



HD&F has a range of stainless steel flexible corrugated metallic hoses available which are manufactured to BS6501 Part 1 1991 Type B, quality assured standards. The size range is 6mm to 250mm nominal bore.

FOR PROCESS UTILITY APPLICATIONS
PRODUCT TRANSFER
FILLING & DECANTING
HOSE MANAGEMENT

Unbraided hose & bronze assemblies are also available. When placing your enquiry with HD&F, we need to know the overall length of assembly, bore size, size and type of end fittings, pressure, temperature conveyant, flexing requirements and the environment in which the assembly will be operating.

Stainless steel wire braiding is applied externally in single or double layers depending on the hose application, working pressure and operating conditions. Braiding corrugated hose increases its ability to withstand pressure, has increased hoop strength and abrasion resistance.

Corrugated stainless steel hose is capable of operating in a temperature range of -200°C to +600°C, and is ideal for many industrial applications, whether conveying liquids or gases. There are a number of advantages to installing flexible metal hoses, they are:

- High physical strength
- Resistance to penetration and damage
- Good resistance to corrosion
- Suitable for high temperatures up to +600°C
- Suitable for low temperatures down to -200°C
- Fire resistant
- Greater flexibility
- Long life when correctly installed

01 SPM Annular Stainless Steel Corrugated Flexible Metal Hose

Standard pitched medium pressure hose used in vibration and flexing applications.

MATERIALS:

TUBE: BS 1449 Part 2 (1983) 321S31 or 316S11

BRAID: 304 or BS 1554 (1981) 321S31 or 316S31

FLEXIBILITY: Type B, BS 6501 Part 1 (1984)

For high flexing or vibrational application other hose types are available. Please provide details to HD&F.



Unbraided Hose SPM 0



Single Braided SPM 1



Double Braided SPM 2

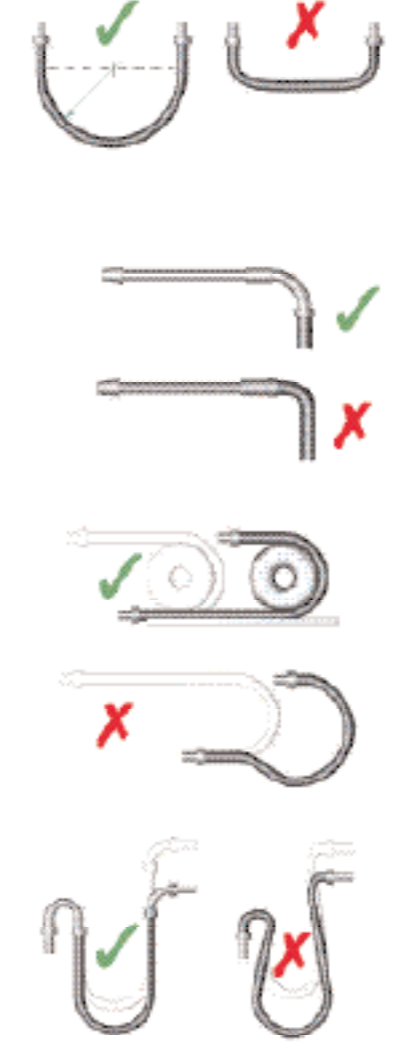
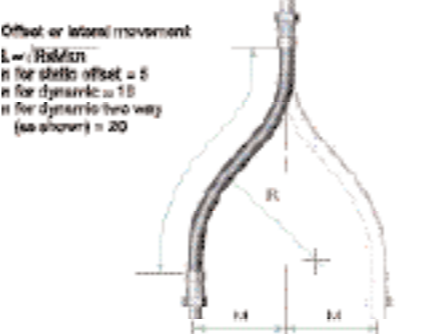
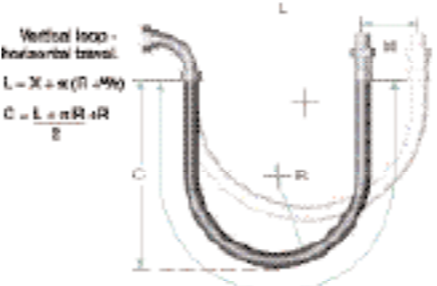
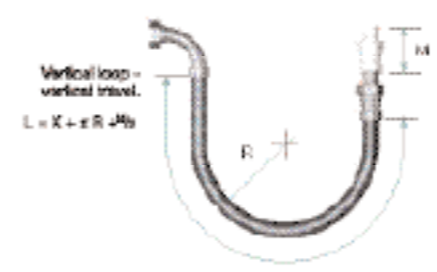
TECHNICAL DATA - METRIC SIZES								
Nom. I.D. (mm)	Hose Type	Min. Hose O.D.	Bore Static	Bore Flexing	Min. BAR Working Pressure	Min. BAR Test Pressure	Min. BAR Burst Pressure	Weight (kg/m)
6	SPM 0	12.9	16	100	10	15	40	0.19
	SPM 1	14.4	28	100	142	213	558	0.20
	SPM 2	15.8	28	100	258	583	1020	0.30
8	SPM 0	12.0	20	140	10	15	40	0.13
	SPM 1	13.7	38	140	138	204	544	0.23
	SPM 2	15.1	38	140	210	515	840	0.38
10	SPM 0	17.7	22	150	88	83	22	0.27
	SPM 1	19.4	40	150	104	156	416	0.48
	SPM 2	21.0	40	150	187	280	748	0.80
12	SPM 0	21.7	24	150	65	83	22	0.38
	SPM 1	23.4	50	150	91.5	137	366	0.68
	SPM 2	25.0	50	150	168	248	660	0.73
15	SPM 0	26.8	28	200	88	75	20	0.58
	SPM 1	28.8	50	200	69.8	104	278	0.88
	SPM 2	29.7	50	200	128	188	500	0.72
20	SPM 0	27.9	30	200	4.1	6.2	16.4	0.45
	SPM 1	29.8	70	200	69.8	104	278	0.78
	SPM 2	31.2	70	200	128	188	500	1.1
25	SPM 0	34.0	44	200	4.1	6.2	16.4	0.60
	SPM 1	37.1	90	200	70.6	100	282	1.0
	SPM 2	39.2	90	200	120	180	480	1.5
32	SPM 0	46.4	58	250	3.4	5.1	13.6	0.80
	SPM 1	48.8	108	250	48.0	67.8	180	1.3
	SPM 2	50.8	108	250	80.0	120	320	1.9
40	SPM 0	54.0	70	250	2.4	3.6	9.6	1.0
	SPM 1	56.6	127	250	41.0	61.5	164	1.7
	SPM 2	58.7	127	250	71.0	107	284	2.4
50	SPM 0	68.0	90	300	1.0	1.5	4.0	1.1
	SPM 1	67.8	178	300	30.8	48.8	122	1.9
	SPM 2	69.9	178	300	50.0	75.0	200	2.6
65	SPM 0	85.4	110	410	1.0	1.5	4.0	1.8
	SPM 1	87.8	200	410	28.8	38.3	102	2.8
	SPM 2	89.7	200	410	48.0	69.0	184	3.8
80	SPM 0	97.8	150	450	1.0	1.5	4.0	2.2
	SPM 1	99.8	200	450	19.2	28.8	78.8	3.8
	SPM 2	102	200	450	34.0	51.0	136	4.4
90	SPM 0	114	178	510	0.78	1.13	3.0	2.8
	SPM 1	117	220	510	20.6	30.9	82.4	4.1
	SPM 2	120	220	510	27.0	40.8	108	5.7
100	SPM 0	126	200	560	0.69	1.04	2.8	2.8
	SPM 1	129	230	560	18.4	27.6	73.6	4.6
	SPM 2	132	230	560	28.0	40.8	102	6.4
125	SPM 0	151	250	710	0.69	1.04	2.8	4.7
	SPM 1	153	260	710	11.8	17.3	48.0	6.8
	SPM 2	156	260	710	20.7	31.0	82.8	9.5
150	SPM 0	178	290	815	0.66	0.83	2.2	5.5
	SPM 1	180	320	815	11.2	16.8	44.8	7.7
	SPM 2	183	320	815	20.0	30.0	80.0	9.9
200	SPM 0	232	400	1015	0.31	0.46	1.34	7.3
	SPM 1	235	420	1015	7.0	11.0	28.0	10
	SPM 2	237	430	1015	10	15	40.0	13
250	SPM 0	287	490	1220	0.28	0.37	1.0	9.2
	SPM 1	292	560	1220	9.6	14.4	38.4	14.7
	SPM 2	-	-	-	-	-	-	-

All the above values are for factory braided & assembled units. This information is given as an aid to hose selection, if the hose is to form an assembly used at the extreme of one or more of the above characteristics, discuss the application with HD&F.

Metallic Hose Installation Guide

DESIGN & INSTALLATION CONSIDERATIONS

Flexible metal hose is usually flexed as shown on this page. To obtain maximum reliability it is essential to calculate the length of an assembly that will not be flexed below the minimum bend radius. The formulae shown here give a guide determining the length of tube required. They are based on standard applications using our current product range. Please discuss any variations with HD&F.



Avoid sharp bends and torsional twisting. Keep flexing in one plane.

L = Minimum live length excluding end fitting ferrule.

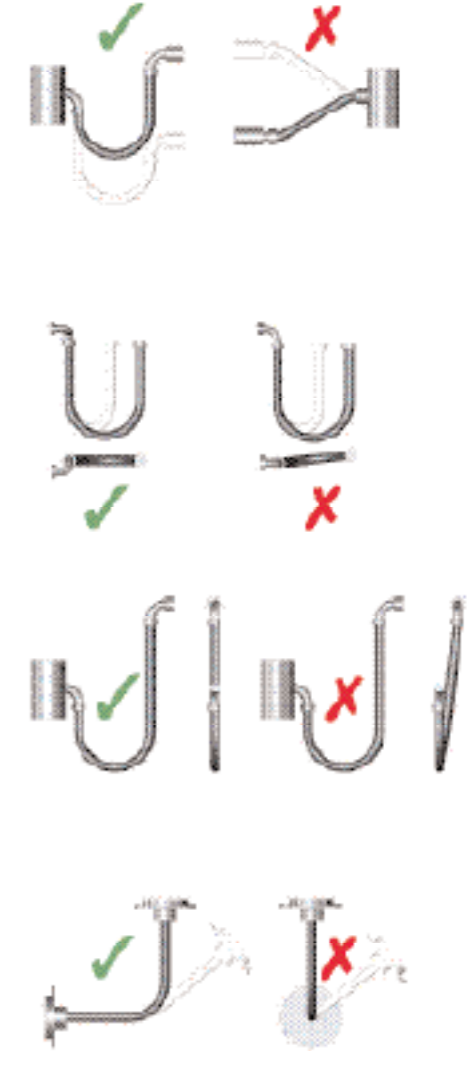
R = Minimum bend radius.

M = Movement

$\pi = 3.142$

X = Extra non-flexed length of hose (given below)

I.D	6	10	15	20	25	32	40	50	65	80
X	50	75	100	125	150	175	200	250	275	300



For easy ordering please specify the following when ordering your hose or simply ask Arco for advice

- S** Size - Hose diameter and length
- T** Operating Temperature
- A** Application - What the hose will be used for
- M** Material - What's going through the hose
- P** Pressure - Recommended ratings, positive pressure or vacuum