

# Medium Voltage PILC Cables

PILC/PILAC

FIHC... Primary group code

Copper 3 Core

FRPVC DTA FRPVC(red stripe)

...20191 Table + Finish code

12700/22000V

LHPVC DTA LHPVC(blue stripe)

...20292

Table 20

SANS 97

Size code	...aaaa...	3050	3070	3095	3120	3150	3185	3240	3300
Conductor size	mm <sup>2</sup> nom	50*	70*	95*	120	150	185	240	300
Conductor depth	mm nom	8.3	10.0	11.8	11.0	12.2	13.7	15.7	17.6
Insulated depth	mm nom	20.8	22.5	24.3	23.5	24.7	26.2	28.2	30.1
Diameter over lead sheath	mm nom	51.5	55.5	59.5	56.5	59.5	63.0	67.5	71.5
Bedding diameter	mm nom	55.0	59.0	63.0	60.0	63.0	67.0	71.5	75.5
Thickness of DSTA	mm	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Overall diameter	mm nom	64.5	68.5	73.0	70.5	73.5	77.5	82.5	87.0
Normal drum length	m	300	300	300	300	300	300	300	300
Cable mass	kg/m app.	9.4	10.8	12.5	13.2	14.8	16.8	19.6	22.6
Gross mass ( drum length)	kg app.	3270	3690	4200	4410	4890	5490	6330	7230
Bending radius	mm min.	968	1028	1095	1058	1103	1163	1238	1305
Current rating									
In ground	Amps	160	195	235	270	300	340	390	435
In ducts	Amps	140	170	200	230	255	290	330	370
In air	Amps	170	215	260	300	340	385	450	510
Positive sequence									
Resistance dc @ 20°C	Ω/km max	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601
ac @ 70°C	Ω/km max	0.463	0.321	0.232	0.184	0.149	0.1198	0.0919	0.0740
Reactance	Ω/km	0.126	0.116	0.109	0.096	0.092	0.088	0.085	0.081
Impedance at 70°C	Ω/km	0.480	0.341	0.256	0.207	0.175	0.149	0.125	0.110
Zero sequence									
Resistance	Ω/km	2.538	2.155	1.858	1.827	1.649	1.480	1.312	1.175
Reactance	Ω/km	0.122	0.117	0.112	0.117	0.114	0.110	0.107	0.103
Impedance	Ω/km	2.541	2.158	1.861	1.831	1.653	1.485	1.316	1.179
Short circuit ratings									
Symmetrical	kA (1sec)	6.9	9.9	13.8	17.4	21.5	26.9	35.3	44.3
Earth fault(Symmetrical limit)	kA (1sec)	8.4(6.9)	9.5	10.7	10.6	11.6	12.8	14.2	15.8

Last updated May 2006

\* Circular Conductor

When ordering please quote: primary + size + table + finish code  
e.g. FIHC 3120 20 191



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