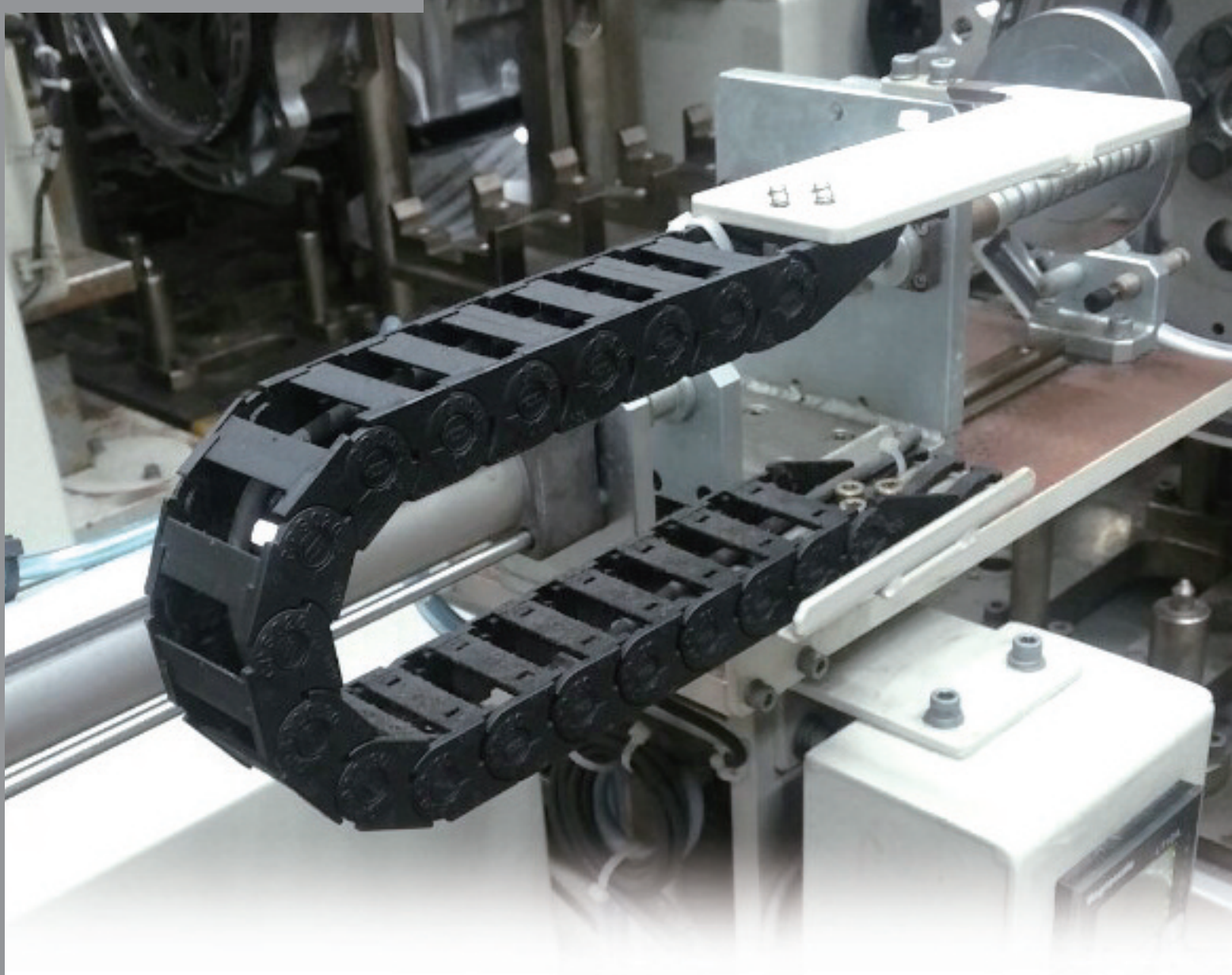


CPS mini chain



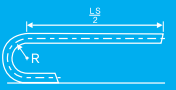
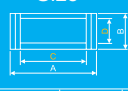








» General information

| Item | Value |
|--------------------|---------------------------------|
| Material | CPS-Amid(PA6+GF), RoHs |
| Noise range | 40dB(DIN EN 61672-1) |
| Speed | 3 ^m /s |
| Acceleration | 10 ^m /s ² |
| Temperature | -30°C ~+130°C |
| Special production | ESD, UV |
| Certificate | CE, ATEX(Ex) |

» Calculation table

| Item | Value |
|-------------------------------------|-------------------------------------|
| Length of Cable Chain | $L = \frac{1}{2} \times LS + LP$ |
| Bending Radius | |
| The biggest Cable inserted | Multiply 8~10 and the biggest cable |
| The biggest Hydraulic Hose inserted | Multiply 15~20 and the biggest hose |

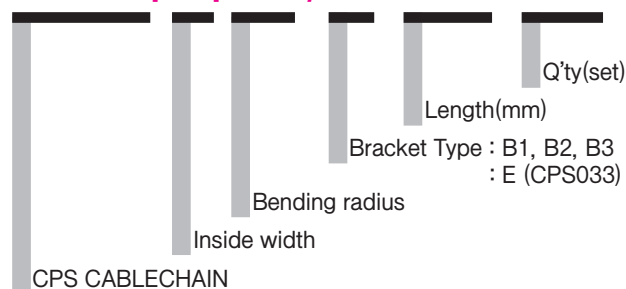
» Dimension table

| CPS Cable Chain MINI Type | Pitch | Bending Radius(R)  | Weight kg/m | Speed m/sec | Temperature °C | Size  | | | | Frame type | Section - composition |
|---------------------------|-------|--|---|-------------|----------------|---|----|----------------------------|------|---|---|
| | | | | | | A | B | C | D | | |
| CPS 015 | 15 | 18, 28, 38 | 0.100 0.106 0.111 0.115 | 3 | -30 ~ +130 | 12.6 16.6 21.6 26.6 | 13 | 6 10 15 20 | 10 |  |  |
| CPS 020 | 20 | 28, 38, 48 | 0.245 0.260 0.285 0.310 | 3 | -30 ~ +130 | 24 29 39 49 | 20 | 15 20 30 40 | 14.5 |  |  |
| CPS 030 | 30 | 38, 48, 75, 100 | 0.380 0.400 0.420 0.440 | 3 | -30 ~ +130 | 29 39 49 64 | 26 | 15 25 35 50 | 19 |  |  |
| CPS 033 | 33 | 35, 45, 75, 100, 120 | 0.550 0.590 0.610 0.680 0.700 | 3 | -30 ~ +130 | 45 55 65 85 95 | 31 | 27 37 47 67 77 | 23 |  |  |

(Dimensions in mm)

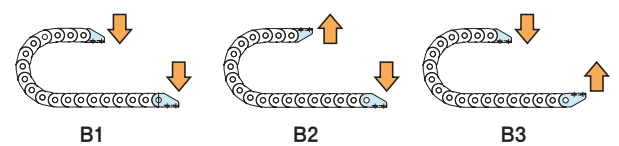
» Ordering

CPS 015, 10, R28 / B2 - 550L : 10ST

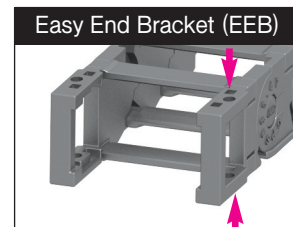


» Bracket type

- CPS015, CPS020, CPS030



- CPS033



There are fixing holes of two directions including upper side and lower side.

» Application of CPS mini Chain

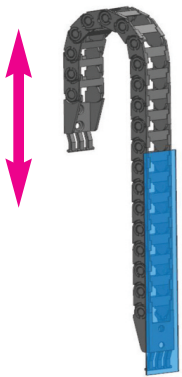
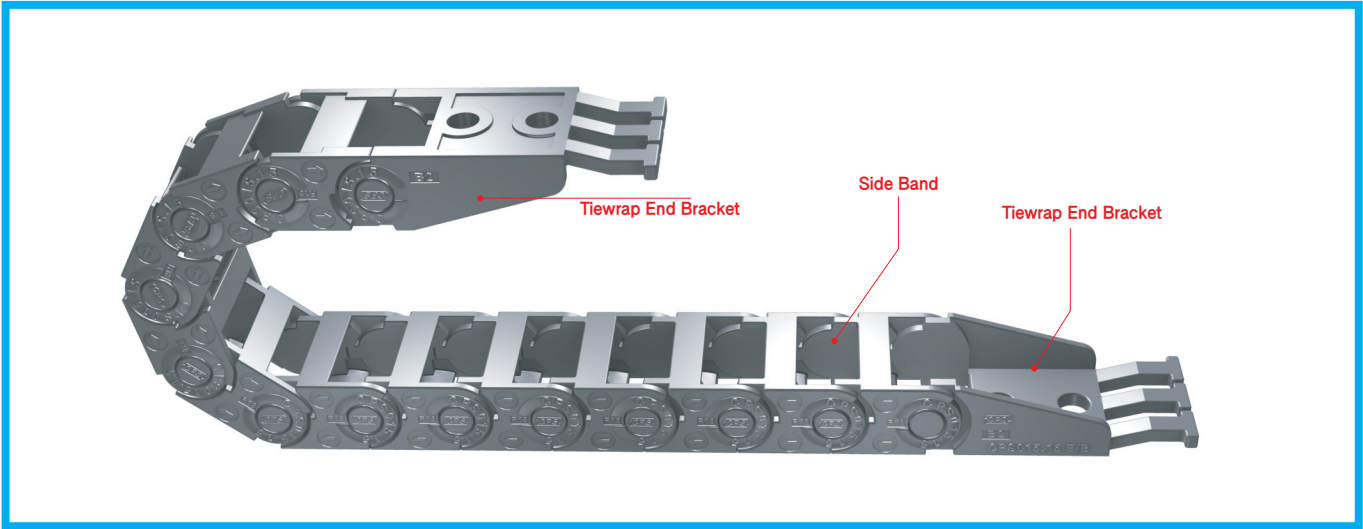


▲ Factory lines.

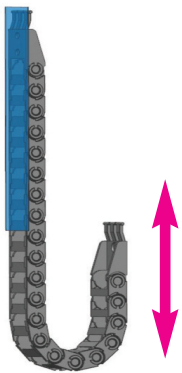


▲ Machine tools.

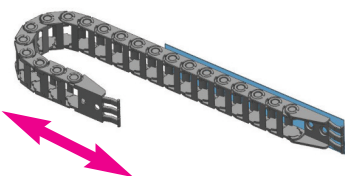
CPS 015



Vertical with curve above



Vertical with curve below



Horizontal application mounted on its side

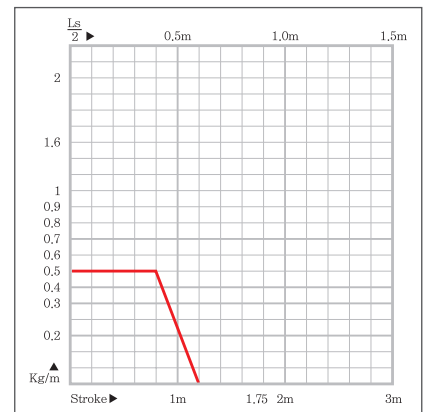
» Calculation of the chain length

$$\left[L = \frac{L_s}{2} + L_p \right]$$

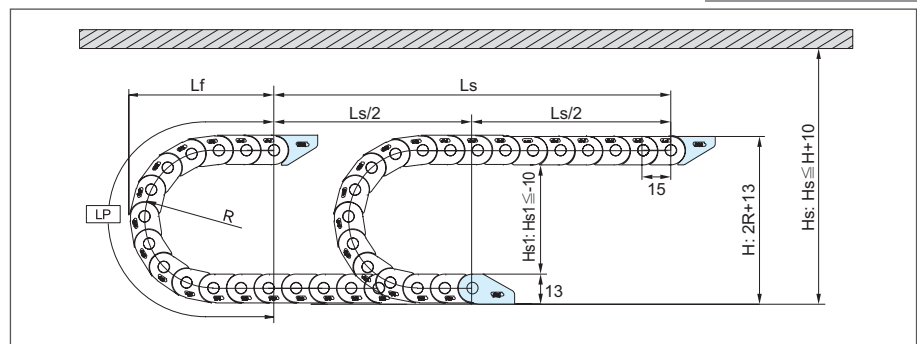
» Other installation length

Vertical curve above = max 0,8m
 Vertical curve below = max 3,0m
 Side Mounted, Unsupported = max 0,2m

» Load diagrams self-supporting length



» Layout of the chain



| Bending Radius (R) | Lp Loop Length | Lf Loof Projection | H Moving Height |
|--------------------|-------------------|-----------------------|--------------------|
| 18 | 117 | 55 | 49 |
| 28 | 148 | 65 | 69 |
| 38 | 180 | 75 | 89 |

(Dimensions in mm)

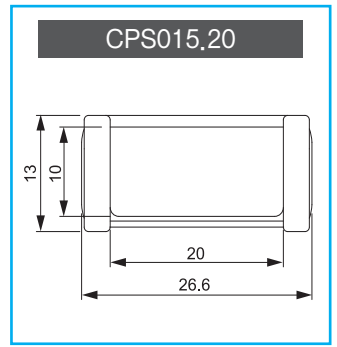
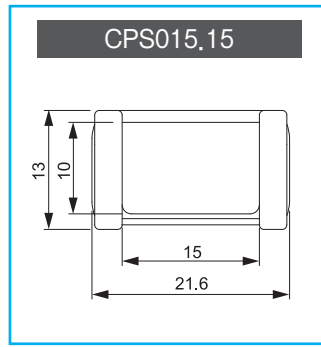
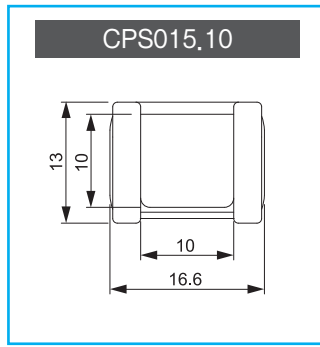
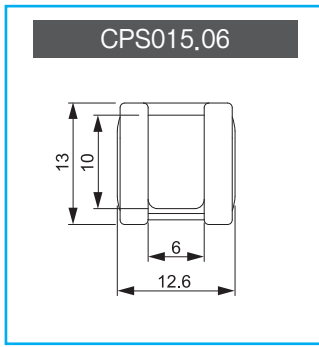
» Chain radius, Weight

| Chain Type | Bending Radius (R) | Weight kg/m |
|------------|--------------------|-------------|
| CPS 015,06 | | 0,100 |
| CPS 015,10 | | 0,106 |
| CPS 015,15 | 18, 28, 38 | 0,111 |
| CPS 015,20 | | 0,115 |

(Dimensions in mm)

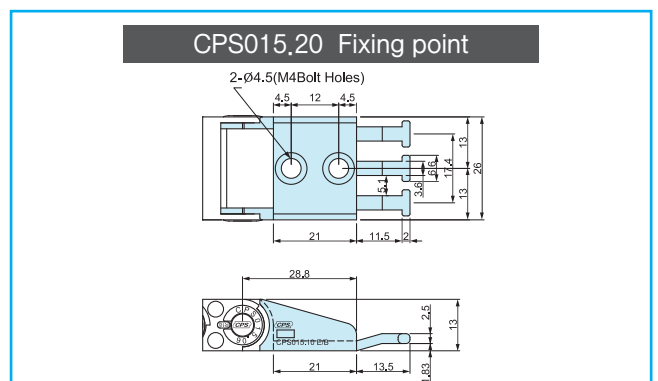
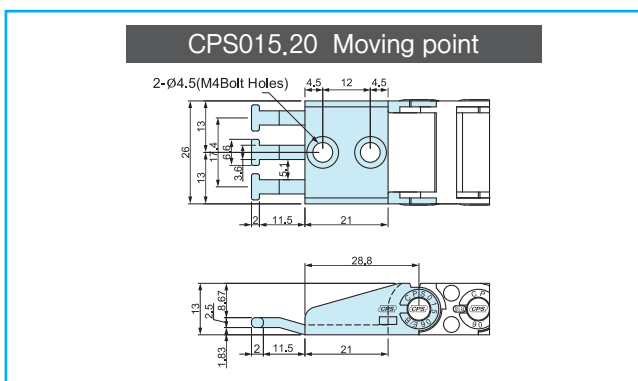
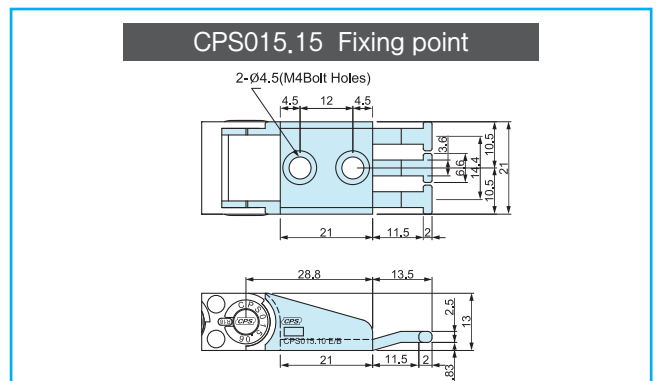
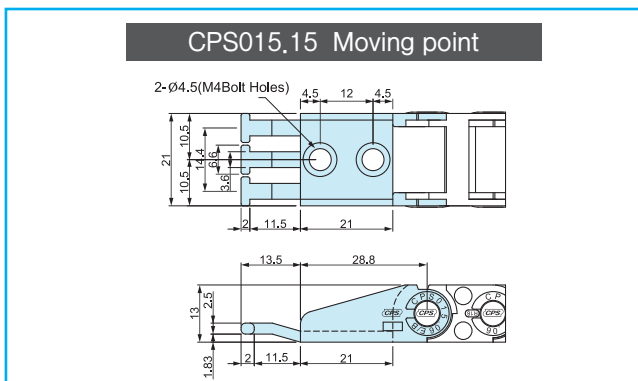
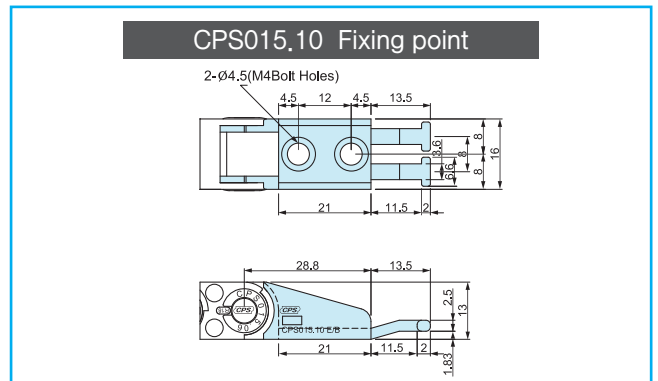
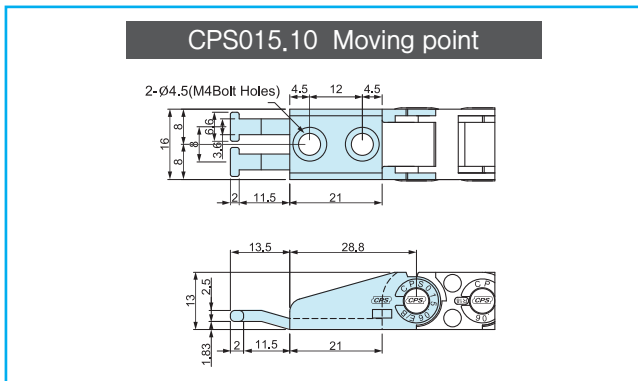
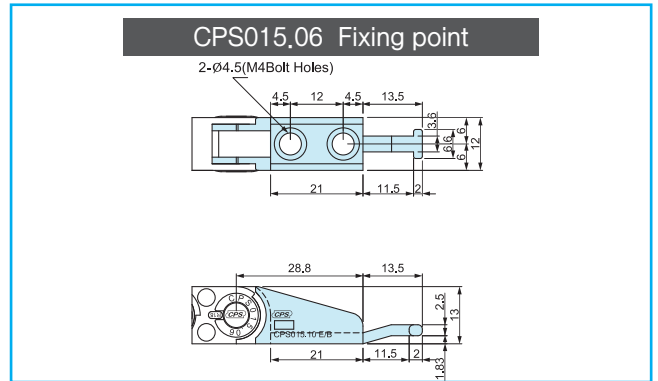
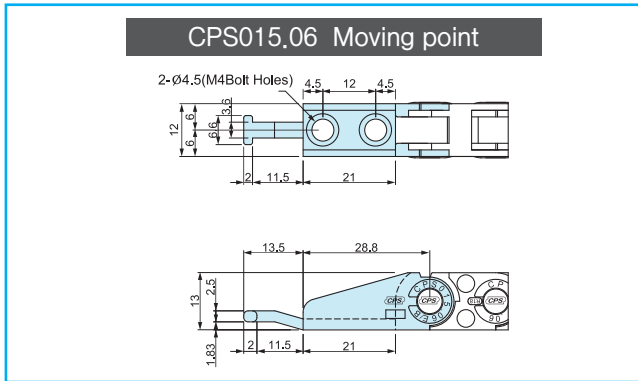
» Chain cross section

(Dimensions in mm)

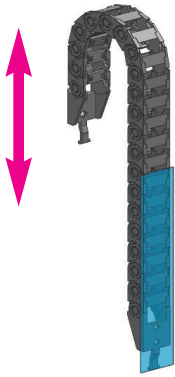
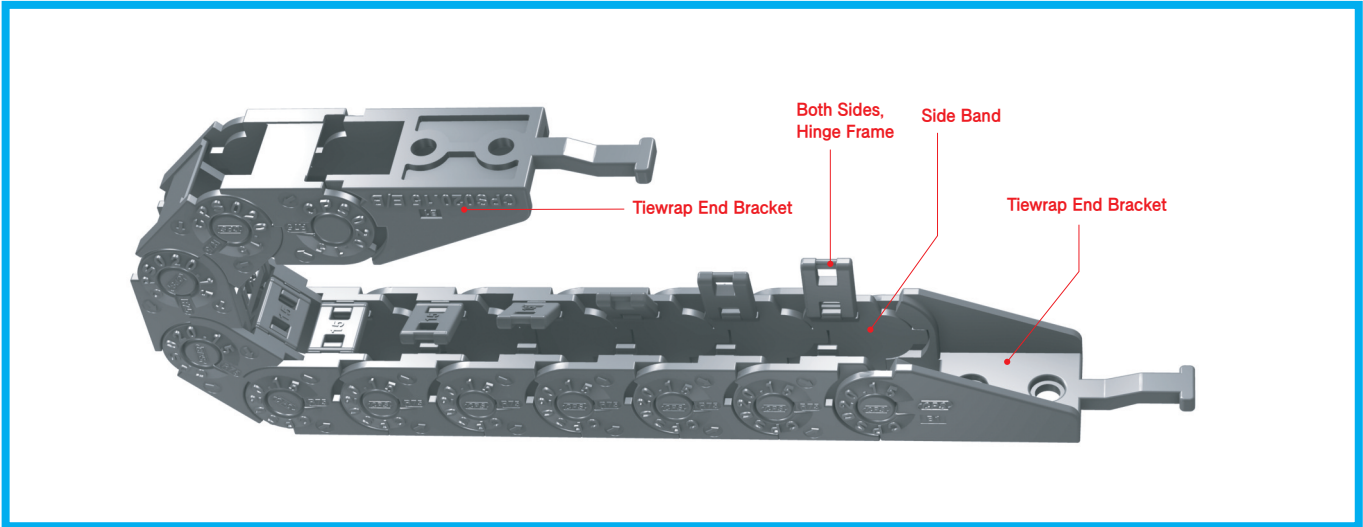


» End bracket (Tie wrap type)

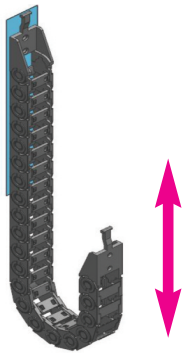
(Dimensions in mm)



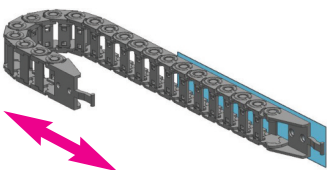
CPS 020



Vertical with curve above



Vertical with curve below



Horizontal application mounted on its side

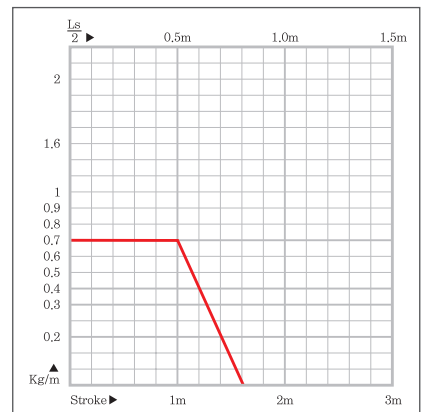
» Calculation of the chain length

$$\left[L = \frac{L_s}{2} + L_p \right]$$

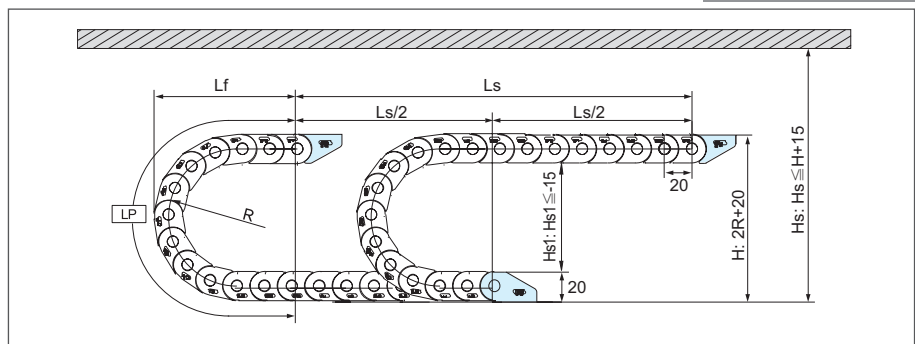
» Other installation length

Vertical curve above = max 1.0m
 Vertical curve below = max 5.0m
 Side Mounted, Unsupported = max 0.5m

» Load diagrams self-supporting length



» Layout of the chain



| Bending Radius (R) | L _p Loop Length | L _f Loop Projection | H Moving Height |
|--------------------|-------------------------------|-----------------------------------|--------------------|
| 28 | 170 | 78 | 76 |
| 38 | 200 | 88 | 96 |
| 48 | 230 | 98 | 116 |

(Dimensions in mm)

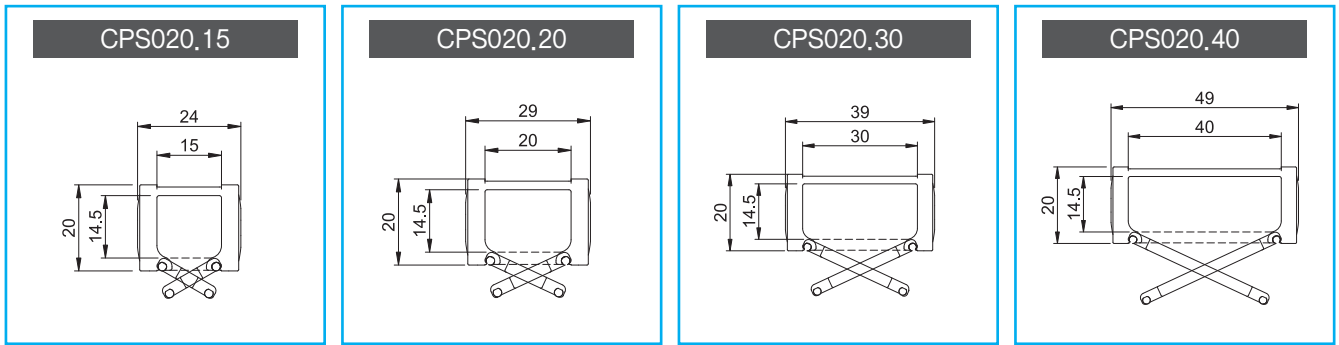
» Chain radius, Weight

| Chain Type | Bending Radius (R) | Weight kg/m |
|------------|--------------------|-------------|
| CPS 020,15 | 28, 38, 48 | 0,245 |
| CPS 020,20 | | 0,260 |
| CPS 020,30 | | 0,285 |
| CPS 020,40 | | 0,310 |

(Dimensions in mm)

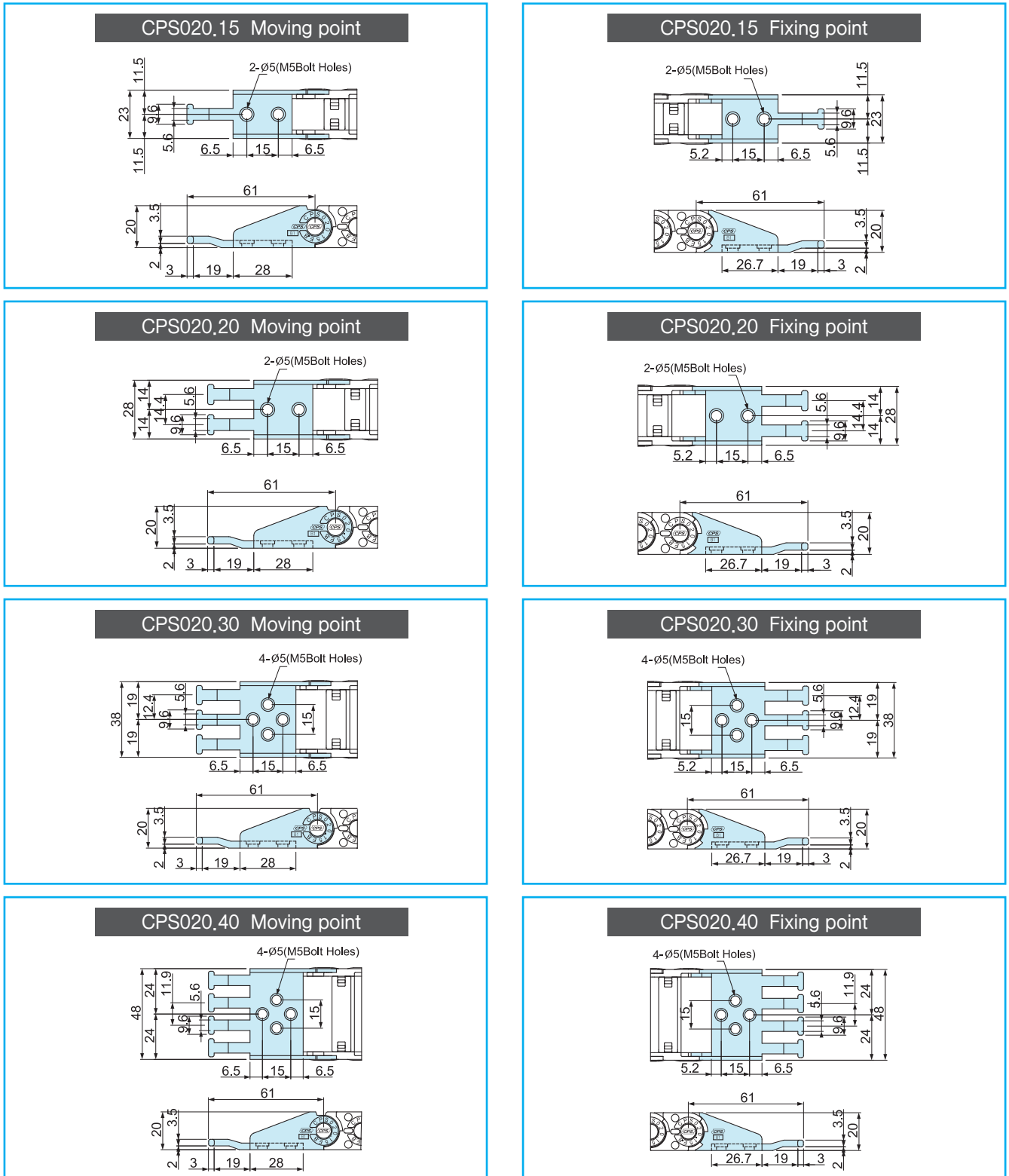
» Chain cross section

(Dimensions in mm)

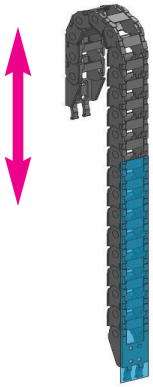
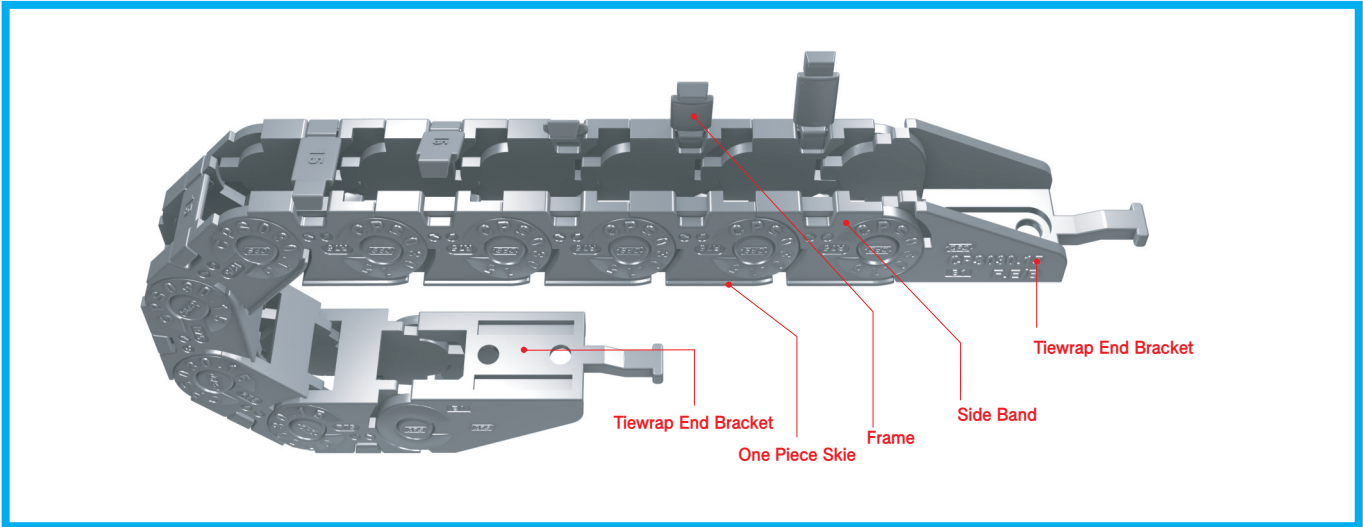


» End bracket (Tie wrap type)

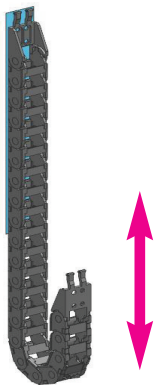
(Dimensions in mm)



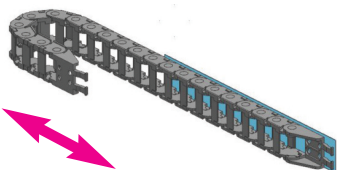
CPS 030



Vertical with curve above



Vertical with curve below



Horizontal application mounted on its side

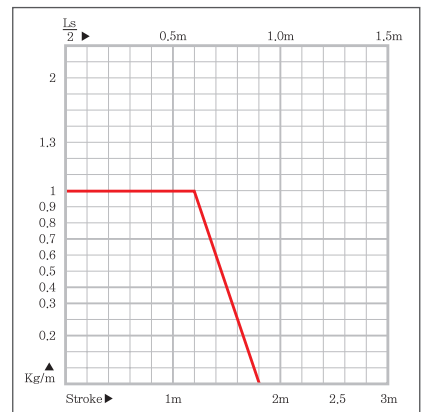
» Calculation of the chain length

$$\left[L = \frac{L_s}{2} + L_p \right]$$

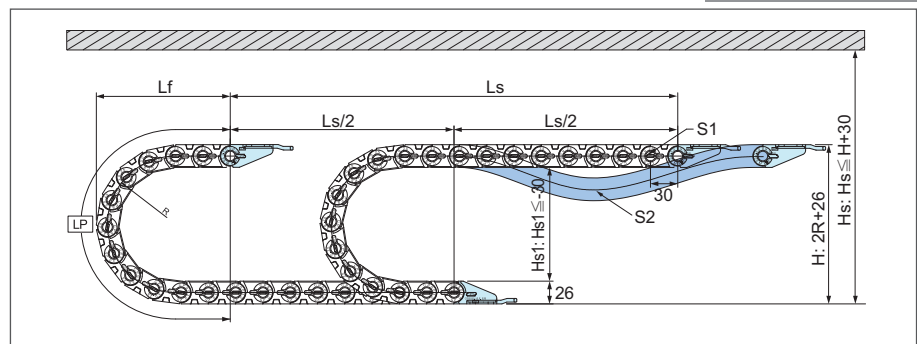
» Other installation length

Vertical curve above = max 1.5m
 Vertical curve below = max 10.0m
 Side Mounted, Unsupported = max 0.6m

» Load diagrams self-supporting length



» Layout of the chain



| Bending Radius (R) | Lp Loop Length | Lf Loof Projection | H Moving Height |
|--------------------|-------------------|-----------------------|--------------------|
| 38 | 240 | 110 | 101 |
| 48 | 271 | 119 | 121 |
| 75 | 356 | 148 | 175 |
| 100 | 434 | 173 | 225 |

(Dimensions in mm)

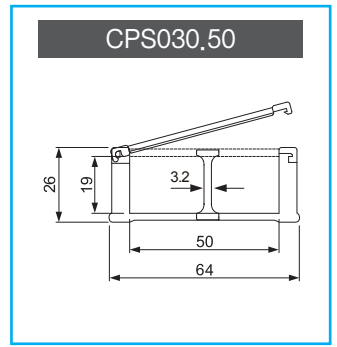
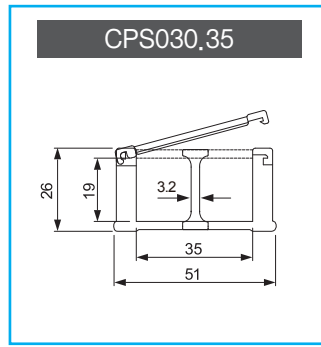
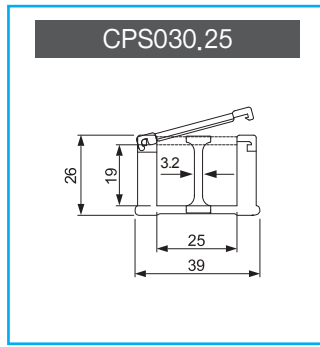
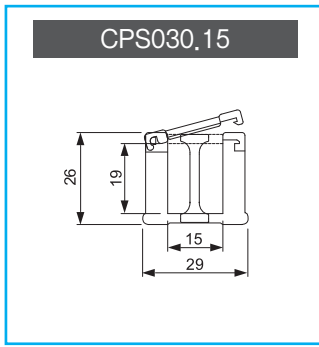
» Chain radius, Weight

| Chain Type | Bending Radius (R) | Weight kg/m |
|------------|--------------------|-------------|
| CPS 030,15 | 38, 48, 75, 100 | 0.38 |
| CPS 030,25 | | 0.40 |
| CPS 030,35 | | 0.42 |
| CPS 030,50 | | 0.44 |

(Dimensions in mm)

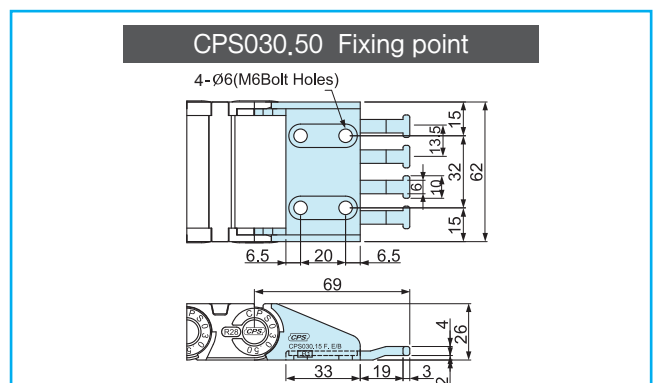
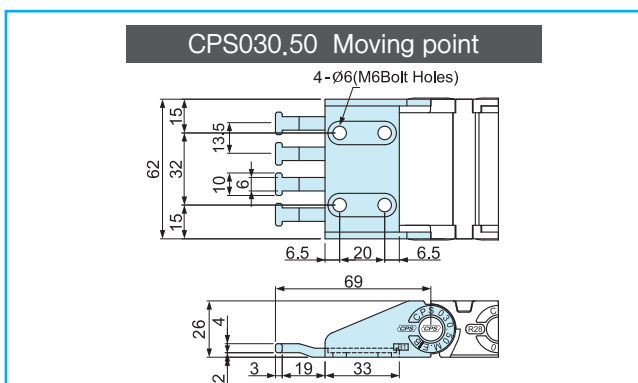
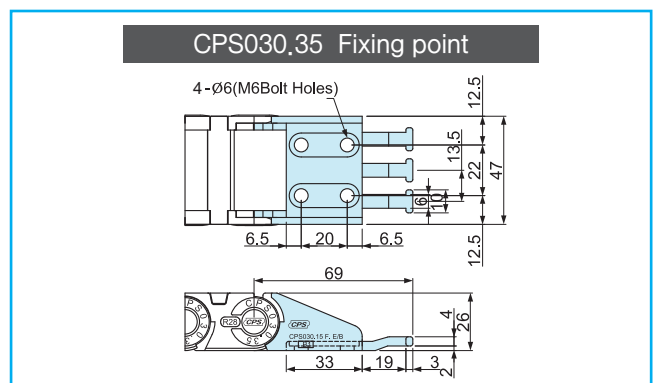
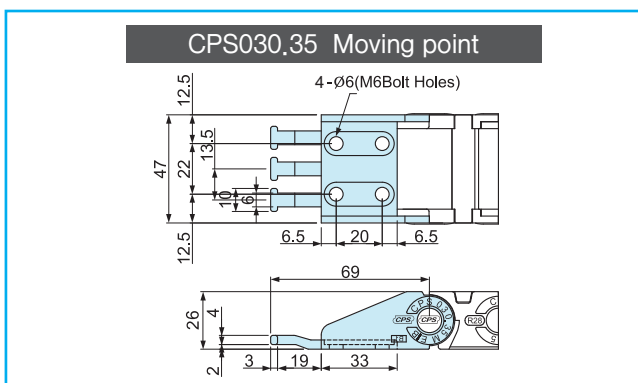
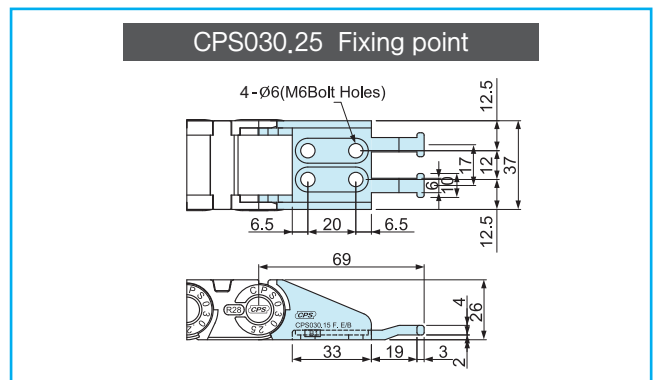
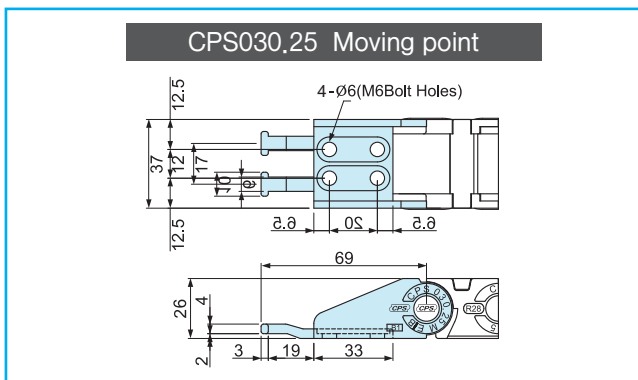
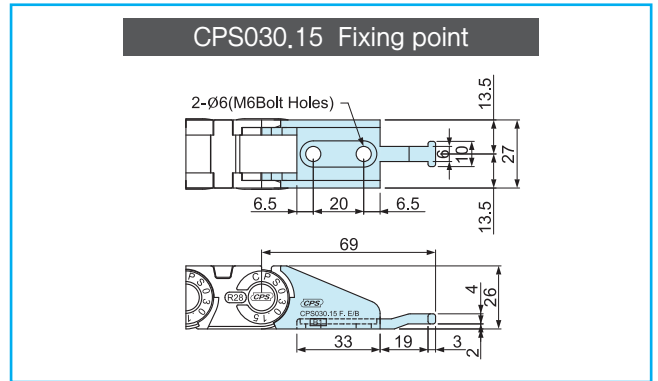
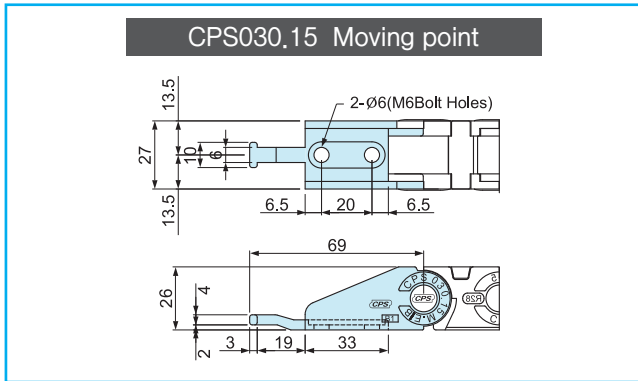
» Chain cross section

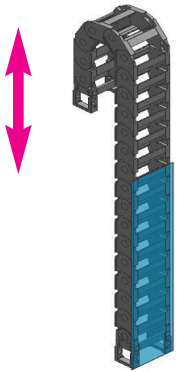
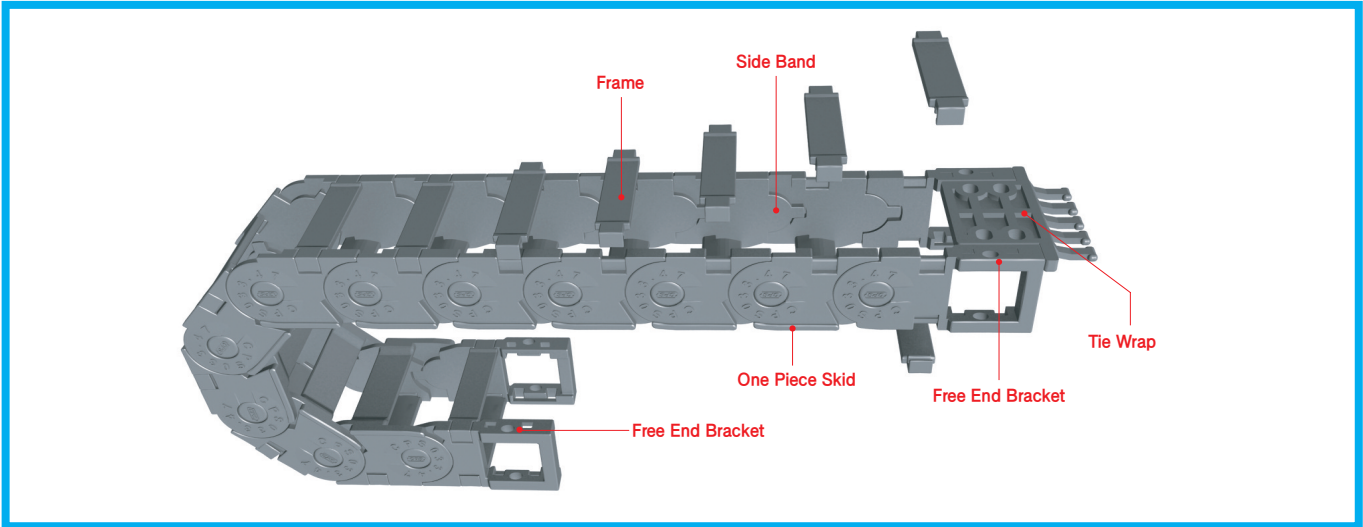
(Dimensions in mm)



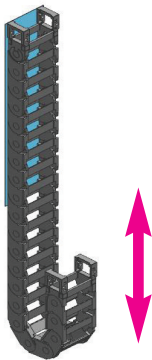
» End bracket (Tie wrap type)

(Dimensions in mm)

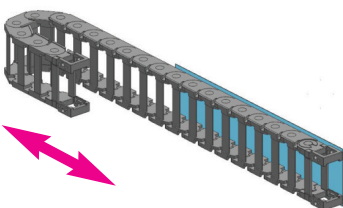




Vertical with curve above



Vertical with curve below



Horizontal application mounted on its side

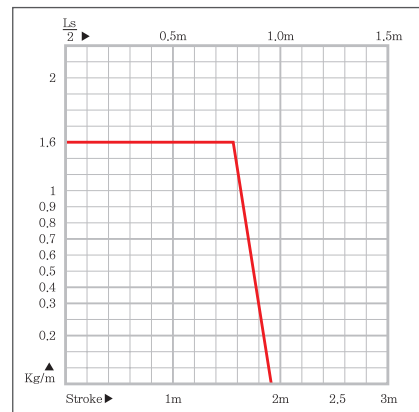
» Calculation of the chain length

$$\left[L = \frac{L_s}{2} + L_p \right]$$

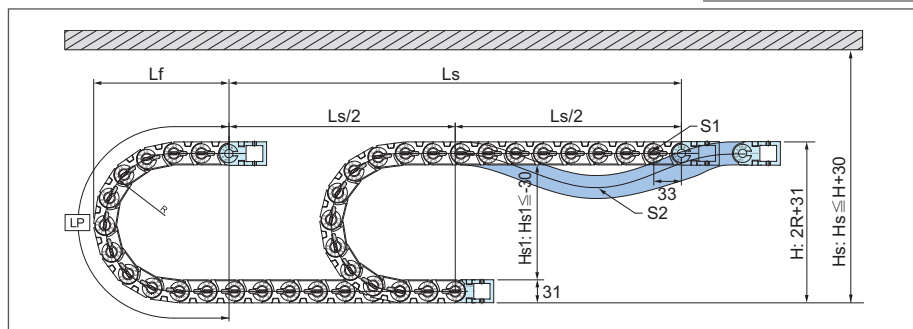
» Other installation length

Vertical curve above = max 1.5m
 Vertical curve below = max 10.0m
 Side Mounted, Unsupported = max 0.6m

» Load diagrams self-supporting length



» Layout of the chain

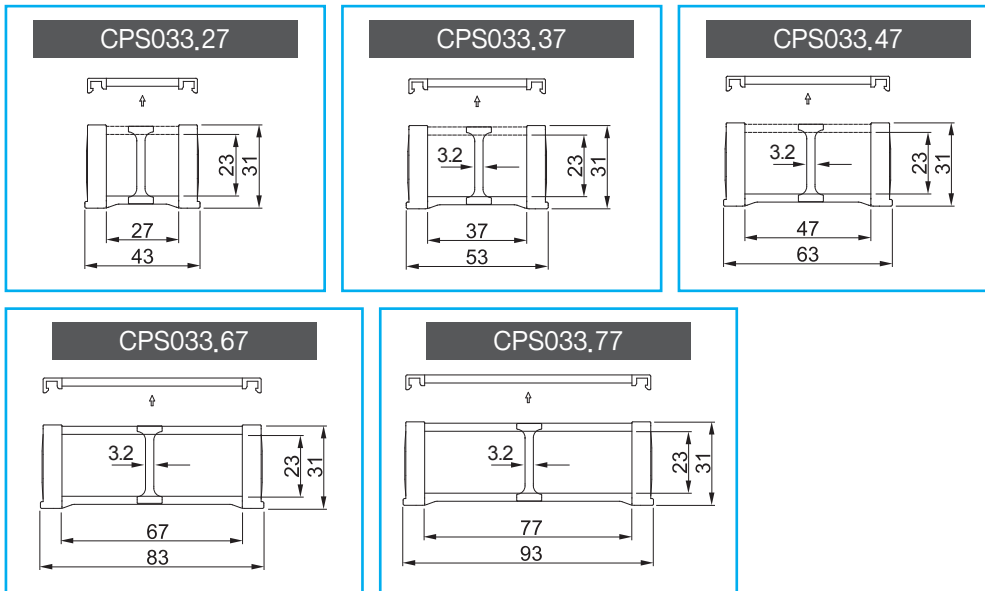


| Bending Radius (R) | Lp Loop Length | Lf Loop Projection | H Moving Height |
|--------------------|-------------------|-----------------------|--------------------|
| 35 | 242 | 117 | 101 |
| 45 | 274 | 127 | 121 |
| 75 | 368 | 157 | 181 |
| 100 | 446 | 182 | 231 |
| 120 | 509 | 202 | 271 |

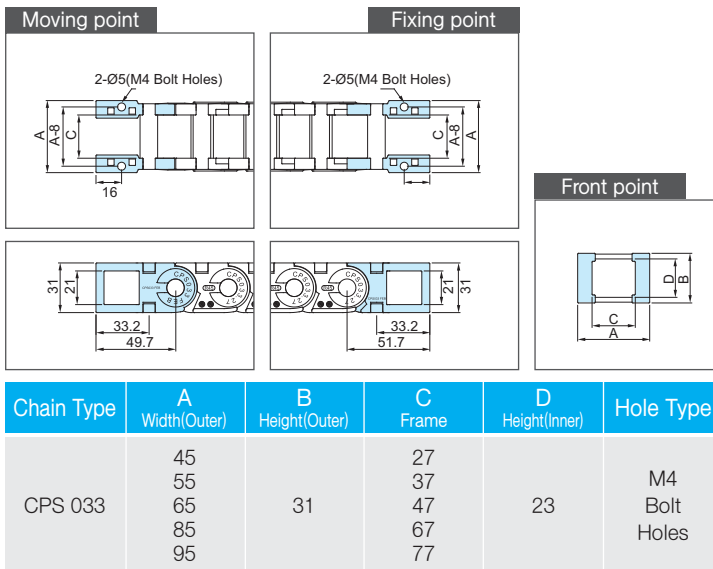
(Dimensions in mm)

» Chain cross section

(Dimensions in mm)

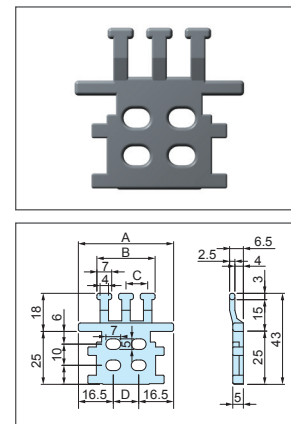


» Easy end bracket



(Dimensions in mm)

» Tie wrap (TW)



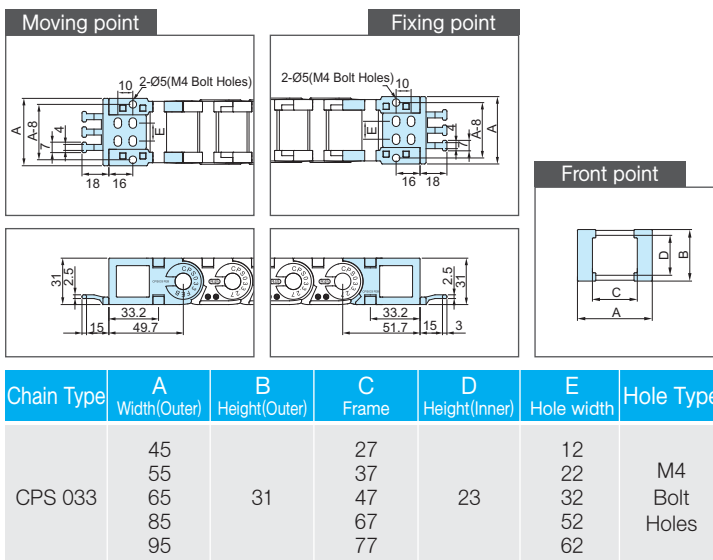
Tie wrap prevents cut off problem of the cable by the twisting and pulling movement.

The tie wrap of this CPS CABLE Chain has two types, separated with bracket type and attached with bracket type.

| Chain Type | Ordering No. | A | B | C | D |
|------------|-----------------|------|------|-------|------|
| CPS 033 | S-TW033/20CR,27 | 45.0 | 27.5 | 10.20 | 12.0 |
| | S-TW033/20CR,37 | 55.0 | 41.0 | 8.50 | 22.0 |
| | S-TW033/20CR,47 | 65.0 | 48.0 | 10.40 | 32.0 |
| | S-TW033/20CR,67 | 85.0 | 68.0 | 10.00 | 52.0 |
| | S-TW033/20CR,77 | 95.0 | 78.0 | 8.87 | 62.0 |

(Dimensions in mm)

» Easy end bracket (Tie wrap type)



(Dimensions in mm)