

# 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 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  $\frac{1}{2}$ " – 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)

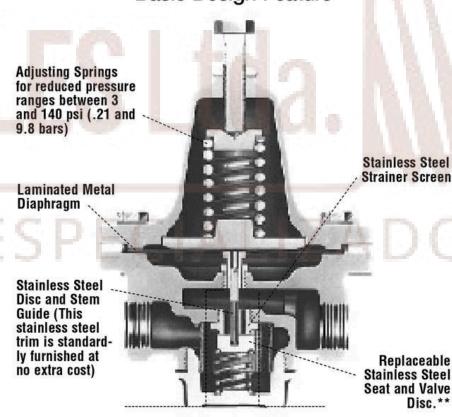
152AT - Maximum Temperature: 300°F (149°C)

Maximum Working Pressure: 300psi (21 bars), and

Maximum Temperature: 400°F (204°C) Maximum Working Pressure: 200psi (14 bars)



# **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 tradename of E.I. duPont deNemours Co., Inc.



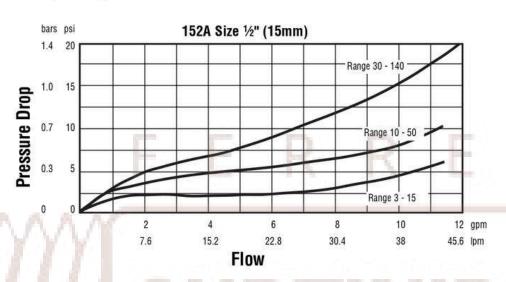
Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior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

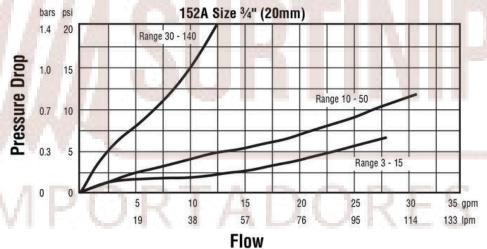
# Quick Reference Capacity Chart For Average Conditions

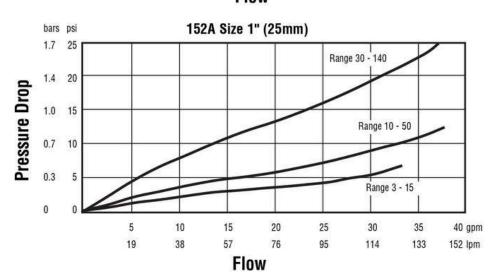
			Fi	rom	Fr	om	Fr	om	Fr	om	Fr	om	Fre	om	Fr	om	Fr	om	Fi	rom
			psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
Initia	l Pressure		50	3.52	75	5.27	100	7.03	125	8.79	150	10.55	175	12.3	200	14.06	225	15.82	250	17.58
		U	р То	Up	Up To Up To		Up To		Up To		Up To		Up To		Up To		Up To			
Redu	ced Pressure	)	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					1.7	*Maxi	mum C	apaciti	es in L	bs. of	Steam	Per H	our		: ::		an =	
152A	1/2"	15		80	1	11	14	13	17	75	2	05	23	37	2	270	2	99		332
152A	3/4"	20	2	285	39	94	50	)6	62	20	7	26	84	1	9	956	1	060	1	178
152A	1"	25	4	402	5	57	71	15	87	75	1(	025	11	86	1	349	1	497	1	1663
152A	11/4"	32	4	442	6	13	78	36	96	62	1	127	13	05	1	484	1	646	1	830
152A	1½"	40	(	665	87	70	11	20	13	55	16	600	19	50	2	230	2	460	2	2725
152A	2"	50	7	765	10	00	12	85	14	90	18	340	22	42	2	564	2	829	3	3134

<sup>\*1</sup> Lb. Steam Equals 970 BTU Per Hour

#### Capacity







# WATTS® REGULATOR

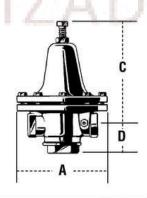


### Series 152A Adjusting Spring Range Chart

SIZE		*ADJUSTA	ABLE 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				
11/4	32	3 – 15	.21 - 1.05	146				
11/4	32	10 – 30	.70 - 2.11	128				
11/4	32	30 - 140	2.11 - 9.84	142				
11/2	40	5 – 40	.35 - 2.81	276				
11/2	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				

<sup>\*</sup>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	E (DN)		WEIGHT						
			A	C	;	D			
in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg.
1/2	15	6	152	7	178	115/16	49	11	4.99
3/4	20	6	152	7	178	115/16	49	11	4.99
1	25	71/2	191	71/2	191	23/16	56	20	9.07
11/4	32	71/2	191	71/2	191	23/16	56	20	9.07
11/2	40	9	229	111/4	286	23/4	70	40	18.14
2	50	9	229	111/4	286	23/4	70	40	18.14