

## For Steam, Liquid or Air Applications

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# Series 152A

## Process Steam Pressure Regulators

Sizes ½" – 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 ½" – 1" stainless steel construction, see literature ES-152SS.

### Specifications

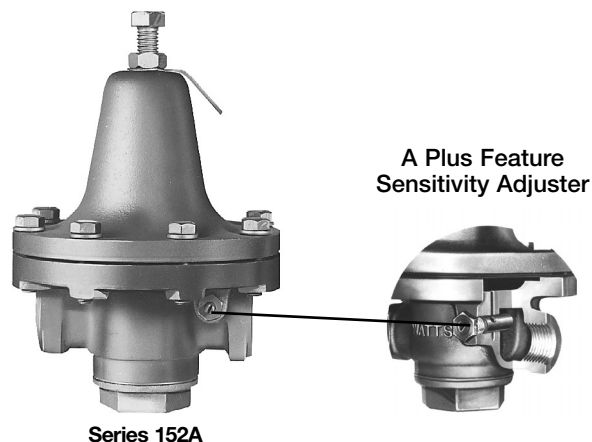
Valve shall be manufactured out of iron and have a maximum working pressure of up to 200psi. Valve shall feature a sensitivity adjuster to eliminate vibrating conditions. Valves shall be serviceable in line and have stainless steel trim and strainer. Valve shall be a Watts Regulator Company Series 152A.

### Materials

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

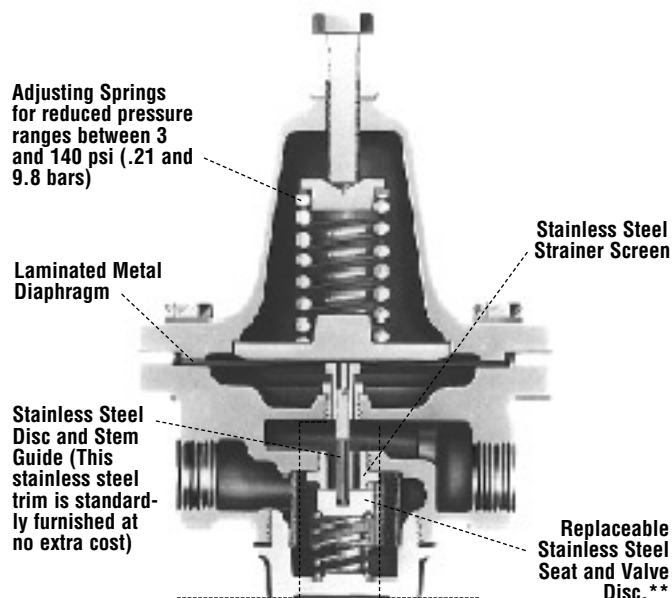
### Pressure – Temperature

<b>152A</b>	Maximum Working Pressure: 200psi (14 bars)
<b>152AT</b>	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)



Series 152A

### 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.

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# Quick Reference Capacity Chart For Average Conditions

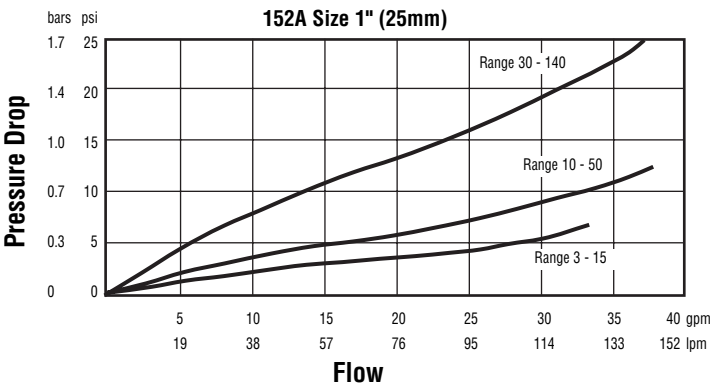
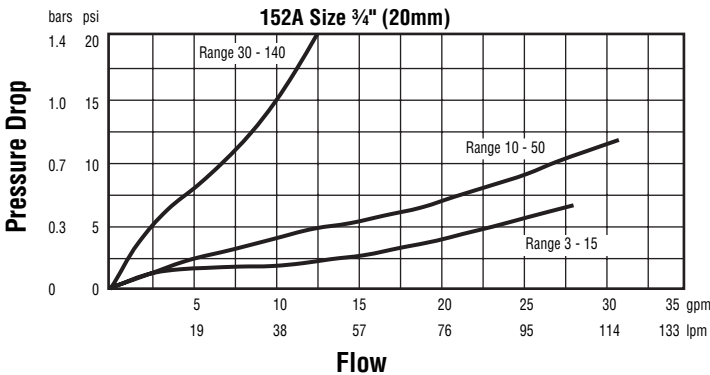
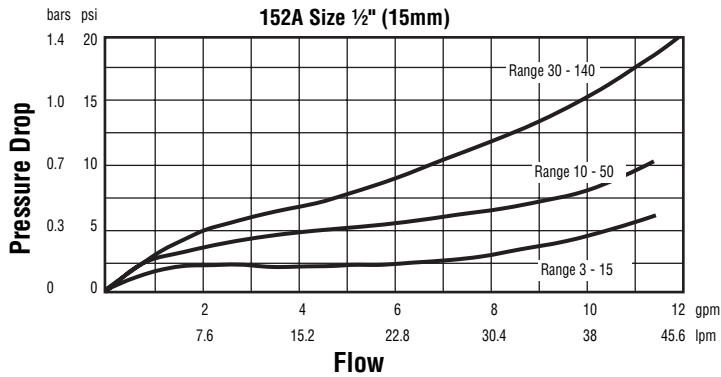
	From		From		From		From		From		From		From		From			
	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar		
<b>Initial Pressure</b>	50	3.52	75	5.27	100	7.03	125	8.79	150	10.55	175	12.3	200	14.06	225	15.82	250	17.58
<b>Reduced Pressure</b>	Up To		Up To		Up To		Up To		Up To		Up To		Up To		Up To		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

	in.	mm	<b>*Maximum Capacities in Lbs. of Steam Per Hour</b>									
152A	1/2"	15	80	111	143	175	205	237	270	299	332	
152A	3/4"	20	285	394	506	620	726	841	956	1060	1178	
152A	1"	25	402	557	715	875	1025	1186	1349	1497	1663	
152A	1 1/4"	32	442	613	786	962	1127	1305	1484	1646	1830	
152A	1 1/2"	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

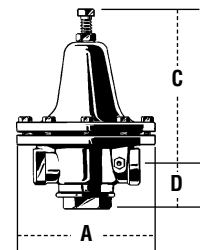


## Series 152A Adjusting Spring Range Chart

SIZE		*ADJUSTABLE RANGES		SPRING AND MODEL NO.
in.	mm	psi	bars	
1/2	15	3 - 15	.21 - 1.05	145
1/2	15	10 - 50	.70 - 3.51	146
1/2	15	30 - 140	2.11 - 9.84	141
3/4	20	3 - 15	.21 - 1.05	145
3/4	20	10 - 50	.70 - 3.51	146
3/4	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
1 1/4	32	3 - 15	.21 - 1.05	146
1 1/4	32	10 - 30	.70 - 2.11	128
1 1/4	32	30 - 140	2.11 - 9.84	142
1 1/2	40	5 - 40	.35 - 2.81	276
1 1/2	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.
1/2	15	6	152	7	178	1 15/16	49	11	4.99
3/4	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
1 1/4	32	7 1/2	191	7 1/2	191	2 3/16	56	20	9.07
1 1/2	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

USA: 815 Chestnut St., No. Andover, MA 01845-6098; www.wattsreg.com

Canada: 5435 North Service Rd., Burlington, ONT. L7L 5H7; www.wattscanada.ca