

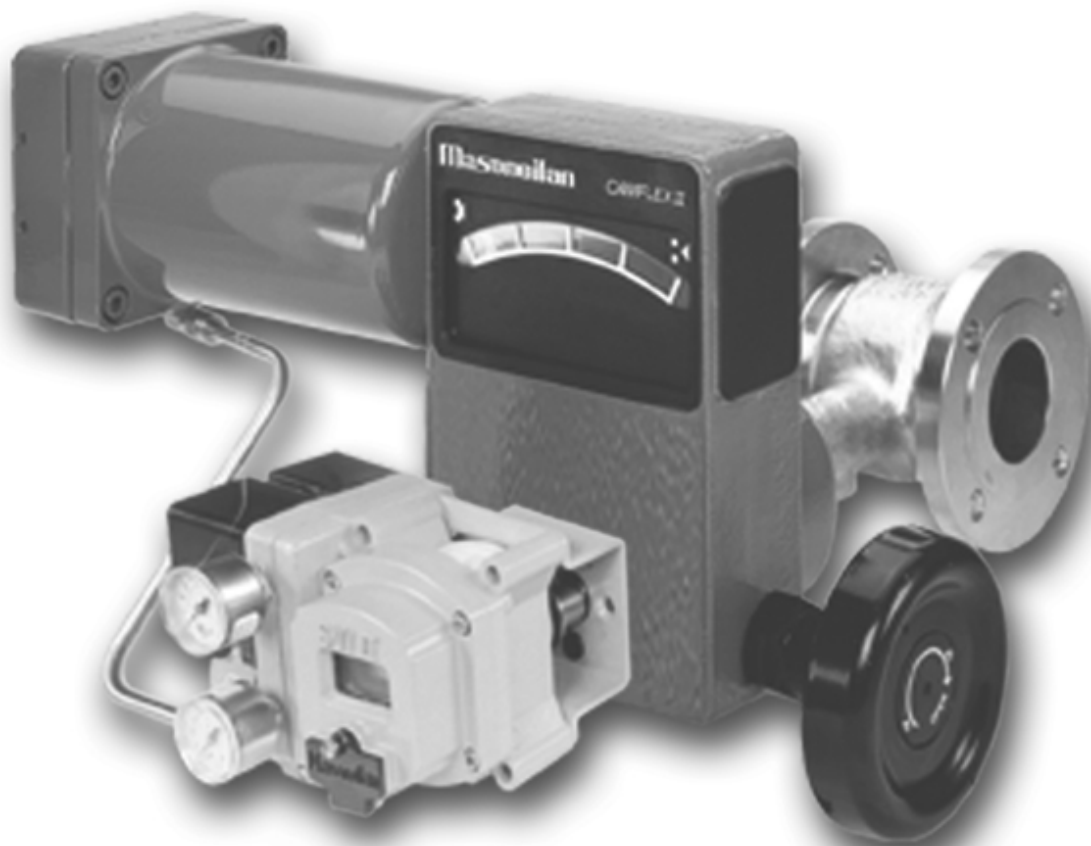
# Camflex

## 35000 Series

### Pressure Drop Tables

#### PH5000

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Masoneilan

# **Metric Units**

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# **Camflex 35000 Series Pressure Drop Tables**

**Masoneilan**

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## 35000 Series Pressure Drop Tables

### PH5000

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##### ANSI Class VI

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Shaft : 17 - 4 PH  
 Seat : Metal / Metal  
 Seat leakage : Class IV  
 Range : 7 - 15

Valve Size		Actuator		CV Flow to Close	CV Flow to Open	CV Differential Velocity Device Flow to Open	Air to Close Flow to Close	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open												
		Size	Range						Supply Pressure (bar)												
DN	in	in	psi						1.4	1.4	1.4	1.8	2.1	2.5	2.8	3.1					
25	1	4 1/2	7-15	15	14		69	70	70												
				9	8.4		100	100	100												
				6	5.6		100	100	100												
				3			100	100	100												
				1			100	100	100												
				0.5			100	100	100												
							5		100	100											
40	1 1/2	4 1/2	7-15	39	33		100	46	29.5	55											
				23.4	19.8		100	69	44	95											
				15.6	13.2		100	96.5	62	100											
50	2	4 1/2	7-15			12.5		69	44	95											
				53	50		33	25	16	34.5	41.5										
				31.8	30		51	38.5	24	52.5	70										
				21.2	20		69	51	32.5	70	70										
80	3	6	7-15			18		38.5	24	52.5	70										
				145	135		18	19.5	12.5	26	41.5										
				87	81		28	29	18.5	40	64										
				58	54		37	44	27.5	60	70										
100	4	6	7-15			48		29	18.5	40	64										
				230			13.0	9.5	6	14	22	30.5	38.5	41.5							
				138			22	15	9.5	20.5	38	46	59	70							
				92			31	21.5	14	29.5	48	67	70	70							
					77		15	9.5	20.5	38	46	59	70								

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 17 - 4 PH  
 Seat : Metal / Metal  
 Seat leakage : Class IV  
 Range : 7-24 & 8-25

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Close Flow to Close	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open																
		Size	Range						Supply Pressure (bar)																
DN	in	in	psi						2.1	2.1	2.1	2.5	2.8	3.1	3.5	3.8	4.2	4.5	4.8	5.2					
150	6	7	7-24	500		FTO		6	3.5	9	14	20.5	25	30.5	36	41.5									
						FTC gas	9.5		3.5	9	14	20.5	25	30.5	36	41.5									
						FTC liquid	9.5		3.5	9	14	20.5	20.5	20.5	20.5	20.5									
				300		FTO		9	5	12.5	20.5	27.5	34.5	42.5	50.5	58.5									
						FTC gas	15		5	12.5	20.5	27.5	34.5	42.5	50.5	58.5									
						FTC liquid	15		5	12.5	20.5	27.5	29.5	29.5	29.5	29.5									
		200		FTO		14	7.5	19	31	42.5	55	67	70												
				FTC gas	21		7.5	19	31	42.5	55	67	70												
				FTC liquid	21		7.5	19	31	34.5	34.5	34.5	34.5												
						181		9	5	12.5	20.5	27.5	34.5	42.5	50.5	58.5									
		6	9	8-25 ATO 7-24 ATC	500		FTO		16	9	22	32	42	51											
							FTC gas	22		9	22	32	42	51											
	FTC liquid						22		9	22	27	27	27												
	300					FTO		24	13	33	49	64	84												
						FTC gas	34		13	33	49	64	84												
						FTC liquid	34		13	33	42	42	42												
	200			FTO		36	20	49	71	93	100														
				FTC gas	49		20	49	71	93	100														
				FTC liquid	49		20	49	61	61	61														
						181		24	13	33	49	64	84												
	200		8	7	7-24	850		FTO		3	1.5	4	7	9.5	12.5	15	18	20.5	23.5	24					
								FTC gas	4.8		1.5	4	7	9.5	12.5										
		FTC liquid						4.8		1.5	4	6	6	6											
		510					FTO		5	3	7	11	15	19.5	23.5	27.5	31.5	36	38						
FTC gas							7.5		3	7	11	15	19.5												
FTC liquid							7.5		3	7	9.5	9.5	9.5												
340				FTO		7.5	4	11	17	24	31	38	44	51	58	62									
				FTC gas	12		4	11	17	24	31														
				FTC liquid	12		4	11	15	15	15														
						308		5	3	7	11	15	19.5	23.5	27.5	31.5	36	38							
8		9		8-25 ATO 7-24 ATC	850		FTO		7.5	4.1	10	15	20	25											
							FTC gas	11		4.1	10	15	20	25											
			FTC liquid				11		4.1	10	13	13	13												
			510			FTO		11	6	16	24	31	38												
						FTC gas	17		6	16	24	31	38												
						FTC liquid	17		6	16	21	21	21												
		340		FTO		19	10	26	39	51	62														
				FTC gas	27		10	26	39	51	62														
				FTC liquid	27		10	26	34	34	34														
						308		11	6	16	24	31	38												

FTO: Flow to open (liquid and gas)    FTC: Flow to close  
 ATO: Air to open, fail closed        ATC: Air to close, fail open

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 17 - 4 PH  
 Seat : Metal / Metal  
 Seat leakage : Class IV  
 Range : 7-24 & 8-25

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Close Flow to Close	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open																	
		Size	Range						Supply Pressure (bar)																	
DN	in	in	psi						2.1	2.1	2.1	2.5	2.8	3.1	3.5	3.8	4.2	4.5	4.8	5.2						
250	10	7	7-24	1300		FTO		1.5	1	2.5	4	5.5	7	8	9.5	11	12.5	15	17	19.5	22					
						FTC gas	2.8		1	2.5	4	5.5	7													
						FTC liquid	2.8		1	2.5	3.5	3.5	3.5													
				780		FTO		3	1.5	3.5	5.5	8	10.5	12.5	15	17	19.5	22								
						FTC gas	4.1		1.5	3.5	5.5	8	10.5													
						FTC liquid	4.1		1.5	3.5	5	5	5													
		520		FTO		4	2.5	6	9.5	13	16.5	20.5	24	27.5	31.5	35										
				FTC gas	6.5		2.5	6	9.5	13	16.5															
				FTC liquid	6.5		2.5	6	8.5	8.5	8.5															
		9	8-25 ATO 7-24 ATC	1300		FTO		4	2	5.5	8	11	14	17	21	22										
						FTC gas	6		2	5.5	8	11	14	15												
						FTC liquid	6		2	5.5	7.5	7.5	7.5													
	780				FTO		6	3.1	8.5	12	17	22	26	32	33											
					FTC gas	9		3.1	8.5	12	17	22	23													
					FTC liquid	9		3.1	8.5	11	11	11														
	520		FTO		10	5	14	20	27	36	43	52	54													
			FTC gas	15		5	14	20	27	36	37															
			FTC liquid	15		5	14	18	18	18																
	486		1300		FTO		6	3.1	8.5	12	17	22	26	32	33											
					FTC gas	6		2	5.5	8	11	14	15													
					FTC liquid	6		2	5.5	7.5	7.5	7.5														
			780		FTO		6	3.1	8.5	12	17	22	26	32	33											
					FTC gas	9		3.1	8.5	12	17	22	23													
					FTC liquid	9		3.1	8.5	11	11	11														
300	12	7	7-24	1750		FTO		1	1.5	2	3	4	5	5.5	6	7	8									
						FTC gas	1.4		1.5	2	3	4	4													
						FTC liquid	1.4		1.5	2	2	2	2													
				1050		FTO		1.5	0.5	2	3.5	5	6	7	8	9.5	11	12.5								
						FTC gas	2.4		0.5	2	3.5	5	6													
						FTC liquid	2.4		0.5	2	3	3	3													
700			FTO		2.5	1.5	3.5	5.5	7.5	9.5	12.5	14.5	16.5	18.5	20.5											
			FTC gas	4.1		1.5	3.5	5.5	7.5	9.5																
			FTC liquid	4.1		1.5	3.5	5	5	5																
684			1750		FTO		1.5	0.5	2	3.5	5	6	7	8	9.5	11	12.5									
					FTC gas	3.5		1	3.1	4.6	6	8	8.5													
					FTC liquid	3.5		1	3.1	4.3	4.3	4.3														
	1050			FTO		3.3	1.5	4.7	7	9.5	12	15	18	20	23	26										
				FTC gas	5		1.5	4.7	7	9.5	12	13														
				FTC liquid	5		1.5	4.7	6.5	6.5	6.5															
700		FTO		5	2.5	7.5	11	15	21	25	30	34	38	43												
		FTC gas	8.5		2.5	7.5	11	15	21	21																
		FTC liquid	8.5		2.5	7.5	10	10	10																	
684		1750		FTO		3.3	1.5	4.7	7	9.5	12	15	18	20	23	26										
				FTC gas	3.5		1	3.1	4.6	6	8	8.5														
				FTC liquid	3.5		1	3.1	4.3	4.3	4.3															
		1050		FTO		3.3	1.5	4.7	7	9.5	12	15	18	20	23	26										
				FTC gas	5		1.5	4.7	7	9.5	12	13														
				FTC liquid	5		1.5	4.7	6.5	6.5	6.5															
700		FTO		5	2.5	7.5	11	15	21	25	30	34	38	43												
		FTC gas	8.5		2.5	7.5	11	15	21	21																
		FTC liquid	8.5		2.5	7.5	10	10	10																	

FTO: Flow to open (liquid and gas)    FTC: Flow to close  
 ATO: Air to open, fail closed        ATC: Air to close, fail open

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

**Shaft : 17 - 4 PH**  
**Seat : PTFE / Metal**  
**Seat Leakage: Class VI**  
**Range : 7 - 15**

Valve Size		Actuator		CV Flow to Close	CV Flow to Open	CV Differential Velocity Device Flow to Open	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open							
		Size	Range					Supply Pressure (bar)							
DN	in	in	psi					1.4	1.4	1.8	2.1	2.5	2.8	3.1	
25	1	4 1/2	7-15	15	14			55	55						
				9	8.4			70	70						
				6	5.6			70	70						
				5		70	70								
40	1 1/2			39	33			34.5	16	48					
				23.4	19.8			70	22	70					
				15.6	13.2			70	36	70					
				12.5		70	22	70							
50	2			53	50			17	6.5	25.5	41.5				
				31.8	30			36.5	9.5	36.5	65				
		21.2	20			36	16	51.5	70						
		18		36.5	9.5	36.5	65								
80	3	145	135			14	6	20.5	34.5						
		87	81			29	9	29	51						
		58	54			33	16	47	55						
		48		29	9	29	51								
100	4	230				7	2.5	11	18	25.5	33	34.5			
		138				14.5	3.5	14.5	26	37	49	55			
		92				16	7	22.5	39.5	55	55	55			
				77		14.5	3.5	14.5	26	37	49	55			

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 17 - 4 PH  
 Seat : PTFE/ Metal  
 Seat leakage : Class VI  
 Range : 7-24 & 8-25

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open																
		Size	Range					Supply Pressure (bar)																
DN	in	in	psi					2.1	2.1	2.5	2.8	3.1	3.5	3.8	4.2	4.5	4.8	5.2						
150	6	7	7-24	500		FTO	4	1.5	6	11.5	16.5	21.5	26	31	34.5									
						FTC gas		1.5	6	11.5	16.5	21.5	26	31	34.5									
						FTC liquid		1.5	6	11.5	16.5	20.5	20.5	20.5	20.5									
				300		FTO	9	2	9	16.5	24	31	36.5	42.5	50.5									
						FTC gas		2	9	16.5	24	31	36.5	42.5	49.5									
						FTC liquid		2	9	16.5	24	25	25	25	25									
				200		FTO	10.5	4	15	26	36.5	47	55											
						FTC gas		4	15	26	36.5	47	55											
						FTC liquid		4	15	26	34.5	34.5	34.5											
						181		FTO	9	2	9	16.5	24	31	36.5	42.5	50.5							
		200	8	7	7-24	850		FTO	1.5		3	5	7.5	10.5	12.5	15	17	20.5						
								FTC gas			3	5	7.5	10.5	12.5									
								FTC liquid			3	5	6	6	6									
						510		FTO	3	0.5	4.5	8	11.5	16	19.5	23.5	27.5	31						
								FTC gas		0.5	4.5	8	11.5	16	19.5									
								FTC liquid		0.5	4.5	8	9.5	9.5	9.5									
						340		FTO	5	1.5	7.5	14	19.5	25.5	31	37	42.5	48						
								FTC gas		1.5	7.5	14	19.5	25.5	31									
FTC liquid								1.5	7.5	14	15	15	15											
						308		FTO	3	0.5	4.5	8	11.5	16	19.5	23.5	27.5	31						
9	8-25 ATO 7-24 ATC			850		FTO	4.9	1.5	7.5	12	17	21												
						FTC gas		1.5	7.5	12	17	21												
						FTC liquid		1.5	7.5	12	13	13												
				510		FTO	7.5	2.7	12	19	26	32												
						FTC gas		2.7	12	19	26	32												
						FTC liquid		2.7	12	19	21	21												
				340		FTO	13	4.9	19	30	41	51												
						FTC gas		4.9	19	30	41	51												
		FTC liquid				4.9	19	30	34	34														
				398		FTO	7.5	2.7	12	19	26	32												

FTO: Flow to open (liquid and gas)    FTC: Flow to close  
 ATO: Air to open, fail closed        ATC: Air to close, fail open

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 17-4 PH  
 Seat :PTFE/ Metal  
 Seat leakage : Class VI  
 Range : 7-24 & 8-25

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open														
		Size	Range					Supply Pressure (bar)														
DN	in	in	psi					2.1	2.1	2.5	2.8	3.1	3.5	3.8	4.2	4.5	4.8	5.2				
250	10	7	7-24	1300		FTO			1	2.5	4	5	6.5	7.5	9	10.5	11.5					
						FTC gas			1	2.5	4	5	6.5	7								
						FTC liquid			1	2.5	3.5	3.5	3.5	3.5								
				780		FTO	1		2	4	6	8	10.5	12.5	14.5	16.5	18.5					
						FTC gas			2	4	6	8	10.5									
						FTC liquid			2	4	5	5	5									
				520		FTO	2		3.5	7	10.5	13	16.5	19.5	22.5	26	29.5					
						FTC gas			3.5	7	10.5	13	16.5									
						FTC liquid			3.5	7	8	8	8									
					486		FTO	1		2	4	6	8	10.5	12.5	14.5	16.5	18.5				
		300	12	7	7-24	1300		FTO	2.3		3.9	6	9	12	15	18	19					
								FTC gas			3.9	6	9	12	15	15						
								FTC liquid			3.9	6	7.5	7.5	7.5	7.5						
						780		FTO	3.8	1	6	10	13	19	22	28	29					
								FTC gas		1	6	10	13	19	22	23						
								FTC liquid		1	6	10	11	11	11	11						
						520		FTO	6.5	2.1	10	16	22	30	36	44	46					
								FTC gas		2.1	10	16	22	30	36	37						
FTC liquid								2.1	10	16	18	18	18	18								
					486		FTO	3.8	1	6	10	13	19	22	28	29						
300	12			7	7-24	1750		FTO				1	1.5	3	3.5	4	5	6	6.5			
								FTC gas					1	1.5	3	3.5	4					
								FTC liquid					1	1.5	2	2	2					
						1050		FTO			0.5	2	3	4.5	5.5	7	7.5	9	10.5			
								FTC gas			0.5	2	3	4.5	5.5	6						
								FTC liquid			0.5	2	3	3	3	3						
						700		FTO	0.5		1.5	3.5	5.5	7.5	9	11	13	15	17			
								FTC gas			1.5	3.5	5.5	7.5	9	9.5						
		FTC liquid							1.5	3.5	5	5	5	5								
					684		FTO			0.5	2	3	4.5	5.5	7	7.5	9	10.5				
		300	12	9	8-25 ATO 7-24 ATC	1750		FTO	1		1.9	3.4	4.9	6.5	8	10	11	13	15			
								FTC gas			1.9	3.4	4.9	6.5	8	8.5	8.5					
								FTC liquid			1.9	3.4	4.3	4.3	4.3	4.3	4.3					
						1050		FTO	1.8		3.2	5	7.5	10	12	15	18	20	23			
								FTC gas			3.2	5	7.5	10	12	13						
								FTC liquid			3.2	5	6.5	6.5	6.5	6.5						
						700		FTO	3.4		5.5	9	12	17	21	25	29	32	37			
								FTC gas			5.5	9	12	17	21	21						
FTC liquid									5.5	9	10	10	10	10								
					684		FTO	1.8		3.2	5	7.5	10	12	15	18	20	23				

FTO: Flow to open (liquid and gas)    FTC: Flow to close  
 ATO: Air to open, fail closed        ATC: Air to close, fail open

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 316 OR 316L  
 Seat : Metal / Metal  
 Seat leakage : Class IV  
 Range : 7 - 15

Valve Size		Actuator		CV Flow to Close	CV Flow to Open	CV Differential Velocity Device Flow to Open	Air to Close Flow to Close	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open					
		Size	Range						Supply Pressure (bar)					
DN	in	in	psi				1.4	1.4	1.4	1.8	2.1	2.5	2.8	3.1
25	1	4 1/2	7-15	15	14		69	70	70					
				9	8.4		100	100	100					
				6	5.6		100	100	100					
				3			100	100	100					
				1			100	100	100					
				0.5			100	100	100					
40	1 1/2	4 1/2	7-15			5		100	100					
				39	33		100	46	29.5	55				
				23.4	19.8		100	69	44	95				
50	2	4 1/2	7-15	15.6	13.2		100	96.5	62	100				
						12.5		69	44	95				
				53	50		33	25	16	34.5	41.5			
				31.8	30		51	38.5	24	52.5	70			
80	3	6	7-15	21.2	20		69	51	32.5	70	70			
						18		38.5	24	52.5	70			
				145	135		18	19.5	12.5	26	41.5			
				87	81		28	29	18.5	40	64			
100	4	6	7-15	58	54		37	44	27.5	60	70			
						48		29	18.5	40	64			
				230			13.0	9.5	6	14	22	30.5	38.5	41.5
				138			22	15	9.5	20.5	38	46	59	70
				92			31	21.5	14	29.5	48	67	70	70
						77		15	9.5	20.5	38	46	59	70

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 316 OR 316L  
 Seat : Metal / Metal  
 Seat leakage : Class IV  
 Range : 7-24

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Close Flow to Close	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open																					
		Size	Range						Supply Pressure (bar)																					
DN	in	in	psi						2.1	2.1	2.1	2.5	2.8	3.1	3.5	3.8	4.2	4.5	4.8	5.2										
150	6	7	7-24	500		FTO		6	3.5	9	14	20.5																		
						FTC	9.5		3.5	9	14	20.5																		
						FTO		9	5	12.5	20.5	27.5																		
						FTC	15		5	12.5	20.5	27.5																		
				200				181		FTO		14	7.5	19	31	41.5														
										FTC	21		7.5	19	31	34.5														
										FTO		9	5	12.5	20.5	27.5														
										FTC																				
200	8	7	7-24	850		FTO		3	1.5	4	7	9.5	12.5	15																
						FTC gas	4.8		1.5	4	7	9.5	12.5																	
						FTC liquid	4.8		1.5	4	6	6	6																	
						FTO		5	3	7	11	15	19	20.5																
						FTC gas	7.5		3	7	11	15	19																	
						FTC liquid	7.5		3	7	9.5	9.5	9.5																	
				340				308		FTO		7.5	4	11	17	24	31	34.5												
										FTC gas	12		4	11	17	24	31													
										FTC liquid	12		4	11	15	15	15													
										FTO		5	3	7	11	15	19	20.5												
										FTC gas																				
										FTC liquid																				

FTO: Flow to open (liquid and gas) FTC: Flow to close

NOTE: INLET PRESSURE MUST NOT EXCEED THE  
 ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 316 OR 316L  
 Seat : Metal / Metal  
 Seat leakage : Class IV  
 Range : 7-24 & 8-25

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Close Flow to Close	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open																
		Size	Range						Supply (bar)																
DN	in	in	psi						2.1	2.1	2.1	2.5	2.8	3.1	3.5	3.8	4.2	4.5	4.8	5.2					
250	10	7	7-24	1300		FTO		1.5	1	2.5	4	5.5	7	8	9.5	11									
						FTC gas	2.8		1	2.5	4	5.5	7												
						FTC liquid	2.8		1	2.5	3.5	3.5	3.5												
				780		FTO		3	1.5	3.5	5.5	8	10.5	12.5	15	17									
						FTC gas	4.1		1.5	3.5	5.5	8	10.5												
						FTC liquid	4.1		1.5	3.5	5	5	5												
		520		FTO		4	2.5	6	9.5	13	16.5	20.5	24	27.5											
				FTC gas	6.5		2.5	6	9.5	13	16.5														
				FTC liquid	6.5		2.5	6	8	8	8														
						486		3	1.5	3.5	5.5	8	10.5	12.5	15	17									
		9	8-25 ATO 7-24 ATC	1300		FTO		4	2	5.5	8	10													
						FTC gas	6		2	5.5	8	10													
	FTC liquid					6		2	5.5	7.5	7.5														
	780				FTO		6	3.1	8.5	12	16														
					FTC gas	9		3.1	8.5	12	16														
					FTC liquid	9		3.1	8.5	11	11														
	520			FTO		10	5	14	20	26															
				FTC gas	15		5	14	20	26															
				FTC liquid	15		5	14	18	18															
						486		6	3.1	8.5	12	16													
	300		12	7	7-24	1750		FTO		1		1.5	2	3	4	5	5.5	6	7	8					
								FTC gas	1.4			1.5	2	3	4	4									
		FTC liquid						1.4			1.5	2	2	2	2										
		1050					FTO		1.5	0.5	2	3.5	5	6	7	8	9.5	11	12.5						
FTC gas							2.4		0.5	2	3.5	5	6												
FTC liquid							2.4		0.5	2	3	3	3												
700				FTO		2.5	1.5	3.5	5.5	7.5	9.5	12.5	14.5	16.5	18.5	20.5									
				FTC gas	4.1		1.5	3.5	5.5	7.5	9.5														
				FTC liquid	4.1		1.5	3.5	5	5	5														
						684		1.5	0.5	2	3.5	5	6	7	8	9.5	11	12.5							
9		8-25 ATO 7-24 ATC		1750		FTO		2.1	1	3.1	4.6	6	8	9											
						FTC gas	3.5		1	3.1	4.6	6	8	8.5											
			FTC liquid			3.5		1	3.1	4.3	4.3	4.3													
			1050		FTO		3.3	1.5	4.7	7.0	9.5	12	14												
					FTC gas	5		1.5	4.7	7.0	9.5	12	13												
					FTC liquid	5		1.5	4.7	6.5	6.5	6.5													
		700		FTO		5	2.5	7.5	11	15	21	23													
				FTC gas	8.5		2.5	7.5	11	15	21	21													
				FTC liquid	8.5		2.5	7.5	10	10	10	10													
						684		3.3	1.5	4.7	7.0	9.5	12	14											

FTO: Flow to open (liquid and gas)    FTC: Flow to close  
 ATO: Air to open, fail closed        ATC: Air to close, fail open

NOTE: INLET PRESSURE MUST NOT EXCEED THE  
 ANSI RATING FOR THE SELECTED PRESSURE CLASS

**Shaft : 316 OR 316L**  
**Seat : PTFE / Metal**  
**Seat Leakage: Class VI**  
**Range : 7 - 15**

Valve Size		Actuator		CV Flow to Close	CV Flow to Open	CV Differential Velocity Device Flow to Open	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open							
		Size	Range					Supply Pressure (bar)							
DN	in	in	psi					1.4	1.4	1.8	2.1	2.5	2.8	3.1	
25	1	4 1/2	7-15	15	14			55	55						
				9	8.4			70	70						
				6	5.6			70	70						
				5		70	70								
40	1 1/2			39	33			34.5	16	48					
				23.4	19.8			70	22	70					
				15.6	13.2			70	36	70					
				12.5		70	22	70							
50	2			53	50			17	6.5	25.5	41.5				
				31.8	30			36.5	9.5	36.5	65				
		21.2	20			36	16	51.5	70						
		18		36.5	9.5	36.5	65								
80	3	145	135			14	6	20.5	34.5						
		87	81			29	9	29	51						
		58	54			33	16	47	55						
		48		29	9	29	51								
100	4	230				7	2.5	11	18	25.5	33	34.5			
		138				14.5	3.5	14.5	26	37	49	55			
		92				16	7	22.5	39.5	55	55	55			
				77		14.5	3.5	14.5	26	37	49	55			

**NOTE: INLET PRESSURE MUST NOT EXCEED THE  
 ANSI RATING FOR THE SELECTED PRESSURE CLASS**

Shaft : 316 OR 316L  
 Seat : PTFE / Metal  
 Seat leakage : Class VI  
 Range : 7-24

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open															
		Size	Range					Supply (bar)															
DN	in	in	psi					2.1	2.1	2.5	2.8	3.1	3.5	3.8	4.2	4.5	4.8	5.2					
150	6	7	7-24	500		FTO	4	1.5	6	11.5	16.5												
						FTC		1.5	6	11.5	16.5												
				300		FTO	9	2	9	16.5	24												
						FTC		2	9	16.5	24												
				200				FTO	10.5	4	15	26	34.5										
								FTC		4	15	26	34.5										
				181		FTO	9	2	9	16.5	24												
200	8	7	7-24	850		FTO	1.5		3	5	7.5	10.5	12.5										
						FTC gas			3	5	7.5	10.5	12.5										
						FTC liquid			3	5	6	6	6										
				510				FTO	3	0.5	4.5	8	11.5	16	19								
								FTC gas		0.5	4.5	8	11.5	16	19								
								FTC liquid		0.5	4.5	8	9.5	9.5	9.5								
				340				FTO	5	1.5	7.5	14	19	25.5	31								
								FTC gas		1.5	7.5	14	19	25.5	31								
								FTC liquid		1.5	7.5	14	15	15	15								
				308		FTO	3	0.5	4.5	8	11.5	16	19										

FTO: Flow to open (liquid and gas) FTC: Flow to close

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 316 OR 316L  
 Seat : PTFE / Metal  
 Seat leakage : Class VI  
 Range : 7-24 & 8-25

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open															
		Size	Range					Supply Pressure (bar)															
DN	in	in	psi					2.1	2.1	2.5	2.8	3.1	3.5	3.8	4.2	4.5	4.8	5.2					
250	10	7	7-24	1300		FTO				1	2.5	4	5	6.5	7.5	9							
						FTC gas				1	2.5	4	5	6.5	7								
						FTC liquid				1	2.5	3.5	3.5	3.5	3.5								
				780		FTO	1			2	4	6	8	10.5	12.5	14.5							
						FTC gas				2	4	6	8	10.5									
						FTC liquid				2	4	5	5	5									
				520		FTO	2			3.5	7	10.5	13	16.5	19.5	22.6							
						FTC gas				3.5	7	10.5	13	16.5									
						FTC liquid				3.5	7	8	8	8									
						486		FTO	1		2	4	6	8	10.5	12.5	14.5						
		9	8-25 ATO 7-24 ATC	1300		FTO	2.3			3.9	6	8.5											
						FTC gas				3.9	6	8.5											
						FTC liquid				3.9	6	7.5											
				780		FTO	3.8	1		6	10	13											
						FTC gas		1		6	10	13											
						FTC liquid		1		6	10	11											
				520		FTO	6.5	2.1		10	16	21											
						FTC gas		2.1		10	16	21											
FTC liquid						2.1		10	16	18													
				486		FTO	3.8	1	6	10	13												
300	12	7	7-24	1750		FTO				1	1.5	3	3.5	4	5	6	6.5						
						FTC gas				1	1.5	3	3.5	4									
						FTC liquid				1	1.5	2	2	2									
				1050		FTO				0.5	2	3	4.5	5.5	7	7.5	9	10.5					
						FTC gas				0.5	2	3	4.5	5.5	6								
						FTC liquid				0.5	2	3	3	3									
				700		FTO	0.5			1.5	3.5	6.5	7.5	9	11	13	15	17					
						FTC gas				1.5	3.5	5.5	7.5	9	9.5								
						FTC liquid				1.5	3.5	5	5	5	5								
						684		FTO			0.5	2	3	4.5	5.5	7	7.5	9	10.5				
		9	8-25 ATO 7-24 ATC	1750		FTO	1			1.9	3.4	4.9	6.5	7.5									
						FTC gas				1.9	3.4	4.9	6.5	7.5									
						FTC liquid				1.9	3.4	4.3	4.3	4.3									
				1050		FTO	1.8			3.2	5	7.5	10	11									
						FTC gas				3.2	5	7.5	10	11									
						FTC liquid				3.2	5	6.5	6.5	6.5									
				700		FTO	3.4			5.5	9	12	17	19.1									
						FTC gas				5.5	9	12	17	19.1									
FTC liquid								5.5	9	10	10	10											
				684		FTO	1.8		3.2	5	7.5	10	11										

FTO: Flow to open (liquid and gas)    FTC: Flow to close  
 ATO: Air to open, fail closed        ATC: Air to close, fail open

NOTE: INLET PRESSURE MUST NOT EXCEED THE  
 ANSI RATING FOR THE SELECTED PRESSURE CLASS

# **US Units**

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# **Camflex 35000 Series Pressure Drop Tables**

**Masoneilan**

# Table of Contents

## 35000 Series Pressure Drop Tables

### PH5000

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

### US Units

#### 17 – 4 PH Shaft

##### ANSI Class IV

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#### 316 or 316L Shaft

##### ANSI Class IV

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#### 17 – 4 PH Shaft

##### ANSI Class VI

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10" – 12".....	Page 8

#### 316 or 316L Shaft

##### ANSI Class VI

1" – 4".....	Page 12
6" – 8".....	Page 13
10" – 12".....	Page 14

Shaft : 17 - 4 PH  
 Seat : Metal / Metal  
 Seat leakage : Class IV  
 Range : 7 - 15

Valve Size		Actuator		CV Flow to Close	CV Flow to Open	CV Differential Velocity Device Flow to Open	Air to Close Flow to Close	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open									
		Size	Range						Supply Pressure (psi)									
in	DN	in	psi						20	20	20	25	30	35	40	45		
1	25	4 1/2	7-15	15	14		1000	1015	1015									
				9	8.4		1450	1450	1450									
				6	5.6		1450	1450	1450									
				3			1450	1450	1450									
				1			1450	1450	1450									
				0.5			1450	1450	1450									
1 1/2	40			4 1/2	7-15			5		1450	1450							
						39	33	1450	667	428	798							
						23.4	19.8	1450	1000	638	1378							
						15.6	13.2	1450	1399	899	1450							
								12.5		1000	638	1378						
						2	50	4 1/2	7-15			18		558	348	761	1015	
53	50	479	363	232	500					602								
31.8	30	740	558	348	761					1015								
21.2	20	1000	740	471	1015					1015								
		18		558	348					761	1015							
3	80	6	7-15							48		421	268	580	928			
				145	135	261	283	181	377	602								
				87	81	406	421	268	580	928								
				58	54	537	638	399	870	1015								
						48		421	268	580	928							
				4	100	6	7-15			77		218	138	297	551	667	856	1015
230		189	138					87	203	319	442	558	602					
138		319	218					138	297	551	667	856	1015					
92		450	312					203	428	696	972	1015	1015					
		77						218	138	297	551	667	856	1015				
		77						218	138	297	551	667	856	1015				

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 17 - 4 PH  
 Seat : Metal / Metal  
 Seat leakage : Class IV  
 Range : 7-24 & 7-25

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Close Flow to Close	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open																				
		Size	Range						Supply Pressure (psi)																				
in	DN	in	psi						30	30	30	35	40	45	50	55	60	65	70	75									
6	150	7	7-24	500		FTO		87	51	131	203	297	363	442	522	602													
						FTC gas	138		51	131	203	297	363	442	522	602													
						FTC liquid	138		51	131	203	297	297	297	297	297													
				300		FTO		131	73	181	297	399	500	616	732	848													
						FTC gas	218		73	181	297	399	500	616	732	848													
						FTC liquid	218		73	181	297	399	428	428	428	428													
				200		FTO		203	109	276	450	616	798	972	1015														
						FTC gas	305		109	276	450	616	798	972	1015														
						FTC liquid	305		109	276	450	500	500	500	500														
				9	8-25 ATO 7-24 ATC	500		FTO		181	131	73	181	297	399	500	616	732	848										
								FTC gas		232	131	319	464	609	740														
								FTC liquid	319		131	319	464	609	740														
		300				FTO		348	189	479	711	928	1218																
						FTC gas	493		189	479	711	928	1218																
						FTC liquid	493		189	479	609	609	609																
		200				FTO		522	290	711	1030	1349	1450																
						FTC gas	711		290	711	1030	1349	1450																
						FTC liquid	711		290	711	885	885	885																
		8	300			7	7-24	850		FTO		44	22	58	102	138	181	218	261	297	341	348							
										FTC gas	70		22	58	102	138	181												
										FTC liquid	70		22	58	87	87													
				510				FTO		73	44	102	160	218	283	341	399	457	522	551									
								FTC gas	109		44	102	160	218	283														
								FTC liquid	109		44	102	138	138	138														
340				FTO		109	58	160	247	348	450	551	638	740	841	899													
				FTC gas	174		58	160	247	348	450																		
				FTC liquid	174		58	160	218	218	218																		
9	8-25 ATO 7-24 ATC			850		FTO		308	73	44	102	160	218	283	341	399	457	522	551										
						FTC gas		109	59	145	218	290	363																
						FTC liquid	160		59	145	218	290	363																
		510		FTO		160	87	232	348	450	551																		
				FTC gas	247		87	232	348	450	551																		
				FTC liquid	247		87	232	305	305	305																		
340		FTO		276	145	377	566	740	899																				
		FTC gas	392		145	377	566	740	899																				
		FTC liquid	392		145	377	493	493	493																				

FTO: Flow to open (liquid and gas)      FTC: Flow to close  
 ATO: Air to open, fail closed            ATC: Air to close, fail open

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 17 - 4 PH  
 Seat : Metal / Metal  
 Seat leakage : Class IV  
 Range : 7-24 & 8-25

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Close Flow to Close	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open																
		Size	Range						Supply Pressure (psi)																
in	DN	in	psi						30	30	30	35	40	45	50	55	60	65	70	75					
10	250	7	7-24	1300		FTO		22	15	36	58	80	102	116	138	160	181	210							
						FTC gas	41		15	36	58	80	102												
						FTC liquid	41		15	36	51	51	51												
				780		FTO		44	22	51	80	116	152	181	218	247	283	319							
						FTC gas	59		22	51	80	116	152												
						FTC liquid	59		22	51	73	73	73												
		520		FTO		58	36	87	138	189	239	297	348	399	457	508									
				FTC gas	94		36	87	138	189	239														
				FTC liquid	94		36	87	123	123	123														
						486		44	22	51	80	116	152	181	218	247	283	319							
		9	8-25 ATO 7-24 ATC	1300		FTO		58	29	80	116	160	203	247	305	319									
						FTC gas	87		29	80	116	160	203	218											
	FTC liquid					87		29	80	109	109	109	109												
	780				FTO		87	45	123	174	247	319	377	464	479										
					FTC gas	131		45	123	174	247	319	334												
					FTC liquid	131		45	123	160	160	160	160												
	520			FTO		145	73	203	290	392	522	624	754	783											
				FTC gas	218		73	203	290	392	522	537													
				FTC liquid	218		73	203	261	261	261	261													
						486		87	45	123	174	247	319	377	464	479									
	12		300	7	7-24	1750		FTO		15		22	29	44	58	73	80	87	102	116					
								FTC gas	20			22	29	44	58	58									
		FTC liquid						20			22	29	29	29	29										
		1050					FTO		22	7	29	51	73	87	102	116	138	160	181						
FTC gas							35		7	29	51	73	87												
FTC liquid							35		7	29	44	44	44												
700				FTO		36	22	51	80	109	138	181	210	239	268	297									
				FTC gas	59		22	51	80	109	138														
				FTC liquid	59		22	51	73	73	73														
						684		22	7	29	51	73	87	102	116	138	160	181							
9		8-25 ATO 7-24 ATC		1750		FTO		30	15	45	67	87	116	138	174	189	218	247							
						FTC gas	51		15	45	67	87	116	123											
			FTC liquid			51		15	45	62	62	62													
			1050		FTO		48	22	68	102	138	174	218	261	290	334	377								
					FTC gas	73		22	68	102	138	174	189												
					FTC liquid	73		22	68	94	94	94	94												
		700		FTO		73	36	109	160	218	305	363	435	493	551	624									
				FTC gas	123		36	109	160	218	305	305													
				FTC liquid	123		36	109	145	145	145	145													
						684		48	22	68	102	138	174	218	261	290	334	377							

FTO: Flow to open (liquid and gas)    FTC: Flow to close  
 ATO: Air to open, fail closed        ATC: Air to close, fail open

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 17 - 4 PH  
 Seat : PTFE / Metal  
 Seat Leakage: Class VI  
 Range : 7 - 15

Valve Size		Actuator		CV Flow to Close	CV Flow to Open	CV Differential Velocity Device Flow to Open	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open							
		Size	Range					Supply Pressure (psi)							
in	DN	in	psi				20	20	25	30	35	40	45		
1	25	4 1/2	7-15	15	14		798	798							
				9	8.4		1015	1015							
				6	5.6		1015	1015							
						5	1015	1015							
1 1/2	40					39	33		500	232	696				
						23.4	19.8		1015	319	1015				
						15.6	13.2		1015	522	1015				
								12.5	1015	319	1015				
2	50					53	50		247	94	370	602			
						31.8	30		529	138	529	943			
						21.2	20		522	232	747	1015			
								18	529	138	529	943			
3	80			145	135		203	87	297	500					
				87	81		421	131	421	740					
				58	54		479	232	682	798					
						48	421	131	421	740					
4	100			230			102	36	152	261	370	479	500		
				138			210	51	210	377	537	711	798		
				92			232	102	326	573	798	798	798		
						77	210	51	210	377	537	711	798		

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 17-4 PH  
 Seat :PTFE/ Metal  
 Seat leakage : Class VI  
 Range : 7-24 & 8-25

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open													
		Size	Range					Supply Pressure (psi)													
in	DN	in	psi					30	30	35	40	45	50	55	60	65	70	75			
6	150	7	7-24	500		FTO	58	22	87	167	239	312	377	450	500						
						FTC gas		22	87	167	239	312	377	450	500						
						FTC liquid		22	87	167	239	297	297	297	297						
				300		FTO	131	29	131	239	348	450	529	616	732						
						FTC gas		29	131	239	348	450	529	616	718						
						FTC liquid		29	131	239	348	363	363	363	363						
		200		FTO	152	58	218	377	529	682	798										
				FTC gas		58	218	377	529	682	798										
				FTC liquid		58	218	377	500	500	500										
						181	FTO	131	29	131	239	348	450	529	616	732					
		9	8-25 ATO 7 24 ATC	500		FTO	145	61	232	363	508	624									
						FTC gas		61	232	363	508	624									
	FTC liquid						61	232	363	392	392										
	300				FTO	232	94	363	566	769	943										
					FTC gas		94	363	566	769	943										
					FTC liquid		94	363	566	609	609										
	200			FTO	348	145	522	812	1102	1363											
				FTC gas		145	522	812	1102	1363											
				FTC liquid		145	522	812	885	885											
						181	FTO	232	94	363	566	769	943								
	8		300	7	7-24	850		FTO	22		44	73	109	152	181	218	247	297			
								FTC gas			44	73	109	152	181						
		FTC liquid								44	73	87	87	87							
		510					FTO	44	7	65	116	167	232	283	341	399	450				
FTC gas								7	65	116	167	232	283								
FTC liquid								7	65	116	138	138	138								
340				FTO	73	22	109	203	283	370	450	537	616	696							
				FTC gas		22	109	203	283	370	450										
				FTC liquid		22	109	203	218	218	218										
						308	FTO	44	7	65	116	167	232	283	341	399	450				
9		8-25 ATO 7 24 ATC		850		FTO	71	22	109	174	247	305									
						FTC gas		22	109	174	247	305									
			FTC liquid				22	109	174	189	189										
			510		FTO	109	39	174	276	377	464										
					FTC gas		39	174	276	377	464										
					FTC liquid		39	174	276	305	305										
		340		FTO	189	71	276	435	595	740											
				FTC gas		71	276	435	595	740											
				FTC liquid		71	276	435	493	493											
						308	FTO	109	39	174	276	377	464								

FTO: Flow to open (liquid and gas)    FTC: Flow to close  
 ATO: Air to open, fail closed        ATC: Air to close, fail open

NOTE: INLET PRESSURE MUST NOT EXCEED THE  
 ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 17-4 PH  
 Seat :PTFE/ Metal  
 Seat leakage : Class VI  
 Range : 7-24 & 8-25

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open												
		Size	Range					Supply Pressure (psi)												
in	DN	in	psi					30	30	35	40	45	50	55	60	65	70	75		
10	250	7	7-24	1300		FTO				15	36	58	73	94	109	131	152	167		
						FTC gas			15	36	58	73	94	102						
						FTC liquid			15	36	51	51	51	51						
				780		FTO	15		29	58	87	116	152	181	210	239	268			
						FTC gas			29	58	87	116	152							
						FTC liquid			29	58	73	73	73							
		520		FTO	29		51	102	152	189	239	283	326	377	428					
				FTC gas			51	102	152	189	239									
				FTC liquid			51	102	116	116	116									
						486	FTO	15		29	58	87	116	152	181	210	239	268		
		9	8-25 ATO 7-24 ATC	1300		FTO	33		57	87	131	174	218	261	276					
						FTC gas			57	87	131	174	218	218						
	FTC liquid							57	87	109	109	109								
	780				FTO	55	15	87	145	189	276	319	406	421						
					FTC gas		15	87	145	189	276	319	334							
					FTC liquid		15	87	145	160	160	160	160							
	520			FTO	94	30	145	232	319	435	522	638	667							
				FTC gas		30	145	232	319	435	522	537								
				FTC liquid		30	145	232	261	261	261	261								
						486	FTO	55	15	87	145	189	276	319	406	421				
	12		300	7	7-24	1750		FTO				15	22	44	51	58	73	87	94	
								FTC gas				15	22	44	51	58				
		FTC liquid									15	22	29	29	29					
		1050					FTO			7	29	44	65	80	102	109	131	152		
FTC gas									7	29	44	65	80	87						
FTC liquid									7	29	44	44	44	44						
700				FTO	7		22	51	80	109	131	160	189	218	247					
				FTC gas			22	51	80	109	131	138								
				FTC liquid			22	51	73	73	73	73								
						684	FTO			7	29	44	65	80	102	109	131	152		
9		8-25 ATO 7-24 ATC		1750		FTO	15		28	49	71	94	116	145	160	189	218			
						FTC gas			28	49	71	94	116	123	123					
			FTC liquid					28	49	62	62	62	62							
			1050		FTO	26		46	73	109	145	174	218	261	290	334				
					FTC gas			46	73	109	145	174	189							
					FTC liquid			46	73	94	94	94	94							
		700		FTO	49		80	131	174	247	305	363	421	464	537					
				FTC gas			80	131	174	247	305	305								
				FTC liquid			80	131	145	145	145	145								
						684	FTO	26		46	73	109	145	174	218	261	290	334		

FTO: Flow to open (liquid and gas)    FTC: Flow to close  
 ATO: Air to open, fail closed        ATC: Air to close, fail open

NOTE: INLET PRESSURE MUST NOT EXCEED THE  
 ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 316 OR 316L  
 Seat : Metal / Metal  
 Seat leakage : Class IV  
 Range : 7 - 15

Valve Size		Actuator		CV Flow to Close	CV Flow to Open	CV Differential Velocity Device Flow to Open	Air to Close Flow to Close	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open									
		Size	Range						Supply Pressure (psi)									
in	DN	in	psi						20	20	20	25	30	35	40	45		
1	25	4 1/2	7-15	15	14		1000	1015	1015									
				9	8.4		1450	1450	1450									
				6	5.6		1450	1450	1450									
				3			1450	1450	1450									
				1			1450	1450	1450									
				0.5			1450	1450	1450									
1 1/2	40			4 1/2	7-15			5		1450	1450							
						39	33		1450	667	428	798						
						23.4	19.8		1450	1000	638	1378						
						15.6	13.2		1450	1399	899	1450						
								12.5		1000	638	1378						
						2	50	4 1/2	7-15			18		558	348	761	1015	
53	50		479							363	232	500	602					
31.8	30		740							558	348	761	1015					
21.2	20		1000							740	471	1015	1015					
		18								558	348	761	1015					
3	80	6	7-15							145	135		261	283	181	377	602	
						87	81				406	421	268	580	928			
				58	54		537			638	399	870	1015					
						48				421	268	580	928					
				230			189			138	87	203	319	442	558	602		
				138			319			218	138	297	551	667	856	1015		
4	100			6	7-15	92					450	312	203	428	696	972	1015	1015
								77		218	138	297	551	667	856	1015		

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 316 OR 316L  
 Seat : Metal / Metal  
 Seat leakage : Class IV  
 Range : 7-24

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Close		Air to Open		Air to Open / Flow to Close or Air to Close / Flow to Open											
		Size	Range				Close	Flow	Open	Flow	Supply Pressure (psi)											
in	DN	in	psi				30	30	30	35	40	45	50	55	60	65	70	75				
6	150	7	7-24	500		FTO		87	51	131	203	297										
						FTC	138		51	131	203	297										
				300		FTO		131	73	181	297	399										
						FTC	218		73	181	297	399										
				200		FTO		203	109	276	450	602										
						FTC	305		109	276	450	500										
				181		FTO		131	73	181	297	399										
8	200	7	7-24	850		FTO		44	22	58	102	138	181	218								
						FTC gas	70		22	58	102	138	181									
						FTC liquid	70		22	58	87	87	87									
				510		FTO		73	44	102	160	218	276	297								
						FTC gas	109		44	102	160	218	276									
						FTC liquid	109		44	102	138	138	138									
				340		FTO		109	58	160	247	348	450	500								
						FTC gas	174		58	160	247	348	450									
						FTC liquid	174		58	160	218	218	218									
				308		FTO		73	44	102	160	218	276	297								

FTO: Flow to open (liquid and gas) FTC: Flow to close

NOTE: INLET PRESSURE MUST NOT EXCEED THE  
 ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 316 OR 316L  
 Seat : Metal / Metal  
 Seat leakage : Class IV  
 Range : 7-24 & 8-25

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Close Flow to Close	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open																
		Size	Range						Supply Pressure (psi)																
in	DN	in	psi						30	30	30	35	40	45	50	55	60	65	70	75					
10	250	7	7-24	1300		FTO			22	15	36	58	80	102	116	138	160								
						FTC gas	41		15	36	58	80	102												
						FTC liquid	41		15	36	51	51	51												
				780		FTO			44	22	51	80	116	152	181	218	247								
						FTC gas	59		22	51	80	116	152												
						FTC liquid	59		22	51	73	73	73												
				520		FTO			58	36	87	138	189	239	297	348	399								
						FTC gas	94		36	87	138	189	239												
						FTC liquid	94		36	87	116	116	116												
						486	FTO			44	22	51	80	116	152	181	218	247							
							FTO			58	29	80	116	145											
		9	8-25 ATO 7-24 ATC	1300		FTO				29	80	116	145												
						FTC gas	87		29	80	116	145													
						FTC liquid	87		29	80	109	109													
				780		FTO			87	45	123	174	232												
						FTC gas	131		45	123	174	232													
						FTC liquid	131		45	123	160	160													
				520		FTO			145	73	203	290	377												
FTC gas	218						73	203	290	377															
FTC liquid	218						73	203	261	261															
				486	FTO			87	45	123	174	232													
12	300	7	7-24	1750		FTO			15		22	29	44	58	73	80	87	102	116						
						FTC gas	20			22	29	44	58	58											
						FTC liquid	20			22	29	29	29	29											
				1050		FTO			22	7	29	51	73	87	102	116	138	160	181						
						FTC gas	35		7	29	51	73	87												
						FTC liquid	35		7	29	44	44	44												
				700		FTO			36	22	51	80	109	138	181	210	239	268	297						
						FTC gas	59		22	51	80	109	138												
						FTC liquid	59		22	51	73	73	73												
						684	FTO			22	7	29	51	73	87	102	116	138	160	181					
		9	8-25 ATO 7-24 ATC	1750		FTO				30	15	45	67	87	116	131									
						FTC gas	51		15	45	67	87	116	123											
						FTC liquid	51		15	45	62	62	62												
				1050		FTO			48	22	68	102	138	174	203										
						FTC gas	73		22	68	102	138	174	189											
						FTC liquid	73		22	68	94	94	94	94											
				700		FTO			73	36	109	160	218	305	334										
						FTC gas	123		36	109	160	218	305	305											
FTC liquid	123						36	109	145	145	145	145													
				684	FTO			48	22	68	102	138	174	203											

FTO: Flow to open (liquid and gas)    FTC: Flow to close  
 ATO: Air to open, fail closed        ATC: Air to close, fail open

NOTE: INLET PRESSURE MUST NOT EXCEED THE  
 ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 316 OR 316L  
 Seat : PTFE / Metal  
 Seat Leakage: Class VI  
 Range : 7 - 15

Valve Size		Actuator		CV Flow to Close	CV Flow to Open	CV Differential Velocity Device Flow to Open	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open							
		Size	Range					Supply Pressure (psi)							
in	DN	in	psi				20	20	25	30	35	40	45		
1	25	4 1/2	7-15	15	14		798	798							
				9	8.4		1015	1015							
				6	5.6		1015	1015							
						5	1015	1015							
1 1/2	40					39	33		500	232	696				
						23.4	19.8		1015	319	1015				
						15.6	13.2		1015	522	1015				
								12.5	1015	319	1015				
2	50					53	50		247	94	370	602			
						31.8	30		529	138	529	943			
						21.2	20		522	232	747	1015			
								18	529	138	529	943			
3	80			145	135		203	87	297	500					
				87	81		421	131	421	740					
				58	54		479	232	682	798					
						48	421	131	421	740					
4	100			230			102	36	152	261	370	479	500		
				138			210	51	210	377	537	711	798		
				92			232	102	326	573	798	798	798		
						77	210	51	210	377	537	711	798		

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 316 OR 316L  
 Seat : PTFE / Metal  
 Seat leakage : Class VI  
 Range : 7-24

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open														
		Size	Range					Supply Pressure (psi)														
in	DN	in	psi					30	30	35	40	45	50	55	60	65	70	75				
6	150	7	7-24	500		FTO	58	22	87	167	239											
						FTC		22	87	167	239											
				300		FTO	131	29	131	239	348											
						FTC		29	131	239	348											
				200		FTO	152	58	218	377	500											
						FTC		58	218	377	500											
				181		FTO	131	29	131	239	348											
8	200	7	7-24	850		FTO	22		44	73	109	152	181									
						FTC gas			44	73	109	152	181									
						FTC liquid			44	73	87	87	87									
				510		FTO	44	7	65	116	167	232	276									
						FTC gas		7	65	116	167	232	276									
						FTC liquid		7	65	116	138	138	138									
				340		FTO	73	22	109	203	276	370	450									
						FTC gas		22	109	203	276	370	450									
						FTC liquid		22	109	203	218	218	218									
				308		FTO	44	7	65	116	167	232	276									

FTO: Flow to open (liquid and gas) FTC: Flow to close

NOTE: INLET PRESSURE MUST NOT EXCEED THE ANSI RATING FOR THE SELECTED PRESSURE CLASS

Shaft : 316 OR 316L  
 Seat : PTFE / Metal  
 Seat leakage : Class VI  
 Range : 7-24 & 8-25

Valve Size		Actuator		CV Flow to Open & Flow to Close	CV Differential Velocity Device Flow to Open	Flow Direction	Air to Open Flow to Open	Air to Open / Flow to Close or Air to Close / Flow to Open													
		Size	Range					Supply Pressure (psi)													
in	DN	in	psi					30	30	35	40	45	50	55	60	65	70	75			
10	250	7	7-24	1300		FTO				15	36	58	73	95	109	131					
						FTC gas			15	36	58	73	95	102							
						FTC liquid			15	36	51	51	51	51							
				780		FTO	15		29	58	87	116	153	182	211						
						FTC gas			29	58	87	116	153								
						FTC liquid			29	58	73	73	73								
				520		FTO	29		51	102	153	189	240	284	327						
						FTC gas			51	102	153	189	240								
						FTC liquid			51	102	116	116	116								
						486	FTO	15		29	58	87	116	153	182	211					
		9	8-25 ATO 7-24 ATC	1300		FTO	33		57	87	124										
						FTC gas			57	87	124										
						FTC liquid			57	87	109										
				780		FTO	55	15	87	145	189										
						FTC gas		15	87	145	189										
						FTC liquid		15	87	145	160										
				520		FTO	95	31	145	233	305										
						FTC gas		31	145	233	305										
FTC liquid						31	145	233	262												
				486	FTO	55	15	87	145	189											
12	300	7	7-24	1750		FTO				15	22	44	51	58	73	87	95				
						FTC gas				15	22	44	51	58							
						FTC liquid				15	22	29	29	29							
				1050		FTO			7	29	44	65	80	102	109	131	153				
						FTC gas			7	29	44	65	80	87							
						FTC liquid			7	29	44	44	44	44							
				700		FTO	7		22	51	95	109	131	160	189	218	247				
						FTC gas			22	51	80	109	131	138							
						FTC liquid			22	51	73	73	73	73							
						684	FTO			7	29	44	65	80	102	109	131	153			
		9	8-25 ATO 7-24 ATC	1750		FTO	15		28	49	71	95	109								
						FTC gas			28	49	71	95	109								
						FTC liquid			28	49	63	63	63								
				1050		FTO	26		47	73	109	145	160								
						FTC gas			47	73	109	145	160								
						FTC liquid			47	73	95	95	95								
				700		FTO	49		80	131	174	247	276								
						FTC gas			80	131	174	247	276								
FTC liquid							80	131	145	145	145										
				684	FTO	26		47	73	109	145	160									

FTO: Flow to open (liquid and gas)    FTC: Flow to close  
 ATO: Air to open, fail closed        ATC: Air to close, fail open

NOTE: INLET PRESSURE MUST NOT EXCEED THE  
 ANSI RATING FOR THE SELECTED PRESSURE CLASS