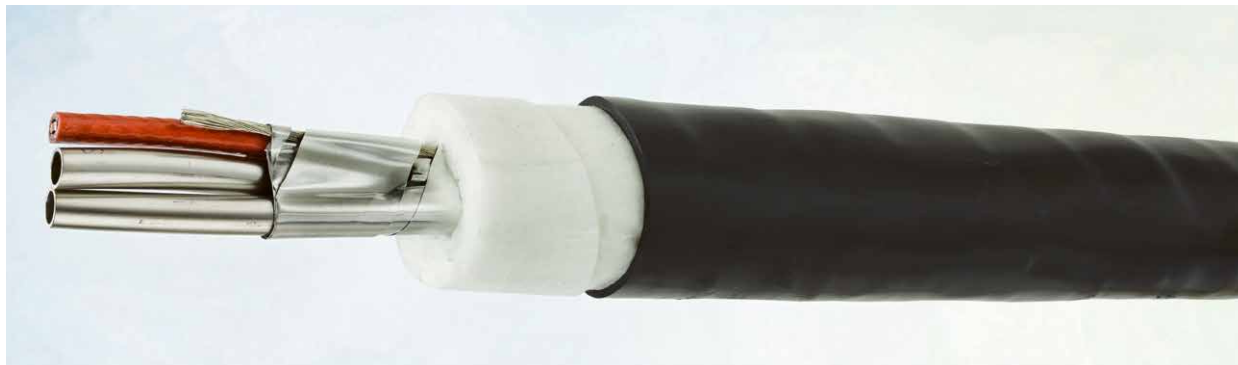


OSNALINE® Datasheet

Heat traced tube bundles (2 x 10 x 1,5)

KME Code: E3-UNSS31254N..GF..10X1,5 -2F TPU/11..4XTV2-CT



KME's special products division includes a variety of specialised tube bundles known as OSNALINE®. These products are used for many industrial applications, in offshore facilities, in shipbuilding and in the building industry. This long tradition of tube bundle applications is one example of KME's unique developing and production potential.

Design – Heat traced tube bundles with electrical heating cable

The tube bundles contain one or two stainless steel tubes and a electrical heating heating cable. From a two-tube design the tubes are consecutively numbered and stranded together.

The tubes and heating cable have a circumferential metal sheathing, consisting of two overlapping aluminium tapes, which bring about an even temperature distribution along the tubes. A tin-plated copper strand carried along in longitudinal direction and touching the metal sheathing over the entire length, serves as an equipotential bonding conductor. This is covered by a fibreglass fleece multi-layer thermal insulation and an extruded black outer jacket of plastic.

Heating cable

(The heating cable is approved for use in potentially explosive areas)

- Self regulating heating cable Raychem 4XTV2-CT (T3)
- In accordance with the respectively used heating cable, maintain temperature of 5°C (frost protection) at an ambient temperature of -25 °C is possible.
- Maximum exposure temperature (power on) 121°C.

Tube material

Stainless Steel UNS S31254 (6MO) acc. to ASTM A269 and NORSOK standard M-630.

Insulating materials

A fibreglass fleece, the maximum working temperature being 500°C. The insulating material is not flammable. The content of water-soluble chlorides is <30 mg/kg.

Jacket material

OSNA TPU (Thermoplastic Polyether Urethane Elastomer)

acc. VDE 0282 Part 10 black, halogen free, flame retardend acc. IEC 332-3-22 Category A/F, tested by ABS 03-ES 331499.

Delivery form

Tube bundle ends are capped and sealed against dust and moisture. Outer jacket printed with dimension, material, marking of length and production code.

Tests

- Dimensions
- Pressure test
- Inside clearance of tube

Characteristics

- Protection against mechanical impacts
- Protection against environments
- Frost protection and maintaining
- Flexible, easy to install

Applications

- Heat traced line for sample extraction
- Process lines and transportation lines in the chemical and petrochemical industry
- Shipbuilding and offshore
- Mechanical and civil engineering

OSNALINE® Datasheet

Heat traced tube bundles (2 x 10 x 1,5)

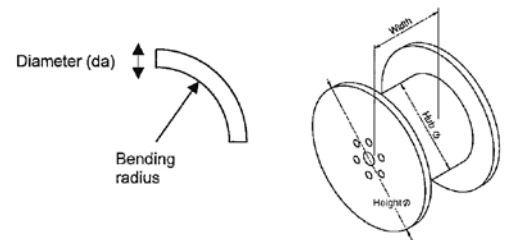


Working temperatures of jacket materials

| KME Type | During installation [°C] | | Before and after assembly [°C] | | Type | Standard value of permissible bending radius |
|----------|--------------------------|------|--------------------------------|------|--------------------------|--|
| | Min. | Max. | Min. | Max. | | |
| OSNA TPU | -40 | +50 | -60 | +120 | Heat traced tube bundles | 10 x da |

Dimensions of drums

| Type | Height [Ø mm] | Width [mm] | Hub Ø [mm] | Weight partly boarded up [Kg] |
|------------|---------------|------------|------------|-------------------------------|
| KME-148/10 | 1400 | 590 | 1000 | 114 |
| KME-149/10 | 1400 | 850 | 1000 | 128 |



Delivery Program - Heat traced tube bundles with electrical heating cable (frost protection)

| Number and outer diameter of tubes [mm] ¹⁾ | Insulation thickness [mm] | Outer jacket thickness [mm] | Outer diameter [mm] ²⁾ | Approx. weight Stainless steel [Kg/100m] ²⁾ |
|---|---------------------------|-----------------------------|-----------------------------------|--|
| 2 x 10 x 1,5 | 10 | 2 | 53 | 171 |

¹⁾ Other dimensions on request ²⁾ Values given are nominal values within the limits of normal manufacturing tolerances. Approx. weight @ 1,5mm wall thickness of tubes.

Accessories

| Tube bundle type | Heater connection set ³⁾ | Heat shrinkable cap | Thermofleece sleeve | Heat shrink sleeve | Entry seal with shrink part |
|------------------|-------------------------------------|----------------------------------|------------------------------------|-----------------------------------|---------------------------------|
| 2 x 10 x 1,5 | 1 x SRH-2 Art.Nr: 7031903 | 2 x ATK3R10-12 Art.Nr:7064678 | 6 x 0,5m TV-6-12 Art.Nr:7031824 | 6 x 0,5m W-25/8 Art.Nr:7064689 | 1 x KVS-43/20 Art.Nr:7031859 |

³⁾ Heater connection set includes: Junction box, Power connector, Heating cable end seal.

Toolbox:



Thermofleece sleeve:



Heat shrink sleeve:



Entry seal with shrink part:



Heat shrinkable cap:



Option Toolbox:



Heater connection Set:

