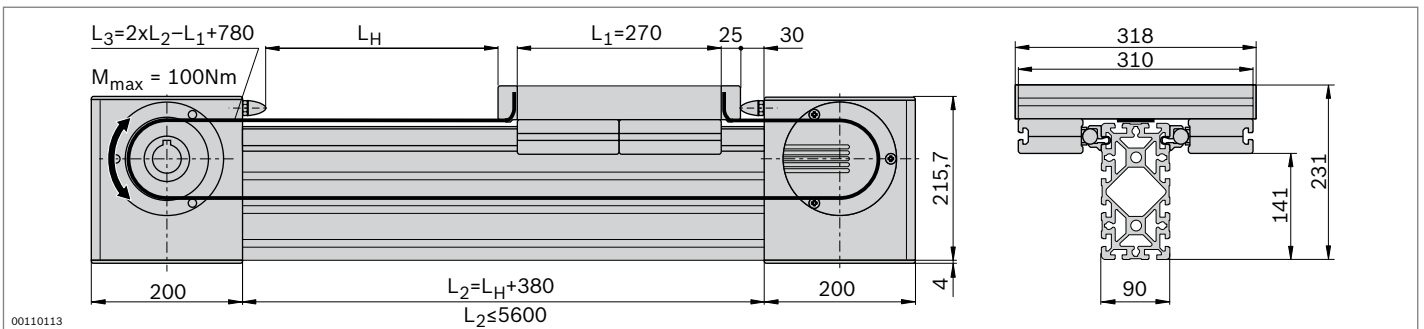


$F_{y \max} = 12500 \text{ N}$
 $F_{z \max} = 6000 \text{ N}$
 $M_{x \max} = 3,0 \times A \text{ Nm}$
 $M_{y \max} = 3,0 \times A \text{ Nm}$
 $M_{z \max} = 6,2 \times A \text{ Nm}$
 $v_{\max} = 5 \text{ m/s}$
 $M_{\max} = 100 \text{ Nm}$

Cam roller guide LF20C – complete axis



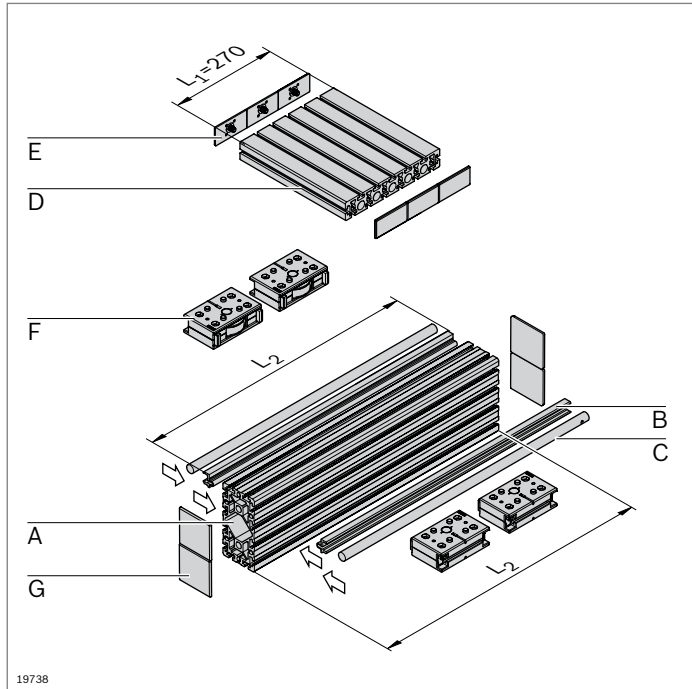
- ▶ Fully assembled cam roller guide
- ▶ Stroke can be individually selected
- ▶ Clamping profile clipped into strut profile 90x180
- ▶ Incl. toothed belt drive; additional notes on the drive concept (p. 13-44)



Technical data

For notes on layout and drive, see page 13-50

Complete axis	L_H (mm)	No.
LF20C	50 ... 5220	3 842 998 500 / L_H

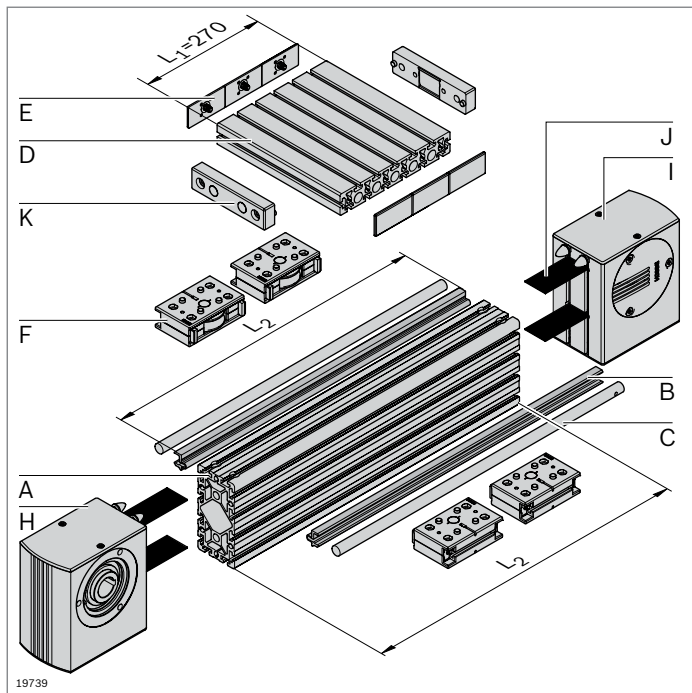


Cam roller guide LF20C – components

- Components for the individual assembly of cam roller guides, with or without drive

Parts list for cam roller guide LF20C without drive

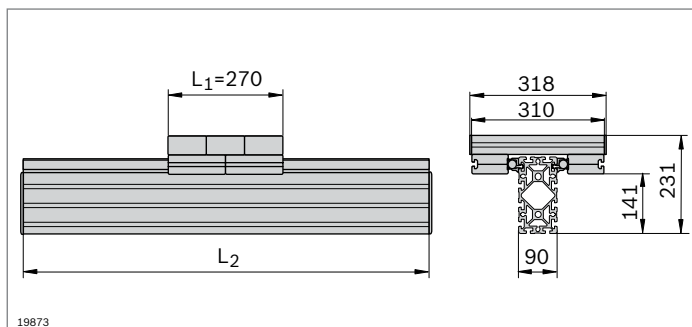
Component	No.	Qty.	Page
A Profile 90x180	3 842 990 416 / L₂	1	2-48
B Clamping profile LF20C	3 842 992 441 / L₂	2	13-39
C Guide rod LF20	3 842 993 969 / L₂	2	13-39
D Profile 45x270	3 842 992 927 / 310 mm	1	2-45
E Cover cap 45x90	3 842 548 757	6	2-45
F Guide bearing LF20	3 842 535 663	4	13-40
G Cover cap 90x90	3 842 548 761	4	2-48

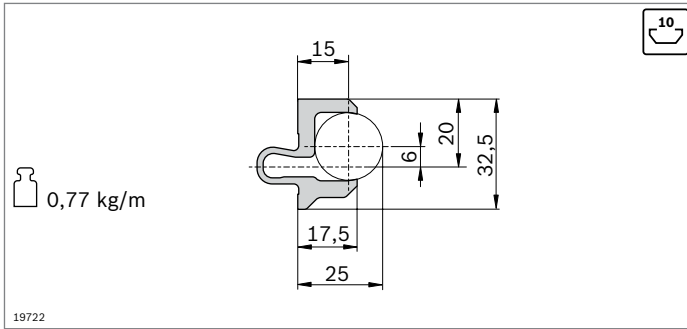


Parts list for cam roller guide LF20C with drive

Component	No.	Qty.	Page
A Profile 90x180 LF20C/LF	3 842 992 898 / L₂	1	2-48
B Clamping profile LF20C	3 842 992 441 / L₂	2	13-39
C Guide rod LF20	3 842 993 969 / L₂	2	13-39
D Profile 45x270	3 842 992 927 / 310 mm	1	2-45
E Cover cap 45x90	3 842 548 757	6	2-45
F Guide bearing LF20	3 842 535 663	4	13-40
H Drive head	3 842 526 867	1	13-42
I Return head	3 842 526 869	1	13-42
J Toothed belt	3 842 994 662 / L₃¹⁾	1	13-43
K Belt connector	3 842 535 680	2	13-43

¹⁾ L₃ = 2xL₂ - L₁ + 780

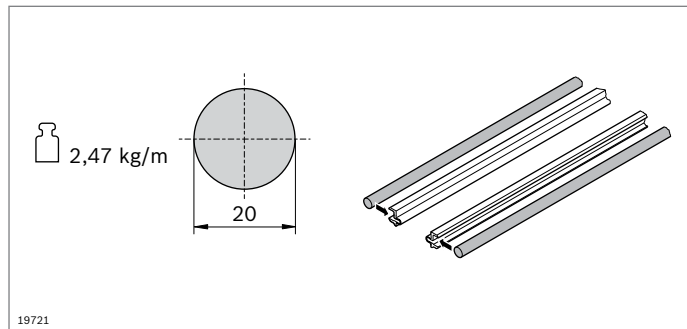




- ▶ The clamping profile is clipped into any chosen 10 mm strut profile slot and holds the guide rods

Clamping profile	L (mm)	No.
LF20C	1 pcs 150 ... 3000	3 842 992 441 / L
	20 pcs 3000	3 842 518 898

Material: aluminum, anodized

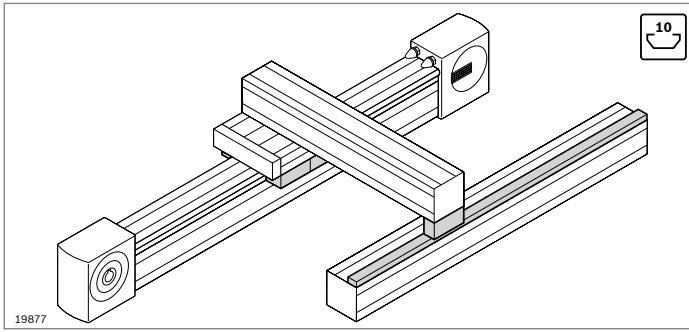


- ▶ The guide rod is pressed into the clamping profile
- ▶ The guide rod guides the guide bearing

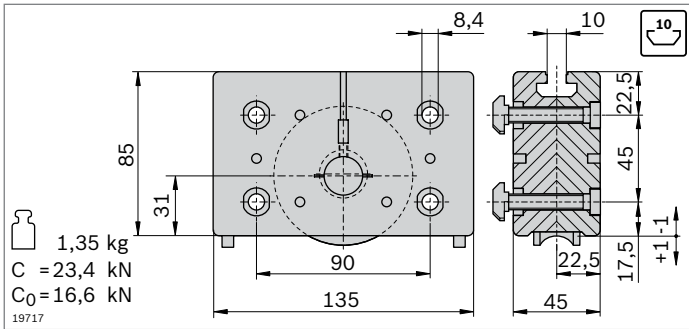
Guide rod	L (mm)		No.
LF20	150 ... 2900	1	3 842 993 969 / L
	2900	20	3 842 539 416

Material: Solid shaft VA, induction hardened, polished

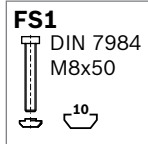
Condition on delivery: ungreased; greasing according to assembly instructions **3 842 527 226**



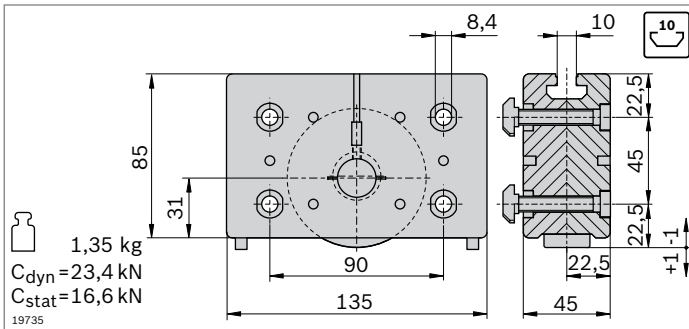
- ▶ Guide bearing for trolley construction
- ▶ Supporting bearing for brackets for bearing off-center forces
- ▶ Guide rail to support supporting bearings (p. 13-41)



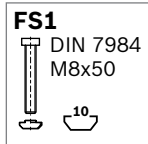
- ▶ Guide bearing for trolley construction
- ▶ Guiding via guide rod
- ▶ Rollers with ball bearings, permanently lubricated
- ▶ Lubricating felts with guide rod lubrication reservoir
- ▶ Play-free roller adjustment via eccentric bolts
- ▶ Replacement of the lubricating felts possible from rear in installed state



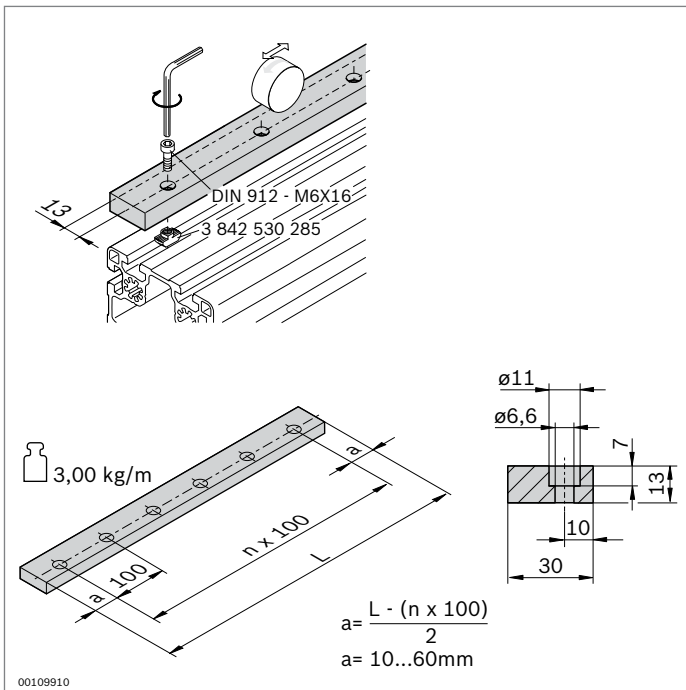
Guide bearing	No.	FS
LF20	2	3 842 535 663 4xFS1
Material:	Housing: Die-cast aluminum Roller: steel, hardened, polished	
Scope of delivery:	incl. fastening material (FS)	
Condition on delivery:	lubricating felts ungreased; greasing according to assembly instructions 3 842 527 226	



- ▶ Supporting bearing for brackets for bearing off-center forces
- ▶ For support on the guide rail
- ▶ Rollers with ball bearings, permanently lubricated
- ▶ Lubricating felts with guide rod lubrication reservoir
- ▶ Play-free roller adjustment via eccentric bolts
- ▶ Replacement of the lubricating felts possible from rear in installed state



Supporting bearing	No.	FS
LF20	2	3 842 535 665 4xFS1
Material:	Housing: Die-cast aluminum Roller: steel, hardened, polished	
Scope of delivery:	incl. fastening material (FS)	
Condition on delivery:	lubricating felts ungreased; greasing according to assembly instructions 3 842 527 226	



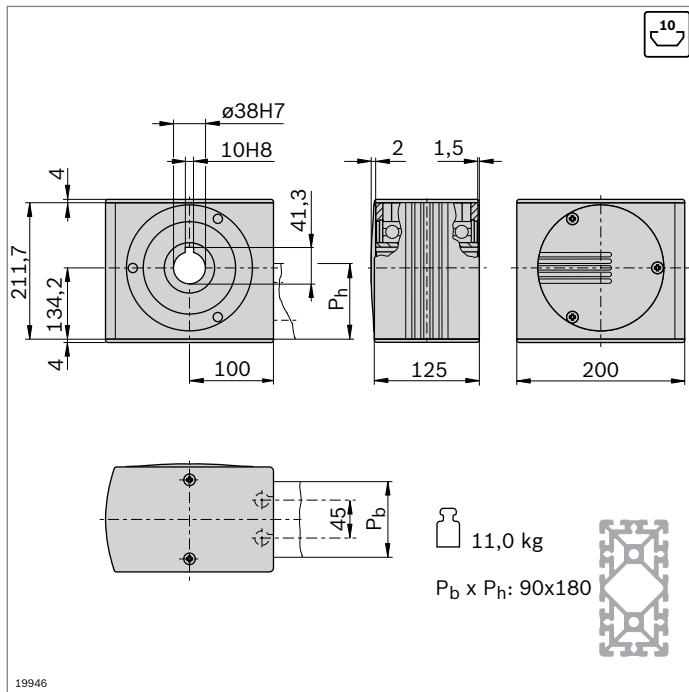
► Guide rail to hold supporting bearings

Guide rail	L (mm)	No.
LF20	120 ... 2000	3 842 994 702 / L

Material: steel, hardened, polished

Accessories: cylinder bolt DIN 912 – M6x16
T-nut M6, 10 mm slot (**3 842 530 285**)

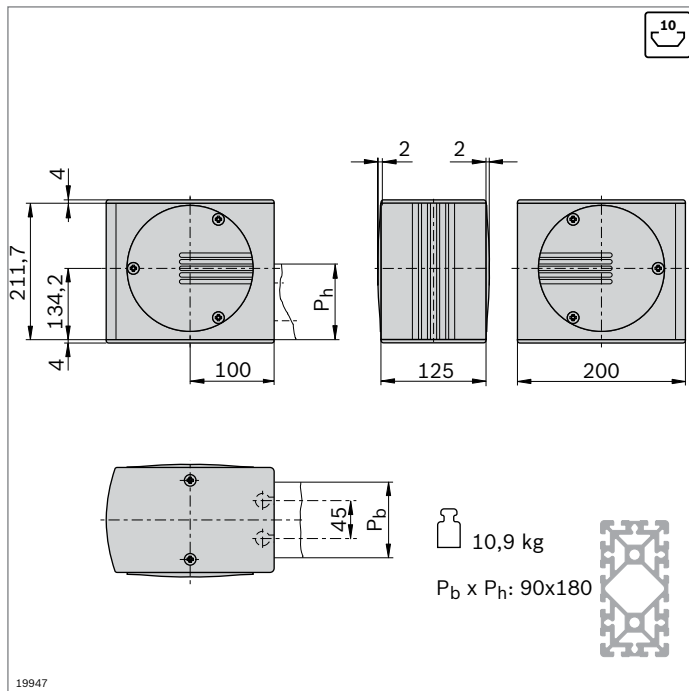
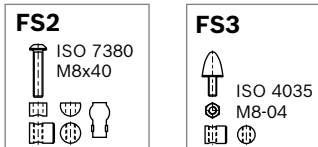
Condition on delivery: ungreased; greasing according to assembly instructions **3 842 527 226**



- ▶ Drive head for transferring drive torque to a toothed belt
- ▶ For direct mounting of a motor or (in conjunction with a center shaft) for mounting a hollow shaft gear or a coupling (p. 13-46)
- ▶ Mounted directly on profile by using longitudinal end connector (connector included in scope of delivery)
- ▶ Profile finishing: LF blind hole drilling for longitudinal end connector

Drive head	No.	FS
LF20C	3 842 526 867	4xFS2, 2xFS3

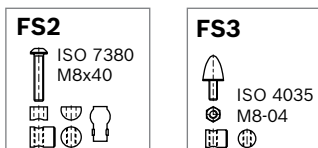
Material: Drive head: aluminum, anodized
Hollow shaft: steel; galvanized
Scope of delivery: incl. fastening material (FS), cover caps

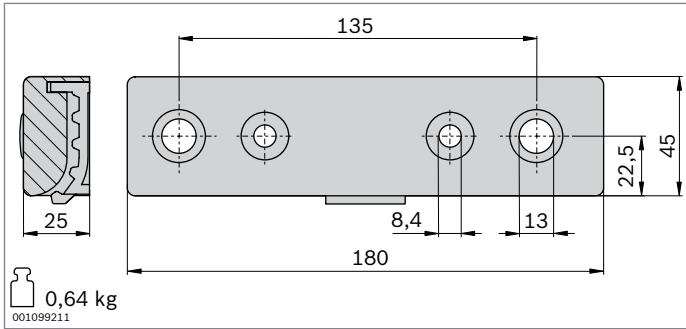


- ▶ Return head for tensioning the toothed belt and changing its direction
- ▶ Mounted directly on profile by using longitudinal end connector (connector included in scope of delivery)
- ▶ Profile finishing: LF blind hole drilling for longitudinal end connector

Return head	No.	FS
LF20C	3 842 526 869	4xFS2, 2xFS3

Material: Return head: aluminum, anodized
Hollow shaft: steel; galvanized
Caps: PA; black
Scope of delivery: incl. fastening material (FS), cover caps






- ▶ Belt connector for fastening the toothed belt to the trolley slot
- ▶ Profile finishing for strut profile 45x270 for trolley LF20S: M12
- ▶ All connecting parts included for mounting at the profile end (LF20S) or the slot (LF20C)

Belt connector	No.	FS
LF20	2	3 842 535 680 2xFS4, 2xFS5, 2xFS6, 2xFS7, 4xFS8


Material: aluminum, painted black
 Scope of delivery: incl. fastening material (FS)

FS4




DIN7984
M12x40

FS5



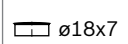
DIN 7984
M8x30
DIN 125
A8,4
10

FS6




DIN 7991
M8x30
10

FS7

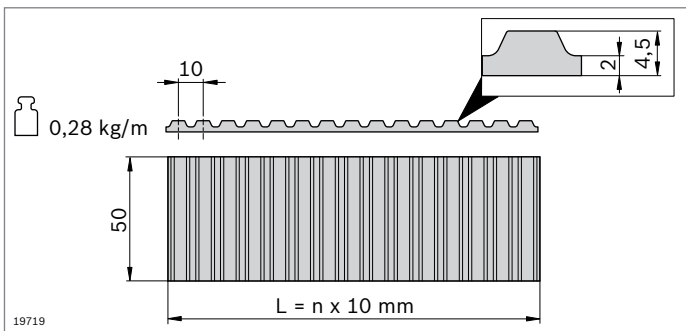


ø18x7

FS8



ø10xø5x11



- ▶ Toothed belt as a trolley drive
- ▶ Pitch: AT10

Toothed belt	L (mm)	No.
LF20	300 ... 50000	3 842 994 662 / L₃¹⁾
	50000	3 842 513 648

¹⁾ $L_3 = 2 \times L_2 - L_1 + 780$

Material: PU with embedded steel wires