

GRP CABLE SYSTEMS

GRP CABLE LADDERS & TRAYS

Corrosion-free cable support for chemical,
offshore, energy and outdoor projects.



CORROSION FREE



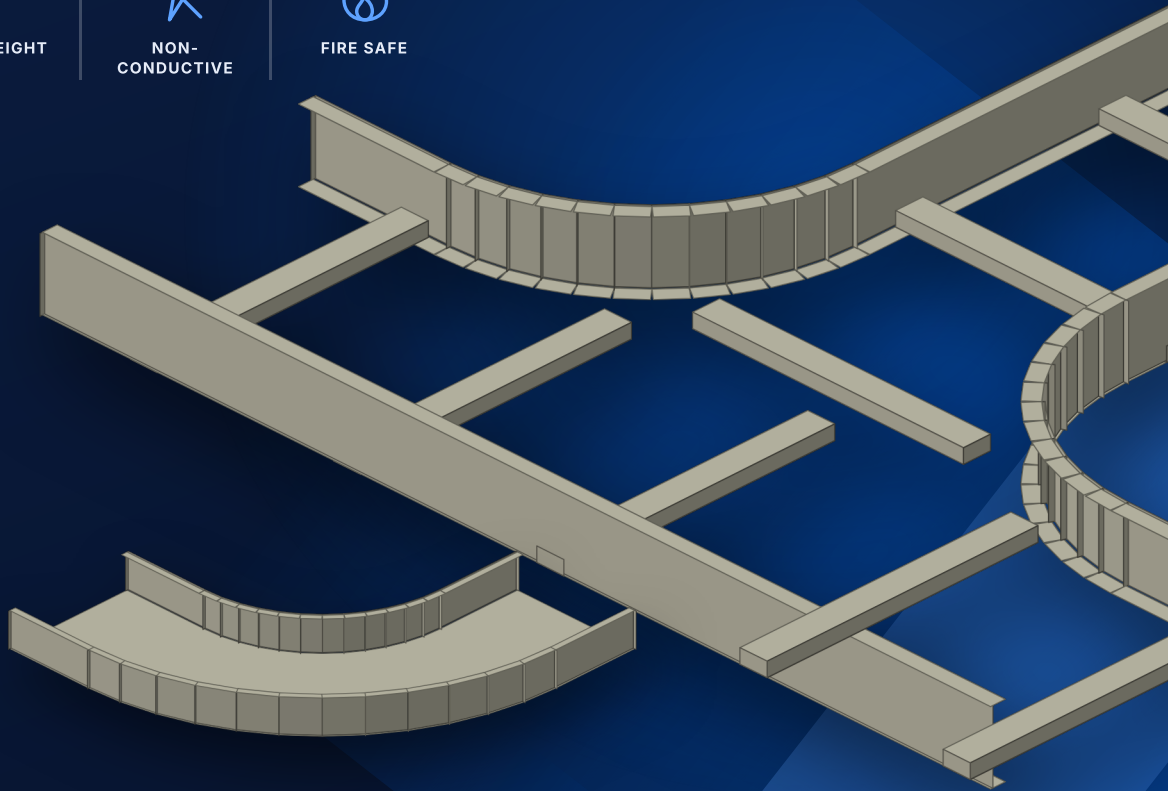
LIGHTWEIGHT



NON-
CONDUCTIVE



FIRE SAFE



CATALOGUE
2026

IEC 61537 · NEMA FG-1 · UL 94 V-0

ABOUT CASK GRP CABLE SYSTEMS

Cable support that does not corrode

CASK Steel, a division of CASK Electric, designs and manufactures cable management systems for infrastructure, energy and industrial projects. Our own GRP production adds pultruded glass-fibre cable ladders and trays for sites where steel would rust, need painting or need earthing: chemical plants, offshore and marine, water treatment, tunnels and coastal projects.

3 497

STANDARD ITEMS

40%

LIGHTER THAN STEEL

UL 94 V-0

SELF-EXTINGUISHING

IEC 61537

LOAD DESIGN

ONE SYSTEM

Ladders, trays, bends, tees, risers, reducers, covers, splice plates and stainless fixings from one manufacturer, with one item-number logic.

BUILT FOR HARSH SITES

Halogen-free, UV-stabilised, non-conductive and maintenance-free, designed to international fire, load and electrical standards.

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WHY GRP

The advantages of glass-fibre reinforced polyester

Pultruded GRP combines the strength needed for long cable spans with the corrosion and fire performance that metal systems cannot offer in aggressive environments.

01**Corrosion resistant**

Withstands acids, alkalis, salt spray and most industrial chemicals. No galvanising, painting or touch-up over the life of the plant.

02**Light weight**

Density of about 1.75 g/cm³: around 40% lighter than conventional steel systems, so easier handling, lower freight and faster installation.

03**Fire performance**

Self-extinguishing to UL 94 V-0, Class 1 to ASTM E84 and BS 476-7, B1 to DIN 4102-1. Zero halogen and low smoke.

04**Electrically safe**

Non-conductive with high dielectric strength (7.2 kV/mm), so no earthing or bonding is needed. Anti-static versions on request.

05**High strength**

Pultruded side rails classified NEMA 12C (H100) and NEMA 20C (H150): support spans up to 6 m, so fewer supports.

06**Weather and UV resistant**

UV-stabilised resin keeps colour and strength outdoors; performs from very low temperatures up to 94 °C continuous.

07**Safe for cables**

No sharp edges or burrs. Cables can be laid in from either side and long armoured runs are pulled with less risk of damage.

08**Easy to install**

Cut and drill on site with standard tools. Bolted splice plates and stainless or composite fixings.

09**Low life-cycle cost**

No maintenance, no repainting and a long service life cut the total cost of ownership.

Applications

Heavy industry

Oil, gas and petrochemical plants

Power plants and substations

Water and wastewater treatment

Mining

Chemical plants

Railways and tunnels

Bridges

Automotive, iron & steel and glass industries

Ships, ports and offshore

Factories and warehouses

Airports

Data centres

LONG LIFE & SUSTAINABILITY

Long life, lower footprint

The greenest cable support is the one you never have to replace. GRP combines a long, maintenance-free service life with a lighter, cleaner supply chain than metal systems.

0

REPAINT CYCLES

~1/4

WEIGHT OF STEEL

100%

HALOGEN-FREE

0

EARTHING NEEDED

01**Built to last for decades**

GRP does not rust, rot or corrode. In chemical, coastal and offshore sites, where galvanised steel needs repair or replacement after some years, a GRP system keeps working for the life of the plant.

02**No repainting, no zinc**

No hot-dip galvanising, no paint systems and no touch-up work. That means no zinc run-off, no solvent emissions from repainting and no shutdowns for maintenance.

03**Lower energy to make**

Pultrusion is a continuous, low-temperature process. Making a GRP profile needs far less energy than smelting, rolling and galvanising steel or producing aluminium.

04**Lighter to move**

At about a quarter of the weight of steel for the same volume, more metres fit on each truck and container, cutting fuel use and transport emissions. Lifting needs smaller equipment on site.

05**Less waste over the life**

No replacement cycles means less material bought, transported and scrapped. Off-cuts and end-of-life GRP can be ground and used in cement-kiln co-processing.

06**Safer in a fire**

Halogen-free resin releases no corrosive halogen gases and gives low smoke, protecting people, equipment and the environment.

Supporting green projects

CASK GRP cable systems are a natural fit for the projects driving the energy transition and for green building schemes:

Solar farms

Wind farms, onshore and offshore

Battery energy storage

Hydrogen and electrolyser plants

Water and desalination

Green and certified buildings

Electric-vehicle charging

Metro and rail electrification

GRP COMPARED

GRP compared with metal cable systems

How pultruded GRP stands against the usual alternatives in corrosive, outdoor and electrical environments.

Property	GRP	Galvanised steel	Aluminium	Stainless steel
Corrosion in aggressive sites	Excellent	Limited (coating wears)	Good	Very good
Weight	Light	Heavy	Light	Heavy
Maintenance	None	Repair and repaint	Low	Low
Electrically conductive	No	Yes	Yes	Yes
Earthing and bonding needed	No	Yes	Yes	Yes
Fire behaviour	Self-extinguishing, halogen-free	Non-combustible	Non-combustible	Non-combustible
Cutting on site	Standard tools, no hot work	Hot work or grinding	Standard tools	Hard to cut
Service life in corrosive sites	Plant lifetime	Short to medium	Medium to long	Long
Total cost over the life	Low	High	Medium	High

General guide; the right material depends on the site, the load and the chemicals present. Our engineers will advise for each project.

A growing sector

GRP cable support started in chemical plants and offshore platforms, where steel failed fastest. Today it is chosen far more widely: renewable energy, water, tunnels, data centres and coastal infrastructure all specify GRP to cut maintenance and extend service life.

Three trends are driving demand: the build-out of solar, wind and storage in harsh outdoor sites; stricter fire and smoke rules that favour halogen-free materials; and owners who now judge cable systems on total life cost, not only the purchase price.

Why choose CASK GRP

- Our own GRP production, with one ordering logic for every item
- Full range: ladders, trays, fittings, covers and fixings
- Designed to IEC 61537, NEMA FG-1 and UL 94 V-0
- Engineering support from route design to installation
- Part of CASK Electric: one supplier for the complete cable system
- Fast quotations through our ERP-based item numbers

CODES, STANDARDS & TESTS

Designed to international standards

Every product family in the CASK GRP range is designed and manufactured to meet the standards below. Test certificates for each project are supplied with the technical submittal.

Standard	Test	Result
UL 94 / ASTM D635	Flammability	V-0: self-extinguishes within 10 seconds
IEC 60695-2-11	Glow-wire test	Withstands 960 °C
BS 476 Part 7	Surface spread of flame	Class 1
ASTM E84 / UL 723	Surface burning characteristics	Class 1 · flame spread index 15 · smoke density 250
ISO 4589-2 / ASTM D2863	Limiting oxygen index	28% (over 45% on request)
DIN 4102-1	Fire behaviour of building materials	B1
NF F 16-101	Fire and smoke (railway)	I0 / F0
EN 45545-2	Fire behaviour of railway vehicles	R6
IEC 60754-1	Halogen acid gas content	Halogen-free
ISO 527 / ASTM D638	Tensile strength	325 MPa
EN 60068-2-75	Impact (hammer test)	10 J
ISO 4892-2 / ASTM G154	Accelerated UV ageing	Good mechanical and colour stability
NEMA FG-1 (UL 568)	Single-span load test	H100: 12C · H150: 20C
IEC 61537	Multi-span load test	Safe working loads declared per size
IEC 60079-0 / ASTM D257	Surface resistivity	> 10 ¹² Ω (anti-static < 10 ⁹ Ω on request)
IEC 60243-1 / ASTM D149	Dielectric strength	7.2 kV/mm
IEC 60112	Proof tracking index	575 V
ISO 9227	Neutral salt spray	Minimum 1 500 hours

MATERIAL DATA

Technical data sheet

Halogen-free polyester resin, RAL 7032. Design values for CASK GRP ladders, trays and accessories.

Property	Test method	Result
Fire behaviour		
Flammability	UL 94 / ASTM D635	V-0
Glow-wire	IEC 60695-2-11	960 °C
Flame spread & smoke index	ASTM E84 / UL 723	Class 1 (FSI 15, SD 250)
Surface flammability	BS 476-7	Class 1
Fire behaviour	DIN 4102-1	B1
Halogen content	IEC 60754-1	Halogen-free
Limiting oxygen index	ISO 4589-2	28% (> 45% on request)
Mechanical		
Tensile strength	ISO 527 / ASTM D638	325 MPa
Impact strength	EN 60068-2-75	10 J
Load class	NEMA FG-1	12C: 149 kg/m at 3.6 m span · 20C: 149 kg/m at 6.0 m span
UV ageing	ISO 4892-2 / ASTM G154	Good mechanical and colour behaviour
Electrical		
Surface resistivity	IEC 60079-0	> 10 ¹² Ω (< 10 ⁹ Ω anti-static)
Dielectric strength	IEC 60243-1	7.2 kV/mm
Tracking index	IEC 60112	575 V
Physical		
Density	ISO 1183 / ASTM D1505	1.73 g/cm³
Water absorption	ISO 62 / ASTM D570	0.28% max.
Coefficient of thermal expansion	ISO 11359-2 / ASTM D696	10 × 10 ⁻⁶ /K

Typical coupon properties (ASTM)

Property	ASTM	Value	Property	ASTM	Value
Tensile strength, LW	D638	206 MPa	Flexural strength, CW	D790	102 MPa
Tensile strength, CW	D638	48 MPa	Flexural modulus, LW	D790	11 GPa
Tensile modulus, LW	D638	17 GPa	Barcol hardness	D2583	45
Compressive strength, LW	D695	206 MPa	24 h water absorption	D570	0.45% max.
Compressive strength, CW	D695	103 MPa	Arc resistance, LW	D495	120 s
Flexural strength, LW	D790	206 MPa	Dielectric constant, PF	D150	5 @ 60 Hz

LW = lengthwise · CW = crosswise · PF = perpendicular to surface

TEMPERATURE

Temperature and thermal expansion

GRP keeps its full strength at normal ambient temperatures. Under continuous high temperature the strength of the profiles is reduced as shown below; apply the factor to the published loads.

Effect of temperature on strength

Operating temperature	Polyester	Vinyl ester
24 °C (75 °F)	100%	100%
38 °C (100 °F)	90%	100%
52 °C (125 °F)	78%	100%
65 °C (150 °F)	68%	90%
79 °C (175 °F)	60%	90%
94 °C (200 °F)	52%	70%

Below 24 °C use the loads declared at 24 °C. Maximum continuous operating temperature: 94 °C.

Spacing of expansion joints

Temperature difference	Max. distance between expansion joints
14 °C (25 °F)	203 m
28 °C (50 °F)	101 m
42 °C (75 °F)	67 m
56 °C (100 °F)	50 m
70 °C (125 °F)	40 m
83 °C (150 °F)	33 m
97 °C (175 °F)	28 m

Based on 25 mm of free movement per expansion splice plate (CGR-AC012).

Load-testing methods

NEMA FG-1 (USA / Canada)

- One straight length tested on a single span, no splice
- Uniformly distributed load applied until failure
- Failure load ÷ 1.5 safety factor = safe working load in kg/m
- Class = span in feet + load letter: A 74 kg/m, B 112 kg/m, C 149 kg/m

IEC 61537 (international)

- Several lengths tested over several spans, joined with splice plates
- Uniform load applied up to a deflection of L/100
- Loading continued to 1.7 times that value
- Safe working load declared in kg/m for the tested span

NEMA FG-1 class	2.4 m (8 ft)	3.0 m (10 ft)	3.6 m (12 ft)	4.8 m (16 ft)	6.0 m (20 ft)
74 kg/m (A)	8A	10A	12A	16A	20A
112 kg/m (B)	8B	10B	12B	16B	20B
149 kg/m (C)	8C	10C	12C · H100	16C	20C · H150

CORROSION GUIDE

Chemical resistance

Maximum concentration and maximum operating temperature for the standard polyester resin and the optional vinyl ester resin. Ask our engineers for chemicals that are not listed.

Chemical	POLYESTER		VINYL ESTER	
	Max. %	°C	Max. %	°C
Acetic acid	10	88	10	99
Acetic acid	50	52	50	82
Acetone	NR	NR	100	24
Aluminium chloride	Sat.	77	Sat.	93
Aluminium hydroxide	Sat.	71	Sat.	77
Aluminium nitrate	Sat.	66	Sat.	77
Aluminium sulphate	Sat.	82	Sat.	93
Ammonium bicarbonate	15	52	Sat.	54
Ammonium carbonate	NR	NR	Sat.	66
Ammonium chloride	Sat.	77	Sat.	88
Ammonium hydroxide	1	38	10	66
Ammonium hydroxide	28	NR	28	38
Ammonium nitrate	Sat.	71	Sat.	88
Ammonium sulphate	Sat.	77	Sat.	93
Amyl alcohol	All	NR	All	32
Amyl alcohol, vapour	–	60	–	49
Benzene	NR	NR	100	60
Benzene sulphonic acid	25	43	Sat.	93
Benzoic acid	Sat.	66	Sat.	93
Benzyl alcohol	100	NR	100	NR
Borax	Sat.	77	Sat.	93
Butanol	All	24	All	49
Calcium carbonate	Sat.	77	Sat.	93
Calcium chloride	Sat.	77	Sat.	93
Calcium hydroxide	25	21	25	74
Calcium nitrate	Sat.	82	Sat.	93
Calcium sulphate	Sat.	82	Sat.	93
Carbon dioxide gas	–	93	–	93
Carbon disulphide	NR	NR	NR	NR
Carbon monoxide gas	–	93	–	93
Carbon tetrachloride	NR	NR	100	24
Carbonic acid	Sat.	54	Sat.	82
Chlorinated water	Sat.	27	Sat.	82
Chlorine, dry gas	–	60	–	77
Chlorine, wet gas	–	NR	–	82
Chromic acid	5	21	10	49
Citric acid	Sat.	77	Sat.	93
Copper chloride	Sat.	77	Sat.	93
Copper nitrate	Sat.	77	Sat.	93

Chemical	POLYESTER		VINYL ESTER	
	Max. %	°C	Max. %	°C
Crude oil, sour	100	77	100	93
Cyclohexane	NR	NR	NR	NR
Cyclohexane, vapour	All	38	All	54
Diesel fuel	100	71	100	82
Diethyl ether	NR	NR	NR	NR
Dimethyl phthalate	NR	NR	NR	NR
Ethanol	50	24	50	32
Ethyl acetate	NR	NR	NR	NR
Ethylene chloride	NR	NR	NR	NR
Ethylene glycol	100	32	100	93
Fatty acids	Sat.	82	Sat.	93
Ferric chloride	Sat.	77	Sat.	93
Ferric nitrate	Sat.	77	Sat.	93
Ferrous sulphate	Sat.	77	Sat.	93
Fluoboric acid	NR	NR	Sat.	74
Fluosilicic acid	NR	NR	Sat.	21
Formaldehyde	50	24	50	38
Formic acid	NR	NR	50	38
Glucose	100	77	100	93
Glycerine	100	66	100	93
Heptane	100	43	100	93
Hexane	100	32	100	54
Hydrobromic acid	50	49	50	49
Hydrochloric acid	10	66	10	93
Hydrochloric acid	20	60	20	88
Hydrochloric acid	37	24	37	35
Hydrofluoric acid	NR	NR	15	27
Hydrogen bromide, dry	100	88	100	93
Hydrogen bromide, wet	100	24	100	54
Hydrogen chloride	–	49	–	93
Hydrogen peroxide	5	38	30	38
Hydrogen sulphide, dry	100	77	100	99
Hydrogen sulphide, wet	100	77	100	99
Hypochlorous acid	20	27	20	66
Isopropyl alcohol	NR	NR	15	27
Kerosene	100	60	100	27
Lactic acid	Sat.	77	Sat.	93
Lead acetate	Sat.	77	Sat.	93
Lead chloride	Sat.	60	Sat.	93

Sat. = saturated solution · All = any concentration · NR = not recommended · – = no data

CORROSION GUIDE

Chemical resistance (continued)

Chemical	POLYESTER		VINYL ESTER	
	Max. %	°C	Max. %	°C
Lead nitrate	Sat.	–	Sat.	93
Linseed oil	100	66	100	88
Lithium chloride	Sat.	66	Sat.	88
Magnesium carbonate	Sat.	60	Sat.	77
Magnesium chloride	Sat.	77	Sat.	93
Magnesium hydroxide	Sat.	66	Sat.	88
Magnesium nitrate	Sat.	60	Sat.	82
Magnesium sulphate	Sat.	77	Sat.	88
Mercuric chloride	Sat.	66	Sat.	88
Mercurous chloride	Sat.	60	Sat.	82
Methyl ethyl ketone	NR	NR	NR	NR
Mineral oil	100	77	100	93
Monochlorobenzene	NR	NR	NR	NR
Naphtha	100	60	100	77
Nickel chloride	Sat.	77	Sat.	93
Nickel nitrate	Sat.	77	Sat.	93
Nickel sulphate	Sat.	77	Sat.	93
Nitric acid	20	21	20	38
Nitric acid	5	60	5	66
Oleic acid	100	77	100	32
Paper-mill liquors	–	38	–	49
Perchloric acid	NR	NR	10	66
Perchloric acid	NR	NR	30	27
Perchloroethylene	100	NR	100	NR
Petrol (gasoline)	100	27	100	66
Phosphoric acid	10	71	10	93
Phosphoric acid	100	49	100	93
Phthalic acid	–	–	Sat.	93
Potassium aluminium sulphate	Sat.	77	Sat.	93
Potassium bicarbonate	50	27	50	60
Potassium carbonate	10	NR	10	49
Potassium chloride	Sat.	77	Sat.	93
Potassium dichromate	Sat.	77	Sat.	93
Potassium hydroxide	NR	NR	25	66
Potassium nitrate	Sat.	77	Sat.	93
Potassium permanganate	100	27	100	99
Potassium sulphate	Sat.	77	Sat.	93
Propylene glycol	All	77	All	93
Sodium acetate	Sat.	71	Sat.	93

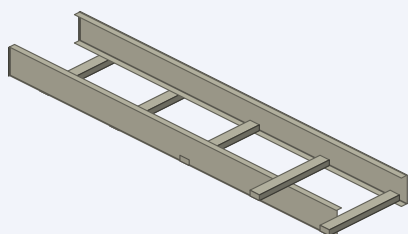
Chemical	POLYESTER		VINYL ESTER	
	Max. %	°C	Max. %	°C
Sodium benzoate	Sat.	77	Sat.	93
Sodium bicarbonate	Sat.	71	Sat.	79
Sodium bisulphate	All	77	All	93
Sodium bromide	All	77	All	93
Sodium carbonate	10	27	35	71
Sodium chloride	Sat.	77	Sat.	93
Sodium cyanide	Sat.	77	Sat.	93
Sodium hydroxide (caustic)	NR	NR	25	27
Sodium hydroxide (caustic)	NR	NR	50	66
Sodium hypochlorite	NR	NR	10	66
Sodium monophosphate	Sat.	77	Sat.	93
Sodium nitrate	Sat.	77	Sat.	93
Sodium sulphate	Sat.	77	Sat.	93
Sodium thiosulphate	All	38	All	49
Stannic chloride	Sat.	71	Sat.	88
Styrene	NR	NR	NR	NR
Succinic acid	Sat.	77	Sat.	93
Sulphonated detergents	0/50	77	0/50	93
Sulphur dioxide	100	27	100	93
Sulphur trioxide	100	27	100	93
Sulphuric acid	25	24	25	88
Sulphuric acid	50	NR	50	82
Sulphuric acid	93	NR	93	NR
Sulphurous acid	Sat.	27	NR	NR
Tetrachloroethylene	NR	NR	Fumes	24
Toluene	NR	NR	NR	NR
Trisodium phosphate	NR	NR	Sat.	79
Urea	Sat.	54	Sat.	60
Vinegar	100	77	100	93
Water, distilled	100	77	100	88
Water, sea	Sat.	77	Sat.	88
Water, tap	100	77	100	88
Xylene	NR	NR	NR	NR
Zinc chloride	Sat.	77	Sat.	93
Zinc nitrate	Sat.	77	Sat.	93
Zinc sulphate	Sat.	77	Sat.	93

Sat. = saturated solution · All = any concentration · NR = not recommended · – = no data

SYSTEM & ITEM NUMBERS

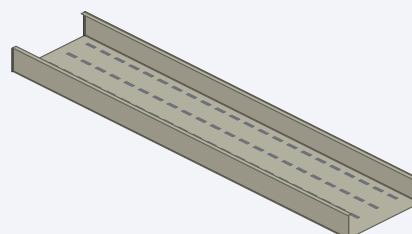
One range, one ordering logic

Two systems share the same covers, splice plates and fixings: the GRP cable ladder for heavy, long-span cable routes and the GRP cable tray for lighter routes and full cable protection.



GRP cable ladder

Side-rail heights 55, 80, 100 and 150 mm · widths 150 – 900 mm · 3 m and 6 m lengths · rungs every 300 mm



GRP cable tray

Side heights 50, 80 and 100 mm · widths 50 – 600 mm · 3 m lengths · perforated or solid base

Main numbers	Product group
CGR-LD011 · 012	Cable ladder, straight lengths 3 m / 6 m
CGR-LD021 · 022	Ladder horizontal bends 45° / 90°
CGR-LD031 · 032	Ladder tees and crosses
CGR-LD041 – 044	Ladder inside and outside risers 45° / 90°
CGR-LD051 · 064	Ladder level change and reducer plates
CGR-LD061 – 063	Ladder reducers: centre, right, left
CGR-TR011 · 012	Cable tray, perforated / solid, 3 m
CGR-TR021 – 052	Tray bends, tees, crosses, risers, level changes
CGR-TR061 – 063	Tray reducers: centre, right, left
CGR-CV1xx	Covers for ladder system
CGR-CV2xx	Covers for tray system
CGR-AC0xx	Splice and expansion plates, separators, brackets, clamps and fixings

How to read a CASK item number



CGR

CASK GRP cable systems

LD

Product group: LD ladder, TR tray, CV cover, AC accessory

022

Main number: the product type (here: 90° horizontal bend)

045

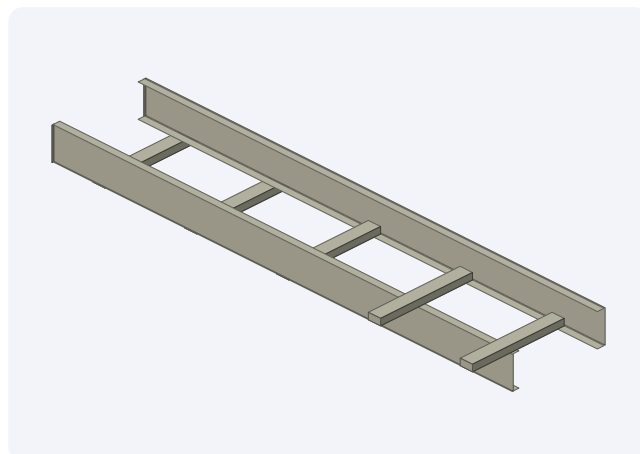
Size number within the main number (height, width, radius)

Brother families share the size number: CGR-LD021-045, CGR-LD022-045, CGR-LD031-045 and CGR-LD032-045 are all the same height, width and radius as a 45° bend, 90° bend, tee and cross.

GRP CABLE LADDER

Straight lengths

Pultruded C-section side rails with C-shaped rungs locked into the rails every 300 mm. Splice holes are pre-drilled at both ends.



Heights (H)	55 · 80 · 100 · 150 mm
Widths (W)	150 – 900 mm
Lengths	3 m and 6 m
Rung spacing	300 mm (others on request)
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.
Colour	RAL 7032 pebble grey. Other RAL colours on request; slight shade variation is normal.

H (mm)	W (mm)	Rail t (mm)	kg/m	3 m length	6 m length
H55 · side rail 4 mm					
55	150	4	1.90	CGR-LD011-001	CGR-LD012-001
55	200	4	1.99	CGR-LD011-002	CGR-LD012-002
55	300	4	2.17	CGR-LD011-003	CGR-LD012-003
55	400	4	2.34	CGR-LD011-004	CGR-LD012-004
55	450	4	2.43	CGR-LD011-005	CGR-LD012-005
55	500	4	2.52	CGR-LD011-006	CGR-LD012-006
55	600	4	2.69	CGR-LD011-007	CGR-LD012-007
55	750	4	2.96	CGR-LD011-008	CGR-LD012-008
55	900	4	3.22	CGR-LD011-009	CGR-LD012-009
H80 · side rail 4 mm					
80	150	4	2.55	CGR-LD011-010	CGR-LD012-010
80	200	4	2.64	CGR-LD011-011	CGR-LD012-011
80	300	4	2.71	CGR-LD011-012	CGR-LD012-012
80	400	4	2.99	CGR-LD011-013	CGR-LD012-013
80	450	4	3.08	CGR-LD011-014	CGR-LD012-014
80	500	4	3.17	CGR-LD011-015	CGR-LD012-015
80	600	4	3.34	CGR-LD011-016	CGR-LD012-016
80	750	4	3.61	CGR-LD011-017	CGR-LD012-017
80	900	4	3.88	CGR-LD011-018	CGR-LD012-018

GRP CABLE LADDER

Straight lengths (continued)

H (mm)	W (mm)	Rail t (mm)	kg/m	3 m length	6 m length
H100 · side rail 5 mm · NEMA 12C					
100	150	5	3.35	CGR-LD011-019	CGR-LD012-019
100	200	5	3.43	CGR-LD011-020	CGR-LD012-020
100	300	5	3.62	CGR-LD011-021	CGR-LD012-021
100	400	5	3.80	CGR-LD011-022	CGR-LD012-022
100	450	5	3.90	CGR-LD011-023	CGR-LD012-023
100	500	5	4.00	CGR-LD011-024	CGR-LD012-024
100	600	5	4.17	CGR-LD011-025	CGR-LD012-025
100	750	5	4.46	CGR-LD011-026	CGR-LD012-026
100	900	5	4.73	CGR-LD011-027	CGR-LD012-027
H150 · side rail 6 mm · NEMA 20C					
150	150	6	5.70	CGR-LD011-028	CGR-LD012-028
150	200	6	5.84	CGR-LD011-029	CGR-LD012-029
150	300	6	6.11	CGR-LD011-030	CGR-LD012-030
150	400	6	6.39	CGR-LD011-031	CGR-LD012-031
150	450	6	6.54	CGR-LD011-032	CGR-LD012-032
150	500	6	6.65	CGR-LD011-033	CGR-LD012-033
150	600	6	6.95	CGR-LD011-034	CGR-LD012-034
150	750	6	7.37	CGR-LD011-035	CGR-LD012-035
150	900	6	7.79	CGR-LD011-036	CGR-LD012-036

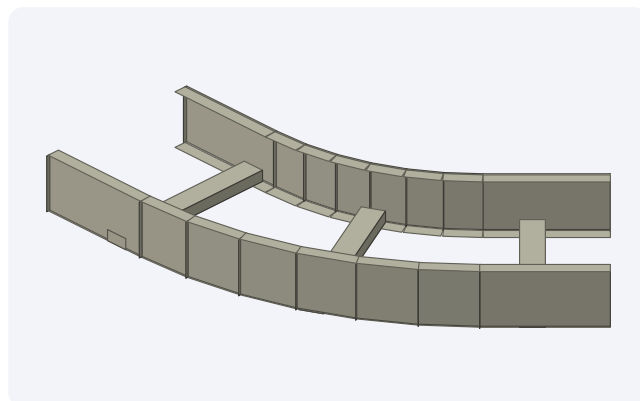
Splice plates: order CGR-AC011 with the bolt set for the height (H55: 4 × M8×25 SS316; H80 – H150: 4 × M10×25 SS316 or 4 × M10×40 GRP). Safe working loads to IEC 61537 for each width and span are supplied with the technical submittal.

GRP CABLE LADDER · FITTINGS

Horizontal bend 45°

For 45° changes of direction in the horizontal plane.

Radius (R)	R300 · R450 · R600 · R900
Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



			ITEM NUMBER				WEIGHT KG/PC			
W	R	Y	H55	H80	H100	H150	H55	H80	H100	H150
150	R300	490	CGR-LD021-001	CGR-LD021-037	CGR-LD021-073	CGR-LD021-109	1.23	1.71	1.98	3.45
150	R450	601	CGR-LD021-002	CGR-LD021-038	CGR-LD021-074	CGR-LD021-110	1.46	2.01	2.35	4.08
150	R600	704	CGR-LD021-003	CGR-LD021-039	CGR-LD021-075	CGR-LD021-111	1.88	2.53	2.99	5.19
150	R900	917	CGR-LD021-004	CGR-LD021-040	CGR-LD021-076	CGR-LD021-112	2.41	3.15	4.10	6.50
200	R300	526	CGR-LD021-005	CGR-LD021-041	CGR-LD021-077	CGR-LD021-113	1.33	1.82	2.09	3.63
200	R450	636	CGR-LD021-006	CGR-LD021-042	CGR-LD021-078	CGR-LD021-114	1.55	2.11	2.46	4.26
200	R600	739	CGR-LD021-007	CGR-LD021-043	CGR-LD021-079	CGR-LD021-115	2.02	2.69	3.16	5.13
200	R900	953	CGR-LD021-008	CGR-LD021-044	CGR-LD021-080	CGR-LD021-116	2.59	3.34	4.35	6.85
300	R300	596	CGR-LD021-009	CGR-LD021-045	CGR-LD021-081	CGR-LD021-117	1.89	2.40	2.66	4.44
300	R450	701	CGR-LD021-010	CGR-LD021-046	CGR-LD021-082	CGR-LD021-118	2.12	2.69	2.03	5.03
300	R600	810	CGR-LD021-011	CGR-LD021-047	CGR-LD021-083	CGR-LD021-119	2.70	3.38	3.50	5.98
300	R900	1023	CGR-LD021-012	CGR-LD021-048	CGR-LD021-084	CGR-LD021-120	2.91	3.68	4.83	7.44
400	R300	667	CGR-LD021-013	CGR-LD021-049	CGR-LD021-085	CGR-LD021-121	2.13	2.40	2.95	4.85
400	R450	778	CGR-LD021-014	CGR-LD021-050	CGR-LD021-086	CGR-LD021-122	2.35	2.96	3.32	5.47
400	R600	880	CGR-LD021-015	CGR-LD021-051	CGR-LD021-087	CGR-LD021-123	3.05	3.76	3.85	7.00
400	R900	1094	CGR-LD021-016	CGR-LD021-052	CGR-LD021-088	CGR-LD021-124	3.29	4.09	5.27	8.17
450	R300	702	CGR-LD021-017	CGR-LD021-053	CGR-LD021-089	CGR-LD021-125	2.25	2.79	3.09	5.07
450	R450	813	CGR-LD021-018	CGR-LD021-054	CGR-LD021-090	CGR-LD021-126	2.47	3.09	3.46	5.70
450	R600	916	CGR-LD021-019	CGR-LD021-055	CGR-LD021-091	CGR-LD021-127	3.23	3.95	4.06	7.31
450	R900	1129	CGR-LD021-020	CGR-LD021-056	CGR-LD021-092	CGR-LD021-128	3.42	4.22	5.51	8.38
500	R300	738	CGR-LD021-021	CGR-LD021-057	CGR-LD021-093	CGR-LD021-129	2.37	2.92	3.25	5.32
500	R450	849	CGR-LD021-022	CGR-LD021-058	CGR-LD021-094	CGR-LD021-130	2.59	3.22	3.62	5.94
500	R600	951	CGR-LD021-023	CGR-LD021-059	CGR-LD021-095	CGR-LD021-131	3.40	4.13	4.66	7.64
500	R900	1164	CGR-LD021-024	CGR-LD021-060	CGR-LD021-096	CGR-LD021-132	3.59	4.41	5.75	8.71
600	R300	808	CGR-LD021-025	CGR-LD021-061	CGR-LD021-097	CGR-LD021-133	2.73	3.18	3.54	5.76
600	R450	738	CGR-LD021-026	CGR-LD021-062	CGR-LD021-098	CGR-LD021-134	2.84	3.48	3.91	6.38
600	R600	1022	CGR-LD021-027	CGR-LD021-063	CGR-LD021-099	CGR-LD021-135	3.76	4.51	5.06	8.25
600	R900	1235	CGR-LD021-028	CGR-LD021-064	CGR-LD021-100	CGR-LD021-136	3.92	4.75	6.23	9.37
750	R300	914	CGR-LD021-029	CGR-LD021-065	CGR-LD021-101	CGR-LD021-137	2.98	3.60	3.98	6.24
750	R450	1025	CGR-LD021-030	CGR-LD021-066	CGR-LD021-102	CGR-LD021-138	3.21	3.89	4.43	7.07
750	R600	1128	CGR-LD021-031	CGR-LD021-067	CGR-LD021-103	CGR-LD021-139	4.30	5.09	5.68	9.18
750	R900	1341	CGR-LD021-032	CGR-LD021-068	CGR-LD021-104	CGR-LD021-140	4.48	5.36	7.00	10.42
900	R300	1020	CGR-LD021-033	CGR-LD021-069	CGR-LD021-105	CGR-LD021-141	3.35	4.00	4.43	7.13
900	R450	1131	CGR-LD021-034	CGR-LD021-070	CGR-LD021-106	CGR-LD021-142	3.58	4.29	4.80	7.76
900	R600	1234	CGR-LD021-035	CGR-LD021-071	CGR-LD021-107	CGR-LD021-143	4.84	5.66	6.30	10.12
900	R900	1447	CGR-LD021-036	CGR-LD021-072	CGR-LD021-108	CGR-LD021-144	4.94	5.85	7.77	11.24

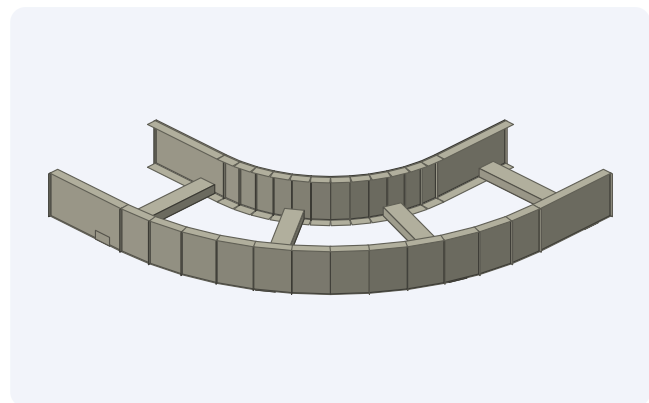
Dimensions in mm. W = inside width, R = inside radius, Y = overall length of the fitting.

GRP CABLE LADDER · FITTINGS

Horizontal bend 90°

For 90° changes of direction in the horizontal plane.

Radius (R)	R300 · R450 · R600 · R900
Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



			ITEM NUMBER				WEIGHT KG/PC			
W	R	Y	H55	H80	H100	H150	H55	H80	H100	H150
150	R300	547	CGR-LD022-001	CGR-LD022-037	CGR-LD022-073	CGR-LD022-109	2.33	2.83	3.08	5.36
150	R450	639	CGR-LD022-002	CGR-LD022-038	CGR-LD022-074	CGR-LD022-110	2.56	3.13	3.45	5.99
150	R600	724	CGR-LD022-003	CGR-LD022-039	CGR-LD022-075	CGR-LD022-111	2.90	3.53	3.94	6.83
150	R900	1152	CGR-LD022-004	CGR-LD022-040	CGR-LD022-076	CGR-LD022-112	4.22	5.51	6.70	11.21
200	R300	597	CGR-LD022-005	CGR-LD022-041	CGR-LD022-077	CGR-LD022-113	2.48	3.52	3.28	5.68
200	R450	689	CGR-LD022-006	CGR-LD022-042	CGR-LD022-078	CGR-LD022-114	2.72	3.31	3.65	6.31
200	R600	774	CGR-LD022-007	CGR-LD022-043	CGR-LD022-079	CGR-LD022-115	3.08	3.73	4.17	7.19
200	R900	1202	CGR-LD022-008	CGR-LD022-044	CGR-LD022-080	CGR-LD022-116	4.47	5.79	7.23	11.73
300	R300	697	CGR-LD022-009	CGR-LD022-045	CGR-LD022-081	CGR-LD022-117	2.80	3.85	3.68	6.31
300	R450	789	CGR-LD022-010	CGR-LD022-046	CGR-LD022-082	CGR-LD022-118	3.49	4.12	4.74	7.77
300	R600	874	CGR-LD022-011	CGR-LD022-047	CGR-LD022-083	CGR-LD022-119	3.71	4.39	5.16	8.35
300	R900	1302	CGR-LD022-012	CGR-LD022-048	CGR-LD022-084	CGR-LD022-120	5.23	6.59	8.01	13.17
400	R300	797	CGR-LD022-013	CGR-LD022-049	CGR-LD022-085	CGR-LD022-121	3.68	4.65	4.89	7.96
400	R450	889	CGR-LD022-014	CGR-LD022-050	CGR-LD022-086	CGR-LD022-122	3.91	4.58	5.28	8.58
400	R600	974	CGR-LD022-015	CGR-LD022-051	CGR-LD022-087	CGR-LD022-123	4.13	4.85	5.90	9.48
400	R900	1402	CGR-LD022-016	CGR-LD022-052	CGR-LD022-088	CGR-LD022-124	5.80	7.21	8.67	14.27
450	R300	847	CGR-LD022-017	CGR-LD022-053	CGR-LD022-089	CGR-LD022-125	3.89	4.52	5.15	8.36
450	R450	939	CGR-LD022-018	CGR-LD022-054	CGR-LD022-090	CGR-LD022-126	4.12	4.81	5.52	8.99
450	R600	1024	CGR-LD022-019	CGR-LD022-055	CGR-LD022-091	CGR-LD022-127	4.63	5.38	6.18	9.92
450	R900	1452	CGR-LD022-020	CGR-LD022-056	CGR-LD022-092	CGR-LD022-128	6.05	7.47	9.03	14.73
500	R300	897	CGR-LD022-021	CGR-LD022-057	CGR-LD022-093	CGR-LD022-129	4.11	5.24	5.43	8.80
500	R450	989	CGR-LD022-022	CGR-LD022-058	CGR-LD022-094	CGR-LD022-130	4.35	5.05	5.80	9.42
500	R600	1074	CGR-LD022-023	CGR-LD022-059	CGR-LD022-095	CGR-LD022-131	4.89	5.64	6.49	10.56
500	R900	1502	CGR-LD022-024	CGR-LD022-060	CGR-LD022-096	CGR-LD022-132	6.35	7.79	9.46	15.30
600	R300	997	CGR-LD022-025	CGR-LD022-061	CGR-LD022-097	CGR-LD022-133	4.44	5.54	5.94	9.60
600	R450	1089	CGR-LD022-026	CGR-LD022-062	CGR-LD022-098	CGR-LD022-134	4.79	5.53	6.31	10.23
600	R600	1174	CGR-LD022-027	CGR-LD022-063	CGR-LD022-099	CGR-LD022-135	5.38	6.18	6.73	12.42
600	R900	1602	CGR-LD022-028	CGR-LD022-064	CGR-LD022-100	CGR-LD022-136	6.88	8.36	10.14	16.33
750	R300	1147	CGR-LD022-029	CGR-LD022-065	CGR-LD022-101	CGR-LD022-137	5.20	5.94	6.75	10.86
750	R450	1239	CGR-LD022-030	CGR-LD022-066	CGR-LD022-102	CGR-LD022-138	5.44	6.24	7.12	11.48
750	R600	1324	CGR-LD022-031	CGR-LD022-067	CGR-LD022-103	CGR-LD022-139	6.11	6.97	7.54	12.83
750	R900	1752	CGR-LD022-032	CGR-LD022-068	CGR-LD022-104	CGR-LD022-140	7.81	9.38	11.14	18.15
900	R300	1297	CGR-LD022-033	CGR-LD022-069	CGR-LD022-105	CGR-LD022-141	5.87	6.67	7.56	12.10
900	R450	1389	CGR-LD022-034	CGR-LD022-070	CGR-LD022-106	CGR-LD022-142	6.11	6.96	7.93	12.72
900	R600	1474	CGR-LD022-035	CGR-LD022-071	CGR-LD022-107	CGR-LD022-143	6.87	7.78	8.85	14.20
900	R900	1902	CGR-LD022-036	CGR-LD022-072	CGR-LD022-108	CGR-LD022-144	8.64	10.27	12.19	19.71

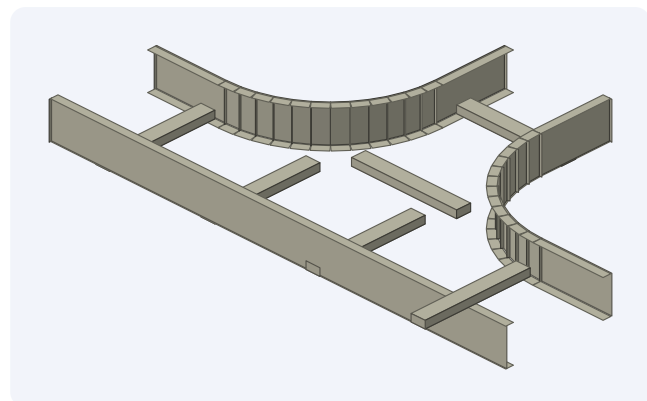
Dimensions in mm. W = inside width, R = inside radius, Y = overall length of the fitting.

GRP CABLE LADDER · FITTINGS

Horizontal tee

Three-way junction for a branch at 90° from the main run.

Radius (R)	R300 · R450 · R600 · R900
Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



			ITEM NUMBER				WEIGHT KG/PC			
W	R	Y	H55	H80	H100	H150	H55	H80	H100	H150
150	R300	955	CGR-LD031-001	CGR-LD031-037	CGR-LD031-073	CGR-LD031-109	3.05	4.19	4.78	7.53
150	R450	1265	CGR-LD031-002	CGR-LD031-038	CGR-LD031-074	CGR-LD031-110	4.58	5.46	6.24	9.96
150	R600	1555	CGR-LD031-003	CGR-LD031-039	CGR-LD031-075	CGR-LD031-111	5.59	6.64	7.74	12.52
150	R900	2154	CGR-LD031-004	CGR-LD031-040	CGR-LD031-076	CGR-LD031-112	6.76	8.53	11.01	17.50
200	R300	1005	CGR-LD031-005	CGR-LD031-041	CGR-LD031-077	CGR-LD031-113	3.69	4.04	5.11	7.91
200	R450	1315	CGR-LD031-006	CGR-LD031-042	CGR-LD031-078	CGR-LD031-114	4.79	5.68	6.48	10.33
200	R600	1605	CGR-LD031-007	CGR-LD031-043	CGR-LD031-079	CGR-LD031-115	5.83	6.90	8.16	12.97
200	R900	2204	CGR-LD031-008	CGR-LD031-044	CGR-LD031-080	CGR-LD031-116	7.01	8.77	11.37	17.98
300	R300	1105	CGR-LD031-009	CGR-LD031-045	CGR-LD031-081	CGR-LD031-117	4.36	4.98	5.69	8.93
300	R450	1415	CGR-LD031-010	CGR-LD031-046	CGR-LD031-082	CGR-LD031-118	5.52	6.43	7.26	11.48
300	R600	1705	CGR-LD031-011	CGR-LD031-047	CGR-LD031-083	CGR-LD031-119	6.31	7.40	8.89	13.90
300	R900	2304	CGR-LD031-012	CGR-LD031-048	CGR-LD031-084	CGR-LD031-120	7.83	9.62	12.59	19.47
400	R300	1205	CGR-LD031-013	CGR-LD031-049	CGR-LD031-085	CGR-LD031-121	4.79	5.09	6.18	9.10
400	R450	1515	CGR-LD031-014	CGR-LD031-050	CGR-LD031-086	CGR-LD031-122	6.00	6.94	7.81	12.10
400	R600	1805	CGR-LD031-015	CGR-LD031-051	CGR-LD031-087	CGR-LD031-123	7.49	8.61	9.70	15.31
400	R900	2404	CGR-LD031-016	CGR-LD031-052	CGR-LD031-088	CGR-LD031-124	8.39	10.21	13.38	20.55
450	R300	1255	CGR-LD031-017	CGR-LD031-053	CGR-LD031-089	CGR-LD031-125	5.00	5.76	6.42	10.04
450	R450	1565	CGR-LD031-018	CGR-LD031-054	CGR-LD031-090	CGR-LD031-126	6.24	7.19	8.10	12.74
450	R600	1855	CGR-LD031-019	CGR-LD031-055	CGR-LD031-091	CGR-LD031-127	7.79	8.91	10.02	15.79
450	R900	2454	CGR-LD031-020	CGR-LD031-056	CGR-LD031-092	CGR-LD031-128	8.68	10.52	13.80	21.04
500	R300	1305	CGR-LD031-021	CGR-LD031-057	CGR-LD031-093	CGR-LD031-129	5.22	5.94	6.66	10.41
500	R450	1615	CGR-LD031-022	CGR-LD031-058	CGR-LD031-094	CGR-LD031-130	6.49	7.45	8.35	13.13
500	R600	1905	CGR-LD031-023	CGR-LD031-059	CGR-LD031-095	CGR-LD031-131	8.09	9.23	10.35	16.28
500	R900	2504	CGR-LD031-024	CGR-LD031-060	CGR-LD031-096	CGR-LD031-132	8.99	10.83	14.23	21.54
600	R300	1405	CGR-LD031-025	CGR-LD031-061	CGR-LD031-097	CGR-LD031-133	5.58	6.30	7.68	12.30
600	R450	1715	CGR-LD031-026	CGR-LD031-062	CGR-LD031-098	CGR-LD031-134	7.44	8.42	9.46	14.65
600	R600	2005	CGR-LD031-027	CGR-LD031-063	CGR-LD031-099	CGR-LD031-135	8.63	9.78	11.02	17.30
600	R900	2604	CGR-LD031-028	CGR-LD031-064	CGR-LD031-100	CGR-LD031-136	9.66	11.53	15.24	22.65
750	R300	1555	CGR-LD031-029	CGR-LD031-065	CGR-LD031-101	CGR-LD031-137	6.84	7.67	8.42	13.07
750	R450	1865	CGR-LD031-030	CGR-LD031-066	CGR-LD031-102	CGR-LD031-138	8.25	9.27	10.27	16.01
750	R600	2155	CGR-LD031-031	CGR-LD031-067	CGR-LD031-103	CGR-LD031-139	10.14	11.33	12.54	19.58
750	R900	2754	CGR-LD031-032	CGR-LD031-068	CGR-LD031-104	CGR-LD031-140	10.97	12.89	17.14	24.09
900	R300	1705	CGR-LD031-033	CGR-LD031-069	CGR-LD031-105	CGR-LD031-141	8.20	9.07	9.78	15.22
900	R450	2015	CGR-LD031-034	CGR-LD031-070	CGR-LD031-106	CGR-LD031-142	9.70	10.76	11.76	18.21
900	R600	2300	CGR-LD031-035	CGR-LD031-071	CGR-LD031-107	CGR-LD031-143	11.75	12.98	14.23	22.02
900	R900	2904	CGR-LD031-036	CGR-LD031-072	CGR-LD031-108	CGR-LD031-144	11.97	13.93	18.55	26.07

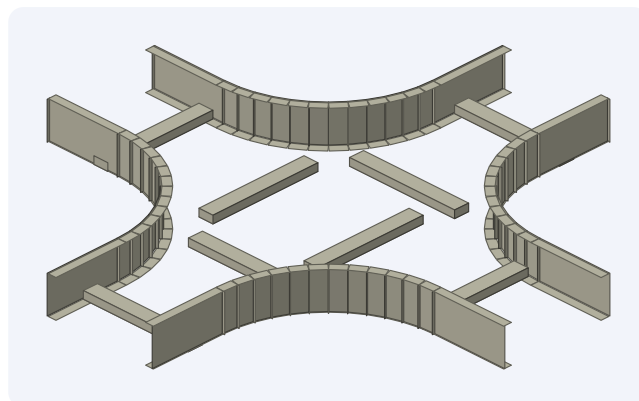
Dimensions in mm. W = inside width, R = inside radius, Y = overall length of the fitting.

GRP CABLE LADDER · FITTINGS

Horizontal cross

Four-way junction in the horizontal plane.

Radius (R)	R300 · R450 · R600 · R900
Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



			ITEM NUMBER				WEIGHT KG/PC			
W	R	Y	H55	H80	H100	H150	H55	H80	H100	H150
150	R300	954	CGR-LD032-001	CGR-LD032-037	CGR-LD032-073	CGR-LD032-109	4.90	5.85	6.44	10.95
150	R450	1267	CGR-LD032-002	CGR-LD032-038	CGR-LD032-074	CGR-LD032-110	6.37	7.55	8.32	14.04
150	R600	1557	CGR-LD032-003	CGR-LD032-039	CGR-LD032-075	CGR-LD032-111	7.76	9.16	10.58	17.58
150	R900	2154	CGR-LD032-004	CGR-LD032-040	CGR-LD032-076	CGR-LD032-112	9.40	11.64	14.37	22.97
200	R300	1004	CGR-LD032-005	CGR-LD032-041	CGR-LD032-077	CGR-LD032-113	5.10	6.04	6.59	11.24
200	R450	1317	CGR-LD032-006	CGR-LD032-042	CGR-LD032-078	CGR-LD032-114	6.60	7.78	8.55	14.38
200	R600	1607	CGR-LD032-007	CGR-LD032-043	CGR-LD032-079	CGR-LD032-115	8.08	9.91	10.89	18.04
200	R900	2204	CGR-LD032-008	CGR-LD032-044	CGR-LD032-080	CGR-LD032-116	9.67	11.90	14.78	23.34
300	R300	1104	CGR-LD032-009	CGR-LD032-045	CGR-LD032-081	CGR-LD032-117	5.90	6.84	7.32	12.26
300	R450	1417	CGR-LD032-010	CGR-LD032-046	CGR-LD032-082	CGR-LD032-118	7.45	8.64	9.35	15.48
300	R600	1707	CGR-LD032-011	CGR-LD032-047	CGR-LD032-083	CGR-LD032-119	8.99	10.93	11.54	19.00
300	R900	2304	CGR-LD032-012	CGR-LD032-048	CGR-LD032-084	CGR-LD032-120	10.73	12.97	16.09	24.91
400	R300	1204	CGR-LD032-013	CGR-LD032-049	CGR-LD032-085	CGR-LD032-121	6.35	7.29	7.79	12.93
400	R450	1517	CGR-LD032-014	CGR-LD032-050	CGR-LD032-086	CGR-LD032-122	7.96	9.14	9.94	16.10
400	R600	1807	CGR-LD032-015	CGR-LD032-051	CGR-LD032-087	CGR-LD032-123	9.55	11.60	12.57	20.45
400	R900	2404	CGR-LD032-016	CGR-LD032-052	CGR-LD032-088	CGR-LD032-124	11.34	13.58	17.01	26.05
450	R300	1254	CGR-LD032-017	CGR-LD032-053	CGR-LD032-089	CGR-LD032-125	6.58	7.52	8.01	13.26
450	R450	1567	CGR-LD032-018	CGR-LD032-054	CGR-LD032-090	CGR-LD032-126	8.21	9.39	10.16	16.65
450	R600	1857	CGR-LD032-019	CGR-LD032-055	CGR-LD032-091	CGR-LD032-127	9.83	11.94	12.90	20.19
450	R900	2454	CGR-LD032-020	CGR-LD032-056	CGR-LD032-092	CGR-LD032-128	11.64	13.87	17.54	26.50
500	R300	1304	CGR-LD032-021	CGR-LD032-057	CGR-LD032-093	CGR-LD032-129	6.80	7.74	8.26	13.60
500	R450	1617	CGR-LD032-022	CGR-LD032-058	CGR-LD032-094	CGR-LD032-130	8.47	9.65	10.39	16.99
500	R600	1907	CGR-LD032-023	CGR-LD032-059	CGR-LD032-095	CGR-LD032-131	10.11	12.28	13.24	21.41
500	R900	2504	CGR-LD032-024	CGR-LD032-060	CGR-LD032-096	CGR-LD032-132	12.04	14.27	17.96	27.09
600	R300	1404	CGR-LD032-025	CGR-LD032-061	CGR-LD032-097	CGR-LD032-133	7.82	8.77	9.78	15.50
600	R450	1717	CGR-LD032-026	CGR-LD032-062	CGR-LD032-098	CGR-LD032-134	9.55	10.73	11.45	18.48
600	R600	2007	CGR-LD032-027	CGR-LD032-063	CGR-LD032-099	CGR-LD032-135	10.68	12.95	13.96	22.46
600	R900	2604	CGR-LD032-028	CGR-LD032-064	CGR-LD032-100	CGR-LD032-136	12.78	15.02	18.79	28.10
750	R300	1554	CGR-LD032-029	CGR-LD032-065	CGR-LD032-101	CGR-LD032-137	8.58	9.53	10.00	16.10
750	R450	1867	CGR-LD032-030	CGR-LD032-066	CGR-LD032-102	CGR-LD032-138	10.39	11.57	12.31	19.73
750	R600	2157	CGR-LD032-031	CGR-LD032-067	CGR-LD032-103	CGR-LD032-139	12.18	14.62	15.12	24.77
750	R900	2754	CGR-LD032-032	CGR-LD032-068	CGR-LD032-104	CGR-LD032-140	14.27	16.51	21.00	30.67
900	R300	1704	CGR-LD032-033	CGR-LD032-069	CGR-LD032-105	CGR-LD032-141	10.09	11.03	11.45	18.16
900	R450	2017	CGR-LD032-034	CGR-LD032-070	CGR-LD032-106	CGR-LD032-142	11.98	13.16	13.85	21.93
900	R600	2307	CGR-LD032-035	CGR-LD032-071	CGR-LD032-107	CGR-LD032-143	13.85	16.46	17.36	27.36
900	R900	2904	CGR-LD032-036	CGR-LD032-072	CGR-LD032-108	CGR-LD032-144	15.34	17.57	22.67	32.42

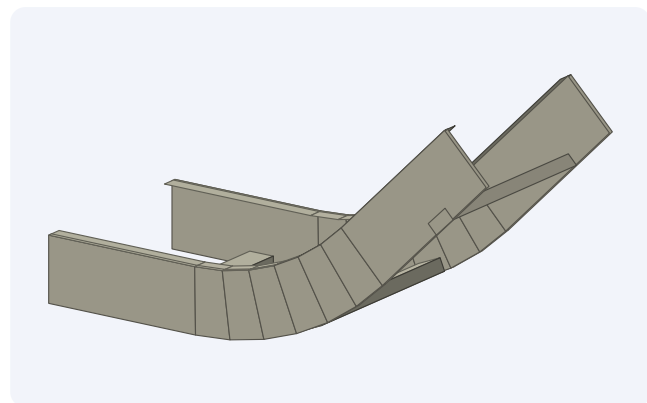
Dimensions in mm. W = inside width, R = inside radius, Y = overall length of the fitting.

GRP CABLE LADDER · FITTINGS

Inside riser 45°

Vertical change of direction upward by 45° (concave).

Radius (R)	R300 · R450 · R600 · R900
Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



		ITEM NUMBER				WEIGHT KG/PC			
W	R	H55	H80	H100	H150	H55	H80	H100	H150
150	R300	CGR-LD041-001	CGR-LD041-037	CGR-LD041-073	CGR-LD041-109	0.87	0.94	1.10	1.81
150	R450	CGR-LD041-002	CGR-LD041-038	CGR-LD041-074	CGR-LD041-110	0.94	1.03	1.22	2.00
150	R600	CGR-LD041-003	CGR-LD041-039	CGR-LD041-075	CGR-LD041-111	1.58	1.72	2.22	3.35
150	R900	CGR-LD041-004	CGR-LD041-040	CGR-LD041-076	CGR-LD041-112	1.58	2.04	2.65	4.07
200	R300	CGR-LD041-005	CGR-LD041-041	CGR-LD041-077	CGR-LD041-113	0.90	0.96	1.14	1.85
200	R450	CGR-LD041-006	CGR-LD041-042	CGR-LD041-078	CGR-LD041-114	0.97	1.05	1.25	2.04
200	R600	CGR-LD041-007	CGR-LD041-043	CGR-LD041-079	CGR-LD041-115	1.63	1.77	2.26	3.44
200	R900	CGR-LD041-008	CGR-LD041-044	CGR-LD041-080	CGR-LD041-116	1.64	2.09	2.69	4.16
300	R300	CGR-LD041-009	CGR-LD041-045	CGR-LD041-081	CGR-LD041-117	0.95	1.02	1.21	1.93
300	R450	CGR-LD041-010	CGR-LD041-046	CGR-LD041-082	CGR-LD041-118	1.03	1.11	1.33	2.13
300	R600	CGR-LD041-011	CGR-LD041-047	CGR-LD041-083	CGR-LD041-119	1.74	1.89	2.33	3.60
300	R900	CGR-LD041-012	CGR-LD041-048	CGR-LD041-084	CGR-LD041-120	1.74	2.20	2.76	4.32
400	R300	CGR-LD041-013	CGR-LD041-049	CGR-LD041-085	CGR-LD041-121	1.01	1.08	1.28	2.02
400	R450	CGR-LD041-014	CGR-LD041-050	CGR-LD041-086	CGR-LD041-122	1.08	1.17	1.40	2.21
400	R600	CGR-LD041-015	CGR-LD041-051	CGR-LD041-087	CGR-LD041-123	1.86	2.00	2.41	3.77
400	R900	CGR-LD041-016	CGR-LD041-052	CGR-LD041-088	CGR-LD041-124	1.85	2.30	2.83	4.49
450	R300	CGR-LD041-017	CGR-LD041-053	CGR-LD041-089	CGR-LD041-125	1.04	1.10	1.32	2.06
450	R450	CGR-LD041-018	CGR-LD041-054	CGR-LD041-090	CGR-LD041-126	1.11	1.19	1.43	2.25
450	R600	CGR-LD041-019	CGR-LD041-055	CGR-LD041-091	CGR-LD041-127	1.91	2.06	2.44	3.85
450	R900	CGR-LD041-020	CGR-LD041-056	CGR-LD041-092	CGR-LD041-128	1.90	2.36	2.87	4.57
500	R300	CGR-LD041-021	CGR-LD041-057	CGR-LD041-093	CGR-LD041-129	1.07	1.13	1.36	2.10
500	R450	CGR-LD041-022	CGR-LD041-058	CGR-LD041-094	CGR-LD041-130	1.14	1.22	1.47	2.29
500	R600	CGR-LD041-023	CGR-LD041-059	CGR-LD041-095	CGR-LD041-131	1.97	2.11	2.48	3.94
500	R900	CGR-LD041-024	CGR-LD041-060	CGR-LD041-096	CGR-LD041-132	1.96	2.41	2.91	4.66
600	R300	CGR-LD041-025	CGR-LD041-061	CGR-LD041-097	CGR-LD041-133	1.12	1.19	1.43	2.18
600	R450	CGR-LD041-026	CGR-LD041-062	CGR-LD041-098	CGR-LD041-134	1.19	1.28	1.54	2.38
600	R600	CGR-LD041-027	CGR-LD041-063	CGR-LD041-099	CGR-LD041-135	2.08	2.22	2.55	4.10
600	R900	CGR-LD041-028	CGR-LD041-064	CGR-LD041-100	CGR-LD041-136	2.06	2.52	2.98	4.83
750	R300	CGR-LD041-029	CGR-LD041-065	CGR-LD041-101	CGR-LD041-137	1.21	1.27	1.54	2.31
750	R450	CGR-LD041-030	CGR-LD041-066	CGR-LD041-102	CGR-LD041-138	1.28	1.36	1.65	2.50
750	R600	CGR-LD041-031	CGR-LD041-067	CGR-LD041-103	CGR-LD041-139	2.25	2.39	2.66	4.35
750	R900	CGR-LD041-032	CGR-LD041-068	CGR-LD041-104	CGR-LD041-140	2.22	2.68	3.09	5.08
900	R300	CGR-LD041-033	CGR-LD041-069	CGR-LD041-105	CGR-LD041-141	1.29	1.36	1.65	2.44
900	R450	CGR-LD041-034	CGR-LD041-070	CGR-LD041-106	CGR-LD041-142	1.36	1.45	1.76	2.63
900	R600	CGR-LD041-035	CGR-LD041-071	CGR-LD041-107	CGR-LD041-143	2.42	2.56	2.77	4.61
900	R900	CGR-LD041-036	CGR-LD041-072	CGR-LD041-108	CGR-LD041-144	2.38	2.84	3.20	5.33

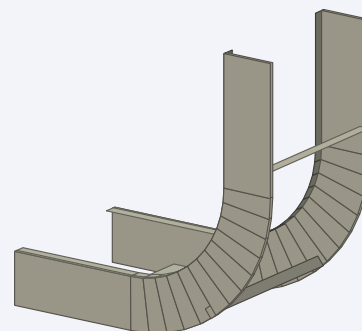
Dimensions in mm. W = inside width, R = inside radius.

GRP CABLE LADDER · FITTINGS

Inside riser 90°

Vertical change of direction upward by 90° (concave).

Radius (R)	R300 · R450 · R600 · R900
Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



		ITEM NUMBER				WEIGHT KG/PC			
W	R	H55	H80	H100	H150	H55	H80	H100	H150
150	R300	CGR-LD042-001	CGR-LD042-037	CGR-LD042-073	CGR-LD042-109	1.06	1.22	1.54	2.53
150	R450	CGR-LD042-002	CGR-LD042-038	CGR-LD042-074	CGR-LD042-110	1.90	2.20	2.84	4.67
150	R600	CGR-LD042-003	CGR-LD042-039	CGR-LD042-075	CGR-LD042-111	2.73	3.19	4.13	6.79
150	R900	CGR-LD042-004	CGR-LD042-040	CGR-LD042-076	CGR-LD042-112	1.95	2.59	4.80	7.81
200	R300	CGR-LD042-005	CGR-LD042-041	CGR-LD042-077	CGR-LD042-113	1.09	1.25	1.50	2.59
200	R450	CGR-LD042-006	CGR-LD042-042	CGR-LD042-078	CGR-LD042-114	1.95	2.26	2.75	4.30
200	R600	CGR-LD042-007	CGR-LD042-043	CGR-LD042-079	CGR-LD042-115	2.82	3.27	4.00	6.20
200	R900	CGR-LD042-008	CGR-LD042-044	CGR-LD042-080	CGR-LD042-116	2.00	2.64	4.91	7.93
300	R300	CGR-LD042-009	CGR-LD042-045	CGR-LD042-081	CGR-LD042-117	1.15	1.30	1.68	2.55
300	R450	CGR-LD042-010	CGR-LD042-046	CGR-LD042-082	CGR-LD042-118	2.07	2.37	2.85	4.75
300	R600	CGR-LD042-011	CGR-LD042-047	CGR-LD042-083	CGR-LD042-119	2.99	3.44	3.00	7.15
300	R900	CGR-LD042-012	CGR-LD042-048	CGR-LD042-084	CGR-LD042-120	2.11	2.75	5.13	8.18
400	R300	CGR-LD042-013	CGR-LD042-049	CGR-LD042-085	CGR-LD042-121	1.20	1.61	1.68	2.75
400	R450	CGR-LD042-014	CGR-LD042-050	CGR-LD042-086	CGR-LD042-122	2.18	2.48	3.11	5.07
400	R600	CGR-LD042-015	CGR-LD042-051	CGR-LD042-087	CGR-LD042-123	3.15	3.61	4.55	7.39
400	R900	CGR-LD042-016	CGR-LD042-052	CGR-LD042-088	CGR-LD042-124	2.21	2.85	5.35	8.44
450	R300	CGR-LD042-017	CGR-LD042-053	CGR-LD042-089	CGR-LD042-125	1.53	1.68	2.03	3.33
450	R450	CGR-LD042-018	CGR-LD042-054	CGR-LD042-090	CGR-LD042-126	2.23	2.54	3.17	5.15
450	R600	CGR-LD042-019	CGR-LD042-055	CGR-LD042-091	CGR-LD042-127	3.24	3.70	4.63	7.51
450	R900	CGR-LD042-020	CGR-LD042-056	CGR-LD042-092	CGR-LD042-128	2.26	2.91	5.45	8.56
500	R300	CGR-LD042-021	CGR-LD042-057	CGR-LD042-093	CGR-LD042-129	1.58	1.73	2.08	3.41
500	R450	CGR-LD042-022	CGR-LD042-058	CGR-LD042-094	CGR-LD042-130	2.29	2.60	3.22	5.23
500	R600	CGR-LD042-023	CGR-LD042-059	CGR-LD042-095	CGR-LD042-131	3.32	3.78	4.71	7.64
500	R900	CGR-LD042-024	CGR-LD042-060	CGR-LD042-096	CGR-LD042-132	2.32	2.96	5.56	8.69
600	R300	CGR-LD042-025	CGR-LD042-061	CGR-LD042-097	CGR-LD042-133	1.64	1.85	2.19	3.57
600	R450	CGR-LD042-026	CGR-LD042-062	CGR-LD042-098	CGR-LD042-134	2.40	2.71	3.38	5.40
600	R600	CGR-LD042-027	CGR-LD042-063	CGR-LD042-099	CGR-LD042-135	3.49	3.95	4.88	7.83
600	R900	CGR-LD042-028	CGR-LD042-064	CGR-LD042-100	CGR-LD042-136	2.42	3.07	5.78	8.94
750	R300	CGR-LD042-029	CGR-LD042-065	CGR-LD042-101	CGR-LD042-137	1.86	2.01	2.36	3.82
750	R450	CGR-LD042-030	CGR-LD042-066	CGR-LD042-102	CGR-LD042-138	2.57	2.88	3.50	5.64
750	R600	CGR-LD042-031	CGR-LD042-067	CGR-LD042-103	CGR-LD042-139	3.74	4.20	5.13	8.24
750	R900	CGR-LD042-032	CGR-LD042-068	CGR-LD042-104	CGR-LD042-140	2.58	3.23	6.11	9.31
900	R300	CGR-LD042-033	CGR-LD042-069	CGR-LD042-105	CGR-LD042-141	2.03	2.18	2.52	4.06
900	R450	CGR-LD042-034	CGR-LD042-070	CGR-LD042-106	CGR-LD042-142	2.74	3.05	3.66	5.88
900	R600	CGR-LD042-035	CGR-LD042-071	CGR-LD042-107	CGR-LD042-143	4.00	4.45	5.38	8.61
900	R900	CGR-LD042-036	CGR-LD042-072	CGR-LD042-108	CGR-LD042-144	2.74	3.39	6.43	9.69

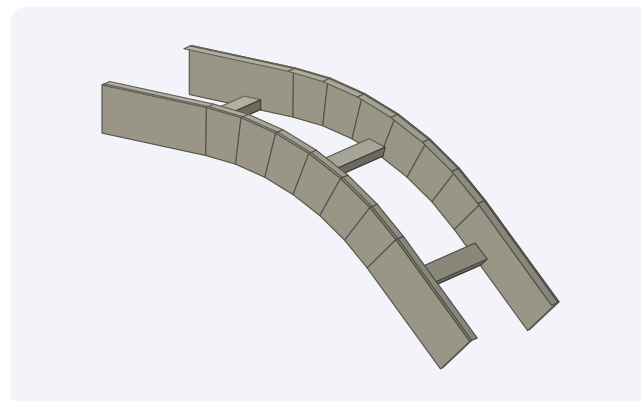
Dimensions in mm. W = inside width, R = inside radius.

GRP CABLE LADDER · FITTINGS

Outside riser 45°

Vertical change of direction downward by 45° (convex).

Radius (R)	R300 · R450 · R600 · R900
Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



		ITEM NUMBER				WEIGHT KG/PC			
W	R	H55	H80	H100	H150	H55	H80	H100	H150
150	R300	CGR-LD043-001	CGR-LD043-037	CGR-LD043-073	CGR-LD043-109	0.87	0.94	1.10	1.81
150	R450	CGR-LD043-002	CGR-LD043-038	CGR-LD043-074	CGR-LD043-110	0.94	1.03	1.22	2.00
150	R600	CGR-LD043-003	CGR-LD043-039	CGR-LD043-075	CGR-LD043-111	1.58	1.72	2.22	3.35
150	R900	CGR-LD043-004	CGR-LD043-040	CGR-LD043-076	CGR-LD043-112	0.94	2.04	2.65	4.07
200	R300	CGR-LD043-005	CGR-LD043-041	CGR-LD043-077	CGR-LD043-113	0.90	0.96	1.14	1.85
200	R450	CGR-LD043-006	CGR-LD043-042	CGR-LD043-078	CGR-LD043-114	0.97	1.05	1.25	2.04
200	R600	CGR-LD043-007	CGR-LD043-043	CGR-LD043-079	CGR-LD043-115	1.63	1.77	2.26	3.44
200	R900	CGR-LD043-008	CGR-LD043-044	CGR-LD043-080	CGR-LD043-116	1.64	2.09	2.69	4.16
300	R300	CGR-LD043-009	CGR-LD043-045	CGR-LD043-081	CGR-LD043-117	0.95	1.02	1.21	1.93
300	R450	CGR-LD043-010	CGR-LD043-046	CGR-LD043-082	CGR-LD043-118	1.03	1.11	1.33	2.13
300	R600	CGR-LD043-011	CGR-LD043-047	CGR-LD043-083	CGR-LD043-119	1.74	1.89	2.33	3.60
300	R900	CGR-LD043-012	CGR-LD043-048	CGR-LD043-084	CGR-LD043-120	1.74	2.20	2.76	4.32
400	R300	CGR-LD043-013	CGR-LD043-049	CGR-LD043-085	CGR-LD043-121	1.01	1.08	1.28	2.02
400	R450	CGR-LD043-014	CGR-LD043-050	CGR-LD043-086	CGR-LD043-122	1.08	1.17	1.40	2.21
400	R600	CGR-LD043-015	CGR-LD043-051	CGR-LD043-087	CGR-LD043-123	1.86	2.00	2.41	3.77
400	R900	CGR-LD043-016	CGR-LD043-052	CGR-LD043-088	CGR-LD043-124	1.85	2.30	2.83	4.49
450	R300	CGR-LD043-017	CGR-LD043-053	CGR-LD043-089	CGR-LD043-125	1.04	1.10	1.32	2.06
450	R450	CGR-LD043-018	CGR-LD043-054	CGR-LD043-090	CGR-LD043-126	1.11	1.19	1.43	2.25
450	R600	CGR-LD043-019	CGR-LD043-055	CGR-LD043-091	CGR-LD043-127	1.91	2.06	2.44	3.85
450	R900	CGR-LD043-020	CGR-LD043-056	CGR-LD043-092	CGR-LD043-128	1.90	2.36	2.87	4.57
500	R300	CGR-LD043-021	CGR-LD043-057	CGR-LD043-093	CGR-LD043-129	1.07	1.13	1.36	2.10
500	R450	CGR-LD043-022	CGR-LD043-058	CGR-LD043-094	CGR-LD043-130	1.14	1.22	1.47	2.29
500	R600	CGR-LD043-023	CGR-LD043-059	CGR-LD043-095	CGR-LD043-131	1.97	2.11	2.48	3.94
500	R900	CGR-LD043-024	CGR-LD043-060	CGR-LD043-096	CGR-LD043-132	1.96	2.41	2.91	4.66
600	R300	CGR-LD043-025	CGR-LD043-061	CGR-LD043-097	CGR-LD043-133	1.12	1.19	1.43	2.18
600	R450	CGR-LD043-026	CGR-LD043-062	CGR-LD043-098	CGR-LD043-134	1.19	1.28	1.54	2.38
600	R600	CGR-LD043-027	CGR-LD043-063	CGR-LD043-099	CGR-LD043-135	2.08	2.22	2.55	4.10
600	R900	CGR-LD043-028	CGR-LD043-064	CGR-LD043-100	CGR-LD043-136	2.06	2.52	2.98	4.83
750	R300	CGR-LD043-029	CGR-LD043-065	CGR-LD043-101	CGR-LD043-137	1.21	1.27	1.54	2.31
750	R450	CGR-LD043-030	CGR-LD043-066	CGR-LD043-102	CGR-LD043-138	1.28	1.36	1.65	2.50
750	R600	CGR-LD043-031	CGR-LD043-067	CGR-LD043-103	CGR-LD043-139	2.25	2.39	2.66	4.35
750	R900	CGR-LD043-032	CGR-LD043-068	CGR-LD043-104	CGR-LD043-140	2.22	2.68	3.09	5.08
900	R300	CGR-LD043-033	CGR-LD043-069	CGR-LD043-105	CGR-LD043-141	1.29	1.36	1.65	2.44
900	R450	CGR-LD043-034	CGR-LD043-070	CGR-LD043-106	CGR-LD043-142	1.36	1.45	1.76	2.63
900	R600	CGR-LD043-035	CGR-LD043-071	CGR-LD043-107	CGR-LD043-143	2.42	2.56	2.77	4.61
900	R900	CGR-LD043-036	CGR-LD043-072	CGR-LD043-108	CGR-LD043-144	2.38	2.84	3.20	5.33

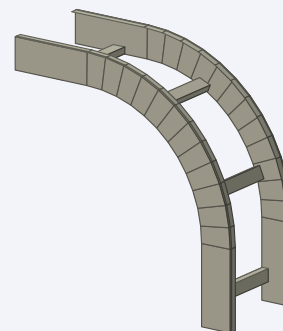
Dimensions in mm. W = inside width, R = inside radius.

GRP CABLE LADDER · FITTINGS

Outside riser 90°

Vertical change of direction downward by 90° (convex).

Radius (R)	R300 · R450 · R600 · R900
Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



		ITEM NUMBER				WEIGHT KG/PC			
W	R	H55	H80	H100	H150	H55	H80	H100	H150
150	R300	CGR-LD044-001	CGR-LD044-037	CGR-LD044-073	CGR-LD044-109	1.06	1.22	1.54	2.55
150	R450	CGR-LD044-002	CGR-LD044-038	CGR-LD044-074	CGR-LD044-110	1.90	2.20	2.59	4.67
150	R600	CGR-LD044-003	CGR-LD044-039	CGR-LD044-075	CGR-LD044-111	2.73	3.19	3.65	6.79
150	R900	CGR-LD044-004	CGR-LD044-040	CGR-LD044-076	CGR-LD044-112	1.95	2.59	4.80	7.81
200	R300	CGR-LD044-005	CGR-LD044-041	CGR-LD044-077	CGR-LD044-113	1.09	1.25	1.57	2.59
200	R450	CGR-LD044-006	CGR-LD044-042	CGR-LD044-078	CGR-LD044-114	1.95	2.26	2.65	4.75
200	R600	CGR-LD044-007	CGR-LD044-043	CGR-LD044-079	CGR-LD044-115	2.82	3.27	3.73	6.92
200	R900	CGR-LD044-008	CGR-LD044-044	CGR-LD044-080	CGR-LD044-116	2.00	2.64	4.91	7.93
300	R300	CGR-LD044-009	CGR-LD044-045	CGR-LD044-081	CGR-LD044-117	1.15	1.30	1.62	2.67
300	R450	CGR-LD044-010	CGR-LD044-046	CGR-LD044-082	CGR-LD044-118	2.07	2.37	2.76	4.91
300	R600	CGR-LD044-011	CGR-LD044-047	CGR-LD044-083	CGR-LD044-119	2.99	3.44	3.89	7.15
300	R900	CGR-LD044-012	CGR-LD044-048	CGR-LD044-084	CGR-LD044-120	2.11	2.75	5.13	8.18
400	R300	CGR-LD044-013	CGR-LD044-049	CGR-LD044-085	CGR-LD044-121	1.20	1.61	1.68	2.75
400	R450	CGR-LD044-014	CGR-LD044-050	CGR-LD044-086	CGR-LD044-122	2.18	2.48	2.87	5.07
400	R600	CGR-LD044-015	CGR-LD044-051	CGR-LD044-087	CGR-LD044-123	3.15	3.61	4.06	7.39
400	R900	CGR-LD044-016	CGR-LD044-052	CGR-LD044-088	CGR-LD044-124	2.21	2.85	5.35	8.44
450	R300	CGR-LD044-017	CGR-LD044-053	CGR-LD044-089	CGR-LD044-125	1.53	1.68	2.03	3.33
450	R450	CGR-LD044-018	CGR-LD044-054	CGR-LD044-090	CGR-LD044-126	2.23	2.54	2.92	5.15
450	R600	CGR-LD044-019	CGR-LD044-055	CGR-LD044-091	CGR-LD044-127	3.24	3.70	4.14	7.51
450	R900	CGR-LD044-020	CGR-LD044-056	CGR-LD044-092	CGR-LD044-128	2.26	2.91	5.45	8.56
500	R300	CGR-LD044-021	CGR-LD044-057	CGR-LD044-093	CGR-LD044-129	1.58	1.73	2.08	3.41
500	R450	CGR-LD044-022	CGR-LD044-058	CGR-LD044-094	CGR-LD044-130	2.29	2.60	2.98	5.23
500	R600	CGR-LD044-023	CGR-LD044-059	CGR-LD044-095	CGR-LD044-131	3.32	3.78	4.23	7.64
500	R900	CGR-LD044-024	CGR-LD044-060	CGR-LD044-096	CGR-LD044-132	2.32	2.96	5.56	8.69
600	R300	CGR-LD044-025	CGR-LD044-061	CGR-LD044-097	CGR-LD044-133	1.64	1.85	2.19	3.57
600	R450	CGR-LD044-026	CGR-LD044-062	CGR-LD044-098	CGR-LD044-134	2.40	2.71	3.09	5.40
600	R600	CGR-LD044-027	CGR-LD044-063	CGR-LD044-099	CGR-LD044-135	3.49	3.95	4.39	7.88
600	R900	CGR-LD044-028	CGR-LD044-064	CGR-LD044-100	CGR-LD044-136	2.42	3.07	5.78	8.94
750	R300	CGR-LD044-029	CGR-LD044-065	CGR-LD044-101	CGR-LD044-137	1.86	2.01	2.36	3.82
750	R450	CGR-LD044-030	CGR-LD044-066	CGR-LD044-102	CGR-LD044-138	2.57	2.88	3.26	5.64
750	R600	CGR-LD044-031	CGR-LD044-067	CGR-LD044-103	CGR-LD044-139	3.74	4.20	4.64	8.24
750	R900	CGR-LD044-032	CGR-LD044-068	CGR-LD044-104	CGR-LD044-140	2.58	3.23	6.11	9.31
900	R300	CGR-LD044-033	CGR-LD044-069	CGR-LD044-105	CGR-LD044-141	2.03	2.18	2.52	4.06
900	R450	CGR-LD044-034	CGR-LD044-070	CGR-LD044-106	CGR-LD044-142	2.74	3.05	3.42	5.88
900	R600	CGR-LD044-035	CGR-LD044-071	CGR-LD044-107	CGR-LD044-143	4.00	4.45	4.89	8.61
900	R900	CGR-LD044-036	CGR-LD044-072	CGR-LD044-108	CGR-LD044-144	2.74	3.39	6.43	9.69

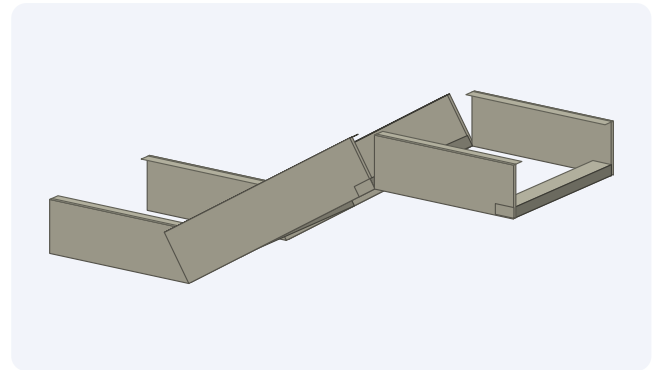
Dimensions in mm. W = inside width, R = inside radius.

GRP CABLE LADDER · FITTINGS

Level change and reducer plates

The adjustable level-change module (SDM) takes the route up or down over an obstacle at any angle. Reducer plates turn a straight length into a field-made reducer.

Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



Adjustable level-change module (SDM)

W	ITEM NUMBER				WEIGHT KG/PC			
	H55	H80	H100	H150	H55	H80	H100	H150
150	CGR-LD051-001	CGR-LD051-010	CGR-LD051-019	CGR-LD051-028	1.37	1.75	1.89	3.40
200	CGR-LD051-002	CGR-LD051-011	CGR-LD051-020	CGR-LD051-029	1.40	1.77	1.92	3.44
300	CGR-LD051-003	CGR-LD051-012	CGR-LD051-021	CGR-LD051-030	1.45	1.83	1.98	3.52
400	CGR-LD051-004	CGR-LD051-013	CGR-LD051-022	CGR-LD051-031	1.51	1.89	2.03	3.61
450	CGR-LD051-005	CGR-LD051-014	CGR-LD051-023	CGR-LD051-032	1.54	1.92	2.38	4.17
500	CGR-LD051-006	CGR-LD051-015	CGR-LD051-024	CGR-LD051-033	1.56	1.94	2.44	4.25
600	CGR-LD051-007	CGR-LD051-016	CGR-LD051-025	CGR-LD051-034	1.62	2.00	2.55	4.42
750	CGR-LD051-008	CGR-LD051-017	CGR-LD051-026	CGR-LD051-035	1.70	2.09	2.73	4.67
900	CGR-LD051-009	CGR-LD051-018	CGR-LD051-027	CGR-LD051-036	1.79	2.14	2.90	4.92

Reducer plates

A	ITEM NUMBER				WEIGHT KG/PC			
	H55	H80	H100	H150	H55	H80	H100	H150
50	CGR-LD064-001	CGR-LD064-013	CGR-LD064-025	CGR-LD064-037	0.24	0.29	0.39	0.65
100	CGR-LD064-002	CGR-LD064-014	CGR-LD064-026	CGR-LD064-038	0.29	0.35	0.46	0.77
150	CGR-LD064-003	CGR-LD064-015	CGR-LD064-027	CGR-LD064-039	0.33	0.40	0.53	0.89
200	CGR-LD064-004	CGR-LD064-016	CGR-LD064-028	CGR-LD064-040	0.38	0.46	0.60	1.01
250	CGR-LD064-005	CGR-LD064-017	CGR-LD064-029	CGR-LD064-041	0.42	0.52	0.67	1.13
300	CGR-LD064-006	CGR-LD064-018	CGR-LD064-030	CGR-LD064-042	0.47	0.57	0.74	1.25
350	CGR-LD064-007	CGR-LD064-019	CGR-LD064-031	CGR-LD064-043	0.51	0.63	0.81	1.36
400	CGR-LD064-008	CGR-LD064-020	CGR-LD064-032	CGR-LD064-044	0.56	0.69	0.88	1.48
450	CGR-LD064-009	CGR-LD064-021	CGR-LD064-033	CGR-LD064-045	0.61	0.75	0.95	1.60
500	CGR-LD064-010	CGR-LD064-022	CGR-LD064-034	CGR-LD064-046	0.65	0.80	1.02	1.72
600	CGR-LD064-011	CGR-LD064-023	CGR-LD064-035	CGR-LD064-047	0.74	0.92	1.16	1.96
750	CGR-LD064-012	CGR-LD064-024	CGR-LD064-036	CGR-LD064-048	0.88	1.09	1.37	2.32

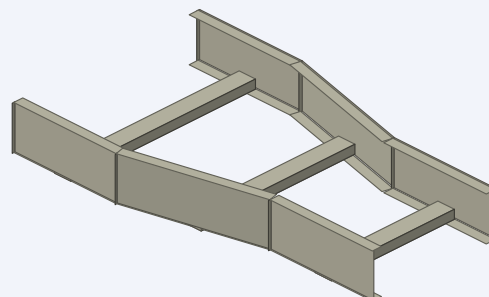
A = width reduction in mm. Body and bent ends in GRP. Order 4 × M10×25 SS316 bolt sets per reducer plate joint.

GRP CABLE LADDER · FITTINGS

Centre reducer

Reduces the ladder width symmetrically on both sides.

Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



		ITEM NUMBER				WEIGHT KG/PC			
W1	W2	H55	H80	H100	H150	H55	H80	H100	H150
300	150	CGR-LD061-001	CGR-LD061-034	CGR-LD061-067	CGR-LD061-100	2.15	2.47	2.91	4.95
400	150	CGR-LD061-003	CGR-LD061-036	CGR-LD061-069	CGR-LD061-102	2.30	2.64	3.10	5.27
450	150	CGR-LD061-006	CGR-LD061-039	CGR-LD061-072	CGR-LD061-105	2.37	2.72	3.20	5.43
500	150	CGR-LD061-009	CGR-LD061-042	CGR-LD061-075	CGR-LD061-108	2.45	2.81	3.30	5.59
600	150	CGR-LD061-013	CGR-LD061-046	CGR-LD061-079	CGR-LD061-112	2.59	2.98	3.49	5.91
750	150	CGR-LD061-019	CGR-LD061-052	CGR-LD061-085	CGR-LD061-118	2.81	3.23	3.79	6.39
900	150	CGR-LD061-026	CGR-LD061-059	CGR-LD061-092	CGR-LD061-125	3.03	3.49	4.08	6.86
300	200	CGR-LD061-002	CGR-LD061-035	CGR-LD061-068	CGR-LD061-101	2.14	2.44	2.87	4.87
400	200	CGR-LD061-004	CGR-LD061-037	CGR-LD061-070	CGR-LD061-103	2.28	2.61	3.06	5.19
450	200	CGR-LD061-007	CGR-LD061-040	CGR-LD061-073	CGR-LD061-106	2.36	2.69	3.16	5.35
500	200	CGR-LD061-010	CGR-LD061-043	CGR-LD061-076	CGR-LD061-109	2.43	2.78	3.26	5.51
600	200	CGR-LD061-014	CGR-LD061-047	CGR-LD061-080	CGR-LD061-113	2.58	2.95	3.45	5.83
750	200	CGR-LD061-020	CGR-LD061-053	CGR-LD061-086	CGR-LD061-119	2.80	3.20	3.74	6.31
900	200	CGR-LD061-027	CGR-LD061-060	CGR-LD061-093	CGR-LD061-126	3.02	3.46	4.04	6.79
400	300	CGR-LD061-005	CGR-LD061-038	CGR-LD061-071	CGR-LD061-104	2.25	2.55	2.98	5.04
450	300	CGR-LD061-008	CGR-LD061-041	CGR-LD061-074	CGR-LD061-107	2.32	2.64	3.08	5.20
500	300	CGR-LD061-011	CGR-LD061-044	CGR-LD061-077	CGR-LD061-110	2.39	2.72	3.17	5.35
600	300	CGR-LD061-015	CGR-LD061-048	CGR-LD061-081	CGR-LD061-114	2.54	2.89	3.37	5.67
750	300	CGR-LD061-021	CGR-LD061-054	CGR-LD061-087	CGR-LD061-120	2.76	3.15	3.66	6.15
900	300	CGR-LD061-028	CGR-LD061-061	CGR-LD061-094	CGR-LD061-127	2.98	3.40	3.95	6.63
500	400	CGR-LD061-012	CGR-LD061-045	CGR-LD061-078	CGR-LD061-111	2.36	2.67	3.09	5.20
600	400	CGR-LD061-016	CGR-LD061-049	CGR-LD061-082	CGR-LD061-115	2.51	2.83	3.28	5.52
750	400	CGR-LD061-022	CGR-LD061-055	CGR-LD061-088	CGR-LD061-121	2.73	3.09	3.58	5.99
900	400	CGR-LD061-029	CGR-LD061-062	CGR-LD061-095	CGR-LD061-128	2.95	3.34	3.87	6.47
600	450	CGR-LD061-017	CGR-LD061-050	CGR-LD061-083	CGR-LD061-116	2.49	2.80	3.24	5.44
750	450	CGR-LD061-023	CGR-LD061-056	CGR-LD061-089	CGR-LD061-122	2.71	3.06	3.53	5.92
900	450	CGR-LD061-030	CGR-LD061-063	CGR-LD061-096	CGR-LD061-129	2.93	3.31	3.83	6.39
600	500	CGR-LD061-018	CGR-LD061-051	CGR-LD061-084	CGR-LD061-117	2.47	2.78	3.20	5.36
750	500	CGR-LD061-024	CGR-LD061-057	CGR-LD061-090	CGR-LD061-123	2.69	3.03	3.49	5.84
900	500	CGR-LD061-031	CGR-LD061-064	CGR-LD061-097	CGR-LD061-130	2.91	3.29	3.78	6.32
750	600	CGR-LD061-025	CGR-LD061-058	CGR-LD061-091	CGR-LD061-124	2.66	2.97	3.41	5.68
900	600	CGR-LD061-032	CGR-LD061-065	CGR-LD061-098	CGR-LD061-131	2.88	3.23	3.70	6.16
900	750	CGR-LD061-033	CGR-LD061-066	CGR-LD061-099	CGR-LD061-132	2.83	3.14	3.57	5.92

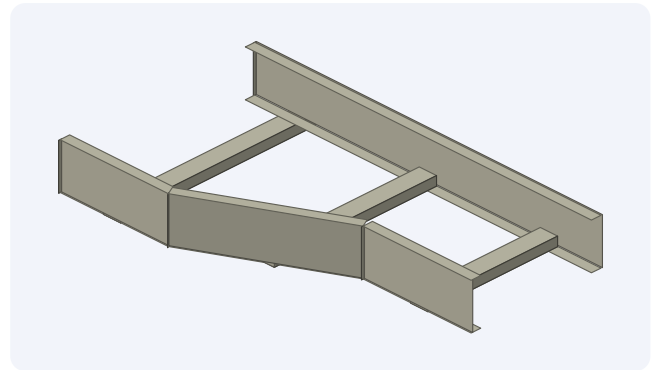
W1 = larger width, W2 = smaller width (mm).

GRP CABLE LADDER · FITTINGS

Right reducer

Reduces the width on the right-hand side; the left side rail runs straight.

Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



		ITEM NUMBER				WEIGHT KG/PC			
W1	W2	H55	H80	H100	H150	H55	H80	H100	H150
300	150	CGR-LD062-001	CGR-LD062-034	CGR-LD062-067	CGR-LD062-100	1.86	2.17	2.59	4.44
400	150	CGR-LD062-003	CGR-LD062-036	CGR-LD062-069	CGR-LD062-102	2.00	2.34	2.79	4.76
450	150	CGR-LD062-006	CGR-LD062-039	CGR-LD062-072	CGR-LD062-105	2.08	2.42	2.89	4.92
500	150	CGR-LD062-009	CGR-LD062-042	CGR-LD062-075	CGR-LD062-108	2.15	2.51	2.98	5.08
600	150	CGR-LD062-013	CGR-LD062-046	CGR-LD062-079	CGR-LD062-112	2.30	2.68	3.18	5.39
750	150	CGR-LD062-019	CGR-LD062-052	CGR-LD062-085	CGR-LD062-118	2.52	2.93	3.47	5.87
900	150	CGR-LD062-026	CGR-LD062-059	CGR-LD062-092	CGR-LD062-125	2.74	3.19	3.76	6.35
300	200	CGR-LD062-002	CGR-LD062-035	CGR-LD062-068	CGR-LD062-101	1.84	2.14	2.55	4.36
400	200	CGR-LD062-004	CGR-LD062-037	CGR-LD062-070	CGR-LD062-103	1.98	2.31	2.75	4.68
450	200	CGR-LD062-007	CGR-LD062-040	CGR-LD062-073	CGR-LD062-106	2.06	2.48	2.84	4.84
500	200	CGR-LD062-010	CGR-LD062-043	CGR-LD062-076	CGR-LD062-109	2.13	2.48	2.94	5.00
600	200	CGR-LD062-014	CGR-LD062-047	CGR-LD062-080	CGR-LD062-113	2.28	2.65	3.13	5.32
750	200	CGR-LD062-020	CGR-LD062-053	CGR-LD062-086	CGR-LD062-119	2.50	2.91	3.43	5.79
900	200	CGR-LD062-027	CGR-LD062-060	CGR-LD062-093	CGR-LD062-126	2.72	3.16	3.72	6.27
400	300	CGR-LD062-005	CGR-LD062-038	CGR-LD062-071	CGR-LD062-104	1.95	2.25	2.66	4.52
450	300	CGR-LD062-008	CGR-LD062-041	CGR-LD062-074	CGR-LD062-107	2.02	2.34	2.76	4.68
500	300	CGR-LD062-011	CGR-LD062-044	CGR-LD062-077	CGR-LD062-110	2.10	2.42	2.86	4.84
600	300	CGR-LD062-015	CGR-LD062-048	CGR-LD062-081	CGR-LD062-114	2.24	2.59	3.05	5.16
750	300	CGR-LD062-021	CGR-LD062-054	CGR-LD062-087	CGR-LD062-120	2.46	2.85	3.34	5.64
900	300	CGR-LD062-028	CGR-LD062-061	CGR-LD062-094	CGR-LD062-127	2.68	3.10	3.63	6.11
500	400	CGR-LD062-012	CGR-LD062-045	CGR-LD062-078	CGR-LD062-111	2.06	2.37	2.77	4.68
600	400	CGR-LD062-016	CGR-LD062-049	CGR-LD062-082	CGR-LD062-115	2.21	2.54	2.97	5.00
750	400	CGR-LD062-022	CGR-LD062-055	CGR-LD062-088	CGR-LD062-121	2.43	2.79	3.26	5.48
900	400	CGR-LD062-029	CGR-LD062-062	CGR-LD062-095	CGR-LD062-128	2.65	3.05	3.55	5.96
600	450	CGR-LD062-017	CGR-LD062-050	CGR-LD062-083	CGR-LD062-116	2.19	2.51	2.93	4.92
750	450	CGR-LD062-023	CGR-LD062-056	CGR-LD062-089	CGR-LD062-122	2.41	2.76	3.22	5.40
900	450	CGR-LD062-030	CGR-LD062-063	CGR-LD062-096	CGR-LD062-129	2.63	3.02	3.51	5.88
600	500	CGR-LD062-018	CGR-LD062-051	CGR-LD062-084	CGR-LD062-117	2.18	2.73	2.88	4.84
750	500	CGR-LD062-024	CGR-LD062-057	CGR-LD062-090	CGR-LD062-123	2.40	2.73	3.17	5.32
900	500	CGR-LD062-031	CGR-LD062-064	CGR-LD062-097	CGR-LD062-130	2.62	2.99	3.47	5.80
750	600	CGR-LD062-025	CGR-LD062-058	CGR-LD062-091	CGR-LD062-124	2.36	2.68	3.09	5.17
900	600	CGR-LD062-032	CGR-LD062-065	CGR-LD062-098	CGR-LD062-131	2.58	2.93	3.38	5.64
900	750	CGR-LD062-033	CGR-LD062-066	CGR-LD062-099	CGR-LD062-132	2.53	2.84	3.26	5.41

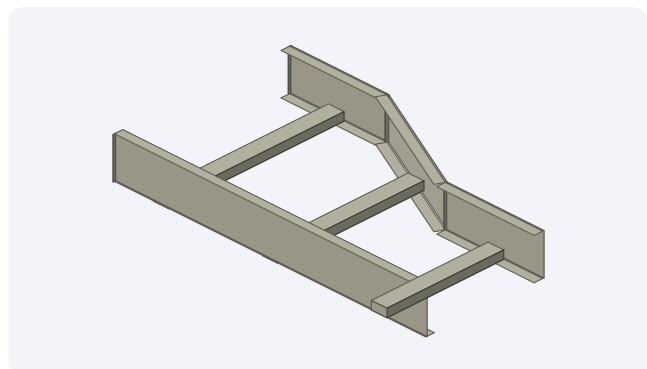
W1 = larger width, W2 = smaller width (mm).

GRP CABLE LADDER · FITTINGS

Left reducer

Reduces the width on the left-hand side; the right side rail runs straight.

Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



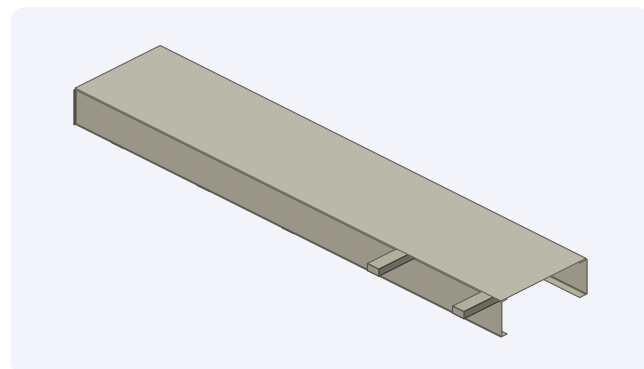
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W1	W2	H55	H80	H100	H150	H55	H80	H100	H150
300	150	CGR-LD063-001	CGR-LD063-034	CGR-LD063-067	CGR-LD063-100	1.86	2.17	2.59	4.44
400	150	CGR-LD063-003	CGR-LD063-036	CGR-LD063-069	CGR-LD063-102	2.00	2.34	2.79	4.76
450	150	CGR-LD063-006	CGR-LD063-039	CGR-LD063-072	CGR-LD063-105	2.08	2.42	2.89	4.92
500	150	CGR-LD063-009	CGR-LD063-042	CGR-LD063-075	CGR-LD063-108	2.15	2.51	2.98	5.08
600	150	CGR-LD063-013	CGR-LD063-046	CGR-LD063-079	CGR-LD063-112	2.30	2.68	3.18	5.39
750	150	CGR-LD063-019	CGR-LD063-052	CGR-LD063-085	CGR-LD063-118	2.52	2.93	3.47	5.87
900	150	CGR-LD063-026	CGR-LD063-059	CGR-LD063-092	CGR-LD063-125	2.74	3.19	3.76	6.35
300	200	CGR-LD063-002	CGR-LD063-035	CGR-LD063-068	CGR-LD063-101	1.84	2.14	2.55	4.36
400	200	CGR-LD063-004	CGR-LD063-037	CGR-LD063-070	CGR-LD063-103	1.98	2.31	2.75	4.68
450	200	CGR-LD063-007	CGR-LD063-040	CGR-LD063-073	CGR-LD063-106	2.06	2.48	2.84	4.84
500	200	CGR-LD063-010	CGR-LD063-043	CGR-LD063-076	CGR-LD063-109	2.13	2.48	2.94	5.00
600	200	CGR-LD063-014	CGR-LD063-047	CGR-LD063-080	CGR-LD063-113	2.28	2.65	3.13	5.32
750	200	CGR-LD063-020	CGR-LD063-053	CGR-LD063-086	CGR-LD063-119	2.50	2.91	3.43	5.79
900	200	CGR-LD063-027	CGR-LD063-060	CGR-LD063-093	CGR-LD063-126	2.72	3.16	3.72	6.27
400	300	CGR-LD063-005	CGR-LD063-038	CGR-LD063-071	CGR-LD063-104	1.95	2.25	2.66	4.52
450	300	CGR-LD063-008	CGR-LD063-041	CGR-LD063-074	CGR-LD063-107	2.02	2.34	2.76	4.68
500	300	CGR-LD063-011	CGR-LD063-044	CGR-LD063-077	CGR-LD063-110	2.10	2.42	2.86	4.84
600	300	CGR-LD063-015	CGR-LD063-048	CGR-LD063-081	CGR-LD063-114	2.24	2.59	3.05	5.16
750	300	CGR-LD063-021	CGR-LD063-054	CGR-LD063-087	CGR-LD063-120	2.46	2.85	3.34	5.64
900	300	CGR-LD063-028	CGR-LD063-061	CGR-LD063-094	CGR-LD063-127	2.68	3.10	3.63	6.11
500	400	CGR-LD063-012	CGR-LD063-045	CGR-LD063-078	CGR-LD063-111	2.06	2.37	2.77	4.68
600	400	CGR-LD063-016	CGR-LD063-049	CGR-LD063-082	CGR-LD063-115	2.21	2.54	2.97	5.00
750	400	CGR-LD063-022	CGR-LD063-055	CGR-LD063-088	CGR-LD063-121	2.43	2.79	3.26	5.48
900	400	CGR-LD063-029	CGR-LD063-062	CGR-LD063-095	CGR-LD063-128	2.65	3.05	3.55	5.96
600	450	CGR-LD063-017	CGR-LD063-050	CGR-LD063-083	CGR-LD063-116	2.19	2.51	2.93	4.92
750	450	CGR-LD063-023	CGR-LD063-056	CGR-LD063-089	CGR-LD063-122	2.41	2.76	3.22	5.40
900	450	CGR-LD063-030	CGR-LD063-063	CGR-LD063-096	CGR-LD063-129	2.63	3.02	3.51	5.88
600	500	CGR-LD063-018	CGR-LD063-051	CGR-LD063-084	CGR-LD063-117	2.18	2.73	2.88	4.84
750	500	CGR-LD063-024	CGR-LD063-057	CGR-LD063-090	CGR-LD063-123	2.40	2.73	3.17	5.32
900	500	CGR-LD063-031	CGR-LD063-064	CGR-LD063-097	CGR-LD063-130	2.62	2.99	3.47	5.80
750	600	CGR-LD063-025	CGR-LD063-058	CGR-LD063-091	CGR-LD063-124	2.36	2.68	3.09	5.17
900	600	CGR-LD063-032	CGR-LD063-065	CGR-LD063-098	CGR-LD063-131	2.58	2.93	3.38	5.64
900	750	CGR-LD063-033	CGR-LD063-066	CGR-LD063-099	CGR-LD063-132	2.53	2.84	3.26	5.41

W1 = larger width, W2 = smaller width (mm).

GRP CABLE LADDER · COVERS

Covers for straight lengths and fittings

Flat 3 mm pultruded GRP covers protect cables from sun, falling objects and dripping liquids. Covers are made up to 600 mm wide in one piece; 750 and 900 mm covers are thicker.



Cover height	15 mm
Thickness	3 mm (4 mm W750, 5 mm W900)
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.

W (mm)	Length (m)	t (mm)	kg/m	Clamps / length	Item number
50	3	3	0.43	3	CGR-CV101-001
100	3	3	0.71	3	CGR-CV101-002
150	3	3	0.99	3	CGR-CV101-003
200	3	3	1.26	3	CGR-CV101-004
300	3	3	1.82	3	CGR-CV101-005
400	3	3	2.38	3	CGR-CV101-006
450	3	3	2.65	3	CGR-CV101-007
500	3	3	2.93	3	CGR-CV101-008
600	3	3	3.49	3	CGR-CV101-009
750	3	3	6.32	4	CGR-CV101-010
900	3	3	7.99	5	CGR-CV101-011

Order grip cover clamps (CGR-AC041) in the quantities shown on the cover clamp table. Widths 750 and 900 mm use clamps with pultruded tie rods and SS316 nuts.

Covers for 45° horizontal bends

W	ITEM NUMBER				WEIGHT KG/PC			
	R300	R450	R600	R900	R300	R450	R600	R900
150	CGR-CV121-001	CGR-CV121-002	CGR-CV121-003	CGR-CV121-004	0.49	0.62	0.74	1.02
200	CGR-CV121-005	CGR-CV121-006	CGR-CV121-007	CGR-CV121-008	0.66	0.83	0.98	1.33
300	CGR-CV121-009	CGR-CV121-010	CGR-CV121-011	CGR-CV121-012	1.03	1.27	1.49	1.98
400	CGR-CV121-013	CGR-CV121-014	CGR-CV121-015	CGR-CV121-016	1.45	1.76	2.04	2.67
450	CGR-CV121-017	CGR-CV121-018	CGR-CV121-019	CGR-CV121-020	1.67	2.02	2.34	3.04
500	CGR-CV121-021	CGR-CV121-022	CGR-CV121-023	CGR-CV121-024	1.91	2.29	2.64	3.42
600	CGR-CV121-025	CGR-CV121-026	CGR-CV121-027	CGR-CV121-028	2.43	2.87	3.29	4.20
750	CGR-CV121-029	CGR-CV121-030	CGR-CV121-031	CGR-CV121-032	4.36	5.11	5.80	7.30
900	CGR-CV121-033	CGR-CV121-034	CGR-CV121-035	CGR-CV121-036	5.63	6.53	7.35	11.42

GRP CABLE LADDER · COVERS

Covers for fittings

Covers for 90° horizontal bends

W	ITEM NUMBER				WEIGHT KG/PC			
	R300	R450	R600	R900	R300	R450	R600	R900
150	CGR-CV122-001	CGR-CV122-002	CGR-CV122-003	CGR-CV122-004	0.80	0.93	1.05	1.78
200	CGR-CV122-005	CGR-CV122-006	CGR-CV122-007	CGR-CV122-008	1.08	1.25	1.40	2.33
300	CGR-CV122-009	CGR-CV122-010	CGR-CV122-011	CGR-CV122-012	1.72	1.95	2.17	3.52
400	CGR-CV122-013	CGR-CV122-014	CGR-CV122-015	CGR-CV122-016	2.44	2.75	3.03	4.79
450	CGR-CV122-017	CGR-CV122-018	CGR-CV122-019	CGR-CV122-020	2.84	3.18	3.50	5.46
500	CGR-CV122-021	CGR-CV122-022	CGR-CV122-023	CGR-CV122-024	3.26	3.64	3.99	6.16
600	CGR-CV122-025	CGR-CV122-026	CGR-CV122-027	CGR-CV122-028	4.16	4.62	5.04	7.62
750	CGR-CV122-029	CGR-CV122-030	CGR-CV122-031	CGR-CV122-032	5.70	6.26	6.78	13.28
900	CGR-CV122-033	CGR-CV122-034	CGR-CV122-035	CGR-CV122-036	7.44	8.11	8.73	20.84

Covers for tees

W	ITEM NUMBER				WEIGHT KG/PC			
	R300	R450	R600	R900	R300	R450	R600	R900
150	CGR-CV131-001	CGR-CV131-002	CGR-CV131-003	CGR-CV131-004	1.44	2.11	2.81	4.39
200	CGR-CV131-005	CGR-CV131-006	CGR-CV131-007	CGR-CV131-008	1.88	2.68	3.50	5.33
300	CGR-CV131-009	CGR-CV131-010	CGR-CV131-011	CGR-CV131-012	2.84	3.90	4.96	7.28
400	CGR-CV131-013	CGR-CV131-014	CGR-CV131-015	CGR-CV131-016	3.91	5.23	6.53	9.34
450	CGR-CV131-017	CGR-CV131-018	CGR-CV131-019	CGR-CV131-020	4.48	5.93	7.36	10.41
500	CGR-CV131-021	CGR-CV131-022	CGR-CV131-023	CGR-CV131-024	5.09	6.67	8.21	11.51
600	CGR-CV131-025	CGR-CV131-026	CGR-CV131-027	CGR-CV131-028	6.38	8.22	10.01	13.80
750	CGR-CV131-029	CGR-CV131-030	CGR-CV131-031	CGR-CV131-032	11.36	14.35	17.21	23.18
900	CGR-CV131-033	CGR-CV131-034	CGR-CV131-035	CGR-CV131-036	14.56	18.06	21.41	35.38

Covers for crosses

W	ITEM NUMBER				WEIGHT KG/PC			
	R300	R450	R600	R900	R300	R450	R600	R900
150	CGR-CV132-001	CGR-CV132-002	CGR-CV132-003	CGR-CV132-004	1.95	2.97	3.21	6.54
200	CGR-CV132-005	CGR-CV132-006	CGR-CV132-007	CGR-CV132-008	2.49	3.69	4.96	7.75
300	CGR-CV132-009	CGR-CV132-010	CGR-CV132-011	CGR-CV132-012	3.67	5.21	6.80	10.25
400	CGR-CV132-013	CGR-CV132-014	CGR-CV132-015	CGR-CV132-016	4.95	6.85	8.76	12.86
450	CGR-CV132-017	CGR-CV132-018	CGR-CV132-019	CGR-CV132-020	5.63	7.70	9.78	14.21
500	CGR-CV132-021	CGR-CV132-022	CGR-CV132-023	CGR-CV132-024	6.35	8.59	10.83	15.59
600	CGR-CV132-025	CGR-CV132-026	CGR-CV132-027	CGR-CV132-028	7.85	10.44	13.00	18.42
750	CGR-CV132-029	CGR-CV132-030	CGR-CV132-031	CGR-CV132-032	13.76	17.92	21.98	30.51
900	CGR-CV132-033	CGR-CV132-034	CGR-CV132-035	CGR-CV132-036	17.39	22.24	26.94	45.99

GRP CABLE LADDER · COVERS

Covers for risers

Covers for inside and outside risers 45°

W	ITEM NUMBER				WEIGHT KG/PC			
	R300	R450	R600	R900	R300	R450	R600	R900
150	CGR-CV141-001	CGR-CV141-002	CGR-CV141-003	CGR-CV141-004	0.15	0.19	0.33	0.46
200	CGR-CV141-005	CGR-CV141-006	CGR-CV141-007	CGR-CV141-008	0.19	0.24	0.43	0.59
300	CGR-CV141-009	CGR-CV141-010	CGR-CV141-011	CGR-CV141-012	0.27	0.35	0.61	0.85
400	CGR-CV141-013	CGR-CV141-014	CGR-CV141-015	CGR-CV141-016	0.35	0.45	0.80	1.11
450	CGR-CV141-017	CGR-CV141-018	CGR-CV141-019	CGR-CV141-020	0.39	0.50	0.90	1.24
500	CGR-CV141-021	CGR-CV141-022	CGR-CV141-023	CGR-CV141-024	0.43	0.56	0.99	1.37
600	CGR-CV141-025	CGR-CV141-026	CGR-CV141-027	CGR-CV141-028	0.52	0.66	1.18	1.63
750	CGR-CV141-029	CGR-CV141-030	CGR-CV141-031	CGR-CV141-032	0.85	1.09	1.95	2.70
900	CGR-CV141-033	CGR-CV141-034	CGR-CV141-035	CGR-CV141-036	1.27	1.63	2.90	4.02

Quantity per riser: R300 and R450: 1 piece; R600 and R900: 2 pieces.

Covers for inside and outside risers 90°

W	ITEM NUMBER				WEIGHT KG/PC			
	R300	R450	R600	R900	R300	R450	R600	R900
150	CGR-CV142-001	CGR-CV142-002	CGR-CV142-003	CGR-CV142-004	0.24	0.49	0.74	1.06
200	CGR-CV142-005	CGR-CV142-006	CGR-CV142-007	CGR-CV142-008	0.31	0.63	0.95	1.35
300	CGR-CV142-009	CGR-CV142-010	CGR-CV142-011	CGR-CV142-012	0.45	0.91	1.36	1.95
400	CGR-CV142-013	CGR-CV142-014	CGR-CV142-015	CGR-CV142-016	0.59	1.19	1.78	2.55
450	CGR-CV142-017	CGR-CV142-018	CGR-CV142-019	CGR-CV142-020	0.66	1.33	1.99	2.85
500	CGR-CV142-021	CGR-CV142-022	CGR-CV142-023	CGR-CV142-024	0.73	1.46	2.20	3.15
600	CGR-CV142-025	CGR-CV142-026	CGR-CV142-027	CGR-CV142-028	0.87	1.74	2.61	3.75
750	CGR-CV142-029	CGR-CV142-030	CGR-CV142-031	CGR-CV142-032	1.58	3.16	4.74	6.19
900	CGR-CV142-033	CGR-CV142-034	CGR-CV142-035	CGR-CV142-036	1.99	3.99	5.99	9.23

Quantity per riser: R300: 1 piece; R450: 2 pieces; R600 and R900: 3 pieces. For the level-change module (SDM) use the 90° riser cover R300 of the same width.

GRP CABLE LADDER · COVERS

Covers for reducers

Centre reducer covers

W1	W2	Item number	kg/pc
300	150	CGR-CV161-001	0.85
400	150	CGR-CV161-003	1.02
450	150	CGR-CV161-006	1.11
500	150	CGR-CV161-009	1.19
600	150	CGR-CV161-013	1.36
750	150	CGR-CV161-019	2.22
900	150	CGR-CV161-026	2.72
300	200	CGR-CV161-002	0.94
400	200	CGR-CV161-004	1.11
450	200	CGR-CV161-007	1.19
500	200	CGR-CV161-010	1.27
600	200	CGR-CV161-014	1.44
750	200	CGR-CV161-020	1.70
900	200	CGR-CV161-027	2.30
400	300	CGR-CV161-005	1.27
450	300	CGR-CV161-008	1.36
500	300	CGR-CV161-011	1.44
600	300	CGR-CV161-015	1.61
750	300	CGR-CV161-021	2.47
900	300	CGR-CV161-028	2.97
500	400	CGR-CV161-012	1.60
600	400	CGR-CV161-016	1.78
750	400	CGR-CV161-022	2.64
900	400	CGR-CV161-029	3.14
600	450	CGR-CV161-017	1.86
750	450	CGR-CV161-023	2.72
900	450	CGR-CV161-030	3.23
600	500	CGR-CV161-018	1.95
750	500	CGR-CV161-024	2.81
900	500	CGR-CV161-031	3.31
750	600	CGR-CV161-025	2.97
900	600	CGR-CV161-032	3.48
900	750	CGR-CV161-033	4.34

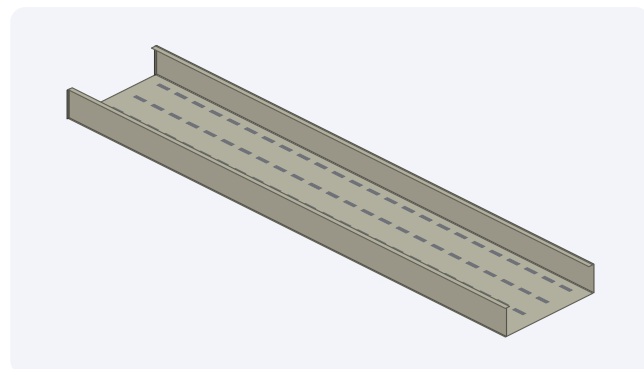
Right / left reducer covers

W1	W2	Item number	kg/pc
300	150	CGR-CV162-001	0.85
400	150	CGR-CV162-003	1.02
450	150	CGR-CV162-006	1.11
500	150	CGR-CV162-009	1.19
600	150	CGR-CV162-013	1.36
750	150	CGR-CV162-019	2.22
900	150	CGR-CV162-026	2.72
300	200	CGR-CV162-002	0.94
400	200	CGR-CV162-004	1.11
450	200	CGR-CV162-007	1.19
500	200	CGR-CV162-010	1.27
600	200	CGR-CV162-014	1.44
750	200	CGR-CV162-020	2.30
900	200	CGR-CV162-027	2.81
400	300	CGR-CV162-005	1.27
450	300	CGR-CV162-008	1.36
500	300	CGR-CV162-011	1.44
600	300	CGR-CV162-015	1.61
750	300	CGR-CV162-021	2.47
900	300	CGR-CV162-028	2.97
500	400	CGR-CV162-012	1.61
600	400	CGR-CV162-016	1.78
750	400	CGR-CV162-022	2.64
900	400	CGR-CV162-029	3.14
600	450	CGR-CV162-017	1.86
750	450	CGR-CV162-023	2.72
900	450	CGR-CV162-030	3.23
600	500	CGR-CV162-018	1.95
750	500	CGR-CV162-024	2.81
900	500	CGR-CV162-031	3.31
750	600	CGR-CV162-025	2.97
900	600	CGR-CV162-032	3.48
900	750	CGR-CV162-033	4.34

GRP CABLE TRAY

Straight lengths

One-piece pultruded channel with a perforated base for ventilation and drainage, or a solid base for full protection. Supplied in 3 m lengths with pre-drilled splice holes.



Heights (H)	50 · 80 · 100 mm
Widths (W)	50 – 600 mm
Length	3 m
Wall thickness	3 mm up to W300, 4.5 mm W400 – 600
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.
Colour	RAL 7032 pebble grey. Other RAL colours on request; slight shade variation is normal.

H (mm)	W (mm)	t (mm)	kg/m	Perforated	Solid
50	50	3.0	0.76	CGR-TR011-001	CGR-TR012-001
50	100	3.0	1.35	CGR-TR011-002	CGR-TR012-002
50	150	3.0	1.55	CGR-TR011-003	CGR-TR012-003
50	200	3.0	1.89	CGR-TR011-004	CGR-TR012-004
50	250	3.0	2.10	CGR-TR011-005	CGR-TR012-005
50	300	3.0	2.42	CGR-TR011-006	CGR-TR012-006
50	400	4.5	4.23	CGR-TR011-007	CGR-TR012-007
50	450	4.5	4.62	CGR-TR011-008	CGR-TR012-008
50	500	4.5	5.03	CGR-TR011-009	CGR-TR012-009
50	600	4.5	5.85	CGR-TR011-010	CGR-TR012-010
80	100	3.0	1.62	CGR-TR011-011	CGR-TR012-011
80	150	3.0	1.89	CGR-TR011-012	CGR-TR012-012
80	200	3.0	2.16	CGR-TR011-013	CGR-TR012-013
80	250	3.0	2.43	CGR-TR011-014	CGR-TR012-014
80	300	3.0	2.71	CGR-TR011-015	CGR-TR012-015
80	400	4.5	4.72	CGR-TR011-016	CGR-TR012-016
80	450	4.5	5.13	CGR-TR011-017	CGR-TR012-017
80	500	4.5	5.54	CGR-TR011-018	CGR-TR012-018
80	600	4.5	6.36	CGR-TR011-019	CGR-TR012-019
100	100	3.0	1.84	CGR-TR011-020	CGR-TR012-020
100	150	3.0	2.11	CGR-TR011-021	CGR-TR012-021
100	200	3.0	2.38	CGR-TR011-022	CGR-TR012-022
100	250	3.0	2.66	CGR-TR011-023	CGR-TR012-023
100	300	3.0	2.93	CGR-TR011-024	CGR-TR012-024
100	400	4.5	5.05	CGR-TR011-025	CGR-TR012-025
100	450	4.5	5.54	CGR-TR011-026	CGR-TR012-026
100	500	4.5	5.87	CGR-TR011-027	CGR-TR012-027
100	600	4.5	6.69	CGR-TR011-028	CGR-TR012-028

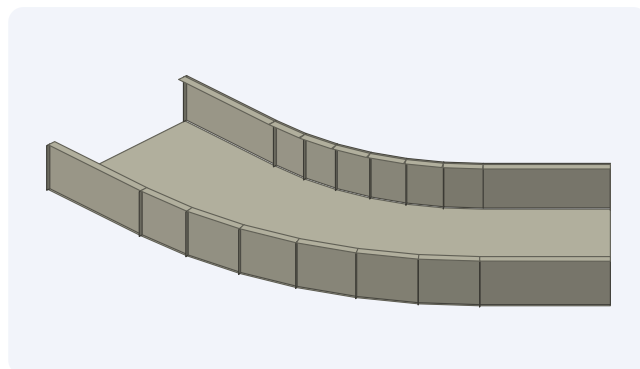
Splice plates: CGR-AC011 (H50: 4 × M8×25 SS316; H80 and H100: 4 × M10×25 SS316 or 4 × M10×40 GRP).

GRP CABLE TRAY · FITTINGS

Horizontal bend 45°

For 45° changes of direction in the horizontal plane.

Radius (R)	R300 · R450 · R600 · R900
Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



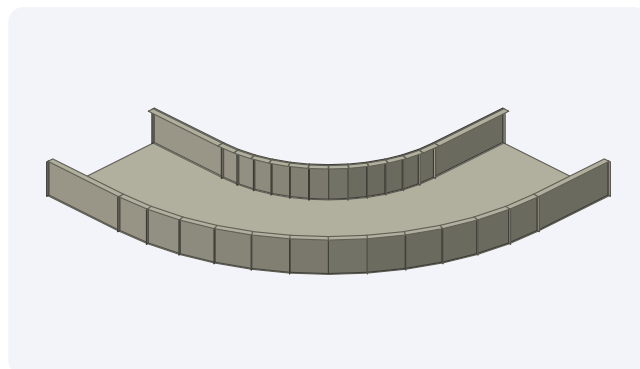
H	W	ITEM NUMBER				WEIGHT KG/PC			
		R300	R450	R600	R900	R300	R450	R600	R900
50	50	CGR-TR021-001	CGR-TR021-002	CGR-TR021-003	CGR-TR021-004	0.67	0.80	0.94	0.95
50	100	CGR-TR021-005	CGR-TR021-006	CGR-TR021-007	CGR-TR021-008	0.83	1.00	1.15	1.42
50	150	CGR-TR021-009	CGR-TR021-010	CGR-TR021-011	CGR-TR021-012	0.93	1.20	1.38	1.73
50	200	CGR-TR021-013	CGR-TR021-014	CGR-TR021-015	CGR-TR021-016	1.19	1.41	1.63	2.04
50	250	CGR-TR021-017	CGR-TR021-018	CGR-TR021-019	CGR-TR021-020	1.37	1.63	1.89	2.36
50	300	CGR-TR021-021	CGR-TR021-022	CGR-TR021-023	CGR-TR021-024	1.57	1.86	2.18	2.72
50	400	CGR-TR021-025	CGR-TR021-026	CGR-TR021-027	CGR-TR021-028	2.82	3.37	3.84	4.90
50	450	CGR-TR021-029	CGR-TR021-030	CGR-TR021-031	CGR-TR021-032	3.16	3.77	4.38	5.45
50	500	CGR-TR021-033	CGR-TR021-034	CGR-TR021-035	CGR-TR021-036	3.52	4.19	4.85	6.02
50	600	CGR-TR021-037	CGR-TR021-038	CGR-TR021-039	CGR-TR021-040	4.35	5.13	5.45	7.20
80	100	CGR-TR021-041	CGR-TR021-042	CGR-TR021-043	CGR-TR021-044	1.20	1.41	1.60	1.97
80	150	CGR-TR021-045	CGR-TR021-046	CGR-TR021-047	CGR-TR021-048	1.29	1.61	1.84	2.28
80	200	CGR-TR021-049	CGR-TR021-050	CGR-TR021-051	CGR-TR021-052	1.57	1.83	2.10	2.60
80	250	CGR-TR021-053	CGR-TR021-054	CGR-TR021-055	CGR-TR021-056	1.77	2.06	2.36	2.94
80	300	CGR-TR021-057	CGR-TR021-058	CGR-TR021-059	CGR-TR021-060	1.97	2.30	2.63	3.30
80	400	CGR-TR021-061	CGR-TR021-062	CGR-TR021-063	CGR-TR021-064	3.33	3.95	4.48	5.68
80	450	CGR-TR021-065	CGR-TR021-066	CGR-TR021-067	CGR-TR021-068	3.68	4.36	5.04	6.24
80	500	CGR-TR021-069	CGR-TR021-070	CGR-TR021-071	CGR-TR021-072	4.05	4.79	5.52	6.82
80	600	CGR-TR021-073	CGR-TR021-074	CGR-TR021-075	CGR-TR021-076	4.91	5.75	6.52	8.02
100	100	CGR-TR021-077	CGR-TR021-078	CGR-TR021-079	CGR-TR021-080	1.33	1.57	1.80	2.26
100	150	CGR-TR021-081	CGR-TR021-082	CGR-TR021-083	CGR-TR021-084	1.53	1.79	2.04	2.57
100	200	CGR-TR021-085	CGR-TR021-086	CGR-TR021-087	CGR-TR021-088	1.72	2.01	2.30	2.90
100	250	CGR-TR021-089	CGR-TR021-090	CGR-TR021-091	CGR-TR021-092	1.92	2.24	2.56	3.23
100	300	CGR-TR021-093	CGR-TR021-094	CGR-TR021-095	CGR-TR021-096	2.13	2.49	2.84	3.61
100	400	CGR-TR021-097	CGR-TR021-098	CGR-TR021-099	CGR-TR021-100	3.56	4.23	4.79	6.11
100	450	CGR-TR021-101	CGR-TR021-102	CGR-TR021-103	CGR-TR021-104	3.92	4.64	5.36	6.68
100	500	CGR-TR021-105	CGR-TR021-106	CGR-TR021-107	CGR-TR021-108	4.30	5.08	5.85	7.26
100	600	CGR-TR021-109	CGR-TR021-110	CGR-TR021-111	CGR-TR021-112	5.17	6.06	6.87	8.48

GRP CABLE TRAY · FITTINGS

Horizontal bend 90°

For 90° changes of direction in the horizontal plane.

Radius (R)	R300 · R450 · R600 · R900
Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



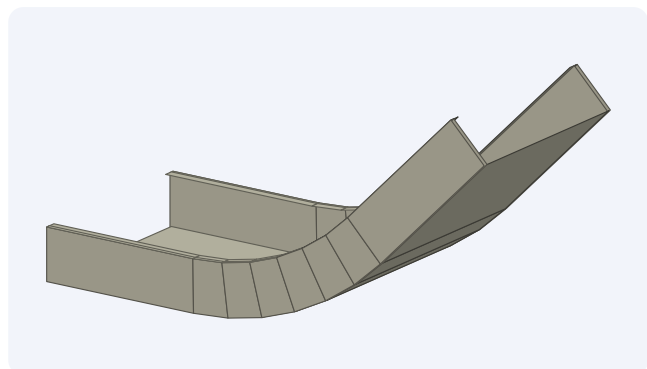
H	W	ITEM NUMBER				WEIGHT KG/PC			
		R300	R450	R600	R900	R300	R450	R600	R900
50	50	CGR-TR022-001	CGR-TR022-002	CGR-TR022-003	CGR-TR022-004	1.16	1.40	1.65	1.74
50	100	CGR-TR022-005	CGR-TR022-006	CGR-TR022-007	CGR-TR022-008	1.41	1.74	2.05	2.60
50	150	CGR-TR022-009	CGR-TR022-010	CGR-TR022-011	CGR-TR022-012	1.71	2.10	2.40	3.16
50	200	CGR-TR022-013	CGR-TR022-014	CGR-TR022-015	CGR-TR022-016	1.99	2.47	2.92	3.73
50	250	CGR-TR022-017	CGR-TR022-018	CGR-TR022-019	CGR-TR022-020	2.31	2.84	3.39	4.33
50	300	CGR-TR022-021	CGR-TR022-022	CGR-TR022-023	CGR-TR022-024	2.68	3.21	3.89	4.97
50	400	CGR-TR022-025	CGR-TR022-026	CGR-TR022-027	CGR-TR022-028	4.78	5.85	6.92	8.95
50	450	CGR-TR022-029	CGR-TR022-030	CGR-TR022-031	CGR-TR022-032	5.43	6.57	7.74	10.01
50	500	CGR-TR022-033	CGR-TR022-034	CGR-TR022-035	CGR-TR022-036	6.08	7.31	8.64	11.07
50	600	CGR-TR022-037	CGR-TR022-038	CGR-TR022-039	CGR-TR022-040	7.46	8.95	10.44	13.28
80	100	CGR-TR022-041	CGR-TR022-042	CGR-TR022-043	CGR-TR022-044	2.08	2.50	2.89	3.65
80	150	CGR-TR022-045	CGR-TR022-046	CGR-TR022-047	CGR-TR022-048	2.40	2.88	3.35	4.21
80	200	CGR-TR022-049	CGR-TR022-050	CGR-TR022-051	CGR-TR022-052	2.69	3.26	3.79	4.80
80	250	CGR-TR022-053	CGR-TR022-054	CGR-TR022-055	CGR-TR022-056	3.02	3.64	4.28	5.41
80	300	CGR-TR022-057	CGR-TR022-058	CGR-TR022-059	CGR-TR022-060	3.41	4.01	4.79	6.07
80	400	CGR-TR022-061	CGR-TR022-062	CGR-TR022-063	CGR-TR022-064	5.71	6.91	8.10	10.40
80	450	CGR-TR022-065	CGR-TR022-066	CGR-TR022-067	CGR-TR022-068	6.39	7.64	8.94	11.50
80	500	CGR-TR022-069	CGR-TR022-070	CGR-TR022-071	CGR-TR022-072	7.05	8.40	9.86	12.57
80	600	CGR-TR022-073	CGR-TR022-074	CGR-TR022-075	CGR-TR022-076	8.47	10.09	11.70	14.83
100	100	CGR-TR022-077	CGR-TR022-078	CGR-TR022-079	CGR-TR022-080	2.31	2.79	3.23	4.17
100	150	CGR-TR022-081	CGR-TR022-082	CGR-TR022-083	CGR-TR022-084	2.64	3.18	3.71	4.74
100	200	CGR-TR022-085	CGR-TR022-086	CGR-TR022-087	CGR-TR022-088	2.94	3.57	4.16	5.34
100	250	CGR-TR022-089	CGR-TR022-090	CGR-TR022-091	CGR-TR022-092	3.28	3.61	4.65	5.96
100	300	CGR-TR022-093	CGR-TR022-094	CGR-TR022-095	CGR-TR022-096	3.68	4.33	5.17	6.63
100	400	CGR-TR022-097	CGR-TR022-098	CGR-TR022-099	CGR-TR022-100	6.11	7.39	8.67	11.21
100	450	CGR-TR022-101	CGR-TR022-102	CGR-TR022-103	CGR-TR022-104	6.80	8.13	9.52	12.32
100	500	CGR-TR022-105	CGR-TR022-106	CGR-TR022-107	CGR-TR022-108	7.48	8.91	10.46	13.41
100	600	CGR-TR022-109	CGR-TR022-110	CGR-TR022-111	CGR-TR022-112	8.93	10.63	12.32	15.68

GRP CABLE TRAY · FITTINGS

Inside riser 45°

Vertical change of direction upward by 45° (concave).

Radius (R)	R300 · R450 · R600 · R900
Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



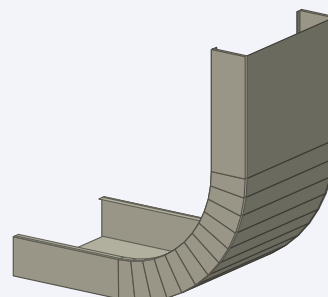
H	W	ITEM NUMBER				WEIGHT KG/PC			
		R300	R450	R600	R900	R300	R450	R600	R900
50	50	CGR-TR041-001	CGR-TR041-002	CGR-TR041-003	CGR-TR041-004	0.47	0.47	0.52	0.62
50	100	CGR-TR041-005	CGR-TR041-006	CGR-TR041-007	CGR-TR041-008	0.49	0.56	0.64	0.79
50	150	CGR-TR041-009	CGR-TR041-010	CGR-TR041-011	CGR-TR041-012	0.52	0.61	0.70	0.89
50	200	CGR-TR041-013	CGR-TR041-014	CGR-TR041-015	CGR-TR041-016	0.56	0.66	0.77	0.99
50	250	CGR-TR041-017	CGR-TR041-018	CGR-TR041-019	CGR-TR041-020	0.59	0.71	0.84	1.09
50	300	CGR-TR041-021	CGR-TR041-022	CGR-TR041-023	CGR-TR041-024	0.62	0.76	0.90	1.19
50	400	CGR-TR041-025	CGR-TR041-026	CGR-TR041-027	CGR-TR041-028	0.85	1.10	1.35	1.86
50	450	CGR-TR041-029	CGR-TR041-030	CGR-TR041-031	CGR-TR041-032	0.90	1.17	1.45	2.01
50	500	CGR-TR041-033	CGR-TR041-034	CGR-TR041-035	CGR-TR041-036	0.95	1.25	1.55	2.16
50	600	CGR-TR041-037	CGR-TR041-038	CGR-TR041-039	CGR-TR041-040	1.05	1.40	1.75	2.46
80	100	CGR-TR041-041	CGR-TR041-042	CGR-TR041-043	CGR-TR041-044	0.69	0.80	0.93	1.13
80	150	CGR-TR041-045	CGR-TR041-046	CGR-TR041-047	CGR-TR041-048	0.72	0.89	1.00	1.23
80	200	CGR-TR041-049	CGR-TR041-050	CGR-TR041-051	CGR-TR041-052	0.76	0.94	1.07	1.33
80	250	CGR-TR041-053	CGR-TR041-054	CGR-TR041-055	CGR-TR041-056	0.79	0.99	1.13	1.43
80	300	CGR-TR041-057	CGR-TR041-058	CGR-TR041-059	CGR-TR041-060	0.82	1.04	1.20	1.53
80	400	CGR-TR041-061	CGR-TR041-062	CGR-TR041-063	CGR-TR041-064	1.07	1.40	1.69	2.26
80	450	CGR-TR041-065	CGR-TR041-066	CGR-TR041-067	CGR-TR041-068	1.12	1.48	1.79	2.41
80	500	CGR-TR041-069	CGR-TR041-070	CGR-TR041-071	CGR-TR041-072	1.17	1.55	1.89	2.56
80	600	CGR-TR041-073	CGR-TR041-074	CGR-TR041-075	CGR-TR041-076	1.27	1.70	2.09	2.86
100	100	CGR-TR041-077	CGR-TR041-078	CGR-TR041-079	CGR-TR041-080	0.84	1.01	1.12	1.34
100	150	CGR-TR041-081	CGR-TR041-082	CGR-TR041-083	CGR-TR041-084	0.87	1.06	1.19	1.44
100	200	CGR-TR041-085	CGR-TR041-086	CGR-TR041-087	CGR-TR041-088	0.90	1.11	1.25	1.54
100	250	CGR-TR041-089	CGR-TR041-090	CGR-TR041-091	CGR-TR041-092	0.94	1.16	1.32	1.64
100	300	CGR-TR041-093	CGR-TR041-094	CGR-TR041-095	CGR-TR041-096	0.97	1.21	1.39	1.74
100	400	CGR-TR041-097	CGR-TR041-098	CGR-TR041-099	CGR-TR041-100	1.23	1.60	1.90	2.51
100	450	CGR-TR041-101	CGR-TR041-102	CGR-TR041-103	CGR-TR041-104	1.28	1.67	2.00	2.66
100	500	CGR-TR041-105	CGR-TR041-106	CGR-TR041-107	CGR-TR041-108	1.33	1.75	2.10	2.81
100	600	CGR-TR041-109	CGR-TR041-110	CGR-TR041-111	CGR-TR041-112	1.43	1.90	2.30	3.11

GRP CABLE TRAY · FITTINGS

Inside riser 90°

Vertical change of direction upward by 90° (concave).

Radius (R)	R300 · R450 · R600 · R900
Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



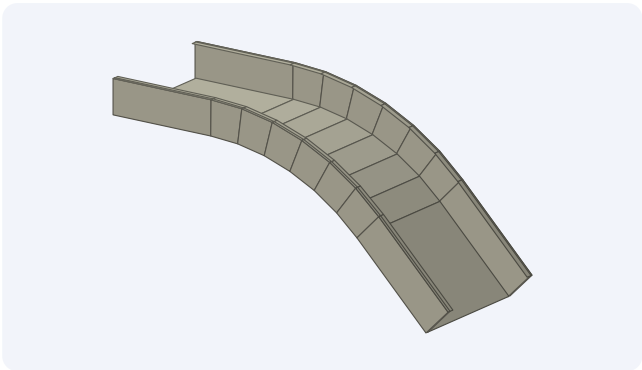
H	W	ITEM NUMBER				WEIGHT KG/PC			
		R300	R450	R600	R900	R300	R450	R600	R900
50	50	CGR-TR042-001	CGR-TR042-002	CGR-TR042-003	CGR-TR042-004	0.57	0.67	0.77	0.95
50	100	CGR-TR042-005	CGR-TR042-006	CGR-TR042-007	CGR-TR042-008	0.63	0.79	0.96	1.29
50	150	CGR-TR042-009	CGR-TR042-010	CGR-TR042-011	CGR-TR042-012	0.70	0.90	1.09	1.50
50	200	CGR-TR042-013	CGR-TR042-014	CGR-TR042-015	CGR-TR042-016	0.77	1.00	1.23	1.71
50	250	CGR-TR042-017	CGR-TR042-018	CGR-TR042-019	CGR-TR042-020	0.84	1.11	1.37	1.92
50	300	CGR-TR042-021	CGR-TR042-022	CGR-TR042-023	CGR-TR042-024	0.91	1.21	1.51	2.13
50	400	CGR-TR042-025	CGR-TR042-026	CGR-TR042-027	CGR-TR042-028	1.38	1.92	2.45	3.53
50	450	CGR-TR042-029	CGR-TR042-030	CGR-TR042-031	CGR-TR042-032	1.48	2.07	2.66	3.84
50	500	CGR-TR042-033	CGR-TR042-034	CGR-TR042-035	CGR-TR042-036	1.59	2.23	2.87	4.16
50	600	CGR-TR042-037	CGR-TR042-038	CGR-TR042-039	CGR-TR042-040	1.80	2.54	3.29	4.78
80	100	CGR-TR042-041	CGR-TR042-042	CGR-TR042-043	CGR-TR042-044	0.89	1.09	1.29	1.82
80	150	CGR-TR042-045	CGR-TR042-046	CGR-TR042-047	CGR-TR042-048	0.96	1.19	1.43	2.03
80	200	CGR-TR042-049	CGR-TR042-050	CGR-TR042-051	CGR-TR042-052	1.03	1.30	1.57	2.24
80	250	CGR-TR042-053	CGR-TR042-054	CGR-TR042-055	CGR-TR042-056	1.09	1.40	1.71	2.45
80	300	CGR-TR042-057	CGR-TR042-058	CGR-TR042-059	CGR-TR042-060	1.16	1.51	1.85	2.66
80	400	CGR-TR042-061	CGR-TR042-062	CGR-TR042-063	CGR-TR042-064	1.68	2.27	2.87	4.19
80	450	CGR-TR042-065	CGR-TR042-066	CGR-TR042-067	CGR-TR042-068	1.78	2.43	3.08	4.50
80	500	CGR-TR042-069	CGR-TR042-070	CGR-TR042-071	CGR-TR042-072	1.88	2.59	3.29	4.81
80	600	CGR-TR042-073	CGR-TR042-074	CGR-TR042-075	CGR-TR042-076	2.09	2.90	3.71	5.44
100	100	CGR-TR042-077	CGR-TR042-078	CGR-TR042-079	CGR-TR042-080	1.10	1.33	1.56	2.10
100	150	CGR-TR042-081	CGR-TR042-082	CGR-TR042-083	CGR-TR042-084	1.17	1.43	1.60	2.31
100	200	CGR-TR042-085	CGR-TR042-086	CGR-TR042-087	CGR-TR042-088	1.24	1.54	1.70	2.52
100	250	CGR-TR042-089	CGR-TR042-090	CGR-TR042-091	CGR-TR042-092	1.31	1.64	1.98	2.73
100	300	CGR-TR042-093	CGR-TR042-094	CGR-TR042-095	CGR-TR042-096	1.37	1.74	2.12	2.93
100	400	CGR-TR042-097	CGR-TR042-098	CGR-TR042-099	CGR-TR042-100	1.91	2.55	3.19	4.55
100	450	CGR-TR042-101	CGR-TR042-102	CGR-TR042-103	CGR-TR042-104	2.02	2.71	3.40	4.86
100	500	CGR-TR042-105	CGR-TR042-106	CGR-TR042-107	CGR-TR042-108	2.12	2.87	3.61	5.17
100	600	CGR-TR042-109	CGR-TR042-110	CGR-TR042-111	CGR-TR042-112	2.33	3.18	4.03	5.80

GRP CABLE TRAY · FITTINGS

Outside riser 45°

Vertical change of direction downward by 45° (convex).

Radius (R)	R300 · R450 · R600 · R900
Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



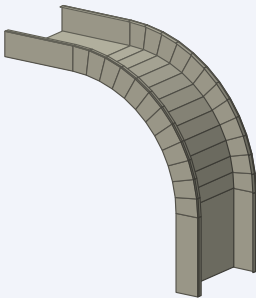
		ITEM NUMBER				WEIGHT KG/PC			
H	W	R300	R450	R600	R900	R300	R450	R600	R900
50	50	CGR-TR043-001	CGR-TR043-002	CGR-TR043-003	CGR-TR043-004	0.47	0.47	0.77	0.62
50	100	CGR-TR043-005	CGR-TR043-006	CGR-TR043-007	CGR-TR043-008	0.49	0.56	0.96	0.79
50	150	CGR-TR043-009	CGR-TR043-010	CGR-TR043-011	CGR-TR043-012	0.52	0.61	1.09	0.89
50	200	CGR-TR043-013	CGR-TR043-014	CGR-TR043-015	CGR-TR043-016	0.56	0.66	1.23	0.99
50	250	CGR-TR043-017	CGR-TR043-018	CGR-TR043-019	CGR-TR043-020	0.59	0.71	1.37	1.09
50	300	CGR-TR043-021	CGR-TR043-022	CGR-TR043-023	CGR-TR043-024	0.62	0.76	1.51	1.19
50	400	CGR-TR043-025	CGR-TR043-026	CGR-TR043-027	CGR-TR043-028	0.85	1.10	2.45	1.86
50	450	CGR-TR043-029	CGR-TR043-030	CGR-TR043-031	CGR-TR043-032	0.90	1.17	2.66	2.01
50	500	CGR-TR043-033	CGR-TR043-034	CGR-TR043-035	CGR-TR043-036	0.95	1.25	2.87	2.16
50	600	CGR-TR043-037	CGR-TR043-038	CGR-TR043-039	CGR-TR043-040	1.05	1.40	3.29	2.46
80	100	CGR-TR043-041	CGR-TR043-042	CGR-TR043-043	CGR-TR043-044	0.69	0.80	1.29	1.13
80	150	CGR-TR043-045	CGR-TR043-046	CGR-TR043-047	CGR-TR043-048	0.72	0.89	1.43	1.23
80	200	CGR-TR043-049	CGR-TR043-050	CGR-TR043-051	CGR-TR043-052	0.76	0.94	1.57	1.33
80	250	CGR-TR043-053	CGR-TR043-054	CGR-TR043-055	CGR-TR043-056	0.79	0.99	1.71	1.43
80	300	CGR-TR043-057	CGR-TR043-058	CGR-TR043-059	CGR-TR043-060	0.82	1.04	1.85	1.53
80	400	CGR-TR043-061	CGR-TR043-062	CGR-TR043-063	CGR-TR043-064	1.07	1.40	2.87	2.26
80	450	CGR-TR043-065	CGR-TR043-066	CGR-TR043-067	CGR-TR043-068	1.12	1.48	3.08	2.41
80	500	CGR-TR043-069	CGR-TR043-070	CGR-TR043-071	CGR-TR043-072	1.17	1.55	3.29	2.56
80	600	CGR-TR043-073	CGR-TR043-074	CGR-TR043-075	CGR-TR043-076	1.27	1.70	3.71	2.86
100	100	CGR-TR043-077	CGR-TR043-078	CGR-TR043-079	CGR-TR043-080	0.84	1.01	1.56	1.34
100	150	CGR-TR043-081	CGR-TR043-082	CGR-TR043-083	CGR-TR043-084	0.87	1.06	1.60	1.44
100	200	CGR-TR043-085	CGR-TR043-086	CGR-TR043-087	CGR-TR043-088	0.90	1.11	1.70	1.54
100	250	CGR-TR043-089	CGR-TR043-090	CGR-TR043-091	CGR-TR043-092	0.94	1.16	1.98	1.64
100	300	CGR-TR043-093	CGR-TR043-094	CGR-TR043-095	CGR-TR043-096	0.97	1.21	2.12	1.74
100	400	CGR-TR043-097	CGR-TR043-098	CGR-TR043-099	CGR-TR043-100	1.23	1.60	3.19	2.51
100	450	CGR-TR043-101	CGR-TR043-102	CGR-TR043-103	CGR-TR043-104	1.28	1.67	3.40	2.66
100	500	CGR-TR043-105	CGR-TR043-106	CGR-TR043-107	CGR-TR043-108	1.33	1.75	3.61	2.81
100	600	CGR-TR043-109	CGR-TR043-110	CGR-TR043-111	CGR-TR043-112	1.43	1.90	4.03	3.11

GRP CABLE TRAY · FITTINGS

Outside riser 90°

Vertical change of direction downward by 90° (convex).

Radius (R)	R300 · R450 · R600 · R900
Supply	Factory assembled
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.



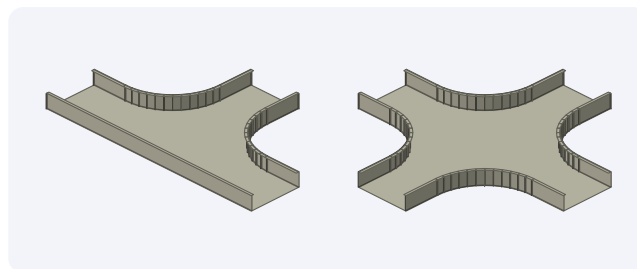
		ITEM NUMBER				WEIGHT KG/PC			
H	W	R300	R450	R600	R900	R300	R450	R600	R900
50	50	CGR-TR044-001	CGR-TR044-002	CGR-TR044-003	CGR-TR044-004	0.57	0.67	0.77	0.95
50	100	CGR-TR044-005	CGR-TR044-006	CGR-TR044-007	CGR-TR044-008	0.63	0.79	0.96	1.29
50	150	CGR-TR044-009	CGR-TR044-010	CGR-TR044-011	CGR-TR044-012	0.70	0.90	1.09	1.50
50	200	CGR-TR044-013	CGR-TR044-014	CGR-TR044-015	CGR-TR044-016	0.77	1.00	1.23	1.71
50	250	CGR-TR044-017	CGR-TR044-018	CGR-TR044-019	CGR-TR044-020	0.84	1.11	1.37	1.92
50	300	CGR-TR044-021	CGR-TR044-022	CGR-TR044-023	CGR-TR044-024	0.91	1.21	1.51	2.13
50	400	CGR-TR044-025	CGR-TR044-026	CGR-TR044-027	CGR-TR044-028	1.38	1.92	2.45	3.53
50	450	CGR-TR044-029	CGR-TR044-030	CGR-TR044-031	CGR-TR044-032	1.48	2.07	2.66	3.84
50	500	CGR-TR044-033	CGR-TR044-034	CGR-TR044-035	CGR-TR044-036	1.59	2.23	2.87	4.16
50	600	CGR-TR044-037	CGR-TR044-038	CGR-TR044-039	CGR-TR044-040	1.80	2.54	3.29	4.78
80	100	CGR-TR044-041	CGR-TR044-042	CGR-TR044-043	CGR-TR044-044	0.89	1.09	1.29	1.82
80	150	CGR-TR044-045	CGR-TR044-046	CGR-TR044-047	CGR-TR044-048	0.96	1.19	1.43	2.03
80	200	CGR-TR044-049	CGR-TR044-050	CGR-TR044-051	CGR-TR044-052	1.03	1.30	1.57	2.24
80	250	CGR-TR044-053	CGR-TR044-054	CGR-TR044-055	CGR-TR044-056	1.09	1.30	1.71	2.45
80	300	CGR-TR044-057	CGR-TR044-058	CGR-TR044-059	CGR-TR044-060	1.16	1.40	1.85	2.66
80	400	CGR-TR044-061	CGR-TR044-062	CGR-TR044-063	CGR-TR044-064	1.68	2.27	2.87	4.19
80	450	CGR-TR044-065	CGR-TR044-066	CGR-TR044-067	CGR-TR044-068	1.78	2.43	3.08	4.50
80	500	CGR-TR044-069	CGR-TR044-070	CGR-TR044-071	CGR-TR044-072	1.88	2.59	3.29	4.81
80	600	CGR-TR044-073	CGR-TR044-074	CGR-TR044-075	CGR-TR044-076	2.09	2.90	3.71	5.44
100	100	CGR-TR044-077	CGR-TR044-078	CGR-TR044-079	CGR-TR044-080	1.10	1.33	3.71	2.10
100	150	CGR-TR044-081	CGR-TR044-082	CGR-TR044-083	CGR-TR044-084	1.17	1.43	1.70	2.31
100	200	CGR-TR044-085	CGR-TR044-086	CGR-TR044-087	CGR-TR044-088	1.24	1.54	1.84	2.52
100	250	CGR-TR044-089	CGR-TR044-090	CGR-TR044-091	CGR-TR044-092	1.31	1.64	1.98	2.73
100	300	CGR-TR044-093	CGR-TR044-094	CGR-TR044-095	CGR-TR044-096	1.37	1.74	2.12	2.93
100	400	CGR-TR044-097	CGR-TR044-098	CGR-TR044-099	CGR-TR044-100	1.91	2.55	3.19	4.55
100	450	CGR-TR044-101	CGR-TR044-102	CGR-TR044-103	CGR-TR044-104	2.02	2.71	3.40	4.86
100	500	CGR-TR044-105	CGR-TR044-106	CGR-TR044-107	CGR-TR044-108	2.12	2.87	3.61	5.17
100	600	CGR-TR044-109	CGR-TR044-110	CGR-TR044-111	CGR-TR044-112	2.33	3.18	4.03	5.80

GRP CABLE TRAY · FITTINGS

Tees and crosses

Three-way and four-way junctions in the horizontal plane, factory assembled.

Material Glass-fibre reinforced polyester (GRP), pultruded.
Vinyl ester and anti-static versions on request.



Horizontal tee

H	W	t	Item number	kg/pc
50	50	3.0	CGR-TR031-001	0.83
50	100	3.0	CGR-TR031-002	1.06
50	150	3.0	CGR-TR031-003	1.32
50	200	3.0	CGR-TR031-004	1.61
50	250	3.0	CGR-TR031-005	1.93
50	300	3.0	CGR-TR031-006	2.27
50	400	4.5	CGR-TR031-007	4.33
50	450	4.5	CGR-TR031-008	4.96
50	500	4.5	CGR-TR031-009	5.64
50	600	4.5	CGR-TR031-010	7.12
80	100	3.0	CGR-TR031-011	1.39
80	150	3.0	CGR-TR031-012	1.66
80	200	3.0	CGR-TR031-013	1.96
80	250	3.0	CGR-TR031-014	2.28
80	300	3.0	CGR-TR031-015	2.63
80	400	4.5	CGR-TR031-016	4.85
80	450	4.5	CGR-TR031-017	5.49
80	500	4.5	CGR-TR031-018	6.18
80	600	4.5	CGR-TR031-019	7.68
100	100	3.0	CGR-TR031-020	1.61
100	150	3.0	CGR-TR031-021	1.89
100	200	3.0	CGR-TR031-022	2.19
100	250	3.0	CGR-TR031-023	2.52
100	300	3.0	CGR-TR031-024	2.88
100	400	4.5	CGR-TR031-025	5.19
100	450	4.5	CGR-TR031-026	5.85
100	500	4.5	CGR-TR031-027	6.54
100	600	4.5	CGR-TR031-028	8.06

Horizontal cross

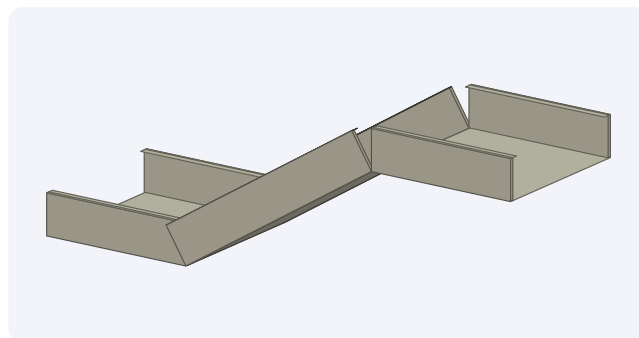
H	W	t	Item number	kg/pc
50	50	3.0	CGR-TR032-001	1.20
50	100	3.0	CGR-TR032-002	1.47
50	150	3.0	CGR-TR032-003	1.71
50	200	3.0	CGR-TR032-004	2.10
50	250	3.0	CGR-TR032-005	2.40
50	300	3.0	CGR-TR032-006	2.84
50	400	4.5	CGR-TR032-007	5.20
50	450	4.5	CGR-TR032-008	5.81
50	500	4.5	CGR-TR032-009	6.64
50	600	4.5	CGR-TR032-010	8.24
80	100	3.0	CGR-TR032-011	1.96
80	150	3.0	CGR-TR032-012	2.20
80	200	3.0	CGR-TR032-013	2.59
80	250	3.0	CGR-TR032-014	2.89
80	300	3.0	CGR-TR032-015	3.33
80	400	4.5	CGR-TR032-016	5.83
80	450	4.5	CGR-TR032-017	6.44
80	500	4.5	CGR-TR032-018	7.27
80	600	4.5	CGR-TR032-019	8.87
100	100	3.0	CGR-TR032-020	2.29
100	150	3.0	CGR-TR032-021	2.53
100	200	3.0	CGR-TR032-022	2.92
100	250	3.0	CGR-TR032-023	3.22
100	300	3.0	CGR-TR032-024	3.66
100	400	4.5	CGR-TR032-025	6.26
100	450	4.5	CGR-TR032-026	6.86
100	500	4.5	CGR-TR032-027	7.69
100	600	4.5	CGR-TR032-028	9.29

GRP CABLE TRAY · FITTINGS

Level changes

The single level-change piece (SDP) makes one vertical offset; the multiple level-change module (SDM) is adjustable for steps over obstacles.

Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.
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Single level-change piece (SDP)

H	W	t	Item number	kg/pc
50	50	3.0	CGR-TR051-001	0.69
50	100	3.0	CGR-TR051-002	0.76
50	150	3.0	CGR-TR051-003	0.83
50	200	3.0	CGR-TR051-004	0.90
50	250	3.0	CGR-TR051-005	0.97
50	300	3.0	CGR-TR051-006	1.04
50	400	4.5	CGR-TR051-007	1.51
50	450	4.5	CGR-TR051-008	1.61
50	500	4.5	CGR-TR051-009	1.72
50	600	4.5	CGR-TR051-010	1.93
80	100	3.0	CGR-TR051-011	1.14
80	150	3.0	CGR-TR051-012	1.21
80	200	3.0	CGR-TR051-013	1.28
80	250	3.0	CGR-TR051-014	1.35
80	300	3.0	CGR-TR051-015	1.42
80	400	4.5	CGR-TR051-016	1.93
80	450	4.5	CGR-TR051-017	2.03
80	500	4.5	CGR-TR051-018	2.14
80	600	4.5	CGR-TR051-019	2.35
100	100	3.0	CGR-TR051-020	1.54
100	150	3.0	CGR-TR051-021	1.61
100	200	3.0	CGR-TR051-022	1.68
100	250	3.0	CGR-TR051-023	1.75
100	300	3.0	CGR-TR051-024	1.82
100	400	4.5	CGR-TR051-025	2.36
100	450	4.5	CGR-TR051-026	2.46
100	500	4.5	CGR-TR051-027	2.56
100	600	4.5	CGR-TR051-028	2.77

Multiple level-change module (SDM)

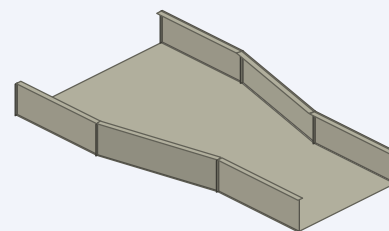
H	W	t	Item number	kg/pc
50	50	3.0	CGR-TR052-001	1.68
50	100	3.0	CGR-TR052-002	1.90
50	150	3.0	CGR-TR052-003	2.11
50	200	3.0	CGR-TR052-004	2.32
50	250	3.0	CGR-TR052-005	2.53
50	300	3.0	CGR-TR052-006	2.74
50	400	4.5	CGR-TR052-007	4.15
50	450	4.5	CGR-TR052-008	4.46
50	500	4.5	CGR-TR052-009	4.77
50	600	4.5	CGR-TR052-010	5.40
80	100	3.0	CGR-TR052-011	2.74
80	150	3.0	CGR-TR052-012	2.95
80	200	3.0	CGR-TR052-013	3.16
80	250	3.0	CGR-TR052-014	3.37
80	300	3.0	CGR-TR052-015	3.58
80	400	4.5	CGR-TR052-016	5.11
80	450	4.5	CGR-TR052-017	5.42
80	500	4.5	CGR-TR052-018	5.74
80	600	4.5	CGR-TR052-019	6.36
100	100	3.0	CGR-TR052-020	3.57
100	150	3.0	CGR-TR052-021	3.77
100	200	3.0	CGR-TR052-022	3.98
100	250	3.0	CGR-TR052-023	4.19
100	300	3.0	CGR-TR052-024	4.40
100	400	4.5	CGR-TR052-025	6.02
100	450	4.5	CGR-TR052-026	6.33
100	500	4.5	CGR-TR052-027	6.64
100	600	4.5	CGR-TR052-028	7.27

GRP CABLE TRAY · FITTINGS

Centre reducer

Reduces the tray width symmetrically on both sides.

Material Glass-fibre reinforced polyester (GRP), pultruded.
Vinyl ester and anti-static versions on request.



		ITEM NUMBER			WEIGHT KG/PC		
W1	W2	H50	H80	H100	H50	H80	H100
150	50	CGR-TR061-001	-	-	0.90	-	-
200	50	CGR-TR061-002	-	-	0.99	-	-
250	50	CGR-TR061-004	-	-	1.09	-	-
300	50	CGR-TR061-007	-	-	1.18	-	-
400	50	CGR-TR061-011	-	-	1.77	-	-
450	50	CGR-TR061-017	-	-	1.91	-	-
500	50	CGR-TR061-023	-	-	2.04	-	-
600	50	CGR-TR061-030	-	-	2.31	-	-
200	100	CGR-TR061-003	CGR-TR061-039	CGR-TR061-069	1.06	1.38	1.55
250	100	CGR-TR061-005	CGR-TR061-040	CGR-TR061-070	1.16	1.49	1.66
300	100	CGR-TR061-008	CGR-TR061-042	CGR-TR061-072	1.25	1.59	1.77
400	100	CGR-TR061-012	CGR-TR061-045	CGR-TR061-075	1.84	2.24	2.46
450	100	CGR-TR061-018	CGR-TR061-050	CGR-TR061-080	1.97	2.38	2.61
500	100	CGR-TR061-024	CGR-TR061-055	CGR-TR061-085	2.11	2.53	2.75
600	100	CGR-TR061-031	CGR-TR061-061	CGR-TR061-091	2.38	2.81	3.06
250	150	CGR-TR061-006	CGR-TR061-041	CGR-TR061-071	1.22	1.54	1.71
300	150	CGR-TR061-009	CGR-TR061-043	CGR-TR061-073	1.32	1.65	1.82
400	150	CGR-TR061-013	CGR-TR061-046	CGR-TR061-076	1.91	2.30	2.52
450	150	CGR-TR061-019	CGR-TR061-051	CGR-TR061-081	2.04	2.44	2.67
500	150	CGR-TR061-025	CGR-TR061-056	CGR-TR061-086	2.17	2.59	2.81
600	150	CGR-TR061-032	CGR-TR061-062	CGR-TR061-092	2.44	2.87	3.11
300	200	CGR-TR061-010	CGR-TR061-044	CGR-TR061-074	1.38	1.70	1.87
400	200	CGR-TR061-014	CGR-TR061-047	CGR-TR061-077	1.97	2.36	2.57
450	200	CGR-TR061-020	CGR-TR061-052	CGR-TR061-082	2.11	2.50	2.72
500	200	CGR-TR061-026	CGR-TR061-057	CGR-TR061-087	2.24	2.64	2.87
600	200	CGR-TR061-033	CGR-TR061-063	CGR-TR061-093	2.51	2.93	3.15
400	250	CGR-TR061-015	CGR-TR061-048	CGR-TR061-078	2.04	2.42	2.62
450	250	CGR-TR061-021	CGR-TR061-053	CGR-TR061-083	2.17	2.56	2.77
500	250	CGR-TR061-027	CGR-TR061-058	CGR-TR061-088	2.31	2.70	2.92
600	250	CGR-TR061-034	CGR-TR061-064	CGR-TR061-094	2.58	2.99	3.22
400	300	CGR-TR061-016	CGR-TR061-049	CGR-TR061-079	2.11	2.47	2.67
450	300	CGR-TR061-022	CGR-TR061-054	CGR-TR061-084	2.24	2.62	2.82
500	300	CGR-TR061-028	CGR-TR061-059	CGR-TR061-089	2.37	2.76	2.97
600	300	CGR-TR061-035	CGR-TR061-065	CGR-TR061-095	2.64	3.05	3.27
500	400	CGR-TR061-029	CGR-TR061-060	CGR-TR061-090	2.91	3.32	3.56
600	400	CGR-TR061-036	CGR-TR061-066	CGR-TR061-096	3.18	3.61	3.85
600	450	CGR-TR061-037	CGR-TR061-067	CGR-TR061-097	3.28	3.71	3.95
600	500	CGR-TR061-038	CGR-TR061-068	CGR-TR061-098	3.39	3.81	4.04

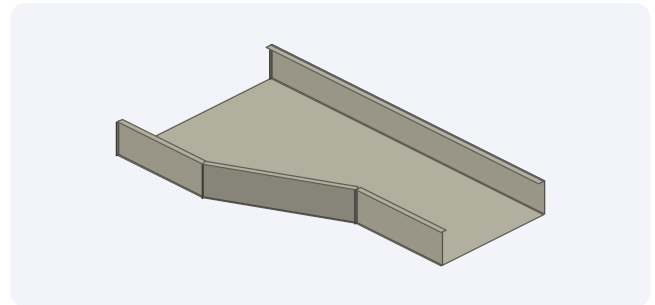
W1 = larger width, W2 = smaller width (mm). - = not available in this height.

GRP CABLE TRAY · FITTINGS

Right reducer

Reduces the width on the right-hand side; the left side runs straight.

Material Glass-fibre reinforced polyester (GRP), pultruded.
Vinyl ester and anti-static versions on request.



		ITEM NUMBER			WEIGHT KG/PC		
W1	W2	H50	H80	H100	H50	H80	H100
100	50	CGR-TR062-001	-	-	0.84	-	-
150	50	CGR-TR062-002	-	-	0.93	-	-
200	50	CGR-TR062-004	-	-	1.03	-	-
250	50	CGR-TR062-007	-	-	1.12	-	-
300	50	CGR-TR062-011	-	-	1.22	-	-
400	50	CGR-TR062-016	-	-	1.80	-	-
450	50	CGR-TR062-022	-	-	1.94	-	-
500	50	CGR-TR062-029	-	-	2.07	-	-
600	50	CGR-TR062-037	-	-	2.34	-	-
150	100	CGR-TR062-003	CGR-TR062-046	CGR-TR062-082	1.00	1.31	1.50
200	100	CGR-TR062-005	CGR-TR062-047	CGR-TR062-083	1.09	1.41	1.61
250	100	CGR-TR062-008	CGR-TR062-049	CGR-TR062-085	1.19	1.52	1.71
300	100	CGR-TR062-012	CGR-TR062-052	CGR-TR062-088	1.28	1.62	1.82
400	100	CGR-TR062-017	CGR-TR062-056	CGR-TR062-092	1.87	2.27	2.52
450	100	CGR-TR062-023	CGR-TR062-061	CGR-TR062-097	2.01	2.42	2.67
500	100	CGR-TR062-030	CGR-TR062-067	CGR-TR062-103	2.14	2.56	2.82
600	100	CGR-TR062-038	CGR-TR062-074	CGR-TR062-110	2.41	2.85	3.11
200	150	CGR-TR062-006	CGR-TR062-048	CGR-TR062-084	1.16	1.47	1.66
250	150	CGR-TR062-009	CGR-TR062-050	CGR-TR062-086	1.26	1.58	1.77
300	150	CGR-TR062-013	CGR-TR062-053	CGR-TR062-089	1.35	1.68	1.88
400	150	CGR-TR062-018	CGR-TR062-057	CGR-TR062-093	1.94	2.33	2.57
450	150	CGR-TR062-024	CGR-TR062-062	CGR-TR062-098	2.07	2.47	2.72
500	150	CGR-TR062-031	CGR-TR062-068	CGR-TR062-104	2.21	2.62	2.87
600	150	CGR-TR062-039	CGR-TR062-075	CGR-TR062-111	2.48	2.90	3.17
250	200	CGR-TR062-010	CGR-TR062-051	CGR-TR062-087	1.32	1.63	1.82
300	200	CGR-TR062-014	CGR-TR062-054	CGR-TR062-090	1.42	1.74	1.93
400	200	CGR-TR062-019	CGR-TR062-058	CGR-TR062-094	2.00	2.39	2.62
450	200	CGR-TR062-025	CGR-TR062-063	CGR-TR062-099	2.14	2.53	2.77
500	200	CGR-TR062-032	CGR-TR062-069	CGR-TR062-105	2.27	2.68	2.92
600	200	CGR-TR062-040	CGR-TR062-076	CGR-TR062-112	2.54	2.96	3.22
300	250	CGR-TR062-015	CGR-TR062-055	CGR-TR062-091	1.48	1.80	1.98
400	250	CGR-TR062-020	CGR-TR062-059	CGR-TR062-095	2.07	2.45	2.68
450	250	CGR-TR062-026	CGR-TR062-064	CGR-TR062-100	2.21	2.59	2.82
500	250	CGR-TR062-033	CGR-TR062-070	CGR-TR062-106	2.34	2.73	2.97
600	250	CGR-TR062-041	CGR-TR062-077	CGR-TR062-113	2.61	3.02	3.27
400	300	CGR-TR062-021	CGR-TR062-060	CGR-TR062-096	2.14	2.51	2.73
450	300	CGR-TR062-027	CGR-TR062-065	CGR-TR062-101	2.27	2.65	2.88
500	300	CGR-TR062-034	CGR-TR062-071	CGR-TR062-107	2.41	2.79	3.02
600	300	CGR-TR062-042	CGR-TR062-078	CGR-TR062-114	2.68	3.08	3.32
450	400	CGR-TR062-028	CGR-TR062-066	CGR-TR062-102	2.81	3.21	3.46
500	400	CGR-TR062-035	CGR-TR062-072	CGR-TR062-108	2.94	3.36	3.61
600	400	CGR-TR062-043	CGR-TR062-079	CGR-TR062-115	3.21	3.64	3.91
500	450	CGR-TR062-036	CGR-TR062-073	CGR-TR062-109	3.05	3.46	3.71
600	450	CGR-TR062-044	CGR-TR062-080	CGR-TR062-116	3.32	3.74	3.71
600	500	CGR-TR062-045	CGR-TR062-081	CGR-TR062-117	3.42	3.84	4.10

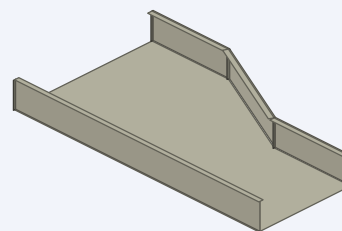
W1 = larger width, W2 = smaller width (mm). - = not available in this height.

GRP CABLE TRAY · FITTINGS

Left reducer

Reduces the width on the left-hand side; the right side runs straight.

Material Glass-fibre reinforced polyester (GRP), pultruded.
Vinyl ester and anti-static versions on request.



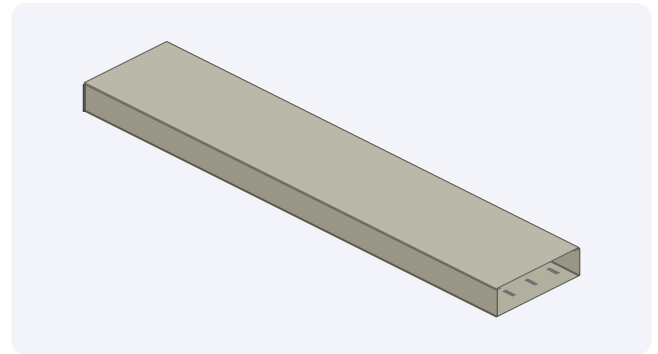
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W1	W2	H50	H80	H100	H50	H80	H100
100	50	CGR-TR063-001	-	-	0.84	-	-
150	50	CGR-TR063-002	-	-	0.93	-	-
200	50	CGR-TR063-004	-	-	1.03	-	-
250	50	CGR-TR063-007	-	-	1.12	-	-
300	50	CGR-TR063-011	-	-	1.22	-	-
400	50	CGR-TR063-016	-	-	1.80	-	-
450	50	CGR-TR063-022	-	-	1.94	-	-
500	50	CGR-TR063-029	-	-	2.07	-	-
600	50	CGR-TR063-037	-	-	2.34	-	-
150	100	CGR-TR063-003	CGR-TR063-046	CGR-TR063-082	1.00	1.31	1.50
200	100	CGR-TR063-005	CGR-TR063-047	CGR-TR063-083	1.09	1.41	1.61
250	100	CGR-TR063-008	CGR-TR063-049	CGR-TR063-085	1.19	1.52	1.71
300	100	CGR-TR063-012	CGR-TR063-052	CGR-TR063-088	1.28	1.62	1.82
400	100	CGR-TR063-017	CGR-TR063-056	CGR-TR063-092	1.87	2.27	2.52
450	100	CGR-TR063-023	CGR-TR063-061	CGR-TR063-097	2.01	2.42	2.67
500	100	CGR-TR063-030	CGR-TR063-067	CGR-TR063-103	2.14	2.56	2.82
600	100	CGR-TR063-038	CGR-TR063-074	CGR-TR063-110	2.41	2.85	3.11
200	150	CGR-TR063-006	CGR-TR063-048	CGR-TR063-084	1.16	1.47	1.66
250	150	CGR-TR063-009	CGR-TR063-050	CGR-TR063-086	1.26	1.58	1.77
300	150	CGR-TR063-013	CGR-TR063-053	CGR-TR063-089	1.35	1.68	1.88
400	150	CGR-TR063-018	CGR-TR063-057	CGR-TR063-093	1.94	2.33	2.57
450	150	CGR-TR063-024	CGR-TR063-062	CGR-TR063-098	2.07	2.47	2.72
500	150	CGR-TR063-031	CGR-TR063-068	CGR-TR063-104	2.21	2.62	2.87
600	150	CGR-TR063-039	CGR-TR063-075	CGR-TR063-111	2.48	2.90	3.17
250	200	CGR-TR063-010	CGR-TR063-051	CGR-TR063-087	1.32	1.63	1.82
300	200	CGR-TR063-014	CGR-TR063-054	CGR-TR063-090	1.42	1.74	1.93
400	200	CGR-TR063-019	CGR-TR063-058	CGR-TR063-094	2.00	2.39	2.62
450	200	CGR-TR063-025	CGR-TR063-063	CGR-TR063-099	2.14	2.53	2.77
500	200	CGR-TR063-032	CGR-TR063-069	CGR-TR063-105	2.27	2.68	2.92
600	200	CGR-TR063-040	CGR-TR063-076	CGR-TR063-112	2.54	2.96	3.22
300	250	CGR-TR063-015	CGR-TR063-055	CGR-TR063-091	1.48	1.80	1.98
400	250	CGR-TR063-020	CGR-TR063-059	CGR-TR063-095	2.07	2.45	2.68
450	250	CGR-TR063-026	CGR-TR063-064	CGR-TR063-100	2.21	2.59	2.82
500	250	CGR-TR063-033	CGR-TR063-070	CGR-TR063-106	2.34	2.73	2.97
600	250	CGR-TR063-041	CGR-TR063-077	CGR-TR063-113	2.61	3.02	3.27
400	300	CGR-TR063-021	CGR-TR063-060	CGR-TR063-096	2.14	2.51	2.73
450	300	CGR-TR063-027	CGR-TR063-065	CGR-TR063-101	2.27	2.65	2.88
500	300	CGR-TR063-034	CGR-TR063-071	CGR-TR063-107	2.41	2.79	3.02
600	300	CGR-TR063-042	CGR-TR063-078	CGR-TR063-114	2.68	3.08	3.32
450	400	CGR-TR063-028	CGR-TR063-066	CGR-TR063-102	2.81	3.21	3.46
500	400	CGR-TR063-035	CGR-TR063-072	CGR-TR063-108	2.94	3.36	3.61
600	400	CGR-TR063-043	CGR-TR063-079	CGR-TR063-115	3.21	3.64	3.91
500	450	CGR-TR063-036	CGR-TR063-073	CGR-TR063-109	3.05	3.46	3.71
600	450	CGR-TR063-044	CGR-TR063-080	CGR-TR063-116	3.32	3.74	3.71
600	500	CGR-TR063-045	CGR-TR063-081	CGR-TR063-117	3.42	3.84	4.10

W1 = larger width, W2 = smaller width (mm). - = not available in this height.

GRP CABLE TRAY · COVERS

Covers for straight lengths and fittings

Flat 3 mm pultruded GRP covers for the tray system, fixed with standard cover clamps or grip cover clamps for outdoor routes.



Cover height	15 mm
Material	Glass-fibre reinforced polyester (GRP), pultruded. Vinyl ester and anti-static versions on request.

W (mm)	Length (m)	t (mm)	kg/m	Clamps / length	Item number
50	3	3	0.43	3	CGR-CV101-001
100	3	3	0.79	3	CGR-CV201-001
150	3	3	1.07	3	CGR-CV201-002
200	3	3	1.35	3	CGR-CV201-003
250	3	3	1.64	3	CGR-CV201-004
300	3	3	1.92	3	CGR-CV201-005
400	3	3	2.47	3	CGR-CV201-006
450	3	3	2.75	3	CGR-CV201-007
500	3	3	3.04	3	CGR-CV201-008
600	3	3	3.60	3	CGR-CV201-009
750	3	3	6.50	4	CGR-CV201-010
900	3	3	8.00	5	CGR-CV201-011

Cover clamps required

Product	Standard clamp	Grip clamp
Straight length 3 m	6	3
45° horizontal bend	4	2
90° horizontal bend	6	3
Tee	6	3
Cross	8	4
Riser R300 / R450 / R600	2 / 4 / 6	1 / 2 / 3

GRP CABLE TRAY · COVERS

Covers for fittings

Covers for 45° horizontal bends

W	ITEM NUMBER				WEIGHT KG/PC			
	R300	R450	R600	R900	R300	R450	R600	R900
50	CGR-CV221-001	CGR-CV221-002	CGR-CV221-003	CGR-CV221-004	0.20	0.26	0.31	0.42
100	CGR-CV221-005	CGR-CV221-006	CGR-CV221-007	CGR-CV221-008	0.37	0.48	0.57	0.77
150	CGR-CV221-009	CGR-CV221-010	CGR-CV221-011	CGR-CV221-012	0.54	0.67	0.90	1.06
200	CGR-CV221-013	CGR-CV221-014	CGR-CV221-015	CGR-CV221-016	0.71	0.87	1.03	1.37
250	CGR-CV221-017	CGR-CV221-018	CGR-CV221-019	CGR-CV221-020	0.89	1.08	1.28	1.68
300	CGR-CV221-021	CGR-CV221-022	CGR-CV221-023	CGR-CV221-024	1.08	1.32	1.55	2.03
400	CGR-CV221-025	CGR-CV221-026	CGR-CV221-027	CGR-CV221-028	1.49	1.80	2.07	2.71
450	CGR-CV221-029	CGR-CV221-030	CGR-CV221-031	CGR-CV221-032	1.71	2.06	2.42	3.07
500	CGR-CV221-033	CGR-CV221-034	CGR-CV221-035	CGR-CV221-036	1.94	2.33	2.72	3.44
600	CGR-CV221-037	CGR-CV221-038	CGR-CV221-039	CGR-CV221-040	2.48	2.94	3.37	4.21

Covers for 90° horizontal bends

W	ITEM NUMBER				WEIGHT KG/PC			
	R300	R450	R600	R900	R300	R450	R600	R900
50	CGR-CV222-001	CGR-CV222-002	CGR-CV222-003	CGR-CV222-004	0.32	0.42	0.53	0.76
100	CGR-CV222-005	CGR-CV222-006	CGR-CV222-007	CGR-CV222-008	0.60	0.80	0.99	1.39
150	CGR-CV222-009	CGR-CV222-010	CGR-CV222-011	CGR-CV222-012	0.87	1.14	1.51	1.92
200	CGR-CV222-013	CGR-CV222-014	CGR-CV222-015	CGR-CV222-016	1.14	1.49	1.82	2.48
250	CGR-CV222-017	CGR-CV222-018	CGR-CV222-019	CGR-CV222-020	1.44	1.85	2.26	3.05
300	CGR-CV222-021	CGR-CV222-022	CGR-CV222-023	CGR-CV222-024	1.78	2.20	2.74	3.67
400	CGR-CV222-025	CGR-CV222-026	CGR-CV222-027	CGR-CV222-028	2.49	3.10	3.71	4.92
450	CGR-CV222-029	CGR-CV222-030	CGR-CV222-031	CGR-CV222-032	2.90	3.56	4.24	5.62
500	CGR-CV222-033	CGR-CV222-034	CGR-CV222-035	CGR-CV222-036	3.32	4.04	4.82	6.30
600	CGR-CV222-037	CGR-CV222-038	CGR-CV222-039	CGR-CV222-040	4.21	5.10	5.99	7.75

Covers for tees

W	Item number	kg/pc
50	CGR-CV231-001	0.31
100	CGR-CV231-002	0.57
150	CGR-CV231-003	0.82
200	CGR-CV231-004	1.11
250	CGR-CV231-005	1.42
300	CGR-CV231-006	1.76
400	CGR-CV231-007	2.52
450	CGR-CV231-008	2.95
500	CGR-CV231-009	3.40
600	CGR-CV231-010	4.39

Covers for crosses

W	Item number	kg/pc
50	CGR-CV232-001	0.40
100	CGR-CV232-002	0.73
150	CGR-CV232-003	1.05
200	CGR-CV232-004	1.39
250	CGR-CV232-005	1.77
300	CGR-CV232-006	2.17
400	CGR-CV232-007	3.04
450	CGR-CV232-008	3.53
500	CGR-CV232-009	4.04
600	CGR-CV232-010	5.15

GRP CABLE TRAY · COVERS

Covers for risers and reducers

Covers for inside and outside risers 45°

W	ITEM NUMBER				WEIGHT KG/PC			
	R300	R450	R600	R900	R300	R450	R600	R900
50	CGR-CV241-001	CGR-CV241-002	CGR-CV241-003	CGR-CV241-004	0.06	0.09	0.12	0.18
100	CGR-CV241-005	CGR-CV241-006	CGR-CV241-007	CGR-CV241-008	0.09	0.14	0.19	0.28
150	CGR-CV241-009	CGR-CV241-010	CGR-CV241-011	CGR-CV241-012	0.13	0.19	0.25	0.38
200	CGR-CV241-013	CGR-CV241-014	CGR-CV241-015	CGR-CV241-016	0.16	0.24	0.32	0.48
250	CGR-CV241-017	CGR-CV241-018	CGR-CV241-019	CGR-CV241-020	0.19	0.29	0.39	0.58
300	CGR-CV241-021	CGR-CV241-022	CGR-CV241-023	CGR-CV241-024	0.23	0.34	0.46	0.68
400	CGR-CV241-025	CGR-CV241-026	CGR-CV241-027	CGR-CV241-028	0.29	0.44	0.59	0.88
450	CGR-CV241-029	CGR-CV241-030	CGR-CV241-031	CGR-CV241-032	0.33	0.49	0.65	0.98
500	CGR-CV241-033	CGR-CV241-034	CGR-CV241-035	CGR-CV241-036	0.36	0.54	0.72	1.08
600	CGR-CV241-037	CGR-CV241-038	CGR-CV241-039	CGR-CV241-040	0.43	0.64	0.85	1.28

Covers for inside and outside risers 90°

W	ITEM NUMBER				WEIGHT KG/PC			
	R300	R450	R600	R900	R300	R450	R600	R900
50	CGR-CV242-001	CGR-CV242-002	CGR-CV242-003	CGR-CV242-004	0.10	0.17	0.23	2.66
100	CGR-CV242-005	CGR-CV242-006	CGR-CV242-007	CGR-CV242-008	0.17	0.29	0.39	2.25
150	CGR-CV242-009	CGR-CV242-010	CGR-CV242-011	CGR-CV242-012	0.24	0.40	0.53	2.04
200	CGR-CV242-013	CGR-CV242-014	CGR-CV242-015	CGR-CV242-016	0.30	0.50	0.67	1.83
250	CGR-CV242-017	CGR-CV242-018	CGR-CV242-019	CGR-CV242-020	0.36	0.61	0.82	1.42
300	CGR-CV242-021	CGR-CV242-022	CGR-CV242-023	CGR-CV242-024	0.43	0.72	0.96	1.21
400	CGR-CV242-025	CGR-CV242-026	CGR-CV242-027	CGR-CV242-028	0.55	0.92	1.23	1.00
450	CGR-CV242-029	CGR-CV242-030	CGR-CV242-031	CGR-CV242-032	0.62	1.03	1.37	0.79
500	CGR-CV242-033	CGR-CV242-034	CGR-CV242-035	CGR-CV242-036	0.68	1.14	1.52	0.59
600	CGR-CV242-037	CGR-CV242-038	CGR-CV242-039	CGR-CV242-040	0.81	1.35	1.80	0.38

GRP CABLE TRAY · COVERS

Covers for reducers

Centre reducer covers

W1	W2	Item number	kg/pc
150	50	CGR-CV261-001	0.46
200	50	CGR-CV261-002	0.55
250	50	CGR-CV261-004	0.63
300	50	CGR-CV261-007	0.72
400	50	CGR-CV261-011	0.88
450	50	CGR-CV261-017	0.97
500	50	CGR-CV261-023	1.05
600	50	CGR-CV261-030	1.22
200	100	CGR-CV261-003	1.32
250	100	CGR-CV261-005	0.73
300	100	CGR-CV261-008	0.82
400	100	CGR-CV261-012	0.98
450	100	CGR-CV261-018	1.07
500	100	CGR-CV261-024	1.15
600	100	CGR-CV261-031	1.32
250	150	CGR-CV261-006	0.82
300	150	CGR-CV261-009	0.90
400	150	CGR-CV261-013	1.07
450	150	CGR-CV261-019	1.15
500	150	CGR-CV261-025	1.24
600	150	CGR-CV261-032	1.40
300	200	CGR-CV261-010	0.98
400	200	CGR-CV261-014	1.15
450	200	CGR-CV261-020	1.24
500	200	CGR-CV261-026	1.32
600	200	CGR-CV261-033	1.49
400	250	CGR-CV261-015	1.24
450	250	CGR-CV261-021	1.32
500	250	CGR-CV261-027	1.40
600	250	CGR-CV261-034	1.57
400	300	CGR-CV261-016	1.32
450	300	CGR-CV261-022	1.41
500	300	CGR-CV261-028	1.49
600	300	CGR-CV261-035	1.66
500	400	CGR-CV261-029	1.66
600	400	CGR-CV261-036	1.82
600	450	CGR-CV261-037	1.91
600	500	CGR-CV261-038	1.99

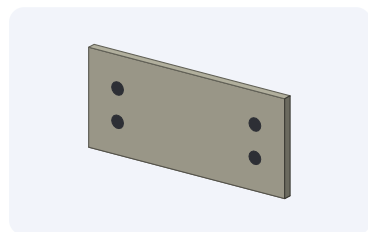
Right / left reducer covers

W1	W2	Item number	kg/pc
100	50	CGR-CV262-001	0.38
150	50	CGR-CV262-002	0.46
200	50	CGR-CV262-004	0.55
250	50	CGR-CV262-007	0.63
300	50	CGR-CV262-011	0.72
400	50	CGR-CV262-016	0.88
450	50	CGR-CV262-022	0.97
500	50	CGR-CV262-029	1.05
600	50	CGR-CV262-037	1.22
150	100	CGR-CV262-003	0.56
200	100	CGR-CV262-005	0.65
250	100	CGR-CV262-008	0.73
300	100	CGR-CV262-012	0.82
400	100	CGR-CV262-017	0.98
450	100	CGR-CV262-023	1.07
500	100	CGR-CV262-030	1.15
600	100	CGR-CV262-038	1.32
200	150	CGR-CV262-006	0.73
250	150	CGR-CV262-009	0.82
300	150	CGR-CV262-013	0.90
400	150	CGR-CV262-018	1.07
450	150	CGR-CV262-024	1.15
500	150	CGR-CV262-031	1.24
600	150	CGR-CV262-039	1.40
250	200	CGR-CV262-010	0.90
300	200	CGR-CV262-014	0.98
400	200	CGR-CV262-019	1.15
450	200	CGR-CV262-025	1.24
500	200	CGR-CV262-032	1.32
600	200	CGR-CV262-040	1.49
300	250	CGR-CV262-015	1.07
400	250	CGR-CV262-020	1.24
450	250	CGR-CV262-026	1.32
500	250	CGR-CV262-033	1.40
600	250	CGR-CV262-041	1.57
400	300	CGR-CV262-021	1.32
450	300	CGR-CV262-027	1.41
500	300	CGR-CV262-034	1.49
600	300	CGR-CV262-042	1.66
450	400	CGR-CV262-028	1.57
500	400	CGR-CV262-035	1.66
600	400	CGR-CV262-043	1.82
500	450	CGR-CV262-036	1.74
600	450	CGR-CV262-044	1.91
600	500	CGR-CV262-045	1.99

ACCESSORIES

Splice plates, expansion plates and level-change joints

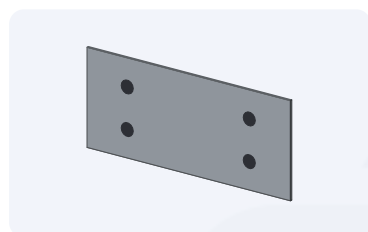
One set of joining parts serves both the ladder and the tray system. Fixings are ordered separately.



Splice plate, GRP

For H	Plate h × L × t	Fixings (order separately)	kg	Item number
H50 / H55	40 × 200 × 6	4 × M8×25 SS316	0.13	CGR-AC011-001
H80	70 × 200 × 6	4 × M10×25 SS316 or M10×40 GRP	0.20	CGR-AC011-002
H100	90 × 200 × 8	4 × M10×25 SS316 or M10×40 GRP	0.31	CGR-AC011-003
H150	140 × 200 × 8	4 × M10×25 SS316 or M10×40 GRP	0.45	CGR-AC011-004

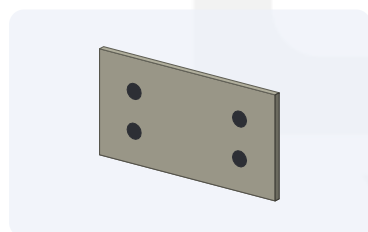
Made by SMC moulding, pre-drilled. The H50 splice plate also fits H55 ladders.



Expansion splice plate, stainless steel 316

For H	Plate h × L × t	Fixings (order separately)	kg	Item number
H50	37 × 200 × 2	4 × M8×25 SS316	0.22	CGR-AC012-001
H80	67 × 200 × 2	4 × M10×25 SS316	0.31	CGR-AC012-002
H100	87 × 200 × 2	4 × M10×25 SS316	0.37	CGR-AC012-003
H150	137 × 200 × 2	4 × M10×25 SS316	0.53	CGR-AC012-004

Slotted holes allow 25 mm of thermal movement. See the expansion-joint spacing table.



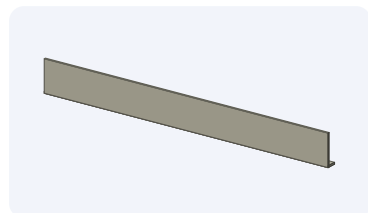
Level-change joint (SDE), GRP

For H	Thickness	kg/set	Item number
H50	5 mm	0.09	CGR-AC013-001
H80	5 mm	0.16	CGR-AC013-002
H100	5 mm	0.25	CGR-AC013-003
H150	5 mm	0.42	CGR-AC013-004

Hinged joint for making vertical angle changes on site. Pre-drilled; fix with M8×25 (H50) or M10×25 SS316 bolt sets.

ACCESSORIES

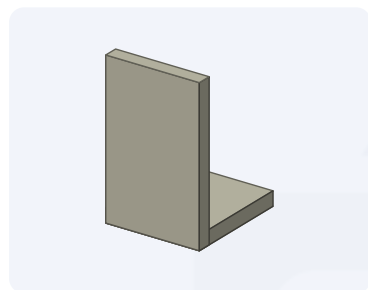
Separators, brackets and cover clamps



Separator, 3 m

System	For H	Separator height	kg/m	Item number
Ladder	H55	36 mm	0.312	CGR-AC021-001
Ladder	H80	62 mm	0.457	CGR-AC021-002
Ladder	H100	75 mm	0.529	CGR-AC021-003
Ladder	H150	119 mm	0.774	CGR-AC021-004
Tray	H50	45 mm	0.57	CGR-AC022-001
Tray	H80	75 mm	0.86	CGR-AC022-002
Tray	H100	95 mm	0.92	CGR-AC022-003

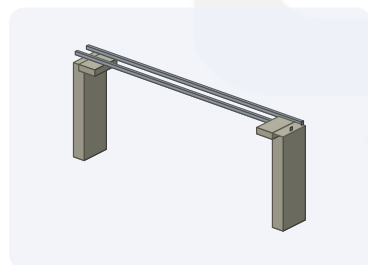
Keeps power and control cables apart. Ladder separators: 1 × M8×40 SS316 set per metre. Tray separators: 3 × M8×25 SS316 sets per 3 m included.



L-fixing bracket, GRP

For H	Bracket height	kg/pc	Item number
H50	35 mm	0.036	CGR-AC031-001
H80	55 mm	0.046	CGR-AC031-002
H100	65 mm	0.052	CGR-AC031-003
H150	100 mm	0.070	CGR-AC031-004

Holds ladders and trays to the support. Drill the side rail on site; ladders and trays are drilled only at the ends for splice plates. Fixing: M6×70 SS316 + GRP set (H100, H150) or M8×25 set.



Grip cover clamp

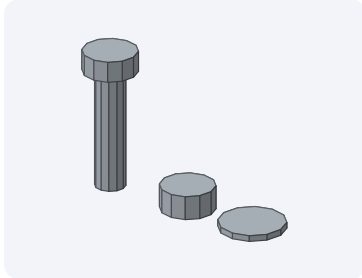
For H	For W	kg/set	Item number
H100	150	0.144	CGR-AC041-001
H100	200	0.163	CGR-AC041-002
H100	300	0.209	CGR-AC041-003
H100	400	0.220	CGR-AC041-004
H100	450	0.241	CGR-AC041-005
H100	500	0.261	CGR-AC041-006
H100	600	0.291	CGR-AC041-007
H100	750	1.128	CGR-AC041-008
H100	900	1.316	CGR-AC041-009
H150	150	0.153	CGR-AC041-010
H150	200	0.163	CGR-AC041-011
H150	300	0.218	CGR-AC041-012
H150	400	0.230	CGR-AC041-013
H150	450	0.250	CGR-AC041-014
H150	500	0.261	CGR-AC041-015
H150	600	0.300	CGR-AC041-016
H150	750	1.154	CGR-AC041-017
H150	900	1.342	CGR-AC041-018

Two GRP profiles, two M8 SS316 threaded rods, four nuts and four washers. Recommended for all outdoor routes.

ACCESSORIES

Fixings

All metal fixings are stainless steel 316 (A4). Composite GRP bolts are available for fully non-metallic installations.



Description	kg	Item number
Mounting clip plate, SS316	0.070	CGR-AC051-001
M8×25 fixing set, SS316 (A4)	0.028	CGR-AC051-002
M10×25 fixing set, SS316 (A4)	0.049	CGR-AC051-003
M6×70 fixing set, SS316 + GRP	0.037	CGR-AC051-004
M8×40 fixing set, SS316 (A4)	0.030	CGR-AC051-005
M8×25 screw DIN 7985, SS316	0.019	CGR-AC051-006
M10×25 screw DIN 7985, SS316	0.028	CGR-AC051-007
M8×40 screw DIN 7985, SS316	0.021	CGR-AC051-008
M8 hex nut DIN 934, SS316	0.005	CGR-AC051-009
M10 hex nut DIN 934, SS316	0.010	CGR-AC051-010
M8 flat washer DIN 9021, SS316	0.004	CGR-AC051-011
M10 flat washer DIN 9021, SS316	0.011	CGR-AC051-012
M10×40 composite bolt + M10 wing nut, GRP	0.015	CGR-AC051-013

Maximum tightening torque for M10×40 composite bolts: 4 Nm. A fixing set is one bolt, one nut and washers.

Fixings needed per joint

Joint	H50 / H55	H80 · H100 · H150
Splice plate, per joint (2 plates)	4 × M8×25 SS316	4 × M10×25 SS316 or 4 × M10×40 GRP
Expansion splice plate, per plate	4 × M8×25 SS316	4 × M10×25 SS316
Level-change joint (SDE)	4 × M8×25 SS316	4 × M10×25 SS316
Reducer plate	4 × M10×25 SS316	4 × M10×25 SS316

INSTALLATION

Installation guidelines

GRP is installed much like steel, with a few simple rules that protect the material and keep the system within its rated load.

1 Supports

Place supports at the span used for the load rating (up to 3.6 m for H100 and 6.0 m for H150 ladders). Put splice joints near a support, at about a quarter of the span.

2 Cutting and drilling

Cut with a fine-tooth or diamond blade and drill with standard HSS or carbide bits. Wear a dust mask and gloves.

3 Seal cut edges

Coat every cut edge and drilled hole with the sealing resin supplied, to keep the glass fibres protected against moisture and chemicals.

4 Splicing

Join lengths with splice plates on the outside of the side rails and stainless steel 316 or composite bolts. Do not over-tighten composite bolts (4 Nm max.).

5 Expansion

Fit an expansion splice plate at the spacing given for the expected temperature difference, and wherever the route crosses a building expansion joint.

6 Covers

Use covers on outdoor routes and under walkways. Fix with the number of clamps given in the cover tables; use grip clamps outdoors.

7 Earthing

GRP is non-conductive and needs no earthing. Earth the cables and any metal supports according to the electrical design.

8 Storage

Store flat on timber bearers, off the ground. Keep covers and small parts in their packaging until installation.

TECHNICAL SPECIFICATION

Specification text

Ready-to-use specification for consultants and contractors. A Word version is available on request.

1. Scope

- This specification covers the design, manufacture, testing and supply of glass-fibre reinforced polyester (GRP) cable ladders and cable trays, with fittings, covers, accessories and fixings, for indoor and outdoor cable installations.

2. Standards

- Ladders and trays shall be designed and manufactured to UL 568 (NEMA FG-1) and IEC 61537.
- All results shall be for uniformly distributed static loads: single-span for NEMA FG-1 and multi-span for IEC 61537.
- 100 mm high ladders shall meet NEMA class 12C and 150 mm high ladders NEMA class 20C, proven by tests on 900 mm wide sections.

3. Design and dimensions

- Ladders shall consist of two pultruded side rails with inward-turned flanges and C-shaped rungs locked into the rails, allowing support spans of up to 6 m.
- Straight lengths: 3 m and 6 m (ladder), 3 m (tray). Ladder heights 55, 80, 100 and 150 mm; widths 150 to 900 mm. Rung spacing 300 mm as standard.
- Horizontal fittings: 45° and 90° bends, tees, crosses and reducers. Vertical fittings: inside and outside risers 45° and 90° and level-change modules. Standard radii R300, R450, R600 and R900.

- There shall be no burrs, projections or sharp edges on surfaces in contact with cables. Splice holes shall be drilled at both ends of every straight length.
- Colour RAL 7032; other RAL colours on request.

4. Material properties

- Self-extinguishing to UL 94 V-0 within 10 s; Class 1 to BS 476-7 and ASTM E84; B1 to DIN 4102-1; limiting oxygen index of at least 28% (45% on request) to ISO 4589-2.
- Halogen-free to IEC 60754 (max. 5 mg/g); glow-wire resistant to 950 °C to IEC 60695; UV resistant to ISO 4892-2; minimum 1 500 h salt spray to ISO 9227.
- Cold resistance to EN 60068-2-1 (72 h at -75 °C), water absorption to ISO 62, ozone ageing to ISO 1431-1, dielectric test to EN 60243-1 and conductivity to EN 60079-0. Anti-static versions on request.

5. Covers

- Covers shall be 3 mm thick, available for all straight lengths and fittings up to 600 mm wide (thicker for 750 and 900 mm). Grip-type cover clamps shall be used outdoors.

6. Accessories and fixings

- Splice plates, expansion plates, adjustable vertical joints, separators and fixing brackets shall be available as standard.
- Splice plates shall be fixed to the outside of the side rails and may be GRP or stainless steel 316. All bolts, nuts and washers shall be stainless steel 316 (A4) or composite GRP.



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Çerkeşli Mah. Tavşancıl Sok. No:72
Dilovası / Kocaeli, Türkiye



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