

## Product Description

Series 72S is the underground cable solution for the situation that requires both optical fiber and twisted pairs. This product is available in fiber counts up to 12 with 2-pair, 3-pair or 6-pair 22 AWG copper pairs. Series 72S serves the need for communications or low voltage power over copper pairs with optical fiber available for the future. The core is constructed with a single tube containing up to 12 optical fibers and up to 6 copper pairs. A corrugated steel armor and longitudinal strength elements are applied over the core tube and encased within a black, weather resistant jacket. Rip cords are included under the armor for ease of access to the core.

## Applications

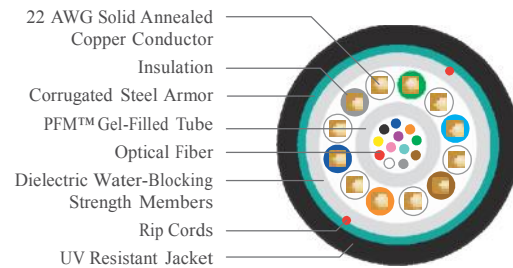
- Fiber to the premise
- Broadband network
- Buried, underground

## Features

- Composite fiber/copper design
- Round shape
- Corrugated steel armor
- Dry (SAP) core standard
- PFM™ gel
- Insulation of tip conductors are marked with a stripe of the mating ring's insulation color

## Benefits

- Multiple Network applications
- Conforms to standard practices and hardware
- Improves compressive strength and rodent protection
- Reduces cable prep and installation time
- Non-sticky gel allows for easier and faster clean up
- Reduces the possibility of splitting pairs during installation



## Specifications

Fiber Components	Available in 2-fiber up to 12-fiber loose inside a PFM gel-filled buffer tube
Copper Components	Available with 2, 3 or 6-pair 22 AWG solid annealed copper conductors each insulated with solid polyolefin in distinctive colors
Standards Compliance	Telcordia GR-20-CORE RDUP PE-90 Designation 72S RoHS-compliant

## Environmental Specifications

Operation/Storage	-40°C to +70°C
Installation	-30°C to +70°C

## Electrical Specifications

Conductor AWG (mm)	Conductor DC Resistance @ 68°F Maximum Individual Ohms/mile (Ohms/km)	Resistance Unbalance Maximum Individual Pair %	Minimum Dielectric Strength DC Potential Volts Conductor to Conductor
22 (0.64)	91.0 (56.4)	5.0	7,200

## Part Numbers and Physical Characteristics

Part Number <sup>1</sup>	Copper Pair Count	Fiber Count	Nominal Diameter in (mm)	Nominal Weight lbs/kft (kg/km)	Maximum Tensile Loading		Minimum Bend Radius		Copper Max. Amperage A	Copper Max. Voltage vDC	Package
					Install lbs (N)	Long Term lbs (N)	Install in (mm)	Long Term in (mm)			
172002xx2S	2	2	0.39 (9.8)	61 (91)	300 (1,335)	100 (445)	7.8 (198)	3.9 (99)	1.0	150	Reel
172004xx2S	2	4	0.39 (9.8)	61 (91)	300 (1,335)	100 (445)	7.8 (198)	3.9 (99)	1.0	150	Reel
172006xx2S	2	6	0.39 (9.8)	61 (91)	300 (1,335)	100 (445)	7.8 (198)	3.9 (99)	1.0	150	Reel
172002xx6S	6	2	0.43 (10.8)	338 (504)	300 (1,335)	100 (445)	8.6 (218)	4.3 (109)	1.0	150	Reel
172004xx6S	6	4	0.43 (10.8)	338 (504)	300 (1,335)	100 (445)	8.6 (218)	4.3 (109)	1.0	150	Reel
172006xx6S	6	6	0.43 (10.8)	338 (504)	300 (1,335)	100 (445)	8.6 (218)	4.3 (109)	1.0	150	Reel
172012xx6S	6	12	0.43 (10.8)	338 (504)	300 (1,335)	100 (445)	8.6 (218)	4.3 (109)	1.0	150	Reel

## Part Number Key

7	2	-	-	-	x	x	2, 3, or 6	S
1	2	3	4	5	6	7	8	9
Product family	Fiber count (002-012)	Fiber type	Internal designator	Copper pairs	Steel armor			

Contact Customer Service for availability of non-standard offerings.

## Single Mode Optical Fiber Types

	Conventional	Reduced Water Peak	Zero Water Peak	TeraFlex® Bend Resistant			NZDS
				G.657.A1	G.657.A2	G.657.B3	
<sup>1</sup> Replace "xx" with:	9S	3S	2S	KS	JS	LS	8S

See the "Optical Fiber Selection Chart" in the "Technical Information" section for detailed fiber type specifications.

## Multimode Optical Fiber Types

	TeraGain®		TeraGain Laser Optimized 50/125	
	62.5/125	10G/150	10G/300	10G/550
<sup>1</sup> Replace "xx" with:	6G	AG	BG	FG