

Smart® Band Compact



The new Smart® Band Compact 32mm Banding System is an exciting step forward in the evolution of the Smart® Band range. It combines the best features of both the Smart® Tie and the Smart® Band Hybrid systems to create a superior product.

The Smart® Band Compact reduces the size of the Hybrid buckle by over 60% allowing it to be installed on applications as low as 100mm in diameter. Yet unlike the Smart® Tie it contains glass fibre reinforced yarn allowing it to maintain the superior strength, retention and relaxation features of the Hybrid system.

Furthermore the innovative technology of over-moulding the buckle directly onto the band has actually produced an increase in the strength and retention of the Compact system. As such the Compact system is now perfectly placed to provide a High Strength, High Retention, Long Life and "quick to fit" strapping method for all major subsea applications including VIV Strake attachment on risers down to 100mm.

Key Features

- 60% reduction in buckle size compared to Hybrid System
- Improved Minimum Diameter – 100mm for 19mm and 200mm for 32mm
- Increase in Strength of over 10% for both 19mm and 32mm systems
- High Load feature for Stinger Installation

19mm (¾ inch)

32mm (1¼ inch)



Performance & Material

System			Max System Strength <small>Measured on 600mm diameter</small>		Min Diameter		Max Temp Resistance*		Flammability*
Dimensions		Material							
mm	in			kgf	lbf	mm	in	°C	
19	¾	PA12GF	1453	3203	100	4	110	230	HB
		PPS	1070	2360	100	4	175	347	V-0
32	1¼	PA12GF	2689	5929	200	8	110	230	HB
		PPS	2153	4747	200	8	175	347	V-0

*Life expectancy is dependant on the working temperature. Refer to the Smart Products Technical Booklet for Downhole Use.



Dimensions, Part Numbers & Packaging

System			Band Dimensions						Buckle Dimensions		
Dimensions		HCL Part No	Width		Thickness		Supplied	Height	Length	Width	
			mm	in	mm	in		mm/in	mm/in	mm/in	
19	¾		SB-COM-19-PA12GF-XXXXMM	19.2	0.76	3.6	0.14	In pre-cut lengths	23.4/0.92	58.6/2.31	37.4/1.47
32	1¼	SB-COM-32-PA12GF-XXXXMM	32.2	1.27	4.7	0.19	In pre-cut lengths	30.0/1.18	74.0/2.91	51.9/2.04	

*Available in PA12GF and PPS for Part No. replace PA12GF with PPS. **Replace XXXX in Part No. with desired length in mm.



Tool Options & Retention

System			Min System Retention*			Speed of Installation	Tool Type	Tension Control
Dimensions		Tool	N	kgf	lbf			
mm	in							
19	¾	SM-FT-1000-19	3500	357	787	20 secs	Manual	Torque Wrench
		SM-FT-2000-19	3000	306	674	10 secs	Manual	Hand
		SM-FT-3000-19	4000	408	899	5 secs	Pneumatic	Air Regulator
32	1¼	SM-FT-1000-32	7000	714	1574	20 secs	Manual	Torque Wrench
		SM-FT-2000-32	3500	357	787	10 secs	Manual	Hand
		SM-FT-3000-32	9000	918	1798	5 secs	Pneumatic	Air Regulator

*Values may be lower depending on materials chosen please refer to Technical Booklets for more information.

Note – Values may be lower depending on Buckle position, Material chose and Application Diameter. Please refer to the Technical Booklet for more information.

Smart® Band Hybrid



The Hybrid name points to the unique patented design of the teeth that sit within the buckle. The low profile buckle is made from a composite of materials allowing for greater flexibility and providing a significant increase in strength over the Standard system.

Smart® Band Hybrid is HCL's high strength composite polymer based band and buckle system. With a range of installation tools including the high speed 3000 pneumatic tool the Smart® Band Hybrid is the ideal solution for many offshore and onshore applications.

Smart® Band Hybrid is typically used as an alternative to high grade corrosion resistant alloy strapping solutions such as Inconel 625, Monel & Titanium. The Hybrid system combines a number of excellent qualities such as high strength, ease of use, high retention, relaxation properties and long life, to provide the ideal strapping solution for offshore & subsea use.

Key Features

- Low Profile Buckle
- High strength up to 2629kgf (5793lbf)
- Long-life materials
- Safe and easy to fit
- High speed installation
- High retention force – above 918kgf (2023lbf)
- Suitable for divers

19mm (¾ inch)

32mm (1¼ inch)



Performance & Material

System			Max System Strength <small>Measured on 600mm diameter</small>		Min Diameter		Max Temp Resistance*		Flammability*
Dimensions		Material							
mm	in			kgf	lbf	mm	in	°C	
19	¾	PA12GF	1321	2911	200	4	110	230	HB
		POM	1017	2238	200	4	95	203	
		PA66	1297	2859	200	4	125	257	
32	1¼	PA12GF	2344	5166	400	8	110	230	

*Life expectancy is dependant on the working temperature..



Dimensions, Part Numbers & Packaging

System				Band Dimensions						Buckle Dimensions			Buckle
Dimensions		HCL Part No		Width		Thickness		Band Reel Lengths*		Height	Length	Width	Pack Qty
mm	in	Band	Buckle	mm	in	mm	in	m	ft	mm/in	mm/in	mm/in	
19	¾	SB-BA-3/4	SB-BU-3/4-HY	19.2	0.76	3.6	0.14	30/60	100/200	12.8/0.50	99.0/3.90	53.0/2.09	50
32	1¼	SB-BA-1-1/4	SB-BU-1-1/4-HY	32.2	1.27	4.7	0.19	30	100	16.8/0.66	135.5/5.33	76.8/3.02	25

*Band is available in pre-cut lengths with buckle fitted for large volume orders.



Tool Options & Retention

System			Min System Retention*			Speed of Installation	Tool Type	Tension Control
Dimensions		Tool	N	kgf	lbf			
mm	in							
19	¾	SM-FT-1000-19	3500	357	787	20 secs	Manual	Torque Wrench
		SM-FT-2000-19	3000	306	674	10 secs	Manual	Hand
		SM-FT-3000-19	4000	408	899	5 secs	Pneumatic	Air Regulator
32	1¼	SM-FT-1000-32	7000	714	1574	20 secs	Manual	Torque Wrench
		SM-FT-2000-32	3500	357	787	10 secs	Manual	Hand
		SM-FT-3000-32	9000	918	2023	5 secs	Pneumatic	Air Regulator

*Values may be lower depending on materials chosen please refer to Technical Booklets for more information.

Note – Values may be lower depending on Buckle position, Material chose and Application Diameter. Please refer to the Technical Booklet for more information.

Smart® Band Standard



The standard name denotes the simplicity of the buckle design, allowing for ease of use & application and presenting itself within HCL's product range as the general industry solution.

Smart® Band Standard is a non-metallic band and buckle system. Highly suited to lightweight applications such as temporary and permanent sign fixing and HVAC.

Smart® Band Standard system is available in a variety of materials, sizes and reel lengths. It offers long-life and non-corrosive properties, making it the ideal alternative to many high grade stainless steel strapping solutions.

Key Features

- Strength up to 440kgf (969lbf)
- Non-corrosive
- Safe and easy to fit
- Long life materials
- Lightweight easy to use hand tools
- Highly suited for sign installation
- Non-conductive

10mm (3/8 inch)

19mm (3/4 inch)



Performance & Material

System			Max System Strength <small>Measured on 600mm diameter</small>		Min Diameter		Max Diameter		Max Temp Resistance*		Flammability*
Dimensions		Material									
mm	in			kgf	lbf	mm	in	mm	in	°C	°F
10	3/8	PA66	264	581	76	2.96	600	24	125	257	NB
		PA12	127	280	76	2.96	600	24	100	212	
19	3/4	PA66	440	969	75	3.00	800	32	125	257	
		PA12	385	850	76	2.96	600	24	100	212	

*Life expectancy is dependant on the working temperature. Refer to the Smart Products Technical Booklet for Downhole Use



Dimensions, Part Numbers & Packaging

System				Band Dimensions						Buckle Dimensions			Buckle
Dimensions		HCL Part No		Width		Thickness		Band Reel Lengths		Height	Length	Width	Pack Qty
mm	in	Band	Buckle	mm	in	mm	in	m	ft	mm/in	mm/in	mm/in	
10	3/8	SB-BA-3/8	SB-BU-3/8-ST	9.8	0.39	3.6	0.14	30/125	100/410	21.5/0.85	77.2/3.04	22.9/0.90	100
19	3/4	SB-BA-3/4	SB-BU-3/4-ST	19.2	0.76	3.6	0.14	30/60	100/200	28.3/1.11	63.8/2.51	30.2/1.19	50



Tool Options & Retention

System			Min System Retention			Speed of Installation	Tool Type	Tension Control
Dimensions		Tool	N	kgf	lbf			
mm	in							
10	3/8	SM-TA-528A	750	77	169	10 secs	Manual	Hand
19	3/4	SM-FT-1000-19	1200	122	270	20 secs	Manual	Torque Wrench
		SM-FT-2000-19	1200	122	270	10 secs	Manual	Hand