

Chlorine Gas Valves

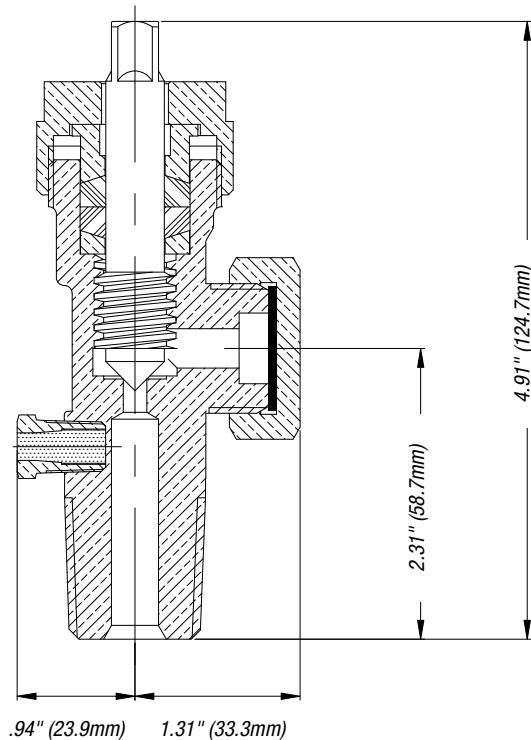
Robust Valve



The Sherwood Exclusive Robust Valve features a heavy-duty body and packing nut for increased load carrying capacity and resistance against stress corrosion and cracking.

Key Features & Benefits

- Approved per the Chlorine Institute Pamphlet 17 Alternate Design Criteria
- Design retains same outlet, inlets, pressure relief device, packing ring, packings, follower, outlet cap, wrenches, yoke and materials as the basic valve
- One-piece Monel® stem offers exceptional durability and positive shut-off in chlorine and other corrosive gas service
- Choice of PTFE (shown here) or Garlock® 6130 packing for easy operation and durable leak-resistant stem seal
- Large wrench flats on valve body for easy installation
- Robust Aluminum Silicon Bronze (C64210) valve body offers corrosion resistance



1210AX1-CL1

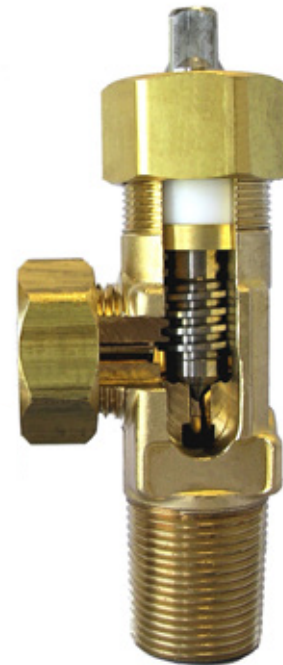
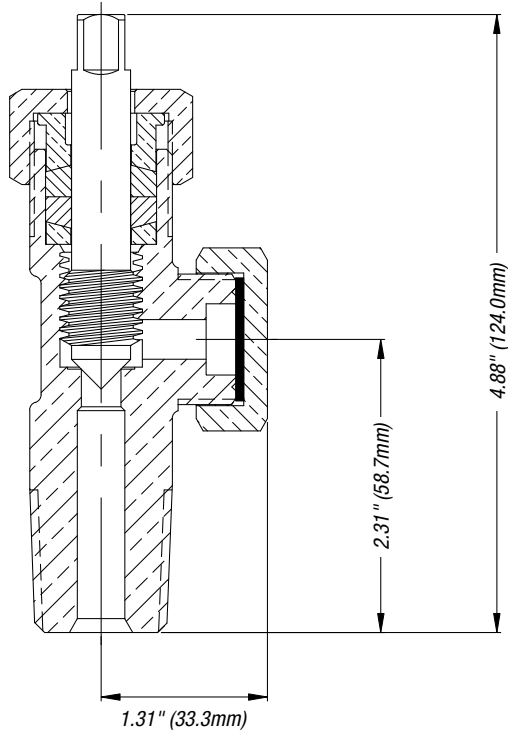
Chlorine Gas Valves

Basic Valve



Key Features & Benefits

- Manufactured in conformance to Chlorine Institute Pamphlet 17
- One-piece Monel® stem offers exceptional durability and positive shut-off in chlorine and other corrosive gas service
- Choice of PTFE (shown here) or Garlock® 6130 packing for easy operation and durable leak-resistant stem seal
- Large wrench flats on valve body for easy installation
- Robust Aluminum Silicon Bronze (C64210) valve body offers corrosion resistance



1214X1-B1

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Robust and Basic Valves

Design Specifications			
	English		Metric
Maximum Working Pressure	500 PSI		34 BAR
Burst Pressure	7200 PSI		496 BAR
Operating Temperature Range	-50° F → +149° F		-45° C → +65° C
Storage Temperature Range	-60° F → +149° F		-51° C → +65° C
Leak Rate Internal/External	1 × 10 ⁻⁶ atm cc/s		1 × 10 ⁻⁶ mL/sec
Operating Torque	5–6 ft.-lbs.		6.8–8.1 N-m
Closing Torque	25 ft.-lbs.		33.9 N-m
Packing Nut Installation Torque	25–35 ft.-lbs.		33.9–47.4 N-m
Stem Installation Torque	10–12 ft.-lbs.		13.5 – 16.3 N-m
Fusible Plug Installation Torque	12–15 ft.-lbs.		16.3–20.3 N-m
Yoke Torque	Not to exceed 35 ft.-lbs.		Not to exceed 47.4 N-m
Minimum Cycle Life	2000 Cycles		2000 Cycles
Cv Flow Factor	1210A	.733	1210A .733
	1214A	1.88	1214A 1.88

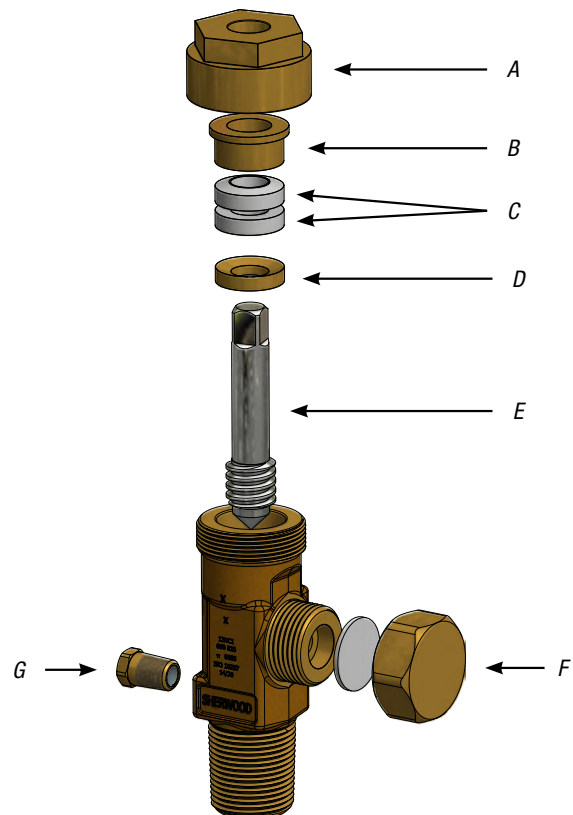
Materials of Construction	
Part Description	Materials of Construction
Body	Aluminum Silicon Bronze C64210
Stem	Monel® ASTM B164-84 Type UNS N04400 or N04405
Packing Nut	Brass C36000
Packing Collar	Naval Brass C48500
Packing Gland	Brass C36000
Packing	PTFE or Garlock® 6130
Outlet Cap	Brass C36000
Outlet Cap Gasket	PTFE
Fusible Plug PRD	Naval Brass C48500 (with 165° F fusible metal)

Standards Conformance	
CGA V-9	Standard for Gas Cylinder Valves
CGA S-1.1	Standard for Pressure Relief Devices
CGA V-1	Compressed Gas Cylinder Valve Outlet and Inlet Connections Standards
Chlorine Institute Pamphlet 17	Cylinder and Ton Container Procedure for Chlorine Packaging and Valve Design Criteria
ISO 10297	International Standard for Cylinder Valves Design Specification
TPED/ADR	Transportable Pressure Equipment Directives

Parts Breakdown for Chlorine Gas Valves

- A. Packing Nut **P1210-3 (Basic) or P1210A-3 (Robust)**
- B. Packing Gland **P1210-4**
- C. Packing (2 required) **P1210-6 (Garlock 6130) or P1210-6T (PTFE)**
- D. Packing Washer **P1210-5N**
- E. Stem **P1210-2M**
- F. Outlet Cap Assembly **P1210-11**
Outlet Cap Only **P1210-14**
Outlet Cap Gasket **P10-G-T**
- G. Fusible Plug **5853T Series (Cylinder Valve) 1333 or 1303 Series (Ton Container Valves)**

See Parts & Accessories, page 7–8, for more information



Chlorine Gas Valves

Chlorine Cylinder Valves

Ordering Information — Robust Cylinder Valve

Sherwood Part Number	Inlet Thread Size*	CGA Outlet**	Pressure Relief Device	Packing
1210AX1-CL1	¾"-14 NGT (CL)-1	660/820	CG-2 165° F Fuse-Metal	PTFE
1210A-CL1	¾"-14 NGT (CL)-1	660/820	CG-2 165° F Fuse-Metal	Garlock® 6130
1210AX1-CL2	¾"-14 NGT (CL)-2	660/820	CG-2 165° F Fuse-Metal	PTFE
1210A-CL2	¾"-14 NGT (CL)-2	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1210AX1-CL3	¾"-14 NGT (CL)-3	660/820	CG-2 165° F Fuse-Metal	PTFE
1210A-CL3	¾"-14 NGT (CL)-3	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1210AX1-CL4	¾"-14 NGT (CL)-4	660/820	CG-2 165° F Fuse-Metal	PTFE
1210A-CL4	¾"-14 NGT (CL)-4	660/820	CG-2 165° F Fuse-Metal	Garlock 6130

Ordering Information — Basic Cylinder Valve

Sherwood Part Number	Inlet Thread Size*	CGA Outlet**	Pressure Relief Device	Packing
1210X1-B1	¾"-14 NGT (CL)-1	660/820	CG-2 165° F Fuse-Metal	PTFE
1210-B1	¾"-14 NGT (CL)-1	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1210X1-B2	¾"-14 NGT (CL)-2	660/820	CG-2 165° F Fuse-Metal	PTFE
1210-B2	¾"-14 NGT (CL)-2	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1210X1-B3	¾"-14 NGT (CL)-3	660/820	CG-2 165° F Fuse-Metal	PTFE
1210-B3	¾"-14 NGT (CL)-3	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1210X1-B4	¾"-14 NGT (CL)-4	660/820	CG-2 165° F Fuse-Metal	PTFE
1210-B4	¾"-14 NGT (CL)-4	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1211X1-B1	1"-11½ NGT (CL)-1	660/820	CG-2 165° F Fuse-Metal	PTFE
1211-B1	1"-11½ NGT (CL)-1	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1211X1-B2	1"-11½ NGT (CL)-2	660/820	CG-2 165° F Fuse-Metal	PTFE
1211-B2	1"-11½ NGT (CL)-2	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1211X1-B3	1"-11½ NGT (CL)-3	660/820	CG-2 165° F Fuse-Metal	PTFE
1211-B3	1"-11½ NGT (CL)-3	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1211X1-B4	1"-11½ NGT (CL)-4	660/820	CG-2 165° F Fuse-Metal	PTFE

*Inlet Thread Size Note:

(CL)-1 = 1st Thread Standard

(CL)-2 = 1st Thread 4 Threads Oversized

(CL)-3 = 1st Thread 8½ Threads Oversized

(CL)-4 = 1st Thread 14 Threads Oversized

**Outlet Connection Note: The same chlorine valve can be used with a CGA 660 connector nut connection or with a CGA 820 yoke connection.

Chlorine Gas Valves

Chlorine Ton Container Valves

Ordering Information — Robust Ton Container Valve

Sherwood Part Number	Inlet Thread Size*	Outlet**	Pressure Relief Device	Packing
1214AX1-CL1	¾"-14 NGT (CL)-1	660/820	None	PTFE
1214A-CL1	¾"-14 NGT (CL)-1	660/820	None	Garlock® 6130
1214AX1-CL2	¾"-14 NGT (CL)-2	660/820	None	PTFE
1214A-CL2	¾"-14 NGT (CL)-2	660/820	None	Garlock 6130
1214AX1-CL3	¾"-14 NGT (CL)-3	660/820	None	PTFE
1214A-CL3	¾"-14 NGT (CL)-3	660/820	None	Garlock 6130
1214AX1-CL4	¾"-14 NGT (CL)-4	660/820	None	PTFE
1214A-CL4	¾"-14 NGT (CL)-4	660/820	None	Garlock 6130

Ordering Information — Basic Ton Container Valve

Sherwood Part Number	Inlet Thread Size*	Outlet**	Pressure Relief Device	Packing
1214X1-B1	¾"-14 NGT (CL)-1	660/820	None	PTFE
1214-B1	¾"-14 NGT (CL)-1	660/820	None	Garlock 6130
1214X1-B2	¾"-14 NGT (CL)-2	660/820	None	PTFE
1214-B2	¾"-14 NGT (CL)-2	660/820	None	Garlock 6130
1214X1-B3	¾"-14 NGT (CL)-3	660/820	None	PTFE
1214-B3	¾"-14 NGT (CL)-3	660/820	None	Garlock 6130
1214X1-B4	¾"-14 NGT (CL)-4	660/820	None	PTFE
1214-B4	¾"-14 NGT (CL)-4	660/820	None	Garlock 6130
1209X1-B1	1"-11½ NGT (CL)-1	660/820	None	PTFE
1209-B1	1"-11½ NGT (CL)-1	660/820	None	Garlock 6130
1209X1-B2	1"-11½ NGT (CL)-2	660/820	None	PTFE
1209-B2	1"-11½ NGT (CL)-2	660/820	None	Garlock 6130
1209X1-B3	1"-11½ NGT (CL)-3	660/820	None	PTFE
1209-B3	1"-11½ NGT (CL)-3	660/820	None	Garlock 6130
1209X1-B4	1"-11½ NGT (CL)-4	660/820	None	PTFE
1209-B4	1"-11½ NGT (CL)-4	660/820	None	Garlock 6130
1214W6X1-1	1.015 1st Thread 25E	BS #6	None	PTFE
1214W6X1-2	1.041 1st Thread 25E	BS #6	None	PTFE

*Inlet Thread Size Note:

(CL)-1 = 1st Thread Standard

(CL)-2 = 1st Thread 4 Threads Oversized

(CL)-3 = 1st Thread 8½ Threads Oversized

(CL)-4 = 1st Thread 14 Threads Oversized

**Outlet Connection Note: The same chlorine valve can be used with a CGA 660 connector nut connection or with a CGA 820 yoke connection.