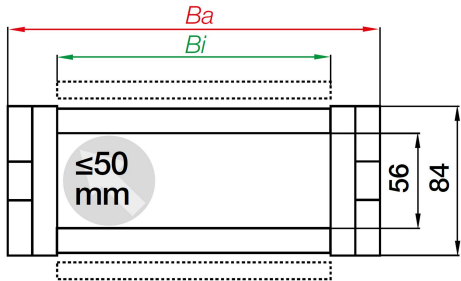


Energy chain E4.56 series | Crossbars every link:
openable along the inner and outer radius | Inner
height: 56mm

E4.56.15.300.0



Energy chain E4.56 series | Crossbars every
link: openable along the inner and outer radius |
Inner height: 56mm

- Inner height hi: 56mm
- Inner width Bi: 50 - 600mm
- Bend radii R: 135 - 500mm
- Pitch: 91mm
- For almost any application
- Openable along the inner and outer radius
- Strong and low-noise operation
- Smooth, cable-friendly inner surfaces

Outer height Ha	84 mm
Inner height [Hi]	56 mm
Inner width [Bi]	150 mm
Max. cable diameter	50 mm
Outer width [Ba]	184 mm

Product description

Introducing the Energy Chain E4.56 series by igus, designed for versatility in almost any application. With an inner height of 56mm, it features crossbars that open along both the inner and outer radius for easy access. Enjoy strong, low-noise operation with a smooth, cable-friendly inner surface. This energy chain is engineered for high push/pull strength, making it ideal for long travels and large unsupported lengths. Enhance your system's efficiency and longevity with the E4.56 series.

Dynamic properties

v max. unsupported (speed)	20 m/s
v max. gliding (speed)	10 m/s



Dimensions

Inner height [Hi]	56 mm
Inner width [Bi]	150 mm
Outer height Ha	84 mm
Outer width [Ba]	184 mm
Bend radius [R]	300 mm
Pitch	91 mm
Chain links per metre	11
Max. cable diameter	50 mm
H	684 mm
D	479 mm
K	1125 mm
H2	266 mm
D2	1180 mm
K2	2002 mm
DeltaHF	50 mm
Velocity FLG unsupported max.	20 m/s
Acceleration FLG max.	200 m/s ²
Maximum unsupported length	5 m
Maximum long travel	400 m

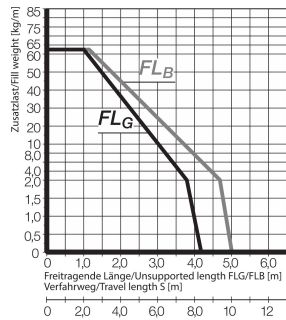
General properties

Opening principle	Can be opened along the inner and outer radius
Maximum fill weight	62.5 kg/m
Colour	black
Material	igumid G LW
Energy chain system	E4.1
Shipping weight (kg or kg/m)	4.35578
CO2 equivalent per piece	2.3939 kg
Temperature e-chain min.	-40 °C
Temperature e-chain max.	120 °C

Certificates and standards



Additional information and diagrams



The unsupported length depends on fill weight

X axis: unsupported length in m FLB/FLG

Y axis: fill weight in kg/m

Lower scale: travel S in m

FLB = unsupported with permissible sag

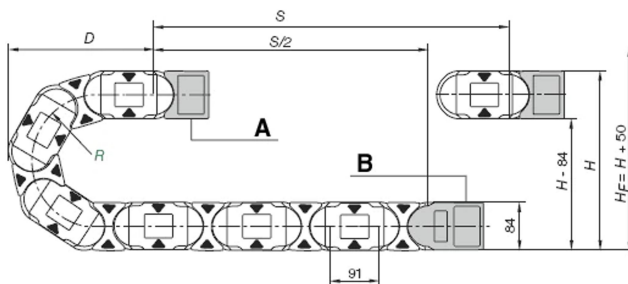
FLG = unsupported with straight upper run

Reference example A:

fill weight = 10 [kg/m]

unsupported length FLB = 3.6m

travel = 7.2m



A = moving end, B = fixed end

Pitch: 91mm

Chain links per m: 11

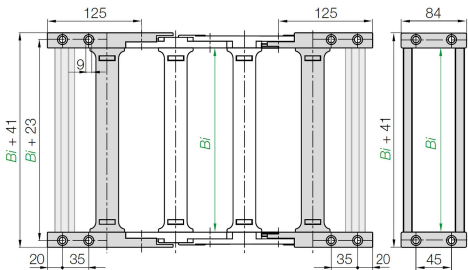
Travel: S

Chain length = $\frac{S}{2} + KK$ = Surcharge for bending radius for e-chain length calculation in mm

Note: Chain length for the e-chain links is rounded up, as there are no half links.

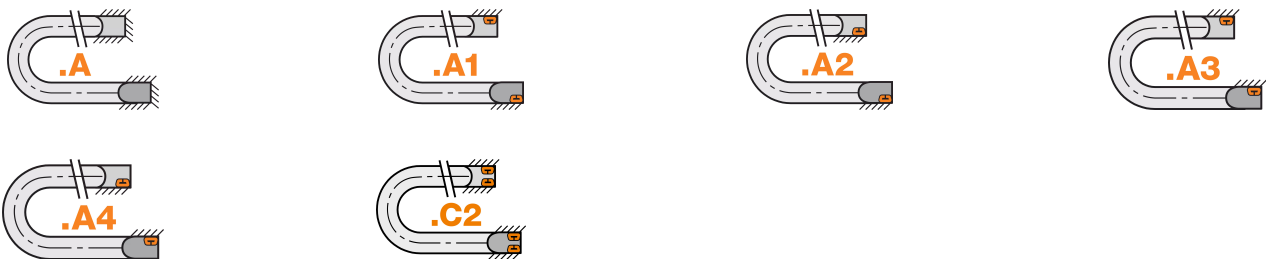


Mounting brackets KMA - pivoting

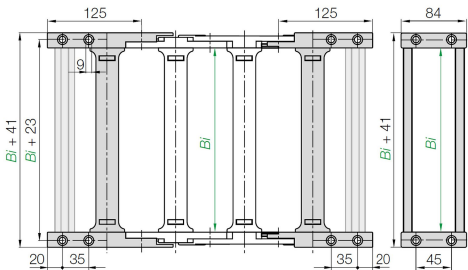


Part number	with C-profile	Mounting type	Alignment (mounting bracket)
E4.560.15.1.12.A	No	A	pivoting
E4.560.15.1.12.C.A1	Yes	A1	pivoting
E4.560.15.1.12.C.A2	Yes	A2	pivoting
E4.560.15.1.12.C.A3	Yes	A3	pivoting
E4.560.15.1.12.C.A4	Yes	A4	pivoting
E4.560.15.1.12.C2.A	Yes	C2	pivoting
E4.560.15.2.12.A	No	A	pivoting
E4.560.15.2.12.C.A1	Yes	A1	pivoting
E4.560.15.2.12.C.A2	Yes	A2	pivoting
E4.560.15.2.12.C.A3	Yes	A3	pivoting
E4.560.15.2.12.C.A4	Yes	A4	pivoting
E4.560.15.2.12.C2.A	Yes	C2	pivoting

Mounting type

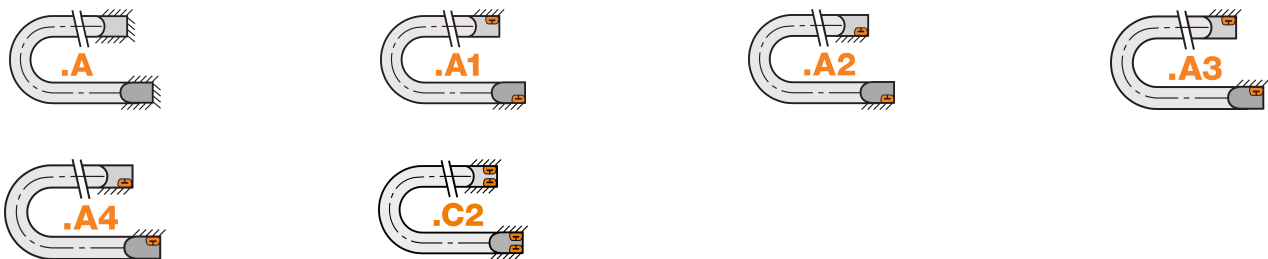


Mounting brackets KMA - fixed



Part number	with C-profile	Mounting type	Alignment (mounting bracket)
E4.561.15.1.12.A	No	A	fixed
E4.561.15.1.12.C.A1	Yes	A1	fixed
E4.561.15.1.12.C.A2	Yes	A2	fixed
E4.561.15.1.12.C.A3	Yes	A3	fixed
E4.561.15.1.12.C.A4	Yes	A4	fixed
E4.561.15.1.12.C2.A	Yes	C2	fixed
E4.561.15.2.12.A	No	A	fixed
E4.561.15.2.12.C.A1	Yes	A1	fixed
E4.561.15.2.12.C.A2	Yes	A2	fixed
E4.561.15.2.12.C.A3	Yes	A3	fixed
E4.561.15.2.12.C.A4	Yes	A4	fixed
E4.561.15.2.12.C2.A	Yes	C2	fixed

Mounting type

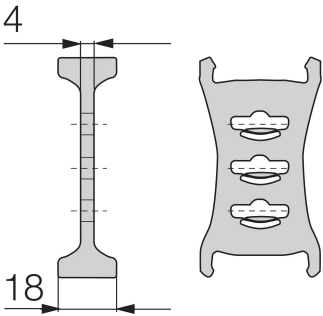


Seperators

Asymmetrical separator, unassembled

Asymmetrical separator, unassembled

Part number	Mounted
401.A	No

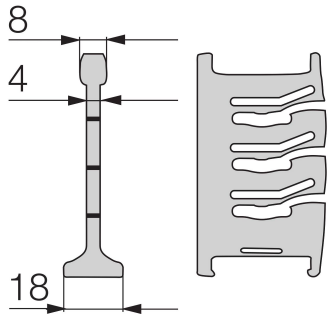
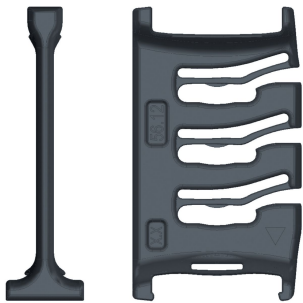


Standard separator, wide base, unassembled

Standard - for any application. Separator, wide base for maximum holding force and secure footing.

Part number	Mounted
56.1	No

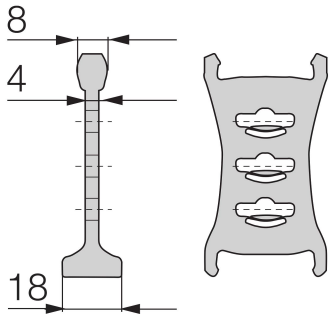




Lean separator, unassembled

Lean separators. For quick fitting of shelves in several layers.

Part number	Mounted
56.12	No

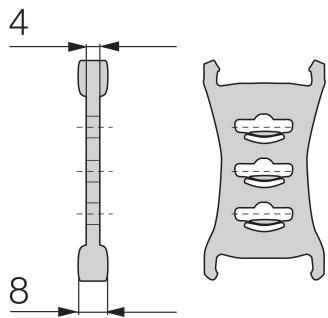


Separator, narrow top, unassembled

Even faster cable installation. Wide on one side for high holding force, narrow on opposite side for easy cable fitting.

Part number	Mounted
56.2	No

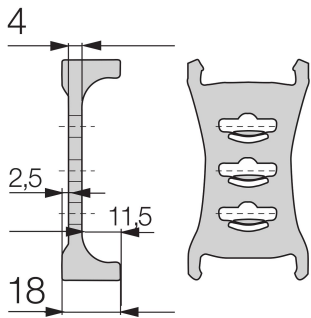
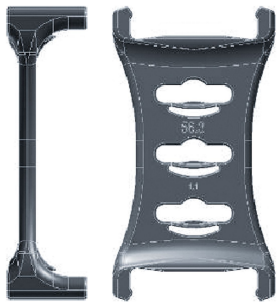




Separator, narrow, unassembled

For a large number of thin cables. Separator with a narrow base for a large number of small cables side by side. Space-saving in energy chains.

Part number	Mounted
56.3	No

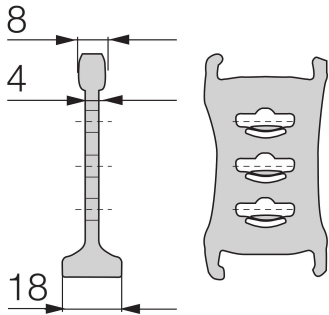
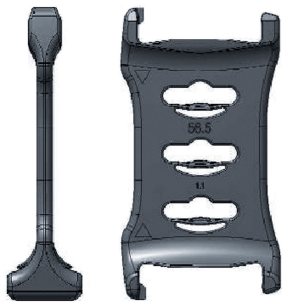


Separator, asymmetrical, unassembled

For e.g. Side-mounted applications. Asymmetrical separator, for defined gap distance. No additional spacers required.

Part number	Mounted
56.4	No





Notch separator, unassembled

Locks securely in preset increments. Notch separator for exact positioning; recommended for side-mounted applications.

Part number	Mounted
56.5	No

Notch locking separator, unassembled

Notch locking separator, unassembled

Part number	Mounted
56.6	No



Separator, unassembled

Separator, unassembled

Part number	Mounted
401	No

Middle plate, unassembled

Middle plate, unassembled

Part number	Mounted
403	No



Locking separator, unassembled

Locking separator, unassembled

Part number	Mounted
404	No

Partial height separator, unassembled

Partial height separator, unassembled

Part number	Mounted
405	No



Height slot separator, unassembled

Height slot separator, unassembled

Part number	Mounted
408	No

Height slot separator, open, unassembled

Height slot separator, open, unassembled

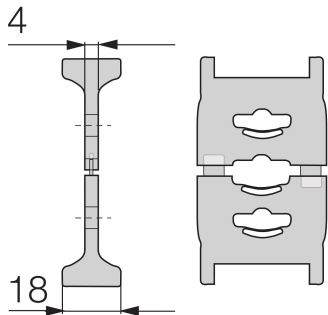
Part number	Mounted
409	No



Locking separator, unassembled

Locking separator, unassembled

Part number	Mounted
410	No

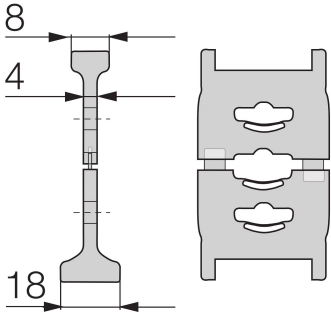


Split separator, wide base/top, unassembled

Split separators. In order to fill energy chains more easily and effectively, these separators can be split in the middle. This allows easier access to middle shelf partitions. Fast assembly and easy retrofit. 2 types available: with wide or narrow top.

Part number	Mounted
56.H.1	No

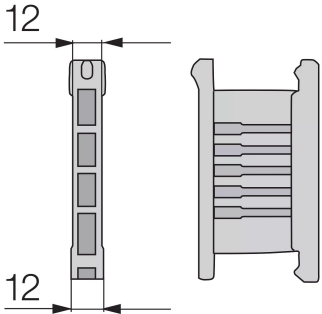




Split separator, narrow top, unassembled

Split separators. In order to fill energy chains more easily and effectively, these separators can be split in the middle. This allows easier access to middle shelf partitions. Fast assembly and easy retrofit. 2 types available: with wide or narrow top.

Part number	Mounted
56.H.2	No



T563 middle plate, unassembled

For quick interior separation at a later date or for initial assembly without dismantling the interior separation.

Part number	Mounted
T563	No



Shelves

Part number	Width	Mounted
420.100	100 mm	No
420.125	125 mm	No
420.150	150 mm	No
420.18	18 mm	No
420.23	23 mm	No
420.25	25 mm	No
420.28	28 mm	No
420.33	33 mm	No
420.43	43 mm	No
420.50	50 mm	No
420.62	62 mm	No
420.75	75 mm	No
420.88	88 mm	No
520.050	50 mm	No
520.065	65 mm	No
520.075	75 mm	No
520.100	100 mm	No
520.125	125 mm	No
520.150	150 mm	No