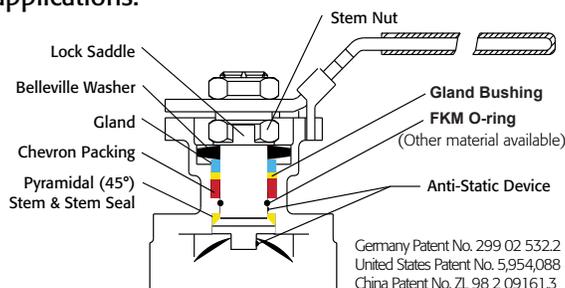




This unique three piece stainless steel valve is specifically designed for pigging applications in SCH 10 pipes. The valve has a full SCH 10 pipe inside diameter to facilitate the passing of a pipe pig to efficiently clean the line between various production batches. The "P1" valve also possesses the A-T Controls patented Pyramidal stem seal and direct mount automation design. This ensures an extended life cycle with minimum repair interruptions for both manual and automated applications.



VALVE SIZE	VALVE Cv
2"	451
3"	1,070
4"	1,790

VALVE SIZE	SW (lbs.)	Class 150 (lbs.)
2"	15	25
3"	34	49
4"	68	92

Easy to Automate!

See automated data sheets for pre-sized assemblies



Pneumatic



Electric



Series P1

DIRECT MOUNT PIGGABLE VALVE

Sizes 2" - 4" (CF for 6")

Available in 316SST

SCH 10 Pipe Diameter

Flanged or Socket Weld Ends

ASME Class 150

ISO 5211 Direct Actuator Mount

Blowout Proof Stem w/ Dual Anti-Static Devices

PTFE Seats Standard

Pyramidal Stem Seal Packing System

Lockable Manual Handle

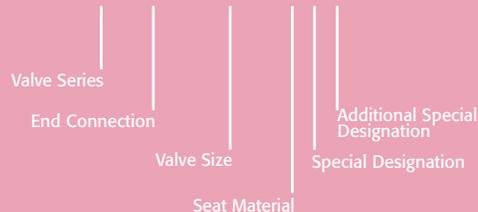
STANDARDS

DESIGN	ASME B16.34
FITTINGS	ASME B16.11
FLANGE DIMENSIONS	ASME 16.5
PRESSURE TESTING	API 598
MOUNTING	ISO 5211
MARKING SYSTEM FOR VALVES	ISO 5209
MATERIAL CERTIFICATION	EN 10204-3.1 MTR
QUALITY ASSURANCE	ISO 9001:2015

HOW TO ORDER MANUAL VALVES

SAMPLE PART #

P1-F1-0400-PXX



See part number matrix for itemized options



9955 International Blvd.
Cincinnati, Ohio 45246
www.atcontrols.com

PHONE (513) 247-5465
FAX (513) 247-5462
sales@atcontrols.com

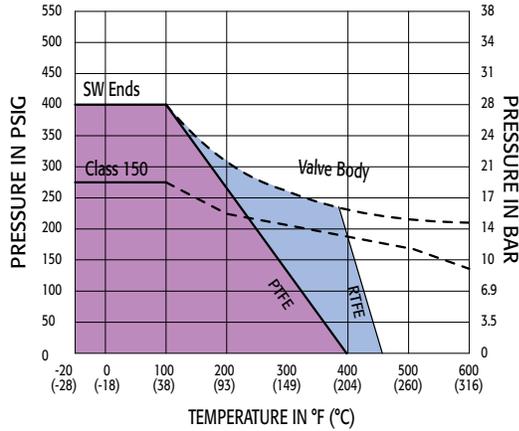
Series P1

Direct Mount SCH 10 Pipe Diameter ASME Class 150

MATERIALS LIST

NO.	PART NAME	2" QTY	3" QTY	4" QTY	MATERIAL
1	BODY	1	1	1	ASTM A351 GRADE CF8M
2	FLANGED END CAP	2	2	2	ASTM A351 GRADE CF8M
2	SW END CAP	2	2	2	ASTM A351 GRADE CF3M
3	BALL	1	1	1	ASTM A351 GRADE CF8M
4	SEAT RING	2	2	2	ASTM A351 GRADE CF8M
5	SEAT	2	2	2	PTFE
6	JOINT GASKET	2	2	2	PTFE
7	STEM SEAL	1	1	1	RTFE
8	STEM	1	1	1	ASTM A276 316SS
9	GLAND PACKING	1	1	1	PTFE
10	GLAND	1	1	1	AISI 304
11	LOCK SADDLE	1	1	1	AISI 304
12	STEM NUT	2	1	1	AISI 304
13	HANDLE	1	1	1	AISI 304
14	HANDLE SLEEVE	1	1	1	VINYL
15	STEM WASHER	1	-	-	AISI 304
16	BODY STUD	4	8	12	2" - ASTM A193 GRADE B8 3-4" - AISI 304
17	NUT	8	-	-	ASTM A194 GRADE 8
18	STUD WASHER	8	-	-	AISI 304
19	BELLEVILLE WASHERS	2	2	2	AISI 301
20	STOP PIN	1	1	1	AISI 304
21	STOP PIN NUT	1	1	1	AISI 304
22	HANDLE LOCK	1	1	1	AISI 304
23	O-RING	1	1	1	FKM
24	STOP PIN WASHER	1	-	-	AISI 304
25	ANTI-STATIC DEVICE	2	2	2	AISI 316
26	GLAND WASHER	1	1	1	RTFE
27	HANDLE BOLT	-	2	2	AISI 304
28	HANDLE BAR	-	1	1	AISI 304
29	HANDLE HUB	-	1	1	AISI 304

Pressure vs. Temperature Chart

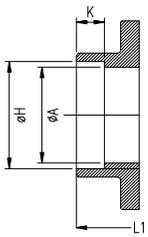


NOTE: Dotted line shows the rating for valve body. Solid line shows the rating for valve seat. Both ratings need to be considered when determining the limitation of the valve for specific application. Consult factory for other seat materials.

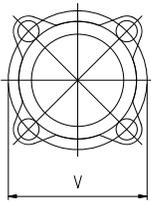
Break Away Torques for PTFE Seats (In-Lbs)

PSID	100	150	400
2"	300	500	600
3"	700	950	1,200
4"	1,100	1,800	2,100

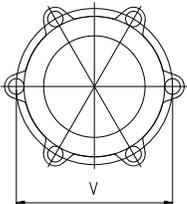
NOTE: Torques includes 25% safety. Torques tested with clean fluid.



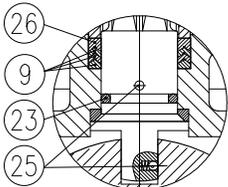
SOCKET WELD END



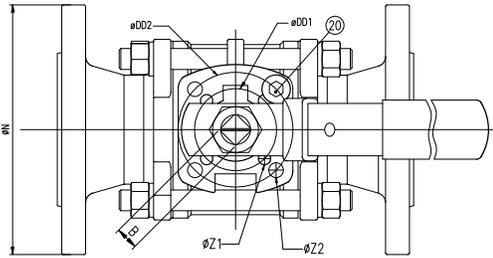
2-3"



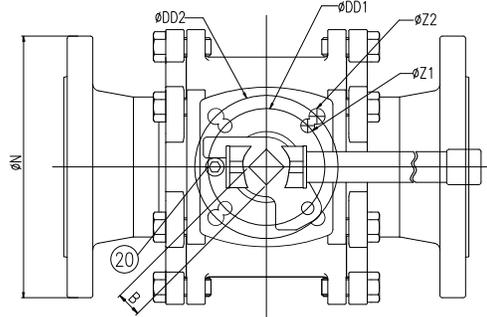
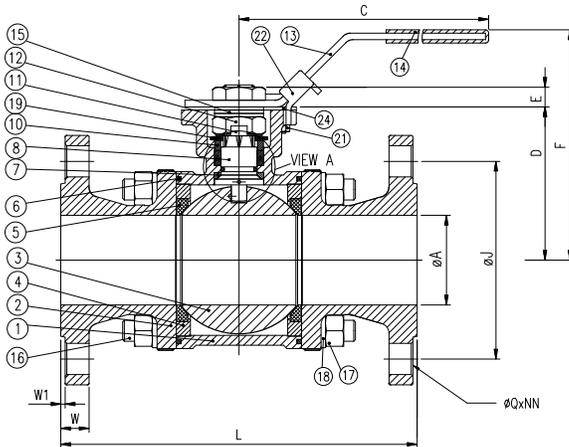
4"



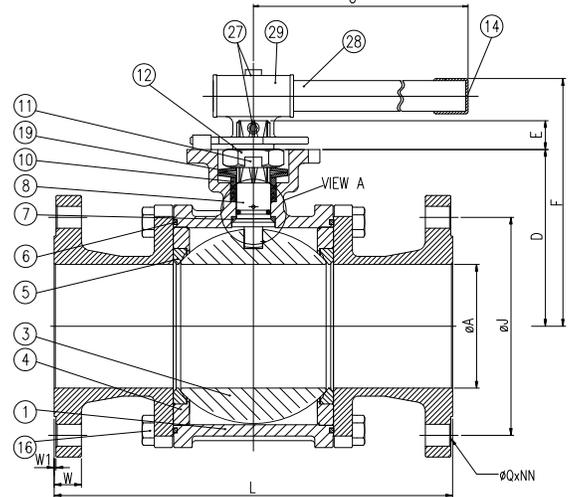
VIEW A



2" Series P1



3-4" Series P1



DIMENSIONS (IN)

SIZE	A	B	C	D	E	F	H	J	K	L	L1	N	Q	V	W	W1	Z1	Z2	DD1	DD2	NN	ISO 5211
2"	2.16	0.551	8.46	3.61	0.53	5.55	2.41	4.75	0.63	8.42	5.91	6.00	0.75	4.80	0.64	0.06	0.30	0.35	1.969	2.756	4	F05/F07
3"	3.26	0.748	15.63	4.79	0.70	7.17	3.54	6.00	0.63	10.30	7.48	7.50	0.75	6.46	0.77	0.06	0.39	0.47	2.756	4.016	4	F07/F10
4"	4.26	0.866	20.08	6.46	0.91	9.06	4.55	7.50	0.79	13.70	9.84	9.00	0.75	8.27	0.94	0.06	0.47	0.55	4.016	4.921	8	F10/F12

HOW TO ORDER: Manual Valves

2	Valve Series
P1	Piggable Valve

3	Body/Ball/Stem
Blank	Valve Series Standard (316SST)

4	End Connection
F1	150# Flanged End
TH	NPT Ends
SW	Socket Weld Ends
BW	Butt Weld Ends
TS	NPT x Socket Weld
TB	NPT x Butt Weld

5	Valve Size
0200	2"
0300	3"
0400	4"

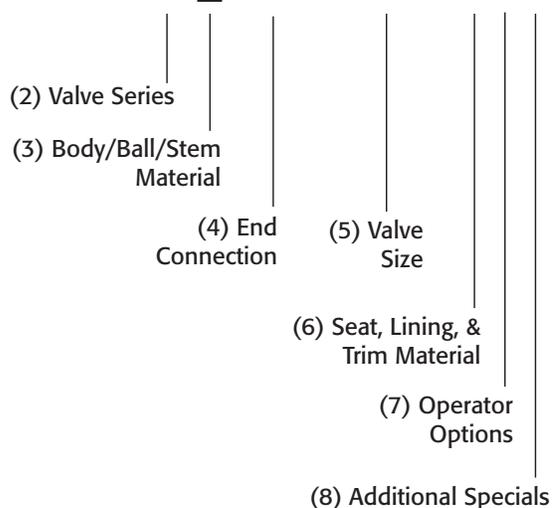
6	Seat, Lining & Trim Material
X	Reinforced TFE Seats (RTFE)
S	50/50 STFE Seats
T	TFM™-1600 Seats

7	Operator Options
X	No Specials/Series Standard Handle
G	Gear Operator
H	Gear Operator with Lockout Plate

8	Additional Specials
X	No Specials/Series Standard

SAMPLE PART #

P1 _-TH-0200-XXX



HOW TO ORDER: Automated Valves

2	Valve Series
P1	Piggable Valve

3	Body/Ball/Stem
Blank	Valve Series Standard (316SST)

4	End Connection
F	150# Flanged End
T	NPT Ends
S	Socket Weld Ends
B	Butt Weld Ends
M	NPT x Socket Weld
P	NPT x Butt Weld

5	Seat, Lining & Trim
1	Valve Series Standard Seats Reinforced TFE Seats (RTFE)
S	50/50 STFE Seats
T	TFM™-1600 Seats

6	Valve Size
0200	2"
0300	3"
0400	4"

7 (A) Pneumatic Actuator - 3R, 3N, 3P Series			
3RC	3R10	3RM	3R850
3RD	3R20	3RN	3R1000
3RE	3R40	3RP	3R1200
3RF	3R80	3RR	3R1750
3RG	3R130	3RS	3R2400
3RH	3R200	3RT	3R2500
3RJ	3R300	3RU	3R2700
3RK	3R500	3RV	3R3300
3RL	3R700	3RW	3R3500

3R=Standard, 3N=Electroless Nickel Plating, 3P=Teflon™ (PTFE) Coating

7 (A) Pneumatic Actuator - S2 Series			
S2C	S2-052	S2G	S2-125
S2D	S2-063	S2H	S2-140
S2E	S2-083	S2J	S2-160
S2F	S2-105	S2K	S2-210

7 (B) Pneumatic Action	
D	Double Acting (DA)
S	Spring CW (5 springs)*
O	Spring CCW (5 springs)*
4	Spring CW (4 springs)**
F	Spring CCW (4 springs)**

*2500 & 3500 80 psig spring

**2500 & 3500 60 psig spring

7 Actuator - Electric (On-Off)			
WEX1	WE-350	WEG1	WE-5200
WEA1	WE-500	WEH1	WE-6900
WEB1	WE-690	WEJ1	WE-10500
WEC1	WE-1350	WEK1	WE-17500
WED1	WE-1700	WEL1	WE-25900
WEE1	WE-2640	WEM1	WE-53000
WEF1	WE-4400	WEN1	WE-80000

7 Actuator - Electric (Modulating)			
WEA2	WEM-500	WEH2	WEM-6900
WEB2	WEM-690	WEJ2	WEM-10500
WEC2	WEM-1350	WEK2	WEM-17500
WED2	WEM-1700	WEL2	WEM-25900
WEE2	WEM-2640	WEM2	WEM-53000
WEF2	WEM-4400	WEN2	WEM-80000
WEG2	WEM-5200		

8	Accessories/Options	Model no.
X	No Specials	
A	TYPE 4 Solenoid 120VAC	TVCS-X411-4N-A120
B	TYPE 7 Solenoid 120VAC	TVCS-X411-7N-A120
C	Intrinsically Safe Solenoid	TVIS-X411-4N-D24
D	TYPE 4 Solenoid 24VDC	TVCS-X411-4N-D24
F	TYPE 7 Solenoid 24VDC	TVCS-X411-7N-D24
Q	TYPE 4 SST Solenoid 120VAC	TVSS-X411-4N-A120
M	TYPE 7 SST Solenoid 120VAC	TVSS-X411-7N-A120
L	TYPE 4 SST Solenoid 24VDC	TVSS-X411-4N-D24
N	TYPE 7 SST Solenoid 24VDC	TVSS-X411-7N-D24
P	Pneumatic Positioner	PPR-1200
E	Electro-Pneumatic Positioner	EPR-1000
R	24VDC Electric Actuator	
S	220VAC Electric Actuator	
T	Other Voltage Electric Actuator	
W	12VDC Electric Actuator	
Y	24VAC Electric Actuator	

* No voltage specified on electric assemblies denotes 120VAC

9	Accessories	Model no.
X	No Specials	
A	TYPE 4 Limit Switch	APL-210N
B	TYPE 7 Limit Switch	APL-510N
C	Intrinsically Safe Limit Switch	APL-218N
Q	TYPE 4 SST Limit Switch	APL-910N
M	TYPE 7 SST Limit Switch	APL-510S
H	NEMA 4 Std. Enc.	APL-310N
1	HS1 High Speed Electric	
2	HS2 High Speed Electric	

10	Special Designation
Blank	No Designation, SST Stem
F	Viton® Seal for Pneumatic Actuators (0°F to 300°F)

SAMPLE PART #

P1 -T1-0200/3RHS-XX

