

SIZING PRESSURE REGULATORS

DATA REQUIRED FOR ORDERING

1. **SERVICE** Fluid flowing through Regulator.
2. **INITIAL (INLET) PRESSURE**
 - (a) Maximum/Minimum.
 - (b) Superheat, Gravity, etc.
 - (1) Steam Service—Total Temperature or Degrees Superheat, if any.
 - (2) Air, Gases, Water and Liquids—Temperature and Specific Gravity.
3. **DELIVERY (OUTLET) PRESSURE** Maximum/Minimum.
4. **CAPACITY** Maximum required flow through Regulator.
5. **END CONNECTIONS** Screwed or Flanged. (If flanged, state drilling.)

EXAMPLE

Select size and type Regulator to pass 14,600 lb. steam per hour reducing from 175/150 psi saturated to 40/20 psi. Ends to be flanged, pilot spring loaded and pressure controlled within 2 psi.

1. Steam
2.
 - (a) 175/150 psi
 - (b) None (saturated, 378°F total temperature)
3. 40/20 psi
4. 14,600 lb. per hour
5. Flanged, if 2½" size or larger

SELECTION OF TYPE AND SIZE OF REGULATOR

MAIN VALVE	PILOT
A. TYPE —See Selection Criteria for Steam, Air, Gases or Water and Liquids in beginning of this Section.	See Selection Criteria and Selection Charts opposite.
B. SIZE —See applicable Valve Capacity Tables in this Section.	
C. MATERIAL — See Main Valve Selection Chart in Technical Reference Section or individual Product Pages.	See Pilot Selection Chart opposite or individual Product Pages.
D. ACCESSORIES —See Accessories in Other Products Section.	

SELECTION OF TYPE AND SIZE OF REGULATOR

MAIN VALVE	PILOT
A. Since maximum Delivery Pressure is less than 75% of minimum Initial Pressure and the least pressure drop exceeds required "minimal differential". SELECT TYPE E	Since maximum Initial Pressure 175 psi, Total Temperature 378°F maximum Delivery Pressure 40 psi, Pilot spring loaded and required accuracy 2 psi: SELECT TYPE D
B. For 14,600 lb. per hour and 150 psi minimum Initial Pressure Economical: SELECT 3" FULL PORT Engineered: SELECT 4" NORMAL PORT	
C. For 175 psi, 378°F: SELECT CAST IRON, FLANGED 250 LB.	For 175 psi, 378°F: SELECT CAST IRON
D. None required in this case.	None required in this case.

ECONOMICAL SOLUTION: 3" FULL PORT SPENCE TYPE ED, CAST IRON BODY, 250 LB. FLANGED ENDS
ENGINEERED SOLUTION: 4" NORMAL PORT SPENCE TYPE ED, CAST IRON BODY, 250 LB. FLANGED ENDS.

NOTE: Pressure Regulators should always be protected by properly designed Strainers.