



Type-21/21a Ball Valve Data Sheet

FEATURES:

- True union design allows for fast, tool-free installation and maintenance
- PTFE seats with elastomeric backing provides a secure, bubble-tight shutoff and reduces downtime
- Full bore design available in sizes from 1/2" to 2" for unrestricted flow and reduced pressure drop
- Vacuum capability: rated for full vacuum across all sizes (1/2" – 6")
- Double O-ring stem seals offer enhanced leak protection & peace of mind
- Built-in spanner wrench simplifies disassembly and reassembly
- Versatile end connections: available in socket and threaded (1/2"–2"), butt, and flanged options
- Molded-in ISO 5211 mounting pad supports direct actuator installation

OPTIONS:

- Pneumatic and electric actuators and accessories
- J-Switch®
- Locking Handles
- Stem extensions
- Limit switches
- 2" square operating nut
- Vented ball

PRESSURE VS. TEMPERATURE (PSI, WATER, NON-SHOCK):

Material	Temperature (F)	inches (mm)			
		1/2" - 2" (15 - 50)	2-1/2" (65)	3" (80)	4" - 6" (100 - 150)
PVC	30° - 70°	230	230	230	150
	71° - 105°	170	170	170	150
	106° - 120°	150	150	150	150
	121° - 140°	30	N/A	N/A	N/A
CPVC	30° - 70°	230	230	230	150
	71° - 105°	170	170	170	150
	106° - 120°	150	150	150	150
	121° - 140°	120	120	85	85
	141° - 175°	75	75	55	55
	176° - 195°	55	55	40	40
PP	-5° - 85°	150	150	150	150
	86° - 120°	110	95	95	95
	121° - 140°	90	70	70	70
	141° - 175°	55	40	40	40
PVDF	-5° - 70°	230	230	230	150
	71° - 105°	185	185	185	150
	106° - 140°	150	150	150	150
	141° - 175°	115	115	100	100
	176° - 210°	85	85	70	70

SPECIFICATIONS:

SIZES: 1/2" - 6"
MODELS: PVC and CPVC: Socket, Threaded, and Flanged
 PP and PVDF: IPS and Metric (DIN) Socket, Threaded, Butt, and Flanged (ANSI)
BODIES: PVC, CPVC, PP, and PVDF
SEATS: PTFE backed with EPDM or FKM
SEALS: EPDM or FKM or AFLAS®‡

PVC/EPDM/FKM models (sizes 1/2" - 4") and CPVC/EPDM/FKM models (sizes 1/2" - 4") NSF-61 Certified

‡ - Trademark of Asahi Glass Co., Ltd.

WEIGHTS (LBS.):

Nominal Size		Socket Threaded	Flanged
inches	mm		
1/2	15	0.44	1.10
3/4	20	0.66	1.54
1	25	1.10	2.70
1-1/4	32	1.54	3.30
1-1/2	40	2.64	4.40
2	50	4.40	8.15
2-1/2	65	6.17	8.80
3	80	9.70	13.00
4	100	24.00	26.67

CV VALUES:

Nominal Size		Cv
inches	mm	
1/2	15	14
3/4	20	29
1	25	47
1-1/4	32	72
1-1/2	40	155
2	50	190
2-1/2	65	365
3	80	410
4	100	680