

V-53 SHUTOFF VALVE & CHECK VALVES

V-53/Check Valve Combination	Part No.	Gas Service	Check Valve Outlet Connection	Cap & Chain Assembly (Accessory)
V-53/CV-1	639767††	Oxygen	CGA-024 ("C"-size RH male)	951506
V-53/CV-2	639768	Fuel Gas	CGA-025 ("C"-size LH male)	951507
V-53/CV-3	998314††	Oxygen	CGA-022 ("B"-size RH male)	86W40
V-53/CV-4	998316	Fuel Gas	CGA-023 ("B"-size LH male)	86W41
V-53/CV-5	639769	*	1/2-in. NPT (male)	—
V-53/CV-6	998442	Inert Gas	CGA-034 ("C"-size RH female)	—
V-53/CV-7	998227	Inlet Gas	CGA-032 ("B"-size RH female)	—

* Any common non-corrosive, non-toxic industrial gas. (See note 2 below.)

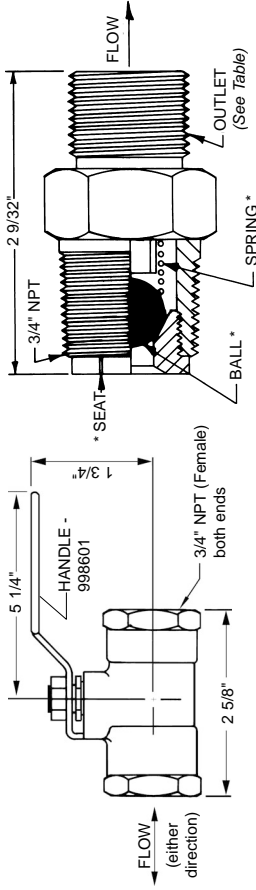
†† Supplied with check valve assembled and sealed to shutoff valve. All others are supplied non-assembled.

- Operating pressure must NOT exceed 200 psig.**
- All V-53 valves and check valves are cleaned for oxygen service before shipment. **If they are used for oxygen service, do NOT use oil or grease since they ignite easily and burn violently under pressure in the presence of oxygen.** If pipe adaptors are necessary, be sure they are thoroughly degreased.
- The V-53 valve/check valve combination, when installed on oxygen and fuel gas station outlets, will comply with the latest NFPA-51 and OSHA requirements. Note that check valves are not designed for stopping flashbacks. Check valves only prevent backflow of one gas from mixing in the pipeline with the other. Only hydraulic back-pressure valves should be used for flashback protection.
- Apply a single turn of 3/8-in. or 1/2-in. wide Teflon tape on all male pipe threads before making pipe connection. Tighten all connections firmly with a wrench.
- The V-53 valve can accept flow from either direction, therefore, either end of the valve can be installed to the pipe. After installing V-53/check valve, make sure the V-53 valve is closed (handle pointing out or perpendicular to the valve) before turning on the main gas supply.
- Before attaching station regulator to check valve outlet, crack the valve slightly for an instant to blow away any dust or dirt that may have collected on the outlet. **Never crack a fuel gas valve near sparks, flames, or any possible source of ignition.** Be sure to follow all instructions packed with your station regulator.
- Check the installation for leakage using Leak Test Solution (998771) or any other solution suitable for oxygen service. If leakage is detected, release pressure and correct.
- Periodically test the check valve for leakage using the reverse flow procedure. Replace check valve or parts shown, on the reverse side of this sheet if there is leakage.

Be sure this information reaches the operator.
You can get extra copies through your supplier.



ESAB Welding & Cutting Products



V-53 SHUTOFF VALVE
Part No. 639674

***Supplied with CV Repair Kit - 18360**
CHECK VALVE
(See Table)

Check Valve	Part No.	Outlet Connection
CV-1	639677	CGA-024 7/8—14 RH male)
CV-2	639710	CGA-025 (7/8—14 LH male)
CV-3	639706	CGA-022 (9/16—18 RH male)
CV-4	639711	CGA-023 (9/16—18 LH male)
CV-5	639717	1/2-in. NPT (male)
CV-6	639719	CGA-034 (7/8—14 RH female)
CV-7	639720	CGA-032 (5/8—18 RH female)

CAPACITY DATA: V-53/CHECK VALVE

Pressure Drop (psi)	*Flow Rate (cfh) at Inlet Pressure of:					
	5 psig	10 psig	15 psig	50 psig	100 psig	200 psig
1	1450	1650	1800	2700	3550	4800
2	2000	2250	2500	3800	5100	7000
3	—	2700	3000	4600	6100	8300
5	—	—	—	5800	7500	10000
V-53/Check Valve Combination						
1	150	160	175	260	350	470
2	370	410	425	690	920	1250
3	—	610	670	1000	1350	1800
5	—	—	—	1550	2100	2850

* For other gases, multiply the given nitrogen flow rate by the following correction factors:

Acetylene	1.03
Hydrogen	3.68
Air	0.97
Methane or Natural Gas	1.31
Argon	0.83
Oxygen	0.92
Carbon dioxide	0.79
Propane	0.79
Helium	2.61

NOTE: Piped or distributed acetylene pressure should never exceed 15 psig.



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