

Hydraulic Hose



High Pressure Hose



Pressure Wash Hose



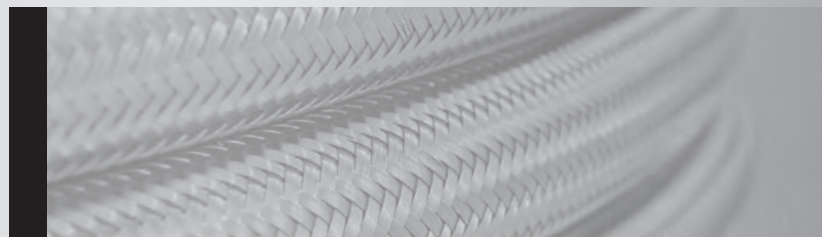
Rail Hose



Thermoplastic Hose



PTFE Hose



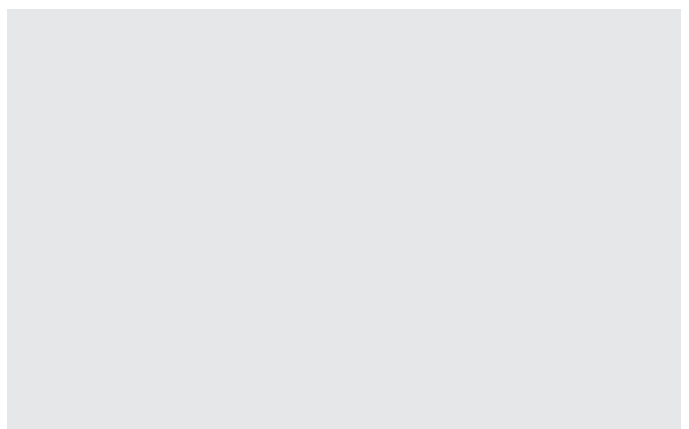
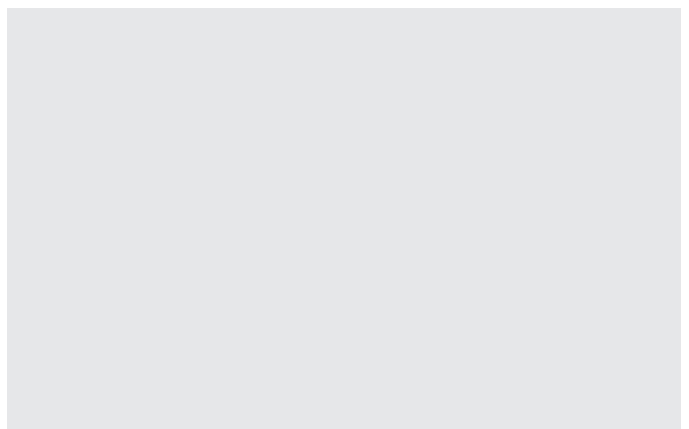
Please note: Unless otherwise stated, all data and figures in this product catalogue are approximate values and are only valid as references, which are not binding (also in respect to any third parties' rights of protection) and thus do not release the customer / user from checking and testing the suitability of the products for the foreseen purposes. Therefore, data and figures can only be used in a limited sense for construction purposes.

The application of the products is beyond the control possibilities of the manufacturer and, therefore, is exclusively subject to the responsibility of the customer / user.

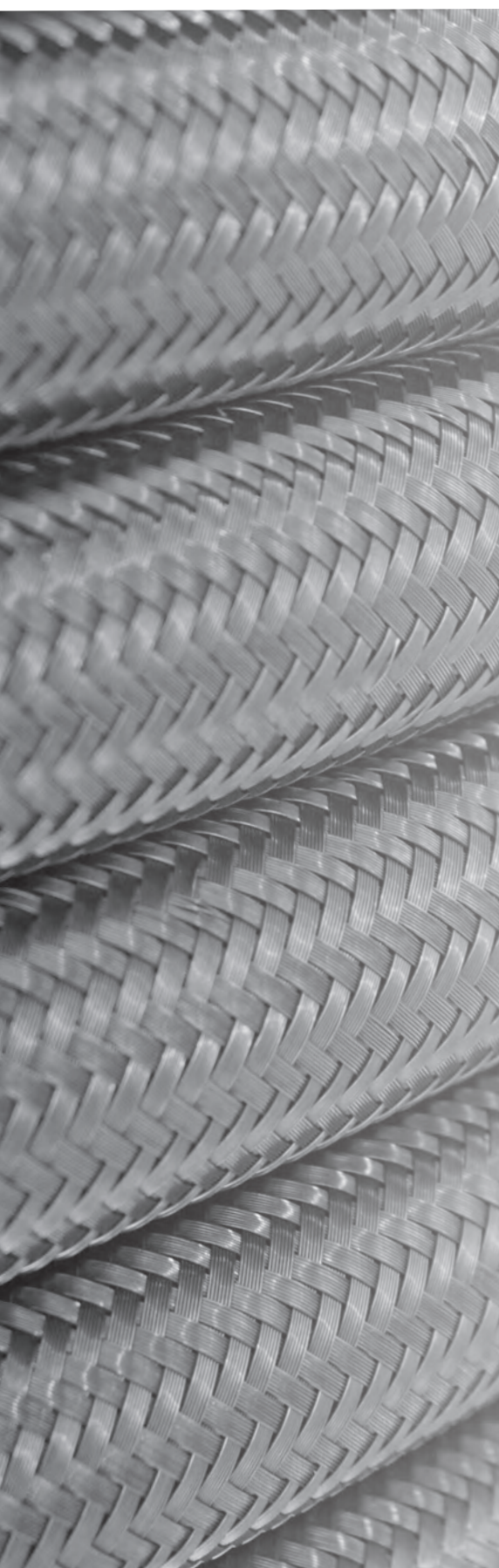
In the event that a liability is nevertheless considered, any compensation will be limited to the value of the goods supplied by the manufacturer and used by the customer / user. As a matter of course, the manufacturer guarantees the perfect quality of all products in accordance with the General Terms and Conditions of Business and Sale.

Subject to modifications due to the ongoing development and improvement of the products.

With the publication of this product overview, previous editions are no longer valid.



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## LOOSE HYDRAULIC HOSE NOMENCLATURE

### DR Sheet (Designation Rule)

#### Hydraulic Hose

Loose Hydraulic Hose (Not Thermoplastic) Product Range

Hose Type	
<b>1SN</b>	Steel reinforced one wire braid hose with thin cover. EN 853 1SN. SAE 100R1AT - ISO1436-1 1SN/R1AT
<b>2SN</b>	Steel reinforced two wire braid hose with thin cover. EN 853 2SN. SAE 1002AT - ISO 1436-1 2SN/2AT
<b>4SP</b>	High Tensile Steel reinforced four spiral hose EN 856 4SP. ISO 3862-1 4SP
<b>4SH</b>	High Tensile Steel reinforced four spiral hose EN 856 4SH. ISO 3862-1 4SH
<b>R13</b>	Four High Tensile Steel reinforced spiral hose (DN19-31) Six Spiral DN38-51) EN 856 R13. SAE 100R13 - ISO 3862-1 R13
<b>1SC</b>	One High Tensile Steel Braid EN 857 1SC - ISO 11237-1 1SC
<b>2SC</b>	Two High Tensile Steel Braid EN 857 2SC - ISO 11237-1 2SC - SAE 100R16S
<b>R15</b>	Four High Tensile Steel reinforced spiral hose (DN19-25) Six Spiral DN31-38) EN 856 R15. SAE 100R15 - ISO 3862-1 R15
<b>R17</b>	One High Tensile Steel Braid SAE 100R17 - ISO 11237-1 R17
<b>PIL</b>	One High Tensile Steel Braid with Constant working pressure 125 bar (pilot hose)
<b>1SNK</b>	One High Tensile Steel Braid which exceeds EN 857 1SC - ISO 11237-1 1SC
<b>2SNK</b>	Two High Tensile Steel Braid which exceeds EN 857 2SC - ISO 11237-1 2SC - SAE 100R16S
<b>1SSK</b>	One High Tensile Steel Braid which exceeds EN 857 1SC - ISO 11237-1 1SC with UHMPE foil
<b>2SSK</b>	Two High Tensile Steel Braid which exceeds EN 857 2SC - ISO 11237-1 2SC - SAE 100R16S with UHMPE foil
<b>SSH</b>	High Tensile Steel reinforced four spiral hose EN 856 4SH. ISO 3862-1 4SH with UHMPE foil
<b>SSP</b>	High Tensile Steel reinforced four spiral hose EN 856 4SP. ISO 3862-1 4SP with UHMPE foil
<b>SCV-PTFE</b>	Super Convoluted PTFE hose
<b>STSB-PTFE</b>	Smooth bore PTFE hose
<b>FLU4000</b>	4000 PSI - Highly flexible multispiral hose with reduced bend radius
<b>FLU5000</b>	5000 PSI - Highly flexible multispiral hose with reduced bend radius
<b>FLU6000</b>	6000 PSI - Highly flexible multispiral hose with reduced bend radius

#### Hose Size

The hose size is defined in DN	
<b>05</b>	3/16" hose inside diameter
<b>06</b>	1/4" hose inside diameter
<b>08</b>	5/16" hose inside diameter
<b>10</b>	3/8" hose inside diameter
<b>12</b>	1/2" hose inside diameter
<b>16</b>	5/8" hose inside diameter
<b>19</b>	3/4" hose inside diameter
<b>25</b>	1" hose inside diameter
<b>31</b>	1.1/4" hose inside diameter
<b>38</b>	1.1/2" hose inside diameter
<b>51</b>	2" hose inside diameter

Hyphen

**HOS - 1SN - 25 - A - STM**

1

Manufacturer Code	
A	Manufacturer (Internal use only)

Branding Type	
<without>	No specific branding type specified
EMB	Embossed branding
STM	Stauff branded Mylar tape branding

## INDUSTRIAL HOSE NOMENCLATURE

### DR Sheet (Designation Rule)

#### Industrial Hose

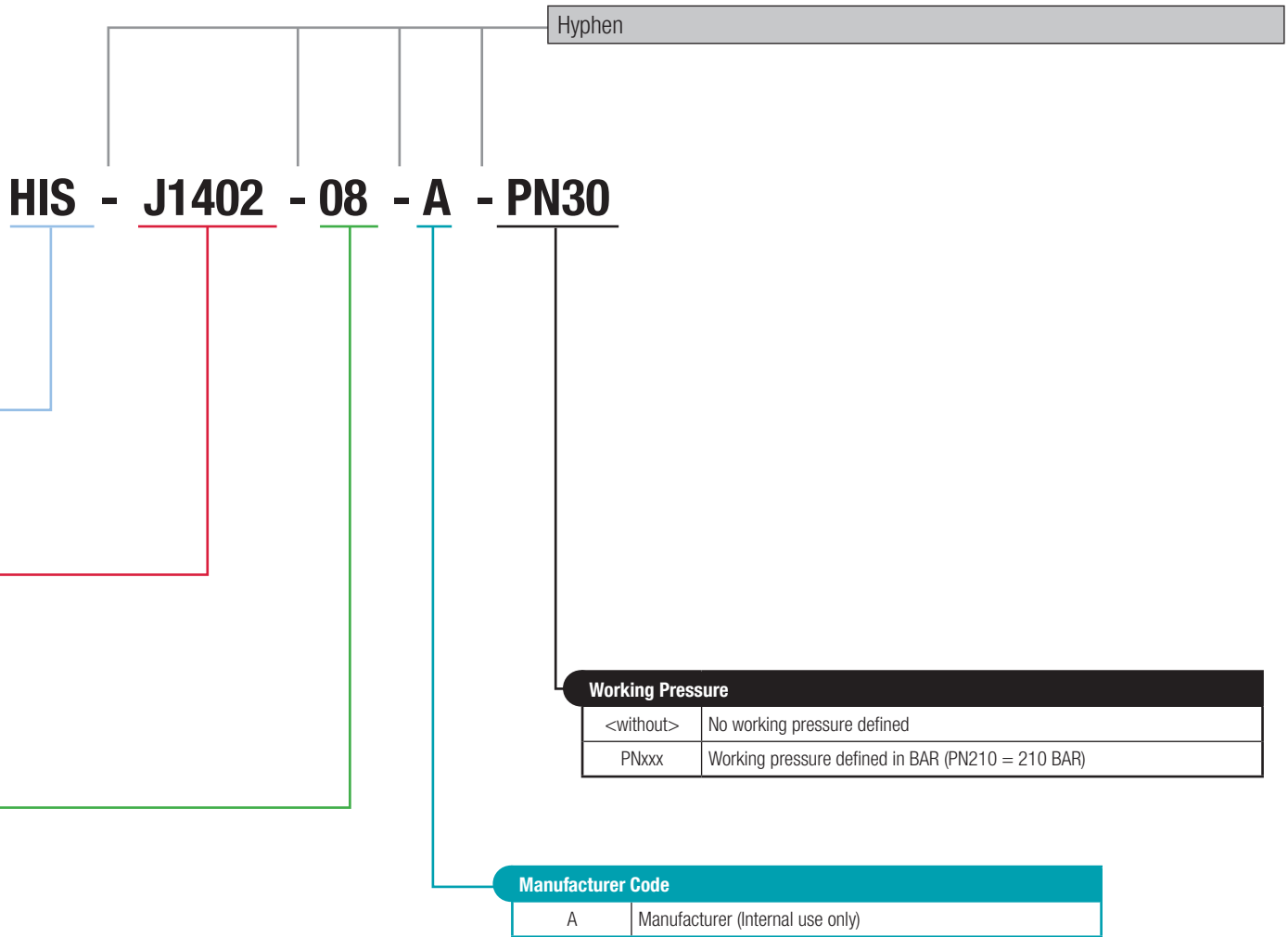
HIS	Loose Industrial Hose Product Range
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#### Hose Type

J1402	J1402 Air brake hose
MPR	Multi purpose anti static hose
OSD	Oil suction & delivery hose

#### Size

The hose size is defined in DN	
03	1/8" hose inside diameter
05	3/16" hose inside diameter
06	1/4" hose inside diameter
08	5/16" hose inside diameter
10	3/8" hose inside diameter
12	1/2" hose inside diameter
16	5/8" hose inside diameter
19	3/4" hose inside diameter
25	1" hose inside diameter
31	1-1/4" hose inside diameter
38	1-1/2" hose inside diameter
51	2" hose inside diameter
63	2-1/2" hose inside diameter
76	3" hose inside diameter
102	4" hose inside diameter



## JETWASH HOSE NOMENCLATURE

### DR Sheet (Designation Rule)

#### Industrial Hose

HJS	Loose Jetwashing Hose Product Range
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#### Hose Type

JET1SN	Pressure washer hose - one high tensile steel braid
JET2SN	Pressure washer hose - two high tensile steel braids

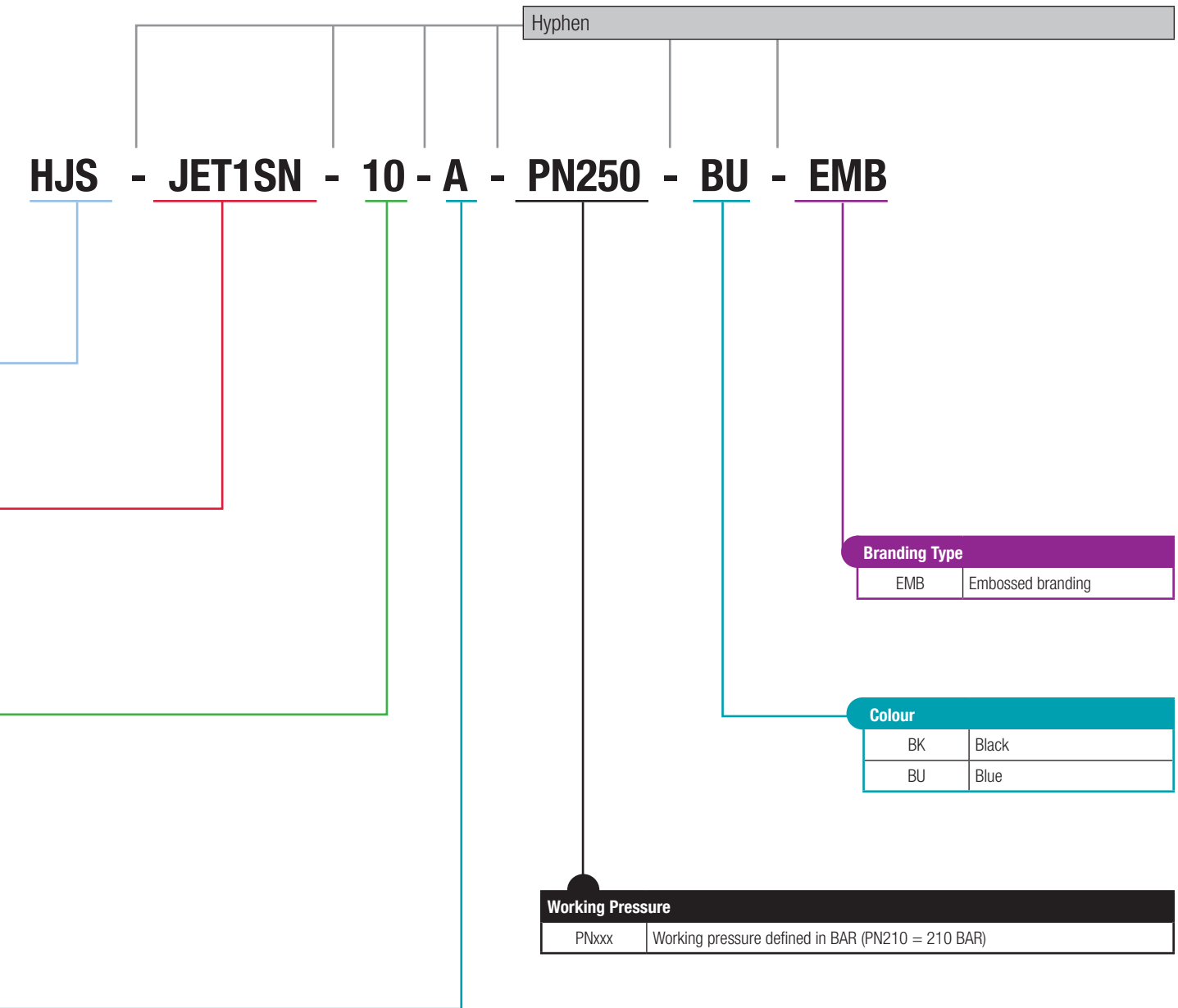
#### Size

The hose size is defined in DN	
06	1/4" hose inside diameter
08	5/16" hose inside diameter
10	3/8" hose inside diameter
12	1/2" hose inside diameter

#### Manufacturer Code

A	Manufacturer (Internal use only)
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## LOOSE THERMOPLASTIC HOSE NOMENCLATURE

### DR Sheet (Designation Rule)

#### Loose Thermoplastic Hose

##### HTS

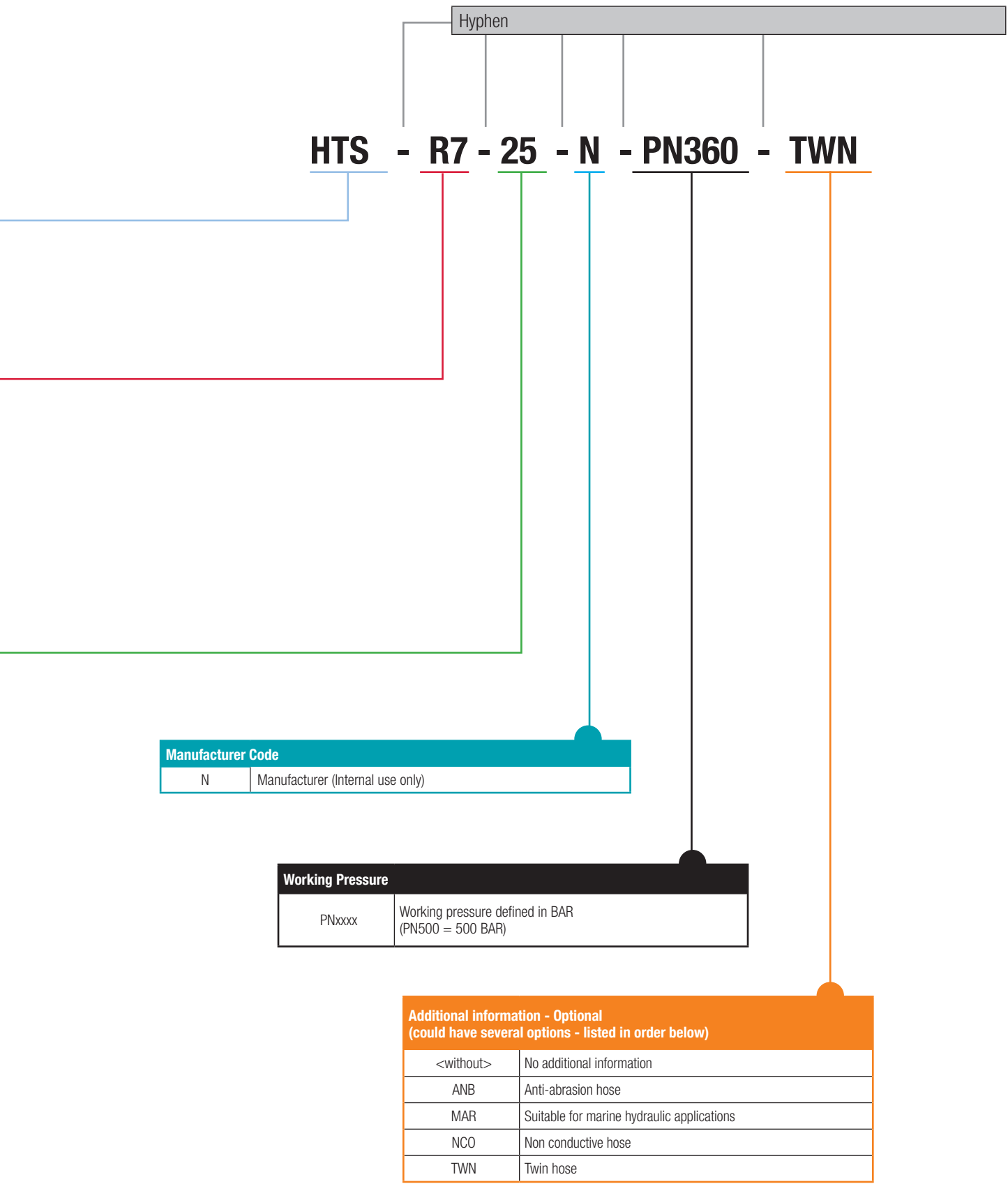
Loose Hydraulic Hose (Thermoplastic) Product Range

#### Hose Type

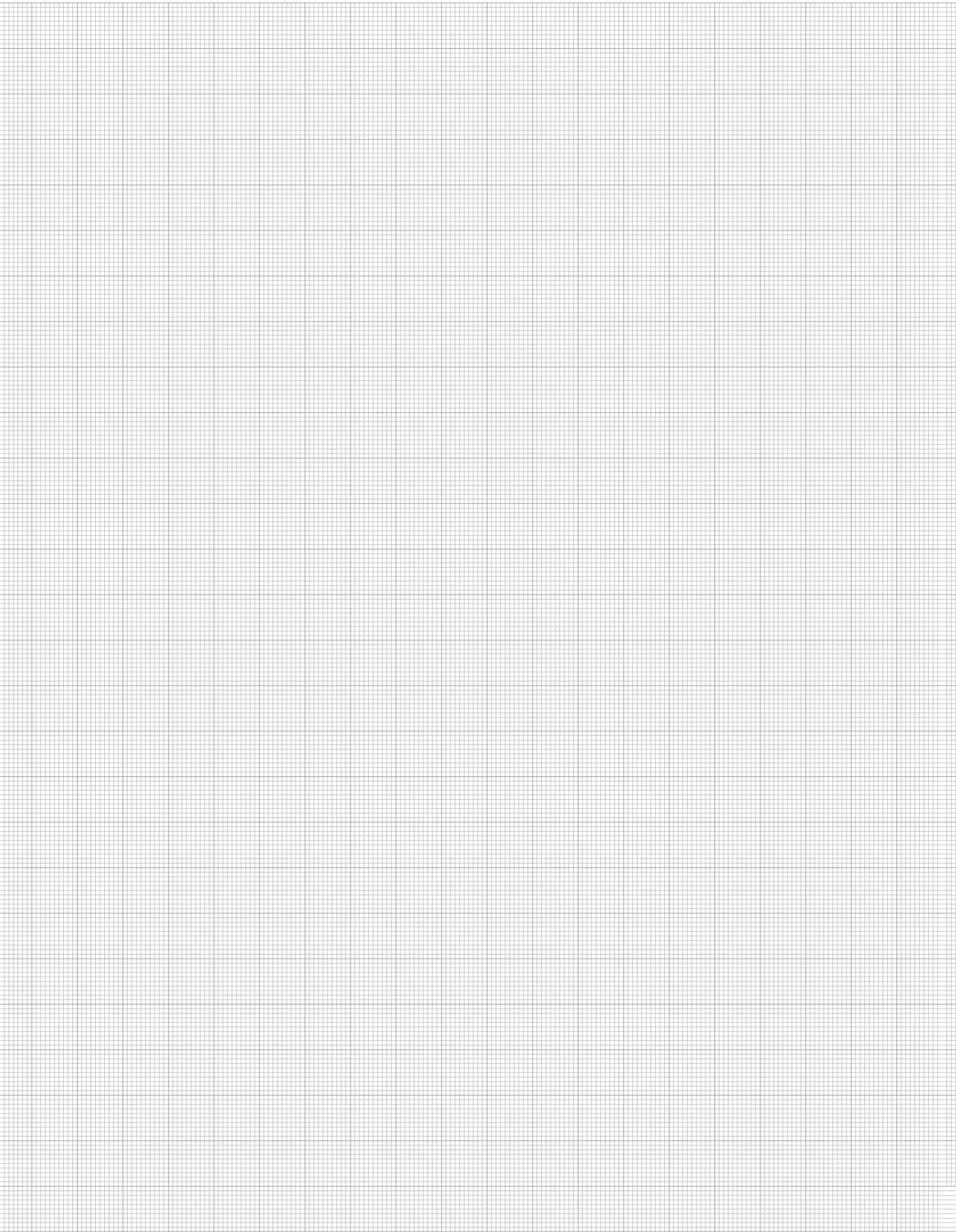
<b>1SB</b>	1 Steel braid reinforcement thermoplastic hose
<b>2SB</b>	2 Steel braid reinforcement thermoplastic hose
<b>R18LT</b>	SAE 100 R18 Low temperature thermoplastic hose
<b>R7</b>	SAE 100 R7 thermoplastic hose
<b>R8</b>	SAE 100 R8 thermoplastic hose
<b>SEHD</b>	Heavy duty thermoplastic hose for sewer cleaning applications
<b>VHP</b>	Very high pressure thermoplastic hose (8000+ psi)

#### Hose Size

03	1/8" hose inside diameter
05	3/16" hose inside diameter
06	1/4" hose inside diameter
08	5/16" hose inside diameter
10	3/8" hose inside diameter
12	1/2" hose inside diameter
16	5/8" hose inside diameter
19	3/4" hose inside diameter
25	1" hose inside diameter
31	1.1/4" hose inside diameter



# Notes

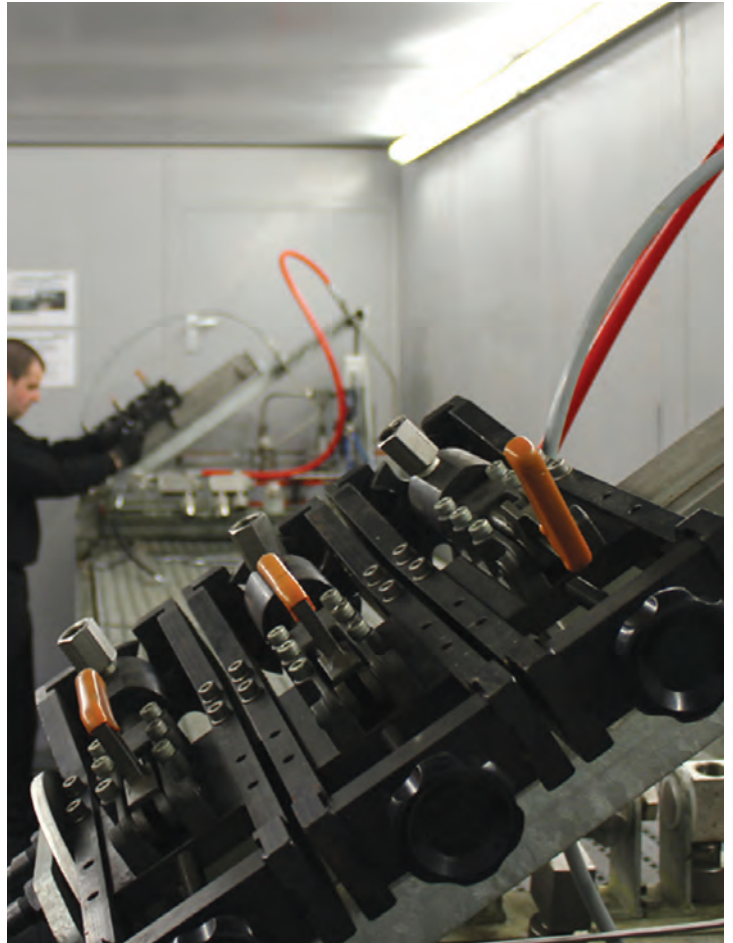
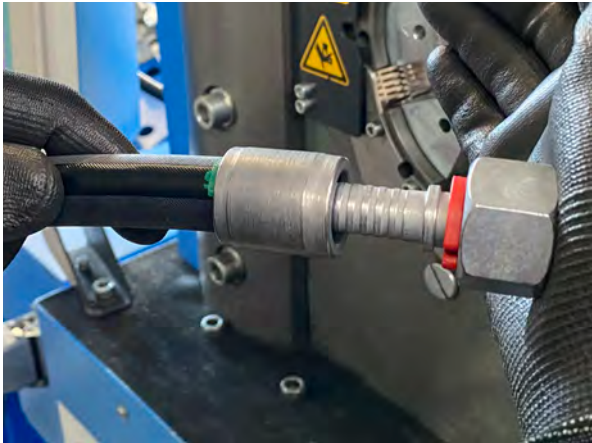


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# 2

## TECHNICAL GUIDANCE

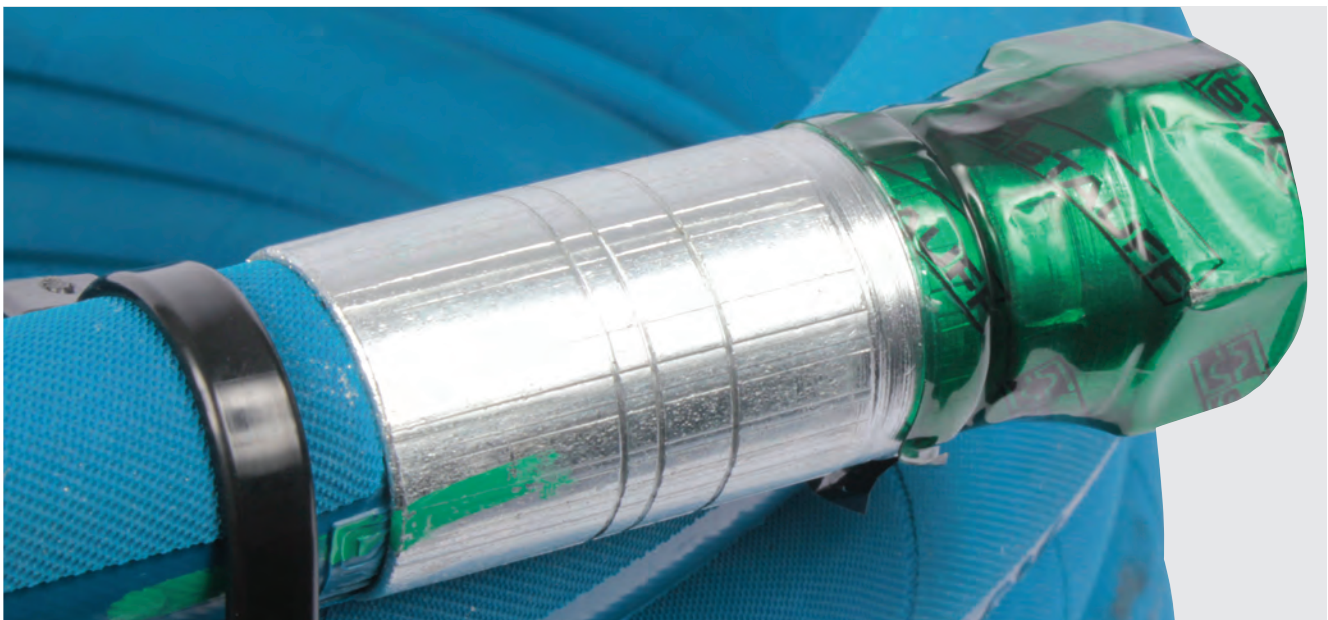
## HOSE PRODUCTION CAPABILITIES

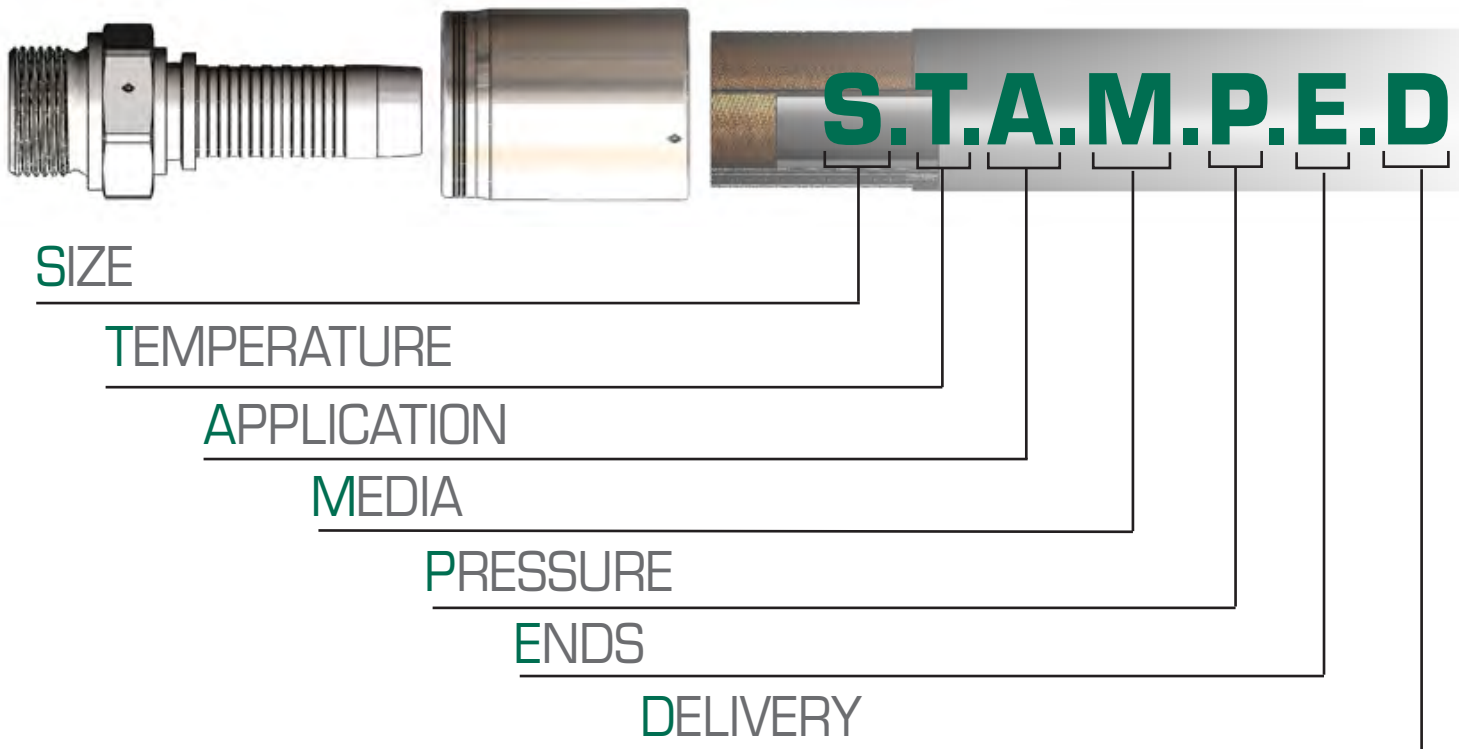


- Design and manufacture of ultra high pressure (UHP up to 4000 bar and testing capability to 5000 bar), very high pressure (VHP up to 700 bar), high, medium and low pressure flexible hoses for a wide range of applications including hydraulic, industrial, chemical, utility and process
- PTFE hose smooth bore and convoluted
- Manufactured to DIN, SAE and other international standards
- End connectors to all major thread and flange standards and international specification, working pressures up to 4000 bar
- 1, 2 and 3 wire braid reinforced
- 4, 6 and 8 spiral wire reinforced
- Thermoplastic for hydraulics, paint spray, water jetting and jacking
- Combination hose and tube assemblies
- Hose testing to ISO7751 performed and certified



2



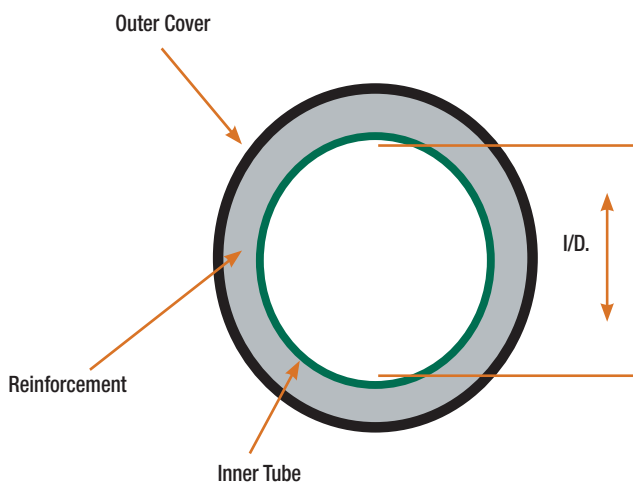


When assessing your requirements for an installation or repair on a fluid power circuit, remembering the acronym “STAMPED” will help you to remember important information required when selecting hose and connectors to create an assembly.

## SIZE

The inside diameter of the hose must be adequate to keep pressure loss to a minimum and avoid damage to the hose due to heat generation or excessive turbulence. See hose sizing Nomographic Chart (See Page 34).

To determine the replacement hose size, read the layline printed on the side of the original hose. If the original hose layline is painted over or worn off, the original hose must be cut and the inside diameter measured for size.



**NOTE: Before cutting an original hose assembly, measure the overall assembly length and fitting orientation. These measurements will be required to build the replacement assembly (see page 26 best practices advice "determining the overall length of the assembly to be produced").**

The hydraulics industry has adopted a measuring system called Dash Numbers to indicate hose and coupling size. The number which precedes the hose or coupling description is the dash size. This industry standard number denotes hose I/D. in sixteenths of an inch. (The exception to this is the SAE100R5 hoses C5C, C5D, C5E, C5M as well as, C14 and AC134a, where dash sizes denote hose I/D. equal to equivalent tube O/D.).

Hose O/D can be a critical factor when hose routing clamps are used or hoses are routed through bulkheads.

Check individual hose specification tables for O/Ds.



## TEMPERATURE

When selecting a replacement assembly, two areas of temperature must be considered. These are fluid temperature and ambient temperature. The hose selected must be capable of withstanding the minimum and maximum temperature seen by the system. Care must be taken when routing near hot manifolds and in extreme cases a heat shield may be advisable.

See the STAUFF Hydraulic Hose Selection Guide; Hose Specification Pages; and/or the Additional Temperature Limits for STAUFF Hydraulic Hoses Chart for temperature ranges and limits for water, water/oil emulsions and water/glycol solutions.

## APPLICATION

Determine where or how the replacement hose or assembly is to be used. Most often only a duplicate of the original hose will have to be made. To fulfil the requirements of the application, additional questions may need to be answered, such as:

- Where will the hose be used?
- Fluid and/or ambient temperature?
- Hose construction?
- Equipment type?
- Fluid compatibility?
- Thread end connection type?
- Working and surge pressures?
- Environmental conditions?
- Permanent or field attachable couplings?
- Suction application?
- Routing requirements?
- Thread type?
- Are Government and Industry Standards being met?
- Unusual mechanical loads?
- Minimum bend radius?
- Non-conductive hose required?
- Excessive abrasion?

## MEDIA

Some applications require specialised oils or chemicals to be conveyed through the system. Hose selection must ensure compatibility of the hose tube, cover, couplings and O-rings with the fluid used. Additional caution must be exercised in hose selection for gaseous applications such as refrigerants and LPG.

**NOTE: All block type couplings contain nitrile**

**O-rings which must be compatible with the fluids being used.**

## PRESSURE

Most important in the hose selection process is knowing system pressure, including pressure spikes.

Published working pressures must be equal to or greater than the system pressure. Pressure spikes greater than the published working pressure will shorten hose life and must be taken into consideration.

## ENDS

Identify end connections using STAUFF coupling templates and measuring tools or Coupling Identification section.




















Once thread ends have been identified, consult the appropriate section of the catalogue for specific part number selection.

## DELIVERY










If the same I/D of the original hose is used, assume the system is properly sized to efficiently transport fluid. If the system is new or altered, determine the hose I/D needed to transport required fluid volume flow by using the Nomographic Chart.

# APPLICATION ICONS

## HYDRAULIC HOSE









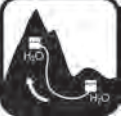














Agricultural Hydraulics		Cherry Pickers		Low Temperature Environments	
Agricultural Sprayer		Deck Cranes		Machine Tools	
Anti Spatter		Earth Moving Equipment		Marine Hydraulics	
Articulating Booms		Elevator Lift		Mining	
Automotive Roof Opening Systems		Forklift		Off-Shore Applications	
Bicycle Disk Brakes		High Pressure Industrial Gases		Off-Shore ROVs	
Boat Steering		High Tension Wind Generation		Power Chains	
Bolt Tensioning		Hose Reels		Pressure Test Equipment	
Cabin Lift		Jacking Applications		Rescue Tooling	
Car Transporter		Loader Cranes		Scissor Lifts	

## HYDRAULIC HOSE

<p>Screeners/Crushers </p>	<p>Spark Safe </p>	<p>Truck Platform </p>
<p>Self-Extinguishing Flame Retardant </p>	<p>Telehandlers </p>	<p>Umbilicals </p>
<p>Servo Controls </p>	<p>Tower Cranes </p>	<p>Yacht Hydraulic Systems </p>

2

## INDUSTRIAL HOSE

<p>Air Cylinder Filling </p>	<p>High Temperatures </p>	<p>Solvents &amp; Aggressive Chemicals </p>
<p>Air-less Paint Spray </p>	<p>Hobby Power Washer </p>	<p>Steam </p>
<p>Beverage Dispensing </p>	<p>Hose Reels </p>	<p>Water Delivery </p>
<p>Corrugated Hose Bunch Protector </p>	<p>Low Temperature Environments </p>	<p>Water Jetting </p>
<p>Corrugated Hose Protector </p>	<p>Professional Power Washer </p>	<p>Water Jetting Trailers </p>
<p>Fire Extinguishing / Suppression </p>	<p>PU Foam </p>	<p>Weather and U.V. Resistant </p>
<p>Greasing Applications </p>	<p>Sewer Cleaning </p>	<p>UHP Cutting </p>
<p>High Pressure Industrial Gases </p>	<p>Shock Resistant </p>	



## STORAGE OF HOSE AND HOSE ASSEMBLIES

**Even under appropriate storage conditions and acceptable operating conditions hose and assemblies are subject to natural ageing. Therefore the shelf life and service life is limited.**

The storage conditions of rubber articles in general are described in detail in DIN 7716, DIN 20066, ISO 8331, SAE 1273 and BS5244 as well as in various other publications. please contact your account manager for more details)

### **Pertinent details regarding storage conditions extracted from DIN 7716, SAE J1273 and ISO 8331 are:**

The storage room should be cool, dry, with little dust and well ventilated

The storage temperature should be between -10°C and +15°C (max +25°C)

The stored material should be protected against sources of heat (direct heating).

The relative humidity of the air should not exceed 65%

Direct exposure to sunlight or strong artificial light with high UV radiation should be avoided. If the storage area has windows or glazed openings, they should be obscured with red, orange or white coverings.

The influence of ozone is especially prejudicial. In the storage rooms no ozone-producing installations such as electrical engines, welding machines etc. must be operated

No solvents, fuels, lubricants, chemical products, disinfectants etc. must be stored in the same storage room as any hose.

The storage period should be kept to a minimum. Rotation of stock is therefore essential and the "first in first out" rule applied. For long-term storage, the following maximum storage periods are recommended:

- For bulk hoses (without fittings attached), a maximum of 4 years
- For hose assemblies, a maximum of 2 years

These two periods can be interpreted as consecutive for a maximum storage duration of 6 years (4 years as bulk hose +2 years as hose assembly).

Experience shows that damage caused by insects or rodents should not be under-estimated. Articles should be secure from attack by rodents and adequate protection should be provided if there are any risks.

Articles should not be placed in contact with certain products or exposed to their vapours, particularly solvents, oils, greases, acids, disinfectants, etc. Some metals, such as copper, iron and manganese, have a harmful effect on certain rubber components.



## STORAGE OF HOSE AND HOSE ASSEMBLIES CONTINUED

Storage areas should not be in the vicinity of equipment that may generate electric or magnetic fields, as variations/fluctuations in such fields could induce currents in metallic joints, which in turn generate heat.

Articles should be stored in such a way that they are not subjected to excessive stress, elongation or deformation. Contact with sharp, pointed or abrasive objects or surfaces should be avoided, and storage racks should be provided whenever possible.

Coiled hose or hose assemblies should be stored flat and preferably not stacked. When stacking is unavoidable, the height of the stack should be restricted so that the articles at the bottom do not suffer permanent deformation. A recommended height of approximately 1.5m should be a maximum, but this depends on the dimension, construction and therefore weight of the hose. The hanging of coils on pegs is not recommended. Hose and hose assemblies supplied in straight lengths should be stored flat and unbent. End caps should be kept on hoses supplied with them.

### **If there are questions regarding quality or usability of hose or hose assemblies, evaluate appropriately:**

- a. Flex the hose to the minimum bend radius and compare it with new hose. After flexing, examine the cover and tube for cracks. If any appear, no matter how small, reject the hose.
- b. If the hose is wire reinforced, and the hose is unusually stiff, or a cracking sound is heard during flexing, check for corrosion by cutting away a section of the cover from a sample. Corrosion would be another reason for rejection.
- c. If doubts still persist, contact hose assembler to conduct proof-pressure tests or any other tests needed to verify hose quality.



## SERVICE LIFE OF HOSE AND HOSE ASSEMBLIES

**In every day use hydraulic hose and assemblies are exposed to a series of stresses which makes it impossible to make a general statement about the service life of hose.**

Standards and publications compiled by professional associations give directives for the service life of hydraulic hose:

### **Recommendations of DIN 20066**

At the time of mounting (assembly of couplings) the hose should not be older than four years.

The working life of the hose should not exceed six years including a possible storage of a maximum of 2 years.

However in determined areas of application the service life can be varied according to data of experience and specially considering the particular conditions of operation. Any data differing from the norms have to be indicated in the instructions of use.



## SERVICE LIFE OF HOSE AND HOSE ASSEMBLIES CONTINUED

### British Standards BS 5244

Gives a much more detailed recommendation:  
Test recommendations for hose:

Age	Recommendations
Up to 3 years	Use without further testing
3 to 5 years	Use after representative samples subjected to a proof pressure test
5 to 8 years	Use after representative samples subjected to proof, impulse and burst pressure tests and cold bend and electrical tests
Over 8 years	Scrap

Test recommendations for hose assemblies:

Age	Recommendations
Up to 3 years	Use without further testing
3 to 5 years	Use only after subjecting each assembly to a pressure test of 1.5 x design working pressure and representative samples to a burst pressure test
5 to 8 years	As above plus impulse pressure test and cold bend and electrical test on representative samples
Over 8 years	Scrap



## INFLUENTIAL FACTORS ON SERVICE LIFE

If hose assemblies are exposed to operating conditions that pass the admissible tolerance a clear reduction of the products lifetime can be expected.

Experience shows that hydraulic assemblies are often over-stressed due to the following operating conditions:

<b>Issue:</b>	Continuous exceeding of the admissible dynamic operating pressure
<b>Effect:</b>	Cracking of wire braids due to fatigue, hose will burst
<b>Issue:</b>	Exceeding of the indicated minimum bending radius
<b>Effect:</b>	Over-stressing of wire construction and rubber material, clear reduction of impulse resistance
<b>Issue:</b>	High exposure to sunlight (ozone, UV exposure), possibly combined with exceeding the minimum bending radius
<b>Effect:</b>	Cracks in the hose cover, humidity will enter the wire layers, subsequent corrosion and bursting
<b>Issue:</b>	Continuous exceeding of working temperature in respect of exceeding indicated peak temperature
<b>Effect:</b>	Ageing (hardening) and appearance of cracks in the hose liner, leakage and loosening of coupling
<b>Issue:</b>	Simultaneous stresses within the admissible value limits
<b>Effect:</b>	Constant operation with maximum operating pressure, maximum working temperature and minimum bending radius will also cause a limitation of the products service life

Hose that is already used as a component of an assembly should not be reused. The first application might have changed the characteristics of the material in such a way that it could increase risk.



## BREAKDOWN OF HOSE ASSEMBLIES

Depending on their use hydraulic assemblies should be checked in defined periods to control their functionality and possible damage.

Together with the effects caused by over-stressing, failures of assemblies are due to the following:

<b>Issue:</b>	Mechanical damage of the cover due to abrasion, cuts, squeezing and bending
<b>Effect:</b>	Penetration of humidity into the wire layers, corrosion and bursting
<b>Issue:</b>	Influence of heat due to exposure to exterior sources of high temperature
<b>Effect:</b>	Ageing (hardening, drying) of the hose cover, cracks, corrosion and bursting
<b>Issue:</b>	Inside overheating due to excessive flow velocity (frictional heat and turbulence)
<b>Effect:</b>	Hardening, drying, partial scorching of the lining, corrosion and bursting

**Note:** The recommended flow velocity in hydraulic systems is between **3 and 6m/sec**.

In NO CASE should a flow velocity of **8m/sec** be exceeded!

<b>Issue:</b>	Deforming of the hose: tearing, twisting and kinking
<b>Effect:</b>	Deformation and over-stressing of the wire layers, bursting
<b>Note:</b>	The construction of hydraulic hose is designed to resist the required pressure values BUT NOT to withstand tractive forces

Twisting a high pressure hose only 7° may reduce its service life up to 90%

<b>Issue:</b>	Influence of aggressive media inadequate for the hose (inside and/or outside) Extreme swelling or hardening of liner and cover, chemical destruction of the compound components, dissolution, corrosion, bursting
<b>Effect:</b>	Damage, deformation or corrosion of the coupling Reduction of functionality and stress resistance
<b>Note:</b>	Please follow the indications in the Fluid Compatibility Chart (See Pages 31 - 33)



## MAKING THE RIGHT CHOICES

Hydraulic hose assemblies are used to transmit force by means of fluid/air/gas pressure and consist of flexible hydraulic hose to which connectors are attached at either end to ensure safe, interlocking connections.

The correct choice of hose assembly components is influenced by many factors, in particular the dynamic working pressure, resistance to the media being transmitted and operating temperatures – both ambient and the media.

### Follow the instructions

Often legal and other regulations need careful consideration where hydraulic hose assemblies are used, and the manufacturer should be informed about them when you make your enquiry. In some cases, observing the instructions for installation will determine the potential service life of a hydraulic hose assembly.



## DYNAMIC WORKING PRESSURE IS DECISIVE

In practice hydraulic hose assemblies are subjected to dynamic loading. A hose assembly must therefore be designed for operation at the maximum permissible working pressure specified for the respective hose type and size.

### Safety factor 4:1

The working pressure of a hydraulic hose assembly is normally a quarter of the theoretical or specified bursting pressure. This safety factor of 4:1 conforms to SAE, DIN and EN-regulations.

### Dynamic operating pressures ...

is the most frequently operating condition in hydraulic systems. Pure static load is the absolute exception and therefore the Static Working Pressure has been eliminated from the standards.

### Consider peak pressures

A hose with a higher pressure rating than the actual working pressure of the installation should be selected for systems in which sudden peak pressures occur.



## DETERMINING HOSE DIMENSIONS

The required inside diameter of a hose assembly is determined by the projected working pressure and the proposed rate of flow.

### Never undersize hoses

Undersized hose assemblies result in a high flow velocity of the medium. The ensuing turbulence causes considerable loss of pressure, noise and increased temperatures. This can be detrimental to the entire system.

If undersize valve connections suggest smaller hose diameters, we recommend the use of suitable adapters which then cause only local constrictions in the system.



## CORRECT STORAGE EXTENDS SERVICE LIFE

The store room should be cool (up to +20°C) dry (rel. humidity max. 65%) and protected from sunlight. Exposure to ozone and UV radiation will shorten the service life of a hose.

The oldest hoses or assemblies in stock should always be used first.

For further details see DIN 7716, DIN 20066, ISO 8331, SAE 1273, BS5244 and ISO 2230.



### MONITORING HIGH PRESSURE GAS SYSTEMS

High pressure gas systems are extremely dangerous and require extra care and regular inspection.

Hose assemblies used in gas systems have to be suitably protected against mechanical damage and chemical and environmental influences.

The hoses of such installations should also be connected in such a way that they cannot whip in the event of a defect occurring.

#### Perforation of outside cover

The outside cover of a hose assembly used for the conveyance of gaseous media must be perforated when pressure exceeds 250 PSI.



### PRESSURE TESTING AS A SAFETY CHECK

Hose assemblies are statically tested by the manufacturer at suitable test pressures; neither leaks nor failure must occur.



### TEMPERATURE AFFECTS SERVICE LIFE

The operating temperatures given for hoses are the maximum temperatures of the medium.

Ambient temperatures must also be taken into consideration.

Continuous operation at high temperatures can adversely affect the service life of the hose and the reliable retention of end connector integrity.

#### Temperature resistance depends on medium

Hose assemblies cannot be used for any medium over the specified temperature range.

#### In case of doubt please ask!

Hoses assemblies will have a considerably longer service life if they are not continually used at the limits of their working pressure, bend radius, temperature of medium and environment.



### ALLOW FOR CHANGES IN LENGTH

Every hose is subject to certain changes in length under working pressure.

The standards specify that these values can vary between +2% to +4% at maximum working pressure. Contraction can occur.

This change in length must be taken into consideration in each case when calculating the nominal length of a hose assembly with connectors.

Be aware lengths can both increase and decrease.



### OBSERVE THE MINIMUM BEND RADIUS

The specified minimum bend radius apply to stationary hose assemblies at maximum working pressure.

The service life of a hose assembly is impaired if bends of less than the recommended minimum bend radius are used. Working pressure should be reduced in such cases.

**BEST PRACTICE ADVICE**



**DAMAGED HOSES CAN CAUSE ACCIDENTS AND PERSONAL INJURY:**

Damaged hydraulic hose assemblies always cause unexpected expense, however, they can also lead to severe accident and personal injury, even death. Many such accidents can be avoided if sufficient attention is paid to the early detection of damage.

**Conditions for safe operation**

- Choice of a suitable hose assembly for the required working pressure, conditions of operation and nominal diameter
- Operating range in accordance with relevant standards or other regulations
- Professional installation, correct and careful routing
- Immediate replacement of visibly damaged hose assemblies

**Main causes of damage**

- Mechanical damage
- Too much bending
- Extreme tension
- Above-average twisting
- Severe compression
- Unsuitable medium
- Working outside temperate ranges approved

**Possible consequences of damage**

- Damage to outer cover down to steel wire reinforcement – may result in corrosion of wire reinforcement
- Deformation or embrittlement of outer cover
- Damage or deformation of hose fittings
- Possibility of bursting

**Regular checks for early detection of damage**

- Perfect condition of outer cover of hose – no cracks, bubbles, deformation, wear or kinking
- Proper attachment of fittings
- Proper routing – avoid extreme kinking, too much tension, violent twisting
- Check for leakage

**Procedure for replacement of hoses**

Replacing hydraulic hose should always be done by a qualified professional (to discuss contact your local STAUFF branch).



**BURST PRESSURE MUST NEVER BE REACHED**

The values specified for burst pressure are minimum values. They apply only to unused hose assemblies.

The burst pressure of a hose or a hose assembly must therefore remain a purely theoretical value for the user. In view of the safety requirements imposed on any installation, this value must never be reached – or even approached – in practice.

It is incorrect to assume that comparable hoses of different manufacturers have longer service life under the same operating conditions the higher the rating for bursting pressure is. Designers should therefore take dynamic pressure values into consideration.

**AS SOON AS A HOSE SHOWS ANY DAMAGE IT HAS TO BE REPLACED IMMEDIATELY**



## BEST PRACTICE ADVICE

### IMPULSE TEST TO MEASURE PERFORMANCE

The impulse test is the most severe test for a hose assembly, reproducing practical operating conditions very closely.

Our manufacturing Research and Development department therefore continually takes samples and subjects them to impulse test quality.

This test is carried out as follows: the hose assembly under test is given the minimum bend radius specified by the standard and subjected to an alternating load varying between a flushing pressure of approx. 10 bar and a pressure equal to 120%, 125% and 133% of its dynamic working pressure.



#### Testing up to 1 million load cycles...

Depending on the type of hose, the sample is expected to withstand at least 150,000, 200,000 or 500,000 load cycles under these conditions.

Special designs such as 2SNK, SPC-2 and SPC-3 are further impulse tested up to 1 million cycles with our MCT insert and ferrule combinations.

Full details of test methods and quality requirements, such as chemical and physical tests, media resistance, ageing characteristics, etc. can be found in the SAE (Society of Automotive Engineers ; US-Standard [www.sae.org](http://www.sae.org)), J517 Series 100 R 1 to SAE 100 R 19, J 343 control standard, EN 853 to 857 and ISO 1436 standards.

#### Application and customer specific dynamic and pressure testing

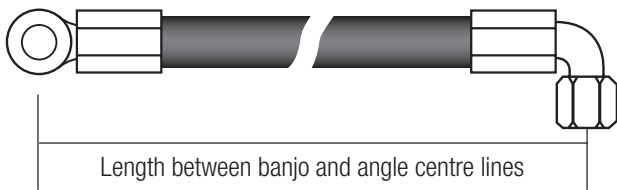
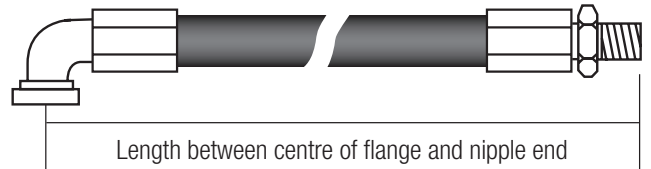
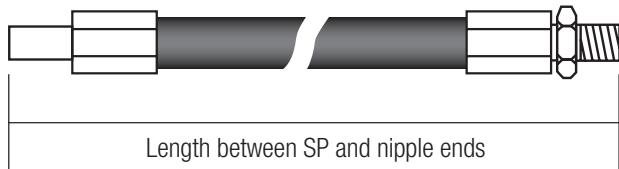
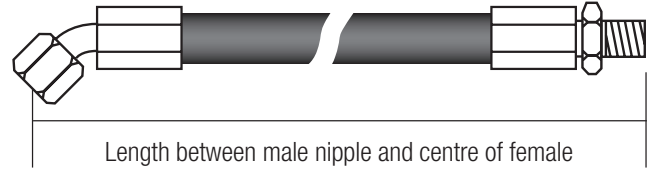
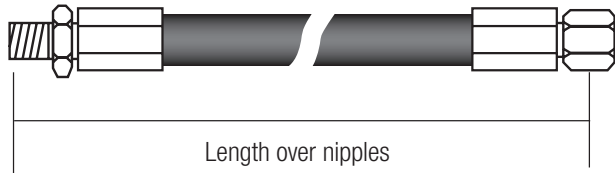
We also undertake a full range of customer specific pressure testing programmes to ensure fitness of purpose in all types of enhanced requirement applications.

This testing, up to 5,000 bar, can be built in as part of the hose assembly manufacturing programme where this is undertaken at the STAUFF Hose and Tube Technology Centre.

**BEST PRACTICE ADVICE**

**HOSE ASSEMBLY**

Determining the overall length of the assembly to be produced.



**TOLERANCES OF LENGTH OF HOSE ASSEMBLIES**

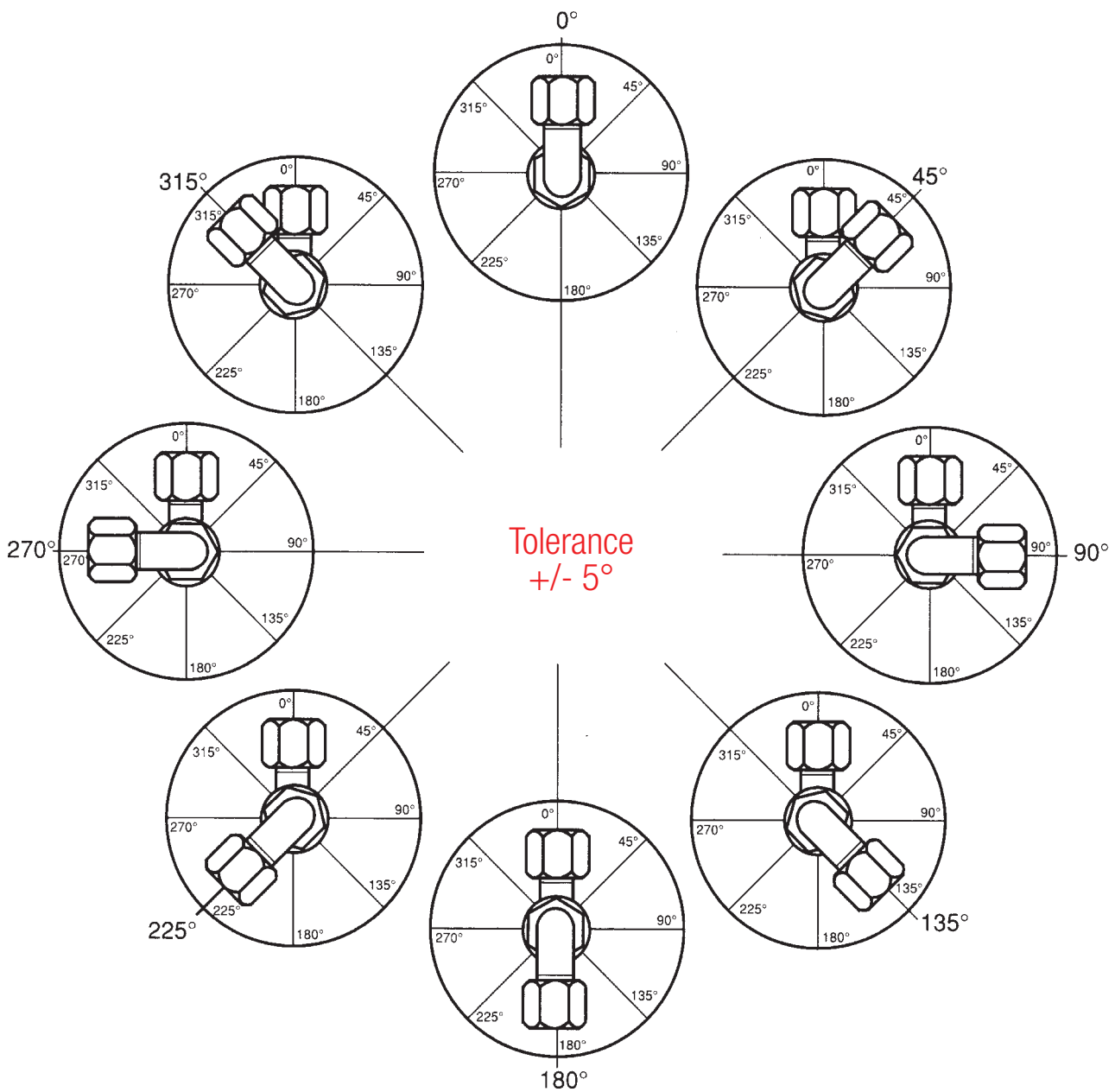
Length MM	Tolerance		
	Up to and including DN25	Over DN25 and including DN50	Over DN50
Up to and including 630	+ 7mm - 3mm	+ 12mm - 4mm	+ 25mm - 6mm
Over 630 and including 1250	+ 12mm - 4mm	+ 20mm - 6mm	
Over 1250 and including 2500	+ 20mm - 6mm	+ 25mm - 6mm	
Over 2500 and including 8000		+ 1.5% - 0.5%	
Over 8000		+ 3% - 1%	

## BEST PRACTICE ADVICE

## CALCULATING THE ANGLE SETTINGS

The angle settings of hose assemblies with elbow connectors at either end need to be very carefully determined. Use the following instructions and illustration guidelines to ensure accurate measurement.

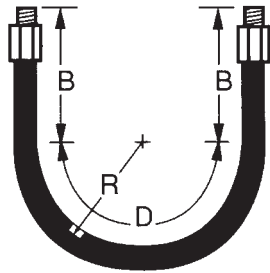
- Look along the hose assembly, with the rear connector away from the body and pointing upwards
- Now specify how many degrees the front connector is rotated in a clockwise direction
- Acceptable Tolerance +/- 5°



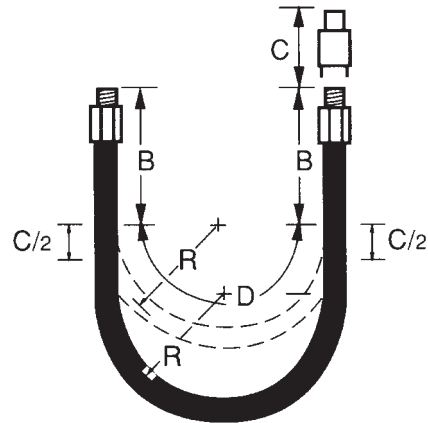
**BEST PRACTICE ADVICE**

**CALCULATING THE HOSE LENGTH**

The service life of hose assemblies can be increased by correct measurement and installation.



Overall length  
 $L = 2B + 3.14R$   
 R = Minimum bend radius



Overall length  
 $L = 2B + 3.14R + C$   
 Additional length C should be allowed for if vertical movement takes place

Depending on the hose diameter, the following table gives the minimum length B, that should be allowed for at the end of the connectors of a hose assembly.

DN Ø	6	8	10	12	16	20	25	32	40
B (mm)	90	100	110	120	130	140	160	180	200

## BEST PRACTICE ADVICE

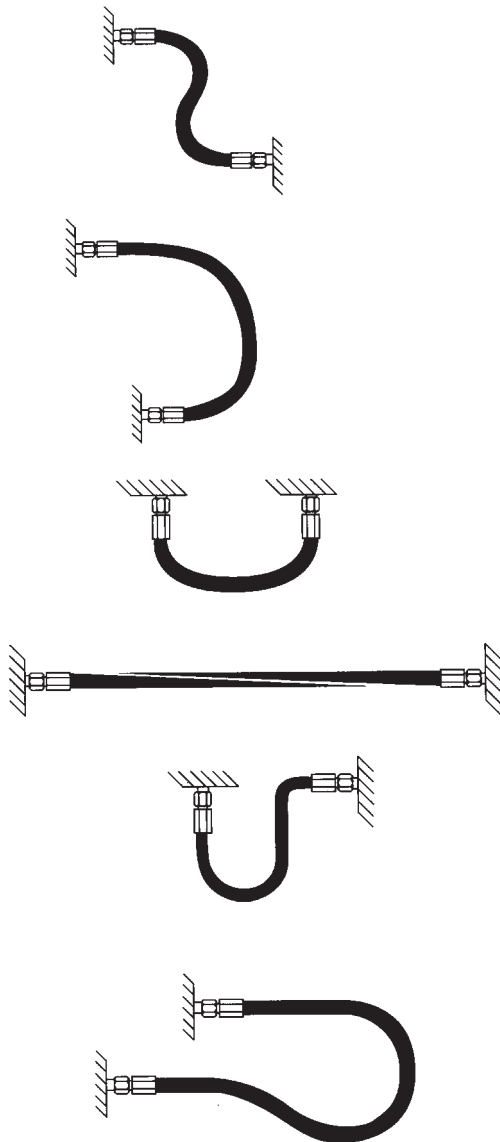
## CORRECT INSTALLATION TECHNIQUES

- Under pressure, alterations of +2% to +4% can occur in the length of hose assemblies, lengths can also reduce
- Hoses should therefore be installed with slack or curves
- Hose assemblies should never be installed twisted (no torsion)
- Hose assemblies should not be bent excessively – use elbow connectors instead
- Note minimum bend radius
- If vertical displacement occurs, allow for amount of travel
- Protect from external damage (use protective spirals)

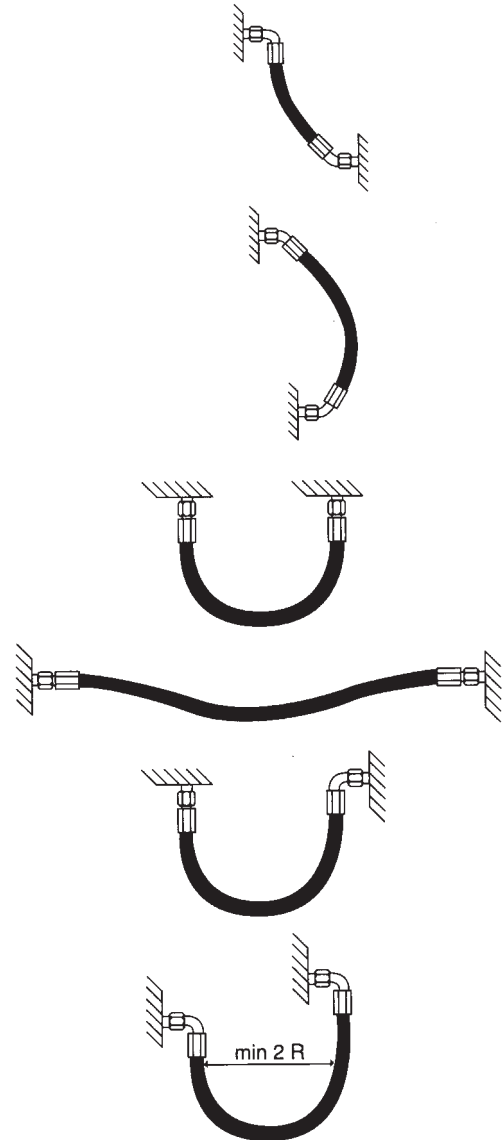
2



Incorrect



Correct



## FLUID COMPATIBILITY

### HYDRAULIC HOSES AND WORKING MEDIUM

The range of STAUFF hydraulic hoses are generally suitable for mineral and synthetic oil based hydraulic fluids (HL, HLP, HLPD, HVLP), for oil water emulsions (HFAE, HFAS, HFB), and for water glycol solutions (HFC), as well as for vegetable and mineral oil-based lubricants. In individual cases, there may be restrictions to the use due to manufacturer-specific oil additives.

Our hydraulic hoses are not suitable for hydraulic fluids based on chlorinated hydrocarbons or phosphated esters (HFD R/S/T).

Our hydraulic hoses are suitable for compressed air up to a maximum of 50 bar/80°C, with a restricted service life-time.

In principle, they are suitable for biodegradable hydraulic fluids (bio oils, HETG, HEPG, HEES), but this may be restricted by manufacturer specific oil additives.

**Caution:**

The hoses' inner surface (inner liner) must be appropriate for the medium used in the application (oil, water, air), as otherwise the hose can be damaged or destroyed by the working medium or its contents and eventually fail, which can result in (partial or serious) material damage and personal injury.

For safety reasons, in case of individual questions or uncertainties about the choice, use or proper handling, please contact a STAUFF specialist.

## FLUID COMPATIBILITY

### THERMOPLASTIC HOSES AND WORKING MEDIUM (Pages 31 - 33)

#### Notes on the chemical resistance table:

The fluid resistance tables are simplified rating tabulations based on immersion tests at ambient temperature 25°C. Higher temperatures tend to reduce ratings. Since final selection depends on pressure, fluid and ambient temperature and other factors, no performance guarantee is expressed or implied. The indicators do not imply any compliance with standards and regulations and do not refer to possible changes of colour, taste or smell. For food and drinking water specially approved materials have to be used. For fluid not listed or for advice on particular applications, please consult STAUFF - telephone: 0114 251 8518. Hose applications for these fluids must take into account legal and insurance regulations.

The chemical resistance indicated does not express or imply approval by certain institutions. For gas applications, the cover should be pin-pricked. Chemical resistance does not imply low permeation. The indication of chemical resistance does not imply any special food compatibility; it refers only to the chemical resistance of the material.

#### Classification code:

- A The fluid has a minimum or absent effect
- B The fluid has a weak or moderate effect
- C The fluid has a serious effect
- Not available

CHEMICAL PRODUCT	POLYESTER	POLYAMIDE 6	POLYAMIDE 12	POLYURETHANE
Acetaldehyde	-	B	A	C
Acetic Acid 10%	A	C	B	C
Acetone	B	A	A	C
Acetylene	A	-	-	-
Ammonia 10%	-	A	A	C
Ammonium Carbonate 10%	-	B	-	-
Ammonium Chloride 10%	A	A	A	-
Ammonium Hydroxide	-	-	-	C
Ammonium Sulfate	B	-	-	-
Amyl Acetate	B	A	B	C
Amyl Alcohol	A	A	A	C
Aniline	C	B	B	C
Antimony Chloride 10%	-	C	-	-
Astm Fuel A	A	A	A	-
Astm Fuel B	A	A	A	-
Astm Fuel C	B	-	-	-
Astm Oil N. 1	A	A	A	B
Astm Oil N. 3	A	B	B	-
Atrazine	A	-	-	-
Barium Chloride 10%	-	C	-	A
Barium Sulfate 10%	-	A	-	A
Beer	A	A	A	A
Benzene	B	A	A	C
Benzoic Acid 10%	-	B	B	-
Borax Solutions	A	A	A	A
Boric Acid 10%	A	B	A	A
Bromine (Anhydrous)	C	C	C	C
Bromine Water 25%	-	A	-	-
Butane	A	A	A	A
Butyric Acid, 10%	-	C	B	-
Butyl Acetate	B	A	A	C
Butyl Alcohol	-	A	A	C

## FLUID COMPATIBILITY

CHEMICAL PRODUCT	POLYESTER	POLYAMIDE 6	POLYAMIDE 12	POLYURETHANE
Calcium Chloride 5%	A	A	A	A
Calcium Hypochlorite 5%	A	C	-	C
Calcium Thiocyanate	-	C	-	-
Carbon Dioxide	A	A	A	A
Carbon Disulfide	B	A	A	-
Carbon Monoxide	A	-	-	A
Carbon Tetrachloride	B	A	B	C
Carbonic Acid 10%	A	A	-	A
Chlorine (Dry)	C	C	C	C
Chlorine (Wet)	C	C	C	C
Chloroacetic Acid 10%	C	C	C	C
Chlorobenzene	C	A	C	C
Chloroform	C	C	C	-
Chlorosulfonic Acid	C	C	C	C
Chromic Acid 10%	C	C	C	C
Citric Acid Solutions	A	B	-	B
Copper Chloride 10%	A	C	-	A
Copper Cyanide	-	-	-	A
Copper Sulfate Solutions	A	-	-	A
Cottonseed Oil	A	A	-	A
Cresol	-	C	-	C
Cyclohexane	A	A	A	B
Dibutyl Phthalate	A	A	A	C
Diethyl Sebacate	A	-	-	B
Diocetyl Phthalate	A	-	-	B
Ethanolamine	-	-	-	B
Ethyl Acetate	B	A	A	C
Ethyl Alcohol	A	A	A	B
Ethylene Chloride	C	A	B	B
Ethylene Glycol	A	A	A	B
Ethylene Oxide	A	-	-	C
Ferric Chloride Solutions	-	C	-	A
Fluorine	C	C	C	C
Formaldehyde, 40%	B	B	B	C
Formic Acid	B	C	C	C
Freon R 407	A	A	-	C
Freon R134a	A	A	-	-
Gasoline	B	A	A	-
Glycerin	A	A	A	B
Glycolic Acid	-	C	-	-
Hexane	A	A	A	B
Hydrazine	C	-	-	C
Hydrochloric Acid 10%	B	C	C	C
Hydrogen	A	A	A	A
Hydrogen Peroxide 5%	-	C	B	-
Hydrogen Sulfide 5%	A	C	C	-
Isooctane	A	A	A	B
Isopropyl Alcohol	A	A	B	-
Lactic Acid 10%	-	B	A	-
Linseed Oil	A	A	A	-
Mercury	A	A	A	A
Methyl Alcohol	A	A	A	C
Methyl Chloride	C	C	C	C
Methyl Ethyl Ketone	B	A	A	C
Methylene Chloride	C	B	C	C
Mineral Oil	A	A	A	A
Naptha	A	A	A	C
Napthalene	B	A	A	B
Nitric Acid 10%	B	C	C	C
Nitric Acid 30%	C	C	C	C
Nitrobenzene	C	B	B	C
Nitromethane	-	A	A	-
Oil Fiat Tutela Lhm	A	-	-	-
Oil Klüber Summit Hy Syn FG 22	A	-	-	-
Oil Panolin 9632	A	-	-	-



## FLUID COMPATIBILITY

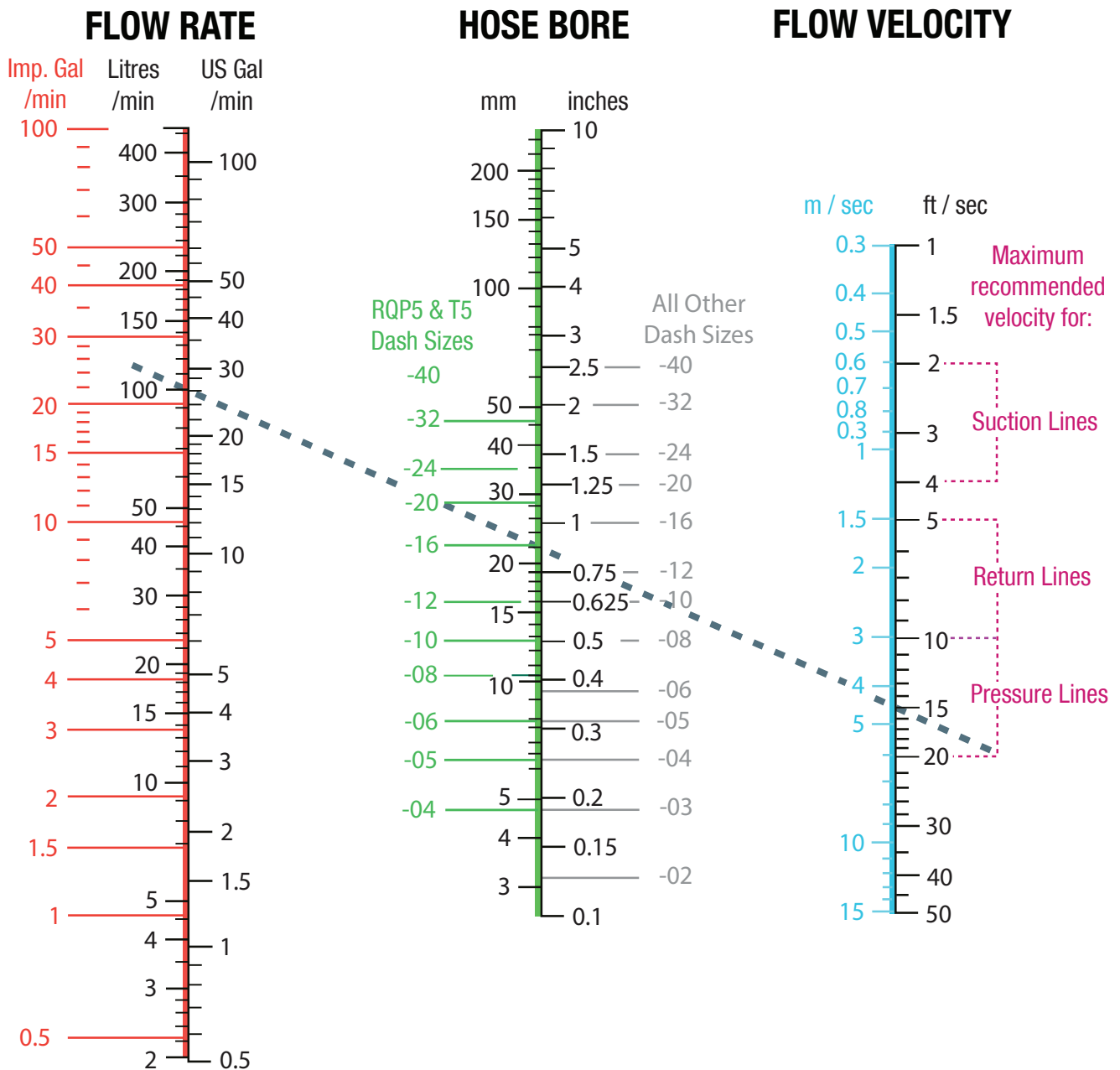
CHEMICAL PRODUCT	POLYESTER	POLYAMIDE 6	POLYAMIDE 12	POLYURETHANE
Oil Panolin Hlp Synth	A	-	-	-
Oil Pentosin Super Dot 4	-	A	A	-
Oleic Acid	A	A	A	B
Oleum 20-25%	C	C	C	C
Palmitic Acid	A	A	-	A
Perchloric Acid 10%	-	C	-	-
Perchloroethylene	C	A	A	C
Petrol	B	A	A	B
Phenol	C	C	C	C
Phosphoric Acid 10%	-	C	-	-
Phosphoric Acid 50%	-	C	-	-
Potassium Carbonate 20%	-	A	-	-
Potassium Carbonate 20%	-	A	-	-
Potassium Chloride 90%	-	A	-	A
Potassium Hydroxide 10%	B	B	B	C
Potassium Permanganate 5%	C	C	C	C
Potassium Thiocyanate	-	C	-	-
Pydraul 312	A	A	A	C
Sea Water	A	A	A	A
Shell Brake Fluid Dot 4	A	A	-	-
Silicone Oils	A	A	A	A
Skydrol 500B	A	A	-	C
Soap Solution	A	A	A	A
Sodium Acetate 60%	-	A	-	C
Sodium Bicarbonate	-	A	A	-
Sodium Carbonate	-	A	A	-
Sodium Chloride 10%	A	A	A	A
Sodium Hydroxide 10%	A	A	A	B
Sodium Hydroxide 20%	A	A	A	B
Sodium Hydroxide 50%	B	C	C	C
Sodium Hypochlorite 5%	A	C	B	C
Sodium Nitrate 5%	-	A	-	-
Sodium Sulfate 90%	-	A	-	A
Sodium Sulfide	-	A	-	-
Steam (100°C)	C	C	C	C
Sulfur Dioxide	-	C	-	-
Sulfuric Acid > 50%	C	C	-	C
Sulfuric Acid 10%	A	C	B	C
Sulfuric Acid 20 - 50%	A	C	B	C
Sulfurous Acid, 10%	B	C	-	C
Tannic Acid 10%	A	-	-	A
Tetrafluoro Propane	-	C	-	-
Tetrahydrofuran	B	A	-	C
Toluene	B	A	A	C
Trichloroethylene	C	B	B	C
Triethanolamine	C	-	-	C
Trisodium Phosphate	A	-	-	-
Water	A	A	A	A
Xylene	B	A	A	C
Zinc Chloride 10%	A	B	A	-

## NOMOGRAPH

The correct sizing of a hose ID, required flow rate and recommended flow velocity can be selected using this nomograph. With knowledge of any two of these factors the third can be calculated.

Using this nomograph:

1. Pick the two known values
2. Lay a straight edge to intersect the two values
3. Intersection on the third vertical line highlights the value of that factor



The velocity of the fluid should not exceed the range shown in the right hand column. For long hoses and/or high viscosity oil, or if the flow of hydraulic fluid is continuous, it is recommended to use figures at the lower end of the Maximum Recommended Velocity range. For short hoses and/or low viscosity oil, or if the flow of hydraulic fluid is intermittent or for only short periods of time, figures at the higher end of the Maximum Recommended Velocity range can be used.

## DYNAMIC WORKING PRESSURE AND BEND RADIUS

### Hydraulic Hose

DN			SAE 100 R1AT EN 853 1SN	DIN EN 857 1SC	SAE 100 R2AT EN 853 2SN	DIN EN 857 2SC	DIN EN 857 2SC Twin	SAE 100 R16S	STAUFFPAC 1SNK	STAUFFPAC 2SNK	DIN EN 853 1SN EHT	STAUFF ULTRACOLD SAE 100 R1AT EN 853 1SN	STAUFF ULTRACOLD SAE 100 R2AT EN 853 2SN	ULTIMATE SAE 100 EN 853 1SN - High Temperature	ULTIMATE SAE 100 EN 853 2SN - High Temperature	STAUFF FORK LIFT HOSE	STAUFFPilot - 4 wire	STAUFFPilot - 6 wire
Working Pressure (wp) in bar																		
mm	inch	dash	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)
6	1/4	-4	225	225	400	400	400	400	290	450	225	225	400	225	400	50	125	1450
8	5/16	-5	215	215	350	350	350	350	250	420	215	215	350	215	350	50	125	
10	3/8	-6	180	180	330	330	330	330	230	385	180	180	330	180	330	45	125	
12	1/2	-8	160	160	275	275	275	275	200	350	160	160	275	160	275	40	125	
16	5/8	-10	130	130	250	250		250	150	290	130	130	250	130	250			
19	3/4	-12	105	105	215	215		215	125	280	105	105	215	105	215			1350
25	1	-16	88	88	165	165		165	110	200	88	88	165	88	165			900
31	1.1/4	-20	63	63	125				100	175	63	63	125	63	125			
38	1.1/2	-24	50		90	100						50	90	50	90			
51	2	-32	40		80	90						40	78	40	78			
Bend Radius (br) in mm																		
mm	inch	dash	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)
6	1/4	-4	100	75	100	75	45	50	40	45	100	100	100	100	100	270	30	250
8	5/16	-5	115	85	115	85	55	55	55	60	115	115	115	115	115	300	40	
10	3/8	-6	125	90	130	90	65	65	65	70	125	130	130	130	130	500	50	
12	1/2	-8	180	130	180	130	80	90	80	90	180	180	180	180	180	630	60	
16	5/8	-10	200	150	200	170		100	105	130	200	200	200	200	200			
19	3/4	-12	240	180	240	200		120	120	160	240	240	240	240	240			280
25	1	-16	300	230	300	250		150	160	210	300	300	300	300	300			330
31	1.1/4	-20	420	210	420				300	300	420	420	420	420	420			
38	1.1/2	-24	500		500	300						500	500	500	500			
51	2	-32	630		630	400						630	630	530	630			

## DYNAMIC WORKING PRESSURE AND BEND RADIUS

### Hydraulic Hoses

DN			STAUFF JACK HOSE	DIN EN 856 4SP	DIN EN 856 4SH	DIN EN 856 / SAE 100 R13	SAE 100 R15	Multi-Purpose Mineral Oil Hose	SAE 100 R6 EN 854	SAE 100 R3 EN 854	En 854 1TE	EN 854 2TE	EN 854 3TE	STAUFF Tex R4-X Flexibility	SAE J1402 Air Brake	SAE 100 R17	SAE 100 R19
<b>Working Pressure (wp) in bar</b>																	
mm	inch	dash	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)
5	3/16	-3							34	103	25	80	160				
6	1/4	-4						25	28	86	25	75	145			210	280
8	5/16	-5						25	28	83	20	68	130			210	
10	3/8	-6	380	445			420	25	28	78	20	63	110		20.7	210	280
12	1/2	-8	350	425			420	25	28	69	16	58	98		20.7	210	280
16	5/8	-10		350	420		420	25	24	60	16	50	80		20.7	210	280
19	3/4	-12	230	350	420	350	420	25	21	52	12	45	70	21		210	280
25	1	-16		320	380	350	420	25	20	39	12	40	55	17		210	
31	1.1/4	-20		210	350	350	420			26		35	45	14			
38	1.1/2	-24		185	290	350	420			20		30	40	10			
51	2	-32		165	200	350	420						33	7			
<b>Bend Radius (br) in mm</b>																	
mm	inch	dash	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)
5	3/16	-3							35	80	35	25	40				
6	1/4	-4						40	45	80	45	40	45			50	50
8	5/16	-5						50	65	100	65	50	55			55	
10	3/8	-6	130	180			150	60	75	100	75	60	70		89	65	65
12	1/2	-8	180	230			200	80	90	125	90	70	85		102	90	90
16	5/8	-10		250	200		235	100	115	140	115	90	105		114	100	100
19	3/4	-12	240	300	280	240	265	120	140	150	140	110	130	50		120	120
25	1	-16		340	340	300	330	150	150	205	150	150	150	68		150	
31	1.1/4	-20		460	460	420	445			255		170	190	85			
38	1.1/2	-24		560	560	500	530			295		190	240	95			
51	2	-32		660	700	630	600						300	135			

\* 4 layer hose is standard, 6 layer available on request

## DYNAMIC WORKING PRESSURE AND BEND RADIUS

### Hydraulic Hoses

DN			STAUFF Shield 1SSK	STAUFF Shield 2SSK	STAUFF Shield SSP	STAUFF Shield SSH	SFLEX ULTRA 4000	SFLEX ULTRA 5000	SFLEX ULTRA 6000	S Flex-Ultra 4000 Plus	S Flex-Ultra 5000 Plus	S Flex-Ultra 6000 Plus	STAUFF Flex Supreme	STAUFF Flex Max	STAUFF Jet 1SN	STAUFF Jet 1SC	STAUFF Jet 2SN	STAUFF Jet 2SC	STAUFF Blast	
Working Pressure (wp) in bar																				
mm	inch	dash	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)
5	3/16	-3																		
6	1/4	-4	290	450											250	250	400	400	1000	
8	5/16	-5													220	250	400	400		
10	3/8	-6	230	385	445		280	300	420			420	470		220	250	400	400	850	
12	1/2	-8	200	350	425		280	380	420			420	470		220	250	400	400	800	
16	5/8	-10	150	500	350		280	300	420			420	470							
19	3/4	-12	125	280	350	420	280	380	420		350	420	450	560						720
25	1	-16	110	200	280	380	280	350	420	280	350	420	440	560						700
31	1.1/4	-20				350	280	350	420	280	350	420	370	525						
38	1.1/2	-24				290		350	420	280	350	420	320							
51	2	-32				250		350	420	280	350	420	280							
Bend Radius (br) in mm																				
mm	inch	dash	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)
5	3/16	-3																		
6	1/4	-4	40	45											100	75	100	75	125	
8	5/16	-5													115	85	115	85		
10	3/8	-6	65	70	180		65	65	65			65	60		125	90	130	90	150	
12	1/2	-8	80	90	230		90	90	90			90	85		180	130	180	130	180	
16	5/8	-10	105	150	250		100	100	100			100	100							
19	3/4	-12	120	160	300	280	120	120	120		120	150	120	270						220
25	1	-16	160	210	340	340	155	150	150	150	150	210	140	300						300
31	1.1/4	-20				460	210	210	400	210	210	260	210	420						
38	1.1/2	-24				560		280	460	250	250	310	250							
51	2	-32				700		540	540	350	350	350	390							

## DYNAMIC WORKING PRESSURE AND BEND RADIUS

### Rail Hoses

DN			1SN EN 853	2SN EN 853	1SC EN 857	2SC EN 857	1SN-K EXCEEDS EN 857	2SN-K EXCEEDS EN 857	STAUFF RAIL AIR NF F 11-380 H22, R23, HL3	2TE - EN 854	3TE - EN 854	4SP - EN 856	RAILWAY R4 SAE 100 R4	RAILWAY AIRBRAKE UIC830-1
Working Pressure (wp) in bar														
mm	inch	dash	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)
5	3/16	-3	225	400						80				
6	1/4	-4	215	350	225	400	290	450	-	75	145			
8	5/16	-5	180	330	215	350	250	420	-	68	130			
10	3/8	-6	160	275	180	330	230	385		63	110	445		
12	1/2	-8	130	250	160	275	200	345		58	93	425		
13	1/2	-8							-					10
16	5/8	-10	105	215	130	250	150	290	-	50	80	350		10
19	3/4	-12	88	165	105	215	125	280	-	45	70	350	21	
22	7/8	-14												10
25	1	-16			88	165	110	200	-	40	55	320	17	
28	1 1/8	-18												10
31	1.1/4	-20				125							14	
35	1 3/8	-22												10
38	1.1/2	-24				100							10	
51	2	-32				90							7	
63	2 1/2	-40											4	
80	3	-50											4	
Bend Radius (br) in mm														
mm	inch	dash	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)
5	3/16	-3	100	100						35				
6	1/4	-4	115	115	50	50	40	45	-	40	45			
8	5/16	-5	130	130	55	55	55	60	-	50	55			
10	3/8	-6	180	180	65	65	65	70		70	70	180		
12	1/2	-8	200	200	90	90	80	90	-	70	85	230		
13	1/2	-8												70
16	5/8	-10	240	240	100	100	105	130	-	90	105	250		90
19	3/4	-12	300	300	120	120	120	160	-	110	130	300	40	
22	7/8	-14												120
25	1	-16			150	150	160	210	-	150	150	340	45	
28	1 1/8	-18												150
31	1.1/4	-20				210							60	
35	1 3/8	-22												170
38	1.1/2	-24				250							65	
51	2	-32				315							100	
63	2 1/2	-40											140	
80	3	-50											180	

## DYNAMIC WORKING PRESSURE AND BEND RADIUS

### Thermoplastic Hoses

DN			R7 Antibrasion	R7 Antibrasion Twin	R7 Mariner	R7 Non Conductive	R8 Antibrasion	R8 Mariner	R8 Non Conductive	1SB Steel Antibrasion	1SB Steel Braid Antibrasion Twin	2SB - Two Steel Braids Antibrasion	2SB - Two Steel Braids Antibrasion Twin	R18 CPLT 3000	R18 CPLT 3000 Non Conductive	VHP 10000	VHP 10000 Twin	Ecology 210 HD	PTFE - Super Tet Smooth-bore	PTFE - Super Convuluted
<b>Working Pressure (wp) in bar</b>																				
mm	inch	dash	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)	(wp)
4	1/8	-2	210	210	210		420	420												
5	3/16	-3	210	210	210	210	350	350	350	360	360			210	210				207	
6	1/4	-4	210	210	210	210	350	350	350	310	310	400	400	210	210	700	700		207	172
8	5/16	-5	190	190	190	190	300	300	300	250	250	400	400	210	210				181	
10	3/8	-6	160	160	160	160	280	280	280	225	225	330	330	210	210	700	700		172	138
12	1/2	-8	140	140	140	140	245	245	245	190	190	260	260	210	210				138	103
16	5/8	-10	105	105	105	105	200	200	200	140	140	220	220	210	210				103	83
19	3/4	-12	90	90	90	90	165	165	165	115	115	150	150					210	86	69
25	1	-16	70	70	70	70	140	140	140	95	95							210	69	46
31	1.1/4	-20																210		34
38	1.1/2	-24																		30
51	2	-32																		23
<b>Bend Radius (br) in mm</b>																				
mm	inch	dash	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)	(br)
4	1/8	-2	25	25	25		25	25												
5	3/16	-3	25	25	25	25	30	30	30	30	30			25	25				38	
6	1/4	-4	35	35	35	35	50	50	50	40	40	40	40	35	35	35	35		51	18
8	5/16	-5	45	45	45	45	55	55	55	55	55	50	50	45	45				76	
10	3/8	-6	55	55	55	55	60	60	60	65	65	65	65	45	45	90	90		100	20
12	1/2	-8	75	75	75	75	80	80	80	85	85	85	85	70	70				133	25
16	5/8	-10	110	110	110	110	125	125	125	115	115	115	115	100	100			120	165	51
19	3/4	-12	140	140	140	140	150	150	150	145	145	170	170					155	197	64
25	1	-16	190	190	190	190	200	200	200	180	180							240	229	89
31	1.1/4	-20																		127
38	1.1/2	-24																		152
51	2	-32																		200

## HIGH ABRASION RESISTANT GUIDE

**Stauff High Abrasion Resistant Hose has been developed and updated over existing proven products for even better performance in the most demanding environment applications.**

They rely on the use of highly developed formulae for hose cover construction and can be applied to all of the standard wire braid and wire spiral manufactured products.

### STAUFFRoc

Benefits from improved dynamic ozone resistance, UV, high temperature and salt water resistance.

In addition this high specification product meets the demanding requirements of the underground coal mining industry.

#### Construction:

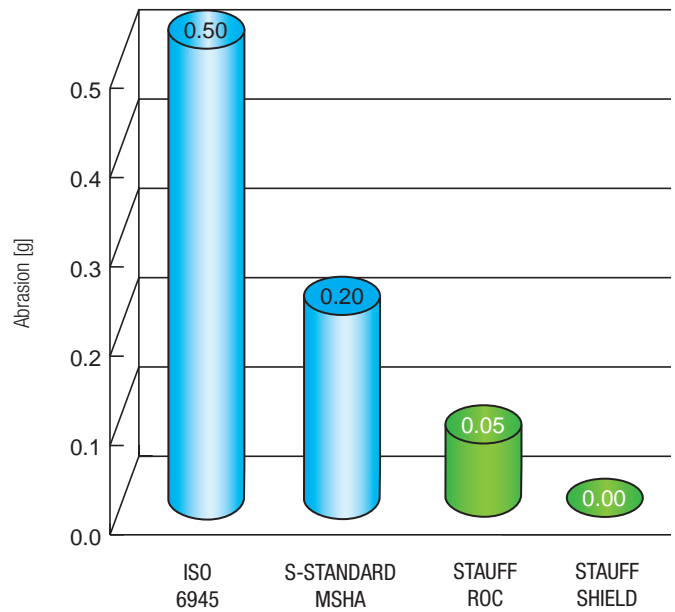
- Tube: Oil resistant synthetic rubber
- Reinforcement: One, two or four high tensile steel wire layers
- Cover: Synthetic rubber cover
  - Super abrasion resistance
  - Excellent ozone and UV resistance
  - Very high weather and salt water resistance
  - Flame resistant acc. to MSHA and DSK
  - Very high wear and abrasion resistance (ISO 6945 / 2000 cycles / 25N / 0.05g)
  - MSHA approved and anti-static
  - Temperature range -40°C to +100°C up to 120°C [for max. 30% of the application]

### STAUFFShield

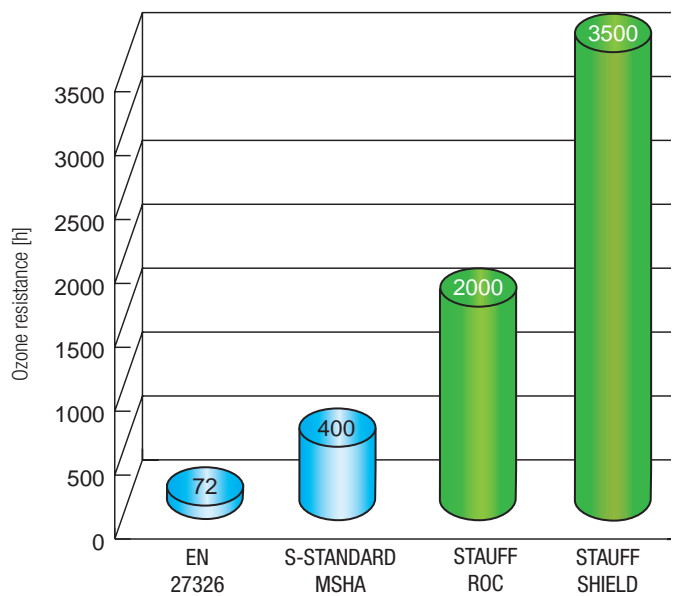
Hose is known for its excellent wear and ozone resistance. This is achieved by a double layer construction with rubber cover and UHMW foil.

Testing to two thousand cycles with 25nm weight, in accordance with EN ISO 6945, shows no measurable abrasion.

Abrasion values according to EN ISO 6945



Ozone resistance according to EN 27326



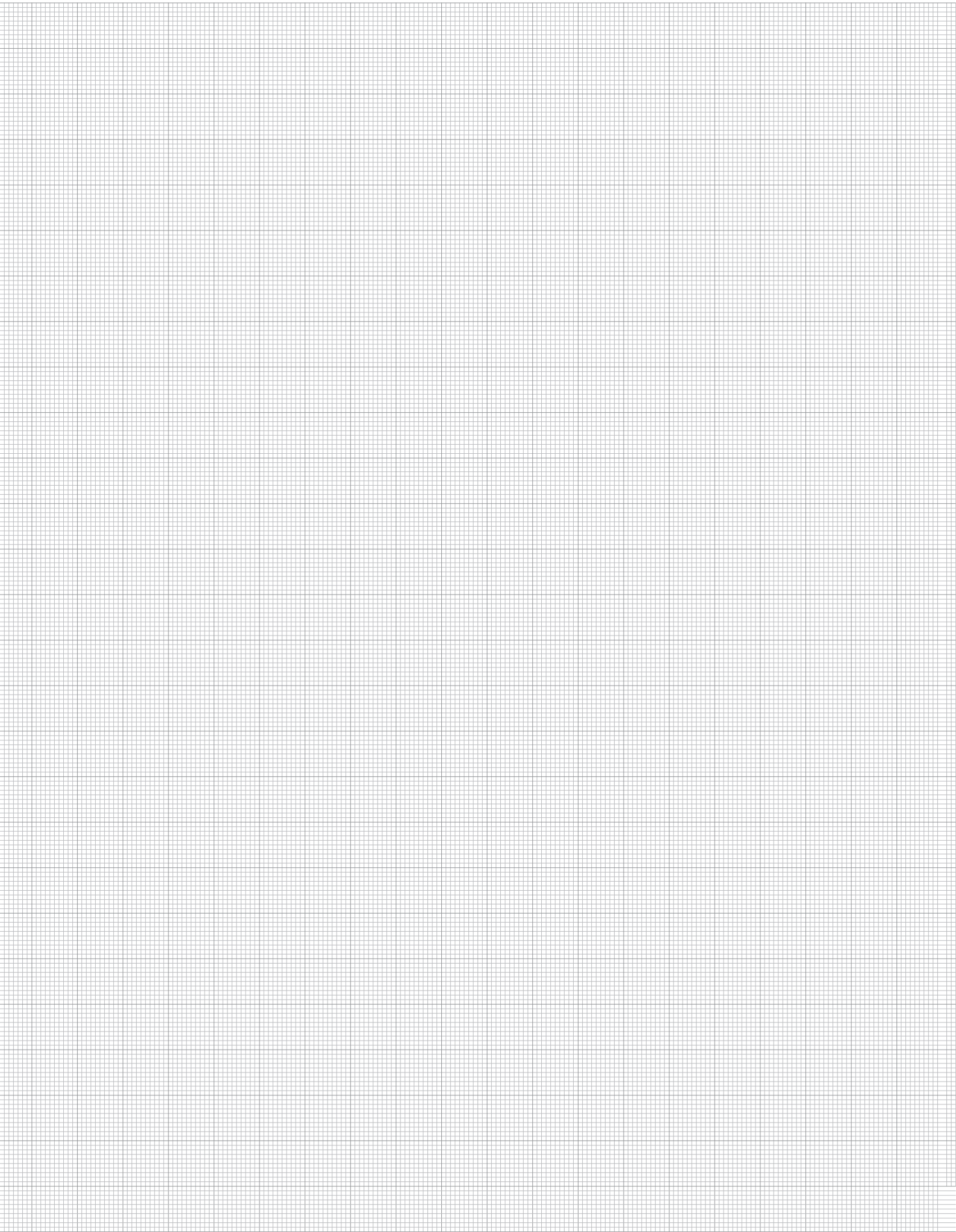
All hose types can be supplied with STAUFFRoc or STAUFFShield cover specifications.



**CONVERSION CHART**

	UNIT	FROM	TO	MULTIPLY BY
Length	1 Inch	in	m	0.0254
	1 Meter	m	in	39.370
	1 Foot	ft	m	0.3048
	1 Meter	m	ft	3.281
Area	1 Square Inch	inch <sup>2</sup>	mm <sup>2</sup>	645.16
	1 Square Meter	m <sup>2</sup>	in <sup>2</sup>	1550
Volume	1 Gallon (UK)	gal	L	4.546
	1 Litre	L	gal (UK)	0.22
	1 Gallon (US)	gal	L	3.78
	1 Litre	L	gal (US)	0.264
Weight	1 Pound	1 lb	kg	0.454
	1 Kilogram	kg	1 lb	2.205
Pressure	1 Pound per square Inch	psi	bar	0.06895
	1 Bar	bar	psi	14.5
	1 Pound per square inch	psi	Mpa	0.006895
	1 Mega Pascal	Mpa	psi	145.038
	1 Kilo Pascal	Kpa	bar	0.01
	1 Bar	bar	Kpa	100
	1 Mega Pascal	Mpa	bar	10
	1 Bar	bar	Mpa	0.1
Velocity	1 Foot per second	ft/s	m/s	0.3048
	1 Meter per second	m/s	ft/s	3.281
Flow Rate	1 Gallon per minute (UK)	gal / min.	l / min.	4.546
	1 Liter per minute	l / min.	gal / min. (UK)	0.22
	1 Gallon per minute (US)	gal / min.	l / min.	3.78
	1 Liter per minute	l / min.	gal / min. (US)	0.264
Temperature	Fahrenheit degree	°F	°C	5/9 (°F-32)
	Celsius degree	°C	°F	9×°C/5+32

# Notes



**STAUFFtex**

MULTI-PURPOSE MINERAL OIL HOSE - TU25 . . . . .	44
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**STAUFFflex**

**FFLEX**

J 517 - W.P. 7 BAR (100 PSI)

# 3

**HYDRAULIC HOSE**

## MULTI-PURPOSE MINERAL OIL HOSE - TU25

### Applications

Flexible hose suitable for industrial oils, unleaded fuels (EN228:2000), diesel oils (EN590:2004) and fuel oils (DIN 51 603 parts 1-5). Applications in industry, garages, filling stations and automobile repair shops. Also suitable for compressed air.

### Construction

Core: NBR, black, smooth, electrically conductive.

### Reinforcement

Textile spirally laid

### Cover

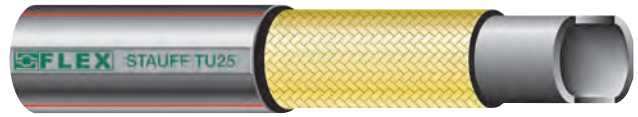
NBR/SBR, black, smooth, abrasion resistant, oil and weather resistant.

### Safety Factor

3.15: 1

### Temperature Range

-40°C to +80°C (-40°F to +176°F) Not to exceed +70°C for air and water based fluids.



### Applications



ORDER CODE	DESCRIPTION	ID			OD MM	WALL THICKNESS MM	WORKING PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M	COIL LENGTH M
		DASH	INCH	MM						
6100190021	HIS-MPR-06-A-PN25	-4	1/4	6.0	14.0	4.0	25	40	0.17	100
2020039900	HIS-MPR-08-A-PN25	-5	5/16	8.0	16.0	4.0	25	50	0.19	100
6100190025	HIS-MPR-10-A-PN25	-6	3/8	10.0	18.0	4.0	25	60	0.23	50
6100190028	HIS-MPR-13-A-PN25	-8	1/2	13.0	21.0	4.0	25	80	0.28	50
6100190030	HIS-MPR-16-A-PN25	-10	5/8	16.0	25.0	4.5	25	100	0.38	50
6100190032	HIS-MPR-19-A-PN25	-12	3/4	19.0	29.0	5.0	25	120	0.50	50
6100190035	HIS-MPR-25-A-PN25	-16	1"	25.0	36.0	5.5	25	150	0.73	50



**NOT TO BE USED AS A PETROL PUMP HOSE**

## SAE 100 R6 EN 854

### Applications

For hydraulic control lines, discharge under low pressure of hydraulic fluids, fuel oil, grease, air and water.

### Construction

Tube - hydraulic oil resistant special synthetic rubber.

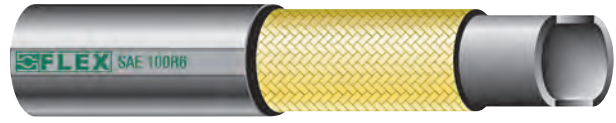
Cover - oil, abrasion, ozone and weather resistant special synthetic rubber.

### Reinforcement

1 High tensile synthetic textile braid.

### Temperature Range

-40°C to +100°C (-40°F to +212°F)



### Applications



ORDER CODE	DESCRIPTION	ID		OD MM	WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT G/M
		INCH	MM		BAR	PSI			
6100190060	HIS-R6-05-R-PN30	3/16	4.8	10.7	34	493	250	35	90
2020000166	HIS-R6-06-R-PN30	1/4	6.4	12.3	28	406	200	45	105
2020000180	HIS-R6-08-R-PN30	5/16	8.0	13.9	28	406	200	65	125
2020000219	HIS-R6-10-R-PN30	3/8	9.5	15.5	28	406	200	75	150
2020000253	HIS-R6-12-R-PN30	1/2	12.7	19.5	28	406	200	90	225
2020000269	HIS-R6-16-R-PN25	5/8	16.0	22.6	24	348	140	115	260
2020000289	HIS-R6-19-R-PN25	3/4	19.0	25.8	21	305	130	140	315
2020000308	HIS-R6-25-R-PN25	1"	25.4	33.2	20	290	100	150	470

## SAE 100 R3 EN 854

### Applications

For hydraulic control lines, discharge under low pressure of hydraulic fluids, fuel oil, grease, air and water.

### Construction

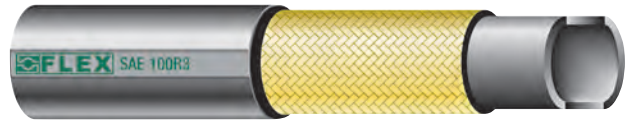
Tube - hydraulic oil resistant special synthetic rubber.  
Cover - oil, abrasion, ozone and weather resistant special synthetic rubber.

### Reinforcement

2 High tensile synthetic textile braids.

### Temperature Range

-40°C to +100°C (-40°F to +212°F)



### Applications



ORDER CODE	DESCRIPTION	ID		COVER OD MM	WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM		BAR	PSI			
6100190079	HIS-R3-05-R-PN103	3/16	4.8	12.7	103	1494	412	80	0.16
6100190087	HIS-R3-06-R-PN86	1/4	6.4	14.3	86	1247	400	80	0.19
6100190096	HIS-R3-08-R-PN83	5/16	8.0	17.5	83	1204	370	100	0.27
2020076745	HIS-R3-10-R-PN78	3/8	9.5	19.1	78	1131	340	100	0.30
2020050339	HIS-R3-12-R-PN69	1/2	12.7	23.8	69	1000	300	125	0.44
6100190111	HIS-R3-16-R-PN60	5/8	16.0	27.0	60	870	270	140	0.50
6100190112	HIS-R3-19-R-PN52	3/4	19.0	31.8	52	754	240	150	0.70
6100190138	HIS-R3-25-R-PN39	1"	25.4	38.1	39	566	190	205	0.87
6100190146	HIS-R3-31-R-PN26	1.1/4	31.8	44.5	26	377	140	255	1.0
6100190297	HIS-R3-38-R-PN20	1.1/2	38.1	51.0	20	290	110	295	1.17

## EN 854 1TE

### Applications

For hydraulic control lines, discharge under low pressure of hydraulic fluids, fuel oil, grease, air and water.

### Construction

Tube - hydraulic oil resistant special synthetic rubber.

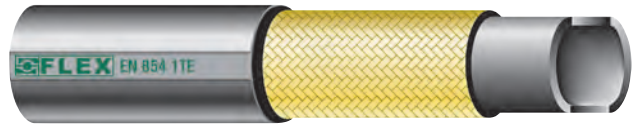
Cover - oil, abrasion, ozone and weather resistant special synthetic rubber.

### Reinforcement

1 High tensile synthetic textile braid.

### Temperature Range

-40°C to +100°C (-40°F to +212°F)



### Applications



ORDER CODE	DESCRIPTION	ID		COVER OD MM	WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM		BAR	PSI			
6100190278	HOS-1TE-05-R-STM-PN25	3/16	4.8	10.7	25	363	230	35	0.09
6100190290	HOS-1TE-06-R-STM-PN25	1/4	6.4	12.3	25	363	180	45	0.12
6100190291	HOS-1TE-08-R-STM-PN20	5/16	8.0	13.9	20	290	180	65	0.13
6100190292	HOS-1TE-10-R-STM-PN20	3/8	9.5	15.5	20	290	170	75	0.16
6100190298	HOS-1TE-12-R-STM-PN16	1/2	12.7	19.0	16	232	160	90	0.21
6100190314	HOS-1TE-16-R-STM-PN16	5/8	16.0	22.6	16	232	130	115	0.27
6100190315	HOS-1TE-19-R-STM-PN12	3/4	19.0	25.8	12	174	120	140	0.32
6100190317	HOS-1TE-25-R-STM-PN12	1"	25.4	33.2	12	174	95	150	0.48

## EN 854 2TE

### Applications

For hydraulic control lines, discharge under low pressure of hydraulic fluids, fuel oil, grease, air and water.

### Construction

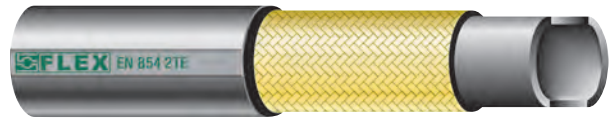
Tube - hydraulic oil resistant special synthetic rubber.  
Cover - oil, abrasion, ozone and weather resistant special synthetic rubber.

### Reinforcement

1 High tensile synthetic textile braid.

### Temperature Range

-40°C to +100°C (-40°F to +212°F)



### Applications



ORDER CODE	DESCRIPTION	ID		COVER OD MM	WORKING PRESSURE		BURST PRESSURE BAR	VACUUM BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM		BAR	PSI				
6100190331	HOS-2TE-05-R-STM-PN80	3/16	4.8	11.8	80	1160	410	-0.60	25	0.12
2020044947	HOS-2TE-06-R-STM-PN75	1/4	6.4	13.4	75	1088	400	-0.60	40	0.15
2020065246	HOS-2TE-08-R-STM-PN68	5/16	8.0	14.9	68	986	380	-0.60	50	0.17
2020065247	HOS-2TE-10-R-STM-PN63	3/8	9.5	16.5	63	914	310	-0.60	60	0.20
2020044698	HOS-2TE-12-R-STM-PN58	1/2	12.7	19.7	58	841	280	-0.60	70	0.24
2020040735	HOS-2TE-16-R-STM-PN50	5/8	16.0	23.9	50	725	260	-	90	0.33
2020044697	HOS-2TE-19-R-STM-PN45	3/4	19.0	27.0	45	653	230	-	110	0.38
2020044948	HOS-2TE-25-R-STM-PN40	1"	25.4	34.4	40	580	200	-	150	0.55
2020044945	HOS-2TE-31-R-STM-PN35	1.1/4	31.8	41.4	35	508	180	-	170	0.74
6100190334	HOS-2TE-38-R-STM-PN30	1.1/2	38.1	48.1	30	435	180	-	190	0.87



## EN 854 3TE

### Applications

For hydraulic control lines, discharge under medium pressure of hydraulic fluids, fuel oil, grease, air and water.

### Construction

Tube - hydraulic oil resistant special synthetic rubber.

Cover - oil, abrasion, ozone and weather resistant special synthetic rubber.

### Reinforcement

2 High tensile synthetic textile braids.

### Temperature Range

-40°C to +100°C (-40°F to +212°F)



### Applications



ORDER CODE	DESCRIPTION	ID		COVER OD MM	WORKING PRESSURE		BURST PRESSURE BAR	VACUUM BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM		BAR	PSI				
6100190336	HOS-3TE-05-R-STM-PN160	3/16	4.8	12.8	160	2320	700	-0.80	40	0.14
6100190337	HOS-3TE-06-R-STM-PN145	1/4	6.4	14.4	145	2103	630	-0.80	45	0.17
6100190338	HOS-3TE-08-R-STM-PN130	5/16	8.0	16.9	130	1885	580	-0.80	55	0.22
6100190339	HOS-3TE-10-R-STM-PN110	3/8	9.5	18.5	110	1595	500	-0.80	70	0.25
6100190357	HOS-3TE-12-R-STM-PN93	1/2	12.7	21.7	93	1349	440	-0.80	85	0.31
6100190365	HOS-3TE-16-R-STM-PN80	5/8	16.0	25.9	80	1160	380	-0.80	105	0.41
6100190378	HOS-3TE-19-R-STM-PN70	3/4	19.0	29.0	70	1015	330	-0.60	130	0.47
6100190390	HOS-3TE-25-R-STM-PN55	1"	25.4	35.9	55	798	280	-0.60	150	0.63
6100190391	HOS-3TE-31-R-STM-PN45	1.1/4	31.8	42.3	45	653	220	-0.60	190	0.76
6100190395	HOS-3TE-38-R-STM-PN40	1.1/2	38.1	49.6	40	580	190	-	240	0.96
6100190396	HOS-3TE-51-R-STM-PN33	2"	50.8	62.3	33	479	160	-	300	1.28

## STAUFF TEX R4-X FLEXIBILITY

### Applications

In oil return lines of hydraulic systems of industrial and agricultural applications.

### Construction

Tube - hydraulic oil resistant special NBR rubber.

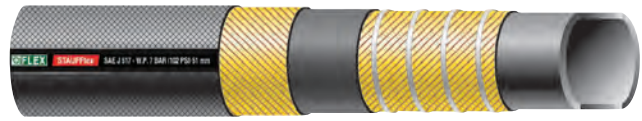
Cover - oil, heat, abrasion, ozone and weather resistant special CR rubber.

### Reinforcement

High tensile synthetic textile and steel wire helix.

### Temperature Range

-40°C to +100°C (-40°F to +212°F)



### Applications



ORDER CODE	DESCRIPTION	ID		OD MM	WORKING PRESSURE		BURST PRESSURE BAR	VACUUM BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM		BAR	PSI				
6100190399	HIS-OSD-19-R-PN84	3/4	19.0	29.0	21	305	84	-0.80	50	0.52
6100190400	HIS-OSD-25-R-PN68	1"	25.4	35.0	17	247	68	-0.80	65	0.64
6100190401	HIS-OSD-31-R-PN56	1.1/4	31.8	42.0	14	203	56	-0.80	85	0.83
6100190405	HIS-OSD-38-R-PN40	1.1/2	38.1	49.0	10	145	40	-0.80	95	1.08
6100190407	HIS-OSD-45-R-PN40	1 3/4	44.5	56.0	10	145	40	-0.80	110	1.40
6100190408	HIS-OSD-51-R-PN28	2"	50.8	62.0	7	102	28	-0.80	135	1.54
6100190409	HIS-OSD-63-R-PN16	2.1/2	63.5	75.5	4	58	16	-0.80	180	2.02
6100190410	HIS-OSD-76-R-PN16	3"	76.2	88.0	4	58	16	-0.80	225	2.51
6100190413	HIS-OSD-88-R-PN12	3.1/2	88.9	103.0	3	44	12	-0.80	270	3.16
6100190414	HIS-OSD-102-R-PN8	4"	101.6	115.0	2	29	8	-0.80	390	3.64

## SAE J1402 / DIN 74310 AIR BRAKE

### Applications

Medium pressure hose lines. Used in automotive air brake systems.

### Construction

Special synthetic rubber.

### Reinforcement

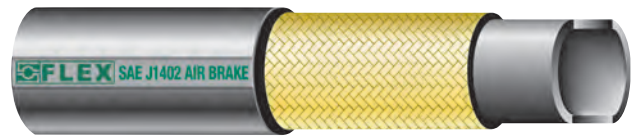
High tensile synthetic textile.

### Cover

Abrasion, ozone and weather resistant special black synthetic rubber.

### Temperature Range

-40°C to +80°C (-40°F to +176°F)

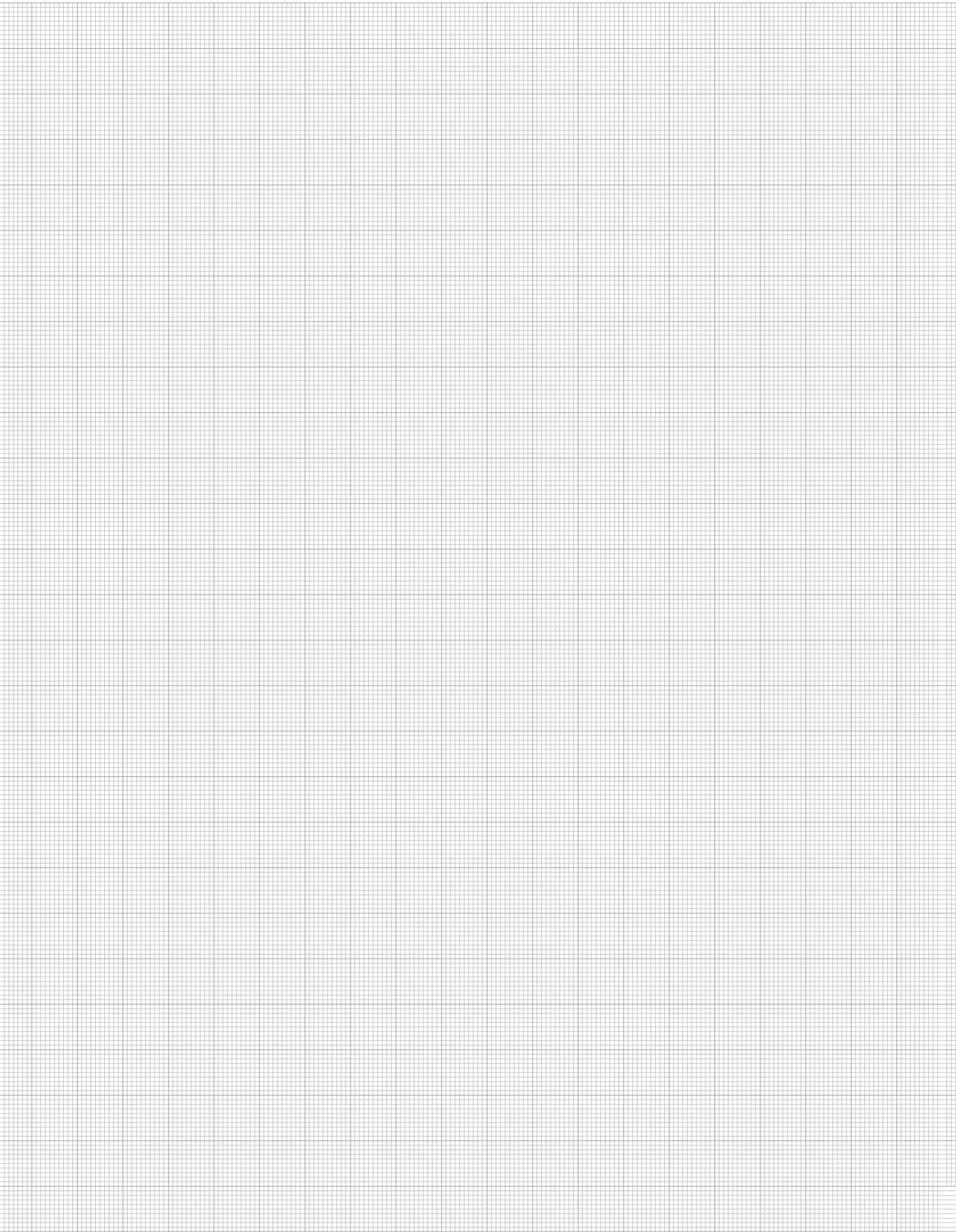


### Applications



ORDER CODE	DESCRIPTION	ID			OD MM	WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT G/M
		DASH	INCH	MM		BAR	PSI			
2020000185	HIS-J1402-10-R-PN20.7	-06	3/8	9.5	19	20.7	300	62	89	0.26
2020000229	HIS-J1402-12-R-PN20.7	-08	1/2	13	22.2	20.7	300	62	102	0.33
2020065269	HIS-J1402-16-R-PN20.7	-10	5/8	16	26.9	20.7	300	62	114	0.48

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*Flex-ultra 5000*



# 4

## HIGH PRESSURE HOSE

**STAUFF Pilot**

**Compact Hose**

**Applications**

For pilot lines and hydraulic systems.

**Construction**

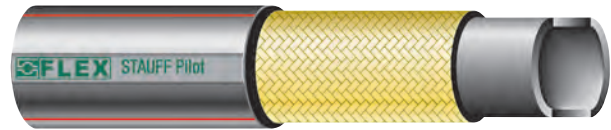
Tube - mineral, vegetable and hydraulic oil resistant special synthetic rubber.  
Cover - oil, abrasion and weather resistant special synthetic rubber.

**Reinforcement**

1 High tensile steel wire braid.

**Temperature Range**

-40°C to +120°C (-40°F to +248°F) (120°C Max)



**Applications**



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
2020040730	HOS-PIL-05-R-STM	3/16	4.8	8.7	10.5	150	2175	600	20	0.14
2020065296	HOS-PIL-06-R-STM	1/4	6.4	9.9	11.5	150	2175	600	25	0.15
2020065297	HOS-PIL-08-R-STM	5/16	8.0	11.5	13.1	120	1740	480	30	0.18
2020065298	HOS-PIL-10-R-STM	3/8	9.5	13.2	14.8	120	1740	480	40	0.20
2020065299	HOS-PIL-12-R-STM	1/2	12.7	16.2	18.0	120	1740	480	50	0.26

## STAUFFLift

### Applications

Hydraulic hose for lift and elevator applications. Pressures comply with EN 81-2.

### Construction

Tube - synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC)

Cover - abrasion and ozone resistant synthetic rubber.

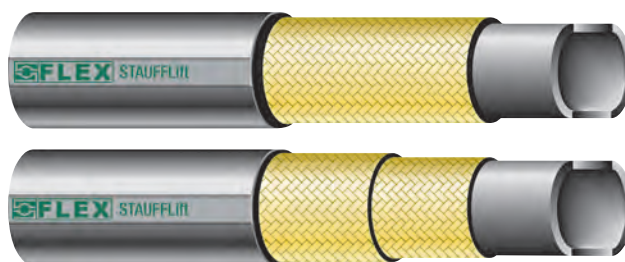
### Reinforcement

One braid DN 19 - DN 31 and two braids DN 38 - DN 51 of high tensile steel wire.

### Temperature Range

-40°C to +100°C (-40°F to +212°F)

Max 120°C / 248°F



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
6100190418	HOS-LIF-19-A-STM	3/4	19.5	25.0	27.1	50	725	100	400	240	0.56
6100190420	HOS-LIF-25-A-STM	1"	26.0	31.0	33.2	50	725	100	400	160	0.74
6100190421	HOS-LIF-31-A-STM	1.1/4	32.5	40.2	43.7	50	725	100	400	300	1.28
6100190426	HOS-LIF-38-A-STM	1.1/2	38.7	51.1	54.5	45	655	90	360	500	2.17
6100190427	HOS-LIF-51-A-STM	2"	51.1	62.9	66.7	40	580	80	320	630	2.79

## STAUFFJack

### Applications

For high pressure hydraulic systems in jacking applications.

### Construction

Tube - mineral, vegetable and hydraulic oil resistant special synthetic rubber.

Cover - oil, abrasion and weather resistant special synthetic rubber.

### Reinforcement

2 high tensile steel wire braids.

### Temperature Range

-40°C to +100°C (-40°F to +212°F)



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
6100190428	HOS-JAC-06-R-EMB	1/4	6.4	11.3	13.4	690	10000	1379	75	0.28
6100190449	HOS-JAC-10-R-EMB	3/8	9.5	15.0	17.1	690	10000	1379	90	0.42

## SAE 100 R1AT EN 853 1SN

### Applications

Medium to high pressure hydraulic lines. Suitable for conveying petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air.

Beware when using hoses for air or inert gases, hose cover requires to be pricked to allow gas permeation and venting to the atmosphere.

### Construction

Tube - synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC)

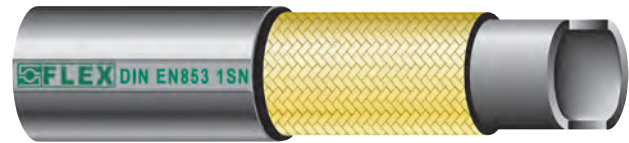
Cover - abrasion, ozone and weather resistant synthetic rubber.

### Reinforcement

1 High tensile steel braid.

### Temperature Range

-40°C to +100°C (-40°F to +212°F) (120°C Max Intermittent)



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
6100220354	HOS-1SN-05-R-STM	3/16	5.2	9.5	11.8	250	3625	500	1000	80	0.16
2020000150	HOS-1SN-06-A-STM	1/4	6.6	10.8	12.9	225	3265	450	900	100	0.18
2020000173	HOS-1SN-08-A-STM	5/16	8.3	12.5	14.7	215	3120	430	860	115	0.22
2020000192	HOS-1SN-10-A-STM	3/8	9.9	14.8	16.7	180	2610	360	720	125	0.29
2020000234	HOS-1SN-12-A-STM	1/2	13.0	17.9	19.9	160	2320	320	640	180	0.36
2020000262	HOS-1SN-16-A-STM	5/8	16.4	21.0	23.2	130	1885	260	520	200	0.42
2020000280	HOS-1SN-19-A-STM	3/4	19.5	25.0	27.1	105	1525	210	420	240	0.53
2020000301	HOS-1SN-25-A-STM	1"	26.0	32.9	35.1	88	1275	176	352	300	0.82
2020000317	HOS-1SN-31-A-STM	1.1/4	32.5	39.9	42.5	63	915	126	252	420	1.04
2020000326	HOS-1SN-38-A-STM	1.1/2	38.7	46.5	50.1	50	725	100	200	500	1.41
2020000335	HOS-1SN-51-A-STM	2"	51.1	60.1	64.1	40	580	80	160	630	2.04



## SAE 100 R2AT EN 853 2SN

### Applications

Medium to high pressure hydraulic lines. Suitable for conveying petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air. Beware when using hoses for air or inert gases, hose cover requires to be pricked to allow gas permeation and venting to the atmosphere.

### Construction

Tube - synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC)

Cover - abrasion, ozone and weather resistant synthetic rubber.

### Reinforcement

2 High tensile steel braids.

### Temperature Range

-40°C to +100°C (-40°F to +212°F) (120°C Max Intermittent)



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
6100232213	HOS-2SN-05-A-STM	3/16	5.2	11.1	13.4	415	6018	830	1680	80	0.28
2020000163	HOS-2SN-06-A-STM	1/4	6.6	12.4	14.3	400	5800	800	1600	100	0.31
2020000176	HOS-2SN-08-A-STM	5/16	8.3	14.0	16.0	350	5075	700	1400	115	0.37
2020000208	HOS-2SN-10-A-STM	3/8	9.9	16.4	18.4	330	4785	660	1320	130	0.44
2020000246	HOS-2SN-12-A-STM	1/2	13.0	19.4	21.3	275	4000	550	1100	180	0.53
2020000265	HOS-2SN-16-A-STM	5/8	16.4	22.6	24.6	250	3625	500	1000	200	0.67
2020000286	HOS-2SN-19-A-STM	3/4	19.5	26.6	28.6	215	3120	430	860	240	0.84
2020000305	HOS-2SN-25-A-STM	1"	26.0	34.5	37.1	165	2395	330	660	300	1.23
2020000319	HOS-2SN-31-A-STM	1.1/4	32.5	43.9	46.7	125	1815	250	500	420	1.79
2020000328	HOS-2SN-38-A-STM	1.1/2	38.7	51.1	54.5	90	1305	180	360	500	2.12
2020000337	HOS-2SN-51-A-STM	2"	51.1	62.9	66.7	80	1160	160	320	630	2.79

## ULTRACOLD SAE 100 R1AT EN 853 1SN (Low Temperature -50°C)

### Applications

For low-medium pressure hydraulic systems in industry and agriculture in extremely low temperatures.

### Construction

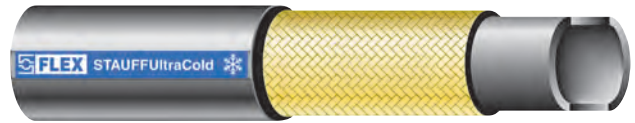
Tube - mineral, vegetable and hydraulic oil resistant special synthetic rubber.  
Cover - oil, abrasion and weather resistant special synthetic rubber.

### Reinforcement

1 High tensile steel wire braid.

### Temperature Range

-50°C to +100°C (-58°F to +212°F)



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		BURST PRESSURE BAR	VACUUM	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
6100190462	HOS-1SNLT-06-R-STM	1/4	6.4	11.1	13.2	225	3263	1030	-0.80	100	0.22
6100190465	HOS-1SNLT-08-R-STM	5/16	8.0	12.6	14.8	215	3118	970	-0.80	115	0.23
6100190466	HOS-1SNLT-10-R-STM	3/8	9.5	15.0	17.2	180	2610	820	-0.80	130	0.33
6100190469	HOS-1SNLT-12-R-STM	1/2	12.7	18.1	20.4	160	2320	700	-0.80	180	0.41
6100190471	HOS-1SNLT-16-R-STM	5/8	16.0	21.2	23.5	130	1885	600	-0.80	200	0.47
6100190463	HOS-1SNLT-19-R-STM	3/4	19.0	25.2	27.5	105	1523	500	-0.80	240	0.58
6100190464	HOS-1SNLT-25-R-STM	1"	25.4	33.1	35.4	88	1276	375	-0.80	300	0.87
6100190467	HOS-1SNLT-31-R-STM	1.1/4	31.8	40.2	43.5	63	914	280	-0.60	420	1.20
6100190474	HOS-1SNLT-38-R-STM	1.1/2	38.1	46.7	50.0	50	725	260	-0.60	500	1.39
6100190475	HOS-1SNLT-51-R-STM	2"	50.8	60.2	63.6	40	580	250	-0.60	630	1.90

## ULTRACOLD SAE 100 R2AT EN 853 2SN (Low Temperature -50°C)

### Applications

For low-high pressure hydraulic systems in industry and agriculture in extremely low temperatures.

### Construction

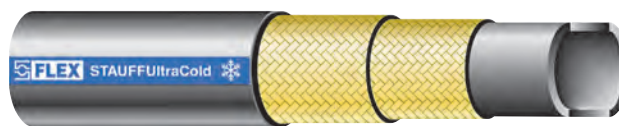
Tube - mineral, vegetable and hydraulic oil resistant special synthetic rubber.  
Cover - oil, abrasion and weather resistant special synthetic rubber.

### Reinforcement

2 High tensile steel wire braid.

### Temperature Range

-50°C to +100°C (-58°F to +212°F)



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		BURST PRESSURE BAR	VACUUM	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
6100190476	HOS-2SNLT-06-R-STM	1/4	6.4	12.8	15.0	400	5800	1700	-0.95	100	0.38
6100190477	HOS-2SNLT-08-R-STM	5/16	8.0	14.3	16.5	350	5075	1550	-0.95	115	0.43
6100190481	HOS-2SNLT-10-R-STM	3/8	9.5	16.7	18.9	330	4785	1450	-0.95	130	0.54
6100190482	HOS-2SNLT-12-R-STM	1/2	12.7	19.8	22.2	275	3988	1300	-0.95	180	0.64
6100190483	HOS-2SNLT-16-R-STM	5/8	16.0	22.9	25.2	250	3625	1050	-0.95	200	0.75
6100190484	HOS-2SNLT-19-R-STM	3/4	19.0	26.9	29.2	215	3118	920	-0.80	240	0.92
6100190485	HOS-2SNLT-25-R-STM	1"	25.4	34.8	37.2	165	2393	690	-0.80	300	1.29
6100190492	HOS-2SNLT-31-R-STM	1.1/4	31.8	44.3	47.3	125	1813	620	-0.80	420	1.89
6100190493	HOS-2SNLT-38-R-STM	1.1/2	38.1	50.7	53.7	90	1305	520	-0.80	500	2.11
6100190495	HOS-2SNLT-51-R-STM	2"	50.8	63.5	66.7	78	1131	420	-0.80	630	2.76

## ULTIMATE SAE 100 R1AT/DIN EN 853 1SN - High Temperature (+135°C)

### Applications

Low-medium pressure hydraulic systems in industry, compressors and mining where operating temperatures are up to 150°C.

### Construction

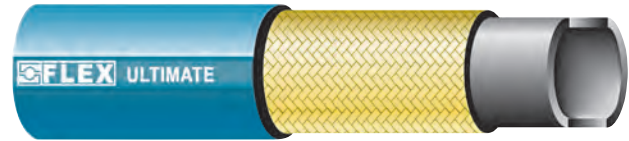
Tube - High temperature hydraulic oil resistant special synthetic rubber.  
Cover - oil, abrasion and weather resistant special synthetic rubber.

### Reinforcement

1 High tensile steel wire braid.

### Temperature Range

-50°C to +135°C (-58°F to +275°F) +150°C (+302°F Discontinuous)



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		BURST PRESSURE BAR	VACUUM BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
2020048160	HOS-1SN-05-R-STM-EHT	3/16	4.8	9.6	11.6	250	3625	1100	-0.80	90	0.19
2020048161	HOS-1SN-06-R-STM-EHT	1/4	6.4	11.1	13.2	225	3263	1030	-0.80	100	0.23
2020048162	HOS-1SN-08-R-STM-EHT	5/16	8.0	12.6	14.8	215	3118	970	-0.80	115	0.27
2020048163	HOS-1SN-10-R-STM-EHT	3/8	9.5	15.0	17.2	180	2610	820	-0.80	130	0.35
2020048164	HOS-1SN-12-R-STM-EHT	1/2	12.7	18.1	20.4	160	2320	700	-0.80	180	0.43
2020048165	HOS-1SN-16-R-STM-EHT	5/8	16.0	21.2	23.5	130	1885	600	-0.80	200	0.50
2020048166	HOS-1SN-19-R-STM-EHT	3/4	19.0	25.2	27.5	105	1523	500	-0.80	240	0.63
2020048167	HOS-1SN-25-R-STM-EHT	1"	25.4	33.1	35.4	88	1276	375	-0.80	300	0.93
2020048168	HOS-1SN-31-R-STM-EHT	1.1/4	31.8	40.2	43.5	63	914	280	-0.60	420	1.31
2020048169	HOS-1SN-38-R-STM-EHT	1.1/2	38.1	46.7	50	50	725	260	-0.60	500	1.48
2020046140	HOS-1SN-51-R-STM-EHT	2"	50.8	60.2	63.6	40	580	250	-0.60	630	2.02

## ULTIMATE SAE 100 R2AT/DIN EN 853 2SN - High Temperature (+135°C)

### Applications

Low-medium pressure hydraulic systems in industry, compressors and mining where operating temperatures are up to 150°C (note: +150°C must be discontinued).

### Construction

Tube - High temperature hydraulic oil resistant special synthetic rubber.  
Cover - oil, abrasion, ozone and weather resistant synthetic rubber.

### Reinforcement

2 High tensile steel braids.

### Temperature Range

-50°C to +135°C / -58°F to +275°F (+135°C max)



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		BURST PRESSURE BAR	VACUUM BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD	BAR	PSI				
2020048178	HOS-2SN-05-R-STM-EHT	3/16	4.8	11.1	13.3	415	6018	1850	-0.95	90	0.31
2020048179	HOS-2SN-06-R-STM-EHT	1/4	6.4	12.8	15.0	400	5800	1700	-0.95	100	0.39
2020048180	HOS-2SN-08-R-STM-EHT	5/16	8.0	14.3	16.5	350	5075	1550	-0.95	115	0.46
6100087024	HOS-2SN-10-R-STM-EHT	3/8	9.5	16.7	18.9	330	4785	1450	-0.95	130	0.56
2020048182	HOS-2SN-12-R-STM-EHT	1/2	12.7	19.8	22.2	275	3988	1300	-0.95	180	0.67
2020048183	HOS-2SN-16-R-STM-EHT	5/8	16.0	22.9	25.2	250	3625	1050	-0.95	200	0.78
2020048184	HOS-2SN-19-R-STM-EHT	3/4	19.0	26.9	29.2	215	3118	920	-0.80	240	0.97
2020048185	HOS-2SN-25-R-STM-EHT	1"	25.4	34.8	37.2	165	2393	690	-0.80	300	1.39
2020048186	HOS-2SN-31-R-STM-EHT	1.1/4	31.8	44.3	47.3	125	1813	600	-0.80	420	2.08
2020048187	HOS-2SN-38-R-STM-EHT	1.1/2	38.1	50.7	53.7	90	1305	500	-0.80	500	2.39
2020048188	HOS-2SN-51-R-STM-EHT	2"	50.8	63.5	66.7	78	1131	420	-0.80	630	3.07

## SAE 100 R17

## Compact Hose

### Applications

Constant 210 bar working pressure hose across all sizes. Suitable for petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air. Lightweight and flexible due to a reduced bend radius.

### Construction

Tube - synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC)

Cover - abrasion, ozone and weather resistant synthetic rubber.

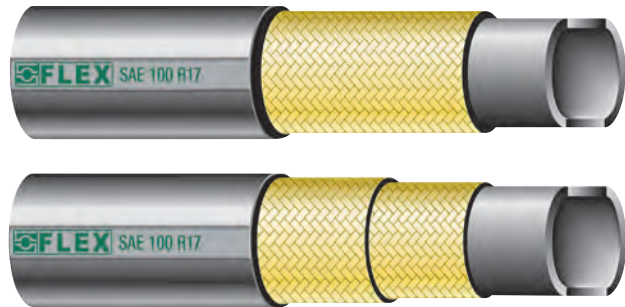
### Reinforcement

1 High tensile steel braid upto 1/2"

2 braids 5/8", 3/4" and 1"

### Temperature Range

-40°C to +100°C (-40°F to +212°F)



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
2020065292	HOS-R17-06-W-STM	1/4	6.6	10.4	12.4	210	3000	420	840	50	0.16
6100224177	HOS-R17-08-W-STM	5/16	8.3	12.0	14.1	210	3000	420	840	55	0.22
2020065294	HOS-R17-10-W-STM	3/8	9.9	13.9	16.0	210	3000	420	840	65	0.27
2020065295	HOS-R17-12-W-STM	1/2	13.0	17.6	19.5	210	3000	420	840	90	0.39
6100224215	HOS-R17-16-W-STM	5/8	16.4	21.7	23.8	210	3000	420	840	100	0.61
6100023958	HOS-R17-19-W-STM	3/4	19.5	27.6	27.6	210	3000	420	840	120	0.76
6100023959	HOS-R17-25-W-STM	1	26.0	34.0	36.2	210	3000	420	840	150	1.27

## SAE 100 R19

### Applications

Compact hydraulic hose construction according to SAE 100 R19.

### Construction

Tube - Synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVL, HFA, HFAS, HFB, HFC).

Cover - Abrasion and ozone resistant synthetic rubber.

### Reinforcement

2 high tensile steel wire braids.

### Temperature Range

-40°C to +100°C (-40°F to +212°F)

Max temp 120°C intermittent



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
6100190532	HOS-R19-06-A-STM	1/4	6.6	11.9	13.9	280	4060	560	1120	50	0.32
6100190537	HOS-R19-10-A-STM	3/8	9.9	15.1	17.0	280	4060	560	1120	65	0.39
6100190538	HOS-R19-12-A-STM	1/2	13.0	18.3	20.5	280	4060	560	1120	90	0.48
6100190539	HOS-R19-16-A-STM	5/8	16.4	22.1	24.0	280	4060	560	1120	100	0.68
6100190541	HOS-R19-19-A-STM	3/4	19.5	25.5	27.6	280	4060	560	1120	120	0.88

## DIN EN 857 1SC

### Applications

Medium to high pressure hydraulic lines. Suitable for conveying petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air. Beware when using hoses for air or inert gases, hose cover requires to be pricked to allow gas permeation and venting to the atmosphere.

### Construction

Tube - synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC)

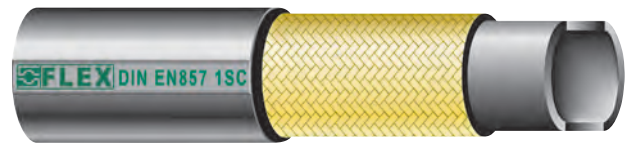
Cover - abrasion, ozone and weather resistant synthetic rubber.

### Reinforcement

1 High tensile steel braid.

### Temperature Range

-40°C to +100°C (-40°F to +212°F) (120°C Max intermittent)



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
2020000147	HOS-1SC-06-A-STM	1/4	6.6	10.1	11.9	225	3265	450	900	75	0.16
6100190542	HOS-1SC-08-A-STM	5/16	8.3	11.7	13.7	215	3120	430	860	85	0.20
2020000189	HOS-1SC-10-A-STM	3/8	9.9	13.6	15.7	180	2610	360	720	90	0.24
2020000233	HOS-1SC-12-A-STM	1/2	13.0	16.6	19.4	160	2320	320	640	130	0.33
2020065279	HOS-1SC-16-A-STM	5/8	16.4	20.3	22.3	130	1885	260	520	150	0.39
2020035915	HOS-1SC-19-A-STM	3/4	19.5	24.0	26.0	105	1525	210	420	180	0.49
2020000300	HOS-1SC-25-A-STM	1"	26.0	31.0	33.2	88	1275	176	352	230	0.71
6100171916	HOS-1SC-31-R-STM	1.1/4	31.8	38.4	41.5	63	914	126	400	210	1.02



## DIN EN 857 2SC

### Applications

Medium to high pressure hydraulic lines. Suitable for conveying petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air. Beware when using hoses for air or inert gases, hose cover requires to be pricked to allow gas permeation and venting to the atmosphere.

### Construction

Tube - synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC)

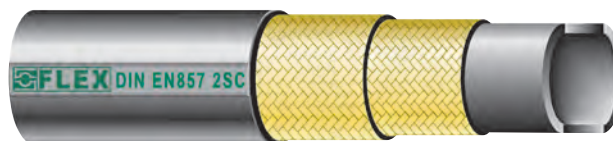
Cover - abrasion, ozone and weather resistant synthetic rubber.

### Reinforcement

2 High tensile steel braids.

### Temperature Range

-40°C to +100°C (-40°F to +212°F) (120°C Max intermittent)



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
6100229925	HOS-2SC-05-A-STM	3/16	5.2	9.5	11.8	415	6020	830	1660	50	0.20
2020000162	HOS-2SC-06-A-STM	1/4	6.6	11.0	13.0	400	5800	800	1600	75	0.25
6100144754	HOS-2SC-08-A-STM	5/16	8.3	12.9	14.7	350	5075	700	1400	85	0.32
2020000206	HOS-2SC-10-A-STM	3/8	9.9	14.7	16.6	330	4785	660	1320	90	0.35
2020000243	HOS-2SC-12-A-STM	1/2	13.0	18.0	20.0	275	3990	550	1100	130	0.44
2020000264	HOS-2SC-16-A-STM	5/8	16.4	21.9	23.9	250	3625	500	1000	170	0.61
2020000285	HOS-2SC-19-A-STM	3/4	19.5	25.7	27.6	215	3120	430	860	200	0.77
2020000304	HOS-2SC-25-A-STM	1"	26.0	32.9	35.6	165	2395	330	660	250	1.15
6100190562	HOS-2SC-31-A-STM	1.1/4	31.8	41.1	43.6	125	1813	290	580	250	1.53
6100190562	HOS-2SC-38-A-STM	1.1/2	38.7	47.6	50.4	100	1450	200	400	300	1.97
6100190564	HOS-2SC-51-A-STM	2"	51.3	60.4	63.6	90	1305	180	360	400	2.49

## DIN EN 857 2SC TWIN BREAKER HOSE

### Applications

Medium to high pressure hydraulic lines. Suitable for conveying petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air. Beware when using hoses for air or inert gases, hose cover requires to be pricked to allow gas permeation and venting to the atmosphere.

### Construction

Tube - oil resistant synthetic rubber.  
Cover - abrasion, ozone and weather resistant synthetic rubber.

### Reinforcement

2 High tensile steel braids.

### Temperature Range

-40°C to +100°C (-40°F to +212°F) (120°C Max Intermittent)



### Applications



ORDER CODE	DESCRIPTION	ID		COVER OD MM	WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM		BAR	PSI			
2020055624	1/2 R2SC TWIN 6M 1/2 Male / 1/2 Male	1/2	12.7	21.0	275	3988	1270	80	1.19
6100025112	1/2 R2SC TWIN 9M 1/2 Male / 1/2 Male	1/2	12.7	21.0	275	3988	1270	80	1.19
2020068416	1/2 R2SC TWIN 6M 1/2 Male / 1/2 Male C/W 1/2 FLAT FACE QRC EACH END	1/2	12.7	21.0	275	3988	1270	80	1.19
6100025111	1/2 R2SC TWIN 9M 1/2 Male / 1/2 Male C/W 1/2 FLAT FACE QRC EACH END	1/2	12.7	21.0	275	3988	1270	80	1.19

### Twin Breaker Individual Hose

ORDER CODE	DESCRIPTION	ID		COVER OD MM	WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM		BAR	PSI			
6100224200	HOS-2SCT-06-R-STM	1/4	6.4	13.5	400	5800	1850	45	0.60
6100224201	HOS-2SCT-08-R-STM	5/16	8.0	15.3	350	5075	1700	55	0.69
2020046740	HOS-2SCT-10-R-STM	3/8	9.5	17.4	330	4785	1550	65	0.86
2020046739	HOS-2SCT-12-R-STM	1/2	12.7	21.0	275	3988	1270	80	1.19

 STAUFF



STAUFF HOSE 1071 910202 1101 30740

STAUFF HOSE 1071 910202 1101 30740

STAUFF HOSE 1071 910202 1101 30740

**STAUFFPAC 1SNK**

Compact Hose

**Applications**

Compact hose medium to high pressure lines. Suitable for conveying petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air.

**Construction**

Tube - Synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC).

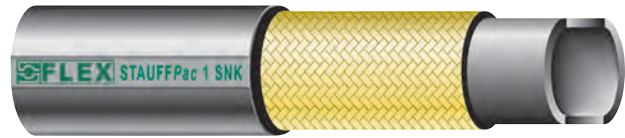
Cover - abrasion, ozone and weather resistant synthetic rubber.

**Reinforcement**

1 High tensile steel braid.

**Temperature Range**

-40°C to +100°C (-40°F to +212°F) (120°C Max Intermittent)



**Applications**



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
2020046157	HOS-1SNK-06-A-STM	1/4	6.6	10.3	12.1	290	4205	580	1160	40	0.18
2020046155	HOS-1SNK-08-A-STM	5/16	8.3	11.7	13.7	250	3625	500	1000	55	0.20
2020046156	HOS-1SNK-10-A-STM	3/8	9.9	13.6	15.9	230	3335	460	920	65	0.24
2020046154	HOS-1SNK-12-A-STM	1/2	13.0	16.9	19.2	200	2900	400	800	80	0.34
2020046153	HOS-1SNK-16-A-STM	5/8	16.4	20.3	22.3	150	2175	300	600	105	0.39
2020046152	HOS-1SNK-19-A-STM	3/4	19.5	23.9	26.1	125	1815	250	500	120	0.49
2020046151	HOS-1SNK-25-A-STM	1"	26.0	31.0	33.2	110	1595	220	440	160	0.71
2020065280	HOS-1SNK-31-A-STM	1.1/4	32.5	40.2	43.7	100	1450	200	400	300	1.30



**IMPULSE TESTED TO 700,000 CYCLES**

**STAUFFPAC 2SNK**
**Compact Hose**
**Applications**

Compact hose medium to high pressure lines. Suitable for conveying petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air.

**Construction**

Tube - Synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC).

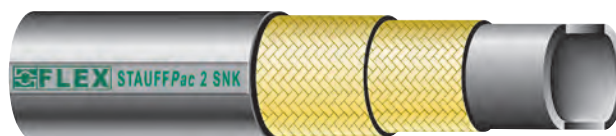
Cover - abrasion, ozone and weather resistant synthetic rubber.

**Reinforcement**

2 High tensile steel braids.

**Temperature Range**

-40°C to +100°C (-40°F to +212°F) (120°C Max Intermittent)


**Applications**


ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
2020046150	HOS-2SNK-06-A-STM	1/4	6.6	11.5	13.4	450	6525	900	1800	45	0.27
6100190579	HOS-2SNK-08-A-STM	5/16	8.3	13.0	15.0	420	6090	840	1680	60	0.32
2020046148	HOS-2SNK-10-A-STM	3/8	9.9	14.7	16.8	385	5585	770	1540	70	0.38
2020046146	HOS-2SNK-12-A-STM	1/2	13.0	18.4	20.5	350	5075	700	1400	90	0.52
2020046145	HOS-2SNK-16-A-STM	5/8	16.4	21.9	23.7	290	4205	580	1160	130	0.61
2020046144	HOS-2SNK-19-A-STM	3/4	19.5	26.0	27.7	280	4060	560	1120	160	0.79
2020046143	HOS-2SNK-25-A-STM	1'	26.0	32.9	35.6	200	2900	400	800	210	1.15
6100190580	HOS-2SNK-31-A-STM	1.1/4	32.5	40.5	43.5	175	2540	350	700	300	1.57



**IMPULSE TESTED TO 1,000,000 CYCLES [1.1/4" TO 200,000 CYCLES]**

**STAUFF SHIELD 1SSK**

High Abrasion Resistant

**Applications**

High abrasion resistant hose increases service life in harsh environments and in heavy duty applications. Suitable for high pressure lines conveying petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air. Eliminates the need for spring guards, nylon sleeving and any other hose protection.

**Construction**

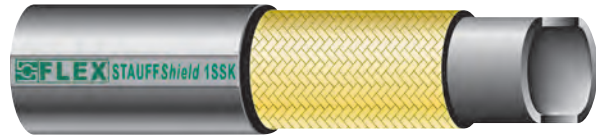
Tube - oil resistant synthetic rubber.  
Cover - double layer construction - rubber cover with UHMPE. MSHA approved.

**Reinforcement**

1 High tensile steel braid.

**Temperature Range**

-40°C to +100°C (-40°F to +212°F), peak temp 120°C



**Applications**



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
2020048261	HOS-1SSK-06-A-STM	1/4	6.6	10.3	12.1	290	4205	1160	40	0.18
2020048264	HOS-1SSK-10-A-STM	3/8	9.9	13.6	15.9	230	3335	920	65	0.24
2020051689	HOS-1SSK-12-A-STM	1/2	13.0	16.9	19.2	200	2900	800	80	0.34
2020065344	HOS-1SSK-16-A-STM	5/8	16.4	20.3	22.3	150	2175	600	105	0.39
2020048266	HOS-1SSK-19-A-STM	3/4	19.5	23.9	26.1	125	1815	500	120	0.49
2020048267	HOS-1SSK-25-A-STM	1"	26.0	31.0	33.2	110	1595	440	160	0.71



**IMPULSE TESTED TO 700,000 CYCLES**



**STAUFFShield** hoses are MSHA approved and feature extraordinary abrasion and ozone resistance which make them perfect for heavy duty applications where maximum protection is required.

**STAUFF SHIELD 2SSK**
**High Abrasion Resistant**
**Applications**

High abrasion resistant hose increases service life in harsh environments and in heavy duty applications. Suitable for high pressure lines conveying petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air. Eliminates the need for spring guards, nylon sleeving and any other hose protection.

**Construction**

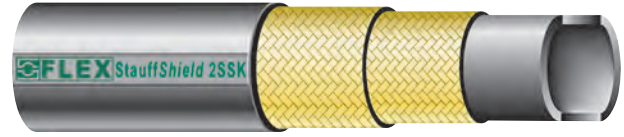
Tube - oil resistant synthetic rubber.  
Cover - double layer construction - rubber cover with UHMPE. MSHA approved.

**Reinforcement**

2 High tensile steel braids.

**Temperature Range**

-40°C to +100°C (-40°F to +212°F), peak temp 120°C


**Applications**


ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
2020048262	HOS-2SSK-06-A-STM	1/4	6.6	11.4	13.4	450	6525	1800	45	0.28
2020048263	HOS-2SSK-10-A-STM	3/8	9.9	14.9	17.0	385	5585	1540	70	0.39
2020048265	HOS-2SSK-12-A-STM	1/2	13.0	18.7	20.7	350	5075	1400	90	0.53
2020049437	HOS-2SSK-16-A-STM	5/8	16.4	21.6	23.6	290	4205	1160	130	0.61
2020053157	HOS-2SSK-19-A-STM	3/4	19.5	25.7	27.7	280	4060	1120	160	0.83
2020065346	HOS-2SSK-25-A-STM	1"	26.0	32.9	35.6	200	2900	800	210	1.15


**IMPULSE TESTED TO 1000,000 CYCLES**

The **STAUFFShield** hose is a double layer construction with outstanding abrasion resistance (Hypalon cover with additional UHMPE foil). Available on different hose types SSC, SSK, SSP and SSH.



## DIN EN 856 4SP

## Multispiral Hose

### Applications

High pressure hydraulic hose. Suitable for conveying petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air. All STAUFF Flex Spiral hose is fully branded Flame Resistant US MSHA approval NO.IC-188

### Construction

Tube - synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLV, HFA, HFAS, HFB, HFC).

Cover - abrasion, ozone and weather resistant synthetic rubber. MSHA approved.

### Reinforcement

4 High tensile steel wire spiral layers.

### Temperature Range

-40°C to +100°C / -40°F to +212°F (max 120°C / 248°F intermittent)



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
2020000224	HOS-4SP-10-A-STM	3/8	9.9	17.7	21.0	445	6455	890	1780	180	0.70
2020000256	HOS-4SP-12-A-STM	1/2	13.0	20.6	24.2	425	6165	850	1700	230	0.84
2020000271	HOS-4SP-16-A-STM	5/8	16.4	24.2	27.9	350	5075	700	1400	250	1.13
2020000291	HOS-4SP-19-A-STM	3/4	19.5	28.3	31.9	350	5075	700	1400	300	1.41
2020000310	HOS-4SP-25-A-STM	1"	25.9	35.1	39.1	320	4640	640	1280	340	1.85
2020000320	HOS-4SP-31-A-STM	1.1/4	32.5	45.9	51.3	210	3045	420	840	460	3.20
2020000329	HOS-4SP-38-A-STM	1.1/2	38.7	52.1	56.8	185	2685	370	740	560	3.76
2020000338	HOS-4SP-51-A-STM	2"	51.1	65.4	70.2	165	2395	330	660	660	4.97



**DIN EN 856 4SH**
**Multispiral Hose**
**Applications**

For hydraulic systems with high peak pressures and arduous operating conditions. All STAUFF Flex Spiral hose is fully branded Flame Resistant US MSHA approval NO.IC-188.

**Construction**

Tube - mineral, ester based oil, vegetable, and glycol based hydraulic oil resistant special synthetic rubber.  
Cover - hydraulic oil, abrasion and weather resistant special synthetic rubber. MSHA approved.

**Reinforcement**

4 High tensile steel wire spiral layers.

**Temperature Range**

-40°C to +100°C / -40°F to +212°F (max 120°C / 248°F intermittent)


**Applications**


ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
2020072615	HOS-4SH-16-R-STM	5/8	16.0	25.3	28.7	420	6090	840	1680	240	1.20
6100165075	HOS-4SH-19-R-STM	3/4	19.0	28.2	32.0	420	6090	840	1680	280	1.47
6100190630	HOS-4SH-25-R-STM	1"	25.4	35.1	38.4	380	5510	760	1520	340	2.04
6100142775	HOS-4SH-31-R-STM	1.1/4	31.8	41.9	45.2	350	5075	700	1400	460	2.39
6100190634	HOS-4SH-38-R-STM	1.1/2	38.1	48.8	53.0	290	4205	580	1160	560	3.19
6100190635	HOS-4SH-51-R-STM	2"	50.8	63.2	67.6	250	3625	500	1000	700	4.37

**STAUFF SHIELD SSP**

High Abrasion Resistant

**Applications**

High abrasion resistant hose increases service life in harsh environments and in heavy duty applications. Suitable for high pressure lines conveying petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air. Eliminates the need for spring guards, nylon sleeving and any other hose protection.

**Construction**

Tube - synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC)

Cover - double layer construction synthetic rubber cover with UHMPE foil MSHA approved. Outstanding abrasion and ozone weather resistance.

**Reinforcement**

4 High tensile steel wire spiral layers up to 1".

**Temperature Range**

-40°C to +100°C (-40°F to +212°F) (Max 120°C / 248°F intermittent)



**Applications**



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
2020065333	HOS-SSP-10-A-STM	3/8	9.9	17.7	21.0	445	6452	1780	180	0.70
6100153195	HOS-SSP-12-A-STM	1/2	13.0	20.6	24.2	425	6162	1700	230	0.84
6100190614	HOS-SSP-16-A-STM	5/8	16.4	24.2	27.9	350	5075	1400	250	1.13
6100190616	HOS-SSP-19-A-STM	3/4	19.5	28.3	31.9	350	5075	1400	300	1.41
6100190617	HOS-SSP-25-A-STM	1"	25.9	35.1	39.1	280	4060	1120	340	1.85

## STAUFF SHIELD SSH

High Abrasion Resistant

### Applications

High abrasion resistant hose increases service life in harsh environments and in heavy duty applications. Suitable for high pressure lines conveying petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air. Eliminates the need for spring guards, nylon sleeving and any other hose protection.

### Construction

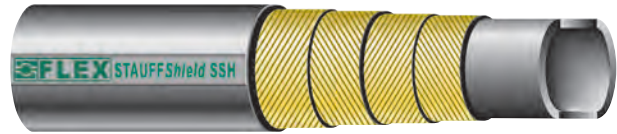
Tube - oil resistant synthetic rubber  
Cover - double layer construction synthetic rubber cover with UHMPE foil MSHA approved. Outstanding abrasion and ozone weather resistance.

### Reinforcement

4 High tensile steel wire spiral layers

### Temperature Range

-40°C to +100°C (-40°F to +212°F) (Max 120°C / 248°F intermittent)



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
6100190644	HOS-SSH-19-R-STM	3/4	19.0	28.4	32.2	420	6090	1680	280	1.53
6100190645	HOS-SSH-25-R-STM	1"	25.4	35.2	38.7	380	5510	1520	340	2.06
6100190649	HOS-SSH-31-R-STM	1.1/4	31.8	41.9	45.5	350	5075	1400	460	2.46
6100190650	HOS-SSH-38-R-STM	1.1/2	38.1	48.8	53.5	290	4205	1160	560	3.35
6100190651	HOS-SSH-51-R-STM	2"	50.8	63.2	68.1	250	3625	1000	700	4.55

### STAUFF SHIELD - High abrasion resistant hose

The STAUFF Shield hose is a double layer construction with outstanding abrasion resistance (Hypalon cover with additional UHMW foil). Available on different hose types SSC, SSK, SSP and SSH. STAUFF Shield hoses are MSHA approved and feature extraordinary abrasion and ozone resistance which make them perfect for heavy duty applications where maximum protection is required.

## DIN EN 856 SAE 100 R13

### Applications

Extremely high pressure hydraulic hose. Suitable for conveying petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air.

All STAUFF Flex Spiral hose is fully branded Flame Resistant US MSHA approval NO.IC-188.

### Construction

Tube - synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC).

Cover - abrasion, ozone and weather resistant synthetic rubber, MSHA approved.

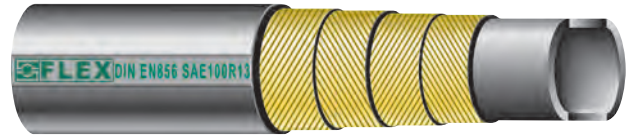
### Reinforcement

4 High tensile steel wire spiral layers up to 1".

6 steel wire spiral layers 1.1/4" and above.

### Temperature Range

-40°C to +121°C / -40°F to +250°F



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
6100190688	HOS-R13-19-A-STM	3/4	19.5	28.6	32.3	350	5075	700	1400	240	1.57
6100190689	HOS-R13-25-A-STM	1"	26.0	35.5	38.7	350	5075	700	1400	300	1.92
6100190690	HOS-R13-31-R-STM	1.1/4	32.1	46.9	50.5	350	5075	700	1400	420	3.77
6100190691	HOS-R13-38-R-STM	1.1/2	38.7	53.9	57.4	350	5075	700	1400	500	4.79
6100190692	HOS-R13-51-R-STM	2"	51.1	67.9	71.5	350	5075	700	1400	630	6.75

## DIN EN 856 SAE 100 R15

### Applications

Extremely high pressure hydraulic hose. Suitable for conveying petroleum based hydraulic fluids, synthetic esters, biodegradable hydraulic fluids, water glycol based fluids and air.

All STAUFF Flex Spiral hose is fully branded Flame Resistant US MSHA approval NO.IC-188.

### Construction

Tube - synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC).

Cover - abrasion and ozone weather resistant synthetic rubber, MSHA approved.

### Reinforcement

4 High tensile steel wire spiral layers up to 1".

6 steel wire spiral layers 1.1/4" and above.

### Temperature Range

-40°C to +121°C / -40°F to +250°F



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
6100190693	HOS-R15-10-A-STM	3/8	9.9	17.4	21.1	420	6090	840	1680	150	0.72
6100190694	HOS-R15-12-A-STM	1/2	13.0	20.6	24.2	420	6090	840	1680	200	0.87
6100190695	HOS-R15-16-A-STM	5/8	16.4	24.2	27.9	420	6090	840	1680	235	1.02
6100190696	HOS-R15-19-A-STM	3/4	19.5	28.3	31.9	420	6090	840	1680	265	1.43
6100190699	HOS-R15-25-A-STM	1"	26.0	35.4	38.7	420	6090	840	1680	330	2.16
6100190700	HOS-R15-31-R-STM	1.1/4	32.5	46.9	50.5	420	6090	840	1680	445	3.77
6100190707	HOS-R15-38-R-STM	1.1/2	38.7	53.9	57.4	420	6090	840	1680	530	4.79
6100190708	HOS-R15-51-R-STM	2"	51.1	67.9	71.5	420	6090	840	1680	600	6.90

## S FLEX-ULTRA 4000

### Applications

Flexible isobaric multispiral hydraulic hose - MSHA approved.  
 Reduced bend radii, exceeds EN 856 / SAE 100 R12.

### Construction

Tube - Synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC).  
 Cover - Abrasion and ozone resistant synthetic rubber - MSHA approved.

### Reinforcement

4 high tensile steel wire spiral layers.

### Temperature Range

-40°C to +121°C / -40°F to +250°F



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
6100190709	HOS-FLU4000-10-A-STM	3/8	9.9	17.4	20.2	280	4060	560	1120	65	0.67
6100190710	HOS-FLU4000-12-A-STM	1/2	13.0	20.6	24.2	280	4060	560	1120	90	0.84
6100190711	HOS-FLU4000-16-A-STM	5/8	16.4	24.2	27.9	280	4060	560	1120	100	1.13
2020080488	HOS-FLU4000-19-R-STM	3/4	19.0	27.2	30.4	280	4060	560	1125	120	1.31
2020080489	HOS-FLU4000-25-R-STM	1"	25.4	35.1	38.1	280	4060	560	1125	150	1.80
2020080490	HOS-FLU4000-31-R-STM	1.1/4	31.8	43.6	46.6	280	4060	560	1120	210	2.49



**IMPULSE TESTED TO 500,000 CYCLES ACCORDING TO ISO 6803:2017**

## S FLEX-ULTRA 5000

### Applications

This highly flexible multispiral compact hydraulic hose with reduced bend radii and bending force meets ISO 18752 - CC / suitable with bio-degradable hydraulic fluids.

### Construction

Tube - Synthetic nitrile rubber, suitable for hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC) and bio-degradable hydraulic fluids.

Cover - Abrasion and ozone resistant synthetic rubber - MSHA approved.

### Reinforcement

4 high tensile steel wire spiral layers.

6 high tensile steel wire spiral layers.

### Temperature Range

-40°C to +121°C / -40°F to +250°F



### Applications



ORDER CODE	DESCRIPTION	ID INCH	RE-INFORCEMENT LAYERS	ID MM	OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
					WIRE OD MM	COVER OD MM	BAR	PSI				
6100190713	HOS-FLU5000-10-A-STM	3/8	4	9.9	17.7	20.2	380	5510	760	1520	65	0.67
6100190714	HOS-FLU5000-12-A-STM	1/2	4	13.0	20.6	22.9	380	5510	760	1520	90	0.78
6100190715	HOS-FLU5000-16-A-STM	5/8	4	16.4	24.2	26.5	380	5510	760	1520	100	1.03
6100084474	HOS-FLU5000-19-A-STM	3/4	4	19.5	27.9	30.5	380	5510	760	1520	120	1.32
6100084464	HOS-FLU5000-25-A-STM	1"	4	26.0	35.1	37.9	350	5075	700	1400	150	1.77
6100084475	HOS-FLU5000-31-A-STM	1.1/4	4	32.5	42.3	45.9	350	5075	700	1400	210	2.55
6100190717*	HOS-FLU5000-38-A-STM	1.1/2	4	38.7	49.2	53.4	350	5075	700	1400	250	3.26
6100190718	HOS-FLU5000-51-A-STM	2"	6	51.1	67.9	71.5	350	5075	700	1400	540	6.75

**\*6 SPIRAL VERSION AVAILABLE ON REQUEST**

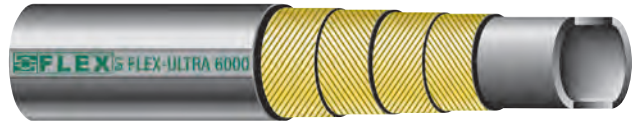


**IMPULSE TESTED TO 500,000 CYCLES ACCORDING TO ISO 6803:2017**

## S FLEX-ULTRA 6000

### Applications

This highly flexible multispiral compact hydraulic hose with reduced bend radii and bending force meets ISO 18752 - CC and exceeds SAE 100 R15. Suitable with bio-degradable hydraulic fluids.



### Construction

Tube - Synthetic nitrile rubber, suitable for hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC) and bio-degradable hydraulic fluids.

Cover - Abrasion and ozone resistant synthetic rubber - MSHA approved.

### Reinforcement

Four (4S) or six (6S) high tensile steel wire spiral layers.

### Temperature Range

-40°C to +121°C / -40°F to +250°F

### Applications



ORDER CODE	DESCRIPTION	ID INCH	RE-INFORCEMENT LAYERS	ID MM	OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
					WIRE OD MM	COVER OD MM	BAR	PSI				
6100059246	HOS-FLU6000-10-R-STM	3/8	4	9.9	17.7	20.2	420	6090	840	1680	65	0.69
6100059247	HOS-FLU6000-12-R-STM	1/2	4	13.0	20.6	22.9	420	6090	840	1680	90	0.79
6100150314	HOS-FLU6000-16-A-STM	5/8	4	16.4	24.2	26.5	420	6090	840	1680	100	1.05
6100084476	HOS-FLU6000-19-A-STM	3/4	4	19.5	28.3	30.5	420	6090	840	1680	120	1.36
6100084478	HOS-FLU6000-25-A-STM	1"	4	25.9	35.4	37.5	420	6090	840	1680	150	1.95
2020080485*	HOS-FLU6000-31-R-STM	1.1/4	4	32.5	43.5	47.3	420	6090	840	1680	400	3.01
2020080487	HOS-FLU6000-38-R-STM	1.1/2	6	38.7	53.9	57.4	420	6090	840	1680	460	4.79
6100190721	HOS-FLU6000-51-A-STM	2"	6	51.1	67.9	71.5	420	6090	840	1680	540	6.89

\*6 SPIRAL VERSION AVAILABLE ON REQUEST



**IMPULSE TESTED TO 500,000 CYCLES ACCORDING TO ISO 6803:2017**



## S FLEX-ULTRA 4000 PLUS

### Applications

4 - 6 steel wire spiral. Exceeds ISO 18752-CC, SAE 100 R12 performance.

For hydraulic systems with high peak pressure and arduous operating conditions such as high pressure hydraulic circuits (for example on booms) on mobile construction equipment, mining equipment and agriculture machines.

### Construction

Tube - Special synthetic rubber tube resistant to mineral, vegetable and glycol based hydraulic oil.

Cover - Super high abrasion and weather resistant special synthetic rubber.

### Reinforcement

4 high tensile strength steel wire reinforced spiral layers.

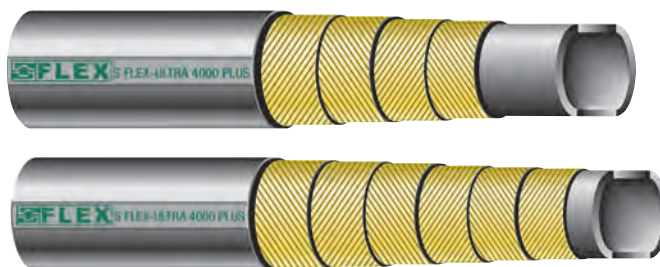
6 high tensile strength steel wire reinforced spiral layers.

### Temperature Range

-40°C to +120°C (-40°F to +248°F)

### Advantages

- Improved flexibility for easier installation in tight spaces, due to meeting and exceeding industry requirements at 50% of the installed hose bend.
- Improved compatibility against most general hydraulic fluids in the market, including new generation environmentally accepted hydraulic fluids such as HETG, HEES, HEPG and HEPR oils.
- Improved lifetime expectation, due to better compatibility with the connector as the enhanced synthetic rubber inner tube bears high compression-set properties.
- Improved lifetime expectation due to high elastic modulus properties of the inner tube, providing higher resistance against deformation in, for example, dynamic applications.
- Improved lifetime expectation due to high abrasion and ozone resistant cover compared to requirements of SAE and EN standard.
- Improved energy saving due to reduction in weight of spiral hose assembly.
- Less shipping cost due to reduction in weight and outer diameter of hose.



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
6100185309	HOS-FLU4PL-25-R-STM	1"	25.40	34.70	37.20	280	4060	560	1120	150	1.51
6100185311	HOS-FLU4PL-31-R-STM	1.1/4	31.80	43.10	45.90	280	4060	560	1120	210	2.30
6100222148	HOS-FLU4PL-38-R-STM	1.1/2	38.10	50.0	53.20	280	4060	560	1120	250	3.00
6100222149	HOS-FLU4PL-51-R-STM	2.0	50.80	67.60	71.40	280	4060	560	1120	350	5.62

## Beneficial Features

- Bend radius improved up to 50% according to SAE standard products
- Force to bend improved up to 25% according to standard products



**MSHA APPROVED**

## S FLEX-ULTRA 5000 PLUS

### Applications

4 - 6 steel wire spiral. Exceeds ISO 18752-CC, SAE 100 R13 performance.

For hydraulic systems with high peak pressure and arduous operating conditions such as high pressure hydraulic circuits (for example on booms) on mobile construction equipment, mining equipment and agriculture machines.

### Construction

Tube - Special synthetic rubber tube resistant to mineral, vegetable and glycol based hydraulic oil.

Cover - Super high abrasion and weather resistant special synthetic rubber.

### Reinforcement

4 high tensile strength steel wire reinforced spiral layers.

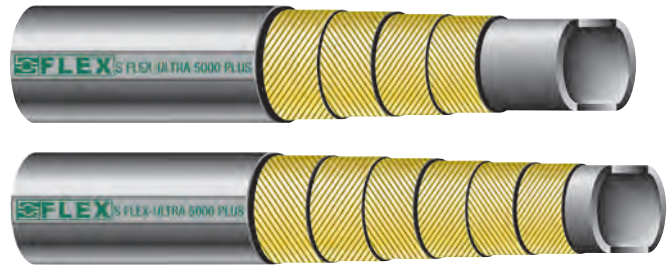
6 high tensile strength steel wire reinforced spiral layers.

### Temperature Range

-40°C to +120°C (-40°F to +248°F)

### Advantages

- Improved flexibility for easier installation in tight spaces, due to meeting and exceeding industry requirements at 50% of the installed hose bend.
- Improved compatibility against most general hydraulic fluids in the market, including new generation environmentally accepted hydraulic fluids such as HETG, HEES, HEPG and HEPR oils.
- Improved lifetime expectation, due to better compatibility with the connector as the enhanced synthetic rubber inner tube bears high compression-set properties.
- Improved lifetime expectation due to high elastic modulus properties of the inner tube, providing higher resistance against deformation in, for example, dynamic applications.
- Improved lifetime expectation due to high abrasion and ozone resistant cover compared to requirements of SAE and EN standard.
- Improved energy saving due to reduction in weight of spiral hose assembly.
- Less shipping cost due to reduction in weight and outer diameter of hose.



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
6100185312	HOS-FLU5PL-19-R-STM	3/4	19.0	27.4	30.3	350	5075	700	1400	120	1.15
6100185313	HOS-FLU5PL-25-R-STM	1"	25.4	34.7	37.7	350	5075	700	1400	150	1.72
6100185314	HOS-FLU5PL-31-R-STM	1.1/4	31.8	43.1	46.1	350	5075	700	1400	210	2.30
6100182225	HOS-FLU5PL-38-R-STM	1.1/2	38.1	50.0	53.2	350	5075	700	1400	250	3.00
6100185315	HOS-FLU5PL-51-R-STM	2"	50.8	67.6	71.4	350	5075	700	1400	350	5.62

## Beneficial Features

- Bend radius improved up to 50% according to SAE standard products
- Force to bend improved up to 40% according to standard products



**MSHA APPROVED**

## S FLEX-ULTRA 6000 PLUS

### Applications

4 - 6 steel wire spiral. Exceeds ISO 18752-CC, SAE 100 R15 performance.

For hydraulic systems with high peak pressure and arduous operating conditions such as high pressure hydraulic circuits (for example on booms) on mobile construction equipment, mining equipment and agriculture machines.

### Construction

Tube - Special synthetic rubber tube resistant to mineral, vegetable and glycol based hydraulic oil.

Cover - Super high abrasion and weather resistant special synthetic rubber.

### Reinforcement

4 high tensile strength steel wire reinforced spiral layers.

6 high tensile strength steel wire reinforced spiral layers.

### Temperature Range

-40°C to +120°C (-40°F to +248°F)

### Advantages

- Improved flexibility for easier installation in tight spaces, due to meeting and exceeding industry requirements at 50% of the installed hose bend.
- Improved compatibility against most general hydraulic fluids in the market, including new generation environmentally accepted hydraulic fluids such as HETG, HEES, HEPG and HEPR oils.
- Improved lifetime expectation, due to better compatibility with the connector as the enhanced synthetic rubber inner tube bears high compression-set properties.
- Improved lifetime expectation due to high elastic modulus properties of the inner tube, providing higher resistance against deformation in, for example, dynamic applications.
- Improved lifetime expectation due to high abrasion and ozone resistant cover compared to requirements of SAE and EN standard.
- Improved energy saving due to reduction in weight of spiral hose assembly.
- Less shipping cost due to reduction in weight and outer diameter of hose.



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		TEST PRESSURE BAR	BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI				
6100185316	HOS-FLU6PL-10-R-STM	3/8	9.5	18.1	20.9	420	6090	840	1680	65	0.70
6100172296	HOS-FLU6PL-12-R-STM	1/2	12.7	21.0	24.4	420	6090	840	1680	90	0.92
6100172295	HOS-FLU6PL-16-R-STM	5/8	15.9	24.6	28.1	420	6090	840	1680	100	1.13
6100185317	HOS-FLU6PL-19-R-STM	3/4	19.0	28.4	30.7	420	6090	840	1680	120	1.25
6100172830	HOS-FLU6PL-25-R-STM	1"	25.4	35.4	37.9	420	6090	840	1680	140**	1.82
6100172294	HOS-FLU6PL-31-R-STM	1.1/4	31.8	46.6	49.6	420	6090	840	1680	260	3.17
6100185319	HOS-FLU6PL-38-R-STM	1.1/2	38.1	54.0	56.9	420	6090	840	1680	310	4.40
6100185318	HOS-FLU6PL-51-R-STM	2"	50.8	68.0	72.0	420	6090	840	1680	350	6.29

\*\*Best in class

## Beneficial Features

- Bend radius improved up to 50% according to SAE standard products
- Force to bend improved up to 40% according to standard products



**MSHA APPROVED**

## STAUFF FLEX SUPREME

### Applications

This highly flexible multi-spiral compact hydraulic hose with reduced bend radii and increased working pressure exceeds performance of EN856 4SP and 4SH.

### Construction

Tube - Synthetic nitrile inner lining, suitable for hydraulic (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC) and bio-degradable hydraulic fluids.

Cover - Abrasion and ozone resistant synthetic rubber.

MSHA, STAUFFRoc and STAUFFShield (DN10 DN25) cover available.

### Reinforcement

4 high tensile strength steel wire reinforced spiral layers.

### Temperature Range

-40°C to +100°C (-40°F to +212°F)



### Applications



ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
6100225338	HOS-FLS-10-A-STM	3/8	9.9	17.7	20.2	470	6815	1880	60	0.69
6100225339	HOS-FLS-12-A-STM	1/2	13.0	20.6	22.9	470	6815	1880	85	0.79
6100225340	HOS-FLS-16-A-STM	5/8	16.4	25.0	27.2	470	6815	1880	100	1.17
6100225341	HOS-FLS-19-A-STM	3/4	19.5	28.3	30.5	450	6525	1800	120	1.36
6100225342	HOS-FLS-25-A-STM	1"	25.9	35.4	37.5	440	6380	1760	150	1.94
6100225343	HOS-FLS-31-A-STM	1.1/4	32.5	42.7	46.5	370	5365	1480	210	2.70
6100225344	HOS-FLS-38-A-STM	1.1/2	38.7	49.2	53.4	320	4640	1280	250	3.26
6100225332	HOS-FLS-51-A-STM	2"	51.1	63.2	68.0	280	4060	1120	390	4.42

STAUFF Flex Supreme exceeds performance of 4SP / 4SH hose types according to EN 856 in bend radius and working pressure.



**MSHA APPROVED**

## STAUFF FLEX MAX

### Applications

4 - 6 steel wire spiral.

For high demanding hydraulic systems:

- Hydrostatic Drive Applications (working pressure up to 560bar).
- Highest pressure applications (forestry, large construction, agriculture).

### Construction

Tube - Synthetic rubber tube resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC) and bio-degradeable hydraulic fluids.

Cover - STAUFFRock Abrasion and ozone resistant synthetic rubber.

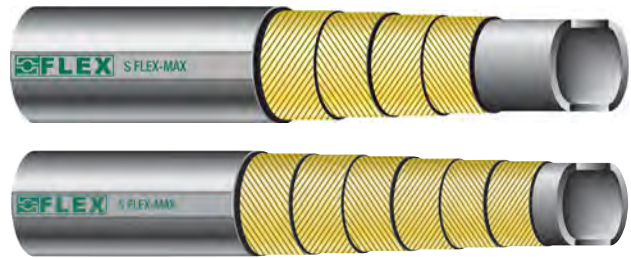
### Reinforcement

4 high tensile strength steel wire reinforced spiral layers.

6 high tensile strength steel wire reinforced spiral layers.

### Temperature Range

-40°C to +100°C / -40°F to +212°F (max +120°C/+248°F intermittent)



### Applications

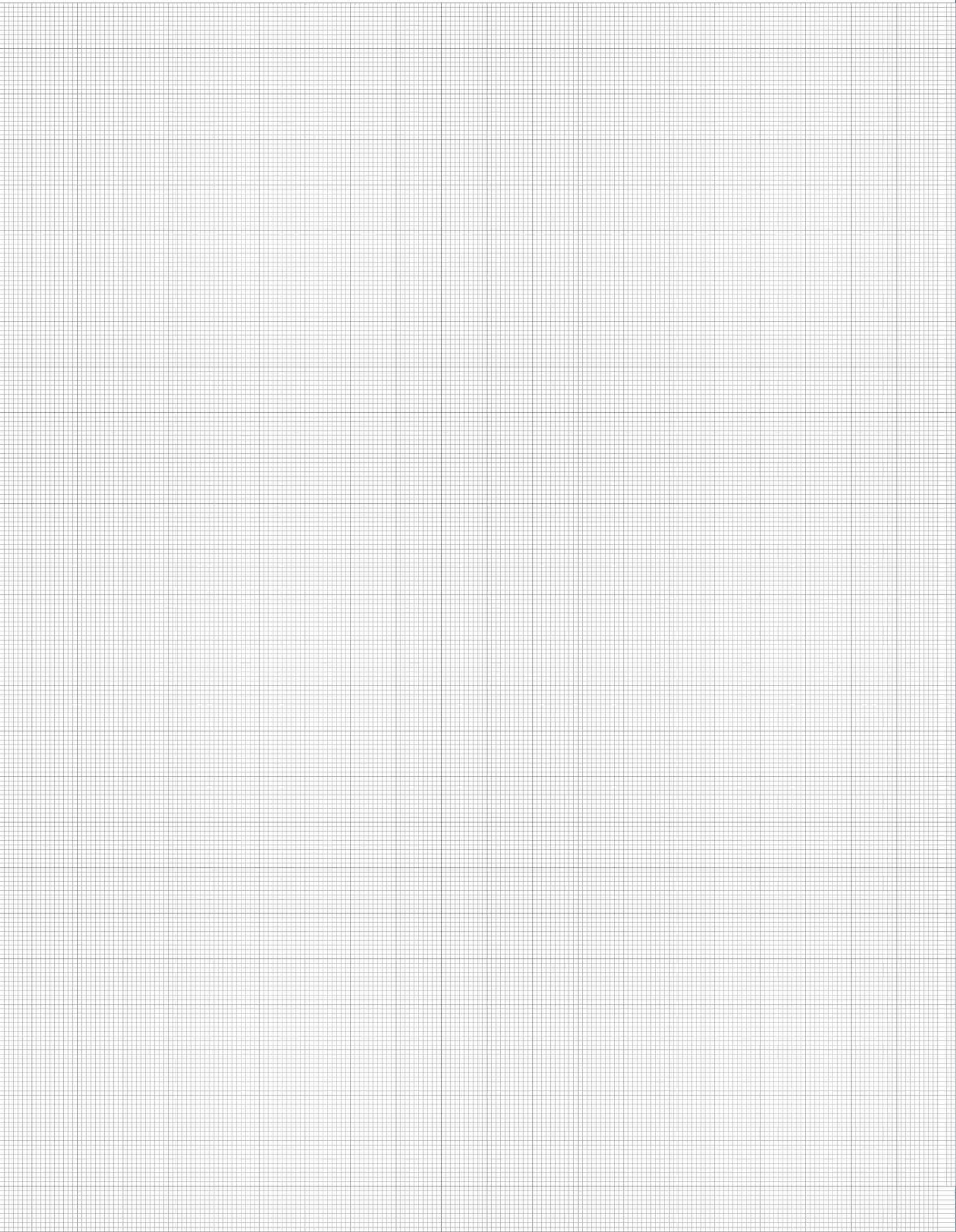


ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
6100225333	HOS-FLM-19-A-STM	3/4	19.5	29.1	31.4	560	8120	2240	270	1.57
6100225336	HOS-FLM-25-A-STM	1"	25.9	36.7	38.9	560	8120	2240	300	2.29
6100225337	HOS-FLM-31-A-STM	1.1/4	32.5	46.9	50.5	525	7610	2100	420	4.12



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5

A large, bold, white numeral '5' is positioned in the lower right quadrant of the page, set against the background of blue hoses.

**PRESSURE WASH HOSE**

## STAUFFJET 1SN

### Applications

For medium pressure cleaning applications with hot water.

### Construction

Tube - 120°C (intermittent 150°C) hot water and detergent solutions resistant special synthetic rubber.

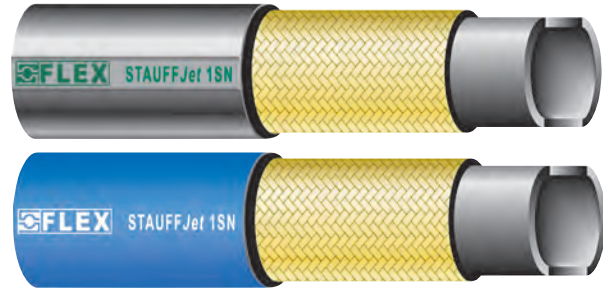
Cover - oil, abrasion and weather resistant special synthetic rubber.

### Reinforcement

1 high tensile steel wire braid.

### Temperature Range

-40°C to + intermittent 150°C, for pressure washer only.  
(-40°F to +248°F)



### Applications



### STAUFFJET AVAILABLE IN BLACK OR BLUE

#### 1SN - BLACK

ORDER CODE	DESCRIPTION	ID			OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		DASH SIZE	INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
6100190741	HJS-JET1SN-06-R-PN250-BK-EMB	-04	1/4	6.4	11.1	13.2	250	3625	1000	100	0.22
6100190742	HJS-JET1SN-08-R-PN250-BK-EMB	-05	5/16	8.0	12.6	14.8	250	3625	1000	115	0.26
6100190743	HJS-JET1SN-10-R-PN250-BK-EMB	-06	3/8	9.5	15.0	17.2	250	3625	1000	130	0.34
6100190746	HJS-JET1SN-12-R-PN250-BK-EMB	-08	1/2	12.7	18.1	20.4	250	3625	1000	180	0.41

#### 1SN - BLUE

ORDER CODE	DESCRIPTION	ID			OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		DASH SIZE	INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
6100190747	HJS-JET1SN-06-R-PN250-BU-EMB	-04	1/4	6.4	11.1	13.2	250	3625	1000	100	0.22
6100190748	HJS-JET1SN-08-R-PN250-BU-EMB	-05	5/16	8.0	12.6	14.8	250	3625	1000	115	0.26
6100190749	HJS-JET1SN-10-R-PN250-BU-EMB	-06	3/8	9.5	15.0	17.2	250	3625	1000	130	0.34
6100190750	HJS-JET1SN-12-R-PN250-BU-EMB	-08	1/2	12.7	18.1	20.4	250	3625	1000	180	0.41

#### 1SC - BLACK

ORDER CODE	DESCRIPTION	ID			OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		DASH SIZE	INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
6100190761	HJS-JET1SC-06-R-PN250-BK-EMB	-04	1/4	6.4	10.4	12.2	250	3625	1000	75	0.18
6100190763	HJS-JET1SC-08-R-PN250-BK-EMB	-05	5/16	8.0	11.5	13.6	250	3625	1000	85	0.20
6100190767	HJS-JET1SC-10-R-PN250-BK-EMB	-06	3/8	9.5	13.6	15.5	250	3625	1000	90	0.26
6100190772	HJS-JET1SC-12-R-PN250-BK-EMB	-08	1/2	12.7	17.0	19.0	250	3625	1000	130	0.35

#### 1SC - BLUE

ORDER CODE	DESCRIPTION	ID			OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		DASH SIZE	INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
6100190776	HJS-JET1SC-06-R-PN250-BU-EMB	-04	1/4	6.4	10.4	12.2	250	3625	1000	75	0.18
6100190778	HJS-JET1SC-08-R-PN250-BU-EMB	-05	5/16	8.0	11.5	13.6	250	3625	1000	85	0.20
6100190779	HJS-JET1SC-10-R-PN250-BU-EMB	-06	3/8	9.5	13.6	15.5	250	3625	1000	90	0.26
6100190791	HJS-JET1SC-12-R-PN250-BU-EMB	-08	1/2	12.7	17.0	19.0	250	3625	1000	130	0.35



## STAUFFJET 1SN BLACK ASSEMBLIES

### Applications

High pressure hose suitable for water jetting cleaning equipment, hot and cold water systems with detergent fluids.

### Construction

Wrapped cover as standard.  
High abrasion resistant covers also available.

### Reinforcement

1 High tensile steel braid.

### Temperature Range

-40°C to +150°C (-40°F to +302°F)



ORDER CODE	DESCRIPTION
2020039726	3/8 STAUFFJET 1SN 10M 3/8 BSPP Male/ 3/8 BSPP Female C/W Cuffs
2020030543	3/8 STAUFFJET 1SN 10M 3/8 BSPP Females Each End C/W Cuffs
2020049458	3/8 STAUFFJET 1SN 20M 3/8 BSPP Male/ 3/8 BSPP Female C/W Cuffs
6100023972	3/8 STAUFFJET 1SN 20M 3/8 BSPP Females Each End C/W Cuffs

## STAUFFJET 1SN BLUE ASSEMBLIES

### Applications

High pressure hose suitable for water jetting cleaning equipment, hot and cold water systems with detergent fluids.

### Construction

Wrapped cover as standard.  
High abrasion resistant covers also available.

### Reinforcement

1 High tensile steel braid.

### Temperature Range

-40°C to +150°C (-40°F to +302°F)



ORDER CODE	DESCRIPTION
2020035194	3/8 STAUFFJET 1SN 10M 3/8 BSPP Male/ 3/8 BSPP Female C/W Cuffs
6100023970	3/8 STAUFFJET 1SN 10M 3/8 BSPP Females Each End C/W Cuffs
2020063821	3/8 STAUFFJET 1SN 20M 3/8 BSPP Male/ 3/8 BSPP Female C/W Cuffs
6100023971	3/8 STAUFFJET 1SN 20M 3/8 BSPP Females Each End C/W Cuffs

5

## STAUFFJET 2SN

### Applications

For high pressure cleaning applications with hot water.

### Construction

Tube - 120°C (intermittent 150°C) hot water and detergent solutions resistant special synthetic rubber.

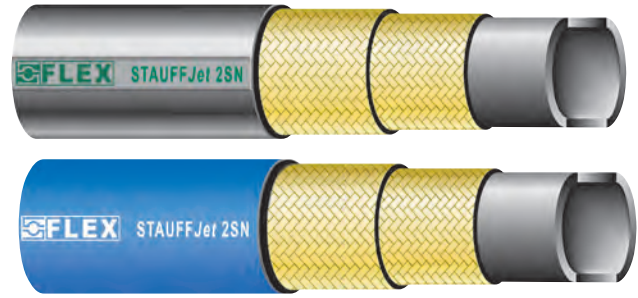
Cover - oil, abrasion and weather resistant special synthetic rubber

### Reinforcement

2 high tensile steel wire braid.

### Temperature Range

-40°C to + intermittent 150°C, for pressure washer only.  
(-40°F to +248°F)



### Applications



### STAUFFJET AVAILABLE IN BLACK OR BLUE

#### 2SN - BLACK

ORDER CODE	DESCRIPTION	ID			OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		DASH SIZE	INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
6100190753	HJS-JET2SN-06-R-PN400-BK-EMB	-04	1/4	6.4	12.8	15.0	400	5800	1600	100	0.38
6100190754	HJS-JET2SN-08-R-PN400-BK-EMB	-05	5/16	8.0	14.3	16.5	400	5800	1600	115	0.44
6100190755	HJS-JET2SN-10-R-PN400-BK-EMB	-06	3/8	9.5	16.7	18.9	400	5800	1600	130	0.55
6100190756	HJS-JET2SN-12-R-PN400-BK-EMB	-08	1/2	12.7	19.8	22.2	400	5800	1600	180	0.64

#### 2SN - BLUE

ORDER CODE	DESCRIPTION	ID			OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		DASH SIZE	INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
6100190758	HJS-JET2SN-06-R-PN400-BU-EMB	-04	1/4	6.4	12.8	15.0	400	5800	1600	100	0.38
6100190759	HJS-JET2SN-08-R-PN400-BU-EMB	-05	5/16	8.0	14.3	16.5	400	5800	1600	115	0.44
6100133262	HJS-JET2SN-10-R-PN400-BU-EMB	-06	3/8	9.5	16.7	18.9	400	5800	1600	130	0.55
6100036805	HJS-JET2SN-12-R-PN400-BU-EMB	-08	1/2	12.7	19.8	22.2	400	5800	1600	180	0.64

#### 2SC BLACK

ORDER CODE	DESCRIPTION	ID			OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		DASH SIZE	INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
6100190793	HJS-JET2SC-06-R-PN400-BK-EMB	-04	1/4	6.4	11.3	13.4	400	5800	1600	75	0.29
6100190795	HJS-JET2SC-08-R-PN400-BK-EMB	-05	5/16	8.0	12.9	15.0	400	5800	1600	85	0.34
6100190797	HJS-JET2SC-10-R-PN400-BK-EMB	-06	3/8	9.5	15.0	17.1	400	5800	1600	90	0.42
6100190798	HJS-JET2SC-12-R-PN400-BK-EMB	-08	1/2	12.7	18.6	20.7	400	5800	1600	130	0.58

#### 2SC BLUE

ORDER CODE	DESCRIPTION	ID			OD		WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		DASH SIZE	INCH	MM	WIRE OD MM	COVER OD MM	BAR	PSI			
6100190807	HJS-JET2SC-06-R-PN400-BU-EMB	-04	1/4	6.4	11.3	13.4	400	5800	1600	75	0.29
6100190808	HJS-JET2SC-08-R-PN400-BU-EMB	-05	5/16	8.0	12.9	15.0	400	5800	1600	85	0.34
6100190809	HJS-JET2SC-10-R-PN400-BU-EMB	-06	3/8	9.5	15.0	17.1	400	5800	1600	90	0.42
6100190810	HJS-JET2SC-12-R-PN400-BU-EMB	-08	1/2	12.7	18.6	20.7	400	5800	1600	130	0.58

## STAUFFJET 2SN BLACK ASSEMBLIES

### Applications

High pressure hose. Suitable water jetting cleaning equipment hot and cold water systems with detergent fluids.

### Construction

Wrapped cover as standard.  
High abrasion resistant covers also available.

### Reinforcement

2 High tensile steel braids.

### Temperature Range

-40°C to +150°C (-40°F to +302°F)



ORDER CODE	DESCRIPTION
2020039698	3/8 STAUFFJET 2SN 10M 3/8 BSPP Male/ 3/8 BSPP Female C/W Cuffs
2020033269	3/8 STAUFFJET 2SN 10M 3/8 BSPP Females Each End C/W Cuffs
2020049459	3/8 STAUFFJET 2SN 20M 3/8 BSPP Male/ 3/8 BSPP Female C/W Cuffs
2020030799	3/8 STAUFFJET 2SN 20M 3/8 BSPP Females Each End C/W Cuffs

## STAUFFJET 2SN BLUE ASSEMBLIES

### Applications

High pressure hose. Suitable water jetting cleaning equipment hot and cold water systems with detergent fluids. Hose has a blue outer cover suitable for use in food factories and areas that require a none marking cover.

### Construction

Wrapped cover as standard.  
High abrasion resistant covers also available.

### Reinforcement

2 High tensile steel braids.

### Temperature Range

-40°C to +150°C (-40°F to +302°F)



ORDER CODE	DESCRIPTION
2020039703	3/8 STAUFFJET 2SN 10M 3/8 BSPP Male/ 3/8 BSPP Female C/W Cuffs
2020033040	3/8 STAUFFJET 2SN 10M 3/8 BSPP Females Each End C/W Cuffs
2020049822	3/8 STAUFFJET 2SN 20M 3/8 BSPP Male/ 3/8 BSPP Female C/W Cuffs
2020072107	3/8 STAUFFJET 2SN 20M 3/8 BSPP Females Each End C/W Cuffs

## STAUFFBLAST

### Applications

Very high pressure hose for water scaling and jetting systems.

### Tube

Mineral, vegetable, hydraulic oils and glycol basis fluids resistant special synthetic rubber.

### Reinforcement

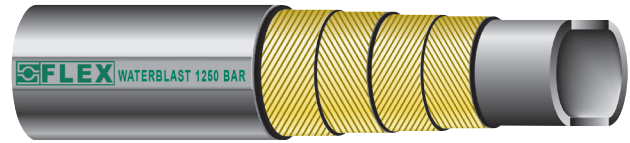
Four high tensile steel spirals.

### Cover

Hydraulic oil, abrasion and weather resistant synthetic rubber.

### Temperature Range

-40°C to +100°C (-40°F to +212°F)



**Extremely flexible under pressure**

### Applications



ORDER CODE	DESCRIPTION	LENGTH (M)	WORKING PRESSURE
2020050106	1/2 Hose with 1/2" BSPP Females Each End	1	1100
2020052240	1/2 Hose with 1/2" BSPP Females Each End	2	1100
2020080095	1/2 Hose with 1/2" BSPP Females Each End	2.5	1100
2020067548	1/2 Hose with 1/2" BSPP Females Each End	5	1100
2020067521	1/2 Hose with 1/2" BSPP Females Each End	10	1100
2020048229	1/2 Hose with 1/2" BSPP Females Each End	20	1100

Other lengths available to meet your needs available upon request.

ORDER CODE	DESCRIPTION	LENGTH (M)	WORKING PRESSURE
6100021622	1/2 Hose with M24x1.5 DKOS Females Each End	1	1100
2020051725	1/2 Hose with M24x1.5 DKOS Females Each End	2	1100
6100021624	1/2 Hose with M24x1.5 DKOS Females Each End	2.5	1100
6100021684	1/2 Hose with M24x1.5 DKOS Females Each End	5	1100
2020051724	1/2 Hose with M24x1.5 DKOS Females Each End	10	1100
2020049392	1/2 Hose with M24x1.5 DKOS Females Each End	20	1100

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# 6

## RAIL HOSE



# Upgrade to a rail hose that meets internal and external useage requirements

At STAUFF we understand, meet and exceed the needs and requirements of the railway industry. Driven by regulations and increased globalisation, train builders and railway operatives must find ways to reduce downtime, increase productivity and enhance the safety and security to drive profitability and make the industry more sustainable.

## Meeting the Standards: EN 45545-2

### Tested conformance to EN45545-2

The advent of a single standard for hose assembly fire behaviour (EN 45545-2) has been adopted by and is replacing country by country standards. STAUFF supplies hoses that conform to every part of the standard. STAUFF hoses actually elevate the product offering to HL3 compatible parts.

**Table 1**  
EN45545-2 conformance tests by country

Country	Standard	Test Item
<b>France</b>	<b>French standard NF F 16-101</b> Tests fire behaviour, fire effluents and toxicity of the hose	Smallest, medium and largest width of a specific hose type: <ul style="list-style-type: none"> <li>• Flame resistance class I3</li> <li>• Smoke generation and toxicity class F3</li> </ul>
<b>Germany</b>	<b>German standard DIN 5510 part 2 (05/2009)</b> Tests fire behaviour, fire effluents and toxicity of the hose	Smallest and largest nominal width of a specific hose type: <ul style="list-style-type: none"> <li>• Flammability class S3</li> <li>• Droplet class ST2</li> <li>• Smoke generation class SR2</li> <li>• Toxicity FED (t zul.) &lt;1</li> </ul>
<b>Great Britain</b>	<b>British standard BS 6853</b> Tests fire behaviour and fire effluents of the hose cover material	Rubber hose cover material: <ul style="list-style-type: none"> <li>• Smoke behaviour</li> <li>• Release of toxins meets the limit value: category Ib, II</li> </ul>
<b>Italy</b>	<b>Italian standard UNI CEI 11170-3</b> Tests fire behaviour, fire effluents of hose material	The smallest and largest nominal width of a specific hose type: <ul style="list-style-type: none"> <li>• Smoke generation</li> <li>• Fire resistance</li> <li>• Toxicity</li> <li>• Overall class: LR4</li> </ul>

# 1SC EN45545-2 HL3 STAUFF RAIL DN6

## EN 45545-2: Classifications and Specifications

### Meets and exceeds hazard requirements

Most manufacturers have yet to meet the stringent requirement sets for R22 and R23. STAUFF Rail hoses are certified to conform to the EN45545-2 standards.

Requirement set used for	Test Method & Reference	Testing for (unit)	Maximum / Minimum	Thresholds			STAUFF Rail Hoses
				HL1	HL2	HL3	
<b>Inside uses R22</b> (IN16; EL2; EL6A; EL7A; M2)	T01 EN ISO 4589-2:01	Oxygen Content (1%)	Minimum	28	28	32	Meets and/or exceeds HL3 minimum threshold
	T10.03 EN ISO 5959-3 25kWm-2	Smoke Density (Ds max. dimensionless)	Maximum	600	300	150	Meets and/or exceeds HL3 minimum threshold
	T12 NF X70-100-1 and -2, 600°C	Smoke Toxicity (CIT NLP dimensionless)	Maximum	1.2	0.9	0.75	Meets and/or exceeds HL3 minimum threshold
<b>Outside uses R23</b> (EX12; EL2; EL5; EL6B; EL7B; M3)	T01 EN ISO 4589-2: 01	Oxygen Content (%)	Minimum	28	28	32	Meets and/or exceeds HL3 minimum threshold
	T10.03 EN ISO 5659-3 25kWm-2	Smoke Density (Ds max. dimensionless)	Maximum	-	600	300	Meets and/or exceeds HL3 minimum threshold
	T12 NF X70-100-1 and -2, 600°C	Smoke Toxicity (CIT NLP dimensionless)	Maximum	-	1.8	1.5	Meets and/or exceeds HL3 minimum threshold

STAUFF RAIL HOSE is compliant and branded with the HL2 and HL3 specification

**STAUFF RAIL HOSE 1SN EN 853**



**Applications**

Suitable for use in hydraulic system service with petroleum and water based fluids, for general industrial service.

**Construction**

Inner Tube: Synthetic rubber tube.  
Cover: Synthetic rubber cover.

**Reinforcement**

One steel braid.

**Temperature Range**

-40°C to 125°C (-40°F to 257°F)  
Air max +75°C  
Water max +85°C

**Additional Certificates:**

EN45545-2  
ISO 15540

ORDER CODE	DESCRIPTION	ID		OD (MAX)		WORKING PRESSURE		MIN. BURST PRESSURE	MIN. BEND RADIUS	WEIGHT
		MM	INCH	MM	INCH	BAR	PSI	BAR	MM	KG/M
6100225020	HOS-1SN-06-R-STM-45545	6.4	1/4	14.1	0.55	225	3263	900	100	0.22
6100225021	HOS-1SN-08-R-STM-45545	7.9	5/16	15.7	0.62	215	3118	860	115	0.26
6100225022	HOS-1SN-10-R-STM-45545	9.5	3/8	18.1	0.71	180	2610	720	130	0.33
6100225023	HOS-1SN-12-R-STM-45545	12.7	1/2	21.4	0.84	160	2320	640	180	0.41
6100225030	HOS-1SN-16-R-STM-45545	15.9	5/8	24.5	0.96	130	1885	520	200	0.47
6100225026	HOS-1SN-19-R-STM-45545	19.0	3/4	28.5	1.12	105	1523	420	240	0.59
6100225025	HOS-1SN-25-R-STM-45545	25.4	1"	36.6	1.44	88	1276	352	300	0.87



**STAUFF RAIL HOSE 2SN EN 853**

**Applications**

Suitable for use in hydraulic system service with petroleum and water based fluids, for general industrial service.

**Construction**

Inner Tube: Synthetic rubber tube.  
Cover: Synthetic rubber cover.

**Reinforcement**

Two steel braids.

**Temperature Range**

-40°C to 125°C (-40°F to 257°F)  
Air max +75°C  
Water max +85°C

**Additional Certificates:**

EN45545-2  
ISO 15540

ORDER CODE	DESCRIPTION	ID		OD (MAX)		WORKING PRESSURE		MIN. BURST PRESSURE	MIN. BEND RADIUS	WEIGHT
		MM	INCH	MM	INCH	BAR	PSI	BAR	MM	KG/M
6100225024	HOS-2SN-06-R-STM-45545	6.4	1/4	15.7	0.62	400	5800	1600	100	0.38
6100225032	HOS-2SN-08-R-STM-45545	7.9	5/16	17.3	0.68	350	5075	1400	115	0.43
6100225033	HOS-2SN-10-R-STM-45545	9.5	3/8	19.7	0.78	330	4785	1320	130	0.54
6100225034	HOS-2SN-12-R-STM-45545	12.7	1/2	23.0	0.91	275	3988	1100	180	0.64
6100225040	HOS-2SN-16-R-STM-45545	15.9	5/8	26.2	1.03	250	3625	1000	200	0.75
6100225041	HOS-2SN-19-R-STM-45545	19.0	3/4	30.1	1.19	215	3118	860	240	0.93
6100225042	HOS-2SN-25-R-STM-45545	25.4	1"	38.9	1.53	165	2393	660	300	1.29

**STAUFF RAIL HOSE 1SC EN 857**



**Applications**

Suitable for use in hydraulic system service with petroleum and water based fluids, for general industrial service.

**Construction**

Inner Tube: Synthetic rubber tube.

Cover: Synthetic rubber.

**Reinforcement**

One steel braid.

**Temperature Range**

-40°C to 125°C

Air Max +75°C

Water Max +85°C

**Additional Certificates:**

EN45545-2

ISO 15540

ORDER CODE	DESCRIPTION	NOMINAL Ø		INSIDE Ø MM	OUTSIDE Ø MM	WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		MM	INCH			BAR	PSI			
6100150013	HOS-1SC-06-R-STM-45545	6	1/4	6.4	13.5	225	3263	900	50	0.18
6100150017	HOS-1SC-08-R-STM-45545	8	5/16	7.9	14.5	215	3118	860	55	0.21
6100150019	HOS-1SC-10-R-STM-45545	10	3/8	9.5	16.9	180	2610	720	65	0.26
6100150023	HOS-1SC-12-R-STM-45545	12	1/2	12.7	20.4	160	2320	640	90	0.35
6100150042	HOS-1SC-16-R-STM-45545	16	5/8	15.9	23.0	130	1885	520	100	0.43
6100150044	HOS-1SC-19-R-STM-45545	19	3/4	19.0	26.7	105	1523	420	120	0.5
6100150045	HOS-1SC-25-R-STM-45545	25	1"	25.4	34.9	88	1276	352	150	0.74

**STAUFF RAIL HOSE 2SC EN 857**

**Applications**

Suitable for use in hydraulic system service with petroleum and water based fluids, for general industrial service.

**Construction**

Inner Tube: Synthetic rubber.

Cover: Synthetic rubber.

**Reinforcement**

Two steel braids.

**Temperature Range**

-40°C to +125°C

Air Max +75°C

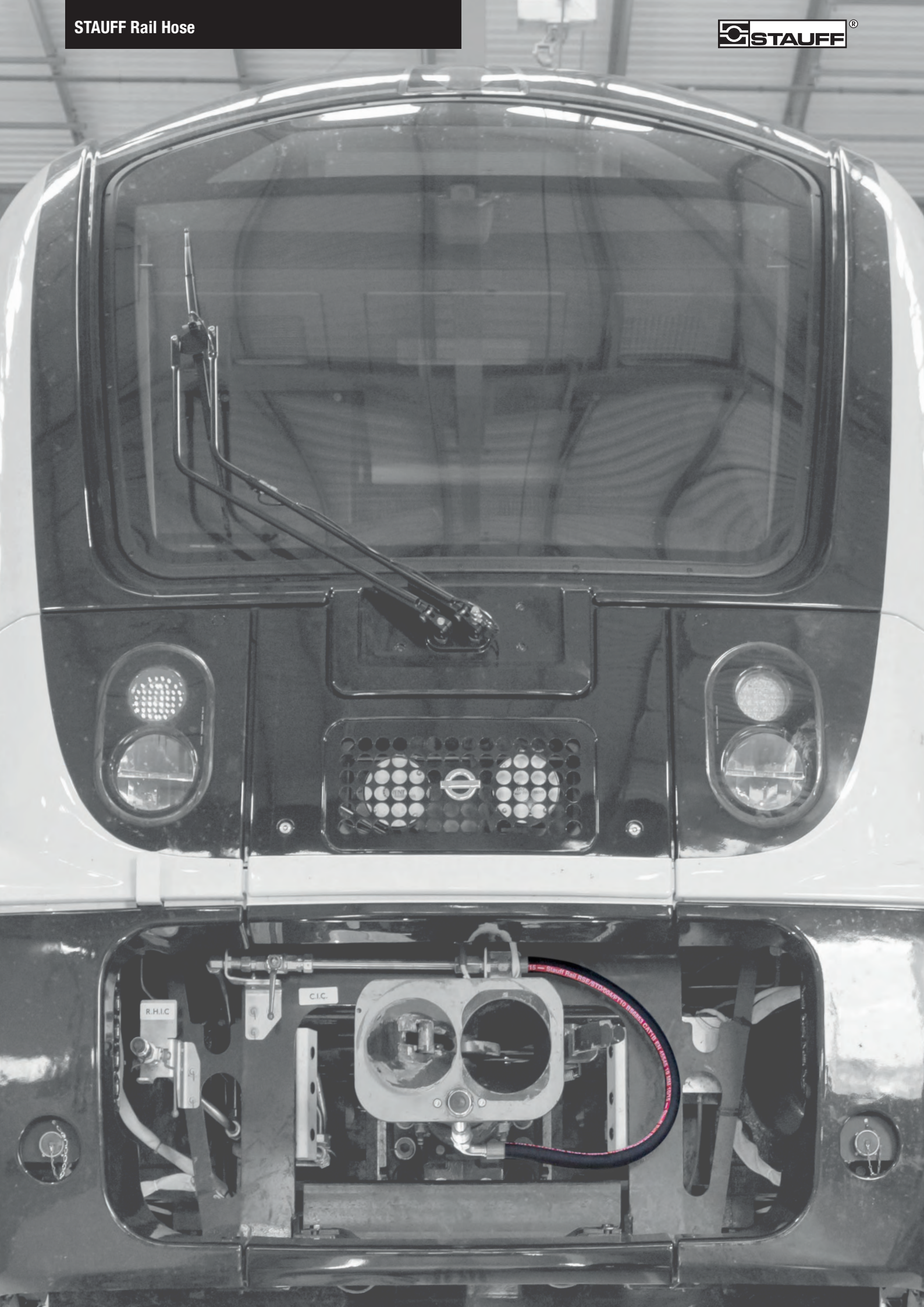
Water Max +85°C

**Additional Certificates:**

EN45545-2

ISO 15540

ORDER CODE	DESCRIPTION	NOMINAL Ø		INSIDE Ø MM	OUTSIDE Ø MM	WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
		MM	INCH			BAR	PSI			
6100150046	HOS-2SC-06-R-STM-45545	6	1/4	6.4	14.2	400	5800	1600	50	0.29
6100150047	HOS-2SC-08-R-STM-45545	8	5/16	7.9	16.0	350	5075	1400	55	0.33
6100150048	HOS-2SC-10-R-STM-45545	10	3/8	9.5	18.3	330	4785	1320	65	0.41
6100150049	HOS-2SC-12-R-STM-45545	12	1/2	12.7	21.5	275	3988	1100	90	0.58
6100150050	HOS-2SC-16-R-STM-45545	16	5/8	15.9	24.7	250	3625	1000	100	0.69
6100150051	HOS-2SC-19-R-STM-45545	19	3/4	19.0	28.6	215	3118	860	120	0.81
6100150052	HOS-2SC-25-R-STM-45545	25	1"	25.4	36.6	165	2393	660	150	1.17
6100150053	HOS-2SC-31-R-STM-45545	31	1.1/4	31.8	44.4	125	1813	500	210	1.53
6100150055	HOS-2SC-38-R-STM-45545	38	1.1/2	38.1	51.5	100	1450	400	250	1.89
6100225113	HOS-2SC-51-R-STM-45545	51	2"	50.8	64.2	90	1305	360	315	2.42



**STAUFF RAIL HOSE AIR NF F 11-380**
**R22, R23 - HL3 BS 6853**
**Compressed Air hose**

**Application:**

Softwall hose designed to convey compressed air in rail carriages and locomotive systems according to the standard NF F 11-380 /cat.2.

**Construction**

Tube: black, smooth synthetic rubber.

Cover: black, smooth (wrapped finish), synthetic rubber, weathering, ozone, oil and fire resistant.

**Reinforcement**

High strength synthetic cord.

**Temperature Range**

from -30°C to +70°C (-22°F to +158°F).

**Standards: Hose**

NF F 11-380:2017/CAT.2. EN 45545-2:15 HL3 R22 and R23; BS 6853

Also available upon request: Different diameters.

ORDER CODE	DESCRIPTION	ID		OD		WORKING PRESSURE		BURST PRESSURE		WEIGHT NOMINAL		LENGTH MAX	
		MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	KG/M	LBS/FT	M	FT
2020070053	HIS-RAH6853-06/16-K-BP50	6	1/4	16	0.63	10	150	50	725	0.23	0.16	60	200
6100136829	HIS-RAH6853-08/18-K-BP50	8	5/16	18	0.71	10	150	50	725	0.27	0.18	60	200
2020050469	HIS-RAH6853-10/22-K-BP50	10	25/64	22	0.87	10	150	50	725	0.41	0.28	60	200
2020049689	HIS-RAH6853-13/26-K-BP50	13	1/2	26	1.02	10	150	50	725	0.51	0.34	60	200
6100136828	HIS-RAH6853-16/29-K-BP50	16	5/8	29	1.14	10	150	50	725	0.59	0.40	60	200
2020065763	HIS-RAH6853-19/33-K-BP50	19	3/4	33	1.30	10	150	50	725	0.76	0.51	60	200
6100150152	HIS-RAH6853-22/37-K-BP50	22	7/8	37	1.46	10	150	50	725	0.94	0.63	60	200
6100136827	HIS-RAH6853-25/42-K-BP50	25	1"	39.5	1.56	10	150	50	725	0.97	0.65	60	200

**Conformity Declaration**

BS 6853:1999 - classification: CAT. La interior and exterior

UNI CEI EN 45545-2:2013 for Hazard Levels HL1 - HL2 - HL3 for requirement set R22 and R23

NF F 16-101:1988 - classification: F1 - 12, grid and 6, as per Lapi Test Report n. 1443.5 of 05.11.2012

The hose fully complies the NF F 11-380/cat.2.

**STAUFF RAIL HOSE 1SN-K (EXCEEDS EN 857)**



**Construction**

Tube: Synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC).  
 Cover: Abrasion and ozone resistant synthetic rubber.

**Reinforcement**

One braid of high tensile steel wire.

**Temperature Range**

-40°C to +100°C (-40°F to +212°F) (max 120°C/248°F intermittent)

**Additional Certificates:**

EN45545-2 (HL2 - R23)

ORDER CODE	DESCRIPTION	NOMINAL Ø		INSIDE Ø	BRAID Ø	OUTSIDE Ø	WORKING PRESSURE		TEST PRESSURE	BURST PRESSURE	BEND RADIUS	WEIGHT
		MM	INCH				BAR	PSI				
6100136324	HOS-1SNK-06-A-STM-45545	6	1/4	6.6	10.3	12.1	290	4205	580	1160	40	0.18
6100136243	HOS-1SNK-08-A-STM-45545	8	5/16	8.3	11.7	13.7	250	4205	500	1000	55	0.20
6100136238	HOS-1SNK-10-A-STM-45545	10	3/8	9.9	13.6	15.9	230	3335	460	920	65	0.24
6100136237	HOS-1SNK-12-A-STM-45545	12	1/2	13.0	16.9	19.2	200	2900	400	800	80	0.34
6100149914	HOS-1SNK-16-A-STM-45545	16	5/8	16.4	20.3	22.3	150	2175	300	600	105	0.39
6100136235	HOS-1SNK-19-A-STM-45545	19	3/4	19.5	23.9	26.1	125	1813	250	500	120	0.49
6100136234	HOS-1SNK-25-A-STM-45545	25	1"	26.0	31.0	33.2	110	1595	220	440	160	0.71

**STAUFF RAIL HOSE 2SN-K (EXCEEDS EN 857)**

**Construction**

Tube: Synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC).  
Cover: Abrasion and ozone resistant synthetic rubber.

**Reinforcement**

Two braids of high tensile steel wire.

**Temperature Range**

-40°C to +100°C (-40°F to +212°F) (max 120°C/248°F intermittent)

**Additional Certificates:**

EN45545-2 (HL2 - R23)

ORDER CODE	DESCRIPTION	NOMINAL Ø		INSIDE Ø	BRAID Ø	OUTSIDE Ø	WORKING PRESSURE		TEST PRESSURE	BURST PRESSURE	BEND RADIUS	WEIGHT
		MM	INCH				BAR	PSI				
6100149916	HOS-2SNK-06-A-STM-45545	6	1/4	6.6	11.5	13.4	450	6525	900	1800	45	0.27
6100136232	HOS-2SNK-08-A-STM-45545	8	5/16	8.3	13.0	15.0	420	6090	840	1680	60	0.32
6100149919	HOS-2SNK-10-A-STM-45545	10	3/8	9.9	14.7	16.8	385	5583	770	1540	70	0.38
6100151303	HOS-2SNK-12-A-STM-45545	12	1/2	13.0	18.4	20.5	350	5075	700	1400	90	0.52
6100149920	HOS-2SNK-16-A-STM-45545	16	5/8	16.4	21.9	23.7	290	4205	580	1160	130	0.61
6100149922	HOS-2SNK-19-A-STM-45545	19	3/4	19.5	25.8	27.7	280	4060	560	1120	160	0.79
6100149923	HOS-2SNK-25-A-STM-45545	25	1"	26.0	32.9	35.6	200	2900	400	800	210	1.15

**STAUFF RAIL HOSE 2TE EN 854**



**Applications**

Hydraulic system service with petroleum and water based fluids, for general industrial service.

**Construction**

Tube: Synthetic rubber.  
Cover: Synthetic rubber.

**Reinforcement**

One textile braid.

**Temperature Range**

--40°C to +125°C (-104°F to +257°F)  
Air Max +75°C  
Water Max +85°C

**Additional Certificates:**

EN45545-2

ORDER CODE	DESCRIPTION	ID		OD (MAX)		WORKING PRESSURE		BURST PRESSURE	BEND RADIUS	WEIGHT
		MM	INCH	MM	INCH	BAR	PSI			
6100149991	HOS-2TE-05-R-STM-45545	5	3/16	12.6	0.50	80	1160	320	35	0.12
6100149992	HOS-2TE-06-R-STM-45545	6	1/4	14.2	0.56	75	1088	300	40	0.15
6100149993	HOS-2TE-08-R-STM-45545	8	5/16	15.7	0.62	68	986	270	50	0.17
6100149997	HOS-2TE-10-R-STM-45545	10	3/8	17.3	0.68	63	914	250	60	0.20
6100149998	HOS-2TE-12-R-STM-45545	13	1/2	20.7	0.81	58	841	230	70	0.24
6100150007	HOS-2TE-16-R-STM-45545	16	5/8	24.9	0.98	50	725	200	90	0.33
6100150010	HOS-2TE-19-R-STM-45545	19	3/4	28	1.10	45	653	180	110	0.38
6100150011	HOS-2TE-25-R-STM-45545	25	1"	35.9	1.41	40	580	160	150	0.55



**STAUFF RAIL HOSE 3TE EN 854**

**Applications**

Hydraulic system service with petroleum and water based fluids, for general industrial service.

**Construction**

Tube: Synthetic rubber.  
Cover: Synthetic rubber.

**Reinforcement**

Two textile braids.

**Temperature Range**

--40°C to +125°C (-104°F to +257°F)  
Air Max +75°C  
Water Max +85°C

**Additional Certificates:**

EN45545-2

ORDER CODE	DESCRIPTION	ID		ID (REF)	OD (MAX)	WORKING PRESSURE BAR	BURST PRESSURE BAR	MIN. BEND RADIUS MM	WEIGHT KG/M
		MM	INCH						
6100225045	HOS-3TE-06-R-STM-45545	6	1/4	6.4	15.2	145	580	45	0.33
6100225047	HOS-3TE-08-R-STM-45545	8	5/16	7.9	17.7	130	520	55	0.41
6100225050	HOS-3TE-10-R-STM-45545	10	3/8	9.5	19.3	110	440	70	0.58
6100225051	HOS-3TE-12-R-STM-45545	12	1/2	12.7	22.7	93	372	85	0.69
6100225052	HOS-3TE-16-R-STM-45545	16	5/8	15.9	26.9	80	320	105	0.81
6100225053	HOS-3TE-19-R-STM-45545	19	3/4	19.0	30.0	70	280	130	1.17
6100225054	HOS-3TE-25-R-STM-45545	25	1"	25.4	37.4	55	220	150	2.42

**STAUFF RAIL HOSE 4SP EN 856**



**Construction**

Tube: Synthetic rubber, resistant against hydraulic fluids (HL, HLP, HLPD, HVLP, HFA, HFAS, HFB, HFC).  
 Cover: Abrasion and ozone resistant synthetic rubber (MSHA approved).

**Reinforcement**

Four spiral layers of high tensile steel wire.

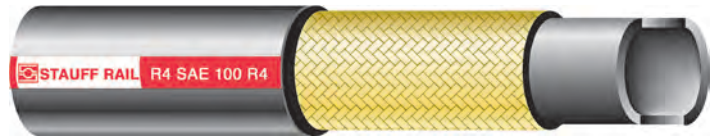
**Temperature Range**

-40°C to +100°C (-40°F to +212°F)  
 (max 120°C/248°F intermittent)

**Additional Certificates:**

EN45545-2 (HL2 - R23)

ORDER CODE	DESCRIPTION	NOMINAL Ø		INSIDE Ø	SPIRAL Ø	OUTSIDE Ø	WORKING PRESSURE		TEST PRESSURE	BURST PRESSURE	BEND RADIUS	WEIGHT
		MM	INCH				BAR	PSI				
6100149924	HOS-4SP-10-A-STM-45545	10	3/8	9.9	17.7	21.0	445	6455	890	1780	180	0.70
6100149926	HOS-4SP-12-A-STM-45545	12	1/2	13.0	20.6	24.2	425	6165	850	1700	230	0.86
6100149930	HOS-4SP-16-A-STM-45545	16	5/8	16.4	24.2	27.9	350	5075	700	1400	250	1.15
6100149931	HOS-4SP-19-A-STM-45545	19	3/4	19.5	28.3	31.9	350	5075	700	1400	300	1.43
6100149932	HOS-4SP-25-A-STM-45545	25	1"	26.0	35.1	39.1	320	4640	640	1280	340	1.88

**STAUFF RAILWAY R4 SAE 100 R4**

**Applications**

Hydraulic system service with petroleum and water based fluids, for general industrial service.

**Construction**

Inner Tube: Synthetic rubber.  
Cover: Synthetic rubber.

**Reinforcement**

One textile braid.

**Temperature Range**

-40°C to +125°C (-40°F to + 257°F)  
Air max +75°C  
Water max +85°C

**Additional Certificates:**

EN45545-2

ORDER CODE	DESCRIPTION	NOMINAL Ø MM	INSIDE Ø MM	OUTSIDE Ø MM	WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	VACUUM BAR	WEIGHT KG/M
					BAR	PSI				
6100225076	HIS-R4-19-R-PN21-STM-45545	19.0	19.0	32.6	21	305	84	40	-0.80	0.83
6100225077	HIS-R4-25-R-PN17-STM-45545	25.0	25.4	38.2	17	247	68	45	-0.80	0.97
6100225078	HIS-R4-31-R-PN14-STM-45545	31.0	32.0	46.0	14	203	56	60	-0.80	1.29
6100225079	HIS-R4-38-R-PN10-STM-45545	38.0	38.0	52.4	10	145	40	65	-0.80	1.65
6100225080	HIS-R4-51-R-PN7-STM-45545	51.0	50.8	66.0	7	102	28	100	-0.80	2.37
6100225081	HIS-R4-63-R-PN4-STM-45545	63.0	63.5	79.1	4	58	16	140	-0.80	2.92
6100225082	HIS-R4-80-R-PN4-STM-45545	80.0	76.2	95.0	4	58	16	180	-0.80	4.18

**STAUFF RAILWAY AIRBRAKE UIC830-1**



**Applications**

For use in railway air brake systems to connect carriages by means of half couplings according to DIN 15807:2011

**Construction**

Inner tube: Synthetic rubber.  
Cover: Fire retardant synthetic rubber.

**Reinforcement**

Four textile cord.

**Temperature Range**

-40°C to +70°C (-104°F to +158°F)

**Additional Certificates:**

EN45545-2  
UIC830-1  
EN 15807:2011

ORDER CODE	DESCRIPTION	NOMINAL Ø MM	INSIDE Ø MM	OUTSIDE Ø MM	WORKING PRESSURE		BURST PRESSURE BAR	BEND RADIUS MM	WEIGHT KG/M
					BAR	PSI			
6100225083	HIS-ABN-13/25-R-PN10-BK-STM-45545	13	13	25	10	145	70	70	0.49
6100225085	HIS-ABN-16/28-R-PN10-BK-STM-45545	16	16	28	10	145	70	90	0.53
6100225086	HIS-ABN-22/36-R-PN10-BK-STM-45545	22	22	36	10	145	70	120	0.87
6100225088	HIS-ABN-28/43-R-PN10-BK-STM-45545	28	28	43	10	145	70	150	1.14
6100225090	HIS-ABN-35/53-R-PN10-BK-STM-45545	35	35	53	10	145	70	170	1.55



R7 ANTIABRASION . . . . .	.110
R7 ANTIABRASION TWIN . . . . .	.111
R7 MARINER.. . . .	.112
R7 NON CONDUCTIVE.. . . .	.113
R8 ANTIABRASION . . . . .	.114
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# 7

## THERMOPLASTIC HOSE

## R7 ANTIABRASION

### Applications

Construction and agricultural equipment – Agricultural brake systems – Forklift Trucks – Articulating and telescopic booms – Aerial platforms – Scissor lifts – Cranes – General hydraulics – Industrial gases.

### Inner Tube

Polyester elastomer.

### Reinforcement

One or two braids of synthetic fibre.

### Cover

Polyurethane, black, pinpricked, white ink-jet branding.

### Features

Lighter, more flexible and more compact than traditional R1 hoses – Bonded construction – Abrasion resistant – Limited change in length – Pinpricked cover.

### Description

Meets or exceeds SAE 100R7 – Medium pressure hose suitable for hydraulic applications with increased resistance to abrasion. For use with petroleum, synthetic or water based hydraulic fluids in hydraulic systems. Suitable for general fluid power transmissions like earthmoving, agricultural machinery and forklift trucks. Also suitable for many industrial gases (check for compatibility). Approved by MSHA - Mine Safety and Health Administration - number IC-305.

### Temperature Range

-40°C to +100°C (-40°F to +212°F), limited to +70°C (+158°F) for air and water based fluids.

### Vacuum Rating

-0.93 bar, -700 mm Hg | -13.5 psi; -27.5 inch Hg

### Specifications

SAE 100R7 / EN855-R7 / ISO3949-R7

### Safety Factor

4:1

Branding on this product:

STAUFF FLEX - TO HYDRAULIC - <PART No> - R7 ANTIABRASION - <NORMATIVE><DASH SIZE> - <INCH SIZE> - <DN SIZE> - WP <WP bar>

bar / <WP psi> psi - MADE IN ITALY - www.stauff.co.uk - <BATCH No>



### Applications



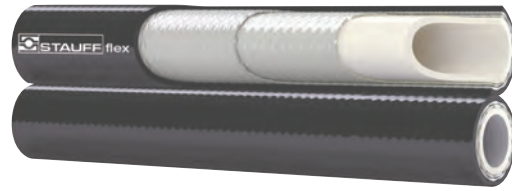
ORDER CODE	DESCRIPTION	ID					OD		WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT	
		DASH	INCH	DN	MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	MM	INCH	G/M	LBS/FT
2020065424	HTS-R7-03-N-PN210-ANB	-2	1/8	DN4	4.00	0.157	8.30	0.327	210	3000	840	12000	25	0.98	52	0.035
2020065425	HTS-R7-05-N-PN210-ANB	-3	3/16	DN5	5.00	0.197	9.60	0.378	210	3000	840	12000	25	0.98	60	0.040
2020000167	HTS-R7-06-N-PN210-ANB	-4	1/4	DN6	6.50	0.256	12.20	0.480	210	3000	840	12000	35	1.38	98	0.066
2020065427	HTS-R7-08-N-PN190-ANB	-5	5/16	DN8	8.10	0.319	14.30	0.563	190	2700	760	10800	45	1.77	130	0.087
2020065428	HTS-R7-10-N-PN160-ANB	-6	3/8	DN10	9.70	0.382	16.00	0.630	160	2300	640	9200	55	2.17	149	0.100
2020065429	HTS-R7-12-N-PN140-ANB	-8	1/2	DN12	13.00	0.512	20.30	0.799	140	2000	560	8000	75	2.95	222	0.149
2020065430	HTS-R7-16-N-PN105-ANB	-10	5/8	DN16	16.30	0.642	23.70	0.933	105	1500	420	6000	110	4.33	278	0.187
2020065431	HTS-R7-19-N-PN95-ANB	-12	3/4	DN20	19.50	0.768	27.10	1.067	90	1300	360	5200	140	5.51	338	0.227
2020065432	HTS-R7-25-N-PN70-ANB	-16	1"	DN25	25.90	1.020	34.00	1.339	70	1000	280	4000	190	7.48	461	0.310

All Thermoplastic Hose available in twin or multi-line version, can be combined with different hose sizes or types.

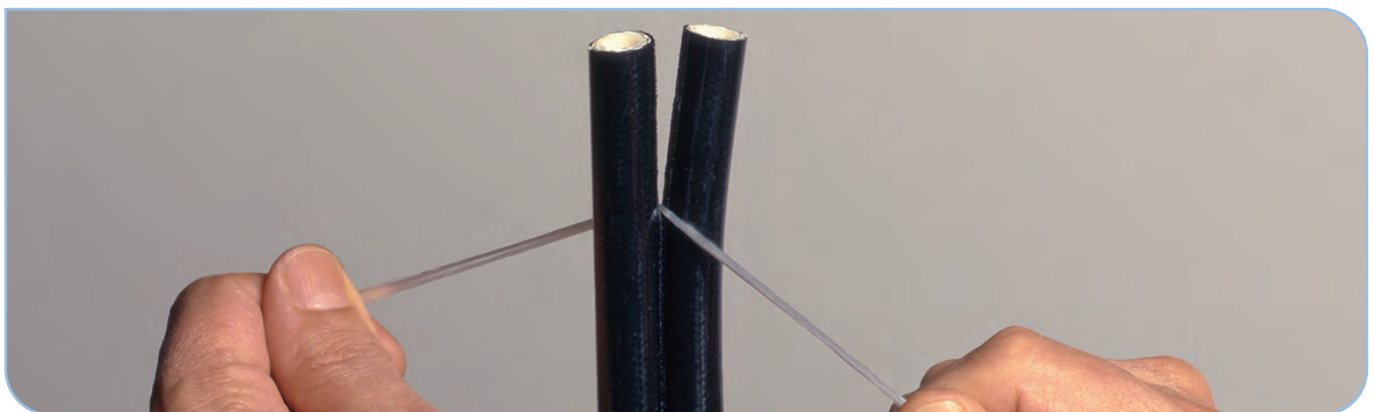
STAUFF Flex thermoplastic hose is compatible with many eco-fluids and biodegradable fluids, including many new ecological hydraulic oils, as used more often in the industry. Although these fluids are positive for the environment thanks to their ecological properties, at the same time they can be extremely aggressive on hoses, especially on traditional rubber hoses.



It is everybody's responsibility to respect our environment. In this way it is important to consider that STAUFF Flex thermoplastic hoses, after their service life, can be recycled as raw material for non engineered products.

**R7 ANTIABRASION TWIN**


ORDER CODE	DESCRIPTION	ID					OD		WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT	
		DASH	INCH	DN	MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	MM	INCH	G/M	LBS/FT
2020065617	HTS-R7-03-N-PN210-ANB-TWN	-2	1/8	DN4	4.00	0.157	8.30	0.327	210	3000	840	12000	25	0.98	97	0.065
2020065618	HTS-R7-05-N-PN210-ANB-TWN	-3	3/16	DN5	5.00	0.197	9.60	0.378	210	3000	840	12000	25	0.98	125	0.084
2020065619	HTS-R7-06-N-PN210-ANB-TWN	-4	1/4	DN6	6.50	0.256	12.20	0.480	210	3000	840	12000	35	1.38	201	0.135
2020065620	HTS-R7-08-N-PN190-ANB-TWN	-5	5/16	DN8	8.10	0.319	14.30	0.563	190	2700	760	10800	45	1.77	265	0.178
2020065642	HTS-R7-10-N-PN160-ANB-TWN	-6	3/8	DN10	9.70	0.382	16.00	0.630	160	2300	640	9200	55	2.17	303	0.204
2020065643	HTS-R7-12-N-PN140-ANB-TWN	-8	1/2	DN12	13.00	0.512	20.30	0.799	140	2000	560	8000	75	2.95	449	0.302
2020065644	HTS-R7-16-N-PN105-ANB-TWN	-10	5/8	DN16	16.30	0.642	23.70	0.933	105	1500	420	6000	110	4.33	561	0.377
2020065645	HTS-R7-19-N-PN95-ANB-TWN	-12	3/4	DN20	19.50	0.768	27.10	1.067	90	1300	360	5200	140	5.51	681	0.458
2020065646	HTS-R7-25-N-PN70-ANB-TWN	-16	1"	DN25	25.90	1.020	34.00	1.339	70	1000	280	4000	190	7.48	927	0.623

**HOW TO SPLIT A TWIN HOSE**

**HOW TO SPLIT A TWIN HOSE**

The picture shows the necessary operation to split the twin hose

- 1 Fasten the hose in a suitable position for splitting.
- 2 Hold a Polyester or Nylon multifilament yarn with both hands.
- 3 Position the yarn at the start of the joined hoses.
- 4 Start splitting the twin hose with an alternating movement taking care the yarn is kept in the middle of the joined hoses.
- 5 Proceed with splitting the joined hose until the desired point has been reached.
- 6 To avoid further separation of the join due to vibrations or other mechanical actions consolidate the hose with a reinforcing strip at the separation point.
- 7 The twin hose is now ready for the assembly operation.

**HOW TO CHECK IF THE SPLIT IS CORRECT**

Immediately after the separation of the hoses, check the cover integrity.

If it has been accidentally cut and reinforcement is exposed it is necessary to eliminate this length of exposed reinforcement.

## R7 MARINER

### Applications

Marine and off-shore equipment – Boats – Cranes – Marine transport systems.

### Inner Tube

Polyester elastomer.

### Reinforcement

One or two braids of synthetic fibre.

### Cover

Polyurethane, black, pinpricked, white ink-jet branding.

### Features

Lightweight – Flexible – Compact – Bonded construction – Abrasion resistant – Pinpricked cover.

### Description

Meets or exceeds SAE 100R7 – Medium pressure hose suitable for petroleum, synthetic or water based hydraulic fluids used in applications requiring increased resistance to seawater and saline environment. Is also recommended for general on-shore equipment working in a high humidity environment.

### Temperature Range

-40°C to +100°C (-40°F to +212°F), limited to +70°C (+158°F) for air and water based fluids.

### Vacuum Rating

-0.93 bar, -700 mm Hg | -13.5 psi; -27.5 inch Hg

### Specifications

SAE 100R7 / EN855-R7 / ISO3949-R7

### Safety Factor

4:1

### Also Available

Other colours.

Branding on this product:

STAUFF FLEX - TO HYDRAULIC - <PART No> - R7 MARINER - <NORMATIVE><DASH SIZE> - <INCH SIZE> - <DN SIZE> - WP

<WP bar> bar / <WP psi> psi - MADE IN ITALY - www.stauff.co.uk - <BATCH No>



### Applications



ORDER CODE	DESCRIPTION	ID				OD MM	WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT G/M
		DASH	INCH	DN	MM		BAR	PSI	BAR	PSI	MM	INCH	
2020065441	HTS-R7-03-N-PN210-MAR	-2	1/8	DN4	4.00	8.30	210	3000	840	12000	25	0.98	45
2020065442	HTS-R7-05-N-PN210-MAR	-3	3/16	DN5	5.00	9.60	210	3000	840	12000	25	0.98	59
2020065443	HTS-R7-06-N-PN210-MAR	-4	1/4	DN6	6.50	12.20	210	3000	840	12000	35	1.38	97
2020065444	HTS-R7-08-N-PN190-MAR	-5	5/16	DN8	8.10	14.30	190	2700	760	10800	45	1.77	128
2020065445	HTS-R7-10-N-PN160-MAR	-6	3/8	DN10	9.70	16.00	160	2300	640	9200	55	2.17	146
2020065446	HTS-R7-12-N-PN140-MAR	-8	1/2	DN12	13.00	20.30	140	2000	560	8000	75	2.95	218
2020065447	HTS-R7-16-N-PN105-MAR	-10	5/8	DN16	16.30	23.70	105	1500	420	6000	110	4.33	274
2020065448	HTS-R7-19-N-PN95-MAR	-12	3/4	DN20	19.50	27.10	90	1300	360	5200	140	5.51	333
2020065449	HTS-R7-25-N-PN70-MAR	-16	1"	DN25	25.90	34.00	70	1000	280	4000	190	7.48	453

All Thermoplastic Hose available in twin or multi-line version, can be combined with different hose sizes or types.

STAUFF Flex thermoplastic hose is compatible with many eco-fluids and biodegradable fluids, including many new ecological hydraulic oils, as used more often in the industry. Although these fluids are positive for the environment thanks to their ecological properties, at the same time they can be extremely aggressive on hoses, especially on traditional rubber hoses.



It is everybody's responsibility to respect our environment. In this way it is important to consider that STAUFF Flex thermoplastic hoses, after their service life, can be recycled as raw material for non engineered products.



## R7 NON CONDUCTIVE

### Applications

High voltage equipment – Safety and rescue equipment – Aerial platforms – Cranes – Equipment requiring electrical high insulation.

### Inner Tube

Polyester elastomer.

### Reinforcement

One or two braids of synthetic fibre.

### Cover

Polyurethane, orange, non pinpricked, black ink-jet branding.

### Features

Lightweight – Flexible – Compact – Orange cover – Non pinpricked – Bonded construction – Abrasion resistant.

### Description

Meets or exceeds SAE 100R7 – Medium pressure hose suitable for petroleum or synthetic based hydraulic fluids used in hydraulic applications requiring electrical high insulation or non-conductivity in a high tension environment e.g. near electrical power lines. Approved by MSHA - Mine Safety and Health Administration - number IC-305.

### Temperature Range

-40°C to +100°C (-40°F to +212°F), limited to +70°C (+158°F) for water based fluids.

### Vacuum Rating

-0.93 bar, -700 mm Hg | -13.5 psi; -27.5 inch Hg

### Specifications

SAE 100R7 / EN855-R7 / ISO3949-R7

Hoses meet standards SAE J517/J343 and EN855 for non conductivity where maximum electrical leakage shall not exceed 50A when a 152mm sample is subject to 37.5 KV for 5 minutes equivalent to 250 KV/metre.

### Safety Factor

4:1

Branding on this product:

**STAUFF FLEX - TO HYDRAULIC - <PART No> - R7 NON CONDUCTIVE - <NORMATIVE><DASH SIZE> - <INCH SIZE> - <DN SIZE> - WP**

**<WP bar> bar / <WP psi> psi - MADE IN ITALY - www.stauff.co.uk - <BATCH No>**



### Applications



ORDER CODE	DESCRIPTION	ID				OD MM	WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT G/M
		DASH	INCH	DN	MM		BAR	PSI	BAR	PSI	MM	INCH	
2020065433	HTS-R7-05-N-PN210-NCO	-3	3/16	DN5	5.00	9.60	210	3000	840	12000	25	0.98	60
2020065434	HTS-R7-06-N-PN210-NCO	-4	1/4	DN6	6.50	12.20	210	3000	840	12000	35	1.38	100
2020065435	HTS-R7-08-N-PN190-NCO	-5	5/16	DN8	8.10	14.30	190	2700	760	10800	45	1.77	130
2020032057	HTS-R7-10-N-PN160-NCO	-6	3/8	DN10	9.70	16.00	160	2300	640	9200	55	2.17	150
2020065437	HTS-R7-12-N-PN140-NCO	-8	1/2	DN12	13.00	20.30	140	2000	560	8000	75	2.95	220
2020065438	HTS-R7-16-N-PN105-NCO	-10	5/8	DN16	16.30	23.70	105	1500	420	6000	110	4.33	280
2020065439	HTS-R7-19-N-PN95-NCO	-12	3/4	DN20	19.50	27.10	90	1300	360	5200	140	5.51	335
2020065440	HTS-R7-25-N-PN70-NCO	-16	1"	DN25	25.90	34.00	70	1000	280	4000	190	7.48	455

All Thermoplastic Hose available in twin or multi-line version, can be combined with different hose sizes or types.

STAUFF Flex thermoplastic hose is compatible with many eco-fluids and biodegradable fluids, including many new ecological hydraulic oils, as used more often in the industry. Although these fluids are positive for the environment thanks to their ecological properties, at the same time they can be extremely aggressive on hoses, especially on traditional rubber hoses.



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## R8 ANTIABRASION

### Applications

Construction and agricultural equipment – Forklift trucks – Articulating and telescopic booms – Aerial platforms – Safety and rescue equipment – Scissor lifts – Cranes – General hydraulics – Industrial gases.

### Inner Tube

Polyester elastomer.

### Reinforcement

One or two braids of aramid fibre.

### Cover

Polyurethane, black, pinpricked, white ink-jet branding.

### Features

Aramid reinforcement for high pressure performance– Compact and lightweight – Bonded construction – Abrasion resistant – Extremely low change in length – Pinpricked cover.

### Description

Meets or exceeds SAE 100R8 – Compact high pressure hose suitable for hydraulic applications with increased resistance to abrasion and very low expansion. For use with petroleum, synthetic or water based hydraulic fluids in hydraulic systems. Suitable for general fluid power transmissions like earthmoving, agricultural machinery, forklifts, trucks and other high pressure equipment. Also suitable for many industrial gases (check for compatibility). Approved by MSHA - Mine Safety and Health Administration - number IC-305.

### Temperature Range

-40°C to +100°C (-40°F to +212°F), limited to +70°C (+158°F) for air and water based fluids.

### Vacuum Rating

Rating -0.93 bar; -700 mm Hgl-13.5 psi; -27.5 inch Hg

### Specifications

SAE 100R8 / EN855-R8 / ISO3949-R8

### Safety Factor

4:1

Branding on this product:

**STAUFF FLEX - TO HYDRAULIC - <PART No> - R8 ANTIABRASION - <NORMATIVE><DASH SIZE> - <INCH SIZE> - <DN SIZE> - WP**

**<WP bar> bar / <WP psi> psi - MADE IN ITALY - www.stauff.co.uk - <BATCH No>**



### Applications



ORDER CODE	DESCRIPTION	ID			OD		WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT			
		DASH	INCH	DN	MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	MM	INCH	G/M	LBS/FT
2020065492	HTS-R8-03-N-PN420-ANB	-2	1/8	DN4	4.00	0.157	8.00	0.315	420	6000	1680	24000	25	0.98	45	0.030
2020065493	HTS-R8-05-N-PN350-ANB	-3	3/16	DN5	5.00	0.197	8.90	0.350	350	5000	1400	20000	30	1.18	52	0.035
2020065494	HTS-R8-06-N-PN350-ANB	-4	1/4	DN6	6.50	0.256	11.50	0.453	350	5000	1400	20000	50	1.97	84	0.056
2020065495	HTS-R8-08-N-PN300-ANB	-5	5/16	DN8	8.10	0.319	13.40	0.528	300	4300	1200	17200	55	2.17	106	0.071
2020065496	HTS-R8-10-N-PN280-ANB	-6	3/8	DN10	9.70	0.382	15.50	0.610	280	4000	1120	16000	60	2.36	136	0.091
2020065497	HTS-R8-12-N-PN245-ANB	-8	1/2	DN12	13.00	0.512	19.90	0.783	245	3500	980	14000	80	3.15	208	0.140
2020065498	HTS-R8-16-N-PN200-ANB	-10	5/8	DN16	16.30	0.642	23.40	0.921	200	2900	800	11600	125	4.92	251	0.169
2020065499	HTS-R8-19-N-PN160-ANB	-12	3/4	DN20	19.50	0.768	27.10	1.059	165	2300	660	9200	150	5.91	323	0.217
2020065500	HTS-R8-25-N-PN140-ANB	-16	1"	DN25	25.90	1.020	34.20	1.346	140	2000	560	8000	200	7.87	443	0.298

All Thermoplastic Hose available in twin or multi-line version, can be combined with different hose sizes or types.

STAUFF Flex thermoplastic hose is compatible with many eco-fluids and biodegradable fluids, including many new ecological hydraulic oils, as used more often in the industry. Although these fluids are positive for the environment thanks to their ecological properties, at the same time they can be extremely aggressive on hoses, especially on traditional rubber hoses.



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## R8 MARINER

### Applications

Marine and off-shore equipment – Boats – Cranes – Marine transport systems.

### Inner Tube

Polyester elastomer.

### Reinforcement

One or two braids of aramid fibre.

### Cover

Polyurethane, black, pinpricked, white ink-jet branding.

### Features

Aramid reinforcement for high pressure performance – Lightweight – Flexible – Compact – Bonded construction – Abrasion resistant – Pinpricked cover.

### Description

Meets or exceeds SAE 100R8 – High pressure hose suitable for petroleum, synthetic or water based hydraulic fluids used in applications requiring increased resistance to seawater and saline environment. Also recommended for general on-shore equipment working in high humidity environment.

### Temperature Range

-40°C to +100°C (-40°F to +212°F), limited to +70°C (+158°F) for air and water based fluids.

### Vacuum Rating

Rating -0.93 bar; -700 mm Hg|-13.5 psi; -27.5 inch Hg

### Specifications

SAE 100 R8 / EN 855-R8 / ISO 3949 R8

### Safety Factor

4:1



### Applications



Branding on this product:

**STAUFF FLEX - TO HYDRAULIC - <PART No> - R8 MARINER - <NORMATIVE><DASH SIZE> - <INCH SIZE> - <DN SIZE> - WP**

**<WP bar> bar / <WP psi> psi - MADE IN ITALY - www.stauff.co.uk - <BATCH No>**

ORDER CODE	DESCRIPTION	ID					OD		WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT	
		DASH	INCH	DN	MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	MM	INCH	G/M	LBS/FT
2020065509	HTS-R8-03-N-PN420-MAR	-2	1/8	DN4	4.00	0.157	8.00	0.315	420	6000	1680	24000	25	0.98	44	0.029
2020065510	HTS-R8-05-N-PN350-MAR	-3	3/16	DN5	5.00	0.197	8.90	0.350	350	5000	1400	20000	30	1.18	51	0.034
2020065511	HTS-R8-06-N-PN350-MAR	-4	1/4	DN6	6.50	0.256	11.50	0.453	350	5000	1400	20000	50	1.97	82	0.055
2020065512	HTS-R8-08-N-PN300-MAR	-5	5/16	DN8	8.10	0.319	13.40	0.528	300	4300	1200	17200	55	2.17	102	0.069
2020065513	HTS-R8-10-N-PN280-MAR	-6	3/8	DN10	9.70	0.382	15.50	0.610	280	4000	1120	16000	60	2.36	131	0.088
2020065514	HTS-R8-12-N-PN245-MAR	-8	1/2	DN12	13.00	0.512	19.90	0.783	245	3500	980	14000	80	3.15	201	0.135
2020065515	HTS-R8-16-N-PN200-MAR	-10	5/8	DN16	16.30	0.642	23.40	0.921	200	2900	800	11600	125	4.92	245	0.165
2020065516	HTS-R8-19-N-PN160-MAR	-12	3/4	DN20	19.50	0.768	27.10	1.059	165	2300	660	9200	150	5.91	317	0.213
2020065517	HTS-R8-25-N-PN140-MAR	-16	1"	DN25	25.90	1.020	34.20	1.346	140	2000	560	8000	200	7.87	439	0.295

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## R8 NON CONDUCTIVE

### Applications

High voltage equipment – Safety and rescue equipment – Aerial platforms – Cranes – Equipment requiring electrical high insulation.

### Inner Tube

Polyester elastomer.

### Reinforcement

One or two braids of aramid fibre.

### Cover

Polyurethane, orange, non pinpricked, black ink-jet branding.

### Features

Aramid reinforcement for high pressure performance – Lightweight – Flexible – Compact – Bonded construction – Orange cover – Non pinpricked – Abrasion resistant.

### Description

Meets or exceeds SAE 100R8 – High pressure hose suitable for petroleum or synthetic based hydraulic fluids used in hydraulic applications requiring electrical high insulation or non-conductivity in high tension environment e.g. near electrical power lines. Approved by MSHA Mine Safety and Health Administration - number IC-305.

### Temperature Range

-40°C to +100°C (-40°F to +212°F), limited to +70°C (+158°F) for water based fluids.

### Vacuum Rating

Rating -0.93 bar; -700 mm Hgl-13.5 psi; -27.5 inch Hg

### Specifications

SAE 100R8 / EN855-R8 / ISO3949-R8

Hoses meet standards SAE J517/J343 and EN855 for non conductivity where maximum electrical leakage shall not exceed 50A when a 152 mm sample is subject to 37.5 KV for 5 minutes equivalent to 250 KV/meter.

### Safety Factor

4:1

Branding on this product:

STAUFF FLEX - TO HYDRAULIC - <PART No> - R8 NON CONDUCTIVE - <NORMATIVE><DASH SIZE> - <INCH SIZE> - <DN SIZE> - WP

<WP bar> bar / <WP psi> psi - MADE IN ITALY - www.stauff.co.uk - <BATCH No>



### Applications



ORDER CODE	DESCRIPTION	ID				OD MM	WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT G/M
		DASH	INCH	DN	MM		BAR	PSI	BAR	PSI	MM	INCH	
2020065501	HTS-R8-05-N-PN350-NCO	-3	3/16	DN5	5.00	8.90	350	5000	1400	20000	30	1.18	52
2020064031	HTS-R8-06-N-PN350-NCO	-4	1/4	DN6	6.50	11.50	350	5000	1400	20000	50	1.97	84
2020065503	HTS-R8-08-N-PN300-NCO	-5	5/16	DN8	8.10	13.40	300	4300	1200	17200	55	2.17	106
2020065504	HTS-R8-10-N-PN280-NCO	-6	3/8	DN10	9.70	15.50	280	4000	1120	16000	60	2.36	136
2020065505	HTS-R8-12-N-PN245-NCO	-8	1/2	DN12	13.00	19.90	245	3500	980	14000	80	3.15	208
2020065506	HTS-R8-16-N-PN200-NCO	-10	5/8	DN16	16.30	23.40	200	2900	800	11600	125	4.92	251
2020065507	HTS-R8-19-N-PN160-NCO	-12	3/4	DN20	19.50	27.10	165	2300	660	9200	150	5.91	324
2020065508	HTS-R8-25-N-PN140-NCO	-16	1"	DN25	25.90	34.20	140	2000	560	8000	200	7.87	443

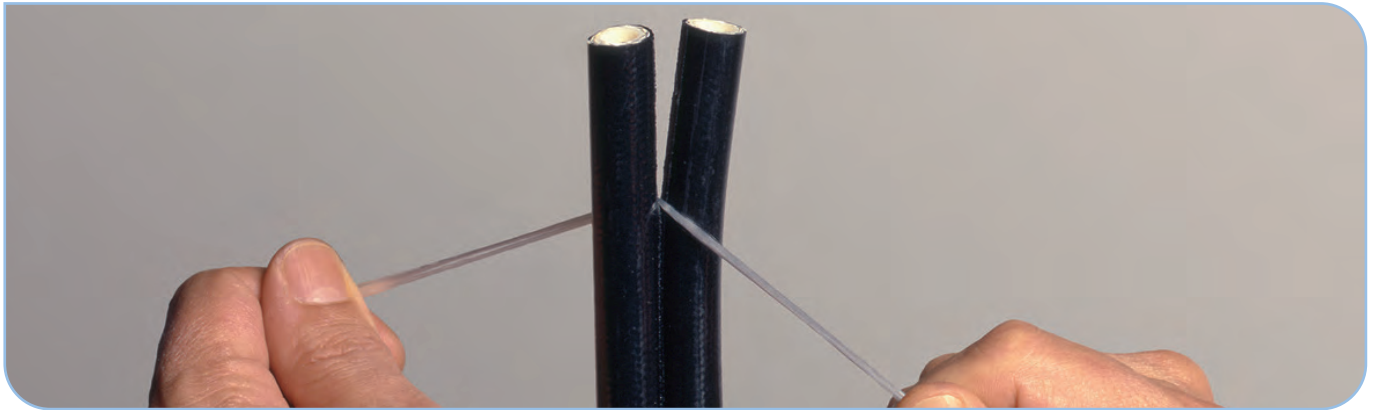
All Thermoplastic Hose available in twin or multi-line version, can be combined with different hose sizes or types.

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## HOW TO SPLIT A TWIN HOSE



### HOW TO SPLIT A TWIN HOSE

The picture shows the necessary operation to split the twin hose

- 1 Fasten the hose in a suitable position for splitting.
- 2 Hold a Polyester or Nylon multifilament yarn with both hands.
- 3 Position the yarn at the start of the joined hoses.
- 4 Start splitting the twin hose with an alternating movement taking care the yarn is kept in the middle of the joined hoses.
- 5 Proceed with splitting the joined hose until the desired point has been reached.
- 6 To avoid further separation of the join due to vibrations or other mechanical actions consolidate the hose with a reinforcing strip at the separation point.
- 7 The twin hose is now ready for the assembly operation.

### HOW TO CHECK IF THE SPLIT IS CORRECT

Immediately after the separation of the hoses, check the cover integrity.

If it has been accidentally cut and reinforcement is exposed it is necessary to eliminate this length of exposed reinforcement.

## 1SB - STEEL BRAID ANTIABRASION

### Applications

General hydraulic applications requiring additional mechanical protection: construction and agricultural equipment, agricultural brake systems, hoisting and handling application, industrial machines.

### Inner Tube

Polyester elastomer.

### Reinforcement

One braid of steel wire.

### Cover

Polyurethane, black, non pinpricked, white ink-jet branding.

### Features

Slimline construction for compact installation and flexibility – Lightweight – Steel braid offers low volumetric expansion and optimum change in length characteristics – Abrasion resistant – Non pinpricked cover.

### Description

Meets or exceeds pressure specifications of UNI EN 853 1ST, EN 853 1SN and EN 857 1SC – High pressure hose suitable for petroleum, synthetic or water based hydraulic fluids in hydraulic systems. Suitable for general fluid power transmissions like earthmoving, agricultural machinery, forklifts trucks and other high pressure equipment. Thermoplastic hose approved by MSHA - Mine Safety and Health Administration - number IC-305 with steel reinforcement for hydraulic applications from 95 to 360 bar (1300 to 5200 psi).

### Temperature Range

-40°C to +100°C (-40°F to +212°F), limited to +70°C (+158°F) for air and water based fluids.

### Vacuum Rating

Rating -0.93 bar; -700 mm Hgl-13.5 psi; -27.5 inch Hg

### Specifications

SAE 100 R1 meets or exceeds pressure specification of EN 853 1SN and EN 857 1SC.

### Safety Factor

4:1

Branding on this product:

**STAUFF FLEX - TO HYDRAULIC - <PART No> - 1SB - STEEL BRAID ANTIABRASION - <INCH SIZE> - <DN SIZE> - WP**

**<WP bar> bar / <WP psi> psi - MADE IN ITALY - www.stauff.co.uk - <BATCH No>**



### Applications



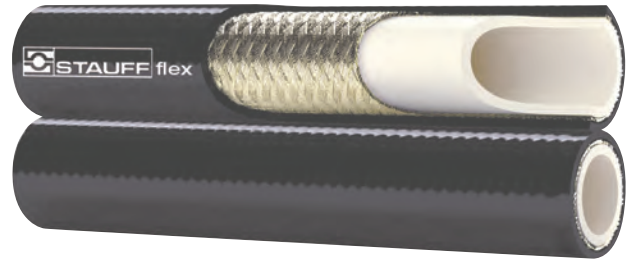
ORDER CODE	DESCRIPTION	ID			OD		WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT			
		DASH	INCH	DN	MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	MM	INCH	G/M	LBS/FT
2020035477	HTS-1SB-05-N-PN360-ANB	-3	3/16	DN5	5.00	0.197	9.70	0.382	360	5200	1440	20800	30	1.18	128	0.086
2020065536	HTS-1SB-06-N-PN310-ANB	-4	1/4	DN6	6.50	0.252	11.70	0.457	310	4500	1241	18000	40	1.57	164	0.110
2020065537	HTS-1SB-08-N-PN250-ANB	-5	5/16	DN8	8.10	0.319	13.20	0.520	250	3600	1000	14400	55	2.17	198	0.133
2020065538	HTS-1SB-10-N-PN225-ANB	-6	3/8	DN10	9.80	0.386	15.50	0.610	225	3200	900	12800	65	2.56	245	0.165
2020065539	HTS-1SB-12-N-PN190-ANB	-8	1/2	DN12	13.00	0.512	18.80	0.740	190	2700	760	10800	85	3.35	312	0.210
2020065540	HTS-1SB-16-N-PN140-ANB	-10	5/8	DN16	16.30	0.642	22.00	0.866	140	2000	560	8000	115	4.53	334	0.224
2020065541	HTS-1SB-19-N-PN115-ANB	-12	3/4	DN20	19.50	0.768	25.80	1.016	115	1600	460	6400	145	5.71	480	0.323
2020065542	HTS-1SB-25-N-PN95-ANB	-16	1"	DN25	25.80	1.016	33.40	1.299	95	1300	380	5200	180	7.09	655	0.440

All Thermoplastic Hose available in twin or multi-line version, can be combined with different hose sizes or types.

STAUFF Flex thermoplastic hose is compatible with many eco-fluids and biodegradable fluids, including many new ecological hydraulic oils, as used more often in the industry. Although these fluids are positive for the environment thanks to their ecological properties, at the same time they can be extremely aggressive on hoses, especially on traditional rubber hoses.



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**1SB - STEEL BRAID ANTIABRASION TWIN**


ORDER CODE	DESCRIPTION	ID					OD		WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT	
		DASH	INCH	DN	MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	MM	INCH	G/M	LBS/FT
2020065629	HTS-1SB-05-N-PN360-ANB-TWN	-3	3/16	DN5	5.00	0.197	9.70	0.382	360	5200	1440	20800	30	1.18	261	0.175
2020065630	HTS-1SB-06-N-PN310-ANB-TWN	-4	1/4	DN6	6.50	0.252	11.70	0.457	310	4500	1240	17600	40	1.57	333	0.224
2020065631	HTS-1SB-08-N-PN250-ANB-TWN	-5	5/16	DN8	8.10	0.319	13.20	0.520	250	3600	1000	14400	55	2.17	401	0.269
2020065633	HTS-1SB-10-N-PN225-ANB-TWN	-6	3/8	DN10	9.80	0.386	15.50	0.610	225	3200	900	12800	65	2.56	483	0.325
2020065634	HTS-1SB-12-N-PN190-ANB-TWN	-8	1/2	DN12	13.00	0.512	18.80	0.740	190	2700	760	10800	85	3.35	629	0.423
2020065635	HTS-1SB-16-N-PN140-ANB-TWN	-10	5/8	DN16	16.30	0.642	22.00	0.866	140	2000	560	8000	115	4.53	673	0.452
2020065636	HTS-1SB-19-N-PN115-ANB-TWN	-12	3/4	DN20	19.50	0.768	25.80	1.016	115	1600	460	6400	145	5.71	965	0.648
2020065637	HTS-1SB-25-N-PN95-ANB-TWN	-16	1"	DN25	25.80	1.016	33.40	1.299	95	1300	380	5200	180	7.09	1315	0.884

## 2SB - TWO STEEL BRAIDS ANTIABRASION

### Applications

General hydraulic applications requiring high mechanical protection properties of hose and braid, combined with high pressure: construction equipment, hoisting and handling equipments, machine tools.

### Inner Tube

Polyester elastomer.

### Reinforcement

Two braids of steel wire.

### Cover

Polyurethane, black, non pinpricked, white ink-jet branding.

### Features

Rugged construction for HD application and prolonged lifetime – Two steel braid offers low volumetric expansion and optimum change in length characteristics – Abrasion resistant.

### Description

High pressure hose suitable for petroleum, synthetic or water based hydraulic fluids in hydraulic systems. Suitable for general fluid power transmissions like earthmoving, forklifts trucks, HD construction machinery, hoisting and handling equipment, high pressure equipment. Also suitable for many industrial gases (check for compatibility). Thermoplastic hose approved by MSHA - Mine Safety and Health Administration - number IC-305. With double steel reinforcement for high pressure hydraulic applications from 150 to 400 bar (2100 to 5800 psi).

### Temperature Range

-40°C to +100°C (-40°F to +212°F), limited to +70°C (+158°F) for air and water based fluids.

### Vacuum Rating

Rating -0.93 bar; -700 mm Hg/-13.5 psi; -27.5 inch Hg

### Specifications

Meets the pressure performance requirements of SAE 100 R2.

### Safety Factor

4:1

Branding on this product:

STAUFF FLEX - TO HYDRAULIC - <PART No> - 2SB - TWO STEEL BRAIDS ANTIABRASION - <INCH SIZE> - <DN SIZE> - WP

<WP bar> bar / <WP psi> psi - MADE IN ITALY - www.stauff.co.uk - <BATCH No>



### Applications



ORDER CODE	DESCRIPTION	ID						OD		WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT	
		DASH	INCH	DN	MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	MM	INCH	G/M	LBS/FT	
2020065556	HTS-2SB-06-N-PN400-ANB	-4	1/4	DN6	6.40	0.252	12.80	0.504	400	5800	1600	23200	40	1.57	248	0.165	
6100212213	HTS-2SB-08-N-PN400-ANB	-5	5/16	DN8	8.10	0.319	14.8	0.583	400	5800	1600	23200	50	1.97	312	0.210	
2020065557	HTS-2SB-10-N-PN330-ANB	-6	3/8	DN10	9.80	0.386	16.80	0.661	330	4700	1320	18800	65	2.56	375	0.252	
2020065558	HTS-2SB-12-N-PN260-ANB	-8	1/2	DN12	13.00	0.512	20.20	0.795	260	3700	1040	14800	85	3.35	474	0.319	
2020065559	HTS-2SB-16-N-PN220-ANB	-10	5/8	DN16	16.30	0.642	23.70	0.933	220	3100	880	12400	115	4.53	561	0.377	
2020065560	HTS-2SB-19-N-PN150-ANB	-12	3/4	DN20	19.50	0.768	27.80	1.094	150	2100	600	8400	170	6.69	717	0.482	

All Thermoplastic Hose available in twin or multi-line version, can be combined with different hose sizes or types.

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**2SB - TWO STEEL BRAIDS ANTIABRASION TWIN**


ORDER CODE	DESCRIPTION	ID					OD		WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT	
		DASH	INCH	DN	MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	MM	INCH	G/M	LBS/FT
2020065638	HTS-2SB-06-N-PN400-ANB-TWN	-4	1/4	DN6	6.40	0.252	12.80	0.504	400	5800	1600	23200	40	1.57	501	0.337
2020065639	HTS-2SB-10-N-PN330-ANB-TWN	-6	3/8	DN10	9.80	0.386	16.80	0.661	330	4700	1320	18800	65	2.56	755	0.507
2020065640	HTS-2SB-12-N-PN260-ANB-TWN	-8	1/2	DN12	13.00	0.512	20.20	0.795	260	3700	1040	14800	85	3.35	953	0.640
2020065641	HTS-2SB-16-N-PN220-ANB-TWN	-10	5/8	DN16	16.30	0.642	23.50	0.925	220	3100	880	12400	115	4.53	1133	0.761
2020065648	HTS-2SB-19-N-PN150-ANB-TWN	-12	3/4	DN20	19.50	0.768	27.50	1.083	150	2100	600	8400	170	6.69	1429	0.967

## R18 CPLT 3000

### Applications

Forklift handling – All industrial and agricultural applications exposed to low temperatures or cyclic and quick temperature changes.

### Inner Tube

Polyester elastomer.

### Reinforcement

One or two braids of synthetic fibre.

### Cover

Special polyester, black, pinpricked, white ink-jet branding.

### Features

2 polyester braid construction from ¼"-DN6 onwards – Optimum bonding between tube, braids and cover – Special polyester cover resistant to low temperatures and meteorological harsh conditions – Tight bend radii without cover wrinkling.

### Description

Meets or exceeds SAE 100R18 specifications – Medium pressure hose suitable for petroleum or synthetic based hydraulic fluids in hydraulic systems of forklifts. Optimum bonding characteristics and special cover also make it the ideal hose for equipment operating in cold environments, while maintaining a high level of flexibility.

### Temperature Range

-55°C to +100°C (-67°F to +212°F), limited to +70°C (+158°F) for air and water based fluids.

### Vacuum Rating

Rating -0.93 bar; -700 mm Hg/-13.5 psi; -27.5 inch Hg

### Specifications

SAE 100 R18 / ISO3949-R18.

### Safety Factor

4:1



### Applications



Branding on this product:

STAUFF FLEX - TO HYDRAULIC - <PART No> - R18 CPLT 3000 - CONSTANT PRESSURE LOW TEMP - <NORMATIVE><DASH SIZE> - <INCH SIZE> - <DN SIZE> - WP

<WP bar> bar / <WP psi> psi - MADE IN ITALY - www.stauff.co.uk - <BATCH No>

ORDER CODE	DESCRIPTION	ID					OD		WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT	
		DASH	INCH	DN	MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	MM	INCH	G/M	LBS/FT
2020065561	HTS-R18LT-05-N-PN210	-3	3/16	DN5	5.00	0.197	9.6	0.378	210	3000	840	12000	25	0.98	60	0.040
2020065562	HTS-R18LT-06-N-PN210	-4	1/4	DN6	6.50	0.256	12.2	0.480	210	3000	840	12000	35	1.38	98	0.066
2020065563	HTS-R18LT-08-N-PN210	-5	5/16	DN8	8.10	0.319	14.3	0.563	210	3000	840	12000	45	1.77	129	0.087
2020065564	HTS-R18LT-10-N-PN210	-6	3/8	DN10	9.70	0.382	16.6	0.654	210	3000	840	12000	45	1.77	166	0.112
2020065565	HTS-R18LT-12-N-PN210	-8	1/2	DN12	13.00	0.512	22.5	0.886	210	3000	840	12000	70	2.76	293	0.197
2020065566	HTS-R18LT-16-N-PN210	-10	5/8	DN16	16.30	0.642	26.1	1.028	210	3000	840	12000	100	3.94	372	0.250

All Thermoplastic Hose available in twin or multi-line version, can be combined with different hose sizes or types.

STAUFF Flex thermoplastic hose is compatible with many eco-fluids and biodegradable fluids, including many new ecological hydraulic oils, as used more often in the industry. Although these fluids are positive for the environment thanks to their ecological properties, at the same time they can be extremely aggressive on hoses, especially on traditional rubber hoses.



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## R18 CPLT 3000 NON CONDUCTIVE

### Applications

High voltage equipment – Aerial platforms – All industrial and hydraulic applications exposed to low temperatures or cyclic and quick temperature changes.

### Inner Tube

Polyester elastomer.

### Reinforcement

One or two braids of synthetic fibre.

### Cover

Special polyester, orange, non pinpricked, black ink-jet branding.

### Features

2 polyester braid construction from 1/4"-DN6 onwards – Optimum bonding between tube, braids and cover – Special polyester cover resistant to low temperatures and meteorological harsh conditions – Tight bend radii without cover wrinkling.

### Description

Meets or exceeds SAE 100R18 specifications – Medium pressure hose suitable for petroleum or synthetic based hydraulic fluids in hydraulic systems requiring electrical high insulation or non-conductivity in high tension environment. Optimum bonding characteristics and special cover also make it the ideal hose for equipment operating in cold environments, while maintaining a high level of flexibility.

### Temperature Range

-55°C to +100°C (-67°F to +212°F), limited to +70°C (+158°F) for water based fluids.

### Vacuum Rating

Rating -0.93 bar; -700 mm Hg/-13.5 psi; -27.5 inch Hg

### Specifications

SAE 100 R18 / ISO3949-R18. Hoses meet standards SAE J517/J343 and EN855 for non conductivity where maximum electrical leakage shall not exceed 50A when a 152mm sample is subject to 37.5 KV for 5 minutes equivalent to 250 KV/metre.

### Safety Factor

4:1

Branding on this product:

**STAUFF FLEX - TO HYDRAULIC - <PART No> - R18 CPLT 3000 NC - CONSTANT PRESSURE LOW TEMP NON CONDUCTIVE - <NORMATIVE><DASH SIZE>**

**- <INCH SIZE> - <DN SIZE> - WP<WP bar> bar / <WP psi> psi - MADE IN ITALY - www.stauff.co.uk - <BATCH No>**



### Applications



ORDER CODE	DESCRIPTION	ID					OD		WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT	
		DASH	INCH	DN	MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	MM	INCH	G/M	LBS/FT
2020065567	HTS-R18LT-05-N-PN210-NCO	-3	3/16	DN5	5.00	0.197	9.60	0.378	210	3000	840	12000	25	0.98	60	0.040
2020065568	HTS-R18LT-06-N-PN210-NCO	-4	1/4	DN6	6.50	0.256	12.20	0.480	210	3000	840	12000	35	1.38	98	0.066
2020065569	HTS-R18LT-08-N-PN210-NCO	-5	5/16	DN8	8.10	0.319	14.30	0.563	210	3000	840	12000	45	1.77	129	0.087
2020065570	HTS-R18LT-10-N-PN210-NCO	-6	3/8	DN10	9.70	0.382	16.60	0.654	210	3000	840	12000	45	1.77	166	0.112
2020065571	HTS-R18LT-12-N-PN210-NCO	-8	1/2	DN12	13.00	0.512	22.50	0.886	210	3000	840	12000	70	2.76	293	0.197
2020065572	HTS-R18LT-16-N-PN210-NCO	-10	5/8	DN16	16.30	0.642	26.10	1.028	210	3000	840	12000	100	3.94	371	0.249

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## VHP 10000

### Applications

Rescue and safety equipment – High pressure systems and pumps – Bolt tensioning tools – Jacking and rerailling equipment.

### Inner Tube

Polyester elastomer.

### Reinforcement

One or two braids of aramid fibre plus one braid of steel wire.

### Cover

Polyurethane, black, non pinpricked, white ink-jet branding.

### Features

Combined Aramid + Steel braid construction for compact design – Lightweight and flexible – Light bend radii for use on hose reels and in tight environments – Antiabrasion cover.

### Description

Exceeds the American Jacking Specifications IJ100 – Very High Pressure hose suitable for petroleum, synthetic or water based hydraulic fluids in hydraulic systems. Combined Aramid + Steel braid ensures longevity, pressure performance and compact design. Approved by MSHA - Mine Safety and Health Administration - number IC-305.

### Temperature Range

-40°C to +100°C (-40°F to +212°F), limited to +70°C (+158°F) for air and water based fluids.

### Vacuum Rating

Rating -0.93 bar; -700 mm Hg/-13.5 psi; -27.5 inch Hg

### Safety Factor

4:1

Branding on this product:

**STAUFF FLEX - TO HYDRAULIC - <PART No> - VHP 10000 - <INCH SIZE> - <DN SIZE> - WP <WP bar> bar /**

**<WP psi> psi - MADE IN ITALY - www.stauff.co.uk - <BATCH No>**



Other colours available



Applications



ORDER CODE	DESCRIPTION	ID						OD		WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT	
		DASH	INCH	DN	MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	MM	INCH	G/M	LBS/FT	
2020052862	HTS-VHP-06-N-PN700	-4	1/4	DN6	6.60	0.260	12.70	0.500	700	10000	2800	40000	35	1.38	179	0.120	
2020031735	HTS-VHP-10-N-PN700	-6	3/8	DN10	9.80	0.386	18.9	0.744	700	10000	2800	40000	90	3.54	329	0.221	

**VHP 10000 TWIN**


ORDER CODE	DESCRIPTION	ID					OD		WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT	
		DASH	INCH	DN	MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	MM	INCH	G/M	LBS/FT
2020065649	HTS-VHP-06-N-PN700-TWN	-4	1/4	DN6	6.60	0.260	12.70	0.500	700	10000	2800	40000	35	1.38	367	0.247
2020065632	HTS-VHP-10-N-PN700-TWN	-6	3/8	DN10	9.80	0.386	18.9	0.736	700	10000	2800	40000	90	3.54	663	0.446



**DUE TO SAFETY REGULATIONS THIS PRODUCT IS ONLY SOLD AS AN ASSEMBLY  
PLEASE CONTACT SALES OFFICE FOR DETAILS**

All Thermoplastic Hose available in twin or multi-line version, can be combined with different hose sizes or types.

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## ECOLOGY 200 HD

### Applications

Standard sewer cleaning vehicles and applications – Cleaning equipment used in high humidity environments.

### Inner Tube

Thermoplastic polymer.

### Reinforcement

One or two braids of synthetic fibre plus one special extra braid of synthetic fibre for cover integration.

### Cover

Polyurethane, blue, non pinpricked, black ink-jet branding.

### Features

Blue cover, impregnated into braid reinforcement for optimum wear resistance and longevity – Available on long lengths – Excellent crush and cut resistance – Lightweight compared to rubber alternatives – Cover resistant against micro-biological attack – Reduced bend radius – Fast operating speeds.

### Description

Extremely wear resistant, heavy duty sewer cleaning hose, suitable for temperatures ranging from -40°C to +60°C (-40°F to +140°F). Hose specifically designed for working in humid conditions without degrading, ensuring increased lifetime. Available with BSP and / or NPT fitting combinations. Other end terminations upon request. Not suitable for hydraulic applications. Factory made assemblies only, please contact our sales office for further details.

### Safety Factor

2.5:1

### Temperature Range

-40°C to +60°C (-40°F to +140°F)



### Applications



Branding on this product:

**STAUFF FLEX - TO INDUSTRIAL - <PART No> - ECOLOGY 210 HD - SEWER CLEANING HOSE - <INCH SIZE> - <DN SIZE> -**

**- WP <WP bar> bar / <WP psi> psi - MADE IN ITALY - www.stauff.co.uk - <BATCH No>**

ORDER CODE	DESCRIPTION	ID			OD		WORKING PRESSURE		BURST PRESSURE		BEND RADIUS		WEIGHT			
		DASH	INCH	DN	MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	MM	INCH	G/M	LBS/FT
2020065772	HTS-SEND-19-N-PN200	-12	3/4	DN20	19.6	0.772	29.7	1.169	200	2900	500	7250	120	4.72	412	0.277
2020065773	HTS-SEND-25-N-PN200	-16	1"	DN25	25.6	1.008	37.5	1.476	200	2900	500	7200	155	6.10	605	0.407
2020065092	HTS-SEND-31-N-PN200	-20	1.1/4	DN32	32.4	1.276	47.2	1.858	200	2900	500	7200	240	9.45	1001	0.673

### ASSEMBLIES ALSO AVAILABLE

ORDER CODE	ID (INCH)	LENGTH (M)	END 1 / END 2
2020033116	3/4	3	BSP Straight Male / Straight Female
2020038793	3/4	5	BSP Straight Male / Straight Female
2020067846	3/4	100	BSP Straight Female / Straight Female
2020033115	1"	3	BSP Straight Male / Straight Female
2020046487	1"	5	BSP Straight Male / Straight Female
2020032207	1"	100	BSP Straight Female / Straight Female
2020033114	1.1/4	3	BSP Straight Male / Straight Female
2020045494	1.1/4	5	BSP Straight Male / Straight Female
2020067851	1.1/4	100	BSP Straight Female / Straight Female

PTFE .....	128
ULTIFLEX .....	129

A close-up, black and white photograph of several parallel braided hoses. The braiding pattern is a tight, diagonal weave, creating a textured, ribbed appearance. The hoses are arranged in a slightly curved, parallel fashion, filling most of the frame.

8

PTFE HOSE

## PTFE HOSE

### Applications

Aggressive chemicals transfer systems – Compressed air and gases – High or low temperature fluid or gas transfer.

### Inner Tube

Polytetrafluoroethylene.

### Reinforcement

One braid of stainless AISI 304 wire.

### Cover

N/A

### Features

Pure PTFE tube material, lightweight, resistant to almost all chemicals, gases and solvents. Stainless steel braid / cover to support medium pressure requirements. Hose comes in random length coils.

### Description

Lightweight smoothbore hose for standard industrial use, especially for high or low temperature and aggressive chemical applications, including some gases (there will be a level of gas permeation which should be taken into account). Care should be taken to ensure proper fitting and ferrule compatibility, we recommend to contact our sales office for fittings selection.

Hose not suitable for continuous hydraulic impulse applications.

Above +130°C (+266°F) there will be a reduction in maximum working pressure: reduce maximum working pressure by 1% for each 2°C (3.6°F) above 130°C (+266°F).

Hose suitability must be checked when discharge of electrical static build up is required.

### Safety Factor

4:1

### Temperature Range

-60°C to +260°C (-76°F to +500°F)

### Fire Test

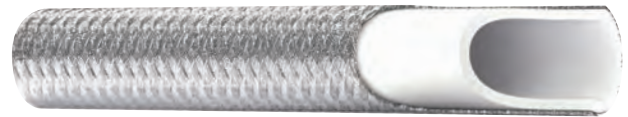
DIN 54837 with classification to DIN 5510-2 Convoluted PTFE.

### SUPER-TEF SMOOTHBORE

ORDER CODE	DESCRIPTION	ID		OD MM	WORKING PRESSURE		BURST PRESSURE		BEND RADIUS MM
		DASH	MM		BAR	PSI	BAR	PSI	
2020024857	HOS-STSB-PTFE-05-P	-3	4.89	7.87	276	4000	827	12000	51
2020024858	HOS-STSB-PTFE-06-P	-4	6.70	9.35	224	3250	672	9750	76
2020024860	HOS-STSB-PTFE-08-P	-5	8.40	11.05	207	3000	621	9000	102
2020024862	HOS-STSB-PTFE-10-P	-6	10.0	12.65	183	2660	552	8000	127
2020000232	HOS-STSB-PTFE-12-P	-8	13.20	16.55	161	2330	483	7000	152
2020024865	HOS-STSB-PTFE-16-P	-10	16.60	19.75	114	1660	345	5000	178
2020024867	HOS-STSB-PTFE-19-P	-12	19.80	22.96	103	1500	310	4500	203
2020024870	HOS-STSB-PTFE-25-P	-16	26.10	29.25	80	1160	241	3500	305

### SUPER-CONVO CONVOLUTED PTFE

ORDER CODE	DESCRIPTION	ID		OD MM	WORKING PRESSURE		BURST PRESSURE		BEND RADIUS MM
		DASH	MM		BAR	PSI	BAR	PSI	
2020024859	HOS-SCV-PTFE-06-P	-4	7.10	12.30	172	2495	517	7498	18
2020024863	HOS-SCV-PTFE-10-P	-6	9.50	14.75	138	2002	414	6005	20
2020024864	HOS-SCV-PTFE-12-P	-8	12.83	18.80	103	1494	310	4496	25
2020024866	HOS-SCV-PTFE-16-P	-10	15.88	22.10	83	1204	248	3597	51
2020024868	HOS-SCV-PTFE-19-P	-12	19.05	24.65	69	1001	207	3002	64
2020024871	HOS-SCV-PTFE-25-P	-16	25.40	32.77	46	667	138	2002	89
2020024872	HOS-SCV-PTFE-31-P	-20	32.20	40.72	34	493	103	1494	127
2020024874	HOS-SCV-PTFE-38-P	-24	38.10	47.00	30	435	90	1305	152
2020024876	HOS-SCV-PTFE-51-P	-32	51.40	60.00	23	334	69	1001	200



### Applications







## SMOOTHBORE PTFE HOSE RANGE

When space is an issue and a smoothbore is a must for an uninterrupted flow and ease of cleaning, ULTIFLEX is perfect for arduous applications where strength and resilience coupled with PTFE's unique qualities are required.

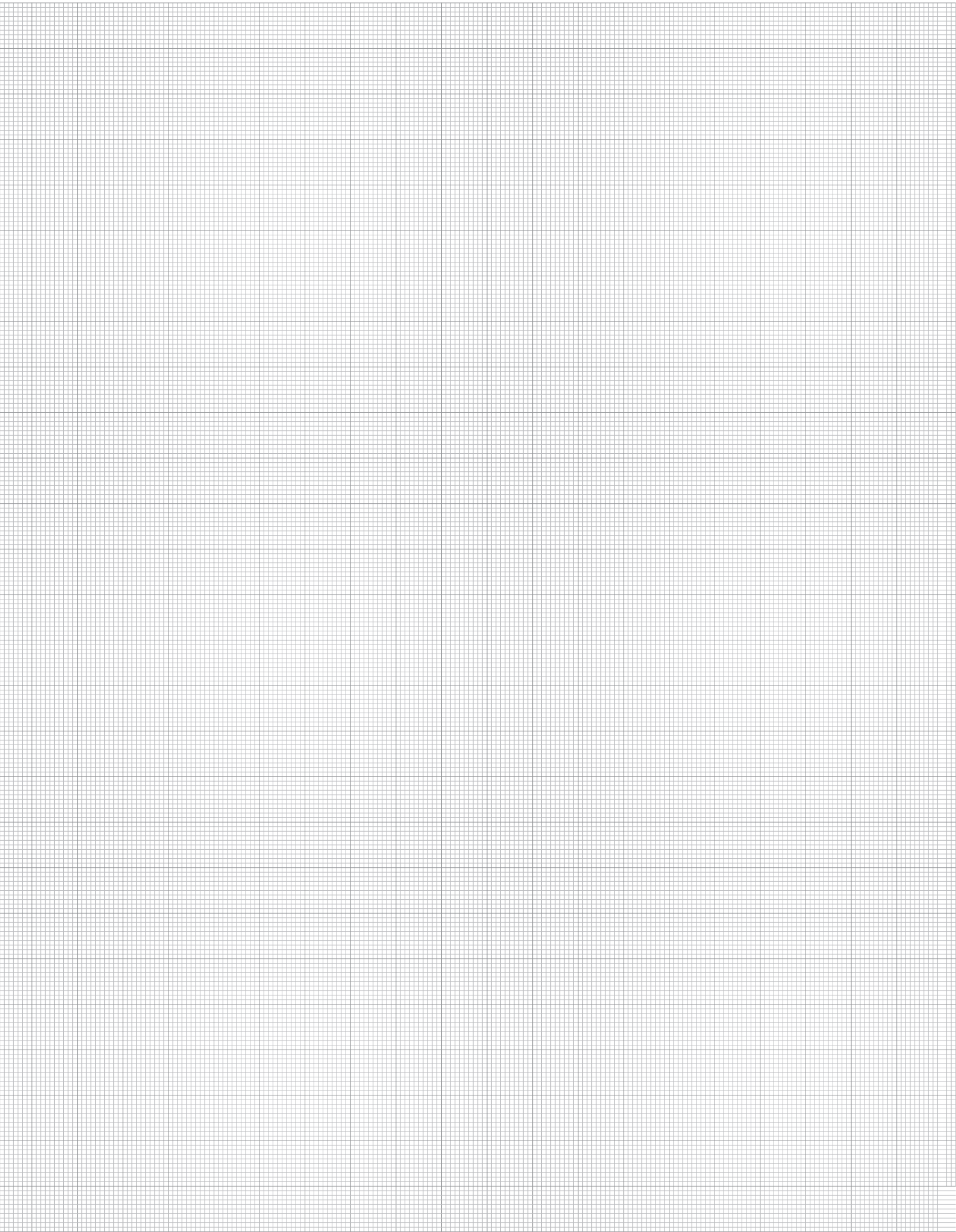
Bespoke UltiFlex PTFE hose assemblies are available directly from STAUFF with non-lined or lined (Tafted / Flared) end fittings to improve cleanliness, remove or reduce bug traps and improve the ability to clean in place (CIP) & Sterilize in Place (SIP).

Ideal for applications such as:

- PHARMACEUTICAL
- BIO-TECH
- FOOD & BEVERAGE
- CHEMICAL
- PETRO-CHEMICAL
- GENERAL PURPOSE INDUSTRIAL
- AUTOMOTIVE OE & AUTOSPORT

<b>Design</b>	<b>1/2" - 1 1/2" patented manufacture of smoothbore, convoluted PTFE hose construction</b>
<b>Inner layer</b>	<b>Fda approved virgin or anti-static ptfе tube</b>
<b>Outer layer</b>	<b>1/2" - 1.1/2" 304/316ss braid</b>
<b>Temperature min/max</b>	<b>-60°c to +260°c (-76°f to +500°f)</b>
<b>Material</b>	<b>PTFE according to: "astm d4895, type 1, grade 4, class b" "astm d4895, type 1, grade 3, class b"</b>
<b>Certification</b>	<b>In compliance; fda, eu food, usp class vi, anti-static (as), en;16643 &amp; material certification</b>

# Notes



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STAUFF products and services are globally available through wholly-owned subsidiaries and a tight network of authorised distributors and representatives in all major industrial regions of the world.

Contact information on this page may be subject to changes and additions over time. Frequently updated and complete contact information can always be found at [www.stauff.com](http://www.stauff.com).

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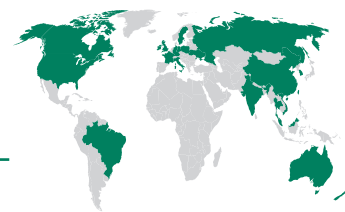
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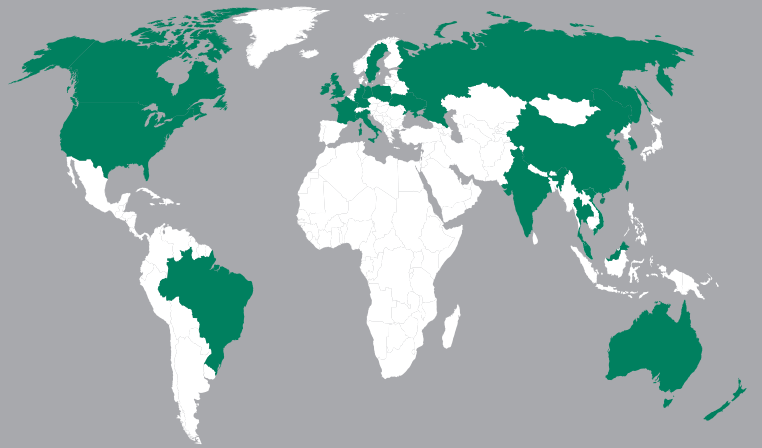
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