

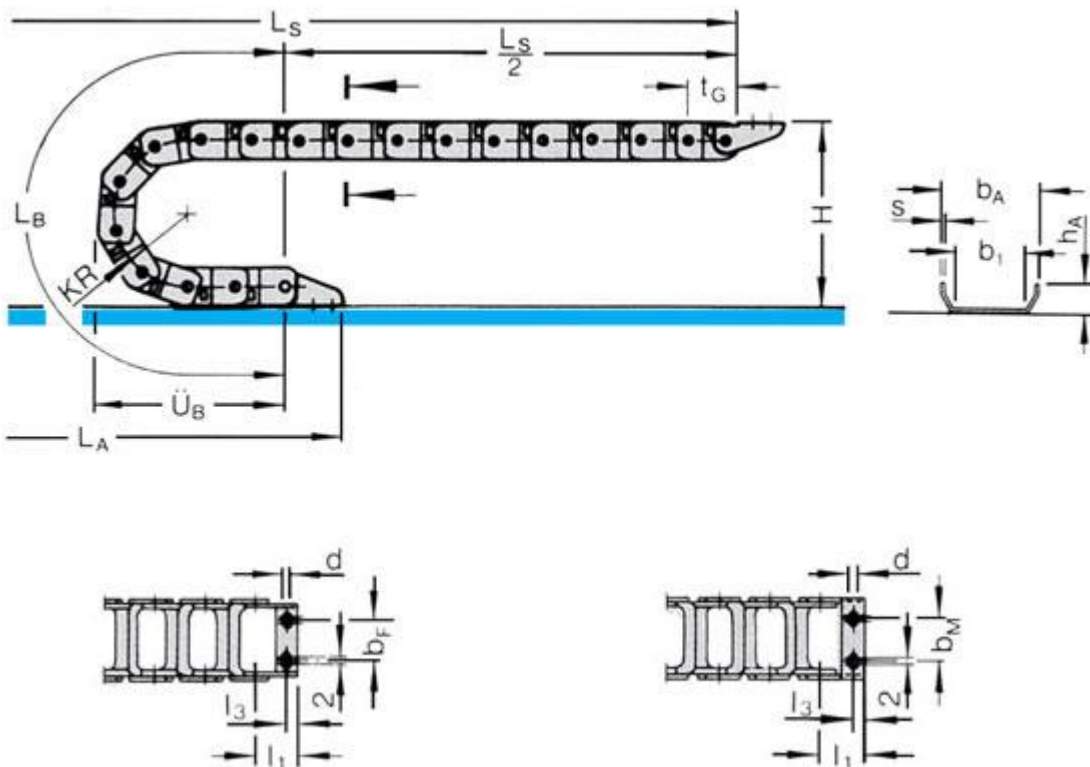


## Cable Carrier

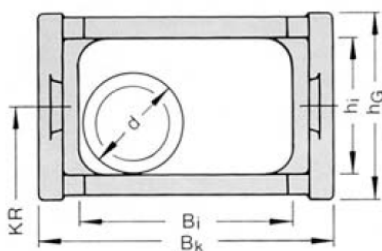
Cable management is critical for reliability in high cycling machinery. Sagging and unsupported cables wear and fail prematurely. This applies to electrical, optical, pneumatic and hydraulic cables and these need to be contained and guided to prevent premature failure.

Cable carrier (also known as energy chain or cable chain) is a segmented structure that flexes around a fixed radius and remains rigid in all other dimension. The cables are run within the rectangular cross section of the cable carrier and as the cable carrier moves with the cables they are not subject to abrasive wear. Cable carrier is available in a range of bend radius and should be large enough to keep the cables within their flexural limits.

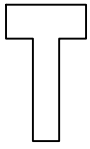
Shinsung of Korea have been producing this product for over 20 years. Their cable carriers are a quality reliable product at a great price point.



Determination of chain length:  $L_K = \frac{L_s}{2} + L_B$  rounded off to nearest chain division tG



- Bk External Width
- hG External Height
- Bi Internal Width
- Hi Internal Height
- KR Bending Radius
- d Cable/hose diameter
- Ls Stroke Length
- tG Chain pitch
- Lb Arc length



**SHINSUNG**

**SMI miniature cable chain**

Material: Glass fibre reinforced  
 Dividers: Optional  
 Sag Type: Yes  
 Temperature range: -30degC - +130degC

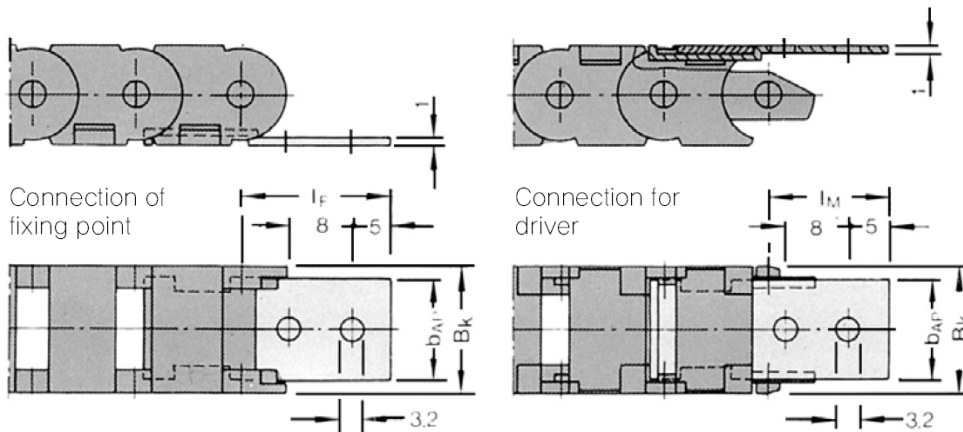
Connectors come as a pair, one male and one female and can be rotated through 180deg.



Type	Pitch	Bending Radius (KR)	Internal Width (Bi)	Internal Height (hi)	External Width (Bk)	External Height (hG)	Max Hose Size (d)	Hinged Bars	Links /M	Weight Kg/M
SMI 0130.06	13	20, 28, 37	6	10	12	12.5	5	Yes	77	0.132
SMI 0130.10	13	20, 28, 37	10	10	16	12.5	8	Yes	77	0.14
SMI 0130.15	13	20, 28, 37	15	10	21	12.5	8	Yes	77	0.15
SMI 0130.20	13	20, 28, 37	20	10	26	12.5	8	Yes	77	0.16
SMI 0180.06	18	28, 37, 50	6	15	12	18	5	Yes	55	0.238
SMI 0180.10	18	28, 37, 50	10	15	16	18	8	Yes	55	0.25
SMI 0180.15	18	28, 37, 50	15	15	23	18	13	Yes	55	0.275
<b>SMI 0180.20</b>	<b>18</b>	<b>28, 37, 50</b>	<b>25</b>	<b>15</b>	<b>34</b>	<b>18</b>	<b>13</b>	<b>Yes</b>	<b>55</b>	<b>0.3</b>
SMI 0180.30	18	28, 37, 50	30	15	38	18	13	Yes	55	0.275
<b>SMI 0180.40</b>	<b>18</b>	<b>28, 37, 50</b>	<b>40</b>	<b>15</b>	<b>48</b>	<b>18</b>	<b>13</b>	<b>Yes</b>	<b>55</b>	<b>0.3</b>

\* stocked items are in bold

**Connectors**



Type	Length female (lf)	Length male (lm)	Width (bap)
SMI 0130	18	15	Bk-3.5
SMI 0180	16	13	Bk-3.5



## SMO Mono cable chain

Material: Glass fibre reinforced  
 Dividers: Optional  
 Sag Type: Yes  
 Temperature range: -30degC - +130degC

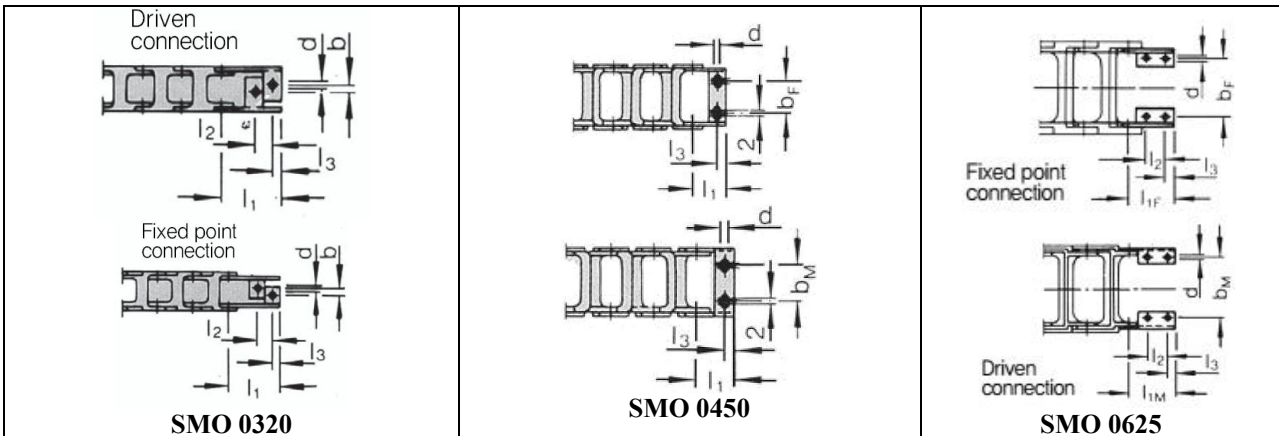


Connectors come as a pair, one male, one female and can be rotated through 180deg.

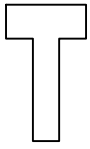
Type	Pitch	Bending Radius (KR)	Internal Width (Bi)	Internal Height (hi)	External Width (Bk)	External Height (hG)	Max Hose Size (d)	Hinged Bars	Links /M	Weight Kg/M
SMO 0320.20	32	37, 47, 77	13	19	24	25	11	Closed	31	0.32
SMO 0320.41	32	37, 47, 77	24	18	35	25	16	Cover Strip	31	0.38
<b>SMO 0320.42</b>	<b>32</b>	<b>37, 47, 77, 100</b>	<b>24</b>	<b>19</b>	<b>35</b>	<b>27</b>	<b>16</b>	<b>Closed</b>	<b>31</b>	<b>0.38</b>
SMO 0450.20	45	52, 94, 125, 150, 200	38	24	54	34	22	Closed	22	0.65
<b>SMO 0450.21</b>	<b>45</b>	<b>52, 94, 125, 150, 200</b>	<b>38</b>	<b>24</b>	<b>54</b>	<b>40</b>	<b>22</b>	<b>Yes</b>	<b>22</b>	<b>0.75</b>
SMO 0450.40	45	52, 94, 125, 150, 200	58	24	74	34	22	Closed	22	0.74
<b>SMO 0450.41</b>	<b>45</b>	<b>52, 94, 125, 150, 200</b>	<b>58</b>	<b>24</b>	<b>74</b>	<b>40</b>	<b>22</b>	<b>Yes</b>	<b>22</b>	<b>0.85</b>
SMO 0450.60	45	52, 94, 125, 150, 200	78	24	94	34	22	Closed	22	0.93
<b>SMO 0450.61</b>	<b>45</b>	<b>52, 94, 125, 150, 200</b>	<b>78</b>	<b>24</b>	<b>94</b>	<b>40</b>	<b>22</b>	<b>Yes</b>	<b>22</b>	<b>1.1</b>
SMO 0450.85	45	52, 94, 125, 150, 200	103	24	119	34	22	Closed	22	1.2
SMO 0625.22	62.5	90, 125, 200, 300	65	34	93	62	31	Closed	16	1.55
<b>SMO 0625.23</b>	<b>62.5</b>	<b>90, 125, 200, 300</b>	<b>65</b>	<b>34</b>	<b>93</b>	<b>62</b>	<b>31</b>	<b>Yes</b>	<b>16</b>	<b>1.55</b>
SMO 0625.40	62.5	90, 125, 200, 300	108	34	126	56	31	Closed	16	1.4
SMO 0625.42	62.5	90, 125, 200, 300	108	34	136	62	31	Closed	16	1.71
<b>SMO 0625.43</b>	<b>62.5</b>	<b>90, 125, 200, 300</b>	<b>108</b>	<b>34</b>	<b>136</b>	<b>62</b>	<b>31</b>	<b>Yes</b>	<b>16</b>	<b>1.71</b>

\* stocked items are in bold

## Connectors



Type	Length L1	Length L <sub>1F</sub>	Length L <sub>1M</sub>	Length L2	Length L3	Width female bf	Width male bm	Hole d
SMO 0320.42	53	0	0	24	8	22	25	Ø7/M6
SMO 0450.21	40	0	0	0	10	22	25	Ø7/M6
SMO 0450.41	40	0	0	0	10	42	45	Ø7/M6
SMO 0450.61	40	0	0	0	10	62	65	Ø7/M6
SMO 0625.23	0	63	70	30	12.5	49	54	Ø9/M8
SMO 0625.43	0	63	70	30	12.5	92	54	Ø9/M8



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**Other types available**

