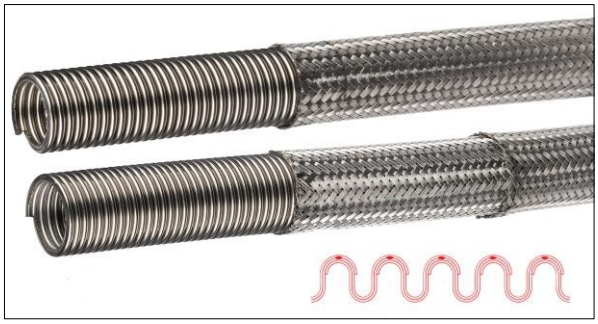
Stainless steel hoses



BOA DUO®

Multilayer spiral corrugated steel hose for high pressures and vibration damping

Inner layer: corrugated hose in AISI 316Ti steel (UHP version - AISI 316L)

Reinforcement: single or double braided with AISI 304 steel

Operating temperature: -273°C to +600°C (pressure temperature-dependent operation)

A special **high-pressure** double-walled steel hose with spiral folds made by cold forming and electric welding according to a process patented in Switzerland. The corrugated steel strip is helically wound and resistance-welded on the upper fold of the tube. The double and, on the upper fold, triple wall of the hose tube provides exceptional strength and durability with high flexibility and a small bending radius at the same time. Depending on the reinforcement version (A, B or C) fitted with one or more high-strength stainless steel braids, also available without braid. With a safety factor of 4:1, the hose is also characterised by very good vibration damping, not transmitting vibrations between equipment. It meets the requirements of ISO 10380 and is suitable for liquids and gases for high-pressure applications and for all types of pipework under severe conditions. Used, among others, in equipment for engines, pumps, compressors, as a universal vibration damper, for high-pressure gas installations. The available UHP version (DN5 and DN6) with increased working pressure is particularly suitable for hoses for filling high-pressure gas cylinders. The hose is supplied in the form of ready-to-use complete hoses with welded-on end fittings as ordered by the customer. End fittings for steel hoses are shown in the following section.

Mechanical configuration of the tube: according to the introduction to this chapter of the catalogue. Chemical **resistance check: chemical** resistance table for AISI 316Ti steel (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 metallic pressure hoses" (IU-04, see introduction to this chapter).



TB-DUO-X-... (without braid)



TB-DUO-... (braided type A)



TB-DUO-B... (braided or braided type B)



TB-DUO-C... (type C braids)

index (AISI 316Ti steel hose, AISI 304 braided hose)	manufacturer's identification	size		braid type	internal 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]	standard length [m]
		[inch].	DN [mm].							static [mm]	dynamic [mm]		
TB-DUO-X-005	M-0004867 1)	3/16"	5	-	5,2	8,7	8	12	32	20	75	0,10	15÷ 22
TB-DUO-005	M-0018048 1)			A		9,9	200	300	800		75	0,17	
TB-DUO-B-005	M-0012953 1)			B		11,1	270	405	1080		120	0,25	
TB-DUOUHP-05**	M-0040158	3/16"	5	GS	5,2	12,6	395	593	1580	20	100	0,35	15÷ 22
TB-DUO-X-006	M-0004868 1)	1/4"	6	0	6,3	9,8	7,5	11,3	30	25	80	0,11	15÷ 22
TB-DUO-006	M-0018826 1)			A		11,0	175	263	700		80	0,18	
TB-DUO-B-006	M-0017608			B		12,2	250	375	1000		140	0,26	
TB-DUOUHP-06**	M-0038493	1/4"	6	GS	6,3	13,7	350	525	1400	25	140	0,4	15÷ 22
TB-DUO-X-008	M-0004870 1)	5/16"	8	-	8,2	12,4	6,5	9,8	26	32	100	0,19	15÷ 22
TB-DUO-008	M-0023369 1)			A		13,6	150	225	600		100	0,34	
TB-DUO-B-008	M-0016848			B		14,8	200	300	800		165	0,48	
TB-DUO-X-010	M-0004856	3/8"	10	-	10,2	14,4	5,5	8,3	22	38	115	0,21	15÷ 22
TB-DUO-010	M-0011068 1)			A		15,6	130	195	520		115	0,36	
TB-DUO-B-010	M-0026701			B		16,8	175	263	700		190	0,51	
TB-DUO-X-012	M-0004857	1/2"	12	-	12,2	17,3	5	7,5	20	45	125	0,28	15÷ 22
TB-DUO-012	M-0007305 1)			A		18,5	110	165	440		125	0,42	
TB-DUO-B-012	M-0027722			B		19,7	160	240	640		210	0,56	
TB-DUO-X-016	M-0004859 1)	5/8"	16	-	16,2	21,3	3,2	4,8	12,8	58	145	0,34	15÷ 22
TB-DUO-016	M-0016792 1)			A		22,9	90	135	360		145	0,61	
TB-DUO-B-016	M-0029551			B		24,5	130	195	520		250	0,88	
TB-DUO-X-020	M-0004861 1)	3/4"	20	-	20,2	26,7	2,5	3,8	10	70	170	0,58	15÷ 22
TB-DUO-020	M-0016793 1)			A		28,3	80	120	320		170	0,87	
TB-DUO-B-020	M-0031842			B		29,9	110	165	440		285	1,19	
TB-DUO-X-025	M-0004862 1)	1"	25	-	25,2	31,7	2	3	8	85	195	0,65	15÷ 22
TB-DUO-025	M-0013189 1)			A		33,3	65	98	260	85	195	1,10	
TB-DUO-B-025	M-0026712			B		34,9	95	143	380	85	325	1,55	
-	-			C		36,5	135	203	540	130	325	1,99	

* - bend radius measured to the centreline of the hose; ** - UHP - hose - AISI 316L steel, braided AISI 304 (1)) -most popular sizes and versions; (2) ()) -sizes and versions on special order; sizes and versions without manufacturer's indexes and markings indicated - may be available with the appropriate minimum quantity.