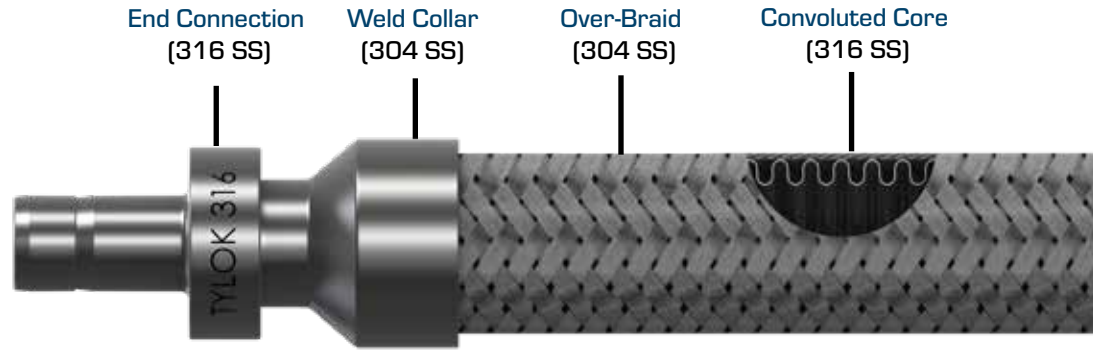


Flexible Metal Hose • PTFE Lined Hose • Multi Purpose Push On Hose

Flexible Metal Hose



Design Features:

- Working pressures from vacuum to 4600 psig (317 bar)
 - L Series (standard pressure) & H Series (high pressure)
- Medium-pressure applications where permeation is unacceptable
- End Connections are available in 1/4" to 1" sizes
- Stainless Steel core for corrosion resistance
- Stainless Steel braid contains hose pressure in dynamic applications
- End Connections weld meets ASME Boiler and Pressure Vessel Code Section IX
- Assembly number and pressure rating are etched onto weld collar
- Hose covers, identification tags, and additional leak testing options are available

Testing

Every Tylok L & H series hose assembly is helium leak tested to a maximum leak rate of 1×10^{-6} std cm³/s. See additional test options in the ordering section.

Available Sizes

Adapter Tube Size	Hose Size	A		Minimum Inside Diameter		Minimum Outside Diameter	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.63	(41.3)	0.16	(4.0)	0.56	(14.3)
3/8	6	1.84	(46.8)	0.28	(7.1)	0.78	(19.8)
1/2	8	2.09	(53.2)	0.39	(9.9)	0.93	(23.2)
3/4	12	2.31	(58.7)	0.63	(15.9)	1.32	(33.5)
1	16	2.81	(71.4)	0.88	(22.2)	1.63	(41.4)

Available End Connections

Tube Adapter; CBC-Lok Tube Fitting; CS-Lok Tube Fitting; Male Pipe Fitting; Female Pipe Fitting; Male JIC, 37° Flare; Female Swivel JIC, 37° flare

Technical Data

	Hose Size Designator	Nominal Hose Size in (mm)	Minimum Bend Radius		Temperature Range °F (°C)	Working Pressure at 70°F (21°C) psig (bar)	Burst Pressure at 70°F (21°C) psig (bar)	Hose Weight lb/ft (kg/m)
			Static in	Dynamic (mm)				
L Series	4	0.47 (11.9)	1.0 (25.4)	4.5 (114)	-325 to 850 (-200 to 454)	1800 (124)	7233 (499)	0.11 (0.16)
	6	0.71 (18.0)	1.2 (30.5)	5.0 (127)	-325 to 850 (-200 to 454)	1558 (107)	6230 (430)	0.20 (0.30)
	8	0.83 (21.1)	1.5 (38.1)	5.5 (140)	-325 to 850 (-200 to 454)	1186 (82)	4743 (327)	0.22 (0.33)
	12	1.22 (31.0)	2.1 (53.3)	8.0 (203)	-325 to 850 (-200 to 454)	898 (62)	3591 (248)	0.37 (0.55)
	16	1.53 (38.9)	2.7 (68.6)	9.0 (229)	-325 to 850 (-200 to 454)	718 (50)	2872 (198)	0.50 (0.74)
H Series	4	0.52 (13.2)	1.1 (27.9)	5.0 (127)	-325 to 850 (-200 to 454)	4600 (317)	18400 (1268)	0.21 (0.31)
	6	0.70 (17.8)	1.4 (35.6)	5.5 (140)	-325 to 850 (-200 to 454)	3800 (162)	15200 (1048)	0.36 (0.54)
	8	0.82 (20.8)	1.6 (40.6)	5.7 (145)	-325 to 850 (-200 to 454)	2600 (179)	10400 (717)	0.43 (0.64)
	12	1.19 (30.2)	2.8 (71.1)	6.5 (165)	-325 to 850 (-200 to 454)	2000 (138)	8000 (552)	0.64 (0.95)
	16	1.39 (35.9)	3.5 (88.9)	7.9 (201)	-325 to 850 (-200 to 454)	1500 (103)	6000 (414)	0.78 (1.16)

Temperature °F (°C)	De-Rating Factor
-325 to 300 (-198 to 149)	1.00
400 (204)	0.93
500 (260)	0.86
600 (316)	0.81
650 (343)	0.79
700 (371)	0.77
750 (399)	0.75
800 (427)	0.74
850 (454)	0.72

Pressure Temperature De-Rating

The working pressure must be de-rated when PTFE-lined hose operates outside of ambient temperatures.

Dynamic Pressure De-Rating

Pulsating or shock pressures, like those encountered with fast-operating valves, can severely damage a hose. If your application experiences pulsating pressures, use a de-rating factor of 0.50. If your application experiences shock pressures, use a de-rating factor of 0.17.

Standard Assemblies

L Series					
SS-L4A4A4-12	1/4" Hose, 1/4" Adapter Ends, 12" OAL	SS-L6A6A6-12	3/8" Hose, 3/8" Adapter Ends, 12" OAL	SS-L8A8A8-12	1/2" Hose, 1/2" Adapter Ends, 12" OAL
SS-L4A4A4-18	1/4" Hose, 1/4" Adapter Ends, 18" OAL	SS-L6A6A6-18	3/8" Hose, 3/8" Adapter Ends, 18" OAL	SS-L8A8A8-18	1/2" Hose, 1/2" Adapter Ends, 18" OAL
SS-L4A4A4-24	1/4" Hose, 1/4" Adapter Ends, 24" OAL	SS-L6A6A6-24	3/8" Hose, 3/8" Adapter Ends, 24" OAL	SS-L8A8A8-24	1/2" Hose, 1/2" Adapter Ends, 24" OAL

H Series					
SS-H4A4A4-12	1/4" Hose, 1/4" Adapter Ends, 12" OAL	SS-H6A6A6-12	3/8" Hose, 3/8" Adapter Ends, 12" OAL	SS-H8A8A8-12	1/2" Hose, 1/2" Adapter Ends, 12" OAL
SS-H4A4A4-18	1/4" Hose, 1/4" Adapter Ends, 18" OAL	SS-H6A6A6-18	3/8" Hose, 3/8" Adapter Ends, 18" OAL	SS-H8A8A8-18	1/2" Hose, 1/2" Adapter Ends, 18" OAL
SS-H4A4A4-24	1/4" Hose, 1/4" Adapter Ends, 24" OAL	SS-H6A6A6-24	3/8" Hose, 3/8" Adapter Ends, 24" OAL	SS-H8A8A8-24	1/2" Hose, 1/2" Adapter Ends, 24" OAL



CBC-Lok® Tube Adapter ¹							
Adapter Tube Size	Hose Size	A		Minimum Inside Diameter		Maximum Outside Dimension	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.63	(41.3)	0.16	(4.0)	0.56	(14.3)
3/8	6	1.84	(46.8)	0.28	(7.1)	0.78	(19.8)
1/2	8	2.09	(53.2)	0.39	(9.9)	0.93	(23.6)
3/4	12	2.31	(58.7)	0.63	(15.9)	1.32	(33.5)
1	16	2.81	(71.4)	0.88	(22.2)	1.63	(41.4)



CBC-Lok® Tube Fitting ¹							
Fitting Size	Hose Size	A		Minimum Inside Diameter		Maximum Outside Dimension	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.66	(42.3)	0.19	(4.7)	0.65	(16.5)
3/8	6	1.89	(48.0)	0.28	(7.1)	0.79	(20.1)
1/2	8	2.02	(51.3)	0.38	(9.5)	1.01	(25.7)
3/4	12	2.25	(57.0)	0.63	(15.9)	1.32	(33.5)
1	16	2.65	(67.2)	0.88	(22.2)	1.73	(44.0)



CS-Lok® Tube Fitting ²							
Fitting Size	Hose Size	A		Minimum Inside Diameter		Maximum Outside Dimension	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.67	(42.4)	0.19	(4.7)	0.65	(16.5)
3/8	6	1.89	(48.1)	0.28	(7.1)	0.79	(20.1)
1/2	8	2.02	(51.4)	0.38	(9.5)	1.01	(25.7)
3/4	12	2.24	(56.9)	0.63	(15.9)	1.32	(33.5)
1	16	2.64	(67.0)	0.88	(22.2)	1.73	(44.0)



Female Pipe Fitting							
NPT Size	Hose Size	A		Minimum Inside Diameter		Maximum Outside Dimension	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.56	(39.7)	0.25	(6.4)	0.87	(22.0)
3/8	6	1.88	(47.6)	0.38	(9.5)	1.01	(25.7)
1/2	8	2.03	(51.6)	0.47	(11.9)	1.23	(31.1)
3/4	12	2.19	(55.5)	0.63	(15.9)	1.51	(38.5)
1	16	2.47	(62.7)	0.88	(22.2)	1.88	(47.7)

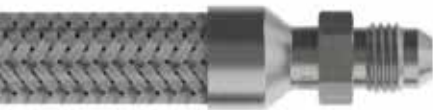


Male Pipe Fitting							
NPT Size	Hose Size	A		Minimum Inside Diameter		Maximum Outside Dimension	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.56	(39.7)	0.25	(6.4)	0.65	(16.5)
3/8	6	1.72	(43.6)	0.38	(9.5)	0.79	(20.1)
1/2	8	1.91	(48.4)	0.47	(11.9)	1.01	(25.7)
3/4	12	2.06	(52.4)	0.63	(15.9)	1.32	(33.5)
1	16	2.47	(62.7)	0.88	(22.2)	1.63	(41.4)

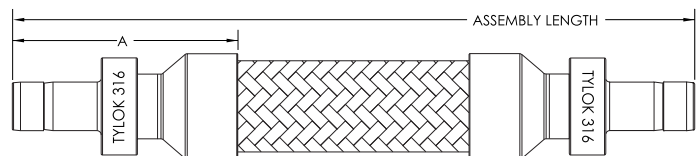


Female Swivel JIC, 37° Flare							
JIC Flare Size	Hose Size	A		Minimum Inside Diameter		Maximum Outside Dimension	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.37	(34.8)	0.17	(4.32)	0.65	(16.5)
3/8	6	1.61	(40.8)	0.30	(7.62)	0.79	(20.1)
1/2	8	1.73	(43.8)	0.39	(9.91)	1.01	(25.7)
3/4	12	2.03	(51.6)	0.61	(15.5)	1.44	(36.7)
1	16	2.26	(57.3)	0.84	(21.3)	1.73	(44.0)

Hose & Connectors



Male JIC, 37° Flare							
JIC Flare Size	Hose Size	A		Minimum Inside Diameter		Maximum Outside Dimension	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.30	(33.0)	0.17	(4.32)	0.60	(15.2)
3/8	6	1.40	(35.6)	0.30	(7.62)	0.78	(19.8)
1/2	8	1.50	(38.1)	0.39	(9.91)	0.93	(23.6)
3/4	12	1.70	(43.2)	0.61	(15.5)	1.32	(33.5)
1	16	1.90	(48.3)	0.84	(21.3)	1.63	(41.4)



Example:

A 1/4" L Series Flexible Metal Hose with 1/4" CBC-Lok Tube Adapter ends, 18" overall length and optional hydrostatic test is designated as follows:

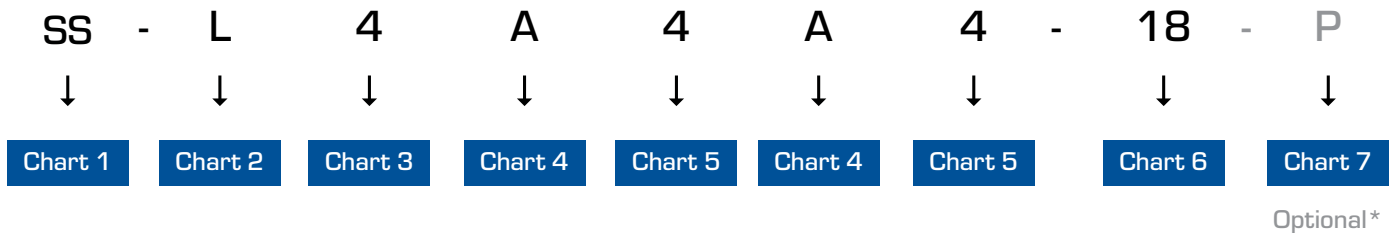


Chart 1- Material	
SS	Stainless Steel

Chart 2- Hose Type	
L	L Series Metal Hose
H	H Series Metal Hose

Chart 3- Hose Size	
4	1/4 in
6	3/8 in
8	1/2 in
12	3/4 in
16	1 in

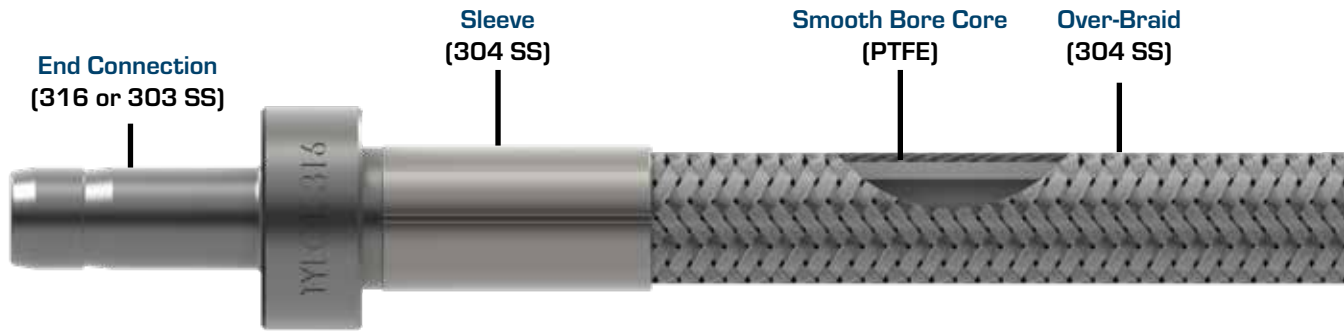
Chart 4- End Connection Type	
A	Tube Adapter
D	CBC-Lok® Tube Fitting
S	CS-Lok® Tube Fitting
M	Male Pipe Threads
F	Female Pipe Threads
AN	Male JIC, 37° Flare
AS	Female Swivel JIC, 37° Flare

Chart 5- End Connection Size	
4	1/4 in
6	3/8 in
8	1/2 in
12	3/4 in
16	1 in

Chart 6- Total Assembly Length	
6	Inches, and ordered in whole number increments

Chart 7- Options	
-TAG	Tag (customer specified text)
H	Helium Leak Test (1x10 ⁻⁹ std cm ³ /s)
N	Nitrogen Pressure Test
P	Hydrostatic Test

PTFE-Lined, Stainless Steel Braided Hose



Design Features:

- PTFE core made from fine powder PTFE resin.
- Stainless Steel end connections are available in 1/4" to 1" sizes.
- Custom lengths and optional cover accessories are available.
- Assembly meets or exceeds requirements of SAE 10OR14.
- PTFE meets FDA 21CFR part 177.1550 for contact with food, water and beverages.
- Carbon black-filled core tube is available to provide static charge dissipation.

Testing

Tylok PTFE-lined hose assemblies are hydrostatically pressure tested at 1.5 times the working pressure, with a requirement of no visible leakage.

Available Sizes

Adapter Tube Size	Hose Size	A		Minimum Inside Diameter		Maximum Outside Dimension	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.58	(40.1)	0.15	(3.8)	0.56	(14.2)
3/8	6	1.74	(44.2)	0.28	(7.0)	0.68	(17.3)
1/2	8	2.09	(53.1)	0.36	(9.0)	0.81	(20.5)
3/4	12	2.35	(59.7)	0.59	(15.0)	1.06	(26.9)
1	16	2.77	(70.4)	0.81	(20.6)	1.37	(34.8)

Available End Connections

Tube Adapter; CBC-Lok Tube Fitting; CS-Lok Tube Fitting; Male Pipe Fitting; Female Pipe Fitting; Male JIC, 37° Flare; Female Swivel JIC, 37° flare

Technical Data

Hose Size Designator	Nominal Hose Size		Minimum Bend Radius		Temperature Range °F (°C)	Working Pressure at 70°F (21°C) psig (bar)	Burst Pressure at 70°F (21°C) psig (bar)	Hose Weight	
	in	(mm)	in	(mm)				lb/ft	(kg/m)
4	1/4	(6.4)	2.0	(50.8)	Continuous: -65 to 400 (-53 to 204) Intermittent: -100 to 500 (-73 to 260)	3000 (206)	12000 (827)	0.07	(0.10)
6	3/8	(9.5)	4.0	(101.6)		2500 (172)	10000 (689)	0.11	(0.16)
8	1/2	(12.7)	5.2	(132.1)		2000 (137)	8000 (551)	0.12	(0.18)
12	3/4	(19.0)	7.7	(195.6)		1200 (82.7)	4800 (331)	0.17	(0.25)
16	1	(25.4)	9.0	(228.6)		1000 (68.9)	4000 (275)	0.27	(0.41)

Temperature °F (°C)	De-Rating Factor
-65 to 100 (-53 to 37)	1.00
200 (93)	0.90
300 (148)	0.83
400 (204)	0.75

Pressure Temperature De-Rating

The working pressure must be de-rated when PTFE-lined hose operates outside of ambient temperatures.

Standard Assemblies

Description	OAL (in.)	Part Number	Interchanges With
1/4" PTFE Hose, 1/4" CBC-Lok® Tube Adapter Ends	6	SS-TH4A4A4-6	SS-4BHT-6
	12	SS-TH4A4A4-12	SS-4BHT-12
	18	SS-TH4A4A4-18	SS-4BHT-18
	24	SS-TH4A4A4-24	SS-4BHT-24
	36	SS-TH4A4A4-36	SS-4BHT-36
	48	SS-TH4A4A4-48	SS-4BHT-48
	60	SS-TH4A4A4-60	SS-4BHT-60
	72	SS-TH4A4A4-72	SS-4BHT-72
3/8" PTFE Hose, 3/8" CBC-Lok® Tube Adapter Ends	12	SS-TH6A6A6-12	SS-6BHT-12
	18	SS-TH6A6A6-18	SS-6BHT-18
	24	SS-TH6A6A6-24	SS-6BHT-24
	36	SS-TH6A6A6-36	SS-6BHT-36
	48	SS-TH6A6A6-48	SS-6BHT-48
	60	SS-TH6A6A6-60	SS-6BHT-60
1/2" PTFE Hose, 1/2" CBC-Lok® Tube Adapter Ends	12	SS-TH8A8A8-12	SS-8BHT-12
	18	SS-TH8A8A8-18	SS-8BHT-18
	24	SS-TH8A8A8-24	SS-8BHT-24
	36	SS-TH8A8A8-36	SS-8BHT-36
	48	SS-TH8A8A8-48	SS-8BHT-48
	60	SS-TH8A8A8-60	SS-8BHT-60
	72	SS-TH8A8A8-72	SS-8BHT-72
3/4" PTFE Hose, 3/4" CBC-Lok® Tube Adapter Ends	24	SS-TH12A12A12-24	SS-12BHT-24
	36	SS-TH12A12A12-36	SS-12BHT-36
	48	SS-TH12A12A12-48	SS-12BHT-48

Example:

What is the pressure rating of size 4 hose at 200°F (93°C)?

Technical Data gives a working pressure of 3000 psig (206 bar). Pressure Temperature De-Rating gives a de-rating factor of .90. $3000 \text{ psig} \times 0.90 = 2700 \text{ psig}$ and $206 \text{ bar} \times 0.90 = 186 \text{ bar}$. The working pressure at 200°F (93°C) is 2700 psig (186 bar).

Hose & Hose Connectors



CBC-Lok® Tube Adapter ¹ (316 SS)							
Adapter Tube Size	Hose Size	A		Minimum Inside Diameter		Maximum Outside Dimension	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.58	(40.1)	0.15	(3.8)	0.55	(14.0)
3/8	6	1.74	(44.2)	0.27	(6.9)	0.68	(17.3)
1/2	8	2.09	(53.1)	0.35	(8.9)	0.80	(20.3)
3/4	12	2.35	(59.7)	0.59	(15.0)	1.05	(26.7)
1	16	2.77	(70.4)	0.81	(20.6)	1.37	(34.8)



CBC-Lok® Tube Fitting ¹ (316 SS)							
Fitting Size	Hose Size	A		Minimum Inside Diameter		Maximum Outside Dimension	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.65	(41.9)	0.15	(3.8)	0.65	(16.5)
3/8	6	1.81	(46.0)	0.27	(6.9)	0.80	(20.3)
1/2	8	2.07	(52.6)	0.35	(8.9)	1.02	(25.9)
3/4	12	2.29	(58.2)	0.59	(15.0)	1.30	(33.0)

¹CBC-Lok® double ferrule tube ends are completely interchangeable with Swagelok® and Parker A-Lok® tube ends.



Male Pipe Fitting (303 SS)							
NPT Size	Hose Size	A		Minimum Inside Diameter		Maximum Outside Dimension	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.52	(38.6)	0.15	(3.8)	0.65	(16.5)
3/8	6	1.68	(42.7)	0.27	(6.9)	0.79	(20.0)
1/2	8	1.98	(50.3)	0.35	(8.9)	1.01	(25.7)
3/4	12	2.26	(57.4)	0.59	(15.0)	1.23	(31.2)
1	16	2.61	(66.3)	0.81	(20.6)	1.59	(40.4)



CS-Lok® Tube Fitting ² (316 SS)							
Fitting Size	Hose Size	A		Minimum Inside Diameter		Maximum Outside Dimension	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.65	(41.9)	0.15	(3.8)	0.65	(16.5)
3/8	6	1.81	(46.0)	0.27	(6.9)	0.80	(20.3)
1/2	8	2.07	(52.6)	0.35	(8.9)	1.02	(25.9)
3/4	12	2.29	(58.2)	0.59	(15.0)	1.30	(33.0)

²CS-Lok® single ferrule tube ends are completely interchangeable with Parker CPI® tube ends.

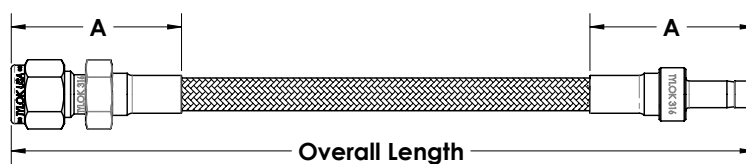


Male JIC, 37° Flare (316 SS)							
JIC Flare Size	Hose Size	A		Minimum Inside Diameter		Maximum Outside Dimension	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.56	(39.6)	0.15	(3.8)	0.58	(14.7)
3/8	6	1.52	(38.6)	0.27	(6.9)	0.72	(18.3)
1/2	8	1.89	(48.0)	0.35	(8.9)	0.93	(23.6)



Female Swivel JIC, 37° Flare (303 SS)							
JIC Flare Size	Hose Size	A		Minimum Inside Diameter		Maximum Outside Dimension	
		in	(mm)	in	(mm)	in	(mm)
1/4	4	1.52	(38.6)	0.15	(3.8)	1.65	(16.5)
3/8	6	1.71	(43.4)	0.27	(6.9)	0.79	(20.0)
1/2	8	1.88	(47.8)	0.35	(8.9)	1.01	(25.7)

Hose & Connectors



Example:

A 1/4" PTFE-Lined Stainless Steel Braided Hose with 1/4" CBC-Lok Tube Adapter ends, 12" overall length and optional hydrostatic test is designated as follows:

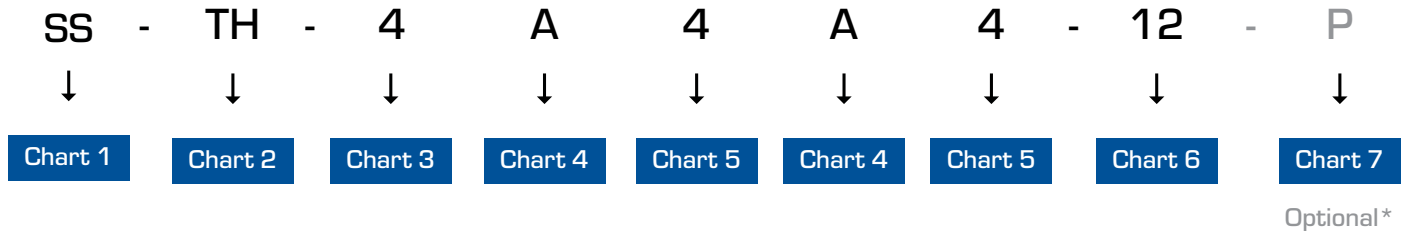


Chart 1- Material	
SS	Stainless Steel

Chart 5- End Connection Size	
2	1/8 in
4	1/4 in
6	3/8 in
8	1/2 in
12	3/4 in
16	1 in

Chart 2- Hose Type	
TH	PTFE Hose
TC	Carbon Black Filled PTFE Hose

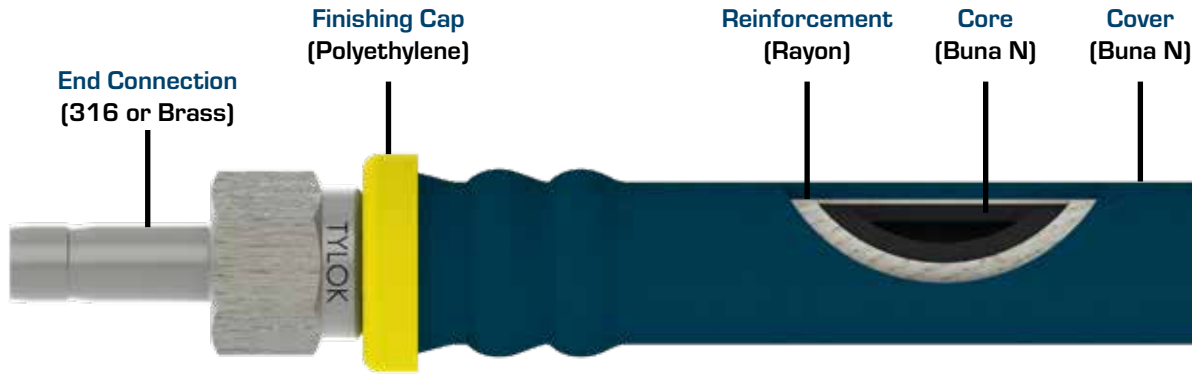
Chart 6- Total Assembly Length	
6	Inches, and ordered in whole number increments

Chart 3- Hose Size	
4	1/4 in
6	3/8 in
8	1/2 in
12	3/4 in
16	1 in

Chart 7- Options	
-TAG	Tag (customer specified text)
H	Helium Leak Test (1x10 ⁻⁹ std cm ³ /s)
N	Nitrogen Pressure Test
P	Hydrostatic Test

Chart 4- End Connection Type	
A	Tube Adapter
D	CBC-Lok [®] Tube Fitting
S	CS-Lok [®] Tube Fitting
M	Male Pipe Threads
AN	Male JIC, 37° Flare
AS	Female Swivel JIC, 37° Flare

Multi-Purpose Push-On Hose



Hose Connectors

- Sizes from 1/4 to 3/4 in.

Design Features

- Flame-resistant cover meets Part 18 of 30CFR
- Single-braided reinforcement maximizes strength and hose connector retention.
- Stainless Steel and Brass HB Series hose connectors are available 1/4 to 3/4 inch sizes (sold separately).
- Assembly does not require clamps or specialized tools.
- Hose connectors are reusable.

Available End Connections

Tube Adapter; CBC-Lok Tube Fitting; CS-Lok Tube Fitting; Male Pipe Fitting; Female Pipe Fitting; Union.

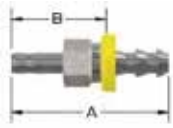
Pressure Temperature De-Rating

The working pressure of multipurpose push-on hose does not de-rate when used in its normal operating range: -40 to 200 °F (-40 to 93 °C). It is not recommended that this hose be used outside of this range.

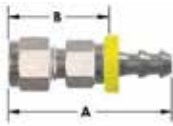
Part Number	Nominal Hose Size in (mm)	Minimum Bend Radius Static in (mm)	Temperature Range °F (°C)	Working Pressure at 70°F (21°C)		Hose Weight	
				psig	(bar)	lb/ft	(kg/m)
PH-4	0.50 (12.7)	3.0 (76.2)	-40 to 200 (-40 to 93)	400	(27.6)	0.08	(0.12)
PH-6	0.67 (17.0)	3.0 (76.2)		400	(27.6)	0.13	(0.19)
PH-8	0.76 (19.3)	5.0 (127)		400	(27.6)	0.14	(0.21)
PH-12	1.06 (26.9)	7.0 (178)		400	(27.6)	0.24	(0.36)

Hose & Hose Connectors

Fitting Size in.	Hose Size in.	Part Number	Interchanges With	A		B		Minimum Inside Diameter		Maximum Outside Dimension	
				in	(mm)	in	(mm)	in	(mm)	in	(mm)

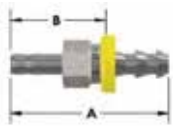


CBC-Lok® Tube Adapter ¹											
1/4	1/4	-4-DATHB-4	PB4 -TA4	1.91	(48.5)	1.51	(29.2)	0.15	(3.8)	0.68	(17.3)
3/8	3/8	-6-DATHB-6	PB6 -TA6	2.00	(50.8)	0.13	(28.7)	0.24	(6.1)	0.87	(22.1)
1/2	1/2	-8-DATHB-8	PB8 -TA8	2.42	(61.5)	1.37	(34.8)	0.34	(8.7)	0.98	(24.9)
3/4	3/4	-12-DATHB-12	PB12 -TA12	3.10	(78.7)	1.43	(36.2)	0.57	(14.5)	1.27	(32.3)

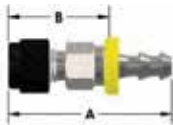


CBC-Lok® Tube Fitting ¹											
1/4	1/4	-4-DTHB-4	PB4 -SL4	1.97	(50.0)	1.21	(30.7)	0.15	(3.8)	0.68	(17.3)
3/8	3/8	-6-DTHB-6	PB6 -SL6	2.11	(53.6)	1.24	(31.5)	0.27	(6.9)	0.87	(22.1)
1/2	1/2	-8-DTHB-8	PB8 -SL8	2.47	(62.7)	1.42	(36.1)	0.37	(9.5)	0.98	(24.9)

¹CBC-Lok® double ferrule tube ends are completely interchangeable with Swagelok® and Parker A-Lok® tube ends.



CS-Lok® Tube Adapter ²											
1/4	1/4	-4-SATHB-4	-	1.91	(48.5)	1.51	(29.2)	0.15	(3.8)	0.68	(17.3)
3/8	3/8	-6-SATHB-6	-	2.00	(50.8)	0.13	(28.7)	0.24	(6.1)	0.87	(22.1)
1/2	1/2	-8-SATHB-8	-	2.42	(61.5)	1.37	(34.8)	0.34	(8.7)	0.98	(24.9)
3/4	3/4	-12-SATHB-12	-	3.10	(78.7)	1.43	(36.2)	0.57	(14.5)	1.27	(32.3)

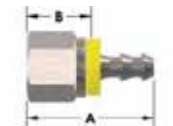


CS-Lok® Tube Fitting ²											
1/4	1/4	-4-STHB-4	-	1.97	(50.0)	1.21	(30.7)	0.15	(3.8)	0.68	(17.3)
3/8	3/8	-6-STHB-6	-	2.11	(53.6)	1.24	(31.5)	0.27	(6.9)	0.87	(22.1)
1/2	1/2	-8-STHB-8	-	2.47	(62.7)	1.42	(36.1)	0.37	(9.5)	0.98	(24.9)

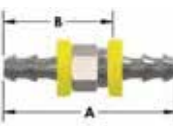
²CS-Lok® single ferrule tube ends are completely interchangeable with Parker CPI® tube ends.



Male Pipe Threads											
1/4	1/4	-4-1MPHB-4	PB4 -PM4	1.67	(42.7)	0.92	(23.4)	0.15	(3.8)	0.68	(17.3)
3/8	3/8	-6-1MPHB-6	PB6 -PM6	1.80	(45.7)	0.93	(23.9)	0.27	(6.9)	0.87	(22.1)
1/2	1/2	-8-1MPHB-8	PB8 -PM8	2.19	(55.6)	1.14	(29.0)	0.37	(9.5)	0.98	(24.9)
3/4	3/4	-12-1MPHB-12	PB12 -PM12	2.81	(71.4)	1.15	(29.2)	0.61	(15.6)	1.27	(32.3)



Female Pipe Threads											
1/4	1/4	-4-1FPHB-4	-	1.53	(38.9)	0.77	(19.6)	0.15	(3.8)	0.87	(22.0)
3/8	3/8	-6-1FPHB-6	-	1.77	(45.0)	0.90	(22.7)	0.27	(6.9)	1.01	(25.7)
1/2	1/2	-8-1FPHB-8	-	2.06	(52.3)	1.02	(25.9)	0.37	(9.5)	1.23	(31.2)



Union											
1/4	1/4	-4-1HBU	PB4 -6	2.07	(52.6)	1.31	(33.3)	0.15	(3.8)	0.68	(17.3)
3/8	3/8	-6-1HBU	PB6 -6	2.25	(57.2)	1.83	(35.1)	0.27	(6.9)	0.87	(22.1)
1/2	1/2	-8-1HBU	PB8 -6	2.61	(66.3)	1.56	(39.6)	0.37	(9.5)	0.98	(24.9)
3/4	3/4	-12-1HBU	PB12 -6	3.83	(97.3)	2.18	(55.4)	0.61	(15.6)	1.27	(32.3)

HC Series End Connections

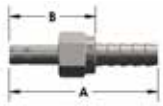
Design Features

- Allow for easy installation of soft rubber or plastic tubing.
- Stainless Steel and Brass end connection are available in 1/4 to 3/4 inch series.
- End Connection are reusable.
- Use of hose clamp with HC Series fittings is recommended for secure connection.
- For field assembly, subtract dimension B from the desired overall assembly length for each end.



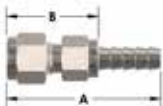
Fitting Size in.	Hose Size in.	Part Number	Interchanges With	A in (mm)	B in (mm)	Minimum Inside Diameter in (mm)	Maximum Outside Dimension in (mm)
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CBC-Lok® Tube Adapter¹



1/4	1/4	-4-DATHC-4	-4-HC-A-401	1.85 (47.0)	1.06 (26.9)	0.15 (3.8)	0.51 (12.9)
3/8	3/8	-6-DATHC-6	-6-HC-A-601	1.99 (50.5)	1.10 (28.0)	0.28 (7.0)	0.65 (16.6)
1/2	1/2	-8-DATHC-8	-8-HC-A-811	2.32 (58.9)	1.38 (35.1)	0.38 (9.7)	0.80 (20.3)
3/4	3/4	-12-DATHC-12	-12-HC-A-1211	2.49 (63.3)	1.44 (36.6)	0.58 (14.7)	1.23 (31.3)

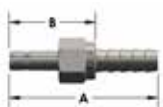
CBC-Lok® Tube Fitting¹



1/4	1/4	-4-DTHC-4	-4-HC-1-400	1.92 (48.8)	1.13 (28.7)	0.18 (4.6)	0.65 (16.6)
3/8	3/8	-6-DTHC-6	-6-HC-1-600	2.06 (52.3)	1.19 (30.2)	0.28 (7.1)	0.87 (22.1)
1/2	1/2	-8-DTHC-8	-8-HC-1-810	2.24 (56.9)	1.30 (33.0)	0.38 (9.7)	1.01 (25.7)

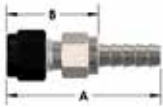
¹CBC-Lok® double ferrule tube ends are completely interchangeable with Swagelok® and Parker A-Lok® tube ends.

CS-Lok® Tube Adapter²



1/4	1/4	-4-SATHC-4	-	1.85 (47.0)	1.06 (26.9)	0.15 (3.8)	0.51 (12.9)
3/8	3/8	-6-SATHC-6	-	1.99 (50.5)	1.10 (28.0)	0.28 (7.0)	0.55 (16.6)
1/2	1/2	-8-SATHC-8	-	2.32 (58.9)	1.38 (35.1)	0.38 (9.7)	0.80 (20.3)
3/4	3/4	-12-SATHC-12	-	2.49 (63.3)	1.44 (36.6)	0.58 (14.7)	1.23 (31.3)

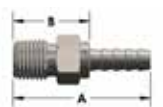
CS-Lok® Tube Fitting²



1/4	1/4	-4-STHC-4	-	1.92 (48.8)	1.13 (28.7)	0.18 (4.6)	0.65 (16.6)
3/8	3/8	-6-STHC-6	-	2.06 (52.3)	1.19 (30.2)	0.28 (7.1)	0.87 (22.1)
1/2	1/2	-8-STHC-8	-	2.24 (56.9)	1.30 (33.0)	0.38 (9.7)	1.01 (25.7)

²CS-Lok® single ferrule tube ends are completely interchangeable with Parker CPI® tube ends.

Male Pipe Threads



1/4	1/4	-4-1MPHC-4	-4-HC-1-4	1.61 (40.9)	0.82 (20.8)	0.18 (4.6)	0.65 (16.6)
3/8	3/8	-6-1MPHC-6	-6-HC-1-6	1.78 (45.2)	0.89 (22.6)	0.28 (7.1)	0.79 (20.2)
1/2	1/2	-8-1MPHC-8	-8-HC-1-8	1.95 (49.5)	1.06 (26.9)	0.40 (10.1)	1.01 (25.7)
3/4	3/4	-12-1MPHC-12	-12-HC-1-12	1.97 (50.0)	1.08 (27.4)	0.62 (15.7)	1.23 (31.3)

Female Pipe Threads



1/4	1/4	-4-1FPHC-4	-4-HC-7-4	1.69 (42.9)	0.90 (22.9)	0.18 (4.6)	0.87 (22.1)
3/8	3/8	-6-1FPHC-6	-6-HC-7-6	1.81 (46.0)	0.92 (23.4)	0.28 (7.1)	1.01 (25.7)
1/2	1/2	-8-1FPHC-8	-8-HC-7-8	2.08 (52.8)	1.19 (30.2)	0.40 (10.1)	1.23 (31.2)

Consider the following categories below when selecting a hose:

S

Size

T

Temperature

A

Application

M

Media

P

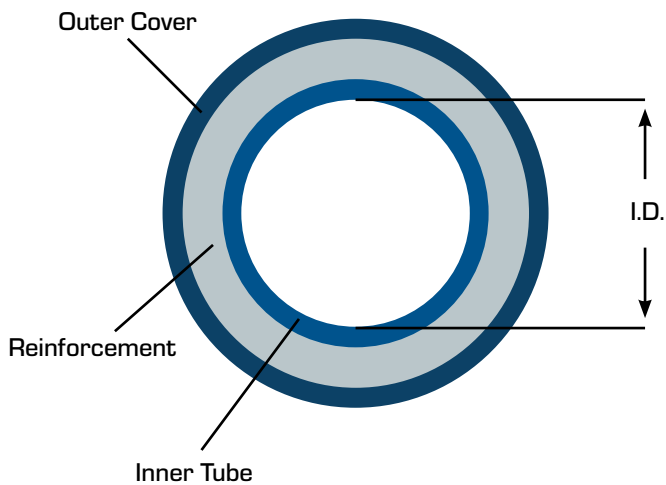
Pressure

E

Ends

D

Delivery



Size

Dash Numbers is a system to indicate hose and fitting size. The dash number, is the measure of a hose's Inner Diameter (I.D.) in sixteenths of an inch.

The hose I.D. should be sized accurately to obtain the proper flow velocity. A flow that's too slow results in sluggish system performance, while a flow that's too high causes excessive pressure drops, system damage, and leaks.

Temperature

There are two temperatures you need to identify. One is the ambient temperature, which is the temperature that is outside the hose where it is being used; the other is the media temperature which is the temperature of the media conveyed through the hose.

Very high or low ambient temperatures can have affects on the hose cover and reinforcement materials, resulting in reduced service life.

Application

Before selecting a hose, it is important to consider how the hose assembly will be used. Some applications require a specific type of hose. Industry standards set specific requirements concerning construction type, size, tolerances, burst pressure, and impulse cycles of hoses.

Hose Selection

Typical Applications Include:

- Hydraulic Presses & Machinery
- Process Tool Cooling Lines
- Testing Equipment
- High Vibration Dissipation
- Portable Measurement Equipment

Media

Also consider what the hose will hold, some applications require the use of specialized oil or chemicals. The hose must be compatible with the medium used. Compatibility must cover the inner tube, the cover, hose fittings, and o-rings.

Pressure

With hose pressure, it's important to know both the system working pressure and any surge pressures and spikes. Surge pressures or peak transient pressures in the system must be below the published maximum working pressure for the hose. A hose assembly is rated at the maximum working pressure of the hose and the fitting component.

End Connections

Consider the style, type, etc. as well when selecting a hose. Clarify any space constraints. Hose assemblies with elbow or union ball joints may help solve these issues.

Delivery

Special delivery requirements or specific quality, testing, and packaging needs should be decided during selection process.