

# Carriages KWVE20-B-ESC (Series KWVE...-B-ESC)

narrow, short carriage, four-row, full complement ball set

The datasheet is only an overview of dimensions and basic load ratings of the selected product. Please always observe all the guidelines in these overview pages. Further information is given on many products under the menu item "Description". You can also order comprehensive information via the Catalogue ordering system ([https://www.schaeffler.de/content.schaeffler.de/en/news\\_media/index.jsp](https://www.schaeffler.de/content.schaeffler.de/en/news_media/index.jsp)) or by telephone on +49 (91 32) 82 - 28 97.

H	28 mm	
B	42 mm	
L	50,4 mm	
1)	Locating face	
2)	Marking	
A <sub>1</sub>	11 mm	
A <sub>2</sub>	5 mm	
A <sub>3</sub>	6 mm	
A <sub>4</sub>	4,3 mm	
aL max	53 mm	aL and aR are dependent on the guideway length
aL min	20 mm	aL and aR are dependent on the guideway length
aR max	53 mm	aL and aR are dependent on the guideway length

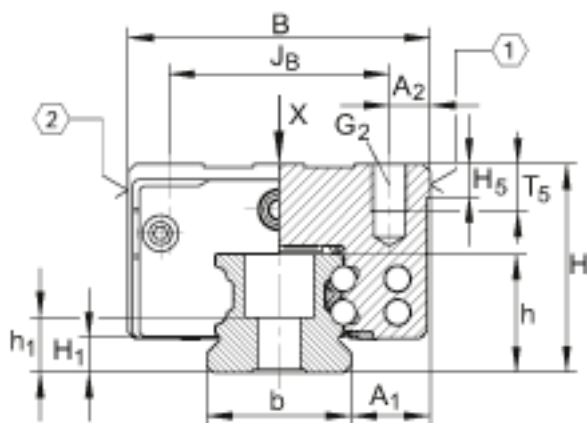
aR min	20 mm	aL and aR are dependent on the guideway length
b	20 mm	Tolerance: -0,005/-0,03
d1	5,8 mm	
G2	M5	<p>for screws to DIN ISO 4762-12.9</p> <p>Max. tightening torque [MA]:</p> <p>M4 = 5 Nm</p> <p>M5 = 10 Nm</p> <p>M6 = 17 Nm</p> <p>M8 = 41 Nm</p> <p>M10 = 83 Nm</p> <p>M12 = 140 Nm</p> <p>M14 = 220 Nm</p> <p>The stated torques represent maximum values for the reliable transmission of forces in vibration-free, quasistatic applications (S0=1). We recommend that the tightening torques of the screw connection to the adjacent construction should be determined at the customer under the specific application conditions and operating conditions, observing the data in VDI Guideline 2230 Part 1 (2015) and the data in the description.</p>
G3	M5 mm	<p>Maximum permissible screw depth for lubrication connectors.</p> <p>M3 = 5,5</p> <p>M5 = 7</p> <p>M6 = 7</p>
G4	M3	Maximum permissible screw depth for lubrication connector: 5,5 mm
h	17 mm	
H1	4,5 mm	
h1	8,6 mm	
H5	5,25 mm	

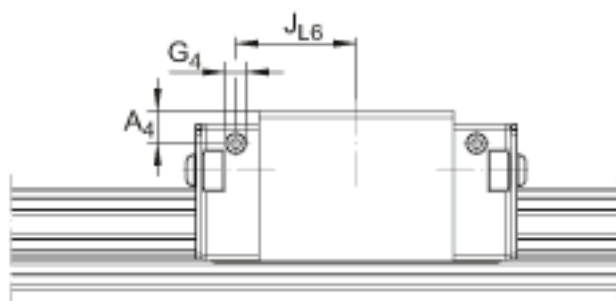
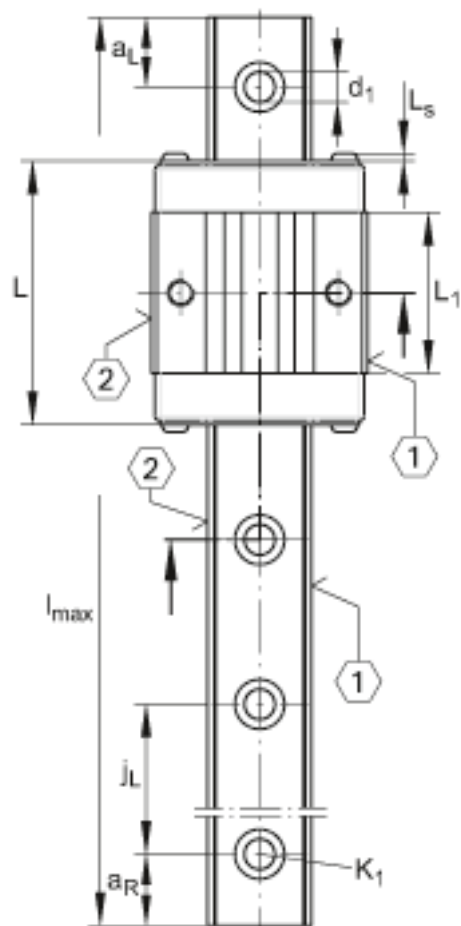
JB	32 mm	
jL	60 mm	
JL6	18,9 mm	
K1	M5	<p>for screws to DIN ISO 4762-12.9</p> <p>Max. tightening torque [MA]:</p> <p>M4 = 5 Nm</p> <p>M5 = 10 Nm</p> <p>M6 = 17 Nm</p> <p>M8 = 41 Nm</p> <p>M10 = 83 Nm</p> <p>M12 = 140 Nm</p> <p>M14 = 220 Nm</p> <p>The stated torques represent maximum values for the reliable transmission of forces in vibration-free, quasistatic applications (S0=1). We recommend that the tightening torques of the screw connection to the adjacent construction should be determined at the customer under the specific application conditions and operating conditions, observing the data in VDI Guideline 2230 Part 1 (2015) and the data in the description.</p>
L1	29,4 mm	
l <sub>max</sub>	5880 mm	Maximum length of single-piece guideways. Permissible guideway segments, see Technical principles
Ls	1,65 mm	
T5	7,5 mm	
mw	0,18 kg	Mass of carriage
ms	2,2 kg/m	Mass of guideway

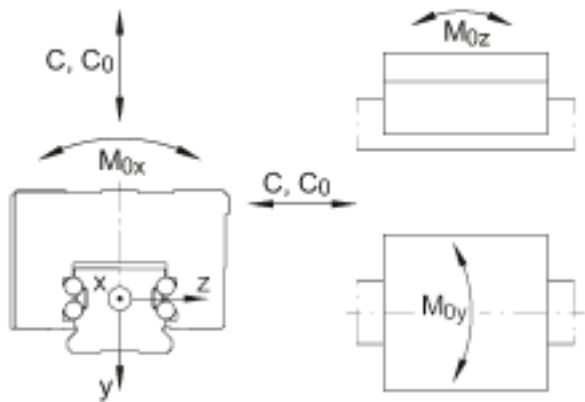
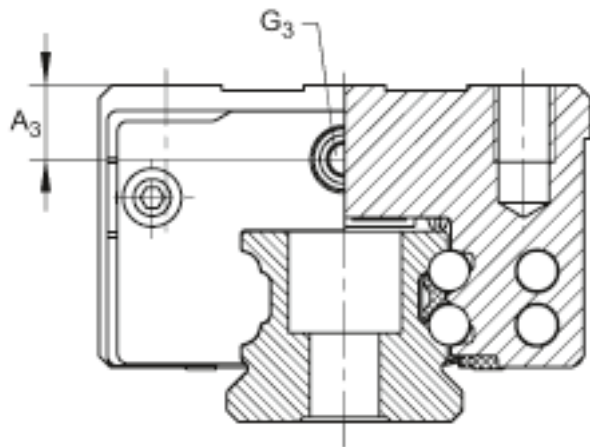
Calculation of basic load rating according to ISO 14728-1.  
increased basic dynamic load rating possible on the basis of  
practical experience.  
The full load rating can only be supported if the full thread length  
is used and the adjacent construction is correspondingly  
dimensioned.

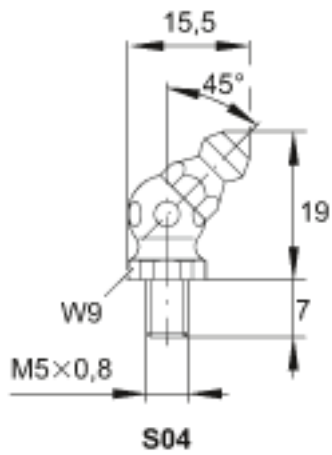
C	8900 N	Basic dynamic load rating
C <sub>0</sub>	15400 N	Basic static load rating
M <sub>0x</sub>	190 Nm	Static moment rating about X axis
M <sub>0y</sub>	85 Nm	Static moment rating about Y axis
M <sub>0z</sub>	85 Nm	Static moment rating about Z axis

Lubrication connectors are included loose:  
S04 with KUVE20-B  
S05 with KUVE25-B to KUVE55-B  
S16 with KUVE15-B









Lubrication connector