

# Polyurethane hoses

*For the automotive industry*

## Polyurethane hoses, resistant to welding spatter

These special hoses are designed for all applications related to welding systems, spot welding tongs or flying sparks, e.g. in the vicinity of grinding machines. They have survived the hardest of conditions and proven themselves in the extensive range of practical tests.

- ✓ **Advantages:**
- Extremely resistant to all forms of welding spatter and spark flight
  - Halogen-free flame retardant, in case of fire self-extinguishing. Fire performance tested by "Underwriters Laboratories Inc.", classification of UL 94 V2 to V0
  - Suitable for all standard push-in connectors
  - Resistant to hydrolysis and microbes for applications with or in water
  - Simple, fast and economical to assemble, as no time-consuming stripping of double-walled hose is necessary and no expensive special screw connections are needed
  - Very tight bend radius possible
  - Very good UV resistant
  - Extremely high wear and abrasion resistance (compatible with cable carriers)
  - Free of paint-wetting impairment substances (PWIS-free)
  - Approved for use in the German automotive industry

**flamex®**

**Material:** Polyether polyurethane  
**Temperature range:** -30°C to max. +100°C  
**Hose colour:** Black  
**Roll length:** 50 m

Type	Hose Ø external x internal	Min. bend radius	Operating pressure
PUN 4x2 FLAMEX	4 x 2	7	20 bar
PUN 8x4 FLAMEX	8 x 4	15	17 bar
PUN 10x6 FLAMEX	10 x 6	20	12 bar
PUN 12x8 FLAMEX	12 x 8	28	12 bar
PUN 14x10 FLAMEX	14 x 10	45	13 bar
PUN 16x11 FLAMEX	16 x 11	55	12 bar

Flame retardance  
and insulation hoses  
on page 224

*For building technology,  
e.g. in cable ducts*

## Polyurethane hoses, flame resistant

These special hoses are particularly suited for use in cable ducts (building technology) with light to moderate spark flights and moderate UV-radiations. They have survived the hardest of conditions and proven themselves in the extensive range of practical tests.

- ✓ **Advantages:**
- Halogen free, flame retardant, self-extinguishing in event of fire, fire performance tested by "Underwriters Laboratories Inc.", classification fire class as per UL 94 V2
  - Suitable for all standard push-in connectors
  - Very tight bend radius possible
  - Extremely high wear and abrasion resistance (compatible with cable carriers)
  - Free of paint-wetting impairment substances (PWIS-free)
  - Approved for use in the German automotive industry

**Material:** Polyether polyurethane  
**Temperature range:** -30°C to max. +100°C  
**Hose colour:** Blue  
**Roll length:** 50 m

⚠ **Warning:** Not for the direct welding area, or pipelines with high levels of mechanical loading

Type	Hose Ø external x internal	Min. bend radius	Operating pressure
PUN 6x4 KKS	6 x 4	14	12 bar
PUN 8x6 KKS	8 x 5.7	28	11 bar
PUN 10x8 KKS	10 x 7.5	38	10 bar
PUN 12x9 KKS	12 x 9	45	10 bar

## Polyurethane hoses, electrically conducting

These electrically conductive special hoses are designed for all applications where static loads are to be avoided. Hence it is used in the manufacture of electronic components, in the coating industry, in explosion-proof areas, in the mining industry or in part conveyance as pneumatic-, conveyor- and as supply hose (e.g. for refrigeration).

- ✓ **Advantages:**
- Extremely anti-static design with a surface resistance  $\leq 10^6$  Ohm
  - Tested for conformity to Atex Directive 94/9/EC
  - High pressure resistance
  - Best mechanical properties
  - Suitable for all standard push-in connectors
  - Resistant to hydrolysis and microbes for applications with or in water
  - Very tight bend radius possible
  - Very good UV resistant
  - Suitable for vacuum applications

**Material:** Polyether polyurethane  
**Temperature range:** -30°C to max. +80°C  
**Hose colour:** Black  
**Roll length:** 50 m

Type	Hose Ø external x internal	Min. bend radius	Operating pressure
PUN 4x2,5 ANTISTAT	4 x 2.5	9	15 bar
PUN 6x4 ANTISTAT	6 x 3.9	15	14 bar
PUN 8x6 ANTISTAT	8 x 5.7	28	10 bar
PUN 10x8 ANTISTAT	10 x 7.5	35	9 bar
PUN 12x9 ANTISTAT	12 x 9	50	9 bar

Push-in fittings  
Ø 3 - 32 mm  
from page 24

Push-in connectors  
made of brass & stain-  
less steel from page 42

All data are considered to be unbinding reference values. We accept no liability for data selection that is not confirmed in writing. Pressure data refer, if not otherwise indicated, to liquids of Group II at +20°C.