

**REVERSE FLOW CHECK VALVES**

For torch and regulator applications, Western Check Valves guard against danger caused by plugged tips, over-pressurizing or incorrect startup procedures. Proper Check Valve installation helps prevent accidents caused by gases mixing in hoses, regulators or cylinders.

**Note: Check valves do not stop flashbacks. See page 36 for more information on Western's Flashback Arrestors.**

Western's reverse flow Check Valves meet or exceed CGA and OSHA requirements (Pamphlet CGA-E2) and feature:

- Flows for cutting up to 12" of steel
- Machined high quality brass with stainless steel operating spring and valve disc
- Low open/close pressures:  
1 - 1-1/2 psig open valve and 10 oz. reverse pressure to positively close valve
- 100% tested
- Made in U.S.A.
- Pressure ratings:  
(unless otherwise listed)  
Oxygen - To 125 PSIG (860 kPa)  
Fuel Gas - To 50 PSIG (345 kPa)
- Check Valve Seat Material:  
A-Size Models - Viton™  
B-Size Models - Buna-N™



**WESTERN CHECK VALVES**

**TORCH MODEL, A-SIZE (3/8"-24)**

A one-piece, compact unit designed for A-Size applications. Mounts to torch to prevent reverse flow at point of origin.

PART NO.		DESCRIPTION	SERVICE
<b>TORCH MODEL, A-SIZE (3/8"-24)</b>			
CV-A9	Oxygen RH, A-Size Male to A-Size Female Nut, to 125 PSIG (800 kPa)	CGA-020	
CV-A10	Fuel Gas LH, A-Size Male to A-Size Female Nut, to 50 PSIG (345 kPa)	CGA-021	
WE-63	Torch Style - Set CV-A9 & CV-A10	-	

**TORCH MODEL, B-SIZE (9/16"-18)**

Mounts easily on torch, is readily seen and can be removed for periodic testing. Flows cut up to 12" steel plate or handle heating tips (1200 SCFH at 50 PSIG). Stops reverse flow at point of origin.

PART NO.		DESCRIPTION	SERVICE
<b>TORCH MODEL B-SIZE (9/16"-18)</b>			
CV-7R**	Oxygen RH, B-Size Male to B-Size Female Nut, to 125 PSIG (800kPa)	CGA-022	
CV-8L**	Fuel Gas LH, B-Size Male to B-Size Female Nut, to 50 PSIG (345 kPa)	CGA-023	
WE-60**	Torch Style - Set CV-7R & CV-8L	-	

**REGULATOR BUSHING ADAPTOR MODEL, B-SIZE (9/16"-18)**

Easily mounts on outlet bushing of any regulator having a B-Size outlet. This model has the same flow capacity as the torch - type (1200 SCFH at 50 PSIG) when installed on a regulator. The Check Valve is to easy to see and is less subject to contamination, abuse and damage.

PART NO.		DESCRIPTION	SERVICE
<b>REGULATOR BUSHING ADAPTOR MODEL B-SIZE (9/16"-18)</b>			
CV-30R**	Oxygen RH, B-Size Female Nut to B-Size Male, to 125 PSIG (800kPa)	CGA-022	
CV-31L**	Fuel Gas LH, B-Size F Nut to B-Size Male, to 50 PSIG (345 kPa)	CGA-023	
WE-61*	Regulator Adaptor - Set CV-30R & CV-31L	-	

\* Sold in retail clamshell packaging  
\*\* UL Listed

## CHECK VALVES

### REGULATOR OUTLET BUSHING MODEL, B-SIZE (9/16"-18)

- Replaces outlet bushing in most regulators
- Flow capacity is 1000 SCFH at 50 PSIG
- Regulator type Check Valve is easily seen and less subject to contamination, abuse and damage
- Installed with PTFE thread seal tape on 1/4" NPT tapered threads

### 1/4" NPT INLINE CHECK VALVES, TO 200 PSIG (1400 kPa)

- These Check Valves are appropriate for applications that require higher operating pressures, up to 200 PSIG
- Compact design and low open/close pressures: 3 oz. to open valve and 10 oz. of reverse pressure for positive valve closing
- Flow characteristics match those in the Flow Specification Chart (below) for B-Size Check Valves

### INLINE NPT CHECK VALVES, HEAVY DUTY

- Heavy Duty Check Valves are designed for high performance in demanding applications
- All styles feature low/open/close pressures: 3 oz. to open the valve and 10 oz. of reverse pressure for positive valve closing
- Check Valve seat material is durable Ethylene Propylene (EPDM)
- For use in high pressure pigtail assemblies

### CGA CYLINDER ADAPTORS WITH CHECK VALVES

- Cylinder Adaptors (see page 53) may be ordered with Check Valves installed in the cylinder nipple
- Adaptors are available from stock for compatible gases only
- To order Cylinder Adaptors with Check Valves, add - CV to the Adaptor part no. For example, Adaptor 15 becomes 15-CV with built-in check valve

### CHECK VALVE FLOW SPECIFICATIONS CHARTS

Flow curves presented here are based on air at 70° F. To convert flows of other gases, multiply by the appropriate conversion factor listed on instruction sheets included with all check valves.

PART NO.	DESCRIPTION	SERVICE
<b>REGULATOR OUTLET BUSHING MODEL B-SIZE (9/16"-18)</b>		
CV-32R**	Oxygen RH, 1/4" NPT Male to B-Size Male, to 125 PSIG (800 kPa)	CGA-022
CV-33L**	Fuel Gas LH, 1/4" NPT Male to B-Size Male, to 50 PSIG (345 kPa)	CGA-023
WE-62**	Regulator Outlet Set Includes CV-32R & CV-33L	B-Size

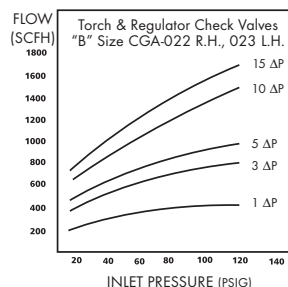
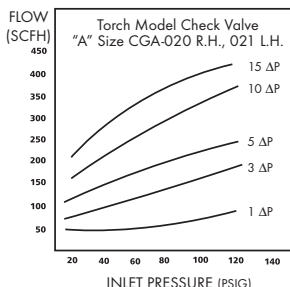
\*\*UL Listed

PART NO.	DESCRIPTION
<b>1/4" NPT INLINE CHECK VALVES, TO 200 PSI (1400 kPa)</b>	
CV-4	1/4" NPT Male to 1/4" NPT Male
CV-5	1/4" NPT Male to 1/4" NPT Female (Flow Male to Female)
CV-6	1/4" NPT Female to 1/4" NPT Male (Flow Female to Male)



PART NO.	DESCRIPTION	MATERIAL	MAX PSIG
<b>INLINE NPT CHECK VALVES, HEAVY DUTY</b>			
CV-4M	1/4" NPT Male Inlet to Male Outlet	Brass	3000
CV-6M	3/8" NPT Male Inlet to Male Outlet	Brass	3000
CVF-4M	1/4" NPT Female Inlet to Male Outlet	Brass	3000
CVM-4F	1/4" NPT Male Inlet to Female Outlet	Brass	3000
CV-4MSS	1/4" NPT Male Inlet to Male Outlet	St. Steel	6000
CVF-4MSS	1/4" NPT Female Inlet to Male Outlet	St. Steel	6000
CVM-4FSS	1/4" NPT Male Inlet to Female Outlet	St. Steel	6000

PART NO.	DESCRIPTION	SERVICE
<b>CHECK VALVE ADAPTORS, SAME CGA BOTH ENDS</b>		
CV-346	Air RH, Female	CGA-346
CV-540	Oxygen RH, Female	CGA-540



ΔP - Pressure Drop (psi)

GAS	CONVERSION FACTOR
Acetylene	1.05
Butane	.89
Hydrogen	3.79
Mapp Gas	.82
Methane	1.34
Oxygen	.95
Propane	.81