



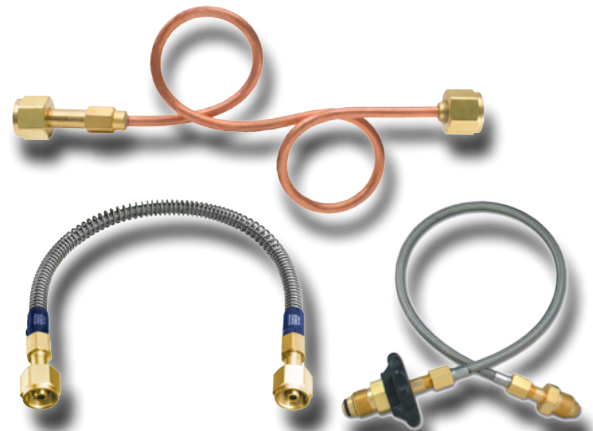
# Superior Products

*Redefining Gas Management Systems*

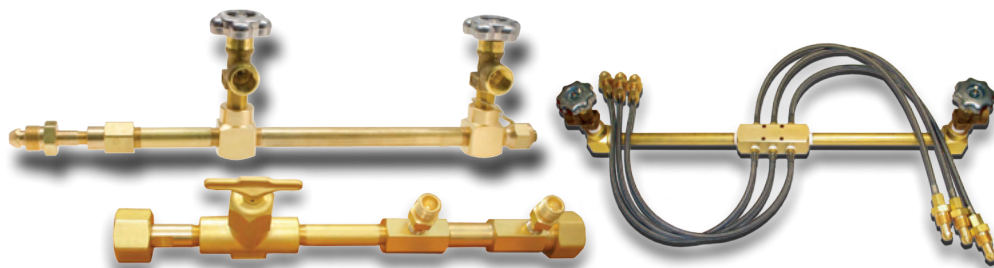
**CATALOG #18B**



**Brass & Stainless Steel  
Gas Fittings & Assemblies**



**Flexible & Rigid Pigtails**



**Manifolds & Gas Management Systems**



[www.superiorprod.com](http://www.superiorprod.com)

# table of contents

General Information/Ordering Information..... 1-5  
 Table of Contents..... 3

**Industrial gas fittings ..... 6-54**

Brass Fittings/Regulator Outlets  
 Cylinder Connections

**Pigtails ..... 56-63**

Pigtails  
 Hose Assemblies

**Manifolds / Fill Plant..... 64-72**

Manifolds  
 Changeover Systems

air/water fittings .....	18, 19	manifold assemblies.....	69-70
brass 'y' connectors.....	46	modular headers.....	68
brass hose ferrules, braces.....	15	outlet adaptors.....	49-51
brass hose fittings.....	6-9	pigtail assemblies .....	56-63
british style fittings .....	20,21	pigtail configurator .....	62-63
cga - regulator inlet nuts & nipples ....	24-42	pin indexed yokes.....	43
check valves .....	10	pipe fittings .....	13, 14
coupler tees & manifold blocks.....	44, 45	power cable nipples & connector assemblies.....	17
cradle pack manifolds.....	66-67	regulator outlets.....	9
cryogenic hose & fittings.....	55	shut-off valves & dust caps.....	47, 48
cylinders to regulator adaptors .....	52-54	yokes .....	43, 81
flash arrestors & quick connectors .....	11		
german style fittings.....	21-22		
hose repair kits .....	16		
manifold accessories.....	70-72		

**PROUD MEMBER OF :**



<b>Adaptors</b>		<b>Flash Arrestors</b>		<b>Pipe Thread Fittings</b>	
Argon & Inert Arc .....	18	Pigtail .....	60	Brass & Stainless Steel .....	13-14
Cryogenic Flare .....	55	Torch, Regulator .....	11		
Cylinder to Regulator, CGA .....	52-54			<b>Plugs</b>	
Hose, Oxygen / Fuel Gas –		<b>Hose Repair Kits</b> .....	16	Manifold, Union .....	71
A, B, C & D size .....	7-9			Pipe Thread .....	14
Liquid CGA-622 x 20 .....	40	<b>Inert Arc Fittings</b>		Plugs, CGA .....	48
Manifold Pipeline Outlet, CGA .....	49-51	Adaptors .....	18	Plug & Chain, CGA .....	48
Pipe Thread .....	7-9,14	Couplers .....	18-19		
		Nipples .....	19	<b>Quick Connectors</b>	
<b>Braces</b>		Nuts .....	18-19	Regulator & Torch .....	11
Hose .....	15	Power Cable .....	17		
				<b>Repair Kits</b>	
<b>British Fittings</b> .....	20-21	<b>Leak Detector</b> .....	15	Hose .....	16
				Crimping Tools .....	16
<b>Bushings</b>		<b>Manifolds</b>			
Manifold Union Bushings .....	71	Semi-Automatic Changeover .....	64	<b>Splicers</b>	
Outlet, Regulator - A, B, C & D size .....	9	Blocks .....	45	Hose .....	6
Pipe thread fittings .....	14	Fittings .....	70-71		
		Headers, Cradle Pack .....	66-67	<b>Station Drops &amp; Valves</b> .....	72
<b>Cable Connectors</b>		Headers, Extension .....	69		
Nipples .....	17	Headers, Modular .....	68	<b>Tees</b>	
		Manual .....	69-70	Manifold, CGA	
<b>Caps</b>		Mixers .....	65	- Brass, Stainless, Chrome .....	44-45
Dust Cap & Chain - CGA & Hose .....	47	Pipe Lengths .....	71	Manifold, Pipe .....	71
				Pipe Thread - Brass & Stainless .....	13
<b>Check Valves</b>		<b>Mixers</b> .....	65		
Inline .....	10			<b>Tools</b>	
Nipple Type .....	24-42	<b>Nipples</b>		Ferrule Crimping, Hand .....	16
Tee, CGA .....	44-45	Handtight (HT) .....	24-42		
Torch, Regulator .....	10	Hose, Inert Gas .....	19	<b>Tubing</b>	
		Hose, Oxygen/Fuel Gas A, B, C, D .....	6	Brass, Copper and Stainless .....	56
<b>Couplers</b>		Regulator Inlet, CGA -			
Hose - A,B,C,D size .....	9	Brass, Stainless & Chrome .....	24-42	<b>Valves</b>	
Hose - Argon & Inert Arc .....	18-19	RPV Style .....	27-38	Ball .....	72
Tees for Manifold, CGA .....	44-45	Union Nipples - Manifold .....	71	Brass Seat, Shut-Off .....	47
		Manifold, Brass .....	71	Header .....	72
<b>Cradle Pack Manifolds</b>				Master Shut-Off .....	72
CPR, Long Style .....	67	<b>Nuts</b>		Station Drop .....	72
SCMB, Short Style .....	64	Handtight (HT) .....	24-42	"Y" with Valves .....	46
		Hose-Argon & Inert Gas .....	18-19		
<b>Cryogenic</b>		Hose-Oxygen & Fuel Gas -		<b>"Y" Connectors</b> .....	46
Fittings .....	55	A, B, C & D size .....	6		
Hose .....	55	Regulator CGA		<b>Yokes</b> .....	43
Flare Adaptors .....	55	- Brass, Stainless, Chrome .....	24-42		
		Union Nut, Manifold .....	71	<b>Zero Clearance Fittings</b> .....	64
<b>DIN Fittings (German)</b>					
Nuts & Nipples .....	21-22	<b>Pigtail Assemblies</b>			
		Armor Guard .....	60		
<b>Ferrules</b>		Brass, Copper .....	56,58		
Hose .....	15	Flexible, Nylon .....	57-58		
		Flexible, Stainless Braided .....	57-60, 60		
<b>Fill Plant</b>		Liquid Cylinder Gas Use .....	58		
Yokes .....	43	NFPA Hospital .....	58		
		Pigtail Configurator .....	59, 62-63		
<b>Filters</b>		Pigtail Ends .....	60-63		
Regulator Inlet Nipple .....	23	Rigid, Stainless Steel .....	56		
		Spring Guard .....	60		
<b>Flash Arrestor, Dry</b> .....	64				

# 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 Products 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)

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

**CO<sub>2</sub> - 110 SCFH**

**NITROUS OXIDE - 80 SCFH**

**ARGON, NITROGEN, OXYGEN - 75 SCFH**

### HIGH PRESSURE W/LIMITED WITHDRAWAL RATE

**CO<sub>2</sub> 50 - SCFH**

**NITROUS OXIDE - 50 SCFH**

**Acetylene - 1/10 CYL CAPACITY/HOUR**

## part type

## letter prefix

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

## GUIDE TO CGA HOSE CONNECTIONS

The Compressed Gas Association (CGA) uses CGA numbers to identify connections for specific gas service. All Superior Products hose fittings are manufactured to CGA standards as defined in CGA E-1 "Standard Connections for Regulator Outlets, Torches and Fitted Hose for Welding and Cutting Equipment".

Many common fittings are referred to as A-Size, B-Size, C-Size and D-Size. This letter identification system, developed by the International Acetylene Association (IAA), predates the CGA numbering system and is still used today.

CGA limits pressure ratings on E-1 connections to a standard maximum working pressure of 200 PSIG (1380 kPa) for safety.

### A-B-C-D Sizes for Oxygen/Fuel Gas



#### A-Size: 3/8"-24 UNF

RH Connection: CGA-020 for Oxygen  
LH Connection: CGA-021 for Fuel Gas



#### B-Size: 9/16"-18 UNF

RH Connection: CGA-022 for Oxygen  
LH Connection: CGA-023 for Fuel Gas



#### C-Size: 7/8"-14 UNF

RH Connection: CGA-024 for Oxygen  
LH Connection: CGA-025 for Fuel Gas



#### D-Size: 1-1/4"-12 UNF

RH Connection: CGA-026 for Oxygen  
LH Connection: CGA-027 for Fuel Gas

### A-B-C-D Sizes for Gas/Water/Air



#### A-Size: 3/8"-24 UNF

RH Connection: CGA-030 for Inert Gases  
LH Connection: CGA-031 for Water & Industrial Air



#### B-Size: 5/8"-18 UNF

RH Connection: CGA-032 for Inert Gases  
LH Connection: CGA-033 for Water & Industrial Air



#### C-Size: 7/8"-14 UNF

RH Connection: CGA-034 for Inert Gases  
LH Connection: CGA-035 for Water & Industrial Air



#### D-Size: 1-1/4"-12 UNF

RH Connection: CGA-036 for Inert Gases  
LH Connection: CGA-037 for Water & Industrial Air


## CGA TABLE OF CONTENTS BY GAS & CGA #

CGA #	PAGE #	CGA #	PAGE #	CGA #	PAGE #
British	20, 21	CGA 347 Air (3001- 5500 psi)	30	CGA 621 Oil Tolerant Nitrogen	39
DIN	21, 22	CGA 350 Hydrogen	31	CGA 622 CO2 Liq Withdrawal	40
CGA 170 Small Bottle	24	CGA 410 Canadian Acetylene	32	CGA 624 N2O Liq Withdrawal	40
CGA 180 Small Bottle	24	CGA 415 Canadian Acetylene	32	CGA 660 Refrigerant Gases	40
CGA 200 Acetylene "MC"	24	CGA 500 Medical Mixtures	33	CGA 677 Inerts (5501-7500 psi)	41
CGA 280 Med. Breathing Mix	25	CGA 510 Propane/Acetylene	34	CGA 680 Inerts (3001-5500 psi)	41
CGA 296 Industrial O2 Mix	25	CGA 520 Acetylene	35	CGA 695 Hydrogen/Methane	42
CGA 300 Acetylene	26	CGA 540 Oxygen	36	CGA 701 Oxygen (4001-5500 psi)	42
CGA 320 Carbon Dioxide	27	CGA 555 Propane/Butane	37	CGA 702 Air (5501-7500 psi)	42
CGA 326 Nitrous Oxide	28	CGA 577 Oxygen (3001-4000 psi)	37		
CGA 330 Liquified Corrosives	29	CGA 580 Inert Gases	38		
CGA 346 Air (up to 3000psi)	29, 30	CGA 590 Sulfur Hexafluoride	39		

# brass hose nuts, nipples & splicers


## Hose Nuts

200 PSI

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


## Hose Nuts

200 PSI

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



## Barb Hose Nipples

200 PSI

Size/Length	For Hose Size	Part No.
		
<b>NP-10</b>		
"A", 1-7/32"	3/16" I.D.	<b>NP-4</b>
"B", 3-1/32"	1/8"-5/32" I.D.	<b>NP-5</b>
"B", 1-7/16"	3/16" I.D.	<b>NP-6</b>
"B", 1-7/16" (with 'O'Ring)	3/16" I.D.	<b>NP-6W</b>
"B", 1-7/16"	1/4" I.D.	<b>NP-10</b>
"B", 1-7/16" (with 'O'Ring)	1/4" I.D.	<b>NP-10W</b>
"B", 1-1/8"	1/4"-9/32" I.D.	<b>NP-65</b>
"B", 1-7/16"	5/16" I.D.	<b>NP-14</b>
"B", 1-7/16"	3/8" I.D.	<b>NP-18</b>
"B", 1-3/4"	3/8" I.D.	<b>NP-20</b>
"C", 1-35/64"	1/4" I.D.	<b>NP-12</b>
"C", 2"	3/8" I.D.	<b>NP-24</b>
"C", 2-1/4"	1/2" I.D.	<b>NP-28</b>
"C", 4-9/16"	1/2" I.D.	<b>NP-30</b>
"D", 2-1/2"	1/2" I.D.	<b>NP-34</b>
"D", 3-1/2"	3/4" I.D.	<b>NP-36</b>
'O'Ring for NP-6W & NP-10W		<b>XOR-002</b>

## Spiral Hose Nipples

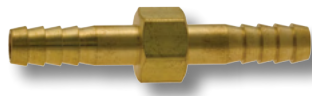

200 PSI

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



\*To order with filter, add suffix "RF"

## Hose Splicers

200 PSI



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

200 PSI

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


**Brass Thread To Hose Barb Adaptor**

200 PSI

	Thread Size	For Hose Size	Part No.
<p><b>Male NPT Thread</b></p>  <p>A-113</p>	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
<p><b>Female NPT Thread Thread</b></p>  <p>A-151</p>	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

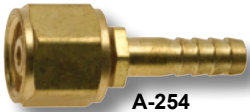
**Hose Barb Adaptors**

200 PSI

(Standard B Thread)	Thread Size	For Hose Size	Part No.
 <p>A-51</p>	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.
 <p>A-254</p>	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**

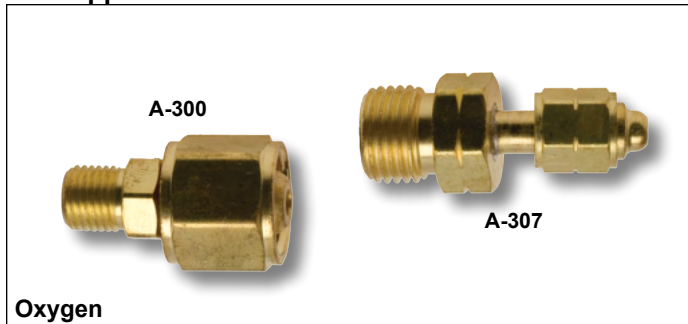
200 PSI

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

# brass hose fittings

## External Hose Nut to Swivel Nut and Nipple

200 PSI



Oxygen

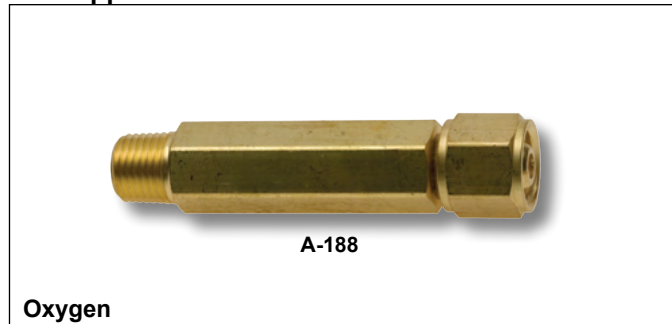
Thread Size	Thread Size	Part No.
"A" 3/8"-24-RH-EXT	"B" 9/16"-18-RH-INT	<b>A-300</b>
"B" 9/16"-18-RH-EXT	"A" 3/8"-24-RH-INT	<b>A-306</b>
"B" 9/16"-18-RH-EXT	"C" 7/8"-14-RH-INT	<b>A-308</b>

Fuel Gas

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

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

200 PSI



Oxygen

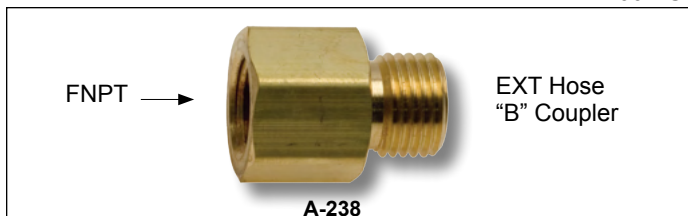
Thread Size	Thread Size	Part No.
1/4" MNPT	"B" 9/16"-18-RH-INT	<b>A-188</b>

Fuel Gas

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

## Female Pipe Thread to "B" Connections

200 PSI



Oxygen

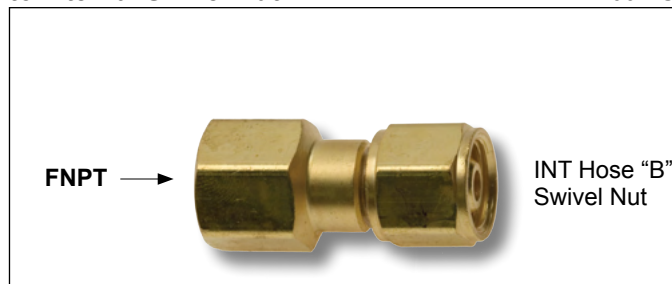
Thread Size	Thread Size	Part No.
1/8" FNPT	"B" 9/16"-18-RH-EXT	<b>A-238</b>
1/4" FNPT	"B" 9/16"-18-RH-EXT	<b>A-242</b>

Fuel Gas

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

## Female NPT to Internal Swivel Nut

200 PSI



Oxygen

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

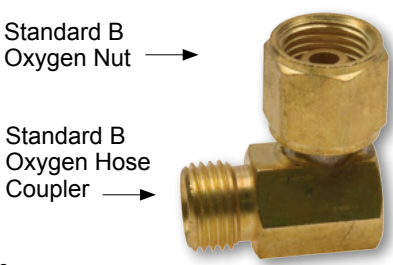
Fuel Gas

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

# brass/stainless steel hose fittings, regulator outlets

## 90° External Hose Coupler to Internal Swivel Nut

200 PSI



**Oxygen**

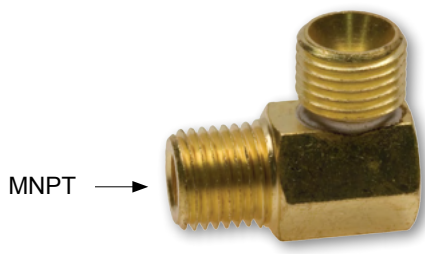
Thread Size	Thread Size	Part No.
"B" 9/16"-18-RH-EXT	"B" 9/16"-18-RH-INT	<b>A-322</b>
1/4" MNPT	"B" 9/16"-18-RH-INT	<b>A-194</b>

**Fuel Gas**

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

## 90° External Pipe to External "B" coupler

200 PSI



**Oxygen**

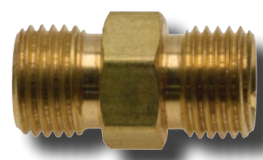
Thread Size	Thread Size	Part No.
1/4" MNPT	"B" 9/16"-18-RH-EXT	<b>A-334</b>

**Fuel Gas**

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

## Hose Couplers (Brass)

200 PSI



**Oxygen**


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

**Fuel Gas**

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

## Regulator Outlet Adaptors

200 PSI



**Oxygen**

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

**Fuel Gas**

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

# check valves

## Check Valves

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

# flash arrestors



- Designed for “B” size torch, regulator and hose connections
- Built-in check valve prevents reverse flow of gas
- Stainless steel sintered element stops multiple flashes (no resetting required)
- U/L Listed
- Purchase as POP display pack or as individual units
- High Flow Capacity
- 2 PSI is minimum pressure for gas to flow
- 1750 SCFH @ 125 psi

\*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	<b>FBK-100</b>
Oxygen/Fuel Gas Set, Torch Style, POP Display	<b>FBK-200</b>
Individual Oxygen Arrestor, Regulator Style	<b>FB-122</b>
Individual Fuel Gas Arrestor, Regulator Style	<b>FB-123</b>
Individual Oxygen Arrestor, Torch Style	<b>FB-222</b>
Individual Fuel Gas Arrestor, Torch Style	<b>FB-223</b>

# quick connectors



- Durable brass coupling pin
- Designed for “B” torch and hose fittings
- Design guided by ISO 7289 safety standards
- Gas specific oxygen and fuel connectors prevent cross connection
- 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	<b>QCT-100</b>
Oxygen Set, Torch Style	<b>QCT-112</b>
Fuel Gas Set, Torch Style	<b>QCT-113</b>
Oxygen & Fuel Gas Set, Regulator Style, POP Display	<b>QCR-200</b>
Oxygen Set, Regulator Style	<b>QCR-222</b>
Fuel Gas Set, Regulator Style	<b>QCR-223</b>
Oxygen & Fuel Gas Set, Hose Style, POP Display	<b>QCH-300</b>
Oxygen Set, Hose Style	<b>QCH-332</b>
Fuel Gas Set, Hose Style	<b>QCH-333</b>
Replacement Pins for Above Parts:	Part No.
Male Pin, Oxygen, Torch Style, 9/16-18 RH-INT	<b>QCT-112-PIN</b>
Male Pin, Fuel Gas, Torch Style, 9/16-18 LH-INT	<b>QCT-113-PIN</b>
Male Pin, Oxygen, Regulator Style, 9/16-18 RH-INT	<b>QCT-222-PIN</b>
Male Pin, Fuel Gas, Regulator Style, 9/16-18 LH-INT	<b>QCT-223-PIN</b>
Male Pin, Oxygen, Hose Style, 9/16-18 RH-EXT	<b>QCH-332-PIN</b>
Male Pin, Fuel Gas, Hose Style, 9/16-18 LH-EXT	<b>QCH-333-PIN</b>

# engineering, manufacturing, and logistics

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](http://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


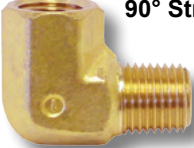
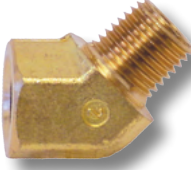





Beyond our ISO 9001 registration, all of our employees and S.P. teams they support have committed themselves to delivering the highest quality products in the compressed gas industry. Our Superior Products Quality Teams are committed to quality. If it has the  logo on it you can be assured it is the 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.
<b>90° Elbow</b>				
		1/8" FNPT x 1/8" FNPT	Brass	<b>PEL-2HP</b>
<b>PEL-4HP</b>	<b>PEL-4SS</b>	1/4" FNPT x 1/4" FNPT	Brass	<b>PEL-4HP</b>
		1/2" FNPT x 1/2" FNPT	Brass	<b>PEL-8HP</b>
		1/4" FNPT x 1/4" FNPT	SS	<b>PEL-4SS</b>
<b>90° Street Elbow</b>				
		1/8" FNPT x 1/8" MNPT	Brass	<b>PL-2HP</b>
<b>PL-4HP</b>	<b>PL-4SS</b>	1/4" FNPT x 1/4" MNPT	Brass	<b>PL-4HP</b>
		3/8" FNPT x 3/8" MNPT	Brass	<b>PL-6HP</b>
		1/2" FNPT x 1/2" MNPT	Brass	<b>PL-8HP</b>
		1/4" FNPT x 1/4" MNPT	SS	<b>PL-4SS</b>
<b>45° Street Elbow</b>				
		1/8" FNPT x 1/8" MNPT	Brass	<b>PSL-2-2HP</b>
<b>PSL-4-4HP</b>	<b>PSL-4SS</b>	1/4" FNPT x 1/4" MNPT	Brass	<b>PSL-4-4HP</b>
		1/4" FNPT x 1/4" MNPT	SS	<b>PSL-4SS</b>
<b>Cap</b>				
		1/8" FNPT	Brass	<b>P-52</b>
<b>P-54</b>		1/4" FNPT	Brass	<b>P-54</b>
		3/8" FNPT	Brass	<b>P-56</b>
		1/2" FNPT	Brass	<b>P-58</b>
<b>Tee</b>				
		1/8" FNPT (3)	Brass	<b>PFT-2HP</b>
<b>PFT-4HP</b>	<b>PFT-4SS</b>	1/4" FNPT (3)	Brass	<b>PFT-4HP</b>
		1/2" FNPT (3)	Brass	<b>PFT-8HP</b>
		1/4" FNPT (3)	SS	<b>PFT-4SS</b>
<b>Street Tee</b>				
		1/8" FNPT (2) x 1/8" MNPT	Brass	<b>PST-2HP</b>
<b>PST-4HP</b>		1/4" FNPT (2) x 1/4" MNPT	Brass	<b>PST-4HP</b>
<b>Cross</b>				
		1/8" FNPT (4)	Brass	<b>PCR-2HP</b>
<b>PCR-4HP</b>	<b>PCR-4SS</b>	1/4" FNPT (4)	Brass	<b>PCR-4HP</b>
		1/4" FNPT (4)	SS	<b>PCR-4SS</b>

# 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
		3/4" MNPT x 3/4" MNPT	Brass	B-247
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
		1/4" FNPT x 3/4" MNPT	Brass	B-286
		3/4" FNPT x 1/2" MNPT	Brass	B-303
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
		3/4" FNPT x 1/2" FNPT	Brass	B-234
		3/4" FNPT x 3/4" FNPT	Brass	B-236
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-430-3
		1/4" FNPT x 1/4" MNPT, 4.0" Long	Brass	B-430-4
		1/4" FNPT x 1/4" MNPT, 6.0" Long	Brass	B-430-6
		1/4" FNPT x 1/4" MNPT, 3.0" Long	SS	B-430-3SS

# brass hose ferrules, braces & clamps

## 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, match the O.D. of hose with the I.D. of ferrule. Include any hose barb expansion.

## Oval Brass Dual Hose Braces



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 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. <b>NEW</b> 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
"B" hose fittings with KT-28 Crimping Tool. Contains nuts, nipples, couplers, splicers and ferrules for 1/4" I.D. hose.	RK-26
"B" hose fittings only nuts, nipples, couplers, splicers and ferrules for 1/4" I.D. hose.	RK-26LT
"A" & "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-27
"A" & "B" hose fittings only. Contains nuts, nipples, couplers, splicers and ferrules for 1/4" and 3/16" I.D. hose.	RK-27LT
"B" hose fittings only. Contains nuts, nipples, couplers, splicers and ferrules for 5/16" & 3/8" I.D. hose.	RK-28LT
"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



KT-28



KT-30





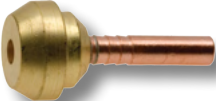
SCR-100

Description	Part No.
2-Hole Jaws to Crimp 1/2" wide to crimp 3/16" - 1/4" Hose	KT-28
3-Hole Jaws to Crimp 1/2" wide to crimp 5/16", 11/32", 27/64" Hole Size Diameters 7/16" and 9/16" on Twin or Single Hose	KT-30
*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.	
Description	Part No.
Bench top, 5-die, crimper Die sizes for 5/8", 37/64", 17/32", 31/64", and 11/16" diameters.	SCR-100

# power cable nipples & connector assemblies

## Brass Nipple & Copper Tube Assembly


Maximum Pressure 200 PSI

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

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

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

## Brass Power Cable Nipples (One Piece)

	Description	Part No.
 <b>CN-10</b>	"A" Nipple x .250" O.D. Tube and Max .203" Diameter Cable Hole * use with nuts N-14 or N-15	<b>CN-6*</b>
	"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	<b>CN-10*</b>

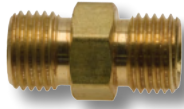
## Brass Nipple & Tellurium Copper Tube Assembly

	Description	Part No.
image not available	"B" Brass Nipple x .225" O.D. Tellurium Copper Tube, Max.140" Dia. Cable Hole * use with nuts N-2400 or N-2500	<b>CN-16-T*</b>
	.21" Dia. Brass Nipple with 1/4"-28 INT Brass Nut x .225 O.D. Tellurium Copper Tube and Max .140" Cable Hole	<b>CN-60-T</b>
	.37" Dia. Brass Nipple with 7/16"-20 INT Brass Nut x .375 O.D. Tellurium Copper Tube and Max .245" Cable Hole	<b>CN-68-T</b>

# hose connections for inert arc welders

## Air-Water Coupler

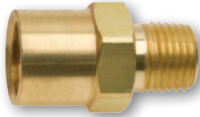
Maximum Pressure 200 PSI



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

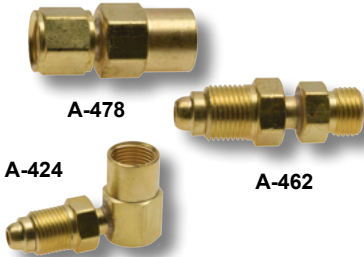
## Air-Water Adaptor



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



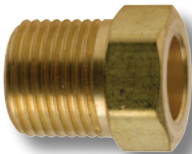
A-478

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.
<b>Use with:</b>	
"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


# hose connections for inert arc welders

## Air-Water Nut

Maximum Pressure 200 PSI


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

## Inert Arc Barb Hose Nipples

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

## Inert Arc Hose Couplers

Maximum Pressure 200 PSI

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

# 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	<b>BN-341-3</b>
Handtight Nuts 	Nut-HT	5/8"A-RH-EXT	Brass, Plastic Grip	<b>BNH-341-3</b>
Nipple-Threaded Inlets 	Nipple	1/4" NPT-M, 2.5"Long	Brass	<b>BNP-341-3-2.5</b>
Nipple-Handtight 	Nipple-HT	1/4" NPT-M, 3.5"Long	Brass	<b>BNP-341-3W-3.5</b>
Replacement Items 	"O"Ring	For BNP-341-3W-3.5	Nitrile	<b>OR-580</b>
Adaptor 	Cylinder Adaptor	To CGA 540 Regulator	Brass	<b>BA-540</b>
	Cylinder Adaptor	To CGA 580 Regulator	Brass	<b>BA-580</b>

### 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	<b>BN-341-2</b>
Nipple-Threaded Inlets 	Nipple	1/4" NPT-M, 2.5"Long	Brass	<b>BNP-341-3-2.5</b>
Nipple-Handtight 	Nipple-HT	1/4" NPT-M, 3.5"Long	Brass	<b>BNP-341-3W-3.5</b>
Replacement Items 	"O"Ring	For BNP-341-3W-3.5	Nitrile	<b>OR-580</b>
Adaptor 	Cylinder Adaptor	To CGA 510 Regulator	Brass	<b>BA-510</b>

# 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	<b>BN-375RH</b>
	Nut		3/8" L.H. Fuel Gas, Combustibles	Brass	<b>BN-375LH</b>
Nipple- Hose Barb 	Nipple		1/4" ID Hose, used for 3/8" Nut	Brass	<b>BNP-375-4</b>
	Nipple		5/16" ID Hose, used for 3/8" Nut	Brass	<b>BNP-375-5</b>

## German Style Fittings

### DIN-477 Connectors




#### #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	<b>DN-477-06</b>
Nipple-Threaded Inlets 	Nipple		1/4" NPT-M, 3.5"Long	Brass	<b>DNP-477-6-3.5</b>
Replacement Items 	Washer		For Nipple	Nylon	<b>DW-477-6N</b>

#### #9 Oxygen




Maximum Pressure (300 bar) 4350 PSI

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

# German standard fittings




## #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	<b>DN-477-10</b>	
	Nipple-Threaded Inlets				
	Nipple	1/4" NPT-M, 3.5"Long	Brass	<b>DNP-477-6-3.5</b>	
	Replacement Items				
	Washer	For Nipple	Nylon	<b>DW-477-6N</b>	

## #12 Nitrous Oxide

Maximum Pressure (300 bar) 4350 PSI

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

# CGA nuts and nipples - basic information

## 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 FILETERS

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.

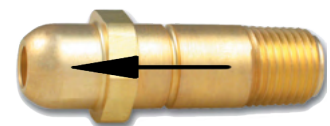
NOTE: These check valves protect against reverse flow only and are not flashback arrestors.

- 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

# regulator 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	<b>N-49</b>
	Nut	.5625"-18UNF-2B-RH-INT	SS	<b>N-49SS</b>
	Nipple-Threaded Inlets			
Nipple-Threaded Inlets 	Nipple	1/8" NPT, 1.25" Long	Brass	<b>NP-101</b>
	Nipple	1/8" NPT, 1.25" Long	SS	<b>NP-101SS</b>
Replacement Items 	Washer	For Nipple	PTFE	<b>W-60</b>






## CGA-180 All Gases In Small Cylinders

3,000 PSI

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

## CGA-200 "MC" Acetylene In Small Cylinders

500 PSI



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

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

# regulator inlet nuts & nipples



## CGA-280 Medical Breathing Mixtures

3,000 PSI

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

## CGA-296 Industrial Oxygen Mixtures

3,000 PSI

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

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.
<b>Hex Nuts</b> 	Nut	.830"-14NGO-RH-INT	Brass	<b>N-56</b>
	Nut	.830"-14NGO-RH-INT	CP Brass	<b>MN-056</b>
<b>Handtight Nuts</b> 	Nut-HT	.830"-14NGO-RH-INT	Brass	<b>HTN-56</b>
	Nut-HT	.830"-14NGO-RH-INT	Brass, Plastic Grip	<b>HTN-56P</b>
<b>Nipple-Threaded Inlets</b> 	Nipple	1/4" NPT, 2"Long	Brass	<b>NP-126</b>
	Nipple	1/4" NPT, 2.5"Long	Brass	<b>NP-128</b>
	Nipple	1/4" NPT, 3.5"Long	Brass	<b>NP-130</b>
	Nipple	1/4" NPT, 3.5"Long	CP Brass	<b>MNP-130</b>
<b>Nipple-Handtight</b> 	Nipple-HT	1/4" NPT-2.5"Long	Brass, PTFE	<b>NP-128T3</b>
<b>Nipple-Countersunk</b> 	Nipple-CS	For 1/4" Tube	Brass	<b>NP-126C2</b>
	Nipple-CS	For 5/16" Tube	Brass	<b>NP-126C3</b>
	Nipple-CS	For 3/8" Tube	Brass	<b>NP-126C4</b>
<b>Nipple-Check Valve</b> 	Nipple-CV	1/4" NPT, 2.5"Long	Brass	<b>NP-128CV</b>
<b>Replacement Items</b> 	Soft Tip	For HT-Nipple	PTFE	<b>T128-3</b>
	O-Ring	For O-Ring Nipple	Nitrile	<b>MR-116</b>

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

# regulator inlet nuts & nipples

CGA-320 Carbon Dioxide

3,000 PSI

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

\*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.
<b>Hex Nuts</b> 	Nut	.830"-14NGO-RH-INT	Brass	<b>N-82</b>
	Nut	.830"-14NGO-RH-INT	SS	<b>N-82SS</b>
	Nut	.830"-14NGO-RH-INT	CP Brass	<b>MN-082</b>
	<b>Handtight Nuts</b>			
	Nut-HT	.830"-14NGO-RH-INT	Brass	<b>HTN-82</b>
	Nut-HT	.830"-14NGO-RH-INT	Brass, Plastic Grip	<b>HTN-82P</b>
	Nut-HT	.830"-14NGO-RH-INT	CP Brass, Plastic Grip	<b>MHN-082P</b>
<b>Nipple-Threaded Inlets</b>				
	Nipple	1/4" NPT, 2.125" Long	Brass	<b>NP-732</b>
	Nipple	1/4" NPT, 2.5" Long	Brass	<b>NP-733</b>
	Nipple	1/4" NPT, 2.5" Long	SS	<b>NP-733SS</b>
	Nipple	1/4" NPT, 2.5" Long	CP Brass	<b>MNP-733</b>
	Nipple	1/4" NPT, 3" Long	Brass	<b>NP-734</b>
<b>Nipple-Handtight</b>				
	Nipple-HT	1/4" NPT, 2.5" Long	Brass, PCTFE	<b>NP-733T1</b>
	Nipple-HT-CS	For 1/4" Tube	Brass, PCTFE	<b>NP-732T1C3</b>
<b>Nipple-Countersunk</b>				
	Nipple-CS	For 1/4" Tube	SS	<b>NP-732C2SS</b>
	Nipple-CS	For 5/16" Tube	Brass	<b>NP-732C3</b>
	Nipple-CS	For 3/8" Tube	Brass	<b>NP-732C4</b>
<b>Nipple-Check Valve</b>				
	Nipple-CV	1/4" NPT, 2.5" Long	Brass	<b>NP-733CV</b>
	Nipple-CV	1/4" NPT, 2.5" Long	SS	<b>NP-733SSCV</b>
	Nipple-CV	1/4" NPT, 2.5" Long	CP Brass	<b>MNP-733CV</b>
<b>Nipples for use with Residual Pressure Valves</b>				
	Nipple-RPV-O-Ring	1/4" NPT, 3.5" Long with Retractable Pin & O-Ring	Brass, EPDM	<b>NP-735W-RPV</b>
<b>Replacement Items</b>				
	Soft Tip	For HT-Nipple	PCTFE	<b>T733-1</b>
	O-ring	For NP-735W-RPV	EPDM	<b>OR-326</b>

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

# regulator inlet nuts & nipples

3,000 PSI

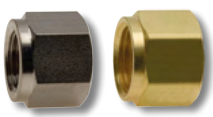


## CGA-330 Non-Corrosive Gases

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

\*Includes Washer

## CGA-346 Air

3,000 PSI


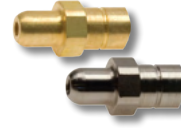
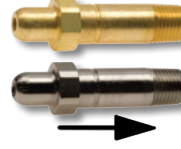

		Part	Description	Material	Part No.
<b>Hex Nuts</b> 	Nut	.830"-14NGO-RH-INT	Brass	<b>N-84</b>	
	Nut	.830"-14NGO-RH-INT	CP Brass	<b>MN-084</b>	
	Nut	.830"-14NGO-RH-INT	SS	<b>N-84SS</b>	
<b>Handtight Nuts</b> 	Nut-HT	.830"-14NGO-RH INT	Brass	<b>HTN-84</b>	
	Nut-HT	.830"-14NGO-RH INT	Brass, Plastic Grip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

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

# regulator inlet nuts & nipples

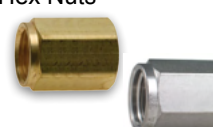






## CGA-346 Air Continued

3,000 PSI

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

## CGA-347 Air

3,001 - 4,700 PSI

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

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

# regulator inlet nuts & nipples

CGA-350 Hydrogen/Methane/Natural Gas

3,000 PSI



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

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	<b>N-66</b>
<b>Nipple-Threaded Inlets</b>				
	Nipple	1/4" NPT, 2.5" Long	Brass	<b>NP-168</b>
	Nipple	1/4" NPT, 3" Long	Brass	<b>NP-169</b>
	Nipple	1/4" NPT, 3.5" Long	Brass	<b>NP-170</b>

## CGA-415 Canadian Acetylene

500 PSI

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




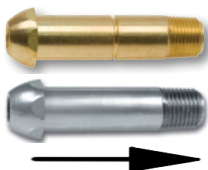



Add "RF" to end of nipple part numbers listed under the CGA numbers for Installed Filters

# regulator inlet nuts & nipples

## CGA-500 Medical Mixtures

3,000 PSI

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

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.
<b>Hex Nuts</b> 	Nut	.880"-14NGO-LH-EXT(7/8"Hex)	Brass	<b>N-68</b>
	Nut	.880"-14NGO-LH-EXT	Brass	<b>N-69</b>
	Nut	.880"-14NGO-LH-EXT	SS	<b>N-69SS</b>
	Nut	.880"-14NGO-LH-EXT	CP Brass	<b>MN-069</b>
<b>Handtight Nuts</b> 	Nut-HT	.880"-14NGO-LH-EXT	Brass	<b>HTN-69</b>
	Nut-HT	.880"-14NGO-LH-EXT	Brass, Plastic Grip	<b>HTN-69P</b>
<b>Nipple-Threaded Inlets</b> 	Nipple	1/4" NPT, 2.5" Long	Brass	<b>NP-188</b>
	Nipple	1/4" NPT, 2.5" Long	CP Brass	<b>MNP-188</b>
	Nipple	1/4" NPT, 2.5" Long	SS	<b>NP-188SS</b>
	Nipple	1/4" NPT, 3" Long	Brass	<b>NP-189</b>
	Nipple	1/4" NPT, 3" Long	CP Brass	<b>MNP-189</b>
	Nipple	1/4" NPT, 3" Long	SS	<b>NP-189SS</b>
	Nipple	1/4" NPT, 3.5" Long	Brass	<b>NP-190</b>
	Nipple	1/4" NPT, 3.5" Long	SS	<b>NP-190SS</b>
	Nipple	1/4" NPT, 3.5" Long	CP Brass	<b>MNP-190</b>
	Nipple	1/4" NPT, 4.5" Long	Brass	<b>NP-191</b>
<b>Nipple-Handtight</b> 	Nipple-HT	1/4" NPT, 3" Long (only with HTN-69)	Brass, PTFE	<b>NP-189T3</b>
	Nipple-HT	1/4" NPT, 3.5" Long, w/ soft tip	Brass, PTFE	<b>NP-190T3</b>
	Nipple-HT	1/4" NPT, 3.5" Long w/ O-Ring	Brass, Nitrile	<b>NP-190W</b>
	Nipple-HT-CS	For 1/4" Tube	Brass, PTFE	<b>NP-188T3C2</b>
	Nipple-HT-CS	For 5/16" Tube	Brass, PTFE	<b>NP-188T3C3</b>
<b>Nipple-Countersunk</b> 	Nipple-CS	For 1/4" Tube	Brass	<b>NP-188C2</b>
	Nipple-CS	For 1/4" Tube	SS	<b>NP-188C2SS</b>
	Nipple-CS	For 5/16" Tube	Brass	<b>NP-188C3</b>
	Nipple-CS	For 5/16" Tube	SS	<b>NP-188C3SS</b>
	Nipple-CS	For 3/8" Tube	Brass	<b>NP-188C4</b>
<b>Nipple-Check Valve</b> 	Nipple-CV	1/4" NPT, 2.5" Long	Brass	<b>NP-188CV</b>
	Nipple-CV	1/4" NPT, 2.5" Long	SS	<b>NP-188SSCV</b>
	Nipple-CV	1/4" NPT, 2.5" Long	CP Brass	<b>MNP-188CV</b>
	Nipple-CV	1/4" NPT, 3" Long	Brass	<b>NP-189CV</b>
	Nipple-CV	1/4" NPT, 3" Long	SS	<b>NP-189SSCV</b>
<b>Replacement Items</b> 	Soft Tip	For HT-Nipple	PTFE	<b>T189-3</b>
	O-Ring	For NP-190W	Nitrile	<b>OR-580</b>

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

# regulator inlet nuts & nipples

**CGA-520 “B Size” Acetylene In Small Cylinders**

500 PSI

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

Notes: \_\_\_\_\_  
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*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.
<b>Hex Nuts</b>					
		Nut	.908"-14NGO-RH-INT.	Brass	<b>N-71</b>
		Nut	.908"-14NGO-RH-INT.	SS	<b>N-71SS</b>
		Nut	.908"-14NGO-RH-INT	CP Brass	<b>MN-071</b>
<b>Handtight Nuts</b>					
		Nut-HT	.908"-14NGO-RH-INT	Brass	<b>HTN-71</b>
		Nut-HT	.908"-14NGO-RH-INT	Brass, Plastic Grip	<b>HTN-71P</b>
		Nut-HT	.908"-14NGO-RH-INT	CP Brass, Plastic Grip	<b>MHN-071P</b>
<b>Nipples - Threaded Inlets</b>					
		Nipple	1/4" NPT, 2.06" Long	Brass	<b>NP-210</b>
		Nipple	1/4" NPT, 2.06" Long	CP Brass	<b>MNP-210</b>
		Nipple	1/4" NPT, 2.5" Long	Brass	<b>NP-211</b>
		Nipple	1/4" NPT, 2.5" Long	CP Brass	<b>MNP-211</b>
		Nipple	1/4" NPT, 2.5" Long	SS	<b>NP-211SS</b>
		Nipple	1/4" NPT, 3" Long	Brass	<b>NP-212</b>
		Nipple	1/4" NPT, 3" Long	CP Brass	<b>MNP-212</b>
		Nipple	1/4" NPT, 3.5" Long	Brass	<b>NP-213</b>
<b>Nipples - Handtight</b>					
		Nipple-HT	1/4" NPT, 2.5" Long w/ O-Ring	Brass/Viton	<b>NP-211W</b>
		Nipple-HT	1/4" NPT, 2.5" Long w/ O-Ring	CP Brass/Viton	<b>MNP-211W</b>
		Nipple-HT	1/4" NPT, 2.5" Long	Brass/PCTFE	<b>NP-211T1</b>
		Nipple-HT	For 1/4" Tube	Brass/PCTFE	<b>NP-210T1C2</b>
		Nipple-HT	For 5/16" Tube	Brass/PCTFE	<b>NP-210T1C3</b>
<b>Nipples - Countersunk</b>					
		Nipple-CS	For 1/4" Tube	Brass	<b>NP-210C2</b>
		Nipple-CS	For 1/4" Tube	SS	<b>NP-210C2SS</b>
		Nipple-CS	For 5/16" Tube	Brass	<b>NP-210C3</b>
		Nipple-CS	For 3/8" Tube	Brass	<b>NP-210C4</b>
<b>Nipple - Check Valve</b>					
		Nipple-CV	1/4" NPT, 2.125" Long	Brass	<b>NP-210CV</b>
		Nipple-CV	1/4" NPT, 2.125" Long	CP Brass	<b>MNP-210CV</b>
		Nipple-CV	1/4" NPT, 2.5" Long	SS	<b>NP-211SSCV</b>
<b>Nipples - Residual Pressure Valve</b>					
		Nipple-RPV	1/4" NPT, 2.5" Long	Brass (Monel Pin)	<b>NP-211-PIN-M</b>
		Nipple-RPV	1/4" NPT, 2.5" Long	Brass (SS Pin)	<b>NP-211-PIN-SS</b>
		Nipple-RPV	1/4" NPT, 2.5" Long w/ O-Ring	Brass (Monel Pin)	<b>NP-211W-PIN-M</b>
		Nipple-RPV	1/4" NPT, 3.5" Long w/ O-Ring	Brass (Retractable SS Pin)	<b>NP-213W-RPV</b>
<b>Replacement Items</b>					
		Soft Tip	For HT-Nipple	PCTFE	<b>T211-1</b>
		O-Ring	For O-Ring Nipple	Viton	<b>OR-011V7</b>
		Pin	For RPV Nipple	SS	<b>PIN-NP-SS</b>
		Pin	For RPV Nipple	Monel	<b>PIN-NP-M</b>

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

# regulator inlet nuts & nipples



## CGA-555 Propane, Butane For Liquid Withdrawal

3,000 PSI

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

## CGA-577 Oxygen

3,001 - 4,000 PSI

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

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

# regulator inlet nuts & nipples

CGA-580 Argon, Helium, Nitrogen

3,000 PSI

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

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

# regulator inlet nuts & nipples



## CGA-590 Sulfur Hexafluoride Formerly Industrial Air

3,000 PSI

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

## CGA-621 Oil Tolerant Nitrogen

3,001-4,700 PSI




Hex Nuts	Part	Description	Material	Part No.
	Nut	1.035"-14NGO-LH-INT	Brass	<b>N-621</b>
<b>Nipple-Threaded Inlets</b>				
	Nipple	1/4" NPT, 3" Long	Brass	<b>NP-621</b>

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

# regulator inlet nuts & nipples



## CGA-622 Carbon Dioxide For Liquid Withdrawal

500 PSI

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

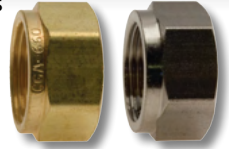




## CGA-624 Nitrous Oxide For Liquid Withdrawal

500 PSI

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

## CGA-660 Refrigerant Gases

3,000 PSI


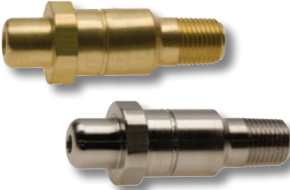

		Part	Description	Material	Part No.
Hex Nuts 	Nut		1.035"-14NGO-RH-INT	Brass	<b>N-77</b>
	Nut		1.035"-14NGO-RH-INT	SS	<b>N-77SS</b>
	Nut		1.035"-14NGO-RH-INT	CP Brass	<b>MN-077</b>
Nipple-Threaded Inlets 	Nipple*		1/4" NPT, 1.75" Long	Brass	<b>NP-236</b>
	Nipple*		1/4" NPT, 2.5" Long	Brass	<b>NP-238</b>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

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

# regulator inlet nuts & nipples

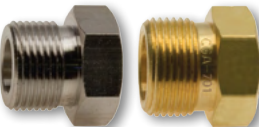
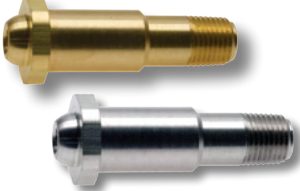

## CGA-677 Argon/Nitrogen/Helium

4,701-6,400 PSI

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

## CGA-680 Argon/Nitrogen/Helium

3,001-4,700 PSI




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

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

# regulator inlet nuts & nipples



## CGA-695 Hydrogen/Methane

3,001-4,700 PSI

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




## CGA-701 Oxygen

3,501-4,700 PSI

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

## CGA-702 Air

4,701-6,400 PSI

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

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

# pin indexed yokes



### CGA-870 Oxygen

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

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

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

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

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

### CGA-950 Medical Air

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

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

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

### CGA-960 Nitrogen

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

### CGA-910 Nitrous Oxide

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

### CGA-973 Medical Gas Mixtures

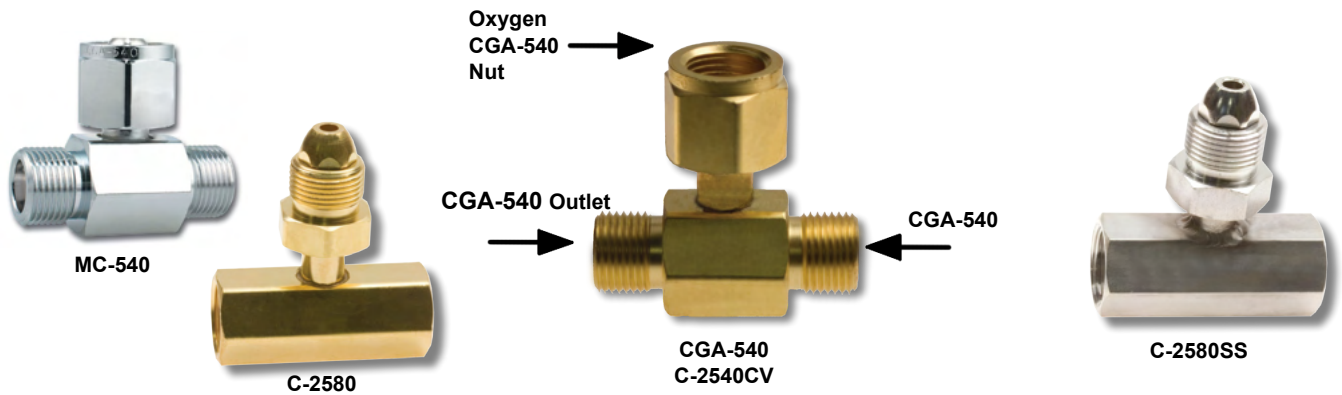
Inlet	Part No.
Yoke w/HT grip x 1/4" NPT male	<b>MFY-973-4H</b>
Yoke w/T-handle x 1/4" NPT male	<b>MFY-973-4</b>
Yoke w/HT grip x 1/2" NPT male	<b>MFY-973-8H</b>
Yoke w/T-handle x 1/2" NPT male	<b>MFY-973-8</b>

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

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

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

# 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

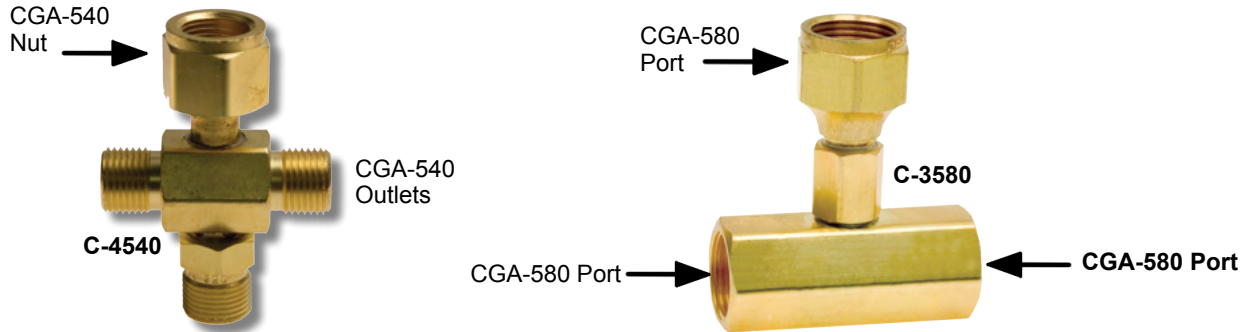
CGA No.	Swivel Connection	End Connection	PSI	Part No.
320 (Carbon Dioxide)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (2)	3000	MC-320
326 (Nitrous Oxide)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (2)	3000	MC-326
346 (Air)	.830"-14NGO-RH-INT	.830"-14NGO-RH-EXT (2)	3000	MC-346
500 (Medical Mixture)	.880"-14NGO-RH-EXT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

## coupler tees & manifold blocks

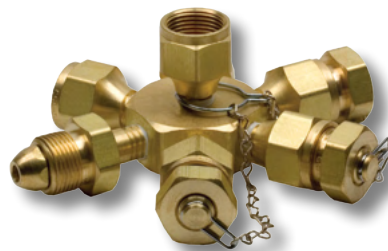


### Brass Manifold Coupler Tees - 4 way CGA Valve Outlets, Nut & Nipple Inlet

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

### Brass Manifold Coupler Tees - 3 way CGA Valve Outlets

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



**2" Hex Brass Body** (with 6 valve outlets)

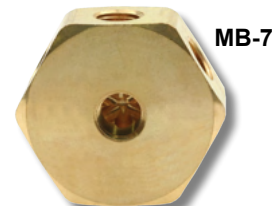
\*Available w/ Check Valve:  
Add "CV" to end of part number

### 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)	<b>MB-540-7*</b>
580 (Argon/Helium/Nitrogen)	.960"-14NGO-RH-EXT	.960"-14NGO-RH-INT (6)	<b>MB-580-7*</b>

### 2" Hex Manifold Blocks (with Female Ports)

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



**MB-7**



**MB-6SS**



**GMA-SCMB**

# brass “y” connectors

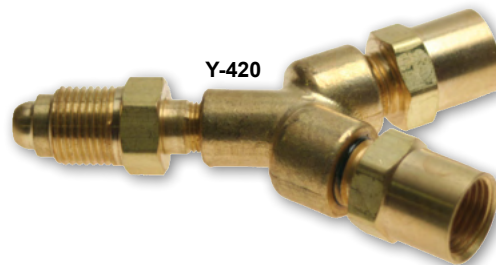
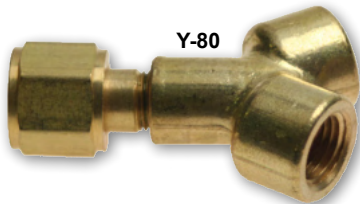
## ERGONOMIC DESIGN



### “Y” Connectors With Shut-Off Valves

200 PSI

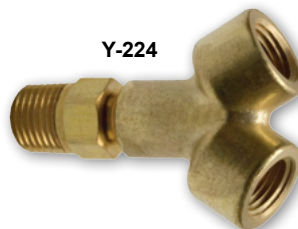
Service	Inlets	Outlets	Part No.
Oxygen	“B” 9/16”-18-RH-INT Swivel Nut	“B” 9/16”-18-RH-EXT	YV-50
Fuel Gas	“B” 9/16”-18-LH-INT Swivel Nut	“B” 9/16”-18-LH-EXT	YV-51
Argon	“B” 5/8”-18-RH-EXT Swivel Nut	“B” 5/8”-18-RH-INT	YV-420
Air-Water	“B” 5/8”-18-LH-EXT Swivel Nut	“B” 5/8”-18-LH-INT	YV-421



### “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

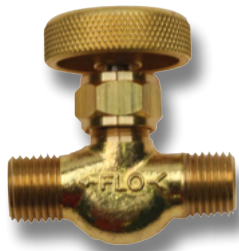
3,000 PSI

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 shut-off valves & dust caps

## 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.



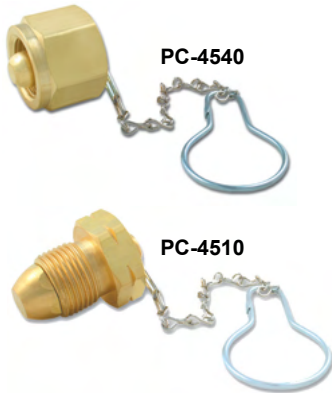
CC-8540  
Oxygen

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
320	Carbon Dioxide	.830"-14NGO-RH-INT	3000	PC-4320
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	3000	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
680	Argon/Helium/Nitrogen	.960"-14NGO-RH-EXT	4700	PC-680

PC-540  
Oxygen

## 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.



P-580  
Argon, Helium,  
Nitrogen



P-540  
Oxygen

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	3000	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

# valve outlet adaptors
















	CGA No.	Valve Outlet Adaptors Gas	Male & Female Pipe Threads Connection x NPT	Material	PSI	Part No.
<b>Male NPT</b> 	180	Non-Corrosive	.620"-18UNF-2B-RH-EXT x 1/4 MNPT	Brass	3,000	<b>A-518</b>
	180	Non-Corrosive	.620"-18UNF-2B-RH-EXT x 1/4 MNPT	SS	3,000	<b>A-518SS</b>
<b>Female NPT</b> 	296	Industrial Oxygen Mixtures	.803" UNS-2B-RH-INT x 1/4 FNPT	Brass	3,000	<b>N-853A</b>
<b>Male NPT</b> 	300	Ethyl Chloride (formerly Acetylene)	.825" 14NGO-RH-EXT x 1/4 MNPT	Brass	500	<b>A-531</b>
	300	Ethyl Chloride (formerly Acetylene)	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	500	<b>A-533</b>
<b>Male NPT</b> 	320	Carbon Dioxide	.825" 14NGO-RH-EXT x 1/4 MNPT	Brass	3,000	<b>A-541</b>
	320	Carbon Dioxide	.825" 14NGO-RH-EXT x 3/8 MNPT	Brass	3,000	<b>A-542</b>
	320	Carbon Dioxide	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	<b>A-543</b>
	320	Carbon Dioxide w/ Check Valve	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	<b>A-543CV</b>
<b>Female NPT</b> 	320	Carbon Dioxide	.825" 14NGO-RH-EXT x 1/4 FNPT	Brass	3,000	<b>N-854A</b>
	330	Carbon Sulfide	.825" 14NGO-LH-EXT x 1/4 FNPT	Brass	3,000	<b>N-330A</b>
<b>Male NPT</b> 	326	Nitrous Oxide	.825" 14NGO-RH-EXT x 1/4 MNPT	Brass	3,000	<b>A-631</b>
	326	Nitrous Oxide	.825" 14NGO-RH-EXT x 1/4 MNPT	CP Brass	3,000	<b>MA-631</b>
	326	Nitrous Oxide	.825" 14NGO-RH-EXT x 3/8 MNPT	Brass	3,000	<b>A-632</b>
	326	Nitrous Oxide w/ Check Valve	.825" 14NGO-RH-EXT x 3/8 MNPT	Brass	3,000	<b>A-632CV</b>
	326	Nitrous Oxide	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	<b>A-633</b>
	326	Nitrous Oxide w/ Check Valve	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	<b>A-633CV</b>
<b>Female NPT</b> 	326	Nitrous Oxide	.825" 14NGO-RH-EXT x 1/4 FNPT	Brass	3,000	<b>N-811A</b>
	326	Nitrous Oxide	.825" 14NGO-RH-EXT x 1/4 FNPT	CP Brass	3,000	<b>MN-326A</b>
<b>Male NPT</b>  	346	Air	.825" 14NGO-RH-EXT x 1/4 MNPT	Brass	3,000	<b>A-641</b>
	346	Air	.825" 14NGO-RH-EXT x 1/4 MNPT	CP Brass	3,000	<b>MA-641</b>
	346	Air	.825" 14NGO-RH-EXT x 1/4 MNPT	SS	3,000	<b>A-641SS</b>
	346	Air w/ Check Valve	.825" 14NGO-RH-EXT x 3/8 MNPT	Brass	3,000	<b>A-642CV</b>
	346	Air	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	<b>A-643</b>
	346	Air w/ Check Valve	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	<b>A-643CV</b>
<b>Female NPT</b> 	346	Air	.825" 14NGO-RH-EXT x 1/4 FNPT	Brass	3,000	<b>N-866A</b>
	346	Air	.825" 14NGO-RH-EXT x 1/4 FNPT	SS	3,000	<b>N-866A-SS</b>
	346	Air	.825" 14NGO-RH-EXT x 1/4 FNPT	CP Brass	3,000	<b>MN-346A</b>
<b>Male NPT</b>  	347	Air	.825" 14NGO-RH-EXT x 1/4 MNPT	Brass	4,700	<b>A-661</b>
	347	Air	.825" 14NGO-RH-EXT x 1/4 MNPT	SS	4,700	<b>A-661SS</b>
	347	Air	.825" 14NGO-RH-EXT x 1/2 MNPT	Brass	4,700	<b>A-663</b>

(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	4,700	<b>N-347A</b>
	347	Air	.825" 14NGO-RH-EXT x 1/4 FNPT	SS	4,700	<b>N-347A-SS</b>
Male NPT 	350	Hydrogen/Methane/Natural Gas	.825" 14NGO-LH-EXT x 1/4 MNPT	Brass	3,000	<b>A-551</b>
	350	Hydrogen/Methane/Natural Gas	.825" 14NGO-LH-EXT x 1/2 MNPT	Brass	3,000	<b>A-553</b>
Female NPT 	350	Hydrogen/Methane/Natural Gas	.825" 14NGO-LH-EXT x 1/4 FNPT	Brass	3,000	<b>N-874A</b>
	350	Hydrogen/Methane/Natural Gas	.825" 14NGO-LH-EXT x 1/4 FNPT	SS	3,000	<b>N-874A-SS</b>
	350	Hydrogen/Methane/Natural Gas	.825" 14NGO-LH-EXT x 1/4 FNPT	CP Brass	3,000	<b>MN-350A</b>
Female NPT 	410	Canadian Acetylene	.850" 14NGO-LH-EXT x 1/4 FNPT	Brass	500	<b>N-836A</b>
Male NPT 	500	Medical Mixtures	.885" 14NGO-RH-INT x 1/4 MNPT	Brass	3,000	<b>A-571</b>
	500	Medical Mixtures w/ Check Valve	.885" 14NGO-RH-INT x 3/8 MNPT	Brass	3,000	<b>A-572CV</b>
	500	Medical Mixtures w/ Check Valve	.885" 14NGO-RH-INT x 1/2 MNPT	Brass	3,000	<b>A-573CV</b>
Female NPT 	500	Medical Mixtures	.885" 14NGO-RH-INT x 1/4 FNPT	Brass	3,000	<b>N-807A</b>
	500	Medical Mixtures	.885" 14NGO-RH-INT x 1/4 FNPT	CP Brass	3,000	<b>MN-500A</b>
Male NPT 	510	Acetylene/Propane/Natural Gas	.885" 14NGO-LH-INT x 1/4 MNPT	Brass	500	<b>A-581</b>
	510	Acetylene/Propane/Natural Gas	.885" 14NGO-LH-INT x 1/2 MNPT	Brass	500	<b>A-583</b>
Female NPT   N-802A	510	Acetylene/Propane/Natural Gas	.885" 14NGO-LH-INT x 1/4 FNPT	Brass	500	<b>N-800A</b>
	510	Acetylene/Propane/Natural Gas	.885" 14NGO-LH-INT x 1/4 FNPT	CP Brass	500	<b>MN-510A</b>
	510(90°)	Acetylene/Propane/Natural Gas	.885" 14NGO-LH-INT x 1/4 FNPT	Brass	500	<b>N-802A</b>
Male NPT  	540	Oxygen	.903" 14NGO-RH-EXT x 1/4 MNPT	Brass	3,000	<b>A-591</b>
	540	Oxygen	.903" 14NGO-RH-EXT x 1/4 MNPT	SS	3,000	<b>A-591SS</b>
	540	Oxygen	.903" 14NGO-RH-EXT x 3/8 MNPT	Brass	3,000	<b>A-592</b>
	540	Oxygen w/ Check Valve	.903" 14NGO-RH-EXT x 3/8 MNPT	Brass	3,000	<b>A-592CV</b>
	540	Oxygen	.903" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	<b>A-593</b>
	540	Oxygen w/ Check Valve	.903" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,000	<b>A-593CV</b>
Female NPT 	540	Oxygen	.903" 14NGO-RH-EXT x 1/4 FNPT	Brass	3,000	<b>N-876A</b>
	540	Oxygen	.903" 14NGO-RH-EXT x 1/4 FNPT	SS	3,000	<b>N-876A-SS</b>
	540	Oxygen	.903" 14NGO-RH-EXT x 1/4 FNPT	CP Brass	3,000	<b>MN-540A</b>
Male NPT 	555	Propane/Butane for Liquid Withdrawal	.903" 14NGO-LH-EXT x 1/4 MNPT	Brass	3,000	<b>A-651</b>
	555	Propane/Butane for Liquid Withdrawal	.903" 14NGO-LH-EXT x 1/2 MNPT	Brass	3,000	<b>A-653</b>
Female NPT 	555	Propane/Butane for Liquid Withdrawal	.903" 14NGO-LH-EXT x 1/4 FNPT	Brass	3,000	<b>N-885A</b>
Male NPT 	577	Oxygen	.960" 14NGO-RH-EXT x 1/2 MNPT	Brass	3,500	<b>A-563</b>
Female NPT 	577	Oxygen	.960" 14NGO-RH-EXT x 1/4 FNPT	Brass	3,500	<b>N-577A</b>

## valve outlet adaptors

	CGA No. Gas	Valve Outlet Adaptors	Male & Female Pipe Threads Connection x NPT	Material	PSI	Part No.
 Male NPT	580	Argon/Helium/Nitrogen	.965" 14NGO-RH-INT x 1/4 MNPT	Brass	3,000	<b>A-601</b>
	580	Argon/Helium/Nitrogen	.965" 14NGO-RH-INT x 3/8 MNPT	Brass	3,000	<b>A-602</b>
	580	Argon/Helium/Nitrogen w/ Check Valve	.965" 14NGO-RH-INT x 3/8 MNPT	Brass	3,000	<b>A-602CV</b>
	580	Argon/Helium/Nitrogen	.965" 14NGO-RH-INT x 1/2 MNPT	Brass	3,000	<b>A-603</b>
	580	Argon/Helium/Nitrogen w/ Check Valve	.965" 14NGO-RH-INT x 1/2 MNPT	Brass	3,000	<b>A-603CV</b>
	580	Argon/Helium/Nitrogen	.965" 14NGO-RH-INT x 3/4 MNPT	Brass	3,000	<b>A-605</b>
 Female NPT	580	Argon/Helium/Nitrogen	.965" 14NGO-RH-INT x 1/4 FNPT	Brass	3,000	<b>N-862A</b>
	580	Argon/Helium/Nitrogen	.965" 14NGO-RH-INT x 1/4 FNPT	SS	3,000	<b>N-862ASS</b>
	580	Argon/Helium/Nitrogen	.965" 14NGO-RH-INT x 1/4 FNPT	CP Brass	3,000	<b>MN-580A</b>
 Male NPT	590	Sulfur Hexafluoride/Industrial Air	.965" 14NGO-LH-INT x 1/4 MNPT	Brass	3,000	<b>A-611</b>
	590	Sulfur Hexafluoride/Industrial Air	.965" 14NGO-LH-INT x 1/2 MNPT	Brass	3,000	<b>A-613</b>
 Female NPT	590	Sulfur Hexafluoride/Industrial Air	.965" 14NGO-LH-INT x 1/4 FNPT	Brass	3,000	<b>N-954A</b>
	590	Sulfur Hexafluoride/Industrial Air	.965" 14NGO-LH-INT x 1/4 FNPT	CP Brass	3,000	<b>MN-590A</b>
 Male NPT	622	Carbon Dioxide Liquid Withdrawal	1.030" 14NGO-RH-EXT x 3/8 MNPT	Brass	500	<b>A-722</b>
 Male NPT	624	Nitrous Oxide Liquid Withdrawal	1.030" 14NGO-RH-EXT x 3/8 MNPT	Brass	500	<b>A-732</b>
 Female NPT	660	Refrigerant Gases	1.030" 14NGO-RH-EXT x 1/4 FNPT	Brass	3,000	<b>N-880A</b>
	660	Refrigerant Gases	1.030" 14NGO-RH-EXT x 1/4 FNPT	CP Brass	3,000	<b>MN-660A</b>
 Male NPT	677	Argon/Helium/Nitrogen	1.030" 14NGO-LH-EXT x 1/4 MNPT	Brass	6,400	<b>A-671</b>
	677	Argon/Helium/Nitrogen	1.030" 14NGO-LH-EXT x 1/4 MNPT	SS	6,400	<b>A-671SS</b>
	677	Argon/Helium/Nitrogen	1.030" 14NGO-LH-EXT x 1/2 MNPT	Brass	6,400	<b>A-673</b>
	677	Argon/Helium/Nitrogen	1.030" 14NGO-LH-EXT x 1/2 MNPT	SS	6,400	<b>A-673SS</b>
 Female NPT	677	Argon/Helium/Nitrogen	1.030" 14NGO-LH-EXT x 1/4 FNPT	Brass	6,400	<b>N-677A</b>
	677	Argon/Helium/Nitrogen	1.030" 14NGO-LH-EXT x 1/4 FNPT	SS	6,400	<b>N-677A-SS</b>
 Male NPT	680	Argon/Helium/Nitrogen	1.045" 14NGO-RH-INT x 1/4 MNPT	Brass	4,700	<b>A-681</b>
	680	Argon/Helium/Nitrogen	1.045" 14NGO-RH-INT x 1/2 MNPT	Brass	4,700	<b>A-683</b>
 Female NPT	680	Argon/Helium/Nitrogen	1.045" 14NGO-RH-INT x 1/4 FNPT	Brass	4,700	<b>N-680A</b>
	680	Argon/Helium/Nitrogen	1.045" 14NGO-RH-INT x 1/4 FNPT	SS	4,700	<b>N-680A-SS</b>
 Male NPT	701	Oxygen	1.103" 18NGO-RH-EXT x 1/2 MNPT	Brass	4,700	<b>A-753</b>
 Female NPT	701	Oxygen	1.103" 18NGO-RH-EXT x 1/4 FNPT	Brass	4,700	<b>N-701A</b>
 Male NPT	702	Air	1.125" 14NGO-RH-INT x 1/2 MNPT	Brass	6,400	<b>A-763</b>
 Female NPT	702	Air	1.125" 14NGO-RH-INT x 1/4 FNPT	Brass	6,400	<b>N-702A</b>



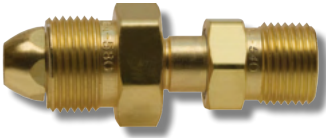
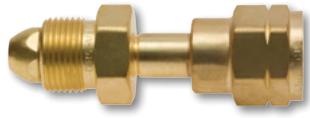
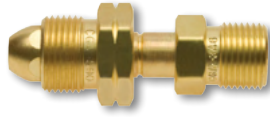
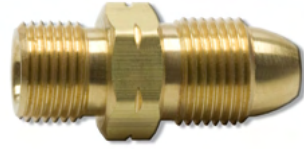
# brass cga cylinder to regulator adaptors

CGA 200-300 Part No.	CGA 200-510 Part No.	CGA 200-510 Part No.	CGA 200-520 Part No.
500 PSI <b>A-775</b> Acetylene Cylinder (CGA-200)  Commercial Acetylene Regulator (CGA-300)	500 PSI <b>A-780</b> Acetylene Cylinder (CGA-200)  Acetylene P.O.L. Regulator (CGA-510)	500 PSI <b>A-781</b> Acetylene "MC" Cylinder (CGA-200)  Acetylene P.O.L. Regulator (CGA-510)	500 PSI <b>A-783</b> Acetylene "MC" Cylinder (CGA-200)  Acetylene B Regulator (CGA-520)
CGA 200-520 Part No.	CGA 280-540 Part No.	CGA 296-590 Part No.	CGA 300-200 Part No.
500 PSI <b>A-784</b> Acetylene "MC" Cylinder (CGA-200)  Acetylene B Regulator (CGA-520)	3000 PSI <b>A-789</b> Medical Breathing Mixtures CGA-280 Cylinder  Oxygen Regulator (CGA-540)	3000 PSI <b>A-968</b> Industrial Oxygen Mixtures CGA-296 Cylinder  Industrial Air Regulator (CGA-590)	500 PSI <b>A-792</b> 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 <b>A-800</b> Commercial Acetylene Cylinder (CGA-300)  Acetylene P.O.L. Regulator (CGA-510)	500 PSI <b>A-801</b> Commercial Acetylene Cylinder (CGA-300) 1 pc. Adaptor  Acetylene P.O.L. Regulator (CGA-510)	500 PSI <b>A-802</b> Commercial Acetylene Cylinder (CGA-300)  510 Acetylene P.O.L. Regulator (CGA-510)	500 PSI <b>A-804</b> 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 <b>A-809</b> Carbon Dioxide Cylinder (CGA-320)  Argon, Helium, or Nitrogen Regulator (CGA-580)	3000 PSI <b>A-810</b> Carbon Dioxide Cylinder (CGA-320) 1 pc. Adaptor  Argon, Helium, or Nitrogen Regulator (CGA-580)	3000 PSI <b>A-930</b> Air Cylinder (CGA-346)  Oxygen Regulator (CGA-540)	3000 PSI <b>A-935</b> 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)	<b>A-820</b>	500 PSI Canadian L.A. Acetylene Cylinder (CGA-415)	<b>A-827</b>	3000 PSI Medical Mixtures Cylinder (CGA-500)	<b>A-909</b>	3,000 PSI Medical Mixtures Cylinder (CGA-500)	<b>A-912</b>
							
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)	<b>A-828</b>	500 PSI Acetylene P.O.L. Cylinder (CGA-510)	<b>A-830</b>	500 PSI Acetylene P.O.L. Cylinder (CGA-510)	<b>A-831</b>	500 PSI Acetylene P.O.L. Cylinder (CGA-510)	<b>A-836</b>
							
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)	<b>A-838</b>	500 PSI Acetylene P.O.L. Cylinder (CGA-510)	<b>A-840</b>	500 PSI Acetylene B Cylinder (CGA-520)	<b>A-842</b>	500 PSI Acetylene B Cylinder (CGA-520)	<b>A-844</b>
							
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)	<b>A-848</b>	500 PSI Acetylene B Cylinder (CGA-520)	<b>A-850</b>	3000 PSI Oxygen Cylinder (CGA-540)	<b>A-866</b>	3000 PSI Oxygen Cylinder (CGA-540)	<b>A-862</b>
							
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 <b>A-948</b> Propane (L.W.) Cylinder (CGA-555)  Acetylene P.O.L. Regulator (CGA-510)	3000 PSI <b>A-952</b> Propane (L.W.) Cylinder (CGA-555)  Argon, Helium, or Nitrogen Regulator (CGA-580)	3000 PSI <b>A-870</b> Argon, Helium, or Nitrogen Cylinder (CGA-580)  Carbon Dioxide Regulator (CGA-320)	3000 PSI <b>A-882</b> 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 <b>A-876</b> Argon, Helium, or Nitrogen Cylinder (CGA-580)  Oxygen Regulator (CGA-540)	3000 PSI <b>A-879</b> Argon, Helium, or Nitrogen Cylinder (CGA-580)  Industrial Air Regulator (CGA-590)	3000 PSI <b>A-894</b> Industrial Air Cylinder (CGA-590)  Air Regulator (CGA-346)	3000 PSI <b>A-892</b> Industrial Air Cylinder (CGA-590)  Argon, Helium, or Nitrogen Regulator (CGA-580)
CGA 410-510 Part No.	CGA 500-590 Part No.	CGA 510-555 Part No.	
500 PSI <b>A-837</b> Canadian Acetylene Cylinder (CGA-410)  image not available  Acetylene P.O.L. Regulator (CGA-510)	3000 PSI <b>A-910</b> Medical Mixtures Cylinder (CGA-500)  image not available  Industrial Air Regulator (CGA-590)	500 PSI <b>A-841</b> Acetylene P.O.L. Cylinder (CGA-510)  Propane (L.W.) Regulator (CGA-555)	



## FLARE TUBING ADAPTORS



500 PSI

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

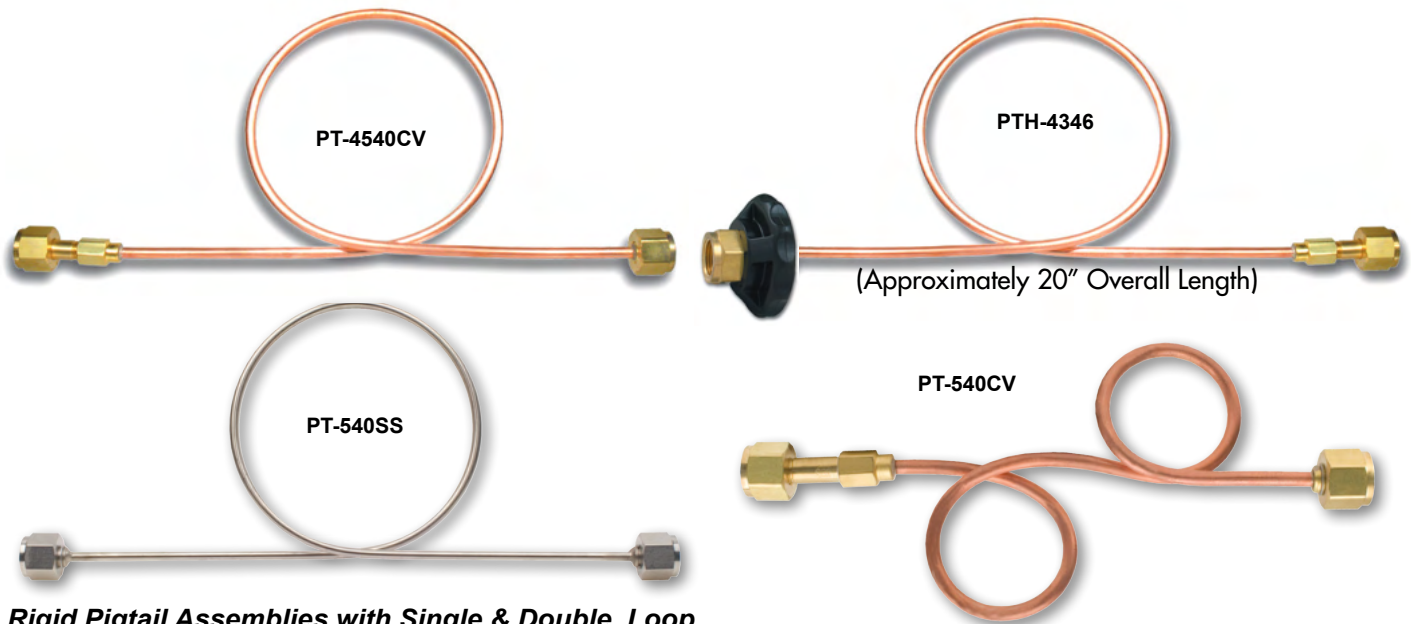
CGA 440 Oxygen Cryogenic Transfer Hose	CGA 295 Nitrogen Cryogenic Transfer Hose																				
<p>(B)=Brass Ends (S)=Stainless Steel Ends – Insert type of material</p> <p style="text-align: right;"><b>500 PSI</b></p> <div style="display: flex; justify-content: space-around; align-items: center;">  <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;"><b>500 PSI</b></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
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																				
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																				

\*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								
<p style="text-align: right;"><b>500 PSI</b></p> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: center;"> <p>STAINLESS STEEL</p> </div> </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Oxygen CGA 440 Handwheel</td><td><b>HTC-440</b></td></tr> <tr><td>Nitrogen/Inert CGA 295 Handwheel</td><td><b>HTC-295</b></td></tr> </table>	Oxygen CGA 440 Handwheel	<b>HTC-440</b>	Nitrogen/Inert CGA 295 Handwheel	<b>HTC-295</b>	<p style="text-align: right;"><b>500 PSI</b></p> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: center;"> <p>STAINLESS STEEL</p> </div> </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Oxygen CGA 440 Tee Handle</td><td><b>CHTE-440</b></td></tr> <tr><td>Nitrogen/Inert CGA 295 Tee Handle</td><td><b>CHTE-295</b></td></tr> </table>	Oxygen CGA 440 Tee Handle	<b>CHTE-440</b>	Nitrogen/Inert CGA 295 Tee Handle	<b>CHTE-295</b>
Oxygen CGA 440 Handwheel	<b>HTC-440</b>								
Nitrogen/Inert CGA 295 Handwheel	<b>HTC-295</b>								
Oxygen CGA 440 Tee Handle	<b>CHTE-440</b>								
Nitrogen/Inert CGA 295 Tee Handle	<b>CHTE-295</b>								

Cryogenic Phase Separator	Fill Elbow						
<p style="text-align: right;"><b>500 PSI</b></p> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: center;"> <p>STAINLESS STEEL</p> </div> </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>3/8" female NPT</td><td><b>CPS-001</b></td></tr> </table>	3/8" female NPT	<b>CPS-001</b>	<p style="text-align: right;"><b>500 PSI</b></p> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: center;"> <p>STAINLESS STEEL</p> </div> </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Oxygen CGA 440</td><td><b>CEL-440</b></td></tr> <tr><td>Nitrogen/Inert CGA 295</td><td><b>CEL-295</b></td></tr> </table>	Oxygen CGA 440	<b>CEL-440</b>	Nitrogen/Inert CGA 295	<b>CEL-295</b>
3/8" female NPT	<b>CPS-001</b>						
Oxygen CGA 440	<b>CEL-440</b>						
Nitrogen/Inert CGA 295	<b>CEL-295</b>						

# 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

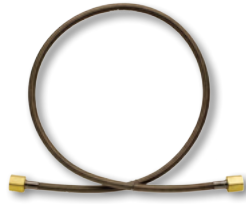
EXAMPLE	PTF	-	580H	-	580	-	24
	Hose Type		Inlet		Outlet		Length

Superior PTF Series PTFE Lined Stainless Braided Pigtaills 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	-	34I	-	34I	-	24
	Hose Type		Inlet		Outlet		Length

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

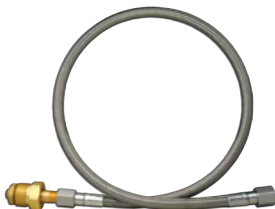
EXAMPLE	PTFN	-	N 34I	-	N34I	-	24
	Hose Type		Inlet		Outlet		Length

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	-	680	-	641SS	-	24
	Hose Type		Inlet		Outlet		Length

For newer high pressure CGA's. PTFE lined, stainless braided hose for 6000 PSI working pressure. (NOT available with Armor Guard.)

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	-	34I	-	34I	-	24
	Hose Type		Inlet		Outlet		Length

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:

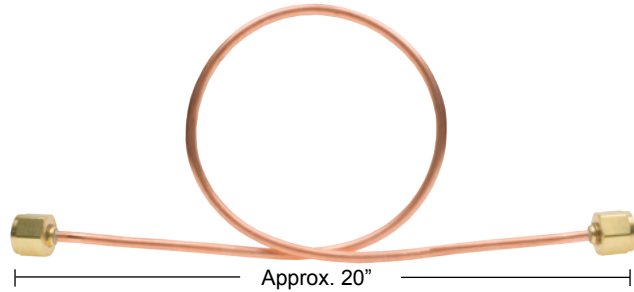
- 1/4" Nominal I.D.
- Braid is Type 304 stainless steel
- Temperature rating -65°F to 450°F
- Burst pressure is 14,400 PSI at room temperature
- Minimum bend radius of 3 inches for maximum safety & life

# NFPA compliant hospital pigtails

## 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	<b>PTFP-320-24 or 36</b>
Nitrous Oxide	CGA 326 Female Nut	Stainless Steel/Teflon	<b>PTFP-326-24 or 36</b>
Medical Air	CGA 346 Female Nut	Stainless Steel/Teflon	<b>PTFP-346-24 or 36</b>
Medical Mixture	CGA 500 Male Nut	Stainless Steel/Teflon	<b>PTFP-500-24 or 36</b>
Nitrogen, Helium	CGA 580 Male Nut	Stainless Steel/Teflon	<b>PTFP-580-24 or 36</b>
Oxygen	CGA 540 Female Nut	Copper/Brass ends	<b>PT-4540</b>
Nitrous Oxide	CGA 326 Female Nut	Copper/Brass ends	<b>PT-4326</b>

## 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	<b>PFSL-320-72</b>
Nitrous Oxide	CGA 326 Female Nut	3/8" I.D. Nylon Tube	<b>PFSL-326-72</b>
Medical Air	CGA 346 Female Nut	3/8" I.D. Nylon Tube	<b>PFSL-346-72</b>
Medical Mixture	CGA 500 Male Nut	3/8" I.D. Nylon Tube	<b>PFSL-500-72</b>
Oxygen	CGA 540 Female Nut	3/8" I.D. Nylon Tube	<b>PFSL-540-72</b>
Nitrogen, Helium	CGA 580 Male Nut	3/8" I.D. Nylon Tube	<b>PFSL-580-72</b>

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"	<b>PTF-34I-34I-18</b>
PTFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	24"	<b>PTF-34I-34I-24</b>
PTFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	36"	<b>PTF-34I-34I-36</b>
PTFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	48"	<b>PTF-34I-34I-48</b>
ETFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	18"	<b>PTFT-34I-34I-18</b>
ETFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	24"	<b>PTFT-34I-34I-24</b>
ETFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	36"	<b>PTFT-34I-34I-36</b>
ETFE core/SS braid, brass ends	1/4"NPT female	X	1/4"NPT female	48"	<b>PTFT-34I-34I-48</b>

## 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"	<b>PTF6-64ISS-64ISS-18</b>
PTFE core/SS braid, SS ends	1/4"NPT female	X	1/4"NPT female	24"	<b>PTF6-64ISS-64ISS-24</b>
PTFE core/SS braid, SS ends	1/4"NPT female	X	1/4"NPT female	36"	<b>PTF6-64ISS-64ISS-36</b>
PTFE core/SS braid, SS ends	1/4"NPT female	X	1/4"NPT female	48"	<b>PTF6-64ISS-64ISS-48</b>

# 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.

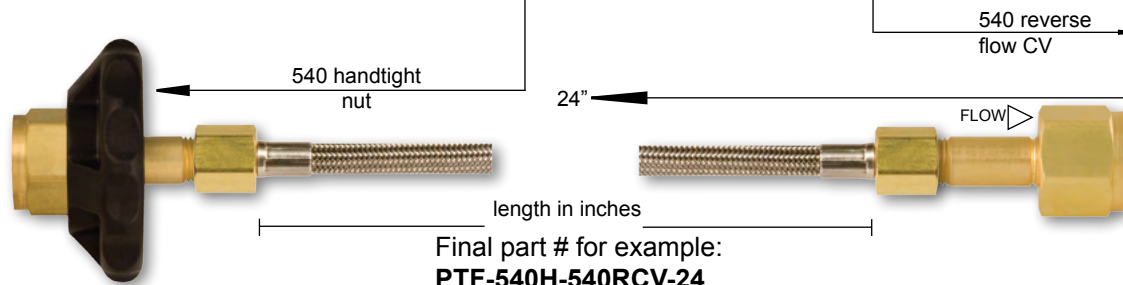
### TYPE OF HOSE

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

Spring Guard is available for Superior's PTF, PTFT, PTF36 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.

Specification: Dependent on the type of hose being used (see available hoses on the previous page)

Minimum Length is 24"

Spring Guard Braided

PTFSG



Armor guard is available for Superior's PTF, PTFT, PTF36 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. Specifications: Dependent on the type of hose being used (see available hoses on the previous page)

Minimum Length is 24"

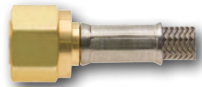
Armor Guard Protection

PTFG



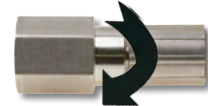
Female NPT

XXX  
34I



1/4" FNPT Swivel

SW



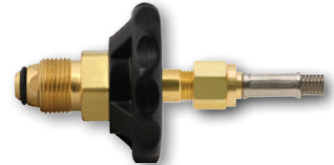
Male NPT

XXX  
34E



Male CGA Handtight

H



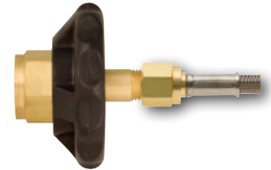
Female CGA's

XXX  
54O



Female CGA Handtight

H



Male CGA's

XXX  
58O



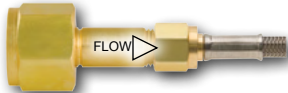
Flash Arrestor

FA



Check Valve Nipple

CV



O2 Adiabatic Heat Sink End

HS



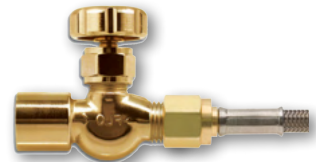
Reverse Flow Check Valve Nipple

RCV



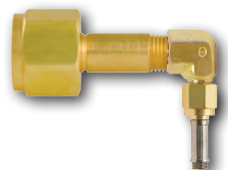
Valves

V



Elbow

L


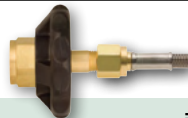

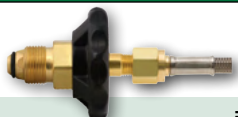

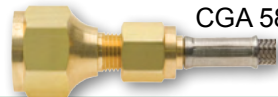


Outlet Adaptor

O









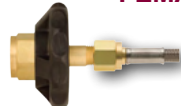
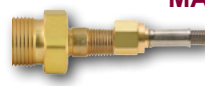
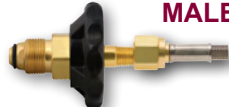


## pigtail end options

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			
CGA 555	=	555M			
CGA 577	=	577M*			
CGA 701	=	701M*			
* Only on 6,000 PSI Hose (PTF6)			* Only on 6,000 PSI Hose (PTF6)		
** Only with ETFE or Nylon Hose (PTFT/PTFN)			** For Helium Use, ETFE or Nylon hose is recommended (PTFT/PTFN)		

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

# pigtail ordering matrix

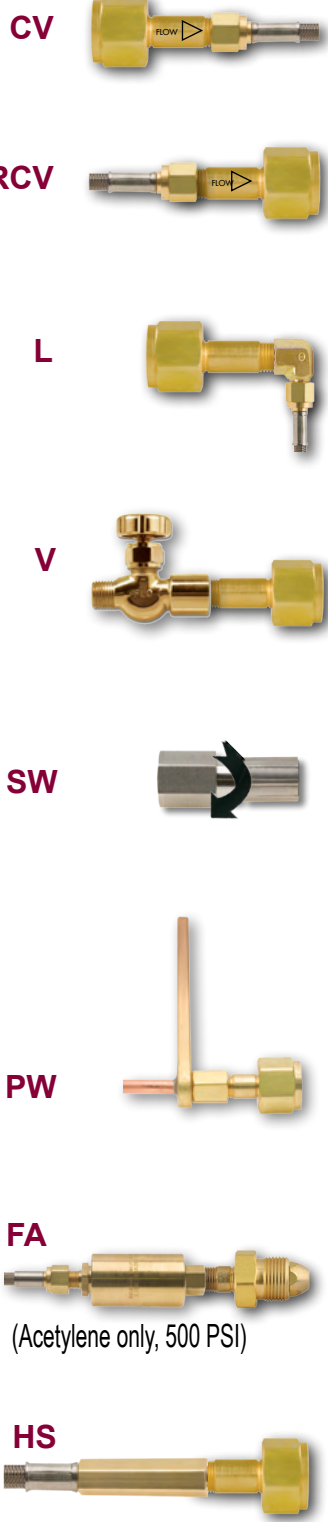
1. Pick Your Hose Type	2. Guard Option	3. CGA or NPT Thread at Inlet
<p><b>PTF, PTFT, PTFN, PTF6, PTF36</b>            PTFE, ETFE, SYNTHETIC TUBE 6000 PSI, POST SINTERED 3600 PTFE DOUBLE BRAID</p>  <p>EXAMPLE: PTF-580H-580-36</p>  <p>EXAMPLE: PTFT-34I-34I-36</p>  <p>EXAMPLE: PTFN-N34I-N34I-24</p>  <p>EXAMPLE: PTF6-680-64ISS-36</p>  <p>EXAMPLE: PTF36-34I-34I-24</p>	<p><b>G = Armor Guard</b>  <b>SG=Spring Guard</b></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> <p>Brass 1/4 Male NPT <b>34E</b>            Stainless Steel 1/4 Male NPT <b>34ESS</b>            Brass 1/4 Female NPT <b>34I</b>            Stainless Steel 1/4 Female NPT <b>34ISS</b>            Brass 3/8 Female NPT <b>36I</b>            Brass 1/2 Female NPT <b>38I</b>            Brass 1/4 Female NPT, 3600 psi <b>44I</b></p> <p><b>FEMALE CGA</b></p>  <p><b>280</b>  <b>300</b>  <b>320</b>  <b>326</b>  <b>330</b>  <b>346</b>  <b>347</b>  <b>350**</b>  <b>410</b>  <b>415</b>  <b>520</b>  <b>540</b>  <b>555</b>  <b>577*</b>  <b>660</b>  <b>701*</b></p> <p><b>FEMALE CGA HT</b></p>  <p><b>300H</b>  <b>320H</b>  <b>326H</b>  <b>346H</b>  <b>347H*</b>  <b>350H**</b>  <b>520H</b>  <b>540H</b>  <b>555H</b></p> <p><b>MALE CGA</b></p>  <p><b>296</b>  <b>500</b>  <b>510</b>  <b>580**</b>  <b>590</b>  <b>680*</b></p> <p><b>MALE CGA HT</b></p>  <p><b>296H</b>  <b>500H</b>  <b>510H</b>  <b>580H**</b>  <b>590H</b></p>

\* 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)**

ADDITIONAL OPTIONS OR ENHANCEMENTS SUCH AS CHECK VALVES, VALVES, ELBOWS, SWIVEL, BRASS WRENCH, HEAT SINK



END CONNECTION STATED AS THE CGA OF THE GAS YOU WISH TO USE IN THE HOSE OR THE TYPE OF TANK

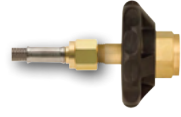
- Brass 1/4 Male NPT **34E**
- Stainless Steel 1/4 Male NPTE **34ESS**
- Brass 1/4 Female NPT **34I**
- Stainless Steel 1/4 Female NPT **34ISS**
- Brass 3/8 Female NPT **36I**
- Brass 1/2 Female NPT **38I**
- Brass 1/4 Female NPT, 3600 psi **44I**

**FEMALE CGA 280**



- 00**
- 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**

STANDARD LENGTHS SHOWN  
CUSTOM LENGTHS AVAILABLE TOO

**Max - 48 ft (576")**  
**Min - 6 in**

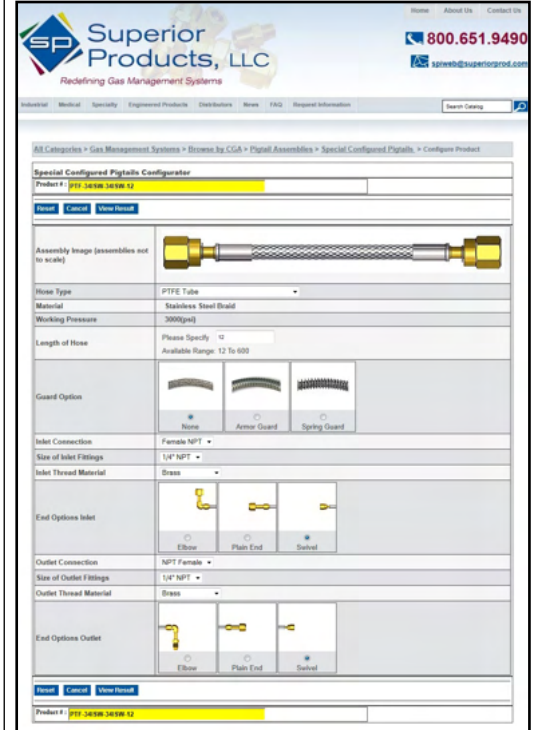
Not cleaned for oxygen service past 20 ft.

**Superior Product's Online Pigtail Configurator**

*One more way to order your custom pigtails from [www.superiorprod.com](http://www.superiorprod.com)*

*Configure your custom pigtails by selecting:*

- 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



# Semi-Automatic Changeover Fuel Gas & Manifold Accessories

## ZERO CLEARANCE FITTINGS

**1,000 PSI**

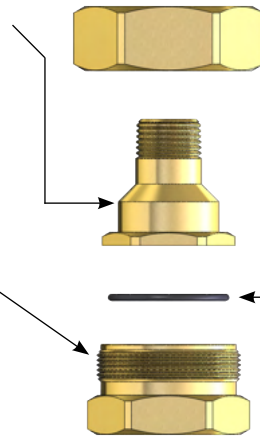
- Zero clearance for easy removal of piped components
- All thread sizes can be mixed and matched.
- Largest possible through holes for maximum flow

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)

Mixers available for the following Gases:

Argon	580A
Nitrogen	580N
Helium	580H
CO <sub>2</sub>	320
Oxygen	540
Hydrogen	350

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.

How to Order		
Gas Mixer Assembly	-	CGA - % - CGA - %
<b>GMA-MX</b>	-	<b>XXX - % - XXX - %</b>
<b>GMA-MX900</b>	-	<b>XXX - % - XXX - %</b>
<b>GMA-MX2000</b>	-	<b>XXX - % - XXX - %</b>
Example: GMA-MX2000-580A-75-320-25 Mixer for Argon-75% & CO <sub>2</sub> -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

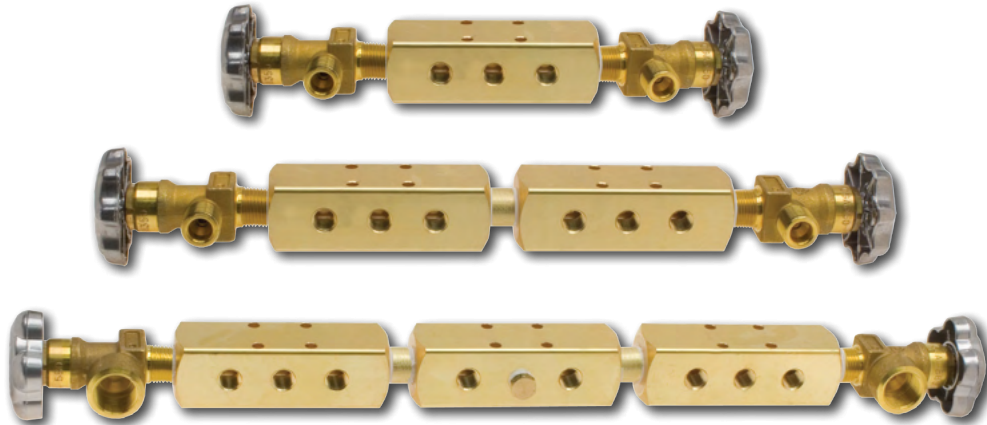
- Tamper proof
- Highly accurate
- Low start up cost
- Compact
- No surge tank required

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

# CRADLE PACK MANIFOLDS FOR 6, 12 & 16 CYLINDER

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

\* 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

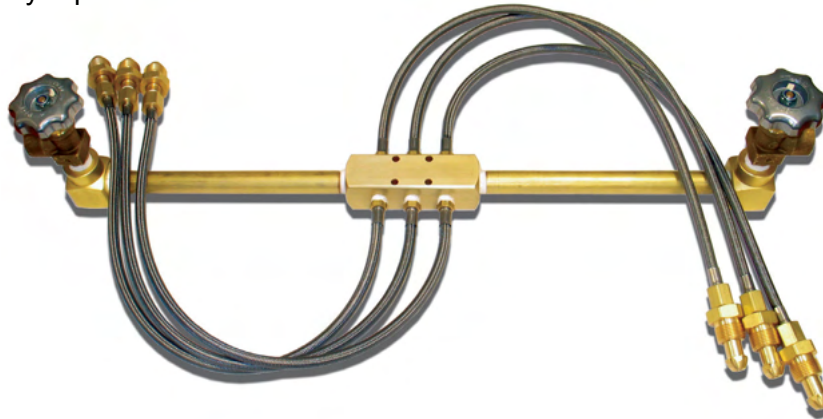
Available for the following gases, replace **XXX** in part number with **CGA#**

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

# CRADLE PACK MANIFOLDS FOR 6, 12 & 16 CYLINDER

## 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 pigtailed 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 pigtailed for heavy duty service. The modular design and removable flexible pigtailed allow for quick, easy repairs.



### Available to order

6 pack, stainless steel PTFE lined pigtailed	<b>GMA-CPR-XXX-06</b>
6 pack, stainless steel ETFE lined pigtailed	<b>GMA-CPR-XXXTZ-06</b>
6 pack, stainless steel 3,600 PSIG PTFE lined pigtailed	<b>GMA-CPR-XXX-36-06</b>
6 pack, single loop copper pigtailed	<b>GMA-CPR-XXX-06-RGD</b>
12 pack, stainless steel PTFE lined pigtailed	<b>GMA-CPR-XXX-12</b>
12 pack, stainless steel ETFE lined pigtailed	<b>GMA-CPR-XXXTZ-12</b>
12 pack, stainless steel 3,600 PSIG PTFE lined pigtailed	<b>GMA-CPR-XXX-36-12</b>
12 pack, single loop copper pigtailed	<b>GMA-CPR-XXX-12-RGD</b>
16 pack, stainless steel PTFE lined pigtailed	<b>GMA-CPR-XXX-16</b>
16 pack, stainless steel ETFE lined pigtailed	<b>GMA-CPR-XXXTZ-16</b>
16 pack, stainless steel 3,600 PSIG PTFE lined pigtailed	<b>GMA-CPR-XXX-36-16</b>
16 pack, single loop copper pigtailed	<b>GMA-CPR-XXX-16-RGD</b>

\* 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**

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

# 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.

**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

- Machine, not brazed, joints
- 5 inches between ports, even when expanded

1 - 11<sup>1</sup>/<sub>16</sub> NPS Thread for expansion

**GMA2**  
(2 port)

**GMA3**  
(3 port)

**GMA4**  
(4 port - Crossover)

**GMA6**  
(6 port - Crossover, Inlets on opposite sides)

#### 2 Choose Outlet

**MHV = Modular Header Valve**

**MHE = Modular Header Extension**



#### 3 Choose Gas

##### Male Inlets

- 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



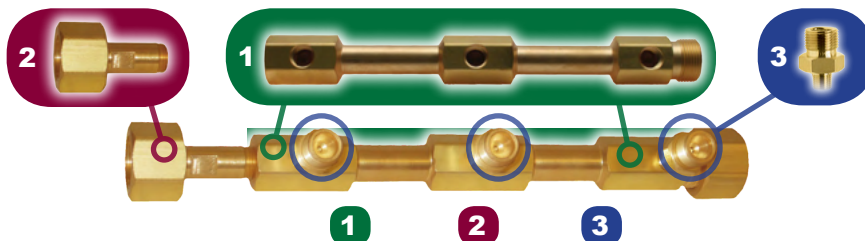
##### Female Inlets

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



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

### CONFIGURED MANIFOLD EXAMPLE



**GMA3 - MHE - 540CV**

3 Cylinder CGA 540 Header Extension with check valve inlets

## GAS MANIFOLD ASSEMBLIES

### ORDERING INFORMATION:

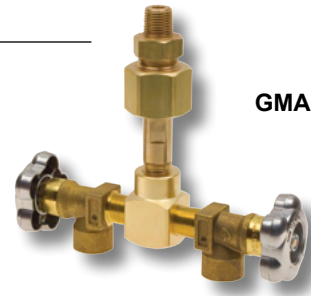
Each manifold part number consists of four sections. The first section denotes a Gas Manifold Assembly (GMA). The second section denotes the type of manifold and its configuration (only for duplex manifolds) otherwise do not use configuration number. The third section denotes the CGA number or type of gas, and the last section denotes the number of inlets 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 Inlets

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

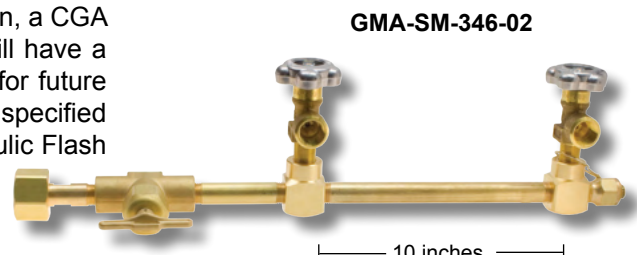
The simple duplex manifold is an economical system with a two cylinder capacity, one per side. The unit is furnished with two header valves and two pigtails with check valves, 1/2" NPT tee, a union and a mounting bracket. Manifolds for Acetylene gas will include pigtails with dry type flashback arrestors.



**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 pigtails with check valves or outlet adaptors with check valve and regular pigtails, 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 pigtails with dry type arrestors.



**GMA-SM-346-02**

10 inches

### 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 pigtails with check valves or outlet adaptors with check valves and flexible pigtails 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				
<b>GMF-3011</b>	<b>GMF-3012</b>	<b>GMF-3013</b>			<b>GMF-3041</b>	<b>GMF-3042</b>	<b>GMF-3043</b>		
Part No.	Ref. A	Ref. B	Ref. F	Ref. G	Part No.	Ref. A	Ref. B	Ref. C & D	Ref. E
<b>GMF-3011</b>	1/2"-14 NPT	1/2"-14 NPT	1-5/16"	3/4"	<b>GMF-3041</b>	1/2"-14 NPT	1/2"-14 NPT	1/2"-14 NPT	1-1/2"
<b>GMF-3012</b>	1/2"-14 NPT	.843"-.847"	1-5/16"	3/4"	<b>GMF-3042</b>	.843"-.847"	1/2"-14 NPT	1/2"-14 NPT	1-1/2"
<b>GMF-3013</b>	.843"-.847"	.843"-.847"	1-5/16"	3/4"	<b>GMF-3043</b>	.843"-.847"	Slip Thru	1/2"-14 NPT	1-1/2"

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



## Wall Bracket

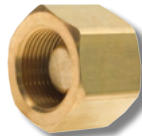
GMF-3611



image not to scale

## 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

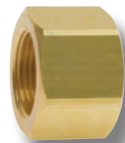
Part No.	Pipe Size	Length
GMF-3236	1/2" Nom.	6 FT.
GMF-3237	1/2" Nom.	12 FT.
GMF-6236	3/4" Nom.	6 FT.
GMF-6237	3/4" Nom.	12 FT.

NOTE: GMF-3237 and GMF-6237 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.



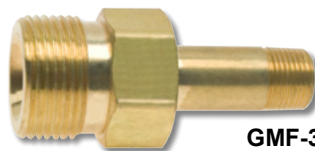
GMF-3311

## UNION NIPPLES

GMF-3326

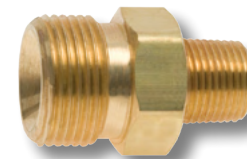


Part No.	Thread	Length
GMF-3321	3/8"-18 NPT	2.40"
GMF-3326	1/2"-14 NPT	2.94"



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	<b>BALL VALVES</b> 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:

Superior Products, LLC.  
3786 Ridge Road  
Cleveland, Ohio 44144-1175  
ATTN: QCA DEPT.

Retail Price \$8.00

 **WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov) Wash hands after use





# Superior Products



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  - Gauges
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  - Hose Fittings and Accessories



- Pigtails
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