



Superior Products, LLC

Redefining Gas Management Systems

CATALOG #18



Brass & Stainless Steel
Gas Fittings & Assemblies



Flexible & Rigid Pigtails



Manifolds & Gas Management Systems



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PROUD MEMBER OF :



product description guide

Superior Products, LLC. has made every effort to publish the most helpful and comprehensive catalog of compressed gas products available. With safety and accurate product specification as top priorities, our product descriptions include information on sizes, operating pressures, application, construction materials, CGA numbers, and all other relevant information.

CGA numbers identify products intended for specific gas services. All Superior fittings are manufactured to Compressed Gas Association standards.

In addition to CGA numbers, many popular fittings are commonly referred to as “**A**”, “**B**”, “**C**”, and “**D**” sized fittings. For your convenience, these letter identifications are also included in our product descriptions as “**A**”, “**B**”, “**C**”, and “**D**”. **Pressure ratings** on A, B, C, and D sized fittings included on these pages are limited by the CGA to 200 PSI (1400 kPa) maximum working pressure. Kilopascals (kPa) are the metric equivalent of Pounds Per Square Inch (PSI).

gas acronyms used

(not all standard)

CGA Compressed Gas Association	RH Right Handed
NGO National Gas Outlet	LH Left Handed
NPT National Pipe Thread	WT Wrench Tight
UNS Unified Numbering System	HT Hand Tight
PSI Pounds per Square Inch	QC Quick Connect
EXT External (M - Male Thread)	CP Chrome Plated
INT Internal (F - Female Thread)	ID Inside Diameter
CS Countersunk	OD Outside Diameter

metric conversion

PSI to kPa to Bar

The following conversions are used throughout this catalog, rounded off for ease of use. Kilopascals & Bar conversions are provided whenever possible. (1 PSI = 6.89 kPa = .07 Bar)

200 PSI = 1379 kPa = 14 Bar	3000 PSI = 20685 kPa = 207 Bar
400 PSI = 2758 kPa = 28 Bar	4500 PSI = 27580 kPa = 310 Bar
500 PSI = 3400 kPa = 35 Bar	5500 PSI = 37920 kPa = 380 Bar
1000 PSI = 6895 kPa = 70 Bar	6000 PSI = 41370 kPa = 414 Bar

maximum gas withdrawal rates for liquified gases

CRYOGENIC CYLINDERS

CO₂ - 110 SCFH

NITROUS OXIDE - 80 SCFH

ARGON, NITROGEN, OXYGEN - 75 SCFH

HIGH PRESSURE W/LIMITED WITHDRAWAL RATE

CO₂ 50 - SCFH

NITROUS OXIDE - 50 SCFH

Acetylene - 1/10 CYL CAPACITY/HOUR

part type

letter prefix

Adaptors - Outlet	A
Bushings - Pipe	B
Brass Tubing	BT
Cable Connectors	CN
Check Valves	CV
Couplers - Tees	C
Copper Tubing	CT
Crimping Tools	KT
Dust Caps & Chain	CC
Elbow	EL
Cryogenic Elbow	CEL
Cryogenic Flexible Hose	CHF
Cryo Hand Tight with Elbow	CHTE
Cryogenic Phase Separator	CPS
Check Valves	CV
Filters	F
Flare Adaptors	FA
Flash Back Arrestor	FA
Gas Manifold Assemblies	GMA
Gas Manifold Fittings	GMF
Hand Tight Cryogenic	HTC
Hand Tight Nuts	HTN
Hose Repair Kits	RK
Manifold Blocks	MB
Chrome Nuts	MN
Chrome Nipples	MNP
Leak Detector	LD
Nipples	NP
Nuts	N
NPT Male	MNPT
NPT Female	FNPT
'O' Rings	OR
Pigtails Rigid	PT
Pigtails Flexible	PTF
Plastic Tips	T
Plugs & Chains	PC
Power Cable Holders	PCH
Reverse Flow Check Valve	RCV
Splicers	S
Stainless Steel	SS
Snap Rings	XSR
Valves	V
Washers	W
"Y" Connectors	Y
"Y" Connectors with Valves	YV

NEW FROM SUPERIOR PRODUCTS FEATURED IN THIS CATALOG !

NEW PRODUCTS

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brass hose nuts, nipples & splicers

Maximum Pressure 200 PSI

Hose Nuts

200 PSI

Oxygen	Thread Size	CGA	Part No.
	"A" 3/8"-24-RH	020	N-10
	"B" 9/16"-18-RH	022	N-20
	Railroad 41/64"-18-RH	028	N-30
	"C" 7/8"-14-RH	024	N-34
	"D" 1-1/4"-12-RH	026	N-42

Hose Nuts

200 PSI

Fuel Gas	Thread Size	CGA	Part No.
	"A" 3/8"-24-LH	021	N-11
	"B" 9/16"-18-LH	023	N-21
	Railroad 41/64"-18-LH	029	N-31
	"C" 7/8"-14-LH	025	N-35
	"D" 1-1/4"-12-LH	027	N-43

Barb Hose Nipples

200 PSI

Size/Length	For Hose Size	Part No.
		
NP-10		
"A", 1-7/32"	3/16" I.D.	NP-4
"B", 3-1/32"	4-5/32" I.D.	NP-5
"B", 1-7/16"	3/16" I.D.	NP-6
"B", 1-7/16"(with 'O'Ring)	3/16" I.D.	NP-6W
"B", 1-7/16"	1/4" I.D.	NP-10
"B", 1-7/16"(with 'O'Ring)	1/4" I.D.	NP-10W
"C", 1-35/64"	1/4" I.D.	NP-12
"B", 1-7/16"	5/16" I.D.	NP-14
"B", 1-7/16"	3/8" I.D.	NP-18
"B", 1-3/4"	3/8" I.D.	NP-20
"C", 2"	3/8" I.D.	NP-24
"C", 2-1/4"	1/2" I.D.	NP-28
"C", 4-9/16"	1/2" I.D.	NP-30
"D", 2-1/2"	1/2" I.D.	NP-34
"D", 3-1/2"	3/4" I.D.	NP-36
'O'Ring for NP-6W & NP-10W		XOR-002

Spiral Hose Nipples

200 PSI

Size/Length	For Hose Size	Part No.
		
NP-46		
"A", 1-1/4"	3/16" I.D.	NP-40
"B", 1-5/16"	3/16" I.D.	NP-42
"B", 1-19/32"	1/4" I.D.	NP-46
"B", 1-5/8"	3/8" I.D.	NP-54
Nipples With Threads- "B", "C" & "D" Size		
		
NP-605		
Size/Length	Thread size	Part No.
"B", 1"	1/8" MNPT	NP-595
"B", 1-1/2"	1/8" MNPT	NP-596
"C", 2"	1/4" MNPT	NP-605*
"C", 2-1/2"	1/4" MNPT	NP-606*
"D", 2-1/2"	1/2" MNPT	NP-640

*To order with filter, add suffix "RF"

Hose Splicers

200 PSI

Barb Hexagon Center Stop	For Hose Size	Part No.
	3/16" I.D.	S-233
	1/4" I.D.	S-244
	5/16" I.D.	S-255
	3/8" I.D.	S-266
S-244		
Barb Round Center Stop	For Hose Size	Part No.
	3/16" I.D.	S-333
	1/4" I.D.	S-344
	5/16" I.D.	S-355
	3/8" I.D.	S-366
	1/2" I.D.	S-388
S-344		

200 PSI

Spiral Hexagon Center Stop	For Hose Size	Part No.
	1/4" I.D.	S-544
	S-544	
Barb No Center Stop	For Hose Size	Part No.
	3/16" I.D.	S-433
	1/4" I.D.	S-444
	3/8" I.D.	S-466
S-444		

Maximum Pressure 200 PSI
200 PSI

Brass Thread To Hose Barb Adaptor

	Thread Size	For Hose Size	Part No.
Male NPT Thread  A-113	1/8" MNPT	1/8" I.D.	A-101
	1/8" MNPT	3/16" I.D.	A-102
	1/8" MNPT	1/4" I.D.	A-103
	1/8" MNPT	3/8" I.D.	A-105
	1/4" MNPT	1/8" I.D.	A-111
	1/4" MNPT	3/16" I.D.	A-112
	1/4" MNPT	1/4" I.D.	A-113
	1/4" MNPT	5/16" I.D.	A-114
	1/4" MNPT	3/8" I.D.	A-115
	3/8" MNPT	1/4" I.D.	A-122
	3/8" MNPT	5/16" I.D.	A-123
	3/8" MNPT	3/8" I.D.	A-124
Female NPT Thread Thread  A-151	1/8" FNPT	1/8" I.D.	A-151
	1/8" FNPT	3/16" I.D.	A-152
	1/8" FNPT	1/4" I.D.	A-153
	1/4" FNPT	1/8" I.D.	A-161
	1/4" FNPT	3/16" I.D.	A-162
	1/4" FNPT	1/4" I.D.	A-163
	1/4" FNPT	5/16" I.D.	A-164
	1/4" FNPT	3/8" I.D.	A-165

Hose Barb Adaptors

200 PSI

(Standard B Thread)	Thread Size	For Hose Size	Part No.
 A-51	Oxygen "B" 9/16"-18-RH-EXT	3/16" I.D.	A-50
	Fuel Gas "B" 9/16"-18-LH-EXT	3/16" I.D.	A-51
	Oxygen "B" 9/16"-18-RH-EXT	1/4" I.D.	A-60
	Fuel Gas "B" 9/16"-18-LH-EXT	1/4" I.D.	A-61

Hose Adaptors

200 PSI

Swivel Nut to Hose Barb Adaptors	Thread Size	For Hose Size	Part No.
 A-254	Oxygen "A" 3/8"-24-RH-INT	1/4" I.D. Hose	A-250
	Fuel Gas "A" 3/8"-24 LH-INT	1/4" I.D. Hose	A-251
	Oxygen "B" 9/16"-18 -RH-INT	1/4" I.D. Hose	A-254
	Fuel Gas "B" 9/16"-18 -LH-INT	1/4" I.D. Hose	A-255

Swivel Nut Adaptors

200 PSI

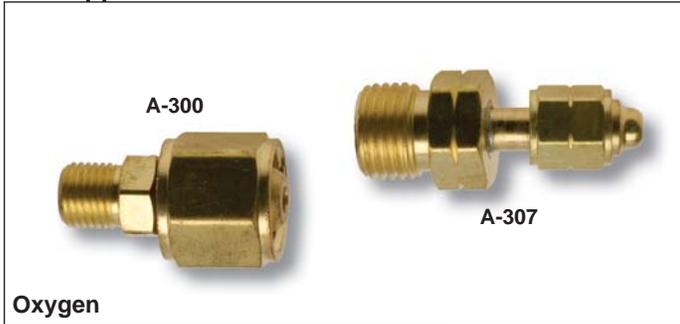
	Thread Size	Hose Connection	Part No.
 A-193	1/4" MNPT	"B" 9/16"-18-RH-INT	A-192
		"B" 9/16"-18-LH-INT	A-193

brass hose fittings

Maximum Pressure 200 PSI

External Hose Nut to Swivel Nut and Nipple

200 PSI



Oxygen

Thread Size	Thread Size	Part No.
"A" 3/8"-24-RH-EXT	"B" 9/16"-18-RH-INT	A-300
"B" 9/16"-18-RH-EXT	"A" 3/8"-24-RH-INT	A-306
"B" 9/16"-18-RH-EXT	"C" 7/8"-14-RH-INT	A-308

Fuel Gas

Thread Size	Thread Size	Part No.
"A" 3/8"-24-LH-EXT	"B" 9/16"-18-LH-INT	A-301
"B" 9/16"-18-LH-EXT	"A" 3/8"-24-LH-INT	A-307

Pipe Thread to Swivel Nut and Nipple 2-1/2"

200 PSI



Oxygen

Thread Size	Thread Size	Part No.
1/4" MNPT	"B" 9/16"-18-RH-INT	A-188

Fuel Gas

Thread Size	Thread Size	Part No.
1/4" MNPT	"B" 9/16"-18-LH-INT	A-189

Female Pipe Thread to "B" Connections

200 PSI



Oxygen

Thread Size	Thread Size	Part No.
1/8" FNPT	"B" 9/16"-18-RH-EXT	A-238
1/4" FNPT	"B" 9/16"-18-RH-EXT	A-242

Fuel Gas

Thread Size	Thread Size	Part No.
1/4" FNPT	"B" 9/16"-18-LH-EXT	A-243

Female NPT to Internal Swivel Nut

200 PSI



Oxygen

Thread Size	Thread Size	Part No.
1/4" FNPT	"B" 9/16"-18-RH-INT	A-228

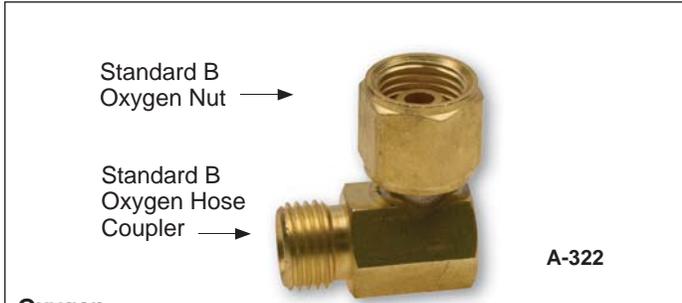
Fuel Gas

Thread Size	Thread Size	Part No.
1/4" FNPT	"B" 9/16"-18-LH-INT	A-229

brass/stainless steel hose fittings, regulator outlets

90° External Hose Coupler to Internal Swivel Nut

200 PSI



Oxygen

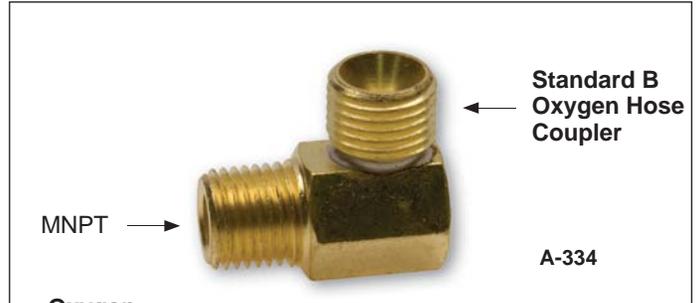
Thread Size	Thread Size	Part No.
"B" 9/16"-18-RH-EXT	"B" 9/16"-18-RH-INT	A-322
1/4" MNPT	"B" 9/16"-18-RH-INT	A-194

Fuel Gas

Thread Size	Thread Size	Part No.
"B" 9/16"-18-LH-EXT	"B" 9/16"-18-LH-INT	A-323

90° External Pipe to External "B" coupler

200 PSI



Oxygen

Thread Size	Thread Size	Part No.
1/4" MNPT	"B" 9/16"-18-RH-EXT	A-334

Fuel Gas

Thread Size	Thread Size	Part No.
1/4" MNPT	"B" 9/16"-18-LH-EXT	A-335

Hose Couplers (Brass)

200 PSI



Oxygen

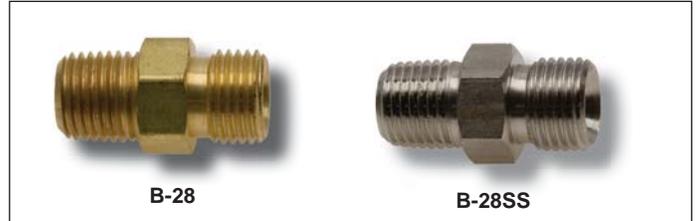
Thread Size	Thread Size	Part No.
"A" 3/8"-24-RH-EXT	"A" 3/8"-24-RH-EXT	C-10
"B" 9/16"-18-RH-EXT	"A" 3/8"-24-RH-EXT	C-20
"B" 9/16"-18-RH-EXT	"B" 9/16"-18-RH-EXT	C-50
"C" 7/8"-14-RH-EXT	"C" 7/8"-14-RH-EXT	C-80
"D" 1-1/4" - 12-RH-EXT	"D" 1-1/4" - 12-RH-EXT	C-90

Fuel Gas

Thread Size	Thread Size	Part No.
"A" 3/8"-24LH-EXT	"A" 3/8"-24-LH-EXT	C-11
"B" 9/16"-18LH-EXT	"A" 3/8"-24-LH-EXT	C-21
"B" 9/16"-18LH-EXT	"B" 9/16"-18-LH-EXT	C-51
"C" 7/8"-14-LH-EXT	"C" 7/8"-14-LH-EXT	C-81
"D" 1-1/4" - 12-LH-EXT	"D" 1-1/4" - 12-LH-EXT	C-91

Regulator Outlet Adaptors

200 PSI



Oxygen

Thread Size	Thread Size	Part No.
1/8" MNPT	"A" 3/8"-24-RH-EXT	B-6
1/8" MNPT	"B" 9/16"-18-RH-EXT	B-8
1/4" MNPT	"A" 3/8"-24-RH-EXT	B-26
1/4" MNPT	"B" 9/16"-18-RH-EXT	B-28
1/4" MNPT	"B" 9/16"-18-RH-EXT	B-28SS
3/8" MNPT	"B" 9/16"-18-RH-EXT	B-50
1/2" MNPT	"C" 7/8"-14-RH-EXT	B-66
1/2" MNPT	"D" 1-1/4" - 12-RH-EXT	B-72
3/4" MNPT	"D" 1-1/4" - 12-RH-EXT	B-74

Fuel Gas

Thread Size	Thread Size	Part No.
1/8" MNPT	"A" 3/8"-24-LH-EXT	B-7
1/8" MNPT	"B" 9/16"-18-LH-EXT	B-9
1/4" MNPT	"A" 3/8"-24-LH-EXT	B-27
1/4" MNPT	"B" 9/16"-18-LH-EXT	B-29
3/8" MNPT	"B" 9/16"-18-LH-EXT	B-51
1/2" MNPT	"C" 7/8"-14-LH-EXT	B-67

check valves

Check Valves

	Inlet	Flow	Outlet	Part No.
Torch Type Check Valve  CV-10R				200 PSI
	Oxygen "A" 3/8"-24-RH-EXT	→	"A" 3/8"-24-RH-INT	CV-10R
	Fuel Gas "A" 3/8"-24-LH-EXT	→	"A" 3/8"-24-LH-INT	CV-11L
B-Size One Piece Torch Type  CV-20R				200 PSI
	Oxygen "B" 9/16"-18-RH-EXT	→	"B" 9/16"-18-RH-INT	CV-20R
	Fuel "B" 9/16"-18-LH-EXT	→	"B" 9/16"-18-LH-INT	CV-21L
Regulator Bushing Adaptor Type  CV-128R				200 PSI
	Oxygen "B" 9/16"-RH-INT	→	"B" 9/16"-18-RH-EXT	CV-128R
	Fuel Gas "B" 9/16"-LH-INT	→	"B" 9/16"-18-LH-EXT	CV-129L
	1/4" MNPT	→	"B" 9/16"-18-RH-EXT	CV-28R
	1/4" MNPT	→	"B" 9/16"-18-LH-INT	CV-29L
Low Pressure Inline Check Valves  CV-25				200 PSI
	1/4" MNPT	→	1/4" MNPT	CV-24
	1/4" MNPT	→	1/4" FNPT	CV-25
	1/4" FNPT	→	1/4" FNPT	CV-26
High Pressure Inline Check Valves  CV-230				3000 PSI
	1/4" MNPT	→	1/4" MNPT	CV-215
	1/4" MNPT	→	1/4" FNPT	CV-219
	1/4" FNPT	→	1/4" FNPT	CV-229
	1/4" FNPT	→	1/4" MNPT	CV-230
Stainless Steel Inline Check Valves  CV-219SS				6000 PSI
	1/4" MNPT	→	1/4" MNPT	CV-215SS
	1/4" MNPT	→	1/4" FNPT	CV-219SS
	1/4" FNPT	→	1/4" FNPT	CV-229SS
	1/4" FNPT	→	1/4" MNPT	CV-230SS

flash arrestors



- Designed for “B” torch & hose fittings
- Built-in check valve prevents reverse flow of gas
- Bronze sintered element stops multiple flashes (no resetting required)
- U/L Listed
- Purchase as POP display pack or as individual components
- High Flow Capacity
- 2 PSI is minimum pressure for gas to flow

*Always leak test system before pressurizing
 *Always bleed the system before disconnecting

200 PSI

Description	Part No.
Oxygen/Fuel Gas Set, Regulator Style, POP Display	FBK-100
Oxygen/Fuel Gas Set, Torch Style, POP Display	FBK-200
Individual Oxygen Arrestor, Regulator Style	FB-122
Individual Fuel Gas Arrestor, Regulator Style	FB-123
Individual Oxygen Arrestor, Torch Style	FB-222
Individual Fuel Gas Arrestor, Torch Style	FB-223

quick connectors



- Durable brass coupling pin
- Designed for “B” torch and hose fittings
- Design guided by ISO 7289 safety standards
- Non-interchangeable oxygen/fuel gas connectors prevent cross connections
- Built-in automatic gas cut-offs shut down upstream gases when disconnected

*Always leak test system before pressurizing
 *Always bleed the system before disconnecting

Oxygen: 200 PSI Max Fuel Gas: 50 PSI Max

Description	Part No.
Oxygen & Fuel Gas Set, Torch Style, POP Display	QCT-100
Oxygen Set, Torch Style	QCT-112
Fuel Gas Set, Torch Style	QCT-113
Oxygen & Fuel Gas Set, Regulator Style, POP Display	QCR-200
Oxygen Set, Regulator Style	QCR-222
Fuel Gas Set, Regulator Style	QCR-223
Oxygen & Fuel Gas Set, Hose Style, POP Display	QCH-300
Oxygen Set, Hose Style	QCH-332
Fuel Gas Set, Hose Style	QCH-333
Replacement Pins for Above Parts:	Part No.
Male Pin, Oxygen, Torch Style, 9/16-18 RH-INT	QCT-112-PIN
Male Pin, Fuel Gas, Torch Style, 9/16-18 LH-INT	QCT-113-PIN
Male Pin, Oxygen, Regulator Style, 9/16-18 RH-INT	QCT-222-PIN
Male Pin, Fuel Gas, Regulator Style, 9/16-18 LH-INT	QCT-223-PIN
Male Pin, Oxygen, Hose Style, 9/16-18 RH-EXT	QCH-332-PIN
Male Pin, Fuel Gas, Hose Style, 9/16-18 LH-EXT	QCH-333-PIN

Superior Products is dedicated to providing solutions for all parts of your business: from the innovative product lines we manufacture, to the new technology we offer as a business solutions partner.

Our start-to-finish solutions include design and engineering, manufacturing, reliable customer service and logistical support.

MADE TO ORDER (MTO)

Superior Products offers a Made To Order (MTO) Program for specialty gas fittings. A dedicated manufacturing cell can machine and deliver parts with a reduced lead time - typically within two weeks. The MTO program is perfect for managing inventories of low-demand parts, prototyping parts, and running small volumes of custom parts.



For a quote or more information, please contact our Customer Care department at 800-651-9490.

SUPPLY CHAIN MANAGEMENT

Our online Customer Managements System allows you to easily manage your supply chain with around the clock access to:

- Part pricing and availability
- Shipment tracking
- Procurement planning
- Inventory management
- Quotes
- Orders
- Invoices
- Part specifications
- Quality Control
- Account information



Visit cms.superiorprod.com to sign-up or learn more

ENGINEERING EXCELLENCE

Superior Products realizes that not all standard parts work for all applications. We can manufacture parts to your specifications or help you design a part to meet your application.

Superior Products designs custom gas management systems, engineered to:

- Improve efficiency
- Work within challenging space constraints
- Manage gas usage
- Provide the most effective layout
- Better meet the application's overall needs

If you do not see what you need in this catalog just call and let us help you design what you need.

LOGISTICS

Superior Products offers a number of logistics solutions for order and inventory needs.

- Superior Products can inventory parts and drop ship/blind drop ship for you.
- A Kanban system can be implemented to ensure you have the necessary parts on hand.



QUALITY

Beyond our ISO 9001:2000 registration, all of our employees and S.P. teams they support have committed themselves to delivering the highest quality products in the compressed gas industry. Our Superior Products Quality Teams are committed to quality. If it has the  logo on it you can be assured it is the best.



brass / stainless steel pipe thread fittings

Brass: Maximum Pressure 3,000 PSI
 Stainless Steel (SS): Maximum Pressure 6,000 PSI

Brass/Stainless Steel Pipe Thread Fittings

		Thread Size	Material	Part No.
90° Elbow				
 PEL-4HP	 PEL-4SS	1/8" FNPT x 1/8" FNPT	Brass	PEL-2HP
		1/4" FNPT x 1/4" FNPT	Brass	PEL-4HP
		1/2" FNPT x 1/2" FNPT	Brass	PEL-8HP
		1/4" FNPT x 1/4" FNPT	SS	PEL-4SS
90° Street Elbow				
 PL-4HP	 PL-4SS	1/8" FNPT x 1/8" MNPT	Brass	PL-2HP
		1/4" FNPT x 1/4" MNPT	Brass	PL-4HP
		3/8" FNPT x 3/8" MNPT	Brass	PL-6HP
		1/2" FNPT x 1/2" MNPT	Brass	PL-8HP
		1/4" FNPT x 1/4" MNPT	SS	PL-4SS
45° Street Elbow				
 PSL-4-4HP	 PSL-4SS	1/8" FNPT x 1/8" MNPT	Brass	PSL-2-2HP
		1/4" FNPT x 1/4" MNPT	Brass	PSL-4-4HP
		1/4" FNPT x 1/4" MNPT	SS	PSL-4SS
Cap				
 P-54		1/8" FNPT	Brass	P-52
		1/4" FNPT	Brass	P-54
		3/8" FNPT	Brass	P-56
		1/2" FNPT	Brass	P-58
Tee				
 PFT-4HP	 PFT-4SS	1/8" FNPT (3)	Brass	PFT-2HP
		1/4" FNPT (3)	Brass	PFT-4HP
		1/2" FNPT (3)	Brass	PFT-8HP
		1/4" FNPT (3)	SS	PFT-4SS
Street Tee				
 PST-4HP		1/8" FNPT (2) x 1/8" MNPT	Brass	PST-2HP
		1/4" FNPT (2) x 1/4" MNPT	Brass	PST-4HP
Cross				
 PCR-4HP	 PCR-4SS	1/8" FNPT (4)	Brass	PCR-2HP
		1/4" FNPT (4)	Brass	PCR-4HP
		1/4" FNPT (4)	SS	PCR-4SS

brass / stainless steel pipe thread fittings

Brass: Maximum Pressure 3,000 PSI

Stainless Steel (SS): Maximum Pressure 6,000 PSI

Brass/Stainless Steel Pipe Thread Fittings

Hex Brass Nipples		Thread Size	Material	Part No.
 <p>B-241 B-215SS</p>		1/8" MNPT x 1/8" MNPT	Brass	B-200
		1/4" MNPT x 1/8" MNPT	Brass	B-206
		1/4" MNPT x 1/4" MNPT	Brass	B-215
		1/4" MNPT x 1/4" MNPT	SS	B-215SS
		3/8" MNPT x 3/8" MNPT	Brass	B-222
		3/8" MNPT x 1/4" MNPT	Brass	B-239
		1/2" MNPT x 1/4" MNPT	Brass	B-241
		1/2" MNPT x 3/8" MNPT	Brass	B-242
		1/2" MNPT x 1/2" MNPT	Brass	B-243
Hex Head Plug				
 <p>P-4</p>		1/8" MNPT	Brass	P-2
		1/4" MNPT	Brass	P-4
		1/2" MNPT	Brass	P-8
Adaptors				
 <p>B-219 B-219SS</p>		1/4" FNPT x 1/4" MNPT	Brass	B-219
		1/4" FNPT x 1/4" MNPT	SS	B-219SS
		1/8" FNPT x 1/8" MNPT	Brass	B-293
		1/4" FNPT x 1/8" MNPT	Brass	B-294
		3/8" FNPT x 1/4" MNPT	Brass	B-296
		1/2" FNPT x 1/4" MNPT	Brass	B-299
Connectors				
 <p>B-218 B-218SS</p>		1/8" FNPT x 1/8" FNPT	Brass	B-201
		1/4" FNPT x 1/8" FNPT	Brass	B-207
		1/4" FNPT x 1/4" FNPT	Brass	B-218
		1/4" FNPT x 1/4" FNPT	SS	B-218SS
		1/2" FNPT x 1/4" FNPT	Brass	B-231
		1/2" FNPT x 1/2" FNPT	Brass	B-233
Reducer Bushing				
 <p>B-284</p>		1/4" MNPT x 1/8" FNPT	Brass	B-280
		3/8" MNPT x 1/4" FNPT	Brass	B-282
		1/2" MNPT x 1/4" FNPT	Brass	B-284
		1/2" MNPT x 3/8" FNPT	Brass	B-285
		3/4" MNPT x 1/4" FNPT	Brass	B-286
		3/4" MNPT x 1/2" FNPT	Brass	B-288
Round Brass Nipples				
 <p>PNP-4-25</p>		1/8" MNPT, 1.5" Long	Brass	PNP-2-15
		1/4" MNPT, 1.5" Long	Brass	PNP-4-15
		1/4" MNPT, 2.0" Long	Brass	PNP-4-20
		1/4" MNPT, 2.5" Long	Brass	PNP-4-25
		1/4" MNPT, 3.0" Long	Brass	PNP-4-30
		1/4" MNPT, 3.5" Long	Brass	PNP-4-35
Pipe Extension				
 <p>B-430</p>		1/8" FNPT x 1/8" MNPT, 2.5" Long	Brass	B-395
		1/4" FNPT x 1/4" MNPT, 3.0" Long	Brass	B-430

Round Brass Hose Ferrules



Diameter(INT)	Length	Part No.
.330"	1/2"	6231
.358"	1/2"	833
.380"	1/2"	622
.410"	1/2"	620
.450"	9/16"	769
.478"	11/16"	4750
.500"	1/2"	624
.500"	1"	7322
.525"	1"	7323
.525"	1/2"	625
.531"	1"	7324
.548"	31/64"	626
.562"	1"	7325
.564"	3/4"	3588
.575"	31/64"	KK
.593"	1"	7326
.600"	1/2"	JJ
.625"	1/2"	II
.625"	1"	7327
.650"	1/2"	HH
.656"	1"	7328
.675"	33/64"	GG
.687"	1"	7329
.700"	33/64"	FF
.718"	1"	7330
.725"	17/32"	EE
.750"	17/32"	DD
.750"	1"	7331
.781"	1"	7332
.812"	1"	7333
.850"	9/16"	Z
.875"	27/32"	7244A
.900"	27/32"	5029A
.937"	27/32"	7242A
.975"	27/32"	5028A

NOTE: Hose diameters may vary, check for proper inside diameter of the ferrules.

Oval Brass Dual Hose Braces Maximum Pressure 200 PSI



Dimension(INT)	Length	Metal Gauge	Part No.
.448 x .890	15/32"	.019"	9116
.474 x .943	15/32"	.019"	9979
.535 x 1.071	3/4"	.024"	9940P
.593 x 1.109	3/4"	.024"	9593
.593 x 1.238	3/4"	.025"	453
.700 x 1.325	3/4"	.025"	454

Gas Leak Detector, Oxygen Safe

Description	Part No.
8 oz. Reusable Plastic Applicators	LD-008
1 Gallon Container for Refilling Applicators	LD-128



hose repair kits

REPAIR KITS:

Hose Connections, Crimping Tools & Pipe Fittings



RK-26



RK-27

Description	Part No.
Superior hose repair kits include: fittings (nuts & nipples, splicers, couplers and ferrules) for the stated hose I.D. and thread size. Also, included with the kits are a 2 or 3 hole, vise grip crimping tool for fast, easy and reliable crimping of the hose fittings. All kits come in a sectioned plastic case with instructions and fitting description charts. NEW All kits are available without the crimping tool and just the fittings that you need if you already have a crimper. To order the kit you want without a crimping tool, add LT to the back of the kit part number. For example, the RK-27LT will get you just the replacement fittings in the same sectioned box.	
"B" hose fittings with KT-28 Crimping Tool. Contains nuts, nipples, couplers, splicers and ferrules for 1/4" and 3/16" I.D. hose.	RK-24
"B" hose fittings, fittings only, nipples, couplers, splicers and ferrules for 1/4" and 3/16" I.D. hose.	RK-24LT
"A" and "B" hose fittings with KT-28 Crimping Tool. Contains nuts, nipples, couplers, splicers and ferrules for 1/4" and 3/16" I.D. hose.	RK-26
"A" and "B" hose fittings only nuts, nipples, couplers, splicers and ferrules for 1/4" and 3/16" I.D. hose.	RK-26LT
"B" hose fittings with KT-28 Crimping Tool. Contains nuts, nipples, couplers, splicers and ferrules for 1/4" I.D. hose.	RK-27
"B" hose fittings only. Contains nuts, nipples, couplers, splicers and ferrules for 1/4" I.D. hose.	RK-27LT
"B" hose fittings with KT-29 Crimping Tool. Contains nuts, nipples, couplers, splicers and ferrules for 5/16" & 3/8" I.D. hose.	RK-28
"B" hose fittings only. Contains nuts, nipples, couplers, splicers and ferrules for 5/16" & 3/8" I.D. hose.	RK-28LT
Ferrules only with KT-28 Crimping Tool for 1/4" and 3/16" I.D. hose	RK-30
Ferrules only for 1/4" and 3/16" I.D. hose	RK-30LT
"B" hose fittings only. Contains nuts, nipples, couplers, splicers and ferrules for 1/4" and 3/16" I.D. hose.	RK-35LT
Inert hose fittings with KT-28 crimping tool. Contains nuts, nipples, couplers, splicers and ferrules for 1/4" I.D. hose	RK-50
Inert hose fittings only. Contains nuts, nipples, couplers, splicers and ferrules for 1/4" I.D. hose	RK-50LT

Ferrule Crimping Tools, Vise Grip Type

Description	Part No.
 <p>KT-28</p>	<p>2-Hole Jaws to Crimp 1/2" wide to crimp 3/16" - 1/4" Hose</p>
 <p>KT-29</p>	<p>2-Hole Jaws to Crimp 1/2" wide to crimp 5/8" - 11/16" Hose</p>
 <p>KT-30</p>	<p>3-Hole Jaws to Crimp 1/2" wide to crimp 5/16", 11/32", 27/64" Hose Diameters 7/16" and 9/16" on Twin or Single Hose</p>
<p>*No hammer, vise, or other tool needed. Insert hose with ferrule and splicer or nut and nipple in proper hole. Offset tool approximately 1/8" from end of ferrule and squeeze. Make 1/4 turn and squeeze again.</p>	
Description	Part No.
 <p>SCR-100</p>	<p>Bench top, 5-die, crimper Die sizes for 5/8", 37/64", 17/32", 31/64", and 11/16" diameters.</p>

power cable nipples & connector assemblies

Brass Nipple & Copper Tube Assembly

Maximum Pressure 200 PSI

	Description	Part No.
 <p>CN-16</p>	"B" Brass Nipple x .225" O.D. Copper Tube, Max.140" Dia. Cable Hole	CN-16*
	"B" Brass Nipple x .322" O.D. Copper Tube, Max.246" Dia. Cable Hole * use with nuts N-2400 or N-2500	CN-20*
 <p>CN-36</p>	"C" Brass Nipple x .263" O.D. Copper Tube & Max.166" Dia. Cable Hole	CN-32*
	"C" Brass Nipple x .322" O.D. Copper Tube & Max.246" Dia. Cable Hole * use with nuts N-3600 or N-3700	CN-36*
 <p>CN-28</p>	"C" Brass Nipple x .225" O.D. Copper Tube & Max.140" Dia. Cable Hole * use with nuts N-34 or N-35	CN-28*

Power Cable Connector w/ Brass Swivel Nut & Nipple Soldered to Copper Tube for Crimping

	Description	Part No.
 <p>CN-48</p>	"A" Brass Nipple with 3/8"-24 RH-EXT Brass Nut x .322" O.D Copper Tube and Max .246" Cable Hole	CN-48
	"A" Brass Nipple with 3/8"-24 LH EXT Brass Nut x .322" O.D. Copper Tube and Max .246" Cable Hole	CN-49
 <p>CN-54</p>	"A" Brass Nipple with 3/8"-24 RH EXT Brass Nut x .322" O.D Copper Tube and Max .246" Cable Hole	CN-54
 <p>CN-60</p>	.21" Dia. Brass Nipple with 1/4"-28 INT Brass Nut x .225 O.D. Copper Tube and Max .140" Cable Hole	CN-60
 <p>CN-68</p>	.37" Dia. Brass Nipple with 7/16"-20 INT Brass Nut x .375 O.D. Copper Tube and Max .245" Cable Hole	CN-68
 <p>CN-72</p>	"B" Brass Nipple with 5/8"-18 EXT Brass Nut x .468 O.D. Copper Tube and Max .328" Cable Hole	CN-72

Brass Power Cable Nipples (One Piece)

	Description	Part No.
 <p>CN-10</p>	"A" Nipple x .250" O.D. Tube and Max .203" Diameter Cable Hole * use with nuts N-14 or N-15	CN-6*
	"B" Nipple x .375" O.D. Tube (.420"O.D. Barbs) Hole and Max .312" Diameter Cable * use with nuts N-2400 or N-2500	CN-10*

hose connections for inert arc welders

Air-Water Coupler

Maximum Pressure 200 PSI



C-134

Thread Size	Part No.
5/8"-18-RH-EXT x 5/8"-18-RH-EXT	C-130
5/8"-18-RH-EXT x 9/16"-18-RH-EXT	C-134
5/8"-18-LH-EXT x 9/16"-18-LH-EXT	C-135

Air-Water Adaptor



A-404

Thread Size	Part No.
1/8" MNPT x 5/8"-18-RH-INT	A-402
1/4" MNPT x 5/8"-18-RH-INT	A-404
1/4" MNPT x 5/8"-18-LH-INT	A-405
1/4" MNPT x 5/8"-18-RH-EXT	A-450

Air-Water Hose Adaptors with Swivel Nuts



A-478

A-424

A-462

Thread Size	Part No.
1/4" MNPT 5/8"-18-RH- EXT "B"	A-414
1/4" MNPT 5/8"-18-LH- EXT "B"	A-415
"B" 5/8"-18-RH-EXT-90 5/8"-18-RH- INT "B"	A-424
"B" 5/8"-18-RH-EXT x "B" 9/16"-18-RH-EXT	A-462
"B" 5/8"-18-RH-INT x "B" 9/16"-18-RH-INT	A-478
"B" 5/8"-18-RH-INT x "B" 9/16"-18-RH-INT (one piece)	A-479

Inert Arc Hose Nuts



N-2400

Thread Size	Part No.
Use with:	
"A" 3/8"-24-RH-EXT NP-66, 67, "A" Cable Connectors	N-14
"A" 3/8"-24-LH-EXT NP-66, 67, "A" Cable Connectors	N-15
"B" 5/8"-18-RH-EXT NP-69, 70, 72, 73, 74, 76, "B" Cable Connectors	N-2400
"B" 5/8"-18-LH-EXT NP-69, 70, 72, 73, 74, 76, "B" Cable Connectors	N-2500
"C" 7/8"-14-RH-EXT NP-606, "C" Cable Connectors	N-3600
"C" 7/8"-14-LH-EXT NP-606, "C" Cable Connectors	N-3700

Air-Water Nut

Maximum Pressure 200 PSI

 N-26	Thread Size	Use with:	Part No.
	5/8"-18-RH-INT	NP-595, NP-596	N-26

Inert Arc Barb Hose Nipples

 NP-73	Description	For Hose Size	Use With Nuts	Part No.
	"A"-size	1/8" I.D.	N-14, N-15	NP-66
	"B"-size	1/8" I.D. undersize	N-2400, N-2500	NP-68
	"B"-size	1/8" I.D.	N-2400, N-2500	NP-69
	"B"-size	3/16" I.D.	N-2400, N-2500	NP-70
	"B"-size	1/4" I.D.	N-2400, N-2500	NP-72
	"B" Special 1/4" barb	1/4" I.D.	N-2400, N-2500	NP-73
	"B"-size	5/16" I.D.	N-2400, N-2500	NP-74
	"B"-size	3/8" I.D.	N-2400, N-2500	NP-76

Inert Arc Hose Couplers

Maximum Pressure 200 PSI

 C-124	Thread Size	Thread Size	Part No.
	3/8"-24-RH-INT "A"	3/8"-24-RH-INT "A"	C-118
	3/8"-24-LH-INT "A"	3/8"-24-LH-INT "A"	C-119
	1/4" FNPT	5/8"-18-RH-INT "B"	C-124
	1/4" FNPT	5/8"-18-LH-INT "B"	C-125
	5/8"-18-RH INT "B"	5/8"-18-RH INT "B"	C-126
	5/8"-18-LH INT "B"	5/8"-18-LH INT "B"	C-127
	7/8"-14-RH-INT "C"	7/8"-14-RH-INT "C"	C-144
7/8"-14-LH-INT "C"	7/8"-14-LH-INT "C"	C-145	

British style fittings

H.P. Cylinder Connectors

BS-341-3 Oxygen, Inert Gases

Maximum Pressure (300 bar) 4350 PSI

	Part	Description	Material	Part No.
Hex Nuts 	Nut	5/8"A-RH-EXT	Brass	BN-341-3
	Handtight Nuts 	Nut-HT	5/8"A-RH-EXT	Brass, Plastic Grip
Nipple-Threaded Inlets 	Nipple	1/4" NPT-M, 2.5"Long	Brass	BNP-341-3-2.5
Nipple-Handtight 	Nipple-HT	1/4" NPT-M, 3.5"Long	Brass	BNP-341-3W-3.5
Replacement Items 	"O"Ring	For BNP-341-3W-3.5	Nitrile	OR-580
Adaptor 	Adaptor	From CGA 540 (Oxygen)	Brass	BA-540
	Adaptor	From CGA 580 (Inerts)	Brass	BA-580

BS-341-2 Flammables

Maximum Pressure (300 bar) 4350 PSI

	Part	Description	Material	Part No.
Hex Nuts 	Nut	G 5/8 A-LH-EXT	Brass	BN-341-2
	Nipple-Threaded Inlets 	Nipple	1/4" NPT-M, 2.5"Long	Brass
Nipple-Handtight 	Nipple-HT	1/4" NPT-M, 3.5"Long	Brass	BNP-341-3W-3.5
Replacement Items 	"O"Ring	For BNP-341-3W-3.5	Nitrile	OR-580
Adaptor 	Adaptor	From CGA 510	Brass	BA-510

British /German style fittings

L.P. Hose Connectors

Maximum Pressure 200 PSI

		Part	Description	Material	Part No.
Hex Nuts 	Nut		3/8" R.H. Oxygen, Inerts	Brass	BN-375RH
	Nut		3/8" L.H. Fuel Gas, Combustibles	Brass	BN-375LH
Nipple- Hose Barb 	Nipple		1/4" ID Hose, used for 3/8" Nut	Brass	BNP-375-4
	Nipple		5/16" ID Hose, used for 3/8" Nut	Brass	BNP-375-5

German Style Fittings

DIN-477 Connectors

DIN-6 Inert Gases

Maximum Pressure (300 bar) 4350 PSI

		Part	Description	Material	Part No.
Hex Nuts 	Nut		W 21.80 x 1/14-RH-INT	Brass	DN-477-06
Nipple-Threaded Inlets 	Nipple		1/4" NPT-M, 3.5"Long	Brass	DNP-477-6-3.5
Replacement Items 	Washer		For Nipple	Nylon	DW-477-6N

DIN-9 Oxygen

Maximum Pressure (300 bar) 4350 PSI

		Part	Description	Material	Part No.
Hex Nuts 	Nut		R 3/4-RH-INT	Brass	DN-477-09
Nipple-Threaded Inlets 	Nipple		1/4" NPT-M, 3.5"Long	Brass	DNP-477-6-3.5
Replacement Items 	Washer		For Nipple	Nylon	DW-477-6N

German standard fittings

DIN-10 Nitrogen

Maximum Pressure (300 bar) 4350 PSI

		Part	Description	Material	Part No.
Hex Nuts 	Nut	W 24.32 x 1/14-RH-INT	Brass	DN-477-10	
	Nipple-Threaded Inlets				
Nipple-Threaded Inlets 	Nipple	1/4" NPT-M, 3.5"Long	Brass	DNP-477-6-3.5	
	Replacement Items				
Replacement Items 	Washer	For Nipple	Nylon	DW-477-6N	

DIN-12 Nitrous Oxide

Maximum Pressure (300 bar) 4350 PSI

		Part	Description	Material	Part No.
Hex Nuts 	Nut	R 3/4-RH-EXT	Brass	DN-477-12	
	Nipple-Threaded Inlets				
Nipple-Threaded Inlets 	Nipple	1/4" NPT-M, 3.5"Long	Brass	DNP-477-6-3.5	
	Replacement Items				
Replacement Items 	Washer	For Nipple	Nylon	DW-477-6N	

Product specification guide and ordering information for regulator inlet nuts and nipples

Superior Products offers nuts and nipples in a variety of materials and styles to fit a full range of gas service requirements. Seven different types of nut/nipple combinations are available:

- Brass nut and nipple
- Stainless steel nut and nipple
- Brass, chrome plated nut and nipple
- Nut and nipple with check valve
- Nut and nipple recessed for tubing
- Hand tight nut and nipple
- Quick connect nut and nipple

Please note that all types may not be available for every CGA.

Nipples with check valves

Nipples with integral check valves are designed to provide additional safety in gas management systems and other equipment.

- Check valve nipples can be built into pigtails, tee connections and manifold blocks to resist back flow of gases from lines, equipment and cylinders.
- Check valves are factory installed and are 100% tested.
- Available in brass and stainless steel
- Check valves are for reverse flows only - they are not to be used as flashback arrestors.
- When using high-pressure cylinder valve connections you should always refer to the Compressed Gas Association V-7 and/or V-7.1 for the correct method of determining cylinder valve outlet connection.

Hand tight nuts and nipples

Superior Products hand tight nuts are available in brass or with plastic grips.

- All nuts are machined to CGA specifications and designed with wrench flats.
- Soft tip or o-ring type nipples always should be used with hand tight nuts.
- CGA fittings rated over 3000 PSI do not have soft tips and final gas tight seating requires a wrench to tighten.

ORDERING INFORMATION INLET NIPPLES FILTERERS

Most brass and chrome plated nipples may be ordered in any of the following two configurations:

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

Example: NP-210 with filter becomes NP-210RF

BRASS AND CHROME PLATED BRASS NIPPLES WITHOUT FILTERS

- Simply order the part numbers as listed under the CGA numbers
- Please note that all Superior Products nipples come standard with filter recess, so a filter can be added.

BRASS AND CHROME PLATED BRASS NIPPLES WITH INSTALLED FILTERS

- Add "RF" to end of nipple part numbers listed under the CGA numbers
- Some nipples require filters to be in NPT end of nipples

Part No.

FILTERS FOR REGULATOR		F-7	Porous metal filter sintered bronze (nickel plated), rated at 35 microns 6000psi
		F-8	Porous metal filter sintered bronze (nickel plated), rated at 35 microns 6000psi
NIPPLE RETAINING RING		XSR-020	C-clip available to hold nut in position and protect nipple seating area.

CGA check valve nipples are factory tested and installed in CGA nipples for additional safety in gas systems, etc. to prevent dangerous reverse flow of gases in lines and other compressed gas equipment.

NOTE: These check valves protect against reverse flow only and are not flashback arrestors.

- Available in brass and stainless steel



Flow
Part No. NP-210CV

Also available with the check valve reversed. Specify "RCV".



Flow
Part No. NP-210RCV

inlet nuts & nipples

CGA-170 Non-Corrosive Gases In Small Cylinders

3,000 PSI

	Part	Description	Material	Part No.
Hex Nuts 	Nut	.5625"-18UNF-2B-RH-INT	Brass	N-49
	Nut	.5625"-18UNF-2B-RH-INT	SS	N-49SS
Nipple-Threaded Inlets 	Nipple	1/8" NPT, 1.25" Long	Brass	NP-101
	Nipple	1/8" NPT, 1.25" Long	SS	NP-101SS
Replacement Items 	Washer	For Nipple	PTFE	W-60

CGA-180 All Gases In Small Cylinders

3,000 PSI

	Part	Description	Material	Part No.
Hex Nuts 	Nut	.625 -18UNF-2B-RH-INT	Brass	N-50
	Nut	.625 -18UNF-2B-RH-INT	CP Brass	MN-050
Nipple-Threaded Inlets 	Nipple	1/8" NPT, 1.75" Long	Brass	NP-109
	Nipple	1/8" NPT, 1.75" Long	CP Brass	MNP-109
Replacement Items 	Washer	For Nipple	PTFE	W-65

CGA-200 "MC" acetylene in small cylinders

500 PSI

	Part	Description	Material	Part No.
Hex Nut 	Nut	.628"-20NGO-RH-INT	Brass	N-57
Handtight Nut 	Nut-HT	.628"-20NGO-RH-INT	Brass, Plastic Grip	HTN-57P
Nipple-Threaded Inlets 	Nipple	1/8" NPT, 1.25" Long	Brass	NP-414
Nipple-Handtight 	Nipple-HT	1/8" NPT, 2.5" Long	Brass, PTFE	NP-418T3
Replacement Item 	Replacement Tip	For HT Nipple	PTFE	T418-3

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

CGA-280 Medical Breathing Mixtures

3,000 PSI

		Part	Description	Material	Part No.
Hex Nuts 	Nut		.750" -14NGO-RH-INT	Brass	N-59
	Nut		.750" -14NGO-RH-INT	CP Brass	MN-059
	Nipple-Threaded Inlets				
	Nipple		1/4" NPT, 2.5"Long	Brass	NP-118
	Nipple		1/4" NPT, 2.5"Long	CP Brass	MNP-118

CGA-296 Industrial Oxygen Mixtures

3,000 PSI

		Part	Description	Material	Part No.
Hex Nuts 	Nut		.803" -14UNS-2A-RH-EXT	Brass	N-60
	Nut		.803" -14UNS-2A-RH-EXT	CP Brass	MN-060
	Handtight Nut				
	Nut-HT		.803" -14UNS-RH-EXT	Brass	HTN-60
	Nipple-Threaded Inlets				
	Nipple		1/4" NPT, 3"Long	Brass	NP-123
	Nipple		1/4" NPT, 3"Long	CP Brass	MNP-123
Nipple-Handtight					
	Nipple-HT		1/4" NPT, 3"Long w/O-ring	Brass, Nitrile	NP-123W
Nipple-Countersunk					
	Nipple-CS		For 5/16" Tube	Brass	NP-122C3
Nipple-Check Valve					
	Nipple-CV		1/4" NPT, 3"Long	Brass	NP-123CV
Replacement Item					
	O-Ring		For HT-Nipple	Nitrile	OR-296

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

regulator inlet nuts & nipples

CGA-300 Ethyl Chlorides (R160) Formerly Commercial Acetylene

500 PSI

	Part	Description	Material	Part No.
Hex Nuts 	Nut	.830"-14NGO-RH-INT	Brass	N-56
	Nut	.830"-14NGO-RH-INT	CP Brass	MN-056
Handtight Nuts 	Nut-HT	.830"-14NGO-RH-INT	Brass	HTN-56
	Nut-HT	.830"-14NGO-RH-INT	Brass, Plastic Grip	HTN-56P
Nipple-Threaded Inlets 	Nipple	1/4" NPT, 2"Long	Brass	NP-126
	Nipple	1/4" NPT, 2.5"Long	Brass	NP-128
	Nipple	1/4" NPT, 3.5"Long	Brass	NP-130
	Nipple	1/4" NPT, 3.5"Long	CP Brass	MNP-130
Nipple-Handtight 	Nipple-HT	1/4" NPT-2.5"Long	Brass, PTFE	NP-128T3
Nipple-Countersunk 	Nipple-CS	For 1/4" Tube	Brass	NP-126C2
	Nipple-CS	For 5/16" Tube	Brass	NP-126C3
	Nipple-CS	For 3/8" Tube	Brass	NP-126C4
Nipple-Check Valve 	Nipple-CV	1/4" NPT, 2.5"Long	Brass	NP-128CV
Replacement Items 	Soft Tip	For HT-Nipple	PTFE	T128-3
	O-Ring	For O-Ring Nipple	Nitrile	MR-116

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

CGA-320 Carbon Dioxide

	Part	Description	Material	Part No.
Hex Nuts 	Nut	.830"-14NGO-RH-INT	Brass	N-61
	Nut	.830"-14NGO-RH-INT	SS	N-61SS
	Nut	.830"-14NGO-RH-INT	CP Brass	MN-061
Handtight Nuts 	Nut-HT	.830"-14NGO-RH-INT	Brass	HTN-61
	Nut-HT	.830"-14NGO-RH-INT	Brass, Plastic Grip	HTN-61P
	Nut-HT	.830"-14NGO-RH-INT	CP Brass, Plastic Grip	MHN-061P
Nipple-Threaded Inlets 	Nipple*	1/4" NPT, 2" Long	Brass	NP-147
	Nipple*	1/4" NPT, 2" Long	Brass	NP-147SS
	Nipple*	1/4" NPT, 2" Long	CP Brass	MNP-147
	Nipple*	1/4" NPT, 2.5" Long	Brass	NP-150
	Nipple*	1/4" NPT, 2.5" Long	SS	NP-150SS
	Nipple*	1/4" NPT, 2.5" Long	CP Brass	MNP-150
	Nipple*	1/4" NPT, 3" Long	Brass	NP-151
	Nipple*	1/4"-NPT, 3" Long	CP Brass	MNP-151
	Nipple*	1/4" NPT, 3.5" Long	SS	NP-154SS
Nipple-Handtight 	Nipple-HT**	1/4" NPT, 2.5" Long	Brass	NP-150T3
	Nipple-HT**	For 1/4" Tube	Brass	NP-147T3C2
	Nipple-HT**	For 5/16" Tube	Brass	NP-147T3C3
Nipple-Countersunk 	Nipple-CS*	For 1/4" Tube	Brass	NP-147C2
	Nipple-CS*	For 5/16" Tube	Brass	NP-147C3
	Nipple-CS*	For 1/4" Tube	SS	NP-147C2SS
Nipple-Check Valve 	Nipple-CV*	1/4"NPT, 2.5" Long	Brass	NP-150CV
	Nipple-CV*	1/4"NPT, 2.5" Long	CP Brass	MNP-150CV
	Nipple-CV*	1/4"NPT, 2.5" Long	SS	NP-150SSCV
Nipples for use with Residual Pressure Valves 	Nipple-RPV*	1/4"NPT, 3" long	Brass	NP-151-PIN-SS
	Nipple-RPV-washer*	1/4"NPT, 3.5" long with Retractable Pin & Washer	Brass	NP-154W-RPV
Replacement Items 	Washer	For Nipple	Fiber	W-6
	Washer	For Nipple	PTFE	W-8
	Washer	For HT-Nipples	PTFE	W-10
	Washer	For Nipple	Nylon	MYP-011
	Pin	For RPV Nipple	SS	PIN-NP-SS

*Includes Washer

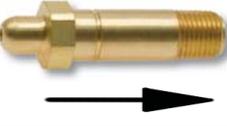
**Replace washer with W-10 only

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

regulator inlet nuts & nipples

CGA-326 Nitrous Oxide

3,000 PSI

		Part	Description	Material	Part No.
Hex Nuts					
	Nut	.830"-14NGO-RH-INT	Brass	N-82	
	Nut	.830"-14NGO-RH-INT	SS	N-82SS	
	Nut	.830"-14NGO-RH-INT	CP Brass	MN-082	
Handtight Nuts					
	Nut-HT	.830"-14NGO-RH-INT	Brass	HTN-82	
	Nut-HT	.830"-14NGO-RH-INT	Brass, Plastic Grip	HTN-82P	
	Nut-HT	.830"-14NGO-RH-INT	CP Brass, Plastic Grip	MHN-082P	
Nipple-Threaded Inlets					
	Nipple	1/4" NPT, 2.125" Long	Brass	NP-732	
	Nipple	1/4" NPT, 2.5" Long	Brass	NP-733	
	Nipple	1/4" NPT, 2.5" Long	SS	NP-733SS	
	Nipple	1/4" NPT, 2.5" Long	CP Brass	MNP-733	
	Nipple	1/4" NPT, 3" Long	Brass	NP-734	
Nipple-Handtight					
	Nipple-HT	1/4" NPT, 2.5" Long	Brass, PCTFE	NP-733T1	
	Nipple-HT-CS	For 1/4" Tube	Brass, PCTFE	NP-732T1C3	
Nipple-Countersunk					
	Nipple-CS	For 1/4" Tube	SS	NP-732C2SS	
	Nipple-CS	For 5/16" Tube	Brass	NP-732C3	
	Nipple-CS	For 3/8" Tube	Brass	NP-732C4	
Nipple-Check Valve					
	Nipple-CV	1/4" NPT, 2.5" Long	Brass	NP-733CV	
	Nipple-CV	1/4" NPT, 2.5" Long	SS	NP-733SSCV	
	Nipple-CV	1/4" NPT, 2.5" Long	CP Brass	MNP-733CV	
Nipples for use with Residual Pressure Valves					
	Nipple-RPV-O-Ring	1/4" NPT, 3.5" Long with Retractable Pin & O-Ring	Brass, EPDM	NP-735W-RPV	
Replacement Items					
	Soft Tip	For HT-Nipple	PCTFE	T733-1	
	O-ring	For NP-735W-RPV	EPDM	OR-326	

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

CGA-330 Non-Corrosive Gases

		Part	Description	Material	Part No.
Hex Nuts 	Nut	.830"-14NGO-LH-INT	Brass	N-62	
	Nut	.830"-14NGO-LH-INT	SS	N-62SS	
	Nut	.830"-14NGO-LH-INT	CP Brass	MN-062	
Nipple-Threaded Inlets 	Nipple*	1/4" NPT, 2" Long	Brass	NP-161	
	Nipple*	1/4" NPT, 2" Long	SS	NP-161SS	
	Nipple*	1/4" NPT, 2.5" Long	Brass	NP-162	
	Nipple*	1/4" NPT, 2.5" Long	SS	NP-162SS	
	Nipple*	1/4" NPT, 2.5" Long	CP Brass	MNP-162	
	Nipple*	1/4" NPT, 3.5" Long	SS	NP-165SS	
Nipple-Countersunk 	Nipple*	For 1/4" Tube	SS	NP-161C2SS	
Replacement Items 	Washer	For Nipple	Fiber	W-6	
	Washer	For Nipple	PTFE	W-8	
	Washer	For Nipple	ETFE	MYP-010	
	Washer	For Nipple	Nylon	MYP-011	

*Includes Washer

CGA-346 Air

		Part	Description	Material	Part No.
Hex Nuts 	Nut	.830"-14NGO-RH-INT	Brass	N-84	
	Nut	.830"-14NGO-RH-INT	CP Brass	MN-084	
	Nut	.830"-14NGO-RH-INT	SS	N-84SS	
Handtight Nuts 	Nut-HT	.830"-14NGO-RH INT	Brass	HTN-84	
	Nut-HT	.830"-14NGO-RH INT	Brass, Plastic Grip	HTN-84P	
	Nut-HT	.830"-14NGO-RH INT	CP Brass, Plastic Grip	MHN-084P	
Nipple-Threaded Inlets 	Nipple	1/4" NPT, 2.5" Long	Brass	NP-753	
	Nipple	1/4" NPT, 2.5" Long	SS	NP-753SS	
	Nipple	1/4" NPT, 2.5" Long	CP Brass	MNP-753	
	Nipple	1/4" NPT, 3.5" Long	Brass	NP-755	
	Nipple	1/4" NPT, 3.5" Long	SS	NP-755SS	
	Nipple	1/4" NPT, 3.5" Long	CP Brass	MNP-755	

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

regulator inlet nuts & nipples

CGA-346 Air Continued

3,000 PSI

	Part	Description	Material	Part No.
Nipple-Handtight 	Nipple-HT	1/4" NPT, 2.5" Long	Brass, PCTFE	NP-753T1
	Nipple-HT-CS	For 1/4" Tube	Brass, PCTFE	NP-753T1C2
	Nipple-HT-CS	For 5/16" Tube	Brass, PCTFE	NP-753T1C3
Nipple-Countersunk 	Nipple-CS	For 1/4" Tube	Brass	NP-752C2
	Nipple-CS	For 1/4" Tube	SS	NP-752C2SS
	Nipple-CS	For 5/16" Tube	Brass	NP-752C3
	Nipple-CS	For 3/8" Tube	Brass	NP-752C4
Nipple-Check Valve 	Nipple-CV	1/4" NPT, 2.5" Long	Brass	NP-753CV
	Nipple-CV	1/4" NPT, 2.5" Long	SS	NP-753SSCV
	Nipple-CV	1/4" NPT, 2.5" Long	CP Brass	MNP-753CV
Replacement Items 	Soft Tip	For HT-Nipple	PCTFE	T753-1
	O-Ring	For Quicknut Nipple	Polyurethane	OR-346

CGA-347 Air

3,001 - 5,500 PSI

	Part	Description	Material	Part No.
Hex Nuts 	Nut	.830"-14NGO-RH-INT	Brass	N-85
	Nut	.830"-14NGO-RH-INT	SS	N-85SS
	Nut	.830"-14NGO-RH-INT	CP Brass	MN-085
Handtight Nuts 	Nut-HT	.830"-14NGO-RH-INT	Brass	HTN-85
	Nut-HT	.830"-14NGO-RH-INT	Brass, Plastic Grip	HTN-85P
	Nut-HT	.830"-14NGO-RH-INT	SS, Alum. Grip	HTN-85SS
Nipple-Threaded Inlets 	Nipple	1/4" NPT, 3" Long	Brass	NP-765
	Nipple	1/4" NPT, 3" Long	SS	NP-765SS
	Nipple	1/4" NPT, 3" Long	CP Brass	MNP-765
Nipple-Handtight 	Nipple-HT	1/4" NPT, 3" Long w/ O-Ring	SS, Polyurethane	NP-765SSW
	Nipple-HT	1/4" NPT, 3" Long w/ O-Ring	Brass, Polyurethane	NP-765W
Nipple-Countersunk 	Nipple-CS	For 1/4" Tube	Brass	NP-765C2
	Nipple-CS	For 1/4" Tube	SS	NP-765C2SS
Nipple-Check Valve 	Nipple-CV	1/4" NPT, 3" Long	SS	NP-765SSCV
Replacement Items 	O-Ring	For HT- Nipple	Polyurethane	OR-347

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

CGA-350 Hydrogen/Methane/Natural Gas

3,000 PSI

	Part	Description	Material	Part No.
Hex Nuts 	Nut	.830"-14NGO-LH-INT	Brass	N-64
	Nut	.830"-14NGO-LH-INT	SS	N-64SS
	Nut	.830"-14NGO-LH-INT	CP Brass	MN-064
Handtight Nuts 	Nut-HT	.830"-14NGO-LH-INT	Brass	HTN-64
	Nut-HT	.830"-14NGO-LH-INT	Brass, Plastic Grip	HTN-64P
Nipple-Threaded Inlets 	Nipple	1/4" NPT, 2.125" Long	Brass	NP-167
	Nipple	1/4" NPT, 2.5" Long	Brass	NP-168
	Nipple	1/4" NPT, 2.5" Long	SS	NP-168SS
	Nipple	1/4" NPT, 2.5" Long	CP Brass	MNP-168
	Nipple	1/4" NPT, 3" Long	Brass	NP-169
	Nipple	1/4" NPT, 3" Long	CP Brass	MNP-169
	Nipple	1/4" NPT, 3.5" Long	Brass	NP-170
	Nipple	1/4" NPT, 3.5" Long	SS	NP-170SS
	Nipple	1/4" NPT, 3.5" Long	CP Brass	MNP-170
Nipple-Handtight 	Nipple-HT	1/4" NPT, 2.5" Long	Brass, PTFE	NP-168T3
	Nipple-HT-CS	For 1/4" Tube	Brass, PTFE	NP-168T3C2
	Nipple-HT-CS	For 5/16" Tube	Brass, PTFE	NP-168T3C3
Nipple-Countersunk 	Nipple-CS	For 1/4" Tube	Brass	NP-168C2
	Nipple-CS	For 1/4" Tube	SS	NP-168C2SS
	Nipple-CS	For 5/16" Tube	Brass	NP-168C3
	Nipple-CS	For 3/8" Tube	Brass	NP-168C4
Nipple-Check Valve 	Nipple-CV	1/4" NPT, 2.5" Long	Brass	NP-168CV
	Nipple-CV	1/4" NPT, 2.5" Long	SS	NP-168SSCV
	Nipple-CV	1/4" NPT, 2.5" Long	CP Brass	MNP-168CV
Nipples for use with Residual Pressure Valves 	Nipple-RPV	1/4" NPT, 2.5" Long	Brass, SS Pin	NP-168-PIN-SS
	Nipple-RPV	1/4" NPT, 2.5" Long	Brass, Monel Pin	NP-168-PIN-M
	Nipple-RPV	1/4" NPT, 3.5" Long	Brass, Retractable SS Pin	NP-170-RPV
Replacement Items 	Soft Tip	For HT-Nipple	PTFE	T168-3
	Pin	SS Pin for NP-168-PIN-SS	SS	PIN-NP-SS
	Pin	Monel Pin for NP-168-PIN-M	Monel	PIN-NP-M

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

regulator inlet nuts & nipples

CGA-410 Canadian Acetylene

500 PSI

Hex Nut	Part	Description	Material	Part No.
	Nut	.855"-14NGO-LH-INT	Brass	N-66
Nipple-Threaded Inlets				
	Nipple	1/4" NPT, 2.5" Long	Brass	NP-168
	Nipple	1/4" NPT, 3" Long	Brass	NP-169
	Nipple	1/4" NPT, 3.5" Long	Brass	NP-170

CGA-415 Canadian Acetylene

500 PSI

Hex Nut	Part	Description	Material	Part No.
	Nut	.855"-14NGO-LH-INT	Brass	N-66
Nipple-Threaded Inlet				
	Nipple	1/4" NPT, 2.5" Long	Brass	NP-181
Replacement Part				
	Washer	For Nipple	Fiber	W-50



Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

CGA-500 Medical Mixtures

	Part	Description	Material	Part No.
Hex Nuts 	Nut	.880"-14NGO-RH-EXT	Brass	N-67
	Nut	.880"-14NGO-RH-EXT	CP Brass	MN-067
Handtight Nuts 	Nut-HT	.880"-14NGO-RH-EXT	Brass, Plastic Grip	HTN-67P
	Nut-HT	.880"-14NGO-RH-EXT	CP Brass, Plastic Grip	MHN-067P
Nipple-Threaded Inlets 	Nipple	1/4" NPT, 2.5" Long	Brass	NP-188
	Nipple	1/4" NPT, 2.5" Long	CP Brass	MNP-188
	Nipple	1/4" NPT, 3" Long	Brass	NP-189
	Nipple	1/4" NPT, 3" Long	CP Brass	MNP-189
	Nipple	1/4" NPT, 3.5" Long	Brass	NP-190
	Nipple	1/4" NPT, 3.5" Long	CP Brass	MNP-190
	Nipple	1/4" NPT, 4.5" Long	Brass	NP-191
Nipple-Handtight 	Nipple-HT	1/4" NPT, 3.5" Long	Brass, PTFE	NP-190T3
	Nipple-HT	1/4" NPT, 3.5" Long w/ O-Ring	Brass, Nitrile	NP-190W
	Nipple-HT	1/4" NPT, 3.5" Long w/ O-Ring	CP Brass, Nitrile	MNP-190W
	Nipple-HT-CS	For 1/4" Tube	Brass, PTFE	NP-188T3C2
	Nipple-HT-CS	For 5/16" Tube	Brass, PTFE	NP-188T3C3
Nipple-Countersunk 	Nipple-CS	For 1/4" Tube	Brass	NP-188C2
	Nipple-CS	For 5/16" Tube	Brass	NP-188C3
	Nipple-CS	For 3/8" Tube	Brass	NP-188C4
Nipple-Check Valve 	Nipple-CV	1/4" NPT, 2.5" Long	Brass	NP-188CV
	Nipple-CV	1/4" NPT, 2.5" Long	CP Brass	MNP-188CV
	Nipple-CV	1/4" NPT, 3" Long	Brass	NP-189CV
Replacement Parts 	O-Ring	For O-Ring Nipple	Nitrile	OR-580
	Soft Tip	For HT-Nipple	PTFE	T189-3

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

regulator inlet nuts & nipples

CGA-510 Acetylene/Propane/Natural Gas

500 PSI

	Part	Description	Material	Part No.
Hex Nuts 	Nut	.880"-14NGO-LH-EXT(7/8"Hex)	Brass	N-68
	Nut	.880"-14NGO-LH-EXT	Brass	N-69
	Nut	.880"-14NGO-LH-EXT	SS	N-69SS
	Nut	.880"-14NGO-LH-EXT	CP Brass	MN-069
Handtight Nuts 	Nut-HT	.880"-14NGO-LH-EXT	Brass	HTN-69
	Nut-HT	.880"-14NGO-LH-EXT	Brass, Plastic Grip	HTN-69P
Nipple-Threaded Inlets 	Nipple	1/4" NPT, 2.5" Long	Brass	NP-188
	Nipple	1/4" NPT, 2.5" Long	CP Brass	MNP-188
	Nipple	1/4" NPT, 2.5" Long	SS	NP-188SS
	Nipple	1/4" NPT, 3" Long	Brass	NP-189
	Nipple	1/4" NPT, 3" Long	CP Brass	MNP-189
	Nipple	1/4" NPT, 3" Long	SS	NP-189SS
	Nipple	1/4" NPT, 3.5" Long	Brass	NP-190
	Nipple	1/4" NPT, 3.5" Long	SS	NP-190SS
	Nipple	1/4" NPT, 3.5" Long	CP Brass	MNP-190
	Nipple	1/4" NPT, 4.5" Long	Brass	NP-191
Nipple-Handtight 	Nipple-HT	1/4" NPT, 3" Long (only with HTN-69)	Brass, PTFE	NP-189T3
	Nipple-HT	1/4" NPT, 3.5" Long, w/ soft tip	Brass, PTFE	NP-190T3
	Nipple-HT	1/4" NPT, 3.5" Long w/ O-Ring	Brass, Nitrile	NP-190W
	Nipple-HT-CS	For 1/4" Tube	Brass, PTFE	NP-188T3C2
	Nipple-HT-CS	For 5/16" Tube	Brass, PTFE	NP-188T3C3
Nipple-Countersunk 	Nipple-CS	For 1/4" Tube	Brass	NP-188C2
	Nipple-CS	For 1/4" Tube	SS	NP-188C2SS
	Nipple-CS	For 5/16" Tube	Brass	NP-188C3
	Nipple-CS	For 5/16" Tube	SS	NP-188C3SS
	Nipple-CS	For 3/8" Tube	Brass	NP-188C4
Nipple-Check Valve 	Nipple-CV	1/4" NPT, 2.5" Long	Brass	NP-188CV
	Nipple-CV	1/4" NPT, 2.5" Long	SS	NP-188SSCV
	Nipple-CV	1/4" NPT, 2.5" Long	CP Brass	MNP-188CV
	Nipple-CV	1/4" NPT, 3" Long	Brass	NP-189CV
	Nipple-CV	1/4" NPT, 3" Long	SS	NP-189SSCV
Replacement Items 	Soft Tip	For HT-Nipple	PTFE	T189-3
	O-Ring	For NP-190W	Nitrile	OR-580

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

CGA-520 "B Size" Acetylene In Small Cylinders

500 PSI

	Part	Description	Material	Part No.
Hex Nuts 	Nut	.899"-18NGO-RH-INT	Brass	N-70
Handtight Nuts 	Nut-HT	.899"-18NGO-RH-INT	Brass, Plastic Grip	HTN-70P
Nipple-Threaded Inlets 	Nipple	1/4" NPT, 1.75" Long	Brass	NP-435
Nipple-Handtight 	Nipple-HT	1/4" NPT, 1.75" Long w/ O-Ring	Brass, EPDM	NP-435W
Nipple-Countersunk 	Nipple-CS	For 1/4"Tube	Brass	NP-435C2
Replacement Parts 	O-Ring	For HT	EPDM	OR-520Z

Notes: _____

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

regulator inlet nuts & nipples

CGA-540 Oxygen

3,000 PSI

		Part	Description	Material	Part No.
Hex Nuts					
		Nut	.908"-14NGO-RH-INT.	Brass	N-71
		Nut	.908"-14NGO-RH-INT.	SS	N-71SS
		Nut	.908"-14NGO-RH-INT	CP Brass	MN-071
Handtight Nuts					
		Nut-HT	.908"-14NGO-RH-INT	Brass	HTN-71
		Nut-HT	.908"-14NGO-RH-INT	Brass, Plastic Grip	HTN-71P
		Nut-HT	.908"-14NGO-RH-INT	CP Brass, Plastic Grip	MHN-071P
Nipples - Threaded Inlets					
		Nipple	1/4" NPT, 2.06" Long	Brass	NP-210
		Nipple	1/4" NPT, 2.06" Long	CP Brass	MNP-210
		Nipple	1/4" NPT, 2.5" Long	Brass	NP-211
		Nipple	1/4" NPT, 2.5" Long	CP Brass	MNP-211
		Nipple	1/4" NPT, 2.5" Long	SS	NP-211SS
		Nipple	1/4" NPT, 3" Long	Brass	NP-212
		Nipple	1/4" NPT, 3" Long	CP Brass	MNP-212
		Nipple	1/4" NPT, 3.5" Long	Brass	NP-213
Nipples - Handtight					
		Nipple-HT	1/4" NPT, 2.5" Long w/ O-Ring	Brass/Viton	NP-211W
		Nipple-HT	1/4" NPT, 2.5" Long w/ O-Ring	CP Brass/Viton	MNP-211W
		Nipple-HT	1/4" NPT, 2.5" Long	Brass/PCTFE	NP-211T1
		Nipple-HT	For 1/4" Tube	Brass/PCTFE	NP-211T1C2
		Nipple-HT	For 5/16" Tube	Brass/PCTFE	NP-211T1C3
Nipples - Countersunk					
		Nipple-CS	For 1/4" Tube	Brass	NP-210C2
		Nipple-CS	For 1/4" Tube	SS	NP-210C2SS
		Nipple-CS	For 5/16" Tube	Brass	NP-210C3
		Nipple-CS	For 3/8" Tube	Brass	NP-210C4
Nipple - Check Valve					
		Nipple-CV	1/4" NPT, 2.125" Long	Brass	NP-210CV
		Nipple-CV	1/4" NPT, 2.125" Long	CP Brass	MNP-210CV
		Nipple-CV	1/4" NPT, 2.5" Long	SS	NP-211SSCV
Nipples - Residual Pressure Valve					
		Nipple-RPV	1/4" NPT, 2.5" Long	Brass (Monel Pin)	NP-211-PIN-M
		Nipple-RPV	1/4" NPT, 2.5" Long	Brass (SS Pin)	NP-211-PIN-SS
		Nipple-RPV	1/4" NPT, 2.5" Long w/ O-Ring	Brass (Monel Pin)	NP-211W-PIN-M
		Nipple-RPV	1/4" NPT, 3.5" Long w/ O-Ring	Brass (Retractable SS Pin)	NP-213W-RPV
Replacement Items					
		Soft Tip	For HT-Nipple	PCTFE	T211-1
		O-Ring	For Nipple	Viton	OR-540
		O-Ring	For O-Ring Nipple	Viton	OR-011V7
		Pin	For RPV Nipple	SS	PIN-NP-SS
		Pin	For RPV Nipple	Monel	PIN-NP-M

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

CGA-555 Propane, Butane For Liquid Withdrawal

3,000 PSI

Hex Nuts		Part	Description	Material	Part No.
	Nut	.908"-14NGO-LH-INT	Brass	N-86	
	Nut	.908"-14NGO-LH-INT	CP Brass	MN-086	
Handtight Nuts					
	Nut-HT	.908"-14NGO-LH-INT	Brass	HTN-86	
Nipple-Threaded Inlets					
	Nipple	1/4" NPT, 2.06" Long	Brass	NP-210	
	Nipple	1/4" NPT, 2.06" Long	CP Brass	MNP-210	
	Nipple	1/4" NPT, 2.5" Long	Brass	NP-211	
	Nipple	1/4" NPT, 2.5" Long	CP Brass	MNP-211	
	Nipple	1/4" NPT, 3" Long	Brass	NP-212	
	Nipple	1/4" NPT, 3" Long	CP Brass	MNP-212	
	Nipple	1/4" NPT, 3.5" Long	Brass	NP-213	
Nipple-Handtight					
	Nipple-HT	1/4" NPT, 2.5" Long w/ o-ring	Brass, Viton	NP-211W	
	Nipple-HT	1/4" NPT, 2.5" Long w/ o-ring	CP Brass, Viton	MNP-211W	
	Nipple-HT	1/4" NPT, 2.5" Long	Brass, PCTFE	NP-211T1	
	Nipple-HT-CS	For 1/4" Tube	Brass, PCTFE	NP-210T1C2	
	Nipple-HT-CS	For 5/16" Tube	Brass, PCTFE	NP-210T1C3	
Nipple-Countersunk					
	Nipple-CS	For 1/4" Tube	Brass	NP-210C2	
	Nipple-CS	For 5/16" Tube	Brass	NP-210C3	
	Nipple-CS	For 3/8" Tube	Brass	NP-210C4	
Nipple-Check Valve					
	Nipple-CV	1/4" NPT, 2.125" Long	Brass	NP-210CV	
	Nipple-CV	1/4" NPT, 2.125" Long	CP Brass	MNP-210CV	
Replacement Parts					
	Soft Tip	For Soft Tip-Nipple	PCTFE	T211-1	
	O-Ring	For O-Ring-Nipple	Viton	OR-011V7	

CGA-577 Oxygen

3,001 - 4,000 PSI

Hex Nuts		Part	Description	Material	Part No.
	Nut	.965"-14NGO-RH-INT	Brass	N-577	
Nipple-Threaded Inlets					
	Nipple	1/4" NPT, 3" Long	Brass	NP-823	

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

regulator inlet nuts & nipples

3,000 PSI

CGA-580 Argon, Helium, Nitrogen

	Part	Description	Material	Part No.
Hex Nuts 	Nut	.960"-14NGO-RH-EXT	Brass	N-73
	Nut	.960"-14NGO-RH-EXT	SS	N-73SS
	Nut	.960"-14NGO-RH-EXT	CP Brass	MN-073
Handtight Nuts 	Nut, HT	.960"-14NGO-RH-EXT	Brass	HTN-73
	Nut, HT	.960"-14NGO-RH-EXT	CP Brass, Plastic Grip	MHN-073P
	Nut, HT	.960"-14NGO-RH-EXT	Brass, Plastic Grip	HTN-73P
Nipple-Threaded Inlets 	Nipple	1/4" NPT, 2.5" Long	Brass	NP-188
	Nipple	1/4" NPT, 2.5" Long	SS	NP-188SS
	Nipple	1/4" NPT, 2.5" Long	CP Brass	MNP-188
	Nipple	1/4" NPT, 3" Long	Brass	NP-189
	Nipple	1/4" NPT, 3" Long	SS	NP-189SS
	Nipple	1/4" NPT, 3" Long	CP Brass	MNP-189
	Nipple	1/4" NPT, 3.5" Long	Brass	NP-190
	Nipple	1/4" NPT, 3.5" Long	SS	NP-190SS
	Nipple	1/4" NPT, 3.5" Long	CP Brass	MNP-190
	Nipple	1/4" NPT, 4.5" Long	Brass	NP-191
Nipple-Handtight 	Nipple-HT	1/4" NPT, 3" Long	Brass, PTFE	NP-189T3
	Nipple-HT	1/4" NPT, 3.5" Long	Brass, PTFE	NP-190T3
	Nipple-HT	1/4" NPT, 3.5" Long, w/ o' ring	Brass, Nitrile	NP-190W
	Nipple-HT-CS	For 1/4" Tube	Brass, PTFE	NP-188T3C2
	Nipple-HT-CS	For 5/16" Tube	Brass, PTFE	NP-188T3C3
Nipple-Countersunk 	Nipple-CS	For 1/4" Tube	Brass	NP-188C2
	Nipple-CS	For 1/4" Tube	SS	NP-188C2SS
	Nipple-CS	For 5/16" Tube	Brass	NP-188C3
	Nipple-CS	For 5/16" Tube	SS	NP-188C3SS
	Nipple-CS	For 3/8" Tube	Brass	NP-188C4
Nipple-Check Valve 	Nipple-CV	1/4" NPT, 2.5" Long	Brass	NP-188CV
	Nipple-CV	1/4" NPT, 2.5" Long	SS	NP-188SSCV
	Nipple-CV	1/4" NPT, 2.5" Long	CP Brass	MNP-188CV
	Nipple-CV	1/4" NPT, 3" Long	Brass	NP-189CV
	Nipple-CV	1/4" NPT, 3" Long	SS	NP-189SSCV
Nipples - Residual Pressure Valve 	Nipple-RPV	1/4" NPT, 3.5" Long	Brass, SS PIN	NP-190-PIN-SS
	Nipple-RPV	1/4" NPT, 3.5" Long	Brass, Monel PIN	NP-190-PIN-M
	Nipple-RPV-O-Ring	1/4" NPT, 3.5" Long	Brass, Retractable Pin	NP-190W-RPV
Replacement Parts 	Soft Tip	For Soft Tip-Nipple	PTFE	T189-3
	O-Ring	For O-Ring-Nipple	Nitrile	OR-580
	Pin	For RPV Nipple	SS	PIN-NP-SS
	Pin	For RPV Nipple	Monel	PIN-NP-M

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

CGA-590 Sulfur Hexafluoride Formerly Industrial Air

3,000 PSI

		Part	Description	Material	Part No.
	Nut		.960"-14NGO-LH-EXT	Brass	N-74
	Nut		.960"-14NGO-LH-EXT	SS	N-74SS
	Nut		.960"-14NGO-LH-EXT	CP Brass	MN-074
	Nut-HT		.960"-14NGO-LH-EXT	Brass	HTN-74
	Nut-HT		.960"-14NGO-LH-EXT	Brass, Plastic	HTN-74P
	Nipple		1/4" NPT, 2.5" Long	Brass	NP-188
	Nipple		1/4" NPT, 2.5" Long	SS	NP-188SS
	Nipple		1/4" NPT, 2.5" Long	CP Brass	MNP-188
	Nipple		1/4" NPT, 3" Long	Brass	NP-189
	Nipple		1/4" NPT, 3" Long	SS	NP-189SS
	Nipple		1/4" NPT, 3" Long	CP Brass	MNP-189
	Nipple		1/4" NPT, 3.5" Long	Brass	NP-190
	Nipple		1/4" NPT, 3.5" Long	CP Brass	MNP-190
	Nipple		1/4" NPT, 3.5" Long	SS	NP-190SS
	Nipple		1/4" NPT, 4.5" Long	Brass	NP-191
	Nipple-HT		1/4" NPT, 3" Long	Brass, PTFE	NP-189T3
	Nipple-HT		1/4" NPT, 3.5" Long	Brass, PTFE	NP-190T3
	Nipple-HT		1/4" NPT, 3.5" Long, w/ o' ring	Brass, Nitrile	NP-190W
	Nipple-HT-CS		For 1/4" Tube	Brass, PTFE	NP-188T3C2
	Nipple-HT-CS		For 5/16" Tube	Brass, PTFE	NP-188T3C3
	Nipple-CS		For 1/4" Tube	Brass	NP-188C2
	Nipple-CS		For 1/4" Tube	SS	NP-188C2SS
	Nipple-CS		For 5/16" Tube	Brass	NP-188C3
	Nipple-CS		For 5/16" Tube	SS	NP-188C3SS
	Nipple-CS		For 3/8" Tube	Brass	NP-188C4
	Nipple-CV		1/4" NPT, 2.5" Long	Brass	NP-188CV
	Nipple-CV		1/4" NPT, 2.5" Long	SS	NP-188SSCV
	Nipple-CV		1/4" NPT, 2.5" Long	CP Brass	MNP-188CV
	Nipple-CV		1/4" NPT, 3" Long	Brass	NP-189CV
	Nipple-CV		1/4" NPT, 3" Long	SS	NP-189SSCV
	Soft Tip		For Soft Tip-Nipple	PTFE	T189-3
	O-Ring		For O-Ring-Nipple	Nitrile	OR-580

CGA-621 Oil Tolerant Nitrogen

3,001-5,500 PSI

		Part	Description	Material	Part No.
	Nut		1.035"-14NGO-LH-INT	Brass	N-621
	Nipple		1/4" NPT, 3" Long	Brass	NP-621

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

regulator inlet nuts & nipples

CGA-622-320 Carbon Dioxide For Liquid Withdrawal

500 PSI

		Part	Description	Material	Part No.
Hex Nut 	Nut		1.035"-14NGO-RH-INT	Brass	N-622
	Nipple-Threaded Inlet 	Nipple	1/4" NPT, 3" Long	Brass	NP-621
Liquid Cylinder to Hose Adaptor 	Nipple		1.035"-14NGO-RH-INT to CGA 320	Brass	A-622

CGA-624 Nitrous Oxide For Liquid Withdrawal

500 PSI

		Part	Description	Material	Part No.
Hex Nut 	Nut		1.035"-14NGO-RH-INT	Brass	N-624
	Nipple-Threaded Inlet 	Nipple	1/4" NPT, 3" Long	Brass	NP-624

CGA-660 Refrigerant Gases

3,000 PSI

		Part	Description	Material	Part No.
Hex Nuts 	Nut		1.035"-14NGO-RH-INT	Brass	N-77
	Nut		1.035"-14NGO-RH-INT	SS	N-77SS
	Nut		1.035"-14NGO-RH-INT	CP Brass	MN-077
Nipple-Threaded Inlets 	Nipple*		1/4" NPT, 1.75" Long	Brass	NP-236
	Nipple*		1/4" NPT, 2.5" Long	Brass	NP-238
	Nipple*		1/4" NPT, 2.5" Long	SS	NP-238SS
	Nipple*		1/4" NPT, 2.5" Long	CP Brass	MNP-238
	Nipple*		1/4" NPT, 3" Long	SS	NP-239SS
	Nipple*		1/4" NPT, 3.5" Long	SS	NP-240SS
Nipple-Countersunk 	Nipple-CS*		For 1/4" Tube	SS	NP-236C2SS
Nipple-Check Valve 	Nipple-CV		1/4" NPT, 2.5" Long	SS	NP-238SSCV
Replacement Item 	Washer		For Nipple	PTFE	W-18

**Includes Washer*

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

CGA-677 Argon/Nitrogen/Helium

5,501-7,500 PSI

		Part	Description	Material	Part No.
Hex Nuts 	Nut		1.035"-14NGO-LH-INT	Brass	N-80
	Nut		1.035"-14NGO-LH-INT	SS	N-80SS
Nipple-Threaded Inlets 	Nipple		1/4" NPT, 2.5" Long	Brass	NP-246
	Nipple		1/4" NPT, 2.5" Long	SS	NP-246SS
	Nipple		1/4" NPT, 3" Long	Brass	NP-247
	Nipple		1/4" NPT, 3" Long	SS	NP-247SS
	Nipple		1/4" NPT, 3.5" Long	SS	NP-248SS
	Nipple		3/8" NPT, 3" Long	Brass	NP-250
	Nipple		3/8" NPT, 3" Long	SS	NP-250SS
Nipple-Tube Sockets 	Nipple-CS		For 1/4" Tube	SS	NP-246C2SS

CGA-680 Argon/Nitrogen/Helium

3,001-5,500 PSI

		Part	Description	Material	Part No.
Hex Nuts 	Nut		1.040"-14NGO-RH-EXT	Brass	N-680
	Nut		1.040"-14NGO-RH-EXT	SS	N-680SS
Nipple-Threaded Inlets 	Nipple		1/4" NPT, 2.5"	Brass	NP-842
	Nipple		1/4" NPT, 2.5"	SS	NP-842SS
	Nipple		1/4" NPT, 3"	Brass	NP-843
	Nipple		1/4" NPT, 3.5"	Brass	NP-844
Nipple-Tube Sockets 	Nipple-CS		For 1/4" Tube	Brass	NP-842C2

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

regulator inlet nuts & nipples

CGA-695 Hydrogen/Methane

3,001-5,500 PSI

		Part	Description	Material	Part No.
Hex Nut 	Nut		1.040"-14NGO-LH-EXT	Brass	N-695
	Nipple-Threaded Inlets				
	Nipple		1/4" NPT, 2.5"	Brass	NP-842
	Nipple		1/4" NPT, 3"	Brass	NP-843
	Nipple		1/4" NPT, 3.5"	Brass	NP-844
Nipple-Countersunk					
	Nipple-CS		For 1/4" Tube	Brass	NP-842C2

CGA-701 Oxygen

4,001-5,500 PSI

		Part	Description	Material	Part No.
Hex Nut 	Nut		1.108"-18NGO-RH-INT	Brass	N-701
	Nut		1.108"-18NGO-RH-INT	SS	N-701SS
	Nipple-Threaded Inlet				
	Nipple		1/4" NPT, 3"	Brass	NP-863
	Nipple		1/4" NPT, 3"	SS	NP-863SS

CGA-702 Air

5,501-7,500 PSI

		Part	Description	Material	Part No.
Hex Nuts 	Nut		1.120"-14NGO-RH-EXT	Brass	N-702
	Nut		1.120"-14NGO-RH-EXT	CP Brass	MN-702
Nipple-Threaded Inlets					
	Nipple		1/4" NPT, 2.5"	Brass	NP-842
	Nipple		1/4" NPT, 3"	Brass	NP-843
	Nipple		1/4" NPT, 3"	CP Brass	MNP-843
	Nipple		1/4" NPT, 3.5"	Brass	NP-844
Nipple-Countersunk					
	Nipple-CS		For 1/4" Tube	Brass	NP-842C2

Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters



CGA-870 Oxygen

Inlet	Part No.
Yoke w/HT grip x CGA 540 male	MFY-870-1H
Yoke w/T-handle x CGA 540 male	MFY-870-1
Yoke w/HT grip x 1/4" NPT male	MFY-870-4H
Yoke w/T-handle x 1/4" NPT male	MFY-870-4
Yoke w/HT grip x 1/2" NPT male	MFY-870-8H
Yoke w/T-handle x 1/2" NPT male	MFY-870-8
Yoke w/S.S. HT grip x 1/4" NPT male	MFY-870-4H-M
Yoke w/S.S. HT grip x 1/2" NPT male	MFY-870-8H-M

CGA-940 CO2/Oxygen Mixture w/ CO2 Over 7%

Inlet	Part No.
Yoke w/HT grip x 1/4" NPT male	MFY-940-4H
Yoke w/T-handle x 1/4" NPT male	MFY-940-4
Yoke w/HT grip x 1/2" NPT male	MFY-940-8H
Yoke w/T-handle x 1/2" NPT male	MFY-940-8

CGA-880 CO2/Oxygen Mixture w/ CO2 Not Over 7%

Inlet	Part No.
Yoke w/HT grip x 1/4" NPT male	MFY-880-4H
Yoke w/T-handle x 1/4" NPT male	MFY-880-4
Yoke w/HT grip x 1/2" NPT male	MFY-880-8H
Yoke w/T-handle x 1/2" NPT male	MFY-880-8

CGA-950 Medical Air

Inlet	Part No.
Yoke w/HT grip x 1/4" NPT male	MFY-950-4H
Yoke w/T-handle x 1/4" NPT male	MFY-950-4
Yoke w/HT grip x 1/2" NPT male	MFY-950-8H
Yoke w/T-handle x 1/2" NPT male	MFY-950-8

CGA-890 Helium/Oxygen Mixture w/ He Not Over 80%

Inlet	Part No.
Yoke w/HT grip x 1/4" NPT male	MFY-890-4H
Yoke w/T-handle x 1/4" NPT male	MFY-890-4
Yoke w/HT grip x 1/2" NPT male	MFY-890-8H
Yoke w/T-handle x 1/2" NPT male	MFY-890-8

CGA-960 Nitrogen

Inlet	Part No.
Yoke w/HT grip x 1/4" NPT male	MFY-960-4H
Yoke w/T-handle x 1/4" NPT male	MFY-960-4
Yoke w/HT grip x 1/2" NPT male	MFY-960-8H
Yoke w/T-handle x 1/2" NPT male	MFY-960-8

CGA-910 Nitrous Oxide

Inlet	Part No.
Yoke w/HT grip x 1/4" NPT male	MFY-910-4H
Yoke w/T-handle x 1/4" NPT male	MFY-910-4
Yoke w/HT grip x 1/2" NPT male	MFY-910-8H
Yoke w/T-handle x 1/2" NPT male	MFY-910-8

CGA-973 Medical Gas Mixtures

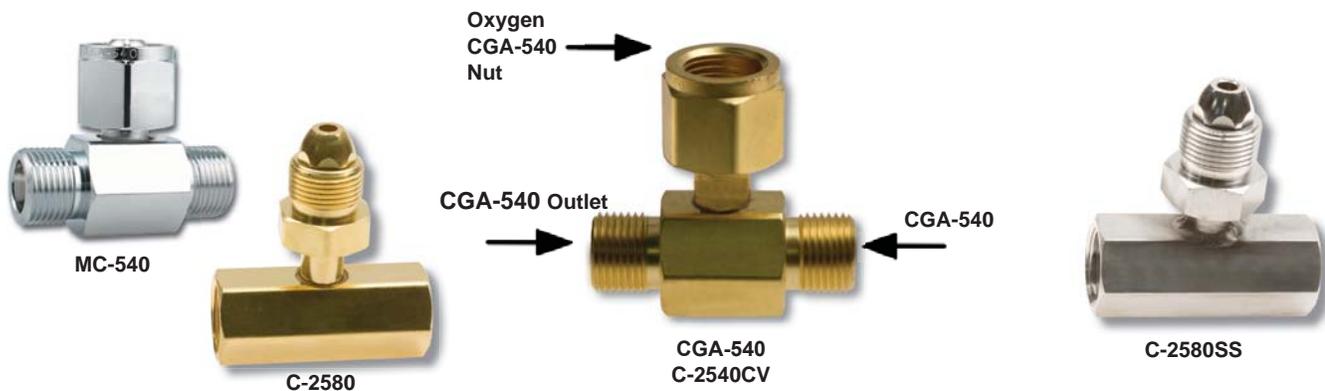
Inlet	Part No.
Yoke w/HT grip x 1/4" NPT male	MFY-973-4H
Yoke w/T-handle x 1/4" NPT male	MFY-973-4
Yoke w/HT grip x 1/2" NPT male	MFY-973-8H
Yoke w/T-handle x 1/2" NPT male	MFY-973-8

CGA-930 Helium/Oxygen Mixture w/ He Over 80%

Inlet	Part No.
Yoke w/HT grip x 1/4" NPT male	MFY-930-4H
Yoke w/T-handle x 1/4" NPT male	MFY-930-4
Yoke w/HT grip x 1/2" NPT male	MFY-930-8H
Yoke w/T-handle x 1/2" NPT male	MFY-930-8

Replacement Parts for all Yokes	Part No.
T-handle	MYP-001
Handtight handle	MYP-002
Inlet bushing 1/4" NPT male	MYP-004
Inlet bushing 1/2" NPT male	MYP-008
ETFE washer	MYP-010
Nylon washer	MYP-011
FKM washer	MYP-012
Sintered inlet filter	MYP-015
Stainless steel pin	MYP-020
Bushing CGA 540 outlet male w/filter	MYP-540
S.S. Replacement Hand tight handle	MYP-002Z

CGA manifold coupler tees



Brass

CGA No.	Swivel Connection	End Connection	PSI	Part No.
296 Industrial Oxygen Mixtures	.803"-14NGO-RH-EXT	.803"-14NGO-RH-INT (2)	3000	C-2296*
300 (Ethyl Chloride)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (2)	500	C-2300*
320 (Carbon Dioxide)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (2)	3000	C-2320*
326 (Nitrous Oxide)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (2)	3000	C-2326*
346 (Air)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (2)	3000	C-2346*
347 (Air)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (2)	5500	C-2347
350 (Hydrogen/Methane/Natural Gas)	.830"-14NGO-LH-INT	.830"-14NGO-LH-EXT (2)	3000	C-2350*
510 (Acetylene/Methane/Propane)	.880"-14NGO-LH-EXT	.880"-14NGO-LH-INT (2)	500	C-2510*
540 (Oxygen)	.908"-14NGO-RH-INT	.908"-14NGO-RH-EXT (2)	3000	C-2540*
555 (Butane/Propane-Liquid Withdrawal)	.908"-14NGO-LH-INT	.908"-14NGO-LH-EXT (2)	3000	C-2555
577 (Oxygen)	.965"-14NGO-RH-INT	.965"-14NGO-RH-EXT (2)	4000	C-2577
580 (Inert Gases)	.960"-14NGO-RH-EXT	.960"-14NGO-RH-INT (2)	3000	C-2580*
590 (Sulfur Hexafluoride)	.960"-14NGO-LH-EXT	.960"-14NGO-LH-INT (2)	3000	C-2590*
660 (Refrigerant Gases)	1.035"-14NGO-RH-INT	1.035"-14NGO-RH-EXT (2)	3000	C-2660
677 (Inert Gases)	1.035"-14NGO-LH-INT	1.035"-14NGO-LH-EXT (2)	7500	C-2677
680 (Inert Gases)	1.040"-14NGO-RH-EXT	1.040"-14NGO-RH-INT (2)	5500	C-2680
695 (Flammables)	1.040"-14NGO-LH-EXT	1.040"-14NGO-LH-INT (2)	5500	C-2695
701 (Oxygen)	1.108"-14NGO-RH-EXT	1.108"-14NGO-RH-INT (2)	5500	C-2701
702 (Air)	1.120"-14NGO-RH-EXT	1.120"-14NGO-RH-INT (2)	7500	C-2702

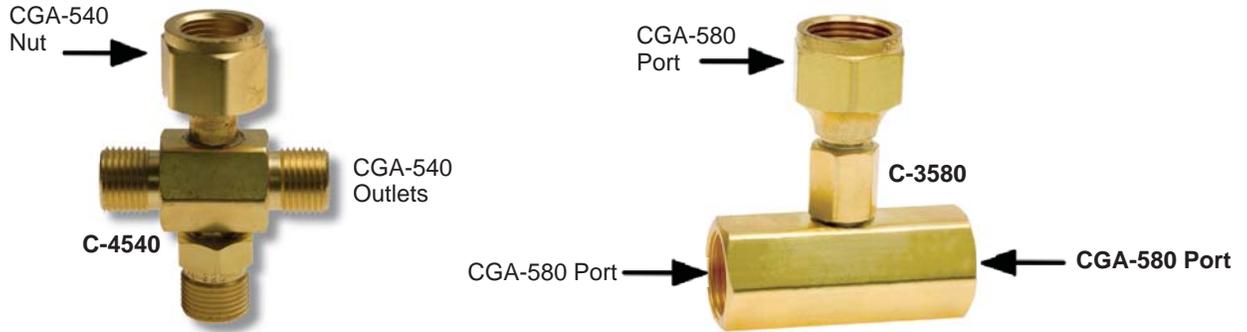
Chrome Plated Brass

CGA No.	Swivel Connection	End Connection	PSI	Part No.
320 (Carbon Dioxide)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (2)	3000	MC-320
326 (Nitrous Oxide)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (2)	3000	MC-326
346 (Air)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (2)	3000	MC-346
500 (Medical Mixture)	.880"-14NGO-RH-EXT	.880"-14NGO-RH-INT (2)	3000	MC-500
540 (Oxygen)	.908"-14NGO-RH-INT	.908"-14NGO-RH-EXT (2)	3000	MC-540
580 (Nitrogen/Helium)	.960"-14NGO-RH-EXT	.960"-14NGO-RH-INT (2)	3000	MC-580

Stainless Steel

CGA No.	Swivel Connection	End Connection	PSI	Part No.
320 (Carbon Dioxide)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (2)	3000	C-2320SS
346 (Air)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (2)	3000	C-2346SS
347 (Air)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (2)	5500	C-2347SS
350 (Hydrogen)	.830"-14NGO-LH-INT	.830"-14NGO-LH-EXT (2)	3000	C-2350SS
540 (Oxygen)	.908"-14NGO-RH-INT	.908"-14NGO-RH-EXT (2)	3000	C-2540SS
580 (Inert Gases)	.960"-14NGO-RH-EXT	.960"-14NGO-RH-INT (2)	3000	C-2580SS
677 (Inert Gases)	1.035"-14NGO-LH-INT	1.035"-14NGO-LH-EXT (2)	7500	C-2677SS

*Available with check valve nipple: Add CV to the end of part number.



Brass Manifold Coupler Tees - 4 way CGA Valve Outlets, Nut & Nipple Inlet

CGA No.	Swivel Connection	End Connections	PSI	Part No.
320 (Carbon Dioxide)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (3)	3000	C-4320*
346 (Air)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (3)	3000	C-4346*
510 (Acetylene/Propane)	.880"-14NGO-LH-EXT	.880"-14NGO-LH-INT (3)	500	C-4510*
540 (Oxygen)	.908"-14NGO-RH-INT	.908"-14NGO-RH-EXT (3)	3000	C-4540*
580 (Argon/Helium/Nitrogen)	.960"-14NGO-RH-EXT	.960"-14NGO-RH-INT (3)	3000	C-4580*
590 (Sulfur Hexafluoride)	.960"-14NGO-LH-EXT	.960"-14NGO-LH-INT (3)	3000	C-4590*

Brass Manifold Coupler Tees - 3 way CGA Valve Outlets

CGA No.	End Connections	PSI	Part No.
540 (Oxygen)	.830"-14NGO-RH-EXT (3)	3000	C-3540
580 (Argon/Helium/Nitrogen)	.960"-14NGO-RH-INT (3)	3000	C-3580



2" Hex Brass Body (with 6 valve outlets)

*Available w/ Check Valve:
Add "CV" to end of part number

Brass/Stainless Steel Manifold Blocks & Assemblies

CGA No.	Swivel Connection	End Connection	Part No.
540 (Oxygen)	.908"-14NGO-RH-INT	.908"-14NGO-RH-EXT (6)	MB-540-7*
580 (Argon/Helium/Nitrogen)	.960"-14NGO-RH-EXT	.960"-14NGO-RH-INT (6)	MB-580-7*

2" Hex Manifold Blocks (with Female Ports)

Connection	Material	PSI	Part No.
1/4" FNPT (6)	Brass	3000	MB-6
1/4" FNPT (6)	SS	6000	MB-6SS
1/4" FNPT (7)	Brass	3000	MB-7
1/4" FNPT (7)	SS	6000	MB-7SS
1/4" FNPT(6) x 1/2"FNPT(2)	Brass	4500	GMA-SCMB



brass "y" connectors



ERGONOMIC DESIGN



"Y" Connectors With Shut-Off Valves

200 PSI

Service	Inlets	Outlets	Part No.
Oxygen	"B" 9/16"-18-RH-INT Swivel Nut	"B" 9/16"-18-RH-EXT	YV-50
Fuel Gas	"B" 9/16"-18-LH-INT Swivel Nut	"B" 9/16"-18-LH-EXT	YV-51
Oxygen	"B" 9/16"-18-RH-INT Swivel Nut	"B" 9/16"-18-RH-EXT (P.O.P.)	EZ-YV50
Fuel Gas	"B" 9/16"-18-LH-INT Swivel Nut	"B" 9/16"-18-LH-EXT (P.O.P.)	EZ-YV51
Argon	"B" 5/8"-18-RH-EXT Swivel Nut	"B" 5/8"-RH-INT	YV-420
Air-Water	"B" 5/8"-18-LH-EXT Swivel Nut	"B" 5/8"-LH-INT	YV-421



"Y" Connectors Without Shut-Off Valves

200 PSI

Service	Inlets	Outlets	Part No.
Oxygen	"B" 9/16"-18-RH-INT Swivel Nut	"B" 9/16"-18-RH-EXT	Y-50
Oxygen	"B" 9/16"-18-RH-INT Swivel Nut	1/4" FNPT	Y-80
Fuel Gas	"B" 9/16"-18-LH-INT Swivel Nut	"B" 9/16"-18-LH-EXT	Y-51
Fuel Gas	"B" 9/16"-18-LH-INT Swivel Nut	1/4" FNPT	Y-81
Argon	5/8"-18-RH-EXT Swivel Nut	"B" 5/8"-18-RH-INT	Y-420
Air-Water	5/8"-18-LH-EXT Swivel Nut	"B" 5/8"-18-LH-INT	Y-421



"Y" Connectors With Pipe Threads

3,000 PSI

Service	Inlets	Outlets	Part No.
Non-Corrosive Gases	1/8" FNPT	1/4" FNPT	Y-184
Non-Corrosive Gases	1/4" MNPT	1/4" FNPT	Y-224

Brass Seat Shut-Off Valves

200 PSI



V-88

Service	Inlet	Outlet	Part No.
Oxygen	"B" 9/16"-18-RH-EXT	"B" 9/16"-18-RH-EXT	V-50
Oxygen	"B" 9/16"-18-RH-INT Swivel Nut	"B" 9/16"-18-RH-EXT	V-52
Oxygen	"B" 9/16"-18-RH-EXT	1/4" MNPT	V-76
Oxygen	1/4" MNPT	"B" 9/16"-18-RH-EXT	V-88
Fuel Gas	1/4" NPT-M	"B" 9/16"-18LH-EXT	V-89
Fuel Gas	"A" 3/8"-24-LH-EXT	1/8" NPT-Male	V-25
Fuel Gas	"B" 9/16"-18-LH-EXT	"B" 9/16"-18-LH-EXT	V-51
Fuel Gas	"B" 9/16"-18-LH-INT Swivel Nut	"B" 9/16"-18-LH-EXT	V-53
Fuel Gas	"B" 9/16"-18-LH-EXT	1/8" MNPT	V-69
Fuel Gas	"B" 9/16"-18-LH-EXT	1/4" MNPT	V-77
Fuel Gas	"B" 9/16"-18-LH-EXT	1/4" FNPT	V-81
Argon	5/8" -18-RH-EXT Swivel Nut "B"	5/8" -18-RH-INT "B"	V-420
Argon	1/4" NPT-M	5/8" -18-RH-INT"B"	V-454



V-335

Service	Inlet	Outlet	Part No.
All Gases	1/8" MNPT	1/8" MNPT	V-301
All Gases	1/4" FNPT	1/4" FNPT	V-332
All Gases	1/4" MNPT	1/4" MNPT	V-333
All Gases	1/4" FNPT	1/4" MNPT	V-334
All Gases	1/4" MNPT	1/4" FNPT	V-335

3000 PSI

Dust Cap & Chain Assemblies (Non-Gas Tight)

Dust caps are one-piece blind nuts used to protect threads and keep some contamination from cylinder valves. CGA thread specifications are used, but they do not make a gas tight seal.



CC-8540
Oxygen

CGA No.	Gases	Connection	Part No.
022	Oxygen Std.	"B"9/16" -18-RH-INT	CC-8020
023	Fuel Gas Std.	"B"9/16" -18-LH-INT	CC-8021
024	Oxygen	"C"7/8"-14-RH-INT	CC-8034
025	Fuel Gas	"C"7/8"-14-LH-INT	CC-8035
300	Ethyl Chloride Acetylene	.830"-14NGO-RH-INT	CC-8300
320	Carbon Dioxide	.830"-14NGO-RH-INT	CC-8320
346	Air	.830"-14NGO-RH-INT	CC-8346
350	Hydrogen/Methane	.830"-14NGO-LH-INT	CC-8350
500	Medical Mixture	.880"-14NGO-RH-EXT	CC-8500
510	Acetylene/Propane	.880"-14NGO-LH-EXT	CC-8510
540	Oxygen	.908"-14NGO-RH-INT	CC-8540
555	Propane Liquid Withdrawal	.908"-14NGO-LH-INT	CC-8555
580	Argon, Helium, Nitrogen	.960"-14NGO-RH-EXT	CC-8580
660	Refrigeration Gases	1.035"-14NGO-RH-INT	CC-8660

brass plugs & plug & chain assemblies

Two-Piece Assemblies

These two-piece nut and blind nipple assemblies are made to CGA standards and make a gas tight seal.



CGA No.	Gases	Connection	Gas Seal (PSI)	Part No.
022	Oxygen	"B"9/16 -18-RH-INT	200	PC-4020
023	Fuel Gas	"B"9/16 -18-LH-INT	200	PC-4021
024	Oxygen	"C"7/8"-14-RH-INT	200	PC-4034
025	Fuel Gas	"C"7/8"-14-LH-INT	200	PC-4035
026	Oxygen	"D"1-1/4"-12-RH-INT	200	PC-4042
027	Fuel Gas	"D"1-1/4"-12-LH-INT	200	PC-4043
032	Inert Gas	"B"5/8"-18-RH-EXT	200	PC-4024
033	Air-Water	"B"5/8"-18-LH-EXT	200	PC-4025
032	Inert Gas	"B"5/8"-18-RH-INT	200	PC-4026
034	Inert Gas	"C"7/8"-14-RH-EXT	200	PC-4036
326	Nitrous Oxide	.830"-14NGO-RH-INT	3000	PC-4326
347	Air	.830"-14NGO-RH-INT	5500	PC-4347
350	Hydrogen/Methane	.830"-14NGO-LH-INT	3000	PC-4350
510	Acetylene/Propane	.880"-14NGO-LH-EXT	500	PC-4510
520	Acetylene	.899"-18NGO-RH-INT	500	PC-4520
540	Oxygen	.908"-14NGO-RH-INT	3000	PC-4540
555	Propane	.908"-14NGO-LH-INT	3000	PC-4555
580	Argon/Helium/Nitrogen	.960"-14NGO-RH-EXT	3000	PC-4580
680	Argon/Helium/Nitrogen	1.040"-14NGO-RH-EXT	5500	PC-4680

One-Piece Assemblies - With Chain

These shorter one-piece plug and chains can be used, where space is limited, to seal off cylinder valves and still be able to install the cylinder valve cap. The part makes a gas tight seal. Nipples have replaceable soft tips or o-rings.



CGA No.	Gases	Connection	Gas Seal (PSI)	Part No.
320	Carbon Dioxide	.830"-14NGO-RH-INT	500	PC-320
326	Nitrous Oxide	.830"-14NGO-RH-INT	3000	PC-326
330	Non-Corrosive Gas	.830"-14NGO-LH-INT	3000	PC-330
346	Air	.830"-14NGO-RH-INT	3000	PC-346
350	Hydrogen/Methane	.830"-14NGO-RH-INT	3000	PC-350
510	Acetylene/Propane	.880"-14NGO-LH-EXT	500	PC-510
540	Oxygen	.908"-14NGO-LH-INT	3000	PC-540
555	Propane	.908"-14NGO-LH-INT	3000	PC-555
580	Argon/Helium/Nitrogen	.960"-14NGO-RH-EXT	3000	PC-580
590	Sulfur Hexafluoride/Ind. Air	.960"-14NGO-LH-EXT	3000	PC-590

One-Piece Assemblies - Without Chain

These shorter one-piece plugs (sold without chains) can be used, where space is limited, to seal off cylinder valves and still be able to install the cylinder valve cap. The part makes a gas tight seal. Nipples have replaceable soft tips or o-rings.



CGA No.	Gases	Connection	Gas Seal (PSI)	Part No.
022	Oxygen	9/16"-18RH-INT	200	P-022
023	Fuel Gas	9/16"-18LH-INT	200	P-023
024	Oxygen	7/8"-14RH-INT	200	P-024
025	Fuel Gas	7/8"-14LH-INT	200	P-025
026	Oxygen	1.25"-12RH-INT	200	P-026
027	Fuel Gas	1.25"-12LH-INT	200	P-027
032	Inert	5/8"-18RH-EXT	200	P-032
032	Inert	5/8"-18RH-INT	200	P-032INT
033	Industrial Air	5/8"-18LH-EXT	200	P-033
034	Inert	7/8"-14RH-EXT	200	P-034
200	Acetylene "MC"	.625"-20RH-INT	500	P-200
300	Acetylene	.830"-14NGO-RH-INT	500	P-300
320	Carbon Dioxide	.830"-14NGO-RH-INT	500	P-320
326	Nitrous Oxide	.830"-14NGO-RH-INT	3000	P-326
330	Non-Corrosive Gas	.830"-14NGO-LH-INT	3000	P-330
346	Air	.830"-14NGO-RH-INT	3000	P-346
350	Hydrogen/Methane	.830"-14NGO-RH-INT	3000	P-350
510	Acetylene/Propane	.880"-14NGO-LH-EXT	500	P-510
540	Oxygen	.908"-14NGO-LH-INT	3000	P-540
555	Propane	.908"-14NGO-LH-INT	3000	P-555
580	Argon/Helium/Nitrogen	.960"-14NGO-RH-EXT	3000	P-580
590	Sulfur Hexafluoride/Ind. Air	.960"-14NGO-LH-EXT	3000	P-590

	CGA No.	Valve Outlet Adaptors Gas	Male & Female Pipe Threads Connection x NPT	Material	PSI	Part No.
Male NPT 	180	Non-Corrosive	.620"-18UNF-2B-RH-EXT x 1/4 MNPT	Brass	3,000	A-518
	180	Non-Corrosive	.620"-18UNF-2B-RH-EXT x 1/4 MNPT	S.S.	3,000	A-518SS
Female NPT 	296	Industrial Oxygen Mixtures	.803" UNS-2B-RH-INT x 1/4 FNPT	Brass	3,000	N-853A
Male NPT 	300	Ethyl Chloride (formerly Acetylene)	.825" 14NGO-RH-EXT x 1/4 MNPT	Brass	500	A-531
	300	Ethyl Chloride (formerly Acetylene)	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	500	A-533
Male NPT 	320	Carbon Dioxide	.825" 14NGO-RH-EXT x 1/4 MNPT	Brass	3,000	A-541
	320	Carbon Dioxide	.825" 14NGO-RH-EXT x 3/8 MNPT	Brass	3,000	A-542
	320	Carbon Dioxide	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	A-543
	320	Carbon Dioxide w/ Check Valve	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	A-543CV
Female NPT 	320	Carbon Dioxide	.825" 14NGO-RH-EXT x 1/4 MNPT	Brass	3,000	N-854A
	330	Carbon Sulfide	.825" 14NGO-LH-EXT x 1/4 FNPT	Brass	3,000	N-330A
Male NPT 	326	Nitrous Oxide	.825" 14NGO-RH-EXT x 1/4 MNPT	Brass	3,000	A-631
	326	Nitrous Oxide	.825" 14NGO-RH-EXT x 1/4 MNPT	CP Brass	3,000	MA-631
	326	Nitrous Oxide	.825" 14NGO-RH-EXT x 3/8 MNPT	Brass	3,000	A-632
	326	Nitrous Oxide w/ Check Valve	.825" 14NGO-RH-EXT x 3/8 MNPT	Brass	3,000	A-632CV
	326	Nitrous Oxide	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	A-633
	326	Nitrous Oxide w/ Check Valve	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	A-633CV
Female NPT 	326	Nitrous Oxide	.825" 14NGO-RH-EXT x 1/4 FNPT	Brass	3,000	N-811A
	326	Nitrous Oxide	.825" 14NGO-RH-EXT x 1/4 FNPT	CP Brass	3,000	MN-326A
Male NPT  	346	Air	.825" 14NGO-RH-EXT x 1/4 MNPT	Brass	3,000	A-641
	346	Air	.825" 14NGO-RH-EXT x 1/4 MNPT	CP Brass	3,000	MA-641
	346	Air	.825" 14NGO-RH-EXT x 1/4 MNPT	S.S.	3,000	A-641SS
	346	Air w/ Check Valve	.825" 14NGO-RH-EXT x 3/8 MNPT	Brass	3,000	A-642CV
	346	Air	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	A-643
	346	Air w/ Check Valve	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	A-643CV
Female NPT 	346	Air	.825" 14NGO-RH-EXT x 1/4 FNPT	Brass	3,000	N-866A
	346	Air	.825" 14NGO-RH-EXT x 1/4 FNPT	S.S.	3,000	N-866A-SS
	346	Air	.825" 14NGO-RH-EXT x 1/4 FNPT	CP Brass	3,000	MN-346A
Male NPT  	347	Air	.825" 14NGO-RH-EXT x 1/4 MNPT	Brass	5,500	A-661
	347	Air	.825" 14NGO-RH-EXT x 1/4 MNPT	S.S.	5,500	A-661SS
	347	Air	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	5,500	A-663

(347 continue next page)

valve outlet adaptors

	CGA No. Gas	Valve Outlet Adaptors	Male & Female Pipe Threads Connection x NPT	Material	PSI	Part No.
Female NPT 	347	Air	.825" 14NGO-RH-EXT x 1/4 FNPT	Brass	5,500	N-347A
	347	Air	.825" 14NGO-RH-EXT x 1/4 FNPT	S.S.	5,500	N-347A-SS
Male NPT 	350	Hydrogen/Methane/Natural Gas	.825" 14NGO-LH-EXT x 1/4 MNPT	Brass	3,000	A-551
	350	Hydrogen/Methane/Natural Gas	.825" 14NGO-LH-EXT x 1/2 MNPT	Brass	3,000	A-553
Female NPT 	350	Hydrogen/Methane/Natural Gas	.825" 14NGO-LH-EXT x 1/4 FNPT	Brass	3,000	N-874A
	350	Hydrogen/Methane/Natural Gas	.825" 14NGO-LH-EXT x 1/4 FNPT	S.S.	3,000	N-874A-SS
	350	Hydrogen/Methane/Natural Gas	.825" 14NGO-LH-EXT x 1/4 FNPT	CP Brass	3,000	MN-350A
Female NPT 	410	Canadian Acetylene	.850" 14NGO-LH-EXT x 1/4 FNPT	Brass	500	N-836A
Male NPT 	500	Medical Mixtures	.885" 14NGO-RH-INT x 1/4 MNPT	Brass	3,000	A-571
	500	Medical Mixtures w/ Check Valve	.885" 14NGO-RH-INT x 3/8 MNPT	Brass	3,000	A-572CV
	500	Medical Mixtures w/ Check Valve	.885" 14NGO-RH-INT x 1/2 MNPT	Brass	3,000	A-573CV
Female NPT 	500	Medical Mixtures	.885" 14NGO-RH-INT x 1/4 FNPT	Brass	3,000	N-807A
	500	Medical Mixtures	.885" 14NGO-RH-INT x 1/4 FNPT	CP Brass	3,000	MN-500A
Male NPT 	510	Acetylene/Propane/Natural Gas	.885" 14NGO-LH-INT x 1/4 MNPT	Brass	500	A-581
	510	Acetylene/Propane/Natural Gas	.885" 14NGO-LH-INT x 1/2 MNPT	Brass	500	A-583
Female NPT   <small>N-802A</small>	510	Acetylene/Propane/Natural Gas	.885" 14NGO-LH-INT x 1/4 FNPT	Brass	500	N-800A
	510	Acetylene/Propane/Natural Gas	.885" 14NGO-LH-INT x 1/4 FNPT	CP Brass	500	MN-510A
	510-90	Acetylene/Propane/Natural Gas	.885" 14NGO-LH-INT x 1/4 FNPT	Brass	500	N-802A
Male NPT  	540	Oxygen	.903" 14NGO-RH-EXT x 1/4 MNPT	Brass	3,000	A-591
	540	Oxygen	.903" 14NGO-RH-EXT x 1/4 MNPT	S.S.	3,000	A-591SS
	540	Oxygen	.903" 14NGO-RH-EXT x 3/8 MNPT	Brass	3,000	A-592
	540	Oxygen w/ Check Valve	.903" 14NGO-RH-EXT x 3/8 MNPT	Brass	3,000	A-592CV
	540	Oxygen	.903" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	A-593
	540	Oxygen w/ Check Valve	.903" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	A-593CV
Female NPT 	540	Oxygen	.903" 14NGO-RH-EXT x 1/4 FNPT	Brass	3,000	N-876A
	540	Oxygen	.903" 14NGO-RH-EXT x 1/4 FNPT	S.S.	3,000	N-876A-SS
	540	Oxygen	.903" 14NGO-RH-EXT x 1/4 FNPT	CP Brass	3,000	MN-540A
Male NPT 	555	Propane/Butane for Liquid Withdrawal	.903" 14NGO-LH-EXT x 1/4 MNPT	Brass	3,000	A-651
	555	Propane/Butane for Liquid Withdrawal	.903" 14NGO-LH-EXT x 1/2 MNPT	Brass	3,000	A-653
Female NPT 	555	Propane/Butane for Liquid Withdrawal	.903" 14NGO-LH-EXT x 1/4 FNPT	Brass	3,000	N-885A
Male NPT 	577	Oxygen	.960" 14NGO-RH-EXT x 1/2 MNPT	Brass	4,000	A-563
Female NPT 	577	Oxygen	.960" 14NGO-RH-EXT x 1/4 FNPT	Brass	4,000	N-577A

	CGA No. Gas	Valve Outlet Adaptors	Male & Female Pipe Threads Connection x NPT	Material	PSI	Part No.	
 <p>Male NPT</p>	580	Argon/Helium/Nitrogen	.965" 14NGO-RH-INT x 1/4 MNPT	Brass	3,000	A-601	
	580	Argon/Helium/Nitrogen	.965" 14NGO-RH-INT x 3/8 MNPT	Brass	3,000	A-602	
	580	Argon/Helium/Nitrogen w/ Check Valve	.965" 14NGO-RH-INT x 3/8 MNPT	Brass	3,000	A-602CV	
	580	Argon/Helium/Nitrogen	.965" 14NGO-RH-INT x 1/2 MNPT	Brass	3,000	A-603	
	580	Argon/Helium/Nitrogen w/ Check Valve	.965" 14NGO-RH-INT x 1/2 MNPT	Brass	3,000	A-603CV	
	580	Argon/Helium/Nitrogen	.965" 14NGO-RH-INT x 3/4 MNPT	Brass	3,000	A-605	
 <p>Female NPT</p>	580	Argon/Helium/Nitrogen	.965" 14NGO-RH-INT x 1/4 FNPT	Brass	3,000	N-862A	
	580	Argon/Helium/Nitrogen	.965" 14NGO-RH-INT x 1/4 FNPT	S.S.	3,000	N-862ASS	
	580	Argon/Helium/Nitrogen	.965" 14NGO-RH-INT x 1/4 FNPT	CP Brass	3,000	MN-580A	
 <p>Male NPT</p>	590	Sulfur Hexafluoride/Industrial Air	.965" 14NGO-LH-INT x 1/4 MNPT	Brass	3,000	A-611	
 <p>Female NPT</p>	590	Sulfur Hexafluoride/Industrial Air	.965" 14NGO-LH-INT x 1/4 FNPT	Brass	3,000	N-954A	
	590	Sulfur Hexafluoride/Industrial Air	.965" 14NGO-LH-INT x 1/4 FNPT	CP Brass	3,000	MN-590A	
 <p>Male NPT</p>	622	Carbon Dioxide Liquid Withdrawal	1.030" 14NGO-RH-EXT x 3/8 MNPT	Brass	500	A-722	
 <p>Male NPT</p>	624	Nitrous Oxide Liquid Withdrawal	1.030" 14NGO-RH-EXT x 3/8 MNPT	Brass	500	A-732	
 <p>Female NPT</p>	660	Refrigerant Gases	1.030" 14NGO-RH-EXT x 1/4 FNPT	Brass	3,000	N-880A	
	660	Refrigerant Gases	1.030" 14NGO-RH-EXT x 1/4 FNPT	CP Brass	3,000	MN-660A	
 <p>Male NPT</p>	677	Argon/Helium/Nitrogen	1.030" 14NGO-LH-EXT x 1/4 MNPT	Brass	7,500	A-671	
	677	Argon/Helium/Nitrogen	1.030" 14NGO-LH-EXT x 1/4 MNPT	S.S.	7,500	A-671SS	
	 <p>Male NPT</p>	677	Argon/Helium/Nitrogen	1.030" 14NGO-LH-EXT x 1/2 MNPT	Brass	7,500	A-673
	677	Argon/Helium/Nitrogen	1.030" 14NGO-LH-EXT x 1/2 MNPT	S.S.	7,500	A-673SS	
 <p>Female NPT</p>	677	Argon/Helium/Nitrogen	1.030" 14NGO-LH-EXT x 1/4 FNPT	Brass	7,500	N-677A	
	677	Argon/Helium/Nitrogen	1.030" 14NGO-LH-EXT x 1/4 FNPT	S.S.	7,500	N-677A-SS	
 <p>Male NPT</p>	680	Argon/Helium/Nitrogen	1.045" 14NGO-RH-INT x 1/4 MNPT	Brass	5,500	A-681	
	680	Argon/Helium/Nitrogen	1.045" 14NGO-RH-INT x 1/2 MNPT	Brass	5,500	A-683	
 <p>Female NPT</p>	680	Argon/Helium/Nitrogen	1.045" 14NGO-RH-INT x 1/4 FNPT	Brass	5,500	N-680A	
 <p>Male NPT</p>	701	Oxygen	1.103" 18NGO-RH-EXT x 1/2 MNPT	Brass	5,500	A-753	
 <p>Female NPT</p>	701	Oxygen	1.103" 18NGO-RH-EXT x 1/4 FNPT	Brass	5,500	N-701A	
 <p>Male NPT</p>	702	Air	1.125" 14NGO-RH-INT x 1/2 MNPT	Brass	7,500	A-763	
 <p>Female NPT</p>	702	Air	1.125" 14NGO-RH-INT x 1/4 FNPT	Brass	7,500	N-702A	

brass cga cylinder to regulator adaptors

CGA 200-300 Part No.	CGA 200-510 Part No.	CGA 200-510 Part No.	CGA 200-520 Part No.
500 PSI A-775 Acetylene Cylinder (CGA-200) Commercial Acetylene Regulator (CGA-300)	500 PSI A-780 Acetylene Cylinder (CGA-200) Acetylene P.O.L. Regulator (CGA-510)	500 PSI A-781 Acetylene "MC" Cylinder (CGA-200) Acetylene P.O.L. Regulator (CGA-510)	500 PSI A-783 Acetylene "MC" Cylinder (CGA-200) Acetylene B Regulator (CGA-520)
CGA 200-520 Part No.	CGA 280-540 Part No.	CGA 280-590 Part No.	CGA 300-200 Part No.
500 PSI A-784 Acetylene "MC" Cylinder (CGA-200) Acetylene B Regulator (CGA-520)	3000 PSI A-789 Medical Breathing Mixtures CGA-280 Cylinder Oxygen Regulator (CGA-540)	3000 PSI A-968 Medical Breathing Mixtures CGA-280 Cylinder Industrial Air (CGA-590) Regulator	500 PSI A-792 Commercial Acetylene Cylinder (CGA-300) Acetylene "MC" Regulator (CGA-200)
CGA 300-510 Part No.	CGA 300-510 Part No.	CGA 300-510 Part No.	CGA 300-520 Part No.
500 PSI A-800 Commercial Acetylene Cylinder (CGA-300) Acetylene P.O.L. Regulator (CGA-510)	500 PSI A-801 Commercial Acetylene Cylinder (CGA-300) 1 pc. Adaptor Acetylene P.O.L. Regulator (CGA-510)	500 PSI A-802 Commercial Acetylene Cylinder (CGA-300) 510 Acetylene P.O.L. Regulator (CGA-510)	500 PSI A-804 Commercial Acetylene Cylinder (CGA-300) Acetylene B Regulator (CGA-520)
CGA 320-580 Part No.	CGA 320-580 Part No.	CGA 346-540 Part No.	CGA 346-580 Part No.
3000 PSI A-809 Carbon Dioxide Cylinder (CGA-320) Argon, Helium, or Nitrogen Regulator (CGA-580)	3000 PSI A-810 Carbon Dioxide Cylinder (CGA-320) 1 pc. Adaptor Argon, Helium, or Nitrogen Regulator (CGA-580)	3000 PSI A-930 Air Cylinder (CGA-346) Oxygen Regulator (CGA-540)	3000 PSI A-935 Air Cylinder (CGA-346) Argon, Helium, or Nitrogen Regulator (CGA-580)

brass cga cylinder to regulator adaptors

CGA 350-580	Part No.	CGA 415-510	Part No.	CGA 500-540	Part No.	CGA 500-580	Part No.
3000 PSI Hydrogen, Methane Cylinder (CGA-350)	A-820	500 PSI Canadian L.A. Acetylene Cylinder (CGA-415)	A-827	3000 PSI Medical Mixtures Cylinder (CGA-500)	A-909	3,000 PSI Medical Mixtures Cylinder (CGA-500)	A-912
							
Argon, Helium, or Nitrogen Regulator (CGA-580)		Acetylene P.O.L. Regulator (CGA-510)		Oxygen Regulator (CGA-540)		Argon, Helium, or Nitrogen Regulator (CGA-580)	
CGA 510-200	Part No.	CGA 510-300	Part No.	CGA 510-300	Part No.	CGA 510-410	Part No.
500 PSI Acetylene P.O.L. Cylinder (CGA-510)	A-828	500 PSI Acetylene P.O.L. Cylinder (CGA-510)	A-830	500 PSI Acetylene P.O.L. Cylinder (CGA-510)	A-831	500 PSI Acetylene P.O.L. Cylinder (CGA-510)	A-836
							
Acetylene "MC" Regulator (CGA-200)		Commercial Acetylene Regulator (CGA-300)		1 pc Adaptor Commercial Acetylene Regulator (CGA-300)		Canadian Acetylene Regulator (CGA-410)	
CGA 510-510	Part No.	CGA 510-520	Part No.	CGA 520-200	Part No.	CGA 520-300	Part No.
500 PSI Acetylene P.O.L. Cylinder (CGA-510)	A-838	500 PSI Acetylene P.O.L. Cylinder (CGA-510)	A-840	500 PSI Acetylene B Cylinder (CGA-520)	A-842	500 PSI Acetylene B Cylinder (CGA-520)	A-844
							
Acetylene P.O.L. Regulator (CGA-510)		Acetylene B Regulator (CGA-520)		Acetylene "MC" Regulator (CGA-200)		Commercial Acetylene Regulator (CGA-300)	
CGA 520-510	Part No.	CGA 520-510	Part No.	CGA 540-346	Part No.	CGA 540-580	Part No.
500 PSI Acetylene B Cylinder (CGA-520)	A-848	500 PSI Acetylene B Cylinder (CGA-520)	A-850	3000 PSI Oxygen Cylinder (CGA-540)	A-866	3000 PSI Oxygen Cylinder (CGA-540)	A-862
							
Acetylene P.O.L. Regulator (CGA-510)		Acetylene P.O.L. Regulator (CGA-510)		Air Regulator (CGA-346)		Argon, Helium, or Nitrogen Regulator (CGA-580)	

brass cga cylinder to regulator adaptors

CGA 555-510 Part No.	CGA 555-580 Part No.	CGA 580-320 Part No.	CGA 580-346 Part No.
500 PSI A-948 Propane (L.W.) Cylinder (CGA-555)  Acetylene P.O.L. Regulator (CGA-510)	3000 PSI A-952 Propane (L.W.) Cylinder (CGA-555)  Argon, Helium, or Nitrogen Regulator (CGA-580)	3000 PSI A-870 Argon, Helium, or Nitrogen Cylinder (CGA-580)  Carbon Dioxide Regulator (CGA-320)	3000 PSI A-882 Argon, Helium, or Nitrogen Cylinder (CGA-580)  Air Regulator (CGA-346)
CGA 580-540 Part No.	CGA 580-590 Part No.	CGA 590-346 Part No.	CGA 590-580 Part No.
3000 PSI A-876 Argon, Helium, or Nitrogen Cylinder (CGA-580)  Oxygen Regulator (CGA-540)	3000 PSI A-879 Argon, Helium, or Nitrogen Cylinder (CGA-580)  Industrial Air Regulator (CGA-590)	3000 PSI A-894 Industrial Air Cylinder (CGA-590)  Air Regulator (CGA-346)	3000 PSI A-892 Industrial Air Cylinder (CGA-590)  Argon, Helium, or Nitrogen Regulator (CGA-580)

FLARE TUBING ADAPTORS

500 PSI

	CGA	Connection	Gas	Part No.
 FA-4404	CGA 165 male	1/4" flare x 1/8" MNPT	Refrigerants	FA-1651
	CGA 165 male	1/4" flare x 1/4" MNPT	Refrigerants	FA-1652
	CGA 182 male	3/8" flare x 1/4" MNPT	Refrigerants	FA-1822
	CGA 295 male	1/2" flare x 1/4" MNPT	Cryogenic Inert	FA-2952
	CGA 295 male	1/2" flare x 3/8" MNPT	Cryogenic Inert	FA-2953
	CGA 295 male	1/2" flare x 1/2" MNPT	Cryogenic Inert	FA-2954
	CGA 440 male	5/8" flare x 1/4" MNPT	Cryogenic Oxygen	FA-4402
	CGA 440 male	5/8" flare x 3/8" MNPT	Cryogenic Oxygen	FA-4403
	CGA 440 male	5/8" flare x 1/2" MNPT	Cryogenic Oxygen	FA-4404
	CGA 440 male	5/8" flare x 3/4" MNPT	Cryogenic Oxygen	FA-4405
	CGA 450 LH male	5/8" flare x 1/4" MNPT	Methane, Natural Gas	FA-4502

CGA 440 Oxygen Cryogenic Transfer Hose	CGA 295 Nitrogen Cryogenic Transfer Hose																				
<p>(B)=Brass Ends (S)=Stainless Steel Ends – Insert type of material</p> <p style="text-align: right;">500 PSI</p> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: center;"> <p>STAINLESS STEEL</p> <p>CHS-440-440-72</p> </div> </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>CGA 440 female both ends 48" long</td><td>CH()-440-440-48</td></tr> <tr><td>CGA 440 female both ends 60" long</td><td>CH()-440-440-60</td></tr> <tr><td>CGA 440 female both ends 72" long</td><td>CH()-440-440-72</td></tr> <tr><td>CGA 440 female both ends 120" long</td><td>CH()-440-440-120</td></tr> <tr><td>CGA 440 female both ends 144" long</td><td>CH()-440-440-144</td></tr> </table>	CGA 440 female both ends 48" long	CH()-440-440-48	CGA 440 female both ends 60" long	CH()-440-440-60	CGA 440 female both ends 72" long	CH()-440-440-72	CGA 440 female both ends 120" long	CH()-440-440-120	CGA 440 female both ends 144" long	CH()-440-440-144	<p>(B)=Brass Ends (S)=Stainless Steel Ends</p> <p style="text-align: right;">500 PSI</p> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: center;"> <p>STAINLESS STEEL</p> <p>CHS-295-295-72</p> </div> </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>CGA 295 female both ends 48" long</td><td>CH()-295-295-48</td></tr> <tr><td>CGA 295 female both ends 60" long</td><td>CH()-295-295-60</td></tr> <tr><td>CGA 295 female both ends 72" long</td><td>CH()-295-295-72</td></tr> <tr><td>CGA 295 female both ends 120" long</td><td>CH()-295-295-120</td></tr> <tr><td>CGA 295 female both ends 144" long</td><td>CH()-295-295-144</td></tr> </table>	CGA 295 female both ends 48" long	CH()-295-295-48	CGA 295 female both ends 60" long	CH()-295-295-60	CGA 295 female both ends 72" long	CH()-295-295-72	CGA 295 female both ends 120" long	CH()-295-295-120	CGA 295 female both ends 144" long	CH()-295-295-144
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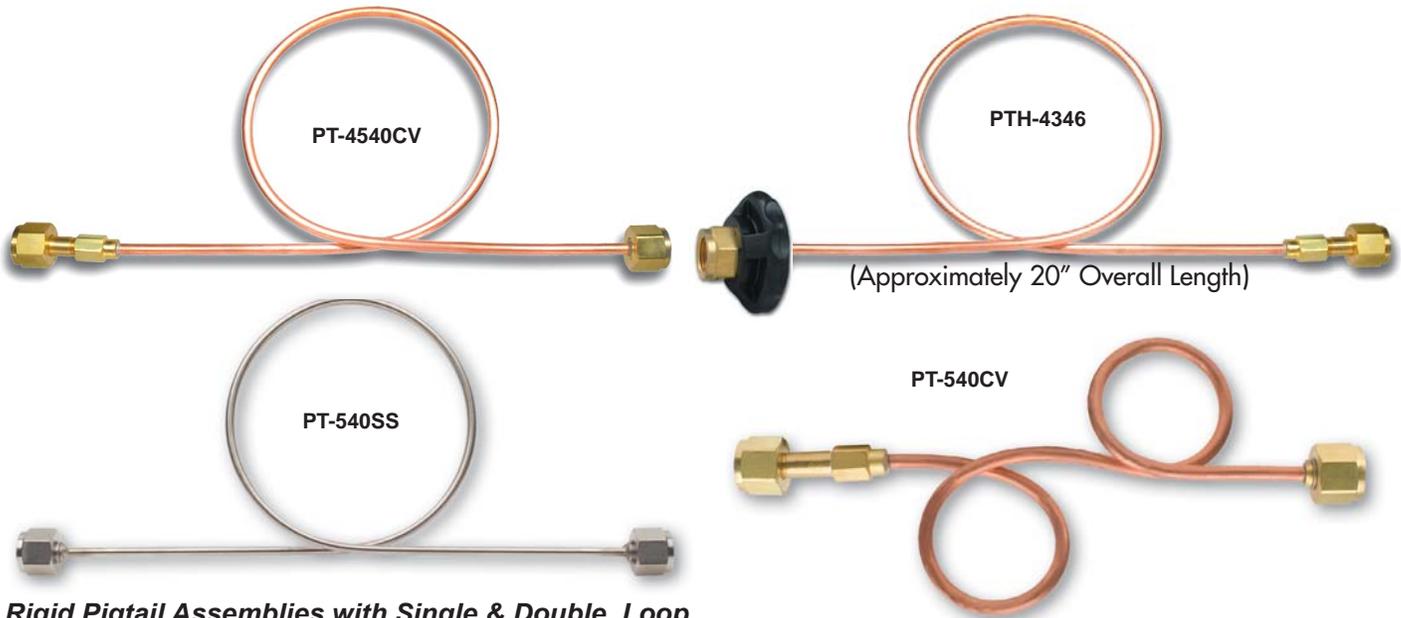
**Other lengths available. Call for part number.*

Example - CHS-295-295-72 = CGA Stainless Steel ends 72" long

Quick Connect Handwheel	Quick Connect Tee Handle								
 500 PSI STAINLESS STEEL	 500 PSI STAINLESS STEEL								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Oxygen CGA 440 Handwheel</td><td>HTC-440</td></tr> <tr><td>Nitrogen/Inert CGA 295 Handwheel</td><td>HTC-295</td></tr> </table>	Oxygen CGA 440 Handwheel	HTC-440	Nitrogen/Inert CGA 295 Handwheel	HTC-295	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Oxygen CGA 440 Tee Handle</td><td>CHTE-440</td></tr> <tr><td>Nitrogen/Inert CGA 295 Tee Handle</td><td>CHTE-295</td></tr> </table>	Oxygen CGA 440 Tee Handle	CHTE-440	Nitrogen/Inert CGA 295 Tee Handle	CHTE-295
Oxygen CGA 440 Handwheel	HTC-440								
Nitrogen/Inert CGA 295 Handwheel	HTC-295								
Oxygen CGA 440 Tee Handle	CHTE-440								
Nitrogen/Inert CGA 295 Tee Handle	CHTE-295								

Cryogenic Phase Separator	Fill Elbow						
 500 PSI STAINLESS STEEL	 500 PSI STAINLESS STEEL						
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>3/8" female NPT</td><td>CPS-001</td></tr> </table>	3/8" female NPT	CPS-001	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Oxygen CGA 440</td><td>CEL-440</td></tr> <tr><td>Nitrogen/Inert CGA 295</td><td>CEL-295</td></tr> </table>	Oxygen CGA 440	CEL-440	Nitrogen/Inert CGA 295	CEL-295
3/8" female NPT	CPS-001						
Oxygen CGA 440	CEL-440						
Nitrogen/Inert CGA 295	CEL-295						

rigid copper & stainless steel pigtails



Rigid Pigtail Assemblies with Single & Double Loop

CGA No.	Operating Pressure (PSI)	Standard Pigtail	Plastic H.T. Nut-One End	Brass Wrench One End	S.S. Tube & S.S Ends	Copper pigtail 2 loops,brass ends
300	250	*PT-3300	*PTH-3300	*PTW-3300	N/A	*PT-300
320	3000	PT-4320	PTH-4320	PTW-4320	PT-320SS	PT-320
326	3000	PT-4326	PTH-4326	PTW-4326	PT-326SS	PT-326
346	3000	PT-4346	PTH-4346	PTW-4346	PT-346SS	PT-346
350	3000	PT-4350	PTH-4350	PTW-4350	PT-350SS	PT-350
510	500	PT-4510	PTH-4510	PTW-4510	PT-510SS	PT-510
510-90°	250	*PT-3510	*PTH-3510	*PTW-3510	N/A	N/A
540	3000	PT-4540	PTH-4540	PTW-4540	PT-540SS	PT-540
580	3000	PT-4580	PTH-4580	PTW-4580	PT-580SS	PT-580
590	3000	PT-4590	PTH-4590	PTW-4590	PT-590SS	PT-590

To add check valve to inlet, add "CV". For reverse check valve on outlet, add "RCV" (see pg. 23 for explanation).

* All pigtails designated for Acetylene service are built with brass tubing.

Annealed Copper Coiled Tubing 3000 psi	Part No.
Seamless copper tubing 1/4" O.D. x .065 wall	CT-44
Seamless copper tubing 5/16" O.D. x .065 wall	CT-45
50 ft. Rolls, Not Cleaned for O2 service	



NPT ends for copper & brass tubing 3000 psi	Part No.
Male 1/4" NPT x 5/16" O.D. Tubing	XPTE-004C3
Female 1/4" NPT x 1/4" O.D. Tubing	XPTE-005C2
Female 1/4" NPT x 1/4" O.D. Tubing, Stainless Steel	XPTE-005C2SS
Female 1/4" NPT x 5/16" O.D. Tubing	XPTE-005C3



XPTE-005C3



XPTE-004C3

Snap rings for pigtail nut & nipples	Part No.
Snap Ring - Secures Nut to Nipple	XSR-020
Standard package of 25	



XSR-020

min. length=6"
max length=600"

flexible hose types



EXAMPLE:
PTF-580H-580-24

PTFE/STAINLESS BRAIDED HOSE

3000 PSI WORKING PRESSURE

EXAMPLE	PTF Hose Type	-	580H Inlet	-	580 Outlet	-	24 Length
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Superior PTF Series PTFE Lined Stainless Braided Pigtails are designed for 3000 PSI working pressure for a broad range of applications. Comes standard with stainless steel ferrules for longer service life. Available with Armor Guard or spring guard.

Specifications:

- 1/4" Nominal I.D.
- Braid is Type 304 stainless steel
- Temperature rating -65°F to 450°F
- Burst pressure is 12,000 PSI at room temperature
- Minimum bend radius of 3 inches for maximum safety & life

Not recommended for lighter than air gases based on effusion



EXAMPLE:
PTFT-34I-34I-24

ETFE/STAINLESS BRAIDED HOSE

3000 PSI WORKING PRESSURE

EXAMPLE	PTFT Hose Type	-	34I Inlet	-	34I Outlet	-	24 Length
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For use in Helium and Hydrogen gas service to reduce effusion of lighter than air gases. ETFE Hose is also good for high purity applications where off gassing of hydrocarbons and low diffusion rate is a concern. Please note ETFE has a lower diffusion rate than PTFE, although it does not provide zero effusion. For zero effusion, use rigid copper, brass or stainless steel. Available with Armor Guard or spring guard.

Specifications:

- 1/4" Nominal I.D.
- Braid is Type 304 stainless steel, lining is ETFE
- Temperature rating -65°F to 450°F
- Burst pressure is 12,000 PSI at room temperature
- Minimum bend radius of 3 inches for maximum safety & life



EXAMPLE:
PTFN-N34I-N34I-24

NYLON SYNTHETIC BRAIDED HOSE

3000 PSI WORKING PRESSURE

EXAMPLE	PTFN Hose Type	-	N 34I Inlet	-	N34I Outlet	-	24 Length
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For use in Helium and Hydrogen gas service to reduce effusion of lighter than air gases. Please note synthetic nylon tube has a lower diffusion rate than PTFE, although it does not provide zero effusion. For zero effusion, use rigid copper, brass or stainless steel. Available with Armor Guard or spring guard.

Specifications:

- 1/4" Nominal I.D.
- Braid is synthetic fiber, lining is extruded nylon, polyurethane cover
- Temperature rating -40°F to 212°F
- Burst pressure is 12,000 PSI at room temperature
- Minimum bend radius of 3 inches for maximum safety & life

Not for oxygen service



EXAMPLE:
PTF6-680-64ISS-24

PTFE/STAINLESS DOUBLE BRAIDED HOSE

6000 PSI WORKING PRESSURE

EXAMPLE	PTF6 Hose Type	-	680 Inlet	-	641SS Outlet	-	24 Length
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For newer high pressure CGA's. PTFE lined, stainless braided hose is available with or without Armor Guard for 6,000 PSI working pressure.

Specifications:

- 1/4" Nominal I.D.
- Braid is Type 304 stainless steel
- Temperature rating -65°F to 450°F
- Burst pressure is 24,000 PSI at room temperature
- Minimum bend radius of 3 inches for maximum safety & life



EXAMPLE:
PTF36-34I-34I-24

POST SINTERED, DOUBLE BRAIDED, PTFE HOSE

3600 PSI WORKING PRESSURE

EXAMPLE	PTF36 Hose Type	-	34I Inlet	-	34I Outlet	-	24 Length
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For newer high pressure CGA's. PTFE lined, stainless braided hose is available with or without Armor Guard for 3,600 PSI working pressure.

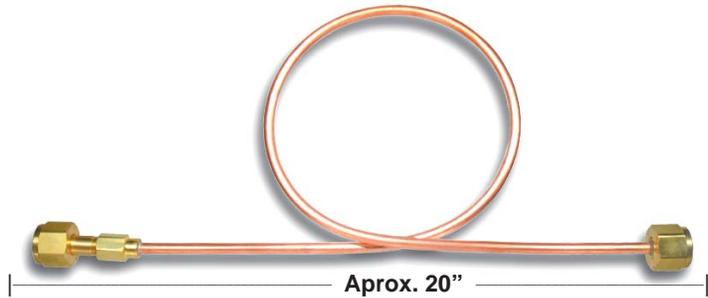
Specifications:

- 1/4" Nominal I.D.
- Braid is Type 304 stainless steel
- Temperature rating -65°F to 450°F
- Burst pressure is 14,400 PSI at room temperature
- Minimum bend radius of 3 inches for maximum safety & life

NFPA Replacement Pigtails for Hospital Medgas Systems



- 304 Stainless Steel Braid
- PTFE Core
- 3,000 PSI Working Pressure
- 100% Leak Tested & Bagged
- Permanent non removable CGA fitting ends per NFPA code
- Stainless Steel Braid not for use with Oxygen



- Annealed Copper Tubing
- 5/16" OD x .065 wall
- Silver Brazed End Fittings
- 3,000 PSI Working Pressure
- Permanent non removable CGA fitting ends per NFPA code

Gas Service	Inlet/Outlet Threads	Hose Materials	Part No.
Carbon Dioxide	CGA 320 Female Nut	Stainless Steel/Teflon	PTFP-320-24 or 36
Nitrous Oxide	CGA 326 Female Nut	Stainless Steel/Teflon	PTFP-326-24 or 36
Medical Air	CGA 346 Female Nut	Stainless Steel/Teflon	PTFP-346-24 or 36
Medical Mixture	CGA 500 Male Nut	Stainless Steel/Teflon	PTFP-500-24 or 36
Nitrogen, Helium	CGA 580 Male Nut	Stainless Steel/Teflon	PTFP-580-24 or 36
Oxygen	CGA 540 Female Nut	Copper/Brass ends	PT-4540
Nitrous Oxide	CGA 326 Female Nut	Copper/Brass ends	PT-4326

72" Liquid Cylinder Gas Use Pigtails for use with Dewar manifold systems



- Black polyester blend perforated cover
- 3/8" ID Nylon Core
- 2,250 PSI Working Pressure
- Temperature rating -70F to +212F
- Permanent non removable CGA fitting ends per NFPA code

Gas Service	Inlet/Outlet Threads	Hose Material	Part No.
Carbon Dioxide	CGA 320 Female Nut	3/8" I.D. Nylon Tube	PFSL-320-72
Nitrous Oxide	CGA 326 Female Nut	3/8" I.D. Nylon Tube	PFSL-326-72
Medical Air	CGA 346 Female Nut	3/8" I.D. Nylon Tube	PFSL-346-72
Medical Mixture	CGA 500 Male Nut	3/8" I.D. Nylon Tube	PFSL-500-72
Oxygen	CGA 540 Female Nut	3/8" I.D. Nylon Tube	PFSL-540-72
Nitrogen, Helium	CGA 580 Male Nut	3/8" I.D. Nylon Tube	PFSL-580-72

The pigtails on this page are specially designed to meet the requirements of NFPA for Hospital medgas manifold systems. The major feature being NFPA's requirement for permanent affixed ends to avoid cross connection through modification or switching of the nut and nipple to hook up a different gas than a system was designed for. The other requirement is a mandatory copper pigtail for use in high pressure oxygen service. Some states also require that because Nitrous Oxide is an oxidizer, copper is also required.

STANDARD 1/4 Inch Flexible PIGTAILS



PTF-34I-34I-24

- 304 Stainless Steel Braid
- PTFE or ETFE Core
- 3000 or 6000 PSI Working Pressure
- 100% Pressure Tested
- Cleaned & bagged for oxygen service
- Stainless Steel Collar



PTF6-64ISS-64ISS-24

Stainless Steel Braided PTFE or ETFE with 1/4" NPT Female Brass Ends

Materials	Inlet Threads		Outlet Threads	Length	Part No.
PTFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	18"	PTF-34I-34I-18
PTFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	24"	PTF-34I-34I-24
PTFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	36"	PTF-34I-34I-36
PTFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	48"	PTF-34I-34I-48
ETFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	18"	PTFT-34I-34I-18
ETFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	24"	PTFT-34I-34I-24
ETFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	36"	PTFT-34I-34I-36
ETFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	48"	PTFT-34I-34I-48

Stainless Steel Double Braided PTFE with 1/4" NPT Female Stainless Steel Ends

Materials	Inlet Threads		Outlet Threads	Length	Part No.
PTFE core/SS braid, SS ends	1/4"NPT female	X	1/4"NPT female	18"	PTF6-64ISS-64ISS-18
PTFE core/SS braid, SS ends	1/4"NPT female	X	1/4"NPT female	24"	PTF6-64ISS-64ISS-24
PTFE core/SS braid, SS ends	1/4"NPT female	X	1/4"NPT female	36"	PTF6-64ISS-64ISS-36
PTFE core/SS braid, SS ends	1/4"NPT female	X	1/4"NPT female	48"	PTF6-64ISS-64ISS-48

SPECIAL CONFIGURED PIGTAILS

Ordering Information

Superior's flexible hose assemblies are made to order, tested and individually bagged. Each configured part number consists of four elements: (see below) The **1st** place holder specifies the type of hose, PTF etc. The **2nd** place holder specifies the inlet fitting and or accessories such as 540H = oxygen with a hand tight nut & nipple on the inlet. The **3rd** place holder specifies outlet connection and/or accessories. The **4th** place holder designates the length of hose in inches.

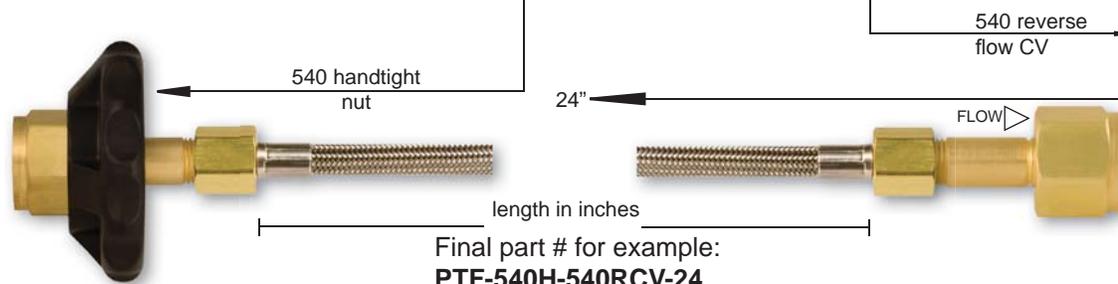
TYPE OF HOSE

PTF 3,000 PSI	PTFT 3,000 PSI	PTFN 3,000 PSI	PTF6 6,000 PSI	PTF36 3,600 PSI
PTFE TUBE TUBE	ETFE TUBE	NYLON TUBE	PTFE TUBE	Post Sintered PTFE
Stainless Steel BRAID	Stainless Steel BRAID	Synthetic BRAID	Stainless Steel DOUBLE BRAID	Stainless Steel DOUBLE BRAID

END CONNECTION & ACCESSORIES STATED AS CGA & OPTIONS PG. 65

END CONNECTION & ACCESSORIES STATED AS CGA & OPTIONS PG. 65

LENGTH OF HOSE STATED IN INCHES



available hose options and features

<p>Spring Guard is available for Superior's PTF, PTFT, PTF36, PTF6, and PTFN Series hoses. Spring Guard provides protection from kinking and abrasion of your flexible hose. The crimped ends offer whip protection if the hose is severed.</p> <p>Specification: Dependent on the type of hose being used (see available hoses on the previous page)</p>	<p>Armor guard is available for Superior's PTF, PTFT, PTF36, PTF6, and PTFN Series Stainless hoses. Armor Guard provides protection from cutting, kinking, abrasion, or crushing your flexible hose. The crimped ends offer whip protection if the hose is severed.</p> <p>Specifications: Dependent on the type of hose being used (see available hoses on the previous page)</p>
<p>Spring Guard Braided</p>	<p>Armor Guard Protection</p>
<p>PTFSG</p>	<p>PTFG</p>
	
<p>Female NPT</p>	<p>1/4" FNPT Swivel</p>
<p>XXX 34I</p>	<p>SW</p>
	
<p>Male NPT</p>	<p>Male CGA Handtight</p>
<p>XXX 34E</p>	<p>H</p>
	
<p>Female CGA's</p>	<p>Female CGA Handtight</p>
<p>XXX 54O</p>	<p>H</p>
	
<p>Male CGA's</p>	<p>Flash Arrestor</p>
<p>XXX 58O</p>	<p>FA</p>
	
<p>Check Valve Nipple</p>	<p>O2 Adiabatic Heat Sink End</p>
<p>CV</p>	<p>HS</p>
	
<p>Reverse Flow Check Valve Nipple</p>	<p>Valves</p>
<p>RCV</p>	<p>V</p>
	
<p>Elbow</p>	
<p>L</p>	
	

Female NPT			Male NPT		
					
Brass 1/8" Female NPT	=	32I	Brass 1/8" Male NPT	=	32E
Brass 1/4" Female NPT	=	34I	Brass 1/4" Male NPT	=	34E
Stainless Steel 1/4" Female NPT	=	34ISS	Stainless Steel 1/4" Male NPT	=	34ESS
Brass 3/8" Female NPT	=	36I	Brass 3/8" Male NPT	=	36E
Brass 1/2" Female NPT	=	38I	Brass 1/2" Male NPT	=	38E
Female CGA			Handtight		
					
CGA 280	=	280	CGA 300	=	300H
CGA 300	=	300	CGA 326	=	326H
CGA 320	=	320	CGA 346	=	346H
CGA 326	=	326	CGA 347	=	347H*
CGA 330	=	330	CGA 350	=	350H**
CGA 346	=	346	CGA 520	=	520H
CGA 350	=	350**	CGA 540	=	540H
CGA 577	=	577*	CGA 555	=	555H
CGA 701	=	701*			
* Only on 6,000 PSI Hose (PTF6)			* Only on 6,000 PSI Hose (PTF6)		
** Only with ETFE or Nylon Hose (PTFT/PTFN)			** Only with ETFE or Nylon Hose (PTFT/PTFN)		
Male CGA			Handtight		
					
CGA 296	=	296	CGA 296	=	296H
CGA 500	=	500	CGA 500	=	500H
CGA 510	=	510	CGA 510	=	510H
CGA 580	=	580**	CGA 580	=	580H**
			CGA 590	=	590H
** For Helium Use, ETFE or Nylon hose is recommended (PTFT/PTFN)			* Only with 6,000 PSI (PTF6)		
			** For Helium Use, ETFE or Nylon hose is recommended (PTFT/PTFN)		
Male CGA Valve Outlets			Female CGA Valve Outlets		
					
		CGA 540			CGA 580
CGA 300	=	300M	CGA 500	=	500F
CGA 320	=	320M	CGA 510	=	510F
CGA 326	=	326M	CGA 580	=	580F**
CGA 346	=	346M	CGA 590	=	590F
CGA 347	=	347M*	CGA 680	=	680F*
CGA 350	=	350M**			
CGA 540	=	540M	* Only on 6,000 PSI Hose (PTF6)		
CGA 555	=	555M	** For Helium Use, ETFE or Nylon hose is recommended (PTFT/PTFN)		
CGA 577	=	577M*			
CGA 701	=	701M*			
* Only on 6,000 PSI Hose (PTF6)					
** Only with ETFE or Nylon Hose (PTFT/PTFN)					

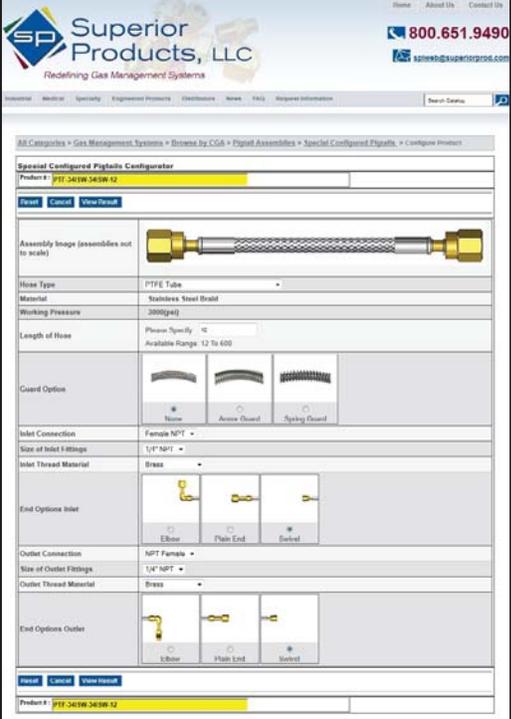
All Handtight Nuts are plastic handles with brass insert. All brass Handtight Nuts available on special request.

pigtail ordering matrix

1. Pick Your Hose Type	2. Guard Option	3. CGA or NPT Thread at Inlet																																																																																						
<p>PTF, PTFT, PTFN, PTF6, PTF36 PTFE, ETFE, SYNTHETIC TUBE 6000 PSI, POST SINTERED 3600 PTFE DOUBLE BRAID</p>  <p>EXAMPLE: PTF-580H-580-36</p>  <p>EXAMPLE: PTFT-34I-34I-36</p>  <p>EXAMPLE: PTFN-N34I-N34I-24</p>  <p>EXAMPLE: PTF6-680-64ISS-36</p>  <p>EXAMPLE: PTF36-34I-34I-24</p>	<p>G = Armor Guard SG=Spring Guard</p>  <p>PTFSG EXAMPLE: PTFSG-G34I-G34I-24</p>  <p>PTFG Armor guard minimum length 24" EXAMPLE: PTFG-G34I-G34I-24</p>	<p>END CONNECTION STATED AS THE CGA OF THE GAS YOU WISH TO USE IN THE HOSE OR THE TYPE OF TANK</p> <table border="0"> <tr> <td>Brass 1/4 Male NPT</td> <td>34E</td> </tr> <tr> <td>Stainless Steel 1/4 Male NPT</td> <td>34ESS</td> </tr> <tr> <td>Brass 1/4 Female NPT</td> <td>34I</td> </tr> <tr> <td>Stainless Steel 1/4 Female NPT</td> <td>34ISS</td> </tr> <tr> <td>Brass 3/8 Female NPT</td> <td>36I</td> </tr> <tr> <td>Brass 1/2 Female NPT</td> <td>38I</td> </tr> <tr> <td>Brass 1/4 Female NPT, 3600 psi</td> <td>44I</td> </tr> <tr> <td>FEMALE CGA</td> <td>280</td> </tr> <tr> <td></td> <td>300</td> </tr> <tr> <td></td> <td>320</td> </tr> <tr> <td></td> <td>326</td> </tr> <tr> <td></td> <td>330</td> </tr> <tr> <td></td> <td>346</td> </tr> <tr> <td></td> <td>347</td> </tr> <tr> <td></td> <td>350**</td> </tr> <tr> <td></td> <td>410</td> </tr> <tr> <td></td> <td>415</td> </tr> <tr> <td></td> <td>520</td> </tr> <tr> <td></td> <td>540</td> </tr> <tr> <td></td> <td>555</td> </tr> <tr> <td></td> <td>577*</td> </tr> <tr> <td></td> <td>660</td> </tr> <tr> <td></td> <td>701*</td> </tr> <tr> <td>FEMALE CGA HT</td> <td>300H</td> </tr> <tr> <td></td> <td>320H</td> </tr> <tr> <td></td> <td>326H</td> </tr> <tr> <td></td> <td>346H</td> </tr> <tr> <td></td> <td>347H*</td> </tr> <tr> <td></td> <td>350H**</td> </tr> <tr> <td></td> <td>520H</td> </tr> <tr> <td></td> <td>540H</td> </tr> <tr> <td></td> <td>555H</td> </tr> <tr> <td>MALE CGA</td> <td>296</td> </tr> <tr> <td></td> <td>500</td> </tr> <tr> <td></td> <td>510</td> </tr> <tr> <td></td> <td>580**</td> </tr> <tr> <td></td> <td>590</td> </tr> <tr> <td></td> <td>680*</td> </tr> <tr> <td>MALE CGA HT</td> <td>296H</td> </tr> <tr> <td></td> <td>500H</td> </tr> <tr> <td></td> <td>510H</td> </tr> <tr> <td></td> <td>580H**</td> </tr> <tr> <td></td> <td>590H</td> </tr> </table>	Brass 1/4 Male NPT	34E	Stainless Steel 1/4 Male NPT	34ESS	Brass 1/4 Female NPT	34I	Stainless Steel 1/4 Female NPT	34ISS	Brass 3/8 Female NPT	36I	Brass 1/2 Female NPT	38I	Brass 1/4 Female NPT, 3600 psi	44I	FEMALE CGA	280		300		320		326		330		346		347		350**		410		415		520		540		555		577*		660		701*	FEMALE CGA HT	300H		320H		326H		346H		347H*		350H**		520H		540H		555H	MALE CGA	296		500		510		580**		590		680*	MALE CGA HT	296H		500H		510H		580H**		590H
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* Only on 6,000 PSI Hose (PTF6)

** Only with ETFE or Nylon Hose (PTFT/PTFN) CGA

4. Options for either end	5. CGA or NPT thread at outlet	6. Length of hose (in inches)
<p>ADDITIONAL OPTIONS OR ENHANCEMENTS SUCH AS CHECK VALVES, VALVES, ELBOWS, SWIVEL, BRASS WRENCH, HEAT SINK</p>	<p>END CONNECTION STATED AS THE CGA OF THE GAS YOU WISH TO USE IN THE HOSE OR THE TYPE OF TANK</p>	<p>STANDARD LENGTHS SHOWN CUSTOM LENGTHS AVAILABLE TOO</p>
<p>CV </p>	<p>Brass 1/4 Male NPT 34E Stainless Steel 1/4 Male NPTE 34ESS Brass 1/4 Female NPT 34I Stainless Steel 1/4 Female NPT 34ISS Brass 3/8 Female NPT 36I Brass 1/2 Female NPT 38I Brass 1/4 Female NPT, 3600 psi 44I</p>	<p>Max - 50 ft (600") Not cleaned for oxygen service past 20 ft.</p>
<p>RCV </p>	<p>FEMALE CGA 280  00 320 326 330 346 347 350** 410 415 520 540 555 577* 660 701*</p>	<p>Superior Product's Online Pigtail Configurator <i>One more way to order your custom pigtails from www.superiorprod.com</i></p>
<p>L </p>	<p>FEMALE CGA HT  300H 320H 326H 346H 347H* 350H** 520H 540H 555H</p>	<p><i>Configure your custom pigtails by selecting:</i></p> <ul style="list-style-type: none"> -Hose type -Hose length -Inlet connection -Inlet fittings -Inlet thread material -End options inlet -Outlet connection -Size of outlet fittings -Outlet thread material -End options outlet
<p>V </p>	<p>MALE CGA 296  500 510 580** 590 680*</p>	
<p>SW </p>	<p>MALE CGA HT 296H  500H 510H 580H** 590H</p>	
<p>PW </p>		
<p>FA  (Acetylene only, 500 PSI)</p>		
<p>HS </p>		

ZERO CLEARANCE FITTINGS

1,000 PSI

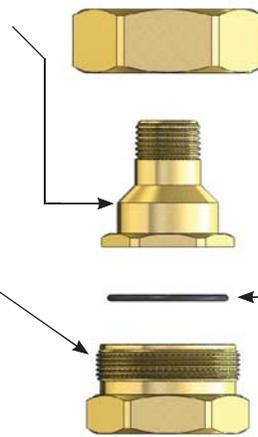
- Zero clearance for easy removal of piped components
- All thread sizes can be mixed and matched.
- Largest possible through holes for maximum flow

Flange Part No.	Thread
FL-ZC-04	1/4"-18NPT-M
FL-ZC-06	3/8"-18NPT-M
FL-ZC-08	1/2"-14NPT-M
FL-ZC-12	3/4"-14NPT-M

Boss Part No.	Thread
N-ZC-04A	1/4"-18NPT-F
N-ZC-06A	3/8"-18NPT-F
N-ZC-08A	1/2"-14NPT-F
N-ZC-12A	3/4"-14NPT-F

Nut Part No.	
N-ZC-001	Nut for all zero clearance sets

O-Ring Part No.	*Boss includes O-Ring
OR-024B7	O-ring for all zero clearance sets



DRY TYPE FLASH BACK ARRESTORS **GMA-FK series**

Superior's flash arrestor kit provides flash back, reverse flow and pressure relief protection in one compact device. This unit is included with a Superior Products acetylene manifold for more than 2 cylinders. It is also available as an option for use with hydrogen or propane manifolds.



- No water or fluid to check or replenish
- Approved safety device under ANSI Z49
- Help meet OSHA & NFPA safety standards
- Built in relief valve meets NFPA 51 requirements

Part No.	Type	Capacity	Inlet/Outlet	Relief Valve
GMA-FKA	Acetylene	300	1/2" NPT	15 PSIG
GMA-FKP-40	Propane	300	1/2" NPT	40 PSIG
GMA-FKP-60	Propane	300	1/2" NPT	60 PSIG
GMA-FKH	Hydrogen	300	1/2" NPT	40 PSIG

FUEL GAS SEMI-AUTOMATIC CHANGEOVER

GMA-SA HIGH PRESSURE SERIES

Designed to regulate flow from high-pressure cylinders (up to 3,000 PSI), the GMA-SA series or GMA-SAHP series provides an uninterrupted gas supply when changing from the "In Use" side to the "Reserve" side, Line delivery pressure remains constant to the pipeline during the changeover cycle. The SA series is perfect for fuel gas as it comes with a NEMA 4 explosion proof cabinet. The SA series is easy to operate. All that is required after cylinder change out is to move the lever to selected primary gas supply bank for the manifold. The SA series is a mechanical pressure differential system that does not require power to operate. Visual and audible alarms are available if power at the site is available.



How to Order

Control Type + Gas/CGA Service + Total # of Cylinders

Ex. GMA-SA or SAHP-580-4
Semi-Automatic changeover, inert service, 4 tanks

PRO-MIX GAS MIXERS

GMA-MX series

Proportional Gas Mixer

Superior Product's PMX mixers are suited for all applications where precise gas mixtures are required. These non-adjustable, high mix accuracy (+/- 2% full scale of cylinder pressure) offer a price advantage over less accurate adjustable models. The MX2000 series requires **NO SURGE TANK** to maintain mixture accuracy. The panel is a small wall mounted unit that is easy to install and requires no electricity, on-going maintenance or adjustment.



Features

- Tamper proof
- Highly accurate
- Low start up cost
- Compact
- No surge tank required (MX2000)

Mixer Specifications	GMA-MX series
Inlet pressure range	110-150 PSIG
Outlet pressure	0-100 PSIG adjustable
Flow rate	300 SCFH or 900 SCFH
Mixture accuracy	± 2% (3 to 900 SCFH)
Inlet filters	50 Micron
Dimensions	8"W x 10"H x 4.5"D
Weight	8 lbs.

Mixers available for the following Gases:

Argon	580A
Nitrogen	580N
Helium	580H
CO ₂	320
Oxygen	540
Hydrogen	350

How to Order

Gas Mixer Assembly	-	CGA - % - CGA - %
GMA-MX	-	XXX - % - XXX - %
GMA-MX900	-	XXX - % - XXX - %
GMA-MX2000	-	XXX - % - XXX - %

Example: GMA-MX2000-580A-75-320-25 Mixer for Argon-75% & CO₂-25%

- * Higher flow rates available upon request
increase in 300 SCFH increments up to 2000 SCFH
- * Three gas mixers available upon request

GMA-MX2000 series

Proportional Gas Mixer /High Capacity



Features

- Tamper proof
- Highly accurate
- Low start up cost
- Compact
- No surge tank required

Mixer Specifications	GMA-MX series
Inlet pressure range	120 PSIG
Outlet pressure	0-100 PSIG adjustable
Flow rate	2000 SCFH
Mixture accuracy	± 2% (2 to 2000 SCFH)
Inlet filters	50 Micron
Dimensions	20"W x 22"H x 6"D
Inlet & Outlet fittings	1/4" NPFT

SCMB Series

Superior's SCMB series is the ideal, low cost replacement header to fit most commercially available cylinder cradles. The body is machined from 1 1/2" yellow brass bar stock. Includes proper CGA valves or RPV valves* and 24" flexible, stainless steel pigtails PTFE lined for standard gas service or ETFE lined for high purity and lighter than air gases (hydrogen and helium) or 3,600 PSI Post Sintered PTFE. Also available with armor guarded flex pigtails for heavy duty service. The modular design and removable flexible pigtails allow for quick, easy repairs.



Available to order

6 pack, stainless steel PTFE lined pigtails 6 pack, stainless steel ETFE lined pigtails 6 pack, single loop copper pigtails 6 pack, stainless steel 3,600 PSIG PTFE Lined Pigtail	GMA-SCMB-XXX-06 GMA-SCMB-XXXTZ-06 GMA-SCMB-XXX-06-RGD GMA-SCMB-XXX-36-06
12 pack, stainless steel PTFE lined pigtails 12 pack, stainless steel ETFE lined pigtails 12 pack, single loop copper pigtails 12 pack, stainless steel 3,600 PSIG PTFE Lined Pigtail	GMA-SCMB-XXX-12 GMA-SCMB-XXXTZ-12 GMA-SCMB-XXX-12-RGD GMA-SCMB-XXX-36-12
16 pack, stainless steel PTFE lined pigtails 16 pack, stainless steel ETFE lined pigtails 16 pack, single loop copper pigtails 16 pack, stainless steel 3,600 PSIG PTFE Lined Pigtail	GMA-SCMB-XXX-16 GMA-SCMB-XXXTZ-16 GMA-SCMB-XXX-16-RGD GMA-SCMB-XXX-36-16

* For **ArmorGuard** Option add "**AG**" to part number
 Example: GMA-SCMB-XXXAG-06-PTFE
 GMA-SCMB-XXXTZAG-06-ETFE
 GMA-SCMB-XXX36AG-06-PTFE 3,600 PSI

* For **Residual Pressure Valve** add "**RPV**" to part number
 Example: GMA-SCMB-XXXRPV-06
 Please Note 3,600 PSIG PTFE is Post Sintered

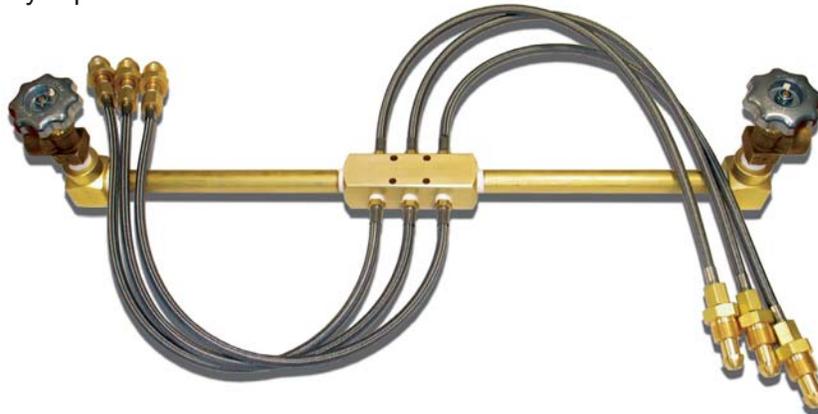
- Other CGA's available upon request
- Optional Tee with gauge available between valve and block

Available for the following gases, replace **XXX** in part number with **CGA#**

Carbon Dioxide	CGA 320
Nitrous Oxide	CGA 326
Air	CGA 346
Hydrogen	CGA 350
Propane/Acetylene	CGA 510
Oxygen	CGA 540
Inert Gases	CGA 580

CPR Series

Superior's CPR series is a cradle pack replacement header to fit most common size cylinder cradles. The body is machined from 1 1/2" yellow brass bar stock. Includes proper CGA valves or RPV valves, 24" flexible, stainless steel pigtails PTFE lined for standard gas service, ETFE lined for high purity and lighter than air gases (hydrogen and helium) or 3,600 PSIG Post Sintered PTFE. Also available with armor guarded flexible pigtails for heavy duty service. The modular design and removable flexible pigtails allow for quick, easy repairs.



Available to order	
6 pack, stainless steel PTFE lined pigtails	GMA-CPR-XXX-06
6 pack, stainless steel ETFE lined pigtails	GMA-CPR-XXXTZ-06
6 pack, stainless steel 3,600 PSIG PTFE lined pigtails	GMA-CPR-XXX-36-06
6 pack, single loop copper pigtails	GMA-CPR-XXX-06-RGD
12 pack, stainless steel PTFE lined pigtails	GMA-CPR-XXX-12
12 pack, stainless steel ETFE lined pigtails	GMA-CPR-XXXTZ-12
12 pack, stainless steel 3,600 PSIG PTFE lined pigtails	GMA-CPR-XXX-36-12
12 pack, single loop copper pigtails	GMA-CPR-XXX-12-RGD
16 pack, stainless steel PTFE lined pigtails	GMA-CPR-XXX-16
16 pack, stainless steel ETFE lined pigtails	GMA-CPR-XXXTZ-16
16 pack, stainless steel 3,600 PSIG PTFE lined pigtails	GMA-CPR-XXX-36-16
16 pack, single loop copper pigtails	GMA-CPR-XXX-16-RGD

* For **ArmorGuard** Option add "**AG**" to part number
 Example: GMA-CPR-XXXAG-06-PTFE
 GMA-CPR-XXXTZAG-06-ETFE
 GMA-CPR-XXX36AG-06-PTFE 3,600 PSI

* For **Residual Pressure Valve** add "**RPV**" to part number
 Example: GMA-CPR-XXXRPV-06

*Please Note 3,600 PSIG PTFE is Post Sintered

• Other CGA's available upon request

Available for the following gases, replace **XXX** in part number with **CGA**

Carbon Dioxide	CGA 320
Nitrous Oxide	CGA 326
Air	CGA 346
Hydrogen	CGA 350
Propane/Acetylene	CGA 510
Oxygen	CGA 540
Inert Gases	CGA 580

HEADERS & OPEN STYLE MANIFOLDS

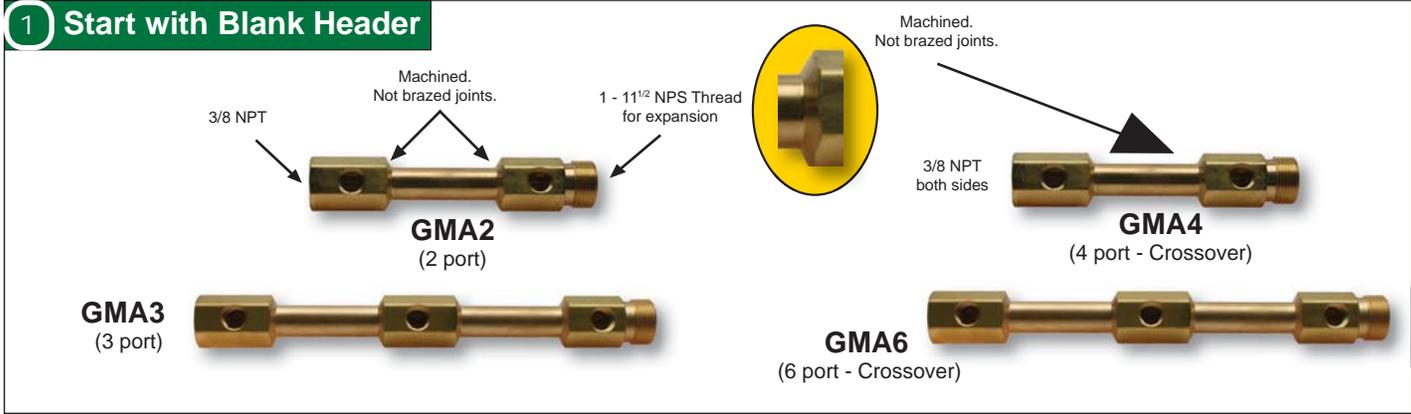
MODULAR NON-BRAZED SIMPLEX HEADERS FOR INDUSTRIAL, SPECIALTY GAS & HOSPITAL MANIFOLD SYSTEMS

Modular simplex manifold headers are a single unit design manufactured from free cutting brass bar stock. This design eliminates all brazed joints. Each unit is tested to full operating pressure and cleaned for oxygen service per CGA-G4.1. Manifold headers can be shipped complete with master valve, individual check valve inlets, flexible stainless steel or rigid copper pigtails, mounting hardware, and CGA inlet connections. Systems available include simplex, MHV series with flexible stainless pigtails, CMHV with rigid copper pigtails, MHE and CMHE series header extensions. Headers are ordered in 2 or 3 cylinder configurations to arrive at the desired number of cylinders. Custom configurations are also available for U-shaped and L-shaped to meet your space requirements. Headers are available with an optional manifold regulator. To order, add an R to the type of manifold ex. GMA-MHVR-540-02.

Configuration: Systems are available in three different basic configurations, for 2 or 3 cylinder sections. Five inch center to center spacing is standard. To order 90 degree elbow sections separately, specify GMF-3710. See page 70.

HOW TO ORDER

1 Start with Blank Header



2 Choose Inlet

MHV = Master Header Valve

MHE = Master Header Extension



3 Choose Gas

Male Outlets

- CGA 300 - Ethyl Chlorides (formerly Acetylene)
- CGA 320 - Carbon Dioxide
- CGA 326 - Nitrous Oxide
- CGA 346 - Air
- CGA 350 - Hydrogen
- CGA 540 - Oxygen
- CGA 555 - Propane
- CGA 577 - Oxygen



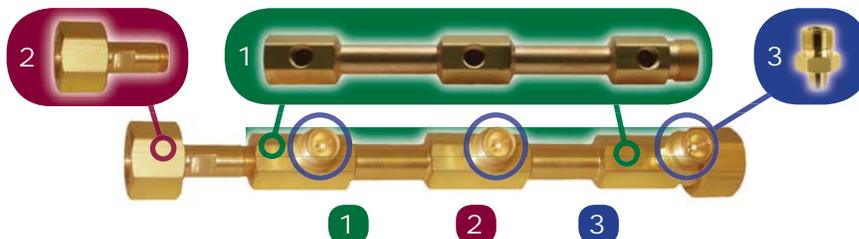
Female Outlets

- CGA 500 - Medical Mixtures
- CGA 510 - Acetylene
- CGA 580 - Inert Gases
- CGA 590 - Sulfur HexaFlouride (formerly Industrial Air)



*** Pigtails sold separately**
For check valve outlets add "CV" after CGA number

CONFIGURED MANIFOLD EXAMPLE



GMA3 - MHE - 540CV

3 Cylinder CGA 540 with Header Extension and check valve outlets

GAS MANIFOLD ASSEMBLIES

ORDERING INFORMATION:

Each manifold part number consists of four sections. The first section denotes a Gas Manifold Assembly (GMA). The second section denotes the type of manifold and its configuration (only for duplex manifolds) otherwise do not use configuration number. The third section denotes the CGA number or type of gas, and the last section denotes the number of outlets or cylinders. The example below is for a twelve cylinder Oxygen duplex manifold in a standard configuration with outlet adaptor with check valves instead of header valves.

GMA - **DM** - **540CV** - **12**
 Gas Manifold Assembly - Type of Manifold & Configuration - CGA Number - Number of Cylinder Outlets

Type of Manifold	Type of Configuration	Type of Gases	
SD-Simple Duplex(Manual)	Standard Configuration	300-Commercial Acetylene	510-Acetylene & Propane
SM-Simplex(Manual)	2-Crossover Configuration	320-Carbon Dioxide	540-Oxygen
DM-Duplex(Manual)	3-"L" Shaped Configuration	326-Nitrous Oxide	580-Nitrogen, Helium & Argon
HEL-Header Extension, left side	4-"U" Shaped Configuration	346-Air	590-Industrial Air
HER-Header Extension, right side	5-Staggered Configuration	350-Hydrogen	

SIMPLE DUPLEX MANIFOLDS

The simple duplex manifold is an economical system with a two cylinder capacity, one per side. The unit is furnished with two header valves and two pigtailed with check valves or two outlet adaptors with check valves and two regular pigtailed, 1/2" NPT tee, a union and a mounting bracket. Manifolds for Acetylene gas will include pigtailed with dry type flashback arrestors.



GMA-SD-320-02

SIMPLEX MANIFOLDS WITH MANUAL CONTROLS

The simplex manifold has a master shut off valve with a single row of cylinder modules. Each module consists of 1/2" piping, 1/2" tees, header valves and pigtailed with check valves or outlet adaptors with check valve and regular pigtailed, a union, a CGA end plug and mounting brackets. The last module will have a plug and chain connected to an adaptor that allows for future expansion. Proper CGA fittings will be furnished for the specified gas. Manifolds for Acetylene gas will include a Hydraulic Flash Arrestor and pigtailed with dry type arrestors.



GMA-SM-346-02

MANIFOLD HEADER EXTENSION ASSEMBLIES

Header extensions are shipped ready for addition to existing manifolds. Unit includes CGA inlet, CGA end plug, 1/2" piping, 1/2" tees, header valves and pigtailed with check valves or outlet adaptors with check valves and flexible pigtailed and a mounting bracket. The last module will have a plug and chain connected to an adaptor that allows for future expansion. Specify right side extension (HER) or left side extension (HEL).



GMA-HER-540-02

HEADERS & OPEN STYLE MANIFOLDS

DUPLEX MANIFOLDS WITH MANUAL CONTROLS

The duplex manifold has two master shut off valves allowing replacement of the exhausted bank of cylinders while the full bank of cylinders is in operation. The center section accommodates a single regulator. The manifold is shipped with 1/2" piping, 1/2" tees, header valves and pigtails with check valves or adaptor outlets with check valve and regular pigtails, a union, a CGA end plug and mounting brackets are included with each module. Modules are furnished with a plug and chain on the last module that allows for future expansion. Proper CGA fittings will be furnished for specified gas. Manifolds for Acetylene gas will include a Hydraulic Flash Arrestor and pigtails with dry type arrestors.



GMA-DM-580-04

BRASS MANIFOLD PIPE AND PIPE FITTINGS

Fittings Are Machined From CDA-360 Brass, Stress Relieved and Cleaned For Oxygen Service

PIPE ELBOWS					PIPE CROSSES				
3,000 PSI					3,000 PSI				
<p>GMF-3011</p>					<p>GMF-3041</p>				
Part No.	Ref. A	Ref. B	Ref. F	Ref. G	Part No.	Ref. A	Ref. B	Ref. C & D	Ref. E
GMF-3011	1/2"-14 NPT	1/2"-14 NPT	1-5/16"	3/4"	GMF-3041	1/2"-14 NPT	1/2"-14 NPT	1/2"-14 NPT	1-1/2"
GMF-3012	1/2"-14 NPT	.843"-.847"	1-5/16"	3/4"	GMF-3042	.843"-.847"	1/2"-14 NPT	1/2"-14 NPT	1-1/2"
GMF-3013	.843"-.847"	.843"-.847"	1-5/16"	3/4"	GMF-3043	.843"-.847"	Slip Thru	1/2"-14 NPT	1-1/2"

PIPE TEES					3,000 PSI				
Part No.	Ref. A	Ref. B	Ref. C	Ref. E	Part No.	Ref. A	Ref. B	Ref. C	Ref. E
GMF-3021	1/2"-14 NPT	1/2"-14 NPT	1/2"-14 NPT	1-1/2"	GMF-3033	.843"-.847"	Slip Thru	1/2"-14 NPT	1-1/2"
GMF-3022	1/2"-14 NPT	1/2"-14 NPT	.843"-.847"	1-1/2"	GMF-3034	.843"-.847"	Slip Thru	.843"-.847"	1-1/2"
GMF-3023	.843"-.847"	1/2"-14 NPT	1/2"-14 NPT	1-1/2"					

PIPE NIPPLES, THREADED ENDS

- Cleaned For Oxygen Service
- Suitable For Acetylene
- Machined From CDA 360 Brass



GMF-3214

Part No.	Thread Size	Length
GMF-3211	1/2"-14 NPT	1-1/2"
GMF-3212	1/2"-14 NPT	2"
GMF-3213	1/2"-14 NPT	4"
GMF-3214	1/2"-14 NPT	6"
GMF-3215	1/2"-14 NPT	9-3/4"
GMF-3216	1/2"-14 NPT	12-3/4"

PIPE LENGTHS, PLAIN ENDS

- Cleaned For Oxygen Service
- Suitable For Acetylene
- Made From CDA 360 Brass
- Special Lengths Available Upon Request



GMF-3224

Part No.	Pipe Size	Length
GMF-3222	1/2" Nom.	2"
GMF-3223	1/2" Nom.	4"
GMF-3224	1/2" Nom.	6"
GMF-3225	1/2" Nom.	9-3/4"
GMF-3226	1/2" Nom.	12-3/4"

UNION 90°



GMF-3710

UNION PLUG

Part No.	Thread
GMA-RH-PLUG	1"-11-1/2 NPS RH-INT.
GMA-LH-PLUG	1"-11-1/2 NPS LH-INT.



PIPE LENGTHS, PLAIN ENDS

- NOT CLEANED** For Oxygen Service
- Suitable For Acetylene
- Made From CDA 360 Brass

Part No.	Pipe Size	Length
	1/2" Nom.	6 FT.
	1/2" Nom.	12 FT.

NOTE: GMF-3237 Must ship via Common Carrier



UNION NUTS

Part No.	Thread
GMF-3311	1"-11-1/2 NPS RH-INT.
GMF-3312	1"-11-1/2 NPS LH-INT.



GMF-3311

UNION NIPPLES

GMF-3326



Part No.	Thread	Length
GMF-3321	3/8"-18 NPT	2.40"
GMF-3326	1/2"-14 NPT	2.94"



GMF-3333

UNION BUSHINGS



GMF-3332

UNION BUSHINGS WITH FILTER 3,000 PSI

UNION BUSHINGS WITHOUT FILTER 3,000 PSI

Part No.	Thread	Pipe Thread	Length	Part No.	Thread	Pipe Thread	Length
GMF-3333	1"-11-1/2 NPS RH	3/8"-18 NPT	3.125"	GMF-3331	1"-11-1/2 NPS RH	3/8"-18 NPT	3.125"
GMF-3334	1"-11-1/2 NPS RH	1/2"-14 NPT	2.187"	GMF-3332	1"-11-1/2 NPS RH	1/2"-14 NPT	2.187"
GMF-3337	1"-11-1/2 NPS LH	3/8"-18 NPT	3.125"	GMF-3335	1"-11-1/2 NPS LH	3/8"-18 NPT	3.125"
GMF-3338	1"-11-1/2 NPS LH	1/2"-14 NPT	2.187"	GMF-3336	1"-11-1/2 NPS LH	1/2"-14 NPT	2.187"
GMF-3341	Replacement Filter						
GMF-3342	Replacement Snap-Ring						

LINE STATION DROPS, LINE STATION VALVES & BALL VALVES

LINE STATION DROPS & LINE STATION VALVES

200 PSI



Part No.	Gas Service	No. Of Outlets	Outlet Size
GMA-SSD-022V-01	Oxygen	Single	9/16"-18 RH "B" size valve
GMA-SSD-022V-02	Oxygen	Double	9/16"-18 RH "B" size valve
GMA-SSD-023V-01	Fuel Gas	Single	9/16"-18 LH "B" size valve
GMA-SSD-023V-02	Fuel Gas	Double	9/16"-18 LH "B" size valve
GMA-SSD-024V-01	Oxygen	Single	7/8"-14 RH "C" size valve
GMA-SSD-024V-02	Oxygen	Double	7/8"-14 RH "C" size valve
GMA-SSD-025V-01	Fuel Gas	Single	7/8"-14 LH "C" size valve
GMA-SSD-025V-02	Fuel Gas	Double	7/8"-14 LH "C" size valve



GMV-1024

Part No.	Operating Pressure	CGA Outlet	Valve Inlet
GMV-1024	200 psi	CGA-024	1/2"-14 NGT
GMV-1025	200 psi	CGA-025	1/2"-14 NGT



GMV-1025

Inlet & Outlet size	Part No.
1/4" female NPT	BALL VALVES GMV-334 GMV-338 GMV-3312
1/2" female NPT	
3/4" female NPT	

Brass body, hot forged brass ball valve, 600 psi rated
Safe for use with acetylene

MASTER SHUT-OFF VALVES 3,000 PSI

- Forged Brass Body
- PTFE Packing
- Kel-F Seat



GMV-1001



GMV-1341



Part No.	Inlet	Outlet
GMV-1001	1/2"-14 NPT	1/2"-14 NPT
GMV-1341	1"-11-1/2 NPS RH-EXT	1"-11-1/2 NPS RH-INT.



GMV-1580

MANIFOLD VALVES

* = Residual Pressure Valve
No Safety Relief Devices



GMV-1540

Part No.	Operating Pressure	CGA Outlet	Valve Inlet
GMV-1300	250 psi	CGA-300	1/2"-14 NGT
GMV-1320	3,000 psi	CGA-320	1/2"-14 NGT
GMV-1326	3,000 psi	CGA-326	1/2"-14 NGT
GMV-1346	3,000 psi	CGA-346	1/2"-14 NGT
GMV-1350	3,000 psi	CGA-350	1/2"-14 NGT
GMV-1510	250/500 psi	CGA-510	1/2"-14 NGT
GMV-1540	3,000 psi	CGA-540	1/2"-14 NGT
GMV-1580	3,000 psi	CGA-580	1/2"-14 NGT
GMV-1590	3,000 psi	CGA-590	1/2"-14 NGT
GMV-3346	3,000 psi	CGA-346	3/4"-14 NGT
GMV-3350	3,000 psi	CGA-350	3/4"-14 NGT
GMV-3540	3,000 psi	CGA-540	3/4"-14 NGT
GMV-3540RPV*	3,000 psi	CGA-540	3/4"-14 NGT
GMV-3580	3,000 psi	CGA-580	3/4"-14 NGT
GMV-3580RPV*	3,000 psi	CGA-580	3/4"-14 NGT
GMV-3660SS	3,000 psi	CGA-660	3/4"-14 NGT
GMV-3680	4,700 psi	CGA-680	3/4"-14 NGT
GMV-3702	6,400 psi	CGA-702	3/4"-14 NGT

* Residual Pressure Valve

SS = Stainless Steel

LIMITED WARRANTY

WARRANTY:

The manufacturer warrants the products sold hereunder to be free from defects in material and workmanship at the date of shipment. Please note the distinction between "defects" and "damage" as used in this warranty: defects are covered because we, the manufacturer, are responsible; however, we have no control over damage caused by such things as misuse or improper installation. Therefore, damage for any reason is not covered under this warranty.

WHAT THE MANUFACTURER WILL DO:

If you, the Buyer, meet the eligibility requirements and obligations listed below, then we shall, within thirty (30) days of receipt of a timely claim and the parts claimed to be defective, inspect the parts and repair or replace, at our option, any parts which we determine were defective at the time of shipment from us. However, if we determine that the parts were defective and also that circumstances are such as to prevent us from remedying the warranted defects by repair or replacement, then we may at our option, refund you the purchase price of the parts.

ELIGIBILITY REQUIREMENTS & OBLIGATIONS OF BUYER:

You are eligible to obtain service under this warranty if you are the original consumer purchaser, either from us directly or from a seller who stocks our product for resale. However, in order for you to obtain service under this warranty, you must do the following:

1. Send a claim in writing along with samples of the parts claimed to be defective to us freight prepaid.
2. Have your claim and sample parts delivered within ninety (90) days from the date of shipment of the parts from our factory. However, if you bought the parts for resale, or if you bought the parts from someone who bought them for resale, then you must deliver the claim and the parts to us within ninety (90) days from the date of re sale—except under no circumstances shall we honor any claim which fails to be delivered to us with the parts within one hundred and eighty (180) day from the date of shipment of the parts from our factory.

Your claim should be in typed or printed form and include the following information:

1. Your name and address; and
2. The name and address of the seller of the parts; and
3. The date of purchase of the parts; and
4. A short description of the alleged defect; and
5. Proof of the purchase of the parts, for example, a receipt or canceled check.

WHAT IS NOT COVERED UNDER THIS WARRANTY (LIMITATION OF LIABILITY):

As stated above, damage for any reason is not covered under this warranty. Furthermore NO OTHER WARRANTY, WHETHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL EXIST IN CONNECTION WITH THE SALE OR USE OF OUR PRODUCTS. However, some states do not allow limitations on how an implied warranty lasts, so this limitation may not apply to you. Also, since this is a limited warranty, WE SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE FOR ANY OTHER CHARGES, LABOR COSTS, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSSES OR DAMAGES OF ANY KIND OR DESCRIPTION WHATSOEVER ARISING OUT OF, OR IN ANYWAY RELATING TO, ANY BREACH OF THIS WARRANTY OR CLAIMED DEFECT IN, OR NON-PERFORMANCE OF, OUR PRODUCTS. However, some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you. This warranty also excludes commercial and other non-consumer purchasers other than the original consumer purchaser.

WE HAVE NO AGENTS:

We do not authorize any person to create for us any obligation of liability in connection with our products.

LEGAL RIGHTS:

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state (province to province in Canada).

Your claim, along with the sample part or parts, should be sent to:

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Cleveland, Ohio 44144-1175
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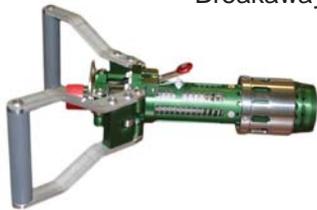
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