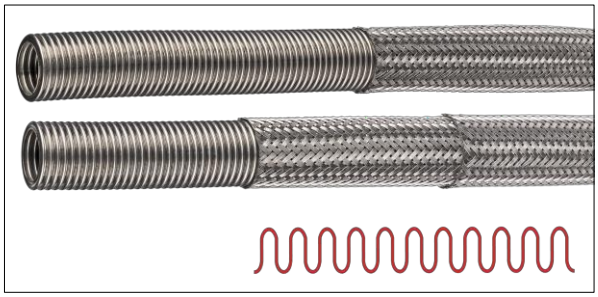
Stainless steel hoses



C-FLEX

Robust industrial vibration-proof steel hose Internal layer: corrugated sheet steel hose

Reinforcement: stainless steel AISI 321 single or double braided with AISI 304 steel

Operating temperature: -200°C to +700°C (pressure temperature-dependent operation)

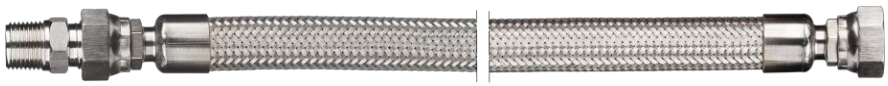
A robust industrial steel hose of English manufacture, with a smaller bending radius and slightly higher working pressure than B-FLEX hose. Made of stainless steel, parallel corrugated, in single or double stainless steel braid. Characterised by a profile with **high, very dense corrugations**, which provides very good flexibility and vibration resistance. Designed for the pressurised transmission of liquids and gases: water, steam, air, hot oil, chemicals. Safety factor of 4:1. Can operate in high vacuum conditions. Available in AISI 316 steel on special request, supplied as complete hoses with welded ends as required. End fittings for steel hoses are shown later in this section.

Mechanical configuration of the cable: according to the introduction to this section of the catalogue. **Check of chemical resistance:** table of chemical resistance of AISI steels 321 (pre-selection), confirmation of resistance and conditions of use by Tubes International. **Use for steam**: see safety instructions in chapter "Steam hoses". **Use of the hose:** according to the "Installation and use instructions for pressurised metal hoses" (IU-04, see introduction to this chapter).

index	size [inch]	DN [mm].	number of braids	Approximate inside diameter [mm]	external diameter [mm]	working pressure 20°C [bar].	testing pressure 20°C [bar].	Bursting pressure 20°C [bar].	bend radius*		mass [kg/m]
									static [mm]	dynamic [mm]	
TB-CFLEX1-006	1/4"	6	1	6	15,0	160	240	640	45	75	0,33
TB-CFLEX2-006			2		17,5	275	412	1100			0,45
TB-CFLEX1-010	3/8"	10	1	10	18,0	138	207	552	54	90	0,48
TB-CFLEX2-010			2		20,5	172	258	690			0,65
TB-CFLEX1-012	1/2"	12	1	12	23,0	103	154	412	60	100	0,60
TB-CFLEX2-012			2		25,5	155	233	620			0,80
TB-CFLEX1-016	5/8"	16	1	16	25,5	65	97	260	69	115	0,75
TB-CFLEX2-016			2		27,5	105	158	420			1,00
TB-CFLEX1-020	3/4"	20	1	20	31,5	62	93	248	69	115	0,75
TB-CFLEX2-020			2		34,5	110	165	440			1,00
TB-CFLEX1-025	1"	25	1	25	37,5	52	78	208	75	125	0,95
TB-CFLEX2-025			2		40,5	90	135	360			1,25
TB-CFLEX1-032	1.1/4"	32	1	32	47,0	42	63	168	90	150	1,40
TB-CFLEX2-032			2		51,0	69	103	276			1,95
TB-CFLEX1-040	1.1/2"	40	1	40	56,5	38	57	152	120	200	1,75
TB-CFLEX2-040			2		60,0	52	78	208			2,45
TB-CFLEX1-050	2"	50	1	50	71,0	34	51	136	165	275	2,45
TB-CFLEX2-050			2		75,0	48	72	192			3,40
TB-CFLEX1-065	2.1/2"	65	1	65	86,5	31	46	124	210	350	3,00
TB-CFLEX2-065			2		91,0	41	61	164			4,20
TB-CFLEX1-080	3"	80	1	80	100,0	27	40	108	240	400	3,55
TB-CFLEX2-080			2		105,0	38	57	152			5,00
TB-CFLEX1-100	4"	100	1	100	130,0	17	25	68	300	500	4,80
TB-CFLEX2-100			2		136,0	20	30	80			6,70
TB-CFLEX1-125	5"	125	1	125	159,0	16	24	64	396	660	7,50
TB-CFLEX2-125			2		165,0	19	28	76			10,20
TB-CFLEX1-150	6"	150	1	150	183,0	10	15	40	456	760	9,10
TB-CFLEX2-150			2		188,0	15	22	60			12,70

* - bend radius measured to the centreline of the hose





Hose TB-CFLEX1-012 (1/2") with AISI 316 stainless steel end fittings: left AF11/AF2 (AF2 end fitting with 1/2" BSPT male thread adaptor) and right AF2 (1/2" BSP female thread, 60° cone). The picture on the left shows details of the connection of the female threaded end to the adaptor - metal-to-metal seal on the 60° cone.