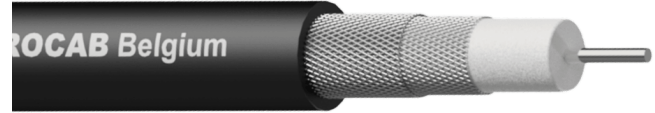


Highlights:

- Made in EU
- Double braided shielding
- Silver plated copper conductors
- Highflex™ solid & flexible jacket

Product information:

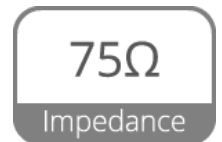
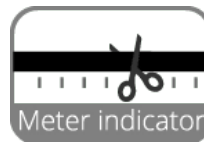
The PCX165 is an RG6/U coaxial video cable specifically designed for 12G SDI video transmissions in both mobile applications and fixed installations for 4K UHD resolutions. Its Highflex™ PVC outer jacket in combination with other high-grade materials guarantee a great flexibility, long service life span and accurate signal transmission under all circumstances. The conductor section composed of an 18 AWG silver plated copper conductor guarantees a reliable signal transmission for the highest frequencies and is surrounded by a foamed polyethylene isolator. The dual braided overall shielding consists of two individual layers with a coverage percentage of 95%, guaranteeing the best possible immunity against noise and interference. Compatible with Neutrik NBNC75BTU11.



Certification:



Properties:



Inner Conductors:



Shielding:



Product Features:

Application

Rental & MI

Series

Bulk & Accessories

Physical Characteristics:

Inner conductor	Number of conductors		1
	Section		0.785 mm ²
	American Wire Gauge		18 AWG
	Material		SPC 1 x 1.0 mm (Ø) (OFC)
	Insulation	Material	FPE 4.75 mm (Ø)
		Colours	White
Overall shielding	Braiding		TC 16 x 9 x 0.12 mm (Ø) (OFC)
	Coverage		> 95%
	Braiding		TC 16 x 9 x 0.12 mm (Ø) (OFC)
	Coverage		> 95%
Outer jacket	Material		Soft PVC 7.1 mm (Ø)
	Colours		Black
Type of cable			75 Ω coaxial video cable

Standards & regulations:

RoHS2 compliant	According EU Directive 2011/65/EU
Reach compliant	According EC 1907/2006
Flammability test	According IEC 60332-1
Indoor / outdoor	UV resistant (UL1581, UVA, 720 h)
Smoke emissions	According IEC 61034
Zero halogen compounds	According EN 50267-2-1 IEC 60754
Cabling standard	RG6/U

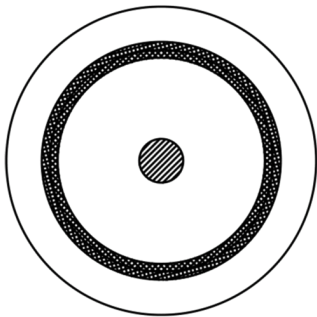
Electrical Characteristics:

Max. conductor DC resistance	22 (Ω / Km)
Dielectric strength	1.5 (KV / 1 min. DC)
Rated voltage	300 V
Nom. Velocity of propagation	86 %
Characteristic impedance	75 $\Omega \pm 3 \Omega$
Conductor to shield Nom. Capacitance	56 (pF/m)
Nom. Delay	4.1 ns/m
Nom. shield DC resistance	5.92 (Ω / Km)

Mechanical Characteristics:

Temperature range	Fixed installation	- 20 °C till + 80 °C
	Mobile installation	- 10 °C till + 70 °C
Bending radius	Fixed installation	8 x outer diameter
	Mobile installation	10 x outer diameter

Cross sections:



Variants:

- PCX165/1 - 100 meter
- PCX165/3 - 300 meter

Attenuation nom.:

Frequency (MHz)	1	5	10	100	500	1000	1485	1750	2000	2150	3000
Attenuation (dB/100 m)	0.5	1.88	2.45	7.45	17.58	25.82	32.09	35.46	38.31	39.38	48.49

Max attenuation = Nom x 1.15

Min. Return loss:

Frequency in MHz	5 ~ 470	470 ~ 862	862 ~ 2150	2150 ~ 3000
Return loss (dB/100m)	> 25	> 23	> 21	> 20

Recommended Transmission distance at Serial Digital Data rates:

Data Rate	Standard	Recommended Distance (m)	Max loss (dB)
270 Mb/s	135 MHz / SMPTE 259M SD-SDI	373	20
360 Mb/s	180 MHz / SMPTE 259M SD-SDI	232	20
540 Mb/s	270 MHz / SMPTE 259M SD-SDI	260	20
1.5 Gb/s	750 MHz / SMPTE 292M HD-SDI	100	20
3 Gb/s	1485 MHz / SMPTE 424M 3G-SDI	68	20
6 Gb/s	3000 MHz / SMPTE 2081 UHDTV 4K	91	40
12 Gb/s	6000 MHz / SMPTE 2082 UHDTV 8K	56	40

Above measurements are based on typical attenuation values for the cables listed and the max loss indicated in relative SMPTE standard. These are theoretical values, estimated for calculation purposes and are referred without assembled connectors (additional attenuators)

Practical test results:

Practical test transmission length	20 m	40 m	50 m	60 m	80 m	90 m	100 m
1.5 Gb/s (Phabrix)	X	X	X	X	X	X	X
1.5 Gb/s (Blackmagic)	X	X	X	X	X	X	X
3 Gb/s (Phabrix)	X	X	X	X	X	X	X
3 Gb/s (Blackmagic)	X	X	X	X	X	X	
6 Gb/s (Phabrix)	X	X	X	X	X		
6 Gb/s (Blackmagic)	X	X	X	X			
12 Gb/s (Phabrix)	X	X	X				
12 Gb/s (Blackmagic)	X	X					

Real-life tests have been performed with assembled connectors providing an indication of performance in live broadcast environment.

Used cable: Procab PCX165 - Used connectors: Neutrik NBNC75BTU11x on both ends.

Used test equipment for these test are: Phabrix QX12G Analyser, Blackmagic ATEM 4ME broadcast studio & URSA 12G Camera.