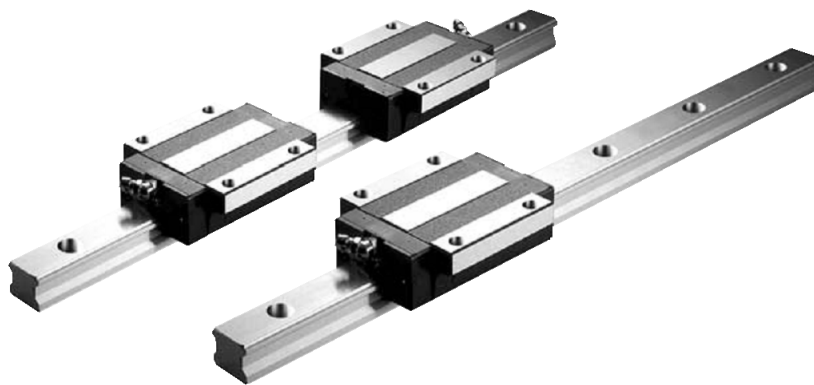


## Linear motion (LM) Guideways

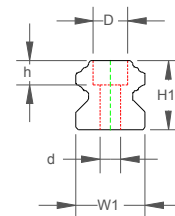
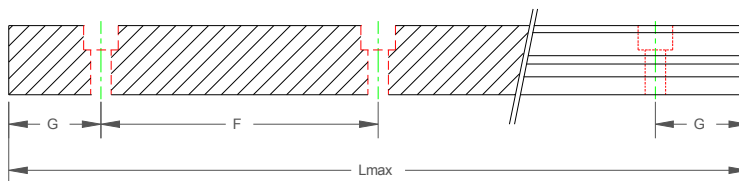
LM profile rail is the linear standard and also commonly known as “Profile Rail”. Widely used where precision motion with rigidity is required. This is the standard guide method in machine tools and production lines. Bearing blocks can also be supplied with aluminium end caps for high temperature applications or with Raydent coating for corrosion protection or for aggressive chemical environments.

### NEW high load SBI type

- On average 30% high static and dynamic life
- More rigid and stable structure
- Larger radius gives more efficient ball return
- More efficient seals
- Small increase in overall length
- Same mounting holes as standard types



### Rails



Base mounted rail also available

Series	W1	H1	F	dxDxh	Lmax	Weight (kg/m)
15	15	15	60	4.5x7.5x5.3	3000	1.45
20	20	17.5	60	6x9.5x8.5	4000	2.2
25	23	21.8	60	7x11x9	4000	3.1
30	28	25	80	9x14x12	4000	4.45
35	34	29	80	9x14x12	4000	6.4
45	45	38	105	14x20x17	4000	11.25
55	53	45	120	16x23x20	4000	15.25
65	63	58.5	150	18x26x22	3000	23.9

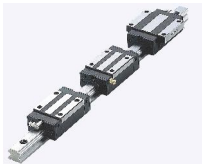


SBI Rail

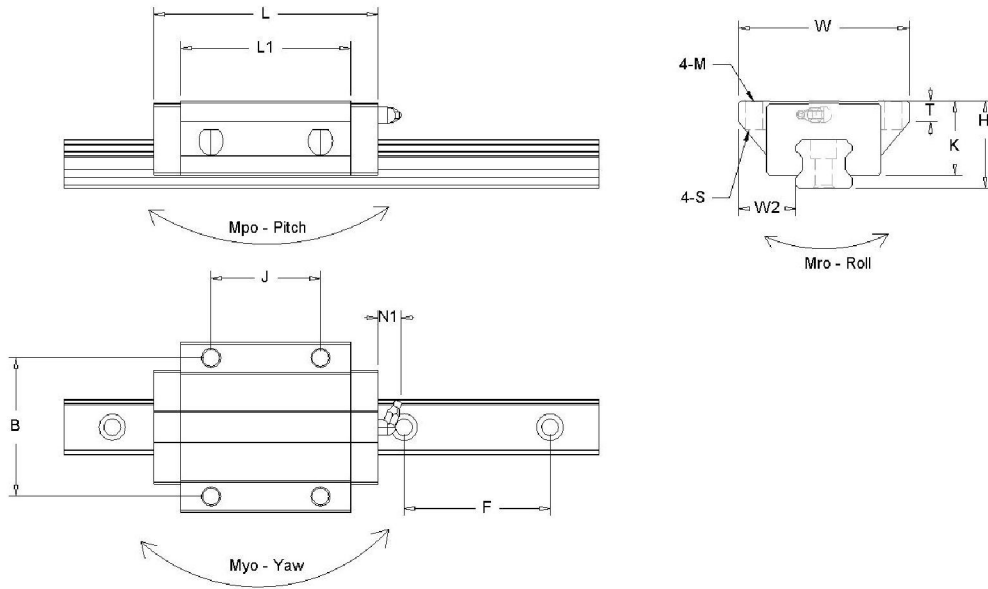


SBG Rail

- Except for miniatures SBC profile rail is fully interchangeable within each family. Any block type or style can run on the same sized rail. SBI rail and blocks are not interchangeable with SBG.
- Longer rail lengths can be achieved by milled the rail faces and butt joining. Matched rails from the factory are recommended.
- Rail can be supplied cut to length. Please specify G dimension, or distance to first hole. If this is not specified the rails will be cut with symmetric hole spacing.
- Plastic hole plugs or SS rail tape can be supplied to seal fastener holes and prevent contamination.
- SPG plastic spacer “Quiet Type” version of SBG types also available.
- Base mounted rail available
- NGLI grade 2 synthetic grease is recommended for most applications.

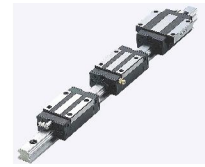


## High Load Flanged SBI\_FL

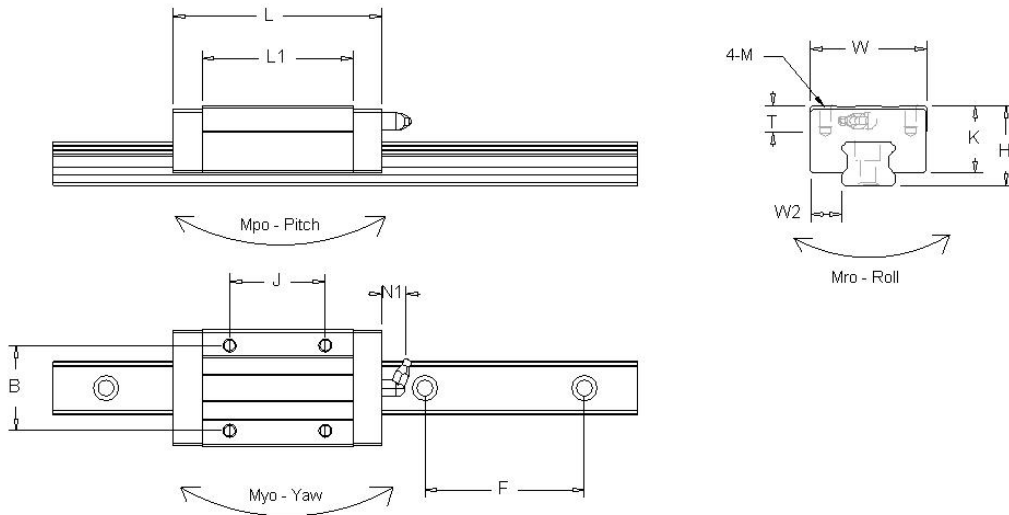


Normal	Mounting Dimensions			Block Dimensions							Load Capacity					Bearing Weight
	H	W2	W	L	BxJ	M	S	L1	K	T	Dynamic C (50 km) kN	Static Co kN	Mro kN.m	Mpo kN.m	Mo kN.m	
<b>SBI15FL</b>	<b>24</b>	<b>16</b>	<b>47</b>	<b>63.8</b>	<b>38x30</b>	<b>M5</b>	<b>M4</b>	<b>45.2</b>	<b>21</b>	<b>8.8</b>	<b>14.1</b>	<b>24.1</b>	<b>0.16</b>	<b>0.17</b>	<b>0.17</b>	<b>0.19</b>
SBI15FLL	24	16	47	79.4	38x30	M5	M4	60.8	21	8.8	17.1	31.7	0.21	0.29	0.29	0.26
<b>SBI20FL</b>	<b>30</b>	<b>21.5</b>	<b>63</b>	<b>78.8</b>	<b>53x40</b>	<b>M6</b>	<b>M5</b>	<b>56.8</b>	<b>25.4</b>	<b>10</b>	<b>22.2</b>	<b>38.2</b>	<b>0.36</b>	<b>0.33</b>	<b>0.33</b>	<b>0.41</b>
SBI20FLL	30	21.5	63	96.4	53x40	M6	M5	74.4	25.4	10	27.9	50	0.47	0.56	0.56	0.54
<b>SBI25FL</b>	<b>36</b>	<b>23.5</b>	<b>70</b>	<b>92</b>	<b>57x45</b>	<b>M8</b>	<b>M6</b>	<b>70</b>	<b>30.5</b>	<b>12.5</b>	<b>31.5</b>	<b>52.1</b>	<b>0.56</b>	<b>0.56</b>	<b>0.56</b>	<b>0.69</b>
SBI25FLL	36	23.5	70	108	57x45	M8	M6	86	30.5	12.5	36.7	64.4	0.69	0.84	0.84	0.85
<b>SBI30FL</b>	<b>42</b>	<b>31</b>	<b>90</b>	<b>107.6</b>	<b>72x52</b>	<b>M10</b>	<b>M8</b>	<b>79.6</b>	<b>35</b>	<b>15.5</b>	<b>42.8</b>	<b>65.4</b>	<b>0.85</b>	<b>0.77</b>	<b>0.77</b>	<b>1.04</b>
SBI30FLL	42	31	90	131.6	72x52	M10	M8	103.6	35	15.5	51.3	84.7	1.1	1.3	1.3	1.37
<b>SBI35FL</b>	<b>48</b>	<b>33</b>	<b>100</b>	<b>124.6</b>	<b>82x62</b>	<b>M10</b>	<b>M8</b>	<b>94.6</b>	<b>40.5</b>	<b>15</b>	<b>59.5</b>	<b>89.1</b>	<b>1.42</b>	<b>1.28</b>	<b>1.28</b>	<b>1.56</b>
SBI35FLL	48	33	100	152.6	82x62	M10	M8	122.6	40.5	15	71.3	115.3	1.83	2.12	2.12	2.04
<b>SBI45FL</b>	<b>60</b>	<b>37.5</b>	<b>120</b>	<b>148</b>	<b>100x80</b>	<b>M12</b>	<b>M10</b>	<b>108</b>	<b>51</b>	<b>18</b>	<b>79.2</b>	<b>116.3</b>	<b>2.48</b>	<b>1.9</b>	<b>1.9</b>	<b>2.8</b>
SBI45FLL	60	37.5	120	180	100x80	M12	M10	140	51	18	94.8	150.5	3.21	3.14	3.14	3.69

Normal stock items in bold type      1kN = 101kgf



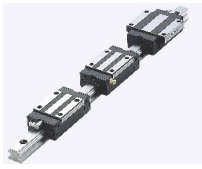
## High Load Block Type SBI\_SL



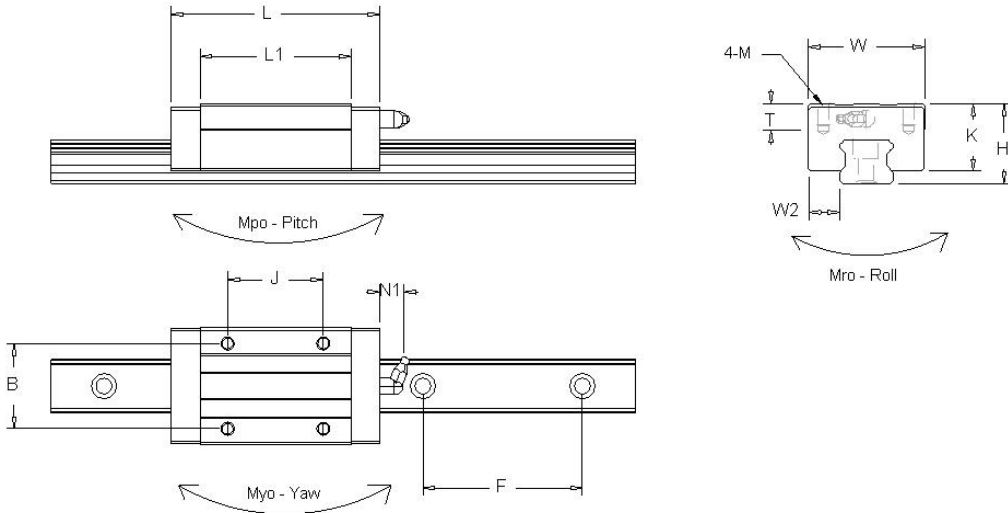
Normal	Mounting Dimensions			Block Dimensions						Load Capacity					Bearing Weight
	H	W2	W	L	BxJ	MxDP	L1	K	T	Dynamic C (50 km) kN	Static Co kN	Mro kN.m	Mpo kN.m	Mo kN.m	
<b>SBI15SL</b>	<b>28</b>	<b>9.5</b>	<b>34</b>	<b>63.8</b>	<b>26x26</b>	<b>M4x5</b>	<b>45.2</b>	<b>25</b>	<b>10</b>	<b>14.1</b>	<b>24.1</b>	<b>0.16</b>	<b>0.17</b>	<b>0.17</b>	<b>0.2</b>
SBI15SLL	28	9.5	34	79.4	26x34	M4x5	60.8	25	10	17.1	31.7	0.21	0.29	0.26	0.26
<b>SBI20SL</b>	<b>30</b>	<b>12</b>	<b>44</b>	<b>79.8</b>	<b>32x36</b>	<b>M5x5</b>	<b>56.8</b>	<b>25.4</b>	<b>10</b>	<b>22.2</b>	<b>38.2</b>	<b>0.36</b>	<b>0.33</b>	<b>0.33</b>	<b>0.3</b>
SBI20SLL	30	12	44	98.4	32x50	M5x5	74.4	25.4	10	27.9	50.0	0.47	0.56	0.56	0.39
<b>SBI25SL</b>	<b>40</b>	<b>12.5</b>	<b>48</b>	<b>92</b>	<b>35x35</b>	<b>M6x8</b>	<b>70</b>	<b>34.5</b>	<b>12</b>	<b>31.5</b>	<b>52.1</b>	<b>0.56</b>	<b>0.56</b>	<b>0.56</b>	<b>0.59</b>
SBI25SLL	40	12.5	48	108	35x50	M6x8	86	34.5	12	36.7	64.4	0.69	0.84	0.84	0.72
<b>SBI30SL</b>	<b>45</b>	<b>16</b>	<b>60</b>	<b>107.6</b>	<b>40x40</b>	<b>M8x10</b>	<b>79.6</b>	<b>38</b>	<b>12</b>	<b>42.8</b>	<b>65.4</b>	<b>0.85</b>	<b>0.77</b>	<b>0.77</b>	<b>1.04</b>
SBI30SLL	45	16	60	131.6	40x60	M8x10	103.6	38	12	51.3	84.7	1.1	1.3	1.3	1.37
<b>SBI35SL</b>	<b>55</b>	<b>18</b>	<b>70</b>	<b>124.6</b>	<b>50x50</b>	<b>M8x10</b>	<b>94.6</b>	<b>47.5</b>	<b>15</b>	<b>59.5</b>	<b>89.1</b>	<b>1.42</b>	<b>1.28</b>	<b>1.28</b>	<b>1.56</b>
SBI35SLL	55	18	70	152.6	50x72	M8x10	122.6	47.5	15	71.3	115.3	1.83	2.12	2.12	2.04
<b>SBI45SL</b>	<b>70</b>	<b>20</b>	<b>86</b>	<b>148</b>	<b>60x60</b>	<b>M10x13</b>	<b>108</b>	<b>61</b>	<b>17</b>	<b>79.2</b>	<b>116.3</b>	<b>2.48</b>	<b>1.9</b>	<b>1.9</b>	<b>2.8</b>
SBI45SLL	70	20	86	180	60x80	M10x13	140	61	17	94.8	150.5	3.21	3.14	3.14	3.69

Normal stock items in bold type 1kN = 101kgf

We recommend low profile SBI\_HL/CL types on next the page

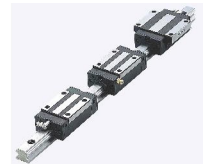


**High Load Block Type Low Profile SBI\_HL/CL**

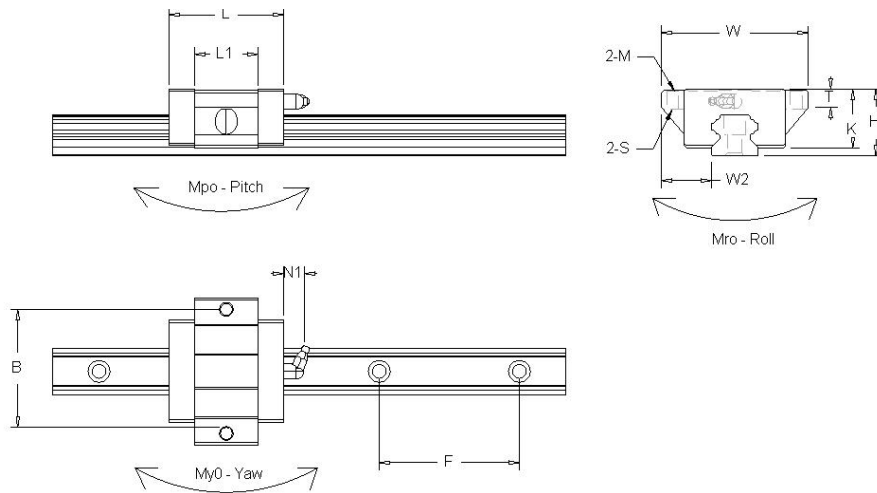


Normal	Mounting Dimensions			Block Dimensions						Load Capacity					Bearing Weight
	H	W2	W	L	BxJ	MxDP	L1	K	T	Dynamic C (50 km) kN	Static Co kN	Mro kN.m	Mpo kN.m	Mo kN.m	
<b>SBI15HL</b>	<b>24</b>	<b>9.5</b>	<b>34</b>	<b>63.8</b>	<b>26x26</b>	<b>M4x5</b>	<b>45.2</b>	<b>21</b>	<b>6</b>	<b>14.1</b>	<b>24.1</b>	<b>0.16</b>	<b>0.17</b>	<b>0.17</b>	<b>0.15</b>
SBI15HLL	24	9.5	34	79.4	26x34	M4x5	60.8	21	6	17.1	31.7	0.21	0.29	0.29	0.2
<b>SBI20CL</b>	<b>28</b>	<b>12</b>	<b>44</b>	<b>78.8</b>	<b>32x32</b>	<b>M5x5</b>	<b>56.8</b>	<b>23.4</b>	<b>7.8</b>	<b>22.2</b>	<b>38.2</b>	<b>0.36</b>	<b>0.33</b>	<b>0.33</b>	<b>0.39</b>
SBI20CLL	28	12	44	96.4	32x50	M5x5	74.4	23.4	7.8	27.9	50	0.47	0.56	0.56	0.52
<b>SBI25CL</b>	<b>33</b>	<b>12.5</b>	<b>48</b>	<b>92</b>	<b>35x35</b>	<b>M6x6</b>	<b>70</b>	<b>27.5</b>	<b>9</b>	<b>31.5</b>	<b>52.1</b>	<b>0.56</b>	<b>0.56</b>	<b>0.56</b>	<b>0.66</b>
SBI25CLL	33	12.5	48	108	35x50	M6x6	86	27.5	9	36.7	64.4	0.69	0.84	0.84	0.82
SBI25HL	36	12.5	48	92	35x35	M6x8	70	30.5	12	31.5	52.1	0.56	0.56	0.56	0.49
<b>SBI25HLL</b>	<b>36</b>	<b>12.5</b>	<b>48</b>	<b>108</b>	<b>35x50</b>	<b>M6x8</b>	<b>86</b>	<b>30.5</b>	<b>12</b>	<b>36.7</b>	<b>64.4</b>	<b>0.69</b>	<b>0.84</b>	<b>0.84</b>	<b>0.6</b>
<b>SBI30HL</b>	<b>42</b>	<b>16</b>	<b>60</b>	<b>107.6</b>	<b>40x40</b>	<b>M8x10</b>	<b>79.6</b>	<b>35</b>	<b>12</b>	<b>42.8</b>	<b>65.4</b>	<b>0.85</b>	<b>0.77</b>	<b>0.77</b>	<b>1.04</b>
SBI30HLL	42	16	60	131.6	40x60	M8x10	103.6	35	12	51.3	84.7	1.1	1.3	1.3	1.37
<b>SBI35HL</b>	<b>48</b>	<b>18</b>	<b>70</b>	<b>124.6</b>	<b>50x50</b>	<b>M8x10</b>	<b>94.6</b>	<b>40.5</b>	<b>15</b>	<b>59.5</b>	<b>89.1</b>	<b>1.42</b>	<b>1.28</b>	<b>1.28</b>	<b>1.56</b>
SBI35HLL	48	18	70	152.6	50x72	M8x10	122.6	40.5	15	71.3	115.3	1.83	2.12	2.12	2.04
<b>SBI45HL</b>	<b>60</b>	<b>20</b>	<b>86</b>	<b>148</b>	<b>60x60</b>	<b>M10x13</b>	<b>108</b>	<b>51</b>	<b>17</b>	<b>79.2</b>	<b>116.3</b>	<b>2.48</b>	<b>1.9</b>	<b>1.9</b>	<b>2.8</b>
SBI45HLL	60	20	86	180	60x80	M10x13	140	51	17	94.8	150.5	3.21	3.14	3.14	3.69

Normal stock items in bold type 1kN = 101kgf



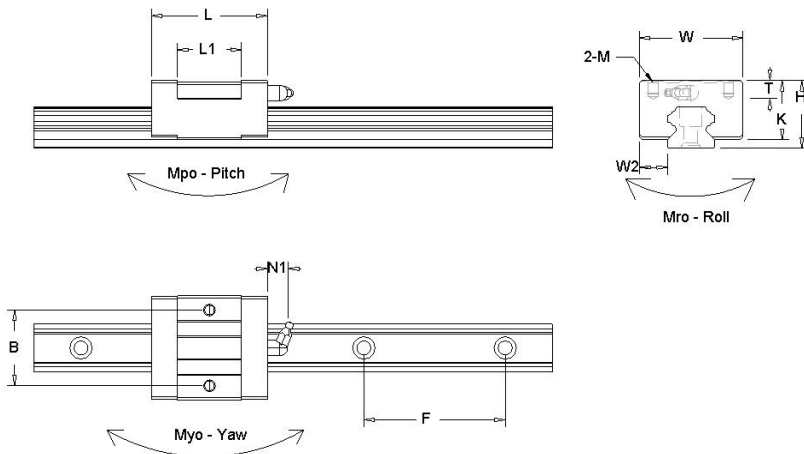
## High Load Super Compact Flanged SBI\_FV



Normal	Mounting Dimensions				Block Dimensions						Load Capacity					Bearing Weight
	H	W2	W	L	B	M	S	L1	K	T	Dynamic C (50 km) kN	Static Co kN	Mro kN.m	Mpo kN.m	Mo kN.m	
SBI15FV	24	16	47	39.9	38	M5	M4	21.3	21	8.8	5.8	12.8	0.04	0.03	0.03	0.1
SBI20FV	28	21.5	63	49.1	53	M6	M5	27.1	23.4	8	9.4	20.2	0.12	0.1	0.1	0.24
SBI25FV	33	21.5	70	52.6	57	M8	M6	30.6	27.5	9	12.4	26.1	0.19	0.17	0.17	0.37

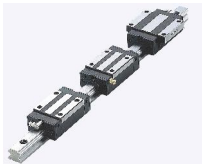
Normal stock items in bold type 1kN = 101kgf

## High Load Super Compact Block Type SBI\_SV



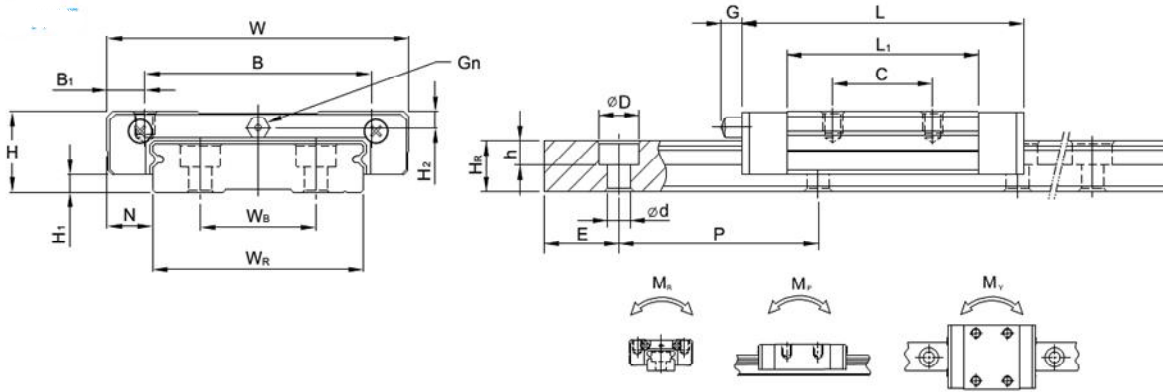
Normal	Mounting Dimensions				Block Dimensions						Load Capacity					Bearing Weight
	H	W2	W	L	B	MxDP	L1	K	T	Dynamic C (50 km) kN	Static Co kN	Mro kN.m	Mpo kN.m	Mo kN.m		
SBI15SV	24	9.5	34	39.9	26	M4x5	21.3	21	6	5.8	12.8	0.04	0.03	0.03	0.1	
SBI20SV	28	21.5	44	49.1	32	M5x5	27.1	23.4	7.8	9.4	20.2	0.12	0.1	0.1	0.24	
SBI25SV	33	23.5	48	52.6	35	M6x6	30.6	27.5	9	12.4	26.1	0.19	0.17	0.17	0.37	

Normal stock items in bold type 1kN = 101kgf



**Miniaures MGN and MGW**

Ideal for jigs, Z-axis guides, inspection equipment and packaging machines. Standard stocked types are stainless steel.



Model	H	H <sub>1</sub>	N	Block										C	C <sub>0</sub>	M <sub>R</sub>	M <sub>P</sub>	M <sub>Y</sub>	Block
				W	B	B <sub>1</sub>	C	L <sub>1</sub>	L	G	G <sub>n</sub>	Mxl	H <sub>2</sub>						
MGN5C	6	1.5	3.5	12	8	2	-	9.6	16	-	∅0.8	M2x1.5	1	0.54	0.84	2	1.3	1.3	0.008
MGN7C	8	1.5	5	17	12	2.5	8	13.5	22.5	-	∅1.2	M2x2.5	1.5	0.98	1.24	4.7	2.84	2.84	0.01
MGN7H							13	21.8	30.8					1.37	1.96	7.64	4.8	4.8	0.015
<b>MGN9C</b>	10	2	5.5	20	15	2.5	10	18.9	28.9	-	∅1.4	M3x3	1.8	1.86	2.55	11.76	7.35	7.35	0.016
MGN9H							16	29.9	39.9					2.55	1.96	19.6	18.62	18.62	0.026
<b>MGN12C</b>	13	3	7.5	27	20	3.5	15	21.7	34.7	-	∅2	M3x3.5	2.5	2.84	3.92	25.48	13.72	13.72	0.034
MGN12H							20	32.4	45.4					3.72	5.88	38.22	36.26	36.26	0.054
<b>MGN15C</b>	16	4	8.5	32	25	3.5	20	26.7	42.1	4.5	∅2	M3x4	3	4.61	5.59	45.08	21.56	21.56	0.059
MGN15H							25	43.4	58.8					6.37	9.11	73.5	57.82	57.82	0.092
MGW5C	6.5	1.5	3.5	1	13	2	-	14.1	20.5	-	∅0.8	M2x1.5	1	0.68	1.18	5.5	2.7	2.7	0.16
MGW5CL				-	-	6.5	-	-	-			M3-Thru							
MGW7C	9	1.9	5.5	25	19	3	10	21	32.2	-	∅1.2	M3x3	1.85	1.37	2.06	15.7	7.14	7.14	0.02
MGW7H							19	30.8	41					1.77	3.14	23.45	15.53	15.53	0.029
MGW9C	12	2.9	6	30	21	4.5	12	27.5	39.3	-	∅1.2	M3x3	2.4	2.75	4.12	40.12	18.96	18.96	0.04
MGW9H					23	3.5	24	38.5	50.7					3.43	5.89	54.54	34	34	0.57
MGW12C	14	3.4	8	40	28	6	15	31.3	46.1	-	∅1.2	M3x3.6	2.8	3.92	5.59	70.34	27.8	27.8	0.071
MGW12H							28	45.6	60.4					5.1	8.24	102.7	57.37	57.37	0.103
MGW15C	16	3.4	9	60	45	7.5	20	38	54.8	5.2	M3	M4x4.2	3.2	6.77	9.22	199.34	56.66	56.66	0.143
MGW15H							35	57	73.8					8.93	13.38	299.01	122.6	122.6	0.215

Normal stock items in bold type      1kN = 101kgf

**Miniature Rail Dimensions**

Model	Rail								Rail bolt	kg/m
	W <sub>R</sub>	W <sub>B</sub>	H <sub>R</sub>	D	h	d	P	E		
MGN5	5	-	3.6	3.6	0.8	2.4	12	5	M2x6	0.15
MGN7	7	-	4.8	4.2	2.3	2.4	15	5	M2x6	0.22
MGN9	9	-	6.5	6	3.5	3.5	20	7.5	M3x8	0.38
MGN12	12	-	8	6	4.5	3.5	25	10	M3x8	0.65
MGN15	15	-	10	6	4.5	3.5	40	15	M3x10	1.06
MGW5	10	-	4	5.5	1.6	3	20	5	M2x7	0.34
MGW7	14	-	5.2	6	3.2	6.5	30	10	M3x6	0.51
MGW9	18	-	7	6	4.5	3.5	30	10	M3x8	0.91
MGW12	24	-	8.5	8	4.5	4.5	40	15	M4x8	1.49
MGW15	42	23	9.5	8	4.5	4.5	40	15	M4x10	2.86