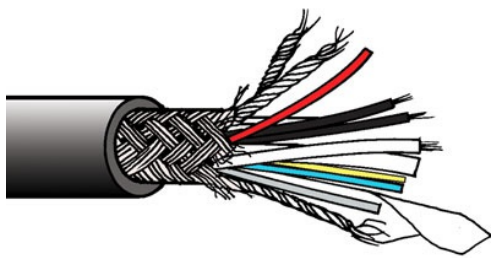




## SMPTE 311 HYBRID SINGLE CHANNEL CABLE

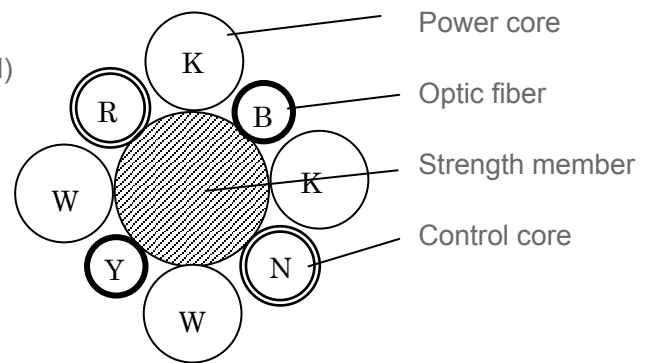
JCS Technologies offers JCS-TV-OM-AMS to the market which is a hybrid cable containing single-mode fibre optic and copper cores, meeting the SMPTE311M standard for HDTV camera connections.

It handles video, audio and control signals plus powering between camera and base units and is suitable for use with the special hybrid connectors produced by manufacturers such as Canare and Lemo.

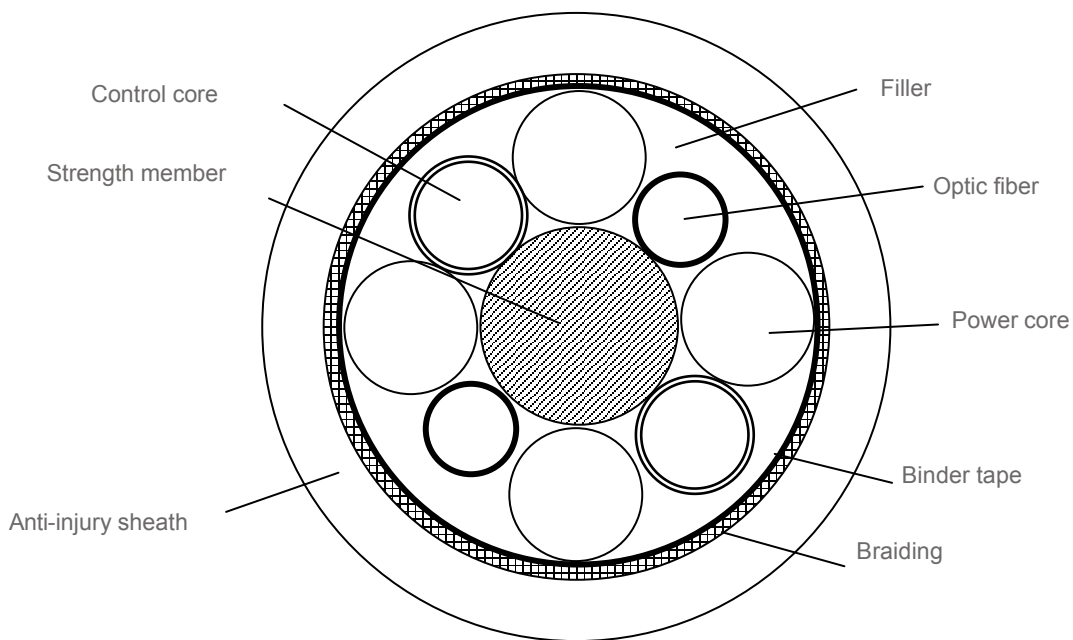


- K : Black
- W : White(natural)
- R : Red
- N : Gray
- B : Blue
- Y : Yellow

### Core identification



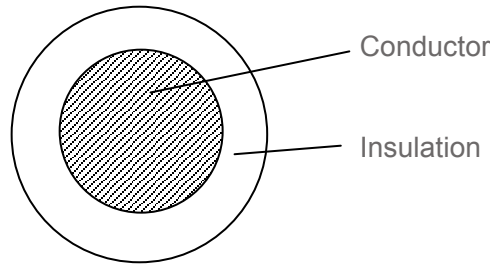
### Drawing Cross section drawing of TV-OM-AMS



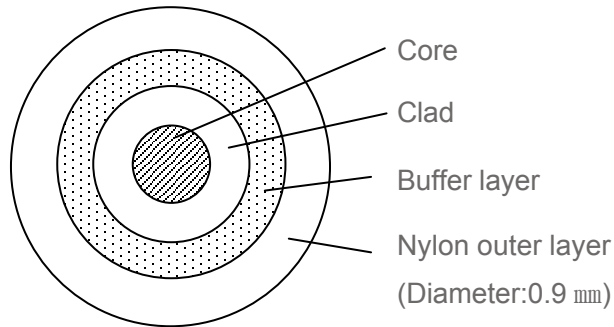
### LOCAL MANUFACTURE, SERVICE AND SUPPORT

JCS TECHNOLOGIES PTY LTD | [www.jcstech.com.au](http://www.jcstech.com.au) |  
 U1, 5-11 Mellor Street, West Ryde NSW 2114  
 T: +61 2 8878 6600 | F: +61 2 9808 2622 | E: [sales@jcstech.com.au](mailto:sales@jcstech.com.au)

## Cross section drawing of power core, control core and strength member



## Cross section drawing of optic fiber



Symbol		TV-OM-AMS			
		Power	Control	Optic fiber	Strength member
No. of cores	No.	4	2	2	1
Size of conductor	AWG	20	24	-	-
Construction of conductor	No/mm	21/0.18	7/0.203	-	19/0.36
Diameter of mode field	μm	-	-	9.5±1	-
Cladding diameter	μm	-	-	125±3	-
Approx. diameter of conductor	mm	0.9	0.61	-	1.8
Nominal thickness of PE insulation	mm	0.4	0.33	-	0.35
Approx. core diameter	mm	1.7	1.27	0.9±0.05	2.5
Approx. thickness of tin-coated annealed copper braid	mm	0.3			
Nominal thickness of anti-injury Sheath	mm	1.2			
Approx. overall diameter	mm	9.2±0.3			
Approx. net weight	g/m	120			
Max. conductor resistance (20°C)	Ω/km	37.5	113	-	To be Conducted
AC withstanding voltage	V/1min	1,750	1,750	-	-
Min. insulation resistance (room temp.)	MΩkm	10,000	10,000	-	-



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## Constitution

Optical composite cables shall be constituted as follows ;

For metal wire : 4 cores 20AWG  
For data : 2 SM fibers  
For metal wire : 2 cores 24AWG

## Conditions

- (1) Operating temp. Range : -20°C ~ +75°C
- (2) Storage and transportation temp. Range : -40°C ~ +80°C
- (3) Bending radius : Not less than 6 times of cable overall diameter
- (4) Allowable tension strength : 700N



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