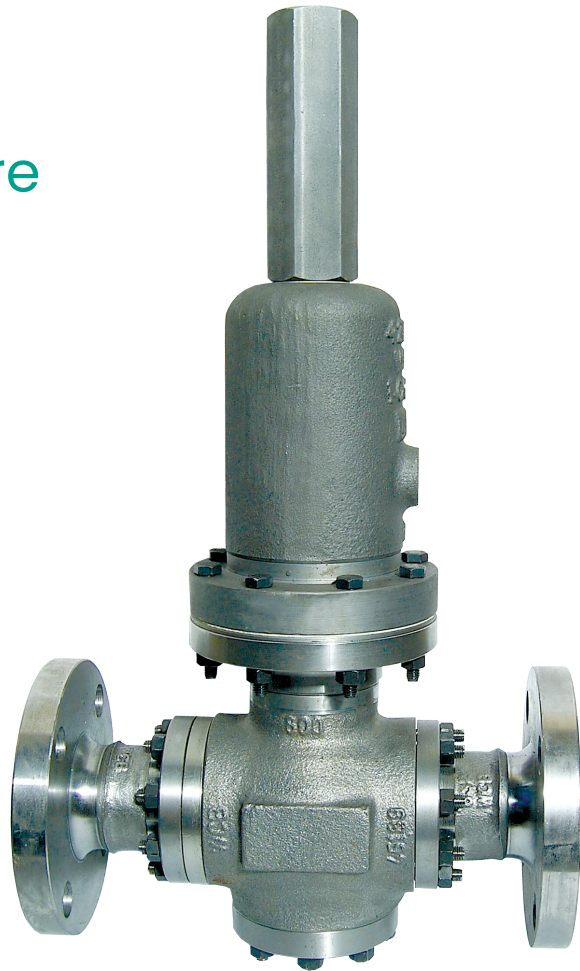
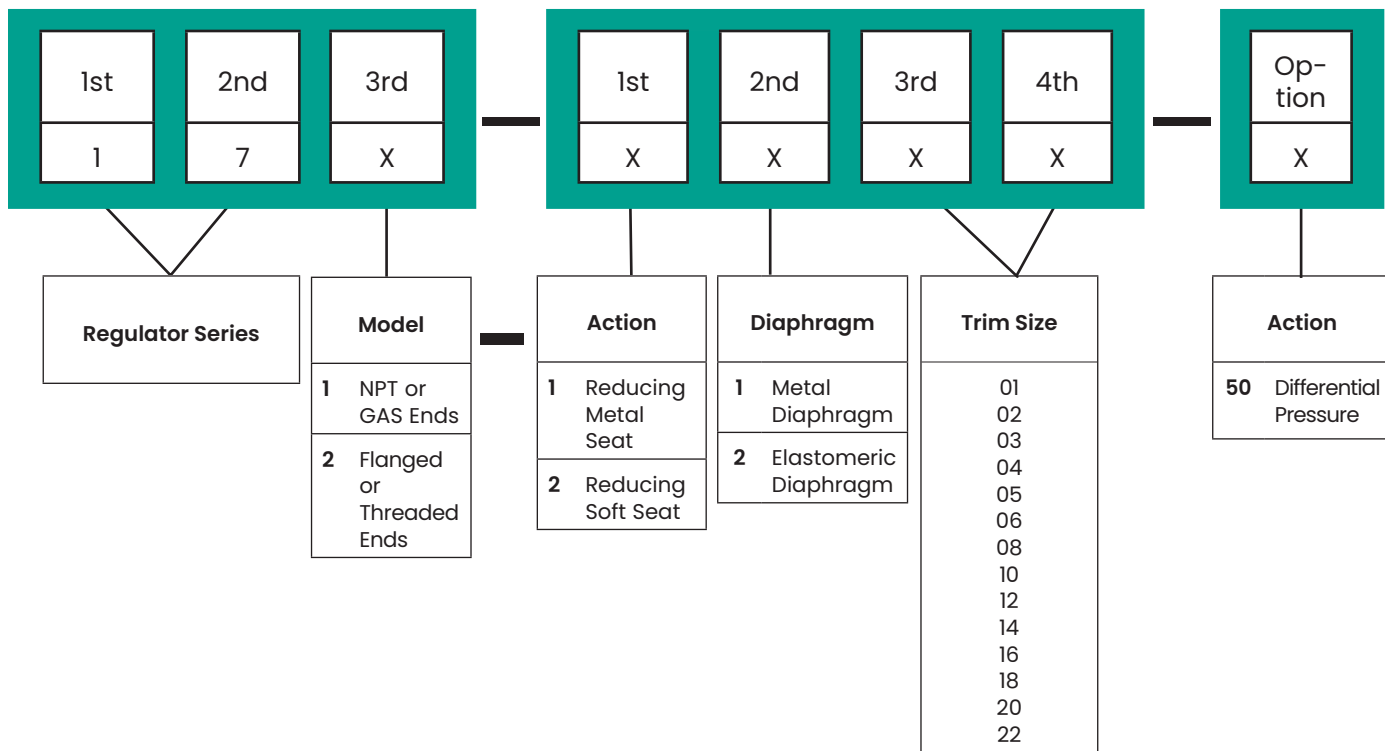


Masoneilan™ 171-172 Series

Direct-Operated, Pressure
Reducing Regulator



Numbering System



171 Series

NPT or Gas End Connections Cast Iron Construction

The 171 series are direct-operated, pressure reducing regulators. They are available in 1/2 through 1 1/2 inch (DN15 through DN40) with NPT or GAS threaded connections. The regulators are available only in cast iron. The robust construction can sustain rugged use. The design can handle inlet pressures up to 580 psig (40 barg).

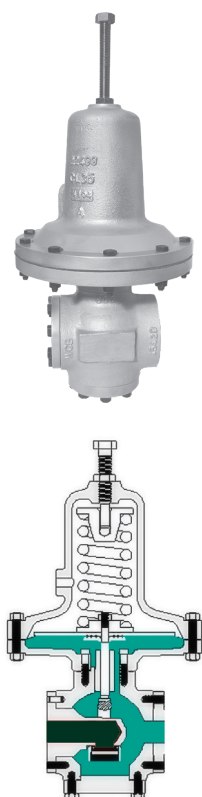
Features

- Economical design
- In-line maintenance
- Elastomer discs for tight shutoff
- Rugged construction

Specifications

Body

- **Body Sizes and End Connections:**
1/2" through 1 1/2" (DN15 through DN40) NPT or GAS
- **Maximum Inlet Pressure:**
580 psig (40 barg)
- **Maximum Outlet Pressure:**
see 171-table 1
- **Set Point Range:**
3 to 217 psig (0.21 to 15 barg)
see 171-table 1
- **Temperature Range:**
see 171-tables 3, 4
- **Pressure Sensing:**
internal (external on request)
- **Capacities:**
see 171-table 6
- **Weight:**
see 171-table 5



172 Series

Threaded or Flanged End Connections Carbon Steel, Stainless Steel & Alloy Construction

The 172 series are direct-operated, pressure reducing regulators. They are available in 1/2 through 2 inch (DN15 through DN50) body sizes and can be supplied with a wide range of different end connections. The flanged design provides flexibility to meet custom face to face dimensions as required. The regulators have a compact design and durable construction to sustain rugged use.

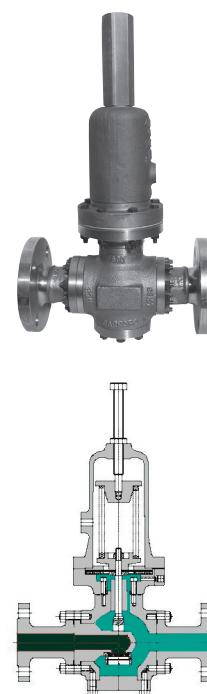
Features

- Versatility
- In-line maintenance
- High stability
- Rugged construction

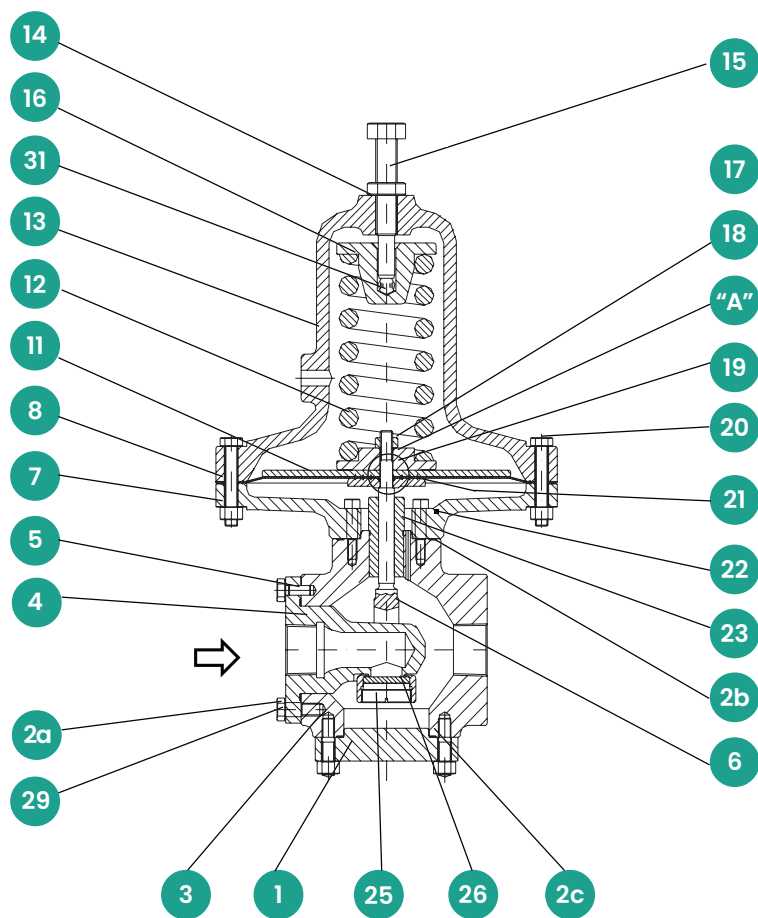
Specifications

Body

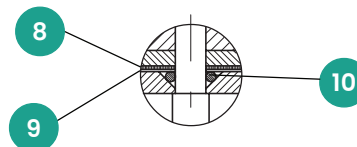
- **Body Sizes and End Connections:**
see 172-table 1
- **Maximum Inlet Pressure:**
see 172-table 5
- **Set Point Range:**
see 172-table 2
- **Materials of Construction:**
see 172-table 4
- **Temperature Range:**
see 172-tables 4, 8, 9
- **Pressure Sensing:**
internal (external on request)
- **Capacities:**
see 172-tables 5, 6
- **Allowable Pressure Drop:**
see 172-tables 10-14 English units,
15-19 Metric units
- **Weight:**
see 172-tables 20, 21



171 Series Materials



Part "A" (only on request)



Parts	
1	Cover
2	Gasket
3	L.P. Body
4	H.P. Body
5	Pin
6	Plug
7	Servomotor Flange
8	Diaphragm
9	Protection (if requested)
10	O-ring Gasket
11	Diaphragm Plate
12	Spring
13	Spring Cover
14	Lock Nut
15	Adjusting Screw
16	Spring Loader
17	Nut
18	Spring Guide
19	Screw
20	Nut
21	Little Plate
22	Screw
23	Guide
24	Spring
25	Plug Tap
26	Disc

171 - Table 1 - Standard Set Pressure Ranges

psig	barg
10.5 to 31	0.72 to 2.2
16 to 36	1.1 to 2.5
21 to 57	1.4 to 4.0
52 to 91	3.6 to 6.3
88 to 140	6.0 to 9.7
133 to 217	9.1 to 15.0

Maximum Outlet Pressure

Actuator Size	Max Outlet Pressure
140	145 psig (10 barg)
130	350 psig (24.1 barg)
120	470 psig (32.4 barg)

Set pressure ranges shown are representative only. For optimum accuracy, final selection should be made using the Masoneilan ValSpeQ™ sizing and selection software.

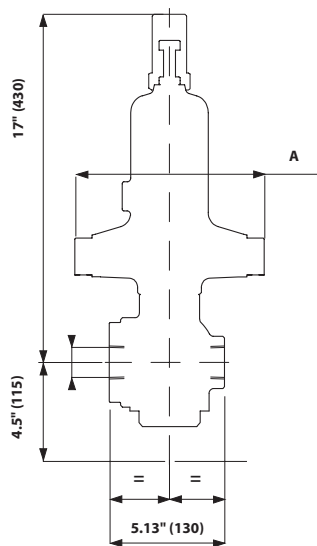
171 Series Materials and Dimensions

171 - Table 2 - Standard Material Combinations on Spring CrV Steel

Body	
	Cast Iron*
	32°F < T < 450°F (0°C < T < 232°C)
LP Body	Cast Iron
HP Body	316 SS
Cover	Carbon Steel
Studs	Carbon Steel
Gasket	PTFE
Trim	
Disc	FKM* Air, Gas, Liquids 316 SS** Steam Service
Plug Stem	316 SS
Guide Bushing	303 SS
Actuator	
Spring Casing	Cast Iron
Actuator Lower Casing	Cast I
Diaphragm	CR (Polychloroprene)*
	FPM***
	Ethylene-Propylene (EPDM + PTFE)** Steam Service

Configurations/Material Availability

*	Standard - Except Steam Service
**	Steam Service
***	Non Standard - Manufactured on Request



Dimensions with Seal Cap

171 - Table 3 - Temperature Ranges for Diaphragms

Chloroprene (CR)*	32 to 194°F (0 to 90°C)
Ethylene-Propylene (EPDM+PTFE)**	32 to 450°F (0 to 232°C)
Fluoroelastomer (FKM+FPM)***	32 to 392°F (0 to 200°C)
Stainless Steel**	32 to 450°F (0 to 232°C)

171 - Table 4 - Temperature Ranges for Disc Elastomers

Fluoroelastomer (FKM)*	32 to 392°F (0 to 200°C)
Polytetrafluoroethylene (PTFE)***	32 to 450°F (0 to 232°C)
Stainless Steel**	32 to 450°F (0 to 232°C)

171 - Table 5 - Assembly Weights

Size	Actuator Size	
	100/120/130/140	220
1/2" (DN15)	36.8 lbs (16.7 kg)	46.7 lbs (21.2 kg)
3/4" (DN20)	36.8 lbs (16.7 kg)	46.7 lbs (21.2 kg)
1" (DN25)	36.6 lbs (16.6 kg)	46.5 lbs (21.1 kg)
1-1/2" (DN40)	36.4 lbs (16.5 kg)	46.3 lbs (21 kg)

171 - Table 6 - Rated C_v for All Body Sizes with Elastomer Diaphragm

Trim Number	Body Size			
	1/2" (DN15)	3/4" (DN20)	1" (DN25)	1 1/2" (DN40)
1	0.031	0.031	0.031	0.031
2	0.15	0.15	0.16	0.16
3	0.35	0.35	0.35	0.35
4	0.57	0.59	0.59	0.59
5	1.0	1.0	1.0	1.0
6	1.2	1.2	1.2	1.2
8	2.1	2.1	2.2	2.3
10	3.0	3.1	3.1	3.3
12	4.3	4.3	4.4	4.7
14	-	5.5	5.5	6.0
16	-	5.9	6.1	6.6
18	-	-	7.5	8.2 (8.0) ¹
20	-	-	8.2	10.4 (9.8) ¹
22	-	-	-	12.8 (12.5) ¹

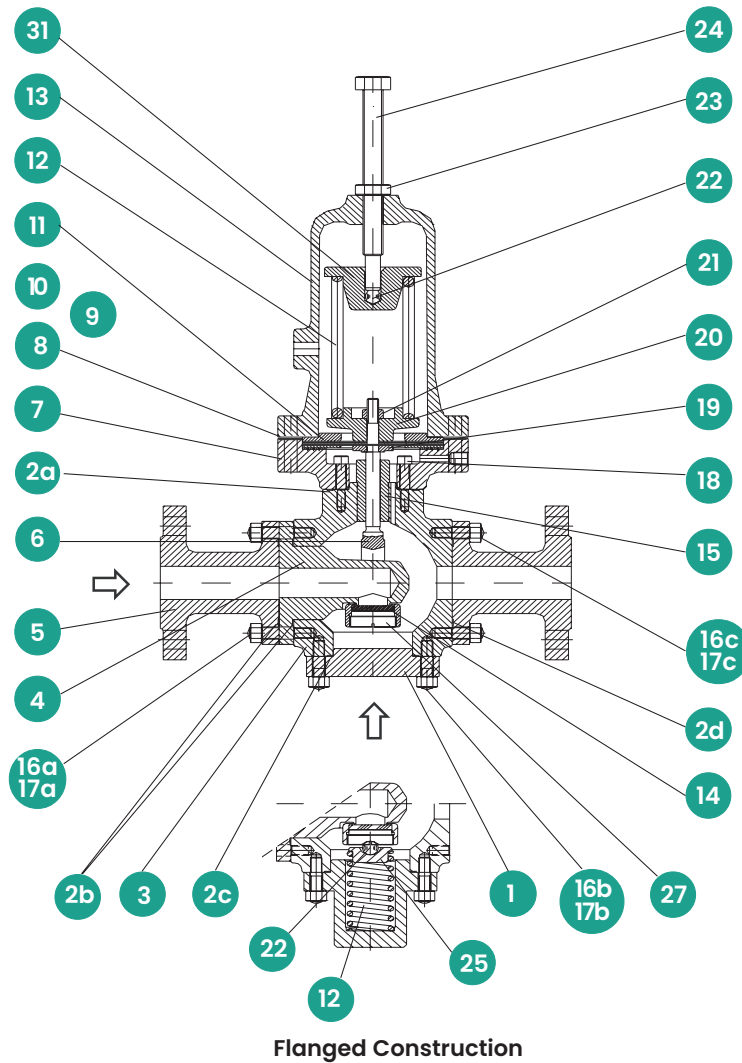
1. Reduced C_v for Actuator 100

171 - Table 7 - Actuator Case Dimensions

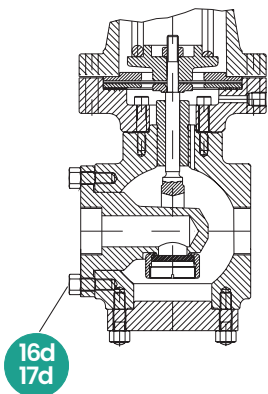
Actuator Model	A
100/120/130	5.2" (132mm)
140	5.5" (140mm)
220	8.7" (220mm)

172 Series Construction

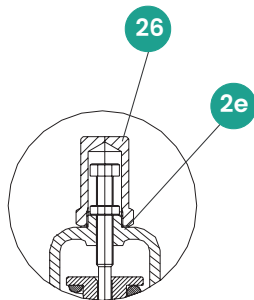
Actuator Sizes 100 to 140



Flanged Construction



Threaded Construction



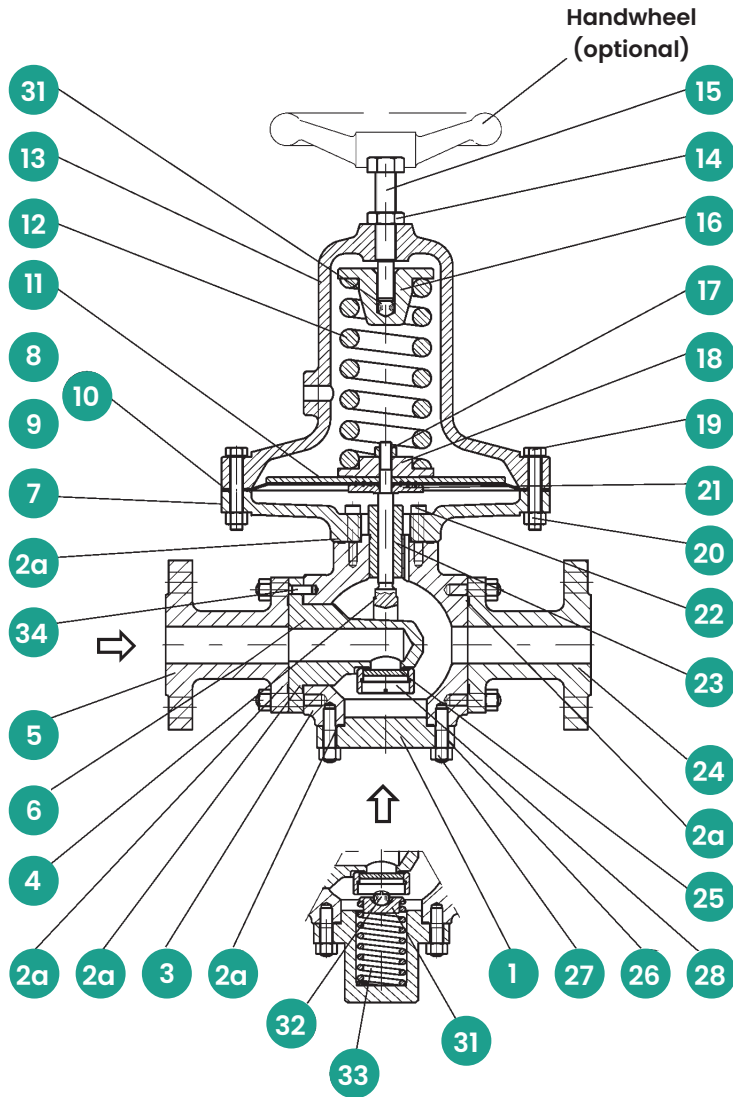
Optional Sealed Cap

Parts

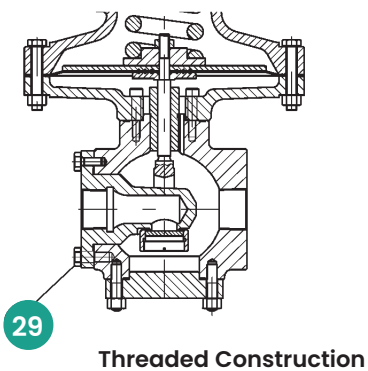
1	Blindhead
2	(a,b,c,d,e) Gasket Set
3	Body
4	H.P. Insert
5	Inlet Flange
6	Plug
7	Actuator Diaphragm Case
8	Diaphragm
9	Protection
10	O-Ring
11	Diaphragm Plate (upper)
12	Spring
13	Spring Case
14	Disc
15	Guide
16	(a,b,c,d) Nut
17	(a,b,c,d) Stud
18	Screw
19	Diaphragm Plate (lower)
20	Spring Button (lower)
21	Nut
22	Ball
23	Adjusting Screw Locknut
24	Adjusting Screw
25	Ball Seat
26	Seal Cap
27	Plug Screw
31	Spring Button (upper)

172 Series Construction

Actuator Size 220



Flanged Construction

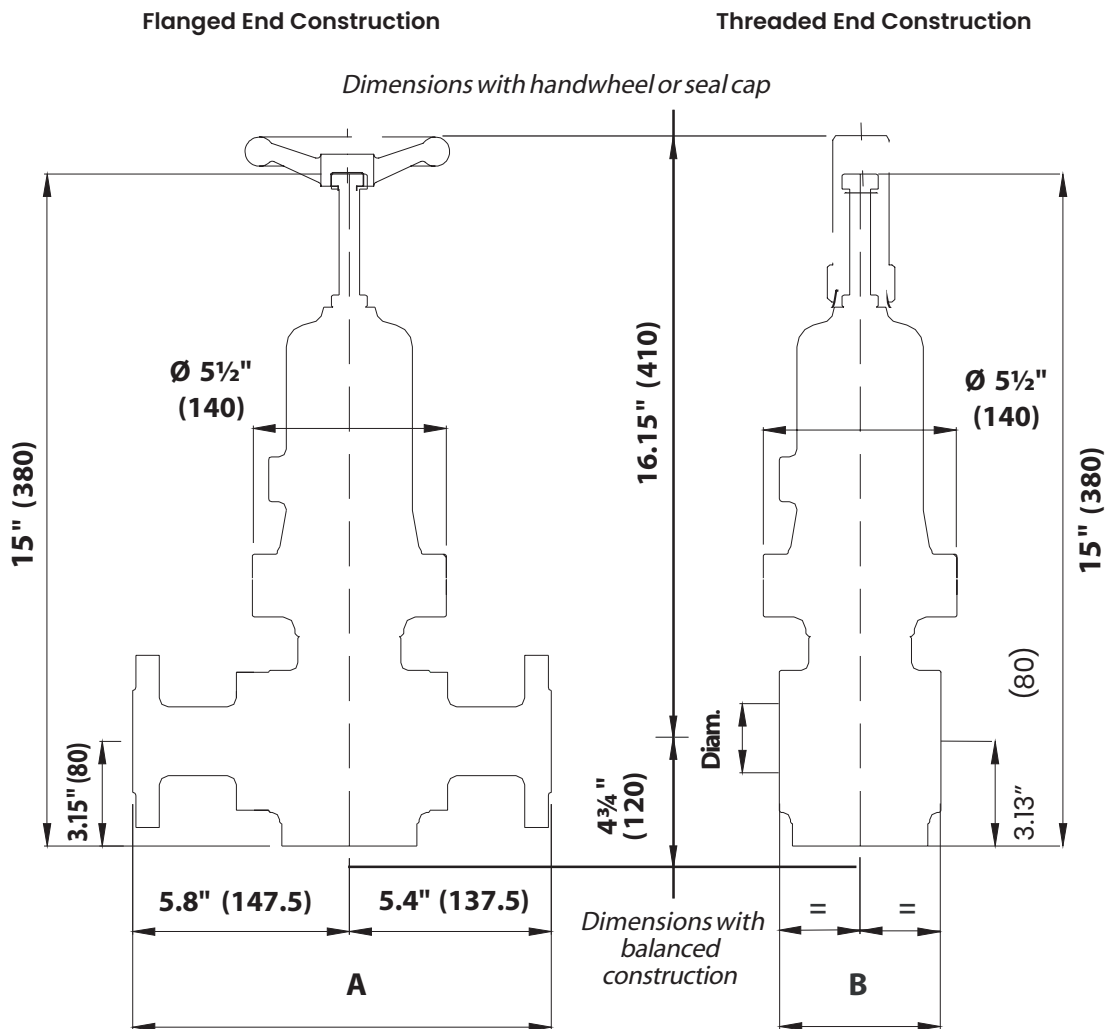


Threaded Construction

Parts	
1	Blindhead
2	Gaskets Set
3	Body
4	Plug
5	Inlet Flange
6	H.P. Insert
7	Actuator Diaphragm Case
8	Diaphragm
9	Protection (Option)
10	O-Ring
11	Diaphragm Plate (upper)
12	Spring
13	Spring Case
14	Adjusting Screw Locknut
15	Adjusting Screw
16	Spring Button (upper)
17	Nut
18	Spring Button (lower)
19	Screw
20	Nut
21	Diaphragm Plate (lower)
22	Screw
23	Guide
24	Outlet Flange
25	Disc
26	Stud
27	Nut
28	Plug Screw
29	Screw
31	Ball Seat
32	Ball
33	Spring
34	Pin

172 Series Dimensions

Actuator Sizes 100 to 140



172 - Table 1 - Body Sizes and Face-to-Face Dimensions¹

DN	Flanged		Threaded
	PN 16	ASME 150RF	NPT-F
	PN 25	ASME 300RF	GAS-F Con.
	PN 40	ASME 600RF	BSP-F
	A		B
1/2" (DN15)	11 1/4" (285mm)	11 1/4" (285mm)	5 1/8" (130mm)
3/4" (DN20)	11 1/4" (285mm)	11 1/4" (285mm)	5 1/8" (130mm)
1" (DN25)	11 1/4" (285mm)	11 1/4" (285mm)	5 1/8" (130mm)
1 1/2" (DN40)	11 1/4" (285mm)	11 1/4" (285mm)	-

1. Special face-to-face dimensions available on request

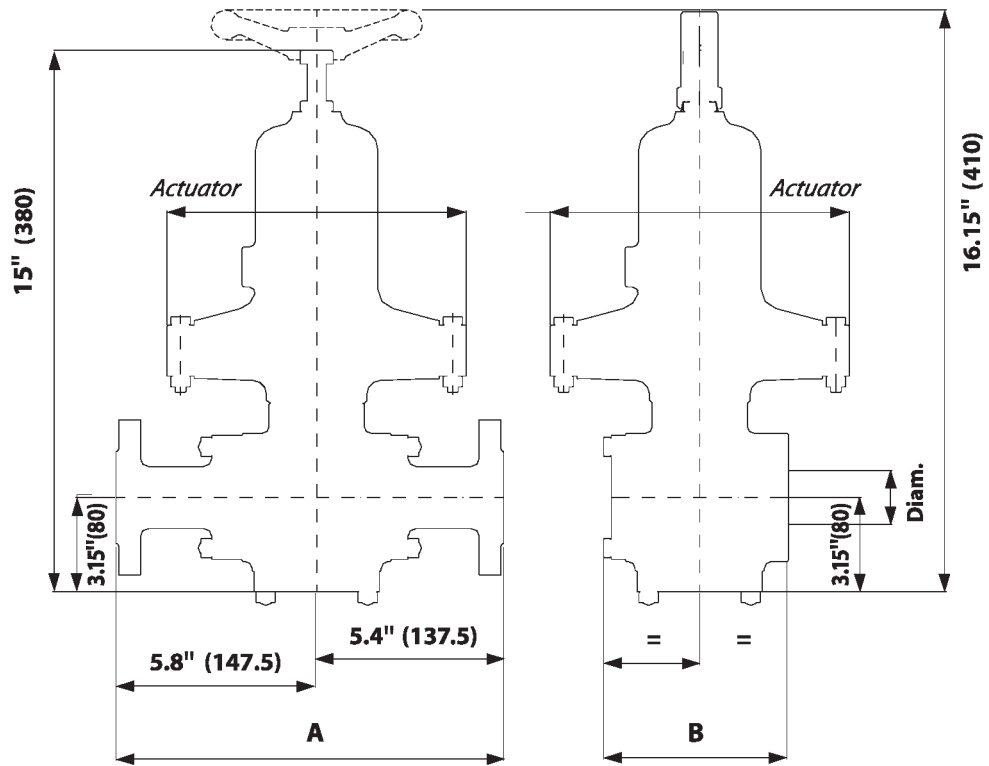
172 Series Dimensions

Actuator Size 220

Flanged End Construction

Threaded End Construction

Dimensions with handwheel or seal cap



172 - Table 2 - Body Sizes and Face-to-Face Dimensions¹

DN	Flanged		Threaded
	PN 16	ASME 150RF	NPT-F
	PN 25	ASME 300RF	GAS-F Con.
	PN 40	ASME 600RF	BSP-F
	A		B
1/2" (DN15)	11 1/4" (285mm)	11 1/4" (285mm)	5 1/8" (130mm)
3/4" (DN20)	11 1/4" (285mm)	11 1/4" (285mm)	5 1/8" (130mm)
1" (DN25)	11 1/4" (285mm)	11 1/4" (285mm)	5 1/8" (130mm)
1 1/2" (DN40)	11 1/4" (285mm)	11 1/4" (285mm)	-

1. Special face-to-face dimensions available on request

172 Series Set Pressure Ranges

172 - Table 3 - Standard Set Pressure Ranges

psig	barg	Actuator Size	Maximum Outlet Pressure
1.36 to 1.80	0.094 to 0.12	220	42 psig (2.9 barg)
1.54 to 3.0	0.106 to 0.20		
1.84 to 3.4	0.127 to 0.24		
2.1 to 5.4	0.144 to 0.37		
3.8 to 8.7	0.26 to 0.60		
5.8 to 13.4	0.40 to 0.93		
8.4 to 14.3	0.58 to 0.99		
13 to 21	0.89 to 1.5		
16 to 24	1.1 to 1.6		
20 to 26	1.4 to 1.8		
23 to 39	1.6 to 2.7	140	145 psig (10 barg)
10 to 19	0.7 to 1.3		
16 to 31	1.1 to 2.1		
23 to 47	1.6 to 3.3		
32 to 50	2.2 to 3.5		
48 to 75	3.3 to 5.2		
60 to 83	4.1 to 5.7		
74 to 91	5.1 to 6.3		
82 to 133	5.7 to 9.2	130	362 psig (25 barg)
25 to 44	1.7 to 3.0		
39 to 74	2.7 to 4.9		
55 to 110	3.8 to 7.6		
76 to 116	5.2 to 8.0		
113 to 175	7.8 to 12.1		
141 to 192	9.7 to 13.2		
174 to 211	12.0 to 14.5	120	470 psig (32.4 barg)
193 to 320	13.3 to 22.1		
37 to 59	2.6 to 4.1		
56 to 95	3.8 to 6.6		
77 to 147	5.3 to 10.1		
105 to 156	7.3 to 10.8		
156 to 235	10.8 to 16.2		
193 to 258	13.3 to 17.8		
238 to 283	16.4 to 19.5	100	754 psig (52 barg)
263 to 428	18.1 to 29.5		
65 to 126	4.5 to 8.7		
105 to 203	7.2 to 14.0		
151 to 314	10.4 to 21.6		
211 to 334	14.6 to 23.0		
319 to 502	22.0 to 34.6		
397 to 550	27.4 to 37.9		
494 to 604	34.1 to 41.7	548 to 667	37.8 to 46.0
548 to 667	37.8 to 46.0		

Represents standard spring ranges. others are optional, provided upon request.

172 Series Materials

172 – Table 4 – Standard Material Combinations

Body				
	Carbon Steel* 32°F < T < 392°F (0°C < T < 200°C)	Full Carbon Steel*** -20°F < T < 482°F (-29°C < T < 250°C)	316 SS* -20°F < T < 482°F (-29°C < T < 250°C)	Full 316 SS*** -320.8°F < T < 482°F (-196°C < T < 250°C)
Body	Carbon Steel	Carbon Steel	316 SS	316 SS
Blindhead	Carbon Steel	Carbon Steel	316 SS	316 SS
Gasket	P T F E	P T F E	P T F E	P T F E
Trim				
Seat	316 SS	316 SS	316 SS	316 SS
Disc	See table 8	See table 8	See table 8	See table 8
Plug Stem	316 SS	316 SS	316 SS	316 SS
Guide Bushing	304 SS / 17-4PH	304 SS / 17-4PH	304 SS / Nitronic 60	304 SS / Nitronic 60
Actuator				
Spring Case	Cast Iron	Carbon Steel	Carbon Steel	316 SS
Diaphragm Case	Carbon Steel	Carbon Steel	316 SS	316 SS
Spring	CrV Steel	CrV Steel	CrV Steel	316 SS
Diaphragm	See table 9			

Note: Special constructions are available in LCB, WCC (N.A.C.E.), 316L, 317, Duplex, Superduplex, Monel, Hastelloy B/C

Configurations/Material Availability

*	Standard – Except Steam Service
***	Non Standard – Manufactured on Request

172 Series C_v Ratings

172 - Table 5 - Maximum Inlet Pressures

End Connection	Construction	P Max				
		68°F (20°C)	212°F (100°C)	392°F (200°C)	482°F (250°C)	572°F (300°C)
Flanged	CS	1566 psig (108 barg)	1566 psig (108 barg)	1566 psig (108 barg)	1566 psig (108 barg)	1566 psig (108 barg)
	Full CS					
	SS					
	Full SS	1175 psig (81 barg)	1088 psig (75 barg)	899 psig (62 barg)	841 psig (58 barg)	783 psig (54 barg)
	Full CS NACE	1262 psig (87 barg)	1262 psig (87 barg)	1262 psig (87 barg)	1262 psig (87 barg)	1262 psig (87 barg)
	SS NACE					
	Full SS NACE	1059 psig (73 barg)	899 psig (62 barg)	841 psig (58 barg)	812 psig (56 barg)	798 psig (55 barg)
Threaded	1/2" - 1"	4061 psig (280 barg)	3437 psig (237 barg)	2886 psig (199 barg)	2741 psig (189 barg)	2567 psig (177 barg)
	1-1/2"	1392 psig (96 barg)	1189 psig (82 barg)	986 psig (68 barg)	928 psig (64 barg)	870 psig (60 barg)

172 - Table 6 - Rated C_v for All Body Sizes with Elastomer Diaphragm

Trim Number	Body Size				
	1/2" (DN15)	3/4" (DN20)	1" (DN25)	1-1/2" (DN40)	2" (DN25)
1	0.031	0.031	0.031	0.031	0.031
2	0.15	0.15	0.16	0.16	0.16
3	0.35	0.35	0.35	0.35	0.35
4	0.57	0.59	0.59	0.59	0.59
5	1.0	1.0	1.0	1.0	1.0
6	1.2	1.2	1.2	1.2	1.2
8	2.1	2.1	2.2	2.3	2.3
10	3.0	3.1	3.1	3.3	3.5
12	4.3	4.3	4.4	4.7	4.7
14	-	5.5	5.5	6.0	6.0
16	-	5.9	6.1	6.6	7.9
18	-	-	7.5	8.2 (8.0) ¹	9.2 (9.0) ¹
20	-	-	8.2	10.4 (9.8) ¹	10.4 (10.1) ¹
22	-	-	-	12.8 (12.5) ¹	12.8 (12.5) ¹

1. Reduced C_v for Actuator 100

172 Series C_v Ratings

172 - Table 7 - Rated C_v for All Body Sizes with Metal Diaphragm

Trim Number	Body Size				
	1/2" (DN15)	3/4" (DN20)	1" (DN25)	1 1/2" (DN40)	2" (DN25)
1	0.031	0.031	0.031	0.031	0.031
2	0.11	0.12	0.13	0.15	0.15
3	0.24	0.24	0.24	0.24	0.24
4	0.40	0.40	0.40	0.40	0.40
5	0.44	0.44	0.44	0.44	0.44
6	0.67	0.67	0.67	0.67	0.67
8	1.2	1.3	1.4	1.4	1.4
10	1.7	1.7	1.7	1.9	1.9
12	2.0	2.0	2.0	2.0	2.0
14	–	2.4	2.4	2.4	2.4
16	–	2.7	2.7	2.7	2.7
18	–	–	3.0	3.0	3.0
20	–	–	3.5	4.0	4.0
22	–	–	–	4.3	4.3

172 - Table 8 - Temperature Ranges and Pressure Limits for Disc Elastomers

Material	Minimum Temperature		Maximum Temperature		Maximum Pressure	
	°C	°F	°C	°F	barg	psig
Fluorocarbon (FKM-FPM)*	-10	14	200	392	40	580
Polytetrafluoroethylene (PTFE)***	-200	-328	250	482	200	2900
Stainless Steel**	-196	-321	455	851	280	4060

172 - Table 9 - Temperature Ranges for Diaphragms

Material	Minimum Temperature		Maximum Temperature	
	°C	°F	°C	°F
Chloroprene (CR)*	-20	-4	90	194
Fluorocarbon (FKM-FPM) + polyester***	-10	14	150	302
Fluorocarbon (FKM-FPM) + polyarylamide***	-10	14	200	392
Ethylene-Propylene (EPDM)**	-35	-31	160	320
Stainless Steel**	-196	-320.8	455	851

Note: Special diaphragms are available in NBR (nitrile butadiene, Buna-N or equivalent), HNBR (hydrogenated nitrile), VMQ (silicone), FVMQ (fluorosilicone), TFE/P (Aflas or equivalent)

Configurations/Material Availability

*	Standard - Except Steam Service
**	Steam Service
***	Non Standard - Manufactured on Request

Allowable Pressure Drops (in psig)

Room Temperature

Table 10 – Maximum Allowable Pressure Drop (Actuator size 100)

Trim Number	Set Pressure (psig)								
	65	141	216	292	367	442	518	595	667
1	3996	3920	3845	3770	3694	3619	3543	3466	3329
2	3996	3920	3845	3770	3694	3619	3543	3466	3329
3	3996	3920	3845	3770	3694	3619	3543	3466	3329
4	2519	3920	3845	3770	3694	3619	3543	3466	3329
5	1612	3475	3698	3698	3694	3619	3543	3466	3329
6	1120	2413	2567	2567	2567	2567	2567	2567	3329
8	630	1357	1436	1436	1436	1436	1436	1436	3329
10	403	869	914	914	914	914	914	914	3329
12	280	603	638	638	638	638	638	638	2828
14	206	443	464	464	464	464	464	464	2074
16	157	339	363	363	363	363	363	363	1581
18	124	268	276	276	276	276	276	276	1247
20	101	217	232	232	232	232	232	232	1015
22	83	179	189	189	189	189	189	189	827

T= 302°F

Trim Number	Set Pressure (psig)								
	65	141	216	292	367	442	518	595	667
1	3082	3007	2931	3118	2780	2705	2630	2553	2415
2	3082	3007	2931	3118	2780	2705	2630	2553	2415
3	3082	3007	2931	1952	2780	2705	2630	2553	2415
4	2519	3007	2931	1098	2780	2705	2630	2553	2415
5	1612	2886	2886	703	2780	2705	2630	2553	2415
6	1120	2002	2002	488	2002	2002	2002	2002	2415
8	630	1117	1117	275	1117	1117	1117	1117	2415
10	403	711	711	176	711	711	711	711	2415
12	280	493	493	122	493	493	493	493	2415
14	206	363	363	90	363	363	363	363	2074
16	157	276	276	69	276	276	276	276	1581
18	124	218	218	54	218	218	218	218	1247
20	101	174	174	44	174	174	174	174	1015
22	83	145	145	36	145	145	145	145	827

T= 572°F

Trim Number	Set Pressure (psig)								
	65	141	216	292	367	442	518	595	667
1	2531	2455	2380	2305	2229	2154	2078	2132	2002
2	2531	2455	2380	2305	2229	2154	2078	2132	2002
3	2531	2455	2380	2305	2229	2154	2078	2132	2002
4	2519	2455	2380	2305	2229	2154	2078	2132	2002
5	1612	2364	2364	2305	2229	2154	2078	2132	2002
6	1120	1639	1639	1639	1639	1639	1639	2132	2002
8	630	914	914	914	914	914	914	2132	914
10	403	595	595	595	595	595	595	2132	595
12	280	406	406	406	406	406	406	1952	406
14	206	305	305	305	305	305	305	1434	305
16	157	232	232	232	232	232	232	1098	232
18	124	174	174	174	174	174	174	868	174
20	101	145	145	145	145	145	145	703	145
22	83	116	116	116	116	116	116	581	116

Allowable Pressure Drops (in psig)

Room Temperature

Table 11 – Maximum Allowable Pressure Drop (Actuator size 120)

Trim Number	Set Pressure (psig)								
	37	87	136	186	235	284	334	383	428
1	4023	3974	3925	3875	3826	3777	3727	3678	3633
2	4023	3974	3925	3875	3826	3777	3727	3678	3633
3	4023	3974	3925	3875	3826	3777	3727	3678	3633
4	3061	3974	3925	3875	3826	3777	3727	3678	3633
5	1959	3698	3698	3698	3698	3698	3698	3678	3633
6	1360	2567	2567	2567	2567	2567	2567	2567	2567
8	765	1436	1436	1436	1436	1436	1436	1436	1436
10	490	914	914	914	914	914	914	914	914
12	340	638	638	638	638	638	638	638	638
14	250	464	464	464	464	464	464	464	464
16	191	363	363	363	363	363	363	363	363
18	151	276	276	276	276	276	276	276	276
20	122	232	232	232	232	232	232	232	232
22	101	189	189	189	189	189	189	189	189

T= 302°F

Trim Number	Set Pressure (psig)								
	37	87	136	186	235	284	334	383	428
1	3110	3060	3011	2962	2912	2863	2814	2764	2719
2	3110	3060	3011	2962	2912	2863	2814	2764	2719
3	3110	3060	3011	2962	2912	2863	2814	2764	2719
4	3061	3060	3011	2962	2912	2863	2814	2764	2719
5	1959	2886	2886	2886	2886	2863	2814	2764	2719
6	1360	2002	2002	2002	2002	2002	2002	2002	2002
8	765	1117	1117	1117	1117	1117	1117	1117	1117
10	490	711	711	711	711	711	711	711	711
12	340	493	493	493	493	493	493	493	493
14	250	363	363	363	363	363	363	363	363
16	191	276	276	276	276	276	276	276	276
18	151	218	218	218	218	218	218	218	218
20	122	174	174	174	174	174	174	174	174
22	101	145	145	145	145	145	145	145	145

T-572°F

Trim Number	Set Pressure (psig)								
	37	87	136	186	235	284	334	383	428
1	2558	2509	2460	2411	2361	2312	2263	2213	2168
2	2558	2509	2460	2411	2361	2312	2263	2213	2168
3	2558	2509	2460	2411	2361	2312	2263	2213	2168
4	2558	2509	2460	2411	2361	2312	2263	2213	2168
5	1959	2364	2364	2364	2361	2312	2263	2213	2168
6	1360	1639	1639	1639	1639	1639	1639	1639	1639
8	765	914	914	914	914	914	914	914	914
10	490	595	595	595	595	595	595	595	595
12	340	406	406	406	406	406	406	406	406
14	250	305	305	305	305	305	305	305	305
16	191	232	232	232	232	232	232	232	232
18	151	174	174	174	174	174	174	174	174
20	122	145	145	145	145	145	145	145	145
22	101	116	116	116	116	116	116	116	116

Allowable Pressure Drops (in psig)

Room Temperature

Table 12 – Maximum Allowable Pressure Drop (Actuator size 130)

Trim Number	Set Pressure (psig)								
	25	61	97	133	170	207	245	283	320
1	4036	4000	3964	3928	3891	3854	3816	3778	3741
2	4036	4000	3964	3928	3891	3854	3816	3778	3741
3	4036	4000	3964	3928	3891	3854	3816	3778	3741
4	2727	4000	3964	3928	3891	3854	3816	3778	3741
5	1745	3698	3964	3928	3698	3698	3698	3698	3698
6	1212	2567	2567	2567	2567	2567	2567	2567	2567
8	682	1436	1436	1436	1436	1436	1436	1436	1436
10	436	914	914	914	914	914	914	914	914
12	303	638	638	638	638	638	638	638	638
14	223	464	464	464	464	464	464	464	464
16	170	363	363	363	363	363	363	363	363
18	135	276	276	276	276	276	276	276	276
20	109	232	232	232	232	232	232	232	232
22	90	189	189	189	189	189	189	189	189

T= 302°F

Trim Number	Set Pressure (psig)								
	25	61	97	133	170	207	245	283	320
1	3123	3086	3050	3014	2978	2940	2902	2864	2827
2	3123	3086	3050	3014	2978	2940	2902	2864	2827
3	3123	3086	3050	3014	2978	2940	2902	2864	2827
4	2727	3086	3050	3014	2978	2940	2902	2864	2827
5	1745	2886	2886	2886	2886	2886	2886	2864	2827
6	1212	2002	2002	2002	2002	2002	2002	2002	2002
8	682	1117	1117	1117	1117	1117	1117	1117	1117
10	436	711	711	711	711	711	711	711	711
12	303	493	493	493	493	493	493	493	493
14	223	363	363	363	363	363	363	363	363
16	170	276	276	276	276	276	276	276	276
18	135	218	218	218	218	218	218	218	218
20	109	174	174	174	174	174	174	174	174
22	90	145	145	145	145	145	145	145	145

T=572°F

Trim Number	Set Pressure (psig)								
	25	61	97	133	170	207	245	283	320
1	2572	2535	2499	2463	2426	2389	2351	2313	2276
2	2572	2535	2499	2463	2426	2389	2351	2313	2276
3	2572	2535	2499	2463	2426	2389	2351	2313	2276
4	2572	2535	2499	2463	2426	2389	2351	2313	2276
5	1745	2364	2364	2364	2364	2364	2351	2313	2276
6	1212	1639	1639	1639	1639	1639	1639	1639	1639
8	682	914	914	914	914	914	914	914	914
10	436	595	595	595	595	595	595	595	595
12	303	406	406	406	406	406	406	406	406
14	223	305	305	305	305	305	305	305	305
16	170	232	232	232	232	232	232	232	232
18	135	174	174	174	174	174	174	174	174
20	109	145	145	145	145	145	145	145	145
22	90	116	116	116	116	116	116	116	116

Allowable Pressure Drops (in psig)

Room Temperature

Table 13 – Maximum Allowable Pressure Drop (Actuator size 140)

Trim Number	Set Pressure (psig)								
	10	25	39	54	68	84	100	116	133
1	4051	4036	4022	4007	3993	3977	3961	3945	3928
2	4051	4036	4022	4007	3993	3977	3961	3945	3928
3	4051	4036	4022	4007	3993	3977	3961	3945	3928
4	2606	4036	4022	4007	3993	3977	3961	3945	3928
5	1668	3698	3698	3698	3698	3698	3698	3698	3698
6	1158	2567	2567	2567	2567	2567	2567	2567	2567
8	651	1436	1436	1436	1436	1436	1436	1436	1436
10	417	914	914	914	914	914	914	914	914
12	290	638	638	638	638	638	638	638	638
14	213	464	464	464	464	464	464	464	464
16	163	363	363	363	363	363	363	363	363
18	129	276	276	276	276	276	276	276	276
20	104	232	232	232	232	232	232	232	232
22	86	189	189	189	189	189	189	189	189

T= 302°F

Trim Number	Set Pressure (psig)								
	10	25	39	54	68	84	100	116	133
1	3137	3123	3108	3094	3079	3063	3047	3031	3014
2	3137	3123	3108	3094	3079	3063	3047	3031	3014
3	3137	3123	3108	3094	3079	3063	3047	3031	3014
4	2606	3123	3108	3094	3079	3063	3047	3031	3014
5	1668	2886	2886	2886	2886	2886	2886	2886	2886
6	1158	2002	2002	2002	2002	2002	2002	2002	2002
8	651	1117	1117	1117	1117	1117	1117	1117	1117
10	417	711	711	711	711	711	711	711	711
12	290	493	493	493	493	493	493	493	493
14	213	363	363	363	363	363	363	363	363
16	163	276	276	276	276	276	276	276	276
18	129	218	218	218	218	218	218	218	218
20	104	174	174	174	174	174	174	174	174
22	86	145	145	145	145	145	145	145	145

T=572°F

Trim Number	Set Pressure (psig)								
	10	25	39	54	68	84	100	116	133
1	2586	2572	2557	2543	2528	2512	2496	2480	2463
2	2586	2572	2557	2543	2528	2512	2496	2480	2463
3	2586	2572	2557	2543	2528	2512	2496	2480	2463
4	2586	2572	2557	2543	2528	2512	2496	2480	2463
5	1668	2364	2364	2364	2364	2364	2364	2364	2364
6	1158	1639	1639	1639	1639	1639	1639	1639	1639
8	651	914	914	914	914	914	914	914	914
10	417	595	595	595	595	595	595	595	595
12	290	406	406	406	406	406	406	406	406
14	213	305	305	305	305	305	305	305	305
16	163	232	232	232	232	232	232	232	232
18	129	174	174	174	174	174	174	174	174
20	104	145	145	145	145	145	145	145	145
22	86	116	116	116	116	116	116	116	116

Allowable Pressure Drops (in psig)

Room Temperature

Table 14 – Maximum Allowable Pressure Drop (Actuator size 220)

Trim Number	Set Pressure (psig)								
	1.36	5.8	10.2	14.5	18.9	23.2	27.6	33.4	39.2
1	4060	4055	4051	4047	4042	4038	4033	4028	4022
2	4060	4055	4051	4047	4042	4038	4033	4028	4022
3	2184	4055	4051	4047	4042	4038	4033	4028	4022
4	1229	4055	4051	4047	4042	4038	4033	4028	4022
5	786	3346	3698	3698	3698	3698	3698	3698	3698
6	546	2324	2567	2567	2567	2567	2567	2567	2567
8	307	1307	1436	1436	1436	1436	1436	1436	1436
10	197	837	914	914	914	914	914	914	914
12	137	581	638	638	638	638	638	638	638
14	100	427	464	464	464	464	464	464	464
16	77	327	363	363	363	363	363	363	363
18	61	258	276	276	276	276	276	276	276
20	49	209	232	232	232	232	232	232	232
22	41	173	189	189	189	189	189	189	189

T= 302° F

Trim Number	Set Pressure (psig)								
	1.36	5.8	10.2	14.5	18.9	23.2	27.6	33.4	39.2
1	3146	3142	3137	3133	3128	3124	3120	3114	3108
2	3146	3142	3137	3133	3128	3124	3120	3114	3108
3	2184	3142	3137	3133	3128	3124	3120	3114	3108
4	1229	3142	3137	3133	3128	3124	3120	3114	3108
5	786	2886	2886	2886	2886	2886	2886	2886	2886
6	546	2002	2002	2002	2002	2002	2002	2002	2002
8	307	1117	1117	1117	1117	1117	1117	1117	1117
10	197	711	711	711	711	711	711	711	711
12	137	493	493	493	493	493	493	493	493
14	100	363	363	363	363	363	363	363	363
16	77	276	276	276	276	276	276	276	276
18	61	218	218	218	218	218	218	218	218
20	49	174	174	174	174	174	174	174	174
22	41	145	145	145	145	145	145	145	145

T=572°F

Trim Number	Set Pressure (psig)								
	1.36	5.8	10.2	14.5	18.9	23.2	27.6	33.4	39.2
1	2595	2590	2586	2582	2577	2573	2569	2563	2557
2	2595	2590	2586	2582	2577	2573	2569	2563	2557
3	2184	2590	2586	2582	2577	2573	2569	2563	2557
4	1229	2590	2586	2582	2577	2573	2569	2563	2557
5	786	2364	2364	2364	2364	2364	2364	2364	2364
6	546	1639	1639	1639	1639	1639	1639	1639	1639
8	307	914	914	914	914	914	914	914	914
10	197	595	595	595	595	595	595	595	595
12	137	406	406	406	406	406	406	406	406
14	100	305	305	305	305	305	305	305	305
16	77	232	232	232	232	232	232	232	232
18	61	174	174	174	174	174	174	174	174
20	49	145	145	145	145	145	145	145	145
22	41	116	116	116	116	116	116	116	116

Allowable Pressure Drops (in barg)

Room Temperature

Table 15 – Maximum Allowable Pressure Drop (Actuator size 100)

Trim Number	Set Pressure (barg)								
	4.5	9.7	14.9	20.1	25.3	30.5	35.7	41	46
1	275.5	270.3	265.1	259.9	254.7	249.5	244.3	239.0	229.5
2	275.5	270.3	265.1	259.9	254.7	249.5	244.3	239.0	229.5
3	275.5	270.3	265.1	259.9	254.7	249.5	244.3	239.0	229.5
4	173.7	270.3	265.1	259.9	254.7	249.5	244.3	239.0	229.5
5	111.2	239.6	255.0	255.0	254.7	249.5	244.3	239.0	229.5
6	77.2	166.4	177.0	177.0	177.0	177.0	177.0	177.0	229.5
8	43.4	93.6	99.0	99.0	99.0	99.0	99.0	99.0	229.5
10	27.8	59.9	63.0	63.0	63.0	63.0	63.0	63.0	229.5
12	19.3	41.6	44.0	44.0	44.0	44.0	44.0	44.0	195
14	14.2	30.6	32.0	32.0	32.0	32.0	32.0	32.0	143
16	10.9	23.4	25.0	25.0	25.0	25.0	25.0	25.0	109
18	8.6	18.5	19.0	19.0	19.0	19.0	19.0	19.0	86
20	6.9	15.0	16.0	16.0	16.0	16.0	16.0	16.0	70
22	5.7	12.4	13.0	13.0	13.0	13.0	13.0	13.0	57

T= 150°C

Trim Number	Set Pressure (barg)								
	4.5	9.7	14.9	20.1	25.3	30.5	35.7	41	46
1	212.5	207.3	202.1	215.0	191.7	186.5	181.3	176.0	166.5
2	212.5	207.3	202.1	215.0	191.7	186.5	181.3	176.0	166.5
3	212.5	207.3	202.1	134.6	191.7	186.5	181.3	176.0	166.5
4	173.7	207.3	202.1	75.7	191.7	186.5	181.3	176.0	166.5
5	111.2	199.0	199.0	48.5	191.7	186.5	181.3	176.0	166.5
6	77.2	138.0	138.0	33.7	138.0	138.0	138.0	138.0	166.5
8	43.4	77.0	77.0	18.9	77.0	77.0	77.0	77.0	166.5
10	27.8	49.0	49.0	12.1	49.0	49.0	49.0	49.0	166.5
12	19.3	34.0	34.0	8.4	34.0	34.0	34.0	34.0	166.5
14	14.2	25.0	25.0	6.2	25.0	25.0	25.0	25.0	143
16	10.9	19.0	19.0	4.7	19.0	19.0	19.0	19.0	109
18	8.6	15.0	15.0	3.7	15.0	15.0	15.0	15.0	86
20	6.9	12.0	12.0	3.0	12.0	12.0	12.0	12.0	70
22	5.7	10.0	10.0	2.5	10.0	10.0	10.0	10.0	57

T=300°C

Trim Number	Set Pressure (barg)								
	4.5	9.7	14.9	20.1	25.3	30.5	35.7	41	46
1	174.5	169.3	164.1	158.9	153.7	148.5	143.3	147.0	138
2	174.5	169.3	164.1	158.9	153.7	148.5	143.3	147.0	138
3	174.5	169.3	164.1	158.9	153.7	148.5	143.3	147.0	138
4	173.7	169.3	164.1	158.9	153.7	148.5	143.3	147.0	138
5	111.2	163.0	163.0	158.9	153.7	148.5	143.3	147.0	138
6	77.2	113.0	113.0	113.0	113.0	113.0	113.0	147.0	113
8	43.4	63.0	63.0	63.0	63.0	63.0	63.0	147.0	63
10	27.8	41.0	41.0	41.0	41.0	41.0	41.0	147.0	41
12	19.3	28.0	28.0	28.0	28.0	28.0	28.0	134.6	28
14	14.2	21.0	21.0	21.0	21.0	21.0	21.0	98.9	21
16	10.9	16.0	16.0	16.0	16.0	16.0	16.0	75.7	16
18	8.6	12.0	12.0	12.0	12.0	12.0	12.0	59.8	12
20	6.9	10.0	10.0	10.0	10.0	10.0	10.0	48.5	10
22	5.7	8.0	8.0	8.0	8.0	8.0	8.0	40.1	8

Allowable Pressure Drops (in barg)

Room Temperature

Table 16 – Maximum Allowable Pressure Drop (Actuator size 120)

Trim Number	Set Pressure (barg)								
	2.6	6	9.4	12.8	16.2	19.6	23	26.4	29.5
1	277.4	274.0	270.6	267.2	263.8	260.4	257.0	253.6	250.5
2	277.4	277.4	270.6	267.2	263.8	260.4	257.0	253.6	250.5
3	277.4	277.4	270.6	267.2	263.8	260.4	257.0	253.6	250.5
4	211.0	270.6	270.6	267.2	263.8	260.4	257.0	253.6	250.5
5	135.1	255.0	255.0	255.0	255.0	255.0	255.0	253.6	250.5
6	93.8	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0
8	52.8	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
10	33.8	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
12	23.4	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
14	17.2	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0
16	13.2	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
18	10.4	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
20	8.4	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
22	7.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0

T= 150°C

Trim Number	Set Pressure (barg)								
	2.6	6	9.4	12.8	16.2	19.6	23	26.4	29.5
1	214.4	211.0	207.6	204.2	200.8	197.4	194.0	190.6	187.5
2	214.4	211.0	207.6	204.2	200.8	197.4	194.0	190.6	187.5
3	214.4	211.0	207.6	204.2	200.8	197.4	194.0	190.6	187.5
4	211.0	211.0	207.6	204.2	200.8	197.4	194.0	190.6	187.5
5	135.1	199.0	199.0	199.0	199.0	197.4	194.0	190.6	187.5
6	93.8	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0
8	52.8	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
10	33.8	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
12	23.4	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
14	17.2	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
16	13.2	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
18	10.4	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
20	8.4	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
22	7.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

T=300°C

Trim Number	Set Pressure (barg)								
	2.6	6	9.4	12.8	16.2	19.6	23	26.4	29.5
1	176.4	173.0	169.6	166.2	162.8	159.4	156.0	152.6	149.5
2	176.4	173.0	169.6	166.2	162.8	159.4	156.0	152.6	149.5
3	176.4	173.0	169.6	166.2	162.8	159.4	156.0	152.6	149.5
4	176.4	173.0	169.6	166.2	162.8	159.4	156.0	152.6	149.5
5	135.1	163.0	163.0	163.0	162.8	159.4	156.0	152.6	149.5
6	93.8	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
8	52.8	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
10	33.8	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
12	23.4	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
14	17.2	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
16	13.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
18	10.4	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
20	8.4	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
22	7.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

Allowable Pressure Drops (in barg)

Room Temperature

Table 17 – Maximum Allowable Pressure Drop (Actuator size 130)

Trim Number	Set Pressure (barg)								
	1.7	4.2	6.7	9.2	11.7	14.3	16.9	19.5	22.1
1	278.3	275.8	273.3	270.8	268.3	265.7	263.1	260.5	257.9
2	278.3	275.8	273.3	270.8	268.3	265.7	263.1	260.5	257.9
3	278.3	275.8	273.3	270.8	268.3	265.7	263.1	260.5	257.9
4	188.0	275.8	273.3	270.8	268.3	265.7	263.1	260.5	257.9
5	120.3	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0
6	83.6	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0
8	47.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
10	30.1	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
12	20.9	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
14	15.4	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0
16	11.8	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
18	9.3	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
20	7.5	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
22	6.2	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0

T= 150°C

Trim Number	Set Pressure (barg)								
	1.7	4.2	6.7	9.2	11.7	14.3	16.9	19.5	22.1
1	215.3	212.8	210.3	207.8	205.3	202.7	200.1	197.5	194.9
2	215.3	212.8	210.3	207.8	205.3	202.7	200.1	197.5	194.9
3	215.3	212.8	210.3	207.8	205.3	202.7	200.1	197.5	194.9
4	188.0	212.8	210.3	207.8	205.3	202.7	200.1	197.5	194.9
5	120.3	199.0	199.0	199.0	199.0	199.0	199.0	197.5	194.9
6	83.6	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0
8	47.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
10	30.1	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
12	20.9	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
14	15.4	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
16	11.8	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
18	9.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
20	7.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
22	6.2	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

T=300°C

Trim Number	Set Pressure (barg)								
	1.7	4.2	6.7	9.2	11.7	14.3	16.9	19.5	22.1
1	177.3	174.8	172.3	169.8	167.3	164.7	162.1	159.5	156.9
2	177.3	174.8	172.3	169.8	167.3	164.7	162.1	159.5	156.9
3	177.3	174.8	172.3	169.8	167.3	164.7	162.1	159.5	156.9
4	177.3	174.8	172.3	169.8	167.3	164.7	162.1	159.5	156.9
5	120.3	163.0	163.0	163.0	163.0	163.0	162.1	159.5	156.9
6	83.6	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
8	47.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
10	30.1	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
12	20.9	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
14	15.4	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
16	11.8	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
18	9.3	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
20	7.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
22	6.2	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

Allowable Pressure Drops (in barg)

Room Temperature

Table 18 – Maximum Allowable Pressure Drop (Actuator size 140)

Trim Number	Set Pressure (barg)								
	0.7	1.7	2.7	3.7	4.7	5.8	6.9	8	9.2
1	279.3	278.3	277.3	276.3	275.3	274.2	273.1	272.0	270.8
2	279.3	278.3	277.3	276.3	275.3	274.2	273.1	272.0	270.8
3	279.3	278.3	277.3	276.3	275.3	274.2	273.1	272.0	270.8
4	179.6	278.3	277.3	276.3	275.3	274.2	273.1	272.0	270.8
5	115.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0
6	79.8	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0
8	44.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
10	28.7	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
12	20.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
14	14.7	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0
16	11.2	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
18	8.9	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
20	7.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
22	5.9	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0

T= 150°C

Trim Number	Set Pressure (barg)								
	0.7	1.7	2.7	3.7	4.7	5.8	6.9	8	9.2
1	216.3	215.3	214.3	213.3	212.3	211.2	210.1	209.0	207.8
2	216.3	215.3	214.3	213.3	212.3	211.2	210.1	209.0	207.8
3	216.3	215.3	214.3	213.3	212.3	211.2	210.1	209.0	207.8
4	179.6	215.3	214.3	213.3	212.3	211.2	210.1	209.0	207.8
5	115.0	199.0	199.0	199.0	199.0	199.0	199.0	199.0	199.0
6	79.8	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0
8	44.9	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
10	28.7	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
12	20.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
14	14.7	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
16	11.2	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
18	8.9	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
20	7.2	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
22	5.9	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

T=300°C

Trim Number	Set Pressure (barg)								
	0.7	1.7	2.7	3.7	4.7	5.8	6.9	8	9.2
1	178.3	177.3	176.3	175.3	174.3	173.2	172.1	171.0	169.8
2	178.3	177.3	176.3	175.3	174.3	173.2	172.1	171.0	169.8
3	178.3	177.3	176.3	175.3	174.3	173.2	172.1	171.0	169.8
4	178.3	177.3	176.3	175.3	174.3	173.2	172.1	171.0	169.8
5	115.0	163.0	163.0	163.0	163.0	163.0	163.0	163.0	163.0
6	79.8	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
8	44.9	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
10	28.7	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
12	20.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
14	14.7	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
16	11.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
18	8.9	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
20	7.2	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
22	5.9	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

Allowable Pressure Drops (in barg)

Room Temperature

Table 19 - Maximum Allowable Pressure Drop (Actuator size 220)

Trim Number	Set Pressure (barg)								
	0.094	0.40	0.70	1.0	1.3	1.6	1.9	2.3	2.7
1	279.9	279.6	279.3	279.0	278.7	278.4	278.1	277.7	277.3
2	279.9	279.6	279.3	279.0	278.7	278.4	278.1	277.7	277.3
3	150.6	279.6	279.3	279.0	278.7	278.4	278.1	277.7	277.3
4	84.7	279.6	279.3	279.0	278.7	278.4	278.1	277.7	277.3
5	54.2	230.7	255.0	255.0	255.0	255.0	255.0	255.0	255.0
6	37.7	160.2	177.0	177.0	177.0	177.0	177.0	177.0	177.0
8	21.2	90.1	99.0	99.0	99.0	99.0	99.0	99.0	99.0
10	13.6	57.7	63.0	63.0	63.0	63.0	63.0	63.0	63.0
12	9.4	40.1	44.0	44.0	44.0	44.0	44.0	44.0	44.0
14	6.9	29.4	32.0	32.0	32.0	32.0	32.0	32.0	32.0
16	5.3	22.5	25.0	25.0	25.0	25.0	25.0	25.0	25.0
18	4.2	17.8	19.0	19.0	19.0	19.0	19.0	19.0	19.0
20	3.4	14.4	16.0	16.0	16.0	16.0	16.0	16.0	16.0
22	2.8	11.9	13.0	13.0	13.0	13.0	13.0	13.0	13.0

T= 150°C

Trim Number	Set Pressure (barg)								
	0.094	0.40	0.70	1.0	1.3	1.6	1.9	2.3	2.7
1	216.9	216.9	216.3	216.0	215.7	215.4	215.1	214.7	214.3
2	216.9	216.9	216.3	216.0	215.7	215.4	215.1	214.7	214.3
3	150.6	216.9	216.3	216.0	215.7	215.4	215.1	214.7	214.3
4	84.7	216.9	216.3	216.0	215.7	215.4	215.1	214.7	214.3
5	54.2	199.0	199.0	199.0	199.0	199.0	199.0	199.0	199.0
6	37.7	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0
8	21.2	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
10	13.6	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
12	9.4	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
14	6.9	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
16	5.3	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
18	4.2	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
20	3.4	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
22	2.8	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

T=300°C

Trim Number	Set Pressure (barg)								
	0.094	0.40	0.70	1.0	1.3	1.6	1.9	2.3	2.7
1	178.9	178.6	178.3	178.0	177.7	177.4	177.1	176.7	176.3
2	178.9	178.6	178.3	178.0	177.7	177.4	177.1	176.7	176.3
3	150.6	178.6	178.3	178.0	177.7	177.4	177.1	176.7	176.3
4	84.7	178.6	178.3	178.0	177.7	177.4	177.1	176.7	176.3
5	54.2	163.0	163.0	163.0	163.0	163.0	163.0	163.0	163.0
6	37.7	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
8	21.2	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
10	13.6	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
12	9.4	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
14	6.9	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
16	5.3	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
18	4.2	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
20	3.4	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
22	2.8	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

172 Series Weights

172 - Table 20 - Weights

Actuator Sizes 100-140					
	NPT/GAS	ASME Class 150 RF	PN 16/25/40	ASME Class 300 RF	ASME Class 600 RF
1/2" (DN15)	36.8 lbs (16.7 kg)	43.2 lbs (19.6 kg)	44.5 lbs (20.2 kg)	43.7 lbs (19.8 kg)	44.3 lbs (20.1 kg)
3/4" (DN20)	36.8 lbs (16.7 kg)	43.9 lbs (19.9 kg)	45.9 lbs (20.8 kg)	46.1 lbs (20.9 kg)	47 lbs (21.3 kg)
1" (DN25)	36.6 lbs (16.6 kg)	45.4 lbs (20.6 kg)	47.2 lbs (21.4 kg)	47.4 lbs (21.5 kg)	48.1 lbs (21.8 kg)
1-1/2" (DN40)	36.4 lbs (16.5 kg)	47.6 lbs (21.6 kg)	49.8 lbs (22.6 kg)	52.5 lbs (23.8 kg)	54.7 lbs (24.8 kg)
2" (DN50)	N/A	50.9 lbs (23.1 kg)	53.9 lbs (24.1 kg)	54.2 lbs (24.6 kg)	57.5 lbs (26.1 kg)

172 - Table 21 - Weights

Actuator Size 220					
	NPT/GAS	ASME Class 150 RF	PN 16/25/40	ASME Class 300 RF	ASME Class 600 RF
1/2" (DN15)	46.7 lbs (21.2 kg)	53.1 lbs (24.1 kg)	44.5 lbs (20.2 kg)	54.5 lbs (24.7 kg)	54.2 lbs (24.6 kg)
3/4" (DN20)	46.7 lbs (21.2 kg)	53.8 lbs (24.4 kg)	45.9 lbs (20.8 kg)	56 lbs (25.4 kg)	56.9 lbs (25.8 kg)
1" (DN25)	46.5 lbs (21.1 kg)	55.3 lbs (25.1 kg)	47.2 lbs (21.4 kg)	57.3 lbs (26 kg)	58 lbs (26.3 kg)
1-1/2" (DN40)	46.3 lbs (21 kg)	57.5 lbs (26.1 kg)	49.8 lbs (22.6 kg)	62.4 lbs (28.3 kg)	64.6 lbs (29.3 kg)
2" (DN50)	N/A	60.9 lbs (27.6 kg)	53.9 lbs (24.1 kg)	64.2 lbs (29.1 kg)	67.5 lbs (30.6 kg)

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