



# 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 (ASME)

150  
300  
600  
900  
1500

### 4 – MATERIAL CLASSIFICATION

SC . . . Cast carbon steel and low alloys

### 5 - VALVE TYPE

L . . . Gate  
J . . . Globe  
O . . . Check

### 6 – TRIMS

6a ( ) 13 Cr.  
S\_ 1/2 HF/Seal Welded Seat Ring\*\*  
6b \_B 1/2 HF/Threaded Seat Ring  
\_D 1/2 HF Disc with Threaded Seat Ring  
\_MM 316 SS ‡  
\_NN Monel ‡  
\_A20 Alloy 20 ‡  
\_Y Full HF with Threaded Seat Rings  
S\_Y Full HF with Seal Welded Seat Rings †

### 7 – SHELL MATERIALS

( ) . . . A216 GR. WCB std, WCC must specify  
5C . . . A217 Gr. C5  
6C . . . A217 Gr. WC6  
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	600SCLS5CY
150SCLS-N	900SCLS12CY-Q
G-300SCLNN	R1500SCLS
300SCLSCLMMY	

( ) Blank - No designation required.

\* KCA Standard RF

\*\* KCA Standard for A216 and A352 materials

† KCA Standard for A217 materials

‡ Figure No. designation exclusive to KCA

# GATE VALVES

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

### CLASS 150

<b>150SCLS</b>									
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>
1½	POA	POA	POA	POA	POA	POA	POA	POA	POA
2	896	POA	1,200	1,133	1,452	1,789	POA	POA	POA
2½	1,141	POA	1,617	1,523	1,847	2,399	POA	POA	POA
3	1,201	POA	1,617	1,523	1,954	2,399	POA	POA	POA
4	1,552	POA	2,083	1,961	2,517	3,100	POA	POA	POA
6	2,413	POA	3,243	3,050	3,915	4,820	POA	POA	POA
8	3,877	POA	5,210	4,902	6,291	7,742	POA	POA	POA
10	5,813	POA	7,814	7,350	9,434	11,608	POA	POA	POA
12	7,344	POA	9,870	9,283	11,914	14,667	POA	POA	POA
14	10,943	POA	15,485	14,565	17,694	23,001	POA	POA	POA
16	14,076	POA	19,915	18,733	22,761	29,590	POA	POA	POA
18	17,739	POA	25,099	23,610	28,684	37,289	POA	POA	POA
20	23,651	POA	31,053	28,337	36,037	44,867	POA	POA	POA
24	32,638	POA	42,790	39,106	48,544	61,917	POA	POA	POA
30 (2)	POA	-	POA	POA	POA	POA	POA	POA	POA
36 (2)	POA	-	POA	POA	POA	POA	POA	POA	POA

(1)(2) See page 14 - Notes

### CLASS 300

<b>300SCLS</b>									
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>
1½	POA	-	POA	POA	POA	POA	POA	POA	POA
2	1,165	POA	1,582	1,473	1,893	2,330	POA	POA	POA
2½	1,507	POA	2,151	2,004	2,438	3,169	POA	POA	POA
3	1,587	POA	2,151	2,004	2,575	3,169	POA	POA	POA
4	2,130	POA	2,886	2,689	3,454	4,254	POA	POA	POA
6	3,769	POA	5,116	4,768	6,118	7,530	POA	POA	POA
8	5,743	POA	7,791	7,259	9,315	11,470	POA	POA	POA
10	8,257	POA	11,204	10,442	13,400	16,491	POA	POA	POA
12	11,403	POA	16,286	18,439	18,957	23,969	POA	POA	POA
14	18,065	POA	25,803	24,042	29,211	37,975	POA	POA	POA
16	22,132	POA	31,611	29,456	35,787	46,524	POA	POA	POA
18	27,230	POA	38,892	36,237	44,032	58,649	POA	POA	POA
20	38,119	POA	49,971	45,669	56,691	72,309	POA	POA	POA
24	64,944	POA	85,137	77,809	96,588	123,198	POA	POA	POA
30 (2)	POA	POA	POA	POA	POA	POA	POA	POA	POA
36 (2)	POA	-	POA	POA	POA	POA	POA	POA	POA

(1)(2) See page 14 - Notes

**CLASS 600**

<b>600SCLS</b>									
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>
2	1,963	POA	2,769	2,555	3,107	4,039			POA
2½	POA	POA	POA	POA	POA	POA	POA	POA	POA
3	2,745	POA	3,872	3,576	4,343	5,646	POA	POA	POA
4	4,326	POA	6,102	5,633	6,844	7,933	POA	POA	POA
6	7,557	POA	10,663	10,297	11,958	15,546	POA	POA	POA
8	12,808	POA	18,071	16,681	20,266	26,345	POA	POA	POA
10	17,416	POA	24,571	22,682	27,555	35,823	POA	POA	POA
12	26,040	POA	32,293	29,475	36,635	46,828	POA	POA	POA
14	47,211	POA	58,547	53,508	66,419	84,902	POA	POA	POA
16	62,620	POA	77,657	70,973	88,101	112,612	POA	POA	POA
18	POA	POA	POA	POA	POA	POA	POA	POA	POA
20 (2)	POA	POA	POA	POA	POA	POA	POA	POA	POA
24 (2)	POA	POA	POA	POA	POA	POA	POA	POA	POA
30 (2)	POA	-	POA	POA	POA	POA	POA	POA	POA

(1)(2) See page 14 - Notes

**CLASS 900**

<b>900SCLS</b>									
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>
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 (2)	POA	-	POA	POA	POA	POA	POA	POA	POA
24 (2)	POA	-	POA	POA	POA	POA	POA	POA	POA

(1)(2) See page 14 - Notes

**CLASS 1500**

<b>1500SCLS</b>									
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>
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

(1) See page 14 - Notes

**GLOBE VALVES**

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

**CLASS 150**

<b>150SCJS</b>									
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>
1½	POA	-	POA	POA	POA	POA	POA	POA	POA
2	942	POA	1,275	1,176	1,448	1,879	POA	POA	POA
2½	1,260	POA	1,799	1,661	2,038	2,648	POA	POA	POA
3	1,327	POA	1,799	1,661	2,038	2,648	POA	POA	POA
4	1,921	POA	2,605	2,405	2,951	3,836	POA	POA	POA
6	3,182	POA	4,316	3,985	4,888	6,356	POA	POA	POA
8	5,239	POA	7,102	6,556	8,049	10,462	POA	POA	POA
10 (3)	12,631	POA	POA	POA	POA	POA	POA	POA	POA
12 (3)	19,745	-	POA	POA	POA	POA	POA	POA	POA
14 (3)	POA	-	POA	POA	POA	POA	POA	POA	POA
16 (3)	POA	-	POA	POA	POA	POA	POA	POA	POA
18 (3)	POA	-	POA	POA	POA	POA	POA	POA	POA

(1)(3) See page 14 - Notes

**CLASS 300**

<b>300SCJS</b>									
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>
1½	POA	-	POA	POA	POA	POA	POA	POA	POA
2	1,236	POA	1,678	1,549	1,899	2,468	POA	POA	POA
2½	1,689	POA	2,412	2,228	2,731	3,550	POA	POA	POA
3	1,778	POA	2,412	2,228	2,731	3,550	POA	POA	POA
4	2,575	POA	3,493	3,224	3,957	5,143	POA	POA	POA
6 (3)	4,876	POA	6,615	6,105	7,490	9,736	POA	POA	POA
8 (3)	11,454	POA	15,391	14,436	14,069	21,258	POA	POA	POA
10 (3)	23,477	POA	POA	POA	POA	POA	POA	POA	POA
12 (3)	27,164	-	POA	POA	POA	POA	POA	POA	POA
14 (3)	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 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>
2	1,911	POA	2,672	2,465	3,023	3,930	POA	POA	POA
2½	POA	-	POA	POA	POA	POA	POA	POA	POA
3	2,949	POA	4,120	3,802	4,667	6,067	POA	POA	POA
4 (3)	7,174	POA	7,352	7,611	7,728	9,749	POA	POA	POA
6 (3)	12,705	POA	13,982	13,538	15,654	20,348	POA	POA	POA
8 (3)	POA	POA	POA	POA	POA	POA	POA	POA	POA
10 (3)	POA	POA	POA	POA	POA	POA	POA	POA	POA
12 (3)	POA	-	POA	POA	POA	POA	POA	POA	POA

(1)(3) See page 14 - Notes

**CLASS 900**

<b>900SCJS (3)</b>									
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>
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**

<b>1500SCJS</b>									
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>
2	POA	POA	POA	POA	POA	POA	POA	POA	POA
2½	POA	-	POA	POA	POA	POA	POA	POA	POA
3 (3)	POA	POA	POA	POA	POA	POA	POA	POA	POA
4 (3)	POA	POA	POA	POA	POA	POA	POA	POA	POA
6 (3)	POA	POA	POA	POA	POA	POA	POA	POA	POA
8 (3)	POA	POA	POA	POA	POA	POA	POA	POA	POA

(1)(3) See page 14 - Notes

**SWING CHECK**

**API 600 WALL THICKNESS • BOLTED CAP**

**CLASS 150**

<b>150SCOS</b>									
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>
1½	POA	-	POA	POA	POA	POA	POA	POA	POA
2	762	POA	1,033	856	1,171	1,521	POA	POA	POA
2½	920	POA	1,310	1,157	1,488	1,934	POA	POA	POA
3	968	POA	1,310	1,157	1,488	1,934	POA	POA	POA
4	1,402	POA	1,899	1,572	2,152	2,798	POA	POA	POA
6	2,348	POA	3,182	2,634	3,606	4,689	POA	POA	POA
8	3,777	POA	5,122	4,240	5,802	7,543	POA	POA	POA
10	5,557	POA	7,540	6,240	8,536	11,097	POA	POA	POA
12	7,891	POA	10,572	9,493	11,954	15,539	POA	POA	POA
14	10,148	-	13,776	12,370	15,600	20,280	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

(1) See page 14 - Notes



**CLASS 300**

<b>300SCOS</b>									
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>
1½	POA	-	POA	POA	POA	POA	POA	POA	POA
2	925	POA	1,254	1,035	1,420	1,847	POA	POA	POA
2½	1,305	POA	1,865	1,549	2,113	2,745	POA	POA	POA
3	1,375	POA	1,865	1,549	2,113	2,745	POA	POA	POA
4	1,939	POA	2,628	2,178	2,979	3,874	POA	POA	POA
6	3,418	POA	4,639	3,840	5,251	6,828	POA	POA	POA
8	5,626	POA	7,631	6,316	8,643	11,235	POA	POA	POA
10	7,515	POA	10,194	8,438	11,545	15,007	POA	POA	POA
12	9,310	POA	13,293	11,166	15,055	19,571	POA	POA	POA
14	15,401	-	19,747	16,587	24,840	27,870	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

(1) See page 14 - Notes

**CLASS 600**

<b>600SCOS</b>									
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>
2	1,260	POA	1,761	1,558	1,995	2,592	POA	POA	POA
2½	POA	POA	POA	POA	POA	POA	POA	POA	POA
3	1,921	POA	2,682	2,374	3,040	3,951	POA	POA	POA
4	3,034	POA	4,236	3,747	4,801	6,240	POA	POA	POA
6	5,840	POA	8,160	7,218	9,241	12,014	POA	POA	POA
8	9,546	POA	13,340	11,234	15,105	19,636	POA	POA	POA
10	15,567	POA	21,752	19,236	24,631	32,019	POA	POA	POA
12	22,632	POA	28,177	24,458	31,904	41,474	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

(1) See page 14 - Notes

**CLASS 900**

<b>900SCOS</b>									
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>
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

(1) See page 14 - Notes

**CLASS 1500**

<b>1500SCOS</b>									
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>
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

(1) 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	\$ 2,496
KG-1	2,933
KG-2	5,693
KG-3	12,699

# 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** Graphite – Braided Carbon Fiber top & bottom, w/ Die Formed Graphite 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” 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.



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