



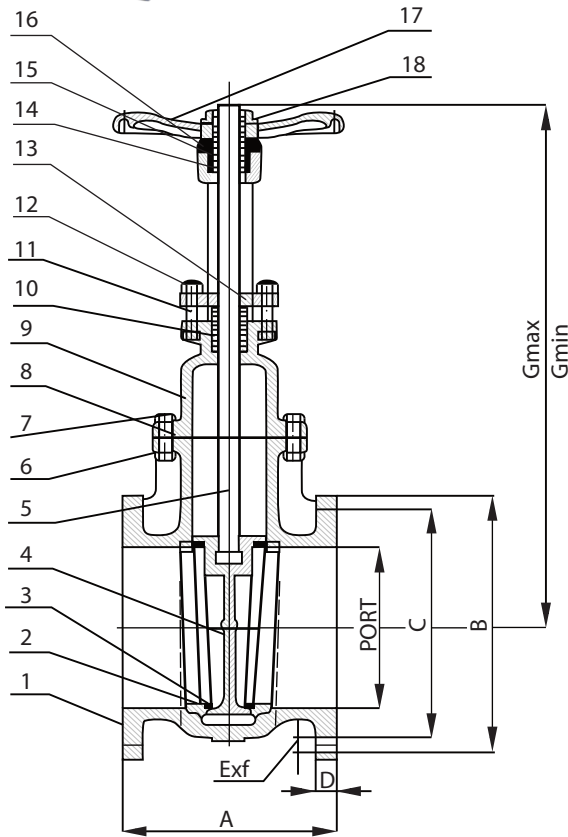
144BR-3"

TEST FEATURES

- TEST ACCORDANCE TO PER API 598
- SHELL TEST (WATER): 350 PSIG
- SEAT TEST (WATER): 200 PSIG
- WORKING PRESSURE: 125 SWP (STEAM SERVICE), 200 WOG (WATER, OIL & GAS SERVICE)

DESIGN FEATURES

- DESIGN ACCORDANCE TO MSS SP-70
- FLANGE DIMENSIONS TO PER ANSI B16.1
- FACE TO FACE DIMENSION TO PER ANSI B16.10
- SOLID WEDGDE
- BOLTED BONNET
- OS&Y 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	ASTM 420 S42000
6	NUT	ASTM A307 B
7	BOLTS	ASTM A307 B
8	GASKET	FLEXIBLE GRAPHITE
9	BONNET	ASTM A126 CLASS B
10	PACKING	FLEXIBLE GRAPHITE
11	BOLTS	ASTM B16
12	NUT	ASTM B16
13	GLAND	ASTM A536 65-45-12
14	STEM NUT	ASTM B16
15	BONNET LOCK NUT	ASTM A126 CLASS B
16	SCREW	ASTM A307 B
17	HANDWHEEL	ASTM A126 CLASS B
18	HANDWHEEL NUTS	ASTM A536 65-45-12

DIMENSIONS

MODEL	SIZE		PORT	A	B	C	D	E	F	Gmin	Gmax
	IN	MM									
144BR-09	2"	50	2.00	7.00	6.00	4.75	0.63	4.00	0.75	12.17	14.45
144BR-10	2 1/2"	65	2.50	7.50	7.00	5.50	0.69	4.00	0.75	13.46	16.42
144BR-11	3"	80	3.00	8.00	7.50	6.00	0.75	4.00	0.75	14.96	18.31
144BR-12	4"	100	4.00	9.00	9.00	7.50	0.94	8.00	0.75	16.44	20.77
144BR-13	5"	125	5.00	10.00	10.00	8.50	0.94	8.00	0.87	19.11	24.40
144BR-14	6"	150	6.00	10.50	11.00	9.50	1.00	8.00	0.87	22.07	28.35
144BR-15	8"	200	8.00	11.50	13.50	11.75	1.12	8.00	0.87	28.17	36.62
144BR-16	10"	250	10.00	13.00	16.00	14.25	1.19	12.00	1.00	33.07	43.84
144BR-17	12"	300	12.00	14.00	19.00	17.00	1.25	12.00	1.00	39.50	51.85

WEIGHT DATA

SIZE	WEIGHT (KG)
2"	14.61
2 1/2"	18.00
3"	25.03
4"	36.20
5"	43.20
6"	62.10
8"	101.00
10"	159.00
12"	231.00

*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