

## Technical Data

## STYROFOAM™ LB-X

Extruded Polystyrene Foam XPS (EN13164) – free from HCFC – blue color

Properties <sup>1)</sup>	CE-Code	Standard	Unit	Value
Density		DIN EN 1602	kg/m <sup>3</sup>	33
Thermal conductivity @ 10°C		DIN EN 12667/ DIN EN 12939	W/m·K	0,027
Thermal conductivity $\lambda_D$		DIN EN 13164	W/m·K	0,029 (20 – 70 mm) 0,030 (71 – 120 mm) 0,031 (> 120 mm)
$\lambda$ design value according to Z-23.15-1476		DIN 4108-4	W/m·K	0,030 (20 – 70 mm) 0,031 (71 – 120 mm) 0,032 (> 120 mm)
Compressive stress or compressive strength @ 10 % deformation <sup>2)</sup>	CS(10Y) $\sigma_m$	DIN EN 826	N/mm <sup>2</sup> <sup>3)</sup>	0,30
Compressive modulus <sup>2)</sup>	–	DIN EN 826	N/mm <sup>2</sup>	12
Tensile strength <sup>2)</sup>	TR400	DIN EN 1607	N/mm <sup>2</sup>	0,50
Tensile modulus <sup>2)</sup>	–	DIN EN 1607	N/mm <sup>2</sup>	12
Shear strength	–	DIN EN 12090	N/mm <sup>2</sup>	0,25
Shear modulus	–	DIN EN 12090	N/mm <sup>2</sup>	8
Water vapour diffusion resistance factor ( $\mu$ )	–	DIN EN 12086	–	100
Long term water absorption by total immersion	WL(T) 1,5	DIN EN 12087	Vol.-%	≤ 1,5
Dimensional stability under specified temperature and humidity:	DS(TH)	DIN EN 1604	%	≤ 2
Deformation under specified compressive load and temperature	DLT(2)5	DIN EN 1605	%	≤ 5
Reaction to fire		DIN 4102	–	B1
Reaction to fire Euroclasse		EN 13501-1	–	E
Coefficient of linear thermal expansion	–	–	mm/m·K	0,07
Temperature limits	–	–	°C	–50/+75
Capillarity	–	–	–	0
Edge profile	–	–	–	butt
Surface finish	–	–	–	planed/grooved
Dimensions <sup>4)</sup>				
Thickness	–	DIN EN 823	mm	20 – 160
Width	–	DIN EN 822	mm	600/1200
Length	–	DIN EN 822	mm	2500
Tolerances <sup>4)</sup>				
Thickness	T3	DIN EN 823	mm	–0,5/+ 0,5
Width < 700 mm	–	DIN EN 822	mm	–0/+3
Width ≥ 700 mm	–	DIN EN 822	mm	–0/+5
Length	–	DIN EN 822	mm	–0/+10
Applications <sup>5)</sup>		DIN 4108, T 10		WAB,WI, DAD

1) The properties refer to thickness ranges mentioned in the table.

2) Measured in thickness direction

3) 1 N/mm<sup>2</sup> = 10<sup>3</sup> kPa; 1 kPa = 10<sup>–3</sup> MPa

4) Products with special dimensions or closer tolerances may be available upon request.

5) Only valid for the use of products in building applications. Details are given for potential applications, which however for the final building product need to be defined by its fabricator.



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**CE Kennzeichnung:**  
XPS-EN13164-T3-CS(10/Y)300-DS(TH)-TR400