



CAST CARBON AND LOW ALLOY STEEL VALVES

Class 150/300/600/900/1500

BOLTED BONNET
GATE
GLOBE
CHECK



INDEX

Certifications	2
Figure Number Construction (Cast Carbon and Low Alloy Steel)	3
GATE VALVES	
Class 150	4
Class 300	4
Class 600	5
Class 900	5
Class 1500	6
GLOBE VALVES	
Class 150	6
Class 300	7
Class 600	7
Class 900	7
Class 1500	8
CHECK VALVES	
Class 150	8
Class 300	9
Class 600	9
Class 900	10
Class 1500	10
Bevel Gear Operator	11
Weight Chart	12
KITZ Standards	13
Industry Standards/Options/Notes	14
Cross Reference Chart	15
General Terms and Conditions	16

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>
1½	POA	POA	POA	POA	POA	POA	POA	POA	POA
2	943	POA	1,330	1,192	1,529	1,883	POA	POA	POA
2½	1,202	POA	1,702	1,603	1,944	2,525	POA	POA	POA
3	1,264	POA	1,702	1,603	2,057	2,525	POA	POA	POA
4	1,634	POA	2,193	2,064	2,650	3,264	POA	POA	POA
6	2,540	POA	3,413	3,210	4,121	5,074	POA	POA	POA
8	4,081	POA	5,485	5,160	6,622	8,149	POA	POA	POA
10	6,119	POA	8,225	7,737	9,930	12,219	POA	POA	POA
12	7,730	POA	10,390	9,771	12,541	15,438	POA	POA	POA
14	11,518	POA	16,300	15,332	18,625	24,212	POA	POA	POA
16	14,816	POA	20,963	19,719	23,958	31,147	POA	POA	POA
18	18,673	POA	26,420	24,853	30,193	39,252	POA	POA	POA
20	24,896	POA	32,687	29,829	37,933	47,229	POA	POA	POA
24	34,356	POA	45,042	41,164	51,099	65,176	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

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>
1½	POA	-	POA	POA	POA	POA	POA	POA	POA
2	1,226	POA	1,665	1,551	1,993	2,452	POA	POA	POA
2½	1,587	POA	2,264	2,110	2,567	3,336	POA	POA	POA
3	1,671	POA	2,264	2,110	2,710	3,336	POA	POA	POA
4	2,242	POA	3,038	2,831	3,636	4,478	POA	POA	POA
6	3,968	POA	5,385	5,019	6,440	7,927	POA	POA	POA
8	6,045	POA	8,201	7,641	9,805	12,074	POA	POA	POA
10	8,692	POA	11,794	10,992	14,105	17,359	POA	POA	POA
12	12,003	POA	17,144	19,409	19,955	25,231	POA	POA	POA
14	19,016	POA	27,161	25,308	30,748	39,974	POA	POA	POA
16	23,297	POA	33,275	31,006	37,671	48,973	POA	POA	POA
18	28,663	POA	40,939	38,144	46,350	61,736	POA	POA	POA
20	40,125	POA	52,601	48,073	59,675	76,115	POA	POA	POA
24	68,362	POA	89,618	81,905	101,671	129,682	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

600SCLS									
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	2,066	POA	2,915	2,690	3,271	4,251			POA
2½	POA	POA	POA	POA	POA	POA	POA	POA	POA
3	2,889	POA	4,076	3,765	4,571	5,943	POA	POA	POA
4	4,553	POA	6,423	5,930	7,205	8,351	POA	POA	POA
6	7,955	POA	11,224	10,839	12,587	16,364	POA	POA	POA
8	13,482	POA	19,022	17,559	21,332	27,732	POA	POA	POA
10	18,332	POA	25,864	23,875	29,006	37,708	POA	POA	POA
12	27,410	POA	33,992	31,027	38,564	49,293	POA	POA	POA
14	49,696	POA	61,628	56,324	69,915	89,370	POA	POA	POA
16	65,916	POA	81,745	74,709	92,738	118,539	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

900SCLS									
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

1500SCLS									
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

150SCJS									
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	992	POA	1,342	1,238	1,524	1,978	POA	POA	POA
2½	1,326	POA	1,893	1,748	2,146	2,788	POA	POA	POA
3	1,397	POA	1,893	1,748	2,146	2,788	POA	POA	POA
4	2,022	POA	2,742	2,531	3,106	4,038	POA	POA	POA
6	3,350	POA	4,543	4,195	5,145	6,690	POA	POA	POA
8	5,515	POA	7,476	6,901	8,472	11,012	POA	POA	POA
10 (3)	13,296	POA	POA	POA	POA	POA	POA	POA	POA
12 (3)	20,785	-	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

300SCJS									
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	1,301	POA	1,776	1,631	1,999	2,598	POA	POA	POA
2½	1,777	POA	2,538	2,346	2,875	3,737	POA	POA	POA
3	1,872	POA	2,538	2,346	2,875	3,737	POA	POA	POA
4	2,710	POA	3,677	3,394	4,165	5,414	POA	POA	POA
6 (3)	5,133	POA	6,963	6,426	7,884	10,249	POA	POA	POA
8 (3)	12,057	POA	16,201	15,195	14,810	22,376	POA	POA	POA
10 (3)	24,712	POA	POA	POA	POA	POA	POA	POA	POA
12 (3)	28,594	-	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

600SCJS									
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	2,012	POA	2,813	2,595	3,182	4,137	POA	POA	POA
2½	POA	-	POA	POA	POA	POA	POA	POA	POA
3	3,104	POA	4,337	4,002	4,912	6,386	POA	POA	POA
4 (3)	7,551	POA	7,739	8,012	8,134	10,262	POA	POA	POA
6 (3)	13,374	POA	14,718	14,250	16,478	21,418	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

900SCJS (3)									
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

1500SCJS									
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 594 WALL THICKNESS • BOLTED CAP

CLASS 150

150SCOHS*									
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	802	POA	1,087	902	1,232	1,601	POA	POA	POA
2½	1,019	POA	1,379	1,218	1,566	2,036	POA	POA	POA
3	1,019	POA	1,379	1,218	1,566	2,036	POA	POA	POA
4	1,475	POA	1,999	1,655	2,266	2,945	POA	POA	POA
6	2,471	POA	3,350	2,773	3,796	4,936	POA	POA	POA
8	3,976	POA	5,391	4,463	6,107	7,940	POA	POA	POA
10	5,849	POA	7,937	6,569	8,986	11,681	POA	POA	POA
12	8,307	POA	11,128	9,992	12,583	16,356	POA	POA	POA
14	10,682	-	14,501	13,021	16,422	21,347	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

* "H" designation indicates full compliance with API 594 and only applies to 2"~18" Class 150.

CLASS 300

300SCOHS*									
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	974	POA	1,320	1,090	1,495	1,944	POA	POA	POA
2½	1,374	POA	1,963	1,631	2,224	2,890	POA	POA	POA
3	1,447	POA	1,963	1,631	2,224	2,890	POA	POA	POA
4	2,042	POA	2,767	2,292	3,136	4,078	POA	POA	POA
6	3,598	POA	4,883	4,042	5,528	7,187	POA	POA	POA
8	5,922	POA	8,032	6,649	9,098	11,826	POA	POA	POA
10	7,910	POA	10,731	8,882	12,153	15,797	POA	POA	POA
12	9,800	POA	13,993	11,754	15,848	20,601	POA	POA	POA
14	16,211	-	20,787	17,460	26,147	29,336	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

* "H" designation indicates full compliance with API 594 and only applies to 2"~16" Class 300.

CLASS 600

600SCOHS*									
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	1,327	POA	1,853	1,640	2,100	2,728	POA	POA	POA
2½	POA	POA	POA	POA	POA	POA	POA	POA	POA
3	2,022	POA	2,823	2,498	3,200	4,159	POA	POA	POA
4	3,193	POA	4,459	3,944	5,053	6,569	POA	POA	POA
6	6,147	POA	8,590	7,598	9,727	12,646	POA	POA	POA
8	10,049	POA	14,042	11,825	15,900	20,670	POA	POA	POA
10	16,387	POA	22,897	20,249	25,928	33,705	POA	POA	POA
12	23,823	POA	29,660	25,745	33,583	43,657	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

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

CLASS 900

900SCOS									
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

1500SCOS									
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	\$ 2,795
KG-1	3,284
KG-2	6,375
KG-3	14,221

CAST STEEL WEIGHTS

UNIT: Lbs.

DESIGN/ CLASS		SIZE																
		1½"	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	
G A T E	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					329		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											
G L O B E	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					357		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										
C H E C K	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.

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

KITZ CORPORATION OF AMERICA

10750 Corporate Drive

Stafford, Texas 77477 U.S.A.

Tel (281) 491-7333 • Toll Free 800-772-0073

Fax (281) 491-9402 • www.kitz.com