

A technical drawing of a mechanical part, likely a valve, with various dimensions and labels. The drawing is in a light brown color on a dark background.

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PRECISION VALVE PRODUCTS

Harrison Valve™ is a global supplier of precision valve products serving a broad range of applications, industries and markets. Our mission is to provide each of our customers with the highest quality products, at market competitive prices.

Quality is paramount at Harrison Valve™. All Harrison valves are produced to meet or exceed the highest US and international standards; including ISO 10297 and CGA V-9. Harrison Valves™ are rigorously tested through a robust quality assurance system, and Harrison Valve™ maintains carefully monitored manufacturing processes to ensure that all Harrison valves meet or exceed design and performance specifications.



Harrison Valve™ strives to provide our customers with significant value by offering cost competitive valve solutions. We are able to do so by maintaining a low cost of production, and by effectively managing a wide range of manufacturing efficiencies. These efforts ultimately result in reduced manufacturing costs which we pass directly to our OEM customers and global distribution partners.

Harrison Valve™ strives to better serve global markets by continually engineering products that provide more innovative solutions for today's compressed gas applications. Please continue to explore our site to familiarize yourself with our extensive and expanding product line. Please contact us directly if we may be of assistance.

HARRISON VALVE PRODUCTS

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Organizations and Standards



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Brass Residual Pressure Valves

O-Ring Seal Technology for all Industrial and Medical Gases

NGT Tapered Threads for Steel Cylinders

KEY FEATURES:

- Harrison VRP Series valves retain 30-50PSI pressure when valve is left open.
- Harrison VRP Series valves eliminate the expense of time consuming purge and clean cycles.
- Positive 30-50PSI pressure maintains the integrity of the cylinder contents against contaminants.
- Universal adapters for Harrison VRP series valves accommodate most major manufacturer's residual pressure valves.
- O-ring seal technology provides superior leak integrity.
- Lower plugs are designed specific for the gas service intended.
- Easy operation under all pressures.
- 100% leak testing on entire production.
- Meets and exceeds CGA V9 and ISO 10297 and ISO 15996 for residual pressure valves.
- Unitized plug with robust hex and threads insure easy installation.
- Most valves supplied with threaded inlet for siphon tubes.
- Oxygen valves passed stringent adiabatic oxygen compression testing per ISO standards.

DESIGN SPECIFICATIONS

Maximum Working Pressure	3000 PSIG	412 BAR
Burst Pressure	15,000 PSIG	1035 BAR
Operating Temperature	Min: -50F	-45C
	Max: 130F	55C
Storage Temperature	Min: -65F	-54C
	Max: 155F	68C
Minimum Cycle Life	5000 Cycles	

Harrison Filling Adaptors Ordering Information

Part Number	Description
AD-T00L	Locking Tool
AD320HT	Retractable Pin Nipple, CGA320
AD346HT	Retractable Pin Nipple, CGA346
AD350HT	Retractable Pin Nipple, CGA350
AD540HT	Retractable Pin Nipple, CGA540
AD580HT	Retractable Pin Nipple, CGA580
AD590HT	Retractable Pin Nipple, CGA590

Part Number	Gas Service	CGA	Outlet Thread	Inlet	Safety
VRP320-6-1-XXXX	Carbon Dioxide	320	.725-14NGO RH EXT	3/4"NGT	CG1
VRP346-6-1-XXXX	Breathing Air	346	.825-14NGO RH EXT	3/4"NGT	CG1
VRP350-6-5-XXXX	Hydrogen	350	.825-14NGO LH EXT	3/4"NGT	CG5
VRP540-6-1-XXXX	Oxygen	540	.903-14NGO RH EXT	3/4"NGT	CG1
VRP580-6-1-XXXX	Inert (Helium, Nitrogen, Argon)	580	.965-14NGO RH INT	3/4"NGT	CG1
VRP590-6-1-XXXX	Air, Sulphur Hex.	590	.965-14NGORH INT	3/4"NGT	CG1

The suffix "xxxx" denotes pressure relief device burst disc rupture pressure. Refer to the safety device ordering information chart for pressures available.
Fusible backed pressure relief devices in 212F nominal melting temperatures are standard with CGA350. Change the numeral in position 6 from a "1" to "5" for all valves other than CGA350 requiring 212F fusible metal safeties.



Brass and Chrome Plated Cylinder Valves

O-Ring Seal Technology for all Industrial and Medical Gases

NGT Tapered Threads for Steel Cylinders
Designed for service pressures up to 3000PSI

KEY FEATURES:

- O-ring seal technology provides superior leak integrity.
- Lower plugs are designed specific for the gas service intended.
- Easy operation under all pressures.
- 100% leak testing on entire production.
- Meets and exceeds CGA V9 and ISO 10297.
- Unitized plug with robust hex and threads insure easy installation.
- Most valves supplied with threaded inlet for siphon tubes.
- Oxygen valves passed stringent adiabatic oxygen compression testing per ISO 10297.
- All valves are bagged and cleaned for oxygen service per CGA G4.1.
- Common design safety and hand wheels readily available.

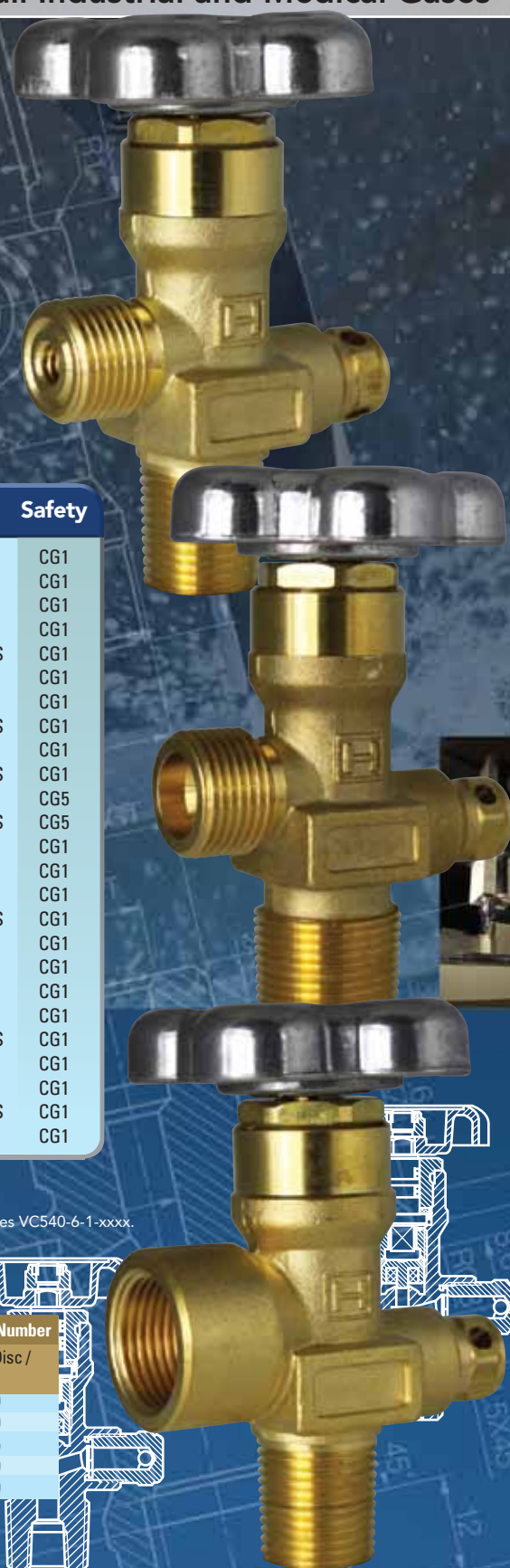
Part Number	Gas Service	CGA	Outlet Thread	Inlet	Safety
V280-6-1-XXXX	Medical Breathing Mixtures	280	.745-14NGO RH EXT	3/4"NGT	CG1
V296-6-1-XXXX	Industrial Oxygen Mixture	296	.803-14UNS-2B RH INT	3/4"NGT	CG1
V320-4-1-XXXX	Carbon Dioxide	320	.725-14NGO RH EXT	1/2"NGT	CG1
V320-6-1-XXXX	Carbon Dioxide	320	.725-14NGO RH EXT	3/4"NGT	CG1
V320-6-1-XXXX-7	Carbon Dioxide	320	.725-14NGO RH EXT	3/4"NGT 70/S	CG1
V320-8-1-XXXX	Carbon Dioxide	320	.725-14NGO RH EXT	1"NGT	CG1
V326-6-1-XXXX	Nitrous Oxide	326	.825-14NGO RH EXT	3/4"NGT	CG1
V326-6-1-XXXX-7	Nitrous Oxide	326	.825-14NGO RH EXT	3/4"NGT 70/S	CG1
V346-6-1-XXXX	Breathing Air	346	.825-14NGO RH EXT	3/4"NGT	CG1
V346-6-1-XXXX-7	Breathing Air	346	.825-14NGO RH EXT	3/4"NGT 70/S	CG1
V350-6-5-XXXX	Hydrogen	350	.825-14NGO LH EXT	3/4"NGT	CG5
V350-6-5-XXXX	Hydrogen	350	.825-14NGO LH EXT	3/4"NGT 70/S	CG5
V500-6-1-XXXX	Medical Gas Mixture	500	.885-14NGO LH EXT	3/4"NGT	CG1
V540-4-1-XXXX	Oxygen	540	.903-14NGO RH EXT	1/2"NGT	CG1
V540-6-1-XXXX	Oxygen	540	.903-14NGO RH EXT	3/4"NGT	CG1
V540-6-1-XXXX-7	Oxygen	540	.903-14NGO RH EXT	3/4"NGT 70/S	CG1
V540-8-1-XXXX	Oxygen	540	.903-14NGO RH EXT	1"NGT	CG1
V555-6-1-XXXX	Liquid withdrawal of propane/butane	555	.903-14 NGO LH EXT	3/4"NGT	CG1
V580-4-1-XXXX	Inert (Helium, Nitrogen, Argon)	580	.965-14NGO RH INT	1/2"NGT	CG1
V580-6-1-XXXX	Inert (Helium, Nitrogen, Argon)	580	.965-14NGO RH INT	3/4"NGT	CG1
V580-6-1-XXXX-7	Inert (Helium, Nitrogen, Argon)	580	.965-14NGO RH INT	3/4"NGT 70/S	CG1
V580-8-1-XXXX	Inert (Helium, Nitrogen, Argon)	580	.965-14NGO RH INT	1"NGT	CG1
V590-6-1-XXXX	Inert (Helium, Nitrogen, Argon)	590	.965-14NGO LH INT	3/4"NGT	CG1
V590-6-1-XXXX-7	Inert (Helium, Nitrogen, Argon)	590	.965-14NGO LH INT	3/4"NGT 70/S	CG1
V660-6-1-XXXX	Sulfur Dioxide	660	1.030-14NGO RH INT	3/4"NGT	CG1

The suffix "xxxx" denotes pressure relief device burst disc rupture pressure. Refer to the safety device ordering information chart for pressures available.

Chrome plating: To order, change the letter "V" in the part number to letter "VC". Example: V540-6-1-xxxx becomes VC540-6-1-xxxx.

Fusible backed pressure relief devices in 212F nominal melting temperatures are standard with CGA350, and CGA695 valves. Change the numeral in position 6 from a "1" to "5" for all valves other than CGA350 and CGA695 requiring 212F fusible metal safeties. Fusible metal safeties at 165F are available special order.

Cylinder Service	Pressure Relief	Disc Rupture Range 165F		Pressure Relief Device Replacement Part Number	
Pressure In PSIG	Device Stamping	Minimum	Maximum	CG-1 Frangible Disc	CG-5 Frangible Disc / 212 Fuse Metal
1800	3000	2700	3000	HBV-CG1-3000	HBV-CG5-3000
2015	3360	3025	3360	HBV-CG1-3360	HBV-CG5-3360
2265	3775	3400	3775	HBV-CG1-3775	HBV-CG5-3775
2400	4000	3600	4000	HBV-CG1-4000	HBV-CG5-4000
3000	5000	4500	5000	HBV-CG1-5000	HBV-CG5-5000



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Brass and Chrome Plated Cylinder Valves

O-Ring Seal Technology for all Industrial and Medical Gases

Parallel / Straight Threads for Aluminum Cylinders

KEY FEATURES:

- O-ring seal technology provides superior leak integrity.
- Lower plugs are designed specific for the gas service intended.
- Easy operation under all pressures.
- 100% leak testing on entire production.
- Meets and exceeds CGA V9 and ISO 10297.
- Unitized plug with robust hex and threads insure easy installation.
- Most valves supplied with threaded inlet for siphon tubes.
- Oxygen valves passed stringent adiabatic oxygen compression testing per ISO 10297.
- All valves are bagged and cleaned for oxygen service per CGA G4.1.
- Common design safety and hand wheels readily available.
- All valves are supplied with inlet O-ring.



Part Number	Gas Service	CGA	Outlet Thread	Inlet	Safety
V320-3-1-XXXX	Carbon Dioxide	320	.725-14NGO RH EXT	.750-16UNF2A	CG1
V320-5-1-XXXX	Carbon Dioxide	320	.725-14NGO RH EXT	1.125-12UNF2A	CG1
V326-5-1-XXXX	Nitrous Oxide	326	.825-14NGO RH EXT	1.125-12UNF2A	CG1
V346-5-1-XXXX	Breathing Air	346	.825-14NGO RH EXT	1.125-12UNF2A	CG1
V350-5-5-XXXX	Hydrogen	350	.825-14NGO LH EXT	1.125-12UNF2A	CG5
V500-5-1-XXXX	Medical Gas Mixture	500	.885-14NGO LH EXT	1.125-12UNF2A	CG1
V540-3-1-XXXX	Oxygen	540	.903-14NGO RH EXT	.750-16UNF2A	CG1
V540-5-1-XXXX	Oxygen	540	.903-14NGO RH EXT	1.125-12UNF2A	CG1
V580-3-1-XXXX	Inert (Helium, Nitrogen, Argon)	580	.965-14NGO RH INT	.750-16UNF2A	CG1
V580-5-1-XXXX	Inert (Helium, Nitrogen, Argon)	580	.965-14NGO RH INT	1.125-12UNF2A	CG1
V590-5-1-XXXX	Industrial Air, Sulphur Hexafluoride	590	.965-14NGO LH INT	1.125-12UNF2A	CG1
V660-5-1-XXXX	Sulphur Dioxide	660	1.030-14NGO RH INT	1.125012UNF2A	CG1

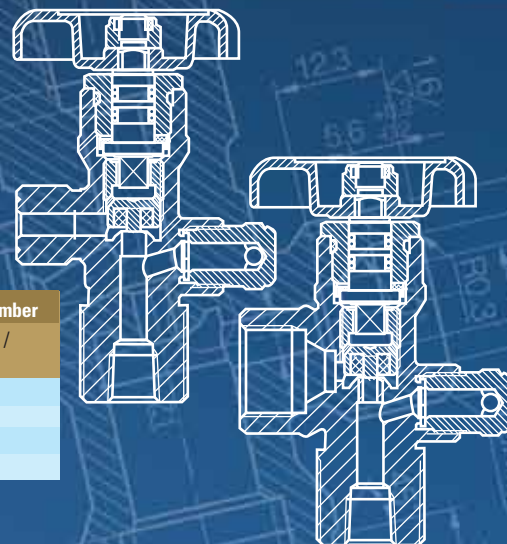
The suffix "xxxx" denotes pressure relief device burst disc rupture pressure.

Refer to the safety device ordering information chart for pressures available.

Chrome plating: To order, change the letter "V" in the part number to letter "CV"

example: V540-6-1-xxxx becomes VC540-6-1-xxxx

Fusible backed pressure relief devices in 212F nominal melting temperatures are standard with CGA350.



Cylinder Service	Pressure Relief	Disc Rupture Range 165F		Pressure Relief Device Replacement Part Number	
Pressure In PSIG	Device Stamping	Minimum	Maximum	CG-1 Frangible Disc	CG-5 Frangible Disc / 212 Fuse Metal
1800	3000	2700	3000	HBV-CG1-3000	HBV-CG5-3000
2015	3360	3025	3360	HBV-CG1-3360	HBV-CG5-3360
2265	3775	3400	3775	HBV-CG1-3775	HBV-CG5-3775
3000	5000	4500	5000	HBV-CG1-5000	HBV-CG5-5000

Chrome Plated Cylinder Valves

O-Ring Seal Technology for all Medical Gases

NGT Tapered Threads for Steel Cylinders

KEY FEATURES:

- O-ring seal technology provides superior leak integrity.
- Lower plugs are designed specific for the gas service intended.
- Easy operation under all pressures.
- 100% leak testing on entire production.
- Meets and exceeds CGA V9 and ISO 10297.
- Unitized plug with robust hex and threads insure easy installation.
- Most valves supplied with threaded inlet for siphon tubes.
- Oxygen valves passed stringent adiabatic oxygen compression testing per ISO 10297.
- All valves are bagged and cleaned for oxygen service per CGA G4.1.
- Common design safety and hand wheels readily available.



Part Number	Gas Service	CGA	Outlet Thread	Inlet	Safety
VC280-6-1-XXXX	Medical Breathing Mixtures	280	.745-14NGO RH EXT	3/4"NGT	CG1
VC296-6-1-XXXX	Industrial Oxygen Mixture	296	.803-14UNS-2B RH INT	3/4"NGT	CG1
VC320-6-1-XXXX	Carbon Dioxide	320	.725-14NGO RH EXT	3/4"NGT	CG1
VC326-6-1-XXXX	Nitrous Oxide	326	.825-14NGO RH EXT	3/4"NGT	CG1
VC500-6-1-XXXX	Medical Gas Mixture	500	.885-14NGO LH EXT	3/4"NGT	CG1
VC540-6-1-XXXX	Oxygen	540	.903-14NGO RH EXT	3/4"NGT	CG1
VC580-6-1-XXXX	Inert (Helium, Nitrogen, Argon)	580	.965-14NGO RH INT	3/4"NGT	CG1
VC590-6-1-XXXX	Inert (Helium, Nitrogen, Argon)	590	.965-14NGO LH INT	3/4"NGT	CG1
VC660-6-1-XXXX	Sulfur Dioxide	660	1.030-14NGO RH INT	3/4"NGT	CG1

The suffix "xxxx" denotes pressure relief device burst disc rupture pressure.
Refer to the safety device ordering information chart for pressures available.

Cylinder Service	Pressure Relief	Disc Rupture Range 165F		Pressure Relief Device Replacement Part Number	
Pressure In PSIG	Device Stamping	Minimum	Maximum	CG-1 Frangible Disc	CG-5 Frangible Disc / 212 Fuse Metal
1800	3000	2700	3000	HBV-CG1-3000	HBV-CG5-3000
2015	3360	3025	3360	HBV-CG1-3360	HBV-CG5-3360
2265	3775	3400	3775	HBV-CG1-3775	HBV-CG5-3775
2400	4000	3600	4000	HBV-CG1-4000	HBV-CG5-4000
3000	5000	4500	5000	HBV-CG1-5000	HBV-CG5-5000

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Chrome Plated Cylinder Valves

O-Ring Seal Technology for all Industrial and Medical Gases

Parallel / Straight Threads for
Aluminum Cylinders

KEY FEATURES:

- O-ring seal technology provides superior leak integrity.
- Lower plugs are designed specific for the gas service intended.
- Easy operation under all pressures.
- 100% leak testing on entire production.
- Meets and exceeds CGA V9 and ISO 10297.
- Unitized plug with robust hex and threads insure easy installation.
- Most valves supplied with threaded inlet for siphon tubes.
- Oxygen valves passed stringent adiabatic oxygen compression testing per ISO 10297.
- All valves are bagged and cleaned for oxygen service per CGA G4.1.
- Common design safety and hand wheels readily available.
- All valves are supplied with inlet O-ring.



Part Number	Gas Service	CGA	Outlet Thread	Inlet	Safety
VC320-3-1-XXXX	Carbon Dioxide	320	.725-14NGO RH EXT	.750-16UNF2A	CG1
VC320-5-1-XXXX	Carbon Dioxide	320	.725-14NGO RH EXT	1.125-12UNF2A	CG1
VC326-5-1-XXXX	Nitrous Oxide	326	.825-14NGO RH EXT	1.125-12UNF2A	CG1
VC346-5-1-XXXX	Breathing Air	346	.825-14NGO RH EXT	1.125-12UNF2A	CG1
VC350-5-5-XXXX	Hydrogen	350	.825-14NGO LH EXT	1.125-12UNF2A	CG5
VC500-5-1-XXXX	Medical Gas Mixture	500	.885-14NGO LH EXT	1.125-12UNF2A	CG1
VC540-3-1-XXXX	Oxygen	540	.903-14NGO RH EXT	.750-16UNF2A	CG1
VC540-5-1-XXXX	Oxygen	540	.903-14NGO RH EXT	1.125-12UNF2A	CG1
VC580-3-1-XXXX	Inert (Helium, Nitrogen, Argon)	580	.965-14NGO RH INT	.750-16UNF2A	CG1
VC580-5-1-XXXX	Inert (Helium, Nitrogen, Argon)	580	.965-14NGO RH INT	1.125-12UNF2A	CG1
VC590-5-1-XXXX	Industrial Air, Sulphur Hexafluoride	590	.965-14NGO LH INT	1.125-12UNF2A	CG1
VC660-5-1-XXXX	Sulphur Dioxide	660	1.030-14NGO RH INT	1.125012UNF2A	CG1

The suffix "xxxx" denotes pressure relief device burst disc rupture pressure.
Refer to the safety device ordering information chart for pressures available.

Cylinder Service	Pressure Relief	Disc Rupture Range 165F		Pressure Relief Device Replacement Part Number	
Pressure In PSIG	Device Stamping	Minimum	Maximum	CG-1 Frangible Disc	CG-5 Frangible Disc / 212 Fuse Metal
1800	3000	2700	3000	HBV-CG1-3000	HBV-CG5-3000
2015	3360	3025	3360	HBV-CG1-3360	HBV-CG5-3360
2265	3775	3400	3775	HBV-CG1-3775	HBV-CG5-3775
3000	5000	4500	5000	HBV-CG1-5000	HBV-CG5-5000

Small Cylinder Acetylene Valves

Hand Knob Operation for Acetylene Gases

Tapered, NGT Threads for Steel Cylinders

All Harrison Valves™ are produced to meet or exceed the highest US and international standards; including ISO 10297 and CGA V-9. Harrison Valves™ are rigorously tested through a robust quality assurance system, and Harrison Valve™ maintains carefully monitored manufacturing processes to ensure that all Harrison Valves™ meet or exceed design and performance specifications.

KEY FEATURES:

- Handwheel design permits easy access to the valve stem and bonnet to perform leak checks in compliance with DOT requirements.
- Positive valve stem nut seal with the valve body eliminates the need for constant tightening of packing nuts.
- Self locking zinc coated steel nut affixes handwheel to the sturdy brass stem.
- Proven double o-ring design technology assures positive leak tight operation extending service life.
- Easy low torque operation eliminates the need for wrenches or keys.
- Handwheel eliminates costly valve repairs reducing overall cost of ownership.
- Easy operation under all pressures.
- 100% leak testing on entire production.
- Meets and exceeds CGA V9 and ISO 10297.
- All valves bagged for cleanliness no matter the gas service intended.

SPECIFICATIONS:

All valves are supplied with safety relief devices as specified by the Compressed Gas Association Standard S1.1. Safety relief devices are a CG3 safety device (212F fusible metal for cylinders not exceeding 500psig.)

Part number A200H with CGA200 outlet for MC style acetylene, 3/8 NGT inlet, and CG3, 212F fusible metal safety device.



Part number A520H with CGA520 outlet for B style acetylene, 3/8 NGT inlet, and CG3, 212F fusible metal safety device.

Part Number	CGA Designation	Gas Service	Inlet Thread Size	Safety Device	Fusible Metal
A200H	CGA200	Small MC Acetylene Cylinder	3/8 NGT	CG3	212F Fusible Metal
A520H	CGA520	Small B Acetylene Cylinder	3/8 NGT	CG3	212F Fusible Metal

Small Cylinder Acetylene Valves

Wrench Operated Stem for Acetylene Gases

Tapered, NGT Threads for Steel Cylinders

All Harrison Valves™ are produced to meet or exceed the highest US and international standards; including ISO 10297 and CGA V-9. Harrison Valves™ are rigorously tested through a robust quality assurance system, and Harrison Valve™ maintains carefully monitored manufacturing processes to ensure that all Harrison Valves™ meet or exceed design and performance specifications.

KEY FEATURES:

- Designed utilizing universal specifications and parts.
- 212F fusible metal safety device cast directly into the valve body.
- Bonnet nuts are secured with a pin for guaranteed tightness.
- Tough carbon steel stem for years of service life.
- 100% leak testing on entire production.
- Meets and exceeds CGA V9 and ISO 10297.
- All valves bagged for cleanliness no matter the gas service intended.

SPECIFICATIONS:

All valves are supplied with safety relief devices as specified by the Compressed Gas Association Standard S1.1. Safety relief devices are a CG3 safety device (212F fusible metal for cylinders not exceeding 500psig.)



Part Number	CGA Designation	Gas Service	Inlet Thread Size	Safety Device	Fusible Metal
A200	CGA200	Small MC Acetylene Cylinder	3/8 NGT	CG3	212F Fusible Metal
A520	CGA520	Small B Acetylene Cylinder	3/8 NGT	CG3	212F Fusible Metal

Large Acetylene Cylinder Valves

CGA300 and CGA510 for Acetylene Service

Tapered, NGT Threads for Steel Cylinders

All Harrison Valves™ are produced to meet or exceed the highest US and international standards; including ISO 10297 and CGA V-9. Harrison Valves™ are rigorously tested through a robust quality assurance system, and Harrison Valve™ maintains carefully monitored manufacturing processes to ensure that all Harrison Valves™ meet or exceed design and performance specifications.

KEY FEATURES:

- O-ring seal technology provides superior leak integrity.
- Easy operation under all pressures.
- 100% leak testing on entire production.
- Meets and exceeds CGA V9 and ISO 10297.
- All valves bagged for cleanliness no matter the gas service intended.
- Lower plugs are designed specific for the gas service intended.
- Common design handwheels readily available.

SPECIFICATIONS:

All A300 and A510 series valves are supplied without a safety device. All A300 and A510 series valves are to be used in manifolds or in conjunction with a fusible metal CG3 plug when utilized in a large acetylene cylinder.

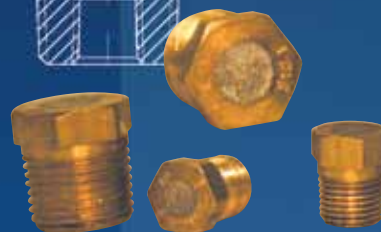


Part Number	CGA Designation	Gas Service	Inlet Thread Size	Safety Device	Service / Safety
A510-4-0	CGA510	Acetylene	1/2 NGT	No safety device	No safety device
A510-6-0	CGA510	Acetylene	3/4 NGT	No safety device	No safety device
A510-8-0	CGA510	Acetylene	1 NGT	No safety device	No safety device
A300-6-0	CGA300	Acetylene	3/4 NGT	No Safety Device	No safety device
A300-8-0	CGA300	Acetylene	1 NGT	No Safety Device	No Safety Device

Fusible Plugs For Acetylene

KEY FEATURES:

- Produced from high quality brass and steel alloy rod.
- Meticulously controlled fusible alloy assures accurate and consistent melt temperatures.
- Fusible alloy is cast into plug body to ensure an extremely strong bond between alloy and plug body.
- Fusible plug stamped with fusible metal yield temperature.



Part Number	Thread Size	Fuse Metal
SFP-212-1	1/8" NPT	212°F
BFB-212-1	1/8" NPT	212°F
BFB-212-2	1/4" NPT	212°F

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PRECISION VALVE PRODUCTS

AV Series – Vertical Outlet Acetylene Valves

O-Ring Seal Technology for Acetylene Gases

Tapered, NGT Threads for Steel Cylinders

All Harrison Valves™ are produced to meet or exceed the highest US and international standards; including ISO 10297 and CGA V-9. Harrison Valves™ are rigorously tested through a robust quality assurance system, and Harrison Valve™ maintains carefully monitored manufacturing processes to ensure that all Harrison Valves™ meet or exceed design and performance specifications.

KEY FEATURES:

- Handwheel design to replace old “Linde” style Acetylene cylinder valves and vertical outlets.
- No wrench needed for operation.
- O-ring seal technology provides superior leak integrity.
- Easy operation under all pressures.
- 100% leak testing on entire production.
- Meets and exceeds CGA V9 and ISO 10297.
- All valves bagged for cleanliness no matter the gas service intended.
- Lower plugs are designed specific for the gas service intended.

SPECIFICATIONS:

All VA510 series valves are supplied without a safety device. All AV510 series valves are to be used in manifolds or in conjunction with a fusible metal CG3 plug when utilized in a large acetylene cylinder.



Part Number	CGA Designation	Gas Service	Inlet Thread Size	Safety Device	Service/Safety
AV510-6-0	CGA510	Acetylene	3/4" NGT	No safety Device	No Safety Device

Fusible Plugs For Acetylene

KEY FEATURES:

- Produced from high quality brass and steel alloy rod.
- Meticulously controlled fusible alloy assures accurate and consistent melt temperatures.
- Fusible alloy is cast into plug body to ensure an extremely strong bond between alloy and plug body.
- Fusible plug stamped with fusible metal yield temperature.

Part Number	Thread Size	Fuse Metal
SFP-212-1	1/8" NPT	212°F
BFB-212-1	1/8" NPT	212°F
BFB-212-2	1/4" NPT	212°F



Medical Pin Index Valves

O-Ring Seal Technology for all Medical Gases

Yoke Outlet Pin Index System Connection Straight, Parallel Threads for Aluminum Cylinders

KEY FEATURES:

- O-ring seal technology provides superior leak integrity.
- Easy operation under all pressures.
- Protective and attractive chrome plated finish.
- 100% leak testing on entire production.
- Meets and exceeds CGA V9 and ISO 10297.
- Passed stringent adiabatic oxygen compression testing per ISO 10297.
- All valves bagged and tagged for oxygen service per CGA G4.1.
- All valves pre-drilled to accept aftermarket toggle device.
- All straight thread inlet valves are supplied with cylinder sealing o-ring.
- All valves are supplied with protective caps on inlet threads.

Part Number	Gas Service / Description	CGA	Inlet
P870-3-4-3360	Oxygen	870	.750-16UNF2A
P870-3-4-3360T	Oxygen with toggle	870	.750-16UNF2A
P870-3-4-3360Z	Oxygen with "Z" valve hand knob	870	.750-16UNF2A
P880-3-4-3360	Oxygen-CO2 mixture	880	.750-16UNF2A
P890-3-4-3360	Oxygen-Helium mixture	890	.750-16UNF2A
P910-3-1-3360	Nitrous Oxide	910	.750-16UNF2
P930-3-4-3360	Helium	930	.750-16UNF2A
P940-3-1-3360	Carbon Dioxide	940	.750-16UNF2A
P950-3-4-3360	Medical Air	950	.750-16UNF2A
P960-3-4-3360	Nitrogen	960	.750-16UNF2A
P965-3-4-3360	Nitrous Oxide - Oxygen mixture	965	.750-16INF2A
P973-3-4-3360	Medical Gas Mixtures	973	.750-16UNF2A

All valves are supplied with safety relief devices as specified by the Compressed Gas Association Standard S1.1. Safety relief devices are flush style CG-4 devices backed by 165 F fuse metal, except valves specified for Carbon Dioxide (CGA 940) and Nitrous Oxide (CGA 940), where a CG-1 hex style pressure relief device without fuse metal is required.

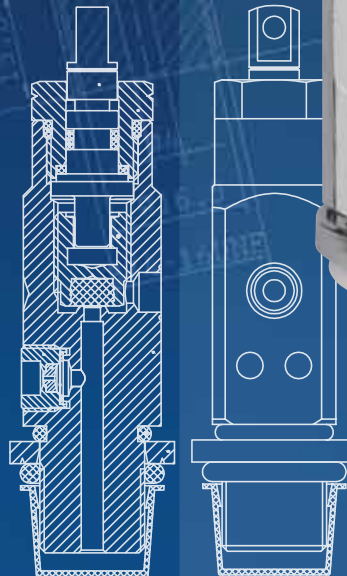
All valves are supplied with rupture discs rated for cylinders with a service pressure of 2,015 psig. Rupture discs rated for other cylinder service pressures are available upon request.

Optional Features:

Z Valve Handknob Example: P870-3-4-3360 changes to P870-4-3-3360Z

Chrome Plated Toggle Example: P870-3-4-3360 changes to P870-4-3-3360T

Gauge Port Example: P870-3-4-3360 changes to P870-4-3-3360G



HARRISON
PRECISION VALVE PRODUCTS

Medical Pin Index Valves

O-Ring Seal Technology for all Medical Gases

Yoke Outlet Pin Index System Connection NGT Tapered Threads for Steel Cylinders

KEY FEATURES:

- O-ring seal technology provides superior leak integrity.
- Easy operation under all pressures.
- Protective and attractive chrome plated finish.
- 100% leak testing on entire production.
- Meets and exceeds CGA V9 and ISO 10297.
- Passed stringent adiabatic oxygen compression testing per ISO 10297.
- All valves bagged and tagged for oxygen service per CGA G4.1.
- All valves pre-drilled to accept aftermarket toggle device.
- All straight thread inlet valves are supplied with cylinder sealing o-ring.
- All valves are supplied with a protective thread cover.

Part Number	Gas Service / Description	CGA	Inlet
P870-4-4-3360	Oxygen	870	1/2" NGT
P870-4-4-3360T	Oxygen with toggle	870	1/2" NGT
P880-4-4-3360	Oxygen-CO2 mixture	880	1/2" NGT
P890-4-4-3360	Oxygen-Helium mixture	890	1/2" NGT
P910-4-1-3360	Nitrous Oxide	910	1/2" NGT
P930-4-4-3360	Helium	930	1/2" NGT
P940-4-1-3360	Carbon Dioxide	940	1/2" NGT
P950-4-4-3360	Medical Air	950	.750-16UNF2A
P960-4-4-3360	Nitrogen	960	1/2" NGT
P965-4-4-3360	Nitrous Oxide - Oxygen mixture	965	1/2" NGT
P973-4-4-3360	Medical Gas Mixtures	973	1/2" NGT

All valves are supplied with safety relief devices as specified by the Compressed Gas Association Standard S1.1. Safety relief devices are flush style CG-4 devices backed by 165 F fuse metal, except valves specified for Carbon Dioxide (CGA 940) and Nitrous Oxide (CGA 940), where a CG-1 hex style pressure relief device without fuse metal is required.

All valves are supplied with rupture discs rated for cylinders with a service pressure of 2,015 psig. Rupture discs rated for other cylinder service pressures are available upon request.

Optional Features:

Chrome Plated Toggle Example: P870-4-4-3360 changes to P870-4-4-3360T



EV Series – Vertical Outlet Oxygen Valves

Medical Homecare, Hospital and Emergency Applications

CGA540 Outlet, Chrome Plated for Durability

All Harrison Valves™ are produced to meet or exceed the highest US and international standards. Harrison Valves™ are rigorously tested through a robust quality assurance system, and Harrison Valve™ maintains carefully monitored manufacturing processes to ensure that all Harrison Valves™ meet or exceed design and performance specifications.

KEY FEATURES:

- Compact design for use with aluminum medical and composite oxygen cylinders for homecare, hospital and emergency oxygen applications.
- Easy to read markings with Open/Close on durable easy to grip handwheel.
- Durable chrome plated brass body resists corrosion.
- Compact design especially suited for use with compact oxygen systems.
- Durable lower plug with Teflon coating for easy operation.
- Easy operation under all pressures.
- 100% leak testing on entire production.
- All valves bagged for cleanliness.
- Common design internal parts and handwheels readily available.
- Single unit, compact pressure relief device with 165F fusible metal safety for maximum cylinder protection.
- Oxygen cleaned to CGA G4.1 specification.

OPTIONS AND SPECIFICATIONS:

All valves are supplied with safety relief devices as specified by the Compressed Gas Association Standard S1.1. Safety relief devices are flush style CG-4 devices backed by 165° F fuse metal. Rupture discs rated for many cylinder service pressures are available upon request.



Part Number	Description	Gas Service	Outlet Thread	Inlet	Safety
EV540-2-4-xxxxG	Vertical outlet oxygen valve	Oxygen	.625-18UNF2A	CGA540	CG4, 165F
EV540-3-4-xxxxG	Vertical outlet oxygen valve	Oxygen	.750-16UNF2A	CGA540	CG4 165F

Part Number EV540-3-4-3360G shown with CGA540 outlet for oxygen service, .750-16UNF2A inlet for aluminum cylinders, 3360PSI safety for 2015PSI service with a 1/8 FNPT gauge port.

Recreational Scuba Diving Valves

Packed Pressure Seal Technology

SCUBA INTERNATIONAL DIN/YOKE VALVE Straight, Parallel Threads for Aluminum Cylinders

KEY FEATURES:

- Standard Yoke Outlet w/ spin out adapter
- Converts a standard SCUBA YOKE to a 230 BAR DIN Outlet
- Exceeds CGA V9 standards for cylinder valves for compressed gases.
- Cycle tested 5000 times to exceed all real world applications.
- Engineered with high flow characteristics to maximize regulator performance.
- Valve design allows for easy and comfortable cylinder handling.
- Slant back hand wheel allows easy access.
- Positive hand wheel grip for easy identification of on/off direction.
- Designed with proven and readily available replacement valve parts.
- DOT approved burst disc assembly uses integrated disc and plug design.

SPECIFICATIONS:

Pressures:

3000PSI Service Pressure, 12,000PSI Test Pressure

Temperature – Storage

Minimum: -65 F

Maximum: 155 F

Temperature – Operating

Minimum: -50 F

Maximum: 120 F

Cycle Tested

Minimum: 5000 Cycles, full pressure Nitrogen

Operating Torque @ 0 PSIG Inlet Pressure 1 – 2 in. lb.

Closing Torque @ 2000 PSIG Inlet Pressure 2 – 3 in. lbs.

DIMENSIONS:

Overall Height: 3.875

Overall Length Installed height: 2.875

Part Number	Gas Service / Description	Outlet	Inlet
HSV-C-48	Breathing Air, Diving applications	DIN/YOKE	3/4" Aluminum Cylinders

All valves are supplied with safety devices as specified by the Compressed Gas Association Standard S1.1

Standard HSV-C-48 valves are supplied with safeties for 3000PSI service pressure cylinders and supplied with a 5000PSI safety.

Rupture discs rated for other cylinder service pressures are available upon request.

See rear of specification page for overhaul parts, kits and repair instructions.



Recreational Scuba Diving Valves

Packed Pressure Seal Technology

SCUBA "K" Valve Connection, CGA850 Yoke Connection Straight, Parallel Threads for Aluminum Cylinders

KEY FEATURES:

- Exceeds CGA V9 standards for cylinder valves for compressed gases.
- Cycle tested 5000 times to exceed all real world applications.
- Engineered with high flow characteristics to maximize regulator performance.
- Valve design allows for easy and comfortable cylinder handling.
- Slant back hand wheel allows easy access.
- Positive hand wheel grip for easy identification of on/off direction.
- Designed with proven and readily available replacement valve parts.
- DOT approved burst disc assembly uses integrated disc and plug design.

SPECIFICATIONS:

Pressures:

3000PSI Service Pressure, 12,000PSI Test Pressure

Temperature – Storage

Minimum: -65 F

Maximum: 155 F

Temperature – Operating

Minimum: -50 F

Maximum: 120 F

Cycle Tested

Minimum: 5000 Cycles, full pressure Nitrogen

Operating Torque @ 0 PSIG Inlet Pressure 1 – 2 in. lb.

Closing Torque @ 2000 PSIG Inlet Pressure 2 – 3 in. lbs.

DIMENSIONS:

Overall Height: 3.875

Overall Length Installed height: 2.875

Part Number	Gas Service / Description	CGA	Inlet
HSV-48	Breathing Air, Diving applications	850	3/4" Aluminum Cylinders

All valves are supplied with safety devices as specified by the Compressed Gas Association Standard S1.1

Standard HSV-48 valves are supplied with safeties for 3000PSI service pressure cylinders and supplied with a 5000PSI safety.

Rupture discs rated for other cylinder service pressures are available upon request.

See rear of specification page for overhaul parts, kits and repair instructions.



High Pressure Line Valves

Panel Mount and Line Applications

KEY FEATURES:

- Durable chrome plated brass body resists corrosion.
- Compact design especially suited for use on compressor panels and cascade systems.
- Very low torque operation under all pressures.
- Dependable packed seal design using common valve parts readily available.
- Wide variety of use; Panel Mount, Line Valve, and Line Valve with Bleed for use with filling pigtails.
- Easy to read markings; Open/Close, 6000PSI, Line Direction Arrows.
- 100% Factory tested with nitrogen at full working pressure.

SPECIFICATIONS:

Pressures:

6000PSI Service Pressure, 24,000PSI Test Pressure

Temperature – Storage

Minimum: -65 F

Maximum: 155 F

Temperature – Operating

Minimum: -50 F

Maximum: 120 F

Cycle Tested

Minimum: 5000 Cycles, full pressure Nitrogen

Operating Torque @ 0 PSIG Inlet Pressure 1 – 2 in. lb.

Closing Torque @ 2000 PSIG Inlet Pressure 2 – 3 in. lbs.

FLOW DATA:

Flow Constant: Cv – Full Open .284

Flow CFM @ 2000 PSIG Inlet 280

DIMENSIONS:

Overall Length: 2.50

Overall Length Installed Inline 2.11

Centerline of inlet to top of handle 2.70

Part Number	Description	Inlet	Outlet	Drawing
HLV-1	Line valve	¼" F.NPT	¼" M.NPT	Figure #1
HLV-2	Line valve with panel feature	¼" F.NPT	¼" M.NPT	Figure #2
HLV-3	Line valve with bleed feature	¼" F.NPT	¼" F.NPT	Figure #3



Figure #1

Figure #2

Figure #3



