

LOW VOLTAGE PRODUCT RANGE

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1GRL

CAST RESIN STRAIGHT JOINTS Up to 0,6/1 (1,2) kV

Application

The 1GRL cast resin straight joints are designed to connect various types of low voltage cables with polymeric (PVC, XLPE) or paper insulation. The joints provide excellent mechanical protection and good electrical insulation.

Available with PUR or Epoxy resins.

The joints can be energized immediately after installation.

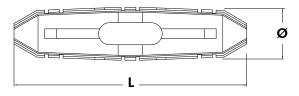
Joints can also accommodate armored cables with the addition of an armor kit.

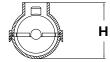
Kit contents

- Injection molded shells
- 2 chamber resin bag / or in cans
- Sealing tape
- Instruction manual
- (Armor kit for cables w. armor)









Meets specifications: EN 50393

h.m.o.	armor add on kit	resin type		application range				L	Ø	Н
type				max size (mm²) Ø cable (mm)			(mm)	(mm)	(mm)	
1GRL1	ACK-L1	EPOXY	1x95	2x25	3x16	4x10	8÷26	190	44	45
1GRL2	ACK-L2	EPOXY	1x240	2x50	3x35	3x35+1x25	14÷32	275	58	60
1GRL3	ACK-L3	EPOXY	1x400	2x95	3x70	3x70+1x35	23÷39	360	62	64
1GRL4	included	PUR	1x630	2x185	3x150	3x150+1x95	30÷55	440	95	64
1GRL5	included	PUR	1x630	2x300	3x300	3x300+1x150	50÷75	650	160	190
1GRL6	included	PUR	1x630	2x400	3x300	3x300+1x150	50÷88	810	160	166

Standard resin: EPOXY for 1GRL1, 1GRL2 and 1GRL3 Standard resin: PUR with fillers for1GRL4, 1GRL5 and 1GRL6

1GRD / 1GRT

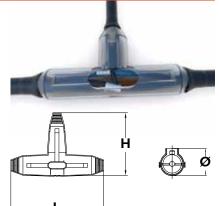
CAST RESIN BRANCH/TEE JOINTS Up to 0,6/1 (1,2) kV

Application

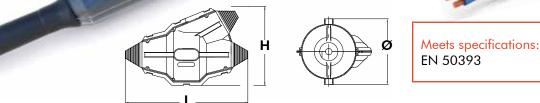
The 1GRD/1GRT cast resin branch/tee joints are designed to accommodate multi core low voltage cables with PVC or XLPE insulation. The joints can be filled with either PUR or Epoxy resin. The joints can be energized immediately after installation. Joints can also accommodate armored cables with the addition of an armor kit.

Kit contents

- Injection molded shells
- 2 chamber resin bag / or in cans
- Sealing tape
- Instruction manual
- (Armor kit for cables w. armor)







BRANCH JOINT armor application range Ø Н resin L type add on (mm) Ø main Ø branch (mm) (mm) type max size (mm²) kit (mm) (mm) ACK-D1 2x25 1GRD1 EPOXY 1x95 3x16 4x10 8÷26 8÷26 190 44 95 1GRD2 ACK-D2 EPOXY 1x240 2x70 3x50 3x35 + 1x2523÷39 14÷32 275 62 120 PUR 1GRD3 included 1x300 2x95 3x70 3x50 + 1x2514÷45 14÷45 300 140 170 1GRD4 included 195 PUR 1x400 2x120 3x95 3x95 + 1x5015÷50 15÷50 435 140 1GRD5 PUR 1x630 2x185 675 included 3x150 3x150 + 1x9520÷60 20÷60 160 280

Standard resin: EPOXY for 1GRD1 and 1GRD2 Standard resin: PUR with fillers for1GRD3, 1GRD4 and 1GRD5

	TEE JOINT										
h	armor	resin		application range					L	ø	н
type	add on kit	type		max size (mm²) Ø main Ø branch (mm) (mm)			(mm)	(mm)	(mm)		
1GRT1	ACK-D1	EPOXY	1x150	2x50	3x35	4x25	14÷39	8÷32	290	75	155
1GRT2	ACK-D2	EPOXY	1x300	2x70	3x50	3x50+1x25	23÷50	20÷45	320	100	200

Standard resin: EPOXY

1GLT4 GR 1 to 7 / (SVMS type)

HEAT-SHRINKABLE LOW VOLTAGE STRAIGHT THROUGH JOINTS Up to 0,6/1 (1,2) kV

Application

The 1GLT4 GR 1 - 7 low voltage heat-shrinkable straight joint kits are designed for plastic insulated cables in full accordance with DIN47640. The kits are designed to accommodate the DIN specific mechanical shear bolt connectors (GPH D-Series), and are fully type tested acc. to EN50393. GT4 heavy wall tubing w. adhesive is used to create the joint. The tube is used to insulate the core/connector as well as rebuilding the outer jacket.



Kit contents

- 4 x GT4 heavy wall tubing w. adhesive for core insulation
- 4 x GPH D series mechanical shear bolt connectors (only "C" series)
- 1 x GT4 heavy wall tubing w. adhesive to rebuild the outer sheath



Type tested acc. to: EN50393 Meets specifications: DIN47640

type	application range (mm²)	L (mm)
1GLT4-GR1	4÷16	420
1GLT4-GR2	16÷35	430
1GLT4-GR3	25÷50	500
1GLT4-GR4	35÷95	710
1GLT4-GR5	35÷150	890
1GLT4-GR6	95÷150	890
1GLT4-GR7	95÷240	1100

type	application range (mm²)	L (mm)
1GLT4-GR1 C	4÷16 Cu/Al	420
1GLT4-GR2 C	16÷35 Cu/Al	430
1GLT4-GR3 C	25÷50 Cu/Al	500
1GLT4-GR4 C	35÷95 Cu/Al	710
1GLT4-GR5 C	35÷150 Cu/Al	890
1GLT4-GR6 C	95÷150 Cu/Al	890
1GLT4-GR7 C	95÷240 Cu/Al	1100

With code C the kits are supplied w.mechanical connectors



1GLT C-E

HEAT-SHRINKABLE LOW VOLTAGE STRAIGHT THROUGH JOINTS FOR CABLES WITH CONCENTRIC NEUTRAL Up to 0,6/1 (1,2) kV

Application

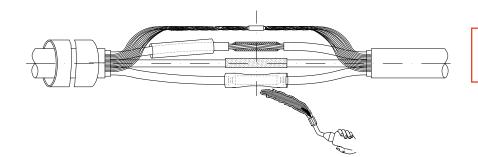
The 1GLT C-E heat-shrinkable low voltage joint kits are designed to connect low voltage cables with concentric neutral having PE, PVC, or XLPE outer sheaths.

The kits can be ordered with crimped or mechanical connectors.

Kit contents

- Inner core/connector insulating tubes w. adhesive
- Outer tube w. adhesive
- Ferrules (crimp or mechanical, market specific)





Meets specifications: EN 50393

type	application range (mm²)	L (mm)
1GLT2C-E	3x6+6С Сu 3x6+16С Сu	375
1GLT3C-E	3x25+25C Cu 3x50+25C Cu	500
1GLT4C-E	3x95+50C Cu 3x150+95C Cu	750
1GLT2CAL-E	3x10+6C AI	375
1GLT3CAL-E	3x25+16C Al 3x50+25C Al	500
1GLT4CAL-E	3x95+35C Al 3x150+50C Al	750
1GLT6CAL-E	3x240+95C Al	1000



1GLT KI

HEAT-SHRINKABLE LOW VOLTAGE STRAIGHT THROUGH ARMORED JOINTS Up to 0,6/1 (1,2) kV

Application

The 1GLT KI heat-shrinkable low voltage straight through joints, are designed to connect armored cables with STA or SWA having PVC, PE, XLPE or EPR insulation.

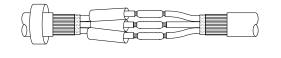
The joints are designed to accommodate both crimp or mechanical ferrules.

Kit contents

- Inner core/connector insulating tubes w. adhesive
- Canister & earthing kit (depending on cable)
- Outer protective tube(s) w. adhesive











type	application range (mm²)	L (mm)
1GLT4.16 KI	4x10-16 Cu/Al	750
1GLT4.35 KI	4x25-35 Cu/Al	750
1GLT4.95 KI	4x50-95 Cu/Al	750
1GLT4.150 KI	4x95-150 Cu/Al	750
1GLT4.240 KI	4x185-240 Cu/Al	750
1GLT4.400 KI	4x300-400 Cu/Al	1000

Meets specifications: EN 50393



1GDT

HEAT-SHRINKABLE LOW VOLTAGE BRANCH JOINTS Up to 0,6/1 (1,2) kV

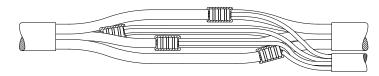
Application

The 1GDT heat-shrinkable low voltage branch joint kits are designed to accommodate 4 core plastic cables, with or without armor.

Kit contents

- Inner core/connector protection tubes w. adhesive
- Outer heat-shrinkable wraparound sleeve with or without reinforcement
- For armored cable: Armor continuity kit supplied







EN 50393

tuna	application	range (mm²)
type	main	branch
1GDT2	4x6÷4x10	2x2,5-4x2,5
1GDT3	4x6÷4x25	2x2,5-4x2,5
1GDT4	3x35+25÷3x95+50	2x2,5-4x25

1TTE

HEAT-SHRINKABLE LOW VOLTAGE OUTDOOR TERMINATION FOR ARMORED OR UNARMORED CABLE Up to 0,6/1 (1,2) kV

Application

The 1TTE heat-shrinkable low voltage outdoor termination kits are designed for cables up to 4 cores with or without armor.

The adhesive coating on the lug sealing tubes, the breakout body and fingers provides a good environmental seal, while the cores are protected with thin or medium wall tubing.

All components are UV resistant.

Kit contents

- Breakout
- Core protection tube (thin or medium wall sleeves)
- Lug sealing tubes w. adhesive
- For armored cable: Armor continuity kit consist of corrosion protection sleeve and earth braid





Type tested acc. to: EN 50393

type	application range (mm²)
1TTE3 & 1TTE 4.16 W	4÷16
1TTE3 & 1TTE 4.50 W	16÷50
1TTE3 & 1TTE 4.150 W	70÷150
1TTE3 & 1TTE 4.300 W	185÷300
111E3 & 111E 4:500 W	105:000



Kits for unarmored cables

type	application range (mm²)
1TTE3 & 1TTE 4.16 Z	4÷16
1TTE3 & 1TTE 4.50 Z	16÷50
1TTE3 & 1TTE 4.150 Z	70÷150
1TTE3 & 1TTE 4.300 Z	185÷300



Kits for armored cables

1SES

HEAT-SHRINKABLE LIVE END SEAL KITS FOR LOW VOLTAGE CABLES Up to 0,6/1 (1,2) kV

Application

The SES kits provides insulation for energized LV cables.

The end caps are spiral coated with adhesive, therefore the cables can be left outdoors.

The caps are weathering resistant are supplied with the required "energized" symbol warning mark.

Kit contents

- 3, or 4 core protective caps, 1 outer sealing cap
- Tinned copper mesh supplied neutral for concentric neutral cable







Meets specifications: EN 50393

		application range	
type	max size (mm²)	max. core Ø cable (mm)	max. outer Ø cable (mm)
1SES 6	4x6	4-8	8-17
1SES 16	10x16	5-8	15-27
1SES 35	25x35	7-15	15-30
1SES 150	50x150	11-17	26-43
1SES 300	150x300	15-27	37-69

