

## Grease Hose Technical Information

HSE-Grease

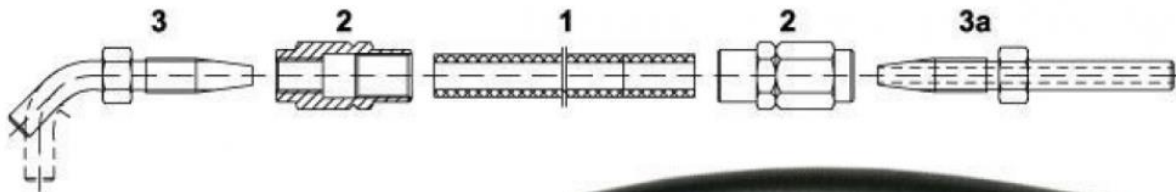


FC Part Number	D (mm)	D1 (mm)	Grease (Pre-filled)	Minimum Bend Radius at 20°C (mm)
HSE-Grease-03 50m Roll	8.6	4.0	Empty	20
HSE-Grease-03-Filled 50m Roll	8.6	4.0	NLGI Class 2	20
HSE-Grease-04 50m Roll	11.3	6.3	Empty	45

Burst Pressure		Maximum Working Pressure	
20°C	60°C	Static	Dynamic
> 840 bar 12180 psi	> 460 bar 6670 psi	280 bar 4060 psi	210 bar 3040 psi

**Operating Temperature** -40°C to 80°C

Max 70°C for greases with corrosion protection additives.



- 1 high pressure hose
- 2 screw sleeve
- 3 hose stud 45°
- 3a hose stud straight



Fluid Connectors high-pressure grease hoses are suitable for grease and central lubrication systems of all conventional lubrication system manufacturers.

The hose is made up of an inner polyamide 6 (PA6) tube, encased and embedded in polyester mesh. The outer polyurethane coat is adhered onto the polyester mesh and the inner tube. This structure provides the required high compressive strength and ensures indispensable safety for assembly. This also allows the hose to be highly flexible.

Our grease hoses play a major role in all systems where maintenance is automated through application of a central lubrication unit. It is also possible to use this hose for manual lubrication systems together with our grease blocks.

A typical use of this hose is as the main line in a central lubrication system. Main lines are defined as the line path from the pump element of the piston pump to the first distribution unit, also referred to as the manifold or main distributor.

However, they may also be used as secondary lines between main distributor and the downstream secondary distributors, also referred to as sub-distributors.

This hose is designed for lubrication system installations only and is not designed to be used as the main feed line on a hand-held grease gun.

For installation, the ends of the hose are terminated using grease ferrules (screw sleeves) and grease hosetails. These are assembled using standard spanners only. No other special tools are required for assembly.

Installation and assembly of high-pressure grease hoses and their connection elements must only be performed by appropriately trained and qualified personnel.

## Other Specifications

	Standard	Inner Tube	Casing	Inner Tube	Casing
<b>Material</b>	-	Polyamide 6	Polyurethane	Polyamide 6	Polyurethane
<b>Tear Strength</b>	DIN EN ISO 527	> 30N/mm2	> 18N/mm2	> 30N/mm2	> 18N/mm2
<b>Elongation at Break</b>	DIN EN ISO 527	> 180%	> 380%	> 180%	> 380%
<b>Hardness shore</b>	DIN EN ISO 868	> D 60 +/- 3	> A 88 +/- 3	> D 60 +/- 3	> A 88 +/- 3

	HSE-Grease-03	HSE-Grease-04
<b>Nominal Size (mm)</b> <i>Internal x External</i>	4.0 x 8.6	6.3 x 11.3
<b>Inner Diameter (mm)</b>	3.90 – 4.10	6.20 – 6.50
<b>Outer Diameter (mm)</b>	8.50 – 8.75	11.10 – 11.50
<b>Maximum Wall Thickness Eccentricity (mm)</b>	0.40	0.35

## Assembly Instructions

### High Pressure Grease Hose

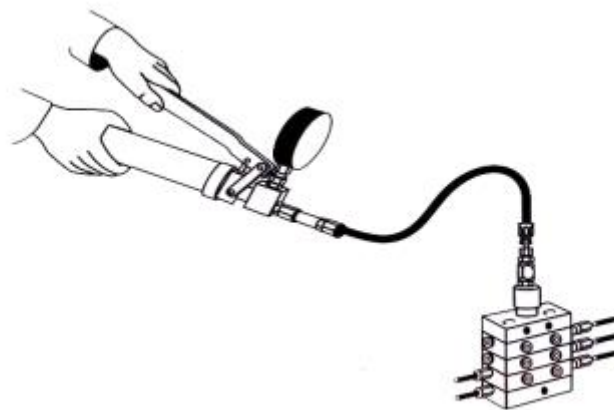
#### General Information Before Installation

High pressure hoses are used in central lubrication systems. They are used as the main line from the lubrication pump to the main distributor and also from the main distributor to the downstream secondary distributor. Please note that, depending on the application, the physiological, thermal, mechanical, etc. environment must be checked case-specifically.

The technical data (pressures, dimensions, field of application etc.) of our grease hoses are product-specific and can not be automatically transferred to mounted valves and components. The capacitance from the system as a whole must be designed and approved by a specialist. When calculating the length of the grease hose, the lengths of the hose stud and the screw sleeve at both ends of the hose must be taken into account (2x grease tails RGT, 2x grease ferrules RGN).

New machines sometimes have hollow spaces in their bearings. Before installation, fill up with the suitable grease, otherwise bearing damage may occur as a result of insufficient lubrication. Pay attention to the cleanliness during installation and ensure no contamination gets into the bearings. Even small impurities can lead to a bearing damage. Central lubrication assembly work should only be carried out by trained technicians!

1. Check all lubrication points, distributors and other components are clear and unobstructed before starting the installation, using a grease filling pump.



2. Cut the hose to the required length.

3. Screw the ferrule (left-hand thread) onto the end of the hose.

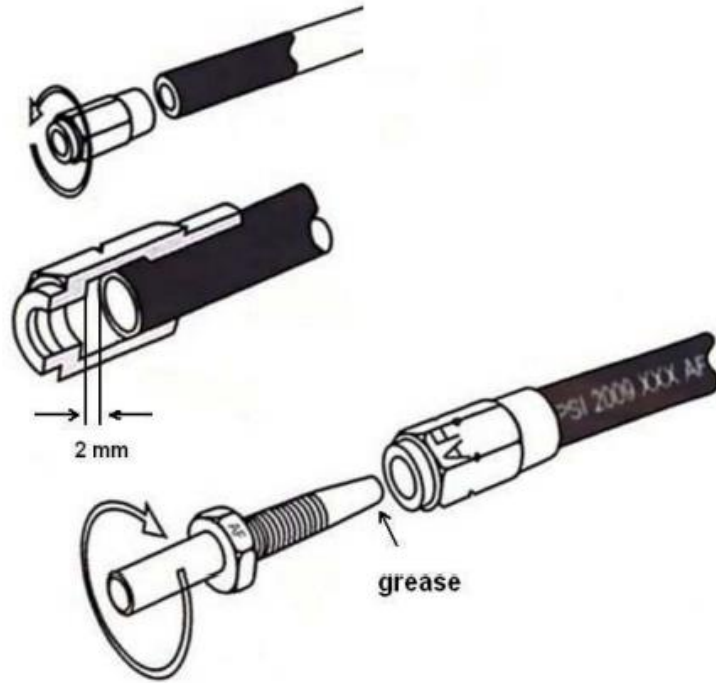
Leave a 2mm gap, see drawing.

4. Apply grease to the end of the tail before assembly.

This avoids damage to the inner core of the hose.

5. Screw the tail (right-hand thread) into the ferrule.

As the tail is screwed into the ferrule, it is pressed into the hose and forms a pressure-resistant seal.



## Grease NLGI 2

EP-Multipurpose Lithium-Based Grease

This grease is natural coloured lithium based EP Multipurpose grease with distinct high pressure additivation. It is also additivated with components for an increasing oxidation stability and corrosion protection. Applications include roller bearings with high and temporary jerky compressive load and vibrations at normal and increasing temperatures.

Based on the smooth texture this grease excellent for pumping in all kinds of central lubrication systems.

Characteristics:

- Provides protections against frictional corrosion and abrasion
- Application temperatures from -30°C to +120°C, temporary up to 130°C
- Does not contain solid lubricants
- Oxidation resistant and stable while penetration
- Water resistant and adherent
- Good corrosion protection and high ability of pressure absorption

### Technical Specifications

NLGI Grade	2	DIN 51818
Viscosity at +40 °C	190 mm <sup>2</sup> /s	DIN EN ISO 3104
Drop point	190 °C	DIN ISO 2176
Stability while penetration	280 till 310	DIN ISO 2137
Water resistance	1 – 90	DIN 51807
Corrosion protection	Grade 0/0	DIN 51802
Copper corrosion	1 – 100	DIN 51811
SKF-running test 120 °C	Passed	DIN 51806
Lubricating grease period of usage at 120 °C	F <sub>50</sub> >150 h	DIN 51821
Soap base	Li-12-Hydroxystearat	DIN 51558

The stated technical facts are average values.

Before using, please check the regulations of the manufacturer concerning the characteristics of quality, the environmental temperature and the intervals of oil changes.

For some applications, separate requirements apply, which must be checked case-specifically by the customer.