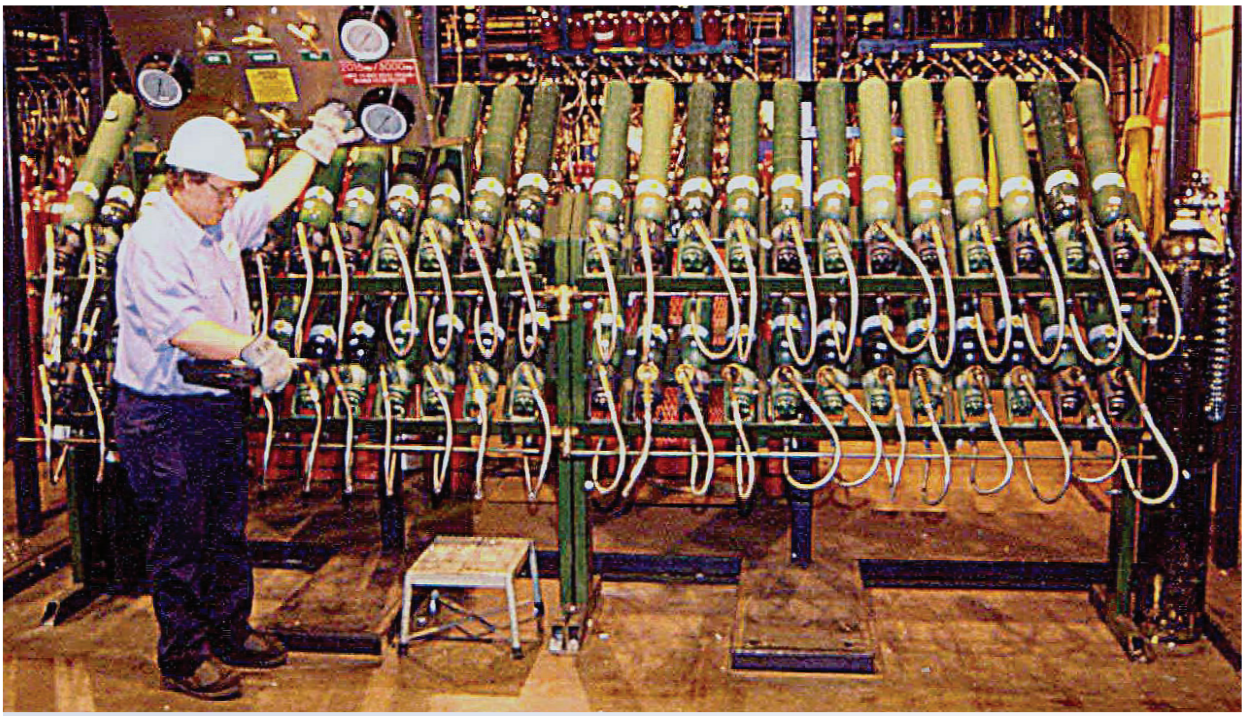
Compressed Gas – Metallic Core Pigtails for High Pressure Cylinder Filling



Many applications require a metal "bellows" type hose that provides an all welded, flexible alternative to rigid pipe and tubing with zero permeation even at high pressures and cryogenic temperatures. A variety of alloys, safety features and options are available so that an assembly matching your precise needs can be provided. All hose assemblies are constructed with heavy-gauge end fittings. Maximum allowable working pressure and date of manufacture are permanently marked on each assembly.

Stainless Steel Inner Core, Stainless Steel Braid

- Designed for strong, safe and flexible operation in demanding specialty gas environments.
- Zero permeation characteristics do not allow gas or atmosphere to pass through its wall in either pressure or vacuum applications.
- Ideal for flammable, toxic, high purity and small molecule gases.

4MDS6: Double SS braided SS inner core – 4000 psi

4MDHP: Double SS braided SS inner core – 4500 psi

Monel® Inner Core, Monel® Braid

- Specify Monel® pigtails when 316 SS inner core is not compatible with corrosive gas such as hydrochloric acid.

4MDM: Double Monel® braided Monel® inner core – 3000 psi
Available with Monel® fittings

Monel® Inner Core, Stainless Steel Braid

- Ideal for oxygen service where particle impingement failure is a concern.
- SS braid is more economical and allows higher working pressures than Monel® braid.

4MDMS*: Double SS braided Monel® inner core – 4500 psi
Available with Monel® or SS fittings

* Special order, consult factory.

See Pigtail Hose Selection Guide on page 9

Compressed Gas – Pigtail Hose Selection Guide & Specifications

Pigtail Hose Selection Guide

Hose Style		4TS	4TD	4TH	4TX	4TZ	4TZD	4MDS6	4MDHP	4MDM	4MDMS*
Inner Core Material		PTFE	PTFE	PTFE	PTFE	ETFE	ETFE	316LSS	316LSS	MONEL®	MONEL®
Maximum Working Pressure	PSI	3,000	4,500	5,000	6,000	3,000	3,500	4,000	4,500	3,000	4,500
	BAR	206.89	310.34	344.82	413.78	206.89	241.37	275.86	310.34	206.89	310.34
Gas	CGA Connection										
Acetylene**	510	V	V	V	E	G	G	G	G	G	G
Air	346	E	E	G	G	G	G	G	G	G	G
Argon	580	E	E	G	G	G	G	G	G	G	G
Arsine**	350 or 660	N	N	N	N	N	N	N	N	G	G
Carbon Dioxide	320	E	E	G	G	N	N	G	G	G	G
Carbon Monoxide**	350	V	V	V	V	V	V	E	E	G	G
Chlorine**	660	N	N	N	N	N	N	N	N	V	V
Fluorine**	679	N	N	N	N	N	N	N	N	V	V
Helium	580	V	V	G	G	E	E	E	E	V	V
Hydrogen**	350	G	G	G	G	V	V	V	V	G	G
Natural Gas**	350	G	G	V	V	G	G	E	E	G	G
Nitrogen	580	E	E	V	V	G	G	G	G	G	G
Nitrous Oxide	326	V	V	G	G	G	G	G	G	G	G
Oxygen	540	E***	E***	G	G	N	N	G	G	V	V
Silane**	350	N	N	N	N	N	N	N	N	V	V

E – Excellent, V – Very Good, G – Good, N – Not Acceptable
All hoses are considered to be 0.250 I.D.
*Special order, consult factory.
**Flammable and poisonous gases should always be filled, stored, transfilled or used in a well-ventilated area.
***When coupled with Oxy-Flex® fitting.

Pigtail Hose Specifications – Part 1 of 2

Hose Style	Size I.D.		Size O.D. Without Armor		Size O.D. With Armor		Inner Core Wall Thickness		Maximum Working Pressure		Minimum Burst Pressure	
	in.	mm	in.	mm	in.	mm	in.	mm	psi	bar	psi	bar
4TS	0.25	6.35	0.38	9.53	0.56	14.22	0.04	1.02	3,000	206.89	12,000	827.57
4TD	0.25	6.35	0.40	10.16	0.63	15.88	0.04	1.02	4,500	310.34	18,000	1241.30
4TH	0.22	5.59	0.38	9.65	0.63	15.88	0.04	1.02	5,000	344.82	16,000	1103.40
4TX	0.23	5.84	0.49	12.45	0.68	17.27	0.04	1.02	6,000	413.78	24,000	1655.10
4TZ	0.25	6.35	0.31	7.87	0.56	14.22	0.03	0.76	3,000	206.89	12,000	827.57
4TZD	0.25	6.35	0.40	10.16	0.63	15.88	0.03	0.76	3,500	241.37	14,000	965.49
4MDS6	0.29	7.24	0.54	13.72	0.83	20.96	0.01	0.25	4,000	275.86	16,000	1103.40
4MDHP	0.29	7.24	0.54	13.72	0.83	20.96	0.01	0.25	4,500	310.34	18,000	1241.30
4MDM	0.29	7.24	0.54	13.72	0.83	20.96	0.01	0.25	3,000	206.89	12,000	827.57
4MDMS*	0.29	7.24	0.54	13.72	0.83	20.96	0.01	0.25	4,500	310.34	18,000	1241.30

Pigtail Hose Specifications – Part 2 of 2

Hose Style	Minimum Bend Radius Without Armor		Minimum Bend Radius With Armor		Weight Without Armor		Weight With Armor		Temperature Range		Conductive
	in.	mm	in.	mm	lb./ft.	kg/m	lb./ft.	kg/m	°F	°C	(Yes/No)
4TS	2.0	50.80	3.6	91.44	0.08	0.12	0.26	0.39	-100 to 450	-73 to 232	No
4TD	2.7	68.58	3.6	91.44	0.10	0.15	0.26	0.39	-100 to 450	-73 to 232	No
4TH	1.5	38.10	2.7	68.58	0.10	0.15	0.26	0.39	-100 to 450	-73 to 232	Yes
4TX	3.0	76.20	5.1	129.54	0.24	0.36	0.40	0.60	-100 to 450	-73 to 232	Yes
4TZ	2.0	50.80	3.6	91.44	0.08	0.12	0.22	0.33	-100 to 250	-73 to 121	No
4TZD	2.7	68.58	3.6	91.44	0.10	0.15	0.26	0.39	-100 to 250	-73 to 121	No
4MDS6	3.0	76.20	3.2	81.28	0.30	0.45	0.53	0.79	Cryo to 1500	Cryo to 815	Yes
4MDHP	3.0	76.20	3.2	81.28	0.30	0.45	0.53	0.79	Cryo to 1500	Cryo to 815	Yes
4MDM	4.0	101.60	4.3	109.22	0.33	0.49	0.53	0.79	Cryo to 1500	Cryo to 815	Yes
4MDMS*	3.0	76.20	3.2	81.28	0.33	0.49	0.53	0.79	Cryo to 1500	Cryo to 815	Yes

*Special order, consult factory.