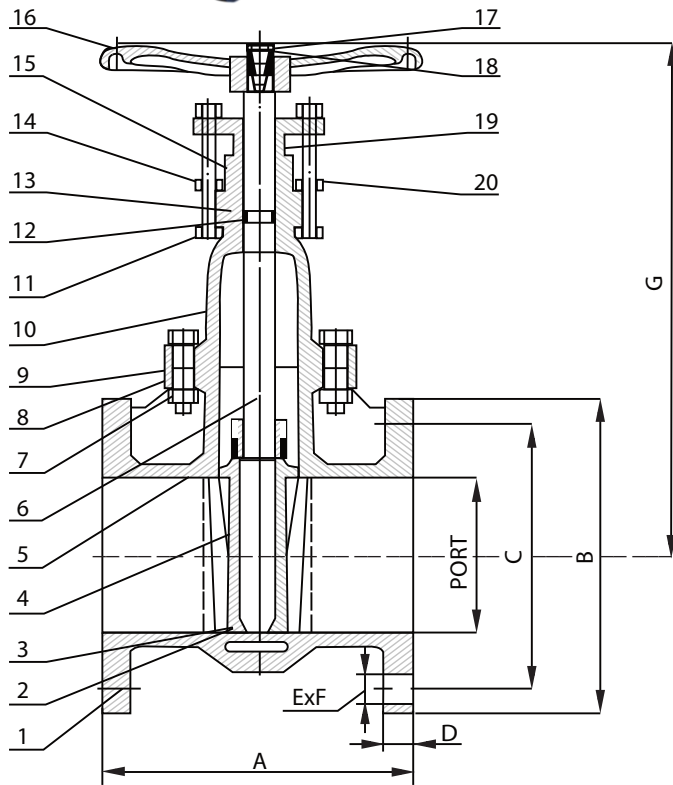




644BR-3\" data-bbox="238 320 311 335"/>

DESIGN FEATURES	TEST FEATURES
DESIGN ACCORDANCE TO MSS SP-70	TEST ACCORDANCE TO PER API 598
FLANGE DIMENSIONS TO PER ANSI B16.1	SHELL TEST (WATER): 350 PSIG
FACE-TO-FACE DIMENSION TO PER ANSI B16.10	SEAT TEST (WATER): 200 PSIG
SOLID WEDGDE	WORKING PRESSURE: 125 SWP (STEAM SERVICE),
BOLTED BONNET	200WOG (WATER, OIL & GAS SERVICE)
NON RISING STEM DESIGN	



BILL OF MATERIAL LIST		
NO.	DESCRIPTION	MATERIAL
1	BODY	ASTM A126 CLASS B
2	BODY RING	ASTM B16
3	WEDGE RING	ASTM B16
4	WEDGE	ASTM A126 CLASS B
5	STEM NUT	ASTM B16
6	STEM	ASTM 420 S42000
7	BODY NUT	ASTM A307 B
8	BODY BOLT	ASTM A307 B
9	BODY GASKET	FLEXIBLE GRAPHITE
10	BONNET	ASTM A126 CLASS B
11	BOLTS	ASTM A307 B
12	RING	ASTM A536 65-45-12
13	O-RING	NBR
14	NUT	ASTM A307 B
15	STUFFING	ASTM A536 65-45-12
16	HANDWHEEL	ASTM A126 CLASS B
17	BOLTS	ASTM A307 B
18	WASHERS	ASTM A536 65-45-12
19	GLAND	ASTM A536 65-45-12
20	PACKING	FLEXIBLE GRAPHITE

DIMENSIONS

MODEL	SIZE		PORT	A	B	C	D	E	F	G
	IN	MM								
644BR-09	2"	50	2.00	7.00	6.00	4.75	0.63	4.00	0.75	11.22
644BR-10	2 1/2"	65	2.50	7.50	7.00	5.50	0.69	4.00	0.75	12.28
644BR-11	3"	80	3.00	8.00	7.50	6.00	0.75	4.00	0.75	13.22
644BR-12	4"	100	4.00	9.00	9.00	7.50	0.94	8.00	0.75	15.24
644BR-13	5"	125	5.00	10.00	10.00	8.50	0.94	8.00	0.87	16.36
644BR-14	6"	150	6.00	10.50	11.00	9.50	1.00	8.00	0.87	18.93
644BR-15	8"	200	8.00	11.50	13.50	11.75	1.12	8.00	0.87	23.03
644BR-16	10"	250	10.00	13.00	16.00	14.25	1.19	12.00	1.00	27.80
644BR-17	12"	300	12.00	14.00	19.00	17.00	1.25	12.00	1.00	31.78

WEIGHT DATA

SIZE	WEIGHT (KG)
2"	14.61
2 1/2"	17.95
3"	24.00
4"	35.00
5"	43.00
6"	66.40
8"	98.00
10"	165.30
12"	227.70

*WEIGHT ESTIMATED

*ALL DIMENSIONS ARE EXPRESSED IN INCHES

GRAY IRON			
TEMPERATURE -°F	125 CLASS NPS 2"-12"	NPS 14"-24"	200 WOG NPS 30"-48"
-20 A 100	200	150	150
200	190	135	115
225	180	130	100
250	175	125	85
275	170	120	65
300	165	110	50
325	155	105	-
350	150	100	-
375	145	-	-
400	140	-	-
425	130	-	-
**450	125	-	-

***Maximum temperature for bronze internals*

CHEMICAL COMPOSITION & MECHANICAL PROPERTIES

ASTM A126 CLASS B	
CHEMICAL REQUIREMENT	%
PHOSPHORUS	0.75 MAX
SULFUR	0.15 MAX

TENSION REQUIREMENT

TENSION RESISTANCE (PSI)	31000 MIN
HARDNESS	195 HB

Maximum permissible according to MSS SP-70.

Shown temperature indicated will be the temperature indicated of metal of the retainers pressure parts.

It will be assume metal temperature will be media temperature.

Gray iron material specifications

Gray cast iron is an iron, carbon, silicon, manganese alloy. Cast iron is the most versatile of all metals foundry.

It's high percentage of carbon makes easier foundry fusion and manufacture machinery.

The low grade or absence of contractions and a high facility of molding provides high foundry quality.

This grade of cast iron it's an iron with a high resistance, modified to control hardness & microstructure.

Get's it's maximun hardness as a result of refined control of the chemical composition, size and graphite scams type. We obtained tension properties desired through the control of these elements and the addition of other alloy elements.

Gray cast iron is commonly used in general services and wet medias such as clean water, waste, oil, gas & steam