

For Steam, Liquid or Air Applications

Job Name _____
 Job Location _____
 Engineer _____
 Approval _____

Contractor _____
 Approval _____
 Contractor's P.O. No. _____
 Representative _____

Series 152A

Process Steam Pressure Regulators

Sizes 1/2" – 2" (15 - 50mm)

Series 152A Process Steam Pressure Regulators are designed to offer highly sensitive response to reduced pressure changes and maintain fullest possible volume without appreciable reduced pressure drop. These regulators are ideal for use on applications such as oil lines, testing fixtures, autoclaves, steam tables, steam irons, single radiators, vulcanizers, sterilizers and process lines. The series 152A features a sensitivity adjuster to eliminate any vibrating condition that may arise from critical flow requirements.

Features

- Iron body construction
- Serviceable in line
- Standard sensitivity adjuster

Models

152A – Iron body for pressures up to 200psi (14 bars)

152AT – Tight seating for dead end and liquid service. Utilizes Teflon® valve disc, maximum operating temperatures are 300°F (204°C) at 300psi (21 bars) and 400°F (204°C) at 200psi (14 bars)

For information on 1/2" – 1" stainless steel construction, see literature ES-152SS.

Specifications

Valve shall be manufactured out of iron and have a maximum working pressure of up to 200psi. Valve shall feature a sensitivity adjuster to eliminate vibrating conditions. Valves shall be serviceable in line and have stainless steel trim and strainer. Valve shall be a Watts Regulator Company Series 152A.

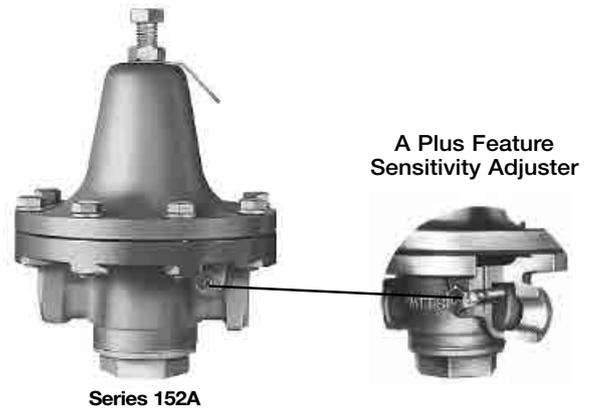
Materials

Body:	Iron
Trim:	Stainless Steel
Strainer:	Stainless Steel
Diaphragm:	Laminated Metal
Seat:	Replaceable Stainless Steel
Disc:	Replaceable Stainless Steel

Pressure – Temperature

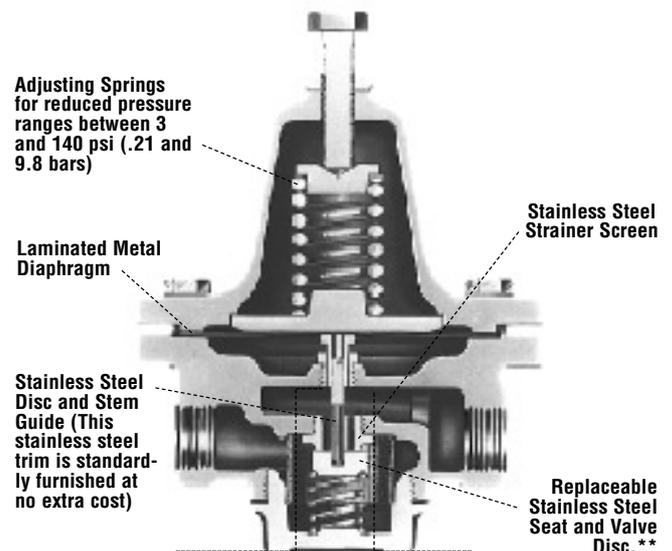
152A Maximum Working Pressure: 200psi (14 bars)

152AT – Maximum Temperature: 300°F (149°C)
 Maximum Working Pressure: 300psi (21 bars), and
 Maximum Temperature: 400°F (204°C)
 Maximum Working Pressure: 200psi (14 bars)



A Plus Feature
Sensitivity Adjuster

Basic Design Feature



** When utilizing a Teflon® valve disc in the 152AT, the maximum operating temperatures are 300°F at 300psi (149°C at 21 bars) and 400°F at 200psi (204°C at 14 bars).

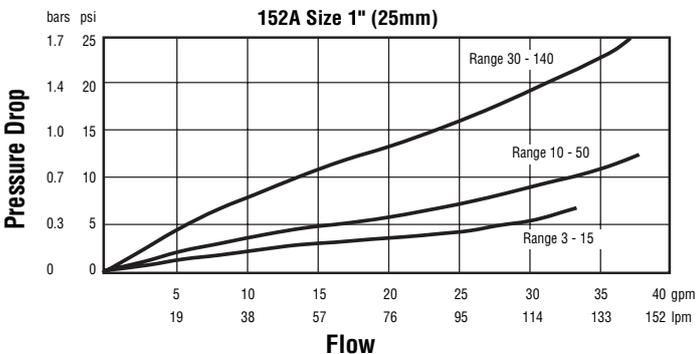
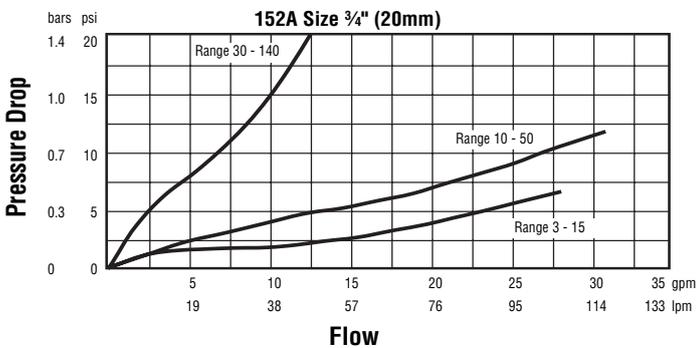
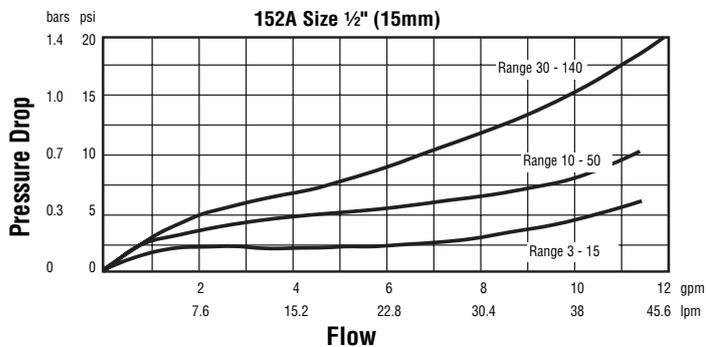
Teflon® is a registered trademark of E.I. duPont deNemours Co., Inc.

Quick Reference Capacity Chart For Average Conditions

	From		From		From		From		From		From		From					
	psi	bar	psi	bar	psi	bar												
Initial Pressure	50	3.52	75	5.27	100	7.03	125	8.79	150	10.55	175	12.3	200	14.06	225	15.82	250	17.58
Reduced Pressure	Up To		Up To		Up To		Up To		Up To									
	20	1.41	35	2.46	50	3.52	60	4.22	70	4.92	80	5.62	90	6.33	100	7.03	125	8.79
*Maximum Capacities in Lbs. of Steam Per Hour																		
	in.	mm	80	111	143	175	205	237	270	299	332							
152A	½"	15	80	111	143	175	205	237	270	299	332							
152A	¾"	20	285	394	506	620	726	841	956	1060	1178							
152A	1"	25	402	557	715	875	1025	1186	1349	1497	1663							
152A	1¼"	32	442	613	786	962	1127	1305	1484	1646	1830							
152A	1½"	40	665	870	1120	1355	1600	1950	2230	2460	2725							
152A	2"	50	765	1000	1285	1490	1840	2242	2564	2829	3134							

*1 Lb. Steam Equals 970 BTU Per Hour

Capacity

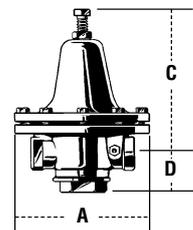


Series 152A Adjusting Spring Range Chart

SIZE	*ADJUSTABLE RANGES		SPRING AND MODEL NO.	
	in.	mm		
½"	15	3 - 15	.21 - 1.05	145
½"	15	10 - 50	.70 - 3.51	146
½"	15	30 - 140	2.11 - 9.84	141
¾"	20	3 - 15	.21 - 1.05	145
¾"	20	10 - 50	.70 - 3.51	146
¾"	20	30 - 140	2.11 - 9.84	141
1"	25	3 - 15	.21 - 1.05	146
1"	25	10 - 30	.70 - 2.11	128
1"	25	30 - 140	2.11 - 9.84	142
1¼"	32	3 - 15	.21 - 1.05	146
1¼"	32	10 - 30	.70 - 2.11	128
1¼"	32	30 - 140	2.11 - 9.84	142
1½"	40	5 - 40	.35 - 2.81	276
1½"	40	30 - 100	2.11 - 7.03	299
2"	50	5 - 40	.35 - 2.81	276
2"	50	30 - 100	2.11 - 7.03	299

*The minimum reduced pressure ranges shown are recommended only when very sensitive regulation service is needed for specific requirements. However, all valves may be adjusted below the working range minimums shown for lower regulation or complete shut off.

Dimensions — Weights



SIZE (DN)		DIMENSIONS				WEIGHT	
in.	mm	A	C	D	lbs.	kg.	
½"	15	6 152	7 178	1 15/16 49	11	4.99	
¾"	20	6 152	7 178	1 15/16 49	11	4.99	
1"	25	7 1/2 191	7 1/2 191	2 3/16 56	20	9.07	
1¼"	32	7 1/2 191	7 1/2 191	2 3/16 56	20	9.07	
1½"	40	9 229	11 1/4 286	2 3/4 70	40	18.14	
2"	50	9 229	11 1/4 286	2 3/4 70	40	18.14	