

# Manual Ball Valve Part Number Matrix

1 Prefix	
F	Firesafe Tested (see valve series for details & testing)
NS	NSF 61 & 372 Certified Series

2 Valve Series	
10	1pc. Regular Port 2000 WOG
20	2pc. Full Port 1000 WOG
21	2pc. Regular Port 2000/1500 WOG
22	2pc. Direct Mount 1000 WOG, Full Port
23	2pc. 3600 WOG, Seal-Welded
24	2pc. 3000 WOG
26	2pc. 6000 WOG, Seal-Welded
30	3-Way Flanged, Full Port
31	3-Way Flanged, Direct Mount, Full Port
33	3, 4, 5-Way Full Port, Multiport
38	3-Way NPT, Regular Port
55	3pc. 1000/800 WOG, Full Port
77	3pc. 1000/800 WOG, Full Port, Sanitary
7S	Series 77, EC 1935/2004 Compliant
HP	3pc. Forged High Purity
H78	3pc. Cast High Purity, Encapsulated Bolts
83	3pc. 2000/1500 WOG, Full Port
8R	3pc. 2000/1500 WOG, Regular Port
88	3pc. Direct Mount 2000/1500/1000 WOG, Full Port
90	3pc. Direct Mount 2000/1500 WOG, Regular Port
98	2pc. Flanged Full Port (Investment Cast)
91	Unibody Regular Port Flanged
9R	Unibody Regular Port Flanged
93	2pc. Flanged Full Port (Sand Cast)
V7	3pc. Sanitary, V-Port
V7S	Series V7, EC 1935/2004 Compliant
V8	3pc. V-Port
V9	Flanged V-Port
D9	Direct Mount Flanged
T5	Tank Bottom 3pc.
C8	Cryogenic 3pc. Full Port
CR	Cryogenic 3pc. Regular Port
DR	3-Way Bottom Entry Diverter Valve
LB	PFA Lined, Split Body, Flanged Ball Valve
P1	Schedule 10 Piggable Valve
MU	Metal Seat Unidirectional Shutoff, Floating Ball
MB	Metal Seat Bidirectional Shutoff, Floating Ball
MS	Metal Seat Scraper Seat Design
MX	Metal Seat 3 pc. Bidirectional, Floating Ball
M3	3-Way Metal Seat
VS	Segment V-Port, Soft Seat
VM	Segment V-Port, Metal Graphite Packing
VV	Segment V-Port, Metal Viton® Packing
WB	Block and Bleed Isolation Valve, 2000 WOG
W6	Block and Bleed Isolation Valve, 6000 WOG

3 Body/Ball/Stem Material	
Blank	Valve Series Standard
A	Alloy 20 Body, Ball, & Stem
C	Carbon Steel Body
L	Low Carbon 316L Stainless Steel
J	Low Carbon 304 Stainless Steel
H	Carbon Body /Hastelloy Ball & Stem
Q	Carbon Body/Monel Ball & Stem
R	316 SST Body/Monel Ball & Stem
T	Hastelloy C-276 Body, Ball & Stem
E	Electropolished Stainless Steel
Z	Epoxy Coated Carbon Steel
D	CD3MN Body/Duplex SST Ball & Stem
G	CE3MN Body/Super Duplex SST Ball & Stem
2	F316L (SF4) Electropolished Forged
3	CF3M (SF4) Electropolished Cast
4	F316H Forged Body
5	LCB Body
8	LCC Body
6	WC6 Body
9	WC9 Body
P	CF8 (304 SST) Body/304 SST Ball & Stem

4 End Connection	
TH	NPT Ends
SW	Socket Weld Ends
BW	Butt Weld Ends
EW	Extended Butt Weld Ends
F1	150# Flanged Ends
F3	300# Flanged Ends
F6	600# Flanged Ends
FR	600# RTJ Flanged Ends
SA	Sanitary Clamp Ends
SF	Sanitary Clamp Ends w/ Cavity Filler
DA	Tube O.D. Ends
DF	Tube O.D. Ends w/ Cavity Filler
DS	Sanitary Clamp x Tube O.D. Ends
TE	NPT x Extended Butt Weld
TS	NPT x Socket Weld
MF	Male NPT x Female NPT
QQ	Tube Socket Weld
W1	150# Wafer
W3	300# Wafer
W6	600# Wafer
XX	Configurable End Connection

5 Valve Size	
0025	1/4"
0038	3/8"
0050	1/2"
0075	3/4"
0100	1"
0125	1-1/4"
0150	1-1/2"
0200	2"
0250	2-1/2"
0300	3"
0400	4"
0600	6"
0800	8"
1000	10"
1200	12"

6 Seat, Lining & Trim Materials	
X	Reinforced TFE Seats (RTFE)
P	Virgin TFE Seats (PTFE)
U	UHMWPE Seats
D	Delrin® Seats
S	50/50 STFE Seats
C	25% CS Powder/ 75% TFE Seats (CTFE)
T	TFM™-1600 Seats
E	All TFM™-1600 Seats, Seals, & Packing
A	50% SS Powder/ 50% TFM™-1600 Seats (STFM)
F	PTFE Cavity Filler Seats
K	PCTFE Seats (Cryogenic)
L	PFA Lined w/ PTFE Seats
M	MG1241 Seats
Z	PEEK Seats
G	STFE Seats w/ Non-Standard Graphite Packing & Gaskets
2	Tungsten Carbide Coated 316 SST Seats & Ball
3	HCr Coated Ball/Stellite® Inlay Seats
4	Chrome Carbide Coated 316 SST Seats & Ball
8	Chrome Carbide Inconel® 718 Seats & Ball

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7 Special Designations	
X	No Specials, Series Standard
G	Gear Operator
H	Gear Operator with Lockout Plate
L	Lockable Handle
O	Oval Handle (available on some)
S	Spring Return Handle (Direct Mount only)
4	4" Lockable Stem Extension

8 Additional Specials	
X	No Specials, Series Standard
O	Oxygen Cleaned
Z	Special End Configuration
V	Vented Ball
E	Bonnet Extension Lockable Handle
F	Fugitive Emissions Bonnet
D	Degreased & Bagged
A	Vented Ball, Degreased & Bagged
B	Vented Ball, Oxygen Cleaned
C	Attenuator (Segment V-Port only)

### OPTIONS:

9 Special Designation	
Blank	No Designation, Valve Series Standard
X	Multiple Option Designation
3	30° V-Port (v-ball)
6	60° V-Port (v-ball)
9	90° V-Port (v-ball)
A	17-4 PH® Stem
B	XM-19 (Nitronic 50) Stem
C	Duplex 2205 Stem
D	Inconel® 718 Stem
E	A286 Stem
L	L-Port 3-Way arrangement
T	T-Port 3-Way arrangement
X	No Specials, Standard (HP/H78 Series)
S	Anti-Static Option (HP/H78 Series)

10 O-Ring	
Blank	Standard
X	Multiple Option Designation
2	Markez Z1028
4	Kalrez 4079
5	Chemraz 505
6	Kalrez 6375
7	Perlast G75M
9	Chemraz 564
B	Low Temp Buna
E	EPDM
S	Silicone

11 Additional Specials	
Blank	Standard
X	Multiple Option Designation
B	B7M Bolting
M	Marine Epoxy Coating

### HOW TO ORDER MANUAL VALVES

standard:

1 2 3 - 4 - 5 - 6 7 8 - 9 - 10 11  
 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓  
**F 88 C - TH - 0150 - X X X**

or with options added:

1 2 3 - 4 - 5 - 6 7 8 - 9 - 10 11  
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**F 88 C - TH - 0150 - S X X - X - 4 -**