


**IBOCO**

# Wire Duct – Flexible

## Polypropylene - Flexible - Self-Adhesive DN Series

### Overview

Dinosaur self-adhesive flexible duct is ideal for transporting wiring to cabinet doors from control panel interiors (for that part of the cable run that leans against the side of the control cabinet) and for electronic equipment. It is resilient and can be bent and twisted without breaking. Manufactured from low-smoke, halogen-free polypropylene material that carries a UL 94V-0 flammability rating and CSA approval.

### Features

- Easily add or remove individual wires from total wires within the duct
- Enclose and secure wiring or cables without requiring duct cover
- Convenient for applications requiring frequent access to wiring
- Easy addition or removal of wires after termination without special tools
- Use in extreme operating conditions (maximum temperature 176°F [80°C])
- Withstands mechanical stress when installed (i.e. earthquake, falling equipment)
- Cut to desired length using scissors or knife
- Rivet R4 may be used to mount on panel
- Duct base perforation according to DIN 43659 and DIN VDE 0660 TEIL 506



UL Recognized file # E123572



### Gray Flexible Self-Adhesive DN Series

Part Number	Qty	Price	Width x Height inches [mm]	Length per piece inches [mm]	Total Actual Length ft [m]	Drawing Link
<a href="#">DN25AG</a>	24	\$155.00	0.50 x 0.75 [12.7 x 19.05]	19.7 [500]	39.37 [12]	<a href="#">PDF</a>
<a href="#">DN25AG-1</a>	1	\$8.25			1.64 [0.5]	
<a href="#">DN35AG</a>	24	\$218.00	1.00 x 1.38 [25.4 x 35.05]		39.37 [12]	<a href="#">PDF</a>
<a href="#">DN35AG-1</a>	1	\$11.00			1.64 [0.5]	
<a href="#">DN45AG</a>	14	\$171.00	1.38 x 1.75 [35.05 x 44.45]		22.96 [7.0]	<a href="#">PDF</a>
<a href="#">DN45AG-1</a>	1	\$14.50			1.64 [0.5]	

### Adhesive-Backed Tape Specifications

<b>Material</b>	Double coated PET film backing, modified acrylic adhesive
<b>Applicable Mounting Surfaces</b>	Paper, cardboard, wood, glass, ceramics, metal, rubber, and many plastics
<b>Recommended Tape Application Temperature</b>	65 to 95°F [18 to 35°C]
<b>Thickness</b>	0.2 mm

Note: Make sure the surface is perfectly clean and dry before applying self-adhesive wire duct.

### Wire Fill Capacity

Nominal Duct Size (inches)	Wire Gauge					
	12AWG	14AWG	16AWG	18AWG	22AWG	
	Insulation Thickness [inches]					
	1/32	3/64	1/32	1/32	1/32	1/64
	OD-0.158	OD-0.165	OD-0.139	OD-0.125	OD-0.113	OD-0.065
	Recommended Maximum Number of Wires per Wire Duct (based on 50% fill capacity)					
1/2 x 1/2	6	5	7	9	11	33
3/4 x 3/4	13	12	6	20	25	75
1/2 x 3/4	8	8	11	13	16	50
1 x 1	23	21	29	36	44	133
1 x 1 3/8	31	28	40	50	61	183
1 1/2 x 1 1/2	51	46	65	81	99	299
1 3/8 x 1 3/4	54	50	70	87	106	321

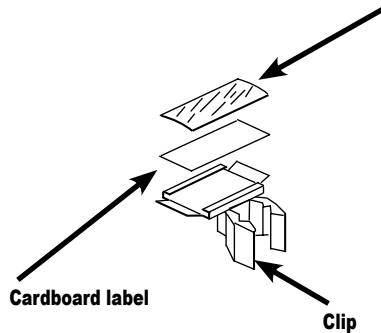

**IBOCO®**

# Wire Duct – Accessories

## Duct Marking Tags

Part Number	Price	Description	Qty
<b>DM1</b>	\$32.00	Single-width white cardboard identification label for wire duct. Supplied with black plastic mounting clip and transparent plastic cover slide	50

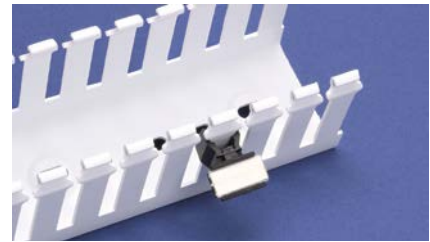
Note: **DM1** marking tags can only be used with T1 series wire duct.



## Identification Tags

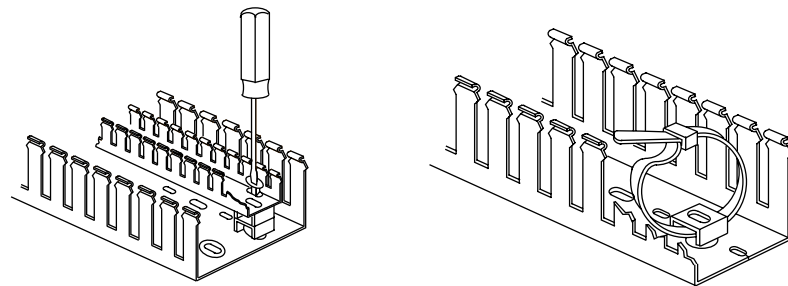
Allowing easy identification of control gear and switchgear, these tags are mounted by snapping the clip onto the sidewall finger segments of the duct. No gluing - no drilling! After installation, they need not be removed during maintenance or any work which involves the removal of the covers.

Note: Take care that clip is installed above the wires coming out to the sidewall slots.



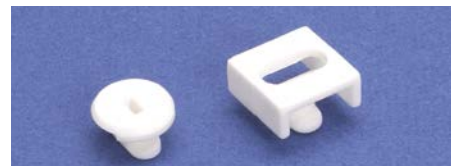
## Mounting Devices

Part Number	Price	Description	Qty
<b>ZP1</b>	\$17.00	Round, white polyamide 'button' used to mount components and separators inside duct.	100
<b>ZP2</b>	\$20.50	Square white polyamide cable tie mount used to tighten a wire bundle inside duct.	50



## Mounting Inserts

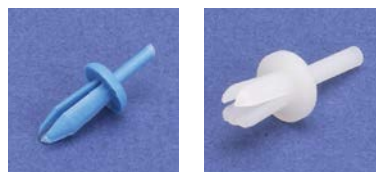
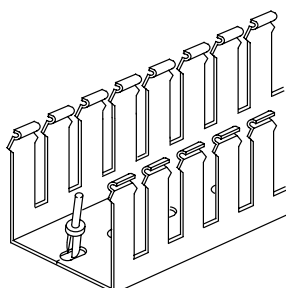
We carry mounts in two styles: ZP1 for mounting components and SEP-E separators inside duct, or for mounting small sizes of duct inside larger sizes (for separation of circuits with different functions); and ZP2, which is used with a cable tie to secure a wire bundle inside the duct.



## Wire Duct Rivets and Rivet Tools

Part Number	Price	Description	Qty
<b>R4*</b>	\$19.50	Blue polyamide rivet used to install all types of wire duct with standard 4.5 mm [0.17 in] mounting holes.	250
<b>B4</b>	\$51.00	Red polyamide rivet tool used to install R4 rivets.	1
<b>R6*</b>	\$22.50	Natural polyamide rivet used to install all types of wire duct with standard 6.5 mm [0.26 in] mounting holes.	250
<b>B6</b>	\$51.00	Yellow polyamide rivet tool used to install R6 rivets.	1

\* R4 drill hole size - 5/32" (4mm), R6 drill hole size - 7/32" [5.5 mm]  
When using with Flexible wire duct, only the R4 rivet will currently work.



## Rivets and Rivet Tools

Wire duct rivets install quickly and easily with the companion rivet tool, offering good temperature resistance and excellent mechanical properties. They can be used to install all types of wire duct with standard mounting holes.




**IBOCO®**

# Wire Duct – Material Specifications

Material Specifications								
Materials	Test Standard	Unit of Measure	Rigid PVC	Polypropylene	PVC Molded Components	Polyamide 6	Polyethylene	Flame Retardant Polyethylene
Technical Characteristics								
Chemical/Physical Properties								
Specific Gravity	ASTM D792	g/cm³	1.55	1.01	1.32	1.14	0.92	0.97
H <sub>2</sub> O 73.4°F Absorption	ISO 62	%	< 0.1	0.02	< 0.1	2.5	< 0.1	< 0.1
Formaldehyde	–	ppm	absent	absent	absent	absent	absent	absent
Cadmium	–	ppm	absent	absent	absent	absent	absent	absent
Mechanical Properties								
Tensile Stress at Break	ASTM D638	MPa	39	28	30	45	17	15
Traction Strength	ASTM D638	MPa	44	27	27	55	9.5	9
Elongation at Break	ASTM D638	%	130	200	97	250	400	600
Modulus of Elasticity at Traction	ASTM D638	MPa	4400	n/a	–	950	–	240
Modulus of Elasticity at Flexion	ASTM D790	MPa	3200	2100	–	1100	210	130
Thermal Properties								
Temperature VICAT	ASTM D1525	°C	84	95	70	198	89	–
HDT	ASTM D648	°C	72	60	60	185	–	–
Coefficient of Expansion	ASTM D696	K <sup>-1</sup>	6x10 <sup>-5</sup>	10 <sup>-5</sup>	8x10 <sup>-5</sup>	8-10x10 <sup>-5</sup>	22x10 <sup>-5</sup>	10 <sup>-5</sup>
Specific Heat	ASTM C351	kJ/kgK	0.94	n/a	1.24	1.7	–	–
Thermal Conductivity	ASTM C177	W/mK	0.14	0.21	0.14	0.29	0.32	0.32
Electrical Properties								
Dielectric Constant	ASTM D150	–	3.2 - 4.0	2.5	3.2	5.0	2.4	2.3
Dielectric Strength	IEC 243	kV/mm	70	25	60	35	90	90
Surface Resistance	IEC 93	Ω	10 <sup>13</sup>	10 <sup>13</sup>	10 <sup>13</sup>	5x10 <sup>11</sup>	10 <sup>13</sup>	10 <sup>13</sup>
Self-Extinguishing								
Self-Extinguishing UL 94 1.6 mm	UL 94	–	V-0	V-0	V-0	V-2	HB	V-2
Self-Extinguishing UL 94 3.2 mm	UL 94	–	V-0	V-0	V-0	V-2	HB	V-2
Hot Wire Test (2 mm)	IEC 695-2-1	°C	960	960	960	650	650	850
Oxygen Number	ASTM D2863	%	43	30	34	25	–	25