

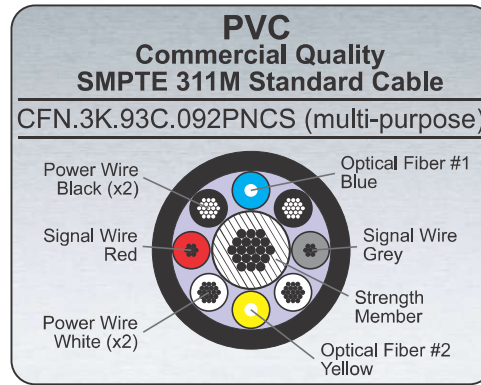
## LEMO™ Northwire™ hybrid camera cable according to SMPTE 311 standards

These composite cables combine power conductors for TV camera, control wires, and optical fibres for video and audio transmission in a single cable. Specially designed to cope with the heavy demands of outside broadcast. The cable fully meets the requirements of the SMPTE 311M standard for camera cables.

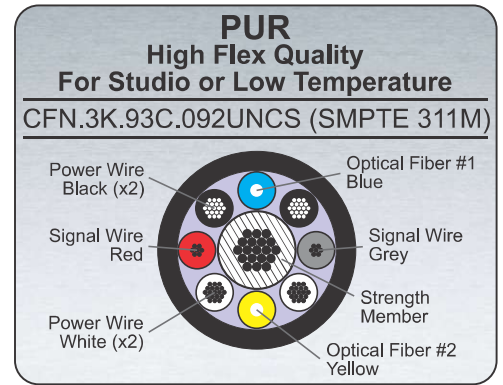
Primary features and benefits of this cable are:

- High durability construction
- Excellent flexing and twist capability coping with rough handling by rigging crews
- Superior load bearing capabilities – can be driven over by trucks whilst in operation
- High tensile strength

### Cable Type: L1



### Cable Type: L2



Core Type	Power (Aux)	Control (Signal)	Optic Fibre	Strength Member
Number of cores	4	2	2	1
Conductor sizes - AWG	20	24	-	-
Conductor construction - Number/mm	19/0.185	7/0.193	-	19/0.330
Mode field diameter - $\mu\text{m}$	-	-	$8.9 \pm 0.8$ at 1310	-
Cladding diameter - $\mu\text{m}$	-	-	$125 \pm 1$	-
Approx. diameter of conductor - mm	0.88	0.58	-	1.75
Nominal insulation thickness - mm	0.41	0.30	-	0.38
Approx. core diameter - mm	1.72	1.22	0.9	2.51
Approx. thickness of tin-coated annealed copper braid - mm	0.127			
Nominal thickness of jacket - mm	1.14			
Approx. overall diameter - mm	9.2			
Approx. net weight - g/m <sup>7</sup>	137			
Max. conductor resistance - (20°C) $\Omega/\text{km}$	43	184 (SMPTE)	-	-
AC withstanding voltage - Vrms at 60 Hz, 1 min	1750	1750 (SMPTE)	-	-
Min. insulation resistance - (20°) M $\Omega/\text{km}$	10'000	10'000	-	-
UL Listing	AWM STYLE 21971			
Allowable tension	700N			
Temperature range (PUR version)	-40°C / +80°C			

Item	Wavelength	Characteristics	Conversion Condition (km)	Conversion Formula
Optical Fibre	$\lambda = 1.31 \mu\text{m}$	Less than .8 dB/km	up to $\geq 0.4$	$0.5 \times L \text{ dB} \geq$
Transmission Loss	$\lambda = 1.31 \mu\text{m}$	Less than .8 dB/km	$L < 0.4$	$0.5 \times 0.4 \text{ dB} \geq$

DISCLAIMER The information contained within this brochure and the functions offered are intended to provide information about products. All reasonable efforts have been made to ensure the accuracy of the information. However, AVP cannot be held responsible for any errors. AVP does not warrant the accuracy and reserves the right to make changes to the catalog and its functions at any time without notice.