



## Types of fittings for high-pressure hoses

TWO-PART FITTINGS - CUTTING THE OUTER AND INNER LAYER OF RUBBER			
tips	sleeves	Material / coating of fittings	hoses
TI-IL (TI-IL...SS)	TI-IL4	Carbon steel with zinc-nickel coating	4SH / R13 / R15
	TI-IL13		R13 / R15
	TI-IL4-...SS	stainless steel	4SH / R13 / R15
	TI-IL13-...SS		R13 / R15

### Selection of lugs and collets (material and plating)

When selecting fittings (end fittings and collets) for a particular type of hose, care should also be taken to ensure that both components are made of the same material and coated with the same galvanic coating.

Example: 1/2" BSP female threaded end, 60° cone seal for DN10 non-cutting double braided steel hydraulic hose in accordance with EN853 2SN (index: HW-2SN-10) for three different configurations:

tips	sleeves	Material / coating of fittings
TI-ZBW110-08-08	TI-Z2TX-08	carbon steel, galvanised
<b>TI-ZBW110-08-08-CN</b>	<b>TI-ZF12T-08-CN</b>	Carbon steel with zinc-nickel coating
<b>TI-ZBW110-08-08-SS</b>	<b>TI-ZF12T-08-SS</b>	stainless steel

### Fitting material, corrosion resistance and operating temperature range

Galvanised carbon steel: from -40°C to +200°C (for requirements of a specific minimum impact strength at sub-zero temperatures, please contact Tubes International, above 120°C working pressure correction recommended). NBR (nitrile) sealing: from -25°C to +100°C. Corrosion resistance (appearance of red rust on components tested in salt chamber according to EN ISO 9227:2017-06): > 350 h.

Carbon steel with zinc-nickel coating: from -40°C to +200°C (for requirements of a specific minimum impact strength at sub-zero temperatures, please contact Tubes International, above 120°C working pressure correction recommended). NBR (nitrile) sealing: from -25°C to +100°C. Corrosion resistance (appearance of red rust on components tested in salt chamber according to EN ISO 9227:2017-06): > 700 h.

AISI 316 stainless steel: from -270°C to +800°C (above 120°C working pressure correction recommended). FKM (viton) seal: from -20°C to +200°C.

tip material	Pressure reduction value depending on operating temperature									
	-60°C	-40°C	+20°C	+50°C	+100°C	+120°C	+150°C	+175°C	+200°C	+250°C
steel	-	0%				11%	19%		28%	

