

CRIMPING PARAMETERS CHART

BRAIDED HOSES / Tubi trecati

TEKNO/15N EXCEED AM857 15C EN 853 15N - SAE 100 R1AT	3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4" 1" 1 1/4" 1 1/2" 2"											
	04	06	08	10	12	16	20	24	30	36	42	48
B12T-N	16.0	18.0	18.6	20.5	23.4	27.0	30.8	39.1	48.5	57.0	69.4	
B15C												
B1T	15.4	16.4	18.2	20.1	24.2	26.4	30.8	38.9	46.6	54.2		
B12T												
B12T-N												
B15C												
B1T												
B12T												

BRAIDED HOSES / Tubi trecati

TEKNO/15C PLUS EXCEED AM857 15C EN 853 15C - SAE 100 R1AT	3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4" 1" 1 1/4" 1 1/2" 2"											
	04	06	08	10	12	16	20	24	30	36	42	48
B15C	15.3	16.8	18.6	22.5	26.4	29.2	36.9					
B1K	15.0	16.3	18.6	22.7	26.4	29.3	37.9	44.8	50.8	64.6		
B12T-N	18.2	19.0	20.6	23.5	27.4	31.1	39.1	48.7	56.2	71.0		
B15C												
B1K	16.2	18.0	20.0	23.8	27.8	30.3	37.9					
B12T-N												
B15C												
B1K												
B12T												

BRAIDED HOSES / Tubi trecati

TEKNO/25N EN 853 25N - SAE 100 R2AT	3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4" 1" 1 1/4" 1 1/2" 2"											
	04	06	08	10	12	16	20	24	30	36	42	48
B12T-N	16.7	19.0	19.6	21.3	24.4	28.2	32.0	39.8	46.6	54.2	71.7	
B15C												
B1T	15.7	18.0	20.2	21.4	25.6	28.5	32.0	41.0	50.0	57.5		
B12T												
B12T-N												
B15C												
B1T												
B12T												

BRAIDED HOSES / Tubi trecati

TEKNO/25C EXCEED AM857 25C EN 853 25C - SAE 100 R2AT	3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4" 1" 1 1/4" 1 1/2" 2"											
	04	06	08	10	12	16	20	24	30	36	42	48
B12T-N	18.2	19.0	20.6	23.5	27.4	31.1	39.1	48.7	56.2	71.0		
B15C												
B1K	16.2	18.0	20.0	23.8	27.8	30.3	37.9					
B12T-N												
B15C												
B1K												
B12T												

BRAIDED HOSES / Tubi trecati

DOLOMITI/15N EXCEED EN853 15N - SAE100 R1AT	3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4" 1" 1 1/4" 1 1/2" 2"											
	04	06	08	10	12	16	20	24	30	36	42	48
B15C	16.0	17.8	18.6	20.5	23.4	27.0	30.8	39.1	48.5	57.0	69.4	
B1T	15.4	16.4	18.2	20.1	24.2	26.4	30.8	38.9	46.6	54.2		
B12T												
B12T-N												
B15C												
B1T												
B12T												

SPIRAL HOSES / Tubi spirali

TEKNO/15C EXCEED AM857 15C EN 853 15C - SAE 100 R1AT	3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4" 1" 1 1/4" 1 1/2" 2"											
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B15C	15.3	16.8	18.6	22.5	26.4	29.2	36.9					
B1K	15.0	16.3	18.6	22.7	26.4	29.3	37.9	44.8	50.8	64.6		
B12T-N	18.2	19.0	20.6	23.5	27.4	31.1	39.1	48.7	56.2	71.0		
B15C												
B1K	16.2	18.0	20.0	23.8	27.8	30.3	37.9					
B12T-N												
B15C												
B1K												
B12T												

SPIRAL HOSES / Tubi spirali

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B15C												
B1T	15.7	18.0	20.2	21.4	25.6	28.5	32.0	41.0	50.0	57.5		
B12T												
B12T-N												
B15C												
B1T												
B12T												

SPIRAL HOSES / Tubi spirali

TEKNO/25N EN 853 25N - SAE 100 R2AT	3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4" 1" 1 1/4" 1 1/2" 2"											
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B12T-N												
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SPIRAL HOSES / Tubi spirali

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B12T-N	18.2	19.0	20.6	23.5	27.4	31.1	39.1	48.7	56.2	71.0		
B15C												
B1K	16.2	18.0	20.0	23.8	27.8	30.3	37.9					
B12T-N												
B15C												
B1K												
B12T												

HOW TO READ THIS CHART

1. DIAMETRI DI PRESSATURA INDICATI SONO VALIDI ANCHE PER LE VERSIONI ICEBERG / FOREVER / EVERGREEN

2. CRIMPING DIAMETERS REPORTED IN THIS DOCUMENT ARE VALID ALSO FOR ICEBERG / FOREVER / EVERGREEN VERSIONS

TERMOPLASTIC HOSES

HOSES	3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4" 1" 1 1/4" 1 1/2" 2"											
	04	06	08	10	12	16	20	24	30	36	42	48
R7*	11.8	14.1	16.2	18.2	22.2	25.6	29.0	36.8				
R7 MTH1*	11.8	14.1	16.2	18.2	22.2	25.6	29.0	36.8				

CLEANER HOSES

HOSES	3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4" 1" 1 1/4" 1 1/2" 2"											
	04	06	08	10	12	16	20	24	30	36	42	48
TEKNOIET/15N	18.0	18.6	20.5	23.4								
TEKNOIET/25N	17.8	20.3	23.0	25.7								
TEKNOIET/15C	15.3	16.8	18.6	22.5								
TEKNOIET/25C	18.2	19.0	20.6	23.5								
TEKNOIET/15T	17.2	18.9	21.0	25.4								
TEKNOIET/25T	17.8	20.3	23.0	25.7								

ASSEMBLY INSTRUCTIONS

Istruzioni di assemblaggio

- Select the hose (A), ferrules (B) and inserts (C)
- Cut the hose squarely using a rotary steel blade to the required length.
- If skiving is required, remove all rubber cover to the "skiving length" specified in the table, avoiding damages to the steel wires reinforcement.
- Place the ferrule fully onto the hose. Push the insert fully into the hose. Select the "COLLAPSE CONTROL MANOREL". Insert the MANOREL into the insert bore. The "NO GO" part of the MANOREL must fully go into the insert bore. Remove the MANOREL.
- Crimp the ferrule to the diameter specified in the table.
- Inspect the crimp diameter by measuring it on each die impression. All measurements must be taken in the center of ferrule length. All measurements must be according to the specified crimping diameters, within a tolerance $\pm 0.01-0.2$ mm.
- Insert the "COLLAPSE CONTROL MANOREL".
- If the "NO GO" part of the MANOREL stops in the bore the crimping diameter must be increased.
- If the "NO GO" part of the MANOREL goes through the bore, the crimping diameter must be reduced by increments of 0.1 mm.
- If the "GO" part of the MANOREL does not go through the bore, the crimping diameter must be increased.

For more practical recommendations regarding the assembly of hydraulic hoses to refer the standard SAE J1173 Feb 2009

HOSE-ASSEMBLY FABRICATION

Persons fabricating hose assemblies should be trained in the proper use of equipment and materials. Properly assembled fittings are vital to the integrity of a hose assembly. Improperly assembled fittings can separate from the hose and may cause serious injury or property damage from whipping hose, or from fire or explosion of vapor expelled from the hose.

Component Inspection
Prior to assembly, examine components for:

- Configuration and types
- Clean
- Damage on cover
- Nicks
- Distortion of the tubes within
- More visible defects
- Damage in general
- Lengths suitable
- Swelling
- Machining burrs
- Corrosion

Hose Fittings Compatibility
Pay attention to the hose - fittings compatibility. Do not use a hose from one manufacturer with a hose fitting from another manufacturer without the consent from the same manufacturers.

Safety Equipment
During fabrication, use proper safety equipment, including eye protection, respiratory protection, and adequate ventilation.

Reuse of Hose and Fittings
Do not reuse:
a. Field-attachable fittings that have blown or pulled off hose
b. Any part of hose fittings that were permanently crimped or swaged to hose
c. Hose that has been in service after pressure checkout
d. Clean inside of the tubes connected
The tubes connected shares may collect contaminants during processing. Flush the pipes until they reach an optimum level of cleanliness.

CONSTRUZIONE DEL TUBO RACCORDATO

Il personale addetto alla costruzione del tubo raccordato, deve essere opportunamente preparato sull'impiego dei componenti e delle attrezzature specifiche. Raccordare non significa, solo fondamentalmente, per la vita del tubo, ma anche creare una raccordatura male eseguita può creare problemi di filtramento di raccordi, e causare un pericoloso "effetto frusta" del tubo o peggio, creare possibili incendi ed esplosioni per i vapori o per le nebulizzazioni del fluido trasportato.

Controllo dei componenti
Prima della raccordatura esaminare i componenti per:
- Configurazione e tipologia
- Pulizia
- Danni sulla copertura
- Intaccature
- Distorsioni
- Ostacoli all'interno dei tubi
- Altri difetti visibili
- Danni in genere
- Lunghezze idonee
- Bore di lavorazione
- Corrosioni

Compatibilità dei tubi e dei raccordi
Prestare molta attenzione nella valutazione della compatibilità tubo-raccordo. Non accoppiare tubi e raccordi provenienti da due produttori diversi senza autorizzazione da parte degli stessi costruttori.

Dispositivi di sicurezza
Durante la produzione del tubo raccordato, utilizzare sempre dispositivi di sicurezza personali.

Pulizia interna dei tubi raccordati
I tubi raccordati possono raccogliere parti contaminanti durante la lavorazione. Flussare i tubi fino al raggiungimento ad un livello di pulizia ottimale.

INSERT BORE COLLAPSE CONTROL

Controllo del collasso

WIRE BRAIDED HOSES STANDARD FITTINGS

NOMINAL SIZE	GO, NO GO MANDRELS DIAMETERS (mm)		
	GO	NO-GO	
03	2.30	2.80	
04	1/4"	3.30	3.75
05	5/16"	4.70	5.20
06	3/8"	6.05	6.55
08	1/2"	8.35	8.75
10	5/8"	10.85	11.40
12	3/4"	13.50	13.80
16	1"	18.50	19.20
20	1 1/4"	23.05	23.90
24	1 1/2"	29.80	30.70
32	2"	41.60	42.60

WIRE SPIRAL HOSES STANDARD FITTINGS

NOMINAL SIZE	GO, NO GO MANDRELS DIAMETERS (mm)		
	GO	NO-GO	
04	1/4"	3.15	3.60
06	3/8"	5.60	6.25
08	1/2"	7.60	8.40
10	5/8"	10.05	10.90
12	3/4"	12.35	13.30
16	1"	17.30	18.35
20	1 1/4"	22.25	23.35
24	1 1/2"	29.15	30.30
32	2"	40.70	42.00

PTFE

HOSES	3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4" 1" 1 1/4" 1 1/2" 2"											
	04	06	08	10	12	16	20	24	30	36	42	48
PTFE (CONDUCTING)	11.0	13.1	14.7	16.2	20.8	22.2	27.9	34.5				
PTFE (NON-CONDUCTING)	12.0	12.8	15.5	16.8	21.1	24.4	34.7					