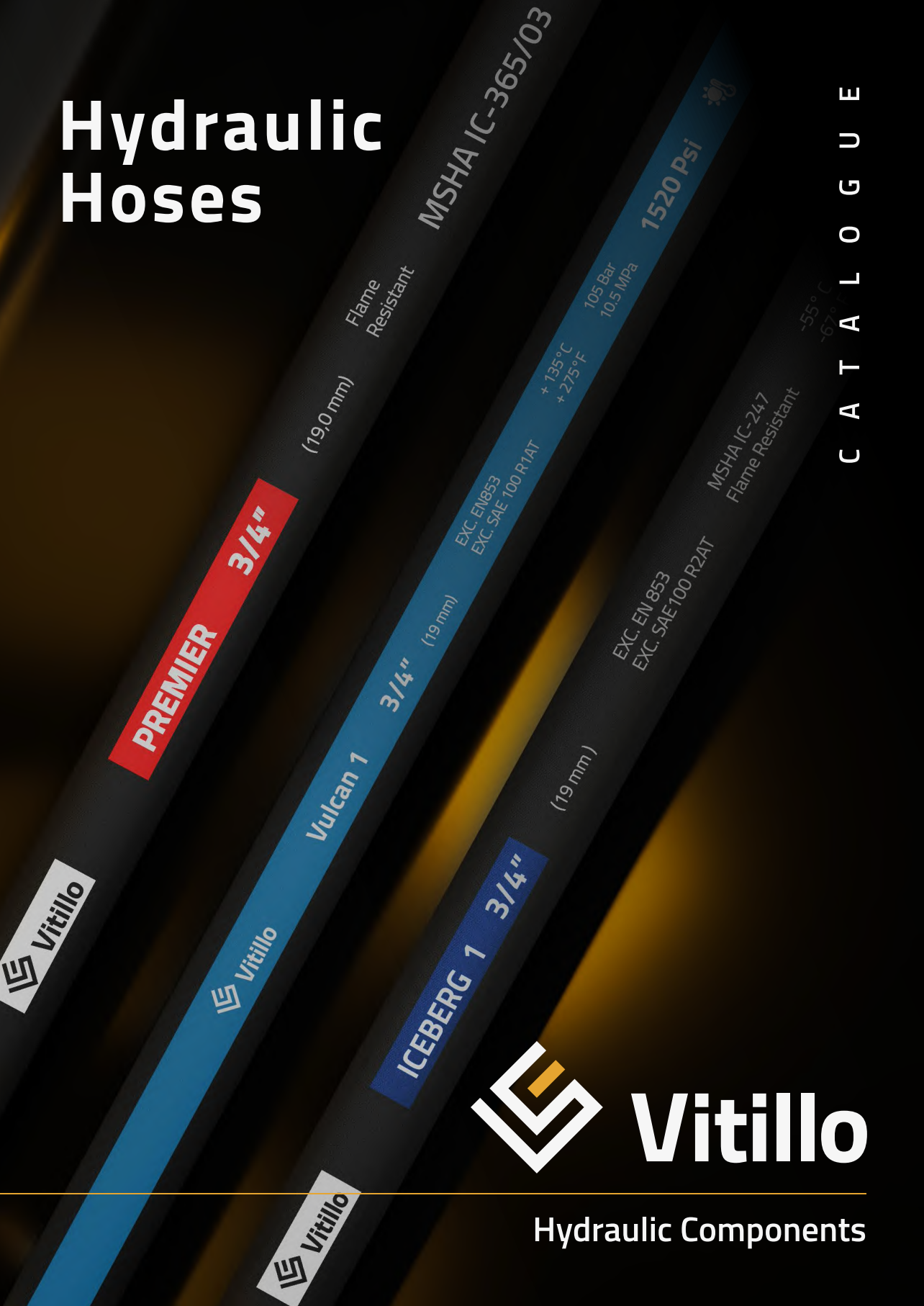
Hydraulic Hoses



Vitillo

Hydraulic Components

VISIONARY
PROFESSIONAL
CREATIVE
DYNAMIC
LEADER
RELIABLE
INNOVATIVE

HYDRAULIC HOSES

Vitillo

CATALOGUE


Vitillo
Vitillo

Vitillo

The Vitillo Group, founded in 1991 by the Vitillo family, is now a leading reality in the **hydraulic field**, able to provide customers a **complete service** for **engineering**, **design**, **production** and **distribution** of **fittings** and **adapters** (in stainless steel and carbon steel with CRIII or Zn-Ni treatment), **rigid pipes** and **flexible hoses** for high and medium pressure and integrated hydraulic systems (flexible, rigid assemblies, manifold blocks).

RANGE

One of the strong points of the Group is the **width** and **completeness** of the offered product range.
An highly qualified engineering staff is able to respond to specific requirements with **customized** and **optimized** products too.

MARKET

The products offered are used in **various industrial fields**: agriculture, earthmoving, nautical, construction, cargo handling, aerospace applications, energy industry and many others.
The Group's products are distributed directly through logistics and distribution centers, but also through business partners. The presence in major and strategic importance areas ensures an **optimal market coverage**.

+35.000 different products processed

+50 Countries around the World supplied

PRODUCTION

Vitillo Group has always stood out for the high quality of its products. For this reason, **every phase of the production and distribution chain** is managed internally and strictly controlled. Total control of the hose-fitting system from the creation of the compound to the production of the hoses, from molding (hot and cold) to turning, up to the galvanic treatment of the fittings, is the **key to excellence.**

12 Production plants

5 Distribution Centers

3 Bending and Assembly Centers

1 R&D Innovation Center

1991 **Vitillo S.p.A.** was founded

2001 - 2005 The production of **adapters** for rigid pipes and of braided and spiral hoses complements the production of **fittings for flexible hoses**

2006 Centro Mescole Sud S.p.A. is acquired. Production of **rubber hose compounds** is internalized in order to improve quality and protect the know-how generated

2008 - 2015 The **internationalization of the Group** is started with the establishment of:

- **Vitek Doo**, a Macedonian company specializing in hose production,

and distribution centers:

- **Vitillo U.S.A.**
- **Vitillo Germany**
- **Vitillo Poland**

2018 **Vitillo R&D Innovation Center**, an advanced laboratory for research, continuous improvement and product testing, is born

2019 **Bijuk**, a Croatian company specialized in the production of fittings and adapters in stainless steel is acquired

2021 **Osca Sistemas**, a Spanish company specialized in the production of shaped rigid pipes, assembled hydraulic hoses and manifold blocks is acquired

PRODUCT RANGE

*Available in:
Cr III
Zn-Ni
Stainless Steel

***DIN 24° ADAPTERS**
DIN 2353

***HYDRAULIC FITTINGS**
ISO 12151 - SAE J516

***JIC ADAPTERS**
SAE J 514

***BSP ADAPTERS**
BSP 5200

***ORFS ADAPTERS**
ORFS J1453

HYDRAULIC HOSES
Braided - spiral - special hoses

SHAPED RIGID PIPES

Vitillo is the ideal solution for any hydraulic application.
Spiral and braided hoses with metal and textile reinforcement, rigid pipes, standard, interlock and hyperspiral press fittings, all types of adapters, and custom specialty fittings.
All our fittings and adapters are available with Zinc Chromium III or Zinc-Nickel surface treatments or in stainless steel.

WHATEVER YOUR NEEDS, VITILLO HAS THE SOLUTION.

APPLICATIONS

Vitillo









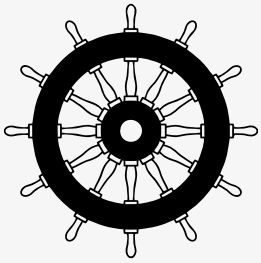




CERTIFICATIONS

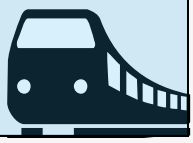
DNV

U.S. Department of Labor
MSHA
Mine Safety & Health Administration



Marine Equipment Directive (MED)

EN 45545-2
R22/R23 for HL 1-3



LAPI SPA
ISO15540 : 2016

ISO
9001 : 2015
45001 : 2018
14001 : 2015
10012 : 2003

PCA
Polskie Centrum Akredytacji
Certyfikacja Wyrobów

AC 149

HOSES & FITTINGS MATCHING

Vitillo

HOSE REFERENCE	CRIMPING WAY	SUGGESTED FERRULES at size/DN										
		5	6	8	10	12	16	19	25	31	38	51
		03	04	05	06	08	10	12	16	20	24	32
ALPI 3300	No skive		B1SC									
			ONE-PIECE									
ALPI 4000	No skive				B12T..N							
			B1SC									
			ONE-PIECE									
EVEREST 3000	No skive									B5K206		
										HB6NS		
	Ext. skive										B9R	
EVEREST 4000	No skive					B5K				B5K204		
						HB4NS						
	Ext. skive					B9R						
EVEREST 5000	No skive					B5K				B5K204		
						HB4NS					HB6NS24	
	Ext. skive					B9R						
	Double skive							KB4SH			KBH13	
EVEREST 5500	No skive							HB4NS				
	Ext. skive							B9R				
	Double skive							KB4SH				
EVEREST 6000	No skive				HB4NS					HB6NS		
	Ext. skive		B9R		B9R							
	Double skive						KB4SH			KBH13		
EVEREST 7300	Double skive							KB4SH		KBH13		
EVEREST 4C 6000	No skive							B5K		B5K204		
								HB4NS				
	Ext. skive							B9R				
	Double skive							KB4SH				
TEKNO 1SC	No skive		B1SC									
			B1K									
			ONE-PIECE									
TEKNO 1SN	No skive		B12T									
			B1SC									
			B1T									
			ONE-PIECE									
TEKNO 2SC	No skive		B12T..N									
			B1SC									
			ONE-PIECE									
TEKNO 2SN	No skive		B12T									
			B2T									
TEKNOSPIR /4SP	No skive				B5K					B5K206		
					HB4NS					HB6NS		
	Ext. skive		B9R		B9R							
	Double skive						KB4SH					
TEKNOSPIR /4SH	No skive							B5K		B5K204		
							HB4NS					
	Ext. skive										B4SH	
	Double skive						KB4SH					
TEKNOSPIR /12	No skive				B5K					B5K206		
					HB4NS					HB6NS		
	Ext. skive				B9R							
											B4SH	
TEKNOSPIR /13	No skive							HB4NS			HB6NS24	
	Double skive							KB4SH			KBH13	
TEKNOSPIR /15	No skive						HB4NS			HB6NS		
	Ext. skive							KB4SH			KBH13	
TEKNO 1SC PLUS	No skive		B1SC									
			B1K									
			ONE-PIECE									
TEKNO 2SC PLUS	No skive		B12T..N									
			B1SC									
			ONE-PIECE									

Standard Fittings

One-Piece Fittings

Hyperspiral Fittings

Interlock Fittings

VulcanAir Fittings

HOSES & FITTINGS MATCHING

HOSE REFERENCE	CRIMPING WAY	SUGGESTED FERRULES at size/DN										
		5	6	8	10	12	16	19	25	31	38	51
		03	04	05	06	08	10	12	16	20	24	32
SMART ONE	No skive		B1K		B1K							
			B1SC					B1SC				
			ONE-PIECE									
SMART TWO	No skive		B12T..N									
			ONE-PIECE									
PREMIER ONE	No skive		B1K									
			ONE-PIECE									
PREMIER	No skive		B12T..N									
			ONE-PIECE									
LIFT-PLUS	No skive										B12T..N	
								B1SC				
										B1K		
										B1T		
	Ext. skive									B1R		
SLIM	No skive		B1SC					B1SC				
			B1K						B1K			
		B7R										
			ONE-PIECE									
SERVOCOMANDO	No skive		B1SC									
			ONE-PIECE									
TEKNOJACK	No skive		B12T..N		B12T..N							
TEKNOMASTER	Ext. skive		B2R									
FORTHREE	No skive				B5K			B5K	B5K			
	Ext. skive		B2R		B2R							
DOLOMITI 1	No skive		B12T									
			B1SC									
			B1T									
			ONE-PIECE									
DOLOMITI 2	No skive		B12T									
			B2T									
			ONE-PIECE									
PREMIER ICE	No skive		B12T..N									
			ONE-PIECE									
FORTHREE ICE	No skive				B5K			B5K	B5K			
	Ext. skive		B2R		B2R							
EVEREST 6000 ICE	No skive				HB4NS					HB6NS		
	Ext. skive		B9R		B9R							
	Double skive						KB4SH			KBH13		
EVEREST 4C 6000 ICE	No skive							B5K	B5K204			
								HB4NS				
	Ext. skive							B9R				
	Double skive							KB4SH				
ETNA	No skive		B12T..N									
			ONE-PIECE									
TEKNO 1SN RW	No skive								B12T..N			
									B1T			
TEKNO 2SN RW	No skive		B12T									
			B2T									
PREMIER ONE RW	No skive		B1K									
			ONE-PIECE									
PREMIER RW	No skive		B12T..N									
			ONE-PIECE									
TEKNO 2TE RW	No skive		B7R									
			B1K					B1K			B1K	
		B1T										
								B3R				
TEKNO 3TE RW	No skive		B3R									
	No skive	B1T									B1T	

Standard Fittings

One-Piece Fittings

Hyperspiral Fittings

Interlock Fittings

VulcanAir Fittings

HOSES & FITTINGS MATCHING

Vitillo

HOSE REFERENCE	CRIMPING WAY	SUGGESTED FERRULES at size/DN										
		5	6	8	10	12	16	19	25	31	38	51
		03	04	05	06	08	10	12	16	20	24	32
VULCAN 1	Ext. skive	B1R										
VULCAN 2	Ext. skive	B2R										
VULCANAIR	No skive				BVA							
TEKNOJET 1SC 250	No skive		B1SC									
TEKNOJET 1SN 250	No skive		B12T..N									
			B1SC									
	Ext. skive		B1R									
TEKNOJET 2SC 400	No skive		B12T..N									
			B1SC									
TEKNOJET 2SN 400	Ext. skive		B12T..N									
	No skive		B2R									
TEKNOJET 1SN PLUS 315	Ext. skive	B1R										
TEKNOJET 2SN PLUS 600	Ext. skive	B2R										
CLEANFARM 2SC	No skive		B12T..N									
			B1SC									
CLEANFARM 2TE	No skive					B1K						
						B7R						
SEWER CLEANING	No skive					BSW		BSW				
TEKNOBLAST	Ext. skive				WB4			WB4				
TEKNOBLAST PLUS	Ext. skive				WB4			WB4				
TEKNOBLAST SUPERB	Ext. skive					WB6		WB6				
TEKNO 1TE/R6	No skive	B7R04	B7R									
			B1K									
		B1T										
		B6R										
TEKNO 2TE	No skive		B7R									
			B1K					B1K			B1K	
		B1T										
							B3R					
TEKNO 3TE	No skive		B3R									
	No skive	B1T									B1T	
TEKNO R4	No skive									B3R		B12T32N
											B1T	
												B12T..N
TEKNO R7/ R7 NON COND.	No skive	B7R										
			B1K									
TEKNO R8 / R8 NON COND.	No skive	B7R										
			B1K									
TEKNO MTH1	No skive	B7R										
			B1K									
TEKNO MTH2	No skive	B12T..N										
TEKNO MTKH	No skive		B12T..N		B12T..N			B12T..N				
TEKNO FHL	No skive	BPTFE										
TEKNO FHM	No skive	BPTFE										
TEKNO FHM-DC	No skive	BPTFE				BPTFE						
			B7R									

Standard Fittings

One-Piece Fittings

Hyperspiral Fittings

Interlock Fittings

VulcanAir Fittings

HOSE BY WORKING PRESSURE

HOSE REFERENCE	REFERENCE STANDARD	WORKING TEMP. (°C)	WORKING PRESSURE (bar) at size/DN									
			5	6	8	10	12	16	19	25	31	38	51
			03	04	05	06	08	10	12	16	20	24	32
ALPI 3300	EXC. SAE 100 R17, EXC. ISO 11237 R17	- 40/+100	225	225	225	225	225	225	225	225			
ALPI 4000	EXC.SAE 100 R19, EXC. ISO 11237 R19	- 40/+100		280	280	280	280	280	280	280			
EVEREST 3000	ISO 18752	- 40/+121									210	210	210
EVEREST 4000	ISO 18752, EXC. SAE 100 R12	- 40/+121				280	280	280	280	280	280	280	280
EVEREST 5000	ISO 18752, EXC. SAE 100 R13	- 40/+121					350	350	350	350	350	350	350
EVEREST 5500	ISO 18752	- 40/+121							380	380			
EVEREST 6000	ISO 18752, EXC. SAE 100 R15	- 40/+121		420		420	420	420	420	420	420	420	420
EVEREST 7300	EXC. SAE 100 R15	- 40/+100							500	500	500		
EVEREST 4C 6000	EXC. SAE 100 R15	- 40/+121							420	420	420		
TEKNO 1SC	EN 857 1SC, ISO 11237	- 40/+100	250	225	215	180	160	130	105	88	70	60	45
TEKNO 1SN	EN 853 1SN, SAE 100 R1AT	- 40/+100	250	225	215	180	160	130	105	88	63	50	40
TEKNO 2SC	EN 857 2SC, ISO 11237	- 40/+100		400	350	330	275	250	215	165	125	100	90
TEKNO 2SN	EN 853 2SN, SAE 100 R2AT	- 40/+100	415	400	350	330	275	250	215	165	125	100	90
TEKNOSPIR /4SP	EN 856 4SP, ISO 3862 4SP	- 40/+100		500		460	425	400	380	320	210	185	175
TEKNOSPIR /4SH	EN 856 4SH, ISO 3862 4SH	- 40/+100						450	420	385	350	300	250
TEKNOSPIR /12	EN 856 R12, SAE 100 R12	- 40/+121				280	280	280	280	280	210	175	175
TEKNOSPIR /13	EN 856 R13, SAE 100 R13	- 40/+121							350	350	350	350	350
TEKNOSPIR /15	SAE 100 R15, ISO 3862 R15	- 40/+121						420	420	420	420	420	420
TEKNO 1SC PLUS	EXCEED EN 857 1SC, EXCEED ISO 11237 1SC	- 40/+100		290	255	230	200	160	150	110	100	75	60
TEKNO 2SC PLUS	EXC. EN 857 2SC, EXC. ISO 11237	- 40/+100		420	400	350	310	280	270	210	170	140	100
SMART ONE	EXC. EN 857 1SC, EXC. ISO 11237	- 40/+100		270	255	250	225	160	150	110			
SMART TWO	EXC. EN 857 2SC, EXC. ISO 11237	- 40/+100		430	400	350	310	280	270	210			
PREMIER ONE	EXC. EN 857 1SC, EXC. ISO 11237	- 40/+121		290	270	260	240	210	170	135	110	90	75
PREMIER	EXC. EN 857 2SC, EXC. ISO 11237	- 40/+121		450	425	390	350	350	300	230	180	150	120
FORTHREE ICE		- 55/+100				500	470	410	380	330			
LIFT-PLUS	EN 81.2	- 40/+100							50	50	50	50	45
SLIM	0	- 40/+100	150	150	150	150	150	150					
SERVOCOMANDO	0	- 40/+100	250	250	250	250	250						
TEKNOJACK	IJ100 HYDRAULIC JACK SPECIFIC	- 40/+100		725		725							
TEKNOMASTER		- 40/+100		490	480	400	360	350	320	250			
ETNA	SAE 100 R16	- 40/+125		350	300	280	250	230	210	200			
DOLOMITI 1	EN 857 1SC, ISO 11237	- 55/+100		225	215	180	160	130	105	88	70	60	45
DOLOMITI 2	EN 857 2SC, ISO 11237	- 55/+100		400	350	330	275	250	215	165	125	100	90
PREMIER ICE	EXC. EN 857 2SC, EXC. ISO 11237	- 55/+100		450	425	390	350	350	300	230	180	150	120
FORTHREE		- 40/+100				500	470	410	380	330			
EVEREST 6000 ICE	ISO 18752, EXC. SAE 100 R15	- 55/+100		420		420	420	420	420	420	420	420	420

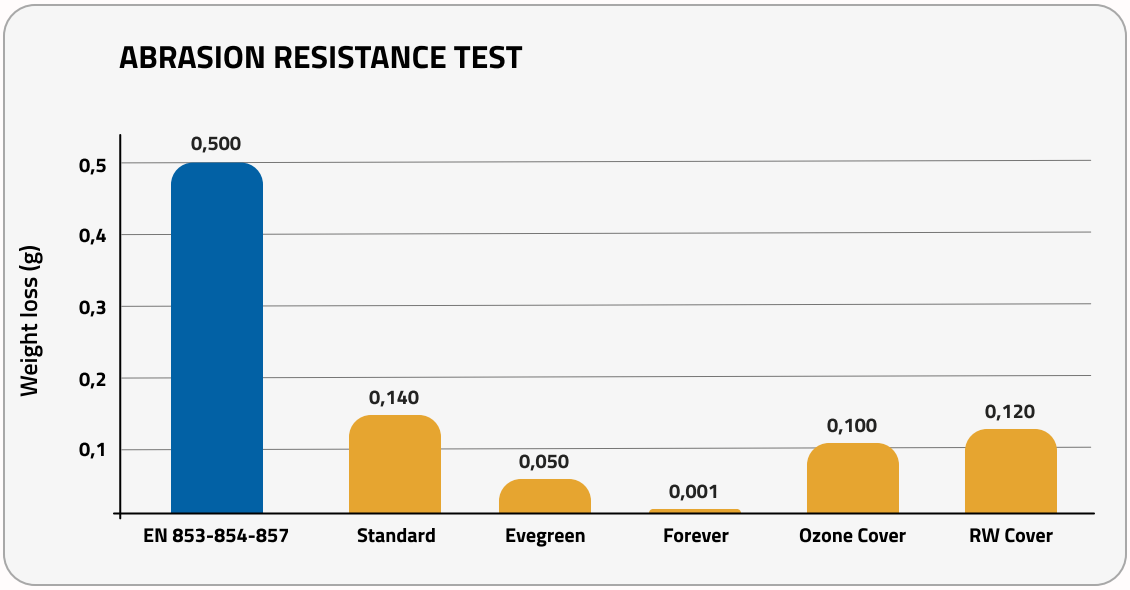
HOSE BY WORKING PRESSURE

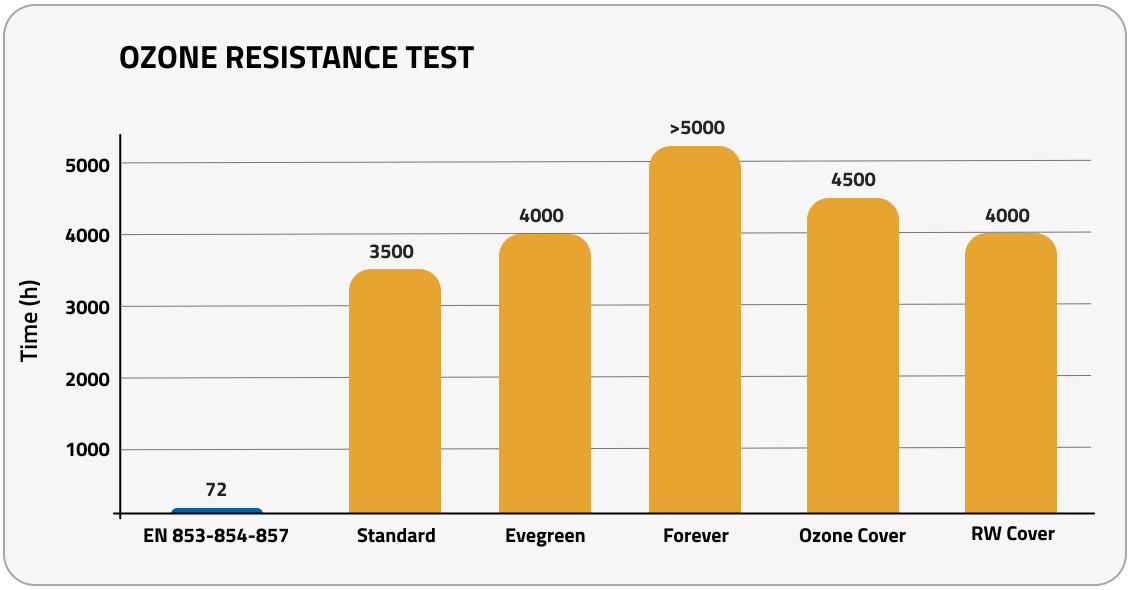
Vitillo

HOSE REFERENCE	REFERENCE STANDARD	WORKING TEMP. (°C)	WORKING PRESSURE (bar) at size/DN										
			5	6	8	10	12	16	19	25	31	38	51
			03	04	05	06	08	10	12	16	20	24	32
EVEREST 4C 6000 ICE	EXC. SAE 100 R15	- 55/+100							420	420	420		
TEKNO 1SN RW	EN 853 1SN, SAE 100 R1AT	- 40/+100								88	63	50	40
TEKNO 2SN RW	EN 853 2SN, SAE 100 R2AT	- 40/+100		400	350	330	275	250	215	165	125	100	90
PREMIER ONE RW	EXC. EN 857 1SC, EXC. ISO 11237	- 40/+121		290	270	260	240	210	170	135			
PREMIER RW	EXC. EN 857 2SC, EXC. ISO 11237	- 40/+121		450	425	390	350	350	300	230			
TEKNO 2TE RW	EN 854 2TE, ISO 4079 2TE	- 40/+100		75	68	63	58	50	45	40	35		
TEKNO 3TE RW	EN 854 3TE, ISO 4079 3TE	- 40/+100									45		
VULCAN 1	EXC. EN 853 1SN, EXC.SAE 100 R1AT	- 40/+135	250	225	215	180	160	130	105	88	63	50	40
VULCAN 2	EXC. EN 853 2SN, EXC. SAE 100 R2AT	- 40/+135	415	400	350	330	275	250	215	165	125	100	90
VULCANAIR		- 40/+150		60		25	25	20	16	16	16	16	16
TEKNOJET 1SC 250	EN 1829 - 2	- 40/+135		250	250	250	250						
TEKNOJET 1SN 250	EN 1829 - 2	- 40/+135		250	250	250	250						
TEKNOJET 2SC 400	EN 1829 - 2	- 40/+135		400	400	400	400						
TEKNOJET 2SN 400	EN 1829 - 2	- 40/+135		400	400	400	400						
TEKNOJET 1SN PLUS 315	EN 1829 - 2	- 40/+135		315	315	315	315						
TEKNOJET 2SN PLUS 600	EN 1829 - 2	- 40/+135		600	600	600	600						
CLEANFARM 2SC	EN 1829 - 2	- 40/+100		400	400	400	400						
CLEANFARM 2TE	EN 854 2TE	- 40/+100					80						
SEWER CLEANING		- 40/+80					250		250	250	250		
TEKNOBLAST	EN 1829-2 ; ISO 7751	-10/+70				750	750		750				
TEKNOBLAST PLUS	EN 1829-2 ; ISO 7751	-10/+70				1250	1100		1000	700			
TEKNOBLAST SUPERB	EN 1829-2 ; ISO 7751	-10/+70					1450		1350				
TEKNO 1TE/R6	EN 854 1TE, SAE100 R6	- 40/+100	35	28	28	28	28	24	21	20			
TEKNO 2TE	EN 854 2TE, ISO 4079 2TE	- 40/+100	80	75	68	63	58	50	45	40	35		
TEKNO 3TE	EN 854 3TE, ISO 4079 3TE	- 40/+100	160	145	130	110	93	80	70	55	45	40	
TEKNO R4	SAE 100 R4	- 40/+100						21	21	17	14	10,5	7
TEKNO R7/ R7 NON COND.	SAE 100R7; ISO 3949	- 40/+100	210	200	190	175	140	105	90	70			
TEKNO R8 / R8 NON COND.	SAE 100 R8, ISO 3949	- 40/+100	350	350	325	280	245	195	165	145			
TEKNO MTH1	SAE 100R1, EN853 1ST-1SN, EN857 1SC	- 40/+100	325	300	240	225	190	150	130	105	70		
TEKNO MTH2	SAE 100R2	- 40/+100		400	350	330	275	250	215	165			
TEKNO MTKH		- 40/+100		700		425	375	250	225	200			
TEKNO FHL	SAE 100 R14	- 70/+260	200	188	170	162	120	100	90	65			
TEKNO FHM	SAE 100 R14	- 70/+260	200	188	170	162	120	100	90	65			
TEKNO FHM-DC	SAE 100 R14	- 70/+260	416	365	300	285	280	235	200	150			

HOSE COVERS

The cover is one of the most important parts of a hydraulic hose, as wear is one of the main causes of hose failure. Thanks to our **ongoing materials research**, we have developed cover compounds capable of withstanding even the most extreme environmental conditions and applications.
Our covers, from standard to those for specific applications, **guarantee exceptional resistance to both abrasion and ozone**.





SYMBOLS

Vitillo

- LOW TEMPERATURES
- HIGH TEMPERATURES
- ABRASION RESISTANCE
- HIGH PRESSURE
- OZONE RESISTANCE
- REDUCED BEND RADIUS
- EVERGREEN COVER
- FOREVER COVER
- ANIMAL FATS RESISTANCE
- INNER DIAMETER
- OUTER DIAMETER
- WORKING PRESSURE
- BURST PRESSURE
- WEIGHT
- MINIMUM BEND RADIUS
- SAFETY FACTOR 2:1

HOSE	HOSE STRUCTURE	REF. STANDARDS	RECOMMENDED FOR	PAGE
ALPI 3300	1 high tensile steel braid (-5 to -12) 2 high tensile steel braids DN(-16 to -25)	EXC. SAE 100 R17, EXC. ISO 11237 R17	Medium-high pressure hydraulic systems	**12**
ALPI 4000	1 high tensile steel braid DN (-6) 2 high tensile steel braids DN(-8 to -25)	EXC.SAE 100 R19, EXC. ISO 11237 R19	Medium-high pressure hydraulic systems	**13**
EVEREST 3000	4 high tensile steel spirals	ISO 18752	Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**14**
EVEREST 4000	4 high tensile steel spirals	ISO 18752, EXC. SAE 100 R12	Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**15**
EVEREST 5000	4 high tensile steel spirals DN(-12 to -31) 6 high tensile steel spirals DN(-38 to -51)	ISO 18752, EXC. SAE 100 R13	Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**16**
EVEREST 5500	4 high tensile steel spirals	ISO 18752	Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**17**
EVEREST 6000	4 high tensile steel spirals DN(-6 to -25) 6 high tensile steel spirals DN(-31 to -51)	ISO 18752, EXC. SAE 100 R15	Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**18**
EVEREST 7300	4 high tensile steel spirals DN (-12 to -16) 6 high tensile steel spirals DN (-20)	EXC. SAE 100 R15	Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**19**
EVEREST 4C 6000	4 high tensile steel spirals	EXC. SAE 100 R15	Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**20**

HOSE	HOSE STRUCTURE	REF. STANDARDS	RECOMMENDED FOR	PAGE
TEKNO 1SC	1 high tensile steel braid	EN 857 1SC, ISO 11237	Low-medium pressure hydraulic systems; pilot lines; return lines; narrow spaces	**21**
TEKNO 1SN	1 high tensile steel braid	EN 853 1SN, SAE 100 R1AT	Medium pressure hydraulic systems; return lines	**22**
TEKNO 2SC	2 high tensile steel braids	EN 857 2SC, ISO 11237	Medium-high pressure hydraulic systems; return lines; suction lines; narrow spaces	**23**
TEKNO 2SN	2 high tensile steel braids	EN 853 2SN, SAE 100 R2AT	Medium-high pressure hydraulic systems; return lines; suction lines	**24**
TEKNOSPIR /4SP	4 high tensile steel spirals	EN 856 4SP, ISO 3862 4SP	High pressure hydraulic systems	**25**
TEKNOSPIR /4SH	4 high tensile steel spirals	EN 856 4SH, ISO 3862 4SH	High pressure hydraulic systems	**26**
TEKNOSPIR /12	4 high tensile steel spirals	EN 856 R12, SAE 100 R12	High pressure hydraulic systems	**27**
TEKNOSPIR /13	4 high tensile steel spirals DN(-6 to -31) 6 high tensile steel spirals DN(-38 to -51)	EN 856 R13, SAE 100 R13	High pressure hydraulic systems	**28**
TEKNOSPIR /15	4 high tensile steel spirals DN(-6 to -25) 6 high tensile steel spirals DN(-31 to -51)	SAE 100 R15, ISO 3862 R15	High pressure hydraulic systems	**29**

HOSE	HOSE STRUCTURE	REF. STANDARDS	RECOMMENDED FOR	PAGE
TEKNO 1SC PLUS	1 high tensile steel braid	EXCEED EN 857 1SC, EXCEED ISO 11237 1SC	Low-medium pressure hydraulic systems; pilot lines; return lines; narrow spaces	**30**
TEKNO 2SC PLUS	2 high tensile steel braids	EXC. EN 857 2SC, EXC. ISO 11237 2SC	Medium-high pressure hydraulic systems; return lines; suction lines; narrow spaces	**31**
SMART ONE	1 high tensile steel braid	EXC. EN 857 1SC, EXC. ISO 11237 1SC	Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**32**
SMART TWO	2 high tensile steel braids	EXC. EN 857 2SC, EXC. ISO 11237 2SC	Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**33**
PREMIER ONE	1 high tensile steel braid	EXC. EN 857 1SC, EXC. ISO 11237 1SC	Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**34**
PREMIER	2 high tensile steel braids	EXC. EN 857 2SC, EXC. ISO 11237 2SC	Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**35**
LIFT-PLUS	1 high tensile steel braid (-19 to -31) 2 high tensile steel braids DN(-38 to -51)	EN 81.2	Elevators, platforms, lifts	**36**
SLIM	1 high tensile steel braid		Pilot lines; forklifts	**37**
SERVOCOMANDO	1 high tensile steel braid		Pilot lines; forklifts	**38**
TEKNOJACK	2 high tensile steel braids	IJ100 HYDRAULIC JACK SPECIFIC	Extremely high static pressure lines; jacking systems	**39**
TEKNOMASTER	2 high tensile steel braids		Very high pressure hydraulic systems	**40**
FORTHREE	3 high tensile steel braids		Reduced Bend Radius, very high pressure hydraulic systems	**41**

HOSE	HOSE STRUCTURE	REF. STANDARDS	RECOMMENDED FOR	PAGE
DOLOMITI 1	1 high tensile steel braid	EN 857 1SC, ISO 11237	Very demanding conditions in terms of low temperatures and ozone (e.g. snow guns); narrow spaces	**42**
DOLOMITI 2	2 high tensile steel braids	EN 857 2SC, ISO 11237	Very demanding conditions in terms of low temperatures and ozone (e.g. snow guns); narrow spaces	**43**
PREMIER ICE	2 high tensile steel braids	EXC. EN 857 2SC, EXC. ISO 11237	Extremely low temperatures; very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**44**
FORTHREE ICE	3 high tensile steel braids		Extremely low temperatures, reduced bend radius, very high pressure hydraulic systems	**45**
EVEREST 6000 ICE	4 high tensile steel spirals DN(-6 to -25) 6 high tensile steel spirals DN(-31 to -51)	ISO 18752, EXC. SAE 100 R15	Extremely low temperatures; very demanding conditions in terms of pressure, impulses and torsions	**46**
EVEREST 4C 6000 ICE	4 high tensile steel spirals	EXC. SAE 100 R15	Extremely low temperatures; very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**47**

HOSE	HOSE STRUCTURE	REF. STANDARDS	RECOMMENDED FOR	PAGE
ETNA	2 high tensile steel braids	SAE 100 R16	Very demanding conditions in terms of high temperatures (ambient and fluid, e.g. engine compartments); narrow spaces	**48**

HOSE	HOSE STRUCTURE	REF. STANDARDS	RECOMMENDED FOR	PAGE
TEKNO 1SN RW	1 high tensile steel braid	EN 853 1SN, SAE 100 R1AT	Medium pressure hydraulic systems for railway applications	**49**
TEKNO 2SN RW	2 high tensile steel braids	EN 853 2SN, SAE 100 R2AT	Medium-high pressure hydraulic systems for railway applications	**50**
PREMIER ONE RW	1 high tensile steel braid	EXC. EN 857 1SC, EXC. ISO 11237 1SC	Railway applications with very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**51**
PREMIER RW	2 high tensile steel braids	EXC. EN 857 2SC, EXC. ISO 11237 2SC	Railway applications with very demanding conditions in terms of pressure, impulses and torsions; narrow spaces	**52**
TEKNO 2TE RW	1 high tensile textile braid	EN 854 2TE, ISO 4079 2TE	Low pressure hydraulic systems for railway applications	**53**
TEKNO 3TE RW	2 high tensile textile braids	EN 854 3TE, ISO 4079 3TE	Low-medium pressure hydraulic systems for railway applications	**54**

HOSE	HOSE STRUCTURE	REF. STANDARDS	RECOMMENDED FOR	PAGE
VULCAN 1	1 high tensile steel braid	EXC. EN 853 1SN, EXC.SAE 100 R1AT	Safe transport of hydraulic oils, lubricating oils and dry or oil-containing air, especially at high temperatures. Air compression systems	**55**
VULCAN 2	2 high tensile steel braids	EXC. EN 853 2SN, EXC. SAE 100 R2AT	Safe transport of hydraulic oils, lubricating oils and dry or oil-containing air, especially at high temperatures. Air compression systems	**56**
VULCANAIR	2 textile braids (DN6-16) 2 textile braids and steel wire helix (DN19-51)		Air compression systems	**57**

HOSE	HOSE STRUCTURE	REF. STANDARDS	RECOMMENDED FOR	PAGE
TEKNOJET 1SC 250	1 high tensile steel braid	EN 1829 - 2	Professional water jet cleaners	**58**
TEKNOJET 1SN 250	1 high tensile steel braid	EN 1829 - 2	Professional water jet cleaners	**59**
TEKNOJET 2SC 400	2 high tensile steel braids	EN 1829 - 2	Professional water jet cleaners	**60**
TEKNOJET 2SN 400	2 high tensile steel braids	EN 1829 - 2	Professional water jet cleaners	**61**
TEKNOJET 1SN PLUS 315	1 high tensile steel braid	EN 1829 - 2	Professional water jet cleaners	**62**
TEKNOJET 2SN PLUS 600	2 high tensile steel braids	EN 1829 - 2	Professional water jet cleaners	**63**
CLEANFARM 2SC	2 high tensile steel braids	EN 1829 - 2	Professional water jet cleaners for stables and chicken coops	**64**
CLEANFARM 2TE	1 high tensile textile braid	EN 854 2TE	Cleaning equipment for stables and chicken coops; low pressure lines	**65**
SEWER CLEANING	2 aramid textile braids		High pressure washing and cleaning of sewer channels	**66**
TEKNOBLAST	4 high tensile steel spirals	EN 1829-2 ; ISO 7751	Water blasting applications, water cutting applications, cleaning and paint or corrosion removal. Not reccomended for dynamic hydraulic applications	**67**
TEKNOBLAST PLUS	4 high tensile steel spirals	EN 1829-2 ; ISO 7751	Water blasting applications, water cutting applications, cleaning and paint or corrosion removal. Not reccomended for dynamic hydraulic applications	**68**
TEKNOBLAST SUPERB	6 high tensile steel spirals	EN 1829-2 ; ISO 7751	Water blasting applications, water cutting applications, cleaning and paint or corrosion removal. Not reccomended for dynamic hydraulic applications	**69**

HOSE	HOSE STRUCTURE	REF. STANDARDS	RECOMMENDED FOR	PAGE
TEKNO 1TE/R6	1 high tensile textile braid	EN 854 1TE, SAE100 R6	Low pressure hydraulic systems; return lines	**70**
TEKNO 2TE	1 high tensile textile braid	EN 854 2TE, ISO 4079 2TE	Low pressure hydraulic systems; return lines	**71**
TEKNO 3TE	2 high tensile textile braids	EN 854 3TE, ISO 4079 3TE	Low-medium pressure hydraulic systems; return lines	**72**
TEKNO R4	2 high tensile textile braids and 1 high tensile steel spiral	SAE 100 R4	Hydraulic oil suction and delivery hoses	**73**
SAUGFLEX	high strength synthetic cord plus steel helix wire	SAE 100 R4	Hydraulic oil suction and delivery hoses	**74**
SAUGFLEX X PLUS G	high strength synthetic cord plus steel helix wire	SAE 100 R4	Hydraulic oil suction and delivery hoses	**75**

HOSE	HOSE STRUCTURE	REF. STANDARDS	RECOMMENDED FOR	PAGE
TEKNO R7	2 polyester fibers	SAE 100R7; ISO 3949	Medium pressure hydraulic systems	**76**
TEKNO R7 NON CONDUCTIVE	2 polyester fibers	SAE 100R7, ISO 3949, ANSI A92.2	Medium pressure hydraulic systems with electrical isolation	**77**
TEKNO R8	2 textile fibers	SAE 100 R8; ISO 3949	High pressure hydraulic systems	**78**
TEKNO R8 NON CONDUCTIVE	2 textile fibers	SAE 100 R8, ISO 3949	High pressure hydraulic systems with electrical isolation	**79**
TEKNO MTH1	1 high tensile steel braid	SAE 100R1, EN853 1ST-1SN, EN857 1SC	High pressure hydraulic systems	**80**
TEKNO MTH2	2 high tensile steel braids	SAE 100R2	High pressure hydraulic systems	**81**
TEKNO MTKH	1 aramidic fiber and 1 high tensile steel braids		High pressure hydraulic systems	**82**

HOSE	HOSE STRUCTURE	REF. STANDARDS	RECOMMENDED FOR	PAGE
TEKNO FHL	1 stainless steel braid AISI 304	SAE 100 R14	Steam for cleaning; plastic moulding presses; transport of corrosive chemical; food and pharmaceutical products; transport of air	**83**
TEKNO FHM	1 stainless steel braid AISI 304	SAE 100 R14	Steam for cleaning; plastic moulding presses; transport of corrosive chemical; food and pharmaceutical products; transport of air	**84**
TEKNO FHM-DC	2 stainless steel braids AISI 304	SAE 100 R14	Steam for cleaning; plastic moulding presses; transport of corrosive chemical; food and pharmaceutical products; transport of air	**85**

ALPI 3300

EXC. SAE 100 R17, EXC. ISO 11237 R17

Medium-high pressure hydraulic systems



Features:

Alternative Versions: MSHA Evergreen

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THAP303	5	4.8	3/16"	10.8	0.43	225	3260	900	13000	35	1.38	0.14	0.1
THAP304	6	6.4	1/4"	12	0.47	225	3260	900	13000	40	1.58	0.17	0.12
THAP305	8	7.9	5/16"	13.5	0.54	225	3260	900	13000	45	1.77	0.21	0.14
THAP306	10	9.5	3/8"	15.6	0.61	225	3260	900	13000	55	2.17	0.29	0.19
THAP308	12	12.7	1/2"	19.9	0.78	225	3260	900	13000	70	2.76	0.41	0.28
THAP310	16	15.9	5/8"	24.4	0.96	225	3260	900	13000	90	3.54	0.63	0.44
THAP312	19	19.1	3/4"	28.2	1.11	225	3260	900	13000	120	4.72	0.8	0.56
THAP316	25	25.4	1"	36.2	1.43	225	3260	900	13000	150	5.9	1.25	0.88

To order the Forever version, add FV at the end of the code.

Hose layline example

Vitillo **ALPI 3300 3/8"** (9.5mm) Flame Resistant **MSHA IC-365/01** EXC. SAE 100 R17 EXC. ISO 11237 R17 225 Bar 22.5 MPa **3260 Psi**

OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:
1 high tensile steel braid
(-5 to -12)
2 high tensile steel braids
DN(-16 to -25)

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

ALPI 4000

EXC.SAE 100 R19, EXC. ISO 11237 R19

Medium-high pressure hydraulic systems



Features:

Alternative Versions: MSHA Evergreen

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THAP404	6	6.4	1/4"	12.2	0.48	280	4060	1120	16240	40	1.57	0.19	0.13
THAP405	8	7.9	5/16"	15	0.59	280	4060	1120	16240	55	2.16	0.26	0.18
THAP406	10	9.5	3/8"	17	0.67	280	4060	1120	16240	65	2.56	0.39	0.26
THAP408	12	12.7	1/2"	20,8	0.82	280	4060	1120	16240	80	3.15	0.5	0.35
THAP410	16	15.9	5/8"	24,2	0.95	280	4060	1120	16240	90	3.54	0.65	0.44
THAP412	19	19.1	3/4"	28,2	1.11	280	4060	1120	16240	120	4.72	0.83	0.56
THAP416	25	25.4	1"	36,2	1.43	280	4060	1120	16240	150	5.9	1.35	0.91

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:
1 high tensile steel braid DN (-6)
2 high tensile steel braids DN(-8 to -25)

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

EVEREST 3000

ISO 18752

Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Alternative Versions:

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TSER320	31	31.8	1"1/4	46,5	1.83	210	3000	840	12000	210	8.27	2.01	1.35
TSER324	38	38.1	1"1/2	53.5	2.11	210	3000	840	12000	250	9.84	3.05	2.05
TSER332	51	50.8	2"	66.5	2.62	210	3000	840	12000	320	12.6	4.07	2.73

To order the Forever version, add FV at the end of the code.

Hose layline example

Vitillo **EVEREST 3000 2"** (50.8mm) Flame Resistant **MSHA IC-365/03** ISO 18752 210 Bar 21 MPa **3000 Psi**

OPERATING TEMPERATURE RANGE:
-40°C/+121°C
(-40°F/+250°F)
with peaks of +125°C (257°F)

TUBE:
Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:
4 high tensile steel spirals

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

EVEREST 4000

ISO 18752, EXC. SAE 100 R12

Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Alternative Versions: Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TSER406	10	9.5	3/8"	20	0.79	280	4000	1120	16000	60	2.36	0.57	0.38
TSER408	12	12.8	1/2"	23	0.91	280	4000	1120	16000	90	3.54	0.68	0.46
TSER410	16	16	5/8"	27	1.06	280	4000	1120	16000	100	3.94	0.91	0.61
TSER412	19	19	3/4"	30,7	1.21	280	4000	1120	16000	120	4.73	1.3	0.87
TSER416	25	25.4	1"	38,3	1.51	280	4000	1120	16000	150	5.91	2	1.34
TSER420	31	31.8	1"1/4	46	1.81	280	4000	1120	16000	225	8.86	2.6	1.75
TSER424	38	38.1	1"1/2	53.2	2.09	280	4000	1120	16000	250	9.84	3.3	2.22
TSER432	51	50.8	2"	66.5	2.62	280	4000	1120	16000	320	12.59	4.5	3.02

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+121°C
(-40°F/+250°F)
with peaks of +125°C (257°F)

TUBE:
Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:
4 high tensile steel spirals

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

EVEREST 5000

ISO 18752, EXC. SAE 100 R13

Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Alternative Versions: Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TSER508	12	12.8	1/2"	23,8	0.94	350	5000	1400	20000	90	3.54	0.8	0.54
TSER510	16	16	5/8"	27,4	1.08	350	5000	1400	20000	100	3.94	1.03	0.69
TSER512	19	19	3/4"	31,4	1.24	350	5000	1400	20000	120	4.72	1.39	0.93
TSER516	25	25.4	1"	38,5	1.52	350	5000	1400	20000	150	5.9	1.95	1.31
TSER520	31	31.8	1"1/4	46	1.81	350	5000	1400	20000	250	9.84	2.77	1.86
TSER524	38	38.1	1"1/2	57	2.24	350	5000	1400	20000	330	12.99	4.42	2.97
TSER532	51	50.8	2"	70.5	2.78	350	5000	1400	20000	420	16.53	5.92	3.98

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+121°C
(-40°F/+250°F)
with peaks of +125°C (257°F)

TUBE:

Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:

4 high tensile steel spirals DN(-12 to -31)
6 high tensile steel spirals DN(-38 to -51)

COVER:

Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

EVEREST 5500

ISO 18752

Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Alternative Versions:

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TSER5512	19	19	3/4"	29.6	1.16	380	5500	1520	22000	135	5.31	1.14	0.77
TSER5516	25	25.4	1"	36.4	1.43	380	5500	1520	22000	165	6.5	1.35	0.91

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+121°C
(-40°F/+250°F)
with peaks of +125°C (257°F)

TUBE:

Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:

4 high tensile steel spirals

COVER:

Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor
MSHA
Mine Safety & Health Administration

EVEREST 6000

ISO 18752, EXC. SAE 100 R15

Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Alternative Versions: Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TSER604	6	6.4	1/4"	17.5	0.69	420	6000	1680	24360	60	2.36	0.58	0.39
TSER606	10	9.5	3/8"	20,6	0.81	420	6000	1680	24360	65	2.56	0.75	0.5
TSER608	12	12.8	1/2"	23,8	0.94	420	6000	1680	24360	90	3.54	0.86	0.58
TSER610	16	16	5/8"	27.4	1.08	420	6000	1680	24360	100	3.94	1.15	0.77
TSER612	19	19	3/4"	31	1.22	420	6000	1680	24360	135	5.31	1.5	1.01
TSER616	25	25.4	1"	38,6	1.52	420	6000	1680	24360	165	6.5	2.21	1.48
TSER620	31	31.8	1"1/4	49.5	1.95	420	6000	1680	24360	300	11.81	3.9	2.62
TSER624	38	38.1	1"1/2	57	2.24	420	6000	1680	24360	460	18.11	4.8	3.22
TSER632	51	50.8	2"	70.5	2.78	420	6000	1680	24360	540	21.26	6.5	4.37

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+121°C
(-40°F/+250°F)
with peaks of +125°C (257°F)

TUBE:
Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:
4 high tensile steel spirals DN(-6 to -25)
6 high tensile steel spirals DN(-31 to -51)

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

EVEREST 7300

EXC. SAE 100 R15

Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Alternative Versions: Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TSER7312	19	19	3/4"	31	1.22	500	7300	2000	29200	180	7.09	1.51	1.01
TSER7316	25	25.4	1"	38,6	1.52	500	7300	2000	29200	210	8.27	2.21	1.48
TSER7320	31	31.8	1"1/4	49.5	1.95	500	7300	2000	29200	350	13.78	3.87	2.6

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:

Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:

4 high tensile steel spirals DN (-12 to -16)
6 high tensile steel spirals DN (-20)

COVER:

Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

EVEREST 4C 6000

EXC. SAE 100 R15

Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Alternative Versions: Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TSER4C612	19	19	3/4"	29.6	1.16	420	6000	1680	24000	120	4.72	1.14	0.77
TSER4C616	25	25.4	1"	36.4	1.43	420	6000	1680	24000	150	5.9	1.35	0.91
TSER4C620	31	31.8	1"1/4	45	1.77	420	6000	1680	24000	225	8.86	2.61	1.75

To order the Forever version, add FV at the end of the code.

Hose layline example

Vitillo EVEREST 4C 6000 1"1/4 (31.8mm) Flame Resistant MSHA IC-365/03 EXC. SAE 100 R15 420 Bar 42 MPa 6000 Psi

OPERATING TEMPERATURE RANGE:
-40°C/+121°C
(-40°F/+250°F)
with peaks of +125°C (257°F)

TUBE:
Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:
4 high tensile steel spirals

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

TEKNO 1SC

EN 857 1SC, ISO 11237

Low-medium pressure hydraulic systems; pilot lines; return lines; narrow spaces



Features:

Alternative Versions:

MSHA Evergreen

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH1SC03	5	4.8	3/16"	10.8	0.42	250	3625	1000	14500	45	1.77	0.15	0.1
TH1SC04	6	6.4	1/4"	12.2	0.48	225	3260	900	13050	50	1.97	0.19	0.13
TH1SC05	8	7.9	5/16"	13.5	0.53	215	3110	860	12470	55	2.17	0.22	0.15
TH1SC06	10	9.5	3/8"	15.6	0.61	180	2610	720	10440	65	2.56	0.25	0.17
TH1SC08	12	12.8	1/2"	19.1	0.75	160	2320	640	9280	90	3.54	0.33	0.22
TH1SC10	16	16	5/8"	22.4	0.88	130	1880	520	7540	100	3.94	0.44	0.3
TH1SC12	19	19	3/4"	26	1.02	105	1520	420	6090	120	4.72	0.51	0.34
TH1SC16	25	25.4	1"	33.4	1.31	88	1270	352	5100	150	5.9	0.73	0.49
TH1SC20	31	31.8	1"1/4	40.9	1.61	70	1015	280	4060	210	8.27	0.98	0.66
TH1SC24	38	38.1	1"1/2	47.5	1.87	60	870	240	3480	250	9.84	1.08	0.73
TH1SC32	51	50.8	2"	60.5	2.38	45	650	180	2610	315	12.4	1.46	0.98

To order the Evergreen version, add EV at the end of the code.
To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
1 high tensile steel braid

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNO 1SN

EN 853 1SN, SAE 100 R1AT

Medium pressure hydraulic systems; return lines



Alternative Versions:

MSHA Evergreen

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH1SN03	5	4.8	3/16"	11.5	0.45	250	3620	1000	14480	90	3.54	0.18	0.12
TH1SN04	6	6.4	1/4"	13.1	0.52	225	3260	900	13040	100	3.94	0.21	0.14
TH1SN05	8	7.9	5/16"	14.7	0.58	215	3110	860	12440	115	4.53	0.24	0.16
TH1SN06	10	9.5	3/8"	17	0.67	180	2610	720	10440	130	5.12	0.31	0.21
TH1SN08	12	12.8	1/2"	20.4	0.8	160	2320	640	9280	180	7.09	0.39	0.26
TH1SN10	16	16	5/8"	23.4	0.92	130	1880	520	7520	200	7.87	0.47	0.31
TH1SN12	19	19	3/4"	27.4	1.08	105	1520	420	6080	240	9.45	0.59	0.4
TH1SN16	25	25.4	1"	35.3	1.39	88	1270	352	5080	300	11.81	0.86	0.58
TH1SN20	31	31.8	1"1/4	42.9	1.69	63	910	252	3620	420	16.54	1.16	0.78
TH1SN24	38	38.1	1"1/2	50	1.97	50	720	200	2880	500	19.69	1.42	0.95
TH1SN32	51	50.8	2"	63.5	2.5	40	580	160	2320	630	24.8	1.97	1.32

To order the Evergreen version, add EV at the end of the code.
To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
1 high tensile steel braid

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNO 2SC

EN 857 2SC, ISO 11237

Medium-high pressure hydraulic systems; return lines; suction lines; narrow spaces



Features:

Alternative Versions: MSHA Evergreen

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2SC03	5	4.8	3/16"	11.6	0.45	500	7250	2000	29000	40	1.57	0.22	0.15
TH2SC04	6	6.4	1/4"	13.4	0.53	400	5800	1600	23200	75	2.95	0.27	0.18
TH2SC05	8	7.9	5/16"	15	0.59	350	5070	1400	20280	85	3.34	0.33	0.22
TH2SC06	10	9.5	3/8"	17	0.67	330	4780	1320	19120	90	3.54	0.4	0.27
TH2SC08	12	12.8	1/2"	21	0.83	275	3990	1100	15950	130	5.11	0.51	0.34
TH2SC10	16	16	5/8"	24.3	0.96	250	3620	1000	14480	170	6.69	0.66	0.44
TH2SC12	19	19	3/4"	27.5	1.08	215	3120	860	12470	200	7.87	0.81	0.54
TH2SC16	25	25.4	1"	35.8	1.41	165	2390	660	9570	230	9.05	1.03	0.69
TH2SC20	31	31.8	1"1/4	43.1	1.7	125	1810	500	7250	250	9.84	1.55	1.04
TH2SC24	38	38.1	1"1/2	49.8	1.96	100	1450	400	5800	300	11.81	1.72	1.16
TH2SC32	51	50.8	2"	63.4	2.5	90	1300	360	5220	400	15.75	2.31	1.55

To order the Evergreen version, add EV at the end of the code.
To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNO 2SN

EN 853 2SN, SAE 100 R2AT

Medium-high pressure hydraulic systems; return lines; suction lines



Alternative Versions:

MSHA Evergreen

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2SN03	5	4.8	3/16"	13.1	0.52	415	6010	1660	24040	90	3.54	0.25	0.17
TH2SN04	6	6.4	1/4"	14.6	0.57	400	5800	1600	23200	100	3.94	0.35	0.24
TH2SN05	8	7.9	5/16"	16.3	0.64	350	5070	1400	20280	115	4.53	0.37	0.25
TH2SN06	10	9.5	3/8"	19	0.75	330	4780	1320	19120	130	5.12	0.52	0.35
TH2SN08	12	12.8	1/2"	22.2	0.87	275	3980	1100	15920	180	7.09	0.62	0.42
TH2SN10	16	16	5/8"	25	0.98	250	3620	1000	14480	200	7.87	0.7	0.47
TH2SN12	19	19	3/4"	29.2	1.15	215	3110	860	12440	240	9.45	0.85	0.57
TH2SN16	25	25.4	1"	37.1	1.46	165	2390	660	9560	300	11.81	1.26	0.85
TH2SN20	31	31.8	1"1/4	46.7	1.83	125	1810	500	7240	420	16.54	1.77	1.19
TH2SN24	38	38.1	1"1/2	53.8	2.12	100	1450	400	5800	500	19.69	2.1	1.41
TH2SN32	51	50.8	2"	66.3	2.61	90	1300	360	5220	630	24.8	2.64	1.77

To order the Evergreen version, add EV at the end of the code.
To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

DNV

TEKNOSPIR /4SP

EN 856 4SP, ISO 3862 4SP

High pressure hydraulic systems



Features:

Alternative Versions: MSHA Evergreen

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TS4SP04	6	6.4	1/4"	17.5	0.69	500	7250	2000	29000	150	5.91	0.56	0.38
TS4SP06	10	9.5	3/8"	20.9	0.82	460	6650	1840	26600	180	7.09	0.72	0.48
TS4SP08	12	12.8	1/2"	24.1	0.95	425	6150	1700	24600	230	9.06	0.84	0.56
TS4SP10	16	16	5/8"	27.7	1.09	400	5800	1600	23200	250	9.84	1.12	0.75
TS4SP12	19	19	3/4"	31.7	1.25	380	5500	1520	22000	300	11.81	1.41	0.95
TS4SP16	25	25.4	1"	38.8	1.53	320	4600	1280	18400	340	13.39	1.89	1.27
TS4SP20	31	31.8	1"1/4	49.5	1.95	210	3000	840	12000	460	18.11	3	2.02
TS4SP24	38	38.1	1"1/2	55.9	2.2	185	2650	740	10600	560	22.05	3.38	2.27
TS4SP32	51	50.8	2"	69.2	2.72	175	2550	700	10200	660	25.98	4.62	3.1

To order the Evergreen version, add EV at the end of the code.
To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:
4 high tensile steel spirals

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

TEKNOSPIR /4SH

EN 856 4SH, ISO 3862 4SH

High pressure hydraulic systems



Features:

Alternative Versions: MSHA Evergreen

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TS4SH10	16	16	5/8"	27.2	1.07	450	6525	1800	26100	240	9.44	1.39	0.93
TS4SH12	19	19	3/4"	31	1.22	420	6090	1680	24360	280	11.02	1.54	1.03
TS4SH16	25	25.4	1"	38.6	1.52	385	5580	1540	22320	340	13.39	2.23	1.5
TS4SH20	31	31.8	1"1/4	46	1.81	350	5070	1400	20280	460	18.11	2.77	1.86
TS4SH24	38	38.1	1"1/2	53.2	2.09	300	4350	1200	17400	560	22.05	3.29	2.21
TS4SH32	51	50.8	2"	67.5	2.66	250	3620	1000	14480	700	27.56	4.8	3.22

To order the Evergreen version, add EV at the end of the code.

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:
4 high tensile steel spirals

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

TEKNOSPIR /12

EN 856 R12, SAE 100 R12

High pressure hydraulic systems



Features:

Alternative Versions: MSHA Evergreen

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TSR1206	10	9.5	3/8"	20	0.79	280	4060	1120	16240	90	3.54	0.58	0.39
TSR1208	12	12.8	1/2"	23	0.91	280	4060	1120	16240	130	5.12	0.77	0.52
TSR1210	16	16	5/8"	27	1.06	280	4060	1120	16240	200	7.87	0.97	0.65
TSR1212	19	19	3/4"	30.7	1.21	280	4060	1120	16240	240	9.45	1.24	0.83
TSR1216	25	25.4	1"	38.3	1.51	280	4060	1120	16240	300	11.81	1.94	1.3
TSR1220	31	31.8	1"1/4	46.5	1.83	210	3050	840	12200	420	16.54	2.93	1.97
TSR1224	38	38.1	1"1/2	54	2.13	175	2550	700	10200	500	19.69	3.39	2.28
TSR1232	51	50.8	2"	66.7	2.63	175	2550	700	10200	630	24.8	4.45	2.99

To order the Evergreen version, add EV at the end of the code.
To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+121°C
(-40°F/+250°F)
with peaks of +125°C (257°F)

TUBE:
Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:
4 high tensile steel spirals

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNOSPIR /13

EN 856 R13, SAE 100 R13

High pressure hydraulic systems



Features:

Alternative Versions: MSHA Evergreen

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TSR1312	19	19	3/4"	31.4	1.24	350	5070	1400	20300	240	9.45	1.42	0.95
TSR1316	25	25.4	1"	38.5	1.52	350	5070	1400	20300	300	11.81	1.94	1.3
TSR1320	31	31.8	1"1/4	46	1.81	350	5070	1400	20300	420	16.54	2.73	1.83
TSR1324	38	38.1	1"1/2	57	2.24	350	5070	1400	20300	500	19.69	4.43	2.98
TSR1332	51	50.8	2"	70.5	2.78	350	5070	1400	20300	630	24.8	5.88	3.95

To order the Evergreen version, add EV at the end of the code.

To order the Forever version, add FV at the end of the code.

Hose layline example

Vitillo **TEKNOSPIR /13** **1"** (25.4mm) Flame Resistant **MSHA IC-365/03** EN 856 R13 SAE 100 R13 350 Bar 35 MPa **5070 Psi**

OPERATING TEMPERATURE RANGE:
-40°C/+121°C
(-40°F/+250°F)
with peaks of +125°C (257°F)

TUBE:
Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:
4 high tensile steel spirals DN(-6 to -31)
6 high tensile steel spirals DN(-38 to -51)

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNOSPIR /15



SAE 100 R15, ISO 3862 R15

High pressure hydraulic systems

Features:

Alternative Versions: MSHA Evergreen

F Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TSR1510	16	16	5/8"	28.5	1.12	420	6090	1680	24360	220	8.66	1.39	0.93
TSR1512	19	19	3/4"	31	1.22	420	6090	1680	24360	265	10.42	1.59	1.07
TSR1516	25	25.4	1"	38.6	1.52	420	6090	1680	24360	330	12.98	1.97	1.32
TSR1520	31	31.8	1"1/4	49.5	1.95	420	6090	1680	24360	445	17.51	3.56	2.39
TSR1524	38	38.1	1"1/2	57	2.24	420	6090	1680	24360	530	20.85	4.6	3.09
TSR1532	51	50.8	2"	70.5	2.78	420	6090	1680	24360	650	25.59	6.5	4.37

To order the Evergreen version, add EV at the end of the code.
To order the Forever version, add FV at the end of the code.

Hose layline example

Vitillo **TEKNOSPIR /15** **1"** (25.4mm) Flame Resistant **MSHA IC-365/03** SAE 100 R15 ISO 3862 R15 420 Bar 42 MPa **6090 Psi**

OPERATING TEMPERATURE RANGE:
-40°C/+121°C
(-40°F/+250°F)
with peaks of +125°C (257°F)

TUBE:
Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:
4 high tensile steel spirals DN(-6 to -25)
6 high tensile steel spirals DN(-31 to -51)

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNO 1SC PLUS

EXCEED EN 857 1SC, EXCEED ISO 11237 1SC

Low-medium pressure hydraulic systems; pilot lines; return lines; narrow spaces



Features:

Alternative Versions:

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH1SC04P	6	6.4	1/4"	12.2	0.48	290	4200	1160	16800	45	1.77	0.19	0.13
TH1SC05P	8	7.9	5/16"	13.5	0.53	255	3700	1020	14800	55	2.17	0.2	0.14
TH1SC06P	10	9.5	3/8"	15.6	0.61	230	3335	920	13400	60	2.36	0.26	0.17
TH1SC08P	12	12.8	1/2"	19.1	0.75	225	3260	900	13040	70	2.76	0.35	0.24
TH1SC10P	16	16	5/8"	22.4	0.88	160	2320	640	9300	90	3.54	0.44	0.3
TH1SC12P	19	19	3/4"	26	1.02	150	2175	600	8700	100	3.94	0.55	0.37
TH1SC16P	25	25.4	1"	33.4	1.31	110	1595	440	6400	150	5.9	0.68	0.46
TH1SC20P	31	31.8	1"1/4	40.9	1.61	100	1450	400	5800	210	8.27	1.01	0.68
TH1SC24P	38	38.1	1"1/2	47.5	1.87	75	1090	300	4360	250	9.84	1.17	0.79
TH1SC32P	51	50.8	2"	60.5	2.38	60	870	240	960	315	12.4	1.4	0.94

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
1 high tensile steel braid

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNO 2SC PLUS

EXC. EN 857 2SC, EXC. ISO 11237 2SC

Medium-high pressure hydraulic systems; return lines; suction lines; narrow spaces



Features:

Alternative Versions: Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2SC04P	6	6.4	1/4"	13.4	0.53	420	6100	1680	24400	45	1.77	0.3	0.2
TH2SC05P	8	7.9	5/16"	15	0.59	400	5800	1600	23200	55	2.17	0.34	0.23
TH2SC06P	10	9.5	3/8"	17	0.67	350	5100	1400	20400	65	2.56	0.41	0.28
TH2SC08P	12	12.8	1/2"	21	0.83	310	4500	1240	18000	80	3.15	0.52	0.35
TH2SC10P	16	16	5/8"	24.3	0.96	280	4100	1120	16400	90	3.54	0.68	0.46
TH2SC12P	19	19	3/4"	28.1	1.11	270	3910	1080	15660	120	4.72	0.85	0.57
TH2SC16P	25	25.4	1"	36.3	1.43	210	3045	840	12180	150	5.9	1.18	0.79
TH2SC20P	31	31.8	1"1/4	43.1	1.7	170	2465	680	9860	210	8.27	1.56	1.05
TH2SC24P	38	38.1	1"1/2	49.8	1.96	140	2030	560	8120	250	9.84	1.85	1.24
TH2SC32P	51	50.8	2"	63.4	2.5	100	1450	400	5800	350	13.78	2.36	1.59

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

SMART ONE

EXC. EN 857 1SC, EXC. ISO 11237 1SC

Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH1SC04SM	6	6.4	1/4"	12.4	0.49	270	3900	1080	15660	40	1.57	0.19	0.13
TH1SC05SM	8	7.9	5/16"	13.7	0.54	255	3700	1020	14800	50	1.96	0.2	0.13
TH1SC06SM	10	9.5	3/8"	15.8	0.62	250	3625	1000	14500	60	2.36	0.29	0.19
TH1SC08SM	12	12.8	1/2"	19.7	0.78	225	3260	900	13000	70	2.75	0.41	0.27
TH1SC10SM	16	16	5/8"	22.6	0.89	160	2320	640	9300	85	3.35	0.48	0.32
TH1SC12SM	19	19	3/4"	26.2	1.03	150	2175	600	8700	100	3.93	0.62	0.42
TH1SC16SM	25	25.4	1"	33	1.3	110	1595	400	6400	140	5.51	0.86	0.58

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
1 high tensile steel braid

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic **smooth** rubber (MSHA approved)

CERTIFICATIONS:

SMART TWO

EXC. EN 857 2SC, EXC. ISO 11237 2SC

Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2SC04SM	6	6.4	1/4"	13.6	0.53	430	6200	1720	25000	45	1.77	0.3	0.2
TH2SC05SM	8	7.9	5/16"	15.2	0.6	400	5800	1600	23200	55	2.16	0.35	0.23
TH2SC06SM	10	9.5	3/8"	17.2	0.68	350	5100	1400	20400	65	2.56	0.42	0.28
TH2SC08SM	12	12.8	1/2"	20.6	0.81	310	4500	1240	18000	80	3.15	0.52	0.35
TH2SC10SM	16	16	5/8"	24.3	0.96	280	4100	1120	16200	90	3.54	0.74	0.5
TH2SC12SM	19	19	3/4"	28.1	1.11	270	3900	1080	15660	120	4.72	0.92	0.62
TH2SC16SM	25	25.4	1"	35.1	1.38	210	3045	840	12180	150	5.9	1.3	0.87

Hose layline example

Vitillo **SMART TWO 3/8"** (9.5mm) Flame Resistant **MSHA IC-365/01** EXC. EN 857 2SC EXC. ISO 11237 2SC 350 Bar 35 MPa **5100 Psi**

OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic **smooth** rubber (MSHA approved)

CERTIFICATIONS:

PREMIER ONE

EXC. EN 857 1SC, EXC. ISO 11237 1SC

Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Alternative Versions: Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH1SC04PRE1	6	6.4	1/4"	12.4	0.49	290	4200	1160	16800	40	1.57	0.19	0.13
TH1SC05PRE1	8	7.9	5/16"	13.2	0.52	270	3900	1080	15660	50	1.97	0.2	0.13
TH1SC06PRE1	10	9.5	3/8"	16	0.63	260	3800	1040	15080	60	2.36	0.29	0.19
TH1SC08PRE1	12	12.8	1/2"	19.6	0.77	240	3500	960	13900	70	2.76	0.41	0.27
TH1SC10PRE1	16	16	5/8"	22.5	0.89	210	3050	840	12200	85	3.34	0.48	0.32
TH1SC12PRE1	19	19	3/4"	26.8	1.06	170	2460	680	9860	100	3.94	0.62	0.42
TH1SC16PRE1	25	25.4	1"	34	1.34	135	1960	540	7800	140	5.51	0.86	0.58
TH1SC20PRE1	31	31.8	1"1/4	40.9	1.61	110	1600	440	6380	200	7.87	1.06	0.71
TH1SC24PRE1	38	38.1	1"1/2	47.5	1.87	90	1300	360	5220	225	8.86	1.22	0.82
TH1SC32PRE1	51	50.8	2"	59	2.32	75	1090	300	4360	280	11.02	1.51	1.01

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+121°C
(-40°F/+250°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
1 high tensile steel braid

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

PREMIER

EXC. EN 857 2SC, EXC. ISO 11237 2SC

Very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Alternative Versions:

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2SC04PRE	6	6.4	1/4"	13.4	0.53	450	6500	1800	26100	45	1.77	0.3	0.2
TH2SC05PRE	8	7.9	5/16"	15.1	0.59	425	6100	1700	24650	55	2.16	0.35	0.23
TH2SC06PRE	10	9.5	3/8"	17.3	0.68	390	5600	1560	22600	65	2.56	0.42	0.28
TH2SC08PRE	12	12.8	1/2"	20.4	0.8	350	5100	1400	20300	80	3.15	0.52	0.35
TH2SC10PRE	16	16	5/8"	24.4	0.96	350	5100	1400	20300	90	3.54	0.74	0.5
TH2SC12PRE	19	19	3/4"	28.6	1.13	300	4300	1200	17400	120	4.72	0.92	0.62
TH2SC16PRE	25	25.4	1"	36.4	1.43	280	4060	1120	16240	150	5.9	1.3	0.87
TH2SC20PRE	31	31.8	1"1/4	43.1	1.7	180	2610	720	10440	210	8.27	1.65	1.11
TH2SC24PRE	38	38.1	1"1/2	49.8	1.96	150	2175	600	8700	250	9.84	2.2	1.48
TH2SC32PRE	51	50.8	2"	63.4	2.5	120	1740	480	6960	310	12.2	2.9	1.95

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+121°C
(-40°F/+250°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

LIFT-PLUS

EN 81.2

Elevators, platforms, lifts

Features: S.F. 9:1



Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH1SC12LP	19	19	3/4"	26	1.02	50	725	450	6520	100	3.94	0.54	0.36
TH1SC16LP	25	25.4	1"	33.4	1.31	50	725	450	6520	160	6.3	0.82	0.55
TH1SC20LP	31	31.8	1"1/4	40.9	1.61	50	725	450	6520	210	8.27	1.08	0.73
TH2SC24LP	38	38.1	1"1/2	49.8	1.96	50	725	450	6520	300	11.81	1.75	1.18
TH2SC32LP	51	50.8	2"	63.4	2.5	45	650	400	5800	400	15.75	2.45	1.65

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:

Oil resistant synthetic rubber

REINFORCEMENT:

1 high tensile steel braid
(-19 to -31)
2 high tensile steel braids
DN(-38 to -51)

COVER:

Standard cover: Synthetic rubber (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

SLIM

Pilot lines; forklifts



Features:

Alternative Versions: MSHA Evergreen

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH1SN03SL	5	4.8	3/16"	9.9	0.39	150	2175	600	8700	20	0.79	0.1	0.07
TH1SN04SL	6	6.4	1/4"	11.5	0.45	150	2175	600	8700	25	0.98	0.12	0.08
TH1SN05SL	8	7.9	5/16"	13.1	0.52	150	2175	600	8700	30	1.18	0.16	0.11
TH1SN06SL	10	9.5	3/8"	14.8	0.58	150	2175	600	8700	40	1.57	0.2	0.13
TH1SN08SL	12	12.8	1/2"	18.5	0.73	150	2175	600	8700	50	1.97	0.27	0.18
TH1SN10SL	16	16	5/8"	21.4	0.99	150	2175	600	8700	65	2.56	0.33	0.22

To order the Evergreen version, add EV at the end of the code.
To order the Forever version, add FV at the end of the code.
New tech spec (150 bar) starting from production Q2/2026

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
1 high tensile steel braid

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

SERVOCOMANDO

Pilot lines; forklifts



Features: R

Alternative Versions: E MSHA Evergreen

F Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH1SC03SC	5	4.8	3/16"	10.8	0.42	250	3625	1000	14500	45	1.77	0.15	0.1
TH1SC04SC	6	6.4	1/4"	12.2	0.48	250	3625	1000	14500	50	1.97	0.19	0.13
TH1SC05SC	8	7.9	5/16"	13.5	0.53	250	3625	1000	14500	55	2.17	0.22	0.15
TH1SC06SC	10	9.5	3/8"	15.8	0.62	250	3625	1000	14500	65	2.56	0.29	0.19
TH1SC08SC	12	12.8	1/2"	19.1	0.75	250	3625	1000	14500	90	3.54	0.37	0.25

To order the Evergreen version, add EV at the end of the code.

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
1 high tensile steel braid

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNOJACK

IJ100 HYDRAULIC JACK SPECIFIC

Extremely high static pressure lines; jacking systems



Features: S.F. 2:1

Alternative Versions: MSHA Evergreen

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TJK2SN04	6	6.4	1/4"	15	0.59	725	10500	1450	21025	100	3.94	0.32	0.22
TJK2SN06	10	9.5	3/8"	17	0.67	725	10500	1450	21025	125	4.92	0.39	0.26

To order the Evergreen version, add EV at the end of the code.

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNOMASTER

Very high pressure hydraulic systems



Features:

Alternative Versions: MSHA Evergreen

Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TM2SN04	6	6.4	1/4"	14	0.55	490	7100	1960	28400	75	2.95	0.29	0.19
TM2SN05	8	7.9	5/16"	16.2	0.64	480	6960	1920	27840	115	4.53	0.41	0.28
TM2SN06	10	9.5	3/8"	19.2	0.76	400	5800	1600	23200	125	4.92	0.51	0.34
TM2SN08	12	12.8	1/2"	22.9	0.9	360	5240	1440	20960	180	7.09	0.68	0.46
TM2SN10	16	16	5/8"	26.2	1.03	350	5150	1400	20600	200	7.87	0.87	0.58
TM2SN12	19	19	3/4"	30	1.18	320	4650	1280	18600	240	9.45	1.03	0.69
TM2SN16	25	25.4	1"	38.1	1.5	250	3650	1000	14600	300	11.81	1.52	1.02

To order the Evergreen version, add EV at the end of the code.
To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

FORTHREE

Reduced Bend Radius, very high pressure hydraulic systems

Features:



Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH3SN06	10	9.5	3/8"	20.4	0.8	500	7250	2000	29000	120	4.72	0.71	0.48
TH3SN08	12	12.8	1/2"	23.7	0.93	470	6850	1880	27400	160	6.3	0.9	0.6
TH3SN10	16	16	5/8"	26.8	1.05	410	6000	1640	24000	210	8.27	1.06	0.71
TH3SN12	19	19	3/4"	30.6	1.2	380	5500	1520	22000	260	10.24	1.36	0.91
TH3SN16	25	25.4	1"	38.4	1.51	330	4800	1320	19200	310	12.2	1.9	1.28

To order the Evergreen version, add EV at the end of the code.
To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
3 high tensile steel braids

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

DOLOMITI 1

EN 857 1SC, ISO 11237

Very demanding conditions in terms of low temperatures and ozone (e.g. snow guns); narrow spaces



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH1SC04DOL	6	6.4	1/4"	12.2	0.48	225	3260	900	13050	50	1.97	0.19	0.13
TH1SC05DOL	8	7.9	5/16"	13.5	0.53	215	3110	860	12470	55	2.17	0.22	0.15
TH1SC06DOL	10	9.5	3/8"	15.6	0.61	180	2610	720	10440	65	2.56	0.25	0.17
TH1SC08DOL	12	12.8	1/2"	19.1	0.75	160	2320	640	9280	90	3.54	0.33	0.22
TH1SC10DOL	16	16	5/8"	22.4	0.88	130	1880	520	7540	100	3.94	0.44	0.3
TH1SC12DOL	19	19	3/4"	26	1.02	105	1520	420	6090	120	4.72	0.51	0.34
TH1SC16DOL	25	25.4	1"	33.4	1.31	88	1270	352	5100	150	5.9	0.73	0.49
TH1SC20DOL	31	31.8	1"1/4	40.9	1.61	70	1015	280	4060	210	8.27	0.98	0.66
TH1SC24DOL	38	38.1	1"1/2	47.5	1.87	60	870	240	3480	250	9.84	1.08	0.73
TH1SC32DOL	51	50.8	2"	60.5	2.38	45	650	180	2610	315	12.4	1.46	0.98

Hose layline example



OPERATING TEMPERATURE RANGE:
-55°C/+100°C
(-67°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
1 high tensile steel braid

COVER:
Ozone Cover: Black synthetic rubber with extreme abrasion and ozone resistance

CERTIFICATIONS:

DOLOMITI 2

EN 857 2SC, ISO 11237

Very demanding conditions in terms of low temperatures and ozone (e.g. snow guns); narrow spaces



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2SC04DOL	6	6.4	1/4"	13.4	0.53	400	5800	1600	23200	75	2.95	0.27	0.18
TH2SC05DOL	8	7.9	5/16"	15	0.59	350	5070	1400	20280	85	3.34	0.33	0.22
TH2SC06DOL	10	9.5	3/8"	17	0.67	330	4780	1320	19120	90	3.54	0.4	0.27
TH2SC08DOL	12	12.8	1/2"	20.4	0.8	275	3990	1100	15950	130	5.11	0.51	0.34
TH2SC10DOL	16	16	5/8"	23.7	0.93	250	3620	1000	14480	170	6.69	0.66	0.44
TH2SC12DOL	19	19	3/4"	27.5	1.08	215	3120	860	12470	200	7.87	0.81	0.54
TH2SC16DOL	25	25.4	1"	35.8	1.41	165	2390	660	9570	250	9.94	1.03	0.69
TH2SC20DOL	31	31.8	1"1/4	43.1	1.7	125	1810	500	7250	280	11.02	1.55	1.04
TH2SC24DOL	38	38.1	1"1/2	49.8	1.96	100	1450	400	5800	330	12.99	1.72	1.16
TH2SC32DOL	51	50.8	2"	63.4	2.5	90	1300	360	5220	450	17.72	2.31	1.55

Hose layline example



OPERATING TEMPERATURE RANGE:
-55°C/+100°C
(-67°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
Ozone Cover: Black synthetic rubber with extreme abrasion and ozone resistance

CERTIFICATIONS:

PREMIER ICE

EXC. EN 857 2SC, EXC. ISO 11237

Extremely low temperatures; very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2SC04PREICE	6	6.4	1/4"	13.4	0.53	450	6500	1800	26100	75	2.95	0.3	0.2
TH2SC05PREICE	8	7.9	5/16"	15.1	0.59	425	6100	1700	24650	85	3.34	0.35	0.23
TH2SC06PREICE	10	9.5	3/8"	17.3	0.68	390	5600	1560	22600	90	3.54	0.42	0.28
TH2SC08PREICE	12	12.8	1/2"	20.4	0.8	350	5100	1400	20300	130	5.11	0.52	0.35
TH2SC10PREICE	16	16	5/8"	24.4	0.96	350	5100	1400	20300	170	6.69	0.74	0.5
TH2SC12PREICE	19	19	3/4"	28.6	1.13	300	4300	1200	17400	200	7.87	0.92	0.62
TH2SC16PREICE	25	25.4	1"	36.4	1.43	230	3335	920	13300	250	9.94	1.3	0.87
TH2SC20PREICE	31	31.8	1"1/4	43.1	1.7	180	2610	720	10440	280	11.02	1.65	1.11
TH2SC24PREICE	38	38.1	1"1/2	49.8	1.96	150	2175	600	8700	330	12.99	2.2	1.48
TH2SC32PREICE	51	50.8	2"	63.4	2.5	120	1740	480	6960	450	17.72	2.9	1.95

Hose layline example



OPERATING TEMPERATURE RANGE:
-55°C/+100°C
(-67°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)

CERTIFICATIONS:

FORTHREE ICE

Extremely low temperatures, reduced bend radius, very high pressure hydraulic systems



Features:

Alternative Versions: Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH3SN06ICE	10	9.5	3/8"	20.4	0.8	500	7250	2000	29000	120	4.72	0.71	0.48
TH3SN08ICE	12	12.8	1/2"	23.7	0.93	470	6850	1880	27400	160	6.3	0.9	0.6
TH3SN10ICE	16	16	5/8"	26.8	1.05	410	6000	1640	24000	210	8.27	1.06	0.71
TH3SN12ICE	19	19	3/4"	30.6	1.2	380	5500	1520	22000	260	10.24	1.36	0.91
TH3SN16ICE	25	25.4	1"	38.4	1.51	330	4800	1320	19200	310	12.2	1.9	1.28

Hose layline example

Vitillo **FORTHREE ICE 3/8"** (9.5mm) -55°C / -67°F Flame Resistant **MSHA IC-365/03** 500 Bar 50 MPa **7250 Psi**

OPERATING TEMPERATURE RANGE:
-55°C/+100°C
(-67°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
3 high tensile steel braids

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

EVEREST 6000 ICE

ISO 18752, EXC. SAE 100 R15

Extremely low temperatures; very demanding conditions in terms of pressure, impulses and torsions



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TSER604ICE	6	6.4	1/4"	17.5	0.69	420	6000	1680	24360	60	2.36	0.58	0.39
TSER606ICE	10	9.5	3/8"	20,6	0.81	420	6000	1680	24360	90	3.55	0.75	0.5
TSER608ICE	12	12.8	1/2"	23,8	0.94	420	6000	1680	24360	120	4.73	0.86	0.58
TSER610ICE	16	16	5/8"	27.4	1.08	420	6000	1680	24360	160	7.09	1.15	0.77
TSER612ICE	19	19	3/4"	31	1.22	420	6000	1680	24360	180	8.27	1.5	1.01
TSER616ICE	25	25.4	1"	38,6	1.52	420	6000	1680	24360	210	9.85	2.21	1.48
TSER620ICE	31	31.8	1"1/4	49.5	1.95	420	6000	1680	24360	300	17.53	3.9	2.62
TSER624ICE	38	38.1	1"1/2	57	2.24	420	6000	1680	24360	530	20.88	4.8	3.22
TSER632ICE	51	50.8	2"	70.5	2.78	420	6000	1680	24360	650	25.61	6.5	4.37

Hose layline example

Vitillo **EVEREST 6000 ICE 2"** (50.8mm) -55°C / -67°F Flame Resistant **MSHA IC-365/03** ISO 18752 EXC. SAE 100 R15 420 Bar 42 MPa **6000 Psi**

OPERATING TEMPERATURE RANGE:
-55°C/+100°C
(-67°F/+212°F)
with peaks of +125°C (257°F)

TUBE:

Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:

4 high tensile steel spirals DN(-6 to -25)
6 high tensile steel spirals DN(-31 to -51)

COVER:

Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

EVEREST 4C 6000 ICE

EXC. SAE 100 R15

Extremely low temperatures; very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TSER64C612ICE	19	19	3/4"	29.6	1.16	420	6000	1680	24000	180	7.09	1.14	0.77
TSER64C616ICE	25	25.4	1"	36.4	1.43	420	6000	1680	24000	210	8.27	1.35	0.91
TSER64C620ICE	31	31.8	1"1/4	45	1.77	420	6000	1680	24000	300	11.81	2.61	1.75

Hose layline example



OPERATING TEMPERATURE RANGE:
-55°C/+100°C
(-67°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Synthetic rubber resistant to oil and biodegradable hydraulic fluids

REINFORCEMENT:
4 high tensile steel spirals

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)

CERTIFICATIONS:

ETNA

SAE 100 R16

Very demanding conditions in terms of high temperatures (ambient and fluid, e.g. engine compartments); narrow spaces



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THETNA04	6	6.4	1/4"	13.4	0.53	350	5000	1400	20000	45	1.77	0.3	0.2
THETNA05	8	7.9	5/16"	15.1	0.59	300	4250	1200	17400	55	2.16	0.35	0.23
THETNA06	10	9.5	3/8"	17.3	0.68	280	4000	1120	16000	65	2.56	0.42	0.28
THETNA08	12	12.8	1/2"	20.4	0.8	250	3625	1000	14500	80	3.15	0.52	0.35
THETNA10	16	16	5/8"	24.4	0.96	230	3300	920	13350	90	3.54	0.74	0.5
THETNA12	19	19	3/4"	28.6	1.13	210	3000	840	12180	120	4.72	0.92	0.62
THETNA16	25	25.4	1"	36.4	1.43	200	2900	800	11600	160	6.3	1.3	0.87

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+125°C
(-40°F/+257°F)
with peaks of +135°C (275°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
Ozone Cover: Black synthetic rubber with extreme abrasion and ozone resistance

CERTIFICATIONS:

TEKNO 1SN RW

EN 853 1SN, SAE 100 R1AT

Medium pressure hydraulic systems for railway applications



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH1SN16RW	25	25.4	1"	35.3	1.39	88	1270	352	5080	300	11.81	0.86	0.58
TH1SN20RW	31	31.8	1"1/4	42.9	1.69	63	910	252	3620	420	16.54	1.16	0.78
TH1SN24RW	38	38.1	1"1/2	50	1.97	50	720	200	2880	500	19.69	1.42	0.95
TH1SN32RW	51	50.8	2"	63.5	2.5	40	580	160	2320	630	24.8	1.97	1.32

Hose layline example

Vitillo **TEKNO 1SN RW 1"** (25.4mm) EN 45545-2 EN 853 1SN SAE 100 R1AT 88 Bar 8.8 MPa **1270 Psi**

OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
1 high tensile steel braid

COVER:
RW Cover: Black fire-retardant synthetic rubber cover

CERTIFICATIONS:

TEKNO 2SN RW

EN 853 2SN, SAE 100 R2AT

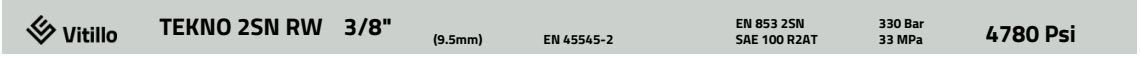
Medium-high pressure hydraulic systems for railway applications



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2SN04RW	6	6.4	1/4"	14.6	0.57	400	5800	1600	23200	100	3.94	0.35	0.24
TH2SN05RW	8	7.9	5/16"	16.3	0.64	350	5070	1400	20280	115	4.53	0.37	0.25
TH2SN06RW	10	9.5	3/8"	18.7	0.74	330	4780	1320	19120	130	5.12	0.52	0.35
TH2SN08RW	12	12.8	1/2"	22.2	0.87	275	3980	1100	15920	180	7.09	0.62	0.42
TH2SN10RW	16	16	5/8"	25	0.98	250	3620	1000	14480	200	7.87	0.7	0.47
TH2SN12RW	19	19	3/4"	29.2	1.15	215	3110	860	12440	240	9.45	0.85	0.57
TH2SN16RW	25	25.4	1"	37.1	1.46	165	2390	660	9560	300	11.81	1.26	0.85
TH2SN20RW	31	31.8	1"1/4	46.7	1.83	125	1810	500	7240	420	16.54	1.77	1.19
TH2SN24RW	38	38.1	1"1/2	53.8	2.12	100	1450	400	5800	500	19.69	2.1	1.41
TH2SN32RW	51	50.8	2"	66.3	2.61	90	1300	360	5220	630	24.8	2.64	1.77

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
RW Cover: Black fire-retardant synthetic rubber cover

CERTIFICATIONS:



PREMIER ONE RW

EXC. EN 857 1SC, EXC. ISO 11237 1SC

Railway applications with very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH1SC04PRE1RW	6	6.4	1/4"	12.4	0.49	290	4200	1160	16800	40	1.57	0.19	0.13
TH1SC05PRE1RW	8	7.9	5/16"	13.2	0.52	270	3900	1080	15660	50	1.97	0.2	0.13
TH1SC06PRE1RW	10	9.5	3/8"	16	0.63	260	3800	1040	15080	60	2.36	0.29	0.19
TH1SC08PRE1RW	12	12.8	1/2"	19.5	0.77	240	3500	960	13900	70	2.76	0.41	0.27
TH1SC10PRE1RW	16	16	5/8"	22.5	0.89	210	3050	840	12200	85	3.34	0.48	0.32
TH1SC12PRE1RW	19	19	3/4"	26.8	1.06	170	2460	680	9860	100	3.94	0.62	0.42
TH1SC16PRE1RW	25	25.4	1"	34	1.34	135	1960	540	7800	140	5.51	0.86	0.58

Hose layline example

Vitillo **PREMIER ONE RW 3/8"** (9.5mm) EN 45545-2 ISO 15540 EXC. EN 857 1SC EXC. ISO 11237 1SC 260 Bar 26 MPa **3800 Psi**

OPERATING TEMPERATURE RANGE:
-40°C/+121°C
(-40°F/+250°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
1 high tensile steel braid

COVER:
RW Cover: Black fire-retardant synthetic rubber cover

CERTIFICATIONS:

PREMIER RW

EXC. EN 857 2SC, EXC. ISO 11237 2SC

Railway applications with very demanding conditions in terms of pressure, impulses and torsions; narrow spaces



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2SC04PRERW	6	6.4	1/4"	13.4	0.53	450	6500	1800	26100	45	1.77	0.3	0.2
TH2SC05PRERW	8	7.9	5/16"	15.1	0.59	425	6100	1700	24650	55	2.16	0.35	0.23
TH2SC06PRERW	10	9.5	3/8"	17.3	0.68	390	5600	1560	22600	65	2.56	0.42	0.28
TH2SC08PRERW	12	12.8	1/2"	20.4	0.8	350	5100	1400	20300	80	3.15	0.52	0.35
TH2SC10PRERW	16	16	5/8"	24.4	0.96	350	5100	1400	20300	90	3.54	0.74	0.5
TH2SC12PRERW	19	19	3/4"	28.6	1.13	300	4300	1200	17400	120	4.72	0.92	0.62
TH2SC16PRERW	25	25.4	1"	36.4	1.43	280	4060	1120	16240	160	6.3	1.3	0.87

Hose layline example

Vitillo **PREMIER RW 3/8"** (9.5mm) EN 45545 EXC. EN 857 2SC EXC. ISO 11237 2SC 390 Bar 39 MPa **5600 Psi**

OPERATING TEMPERATURE RANGE:
-40°C/+121°C
(-40°F/+250°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
RW Cover: Black fire-retardant synthetic rubber cover

CERTIFICATIONS:

TEKNO 2TE RW

EN 854 2TE, ISO 4079 2TE

Low pressure hydraulic systems for railway applications



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2TE04RW	6	6.4	1/4"	13.1	0.52	75	1088	300	4350	40	1.57	0.13	0.09
TH2TE05RW	8	7.9	5/16"	14.8	0.58	68	986	272	3944	50	1.97	0.17	0.11
TH2TE06RW	10	9.5	3/8"	16.4	0.65	63	914	252	3654	60	2.36	0.18	0.12
TH2TE08RW	12	12.8	1/2"	20	0.79	58	841	232	3364	70	2.75	0.26	0.17
TH2TE10RW	16	15.9	5/8"	24.4	0.96	50	725	200	2900	90	3.54	0.36	0.24
TH2TE12RW	19	19	3/4"	27.3	1.07	45	653	180	2610	110	4.33	0.4	0.27
TH2TE16RW	25	25.4	1"	34.6	1.36	40	580	160	2320	150	5.9	0.58	0.39
TH2TE20RW	31	31.8	1"1/4	41	1.61	35	508	140	2030	170	6.69	0.72	0.48

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
1 high tensile textile braid

COVER:
RW Cover: Black fire-retardant synthetic rubber cover

CERTIFICATIONS:



TEKNO 3TE RW

EN 854 3TE, ISO 4079 3TE

Low-medium pressure hydraulic systems for railway applications



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH3TE20RW	31	31.8	1"1/4	43.3	1.7	45	650	180	2610	190	7.47	0.79	0.53

Hose layline example

Vitillo	TEKNO 3TE RW	1"1/4 (31.8mm)	EN 45545-2	EN 854 3TE ISO 4079 3TE	45 Bar 4.5 MPa	650 Psi

OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
with peaks of +125°C (257°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
2 high tensile textile braids

COVER:
RW Cover: Black fire-retardant synthetic rubber cover

CERTIFICATIONS:

VULCAN 1

EXC. EN 853 1SN, EXC.SAE 100 R1AT

Safe transport of hydraulic oils, lubricating oils and dry or oil-containing air, especially at high temperatures. Air compression systems



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH1SN03V1	5	4.8	3/16"	11.7	0.46	250	3620	1000	14480	90	3.54	0.18	0.12
TH1SN04V1	6	6.4	1/4"	13.6	0.54	225	3260	900	13040	100	3.94	0.24	0.16
TH1SN05V1	8	7.9	5/16"	15.2	0.6	215	3110	860	12440	115	4.53	0.29	0.19
TH1SN06V1	10	9.5	3/8"	17.5	0.69	180	2610	720	10440	130	5.12	0.36	0.24
TH1SN08V1	12	12.8	1/2"	20.9	0.82	160	2320	640	9280	180	7.09	0.43	0.29
TH1SN10V1	16	16	5/8"	23.9	0.94	130	1880	520	7520	200	7.87	0.52	0.35
TH1SN12V1	19	19	3/4"	27.9	1.1	105	1520	420	6080	240	9.45	0.64	0.43
TH1SN16V1	25	25.4	1"	35.8	1.41	88	1270	352	5080	300	11.81	0.93	0.62
TH1SN20V1	31	31.8	1"1/4	43.5	1.71	63	910	252	3620	420	16.54	1.25	0.84
TH1SN24V1	38	38.1	1"1/2	50	1.97	50	720	200	2880	500	19.69	1.46	0.98
TH1SN32V1	51	50.8	2"	63.5	2.5	40	580	160	2320	630	24.8	2.05	1.38

Available colors: BLUE - BLACK

To order Black version, add N at the end of the code.

Compressed air applications require a pin prick cover

Hose layline example

Vitillo VULCAN 1 3/8" (9.5mm) Flame Resistant MSHA IC-365/08 EXC. EN 853 1SN EXC.SAE 100 R1AT 180 Bar 18 MPa 2610 Psi

OPERATING TEMPERATURE RANGE:

-40°C/+135°C
(-40°F/+275°F)
with peaks of +150°C (302°F)

TUBE:

Air and oil resistant synthetic rubber

REINFORCEMENT:

1 high tensile steel braid

COVER:

Synthetic rubber with high ozone, weather and heat resistance

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

VULCAN 2

EXC. EN 853 2SN, EXC. SAE 100 R2AT

Safe transport of hydraulic oils, lubricating oils and dry or oil-containing air, especially at high temperatures. Air compression systems



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2SN03V2	5	4.8	3/16"	13.3	0.52	415	6010	1660	24040	90	3.54	0.25	0.17
TH2SN04V2	6	6.4	1/4"	15.1	0.59	400	5800	1600	23200	100	3.94	0.35	0.24
TH2SN05V2	8	7.9	5/16"	16.8	0.66	350	5070	1400	20280	115	4.53	0.42	0.28
TH2SN06V2	10	9.5	3/8"	19.3	0.76	330	4780	1320	19120	130	5.12	0.54	0.36
TH2SN08V2	12	12.8	1/2"	22.5	0.89	275	3980	1100	15920	180	7.09	0.63	0.42
TH2SN10V2	16	16	5/8"	25.5	1	250	3620	1000	14480	200	7.87	0.77	0.52
TH2SN12V2	19	19	3/4"	29.7	1.17	215	3110	860	12440	240	9.45	0.93	0.62
TH2SN16V2	25	25.4	1"	37.6	1.48	165	2390	660	9560	300	11.81	1.37	0.92
TH2SN20V2	31	31.8	1"1/4	47.3	1.86	125	1810	500	7240	420	16.54	1.96	1.32
TH2SN24V2	38	38.1	1"1/2	53.8	2.12	100	1450	400	5800	500	19.69	2.23	1.5
TH2SN32V2	51	50.8	2"	66.3	2.61	90	1300	360	5220	630	24.8	2.77	1.86

Available colors: BLUE - BLACK

To order Black version, add N at the end of the code.

Compressed air applications require a pin prick cover

Hose layline example

Vitillo VULCAN 2 3/8" (9.5mm) Flame Resistant MSHA IC-365/08 EXC. EN 853 2SN EXC. SAE 100 R2AT 330 Bar 33 MPa 4780 Psi

OPERATING TEMPERATURE RANGE:

-40°C/+135°C
(-40°F/+275°F)
with peaks of +150°C (302°F)

TUBE:

Air and oil resistant synthetic rubber

REINFORCEMENT:

2 high tensile steel braids

COVER:

Synthetic rubber with high ozone, weather and heat resistance

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

VULCANAIR

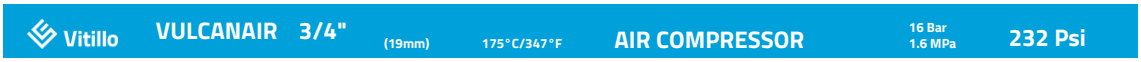
Air compression systems

Features:



Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2SC04VA	6	6.4	1/4"	12.4	0.49	60	870	240	3480	40	1.57	0.11	0.07
TH2SC06VA	10	9.5	3/8"	15.2	0.6	25	360	100	1450	60	2.36	0.14	0.09
TH2SC08VA	12	12.8	1/2"	21.3	0.84	25	360	100	1450	70	2.75	0.29	0.19
TH2SC10VA	16	16	5/8"	25	0.98	20	290	80	1160	110	4.33	0.38	0.25
TH2SC12VA	19	19	3/4"	27.8	1.09	16	232	64	928	130	5.12	0.42	0.28
TH2SC16VA	25	25.4	1"	35.8	1.41	16	232	64	928	150	5.9	0.6	0.4
TH2SC20VA	31	31.8	1"1/4	41.5	1.63	16	232	64	928	180	7.09	0.82	0.55
TH2SC24VA	38	38.1	1"1/2	49	1.93	16	232	64	928	240	9.45	1.07	0.72
TH2SC32VA	51	50.8	2"	61.3	2.41	16	232	64	928	300	11.81	1.19	0.8

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+150°C
(-40°F/+302°F)
Air max +175°C(+347°F)

TUBE:
Black smooth synthetic rubber

REINFORCEMENT:
2 textile braids (DN6-16)
2 textile braids and steel wire helix (DN19-51)

COVER:
Synthetic rubber with high resistance to abrasion, ozone, and UV

TEKNOJET 1SC 250

EN 1829 - 2

Professional water jet cleaners



Features: R S.F. 4:1

Alternative Versions: F Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TJ1SC04	6	6.4	1/4"	12.2	0.48	250	3625	1000	14500	50	1.97	0.17	0.11
TJ1SC05	8	7.9	5/16"	13.5	0.53	250	3625	1000	14500	55	2.17	0.2	0.13
TJ1SC06	10	9.5	3/8"	15.8	0.62	250	3625	1000	14500	65	2.56	0.27	0.18
TJ1SC08	12	12.8	1/2"	19.3	0.76	250	3625	1000	14500	90	3.54	0.35	0.24

Available colors: BLACK - BLUE - RED - GREY

To order different colors, add B (Blue), R (Red), or G (Grey) at the end of the code.

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+135°C
(-40°F/+275°F)
with peaks of +150°C (302°F)

TUBE:
Hot water, detergent and oil synthetic rubber

REINFORCEMENT:
1 high tensile steel braid

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNOJET 1SN 250

EN 1829 - 2

Professional water jet cleaners



Features: R S.F. 4:1

Alternative Versions: F Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TJ1SN04	6	6.4	1/4"	13.1	0.52	250	3625	1000	14500	100	3.94	0.21	0.14
TJ1SN05	8	7.9	5/16"	14.7	0.58	250	3625	1000	14500	115	4.53	0.25	0.17
TJ1SN06	10	9.5	3/8"	17.2	0.68	250	3625	1000	14500	130	5.12	0.34	0.23
TJ1SN08	12	12.8	1/2"	19.6	0.77	250	3625	1000	14500	180	7.09	0.48	0.32

Available colors: BLACK - BLUE - RED - GREY

To order different colors, add B (Blue), R (Red), or G (Grey) at the end of the code.

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+135°C
(-40°F/+275°F)
with peaks of +150°C (302°F)

TUBE:
Hot water, detergent and oil synthetic rubber

REINFORCEMENT:
1 high tensile steel braid

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNOJET 2SC 400

EN 1829 - 2

Professional water jet cleaners



Features: R S.F. 4:1

Alternative Versions: F Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TJ2SC04	6	6.4	1/4"	13.4	0.53	400	5800	1600	23200	75	2.95	0.25	0.17
TJ2SC05	8	7.9	5/16"	15	0.59	400	5800	1600	23200	85	3.34	0.3	0.2
TJ2SC06	10	9.5	3/8"	17	0.67	400	5800	1600	23200	90	3.54	0.4	0.27
TJ2SC08	12	12.8	1/2"	21.1	0.83	400	5800	1600	23200	130	5.11	0.59	0.4

Available colors: BLACK - BLUE - RED - GREY

To order different colors, add B (Blue), R (Red), or G (Grey) at the end of the code.

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+135°C
(-40°F/+275°F)
with peaks of +150°C (302°F)

TUBE:
Hot water, detergent and oil synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNOJET 2SN 400

EN 1829 - 2

Professional water jet cleaners



Features: R S.F. 4:1

Alternative Versions: F Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TJ2SN04	6	6.4	1/4"	14.6	0.57	400	5800	1600	23200	100	3.94	0.33	0.22
TJ2SN05	8	7.9	5/16"	16.3	0.64	400	5800	1600	23200	115	4.53	0.39	0.26
TJ2SN06	10	9.5	3/8"	19.2	0.76	400	5800	1600	23200	130	5.12	0.51	0.34
TJ2SN08	12	12.8	1/2"	22.3	0.88	400	5800	1600	23200	180	7.09	0.67	0.45

Available colors: BLACK - BLUE - RED - GREY

To order different colors, add B (Blue), R (Red), or G (Grey) at the end of the code.

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+135°C
(-40°F/+275°F)
with peaks of +150°C (302°F)

TUBE:
Hot water, detergent and oil synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNOJET 1SN PLUS 315

EN 1829 - 2

Professional water jet cleaners



Features: S.F. 3:1

Alternative Versions: Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TJ1SN04P	6	6.4	1/4"	12.7	0.5	315	4570	1000	14500	100	3.94	0.21	0.14
TJ1SN05P	8	7.9	5/16"	14.7	0.58	315	4570	1000	14500	115	4.53	0.25	0.17
TJ1SN06P	10	9.5	3/8"	17.4	0.69	315	4570	1000	14500	130	5.12	0.34	0.23
TJ1SN08P	12	12.8	1/2"	19.6	0.77	315	4570	1000	14500	180	7.09	0.41	0.28

Available colors: BLACK - BLUE - RED - GREY

To order different colors, add B (Blue), R (Red), or G (Grey) at the end of the code.

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+135°C
(-40°F/+275°F)
with peaks of +150°C (302°F)

TUBE:
Hot water, detergent and oil synthetic rubber

REINFORCEMENT:
1 high tensile steel braid

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNOJET 2SN PLUS 600

EN 1829 - 2

Professional water jet cleaners



Features: S.F. 3:1

Alternative Versions: Forever

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TJ2SN04P	6	6.4	1/4"	14.6	0.57	600	8700	1800	26100	100	3.94	0.34	0.23
TJ2SN05P	8	7.9	5/16"	16.7	0.66	600	8700	1800	26100	115	4.53	0.41	0.28
TJ2SN06P	10	9.5	3/8"	19.1	0.75	600	8700	1800	26100	130	5.12	0.51	0.34
TJ2SN08P	12	12.8	1/2"	22.7	0.89	600	8700	1800	26100	180	7.09	0.74	0.5

Available colors: BLACK - BLUE - RED - GREY

To order different colors, add B (Blue), R (Red), or G (Grey) at the end of the code.

To order the Forever version, add FV at the end of the code.

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+135°C
(-40°F/+275°F)
with peaks of +150°C (302°F)

TUBE:
Hot water, detergent and oil synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
Standard cover: Synthetic rubber (MSHA approved)
Forever FV: Polyethylene-coated synthetic rubber with extreme resistance to abrasion, ozone, and UV (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

CLEANFARM 2SC

EN 1829 - 2

Professional water jet cleaners for stables and chicken coops

Features:



Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TJ2SC04CFB	6	6.4	1/4"	13.4	0.53	400	5800	1600	23200	75	2.95	0.25	0.17
TJ2SC05CFB	8	7.9	5/16"	15	0.59	400	5800	1600	23200	85	3.34	0.3	0.2
TJ2SC06CFB	10	9.5	3/8"	17	0.67	400	5800	1600	23200	90	3.54	0.4	0.27
TJ2SC08CFB	12	12.8	1/2"	21.1	0.83	400	5800	1600	23200	130	5.11	0.59	0.4

Available colors: YELLOW

To order Yellow version, replace B with Y at the end of the code

Hose layline example

Vitillo CLEANFARM 2SC 1/2" (12.8mm) Flame Resistant MSHA IC-365/07 EN 1829 - 2 400 Bar 40 MPa 5800 Psi

OPERATING TEMPERATURE RANGE:
-40°C/+135°C
(-40°F/+275°F)
with peaks of +150°C (302°F)

TUBE:
Oil and water resistant synthetic rubber

REINFORCEMENT:
2 high tensile steel braids

COVER:
Special synthetic rubber resistant to vegetable, animal and chicken fats

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

CLEANFARM 2TE

EN 854 2TE

Cleaning equipment for stables and chicken coops; low pressure lines



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2TE08CF	12	12.8	1/2"	20	0.79	80	1160	240	3480	90	3.54	0.28	0.19

Available colors: BLUE - YELLOW

To order Yellow version, add Y at the end of the code

Hose layline example

Vitillo CLEANFARM 2TE 1/2" (12.8mm) Flame Resistant MSHA IC-365/07 EN 854 2TE 80 Bar 8 MPa 1160 Psi

OPERATING TEMPERATURE RANGE:
-40°C/+135°C
(-40°F/+275°F)
with peaks of +150°C (302°F)

TUBE:
Oil and water resistant synthetic rubber

REINFORCEMENT:
1 high tensile textile braid

COVER:
Special synthetic rubber resistant to vegetable, animal and chicken fats

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

SEWER CLEANING

High pressure washing and cleaning of sewer channels

Features: S.F. 2.5:1



Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2TSW08	12	12.8	1/2"	24.7	0.97	250	3625	625	9060	70	2.75	0.47	0.32
TH2TSW12	19	19	3/4"	30.9	1.22	250	3625	625	9060	90	3.54	0.6	0.4
TH2TSW16	25	25.4	1"	38.9	1.53	250	3625	625	9060	100	3.94	0.88	0.59
TH2TSW20	31	31.8	1"1/4	46.4	1.83	250	3625	625	9060	130	5.12	1.24	0.83

Available lengths 40/60/80/100/120/150 m

Coming soon (not yet available to order)

Hose layline example

Vitillo **SEWER CLEANING 3/4"** (19mm) Flame Resistant **MSHA IC-365/03** 250 Bar 25 MPa **3625 Psi**

OPERATING TEMPERATURE RANGE:
-40°C/+80°C
(-40°F/+176°F)

TUBE:
Black smooth synthetic rubber

REINFORCEMENT:
2 aramid textile braids

COVER:
Smooth rubber with very low sliding resistance

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNOBLAST

EN 1829-2 ; ISO 7751

Water blasting applications, water cutting applications, cleaning and paint or corrosion removal.
Not reccomended for dynamic hydraulic applications



Features: S.F. 2.5:1

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TB4SP06	10	9.5	3/8"	21	0.83	750	10870	1875	27190	180	7.09	0.68	0.46
TB4SP08	12	12.8	1/2"	23.9	0.94	750	10870	1875	27190	220	8.66	0.92	0.62
TB4SP12	19	19	3/4"	31	1.22	750	10870	1875	27190	280	11.02	1.53	1.03

Hose layline example

Vitillo **TEKNOBLAST** **3/4"** (19mm) Flame Resistant **MSHA IC-365/03** EN 1829-2 ; ISO 7751 750 Bar 75 MPa **10870 Psi**

OPERATING TEMPERATURE RANGE:
-10°C/+70°C
(14°F / +158°F)
with peaks of 90°C (194°F)

TUBE:
Synthetic rubber resistant to water, water-soap and oil

REINFORCEMENT:
4 high tensile steel spirals

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)

CERTIFICATIONS:

TEKNOBLAST PLUS

EN 1829-2 ; ISO 7751

Water blasting applications, water cutting applications, cleaning and paint or corrosion removal.
Not reccomended for dynamic hydraulic applications



Features: S.F. 2.5:1

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TB4SP06P	10	9.5	3/8"	21.4	0.84	1250	18120	3125	45310	230	9.06	0.87	0.58
TB4SP08P	12	12.8	1/2"	24.5	0.96	1100	15950	2750	39870	230	9.06	1.13	0.76
TB4SP12P	19	19	3/4"	32	1.26	1000	14500	2500	36250	250	9.84	1.69	1.14
TB4SP16P	25	24.4	1"	38.6	1.52	700	10150	1750	25370	260	10.23	2.22	1.49

Hose layline example



OPERATING TEMPERATURE RANGE:
-10°C/+70°C
(14°F / +158°F)
with peaks of 90°C (194°F)

TUBE:

Synthetic rubber resistant to water, water-soap and oil

REINFORCEMENT:

4 high tensile steel spirals

COVER:

Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNOBLAST SUPERB

EN 1829-2 ; ISO 7751

Water blasting applications, water cutting applications, cleaning and paint or corrosion removal.
Not reccomended for dynamic hydraulic applications



Features: S.F. 2.5:1

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TB4SP08S	12	12.8	1/2"	28	1.1	1450	21000	3625	52490	250	9.84	1.88	1.26
TB4SP12S	19	19	3/4"	35.4	1.39	1350	19580	3375	48870	280	11.02	2.57	1.73

Hose layline example

Vitillo | TEKNOBLAST SUPERB 3/4" (19mm) | Flame Resistant | MSHA IC-365/03 | EN 1829-2 ; ISO 7751 | 1350 Bar 135 MPa | 19580 Psi

OPERATING TEMPERATURE RANGE:
-10°C/+70°C
(14°F / +158°F)
with peaks of 90°C (194°F)

TUBE:
Synthetic rubber resistant to water, water-soap and oil

REINFORCEMENT:
6 high tensile steel spirals

COVER:
Evergreen EV: High-abrasion, ozone-resistant synthetic rubber (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNO 1TE/R6

EN 854 1TE, SAE100 R6

Low pressure hydraulic systems; return lines



Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH1TER603	5	4.8	3/16"	10.3	0.41	35	507	140	2030	35	1.38	0.1	0.06
TH1TER604	6	6.4	1/4"	12.6	0.5	28	406	112	1624	45	1.77	0.12	0.08
TH1TER605	8	7.9	5/16"	14	0.55	28	406	112	1624	65	2.56	0.13	0.09
TH1TER606	10	9.5	3/8"	15.8	0.62	28	406	112	1624	75	2.95	0.17	0.11
TH1TER608	12	12.8	1/2"	19.4	0.76	28	406	112	1624	90	3.54	0.22	0.15
TH1TER610	16	16	5/8"	23	0.91	24	348	96	1392	115	4.53	0.29	0.19
TH1TER612	19	19	3/4"	25.8	1.02	21	305	84	1218	150	5.91	0.32	0.21
TH1TER616	25	25.4	1"	33	1.3	20	290	80	1160	205	8.07	0.45	0.3

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+125°C
(-40°F/+257°F)
with peaks of +135°C (275°F)

TUBE:

Oil resistant synthetic rubber

REINFORCEMENT:

1 high tensile textile braid

COVER:

Standard cover: Synthetic rubber (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNO 2TE

EN 854 2TE, ISO 4079 2TE

Low pressure hydraulic systems; return lines



Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH2TE03	5	4.8	3/16"	12	0.47	80	1160	320	4640	25	0.98	0.12	0.08
TH2TE04	6	6.4	1/4"	13.1	0.52	75	1088	300	4350	40	1.57	0.13	0.09
TH2TE05	8	7.9	5/16"	14.8	0.58	68	986	272	3944	50	1.97	0.17	0.11
TH2TE06	10	9.5	3/8"	16.4	0.65	63	914	252	3654	60	2.36	0.18	0.12
TH2TE08	12	12.8	1/2"	20	0.79	58	841	232	3364	70	2.75	0.26	0.17
TH2TE10	16	15.9	5/8"	24.4	0.96	50	725	200	2900	90	3.54	0.36	0.24
TH2TE12	19	19	3/4"	27.3	1.07	45	653	180	2610	110	4.33	0.4	0.27
TH2TE16	25	25.4	1"	34.6	1.36	40	580	160	2320	150	5.9	0.58	0.39
TH2TE20	31	31.8	1"1/4	41	1.61	35	508	140	2030	170	6.69	0.72	0.48

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+125°C
(-40°F/+257°F)
with peaks of +135°C (275°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
1 high tensile textile braid

COVER:
Standard cover: Synthetic rubber (MSHA approved)

CERTIFICATIONS:

TEKNO 3TE

EN 854 3TE, ISO 4079 3TE

Low-medium pressure hydraulic systems; return lines



Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
TH3TE03	5	4.8	3/16"	12.4	0.49	160	2320	640	9280	40	1.57	0.12	0.08
TH3TE04	6	6.4	1/4"	14.8	0.58	145	2100	580	8410	45	1.77	0.17	0.11
TH3TE05	8	7.9	5/16"	17.5	0.69	130	1885	520	7540	55	2.16	0.24	0.16
TH3TE06	10	9.5	3/8"	19.1	0.75	110	1595	440	6380	70	2.75	0.25	0.16
TH3TE08	12	12.8	1/2"	22.3	0.88	93	1350	370	5394	85	3.34	0.31	0.2
TH3TE10	16	16	5/8"	26.5	1.04	80	1160	320	4640	105	4.13	0.44	0.3
TH3TE12	19	19	3/4"	29.6	1.17	70	1015	280	4060	130	5.11	0.51	0.34
TH3TE16	25	25.4	1"	36.5	1.44	55	800	220	3190	150	5.9	0.67	0.45
TH3TE20	31	31.8	1"1/4	43.3	1.7	45	650	180	2610	190	7.47	0.79	0.53
TH3TE24	38	38.1	1"1/2	50.4	1.95	40	580	160	2320	240	9.45	1.05	0.71

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+125°C
(-40°F/+257°F)
with peaks of +135°C (275°F)

TUBE:

Oil resistant synthetic rubber

REINFORCEMENT:

2 high tensile textile braids

COVER:

Standard cover: Synthetic rubber (MSHA approved)

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNO R4

SAE 100 R4

Hydraulic oil suction and delivery hoses



Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THR410	16	16	5/8"	27	1.06	21	315	84	1260	112	4.4	0.57	0.38
THR412	19	19	3/4"	29.5	1.16	21	315	84	1260	120	4.7	0.59	0.4
THR416	25	25	1"	35.5	1.4	17	255	68	1020	145	5.7	0.74	0.49
THR420	32	32	1"1/4	42.5	1.67	14	210	56	840	195	7.7	0.9	0.6
THR424	38	38	1"1/2	49	1.93	10.5	158	42	630	228	9	1.11	0.74
THR432	51	51	2"	62	2.44	7	105	28	420	300	11.8	1.43	0.96
THR440	63.5	63.5	2"1/2	76	2.99	4	60	16	240	355	14	2.14	1.46
THR448	76	76	3"	88	3.47	4	60	16	240	455	17.9	2.56	1.75
THR464	102	102	4"	115	4.53	2.5	38	10	150	610	24	3.78	2.58

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
2 high tensile textile braids and 1 high tensile steel spiral

COVER:
Weather resistant synthetic rubber

SAUGFLEX

SAE 100 R4

Hydraulic oil suction and delivery hoses



Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THR412S	19	19	3/4"	28	1.1	10	150	30	450	70	2.75	0.56	0.38
THR416S	25	25	1"	34	1.34	10	150	30	450	85	3.34	0.7	0.47
THR418S	28	28	1"3/32	38	1.5	10	150	30	450	95	3.74	0.77	0.52
THR420S	31	31	1"1/4	42	1.65	10	150	30	450	105	4.13	0.85	0.57
THR424S	38	38	1"1/2	48	1.89	10	150	30	450	130	5.11	1.15	0.77
THR425S	40	40	1"9/16	50	1.97	10	150	30	450	135	5.31	1.2	0.81
THR432S	51	51	2"	62	2.44	10	150	30	450	165	6.49	1.49	1
THR438S	60	60	2"3/8	70	2.76	10	150	30	450	200	7.87	1.77	1.19
THR440S	63	63	2"1/2	75.5	2.97	10	150	30	450	220	8.65	1.87	1.26
THR448S	76	76	3"	90	3.54	10	150	30	450	270	10.62	2.34	1.57
THR456S	90	90	3"1/2	104	4.09	10	150	30	450	340	13.38	2.73	1.83
THR464S	102	102	4"	116	4.57	10	150	30	450	390	15.4	3.56	2.39
THR480S	125	125	5"	139	5.47	6	90	18	270	520	20.46	4.3	2.89
THR496S	152	152	6"	169	6.65	5	75	15	225	840	33.1	6.12	4.11
THR4128S	203	203	8"	223	8.78	5	75	15	225	1220	48.1	9.89	6.65

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
high strength synthetic cord plus steel helix wire

COVER:
Black, square corrugated (wrapped finish) synthetic rubber, weather resistant

SAUGFLEX X PLUS G

SAE 100 R4

Hydraulic oil suction and delivery hoses



Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THR412SX	19	19	3/4"	29	1.14	21	304	63	912	40	1.57	0.55	0.37
THR416SX	25	25	1"	35	1.38	17	247	51	741	45	1.77	0.72	0.48
THR420SX	32	32	1"1/4	42	1.65	15	217	45	651	60	2.36	0.88	0.59
THR424SX	38	38	1"1/2	48.5	1.91	10	150	30	450	65	2.56	1.08	0.73
THR432SX	51	51	2"	63	2.48	10	150	30	450	90	3.54	1.76	1.18
THR440SX	63.5	63.5	2"1/2	76	2.99	10	150	30	450	110	4.33	2.25	1.51
THR448SX	76	76	3"	89	3.5	10	150	30	450	135	5.31	2.88	1.94
THR464SX	102	102	4"	116	4.57	10	150	30	450	210	8.26	4.11	2.76

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)

TUBE:
Oil resistant synthetic rubber

REINFORCEMENT:
high strength synthetic cord plus steel helix wire

COVER:
Black, smooth (wrapped finish) CR rubber, weather and oil resistant

TEKNO R7

SAE 100R7; ISO 3949

Medium pressure hydraulic systems



Features: S.F. 4:1

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THR703	5	4.8	3/16"	9.6	0.38	210	3045	840	12180	25	0.98	0.07	0.05
THR704	6	6.4	1/4"	12.2	0.48	210	3045	840	12180	35	1.38	0.09	0.06
THR705	8	8	5/16"	14.3	0.56	190	2755	760	11020	45	1.77	0.13	0.09
THR706	10	9.7	3/8"	16	0.63	160	2320	640	9280	55	2.17	0.16	0.1
THR708	12	13	1/2"	20.3	0.8	140	2030	560	8120	75	2.95	0.22	0.15
THR710	16	16	5/8"	23.7	0.93	105	1523	420	6090	110	4.33	0.28	0.19
THR712	19	19.2	3/4"	27.1	1.07	90	1305	360	5220	140	5.51	0.33	0.22
THR716	25	25.6	1"	34	1.34	70	1015	280	4060	190	7.48	0.4	0.27

Hose layline example

Vitillo **TEKNO R7 3/8"** (9.7mm) SAE 100R7; ISO 3949 160 Bar 16 MPa **2320 Psi**

OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
Air and water max +70°C
(+158/°F)

TUBE:
Thermoplastic polyester

REINFORCEMENT:
2 polyester fibers

COVER:
Antiabrasion polyurethane stabilized to UV rays

TEKNO R7 NON CONDUCTIVE

SAE 100R7, ISO 3949, ANSI A92.2

Medium pressure hydraulic systems with electrical isolation



Features: S.F. 4:1

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THR703NC	5	4.8	3/16"	9.6	0.38	210	3045	840	12180	25	0.98	0.07	0.05
THR704NC	6	6.4	1/4"	12.2	0.48	210	3045	840	12180	35	1.38	0.09	0.06
THR705NC	8	8	5/16"	14.3	0.56	190	2755	760	11020	45	1.77	0.13	0.09
THR706NC	10	9.7	3/8"	16	0.63	160	2320	640	9280	55	2.17	0.16	0.1
THR708NC	12	13	1/2"	20.3	0.8	140	2030	560	8120	75	2.95	0.22	0.15
THR710NC	16	16	5/8"	23.7	0.93	105	1523	420	6090	110	4.33	0.28	0.19
THR712NC	19	19.2	3/4"	27.1	1.07	90	1305	360	5220	140	5.51	0.33	0.22
THR716NC	25	25.6	1"	34	1.34	70	1015	280	4060	190	7.48	0.4	0.27

Hose layline example

Vitillo **TEKNO R7 NON CONDUCTIVE 3/8"** (9.7mm) SAE 100R7 ISO 3949 ANSI A92.2 160 Bar 16 MPa **2320 Psi**

OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
Air and water max +70°C
(+158/°F)

TUBE:
Thermoplastic polyester

REINFORCEMENT:
2 polyester fibers

COVER:
Orange, antiabrasion polyurethane stabilized to UV rays, not microperforated

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNO R8

SAE 100 R8; ISO 3949

High pressure hydraulic systems



Features: S.F. 4:1

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THR802	3	3.5	1/8"	7.1	0.28	420	6090	1680	24360	30	1.18	0.04	0.02
THR803	5	4.8	3/16"	8.9	0.35	350	5075	1400	20300	30	1.18	0.07	0.05
THR804	6	6.4	1/4"	11.5	0.46	350	5075	1400	20300	50	1.97	0.09	0.06
THR805	8	8	5/16"	13.4	0.53	300	4300	1200	17400	55	2.17	0.13	0.08
THR806	10	9.7	3/8"	15.5	0.61	280	4060	1120	16240	60	2.36	0.15	0.1
THR808	12	13	1/2"	19.9	0.78	245	3553	980	14210	80	3.15	0.23	0.15
THR810	16	16	5/8"	23.4	0.92	200	2828	800	11600	125	4.92	0.27	0.18
THR812	19	19.2	3/4"	27.1	1.07	165	2393	660	9570	150	5.9	0.35	0.24
THR816	25	25.6	1"	34.2	1.35	140	2030	560	8120	200	7.87	0.51	0.34

Hose layline example

Vitillo **TEKNO R8 3/4"** (19.2mm) SAE 100 R8; ISO 3949 165 Bar 16.5 MPa **2393 Psi**

OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
Air and water max +70°C
(+158/°F)

TUBE:
Thermoplastic polyester

REINFORCEMENT:
2 textile fibers

COVER:
Antiabrasion polyurethane stabilized to UV rays

TEKNO R8 NON CONDUCTIVE

SAE 100 R8, ISO 3949

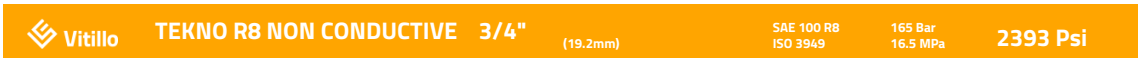
High pressure hydraulic systems with electrical isolation



Features: S.F. 4:1

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THR802NC	3	3.5	1/8"	7.1	0.28	420	6090	1680	24360	30	1.18	0.04	0.02
THR803NC	5	4.8	3/16"	8.9	0.35	350	5075	1400	20300	30	1.18	0.07	0.05
THR804NC	6	6.4	1/4"	11.5	0.46	350	5075	1400	20300	50	1.97	0.09	0.06
THR805NC	8	8	5/16"	13.4	0.53	300	4300	1200	17400	55	2.17	0.13	0.08
THR806NC	10	9.7	3/8"	15.5	0.61	280	4060	1120	16240	60	2.36	0.15	0.1
THR808NC	12	13	1/2"	19.9	0.78	245	3553	980	14210	80	3.15	0.23	0.15
THR810NC	16	16	5/8"	23.4	0.92	200	2828	800	11600	125	4.92	0.27	0.18
THR812NC	19	19.2	3/4"	27.1	1.07	165	2393	660	9570	150	5.9	0.35	0.24
THR816NC	25	25.6	1"	34.2	1.35	140	2030	560	8120	200	7.87	0.51	0.34

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
Air and water max +70°C
(+158/°F)

TUBE:
Thermoplastic polyester

REINFORCEMENT:
2 textile fibers

COVER:
Orange, antiabrasion polyurethane stabilized to UV rays, not microperforated

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNO MTH1

SAE 100R1, EN853 1ST-1SN, EN857 1SC

High pressure hydraulic systems



Features: **S.F. 4:1**

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THMTH103	5	4.8	3/16"	10	0.39	325	4713	1300	18850	30	1.18	0.13	0.09
THMTH104	6	6.4	1/4"	11.9	0.47	300	4350	1200	17400	40	1.57	0.17	0.11
THMTH105	8	8	5/16"	14	0.55	240	3480	960	13920	50	1.97	0.22	0.15
THMTH106	10	9.7	3/8"	16	0.63	225	3263	900	13050	60	2.36	0.26	0.17
THMTH108	12	13	1/2"	19.2	0.76	190	2755	760	11020	75	2.95	0.33	0.22
THMTH110	16	16.3	5/8"	23.3	0.92	150	2175	600	8700	110	4.33	0.41	0.28
THMTH112	19	19.2	3/4"	25.5	1	130	1885	520	7540	150	5.9	0.45	0.31
THMTH116	25	25.6	1"	32.5	1.28	105	1523	420	6090	185	7.28	0.59	0.4
THMTH120	32	32	1"1/4	40	1.57	70	1015	280	4060	290	11.4	0.89	0.6

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
Water max +70°C (+158°F)

TUBE:
Thermoplastic polyester

REINFORCEMENT:
1 high tensile steel braid

COVER:
Antiabrasion polyurethane stabilized to UV rays

TEKNO MTH2

SAE 100R2

High pressure hydraulic systems



Features: S.F. 4:1

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THMTH204	6	6.4	1/4"	13.5	0.53	400	5800	1600	23200	40	1.57	0.29	0.2
THMTH205	8	8	5/16"	15.1	0.59	350	5075	1400	20300	50	1.97	0.35	0.23
THMTH206	10	9.7	3/8"	17	0.67	330	4785	1320	19140	60	2.36	0.42	0.28
THMTH208	12	13	1/2"	21.5	0.85	275	3988	1100	15950	75	2.95	0.6	0.4
THMTH210	16	16.3	5/8"	24.5	0.96	250	3625	1000	14500	110	4.33	0.66	0.44
THMTH212	19	19.2	3/4"	27.5	1.08	215	3118	860	12470	150	5.9	0.79	0.53
THMTH216	25	25.6	1"	35	1.38	165	2393	660	9570	185	7.28	1.05	0.71

Hose layline example

Vitillo **TEKNO MTH2 5/16"** (8mm) SAE 100R2 350 Bar 35 MPa **5075 Psi**

OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
Water max +70°C (+158°F)

TUBE:
Thermoplastic polyester

REINFORCEMENT:
2 high tensile steel braids

COVER:
Antiabrasion polyurethane stabilized to UV rays

TEKNO MTKH

High pressure hydraulic systems

Features: S.F. 4:1



Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THMTKH04	6	6.4	1/4"	14.5	0.57	700	10150	2800	40600	40	1.57	0.26	0.17
THMTKH06	10	9.7	3/8"	18	0.71	425	6163	1700	24650	60	2.36	0.34	0.23
THMTKH08	12	13	1/2"	22	0.87	375	5438	1500	21750	75	2.95	0.46	0.31
THMTKH10	16	16	5/8"	25	0.98	250	3625	1000	14500	110	4.33	0.53	0.38
THMTKH12	19	19.2	3/4"	28.2	1.11	225	3263	900	13050	150	5.9	0.66	0.44
THMTKH16	25	25.8	1"	35.4	1.39	200	2900	800	11600	250	9.842	0.86	0.58

Hose layline example



OPERATING TEMPERATURE RANGE:
-40°C/+100°C
(-40°F/+212°F)
Water max +70°C (+158°F)

TUBE:
Thermoplastic polyester

REINFORCEMENT:
1 aramidic fiber and 1 high tensile steel braids

COVER:
Antiabrasion polyurethane stabilized to UV rays

CERTIFICATIONS:

U.S. Department of Labor MSHA Mine Safety & Health Administration

TEKNO FHL

SAE 100 R14

Steam for cleaning; plastic moulding presses; transport of corrosive chemical; food and pharmaceutical products; transport of air



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THFHL02	3.2	3.2	1/8"	5.9	0.23	275	3988	1100	15950	25	0.98	0.06	0.04
THFHL03	5	4.8	3/16"	7.4	0.29	200	2900	750	10880	35	1.38	0.07	0.05
THFHL04	6	6.35	1/4"	9	0.35	188	2720	680	9860	45	1.77	0.09	0.06
THFHL05	8	7.9	5/16"	10.8	0.43	170	2465	600	8700	50	1.97	0.13	0.09
THFHL06	9.5	9.5	3/8"	12.4	0.49	162	2350	650	9430	55	2.16	0.15	0.1
THFHL08	13	12.7	1/2"	15.7	0.62	120	1740	480	6960	70	2.75	0.21	0.14
THFHL10	16	15.9	5/8"	19.1	0.75	100	1450	400	5800	130	5.11	0.26	0.17
THFHL12	19	19	3/4"	22.2	0.87	90	1305	360	5220	190	7.47	0.32	0.22
THFHL16	25	25.4	1"	29.3	1.15	65	943	260	3770	270	10.62	0.45	0.3

Hose layline example



OPERATING TEMPERATURE RANGE:
-70°C/+260°C (-94°F/+500°F)

TUBE:
Synterized PTFE

REINFORCEMENT:
1 stainless steel braid AISI 304

COVER:

TEKNO FHM

SAE 100 R14

Steam for cleaning; plastic moulding presses; transport of corrosive chemical; food and pharmaceutical products; transport of air



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THFHM02	3.2	3.2	1/8"	6.5	0.26	275	3988	1100	15950	25	0.98	0.07	0.05
THFHM03	5	4.8	3/16"	7.8	0.31	200	2900	800	11600	35	1.38	0.09	0.06
THFHM04	6	6.35	1/4"	9.4	0.37	188	2720	750	10880	45	1.77	0.11	0.07
THFHM05	8	7.9	5/16"	11.2	0.44	170	2465	680	9860	50	1.97	0.15	0.1
THFHM06	9.5	9.5	3/8"	12.8	0.5	162	2350	650	9430	55	2.16	0.17	0.12
THFHM08	13	12.7	1/2"	16	0.63	120	1740	480	6960	70	2.75	0.24	0.16
THFHM10	16	15.9	5/8"	19.2	0.76	100	1450	400	5800	130	5.11	0.3	0.2
THFHM12	19	19	3/4"	22.5	0.89	90	1305	360	5220	190	7.47	0.37	0.25
THFHM16	25	25.4	1"	29.4	1.16	65	943	260	3770	270	10.62	0.5	0.34

Hose layline example

Vitillo **TEKNO FHM 5/16"** (7.9mm) SAE 100 R14 170 Bar 17 MPa **2465 Psi**

OPERATING TEMPERATURE RANGE:
-70°C/+260°C (-94°F/+500°F)

TUBE:
Synterized PTFE

REINFORCEMENT:
1 stainless steel braid AISI 304

COVER:

TEKNO FHM-DC

SAE 100 R14

Steam for cleaning; plastic moulding presses; transport of corrosive chemical; food and pharmaceutical products; transport of air



Features:

Code	Hose Size			Outside diameter		Max working pressure		Min burst pressure		Min bend radius		Weight	
	D.N.	mm	Inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/mt	lb/ft
THFHMDC03	5	4.8	3/16"	9	0.35	416	6030	1250	18125	30	1.18	0.14	0.09
THFHMDC04	6	6.35	1/4"	10.5	0.41	365	5293	1100	15950	35	1.38	0.17	0.12
THFHMDC05	8	7.9	5/16"	12.7	0.5	300	4350	900	13050	40	1.57	0.23	0.15
THFHMDC06	9.5	9.5	3/8"	14.3	0.56	285	4133	850	12325	50	1.97	0.27	0.18
THFHMDC08	13	12.7	1/2"	17.6	0.69	280	4060	750	10875	70	2.75	0.37	0.25
THFHMDC10	16	15.9	5/8"	21	0.83	235	3408	700	10150	110	4.33	0.51	0.34
THFHMDC12	19	19	3/4"	24.1	0.95	200	2900	600	8700	180	7.08	0.61	0.41
THFHMDC16	25	25.4	1"	31.5	1.24	150	2175	450	6525	240	9.44	0.81	0.55

Hose layline example

Vitillo **TEKNO FHM-DC 1/4"** (6.35mm) SAE 100 R14 365 Bar 36.5 MPa **5293 Psi**

OPERATING TEMPERATURE RANGE:
-70°C/+260°C (-94°F/+500°F)

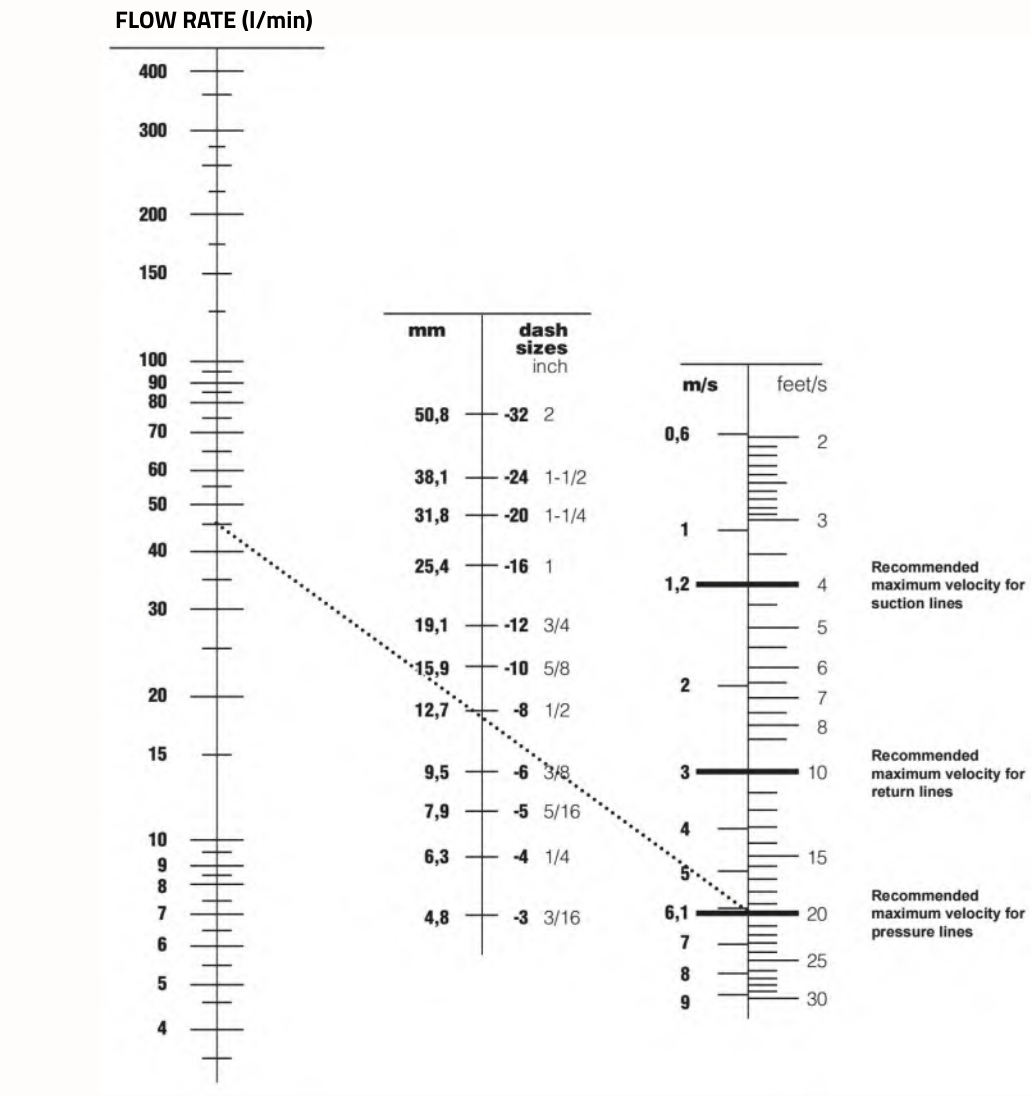
TUBE:
Synterized PTFE

REINFORCEMENT:
2 stainless steel braids AISI 304

COVER:

FLOW CAPACITY NORMOGRAM

This chart is a crucial tool for determining the correct hydraulic hose inside diameter. It helps to **identify the appropriate hose size** based on the liquid flow and its speed. To use it, you need the liquid flow value and the suggested fluid speed. The recommended speed varies depending on whether it's a pressure line or a suction/return line.
The process involves drawing a straight line between your known flow value and the appropriate suggested speed. This line will intersect the central column, revealing the necessary hose ID in millimeters or inches. If the indicated ID is below a standard size, you would choose the next standard size up. The same method applies to both pressure and suction hoses, ensuring you use the correct velocity ranges for each.



HOSE ASSEMBLY INSTRUCTIONS

Vitillo

1. Measure and cut the hose

Cut the tube to the desired length, using the appropriate disc cutter ***(Fig.1a)***. Ensure that the hose is cut squarely and clean. ***(Fig.1b -1c)***



Fig. 1a



Fig. 1b

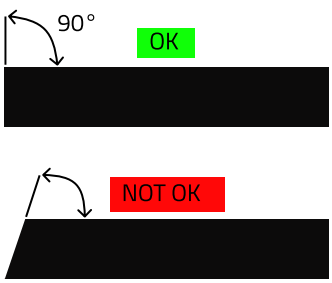


Fig. 1c

2. Clean the hose

After cutting the hose it is recommended to clean it with compressed air on both sides, to make sure there are no residues inside the hose ***(Fig.2a)***



Fig. 2a

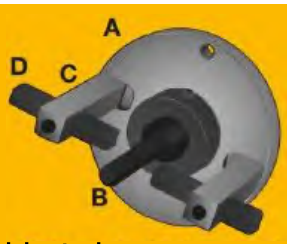
3. Skiving (only if requested)

For certain combinations of hoses and ferrules, it may be necessary to skive the hose ends before the ferrule is pressed on. This process can involve external skiving and, in some cases, internal skiving as well.
To ensure proper assembly, you must always consult the Vitillo crimping parameters chart. This document will confirm whether skiving is required for your specific components and will provide the exact skiving length suitable for the ferrule you are using.

HOSE ASSEMBLY INSTRUCTIONS

Procedure for external skiving

1. Select the appropriate outside skiving mandrel tool ***(Fig.3a)***, according to hose size and install tool in the machine ***(Fig.3a-part.B)***.
2. Adjust the skiving depth according to the size of the hose; skiving depth is set by moving the knives radially inward or outward. ***(Fig.3a-part.D)***.
3. Set the external skive length. Skiving length is adjustable by moving the mandrel forwards or backwards for the length required ***(Fig.3b)***. The distance between the base of mandrel and knives has to be the same as the value of external skive length indicated in the crimping parameters chart.
4. Activate the hose skiving machine ***(Fig.3c)***.
5. Slide hose onto mandrel. Knife should contact hose cover. Clean away as much hose cover as possible, without damaging the hose reinforcement ***(Fig.3d)***.
6. After the skiving process it is mandatory to clean the hose with compressed air.



External skiving tool

A: External skiving tool with two arms

B: Mandrel for external skiving

C: Supporting arm for skiving knife (short/long arm)

D: External skiving knife

Fig. 3a

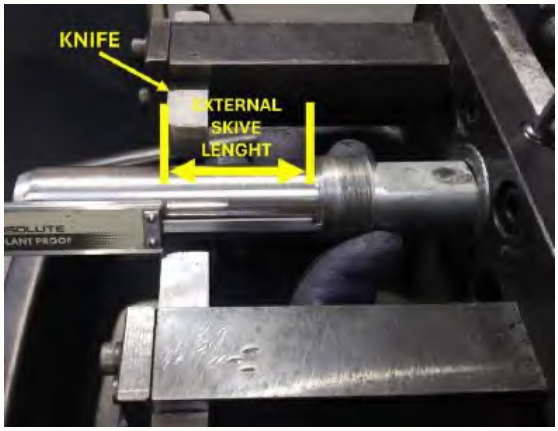


Fig. 3b



Fig. 3c



Fig. 3d

Procedure for internal skiving

1. Change mandrel for external skive to the internal skive tool ***(Fig.3f)***. Select the appropriate internal skiving tool, according to hose size and install the tool in the machine.
2. Adjust the internal skive depth to the size of the hose. Skiving depth is adjustable by setting the height of the skiving knife.
3. Set the internal skive length ***(Fig.3g)***. Skiving length is adjustable by rotating the ring clockwise or anticlockwise.The distance between the knives and the ring has to be the same as the value of internal skive length indicated in the crimping parameters chart.
4. Activate the hose skiving machine ***(Fig.3h)***.
5. Slide hose onto mandrel. Knife should contact hose cover. Clean away as much hose cover as possible, without damaging the hose reinforcement ***(Fig.3i)***.
6. All hoses that have been skived internally must be cleaned immediately after skiving. For this purpose, it is recommended to use special cleaning plugs that are blasted through the hose with compressed air. In addition to this work step, the finished hose must be cleaned at both ends with compressed air.

Internal skiving tool
a: Skiving knife

Skiving tool
A: Complete tool holder
B: Skiving mandrel for internal skiving
C: Supporting arm for skiving knife (short/long arm)
D: Skiving knife for external skiving (2x)
E: Skiving knife for internal skiving

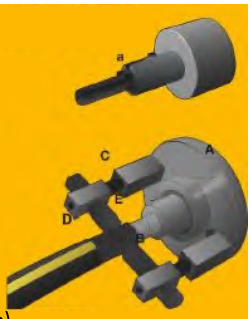


Fig. 3e



Fig. 3f

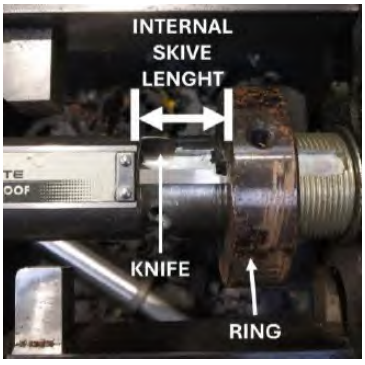


Fig. 3g



Fig. 3h



Fig. 3i

HOSE ASSEMBLY INSTRUCTIONS

4. Hose assembly

Put the ferrule onto the hose by hand until the hose reaches the bottom of the ferrule ***(Fig.4a-4b)***.
Then push the insert down into the hose until it reaches the stop on the lower groove ***(Fig.4c-4d)***.
Lightly lubricate insert and inside of hose if necessary (applying lubricant allows the fitting to be inserted easily and evenly, without marring or damaging the inner liner of the hose).

To quickly select the most appropriate ferrule for your hose, refer to crimping parameters chart.



Fig. 4a



Fig. 4b



Fig. 4c



Fig. 4d

5. Crimping process

Select the correct die set specific to the hose and fitting to be crimped ***(Fig.5a)*** and insert the dies into the crimping press.
Place the hose with the ferrule and the insert between the punches, ensuring that the positioning allows the entire length of the ferrule to be crimped ***(Fig.5b)*** The ferrule must be centered in the crimping area to ensure uniform compression ***(Fig.5c)***. Make sure there are no bends or twists in the hose that could compromise the crimping process.
Set the crimping diameter on the crimping machine, then activate the machine, which will press the die around the fitting ***(Fig.5d)*** .
Hold the hose in place during the crimping process and make sure there are no twists in the hoses that could compromise the crimping process.



Fig. 5a



Fig. 5b



Fig. 5c



Fig. 5d

HOSE ASSEMBLY INSTRUCTIONS

6. Check the crimping process

Make sure the hose has the correct crimp diameter by measuring it with a caliper measuring on the flats of the crimp ***(Fig.6a)***. For the crimping diameter values refer to the crimping parameters chart (upper deviation: +0,01mm; lower deviation: -0,2 mm).
It is also recommended to check the internal diameter of the stem with NO-GO and GO gauges ***(Fig.6b-6c)*** to ensure compliance with the values given in the crimping parameters chart.

NO-GO Gauge Test
Insert the NO-GO end of the gauge into the insert hole; the gauge should stop halfway along the tail section. This indicates that the hole has reached its minimum collapse ***(Fig. 6b)***. If the NO-GO gauge passes through the hole, the crimp diameter should be reduced in 0.1 mm increments.

GO Gauge Test
Insert the GO end of the gauge into the insert hole. The gauge should fully engage the tail section. This indicates that the hole has collapsed to its maximum extent. ***(Fig. 6c)*** If the GO gauge does not fit through the hole, the crimp diameter needs to be increased.



Fig. 6a



Fig. 6b



Fig. 6c

6. Cleaning

It is good practice to inspect the assembly before delivery or use ***(Fig. 7a)***.
The level of inspection must comply with the quality plan.

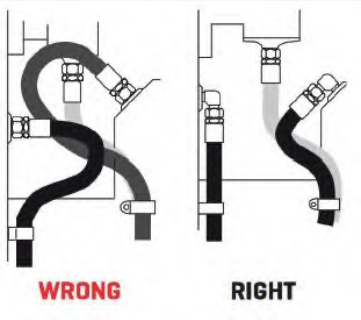
It is recommended to:

- Clean to remove dust, chips, gum, etc.
- Apply caps or shrink-wrap the hose to prevent contamination.
- Apply labels if required.



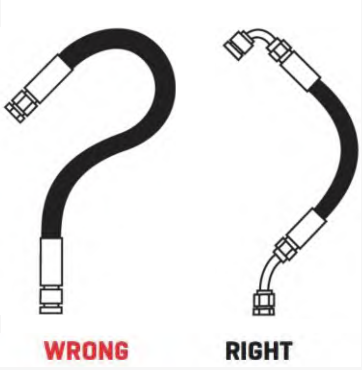
Fig. 7a

CORRECT INSTALLATION



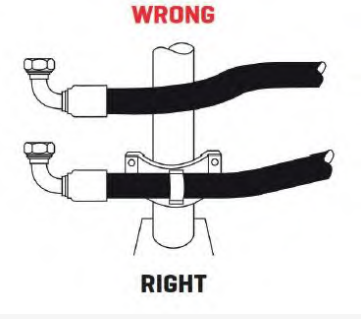
Appearance

Route hose directly by using 45° and/or 90° adapters and fittings. Avoid excessive hose length to improve appearance.



Collapse

To avoid hose collapse and flow restriction, keep hose bend radius as large as possible.
Refer to hose specification tables for minimum bend radius.

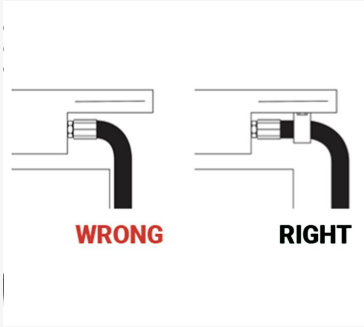


High temperature

High ambient temperatures shorten hose life, so make sure hose is kept away from hot parts.
If this is not possible, insulate hose with protective sleeving.

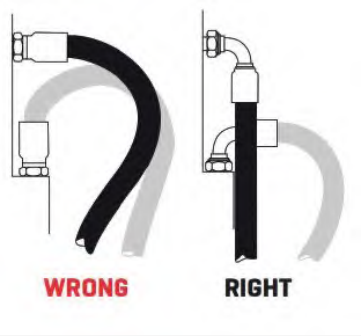
CORRECT INSTALLATION

Vitillo



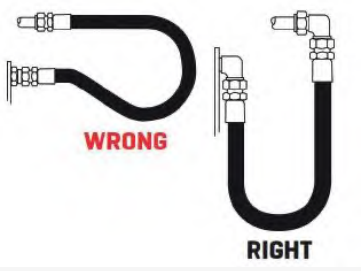
Abrasion

Run hose in the installation so that it avoids rubbing and abrasion. Often, clamps are required to support long hose runs or to keep hose away from moving parts. Use clamps of the correct size. Too large a clamp allows hose to move inside the clamp and cause wear.



Strain

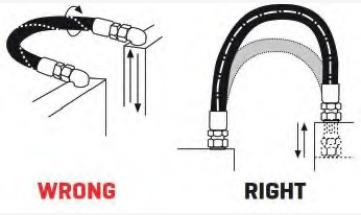
Elbows and adapters should be used to relieve strain on the assembly, and to provide neater installations which will be more accessible for inspection and maintenance.

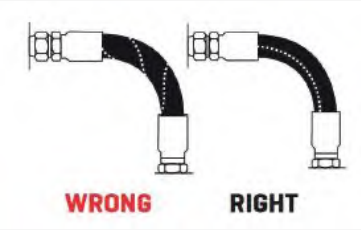


Bend radius

When the radius is less than the minimum required, use an angle adapter to avoid sharp turns.

CORRECT INSTALLATION





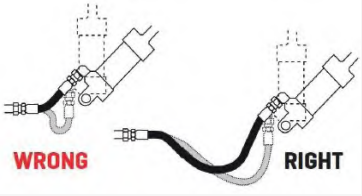
Twist

Prevent twisting and distortion by bending the hose in the same plane as the movement of the port to which it is connected.
Also, ensure that the hose is not twisted during installation. Pressure applied to a twisted hose can cause the hose to break or the connections to loosen.



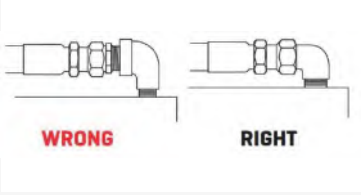
Length change

When installing the hose straight, leave enough slack in the hose line to compensate for length changes that occur when pressure is applied.



Movement/Flexing

In moving applications, pay special attention to having adequate hose length to avoid tensile stress or abrasion.



Reduce connections

Reduce the number of hose thread joints by using hydraulic adapters instead of hose fittings.

SAFETY NOTES

Vitillo

Selecting the appropriate hydraulic hose is fundamental for achieving a safe, efficient, and durable system.
Our products are meticulously engineered based on extensive industrial experience and advanced technology. However, their optimal performance and safety depend critically on careful consideration of your specific application and adherence to best practices.

Essential Considerations for Hose Selection and Use: The suitability of any hose is shaped by numerous factors, including the precise installation environment, the required curvature, and the chosen coupling combination. It is paramount to verify the compatibility of the fluid medium with the hose's inner liner. Always ensure the selected product is fully appropriate for your application's specific demands.

- **Fluid Compatibility**: The use of inappropriate or incompatible fluids can severely degrade the hose's internal components, potentially leading to leaks or catastrophic system failure. For any new or untested media, or for applications not clearly described in our product literature, always seek expert consultation.

- **Pressure and Temperature Limits**: Strict adherence to the maximum working pressure and the recommended temperature range specified for each hose is non-negotiable. Exceeding these operational limits can drastically shorten the hose's service life and significantly increase the risk of rupture or coupling blow-off.

- **Bend Radius**: Avoiding excessively tight bends is crucial to prevent premature wear and potential failures. Always respect the minimum bending radius stipulated for each hose type and size. Utilizing appropriate adapters or spring guards can help maintain the correct curvature during installation.

- **Coupling Assembly**: Correctly tightening couplings to the recommended torque is critical for system integrity. Under-tightening can result in leaks, while over-tightening may lead to over-stressing or cracking, compromising the safety and reliability of the entire assembly.

SAFETY NOTES

Prioritizing Safety in Operation: Hydraulic systems operate under considerable pressure, demanding rigorous attention to safety to prevent serious injury, property damage, or even fatalities.

- **Pressurized Fluid Hazards**: Highly pressurized fluid escaping through even a tiny pinhole can be nearly invisible yet possess immense force, capable of penetrating skin and other tissues, leading to severe injury. Hot fluids or chemicals pose a risk of severe burns, and an uncontrolled release of pressurized fluids can unleash tremendous explosive force. Many hydraulic fluids are also highly flammable.

- **Personal Protection**: Always position a shield between yourself and pressurized hydraulic lines, or ensure pressure is shut off before working nearby. Wear safety glasses. Never use your hands to check for leaks or touch a pressurized hydraulic hose assembly. If fluid penetrates the skin, even without immediate pain, it constitutes a serious medical emergency requiring immediate medical attention to prevent severe, irreversible consequences, including loss of the injured body part or death.

- **Electrical Conductivity**: Be aware that many hydraulic hoses are electrically conductive. For applications where electrical conductivity is undesirable, such as near live electrical power lines, non-conductive thermoplastic hoses must be specified and used.

- **Protect Against External Factors**: Safeguard hose assemblies from abrasion, impacts, excessive external force, tension, or twisting. Avoid prolonged negative pressure within the hose, as this can damage the inner tube and cause leakage.

- **Remove Trapped Air**: Ensure all air is thoroughly purged from inside the hose during installation to prevent damage to the inner tube and potential failures.

SAFETY NOTES

Vitillo

Installation, Maintenance, and Storage for Extended Life: A proactive approach to maintenance, coupled with correct installation and storage, is paramount for maximizing the service life and ensuring the safety of your hydraulic hoses.

- **Regular Inspections**: Implement a comprehensive program of regular inspection, testing, and timely replacement. Only properly trained personnel should routinely check for any signs of damage, such as swelling, exposed reinforcement, or mechanical alterations like sharp bending. Adjust your replacement cycles based on specific operating conditions, including frequency of use and severity of the application, as unfavorable conditions (e.g., maximum pressure, temperature, minimum bending radius) can significantly reduce product lifespan. Document all maintenance, inspections, and testing.

- **Storage and Handling**: Store hoses in dry conditions, within a temperature range of -10°C to +40°C, away from direct sunlight, noxious gases, oils, and chemicals. All products must be stored, handled, and maintained in accordance with our instructions and recognized industry standards like DIN 7716:1982.

- **No Repairs or Modifications**: For safety reasons and to maintain specified performance, our hoses should never be repaired or remodelled.

- **Component Compatibility**: For optimal safety and reliability, we strongly recommend using our hoses exclusively with fittings specified and tested for them, and to follow all our assembly recommendations. The use of components from different manufacturers, or those not explicitly validated for compatibility with our products, is not recommended and may lead to unreliable or unsafe assemblies. A simple burst or pressure test cannot fully determine the suitability of a hose and coupling combination.

Staying Informed: Our products are subject to continuous development and improvement. Information contained in our catalogs and data-sheets may be updated without prior notice.
To ensure you always have access to the most current product and safety information, please visit our website regularly or contact one of our specialist dealers or application engineers for specific advice.
Please note, our products are not suitable for use in airplanes or other aerial vehicles under any circumstance.

GENERAL WARRANTY CONDITIONS

1. NATURE OF THE WARRANTY

Vitillo S.p.A. warrants that the Products Supplied to the Purchaser:

- comply with the agreed Product Specifications;
- comply with the technical regulations currently in force in the European Union;
- are free from design and manufacturing defects;
- are fit for their normal intended purpose;
- do not infringe the intellectual property rights of third parties.

Furthermore, The Supplier guarantees that it has full and valid title to the Products and undertakes to deliver them free from any encumbrance.

2. WARRANTY PERIOD

The warranty shall apply for a period of 24 months from the date of delivery of the Product to the Purchaser.

3. WARRANTY SERVICE

The warranty service consists of the complete replacement or repair of the defective and/or faulty part. In the event of repair, the Purchaser shall send the defective Product at its own expense to the headquarters or branch indicated by the Supplier. The Supplier shall send the new Product or the repaired Product to the Purchaser, bearing the shipping costs. This warranty only covers the replacement or repair of defective Products, excluding any further and different obligations.

In order to obtain the warranty service, the Purchaser must report the fault and/or defect or malfunction in writing within 8 days of receipt of the Product for apparent and obvious faults and/or defects, and within 8 days of the date of discovery of the faults and/or defects for hidden or not easily recognizable faults and/or defects, under penalty of forfeiture of the right.

The complaint must be notified to the Supplier by email to the Supplier's Customer Service, specifying the nature and extent of the faults and/or defects in detail. If no complaint is sent by the Purchaser to the Supplier within this strict deadline, the Product shall be deemed to have been automatically accepted.

The Supplier shall send the Purchaser written notification of receipt of the complaint within 3 business days and undertakes to respond within 30 business days of receipt of the complaint.

The Purchaser shall consult with the Supplier in advance on the actions to be taken in relation to any intervention under the Warranty.

Any replacement of components or parts of the Product carried out during the warranty period shall not renew the expiry of the warranty on the Product as a whole nor extend its expiry date, without prejudice to the separate warranty on the replaced component or part.

The replacement of the entire Product shall entitle the Purchaser to a renewal of the contractual warranty for the entire period provided for.

GENERAL WARRANTY CONDITIONS

Vitillo

4. LIABILITY

The Supplier's liability shall in no case extend to the obligation to reimburse the costs of dismantling, assembly or transport or to pay compensation or indemnity for machine downtime, line downtime or damage of any kind, whether direct or indirect, including to third parties.
For conformity defects relating to goods supplied to an end consumer, no compensation or damages of any kind shall be payable by the Supplier, except in cases of willful misconduct or gross negligence and/or where liability cannot be excluded under mandatory law.

5. WARRANTY EXCLUSIONS

The warranty shall not apply and shall not be valid, by way of example and without limitation, when:

- the Products have been used incorrectly, modified, damaged, stored in an unsuitable environment or subjected to incorrect maintenance, or whose malfunction is due to products not supplied by the Supplier;
- the Products have been repaired without prior written authorization from the Supplier;
- the defects have occurred for reasons attributable to the Purchaser or caused by errors, omissions, design characteristics or other shortcomings in the technical documentation provided by the Purchaser to the Supplier;
- the Products have not been assembled and stored in accordance with the Supplier's technical specifications and in compliance with current regulations;
- in the case of normal wear and tear of the Product;
- in the event that the Warranty Period for such Products has already expired.

6. PLACE OF JURISDICTION AND APPLICABLE LAW

For any dispute arising from or related to these General Warranty Conditions, including, but not limited to, disputes relating to their existence, validity, interpretation, effectiveness, and execution, the Court of Benevento shall have exclusive jurisdiction, even if the Contract contains international elements, without prejudice to the mandatory provisions of the Consumer Code.
These General Warranty Conditions are entirely subject to Italian law and interpreted in accordance with it, even if the Contract has international elements.

We feel better under pressure

Vitillo

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