

AKSH TECHNOLOGIES LIMITED

PART No.: A-4/SM/MTJ(F&A)-PMFP-B11.8
 A-8/SM/MTJ(F&A)-PMFP-B11.8
 A-12/SM/MTJ(F&A)-PMFP-B11.8

DATE OF ISSUE: 30.11.2011
 CABLE TYPE: 4, 8, 12F SM O.F. CABLE

DESIGN & DATA SPECIFICATION SHEET

PREPARED BY:
 RAJAN KUMAR

1. FIBRE PROPERTIES:

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	:	3000 Newton
B. CRUSH RESISTANCE	:	2000 Newton/100 mm
C. MINIMUM BENDING RADIUS -- TEMPORARY	:	118 mm
PERMANENT	:	236 mm
D. MAX. OPERATING/ INSTALLATION TEMPERATURE	:	- 30 °C to + 70 °C

3. PHYSICAL & DIMENSIONS PROPERTIES

NO. OF FIBRES	4F	8F	12F
NO OF TUBES/NO OF FILLER	1/5	2/4	3/3
TYPE OF FIBRE	SM G652 D		
LOOSE TUBE DIAMETER	2.0 mm Nominal		
FRP DIAMETER	2.2 mm Nominal		
STRENGTH MEMBER	FRP & ARAMID YARN REINFORCEMENT		
SEQUENCE OF TUBE	BLUE, FILLER-1, FILLER-2, FILLER-3, FILLER-4, FILLER-5	BLUE, ORANGE, FILLER-1, FILLER-2, FILLER-3, FILLER-4	BLUE, ORANGE, GREEN, FILLER-1, FILLER-2, FILLER-3
COLOUR OF FIBRE	BLUE, ORANGE, GREEN & BROWN		
SHEATH MATERIAL	HDPE		
INNER SHEATH THICKNESS	0.8 mm Nominal		
OUTER SHEATH THICKNESS	1.7 mm Nominal		
OUTER CABLE DIAMETER	11.8 ± 0.6 mm		
CABLE WEIGHT	107 ± 11 Kg/Km		
PRINTING ON CABLE	AS PER CUSTOMER REQUIREMENT		
STANDARD LENGTH	2,3,4 ± 10% KMS		

CABLE CROSS SECTION:

OUTER SHEATH (H.D.P.E)

INNER SHEATH (H.D.P.E)

POLYESTER TAPE

F.R.P

FLOODING JELLY

ARAMID YARN

LOOSE TUBE WITH FIBRES

RIP CORD

