

AKSH TECHNOLOGIES LIMITED

PART No.: D-12/SM/MTY(F&G)-MFP-B11.2

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DESIGN & DATA SPECIFICATION SHEET

CABLE TYPE: 12F SM DUCT O.F. CABLE

PREPARED BY:
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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 -- LONG TERM	:	800 Newton
MAX INSTALLATION TENSION -- SHORT TERM	:	1600 Newton
B. CRUSH RESISTANCE	:	2000 Newton/100 mm
C. MINIMUM BENDING RADIUS -- TEMPORARY	:	112 mm
PERMANENT	:	224 mm
D. MAX. OPERATING/ INSTALLATION TEMPERATURE	:	- 30 °C to + 70 °C

3. PHYSICAL & DIMENSIONS PROPERTIES

NO. OF FIBRES	12F
NO OF TUBES/NO OF FILLER	1/5
TYPE OF FIBRE	SM G652 D
LOOSE TUBE DIAMETER	2.1 mm Nominal
STRENGTH MEMBER	FRP & GLASS YARN REINFORCEMENT
SEQUENCE OF TUBE	BLUE, FILLER-1, FILLER-2, FILLER-3, FILLER-4, FILLER-5
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
OUTER CABLE DIAMETER	11.2 ± 0.6 mm
CABLE WEIGHT	98 ± 10 Kg/Km
PRINTING ON CABLE	AS PER CUSTOMER REQUIREMENT
STANDARD LENGTH	$2,3,4 \pm 10\%$ KMS

CABLE CROSS SECTION:

OUTER SHEATH (H.D.P.E)

IMPREGNATED GLASS ROVING

F.R.P

WS YARNS

WATER SWELLABLE TAPE

LOOSE TUBE WITH FIBRES

RIP CORD

