

## SPECIAL ORDER PIGTAILS

### SPECIFICATIONS FOR PIGTAIL ASSEMBLIES

#### FOR 3000 PSIG STAINLESS STEEL BRAID/TEFLON HOSE PIGTAILS FITTED WITH BRASS CONNECTIONS

##### Design & Material Data:

- Core consists of Teflon (polytetrafluoroethylene) with two outer reinforcing jackets of stainless steel braid (Teflon is inert to most chemicals and solvents, except molten alkali metals and fluorine at elevated temperatures and pressures)
- 1/4" nominal I.D.
- Braid consists of Type 304 full hard drawn stainless steel wire
- Teflon withstands temperatures from -65°F (-54C) through +450°F (232C)
- Burst pressure rating at room temperature: 12,000 PSIG
- Minimum bend radius of 3 inches provides for maximum life and safe performance
- Maximum 3000 PSIG working pressure on tubing
- Brass cylinder connections machined to CGA specifications for applicable gases
- All pigtails 100% tested before shipping and labelled for gas service and pressure rating
- Pressure ratings limited by CGA connection standards—the lowest pressure rating prevails

##### Notes:

- Burst pressure ratings for pigtails are determined at room temperature with the hose in a straight line. A safety factor of 4:1 or 5:1 should be used for normal applications. Impulse and shock pressure applications may require a higher safety factor.
- Do not apply heat to pigtails.

#### FOR 6000 PSIG STAINLESS STEEL BRAID/TEFLON HOSE PIGTAILS FITTED WITH STAINLESS STEEL CONNECTIONS

##### Design & Material Data:

- Core consists of high pressure, reinforced Teflon (polytetrafluoroethylene) hose (Teflon is inert to most chemicals and solvents, except molten alkali metals and fluorine at elevated temperatures and pressures)
- Teflon fluid and ambient temperature range: -65°F (-54 C) through +450°F (232°C)
- 1/4" nominal I.D.
- .229" Minimum I.D.  
.495" Maximum O.D.
- Conductive; extruded Teflon dissipates static charges
- Braid consists of inner layer with type 304 SS stainless steel, two layers of stainless steel spiral wrap, plus an outer braid of stainless steel
- Burst pressure rating at room temperature: 24,000 PSIG (see note below)
- Type 316 stainless steel used for primary tube fittings with swaged design
- Most CGA cylinder connections machined of stainless steel to specifications for applicable gases
- Minimum bend radius of 3" provides for maximum life and safe performance
- All pigtails 100% tested and labeled for gas service and pressure rating

### HOW TO SPECIFY A SPECIAL ORDER WESTERN PIGTAIL

TUBE/HOSE TYPE & SIZE	INLET END CONNECTION	INLET END CONN. FINISH	OPTIONAL FEATURES
<b>PF</b>	<b>346N</b>		<b>HTP</b>

##### Rigid Tube

P4 = 1/4" OD  
P = 5/16" OD  
P6 = 3/8" OD\*  
PB = 5/16" OD  
PB6 = 3/8" OD\*  
PS = 1/4" OD

##### Flex Hose

PF = 1/4" ID  
PFS = 1/4" ID  
PF6 = .229" ID

##### All Styles

CGA No. +N=  
CGA Nut/Nipple  
**Example:** 540N  
CGA No. +B=  
CGA VO or Body  
**Example:** 540B  
Fraction +M or F=  
ANSI Pipe Thread  
**Example:** 1/4F

##### All Styles

Blank = Brass  
PL = Plated  
SS = S Steel

##### All Styles

Blank (None)  
CV = Check Valve  
FA = Flash Arrestor\*  
HTP = Hand Tight N/N w/Plastic Grip  
HTB = Hand Tight N/N w/Brass H/T Nut  
  
GA = Gauge  
PH = Brass Handle  
VA = Shutoff Valve  
EL = 90° Elbow

<b>Model P</b>	- 3000 PSIG (20,700kPa),....Rigid Copper Pigtail
<b>Model PB</b>	- 3000 PSIG (20,700kPa),....Rigid Brass Pigtail
<b>Model PS</b>	- 6000 PSIG (41,300kPa),....Rigid Stainless Steel Pigtail
<b>Model PF</b>	- 3000 PSIG (20,700kPa),....Flexible Teflon-Lined Pigtail
<b>Model PFS</b>	- 3000 PSIG (20,700kPa),....Flexible Nylon-Lined Pigtail
<b>Model PF6</b>	- 6000 PSIG (41,300kPa),....Flexible Teflon-Lined Pigtail

\*Use with 3/8" OD Flash Arrestor option.

## SPECIAL ORDER PIGTAILS

### FOR 3000 PSIG THERMOPLASTIC HOSE PIGTAILS WITH STAINLESS STEEL OR BRASS CONNECTIONS

Note: Hydrogen and Helium use only.

#### Design & Material Data:

- Nylon core
- Nylon withstands temperatures from -65°F (-54°C) through +250°F (+121°C)
- 1/4" nominal I.D.
- Synthetic fiber braid with polyurethane cover
- Minimum bend radius: 3"
- Burst pressure rating at room temperature: 12,000 PSIG (see note on page 66)
- CGA cylinder connections machined of brass to specifications for applicable gases

- Pressure ratings limited by CGA connections standards—the lowest pressure rating prevails
- Nylon core minimizes permeation of Helium and Hydrogen
- Non-conductive hose requires additional grounding for Hydrogen service
- Not available for oxygen service
- All Pigtails 100% tested and labeled for gas service and pressure rating


Western can make special pigtails in a variety of lengths and in any combination of compatible CGA fittings. However, Western is not responsible for misuse and service life of special pigtails when the applications are unknown to the company.

OUTLET END CONNECTION	OUTLET END CONN. FINISH	OPTIONAL FEATURES	TUBE/HOSE LENGTH	BEND/SWIVEL OPTIONS
<b>1/2M</b>			<b>36</b>	<b>B</b>
<b>All Styles</b> CGA No. + N= CGA Nut/Nipple <b>Example:</b> 540 N CGA No. + B = CGA VO or Body <b>Example:</b> 540 N Fraction + M or F = ANSI Pipe Thread <b>Example:</b> 1/4F	<b>All Styles</b> Blank =Brass PL =Plated SS =St. Steel	<b>All Styles</b> Blank (None) CV =Check Valve FA =Flash Arrestor* HTP =Hand Tight N/N with Plastic Grip HTB =Hand Tight N/N with Brass H/T Nut GA =Gauge PH =Brass Handle VA =Shutoff Valve EL =90° Elbow	<b>Rigid Tube</b> 27 = 27 inches 36 = 36 inches 48 = 48 inches  <b>Flex Hose</b> Lengths in 6" Increments: 12" minimum 18" minimum- Spring Guard 300" maximum <b>Example:</b> 12 = 12" (Note: Lengths do not include connections)	<b>Rigid Tube Bends</b> COIL Standard on 48" DBL Two 3" Loops Standard on 27" P, PB SGL 6" Loop Standard, 36" P, PB, PS SPCL Special Bend, Print Required  <b>Flex Hose Only</b> B =Spring Guard B1 =Spring Guard w/Swivel Inlet B2 =Spring Guard w/Swivel Outlet B1.2 =Spring Guard w/Swivel, Both Ends

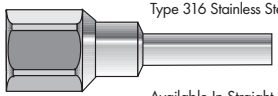
Use the chart above to develop specifications for Special Order Pigtails.

**For example: PF-346N-HTP x 1/2M-36B**  
 represents 1/4" I.D. flexible Teflon-lined Pigtail with CGA 346 Nut/Nipple Inlet Connection (brass) Hand-tight with plastic tip and 1/2" NTP M Outlet Connection (brass), 36" long with Spring Guard

## RIGID PIGTAILS

RIGID PIGTAILS, BRASS ACETYLENE & LPG SERVICE Pressure to 500 PSIG (3400 kPa)		PART NO.	WITH CV	DESCRIPTION	GAS SERVICE
 <p>P-15-PCV</p>		<b>5/16" X .065" WALL BRASS TUBING 20" FINISHED LENGTH OVERALL</b>			
		P-16	-	RH F Propane, Comm. Acet, Horiz.	CGA-300
		PV-15	-	LH M Propane, Brass, Horiz.	CGA-510
		P-15	P-15CV	LH M Propane, Mapp, Horiz.	CGA-510
		P-15-P	P-15-PCV	LH M Propane, POL Acet, Vert.	CGA-510

PART NO.	DESCRIPTION	GAS SERVICE	<b>HAND-TIGHT RIGID PIGTAILS FOR PLANT OR FILLING STATIONS</b> with Brass Connections Pressure to 3000 PSIG (20,700 kPa) 36" Bent to 20" Finished Length Overall
<b>HAND-TIGHT NUTS &amp; NIPPLES * 5/16" x .065" WALL COPPER TUBE</b>			
PHC-320	RH F Carbon Dioxide	CGA-320	
PHC-326	RH F Nitrous Oxide	CGA-326	
PHC-346	RH F Air	CGA-346	
PHC-63	RH F Oxygen	CGA-540	
PHC-83	LH F Hydrogen	CGA-350	
PHC-92	RH M Nitrogen, Argon	CGA-580	

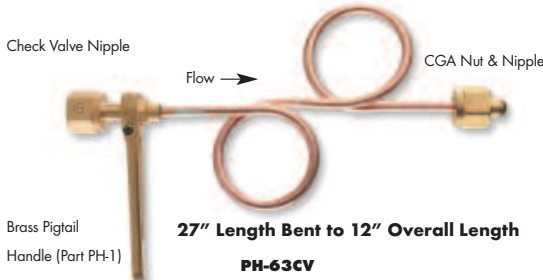
STAINLESS STEEL RIGID PIGTAILS with Stainless Steel Connections * PRESSURES TO 3000 PSIG (20,700 kPa)		PART NO.	WITH CV	DESCRIPTION	GAS SERVICE
Type 304 Stainless Steel Tube    TIG Welded For Long Service Life Type 316 Stainless Steel Welded Fittings  Available In Straight Lengths Use With Either Stainless Steel Or Brass Connections		<b>1/4" x .049 WALL ST. STEEL TUBE TYPE 316 SS CGA FITTINGS 20" Finished Length Overall</b>			
		PS-320	-	Carbon Dioxide, RH F	CGA-320
		PS-540	PS-540CV	Oxygen, RH F	CGA-540
		PS-580	PS-580CV	Nitrogen, Argon, RH M	CGA-580
		PS-590	-	Industrial Air, LH M	CGA-590




## RIGID PIGTAILS

PART NO.	WITH CV	DESCRIPTION	GAS SERVICE
<b>5/16" x .065" WALL COPPER TUBE, DOUBLE LOOP</b> Pressures to 3000 PSIG (20,700 kPa)			
PH-320	-	RH F Carbon Dioxide	CGA-320
PH-326	PH-326CV	RH F Nitrous Oxide	CGA-326
PH-346	PH-346CV	RH F Air	CGA-346
PH-63	PH-63CV	RH F Oxygen	CGA-540
PH-73	-	LH F Propane (Liquid With.)	CGA-555
PH-83	PH-83CV	LH F Hydrogen	CGA-350
PH-92	PH-92CV	RH M Nitrogen, Argon	CGA-580
PH-93	-	LH M Industrial Air	CGA-590
<b>5/16" x .065" WALL BRASS TUBE, SINGLE LOOP</b> Pressures to 500 PSIG (3400 kPa)			
PH-300	-	RH F Commercial Acetylene	CGA-300
PH-510	-	LH M POL Acetylene	CGA-510

**RIGID PIGTAILS,  
BRASS FORGED HANDLE  
with Brass Connections**




**27" Length Bent to 12" Overall Length**  
**PH-63CV**

PART NO.	WITH CV	DESCRIPTION	SERVICE
<b>MANIFOLD RIGID PIGTAILS, COPPER TUBING</b> with Brass Connections PRESSURES TO 3000 PSIG (20,700 kPa)			
			
<b>ANNEALED 5/16" x .065" WALL COPPER TUBE</b>			
P-CO-3	-	RH F, Carbon Dioxide	CGA-320
P-63	P-63CV	RH F, Oxygen	CGA-540
P-73	-	LH F, Propane (Liquid With.)	CGA-555
P-83	P-83CV	LH F, Hydrogen	CGA-350
P-92	P-92CV	RH M, Nitrogen, Argon, Helium	CGA-580
P-93	-	LH M, Industrial Air	CGA-590
P-1320	P-1320CV	RH F, Nitrous Oxide	CGA-326
P-1340	P-1340CV	RH F, Air	CGA-346

PART NO.	DESCRIPTION	SERVICE
<b>ANNEALED 5/16" x .065" WALL COPPER TUBE</b>		
PV-CO-3	RH F, Carbon Dioxide	CGA-320
PV-1340	RH F, Air	CGA-346
PV-63	RH F, Oxygen	CGA-540
PV-92	RH M, Nitrogen, Argon, Helium	CGA-580

**RIGID PIGTAILS, COPPER TUBING, BRASS SHUTOFFS**  
with Brass Connections  
Pressures to 3000 PSIG (20,700 kPa)



PART NO.	DESCRIPTION
<b>STAINLESS STEEL RIGID PIGTAILS</b> Pressures to 6000 PSIG (41,300 kPa)	
	<b>1/4" Female Both Ends</b>
PS-4-36	36" Length, Straight
PS-4-48	48" Length, Straight
PS-4-60	60" Length, Straight

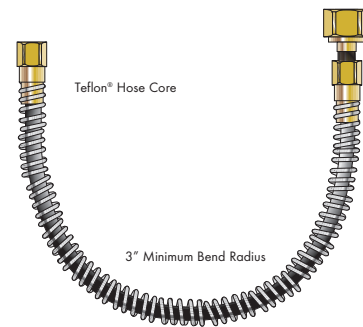
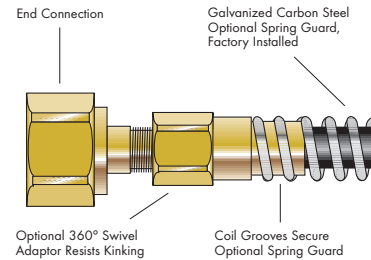
## FLEXIBLE PIGTAILS

SERVICE	PART NO.	DESCRIPTION	WORKING PRESSURE
-	PF-4	1/4" NPT F x 1/4" F NPT with Spring Guard: Add B to End of Part No.	0-3000
<b>COMPLETE ASSEMBLIES</b>			
CGA-300	PF-16 PF-16CV PF-16HT	Commercial Acetylene, RH Female with Check Valve, Inlet with Hand Tight Nut, One End	0-500
CGA-320	PF-320 PF-320HT	Carbon Dioxide, RH Female with Spring Guard add B to length with Hand Tight Nut, One End	0-3000
CGA-326	PF-326 PF-326CV PF-326HT	Nitrous Oxide, RH Female with Spring Guard add B to length with Check Valve, Inlet Side with Hand Tight Nut, One End	0-3000
CGA-346	PF-346 PF-346CV PF-346HT	Air, RH Female with Spring Guard add B to length with Check Valve, Inlet Side with Hand Tight Nut, One End	0-3000
CGA-347	PF-347 PF-347CV PF-347HT	Air, RH Female with Check Valve, Inlet Side with Hand Tight Nut, One End	3001-5500
CGA-510	PF-15 PF-15CV PF-15HT	POL Acetylene, LH Male with Check Valve, Inlet Side with Hand Tight Nut, One End	0-500
CGA-540	PF-63 PF-63CV PF-63HT	Oxygen, RH Female with Spring Guard add B to length with Check Valve, Inlet Side with Hand Tight Nut, One End	0-3000
CGA-577	PF-577 PF-577CV	Oxygen, RH Female with Check Valve, Inlet Side	3001-4000
CGA-580	PF-92 PF-92CV PF-92HT	Nitrogen, Argon, RH Male with Spring Guard add B to length with Check Valve, Inlet Side with Hand Tight Nut, One End	0-3000
CGA-590	PF-93 PF-93CV PF-93HT	Industrial Air, LH Male with Spring Guard add B to length with Check Valve, Inlet Side with Hand Tight Nut, One End	0-3000
CGA-680	PF-680 PF-680CV PF-680HT	Inert Gases, RH Male with Check Valve, Inlet Side with Hand Tight Nut, One End	3001-5500
CGA-701	PF-701 PF-701CV	Oxygen, RH Female with Check Valve, Inlet Side	4001-5500

### STAINLESS STEEL FLEXIBLE PIGTAILS, BRASS CONNECTIONS

- SUB ASSEMBLY FOR SPECIAL CONFIGURATIONS
- AVAILABLE IN A VARIETY OF LENGTHS
- 100% TESTED AND CLEANED FOR OXYGEN SERVICE
- FOR HOSE SPECIFICATIONS SEE PAGE 64

#### Type 304 SS Braid



#### HOW TO ORDER PF-XXX-XX-X

END CONNECTIONS  
From CGA Listing Below

LENGTH  
18", 24", 36", 48"  
[Note: Lengths Do Not  
include Connections]

OPTIONS  
B = Spring Guard  
B1 = Spring Guard,  
With Inlet  
Swivel Adaptor  
B2 = Spring Guard,  
With Outlet  
Swivel Adaptor

## FLEXIBLE PIGTAILS

PART NO.	DESCRIPTION	MAX PSIG	GAS SERVICE	<b>THERMOPLASTIC FLEXIBLE PIGTAILS, NYLON LINED, BRASS CONNECTIONS</b>
<b>COMPLETE ASSEMBLIES 100% TESTED</b>				
PFS-83	Hydrogen, LH F	0-3000	CGA-350	
PFS-83CV	with Check Valve, Inlet Side			
PFS-92	Helium, RH M	0-3000	CGA-580	
PFS-92CV	with Check Valve, Inlet Side			

PART NO.	DESCRIPTION	MAX PSIG	SERVICE
<b>COMPLETE ASSEMBLIES 100% TESTED &amp; OXYGEN CLEANED</b>			
PF-346SS	Air, RH F	3000	CGA-346
PF-347SS	High Pressure Air, RH F	5500	CGA-347
PF-350SS	Natural Gas, LHF	3000	CGA-350
PF-540SS	Oxygen, RH F	3000	CGA-540
PF-580SS	Argon, Nitrogen, Etc, RH M	3000	CGA-580
PF-590SS	Air, Nitrogen, Etc, LH M	3000	CGA-590
PF-4SS	1/4" NPT Female to 1/4" NPT F	6000	-

**STAINLESS STEEL FLEXIBLE PIGTAILS, TEFLON LINED, STAINLESS STEEL CONNECTIONS**

See page 46 for hose specifications

PART NO.	DESCRIPTION	LENGTH	<b>STAINLESS STEEL FLEXIBLE PIGTAILS, BRASS CONNECTIONS</b> Pressures to 3000 PSIG (20,700 kPa)
<b>100% TESTED &amp; CLEANED FOR OXYGEN * INDIVIDUALLY POLY BAGGED 3" MINIMUM BEND RADIUS</b>			
PF2-4-12	1/4" NPT Female End Connections	12"	 No Specials Available
PF2-4-18	1/4" NPT Female End Connections	18"	
PF2-4-24	1/4" NPT Female End Connections	24"	
PF2-4-36	1/4" NPT Female End Connections	36"	
PF2-4-48	1/4" NPT Female End Connections	48"	
PF2-4-60	1/4" NPT Female End Connections	60"	
PF2-4-72	1/4" NPT Female End Connections	72"	

See page 46 for hose specifications

PART NO.	DESCRIPTION	LENGTH
<b>100% TESTED &amp; CLEANED FOR OXYGEN * INDIVIDUALLY POLY BAGGED 2-3/4" MINIMUM BEND RADIUS</b>		
HPF-4-18	1/4" NPT F x 1/4" NPT F	18"
HPF-4-24	1/4" NPT F x 1/4" NPT F	24"
HPF-4-36	1/4" NPT F x 1/4" NPT F	36"
HPF-4-48	1/4" NPT F x 1/4" NPT F	48"

**STAINLESS STEEL FLEXIBLE PIGTAILS, STAINLESS STEEL CORRUGATED INNER CORE, STAINLESS STEEL CONNECTIONS**  
Pressures to 3000 PSIG (20,700 kPa)