



# CAST CARBON AND LOW ALLOY STEEL VALVES

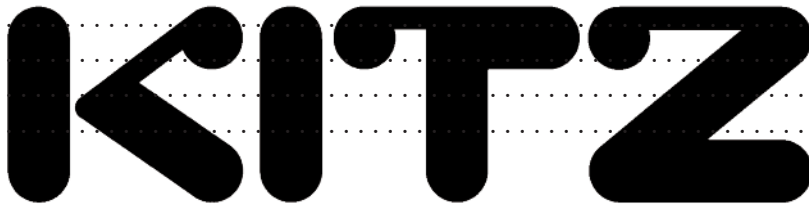
**Class 150/300/600/900/1500**

BOLTED BONNET  
GATE  
GLOBE  
CHECK



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## CERTIFICATIONS

### Fugitive Emissions

KITZ Cast Steel Valves meet Federal EPA Regulations for Low Fugitive Emission Service. Please contact KCA or your Regional Manager for detailed information.

### ISO Certification

KITZ Corporation's manufacturing plants have been registered and certified by Bureau Veritas Quality International, which has assessed and found KITZ' Quality Management System to be in accordance with the requirements of the quality standards and scope of supply detailed below.

### Quality Standards

ISO-9001

# FIGURE NUMBER CONSTRUCTION

## CAST CARBON AND LOW ALLOY STEEL VALVES

G - W   1500   SC   L   S   6C   Y - N  
**1**   **2**   **3**   **4**   **5**   **6a**   **7**   **6b**   **8**

### 1 – OPERATION

( ) Handwheel  
 G Gear operator  
 E Electric

### 2 – END CONNECTION

( ) RFF, 125~250 AARH \*  
 K RFF, 250~500 AARH  
 R Ring Joint ‡  
 W Butt Weld

### 3 – PRESSURE CLASS (ANSI/ASME)

150  
 300  
 600  
 900  
 1500  
 2500

### 4 – MATERIAL CLASSIFICATION

SC Generic for all Cast Steel

### 5 - VALVE TYPE

L Gate  
 J Globe  
 O Swing Check  
 OH API 594 Swing Check

### 6 – TRIMS

1 ( ) 13 Cr.  
 8 S\_ 1/2 HF \*\*  
 5 SY Full HF  
 5 S\_Y Full HF †  
 10 MM 316 SS ‡  
 12 SMM 316/HF ‡  
 9 NN Monel ‡  
 11 SNN Monel/HF ‡  
 14 \_A20 Alloy 20 ‡

### 7 – SHELL MATERIALS

( ) A216 GR. WCB std, WCC must specify  
 5C A217 Gr. C5  
 6C A217 Gr. WC6  
 9C A217 Gr. WC9  
 12C A217 Gr. C12  
 CL A352 Gr. LCC

### 8 – OTHERS

Bore Schedules: sch-std, sch-40...,  
 N - NACE (MRO103) ‡  
 Q Special User Requirements i.e. NDE, Trims,  
 Packing and Gaskets, Cleaning, others ‡

### SPECIAL

M Prefix used for valves modified through  
 QMS by KCA ‡

### EXAMPLES

150SCL	R1500SCLS
150SCLS-N	W1500SCLSP6
G-300SCLSM	600SCLS5CY
300SCLSBMMY	900SCLS12CY-Q
600SCLS5CY	R1500SCLS
900SCLS12CY-Q	W1500SCLSP6

( ) Blank - No designation required.

\* KCA Standard RF

\*\* KCA Standard for A216 and A352 materials

† KCA Standard for Chrome (A217) materials

‡ Figure No. designation utilized by KCA only



# GATE VALVES

## API 600 • OS&Y • BOLTED BONNET FLEXIBLE ONE PIECE WEDGE

### CLASS 150

150SCLS									
Body Material	WCB				LCC		WC6	C5	C12
Trim API No.	13 Cr+HF 8	13 Cr+HF 8	316+HF 12	FULL HF 5	13 Cr+HF 8	316+HF 12	FULL HF 5	FULL HF 5	FULL HF 5
ENDS	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> _	_ <i>MM</i>	_ <i>Y</i>	_ <i>CL</i>	_ <i>CLMM</i>	_ <i>6CY</i>	_ <i>5CY</i>	_ <i>12CY</i>
1/2	POA	POA	POA	POA	POA	POA	POA	POA	POA
2	1,621	POA	2,175	2,053	POA	3,206	POA	POA	POA
2 1/2	2,069	POA	2,930	2,758	POA	4,346	POA	POA	POA
3	2,176	POA	2,930	2,758	POA	4,346	POA	POA	POA
4	2,813	POA	3,774	3,554	POA	5,616	POA	POA	POA
6	4,373	POA	5,875	5,525	POA	8,733	POA	POA	POA
8	7,023	POA	9,440	8,881	POA	14,025	POA	POA	POA
10	10,531	POA	14,156	13,616	POA	21,031	POA	POA	POA
12	13,304	POA	17,881	16,818	POA	26,570	POA	POA	POA
14	19,825	POA	28,054	26,388	POA	41,669	POA	POA	POA
16	25,499	POA	36,079	33,938	POA	53,605	POA	POA	POA
18	32,138	POA	45,469	42,773	POA	67,555	POA	POA	POA
20	42,846	POA	56,258	51,338	POA	81,284	POA	POA	POA
24	59,129	POA	77,518	70,846	POA	112,173	POA	POA	POA
30 <sup>(2)</sup>	POA	POA	POA	POA	POA	POA	POA	POA	POA
36 <sup>(2)</sup>	POA	POA	POA	POA	POA	POA	POA	POA	POA

<sup>(1)(2)</sup> See page 14 - Notes

### CLASS 300

300SCLS									
Body Material	WCB				LCC		WC6	C5	C12
Trim API No.	13 Cr+HF 8	13 Cr+HF 8	316+HF 12	FULL HF 5	13 Cr+HF 8	316+HF 12	FULL HF 5	FULL HF 5	FULL HF 5
ENDS	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> _	_ <i>MM</i>	_ <i>Y</i>	_ <i>CL</i>	_ <i>CLMM</i>	_ <i>6CY</i>	_ <i>5CY</i>	_ <i>12CY</i>
1/2	POA	-	POA	POA	POA	POA	POA	POA	POA
2	2,110	POA	2,866	2,670	4,221	4,221	POA	POA	POA
2 1/2	2,730	POA	3,896	3,631	5,741	5,741	POA	POA	POA
3	2,876	POA	3,896	3,631	5,741	5,741	POA	POA	POA
4	3,859	POA	5,229	4,873	7,708	7,708	POA	POA	POA
6	6,829	POA	9,269	8,639	13,643	13,643	POA	POA	POA
8	10,404	POA	14,115	13,151	20,781	20,781	POA	POA	POA
10	14,959	POA	20,299	18,918	29,874	29,874	POA	POA	POA
12	20,659	POA	29,505	33,405	43,424	43,424	POA	POA	POA
14	32,728	POA	42,188	43,556	68,798	68,798	POA	POA	POA
16	40,096	POA	57,268	53,364	84,284	84,284	POA	POA	POA
18	49,329	POA	70,459	65,648	106,250	106,250	POA	POA	POA
20	69,058	POA	90,529	82,736	130,998	130,998	POA	POA	POA
24	117,655	POA	154,238	140,961	223,191	223,191	POA	POA	POA
30 <sup>(2)</sup>	POA	POA	POA	POA	POA	POA	POA	POA	POA
36 <sup>(2)</sup>	POA	-	POA	POA	POA	POA	POA	POA	POA

<sup>(1)(2)</sup> See page 14 - Notes

**CLASS 600**

<b>600SCLS</b>									
Body Material	WCB				LCC		WC6	C5	C12
Trim	13 Cr+HF	13 Cr+HF	316+HF	FULL HF	13 Cr+HF	316+HF	FULL HF	FULL HF	FULL HF
API No.	8	8	12	5	8	12	5	5	5
Ends	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> <sub>-</sub>	<i>MM</i>	<i>Y</i>	<i>CL</i>	<i>CLMM</i>	<i>6CY</i>	<i>5CY</i>	<i>12CY</i>
2	3,556	POA	7,316	2,831	POA	7,316			POA
2½	POA	POA	POA	POA	POA	POA	POA	POA	POA
3	4,971	POA	7,015	3,963	POA	10,229	POA	POA	POA
4	7,838	POA	11,054	6,242	POA	14,371	POA	POA	POA
6	13,691	POA	19,318	11,409	POA	28,163	POA	POA	POA
8	23,203	POA	32,740	18,483	POA	47,729	POA	POA	POA
10	31,550	POA	44,513	25,132	POA	64,899	POA	POA	POA
12	47,175	POA	58,501	32,660	POA	84,835	POA	POA	POA
14	85,529	POA	106,065	59,289	POA	153,811	POA	POA	POA
16	113,445	POA	140,686	78,641	POA	204,013	POA	POA	POA
18	POA	POA	POA	POA	POA	POA	POA	POA	POA
20 <sup>(2)</sup>	POA	POA	POA	POA	POA	POA	POA	POA	POA
24 <sup>(2)</sup>	POA	POA	POA	POA	POA	POA	POA	POA	POA
30 <sup>(2)</sup>	POA	-	POA	POA	POA	POA	POA	POA	POA

<sup>(1)(2)</sup> See page 14 - Notes

**CLASS 900**

<b>900SCLS</b>									
Body Material	WCB				LCC		WC6	C5	C12
Trim	13 Cr+HF	13 Cr+HF	316+HF	FULL HF	13 Cr+HF	316+HF	FULL HF	FULL HF	FULL HF
API No.	8	8	12	5	8	12	5	5	5
Ends	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> <sub>-</sub>	<i>MM</i>	<i>Y</i>	<i>CL</i>	<i>CLMM</i>	<i>6CY</i>	<i>5CY</i>	<i>12CY</i>
2	-	POA	POA	POA	POA	POA	POA	POA	POA
2½	-	POA	POA	POA	POA	POA	POA	POA	POA
3	POA	POA	POA	POA	POA	POA	POA	POA	POA
4	POA	POA	POA	POA	POA	POA	POA	POA	POA
6	POA	POA	POA	POA	POA	POA	POA	POA	POA
8	POA	POA	POA	POA	POA	POA	POA	POA	POA
10	POA	POA	POA	POA	POA	POA	POA	POA	POA
12	POA	-	POA	POA	POA	POA	POA	POA	POA
14	POA	-	POA	POA	POA	POA	POA	POA	POA
16	POA	-	POA	POA	POA	POA	POA	POA	POA
18	-	-	-	-	-	-	-	-	POA
20 <sup>(2)</sup>	POA	-	POA	POA	POA	POA	POA	POA	POA
24 <sup>(2)</sup>	POA	-	POA	POA	POA	POA	POA	POA	POA

<sup>(1)(2)</sup> See page 14 - Notes

**CLASS 1500**

1500SCLS									
Body Material	WCB				LCC		WC6	C5	C12
Trim	13 Cr+HF	13 Cr+HF	316+HF	FULL HF	13 Cr+HF	316+HF	FULL HF	FULL HF	FULL HF
API No.	8	8	12	5	8	12	5	5	5
Ends	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> <sub>-</sub>	<i>MM</i> <sub>-</sub>	<i>Y</i> <sub>-</sub>	<i>CL</i> <sub>-</sub>	<i>CLMM</i> <sub>-</sub>	<i>6CY</i> <sub>-</sub>	<i>5CY</i> <sub>-</sub>	<i>12CY</i> <sub>-</sub>
2	POA	POA	POA	POA	POA	POA	POA	POA	POA
2½	POA	POA	POA	POA	POA	POA	POA	POA	POA
3	POA	POA	POA	POA	POA	POA	POA	POA	POA
4	POA	POA	POA	POA	POA	POA	POA	POA	POA
6	POA	POA	POA	POA	POA	POA	POA	POA	POA
8	POA	-	POA	POA	POA	POA	POA	POA	POA
10	POA	-	POA	POA	POA	POA	POA	POA	POA
12	POA	-	POA	POA	POA	POA	POA	POA	POA

<sup>(1)</sup> See page 14 - Notes

**GLOBE VALVES**  
**API 600 WALL THICKNESS • OS&Y • BOLTED BONNET**  
**CONVENTIONAL SWIVEL TYPE PLUG DISC**

**CLASS 150**

150SCJS									
Body Material	WCB				LCC		WC6	C5	C12
Trim	13 Cr+HF	13 Cr+HF	316+HF	FULL HF	13 Cr+HF	316+HF	FULL HF	FULL HF	FULL HF
API No.	8	8	12	5	8	12	5	5	5
Ends	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> <sub>-</sub>	<i>MM</i> <sub>-</sub>	<i>Y</i> <sub>-</sub>	<i>CL</i> <sub>-</sub>	<i>CLMM</i> <sub>-</sub>	<i>6CY</i> <sub>-</sub>	<i>5CY</i> <sub>-</sub>	<i>12CY</i> <sub>-</sub>
1½	POA	-	POA	POA	POA	POA	POA	POA	POA
2	1,708	POA	2,310	2,131	POA	3,405	POA	POA	POA
2½	2,283	POA	3,258	3,009	POA	4,798	POA	POA	POA
3	2,404	POA	3,258	3,009	POA	4,798	POA	POA	POA
4	3,480	POA	4,720	4,356	POA	6,949	POA	POA	POA
6	5,766	POA	7,820	7,220	POA	11,515	POA	POA	POA
8	9,491	POA	12,866	11,878	POA	18,953	POA	POA	POA
10 <sup>(3)</sup>	POA	POA	POA	POA	POA	POA	POA	POA	POA
12 <sup>(3)</sup>	POA	-	POA	POA	POA	POA	POA	POA	POA
14 <sup>(3)</sup>	POA	-	POA	POA	POA	POA	POA	POA	POA
16 <sup>(3)</sup>	POA	-	POA	POA	POA	POA	POA	POA	POA
18 <sup>(3)</sup>	POA	-	POA	POA	POA	POA	POA	POA	POA

<sup>(1)(3)</sup> See page 14 - Notes

**CLASS 300**

<b>300SCJS</b>									
Body Material	WCB				LCC		WC6	C5	C12
Trim	13 Cr+HF	13 Cr+HF	316+HF	FULL HF	13 Cr+HF	316+HF	FULL HF	FULL HF	FULL HF
API No.	8	8	12	5	8	12	5	5	5
Ends	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> <sub>-</sub>	<i>MM</i> <sub>-</sub>	<i>Y</i> <sub>-</sub>	<i>CL</i> <sub>-</sub>	<i>CLMM</i> <sub>-</sub>	<i>6CY</i> <sub>-</sub>	<i>5CY</i> <sub>-</sub>	<i>12CY</i> <sub>-</sub>
1/2	POA	-	POA	POA	POA	POA	POA	POA	POA
2	2,239	POA	3,056	2,806	POA	4,471	POA	POA	POA
2 1/2	3,059	POA	4,369	4,038	POA	6,431	POA	POA	POA
3	3,223	POA	4,369	4,038	POA	6,431	POA	POA	POA
4	4,664	POA	6,329	5,841	POA	9,319	POA	POA	POA
6 <sup>(3)</sup>	8,835	POA	11,984	11,060	POA	17,639	POA	POA	POA
8 <sup>(3)</sup>	POA	POA	POA	POA	POA	POA	POA	POA	POA
10 <sup>(3)</sup>	POA	POA	POA	POA	POA	POA	POA	POA	POA
12 <sup>(3)</sup>	POA	-	POA	POA	POA	POA	POA	POA	POA
14 <sup>(3)</sup>	POA	-	POA	POA	POA	POA	POA	POA	POA

(1) (3) See page 14 - Notes

**CLASS 600**

<b>600SCJS</b>									
Body Material	WCB				LCC		WC6	C5	C12
Trim	13 Cr+HF	13 Cr+HF	316+HF	FULL HF	13 Cr+HF	316+HF	FULL HF	FULL HF	FULL HF
API No.	8	8	12	5	8	12	5	5	5
Ends	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> <sub>-</sub>	<i>MM</i> <sub>-</sub>	<i>Y</i> <sub>-</sub>	<i>CL</i> <sub>-</sub>	<i>CLMM</i> <sub>-</sub>	<i>6CY</i> <sub>-</sub>	<i>5CY</i> <sub>-</sub>	<i>12CY</i> <sub>-</sub>
2	3,463	POA	4,841	4,466	POA	7,120	POA	POA	POA
2 1/2	POA	-	POA	POA	POA	POA	POA	POA	POA
3	5,343	POA	7,464	6,888	POA	10,991	POA	POA	POA
4 <sup>(3)</sup>	12,995	POA	13,320	13,789	POA	17,663	POA	POA	POA
6 <sup>(3)</sup>	23,016	POA	25,330	24,525	POA	36,861	POA	POA	POA
8 <sup>(3)</sup>	POA	POA	POA	POA	POA	POA	POA	POA	POA
10 <sup>(3)</sup>	POA	POA	POA	POA	POA	POA	POA	POA	POA
12 <sup>(3)</sup>	POA	-	POA	POA	POA	POA	POA	POA	POA

(1)(3) See page 14 - Notes

**CLASS 900**

<b>900SCJS <sup>(3)</sup></b>									
Body Material	WCB				LCC		WC6	C5	C12
Trim	13 Cr+HF	13 Cr+HF	316+HF	FULL HF	13 Cr+HF	316+HF	FULL HF	FULL HF	FULL HF
API No.	8	8	12	5	8	12	5	5	5
Ends	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> <sub>-</sub>	<i>MM</i> <sub>-</sub>	<i>Y</i> <sub>-</sub>	<i>CL</i> <sub>-</sub>	<i>CLMM</i> <sub>-</sub>	<i>6CY</i> <sub>-</sub>	<i>5CY</i> <sub>-</sub>	<i>12CY</i> <sub>-</sub>
3	POA	POA	POA	POA	POA	POA	POA	POA	POA
4	POA	POA	POA	POA	POA	POA	POA	POA	POA
6	POA	POA	POA	POA	POA	POA	POA	POA	POA
8	POA	-	POA	POA	POA	POA	POA	POA	POA

(1)(3) See page 14 - Notes

**CLASS 1500**

1500SCJS									
Body Material	WCB				LCC		WC6	C5	C12
Trim	13 Cr+HF	13 Cr+HF	316+HF	FULL HF	13 Cr+HF	316+HF	FULL HF	FULL HF	FULL HF
API No.	8	8	12	5	8	12	5	5	5
Ends	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> <sub>-</sub>	<i>MM</i> <sub>-</sub>	<i>Y</i> <sub>-</sub>	<i>CL</i> <sub>-</sub>	<i>CLMM</i> <sub>-</sub>	<i>6CY</i> <sub>-</sub>	<i>5CY</i> <sub>-</sub>	<i>12CY</i> <sub>-</sub>
2	POA	POA	POA	POA	POA	POA	POA	POA	POA
2½	POA	-	POA	POA	POA	POA	POA	POA	POA
3 <sup>(3)</sup>	POA	POA	POA	POA	POA	POA	POA	POA	POA
4 <sup>(3)</sup>	POA	POA	POA	POA	POA	POA	POA	POA	POA
6 <sup>(3)</sup>	POA	POA	POA	POA	POA	POA	POA	POA	POA
8 <sup>(3)</sup>	POA	POA	POA	POA	POA	POA	POA	POA	POA

<sup>(1)(3)</sup> See page 14 - Notes

**SWING CHECK**  
API 594 WALL THICKNESS • BOLTED CAP

**CLASS 150**

150SCOHS*									
Body Material	WCB				LCC		WC6	C5	C12
Trim	13 Cr+HF	13 Cr+HF	316+HF	FULL HF	13 Cr+HF	316+HF	FULL HF	FULL HF	FULL HF
API No.	8	8	12	5	8	12	5	5	5
Ends	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> <sub>-</sub>	<i>MM</i> <sub>-</sub>	<i>Y</i> <sub>-</sub>	<i>CL</i> <sub>-</sub>	<i>CLMM</i> <sub>-</sub>	<i>6CY</i> <sub>-</sub>	<i>5CY</i> <sub>-</sub>	<i>12CY</i> <sub>-</sub>
1½	POA	-	POA	1,519	POA	POA	POA	POA	POA
2	1380	POA	1,871	2,095	POA	2,755	POA	POA	POA
2½	1,755	POA	2,374	POA	POA	POA	POA	POA	POA
3	1,754	POA	2,374	2,098	POA	3,504	POA	POA	POA
4	2,539	POA	3,440	2,848	POA	5,069	POA	POA	POA
6	4,253	POA	5,765	4,773	POA	7,879	POA	POA	POA
8	6,843	POA	9,279	7,681	POA	12,674	POA	POA	POA
10	10,066	POA	13,660	11,306	POA	POA	POA	POA	POA
12	14,296	POA	19,153	17,198	POA	POA	POA	POA	POA
14	18,384	-	POA	POA	POA	POA	POA	POA	POA
16	POA	-	POA	POA	POA	POA	POA	POA	POA
18	POA	-	POA	POA	POA	POA	POA	POA	POA
20	POA	-	POA	POA	POA	POA	POA	POA	POA
24	POA	-	POA	POA	POA	POA	POA	POA	POA
30	POA	-	POA	POA	POA	POA	POA	POA	POA

<sup>(1)</sup> See page 14 - Notes

\* "H" designation indicates full compliance with API 594 and only applies to 1½"~18" Class 150.

**CLASS 300**

<b>300SCOHS*</b>									
Body Material	WCB				LCC		WC6	C5	C12
Trim	13 Cr+HF	13 Cr+HF	316+HF	FULL HF	13 Cr+HF	316+HF	FULL HF	FULL HF	FULL HF
API No.	8	8	12	5	8	12	5	5	5
Ends	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> <sub>-</sub>	<i>MM</i> <sub>-</sub>	<i>Y</i> <sub>-</sub>	<i>CL</i> <sub>-</sub>	<i>CLMM</i> <sub>-</sub>	<i>6CY</i> <sub>-</sub>	<i>5CY</i> <sub>-</sub>	<i>12CY</i> <sub>-</sub>
1/2	POA	-	POA	POA	POA	POA	POA	POA	POA
2	1,676	POA	2,271	1,876	POA	3,102	POA	POA	POA
2 1/2	2,365	POA	3,378	2,806	POA	POA	POA	POA	POA
3	2,491	POA	3,378	2,806	POA	4,974	POA	POA	POA
4	3,514	POA	4,764	3,946	POA	7,020	POA	POA	POA
6	6,193	POA	8,404	6,958	POA	12,369	POA	POA	POA
8	10,191	POA	13,824	11,444	POA	17,739	POA	POA	POA
10	13,613	POA	18,469	15,286	POA	27,188	POA	POA	POA
12	16,866	POA	POA	20,229	POA	POA	POA	POA	POA
14	27,900	-	POA	POA	POA	POA	POA	POA	POA
16	POA	-	POA	POA	POA	POA	POA	POA	POA
18	POA	-	POA	POA	POA	POA	POA	POA	POA
20	POA	-	POA	POA	POA	POA	POA	POA	POA
24	POA	-	POA	POA	POA	POA	POA	POA	POA
30	POA	-	POA	POA	POA	POA	POA	POA	POA

<sup>(1)</sup> See page 14 - Notes

\* "H" designation indicates full compliance with API 594 and only applies to 1/2"~18" Class 300.

**CLASS 600**

<b>600SCOHS*</b>									
Body Material	WCB				LCC		WC6	C5	C12
Trim	13 Cr+HF	13 Cr+HF	316+HF	FULL HF	13 Cr+HF	316+HF	FULL HF	FULL HF	FULL HF
API No.	8	8	12	5	8	12	5	5	5
Ends	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> <sub>-</sub>	<i>MM</i> <sub>-</sub>	<i>Y</i> <sub>-</sub>	<i>CL</i> <sub>-</sub>	<i>CLMM</i> <sub>-</sub>	<i>6CY</i> <sub>-</sub>	<i>5CY</i> <sub>-</sub>	<i>12CY</i> <sub>-</sub>
2	2,284	POA	2,780	1,726	2,211	2,872	POA	POA	POA
2 1/2	POA	POA	POA	POA	POA	POA	POA	POA	POA
3	3,480	POA	4,235	2,629	3,368	4,378	POA	POA	POA
4	5,495	POA	6,689	4,152	5,319	6,915	POA	POA	POA
6	10,580	POA	12,885	7,998	10,239	13,312	POA	POA	POA
8	17,294	POA	21,063	12,447	16,737	21,758	POA	POA	POA
10	28,203	POA	34,346	21,315	27,293	35,479	POA	POA	POA
12	41,000	POA	44,490	27,100	35,351	45,955	POA	POA	POA
14	POA	POA	POA	POA	POA	POA	POA	POA	POA
16	POA	POA	POA	POA	POA	POA	POA	POA	POA
18	POA	-	POA	POA	POA	POA	POA	POA	POA
20	POA	-	POA	POA	POA	POA	POA	POA	POA
24	POA	POA	POA	POA	POA	POA	POA	POA	POA

<sup>(1)</sup> See page 14 - Notes

\* "H" designation indicates full compliance with API 594 and only applies to 2"~12" Class 600.

**CLASS 900**

<b>900SCOS</b>									
Body Material	WCB				LCC		WC6	C5	C12
Trim	13 Cr+HF	13 Cr+HF	316+HF	FULL HF	13 Cr+HF	316+HF	FULL HF	FULL HF	FULL HF
API No.	8	8	12	5	8	12	5	5	5
Ends	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> <sub>-</sub>	<i>MM</i>	<i>Y</i>	<i>CL</i>	<i>CLMM</i>	<i>6CY</i>	<i>5CY</i>	<i>12CY</i>
3	POA	POA	POA	POA	POA	POA	POA	POA	POA
4	POA	POA	POA	POA	POA	POA	POA	POA	POA
6	POA	POA	POA	POA	POA	POA	POA	POA	POA
8	POA	-	POA	POA	POA	POA	POA	POA	POA
10	POA	-	POA	POA	POA	POA	POA	POA	POA
12	POA	-	POA	POA	POA	POA	POA	POA	POA
14	-	-	-	-	-	-	-	-	-
16	POA	-	POA	POA	POA	POA	POA	POA	POA

<sup>(1)</sup> See page 14 - Notes

**CLASS 1500**

<b>1500SCOS</b>									
Body Material	WCB				LCC		WC6	C5	C12
Trim	13 Cr+HF	13 Cr+HF	316+HF	FULL HF	13 Cr+HF	316+HF	FULL HF	FULL HF	FULL HF
API No.	8	8	12	5	8	12	5	5	5
Ends	RFF	BW	RFF	RFF	RFF	RFF	RFF	RFF	RFF
Figure Code	-	(1) <i>W</i> <sub>-</sub>	<i>MM</i>	<i>Y</i>	<i>CL</i>	<i>CLMM</i>	<i>6CY</i>	<i>5CY</i>	<i>12CY</i>
2	POA	POA	POA	POA	POA	POA	POA	POA	POA
2½	POA	-	POA	POA	POA	POA	POA	POA	POA
3	POA	POA	POA	POA	POA	POA	POA	POA	POA
4	POA	POA	POA	POA	POA	POA	POA	POA	POA
6	POA	-	POA	POA	POA	POA	POA	POA	POA
8	POA	-	POA	POA	POA	POA	POA	POA	POA
10	POA	-	POA	POA	POA	POA	POA	POA	POA
12	POA	-	POA	POA	POA	POA	POA	POA	POA

<sup>(1)</sup> See page 14 - Notes

# BEVEL GEAR OPERATOR

SIZE	GATE					GLOBE					SIZE
	CLASS					CLASS					
	150	300	600	900	1500	150	300	600	900	1500	
2	-	-	-	-	-	-	-	-	-	-	2
2½	-	-	-	-	-	-	-	-	-	-	2½
3	-	-	-	-	KG-0	-	-	-	KG-0	KG-1	3
4	-	-	-	KG-0	KG-0	-	-	KG-0	KG-1	KG-2	4
6	-	KG-0	KG-0	KG-0	KG-1	KG-0	KG-0	KG-1	KG-2	KG-3	6
8	KG-0	KG-0	KG-0	KG-1	KG-1	KG-0	KG-1	KG-2	KG-3	POA	8
10	KG-0	KG-0	KG-1	KG-1	KG-2	KG-1	KG-2	POA	-	-	10
12	KG-0	KG-0	KG-1	POA	KG-3	KG-1	KG-2	POA	-	-	12
14	KG-0	KG-1	KG-2	POA	-	POA	POA	-	-	-	14
16	KG-1	KG-1	KG-2	POA	-	POA	-	-	-	-	16
18	KG-1	KG-1	POA	-	-	POA	-	-	-	-	18
20	KG-1	KG-2	POA	POA	-	-	-	-	-	-	20
24	KG-1	KG-2	POA	POA	-	-	-	-	-	-	24
26	POA	POA	-	-	-	-	-	-	-	-	26
28	POA	POA	-	-	-	-	-	-	-	-	28
30	POA	POA	POA	-	-	-	-	-	-	-	30
32	POA	POA	-	-	-	-	-	-	-	-	32
34	POA	POA	-	-	-	-	-	-	-	-	34
36	KG-3	KG-3	-	-	-	-	-	-	-	-	36

FIGURE NO.	LIST PRICE
KG-0	\$ 2,942
KG-1	3,457
KG-2	6,711
KG-3	14,969

# CAST STEEL WEIGHTS

UNIT: Lbs.

DESIGN/ CLASS		SIZE																
		1½"	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	
<b>G A T E</b>	150	27	42	55	75	102	139	172	271	397	512	730	1058	1268	1654	2403		
	G-150								346	485	675	833	1102	1323	1742	2425	4498	
	W150		35	44	64	86	132	159	243	366	509	668	979	1257	1576	2315		
	300	44	60	77	108	159	218	304	476	732	1045	1543	1940	2425	3252	4740		
	G-300								386	507	794	1169	1632	2050	2535	3417	4850	8874
	W300		46	60	84	113	170	240	375	578	864	1292	1570	2035	2414	4030	7386	
	600		84	117	143	247	421	558	875	1332	1819	2205	3131	4586				
	G-600								677	994	1462	1964	2573	3318	4949	5589	9744	16094
	W600		73	95	117	216			509	866	1191	1775	2150	2557	4233	4828	8774	
	900		152		245	386			88	1402	1896	3031		4542				
	G-900								902	1524	2240	3126		4894		9447	14021	
	W900				203	302			688	1094	1742							
	1500		210	280	357	531			1378	1896	3968	5783						
	G-1500								587	1508	2297	4145	6940					
W1500		187		313	470			1248										
<b>G L O B E</b>	150	31	49	66	79	121	179	203	357	562	774							
	G-150								251	441	750	937	1226	1676	2105			
	W150		42	57	68	101	154	174	311	501	677							
	300	44	62	90	112	174	240	364	670	906	1202							
	G-300								492	816	1160	1654	2255	2535				
	W300		51	75	93	137	196	307	580	781	1014							
	600		84	115	194	273			657	1164	1671	2315						
	G-600								758	1380	2094	3682						
	W600		71	97	126	218			549	789	1477	2028						
	900				231	412			908	1455								
	G-900				390	547			1078	1521								
	W900				205	373			836	1332								
	1500		196	282	373	615			1378	2260								
	G-1500				392	417	820		1508									
W1500		174		328	553			1248	2050									
<b>C H E C K</b>	150	22	40	51	60	99	135	163	265	426	609	948	1116	1426	1859	2866	4696	
	W150		33	40	55	79	110	135	201	364	512	822	957	1257	1645	2562		
	300	35	46	73	93	132	179	273	419	609	966	1347	1786	2229	2791	4740	8003	
	W300		35	57	71	95	135	214	329	486	778	1096	1400	1839	2247	4030		
	600		66	86	112	206			395	664	1067	1446	2205	2727	3364	4740	6856	
	W600		53	66	97	148			2887	509	814	1158	1865	2242	2776	3990	5782	
	900				190	291			631	1045	1632	2315	3031	4012	5335	6945		
	W900				146	225			490	805	1292	1870		3779				
	1500		157	190	280	439			1014	1716	2778	4233	5666	7848				
	W1500		121		216	344			807	1376	2200	3395						

NOTE: Weights are based on WCB and should be used for estimating purposes only.  
Butt Weld gate and globe include Handwheels only.

# KCA STANDARDS

## CAST CARBON & LOW ALLOY STEEL

KITZ Cast Carbon and Low Alloy Steel valve catalogs reflect the manufacturer standards for our international product. Below you will find a listing of supplemental requirements for standard product provided to the KCA market. Included in this listing you will find some of the documentation readily available from KCA.

1. **WCB Castings** ASTM A216 Gr. WCB – 0.23% Carbon max.
2. **Trim/Seating**
  - a. Renewable Seal Welded Seat Rings
  - b. WCB, LCC – Hard Faced body seat rings (½ HF), API Trim No. 8
  - c. Chromes, i.e. C5, WC6 – Full Hard Face (FHF), API Trim No. 5
3. **Packing** API 622 certified Graphite – Braided top & bottom wipers, with Die Formed center rings
4. **Gasket**
  - a. Class 150: Corrugated Steel/Graphite
  - b. Class 300: Spiral Wound 316/Graphite with inner ring
  - c. Class 600≤: Ring Joint - Soft Steel for A216, 304 for A352, and F5 for A217
5. **Gate** Disc is Flexible one-piece wedge on all sizes
6. **Bonnet Bolting**
  - a. WCB - A193 Gr. B7 studs w/ A194 Gr. 2H nuts; for NACE – B7/2H, when API Trim 12 is ordered – B7M/2HM
  - b. Chromes - A193 Gr. B16 studs w/ A194 Gr. 2H nuts
  - c. LCC - A320 Gr. L7 studs w/ A194 Gr. 4 nuts; for NACE – L7M/7M
7. **Flange Finish** 125~250 AARH
8. **Fugitive Emission (LEV)**
  - a. 50 PPM max.
9. **Operation**

Operator	CLASS									
	150		300		600		900		1500	
	Gate	Globe	Gate	Globe	Gate	Globe	Gate	Globe	Gate	Globe
Handwheel	1½~24	1½~4	1½~24	1½~4	2~12	2~2½	3~16	-	2~12	-
Hammerblow	N/A	6&8 10*,12*	N/A	6 8*,10*	N/A	3 4*,8*	N/A	3*,8*	N/A	2½*,3*
Bare Stem	26≤	-	26≤	-	20≤	-	18≤	-	14≤	-
Gear	8≤	10~18	6≤*	8~16	6≤*	4~12	4≤*	3~8	3≤*	2½~8

\* Optional

10. **Testing** Per API 598 (factory closure test criteria – ZERO leakage)
11. **MTR** MTRs, Inspection Certificates, and Hardness Test Results for each ASME rated valve.
12. **Line Drawings** – on file for price sheet items and available upon request
13. **Color Coding**
  - a. Handwheels - Orange
  - b. Trims
    - HF - White stripes on handwheel spoke, one stripe = ½ HF, two stripes = Full HF
    - 13% Cr. (F6a) – Orange top of stem
    - 13% Cr. NACE (AISI 410) – Purple top of stem
    - 316 – Red top of stem
  - c. Body Materials: 2” vertical stripe across body flange above casting information
    - WC6 – Orange
    - C5 - Green
    - C12 – Purple
    - LCC – Light Blue
14. **Other**
  - Manufacturing number tag is wired to the gate and globe valve gland bolting, and cap bolting of swing checks.
  - “LOW EMISSION API 624” tag is tack welded to the bonnet flange.
  - “CE” plate tack welded on opposite side of the body flange from the name plate.

# INDUSTRY STANDARDS/OPTIONS

## STANDARDS

KITZ ASME/API rated Carbon Steel valves are designed, manufactured and tested in accordance with the following Industry Standards.

<b>P-T Rating</b>	ASME B16.34
<b>Basic Valve Design</b>	ASME B16.34 Gate Valves: API 600 Globe Valves: BS 1873 Check Valves: API 594, BS 1868
<b>Wall Thickness</b>	API 600
<b>Flanges</b>	ASME B16.5, B16.47
<b>End to End</b>	ASME B16.10
<b>Butt Weld Ends</b>	ASME B16.25
<b>Markings</b>	MSS SP-25, ASME B16.34
<b>Testing</b>	API 598

## OPTIONS

Listed below are the more common options KITZ can provide. For pricing adders and other optional requirements not listed, please contact KCA's Customer Service group.

- NACE MR0103
- Special Trims
- RTJ and other end connections
- Extended Bonnets for high or low temperatures
- Chain Wheels
- By-passes, vents, and drains
- Operators: Manual or Power assist
- Check valves with Outside Lever and Weights or Dash Pots
- Packing and gaskets
- Enhanced fugitive emission ratings
- Special NDE per user requirements
- Pressure testing per MSS SP-61 or BS 6755 Part 1
- Sizes available on POA basis not shown herein include 5" and 22"~54" depending on pressure class.
- Compliance with International Standards such as ISO, BS and JIS as well as a limited number of others.

## NOTES

1. All BW ends will be provided with Schedule 40 or Standard bore unless otherwise specified in the purchase order.
2. Valve is provided bare stem from the factory, a manual gear or power actuator is required for operation.
3. Globe valve is supplied with manual gear operator as standard. The cost of gear operators has been included in the globe valve pricing. The "G-" prefix should be added to the figure number on all purchase orders. A Hammerblow handwheel is available as POA on certain sizes.

# CROSS REFERENCE CHART

## CAST CARBON & LOW ALLOY STEEL

VALVE TYPE	CLASS	KITZ		CRANE	POWELL	WALWORTH	VELAN
GATE	150	150 W150	SCLS	47, 55 47½, 55½	1503N, 1503 1503N-WE, 1503WE	5202F	F0064C-02TY
	300	300 W300		33 33½	3003N, 3003 3003N-WE, 3003WE	5206F 5206WE	F1064C-02TY B1064C-02TY
	600	600 W600		76 76½	6003 6003WE	5232F 5232WE	F2064C-02TY B2064C-02TY
	900	900 W900		83 83½	9003 9003WE	5247F 5247WE	F3054B-02TY B3054B-02TS
	1500	1500 W1500		87 87½	1303 1303WE	5262F 5262F	- -
	2500	2500 W2500		- -	2503 2503WE	- -	- -
GLOBE	150	150 W150	SCJS	143 143½	1531 1531WE	5275F 5275WE	F0074C-02TY B0074C-02TY
	300	300 W300		151 151½	3031 3031WE	5281F 5281WE	F1074C-02TY B1074C-02TY
	600	600 W600		161 161½	6031 6031WE	5295F 5295WE	F2074C-02TY B2074C-02TY
	900	900 W900		183 183½	9031 9031WE	5301 5301WE	B3074B-02TS B3074B-02TS
	1500	1500 W1500		189 189½	1331 1331WE	5308F 5308WE	- -
	2500	2500 W2500		- -	- -	- -	- -
CHECK	150	150 W150	SCOS	147 147½	1561A 1561A-WE	5341F 5341WE	F0114C-02TY B0114C-02TY
	300	300 W300		159 159½	3061A 3061A-WE	5344F 5344WE	F114C-02TY B114C-02TY
	600	600 W600		175 175½	6061 6061WE	5350F 5350WE	F2114C-02TY B2114C-02TY
	900	900 W900		187 187½	9061 9061WE	5353F 5353WE	- -
	1500	1500 W1500		199 199½	1361 1361WE	5356F 5356WE	- -
	2500	2500 W2500		- -	- -	- -	- -

This chart should be used as a general guide for converting valve figure numbers of various manufacturers to the corresponding KITZ valve figure number.

A direct comparison made solely by part number is not practical since each manufacturer may have minor differences in the type of bonnet, disc, body or seat mounting construction. These variations do not affect operation of the valve and will allow for interchangeability between valves of various manufacturers.

# GENERAL TERMS & CONDITIONS

## ACCEPTANCE

All quotations are for acceptance within 30 days from date of quotation unless extended in writing. In the event a purchase order is placed after this time, the Seller's company reserves the right to requote prices of all valves offered. All orders and contracts are subject to credit approval and acceptance by KITZ.

## FREIGHT

All materials will be shipped F.O.B. point of shipment - no freight allowance unless otherwise stated and agreed upon with the Buyer.

## PRICES

There will be added to all prices quoted any sales, excise, or similar tax which Seller may be required to collect on or in connection with the sale. Seller reserves the right to cancel any order in the event that selling prices shall be established by Federal, State or other governmental regulation with respect to the products covered by the order which shall be lower than the prices specified in the order.

## ESCALATION TERMS

Prices shown in this price schedule reflect the costs in effect at the time of publication. These prices will remain firm on all products with a quoted delivery of twenty six (26) weeks or less. On products with a quoted delivery of more than 26 weeks, the Seller has a right to price and invoice at the applicable price sheet in effect at the time of shipment. In no event will the invoiced price be less than price originally quoted.

## DEFERRED SHIPMENTS

If for any reason the Buyer desires to delay shipments more than 30 days after manufacturing or to place a hold or to stop the order during the manufacturing cycle, the Seller's company reserves the right to consider the order cancelled and to invoke cancellation charges.

## CREDIT TERMS

As quoted. Overdue balances will be subject to 1½% service charge per month on such indebtedness.

## DELIVERIES

Shipments made to the Buyer shall at all times be subject to the approval of Seller's Credit Department. All schedules of shipments are estimated as closely as possible and Seller will use its best effort to ship within the time schedule but does not guarantee to do so. Seller shall not be liable for any direct, indirect, or consequential damage or loss caused by delay in delivery, regardless of the cause of delay. Items offered from stock are subject to prior sale.

## RETURNS

No returns are allowed without prior arrangements made with the Seller. Product considered for return must be in new, resalable condition and of current design.

## WARRANTY

Seller will replace without charge or refund the purchase price of products manufactured by Seller which prove to be defective in material or workmanship, provided in each case that the product is properly installed and is used in the service for which Seller recommends it and that written claim, specifying the alleged defect, is presented to the Seller within one year from the date of shipment. Seller shall in no event be responsible for claims of A) labor, expenses, or other damages occasioned by defective parts or products or for B) consequential or secondary damages. **The Warranty stated in this paragraph is in lieu of all other warranties, either expressed or implied. With respect to warranties, this paragraph states Buyer's exclusive remedy and Seller's exclusive liability.**

## DESIGN

Because of a policy of continuous product improvement, Seller reserves the right to change design, materials or specifications without notice. There will be a charge for modifying an order after it has been entered when such change or modification results in additional engineering or clerical work for either KITZ or its suppliers.

## NOTE

KITZ reserves the right to correct any obvious clerical errors in quotations, invoices and other contracts.

**KITZ<sup>®</sup>**

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