

# Type NCV

Standard weight - Low fire hazard



Flexible standard weight, NCV nylon (PA6) conduit is a flame retardant conduit suitable for automotive harness applications.

**Certifications / Standards:**

(Refer to tables for certifications details)



**Features & benefits:**

- Standard weight - fire resistant conduit
- High flexibility & fatigue life
- Very high abrasion, impact and shock resistance
- Self-extinguishing, low smoke toxicity and halogen Free
- Very high UV resistance
- Available in black

**Applications:**

- High specification automotive harnesses

**Temperature range:**

- Static applications: -40°C to +120°C
- Moving applications: -5°C to +120°C
- Short term: +150°C

**UV Resistance:**

- Very high (Black)

**Material / Materials / Finishes:**

- Fire Resistant Polyamide (Nylon) PA 6

**Ingress protection:**

- For use with all hinged and sealed fittings in the Harnessflex range
- IP40 - Hinged fittings
- IP67 (10 bar 30 mins) - Sealed fittings
- IP68 - Sealed fittings

**Conforms to:**

- CE marked to Low Voltage Directive 2014/35/EU
- RoHS Compliant to 2011/65/EU
- Conforms with end of life vehicle directive (ELV) EU200/53/EC

**Fire performance:**

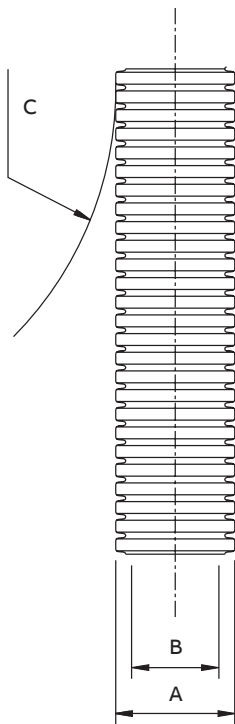
Test standard	Performance rating
IEC 61386-1	Pass
UL94	V0
ISO 4589-2	34.3%
IEC 60695	850°C

**Degree of mechanical protection:**

- High flexibility & fatigue life

**Chemical resistance:**

- High chemical resistance levels
- View our chemical resistance guide [here](#).



## Type CTPA Conduit – Part numbers and dimensions

Part No.	Conduit size		Dimensions (mm)			Reel length (m)
	(NC)	(NW)	Outside Dia. (A)	Inside Dia. (B)	Bend radi (C)	
NCV06	06	4.5	7.2	4.5	10	100
NCV08	08	7.5	9.8	6.2	20	100
NCV10	10	8.5	11.5	8.0	23	100
NCV12	12	10	13.0	9.6	26	100
NCV16	16	13	16.0	11.7	32	100
NCV20	20	17	21.2	16.3	42	50
NCV25	25	22	25.3	21.3	52	50
NCV28	28	23	28.5	22.5	57	50
NCV32	32	29	34.5	28.6	79	50

Part number example: To order quote part number & reel length, e.g. NCV06/100m.

Colours available: Black ● RAL 9005 /

## Mechanical properties

Test type	Standard	Requirement	Status
Crush strength	IEC61386-1	<25% crush >90% recovery	>320N
Tensile strength	IEC61386-1	Fitting pull off (Hinged Fitting)	>100N
Impact strength @ 23°C	IEC61386-1	No cracks <20% deformation min value	>20J
Impact strength @ -15°C	IEC61386-1	No cracks <20% deformation min value	>6J
Dynamic bend radius @ -15 °C	IEC61386-23	5,000 cycles minimum	4xOD

## Thermal properties

Test type	Standard	Requirement	Value
Minimum temperature	–	Permanent use	-40°C
Minimum temperature	IEC 61386-23	Dynamic Use (5000 cycles @ minimum bend radius @ 40 reverse bends / minute)	-15°C
Max temperature	–	Permanent use	120°C
Max short term temperature	–	Temporary Use (3000 hours)	150°C
Max short term temperature	–	Temporary use (200 hours)	170°C

## Flammability

Test type	Standard	Requirement	Result	Value
Oxygen Index	ISO 4589-2	% oxygen to support combustion	34.3	%
Glow wire rating	IEC 60695	No ignition, to extinguish in 30s	850°C	--
Flammability	UL94	Vertical (V0,V2) or Horizontal (HB)	V0	–
Flammability	BS EN IEC 61386-1	1Kw Burner @ 45° vertical burn	Pass	Pass/Fail
Flammability	FMVSS3042	≤100mm/min	0	mm/min

## Toxicity

Test type	Standard	Requirement	Result	Value
Halogen free	–	<0.5%	Pass	Pass/Fail
Phosphorous free	–	<0.5%	Pass	Pass/Fail
Sulphur free	–	<0.5%	Pass	Pass/Fail

## Pre-test conditions

Duration	Standard	Temperature	Relative humidity
168 (hrs)	BS EN IEC 61386-1	23°C	50%

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