

# Powers #11 Type DB and DS Double Seat Regulators (1" to 2")

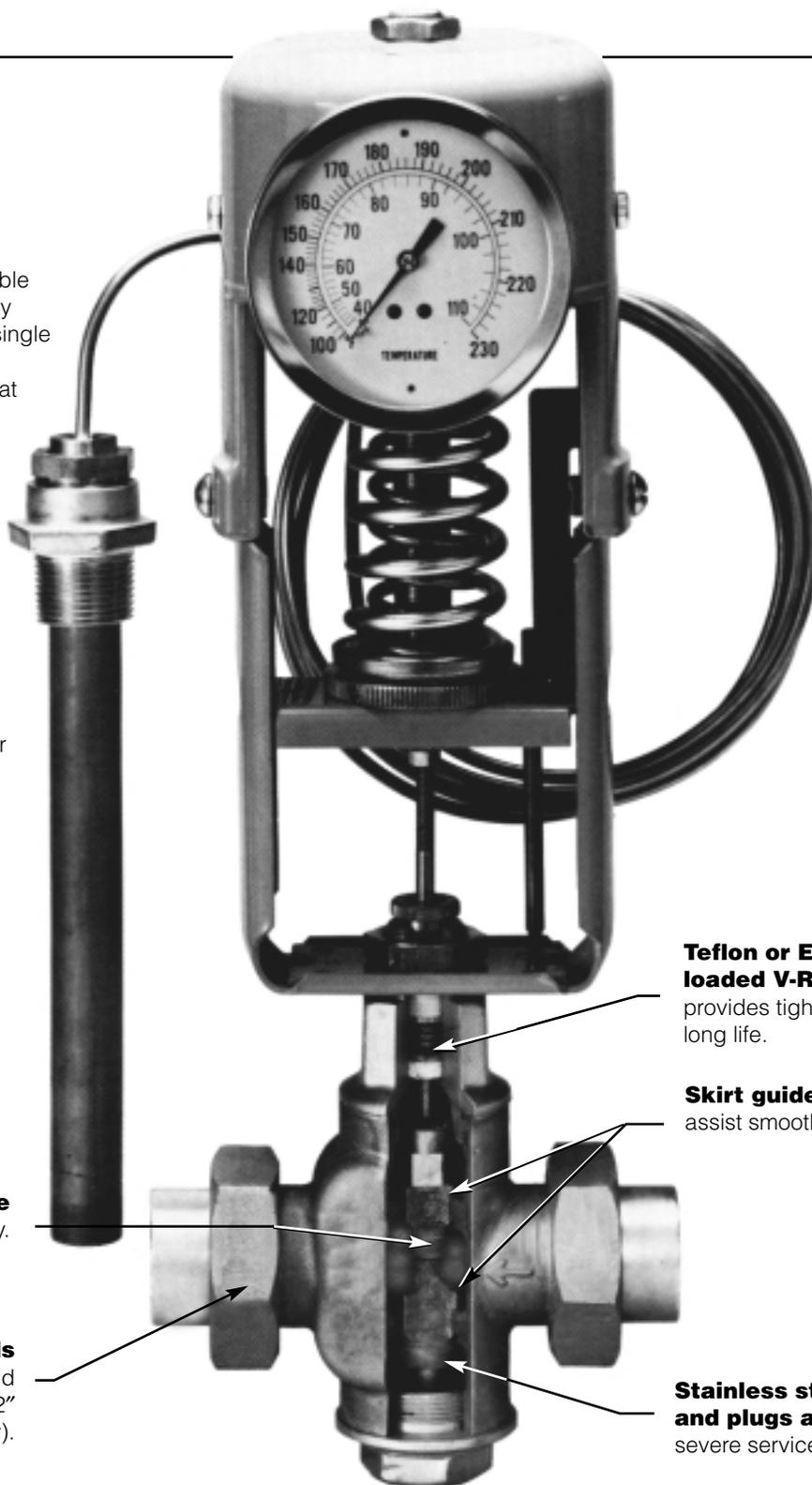
**Heating or Cooling**  
**Sizes 1" to 2"**  
**Double Seat**  
**Bronze or Stainless Trim**

**Application:** The #11 Double Seat Regulators are normally used in applications where single seat regulators do not have enough capacity. Double Seat Regulators do not have tight shut-off (when new, leakage = 0.5% of max. flow), and should not be used where leakage can cause overheating in low capacity heating systems (e.g. Heat Exchangers). Double Seat Regulators will work well in heating systems that have storage capacity (e.g., tank type water heaters, or constant flow heat exchanger systems with storage tanks) and are excellent for cooling applications which usually utilize some additional method of bypassing water around the #11 Regulator.

Bronze trim is suitable for water and steam inlet pressures below 50 psi. Stainless steel trim should be used when inlet pressure is above 50 psi.

**Double Seat Style**  
provides extra capacity.

**Union ends**  
ease installation and maintenance size 1"-2"  
(Bronze body).



**Teflon or EPT spring-loaded V-Ring packing**  
provides tight sealing and long life.

**Skirt guided plugs**  
assist smooth operation.

**Stainless steel seats and plugs available** for severe service applications.

**Selection**

Refer to Load Calculations (page 16) to determine valve capacity required for your process.

Refer to Valve Sizing Charts (pages 16–21) to select valve size matching your capacity requirements.

**Type Description**

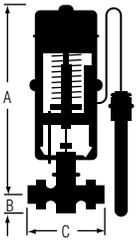
- DB . . . . . Double Seat Bronze Trim, Size 1" to 2"
- DS . . . . . Double Seat Stainless Trim, Size 1" to 2"



**How to Order**

Refer to the product number guide (pages 22–23) to match your valve and thermal system selections and determine product number.

**Double Seat Regulator Dimensions**

	Valve Style	Material and Connections	Valve Size	A in. (mm)	B in. (mm)		C in. (mm)	Shipping Weight lbs. (kg)
					Heating	Cooling		
<b>Double Seat</b>	Bronze body, double female unions, Types DB, DS	1"	15 (381)	2 1/8 (54)	2 3/4 (70)	6 3/4 (171)	24 (11)	
		1 1/4"	15 1/4 (387)	2 1/2 (64)	3 (76)	7 (178)	26 (12)	
		1 1/2"	15 3/8 (390)	2 5/8 (67)	3 1/4 (83)	8 (203)	28 (13)	
		2"	16 1/2 (419)	3 5/8 (92)	4 3/8 (111)	9 5/8 (244)	39 (18)	

**Specifications**

**Body:** 1" to 2" Bronze ANSI Class 250, 2 1/2" to 4" Iron ANSI Class 125

**Connections:** 1" to 2" Union Ends, 2 1/2" to 4" Flanged

**Trim:** Bronze or Stainless Steel

Sizes	1"	1 1/4"	1 1/2"	2"
<b>C<sub>v</sub></b>	13.5	22.0	28.0	53.0
<b>Max. ΔP Bronze</b> (PSI/kPa)	50 (345)	50 (345)	50 (345)	50 (345)
<b>Max. ΔP Stainless Steel</b> (PSI/kPa)	150 (1034)	150 (1034)	150 (1034)	125 (862)