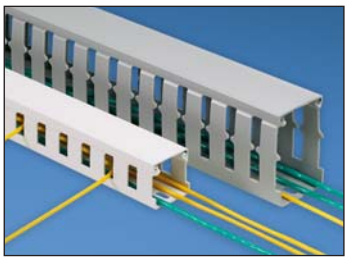
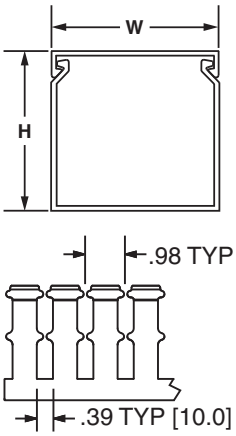
Panduct® Type NNC Halogen-Free Metric Wiring Duct

- Material: Halogen-free modified polyphenylene oxide (mPPO) material as verified with IEC 60754-2 test method (test on gases evolved during combustion of electric cables)
- UL recognized continuous use temperature: 203°F (95°C)
- UL 94 flammability rating of V-0
- Conforms with NFPA 79-2007 section 13.3.1 requirement for flame retardant material
- Provided with DIN 43 659 mounting holes
- Metric sizing and finger progression
- Duct and cover packaged together in two meter lengths

LF LOW FLAMMABILITY UL 94V-0 · HF HALOGEN-FREE IEC 60754-2 · ET ELEVATED TEMPERATURE · LT LOW TOXICITY BSS-7239 ATS 1000.01





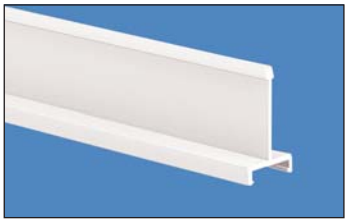
Multiple slot restrictors present with 75mm and greater duct wall height.

Base and Cover Part Number	Duct Size (W x H)*		Slot Width		Replacement Cover Part Number	Base and Cover Ctn. Qty. (m)	Replacement Cover Ctn. Qty. (m)
	mm	In.	In.	mm			
NNC25X25LG2	24.6 x 23.6	.97 x .93	.39	10.0	NC25LG2	20	20
NNC25X37LG2	24.6 x 35.8	.97 x 1.41	.39	10.0	NC25LG2	20	20
NNC25X50LG2	24.6 x 47.8	.97 x 1.88	.39	10.0	NC25LG2	20	20
NNC25X75LG2	24.6 x 72.4	.97 x 2.85	.39	10.0	NC25LG2	20	20
NNC37X37LG2	37.1 x 35.8	1.46 x 1.41	.39	10.0	NC37LG2	20	20
NNC37X50LG2	37.1 x 47.8	1.46 x 1.88	.39	10.0	NC37LG2	20	20
NNC37X75LG2	37.1 x 72.4	1.46 x 2.85	.39	10.0	NC37LG2	20	20
NNC50X50LG2	49.5 x 47.8	1.95 x 1.88	.39	10.0	NC50LG2	20	20
NNC50X75LG2	49.5 x 72.4	1.95 x 2.85	.39	10.0	NC50LG2	10	20
NNC50X100LG2	49.5 x 97.8	1.95 x 3.85	.39	10.0	NC50LG2	10	20
NNC75X75LG2	74.7 x 72.4	2.94 x 2.85	.39	10.0	NC75LG2	10	20
NNC100X50LG2	99.6 x 47.8	3.92 x 1.88	.39	10.0	NC100LG2	10	20
NNC100X75LG2	99.6 x 72.4	3.92 x 2.85	.39	10.0	NC100LG2	10	20
NNC100X100LG2	99.6 x 97.8	3.92 x 3.85	.39	10.0	NC100LG2	10	20

Available in LG (Light Gray) and WH (White).
Do not allow cutting, tapping, or cleaning fluids that contain hydrocarbons to come in contact with type NNC wiring duct as it will cause stress cracking. See page C1.49 for a list of chemicals to avoid.
*"H" dimension includes duct and cover.

Panduct® Type NNC Divider Wall

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



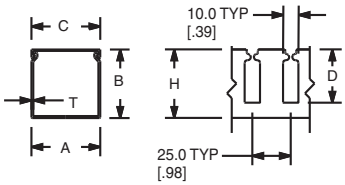
Part Number	Length (m)	For Nominal Duct Height (mm)	Std. Pkg. Qty.	Std. Ctn. Qty. (m)
NNC50DWH2	2	50	2	40
NNC75DWH2	2	75	2	40

Available in WH (White) color only.
NOTE: Must be used with mounting base DB-C (see page C1.26), 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.

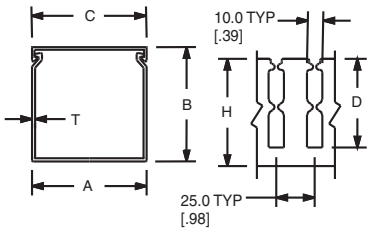
Panduct® Type NNC Wiring Duct Dimensions

Dimensions are shown for reference only. Contact Panduit Customer Service at 800-777-3300 for specific dimensional needs.

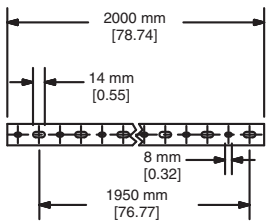
For 25mm, 37.5mm, and 50mm high duct.



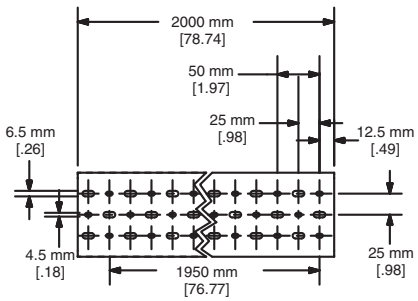
For 75mm and 100mm high duct.



Mounting Hole Dimensions
For 25mm, 37.5mm, and 50mm width duct.



For 75mm and 100mm width duct.



Duct Size (W x H)	Dimensions – mm (Inches)					
	A	B	C	D	H	T
25 x 25	24.6	23.6	24.6	13.6	20.3	1.5
(.98) x (.98)	(.97)	(.93)	(.97)	(.54)	(.80)	(.06)
25 x 37	24.6	35.8	24.6	24.6	33.0	1.8
(.98) x (1.48)	(.97)	(1.41)	(.97)	(.97)	(1.30)	(.07)
25 x 50	24.6	47.8	24.6	34.8	45.5	2.0
(.98) x (1.97)	(.97)	(1.88)	(.97)	(1.37)	(1.79)	(.08)
25 x 75	24.6	72.4	24.6	57.6	70.6	2.0
(.98) x (2.95)	(.97)	(2.85)	(.97)	(2.27)	(2.78)	(.08)
37.5 x 37.5	37.1	35.8	37.1	24.7	33.0	1.8
(1.48) x (1.48)	(1.46)	(1.41)	(1.46)	(.97)	(1.30)	(.07)
37.5 x 50	37.1	47.8	37.1	34.8	45.5	2.0
(1.48) x (1.97)	(1.46)	(1.88)	(1.46)	(1.37)	(1.79)	(.08)
37.5 x 75	37.1	72.4	37.1	57.6	70.6	2.0
(1.48) x (2.95)	(1.46)	(2.85)	(1.46)	(2.27)	(2.78)	(.08)
50 x 50	49.5	47.8	49.5	34.8	45.5	2.0
(1.97) x (1.97)	(1.95)	(1.88)	(1.95)	(1.37)	(1.79)	(.08)
50 x 75	49.5	72.4	49.5	57.6	70.6	2.0
(1.97) x (2.95)	(1.95)	(2.85)	(1.95)	(2.27)	(2.78)	(.08)
50 x 100	49.5	97.8	49.5	81.0	95.5	2.3
(1.97) x (3.94)	(1.95)	(3.85)	(1.95)	(3.19)	(3.76)	(.09)
75 x 75	74.7	72.4	74.7	57.6	70.6	2.0
(2.95) x (2.95)	(2.94)	(2.85)	(2.94)	(2.27)	(2.78)	(.08)
100 x 50	99.6	47.8	99.6	34.8	45.5	2.0
(3.94) x (1.97)	(3.92)	(1.88)	(3.92)	(1.37)	(1.79)	(.08)
100 x 75	99.6	72.4	99.6	57.6	70.6	2.0
(3.94) x (2.95)	(3.92)	(2.85)	(3.92)	(2.27)	(2.78)	(.08)
100 x 100	99.6	97.8	99.6	81.0	95.5	2.3
(3.92) x (3.85)	(3.92)	(3.85)	(3.92)	(3.19)	(3.76)	(.09)

Panduct® Type MC and NNC Wiring Duct – Wirefill Capacity

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	2.1	2.5	2.7	2.2	8.4	6.4	4.8	3
		THHN	THHN	THHN	MTW	MTW	THHN	MTW	MTW	TFFN	MTW	MTW	TFFN	MTW	MTW	MTW	Cat. 6A	Cat. 6	Cat. 5e	3.0 mm
25 x 25	625	11	20	32	27	23	44	36	31	60	44	39	78	55	49	76	5	8	15	39
25 x 37	925	17	30	48	41	35	66	53	46	88	66	58	116	81	72	113	7	13	22	58
25 x 50	1250	23	41	65	55	47	89	72	62	120	89	79	156	110	98	153	10	17	30	79
25 x 62	1550	29	51	81	69	59	111	89	77	148	111	98	194	137	122	190	12	21	38	98
25 x 75	1875	35	61	98	83	71	134	108	93	180	134	119	235	166	147	229	15	26	46	119
37 x 37	1369	25	45	71	60	52	98	78	68	131	98	87	171	121	107	167	11	19	33	86
37 x 50	1850	35	60	96	82	70	132	106	92	177	132	117	232	163	145	226	15	26	45	117
37 x 62	2294	43	75	120	102	87	164	132	114	220	164	145	287	203	180	281	18	32	56	145
37 x 75	2775	52	91	145	123	106	199	159	138	266	199	176	348	245	218	340	22	39	68	176
50 x 50	2500	47	82	131	111	95	179	144	125	240	179	159	313	221	197	306	20	35	61	158
50 x 75	3750	71	123	196	167	143	269	216	187	360	269	238	470	332	295	459	30	53	92	238
50 x 100	5000	94	164	262	222	191	359	288	250	480	359	318	627	442	394	612	40	70	122	317
62 x 62	3844	72	126	201	171	147	276	221	192	369	276	244	482	340	303	471	31	54	94	244
75 x 50	3750	71	123	196	167	143	269	216	187	360	269	238	470	332	295	459	30	53	92	238
75 x 62	4650	88	153	243	207	178	334	267	232	446	334	295	583	411	366	570	37	65	114	295
75 x 75	5625	106	185	294	250	215	404	324	281	540	404	357	706	498	443	689	45	79	138	357
75 x 100	7500	142	246	393	334	287	539	432	375	720	539	477	941	664	591	919	60	106	184	476
100 x 50	5000	94	164	262	222	191	359	288	250	480	359	318	627	442	394	612	40	70	122	317
100 x 75	7500	142	246	393	334	287	539	432	375	720	539	477	941	664	591	919	60	106	184	476
100 x 100	10000	189	329	524	445	383	718	576	500	961	718	636	1255	885	788	1225	81	141	245	634

Table shows maximum wirefill based on 50% of duct internal cross sectional area. Formula = nominal area/1.75 x D^2. See page C1.48 for wiring duct color and size availability. Not all sizes available for each duct type.

AWG dimensions represent typical outer cable diameter in millimeters.

Panduct® Wiring Duct and Raceway – Material Specifications

Properties	Units	Test Method	Lead-Free PVC	Halogen-Free Modified PPO (NNC, NE)	Polypropylene (FL)
General					
Specific gravity	g/cc	ASTM D 792	1.45	1.09	0.95
Heat deflection temperature @264 psi	°F	ASTM D 648	156	215	117
Thermal expansion	10-5 in/in/°F	ASTM D 696	3.7	3.8	N/A
Thermal conductivity	(BTU-in/hr-ft²)°F	ASTM C 177	1.3	1.3	N/A
Burning Characteristics					
Flammability class	—	UL 94	V-0	V-0	V-2
Smoke density @ 4 minutes	—	ASTM E 662	538	513	N/A
Limited oxygen index (LOI)	—	ASTM D 2863	35	30	25
Peak heat release rate	kW/m2	ASTM E 1354	N/A	N/A	N/A
Hardness					
Durometer hardness	"D"	ASTM D 2240	78	N/A	N/A
Rockwell hardness	"R"	ASTM D 785	111	116	N/A
Tensile					
Yield Strength	psi	ASTM D 638	6,200	7,700	3,770
Modulus	psi	ASTM D 638	390,000	350,000	172,000
Flexural					
Yield Strength	psi	ASTM D 790	8,700	11,500	4,350
Modulus	psi	ASTM D 790	325,000	340,000	181,250
Impact strength					
Notched Izod (.125")					
23°C (73°F)	ft-lb/in	ASTM D 256	4.0	5.0	1.8
0°C (32°F)	ft-lb/in		1.6	2.0	N/A
Electrical Properties					
Power factor:					
60 Hz @30°C (86°F)	—	ASTM D 150	2.90	N/A	N/A
1 MHz @30°C (86°F)	—		4.00	N/A	N/A
Dielectric constant:					
60 Hz @30°C (86°F)	—	ASTM D 150	3.90	N/A	N/A
1 MHz @30°C (86°F)	—		3.30	N/A	N/A
Dielectric strength:					
Unconditioned	volts/mil	ASTM D 149	690	N/A	N/A
Conditioned	volts/mil		700	N/A	N/A

Note: To the best of our knowledge the above information is accurate.
Panduit assumes no liability for the accuracy or completeness of this information.

Rigid Polyvinyl Chloride (PVC)

A general purpose material for use in indoor applications. PVC has a UL 94 flammability rating of V-0 and is UL Recognized for continuous use temperatures up to 122°F (50°C). PVC is an economical wiring duct material.

Halogen-Free (Modified Polyphenylene Oxide)

A special purpose material for use in halogen-free or high temperature applications. Modified PPO has a UL 94 flammability rating of V-0 and is UL Recognized for continuous use temperatures up to 203°F (95°C), and is 20% lighter than PVC.

Polypropylene

A flexible material with a UL 94 flammability rating of V-2 and UL Recognized for continuous use temperatures up to 149°F (65°C).

Panduct® Wiring Duct and Raceway – Color and Size Selection

Duct Size W x H		LG Light Gray											WH White												BL Black					IB Intrs. Blue*	IG Intl. Gry.
In.	mm																														
.5 x .5	12 x 12	G	F	FS						FL			G	F	FS		NE														
.5 x 1		G	F	FS									G	F			NE														
.5 x 2		G											G																		
.75 x .75		G	F	FS									G	F																	
.75 x 1		G											G																		
.75 x 1.5		G	F										G	F																	
.75 x 2		G											G												G						
1 x 1	25 x 25	G	F	FS					NNC	FL			G	F	FS		NE				NNC	MC			G	FS				G	F	MC
1 x 1.5	25 x 37	G	F	FS					NNC				G	F			NE				NNC	MC			G					G	F	MC
1 x 2	25 x 50	G	F	FS	D				NNC				G	F			NE				NNC	MC			G		D			G	F	MC
1 x 2.5	25 x 62																					MC									MC
1 x 3	25 x 75	G	F	FS	D				NNC				G	F		D	NE				NNC	MC			G		D			G	F	MC
1 x 4	25 x 100	G	F	FS	D								G	F		D	NE								G		D			G	F	
1.5 x 1		G	F	FS									G	F	FS																
1.5 x 1.5	37 x 37	G	F	FS					NNC				G	F	FS		NE				NNC	MC			G	FS				G	F	MC
1.5 x 2	37 x 50	G	F	FS	D	H	HN	HS	NNC				G	F			NE	H	HN	HS	NNC	MC			G		D	H	HS	G	F	MC
1.5 x 2.5	37 x 62																					MC									MC
1.5 x 3	37 x 75	G	F	FS	D	H	HN	HS	NNC				G	F		D	NE	H	HN	HS	NNC	MC			G		D	H	HS	G	F	MC
1.5 x 4		G	F		D								G	F		D	NE								G		D			G	F	
2 x 1		G	F	FS									G	F	FS		NE								G						
2 x 1.5		G	F	FS									G	F	FS																
2 x 2	50 x 50	G	F	FS	D	H	HN	HS	NNC	FL			G	F	FS	D	NE	H	HN	HS	NNC	MC			G	FS	D	H	HS	G	F	MC
2 x 3	50 x 75	G	F	FS	D	H	HN	HS	NNC				G	F	FS	D	NE	H	HN	HS	NNC	MC			G		D	H	HS	G	F	MC
2 x 4	50 x 100	G	F	FS	D	H	HN	HS	NNC				G	F		D	NE	H	HN	HS	NNC	MC			G		D	H	HS	G	F	MC
2 x 5		G	F										G	F																	
2.5 x 2.5	62 x 62																					MC									MC
2.5 x 3		G	F		D								G	F											G						
3 x 1		G	F	FS									G	F	FS		NE														
3 x 2	75 x 50	G	F	FS	D								G	F	FS		NE					MC			G	FS						MC
3 x 2.5	75 x 62																					MC									MC
3 x 3	75 x 75	G	F	FS	D	H	HN	HS	NNC				G	F	FS	D	NE	H	HN	HS	NNC	MC			G	FS	D	H	HS	G	F	MC
3 x 4	75 x 100	G	F	FS	D	H	HN	HS					G	F	FS	D	NE	H	HN	HS		MC			G		D	H	HS	G	F	MC
3 x 5		G	F	FS									G	F	FS		NE														
4 x 1.5		G		FS									G																		
4 x 2	100 x 50	G	F	FS	D				NNC				G	F	FS		NE				NNC	MC			G		D					MC
4 x 3	100 x 75	G	F	FS	D				NNC				G	F	FS		NE				NNC	MC			G					G	F	MC
4 x 4	100 x 100	G	F	FS	D	H	HN	HS	NNC				G	F	FS	D	NE	H	HN	HS	NNC	MC			G	FS	D	H	HS	G	F	MC
4 x 5		G	F	FS									G	F	FS		NE								G						
6 x 4		G	F	FS									G	F	FS																
4.40 x 3.57*	111.8 x 90.7										CWD												CWD								
5.33 x 4.58*	135.3 x 115.7										CWD												CWD								
6.25 x 2.12**	156.7 x 54.0											DRD												DRD								
7.25 x 3.12**	184.1 x 79.4											DRD												DRD								
8.25 x 4.12**	209.5 x 104.8											DRD												DRD								

*Corner Duct Profile
**DIN Rail Duct Profile

*Intrinsic Blue Color – IB

Intrinsic blue wiring duct is made from the same lead-free PVC material as our standard PVC duct. Intrinsic blue is an internationally recognized standard blue color that identifies the wiring duct as “incapable of releasing sufficient electrical or thermal energy under normal or abnormal conditions to cause ignition of a specific hazardous atmospheric mixture in its most easily ignited concentrations.”

*ISA-RD12.6 (Instrument Society of America)