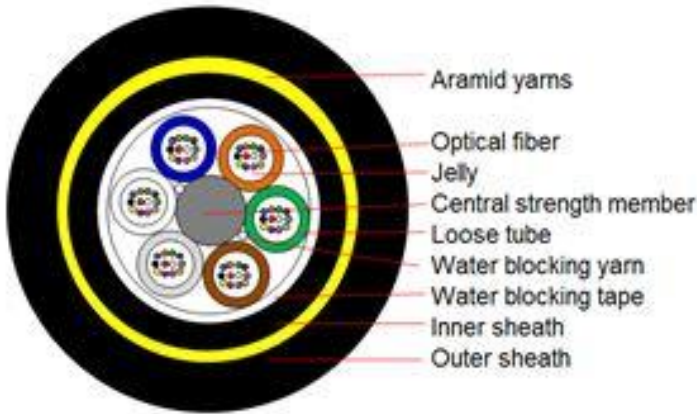


## ADSS DOBLE PBT\_1



### Characteristic of Optical Cable

- Min. bending radius for installation
  - Static: 12.5 x cable diameter
  - Dynamic: 25 x cable diameter
- Application temperature range
  - Operation: -30°C ~ +70°C
  - Installation: -10°C ~ +60°C
  - Storage/transportation: -40°C ~ +70°C

### Cable Specification:

Loose tube construction, tubes jelly filled, elements (tubes and filler rods) laid up around non-metallic central strength member, polyester yarns used to bind the cable core, water blocking tape wrapped around the cable core, PE inner sheath, then aramid yarns and PE outer sheath.

### Cable structure and parameter

SN	Item	Unit	Value			
1	No. of fibers	count	72	96	120	144
2	No. of fibers per tube	count	12	12	12	12
3	No. of elements	count	6	8	10	12
4	Cable diameter(±5%)	mm	13.5	14.9	16.6	18.2
5	Cable weight(±10%)	kg/km	140	175	214	254
6	MAT (Max. Allowable Working tension)	N	6000			
7	Short term crush	N/100mm	3000			
8	Weather condition	/	NESC medium			
9	Span	m	215			

### Fiber color code and Color codes for loose tube & filler rod

1	2	3	4	5	6	7	8	9	10	11	12
Blue	Orange	Green	Brown	Gray	White	Red	Black	Yellow	Purple	Pink	Aqua

## Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 60794-1-2-E1	- Load: Short term tension - Length of cable: about 50m - Load time: 1min	- Fiber strain $\leq 0.33\%$ - No fiber break and no sheath damage.
Crush Test IEC 60794-1-2-E3	- Load: Short term crush - Load time: 1min	- Loss change $\leq 0.1\text{dB}@1550\text{nm}$ - No fiber break and no sheath damage.

## Characteristic of Optical Fiber

### ***G652D fiber information***

Mode field diameter (1310nm):	9.2 $\mu\text{m}$ $\pm$ 0.4 $\mu\text{m}$
Mode field diameter (1550nm):	10.4 $\mu\text{m}$ $\pm$ 0.8 $\mu\text{m}$
Cut off wavelength of cabled fiber ( $\lambda_{cc}$ ):	$\leq 1260\text{nm}$
Attenuation at 1310nm:	$\leq 0.36\text{dB/km}$
Attenuation at 1550nm:	$\leq 0.22\text{dB/km}$
Bending loss at 1550nm (100 turns, 30mm radius):	$\leq 0.05\text{dB}$
Dispersion in the range 1288 to 1339nm:	$\leq 3.5\text{ps}/(\text{nm}\cdot\text{km})$
Dispersion at 1550nm:	$\leq 18\text{ps}/(\text{nm}\cdot\text{km})$
Dispersion slope at zero dispersion wavelength:	$\leq 0.092\text{ps}/(\text{nm}^2\cdot\text{km})$