



SWSI

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Welding | Industrial | Safety

International Wholesale Distribution

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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	INLET END	INLET END	OPTIONAL FEATURES
PF	346N		HTP
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

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

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

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

Design & Material Data:

- Nylon core
- Nylon withstands temperatures from -65°F (-54°C) through +250°F (+121C)
- 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.

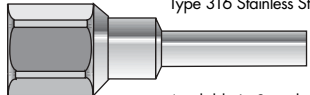
OUTLET END	OUTLET END	OPTIONAL FEATURES	TUBE/HOSE	BEND/SWIVEL OPTIONS
1/2M			36	B
<p>All Styles CGA No. + N = CGA Nut/Nipple Example: 540 N CGA No. + B = CGA VO or Body Example: 540 N Fraction + M or F = ANSI Pipe Thread Example: 1/4F</p>	<p>All Styles Blank =Brass PL =Plated SS =St. Steel</p>	<p>All Styles 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</p>	<p>Rigid Tube 27 = 27 inches 36 = 36 inches 48 = 48 inches</p> <p>Flex Hose Lengths in 6" Increments: 12" minimum 18" minimum- Spring Guard 300" maximum Example: 12 = 12"</p>	<p>Rigid Tube Bends 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</p> <p>Flex Hose Only B =Spring Guard B1 =Spring Guard w/Swivel Inlet B2 =Spring Guard w/Swivel Outlet B1.2 =Spring Guard w/Swivel, Both Ends</p>

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

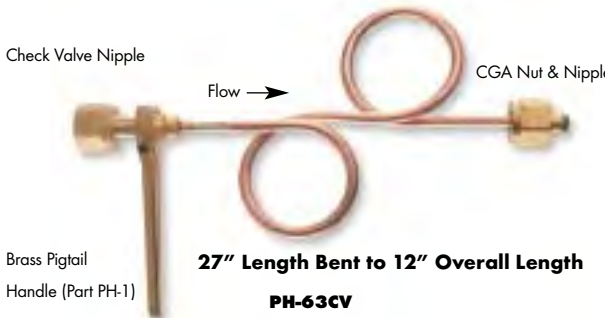
	PART NO.	WITH CV	DESCRIPTION	GAS SERVICE
<p>RIGID PIGTAILS, BRASS ACETYLENE & LPG SERVICE Pressure to 500 PSIG (3400 kPa)</p>  <p>P-15-PCV</p>	5/16" X .065" WALL BRASS TUBING 20" FINISHED LENGTH OVERALL			
	P-16	-	RH F Propane, Comm. Acet, Horiz.	CGA-300
	PV-15	-	LH M Propane, Brass, Horiz.	CGA-510
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

PART NO.	DESCRIPTION	GAS SERVICE	
HAND-TIGHT NUTS & NIPPLES * 5/16" x .065" WALL COPPER TUBE			<p>HAND-TIGHT RIGID PIGTAILS FOR PLANT OR FILLING STATIONS with Brass Connections Pressure to 3000 PSIG (20,700 kPa) 36" Bent to 20" Finished Length Overall</p>
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	
PHC-93	LH M Industrial Air	CGA-590	

	PART NO.	WITH CV	DESCRIPTION	GAS SERVICE
<p>STAINLESS STEEL RIGID PIGTAILS with Stainless Steel Connections * PRESSURES TO 3000 PSIG (20,700 kPa)</p> <p>Type 304 Stainless Steel Tube TIG Welded For Long Service Life Type 316 Stainless Steel Welded Fittings</p>  <p>Available In Straight Lengths</p> <p>Use With Either Stainless Steel Or Brass Connections</p>	1/4" x .049 WALL ST. STEEL TUBE TYPE 316 SS CGA FITTINGS 20" Finished Length Overall			
	PS-320	-	Carbon Dioxide, RH F	CGA-320
	PS-346	-	Air, RH F	CGA-346
	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

PART NO. WITH CV		DESCRIPTION	GAS SERVICE
5/16" x .065" WALL COPPER TUBE, DOUBLE LOOP			
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
5/16" x .065" WALL BRASS TUBE, SINGLE LOOP			
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**




Check Valve Nipple
Flow →
CGA Nut & Nipple

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

Brass Pigtail
Handle (Part PH-1)

PART NO. WITH CV		DESCRIPTION	SERVICE
MANIFOLD RIGID PIGTAILS, COPPER TUBING			
with Brass Connections			
PRESSURES TO 3000 PSIG (20,700 kPa)			
ANNEALED 5/16" x .065" WALL COPPER TUBE			
P-CO-3			
P-63	P-63CV	RH F, Carbon Dioxide	CGA-320
P-73	-	RH F, Oxygen	CGA-540
P-83	P-83CV	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

P-92CV



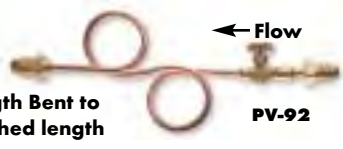
27" Length Bent to 12"

PART NO.	DESCRIPTION	SERVICE
ANNEALED 5/16" x .065" WALL COPPER TUBE		
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)



← Flow

27" length Bent to 14" Finished length
PV-92

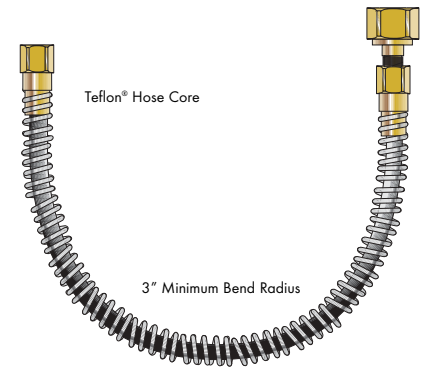
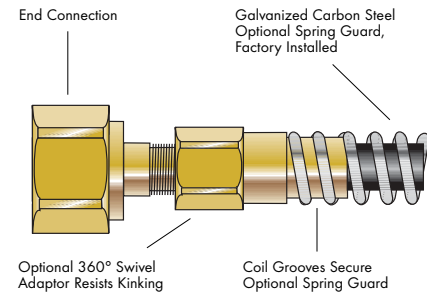
PART NO.	DESCRIPTION
STAINLESS STEEL RIGID PIGTAILS	
Pressures to 6000 PSIG (41,300 kPa)	
	1/4" Female Both Ends
PS-4-36	36" Length, Straight
PS-4-48	48" Length, Straight
PS-4-60	60" Length, Straight

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
COMPLETE ASSEMBLIES			
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 |
|--------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|

PART NO.	DESCRIPTION	MAX PSIG	GAS SERVICE	THERMOPLASTIC FLEXIBLE PIGTAILS, NYLON LINED, BRASS CONNECTIONS
COMPLETE ASSEMBLIES 100% TESTED				
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			

STAINLESS STEEL FLEXIBLE PIGTAILS, TEFLON LINED, STAINLESS STEEL CONNECTIONS	PART NO.	DESCRIPTION	MAX PSIG	SERVICE
	COMPLETE ASSEMBLIES 100% TESTED & OXYGEN CLEANED			
<p>3" Minimum Bend Radius</p> <p>See page 46 for hose specifications</p>	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	-
	PH-3	Chrome Plated brass Handle with Set Screw, Prevents Twisting when Tightening		

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

STAINLESS STEEL FLEXIBLE PIGTAILS, STAINLESS STEEL CORRUGATED INNER CORE, STAINLESS STEEL CONNECTIONS Pressures to 3000 PSIG (20,700 kPa)	PART NO.	DESCRIPTION	LENGTH
	100% TESTED & CLEANED FOR OXYGEN * INDIVIDUALLY POLY BAGGED 2-3/4" MINIMUM BEND RADIUS		
	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"