EAE
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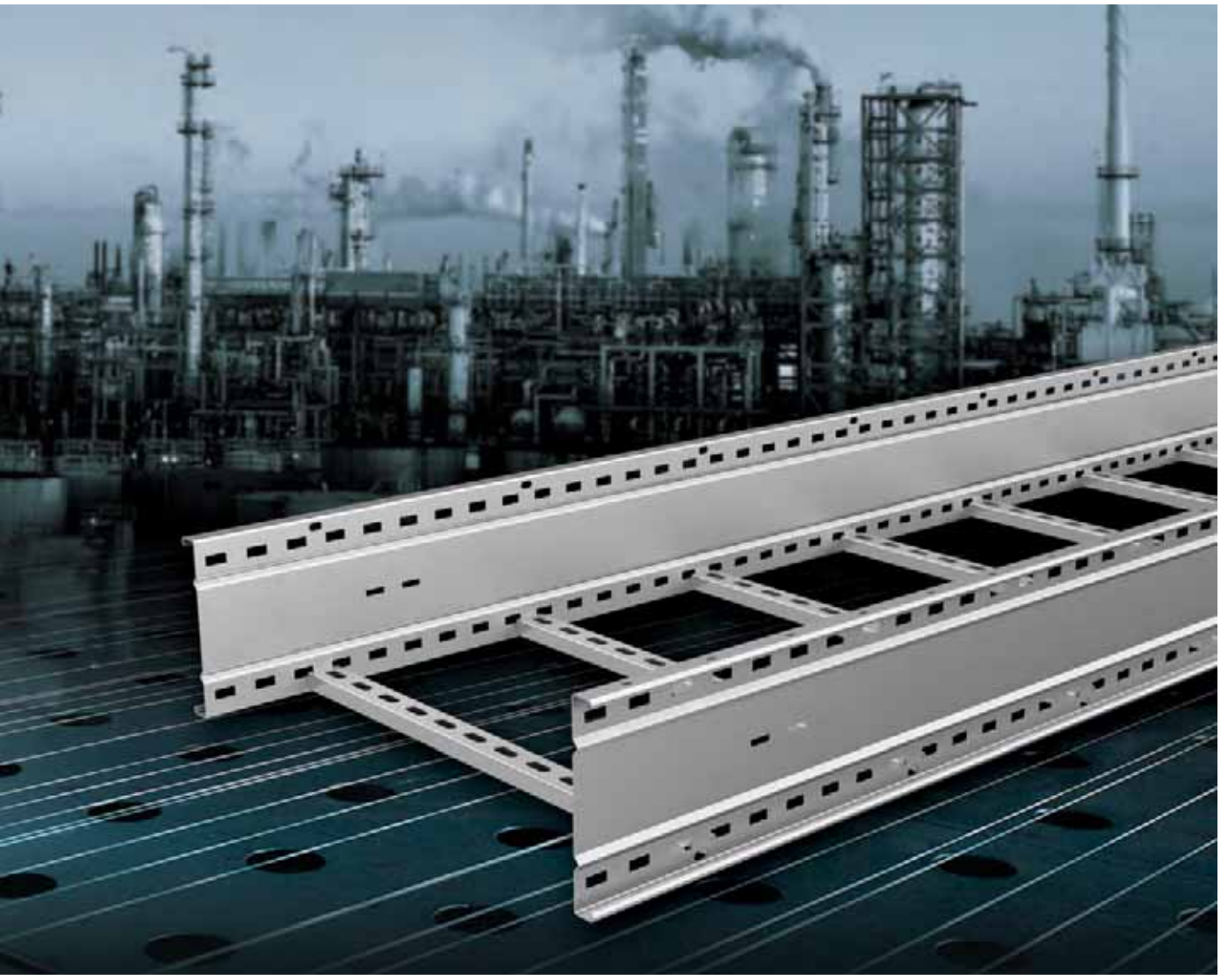
E-LINEKCA OG

Industrıal Cable Ladder System



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E-LINEKCA OG

CONTENTS

E-LINE KCA OG

Company Profile ... 6-7
References ... 8
EAE Code Description ... 9
Certificates ... 10
Straight ... 11-24
Fittings
- Fittings YD30-YD45-YD60-YD90 Horizontal Elbow ... 25-33
- Fittings DD30-DD45-DD60-DD90 Vertical Outside Elbow ... 34-41
- Fittings ID30-ID45-ID60-ID90 Vertical Inside Elbow ... 42-49
- Fittings YT Horizontal Tee ... 50-51
- Fittings AD Horizontal Cross ... 52-53
- Fittings Middle Reduction ... 54
- Fittings Left Side Reduction ... 55
- Fittings Right Side Reduction ... 56

Accessories End Cover ... 57
Straight Cover ... 58
Cover Slope Bracket ... 59
Cover Elevation Bracket ... 60
Info ... 61
Fittings Cover
- Fittings Cover YD30-YD45-YD60-YD90 Horizontal Elbow ... 62-65
- Fittings Cover DD30-DD45-DD60-DD90 Vertical Outside ... 66-69
- Fittings Cover ID30-ID45-ID60-ID90 Vertical Inside ... 70-73
- Fittings Cover YT Horizontal Tee ... 74
- Fittings Cover AD Cross ... 75
- Fittings Middle Reduction Cover ... 76
- Fittings Left Side Reduction Cover ... 77
- Fittings Right Side Reduction Cover ... 78

Accessories Splice Plate ... 80-81
Accessories Expansion Splice Plate ... 82-83
Accessories Horizontal Adjustable Couplers ... 84
Accessories Vertical Adjustable Couplers ... 85
Accessories Vertical Adjustable Fitting ... 86-87
Bonding Jumper ... 88
Accessories Ladder Divider ... 89
Accessories Riser Divider ... 90
Accessories Cable Drop Out ... 91
Accessories - Box Plate ... 92
Vertical Fixing Bracket ... 93
Horizontal Fixing Bracket ... 94
Accessories ... 95
Installation ... 96-98
Installation Guide to Thermal Movements ... 99-101
Load Class ... 102
Corrosion ... 103-108
Certificates ... 109-111

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ELINE
KCAOG

EAE
ELEKTRİK

OVER 40 YEARS

Expertise in Cable Support System

Production:

12.000.000 mt Tray / YEAR

1.500.000 mt Ladder / YEAR

66.000 tones / YEAR Steel Process Capacity

CAPABLE
Reliable support systems are vital to any electrical installation. EAE is an innovative designer and manufacturer of modern, leading-edge support systems that suit multiple industries.

RANGE
The EAE range consists of over 6000 products that are suited to so many sectors, that they have been used for many iconic projects.
As well as this, EAE offers specialist systems designed for when specific standard compliance is required; as well as in-house engineers capable of producing customised products to address any unique requirements that your project may have.

PROJECT MANAGEMENT
We can offer you a dedicated Project Manager as a single point of contact, and who will manage design, conformance, manufacturing and distribution of your products.

DISTRIBUTION & SUPPLY
Wherever it is around the world, EAE can manage all the logistical needs of any size project, including export packaging and documentation.

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HIGH PERFORMANCE

CABLE LADDER KCA OG

Selected for YAMAL LNG Project

-70 °C CERTIFIED

ELINE
KCAOG

E-Line KCA OG has a reputation for setting the industry standard for cable support systems across all around world. E-Line KCA OG has a unique combination of high strength, resilience, and lightweight design.
E-Line KCA OG Cable Ladder range is engineered for the ultimate load bearing strength in its class, high resistance to impact and environmental forces, while also achieving all weight reductions possible. The structural design maximises the capabilities of the steel. Project Engineers for large offshore, modular, marine and other projects now have a cable support solution that can give them the strength they need over long spans, while also meeting project weight requirements.
IEC 61537 is a standard for cable management which provides test methods and a classification regime for cable ladders. E-Line KCA OG is tested in accordance with this standard for load capability, electrical continuity and impact resistance.
DEKRA witnessed these tests and checked our quality systems to ensure we manufacture these ladders consistently, to the tested specifications, before awarding certification. For installation, splicing and fitting design and recommendations, contact EAE. All raw materials are tested to relevant standards for your project. EAE maintains ISO 9001 (Quality) as well as ISO 14001 (Environmental) compliance.

MAXIMUM CABLE SUPPORT CAPACITY

200 KCA OG 1100= Height: 200mm/Width:1100mm/Freespace:0,1969m^2

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HIGH TEMPERATURE WORKING

Accordence with DIN 4102-12 (E90)
Tested at 1000 C for 90 minutes

E90

A product with the right properties fit for purpose will meet the high demands on performance, reliability and cost-efficiency. That is why a thorough analysis of the environment in terms of corrosion, pollution, humidity and salt is critical before deciding on type of material and surface treatment. Whether you need Cable Support System, dry indoor applications or the harshest offshore enviroments, EAE can find the best solution for you...

ELINE
KCAOG
▶▶Company Profile

EAE Elektrik A.Ş., the original company of the EAE Group, was established in 1973 EAE Elektrik A.S products include:

- Busbar Power Distribution Systems,
- Lighting Busbar Systems,
- Cable Tray Systems,
- Underfloor Trunking,
- Trolley Busbar System

EAE Elektrik A.Ş. has 4 factories in İstanbul where the company headquarter is also situated, additionally 1 factory in Kocaeli and 1 factory in Alexandrov, Russia. Three of the EAE Factories manufacture Cable Support Systems using cutting-edge technology for domestic and foreign markets.
Having a widespread branch and authorised dealer network in Turkey. EAE Elektrik also exports its products to more than 65 countries whom products are used in industrial facilities, the textile industry, business centres, the automotive industry, malls, high-rise buildings, factories and offices, etc.

EAE is a leader and pioneer of the cable management system market with it's high quality, innovative and proven products.Over 40 years experienced EAE has continuously invested global strategic locations with high technolgic facilities . High quality raw metarials are supplied and processed in automationed production lines to ensure high product quality and consistency of deliveries. In 2015, EAE includes 40 000 m^2 manufacturing and warehousing facility in Kocaeli, Turkey which was planned and designed according to satisfy majo industrial projects needs.

For perfect match with the needs of Oil&Gas, Power Generation and Heavy Industry Projects, EAE has developed “KCA OG” Cable Ladder System in addition to E-Line Cable Support Systems which contains; Perforated Cable Trays, Ladders, Trunking, Wire Mesh, Binrak Strut and large range of Support Solutions. For the specific needs of major project, EAE can be performed to satify the customer with technical experienced Sales Support Team.

26.000 m^2 (Istanbul/Turkey)

13.500 m^2 Alexandrov/Russia

EAE Cable Support System Manufacturing Facilities

ELINE
KCAOG
▶▶Company Profile

Over 40 years experienced EAE Cable Support System Department is proud to be presenting new Industrial Cable Ladder Serie “KCA OG”.
With the participation of the new KCA OG, EAE can supply all ranges of demands.

Cable Ladder Series:

- KM : Light Duty Cable Ladder
- KC : Heavy Duty Cable Ladder
- **KCA OG : Extra Heavy Duty Cable Ladder**

KCA OG is designed to satify highly performance of all Industrial Market.

▶ **Stainless Steel Finishes:**
For the off-shore applications, KCA OG can be manufactured with Stainless Steel (316L) which can supply high performance against the corrosive effect of salt water combined with very changeable weather conditions.

▶ **High Load Performance:**
For the long span applications, KCA OG can be manufactured in 6000 mm standard length. Form of latitude lines on the siderails help KCA OG to upgrade loading capacity.

▶ **Integral Joints on Fittings:**
The installation time can be reduced by the innovative design of the KCA OG fitting which has integral joints.

▶ **Largest Capacity:**
H: 200mm serie cable ladder supplys largest cable capacity and air flow features.

Oil&Gas Industry

Power Generation Industry

Petrochemical Industry

ELINE
KCAOG
▶▶ References

YAMAL LNG-RUSSIA

YENI ELEKTRIK 865MW CCPP-TURKEY

SOCAR STAR REFINERY - TURKEY

MARY AMONIUM & UREA PLANT

REFERENCES

Baku Flame Towers	Azerbaijan	Serdivan Shopping Mall	Turkey
Baku Trumph Towers	Azerbaijan	Trumph Towers	Turkey
Port Baku Residences	Azerbaijan	Hunplus Project	Turkey
Baku Waste To Energy	Azerbaijan	Anthill Bomonti Project	Turkey
Socartower	Azerbaijan	Kuyumcu Kent Extanion Part	Turkey
Sofaz Tower	Baku - Azerbaijan	Perlavista Shopping Mall	Turkey
Baku Shipyard Project	Baku - Azerbaijan	Nish Istanbul Office Blocks	Turkey
Hilton Otel	Baku - Azerbaijan	Holiday Inn Otel	Turkey
Al Tahady Uni. - All Faculties	Libya	Atakoy Shopping Mall	Turkey
Veterinery Fac. Al Fateh Uni.	Libya	Dumankaya Vizyon	Turkey
Mathematic Fac. Al Fateh Uni.	Libya	Areva Adh2 New Transformer Plant	Turkey
Bab Trablus Shopping Mall And Complex	Libya	Sapphire Project	Turkey
Ruby Shooping Mall	Kazakistan	Mashattan Residance Project	Turkey
Zorlu Center Shopping Mall	Turkey	Sabiha Gokcen Int. Airport	Turkey
Optimum K.maras Shopping Mall	Turkey	Deeppo Shopping Mall	Turkey
Vialand Avm Shopping Mall	Turkey	Gordion Shopping Mall	Turkey
Eroğlu Merter Shopping Mall	Turkey	Marmara Forum Shooping Mall	Turkey
Koru Florya Shopping Mall	Turkey	Ora Shooping Mall	Turkey
Mall Of Istanbul – Torunlar	Turkey	Btc Pipeline Pump Stations	Turkey
Marmarapark Shopping Mall Ece Group	Turkey	Tupraş Rup Project	Turkey
Eroğlu Merter Shopping Mall	Turkey	Skyport Tower	Turkey
Florya Akvaryum Shopping Mall	Turkey	870 Mw Samsun Ccpp	Turkey
Antalya Erasta Park Avm – Torunlar	Turkey	865 Mw Yeni Elektrik A.S. Ccpp	Turkey
Istwest	Turkey	755 Mw Denizliccpp	Turkey
Buyaka Shopping Mall	Turkey	Mary Amonium&Urea Plant	Turkmenistan
Akbati Shopping Mall	Turkey	Onshore Gas Terminal	Turkmenistan
Olimpa Shopping Mall	Turkey	Turkmenbashi Int. Airport	Turkmenistan
Airport Shopping Mall	Turkey	Autoclaved Aerated Concrete Factory	Turkmenistan
Zonguldak Eren Termic Power Plant	Turkey	South Yoleten Gas Field Development Pr.	Turkmenistan

ELINE
KCAOG
▶▶EAE Code Description

Example: 150 KCAOG 600 / L6 / Δ / 2/2

1 / 2 / 3 / 4 / 5 / 6

Height

100 : 100 mm
125 : 125 mm
150 : 150 mm
200 : 200 mm

Character

Ladder: KCA OG
Cover : KCA OGK

Width

150: 150 mm
200: 200 mm
300: 300 mm
450: 450 mm
600: 600 mm
750: 750 mm
900: 900 mm
1000: 1000 mm
1100: 1100 mm
Reduction: (Ws / Wp)

Radius

300: 300 mm
450: 450 mm
600: 600 mm
900: 900 mm

Thickness
Trung / Tsidreal

1.5/1.5
2/1.5
2/2
2/2.5
2.5/2.5

Finish

Hot Dip Galvanized 180: HDG
Silicon Rich Steel Sheet : DG
Stainless Steel (304&316L) : SS

Fitting Type

YD30-HOR.ELB. 30°
YD45-HOR.ELB. 45°
YD60-HOR.ELB. 60°
YD90-HOR.ELB. 90°

ID30-VER.INS. 30°
ID45-VER.INS. 45°
ID60-VER.INS. 60°
ID90-VER.INS. 90°

DD30-VER.OUT. 30°
DD45-VER.OUT. 45°
DD60-VER.OUT. 60°
DD90-VER.OUT. 90°

YT-HOR.TEE
AD-HOR.CROSS

MR-Middle Reduction
LR- Left Side Reduction
RR-Right Side Reduction

Length

L6: 6mt.
L3: 3mt.

IEC

SERIES CABLE LADDER


DEKRA

TEST CERTIFICATE

NEMA

SERIES CABLE LADDER


DEKRA

TEST CERTIFICATE

ELINE
KCAOG
▶▶Straight

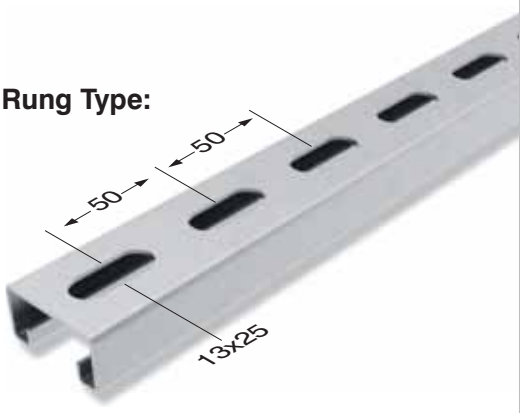
Features of KCA OG :

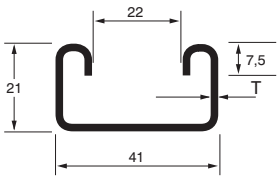
Length : Standard in 3000 mm and 6000 mm
Finishes : Hot Dip Galvanized (HDG) according to ISO EN 1461 | Silicon Rich Steel Sheet (DG) Stainless Steel 316L (SS304 optional)

Side Rail
Height : 100 mm / 125 mm / 150 mm / 200 mm
Thickness : 1.5 mm / 2.00 mm / 2.5 mm(optional)
Latitude Line : Single (100 mm Height) / Double (125 mm / 150 mm / 200 mm)

Rung
Dimension : 41(width) x 21 (Height) Strud Channel
Spacing : 300 mm
Width : 150 mm / 300 mm / 450 mm / 600 mm / 900 mm
Optional Width : 200 mm / 750 mm / 1000 mm / 1100 mm
Thickness : 1.5 mm / 2.00 mm / 2.50 mm (Optional)

Rung Type:





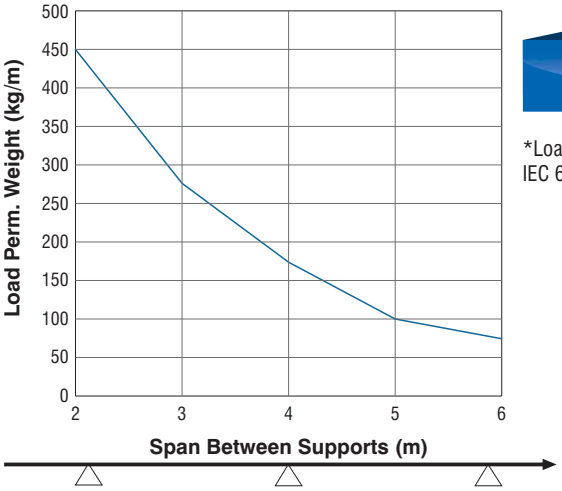
1,5 mm for up to 600 mm width ,
2 mm for above width

Standard Position

100 KCA OG 100 mm Height Cable Ladder / Length: 3000mm / 6000mm

The cable ladder is available in standard widths of 150mm, 200mm, 300mm, 450mm, 600mm, 750mm, 900mm and 1000mm although other widths up to 1100mm are available to order. Rung spacing is 300mm as standard.

- Loading Depth: 78 mm
- Finishes &Metarials: Hot Dipped Galvanized Mild Steel
- Hot Dipped Galvanized Corten A
- 316 L grade Stainless Steel (304 grade is avaible)



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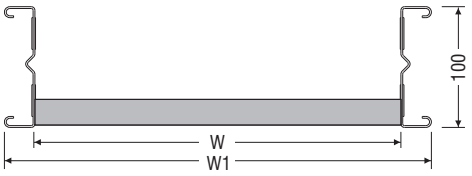
*Loading test performed according to IEC 61537 standard.

"Support distance for cable ladders should not exceed the length of cable ladder. Thus, OG cable ladder with L=3m should be supported 3m or less."



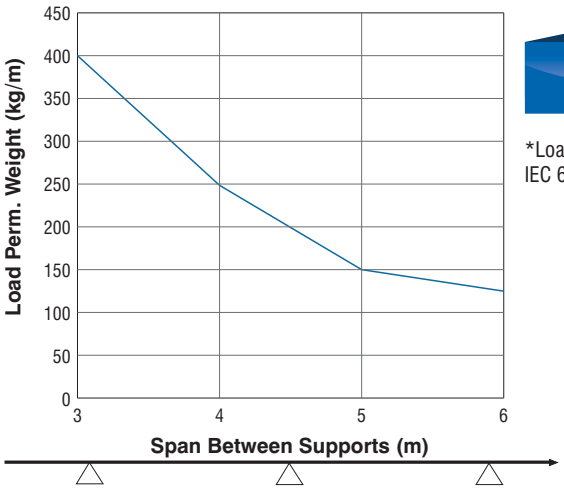
Code	Description	No.of Rungs	Dimensions(mm)				Weight (kg/mt)	Siderail (mm)	Rung (mm)
			W	W1	L	H			
3066914	100 KCA OG150/L/Δ/1.5/1.5	10	150	200	3000/6000	100	4,675	1,5	1,5
3066920	100 KCA OG200/L/Δ/1.5/1.5	10	200	250	3000/6000	100	4,880	1,5	1,5
3066926	100 KCA OG300/L/Δ/1.5/1.5	10	300	350	3000/6000	100	5,298	1,5	1,5
3066932	100 KCA OG450/L/Δ/1.5/1.5	10	450	500	3000/6000	100	5,922	1,5	1,5
3066938	100 KCA OG600/L/Δ/1.5/1.5	10	600	650	3000/6000	100	6,545	1,5	1,5
3066945	100 KCA OG750/L/Δ/1.5/2	10	750	800	3000/6000	100	8,045	1,5	2
3066951	100 KCAOG900/L/Δ/1.5/2	10	900	950	3000/6000	100	8,844	1,5	2
3066957	100 KCA OG1000/L/Δ/1.5/2	10	1000	1050	3000/6000	100	9,376	1,5	2
3066963	100 KCA OG1100/L/Δ/1.5/2	10	1100	1150	3000/6000	100	9,911	1,5	2

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate compenent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94
- Please check page “58” for the cover selection.

125 KCA OG 125 mm Height Cable Ladder / Length: 3000mm / 6000mm

The cable ladder is available in standard widths of 150mm, 200mm, 300mm, 450mm, 600mm, 750mm, 900mm and 1000mm although other widths up to 1100mm are available to order. Rung spacing is 300mm as standard.

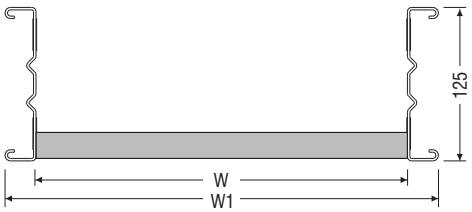
- Loading Depth :100 mm
- Finishes &Metarials :Hot Dipped Galvanized Mild Steel
- Hot Dipped Galvanized Corten A
- 316 L grade Stainless Steel (304 grade is avaible)



IEC

*Loading test performed according to IEC 61537 standard.

"Support distance for cable ladders should not exceed the length of cable ladder. Thus, OG cable ladder with L=3m should be supported 3m or less."



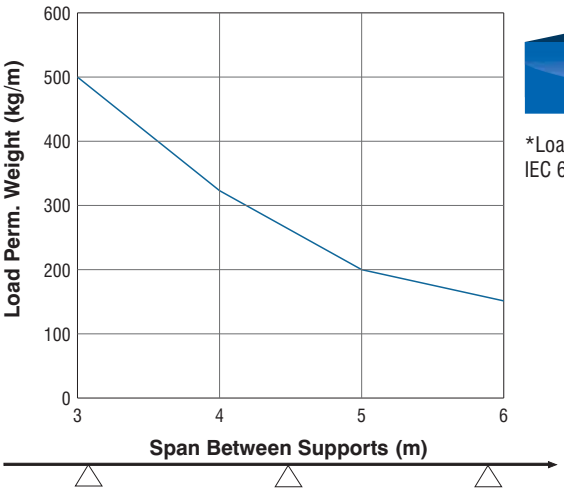
Code	Description	No.of Rungs	Dimensions(mm)				Weight (kg/mt)	Siderail (mm)	Rung (mm)
			W	W1	L	H			
3066969	125 KCA OG150/L/Δ/2/1,5	10	150	200	3000/6000	125	6,915	2	1,5
3066975	125 KCA OG200/L/Δ/2/1,5	10	200	250	3000/6000	125	7,121	2	1,5
3066981	125 KCA OG300/L/Δ/2/1,5	10	300	350	3000/6000	125	7,539	2	1,5
3066987	125 KCA OG450/L/Δ/2/1,5	10	450	500	3000/6000	125	8,162	2	1,5
3066993	125 KCA OG600/L/Δ/2/1,5	10	600	650	3000/6000	125	8,785	2	1,5
3067000	125 KCA OG750/L/Δ/2/2	10	750	800	3000/6000	125	10,285	2	2
3067006	125 KCA OG900/L/Δ/2/2	10	900	950	3000/6000	125	11,084	2	2
3067012	125 KCA OG1000/L/Δ/2/2	10	1000	1050	3000/6000	125	11,616	2	2
3067018	125 KCA OG1100/L/Δ/2/2	10	1100	1150	3000/6000	125	12,151	2	2

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94
- Please check page “58” for the cover selection.

150 KCA OG 150 mm Height Cable Ladder / Length: 3000mm / 6000mm

The cable ladder is available in standard widths of 150mm, 200mm, 300mm, 450mm, 600mm, 750mm, 900mm and 1000mm although other widths up to 1100mm are available to order. Rung spacing is 300mm as standard.

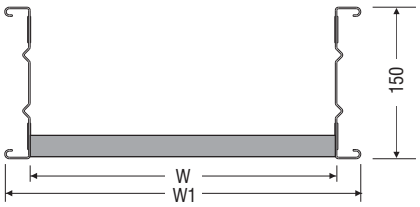
- Loading Depth :125 mm
- Finishes &Metarials :Hot Dipped Galvanized Mild Steel
- Hot Dipped Galvanized Corten A
- 316 L grade Stainless Steel (316 grade is avaible)



"Support distance for cable ladders should not exceed the length of cable ladder. Thus, OG cable ladder with L=3m should be supported 3m or less."

IEC

*Loading test performed according to IEC 61537 standard.



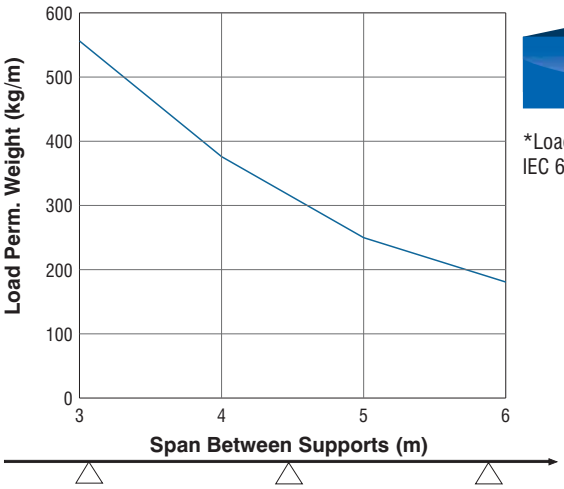
Code	Description	No.of Rungs	Dimensions(mm)				Weight (kg/mt)	Siderail (mm)	Rung (mm)
			W	W1	L	H			
3067024	150 KCA OG150/L/Δ/2/2	10	150	200	3000/6000	150	7,954	2	2
3067030	150 KCA OG200/L/Δ/2/2	10	200	250	3000/6000	150	8,218	2	2
3067036	150 KCA OG300/L/Δ/2/2	10	300	350	3000/6000	150	8,754	2	2
3067042	150 KCA OG450/L/Δ/2/2	10	450	500	3000/6000	150	9,553	2	2
3067048	150 KCA OG600/L/Δ/2/2	10	600	650	3000/6000	150	10,349	2	2
3067054	150 KCA OG750/L/Δ/2/2	10	750	800	3000/6000	150	11,148	2	2
3067060	150 KCA OG900/L/Δ/2/2	10	900	950	3000/6000	150	11,947	2	2
3067066	150 KCA OG1000/L/Δ/2/2	10	1000	1050	3000/6000	150	12,479	2	2
3067072	150 KCA OG1100/L/Δ/2/2	10	1100	1150	3000/6000	150	13,014	2	2

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate compenent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94
- Please check page “58” for the cover selection.

200 KCA OG 200 mm Height Cable Ladder / Length: 3000mm / 6000mm

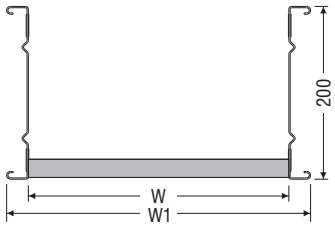
The cable ladder is available in standard widths of 150mm, 200mm, 300mm, 450mm, 600mm, 750mm, 900mm and 1000mm although other widths up to 1100mm are available to order. Rung spacing is 300mm as standard.

- Loading Depth :175 mm
- Finishes &Metarials :Hot Dipped Galvanized Mild Steel
- Hot Dipped Galvanized Corten A
  316 L grade Stainless Steel (304 grade is avaible)



*Loading test performed according to IEC 61537 standard.

"Support distance for cable ladders should not exceed the length of cable ladder. Thus, OG cable ladder with L=3m should be supported 3m or less."



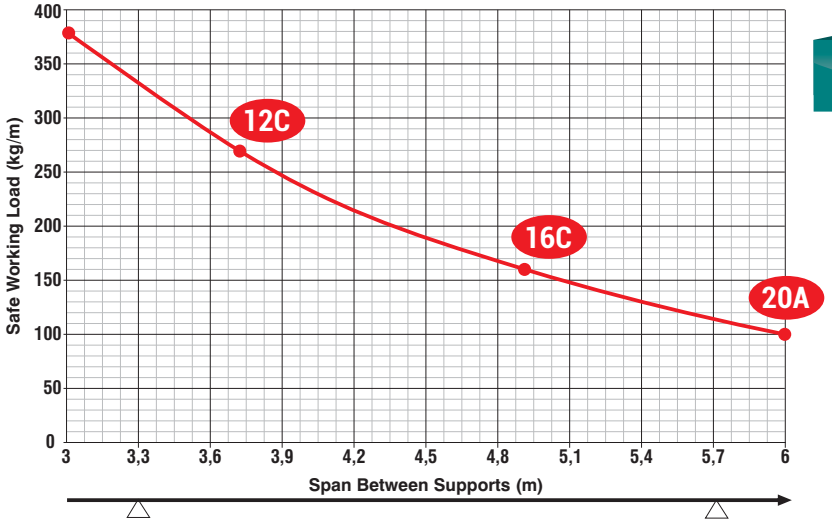
Code	Description	No.of Rungs	Dimensions(mm)				Weight (kg/mt)	Siderail (mm)	Rung (mm)
			W	W1	L	H			
3067078	200 KCA OG200/L/Δ/2/2	10	200	250	3000/6000	200	9,930	2	2
3067084	200 KCA OG300/L/Δ/2/2	10	300	350	3000/6000	200	10,465	2	2
3067090	200 KCA OG450/L/Δ/2/2	10	450	500	3000/6000	200	11,265	2	2
3067096	200 KCA OG600/L/Δ/2/2	10	600	650	3000/6000	200	12,060	2	2
3067102	200 KCA OG750/L/Δ/2/2	10	750	800	3000/6000	200	12,860	2	2
3067108	200 KCA OG900/L/Δ/2/2	10	900	950	3000/6000	200	13,659	2	2
3067114	200 KCA OG1000/L/Δ/2/2	10	1000	1050	3000/6000	200	14,191	2	2
3067120	200 KCA OG1100/L/Δ/2/2	10	1100	1150	3000/6000	200	14,726	2	2

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94
- Please check page “58” for the cover selection.

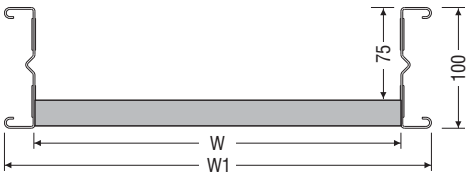
100 KCA OG "NEMA 20A Series Hot-Dipped Galvanized Steel Cable Ladder"

- Overall Height (H) : 100mm (Loading depth: 75mm)
- Internal Widths (W) : 150mm, 200mm, 300mm, 450mm, 600mm, 750mm, 900mm, 1000mm, 1100mm
- Overall Widths : W+50
- Standard Rung Spacing : 300mm
- Standard Lengths (L) : 3 meter/6 meter

H100 HDG NEMA VE-1 Class 20A



Safe working load values are based on simple beam test according to NEMA VE-1-2017 edition.
*Please check Page 101 for NEMA Class Designations.



100 KCAOG HDG STEEL CABLE LADDER							
NEMA 20A Code	Description	DIMENSIONS					
		HEIGHT		WIDTH		LENGTH	RUNG
		Side Rail Height	Loading Depth	Internal Width (W)	Overall Width (W1)	Standard Length	Standard Rung Spacing
		mm (inch.)		mm (inch.)		m (ft.)	mm (inch.)
3125361	100 KCA OG 150/HDG/L	100 (4")	75 (3")	150 (6")	200 (8")	3m/6m(10ft./20ft.)	300 (12")
3125362	100 KCA OG 200/HDG/L	100 (4")	75 (3")	200 (8")	250 (10")	3m/6m(10ft./20ft.)	300 (12")
3125363	100 KCA OG 300/HDG/L	100 (4")	75 (3")	300 (12")	350 (14")	3m/6m(10ft./20ft.)	300 (12")
3125364	100 KCA OG 450/HDG/L	100 (4")	75 (3")	450 (18")	500 (20")	3m/6m(10ft./20ft.)	300 (12")
3125365	100 KCA OG 600/HDG/L	100 (4")	75 (3")	600 (24")	650 (26")	3m/6m(10ft./20ft.)	300 (12")
3125366	100 KCA OG 750/HDG/L	100 (4")	75 (3")	750 (30")	800 (32")	3m/6m(10ft./20ft.)	300 (12")
3125367	100 KCA OG 900/HDG/L	100 (4")	75 (3")	900 (36")	950 (38")	3m/6m(10ft./20ft.)	300 (12")
3125368	100 KCA OG 1000/HDG/L	100 (4")	75 (3")	1000 (40")	1050 (42")	3m/6m(10ft./20ft.)	300 (12")
3125369	100 KCA OG 1100/HDG/L	100 (4")	75 (3")	1100 (44")	1150 (46")	3m/6m(10ft./20ft.)	300 (12")

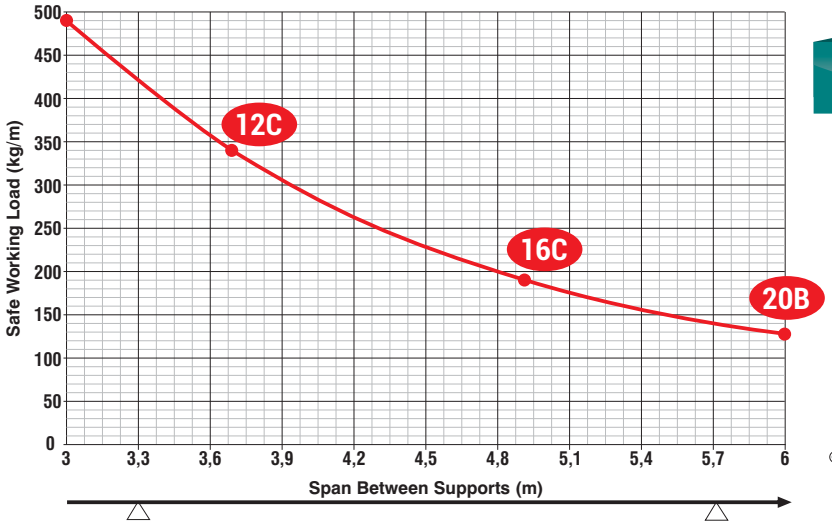
Standard manufacturing lengths are metric system. (Dimensions given in the parenthesis (inch and ft.) are for information.)

■ Please check page "58" for the cover selection.

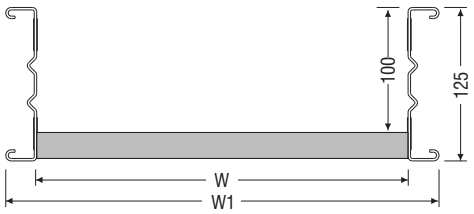
125 KCA OG "NEMA 20B Series Hot-Dipped Galvanized Steel Cable Ladder"

- Overall Height (H) : 125mm (**Loading depth**: 100mm)
- Internal Widths (W) : 150mm, 200mm, 300mm, 450mm, 600mm, 750mm, 900mm, 1000mm, 1100mm
- Overall Widths : W+50
- Standard Rung Spacing : 300mm
- Standard Lengths (L) : 3 meter/6 meter

H125 HDG NEMA VE-1 Class 20B



Safe working load values are based on simple beam test according to NEMA VE-1-2017 edition.
*Please check Page 101 for NEMA Class Designations.



125 KCAOG HDG STEEL CABLE LADDER							
NEMA 20B Code	Description	DIMENSIONS					
		HEIGHT		WIDTH		LENGTH	RUNG
		Side Rail Height	Loading Depth	Internal Width (W)	Overall Width (W1)	Standard Length	Standard Rung Spacing
		mm (inch.)		mm (inch.)		m (ft.)	mm (inch.)
3125370	125 KCA OG 150/HDG/L	125 (5")	100 (4")	150 (6")	200 (8")	3m/6m(10ft./20ft.)	300 (12")
3125371	125 KCA OG 200/HDG/L	125 (5")	100 (4")	200 (8")	250 (10")	3m/6m(10ft./20ft.)	300 (12")
3125372	125 KCA OG 300/HDG/L	125 (5")	100 (4")	300 (12")	350 (14")	3m/6m(10ft./20ft.)	300 (12")
3125373	125 KCA OG 450/HDG/L	125 (5")	100 (4")	450 (18")	500 (20")	3m/6m(10ft./20ft.)	300 (12")
3125374	125 KCA OG 600/HDG/L	125 (5")	100 (4")	600 (24")	650 (26")	3m/6m(10ft./20ft.)	300 (12")
3125375	125 KCA OG 750/HDG/L	125 (5")	100 (4")	750 (30")	800 (32")	3m/6m(10ft./20ft.)	300 (12")
3125376	125 KCA OG 900/HDG/L	125 (5")	100 (4")	900 (36")	950 (38")	3m/6m(10ft./20ft.)	300 (12")
3125377	125 KCA OG 1000/HDG/L	125 (5")	100 (4")	1000 (40")	1050 (42")	3m/6m(10ft./20ft.)	300 (12")
3125378	125 KCA OG 1100/HDG/L	125 (5")	100 (4")	1100 (44")	1150 (46")	3m/6m(10ft./20ft.)	300 (12")

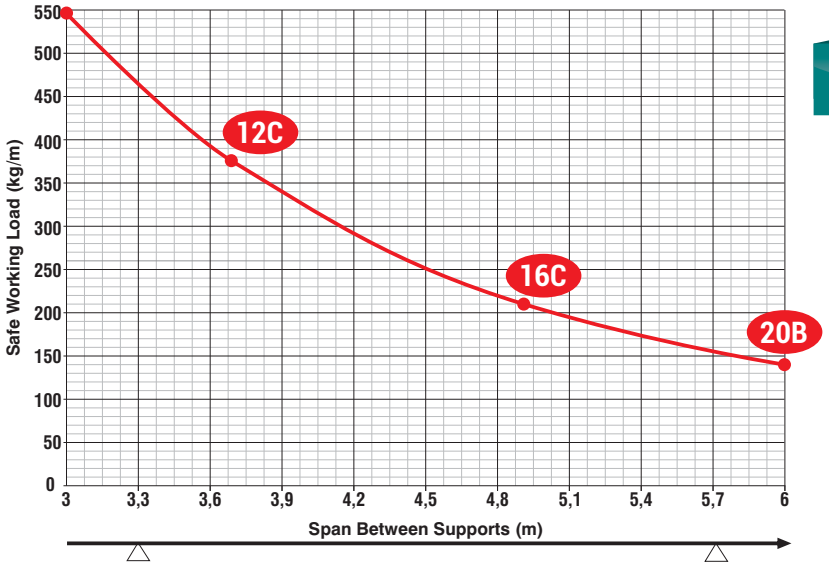
Standard manufacturing lengths are metric system. (Dimensions given in the parenthesis (inch and ft.) are for information.)

■ Please check page "58" for the cover selection.

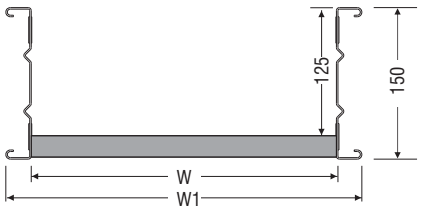
150 KCA OG "NEMA 20B Series Hot-Dipped Galvanized Steel Cable Ladder"

- Overall Height (H) : 150mm (Loading depth: 125mm)
- Internal Widths (W) : 150mm, 200mm, 300mm, 450mm, 600mm, 750mm, 900mm, 1000mm, 1100mm
- Overall Widths : W+50
- Standard Rung Spacing : 300mm
- Standard Lengths (L) : 3 meter/6 meter

H150 HDG NEMA VE-1 Class 20B



Safe working load values are based on simple beam test according to NEMA VE-1-2017 edition.
*Please check Page 101 for NEMA Class Designations.



150 KCAOG HDG STEEL CABLE LADDER							
NEMA 20B Code	Description	DIMENSIONS					
		HEIGHT		WIDTH		LENGTH	RUNG
		Side Rail Height	Loading Depth	Internal Width (W)	Overall Width (W1)	Standard Length	Standard Rung Spacing
		mm (inch.)		mm (inch.)		m (ft.)	mm (inch.)
3125379	150 KCA OG 150/HDG/L	150 (6")	125 (5")	150 (6")	200 (8")	3m/6m(10ft./20ft.)	300 (12")
3125380	150 KCA OG 200/HDG/L	150 (6")	125 (5")	200 (8")	250 (10")	3m/6m(10ft./20ft.)	300 (12")
3125381	150 KCA OG 300/HDG/L	150 (6")	125 (5")	300 (12")	350 (14")	3m/6m(10ft./20ft.)	300 (12")
3125382	150 KCA OG 450/HDG/L	150 (6")	125 (5")	450 (18")	500 (20")	3m/6m(10ft./20ft.)	300 (12")
3125383	150 KCA OG 600/HDG/L	150 (6")	125 (5")	600 (24")	650 (26")	3m/6m(10ft./20ft.)	300 (12")
3125384	150 KCA OG 750/HDG/L	150 (6")	125 (5")	750 (30")	800 (32")	3m/6m(10ft./20ft.)	300 (12")
3125385	150 KCA OG 900/HDG/L	150 (6")	125 (5")	900 (36")	950 (38")	3m/6m(10ft./20ft.)	300 (12")
3125386	150 KCA OG 1000/HDG/L	150 (6")	125 (5")	1000 (40")	1050 (42")	3m/6m(10ft./20ft.)	300 (12")
3125387	150 KCA OG 1100/HDG/L	150 (6")	125 (5")	1100 (44")	1150 (46")	3m/6m(10ft./20ft.)	300 (12")

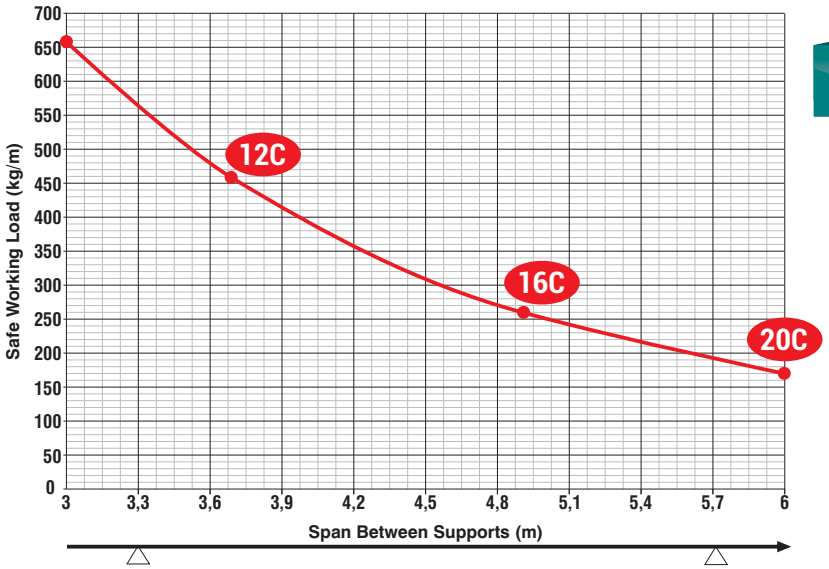
Standard manufacturing lengths are metric system. (Dimensions given in the parenthesis (inch and ft.) are for information.)

■ Please check page "58" for the cover selection.

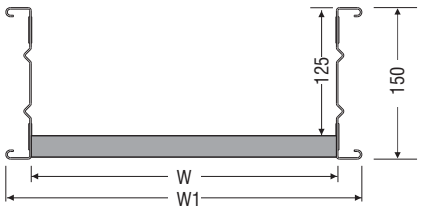
150 KCA OG "NEMA 20C Series Hot-Dipped Galvanized Steel Cable Ladder"

- Overall Height (H) : 150mm (Loading depth: 125mm)
- Internal Widths (W) : 150mm, 200mm, 300mm, 450mm, 600mm, 750mm, 900mm, 1000mm, 1100mm
- Overall Widths : W+50
- Standard Rung Spacing : 300mm
- Standard Lengths (L) : 3 meter/6 meter

H150 HDG NEMA VE-1 Class 20C



Safe working load values are based on simple beam test according to NEMA VE-1-2017 edition.
*Please check Page 101 for NEMA Class Designations.



150 KCAOG HDG STEEL CABLE LADDER							
NEMA 20C Code	Description	DIMENSIONS					
		HEIGHT		WIDTH		LENGTH	RUNG
		Side Rail Height	Loading Depth	Internal Width (W)	Overall Width (W1)	Standard Length	Standard Rung Spacing
		mm (inch.)		mm (inch.)		m (ft.)	mm (inch.)
3125388	150 KCA OG 150/HDG/L	150 (6")	125 (5")	150 (6")	200 (8")	3m/6m(10ft./20ft.)	300 (12")
3125389	150 KCA OG 200/HDG/L	150 (6")	125 (5")	200 (8")	250 (10")	3m/6m(10ft./20ft.)	300 (12")
3125390	150 KCA OG 300/HDG/L	150 (6")	125 (5")	300 (12")	350 (14")	3m/6m(10ft./20ft.)	300 (12")
3125391	150 KCA OG 450/HDG/L	150 (6")	125 (5")	450 (18")	500 (20")	3m/6m(10ft./20ft.)	300 (12")
3125392	150 KCA OG 600/HDG/L	150 (6")	125 (5")	600 (24")	650 (26")	3m/6m(10ft./20ft.)	300 (12")
3125393	150 KCA OG 750/HDG/L	150 (6")	125 (5")	750 (30")	800 (32")	3m/6m(10ft./20ft.)	300 (12")
3125394	150 KCA OG 900/HDG/L	150 (6")	125 (5")	900 (36")	950 (38")	3m/6m(10ft./20ft.)	300 (12")
3125395	150 KCA OG 1000/HDG/L	150 (6")	125 (5")	1000 (40")	1050 (42")	3m/6m(10ft./20ft.)	300 (12")
3125396	150 KCA OG 1100/HDG/L	150 (6")	125 (5")	1100 (44")	1150 (46")	3m/6m(10ft./20ft.)	300 (12")

Standard manufacturing lengths are metric system. (Dimensions given in the parenthesis (inch and ft.) are for information.)

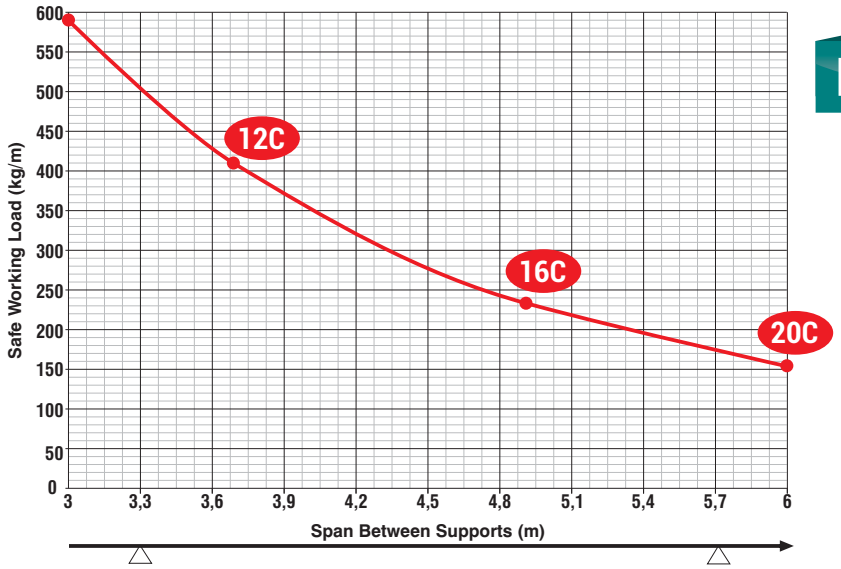
■ Please check page "58" for the cover selection.

ELINE
KCAOG
▶▶Straight

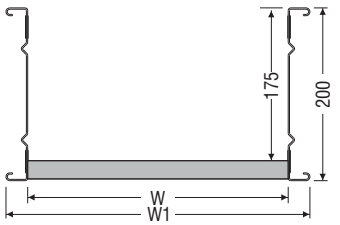
200 KCA OG "NEMA 20C Series Hot-Dipped Galvanized Steel Cable Ladder"

- Overall Height (H) : 200mm (Loading depth: 175mm)
- Internal Widths (W) : 200mm, 300mm, 450mm, 600mm, 750mm, 900mm, 1000mm, 1100mm
- Overall Widths : W+50
- Standard Rung Spacing : 300mm
- Standard Lengths (L) : 3 meter/6 meter

H200 HDG NEMA VE-1 Class 20C



Safe working load values are based on simple beam test according to NEMA VE-1-2017 edition.
*Please check Page 101 for NEMA Class Designations.



200 KCAOG HDG STEEL CABLE LADDER							
NEMA 20C Code	Description	DIMENSIONS					
		HEIGHT		WIDTH		LENGTH	RUNG
		Side Rail Height	Loading Depth	Internal Width (W)	Overall Width (W1)	Standard Length	Standard Rung Spacing
		mm (inch.)		mm (inch.)		m (ft.)	mm (inch.)
3125397	200 KCA OG200/HDG/L	200 (8")	175 (7")	200 (8")	250 (10")	3m/6m(10ft./20ft.)	300 (12")
3125398	200 KCA OG300/HDG/L	200 (8")	175 (7")	300 (12")	350 (14")	3m/6m(10ft./20ft.)	300 (12")
3125399	200 KCA OG450/HDG/L	200 (8")	175 (7")	450 (18")	500 (20")	3m/6m(10ft./20ft.)	300 (12")
3125400	200 KCA OG600/HDG/L	200 (8")	175 (7")	600 (24")	650 (26")	3m/6m(10ft./20ft.)	300 (12")
3125401	200 KCA OG750/HDG/L	200 (8")	175 (7")	750 (30")	800 (32")	3m/6m(10ft./20ft.)	300 (12")
3125402	200 KCA OG900/HDG/L	200 (8")	175 (7")	900 (36")	950 (38")	3m/6m(10ft./20ft.)	300 (12")
3125403	200 KCA OG1000/HDG/L	200 (8")	175 (7")	1000 (40")	1050 (42")	3m/6m(10ft./20ft.)	300 (12")
3125404	200 KCA OG1100/HDG/L	200 (8")	175 (7")	1100 (44")	1150 (46")	3m/6m(10ft./20ft.)	300 (12")

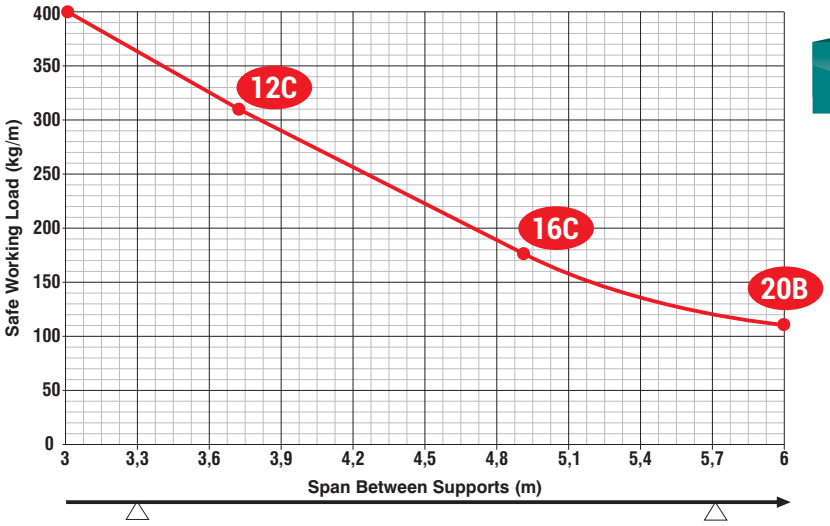
Standard manufacturing lengths are metric system. (Dimensions given in the parenthesis (inch and ft.) are for information.)

■ Please check page "58" for the cover selection.

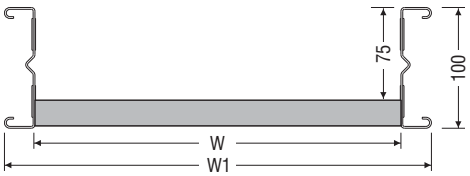
100 KCA OG "NEMA 20B Series STAINLESS STEEL 304/316L Cable Ladder"

- Overall Height (H) : 100mm (Loading depth: 75mm)
- Internal Widths (W) : 150mm, 200mm, 300mm, 450mm, 600mm, 750mm, 900mm, 1000mm, 1100mm
- Overall Widths : W+50
- Standard Rung Spacing : 300mm
- Standard Lengths (L) : 3 meter/6 meter

H100 SS NEMA VE-1 Class 20B



Safe working load values are based on simple beam test according to NEMA VE-1-2017 edition.
*Please check Page 101 for NEMA Class Designations.



100 KCAOG STAINLESS STEEL CABLE LADDER							
NEMA 20B Code	Description	DIMENSIONS					
		HEIGHT		WIDTH		LENGTH	RUNG
		Side Rail Height	Loading Depth	Internal Width (W)	Overall Width (W1)	Standard Length	Standard Rung Spacing
		mm (inch.)		mm (inch.)		m (ft.)	mm (inch.)
3125405	100 KCA OG 150/SS/L	100 (4")	75 (3")	150 (6")	200 (8")	3m/6m(10ft./20ft.)	300 (12")
3125406	100 KCA OG 200/SS/L	100 (4")	75 (3")	200 (8")	250 (10")	3m/6m(10ft./20ft.)	300 (12")
3125407	100 KCA OG 300/SS/L	100 (4")	75 (3")	300 (12")	350 (14")	3m/6m(10ft./20ft.)	300 (12")
3125408	100 KCA OG 450/SS/L	100 (4")	75 (3")	450 (18")	500 (20")	3m/6m(10ft./20ft.)	300 (12")
3125409	100 KCA OG 600/SS/L	100 (4")	75 (3")	600 (24")	650 (26")	3m/6m(10ft./20ft.)	300 (12")
3125410	100 KCA OG 750/SS/L	100 (4")	75 (3")	750 (30")	800 (32")	3m/6m(10ft./20ft.)	300 (12")
3125411	100 KCA OG 900/SS/L	100 (4")	75 (3")	900 (36")	950 (38")	3m/6m(10ft./20ft.)	300 (12")
3125412	100 KCA OG 1000/SS/L	100 (4")	75 (3")	1000 (40")	1050 (42")	3m/6m(10ft./20ft.)	300 (12")
3125413	100 KCA OG 1100/SS/L	100 (4")	75 (3")	1100 (44")	1150 (46")	3m/6m(10ft./20ft.)	300 (12")

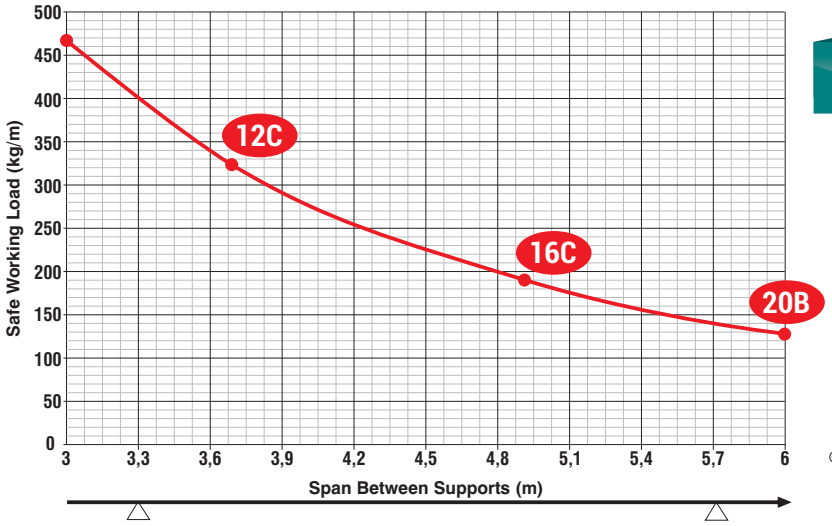
Standard manufacturing lengths are metric system. (Dimensions given in the parenthesis (inch and ft.) are for information.)

■ Please check page "58" for the cover selection.

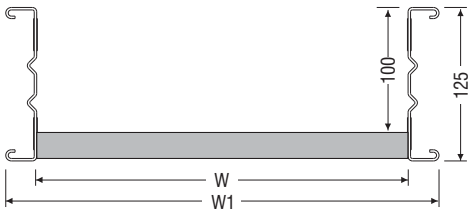
125 KCA OG "NEMA 20B Series STAINLESS STEEL 304/316L Cable Ladder"

- Overall Height (H) : 125mm (**Loading depth**: 100mm)
- Internal Widths (W) : 150mm, 200mm, 300mm, 450mm, 600mm, 750mm, 900mm, 1000mm, 1100mm
- Overall Widths : W+50
- Standard Rung Spacing : 300mm
- Standard Lengths (L) : 3 meter/6 meter

H125 SS NEMA VE-1 Class 20B



Safe working load values are based on simple beam test according to NEMA VE-1-2017 edition.
*Please check Page 101 for NEMA Class Designations.



125 KCAOG STAINLESS STEEL CABLE LADDER							
NEMA 20B Code	Description	DIMENSIONS					
		HEIGHT		WIDTH		LENGTH	RUNG
		Side Rail Height	Loading Depth	Internal Width (W)	Overall Width (W1)	Standard Length	Standard Rung Spacing
		mm (inch.)		mm (inch.)		m (ft.)	mm (inch.)
3125414	125 KCA OG 150/SS/L	125 (5")	100 (4")	150 (6")	200 (8")	3m/6m(10ft./20ft.)	300 (12")
3125415	125 KCA OG 200/SS/L	125 (5")	100 (4")	200 (8")	250 (10")	3m/6m(10ft./20ft.)	300 (12")
3125416	125 KCA OG 300/SS/L	125 (5")	100 (4")	300 (12")	350 (14")	3m/6m(10ft./20ft.)	300 (12")
3125417	125 KCA OG 450/SS/L	125 (5")	100 (4")	450 (18")	500 (20")	3m/6m(10ft./20ft.)	300 (12")
3125418	125 KCA OG 600/SS/L	125 (5")	100 (4")	600 (24")	650 (26")	3m/6m(10ft./20ft.)	300 (12")
3125419	125 KCA OG 750/SS/L	125 (5")	100 (4")	750 (30")	800 (32")	3m/6m(10ft./20ft.)	300 (12")
3125420	125 KCA OG 900/SS/L	125 (5")	100 (4")	900 (36")	950 (38")	3m/6m(10ft./20ft.)	300 (12")
3125421	125 KCA OG 1000/SS/L	125 (5")	100 (4")	1000 (40")	1050 (42")	3m/6m(10ft./20ft.)	300 (12")
3125422	125 KCA OG 1100/SS/L	125 (5")	100 (4")	1100 (44")	1150 (46")	3m/6m(10ft./20ft.)	300 (12")

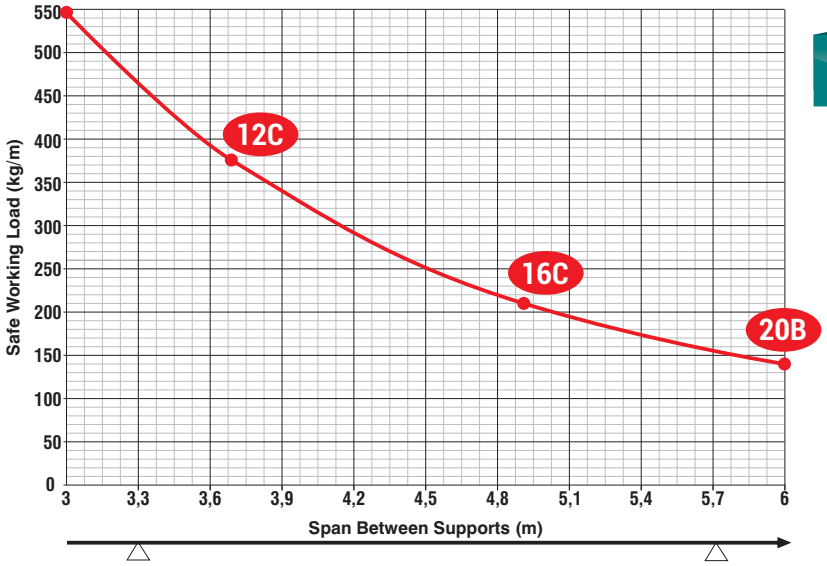
Standard manufacturing lengths are metric system. (Dimensions given in the parenthesis (inch and ft.) are for information.)

■ Please check page "58" for the cover selection.

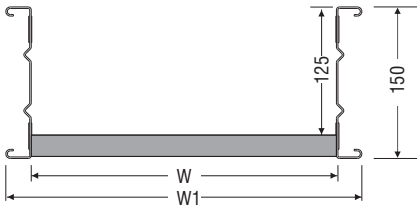
150 KCA OG "NEMA 20B Series STAINLESS STEEL 304/316L Cable Ladder"

- Overall Height (H) : 150mm (Loading depth: 125mm)
- Internal Widths (W) : 150mm, 200mm, 300mm, 450mm, 600mm, 750mm, 900mm, 1000mm, 1100mm
- Overall Widths : W+50
- Standard Rung Spacing : 300mm
- Standard Lengths (L) : 3 meter/6 meter

H150 SS NEMA VE-1 Class 20B



Safe working load values are based on simple beam test according to NEMA VE-1-2017 edition.
*Please check Page 101 for NEMA Class Designations.



150 KCAOG STAINLESS STEEL CABLE LADDER							
NEMA 20B Code	Description	DIMENSIONS					
		HEIGHT		WIDTH		LENGTH	RUNG
		Side Rail Height	Loading Depth	Internal Width (W)	Overall Width (W1)	Standard Length	Standard Rung Spacing
		mm (inch.)		mm (inch.)		m (ft.)	mm (inch.)
3125423	150 KCA OG 150/SS/L	150 (6")	125 (5")	150 (6")	200 (8")	3m/6m(10ft./20ft.)	300 (12")
3125424	150 KCA OG 200/SS/L	150 (6")	125 (5")	200 (8")	250 (10")	3m/6m(10ft./20ft.)	300 (12")
3125425	150 KCA OG 300/SS/L	150 (6")	125 (5")	300 (12")	350 (14")	3m/6m(10ft./20ft.)	300 (12")
3125426	150 KCA OG 450/SS/L	150 (6")	125 (5")	450 (18")	500 (20")	3m/6m(10ft./20ft.)	300 (12")
3125427	150 KCA OG 600/SS/L	150 (6")	125 (5")	600 (24")	650 (26")	3m/6m(10ft./20ft.)	300 (12")
3125428	150 KCA OG 750/SS/L	150 (6")	125 (5")	750 (30")	800 (32")	3m/6m(10ft./20ft.)	300 (12")
3125429	150 KCA OG 900/SS/L	150 (6")	125 (5")	900 (36")	950 (38")	3m/6m(10ft./20ft.)	300 (12")
3125430	150 KCA OG 1000/SS/L	150 (6")	125 (5")	1000 (40")	1050 (42")	3m/6m(10ft./20ft.)	300 (12")
3125431	150 KCA OG 1100/SS/L	150 (6")	125 (5")	1100 (44")	1150 (46")	3m/6m(10ft./20ft.)	300 (12")

Standard manufacturing lengths are metric system. (Dimensions given in the parenthesis (inch and ft.) are for information.)

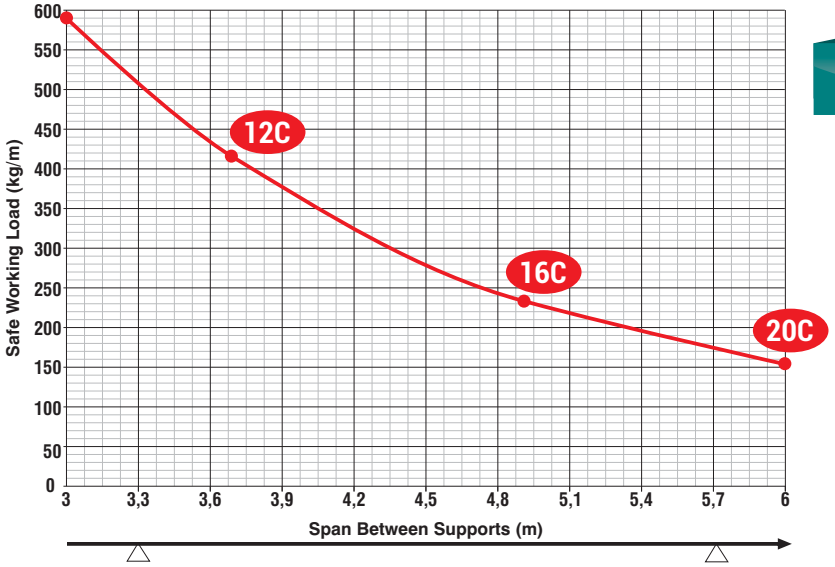
■ Please check page "58" for the cover selection.

ELINE
KCAOG
▶▶Straight

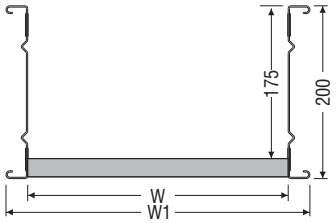
200 KCA OG "NEMA 20C Series STAINLESS STEEL 304/316L Cable Ladder"

- Overall Height (H) : 200mm (Loading depth: 175mm)
- Internal Widths (W) : 200mm, 300mm, 450mm, 600mm, 750mm, 900mm, 1000mm, 1100mm
- Overall Widths : W+50
- Standard Rung Spacing : 300mm
- Standard Lengths (L) : 3 meter/6 meter

H200 SS NEMA VE-1 Class 20C



Safe working load values are based on simple beam test according to NEMA VE-1-2017 edition.
*Please check Page 101 for NEMA Class Designations.



200 KCAOG STAINLESS STEEL CABLE LADDER							
NEMA 20C	Description	DIMENSIONS					
		HEIGHT		WIDTH		LENGTH	RUNG
Code		Side Rail Height	Loading Depth	Internal Width (W)	Overall Width (W1)	Standard Length	Standard Rung Spacing
		mm (inch.)		mm (inch.)		m (ft.)	mm (inch.)
3125432	200 KCA OG200/SS/L	200 (8")	175 (7")	200 (8")	250 (10")	3m/6m(10ft./20ft.)	300 (12")
3125433	200 KCA OG300/SS/L	200 (8")	175 (7")	300 (12")	350 (14")	3m/6m(10ft./20ft.)	300 (12")
3125434	200 KCA OG450/SS/L	200 (8")	175 (7")	450 (18")	500 (20")	3m/6m(10ft./20ft.)	300 (12")
3125435	200 KCA OG600/SS/L	200 (8")	175 (7")	600 (24")	650 (26")	3m/6m(10ft./20ft.)	300 (12")
3125436	200 KCA OG750/SS/L	200 (8")	175 (7")	750 (30")	800 (32")	3m/6m(10ft./20ft.)	300 (12")
3125437	200 KCA OG900/SS/L	200 (8")	175 (7")	900 (36")	950 (38")	3m/6m(10ft./20ft.)	300 (12")
3125438	200 KCA OG1000/SS/L	200 (8")	175 (7")	1000 (40")	1050 (42")	3m/6m(10ft./20ft.)	300 (12")
3125439	200 KCA OG1100/SS/L	200 (8")	175 (7")	1100 (44")	1150 (46")	3m/6m(10ft./20ft.)	300 (12")

Standard manufacturing lengths are metric system. (Dimensions given in the parenthesis (inch and ft.) are for information.)

■ Please check page "58" for the cover selection.

KCA OG

KCA OG Vertical Elbows are available in widths from 150mm to 1100mm and angles at 30, 45, 60 and 90 degree as standard. The standard radius are 300mm, 450mm, 600mm and 900mm.

- Integral Coupler is the main features which makes no need for additional joint.
- Rungs can be welded open face uppermost according to requirment

YD30

YD45

YD60

YD90

DD30

ID30

DD45

ID45

DD60

ID60

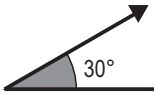
DD90

ID90

ELINE
KCAOG

▶▶Fittings YD30 Horizontal Elbow

YD30



Width (mm)	Radius (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	300	↕ KCA OG150/YD30/Δ/300	3067124	3067133	3067142		3,038	3,614	3,626	
	450	↕ KCA OG150/YD30/Δ/450	3067264	3067273	3067282		3,524	4,144	4,705	
	600	↕ KCA OG150/YD30/Δ/600	3067404	3067413	3067422		3,911	4,642	5,273	
	900	↕ KCA OG150/YD30/Δ/900	3067544	3067553	3067562		4,870	5,702	6,468	
200	300	↕ KCA OG200/YD30/Δ/300	3067125	3067134	3067143	3067151	3,237	3,826	4,330	5,220
	450	↕ KCA OG200/YD30/Δ/450	3067265	3067274	3067283	3067291	3,724	4,356	4,928	6,076
	600	↕ KCA OG200/YD30/Δ/600	3067405	3067414	3067423	3067431	4,110	4,853	5,496	6,779
	900	↕ KCA OG200/YD30/Δ/900	3067545	3067554	3067563	3067571	5,068	5,914	6,690	8,247
300	300	↕ KCA OG300/YD30/Δ/300	3067126	3067135	3067144	3067152	3,638	4,253	4,780	5,838
	450	↕ KCA OG300/YD30/Δ/450	3067266	3067275	3067284	3067292	4,124	4,783	5,378	6,571
	600	↕ KCA OG300/YD30/Δ/600	3067406	3067415	3067424	3067432	4,510	5,281	5,946	7,275
	900	↕ KCA OG300/YD30/Δ/900	3067546	3067555	3067564	3067572	5,469	6,340	7,141	8,742
450	300	↕ KCA OG450/YD30/Δ/300	3067127	3067136	3067145	3067153	4,235	4,890	5,451	6,576
	450	↕ KCA OG450/YD30/Δ/450	3067267	3067276	3067285	3067293	4,721	5,420	6,048	7,311
	600	↕ KCA OG450/YD30/Δ/600	3067407	3067416	3067425	3067433	5,107	5,918	6,617	8,014
	900	↕ KCA OG450/YD30/Δ/900	3067547	3067556	3067565	3067573	6,067	6,977	7,811	9,480
600	300	↕ KCA OG600/YD30/Δ/300	3067128	3067137	3067146	3067154	4,835	5,529	6,123	7,317
	450	↕ KCA OG600/YD30/Δ/450	3067268	3067277	3067286	3067294	6,073	6,811	7,473	8,803
	600	↕ KCA OG600/YD30/Δ/600	3067408	3067417	3067426	3067434	6,459	7,308	8,042	9,506
	900	↕ KCA OG600/YD30/Δ/900	3067548	3067557	3067566	3067574	7,417	8,369	9,237	10,973
750	300	↕ KCA OG750/YD30/Δ/300	3067129	3067138	3067147	3067155	5,966	6,700	7,328	8,590
	450	↕ KCA OG750/YD30/Δ/450	3067269	3067278	3067287	3067295	7,658	8,435	9,132	10,529
	600	↕ KCA OG750/YD30/Δ/600	3067409	3067418	3067427	3067435	8,044	8,933	9,700	11,232
	900	↕ KCA OG750/YD30/Δ/900	3067549	3067558	3067567	3067575	9,002	9,992	10,894	12,698
900	300	↕ KCA OG900/YD30/Δ/300	3067130	3067139	3067148	3067156	8,117	8,889	9,552	10,881
	450	↕ KCA OG900/YD30/Δ/450	3067270	3067279	3067288	3067296	8,603	9,419	10,150	11,615
	600	↕ KCA OG900/YD30/Δ/600	3067410	3067419	3067428	3067436	8,988	9,918	10,718	12,318
	900	↕ KCA OG900/YD30/Δ/900	3067550	3067559	3067568	3067576	9,947	10,977	11,913	13,785
1000	300	↕ KCA OG1000/YD30/Δ/300	3067131	3067140	3067149	3067157	8,745	9,545	10,230	11,604
	450	↕ KCA OG1000/YD30/Δ/450	3067271	3067280	3067289	3067297	9,231	10,074	10,827	12,338
	600	↕ KCA OG1000/YD30/Δ/600	3067411	3067420	3067429	3067437	9,617	10,572	11,396	13,041
	900	↕ KCA OG1000/YD30/Δ/900	3067551	3067560	3067569	3067577	10,577	11,633	12,591	14,508
1100	300	↕ KCA OG1100/YD30/Δ/300	3067132	3067141	3067150	3067158	9,374	10,199	10,908	12,327
	450	↕ KCA OG1100/YD30/Δ/450	3067272	3067281	3067290	3067298	9,860	10,729	11,505	13,060
	600	↕ KCA OG1100/YD30/Δ/600	3067412	3067421	3067430	3067438	10,245	11,228	12,074	13,764
	900	↕ KCA OG1100/YD30/Δ/900	3067552	3067561	3067570	3067578	11,205	12,287	13,268	15,231

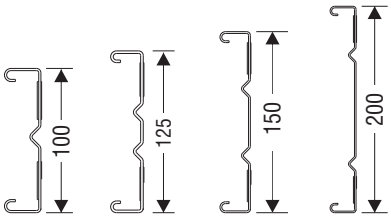
- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

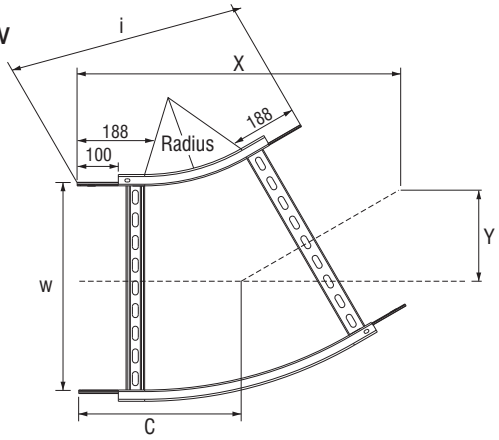
ELINE
KCAOG

▶▶Fittings YD30 Horizontal Elbow

Siderail:



2 mm Standard thickness



Fitting shown for illustration purposes only. The rung layout shown is typical and will vary on each fitting, depending on width and radius.

Description	No. of Rungs	Dimensions (mm)			
		X	Y	i	C
↕ KCA OG150/YD30/Δ/300	2	539	144	518	289
↕ KCA OG150/YD30/Δ/450	2	614	165	596	329
↕ KCA OG150/YD30/Δ/600	2	689	185	673	369
↕ KCA OG150/YD30/Δ/900	3	839	225	829	449
↕ KCA OG200/YD30/Δ/300	2	552	148	518	296
↕ KCA OG200/YD30/Δ/450	2	626	168	596	335
↕ KCA OG200/YD30/Δ/600	2	701	188	673	375
↕ KCA OG200/YD30/Δ/900	3	864	232	829	462
↕ KCA OG300/YD30/Δ/300	2	577	155	518	309
↕ KCA OG300/YD30/Δ/450	2	651	175	596	349
↕ KCA OG300/YD30/Δ/600	2	726	195	673	389
↕ KCA OG300/YD30/Δ/900	3	889	238	829	476
↕ KCA OG450/YD30/Δ/300	2	614	165	518	329
↕ KCA OG450/YD30/Δ/450	2	689	185	596	369
↕ KCA OG450/YD30/Δ/600	2	764	205	673	409
↕ KCA OG450/YD30/Δ/900	3	926	248	829	496
↕ KCA OG600/YD30/Δ/300	2	651	175	518	349
↕ KCA OG600/YD30/Δ/450	2	728	196	596	389
↕ KCA OG600/YD30/Δ/600	2	801	215	673	429
↕ KCA OG600/YD30/Δ/900	3	964	258	829	516
↕ KCA OG750/YD30/Δ/300	2	689	185	518	369
↕ KCA OG750/YD30/Δ/450	2	766	206	596	409
↕ KCA OG750/YD30/Δ/600	2	838	225	673	449
↕ KCA OG750/YD30/Δ/900	3	1001	268	829	536
↕ KCA OG900/YD30/Δ/300	2	726	195	518	389
↕ KCA OG900/YD30/Δ/450	2	803	216	596	429
↕ KCA OG900/YD30/Δ/600	2	876	235	673	469
↕ KCA OG900/YD30/Δ/900	3	1039	278	829	556
↕ KCA OG1000/YD30/Δ/300	2	752	202	518	403
↕ KCA OG1000/YD30/Δ/450	2	829	223	596	443
↕ KCA OG1000/YD30/Δ/600	2	901	241	673	483
↕ KCA OG1000/YD30/Δ/900	3	1064	285	829	569
↕ KCA OG1100/YD30/Δ/300	2	777	208	518	416
↕ KCA OG1100/YD30/Δ/450	2	854	230	596	456
↕ KCA OG1100/YD30/Δ/600	2	926	248	673	496
↕ KCA OG1100/YD30/Δ/900	3	1089	292	829	582

■ Please check page “62” for the cover selection.

■ Please indicate order code in your orders.

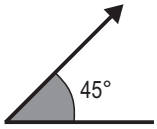
■ Please contact us for special modules.

■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶Fittings YD45 Horizontal Elbow

YD45



Width (mm)	Radius (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	300	↕ KCA OG150/YD45/Δ/300	3067159	3067168	3067177		3,605	4,278	4,858	
	450	↕ KCA OG150/YD45/Δ/450	3067299	3067308	3067317		4,252	5,042	5,730	
	600	↕ KCA OG150/YD45/Δ/600	3067439	3067448	3067457		5,047	5,837	6,626	
	900	↕ KCA OG150/YD45/Δ/900	3067579	3067588	3067597		6,398	7,426	8,418	
200	300	↕ KCA OG200/YD45/Δ/300	3067160	3067169	3067178	3067186	3,841	4,533	5,130	6,331
	450	↕ KCA OG200/YD45/Δ/450	3067300	3067309	3067318	3067326	4,741	5,552	6,257	7,655
	600	↕ KCA OG200/YD45/Δ/600	3067440	3067449	3067458	3067466	5,282	6,093	6,898	8,501
	900	↕ KCA OG200/YD45/Δ/900	3067580	3067589	3067598	3067606	6,634	7,682	8,691	10,700
300	300	↕ KCA OG300/YD45/Δ/300	3067161	3067170	3067179	3067187	4,318	5,049	5,680	6,948
	450	↕ KCA OG300/YD45/Δ/450	3067301	3067310	3067319	3067327	4,963	5,814	6,553	8,018
	600	↕ KCA OG300/YD45/Δ/600	3067441	3067450	3067459	3067467	5,759	6,608	7,448	9,497
	900	↕ KCA OG300/YD45/Δ/900	3067581	3067590	3067599	3067607	7,110	8,197	9,240	11,318
450	300	↕ KCA OG450/YD45/Δ/300	3067162	3067171	3067180	3067188	5,592	6,383	7,066	8,435
	450	↕ KCA OG450/YD45/Δ/450	3067302	3067311	3067320	3067328	6,238	7,148	7,938	9,505
	600	↕ KCA OG450/YD45/Δ/600	3067442	3067451	3067460	3067468	7,033	7,942	8,833	10,605
	900	↕ KCA OG450/YD45/Δ/900	3067582	3067591	3067600	3067608	8,385	9,532	10,626	12,804
600	300	↕ KCA OG600/YD45/Δ/300	3067163	3067172	3067181	3067189	6,491	7,341	8,075	9,546
	450	↕ KCA OG600/YD45/Δ/450	3067303	3067312	3067321	3067329	7,137	8,106	8,946	10,616
	600	↕ KCA OG600/YD45/Δ/600	3067443	3067452	3067461	3067469	7,933	8,900	9,842	11,716
	900	↕ KCA OG600/YD45/Δ/900	3067583	3067592	3067601	3067609	9,284	10,490	11,635	13,915
750	300	↕ KCA OG750/YD45/Δ/300	3067164	3067173	3067182	3067190	8,188	9,098	9,882	11,455
	450	↕ KCA OG750/YD45/Δ/450	3067304	3067313	3067322	3067330	10,041	11,068	11,959	13,731
	600	↕ KCA OG750/YD45/Δ/600	3067444	3067453	3067462	3067470	10,836	11,862	12,856	14,830
	900	↕ KCA OG750/YD45/Δ/900	3067584	3067593	3067602	3067610	10,981	12,247	13,442	15,825
900	300	↕ KCA OG900/YD45/Δ/300	3067165	3067174	3067183	3067191	9,247	10,215	11,050	12,725
	450	↕ KCA OG900/YD45/Δ/450	3067305	3067314	3067323	3067331	11,338	12,425	13,367	15,239
	600	↕ KCA OG900/YD45/Δ/600	3067445	3067454	3067463	3067471	12,133	13,219	14,263	16,339
	900	↕ KCA OG900/YD45/Δ/900	3067585	3067594	3067603	3067611	13,484	14,809	16,056	18,539
1000	300	↕ KCA OG1000/YD45/Δ/300	3067166	3067175	3067184	3067192	11,554	12,563	13,432	15,175
	450	↕ KCA OG1000/YD45/Δ/450	3067306	3067315	3067324	3067332	12,200	13,328	14,303	16,244
	600	↕ KCA OG1000/YD45/Δ/600	3067446	3067455	3067464	3067472	12,997	14,122	15,200	17,344
	900	↕ KCA OG1000/YD45/Δ/900	3067586	3067595	3067604	3067612	14,347	15,711	16,992	19,544
1100	300	↕ KCA OG1100/YD45/Δ/300	3067167	3067176	3067185	3067193	12,418	13,466	14,368	16,179
	450	↕ KCA OG1100/YD45/Δ/450	3067307	3067316	3067325	3067333	13,064	14,231	15,241	17,249
	600	↕ KCA OG1100/YD45/Δ/600	3067447	3067456	3067465	3067473	13,859	15,025	16,136	18,348
	900	↕ KCA OG1100/YD45/Δ/900	3067587	3067596	3067605	3067613	15,211	16,614	17,929	20,548

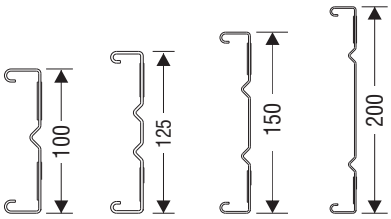
- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

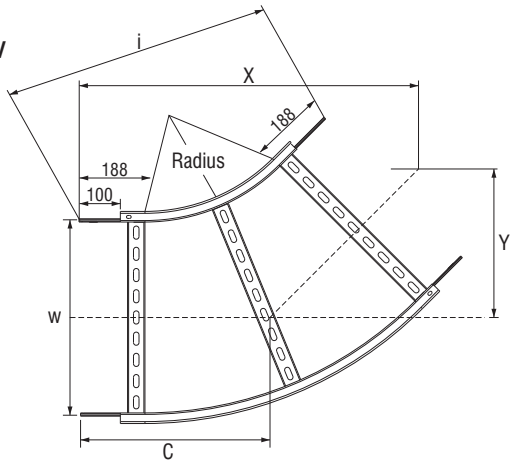
ELINE
KCAOG

▶▶Fittings YD45 Horizontal Elbow

Siderail:



2 mm Standard thickness



Fitting shown for illustration purposes only. The rung layout shown is typical and will vary on each fitting, depending on width and radius.

Description	No. of Rungs	Dimensions (mm)			
		X	Y	i	C
↕ KCA OG150/YD45/Δ/300	2	587	244	576	344
↕ KCA OG150/YD45/Δ/450	3	693	288	691	406
↕ KCA OG150/YD45/Δ/600	3	800	332	807	468
↕ KCA OG150/YD45/Δ/900	3	1012	419	1036	592
↕ KCA OG200/YD45/Δ/300	2	604	251	576	354
↕ KCA OG200/YD45/Δ/450	3	711	295	691	416
↕ KCA OG200/YD45/Δ/600	3	817	339	807	478
↕ KCA OG200/YD45/Δ/900	3	1029	426	1036	602
↕ KCA OG300/YD45/Δ/300	2	640	266	576	375
↕ KCA OG300/YD45/Δ/450	3	746	310	691	437
↕ KCA OG300/YD45/Δ/600	3	852	353	807	499
↕ KCA OG300/YD45/Δ/900	3	1064	440	1036	623
↕ KCA OG450/YD45/Δ/300	2	693	288	576	406
↕ KCA OG450/YD45/Δ/450	3	799	332	691	468
↕ KCA OG450/YD45/Δ/600	3	905	375	807	530
↕ KCA OG450/YD45/Δ/900	3	1118	462	1036	654
↕ KCA OG600/YD45/Δ/300	2	747	310	576	437
↕ KCA OG600/YD45/Δ/450	3	853	355	691	499
↕ KCA OG600/YD45/Δ/600	3	957	397	807	561
↕ KCA OG600/YD45/Δ/900	3	1170	484	1036	685
↕ KCA OG750/YD45/Δ/300	2	800	333	576	469
↕ KCA OG750/YD45/Δ/450	3	906	377	691	530
↕ KCA OG750/YD45/Δ/600	3	1010	418	807	592
↕ KCA OG750/YD45/Δ/900	3	1224	506	1036	716
↕ KCA OG900/YD45/Δ/300	2	853	355	576	499
↕ KCA OG900/YD45/Δ/450	3	960	399	691	561
↕ KCA OG900/YD45/Δ/600	3	1063	439	807	623
↕ KCA OG900/YD45/Δ/900	3	1277	528	1036	747
↕ KCA OG1000/YD45/Δ/300	2	889	370	576	520
↕ KCA OG1000/YD45/Δ/450	3	995	414	691	582
↕ KCA OG1000/YD45/Δ/600	3	1098	454	807	644
↕ KCA OG1000/YD45/Δ/900	3	1312	543	1036	767
↕ KCA OG1100/YD45/Δ/300	2	924	384	576	541
↕ KCA OG1100/YD45/Δ/450	3	1031	429	691	603
↕ KCA OG1100/YD45/Δ/600	3	1133	469	807	664
↕ KCA OG1100/YD45/Δ/900	3	1348	557	1036	788

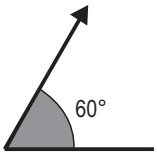
■ Please check page “63” for the cover selection.

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶Fittings YD60 Horizontal Elbow

YD60



Width (mm)	Radius (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	300	↕ KCA OG150/YD60/Δ/300	3067194	3067203	3067212		4,216	4,962	5,628	
	450	↕ KCA OG150/YD60/Δ/450	3067334	3067343	3067352		5,301	6,184	6,985	
	600	↕ KCA OG150/YD60/Δ/600	3067474	3067483	3067492		6,224	7,244	8,181	
	900	↕ KCA OG150/YD60/Δ/900	3067614	3067623	3067632		7,864	9,170	10,551	
200	300	↕ KCA OG200/YD60/Δ/300	3067195	3067204	3067213	3067221	4,489	5,262	5,950	7,307
	450	↕ KCA OG200/YD60/Δ/450	3067335	3067344	3067353	3067361	5,635	6,545	7,369	8,998
	600	↕ KCA OG200/YD60/Δ/600	3067475	3067484	3067493	3067501	6,559	7,605	8,565	10,464
	900	↕ KCA OG200/YD60/Δ/900	3067615	3067624	3067633	3067641	8,645	9,978	10,935	13,397
300	300	↕ KCA OG300/YD60/Δ/300	3067196	3067205	3067214	3067222	5,041	5,866	6,599	8,048
	450	↕ KCA OG300/YD60/Δ/450	3067336	3067345	3067354	3067362	6,312	7,274	8,143	9,863
	600	↕ KCA OG300/YD60/Δ/600	3067476	3067485	3067494	3067502	7,236	8,335	9,339	11,329
	900	↕ KCA OG300/YD60/Δ/900	3067616	3067625	3067634	3067642	9,447	10,833	11,710	14,262
450	300	↕ KCA OG450/YD60/Δ/300	3067197	3067206	3067215	3067223	6,428	7,333	8,133	9,717
	450	↕ KCA OG450/YD60/Δ/450	3067337	3067346	3067355	3067363	7,321	8,362	9,298	11,153
	600	↕ KCA OG450/YD60/Δ/600	3067477	3067486	3067495	3067503	8,245	9,422	10,494	12,620
	900	↕ KCA OG450/YD60/Δ/900	3067617	3067626	3067635	3067643	10,641	12,106	12,865	15,552
600	300	↕ KCA OG600/YD60/Δ/300	3067198	3067207	3067216	3067224	7,440	8,424	9,292	11,011
	450	↕ KCA OG600/YD60/Δ/450	3067338	3067347	3067356	3067364	9,085	10,205	11,209	13,200
	600	↕ KCA OG600/YD60/Δ/600	3067478	3067487	3067496	3067504	10,008	11,265	12,405	14,666
	900	↕ KCA OG600/YD60/Δ/900	3067618	3067627	3067636	3067644	12,592	14,135	14,775	17,599
750	300	↕ KCA OG750/YD60/Δ/300	3067199	3067208	3067217	3067225	10,457	11,518	12,454	14,310
	450	↕ KCA OG750/YD60/Δ/450	3067339	3067348	3067357	3067365	11,348	12,548	13,619	15,745
	600	↕ KCA OG750/YD60/Δ/600	3067479	3067488	3067497	3067505	12,272	13,607	14,815	17,212
	900	↕ KCA OG750/YD60/Δ/900	3067619	3067628	3067637	3067645	15,309	16,931	17,185	20,144
900	300	↕ KCA OG900/YD60/Δ/300	3067200	3067209	3067218	3067226	11,866	13,008	14,011	16,002
	450	↕ KCA OG900/YD60/Δ/450	3067340	3067349	3067358	3067366	12,758	14,036	15,176	17,437
	600	↕ KCA OG900/YD60/Δ/600	3067480	3067489	3067498	3067506	13,681	15,095	16,371	18,905
	900	↕ KCA OG900/YD60/Δ/900	3067620	3067629	3067638	3067646	16,958	18,659	18,742	21,836
1000	300	↕ KCA OG1000/YD60/Δ/300	3067201	3067210	3067219	3067227	14,409	15,602	16,652	18,733
	450	↕ KCA OG1000/YD60/Δ/450	3067341	3067350	3067359	3067367	15,301	16,632	17,817	20,170
	600	↕ KCA OG1000/YD60/Δ/600	3067481	3067490	3067499	3067507	16,224	17,691	19,012	21,636
	900	↕ KCA OG1000/YD60/Δ/900	3067621	3067630	3067639	3067647	18,055	19,810	21,383	24,569
1100	300	↕ KCA OG1100/YD60/Δ/300	3067202	3067211	3067220	3067228	15,507	16,753	17,848	20,020
	450	↕ KCA OG1100/YD60/Δ/450	3067342	3067351	3067360	3067368	16,399	17,783	19,012	21,456
	600	↕ KCA OG1100/YD60/Δ/600	3067482	3067491	3067500	3067508	17,322	18,842	20,208	22,922
	900	↕ KCA OG1100/YD60/Δ/900	3067622	3067631	3067640	3067648	19,153	20,961	22,579	25,854

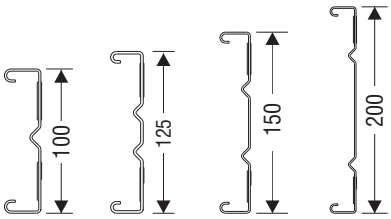
- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

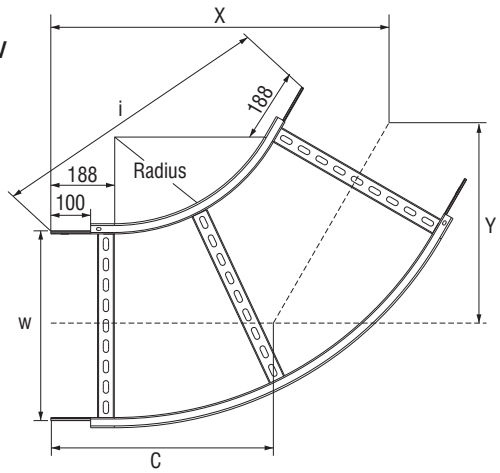
ELINE
KCAOG

▶▶Fittings YD60 Horizontal Elbow

Siderail:



2 mm Standard thickness



Fitting shown for illustration purposes only. The rung layout shown is typical and will vary on each fitting, depending on width and radius.

Description	No. of Rungs	Dimensions (mm)			
		X	Y	i	C
↕ KCA OG150/YD60/Δ/300	2	608	351	625	405
↕ KCA OG150/YD60/Δ/450	3	738	426	715	492
↕ KCA OG150/YD60/Δ/600	3	868	502	952	579
↕ KCA OG150/YD60/Δ/900	4	1128	651	1125	752
↕ KCA OG200/YD60/Δ/300	2	629	363	625	419
↕ KCA OG200/YD60/Δ/450	3	759	438	715	506
↕ KCA OG200/YD60/Δ/600	3	889	514	952	593
↕ KCA OG200/YD60/Δ/900	4	1149	663	1125	766
↕ KCA OG300/YD60/Δ/300	2	672	388	625	448
↕ KCA OG300/YD60/Δ/450	3	802	463	715	535
↕ KCA OG300/YD60/Δ/600	3	933	539	952	622
↕ KCA OG300/YD60/Δ/900	4	1193	688	1125	795
↕ KCA OG450/YD60/Δ/300	2	737	425	625	491
↕ KCA OG450/YD60/Δ/450	3	867	500	715	578
↕ KCA OG450/YD60/Δ/600	3	998	577	952	665
↕ KCA OG450/YD60/Δ/900	4	1258	726	1125	838
↕ KCA OG600/YD60/Δ/300	2	802	463	625	534
↕ KCA OG600/YD60/Δ/450	3	932	537	715	621
↕ KCA OG600/YD60/Δ/600	3	1063	614	952	709
↕ KCA OG600/YD60/Δ/900	4	1323	763	1125	881
↕ KCA OG750/YD60/Δ/300	2	867	500	625	578
↕ KCA OG750/YD60/Δ/450	3	997	574	715	665
↕ KCA OG750/YD60/Δ/600	3	1128	652	952	752
↕ KCA OG750/YD60/Δ/900	4	1388	801	1125	925
↕ KCA OG900/YD60/Δ/300	2	932	538	625	621
↕ KCA OG900/YD60/Δ/450	3	1061	611	715	708
↕ KCA OG900/YD60/Δ/600	3	1193	690	952	795
↕ KCA OG900/YD60/Δ/900	4	1453	839	1125	968
↕ KCA OG1000/YD60/Δ/300	2	975	563	625	650
↕ KCA OG1000/YD60/Δ/450	3	1104	636	715	737
↕ KCA OG1000/YD60/Δ/600	3	1236	715	952	824
↕ KCA OG1000/YD60/Δ/900	4	1496	864	1125	997
↕ KCA OG1100/YD60/Δ/300	2	1019	588	625	679
↕ KCA OG1100/YD60/Δ/450	3	1148	661	715	766
↕ KCA OG1100/YD60/Δ/600	3	1279	740	952	853
↕ KCA OG1100/YD60/Δ/900	4	1540	889	1125	1026

■ Please check page “64” for the cover selection.

■ Please indicate order code in your orders.

■ Please contact us for special modules.

■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶Fittings YD90 Horizontal Elbow

YD90

Width (mm)	Radius (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	300	↕ KCA OG150/YD90/Δ/300	3067229	3067238	3067247		5,522	6,436	7,272	
	450	↕ KCA OG150/YD90/Δ/450	3067369	3067378	3067387		6,867	7,996	9,035	
	600	↕ KCA OG150/YD90/Δ/600	3067509	3067518	3067527		8,433	9,778	11,021	
	900	↕ KCA OG150/YD90/Δ/900	3067649	3067658	3067667		10,958	12,735	14,385	
200	300	↕ KCA OG200/YD90/Δ/300	3067230	3067239	3067248	3067256	5,933	6,886	7,756	8,487
	450	↕ KCA OG200/YD90/Δ/450	3067370	3067379	3067388	3067396	7,277	8,446	9,519	11,666
	600	↕ KCA OG200/YD90/Δ/600	3067510	3067519	3067528	3067536	8,905	10,289	11,567	14,120
	900	↕ KCA OG200/YD90/Δ/900	3067650	3067659	3067668	3067676	11,877	13,692	15,376	18,743
300	300	↕ KCA OG300/YD90/Δ/300	3067231	3067240	3067249	3067257	6,761	7,792	8,730	10,606
	450	↕ KCA OG300/YD90/Δ/450	3067371	3067380	3067389	3067397	8,104	9,351	10,493	12,774
	600	↕ KCA OG300/YD90/Δ/600	3067511	3067520	3067529	3067537	9,857	11,321	12,665	15,354
	900	↕ KCA OG300/YD90/Δ/900	3067651	3067660	3067669	3067677	12,954	14,849	16,600	20,103
450	300	↕ KCA OG450/YD90/Δ/300	3067232	3067241	3067250	3067258	8,559	9,710	10,749	12,828
	450	↕ KCA OG450/YD90/Δ/450	3067372	3067381	3067390	3067398	9,903	11,270	12,513	14,997
	600	↕ KCA OG450/YD90/Δ/600	3067512	3067521	3067530	3067538	11,276	12,859	14,306	17,197
	900	↕ KCA OG450/YD90/Δ/900	3067652	3067661	3067670	3067678	15,125	17,138	18,992	22,697
600	300	↕ KCA OG600/YD90/Δ/300	3067233	3067242	3067251	3067259	9,984	11,253	12,394	14,676
	450	↕ KCA OG600/YD90/Δ/450	3067373	3067382	3067391	3067399	12,079	13,564	14,909	17,598
	600	↕ KCA OG600/YD90/Δ/600	3067513	3067522	3067531	3067539	13,452	15,154	16,701	19,797
	900	↕ KCA OG600/YD90/Δ/900	3067653	3067662	3067671	3067679	16,922	19,075	21,009	24,918
750	300	↕ KCA OG750/YD90/Δ/300	3067234	3067243	3067252	3067260	13,677	15,066	16,309	18,795
	450	↕ KCA OG750/YD90/Δ/450	3067374	3067383	3067392	3067400	15,021	16,624	18,071	20,963
	600	↕ KCA OG750/YD90/Δ/600	3067514	3067523	3067532	3067540	16,394	18,214	19,864	23,163
	900	↕ KCA OG750/YD90/Δ/900	3067654	3067663	3067672	3067680	20,317	22,568	24,625	28,738
900	300	↕ KCA OG900/YD90/Δ/300	3067235	3067244	3067253	3067261	15,552	17,059	18,403	21,093
	450	↕ KCA OG900/YD90/Δ/450	3067375	3067384	3067393	3067401	16,896	18,618	20,166	23,262
	600	↕ KCA OG900/YD90/Δ/600	3067515	3067524	3067533	3067541	18,269	20,228	21,958	25,461
	900	↕ KCA OG900/YD90/Δ/900	3067655	3067664	3067673	3067681	22,432	24,801	26,959	31,275
1000	300	↕ KCA OG1000/YD90/Δ/300	3067236	3067245	3067254	3067262	16,800	18,385	19,798	22,624
	450	↕ KCA OG1000/YD90/Δ/450	3067376	3067385	3067394	3067402	19,748	21,549	23,166	26,397
	600	↕ KCA OG1000/YD90/Δ/600	3067516	3067525	3067534	3067542	21,122	23,139	24,958	28,597
	900	↕ KCA OG1000/YD90/Δ/900	3067656	3067665	3067674	3067682	23,839	26,287	28,513	32,966
1100	300	↕ KCA OG1100/YD90/Δ/300	3067237	3067246	3067255	3067263	19,813	21,478	22,957	25,918
	450	↕ KCA OG1100/YD90/Δ/450	3067377	3067386	3067395	3067403	21,156	23,036	24,720	28,086
	600	↕ KCA OG1100/YD90/Δ/600	3067517	3067526	3067535	3067543	22,529	24,626	26,512	30,286
	900	↕ KCA OG1100/YD90/Δ/900	3067657	3067666	3067675	3067683	27,012	29,538	31,832	36,420

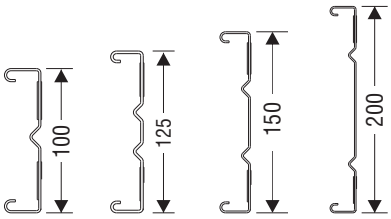
- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

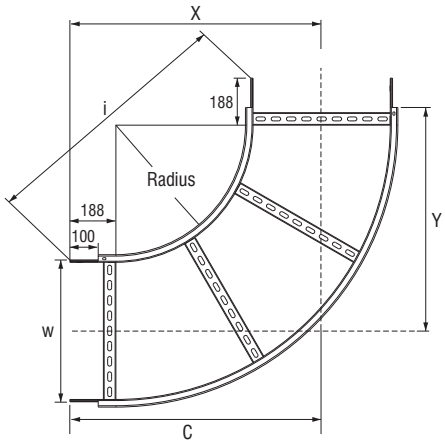
ELINE
KCAOG

▶▶Fittings YD90 Horizontal Elbow

Siderail:



2 mm Standard thickness



Fitting shown for illustration purposes only. The rung layout shown is typical and will vary on each fitting, depending on width and radius.

Description	No. of Rungs	Dimensions (mm)			
		X	Y	i	C
↕ KCA OG150/YD90/Δ/300	3	565	565	690	565
↕ KCA OG150/YD90/Δ/450	4	715	715	902	715
↕ KCA OG150/YD90/Δ/600	4	865	865	1114	865
↕ KCA OG150/YD90/Δ/900	5	1165	1165	1538	1165
↕ KCA OG200/YD90/Δ/300	3	590	590	690	590
↕ KCA OG200/YD90/Δ/450	4	740	740	902	740
↕ KCA OG200/YD90/Δ/600	4	890	890	1114	890
↕ KCA OG200/YD90/Δ/900	5	1190	1190	1538	1190
↕ KCA OG300/YD90/Δ/300	3	640	640	690	640
↕ KCA OG300/YD90/Δ/450	4	790	790	902	790
↕ KCA OG300/YD90/Δ/600	4	940	940	1114	940
↕ KCA OG300/YD90/Δ/900	5	1240	1240	1538	1240
↕ KCA OG450/YD90/Δ/300	3	715	715	690	715
↕ KCA OG450/YD90/Δ/450	4	865	865	902	865
↕ KCA OG450/YD90/Δ/600	4	1015	1015	1114	1015
↕ KCA OG450/YD90/Δ/900	5	1315	1315	1538	1315
↕ KCA OG600/YD90/Δ/300	3	790	790	690	1465
↕ KCA OG600/YD90/Δ/450	4	940	940	902	1660
↕ KCA OG600/YD90/Δ/600	4	1090	1090	1114	1855
↕ KCA OG600/YD90/Δ/900	5	1390	1390	1538	2050
↕ KCA OG750/YD90/Δ/300	3	865	865	690	865
↕ KCA OG750/YD90/Δ/450	4	1015	1015	902	1015
↕ KCA OG750/YD90/Δ/600	4	1165	1165	1114	1165
↕ KCA OG750/YD90/Δ/900	5	1465	1465	1538	1465
↕ KCA OG900/YD90/Δ/300	3	940	940	690	940
↕ KCA OG900/YD90/Δ/450	4	1090	1090	902	1090
↕ KCA OG900/YD90/Δ/600	4	1240	1240	1114	1240
↕ KCA OG900/YD90/Δ/900	5	1540	1540	1538	1540
↕ KCA OG1000/YD90/Δ/300	3	990	990	690	990
↕ KCA OG1000/YD90/Δ/450	4	1140	1140	902	1140
↕ KCA OG1000/YD90/Δ/600	4	1290	1290	1114	1290
↕ KCA OG1000/YD90/Δ/900	5	1590	1590	1538	1590
↕ KCA OG1100/YD90/Δ/300	3	1040	1040	690	1040
↕ KCA OG1100/YD90/Δ/450	4	1190	1190	902	1190
↕ KCA OG1100/YD90/Δ/600	4	1340	1340	1114	1340
↕ KCA OG1100/YD90/Δ/900	5	1640	1640	1538	1640

■ Please check page “65” for the cover selection.

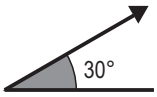
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶Fittings DD30 Vertical Outside Elbow

DD30

Fitting shown for illustration purposes only. The rung layout shown is typical and will vary on each fitting, depending on width and radius.



Width (mm)	Radius (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	300	↕ KCA OG150/DD30/Δ/300	3068244	3068253	3068262		2,151	2,687	3,145	
	450	↕ KCA OG150/DD30/Δ/450	3068384	3068393	3068402		2,615	3,185	3,682	
	600	↕ KCA OG150/DD30/Δ/600	3068524	3068533	3068542		2,973	3,603	4,282	
	900	↕ KCA OG150/DD30/Δ/900	3068664	3068673	3068682		4,245	5,175	5,488	
200	300	↕ KCA OG200/DD30/Δ/300	3068245	3068254	3068263	3068271	2,212	2,749	3,207	4,170
	450	↕ KCA OG200/DD30/Δ/450	3068385	3068394	3068403	3068411	2,676	3,246	3,743	4,806
	600	↕ KCA OG200/DD30/Δ/600	3068525	3068534	3068543	3068551	3,035	3,664	4,344	5,613
	900	↕ KCA OG200/DD30/Δ/900	3068665	3068674	3068683	3068691	4,430	5,360	5,673	7,472
300	300	↕ KCA OG300/DD30/Δ/300	3068246	3068255	3068264	3068272	2,338	2,874	3,332	4,296
	450	↕ KCA OG300/DD30/Δ/450	3068386	3068395	3068404	3068412	2,802	3,372	3,869	4,931
	600	↕ KCA OG300/DD30/Δ/600	3068526	3068535	3068544	3068552	3,160	3,790	4,469	5,739
	900	↕ KCA OG300/DD30/Δ/900	3068666	3068675	3068684	3068692	4,806	5,736	6,049	7,849
450	300	↕ KCA OG450/DD30/Δ/300	3068247	3068256	3068265	3068273	2,523	3,060	3,518	4,481
	450	↕ KCA OG450/DD30/Δ/450	3068387	3068396	3068405	3068413	2,988	3,557	4,055	5,117
	600	↕ KCA OG450/DD30/Δ/600	3068527	3068536	3068545	3068553	3,346	3,975	4,655	5,925
	900	↕ KCA OG450/DD30/Δ/900	3068667	3068676	3068685	3068693	5,364	6,294	6,607	8,406
600	300	↕ KCA OG600/DD30/Δ/300	3068248	3068257	3068266	3068274	2,710	3,247	3,705	4,668
	450	↕ KCA OG600/DD30/Δ/450	3068388	3068397	3068406	3068414	3,175	3,744	4,242	5,304
	600	↕ KCA OG600/DD30/Δ/600	3068528	3068537	3068546	3068554	3,533	4,162	4,842	6,112
	900	↕ KCA OG600/DD30/Δ/900	3068668	3068677	3068686	3068694	5,925	6,855	7,168	8,967
750	300	↕ KCA OG750/DD30/Δ/300	3068249	3068258	3068267	3068275	3,164	3,700	4,158	5,122
	450	↕ KCA OG750/DD30/Δ/450	3068389	3068398	3068407	3068415	3,628	4,198	4,695	5,757
	600	↕ KCA OG750/DD30/Δ/600	3068529	3068538	3068547	3068555	3,986	4,616	5,295	6,565
	900	↕ KCA OG750/DD30/Δ/900	3068669	3068678	3068687	3068695	7,284	8,214	8,527	10,327
900	300	↕ KCA OG900/DD30/Δ/300	3068250	3068259	3068268	3068276	3,403	3,940	4,398	5,361
	450	↕ KCA OG900/DD30/Δ/450	3068390	3068399	3068408	3068416	3,868	4,437	4,935	5,997
	600	↕ KCA OG900/DD30/Δ/600	3068530	3068539	3068548	3068556	4,226	4,855	5,535	6,805
	900	↕ KCA OG900/DD30/Δ/900	3068670	3068679	3068688	3068696	8,004	8,934	9,247	11,046
1000	300	↕ KCA OG1000/DD30/Δ/300	3068251	3068260	3068269	3068277	3,563	4,100	4,557	5,521
	450	↕ KCA OG1000/DD30/Δ/450	3068391	3068400	3068409	3068417	4,027	4,597	5,094	6,157
	600	↕ KCA OG1000/DD30/Δ/600	3068531	3068540	3068549	3068557	4,386	5,015	5,695	6,964
	900	↕ KCA OG1000/DD30/Δ/900	3068671	3068680	3068689	3068697	8,482	9,412	9,725	11,525
1100	300	↕ KCA OG1100/DD30/Δ/300	3068252	3068261	3068270	3068278	3,722	4,259	4,717	5,680
	450	↕ KCA OG1100/DD30/Δ/450	3068392	3068401	3068410	3068418	4,187	4,756	5,254	6,316
	600	↕ KCA OG1100/DD30/Δ/600	3068532	3068541	3068550	3068558	4,545	5,174	5,854	7,124
	900	↕ KCA OG1100/DD30/Δ/900	3068672	3068681	3068690	3068698	9,093	9,891	10,204	12,003

- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

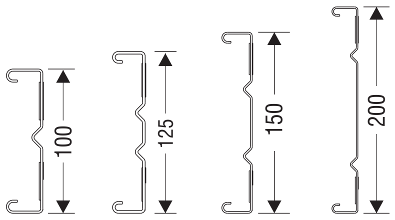
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

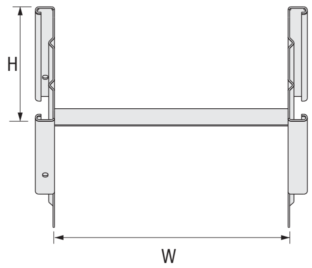
▶▶ Fittings DD30 Vertical Outside Elbow

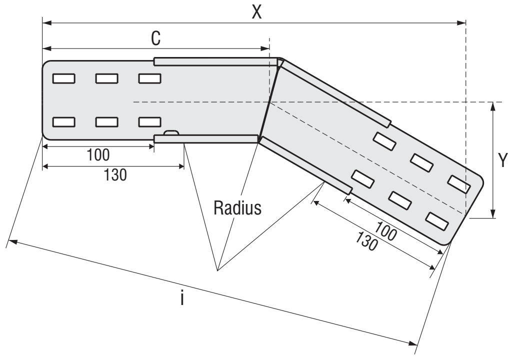
EAE ELEKTRİK

Siderail:



2 mm Standard thickness





No. of Rungs	↕100 / Dimensions (mm)				↕125 / Dimensions (mm)				↕150 / Dimensions (mm)				↕200 / Dimensions (mm)			
	X	Y	i	C	X	Y	i	C	X	Y	i	C	X	Y	i	C
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398

- Please check page “66” for the cover selection.

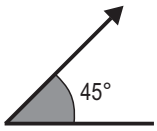
- Please indicate order code in your orders.
- Please contact us for special modules.
- Material weights may vary by ± 10%

ELINE
KCAOG

▶▶Fittings DD45 Vertical Outside Elbow

DD45

Fitting shown for illustration purposes only. The rung layout shown is typical and will vary on each fitting, depending on width and radius.



Width (mm)	Radius (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	300	↕ KCA OG150/DD45/Δ/300	3068279	3068288	3068297		2,723	3,325	3,880	
	450	↕ KCA OG150/DD45/Δ/450	3068419	3068428	3068437		3,639	4,369	5,036	
	600	↕ KCA OG150/DD45/Δ/600	3068559	3068568	3068577		4,301	5,203	6,004	
	900	↕ KCA OG150/DD45/Δ/900	3068699	3068708	3068717		5,970	7,076	8,060	
200	300	↕ KCA OG200/DD45/Δ/300	3068280	3068289	3068298	3068306	2,784	3,387	3,941	5,118
	450	↕ KCA OG200/DD45/Δ/450	3068420	3068429	3068438	3068446	3,762	4,492	5,159	6,554
	600	↕ KCA OG200/DD45/Δ/600	3068560	3068569	3068578	3068586	4,424	5,326	6,127	7,700
	900	↕ KCA OG200/DD45/Δ/900	3068700	3068709	3068718	3068726	6,155	7,261	8,245	10,280
300	300	↕ KCA OG300/DD45/Δ/300	3068281	3068290	3068299	3068307	2,910	3,512	4,067	5,244
	450	↕ KCA OG300/DD45/Δ/450	3068421	3068430	3068439	3068447	4,013	4,743	5,410	6,805
	600	↕ KCA OG300/DD45/Δ/600	3068561	3068570	3068579	3068587	4,675	5,577	6,378	7,951
	900	↕ KCA OG300/DD45/Δ/900	3068701	3068710	3068719	3068727	6,531	7,637	8,621	10,656
450	300	↕ KCA OG450/DD45/Δ/300	3068282	3068291	3068300	3068308	3,095	3,698	4,253	5,430
	450	↕ KCA OG450/DD45/Δ/450	3068422	3068431	3068440	3068448	4,385	5,115	5,782	7,176
	600	↕ KCA OG450/DD45/Δ/600	3068562	3068571	3068580	3068588	5,047	5,949	6,750	8,323
	900	↕ KCA OG450/DD45/Δ/900	3068702	3068711	3068720	3068728	7,088	8,195	9,178	11,213
600	300	↕ KCA OG600/DD45/Δ/300	3068283	3068292	3068301	3068309	3,282	3,885	4,440	5,617
	450	↕ KCA OG600/DD45/Δ/450	3068423	3068432	3068441	3068449	4,759	5,489	6,156	7,550
	600	↕ KCA OG600/DD45/Δ/600	3068563	3068572	3068581	3068589	5,421	6,323	7,124	8,697
	900	↕ KCA OG600/DD45/Δ/900	3068703	3068712	3068721	3068729	7,649	8,756	9,739	11,774
750	300	↕ KCA OG750/DD45/Δ/300	3068284	3068293	3068302	3068310	3,736	4,338	4,893	6,070
	450	↕ KCA OG750/DD45/Δ/450	3068424	3068433	3068442	3068450	5,665	6,395	7,062	8,457
	600	↕ KCA OG750/DD45/Δ/600	3068564	3068573	3068582	3068590	6,327	7,229	8,030	9,603
	900	↕ KCA OG750/DD45/Δ/900	3068704	3068713	3068722	3068730	9,009	10,116	11,099	13,134
900	300	↕ KCA OG900/DD45/Δ/300	3068285	3068294	3068303	3068311	3,975	4,578	5,133	6,310
	450	↕ KCA OG900/DD45/Δ/450	3068425	3068434	3068443	3068451	6,145	6,875	7,542	8,936
	600	↕ KCA OG900/DD45/Δ/600	3068565	3068574	3068583	3068591	6,807	7,709	8,510	10,083
	900	↕ KCA OG900/DD45/Δ/900	3068705	3068714	3068723	3068731	9,728	10,835	11,818	13,853
1000	300	↕ KCA OG1000/DD45/Δ/300	3068286	3068295	3068304	3068312	4,135	4,738	5,292	6,469
	450	↕ KCA OG1000/DD45/Δ/450	3068426	3068435	3068444	3068452	6,464	7,194	7,861	9,255
	600	↕ KCA OG1000/DD45/Δ/600	3068566	3068575	3068584	3068592	7,126	8,028	8,829	10,402
	900	↕ KCA OG1000/DD45/Δ/900	3068706	3068715	3068724	3068732	10,207	11,314	12,297	14,332
1100	300	↕ KCA OG1100/DD45/Δ/300	3068287	3068296	3068305	3068313	4,294	4,897	5,452	6,629
	450	↕ KCA OG1100/DD45/Δ/450	3068427	3068436	3068445	3068453	6,783	7,513	8,180	9,574
	600	↕ KCA OG1100/DD45/Δ/600	3068567	3068576	3068585	3068593	7,445	8,347	9,148	10,721
	900	↕ KCA OG1100/DD45/Δ/900	3068707	3068716	3068725	3068733	10,685	11,792	12,775	14,810

- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

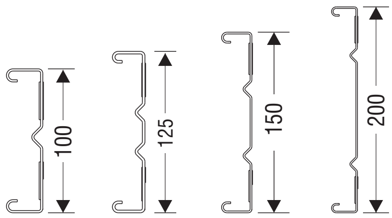
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

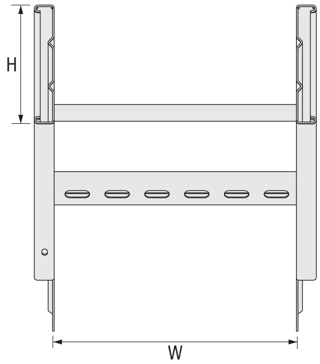
▶▶Fittings DD45 Vertical Outside Elbow

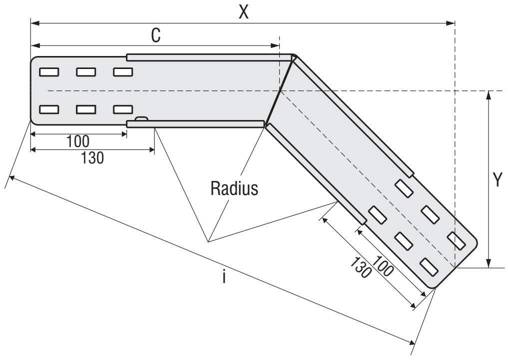
EAE ELEKTRİK

Siderail:



2 mm Standard thickness





No. of Rungs	↕100 / Dimensions (mm)				↕125 / Dimensions (mm)				↕150 / Dimensions (mm)				↕200 / Dimensions (mm)			
	X	Y	i	C	X	Y	i	C	X	Y	i	C	X	Y	i	C
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543

- Please check page “67” for the cover selection.

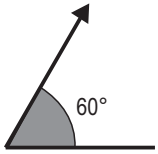
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶Fittings DD60 Vertical Outside Elbow

DD60

Fitting shown for illustration purposes only. The rung layout shown is typical and will vary on each fitting, depending on width and radius.



Width (mm)	Radius (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	300	↕ KCA OG150/DD60/Δ/300	3068314	3068323	3068332		3,408	4,134	4,781	
	450	↕ KCA OG150/DD60/Δ/450	3068454	3068463	3068472		4,343	5,205	5,991	
	600	↕ KCA OG150/DD60/Δ/600	3068594	3068603	3068612		5,453	6,476	7,400	
	900	↕ KCA OG150/DD60/Δ/900	3068734	3068743	3068752		7,480	8,846	9,895	
200	300	↕ KCA OG200/DD60/Δ/300	3068315	3068324	3068333	3068341	3,531	4,257	4,904	6,307
	450	↕ KCA OG200/DD60/Δ/450	3068455	3068464	3068473	3068481	4,466	5,328	6,114	7,795
	600	↕ KCA OG200/DD60/Δ/600	3068595	3068604	3068613	3068621	5,638	6,661	7,585	9,543
	900	↕ KCA OG200/DD60/Δ/900	3068735	3068744	3068753	3068761	7,726	9,093	10,333	12,877
300	300	↕ KCA OG300/DD60/Δ/300	3068316	3068325	3068334	3068342	3,782	4,508	5,155	6,558
	450	↕ KCA OG300/DD60/Δ/450	3068456	3068465	3068474	3068482	4,717	5,579	6,365	8,045
	600	↕ KCA OG300/DD60/Δ/600	3068596	3068605	3068614	3068622	6,014	7,037	7,961	9,919
	900	↕ KCA OG300/DD60/Δ/900	3068736	3068745	3068754	3068762	8,228	9,594	10,835	13,378
450	300	↕ KCA OG450/DD60/Δ/300	3068317	3068326	3068335	3068343	4,154	4,880	5,526	6,930
	450	↕ KCA OG450/DD60/Δ/450	3068457	3068466	3068475	3068483	5,089	5,951	6,736	8,417
	600	↕ KCA OG450/DD60/Δ/600	3068597	3068606	3068615	3068623	6,571	7,594	8,518	10,476
	900	↕ KCA OG450/DD60/Δ/900	3068737	3068746	3068755	3068763	8,972	10,338	11,579	14,122
600	300	↕ KCA OG600/DD60/Δ/300	3068318	3068327	3068336	3068344	4,528	5,254	5,900	7,304
	450	↕ KCA OG600/DD60/Δ/450	3068458	3068467	3068476	3068484	5,463	6,325	7,110	8,791
	600	↕ KCA OG600/DD60/Δ/600	3068598	3068607	3068616	3068624	7,132	8,155	9,079	11,037
	900	↕ KCA OG600/DD60/Δ/900	3068738	3068747	3068756	3068764	9,720	11,086	12,327	14,870
750	300	↕ KCA OG750/DD60/Δ/300	3068319	3068328	3068337	3068345	5,434	6,160	6,807	8,210
	450	↕ KCA OG750/DD60/Δ/450	3068459	3068468	3068477	3068485	6,369	7,231	8,017	9,698
	600	↕ KCA OG750/DD60/Δ/600	3068599	3068608	3068617	3068625	8,492	9,515	10,439	12,397
	900	↕ KCA OG750/DD60/Δ/900	3068739	3068748	3068757	3068765	11,532	12,899	14,139	16,683
900	300	↕ KCA OG900/DD60/Δ/300	3068320	3068329	3068338	3068346	5,914	6,640	7,286	8,690
	450	↕ KCA OG900/DD60/Δ/450	3068460	3068469	3068478	3068486	6,849	7,711	8,496	10,177
	600	↕ KCA OG900/DD60/Δ/600	3068600	3068609	3068618	3068626	9,211	10,234	11,158	13,116
	900	↕ KCA OG900/DD60/Δ/900	3068740	3068749	3068758	3068766	12,492	13,858	15,095	17,642
1000	300	↕ KCA OG1000/DD60/Δ/300	3068321	3068330	3068339	3068347	6,233	6,959	7,605	9,009
	450	↕ KCA OG1000/DD60/Δ/450	3068461	3068470	3068479	3068487	7,168	8,030	8,815	10,496
	600	↕ KCA OG1000/DD60/Δ/600	3068601	3068610	3068619	3068627	9,690	10,713	11,637	13,595
	900	↕ KCA OG1000/DD60/Δ/900	3068741	3068750	3068759	3068767	13,130	14,496	15,737	18,280
1100	300	↕ KCA OG1100/DD60/Δ/300	3068322	3068331	3068340	3068348	6,552	7,278	7,924	9,328
	450	↕ KCA OG1100/DD60/Δ/450	3068462	3068471	3068480	3068488	7,487	8,349	9,134	10,815
	600	↕ KCA OG1100/DD60/Δ/600	3068602	3068611	3068620	3068628	10,168	11,191	12,115	14,073
	900	↕ KCA OG1100/DD60/Δ/900	3068742	3068751	3068760	3068768	13,768	15,134	16,375	18,918

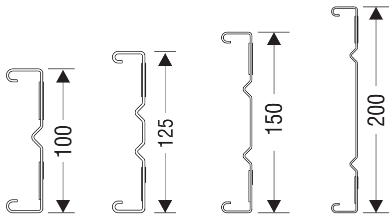
- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

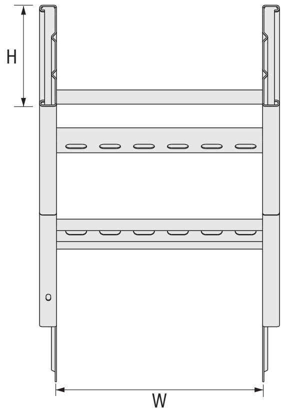
ELINE
KCAOG

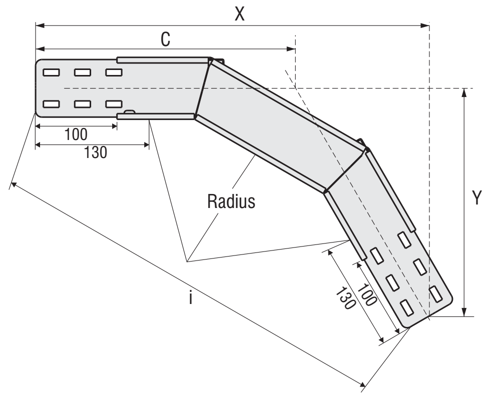
▶▶ Fittings DD60 Vertical Outside Elbow

Siderail:



2 mm Standard thickness





No. of Rungs	↕100 / Dimensions (mm)				↕125 / Dimensions (mm)				↕150 / Dimensions (mm)				↕200 / Dimensions (mm)			
	X	Y	i	C	X	Y	i	C	X	Y	i	C	X	Y	i	C
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	506	825	438	768	511	825	443	778	518	825	449	800	533	825	462
4	1017	678	1124	587	1027	684	1124	593	1039	693	1124	600	1060	707	1124	612
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	506	825	438	768	511	825	443	778	518	825	449	800	533	825	462
4	1017	678	1124	587	1027	684	1124	593	1039	693	1124	600	1060	707	1124	612
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	506	825	438	768	511	825	443	778	518	825	449	800	533	825	462
4	1017	678	1124	587	1027	684	1124	593	1039	693	1124	600	1060	707	1124	612
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	506	825	438	768	511	825	443	778	518	825	449	800	533	825	462
4	1017	678	1124	587	1027	684	1124	593	1039	693	1124	600	1060	707	1124	612
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	506	825	438	768	511	825	443	778	518	825	449	800	533	825	462
4	1017	678	1124	587	1027	684	1124	593	1039	693	1124	600	1060	707	1124	612
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	506	825	438	768	511	825	443	778	518	825	449	800	533	825	462
4	1017	678	1124	587	1027	684	1124	593	1039	693	1124	600	1060	707	1124	612
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	506	825	438	768	511	825	443	778	518	825	449	800	533	825	462
4	1017	678	1124	587	1027	684	1124	593	1039	693	1124	600	1060	707	1124	612
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	506	825	438	768	511	825	443	778	518	825	449	800	533	825	462
4	1017	678	1124	587	1027	684	1124	593	1039	693	1124	600	1060	707	1124	612

- Please check page "68" for the cover selection.

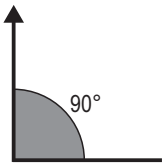
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

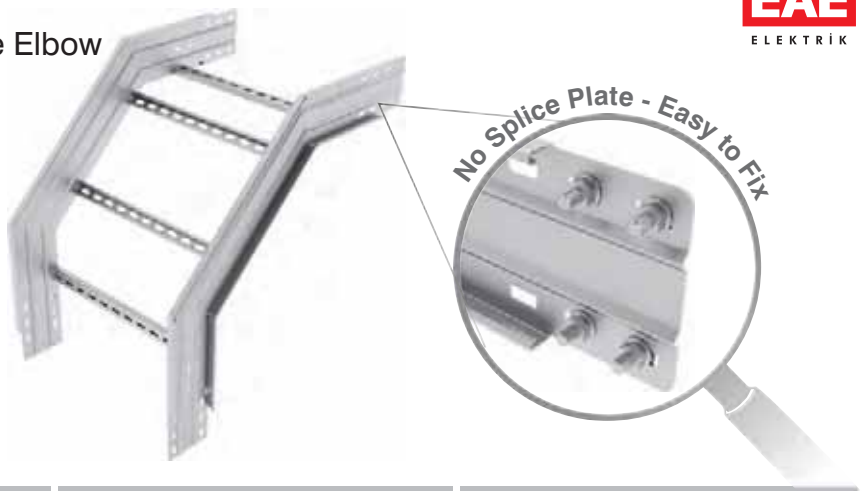
ELINE
KCAOG

▶▶Fittings DD90 Vertical Outside Elbow

DD90

Fitting shown for illustration purposes only. The rung layout shown is typical and will vary on each fitting, depending on width and radius.





Width (mm)	Radius (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	300	↕ KCA OG150/DD90/Δ/300	3068349	3068358	3068367		4,613	5,573	6,426	
	450	↕ KCA OG150/DD90/Δ/450	3068489	3068498	3068507		6,181	7,417	8,522	
	600	↕ KCA OG150/DD90/Δ/600	3068629	3068638	3068647		7,834	9,295	10,615	
	900	↕ KCA OG150/DD90/Δ/900	3068769	3068778	3068787		10,838	12,825	14,572	
200	300	↕ KCA OG200/DD90/Δ/300	3068350	3068359	3068368	3068376	4,737	5,696	6,549	8,472
	450	↕ KCA OG200/DD90/Δ/450	3068490	3068499	3068508	3068516	6,366	7,602	8,707	11,058
	600	↕ KCA OG200/DD90/Δ/600	3068630	3068639	3068648	3068656	8,081	9,541	10,861	13,598
	900	↕ KCA OG200/DD90/Δ/900	3068770	3068779	3068788	3068796	11,146	13,133	14,880	18,519
300	300	↕ KCA OG300/DD90/Δ/300	3068351	3068360	3068369	3068377	4,987	5,947	7,180	9,103
	450	↕ KCA OG300/DD90/Δ/450	3068491	3068500	3068509	3068517	6,742	7,978	9,083	11,435
	600	↕ KCA OG300/DD90/Δ/600	3068631	3068640	3068649	3068657	8,582	10,043	11,363	14,100
	900	↕ KCA OG300/DD90/Δ/900	3068771	3068780	3068789	3068797	11,773	13,760	15,507	19,146
450	300	↕ KCA OG450/DD90/Δ/300	3068352	3068361	3068370	3068378	5,359	6,318	7,737	9,660
	450	↕ KCA OG450/DD90/Δ/450	3068492	3068501	3068510	3068518	7,300	8,536	9,640	11,992
	600	↕ KCA OG450/DD90/Δ/600	3068632	3068641	3068650	3068658	9,326	10,787	12,107	14,843
	900	↕ KCA OG450/DD90/Δ/900	3068772	3068781	3068790	3068798	12,703	14,689	16,436	20,075
600	300	↕ KCA OG600/DD90/Δ/300	3068353	3068362	3068371	3068379	5,733	6,692	8,298	10,221
	450	↕ KCA OG600/DD90/Δ/450	3068493	3068502	3068511	3068519	7,861	9,097	10,201	12,553
	600	↕ KCA OG600/DD90/Δ/600	3068633	3068642	3068651	3068659	10,074	11,535	12,855	15,591
	900	↕ KCA OG600/DD90/Δ/900	3068773	3068782	3068791	3068799	13,638	15,624	17,371	21,010
750	300	↕ KCA OG750/DD90/Δ/300	3068354	3068363	3068372	3068380	7,845	8,804	9,658	11,581
	450	↕ KCA OG750/DD90/Δ/450	3068494	3068503	3068512	3068520	9,220	10,457	11,561	13,913
	600	↕ KCA OG750/DD90/Δ/600	3068634	3068643	3068652	3068660	11,887	13,347	14,667	17,404
	900	↕ KCA OG750/DD90/Δ/900	3068774	3068783	3068792	3068800	15,904	17,890	19,637	23,276
900	300	↕ KCA OG900/DD90/Δ/300	3068355	3068364	3068373	3068381	8,565	9,524	10,377	12,300
	450	↕ KCA OG900/DD90/Δ/450	3068495	3068504	3068513	3068521	9,940	11,176	12,280	14,632
	600	↕ KCA OG900/DD90/Δ/600	3068635	3068644	3068653	3068661	12,846	14,307	15,627	18,363
	900	↕ KCA OG900/DD90/Δ/900	3068775	3068784	3068793	3068801	17,103	19,089	20,836	24,475
1000	300	↕ KCA OG1000/DD90/Δ/300	3068356	3068365	3068374	3068382	9,043	10,002	10,856	12,779
	450	↕ KCA OG1000/DD90/Δ/450	3068496	3068505	3068514	3068522	10,418	11,655	12,759	15,111
	600	↕ KCA OG1000/DD90/Δ/600	3068636	3068645	3068654	3068662	13,484	14,945	16,265	19,001
	900	↕ KCA OG1000/DD90/Δ/900	3068776	3068785	3068794	3068802	17,900	19,887	21,634	25,273
1100	300	↕ KCA OG1100/DD90/Δ/300	3068357	3068366	3068375	3068383	9,522	10,481	11,334	13,257
	450	↕ KCA OG1100/DD90/Δ/450	3068497	3068506	3068515	3068523	10,897	12,133	13,237	15,589
	600	↕ KCA OG1100/DD90/Δ/600	3068637	3068646	3068655	3068663	14,122	15,583	16,903	19,639
	900	↕ KCA OG1100/DD90/Δ/900	3068777	3068786	3068795	3068803	18,698	20,684	22,431	26,070

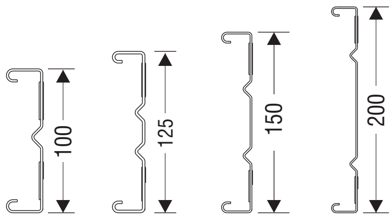
- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

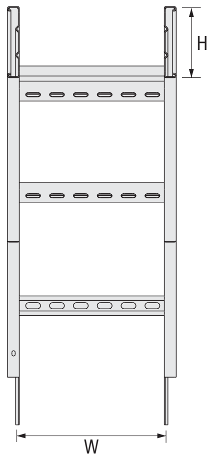
ELINE
KCAOG

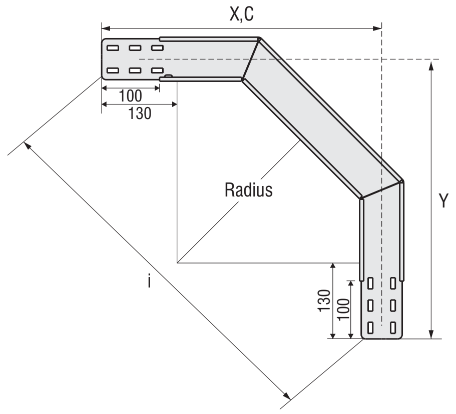
▶▶ Fittings DD90 Vertical Outside Elbow

Siderail:



2 mm Standard thickness





No. of Rungs	↕100 / Dimensions (mm)				↕125 / Dimensions (mm)				↕150 / Dimensions (mm)				↕200 / Dimensions (mm)			
	X	Y	i	C	X	Y	i	C	X	Y	i	C	X	Y	i	C
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129

- Please check page “69” for the cover selection.

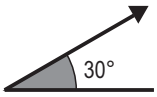
- Please indicate order code in your orders.
- Please contact us for special modules.
- Material weights may vary by ± 10%

ELINE
KCAOG

▶▶Fittings ID30 Vertical Inside Elbow

ID30

Fitting shown for illustration purposes only. The rung layout shown is typical and will vary on each fitting, depending on width and radius.



Width (mm)	Radius (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	300	↕ KCA OG150/ID30/Δ/300	3067684	3067693	3067702		2,151	2,687	3,145	
	450	↕ KCA OG150/ID30/Δ/450	3067824	3067833	3067842		2,615	3,185	3,682	
	600	↕ KCA OG150/ID30/Δ/600	3067964	3067973	3067982		2,973	3,603	4,282	
	900	↕ KCA OG150/ID30/Δ/900	3068104	3068113	3068122		4,245	5,175	5,488	
200	300	↕ KCA OG200/ID30/Δ/300	3067685	3067694	3067703	3067711	2,212	2,749	3,207	4,170
	450	↕ KCA OG200/ID30/Δ/450	3067825	3067834	3067843	3067851	2,676	3,246	3,743	4,806
	600	↕ KCA OG200/ID30/Δ/600	3067965	3067974	3067983	3067991	3,035	3,664	4,344	5,613
	900	↕ KCA OG200/ID30/Δ/900	3068105	3068114	3068123	3068131	4,430	5,360	5,673	7,472
300	300	↕ KCA OG300/ID30/Δ/300	3067686	3067695	3067704	3067712	2,338	2,874	3,332	4,296
	450	↕ KCA OG300/ID30/Δ/450	3067826	3067835	3067844	3067852	2,802	3,372	3,869	4,931
	600	↕ KCA OG300/ID30/Δ/600	3067966	3067975	3067984	3067992	3,160	3,790	4,469	5,739
	900	↕ KCA OG300/ID30/Δ/900	3068106	3068115	3068124	3068132	4,806	5,736	6,049	7,849
450	300	↕ KCA OG450/ID30/Δ/300	3067687	3067696	3067705	3067713	2,523	3,060	3,518	4,481
	450	↕ KCA OG450/ID30/Δ/450	3067827	3067836	3067845	3067853	2,988	3,557	4,055	5,117
	600	↕ KCA OG450/ID30/Δ/600	3067967	3067976	3067985	3067993	3,346	3,975	4,655	5,925
	900	↕ KCA OG450/ID30/Δ/900	3068107	3068116	3068125	3068133	5,364	6,294	6,607	8,406
600	300	↕ KCA OG600/ID30/Δ/300	3067688	3067697	3067706	3067714	2,710	3,247	3,705	4,668
	450	↕ KCA OG600/ID30/Δ/450	3067828	3067837	3067846	3067854	3,175	3,744	4,242	5,304
	600	↕ KCA OG600/ID30/Δ/600	3067968	3067977	3067986	3067994	3,533	4,162	4,842	6,112
	900	↕ KCA OG600/ID30/Δ/900	3068108	3068117	3068126	3068134	5,925	6,855	7,168	8,967
750	300	↕ KCA OG750/ID30/Δ/300	3067689	3067698	3067707	3067715	3,164	3,700	4,158	5,122
	450	↕ KCA OG750/ID30/Δ/450	3067829	3067838	3067847	3067855	3,628	4,198	4,695	5,757
	600	↕ KCA OG750/ID30/Δ/600	3067969	3067978	3067987	3067995	3,986	4,616	5,295	6,565
	900	↕ KCA OG750/ID30/Δ/900	3068109	3068118	3068127	3068135	7,284	8,214	8,527	10,327
900	300	↕ KCA OG900/ID30/Δ/300	3067690	3067699	3067708	3067716	3,403	3,940	4,398	5,361
	450	↕ KCA OG900/ID30/Δ/450	3067830	3067839	3067848	3067856	3,868	4,437	4,935	5,997
	600	↕ KCA OG900/ID30/Δ/600	3067970	3067979	3067988	3067996	4,226	4,855	5,535	6,805
	900	↕ KCA OG900/ID30/Δ/900	3068110	3068119	3068128	3068136	8,004	8,934	9,247	11,046
1000	300	↕ KCA OG1000/ID30/Δ/300	3067691	3067700	3067709	3067717	3,563	4,100	4,557	5,521
	450	↕ KCA OG1000/ID30/Δ/450	3067831	3067840	3067849	3067857	4,027	4,597	5,094	6,157
	600	↕ KCA OG1000/ID30/Δ/600	3067971	3067980	3067989	3067997	4,386	5,015	5,695	6,964
	900	↕ KCA OG1000/ID30/Δ/900	3068111	3068120	3068129	3068137	8,482	9,412	9,725	11,525
1100	300	↕ KCA OG1100/ID30/Δ/300	3067692	3067701	3067710	3067718	3,722	4,259	4,717	5,680
	450	↕ KCA OG1100/ID30/Δ/450	3067832	3067841	3067850	3067858	4,187	4,756	5,254	6,316
	600	↕ KCA OG1100/ID30/Δ/600	3067972	3067981	3067990	3067998	4,545	5,174	5,854	7,124
	900	↕ KCA OG1100/ID30/Δ/900	3068112	3068121	3068130	3068138	9,093	9,891	10,204	12,003

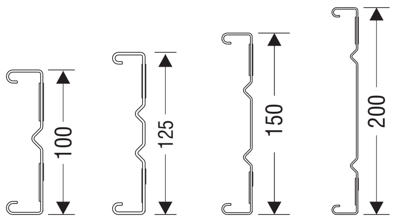
- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

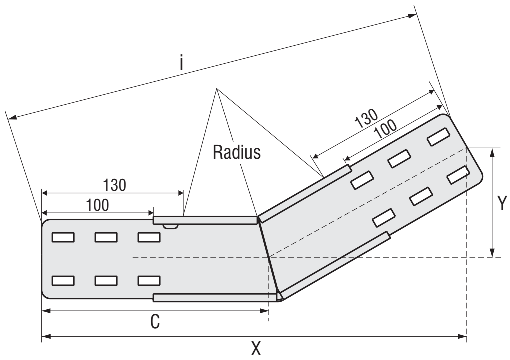
ELINE
KCAOG

▶▶ Fittings ID30 Vertical Inside Elbow

Siderail:



2 mm Standard thickness



No. of Rungs	↕100 / Dimensions (mm)				↕125 / Dimensions (mm)				↕150 / Dimensions (mm)				↕200 / Dimensions (mm)			
	X	Y	i	C	X	Y	i	C	X	Y	i	C	X	Y	i	C
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398
1	417	112	406	224	423	113	406	226	429	115	406	230	441	118	406	236
1	494	132	485	264	500	134	485	268	505	135	485	270	518	138	485	278
1	567	152	561	304	573	154	561	307	579	155	561	310	592	158	561	317
3	717	192	717	384	724	194	717	388	729	196	717	390	742	198	717	398

- Please check page “70” for the cover selection.

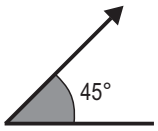
- Please indicate order code in your orders.
- Please contact us for special modules.
- Material weights may vary by ± 10%

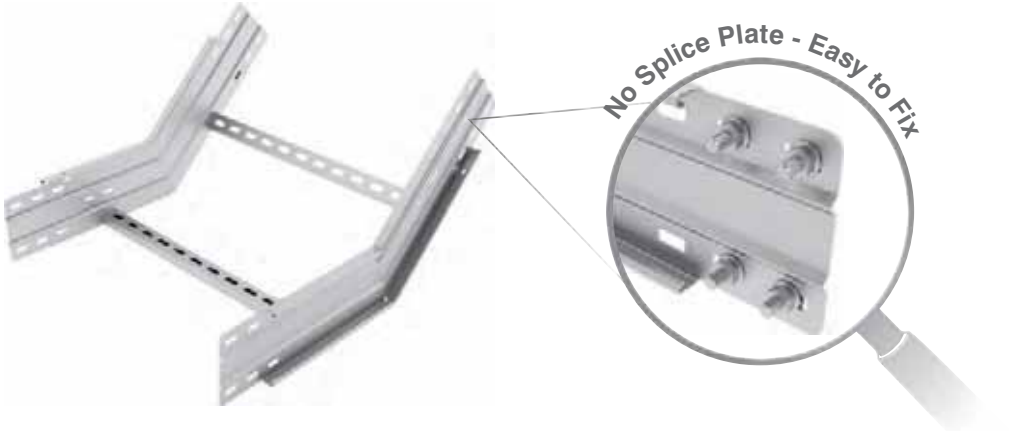
ELINE
KCAOG

▶▶Fittings ID45 Vertical Inside Elbow

ID45

Fitting shown for illustration purposes only. The rung layout shown is typical and will vary on each fitting, depending on width and radius.





Width (mm)	Radius (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	300	↕ KCA OG150/ID45/Δ/300	3067719	3067728	3067737		2,723	3,325	3,880	
	450	↕ KCA OG150/ID45/Δ/450	3067859	3067868	3067877		3,639	4,369	5,036	
	600	↕ KCA OG150/ID45/Δ/600	3067999	3068008	3068017		4,301	5,203	6,004	
	900	↕ KCA OG150/ID45/Δ/900	3068139	3068148	3068157		5,970	7,076	8,060	
200	300	↕ KCA OG200/ID45/Δ/300	3067720	3067729	3067738	3067746	2,784	3,387	3,941	5,118
	450	↕ KCA OG200/ID45/Δ/450	3067860	3067869	3067878	3067886	3,762	4,492	5,159	6,554
	600	↕ KCA OG200/ID45/Δ/600	3068000	3068009	3068018	3068026	4,424	5,326	6,127	7,700
	900	↕ KCA OG200/ID45/Δ/900	3068140	3068149	3068158	3068166	6,155	7,261	8,245	10,280
300	300	↕ KCA OG300/ID45/Δ/300	3067721	3067730	3067739	3067747	2,910	3,512	4,067	5,244
	450	↕ KCA OG300/ID45/Δ/450	3067861	3067870	3067879	3067887	4,013	4,743	5,410	6,805
	600	↕ KCA OG300/ID45/Δ/600	3068001	3068010	3068019	3068027	4,675	5,577	6,378	7,951
	900	↕ KCA OG300/ID45/Δ/900	3068141	3068150	3068159	3068167	6,531	7,637	8,621	10,656
450	300	↕ KCA OG450/ID45/Δ/300	3067722	3067731	3067740	3067748	3,095	3,698	4,253	5,430
	450	↕ KCA OG450/ID45/Δ/450	3067862	3067871	3067880	3067888	4,385	5,115	5,782	7,176
	600	↕ KCA OG450/ID45/Δ/600	3068002	3068011	3068020	3068028	5,047	5,949	6,750	8,323
	900	↕ KCA OG450/ID45/Δ/900	3068142	3068151	3068160	3068168	7,088	8,195	9,178	11,213
600	300	↕ KCA OG600/ID45/Δ/300	3067723	3067732	3067741	3067749	3,282	3,885	4,440	5,617
	450	↕ KCA OG600/ID45/Δ/450	3067863	3067872	3067881	3067889	4,759	5,489	6,156	7,550
	600	↕ KCA OG600/ID45/Δ/600	3068003	3068012	3068021	3068029	5,421	6,323	7,124	8,697
	900	↕ KCA OG600/ID45/Δ/900	3068143	3068152	3068161	3068169	7,649	8,756	9,739	11,774
750	300	↕ KCA OG750/ID45/Δ/300	3067724	3067733	3067742	3067750	3,736	4,338	4,893	6,070
	450	↕ KCA OG750/ID45/Δ/450	3067864	3067873	3067882	3067890	5,665	6,395	7,062	8,457
	600	↕ KCA OG750/ID45/Δ/600	3068004	3068013	3068022	3068030	6,327	7,229	8,030	9,603
	900	↕ KCA OG750/ID45/Δ/900	3068144	3068153	3068162	3068170	9,009	10,116	11,099	13,134
900	300	↕ KCA OG900/ID45/Δ/300	3067725	3067734	3067743	3067751	3,975	4,578	5,133	6,310
	450	↕ KCA OG900/ID45/Δ/450	3067865	3067874	3067883	3067891	6,145	6,875	7,542	8,936
	600	↕ KCA OG900/ID45/Δ/600	3068005	3068014	3068023	3068031	6,807	7,709	8,510	10,083
	900	↕ KCA OG900/ID45/Δ/900	3068145	3068154	3068163	3068171	9,728	10,835	11,818	13,853
1000	300	↕ KCA OG1000/ID45/Δ/300	3067726	3067735	3067744	3067752	4,135	4,738	5,292	6,469
	450	↕ KCA OG1000/ID45/Δ/450	3067866	3067875	3067884	3067892	6,464	7,194	7,861	9,255
	600	↕ KCA OG1000/ID45/Δ/600	3068006	3068015	3068024	3068032	7,126	8,028	8,829	10,402
	900	↕ KCA OG1000/ID45/Δ/900	3068146	3068155	3068164	3068172	10,207	11,314	12,297	14,332
1100	300	↕ KCA OG1100/ID45/Δ/300	3067727	3067736	3067745	3067753	4,294	4,897	5,452	6,629
	450	↕ KCA OG1100/ID45/Δ/450	3067867	3067876	3067885	3067893	6,783	7,513	8,180	9,574
	600	↕ KCA OG1100/ID45/Δ/600	3068007	3068016	3068025	3068033	7,445	8,347	9,148	10,721
	900	↕ KCA OG1100/ID45/Δ/900	3068147	3068156	3068165	3068173	10,685	11,792	12,775	14,810

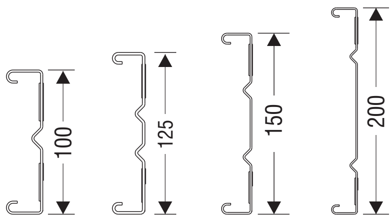
- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

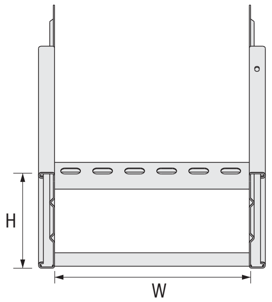
ELINE
KCAOG

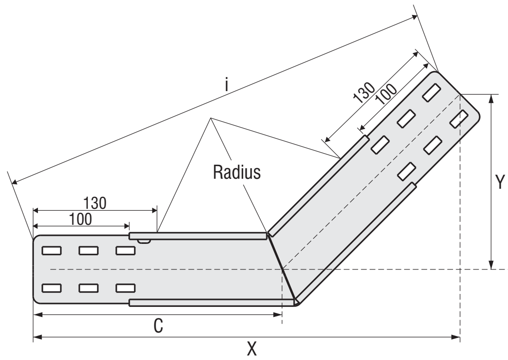
▶▶ Fittings ID45 Vertical Inside Elbow

Siderail:



2 mm Standard thickness





No. of Rungs	↕100 / Dimensions (mm)				↕125 / Dimensions (mm)				↕150 / Dimensions (mm)				↕200 / Dimensions (mm)			
	X	Y	i	C	X	Y	i	C	X	Y	i	C	X	Y	i	C
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543
1	468	193	468	274	477	198	468	279	485	201	468	284	503	208	468	295
2	575	238	585	337	584	242	585	342	593	245	585	347	611	253	585	358
2	680	282	698	398	690	286	699	404	698	289	699	409	716	297	699	419
3	893	370	928	523	902	373	928	528	910	377	928	533	928	384	928	543

- Please check page "71" for the cover selection.

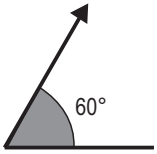
- Please indicate order code in your orders.
- Please contact us for special modules.
- Material weights may vary by ± 10%

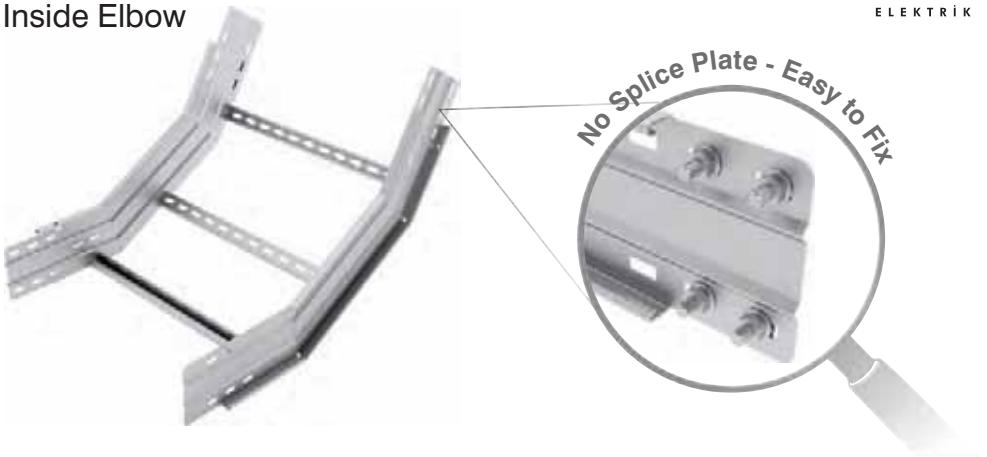
ELINE
KCAOG

▶▶Fittings ID60 Vertical Inside Elbow

ID60

Fitting shown for illustration purposes only. The rung layout shown is typical and will vary on each fitting, depending on width and radius.





Width (mm)	Radius (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	300	↕ KCA OG150/ID60/Δ/300	3067754	3067763	3067772		3,408	4,134	4,781	
	450	↕ KCA OG150/ID60/Δ/450	3067894	3067903	3067912		4,343	5,205	5,991	
	600	↕ KCA OG150/ID60/Δ/600	3068034	3068043	3068052		5,453	6,476	7,400	
	900	↕ KCA OG150/ID60/Δ/900	3068174	3068183	3068192		7,480	8,846	9,895	
200	300	↕ KCA OG200/ID60/Δ/300	3067755	3067764	3067773	3067781	3,531	4,257	4,904	6,307
	450	↕ KCA OG200/ID60/Δ/450	3067895	3067904	3067913	3067921	4,466	5,328	6,114	7,795
	600	↕ KCA OG200/ID60/Δ/600	3068035	3068044	3068053	3068061	5,638	6,661	7,585	9,543
	900	↕ KCA OG200/ID60/Δ/900	3068175	3068184	3068193	3068201	7,726	9,093	10,333	12,877
300	300	↕ KCA OG300/ID60/Δ/300	3067756	3067765	3067774	3067782	3,782	4,508	5,155	6,558
	450	↕ KCA OG300/ID60/Δ/450	3067896	3067905	3067914	3067922	4,717	5,579	6,365	8,045
	600	↕ KCA OG300/ID60/Δ/600	3068036	3068045	3068054	3068062	6,014	7,037	7,961	9,919
	900	↕ KCA OG300/ID60/Δ/900	3068176	3068185	3068194	3068202	8,228	9,594	10,835	13,378
450	300	↕ KCA OG450/ID60/Δ/300	3067757	3067766	3067775	3067783	4,154	4,880	5,526	6,930
	450	↕ KCA OG450/ID60/Δ/450	3067897	3067906	3067915	3067923	5,089	5,951	6,736	8,417
	600	↕ KCA OG450/ID60/Δ/600	3068037	3068046	3068055	3068063	6,571	7,594	8,518	10,476
	900	↕ KCA OG450/ID60/Δ/900	3068177	3068186	3068195	3068203	8,972	10,338	11,579	14,122
600	300	↕ KCA OG600/ID60/Δ/300	3067758	3067767	3067776	3067784	4,528	5,254	5,900	7,304
	450	↕ KCA OG600/ID60/Δ/450	3067898	3067907	3067916	3067924	5,463	6,325	7,110	8,791
	600	↕ KCA OG600/ID60/Δ/600	3068038	3068047	3068056	3068064	7,132	8,155	9,079	11,037
	900	↕ KCA OG600/ID60/Δ/900	3068178	3068187	3068196	3068204	9,720	11,086	12,327	14,870
750	300	↕ KCA OG750/ID60/Δ/300	3067759	3067768	3067777	3067785	5,434	6,160	6,807	8,210
	450	↕ KCA OG750/ID60/Δ/450	3067899	3067908	3067917	3067925	6,369	7,231	8,017	9,698
	600	↕ KCA OG750/ID60/Δ/600	3068039	3068048	3068057	3068065	8,492	9,515	10,439	12,397
	900	↕ KCA OG750/ID60/Δ/900	3068179	3068188	3068197	3068205	11,532	12,899	14,139	16,683
900	300	↕ KCA OG900/ID60/Δ/300	3067760	3067769	3067778	3067786	5,914	6,640	7,286	8,690
	450	↕ KCA OG900/ID60/Δ/450	3067900	3067909	3067918	3067926	6,849	7,711	8,496	10,177
	600	↕ KCA OG900/ID60/Δ/600	3068040	3068049	3068058	3068066	9,211	10,234	11,158	13,116
	900	↕ KCA OG900/ID60/Δ/900	3068180	3068189	3068198	3068206	12,492	13,858	15,095	17,642
1000	300	↕ KCA OG1000/ID60/Δ/300	3067761	3067770	3067779	3067787	6,233	6,959	7,605	9,009
	450	↕ KCA OG1000/ID60/Δ/450	3067901	3067910	3067919	3067927	7,168	8,030	8,815	10,496
	600	↕ KCA OG1000/ID60/Δ/600	3068041	3068050	3068059	3068067	9,690	10,713	11,637	13,595
	900	↕ KCA OG1000/ID60/Δ/900	3068181	3068190	3068199	3068207	13,130	14,496	15,737	18,280
1100	300	↕ KCA OG1100/ID60/Δ/300	3067762	3067771	3067780	3067788	6,552	7,278	7,924	9,328
	450	↕ KCA OG1100/ID60/Δ/450	3067902	3067911	3067920	3067928	7,487	8,349	9,134	10,815
	600	↕ KCA OG1100/ID60/Δ/600	3068042	3068051	3068060	3068068	10,168	11,191	12,115	14,073
	900	↕ KCA OG1100/ID60/Δ/900	3068182	3068191	3068200	3068208	13,768	15,134	16,375	18,918

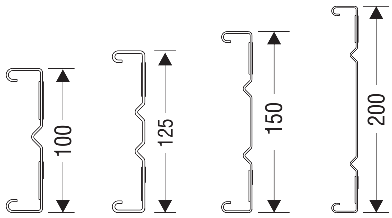
- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

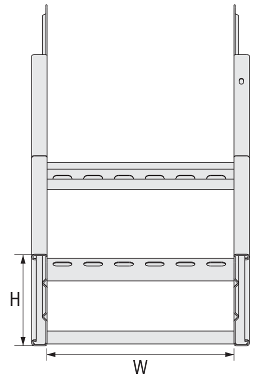
ELINE
KCAOG

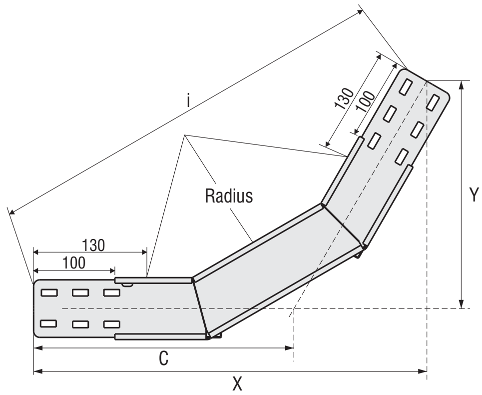
▶▶ Fittings ID60 Vertical Inside Elbow

Siderail:



2 mm Standard thickness





No. of Rungs	↕100 / Dimensions (mm)				↕125 / Dimensions (mm)				↕150 / Dimensions (mm)				↕200 / Dimensions (mm)			
	X	Y	i	C	X	Y	i	C	X	Y	i	C	X	Y	i	C
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	438	825	506	768	443	825	511	778	449	825	518	800	462	825	533
4	1017	587	1124	678	1027	593	1124	684	1039	600	1124	693	1060	612	1124	707
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	438	825	506	768	443	825	511	778	449	825	518	800	462	825	533
4	1017	587	1124	678	1027	593	1124	684	1039	600	1124	693	1060	612	1124	707
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	438	825	506	768	443	825	511	778	449	825	518	800	462	825	533
4	1017	587	1124	678	1027	593	1124	684	1039	600	1124	693	1060	612	1124	707
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	438	825	506	768	443	825	511	778	449	825	518	800	462	825	533
4	1017	587	1124	678	1027	593	1124	684	1039	600	1124	693	1060	612	1124	707
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	438	825	506	768	443	825	511	778	449	825	518	800	462	825	533
4	1017	587	1124	678	1027	593	1124	684	1039	600	1124	693	1060	612	1124	707
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	438	825	506	768	443	825	511	778	449	825	518	800	462	825	533
4	1017	587	1124	678	1027	593	1124	684	1039	600	1124	693	1060	612	1124	707
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	438	825	506	768	443	825	511	778	449	825	518	800	462	825	533
4	1017	587	1124	678	1027	593	1124	684	1039	600	1124	693	1060	612	1124	707
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	438	825	506	768	443	825	511	778	449	825	518	800	462	825	533
4	1017	587	1124	678	1027	593	1124	684	1039	600	1124	693	1060	612	1124	707
2	500	289	526	333	509	293	526	339	520	300	526	346	542	312	526	361
2	629	363	676	419	639	368	676	426	648	374	676	432	671	387	676	447
3	758	438	825	506	768	443	825	511	778	449	825	518	800	462	825	533
4	1017	587	1124	678	1027	593	1124	684	1039	600	1124	693	1060	612	1124	707

- Please check page "72" for the cover selection.

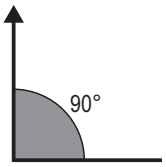
- Please indicate order code in your orders.
- Please contact us for special modules.
- Material weights may vary by ± 10%

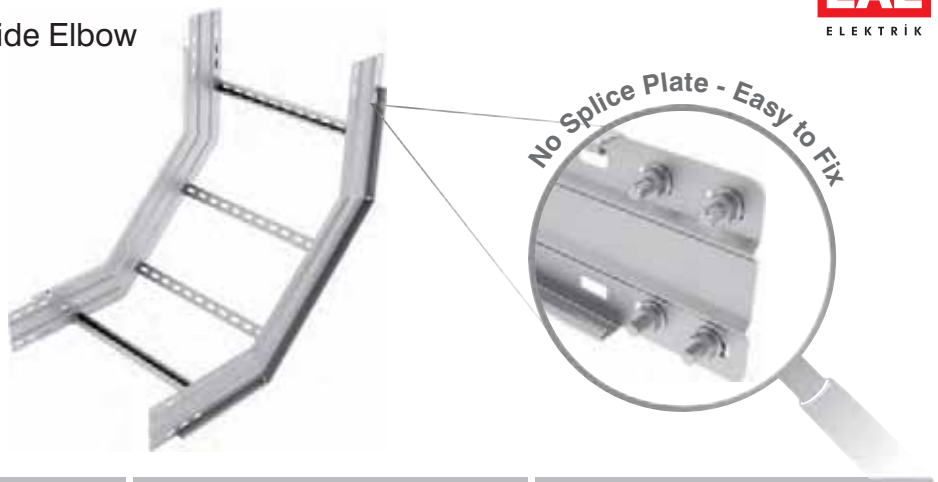
ELINE
KCAOG

▶▶Fittings ID90 Vertical Inside Elbow

ID90

Fitting shown for illustration purposes only. The rung layout shown is typical and will vary on each fitting, depending on width and radius.





Width (mm)	Radius (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	300	↕ KCA OG150/ID90/Δ/300	3067789	3067798	3067807		4,613	5,573	6,426	
	450	↕ KCA OG150/ID90/Δ/450	3067929	3067938	3067947		6,181	7,417	8,522	
	600	↕ KCA OG150/ID90/Δ/600	3068069	3068078	3068087		7,834	9,295	10,615	
	900	↕ KCA OG150/ID90/Δ/900	3068209	3068218	3068227		10,838	12,825	14,572	
200	300	↕ KCA OG200/ID90/Δ/300	3067790	3067799	3067808	3067816	4,737	5,696	6,549	8,472
	450	↕ KCA OG200/ID90/Δ/450	3067930	3067939	3067948	3067956	6,366	7,602	8,707	11,058
	600	↕ KCA OG200/ID90/Δ/600	3068070	3068079	3068088	3068096	8,081	9,541	10,861	13,598
	900	↕ KCA OG200/ID90/Δ/900	3068210	3068219	3068228	3068236	11,146	13,133	14,880	18,519
300	300	↕ KCA OG300/ID90/Δ/300	3067791	3067800	3067809	3067817	4,987	5,947	7,180	9,103
	450	↕ KCA OG300/ID90/Δ/450	3067931	3067940	3067949	3067957	6,742	7,978	9,083	11,435
	600	↕ KCA OG300/ID90/Δ/600	3068071	3068080	3068089	3068097	8,582	10,043	11,363	14,100
	900	↕ KCA OG300/ID90/Δ/900	3068211	3068220	3068229	3068237	11,773	13,760	15,507	19,146
450	300	↕ KCA OG450/ID90/Δ/300	3067792	3067801	3067810	3067818	5,359	6,318	7,737	9,660
	450	↕ KCA OG450/ID90/Δ/450	3067932	3067941	3067950	3067958	7,300	8,536	9,640	11,992
	600	↕ KCA OG450/ID90/Δ/600	3068072	3068081	3068090	3068098	9,326	10,787	12,107	14,843
	900	↕ KCA OG450/ID90/Δ/900	3068212	3068221	3068230	3068238	12,703	14,689	16,436	20,075
600	300	↕ KCA OG600/ID90/Δ/300	3067793	3067802	3067811	3067819	5,733	6,692	8,298	10,221
	450	↕ KCA OG600/ID90/Δ/450	3067933	3067942	3067951	3067959	7,861	9,097	10,201	12,553
	600	↕ KCA OG600/ID90/Δ/600	3068073	3068082	3068091	3068099	10,074	11,535	12,855	15,591
	900	↕ KCA OG600/ID90/Δ/900	3068213	3068222	3068231	3068239	13,638	15,624	17,371	21,010
750	300	↕ KCA OG750/ID90/Δ/300	3067794	3067803	3067812	3067820	7,845	8,804	9,658	11,581
	450	↕ KCA OG750/ID90/Δ/450	3067934	3067943	3067952	3067960	9,220	10,457	11,561	13,913
	600	↕ KCA OG750/ID90/Δ/600	3068074	3068083	3068092	3068100	11,887	13,347	14,667	17,404
	900	↕ KCA OG750/ID90/Δ/900	3068214	3068223	3068232	3068240	15,904	17,890	19,637	23,276
900	300	↕ KCA OG900/ID90/Δ/300	3067795	3067804	3067813	3067821	8,565	9,524	10,377	12,300
	450	↕ KCA OG900/ID90/Δ/450	3067935	3067944	3067953	3067961	9,940	11,176	12,280	14,632
	600	↕ KCA OG900/ID90/Δ/600	3068075	3068084	3068093	3068101	12,846	14,307	15,627	18,363
	900	↕ KCA OG900/ID90/Δ/900	3068215	3068224	3068233	3068241	17,103	19,089	20,836	24,475
1000	300	↕ KCA OG1000/ID90/Δ/300	3067796	3067805	3067814	3067822	9,043	10,002	10,856	12,779
	450	↕ KCA OG1000/ID90/Δ/450	3067936	3067945	3067954	3067962	10,418	11,655	12,759	15,111
	600	↕ KCA OG1000/ID90/Δ/600	3068076	3068085	3068094	3068102	13,484	14,945	16,265	19,001
	900	↕ KCA OG1000/ID90/Δ/900	3068216	3068225	3068234	3068242	17,900	19,887	21,634	25,273
1100	300	↕ KCA OG1100/ID90/Δ/300	3067797	3067806	3067815	3067823	9,522	10,481	11,334	13,257
	450	↕ KCA OG1100/ID90/Δ/450	3067937	3067946	3067955	3067963	10,897	12,133	13,237	15,589
	600	↕ KCA OG1100/ID90/Δ/600	3068077	3068086	3068095	3068103	14,122	15,583	16,903	19,639
	900	↕ KCA OG1100/ID90/Δ/900	3068217	3068226	3068235	3068243	18,698	20,684	22,431	26,070

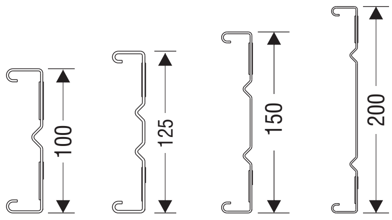
- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

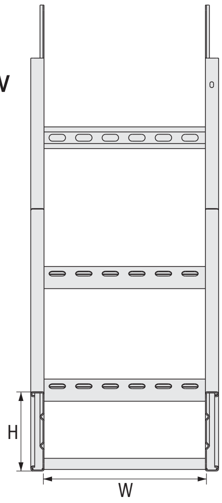
ELINE
KCAOG

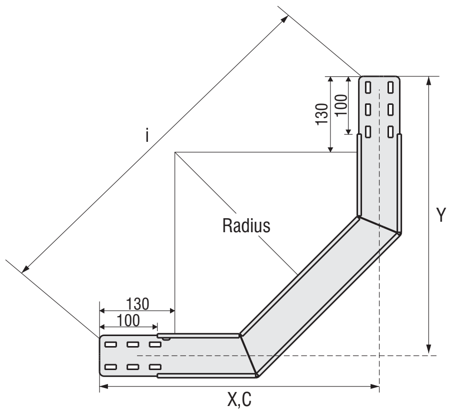
▶▶ Fittings ID90 Vertical Inside Elbow

Siderail:



2 mm Standard thickness





No. of Rungs	↕100 / Dimensions (mm)				↕125 / Dimensions (mm)				↕150 / Dimensions (mm)				↕200 / Dimensions (mm)			
	X	Y	i	C	X	Y	i	C	X	Y	i	C	X	Y	i	C
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129
2	482	482	610	482	493	493	610	493	504	504	607	504	528	528	607	528
3	629	629	820	629	642	642	820	642	653	653	820	653	680	680	820	680
4	780	780	1032	780	792	792	1032	792	803	803	1030	803	826	826	1028	826
5	1077	1077	1453	1077	1092	1092	1456	1092	1104	1104	1456	1104	1129	1129	1456	1129

- Please check page “73” for the cover selection.

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶ Fittings YT Horizontal Tee

YT

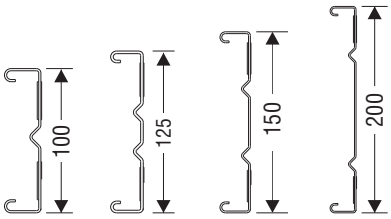
Width (mm)	Radius (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	300	↕ KCA OG150/YT/Δ/300	3068804	3068813	3068822		8,616	9,805	11,026	
	450	↕ KCA OG150/YT/Δ/450	3068839	3068848	3068857		11,091	12,879	14,445	
	600	↕ KCA OG150/YT/Δ/600	3068874	3068883	3068892		13,614	15,840	17,667	
	900	↕ KCA OG150/YT/Δ/900	3068909	3068918	3068927		18,330	22,632	24,709	
200	300	↕ KCA OG200/YT/Δ/300	3068805	3068814	3068823	3068831	9,232	10,662	11,904	14,843
	450	↕ KCA OG200/YT/Δ/450	3068840	3068849	3068858	3068866	11,606	13,415	14,986	18,128
	600	↕ KCA OG200/YT/Δ/600	3068875	3068884	3068893	3068901	14,191	16,440	18,288	22,097
	900	↕ KCA OG200/YT/Δ/900	3068910	3068919	3068928	3068936	20,477	23,438	26,008	31,154
300	300	↕ KCA OG300/YT/Δ/300	3068806	3068815	3068824	3068832	10,270	11,744	13,028	15,826
	450	↕ KCA OG300/YT/Δ/450	3068841	3068850	3068859	3068867	13,113	14,972	16,587	19,815
	600	↕ KCA OG300/YT/Δ/600	3068876	3068885	3068894	3068902	15,301	17,774	19,676	15,085
	900	↕ KCA OG300/YT/Δ/900	3068911	3068920	3068929	3068937	22,039	25,050	27,664	32,896
450	300	↕ KCA OG450/YT/Δ/300	3068807	3068816	3068825	3068833	11,789	13,334	14,684	17,375
	450	↕ KCA OG450/YT/Δ/450	3068842	3068851	3068860	3068868	14,853	16,784	18,464	21,823
	600	↕ KCA OG450/YT/Δ/600	3068877	3068886	3068895	3068903	17,967	20,346	22,303	26,327
	900	↕ KCA OG450/YT/Δ/900	3068912	3068921	3068930	3068938	24,307	27,424	30,073	35,433
600	300	↕ KCA OG600/YT/Δ/300	3068808	3068817	3068826	3068834	14,177	15,803	17,217	20,040
	450	↕ KCA OG600/YT/Δ/450	3068843	3068852	3068861	3068869	17,426	19,429	21,174	24,662
	600	↕ KCA OG600/YT/Δ/600	3068878	3068887	3068896	3068904	19,863	22,315	24,335	28,490
	900	↕ KCA OG600/YT/Δ/900	3068913	3068922	3068931	3068939	27,730	30,938	33,724	40,733
750	300	↕ KCA OG750/YT/Δ/300	3068809	3068818	3068827	3068835	17,923	19,621	21,100	24,055
	450	↕ KCA OG750/YT/Δ/450	3068844	3068853	3068862	3068870	21,693	23,772	25,582	29,200
	600	↕ KCA OG750/YT/Δ/600	3068879	3068888	3068897	3068905	25,806	29,445	30,411	34,695
	900	↕ KCA OG750/YT/Δ/900	3068914	3068923	3068932	3068940	33,447	36,680	39,488	45,108
900	300	↕ KCA OG900/YT/Δ/300	3068810	3068819	3068828	3068836	21,569	23,334	24,879	27,958
	450	↕ KCA OG900/YT/Δ/450	3068845	3068854	3068863	3068871	24,042	26,195	28,070	31,818
	600	↕ KCA OG900/YT/Δ/600	3068880	3068889	3068898	3068906	28,381	30,975	33,127	37,540
	900	↕ KCA OG900/YT/Δ/900	3068915	3068924	3068933	3068941	36,494	39,801	42,673	48,424
1000	300	↕ KCA OG1000/YT/Δ/300	3068811	3068820	3068829	3068837	23,158	24,974	26,562	29,730
	450	↕ KCA OG1000/YT/Δ/450	3068846	3068855	3068864	3068872	25,631	27,830	29,747	33,581
	600	↕ KCA OG1000/YT/Δ/600	3068881	3068890	3068899	3068907	30,192	32,836	35,030	39,530
	900	↕ KCA OG1000/YT/Δ/900	3068916	3068925	3068934	3068942	40,295	43,655	46,570	52,406
1100	300	↕ KCA OG1100/YT/Δ/300	3068812	3068821	3068830	3068838	24,698	26,565	28,196	31,450
	450	↕ KCA OG1100/YT/Δ/450	3068847	3068856	3068865	3068873	29,053	31,303	33,263	37,183
	600	↕ KCA OG1100/YT/Δ/600	3068882	3068891	3068900	3068908	33,947	36,642	38,880	43,465
	900	↕ KCA OG1100/YT/Δ/900	3068917	3068926	3068935	3068943	42,494	45,903	48,862	54,784

- 24 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

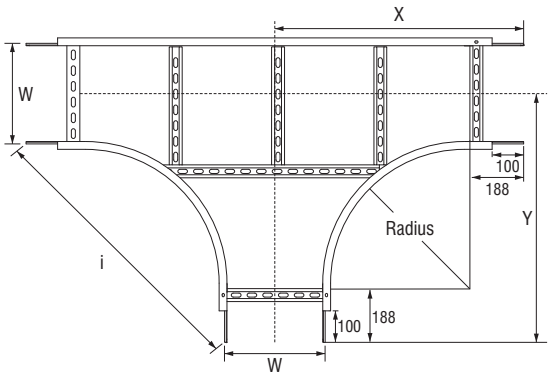
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG
▶▶Fittings YT Horizontal Tee

Siderail:



2 mm Standard thickness



Fitting shown for illustration purposes only. The rung layout shown is typical and will vary on each fitting, depending on width and radius.

Description	Dimensions (mm)			
	X	Y	i	C
↕ KCA OG150/YT/Δ/300	565	565	690	565
↕ KCA OG150/YT/Δ/450	715	715	902	715
↕ KCA OG150/YT/Δ/600	865	865	1114	865
↕ KCA OG150/YT/Δ/900	1165	1165	1538	1165
↕ KCA OG200/YT/Δ/300	590	590	690	590
↕ KCA OG200/YT/Δ/450	740	740	902	740
↕ KCA OG200/YT/Δ/600	890	890	1114	890
↕ KCA OG200/YT/Δ/900	1190	1190	1538	1190
↕ KCA OG300/YT/Δ/300	640	640	690	640
↕ KCA OG300/YT/Δ/450	790	790	902	790
↕ KCA OG300/YT/Δ/600	940	940	1114	940
↕ KCA OG300/YT/Δ/900	1240	1240	1538	1240
↕ KCA OG450/YT/Δ/300	715	715	690	715
↕ KCA OG450/YT/Δ/450	865	865	902	865
↕ KCA OG450/YT/Δ/600	1015	1015	1114	1015
↕ KCA OG450/YT/Δ/900	1315	1315	1538	1315
↕ KCA OG600/YT/Δ/300	790	790	690	1465
↕ KCA OG600/YT/Δ/450	940	940	902	1660
↕ KCA OG600/YT/Δ/600	1090	1090	1114	1855
↕ KCA OG600/YT/Δ/900	1390	1390	1538	2050
↕ KCA OG750/YT/Δ/300	865	865	690	865
↕ KCA OG750/YT/Δ/450	1015	1015	902	1015
↕ KCA OG750/YT/Δ/600	1165	1165	1114	1165
↕ KCA OG750/YT/Δ/900	1465	1465	1538	1465
↕ KCA OG900/YT/Δ/300	940	940	690	940
↕ KCA OG900/YT/Δ/450	1090	1090	902	1090
↕ KCA OG900/YT/Δ/600	1240	1240	1114	1240
↕ KCA OG900/YT/Δ/900	1540	1540	1538	1540
↕ KCA OG1000/YT/Δ/300	990	990	690	990
↕ KCA OG1000/YT/Δ/450	1140	1140	902	1140
↕ KCA OG1000/YT/Δ/600	1290	1290	1114	1290
↕ KCA OG1000/YT/Δ/900	1590	1590	1538	1590
↕ KCA OG1100/YT/Δ/300	1040	1040	690	1040
↕ KCA OG1100/YT/Δ/450	1190	1190	902	1190
↕ KCA OG1100/YT/Δ/600	1340	1340	1114	1340
↕ KCA OG1100/YT/Δ/900	1640	1640	1538	1640

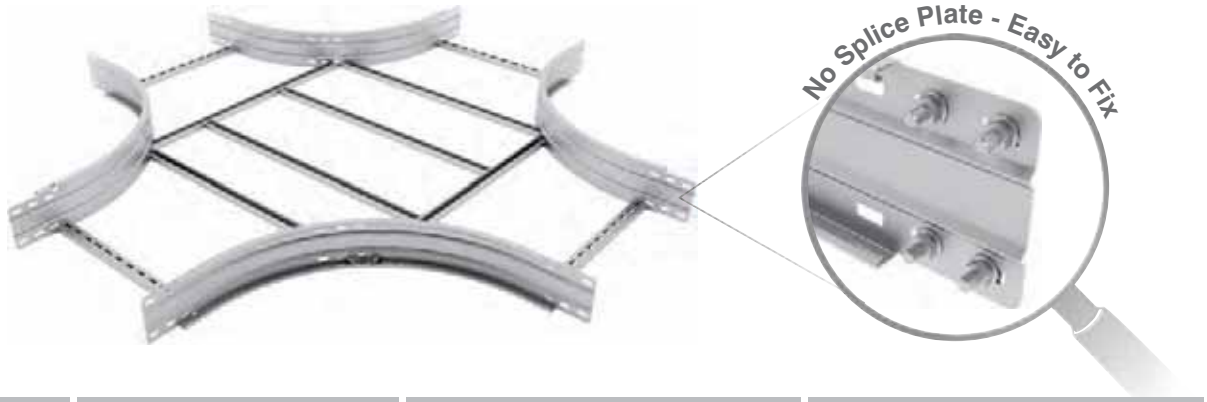
■ Please check page “74” for the cover selection.

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶Fittings AD Horizontal Cross

AD



Width (mm)	Radius (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	300	↕ KCA OG150/AD/Δ/300	3068944	3068953	3068962		11,191	12,413	14,066	
	450	↕ KCA OG150/AD/Δ/450	3068979	3068988	3068997		14,239	16,395	18,256	
	600	↕ KCA OG150/AD/Δ/600	3069014	3069023	3069032		17,558	20,189	22,473	
	900	↕ KCA OG150/AD/Δ/900	3069049	3069058	3069067		31,125	34,716	37,804	
200	300	↕ KCA OG200/AD/Δ/300	3068945	3068954	3068963	3068971	11,751	13,127	14,753	17,666
	450	↕ KCA OG200/AD/Δ/450	3068980	3068989	3068998	3069006	14,799	16,955	18,816	22,552
	600	↕ KCA OG200/AD/Δ/600	3069015	3069024	3069033	3069041	18,140	20,771	23,054	27,591
	900	↕ KCA OG200/AD/Δ/900	3069050	3069059	3069068	3069076	32,498	36,088	39,177	45,355
300	300	↕ KCA OG300/AD/Δ/300	3068946	3068955	3068964	3068972	12,874	14,564	16,024	18,937
	450	↕ KCA OG300/AD/Δ/450	3068981	3068990	3068999	3069007	15,944	18,100	19,961	23,697
	600	↕ KCA OG300/AD/Δ/600	3069016	3069025	3069034	3069042	19,241	21,872	24,156	28,692
	900	↕ KCA OG300/AD/Δ/900	3069051	3069060	3069069	3069077	34,610	38,200	41,289	47,467
450	300	↕ KCA OG450/AD/Δ/300	3068947	3068956	3068965	3068973	14,553	16,242	17,703	20,616
	450	↕ KCA OG450/AD/Δ/450	3068982	3068991	3069000	3069008	17,601	19,757	21,618	25,353
	600	↕ KCA OG450/AD/Δ/600	3069017	3069026	3069035	3069043	21,916	24,547	26,831	31,367
	900	↕ KCA OG450/AD/Δ/900	3069052	3069061	3069070	3069078	38,588	42,178	45,267	51,444
600	300	↕ KCA OG600/AD/Δ/300	3068948	3068957	3068966	3068974	17,204	18,893	20,354	23,267
	450	↕ KCA OG600/AD/Δ/450	3068983	3068992	3069001	3069009	20,369	22,525	24,387	28,122
	600	↕ KCA OG600/AD/Δ/600	3069018	3069027	3069036	3069044	23,786	26,417	28,701	33,237
	900	↕ KCA OG600/AD/Δ/900	3069053	3069062	3069071	3069079	41,716	45,306	48,395	54,573
750	300	↕ KCA OG750/AD/Δ/300	3068949	3068958	3068967	3068975	22,092	23,782	25,242	28,155
	450	↕ KCA OG750/AD/Δ/450	3068984	3068993	3069002	3069010	25,383	27,539	29,400	33,136
	600	↕ KCA OG750/AD/Δ/600	3069019	3069028	3069037	3069045	29,044	31,675	33,959	38,495
	900	↕ KCA OG750/AD/Δ/900	3069054	3069063	3069072	3069080	51,103	54,694	57,783	63,960
900	300	↕ KCA OG900/AD/Δ/300	3068950	3068959	3068968	3068976	26,210	27,900	29,361	32,274
	450	↕ KCA OG900/AD/Δ/450	3068985	3068994	3069003	3069011	29,618	31,774	33,635	37,371
	600	↕ KCA OG900/AD/Δ/600	3069020	3069029	3069038	3069046	33,440	36,071	38,354	42,891
	900	↕ KCA OG900/AD/Δ/900	3069055	3069064	3069073	3069081	54,991	58,581	61,670	67,848
1000	300	↕ KCA OG1000/AD/Δ/300	3068951	3068960	3068969	3068977	27,973	29,662	31,123	34,036
	450	↕ KCA OG1000/AD/Δ/450	3068986	3068995	3069004	3069012	31,380	33,536	35,398	39,133
	600	↕ KCA OG1000/AD/Δ/600	3069021	3069030	3069039	3069047	35,194	37,825	40,109	44,645
	900	↕ KCA OG1000/AD/Δ/900	3069056	3069065	3069074	3069082	57,659	61,250	64,339	70,516
1100	300	↕ KCA OG1100/AD/Δ/300	3068952	3068961	3068970	3068978	29,727	31,417	32,877	35,790
	450	↕ KCA OG1100/AD/Δ/450	3068987	3068996	3069005	3069013	33,135	35,291	37,152	40,888
	600	↕ KCA OG1100/AD/Δ/600	3069022	3069031	3069040	3069048	36,949	39,5802	41,863	46,400
	900	↕ KCA OG1100/AD/Δ/900	3069057	3069066	3069075	3069083	60,346	63,9364	67,025	73,202

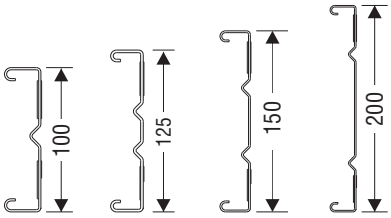
- 32 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

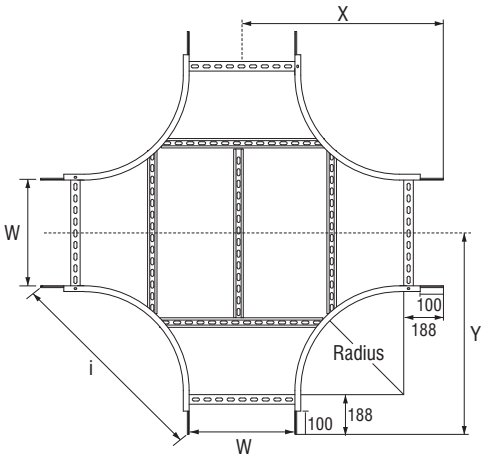
ELINE
KCAOG

▶▶Fittings AD Horizontal Cross

Siderail:



2 mm Standard thickness



Fitting shown for illustration purposes only. The rung layout shown is typical and will vary on each fitting, depending on width and radius.

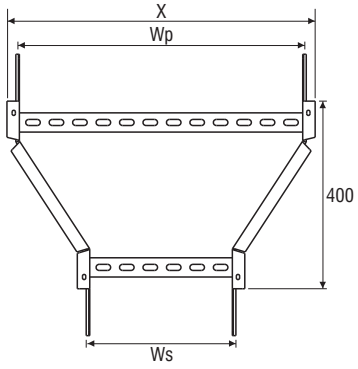
Description	No. of Rungs	Dimensions (mm)			
		X	Y	i	C
↕ KCA OG150/AD/Δ/300	3	565	565	690	565
↕ KCA OG150/AD/Δ/450	4	715	715	902	715
↕ KCA OG150/AD/Δ/600	4	865	865	1114	865
↕ KCA OG150/AD/Δ/900	5	1165	1165	1538	1165
↕ KCA OG200/AD/Δ/300	3	590	590	690	590
↕ KCA OG200/AD/Δ/450	4	740	740	902	740
↕ KCA OG200/AD/Δ/600	4	890	890	1114	890
↕ KCA OG200/AD/Δ/900	5	1190	1190	1538	1190
↕ KCA OG300/AD/Δ/300	3	640	640	690	640
↕ KCA OG300/AD/Δ/450	4	790	790	902	790
↕ KCA OG300/AD/Δ/600	4	940	940	1114	940
↕ KCA OG300/AD/Δ/900	5	1240	1240	1538	1240
↕ KCA OG450/AD/Δ/300	3	715	715	690	715
↕ KCA OG450/AD/Δ/450	4	865	865	902	865
↕ KCA OG450/AD/Δ/600	4	1015	1015	1114	1015
↕ KCA OG450/AD/Δ/900	5	1315	1315	1538	1315
↕ KCA OG600/AD/Δ/300	3	790	790	690	1465
↕ KCA OG600/AD/Δ/450	4	940	940	902	1660
↕ KCA OG600/AD/Δ/600	4	1090	1090	1114	1855
↕ KCA OG600/AD/Δ/900	5	1390	1390	1538	2050
↕ KCA OG750/AD/Δ/300	3	865	865	690	865
↕ KCA OG750/AD/Δ/450	4	1015	1015	902	1015
↕ KCA OG750/AD/Δ/600	4	1165	1165	1114	1165
↕ KCA OG750/AD/Δ/900	5	1465	1465	1538	1465
↕ KCA OG900/AD/Δ/300	3	940	940	690	940
↕ KCA OG900/AD/Δ/450	4	1090	1090	902	1090
↕ KCA OG900/AD/Δ/600	4	1240	1240	1114	1240
↕ KCA OG900/AD/Δ/900	5	1540	1540	1538	1540
↕ KCA OG1000/AD/Δ/300	3	990	990	690	990
↕ KCA OG1000/AD/Δ/450	4	1140	1140	902	1140
↕ KCA OG1000/AD/Δ/600	4	1290	1290	1114	1290
↕ KCA OG1000/AD/Δ/900	5	1590	1590	1538	1590
↕ KCA OG1100/AD/Δ/300	3	1040	1040	690	1040
↕ KCA OG1100/AD/Δ/450	4	1190	1190	902	1190
↕ KCA OG1100/AD/Δ/600	4	1340	1340	1114	1340
↕ KCA OG1100/AD/Δ/900	5	1640	1640	1538	1640

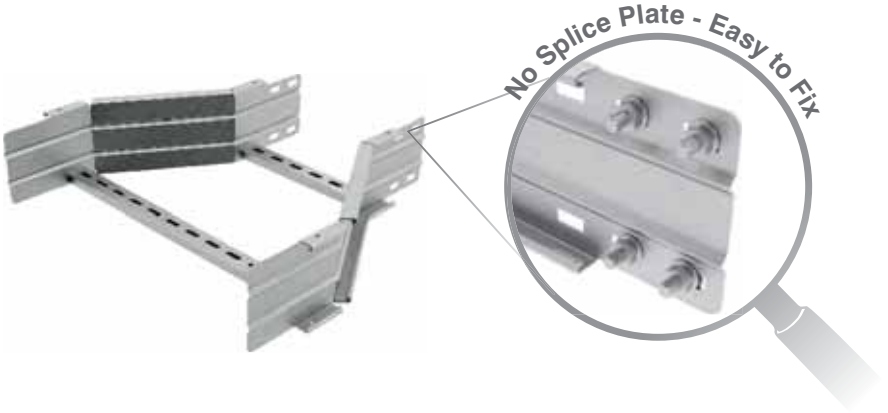
■ Please check page “75” for the cover selection.

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG
▶▶Fittings Middle Reduction

MR





Ws (mm)	Wp (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	200	↕ KCA OG 150/200/MR / Δ	3069356	3069392	3069428		1,192	1,454	1,698	
	300	↕ KCA OG 150/300/MR / Δ	3069357	3069393	3069429		2,437	2,787	2,849	
	450	↕ KCA OG 150/450/MR / Δ	3069358	3069394	3069430		3,238	3,682	4,131	
	600	↕ KCA OG 150/600/MR / Δ	3069359	3069395	3069431		3,886	4,389	4,930	
	750	↕ KCA OG 150/750/MR / Δ	3069360	3069396	3069432		4,785	5,414	6,034	
	900	↕ KCA OG 150/900/MR / Δ	3069361	3069397	3069433		5,396	6,087	6,769	
	1000	↕ KCA OG 150/1000/MR / Δ	3069362	3069398	3069434		6,297	7,102	7,899	
	1100	↕ KCA OG 150/1100/MR / Δ	3069363	3069399	3069435		6,717	7,565	8,399	
200	300	↕ KCA OG 200/300/MR / Δ	3069364	3069400	3069436	3069464	1,404	1,666	1,928	2,454
	450	↕ KCA OG 200/450/MR / Δ	3069365	3069401	3069437	3069465	2,971	3,351	3,472	4,552
	600	↕ KCA OG 200/600/MR / Δ	3069366	3069402	3069438	3069466	3,831	4,308	4,801	5,787
	750	↕ KCA OG 200/750/MR / Δ	3069367	3069403	3069439	3069467	4,722	5,331	5,932	7,131
	900	↕ KCA OG 200/900/MR / Δ	3069368	3069404	3069440	3069468	5,373	6,046	6,708	8,037
	1000	↕ KCA OG 200/1000/MR / Δ	3069369	3069405	3069441	3069469	5,801	6,523	7,231	8,646
	1100	↕ KCA OG 200/1100/MR / Δ	3069370	3069406	3069442	3069470	6,680	7,509	8,328	9,962
300	450	↕ KCA OG 300/450/MR / Δ	3069371	3069407	3069443	3069471	2,917	3,267	3,328	4,367
	600	↕ KCA OG 300/600/MR / Δ	3069372	3069408	3069444	3069472	3,370	3,751	4,151	4,954
	750	↕ KCA OG 300/750/MR / Δ	3069373	3069409	3069445	3069473	4,367	4,868	5,409	6,413
	900	↕ KCA OG 300/900/MR / Δ	3069374	3069410	3069446	3069474	5,007	5,583	6,162	7,321
	1000	↕ KCA OG 300/1000/MR / Δ	3069375	3069411	3069447	3069475	5,721	6,396	7,065	8,402
	1100	↕ KCA OG 300/1100/MR / Δ	3069376	3069412	3069448	3069476	6,120	6,842	7,550	8,965
450	600	↕ KCA OG 450/600/MR / Δ	3069377	3069413	3069449	3069477	3,423	3,605	3,847	5,255
	750	↕ KCA OG 450/750/MR / Δ	3069378	3069414	3069450	3069478	4,331	4,791	5,262	6,206
	900	↕ KCA OG 450/900/MR / Δ	3069379	3069415	3069451	3069479	4,978	5,504	6,041	7,114
	1000	↕ KCA OG 450/1000/MR / Δ	3069380	3069416	3069452	3069480	5,406	5,982	6,561	7,720
	1100	↕ KCA OG 450/1100/MR / Δ	3069381	3069417	3069453	3069481	5,823	6,452	7,073	8,316
600	750	↕ KCA OG 600/750/MR / Δ	3069382	3069418	3069454	3069482	3,876	4,226	4,287	5,326
	900	↕ KCA OG 600/900/MR / Δ	3069383	3069419	3069455	3069483	4,329	4,710	5,110	5,913
	1000	↕ KCA OG 600/1000/MR / Δ	3069384	3069420	3069456	3069484	5,109	5,586	6,079	7,065
	1100	↕ KCA OG 600/1100/MR / Δ	3069385	3069421	3069457	3069485	5,537	6,063	6,600	7,673
750	900	↕ KCA OG 750/900/MR / Δ	3069386	3069422	3069458	3069486	4,356	4,705	4,767	5,805
	1000	↕ KCA OG 750/1000/MR / Δ	3069387	3069423	3069459	3069487	5,210	5,846	6,141	7,254
	1100	↕ KCA OG 750/1100/MR / Δ	3069388	3069424	3069460	3069488	5,260	5,830	6,300	8,734
900	1000	↕ KCA OG 900/1000/MR / Δ	3069389	3069425	3069461	3069489	4,504	4,884	4,980	6,057
	1100	↕ KCA OG 900/1100/MR / Δ	3069390	3069426	3069462	3069490	4,941	5,346	6,253	7,572
1000	1100	↕ KCA OG 1000/1100/MR / Δ	3069391	3069427	3069463	3069491	5,420	5,944	6,406	8,832

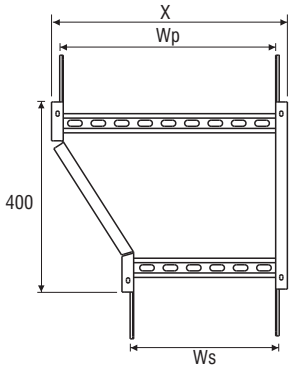
- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

- Please check page “76” for the cover selection.
- Please indicate order code in your orders.
- Please contact us for special modules.
- Material weights may vary by ± 10%

ELINE
KCAOG
▶▶Fittings Left Side Reduction

EAE ELEKTRİK

LR



Ws (mm)	Wp (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	200	↕ KCA OG 150/200/LR / Δ	3069220	3069256	3069292		1,405	1,536	1,786	
	300	↕ KCA OG 150/300/LR / Δ	3069221	3069257	3069293		2,296	2,751	3,103	
	450	↕ KCA OG 150/450/LR / Δ	3069222	3069258	3069294		3,393	3,920	4,393	
	600	↕ KCA OG 150/600/LR / Δ	3069223	3069259	3069295		4,818	5,549	6,206	
	750	↕ KCA OG 150/750/LR / Δ	3069224	3069260	3069296		5,808	6,672	7,443	
	900	↕ KCA OG 150/900/LR / Δ	3069225	3069261	3069297		6,947	7,957	8,862	
	1000	↕ KCA OG 150/1000/LR / Δ	3069226	3069262	3069298		7,751	8,873	9,875	
	1100	↕ KCA OG 150/1100/LR / Δ	3069227	3069263	3069299		8,570	9,807	10,909	
200	300	↕ KCA OG 200/300/LR / Δ	3069228	3069264	3069300	3069328	2,366	2,704	3,084	3,198
	450	↕ KCA OG 200/450/LR / Δ	3069229	3069265	3069301	3069329	3,339	3,841	4,293	5,197
	600	↕ KCA OG 200/600/LR / Δ	3069230	3069266	3069302	3069330	4,754	5,461	6,096	7,367
	750	↕ KCA OG 200/750/LR / Δ	3069231	3069267	3069303	3069331	5,759	6,601	7,353	8,856
	900	↕ KCA OG 200/900/LR / Δ	3069232	3069268	3069304	3069332	6,883	7,869	8,752	10,519
	1000	↕ KCA OG 200/1000/LR / Δ	3069233	3069269	3069305	3069333	7,687	8,785	9,765	11,727
	1100	↕ KCA OG 200/1100/LR / Δ	3069234	3069270	3069306	3069334	8,507	9,719	10,799	12,960
300	450	↕ KCA OG 300/450/LR / Δ	3069235	3069271	3069307	3069335	3,064	3,230	3,582	4,285
	600	↕ KCA OG 300/600/LR / Δ	3069236	3069272	3069308	3069336	4,222	4,808	5,333	6,387
	750	↕ KCA OG 300/750/LR / Δ	3069237	3069273	3069309	3069337	5,297	6,029	6,685	8,000
	900	↕ KCA OG 300/900/LR / Δ	3069238	3069274	3069310	3069338	6,287	7,152	7,923	9,465
	1000	↕ KCA OG 300/1000/LR / Δ	3069239	3069275	3069311	3069339	7,202	8,188	9,071	10,838
	1100	↕ KCA OG 300/1100/LR / Δ	3069240	3069276	3069312	3069340	8,006	9,104	10,084	12,046
450	600	↕ KCA OG 450/600/LR / Δ	3069241	3069277	3069313	3069341	2,711	3,710	4,062	4,765
	750	↕ KCA OG 450/750/LR / Δ	3069242	3069278	3069314	3069342	4,702	5,287	5,813	6,867
	900	↕ KCA OG 450/900/LR / Δ	3069243	3069279	3069315	3069343	5,777	6,508	7,165	8,479
	1000	↕ KCA OG 450/1000/LR / Δ	3069244	3069280	3069316	3069344	6,558	7,399	8,152	9,654
	1100	↕ KCA OG 450/1100/LR / Δ	3069245	3069281	3069317	3069345	6,989	7,879	8,672	10,257
600	750	↕ KCA OG 600/750/LR / Δ	3069246	3069282	3069318	3069346	3,830	4,189	4,541	5,244
	900	↕ KCA OG 600/900/LR / Δ	3069247	3069283	3069319	3069347	4,832	5,359	5,832	6,779
	1000	↕ KCA OG 600/1000/LR / Δ	3069248	3069284	3069320	3069348	5,611	6,241	6,811	7,950
	1100	↕ KCA OG 600/1100/LR / Δ	3069249	3069285	3069321	3069349	6,479	7,236	7,914	9,271
750	900	↕ KCA OG 750/900/LR / Δ	3069250	3069286	3069322	3069350	4,069	4,669	5,021	5,724
	1000	↕ KCA OG 750/1000/LR / Δ	3069251	3069287	3069323	3069351	5,097	5,497	6,051	6,955
	1100	↕ KCA OG 750/1100/LR / Δ	3069252	3069288	3069324	3069352	5,876	6,463	7,029	8,125
900	1000	↕ KCA OG 900/1000/LR / Δ	3069253	3069289	3069325	3069353	4,603	5,069	5,321	6,517
	1100	↕ KCA OG 900/1100/LR / Δ	3069254	3069290	3069326	3069354	5,362	5,480	6,270	7,130
1000	1100	↕ KCA OG 1000/1100/LR / Δ	3069255	3069291	3069327	3069355	4,922	5,475	5,640	6,836

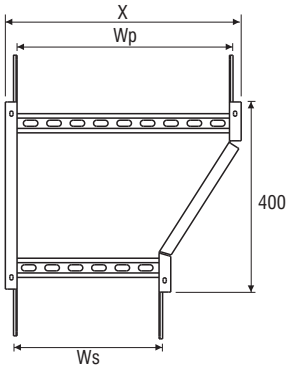
- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate compenent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

- Please check page “77” for the cover selection.
- Please indicate order code in your orders.
- Please contact us for special modules.
- Material weights may vary by ± 10%

ELINE
KCAOG

▶▶Fittings Right Side Reduction

RR



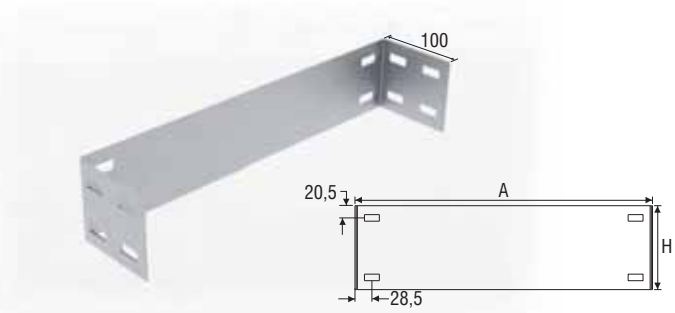
Ws (mm)	Wp (mm)	Description	Code				Weight (kg)			
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200
150	200	↕ KCA OG 150/200/RR / Δ	3069084	3069120	3069156		1,405	1,536	1,786	
	300	↕ KCA OG 150/300/RR / Δ	3069085	3069121	3069157		2,296	2,751	3,103	
	450	↕ KCA OG 150/450/RR / Δ	3069086	3069122	3069158		3,393	3,920	4,393	
	600	↕ KCA OG 150/600/RR / Δ	3069087	3069123	3069159		4,818	5,549	6,206	
	750	↕ KCA OG 150/750/RR / Δ	3069088	3069124	3069160		5,808	6,672	7,443	
	900	↕ KCA OG 150/900/RR / Δ	3069089	3069125	3069161		6,947	7,957	8,862	
	1000	↕ KCA OG 150/1000/RR / Δ	3069090	3069126	3069162		7,751	8,873	9,875	
	1100	↕ KCA OG 150/1100/RR / Δ	3069091	3069127	3069163		8,570	9,807	10,909	
200	300	↕ KCA OG 200/300/RR / Δ	3069092	3069128	3069164	3069192	2,366	2,704	3,084	3,198
	450	↕ KCA OG 200/450/RR / Δ	3069093	3069129	3069165	3069193	3,339	3,841	4,293	5,197
	600	↕ KCA OG 200/600/RR / Δ	3069094	3069130	3069166	3069194	4,754	5,461	6,096	7,367
	750	↕ KCA OG 200/750/RR / Δ	3069095	3069131	3069167	3069195	5,759	6,601	7,353	8,856
	900	↕ KCA OG 200/900/RR / Δ	3069096	3069132	3069168	3069196	6,883	7,869	8,752	10,519
	1000	↕ KCA OG 200/1000/RR / Δ	3069097	3069133	3069169	3069197	7,687	8,785	9,765	11,727
	1100	↕ KCA OG 200/1100/RR / Δ	3069098	3069134	3069170	3069198	8,507	9,719	10,799	12,960
300	450	↕ KCA OG 300/450/RR / Δ	3069099	3069135	3069171	3069199	3,064	3,230	3,582	4,285
	600	↕ KCA OG 300/600/RR / Δ	3069100	3069136	3069172	3069200	4,222	4,808	5,333	6,387
	750	↕ KCA OG 300/750/RR / Δ	3069101	3069137	3069173	3069201	5,297	6,029	6,685	8,000
	900	↕ KCA OG 300/900/RR / Δ	3069102	3069138	3069174	3069202	6,287	7,152	7,923	9,465
	1000	↕ KCA OG 300/1000/RR / Δ	3069103	3069139	3069175	3069203	7,202	8,188	9,071	10,838
	1100	↕ KCA OG 300/1100/RR / Δ	3069104	3069140	3069176	3069204	8,006	9,104	10,084	12,046
450	600	↕ KCA OG 450/600/RR / Δ	3069105	3069141	3069177	3069205	2,711	3,710	4,062	4,765
	750	↕ KCA OG 450/750/RR / Δ	3069106	3069142	3069178	3069206	4,702	5,287	5,813	6,867
	900	↕ KCA OG 450/900/RR / Δ	3069107	3069143	3069179	3069207	5,777	6,508	7,165	8,479
	1000	↕ KCA OG 450/1000/RR / Δ	3069108	3069144	3069180	3069208	6,558	7,399	8,152	9,654
	1100	↕ KCA OG 450/1100/RR / Δ	3069109	3069145	3069181	3069209	6,989	7,879	8,672	10,257
600	750	↕ KCA OG 600/750/RR / Δ	3069110	3069146	3069182	3069210	3,830	4,189	4,541	5,244
	900	↕ KCA OG 600/900/RR / Δ	3069111	3069147	3069183	3069211	4,832	5,359	5,832	6,779
	1000	↕ KCA OG 600/1000/RR / Δ	3069112	3069148	3069184	3069212	5,611	6,241	6,811	7,950
	1100	↕ KCA OG 600/1100/RR / Δ	3069113	3069149	3069185	3069213	6,479	7,236	7,914	9,271
750	900	↕ KCA OG 750/900/RR / Δ	3069114	3069150	3069186	3069214	4,069	4,669	5,021	5,724
	1000	↕ KCA OG 750/1000/RR / Δ	3069115	3069151	3069187	3069215	5,097	5,497	6,051	6,955
	1100	↕ KCA OG 750/1100/RR / Δ	3069116	3069152	3069188	3069216	5,876	6,463	7,029	8,125
900	1000	↕ KCA OG 900/1000/RR / Δ	3069117	3069153	3069189	3069217	4,603	5,069	5,321	6,517
	1100	↕ KCA OG 900/1100/RR / Δ	3069118	3069154	3069190	3069218	5,362	5,480	6,270	7,130
1000	1100	↕ KCA OG 1000/1100/RR / Δ	3069119	3069155	3069191	3069219	4,922	5,475	5,640	6,836

- 16 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate compenent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

- Please check page “78” for the cover selection.
- Please indicate order code in your orders.
- Please contact us for special modules.
- Material weights may vary by ± 10%

ELINE
KCAOG
▶▶Accessories End Cover

Description	A (mm)	Code	Weight (kg)
100 KCAOG/END/150/Δ	150	3070505	0,482
100 KCAOG/END/200/Δ	200	3070506	0,561
100 KCAOG/END/300/Δ	300	3070507	0,718
100 KCAOG/END/450/Δ	450	3070508	0,953
100 KCAOG/END/600/Δ	600	3070509	1,190
100 KCAOG/END/750/Δ	750	3070510	1,425
100 KCAOG/END/900/Δ	900	3070511	1,661
100 KCAOG/END/1000/Δ	1000	3070512	1,818
100 KCAOG/END/1100/Δ	1100	3070513	1,975



Description	A (mm)	Code	Weight (kg)
125 KCAOG/END/150/Δ	150	3070514	0,631
125 KCAOG/END/200/Δ	200	3070515	0,731
125 KCAOG/END/300/Δ	300	3070516	0,931
125 KCAOG/END/450/Δ	450	3070517	1,232
125 KCAOG/END/600/Δ	600	3070518	1,532
125 KCAOG/END/750/Δ	750	3070519	1,832
125 KCAOG/END/900/Δ	900	3070520	2,132
125 KCAOG/END/1000/Δ	1000	3070521	2,334
125 KCAOG/END/1100/Δ	1100	3070522	2,534

Description	A (mm)	Code	Weight (kg)
150 KCAOG/END/150/Δ	150	3070523	0,778
150 KCAOG/END/200/Δ	200	3070524	0,900
150 KCAOG/END/300/Δ	300	3070525	1,144
150 KCAOG/END/450/Δ	450	3070526	1,509
150 KCAOG/END/600/Δ	600	3070527	1,874
150 KCAOG/END/750/Δ	750	3070528	2,240
150 KCAOG/END/900/Δ	900	3070529	2,605
150 KCAOG/END/1000/Δ	1000	3070530	2,849
150 KCAOG/END/1100/Δ	1100	3070531	3,092

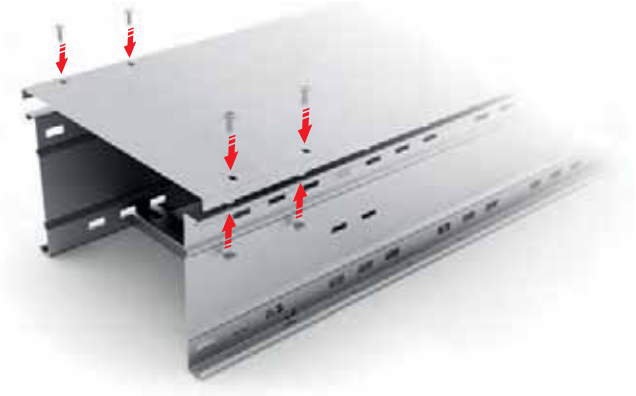
Description	A (mm)	Code	Weight (kg)
200 KCAOG/END/200/Δ	200	3070532	1,240
200 KCAOG/END/300/Δ	300	3070533	1,570
200 KCAOG/END/450/Δ	450	3070534	2,064
200 KCAOG/END/600/Δ	600	3070535	2,559
200 KCAOG/END/750/Δ	750	3070536	3,054
200 KCAOG/END/900/Δ	900	3070537	3,549
200 KCAOG/END/1000/Δ	1000	3070538	3,879
200 KCAOG/END/1100/Δ	1100	3070539	4,209

- 4 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

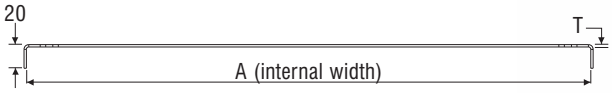
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

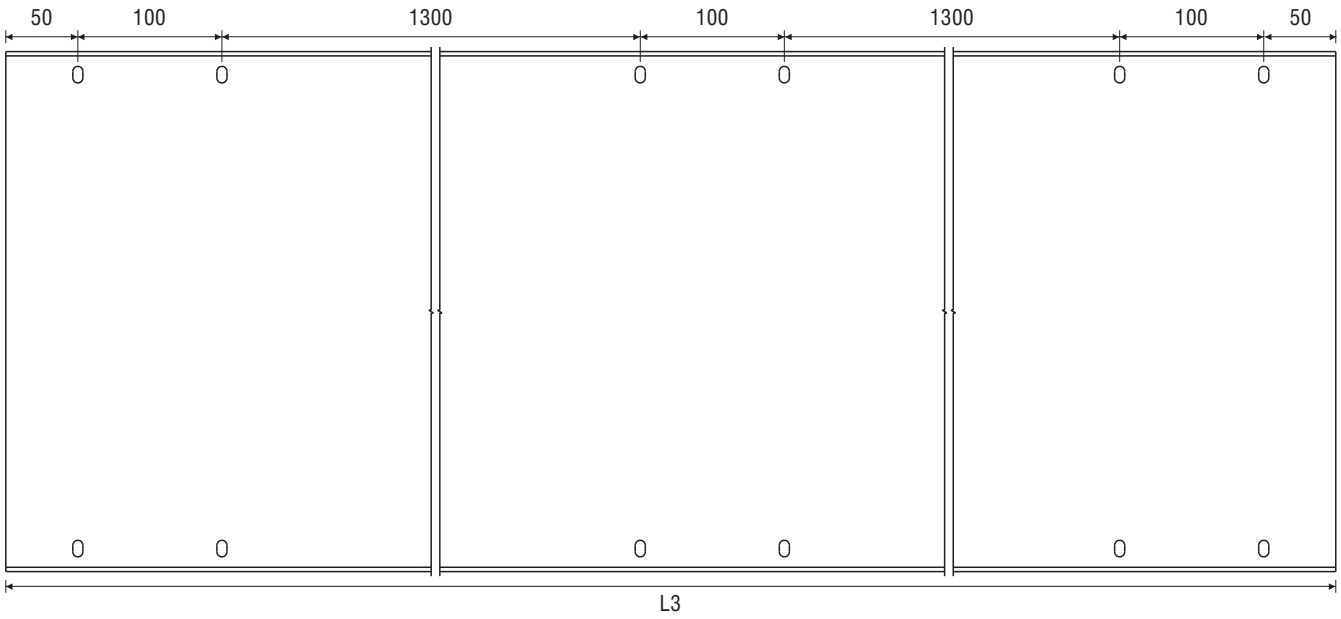
ELINE
KCAOG
▶▶Straight Cover

Description	Code	A	Weight (kg/m)	M6x12 Cover Fixing Set
KCAOGK/150/L3/Δ	3069562	210	3,050	12
KCAOGK/200/L3/Δ	3069563	260	3,700	12
KCAOGK/300/L3/Δ	3069564	360	5,000	12
KCAOGK/450/L3/Δ	3069565	510	9,220	12
KCAOGK/600/L3/Δ	3069566	660	11,810	12
KCAOGK/750/L3/Δ	3069567	810	14,410	12
KCAOGK/900/L3/Δ	3069568	960	17,000	12
KCAOGK/1000/L3/Δ	3069569	1060	18,720	12
KCAOGK/1100/L3/Δ	3069570	1160	20,450	12



- T: 1.5mm up to 300 mm width
- Over 300mm is T: 2mm
- Standard length: 3000mm
- Over 600mm widh cover, Asu profile should be ordered.



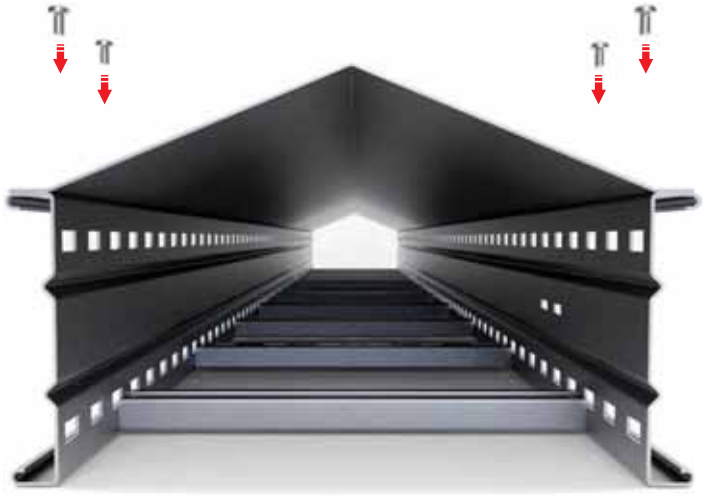


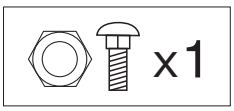
- 12 pcs M6X12 pan head bolt set should be ordered. Per 3mt. cover.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

- Please indicate order code in your orders.
- Please contact us for special modules.
- Material weights may vary by ± 10%

ELINE
KCAOG
▶▶Cover Slope Bracket

Description	Code	Weight (kg/m)	M6X12 Cıvata+Somun (Adet)
KCAOG/150/L3/Slope COVER	3106204	3,580	16
KCAOG/200/L3/Slope COVER	3106205	4,510	16
KCAOG/300/L3/Slope COVER	3106206	6,380	16
KCAOG/450/L3/Slope COVER	3106207	9,200	16
KCAOG/600/L3/Slope COVER	3106208	11,990	16
KCAOG/750/L3/Slope COVER	3106209	14,790	16
KCAOG/900/L3/Slope COVER	3106210	17,600	16
KCAOG/1000/L3/Slope COVER	3106211	19,470	16
KCAOG/1100/L3/Slope COVER	3106212	21,340	16





- 1 pcs M10X20 & 1 pcs M6X12 bolt pan head bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

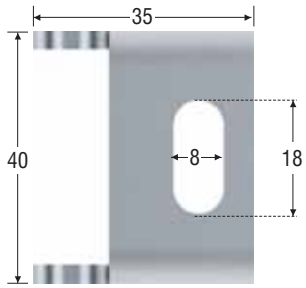
ELINE
KCAOG
▶▶Cover Elevation Bracket

Description	Code	Weight (kg)
KCA OG / ELV / Δ	2044398	0,076

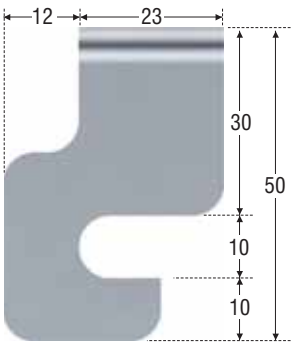
■ Cover elevation bracket for air ventilation

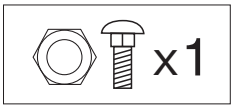
Tray & Fitting Type	Width	
	50 mm to 150 mm	200 mm to 300 mm
Straight Tray	6	6
90° Flat Elbow	4	4
60° Flat Elbow	4	4
45° Flat Elbow	4	4
30° Flat Elbow	4	4
Reducers	4	4

Up view



Side view





- 1 pcs M10X20 & 1 pcs M6X12 bolt pan head should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

E-LINE CABLE SUPPORT SYSTEMS

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www.eae.com.tr

UKS-UKFE Pre-galvanized UKS-UKFE Cable Tray Systems

UKFG-C Pre-galvanized UKFG-C Cable Tray Systems

KM Pre-galvanized Foldable Cable Ladders

TKS Pre-galvanized - Hot Dip Galvanized Trunking Systems

KMH-KMA Hot Dip Galvanized After Fabrication
KMH-KMA Cable Ladder and Modules

CT Hot Dip Galvanized After Fabrication
CTHF-E-CTN-CTH-CTA Cable Tray Systems

CTK Hot Dip Galvanized CTK Cable Tray Systems

TLS Cable Tray Systems

A-A Pre-galvanized and Hot Dip Galvanized After Fabrication
Cable Support Systems and Accessories

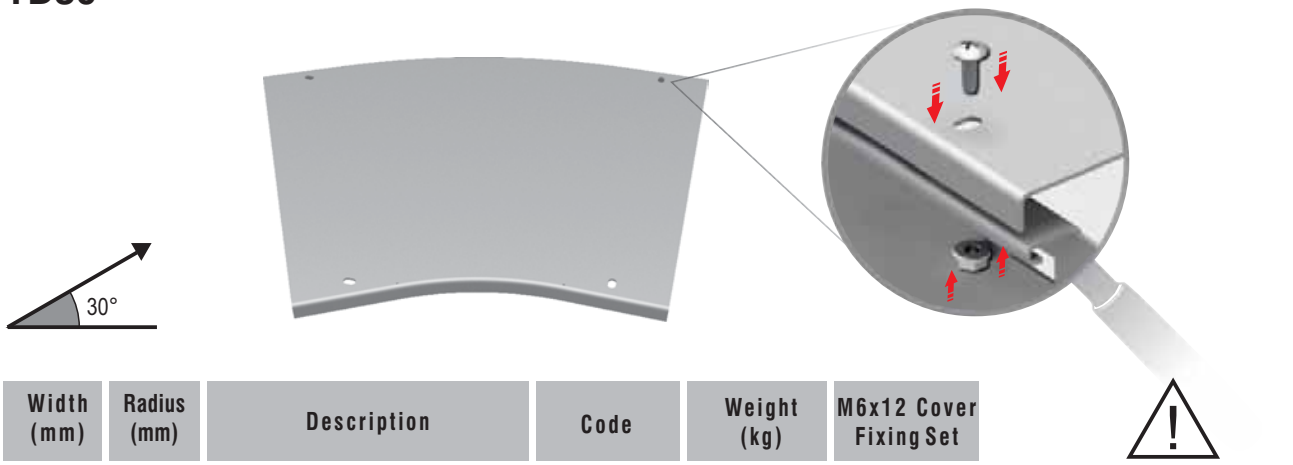
BR Binrak Support Systems

INFO Technical Information
Certificates General Product
Specifications Weight Carriage Figuresi

ELINE
KCAOG

▶▶Fittings Cover YD30 Horizontal Elbow

YD30



Fitting Cover shown
for illistration purposes only

Width (mm)	Radius (mm)	Description	Code	Weight (kg)	M6x12 Cover Fixing Set
150	300	KCA OGK150/YD30/Δ/300	3069571	1,500	4
	450	KCA OGK150/YD30/Δ/450	3069580	1,385	4
	600	KCA OGK150/YD30/Δ/600	3069589	1,635	4
	900	KCA OGK150/YD30/Δ/900	3069598	2,132	4
200	300	KCA OGK200/YD30/Δ/300	3069572	1,887	4
	450	KCA OGK200/YD30/Δ/450	3069581	2,042	4
	600	KCA OGK200/YD30/Δ/600	3069590	2,655	4
	900	KCA OGK200/YD30/Δ/900	3069599	3,424	4
300	300	KCA OGK300/YD30/Δ/300	3069573	2,728	4
	450	KCA OGK300/YD30/Δ/450	3069582	3,248	4
	600	KCA OGK300/YD30/Δ/600	3069591	3,768	4
	900	KCA OGK300/YD30/Δ/900	3069600	4,808	4
450	300	KCA OGK450/YD30/Δ/300	3069574	4,159	4
	450	KCA OGK450/YD30/Δ/450	3069583	4,315	4
	600	KCA OGK450/YD30/Δ/600	3069592	4,358	4
	900	KCA OGK450/YD30/Δ/900	3069601	7,053	4
600	300	KCA OGK600/YD30/Δ/300	3069575	5,793	4
	450	KCA OGK600/YD30/Δ/450	3069584	6,720	4
	600	KCA OGK600/YD30/Δ/600	3069593	7,647	4
	900	KCA OGK600/YD30/Δ/900	3069602	9,501	4
750	300	KCA OGK750/YD30/Δ/300	3069576	7,631	4
	450	KCA OGK750/YD30/Δ/450	3069585	8,762	4
	600	KCA OGK750/YD30/Δ/600	3069594	9,891	4
	900	KCA OGK750/YD30/Δ/900	3069603	12,153	4
900	300	KCA OGK900/YD30/Δ/300	3069577	9,671	4
	450	KCA OGK900/YD30/Δ/450	3069586	11,006	4
	600	KCA OGK900/YD30/Δ/600	3069595	12,340	4
	900	KCA OGK900/YD30/Δ/900	3069604	15,007	4
1000	300	KCA OGK1000/YD30/Δ/300	3069578	11,145	4
	450	KCA OGK1000/YD30/Δ/450	3069587	12,615	4
	600	KCA OGK1000/YD30/Δ/600	3069596	14,084	4
	900	KCA OGK1000/YD30/Δ/900	3069605	17,024	4
1100	300	KCA OGK1100/YD30/Δ/300	3069579	12,709	4
	450	KCA OGK1100/YD30/Δ/450	3069588	14,315	4
	600	KCA OGK1100/YD30/Δ/600	3069597	15,920	4
	900	KCA OGK1100/YD30/Δ/900	3069606	19,130	4

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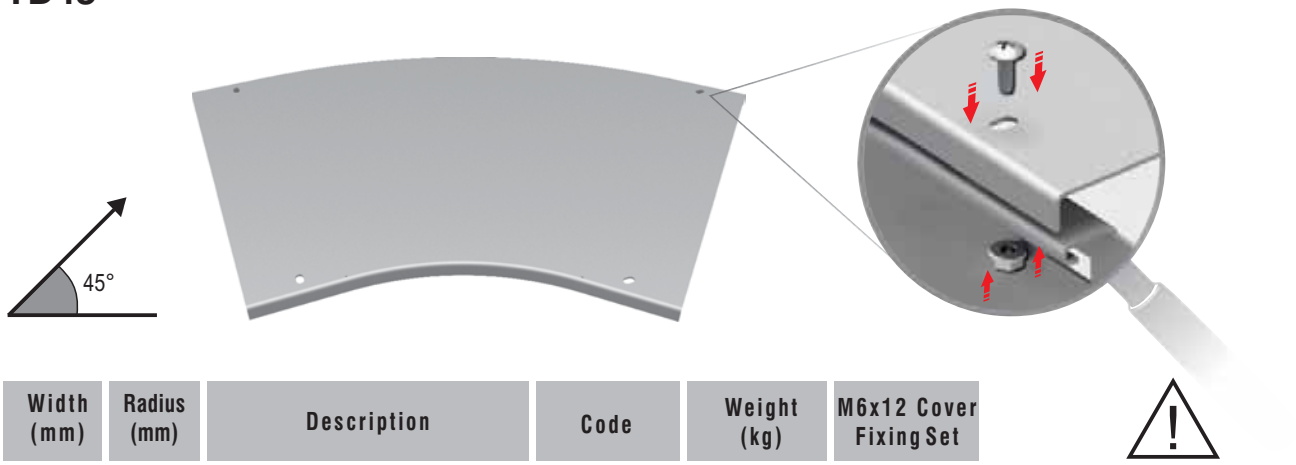
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶Fittings Cover YD45 Horizontal Elbow

YD45



Width (mm)	Radius (mm)	Description	Code	Weight (kg)	M6x12 Cover Fixing Set
150	300	KCA OGK150/YD45/Δ/300	3069607	1,899	4
	450	KCA OGK150/YD45/Δ/450	3069616	1,802	4
	600	KCA OGK150/YD45/Δ/600	3069625	2,175	4
	900	KCA OGK150/YD45/Δ/900	3069634	2,922	4
200	300	KCA OGK200/YD45/Δ/300	3069608	2,402	4
	450	KCA OGK200/YD45/Δ/450	3069617	2,672	4
	600	KCA OGK200/YD45/Δ/600	3069626	3,555	4
	900	KCA OGK200/YD45/Δ/900	3069635	4,709	4
300	300	KCA OGK300/YD45/Δ/300	3069609	3,511	4
	450	KCA OGK300/YD45/Δ/450	3069618	4,291	4
	600	KCA OGK300/YD45/Δ/600	3069627	5,072	4
	900	KCA OGK300/YD45/Δ/900	3069636	6,632	4
450	300	KCA OGK450/YD45/Δ/300	3069610	5,430	4
	450	KCA OGK450/YD45/Δ/450	3069619	5,740	4
	600	KCA OGK450/YD45/Δ/600	3069628	5,881	4
	900	KCA OGK450/YD45/Δ/900	3069637	9,771	4
600	300	KCA OGK600/YD45/Δ/300	3069611	7,653	4
	450	KCA OGK600/YD45/Δ/450	3069620	9,043	4
	600	KCA OGK600/YD45/Δ/600	3069629	10,434	4
	900	KCA OGK600/YD45/Δ/900	3069638	13,215	4
750	300	KCA OGK750/YD45/Δ/300	3069612	10,182	4
	450	KCA OGK750/YD45/Δ/450	3069621	11,877	4
	600	KCA OGK750/YD45/Δ/600	3069630	13,573	4
	900	KCA OGK750/YD45/Δ/900	3069639	16,964	4
900	300	KCA OGK900/YD45/Δ/300	3069613	13,015	4
	450	KCA OGK900/YD45/Δ/450	3069622	15,016	4
	600	KCA OGK900/YD45/Δ/600	3069631	17,017	4
	900	KCA OGK900/YD45/Δ/900	3069640	21,019	4
1000	300	KCA OGK1000/YD45/Δ/300	3069614	15,074	4
	450	KCA OGK1000/YD45/Δ/450	3069623	17,279	4
	600	KCA OGK1000/YD45/Δ/600	3069632	19,483	4
	900	KCA OGK1000/YD45/Δ/900	3069641	23,891	4
1100	300	KCA OGK1100/YD45/Δ/300	3069615	17,269	4
	450	KCA OGK1100/YD45/Δ/450	3069624	19,676	4
	600	KCA OGK1100/YD45/Δ/600	3069633	22,084	4
	900	KCA OGK1100/YD45/Δ/900	3069642	26,899	4

Fitting Cover shown for illistration purposes only

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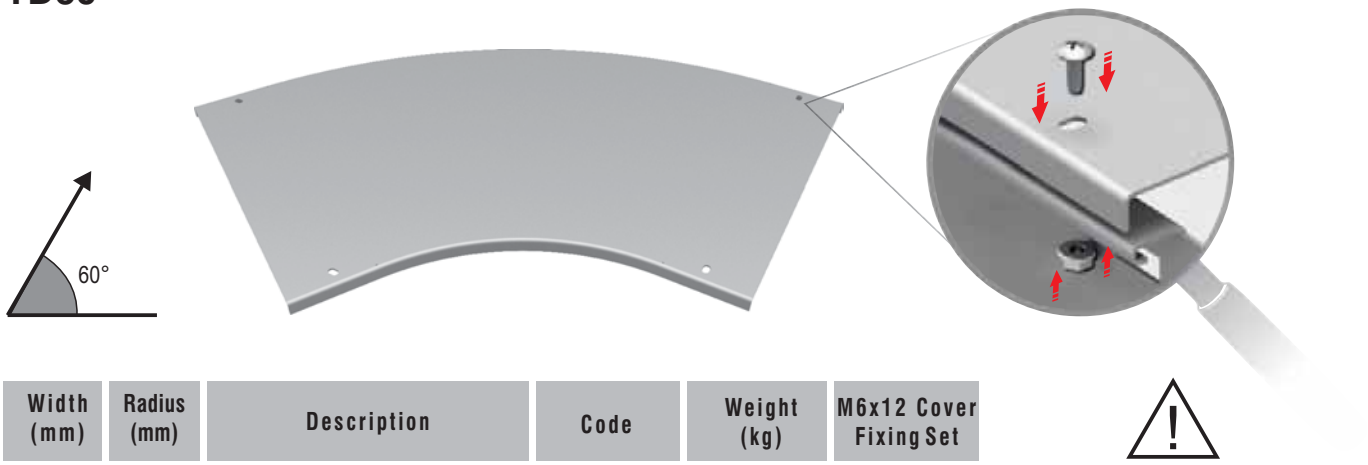
ELINE
KCAOG

▶▶Fittings Cover YD60 Horizontal Elbow

YD60



Width (mm)	Radius (mm)	Description	Code	Weight (kg)	M6x12 Cover Fixing Set
150	300	KCA OGK150/YD60/Δ/300	3069643	2,297	4
	450	KCA OGK150/YD60/Δ/450	3069652	2,218	4
	600	KCA OGK150/YD60/Δ/600	3069661	2,716	4
	900	KCA OGK150/YD60/Δ/900	3069670	3,710	4
200	300	KCA OGK200/YD60/Δ/300	3069644	2,917	4
	450	KCA OGK200/YD60/Δ/450	3069653	3,302	4
	600	KCA OGK200/YD60/Δ/600	3069662	4,455	4
	900	KCA OGK200/YD60/Δ/900	3069671	5,993	4
300	300	KCA OGK300/YD60/Δ/300	3069645	4,296	4
	450	KCA OGK300/YD60/Δ/450	3069654	5,335	4
	600	KCA OGK300/YD60/Δ/600	3069663	6,376	4
	900	KCA OGK300/YD60/Δ/900	3069672	8,456	4
450	300	KCA OGK450/YD60/Δ/300	3069646	6,700	4
	450	KCA OGK450/YD60/Δ/450	3069655	7,165	4
	600	KCA OGK450/YD60/Δ/600	3069664	7,403	4
	900	KCA OGK450/YD60/Δ/900	3069673	12,488	4
600	300	KCA OGK600/YD60/Δ/300	3069647	9,513	4
	450	KCA OGK600/YD60/Δ/450	3069656	11,367	4
	600	KCA OGK600/YD60/Δ/600	3069665	13,221	4
	900	KCA OGK600/YD60/Δ/900	3069674	16,929	4
750	300	KCA OGK750/YD60/Δ/300	3069648	12,733	4
	450	KCA OGK750/YD60/Δ/450	3069657	14,993	4
	600	KCA OGK750/YD60/Δ/600	3069666	17,255	4
	900	KCA OGK750/YD60/Δ/900	3069675	21,777	4
900	300	KCA OGK900/YD60/Δ/300	3069649	16,359	4
	450	KCA OGK900/YD60/Δ/450	3069658	19,027	4
	600	KCA OGK900/YD60/Δ/600	3069667	21,694	4
	900	KCA OGK900/YD60/Δ/900	3069676	27,030	4
1000	300	KCA OGK1000/YD60/Δ/300	3069650	19,003	4
	450	KCA OGK1000/YD60/Δ/450	3069659	21,942	4
	600	KCA OGK1000/YD60/Δ/600	3069668	24,881	4
	900	KCA OGK1000/YD60/Δ/900	3069677	30,759	4
1100	300	KCA OGK1100/YD60/Δ/300	3069651	21,827	4
	450	KCA OGK1100/YD60/Δ/450	3069660	25,037	4
	600	KCA OGK1100/YD60/Δ/600	3069669	28,248	4
	900	KCA OGK1100/YD60/Δ/900	3069678	34,669	4

Fitting Cover shown for illistration purposes only

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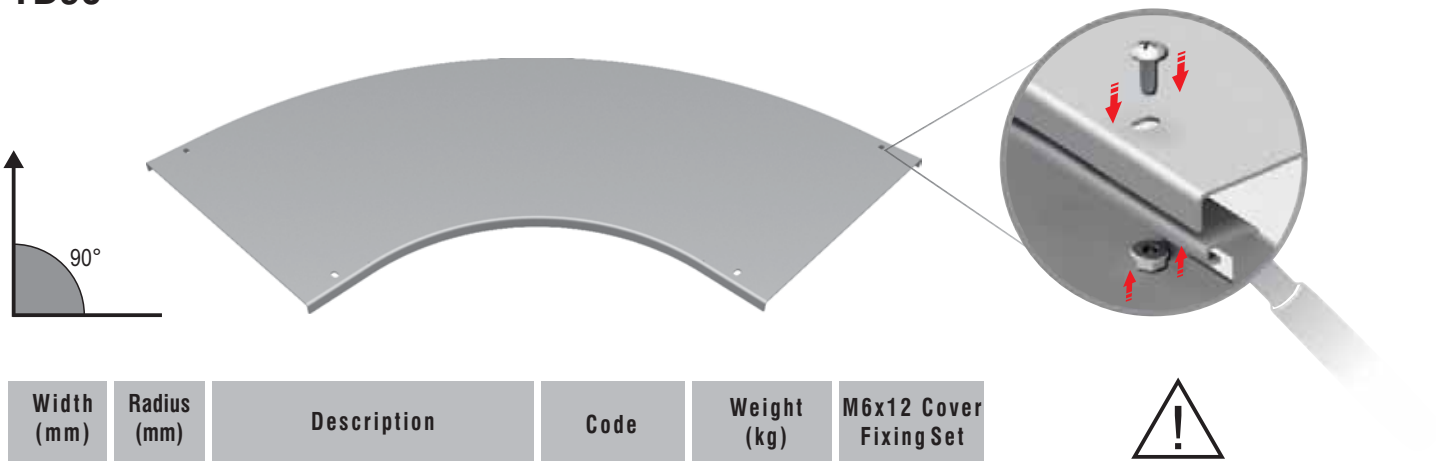
ELINE
KCAOG

▶▶Fittings Cover YD90 Horizontal Elbow

YD90



Width (mm)	Radius (mm)	Description	Code	Weight (kg)	M6x12 Cover Fixing Set
150	300	KCA OGK150/YD90/Δ/300	3069679	3,092	4
	450	KCA OGK150/YD90/Δ/450	3069688	3,050	4
	600	KCA OGK150/YD90/Δ/600	3069697	3,797	4
	900	KCA OGK150/YD90/Δ/900	3069706	5,290	4
200	300	KCA OGK200/YD90/Δ/300	3069680	3,948	4
	450	KCA OGK200/YD90/Δ/450	3069689	4,563	4
	600	KCA OGK200/YD90/Δ/600	3069698	6,255	4
	900	KCA OGK200/YD90/Δ/900	3069707	8,561	4
300	300	KCA OGK300/YD90/Δ/300	3069681	5,862	4
	450	KCA OGK300/YD90/Δ/450	3069690	7,423	4
	600	KCA OGK300/YD90/Δ/600	3069699	8,983	4
	900	KCA OGK300/YD90/Δ/900	3069708	12,103	4
450	300	KCA OGK450/YD90/Δ/300	3069682	9,242	4
	450	KCA OGK450/YD90/Δ/450	3069691	10,016	4
	600	KCA OGK450/YD90/Δ/600	3069700	10,449	4
	900	KCA OGK450/YD90/Δ/900	3069709	17,925	4
600	300	KCA OGK600/YD90/Δ/300	3069683	13,233	4
	450	KCA OGK600/YD90/Δ/450	3069692	16,015	4
	600	KCA OGK600/YD90/Δ/600	3069701	18,796	4
	900	KCA OGK600/YD90/Δ/900	3069710	24,357	4
750	300	KCA OGK750/YD90/Δ/300	3069684	17,834	4
	450	KCA OGK750/YD90/Δ/450	3069693	21,226	4
	600	KCA OGK750/YD90/Δ/600	3069702	24,617	4
	900	KCA OGK750/YD90/Δ/900	3069711	31,400	4
900	300	KCA OGK900/YD90/Δ/300	3069685	23,046	4
	450	KCA OGK900/YD90/Δ/450	3069694	27,048	4
	600	KCA OGK900/YD90/Δ/600	3069703	31,050	4
	900	KCA OGK900/YD90/Δ/900	3069712	39,053	4
1000	300	KCA OGK1000/YD90/Δ/300	3069686	26,860	4
	450	KCA OGK1000/YD90/Δ/450	3069695	31,269	4
	600	KCA OGK1000/YD90/Δ/600	3069704	35,677	4
	900	KCA OGK1000/YD90/Δ/900	3069713	44,494	4
1100	300	KCA OGK1100/YD90/Δ/300	3069687	30,944	4
	450	KCA OGK1100/YD90/Δ/450	3069696	35,760	4
	600	KCA OGK1100/YD90/Δ/600	3069705	40,576	4
	900	KCA OGK1100/YD90/Δ/900	3069714	50,206	4

Fitting Cover shown for illistration purposes only

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- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

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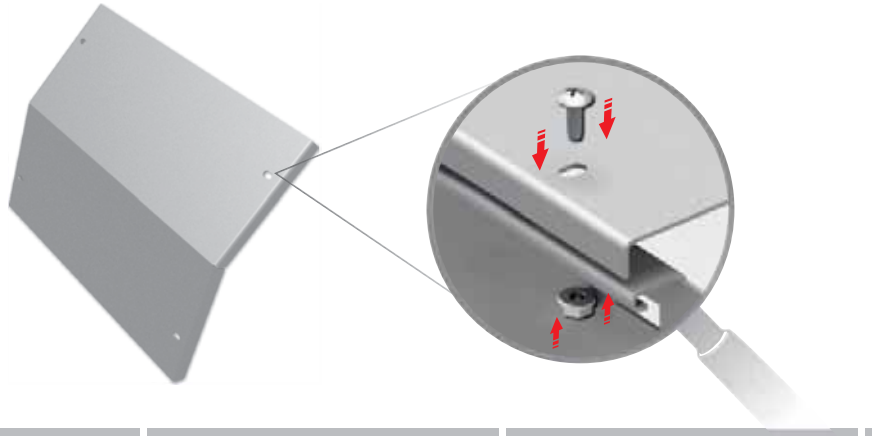
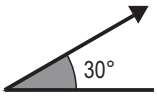
ELINE
KCAOG

▶▶Fittings Cover DD30 Vertical Outside

DD30

Fitting cover shown for illistration purposes only





Width (mm)	Radius (mm)	Description	Code				Weight (kg)				M6x12 Cover Fixing Set
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200	
150	300	KCA OGK150/DD30/Δ/300	3069859	3069868	3069877		1,097	1,148	1,201		4
	450	KCA OGK150/DD30/Δ/450	3069894	3069903	3069912		1,427	1,480	1,531		4
	600	KCA OGK150/DD30/Δ/600	3069929	3069938	3069947		1,746	1,797	1,850		4
	900	KCA OGK150/DD30/Δ/900	3069964	3069973	3069982		2,395	2,446	2,495		4
200	300	KCA OGK200/DD30/Δ/300	3069860	3069869	3069878	3069886	1,338	1,396	1,460	1,592	4
	450	KCA OGK200/DD30/Δ/450	3069895	3069904	3069913	3069921	1,734	1,797	1,861	1,993	4
	600	KCA OGK200/DD30/Δ/600	3069930	3069939	3069948	3069956	2,121	2,185	2,248	2,380	4
	900	KCA OGK200/DD30/Δ/900	3069965	3069974	3069983	3069991	2,908	2,972	3,032	3,168	4
300	300	KCA OGK300/DD30/Δ/300	3069861	3069870	3069879	3069887	1,811	1,892	1,978	2,156	4
	450	KCA OGK300/DD30/Δ/450	3069896	3069905	3069914	3069922	2,349	2,434	2,520	2,699	4
	600	KCA OGK300/DD30/Δ/600	3069931	3069940	3069949	3069957	2,872	2,958	3,044	3,223	4
	900	KCA OGK300/DD30/Δ/900	3069966	3069975	3069984	3069992	3,938	4,024	4,103	4,289	4
450	300	KCA OGK450/DD30/Δ/300	3069862	3069871	3069880	3069888	2,519	2,635	2,754	3,003	4
	450	KCA OGK450/DD30/Δ/450	3069897	3069906	3069915	3069923	3,270	3,390	3,510	3,759	4
	600	KCA OGK450/DD30/Δ/600	3069932	3069941	3069950	3069958	3,997	4,117	4,237	4,486	4
	900	KCA OGK450/DD30/Δ/900	3069967	3069976	3069985	3069993	5,481	5,601	5,711	5,970	4
600	300	KCA OGK600/DD30/Δ/300	3069863	3069872	3069881	3069889	3,229	3,377	3,531	3,850	4
	450	KCA OGK600/DD30/Δ/450	3069898	3069907	3069916	3069924	4,192	4,345	4,499	4,817	4
	600	KCA OGK600/DD30/Δ/600	3069933	3069942	3069951	3069959	5,124	5,278	5,431	5,750	4
	900	KCA OGK600/DD30/Δ/900	3069968	3069977	3069986	3069994	7,025	7,178	7,319	7,651	4
750	300	KCA OGK750/DD30/Δ/300	3069864	3069873	3069882	3069890	3,938	4,121	4,308	4,696	4
	450	KCA OGK750/DD30/Δ/450	3069899	3069908	3069917	3069925	5,114	5,301	5,488	5,876	4
	600	KCA OGK750/DD30/Δ/600	3069934	3069943	3069952	3069960	6,250	6,437	6,624	7,014	4
	900	KCA OGK750/DD30/Δ/900	3069969	3069978	3069987	3069995	8,568	8,755	8,928	9,330	4
900	300	KCA OGK900/DD30/Δ/300	3069865	3069874	3069883	3069891	4,648	4,863	5,084	5,543	4
	450	KCA OGK900/DD30/Δ/450	3069900	3069909	3069918	3069926	6,035	6,256	6,477	6,936	4
	600	KCA OGK900/DD30/Δ/600	3069935	3069944	3069953	3069961	7,377	7,598	7,819	8,278	4
	900	KCA OGK900/DD30/Δ/900	3069970	3069979	3069988	3069996	10,111	10,332	10,536	11,011	4
1000	300	KCA OGK1000/DD30/Δ/300	3069866	3069875	3069884	3069892	5,119	5,358	5,601	6,107	4
	450	KCA OGK1000/DD30/Δ/450	3069901	3069910	3069919	3069927	6,650	6,893	7,136	7,642	4
	600	KCA OGK1000/DD30/Δ/600	3069936	3069945	3069954	3069962	8,128	8,371	8,618	9,119	4
	900	KCA OGK1000/DD30/Δ/900	3069971	3069980	3069989	3069997	11,140	11,384	11,608	12,132	4
1100	300	KCA OGK1100/DD30/Δ/300	3069867	3069876	3069885	3069893	5,592	5,854	6,119	6,672	4
	450	KCA OGK1100/DD30/Δ/450	3069902	3069911	3069920	3069928	7,264	7,530	7,796	8,347	4
	600	KCA OGK1100/DD30/Δ/600	3069937	3069946	3069955	3069963	8,878	9,144	9,411	9,962	4
	900	KCA OGK1100/DD30/Δ/900	3069972	3069981	3069990	3069998	12,169	12,434	12,680	13,252	4

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate compenent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

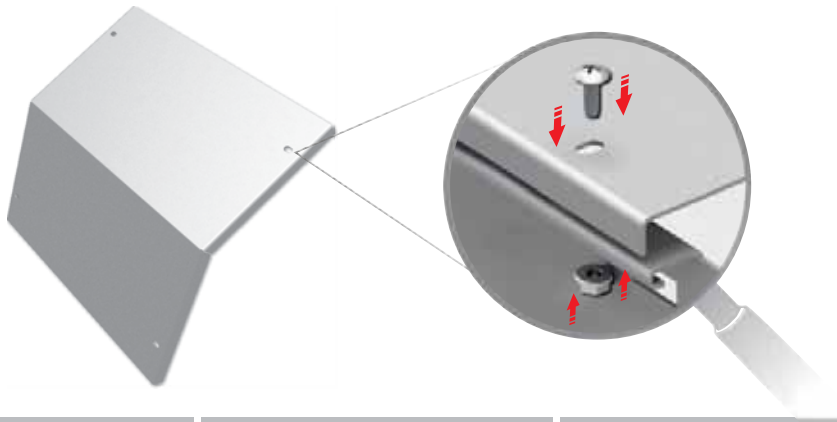
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

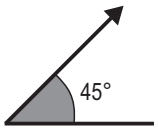
ELINE
KCAOG

▶▶Fittings Cover DD45 Vertical Outside

DD45

Fitting cover shown for illistration purposes only





Width (mm)	Radius (mm)	Description	Code				Weight (kg)				M6x12 Cover Fixing Set
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200	
150	300	KCA OGK150/DD45/Δ/300	3069999	3070008	3070017		1,560	1,645	1,726		4
	450	KCA OGK150/DD45/Δ/450	3070034	3070043	3070052		2,068	2,153	2,234		4
	600	KCA OGK150/DD45/Δ/600	3070069	3070078	3070087		2,564	2,649	2,734		4
	900	KCA OGK150/DD45/Δ/900	3070104	3070113	3070122		3,568	3,653	3,733		4
200	300	KCA OGK200/DD45/Δ/300	3070000	3070009	3070018	3070026	1,896	1,999	2,097	2,302	4
	450	KCA OGK200/DD45/Δ/450	3070035	3070044	3070053	3070061	2,514	2,616	2,714	2,919	4
	600	KCA OGK200/DD45/Δ/600	3070070	3070079	3070088	3070096	3,115	3,218	3,321	3,521	4
	900	KCA OGK200/DD45/Δ/900	3070105	3070114	3070123	3070131	4,334	4,436	4,534	4,740	4
300	300	KCA OGK300/DD45/Δ/300	3070001	3070010	3070019	3070027	2,569	2,707	2,840	3,119	4
	450	KCA OGK300/DD45/Δ/450	3070036	3070045	3070054	3070062	3,402	3,542	3,674	3,952	4
	600	KCA OGK300/DD45/Δ/600	3070071	3070080	3070089	3070097	4,217	4,356	4,496	4,767	4
	900	KCA OGK300/DD45/Δ/900	3070106	3070115	3070124	3070132	5,866	6,005	6,138	6,415	4
450	300	KCA OGK450/DD45/Δ/300	3070002	3070011	3070020	3070028	3,577	3,770	3,955	4,342	4
	450	KCA OGK450/DD45/Δ/450	3070037	3070046	3070055	3070063	4,738	4,931	5,115	5,502	4
	600	KCA OGK450/DD45/Δ/600	3070072	3070081	3070090	3070098	5,871	6,064	6,258	6,635	4
	900	KCA OGK450/DD45/Δ/900	3070107	3070116	3070125	3070133	8,164	8,358	8,543	8,929	4
600	300	KCA OGK600/DD45/Δ/300	3070003	3070012	3070021	3070029	4,585	4,832	5,069	5,565	4
	450	KCA OGK600/DD45/Δ/450	3070038	3070047	3070056	3070064	6,072	6,320	6,556	7,052	4
	600	KCA OGK600/DD45/Δ/600	3070073	3070082	3070091	3070099	7,524	7,772	8,019	8,503	4
	900	KCA OGK600/DD45/Δ/900	3070108	3070117	3070126	3070134	10,462	10,711	10,946	11,442	4
750	300	KCA OGK750/DD45/Δ/300	3070004	3070013	3070022	3070030	5,594	5,895	6,183	6,788	4
	450	KCA OGK750/DD45/Δ/450	3070039	3070048	3070057	3070065	7,406	7,709	7,997	8,601	4
	600	KCA OGK750/DD45/Δ/600	3070074	3070083	3070092	3070100	9,177	9,479	9,781	10,372	4
	900	KCA OGK750/DD45/Δ/900	3070109	3070118	3070127	3070135	12,761	13,064	13,351	13,956	4
900	300	KCA OGK900/DD45/Δ/300	3070005	3070014	3070023	3070031	6,601	6,958	7,297	8,011	4
	450	KCA OGK900/DD45/Δ/450	3070040	3070049	3070058	3070066	8,741	9,098	9,438	10,151	4
	600	KCA OGK900/DD45/Δ/600	3070075	3070084	3070093	3070101	10,831	11,187	11,543	12,240	4
	900	KCA OGK900/DD45/Δ/900	3070110	3070119	3070128	3070136	15,059	15,415	15,755	16,469	4
1000	300	KCA OGK1000/DD45/Δ/300	3070006	3070015	3070024	3070032	7,273	7,666	8,040	8,826	4
	450	KCA OGK1000/DD45/Δ/450	3070041	3070050	3070059	3070067	9,631	10,024	10,398	11,184	4
	600	KCA OGK1000/DD45/Δ/600	3070076	3070085	3070094	3070102	11,933	12,326	12,718	13,485	4
	900	KCA OGK1000/DD45/Δ/900	3070111	3070120	3070129	3070137	16,591	16,984	17,358	18,145	4
1100	300	KCA OGK1100/DD45/Δ/300	3070007	3070016	3070025	3070033	7,945	8,374	8,784	9,642	4
	450	KCA OGK1100/DD45/Δ/450	3070042	3070051	3070060	3070068	10,520	10,949	11,359	12,217	4
	600	KCA OGK1100/DD45/Δ/600	3070077	3070086	3070095	3070103	13,034	13,464	13,893	14,731	4
	900	KCA OGK1100/DD45/Δ/900	3070112	3070121	3070130	3070138	18,124	18,553	18,962	19,820	4

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate compenent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

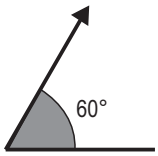
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

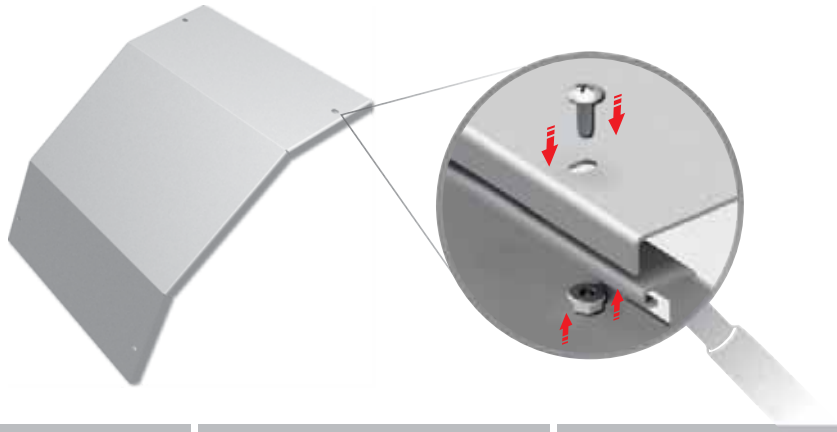
ELINE
KCAOG

▶▶Fittings Cover DD60 Vertical Outside

DD60

Fitting cover shown for illistration purposes only





Width (mm)	Radius (mm)	Description	Code				Weight (kg)				M6x12 Cover Fixing Set
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200	
150	300	KCA OGK150/DD60/Δ/300	3070139	3070148	3070157		1,973	2,075	2,175		4
	450	KCA OGK150/DD60/Δ/450	3070174	3070183	3070192		2,618	2,719	2,820		4
	600	KCA OGK150/DD60/Δ/600	3070209	3070218	3070227		3,264	3,364	3,465		4
	900	KCA OGK150/DD60/Δ/900	3070244	3070253	3070262		4,555	4,666	4,792		4
200	300	KCA OGK200/DD60/Δ/300	3070140	3070149	3070158	3070166	2,398	2,520	2,643	2,912	4
	450	KCA OGK200/DD60/Δ/450	3070175	3070184	3070193	3070201	3,181	3,303	3,427	3,695	4
	600	KCA OGK200/DD60/Δ/600	3070210	3070219	3070228	3070236	3,964	4,087	4,210	4,478	4
	900	KCA OGK200/DD60/Δ/900	3070245	3070254	3070263	3070271	5,533	5,668	5,820	6,094	4
300	300	KCA OGK300/DD60/Δ/300	3070141	3070150	3070159	3070167	3,248	3,413	3,579	3,944	4
	450	KCA OGK300/DD60/Δ/450	3070176	3070185	3070194	3070202	4,308	4,473	4,639	5,003	4
	600	KCA OGK300/DD60/Δ/600	3070211	3070220	3070229	3070237	5,367	5,533	5,698	6,062	4
	900	KCA OGK300/DD60/Δ/900	3070246	3070255	3070264	3070272	7,489	7,671	7,877	8,248	4
450	300	KCA OGK450/DD60/Δ/300	3070142	3070151	3070160	3070168	4,523	4,753	4,983	5,490	4
	450	KCA OGK450/DD60/Δ/450	3070177	3070186	3070195	3070203	5,997	6,227	6,457	6,964	4
	600	KCA OGK450/DD60/Δ/600	3070212	3070221	3070230	3070238	7,471	7,701	7,931	8,438	4
	900	KCA OGK450/DD60/Δ/900	3070247	3070256	3070265	3070273	10,424	10,677	10,963	11,479	4
600	300	KCA OGK600/DD60/Δ/300	3070143	3070152	3070161	3070169	5,797	6,093	6,388	7,037	4
	450	KCA OGK600/DD60/Δ/450	3070178	3070187	3070196	3070204	7,686	7,981	8,276	8,925	4
	600	KCA OGK600/DD60/Δ/600	3070213	3070222	3070231	3070239	9,574	9,869	10,164	10,814	4
	900	KCA OGK600/DD60/Δ/900	3070248	3070257	3070266	3070274	13,357	13,682	14,048	14,708	4
750	300	KCA OGK750/DD60/Δ/300	3070144	3070153	3070162	3070170	7,072	7,432	7,791	8,583	4
	450	KCA OGK750/DD60/Δ/450	3070179	3070188	3070197	3070205	9,375	9,735	10,095	10,887	4
	600	KCA OGK750/DD60/Δ/600	3070214	3070223	3070232	3070240	11,678	12,037	12,398	13,189	4
	900	KCA OGK750/DD60/Δ/900	3070249	3070258	3070267	3070275	16,291	16,687	17,133	17,939	4
900	300	KCA OGK900/DD60/Δ/300	3070145	3070154	3070163	3070171	8,347	8,771	9,196	10,130	4
	450	KCA OGK900/DD60/Δ/450	3070180	3070189	3070198	3070206	11,064	11,488	11,913	12,848	4
	600	KCA OGK900/DD60/Δ/600	3070215	3070224	3070233	3070241	13,782	14,207	14,631	15,565	4
	900	KCA OGK900/DD60/Δ/900	3070250	3070259	3070268	3070276	19,225	19,692	20,218	21,170	4
1000	300	KCA OGK1000/DD60/Δ/300	3070146	3070155	3070164	3070172	9,197	9,665	10,132	11,162	4
	450	KCA OGK1000/DD60/Δ/450	3070181	3070190	3070199	3070207	12,190	12,658	13,126	14,155	4
	600	KCA OGK1000/DD60/Δ/600	3070216	3070225	3070234	3070242	15,184	15,652	16,119	17,149	4
	900	KCA OGK1000/DD60/Δ/900	3070251	3070260	3070269	3070277	21,181	21,695	22,275	23,323	4
1100	300	KCA OGK1100/DD60/Δ/300	3070147	3070156	3070165	3070173	10,046	10,558	11,068	12,192	4
	450	KCA OGK1100/DD60/Δ/450	3070182	3070191	3070200	3070208	13,317	13,827	14,339	15,463	4
	600	KCA OGK1100/DD60/Δ/600	3070217	3070226	3070235	3070243	16,587	17,097	17,609	18,733	4
	900	KCA OGK1100/DD60/Δ/900	3070252	3070261	3070270	3070278	23,137	23,698	24,332	25,477	4

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate compenent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

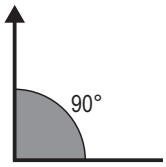
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

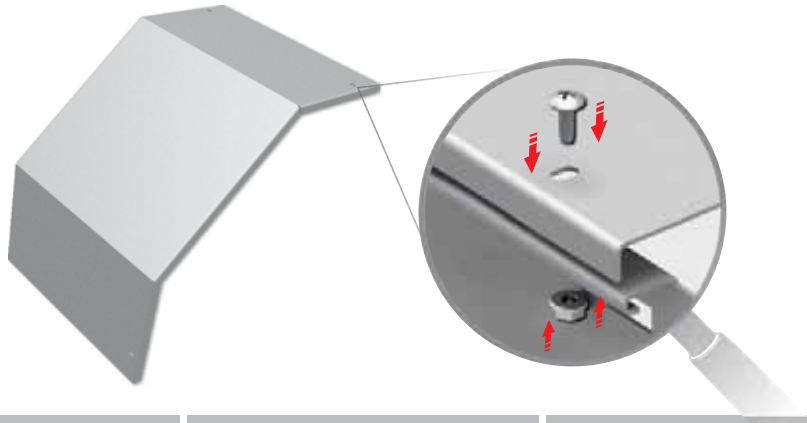
ELINE
KCAOG

▶▶Fittings Cover DD90 Vertical Outside

DD90

Fitting cover shown for illistration purposes only





Width (mm)	Radius (mm)	Description	Code				Weight (kg)				M6x12 Cover Fixing Set
			↕100	↕125	↕150	↕200	↕100	↕125	↕150	↕200	
150	300	KCA OGK150/DD90/Δ/300	3070279	3070288	3070297		2,922	3,083	3,224		4
	450	KCA OGK150/DD90/Δ/450	3070314	3070323	3070332		3,890	4,071	4,232		4
	600	KCA OGK150/DD90/Δ/600	3070349	3070358	3070367		4,917	5,079	5,239		4
	900	KCA OGK150/DD90/Δ/900	3070384	3070393	3070402		6,893	7,074	7,235		4
200	300	KCA OGK200/DD90/Δ/300	3070280	3070289	3070298	3070306	3,550	3,746	3,917	4,333	4
	450	KCA OGK200/DD90/Δ/450	3070315	3070324	3070333	3070341	4,725	4,946	5,141	5,557	4
	600	KCA OGK200/DD90/Δ/600	3070350	3070359	3070368	3070376	5,973	6,169	6,365	6,756	4
	900	KCA OGK200/DD90/Δ/900	3070385	3070394	3070403	3070411	8,371	8,592	8,788	9,204	4
300	300	KCA OGK300/DD90/Δ/300	3070281	3070290	3070299	3070307	4,807	5,072	5,304	5,866	4
	450	KCA OGK300/DD90/Δ/450	3070316	3070325	3070334	3070342	6,397	6,695	6,960	7,522	4
	600	KCA OGK300/DD90/Δ/600	3070351	3070360	3070369	3070377	8,085	8,350	8,615	9,144	4
	900	KCA OGK300/DD90/Δ/900	3070386	3070395	3070404	3070412	11,330	11,628	11,892	12,455	4
450	300	KCA OGK450/DD90/Δ/300	3070282	3070291	3070300	3070308	6,692	7,061	7,383	8,166	4
	450	KCA OGK450/DD90/Δ/450	3070317	3070326	3070335	3070343	8,903	9,318	9,687	10,470	4
	600	KCA OGK450/DD90/Δ/600	3070352	3070361	3070370	3070378	11,253	11,622	11,990	12,727	4
	900	KCA OGK450/DD90/Δ/900	3070387	3070396	3070405	3070413	15,766	16,181	16,550	17,333	4
600	300	KCA OGK600/DD90/Δ/300	3070283	3070292	3070301	3070309	8,578	9,051	9,463	10,467	4
	450	KCA OGK600/DD90/Δ/450	3070318	3070327	3070336	3070344	11,411	11,942	12,415	13,418	4
	600	KCA OGK600/DD90/Δ/600	3070353	3070362	3070371	3070379	14,421	14,893	15,365	16,309	4
	900	KCA OGK600/DD90/Δ/900	3070388	3070397	3070406	3070414	20,204	20,735	21,207	22,210	4
750	300	KCA OGK750/DD90/Δ/300	3070284	3070293	3070302	3070310	10,463	11,040	11,543	12,767	4
	450	KCA OGK750/DD90/Δ/450	3070319	3070328	3070337	3070345	13,918	14,566	15,142	16,365	4
	600	KCA OGK750/DD90/Δ/600	3070354	3070363	3070372	3070380	17,588	18,164	18,740	19,891	4
	900	KCA OGK750/DD90/Δ/900	3070389	3070398	3070407	3070415	24,641	25,289	25,864	27,088	4
900	300	KCA OGK900/DD90/Δ/300	3070285	3070294	3070303	3070311	12,350	13,028	13,624	15,067	4
	450	KCA OGK900/DD90/Δ/450	3070320	3070329	3070338	3070346	16,425	17,190	17,870	19,313	4
	600	KCA OGK900/DD90/Δ/600	3070355	3070364	3070373	3070381	20,756	21,436	22,114	23,474	4
	900	KCA OGK900/DD90/Δ/900	3070390	3070399	3070408	3070416	29,079	29,843	30,522	31,966	4
1000	300	KCA OGK1000/DD90/Δ/300	3070286	3070295	3070304	3070312	13,606	14,355	15,010	16,600	4
	450	KCA OGK1000/DD90/Δ/450	3070321	3070330	3070339	3070347	18,097	18,939	19,687	21,277	4
	600	KCA OGK1000/DD90/Δ/600	3070356	3070365	3070374	3070382	22,868	23,617	24,365	25,862	4
	900	KCA OGK1000/DD90/Δ/900	3070391	3070400	3070409	3070417	32,036	32,878	33,627	35,218	4
1100	300	KCA OGK1100/DD90/Δ/300	3070287	3070296	3070305	3070313	14,863	15,681	16,397	18,134	4
	450	KCA OGK1100/DD90/Δ/450	3070322	3070331	3070340	3070348	19,768	20,688	21,505	23,243	4
	600	KCA OGK1100/DD90/Δ/600	3070357	3070366	3070375	3070383	24,980	25,797	26,615	28,250	4
	900	KCA OGK1100/DD90/Δ/900	3070392	3070401	3070410	3070418	34,994	35,914	36,731	38,469	4

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate compenent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

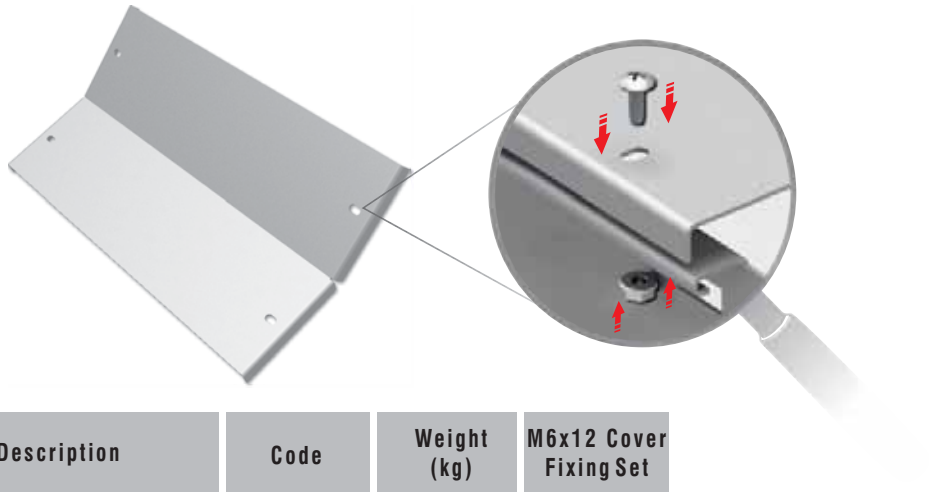
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

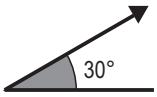
ELINE
KCAOG

▶▶Fittings Cover ID30 Vertical Inside

ID30

Fitting cover shown for illistration purposes only





Width (mm)	Radius (mm)	Description	Code	Weight (kg)	M6x12 Cover Fixing Set
150	300	KCA OGK150/ID30/Δ/300	3069715	0,877	4
	450	KCA OGK150/ID30/Δ/450	3069724	1,216	4
	600	KCA OGK150/ID30/Δ/600	3069733	1,530	4
	900	KCA OGK150/ID30/Δ/900	3069742	2,179	4
200	300	KCA OGK200/ID30/Δ/300	3069716	1,066	4
	450	KCA OGK200/ID30/Δ/450	3069725	1,477	4
	600	KCA OGK200/ID30/Δ/600	3069734	1,859	4
	900	KCA OGK200/ID30/Δ/900	3069743	2,647	4
300	300	KCA OGK300/ID30/Δ/300	3069717	1,443	4
	450	KCA OGK300/ID30/Δ/450	3069726	2,000	4
	600	KCA OGK300/ID30/Δ/600	3069735	2,516	4
	900	KCA OGK300/ID30/Δ/900	3069744	3,583	4
450	300	KCA OGK450/ID30/Δ/300	3069718	2,010	4
	450	KCA OGK450/ID30/Δ/450	3069727	2,784	4
	600	KCA OGK450/ID30/Δ/600	3069736	3,502	4
	900	KCA OGK450/ID30/Δ/900	3069745	4,986	4
600	300	KCA OGK600/ID30/Δ/300	3069719	2,577	4
	450	KCA OGK600/ID30/Δ/450	3069728	3,568	4
	600	KCA OGK600/ID30/Δ/600	3069737	4,489	4
	900	KCA OGK600/ID30/Δ/900	3069746	6,389	4
750	300	KCA OGK750/ID30/Δ/300	3069720	3,144	4
	450	KCA OGK750/ID30/Δ/450	3069729	4,353	4
	600	KCA OGK750/ID30/Δ/600	3069738	5,476	4
	900	KCA OGK750/ID30/Δ/900	3069747	7,792	4
900	300	KCA OGK900/ID30/Δ/300	3069721	3,710	4
	450	KCA OGK900/ID30/Δ/450	3069730	5,137	4
	600	KCA OGK900/ID30/Δ/600	3069739	6,461	4
	900	KCA OGK900/ID30/Δ/900	3069748	9,196	4
1000	300	KCA OGK1000/ID30/Δ/300	3069722	4,089	4
	450	KCA OGK1000/ID30/Δ/450	3069731	5,661	4
	600	KCA OGK1000/ID30/Δ/600	3069740	7,119	4
	900	KCA OGK1000/ID30/Δ/900	3069749	10,132	4
1100	300	KCA OGK1100/ID30/Δ/300	3069723	4,466	4
	450	KCA OGK1100/ID30/Δ/450	3069732	6,183	4
	600	KCA OGK1100/ID30/Δ/600	3069741	7,777	4
	900	KCA OGK1100/ID30/Δ/900	3069750	11,067	4

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

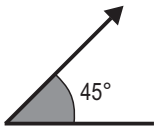
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

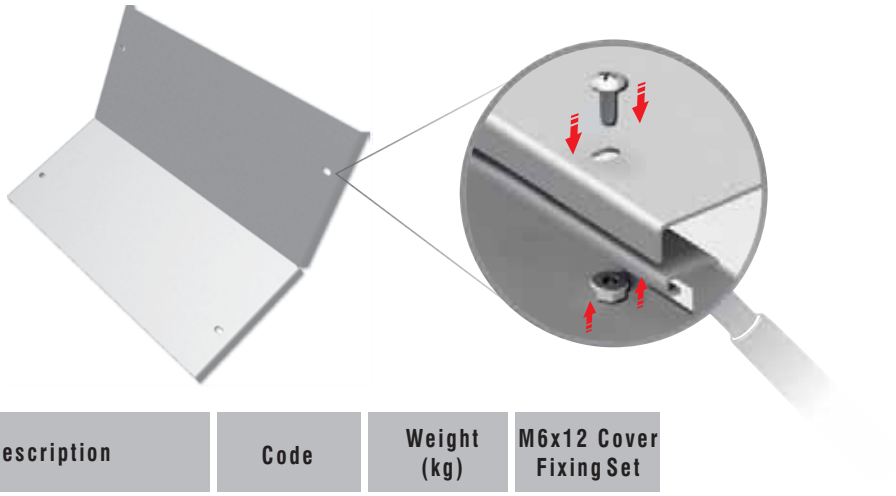
ELINE
KCAOG

▶▶Fittings Cover ID45 Vertical Inside

ID45

Fitting cover shown for illistration purposes only





Width (mm)	Radius (mm)	Description	Code	Weight (kg)	M6x12 Cover Fixing Set
150	300	KCA OGK150/ID45/Δ/300	3069751	1,234	4
	450	KCA OGK150/ID45/Δ/450	3069760	1,742	4
	600	KCA OGK150/ID45/Δ/600	3069769	2,234	4
	900	KCA OGK150/ID45/Δ/900	3069778	3,242	4
200	300	KCA OGK200/ID45/Δ/300	3069752	1,499	4
	450	KCA OGK200/ID45/Δ/450	3069761	2,116	4
	600	KCA OGK200/ID45/Δ/600	3069770	2,714	4
	900	KCA OGK200/ID45/Δ/900	3069779	3,937	4
300	300	KCA OGK300/ID45/Δ/300	3069753	2,030	4
	450	KCA OGK300/ID45/Δ/450	3069762	2,864	4
	600	KCA OGK300/ID45/Δ/600	3069771	3,672	4
	900	KCA OGK300/ID45/Δ/900	3069780	5,327	4
450	300	KCA OGK450/ID45/Δ/300	3069754	2,826	4
	450	KCA OGK450/ID45/Δ/450	3069763	3,986	4
	600	KCA OGK450/ID45/Δ/600	3069772	5,111	4
	900	KCA OGK450/ID45/Δ/900	3069781	7,413	4
600	300	KCA OGK600/ID45/Δ/300	3069755	3,621	4
	450	KCA OGK600/ID45/Δ/450	3069764	5,108	4
	600	KCA OGK600/ID45/Δ/600	3069773	6,548	4
	900	KCA OGK600/ID45/Δ/900	3069782	9,500	4
750	300	KCA OGK750/ID45/Δ/300	3069756	4,417	4
	450	KCA OGK750/ID45/Δ/450	3069765	6,230	4
	600	KCA OGK750/ID45/Δ/600	3069774	7,987	4
	900	KCA OGK750/ID45/Δ/900	3069783	11,585	4
900	300	KCA OGK900/ID45/Δ/300	3069757	5,213	4
	450	KCA OGK900/ID45/Δ/450	3069766	7,352	4
	600	KCA OGK900/ID45/Δ/600	3069775	9,425	4
	900	KCA OGK900/ID45/Δ/900	3069784	13,671	4
1000	300	KCA OGK1000/ID45/Δ/300	3069758	5,743	4
	450	KCA OGK1000/ID45/Δ/450	3069767	8,100	4
	600	KCA OGK1000/ID45/Δ/600	3069776	10,384	4
	900	KCA OGK1000/ID45/Δ/900	3069785	15,061	4
1100	300	KCA OGK1100/ID45/Δ/300	3069759	6,273	4
	450	KCA OGK1100/ID45/Δ/450	3069768	8,848	4
	600	KCA OGK1100/ID45/Δ/600	3069777	11,342	4
	900	KCA OGK1100/ID45/Δ/900	3069786	16,452	4

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

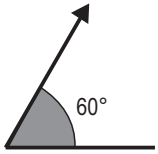
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

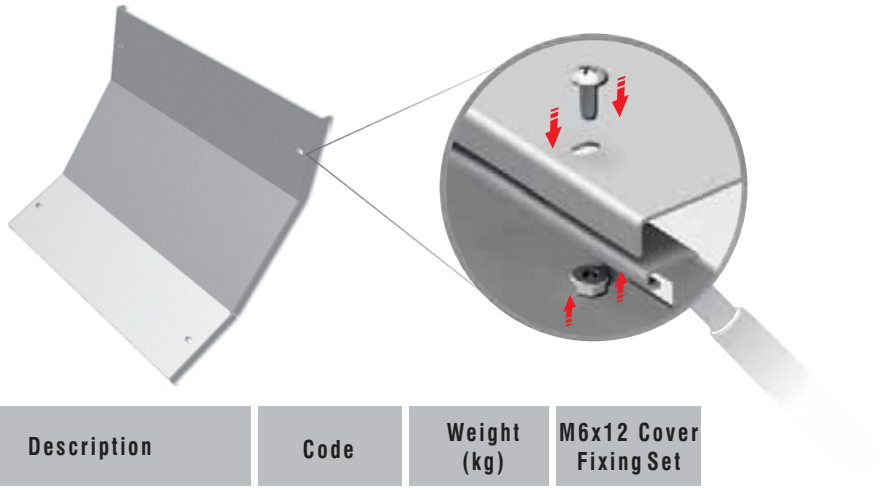
ELINE
KCAOG

▶▶Fittings Cover ID60 Vertical Inside

ID60

Fitting cover shown for illistration purposes only





Width (mm)	Radius (mm)	Description	Code	Weight (kg)	M6x12 Cover Fixing Set
150	300	KCA OGK150/ID60/Δ/300	3069787	1,543	4
	450	KCA OGK150/ID60/Δ/450	3069796	2,188	4
	600	KCA OGK150/ID60/Δ/600	3069805	2,833	4
	900	KCA OGK150/ID60/Δ/900	3069814	4,123	4
200	300	KCA OGK200/ID60/Δ/300	3069788	1,874	4
	450	KCA OGK200/ID60/Δ/450	3069797	2,658	4
	600	KCA OGK200/ID60/Δ/600	3069806	3,441	4
	900	KCA OGK200/ID60/Δ/900	3069815	5,007	4
300	300	KCA OGK300/ID60/Δ/300	3069789	2,537	4
	450	KCA OGK300/ID60/Δ/450	3069798	3,596	4
	600	KCA OGK300/ID60/Δ/600	3069807	4,655	4
	900	KCA OGK300/ID60/Δ/900	3069816	6,775	4
450	300	KCA OGK450/ID60/Δ/300	3069790	3,530	4
	450	KCA OGK450/ID60/Δ/450	3069799	5,004	4
	600	KCA OGK450/ID60/Δ/600	3069808	6,478	4
	900	KCA OGK450/ID60/Δ/900	3069817	9,426	4
600	300	KCA OGK600/ID60/Δ/300	3069791	4,524	4
	450	KCA OGK600/ID60/Δ/450	3069800	6,412	4
	600	KCA OGK600/ID60/Δ/600	3069809	8,301	4
	900	KCA OGK600/ID60/Δ/900	3069818	12,078	4
750	300	KCA OGK750/ID60/Δ/300	3069792	5,518	4
	450	KCA OGK750/ID60/Δ/450	3069801	7,821	4
	600	KCA OGK750/ID60/Δ/600	3069810	10,123	4
	900	KCA OGK750/ID60/Δ/900	3069819	14,729	4
900	300	KCA OGK900/ID60/Δ/300	3069793	6,511	4
	450	KCA OGK900/ID60/Δ/450	3069802	9,229	4
	600	KCA OGK900/ID60/Δ/600	3069811	11,946	4
	900	KCA OGK900/ID60/Δ/900	3069820	17,381	4
1000	300	KCA OGK1000/ID60/Δ/300	3069794	7,173	4
	450	KCA OGK1000/ID60/Δ/450	3069803	10,167	4
	600	KCA OGK1000/ID60/Δ/600	3069812	13,162	4
	900	KCA OGK1000/ID60/Δ/900	3069821	19,149	4
1100	300	KCA OGK1100/ID60/Δ/300	3069795	7,836	4
	450	KCA OGK1100/ID60/Δ/450	3069804	11,106	4
	600	KCA OGK1100/ID60/Δ/600	3069813	14,376	4
	900	KCA OGK1100/ID60/Δ/900	3069822	20,917	4

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

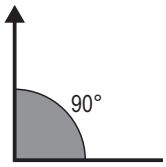
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

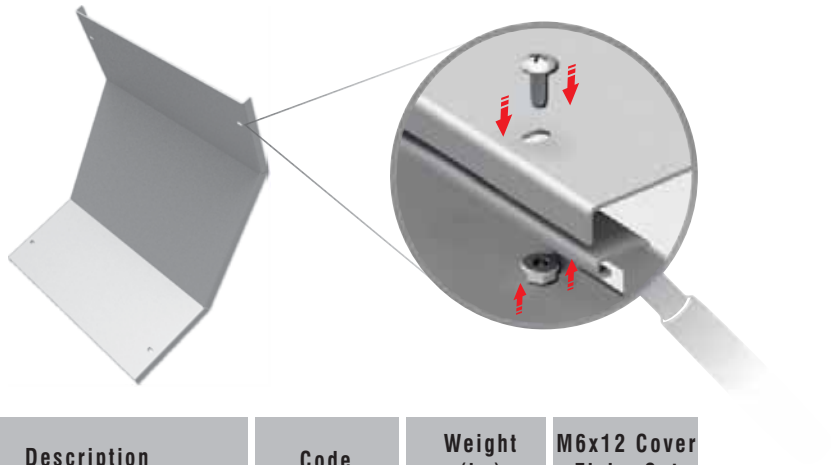
ELINE
KCAOG

▶▶Fittings Cover ID90 Vertical Inside

ID90

Fitting cover shown for illistration purposes only





Width (mm)	Radius (mm)	Description	Code	Weight (kg)	M6x12 Cover Fixing Set
150	300	KCA OGK150/ID90/Δ/300	3069823	2,262	4
	450	KCA OGK150/ID90/Δ/450	3069832	3,230	4
	600	KCA OGK150/ID90/Δ/600	3069841	4,257	4
	900	KCA OGK150/ID90/Δ/900	3069850	6,233	4
200	300	KCA OGK200/ID90/Δ/300	3069824	2,747	4
	450	KCA OGK200/ID90/Δ/450	3069833	3,922	4
	600	KCA OGK200/ID90/Δ/600	3069842	5,169	4
	900	KCA OGK200/ID90/Δ/900	3069851	7,568	4
300	300	KCA OGK300/ID90/Δ/300	3069825	3,716	4
	450	KCA OGK300/ID90/Δ/450	3069834	5,305	4
	600	KCA OGK300/ID90/Δ/600	3069843	6,994	4
	900	KCA OGK300/ID90/Δ/900	3069852	10,238	4
450	300	KCA OGK450/ID90/Δ/300	3069826	5,170	4
	450	KCA OGK450/ID90/Δ/450	3069835	7,381	4
	600	KCA OGK450/ID90/Δ/600	3069844	9,730	4
	900	KCA OGK450/ID90/Δ/900	3069853	14,244	4
600	300	KCA OGK600/ID90/Δ/300	3069827	6,624	4
	450	KCA OGK600/ID90/Δ/450	3069836	9,457	4
	600	KCA OGK600/ID90/Δ/600	3069845	12,466	4
	900	KCA OGK600/ID90/Δ/900	3069854	18,250	4
750	300	KCA OGK750/ID90/Δ/300	3069828	8,078	4
	450	KCA OGK750/ID90/Δ/450	3069837	11,532	4
	600	KCA OGK750/ID90/Δ/600	3069846	15,203	4
	900	KCA OGK750/ID90/Δ/900	3069855	22,255	4
900	300	KCA OGK900/ID90/Δ/300	3069829	9,533	4
	450	KCA OGK900/ID90/Δ/450	3069838	13,608	4
	600	KCA OGK900/ID90/Δ/600	3069847	17,940	4
	900	KCA OGK900/ID90/Δ/900	3069856	26,261	4
1000	300	KCA OGK1000/ID90/Δ/300	3069830	10,502	4
	450	KCA OGK1000/ID90/Δ/450	3069839	14,993	4
	600	KCA OGK1000/ID90/Δ/600	3069848	19,764	4
	900	KCA OGK1000/ID90/Δ/900	3069857	28,932	4
1100	300	KCA OGK1100/ID90/Δ/300	3069831	11,472	4
	450	KCA OGK1100/ID90/Δ/450	3069840	16,377	4
	600	KCA OGK1100/ID90/Δ/600	3069849	21,589	4
	900	KCA OGK1100/ID90/Δ/900	3069858	31,603	4

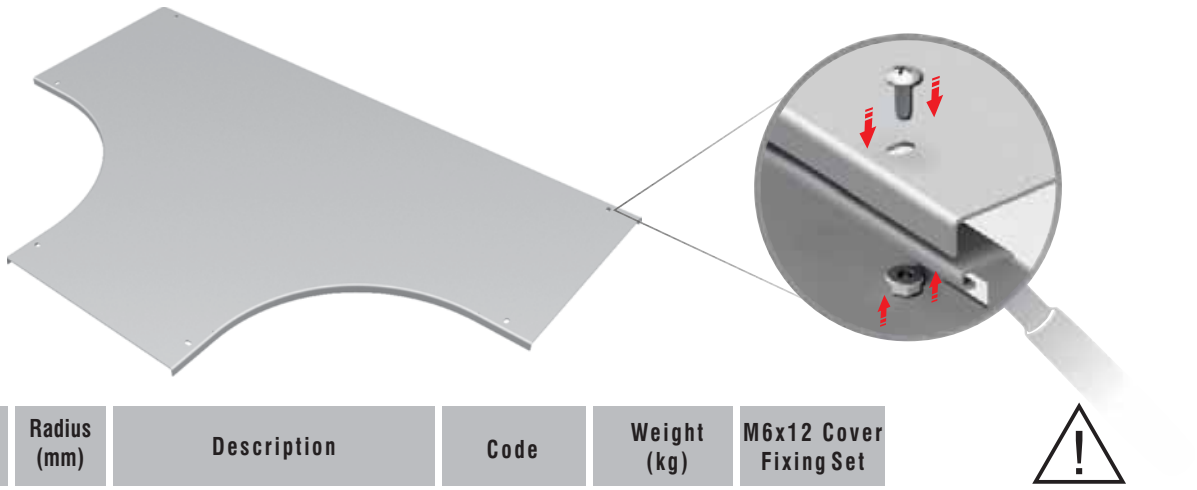
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶Fittings Cover YT Horizontal Tee

YT



Fitting Cover shown
for illistration purposes only

Width (mm)	Radius (mm)	Description	Code	Weight (kg)	M6x12 Cover Fixing Set
150	300	KCA OGK150/YT/Δ/300	3070419	5,652	6
	450	KCA OGK150/YT/Δ/450	3070428	8,212	6
	600	KCA OGK150/YT/Δ/600	3070437	11,103	6
	900	KCA OGK150/YT/Δ/900	3070446	17,890	6
200	300	KCA OGK200/YT/Δ/300	3070420	7,000	6
	450	KCA OGK200/YT/Δ/450	3070429	9,948	6
	600	KCA OGK200/YT/Δ/600	3070438	13,230	6
	900	KCA OGK200/YT/Δ/900	3070447	20,793	6
300	300	KCA OGK300/YT/Δ/300	3070421	9,956	6
	450	KCA OGK300/YT/Δ/450	3070430	13,682	6
	600	KCA OGK300/YT/Δ/600	3070439	17,881	6
	900	KCA OGK300/YT/Δ/900	3070448	26,858	6
450	300	KCA OGK450/YT/Δ/300	3070422	15,038	6
	450	KCA OGK450/YT/Δ/450	3070431	19,929	6
	600	KCA OGK450/YT/Δ/600	3070440	25,154	6
	900	KCA OGK450/YT/Δ/900	3070449	36,603	6
600	300	KCA OGK600/YT/Δ/300	3070423	20,897	6
	450	KCA OGK600/YT/Δ/450	3070432	26,953	6
	600	KCA OGK600/YT/Δ/600	3070441	33,516	6
	900	KCA OGK600/YT/Δ/900	3070450	47,124	6
750	300	KCA OGK750/YT/Δ/300	3070424	27,533	6
	450	KCA OGK750/YT/Δ/450	3070433	34,756	6
	600	KCA OGK750/YT/Δ/600	3070442	42,312	6
	900	KCA OGK750/YT/Δ/900	3070451	58,423	6
900	300	KCA OGK900/YT/Δ/300	3070425	34,947	6
	450	KCA OGK900/YT/Δ/450	3070434	43,335	6
	600	KCA OGK900/YT/Δ/600	3070443	52,056	6
	900	KCA OGK900/YT/Δ/900	3070452	70,500	6
1000	300	KCA OGK1000/YT/Δ/300	3070426	40,321	6
	450	KCA OGK1000/YT/Δ/450	3070435	49,486	6
	600	KCA OGK1000/YT/Δ/600	3070444	58,984	6
	900	KCA OGK1000/YT/Δ/900	3070453	78,982	6
1100	300	KCA OGK1100/YT/Δ/300	3070427	46,039	6
	450	KCA OGK1100/YT/Δ/450	3070436	55,982	6
	600	KCA OGK1100/YT/Δ/600	3070445	66,257	6
	900	KCA OGK1100/YT/Δ/900	3070454	87,810	6

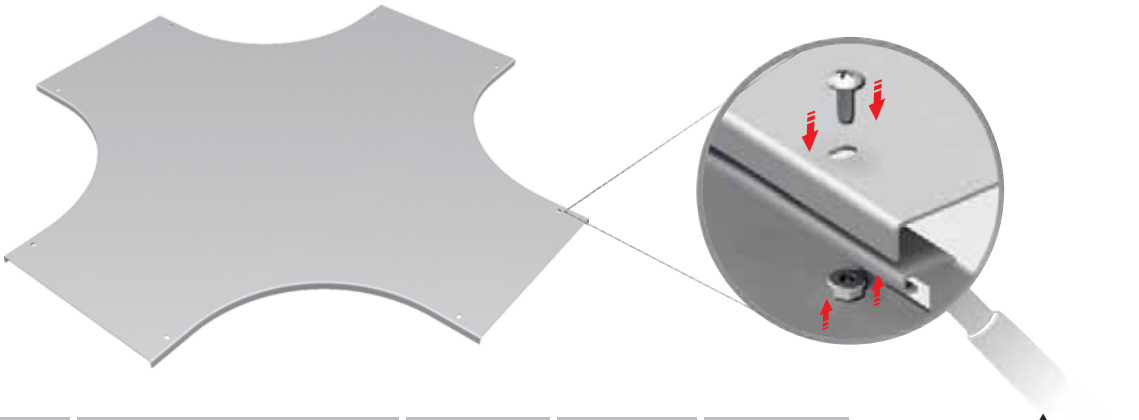
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶ Fittings Cover AD Cross

AD



Width (mm)	Radius (mm)	Description	Code	Weight (kg)	M6x12 Cover Fixing Set
150	300	KCA OGK150/AD/Δ/300	3070455	7,721	8
	450	KCA OGK150/AD/Δ/450	3070464	11,696	8
	600	KCA OGK150/AD/Δ/600	3070473	16,338	8
	900	KCA OGK150/AD/Δ/900	3070482	27,625	8
200	300	KCA OGK200/AD/Δ/300	3070456	9,382	8
	450	KCA OGK200/AD/Δ/450	3070465	13,874	8
	600	KCA OGK200/AD/Δ/600	3070474	19,036	8
	900	KCA OGK200/AD/Δ/900	3070483	31,359	8
300	300	KCA OGK300/AD/Δ/300	3070457	12,962	8
	450	KCA OGK300/AD/Δ/450	3070466	18,491	8
	600	KCA OGK300/AD/Δ/600	3070475	24,687	8
	900	KCA OGK300/AD/Δ/900	3070484	39,083	8
450	300	KCA OGK450/AD/Δ/300	3070458	18,979	8
	450	KCA OGK450/AD/Δ/450	3070467	26,063	8
	600	KCA OGK450/AD/Δ/600	3070476	33,814	8
	900	KCA OGK450/AD/Δ/900	3070485	51,318	8
600	300	KCA OGK600/AD/Δ/300	3070459	25,775	8
	450	KCA OGK600/AD/Δ/450	3070468	34,412	8
	600	KCA OGK600/AD/Δ/600	3070477	43,718	8
	900	KCA OGK600/AD/Δ/900	3070486	64,331	8
750	300	KCA OGK750/AD/Δ/300	3070460	33,348	8
	450	KCA OGK750/AD/Δ/450	3070469	43,539	8
	600	KCA OGK750/AD/Δ/600	3070478	54,399	8
	900	KCA OGK750/AD/Δ/900	3070487	78,120	8
900	300	KCA OGK900/AD/Δ/300	3070461	41,697	8
	450	KCA OGK900/AD/Δ/450	3070470	53,444	8
	600	KCA OGK900/AD/Δ/600	3070479	65,857	8
	900	KCA OGK900/AD/Δ/900	3070488	92,687	8
1000	300	KCA OGK1000/AD/Δ/300	3070462	47,695	8
	450	KCA OGK1000/AD/Δ/450	3070471	60,477	8
	600	KCA OGK1000/AD/Δ/600	3070480	73,928	8
	900	KCA OGK1000/AD/Δ/900	3070489	102,829	8
1100	300	KCA OGK1100/AD/Δ/300	3070463	54,038	8
	450	KCA OGK1100/AD/Δ/450	3070472	67,857	8
	600	KCA OGK1100/AD/Δ/600	3070481	82,343	8
	900	KCA OGK1100/AD/Δ/900	3070490	113,318	8

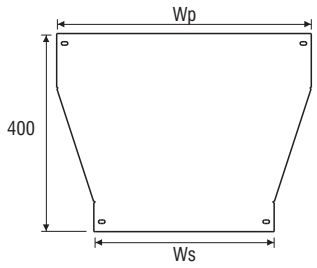
Fitting Cover shown for illistration purposes only

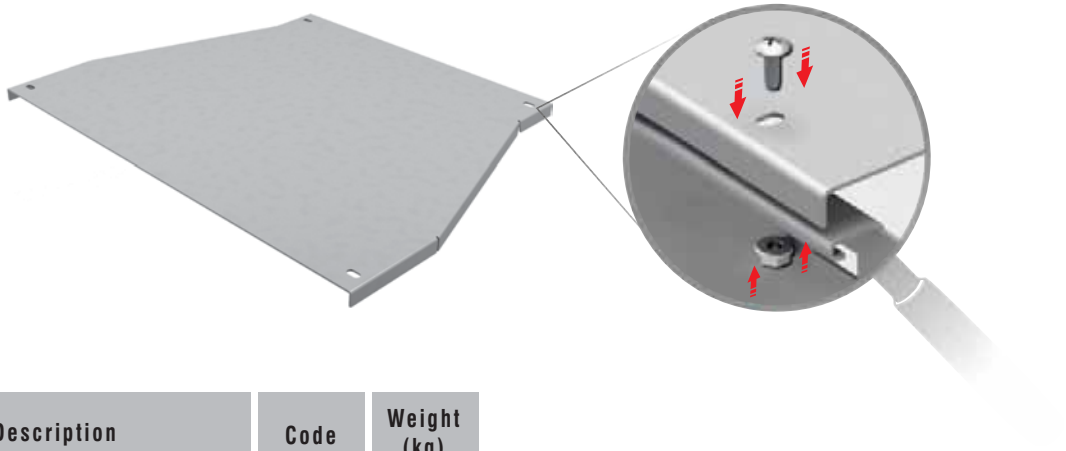
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To optain the appropriate compenent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG
▶▶Fittings Middle Reduction Cover

MR





Ws (mm)	Wp (mm)	Description	Code	Weight (kg)
150	200	KCA OGK150/200/MR / Δ	3106939	0,235
	300	KCA OGK150/300/MR / Δ	3106940	0,569
	450	KCA OGK150/450/MR / Δ	3106941	1,093
	600	KCA OGK150/600/MR / Δ	3106942	2,163
	750	KCA OGK150/750/MR / Δ	3106943	4,057
	900	KCA OGK150/900/MR / Δ	3106944	5,667
	1000	KCA OGK150/1000/MR / Δ	3106945	7,247
	1100	KCA OGK150/1100/MR / Δ	3106946	9,002
200	300	KCA OGK200/300/MR / Δ	3106947	0,611
	450	KCA OGK200/450/MR / Δ	3106948	1,158
	600	KCA OGK200/600/MR / Δ	3106949	2,278
	750	KCA OGK200/750/MR / Δ	3106950	4,241
	900	KCA OGK200/900/MR / Δ	3106951	5,896
	1000	KCA OGK200/1000/MR / Δ	3106952	7,520
	1100	KCA OGK200/1100/MR / Δ	3106953	9,318
300	450	KCA OGK300/450/MR / Δ	3106954	1,288
	600	KCA OGK300/600/MR / Δ	3106955	2,509
	750	KCA OGK300/750/MR / Δ	3106956	4,612
	900	KCA OGK300/900/MR / Δ	3106957	6,353
	1000	KCA OGK300/1000/MR / Δ	3106958	8,065
	1100	KCA OGK300/1100/MR / Δ	3106959	9,950
450	600	KCA OGK450/600/MR / Δ	3106960	2,858
	750	KCA OGK450/750/MR / Δ	3106961	5,171
	900	KCA OGK450/900/MR / Δ	3106962	7,042
	1000	KCA OGK450/1000/MR / Δ	3106963	8,884
	1100	KCA OGK450/1100/MR / Δ	3106964	10,899
600	750	KCA OGK600/750/MR / Δ	3106965	5,926
	900	KCA OGK600/900/MR / Δ	3106966	7,968
	1000	KCA OGK600/1000/MR / Δ	3106967	9,983
	1100	KCA OGK600/1100/MR / Δ	3106968	12,171
750	900	KCA OGK750/900/MR / Δ	3106969	8,434
	1000	KCA OGK750/1000/MR / Δ	3106970	10,535
	1100	KCA OGK750/1100/MR / Δ	3106971	12,810
900	1000	KCA OGK900/1000/MR / Δ	3106972	11,369
	1100	KCA OGK900/1100/MR / Δ	3106973	13,770
1000	1100	KCA OGK1000/1100/MR / Δ	3106974	14,4144

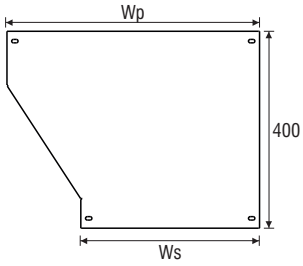
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate compenent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

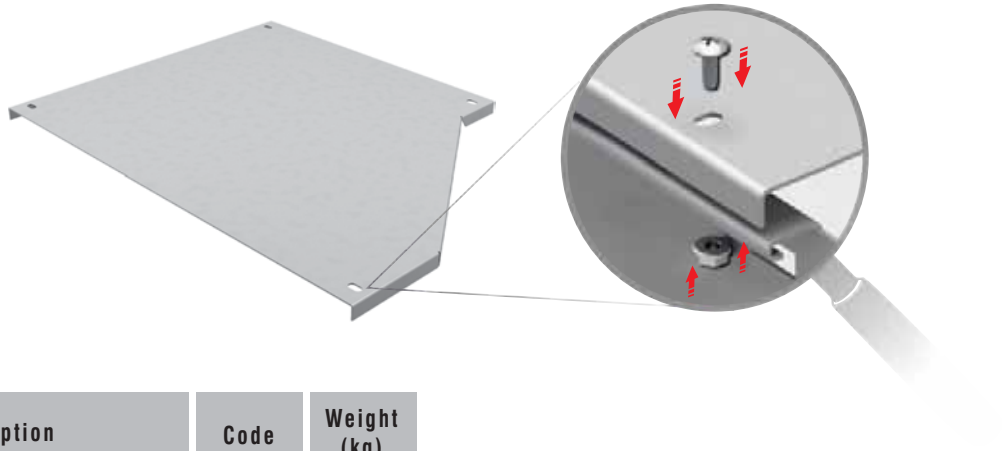
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶Fittings Left Side Reduction Cover

LR



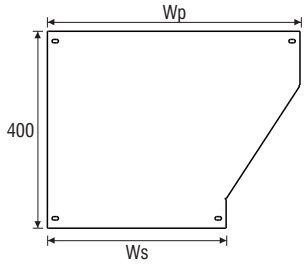


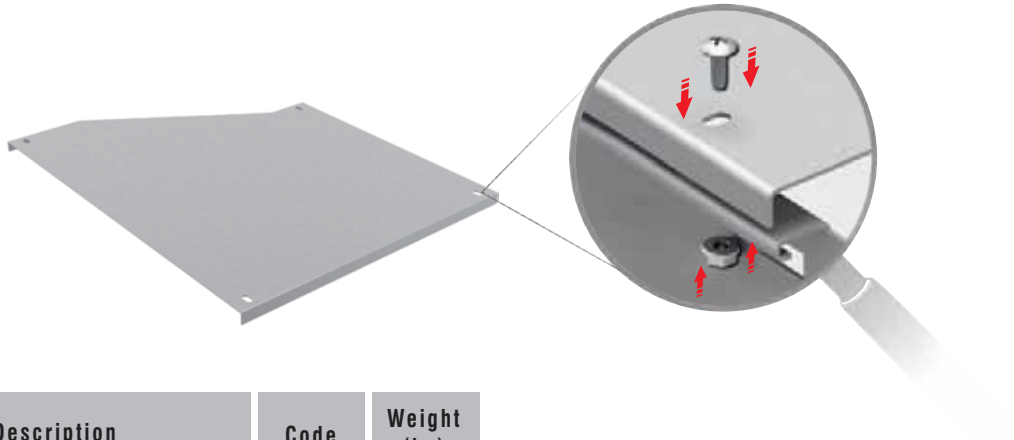
Ws (mm)	Wp (mm)	Description	Code	Weight (kg)
150	200	**KCA OGK150/200/LR / Δ**	3106903	0,222
	300	**KCA OGK150/300/LR / Δ**	3106904	0,538
	450	**KCA OGK150/450/LR / Δ**	3106905	1,000
	600	**KCA OGK150/600/LR / Δ**	3106906	1,987
	750	**KCA OGK150/750/LR / Δ**	3106907	3,721
	900	**KCA OGK150/900/LR / Δ**	3106908	5,192
	1000	**KCA OGK150/1000/LR / Δ**	3106909	6,634
	1100	**KCA OGK150/1100/LR / Δ**	3106910	8,234
200	300	**KCA OGK200/300/LR / Δ**	3106911	0,573
	450	**KCA OGK200/450/LR / Δ**	3106912	1,064
	600	**KCA OGK200/600/LR / Δ**	3106913	2,089
	750	**KCA OGK200/750/LR / Δ**	3106914	3,887
	900	**KCA OGK200/900/LR / Δ**	3106915	5,398
	1000	**KCA OGK200/1000/LR / Δ**	3106916	6,880
	1100	**KCA OGK200/1100/LR / Δ**	3106917	8,518
300	450	**KCA OGK300/450/LR / Δ**	3106918	1,180
	600	**KCA OGK300/600/LR / Δ**	3106919	2,295
	750	**KCA OGK300/750/LR / Δ**	3106920	4,220
	900	**KCA OGK300/900/LR / Δ**	3106921	5,810
	1000	**KCA OGK300/1000/LR / Δ**	3106922	7,370
	1100	**KCA OGK300/1100/LR / Δ**	3106923	9,088
450	600	**KCA OGK450/600/LR / Δ**	3106924	2,607
	750	**KCA OGK450/750/LR / Δ**	3106925	4,721
	900	**KCA OGK450/900/LR / Δ**	3106926	6,429
	1000	**KCA OGK450/1000/LR / Δ**	3106927	8,108
	1100	**KCA OGK450/1100/LR / Δ**	3106928	9,944
600	750	**KCA OGK600/750/LR / Δ**	3106929	5,396
	900	**KCA OGK600/900/LR / Δ**	3106930	7,259
	1000	**KCA OGK600/1000/LR / Δ**	3106931	9,095
	1100	**KCA OGK600/1100/LR / Δ**	3106932	11,088
750	900	**KCA OGK750/900/LR / Δ**	3106933	7,677
	1000	**KCA OGK750/1000/LR / Δ**	3106934	9,591
	1100	**KCA OGK750/1100/LR / Δ**	3106935	11,663
900	1000	**KCA OGK900/1000/LR / Δ**	3106936	10,342
	1100	**KCA OGK900/1100/LR / Δ**	3106937	12,529
1000	1100	**KCA OGK1000/1100/LR / Δ**	3106938	13,110

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate compenent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG
▶▶Fittings Right Side Reduction Cover
RR

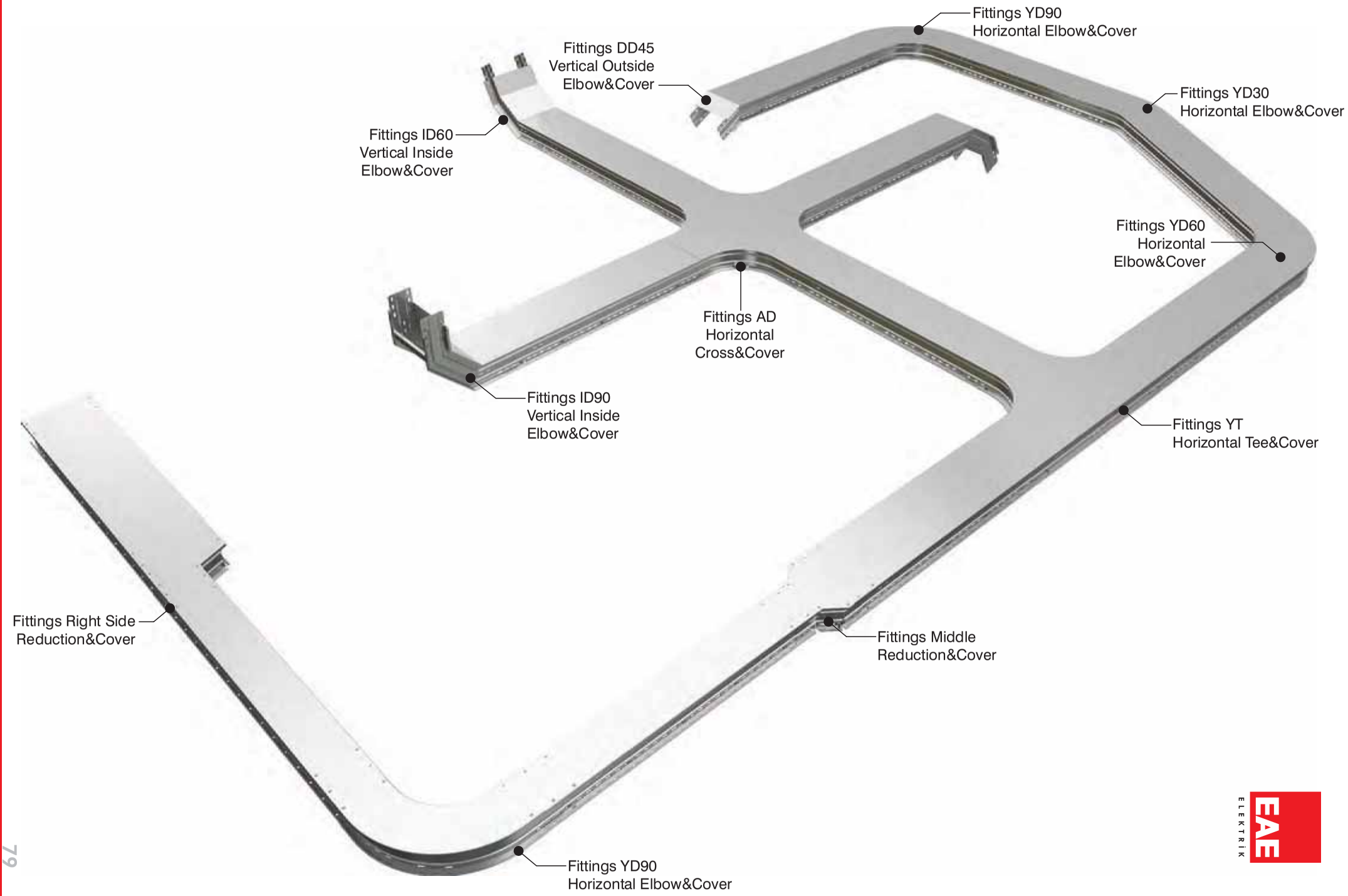




Ws (mm)	Wp (mm)	Description	Code	Weight (kg)
150	200	**KCA OGK150/200/RR / Δ**	3106867	0,222
	300	**KCA OGK150/300/RR / Δ**	3106868	0,538
	450	**KCA OGK150/450/RR / Δ**	3106869	1,000
	600	**KCA OGK150/600/RR / Δ**	3106870	1,987
	750	**KCA OGK150/750/RR / Δ**	3106871	3,721
	900	**KCA OGK150/900/RR / Δ**	3106872	5,192
	1000	**KCA OGK150/1000/RR / Δ**	3106873	6,634
	1100	**KCA OGK150/1100/RR / Δ**	3106874	8,234
200	300	**KCA OGK200/300/RR / Δ**	3106875	0,573
	450	**KCA OGK200/450/RR / Δ**	3106876	1,064
	600	**KCA OGK200/600/RR / Δ**	3106877	2,089
	750	**KCA OGK200/750/RR / Δ**	3106878	3,887
	900	**KCA OGK200/900/RR / Δ**	3106879	5,398
	1000	**KCA OGK200/1000/RR / Δ**	3106880	6,880
	1100	**KCA OGK200/1100/RR / Δ**	3106881	8,518
300	450	**KCA OGK300/450/RR / Δ**	3106882	1,180
	600	**KCA OGK 300/600/RR / Δ**	3106883	2,295
	750	**KCA OGK300/750/RR / Δ**	3106884	4,220
	900	**KCA OGK300/900/RR / Δ**	3106885	5,810
	1000	**KCA OGK300/1000/RR / Δ**	3106886	7,370
	1100	**KCA OGK300/1100/RR / Δ**	3106887	9,088
450	600	**KCA OGK450/600/RR / Δ**	3106888	2,607
	750	**KCA OGK450/750/RR / Δ**	3106889	4,721
	900	**KCA OGK450/900/RR / Δ**	3106890	6,429
	1000	**KCA OGK450/1000/RR / Δ**	3106891	8,108
	1100	**KCA OGK450/1100/RR / Δ**	3106892	9,944
600	750	**KCA OGK600/750/RR / Δ**	3106893	5,396
	900	**KCA OGK600/900/RR / Δ**	3106894	7,259
	1000	**KCA OGK600/1000/RR / Δ**	3106895	9,095
	1100	**KCA OGK600/1100/RR / Δ**	3106896	11,088
750	900	**KCA OGK750/900/RR / Δ**	3106897	7,677
	1000	**KCA OGK750/1000/RR / Δ**	3106898	9,591
	1100	**KCA OGK750/1100/RR / Δ**	3106899	11,663
900	1000	**KCA OGK900/1000/RR / Δ**	3106900	10,342
	1100	**KCA OGK900/1100/RR / Δ**	3106901	12,529
1000	1100	**KCA OGK1000/1100/RR / Δ**	3106902	13,110

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate compenent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

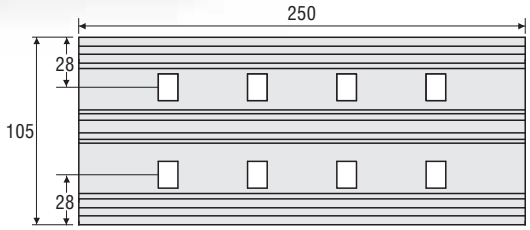
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

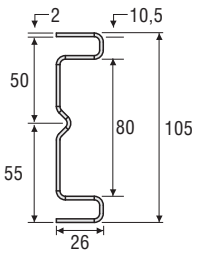

Fittings YD90
Horizontal Elbow&Cover
Fittings DD45
Vertical Outside
Elbow&Cover
Fittings YD30
Horizontal Elbow&Cover
Fittings ID60
Vertical Inside
Elbow&Cover
Fittings YD60
Horizontal
Elbow&Cover
Fittings AD
Horizontal
Cross&Cover
Fittings ID90
Vertical Inside
Elbow&Cover
Fittings YT
Horizontal Tee&Cover
Fittings Right Side
Reduction&Cover
Fittings Middle
Reduction&Cover
Fittings YD90
Horizontal Elbow&Cover

ELINE
KCAOG
▶▶Accessories Splice Plate

▶▶ H:100 Straight Splice Plate

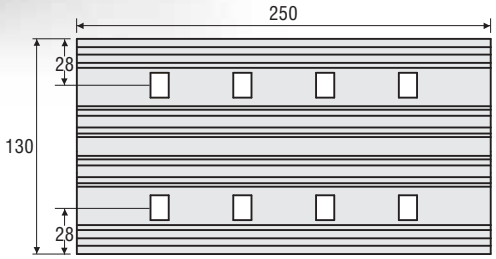
Description	Weight	Code
100 KCA OG / SP / Δ	0,820	3070491

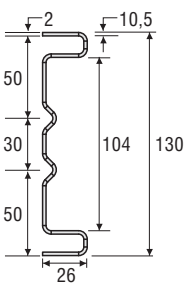




▶▶ H:125 Straight Splice Plate

Description	Weight	Code
125 KCA OG / SP / Δ	0,946	3070492





- 8 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

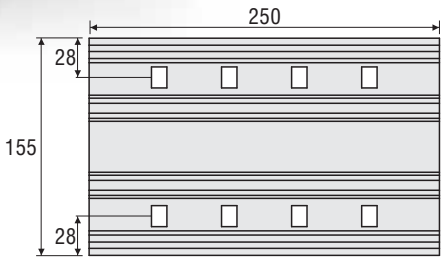
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

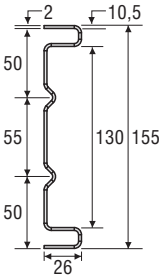
ELINE
KCAOG

▶▶ Accessories Splice Plate

▶▶ H:150 Straight Splice Plate

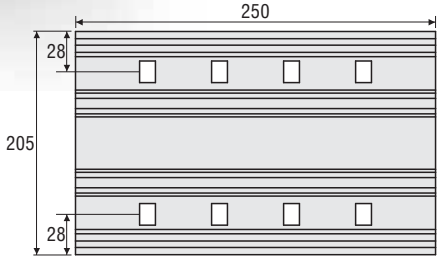
Description	Weight	Code
150 KCA OG / SP / Δ	1,054	3070493

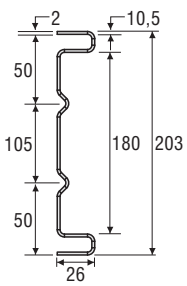


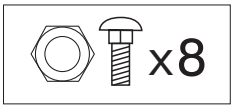


▶▶ H:200 Straight Splice Plate

Description	Weight	Code
200 KCA OG / SP / Δ	1,269	3070494







- 8 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

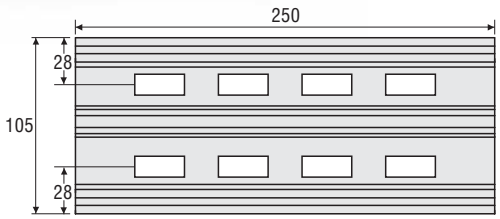
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

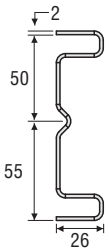
ELINE
KCAOG

▶▶Accessories Expansion Splice Plate

▶▶ H:100 Expansion Splice Plate

Description	Weight (kg)	Code
100 KCA OG / EXP / Δ	0,820	3070819

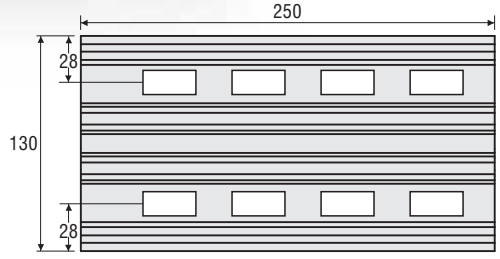


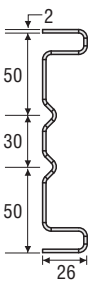


8 Pcs Expansion Bolt Set
- 1 pc M10x30 Round Head Square Neck Bolt
- 1 pc M12 Plain Washer
- 2 pcs M10 Nut

▶▶ H:125 Expansion Splice Plate

Description	Weight (kg)	Code
125 KCA OG / EXP / Δ	0,946	3070820





8 Pcs Expansion Bolt Set
- 1 pc M10x30 Round Head Square Neck Bolt
- 1 pc M12 Plain Washer
- 2 pcs M10 Nut

- 8 pcs M10X30 Expansion bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

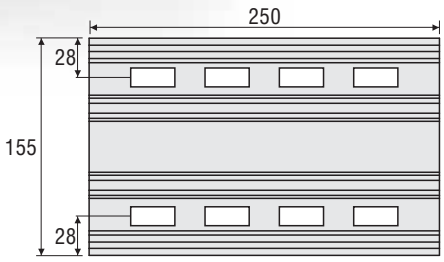
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

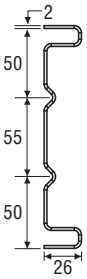
ELINE
KCAOG

▶▶Accessories Expansion Splice Plate

▶▶ H:150 Expansion Splice Plate

Description	Weight (kg)	Code
150 KCA OG / EXP / Δ	1,054	3070821

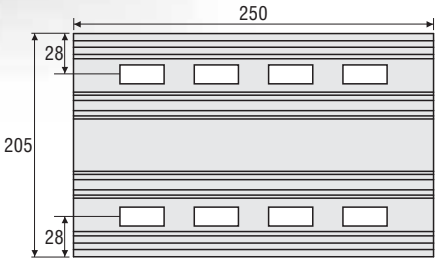


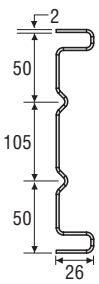


8 Pcs Expansion Bolt Set
- 1 pc M10x30 Round Head Square Neck Bolt
- 1 pc M12 Plain Washer
- 2 pcs M10 Nut

▶▶ H:200 Expansion Splice Plate

Description	Weight (kg)	Code
200 KCA OG / EXP / Δ	1,269	3070822





8 Pcs Expansion Bolt Set
- 1 pc M10x30 Round Head Square Neck Bolt
- 1 pc M12 Plain Washer
- 2 pcs M10 Nut

- 8 pcs M10X30 Expansion bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶ Accessories Horizontal Adjustable Couplers

▶▶ H:100 Horizontal Adjustable Couplers

Description	Weight	Code (Set)
100 KCA OG / ME / Δ	0,800	**3070794**

▶▶ H:125 Horizontal Adjustable Couplers

Description	Weight	Code (Set)
125 KCA OG / ME / Δ	0,985	**3070795**

▶▶ H:150 Horizontal Adjustable Couplers

Description	Weight	Code (Set)
150 KCA OG / ME / Δ	1,213	**3070796**

▶▶ H:200 Horizontal Adjustable Couplers

Description	Weight	Code (Set)
200 KCA OG / ME / Δ	1,651	**3070797**

- 8 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶ Accessories Vertical Adjustable Couplers

▶▶ H:100 Vertical Adjustable Couplers

Description	Code (Set)
100 KCA OG / SDE / Δ	3070497

▶▶ H:125 Vertical Adjustable Couplers

Description	Code (Set)
125 KCA OG / SDE / Δ	3070498

▶▶ H:150 Vertical Adjustable Couplers

Description	Code (Set)
150 KCA OG / SDE / Δ	3070499

▶▶ H:200 Vertical Adjustable Couplers

Description	Code (Set)
200 KCA OG / SDE / Δ	3070500

- 8 pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

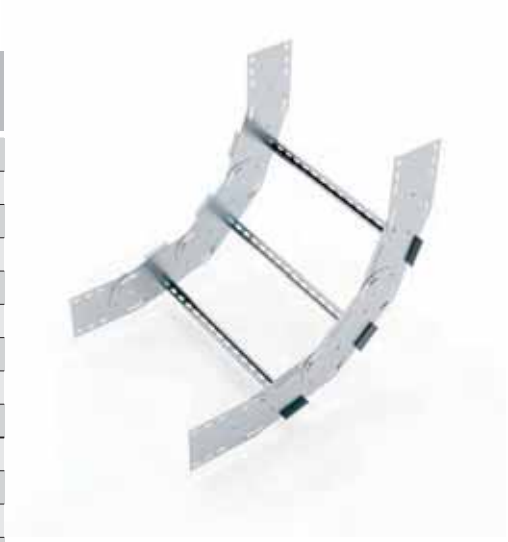
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶Accessories Vertical Adjustable Fitting

SDM

Height	Width (mm)	Description	No. of Sections	Weight (kg)	Code
100	150	↕ KCA OG150/SDM/Δ	3	5,949	3084141
	200	↕ KCA OG200/SDM/Δ	3	6,190	3084142
	300	↕ KCA OG300/SDM/Δ	3	6,669	3084143
	450	↕ KCA OG450/SDM/Δ	3	7,388	3084144
	600	↕ KCA OG600/SDM/Δ	3	8,108	3084145
	750	↕ KCA OG750/SDM/Δ	3	8,827	3084146
	900	↕ KCA OG900/SDM/Δ	3	9,546	3084147
	1000	↕ KCA OG1000/SDM/Δ	3	10,025	3084148
	1100	↕ KCA OG1100/SDM/Δ	3	10,923	3084149
125	150	↕ KCA OG150/SDM/Δ	3	7,646	3084150
	200	↕ KCA OG200/SDM/Δ	3	7,887	3084151
	300	↕ KCA OG300/SDM/Δ	3	8,365	3084152
	450	↕ KCA OG450/SDM/Δ	3	9,084	3084153
	600	↕ KCA OG600/SDM/Δ	3	9,804	3084154
	750	↕ KCA OG750/SDM/Δ	3	10,523	3084155
	900	↕ KCA OG900/SDM/Δ	3	11,243	3084156
	1000	↕ KCA OG1000/SDM/Δ	3	11,721	3084157
	1100	↕ KCA OG1100/SDM/Δ	3	12,619	3084158
150	150	↕ KCA OG150/SDM/Δ	3	9,639	3084159
	200	↕ KCA OG200/SDM/Δ	3	9,880	3084160
	300	↕ KCA OG300/SDM/Δ	3	10,358	3084161
	450	↕ KCA OG450/SDM/Δ	3	11,078	3084162
	600	↕ KCA OG600/SDM/Δ	3	11,797	3084163
	750	↕ KCA OG750/SDM/Δ	3	12,516	3084164
	900	↕ KCA OG900/SDM/Δ	3	13,236	3084165
	1000	↕ KCA OG1000/SDM/Δ	3	13,714	3084166
	1100	↕ KCA OG1100/SDM/Δ	3	14,612	3084167
200	200	↕ KCA OG200/SDM/Δ	3	14,841	3084168
	300	↕ KCA OG300/SDM/Δ	3	15,319	3084169
	450	↕ KCA OG450/SDM/Δ	3	16,039	3084170
	600	↕ KCA OG600/SDM/Δ	3	16,758	3084171
	750	↕ KCA OG750/SDM/Δ	3	17,477	3084172
	900	↕ KCA OG900/SDM/Δ	3	18,197	3084173
	1000	↕ KCA OG1000/SDM/Δ	3	18,675	3084174
	1100	↕ KCA OG1100/SDM/Δ	3	19,573	3084175

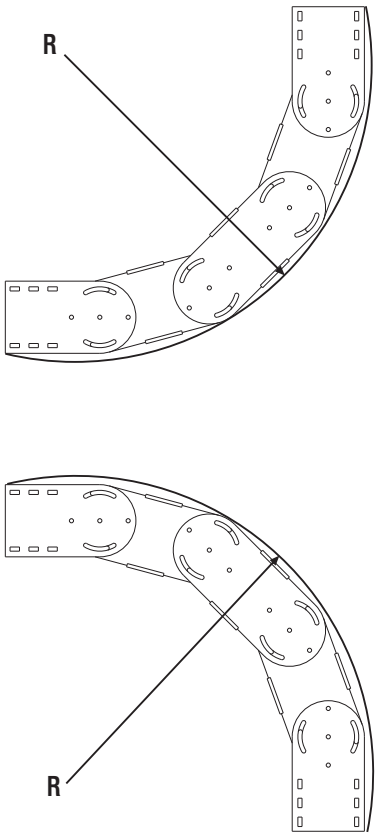


- M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG
▶▶ Accessories Vertical Adjustable Fitting

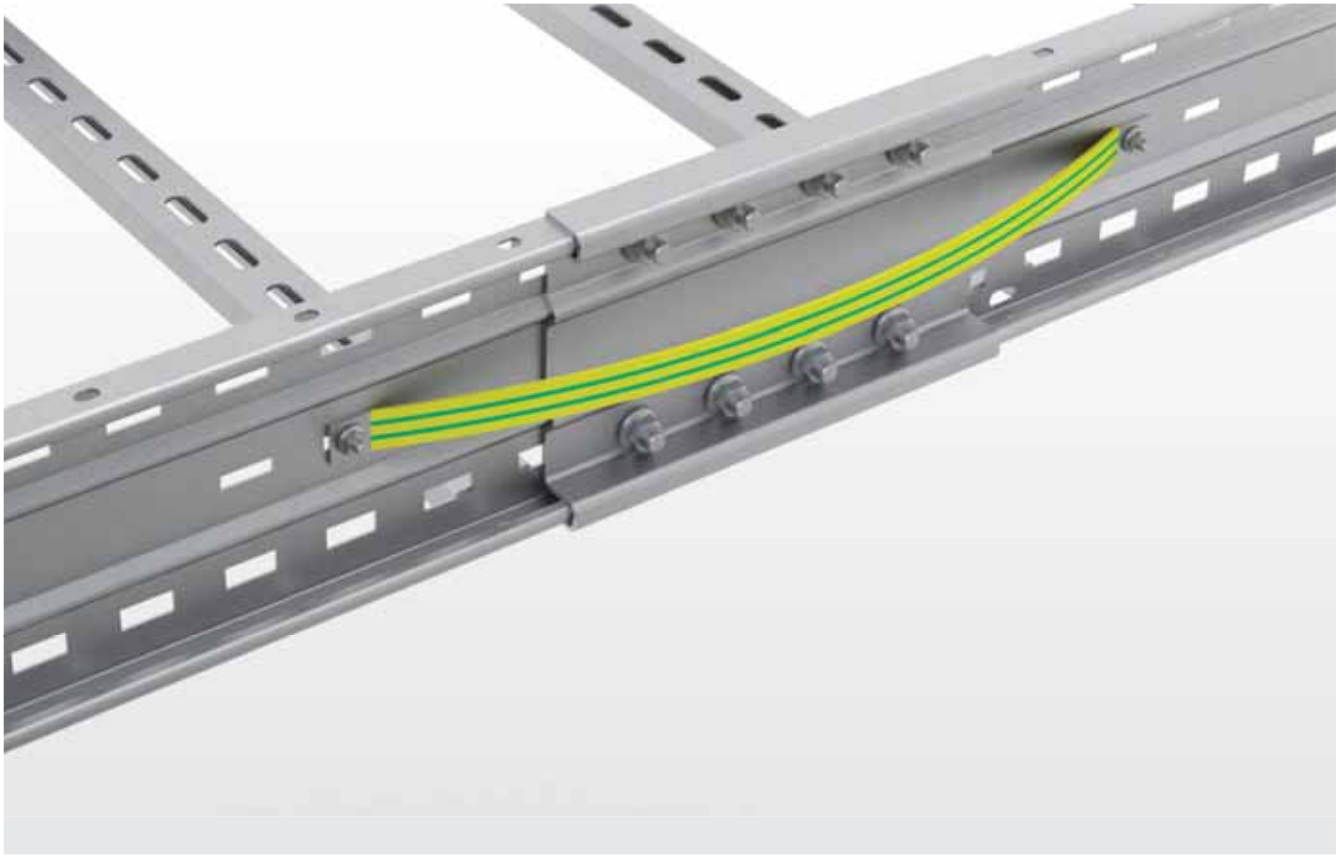
Description	Angle	No. of Sections	Radious (mm)	
			Inside	Outside
↕KCA OG ↔ / SDM / Δ / 1	30	1	1096	1196
↕KCA OG ↔ / SDM / Δ / 2	30	2	1478	1578
↕KCA OG ↔ / SDM / Δ / 3	30	3	1862	1962
↕KCA OG ↔ / SDM / Δ / 1	45	1	714	814
↕KCA OG ↔ / SDM / Δ / 2	45	2	969	1069
↕KCA OG ↔ / SDM / Δ / 3	45	3	1227	1327
↕KCA OG ↔ / SDM / Δ / 4	45	4	1482	1582
↕KCA OG ↔ / SDM / Δ / 1	60	1	523	623
↕KCA OG ↔ / SDM / Δ / 2	60	2	714	814
↕KCA OG ↔ / SDM / Δ / 3	60	3	910	1010
↕KCA OG ↔ / SDM / Δ / 4	60	4	1101	1201
↕KCA OG ↔ / SDM / Δ / 5	60	5	1315	1415
↕KCA OG ↔ / SDM / Δ / 6	60	6	1510	1610
↕KCA OG ↔ / SDM / Δ / 1	90	1	333	433
↕KCA OG ↔ / SDM / Δ / 2	90	2	460	560
↕KCA OG ↔ / SDM / Δ / 3	90	3	595	695
↕KCA OG ↔ / SDM / Δ / 4	90	4	722	822
↕KCA OG ↔ / SDM / Δ / 5	90	5	864	964
↕KCA OG ↔ / SDM / Δ / 6	90	6	997	1097
↕KCA OG ↔ / SDM / Δ / 7	90	7	1107	1207
↕KCA OG ↔ / SDM / Δ / 8	90	8	1235	1335

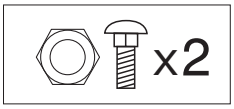


- Please indicate order code in your orders.
- Please contact us for special modules.
- Material weights may vary by ± 10%

ELINE
KCAOG
▶▶Bonding Jumper

Description	Code	Length	Cross-Section
Bonding Jumper	1020286	500 mm	35 mm²





- 2 pcs M6X20 set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶ Accessories Ladder Divider

▶▶ Straight Ladder Divider

Description	Code	L (mm)	H (mm)	F (mm)
100 KCA OG / SPR / L3 /Δ	3070840	1500	60	20
125 KCA OG / SPR / L3 /Δ	3070841	1500	85	20
150 KCA OG / SPR / L3 /Δ	3070842	1500	110	20
200 KCA OG / SPR / L3 /Δ	3070843	1500	160	20

Hot Dip Galvanized are manufactured out of 1.2 mm Gauge Material

M8X20 pan head bolt c/w short spring channel nut and flat washer.
Should be order in each 1 mt.

▶▶ Fitting Divider

Description	Code	L (mm)	H (mm)	F (mm)
100 KCA OG / YSPR / Δ	3070844	1500	60	20
125 KCA OG / YSPR / Δ	3070845	1500	85	20
150 KCA OG / YSPR / Δ	3070846	1500	110	20
200 KCA OG / YSPR / Δ	3070847	1500	160	20

Hot Dip Galvanized are manufactured out of 1.2 mm Gauge Material

M8X20 pan head bolt c/w short spring channel nut and flat washer.

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

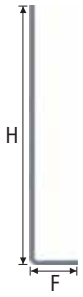
ELINE
KCAOG

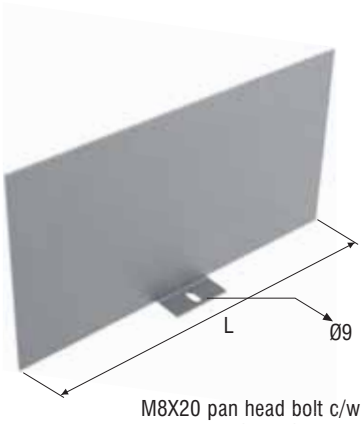
▶▶ Accessories Riser Divider

▶▶ Riser Divider

Description	Code	L (mm)	H (mm)	F (mm)
100 KCA OG / DSPR / Δ	**3070848**	300	60	20
125 KCA OG / DSPR / Δ	**3070849**	300	85	20
150 KCA OG / DSPR / Δ	**3070850**	300	110	20
200 KCA OG / DSPR / Δ	**3070851**	300	160	20

Hot Dip Galvanized are manufactured out of 1.2 mm Gauge Material





M8X20 pan head bolt c/w short spring channel nut and flat washer. Should be ordered per pc.

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

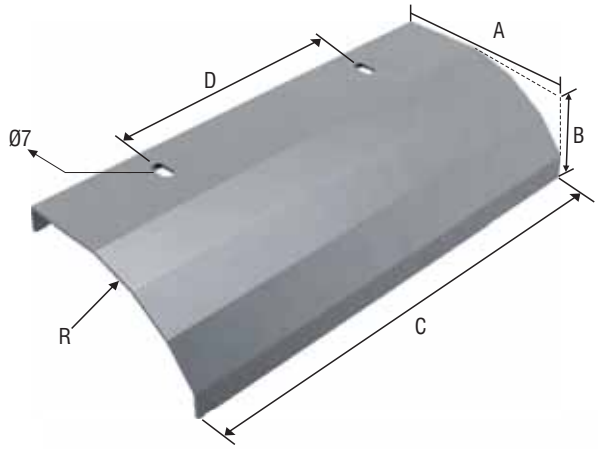
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG

▶▶Accessories Cable Drop Out

▶▶ Cable Drop Out

Description	Code	A (mm)	B (mm)	C (mm)	D (mm)	R
KCA OG / DRP / 150 /Δ	3070831	120	60	130	50	95
KCA OG / DRP / 200 /Δ	3070832	120	60	180	100	95
KCA OG / DRP / 300 /Δ	3070833	120	60	280	150	95
KCA OG / DRP / 450 /Δ	3070834	120	60	430	300	95
KCA OG / DRP / 600 /Δ	3070835	120	60	580	450	95
KCA OG / DRP / 750 /Δ	3070836	120	60	730	600	95
KCA OG / DRP / 900 /Δ	3070837	120	60	880	750	95
KCA OG / DRP / 1000 /Δ	3070838	120	60	980	850	95
KCA OG / DRP / 1100 /Δ	3070839	120	60	1080	950	95



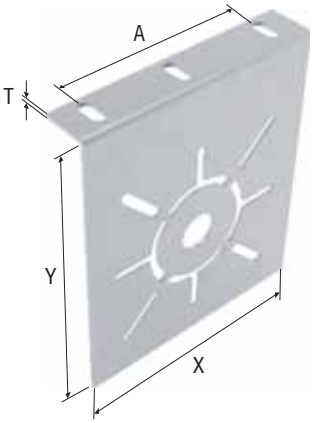
- 2 Pcs M10X20 bolt set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG
▶▶ Accessories - Box Plate

▶▶ Junction Box Plates

Description	Code	X (mm)	Y (mm)	A (mm)	T (mm)
KCA OG / PM1 / Δ	3070852	130	150	100	2

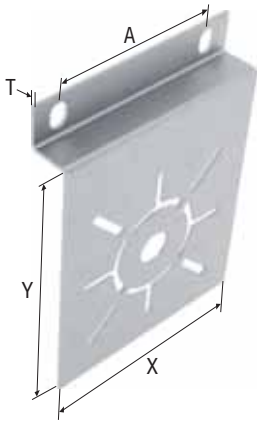


Recommended Fixing

For attachment to Speedway cable ladder - M6x12 Pan head screw and M6 nut (&M6 Flat Washer for stainless steel). Consult our sales Team for further details.

▶▶ Tube Clamp Plates

Description	Code	X (mm)	Y (mm)	A (mm)	T (mm)
KCA OG / PM2 / Δ	3097025	130	150	100	2



Recommended Fixing

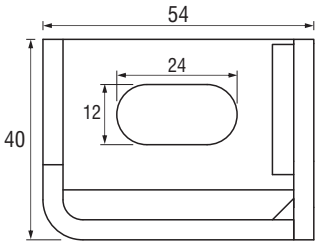
For attachment to Speedway cable ladder - M10x20 Pan head screw and M10 nut (&M10 Flat Washer for stainless steel). Consult our sales Team for further details.

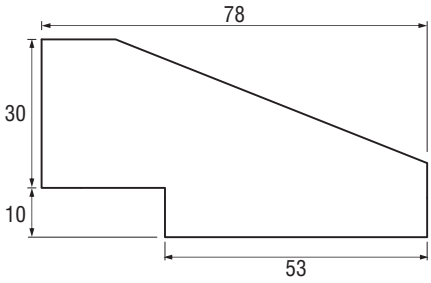
■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

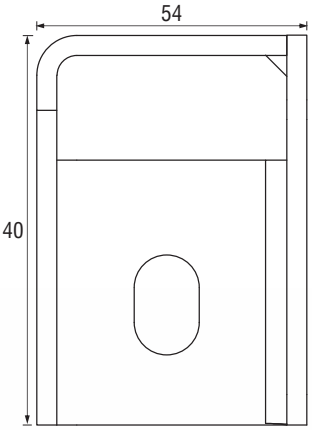
ELINE
KCAOG
▶▶Vertical Fixing Bracket

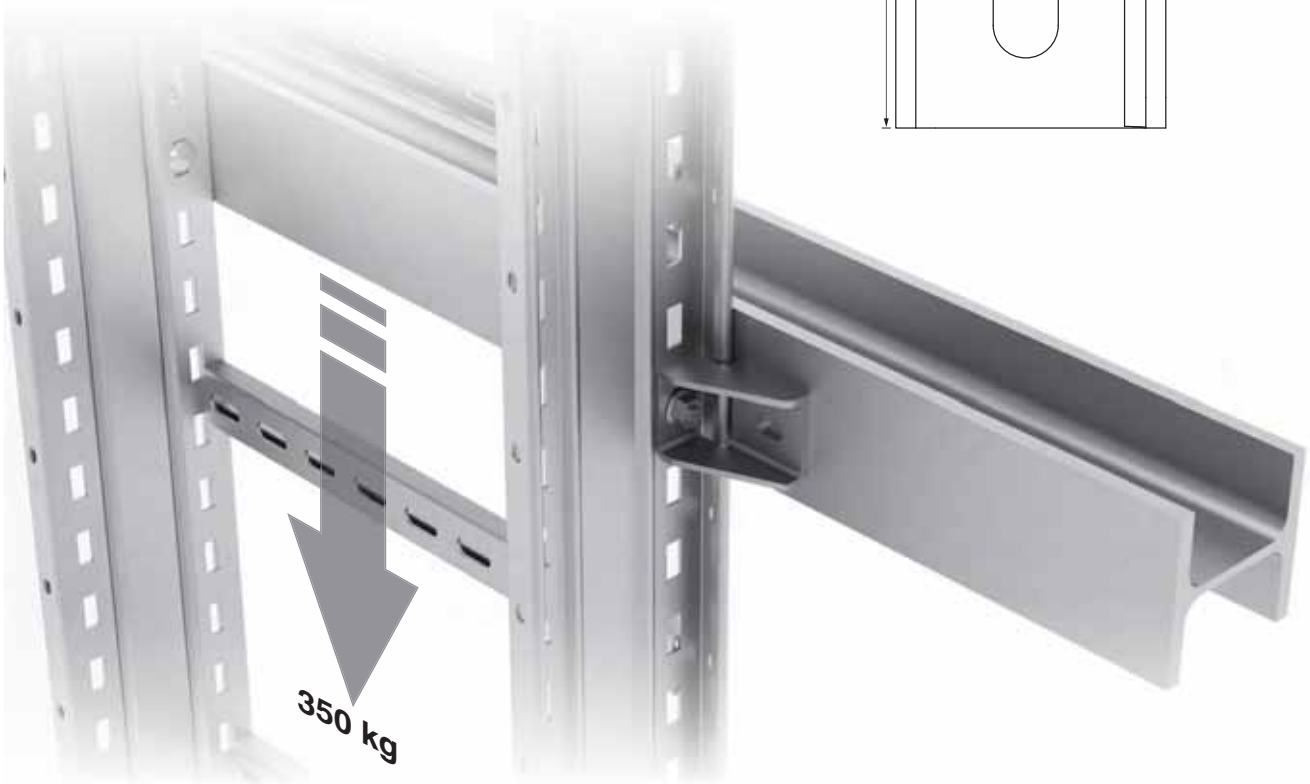
Description	Code	Weight (kg)
KCAOG SE1 BRACKET	3106213	0,330

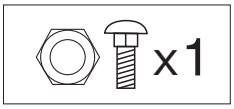
■ **For vertical application! Tested to 350 kg**









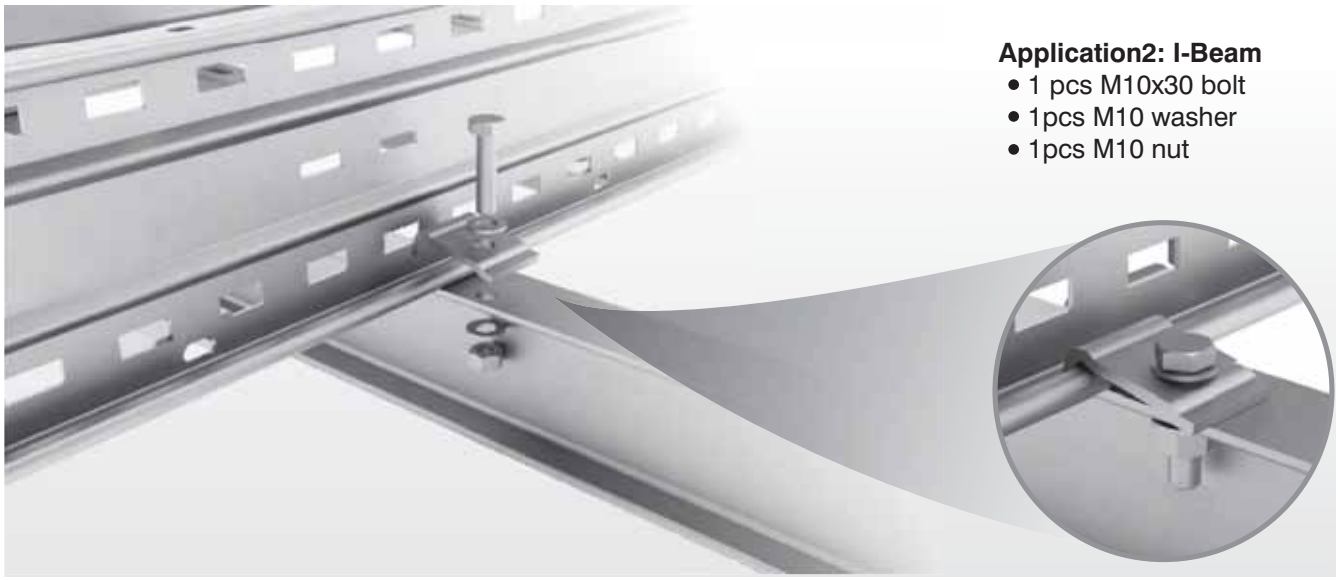


- 1 pcs M10X20 set should be ordered.
- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

ELINE
KCAOG
▶▶Horizontal Fixing Bracket

Description	Code	Weight (kg/pcs)
KCAOG STK BRACKET	2000271	0,073



Application2: I-Beam
- 1 pcs M10x30 bolt
- 1pcs M10 washer
- 1pcs M10 nut

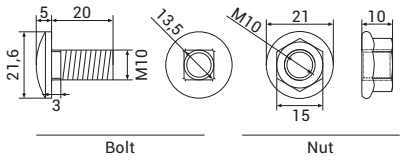
Application1: STRUT
- 1 pcs M10x30 bolt
- 1pcs M10 washer
- 1pcs M10 spring nut

- Δ: All products codes and weights given are in kilograms (kg) and are hotdip galvanized (HDG) finish.
- To obtain the appropriate companent weight in other finishes, multiply the given weight by the below finish factors.
- Finish factor: HDG (ISO En1461) = (HDG):1 / Stainless Steel = (SS) : 0.94

■ Please indicate order code in your orders. ■ Please contact us for special modules. ■ Material weights may vary by ± 10%

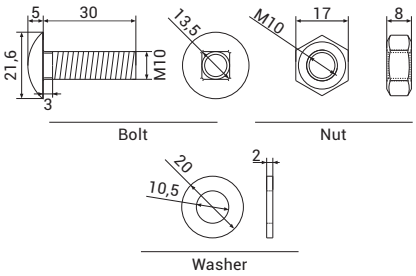
JOINT BOLT SET (M10x20)

Description	Code
M10x20 JOINT BOLT SET (ELC)	1008164
M10x20 JOINT BOLT SET (A4)	1015751
M10x20 JOINT BOLT SET (A2)	1015752



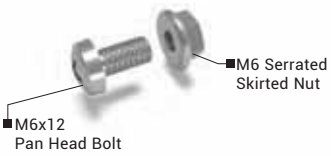
EXPANSION BOLT SET (M10x30)

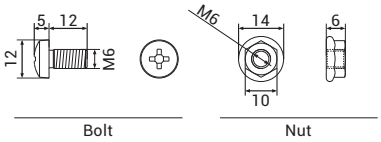
Description	Code
M10x30 EXPANSION BOLT SET (ELC)	1015780
M10x30 EXPANSION BOLT SET (A4)	1015781
M10x30 EXPANSION BOLT SET (A2)	1015753



COVER FIXING BOLT SET (M6x12)

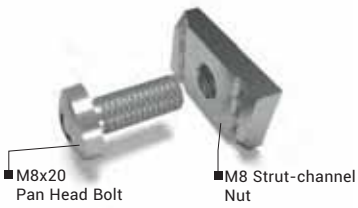
Description	Code
M6x12 COVER FIXING BOLT SET (ELC)	1008166
M6x12 COVER FIXING BOLT SET (A4)	1015754
M6x12 COVER FIXING BOLT SET (A2)	1015755

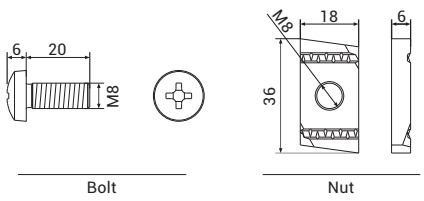




SEPARATOR FIXING BOLT SET (M8x20)

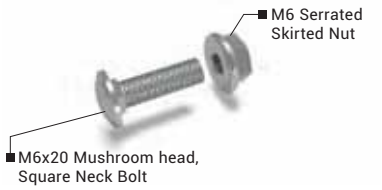
Description	Code
M8x20 SEP. FIXING BOLT SET (ELC)	1015756
M8x20 SEP. FIXING BOLT SET (A4)	1015757
M8x20 SEP. FIXING BOLT SET (A2)	1015758

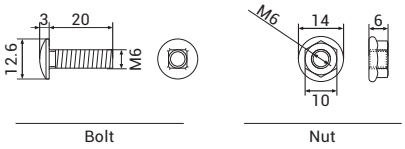




BONDINGJUMPER FIXING BOLT SET (M6x20)

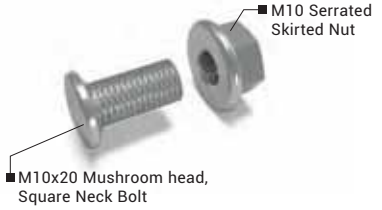
Description	Code
M6x20 BONDING JUMPER FIX. BOLT SET (ELC.)	1002984
M6x20 BONDING JUMPER FIX. BOLT SET (A4)	1020350
M6x20 BONDING JUMPER FIX. BOLT SET (A2)	1000923

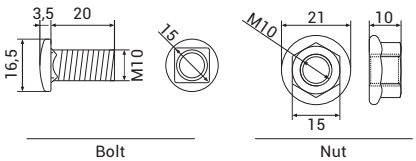




VERTICLE ADJUSTABLE COUPLERS BOLT SET (M10x20)

Description	Code
M10x20 VERTICLE ADJ. COUP. FIX. BOLT SET (ELC.)	1027697
M10x20 VERTICLE ADJ. COUP. FIX. BOLT SET (A2)	1027695
M10x20 VERTICLE ADJ. COUP. FIX. BOLT SET (A4)	1027698





- Please indicate order code in your orders.
- Please contact us for special modules.
- Material weights may vary by ± 10%

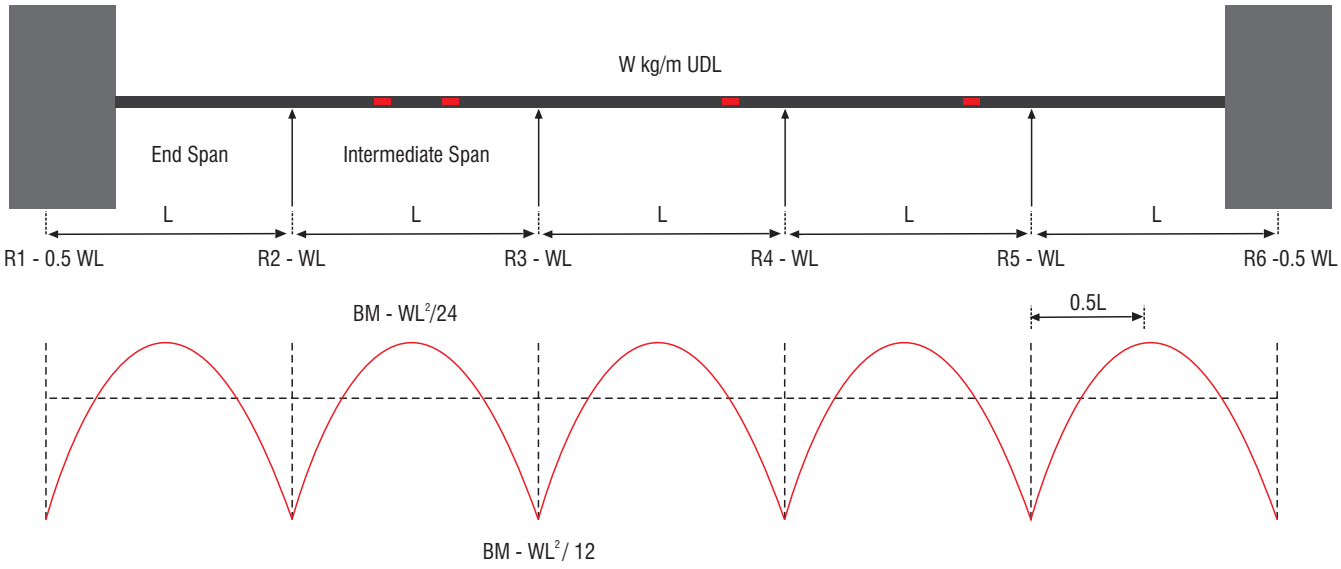
INSTALLATION RECOMMENDATIONS

Loads:
A correctly designed and specified cable ladder installation should take into account the nature and extent of the loads which will be imposed on the cable ladder system. These loads comprise of dead loads including the selfweight of the cable ladder system, the weight of the cables and secondary equipment attached to the cable ladder, imposed loads which occur during installation of the cable ladder system and during cable pulling operations, and external loads such as wind, snow,& ice.

Cable ladders are often employed in locations where the wind speeds may cause considerable lateral loading and careful consideration must be given to design to ensure a satisfactory installation. An awareness of the worst possible climate conditions is necessary when specifying the correct cable ladder system.
The load-deflection information is based on static loading of the cable ladder installation and does not take into account dynamic effects such as earthquake loading, etc.In designing a cable ladder installation it is good practiceto allow at least a 20% excess capacity in a new installation for future expansion. Such a provision is of great economic advantage when there is a later need for additional cables.

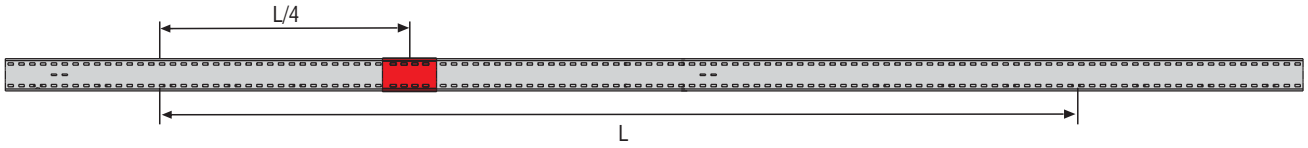
Support Spacing:
The space between the supports of a cable ladder installation is referred to as the span. Supports for cable ladder should, as far as practicable, be spaced so as to create the most economical load/span ratio to suit the capacity of the cable ladder system. This will give the most advantageous solution when considering procurement and installation costs. As a general rule of thumb, the load-carrying capability of the Cable Ladder system increases as the span decreases, so a lighter duty cable ladder system can be specified for shorter spans. Conversely, a heavier duty Cable Ladder system will need to be specified for longer spans.When considering support positions it should be remembered that it is necessary to support accessories when a change of direction takes place i.e. bends, tees, risers etc. This is to ensure that undue 'corner' cantilever reaction is minimised. Recommendations for the location of supports for Cable Ladder fittings are given in below.

Location of Couplers:
The maximum bending moments acting on a cable ladder run occur in the cable ladder side members at the supports and at the mid span position. For this reason it is good practice to avoid locating couplers in a cable ladder run either directly on supports or at the mid span position. It is also good practice to avoid locating couplers in the end span of a continuous beam installation as the bending moments in the end span are, for simple end support installations, much higher than those found in the intermediate spans.These limitations cannot always be achieved in a cable ladder installation and are not a mandatory requirement for the coupling system where the loading information given in 3.3 is valid irrespective of the location of the couplers. The ideal positions to locate the connections in a cable ladder run are at approximately a quarter of a span from the supports where the bending moment, and hence the stress, are minimal. Positioning the couplers at the quarter span positions is of benefit during installation, assisting in alignment of the cable ladders and allowing unhindered securing of the cable ladder to the supports.



Bending Movement distribution for a continuous beam with fixed ends
(The Bending Movement for ends spans in a continous beam with simple end supports will be higher than that shown)

L= Span
W=Load
UDL= Uniformly Distributed Load
R= Reaction at Support
BM= Bending Movement



Location of coupler at points of leaast bending movement (1/4 SPAN)

Support Locations for Fittings:

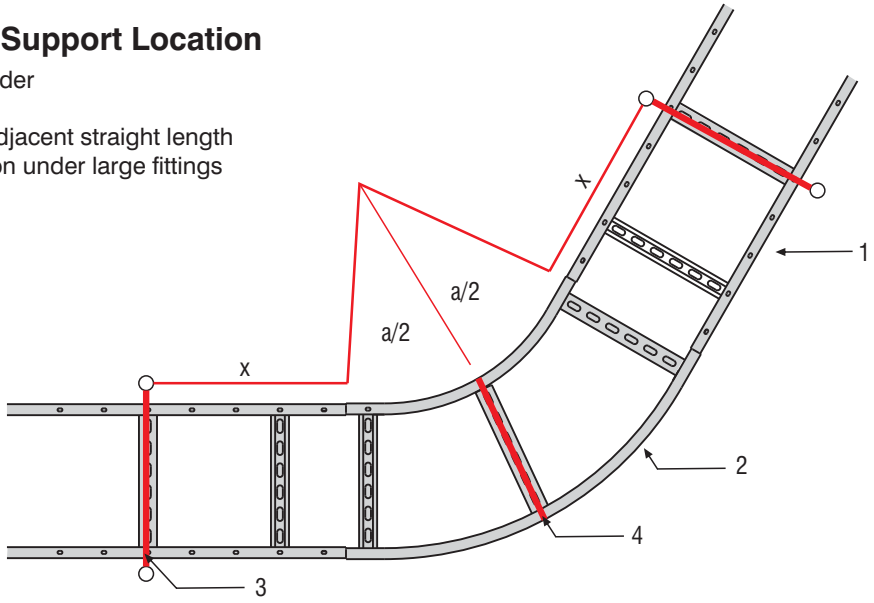
The following illustrations show the recommended support positions when installing cable ladder fittings.The supports should be fully fixed to provide maximum support for the cable ladder fitting. For more specific recommendations relating to particular site installations please contact EAE.

Horizontal Elbow' s Support Location

1- Straight length tray or ladder
2- Fitting of tray or ladder
3- Support position under adjacent straight length
4- Additional support position under large fittings

x⩽600mm

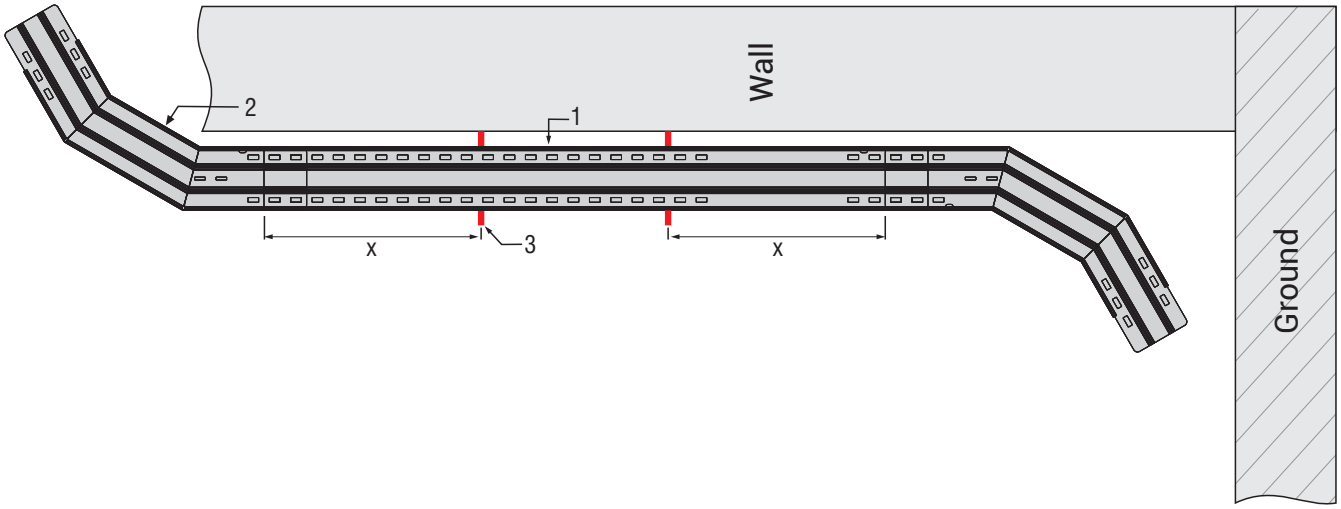
a: Fitting Turning Angle



Vertical Elbow' s Support Location

1- Straight length tray or ladder
2- Fitting of tray or ladder
3- Support position under adjacent straight length

x⩽600mm

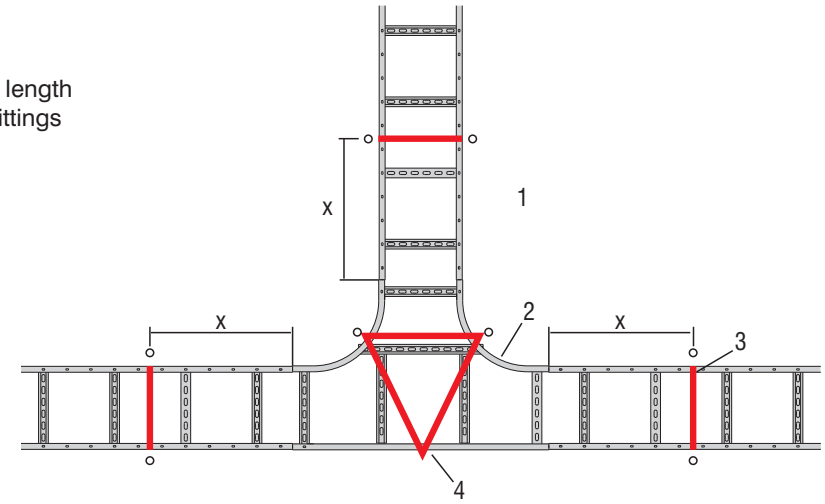


Horizontal Tee' s Support Location

1- Straight length tray or ladder
2- Fitting of tray or ladder
3- Support position under adjacent straight length
4- Additional support position under large fittings

Radius ≤300mm ➡ x≤300mm
No need for 4

Radius >300mm ➡ x≤600mm
+ Triangle Support 4 recommended

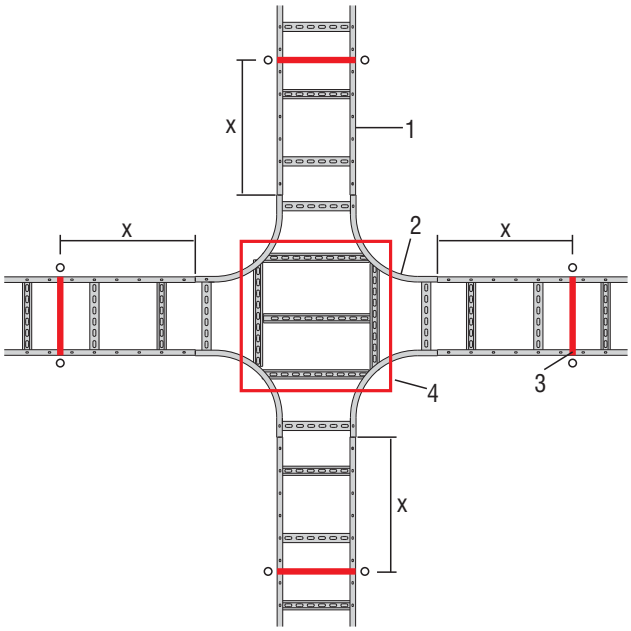


Horizontal Tee' s Support Location

1- Straight length tray or ladder
2- Fitting of tray or ladder
3- Support position under adjacent straight length
4- Additional support position under large fittings

Radius ≤300mm ➡ x≤300mm
No need for 4

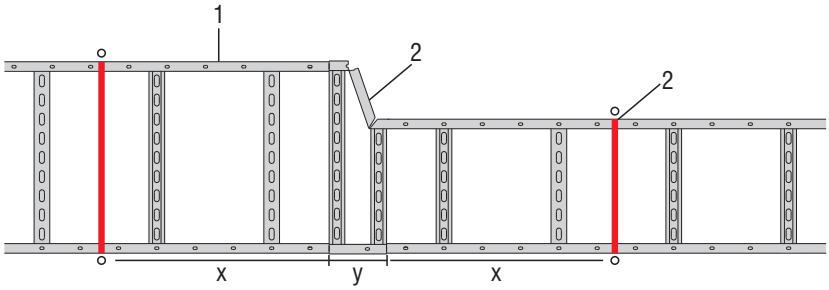
Radius >300mm ➡ x≤600mm
+ Square Support 4 recomended



Horizontal Reduction' s Support Location

1- Straight length tray or ladder
2- Fitting of tray or ladder
3- Support position under adjacent straight length

y ⩽ 500mm ➡ x⩽600mm



Thermal Expansion & Contraction

Due to the seasonal temperature changes, it is important to consider thermal contraction and expansion during design and installation phase of cable tray/ladder systems. The length of the straight cable ladder run, type of material and the seasonal temperature differential determine the number of expansion splice plates required.

Following steps should be applied during design and installation when considering thermal movements:

1. Determination of maximum spacing between two expansion joints

The distance between expansion splice plates should be calculated either by given table below or the following formula under the table:

TEMPERATURE DIFFERENTIAL (between hottest and coldest day in a season)	MAXIMUM SPACING BETWEEN EXPANSION SPLICE PLATES (L)			
ΔT	Hot Dip Galvanized Carbon Steel	Stainless Steel		Aluminum
		316	304	
°C	m	m	m	m
10	217	161	148	115
20	108,5	80,5	74	57,5
30	72	53,5	49	38,5
40	54	40	37	29
50	43,5	32	29,5	23
60	36	27	24,5	19
70	31	23	21	16,5
80	27	20	18,5	14
90	24	18	16,5	13
100	22	16	15	11,5

Method 2: Determination by formula

$$L = \frac{C}{\Delta T}$$

L = Distance between two expansion splice plates (m)
ΔT = Temperature difference between the seasonal maximum temperature (Tmax) and minimum temperature (Tmin) at the installation site.
C = Coefficient
C = 2170 for hot dip galvanized steel
C = 1607 for 316 stainless steel
C = 1476 for 304 stainless steel
C = 1149 for Aluminum

For an example:

Maximum temperature = +40 °C
Minimum temperature = -10 °C
Temperature differential (ΔT) = 50 °C

With using table, for the 50 °C temperature differential, based on the Hot Dip Galvanized Carbon Steel, expansion splice plates should be fitted at maximum every 43,5m which means that every 7th 6m cable ladder expansion splice plates (giving 42m spacing) should be fitted.

With using formula, L = C / ΔT = 2170 / 50 = 43,4m

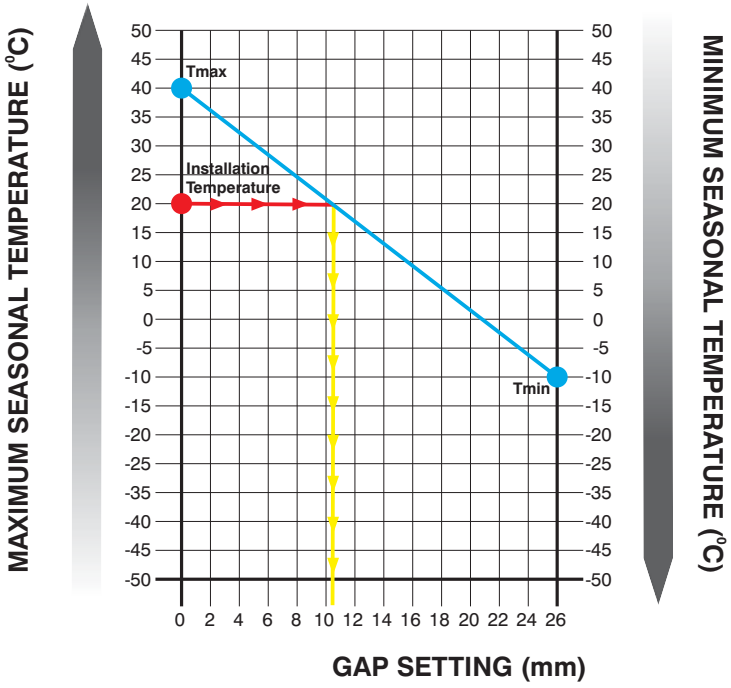
2. Setting Gap

Accurate gap setting at the moment of installation is necessary for proper operation of the expansion splice plates. The gap can be set according to either by given graph below or formula under the graph;

Method 1: Determination gap setting by table

Follow the below steps in order to set accurate gap setting;

A) Plot the maximum expected temperature on the maximum temperature.
(Example Value: +40 °C) upper left blue dot
B) Plot the minimum expected temperature on the minimum temperature.
(Example Value: -10 °C) lower right blue dot
C) Draw a line between the maximum and minimum points. blue line
D) Plot the temperature at the moment of installation to determine the gap setting (Example Value: 20 °C),
E) Follow horizontal red line and continue with vertical yellow line.
Example value: 10,1mm



Method 2: Determination gap setting by formula

Follow the below steps in order to set accurate gap setting;

$$S = 25{,}4\text{mm}\ \frac{T_{max} - T}{T_{max} - T_{min}}$$

- T_{max} = Maximum temperature in a season
- T_{min} = Minimum temperature in a season
- T= Temperature at installation moment
- 25,4 is the maximum allowed gap (mm9
- S=Required gap (mm)

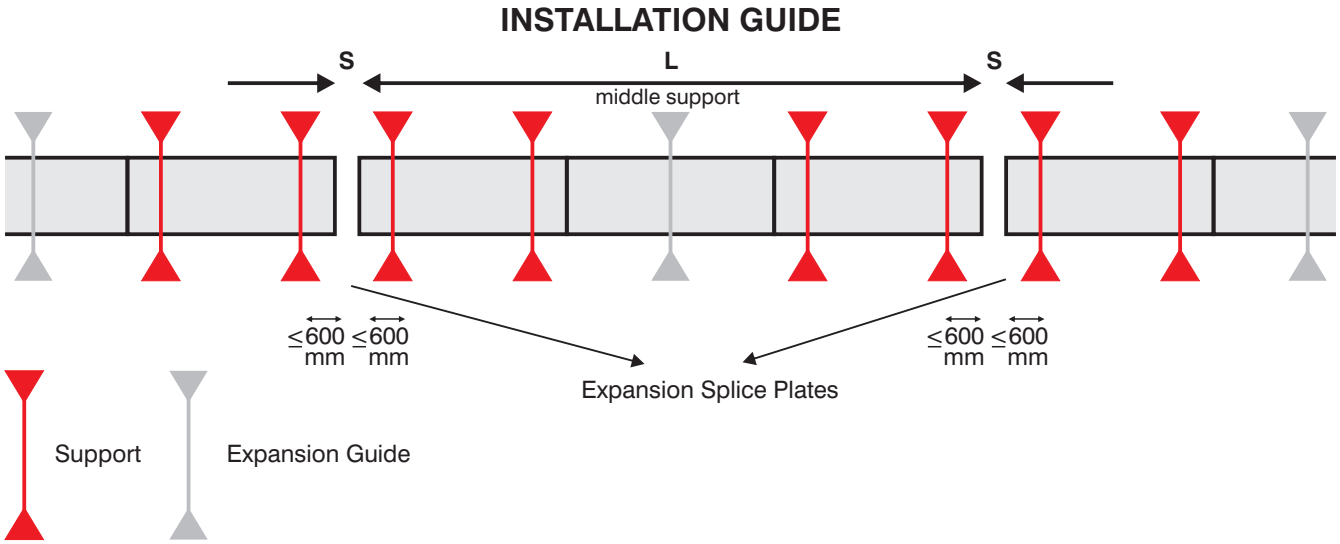
For an example:

Maximum temperature= +40 °C
Minimum temperature= -10 °C
Temperature at installation moment= 20 °C

$$S = 25{,}4\text{mm}\ \frac{T_{max} - T}{T_{max} - T_{min}} = 25{,}4 \times \frac{40 - 20}{40 - (-10)} = 25{,}4 \times \frac{20}{50} = 10{,}1\ \text{mm}$$

3. Support Installation

Supports should be located within 600 mm of each side of the expansion splice plates. The support in the middle of two expansion and guide supports close to expansion splice plates should allow ladder to slide during thermal movements. Special hardware such as hold down clamp and plastic stop nut is supplied with expansion splice plates. The nuts may have a stopping device (plastic stop nut). Important: For plastic stop nut designs, tighten hardware, then loosen 1/2 turn. EAE Cable Ladders are capable of carrying loads in between two supports close to expansion splice plates.
Consult our Technical Office for details about the installation requirements of expansion splice plates.



NOTE: Each pair of metal cable tray expansion joints require bonding jumper application for electrical continuity.

NEMA CLASS DESIGNATIONS

According to NEMA VE-1, standard class of cable ladders are classified according to load capacities associated with the support spacing as shown on “Table 1 Span/Load Class Designation-U.S.A” which is most commonly used.

**NEMA VE-1 2017 Table 1:
SPAN/LOAD CLASS DESIGNATION - USA**

Load, kg/m (lb./ft.)	Span, m (ft.)				
	1.5 (5)	2.4 (8)	3.0 (10)	3.7 (12)	6.0 (20)
37 (25)	5AA	8AA	10AA	12AA	20AA
74 (50)	5A	8A	10A	12A	20A
112 (75)	-	8B	-	12B	20B
149 (100)	-	8C	-	12C	20C

**NEMA VE-1 2017 Table 2:
SPAN/LOAD CLASS DESIGNATION - CANADA**

Load, kg/m (lb./ft.)	Span, m (ft.)						
	1.5 (5)	2.0	2.5	3.0(10)	4.0	5.0	6.0(20)
37 (25)				A			
45 (30)			A				
62 (42)		A					
67 (45)							D
82 (55)						D	
97 (65)				C			
99 (67)	A						
112 (75)							E
113 (76)					D		
119 (80)			C				
137 (92)						E	
164 (110)		C					
179 (120)				D			
189 (127)					E		
259 (174)	C						
299 (200)				E			

Corrosion Categories As Per DIN EN ISO 12944

Corrosion Category	Typical Indoor Ambient	Typical Outdoor Ambient	Corrosion Load	Average Zinc Layer	Suitable Coating Type
C1	Buildings with fresh air and air conditioning such as Offices, Department Stores, Schools, Hotels	-	Very Low	<0,1 µm/year	TS EN 10346 TS EN 10143 PREGALVANIZE
C2	Unheated building where condensation may happen, for example: Warehouses, fitness centres	Environments where less pollution exists.	Low	0,1 - 0,7 µm/year	TS EN 10346 TS EN 10143 PREGALVANIZE
C3	Environments where high humidity levels and partial air pollution exist	Metropolitan and industrial environments, moderately polluted areas due to sulphur dioxide, sea-side resorts with low salt concentration.	Mild	0,7 - 2,1µm/years	TS EN ISO 1461 HOT-DIP
C4	Chemical facilities, swimming pools, facilities over the sea.	Industrial zones and zones with low salt concentration	Strong	2,1 - 4,2µm/years	TS EN ISO 1461 HOT-DIP
C5	Buildings or zones where continuous condensation and strong pollution is possible.	Industrial zones where high humidity and an aggressive environment is possible	Very Strong	4,2 - 8,4µm/years	Duplex (Hot-Dip+ Electrostatic Powder Paint Coating) or 316L-Stainless
C6	Buildings or zones where continuous condensation occurs and strong pollution is probable.	Sea shores with a high salt concentration or open sea environments.	Extremely Strong	>4,2 - 8,4µm/years	Duplex (Hot-Dip+ Electrostatic Powder Paint Coating) or 316L-Stainless

Chemical Corrosion Protection

Chemical	Galvanised	Aluminium	304	316	Plastic
Benzene	N/A	R	R	R	NR
Carbon Tetrachloride	N/A	C	R	R	C
Gasoline	R	R	R	R	C
Hydrochloric Acid 40%	NR	NR	NR	NR	C
Hydrochloric Acid 10%	NR	NR	NR	NR	R
Hydrochloric Acid 2%	NR	NR	NR	NR	R
Hydrogen Peroxide 30%	N/A	R	R	R	C
Hydrogen Peroxide 3%	N/A	R	R	R	C
Hydrogen Sulphide (Gas)	N/A	R	C	R	R
Mineral Spirits	N/A	R	N/A	N/A	NR
Motor Oil	R	R	R	R	R
Nitric Acid	N/A	C	R	R	C
Phosphoric Acid 2%	NR	C	R	R	R
Sodium Chloride 25%	C	C	R	R	R
Sulphuric Acid 2%	NR	C	NR	R	R
Water: Deionised	C	R	R	R	R
Water: Sea	C	C	R	R	R
Water: Tap	R	R	C	C	R

r: Recommended
C: Conditions dependant
nr: Not Recommended
n/a: Info not available

The above Corrosion Chart shows the likelihood of a particular material being suitable for an environment with a certain chemical present.

Used in conjunction with field tests and inspecting actual environmental conditions, the Corrosion Chart should assist in determining which materials and finishes can be selected to avoid high levels of corrosion.

However, information displayed in the chart can be used as a guide for comparison only, as subtle variables can influence the performance of these materials under certain conditions.

Dissimilar Metal's Corrosion

When iron is extracted from its ore, a fundamental common tendency of nature is immediately reversed. Iron and steel unprotected will corrode in most environments, thus returning to their natural states.

• All metal surfaces exposed to the environment are affected by corrosion. Corrosion is the deterioration of metals by direct chemical or electrochemical attack. The three commonly recognised forms of corrosion are:

• Direct chemical attack which can best be handled by not allowing the chemical attack agent to come into contact with the metal (see chart for further information).

• Electrochemical attack or electrical current flow through the metal is a common form of cable tray corrosion. It occurs in the presence of a conducting agent, or electrolyte. Usually this electrolyte is made up of a combination of rain, orsprays mixed with an industrial residue andchemical deposits.

• A third form of corrosion is Bimetallic Electrochemical corrosion, commonly referred to as galvanic corrosion. Although not normally a problem with cable trays, it can become a problem when two dissimilar metals come in contact in the presence of an electrolyte. Corrosion is reasonably preventable. Through selection and use of the appropriate product, material and protective finishes, savings can be made in plant maintenance costs by deferring the longer term replacement of the cable support systems.This catalogue is designed to assist you in protecting your cable support products through the correct selection of materials based on the prevalent conditions. Information is provided outlining whichmetals are safe to put into contact with each other,and how various steel products react to the exposureof certain chemicals.

The Table of Dissimilar Metals groups metalsthat have little galvanic effect on each other andare therefore relatively safe to put into contact.

The groups have been arranged with the corroded(ANODIC) metals at the top, and the protected(CATHODIC) metals at the bottom.

Any metal in the group above would corrode when in contact with a metal in the group below. Avoid pairing metals from widely separated groups, as the risk of corrosion will be greater. By using this table as a guide and analysing the local conditions of each site, it is more likely that a wise decision concerning material and finish selection can be made to minimise direct chemical attack and electrochemical corrosion.

CORRODED END (ANODIC) MAGNESIUM ZINC ALUMINIUM 1100 CADMIUM ALUMINIUM 2017
STEEL/IRON LEAD/TIN NICKEL BRASS/COPPER/BRONZE SILVER SOLDER STAINLESS STEEL 304/STAINLESS STEEL 316 TITANIUM SILVER GRAPHITE/GOLD/PLATINUM **PROTECTED END (CATHODIC)**

DESIGN & DEFLECTION

E-Line KCA OG cable ladder sections are designed and manufactured to achieve the loading requirements of the IEC 61537, and are available in various load and span performances .
A sample of each section has been tested and certified by a DEKRA approved facility, ensuring that we continue to provide the benchmark in product performance.
All reported results are based on uniformly distributed static loads.
150 mm and 200 mm Height KCA OG ladders are suitable for NEMA 20C standard .
Whilst NEMA publication does not specify a limitation on deflection, a guide to deflection has been included for easy reference.
All cable support deflections, within this catalogue, pertain to continuous cable support systems and do not take into consideration simply supported or end bay sections.
It should be noted that the positioning of splice joints and loading techniques can significantly impact upon the actual deflection. Refer to Nema VE2 installation guidelines for further information.
Special consideration should always be given to live loads resulting from cable pulling to ensure this does not exceed the static cable support load limit.
All load results detailed in this section have been derived from testing 600mm wide sections of mild steel cable ladders in the various configurations.

TECHNICAL SPECIFICATION

1) Cable Ladder shall be used in the places designated in the project for supporting power cables in their horizontal and vertical distribution.
2) Side rail of the cable ladder should have these features;
- Different height according to different load capacity as 100 mm, 125 mm, 150 mm and 200 mm.
- Height 100 mm has got 1 pc, Height 125, 150 and 200 mm have got 2 pcs of longtitude bend lines for upgrade the load capacity
- Thickness of the metarial can be 1,5 mm , 2 mm and 2,5 mm according to load capacity
- Finishes and metarials can be Hot Dip Galvanized, Silicon Rich Steel Sheet (DG) or Stainless steel according to corrosion protection level.
- Upper side holes can supply opportunities for mounting cover to ladder, Lower side Holes can help to drainage the water.

3)The holes opened on the sides of Cable Ladders for the purpose of making joints shall be 10mm x 25 mm in size.
4) The rungs of Cable Ladders shall be welded to the sides at intervals of 300mm.
6) The Cable Ladders should be produced in equal lengths of 3m and 6m..
7) The rungs of Cable Ladders should be produced in type C Strud.
a) C rungs should have a height of 21mm with holes of 13 mm x 25mm opened at intervals of 50mm from centre to centre.
8) Finishes;
- Hot Dip Galvanized ISO EN 1461 : min 45 micron , avarage 55 micron ZİNC
- Silicon Rich Steel Sheet (DG) : 80-120 micron Zinc

9) In places where the Cable Ladder descends or ascends, the level adaptation modules or level adaptation Coupler pieces should be used.
10) The connection of Cable Ladders to each other should be made by means of two joining pieces for each Ladder. The mounting of all turning pieces to the Cable Ladder should be made using coupler.
11) In places where the Cable Ladder changes direction, the 90° horizontal elbows, “T” shaped horizontal connecting pieces and cross shaped horizontal turning pieces should be used.
12) In the case of densely placed Cable Ladders, the connections of Cable Ladders of different width should be realized using the "Z" type reduction modules. The central reduction module should comprise two symmetrical pieces. The left and right reduction modules should comprise a combination of one normal reduction piece and one joining piece.
13) In the mounting of couplers, the lacquer coated M10 x20 bolt set should be used. The bolts should be round headed, flanged and capable of self locking into their holes. The M10 nuts should be flanged and snug headed.
14) For the mounting of both joining modules and reduction modules, 4 joining bolt and nut sets(M10x20) should be used for Cable Ladders having a side height of 100 mm , 125 mm , 150 mm and 200 mm .
15) Cable ladders should not be walked on or used as walkways.

SAFETY

Heavy duty cable ladders are designed for rugged conditions and can withstand some abuse. However they are not designed or intended for use as walkways or scaffolds and proper working platforms or temporary access scaffolding must be provided for the use of installation personnel.
If any welding of equipment carry out , fumes should be removed with the proper ventilation and operator should wear the protective face mask.

EAE recommends to work under these levels of Zinc Oxide Fumes,

Short Term Exposure : 10 mg/m3
Long Term Exposure : 5 mg/m3

STORAGE

EAE reccomends , pallets should be unload and set by Fork Lift Vehicle.
By the virtue of its composition, the galvanized sheet metal is known to be particularly sensitive against the effects of materials of acidic character, polluted air, water and relative humidity present above a certain rate. The service life of galvanized sheet metal is shorter in the industrial areas where the air is densely polluted. The most important element of atmospheric air pollution is sulphur dioxide.

$$C + H + S + O2 \longrightarrow Co2 + H2O + So2$$
$$SO2 + ½\ O2 \longrightarrow SO3$$
$$SO2 + H2O \longrightarrow H2SO3$$
$$SO3 + H2O \longrightarrow H2SO4$$

The sulphurous and sulphuric acid forming at various rates reacts with the zincand causes corrosion in the layer of galvanization. Decreasing the rate of atmospheric pollution or reducing it to zero will not be possible on an individual basis. To prevent the likely corrosion of the galvanized layer due to air pollution in stockpiling will be possible only by stockpiling the galvanized sheet metal in well protected warehouses. The matter causing the greatest concern regarding galvanized sheet steel are the white coloured spots called white rust, which develop on the surface of sheet metal during the course of stockpiling. Its development,however, can be minimized, even completely eliminated, by taking proper measures. The white rust is the result of a chemical reaction between zinc and the carbon dioxide, oxygen and water or moisture in the air.

$$C + O2 \longrightarrow Co2$$
$$Zn + ½\ O2 \longrightarrow ZnO$$
$$4Zn + 3H2O + CO2 \longrightarrow ZnCO3.3Zn(OH)2$$

The white rust phenomenon occurs during the stockpiling of galvanized sheet metal as a result of combined action of above-stated parameters and mostly in the case of stock-piled sheet metal. As the air with a high rate of moisture will be trapped between the pieces of stocked sheet metal, any differences in temperature will cause the trapped air to reach the dew point, leading to formation of droplets of water on the surfaces of sheet metal pieces. As a result, the oxygen dissolved in water will react with Zn to produce zinc hydroxide while the carbon dioxide present in the air will react with zinc to produce zinc carbonate. The combined result of these two reactions will lead to the development of zinc carbonate zinc hydroxide, called white rust.
In order to protect the stacked sheet metal against the effects of white rust for a certain period of time, although not for long, the pieces of sheet metal are subjected to a process named passivation. During this process,a protective film is produced on the surface of galvanized sheet metal through a chemical reaction. That protective film will protect the galvanized sheet metal against the formation of white rust for a certain period of time. In order to ensure said protection, however, the following conditions must be strictly observed.
- Stacked sheet metal must never be allowed to come in contact with water .
- There must be sufficient space provided for continuous circulation of air in the place where they are stacked.
- There must be sufficient space provided for proper circulation of air between the stacks of sheet metal (min 300mm between the two stacks).
- The temperature differences in the places of stockpiling must be small (between 5-10°C).
- The relative humidity in the places of stockpiling must not exceed 70%.
- The sheet metal must not be stockpiled in places where there is air pollution.
- Where the stacked sheet metal is to be stockpiled for long periods of time, each piece of sheet metal must be examined periodically, and any droplets of water likely to be formed on the surfaces of sheet metal must be wiped off and the surfaces must be dried.
- The stacks must be placed, without fail, on wooden palettes or props as to prevent the sheet metal to come in contact with the floor.
When the above conditions are fulfilled, it will be possible to ensure proper circulation of air in the place of stockpiling, thereby ensuring the formation of white rust at a reduced level.

PACKAGING

Standard Packing

Cable Trays&Ladders and Modules are packed using wooden paletts in order to ensure safe transportation to site. After being stacked on the wooden pallets the products are bound to the pallet using PVC strapping to prevent the goods sliding from the pallet. Wooden laths nailed on the sides and onto the palette ensure protection against forces that may possibly come from above and sides.

The specially designed wooden framework enables lifting of the pallet by fork lift vehicle from either side or one end only. It is also designed to prevent insertion of the forks between components which will cause damage

Support and suspension equipment used in the installation of the cable tray is covered using shrink wrap. Packages do not contain more than a total weight of 25 kg of product to facilitate the ease of transport.Product amount within the package are stuck onto the packageare arranged in 10 units or tenfold unit to facilitate counting. Labels containing the code, description, small technical drawing of the product and specifying the content and amount within the package are adhered onto the packages for easy product identification. Small product packages then are stacked onto wooden palette and wrapped against scattering and supported on the sides using PVC strapping.

Accessories such as joint components, screws, nuts, dowels etc, are packed within cardboard parcels. İn order to prevent screws, nuts, washers and dowels from rusting., they firstly are put into nylon bags. All parcels are prepared not exceeding 25kg and are identified by labels indicating product information. Small product packages then are stacked onto wooden palette and wrapped against scattering and supported on the sides using PVC strapping.
All palettes are identified with labels indicating product information contained within. Palette labels also contain customer information and palette total weight.
Package type above is for large scale projects. It may differ for small deliveries and warehouses.

TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

Markanın Tanımı — Description of the Mark
TSE

BELGE NUMARASI REFERENCE NUMBER OF LICENCE	000287-TSE-04/03
BELGENİN İLK VERİLİŞ TARİHİ DATE OF FIRST ISSUE OF LICENCE	21.01.2010
BELGENİN SON GEÇERLİLİK TARİHİ LICENCE VALID UNTIL	13.12.2018
BELGE SAHİBİ KURULUŞUN ADI NAME OF THE LICENCE HOLDER	EAE ELEKTRİK ASANSÖR ENDÜSTRİSİ İNŞAAT SANAYİ VE TİCARET ANONİM ŞİRKETİ
BELGE SAHİBİ KURULUŞUN ADRESİ ADRESS OF THE LICENCE HOLDER	AKÇABURGAZ MAH. 3114 SOK.NO:16 ESENYURT İSTANBUL/TÜRKİYE
ÜRETİM YERİ ADI NAME OF THE MANUFACTURING PLACE	EAE ELEKTRİ... ANONİM ŞİRK...
ÜRETİM YERİ ADRESİ ADRESS OF THE MANUFACTURING PLACE	Makine İhtisas... Dilovası /Koca...
İPTAL EDİLEN BELGE NUMARASI (Varsa) INDICATION OF SUPERSEDED LICENCE (if any)	000287-TSE-0...
TESCİLLİ TİCARİ MARKASI REGISTERED TRADE MARK	EAE
İLGİLİ TÜRK STANDARDI RELATED TURKISH STANDARD	TS EN 61537... managementi(I...

BELGE KAPSAMI
SCOPE OF LICENCE

-CABLE TRAY SYSTEMS
C CLASS, METALLIC COATED,
OPERATING TEMPERATURES BETWEEN -20 °C - + 120...
IMPACT RESISTANCE OF 50 J,
CLASS 8 (ANTI-CORROSION),
MANUFACTURED FROM METAL,
MEDIUM DUTY-HEAVY DUTY
-UK MODEL Cable Tray Systems (Tray and Fittings)
(Width Range: from 50 mm up to 600 mm, Height Range: fr...
up to 2 mm.)
-CT MODEL Tray Systems (Tray and Fittings)
Width Range: from 50 mm up to 600 mm, Height Range: fro...
up to 2 mm.(K.G 12.12.2017)

MAN...

TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ EKİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS APPENDIX

BELGE KAPSAMI (000287-TSE-04/03nolu belge devamı) : EAE ELEKTRİK ASANSÖR ENDÜSTRİSİ İNŞAAT SANAYİ VE TİCARET ANONİM ŞİRKETİ
İLGİLİ TÜRK STANDARDI(*RELATED TURKISH STANDARD*): TS EN 61537 / Cable tray systems and cable ladder systems for cable management (IEC 61537:2001) / 26.06.2007

-UKF MODEL Cable Tray Systems (Tray and Fittings)
(Width Range: from 100 mm to 600, Height Range: from 40 mm to 60 mm, Thickness Range: from 0.7 mm up to 0.9 mm.)
CORROSION CLASS FOR PRE-GALVANIZED is 3 and FOR HOT-DIPPING is 8. (K.G 12.12.2017)
-UKFG MODEL, UKFC MODEL (with bolt junction) Cable Tray Systems (Tray and Fittings)
(Width Range: from 100 mm to 600, Height Range: from 40 mm to 60mm, Thickness Range: from 0.7 mm up to 0.9 mm.)
CORROSION CLASS is 3 DUE TO PRE-GALVANIZED NATURE (K.G 12.12.2017)
-CTK MODEL Tray Systems (Tray and Fittings)
Width Range: from 100 mm up to 600 mm, Height Range: from 60 mm up to 100 mm,
Thickness Range: from 1.5 mm up to 2 mm.)
CORROSION CLASS FOR HOT-DIPPING is 8. (K.G 12.12.2017)
-TKS MODEL Tray Systems (Tray and Fittings)
Width Range: from 50mm up to 150 mm, Height Range: from 50 mm up to 150 mm,
Thickness Range: from 1.2 mm up to 1.5 mm.
CORROSION CLASS is 3 DUE TO PRE-GALVANIZED NATURE, A CLASS (K.G 12.12.2017)
- CABLE LADDER SYSTEM AND FITTINGS
• Y CLASS, METALLIC COATED,
OPERATING TEMPERATURES BETWEEN -20 °C - + 120 °C (ENTERPRISE STATEMENT)
IMPACT RESISTANCE OF 50 J,
CLASS 8 (ANTI-CORROSION),
MANUFACTURED FROM METAL,
MEDIUM DUTY-HEAVY DUTY
- KC MODEL Cable Ladder and Fittings (Including Accessories)
Width Range: from 100 mm to 600, Height Range: from 40 mm to 100 mm, Thickness Range: from 1.5 mm up to 2 mm.)
-KM MODEL Cable Ladder and Fittings (Including Accessories)
Width Range: from 100 mm to 600, Height Range: from 40 mm to 150 mm, Thickness Range: from 1.2 mm up to 2 mm
CORROSION CLASS FOR PRE-GALVANIZED is 3 and for HOT-DIPPING is 8. (K.G 12.12.2017)
- UMK MODEL Cable Ladder and Fittings (including Accessories)
Width Range: from 100 mm to 500, Height: 60 mm, Thickness Range: from 0.6 mm up to 1.2 mm
-KCA OG MODEL Cable Ladder and Fittings (Including Accessories)
Width Range: from 150 mm, Height Range: from 100 mm up to 200 mm,
Thickness Range: from 1.5 mm up to 2.5 mm,
CORROSION CLASS FOR HOT-DIPPING is 8. (K.G 12.12.2017)

22 /01/2018
Belgelendirme Merkezi Başkanı Adına
AHMET NURSİ KARTAL
MANAGER OF THE TSE ISTANBUL CERTIFICATION DEPT

TEST CERTIFICATE

Issued to:	EAE Elektrik Asansör End. Insaat San. ve Tic. A.S. Akçaburgaz Mahallesi 119 Sokak No: 10, 34510 Esenyurt / Istanbul, Turkey
For the product:	Cable bearing systems
Trade name:	EAE Elektrik A.S.
Types: Cable ladders:	060 KM 100 ~ 600 / 075 KM 100 ~ 600 / 100 KM 100 ~ 600 / 125 KM 100 ~ 600 & 150 KM 100 ~ 300 060 KCH 100 ~ 300 / 075 KCH 100 ~ 300 / 100 KCH 100 ~ 300 125 KCH 100 ~ 300 & 150 KCH 100 ~ 300 100 KCA OG 150 ~ 1100 / 125 KCA OG 150 ~ 1100 / 150 KCA OG 150 ~ 1100 & 200 KCA OG 150 ~ 1100
Manufactured by:	EAE Elektrik Asansör End. Insaat San. ve Tic. A.S. Akçaburgaz Mahallesi 119 Sokak No: 10, 34510 Esenyurt / Istanbul, Turkey
Subject:	Fire behaviour of building materials and elements - Fire resistance of electric cable systems required.
Requirements:	DIN 4102-12:1998
Remarks:	For the classifications see Fires Test Report FIRES-JR-205-14-NURE (17-02-2015). This Test Certificate is valid till 11 January 2019 and expires upon withdrawal of one of the above mentioned standards or after changing the construction, materials or production method.

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in a confidential file no 217510100 (FIRES Test Report FIRES-JR-205-14-NURE, dated 17-02-2015).

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Arnhem, 11 January 2016 Number: 2175101.03

DEKRA Certification B.V.

drs. G.J. Zoetbrood
Managing Director

H.R.M. Barends
Certification Manager

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Şekerpınar – Çayırova, KOCAELİ

AB-0556-T
14.02.2017
RFTR17020

DENEY RAPORU
TEST REPORT

Müşterinin adı/adresi *Customer name/address*	:	EAE ELEKTRİK ASANSÖR END. İNŞ. VE SAN. TİC. A.Ş. Akçaburgaz Mah. 119. Sok. No:10 Esenyurt, İSTANBUL/TURKEY
İstek numarası *Order No.*	:	EEA-16-000412-REV2
Numunenin adı ve tarifi *Name and identity of test sample*	:	Cable System - Power cables fixed on cable trays, cable ladders and clips "EAE
Numunenin kabul tarihi *The date of receipt of sample*	:	19.12.2016
Açıklamalar *Remarks*	:	
Deneyin yapıldığı tarih *Date of test*	:	26.12.2016
Raporun sayfa sayısı *Number of pages of the Report*	:	33 (39 pages including appendixes)

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The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report

Mühür *Seal*	Tarih *Date*	Deney Sorumlusu *Person in charge of test*	Laboratuvar Müdürü *Head of Testing Laboratory*
	14.02.2017	Yusuf ÜSTÜNDAĞ	Ali BAYRAKTAR

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BUSBAR POWER DISTRIBUTION SYSTEMS

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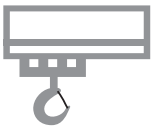

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