



## TECH TIP #39

# PRESSURE - TEMPERATURE RATINGS

## Bronze - Gate, Globe, Angle and Check Valves

### MANUFACTURER'S STANDARDIZATION SOCIETY (MSS) STANDARD PRACTICE SP-80.

MSS-SP 80 provides a temperature pressure chart for 125, 150, 200, 300 and 350 class bronze valves, covering temperatures from  $-20^{\circ}$  F. to  $550^{\circ}$  F.

There are some special exceptions noted such as temperatures below  $-20^{\circ}$  F. and for solder joints, but this is a chart that provides the basic temperature pressure relationships for the bronze valves themselves. The maximum recommended pressure temperature ratings for solder joints vary with the solder and the size and they are specified in ANSI B16.18.

Press. Class	PRESSURE - PSI (SWP)							
	125	150		200	300		350	
End. Conn.	THD	THD	FLG	THD	THD	THD	FLG	THD
Temp. deg. F	MATERIAL							
	ASTM B-62			ASTM B-61				
$-20^{\circ}$ to $150^{\circ}$	200	300	225	400	1000	600	500	1000
$200^{\circ}$	185	270	210	375	920	560	475	920
$250^{\circ}$	170	240	195	350	830	525	450	830
$300^{\circ}$	155	210	180	325	740	490	425	750
$350^{\circ}$	140	180	165	300	650	450	400	670
$400^{\circ}$	—	—	—	275	560	410	375	590
$406^{\circ}$	125	150	150	—	—	—	—	—
$450^{\circ}$	120	145	—	250	480	375	350	510
$500^{\circ}$	—	—	—	225	390	340	325	430
$550^{\circ}$	—	—	—	200	300	300	300	350

**INNOVATION** IN EVERY VALVE



**MILWAUKEE VALVE**

**7**



# TECH TIP #39 (Cont.)

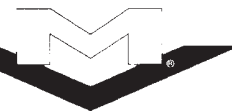
## PRESSURE - TEMPERATURE RATINGS

Iron - Gate, Globe  
and Check Valves

MANUFACTURER'S STANDARDIZATION SOCIETY (MSS)  
STANDARD PRACTICE SP-70, SP-71 AND SP-85  
MILWAUKEE IRON BODY GATE, GLOBE AND CHECK VALVES

MAXIMUM ALLOWABLE NON-SHOCK PRESSURE			
Material	ASTM A126 CLASS B		
Class	125		250
Temperature Degrees F.	Sizes 2"-12"	Sizes 14"-24"	Sizes 2"-12"
-20° to 150°	200	150	500
200°	190	135	460
225°	180	130	440
250°	175	125	415
275°	170	120	395
300°	165	110	375
325°	155	105	355
350°	150	100	335
375°	145	—	315
400°	140	—	290
425°	130	—	270
450°	125	—	250

**INNOVATION** IN EVERY VALVE



**MILWAUKEE VALVE**