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arnocanali
per portare energia

Passerelle isolanti industriali portacavi
Industrial insulating cable tray

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Catalogo Pemsa
Pemsa Catalogue
2024

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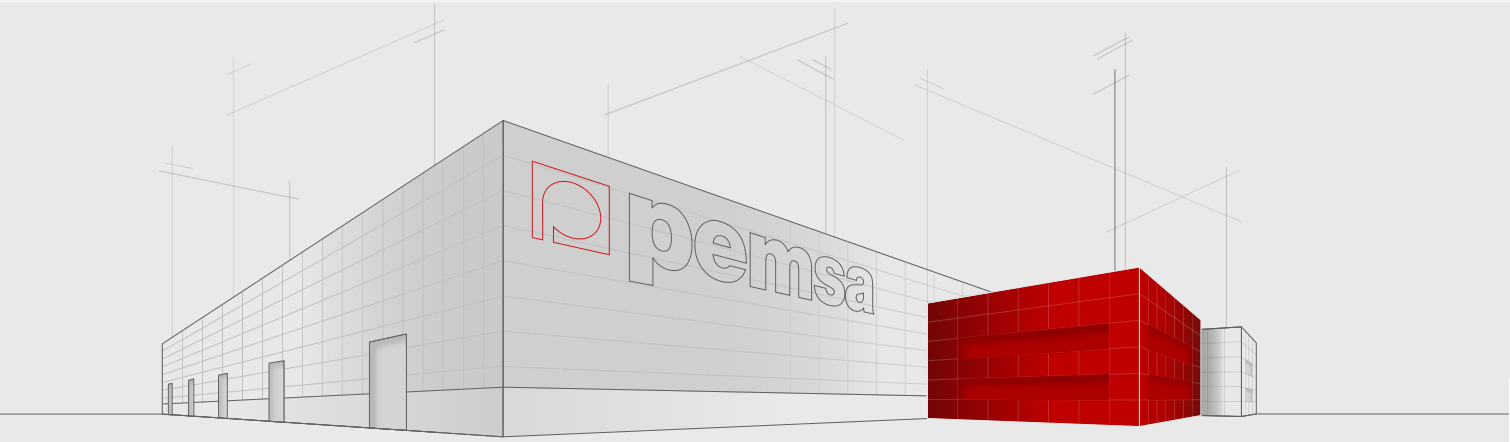

Un **passo avanti** nelle passerelle isolanti portacavi

***A step forward** on insulating cable trays*

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Schema generale di montaggio
General assembly diagram 04-05

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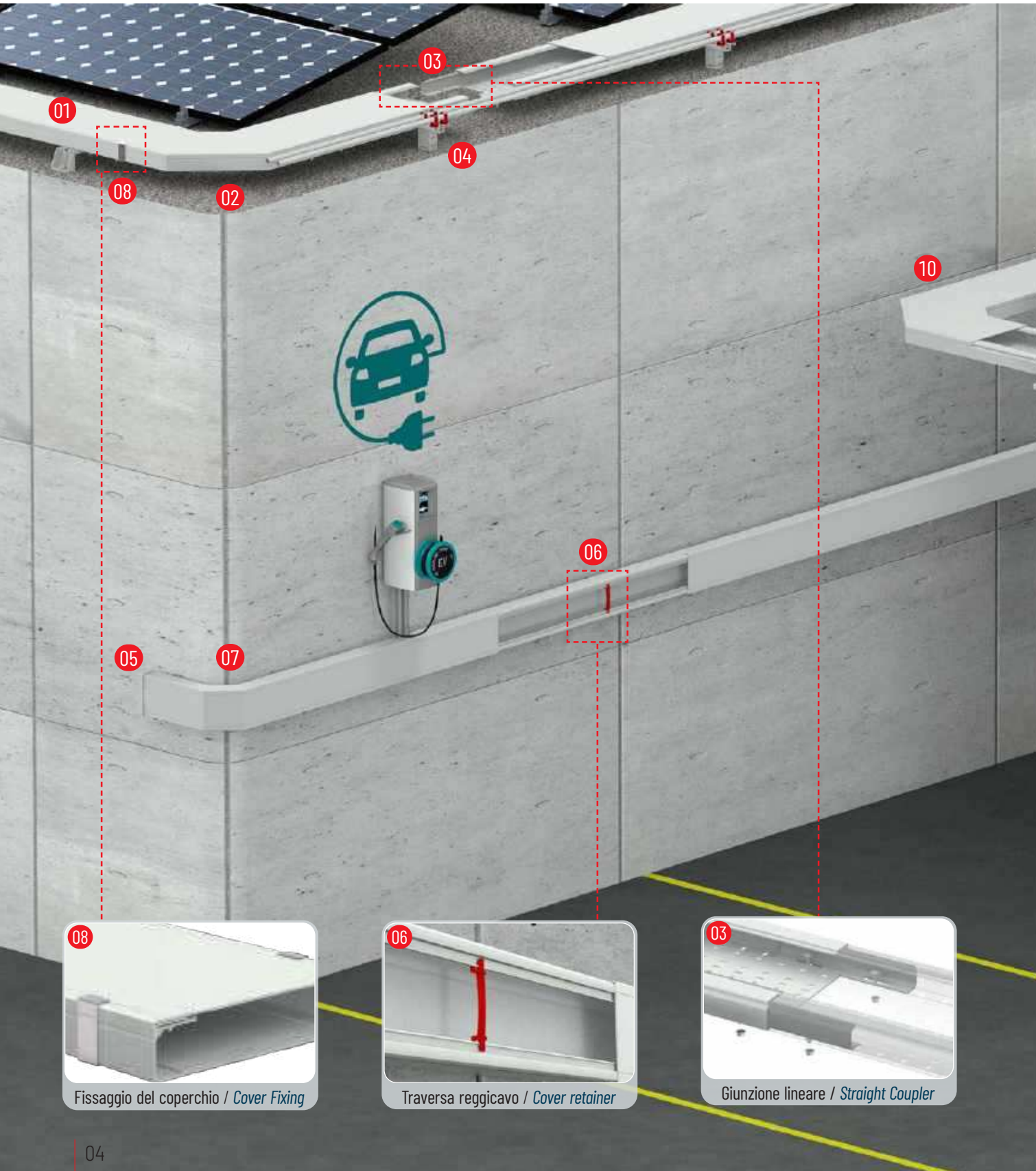
Un passo avanti nelle passerelle isolanti in PVC M1

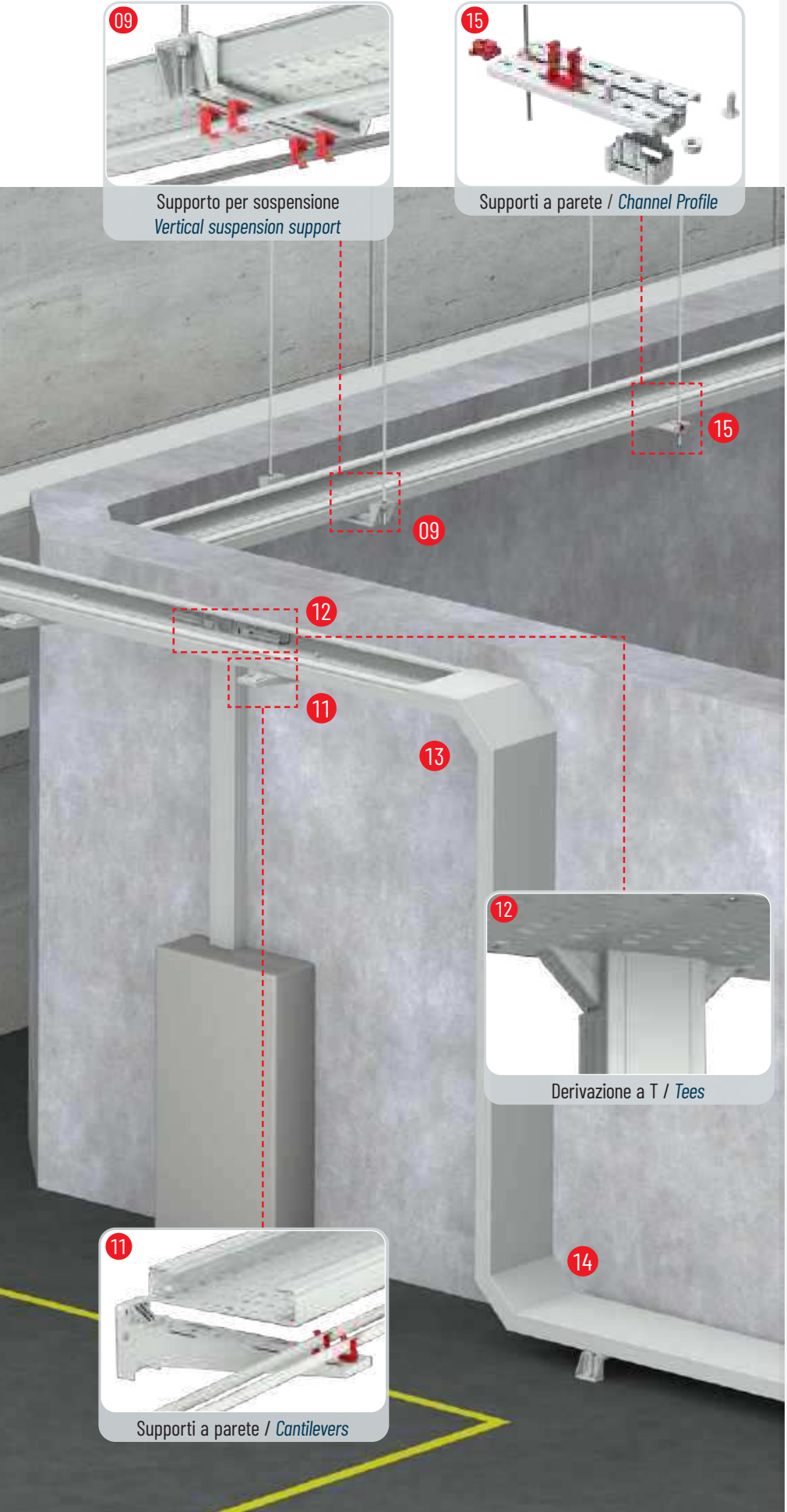
One step forward on PVC M1 insulating cable trays



Fissaggio del coperchio / *Cover Fixing*

Traversa reggicavo / *Cover retainer*

Giunzione lineare / *Straight Coupler*



Marchi di qualità e certificazioni
Quality marks and certifications

IEC 61537 — Norma internazionale per passerelle portacavi
International standard of cable trays

EN 50085 — Norma internazionale per canalina portacavi
International standard of cable trunking

AENOR — Marchio N AENOR EN 61537 EN 50085
AENOR N Mark

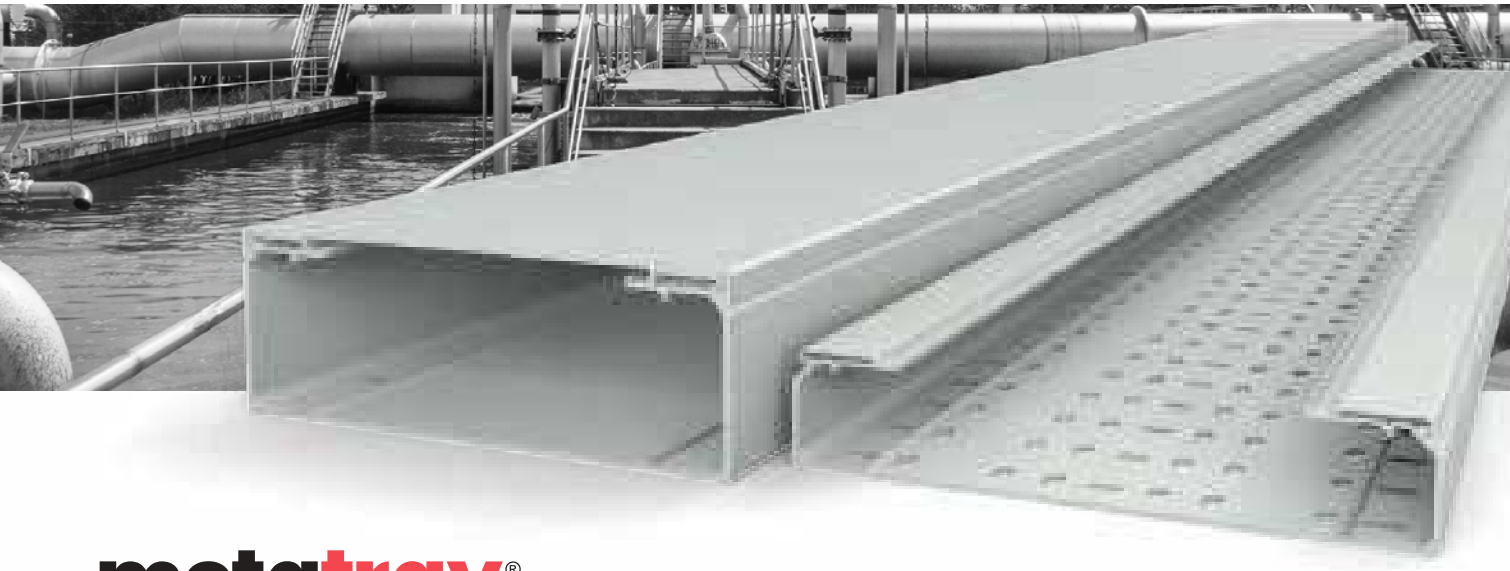
IECEE CB SCHEME — Conformità CE direttiva 2014/35/UE
CE conformity, directive 2014/35/UE

CE — Marcatura CE
CE mark

UKCA — Conformità UKCA
UKCA conformity

RoHS III — RoHS 2011/65/EU
WEEE 2012/19/UE

01 16
02 20
03 12
04 18
05 22
06 16
07 12
08 14
09 16
10 20
11 16
12 22
13 22
14 20
15 18



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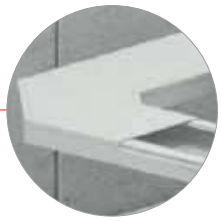
Passerelle isolanti forate e chiuse

Insulating perforated and solid cable trays

Caratteristiche generali e settori di applicazione / *General features and application sectors*

Ampia gamma di accessori con molteplici applicazioni
Wide range of accessories with a large number of applications



Massima funzionalità e adattamento a spazi e ambienti diversi
Maximum functionality and adaptability to different spaces and environments

Eccellente comportamento negli ambienti corrosivi, all'aperto anche in esposizione ai raggi UV
Excellent performance in corrosive environments, weathering and radiation exposure

Materiale isolante. Sicurezza elettrica e riduzione dei costi in manutenzione.
Insulating material. Electrical safety and reduced maintenance costs

Rispettose dell'ambiente.
Materiale riciclabile. Imballaggio sostenibile
Environmentally friendly. Recyclable material. Sustainable packaging

Sistema brevettato. Innovazione e sviluppo del proprio prodotto
Patented system. Innovation and own product development

Energia rinnovabile
Renewable energies

Edilizia terziaria
Service and Retail construction

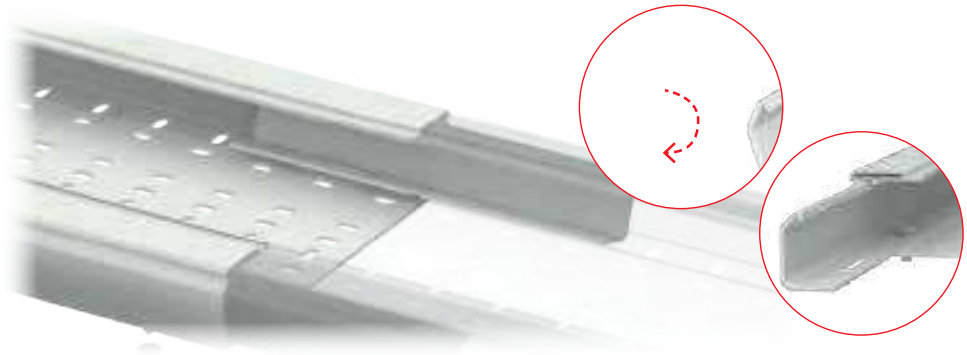
Trattamento delle acque
Water treatment

Veicoli elettrici
Electric vehicle

Industria navale
Marine Industry

Industria petrolchimica
Petrochemical Industry

Vantaggi tecnici / *Differentiating features*



Sistema di giunzione con inserimento a scatto del giunto per una connessione rapida

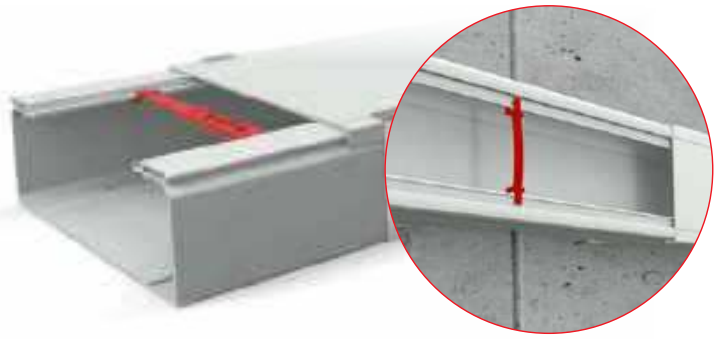
Snap-on and prefixed jointing system for quick connection

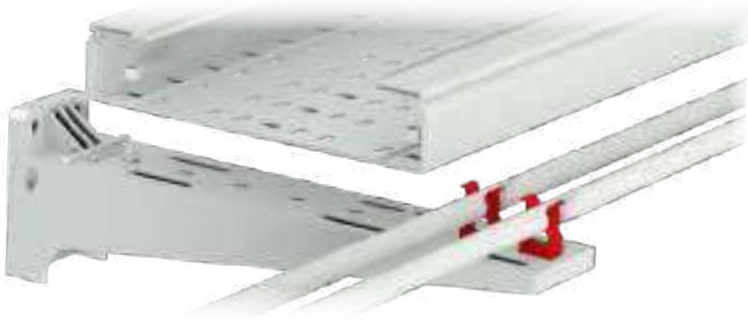
Traversa reggicavo

garantisce una migliore tenuta del coperchio ed evita la fuoriuscita dei cavi

Cover retainer

Prevents deformation due to temperature gradients and facilitates the removal/ assembly of the covers





Supporti orizzontali

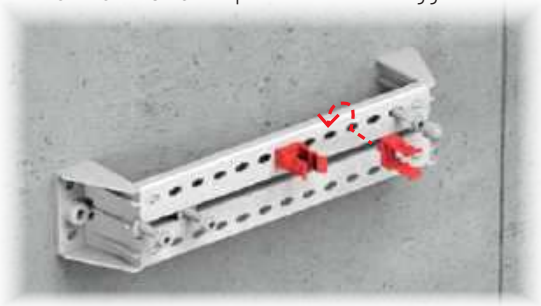
con fori per clip di fissaggio e clip per tubi

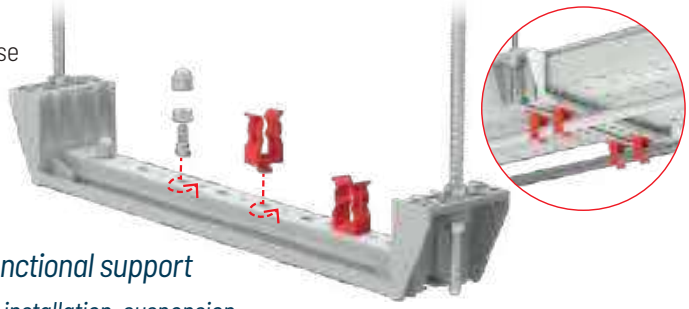
Cantilevers

with perforations for Conduit Clips and Clip Joint Kits

Supporto multifunzione

Installazione verticale, sospensione e pavimento + fissaggio dei tubi nella base





Multifunctional support

Vertical installation, suspension and floor installation + conduit fixing on the base

Profilo progettato per inserire gli accessori

Channel designed to fit accesories

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Guida alla selezione: Sistema di passerelle isolanti, supporti e accessori

Selection Guide: Insulating cable trays, supports and accessories.

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				Giunti / *Joints*					
		Passerella forata *Perforated cable tray*	Passerella chiusa *Insulating solid cable tray*	Giunto *Coupler*	Kit viti *Joint kit*	Giunto di rinforzo base (> 400m) *Reinforced base joint*	Giunto di rinforzo base *Reinforced central joint*	Giunto variabile angolare *Corner joint*	Giunto regolabile *Vertical hinge*
60	100	82004160	82003651	82003672	81000298	-	-	81000282	81000284
	150	82004161	82003652						
	200	82004162	82003653						
	300	82004163	82003654				82004223		
	400	82004164	82003655			81000290			
100	200	82004165	82003656	82003673 82004247		-	-	81000283	81000285
	300	82004166	82003657				82004223		
	400	82004167	82003658			81000290			
	500	82004168	82003659				82004224		
	600	82004169	82003660						
		10	11	12	12	12	12	14	

				Supporti / *Supports*		Montaggio / *Assembly*		
		Passerella forata *Perforated cable tray*	Passerella chiusa *Insulating solid cable tray*	Profilo *Channel*	Piede distanziatore *Elevating foot*	Rinforzo profilo *Strut plug*	Clip a vite *Clip joint*	Cappuccio copridado *Insulating protector*
60	100	82004160	82003651	L=1 m 82003670	81000294	81000295	81000297	81000401
	150	82004161	82003652					
	200	82004162	82003653					
	300	82004163	82003654					
	400	82004164	82003655					
100	200	82004165	82003656	L= 2m 82003671				
	300	82004166	82003657					
	400	82004167	82003658					
	500	82004168	82003659					
	600	82004169	82003660					
		10	11	18	18	18	18	18

Guida alla selezione: Sistema di passerelle isolanti, supporti e accessori

Selection Guide: Insulating cable trays, supports and accessories.

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Giunti / *Joints*	Supporti / *Supports*		Montaggio / *Assembly*				
Giunto regolabile verticale *Riser/dropper*	Supporto a parete *Cantilever*	Supporto sospensione/ distanziatore *Suspension vertical support*	Coperchio *Cover*	Clip fissaggio coperchio *Cover fixing*	Traversa reggicavo *Cover retainer*	Parete divisoria *Divider*	Clip di fissaggio tubo *Conduit fixing clip*
81000286	81000270	82003674	82003663	81000296	81000351	82003661	DN16 81000277
	81000271	82003675	82003664		81000291		DN20 81000278
	81000272	82003676	82003665		81000292		DN25 81000279
	81000273	82003677	82003666		81000292		DN32 81000280
	81000274	82003678	82003667		81000293		DN40 81000281
81000287	81000272	82003676	82003665	81000311	81000292	82003662	DN16 81000277
	81000273	82003677	82003666		81000292		DN20 81000278
	81000274	82003678	82003667		81000293		DN25 81000279
	81000275	82003679	82003668		81000293		DN32 81000280
	81000276	82003680	82003669		81000293		DN40 81000281
14	16	16	14	14	16	16	18

Accessori di vassoi/ *Cable tray accessories*

Curva a 90º *90º bend*	Coperchio curva piana *90º bend cover*	Curva discesa *Outside riser*	Coperchio CS *Outside riser cover*	Curva salita *Inside riser*	Coperchio CS *Inside riser cover*	Giunto per derivazione *T-joint*	Tappo terminale *End cover*
82003722	82003732	82003688	82003698	82003705	82003715	81000288	82003681
82003723	82003733	82003689	82003699	82003706	82003716		82003682
82003724	82003734	82003690	82003700	82003707	82003717		82003683
82003725	82003735	82003691	82003701	82003708	82003718		82003684
82003726	82003736	82003692	82003702	82003709	82003719		82003685
82003727	82004067	82003693	82004061	82003710	82004064	81000289	82003686
82003728	82004068	82003694	82004062	82003711	82004065		82003687
82003729	82004069	82003695	82004063	82003712	82004066		82003739
82003730	82003737	82003696	82003703	82003713	82003720		82003740
82003731	82003738	82003697	82003704	82003714	82003721		82003741
20	20	20	20	22	22	22	22

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Passerella isolante forata

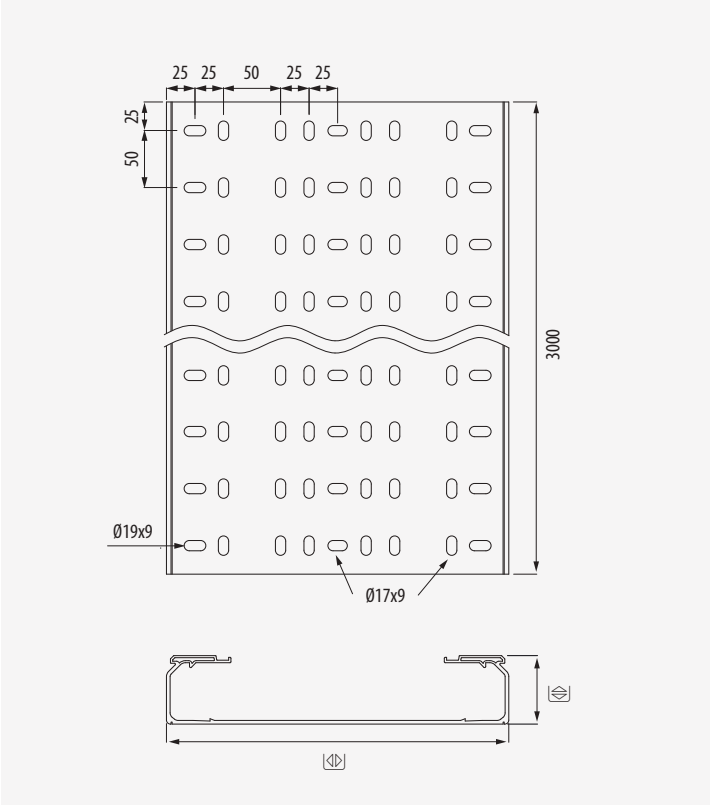
Perforated insulating cable tray

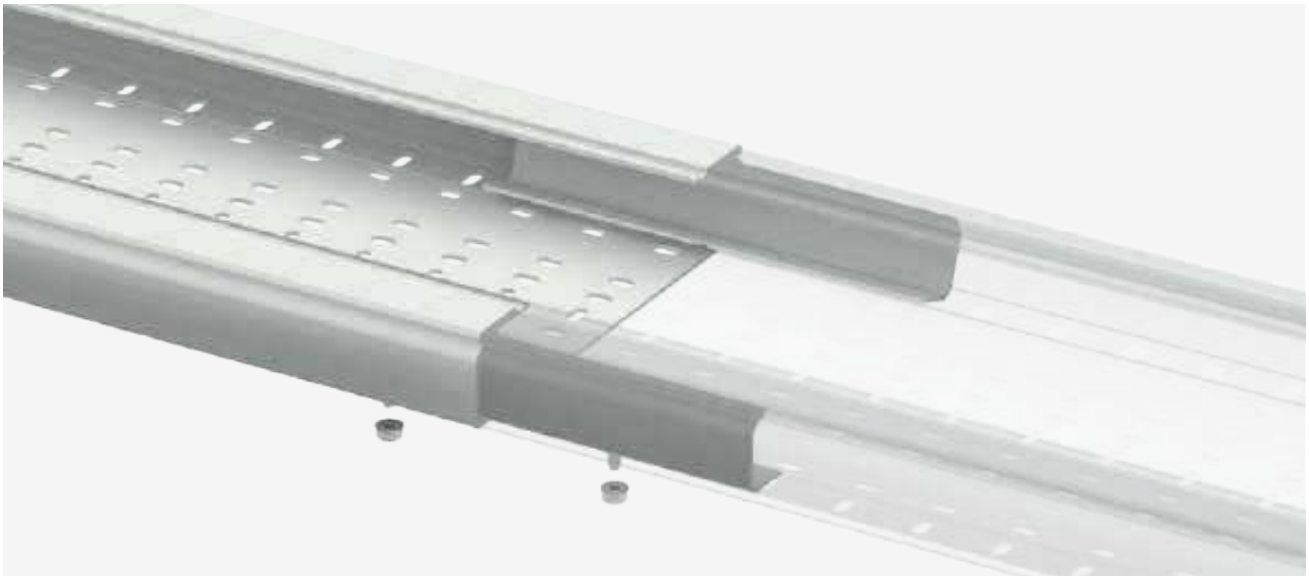
60, 100 • 100-600 • 3000

IEC 61537 EN 50085

ETIM: EC000047

• 60 -100 • 100 - 600				
		Ref	kg/m	
60	100	82004160	1,070	24
	150	82004161	1,340	12
	200	82004162	1,710	12
	300	82004163	2,600	12
	400	82004164	3,160	6
100	200	82004165	2,560	6
	300	82004166	3,360	6
	400	82004167	4,270	6
	500	82004168	5,240	6
	600	82004169	6,420	6





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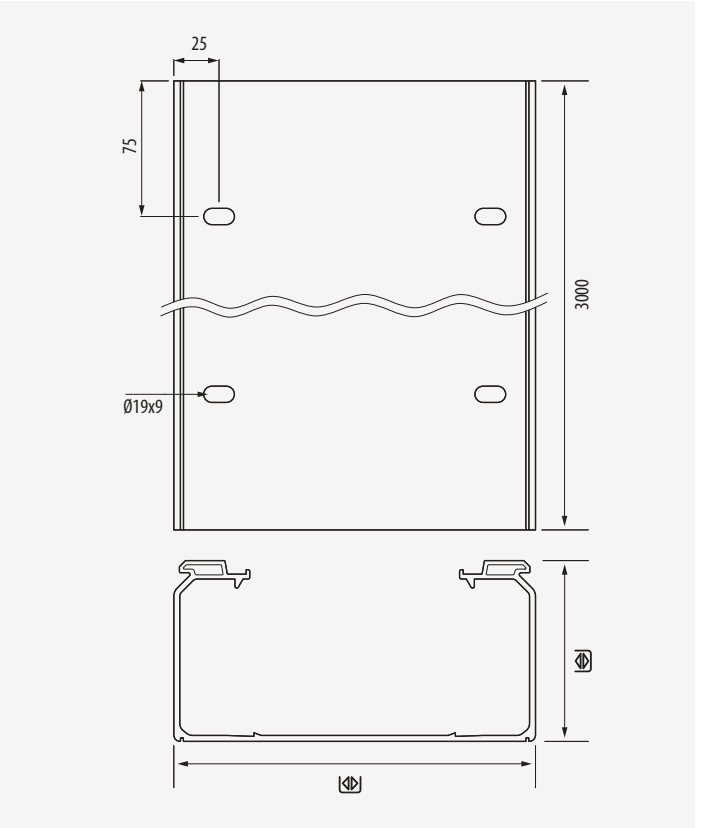
Passerella isolante chiusa

Insulating solid cable tray

60, 100 • 100-600 • 3000

ETIM: EC000047



• 60 -100 • 100 - 600				
		Ref	kg/m	
60	100	82003651	1,100	24
	150	82003652	1,390	12
	200	82003653	1,780	12
	300	82003654	2,750	12
	400	82003655	3,370	6
100	200	82003656	2,660	6
	300	82003657	3,530	6
	400	82003658	4,520	6
	500	82003659	5,570	6
	600	82003660	6,860	6

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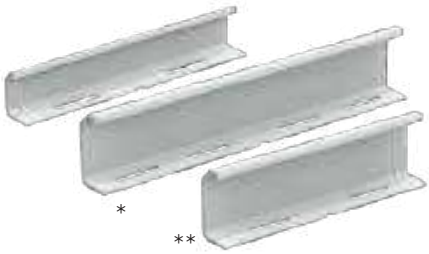
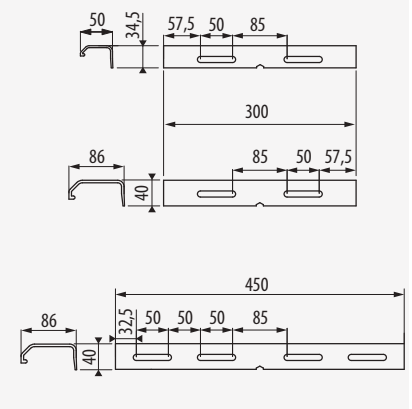
Giunto lineare
Coupler



• 60-100			
	Ref	kg/u	
60	82003672	0,107	24
100*	82003673	0,339	10
100**	82004247	0,224	10

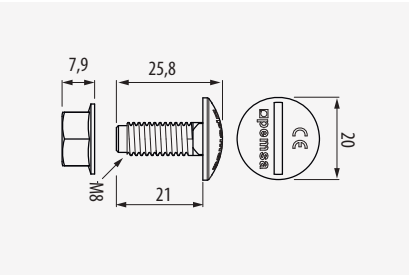
ETIM: EC002413



Kit vite M8
Joint kit M8

M	Ref	kg/u	
M8	81000298	0,003	100

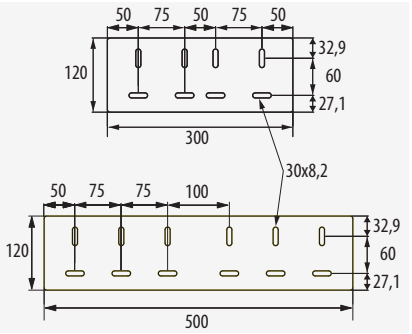
ETIM: EC002935



Giunto centrale di rinforzo
Reinforced central joint

• 60-100 • 400-600				
		Ref	kg/u	
PO-PG	300-400	82004223	0,531	6
	500-600	82004224	0,896	6

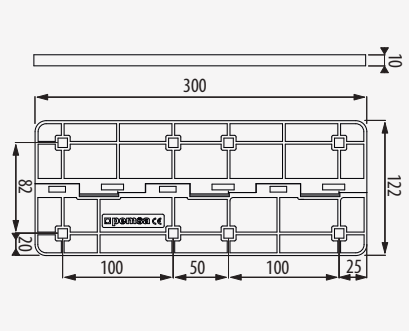
ETIM: EC002413



Giunto di rinforzo base
Reinforced base joint

Ref	kg/u	
81000290	0,270	6

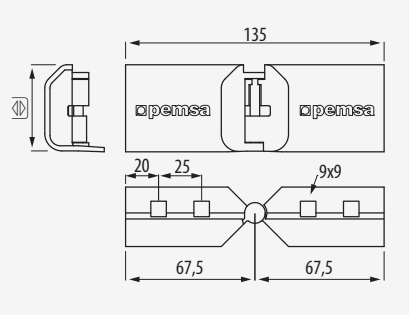
ETIM: EC002413

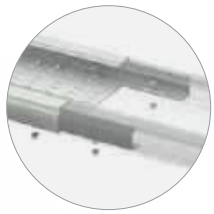


Giunto regolabile angolare
Corner joint

• 60-100			
	Ref	kg/u	
60	81000282	0,050	8
100	81000283	0,139	8

ETIM: EC002413





2	4

Giunto a scatto per una giunzione veloce

Snap-on and prefixed jointing system for quick connection

Fissaggio sicuro

Secure fixing

100-150	x1
200-400	x2
500-600	x3

Giunto di rinforzo per base da larghezza 300

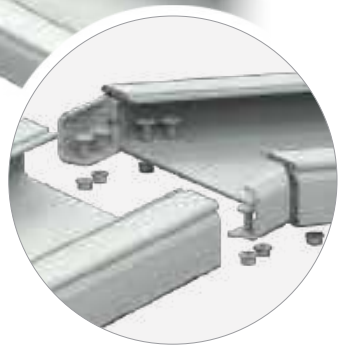
Base reinforcement from 300 width

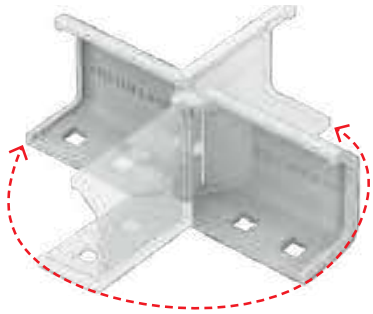
1	8

60-100	4

Per creare curve piane di qualsiasi angolo o raggio

Creation of flat bends of any angle or radius





+90⁰ <-> -90⁰

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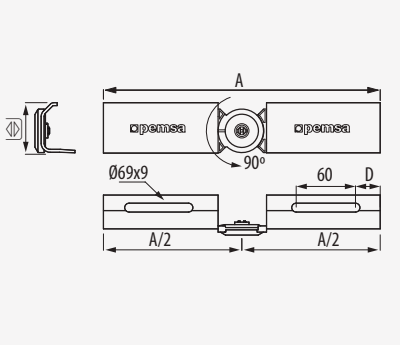
Giunto regolabile
Vertical hinge

	A	D	Ref	kg/u	
60	280	33	81000284	0,094	12
100	384	22	81000285	0,287	12

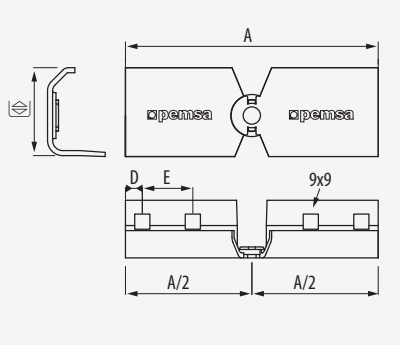
ETIM: EC002413



Giunto regolabile verticale
Riser/dropper

	A	D	E	Ref	kg/u	
60	159	15	30	81000286	0,053	8
100	195,4	22,1	40	81000287	0,136	8

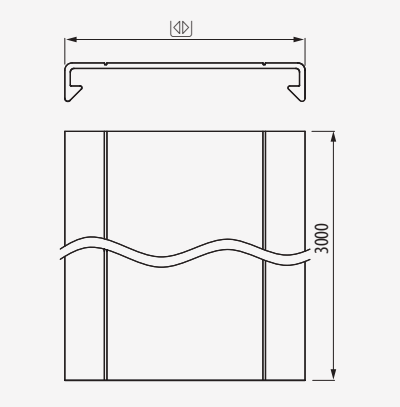
ETIM: EC002413



Coperchio
Cover

	Ref	kg/m	
100	82003663	0,485	24
150	82003664	0,678	12
200	82003665	0,887	12
300	82003666	1,320	12
400	82003667	2,110	6
500	82003668	2,830	6
600	82003669	3,640	6

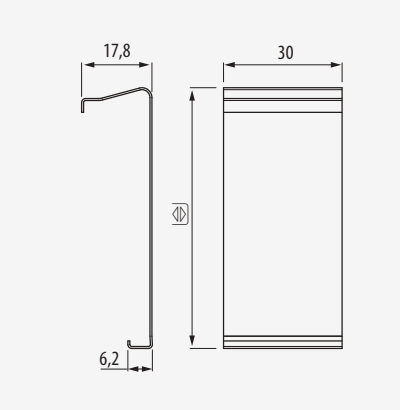
ETIM: EC002403



Clip per fissaggio coperchio
Cover fixing

		Ref	kg/u	
304	60	81000296	0,011	50
	100	81000311	0,015	50

ETIM: EC001002

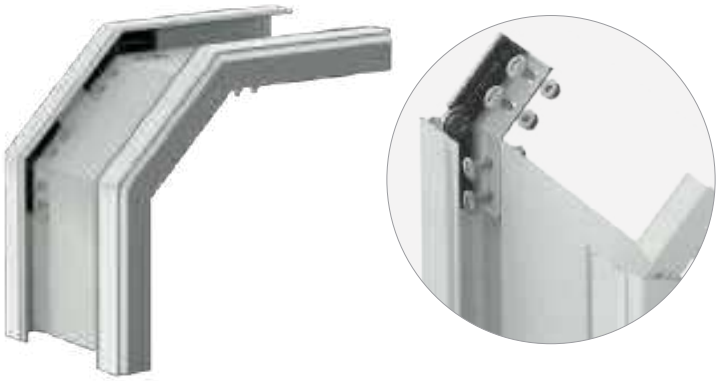


Angolo variabile

Adjustable Angle

x2 12
x8 12

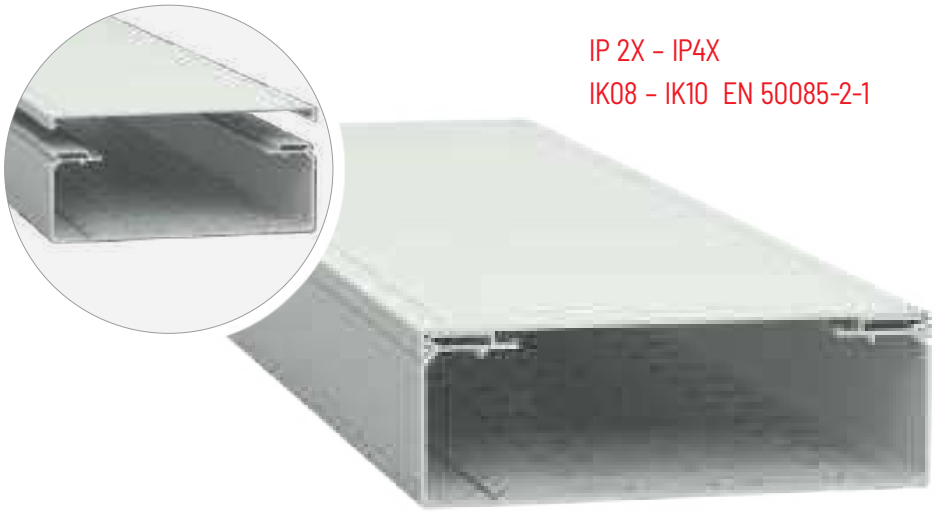
15⁰ - 30⁰ - 45⁰ - 60⁰ - 90⁰



x8 12

Per creare un cambio di livello personalizzato

Creating risers of any angle or radius



IP 2X – IP4X
IK08 – IK10 EN 50085-2-1

Per la protezione massima dei cavi

Protection and maximum tightness for cables

Passerella con coperchio = protezione canale EN 50085

Cable tray + cover = Cable trunking EN 50085

Protezione meccanica IK10/20J
Apertura con attrezzo

2x1m 12

Mechanical protection. IK10 / 20J

Opening with tool

Traversa reggicavo

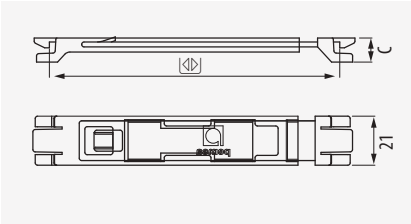
Cover retainer

IEC 61537 | EN 50085 | CE | UKCA | RoHS III

100 - 600			
	Ref	kg/u	
100	81000351	0,004	24
150	81000291	0,005	12
200-300	81000292	0,011	12
400-500-600	81000293	0,014	12

RAL 9010

ETIM: EC001936



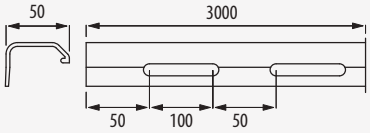
Parete divisoria

Divider

60-100			
	Ref	kg/u	
60	82003661	0,430	30
100	82003662	0,892	36

ETIM: EC001000

AENOR | IEC 61537 | EN 50085 | CE | UKCA | RoHS III



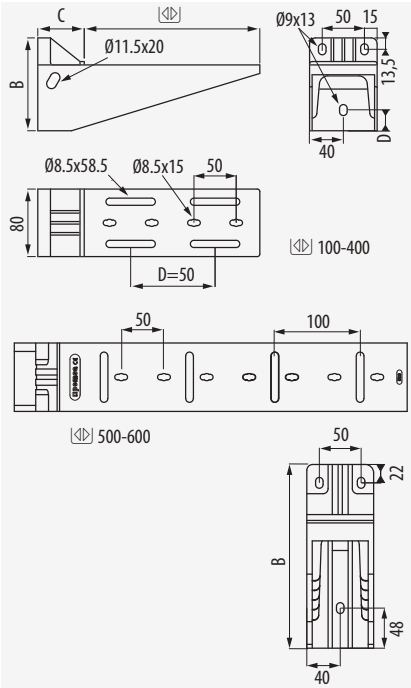
Supporto a parete

Cantilever

AENOR | IEC 61537 | EN 50085 | CE | UKCA | RoHS III

100 - 600						
	B	C	D	Ref	kg/u	
100	110	62	23	81000270	0,206	4
150	110	63	23	81000271	0,227	4
200	110	63	23	81000272	0,294	4
300	130	65	19	81000273	0,552	4
400	130	65	19	81000274	0,623	4
500	220	60	48	81000275	1,010	4
600	220	60	48	81000276	1,960	4

ETIM: EC000022



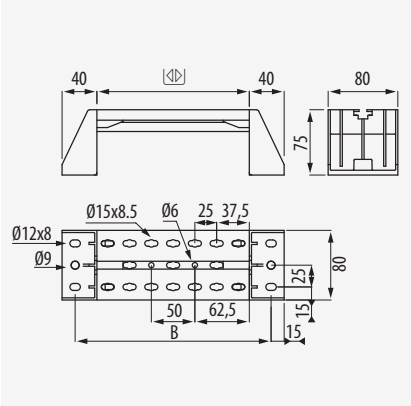
Supporto in sospensione o distanziatore

Suspension vertical support

AENOR | IEC 61537 | EN 50085 | CE | UKCA | RoHS III

100 - 600			
	Ref	kg/u	
100	82003674	0,220	4
150	82003675	0,248	4
200	82003676	0,277	4
300	82003677	0,344	4
400	82003678	0,401	4
500	82003679	0,482	4
600	82003680	0,539	4

ETIM: EC000022

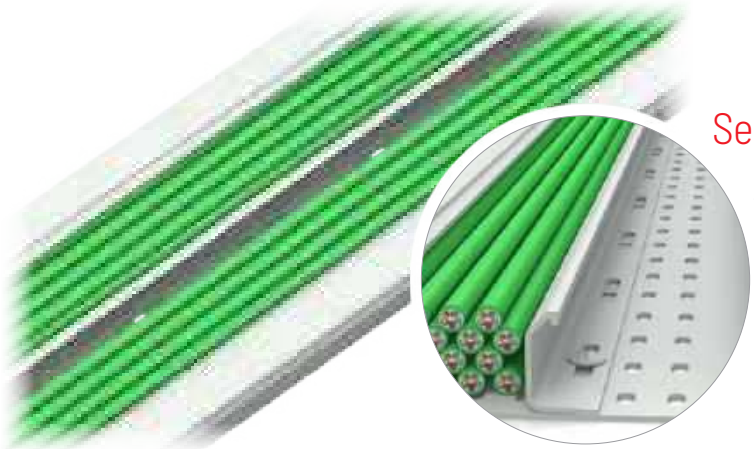


Evita la dilatazione e migliora la tenuta del coperchio

1 x m

Avoids expansion and improves removal/ assembly of the covers

1 kit x m 12

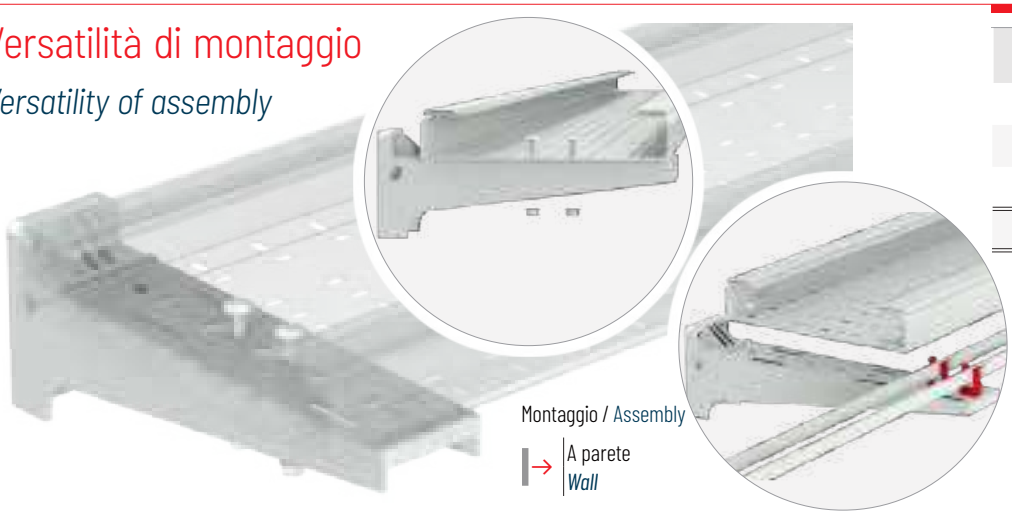


Separazione e distribuzione dei cavi

Division and organisation of cables

Versatilità di montaggio

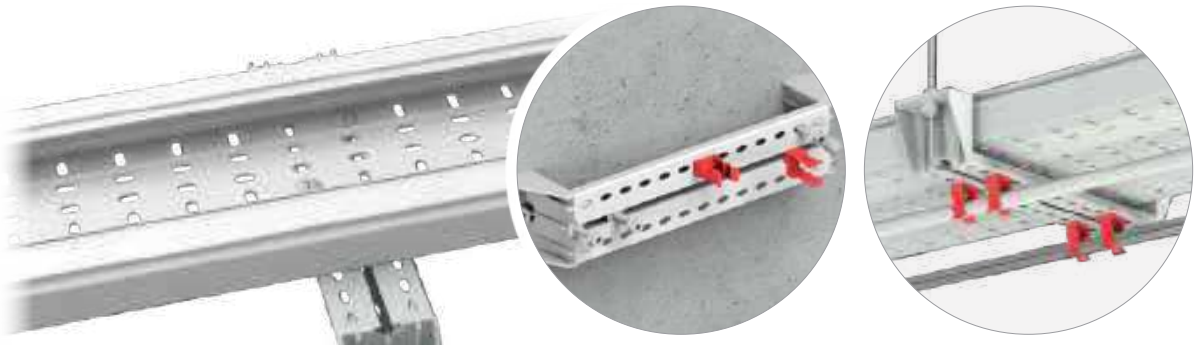
Versatility of assembly



100-150	x1
200-400	x2
500-600	x3
16	12 / 18

Montaggio / Assembly

A parete
Wall



Montaggio / Assembly

Installazione a pavimento
Floor installations

Montaggio / Assembly

A parete
Wall

Montaggio / Assembly

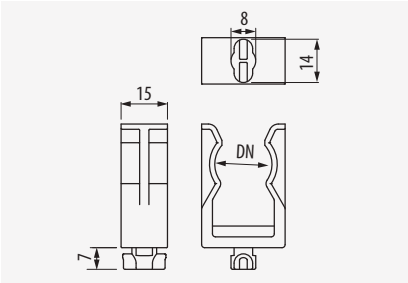
A soffitto in sospensione
Ceiling with threaded rods

pemsa

Clip di fissaggio per tubi
Conduit fixing clip

DN	Ref	kg/u	
16	81000277	0,005	50
20	81000278	0,006	50
25	81000279	0,007	50
32	81000280	0,007	30
40	81000281	0,011	20

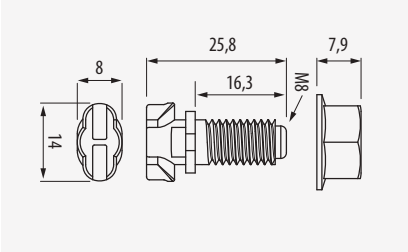
RAL 9010. ETIM: EC002320



Clip a vite
Joint Clip

M	Ref	kg/u	
M8	81000297	0,001	100

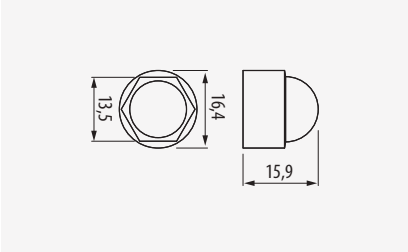
ETIM: EC003861



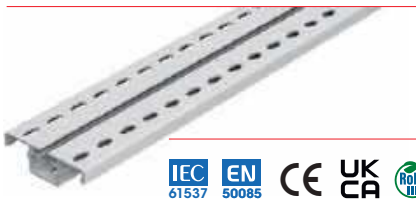
Cappuccio copridado
Screw protector M8

M	Ref	kg/u	
M8	81000401	0,0009	100

ETIM: EC002375

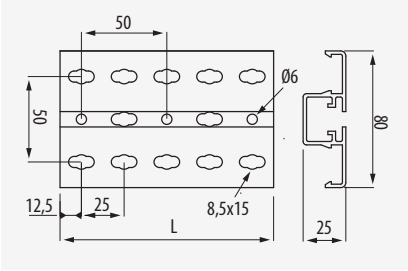


Profilo
Profile



L	Ref	kg/m	
1000	82003670	0,571	24
2000	82003671	0,571	24

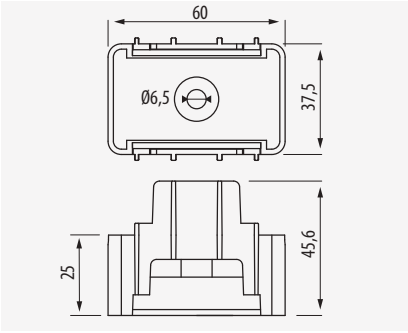
ETIM: EC000386



Piede distanziatore
Elevating foot

Ref	kg/u	
81000294	0,026	20

ETIM: EC000022

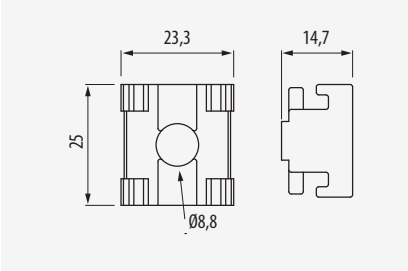


Rinforzo per profilo
Red Profile plug

Ref	kg/u	
81000295	0,004	20

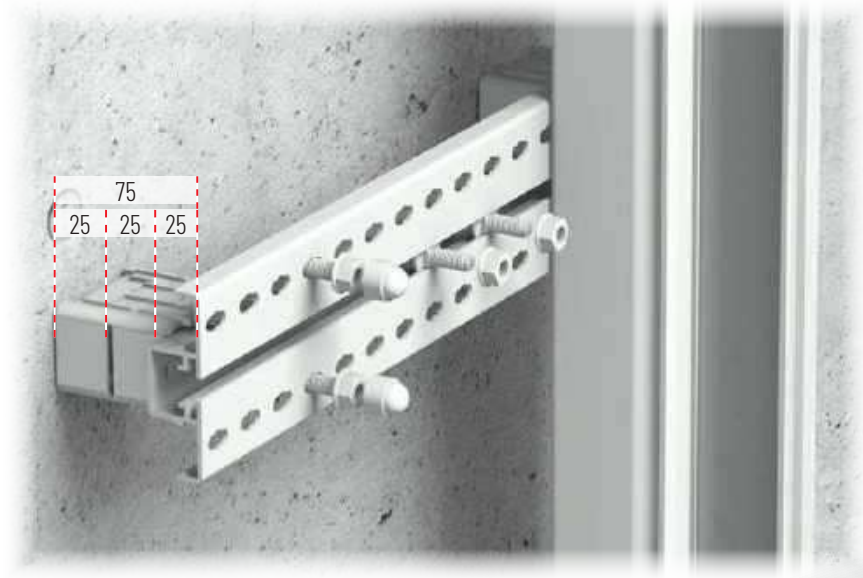
RAL 9010

ETIM: EC000475



Supporti con asole per clip a vite e clip per tubi

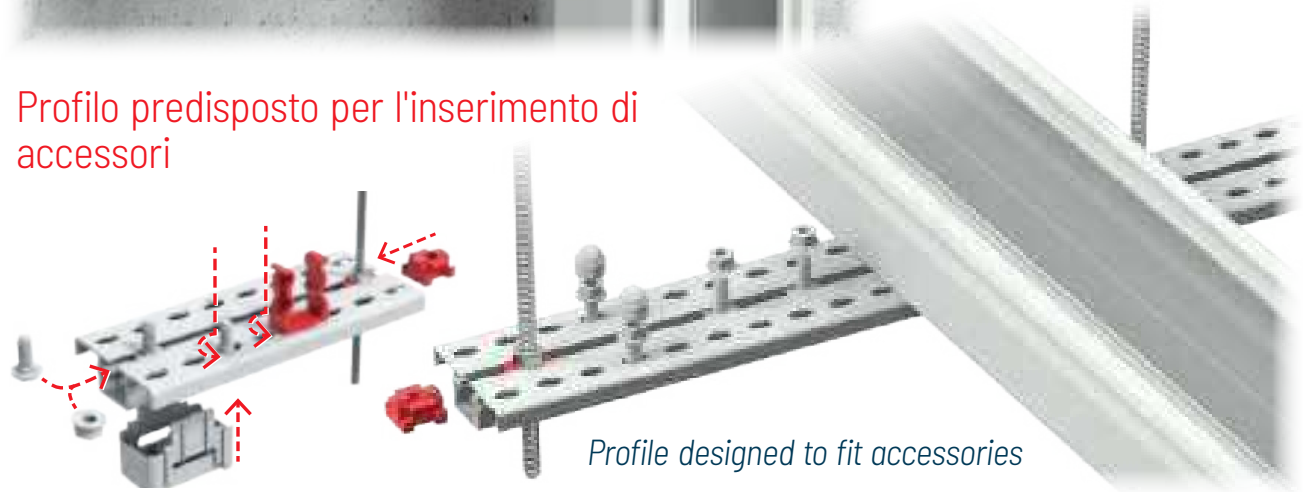
Multi-functionality with perforations for Conduit Clips and Clip Joint Kits



Impilabile per 2 altezze. Da 50 a 75 mm.

Stackable up to 2 heights. from 50 to 75 mm.

Profilo predisposto per l'inserimento di accessori



Profile designed to fit accessories

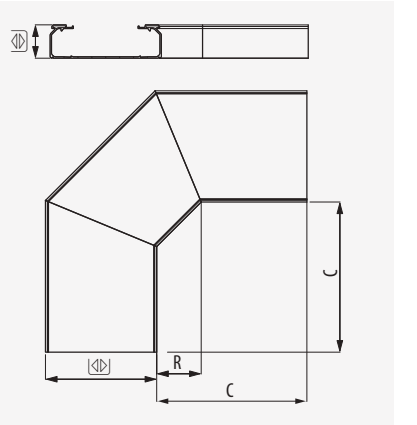
Curva a 90°

Insulating 90º bend

ETIM: EC002400

• 60 - 100 • 100 - 600

		C	R	Ref	kg/u	
60	100	270	80	82003722	0,672	2
60	150	270	80	82003723	0,898	2
60	200	270	80	82003724	1,197	2
60	300	270	80	82003725	1,994	2
60	400	270	80	82003726	2,680	1
100	200	345	100	82003727	2,164	2
100	300	345	100	82003728	3,073	2
100	400	345	100	82003729	4,218	1
100	500	365	100	82003730	5,552	1
100	600	365	100	82003731	7,275	1



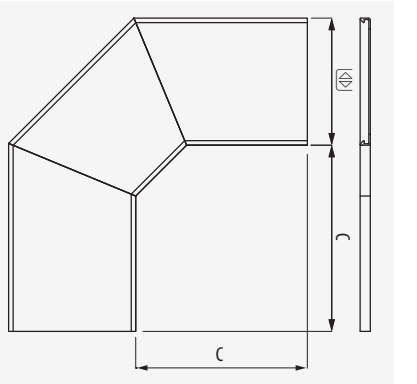
Coperchio per curva 90º

90º bend insulating cover

ETIM: EC001569

• 60 - 100 • 60 - 600

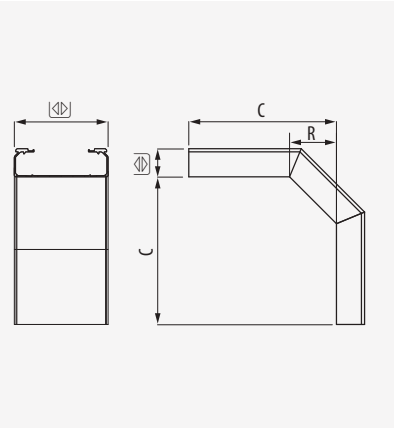
		C	Ref	kg/u	
60	100	270	82003732	0,264	2
60	150	270	82003733	0,402	2
60	200	270	82003734	0,559	2
60	300	270	82003735	1,129	2
60	400	270	82003736	1,632	1
100	200	345	82004067	0,674	2
100	300	345	82004068	1,340	2
100	400	345	82004069	1,906	1
100	500	365	82003737	2,652	1
100	600	365	82003738	3,893	1



• 60 - 100 • 100 - 600

		C	R	Ref	kg/u	
60	100	315	100	82003688	0,805	2
60	150	315	100	82003689	0,984	2
60	200	315	100	82003690	1,209	2
60	300	315	100	82003691	1,753	2
60	400	315	100	82003692	2,110	1
100	200	425	120	82003693	2,524	2
100	300	425	120	82003694	3,176	2
100	400	425	120	82003695	3,916	1
100	500	425	120	82003696	4,695	1
100	600	425	120	82003697	5,631	1

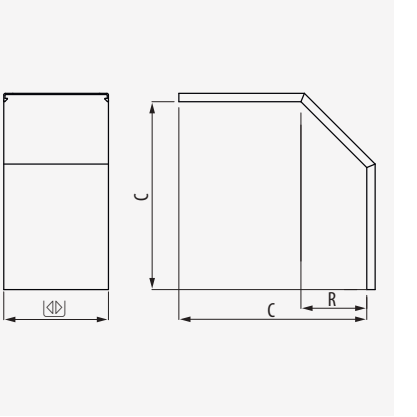
ETIM: EC002400



ETIM: EC002402

• 60 - 100 • 100 - 600

	C	R	Ref	kg/u	
60	100	0,264	82003698	0,300	2
60	150	0,402	82003699	0,430	2
60	200	0,559	82003700	0,562	2
60	300	1,129	82003701	1,023	2
60	400	1,632	82003702	1,343	1
100	200	0,674	82004061	0,766	2
100	300	1,340	82004062	1,396	2
100	400	1,906	82004063	1,827	1
100	500	2,652	82003703	2,453	1
100	600	3,893	82003704	3,143	1

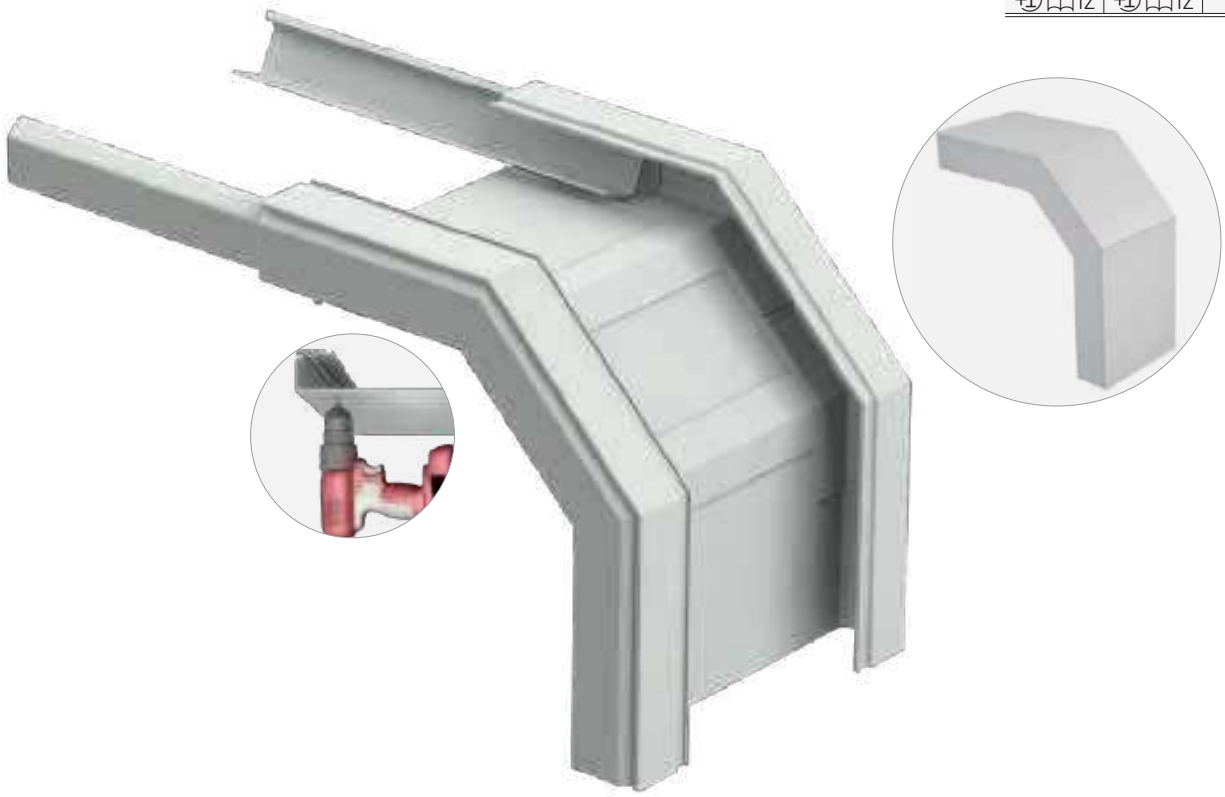


2	4	4
12	12	

Pezzo preformato. Risparmio di manodopera

Single piece item. Labour savings

2	4	4
12	12	



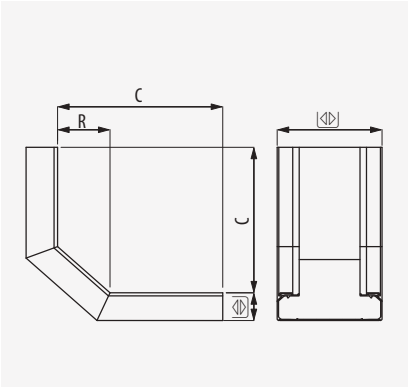
Curva in discesa

Inside riser

IEC 61537 EN 50085 CE UKCA RoHS

• 60 - 100 • 100 - 600

		C	R	Ref	kg/u	
60	100	315	100	82003705	0,817	2
60	150	315	100	82003706	1,008	2
60	200	315	100	82003707	1,248	2
60	300	315	100	82003708	1,834	2
60	400	315	100	82003709	2,225	2
100	200	425	120	82003710	2,602	2
100	300	425	120	82003711	3,317	2
100	400	425	120	82003712	4,140	1
100	500	425	120	82003713	4,997	1
100	600	425	120	82003714	6,053	1



ETIM: EC002400

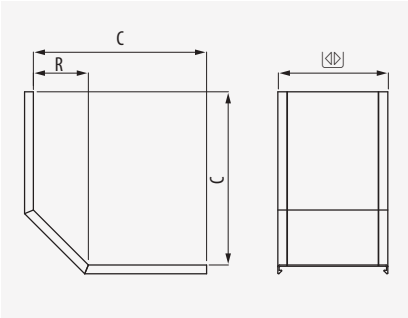
Coperchio per curva in discesa

Inside riser Cover

IEC 61537 EN 50085 CE UKCA RoHS

• 60 - 100 • 100 - 600

		C	R	Ref	kg/u	
60	100	315	100	82003715	0,261	2
60	150	315	100	82003716	0,373	2
60	200	315	100	82003717	0,487	2
60	300	315	100	82003718	0,880	2
60	400	315	100	82003719	1,156	2
100	200	425	120	82004064	0,640	2
100	300	425	120	82004065	1,160	2
100	400	425	120	82004066	1,520	1
100	500	425	120	82003720	2,041	1
100	600	425	120	82003721	2,610	1



ETIM: EC002402

Giunto per derivazioni a T

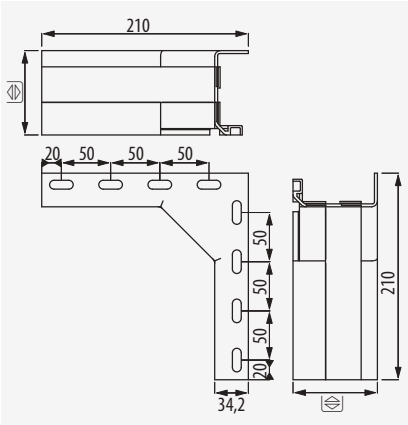
T-joint

IEC 61537 EN 50085 CE UKCA RoHS

• 60 - 100

	Ref	kg/u	
60	81000288	0,192	4
100	81000289	0,253	4

ETIM: EC002401



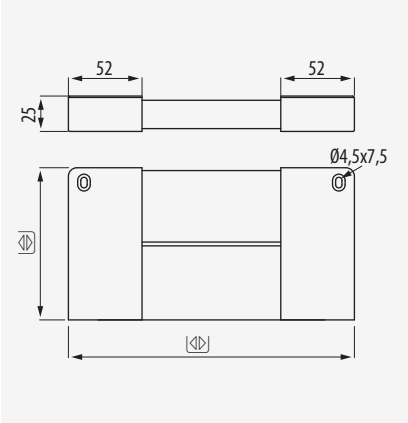
Tappo terminale

End cover

IEC 61537 EN 50085 CE UKCA RoHS

• 60 - 100 • 100 - 600

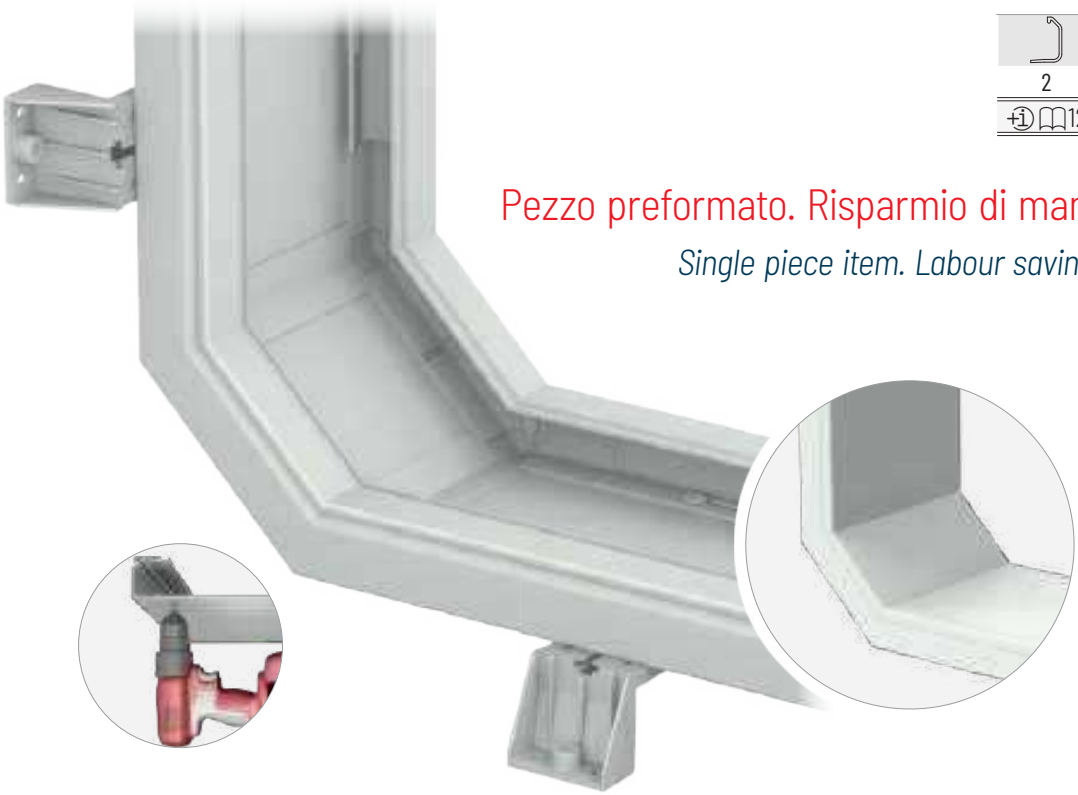
		Ref	kg/u	
60	100	82003681	0,061	4
60	150	82003682	0,075	2
60	200	82003683	0,091	2
60	300	82003684	0,121	2
60	400	82003685	0,151	2
100	200	82003686	0,133	2
100	300	82003687	0,198	2
100	400	82003739	0,220	2
100	500	82003740	0,264	2
100	600	82003741	0,308	2



2	4	4
12	12	

Pezzo preformato. Risparmio di manodopera

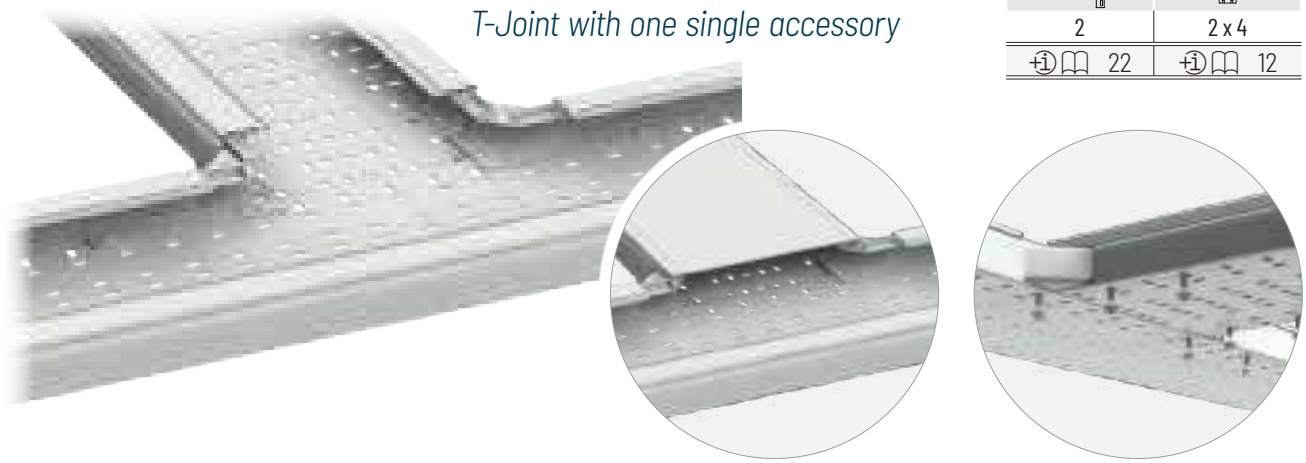
Single piece item. Labour savings



Derivazioni a T con un unico accessorio

T-Joint with one single accessory

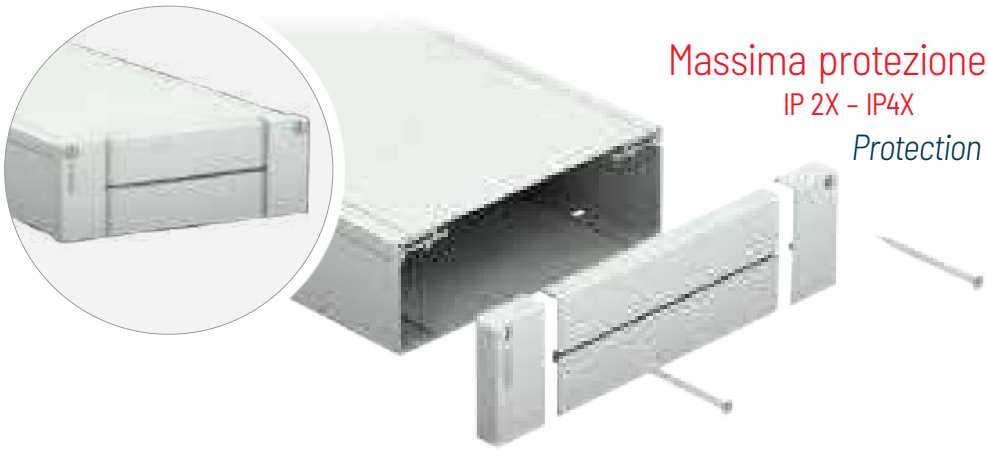
2	2 x 4
22	12



Massima protezione e tenuta

IP 2X - IP4X

Protection and maximum tightness



Dati tecnici

Technical data

	Materia Prima	*Raw Material*
	Materiale termoplastico isolante a base di PVC sviluppato con propria formulazione Colore Grigio RAL7035	*PVC-based Thermoplastic insulating material developed with own formulation.* *Ral 7035 Grey colour.*

	Buon comportamento nei confronti delle sostanze chimiche **ISO/TR 10358 e DIN 8061** (consultare sostanze, concentrazione e temperatura)	*Good resistance to corrosion and to chemical agents.* *ISO/TR 10358 y DIN 8061.* *(consult agents, concentration and temperature)*
	Buon comportamento agli agenti atmosferici e ai raggi UV ANSI/UL 568	*Good performance outdoors and with exposure to UV rays.* *ANSI/UL 568*
	Isolamento elettrico **EN 61537** Isolante, non conduttore. Non necessita di messa a terra **Rigidità dielettrica** EN 60243-1: 18±5 kV/mm	*Electrical insulating* *EN 61537* *Insulating material. No earthing required.* *Dielectric strength* *EN 60243-1: 18±5 kV/mm*
	Resistenza agli urti **EN 61537: 20 J** **Passarella** 60x100: 10J **EN 50085-2-1** Passerella con coperchio: IK10	*Impact strength* *EN 61537: 20 J* *Cable tray 60x100: 10J* *EN 50085-2-1* *Cable tray + cover: IK10*
	Grado di protezione IP-XX (penetrazione di solidi/liquidi) IP 2X (forata), IP4X o IP44. (chiusa)	*IP-XX Protection (solids and liquids)* *IP2X (perforated cable tray)* *IP4X or IP44 (solid cable tray)*
	L'assenza di sostanze contaminanti e pericolose è conforme alla normativa RoHS III e REACH	*Free of pollutants and hazardous substances, RoHS III and REACH compliant, free of phthalates and silicones.*
	Capacità di carico **EN 61537**	*Working loads* *EN 61537*
	Reazione al fuoco **EN 61537:** Prova del filo incandescente a 960 ºC. Non propaga la fiamma **UL94:** Grado V0, non trasmette né gocciola. Bassa emissione di anidride carbonica e monossido di carbonio **UNE 201010:** Classificazione: M1	*Reaction to fire* *EN 61537: Glow-wire test 960 ºC.* *Non-flame propagating* *UL94: V0 Grade, no hot spots are generated away from the fire source.* *Low carbon dioxide and carbon monoxide emissions* *UNE 201010. Classification M1*

Pemsa e Arnocanali si riservano il diritto di apportare modifiche e aggiornamenti alle caratteristiche e ai dati senza che gli stessi siano espressi nei testi, nelle tabelle e nelle informazioni nel presente documento.

Pemsa reserves the right to make changes and updates to the characteristics and data without these being expressed in the texts, tables and information set out in this document or catalogue.

Marchi di qualità e certificazioni *Certifications and quality marks*

Marchi di qualità / *Quality marks*		
EN 61537 EN 50085	N di AENOR certifica di aver superato i requisiti delle norme europee EN 61537, "Sistemi di passerelle e scalette per la distribuzione di cavi" e EN 50085 "Sistemi di canaline per cavi e sistemi di canali chiusi con sezione non circolare per installazioni elettriche, dove vengono specificate le condizioni, i test, le caratteristiche tecniche, ecc., che le passerelle e i canali di protezione devono rispettare.	*N from AENOR certifying that they have met the requirements of the European standards, EN 61537, " Cable tray systems and cable ladder systems for cable management" and EN 50085 " Cable trunking systems and cable ducting systems for electrical installation", which specifies the safety conditions, tests, technical characteristics, etc., to be met by protective trays and channels.*
IEC 61537 EN 50085	Certificato internazionale creato all'interno della Commissione Elettrotecnica Internazionale (IEC) che certifica la conformità del prodotto rispetto alle norme di prodotto IEC 61537 e EN 50085. Questo certificato facilita l'ottenimento dei marchi di conformità in altri paesi.	*International certificate created within the International Electrotechnical Commission (IEC) that certifies product conformity to the IEC 61537 and EN 50085 product standards. This certificate makes it easier to obtain marks of conformity in other countries.*

Dichiarazioni di conformità / *Declarations of conformity*		
CE	Dichiarazione di conformità UE (marcatura CE), secondo la norma EN 61537 e la Direttiva Bassa Tensione 2014/35/UE.	*EU Declaration of Conformity (CE marking), according to EN 61537 and Low Voltage Directive 2014/35 / EU.*
UK CA	Dichiarazione di conformità UKCA (marchio UKCA), secondo la norma BS EN 61537 e le normative elettriche e delle apparecchiature (sicurezza) 2016 (S.I. 2016 n. 1101)	*UKCA Declaration of Conformity (UKCA marking), according to BS EN 61537 and directive Electrical and Equipment (Safety) Regulations 2016* *(S.I. 2016 No. 1101).*

Secondo / *According to*		
☑	Passerella e canale protettivo secondo le Norme Elettrotecniche di Bassa Tensione, REBT. Istruzioni ITC-BT 20 e 21. (Passerella + coperchio)	*Cable tray and protective cable trunking according to REBT*. ITC-BT 20 and 21 (Cable tray + cover)*

Dati tecnici

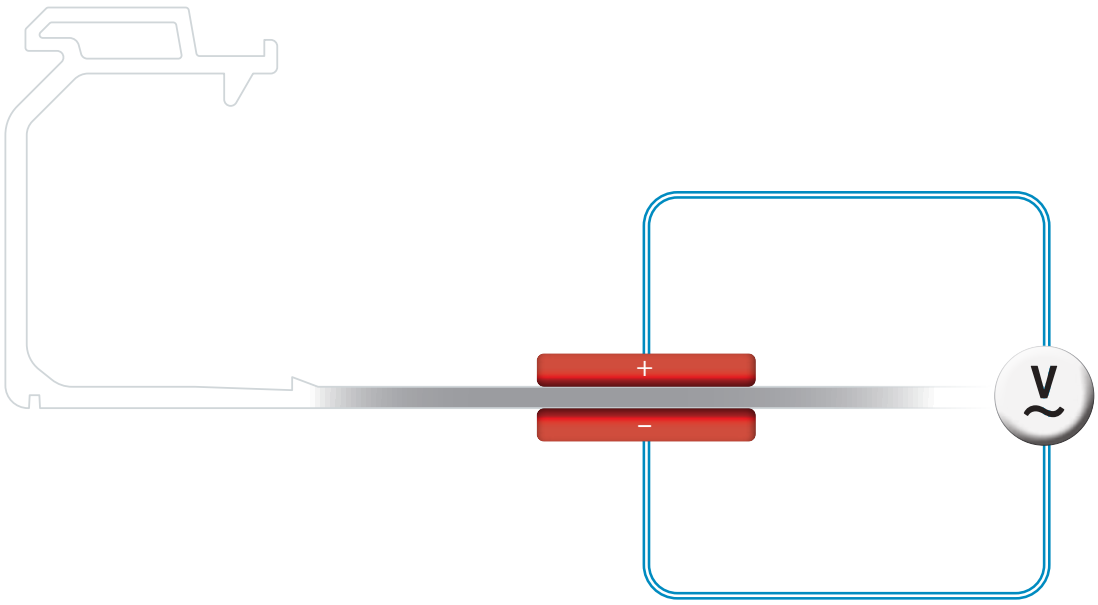
Technical data

Isolamento elettrico

Sicurezza elettrica e riduzione dei costi in manutenzione.

Electrical insulating

Electrical safety and reduced maintenance costs.



- Non è richiesta la **messa a terra**, quindi (1) non è necessario installare cavi e morsetti di collegamento equipotenziale per il circuito di terra; (2) risparmio nei costi di installazione (materiale, manodopera...).
- Materiale isolante che garantisce una protezione dai **contatti indiretti**, aumentando così la sicurezza per persone e animali domestici.
- L'isolamento elettrico, se la passerella viene installata con coperchio, ne consente l'utilizzo in tutte le parti dell'impianto che abbiano **cavi con tensione nominale 450/750 V.**
- Elevata **rigidità dielettrica**: 18 ± 5 kV/mm secondo EN 60243-1

- *No **earth connection** is required, so (1) no need to install equipotential cables and terminals to connect the earth circuit; (2) savings in installation costs (material, labour...).*
- *System protected against **indirect contacts** (*), as it is made of electrically insulated material, increasing the safety of the installation for people and domestic animals.*
- *The electrical insulation, when the tray is installed with a cover, allows its use in any part of the installation of **insulated conductors of rated voltage 450/750 V.***
- *High **dielectric strength**: 18 ± 5 kV / mm according to EN 60243-1.*

(*) Contatto indiretto: contatto di persone o animali domestici con parti che sono state messe sotto stress a causa di un cedimento dell' isolamento (Regolamento Elettrotecnico di Bassa Tensione nelle sue istruzioni tecnica.

(*) Indirect contact: contact of people or domestic animals with parts that have been put under voltage as a result of an insulation fault (spanish Low Voltage Electrotechnical Regulation in its complementary technical instruction ITC BT-01).

Resistenza alla corrosione

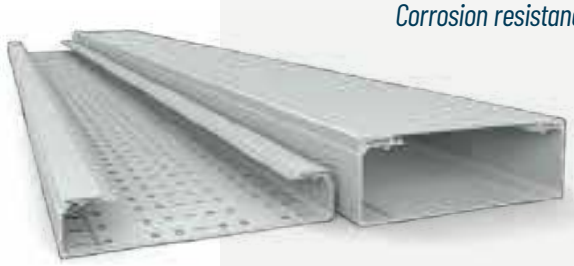
Comportamento in ambienti umidi e corrosivi.

La formulazione specifica sviluppata da Pemsa fornisce prestazioni eccellenti alla corrosione per passerelle Metatray. Nella tabella seguente l'idoneità per vari ambienti e la loro corrosività secondo la norma internazionale ISO 9223.

Corrosion Resistance

Performance in humid and corrosive environments

The specific formulation developed by Pemsa provides excellent corrosion performance for Metatray cable trays. The following table shows the suitability for various environments and their corrosiveness according to the international standard ISO 9223.



Resistenza alla corrosione. Raccomandazioni per ambienti secondo la norma ISO 9223
Corrosion resistance. Recommended for environments according to ISO 9223.

C3	Industria alimentare. Banca dati. Aree urbane esterne. Impianti industriale senza ambiente chimico. *Food industry. Data Center. External urban areas. Industrial plants without a chemical environment.*
C4	Tunnel e piscine riscaldate. Stabilimenti industriali. Esterni industriali. Impianti solari in zone costiere umide o interne. *Tunnels, heated swimming pools. Industrial plants and External industry. Solar plants in humid or inland coastal areas.*
C5	Industrie chimiche e petrolchimiche, porti e industria navale. *Chemical and near-chemical industries, ports and shipbuilding industry*
CX	Piattaforme offshore, impianti chimici e industrie nelle aree tropicali. *Offshore platforms, Chemical and industrial plants in tropical areas.*

Comportamento alle intemperie e all'esposizione alle raggi UV.

La materia prima sviluppata da Pemsa per le sue passerelle isolanti è conformi allo standard UL 568, superando la prova e definendosi a materiale adatto all'esterno.

Questo ci permette di consigliare la gamma Metatray per applicazioni in ambienti esterni come impianti fotovoltaici, energia rinnovabile o industriali.

Outdoor performance and exposure to UV radiation.

The raw material developed by Pemsa for its insulating trays complies with the UL 568 standard, meeting the test and being defined as a material suitable for outdoor use.

This allows us to recommend the Metatray range for outdoor applications and outdoor environments such as solar roofs, renewable energy or industrial environments.

Dati tecnici

Technical data

Resistenza agli urti

Caratteristiche e protezione meccanica

Prova di impatto EN 61537 a temperatura minima dichiarata.

La formulazione particolare del materiale termoplastico consente alle passerelle Metatray di fornire ottime caratteristiche meccaniche di protezione e di non subire deterioramenti in seguito all'esposizione di temperature minime di utilizzo previste dalla norma EN 61537.

* 60x100: 10J.

Impact strength

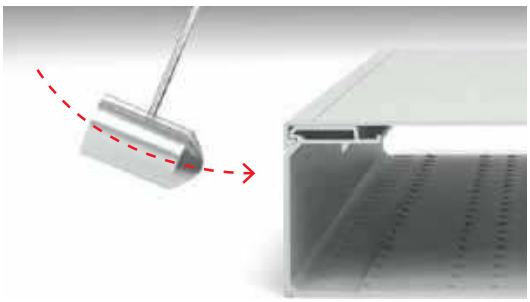
Features and mechanical protection

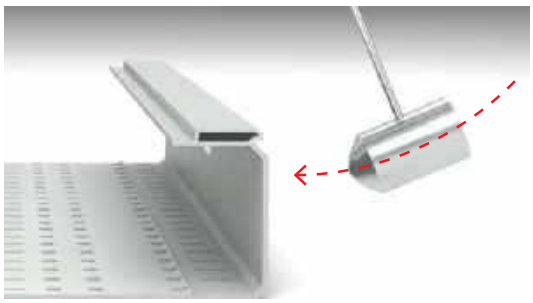
EN 61537 impact test at minimum declared temperature.

Pemsa's exclusive design on the thermoplastic material allows Metatray cable trays to provide excellent mechanical protection features and do not suffer deterioration when exposed to the minimum temperature of use as set out in the EN 61537 standard.

** 60x100: 10J.*

Resistenza agli urti *Impact strength*	20J*
Temperatura minima EN 61537 *Minimum temperature*	-20ºC





Prova d'urto EN 50085-2-1.

Le passerelle metatray con coperchio si considerano canali con protezione conformi alla norma EN 50085-2-1.

Nel test di impatto si ottiene un grado IK10 a temperatura ambiente.

Impact test EN 50085-2-1.

Metatray cable trays with cover are considered to be protective trunkings as they are compliant with EN 50085-2-1.

A grade IK10 is achieved in the impact test at ambient temperature.

Reazione al fuoco

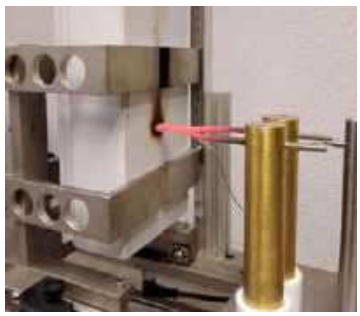
Lo sviluppo della formulazione delle passerelle Metatray superano i test di propagazione alla fiamma definiti nella norma EN 61537 e EN 50085.

Fire reaction

The development of Pemsa's own formulation in its cable trays overcomes the flame propagation and flammability tests defined in the EN 61537 and EN 50085 standards.

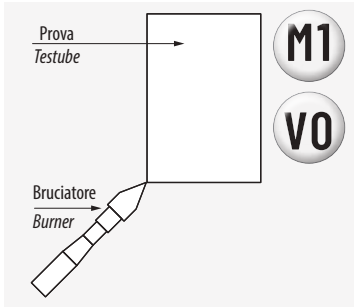
Non propagante la fiamma EN 61537

No propagation of a flame EN 61537



Prova del filo incandescente a 960ºC
Non trasmette la fiamma né gocciola

Incandescent wire test at 960°C
Does not transmit flame or drip.



Infiammabilità secondo UNE 202010 e UL94
Classificazione M1 e Grado V0. Non infiammabile

Flammability acc. to UNE 202010 and UL94
M1 class and Grado V0. non-flammable

Carichi di lavoro e dati dimensionali

Working loads and dimensional data

Passerelle Metatray forate e chiuse / *Perforated and solid Metatray cable trays*

Sezioni utili mm² / *Useful cross sections mm²*

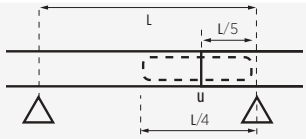
x	60x100	60x150	60x200	60x300	60x400	100x200	100x300	100x400	100x500	100x600
mm²	4666	7183	9692	14869	19934	16611	25229	33825	42360	50917

Carico di lavoro ammissibile (CTA) per passerelle portacavi (N/m) / *Safety working loads (SWL) tests for cable trays (N/m)*

		60x100	60x150	60x200	60x300	60x400	100x200	100x300	100x400	100x500	100x600
60°C	1 m	120	150	250	350	450	400	450	600	700	800
40ºC	1,5 m										

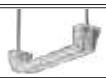
I prove CTA sono state eseguite con le giunti, riferimenti: 82004223 e 82004224. / *The SWL were performed with the joints, references: 82004223 and 82004224.*

Condizioni di prova del carico di lavoro ammissibili EN 61537 / *Safety working load test conditions for cable trays EN 61537*

Temperatura / *Temperature*	40ºC	60ºC
Distanza tra i supporti / *Support Span*	1,5 m	1 m
Flessione longitudinale / *Longitudinal deflection*	Inferiore all' 1% di distanza tra i supporti / *Less than 1% support span*	
Flessione trasversale / *Transverse deflection*	Inferiore al 5% della larghezza della passerella / *Less than 5% of the cable tray width*	
Posizione dei giunti / *Placement of joints*	(L/4) > u > (L/5) 	
Fattore di sicurezza senza arrivare al collasso *Increased safety coefficient*	1,7 volte il carico di lavoro di sicurezza dichiarato *1.7 times the declared safety working load*	

Prove di carico di lavoro ammissibile (CTA) per i supporti (N) / *Safety working loads (SWL) tests for supports (N)*

			100	150	200	300	400	500	600
Supporto a parete *Cantilever*	N	60ºC	280	350	400	500	400	700	900
		40ºC	380	550	700	850	750	1051	1601

			100	150	200	300
Supporto in sospensione a soffitto *Vertical ceiling support* 	N	60ºC	250	320	400	420
		40ºC	375	510	600	630

			100	150	200	300**	400**	500**	600**
Supporto a pavimento *Floor vertical support*	N	60ºC	180	225	490	675	1050	1200	1500
		40ºC	270	338	700	1013	1575	1800	2250

** Supporto a pavimento articolo 81000294 è al centro del profilo / *Elevating foot ref. 81000294 is installed in the centre of the support width as a reinforcement.*

Condizioni di prova del carico di lavoro ammissibili per supporti EN 61537 / *Safety working load test conditions for supports EN 61537*

Temperatura / *Temperature*	40ºC	60ºC
Flessione ammissibile / *Admissible deflection*	Inferiore al 5% della lunghezza del supporto / *Lower than 5% of the length of the support*	
Fattore di sicurezza / *Increased safety coefficient*	1,7 volte il carico di lavoro di sicurezza dichiarato / *1.7 times the safety working load declared*	

metatray®

Caratteristiche aggiuntive

Additional features

Marcatura e identificazione del prodotto

- Permette una perfetta identificazione del prodotto.
- Sostenibile. Con scatole di cartone e sacchetti in Materiale riciclabile al 100%.

Product marking and identification

- *Allows perfect identification directly of all the elements of the range.*
- *Sustainable. With cardboard boxes and bags made from 100% recycled material.*

pemsa **82003644** METATRAY ISOLANTE FORATO 60X300 EN 61537 EN 50085

Etichette di identificazione

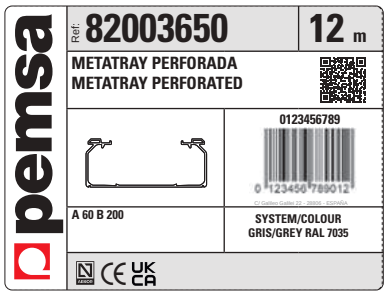
Permettono la perfetta identificazione di tutta la gamma

- Facilita lo stoccaggio.
- Consente l'identificazione del prodotto durante l'intero processo produttivo.
- Include: codice QR per scheda tecnica, codice di registrazione EAN13, numero di riferimento, unità e dimensioni del pezzo.

Identification labels

Allows perfect identification of all the ranges.

- *Facilitates storage.*
- *Allows product identification during the entire manufacturing process.*
- *Includes the following: QR code with linked technical sheet, 13-digit EAN bar code, reference number, the units it contains and part dimensions.*



Packaging distintivo e sostenibile

- Permette la perfetta identificazione di tutti gli elementi della gamma.
- Sostenibile. Con scatole di cartone e sacchetti in Materiale riciclabile al 100%.
- Garantisce una protezione massima e perfetto immagazzinaggio.

Distinctive and sustainable packaging

- *Allows perfect identification of all the elements of the range.*
- *Sustainable. With cardboard boxes and bags made of 100% recycled material.*
- *Guarantees maximum protection and perfect storage.*

ETIM

Classificazione dei prodotti ETIM

Tutti i prodotti in questo catalogo portano assegnato un codice di classificazione del prodotto secondo l'ultima versione dello standard ETIM.

ETIM product classification

All products in this catalogue have been assigned an international product classification code according to the last edition of ETIM standard.

metatray®

Applicazioni di settore

Applications by sector

Energia rinnovabile

Renewable energies

Edilizia terziaria

Service & retail construction

Trattamento delle acque

Water treatment

Veicolo elettrico

Electric vehicle

Industria navale

Marine industry

industria ferroviaria

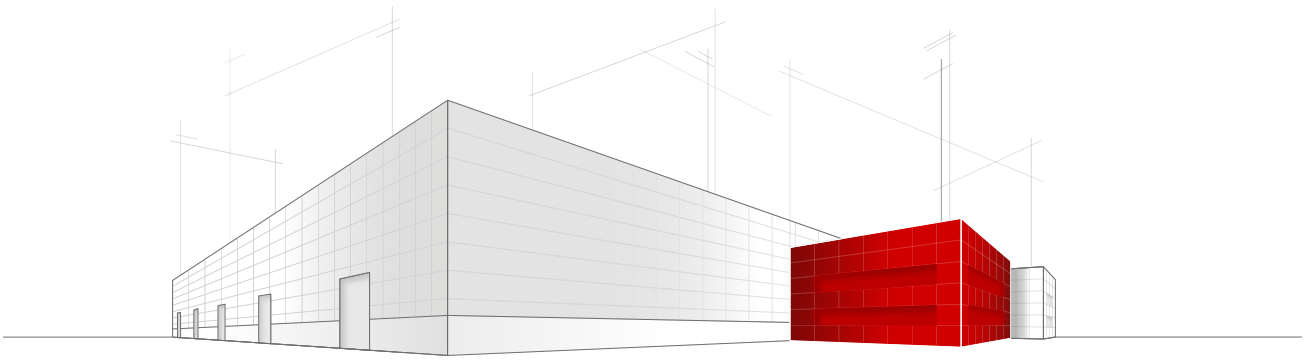
Railway industry

Off-shore, porti

Offshore, ports

Industria petrolchimica

Petrochemical industry



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ETIM

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Il catalogo ARNOCANALI/PEMSA ha tutti i prodotti classificati secondo questo standard internazionale

All of our product catalogue is classified under this International standard

pemsaPro ONLINE

CALCOLO E DIMENSIONAMENTO DI PASSERELLE

CALCULATION AND SIZING OF CABLE TRAYS

Nuovo strumento di calcolo e dimensionamento delle passerelle portacavi

New calculation tool and sizing of cable trays

Arnocanali S.p.A.© 2022
Via G. Di Vittorio, 34/36
50067 Rignano sull'Arno
Firenze - Toscana (IT)
Telefono +39 055 8349181
Web: www.arnocanali.it