



Elvod
SINCE 1957 Kragujevac

VATROOTPORNI NOSAČI KABLOVA E90





Preduzeće ELVOD proizvodi nosače kablova tipa -E- u skladu sa opštim uslovima standarda SRPS ISO 834 (1994) u delu koji se odnosi na stabilnost (nosivost) nosača kablova pri ispitivanju u ispitnoj peći sa standardnim razvojem požara. Na osnovu ispitivanja izvršenog od strane akreditovanog instituta IMS Beograd (laboratorija za toplotnu tehniku i zaštitu od požara) prema zahtevima standarda DIN 4102 deo 12, ispitani uzorci iz proizvodnog programa ELVOD zadržavaju stabilnost u trajanju požara od 90 min .

ELVOD je kao višedecenijski proizvođač ove vrste opreme konstrukciju nosača kablova tipa -E- zasnovao na svom osnovnom programu. Ojačani su nosači kablova, kao i noseći elementi (stubovi, konzole i sl.) Primena pomoćnih držača (navojnih šipki) konstrukciju čini postojanom pri ekstremnim uslovima kao što su uslovi požara. U objektima javne namene, gde je masovno prisustvo ljudi: sportske dvorane, hale, aerodromi, železničke i autobuske stanice, tržni centri, banke , bioskopi i sl. primena ovog tipa proizvoda je uslovljena -obavezna. Sigurnost sistema odgovara zahtevima na kojima insistiraju zavodi za osiguranje lica i objekata.

ELVOD produces cable carriers of type -E- in accordance with the general conditions of the standard SRPS ISO 834 (1994) in the part relating to the stability (load capacity) of the cable carrier in testing in a test furnace with standard fire development. Based on the test done by the accredited institute IMS Belgrade (laboratory for heat engineering and fire protection) according to the requirements of DIN 4102 part 12, tested samples from the production ELVOD programs maintain stability in a 90 minute fire.

ELVOD is a multi-decelerometer manufacturer of this type of equipment -E- based on your basic program. Cable carriers, as well as supporting elements, have been strengthened (poles, brackets, etc.). The use of auxiliary brackets (screw rods) makes the structure steady under extreme conditions such as fire conditions. In public buildings, where it is mass the presence of people: sports halls, halls, airports, railway and bus stations, shopping malls, banks, cinemas, etc. the application of this type of product is conditional-obligatory. System security meets the requirements on which persons and facilities insurance institutions insist.

IMS - IIS - INSTITUT IMS PG BEOGRAD	
Institut za ispitivanje materijala a.d. Beograd Centralna laboratorija za ispitivanje materijala Laboratorija za toplotnu tehniku i zaštitu od požara BEOGRAD, Bulevar Oslobođenja 41 BEOGRAD, Beograd, 11000, Srbija Tel: +381 (0) 11 311 1111, Fax: +381 (0) 11 311 1112, e-mail: ims@ims.rs	
IZVEŠTAJ O ISPITIVANJU GFT-5144/15-OPZ	
Predmet ispitivanja:	Ispitivanje stabilnosti sistema držača nosača električnih provodnika i kablova tip. E90, PNR-000, PNR-000, PNR-000 i PNR-000 u uslovnim standardnog požara u trajanju od 90 minuta, proizvođača ELVOD - Kragujevac.
Naručilac:	ELVOD BEOGRADSKA 67 34000 Kragujevac.
Zahtev/Porudžba/Ugovor:	Paruska broj 41-8943 od 21.07.2015.
Šifra:	Ukupno 21 (tridesetjedam) strana, od čega 26 strana u prilogu.
Uzorkovanje izvršilo:	Naručilac.
Izveštaj odobrio:	
Beograd, 04. decembar 2015. godine	

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DOPUNA IZVEŠTAJA O ISPITIVANJU GFT-5144/15-OPZ*	
Predmet ispitivanja:	Ispitivanje stabilnosti sistema držača nosača električnih provodnika i kablova tip. PNR-000, PNR-000, PNR-000, PNR-000 i PNR-400 u uslovnim standardnog požara u trajanju od 90 minuta, proizvođača ELVOD - Kragujevac.
Naručilac:	ELVOD BEOGRADSKA 67 34000 Kragujevac.
Zahtev/Porudžba/Ugovor:	Paruska broj 41-8943 od 21.07.2015.
Šifra:	Ukupno 26 (tridesetšest) strana, od čega 21 strana u prilogu.
Uzorkovanje izvršilo:	Naručilac.
Izveštaj odobrio:	
Beograd, 16. novembar 2015. godine	
* Ova izveštaj zamenjuje izvornik u ispitivanju št. GFT - 5144/15-OPZ u oktobra 2015. godine	




■ Ispitivanje nosača u ispitnoj peći Laboratorije za toplotnu tehniku i zaštitu od požara



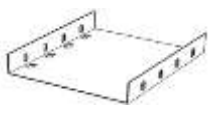


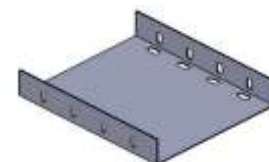
Vatrootporni perforirani nosači kablova

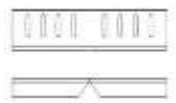
E-90

PNK							Perforated cable tray		
	Tip Type	Širina Width (mm)	Visina Height (mm)	Dužina Length (mm)	Debljina lima Thickness (mm)	Korisni presek Useful section cm ²	Dozvoljeno opterećenje Allowed load (Nm)		
							Kataloški broj Catalog N°		
							1.5m	2m	3m
	PNK E-50	50	48	2000/3000	1,5	24	100	08.000.050	08.000.050.3
	PNK E-100	100	50	2000/3000	1,5	48	100	08.000.100	08.000.100.3
	PNK E-200	200	50	2000/3000	1,5	97	100	08.000.200	08.000.200.3
	PNK E-300	300	50	2000/3000	1,5	146	100	08.000.300	08.000.300.3
	PNK E-400	400	50	2000/3000	1,5	195	100	08.000.400	08.000.400.3




Spojnica PNK-E					Connector PNK -E	
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°	
	SP/PNK E-50	50	50	1,5	08.050.005	
	SP/PNK E-100	100	50	1,5	08.200.002	
	SP/PNK E-200	200	60	1,5	08.230.002	
	SP/PNK E-300	300	50	1,5	08.260.002	
	SP/PNK E-400	400	50	1,5	08.270.002	

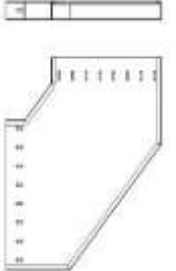


Lomljiva spojnica				Angle connector	
	Tip Type	Visina Height (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°	
	LSPNK-E 50	50	1,5	06.251.201	

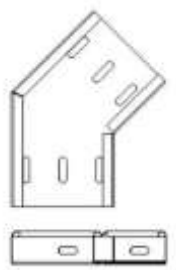


Zglobna spojnica				Adjustable connector	
	Tip Type	Visina Height (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°	
	ZS-E 50	50	1,5	09.000.197	



Ugaona spojnica 90°					Angle connector 90°	
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°	
	SL/PNK-E-50	48	50	1,5	08.429.048	
	SL/PNK-E-100	100	50	1,5	08.429.105	
	SL/PNK-E-200	200	50	1,5	08.429.200	
	SL/PNK-E-300	300	50	1,5	08.429.300	
	SL/PNK-E-400	400	50	1,5	08.429.400	

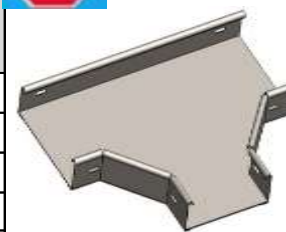


Ugaona spojnica 45°					Angle connector 45°	
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°	
	SY/PNK-E-50	48	50	1,5	8.438.050	
	SY/PNK-E-100	100	50	1,5	08.438.100	
	SY/PNK-E-200	200	50	1,5	08.438.200	
	SY/PNK-E-300	300	50	1,5	08.438.300	
	SY/PNK-E-400	400	50	1,5	08.438.400	





Račvasta spojnica					<i>T connector</i>	E 90
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lina Thickness (mm)	Kataloški broj Catalog N°	
	ST/PNK-E-50	48	50	1,5	08.438.048	
	ST/PNK-E-100	100	50	1,5	08.438.105	
	ST/PNK-E-200	200	50	1,5	08.438.200	
	ST/PNK-E-300	300	50	1,5	08.438.300	
ST/PNK-E-400	400	50	1,5	08.438.400		



Krstasta spojnica					<i>Cross connector</i>	E 90
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lina Thickness (mm)	Kataloški broj Catalog N°	
	SX/PNK-E-50	48	50	1,5	08.448.048	
	SX/PNK-E-100	100	50	1,5	08.448.105	
	SX/PNK-E-200	200	50	1,5	08.448.200	
	SX/PNK-E-300	300	50	1,5	08.448.300	
SX/PNK-E-400	400	50	1,5	08.448.400		



Vertikalna uzlazna spojnica					<i>Vertical up connector</i>	E 90
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lina Thickness (mm)	Kataloški broj Catalog N°	
	SE-I-50u	48	50	1,5	08.505.048	
	SE-I-100u	100	50	1,5	08.505.100	
	SE-I-200u	200	50	1,5	08.505.200	
	SE-I-300u	300	50	1,5	08.505.300	
SE-I-400u	400	50	1,5	08.505.400		





Vertikalna silazna spojnica					<i>Vertical down connector</i>	E 90
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lina Thickness (mm)	Kataloški broj Catalog N°	
	SE-I-50s	48	50	1,5	08.506.048	
	SE-I-100s	100	50	1,5	08.506.100	
	SE-I-200s	200	50	1,5	08.506.200	
	SE-I-300s	300	50	1,5	08.506.300	
SE-I-400s	400	50	1,5	08.506.400		







Element vertikalne zglobne spojnice					<i>Element of vertical angle connector</i>	E 90
	Tip Type	Visina Height (mm)	Širina Width (mm)	Debljina lina Thickness (mm)	Kataloški broj Catalog N°	
	EVPNK-E 100	100	50	1,5	06.004.011	
	EVPNK-E 200	200	50	1,5	06.004.013	
	EVPNK-E 300	300	50	1,5	06.004.015	
EVPNK-E 400	400	50	1,5	06.004.016		











Vertikalna zglobna spojnica		Vertical angle connector				 
Tip Type	Visina Height (mm)	Širina Width (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°		
VPNK-E 100	100	50	1,5	06.005.010		
VPNK-E 200	200	50	1,5	06.005.012		
VPNK-E 300	300	50	1,5	06.005.014		
VPNK-E 400	400	50	1,5	06.005.015		

Reducir spojnica I		Reduction connector I				 
Tip Type	Visina Height (mm)	Širina redukcije Reduction width (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°		
ERS50-I 50	45	50	1,5	06.760.008		
ERS100-I 50	45	100	1,5	06.760.009		
ERS200-I 50	45	200	1,5	06.760.010		
ERS300-I 50	45	300	1,5	06.760.011		



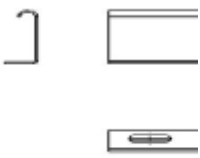
Reducir spojnica II		Reduction connector II				 
Tip Type	Visina Height (mm)	Širina redukcije Reduction width (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°		
RS50-II 50	50	50	0,8	06.900.051		
RS100-II 50	50	100	0,8	06.900.052		

Reducir ugaona 90° spojnica		Angle reduction connector 90°				 
Tip Type	Visina Height (mm)	Širina redukcije Reduction width (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°		
ERS50-III 50	50	50	1,5	06.900.053		
ERS100-III 50	50	100	1,5	06.900.054		

Desna reducir spojnica		Right Reduction connector				 
Tip Type	Visina Height (mm)	Širina redukcije Reduction width (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°		
RS50-IV 50	50	50	0,8	06.900.055		
RS100-IV 50	50	100	0,8	06.900.056		

Leva reducir spojnica		Left reduction connector				 
Tip Type	Visina Height (mm)	Širina redukcije Reduction width (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°		
RS50-IV 50	50	50	0,8	06.905.057		
RS100-IV 50	50	100	0,8	06.905.058		



Pregrada					Divider		 
	Tip Type	Visina Height (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°			
				2m	3m		
	PR 50	50	1,5	06.200.005	06.200.005.3		

Za sve perforirane nosače kablova klase E90 obezbedili smo različite oblike površinske zaštite prikazane u tabeli ispod


For all perforated cable trays class E90 we have provided various shapes of protection surfaces shown in the table below

Površinska zaštita Surface protection	Oznaka Mark	Oblast primene Field of application	STANDARD
Galvanizacija cinkom Galvanized sheet	PL	Unutrašnja oblast Internal area	EN 10142
Topla galvanizacija cinkom Hot dip galvanized	TC	Spoljna oblast External field	SRPS EN ISO 1461
Nerđajući čelik Inox	I	Specijalni industrijski zahtevi, prehrambena industrija, farmacija, hemijska industrija itd. Special industrial requirements, food industry, pharmacy, chemical industry, etc.	V2A, V4A

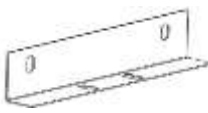


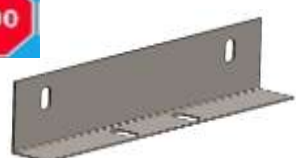
Vatrootporni rešetkasti nosači kablova

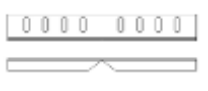
E-90

RNK Cable ladder with rail										
	Tip Type	Širina Width (mm)	Visina Height (mm)	Dužina Length (mm)	Debljina lima Thickness (mm)	Korisni presek Useful section cm ²	Dozvoljeno opterećenje Allowed load (N/m)			Kataloški broj Catalog N°
							1.5m	2m	3m	
							RNK E-100	100	60	
RNK E-200	200	60	2000/3000	1,5	117	200	08.420.000	08.420.000.3		
RNK E-300	300	60	2000/3000	1,5	175	200	08.430.000	08.430.000.3		
RNK E-400	400	60	2000/3000	1,5	234	200	08.440.000	08.440.000.3		




Spojnica RNK-E Connector RNK-E				
	Tip Type	Visina Height (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°
	SP/RNK E	60	1,5	08.420.100

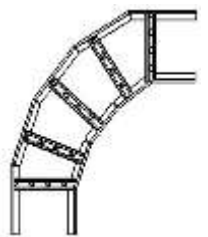


Lomljiva spojnica Angle connector				
	Tip Type	Visina Height (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°
	LSPNK-E 60	60	1,5	06.251.201

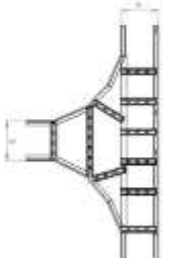


Zglobna spojnica Adjustable connector				
	Tip Type	Visina Height (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°
	ZS-E 60	60	1,5	9.000.203



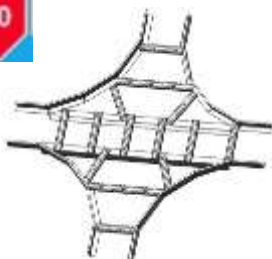
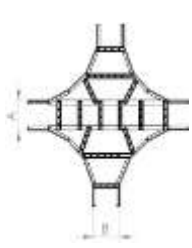
Lučna spojnica sa C šinom Horizontal connector with C rail						
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lima Thickness (mm)		Kataloški broj Catalog N°
				Stranica Cover	Prečaga Rail	
	LRNK-E 100	100	60	1,5	1,5	06.460.100
	LRNK-E 200	200	60	1,5	1,5	06.460.200
	LRNK-E 300	300	60	1,5	1,5	06.460.300
LRNK-E 400	400	60	1,5	1,5	06.460.400	


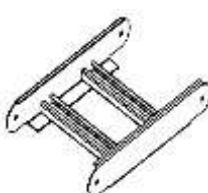



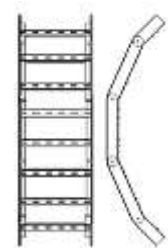
Račvasta spojnica sa C šinom T connector with C rail						
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lima Thickness (mm)		Kataloški broj Catalog N°
				Stranica Cover	Prečaga Rail	
	TRNK-E 100	100	60	1,5	1,5	06.470.100
	TRNK-E 200	200	60	1,5	1,5	06.470.200
	TRNK-E 300	300	60	1,5	1,5	06.470.300
TRNK-E 400	400	60	1,5	1,5	06.470.400	


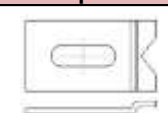








Krstasta spojnica sa C šinom		Cross connector with C rail					E 90	
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lima Thickness (mm)		Kataloški broj Catalog N°		
				Stranica Cover	Prečaga Rail			
	XRNK-E 100	100	60	1,5	1,5	06.480.100		
	XRNK-E 200	200	60	1,5	1,5	06.480.200		
	XRNK-E 300	300	60	1,5	1,5	06.480.300		
	XRNK-E 400	400	60	1,5	1,5	06.480.400		

Element vertikalne zglobne spojnice sa C šinom		Element of vertical connector with C rail					E 90	
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lima Thickness (mm)		Kataloški broj Catalog N°		
				Stranica Cover	Prečaga Rail			
	EVRNK-E 100	100	60	1,5	1	06.496.100		
	EVRNK-E 200	200	60	1,5	1	06.496.200		
	EVRNK-E 300	300	60	1,5	1	06.496.300		
	EVRNK-E 400	400	60	1,5	1	06.496.400		

Vertikalna spojnica sa C šinom		Vertical connector with C rail					E 90	
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lima Thickness (mm)		Kataloški broj Catalog N°		
				Stranica Cover	Prečaga Rail			
	VRNK-E 100	100	60	1,5	1,5	06.490.100		
	VRNK-E 200	200	60	1,5	1,5	06.490.200		
	VRNK-E 300	300	60	1,5	1,5	06.490.300		
	VRNK-E 400	400	60	1,5	1,5	06.490.400		

Stezna pločica		Clamp plate			E 90	
	Tip Type	Debljina lima Thickness (mm)		Kataloški broj Catalog N°		
		SP-E	2		06.420.119	

Ugaona spojnica sa C šinom 90° I		Angle connector with C rail 90° I					E 90	
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lima Thickness (mm)		Kataloški broj Catalog N°		
				Stranica Cover	Prečaga Rail			
	LRNK-E I 100	100	60	1,5	1,5	06.497.100		
	LRNK-E I 200	200	60	1,5	1,5	06.497.200		
	LRNK-E I 300	300	60	1,5	1,5	06.497.300		
	LRNK-E I 400	400	60	1,5	1,5	06.497.400		

Ugaona spojnica sa C šinom 90° II		Angle connector with C rail 90° II					E 90	
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lima Thickness (mm)		Kataloški broj Catalog N°		
				Stranica Cover	Prečaga Rail			
	LRNK-E II 100	100	60	1,5	1,5	06.498.100		
	LRNK-E II 200	200	60	1,5	1,5	06.498.200		
	LRNK-E II 300	300	60	1,5	1,5	06.498.300		
	LRNK-E II 400	400	60	1,5	1,5	06.498.400		



Ugradna račva		RNK branching				E 90	
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°		
	RRNK-E 100	154	60	1,5	06.424.160		
	RRNK-E 200	254	60	1,5	06.424.260		
	RRNK-E 300	354	60	1,5	06.424.360		
	RRNK-E 400	454	60	1,5	06.424.460		

Za sve rešetkaste nosače kablova klase E90 obezbedili smo različite oblike površinske zaštite prikazane u tabeli ispod

For all ladder cable trays class E90 we have provided various shapes of protection surfaces shown in the table below

Površinska zaštita Surface protection	Oznaka Mark	Oblast primene Field of application	STANDARD
Galvanizacija cinkom Galvanized sheet	PL	Unutrašnja oblast Internal area	EN 10142
Topla galvanizacija cinkom Hot dip galvanized	TC	Spoljna oblast External field	SRPS EN ISO 1461
Nerđajući čelik Inox	I	Specijalni industrijski zahtevi, prehrambena industrija, farmacija, hemijska industrija itd. Special industrial requirements, food industry, pharmacy, chemical industry, etc.	V2A, V4A

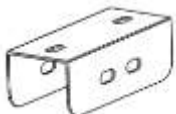

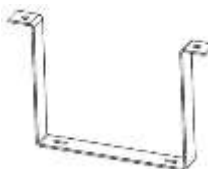



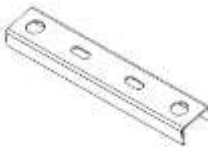



Elementi grupe montažni sistemi su zajednički za perforirane i rešetkaste nosače kablova i dati su tabelama na sledećim stranicama u tabelama

Elements of the group mounting systems are common for perforated and lattice (ladder) cable carriers and they show in tabels below

Konzola KZ-E		Cantilever KZ-E				E 90	
	Tip Type	Širina Width (mm)	Visina Height (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°		
	KZ E-50	30	80	2,5	08.530.050		
	KZ E-100	30	80	2,5	08.530.100		
	KZ E-200	30	80	2,5	08.530.400		
	KZ E-300	30	80	2,5	08.530.300		
	KZ E-400	30	80	2,5	08.530.400		

Kosi nosač UN-E		Bevel connector UN-E			E 90	
	Tip Type	Visina Height (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°		
	UN-E 65	100	3		08.300.010	



Učvršćivač					Carrier		
	Tip Type	Širina Width (mm)	Debljina lima Thickness (mm)		Kataloški broj Catalog N°		
	UC-E	60	3		08.530.006.0		
Plafonski nosač PN-E					Ceiling connector PN-E		
	Tip Type	Širina Width (mm)	Debljina lima Thickness (mm)		Kataloški broj Catalog N°		
	PN-E 100	40	4		08.527.010		
	PN-E 200	40	4		08.527.020		
	PN-E 300	40	4		08.527.030		
	PN-E 400	40	4		08.527.040		
"U" stub US-E					"U" pillar US-E		
	Tip Type	Dužina Length (mm)	Debljina lima Thickness (mm)		Kataloški broj Catalog N°		
	US E-3000	3000	2		06.530.030		
	US E-2000	2000	2		06.530.005		
	US E-1000	1000	2		06.530.004		
	US E-800	800	2		06.530.008		
	US E-600	600	2		06.530.009		
	USN E-500	500	2		06.530.006		
	US E-400	400	2		06.530.007		
	US E-300	300	2		06.530.010		
"U" nosač UN-E					"U" carrier UN-E		
	Tip Type	Širina Width (mm)	Visina Height (mm)	Dužina Length (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°	
	UN E-50	30	18	115	2,5	08.300.050	
	UN E-100	30	18	165	2,5	08.300.100	
	UN E-200	30	18	225	2,5	08.300.200	
	UN E-300	30	18	265	2,5	08.300.300	
	UN E-400	30	18	285	2,5	08.300.400	
Varijabilni nosač VN-E					Carrier VN-E		
	Tip Type	Dužina Length (mm)	Širina Width (mm)	Debljina lima Thickness (mm)	Kataloški broj Catalog N°		
	VN-E	140	60	3	08.530.006		



POMOĆ PRI MONTAŽI ***MOUNTING ASSISTANCE***

U cilju što lakšeg snalaženja pri montaži naših sistema daćemo Vam neke primere vezivanja nosača kablova stabilnih u uslovima požara E90 za plafon ili zid

With the aim of making it easier to mount our systems, we will give you some examples of bonding of cable carriers stable in fire conditions E90 to roof or wall



Montaža nosača kablova stabilnih u uslovima požara E90 se treba vršiti prema uputstvu proizvođača, a u skladu sa zakonskim normama.

"ELVOD" preporučuje četiri načina postavljanja svojih proizvoda iz ove klase :

1. POSTAVLJANJE TIP "PLAFON-PLAFON"
2. POSTAVLJANJE TIP "STUB-PLAFON"
3. POSTAVLJANJE TIP "ZID-ZID"
4. POSTAVLJANJE POMOĆU PLAFONSKOG NOSAČA

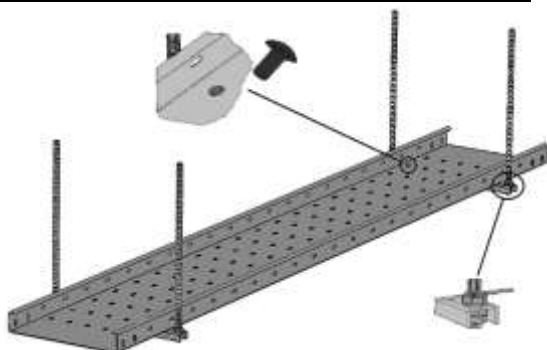
Mounting of cable trays stable in conditions of fire E90 should be carried out according to the manufacturer's instructions, in accordance with the legal norms.

"ELVOD" recommends four ways to set up products from this class:

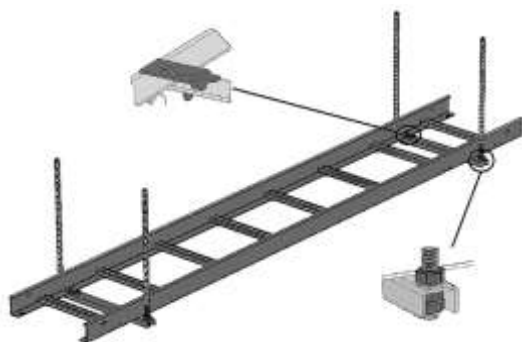
1. **INSTALLATION TIP "CEILING-CEILING"**
2. **INSTALLATION TIP "BRACKET-CEILING"**
3. **INSTALLATION TIP "WALL-WALL"**
4. **INSTALATION WITH „U" CEILING BRACKET**



1. POSTAVLJANJE TIP "PLAFON-PLAFON"

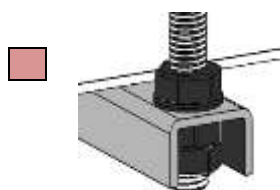


Postavljanje perforiranog nosača kablova na plafon pomoću U nosača E90 i navojnih šipki
Placing a perforated cable tray on the ceiling using the U mounting bracket E90 and threaded rods



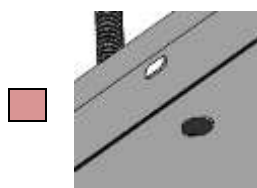
Postavljanje rešetkastog nosača kablova na plafon pomoću U nosača E90 i navojnih šipki

Installing the lattice cable tray on the ceiling using the U-mounting bracket E90 and threaded rods



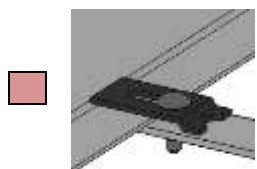
Veza između "U" nosača i navojne šipke se ostvaruje pomoću elementa za vezu strane, kao i jedna podloška (A10) i dve navrtke (M10) koje se postavljaju sa donje strane

The connection between the "U" pillar and the threaded rod is accomplished using the link element side, as well as one washer (A10) and two nuts (M10) which are placed on the bottom side



Pri montaži potrebno je pričvrstiti perforirani nosač kablova za "U" nosač, što se ostvaruje pomoću torban vijka M6x15 (komplet)

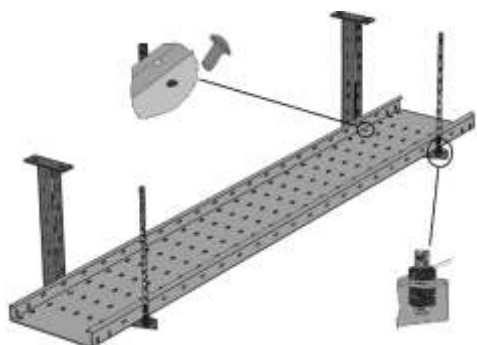
When installing, it is necessary to attach a perforated cable tray for the "U" pillar, which is achieved with a torch screw M6x15 (complete)



Kod rešetkastih nosača kablova veza sa „U“ nosačem se ostvaruje pomoću pločice za vezu koja se pričvršćuje torban vijkom M6x15 (komplet)

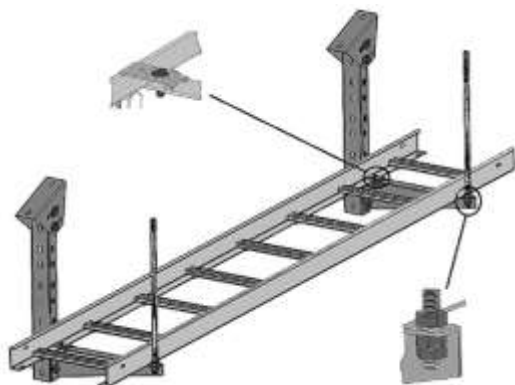
In the case of lattice cable trays, the connection with the "U" pillar is achieved by means of a connection plate that is fastened with a torch screw M6x15 (complete)

2. POSTAVLJANJE TIP "STUB-PLAFON"



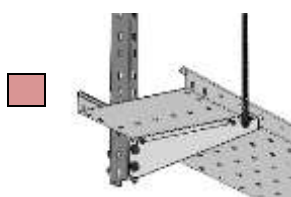
Postavljanje perforiranog nosača kablova na plafon pomoću „U“ nosača sa zavarenom stopom E90, konzole, torban vijaka i navojnih šipki

Placing a perforated cable tray on the ceiling using a "U" bracket with welded plate E90, console, torch screws and threaded rods



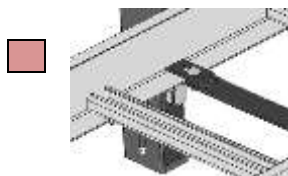
Postavljanje rešetkastog nosača kablova na plafon pomoću „U“ nosača sa učvršćivačem UD E90, konzole, torban vijaka i navojnih šipki

Mounting the lattice cable tray to the ceiling using the "U" bracket with an UD E90 hardener, console, torch screws and threaded rods



Veza između konzole i „U“ stuba se ostvaruje pomoću odstoynika M10x80 (sa odstoynom cevčicom, navrtkom M10 i dve podloške (A10)). Veza između navojne šipke i konzole se ostvaruje pomoću elementa za vezu sa dve podloške (A10) i jednom navrtkom (M10) koje se postavljaju sa gornje strane, kao i sa jednom podloškom (A10) i dve navrtke (M10) koje se postavljaju sa donje strane. Perforirani nosač kablova se pričvršćuje na konzolu pomoću torban vijka M6x15

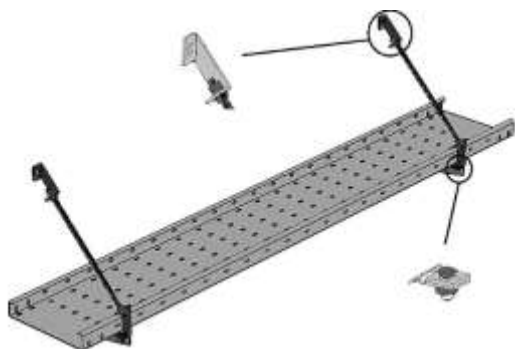
The connection between the console and the U-pillar is accomplished using the spacers M10x80 (with spacer tube, M10 nut and two washers (A10)). The connection between the threaded rod and the console is accomplished by linking element and two washers (A10) and a single nuts (M10) which are mounted on the upper side, as well as with one washers (A10) and two nuts (M10). The perforated cable tray is attached to the console using a torch bolt M6x15



Kao i kod prethodnog način rešetkasti nosač kablova se pričvršćuje uz pomoć pločice za vezu i torban vijka M6x15 (komplet)

As with the previous way, the lattice cable tray is fastened using the connection plate and torch bolt M6x15 (complete)

3. POSTAVLJANJE TIP "ZID-ZID"



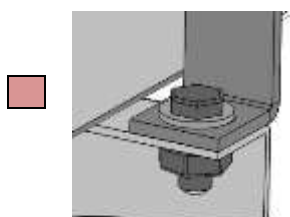
Kod ovog načina perforiranog nosača kablova kačenja koristi se konzola tipa E90, dva kosa nosača tipa E90 i navojna šipka M10

This type of hanging perforated cable tray uses an E90 type console, two slope pieces of E90 type and threaded rod M10



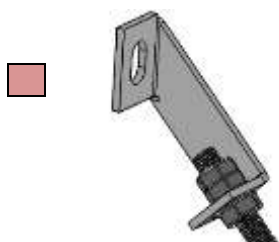
Kod ovog načina rešetkastog nosača kablova kačenja koristi se konzola tipa E90, dva kosa nosača tipa E90 i navojna šipka M10

This type of hanging lattice cable tray uses an E90 type console, two slope pieces of E90 type and threaded rod M10



Veza između kosog nosača i konzole se ostvaruje pomoću vijka M10x25 (komplet)

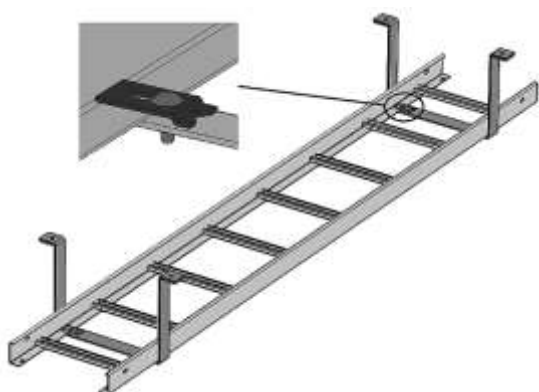
The connection between the slope bracket and the console is achieved using the M10x25 screw (complete)



Veza između navojne šipke i kosog nosača se ostvaruje pomoću elementa za vezu M10

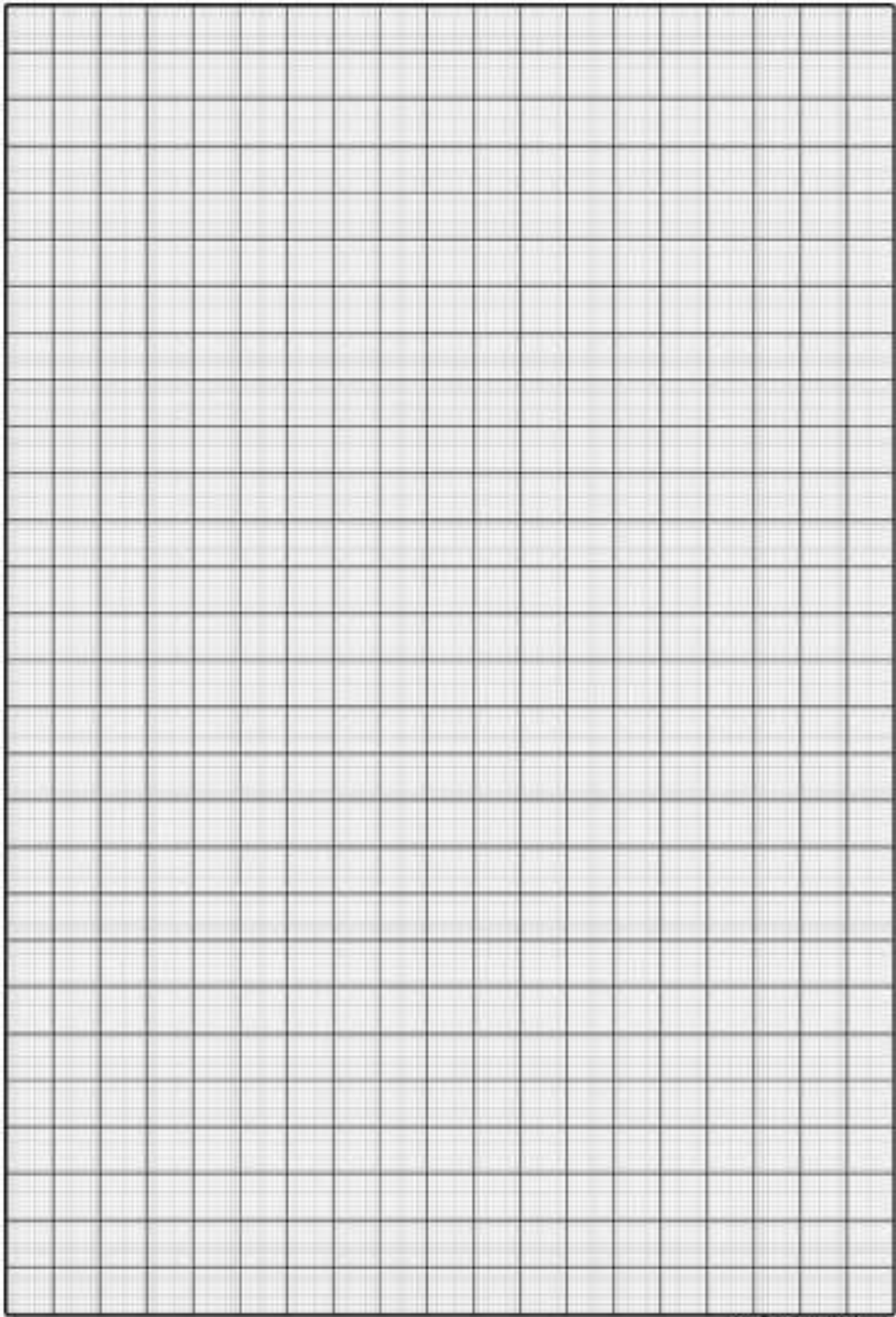
The connection between the threaded rod and the slope bracket is realized using the M10 connection element

4. POSTAVLJANJE POMOĆU PLAFONSKOG NOSAČA



Kod ovog načina kačenja nosača kablova koristi se plafonski „U” nosač koji se za plafon pričvršćuje pomoću anker vijka ili metalnog tipla. Veza nosača kablova i plafonskog nosača se ostvaruje pomoću pločice za vezu i torban vijka M6x15 (komplet)

With this method of fastening the cable tray, the ceiling „U” is used, which is secured to the ceiling by the anchor bolt or metal anchor. The connection between the cable tray and ceiling mounting brackets is achieved using the connection plates and



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