

# KITZ®

## STAINLESS STEEL AND HIGH ALLOY STEEL VALVES

**Class 150/300/600/900/1500  
and  
200 WOG**

GATE  
GLOBE  
CHECK



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A-Series Flanged Gate Valves .....5-6

Items	Standards
Shell wall thickness and general valve design specifications	ASME B16.34
Pressure - Temperature rating	ASME B16.34
Face-toFace Dimensions	ASME B16.10
End Flange Dimensions	ASME B16.5

C-Series Flanged Gate Valves .....7-8

Items	Standards
Shell wall thickness and general valve design specifications	API 600/ISO 10434
Pressure - Temperature rating	ASME B16.34
Face-toFace Dimensions	ASME B16.10
End Flange Dimensions	ASME B16.5

D-Series Flanged Gate Valves ..... 9

Items	Standards
Shell wall thickness and general valve design specifications	ASME B16.34
Pressure - Temperature rating	ASME B16.34
End-to-End Dimensions*	KITZ Standard
End Connection - Threaded	ASME B1.20.1
End Connection - Socket Weld	ASME B16.11

\*No industry standard for Threaded or Socket Weld

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# KITZ CERTIFICATIONS

## FUGITIVE EMISSIONS

KITZ A, C and D Series are available to meet Federal EPA Regulations for Low Fugitive Emission Service. Please consult KCA or your regional manager for detailed information.

## 9001 ISO CERTIFICATION

KITZ Corporation's manufacturing plant has 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

EN-29001, ISO-9001, BS5750: Part 1, and JIS Z9901

## CRYOGENIC VALVES

Available from Kitz are Cryogenic Valves to meet low temperature applications. Please contact KCA or your regional manager for detailed information.

## VALVE OPTIONS

- Bevel Gear Operations
- 2" Square Operation Nut
- Nace Preparation
- RTJ
- X-Ray
- Liquid Dye Penetrant
- Positive Material identification P(.M.I.)
- Special Gasket and Packing Materials
- Drill, Tap & Plug
- O<sup>2</sup> Service Preparation
- Vacuum Service Preparation
- By-Pass

# STAINLESS/HIGH ALLOY MULTI-TURN FIGURE NUMBER CONSTRUCTION CHART FOR GATE/GLOBE/CHECK

$\frac{1}{1}$     $\frac{2}{2}$     $\frac{150}{3}$     $\frac{U}{4}$     $\frac{M}{5}$     $\frac{A}{6}$     $\frac{M}{7}$     $\frac{8}{8}$     $\frac{9}{9}$     $\frac{10}{10}$     $\frac{4}{11}$

## 1 - OPERATOR

None . . . . .Hand Wheel on gates and globes  
 G . . . . .Gear Operator\*  
 E . . . . .Electric motor operator

## 2 - END CONNECTION

None . . . . .RF-flanged ends with 125-250 RMS (Standard)  
 K . . . . .RT-flanged with 125-500 RMS  
 R . . . . .RTJ flanged  
 AK . . . . .NPT threaded per ASME B1.20.1  
 AW . . . . .Socket weld per ASME B16.11  
 AK/AW . . . . .NPT by socket weld  
 W . . . . .Butt weld (Schedule TBA)

## 3 - ASME/ANSI PRESSURE CLASS

150 . . . . .ASME Class 150  
 300 . . . . .ASME Class 300  
 600 . . . . .ASME Class 600  
 900 . . . . .ASME Class 900  
 1500 . . . . .ASME Class 1500

## 4 - SHELL MATERIAL

U . . . . .Stainless steel body, bonnet/cover

## 5 - VALVE TYPE

M . . . . .Gate  
 P . . . . .T-Globe  
 O . . . . .Swing Check  
 N . . . . .Lift Check  
 PD . . . . .Soft Seated T-globe  
 PW . . . . .Bellows Seal T-globe

## 6 - SERIES/GENERAL DESIGN

A . . . . .A Series/ASME B16.34 Design  
 C . . . . .C Series/API 600 Design  
 None . . . . .D Series/ASME B16.34 Design

## 7 - BODY MATERIAL DESIGNATION/STANDARD

None . . . . .A351 CF8/304  
 M . . . . .A351 CF8M/316  
 V . . . . .A351 CF3/304L  
 O . . . . .A351 CF3M/316L  
 CG . . . . .A351 CG8M/317  
 GM . . . . .A351 CG3M/317L  
 CB . . . . .A351 CF8C/347

## 7 - BODY MATERIAL DESIGNATION/STANDARD

CN . . . . .A351 CN7M/Alloy 20  
 3M . . . . .A990 CN3MCu/Alloy 20 (Special)  
 CK . . . . .A351 CK20/310  
 CA . . . . .A743 CA15/410  
 Z1 . . . . .A351 CN3MN  
 1B . . . . .A995 1A (CD4MCuN) / UNS J93372  
 4A . . . . .A995 4A (CD3MN) / UNS J92205  
 5A . . . . .A995 5A (CE3MN) / UNS J93404  
 6A . . . . .A995 6A (CD3MWCuN) / UNS J93380  
 HB . . . . .A494 N-12MV/Hastelloy B  
 7M . . . . .A494 N-7M/Hastelloy B-2  
 HC . . . . .A494 CW-12MW/Hastelloy C276  
 6M . . . . .A494 CW-6M/Hastelloy (Special)  
 CX . . . . .A494 CX2MW/Hastelloy C22  
 2M . . . . .A990 CW-2M/Hastelloy C4 (Special)  
 NN . . . . .A494 35-1/Monel 400  
 CZ . . . . .A494 CZ100/Nickel 200  
 CY . . . . .A494 CY40/Inconel 600  
 CW . . . . .A494 CW-6MC/Inconel 625  
 CT . . . . .A351 CT15C/Incoloy 800  
 CU . . . . .A494 CU5MCuC/Incoloy 825

## 8 - TRIM MATERIAL

None . . . . .Equal to body material  
 B . . . . .Hard faced body seats  
 D . . . . .Hard faced disc/plug  
 Y . . . . .Hard faced seats and disc/plug

## 9 - PACKING AND GASKET

None . . . . .KITZ standard for Teflon-based seals  
 -GRF . . . . .KITZ standard for Graphite-based seals

## 10 - SPECIAL/OTHER/"QUALIFIED"

-Q . . . . .Special requirements apply; see full description.  
 -BST . . . . .Bare stem\*

## 11 - VALVE SIZE

Size specified in inches.

\*For bare stem with a mounting pad, include both the "G-" prefix and the "-BST" suffix.

Kitz Stainless and High Alloy Series A, C and D are optionally available with flexible graphite packing and graphite gasket.

# GATE VALVES

**ASME B16.34 • RFF • OS&Y  
BOLTED BONNET • FLEXIBLE ONE-PIECE WEDGE • PTFE SEALS**

## CLASS 150 - 300 - 600

Body Material	CF8M (316)			CN7M (A20)			Body Material
Figure No.	150UMAM	300UMAM	600UMAM	150UMACN	300UMACN	600UMACN	Figure No.
½	490	888	1,149	POA	POA	POA	½
¾	523	981	1,246	POA	POA	POA	¾
1	645	1,177	1,531	POA	POA	POA	1
1½	895	1,820	2,196	POA	POA	POA	1½
2	1,066	2,201	3,926	POA	POA	POA	2
2½	1,696	3,563	11,599	POA	POA	POA	2½
3	1,696	3,563	11,599	POA	POA	POA	3
4	2,433	5,096	17,798	POA	POA	POA	4
6	4,342	9,185	29,840	POA	POA	POA	6
8	8,251	13,880	54,929	POA	POA	POA	8
10	13,712	25,777	83,468	POA	POA	POA	10
12	20,620	36,594	105,566	POA	POA	POA	12
14	31,053	69,627	-	POA	POA	-	14
16	41,064	85,525	-	POA	POA	-	16
18	48,993	99,606	-	POA	POA	-	16
20	64,959	137,675	-	POA	POA	-	20
24	107,348	204,965	-	POA	POA	-	24

# GLOBE VALVES

**ASME B16.34 • RFF • OS&Y  
BOLTED BONNET • PTFE SEALS**

## CLASS 150 - 300 - 600

Body Material	CF8M (316)			CN7M (A20)			Body Material
Figure No.	150UPAM	300UPAM	600UPAM	150UPACN	300UPACN	600UPACN	Figure No.
½	498	952	1,193	POA	POA	POA	½
¾	548	1,061	1,266	POA	POA	POA	¾
1	682	1,277	1,654	POA	POA	POA	1
1½	1,015	2,152	2,288	POA	POA	POA	1½
2	1,235	2,584	4,576	POA	POA	POA	2
2½	2,682	4,003	11,213	POA	POA	POA	2½
3	2,682	4,003	11,213	POA	POA	POA	3
4	3,146	6,523	19,686	POA	POA	POA	4
6	5,532	11,064	30,901	POA	POA	POA	6
8	11,545	17,943	-	POA	POA	-	8
10	19,592	35,274	-	POA	POA	-	10
12	26,881	-	-	POA	-	-	12

# LIFT CHECK VALVES

ASME B16.34 • RFF • BOLTED CAP  
R-PTFE SEAL

## CLASS 150 - 300

Body Material	CF8M (316)		CN7M (A20)		Body Material
Figure No.	150UNAM*	300UNAM	150UNACN*	300UNACN*	Figure No.
½	489	1,011	POA	POA	½
¾	517	1,117	POA	POA	¾
1	674	1,336	POA	POA	1

\*Lift check (½" - 1" only). For swing check in these sizes, must use C-Series.

# SWING CHECK VALVES

ASME B16.34 • RFF • BOLTED CAP  
R-PTFE SEAL

## CLASS 150 - 300 - 600

Body Material	CF8M (316)			CN7M (A20)			Body Material
Figure No.	150UOAM*	300UOAM	600UOAM	150UOACN*	300UOACN*	600UOACN	Figure No.
½	-	-	1,233	-	-	POA	½
¾	-	-	1,335	-	-	POA	¾
1	-	-	1,666	-	-	POA	1
1½	969	1,838	2,089	POA	POA	POA	1½
2	1,170	2,180	4,432	POA	POA	POA	2
2½	1,853	3,510	10,274	POA	POA	POA	2½
3	1,853	3,510	10,274	POA	POA	POA	3
4	2,802	5,323	16,379	POA	POA	POA	4
6	5,010	10,550	28,630	POA	POA	POA	6
8	9,863	17,696	56,715	POA	POA	POA	8
10	16,457	29,060	64,934	POA	POA	POA	10
12	24,480	41,256	-	POA	POA	-	12
14	34,172	59,872	-	POA	POA	-	14
16	46,866	90,857	-	POA	POA	-	16
18	56,310	-	-	POA	-	-	18

**ASME B16.34 • RFF • OS&Y • API 600 • BOLTED BONNET  
FLEXIBLE ONE-PIECE WEDGE • PTFE SEALS • INTEGRAL SEAT**

**CLASS 150 - 1500**

Body Material	CF8M (316)					Body Material
Figure No.	150UMCM	300UMCM	600UMCM	900UMCM	1500UMCM	Figure No.
1/2	1,289	1,564	-	-	-	1/2
3/4	1,318	1,844	-	-	-	3/4
1	1,511	1,942	2,695	-	-	1
1 1/2	1,961	2,766	4,292	-	-	1 1/2
2	3,142	4,195	6,739	POA	POA	2
2 1/2	-	-	-	-	POA	2 1/2
3	5,061	6,993	13,007	POA	POA	3
4	6,483	10,107	20,832	POA	POA	4
6	10,426	18,434	39,313	POA	POA	6
8	17,291	27,844	64,838	POA	POA	8
10	25,236	41,892	96,622	POA	-	10
12	36,678	56,510	127,958	POA	-	12
14	45,770	96,939	-	-	-	14
16	58,545	116,010	-	-	-	16
18	POA	POA	-	-	-	18
20	POA	-	-	-	-	20

**GLOBE VALVES**

**ASME B16.34 • RFF • OS&Y • API 600  
BOLTED BONNET • PTFE SEALS • INTEGRAL SEAT**

**CLASS 150 - 1500**

Body Material	CF8M (316)					Body Material
Figure No.	150UPCM	300UPCM	600UPCM	900UPCM	1500UPCM	Figure No.
1/2	1,138	1,579	-	-	-	1/2
3/4	1,263	1,855	-	-	-	3/4
1	1,431	1,881	2,587	-	-	1
1 1/2	1,819	2,727	4,140	-	-	1 1/2
2	3,039	3,834	6,802	-	POA	2
2 1/2	-	-	-	-	-	2 1/2
3	4,830	6,739	14,092	POA	POA	3
4	7,119	9,854	22,982	POA	POA	4
6	12,015	18,561	38,604	POA	POA	6
8	20,042	33,019	60,932	POA	POA	8
10	33,815	53,413	-	-	-	10
12	48,823	POA	-	-	-	12

# SWING CHECK VALVES

ASME B16.34 • RFF • OS&Y • API 600 • BOLTED BONNET  
 FLEXIBLE ONE-PIECE WEDGE • PTFE SEALS • INTEGRAL SEAT

## CLASS 150 - 1500

Body Material	CF8M (316)					Body Material
Figure No.	150UOCM	300UOCM	600UOCM	900UOCM	1500UOCM	Figure No.
½	574	1,163	-	-	-	½
¾	643	1,283	-	-	-	¾
1	914	1,537	2,125	-	-	1
1½	2,118	2,357	3,382	-	-	1½
2	2,543	3,068	5,078	-	POA	2
2½	-	-	-	-	POA	2½
3	3,832	5,423	11,305	POA	POA	3
4	5,720	7,375	18,700	POA	POA	4
6	9,216	14,112	33,413	POA	POA	6
8	15,511	21,613	62,389	POA	POA	8
10	23,583	33,231	80,517	-	-	10
12	31,722	57,654	116,855	-	-	12
14	43,578	74,907	-	-	-	14
16	64,647	101,199	-	-	-	16
18	POA	POA	-	-	-	18
20	POA	POA	-	-	-	20

# THREADED GATE, GLOBE & CHECK VALVES

KITZ STANDARD

## 200 WOG

Body Material	CF8M (316)			Body Material
Figure No.	AKUELM	AKUJM	AKUOM	Figure No.
⅜	-	162	-	⅜
½	162	177	168	½
¾	194	212	177	¾
1	236	259	227	1
1¼	326	358	279	1¼
1½	326	525	425	1½
2	473	657	722	2
2½	1,036*	1,317	800	2½
3	1,356*	1,854	1,043	3
4	2,264*	-	-	4

\*Figure Number AKUEM



# GATE VALVES

**ASME B16.34 • RFF • OS&Y • API 600  
BOLTED BONNET • PTFE SEALS • INTEGRAL SEAT**

## CLASS 150 - 300 - 600 / Threaded & Socketweld

Body Material	CF8M (316)			CN7M (A20)			Body Material
Fig.No. Thrd	AK150UMM	AK300UMM	AK600UMM	AK150UMCN	AK300UMCN	AK600UMCN	Threaded
Fig.No. S/W	AW150UMM	AW300UMM	AW600UMM	AW150UMCN	AW300UMCN	AW600UMCN	Socketweld
½	375	447	581	POA	POA	POA	½
¾	442	517	696	POA	POA	POA	¾
1	501	590	807	POA	POA	POA	1
1½	743	972	1,654	POA	POA	POA	1½
2	852	1,182	2,051	POA	POA	POA	2

# GLOBE VALVES

**ASME B16.34 • RFF • OS&Y • API 600  
BOLTED BONNET • PTFE SEALS • INTEGRAL SEAT**

## CLASS 150 - 300 / Threaded & Socketweld

Body Material	CF8M (316)		CN7M (A20)		Body Material
Fig.No. Thrd	AK150UPM	AK300UPM	AK150UPCN	AK300UPCN	Threaded
Fig.No. S/W	AW150UPM	AW300UPM	AW150UPCN	AW300UPCN	Socketweld
½	442	517	POA	POA	½
¾	486	554	POA	POA	¾
1	567	679	POA	POA	1
1½	871	1,029	POA	POA	1½
2	1,096	1,358	POA	POA	2

# CHECK VALVES

**ASME B16.34 • RFF • OS&Y • API 600  
BOLTED BONNET • PTFE SEALS • INTEGRAL SEAT**

## CLASS 150 - 300 / Threaded & Socketweld

Body Material	CF3M (316L)		CN7M (A20)		Body Material
MATERIAL	AK150UOM	AK300UOM	AK150UCN	AK300UCN	Threaded
Fig.No. S/W	AW150UOM	AW300UOM	AW150UCN	AW300UCN	Socketweld
½	421	503	POA	POA	½
¾	470	545	POA	POA	¾
1	517	596	POA	POA	1
1½	801	920	POA	POA	1½
2	978	1,128	POA	POA	2

**CROSS REFERENCE CHART**

	<b>KITZ</b>	<b>ALOYCO</b>	<b>LADISH</b>	<b>POWELL</b>	<b>VELAN</b>
Class 150	AK150UMM	110	3270	2494	
	AK150UPM	310	7270	2474	
	AK150UOM	370	5270	2341	
	150UMAM	117	8272	2495	F-0064C-13
	150UPAM	317	7272	2629	F-0074C-13
	150UOAM	377	5272	2342	F0114C-13
Class 300	AK300UMM	2201A	8653	2466	
	AK300UPM	2310A	7350	2446	
	AK300UOM	2370	5370	2345	
	300UMAM	2117	8375	2467	F1064C-13
	300UPAM	2317	7372	2447	F-1074C-13
	300UOAM	2377	5372	2346	F-1114C-13
Class 600	AK600UMM	4210A	8663	1972	
	600UMAM	4217A	8675	1973	

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 solely by part number is not practical since each manufacturer may have some 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 AND 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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