



Technical Data Sheet



Smart® Band Flex ½" 13mm Locking Head, Material POM Part No. SB-BU-FX-1/2-LH-POM



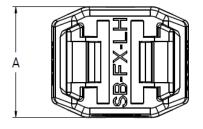


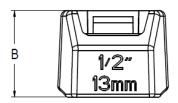
Description

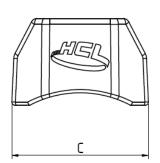
Medium duty locking head used together with Smart® Band Flex 13mm Banding. Made from UV stabilised POM and suitable for long life, outdoor and marine use.

Outline Dimensions (General Tolerance ± 0.2mm)









General Properties POM ¹					
Property	Value	Unit			
Weight	3.78 (0.133) +/- 2%	g (oz)			
Length (A)	21.8 (0.858)	mm (inch)			
Width (B)	18.4 (0.724)	mm (inch)			
Height (C)	13.9 (0.547)	mm (inch)			
Slot Width (D)	13.3 (0.524)	mm (inch)			

¹POM is the material code for Polyoxymethylene. The generic designation is Acetal



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Material Properties POM ¹					
Property	Dry as Moulded	Unit	Test Method		
Density	1.41 (0.82) g/cm³ (oz/inch³)		ISO 1183		
Water Absorption 24hr	0.2 %		ASTM D570		
@ 23°C, 50% RH					
Tensile Modulus +23°C/+73°F	2500 (362.6)	MPa (kpsi)	ISO 527-1		
Tensile Stress @ Yield +23°C/+73°F	62.0 (9.0)	MPa (kpsi)	ISO 527-2		
Tensile Strain @ Break +23°C/+73°F	40	%	ISO 527-2		
Flexural Modulus	2400 ()	MPa (kpsi)	ISO 178		
Flexural Strength	88 (12.8)	MPa (kpsi)	ISO 178		
Charpy Notched Impact Strength	9 (4.3)	kj/m² (ft-lb/in²)	ISO 179		
Heat Deflection Temperature					
0.45 MPa Unannealed	156 (312)	°C (°F)	ISO 75-2/B		
1.8 MPa, Unannealed	95 (203)	°C (°F)	ISO 75-2/A		
Vicat Softening Temperature					
50N		°C (°F)	ISO 306/B		
10N	160 (320)	°C (°F)	ISO 306/B		
Melting Temperature	189 (372)	°C (°F)	ISO 11357		
Flammability	НВ		UL 94		
RoHS Compliance	✓ RoHS Compliant				
UL File Number	E48285				

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Mechanical Tests:



Property	Test Diameter mm	System Yield Strength	Unit	Test Speed mm/min (inch/min)
System Tensile Test ²	50	2340 (238) [526]	N (kgf) [lbf]	50.8 (2.0)
	88.9 ³	2330 (237) [524]	N (kgf) [lbf]	50.8 (2.0)
	100	2160 (220) [485]	N (kgf) [lbf]	50.8 (2.0)
	200	2110 (215) [474]	N (kgf) [lbf]	50.8 (2.0)

 $^{^2}$ Tests carried out in HCL laboratory at room temperature 2 20°C and 2 50% humidity on a steel half shell pipe arrangement. System tests carried out using a SB-BU-FX-1/2-LH-POM locking head with SB-BA-FX-1/2-POM flex band.

³Diameter required from Telecordia standard number TR-TSY-000789



Property/Tool Type	Test Diameter mm (inch)	Maximum Tension during	Minimum Tension after	Unit
	inin (inch)	Installation ⁴	Installation ⁴	
Nominal System Retention ⁴				
SM-FT-2000-13-FX	100 (3.94)	1000 (102) [224]	400 (40) [90]	N (kgf) [lbf]

^aThe system retention gives an idea of the expected retention or tension during and after tightening using a Smart® Band installation tool (part number SM-FT-2000-13-FX) around a 100mm diameter steel pipe and depends on how much force the user can apply. Surface friction and the capstan effect may produce different results. Tool operated using one hand only as per recommendation.



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Further Technical Information and Design Guidelines can be found in the following booklets:

- Smart® Products Technical Booklet



Important Notice to User

Shelf Life: Store in a cool dry area in original cartons and use within 5 years after date of receipt.



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