

Smart® Tie



Smart® Tie incorporates the High Strength Tooth Feature of the Smart® Band Hybrid and Compact and creates the strongest Polymer Cable Tie in the World.

Smart® Tie is a patented heavy duty polymer tie wrap, able to withstand system loads in excess of 1200kgf.* It has the advantage of being manufactured from a range of high temperature polymers, giving it superior chemical and temperature resistance up to 175°C*.

Lightweight and very easy to use the Smart® Tie has become the ideal downhole cable tie solution and compatibility with the Smart® Protector provides a complete solution for many down-hole applications. The Smart® Tie is also used widely in offshore applications such as Cable Protection and can be manufactured from long-life PA12.

*Depending on material choice.

Key Features

- High temperature resistance up to 175°C (347°F)
- High strength up to 1223kgf (2695lbf)
- Safe and very easy to fit
- High speed installation
- 100% recyclable
- Non-corrosive
- Long life materials
- Suitable for divers

19mm (3/4 inch)	20mm (3/4 inch)	32mm (1 1/4 inch)
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Performance & Material											
System		Max System Strength		Min Diameter		Max Temp Resistance*		Flammability*	Gas Resistance		
mm	in	kgf	lbf	mm	in	°C	°F		CBM Coal Seam Gas	H ₂ S Sour Gas	
20	3/4	PA66	513	1128	60	2.36	125	260	V-2	?	?
20	3/4	PK	565	1220	60	2.36	125	257	HB	Good	Good
		PA12	414	911	60	2.36	100	212	HB	Fair	Fair
		PPS	514	1130	60	2.36	175	347	V-0	Very Good	Very Good
32	1 1/4	PK	1270	2800	60	2.36	125	257	HB	Good	Good
		PA12	984	2169	60	2.36	100	212	HB	Fair	Fair
		PPS	1223	2695	60	2.36	175	347	V-0	Very Good	Very Good

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

Dimensions, Part Numbers & Packaging									
System		Band Dimensions							
Dimensions		HCL Part No	Maximum Length		Band Width		Band Thickness	Head Width	Head Height
mm	in		mm	in	mm	in	mm/in	mm/in	mm/in
20	3/4	ST-20-600	620.0	24.41	20	0.79	3.6/0.14	35.0/1.38	12.0/0.47
		ST-20-750	770.0	30.31					
		ST-32-550	573.0	22.56	32	1.26			
ST-32-850	873.0	34.37							

Tool Options & Retention									
System		Min Retention*				Speed of Installation	Tool Type	Tension Control	
mm	in	Tool	N	kgf	lbf				
20	3/4	SM-FT-1000-20ST	1500	153	337	20 secs	Manual	Torque Wrench	
		SM-FT-2000-19	1500	153	337	10 secs	Manual	Hand	
		SM-FT-3000-20ST	1500	153	337	5 secs	Pneumatic	Air Regulator	
32	1 1/4	SM-FT-1000-32ST	4000	408	899	20 secs	Manual	Torque Wrench	
		SM-FT-2000-32	3700	377	832	10 secs	Manual	Hand	
		SM-FT-3000-32ST	4000	408	899	5 secs	Pneumatic	Air Regulator	

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