

AKSH TECHNOLOGIES LIMITED

PART No.: A-48/SM/MTY(F&7W)-MFP-B19.1

SPAN LENGTH: 80 METRES

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CABLE TYPE: 48 F SM (FIGURE 8 TYPE)
AERIAL O.F. CABLE

DESIGN & DATA SPECIFICATION SHEET

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CHARACTERISTICS	UNIT	VALUE
ATTENUATION @ 1310 nm	dB/km	≤ 0.38 Max & ≤ 0.35 Average
@ 1550 nm		≤ 0.25 Max & ≤ 0.22 Average
CHROMATIC DISPERSION 1285-1330 nm	ps/nm.km	≤ 3.5
At 1550 nm		≤ 18.0
ZERO DISPERSION WAVELENGTH	nm	1300 to 1324
ZERO DISPERSION SLOPE	ps/nm ² .km	≤ 0.092
CUT OFF WAVELENGTH	nm	≤ 1320
POLARISATION MODE DISPERSION	ps/root km	≤ 0.2
MODE FIELD DIAMETER at 1310 nm	um	9.3 ± 0.5
CORE- CLAD CONCENTRICITY ERROR	um	≤ 0.8
CLADDING NON CIRCULARITY	%	≤ 1.0
CLADDING DIAMETER	um	125 ± 1.0
COATING DIAMETER	um	245 ± 10

2. MECHANICAL & ENVIRONMENTAL PROPERTIES

A. MAX. OPERATING TENSION -- LONG TERM	:	7000 Newton
MAX INSTALLATION TENSION -- SHORT TERM	:	14000 Newton
B. CRUSH RESISTANCE	:	2000 Newton/100 mm
C. MINIMUM BENDING RADIUS -- TEMPORARY	:	191 mm
PERMANENT	:	382 mm
D. MAX. OPERATING/ INSTALLATION TEMPERATURE	:	- 30 °C to + 70 °C

3. PHYSICAL & DIMENSIONS PROPERTIES

NO. OF FIBRES	48F
TYPE OF FIBRE	SM G652 D
LOOSE TUBE DIAMETER	2.1 mm Nominal
STRENGTH MEMBER	FRP & 7x0.8 mm Stranded Steel Wire
SEQUENCE OF TUBE	BLUE, ORANGE, GREEN, BROWN, FILLER-1, FILLER-2
COLOUR OF FIBRE	BLUE, ORANGE, GREEN, BROWN SLATE, WHITE, RED, BLACK, YELLOW, VIOLET, PINK & AQUA
OUTER SHEATH MATERIAL	HDPE
OUTER SHEATH THICKNESS	1.8 mm Nominal
CABLE DIAMETER	10.5 ± 0.6 mm
CABLE DIAMETER INCLUDING MESSENGER WIRE & WEB	19.1 ± 0.8 mm
CABLE WEIGHT	139 ± 15 Kg/Km
PRINTING ON CABLE	AS PER CUSTOMER REQUIREMENT
STANDARD LENGTH	2 ± 10% KMS

CROSS SECTIONAL VIEW:

MESSENGER WIRE ←

WEB ←

OUTER SHEATH (P.E) ←

WATER SWELLABLE TAPE ←

LOOSE TUBE WITH FIBRES ←

CENTRAL STRENGTH MEMBER (F.R.P) ←

WS YARNS ←

RIP CORD ←

