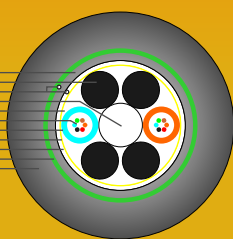


# FIBER OPTIC CABLE

## Multi Loose Tube - Direct Burial Cable



- ▶ Outer Sheath
- ▶ Armor
- ▶ Wrapping Tape
- ▶ Peripheral Strength Member
- ▶ Filled Buffer Tube
- ▶ Optical Fibres
- ▶ Water Blocked Material
- ▶ Central Strength Member
- ▶ Ripcord
- ▶ Filler
- ▶ Inner Sheath

Description	Part Number MM 50µm	Part Number SM 9µm
Double Jacket Direct Burial Fiber Optic Cable, 4 Core	NVL - DBMM-004	NVL - DBSM-004
Double Jacket Direct Burial Fiber Optic Cable, 6 Core	NVL - DBMM-006	NVL - DBSM-006
Double Jacket Direct Burial Fiber Optic Cable, 8 Core	NVL - DBMM-008	NVL - DBSM-008
Double Jacket Direct Burial Fiber Optic Cable, 12 Core	NVL - DBMM-012	NVL - DBSM-012
Double Jacket Direct Burial Fiber Optic Cable, 24 Core	NVL - DBMM-024	NVL - DBSM-024

\*Number of Fiber options are available specific customer requirements

### FEATURE/BENEFITS

- Fiber Count up to 144
- Strain free fibers in a stranded loose tube design
- SZ stranding design allows for easy mid-span access and isolate fibers from installation and environmental rigors
- Most common and widely used design
- Complies with international or national standard (IEC, STEL-K)
- Suitable for access and long distance applications

### FULL RANGE OF FIBER TYPE

- G. 651 (Multimode Fiber)
- G. 652 (Singlemode Fiber)
- G. 655 (NZD Fiber for DWDM application)

### TYPICAL PARAMETER

No. Of Fibres	core	up to 72	up to 96	up to 144
Nominal Outer Diameter	mm	11.7	13.7	17.0
Nominal Cable Weight	kg/km	250	300	425
Minimum Bend Radius	mm	160	180	220
Maximum Tensile Load	N	2500	3000	4500
Temperatures	Operation	°C	-20 to +70	
	Installation	°C	-10 to +40	
	Storage	°C	-20 to +70	
Crush Resistance	N/100mm	3000		
Impact Resistance	N.m	10		

\*Jacketing Construction options are available specific customer requirements

### OPTICAL SPECIFICATIONS

	µ.m.	9/125	50/125	50/125 Hi Band	50/125 OM3
Core Diameter (m)	(db/km)	9.2±0.4	50±3	50±3	50±3
Typical Attenuation @ 850 nm	(db/km)		2.8	2.8	2.5
Typical Attenuation @ 1300 nm	(db/km)		0.8	0.8	0.7
Typical Attenuation @ 1310 nm	(db/km)	0.36			
Typical Attenuation @ 1550 nm	(db/km)	0.23			
Chromatic Disper. @ 1310 nm	(ps/nm*Km)	≤3.5			
Chromatic Disper. @ 1550 nm	(ps/nm*Km)	≤18			
Cable cut-off Wavelength	(nm)	≤1260			
Bandwidth @ 850 nm	(Mhz x Km)		≥400	≥600	≥1500
Bandwidth @ 1300 nm	(Mhz x Km)		≥800	≥1200	≥500

#### Full Range of Protection

- Water Blocked
- Rodent Resistant
- Impact Resistant

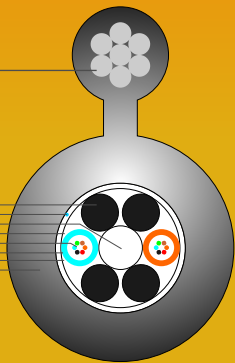
#### Full Range of Application

- Outdoor
- Underground

#### Further Protection Available

- Flame Retardant
- Termite Resistant

Figure - 8 Cable



- Outer Sheath
- Wrapping Tape
- Filled Buffer Tube
- Optical Fibres
- Water Blocked Material
- Central Strength Member
- Ripcord
- Filler
- Cable Messenger

Description	Part Number MM 50µm	Part Number SM 9µm
Aerial Fiber Optic Cable, 4 Core	NVL - ARMM-004	NVL - ARSM-004
Aerial Fiber Optic Cable, 6 Core	NVL - ARMM-006	NVL - ARSM-006
Aerial Fiber Optic Cable, 8 Core	NVL - ARMM-008	NVL - ARSM-008
Aerial Fiber Optic Cable, 12 Core	NVL - ARMM-012	NVL - ARSM-012
Aerial Fiber Optic Cable, 24 Core	NVL - ARMM-024	NVL - ARSM-024

\*Number of Fiber options are available specific customer requirements

### FEATURE/BENEFITS

- Fiber Count up to 144
- Strain free fibers in a stranded loose tube design
- SZ stranding design allows for easy mid-span access and isolate fibers from installation and environmental rigors
- Most common and widely used design
- Complies with international or national standard (IEC, STEL-K)
- Suitable for access and long distance applications

### FULL RANGE OF FIBER TYPE

- G. 651 (Multimode Fiber)
- G. 652 (Singlemode Fiber)
- G. 655 (NZD Fiber for DWDM application)

### TYPICAL PARAMETER

No. Of Fibres	core	up to 72	up to 96	up to 144	
Nominal Diameter	Minor Axes	mm	11.8	13.2	16.3
	Major Axes	mm	21	24	28
Nominal Cable Weight	kg/km	235	320	475	
Minimum Bend Radius	mm	250	275	300	
Maximum Working Tension	N	2000	4000	6000	
Temperatures	Operation	°C	-40 to +70		
	Installation	°C	-20 to +40		
	Storage	°C	-40 to +70		
Crush Resistance	N/100mm	3000			
Impact Resistance	N.m	10			

\*Jacketing Construction options are available specific customer requirements

### OPTICAL SPECIFICATIONS

	µ.m.	9/125	50/125	50/125 Hi Band	50/125 OM3
Core Diameter (m)	(db/km)	9.2±0.4	50±3	50±3	50±3
Typical Attenuation @ 850 nm	(db/km)		2.8	2.8	2.5
Typical Attenuation @ 1300 nm	(db/km)		0.8	0.8	0.7
Typical Attenuation @ 1310 nm	(db/km)	0.36			
Typical Attenuation @ 1550 nm	(db/km)	0.23			
Chromatic Disper. @ 1310 nm	(ps/nm*Km)	≤3.5			
Chromatic Disper. @ 1550 nm	(ps/nm*Km)	≤18			
Cable cut-off Wavelength	(nm)	≤1260			
Bandwidth @ 850 nm	(Mhz x Km)		≥400	≥600	≥1500
Bandwidth @ 1300 nm	(Mhz x Km)		≥800	≥1200	≥500

#### Full Range of Protection

- Water Blocked
- Rodent Resistant
- Impact Resistant

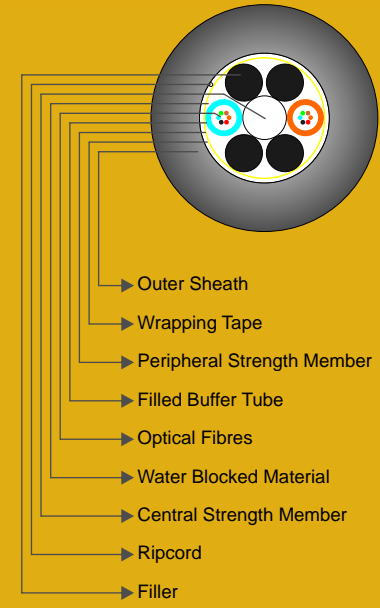
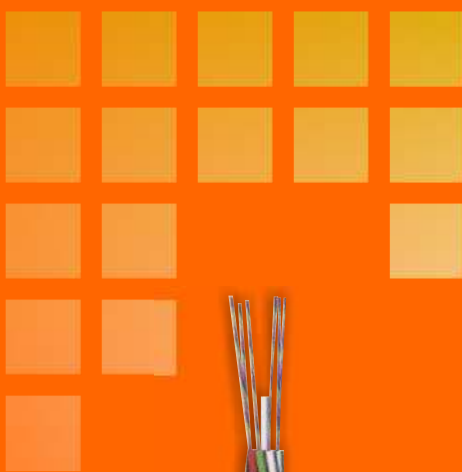
#### Full Range of Application

- Outdoor
- Aerial

#### Further Protection Available

- Flame Retardant
- Shotgun Resistant

## Universal Duct Cable



Description	Part Number MM 50µm	Part Number SM 9µm
Universal Duct Fiber Optic Cable, 4 Core	NVL - UDMM-004	NVL - UDSM-004
Universal Duct Fiber Optic Cable, 6 Core	NVL - UDMM-006	NVL - UDSM-006
Universal Duct Fiber Optic Cable, 8 Core	NVL - UDMM-008	NVL - UDSM-008
Universal Duct Fiber Optic Cable, 12 Core	NVL - UDMM-012	NVL - UDSM-012
Universal Duct Fiber Optic Cable, 24 Core	NVL - UDMM-024	NVL - UDSM-024

\*Number of Fiber options are available specific customer requirements

### FEATURE/BENEFITS

- Fiber Count up to 144
- Strain free fibers in a stranded loose tube design
- SZ stranding design allows for easy mid-span access and isolate fibers from installation and environmental rigors
- Most common and widely used design
- Complies with international or national standard (IEC, STEL-K)
- Suitable for access and long distance applications

### FULL RANGE OF FIBER TYPE

- G. 651 (Multimode Fiber)
- G. 652 (Singlemode Fiber)
- G. 655 (NZD Fiber for DWDM application)

### TYPICAL PARAMETER

No. Of Fibres	core	up to 12	up to 24
Nominal Outer Diameter	mm	6.5	8
Nominal Cable Weight	kg/km	48	55
Minimum Bend Radius	mm	160	180
Maximum Tensile Load	N	750	1000
Temperatures	Operation	°C	-20 to +60
	Installation	°C	-10 to +40
	Storage	°C	-20 to +60
Crush Resistance	N/100mm		1500
Impact Resistance	N.m		5

\*Jacketing Construction options are available specific customer requirements

### OPTICAL SPECIFICATIONS

	µ.m.	9/125	50/125	50/125 Hi Band	50/125 OM3
Core Diameter (m)	(db/km)	9.2±0.4	50±3	50±3	50±3
Typical Attenuation @ 850 nm	(db/km)		2.8	2.8	2.5
Typical Attenuation @ 1300 nm	(db/km)		0.8	0.8	0.7
Typical Attenuation @ 1310 nm	(db/km)	0.36			
Typical Attenuation @ 1550 nm	(db/km)	0.23			
Chromatic Disper. @ 1310 nm	(ps/nm*Km)	≤3.5			
Chromatic Disper. @ 1550 nm	(ps/nm*Km)	≤18			
Cable cut-off Wavelength	(nm)	≤1260			
Bandwidth @ 850 nm	(Mhz x Km)		≥400	≥600	≥1500
Bandwidth @ 1300 nm	(Mhz x Km)		≥800	≥1200	≥500

#### Full Range of Protection

- Water Blocked
- Rodent Resistant

#### Full Range of Application

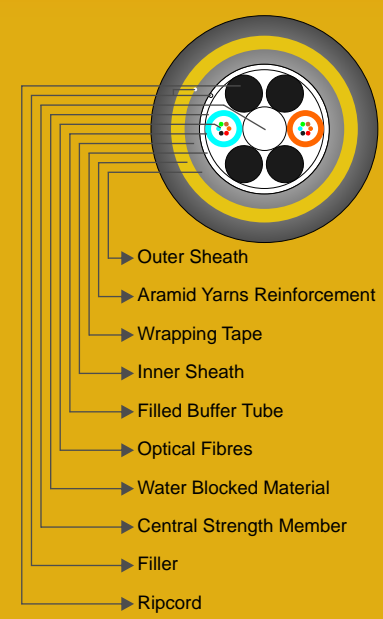
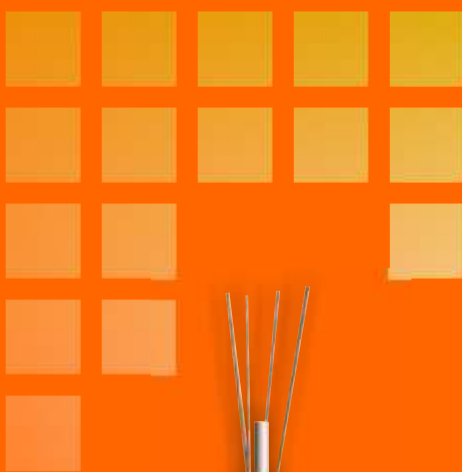
- Outdoor
- Indoor
- Underground

#### Further Protection Available

- Flame Retardant

# FIBER OPTIC CABLE

ADSS (All Dielectric Self Supporting)



Description	Part Number MM 50µm	Part Number SM 9µm
All Dielectric Fiber Optic Cable, 4 Core	NVL - ADMM-004	NVL - ADSM-004
All Dielectric Fiber Optic Cable, 6 Core	NVL - ADMM-006	NVL - ADSM-006
All Dielectric Fiber Optic Cable, 8 Core	NVL - ADMM-008	NVL - ADSM-008
All Dielectric Fiber Optic Cable, 12 Core	NVL - ADMM-012	NVL - ADSM-012
All Dielectric Fiber Optic Cable, 24 Core	NVL - ADMM-024	NVL - ADSM-024

\*Number of Fiber options are available specific customer requirements

## FEATURE/BENEFITS

- Fiber Count up to 144
- Strain free fibers in a stranded loose tube design
- SZ stranding design allows for easy mid-span access and isolate fibers from installation and environmental rigors
- Most common and widely used design
- Complies with international or national standard (IEC, STEL-K)
- Suitable for access and long distance applications

## FULL RANGE OF FIBER TYPE

- G. 651 (Multimode Fiber)
- G. 652 (Singlemode Fiber)
- G. 655 (NZD Fiber for DWDM application)

## TYPICAL PARAMETER

No. Of Fibres	core	up to72	up to 96	up to144
Nominal Outer Diameter	mm	15.0 - 15.7	17.0 - 18.0	20.5 - 21.5
Nominal Cable Weight	kg/km	200	300	400
Minimum Bend Radius	mm	325	180	450
Maximum Working Tension	N	6000	10000	25000
Maximum Breaking Load	N	30000	60000	150000
Temperatures	Operation	°C	-40 to +70	
	Installation	°C	-20 to +40	
	Storage	°C	-40 to +70	
Crush Resistance	N/100mm	2000		
Impact Resistance	N.m	5		

\*Jacketing Construction options are available specific customer requirements

## OPTICAL SPECIFICATIONS

	µ.m.	9/125	50/125	50/125 Hi Band	50/125 OM3
Core Diameter (m)	(db/km)	9.2±0.4	50±3	50±3	50±3
Typical Attenuation @ 850 nm	(db/km)		2.8	2.8	2.5
Typical Attenuation @ 1300 nm	(db/km)		0.8	0.8	0.7
Typical Attenuation @ 1310 nm	(db/km)	0.36			
Typical Attenuation @ 1550 nm	(db/km)	0.23			
Chromatic Disper. @ 1310 nm	(ps/nm*Km)	≤3.5			
Chromatic Disper. @ 1550 nm	(ps/nm*Km)	≤18			
Cable cut-off Wavelength	(nm)	≤1260			
Bandwidth @ 850 nm	(Mhz x Km)		≥400	≥600	≥1500
Bandwidth @ 1300 nm	(Mhz x Km)		≥800	≥1200	≥500

### Full Range of Protection



### Full Range of Application



### Further Protection Available

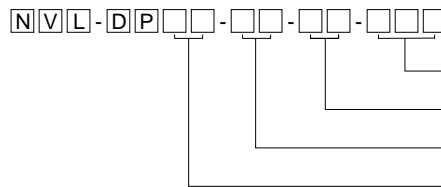


Patch Cord Cable



Description	Part Number MM 50µm	Part Number SM 9µm
Patch Cord, Duplex, ST to ST, 2 meter	NVL-DPMM-ST-ST-002	NVL-DPSM-ST-ST-002
Patch Cord, Duplex, ST to ST, 3 meter	NVL-DPMM-ST-ST-003	NVL-DPSM-ST-ST-003
Patch Cord, Duplex, ST to ST, 5 meter	NVL-DPMM-ST-ST-005	NVL-DPSM-ST-ST-005
Patch Cord, Duplex, ST to SC, 2 meter	NVL-DPMM-ST-SC-002	NVL-DPSM-ST-SC-002
Patch Cord, Duplex, ST to SC, 3 meter	NVL-DPMM-ST-SC-003	NVL-DPSM-ST-SC-003
Patch Cord, Duplex, ST to SC, 5 meter	NVL-DPMM-ST-SC-005	NVL-DPSM-ST-SC-005
Patch Cord, Duplex, ST to LC, 2 meter	NVL-DPMM-ST-LC-002	NVL-DPSM-ST-LC-002
Patch Cord, Duplex, ST to LC, 3 meter	NVL-DPMM-ST-LC-003	NVL-DPSM-ST-LC-003
Patch Cord, Duplex, ST to LC, 5 meter	NVL-DPMM-ST-LC-005	NVL-DPSM-ST-LC-005
Patch Cord, Duplex, ST to FC, 2 meter	NVL-DPMM-ST-FC-002	NVL-DPSM-ST-FC-002
Patch Cord, Duplex, ST to FC, 3 meter	NVL-DPMM-ST-FC-003	NVL-DPSM-ST-FC-003
Patch Cord, Duplex, ST to FC, 5 meter	NVL-DPMM-ST-FC-005	NVL-DPSM-ST-FC-005
Patch Cord, Duplex, SC to SC, 2 meter	NVL-DPMM-SC-SC-002	NVL-DPSM-SC-SC-002
Patch Cord, Duplex, SC to SC, 3 meter	NVL-DPMM-SC-SC-003	NVL-DPSM-SC-SC-003
Patch Cord, Duplex, SC to SC, 5 meter	NVL-DPMM-SC-SC-005	NVL-DPSM-SC-SC-005
Patch Cord, Duplex, SC to LC, 2 meter	NVL-DPMM-SC-LC-002	NVL-DPSM-SC-LC-002
Patch Cord, Duplex, SC to LC, 3 meter	NVL-DPMM-SC-LC-003	NVL-DPSM-SC-LC-003
Patch Cord, Duplex, SC to LC, 5 meter	NVL-DPMM-SC-LC-005	NVL-DPSM-SC-LC-005
Patch Cord, Duplex, SC to FC, 2 meter	NVL-DPMM-SC-FC-002	NVL-DPSM-SC-FC-002
Patch Cord, Duplex, SC to FC, 3 meter	NVL-DPMM-SC-FC-003	NVL-DPSM-SC-FC-003
Patch Cord, Duplex, SC to FC, 5 meter	NVL-DPMM-SC-FC-005	NVL-DPSM-SC-FC-005
Patch Cord, Duplex, LC to LC, 2 meter	NVL-DPMM-LC-LC-002	NVL-DPSM-LC-LC-002
Patch Cord, Duplex, LC to LC, 3 meter	NVL-DPMM-LC-LC-003	NVL-DPSM-LC-LC-003
Patch Cord, Duplex, LC to LC, 5 meter	NVL-DPMM-LC-LC-005	NVL-DPSM-LC-LC-005
Patch Cord, Duplex, SC to FC, 2 meter	NVL-DPMM-SC-FC-002	NVL-DPSM-SC-FC-002
Patch Cord, Duplex, SC to FC, 3 meter	NVL-DPMM-SC-FC-003	NVL-DPSM-SC-FC-003
Patch Cord, Duplex, SC to FC, 5 meter	NVL-DPMM-SC-FC-005	NVL-DPSM-SC-FC-005

Ordering Information



- Cable Length in Meter : 002 = 2 m / 003 = 3 m / 005 = 5 m
- Connector Type on Second End : ST / SC / LC / FC
- Connector Type on Grip End : ST / SC / LC / FC
- Fiber Type : MM = 50/125µm / SM = 9 µm

Pigtail Cable



Description	Part Number MM 50µm	Part Number SM 9µm
Pigtail ST, 1 meter	NVL-PTMM-ST-01	NVL-PTSM-ST-01
Pigtail ST, 2 meter	NVL-PTMM-ST-02	NVL-PTSM-ST-02
Pigtail SC, 1 meter	NVL-PTMM-SC-01	NVL-PTSM-SC-01
Pigtail SC, 2 meter	NVL-PTMM-SC-02	NVL-PTSM-SC-02
Pigtail LC, 1 meter	NVL-PTMM-LC-01	NVL-PTSM-LC-01
Pigtail LC, 2 meter	NVL-PTMM-LC-02	NVL-PTSM-LC-02
Pigtail FC, 1 meter	NVL-PTMM-FC-01	NVL-PTSM-FC-01
Pigtail FC, 2 meter	NVL-PTMM-FC-02	NVL-PTSM-FC-02