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Wherever gas is used, we are there

High Pressure Cylinder Valves

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CBA series
Commercial and POL Style Acetylene Cylinder Valves
O-Ring seal type

List Features
- O-Ring technology provides superior leak integrity
- Easy operation and long service life
- 100% leak test to 1.2 times service pressure
- All markings are located on the valve neck to protect them from damage
- Large orifice size provides faster vacuum and filling rates
- Durable forged brass body manufactured by Cavagna Group
- Unique seat holder design
- Available configurations include: Inlet threads (NGT, DIN477, BS, EN, EN ISO)

List Technical data

Pressure		
Maximum Service Pressure	34,5 bar	500 PSI
Test Pressure	60 bar	885 PSI
Temperature - Storage	-50° C ÷ 65° C	-60° F ÷ 149° F
Temperature - Operating	-45° C ÷ 65° C	-50° F ÷ 149° F
Life Cycle	2,000 minimum	
Torque Values for PBA Acetylene valves		
Max Operating torque @ 0 PSIG inlet pressure	1 N/m	8.8 lbs / inch
Max Operating torque @ 240 PSIG inlet pressure	1 N/m	8.8 lbs / inch
Max Operating torque @ 2,900 PSIG inlet pressure	2 N/m	17.7 lbs / inch
Max Overtorque	25 N/m	221 lbs / inch
Flow Capacity (CV)	n/a	
Orifice Ø:	3.5 mm	0.137 inch

Material components

Valve Body	Forged Brass EN12165 alloy
Back up ring	PTFE
Handwheel	Aluminium
Seat	PA 612-Zytel
O-rings	EPDM
Antifriction ring	Delrin
Bonnet	Brass alloy conforming EN12164

Conforms to all requirements of:

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
ISO 10297	International Standard
ISO 14246	International Standard

Ordering Information

Part Number	Type	CGA Outlet	Outlet Thread Size	Inlet Thread Size
CBA 8 300 o	Commercial	300	.825"-14 NGO RH Ext.	1/2" NGT
CBA 1 300 o	Commercial	300	.825"-14 NGO RH Ext.	3/4"-14 NGT
CBA 6 300 o	Commercial	300	.825"-14 NGO RH Ext.	1"-11 1/2 NGT
CBA 1 410 o	Canadian Style	410	.850"-14 NGO LH Int.	3/4"-14 NGT
CBA 8 510 o	P.O.L.	510	.885"-14 NGO LH Int.	1/2" NGT
CBA 1 510 o	P.O.L.	510	.885"-14 NGO LH Int.	3/4"-14 NGT
CBA 6 510 o	P.O.L.	510	.885"-14 NGO LH Int.	1"-11 1/2 NGT

CBO series
Vertical Outlet Acetylene Valve with Handwheel
For Collar Style Cylinders

List Features
- Rugged brass forged body manufactured by Cavagna Group
- O-Ring design provides industries best leak tightness and easy operation
- Compact Handwheel provides better access to the valve Handwheel and eliminates interference with cylinder collar
- Inlet screen prevents filler mass or felts from entering the valve
- Easy to read valve markings are roll stamped on the valve neck - not on the wrench flats
- Soft seat design provides positive shut off

List Technical data

Pressure		
Maximum Service Pressure	34,5 bar	500 PSI
Test Pressure	60 bar	885 PSI
Temperature - Storage	-50° C ÷ 65° C	-60° F ÷ 149° F
Temperature - Operating	-45° C ÷ 65° C	-50° F ÷ 149° F
Life Cycle	2,000 minimum	
Torque Values for PBA Acetylene valves		
Max Operating torque @ 0 PSIG inlet pressure	1 N/m	8.8 lbs / inch
Max Operating torque @ 240 PSIG inlet pressure	1 N/m	8.8 lbs / inch
Max Operating torque @ 2,900 PSIG inlet pressure	2 N/m	17.7 lbs / inch
Max Overtorque	25 N/m	221 lbs / inch
Flow Capacity (CV)	n/a	
Orifice Ø:	3.5 mm	0.137 inch

Material components

Valve Body	Forged Brass EN121645
Handwheel	Aluminium
Bonnet	Brass EN12164
Seat	PA 612 Zytel 158
O-Rings	EPDM
Back up Ring	PTFE
Antifriction ring	Delrin
Filter	Stainless Steel

Conforms to all requirements of:

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
ISO 10297	International Standard
ISO 14246	International Standard

Ordering Information

Part Number	Type	CGA Outlet	Outlet Thread Size	Inlet Thread Size
CBO 1 510 0	P.O.L.	510	.885"-14 NGO LH Int.	3/4" NGT
CBO 1 300 0	Commercial	300	.825"-14 NGO RH Ext.	3/4" NGT

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CBH/CBI series

New Handwheel O-ring Seal B and MC

Acetylene Cylinder Valves

List Features

- Handwheel design permits easy access to the valve stem and bonnet to perform leak checks in compliance with DOT requirements
- Positive spindle nut seal with the valve body eliminates the need for constant tightening of packing nuts
- Robust brass Handwheel prevents breakage and corrosion associated with aluminium versions
- Self locking zinc coated steel nut affixes Handwheel to the Sturdy Brass Stem
- Proven double O-Ring technology assures positive leak tight operation extending service life
- Easy low torque operation eliminates the need for wrenches or keys
- Soft seat extends service life and reduces leakage
- Handwheel design eliminates costly valve repairs reducing overall "Cost of Ownership"

List Technical data

Pressure		
Proof	100 bar min	1,465 PSI min
Test	60 bar	885 PSI
Temperature - Storage	-50° C ÷ 65° C	-60° F ÷ 149° F
Temperature - Operating	-45° C ÷ 65° C	-50° F ÷ 149° F
Life Cycle	2,000 minimum	
Torque Values for PBH/PBI Acetylene valves		
Operating torque @ 500 PSIG	3 lbs/inch (CGA 200)	3 lbs/inch (CGA 520)
Max Overtorque	25 N/m	221 lbs / inch
Orifice Ø:	(200) .133 inch	(520) .133 inch

Material components

Valve Body	Forged Brass EN12165
Handwheel	Brass EN12164
Bonnet Nut	Brass EN12164
Seat	PA 612 Zytel 158
O-Rings	EPDM
Back up Ring	PTFE
Fusible plug	212° F Integral Fusible metal
Strainer	AISI 304 100 mesh

Conforms to all requirements of:

CGA S-1.1	Standard for Pressure Relief Devices
CGA V-1	Compressed Gas Cylinder Valve Outlet and Inlet Connections
CGAV9	Standard for Gas Cylinder valves

Ordering Information

Part Number	Gas Service	CGA Outlet	Outlet Thread Size	Inlet Thread Size
CBH 5 520 3	Acetylene	520	.895-18 NGO RH Ext.	3/8-18 NGT
CBI 5 200 3	Acetylene	200	.625-20 NGO RH Ext.	3/8-18 NGT

CBB/CBC series

Wrench Operated Acetylene Valves

List Features

- Valve body made of rugged forged brass produced by Cavagna Group
- Fusible metal pressure relief device
- Large wrench flats for easy installation
- Teflon packing and anti extrusion rings prevent packing leakage
- Plated steel stem resists damage from wrenches and corrosion

List Technical data

Pressure		
Proof	100 bar min	1,465 PSI min
Test	60 bar	885 PSI
Temperature - Storage	-50° C ÷ 65° C	-60° F ÷ 149° F
Temperature - Operating	-45° C ÷ 65° C	-50° F ÷ 149° F
Life Cycle	2,000 minimum	

Torque Values for PBB/PBC Acetylene valves:
See Ordering information below.

Material components

Valve Body	Forged Brass EN12165 alloy
Pressure Relief	212° F Integral Fusible Metal
Packing Nut	Brass EN12164
Packing	Teflon (PTFE)
Packing Gland	Brass EN12164 alloy
Packing Washer	Brass EN12165 alloy
Stem	Steel UNI4838
Strainer	AISI 304 100 mesh

Conforms to all requirements of:

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

Ordering Information

Part Number	Gas Service	CGA Outlet	Outlet Thread Size	Inlet Thread Size
CBB 5 520 3	Acetylene	520	.895-18 NGO RH Ext.	3/8-18 NGT
CBC 5 200 3	Acetylene	200	.625-20 NGO RH Ext.	3/8-18 NGT

Torque Values

Description	Torque
Operating Torque @ 0 psig Inlet Pressure	6 - 10 in lbs
Closing Torque @ 500 psig Inlet Pressure	6 - 10 in lbs
Packing Nut Installation Torque	80 - 100 in lbs
Stem Installation Torque	45 ± 5 in lbs

Flow Data

CGA Outlet Number	200	520
Orifice Ø: Diameter (inches)	.133	.133
Flow Constant: Cv - Full Open	n/a	n/a
Flow CFM @ 240 PSIG Inlet	n/a	n/a

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CBA series

Brass High Pressure Cylinder Valve for Industrial Gases

O-Ring seal type

List Features

- O-Ring technology provides superior leak integrity
- Easy operation under high pressure
- 100% leak test to 1.2 times cylinder service pressure
- All markings are located on the valve neck to protect them from damage
- Large Orifice Ø: provides faster vacuum and filling rates
- Available bursting discs for all DOT cylinders
- Durable forged brass body manufactured by Cavagna Group
- Passes stringent oxygen adiabatic compression test
- Unique seat holder design
- Available configurations include:
  Inlet threads (NGT, UNF, DIN477, BS, EN, EN ISO)
  All CGA outlets available
- Available with inlet thread for DT
- Unitized "plug style" pressure relief device

List Technical data

Pressure		
Maximum Service Pressure	276 bar	4,000 PSI
Temperature - Storage	-50° C ÷ 65° C	-60° F ÷ 149° F
Temperature - Operating	-45° C ÷ 65° C	-50° F ÷ 149° F
Life Cycle	2,000 minimum	
Torque Values for PBA Acetylene valves		
Max Operating torque @ 0 PSIG inlet pressure	1 N/m	8.8 lbs / inch
Max Operating torque @ 240 PSIG inlet pressure	1 N/m	8.8 lbs / inch
Max Operating torque @ 2900 PSIG inlet pressure	2 N/m	17.7 lbs / inch
Max Overtorque	25 N/m	221 lbs / inch
Flow Capacity CV / Full open	n/a	
Orifice Ø:	4 mm	.160 inch

Material components

Valve Body	Forged Brass EN12165 alloy
Bursting disc	Nickel alloy or Stainless Steel
Bursting disc body	Brass (also available with 212°F fusible metal)
Back up Ring	Nylon or PTFE
Bonnet	Brass
Handwheel	Aluminium
Seat	Polyamide
O-rings	EPDM
Antifriction	Delrin
Stem	Brass according to EN 12164 alloy

Conforms to all requirements of:

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
ISO 10297	International Standard
ISO 14246	International Standard

CBA series

Brass High Pressure Cylinder Valve for Industrial Gases

O-Ring seal type

Ordering Information

Part Number	Gas Service	CGA Outlet	Outlet Thread Size	Inlet Thread Size
	Hydrogen			
CBA 8 350 6 xxxx	0 to 3,000 psi	350	.825-14 NGO LH Ext.	1/2"-14 NGT
CBA 1 350 6 xxxx				3/4"-14 NGT
CBA 6 350 6 xxxx				1-11 1/2 NGT
CBA 3 350 6 xxxx				.750"-16 UNF
CBA 9 350 6 xxxx				1.125" -12 UNF
CBA 1 695 6 xxxx	3,000 to 5,500 psi	695	1.045-14 NGO RH Int.	3/4"-14 NGT
CBA 1 703 6 xxxx	5,500 to 7,500 psi	703	1.125-14 NGO LH Int.	3/4"-14 NGT
	Krypton			
CBA 8 580 1 xxxx	0 to 3,000 psi	580	.965-14 NGO RH Int.	1/2"-14 NGT
CBA 1 580 1 xxxx				3/4"-14 NGT
CBA 6 580 1 xxxx				1-11 1/2 NGT
CBA 3 580 1 xxxx				.750"-16 UNF
CBG 9 580 1 xxxx				1.125" -12 UNF
CBA 1 680 1 xxxx	3,000 to 5,500 psi	680	1.045-14 NGO RH Int.	3/4"-14 NGT
CBA 1 677 1 xxxx	5,500 to 7,500 psi	677	1.030-14 NGO LH Ext.	3/4"-14 NGT
	Methane (R50)			
CBA 8 350 6 xxxx	0 to 3,000 psi	350	.825-14 NGO LH Ext.	1/2"-14 NGT
CBA 1 350 6 xxxx				3/4"-14 NGT
CBA 6 350 6 xxxx				1-11 1/2 NGT
CBA 3 350 6 xxxx				.750"-16 UNF
CBA 9 350 6 xxxx				1.125" -12 UNF
CBA 1 695 6 xxxx	3,000 to 5,500 psi	695	1.045-14 NGO RH Int.	3/4"-14 NGT
CBA 1 703 6 xxxx	5,500 to 7,500 psi	703	1.125-14 NGO LH Int.	3/4"-14 NGT
	Natural Gas			
CBA 8 350 6 xxxx	0 to 3,000 psi	350	.825-14 NGO LH Ext.	1/2"-14 NGT
CBA 1 350 6 xxxx				3/4"-14 NGT
CBA 6 350 6 xxxx				1-11 1/2 NGT
CBA 3 350 6 xxxx				.750"-16 UNF
CBA 9 350 6 xxxx				1.125" -12 UNF
CBA 1 695 6 xxxx	3,000 to 5,500 psi	695	1.045-14 NGO RH Int.	3/4"-14 NGT
CBA 1 703 6 xxxx	5,500 to 7,500 psi	703	1.125-14 NGO LH Int.	3/4"-14 NGT
	Neon			
CBA 8 580 1 xxxx	0 to 3,000 psi	580	.965-14 NGO RH Int.	1/2"-14 NGT
CBA 1 580 1 xxxx				3/4"-14 NGT
CBA 6 580 1 xxxx				1-11 1/2 NGT
CBA 3 580 1 xxxx				.750"-16 UNF
CBA 9 580 1 xxxx				1.125" -12 UNF
CBA 1 680 1 xxxx	3,000 to 5,500 psi	680	1.045-14 NGO RH Int.	3/4"-14 NGT
CBA 1 677 1 xxxx	5,500 to 7,500 psi	677	1.030-14 NGO LH Ext.	3/4"-14 NGT
	Nitrogen			
CBA 580 1 xxxx	0 to 3,000 psi	580	.965-14 NGO RH Int.	1/2"-14 NGT
CBA 1 580 1 xxxx				3/4"-14 NGT
CBA 6 580 1 xxxx				1-11 1/2 NGT
CBA 3 580 1 xxxx				.750"-16 UNF
CBA 9 580 1 xxxx				1.125" -12 UNF
CBA 1 680 1 xxxx	3,000 to 5,500 psi	680	1.045-14 NGO RH Int.	3/4"-14 NGT
CBA 1 677 1 xxxx	5,500 to 7,500 psi	677	1.030-14 NGO LH Ext.	3/4"-14 NGT
	Air (R729)			
CBA 8 346 1 xxxx	0 psi to 3,000 psi	346	.825"- 14 NGO RH Ext.	1/2"-14 NGT
CBA 1 346 1 xxxx				3/4"-14 NGT
CBA 6 346 1 xxxx				1-11 1/2 NGT
CBA 3 346 1 xxxx				.750"-16 UNF
CBA 9 346 1 xxxx				1.125" -12 UNF
CBA 1 347 1 xxxx	3,000 to 5,500 psi	347	.825-14 NGO RH Ext.	3/4"-14 NGT
CBA 1 702 1 xxxx	5,500 to 7,500 psi	702	1.125"-14 NGO RH Ext.	3/4"-14 NGT
	Argon			
CBA 8 580 1 xxxx	0 to 3,000 psi	580	.965-14 NGO RH Int.	1/2"-14 NGT
CBA 1 580 1 xxxx				3/4"-14 NGT
CBA 6 580 1 xxxx				1-11 1/2 NGT
CBA 3 580 1 xxxx				.750"-16 UNF
CBA 9 580 1 xxxx				1.125" -12 UNF
CBA 1 680 1 xxxx	3,000 to 5,500 psi	680	1.045-14 NGO RH Int.	3/4"-14 NGT
CBA 1 677 1 xxxx	5,500 to 7,500 psi	677	1.030-14 NGO LH Ext.	3/4"-14 NGT
	Butane/Propane			
CBA 8 555 1 xxxx	Liquid Withdrawal	555	.903-14 NGO LH Ext.	1/2"-14 NGT
CBA 1 555 1 xxxx				3/4"-14 NGT
CBA 6 555 1 xxxx				1-11 1/2 NGT
CBA 3 555 1 xxxx				.750"-16 UNF
CBA 9 555 1 xxxx				1.125" -12 UNF
CBA 8 320 1 xxxx	**Carbon Dioxide**	320	.825-14 NGO RH Ext.	1/2"-14 NGT
CBA 1 320 1 xxxx	(R744)			3/4"-14 NGT
CBA 6 320 1 xxxx				1-11 1/2 NGT
CBA 3 320 1 xxxx				.750"-16 UNF
CBG 9 320 1 xxxx				1.125" -12 UNF

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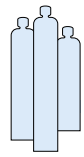

CBA series
Brass High Pressure Cylinder Valves
for Industrial Gases

Ordering Information

Part Number	Gas Service	CGA Outlet	Outlet Thread Size	Inlet Thread Size
	Carbon Monoxide			
CBA 8 350 6 xxxx	0 to 3,000 psi	350	.825-14 NGO LH Ext.	1/2"-14 NGT
CBA 1 350 6 xxxx				3/4"-14 NGT
CBA 6 350 6 xxxx				1-11 1/2 NGT
CBA 3 350 6 xxxx				.750"-16 UNF
CBA 9 350 6 xxxx				1.125" -12 UNF
CBA 1 695 6 xxxx	3,000 to 5,500 psi	695	1.045-14 NGO LH Int.	3/4"-14 NGT
CBA 1 703 6 xxxx	5,500 to 7,500 psi	703	1.125-14 NGO LH Int.	3/4"-14 NGT
CBA 8 660	**1,2 Dichloroethylene**	660	1.030-14 NGO RH Ext.	1/2"-14 NGT
CBA 1 660	(R1130)		(Face Washer Seal)	3/4"-14 NGT
CBA 6 660				1-11 1/2 NGT
CBA 3 660				.750"-16 UNF
CBA 9 660				1.125" -12 UNF
CBA 8 580 1 xxxx	**Helium**	580	.965-14 NGO RH Int.	1/2"-14 NGT
CBA 1 580 1 xxxx	0 to 3,000 psi			3/4"-14 NGT
CBA 6 580 1 xxxx				1-11 1/2 NGT
CBA 3 580 1 xxxx				.750"-16 UNF
CBG 9 580 1 xxxx				1.125" -12 UNF
CBA 1 680 1 xxxx	3,000 to 5,500 psi	680	1.045-14 NGO RH Int.	3/4"-14 NGT
CBA 1 677 1 xxxx	5,500 to 7,500 psi	677	1.030-14 NGO LH Ext.	3/4"-14 NGT
CBA 8 326 1 xxxx	**Nitrous Oxide**	326	.825-14 NGO RH Ext.	1/2"-14 NGT
CBA 1 326 1 xxxx	(R744a)			3/4"-14 NGT
CBA 6 326 1 xxxx				1-11 1/2 NGT
CBA 3 326 1 xxxx				.750"-16 UNF
CBA 9 326 1 xxxx				1.125" -12 UNF
	Oxygen			
CBA 8 540 1 xxxx	0 to 3,000 psi	540	.903-14 NGO RH Ext.	1/2"-14 NGT
CBA 1 540 1 xxxx				3/4"-14 NGT
CBA 6 540 1 xxxx				1-11 1/2 NGT
CBA 3 540 1 xxxx				.750"-16 UNF
CBA 9 540 1 xxxx				1.125" -12 UNF
CBA 1 577 1 xxxx	3,000 to 4,000 psi	577	.960-14 NGO RH Ext.	3/4"-14 NGT
CBA 1 701 1 xxxx	4,000 to 5,500 psi	701	1.103-14 NGO RH Ext.	3/4"-14 NGT
CBA 8 660 1 xxxx	**Sulfur Dioxide**	660	1.030-14 NGO RH Int.	1/2"-14 NGT
CBA 1 660 1 xxxx				3/4"-14 NGT
CBA 6 660 1 xxxx				1-11 1/2 NGT
CBA 3 660 1 xxxx				.750"-16 UNF
CBA 9 660 1 xxxx				1.125" -12 UNF
	Xenon			
CBA 8 580 1 xxxx	0 to 3,000 psi	580	.965-14 NGO RH Int.	1/2"-14 NGT
CBA 1 580 1 xxxx				3/4"-14 NGT
CBA 6 580 1 xxxx				1-11 1/2 NGT
CBA 3 580 1 xxxx				.750"-16 UNF
CBA 9 580 1 xxxx				1.125" -12 UNF
CBA 1 680 1 xxxx	3,000 to 5,500 psi	680	1.045-14 NGO RH Int.	3/4"-14 NGT
CBA 1 677 1 xxxx	5,500 to 7,500 psi	677	1.030-14 NGO LH Ext.	3/4"-14 NGT

xxxx Denotes Pressure Relief Device burst disc rupture pressure.

Available with:
4 and 7 thread oversize inlets: To order change the first number "1" in the part number to "4" or "7"

example: CBA 1 320 1 xxxx becomes CBA 4 320 1 xxxx

Chromium plating: To order, change the letter "B" in the part number to letter "D"
example: CBA 1 540 1 xxxx becomes CDA 1 540 1 xxxx

Fusible backed pressure relief devices in 165° F and 212° F nominal melting temperatures:
To order, change the eigth position in the part number to "5" for 165° F and "6" for 212° F
example: CBA 1350 1 xxxx becomes CBA 1 350 5 xxxx for 165° F or CBA 1 350 6 xxxx for 212° F

Pressure Relief Device Selection Guide

TABLE 2.0 PRESSURE RELIEF DEVICE SELECTION CHART FOR CBA/CBO/CDA CYLINDER VALVES SERIES

Cylinder Service Pressure			Disc Rupture Range Psig @ 165° F		Pressure Relief Device Cap Stamping	Pressure Relief Device Replacement Part Number		
D.O.T. Spec. 3A, 3AA, 3AL Cylinders In Psig	D.O.T. Spec. Exemption Cylinders In Psig	ISO/UN Cylinders	Minimum	Maximum		CG-1 Style Frangible Disc Only	CG-4 Style Frangible Disc & 165° F Fuse Metal	CG-5 Style Frangible Disc & 212° F Fuse Metal
1665			2500	2775	2775	CS1 2775	CS3 2775	CS4 2775
1800			2700	3000	3000	CS1 3000	CS3 3000	CS4 3000
2015			3025	3360	3360	CS1 3360	CS3 3360	CS4 3360
2265			3400	3775	3775	CS1 3775	CS3 3775	CS4 3775
2400			3600	4000	4000	CS1 4000	CS3 4000	CS4 4000
		200	3915	4350	4350	CS1 4350	CS3 4350	CS4 4350
2670			4005	4450	4450	CS1 4450	CS3 4450	CS4 4450
2900			4350	4833	4833	CS1 4833	CS3 4833	CS4 4833
2950			4425	4917	4917	CS1 4917	CS3 4917	CS4 4917
3000			4500	5000	5000	CS1 5000	CS3 5000	CS4 5000
	3600		4860	5400	5400	CS1 5600	CS3 5600	CS4 5600
3500/3600			5250	5833	5833	CS1 5833	CS3 5833	CS4 5833
4000			6000	6665	6665	CS1 6665	CS3 6665	CS4 6665
	4500		6075	6750	6750	CS1 6750	CS3 6750	CS4 6750
5000			7500	8333	8333	CS1 8333	CS3 8333	CS4 8333
	6000		8100	9000	9000	CS1 9000	CS3 9000	CS4 9000
6000			9000	10000	10000	CS1 10000	CS310000	CS410000
		230	4500	5000	5000	CS1 5000	CS3 5000	CS4 5000
		300	5875	6525	6525	CS1 6750	CS3 6750	CS4 6750
	5000		6750	7500	7500	CS1 7500	CS3 7500	CS4 7500

To order chromium plated device caps CG-1 style please order CS2 + (xxxx) (Setting pressure of the rupture disc).

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P 2009 series
Residual High Pressure Cylinder Valves
for Industrial Gases

List Features
- Residual pressure valve, o-ring seal type for various gases including CO2
- Filling connector available separately

List Technical data

Pressure		
Maximum Service Pressure	230 bar	3,336 PSI
Test	276 bar	4,000 PSI
Temperature Range	-40°C ÷ +65°C	-40°F ÷ +149°F
Life Cycle	2,000 minimum	
Guaranteed External Tightness	leakage ≤ 6 cm³/h	0.788 scfm
Guaranteed Internal Tightness	leakage ≤ 6 cm³/h	0.788 scfm
Residual pressure device	2.5 to 4 bar	35 to 58 PSI
	(according to customer's specifications)	

Material components

Handwheel	Aluminium
Valve Body	Brass alloy according to EN12165
O-ring	EPDM
Seat pad	Polyamide
Bursting disc	Nickel alloy or Stainless Steel
Spring	Stainless steel or copper beryllium
Seal	Plastic
Bursting disc body	Brass
Spindle	Brass
Spring retainer	Brass

Options
Customized Handwheel logo cap
Dip tube
Bursting disc safety available in various settings
Chromium plating
Plastic Handwheel
Filter
Parallel thread
Thread for dip tube installation

FILLING ADAPTOR

Conforms to all requirements of:

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
ISO 10297	International Standard
ISO 14246	International Standard
ISO 15996	International Standard

P 1020 series
Residual High Pressure Cylinder Valves
for Industrial Gases

List Features
- Residual pressure valve, o-ring seal type for various gases including CO2
- Filling connector available separately

List Technical data

Pressure		
Maximum Service Pressure	230 bar	3,336 PSI
Test	276 bar	4,000 PSI
Temperature Range	-40°C ÷ +65°C	-40°F ÷ +149°F
Life Cycle	2,000 minimum	
Guaranteed External Tightness	leakage ≤ 6 cm^3/h	0.788 scfm
Guaranteed Internal Tightness	leakage ≤ 6 cm^3/h	0.788 scfm
Residual pressure device	2.5 to 4 bar	35 to 58 PSI
	(according to customer's specifications)	

Material components

Handwheel	Aluminium
Valve Body	Brass alloy according to EN12165
O-ring	EPDM
Seat pad	Polyamide
Bursting disc	Nickel alloy or Stainless Steel
Spring	Stainless steel or copper beryllium
Seal	Plastic
Bursting disc body	Brass
Spindle	Brass
Spring retainer	Brass

Options
Customized Handwheel logo cap
Dip tube
Bursting disc safety available in various settings
Chromium plating
Plastic Handwheel
Filter
Parallel thread
Thread for dip tube installation

FILLING ADAPTOR

Conforms to all requirements of:

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
ISO 10297	International Standard
ISO 14246	International Standard
ISO 15996	International Standard

FILLING CONNECTORS

for Residual Pressure valves

List Features

- The filling connectors are available in brass, in accordance with all CGA standardized cylinder valve outlets
- The connectors can be used with all the different types of residual pressure valves:

- P2009 series
- P1020 series

- The design with a special retractile pin is also available, to allow the connectors to be used with the standard valves series.

Options

Chromium plating

IVIPR series
Valve with Integrated Pressure Regulator
for Oxygen

List Features
- Residual pressure valve with integrated Pressure Regulator
- Ergonomically designed with a compact, user friendly casing
- All of the user's primary functions are visible and accessible from one side without turning the cylinder
- Suitable for Oxygen
- Meets all the requirements of ISO 22435, EN-ISO 15996

iVIPR

List Technical data

Pressure		
Maximum Service Pressure	230 or 300 bar	3,336 or 4,350 PSI
Test	276 bar	4,000 PSI
Outlet pressure	adjustable 0 to 145 PSI	
Temperature Range	-40°C ÷ +65°C	-40°F ÷ +149°F
Life Cycle	2,000 minimum	
Guaranteed External Tightness	leakage ≤ 6 cm^3/h	0.788 scfm
Guaranteed Internal Tightness	leakage ≤ 6 cm^3/h	0.788 scfm
Residual pressure range	2.5 to 4 bar	35 to 58 PSI
	(according to customer's specifications)	
Flow Rate	Q1 30 m^3/h	

Material components

Handwheel	Aluminium
Valve Body	Brass alloy according to EN12165
O-ring	EPDM
Main shut off seat pad	PA66
Spring	Stainless steel AISI 302
Sealing cap	Acetal resin
Spring regulator	Cu Be, AISI
Filter	Sintered Bronze
Diaphragms pressure reducer seat	HYTREL 5526
Toroidal ring	EPDM

Options
Customized Handwheel logo cap
Threaded connection and quick connection available according to EN 561

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IVIPR series

Valve with Integrated Pressure Regulator

for Ar/CO2 Mix and Inert Gases Mix

List Features

- Residual pressure valve with integrated Pressure Regulator
- Ergonomically designed with a compact, user friendly casing
- All of the user's primary functions are visible and accessible from one side without turning the cylinder
- Suitable for Ar/CO2 mix and Inert Gases Mix
- Meets all the requirements of ISO 22435, EN-ISO 15996

iVIPR

List Technical data

Pressure		
Maximum Service Pressure	230 or 300 bar	3,336 or 4,350 PSI
Test	276	4,000 PSI
Temperature Range	-40°C ÷ +65°C	-40°F ÷ +149°F
Life Cycle	2,000 minimum	
Guaranteed External Tightness	leakage ≤ 6 cm³/h	0.788 scfm
Guaranteed Internal Tightness	leakage ≤ 6 cm³/h	0.788 scfm
Residual pressure range	2.5 to 4 bar	35 to 58 PSI
	(according to customer's specifications)	
Flow rate:	Q1 0-40 L/min	

Material components

Handwheel	Aluminium
Valve Body	Brass alloy according to EN12165
O-ring	EPDM
Main shut off seat pad	PA66
Spring	Stainless steel AISI 302
Sealing cap	Acetal resin
Spring regulator	Cu Be, AISI
Filter	Sintered Bronze
Diaphragms pressure reducer seat	HYTREL 5526
Toroidal ring	EPDM

Options

Customized Handwheel logo cap
Threaded connection and quick connection available according to EN 561

IVIPR series
Valve with Integrated Pressure Regulator
for Acetylene

List Features
- Valve with integrated Pressure Regulator
- Ergonomically designed with a compact, user friendly casing
- All of the user's primary functions are visible and accessible from one side without turning the cylinder
- Suitable for Acetylene
- Meets all the requirements of ISO 22435 (except acetylene decomposition test)

List Technical data

Pressure		
Maximum Service Pressure	25 bar	360 PSI
Test	30 bar	435 PSI
Outlet Pressure	adjustable 0 to 17.4 PSI	
Temperature Range	-40°C ÷ +65°C	-40°F ÷ +149°F
Life Cycle	2,000 minimum	
Guaranteed External Tightness	leakage ≤ 6 cm^3/h	0.788 scfm
Guaranteed Internal Tightness	leakage ≤ 6 cm^3/h	0.788 scfm
Flow rate:	Q1 1 m^3/h	

iVIPR

Material components

Handwheel	Aluminium
Valve Body	Brass alloy according to EN12165
O-ring	EPDM
Main shut off seat pad	PEEK
Spring	Stainless steel AISI 302
Sealing cap	Acetal resin
Spring regulator	AISI
Filter	Sintered Bronze
Diaphragms pressure reducer seat	HYTREL 5526
Toroidal Ring	EPDM

Options
Customized Handwheel logo cap
Threaded connection and quick connection available according to EN 561

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NOS series
Chromium Plated Brass High Pressure Cylinder Valves
for Nitrogen Dioxide - O-Ring seal type

List Features
- O-Ring technology provides superior leak integrity
- Easy operation under high pressure
- 100% leak test to 1.2 times cylinder service pressure
- Available bursting discs for all DOT cylinders
- Different inlet threads available upon request

List Technical data

Pressure

Maximum Service Pressure	124 bar	1,800 PSI
Test	149 bar	2,161 PSI
Temperature - Storage	-50° C ÷ 65° C	-60° F ÷ 149° F
Temperature - Operating	-45° C ÷ 65° C	-50° F ÷ 149° F
Life Cycle	2,000 minimum	
Max Overtorque	9 N/m	79 lbs / inch
Flow Capacity CV / Full open	n/a	
Orifice Ø:	6 mm	.260"

Material components

Valve Body	Brass according to EN12164 alloy
Bursting disc	Nickel alloy
Bursting disc body	Brass
Back up Ring	PTFE
Bonnet	Brass
Handwheel	Plastic
Seat	Polyamide
O-rings	EPDM
Stem	Brass according to EN 12164 alloy

Conforms to all requirements of:

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

Ordering Information

Part Number	Gas Service	Outlet Thread Size	Inlet Thread Size
CCS300013000	Nitrous Dioxide	1/4-27 NPT	.625-18 UNF 2A
			.750-16 UNF 2A

NOS series
Chromium Plated Brass High Pressure Cylinder Valves
for Nitrogen Dioxide - O-Ring seal type

List Features
- O-Ring technology provides superior leak integrity
- Easy operation under high pressure
- 100% leak test to 1.2 times cylinder service pressure
- All marking on the valve neck, protects against damage
- Large Orifice Ø: provides faster vacuum and filling rates
- Gauge port available
- Bursting discs available for all DOT cylinders
- Available configurations include:
  Inlet threads (NGT, UNF, DIN477, BS, EN, EN ISO)

List Technical data

Pressure

Maximum Service Pressure	207 bar	3,000 PSI
Test	249 bar	3,597 PSI
Temperature - Storage	-50° C ÷ 65° C	-60° F ÷ 149° F
Temperature - Operating	-45° C ÷ 65° C	-50° F ÷ 149° F
Life Cycle	2,000 minimum	
Max Overtorque	25 N/m	221 lbs / inch
Flow Capacity CV / Full open	n/a	
Orifice Ø:	8 mm	.315"

Material components

Valve Body	Forged Brass according to EN12165 alloy
Bursting disc	Nickel alloy
Bursting disc body	Brass (also available with 212°F fusible metal)
Back up Ring	Polyamide
Bonnet	Brass
Handwheel	Aluminium
Seat	Polyamide
O-rings	EPDM
Antifriction	Polyamide
Stem	Brass according to EN 12164 alloy

Conforms to all requirements of:

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

Ordering Information

Part Number	Gas Service	Outlet Thread Size	Inlet Thread Size
V0A9APA001	Nitrous Dioxide	CGA 660	1.125-12 UNF 2A