

T-FIT[®] Process



Product information

Typical Values

T-FIT[®] Process is manufactured from Zotefoams ZOTEK[®] NB 50 closed cell Nylon foam.

The values provided in this Product Information Sheet represent data gathered from random samples of our production of Zotek NB50 from which T-FIT PROCESS is produced and represent typical data. These are given to the best of our knowledge and should be considered as guidance only for selecting a suitable grade for a given application.



Property	Test Standard	Typical Value
Material		ZOTEK [®] N B50 Closed Cell Nylon Foam
Service Temperature	See Notes Below*	-20 °C to +200 °C (-4 °F to +392 °F)
Thermal Conductivity		
Mean temperature of 25°C (77 °F)	ISO 8301	0.0361 W/m.K (0.25 Btu.in/h.ft ² °F)
Mean temperature of 170°C (338 °F)		0.0485 W/m.K (0.34 Btu.in/h.ft ² °F)
Fungus Resistance	ASTM G21-15	Full test complete No signs after 28 days
28 day corrosion and chemical test	ASTM C-795	Pass
Fire Certification		
Euroclass (Glad Product Only)	EN13501-1	E, E _L
AS 1530	Gauge mm Ignitability Spread of flame Heat Evolved Smoke Dev	
	5 0 0 0 3	
Integral Cladding		Alu-PET Composite

* These are extreme temperatures. For continuous use or advice on product specification with respect to condensation control please contact your local T-FIT[®] representative

Product Code	Description: T-FIT Process, Straight Tubes	Standard	Insulation Sizing in	Insulation Sizing mm
TFPS009A06C000-9000	ASME BPE 0.375" OD 9.53mm T-FIT Process Insulating Straight 6.35mm THK	ASME BPE	0.375"	9.53
TFPS012A06C000-9001	ASME BPE 0.5" OD 12.70mm T-FIT Process Insulating Straight 6.35mm THK	ASME BPE	0.5"	12.70
TFPS019A06C000-9002	ASME BPE 0.75" OD 19.05mm T-FIT Process Insulating Straight 6.35mm THK	ASME BPE	0.75"	19.05
TFPS025A06C000-9003	ASME BPE 1.0" OD 25.40mm T-FIT Process Insulating Straight 6.35mm THK	ASME BPE	1.0"	25.40
TFPS038A06C000-9004	ASME BPE 1.5" OD 38.10mm T-FIT Process Insulating Straight 6.35mm THK	ASME BPE	1.5"	38.10
TFPS050A06C000-9005	ASME BPE 2.0" OD 50.80mm T-FIT Process Insulating Straight 6.35mm THK	ASME BPE	2.0"	50.80
TFPS063A06C000-9006	ASME BPE 2.5" OD 63.50mm T-FIT Process Insulating Straight 6.35mm THK	ASME BPE	2.5"	63.50
TFPS076A06C000-9007	ASME BPE 3.0" OD 76.20mm T-FIT Process Insulating Straight 6.35mm THK	ASME BPE	3.0"	76.20
TFPS101A06C000-9008	ASME BPE 4.0" OD 101.60mm T-FIT Process Insulating Straight 6.35mm THK	ASME BPE	4.0"	101.60
TFPS023D06C000-9004	DIN 11850 DN20 OD 23.00mm T-FIT Process Insulating Straight 6.35mm THK	DIN 11850	DN20	23.00
TFPS029D06C000-9005	DIN 11850 DN25 OD 29.00mm T-FIT Process Insulating Straight 6.35mm THK	DIN 11850	DN25	29.00
TFPS035D06C000-9006	DIN 11850 DN32 OD 35.00mm T-FIT Process Insulating Straight 6.35mm THK	DIN 11850	DN32	35.00
TFPS041D06C000-9007	DIN 11850 DN40 OD 41.00mm T-FIT Process Insulating Straight 6.35mm THK	DIN 11850	DN40	41.00
TFPS053D06C000-9008	DIN 11850 DN50 OD 53.00mm T-FIT Process Insulating Straight 6.35mm THK	DIN 11850	DN50	53.00
TFPS070A06C000-9009	DIN 11850 DN65 OD 70.00mm T-FIT Process Insulating Straight 6.35mm THK	DIN 11850	DN65	70.00
TFPS085D06C000-9010	DIN 11850 DN80 OD 85.00mm T-FIT Process Insulating Straight 6.35mm THK	DIN 11850	DN80	85.00
TFPS104D06C000-9011	DIN 11850 DN100 OD 104.00mm T-FIT Process Insulating Straight 6.35mm THK	DIN 11850	DN100	104.00
TFPS060I06C000-9013	ISO 1127 DN50 OD 60.3mm T-FIT Process Insulating Straight 6.35mm THK	ISO 1127	DN50	60.30
TFPS076I06C000-9014	ISO 1127 DN65 OD 76.1mm T-FIT Process Insulating Straight 6.35mm THK	ISO 1127	DN65	76.10
TFPS021I06C000-9009	ISO 1127 DN15 OD 21.3mm T-FIT Process Insulating Straight 6.35mm THK	ISO 1127	DN15	21.30
TFPS026I06C000-9010	ISO 1127 DN20 OD 26.9mm T-FIT Process Insulating Straight 6.35mm THK	ISO 1127	DN20	26.90
TFPS033I06C000-9011	ISO 1127 DN25 OD 33.7mm T-FIT Process Insulating Straight 6.35mm THK	ISO 1127	DN25	33.70
TFPS048I06C000-9012	ISO 1127 DN40 OD 48.3mm T-FIT Process Insulating Straight 6.35mm THK	ISO 1127	DN40	48.30
TFPS088I06C000-9015	ISO 1127 DN80 OD 88.9mm T-FIT Process Insulating Straight 6.35mm THK	ISO 1127	DN80	88.90
TFPS114I06C000-9016	ISO 1127 DN100 OD 114.3mm T-FIT Process Insulating Straight 6.35mm THK	ISO 1127	DN100	114.30
TFPS042I06C000-9017	ISO 1127 DN32 OD 42.4mm T-FIT Process Insulating Straight 6.35mm THK	ISO 1127	DN 32	42.40
TFPS025A12C000-9003	ASME BPE 1.0" OD 25.40mm T-FIT Process Insulating Straight 12.7mm THK	ASME BPE	1.0"	25.40
TFPS038A12C000-9004	ASME BPE 1.5" OD 38.10mm T-FIT Process Insulating Straight 12.7mm THK	ASME BPE	1.5"	38.10
TFPS050A12C000-9005	ASME BPE 2.0" OD 50.80mm T-FIT Process Insulating Straight 12.7mm THK	ASME BPE	2.0"	50.80
TFPS063A12C000-9006	ASME BPE 2.5" OD 63.50mm T-FIT Process Insulating Straight 12.7mm THK	ASME BPE	2.5"	63.50
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TFPS026I12C000-9010	ISO 1127 DN20 OD 26.9mm T-FIT Process Insulating Straight 12.7mm THK	ISO 1127	DN20	26.90
TFPS033I12C000-9011	ISO 1127 DN25 OD 33.7mm T-FIT Process Insulating Straight 12.7mm THK	ISO 1127	DN25	33.70
TFPS042I12C000-9017	ISO 1127 DN32 OD 42.4mm T-FIT Process Insulating Straight 12.7mm THK	ISO 1127	DN32	42.40
TFPS048I12C000-9012	ISO 1127 DN40 OD 48.3mm T-FIT Process Insulating Straight 12.7mm THK	ISO 1127	DN40	48.30
TFPS060I12C000-9013	ISO 1127 DN50 OD 60.3mm T-FIT Process Insulating Straight 12.7mm THK	ISO 1127	DN50	60.30
TFPS076I12C000-9014	ISO 1127 DN65 OD 76.1mm T-FIT Process Insulating Straight 12.7mm THK	ISO 1127	DN65	76.10
TFPS088I12C000-9015	ISO 1127 DN80 OD 88.9mm T-FIT Process Insulating Straight 12.7mm THK	ISO 1127	DN80	88.90
TFPS114I12C000-9016	ISO 1127 DN100 OD 114.3mm T-FIT Process Insulating Straight 12.7mm THK	ISO 1127	DN100	114.30

On test equipment, Zotefoams can demonstrate that an operator can safely touch the surface of a T-FIT Process tube with 6.35 mm wall thickness and clad with aluminium/PET film composite on a pipe with process temperatures of 200 °C, even though the measured surface temperature can be as high as 90 °C. Injury is not sustained, despite the high surface temperature, because the PET film is an extremely poor conductor. The maximum skin contact temperature measured is only around 40 °C after 5 seconds contact (standard reaction

time in an industrial environment). These contact temperatures are deemed safe as they are below the threshold temperature for burn injuries over this time frame.

The widespread use of metallic cladding systems may have given rise to an acceptance that 60 °C is the upper surface temperature limit with regards to personal protection, but substitution of this cladding with the composite described above allows operators to be protected even when temperatures exceed this so-called limit.

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Zotefoams plc Management systems are covered by the following:



Zotefoams plc
675 Mitcham Road
Croydon, Surrey
CR9 3AL, United Kingdom
Tel: +44 (0) 20 8664 1600
Email: t-fitsales@zotefoams.com

**T-FIT Insulation Solutions
India Private Limited**
810 Shapath V, S.G. Highway
Ahmedabad, Gujarat, 380015
Tel: +91 (0) 7433946464
Email: t-fitindia@zotefoams.com

**Zotefoams T-FIT Material
Technology (Kunshan) Co., Ltd**
181 Huanlou Road, Development Zone,
Kunshan City, Jiangsu Pr. China 215333
Tel: +86 (0) 512 5012 6001-8001
Email: t-fitchina@zotefoams.com

Zotefoams Inc.
55 Precision Drive
Walton KY, 41094 USA
Tel: +1 (0) 859 371 4025
Free: (800) 362-8358 (US Only)
Email: t-fitusa@zotefoams.com

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Issue 1

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