

Technický datový list

Durolight® S3

Vlastnosti produktu

- Low thermal conductivity
- High mechanical strength
- Glass-reinforced thermoset SMC high-pressure laminate developed for applications at cryogenic temperatures

Typické oblasti použití

- LNG pohony – Nízkoteplotní izolace
- Potrubí
- Subsea
- Zdravotní péče

	Testovací metoda	Jednotka	Orientační hodnota
Mechanické vlastnosti			
Hustota	ISO 1183	g / cm ³	1,85
Pevnost v ohybu $\perp$ RT	ISO 178	MPa	350
Pevnost v ohybu $\perp$ -196 °C	ISO 178	MPa	500
Modul pružnosti v ohybu $\perp$ RT	ISO 178	MPa	17000
Modul pružnosti v ohybu $\perp$ -196°C	ISO 178	MPa	20000
Pevnost v tlaku $\perp$ RT	ISO 604	MPa	450
Pevnost v tlaku II RT	ISO 604	MPa	300
Pevnost v tlaku II -196 °C	ISO 604	MPa	350
Pevnost v tlaku $\perp$ -196 °C	ISO 604	MPa	550
Pevnost v tahu II RT	ISO 527	MPa	280
Pevnost v tahu II - 196°C	ISO 527	MPa	360
Rázová houževnatost II (Charpy)	ISO 179	kJ / m ²	90
Tepelné vlastnosti			
Tepelná vodivost $\perp$		W / (m * K)	≈ 0,3
Součinitel lineární roztažnosti $\perp$	TMA (Mettler)	10 ⁻⁶ x K ⁻¹	≈ 65
Součinitel lineární roztažnosti II	TMA (Mettler)	10 ⁻⁶ x K ⁻¹	≈ 13
Provozní teplota		°C	-196 to +180
Fyzikální vlastnosti			
Absorpce vody (metoda 1)	ISO 62	%	< 0,1

$\perp$ = perpendicular to the lamination II = parallel to the lamination

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Print: 12/12/2025 • Vydáno: 20/09/2023

PIM-verze: 958 • PIM-ID: 716659 • PIM-kód: 958-39-12.23.9-3.5.5.27-13

Company-IDs: 20000-1

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