

Panduct® Type NNC – Halogen-Free Metric Wiring Duct

Panduct® Type NNC Wiring Duct is made from halogen-free material* that will not emit corrosive or harmful toxic gases when burned, and withstands higher continuous-use temperatures than PVC. NNC wiring duct is used to route, protect, and manage wires near sensitive electronic equipment and in environments where heat resistance or public safety is a concern.

NNC wiring duct is available in fourteen metric profile sizes from 25.0mm (1.00") x 25.0mm (1.00") to 100.0mm (4.00") x 100.0mm (4.00") to meet a variety of applications. The product base features a wide-slot design, allowing the product to be used with a large range of cable diameters, and two score lines for easy removal of duct fingers and sidewalls. The non-slip cover stays in place when mounted vertically or in areas of high vibration. The halogen-free material has a UL94 flammability rating of V-0 and a UL recognized continuous-use temperature rating of 95°C (203°F). NNC wiring duct meets NFPA 79-2012, Electrical Standard for Industrial Machinery, Section 13.3.1.

*Per IEC 60754-2 determination of the amount of halogen acid gas evolved during the combustion of material.



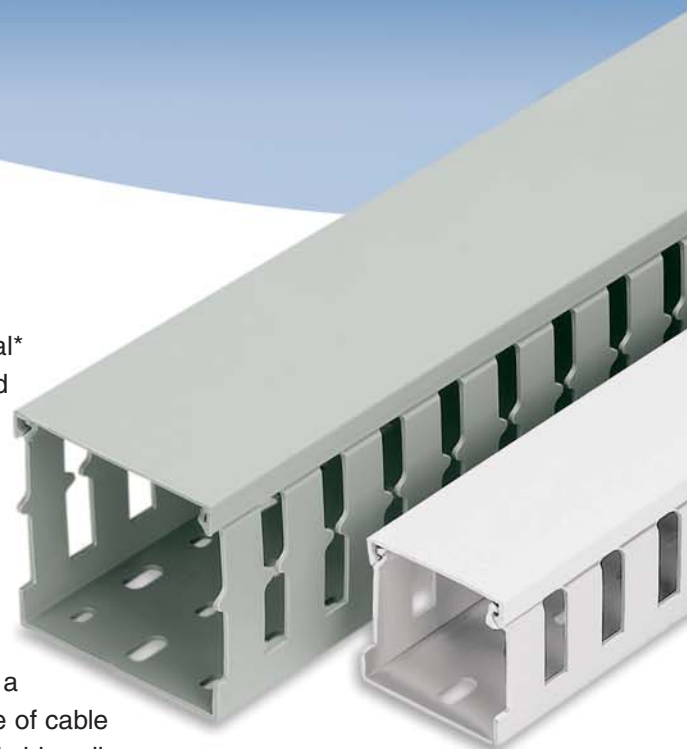
LOW
FLAMMABILITY
UL94 V-0



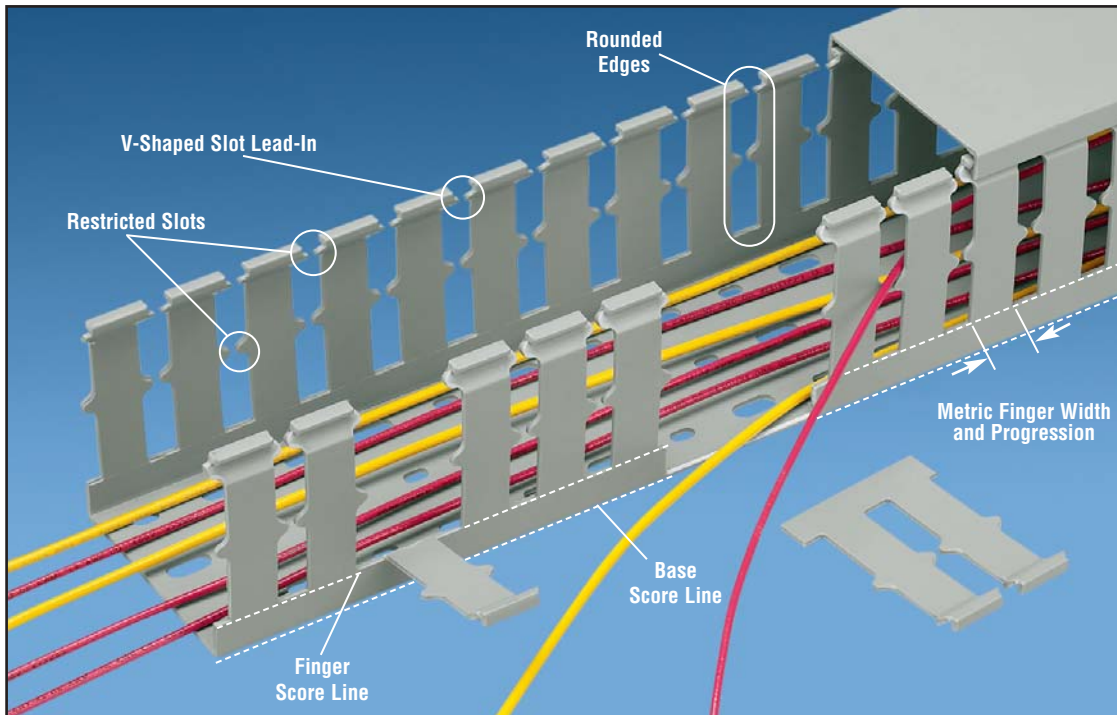
ELEVATED
TEMPERATURE
95°C (203°F)



HALOGEN-
FREE
IEC 60754-2



Panduct® Type NNC Wiring Duct



Key Features

Benefits

Halogen-free material

Non-toxic, lead-free, environmentally safe material and will not release toxic or corrosive gases in the event of a fire that could endanger public safety or damage sensitive electronics in enclosed environments (passenger rail, oil and gas platforms)

UL94 V-0 material flame rating

Material is self extinguishing and provides a greater flame resistance when compared to other halogen-free wiring ducts enabling its use in more electrical applications

High continuous-use temperature

The UL recognized continuous-use temperature of 95°C (203°F) is greater than other PVC wiring ducts, indicating its use in more applications

Flush cover

The base sidewall is even with cover for superior aesthetics and greater wiring capacity when compared to non-flush cover wiring duct

Base and finger score line

The product has score lines at the base of the finger and sidewall allowing easy finger and sidewall breakouts, saving installation time compared to other halogen-free ducts

Halogen-free non-slip cover liner

The halogen-free liner ensures that the cover does not slide easily when installed on the base, and stays in place during control panel vibration (due to shipment or during machine operation)

DIN 43 659 mounting hole pattern

Provides the appropriate mounting hole pattern for control panels designed to European standards and provides more mounting holes for greater mounting flexibility

Fourteen sizes available

User can maximize value by choosing duct sizes with wire capacity to closely match application requirements, providing design flexibility and scalability to the application

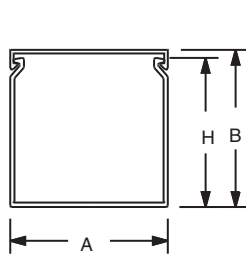
Ordering Information

Duct and Cover* Part Numbers	Duct Nominal Size		Duct and Cover Std. Ctn.** Qty. (m)	Replacement Cover Part Numbers	Replacement Cover Std. Ctn. Qty. (m)
	W x H (mm)	W x H (In.)			
NNC25X25LG2	25 x 25	1.00 x 1.00	20	NC25LG2	20
NNC25X37LG2	25 x 37	1.00 x 1.50	20		20
NNC25X50LG2	25 x 50	1.00 x 2.00	20		20
NNC25X75LG2	25 x 75	1.00 x 3.00	20		20
NNC37X37LG2	37 x 37	1.50 x 1.50	20	NC37LG2	20
NNC37X50LG2	37 x 50	1.50 x 2.00	20		20
NNC37X75LG2	37 x 75	1.50 x 3.00	20		20
NNC50X50LG2	50 x 50	2.00 x 2.00	20		20
NNC50X75LG2	50 x 75	2.00 x 3.00	10	NC50LG2	20
NNC50X100LG2	50 x 100	2.00 x 4.00	10		20
NNC75X75LG2	75 x 75	3.00 x 3.00	10		20
NNC100X50LG2	100 x 50	4.00 x 2.00	10		20
NNC100X75LG2	100 x 75	4.00 x 3.00	10	NC100LG2	20
NNC100X100LG2	100 x 100	4.00 x 4.00	10		20

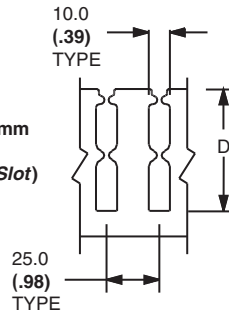
*For White, substitute LG (Light Gray) with WH. For example: NNC25X50WH2.

**Order number of meters required in multiples of standard carton quantities. Duct base and cover packaged together in 2m lengths.

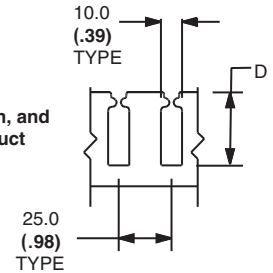
DIMENSIONS – mm (In.) Refer to drawings below			
A	B	D	H
24.6 (0.97)	23.6 (0.93)	13.6 (0.54)	20.3 (0.80)
24.6 (0.97)	35.8 (1.41)	24.6 (0.97)	33.0 (1.30)
24.6 (0.97)	47.8 (1.88)	34.8 (1.37)	45.5 (1.79)
24.6 (0.97)	72.4 (2.85)	57.6 (2.27)	70.6 (2.78)
37.1 (1.46)	35.8 (1.41)	24.7 (0.97)	33.0 (1.30)
37.1 (1.46)	47.8 (1.88)	34.8 (1.37)	45.5 (1.79)
37.1 (1.46)	72.4 (2.85)	57.6 (2.27)	70.6 (2.78)
49.5 (1.95)	47.8 (1.88)	34.8 (1.37)	45.5 (1.79)
49.5 (1.95)	72.4 (2.85)	57.6 (2.27)	70.6 (2.78)
49.5 (1.95)	97.8 (3.85)	81.0 (3.19)	95.5 (3.76)
74.7 (2.94)	72.4 (2.85)	57.6 (2.27)	70.6 (2.78)
99.6 (3.92)	47.8 (1.88)	34.8 (1.37)	45.5 (1.79)
99.6 (3.92)	72.4 (2.85)	57.6 (2.27)	70.6 (2.78)
99.6 (3.92)	97.8 (3.85)	81.0 (3.19)	95.5 (3.76)



For 75mm and 100mm
High Duct
(Double Restricted Slot)

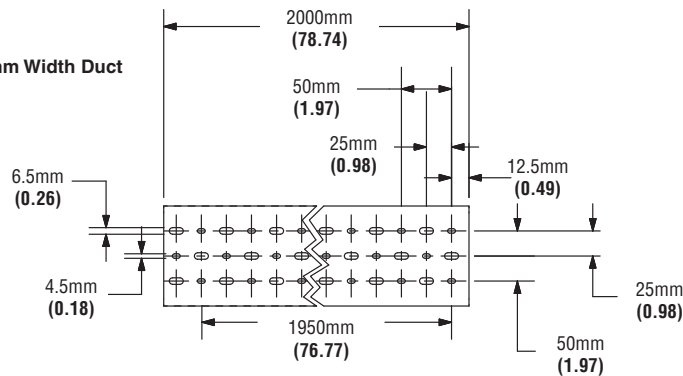


For 25mm, 37mm, and
50mm High Duct

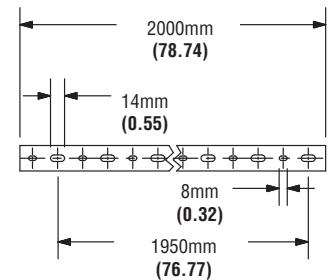


Mounting Hole Dimensions

For 75mm and 100mm Width Duct



For 25mm, 37.5mm, and 50mm Width Duct



Dimensions shown are for reference only. Dimensions above are millimeters (inches).

NOMINAL DUCT SIZE (W x H) mm	NOMINAL AREA mm²	ELECTRICAL															COMMUNICATION				
		8 AWG	10 AWG	12 AWG			14 AWG			16 AWG			18 AWG			22 AWG	23 AWG		23/24 AWG	24 AWG	Fiber Cable
		5.5	4.2	3.3	3.6	3.9	2.8	3.1	3.4	2.4	2.8	3.0	2.1	2.5	2.7	2.2	7.4	7.6	6.4	4.8	3.0
		THHN	THHN	THHN	MTW	MTW	THHN	MTW	MTW	TFFN	MTW	MTW	TFFN	MTW	MTW	MTW	Cat 6A	Cat 6	Cat 5e	3.0mm	
25 X 25	625	11	20	32	27	23	44	36	31	60	44	39	78	55	49	76	6	6	8	15	39
25 X 37	925	17	30	48	41	35	66	53	46	88	66	58	116	81	72	113	9	9	13	23	58
25 X 50	1250	23	41	65	55	47	89	72	62	120	89	79	156	110	98	153	13	12	17	31	79
25 X 75	1875	35	61	98	83	71	134	108	93	180	134	119	235	166	147	229	19	18	26	47	119
37 X 37	1369	25	45	71	60	52	98	78	68	131	98	87	171	121	107	167	14	13	19	34	86
37 X 50	1850	35	60	96	82	70	132	106	92	177	132	117	232	163	145	226	19	18	26	46	117
37 X 75	2775	52	91	145	123	106	199	159	138	266	199	176	348	245	218	340	29	27	39	70	176
50 X 50	2500	47	82	131	111	95	179	144	125	240	179	159	313	221	197	306	26	24	35	63	158
50 X 75	3750	71	123	196	167	143	269	216	187	360	269	238	470	332	295	459	39	37	53	94	238
50 X 100	5000	94	164	262	222	191	359	288	250	480	359	318	627	442	394	612	52	49	70	126	317
75 X 75	5625	106	185	294	250	215	404	324	281	540	404	357	706	498	443	689	59	56	79	142	357
100 X 50	5000	94	164	262	222	191	359	288	250	480	359	318	627	442	394	612	52	49	70	126	317
100 X 75	7500	142	246	393	334	287	539	432	375	720	539	477	941	664	591	919	79	74	106	189	476
100 X 100	10000	189	329	524	445	383	718	576	500	961	718	636	1255	885	788	1225	105	99	141	253	634

Wirefill is based on 50% cross-sectional area.

Panduct® Type NNC Wiring Duct - Material Properties

Properties	Halogen-Free PPO Material	Test Method
General		
Specific Gravity	1.09 g/cc	ASTM D 792
Mechanical		
Tensile Strength at Yield	7,700 psi	ASTM D 638
Flexural Strength	11,500 psi	ASTM D 790
Flexural Modulus	340,000 psi	ASTM D 790
Notched Izod Impact @ 23°C (73°F)	5.0 ft.-lbs./in.	ASTM D 256
Heat Deflection Temperature @264 psi	102°C (215°F)	ASTM D 648

Properties	Halogen-Free PPO Material	Test Method
Flammability		
Limited Oxygen Index (LOI)	30	ASTM D 2863
Smoke Density (Flaming) @ 4 min.	534	ASTM E 662
Flammability Class @ 0.060"	V-0	UL94
Halogen Free	Yes	IEC 60754-2
Agency Approvals		
UL Recognized file E147128 CSA Certified file 016446-0-00 CE Compliant:		

Note: DO NOT allow cutting, tapping, or cleaning fluids that contain hydrocarbons to come in contact with Type NNC wiring duct. For a list of recommended lubricants to use with Type NNC wiring duct log on to www.panduit.com

Accessories

Panduct® Type NNC Halogen-Free Solid Divider Wall

- NNC solid divider wall can be mounted inside NNC or NE wiring duct to create multiple channels
- Material: Halogen-free modified PPO
- Simply install the divider wall base when mounting the duct and snap the divider wall onto mounting base, DB-C



NNC**DWH2

Part Number	For Nominal Duct Height (mm)	Length (m)	Std. Pkg. Qty.	Std. Ctn. Qty.
NNC50DWH2	50	2	2	40
NNC75DWH2	75	2	2	40

Available in WH (White) color only.

Note: Must be used with mounting base, DB-C, which is sold separately. Install mounting bases to the duct channel; locate within 2" of each divider wall end and at least every 12" along the length.

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