

VALVE CONFIGURATION ORDERING INFORMATION

Number(s) in parentheses indicate valve configuration part number position

Part Number Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Part Number Code Example	S	P	H	L	E	5	Q	-	G	-	-	-	3	4	A	-	V	X	X	X

INDUSTRIAL VALVES

PRODUCT (1-2)	MATERIAL(2) (3-4)	SIZE (5)	SERIES (6)	END CONNECTION(3) (7-8)	SEAT & SEAL/FILLERS/O-RINGS (IF USED) (4) (9)	SEAT	FILLER	O-RING
AN ANSI	A- Aluminum	A 1/4	4 Series 4	B- Ext. Sch 40 butt weld	F(9)	Metal		None
CN Cryogenic (ANSI)	C- Hastelloy® C-276	B 3/8	5 Series 5	D- Ext. Sch 10 butt weld	G	TF		VI
CD Cryogenic 3-way	C1 Hastelloy® B2	C 1/2	6 Series 6	J- Ext. socket weld	H	HT		VI
CP Cryogenic	D- Iron(6)	D 3/4		L- 150# Flange	I	HT	VT	VI
DD Diverter (Steam)	E- Carbon Steel(6)	E 1		M- 300# Flange	J	TF	VT	VI
DP Diverter Port	G- Lead Free Bronze	F 1-1/4		P- Male NPT	K	UT		VI
FD Flush Tank (Steam)	H- 316/316L Stainless	G 1-1/2		Q- Female NPT	L	UT	VT	VI
FT Flush Tank	HC Alloy 20	H 2		Q1 BSPT	M	UT	UT	VI
MP Multi-Port	HL 316L Stainless	J 2-1/2		S- Sil-braze1 groove (pipe)	Q(9)	CG		None
SP Industrial 2-way	HF F316L Forged	K 3		T- Solder joint (tube)	Y	CT		None
SD SP (Steam)	H2 317L Stainless	L 4		U- Socket weld (pipe)	Z	TF		EP
	I- Inconel® 600	M 6		-Z No end fittings	0	HT		EP
	M- Monel 400				1	HT		EP
	N- 922 Bronze			For other end fittings, Consult Factory	2	TF	VT	EP
	P- AL6XN				3	UT		EP
	R- 955 NiAl-Bronze				4	UT	VT	EP
	S- 953 Al-Bronze				5	UT	UT	EP
	T- Gr. 5 Titanium				9	TF		VV
	T2 Gr. 2 Titanium							
	T7 Gr. 7 Titanium							
	W- Nickel 200							
	X- 958 NiAl-Bronze							
	Z- 70/30 CuNi							
	1- 90/10 CuNi							
	5- Inconel® 625							
	9- 954 Al-Bronze							
	25 254SMO®6Mo							
	22 Duplex 2205							
	76 Super Duplex 32760							
	For other materials, Consult Factory							

SEAT/SEAL/MATERIAL CODES

CG Carbon-Graphite
 HT S-TEF®
 CT C-TEF™
 TF V-TEF™
 VT VTFE (Cavity Fillers Only)
 UT UHMWPE
 F Metal Seats

O-RING MATERIAL CODES

EP EPR
 VI FKM
 VV FEP Encapsulated FKM

Column 8 options

3 Non Adjust-O-Seal®
 4 Reduced port
 5 Non Adjust-O-Seal® & Reduced port
 7 Flat-faced flanges
 9 Bar-stock

O-RINGS ARE NOT USED IN ALL VALVE PRODUCTS - SEE EACH RESPECTIVE PAGE

SANITARY VALVES

PRODUCT (1-2)	MATERIAL(2) (3-4)	SIZE (5)	SERIES (6)	END CONNECTION(3) (7-8)	SEAT & SEAL/FILLERS/O-RINGS (IF USED) (4) (9)	SEAT	FILLER	O-RING
CS Clean Steam	C- Hastelloy® C-276	A 1/4	4 Series 4	F- Ext tube butt weld	G	TF		VI
CT Clean Steam Trap	HC Alloy 20	B 3/8	5 Series 5	G- Female Cbi(7)	H	HT		VI
DI Diverter Port	HL 316L Stainless	C 1/2	6 Series 6	H- Male Cbi(7)	I	HT	VT	VI
DC Diverter (Steam)	HF F316L Forged	D 3/4	8 Series 8	SM Compression	J	TF	VT	VI
FI Flush Tank	H2 317L Stainless	E 1	9 Series 9	X- Hygenic Clamp	K	UT		VI
FC Flush Tank (Steam)	I- Inconel® 600	F 1-1/4		Z- No end fittings	L	UT	VT	VI
MI Multi-Port	P- AL6XN	G 1-1/2			M	UT	UT	VI
SI Sanitary 2-way	T- Gr. 5 Titanium	H 2		For other end fittings, Consult Factory	Z	TF		EP
	T2 Gr. 2 Titanium	J 2-1/2			0	HT		EP
	T7 Gr. 7 Titanium	K 3			1	HT	VT	EP
	Y- Hastelloy® C-22®	L 4			2	TF	VT	EP
	5- Inconel® 625	M 6			3	UT		EP
	25 254SMO®6Mo				4	UT	VT	EP
	22 Duplex 32760				5	UT	UT	EP
	76 Super Duplex 32760				9	TF		VV
	For other materials, Consult Factory							

CURRENT PRODUCT SERIES	
1	AF, PV, RD, Bronze AN, DP, MP & SP, Ductile Iron MP
3	AF (Fire-safe API-607)
4	MP, MI (300# class maximum)
5	AN, DD, DP, FD, FT, Stainless MI(8), Stainless MP(8), SP, SD
6	AN, FI, SI, SP, FT (Fire-safe API-607)
6	CN, CP (Fire-safe API-607), CD (Fire-safe design)
8 & 9	CS, CT, DC, DI, FC, FI, SI

STEAM vs. SEAT COMPATIBILITY
V-TEF™ - ≤150psig AT ≤366°F
S-TEF® - ≤200psig AT ≤388°F

O-RING MATERIAL CODES
EP EPR
VI FKM
VV FEP Encapsulated FKM

O-RINGS ARE NOT USED IN ALL VALVE PRODUCTS - SEE EACH RESPECTIVE PAGE

(2) For valves with 2 different materials, use the 1st position for body material and the 2nd position for end fitting material. (3) - For valves with 2 different end connections, use both end codes - e.g. - FX = extended butt weld for tube by clamp. (4) - For standard seat/seal material by series, please see appropriate pricing page. (5) - PBM reserves the right to use 922 Bronze in place of 836 Bronze without notification. (6) - All Carbon Steel and Ductile Iron valves may be coated internally and externally with a rust inhibitor. Information on the rust inhibitor and/or an MSDS is available upon request. In addition, Carbon steel and Ductile Iron cast products are painted (black in color) externally prior to coating. (8) - 150# class maximum. (9) Requires 17-4PH stem

VALVE CONFIGURATION ORDERING INFORMATION

Number(s) in parentheses indicate valve configuration part number position
PBM part numbers can have up to 20 alpha-numeric characters

Part Number Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Part Number Code Example	S	P	H	L	E	5	Q	-	G	-	-	-	3	4	A	-	V	X	X	X

INDUSTRIAL VALVES

FLOW PATTERN/TANK PAD/PURGE OPTIONS (10 & 11)	BALL / STEM OPTIONS (12)	OPERATOR OPTIONS (13 & 14)	POLISH OPTIONS (15)
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DIVERTER PORT AND MULTI-PORT VALVES
 • FOR DIVERTER AND MULTI-PORT VALVES, USE
POSITION 10 & 11 TO INDICATE THE FLOW PATTERN -
 SEE PAGE 8 FOR COMMON FLOW PATTERNS

FLUSH TANK OPTIONS (●●POSITION 10 & 11●●)
 - Standard flush tank weld pad
 02 Less tank weld pad but with plastic or wood shipping pad

5 w/1" bolt-on tank pad
 6 w/1.5" bolt-on tank pad
 7 w/2" bolt-on tank pad
 8 w/3" bolt-on tank pad
 9 w/4" bolt-on tank pad
 10 w/6" bolt-on tank pad
 11 w/8" bolt-on tank pad

PURGE PORT OPTIONS (●●POSITION 1 ONLY●●)
 - No purge option(s) selected¹
 A (1) 1/2" clamp on center 90° from stem
 B (1) 1/2" clamp on center opposite stem
 C (1) 1/2" clamp upstream 90° from stem
 D (1) 1/2" clamp downstream opposite stem
 E (2) 1/2" clamp (1) on center 90° from stem & (1) opposite stem
 F (2) 1/2" clamp (1) upstream 90° from stem & (1) downstream opposite stem

G (1) 1/2" BWTE on center 90° from stem
 H (1) 1/2" BWTE on center opposite stem
 I (1) 1/2" BWTE upstream 90° from stem
 J (1) 1/2" BWTE downstream opposite stem
 K (2) 1/2" BWTE on center (1) 90° from stem & (1) opposite stem
 L (2) 1/2" BWTE upstream 90° from stem & (1) downstream opposite stem
 M (1) 1/4" FNPT on center 90° from stem
 N (1) 1/4" FNPT on center opposite stem
 O (1) 1/4" FNPT upstream 90° from stem
 P (1) 1/4" FNPT downstream opposite stem
 Q (2) 1/4" FNPT on center 90° from stem & (1) opposite stem
 R (2) 1/4" FNPT (1) upstream 90° from stem & (1) downstream opposite stem

BALL HOLE & FLAT OPTIONS (●●POSITION 11 ONLY●●)
 - No ball options selected position
 A Flats in closed downstream position
 B Flats in closed upstream position
 C Flats in open upstream position
 D Flats in open downstream position
 E Flats in open upstream & downstream position
 F Holes in closed downstream position
 G Holes in closed upstream position
 K Ball with vent hole (downstream)
 L Ball with (2) crown flats
 V Standard width slotted ball
 W 30° V-ball
 X 45° V-ball
 Y 60° V-ball
 7 Self-flush ball with flats closed downstream
 8 Self-flushing ball
 9 Ball with vent hole (upstream)

- Standard (316/316L ball & stem)
 F Internal / external grounding
 G 17-4PH stem
 I Monel ball
 J 932 Bronze ball
 K Monel stem & followers
 L Monel ball, stem & followers
 M Aluminum ball
 N 922 Bronze ball
 O Hastelloy C-276 ball
 P C-276 ball, stem & followers
 Q 922 Bronze ball w/Monel stem
 R Monel stem, followers & bolting
 S Monel ball, stem, followers & bolting
 T 922 Bronze ball, Monel stem & followers, Silicon Bronze bolting & CuSi fasteners
 U 922 Bronze ball w/Monel stem & followers
 V 12" extended stem/body bonnet (cryo only)
 1 Chrome carbide (ball & seat coating)
 2 Tungsten carbide (ball & seat coating)

	24vac	24vac	24vac	24vac	24vac
	PBM, Asco & Westlock combo				
55	DA80 psig actr & GP Sol	↔			
56	DA80 psig actr & GP LS & Sol	↔			
57	DA80 psig actr & XP Sol	↔			
58	DA80 psig actr & XP LS & Sol	↔			
59	DA60 psig actr & GP Sol	↔			
60	DA60 psig actr & GP LS & Sol	↔			
61	DA60 psig actr & XP Sol	↔			
62	DA60 psig actr & XP LS & Sol	↔			
63	SR80 psig actr & GP Sol	↔			
64	SR80 psig actr & GP LS & Sol	↔			
65	SR80 psig actr & XP Sol	↔			
66	SR80 psig actr & XP LS & Sol	↔			
67	SR60 psig actr & GP Sol	↔			
68	SR60 psig actr & GP LS Sol	↔			
69	SR60 psig actr & XP Sol	↔			
70	SR60 psig actr & XP LS & Sol	↔			

Standard Asco solenoids (12vac & 24vac)
 GP - WT8551A001MS
 XP - EF8551A001MS
 - solenoids are not wired to position monitors

Standard Westlock position monitors
 GP - 2004NBY2A2M0200
 XP - 2007NBY2B2M0200

Standard TopWorx position monitors
 GP/XP - TXP-M21GNEM

Standard TopWorx proximity position monitor
 GP/XP - TXP-P21GNEM

- w/handle
 00 Stainless locking oval hand wheel(a)
 02 w/o handles, w/stem actr prep
 03 w/handle, w/stem actr prep
 04 Locking lever handle
 05 w/stainless oval hand wheel(a)
 07 w/45° handle
 08 w/gear operator
 09 w/T-handle
 10 w/manual spring return handle(b)
 11 w/fusible link SR handle (165°F)Ⓞ
 12 w/vane actr for 80psig
 13 w/GP electric actuator
 14 w/XP electric actuator
 17 w/ext lockable oval hand wheel (a)
 18 w/ext lockable lever handle
 71 w/ext lockable lever handle - Sanitary(a)
 72 w/ext lockable oval hand wheel - Sanitary (a)

	120vac	120vac	120vac
	PBM, Asco & Westlock combo		
20	DA80 psig actr		
21	DA80 psig actr & GP LS		
22	DA80 psig actr & GP Sol		
23	DA80 psig actr & GP LS & Sol		
24	DA80 psig actr & XP LS		
25	DA80 psig actr & XP Sol		
26	DA80 psig actr & XP LS & Sol		
27	DA60 psig actr		
28	DA60 psig actr & GP LS		
29	DA60 psig actr & GP Sol		
30	DA60 psig actr & GP LS & Sol		
31	DA60 psig actr & XP LS		
32	DA60 psig actr & XP Sol		
33	DA60 psig actr & XP LS & Sol		
34	SR80 psig actr		
35	SR80 psig actr & GP LS		
36	SR80 psig actr & GP Sol		
37	SR80 psig actr & GP LS & Sol		
38	SR80 psig actr & XP LS		
39	SR80 psig actr & XP Sol		
40	SR80 psig actr & XP LS & Sol		
41	SR60 psig actr		
42	SR60 psig actr & GP LS		
43	SR60 psig actr & GP Sol		
44	SR60 psig actr & GP LS & Sol		
45	SR60 psig actr & XP LS		
46	SR60 psig actr & XP Sol		
47	SR60 psig actr & XP LS & Sol		
51(d)	DA80 psig actr & position indicator		
52(d)	DA60 psig actr & position indicator		
53(d)	SR80 psig actr & position indicator		
54(d)	SR60 psig actr & position indicator		

PBM, Asco & Topworx combo - 120vac

73 DA80 psig actr & XP LS
 74 DA80 psig actr, XP LS+GP Sol
 75 DA80 psig actr, XP LS+XP Sol
 76 DA60 psig actr & XP LS
 77 DA60 psig actr & XP LS+GP Sol
 78 DA60 psig actr & XP LS+XP Sol
 79 SR80 psig actr & XP LS
 80 SR80 psig actr, XP LS+GP Sol
 81 SR80 psig actr, XP LS+XP Sol
 82 SR60 psig actr & XP LS
 83 SR60 psig actr & XP LS+GP Sol
 84 SR60 psig actr & XP LS+XP Sol
 85 DA80 psig actr & XP Prox
 86 DA80 actr, XP Prox+XP Sol
 87 DA60 psig actr & XP Prox
 88 DA60 actr, XP Prox+XP Sol
 89 SR80 psig actr & XP Prox
 90 SR80 actr, XP Prox+XP Sol
 91 SR60 psig actr & XP Prox
 92 SR60 actr, XP Prox+XP Sol

- Standard polish
 A 20Ra ID
 B 32Ra OD
 C 20Ra ID / 32Ra OD
 D 15Ra ID
 E 10Ra ID
 F 20Ra ID after EP
 G 15Ra ID after EP
 H 10Ra ID after EP
 I 5Ra ID
 K 5Ra ID / 32Ra OD
 L 20Ra ID / 32Ra OD / EP
 M EP ID
 N 10 Ra ID / 32Ra OD
 O 15Ra ID / 32Ra OD / EP
 Q 15Ra ID / 32Ra OD
 S 10Ra ID / 32Ra OD / EP

LOX & BOLTING OPTIONS (16)
 - No option(s) required
 L LOX cleaning per PBM procedure
 M LOX & CRN bolting
 Z CRN bolting

SPECIAL ENGINEERING# (17 - 20)

Special engineering number columns - consult PBM

Example: VXXX suffix at end of standard PBM part number

Polish Notes

- On ID polished valves, the body, ball, seat retainer (if applicable) and end fittings are polished
- On ID/OD polished valves, the body, ball, seat retainer (if applicable) and end fittings are polished
- On ID+EP polished valves, the body, ball, seat retainer (if applicable) and end fittings are polished (Stem is EP'd)

AUTOMATION NOTES
 (a) for 2" and smaller valves
 (b) for 1-1/2" and smaller valves
 (c) for 3" and smaller valves
 (d) consult PBM for beacon indicators

ABBREVIATION INDEX
 GP = General Purpose
 XP = Explosion Proof
 LS = Limit Switch
 Sol = Solenoid - N/C
 DA = Double Acting
 SR = Spring Return - FCW