the selected pressure class.
 2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.
 3. See CH3000 for orifice size and travel required to obtain rated C_v.
 4. 41905 Series Leakage: Class III (2" to 4") and Class IV (6" to 16").
 5. Consult Masoneilan for applications with Shutoff Pressure Drops above 120 bar.

Allowable Pressure Drops for 41905 Series (Metric) Air to Open and Air to Close, Flow to Open

Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE			
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply	Allow. Delta P	Actuator Size	Bench range	Supply	Allow. Delta P
inches	mm							psi	bar			psi	bar	
8 10 x 8 12 x 8	200 250 x 200 300 x 200	1500	640	230 575	165 220 290 380	155 250	16	3 - 15	25	—	16	3 - 15	20	—
								6 - 30	40	—		3 - 15	25	—
								11 - 23	35	—		6 - 30	45	31
								21 - 45	55	91		6 - 30	50	72
							23	3 - 15	25	—	23	3 - 15	20	—
								6 - 30	40	—		3 - 15	25	33
								11 - 23	35	60		6 - 30	40	17
								21 - 45	55	120		6 - 30	45	75
			18	6 - 48	55	7	18	3 - 13	25	—				
				15 - 50	55	106		3 - 35	55	106				
			24	6 - 40	45	62	24	6 - 40	50	81				
				—	—	—		6 - 40	55	120				
			154	15 - 22	35	73	154	15 - 22	40	55				
				25 - 37	55	120			60	120				
				314	12 - 18	35		120	25 - 37	50	18			
					25 - 37	55		120		60	93			
314	—	—	—	314	12 - 18	40	120							
	—	—	—			50	115							
	—	—	—		25 - 37	60	120							
	—	—	—			60	120							
10	250	1500	510	—	225 290 390	230	16	—	—	—	16	3 - 15	25	—
								6 - 30	40	—		3 - 15	30	—
								11 - 23	35	—		6 - 30	45	23
								21 - 45	55	83		6 - 30	50	62
							23	—	—	—	23	3 - 15	20	—
								6 - 30	40	—		3 - 15	25	24
								11 - 23	35	51		6 - 30	40	10
								21 - 45	55	120		6 - 30	45	66
			18	6 - 48	55	1	18	3 - 13	25	—				
				15 - 50	55	98		3 - 35	55	97				
			24	6 - 40	45	52	24	6 - 40	50	74				
				—	—	—		6 - 40	55	120				
			154	15 - 22	35	28	154	15 - 22	40	45				
				25 - 37	55	98			60	120				
				314	12 - 18	35		94	25 - 37	50	11			
					25 - 37	55		120		60	80			
			314	—	—	—	314	12 - 18	30	94				
				—	—	—			40	120				
				—	—	—		25 - 37	50	101				
				—	—	—			60	120				
			18	6 - 30	35	1	18	3 - 15	25	—				
				—	—	—		6 - 30	45	60				
			24	13 - 50	55	120	24	6 - 30	40	69				
				—	—	—		6 - 30	45	115				
			154	15 - 24	35	28	154	15 - 24	40	37				
				25 - 40	55	98			60	120				
				314	12 - 19	35		94	25 - 40	60	66			
					25 - 40	55		120		—	—			
			314	—	—	—	314	12 - 19	30	80				
				—	—	—			40	120				
				—	—	—		25 - 40	50	71				
				—	—	—			60	120				

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

2. Ex. 3x2 Size = Valve with 3" Body x Standard 2" Trim.

3. See CH3000 for orifice size and travel required to obtain rated C_v.

4. 41905 Series Leakage: Class III (2" to 4") and Class IV (6" to 16").

5. Consult Masoneilan for applications with Shutoff Pressure Drops above 120 bar.

Allowable Pressure Drops for 41905 Series (Metric) Air to Open and Air to Close, Flow to Open

Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE					
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply	Allow. Delta P	Actuator Size	Bench range	Supply	Allow. Delta P		
inches	mm							psi	bar			psi	bar			
12 16 x 12	300 400 x 300	1500	770	-	480 630	375	16	-	-	-	16	3 - 15	25	-		
								-	-	-		3 - 15	30	-		
								11 - 23	35	-		6 - 30	45	12		
								21 - 45	55	60		6 - 30	50	40		
							23	-	-	-	23	3 - 15	20	-		
								6 - 30	40	-		3 - 15	25	12		
								11 - 23	35	31		6 - 30	40	2		
								21 - 45	55	100		6 - 30	45	42		
			1400	500 1260	-	-	18	-	18	6 - 27	35	-	18	3 - 14	25	-
										-	-	-		3 - 30	45	35
									24	6 - 28	35	32	24	6 - 28	40	61
										-	-	-		-	-	-
							154	15 - 24	35	39	154	15 - 24	40	18		
								25 - 40	55	88		60	117			
								12 - 19	35	86		60	36			
								25 - 40	55	120		-	-			
			314	-	-	-	314	12 - 19	30	46						
				-	-	-		40	120							
				-	-	-		50	35							
				-	-	-		25 - 40	60	120						
			-	-	840	600	18	-	18	10 - 34	40	31	18	3 - 15	30	-
										-	-	-		6 - 30	50	55
							24	6 - 30	35	32	24	3 - 15	25	38		
								-	-	-		6 - 30	45	81		
154	15 - 25	35					39	154	40	15						
	25 - 42	55					88		60	114						
	12 - 20	35					86		60	31						
	25 - 42	55					120		-	-						
314	-	-					-	314	12 - 20	30	41					
	-	-					-		40	120						
	-	-					-		50	25						
	-	-					-		25 - 42	60	120					
-	-	1100	725	154	-	154	15 - 27	35	39	154	15 - 27	50	52			
							25 - 46	55	88		60	101				
				314	12 - 22	35	86	314	60	11						
					25 - 46	55	120		-	-						
					-	-	-		12 - 22	30	21					
					-	-	-		40	120						
-	-	-	-	60	83											
-	-	-	-	-	-											

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Graphite Seal Ring

Body Rating: ANSI Class 150 to 1500

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

Flexible Graphite Packing

VALVE SIZE		Maximum ANSI Class	Rated C _v				AIR TO OPEN				AIR TO CLOSE								
			Linear	Equal %	Lo-dB	Multi-Stage Lo-dB	Actuator Size	Bench range	Supply	Allow. Delta P	Actuator Size	Bench range	Supply	Allow. Delta P					
inches	mm							psi	bar			psi	bar						
16	400	1500	1280	-	780	500	16	-	-	-	16	3 - 15	25	-					
								-	-	-		3 - 15	30	-					
								11 - 23	35	-		6 - 30	45	3					
								21 - 45	55	45		6 - 30	50	27					
							23	-	-	-	23	3 - 15	25	4					
								6 - 30	40	-		3 - 15	30	39					
			2000	-	1030	800	18	18	11 - 23	35	20	18	6 - 30	40	-				
									21 - 45	55	85		6 - 30	45	30				
							24	24	10 - 34	40	20	24	3 - 15	30	-				
									-	-	-		6 - 30	50	40				
							154	154	1030	800	154	154	6 - 30	35	21	154	3 - 15	25	26
													-	-	-		6 - 30	45	67
		314	314	15 - 25	35	4					314	15 - 25	50	53					
				25 - 42	55	48						60	102						
		2500	900	1360	-	154	154	12 - 20	35	46	154	25 - 42	60	21					
								25 - 42	55	120		-	-						
						314	314	-	-	-	314	30	31						
								-	-	-		12 - 20	40	120					
								-	-	-		25 - 42	50	15					
								-	-	-		60	113						
		-	-	1800	1105	154	154	15 - 28	35	4	154	15 - 28	50	41					
								25 - 46	55	48		60	90						
						314	314	12 - 22	35	46	314	25 - 46	-	-					
								25 - 46	55	120		-	-						
-	-							-	12 - 22	40		110							
-	-							-	50	120									
-	-	1800	1105	154	154	-	-	-	154	25 - 46	60	72							
						15 - 30	35	4		15 - 30	50	29							
				314	314	25 - 50	55	48	314	60	77								
						12 - 24	35	46		25 - 50	-	-							
						25 - 50	55	120		-	-								
						-	-	-		40	90								
-	-	-	-	-	12 - 24	50	120												
-	-	-	-	-	25 - 50	60	31												

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