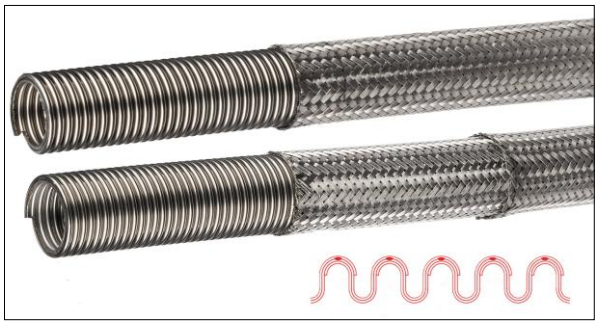
Stainless steel hoses



BOA DUO®

Multi-layer spirally corrugated steel hose for high pressures and vibration damping

Inner layer: corrugated hose made of AISI 316Ti steel (UHP version – AISI 316L)

Reinforcement: single or double AISI 304 steel braid

Working temperature: from -273°C to +600°C (pressure dependent on pressure temperature)

Special **high-pressure** double-wall steel hose with spirally arranged corrugations produced by cold forming and electric welding using a process patented in Switzerland. The corrugated steel strip is spirally wound and resistance-welded on the upper corrugation of the tube. The double, and on the upper corrugation triple, tube wall ensures exceptional strength and service life together with high flexibility and small bend radius. Depending on the reinforcement version (A, B or C) fitted with one or more high-strength stainless steel braids, also available without braid. Safety factor 4:1. The hose also features very good vibration damping, not transmitting vibrations between devices. Complies with ISO 10380. Designed for liquids and gases in high-pressure applications and all types of piping installations in heavy-duty conditions. Used among others in engine, pump, compressor equipment, as a universal vibration damper, for high-pressure gas installations. The available UHP version (DN5 and DN6) with increased working pressure is intended especially for high-pressure gas cylinder filling lines. The hose is supplied as ready complete lines (hoses) with welded-on ends, according to customer order. Ends for steel hoses are shown later in this chapter.

Mechanical line configuration: as per the introduction to this catalogue chapter. **Chemical resistance check:** chemical resistance table for AISI 316Ti steel (preliminary selection), confirmation of resistance and application conditions by Tubes International. **Application for steam**: see safety notes in the chapter "Steam hoses". **Line use:** as per the "Installation and operating instructions for pressurised metal hoses" (IU-04, see the introduction to this chapter).



TB-DUO-X-… (without braid)



TB-DUO-… (type A braid)



TB-DUO-B… (type B braid or braids)



TB-DUO-C… (type C braids)

index (hose in AISI 316Ti steel, AISI 304 braid)	designation of mfr	size		type braid	diameter inner [mm]	diameter outer [mm]	working working 20°C [bar]	working test 20°C [bar]	working burst 20°C [bar]	bend radius*		weight [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 hose centreline; ** - UHP – hose - AISI 316L steel, AISI braid 304 [1] – most popular sizes and versions; [2] – sizes and versions to special order; sizes and versions without the stated indices and manufacturer designations – may be available at an appropriate minimum quantity.