

TECHNICAL DATA SHEET

Type NC

Standard weight - General-purpose conduit





Flexible standard weight, nylon (PA 6), general-purpose conduit. Suitable for general-purpose automotive harness applications.

Certifications / Standards:

(Refer to tables for certifications details)







Features & benefits:

- Standard weight General purpose conduit
- · High flexibility & fatigue life
- Very high abrasion, impact and shock resistance
- Able to withstand extremes of temperatures and resistant to automotive oils and solvents
- Self-extinguishing, low smoke toxicity and halogen Free
- · Very high UV resistance
- Available in black, orange (RAL 2003) and red (RAL 3031)

Applications:

- Suited to high risk impact applications
- Extensively used in harnesses on HGV and off road vehicle applications where a superior protection against impact and mechanical shock is preferred
- The conduit is used for both chassis and engine applications and can be used in a wide range of temperatures

Temperature range:

- Static applications: -40°C to +120°C (-40°F to +248°F)
- Moving applications: -15°C to +120°C (+5°F to +248°F)
- Short term: +150°C (+302°F)

UV Resistance:

• Very high (Black)

Material / Materials / Finishes:

• Polyamide (Nylon) PA 6 - heat and UV stabilised

Ingress protection:

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

Conforms to:

- CE marked to Low Voltage Directive 2014/35/EU
- ADR / GGVS Approved
- RoHS Compliant to 2011/65/EU
- Conforms with end of life vehicle directive (ELV) EU200/53/EC
- FMVSS302

Fire performance:

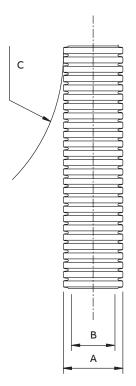
Test standard	Performance rating
IEC 61386-1	Pass
UL94	НВ
FMVSS302	0 mm/min

Degree of mechanical protection:

High flexibility & fatigue life

Chemical resistance:

· High chemical resistance levels



Type NC Conduit - Part numbers and dimensions

		Conduit size			Dimensions (mm)
Part No.	(NC)	(NW)	Outside Dia. (A)	Inside Dia. (B)	Bend radi (C)
NC06	6	4.5	7.2	4.4	10.0
NC08	8	7.5	10.0	6.2	20.0
NC10	10	8.5	11.6	8.0	23.0
NC12	12	10	13.1	9.6	26.0
NC16	16	13	15.9	11.7	32.0
NC18	18	14	18.5	14.0	37.0
NC20	20	17	21.2	16.3	42.0
NC25	25	22	25.6	21.3	52.0
NC28	28	23	28.4	22.5	57.0
NC30	30	26	31.6	26.0	50.0
NC32	32	29	34.5	28.6	79.0
NC40	40	36	42.4	34.8	85.0
NC50	50	48	54.3	46.2	90.0

Part number example: To order quote part number & reel length, e.g. NC06/100m. For slit conduit options add-S to part number, e.g. NC06-S/100m. Colours available: Black RAL 9001 / Orange RAL 2003 / Red RAL 3031 / *Other colour options available, subject strictly to MOQ. For colours other than standard Black also add colour, i.e. /OR for Orange conduit, e.g. NC06/OR/100m.

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
Cold bend @ -40°C	NFR13-903	2xOD	Pass

Thermal properties

Test type	Standard	Requirement	Value
Minimum temperature	-	Permanent use static	-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	_	Permanent use	150°C
Max short term temperature	_	Permanent use	175°C

Flammability

Test type	Standard	Requirement	Result	Value
Oxygen index	ISO 4589-2	% Oxygen to support combustion	23	%
Glow wire	UL94	Vertical (V0,V2) or Horizontal (HB)	НВ	_
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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