

INTERFLEX

STAINLESS STEEL FLEXIBLE HOSE ASSEMBLIES

Since 1987, Interflex Hose & Bellows Ltd. has specialised in the manufacture of flexible stainless steel hose assemblies, and has established a name for quick, reliable service with competitive pricing, and an emphasis on high quality.



Our sales office, based at our Shropshire factory, will be pleased to offer ou, from initial design through to installation, the expertise

that members of our team have gained from being in this field for many years, whatever the inquiry.

APPLICATIONS

The success of the flexible metallic hose assembly may be attributed to the fact that there is a hose suitable for almost any application. Interflex manufacture and supply a comprehensive range of corrugated stainless steel hose products covering a wide range of uses - whatever the requirements of flexibility, media, environment, temperature or pressure.

In fact, wherever you require a hose for vibration, misalignment, lateral movement, protection, thermal expansion, or corrosive or caustic chemicals, we are confident that we can provide an assembly that is designed to cope with your operating conditions with utmost reliability, however arduous or demanding.

ADVANTAGES

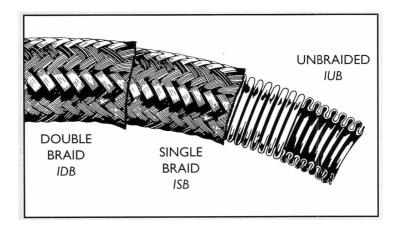
- Vacuum proof
- Long lasting FlexibleCorrosion resistant
- Fire resistant
- High physical strength
- Resistant to penetration and damage
- High safety factor
- Excellent at temperature & pressure extremes

STAINLESS STEEL HOSE & BRAID

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NOMINAL BORE		HOSE TYPE	MINIMUM BEND RADIUS		MAXIMUM WORKING PRESSURE @ 20°C		MAXIMUM TEST PRESSURE @ 20°C	
in	mm	- 1 But	STATIC mm	FLEXING mm	BAR	PSI	BAR	PSI
1/4	6	IUB ISB IDB	16 25 25	100 100 100	10 142 255	145 2060 3700	15 213 383	218 3090 5550
3/8	10	IUB ISB IDB	22 40 40	150 150 150	5.5 104 187	80 1510 2710	8.3 156 280	120 2265 4065
1/2	12	IUB ISB IDB	24 50 50	150 150 150	5.5 91.5 165	80 1325 2400	8.3 137 248	120 1988 3600
3/4	20	IUB ISB IDB	30 70 70	200 200 200	4.1 69.5 125	60 1010 1810	6.2 104 188	90 1515 2715
1	25	IUB ISB IDB	44 90 90	200 200 200	4.1 70.6 120	60 1025 1740	6.2 106 180	90 1538 2610
1 ¹ /4	32	IUB ISB IDB	55 108 108	250 250 250	3.4 45 80	50 653 1160	5.1 67.5 120	75 980 1740
1 1/2	40	IUB ISB IDB	70 127 127	250 250 250	2.4 41 71	35 595 1030	3.6 61.5 107	53 893 1545
2	50	IUB ISB IDB	90 175 175	350 350 350	1.0 30.5 50	15 440 725	1.5 45.8 75	23 660 1088
2 1/2	65	IUB ISB IDB	110 200 200	410 410 410	1.0 25.5 46	15 370 667	1.5 38.3 69	23 555 1000
3	80	IUB ISB IDB	130 200 200	450 450 450	1.0 19.2 34	15 280 493	1.5 28.8 51	23 420 740
3 1/2	90	IUB ISB IDB	175 220 220	510 510 510	0.75 20.6 27	11 300 390	1.13 30.9 40.5	17 450 585
4	100	IUB ISB IDB	200 230 230	560 560 560	0.69 18.4 33	10 267 480	1.04 27.6 49.5	15 400 720
5	125	IUB ISB IDB	250 280 280	710 710 710	0.69 11.5 20.7	10 167 300	1.04 17.3 31	15 250 450
6	150	IUB ISB IDB	290 320 320	815 815 815	0.55 11.2 20	8 162 290	0.83 16.8 30	12 243 435
8	200	IUB ISB IDB	400 435 435	1015 1015 1015	0.31 7 10	4.5 102 145	0.46 10.5 15	6.8 153 218
10	250	IUB ISB	490 560 560	1220 1220 1220	0.25 9.6 17.6	3.6 140 255	0.37 14.4 26.4	5.4 210 382

Minimum Burst Pressure = 4 x Maximum Working Pressure. Maximum pressures also dependant of types of fitting used.

1 bar = 14.50 psi = 0.987 atm = 100 kPa = 1.02 kg/cm²



QUALITY

Paramount importance is given by Interflex Hose & Bellows to the quality of our product and service, and our ability to meet precise customer specifications.

Our commitment to the highest possible standards means that all Interflex assemblies can be supplied, when requested, with the following documentation:

- Material Test Certification (including to DIN 50 049 3.1B).
- Hydraulic Pressure Test Certificates (normally to 1.5 times the design pressure).
- Certificates of Conformity.
- Certificates of Origin.
- Technical Drawings.

All our assemblies are manufactured generally in conformance with BS6501 Pt.1, and with quality assurance in line with BS5750. We can supply complete hose assemblies specified as requiring quality assurance to BS669, ISO9001, MOD DEFSTAN 05-91, Lloyd's standards, etc.

Where normal industrial standards for testing and cleaning are not acceptable, Interflex offer special procedures, including packaging, to ensure the quality and cleanliness of the assembly is retained.

Additionally, our hose assemblies can be permanently etched with any required information.

CONSTRUCTION

Standard Interflex hose assemblies are made from annularly corrugated medium pressure (BS6501 Pt.1 type 'B') tube, in AISI 321 stainless steel to BS1449 Pt.2, & with outer braiding in AISI 304 stainless steel to BS1554.

When required, tube and braid can be supplied in alternative materials such as AISI 316 stainless steel, bronze, monel, etc.

General construction is of the convoluted tube, with a single or double layer of braiding to suit pressure requirements, and welded - or brazed - on end fittings.

DERATING FACTORS

OPERATING TEMPERATURE OC	321 STAINLESS STEEL	316 STAINLESS STEEL
-200 to 50	1.00	1.00
100	.96	.94
150	.92	.90
200	.88	.86
250	.84	.82
300	.80	.78
350	.76	.74
400	.72	.70
450	.66	100
500	.60	
550	.54	
600	.44	

COVERINGS & LININGS

Interflex hose assemblies are offered with a number of options, such as internal PTFE or stripwound linings; and external covers such as thermal insulating glass fibre sleeving, protective coil springs, stripwound covers or heat - shrink sleeving - for where protection from abrasion or chemicals, or where cleanliness or insulation is required.

PRESSURES

Depending upon construction, size and temperature, our hoses will operate from full vacuum up to 3700 psi. For stainless steel hose, please see our main table. Higher pressure ratings can be offered upon request.

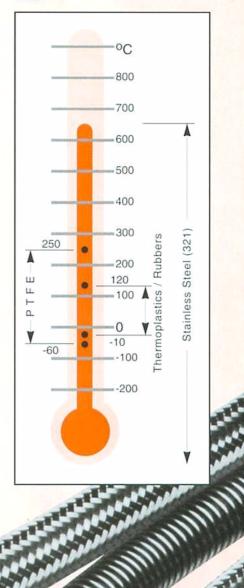
SIZES

Available in a range of sizes, from 6 mm (¹/₄") NB to 250 mm (10") NB. Larger sizes are available upon request.

TEMPERATURE RANGE

Depending on construction, suitable throughout sub-zero temperatures, & up to +600 °C. For hoses operating above +50 °C, the maximum working pressure must be multiplied by a temperature correcting factor.

The derating factors for stainless steel tube are shown left.



MOVEMENT

Braided hoses will only accept lateral movement according to the following formula (not for vibration):

$$L = \sqrt{A \times R \times M}$$

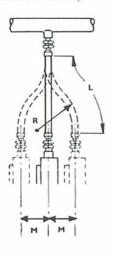
A = 10 for static offset

20 for constant flexing minimum live length

(i.e. excluding end fittings & ferrules)

R = minimum bend radius (see main table)

M = movement (small only)



TYPICAL USES

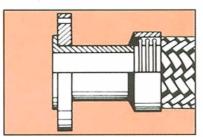
- Water and steam lines
- Pumps and compressors
- Exhaust gases Lub. oils
- Food processing Solvents, resins and corrosive media
- Cable protection Fuels and gas
- Tank settlement Suction lines

END FITTINGS

Interflex offer a full range of flanges, screwed connectors, elbows, quick release couplings, and plain tube ends, plus any kind of special fitting can be manufactured. Materials include carbon steel, all grades of stainless steel, brass, copper, and nickel alloys. Typical end fittings are shown below.

Screwed fittings - generally threaded BSP(T), but NPT, UNF and other threads available.

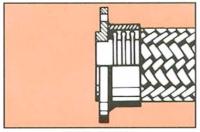
Flanges - to BS10, BS4504, ANSI / ASA, DIN and JIS standards, or as required.



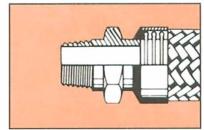
SWIVEL FLANGE



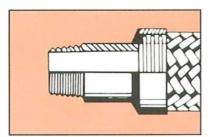
STANDPIPE / PIPE END



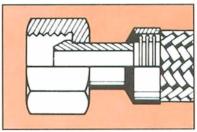
FIXED FLANGE



FIXED HEXAGON MALE



HALF BARREL MALE (WELD NIPPLE)



SWIVEL FEMALE (NUT + NIPPLE) [CONE SEAT OR FLAT FACE]

INDUSTRIES

- Cryogenics and refrigeration
- Marine Iron and steel
- Power generation Defence
- Agro and Petro-chemical
- Heating and ventilation
- Paper and pulp Combustion
- Automotive General process

CUSTOMERS

Our customers are found worldwide, from France and Eire in Europe, and from the Middle - to the Far-East.

They have included the Ministry of Defence, GEC, National Power, ESSO ... even Harrods!



OTHER PRODUCTS

• Sole UK & Eire Agent of MERCER RUBBER Co. Rubber Expansion Joints

- Stainless steel expansion joints
 PTFE hoses and bellows
 Galvanised and stainless steel stripwound
 Vibration eliminators
- Fabric expansion joints ● Custom-built rubber hose assemblies ● Gas cooker hoses ● Composite and thermoplastic hoses

- Flexible ducting Conduit & stayput hoses Pump connectors Flexible exhaust assemblies Jacketted hose assemblies



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