



20mm (¾ inch)

32mm (1¼ inch)

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 downhole 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



## Performance & Material

System		Material	Max System Strength Measured on 100mm diameter		Min Diameter		Max Temp Resistance*		Flammability*	Gas Resistance	
Dimensions			kgf	lbf	mm	in	°C	°F		CBM Coal Seam Gas	H <sub>2</sub> S Sour Gas
20	¾	PA66	508	1119	60	2.36	125	257	V-2	?	?
		PK	603	1329	60	2.36	125	257	HB	Good	Good
		PA12	413	911	60	2.36	100	212	HB	Fair	Fair
		PPS	512	1129	60	2.36	175	347	V-0	Very Good	Very Good
32	1¼	PK	1278	2818	60	2.36	125	257	HB	Good	Good
		PA12	949	2092	60	2.36	100	212	HB	Fair	Fair

\*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										
Dimensions		HCL Part No	Maximum Length		Band Width		Band Thickness		Head Width		Head Height	
mm	in		mm	in	mm	in	m	ft	mm	in	mm	in
20	¾	ST-20-450*	470.0	18.50								
		ST-20-600	620.0	24.41	20.0	0.79	3.6	0.14	35.0	1.38	12.0	0.47
		ST-20-750	770.0	30.31								
32	1¼	ST-32-550**	573.0	22.56								
		ST-32-850	873.0	34.37	32.0	1.26	4.6	0.18	50.0	1.97	20.0	0.79

\*Only available in PA66 material. \*\*Not available in PPS material.



## Tool Options & Retention

System			Min System Retention			Speed of Installation	Tool Type	Tension Control
Dimensions		Tool	N	kgf	lbf			
mm	in							
20	¾	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	2500	255	562	5 secs	Pneumatic	Air Regulator
32	1¼	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.

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