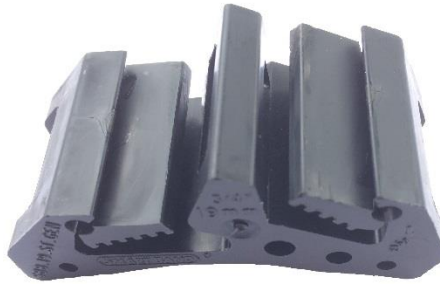


iQ parts
IQ-PARTS-SHOP.COM



**SPECS &
INFORMATION**

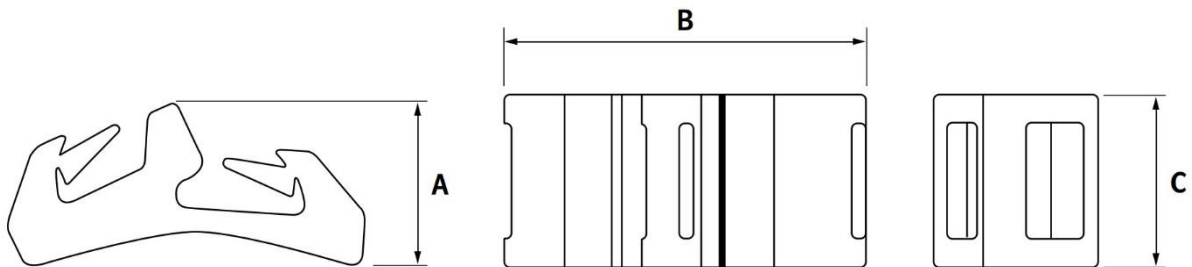
Smart® Band Standard Buckle 19mm, Material PA66 Part No. SB-BU-3/4-ST-PA66



Description

Polymer based buckle used together with Smart® Band.

Outline Dimensions (General Tolerance $\pm 0.2\text{mm}$)



General Properties PA66¹

Property	Value	Unit
Weight	24 (0.86) +/- 2%	g (oz)
Height (A)	28.3 (1.11)	mm (inch)
Length (B)	63.8 (2.51)	mm (inch)
Width (C)	30.2 (1.19)	mm (inch)

¹PA66 is the material code for Polyamide 66. The generic designation is Nylon 66

Material Properties PA66¹

Property	Dry as Moulded	Conditioned 50%RH	Unit	Test Method
Density	1.14 (0.66)		g/cm ³ (oz/inch ³)	ISO 1183
Water Absorption @ 23°C Equilibrium @ 50% RH	2.4		%	ISO 62
Saturation	8.5		%	ISO 62
Tensile Modulus +23°C/+73°F	3000 (435)	1400 (577)	MPa (kpsi)	ISO 527-2
Tensile Stress @ Yield +23°C/+73°F	83 (12.0)	66 (9.6)	MPa (kpsi)	ISO 527-2
Tensile Stress @ Break +23°C/+73°F	93 (13.4)	90 (13.1)	MPa (kpsi)	ISO 527-2
Tensile Strain @ Yield +23°C/+73°F	4.5	25	%	ISO 527-2
Tensile Strain @ Break +23°C/+73°F	25	105	%	ISO 527-2
Flexural Modulus	2900 (420)	1350 (196)	MPa (kpsi)	ISO 178

¹PA66 is the material code for Polyamide 66. The generic designation is Nylon 66



Material Properties PA66 ¹ Cont'd				
Property	Dry as Moulded	Conditioned 50%RH	Unit	Test Method
Flexural Strength	86 (12.5)	22 (3.2)	MPa (kpsi)	ISO 178
Charpy Unnotched Impact Strength +23°C/+73°F -30°C/-22°F -55°C/-67°F	No break		kJ/m ² (ft-lb/in ²)	ISO 179
	No break		kJ/m ² (ft-lb/in ²)	ISO 179
	No break		kJ/m ² (ft-lb/in ²)	ISO 179
Charpy Notched Impact Strength +23°C/+73°F -30°C/-22°F	6.6 (3.1)		kJ/m ² (ft-lb/in ²)	ISO 179
	5.3 (2.5)		kJ/m ² (ft-lb/in ²)	ISO 179
Heat Deflection Temperature 0.45 MPa, Unannealed 1.82 MPa, Unannealed	200 (392)		°C (°F)	ISO 75-2/B
	70 (158)		°C (°F)	ISO 75-2/A
Vicat Softening Temperature 50N 10N	236 (457)		°C (°F)	ISO 306/B
	255 (491)		°C (°F)	ISO 306/B
Melting Temperature	260 (500)		°C (°F)	ISO 11357
Flammability	HB			UL 94
RoHS Compliance	RoHS Compliant			
UL File Number				

¹PA66 is the material code for Polyamide 66. The generic designation is Nylon 66

Mechanical Tests:



Property	Test Diameter mm	System Yield Strength	Unit	Test Speed mm/s
System Tensile Test ³	100	3400 (347) [764]	N (kgf) [lbf]	10
	200	3830 (391) [861]	N (kgf) [lbf]	10
	280	3590 (366) [807]	N (kgf) [lbf]	10
	400	4170 (425) [937]	N (kgf) [lbf]	10
	600	4310 (440) [969]	N (kgf) [lbf]	10
	800	3590 (366) [807]	N (kgf) [lbf]	10

³Tests carried out in HCL laboratory at room temperature ~20°C and ~50% humidity on a steel half shell pipe arrangement. System tests carried out using a SB-BU-3/4-ST-PA66 buckle with SB-BA-3/4-PA66 band



Property/Tool Type	Test Diameter mm	Maximum Tension during Installation	Minimum Tension after Installation	Unit
System Retention ⁴ SM-FT-1000-19 SM-FT-2000-19	400	3500 (357) [787]	1200 (122) [270]	N (kgf) [lbf]
	400	4000 (408) [899]	1200 (122) [270]	N (kgf) [lbf]

⁴The system retention is the expected retention or tension during and after tightening using a Smart[®] installation Tool and depends on tool setup and use. Surface friction and the capstan effect may produce different results



Technical Data Sheet



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.

Warranty: HCL warrants that all products when stored, used and maintained in accordance with HCL's written instructions will meet or exceed the above specification. HCL makes no other warranties or conditions, expressed or implied, including, but not limited to, any implied warranty or condition of merchantability or fitness for a particular purpose or any implied warranty or condition arising out of a course of dealing, custom or usage of trade. If any HCL product does not conform to this warranty then only replacement or refund of the affected parts will be considered.

Limitation of Liability: Except where expressly prohibited by law, HCL will not be liable for any damage or loss arising from the use of the HCL product.

Product Use: It is the user's responsibility to determine the suitability of the product for the task it is to be used for. HCL reserve the right to continually improve its product and would advise the user to contact HCL at all times to ensure they have up to date current data to work with.





info@iq-parts.nl
Harsweg 34A
2461 EZ Ter Aar
T +31 252 624 126
The Netherlands