

Insulation pipe section

Pre-formed pipe section



PRODUCT DESCRIPTION

Insulation pipe section cut from stone wool blocks Orstech Block. Mineral wool fibres are processed into the final shape of blocks at the production line from which several producers cut insulation pipe sections themselves that are sold under various trademark on the market. For more information we can forward you to one of our OEM partner.

Pre-formed snap-on pipe sections are single-layered hollow cylinders made of one or more segments. Snap-on configuration prevents the longitudinal slot against heat loss. Pipe sections can be supplied without an outer facing or with a factory-applied fibreglass reinforced aluminium foil incorporating a self-adhesive overlap. The pipe section is recommended to secure by aluminium tape or by galvanized wire transversely. Pipe sections are usually knotted three times per meter, more times at pipe sections with higher diameter. Higher diameters should be secured either by wire or by metal band (at least two bands per meter).



APPLICATION

Insulation pipe sections designed to provide thermal and acoustic insulation of pipework in HVAC and industrial applications. Despite the fact that hydrophobing additives in the insulation impede the ingress of water, it is necessary to protect the slab in the construction against moisture and possible mechanical damage by a proper manner.

Maximum service temperature: 600 °C according to EN 14707. Surface temperature on the aluminium side must not exceed 100 °C; proper thickness of insulation must be designed to fulfil that. Binders and greasing agents in mineral wool products dissolve and evaporate in areas with temperatures higher than 150 °C. In the outer, colder areas, no dissolution and evaporation take place.

PACKAGING, TRANSPORT, WAREHOUSING

Pipe sections are supplied in closed cartons or unpacked (for bigger diameters). The pipe sections should be transported in covered vehicles under such conditions to avoid moistening or other degradation. They should be stored in covered places under dry conditions.

DIMENSIONS AND PACKAGING

Inner diameter of a pipe section	Thickness of a pipe section	Pipe section length
21-273 mm*	25-100 mm*	1 000, 1 200 mm

* Final design is dependent on the diameter of the pipe and on specified insulation thickness.

TECHNICAL PARAMETERS

Parameter	Unit	Value	Standard
Thermal technical properties			
Declared value of the thermal conductivity λ_D according to EN ISO 13787 for pipe section with density 65 kg/m ^{3**}	°C	40 50 100 150 200 250 300	
	W·m ⁻¹ ·K ⁻¹	0.043 0.044 0.055 0.068 0.087 0.110 0.136	
Declared value of the thermal conductivity λ_D according to EN ISO 13787 for pipe section with density 90 kg/m ^{3**}	W·m ⁻¹ ·K ⁻¹	0.042 0.043 0.052 0.063 0.079 0.096 0.117	
Maximum service temperature ST(+)/ on the aluminium side	°C	600 / max. 100	EN 14707
Specific heat capacity c_p *	J·kg ⁻¹ ·K ⁻¹	800	-
Physical properties			
Density*	kg·m ⁻³	65, 90	EN 13470
Short-term water absorption (W_p) WS	kg·m ⁻²	<< 1	EN ISO 29767
Fire safety properties			
Pipe section without a facing: Reaction to fire	-	A ₁ _L	EN 13501-1
Pipe section with the aluminium facing: Reaction to fire - additional classifications on smoke emission and speed (s) and on the possible fall of flaming droplets (d)	-	A ₂ _{L-s1, d0}	EN 13501-1
Melting temperature t_f *	°C	\geq 1 000	DIN 4102 part 17

* Informative non-declared value beyond scope of CPR, obtained by concrete tests.

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BENEFITS

- Very good insulation performance.
- Easy to handle, easy to cut with a sharp knife.

More about the product

www.isover.cz/en/products/pipeline-insulation-sleeves

