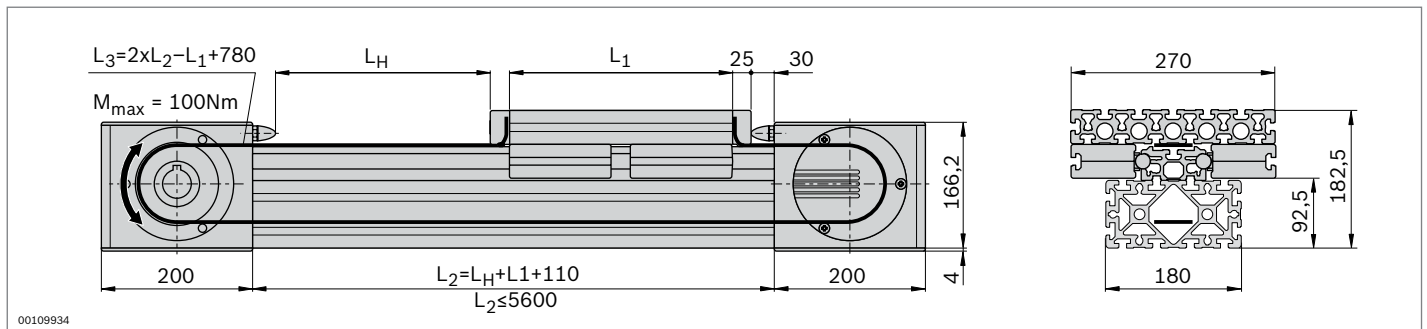


Cam roller guide LF20S – complete axis



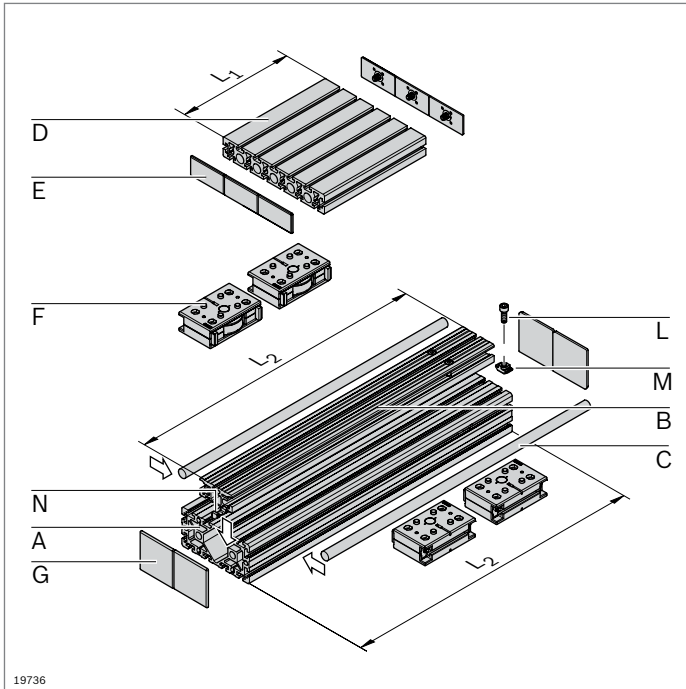
- ▶ Fully assembled cam roller guide
- ▶ Stroke and trolley length can be individually selected
- ▶ Rail profile mounted on strut profile 90x180
- ▶ Incl. toothed belt drive; additional notes on the drive concept (p. 13-44)



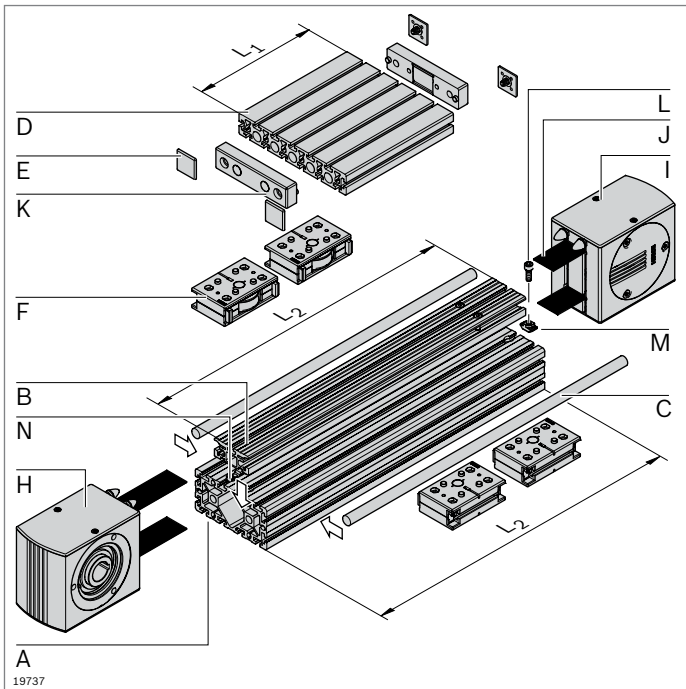
Technical data

See pages 13-57 for notes on layout and drive

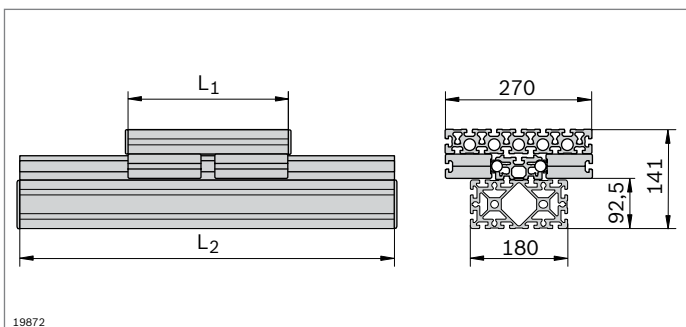
Complete axis	L_H / L_1 (mm)	No.
LF20S	$L_1 + 50 \leq L_H \leq 5220$ $270 \leq L_1 \leq 1000$	3 842 998 499 / L_H / L_1



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Cam roller guide LF20S – components

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

Parts list for cam roller guide LF20S without drive

Component	No.	Qty.	Page
A Profile 90x180	3 842 990 416 / L₂	1	2-48
B Guide profile LF20S	3 842 993 080 / L₂	1	13-32
C Guide rod LF20	3 842 993 969 / L₂	2	13-32
D Profile 45x270	3 842 992 927 / L₁	1	2-45
E Cover cap 45x90	3 842 548 757	6	2-45
F Guide bearing LF20	3 842 535 663	4	13-33
G Cover cap 90x90	3 842 548 761	4	2-47
L Cylinder bolt DIN 7984 – M8x45	n ¹⁾		
M T-nut M8, 10 mm slot	3 842 530 287	n ¹⁾	3-4
N Sliding block	3 842 146 877	n ¹⁾	13-32

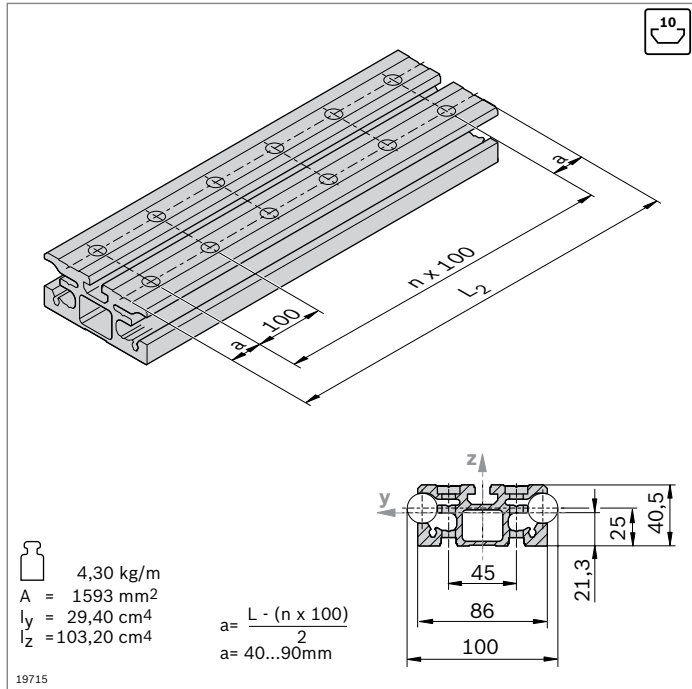
¹⁾ For identification see page 13-32

Parts list for cam roller guide LF20S with drive

Component	No.	Qty.	Page
A Profile 90x180 LF-S LF-S	3 842 993 081 / L₂	1	2-48
B Guide profile LF20S	3 842 993 080 / L₂	1	13-32
C Guide rod LF20	3 842 993 969 / L₂	2	13-32
D Profile 45x270 M12 M12	3 842 992 928 / L₁	1	2-45
E Cover cap 45x45	3 842 548 753	4	2-40
F Guide bearing LF20	3 842 535 663	4	13-33
H Drive head LF20S	3 842 526 414	1	13-35
I Return head LF20S	3 842 526 415	1	13-35
J Toothed belt LF20	3 842 994 662 / L₃¹⁾	1	13-36
K Belt connector LF20	3 842 535 680	2	13-36
L Cylinder bolt DIN 7984 – M8x45	n ²⁾		
M T-nut M8, 10 mm slot	3 842 530 287	n ²⁾	3-4
N Sliding block	3 842 146 877	n ²⁾	13-32

¹⁾ $L_3 = 2 \times L_2 - L_1 + 780$

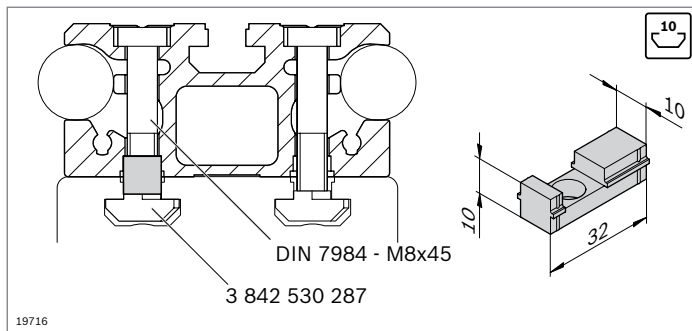
²⁾ For identification see page 13-32



- ▶ Guide profile LF20S to hold guide rods
- ▶ Installation on MGE strut profiles with 10 mm slot or directly on a flat surface

Guide profile		L_2 (mm)	No.
LF20S	1 pcs	150 ... 5600	3 842 993 080 / L_2
	5 pcs	5600	3 842 526 878

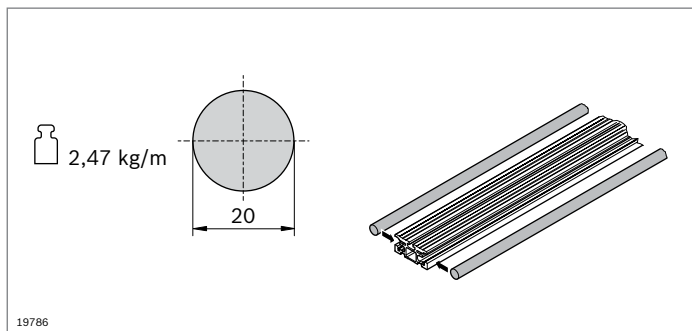
Accessories: Cylinder screw DIN 7984 – M8x45
 T-nut M8, 10 mm slot (p. 3-4)
 Sliding block



- ▶ Sliding block as a centering aid for mounting the guide profile in a 10 mm profile slot

Sliding block		No.
	50	3 842 146 877

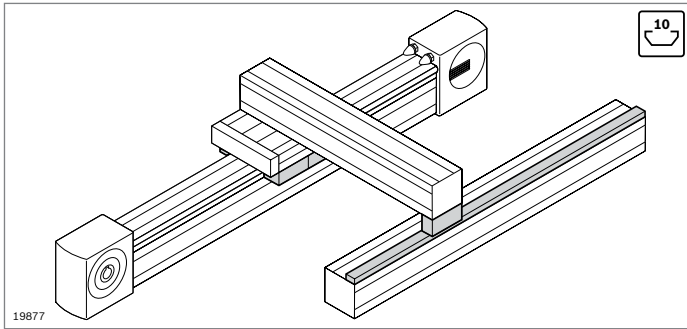
Material: PA; black



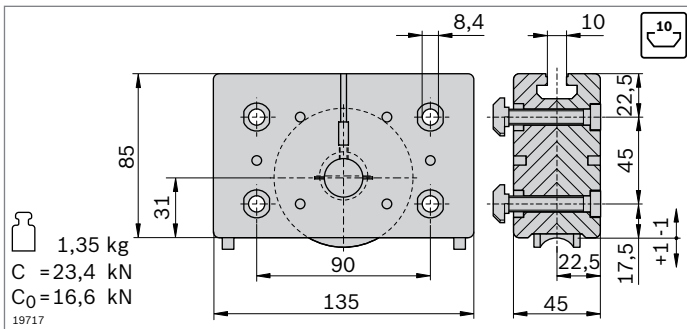
- ▶ The guide rod is pressed into the guide profile
- ▶ The guide rod guides the guide bearing

Guide rod	L_2 (mm)	No.
LF20	150 ... 2900	1 3 842 993 969 / L_2
	2900	20 3 842 539 416

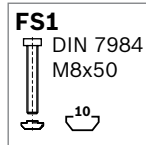
Material: Solid shaft VA, induction hardened, polished
 Condition on delivery: ungreased; greasing according to assembly instructions **3 842 527 226**



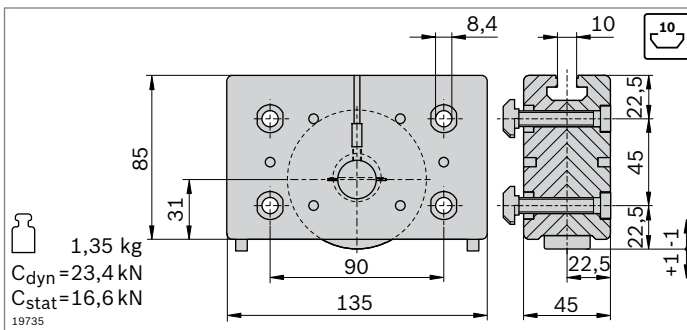
- ▶ Guide bearing for trolley construction
- ▶ Supporting bearing for brackets for bearing off-center forces
- ▶ Guide rail to support supporting bearings (p. 13-34)



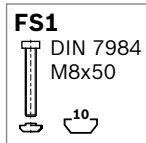
- ▶ Guide bearing for trolley construction
- ▶ Guiding via guide rod
- ▶ Rollers with ball bearings, permanently lubricated
- ▶ Lubricating felts with guide rod lubrication reservoir
- ▶ Play-free roller adjustment via eccentric bolts
- ▶ Replacement of the lubricating felts possible from rear in installed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



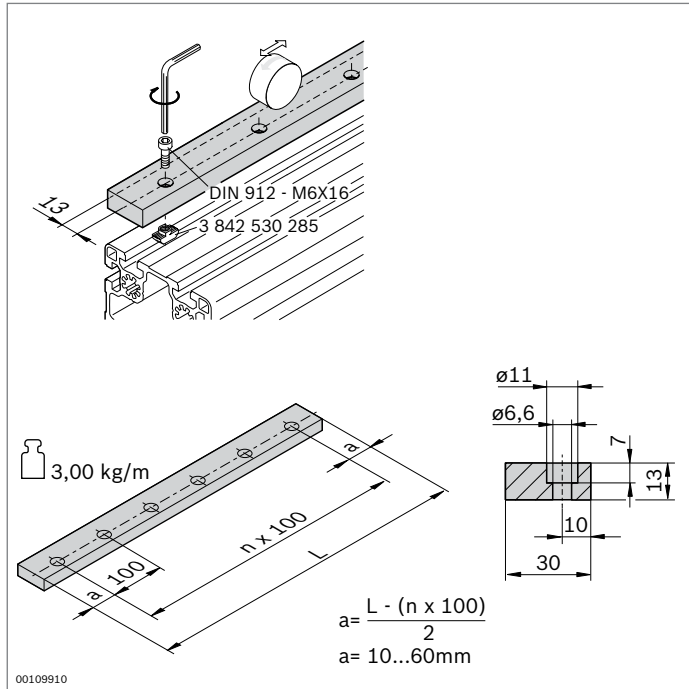
Guide bearing	No.	FS
LF20	2 3 842 535 663	4xFS1
Material:	Housing: Die-cast aluminum Roller: steel, hardened, polished	
Scope of delivery:	incl. fastening material (FS)	
Condition on delivery:	lubricating felts ungreased; greasing according to assembly instructions 3 842 527 226	



- ▶ 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	



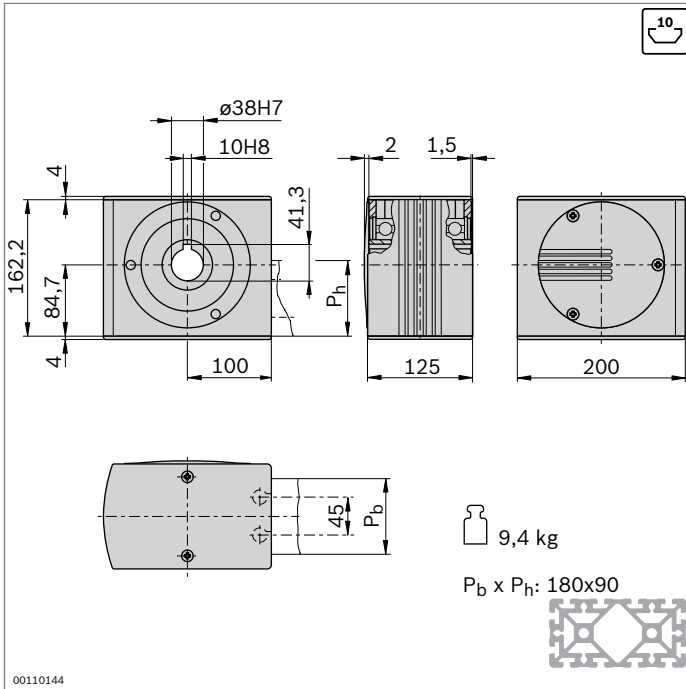
► Guide rail to hold supporting bearings

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

Material: steel, hardened, polished

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

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

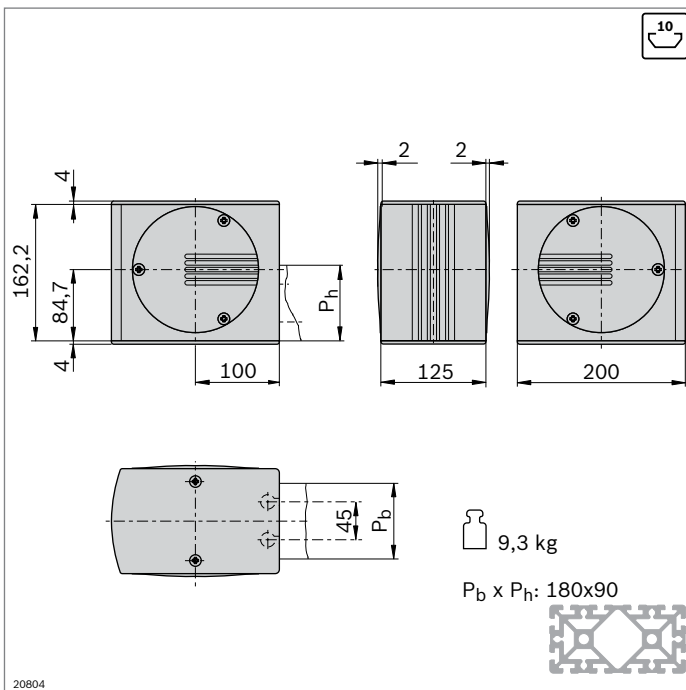
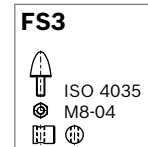
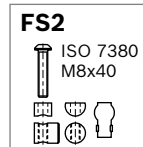


- ▶ Drive head for transferring drive torque to a toothed belt
- ▶ For direct mounting of a motor or (in conjunction with a center shaft) for mounting a hollow shaft gear or a coupling (p. 13-46)
- ▶ Mounted directly on profile by using longitudinal end connector (connector included in scope of delivery)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

Drive head	No.	FS
LF20S	3 842 526 414	4xFS2, 2xFS3

Material: Drive head: aluminum, anodized
Hollow shaft: steel; galvanized

Scope of delivery: incl. fastening material (FS), cover caps

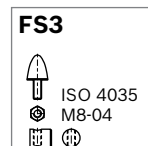
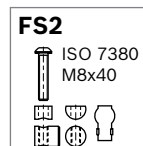


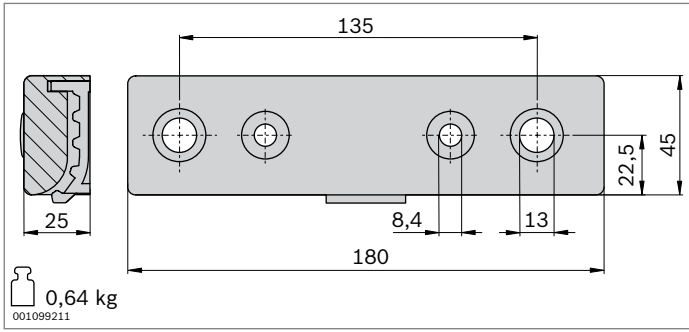
- ▶ Return head for tensioning the toothed belt and changing its direction
- ▶ Mounted directly on profile by using longitudinal end connector (connector included in scope of delivery)
- ▶ Profile finishing: LF-S blind hole drilling for longitudinal end connector

Return head	No.	FS
LF20S	3 842 526 415	4xFS2, 2xFS3

Material: Return head: aluminum, anodized
Hollow shaft: steel; galvanized
Caps: PA; black

Scope of delivery: incl. fastening material (FS), cover caps



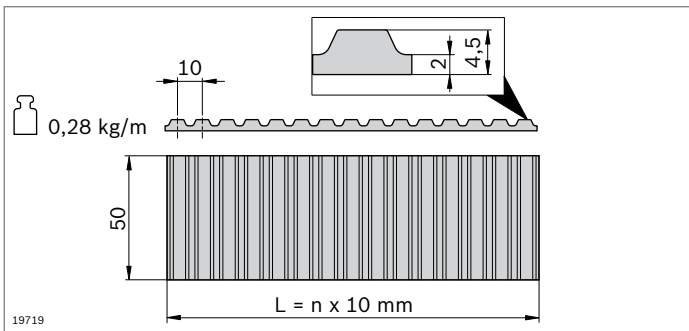
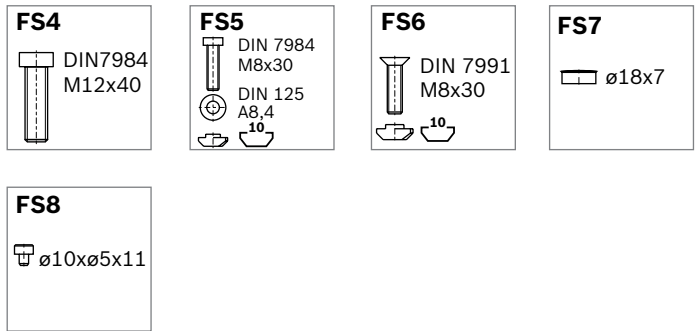


- ▶ Belt connector for fixing the toothed belt on the front of the trolley
- ▶ Profile finishing for strut profile 45x270 for trolley
LF20S: M12
- ▶ All connecting parts included for mounting at the profile end (LF20S) or the slot (LF20C)

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)



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

Toothed belt	L_3 (mm)	No.
LF20	300 ... 50000	3 842 994 662 / $L_3$¹⁾
	50000	3 842 513 648

¹⁾ $L_3 = 2xL_2 - L_1 + 780$

Material: PU with embedded steel wires