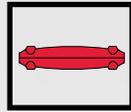




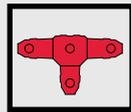
## Cast-resin technology



Straight-through joints

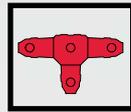
Page

70



Branch joints

80



Universal box

96



Cast-resins

97



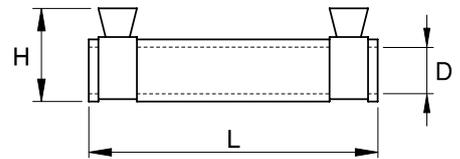
# MR 0

## Cast resin straight-through joint

for small cross sections, e.g. submersible pumps

Universally suitable for connection of polymeric cables and conductors with PVC, PE, XLPE and EPR (e.g. N (A)YY, NYM, TT) insulation. Suitable for copper conductors.

### Dimensions



### Characteristics

- Compact dimensions
- Splice site visible before casting
- High-quality transparent shockproof plastic moulds
- Funnel clips for easy casting
- Suitable for vertical casting
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength

### Application

- Indoor
- Outdoor
- Underwater (min. IP68)
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U_n$  0.6/1 (1.2) kV

### Scope of delivery

- Cap
- Hydrolysis resistance  
PUR type EG cast-resin, containing the correct volume ready for mixing.
- Packed in practical and easy-to-use two chamber bags
- Transparent plastic moulds
- Spacers
- PVC insulation tape
- Protective gloves
- Funnel clips
- Assembly instructions

### Note

- Connectors not included

### Tests

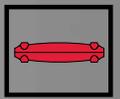
- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

### Storage conditions/Shelf life

- Cast resin up to 40 months

Type	L mm	D mm	H mm	max Cable-Ø mm	Polymeric cable mm <sup>2</sup>					Control and signal cable mm <sup>2</sup>		Art.-No.
					1x	2x	3x	4x	5x	0.75	1.5	
					Nominal cross section per conductor					Number of conductors		
<b>Particularly for the european market</b>												
MR 02	120	26	40	16	25	6	4	2.5	1.5	8	5	<b>124507*</b>
MR 05	180	26	40	16	25	6	4	4	2.5	16	8	<b>124508*</b>
<b>Particularly for the export market</b>												
MR 02	120	26	40	16	25	6	4	2.5	1.5	8	5	<b>124552*</b>

\*Optional accessory: Funnel set/Filling in funnel/Accessories  
Compression connectors/Connecting technology  
UNIVERSAL CLEANER No.121/ Accessories



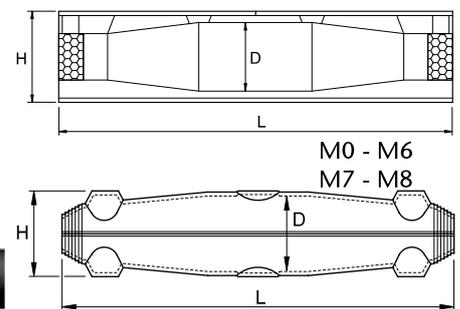
## M

### Cast resin straight-through joint

Universally suitable to connect polymeric cables or conductors insulated with PVC, PE, VPE and EPR, (e.g. N(A)YY, NYM, TT).



#### Dimensions



#### Characteristics

- Compact dimensions
- Splice site visible before casting
- High-quality transparent shockproof plastic moulds
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength

#### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

#### Voltage level

- $U_0/U (U_m)$  0.6/1 (1.2) kV

#### Scope of delivery

- Hydrolysis resistance
- PUR type EG cast-resin, containing the correct volume ready for mixing.
- Packed in practical and easy-to-use two chamber bags
- Transparent plastic moulds
- Fill and air-release funnel
- PVC insulation tape
- Protective gloves
- Assembly instructions

#### Note

- Connectors not included

#### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

#### Storage conditions/Shelf life

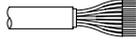
- Cast resin up to 40 months

For energy cables and conductors

Type	L mm	D mm	H mm	max. Cable-Ø mm	Polymeric cable					Concentric conductor		Armoured		Art.-No.
														
					1x	2x	3x	4x	5x	3x	4x	3x	4x	
max. Nominal cross section per conductor mm <sup>2</sup>														
<b>Particularly for the european market</b>														
M 0	185	32	37	15	25	10	6	6	2.5					<b>124293</b>
M 1	240	40	45	22	95	25	16	16	6	10/10				<b>124294</b>
M 2	265	45	50	30	185		35	25	16	25/25	16/16	16	16	<b>124295</b>
M 2.5	310	58	65	37	300		70	50	35	35/35	25/25	35	16 - 35	<b>124296</b>
M 3	355	70	80	42	400		95	70	50	50/50	50/25	50	35 - 50	<b>124297</b>
M 4	430	90	98	52	500		120	95	70	95/95	70/35	95	50 - 95	<b>124298</b>
M 5	550	110	120	62			240	185	120	150/150	120/70	120	95 - 120	<b>124299</b>
M 6	660	145	165	80			300	240		240/240	240/120	240	120 - 240	<b>124300</b>
M 7	900	150	190	80				300						<b>124308</b>
M 8	1100	150	190	90				400					300 - 400	<b>124309</b>
<b>Particularly for the export market</b>														
M 0	185	32	37	15	25	10	6	6	2.5					<b>124409</b>
M 1	240	40	45	22	95	25	16	16	6	10/10				<b>124410</b>
M 2	265	45	50	30	185		35	25	16	25/25		16	16	<b>124411</b>
M 2.5	310	58	65	37	300		70	50	35	35/35	16/16	35	16 - 35	<b>124412</b>
M 3	355	70	80	42	400		95	70	50	50/50	25/25	50	35 - 50	<b>124413</b>
M 4	430	90	98	52	500		120	95	70	95/95	50/25	95	50 - 95	<b>124414</b>
M 5	550	110	120	62			240	185		150/150	70/35	120	95 - 120	<b>124415</b>
M 6	660	145	165	80			300	240		240/240	120/70	240	120 - 240	<b>124416</b>

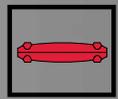
Appropriate connectors must be ordered separately.  
 Armour continuity kit for armoured cable available to order.  
 Straight-through joints for mining areas available to order.

Control cable and signal cable

Type	L mm	D mm	H mm	max. Cable-Ø mm	Control and signal cable					Art.-No.
										
					0.4 mm <sup>2</sup>	0.6 mm <sup>2</sup>	0.8 mm <sup>2</sup>	0.75 mm <sup>2</sup>	1.5 mm <sup>2</sup>	
				Number of twisted pairs		Number of conductor				
<b>Particularly for the european market</b>										
M 1	240	40	45	22	30 - 70	20 - 30	10 - 20	56	21	<b>124294*</b>
M 2	265	45	50	30	100 - 150	40 - 70	30 - 40	114	56	<b>124295*</b>
M 2.5	310	58	65	37	200 - 250	100 - 120	50 - 70	154	96	<b>124296*</b>
M 3	355	70	80	42	300	150	100 - 120	200	133	<b>124297*</b>
M 0	185	32	37	15	6 - 20	6 - 10	6	16	8	<b>124293*</b>
<b>Particularly for the export market</b>										
M 0	185	32	37	15	6 - 20	6 - 10	6 - 6	16	8	<b>124409*</b>
M 1	240	40	45	22	30 - 70	20 - 30	10 - 20	56	21	<b>124410*</b>
M 2	265	45	50	30	100 - 150	40 - 70	30 - 40	114	56	<b>124411*</b>
M 2.5	310	58	65	37	200 - 250	100 - 120	50 - 70	154	96	<b>124412*</b>
M 3	355	70	80	42	300	150	100 - 120	200	133	<b>124413*</b>

For telecommunication cable a screen transfer type SVL is required.

\*Optional accessory: Screen straight-through conductor SVL/Accessories  
 Compression connectors/Connecting technology  
 UNIVERSAL CLEANER No.121/Accessories



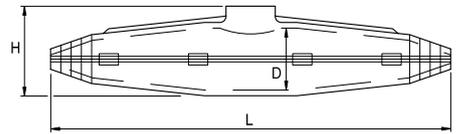
# M-Euroline

## Cast resin straight-through joint

Universally suitable for the connection of polymeric cables and conductors with PVC, PE, XLPE and EPR insulation (e.g. N(A)YY, NYM, TT).



### Dimensions



### Characteristics

- Compact dimensions
- Splice site visible before casting
- High-quality transparent shockproof plastic moulds
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts
- Voltage level
- $U_0/U (U_n)$  0.6/1 (1.2) kV

### Scope of delivery

- Cap
- Hydrolysis resistance
- PUR type EG cast-resin, containing the correct volume ready for mixing.
- Packed in practical and easy-to-use two chamber bags
- Transparent plastic moulds

### Scope of delivery

- Spacers
- PVC insulation tape
- Protective gloves
- Assembly instructions

### Note

- Connectors not included

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

### Storage conditions/Shelf life

- Cast resin up to 40 months

For energy cables and conductors

Type	L mm	D mm	H mm	max. Cable-Ø mm	Polymeric cable				Concentric conductor		armiert	Art.-No.
					1x	3x	4x	5x	3x	4x	4x	
max. Nominal cross section per conductor mm <sup>2</sup>												
<b>Particularly for the european market</b>												
M 11	190	36	50	26	10	6	10	6	10/10		4	124169*
M 12	260	47	63	34	25	16	25	16	25/25	16/16	10	124170*
M 13 S	310	55	68	43	35	25	35	25	35/35	25/16	25	124171*
M 13	360	55	75	43	50	35	50	35	50/50	25/16	35	124172*
M 14 S	350	70	95	48	70	50	70	50	70/70	50/50	50	124173*
M 14	400	70	95	48	95	95	95	70	95/95	50/50	70	124174*
M 15	530	100	120	63	150	20	150	120	150/150	120/70	120	124175*
M 16	700	125	160	81	240	185	240	185	240/120	185/70	240	124176*
<b>Particularly for the export market</b>												
M 11	190	36	50	26			10	6	10/10		4	124209*
M 12	260	47	63	34			25	16	25/25		10	124210*
M 13 S	310	55	68	43			35	25	35/35		25	124211*
M 13	360	55	75	43			50	35	50/50		35	124212*
M 14 S	350	70	95	48			70	50	70/70		50	124213*
M 14	400	70	95	48			95	70	95/95		70	124214*
M 15	530	100	120	63			150	120	150/150		120	124215*
M 16	700	125	160	81			240	185	240/120		240	124216*
M 17	900	150		90			300				300	169406*

Armour continuity kit for armoured cable available to order.

Other nominal cross sections available to order.

\*Optional accessory: Compression connectors/Connecting technology  
UNIVERSAL CLEANER No.121/Accessories

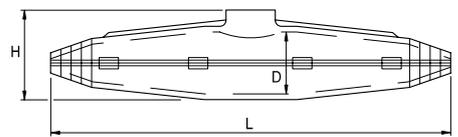
# M...V-Euroline

## Cast resin straight-through joint

with screw connectors

Universally suitable to connect polymeric cables or conductors insulated with PVC, PE, VPE and EPR, (e.g. N(A)YY, NYM, TT). Suitable for aluminium or copper conductors.

### Dimensions



### Characteristics

- Compact dimensions
- Splice site visible before casting
- High-quality transparent shockproof plastic moulds
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U (U_m)$  0.6/1 (1.2) kV

### Scope of delivery

- Cap
- Hydrolysis resistance  
PUR type EG cast-resin, containing the correct volume ready for mixing.  
Packed in practical and easy-to-use two chamber bags
- Transparent plastic moulds
- Screw connector
- Spacers
- PVC insulation tape
- Protective gloves
- Assembly instructions

### Note

- Incl. screw connectors

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

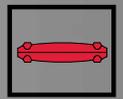
### Storage conditions/Shelf life

- Cast resin up to 40 months

For energy cables and conductors

Type	L mm	D mm	H mm	max. Cable-Ø mm	Polymeric cable			Concentric conductor		Art.-No.
					3x	4x	5x	3x	4x	
Nominal cross section per conductor mm <sup>2</sup>										
M 11 V	190	36	50	26	1.5 - 6	1.5 - 6	1.5 - 6		1.5/1.5 - 6/6	131863*
M 12 V	260	47	63	34	10 - 16	10 - 16	10 - 16		10/10 - 16/16	131867*
M 13 SV	310	55	68	43	16 - 25	16 - 25		16/16 - 25/25		131866*
M 13 V	360	55	75	43	25 - 35	25 - 35		25/25 - 35/35		131864*
M 14 V	400	70	95	48	50 - 70	50 - 70		50/50 - 70/70		131865*

\*Optional accessory: UNIVERSAL CLEANER No.121/ Accessories

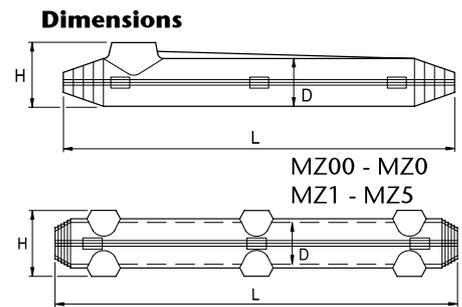


# MZ

## Cast resin straight-through joint

for control cable and signal cable

Universally suitable for connection of control cables and signalling cables, e.g. as a protective sleeve for repair of the cable sheath.



### Characteristics

- Compact dimensions
- Splice site visible before casting
- High-quality transparent shockproof plastic moulds
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U (U_m)$  0.6/1 (1.2) kV

### Scope of delivery

- Hydrolysis resistance
- PUR type UG cast-resin, containing the correct volume ready for mixing.
- Packed in practical and easy-to-use two chamber bags
- Transparent plastic moulds
- Spacer mesh
- Fill and air-release funnel
- PVC insulation tape
- Protective gloves
- Assembly instructions

### Note

- Connectors not included

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

### Storage conditions/Shelf life

- Cast resin up to 40 months

Control cable and signal cable

Type	L mm	D mm	H mm	max. Cable-Ø mm	Control and signal cable mm <sup>2</sup>					Art.-No.
					0.4	0.6	0.8	1.5	2.5	
					Number of twisted pairs			Number of conductor		
MZ 00	180	23	35	20	10 - 15	5 - 10	5 - 10	7	5	124505*
MZ 0	250	35	55	32	15 - 30	10 - 20	10 - 20	15	10	124506*
MZ 1	400	33	57	30	30 - 60	20 - 50	20 - 40	30	20	124510*
MZ 2	500	41	67	40	70 - 100	60 - 100	50 - 70	50	40	124513*
MZ 3	600	51	78	50	150 - 200	150 - 250	100 - 150	60	50	124511*
MZ 5	800	71	100	70	300 - 350	250 - 300	150 - 250	75	60	124512*

For telecommunication cable a screen transfer type SVL is required.

\*Optional accessory: Screen straight-through conductor SVL/Accessories  
 Compression connectors/Connecting technology  
 UNIVERSAL CLEANER No.121/Accessories

# MZ...FG

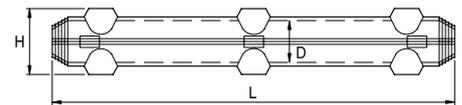
## Cast resin straight-through joint

drummable, with flexibel cast-resin

Universal application as repair joint for flexible rubber cable.



### Dimensions



### Characteristics

- Compact dimensions
- Splice site visible before casting
- High-quality transparent shockproof plastic moulds
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U_m$  0.6/1 (1.2) kV

### Scope of delivery

- Transparent plastic moulds
- Fill and air-release funnel
- Heat-shrink tubing for connectors
- Hydrolysis resistance
- PUR type FG cast-resin, containing the correct volume ready for mixing.
- Packed in practical and easy-to-use two chamber bags
- PVC insulation tape
- Protective gloves
- Assembly instructions

### Note

- Connectors not included

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

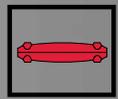
### Storage conditions/Shelf life

- Cast resin up to 24 months

For energy cables and conductors

Type	L mm	D mm	H mm	max. Cable-Ø mm	Polymeric cable		Art.-No.
							
					4x	5x	
					max. Nominal cross section per conductor mm <sup>2</sup>		
MZ 1 FG	400	33	57	30	10	6	124516
MZ 2 FG	500	41	67	40	25	16	124517
MZ 3 FG	600	51	78	50	50	25	124518
MZ 5 FG	800	71	100	70	120		124519

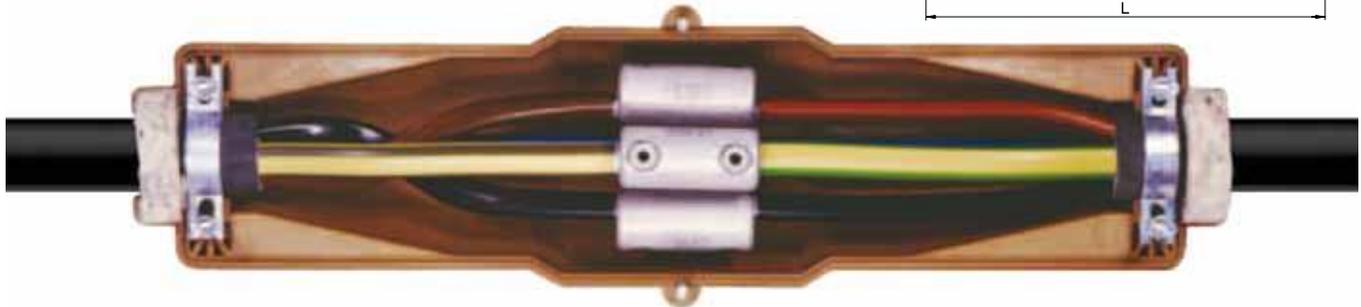
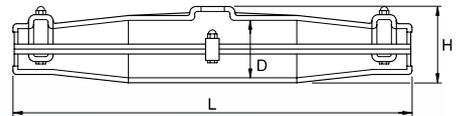
Straight-through joints for mining areas available to order.



# PV, PVM, PVS Cast resin straight-through joint

Universal applications to connect polymeric cables or conductors insulated with PVC, PE, VPE and EPR (e.g. N(A)YY, TT) and paper insulated cables. Suitable for aluminium and copper conductors.

### Dimensions



### Characteristics

- Compact dimensions
- Integrated strain relief
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength
- High-quality brown shockproof plastic moulds

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U (U_m)$  0.6/1 (1.2) kV

### Scope of delivery

- Sealants
- Hydrolysis-resistant PUR type EG cast-resin, containing the correct volume ready for mixing
- Plastic mould
- Protective gloves
- Strain relief
- Assembly instructions

### Note

- Connectors not included

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

### Storage conditions/Shelf life

- Cast resin up to 40 months

For energy cables and conductors

Type	L mm	D mm	H mm	max. Cable-Ø mm	Polymeric cable		Concentric conductor		Art.-No.
					3x	4x	3x	4x	
Nominal cross section per conductor mm <sup>2</sup>									
PV 3	427	100	120	40	50 - 95	35 - 70	70/70	50/50	<b>127705*</b>
PVM 5	642	116	135	48	95 - 150	95 - 150	150/150	120/120	<b>127706*</b>
PVS 5	642	136	160	48	95 - 150	95 - 150	150/150	120/120	<b>127708*</b>
PVM 6	850	137	185	58	185 - 300	185 - 240	240/120	185/185	<b>127707*</b>

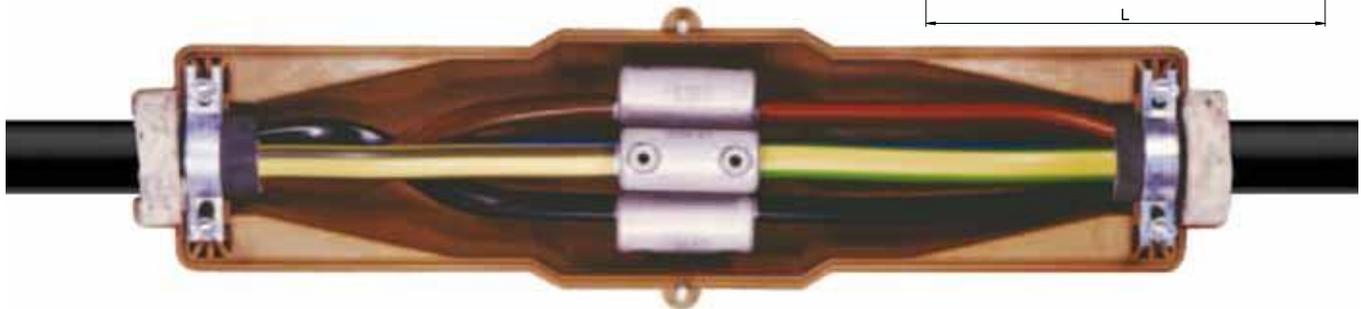
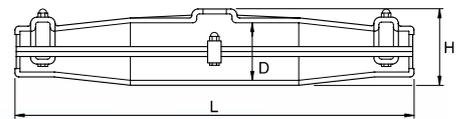
\*Optional accessory: Compression connectors/Connecting technology  
UNIVERSAL CLEANER No.121/Accessories

# PV, PVM

## Cast resin straight-through joint

Universal applications to connect polymeric cables or conductors insulated with PVC, PE, VPE and EPR (e.g. N(A)YY, TT) and paper insulated cables. Suitable for aluminium and copper conductors.

### Dimensions



### Characteristics

- Compact dimensions
- Integrated strain relief
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength
- High-quality brown shockproof plastic moulds

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U_m$  0.6/1 (1.2) kV

### Scope of delivery

- Sealants
- Plastic mould
- Strain relief
- Assembly instructions

### Note

- Connectors not included

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

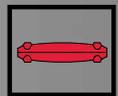
### Storage conditions/Shelf life

- Unlimited shelf life

For energy cables and conductors

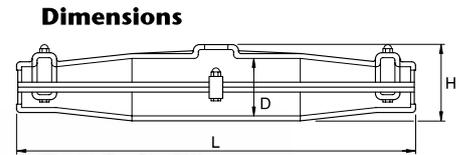
Type	L mm	H mm	D mm	Content ml	max. Cable-Ø mm	Polymeric cable		Concentric conductor		Art.-No.
						3x	4x	3x	4x	
						Nominal cross section per conductor mm <sup>2</sup>				
<b>Particularly for the Swiss market</b>										
<b>without resin</b>										
PV 3	427	120	100	2200	40	50 - 95	35 - 70	70/70	50/50	<b>127689*</b>
PV 4	552	145	125	4400	58			120/120	95/95	<b>127690*</b>
PVM 5	642	135	116	4500	48	95 - 150	95 - 150	150/150	120/120	<b>127688*</b>

\*Optional accessory: Cast-resin WG, WGD/Cast-resin technology



# PM Cast resin straight-through joint

Universally suitable to connect polymeric cables or conductors insulated with PVC, PE, VPE and EPR (e.g. N(A)YY, TT) and paper insulated cables. Suitable for aluminium and copper conductors.



### Characteristics

- Compact dimensions
- Integrated strain relief
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength
- High-quality brown shockproof plastic moulds

### Application

- Indoor
  - Outdoor
  - Underground
  - Water
  - Installation ducts
- Voltage level**
- $U_0/U (U_m)$  0.6/1 (1.2) kV

### Scope of delivery

- Sealants
- Plastic mould
- PVC insulation tape
- Earthing kit
- Assembly instructions

### Note

- Connectors not included

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

### Storage conditions/Shelf life

- Unlimited shelf life

For energy cables and conductors

Type	L mm	H mm	D mm	Content ml	max. Cable-Ø mm	Concentric conductor		Art.-No.
								
						3x	4x	
						Nominal cross section per conductor mm <sup>2</sup>		
<b>Particularly for the Swiss market</b>								
<b>without resin</b>								
PM 450	650	195	135	6400	65	150/150	150/150	<b>124881*</b>
PM 600	800	220	160	11000	75	240/240	240/240	<b>124882*</b>

\*Optional accessory: Cast-resin WG, WGD/Cast-resin technology

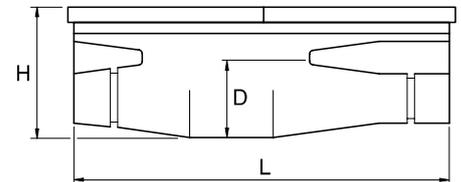
# KA, KAV

## Cast resin parallel branch joint

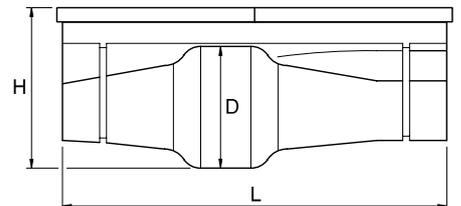
Universally suitable to branch-off cables and conductors insulated with PVC, PE and VPE (e.g. N(A)YY, GKN (Alse)). Suitable for aluminium and copper conductors. Especially suitable for cable branch-off clamps.



### Dimensions



KA 4 - KA 6  
KAV 1 - KAV 2



### Scope of delivery

- Sealants
- Hydrolysis-resistant PUR type EG cast-resin, containing the correct volume ready for mixing
- Transparent mould with locking bar
- Sealing tape
- Assembly instructions

### Note

- Connectors not included

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)
- According to KEMA and BS

### Characteristics

- Compact dimensions
- Splice site visible before casting
- High-quality transparent shockproof plastic moulds
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

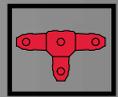
- $U_0/U_m$  0.6/1 (1.2) kV

For energy cables and conductors

Type	L mm	D mm	H mm	max. Cable-Ø mm		Polymeric cable		Armoured		Art.-No.
						4x		4x		
				Main cable	Branch cable	Main cable	Branch cable			
				max. Nominal cross section per conductor mm <sup>2</sup>						
<b>Particularly for the Swiss market</b>										
KA 4	300	118	135	55	33	150	25			<b>142200*</b>
KA 4.5	340	118	135	55	33	150	35	25	16	<b>190195*</b>
KA 6	400	132	150	55	45	150	95	70	35	<b>124865*</b>
KAV 1	230	58	78	30	20	16	6			<b>181014*</b>
KAV 2	270	58	78	33	20	25	10	6	4	<b>124861*</b>

Additional accessories required: Earthing kit and armoring continuity kit  
Available to order

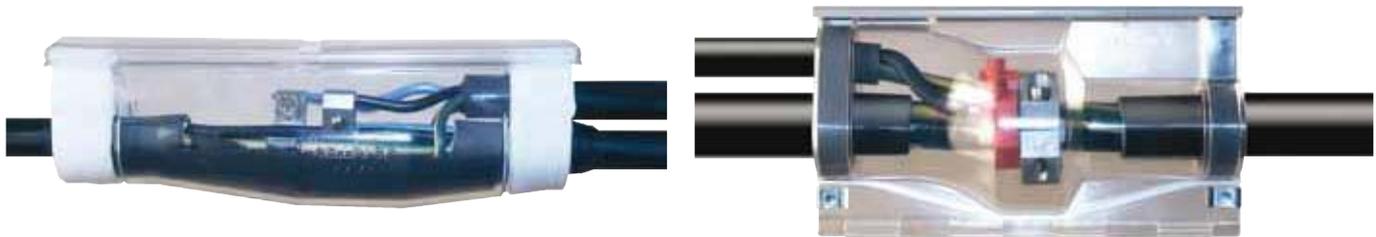
\*Optional accessory: Branch-off ring connector HE 1/70/150/Connecting technology  
Compression connectors/Connecting technology  
UNIVERSAL CLEANER No.121/Accessories



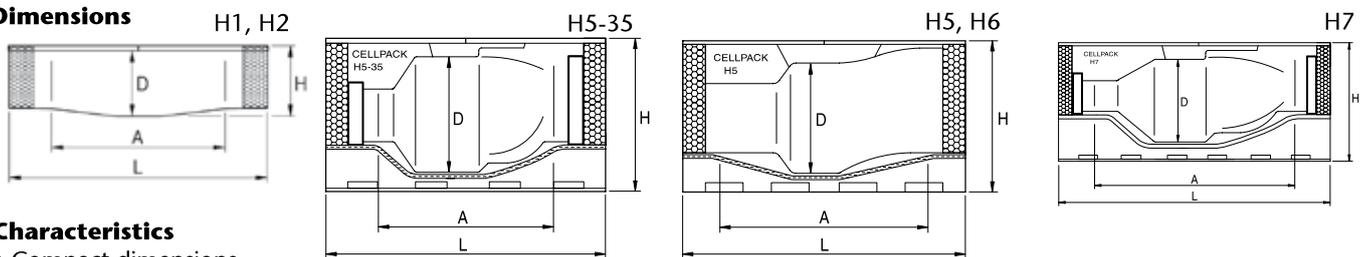
# H

## Cast resin parallel branch joint

Universally suitable for branching of cables and conductors with PVC, PE and XLPE (e.g. N(A)YY,TT) insulation. Suitable for assembly of individual branch connectors according to type (overhead line clamps for H1 and H2) or branch-off ring connectors (H5... H6).



### Dimensions



### Characteristics

- Compact dimensions
- Splice site visible before casting
- High-quality transparent shockproof plastic moulds
- Can be used as double-branch joint (H1 and H2)
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U_{m,}$  0.6/1 (1.2) kV

### Scope of delivery

- Sealants
- Hydrolysis-resistant PUR type EG cast-resin, containing the correct volume ready for mixing
- Transparent plastic moulds
- Centering elements (H5-35 and H7)
- Protective gloves
- Steel clamps (H5 and H6)
- Assembly instructions

### Note

- Connectors not included

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

For energy cables and conductors

Type	L mm	L1 mm	D mm	H mm	max. Cable-Ø mm		Polymeric cable		Concentric conductor		Art.-No.
					Main cable	Branch cable	4x		3x		
							Main cable	Branch cable	Main cable	Branch cable	
Nominal cross section per conductor mm <sup>2</sup>											
<b>without connectors</b>											
H 1	235	155	60	70	25	20	16	6			124789*
H 2	270	180	60	80	32	22	16 - 25	6 - 10			124790*
H 5	300	246	115	170	50	32	95 - 150	16 - 50			124787*
H 5-35	290	180	135	185	52	36	95 - 150	16 - 70			124815*
H 6	350	296	135	190	55	39	120 - 185	50 - 70	120/70 - 150/70	35/16 - 70/35	124788*
H 7	490	330	180	230	59	54	150 - 240	70 - 150	150/150 - 185/95	70/70 - 150/70	124786*

H5 parallel-branch joint can be used with compact branch-off clamps HE 1/70/150.

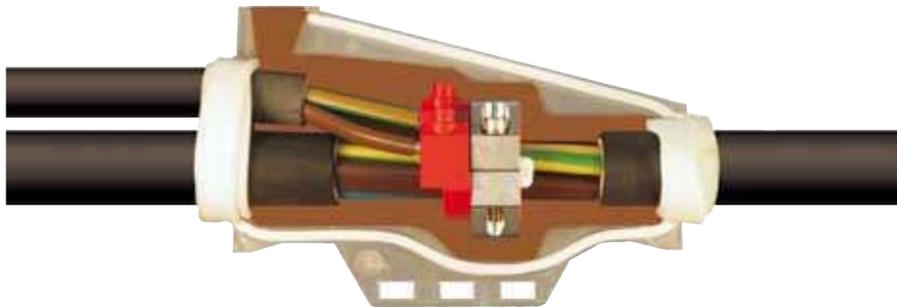
**\*Optional accessory: Branch-off ring connector HE 1/70/150/Connecting technology**  
**Split bolt connector Cu FK/Connecting technology**  
**Compression connectors/Connecting technology**  
**UNIVERSAL CLEANER No.121/ Accessories**

# H 5-SYS

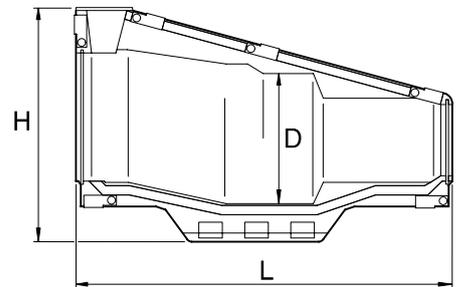
## Cast resin connection joint for domestic houses

with branch-off clamp

To branch-off PVC, PE and VPE insulated cables, (e.g. N(A)YY, GN-CLN...).



Dimensions



### Characteristics

- High-quality transparent shockproof plastic moulds
- Cast resin can be poured in with an angle up to 45° or laterally up to 45°
- Ready for immediate operation
- Compatible with a clamping system with contact geometry designed to facilitate connection of spur in visible area, ensuring safe handling
- Easy seal application
- Quick and easy assembly saves time and reduces costs
- Large filler aperture to facilitate casting
- Can be installed on a live cable
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- High electrical insulating values
- High mechanical strength

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U_m$  0.6/1 (1.2) kV

### Scope of delivery

- Hydrolysis resistance PUR type UWR cast-resin, containing the correct volume ready for mixing. Packed in practical and easy-to-use two chamber bags
- Hydrolysis resistance PUR type UWR cast-resin, containing the correct volume ready for mixing. In tins
- Transparent plastic moulds
- Branch-off ring connector HE 1/70/150
- Sealing tapes
- Protective gloves
- Assembly instructions

### Note

- Branch-off ring connector with screw connection included

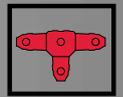
### Tests

- Joint: DIN VDE 0278-623
- Branch-off clamp: DIN VDE 0220 part 3

For energy cables and conductors

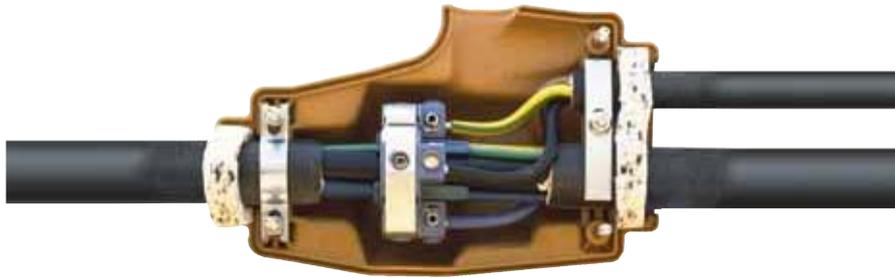
Type	L mm	D mm	H mm	max. Cable-Ø mm		Polymeric cable			Art.-No.	
				Main cable	Branch cable	Main cable		Branch cable		
						SE	SM	4x		
				Nominal cross section per conductor mm <sup>2</sup>						
H 5-SYS	70-150	270	110	180	46	36	95 - 150	70 - 120	16 - 50	195816*

\*Optional accessory: UNIVERSAL CLEANER No.121/ Accessories

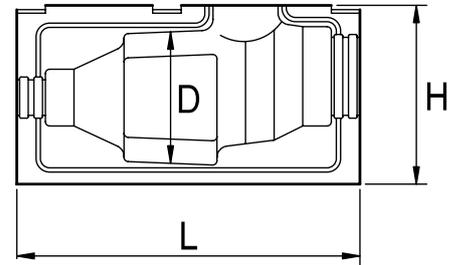


# P Cast resin parallel branch joint

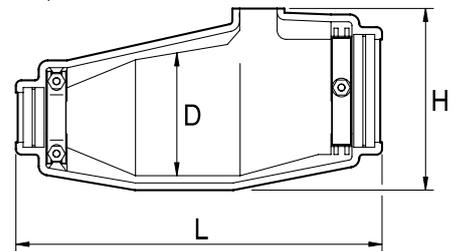
Universally suitable to connect polymeric cables insulated with PVC, PE, VPE and paper (e.g. N(A)YY, N(A)KBA, GN-CLN, TT) with or without concentric conductor. Suitable for aluminium and copper conductors.



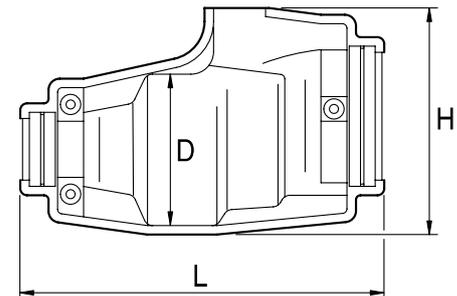
### Dimensions



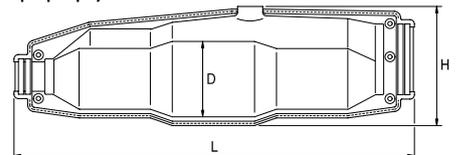
P 2, P 2KP



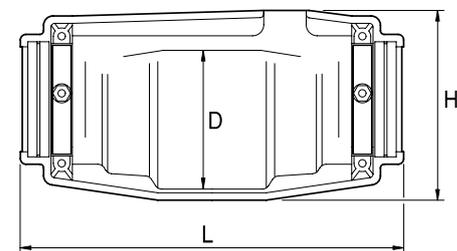
P 3, PC 5, PC 7



P 4 - P 7



PB 4, PBE 4, PE 7



PD 5

### Characteristics

- Compact design
- Integrated strain relief
- Quick, safe and easy assembly
- Ready for immediate operation
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength
- High-quality brown shockproof plastic moulds

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Scope of delivery

- Sealant
- Hydrolysis resistance
- PUR type EG cast-resin, containing the correct volume ready for mixing. Packed in practical and easy-to-use two chamber bags
- Plastic mould with integrated strain relief
- 5 insulated branch-off ring connectors (P 2KP only)
- Hexagon head screws and nuts
- Assembly instructions

### Voltage level

- $U_0/U_m$  (U<sub>m</sub>) 0.6/1 (1.2) kV

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

Type	L mm	D mm	H mm	Cable-Ø mm		Mass-impregnated paper cables		Art.-No.
								
				Main cable	Branch cable	3x	4x	
						Main cable		
P 2	240	90	127	13 - 25	13 - 25			127697*
P 2KP*	240	90	127	13 - 25	13 - 25			127750*
P 4	302	113	200	28 - 45	21 - 34			127698*
P 5	325	135	200	37 - 54	20 - 36			127733*
P 6	432	135	210	44 - 59	28 - 45			127695*
P 7	442	150	245	40 - 59	40 - 59			127696*
PD 5	427	130	212	37 - 54	20 - 36			127701*
P 3	342	90	160	15 - 35	12 - 30			127703*
PC 5	392	130	210	35 - 54	20 - 36			127699*
PC 7	472	150	225	40 - 59	40 - 50			127700*
PB 4	532	210	200	30 - 50	27 - 44	95 - 150	95 - 150	127763*
PBE 4	730	150	230	30 - 50	27 - 44	95 - 150	95 - 150	127704*
PE 7	692	150	210	40 - 59	40 - 59			127709*

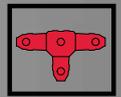
Type	Polymeric cable				Concentric conductor				Art.-No.
									
	4x		5x		3x		4x		
	Main cable	Branch cable	Main cable	Branch cable	Main cable	Branch cable	Main cable	Branch cable	
Nominal cross section per conductor mm <sup>2</sup>									
P 2	2.5 - 16	2.5 - 16							127697*
P 2KP*			1.5 - 10	1.5 - 10					127750*
P 4	50 - 95	16 - 35							127698*
P 5	95 - 150	16 - 50							127733*
P 6	150 - 185	50 - 95							127695*
P 7	120 - 185	120 - 150							127696*
PD 5	95 - 150	16 - 50							127701*
P 3	10 - 25	4 - 16			10/10 - 16/16	4/4 - 16/16	10/10 - 16/16	4/4 - 16/16	127703*
PC 5					95/95 - 150/70	16/16 - 50/50	95/50 - 150/70	16/16 - 50/25	127699*
PC 7					150/150 - 185/95	50/50 - 95/95	150/70 - 185/95	50/25 - 95/50	127700*
PB 4		50 - 95				50/50 - 95/95		50/25 - 95/50	127763*
PBE 4		50 - 95				50/50 - 95/95		50/25 - 95/50	127704*
PE 7	150 - 185	120 - 185							127709*

\* with isolated branch-off clamp

For joint sizes P4 and exceeding, branch-off ring connectors can be used (e.g. beginning with P 5: branch-off ring connector HE 1/70/150)

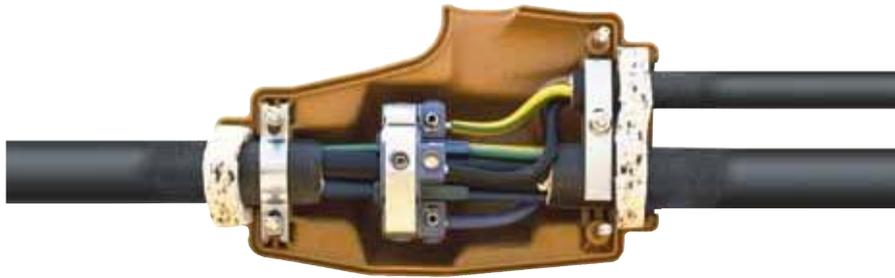
\*Optional accessory: UNIVERSAL CLEANER No.121/ Accessories

\*Optional accessory: Branch-off ring connector HE 1/70/150/Connecting technology  
UNIVERSAL CLEANER No.121/ Accessories

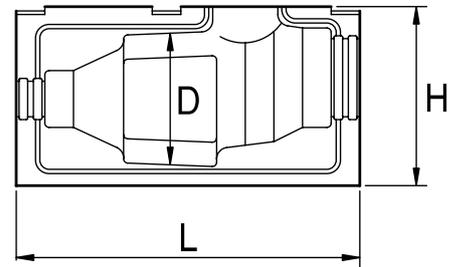


# P Cast resin parallel branch joint

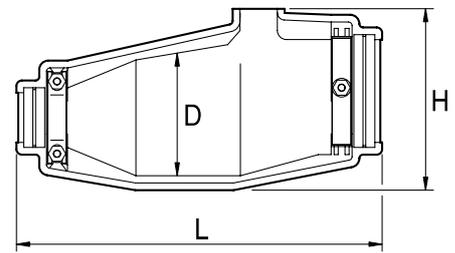
Universally suitable to connect polymeric cables insulated with PVC, PE, VPE and paper (e.g. N(A)YY, N(A)KBA, GN-CLN, TT) with or without concentric conductor. Suitable for aluminium and copper conductors.



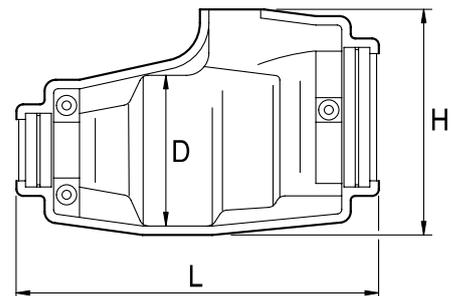
### Dimensions



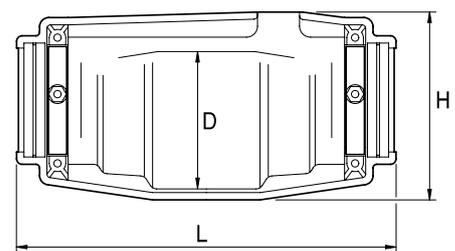
P 2, P 2KP



P 3, PC 5, PC 7



P 4 - P 7



PD 5

### Characteristics

- Compact design
- Integrated strain relief
- Quick, safe and easy assembly
- Ready for immediate operation
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength
- High-quality brown shockproof plastic moulds

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U (U_m)$  0.6/1 (1.2) kV

### Scope of delivery

- Sealant
- Hydrolysis resistance  
PUR type EG cast-resin, containing the correct volume ready for mixing. Packed in practical and easy-to-use two chamber bags
- Plastic mould with integrated strain relief
- 5 insulated branch-off ring connectors (P 2KP only)
- Hexagon head screws and nuts
- Assembly instructions

### Note

- Connectors not included

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

Type	L mm	D mm	H mm	Content ml	Cable-Ø mm		Polymeric cable				Art.-No.		
													
					4x		5x		Main cable	Branch cable		Main cable	Branch cable
					Nominal cross section per conductor mm <sup>2</sup>								
<b>Particularly for the Swiss market</b>													
<b>without resin</b>													
P 2	240	90	127	900	13 - 25	13 - 25	2.5 - 16	2.5 - 16	1.5 - 10	1.5 - 10	<b>127680*</b>		
P 3	342	90	160	1500	15 - 35	12 - 30	10 - 25	4 - 16			<b>127681*</b>		
P 4	302	113	200	2200	28 - 45	21 - 34	50 - 95	16 - 35			<b>127682*</b>		
PC 7	472	150	225	5000	40 - 59	40 - 50					<b>127686*</b>		
PD 5	427	130	212	4400	37 - 54	20 - 36	95 - 150	16 - 50			<b>127687*</b>		

Type	Concentric conductor				Art.-No.
					
	3x		4x		
	Main cable	Branch cable	Main cable	Branch cable	
Nominal cross section per conductor mm <sup>2</sup>					
<b>Particularly for the Swiss market</b>					
P 2					<b>127680*</b>
P 3					<b>127681*</b>
P 4					<b>127682*</b>
PD 5					<b>127687*</b>
PC 7	150/150 - 185/95	50/50 - 95/95	150/70 - 185/95	50/25 - 95/50	<b>127686*</b>

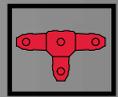
For joint sizes P4 and exceeding, branch-off ring connectors can be used (e.g. beginning with P 5: branch-off ring connector HE 1/70/150)

\* with isolated branch-off clamp

°Optional accessory: Cast-resin WG, WGD/Cast-resin technology

°Optional accessory: Branch-off ring connector HE 1/70/150/Connecting technology  
Cast-resin WG, WGD/Cast-resin technology

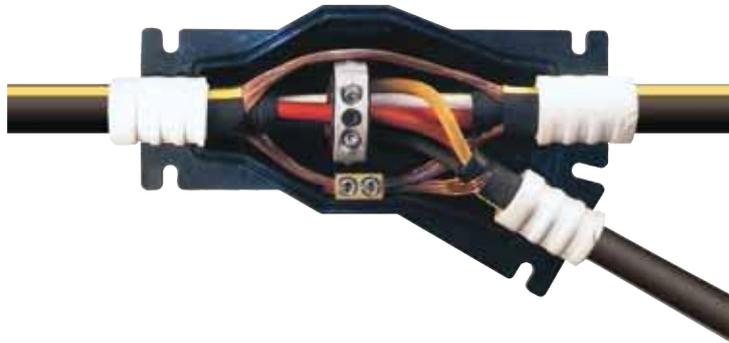
Cast-resin technology



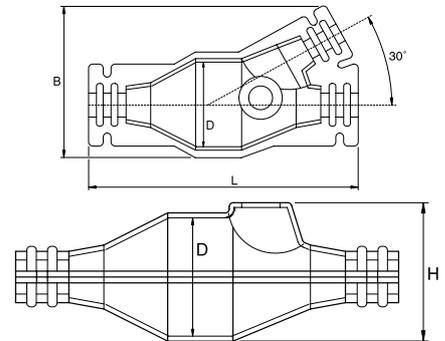
# PY

## Cast resin parallel branch joint

Universally suitable to connect polymeric cables or conductors insulated with PVC, PE, VPE and EPR, (e.g. GKN GN-CLN) with or without concentric conductor. Suitable for aluminium and copper conductors.



### Dimensions



### Characteristics

- Compact dimensions
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength
- High-quality black shockproof plastic moulds

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U_m$  0.6/1 (1.2) kV

### Scope of delivery

- Plastic mould
- Sealant
- Strain relief
- Hexagon head screws
- Hexagonal nuts
- Earthing kit
- Assembly instructions

### Note

- Connectors not included

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

Cast-resin technology

For energy cables and conductors

Type	L mm	B mm	D mm	H mm	Content ml	max. Cable-Ø mm		Polymeric cable		Concentric conductor		Art.-No.
						Main cable	Branch cable	4x		3x		
								Main cable	Branch cable	Main cable	Branch cable	
						max. Nominal cross section per conductor mm <sup>2</sup>						
<b>Particularly for the Swiss market</b>												
<b>without resin</b>												
PY 4	400	260	150	200	3600	55	45	95	50	95/50	50/25	<b>124883*</b>
PY 7	525	315	180	230	7000	65	65	240	150	240/120	150/70	<b>124884*</b>

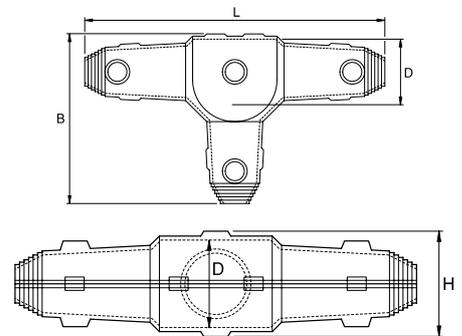
\*Optional accessory: Funnel set for PY 4/Accessories  
 Funnel set for PY 7/Accessories  
 Cast-resin WG, WGD/Cast-resin technology

# T Cast resin parallel branch joint

Universally suitable to connect cables or conductors insulated with PVC, PE, VPE and EPR (e.g. N(A)YY, NYM, TT) with or without concentric conductor. Suitable for aluminium and copper conductors.



### Dimensions



### Characteristics

- Compact dimensions
- Splice site visible before casting
- High-quality transparent shockproof plastic moulds
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U_m$  0.6/1 (1.2) kV

### Scope of delivery

- Hydrolysis resistance
- PUR type EG cast-resin, containing the correct volume ready for mixing.
- Packed in practical and easy-to-use two chamber bags
- Transparent plastic moulds
- Fill and air-release funnel
- PVC insulation tape
- Protective gloves
- Assembly instructions

### Note

- Branch-off ring connector not included

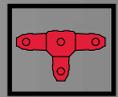
### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

For energy cables and conductors

Type	L mm	B mm	D mm	H mm	max. Cable-Ø mm	Polymeric cable		Art.-No.
								
						3x		
						Main cable	Branch cable	
						max. Nominal cross section per conductor mm <sup>2</sup>		
<b>Particularly for the european market</b>								
T 1	240	138	50	60	22	10	10	131149*
T 2	267	154	60	70	30	25	25	133024*
T 2.5	310	183	75	85	37	50	50	131855*
T 3	354	212	90	100	42	70	70	131151*
T 4	432	262	110	125	52	120	120	131778*
T 5	550	290	130	155	62	185	150	131854*
<b>Particularly for the export market</b>								
T 1	240	138	50	60	22	10	10	124616*
T 2	267	154	60	70	30	25	25	124618*
T 2.5	310	183	75	85	37	50	50	124619*
T 3	354	212	90	100	42	70	70	124620*
T 4	432	262	110	125	52	120	120	124621*
T 5	550	290	130	155	62	185	150	124622*

\*Optional accessory: Compression connectors/Connecting technology  
UNIVERSAL CLEANER No.121/Accessories



For energy cables and conductors

Type	Polymeric cable				Concentric conductor				Art.-No.
	4x		5x		3x		4x		
	Main cable	Branch cable	Main cable	Branch cable	Main cable	Branch cable	Main cable	Branch cable	
	max. Nominal cross section per conductor mm <sup>2</sup>								
<b>Particularly for the european market</b>									
T 1	6	6	4	4	6/6	6/6			<b>131149*</b>
T 2	16	10	10	10	16/16	10/10	16/16	16/16	<b>133024*</b>
T 2.5	35	16	16	10	35/35	16/16	35/16	25/16	<b>131855*</b>
T 3	50	25	25	16	50/50	25/25	50/25	35/16	<b>131151*</b>
T 4	95	50	50		95/95	50/50	95/50	70/35	<b>131778*</b>
T 5	185	150	120		185/185	70/70	150/70	95/50	<b>131854*</b>
<b>Particularly for the export market</b>									
T 1	6	6	4	4	6/6	6/6			<b>124616*</b>
T 2	16	10	10	10	16/16	10/10	16/16	16/16	<b>124618*</b>
T 2.5	35	16	16	10	35/35	16/16	35/16	25/16	<b>124619*</b>
T 3	50	25	25	16	50/50	25/25	50/25	35/16	<b>124620*</b>
T 4	95	50			95/95	50/50	95/50	70/35	<b>124621*</b>
T 5	185	150			185/185	70/70	150/70	95/50	<b>124622*</b>

Cast-resin technology

\*Optional accessory: Compression connectors/Connecting technology  
UNIVERSAL CLEANER No.121/Accessories

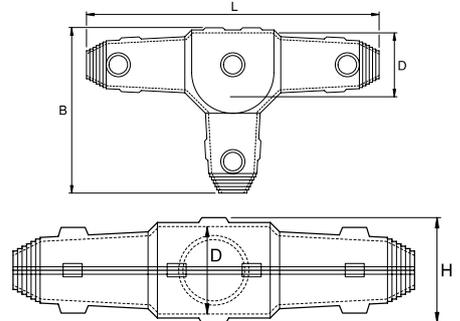
# T...V

## Cast resin parallel branch joint with branch-off clamp

Universally suitable to connect polymeric cables or conductors insulated with PVC, PE, VPE and EPR (e.g. N(A)YY, NYM, TT) with or without concentric conductor. Suitable for copper conductors.



### Dimensions



### Characteristics

- Compact dimensions
- Splice site visible before casting
- High-quality transparent shockproof plastic moulds
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U (U_m)$  0.6/1 (1.2) kV

### Scope of delivery

- Hydrolysis resistance  
PUR type EG cast-resin, containing the correct volume ready for mixing.  
Packed in practical and easy-to-use two chamber bags
- Transparent plastic moulds
- Branch-off clamp
- PVC insulation tape
- Protective gloves
- Assembly instructions

### Note

- Branch-off ring connector included

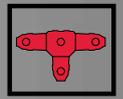
### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

For energy cables and conductors

Type	L mm	B mm	D mm	H mm	max. Cable-Ø mm	Polymeric cable				Art.-No.
						4x		5x		
						Main cable	Branch cable	Main cable	Branch cable	
						Nominal cross section per conductor mm <sup>2</sup>				
T 1 V	240	138	50	60	22	2.5 - 6	2.5 - 6	2.5 - 6	2.5 - 6	155202*
T 2 V	267	154	60	70	30	4 - 16	4 - 16	4 - 16	4 - 16	155204*
T 2.5 V	310	183	75	85	37	6 - 25	6 - 16	6 - 25	6 - 16	155207*

\*Optional accessory: UNIVERSAL CLEANER No.121/ Accessories

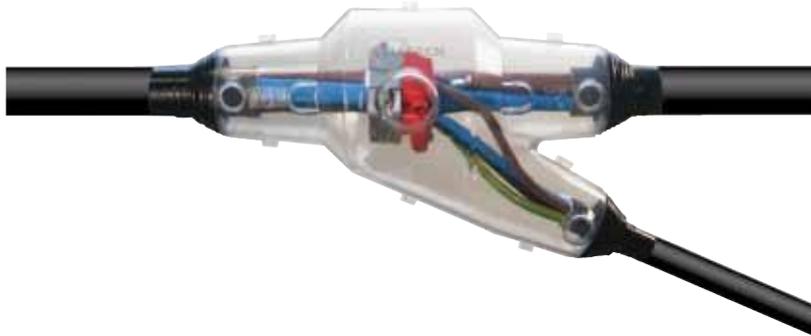


# Y

## Cast resin parallel branch joint

to branch off conductors and cables

Universally suitable to connect cables or conductors insulated with PVC, PE, VPE and EPR (e.g. N(A)YY, NYM, TT) with or without concentric conductor. Suitable for aluminium and copper conductors.



### Characteristics

- Compact dimensions
- Splice site visible before casting
- High-quality transparent shockproof plastic moulds
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength

### Scope of delivery

- Hydrolysis resistance
- PUR type EG cast-resin, containing the correct volume ready for mixing.
- Packed in practical and easy-to-use two chamber bags
- Transparent plastic moulds
- Closing stops
- Fill and air-release funnel
- PVC insulation tape
- Protective gloves
- Assembly instructions

### Note

- Branch-off ring connector not included

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

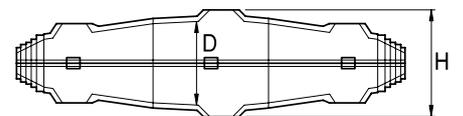
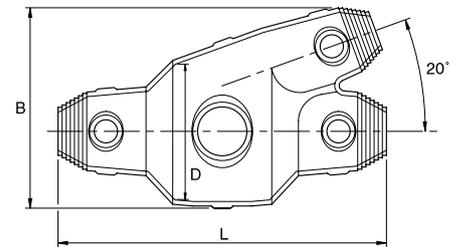
### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

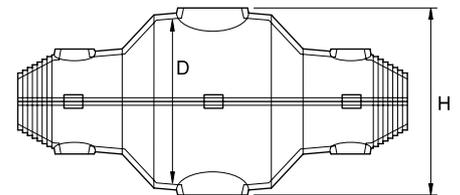
### Voltage level

- $U_0/U_m$  (U<sub>m</sub>) 0.6/1 (1.2) kV

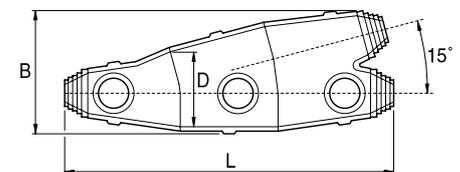
### Dimensions



Y00 - Y2, Y3.5, Y5, Y6



Y3, Y4, Y4.5

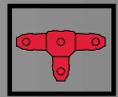


For energy cables and conductors

Type	L mm	B mm	D mm	H mm	max. Cable-Ø mm		Polymeric cable			Concentric conductor		Art.-No.	
													
					3x	4x		5x	3x				
					Main cable	Branch cable	Branch cable	Main cable	Branch cable	Main cable	Branch cable		
max. Nominal cross section per conductor mm <sup>2</sup>													
<b>Particularly for the european market</b>													
Y 00	150	75	38	50	19	19	2.5			2.5			<b>133841*</b>
Y 0	185	80	45	55	17	17	4	4	4	4	4/4	4/4	<b>152932*</b>
Y 1	240	110	60	70	22	22	6	10	10	6	10/10	10/10	<b>124730*</b>
Y 2	285	120	65	75	37	33	16	16	16	16	16/16	10/10	<b>147533*</b>
Y 3	240	145	100	110	42	37	25	50	35	25	25/25	16/16	<b>131123*</b>
Y 3.5	300	150	110	120	54	38	25	50	35	35	35/35	25/25	<b>131118*</b>
Y 4	285	170	110	120	53	37	35	95	50	50	70/70	25/25	<b>124763*</b>
Y 4.5	335	193	120	130	56	42		150	70		120/120	95/95	<b>131119*</b>
Y 5	382	220	140	150	62	52		240	95		150/150	95/95	<b>157645*</b>
Y 6	570	275	180	190	90	80		300	185		240/120	185/95	<b>131126*</b>
<b>Particularly for the export market</b>													
Y 00	150	75	38	50	19	19	2.5			2.5			<b>133122*</b>
Y 0	185	80	45	55	17	17	4	4	4	4	4/4	4/4	<b>124747*</b>
Y 1	240	110	60	70	22	22	6	10	4	6	10/10	10/10	<b>124744*</b>
Y 2	285	120	65	75	37	33	16	16	16	16	16/16	10/10	<b>124745*</b>
Y 3	240	145	100	110	42	37	25	50	35	25	25/25	16/16	<b>124746*</b>
Y 3.5	300	150	110	120	54	38	25	50	35	35	35/35	25/25	<b>124749*</b>
Y 4	285	170	110	120	53	37	35	95	50	50	70/70	25/25	<b>124748*</b>
Y 4.5	335	193	120	130	56	42		150	70		120/120	95/95	<b>124750*</b>
Y 5	382	220	140	150	62	52		240	95		150/150	95/95	<b>124751*</b>
Y 6	570	275	180	190	90	80		300	185		240/120	185/95	<b>124752*</b>

Other cross sections on request

\*Optional accessory: Branch-off ring connector HE 1/70/150/Connecting technology  
 Split bolt connector Cu Fk/Connecting technology  
 UNIVERSAL CLEANER No.121/Accessories



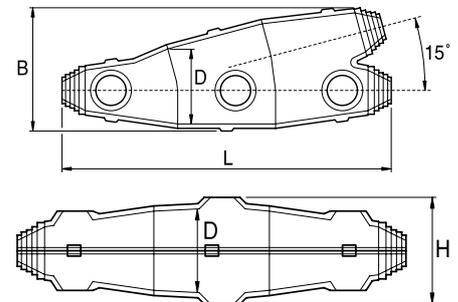
# Y...V AK

## Cast resin parallel branch joint with screw connector clamps

Universally suitable to connect cables or conductors insulated with PVC, PE, VPE and EPR (e.g. N(A)YY, NYM, TT) with or without concentric conductor. Suitable for copper-and aluminium conductors.



### Dimensions



### Characteristics

- Splice site visible before casting
- High-quality transparent shockproof plastic moulds
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U_m$  0.6/1 (1.2) kV

### Scope of delivery

- Hydrolysis resistance
- PUR type EG cast-resin, containing the correct volume ready for mixing. Packed in practical and easy-to-use two chamber bags
- Transparent plastic moulds
- Closing stops
- Fill and air-release funnel
- PVC insulation tape
- Protective gloves
- Screw connector clamps
- Assembly instructions

### Note

- Screw connector clamps included

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

For energy cables and conductors

Type	L mm	B mm	D mm	H mm	max. Cable-Ø mm	Polymeric cable				Art.-No.
						4x		5x		
						Main cable	Branch cable	Main cable	Branch cable	
						Nominal cross section per conductor mm <sup>2</sup>				
Y 0 V AK	185	80	45	55	17	4	4	4	4	<b>299001</b>
Y 1 V AK	240	110	60	70	22	2.5 - 6	2.5 - 6	2.5 - 6	2.5 - 6	<b>299002</b>
Y 2 V AK	285	120	65	75	33	4 - 16	4 - 16	4 - 16	4 - 16	<b>299003</b>

Other cross sections on request

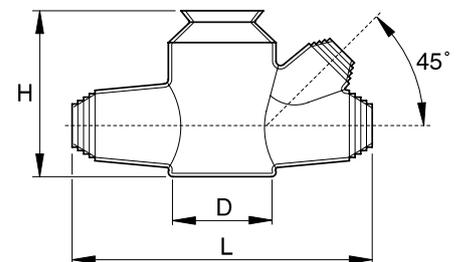
# YCP

## Cast resin parallel branch joint

Suitable to branch-off single-core cables or conductors, e.g. conductors for cathodic corrosion protection from chemical and electrochemical reactions below surface and water. Pipes, warehouse containers, electric supply lines and other metal constructions are effectively protected against passive corrosion (plastic casings, mastic-glassfibre casings).



### Dimensions



### Characteristics

- Compact dimensions
- Splice site visible before casting
- High-quality transparent shockproof plastic moulds
- Ready for immediate operation
- Quick and easy assembly saves time and reduces costs
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength

### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U (U_m)$  0.6/1 (1.2) kV

### Scope of delivery

- Hydrolysis resistance
- PUR type EG cast-resin, containing the correct volume ready for mixing.
- Packed in practical and easy-to-use two chamber bags
- Transparent plastic moulds
- Closing stops
- PVC insulation tape
- Protective gloves
- Assembly instructions

### Note

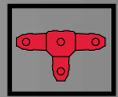
- Branch-off ring connector not included

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

Type	L mm	B mm	D mm	H mm	max. Cable-Ø mm		Polymeric cable		Art.-No.		
					Main cable	Branch cable	1x				
							Main cable	Branch cable		Nominal cross section per conductor mm <sup>2</sup>	
YCP	135	48.0	44	75	23	20	10 - 50	4 - 50	124683*		

\*Optional accessory: Spilt bolt connector Cu FK/Connecting technology  
UNIVERSAL CLEANER No.121/ Accessories



# D1 Cast resin parallel-branch / straight-through joint

The Parallel-branch joint (dual connection joint) D1 is mainly used for single-core special cables for lighting of runways on airports.



### Characteristics

- Compact dimensions
- Splice site visible before casting
- High-quality transparent shockproof plastic moulds
- Quick, safe and easy assembly
- Ready for immediate operation
- Large filler aperture to facilitate casting
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Longitudinally and transversely watertight
- High electrical insulating values
- High mechanical strength

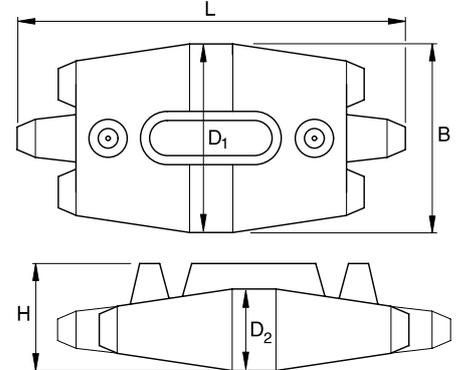
### Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts

### Voltage level

- $U_0/U (U_m)$  0.6/1 (1.2) kV - 5 kV DC

### Dimensions



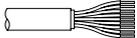
### Scope of delivery

- Plastic mould
- Cap
- Hydrolysis-resistant PUR type EG cast-resin, containing the correct volume ready for mixing
- PVC insulation tape
- Assembly instructions

### Tests

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278 part 623)

Cast-resin technology

Type	L mm	B mm	D1 mm	D2 mm	H mm	max. Cable-Ø mm	Polymeric cable		Control and signal cable mm <sup>2</sup>				Art.-No.
													
							1x	4x	0.6	0.8	0.75	1.5	
Main cable		max. Nominal cross section per conductor mm <sup>2</sup>		Number of twisted pairs		Number of conductors							
D 1	185	90	84	30	48	16	6	2.5	6 - 10	6 - 6	6	4	124685*

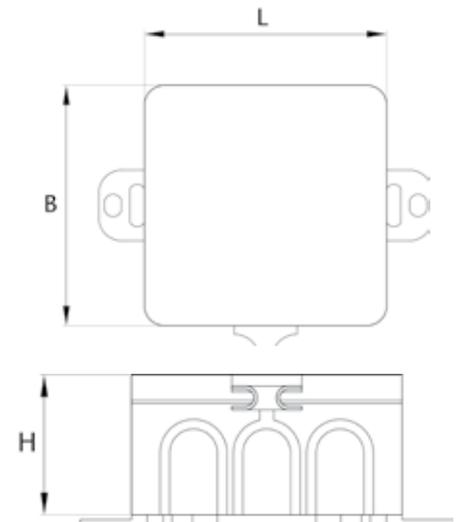
\*Optional accessory: Compression connectors/Connecting technology  
UNIVERSAL CLEANER No.121/Accessories

## Universal Box KG Branch-off and connection box with clamps

The new connection and branching box, combines the advantages of a traditional box with the well-known professional cast-resin technology. Complex connections in a very small volume can be done with this universal box. The system guarantees an absolute waterproof solution, excluding all condensation risks.



### Dimensions



### Characteristics

- Branch box with diaphragm grommets
- For conductor cross-sections of 0.5-2.5mm<sup>2</sup>
- Salt water-resistant
- Stabilized against UV rays
- Not harmful to the environment
- High flexibility due to removable transparent cast resin
- Withstands long-term exposure to moisture

### Application

- Outdoor
  - Indoor areas with high humidity levels
- Voltage level**
- 230/440V

### Scope of delivery

- Type KG cast resin, 286 ml
- Junction box with diaphragm
- 5 Spring clamp connectors 5pol. 0.5-2.5mm<sup>2</sup>
- Cleaning cloth
- Emery cloth
- Funnel for easy vertical filling
- Assembly instructions

### Note

- Type KG 286 cast resin refills may be ordered separately

### Tests

- Corresponds to the protection class IP68

### Test standard

- EN 50393, (VDE 0278 Part 393), Test methods and test requests for distributor cables-kits with nominal voltage 0,6/1,0 (1,2) kV

Type	L mm	B mm	H mm	max. Cable-Ø mm	Polymeric cable		Art.-No.
					Nominal cross section mm <sup>2</sup>		
Universal Box KG	286ml	85	85	45	15	0.5 - 2.5	<b>221122</b>



## EG Two-component PUR cast resin

Cast-resin type EG is suitable for the following types of cables: Low-voltage plastic-insulated and paper-insulated cables rated up to 1kV. Telecommunications and signal plastic-insulated and paper-insulated cables. Suitable for mechanical protection and water-sealing on medium voltage cables.



### Characteristics

- Two-component PUR cast resin
- In practical and easy-to-use two-chamber bags
- Favourable flow properties
- High hydrolytic resistance
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Halogen-free
- Not harmful to the environment
- Flexibility ensures mechanical stress absorption.
- No fracturing under electrical stress
- Excellent adherence to all cable materials
- No fracturing under mechanical stress
- Low hardening temperature

### Shelf life

- Shelf life: 40 months at ambient temperatures between 15°C and 35°C

### Tests

- Governmental institute for material testing Darmstadt: DIN VDE 0291
- KEMA, Netherland: report on the MAK value, which lies well below the maximum value of 0.001 ppm, allowed by law

Type	Content ml	Art.-No.
<b>Particularly for the european market</b>		
EG	80	134999
	143	124909
	286	124986
	370	124962
	464	124989
	730	124990
	1000	124992
	1150	124901
	1500	124991
2000	132206	
<b>Particularly for the export market</b>		
EG	80	124921
	143	124923
	286	124925
	464	124927
	730	124929
	1000	124931
	1150	124932
	1500	124933
	2000	124934

Other drum sizes/ tins available to order.

Technical data	Value	Test
Flash point of cast-resin component (open cup)	> 200 °C	
Flash point of reactant (open cup)	> 200 °C	DIN 16945
Processing time (potlife) of 300ml mixture at 5°C 23°C 35°C	40 minutes 23 minutes 15 minutes	DIN VDE 0291-2
Max. Reaction temperature	80 °C	DIN VDE 0291-2
Total volume shrinkage during curing	4.0 %	DIN 16945
Density	1.10 g/cm <sup>3</sup>	DIN 53 479
Impact strength	> 10 kJ/m <sup>2</sup>	ISO 179
Hardness	55 Shore D	DIN 53 505
Combustibility	Category 2C	DIN VDE 0304
Water absorption in warm water (42d at 50°C)		DIN 53495
Electrolytic corrosion	A 1	DIN VDE 0303-6
1 minute test voltage at 23°C 80°C	> 20 kV > 20 kV	DIN VDE 0304-43
Dielectric dissipation factor at 23°C and 1 kHz 23°C und 50 Hz	0.05 0.08	DIN VDE 0304-4
Dielectric constant at 23°C and 1 kHz 23°C und 50 Hz	5.3 5.1	DIN VDE 0304-4
Tracking resistance	KA 3c	DIN VDE 0304-4
Operating temperature range	-40 °C up to 105 °C	



## FG Two-component PUR cast resin flexible

Cast-resin type FG is suitable for repairing damaged cable-sheaths and for joints on flexible cables. The cast-resins forming an excellent non-abrasive.



### Characteristics

- Two-component PUR cast resin
- In practical and easy-to-use two-chamber bags
- Favourable flow properties
- High hydrolytic resistance
- Halogen-free
- Not harmful to the environment
- Resin remains highly flexible after curing
- Flexibility ensures mechanical stress absorption.
- No fracturing under electrical stress
- Excellent adherence to all cable materials
- No fracturing under mechanical stress
- Low hardening temperature

### Shelf life

- Shelf life: 24 months at ambient temperatures between 15°C and 35°C

### Tests

- According to DIN VDE 0291 part 2

Type	Content ml	Art.-No.
FG	143	<b>135534</b>
	286	<b>125153</b>
	464	<b>125154</b>
	730	<b>131233</b>
	1000	<b>125155</b>

Other drum sizes/ tins available to order.

Technical data	Value
Flash point of cast-resin component (open cup)	> 200 °C
Flash point of reactant (open cup)	> 200 °C
Processing time (potlife) of 300ml mixture at 5°C 23°C 35°C	21 minutes 17 minutes 12 minutes
Max. Reaction temperature	60 °C
Total volume shrinkage during curing	6.0 %
Density	1.10 g/cm <sup>3</sup>
Hardness	50 Shore A
Elongation at break	250 %
Water absorption in warm water (42d at 50°C)	600 mg
1 minute test voltage at 23°C 80°C	> 20 kV > 10 kV
Dielectric dissipation factor at 23°C and 50 Hz 50°C und 50 Hz	0.20 1.40
Dielectric constant at 23°C and 50 Hz 50°C und 50 Hz	7.4 8.9
Tracking resistance	KA 3c



# UG

## Two-component PUR cast resin

flame-retardant

Cast-resin UG fulfils higher fire protection demands and was developed for use in mining. It fulfils the requirements for cast-resins according to DIN VDE 029, part 2 on filling cable joints or parts of it for:  
 Power cables with a nominal voltage up to 1kV – GNH,  
 Power cables with a nominal voltage up to 10kV – GMH  
 Telecommunications and signal cables – GFH.



### Characteristics

- Two-component PUR cast resin
- In practical and easy-to-use two-chamber bags
- Favourable flow properties
- Fast-curing
- High hydrolytic resistance
- Resistant to chemical agents
- Resistant to alkaline earth elements
- Stabilized against UV rays
- Halogen-free
- Flame-retardant
- Not harmful to the environment
- Low smoke emission in case of fire
- No fracturing under electrical stress
- Excellent adherence to all cable materials
- No fracturing under mechanical stress

### Tests

- Flame-retardation in accordance with DIN VDE 0472 part 804, test type C
- Properties of insulation subjected to flames in accordance with DIN VDE 0472, part 814
- Corrosiveness of combustion gases in accordance with DIN VDE 0472, part 813

### Shelf life

- Shelf life: 24 months at ambient temperatures between 15°C and 35°C

Type	Content ml	Art.-No.
UG	80	<b>125286</b>
	143	<b>125287</b>
	286	<b>125288</b>
	464	<b>125289</b>
	730	<b>125290</b>
	1000	<b>125291</b>
	1850	<b>131331</b>
	2000	<b>135533</b>

Other drum sizes/ tins available to order.

Technical data	Value
Flash point of cast-resin component (open cup)	> 200 °C
Flash point of reactant (open cup)	> 200 °C
Processing time (potlife) of 300ml mixture at 5°C 23°C 35°C	23 minutes 16 minutes 12 minutes
Max. Reaction temperature	78 °C
Total volume shrinkage during curing	2.5 %
Density	1.40 g/cm <sup>3</sup>
Impact strength	> 20 kJ/m <sup>2</sup>
Hardness	80 Shore D
Combustibility	Category 2A
Water absorption in warm water (42d at 50°C)	250 mg
Water absorption in cold water (24h at 23°C)	18 mg
Electrolytic corrosion	A 1.2
1 minute test voltage at 23°C 80°C	38 kV 35 kV
Dielectric dissipation factor at 23°C and 1 kHz 23°C und 50 Hz 50°C und 50 Hz 80°C und 50 Hz	0.02 0.03 0.06 0.15
Dielectric constant at 23°C and 1 kHz 23°C und 50 Hz 50°C und 50 Hz 80°C und 50 Hz	4.1 4.3 5.5 7.2
Tracking resistance	KA 3c



## UWR

### Two-component PUR cast resin

water resistant

Developed for filling cable joints in humid conditions, cast-resin UWR is water resistant when fluid or hardened and is suitable for the following cable types:

- Low-voltage plastic-insulated and paper-insulated cables rated up to 1 kV.
- Telecommunications and signal plastic-insulated and paper-insulated cables.
- Suitable for mechanical protection and water-sealing on medium voltage cables.



#### Characteristics

- In practical and easy-to-use two-chamber bags
- Favourable flow properties
- High hydrolytic resistance
- Halogen-free
- Not harmful to the environment
- No fracturing under electrical stress
- Excellent adherence to all cable materials
- Highly water-resistant

#### Shelf life

- Shelf life: 24 months at ambient temperatures between 15°C and 35°C

#### Tests

- Draft DIN VDE 0291 part 2, edition 7/97

Type	Content ml	Art.-No.
UWR 143	143	<b>139163</b>
UWR 286	286	<b>138162</b>
UWR 464	464	<b>148876</b>
UWR 650	650	<b>199362</b>
UWR 1175	1175	<b>137406</b>
UWR 1350	1350	<b>137358</b>
UWR 1500	1500	<b>137712</b>
UWR 1850	1850	<b>163053</b>
UWR 2000	2000	<b>137877</b>

Technical data	Value
Flash point of cast-resin component (open cup)	140 °C
Processing time (potlife) of 300ml mixture at 5°C 23°C 35°C	30 minutes 15 minutes 8 minutes
Max. Reaction temperature	88 °C
Total volume shrinkage during curing	4.2 %
Density	1.20 g/cm <sup>3</sup>
Impact strength	> 28 kJ/m <sup>2</sup>
Hardness	60 Shore D
Elongation at break	40 %
Effect of long-term warm storage on impact strength (38d)	15 kJ/m <sup>2</sup>
Tear resistance	16 N/mm <sup>2</sup>
Tensile strength	15 N/mm <sup>2</sup>
Deformation at rest (after 24h)	0.4 %
Pressure required for 30% deformation	27 N/mm <sup>2</sup>
Curing under water	< 10ml glass
Hydrolysis resistance after water immersion (28d at 70°C)	passed
Physical structure	Passed (homogeneous and bubble-free)



## WG, WGD

### Two-component PUR cast resin

removable

The unfilled waterthin two-component polyurethane cast-resin (PUR) WG was developed especially for cable joints. The hardened resin remains elastic and removable with simple tooling.



#### Characteristics

- In practical and easy-to-use two-chamber bags
- Favourable flow properties
- High hydrolytic resistance
- Halogen-free
- Not harmful to the environment
- No fracturing under electrical stress
- Excellent adherence to all cable materials
- Low hardening temperature
- Permanently flexible after curing

#### Shelf life

- Shelf life: 18 months at ambient temperatures between 15°C and 35°C

#### Note

- Connection requires mechanical tension relief due to the flexible nature of cast resin e.g. by means of a mechanically stable joint housing.

#### Tests

- According to DIN VDE 0291 part 2

Type	Content ml	Art.-No.
<b>in two chamber bag</b>		
WG	286	125202*
	464	125203*
	730	125204*
	1000	125205*
	1150	125206*
	1500	125207*
	2000	125208*
	2200	125209*
<b>in tins</b>		
WG-D	900	125215*
	1500	125216*
	2200	125217*
	2900	125218*
	3600	125219*
	5000	125221*
	7000	134247*
	10000	204397*

Other drum sizes available to order.

\*Optional accessory: Oil stop varnish OS/Accessories

Technical data	Value
Flash point of cast-resin component (open cup)	200 °C
Flash point of reactant (open cup)	200 °C
Processing time (potlife) of 300ml mixture at 5°C 23°C 35°C	33 minutes 24 minutes 21 minutes
Max. Reaction temperature	60 °C
Total volume shrinkage during curing	1.2 %
Density	1.10 g/cm <sup>3</sup>
Hardness	44 Shore A
Elongation at break	60 %
Thermal expansion coefficient over temperature range of 20-50°C	2.8 x 10 <sup>-4</sup> K <sup>-1</sup>
Tensile strength	0.6 N/mm <sup>2</sup>
Tracking resistance	KA 3c
Water absorption in warm water (42d at 50°C)	450 mg
Thermal conductivity	0.3 W x m <sup>-1</sup> x K <sup>-1</sup>
Electrolytic corrosion	A 1.2
1 minute test voltage at 23°C 80°C	> 20 kV > 10 kV
Dielectric dissipation factor at 23°C and 50 Hz	0.04
Dielectric constant at 23°C and 50 Hz	5.7



## KG Two-component PUR-»crumbly«-cast resin removable

The cast-resin KG is an especially developed two-component polyurethan (PUR) cast-resin for isolating cable connections. The transparent removable »crumbly« cast-resin allows sight control of the connection after filling. The connection can at all times be released by removing the resin. Typical applications: cable branch-off cabinet, connection boxes, communication cable connections, electronic components, etc.



### Characteristics

- In practical and easy-to-use two-chamber bags
- Favourable flow properties
- High hydrolytic resistance
- Halogen-free
- Remains transparent after curing
- No fracturing under electrical stress
- Excellent adherence to all cable materials
- Low hardening temperature

### Shelf life

- Shelf life: 24 months at ambient temperatures between 15°C and 35°C

### Note

- Connection requires mechanical tension relief due to flexibility

### Tests

- According to DIN VDE 0291 part 2 (edition 6/97)

Type	Content ml	Art.-No.
KG 143	143	<b>125165</b>
KG 286	286	<b>125166</b>
KG 730	730	<b>125167</b>
KG 2000	2000	<b>255159</b>

Technical data	Value
Density	1.00 g/m <sup>3</sup>
Hardness	10 Shore A
Elongation at break	10 %
Water absorption in warm water (42d at 50°C)	188 mg
Water absorption in cold water (24h at 23°C)	30 mg
1 minute test voltage at 23°C	> 20 kV
80°C	> 10 kV
Tensile strength	0.7 N/mm <sup>2</sup>
Volume resistivity	2 x 10 <sup>10</sup> Ω x cm
Viscosity (20°C)	1000 mPa x s

