

Carriages KWSE20 (Series KWSE)

standard carriage for six-row linear recirculating ball bearing and guideway assembly

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) or by telephone on +49 (91 32) 82 - 28 97.

H	30 mm	
B	63 mm	
L	71,4 mm	Minimum covered length for sealing the upper lubrication connections N2
1)	Locating face	
2)	Marking	
A1	21,5 mm	
A2	5 mm	
A3	5,8 mm	Maximum screw depth in end piece 7mm
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
d ₁	5,8 mm	
D ₂	5,5	
G ₂	M6	for screws to DIN ISO 4762-12.9 Max. tightening torque [MA]: M6 = 10 Nm M8 = 24 Nm M10 = 41 Nm M12 = 83 Nm M14 = 140 Nm M16 = 220 Nm M20 = 470 Nm 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.
h	18 mm	
H ₁	4,6 mm	
h ₁	9,8 mm	
H ₄	10,6 mm	
H ₅	5 mm	
J _B	53 mm	
J _L	40 mm	
j _L	60 mm	

JL5	9,95 mm	Position of lubrication hole in adjacent construction.
JLZ	35 mm	
K1	M5	for screws to DIN ISO 4762-12.9 Max. tightening torque [MA]: M5 = 10 Nm M6 = 17 Nm M8 = 41 Nm M10 = 83 Nm M12 = 140 Nm M16 = 350 Nm 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.
K3	M5	for screws to DIN ISO 4762-12.9 Max. tightening torque [MA]: M5 = 10 Nm M6 = 17 Nm M8 = 41 Nm M10 = 83 Nm M12 = 140 Nm M16 = 350 Nm 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.
K6	M5	for screws to DIN ISO 7984-8.8 Max. tightening torque [MA]: M5 = 5,8 Nm M6 = 10 Nm

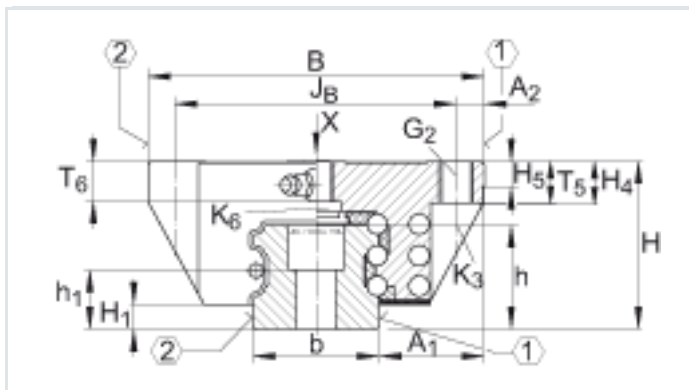
M8 = 24 Nm

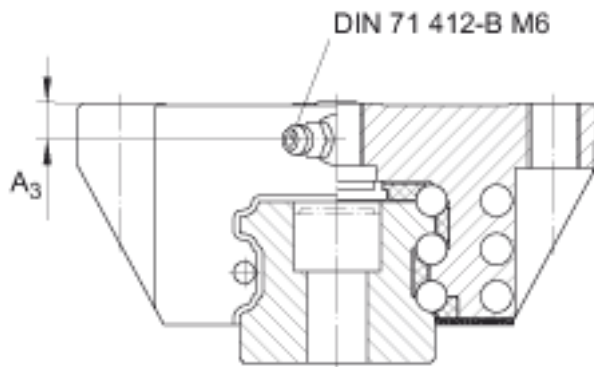
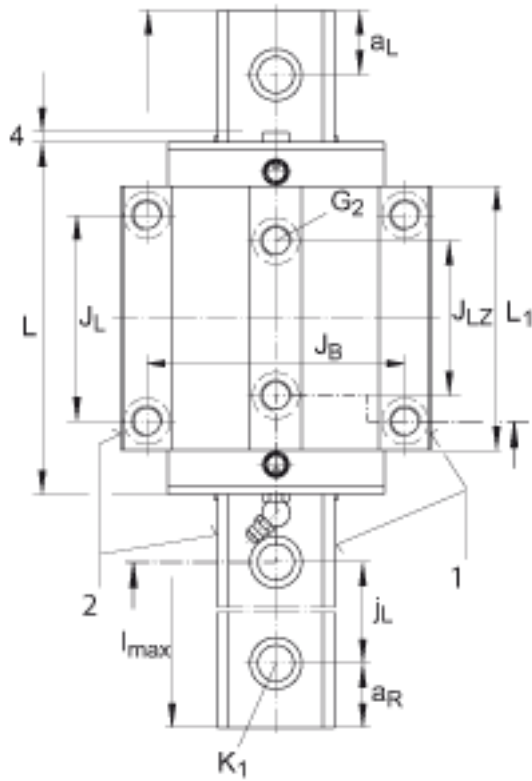
M10 = 48 Nm

The stated torques represent maximum values for the reliable transmission of forces in vibration-free, quasistatic applications ($S_0=1$). 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.

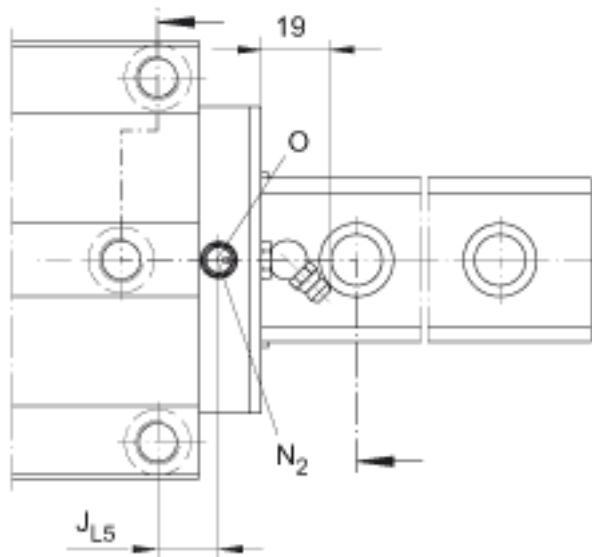
L1	52,4 mm	
l _{max}	3900 mm	Maximum length of single-piece guideways. Permissible guideway segments, see Technical principles
N2	3 mm	Maximum diameter of lubrication hole in adjacent construction
O	3x1,5 mm	DIN 3771
T5	10 mm	
T6	7,2 mm	for location from above: max. screw depth for central threaded holes T6 + 3 mm
m _w	0,43 kg	Mass of carriage
m _s	2,3 kg/m	Mass of guideway
C _I	25500 N	Load direction I: compressive load
C _{0 I}	61000 N	Load direction I: compressive load
C _{II}	21300 N	Load direction II: tensile load
C _{0 II}	35300 N	Load direction II: tensile load

CIII	21000 N	Load direction III: lateral load
C ₀ III	35000 N	Load direction III: lateral load
	The full load rating can only be supported if the full thread length is used and the adjacent construction is correspondingly dimensioned.	
M _{0x}	530 Nm	Static moment rating about X axis
M _{0y}	350 Nm	Static moment rating about Y axis
M _{0z}	305 Nm	Static moment rating about Z axis

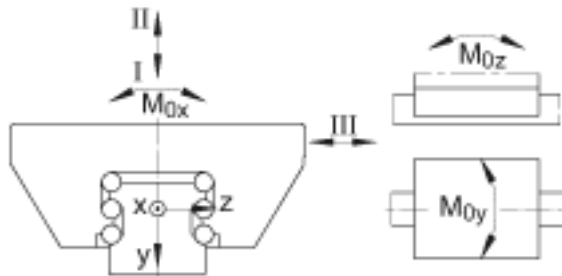




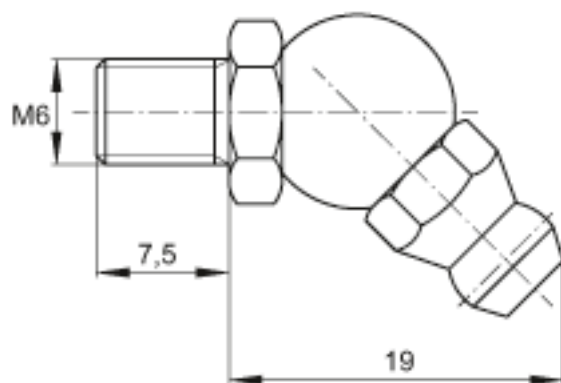
Lubrication connector on end face



Lubrication connector in top face



Load directions



Lubrication connector S05