

For a safer system turn to Hoke  
guaranteed valves and fittings

A range of flexible hose assemblies for a wide range of industrial applications.

Options available:

- Stainless steel flexible hose for performance in aggressive environments.
- Smooth bore PTFE hose with 304 stainless steel braid for full flow performance.
- A choice of fittings including Hoke Gyrolok twin ferrule compression type for full compatibility with other products in the Hoke range.

Certification and tagging for traceability as standard.

## Metallic flexible hose

to BS 6501 Type B (Flexible)

### Available in two braiding specifications:

- Single braided hose - For pressures to 140 bar on 1/4" hose or 70 bar on 1" hose
- Double braided hose - Allows 70% and 80% higher pressures.

### Specification details

- Core: 321 stainless steel (convoluted)
- Braid: 304 stainless steel
- Size range: 1/4" NB - 1" NB
- Temperature range: -273°C - +600°C
- Pressure: See table for maxima in each size (ratings reduced at temperatures above 99°C) (capable of full vacuum in all sizes)
- End connections: NPT / BSP / Tube adaptors / Quick connectors (other connections available on request)

Other materials and sizes available on request.

### Applications for metal hose

- In areas of high risk or potential danger to life. e.g. high temperature applications such as furnaces transfer of hot or highly corrosive materials
- To stop transmission of vibration.

Other benefits of metal hose include:

- no kinking
- does not burn
- no swelling with media
- end fittings welded to hose cannot blow out
- excellent environmental resistance

### Maximum velocities

The corrugated bore of metallic hose induces turbulence at higher velocities with consequent pressure losses. Therefore limit velocities to:

- liquids 5 metres / sec
- gases 37 metres / sec

If these figures are likely to be exceeded, increase size or install additional hoses in parallel.

#### Metal hose care

While metal hose is built to perform in punishing conditions, the following precautions must be followed:

- don't stretch it
- don't compress it
- don't damage the braid
- don't over-bend it
- don't torque (or twist) it

## Smooth bore P.T.F.E. hose

### Available in two braiding specifications:

- Single braided hose - A general usage hose for high and low pressure steam, chemicals, paints, fuel oils, detergents and foodstuffs
- Double braided hose - A special purpose hose for higher pressure applications or where higher stresses are anticipated

### Specification details

- Core: Straight extruded virgin PTFE hose (extra flexible grade)
- Braid: High tensile 304 SS
- Size range: 1/4" NB - 1" NB
- Temperature range: -70°C - +230°C (temperature correction factors apply)
- Pressure: See tables for maxima in each size (ratings reduced at temperatures above 130°C) (capable of 50% vacuum at ambient temperatures in all sizes)
- End connections: NPT / BSP / Tube types / Quick connectors (other connectors available on request)

**Note:** Smooth bore PTFE hose in sizes greater than 1/2" NB is prone to kinking; especially on longer lengths.



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# Flexible hose assemblies

## Supporting data



### Pressure rating tables

#### Notes:

- Burst pressures relate to the capability of the hose before use
- Working pressures are shown at 25% of before use burst pressures

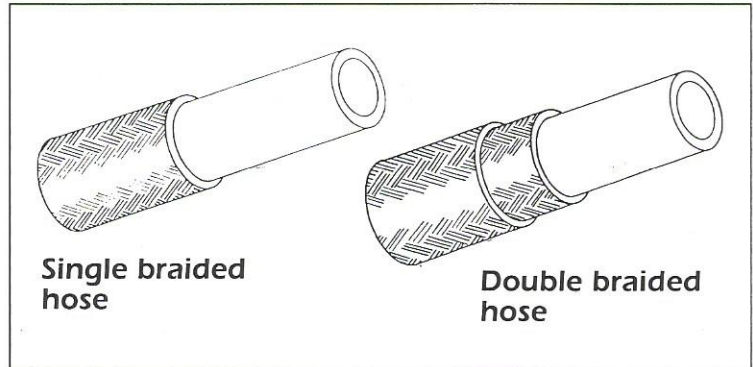
Pressure ratings are reduced at higher temperatures.

For metal hose:

See de-rating table for temperatures above 99°C.

For P.T.F.E. hose:

reduce by 1% for every 1° above 130°C



#### Metal hose

Nominal Size	Braiding	Max working pressure (psi / bar)	Burst pressure (psi / bar)	Bend radius
1/4"	Single	2060 / 140	8240 / 561	100 mm
	Double	3700 / 252	14800 / 1007	100 mm
3/8"	Single	1510 / 103	6040 / 411	150 mm
	Double	2710 / 184	10840 / 737	150 mm
1/2"	Single	1325 / 90	5300 / 361	150 mm
	Double	2400 / 163	9600 / 653	150 mm
3/4"	Single	1010 / 69	4040 / 275	200 mm
	Double	1810 / 123	7240 / 493	200 mm
1"	Single	1025 / 70	4100 / 279	200 mm
	Double	1740 / 118	6960 / 473	200 mm

**Note:** Bend radii can be reduced by about 25% if no flexing occurs.

#### De-rating table for temperatures over 99°C. (Interpolate for intermediate values)

Temperature	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	500°C	600°C
Factor	0.96	0.92	0.88	0.84	0.80	0.76	0.72	0.66	0.60	0.44

#### PTFE hose - single braided

Nominal bore (in / mm)	Nominal tube wall thickness (in / mm)	Max working pressure (psi / bar)	Burst pressure (psi / bar)	Bend radius (mm) flexing / non-flexing	Max continuous length
1/4" / 6.34	0.04 / 1.00	2500 / 170	10000 / 680	38 / 76	37
3/8" / 9.52	0.04 / 1.00	2120 / 144	8500 / 578	50 / 101	30
1/2" / 12.70	0.05 / 1.27	1750 / 119	7000 / 476	76 / 127	21
5/8" / 15.86	0.05 / 1.27	1370 / 93	5500 / 374	101 / 152	16
3/4" / 19.04	0.05 / 1.27	1120 / 76	4500 / 306	152 / 203	14
1" / 25.58	0.05 / 1.27	870 / 59	3500 / 238	203 / 253	10

#### PTFE hose - double braided

Nominal bore (in / mm)	Nominal tube wall thickness (in / mm)	Max working pressure (psi / bar)	Burst pressure (psi / bar)	Bend radius (mm) flexing / non-flexing	Max continuous length
1/4" / 6.34	0.04 / 1.00	3500 / 238	14000 / 952	25 / 51	37
3/8" / 9.52	0.04 / 1.00	2750 / 187	11000 / 748	38 / 76	30
1/2" / 12.70	0.05 / 1.27	2370 / 161	9000 / 612	50 / 101	21
5/8" / 15.86	0.05 / 1.27	1870 / 127	7500 / 510	63 / 127	16
3/4" / 19.04	0.05 / 1.27	1500 / 102	6000 / 408	88 / 177	14
1" / 25.58	0.05 / 1.27	1125 / 77	4500 / 306	152 / 230	10