

# PRODUCT DATA SHEET

# PRESSURE SLEEVE

## PRODUCT DESCRIPTION

The pressure sleeve acts as a spacer for attachment parts when non-load-bearing intermediate layers extend up to the anchoring base.

## APPLICATIONS

The pressure sleeve is used to attach canopies, awnings, railings, SAT systems, retrofitted chimneys, rainwater downpipes etc. to external thermal insulation composite systems (ETICS).



## ADVANTAGES

- Flexible and universally usable
- The ring segments with four centre bolts can be easily stacked on top of each other until the desired distance height has been reached
- The bending moments acting on the fastening are transferred axially into the mounting substrate via the spacer sleeve
- The pressure sleeves can be used in conjunction with a range of fasteners with a maximum diameter of up to 18 mm. The insulation requires a  $\geq 50$  mm bore diameter
- High compressive strength
- Subsequent assembly and disassembly possible

## MATERIAL

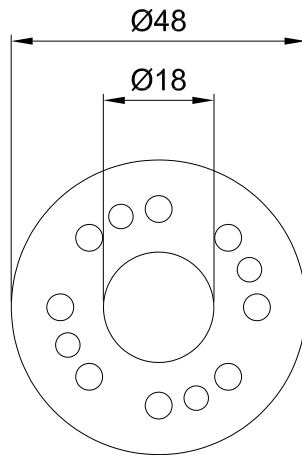
- Polyamide PA6 -GF30, grey  
→ Polyamide PA6 with a 30% glass fibre content, elastomer-modified, heat-stabilised, limited UV-resistance\*

\*The pressure sleeve is regularly used with encapsulated insulation materials.

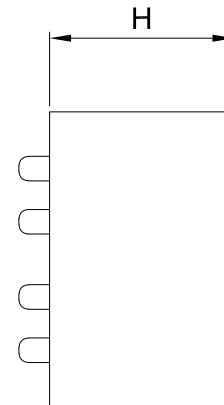
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## TECHNICAL INFORMATION



Front view



Side view

Characteristic compressive load capacity of PA6-GF30: 15 MPa = 15 N/mm<sup>2</sup> Safety factor:  $\gamma_{MK} = 4,0$

$$F_{D,k} = 15 \frac{\text{N}}{\text{mm}^2} \times 1200 \text{ mm}^2 = 18000 \text{ N} = 18 \text{ kN}$$

$$F_{D,d} = \frac{18 \text{ kN}}{4,0} = 4,5 \text{ kN}$$

The specified values are preliminary design values! Temperature and humidity effects have not been considered! Following the installation, the pressure sleeves must be encapsulated in order to protect them from UV radiation. Please take into account that plastics are subject to ageing processes which may change their mechanical properties.

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## TECHNICAL INFORMATION

Pressure sleeve			
	Test procedure	Test value	Unit
<b>Physical values</b>			
Density	ISO 1183	1310	kg/m <sup>3</sup>
<b>Mechanical values</b>			
Elastic modulus (tensile test)	DIN EN ISO 527	7000	MPa
Elongation at break (tensile test)	DIN EN ISO 527	4,0	%
Breaking stress	DIN EN ISO 527	105	MPa
Elastic modulus (bending test)	DIN EN ISO 178	6500	MPa
Flexural strength	DIN EN ISO 178	150	MPa
Charpy impact strength (23°C)	DIN 53453	55,0	kJ/m <sup>2</sup>
Charpy notched impact strength (23°C)	DIN 53453	20,0	kJ/m <sup>2</sup>
<b>Thermal values</b>			
Heat deflection temperature HDT A (1.8 MPa)	DIN EN ISO 75	195	°C
Vicat softening temperature VST B/50	DIN EN ISO 306	195	°C
<b>Electrical values</b>			
Specific volume resistance	DIN IEC 93	1E15	Ω x cm
<b>Other values</b>			
Flammability at nominal 1.5 mm	UL 94	HB	Class

## PRODUCT TABLE

Pressure sleeve			
Art. no.	Dimension <sup>a)</sup> [mm]	Distance mounting [mm]	PU
200102	48 x 18 x 5	5	20
200103	48 x 18 x 10	10	20
200104	48 x 18 x 20	20	20
200105	48 x 18 x 30	30	20
200106	48 x 18 x 50	50	20
200107	48 x 18 x 100	100	20

<sup>a)</sup> Outer Ø x inner Ø x length

If you are not familiar with how this product is used, and particularly with the product's intended use, please contact our Application Technology department (Technik@eurotec.team).