



HIGH-PRESSURE HOSES

High-pressure hoses from WIRO

Our high-pressure hoses are specially designed for high pressure and clean gases. They are being used for example in gas filling stations and between gas cylinders and regulators. High-pressure hoses are available in several materials, most common are PTFE, ETFE and the only non-permeation hose material, stainless steel.

WE HAVE SEVERAL TYPES OF HIGH-PRESSURE HOSES AVAILABLE

Our high-pressure hoses are designed with a specially made inner tubing of PTFE, ETFE or stainless steel. Outside the tube is wrought a special braid made of stainless steel and in some applications also *Kevlar™*. All fittings are machined out of approved materials like stainless steel 316 or 316L and for some applications out of brass.

The welding is done by validated welders manually or when possible by an automatic orbital TIG welding system.

To obtain the highest possible level of security possible for a high-pressure hose, we can add a unique patented passive safety system called the *Lifeguard™*. Please read the special data sheet.

QUALITY

We are approved by *RISE* to CE mark our high-pressure products according to the *Medical Device Directive MDD 93/42/EEC*.

For more than 30 years, WIRO has been a supplier to many gas companies. Together with our customers we have developed the knowledge and experience needed to design and manufacture safe and secure gas applications.

We offer our customers technically advanced solutions to a reasonable price level.



Stainless steel high-pressure hose



PTFE high-pressure hose

STAINLESS STEEL HIGH-PRESSURE HOSE

The convoluted inner tube is made in stainless steel, material grade *AISI 316L*, and the braid in stainless steel, material grade *AISI 304*.

The unique convoluted profile makes the hose flexible even under high pressure. The braid is closely wrought over the tube, making the high-pressure hose suitable for very high pressures. The stainless steel alternative is often used when the demands are high regarding purity, due to the fact that the stainless steel high pressure hose is 100% free from permeation.

part number	inner diameter	external diameter	number of braids	min bending radius		max working pressure	max test pressure	burst pressure	weight
	mm +/- 0,2	mm +/- 0,5		single motion	repeted motion				
						bar	bar	bar	kg/m
3581006BSZ	6	12,2	1	30	190	335	503	1350	0,26
3592006BSZ	6	14,4	2	30	190	420	742	1680	0,44
3582006BST	6	14,3	2	30	190	330	495	1320	0,4
3582008BSI	8	15,4	2	65	140	240	360	960	0,5
3592010BST	10	19,6	2	45	250	250	375	1000	0,63
3582012BST	12	22,9	2	55	300	225	338	900	0,84



PTFE HIGH-PRESSURE HOSES

PTFE high-pressure hoses are often used as standard choice in gas filling stations. The smooth tube is a thick-walled PTFE hose with a closely wrought stainless steel braid over the tube. The PTFE hoses are suitable for many gases. For example, oxygen, nitrogen, argon, carbon dioxide, acetylene, and air.

part number	antistatic	inner diameter	outer diameter	number of braids	min bending radius	max working pressure	burst pressure
		mm	mm		mm	bar	bar
424-05	No	4,93	8,00	1	51	206	827
424-06	No	6,60	10,16	1	64	200	800
425-06	No	6,60	11,43	2	76	320	1279
425-08	No	8,05	13,00	2	76	275	1103
427-06	Yes	6,60	11,43	2	76	320	1279

part number	inner diameter	outer diameter	number of braids	min bending radius	max working pressure	burst pressure
	mm	mm		mm	bar	bar
443-06	6,2	12,3	3	38	475	1900
443-08	8,1	14,2	3	47	450	1800
443-12	12,2	19,0	3	74	425	1700
443-16	15,1	22,0	3	90	360	1440
443-25	23,0	31,8	3	200	250	1000

We have a "high performance" PTFE high-pressure hose with an inner braid of Aramid and an outer braid of stainless steel, *AISI 304*. The hose is coated with a *Hytrel* cover. The cover is available in several colors. Please note that the maximum temperature for the *Hytrel* cover is 120°C.

part number	hytrel color	antistatic	inner diameter	outer diameter	number of braids	min bending radius	max working pressure	burst pressure
			mm	mm		mm	bar	bar
6304-06	Black	No	6,35	11,25	2	76	414	1654
6304-06HB	Blue	No	6,35	11,25	2	76	414	1654
6306-06HR	Red	Yes	6,35	11,25	2	76	414	1654
6307-10	Black	No	10,3	17,15	2	133	310	1241
6306-10HR	Red	Yes	10,3	17,15	2	133	310	1241

ETFE HIGH-PRESSURE HOSES

ETFE hoses have a higher density than PTFE hoses and is better suited for gases like hydrogen and helium. The braid design is equal to the braid of PTFE hoses.

part number	inner diameter	outer diameter	number of braids	min bending radius	max working pressure	burst pressure
	mm	mm		mm	bar	bar
434-06	6,60	10,16	1	76	200	800
435-06	6,35	11,43	2	76	320	1280
435-08	8,05	12,74	2	102	275	1103



Our pressure test certificate of the manufactured batch is sent together with the goods. Copies are archived for minimum 10 years.

We ensure that necessary levels of purity are obtained, cap the fittings and pack them individually in plastic bags. We also label all products with batch number to ensure traceability.