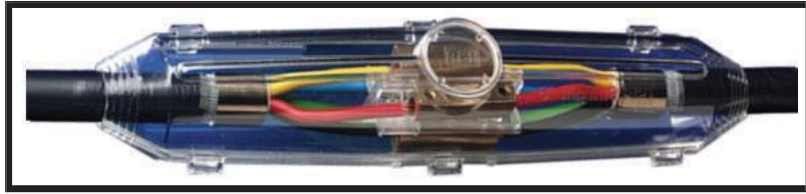


CAST RESIN KITS

CRK



PUR cast resin technology was especially developed to seal and protect power, signal and telephone cables. This new generation of two component cast resin has been developed for the most demanding environments and circumstances. Our cast resin joints have been tested according to EN50393 standards.

Straight through and branch joints up to 300mm² are supplied as complete kits in a single carton. Each kit comprises a clear plastic shell, a two-part polyurethane resin compound, gloves and instructions. Joint kits are also available with crimp ferrules upon request.

LOW VOLTAGE CAST RESIN STRAIGHT THROUGH JOINT					
CATALOGUE NO	CABLE SIZE mm ²	L (mm)	H (mm)	D1 (mm)	D2 (mm)
CRK-1	4 x 1.5 – 10	185	40	8	26
CRK-2	4 x 10 – 25	270	55	14	32
CRK-3	4 x 35 – 50	355	60	23	39
CRK-4	4 x 50 – 70	400	75	28	50
CRK-5	4 x 95 – 150	530	120	35	65
CRK-6	4 x 185 – 300	700	160	45	80

LOW VOLTAGE CAST RESIN BRANCH JOINT						
CATALOGUE NO	CABLE SIZE mm ²	BRANCH CABLE SIZE mm ²	L (mm)	H (mm)	D1 (mm)	D2 (mm)
CRK-00B	4 x 1.5 – 2.5	4 x 1.5	150	50	11	20
CRK-0B	4 x 4 – 10	4 x 4	175	60	6	21
CRK-1B	4 x 6 – 25	4 x 16	225	70	9	24

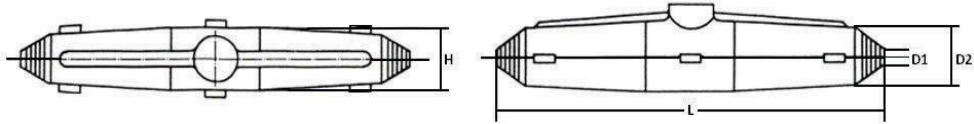
CRK BRANCH JOINT (B-Y SERIES)						
CATALOGUE NO	MAX CABLE OUTSIDE DIAMETER		MAX CROSS SECTIONAL AREA		PRODUCT DIMENSION L – W – H mm	RESIN WEIGHT
	LARGE FINGER (LF) mm	SMALL FINGER (SF) mm	LARGE FINGER mm ²	SMALL FINGER mm ²		
CRK-B-Y1	10 – 28	5 – 18	≤4 * 25	≤4 * 10	176*120*105	500g
CRK-B-Y2	20 – 40	8 – 30	≤4 * 70	≤4 * 25	250*142*111	1000g
CRK-B-Y3	20 – 40	8 – 30	≤4 * 95	≤4 * 95	350*142*111	2000g
CRK-B-Y4	35 – 65	20 – 56	≤4 * 240	≤4 * 240	485*220*180	6000g

****EARTHING KITS AVAILABLE FOR SWA CABLES****

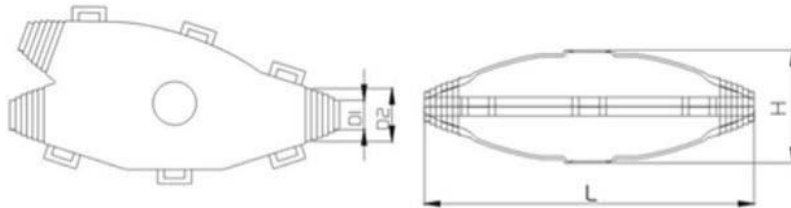
DIMENSION CHART

CRK

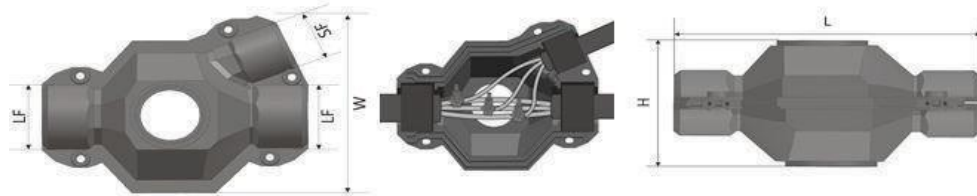
CRK STRAIGHT JOINT



CRK BRANCH JOINT (B SERIES)



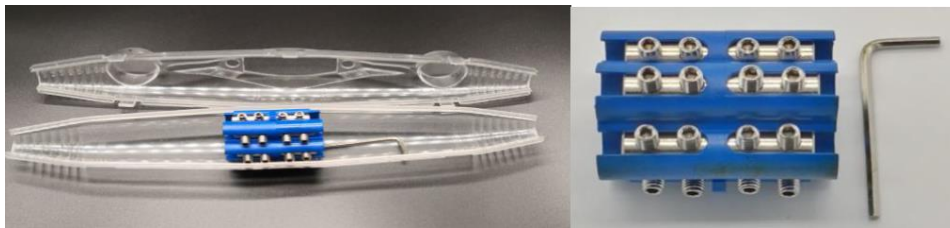
CRK BRANCH JOINT (PB-Y SERIES)



LOW VOLTAGE RESIN PACKS		
CATALOGUE NO	TYPE	VOLUME OF RESIN (ml)
RP-80	PU25-80	80
RP-180	PU25-180	180
RP-286	PU25-286	286
RP-464	PU25-464	464
RP-1LT	PU25-1000	1000
* Larger sizes available upon request		

CRK-C CONNECTOR

The CRK-C was specially developed to divide the wire during the application of CRK resin kits. It is made of copper with a blue plastic insulation cover.



CATALOGUE NO	CABLE SIZE (mm)	L (mm)	COPPER TUBE DIAMETER (mm)	COVER DIAMETER (mm)
CRK-1-CONNECTOR	5 x 1.5 – 10	25	4	33
CRK-2-CONNECTOR	5 x 16 – 35	40	7.5	42

CAST RESIN KITS (CRK)

TECHNICAL OF PU25	VALUE	ACCORDING TO DIN VDE 0291
Pot life at		
5°C	35 min	Product conforms $\pm 30\%$
23°C	20 min	Product conforms $\pm 30\%$
35°C	15 min	Product conforms $\pm 30\%$
Reactant	>200°C	>55
Open cup flash point	>200°C	>55
Tensile Strength	8.0 Mpa	5.0 Mpa
Hot Ageing	-5 Shore A	< -7 Shore A
Adhesive	>1500CP.S	>1500CP.S
Tear Elongation	$\geq 100\%$	$\geq 50\%$
Gel time for 300ml at	23°C	-
Pouch >1000ml	26 min	Product Conforms $\pm 10\%$
Pouch >1000ml	17 min	Product Conforms $\pm 10\%$
Max reaction Temp	600°C/333K	Product Conforms $\pm 10\%$
Total Vol Variable when Hardening	6%	Max 6.5%
Cast Resin Component	>200°C	>100°C
Open cup flash point	>200°C	>100°C
Density	1.07g/cm ³	-
Impact Strength	>10kJ/m ²	>10kJ/m ²
Hardness	75 Shore A	Min 20 Shore D
Expansion Coefficient in temp range of 20 – 50°C	$5.9 \times 10^{-4} .K^{-1}$	Product Conforms $\pm 15\%$
Thermal Conductivity	0.2W/m.k	Product Conforms $\pm 20\%$
Flammability	Class IIc	Acc to DIN VDE 0304, part 3
Water Absorption 42 days at 50°C	360mg	Max 400mg
Electrolytic Corrosion	A1	-
1 min Voltage Test at		No Breakdown at test voltage
23°C	>20kV	20kV
80°C	>10kV	10kV

DIELECTRIC DISSIPATION FACTOR		
TECHNICAL OF PU25	VALUE	ACCORDING TO DIN VDE 0291
At 23°C and 50Hz	0.08	Max 0.1
At 23°C and 1kHz	0.05	-

RELATIVE PERMITTIVITY		
TECHNICAL OF PU25	VALUE	ACCORDING TO DIN VDE 0291
At 23°C and 50Hz	5	<6
At 23°C and 1kHz	5.1	-
Tracking Resistance	KA 3c	Min KA 3c

PHYSICAL VALUES AFTER 28 DAYS OF IMMERSION IN 90°C WATER		
TECHNICAL OF PU25	VALUE	ACCORDING TO DIN VDE 0291
Tensile Strength	8.2N/mm ²	65% of initial value
Elongation at Break	60%	65% of initial value
Hardness	47 Shore A	85% of initial value

CJS

CABLE JOINTING SUPPLIES

Energy Products

Cast-Resin Cable Accessories

$U_0/U (U_m)$ 0,6/1,0 (1,2kV)



CAST RESIN JOINTS

Low Voltage cast resin straight through joints

CAST RESIN Technology

Type tested @ RWE acc. to EN50393 (Cenelec HD623 S1:1996)



*Resin filled straight joints for cables with XLPE, PVC, EPR, and Paper insulation;
NYY, NAYY, CYKY, NYCY, NAYCWY, NYCWY, SZAMKAUM, SZRMKVM-J U₀/U (Um) (kV) 0.6/1 (1.2kV)*

PUR cast resin technology was especially developed to seal and protect power, signal and telephone cables. This new generation of two component cast resin has been developed for the most demanding environments and circumstances. Our cast resin joints have been tested according to EN50393, assuring only the highest quality. Quick setting properties in humid or even cold conditions make it a fast and reliable solution.

PUR cast resin joints



No need to measure or mix with spatula. just remove the dividing rail from the laminated Al-Pe bag and mix together. No spillage, or mess at installation site. An extended shelf-life of the resins are now 48 months* as standard even in the most difficult storage conditions. The kit shells are made of high quality shatter proof PC (polycarbonate) resulting in excellent hydrophobic properties and unmatched impact resistance. The resin has good adhesion to PVC and metals ensure a watertight seal and excellent impact resistance.

CAST RESIN JOINTS

Low Voltage cast resin straight through joints

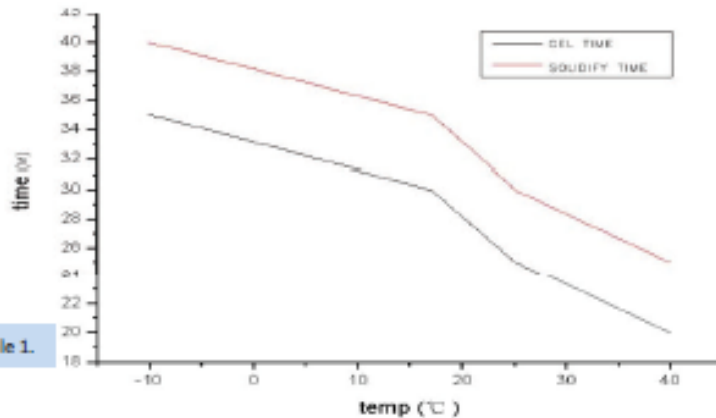


Table 1.

Table 1. shows gel time and complete solidifying time (shown in minutes) curves for installation reference at variable temperatures.

Technical Data	Value	According to DIN VDE 0291
Pot life @		
5°C	35 min	
23°C	20 min	product conforms ±30%
35°C	15 min	
Reactant	>200°C	>55
Open cup flash point		
Tensile strength	≥8.0 Mpa	≥5.0
Hot aging	- 5 Shore A	- 7
Adhesive	>1500 CP. S	< 1500
Tear elongation	≥100%	≥50
Gel time for 300 ml @	23°C	
Pouch >1000ml	26 min	product conforms ±10%
Pouch <1000ml	17 min	product conforms ±10%
Max. reaction temp	60°C/333K	product conforms ±10%
Total vol. variable when hardening	6%	max. 6.5%
Cast resin component		
Open cup flash point	>200°C	>100
Density	1.07g/cm ³	-
Impact strength	> 10kJ/m ²	> 10kJ/m ²
Hardness	75 Shore A	min. 20 Shore D

CAST RESIN JOINTS

Low Voltage cast resin straight through joints

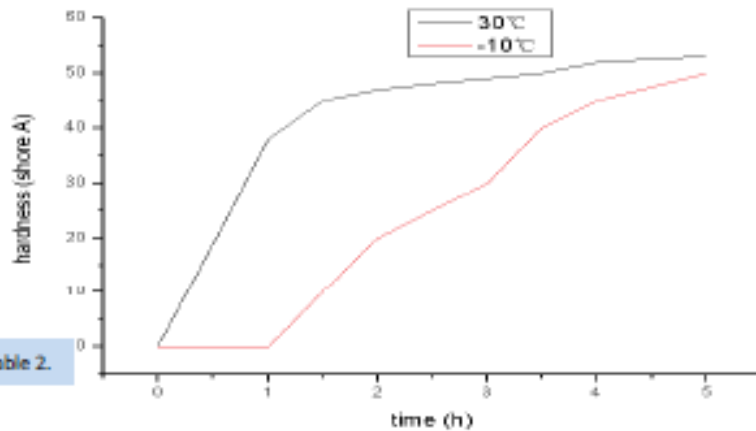


Table 2.

Table 2. shows hardness levels (shore A) together with elapsed time in hours at variable temperatures.

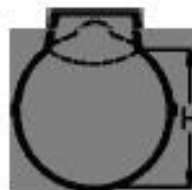
Technical data	Value	According to DIN VDE 0291
Expansion coefficient in temp range of 20-50°C	$5,9 \times 10^{-4} \text{ K}^{-1}$	product conforms $\pm 15\%$
Thermal conductivity	$0,2 \text{ W} \times \text{m}^{-1} \times \text{K}^{-1}$	product conforms $\pm 20\%$
Flammability	Class II c	acc to DIN VDE 0304, part 3
Water absorption 42 days@50°C	360mg	max. 400 mg
Electrolytic corrosion	A 1	-
Voltage test@		no breakdown @ test voltage
23°C	>20kV	20kV
80°C	>10kV	20kV
Dielectric dissipation factor @ 23°C and 50Hz	0.08	max. 0.1
@ 23°C and 1kHz	0.05	-
Relative permittivity 23°C @ 50Hz	5	< 6
23°C @ 1kHz	5.1	-
Tracking resistance	KA 3c	min. KA 3c
Physical values after 28 days of immersion in 90°C water		
Tensile strength	8.2N/mm ²	≥ 65% of initial value
Elongation at break	60%	≥ 65% of initial value
Hardness	47 Shore	≥ 80% of initial value

CAST RESIN JOINTS

Low Voltage cast resin straight through joints



Type	Cable Size mm ²	L(mm)	H(mm)	D1(mm)	D2(mm)
CRK -1	4 x 1.5 – 10	202	36	8	26
CRK -2	4 x 10 – 25	260	47	16	32
CRK-3	4 x 35 – 50	360	55	21	38
CRK -4	4 x 50 – 70	400	70	26	41
CRK-5	4 x 95 – 150	530	100	35	56
CRK -6	4 x 185 – 300	700	125	47	74



PUR cast resin joints

CAST RESIN JOINTS

Low Voltage cast resin straight through joints

2 component PUR resin



Two component PUR cast resin. Available also as separate packs. Large volume bags available on special request.

PU25 Black cast resin is a high quality, and fast setting resin for tough ambient conditions. Ideal for power cable accessories as insulation or as protective layer in case of MV joints.

PU20 Beige color is an inexpensive casting resin. Mechanically tough, good hydrophobic properties.

Resin packs

Type	Volume (ml)	Order Ref #	Type	Volume (ml)	Order Ref #
+PU-025	80	HCK-15-80	+PU-20	80	HCK-15b-80
+PU-025	143	HCK-15-143	+PU-20	143	HCK-15b-143
+PU-025	286	HCK-15-286	+PU-20	286	HCK-15b-286
+PU-025	370	HCK-15-370	+PU-20	370	HCK-15b-370
+PU-025	464	HCK-15-464	+PU-20	464	HCK-15b-464
+PU-025	730	HCK-15-730	+PU-20	730	HCK-15b-730
+PU-025	1000	HCK-15-1000	+PU-20	1000	HCK-15b-1000
+PU-025	1150	HCK-15-1150	+PU-20	1150	HCK-15b-1150
+PU-025	1500	HCK-15-1500	+PU-20	1500	HCK-15b-1500
+PU-025	2000	HCK-15-2000	+PU-20	2000	HCK-15b-2000

This 2 component PUR resin is suitable to be used for jointing PVC, XLPE, or paper insulated cables up to 1kV

***IMPORTANT:** Product available separately, and can be supplied in tins. * Shelf life up to 48 months, in ambient conditions of 15°C to 35°C. Special quantity pack available on request.

CAST RESIN JOINTS

Low Voltage cast resin straight through joints

Application range:

	3 Core cable	4 Core cable	5 Core cable
Type	Cross section	Cross section	Cross section
HCRK-S1	mm ²	mm ²	mm ²
	3 x 2.5	4 x 1.5	5 x 1.5
	3 x 4	4 x 4	5 x 2.5
	3 x 6	4 x 6	5 x 4
	3 x 10	4 x 10	5 x 6
HCRK-S2	3 x 16	4 x 10	5 x 6
	3 x 25	4 x 16	5 x 10
	3 x 35	4 x 25	5 x 16
HCRK-S3	3 x 50	4 x 35	5 x 16
	3 x 70	4 x 50	5 x 25
HCRK-S4	3 x 70	4 x 50	5 x 35
	3 x 95	4 x 70	-
HCRK-S5	3 x 120	4 x 95	5 x 50
	3 x 150	4 x 120	-
	3 x 185	4 x 150	-
HCRK-S6	3 x 240	4 x 185	-
	3 x 300	4 x 240	-
	-	4 x 300	-

CAST RESIN JOINTS

Low Voltage cast resin straight through joints



The test report is available if request.

Kit contents:

- 2 part mould
- Connector spacer
- 2 component PUR resin supplied in 5 layer laminated Al bag, with dividing rod.
- PVC tape
- Abrasive strip
- PE gloves
- Easy to follow installation instructions
- Funnel (optional)

PUR cast resin

