

## Engineering Specification

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

Contractor \_\_\_\_\_

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

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

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

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# Series 152A

## Process Steam Pressure Regulators

1/2" – 2"

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

### Specification

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 Series 152A.

### Models

- 152A – Iron body for pressures up to 200psi (14 bar)  
 152AT – Tight seating for dead end and liquid service. Utilizes Teflon® valve disc, maximum operating temperatures are 300°F (204°C) at 300psi (21 bar) and 400°F (204°C) at 200psi (14 bar)

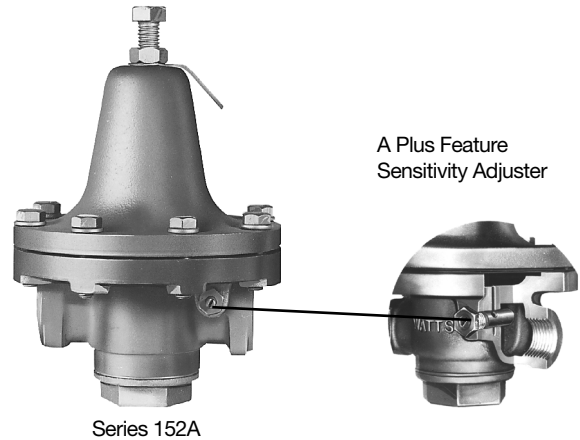
For information on 1/2" – 1" stainless steel construction, see literature ES-152SS.

### Materials

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

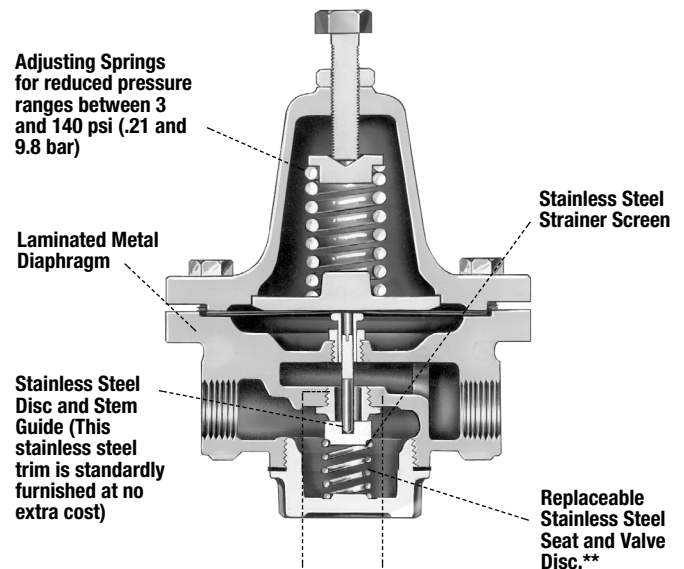
### Pressure – Temperature

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



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 bar) and 400°F at 200psi (204°C at 14 bar). Teflon® is a registered trademark of E.I. duPont deNemours Co., Inc.

### NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product. Inquire with governing authorities for local installation requirements

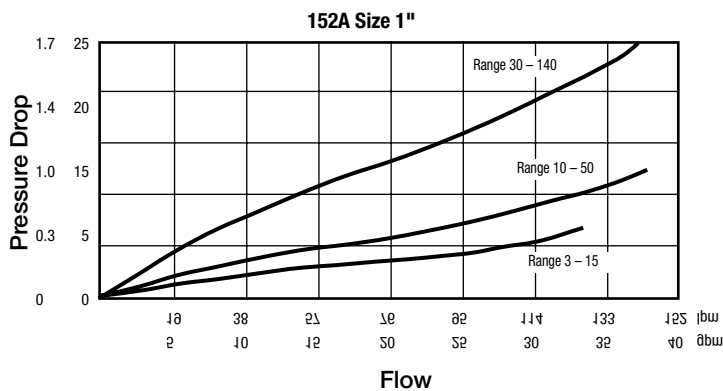
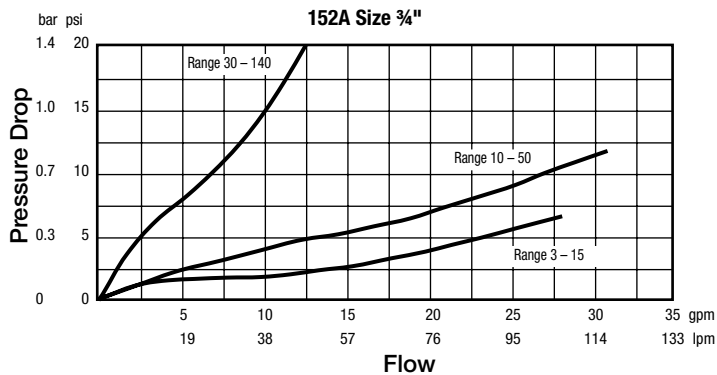
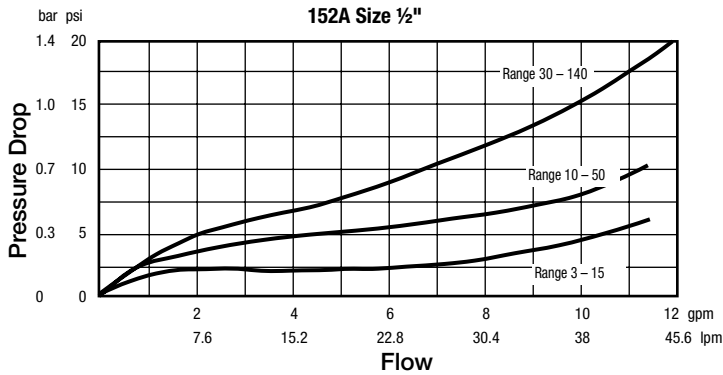
Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

# Quick Reference Capacity Chart For Average Conditions

	FROM		FROM		FROM		FROM		FROM		FROM		FROM		FROM		FROM	
	psi	bar	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
	Up To		Up To		Up To		Up To		Up To		Up To		Up To		Up To		Up To	
<b>Reduced Pressure</b>	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.	<b>*MAXIMUM CAPACITIES IN LBS. OF STEAM PER HOUR</b>																
252A, 152A	½	80	111	143	175	205	237	270	299	332								
252A, 152A	¾	285	394	506	620	726	841	956	1060	1178								
252A, 152A	1	402	557	715	875	1025	1186	1349	1497	1663								
152A	1 - ¼	442	613	786	962	1127	1305	1484	1646	1830								
152A	1 - ½	665	870	1120	1355	1600	1950	2230	2460	2725								
152A	2	765	1000	1285	1490	1840	2242	2564	2829	3134								

\*1 Lb. Steam Equals 970 BTU Per Hour

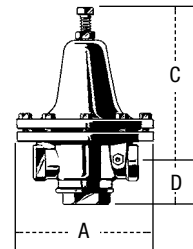
## Capacity



## Series 152A Adjusting Spring Range Chart

SIZE	*ADJUSTABLE RANGES		SPRING AND MODEL NO.
½	3 - 15	0.21 - 1.05	145
½	10 - 50	0.70 - 3.51	146
½	30 - 140	2.11 - 9.84	141
¾	3 - 15	0.21 - 1.05	145
¾	10 - 50	0.70 - 3.51	146
¾	30 - 140	2.11 - 9.84	141
1	3 - 15	0.21 - 1.05	146
1	10 - 30	0.70 - 2.11	128
1	30 - 140	2.11 - 9.84	142
1¼	3 - 15	0.21 - 1.05	146
1¼	10 - 30	0.70 - 2.11	128
1¼	30 - 140	2.11 - 9.84	142
1½	5 - 40	0.35 - 2.81	276
1½	30 - 100	2.11 - 7.03	299
2	5 - 40	0.35 - 2.81	276
2	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 minimum shown for lower regulation or complete shut off.



## Dimensions — Weights

SIZE	DIMENSIONS						WEIGHT	
	A		B		C		lbs.	kgs
½	in.	mm	in.	mm	in.	mm	11	4.99
¾	6	152	7	178	115/16	49	11	4.99
1	7½	191	7½	191	23/16	56	20	9.07
1¼	7½	191	7½	191	23/16	56	20	9.07
1½	9	229	11¼	286	2¾	70	40	18.14
1½	9	229	11¼	286	2¾	70	40	18.14

