2.2.5.2 Multilayer Mixal® insulated pipe features

Mixal® pipes that are covered in the factory with thermal insulting sleeves are suitable in all applications that require a certain degree of insulation against condensation and against energy loss combined with an extremely practical and economic installation.



Table 2.14 Multilayer Mixal® insulated pipe features.

| Pipe | Insulating layer thickness | External diameter of the insulated pipe | Weight | Thermal conductivity of the insulated pipe |
|---------|----------------------------|---|--------|--|
| | [mm] | [mm] | [g/m] | [W/m·K] |
| 14x2 | 6 | 26 | 97 | 0.059 |
| 16x2 | 6 | 28 | 113 | 0.058 |
| 16x2 | 10 | 36 | 125 | 0.052 |
| 18x2 | 6 | 30 | 129 | 0.057 |
| 20x2 | 6 | 32 | 150 | 0.056 |
| 20x2 | 10 | 40 | 163 | 0.051 |
| 20x2.25 | 6 | 32 | 161 | 0.058 |
| 25x2.5 | 6 | 37 | 233 | 0.059 |
| 26x3 | 6 | 38 | 266 | 0.063 |
| 26x3 | 10 | 46 | 282 | 0.056 |
| 32x3 | 10 | 52 | 370 | 0.055 |

The features of the material used for the production of the insulating sheath are indicated in the table.

Table 2.15 Features of the material used for the production of the insulating sheath.

| Features | Unit | Value |
|----------------------|-------------|---------------------------------------|
| Material | - | High density closed cell polyethylene |
| Flame-retardant | - | B _L -s1,d0 |
| Density | [kg/m³] | 33 |
| Thermal conductivity | [W/m·K] | 0.0397 |
| Traction resistance | [N/mm²] | >0.18 |
| Ultimate elongation | [%] | >80 |
| Steam permeability | [mg/Pa·s·m] | <0.15 |

2.2.5.3 Features of the multilayer Mixal® pipe with corrugated protective sheath

Mixal® pipes that are covered in the factory with a protective corrugated insulating sleeve are generally used in domestic water supply systems that require protection or the possibility of removing or replacing the pipes.



Table 2.16 Features of the multilayer Mixal® pipe with corrugated protective sheath.

| Pipe | Sheath thickness | External diameter sheathed pipe | Weight | Crushing |
|------|------------------|---------------------------------|--------|----------|
| | [mm] | [mm] | [g/m] | [N/m] |
| 14x2 | 0.75 | 24.5 | 139 | 320 |
| 16x2 | 0.85 | 26.5 | 164 | 320 |
| 18x2 | 0.95 | 28.5 | 189 | 320 |
| 20x2 | 1.05 | 30.5 | 219 | 320 |

The features of the material used for the production of the corrugated protective sheath are indicated in the table.

Table 2.17 Features of the corrugated protective sheath.

| Features | Unit | Value |
|----------------------|---------|---------------------------|
| Material | - | High density polyethylene |
| Flame retardant | - | No |
| Density | [kg/m³] | 961 |
| Thermal conductivity | [W/m·K] | 0.38 |
| Traction resistance | [N/mm²] | > 22 |
| Ultimate elongation | [%] | > 350 |
| Steam permeability | - | > 100,000 |

