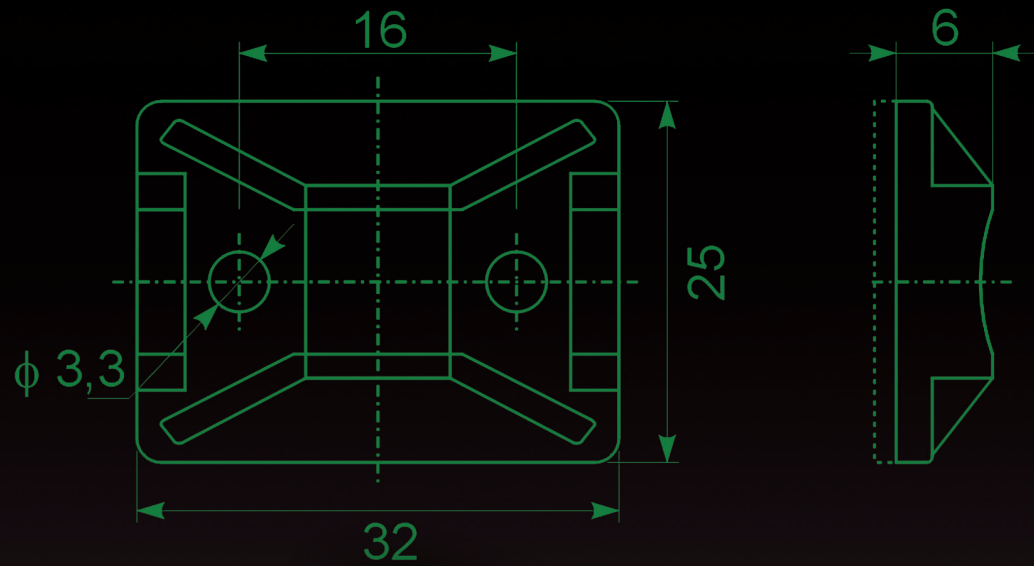




Fastening and protective elements

Fastening elements mating with cable ties

Holder, D6 type	37
Fasteners, D 10 type	38
Fasteners, E3 type	39
Fasteners, E4 type	40
Fasteners, ES 10	41
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Cable fastening elements

Fasteners EE type	44
Cable holders, UG type	45
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Cable and bundle protection

Spiral hose, WSN type	48
Edge shield, OKU type	49
Edge shield, OPC type	50
Edge shield, OPN type	51

Fastener, D6 type

FEATURES & BENEFITS



reliable and fast bundle mounting to enclosure, in hole



for indoor use

LOGISTIC DATA

Quantity in package [pcs]	100
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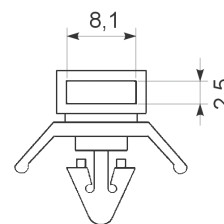
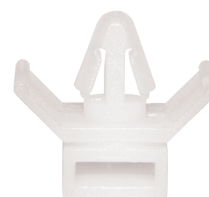
Fasteners D6RA type are made of material that meets the requirements of the railway standard PN-EN 45545-2:2013+A1:2015 in the field of smoke and toxic substances generation, the D6HT elements are intended for operation at high temperatures.

MECHANICAL DATA

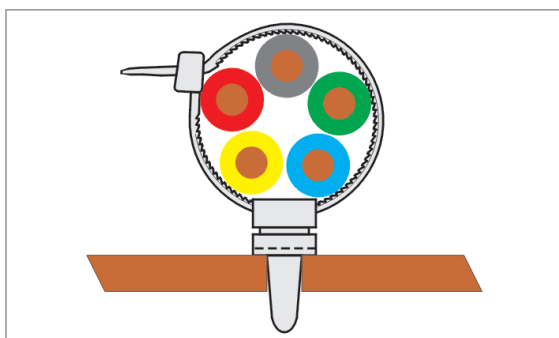
Material	polyamide 6
Halogen-free	yes
Installation	by snap-fastening in a $\varnothing 6,3$ hole; thickness of the structural element from 0,8 mm to 3 mm
Max. tape width [mm]	8
Application in buildings	indoors

CERTIFICATES & STANDARDS

Flammability class	UL 94 V2 (white); UL 94 V0 (black);
--------------------	-------------------------------------



Type	Colour	Operating temperature [°C]	Application in buildings
D6	natural	-30 ÷ +85	indoors
D6 V0	black	-30 ÷ +85	indoors
D6RA	black	-30 ÷ +100	
D6HT	white	-40 ÷ +120	



Fasteners, D 10 type

FEATURES & BENEFITS



reliable fixing of heavy cable bundles to walls using cable ties



for indoor use

LOGISTIC DATA

Quantity in package [pcs]	100
---------------------------	-----

MECHANICAL DATA

Material	polyamide 6
----------	-------------

Operating temperature [°C]	-40 ÷ +85
----------------------------	-----------

Colour	black
--------	-------

DIMENSIONS

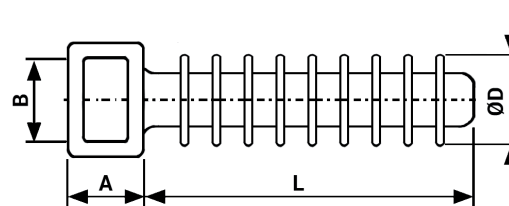
L	37
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CERTIFICATES & STANDARDS

Flammability class	UL 94 V2
--------------------	----------

NOTE!

The mounting hole diameter must be adapted to floor material properties.



Type	A	B	D
D 10	6,5	9,2	10
D 10/8	6,0	8,2	8

Fasteners, E3 type

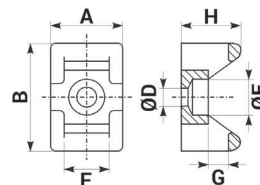
FEATURES & BENEFITS



reliable fastening of bundle to enclosure, e.g. with screw and cable tie



wide range of solutions for various ambient conditions



LOGISTIC DATA

Quantity in package [pcs] 100

Fasteners E3RA type are made of material that meets the requirements of the railway standard PN-EN 45545-2:2013+A1:2015 in the field of smoke and toxic substances generation, the E3HT elements are intended for operation at high temperatures.

MECHANICAL DATA

Material polyamide 6

Halogen-free yes

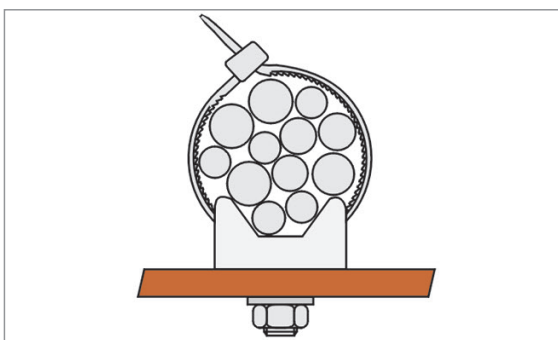
Installation by screwing

Application in buildings indoors

CERTIFICATES & STANDARDS

Flammability class UL 94 V2 (white); UL 94 V0 (black);

Type	Colour	Operating temperature [°C]	Application in buildings	A	B	D	E	F	G	H
E301	white	-40 ÷ +85	indoors	10,7	16	3,7	7	5,4	1,8	7
E301V0	black	-40 ÷ +85	indoors	10,7	16	3,7	7	5,4	1,8	7
E3	white	-40 ÷ +85	indoors	12	18	4,5	8	8,3	2,0	9
E3V0	black	-40 ÷ +85	indoors	12	18	4,5	8	8,3	2,0	9
E3RA	black	-30 ÷ +100		12	18	4,5	8	8,3	2,0	9
E3HT	white	-40 ÷ +120		12	18	4,5	8	8,3	2,0	9
E302	white	-40 ÷ +85	indoors	16	26	5	10	9,8	2,5	11
E302V0	black	-40 ÷ +85	indoors	16	26	5	10	9,8	2,5	11



Fasteners, E4 type

FEATURES & BENEFITS



reliable fastening of bundle to enclosure, e.g. with screw and cable tie



to be used in various ambient conditions

LOGISTIC DATA

Quantity in package [pcs] 100

MECHANICAL DATA

Material polyamide 6

Halogen-free yes

Installation by screwing

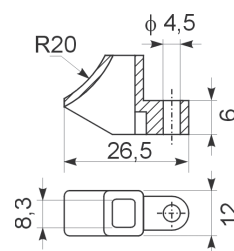
Operating temperature [°C] -40 ÷ +85

Max. tape width [mm] 8

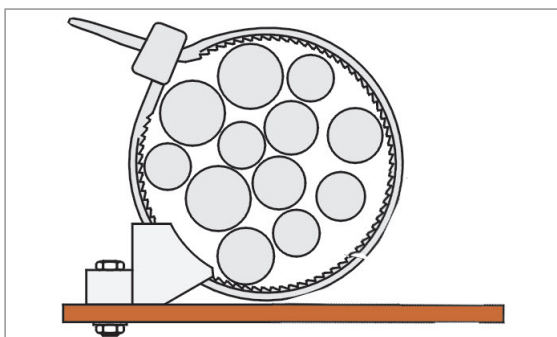
Application in buildings indoors

CERTIFICATES & STANDARDS

Flammability class UL 94 V2 (white); UL 94 V0 (black);



Type	Colour
E4	white
E4V0	black



Holders, ES 10 type

FEATURES & BENEFITS

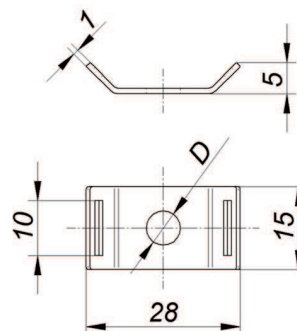
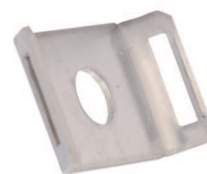
- ☒ stainless steel components for bundle fitting
- ☒ reliable fastening of bundle to enclosure, e.g. with screw and TSB cable tie
- ☒ for difficult climatic or environmental conditions

LOGISTIC DATA

Quantity in package [pcs]	100
---------------------------	-----

MECHANICAL DATA

Material	stainless steel 304 type according to AISI/ASTM
Operating temperature [°C]	-80 ÷ +500
Max. tape width [mm]	9,5



Type	D
ES 10/4	4,2
ES 10/6	6,2

Fasteners, E8 type

FEATURES & BENEFITS

-  reliable fastening of bundle to enclosure, e.g. with cable tie
-  wide range of solutions for various ambient conditions and floor types

LOGISTIC DATA

Quantity in package [pcs]	100
---------------------------	-----

Fasteners E8RA type are made of material that meets the requirements of the railway standard PN-EN 45545-2:2013+A1:2015 in the field of smoke and toxic substances generation, the E8HT elements are intended for operation at high temperatures.

MECHANICAL DATA

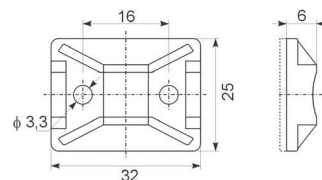
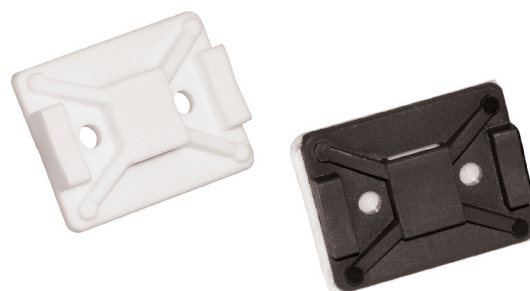
Material	polyamide 6
Halogen-free	yes
Max. tape width [mm]	8

CERTIFICATES & STANDARDS

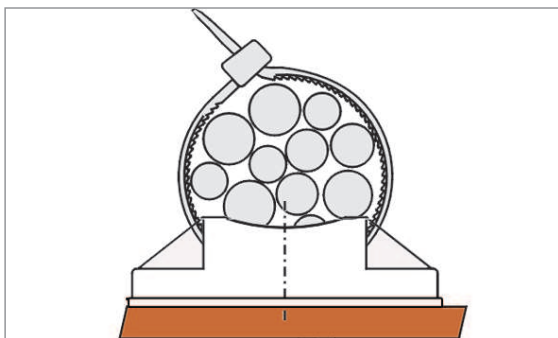
Flammability class	UL 94 V2 (white); UL 94 V0 (black);
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NOTE!

Static load approximated for 20 °C. For minimal and maximum temperatures, the load will be lower. For "S" version, V0 flammability data does not apply to self-adhesive tapes.



Type	Installation	Colour	Operating temperature [°C]	Max. static load [g]	Application in buildings
E8	by screwing	white	-40 ÷ +80		indoors and outdoors
E8S	self-adhesive fastening	white	-30 ÷ +60	220	indoors
E8V0	by screwing	black	-40 ÷ +80		indoors and outdoors
E8S V0	self-adhesive fastening	black	-30 ÷ +60	220	indoors
E8RA	by screwing	black	-30 ÷ +100		
E8HT	by screwing	white	-40 ÷ +120		



Fasteners, E9 type

FEATURES & BENEFITS



reliable fastening of bundle to enclosure, e.g. with cable tie



wide range of solutions for various ambient conditions and floor types

LOGISTIC DATA

Quantity in package [pcs] 100

Fasteners E9...RA type are made of material that meets the requirements of the railway standard PN-EN 45545-2:2013+A1:2015 in the field of smoke and toxic substances generation, the E9...HT elements are intended for operation at high temperatures.

MECHANICAL DATA

Material polyamide 6

Halogen-free yes

CERTIFICATES & STANDARDS

Flammability class UL 94 V2 (white); UL 94 V0 (black);

NOTE!

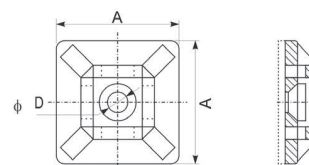
- static load approximated for 20°C. For minimal and maximum temperatures, the load will be lower;
- installation as per the manual;
- for "S" version - V0 flammability refers to the self-adhesive tape.

E93; E93S; E93HT
E95; E95S; E95HT
E93RA
E95RA

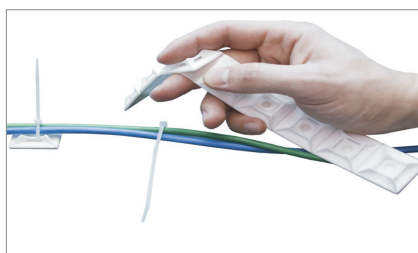
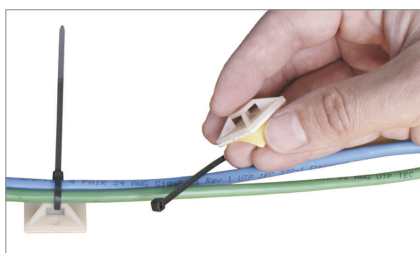
E9
E9S
E9HT

E9 V0
E9S V0
E9RA

E91S; E91S V0
E92S; E92S V0



Type	Installation	Colour	Operating temperature [°C]	Max. tape width [mm]	Max. static load [g]	Application in buildings	A	D
E9	by screwing	white	-40 ÷ +85	8		indoors and outdoors	29	4,5
E9S	self-adhesive fastening	white	-30 ÷ +75	8	260	indoors	29	4,5
E9V0	by screwing	black	-40 ÷ +85	8		indoors and outdoors	29	4,5
E9S V0	self-adhesive fastening	black	-30 ÷ +75	8	260	indoors	29	4,5
E9RA	by screwing	black	-30 ÷ +100	8			29	4,5
E9HT	by screwing	white	-40 ÷ +120	8			29	4,5
E91S	self-adhesive fastening	white	-30 ÷ +75	3,6	40	indoors	12,5	4,5
E91S V0	self-adhesive fastening	black	-30 ÷ +75	3,6	40	indoors	12,5	4,5
E92S	self-adhesive fastening	white	-30 ÷ +75	3,6	100	indoors	19	4,5
E92S V0	self-adhesive fastening	black	-30 ÷ +75	6,5	100	indoors	19	4,5
E93	by screwing	white	-40 ÷ +85	6,5		indoors and outdoors	38	2x3,5
E93S	self-adhesive fastening	white	-30 ÷ +75	6,5	170	indoors	38	2x3,5
E93V0	by screwing	black	-40 ÷ +75	6,5		indoors and outdoors	38	2x3,5
E93S V0	self-adhesive fastening	black	-30 ÷ +75	6,5	170	indoors	38	2x3,5
E93RA	by screwing	black	-30 ÷ +100	6,5			38	2x3,5
E93HT	by screwing	white	-40 ÷ +120	6,5			38	2x3,5
E95	by screwing	white	-40 ÷ +85	11,2		indoors and outdoors	38	2x4
E95S	self-adhesive fastening	white	-30 ÷ +75	11,2	460	indoors	38	2x4
E95V0	by screwing	black	-40 ÷ +75	11,2		indoors and outdoors	38	2x4
E95S V0	self-adhesive fastening	black	-30 ÷ +75	11,2	460	indoors	38	2x4
E95RA	self-sticking fastening	black	-30 ÷ +100	11,2			38	2x4
E95HT	self-sticking fastening	white	-40 ÷ +120	11,2			38	2x4



FEATURES & BENEFITS

- ☒ reliable mounting to enclosure or wall with screw
- ☒ for indoor use

LOGISTIC DATA

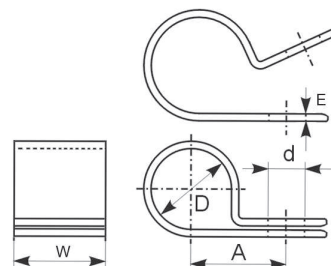
Quantity in package [pcs]	100
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MECHANICAL DATA

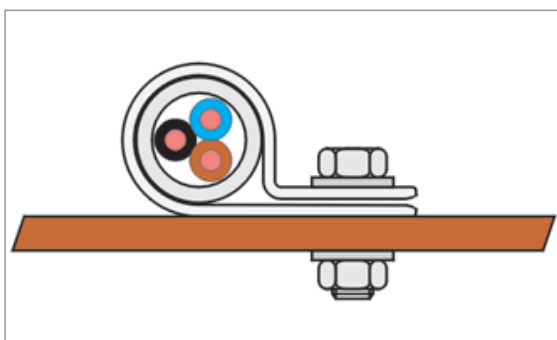
Material	polyamide 6.6
Halogen-free	yes
Operating temperature [°C]	-40 ÷ +85
Colour	transparent

CERTIFICATES & STANDARDS

Flammability class	UL 94 V2
--------------------	----------



Type	A	D	E	W
EE31	9,5	2,8	1,2	9,5
EE47	10,3	4,6	1,2	9,5
EE63	11,1	5,6	1,2	9,5
EE79	11,9	7,4	1,2	9,5
EE95	12,7	10,0	1,2	9,5
EE127	14,3	11,9	1,2	9,5
EE142	15,1	13,5	1,2	9,5
EE190	17,5	16,8	1,5	12,7
EE222	19	21,9	1,5	12,7
EE285	23	25,0	1,5	12,7



Cable holders, UG type

FEATURES & BENEFITS



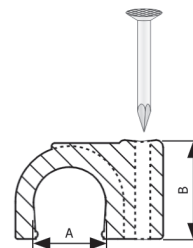
popular elements for wall-fastening



can be used in multiple floor types into which hardened nails can be hammered



wide range



LOGISTIC DATA

Quantity in package [pcs]	100
---------------------------	-----

MECHANICAL DATA

Material	polypropylene + steel
----------	-----------------------

Operating temperature [°C]	-40 ÷ +85
----------------------------	-----------

Colour	white
--------	-------

Type	A	B
UG 3,5	3,5	4,5
UG 4	4	5,3
UG 5	5	6,5
UG 6	6	8,1
UG 7	7	8,7
UG 8	8	9,6
UG 9	9	10,7
UG 10	10	11,7
UG 12	12	12,8
UG 14	14	14,9
UG 16	16	16,9
UG 18	18	21,5
UG 20	20	23,0
UG 22	22	25,5

Cable holders, UGP type

FEATURES & BENEFITS

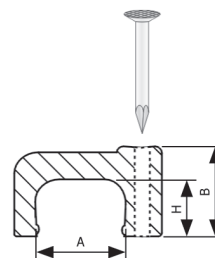
- ☒ popular elements for wall-fastening of flat cables
- ☒ can be used in multiple floor types into which hardened nails can be hammered
- ☒ wide range

LOGISTIC DATA

Quantity in package [pcs] 100

MECHANICAL DATA

Material polypropylene + steel
 Operating temperature [°C] $-40 \div +85$
 Colour white



Type	A	B	H
UGP 4X4	4	6,0	3,8
UGP 5X4	5	6,0	3,8
UGP 6X4	6	6,5	4,1
UGP 7X4,5	7	7,0	4,7
UGP 8X5	8	7,5	5,0
UGP 9X5,5	9	8,2	5,4
UGP 10X5,5	10	8,6	5,7
UGP 12X6	12	9,0	6,1
UGP 14X5,5	14	6,8	5,5

Cable holders, UZK type

FEATURES & BENEFITS

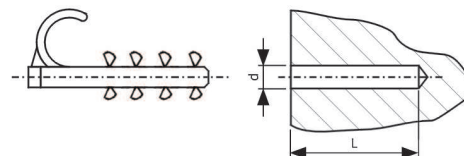
- ☒ popular holders for flush-mounted electric systems
- ☒ particularly useful for brick and aerated concrete walls

LOGISTIC DATA

Quantity in package [pcs] 100

MECHANICAL DATA

Material polypropylene
 Operating temperature [°C] $-30 \div +90$
 Colour white
 Mounting hole d [mm] 7
 Mounting hole L [mm] 35



Type	Cable external diameter [mm]
UZK 1	$6 \div 10$
UZK 2	$10 \div 16$

Cable holders, UZP type

FEATURES & BENEFITS



popular holders for flush-mounted electric systems



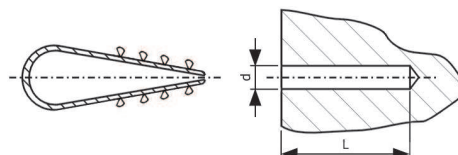
particularly useful for brick and aerated concrete walls

MECHANICAL DATA

Material	copolymer PE + PP
Operating temperature [°C]	-30 ÷ +70
Colour	white
Mounting hole d [mm]	7

NOTE!

Mounting hole diameter, depending on the substrate type, must be adjusted to the fixture.



Type	Cable external diameter [mm]	Mounting hole L [mm]	Quantity in package [pcs]
UZP 1	max. 6	40	100
UZP 2	6 ÷ 10	50	50

Spiral hose, WSN type

FEATURES & BENEFITS

- ☒ popular hoses for bundling cables
- ☒ cables can be branched in any bundle section
- ☒ mechanical protection of bundled cables
- ☒ for wide range of bundle diameters

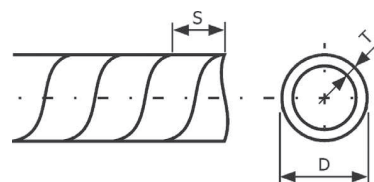


LOGISTIC DATA

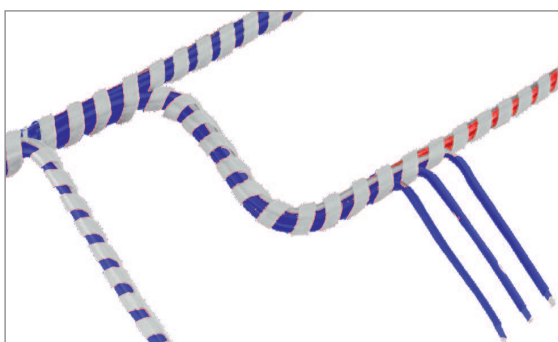
Quantity in package [m] 10

MECHANICAL DATA

Halogen-free yes
Operating temperature [°C] -30 ÷ +70



Type	Material	Colour	Bundle dia. [mm]	D	S	T
WSN 3	polyethylene; UL 94 HB	transparent	3÷10	3	5	0,75
WSN 6			6÷18	6	7	1
WSN 8			8÷24	8	11	
WSN 10			10÷32	10	12	
WSN 12			12÷40	12	14	1,5
WSN 15			15÷50	15	15	
WSN 19			19÷65	19	18	2
WSN 24			24÷80	24	20	
WSN 3 S	polyethylene; UL 94 HB	black	3÷10	3	5	0,75
WSN 6 S			6÷18	6	7	1
WSN 8 S			8÷24	8	11	
WSN 10 S			10÷32	10	12	
WSN 12 S			12÷40	12	14	1,5
WSN 15 S			15÷50	15	15	
WSN 19 S			19÷65	19	18	2
WSN 24 S			24÷80	24	20	
WSN 3 V2	self-extinguishing polyethylene; UL 94 V2	white	3÷10	3	5	0,75
WSN 6 V2			6÷18	6	7	1
WSN 8 V2			8÷24	8	11	
WSN 10 V2			10÷32	10	12	
WSN 12 V2			12÷40	12	14	1,5
WSN 15 V2			15÷50	15	15	
WSN 19 V2			19÷65	19	18	2
WSN 24 V2			24÷80	24	20	



Edge shield, OKU type

FEATURES & BENEFITS



sheet metal edge shields in enclosures at wire and cable routing points



protects wire insulation from damage



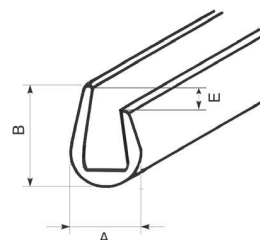
for a wide range of enclosure wall thickness

MECHANICAL DATA

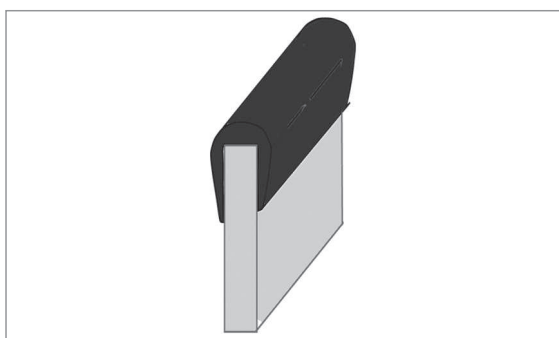
Material	PCV resistant to typical solvents, lubricants, oils, sea water, moulds etc.
Operating temperature [°C]	-30 ÷ +70
Assembly temperature [°C]	-5 ÷ +35
Colour	black

NOTE!

RD, BL, GY, WT, YL colours on request - for details visit www.ergom.com



Type	Metal plate thickness [mm]	A	B	E	Quantity in package [m]
OKU 1/0,5	0,4÷0,7	3,5	7,5	0,5	50
OKU 2/1	0,8÷1,2	4,5	9,5	0,5	50
OKU 3/1,5	1,2÷1,8	5,0	10,0	0,5	50
OKU 4/2	1,7÷2,3	5,5	10,5	1,0	25
OKU 5/2,5	2,2÷2,8	6,5	12,5	1,0	25
OKU 6/3	2,7÷3,3	7,5	13,0	1,5	25
OKU 7/3,5	3,3÷3,8	7,5	14,0	1,5	25
OKU 8/4	3,7÷4,3	8,5	14,0	2,0	25
OKU 9/4,5	4,2÷4,8	9,5	15,5	2,0	25
OKU 10/5	4,6÷5,4	10,5	16,5	2,0	25
OKU 11/5,5	5,1÷5,9	11,5	17,5	2,0	25
OKU 12/6	5,6÷6,4	12,0	19,0	2,0	25



Edge shield, OPC type

FEATURES & BENEFITS

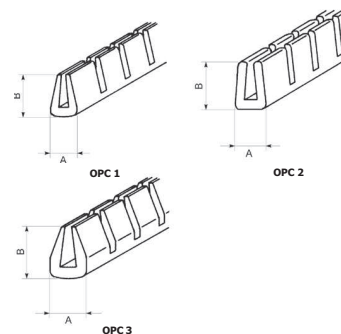
- ☒ sheet metal edge shields in enclosures at wire and cable routing points
- ☒ protects wire insulation from damage by easily adapting to the protected edge shape, e.g. in opening, due to stresses
- ☒ for a wide range of enclosure wall thickness

LOGISTIC DATA

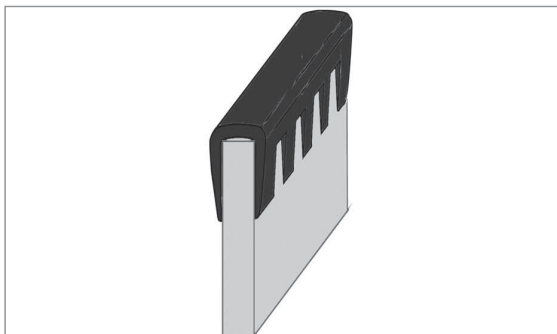
Quantity in package [m] 50

MECHANICAL DATA

Material	PCV resistant to typical solvents, lubricants, oils, sea water, moulds etc.
Operating temperature [°C]	-30 ÷ +70
Assembly temperature [°C]	-5 ÷ +35
Colour	black



Type	Min. bending radius [mm]	Metal plate thickness [mm]	A	B
OPC-1	45	0,4÷1,3	5,0	9,0
OPC-2	55	1,3÷2,2	6,5	9,5
OPC-3	65	2,2÷3,3	7,5	11,0



Edge shield, OPN type

FEATURES & BENEFITS

- ☒ sheet metal edge shields in enclosures at wire and cable routing points
- ☒ protects wire insulation from damage
- ☒ for a wide range of enclosure wall thickness

LOGISTIC DATA

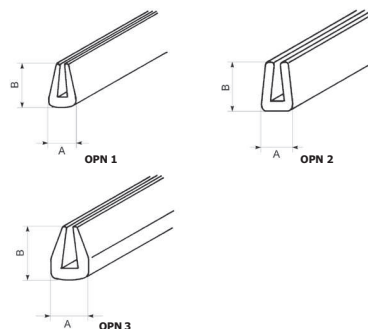
Quantity in package [m]	50
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MECHANICAL DATA

Material	PCV resistant to typical solvents, lubricants, oils, sea water, moulds etc.
Operating temperature [°C]	-30 ÷ +70
Assembly temperature [°C]	-5 ÷ +35
Colour	black

NOTE!

RD, BL, GY, WT, YL colours on request - for details visit www.ergom.com



Type	Metal plate thickness [mm]	A	B
OPN-1	0,4÷1,3	5,0	9,0
OPN-2	1,3÷2,2	6,5	9,5
OPN-3	2,2÷3,3	7,5	11,0

