

Safetrack 1 SHROUDED CONDUCTOR TECHNICAL DATA SHEET					
CONDUCTOR		SF1-40A	SF1-100A	SF1-125A	SF1-250A SF1-315A
Material		Stainless Steel	Galvanised Steel		Copper
Cross Sectional Area (Thickness)		50.4 (1mm)	50.4 (1mm)	63 (1.2mm)	50.4 (1mm) 63 (1.2mm)
Impedence milli Ohms/M +35 °C		12.95	2.9	2.5	0.345 0.335
DC Resistance milli Ohms/M +35 °C		12.88	2.86	2.45	0.333 0.333
Co eff. Of Expansion / °C		1.8 x 10 ⁻⁵	1.26 x 10 ⁻⁵	1.26 x 10 ⁻⁵	1.62 x 10 ⁻⁵ 1.62 x 10 ⁻⁵
Conductor Rating At +35 °C CDF 100%		40A	100A	125A	250A 315A
80%		43A	112A	139A	280A 352A
60%		46A	123A	152A	307A 385A
40%		50A	135A	160A	315A 400A
Conductor Rating at 100% CDF At +35 °C		40A	100A	125A	250A 315A
+40 °C		40A	100A	125A	240A 300A
+45 °C		38A	95A	115A	225A 280A
+50 °C		35A	90A	110A	210A 260A
+55 °C		32A	80A	100A	190A 240A
Standard Conductor Length		4 Mtrs	4 Mtrs		4 Mtrs
Track Configuration straight / curved Bending radius minimum Horz/ Vert		1000 mm	1000 mm		1000 mm
Conductor Joint		PIN JOINT	PIN JOINT		PIN JOINT
INSULATION					
Standard Insulation		PVC	PVC		PVC
System working Temperature*		80 °C	80 °C		80 °C
Flame Test		Self Extinguishing	Self Extinguishing		Self Extinguishing
Insulation Cover		RYBG	RYBG		RYBG
Protection Class (Finger Safe)		IP21	IP21		IP21
Maximum System Voltage		500VAC 600VDC	500V AC / 600V DC		500V AC / 600V DC
High Voltage withstand For 1min / Flashover Test		2.5KV / 7.5KV	2.5KV / 7.5KV		2.5KV/ 7.5KV
INSTALLATION					
Support Pitch Standard		1000 mm	1000 mm		1000 mm
Lateral		1000 mm	1000 mm		1000 mm
On curved path		500 mm	500 mm		500 mm
Hanger Clamps		1pole special	1pole / 4pole		1pole / 4pole
Minimum Pitch Centre 4P HC Fixed		NA	43 mm		43 mm
1P HC		50 mm	40 mm min		40 mm min
Max distance between Anchor points		75 Mtrs	75 Mtrs		75 Mtrs
Power Feeding		At joint or at any location	At joint or at any location		At joint or at any location
Expansion section required for bay lengths more than		150 Mtrs	200 Mtrs		150 Mtrs
In Expn Tandem Collectors Required		Yes	Yes		Yes
Site Crimping (Tool Supplied)		N.A	N.A		Required
Installation suitable for		Indoor / outdoor	Indoor / outdoor		Indoor / outdoor
OTHER ACCESSORIES					
Transfer Guides / Isolating Sections *High Temp. Sleeves For 120 °C		Available	Available		Available
APPLICATIONS		Shrouded DSL installations for EOT Cranes, Electric Hoists, Straight / Curved Monorails, Conveyors, Amusement Drives, Electric Trolleys, Transfer Cars, Automated storage systems, Material handling systems etc. SS Conductors for Corosive atmosphere.			