Customer information: Handling and properties of modern fire hoses

1. General product characteristics

High-strength polyester yarn and a sleeve made of high-quality EPDM rubber compound or polyurethane form the raw material for round-woven fire hoses. These hoses are characterized by high pressure resistance, extreme UV and ozone resistance, complete rot resistance, and neutral behavior towards many chemicals. They require little maintenance and care, while offering an almost unlimited service life.

Further advantages include good flexibility, low weight, minimal space requirements, and barely measurable elongation—even under heavy use.

2. Material and structure

The fabric is made from twisted, high-strength polyester yarn on circular looms, usually in a twill weave to achieve high abrasion resistance. The fabric alone acts as a pressure carrier.

The inner lining – a sleeve made of high-quality EPDM rubber or polyurethane – is incorporated in a special vulcanization process and ensures the hose is leak-proof. The hoses are suitable for continuous use at temperatures up to +80°C. An optional polyurethane outer coating further increases abrasion resistance and service life.

3. Handling and care instructions

- Lay hoses without kinks or twists.
- Do not drag them across the floor or pull them over sharp edges.
- Do not pull hoses that are filled with water but not pressurized.
- Avoid contact with broken glass, debris, or embers.
- Prevent contamination by corrosive or sticky substances.
- Secure hoses laid on ladders or hanging freely with holders.
- Cross roadways at right angles; use hose bridges.
- Avoid driving over empty or filled hoses.
- Do not interrupt the water flow in frosty conditions; never kink frozen hoses.
- Never throw hose couplings; protect them from contamination.
- Store hoses in the vehicle in such a way as to prevent chafing.
- Fire hoses are suitable for water up to +80°C.

4. Cleaning, drying, and storage

After use, clean with water and a soft brush or suitable washing equipment. Heavily soiled hoses can be soaked beforehand – never brush them dry.

Special cleaning agents are not usually necessary; water up to a maximum of 30°C is sufficient.
Alternatively, all commercially available detergents for textiles can also be used for fire hoses, but only in a highly diluted form. After using cleaning agents, rinse the hose thoroughly with clean water. Detergents with bleaching or oxidizing additives must not be used as they can damage the hose material.

The hose must then be pressurized, visually inspected, and any damage marked. Immediately after cleaning, the hose must be completely dried. Hoses may only be stored when completely dry.
The hose storage area must be dry, well ventilated, frost-free, and protected from direct sunlight.

5. Technical information: Behavior during repeated use

Modern hose types—e.g., the Intrax type—have increased material density and a structured wall construction. These properties result in a slightly altered return to shape after repeated use.

Unlike conventional standard hoses, modern hoses retain a certain degree of dimensional stability after multiple uses. This is due to the increased material density and elastic elongation of the rubber core during operation. Complete return to the particularly compact original state usually only occurs through the combined influence of temperature and mechanical pressure (e.g., through storage or machine winding).

Note: The material properties described have no influence on the safety, pressure resistance, or usability of the hose. Full functionality remains unrestricted.