Electric Drives and Controls | Hydraulics | Linear Motion and Assembly Technologies | Pneumatics | Service

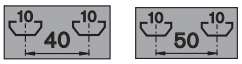
Rexroth
Bosch Group

Basic Mechanic Elements Quick & Easy

Version 1.1

The Drive & Control Company

Symbols

	Width of profile groove; accessories suitable for attaching in profile groove
	Modular profile dimensions; accessories suitable for mounting in modular dimensions
LE Nr. L (mm) 20 **3 842 529 229** 6070	Part number; delivery of one delivery unit with 20 pieces; length of profiles: 6070 mm
LE Nr. L (mm) 1 **3 842 993 724** 100 ≤ L ≤ 5600	Part number; delivery of one profile (LE 1); state desired length; additional indication of profile finishes possible
☞ **3-4**	Reference to another page
M12 D17	Profile end finishing after usual order with fixed material number
	Note on possible standard profile finishes

Contents

Profile finishing

Rexroth's proven modular profile system can be extended by numerous options for custom profile finishes. This enables even faster and more cost-efficient construction of frames, enclosures, workstations, and customer-specific applications.

Profile finishing is required, for example, in order to use interlocking connectors, mount in the core holes of a profile, or with miter cuts.

Thanks to Rexroth's Quick & Easy, it is now possible to order and supply individually configured profiles and finishes.

The new profile finishes from Rexroth

Thanks to a new production complex – e.g. our new profile finishing center in Stuttgart – we can offer you the following advantages:

– Profile finishing of all Rexroth profiles with extremely short delivery times
– Very attractive finishing prices
– Simplified logistics - just one material number, regardless of finishing

Profile finishing

New profile finishes from Rexroth – Quick & Easy

eShop and MT*pro* - software tools for designers, planners, and purchasers

Quick & Easy is supported by Rexroth's eShop and the new MT*pro* profile configurator.

We offer:

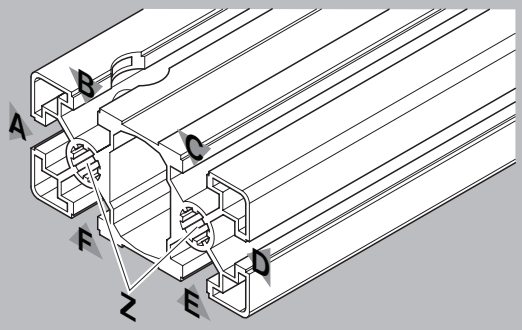
– Customer-friendly configurations
– Generation of 3-D CAD models for designers
– Drawings at the press of a button
– Integration of frames/profiles in layouts
– Easy ordering at the click of a mouse

Quick & Easy – four steps for simple ordering

The type of profile finishing is defined in an order key; all finishes for a profile can be summarized in one order key.

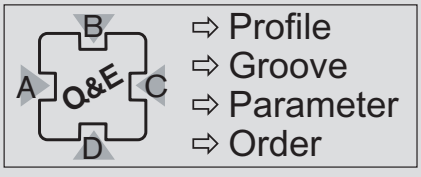
1 Select profile cross section and length
2 Indicate the groove for finishing:
See profile dimensional drawings for groove designations (A; B; C; ...)
3 Define parameters:
– Type of finishing (drilling, milling, miter cut)
– Distance from profile end
4 Send order:
Conventionally via fax or preferably online in our e-shop

45x90L
3 842 993 662



3 842 993 662 / 580 / B = D17/-

Material number | Length | Standard finish through hole D17 in groove B



All profile grooves are identified with letters in ascending order and clockwise:

Principle structure of the order key

Material number/length/[groove designation = finishing; parameter set]

Profile finishing

Order options for Rexroth profiles

Fixed material numbers
for defined finishing of selected profiles.

Standard profile finishes
are required very frequently for all profiles. This includes e.g. finishing for standard connectors from Rexroth.

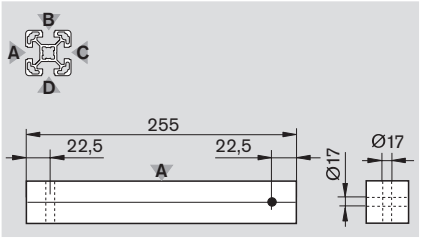
The order key for standard finishes only includes information on the groove and finishing (separate for both profile ends). Here, the parameter set is already permanently stored for an exact description (distances, depths, etc.).

Individual profile finishes
offer the highest flexibility for defining profile finishing. The finishes can be implemented in almost any combination.

An appropriate parameter set is available for each finish for descriptive purposes, see "Individual profile finishes".

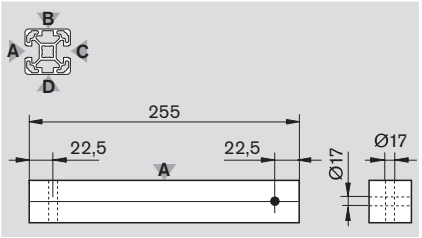
Example: 40x40L

3 842 993 126/255 D17 D17V



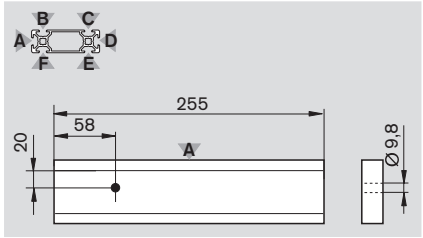
Example: 40x40L 2N

3 842 993 720/255/
A=D17/-; B=-/D17



Example: 20x60

3 842 993 698/255/
[B=DI; PS=58; OS=20;
DM=9.8]

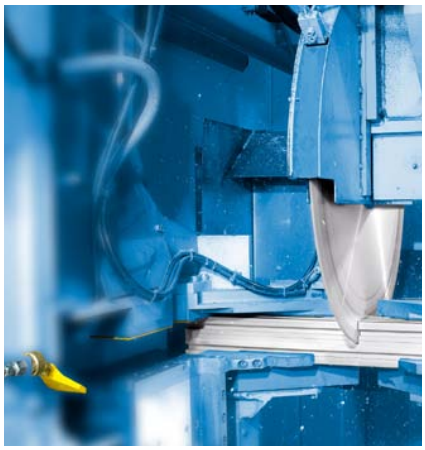


Available standard finishes:

Through hole	D
Blind hole bore	DB
Thread cutting	M
Standard milling	F1

Available individual finishes:

Boring	DI
Bore sequence	DIS
Cross milling	MT
Cross milling sequence	MTS
Lengthwise milling	MI
Lengthwise milling sequence	MIS
Miter cuts	S1/S3



Profile finishing

Standard profile finishes

Standard profile finishes are used in conjunction with Rexroth connection technology and to mount accessories:
– Central bolts (corner connections)
– Quick connectors
– Bolt connectors
– Cross connectors
– Bases and wheels

They offer decisive advantages:
– A guiding material number for all conceivable finishes for profile cross sections.
– Available for all profiles
– Any combination possible.
– Blind hole bores possible.
All this results in brand new options!

The order key has a simple structure: The parameters for the exact type of finishing of each profile are permanently stored, see the table.
Information on the groove designations and available standard profile finishes can be found on the order sheets (☞🗎16ff).

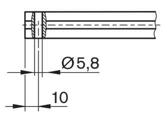
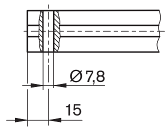
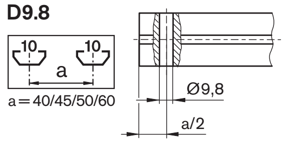
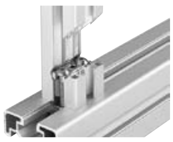
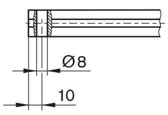
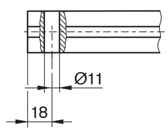
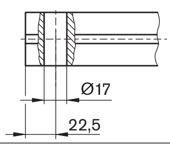
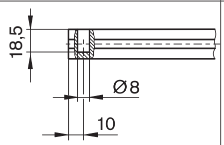
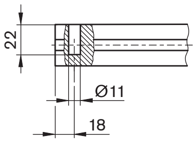
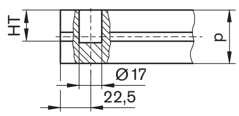
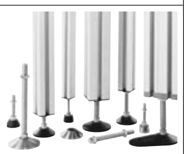
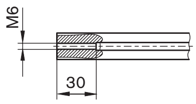
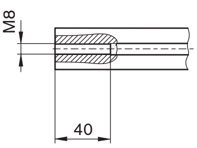
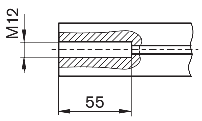
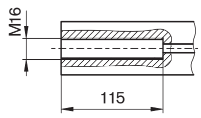
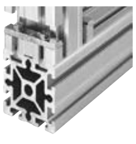
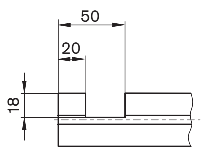
Order syntax for through holes, blind hole bores, standard milling

Material number/length/groove designation = finishing at profile start/finishing at profile end; ...

Order syntax for threads

Material number/length/Z = Mx at profile start/Mx at profile end

Standard profile finishes

		6 mm groove (6)	**8 mm groove** (8)	**10 mm groove** (10)
Through hole for corner connections with central bolts		**D5.8** 	**D7.8** 	**D9.8** 
Through hole for bolt connectors and quick connectors		**D8** 	**D11** 	**D17** 
Blind hole bore for longitudinal end connectors and quick connectors in closed profiles		**DB8** 	**DB11** 	**DB17**  **p** 40 45 50 60 **HT** 31 34 36 41
Threads in all core holes for accessories		**M6** 	**M8** 	**M12**  **M16** 
Standard milling for cross connectors				**F1** 

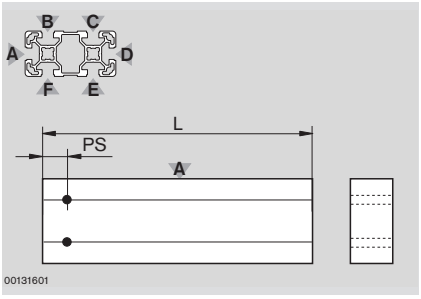
Profile finishing

Order overview for standard profile finishes

Through hole Dx

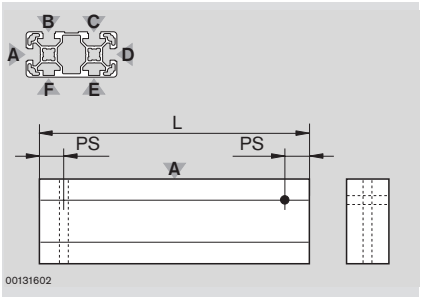
Application:
– **D5.8; D7.8; D9.8** for corner connections with central bolts
– **D8; D11; D17** for bolt connectors and quick connectors

Permanently stored:
– Distance from profile end (PS)



Example:
3 842 993 728/255/B=D17/-; C=D17/-

Profile 40x80L/L = 255 mm/
groove B: through hole D17 at profile start/ no finishing at profile end;
groove C: through hole D17 at profile start/ no finishing at profile end
Fixed: PS = 22.5 mm (☞7)



Example:
3 842 993 729/255/B=-/D17; D=D17/-

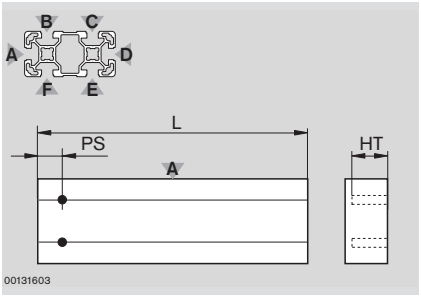
Profile 40x80L 4N/L = 255 mm/
groove B: no finishing at profile start/ through hole D17 at profile end;
groove D: through hole D17 at profile start/ no finishing at profile end
Fixed: PS = 22.5 mm (☞7)

Blind hole bore DBx

Application:
– **DB8; DB11; DB17** for quick connectors in closed profiles and longitudinal end connectors

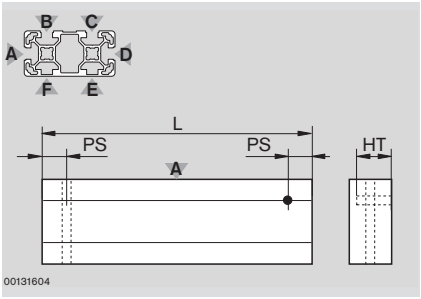
Advantage:
With closed grooves, the profile surface is not interrupted.

Permanently stored:
– Distance from profile end (PS)
– Depth of blind hole bore (HT)



Example:
3 842 993 728/255/ B=DB17/-; C=DB17/-

Profile 40x80L/L = 255 mm/
groove B: blind hole bore DB17 at profile start/no finishing at profile end;
groove C: blind hole bore DB17 at profile start/no finishing at profile end
Fixed: PS = 22.5 mm, HT = 34 mm (☞7)



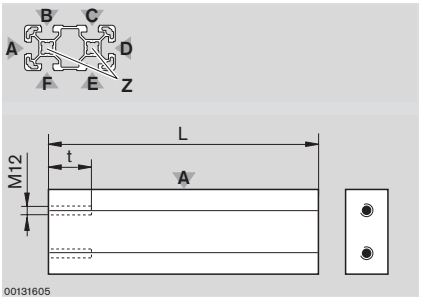
Example:
3 842 993 729/255/ B=-/DB17; D=D17/-

Profile 40x80L 4N/L = 255 mm/
groove B: no finishing at profile start/blind hole bore DB17 at profile end;
groove D: through hole D17 at profile start/ no finishing at profile end
Fixed: PS = 22.5 mm, HT = 34 mm (☞7)

Thread Mx

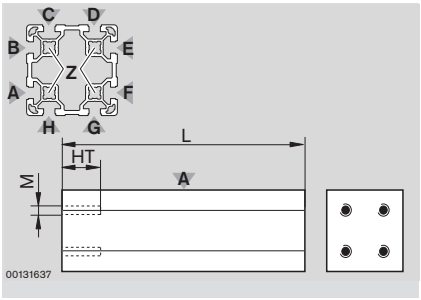
Application:
– **M6; M8; M12; M16** in all core holes of the profile, e.g. for screwing on bases and wheels

Permanently stored:
– Thread depth



Example:
3 842 993 728/255/Z=M12/-

Profile 40x80L/L = 255 mm/
Thread M12 in all core holes at profile start/ no finishing at profile end
Fixed: Thread depth HT = 55 mm (☞7)



Example:
3 842 993 674/255/Z=M12/-

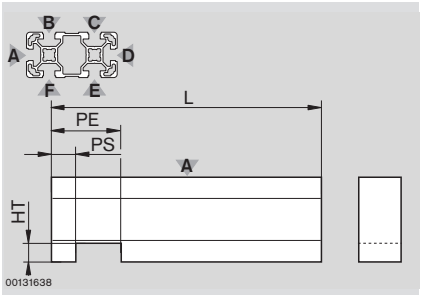
Profile 80x80L/L = 255 mm/
Thread M12 in all core holes at profile start/ no finishing at profile end
Fixed: Thread depth HT = 55 mm (☞7)

Profile finishing

Standard milling F1

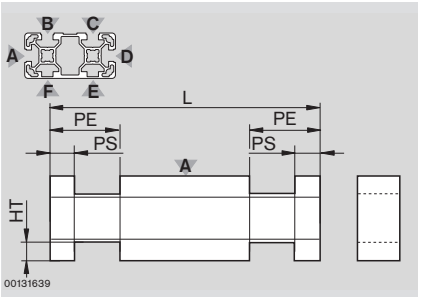
Application:
– F1 for cross connectors

Permanently stored:
– Starting point of milling (PS)
– Ending point of milling (PE)
– Depth of milling (HT)



Example:
3 842 993 728/383/D=F1/-

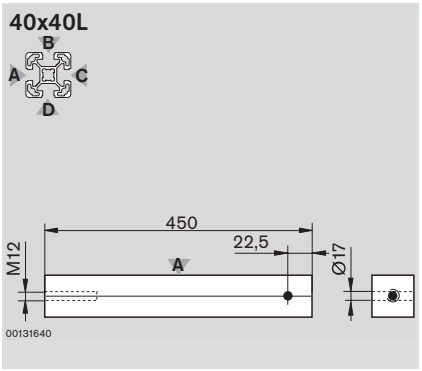
Profile 40x80L/L = 383 mm/
groove D: cross milling at profile start/no finishing at profile end
Fixed: PS = 20 mm; PE = 50 mm;
HT = 18 mm (☞ 7)



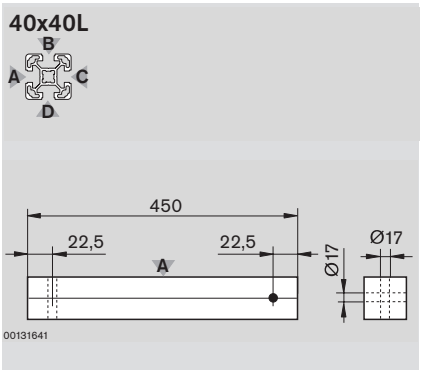
Example:
3 842 993 729/383/A=F1/F1; D=F1/F1

Profile 40x80L 4N/L = 383 mm/
groove A: cross milling at profile start/cross milling at profile end
groove D: cross milling at profile start/cross milling at profile end
Fixed: PS = 20 mm; PE = 50 mm;
HT = 18 mm (☞ 7)

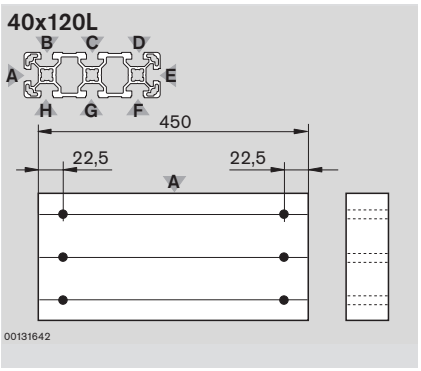
Further examples



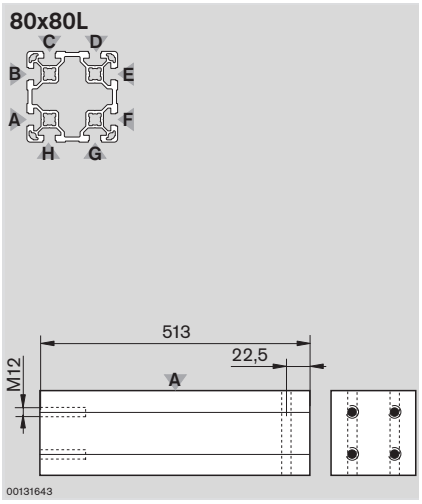
Example:
3 842 993 724/450/
Z=M12/-; B=-/D17



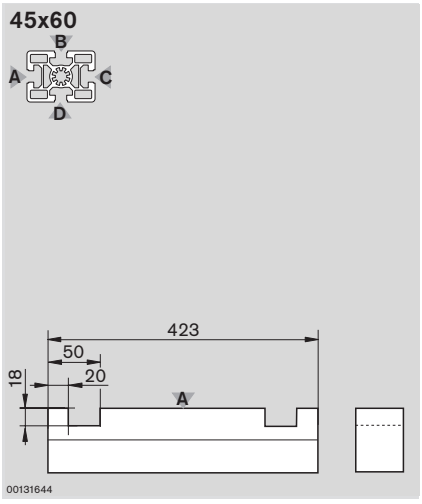
Example:
3 842 993 724/450/
A=D17/-; B=-/D17



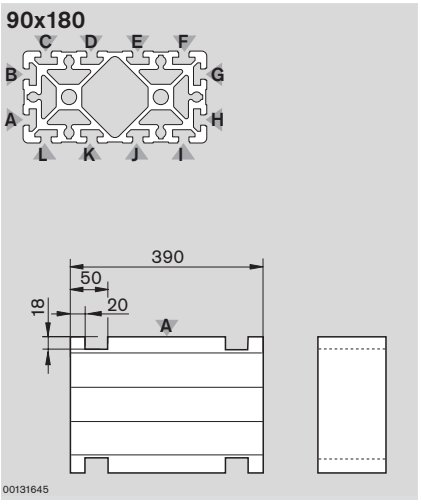
Example:
3 842 993 716/450/
B=D17/D17; C=D17/D17;
D=D17/D17



Example:
3 842 993 674/513/
Z=M12/-; A=-/D17; B=-/D17



Example:
3 842 993 743/423/A=F1/F1



Example:
3 842 993 676/390/
A=F1/F1; G=F1/F1

Individual profile finishes

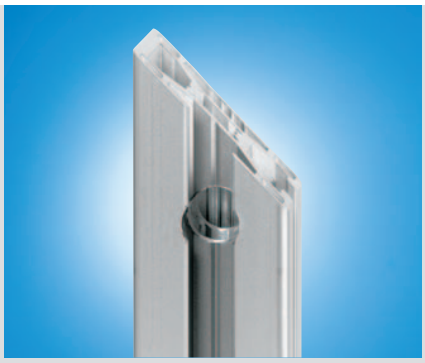
With individual profile finishes, Quick & Easy offers the following advantages:

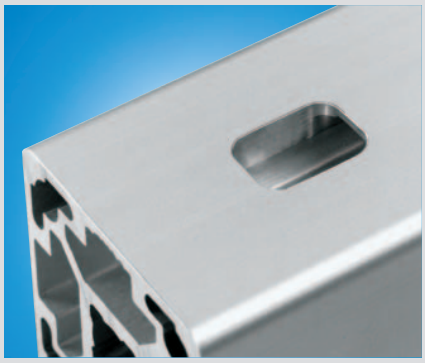
– Precise finishing at almost every point on the profile
– Highest variety of available finishes
– Available for many profiles
– Finishes possible in almost any combination, including sequential finishing
– A wide variety of finishes from one source

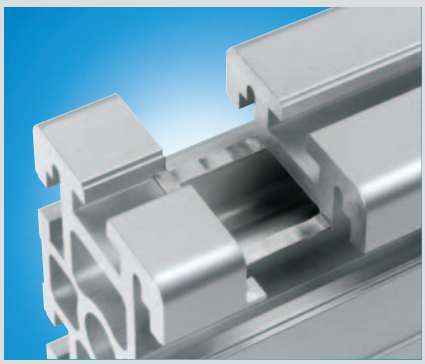
The following finishes are possible:

– Through holes
– Blind holes
– Stepped bores
– Cross milling (transverse to the longitudinal axis)
– Lengthwise milling (in the longitudinal axis)
– Miter cuts

Note:
Minimum and maximum lengths must be taken into account in the order, depending on the selected finish.







Individual profile finishes

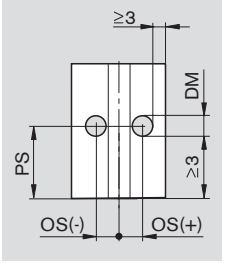
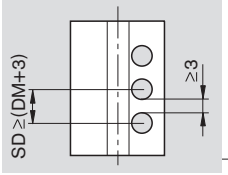
Boring

Easy configuration in the eShop
www.boschrexroth.com

Bore DI
- Through holes with diameter (**DM**) at any point on the profile (**PS, OS**). Note the information on OS in the table.
- Blind hole bore through additional information on the bore depth (**HT)**
- Stepped bores via two bores at the same point on the profile
- Note the required minimum thicknesses (PS_{min}, PS_{max})!

Bore sequence DIS
- Regular sequence of the same bores (**SN, SD**)
- Note the required minimum thicknesses (SD_{min})!

Parameter

End finishing	Abbrev.	Parameter	
Bore	**DI**	**PS**	Center point of bore
			PS_{min} = DM/2 + 3 mm; PS_{max} = L - (DM/2 + 3 mm)
		OS (optional)	Offset starting point
			Select the OS so that the bore does not cut through any groove edges
		DM	Bore diameter
			See table for DM
		HT (optional)	Depth of bore. Through bores provided if no information indicated.
			See table for HT_{max}
Bore sequence	**DIS**	**PS, OS, DM, HT**	As with bore DI
		**SN**	Number of finishes
			SN_{max} = INT ((L - 3 - PS - DM/2)/SD) + 1
		SD	Distance between adjacent finishes
			SD_{min} = DM + 3

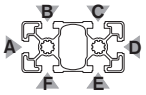
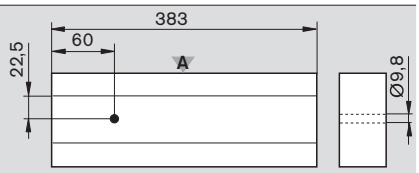
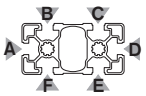
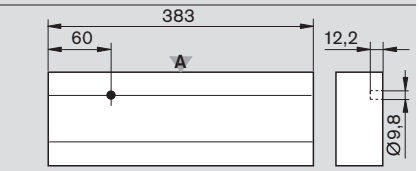
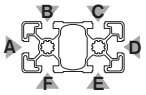
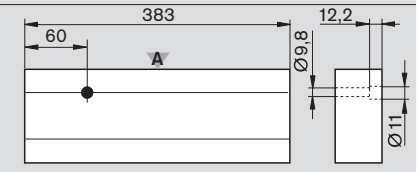
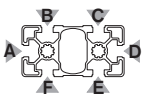
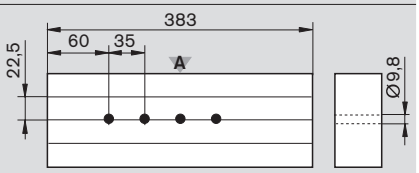
Permissible bore diameters, permissible bore depths (in mm)

DM	5.8	6.4	7.8	8.0	8.4	9.8	11.0	17.0
HT_{max}	40.0	45.0	45.0	45.0	45.0	50.0	60.0	75.0
	ATTENTION: If HT_{max} is not sufficient to drill through the profile, you must order two opposite bores!							

Order syntax

Material number/length/[groove designation=DI; PS=...; *OS=...*; **DM=...;** *HT=...*]; *[...]*
Material number/length/[groove designation=DIS; PS=...; *OS=...*; **DM=...;** *HT=...*; **SN=...; SD=...];** *[...]*

Order examples for profile 45x90, L = 383 mm

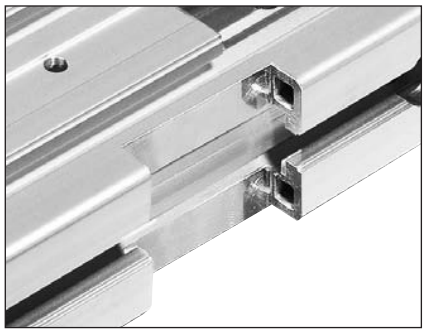
DI	Through holes next to groove **3842993661/383/[B=DI; PS=60; OS=22.5; DM=9.8]**		
	Blind holes **3842993661/383/[B=DI; PS=60; DM=9.8; HT=12.2]**		
	Stepped bores **3842993661/383/** **[B=DI; PS=60; DM=11,0; HT=12,2]; [B=DI; PS=60; DM=9.8]**		
DIS	Through hole sequence **3842993661/383/** **[B=DIS; PS=60; OS=22,5; DM=9.8; SN=4; SD=35]**		

⇨ Profile
⇨ Groove
⇨ Parameter
⇨ Order

Individual profile finishes

Cross milling

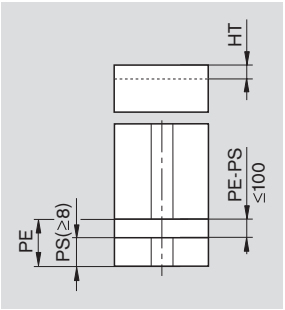
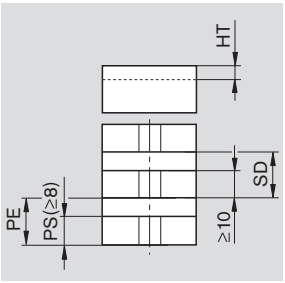
Easy configuration in the eShop
www.boschrexroth.com



Cross milling MT
- Cross milling at any point on the profile (groove designation, **PS**) with variable depth (**HT**) and length (**PE – PS**); the width corresponds to the profile width.
- Note the required minimum thicknesses (PS_{min}, PS_{max})!

Cross milling sequence MTS
- Regular sequence of identical cross millings (**SN, SD**)
- Note the required minimum distances (SD_{min})!

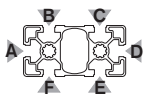
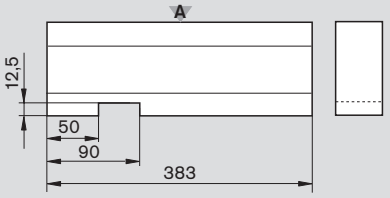
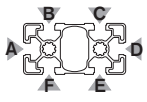
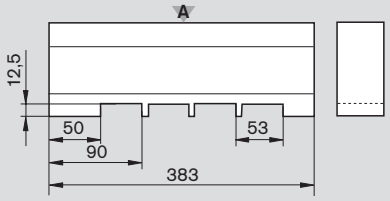
Parameter

End finishing	Abbrev.	Parameter	
Cross milling	**MT**		
		**PS**	Starting point of milling (distance between profile cutting area - cross milling front edge)
			PS_{min} = 8 mm PS_{min} = 60 mm on the bottom of the profile
		HT	Depth of milling
			HT_{max} = 5.5 mm (6 mm groove) HT_{max} = 9.0 mm (8 mm groove) HT_{max} = 12.5 mm (10 mm groove)
		PE	Ending point of milling (distance between profile cutting area - cross milling rear edge)
			PE_{max} = L - 8 mm 8 mm ≤ PE - PS ≤ 100 mm
Cross milling sequence	**MTS**	**PS, HT, PE**	As with cross milling MT
		**SN**	Number of finishes
			SN_{max} = INT((L - 8 - PE)/SD)+1
		SD	Distance between adjacent finishes
			SD_{min} = (PE - PS) + 10

Order syntax

Material number/length/[groove designation=MT; PS=...; HT=...; PE=...]; *[...]*
Material number/length/[groove designation=MTS; PS=...; HT=...; PE=...; SN=...; SD=...]; *[...]*

Order examples for profile 45x90, L = 383 mm

MT	Cross milling on profile side groove D **3842993661/383/[D=MT; PS=50; HT=12.5; PE=90]**		
MTS	Cross milling sequence on profile side groove D **3842993661/383/** **[D=MTS; PS=50; HT=12.5; PE=90; SN=4; SD=53]**		

B A Q&E C D
⇨ Profile
⇨ Groove
⇨ Parameter
⇨ Order

Individual profile finishes

Lengthwise milling

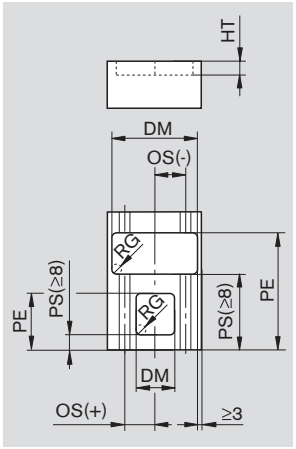
Easy configuration in the eShop
www.boschrexroth.com

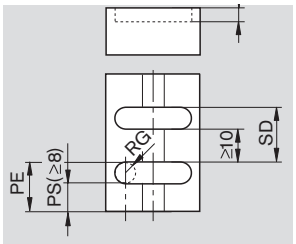
Lengthwise milling MI
- Lengthwise milling at any point on the profile (groove designation, **PS, OS**) with variable depth (**HT**), width (**DM**) and length (**PE – PS**). The radius of the milling cutter (**RG**) determines the corner radius of the milling.
- Note the required minimum distances (PS_{min}, PS_{max}, DM_{max})!

Lengthwise milling sequence MIS
- Regular sequence of identical lengthwise milling (**SN, SD**)
- Note the required minimum thicknesses! (SD_{min})

Parameter

End finishing	Abbrev.	Parameter	
Lengthwise milling	**MI**	**PS**	Starting point of milling
			PS_{min} = 8 mm PS_{min} = 60 mm on the bottom of the profile (see order tables for orientation)
		OS (optional)	Offset starting point
		DM	Milling width
			DM_{min} = 8 mm DM_{max} = profile width/height - 6 mm At least 3 mm of profile must remain on both sides
		HT	Depth of milling
			HT_{max} = 5.5 mm (6 mm groove) HT_{max} = 9.0 mm (8 mm groove) HT_{max} = 12.5 mm (10 mm groove)
		PE	Ending point of milling
			PE_{max} = L - 8 mm 8 mm ≤ PE - PS ≤ 100 mm
		RG	Radius of milling geometry
			RG = 3 mm; 4 mm; 5 mm; 8 mm
Lengthwise milling sequence	**MIS**	**PS, *OS*, DM, HT, PE, RG**	As with lengthwise milling MI
		SN	Number of finishes
			SN_{max} = INT(L - 8 - PE/SD) + 1
		SD	Distance between adjacent finishes
			SD_{min} = (PE - PS) + 10





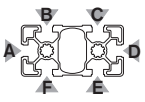
Order syntax

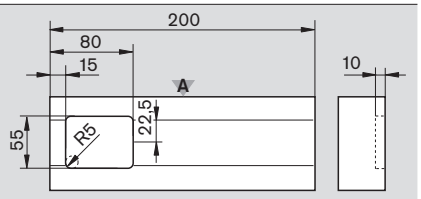
Material number/length/[groove designation=MI; PS=...; *OS=...*; **DM=...; HT=...; PE=...; RG=R..];** *[...]*
Material number/length/[groove designation=MIS; PS=...; *OS=...*; **DM=...; HT=...; PE=...; RG=R..; SN=...; SD=...];** *[...]*

Order examples for profile 45x90, L = 200 mm

MI Lengthwise milling

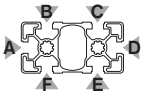
3842993661/200/
[B=MI; PS=15; OS=22.5; DM=55; HT=10; PE=80; RG=5]

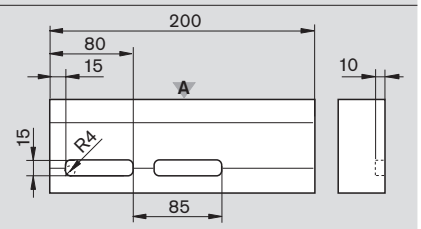




MIS Lengthwise milling sequence

3842993661/200/
[C=MIS; PS=15; DM=15; HT=10; PE=80; RG=4; SN=2; SD=85]



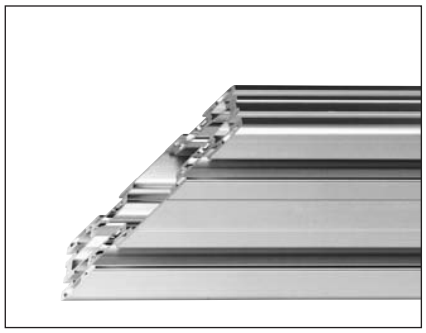


B A Q&E C D
⇨ Profile
⇨ Groove
⇨ Parameter
⇨ Order

Individual profile finishes

Miter cuts

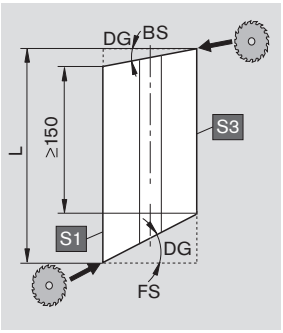
Easy configuration in the eShop
www.boschrexroth.com



Miter cuts
- Cutting of profiles at any angle
- Profile sides are numbered clockwise. S1 is the left side of the profile, in accordance with the position illustrated on the order pages; the following sides are designated S2, S3 and S4.
- Miter cut begins on the designated side. Possible sides: S1 and S3.
- Note the maximum permissible miter angles and minimum lengths, see table on page 15

Parameter

End finishing	Abbrev.	Parameter	
Miter cuts	-	**FS**	Front side - designation of the profile end on which the miter cut should be made S1, S3 - profile side on which the miter cut begins
			FS = S1; FS = S3
		BS	Back side - opposite profile end S1, S3 - profile side on which the miter cut begins
			BS = S1; BS = S3
		DG	Miter angle
			DG > 0 The angle is always indicated positively; the orientation results from FS/BS and the side on which the miter cut begins. Note the maximum permissible miter angle.



Order syntax

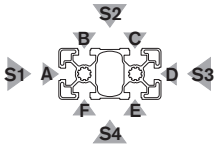
Material number/length/[FS=side; DG=miter angle]; *[BS=side; DG=miter angle]*

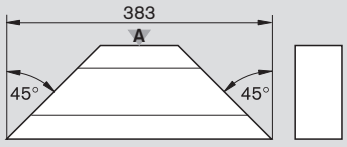
Order examples for profile 45x90, L = 383 mm

MT

Miter cut on both sides through side S3 (side with groove D)

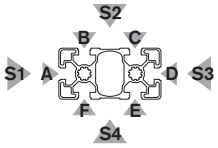
3842993661/383/[FS=S3; DG=45]; [BS=S3; DG=45]

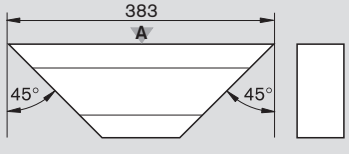




Miter cut on both sides through side S1 (side with groove A)

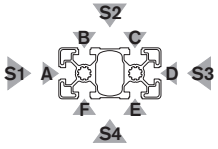
3842993661/383/[FS=S1; DG=45]; [BS=S1; DG=45]

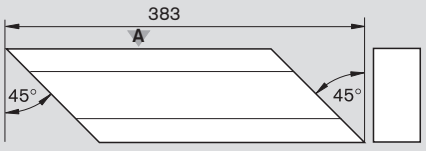




Miter cut through side S1 (FS) and S3 (BS)

3842993661/383/[FS=S1; DG=45]; [BS=S3; DG=45]





B A Q&E C D
⇨ Profile
⇨ Groove
⇨ Parameter
⇨ Order

Individual profile finishes

Permissible miter cuts

Profile	No.	DG_{max} (°)	L_{min1} (mm)[1]	L_{min2} (mm)[2]
20x20	**3 842 993 694**	45	335	370
20x20 1N	**3 842 993 690**	45	335	370
20x20 2N	**3 842 993 691**	45	335	370
20x20 2NVS	**3 842 993 692**	45	335	370
20x20 3N	**3 842 993 693**	45	335	370
20x20 R	**3 842 993 695**	–	–	–
20x40	**3 842 993 696**	45	370	440
20x60	**3 842 993 698**	45	404	508
20x40x40	**3 842 993 697**	45	370	440
10x40	**3 842 993 683**	–	–	–
30x30	**3 842 993 703**	45	352	404
30x30 1N	**3 842 993 704**	45	352	404
30x30 2N	**3 842 993 705**	45	352	404
30x30 2NVS	**3 842 993 706**	45	352	404
30x30 3N	**3 842 993 707**	45	352	404
30x30°	**3 842 993 708**	–	–	–
30x45°	**3 842 993 711**	–	–	–
30x60°	**3 842 993 714**	–	–	–
30x30 R	**3 842 993 709**	–	–	–
30x60	**3 842 993 712**	45	404	508
30x60 4N	**3 842 993 713**	45	404	508
30x60x60	**3 842 993 715**	45	404	508
30x90	**3 842 993 762**	45	150	150
30x120	**3 842 993 763**	45	150	150
30x45	**3 842 993 710**	45	378	456
60x60 8N	**3 842 993 669**	45	404	508
11x20	**3 842 993 688**	–	–	–
15x120	**3 842 993 684**	–	–	–
40x40L	**3 842 993 724**	45	370	440
40x40L 0N	**3 842 993 760**	45	370	440
40x40L 1N	**3 842 993 719**	45	370	440
40x40L 2N	**3 842 993 720**	45	370	440
40x40L 2NVS	**3 842 993 721**	45	370	440
40x40L 3N	**3 842 993 722**	45	370	440
40x30°	**3 842 993 718**	–	–	–
40x45°	**3 842 993 726**	–	–	–
40x60°	**3 842 993 727**	–	–	–
40x40L R	**3 842 993 725**	–	–	–
40x40 HR	**3 842 993 723**	45	370	440
40x80L	**3 842 993 728**	45	439	578
40x80L 4N	**3 842 993 729**	45	439	578
40x80L 3NVS	**3 842 993 753**	45	439	578
40x80x80L	**3 842 993 730**	45	439	578
40x120L	**3 842 993 716**	45	420	540
40x160L	**3 842 993 717**	45	460	620
80x80L	**3 842 993 674**	45	439	578
80x80L 4NVS	**3 842 993 758**	45	439	578
80x80L 6N	**3 842 993 675**	45	439	578
40x120x120L	**3 842 993 757**	45	420	540
80x120L	**3 842 993 672**	45	420	540
80x160L	**3 842 993 673**	45	460	620
45x45L	**3 842 993 737**	45	378	456
45x45L 0N	**3 842 993 761**	45	378	456
45x45L 1N	**3 842 993 738**	45	378	456
45x45L 2N	**3 842 993 739**	45	378	456
45x45L 2NVS	**3 842 993 740**	45	378	456
45x45L 3N	**3 842 993 741**	45	378	456
45x30°	**3 842 993 733**	–	–	–
45x45°	**3 842 993 735**	–	–	–
45x60°	**3 842 993 744**	–	–	–
45x45L R	**3 842 993 742**	–	–	–
45x45 HR	**3 842 993 736**	45	378	456
45x45	**3 842 993 734**	45	378	456
45x60	**3 842 993 743**	45	404	508
45x90SL	**3 842 993 759**	45	456	612
45x90L	**3 842 993 662**	45	456	612
45x90L 2N	**3 842 993 751**	45	456	612
45x90L 3NVS	**3 842 993 752**	45	456	612
45x90	**3 842 993 661**	45	456	612
45x180	**3 842 993 731**	30	404	508
45x270	**3 842 993 732**	–	–	–
45x90x90L	**3 842 993 682**	45	456	612
90x90SL	**3 842 993 681**	45	456	612
90x90L	**3 842 993 680**	45	456	612
90x90L 4N	**3 842 993 755**	45	456	612
90x90L 4NVS	**3 842 993 756**	45	456	612
90x90	**3 842 993 679**	45	456	612
90x180L	**3 842 993 677**	30	404	508
90x180	**3 842 993 676**	30	404	508
90x360	**3 842 993 678**	–	–	–
15x22,5	**3 842 993 689**	–	–	–
15x180	**3 842 993 686**	–	–	–
22,5x45	**3 842 993 700**	45	378	456
22,5x180	**3 842 993 699**	–	–	–
50x50L	**3 842 993 665**	45	387	474
50x100L	**3 842 993 663**	45	474	648
50x150L	**3 842 993 664**	45	450	600
100x100L	**3 842 993 685**	45	474	648
100x200L	**3 842 993 687**	30	416	532
60x60L	**3 842 993 670**	45	404	508
60x60	**3 842 993 668**	45	404	508
60x90	**3 842 993 671**	45	456	612

[1] With miter cut on one side with DG_{max}
[2] With miter cut on both sides with DG_{max}

Depending on the size and shape of the profile, as well as the selected miter angle, tolerance deviations up to max. ± 1,2 mm may occur for the L dimension (profile length).

Strut profiles with 6 mm groove

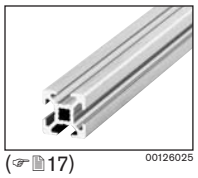
Strut profiles with 6 mm groove for light structures, such as supports and lab fixtures. Profiles 20x40 and 20x60 are especially suitable for reinforcing, profile 20x40x40 is suitable for constructing show cases, shelves and housings.

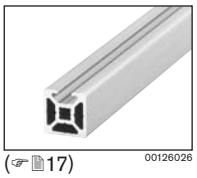
Custom profiles
The material number, length, and any finishes must be indicated in the order. Possible standard profile finishes are indicated in the order table. Some standard profile finishes are limited to specific profile grooves. Individual finishes are always possible and only limited to the values listed on pages 8 to 11.

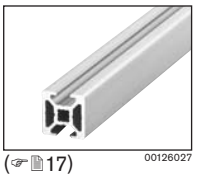
Minimum profile lengths for profiles with finishing may deviate from the values in the order table, see the table below. In the case of overlapping, the larger value applies.

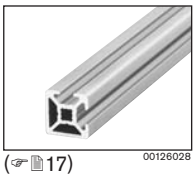
Note the reduced maximum profile lengths for individual profile finishes! See table below.

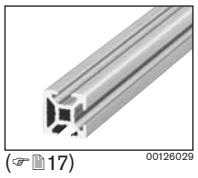
Delivery units
Packing units (LE) with unfinished profiles of a specific length.

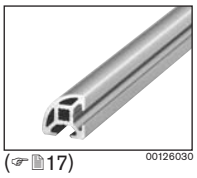


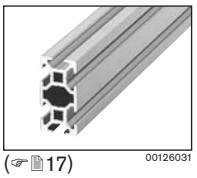


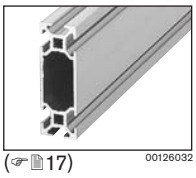


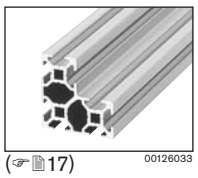


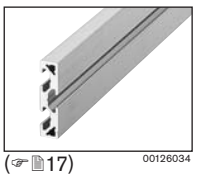




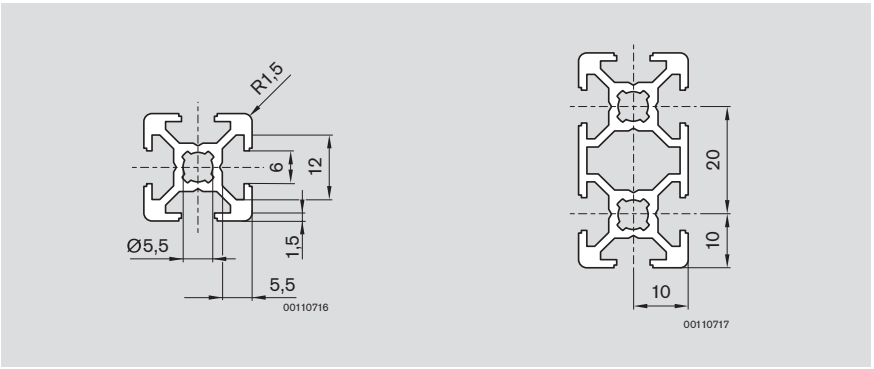




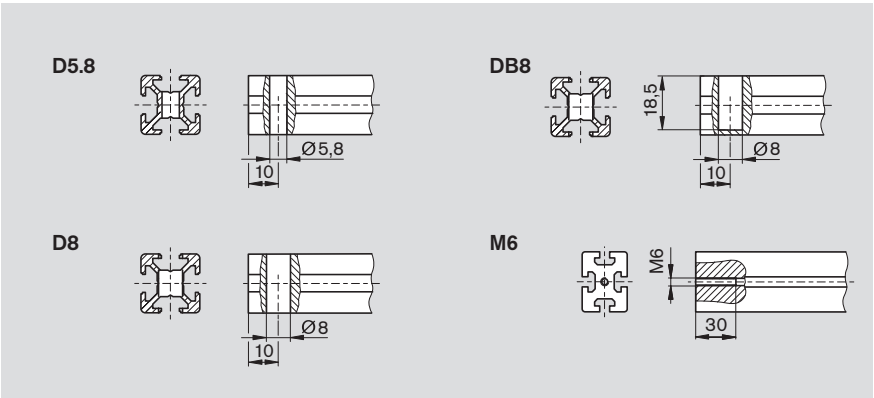




Central dimension information - groove, modular dimensions, central bore



Dimensions for standard profile finishes



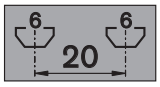
Minimum profile lengths (mm) for standard profile finishes on one or both sides

	–	M6	D5.8	D8/ DB8
–	50	50	50	50
M6	50	60	50	50
D5.8	50	50	50	50
D8/ DB8	50	50	50	50

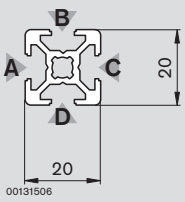
Reduced maximum profile lengths $L_{max\ i}$ for individual profile finishes

L_{max}	$L_{max\ i}$
6000 mm	5400 mm
5600 mm	4900 mm
3000 mm	2300 mm
2000 mm	1300 mm

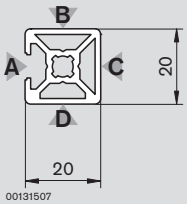
Strut profiles with 6 mm groove



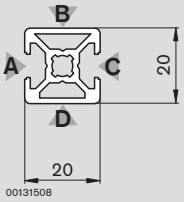
20x20



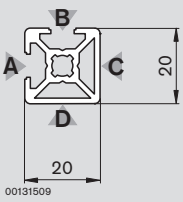
20x20 1N



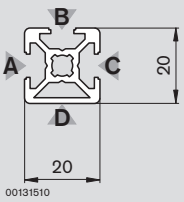
20x20 2N



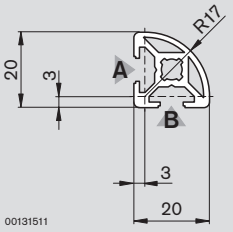
20x20 2NVS



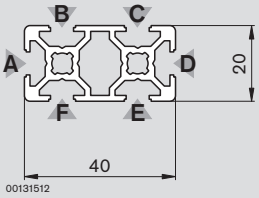
20x20 3N



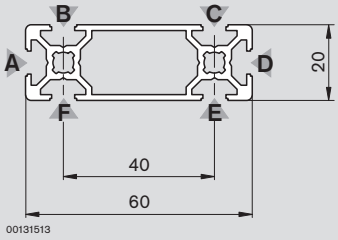
20x20 R



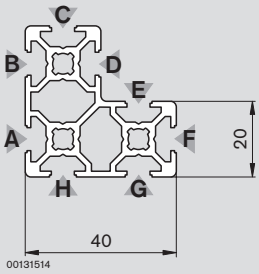
20x40



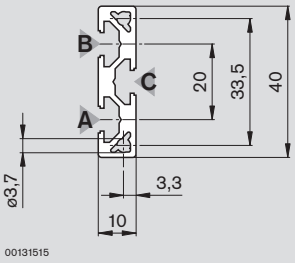
20x60



20x40x40



10x40



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
20x20	1	**3 842 993 694**	50 ≤ L ≤ 3000	**M6 / D5.8 / D8 / DB8**	20	**3 842 517 179**	3000
20x20 1N	1	**3 842 993 690**	50 ≤ L ≤ 3000	**M6 / D5.8 / D8 / DB8**	20	**3 842 536 475**	3000
20x20 2N	1	**3 842 993 691**	50 ≤ L ≤ 3000	**M6 / D5.8 / D8 / DB8**	20	**3 842 536 478**	3000
20x20 2NVS	1	**3 842 993 692**	50 ≤ L ≤ 3000	**M6 / D5.8 / D8 / DB8**	20	**3 842 519 658**	3000
20x20 3N	1	**3 842 993 693**	50 ≤ L ≤ 3000	**M6 / D5.8 / D8 / DB8**	20	**3 842 517 180**	3000
20x20 R [3)]	1	**3 842 993 695**	50 ≤ L ≤ 3000	**M6**	20	**3 842 517 183**	3000
20x40	1	**3 842 993 696**	50 ≤ L ≤ 3000	**M6 / D5.8 / D8 / DB8**	24	**3 842 537 816**	3000
20x60	1	**3 842 993 698**	50 ≤ L ≤ 3000	**M6 / D5.8** (B,C,E,F)*** / D8** (B,C,E,F)*** / DB8**	16	**3 842 537 819**	3000
20x40x40	1	**3 842 993 697**	50 ≤ L ≤ 3000	**M6 / D5.8 / D8 / DB8**	16	**3 842 537 818**	3000
10x40 [3)]	1	**3 842 993 683**	50 ≤ L ≤ 3000	**D5.8 / D8**	10	**3 842 526 817**	3000

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞16). In the case of overlapping, the larger value applies.

[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞16).

[3)] Individual profile finishes not possible.

Technical data

	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
20x20	0.7	0.7	0.7	0.7	1.6	0.4
20x20 1N	0.7	0.7	0.7	0.7	1.6	0.4
20x20 2N	0.7	0.7	0.7	0.7	1.6	0.4
20x20 2NVS	0.7	0.7	0.7	0.7	1.6	0.4
20x20 3N	0.7	0.7	0.7	0.7	1.6	0.4
20x20 R	0.6	0.6	0.5	0.5	1.6	0.4
20x40	4.6	1.2	2.5	1.4	2.9	0.8
20x60	14.2	1.7	4.7	1.7	3.5	0.9
20x40x40	6.0	6.0	2.6	2.6	4.1	1.1
10x40	3.2	0.2	-	-	2.1	0.6

☞16
☞Cover fold-out page

Strut profiles with 8 mm groove

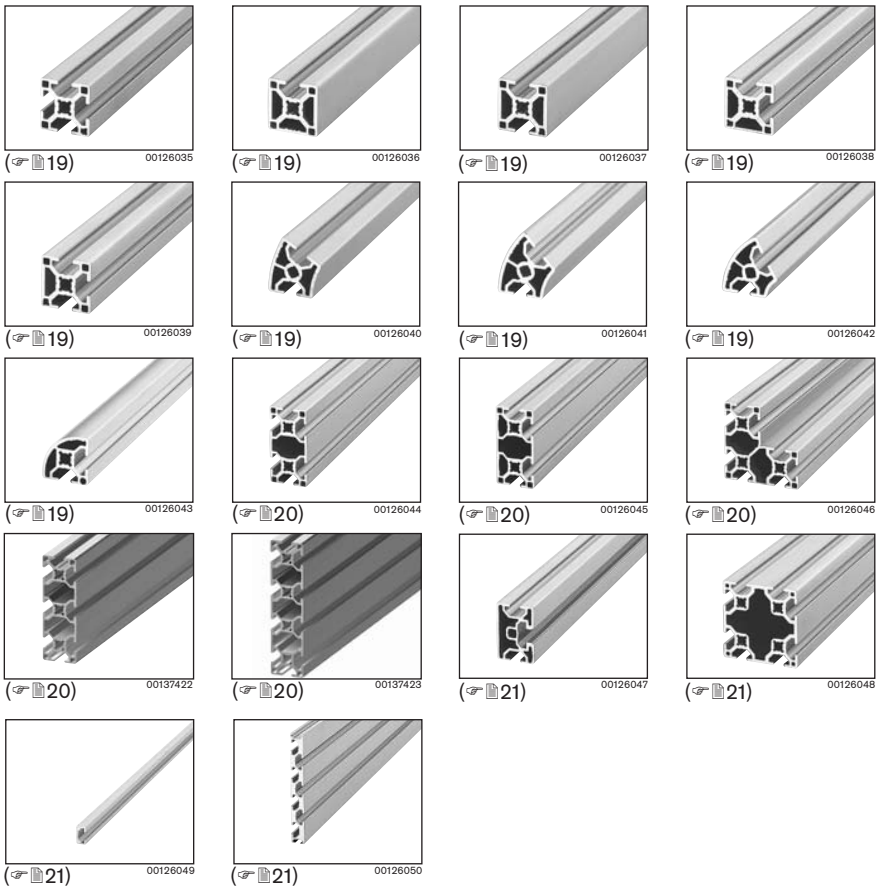
Strut profile with 8 mm groove for medium loads, such as material shuttles, light fixtures, frames and partition walls. Profile 30x60x60 is suitable for constructing show cases and shelves. Attractive covers and hoods can be designed with radius profiles.

Custom profiles
The material number, length, and any finishes must be indicated in the order. Possible standard profile finishes are indicated in the order table. Some standard profile finishes are limited to specific profile grooves. Individual finishes are always possible and only limited to the values listed on pages 8 to 11.

Minimum profile lengths for profiles with finishing may deviate from the values in the order table, see the table below. In the case of overlapping, the larger value applies.

Note the reduced maximum profile lengths for individual profile finishes! See table below.

Delivery units
Packing units (LE) with unfinished profiles of a specific length.



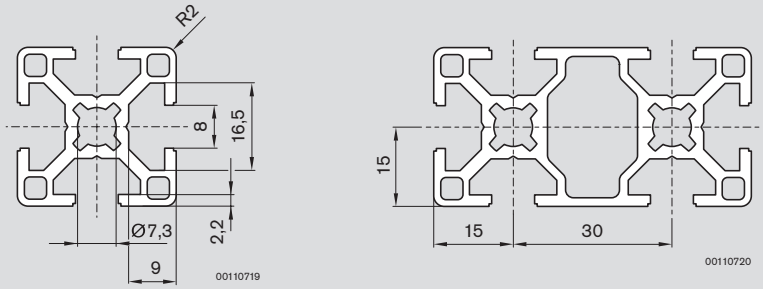
Minimum profile lengths (mm) for standard profile finishes on one or both sides

	–	M8	D7.8	D11/ DB11
–	50	50	50	50
M8	50	80	62	66
D7.8	50	62	50	50
D11/ DB11	50	66	50	52

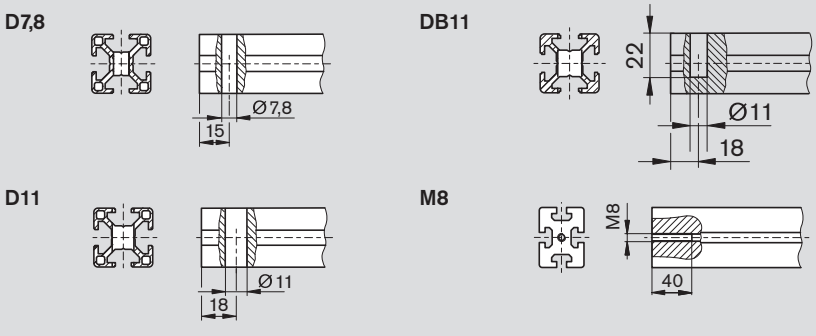
Reduced maximum profile lengths $L_{max\,i}$ for individual profile finishes

L_{max}	$L_{max\,i}$
6000 mm	5400 mm
5600 mm	4900 mm
3000 mm	2300 mm
2000 mm	1300 mm

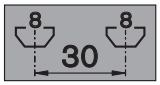
Central dimension information - groove, modular dimensions, central bore

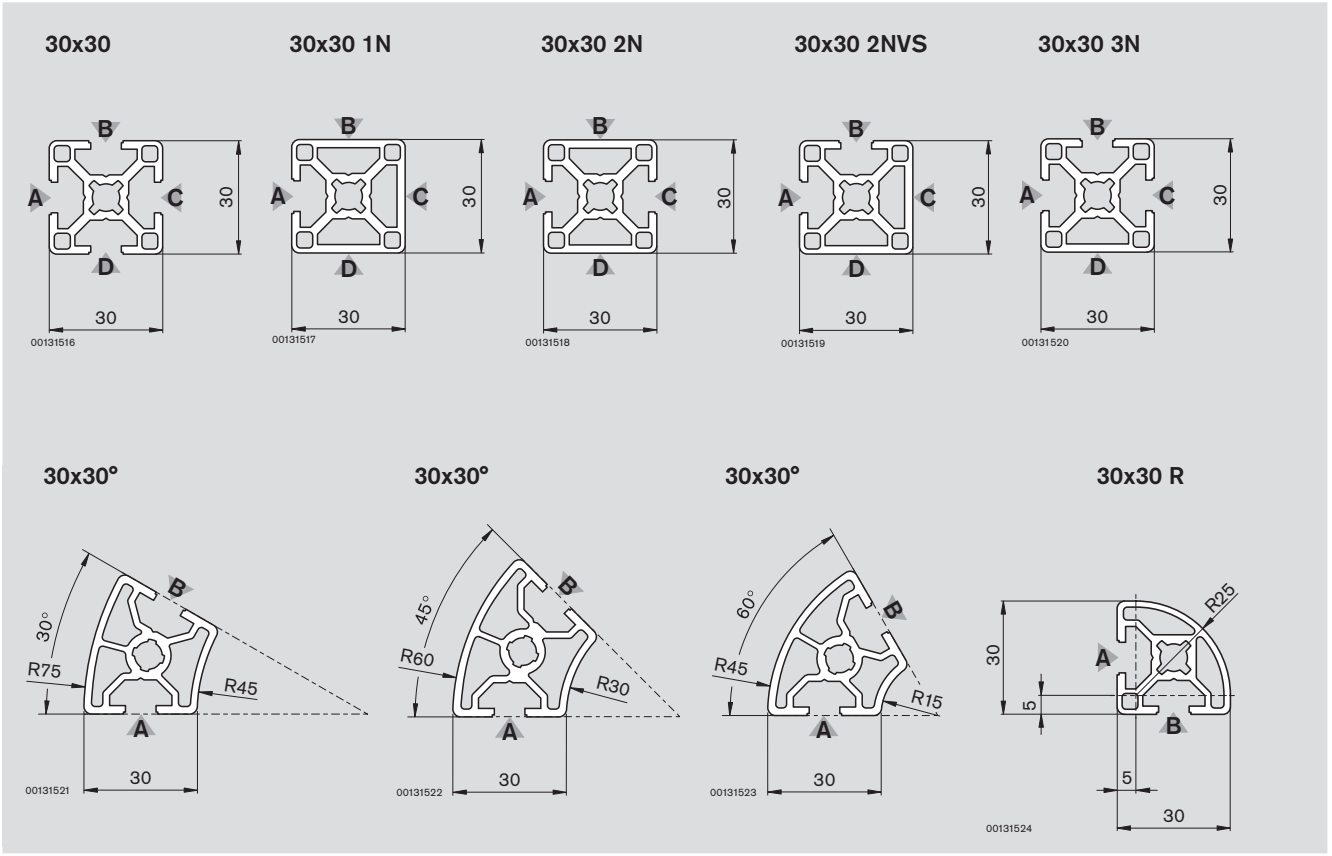


Dimensions for standard profile finishes



Strut profiles with 8 mm groove





	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
30x30	1	**3 842 993 703**	50 ≤ L ≤ 5600	**M8/D7.8/D11/DB11**	20	**3 842 509 178**	5600
30x30 1N	1	**3 842 993 704**	50 ≤ L ≤ 5600	**M8/D7.8/D11/DB11**	20	**3 842 506 948**	5600
30x30 2N	1	**3 842 993 705**	50 ≤ L ≤ 5600	**M8/D7.8/D11/DB11**	20	**3 842 506 950**	5600
30x30 2NVS	1	**3 842 993 706**	50 ≤ L ≤ 5600	**M8/D7.8/D11/DB11**	20	**3 842 506 949**	5600
30x30 3N	1	**3 842 993 707**	50 ≤ L ≤ 5600	**M8/D7.8/D11/DB11**	20	**3 842 506 951**	5600
30x30° [3)]	1	**3 842 993 708**	50 ≤ L ≤ 5600	**M8**	20	**3 842 524 031**	5600
30x45° [3)]	1	**3 842 993 711**	50 ≤ L ≤ 5600	**M8**	20	**3 842 524 034**	5600
30x60° [3)]	1	**3 842 993 714**	50 ≤ L ≤ 5600	**M8**	20	**3 842 524 037**	5600
30x30 R [3)]	1	**3 842 993 709**	50 ≤ L ≤ 5600	**M8/DB11**	20	**3 842 517 198**	5600

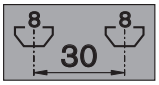
[1)] Note any deviating minimum lengths for the profile finishes, (☞18). In the case of overlapping, the larger value applies.
[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞18).
[3)] Individual profile finishes not possible.

Technical data

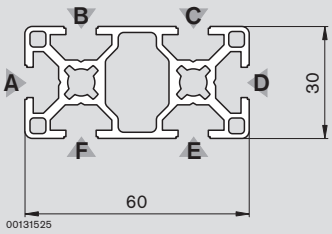
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
30x30	2.7	2.7	1.8	1.8	3.1	0.8
30x30 1N	2.7	2.7	1.8	1.8	3.1	0.8
30x30 2N	2.7	2.7	1.8	1.8	3.1	0.8
30x30 2NVS	2.7	2.7	1.8	1.8	3.1	0.8
30x30 3N	2.7	2.7	1.8	1.8	3.1	0.8
30x30°	3.5	3.6	2.0	1.9	3.6	1.0
30x30°	3.6	5.1	2.1	2.3	4.0	1.1
30x30°	3.0	4.1	1.7	1.9	3.6	1.0
30x30 R	2.3	2.3	1.4	1.4	2.9	0.8

☞18
☞Cover fold-out page

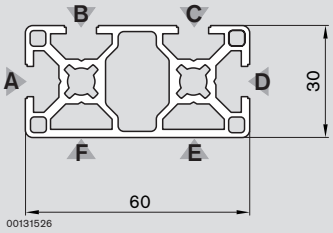
Strut profiles with 8 mm groove



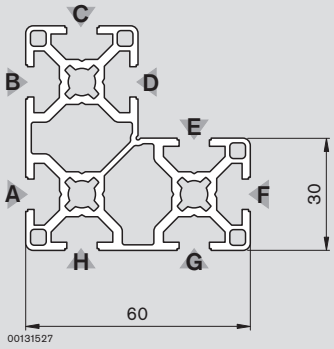
30x60



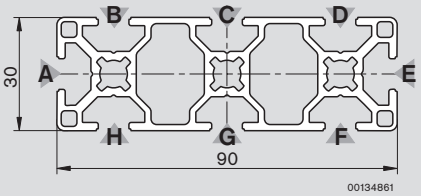
30x60 4N



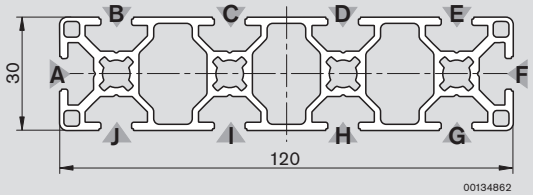
30x60x60



30x90



30x120



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
30x60	1	**3 842 993 712**	50 ≤ L ≤ 5600	**M8 / D7.8 / D11 / DB11**	10	**3 842 512 603**	5600
30x60 4N	1	**3 842 993 713**	50 ≤ L ≤ 6000	**M8 / D7.8 / D11 / DB11**	10	**3 842 536 472**	6070
30x60x60	1	**3 842 993 715**	50 ≤ L ≤ 5600	**M8 / D7.8 / D11 / DB11**	20	**3 842 524 049**	5600
30x90	1	**3 842 993 762**	50 ≤ L ≤ 6000	**M8 / D7.8** (B,C,D,F,G,H)* / **D11** (B,C,D,F,G,H)* / **DB11**	20	**3 842 541 937**	6070
30x120	1	**3 842 993 763**	50 ≤ L ≤ 6000	**M8 / D7.8** (B,C,D,E,G,H,I,J)* / **D11** (B,C,D,E,G,H,I,J)* / **DB11**	20	**3 842 541 939**	6070

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞18). In the case of overlapping, the larger value applies.

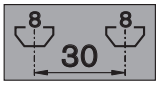
[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞18).

Technical data

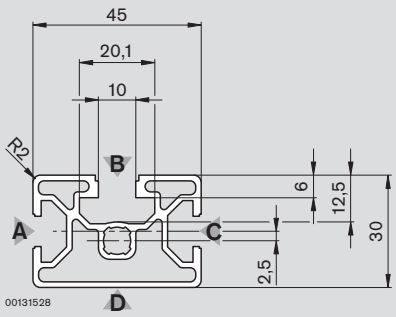
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
30x60	19.7	5.1	7.0	3.9	5.6	1.5
30x60 4N	19.7	5.1	7.0	3.9	5.6	1.5
30x60x60	26.1	26.1	7.5	7.5	8.2	2.2
30x90	60.6	7.3	13.4	4.9	8.0	2.1
30x120	136.3	9.6	22.7	6.4	9.9	2.7

☞18
☞Cover fold-out page

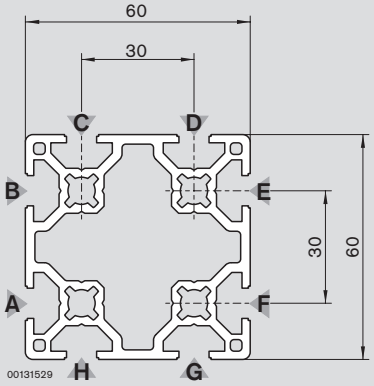
Strut profiles with 8 mm groove



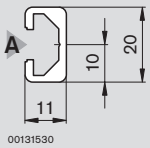
30x45



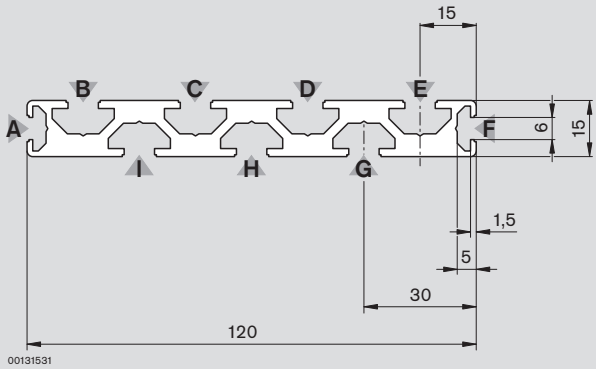
60x60 8N



11x20



15x120



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
30x45	1	**3 842 993 710**	50 ≤ L ≤ 5600	**M8 / D7.8** (A,C)* **/ D11** (A,C)* **/ DB11 / D9.8** (B)* **/ D17**(B)*	18	**3 842 511 704**	5600
60x60 8N	1	**3 842 993 669**	50 ≤ L ≤ 6000	**M8 / D7.8 / D11 / DB11**	20	**3 842 535 176**	6070
11x20 [3)]	1	**3 842 993 688**	50 ≤ L ≤ 2000	**D7.8 / D11**	10	**3 842 513 581**	2000
15x120	1	**3 842 993 684**	80 ≤ L ≤ 3000	**D7.8** (B,C,D,E,G,H,I)* **/ D11** (B,C,D,E,G,H,I)*	10	**3 842 537 821**	3000

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞18). In the case of overlapping, the larger value applies.

[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞18).

[3)] Individual profile finishes not possible.

Technical data

	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
30x45	8.1	3.9	3.6	2.5	3.9	1.1
60x60 8N	39.7	39.7	13.2	13.2	9.8	2.6
11x20	0.5	0.1	0.5	0.2	1.0	0.3
15x120	110.4	2.2	18.4	2.7	9.0	2.4

☞18
☞Cover fold-out page

Strut profiles with 10 mm groove

Strut profiles with 10 mm groove

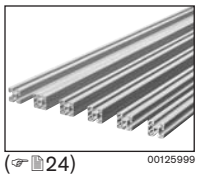
For applications with high loads, we recommend especially stable profiles with 10 mm grooves, e.g. for heavy work tables, fixtures, machine frames, transport shuttles, protective enclosures and handling systems. Thanks to their design characteristics, this groove enables connections with the highest strength.

Custom profiles
The material number, length, and any finishes must be indicated in the order. Possible standard profile finishes are indicated in the order table. Some standard profile finishes are limited to specific profile grooves. Individual finishes are always possible and only limited to the values listed on pages 8 to 11.

Minimum profile lengths for profiles with finishing may deviate from the values in the order table, see the table below. In the case of overlapping, the larger value applies.

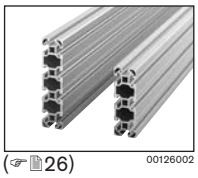
Note the reduced maximum profile lengths for individual profile finishes! See table below.

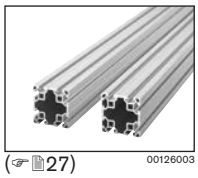
Delivery units
Packing units (LE) with unfinished profiles of a specific length.

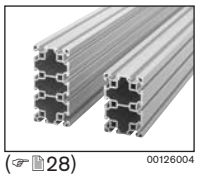

(☞ 24) 00125999

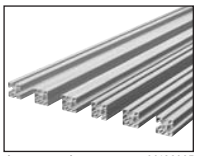

(☞ 24,25) 00126000


(☞ 25) 00126001

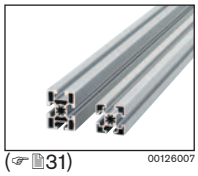

(☞ 26) 00126002

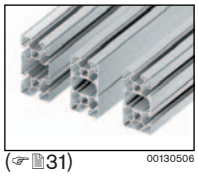

(☞ 27) 00126003

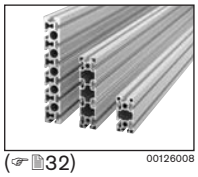

(☞ 28) 00126004


(☞ 29) 00126005

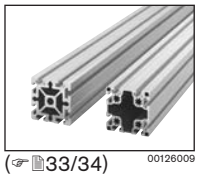

(☞ 30) 00126006

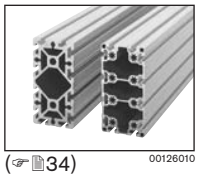

(☞ 31) 00126007

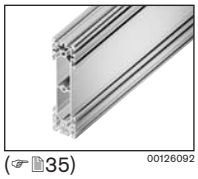

(☞ 31) 00130506

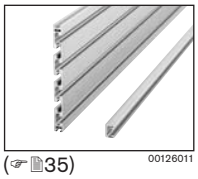

(☞ 32) 00126008

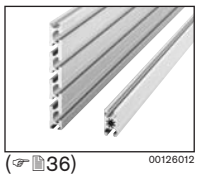

(☞ 33) 00126086

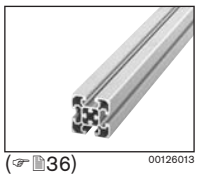

(☞ 33/34) 00126009


(☞ 34) 00126010

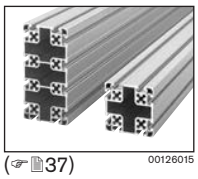

(☞ 35) 00126092


(☞ 35) 00126011


(☞ 36) 00126012


(☞ 36) 00126013


(☞ 36) 00126014


(☞ 37) 00126015


(☞ 38) 00126016

Minimum profile lengths (mm) for standard profile finishes on one or both sides

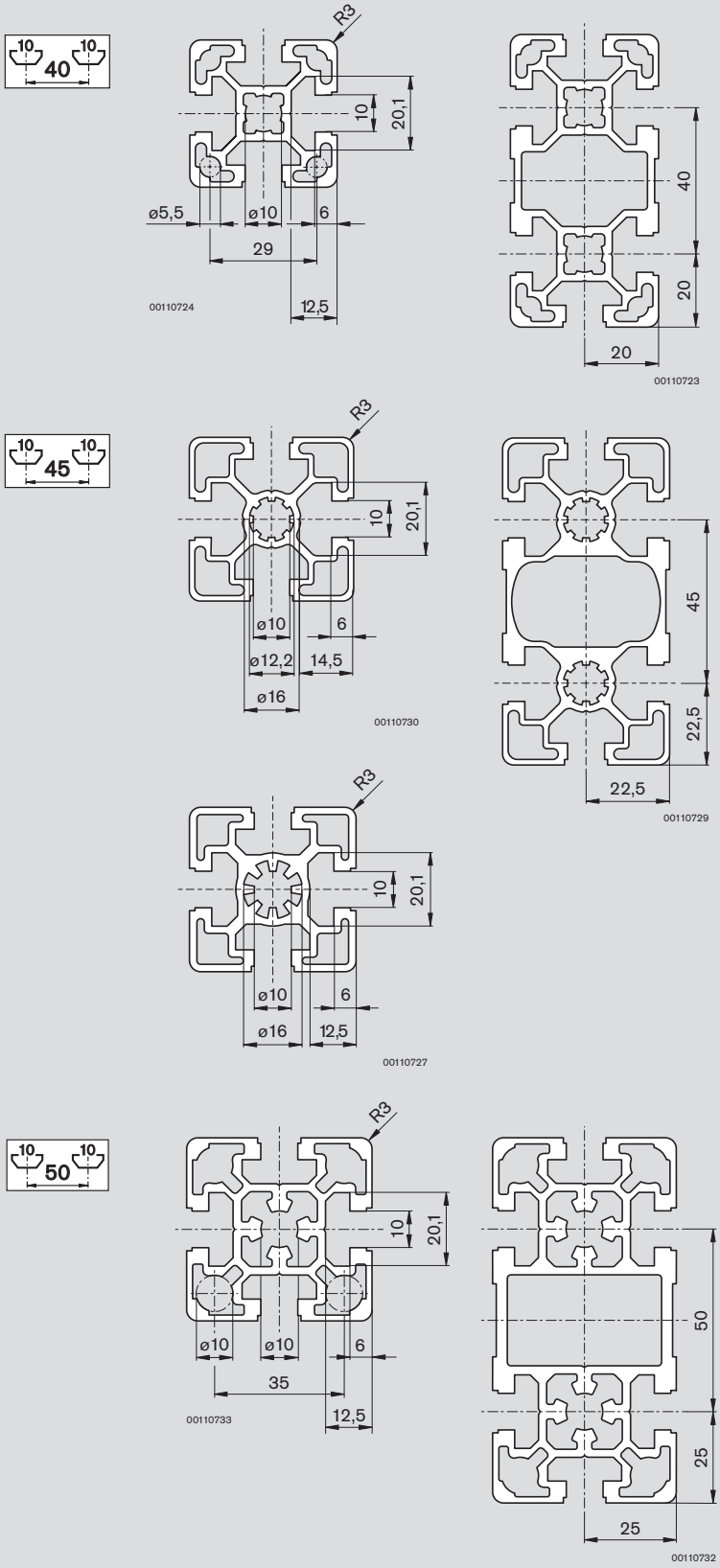
	–	M12	M16	D9.8	D17/ DB17	F1
–	50	55	115	50	50	53
M12	55	110	170	85	89	108
M16	115	170	230	145	149	168
D9.8	50	85	145	60	64	83
D17/ DB17	50	89	149	64	68	87
F1	53	108	168	83	87	106

Reduced maximum profile lengths $L_{max\ i}$ for individual profile finishes

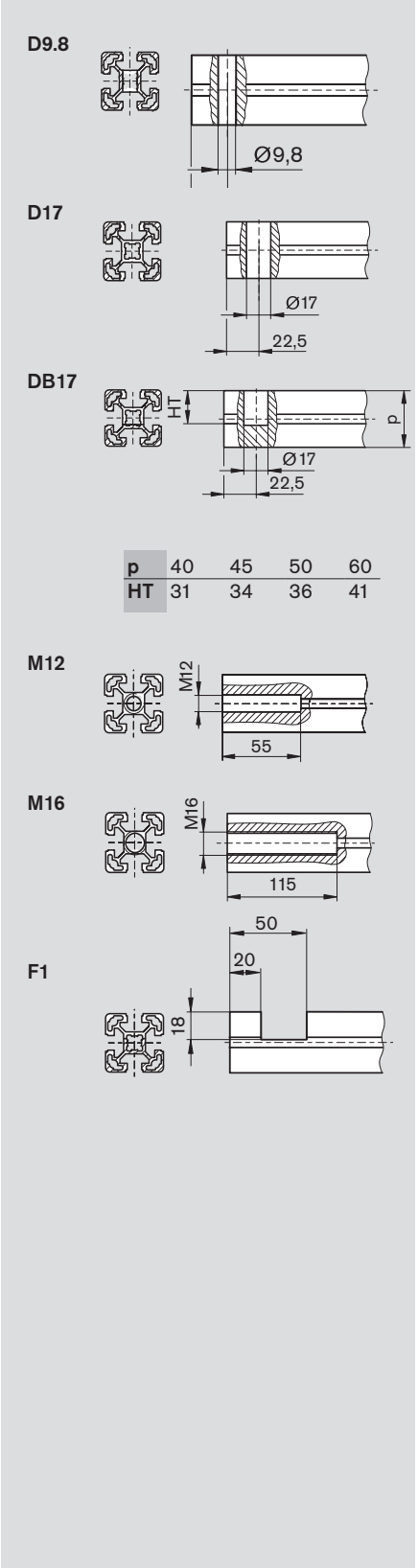
L_{max}	$L_{max\ i}$
6000 mm	5400 mm
5600 mm	4900 mm
3000 mm	2300 mm
2000 mm	1300 mm

Strut profiles with 10 mm groove

Central dimension information - groove, modular dimensions, central bore

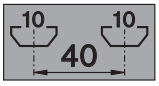


Dimensions for standard profile finishes

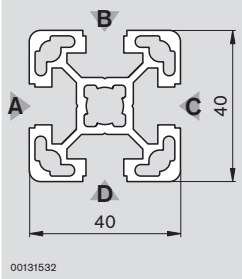


p	40	45	50	60
HT	31	34	36	41

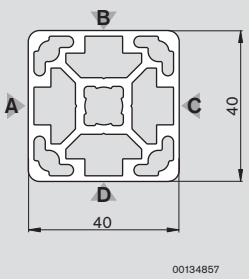
Strut profiles with 10 mm groove



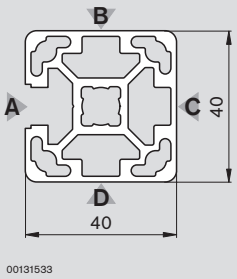
40x40L



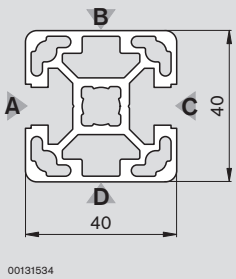
40x40L 0N



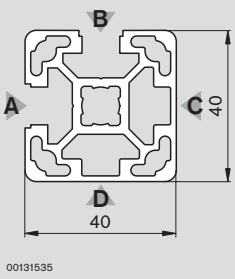
40x40L 1N



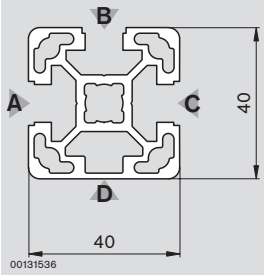
40x40L 2N



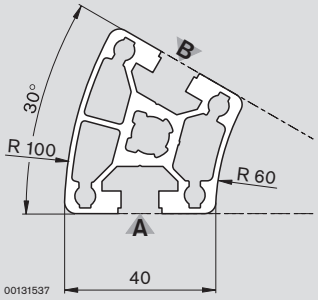
40x40L 2NVS



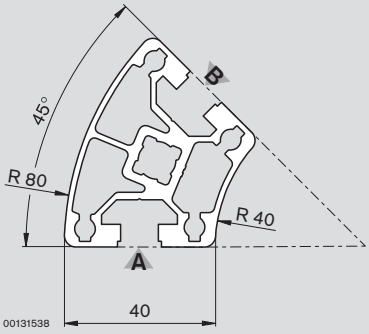
40x40L 3N



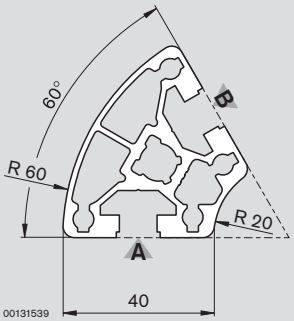
40x30°



40x45°



40x60°



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
40x40L	1	**3 842 993 724**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17 / F1 (A)***	20	**3 842 529 339**	6070
40x40L 0N	1	**3 842 993 760**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17**	20	**3 842 540 954**	6070
40x40L 1N	1	**3 842 993 719**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17**	20	**3 842 529 361**	6070
40x40L 2N	1	**3 842 993 720**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17**	20	**3 842 529 363**	6070
40x40L 2NVS	1	**3 842 993 721**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17**	20	**3 842 529 365**	6070
40x40L 3N	1	**3 842 993 722**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17**	20	**3 842 529 367**	6070
40x30° [3)]	1	**3 842 993 718**	50 ≤ L ≤ 6000	**M12**	12	**3 842 529 371**	6070
40x45° [3)]	1	**3 842 993 726**	50 ≤ L ≤ 6000	**M12**	12	**3 842 529 373**	6070
40x60° [3)]	1	**3 842 993 727**	50 ≤ L ≤ 6000	**M12**	12	**3 842 529 375**	6070

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞🗎22). In the case of overlapping, the larger value applies.

[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞🗎22).

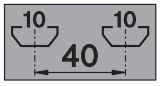
[3)] Individual profile finishes not possible.

Technical data

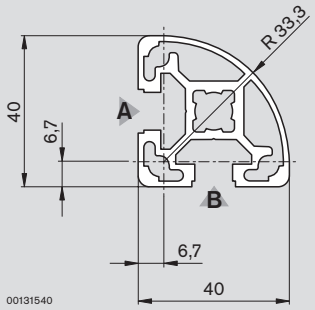
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
40x40L	9.0	9.0	4.5	4.5	5.6	1.5
40x40L 0N	9.0	9.0	4.5	4.5	5.6	1.5
40x40L 1N	9.0	9.0	4.5	4.5	5.6	1.5
40x40L 2N	9.0	9.0	4.5	4.5	5.6	1.5
40x40L 2NVS	9.0	9.0	4.5	4.5	5.6	1.5
40x40L 3N	9.0	9.0	4.5	4.5	5.6	1.5
40x30°	9.4	11.8	4.7	5.9	6.2	1.7
40x45°	9.9	16.6	4.9	8.3	6.8	1.8
40x60°	8.7	13.1	4.3	6.5	6.3	1.7

☞🗎22, 23
☞🗎Cover fold-out page

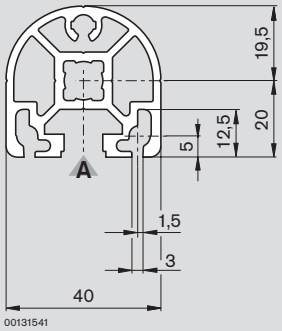
Strut profiles with 10 mm groove



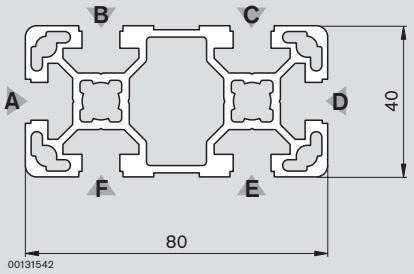
40x40L R



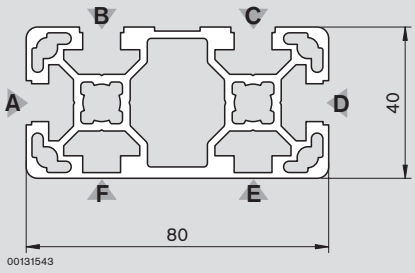
40x40 HR



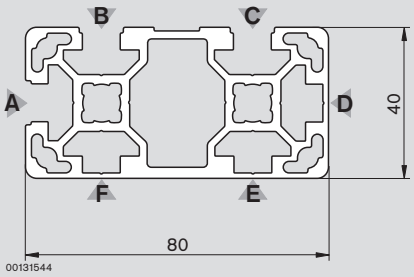
40x80L



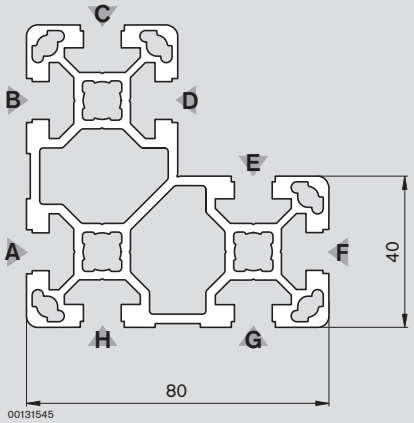
40x80L 4N



40x80L 3NVS



40x80x80L



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
40x40L R [3)]	1	**3 842 993 725**	50 ≤ L ≤ 6000	**M12/DB17** (A,B)*	20	**3 842 529 359**	6070
40x40 HR	1	**3 842 993 723**	50 ≤ L ≤ 6000	**M12/DB17**	20	**3 842 529 381**	6070
40x80L	1	**3 842 993 728**	50 ≤ L ≤ 6000	**M17/D17/D17/DB17/F1** (A,D)*	12	**3 842 529 341**	6070
40x80L 4N	1	**3 842 993 729**	50 ≤ L ≤ 6000	**M17/D17/D17/DB17/F1** (A,D)*	12	**3 842 536 484**	6070
40x80L 3NVS	1	**3 842 993 753**	50 ≤ L ≤ 6000	**M12/D9.8/D17/DB17**	12	**3 842 538 330**	6070
40x80x80L	1	**3 842 993 730**	50 ≤ L ≤ 6000	**M12/D9.8/D17/DB17**	8	**3 842 537 827**	6070

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞🗎22). In the case of overlapping, the larger value applies.

[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞🗎22).

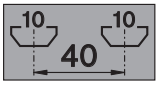
[3)] Individual profile finishes not possible.

Technical data

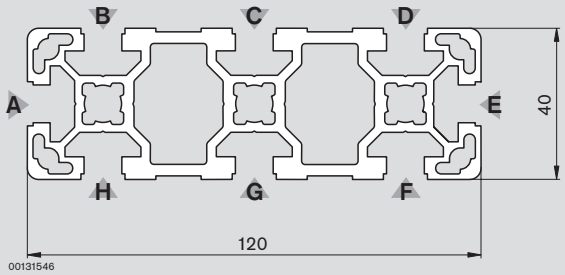
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
40x40L R	7.2	7.2	3.6	3.6	5.0	1.3
40x40 HR	8.1	7.6	4.0	3.6	5.5	1.5
40x80L	63.4	17.3	15.9	8.7	9.9	2.7
40x80L 4N	63.4	17.3	15.9	8.7	9.9	2.7
40x80L 3NVS	63.4	17.3	15.9	8.7	9.9	2.7
40x80x80L	96.6	96.6	24.1	24.1	15.4	4.1

☞🗎22, 23
☞🗎Cover fold-out page

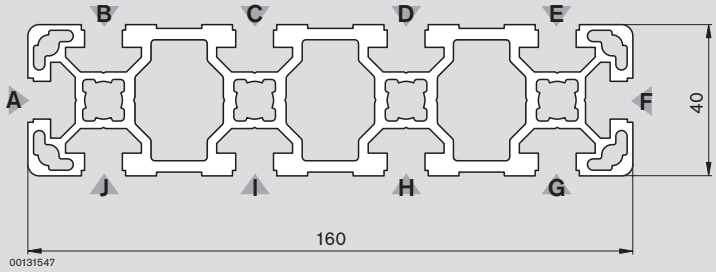
Strut profiles with 10 mm groove



40x120L



40x160L



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
40x120L	1	**3 842 993 716**	50 ≤ L ≤ 6000	**M12 / D9.8** (B,C,D,F,G,H)* / **D17** (B,C,D,F,G,H)* / **DB17 / F1** (A,E)*	8	**3 842 537 824**	6070
40x160L	1	**3 842 993 717**	80 ≤ L ≤ 6000	**M12 / D9.8** (B,C,D,E,G,H,I,J)* / **D17** (B,C,D,E,G,H,I,J)* / **DB17; F1** (A,F)*	6	**3 842 529 345**	6070

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞22). In the case of overlapping, the larger value applies.

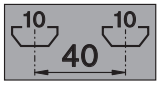
[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞22).

Technical data

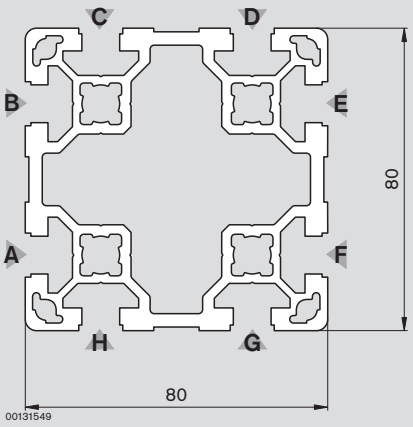
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
40x120L	203.2	27.8	33.9	13.9	15.5	4.2
40x160L	466.7	37.2	58.3	18.6	20.5	5.5

☞22, 23
☞Cover fold-out page

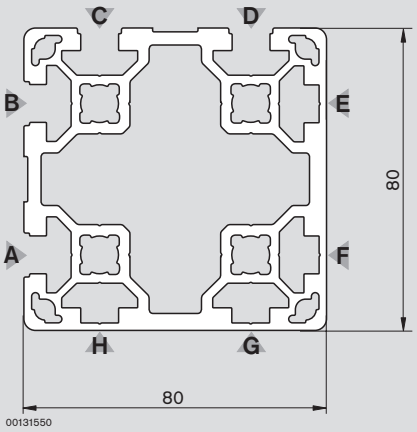
Strut profiles with 10 mm groove



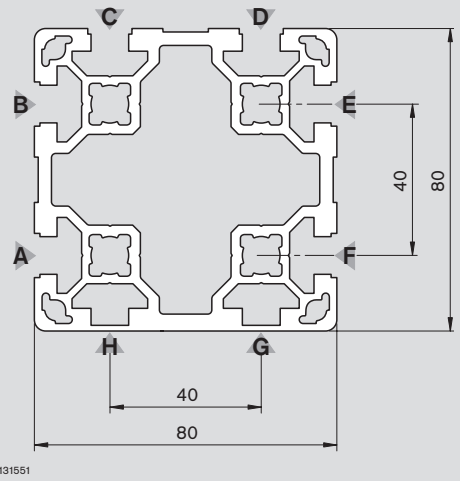
80x80L



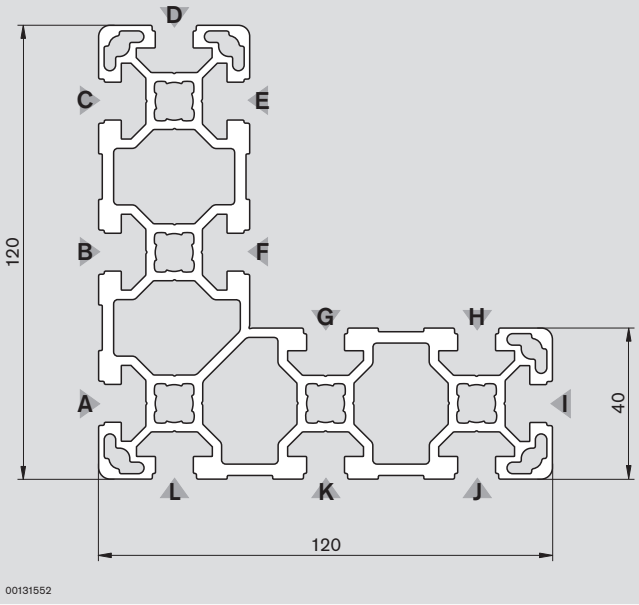
80x80L 4NVS



80x80L 6N



40x120x120L



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
80x80L	1	**3 842 993 674**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17 / F1**	6	**3 842 529 347**	6070
80x80L 4NVS	1	**3 842 993 758**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17**	6	**3 842 538 334**	6070
80x80L 6N	1	**3 842 993 675**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17 / F1** (A,C,F)*	6	**3 842 536 481**	6070
40x120x120L	1	**3 842 993 757**	50 ≤ L ≤ 6000	**M12 / D9.8** (B,C,J,K)* **/ D17 / DB17** (A,B,C,D,I,J,K,L)* **/ F1** (D,I)*	4	**3 842 538 287**	6070

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞🗎22). In the case of overlapping, the larger value applies.

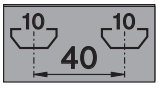
[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞🗎22).

Technical data

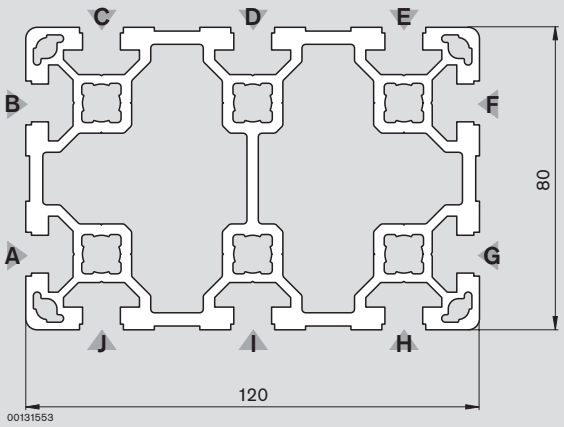
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
80x80L	132.1	132.1	33.0	33.0	18.2	4.9
80x80L 4NVS	132.1	132.1	33.0	33.0	18.2	4.9
80x80L 6N	132.1	132.1	33.0	33.0	18.2	4.9
40x120x120L	318.0	318.0	42.2	42.2	24.6	6.7

☞🗎22, 23
☞🗎Cover fold-out page

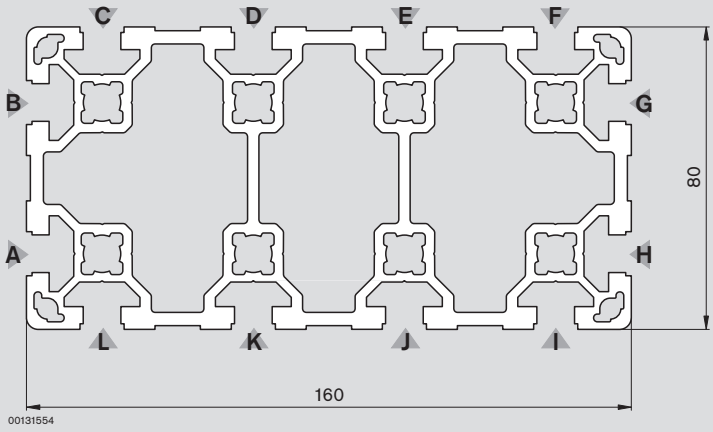
Strut profiles with 10 mm groove



80x120L



80x160L



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
80x120L	1	**3 842 993 672**	50 ≤ L ≤ 6000	**M12/D9.8** (C,D,E,H,I,J)*/**D17** (C,D,E,H,I,J)*/ **DB17/F1** (A,F)*	4	**3 842 537 828**	6070
80x160L	1	**3 842 993 673**	80 ≤ L ≤ 6000	**M12/D9.8** (C,D,E,F,I,J,K,L)*/ **D17** (C,D,E,F,I,J,K,L)*/**DB17/F1** (A,G)*	3	**3 842 529 349**	6070

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞22). In the case of overlapping, the larger value applies.

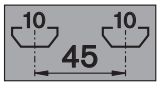
[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞22).

Technical data

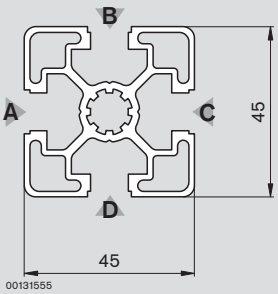
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
80x120L	389.3	192.8	64.8	48.2	25.5	6.9
80x160L	850.8	253.4	106.4	63.4	32.9	8.9

☞22, 23
☞Cover fold-out page

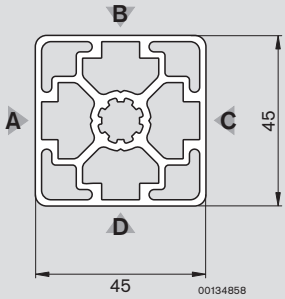
Strut profiles with 10 mm groove



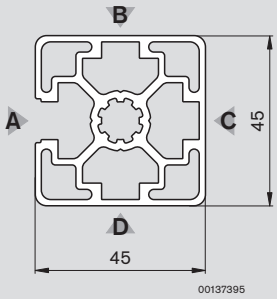
45x45L



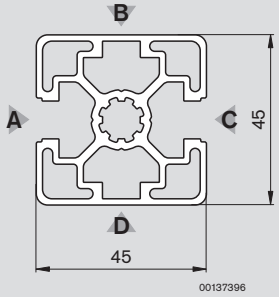
45x45L 0N



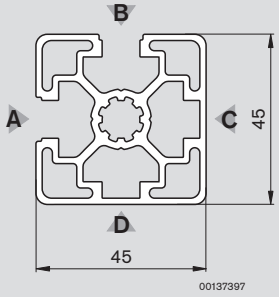
45x45L 1N



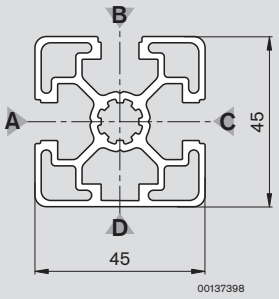
45x45L 2N



45x45L 2NVS



45x45L 3N



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
45x45L	1	**3 842 993 737**	50 ≤ L ≤ 5600	**M12 / D9.8 / D17 / DB17 / F1 (A)***	20	**3 842 511 702**	5600
45x45L 0N	1	**3 842 993 761**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17**	20	**3 842 540 955**	6070
45x45L 1N	1	**3 842 993 738**	50 ≤ L ≤ 5600	**M12 / D9.8 / D17 / DB17**	20	**3 842 506 956**	5600
45x45L 2N	1	**3 842 993 739**	50 ≤ L ≤ 5600	**M12 / D9.8 / D17 / DB17**	20	**3 842 506 958**	5600
45x45L 2NVS	1	**3 842 993 740**	50 ≤ L ≤ 5600	**M12 / D9.8 / D17 / DB17**	20	**3 842 506 957**	5600
45x45L 3N	1	**3 842 993 741**	50 ≤ L ≤ 5600	**M12 / D9.8 / D17 / DB17**	20	**3 842 506 959**	5600

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞🗎22). In the case of overlapping, the larger value applies.

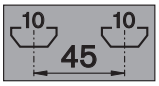
[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞🗎22).

Technical data

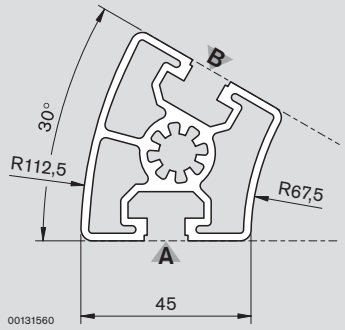
	I_x (cm⁴)	I_y (cm⁴)	W_x (cm³)	W_y (cm³)	A (cm²)	m (kg/m)
45x45L	11.0	11.0	4.8	4.8	5.7	1.5
45x45L 0N	11.0	11.0	4.8	4.8	5.7	1.5
45x45L 1N	11.0	11.0	4.8	4.8	5.7	1.5
45x45L 2N	11.0	11.0	4.8	4.8	5.7	1.5
45x45L 2NVS	11.0	11.0	4.8	4.8	5.7	1.5
45x45L 3N	11.0	11.0	4.8	4.8	5.7	1.5

☞🗎22, 23
☞🗎Cover fold-out page

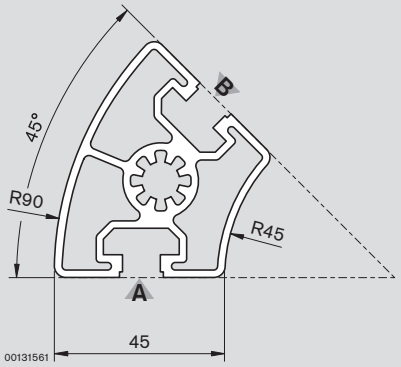
Strut profiles with 10 mm groove



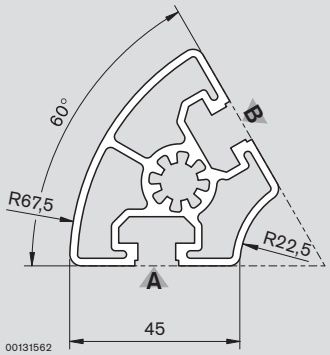
45x45°



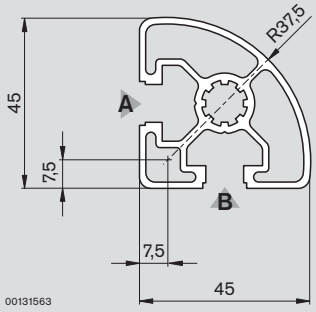
45x45°



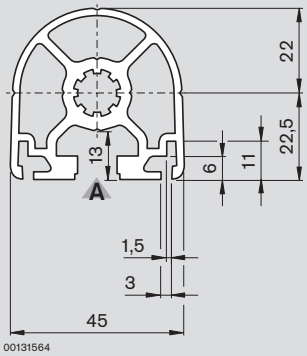
45x45°



45x45L R



45x45 HR



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
45x30° [3)]	1	**3 842 993 733**	50 ≤ L ≤ 5600	**M12**	20	**3 842 524 040**	5600
45x45° [3)]	1	**3 842 993 735**	50 ≤ L ≤ 5600	**M12**	20	**3 842 524 043**	5600
45x60° [3)]	1	**3 842 993 744**	50 ≤ L ≤ 5600	**M12**	20	**3 842 524 046**	5600
45x45L R [3)]	1	**3 842 993 742**	50 ≤ L ≤ 5600	**M12/DB17**	20	**3 842 517 200**	5600
45x45 HR	1	**3 842 993 736**	50 ≤ L ≤ 5600	**M12/DB17**	20	**3 842 525 505**	5600

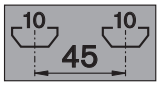
[1)] Note any deviating minimum lengths for the profile finishes, (☞🗎22). In the case of overlapping, the larger value applies.
[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞🗎22).
[3)] Individual profile finishes not possible.

Technical data

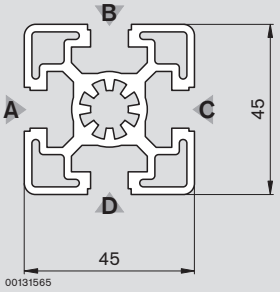
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
45x30°	12.7	15.2	5.0	5.3	6.9	1.8
45x45°	13.4	21.4	5.2	6.4	7.6	2.0
45x60°	11.4	17.0	4.4	5.2	6.8	1.8
45x45L R	8.5	8.5	5.0	5.0	4.9	1.3
45x45 HR	11.0	10.7	4.4	4,7	6.6	1.8

☞🗎22, 23
☞🗎Cover fold-out page

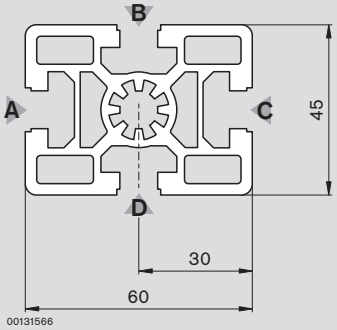
Strut profiles with 10 mm groove



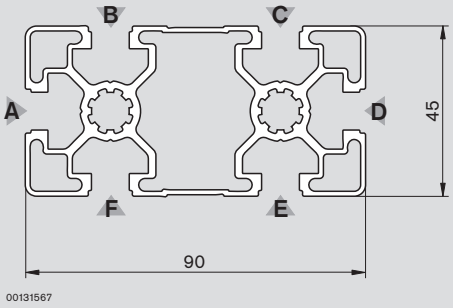
45x45



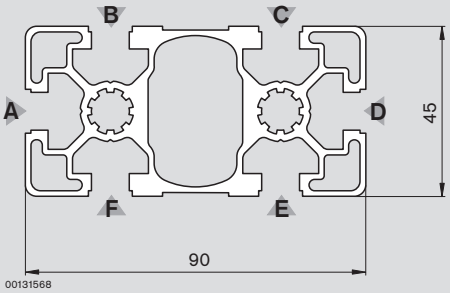
45x60



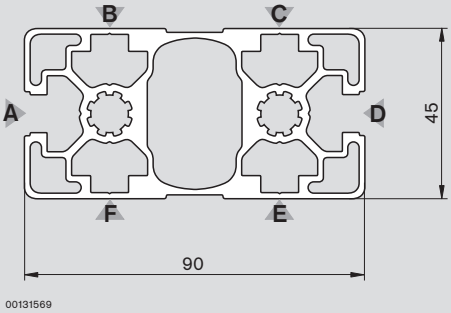
45x90SL



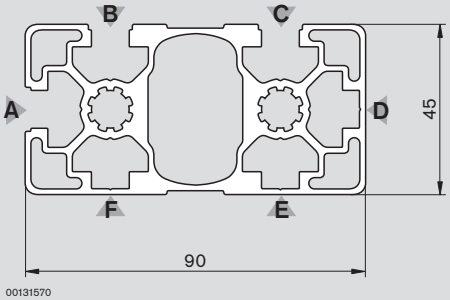
45x90L



45x90L 2N



45x90L 3NVS



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
45x45	1	**3 842 993 734**	50 ≤ L ≤ 5600	**M12 / M16 / D9.8 / D17 / DB17**	20	**3 842 509 175**	5600
45x60	1	**3 842 993 743**	50 ≤ L ≤ 5600	**M12 / M16 / D9.8 / D17 / DB17 / F1** (A,C)*	20	**3 842 509 184**	5600
45x90SL[3)]	1	**3 842 993 759**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17**	12	**3 842 537 102**	6070
45x90L	1	**3 842 993 662**	50 ≤ L ≤ 5600	**M12 / D9.8 / D17 / DB17 / F1** (A,D)*	12	**3 842 511 782**	5600
45x90L 2N	1	**3 842 993 751**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17**	12	**3 842 538 299**	6070
45x90L 3NVS	1	**3 842 993 752**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17**	12	**3 842 538 298**	6070

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞🗎22). In the case of overlapping, the larger value applies.

[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞🗎22).

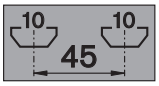
[3)] Individual cross milling (MT, MTS) and lengthwise milling (MI, MIS) not possible.

Technical data

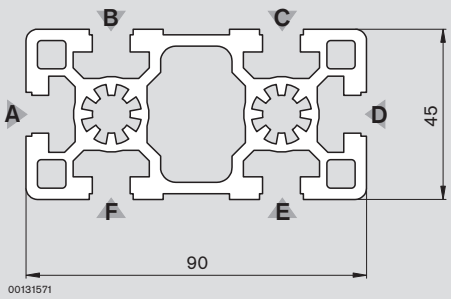
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
45x45	14.0	14.0	6.1	6.1	7.5	2.0
45x60	37.2	22.7	12.4	10.1	11.0	3.0
45x90SL	73.4	18.1	16.3	8.0	9.0	2.4
45x90L	81.9	23.6	18.2	10.5	11.2	3.1
45x90L 2N	81.9	23.6	18.2	10.5	11.2	3.1
45x90L 3NVS	81.9	23.6	18.2	10.5	11.2	3.1

☞🗎22, 23
☞🗎Cover fold-out page

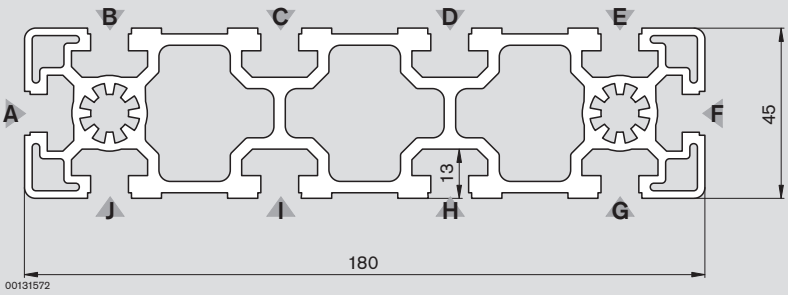
Strut profiles with 10 mm groove



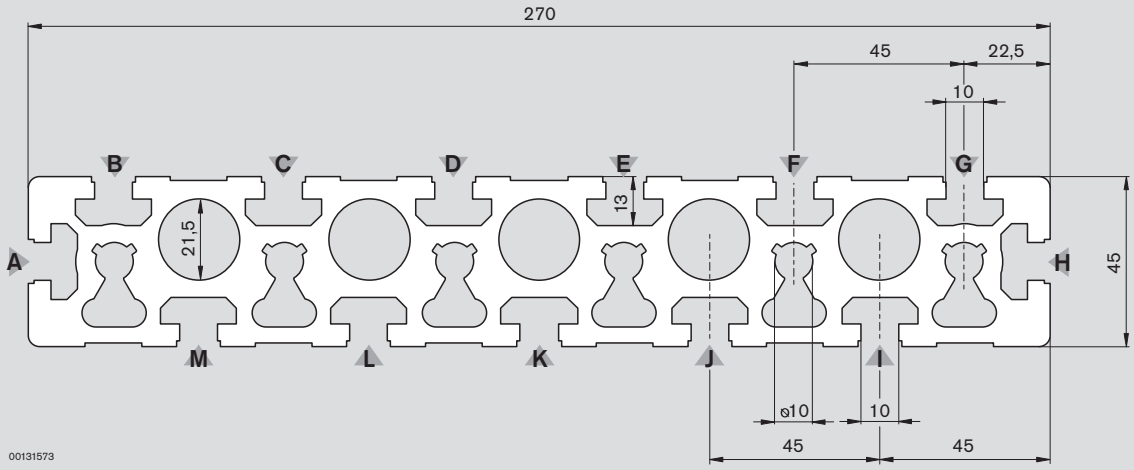
45x90



45x180



45x270



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
45x90	1	**3 842 993 661**	50 ≤ L ≤ 5600	**M12/M16/D9.8/D17/DB17/F1** (A,D)*	12	**3 842 509 186**	5600
45x180	1	**3 842 993 731**	80 ≤ L ≤ 5600	**M12/M16/D9.8** (B,C,D,E,G,H,I,J)*/ **D17** (B,C,D,E,G,H,I,J)*/**DB17/F1** (A,F)*	6	**3 842 509 187**	5600
45x270	1	**3 842 993 732**	80 ≤ L ≤ 5600	**M12/D9.8** (B,C,D,E,F,G,I,J,K,L,M)*/ **D17** (B,C,D,E,F,G,I,J,K,L,M)*/**DB17; F1** (A,H)*	2	**3 842 520 025**	5600

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞22). In the case of overlapping, the larger value applies.

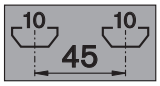
[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞22).

Technical data

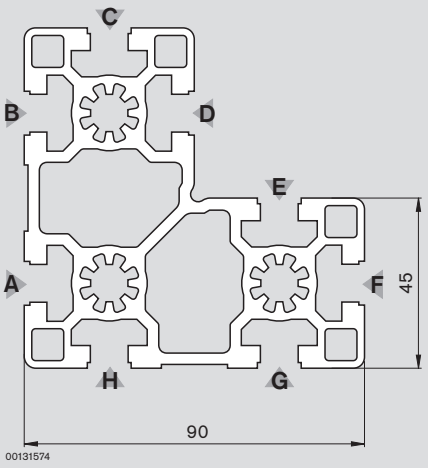
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
45x90	125.0	32.8	27.7	14.6	15.6	4.2
45x180	766.7	57.3	85.1	25.4	25.5	6.9
45x270	3962.0	118.0	300.2	61.5	61.8	16.7

☞22, 23
☞Cover fold-out page

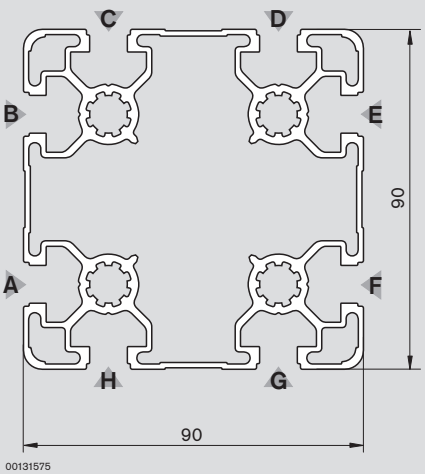
Strut profiles with 10 mm groove



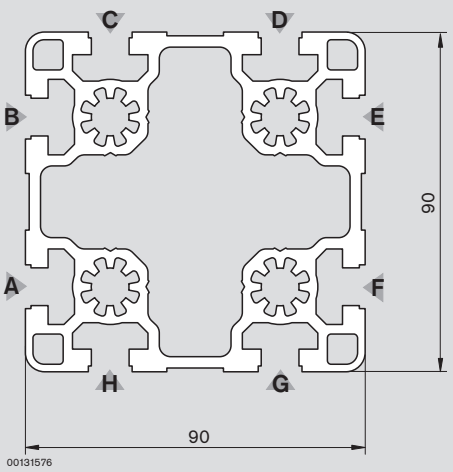
45x90x90L



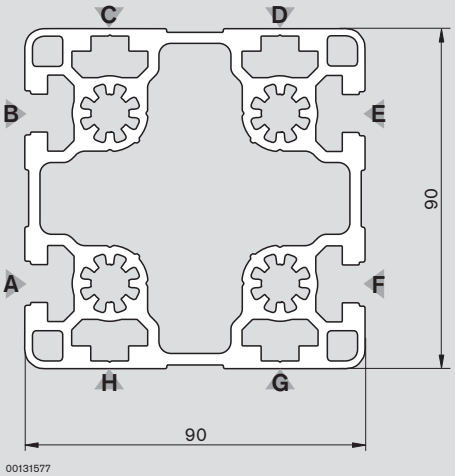
90x90SL



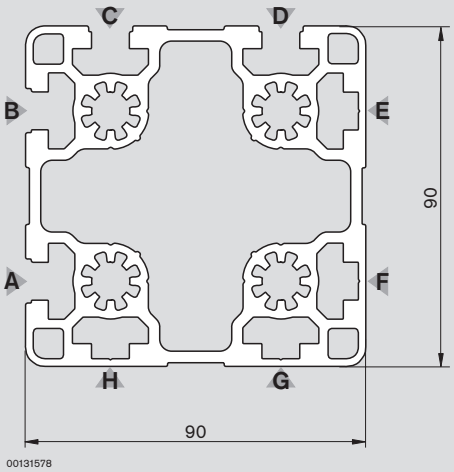
90x90L



90x90L 4N



90x90L 4NVS



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
45x90x90L	1	**3 842 993 682**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17** (A,B,C,F,G,H)*	8	**3 842 537 823**	6070
90x90SL[3)]	1	**3 842 993 681**	50 ≤ L ≤ 6000	**M12 / D9.8 / D17 / DB17**	6	**3 842 537 100**	6070
90x90L	1	**3 842 993 680**	50 ≤ L ≤ 5600	**M12 / D9.8 / D17 / DB17**	6	**3 842 509 658**	5600
90x90L 4N	1	**3 842 993 755**	50 ≤ L ≤ 5600	**M12 / D9.8 / D17 / DB17**	6	**3 842 538 297**	6070
90x90L 4NVS	1	**3 842 993 756**	50 ≤ L ≤ 5600	**M12 / D9.8 / D17 / DB17**	6	**3 842 538 296**	6070

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞🗎22). In the case of overlapping, the larger value applies.

[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞🗎22).

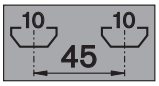
[3)] Individual cross milling (MT, MTS) and lengthwise milling (MI, MIS) not possible.

Technical data

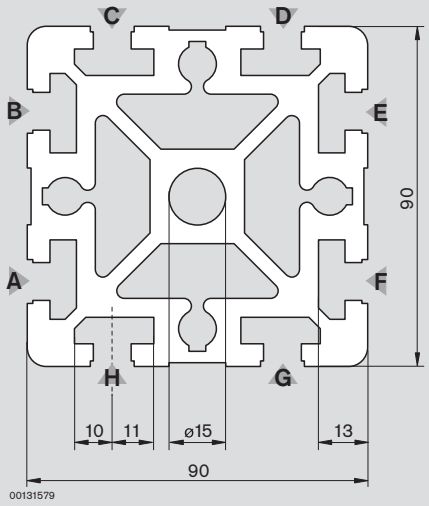
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
45x90x90L	152.1	152.1	29.1	29.1	21.0	5.7
90x90SL	129.0	129.0	28.6	28.6	13.9	3.8
90x90L	210.0	210.0	46.4	46.4	23.6	6.3
90x90L 4N	210.0	210.0	46.4	46.4	23.6	6.3
90x90L 4NVS	210.0	210.0	46.4	46.4	23.6	6.3

☞🗎22, 23
☞🗎Cover fold-out page

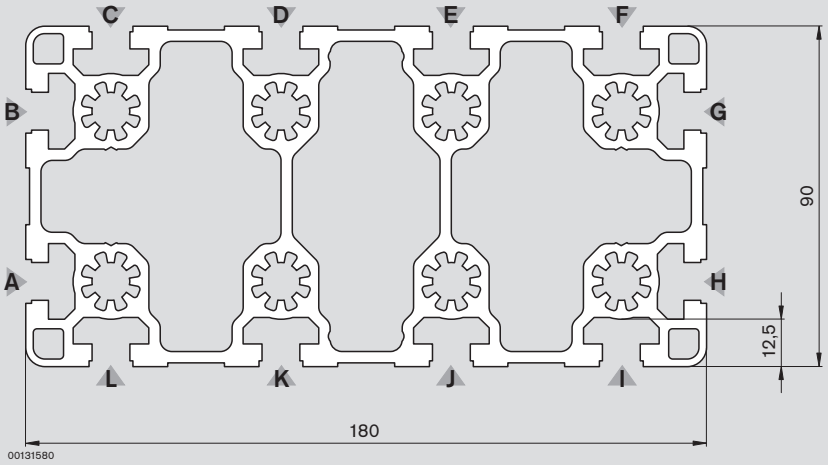
Strut profiles with 10 mm groove



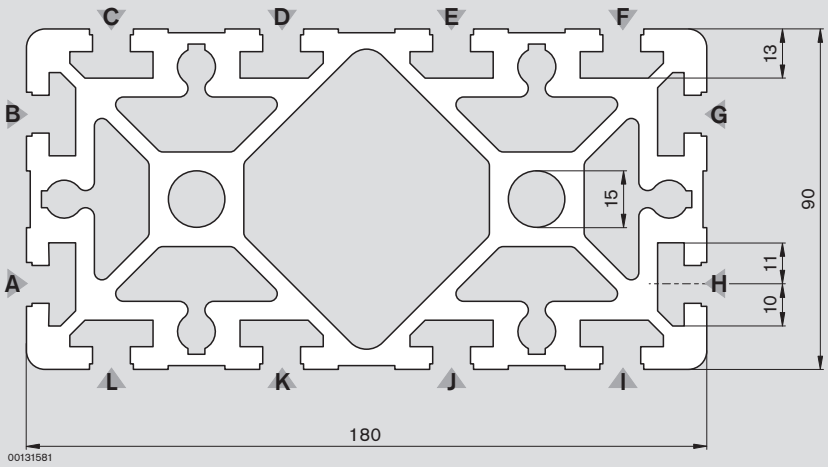
90x90



90x180L



90x180



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
90x90	1	**3 842 993 679**	50 ≤ L ≤ 5600	**M16/D9.8/D17/DB17/F1**	6	**3 842 509 189**	5600
90x180L	1	**3 842 993 677**	80 ≤ L ≤ 5600	**M17/D17** (C,D,E,F,I,J,K,L)*/ **D17** (C,D,E,F,I,J,K,L)*/**DB17/F1** (A,G)*	3	**3 842 516 015**	5600
90x180	1	**3 842 993 676**	80 ≤ L ≤ 5600	**M17/D17** (C,D,E,F,I,J,K,L)*/ **D17** (C,D,E,F,I,J,K,L)*/**DB17/F1** (A,G)*	3	**3 842 509 188**	5600

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞🗎22). In the case of overlapping, the larger value applies.

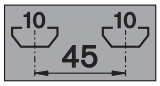
[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞🗎22).

Technical data

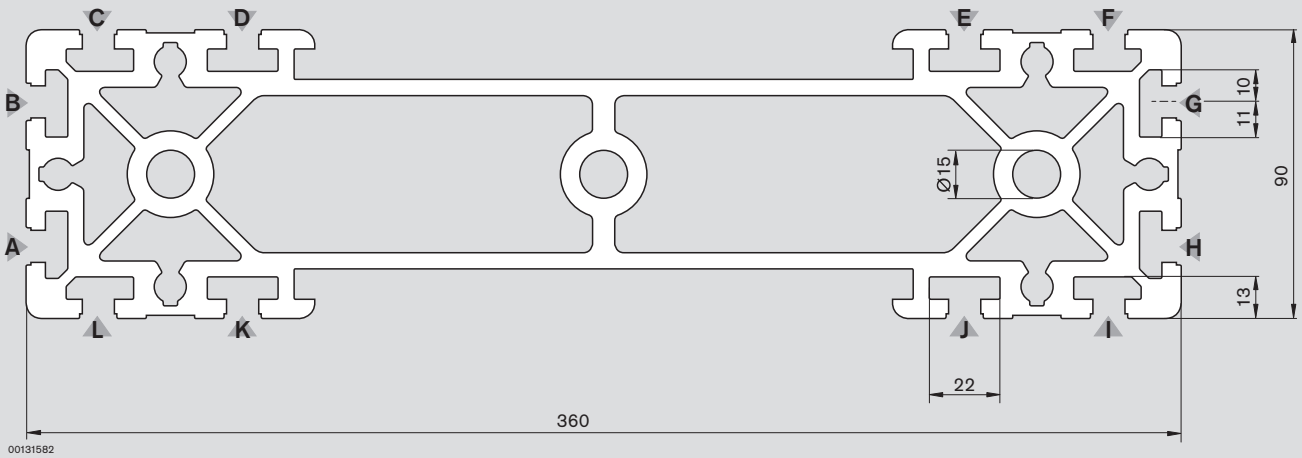
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
90x90	299.8	299.8	67.0	67.0	39.5	10.5
90x180L	1380.0	401.0	153.3	89.1	42.9	11.6
90x180	2138.3	544.3	237.6	121.0	63.6	17.2

☞🗎22, 23
☞🗎Cover fold-out page

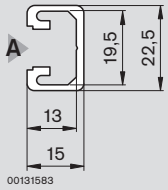
Strut profiles with 10 mm groove



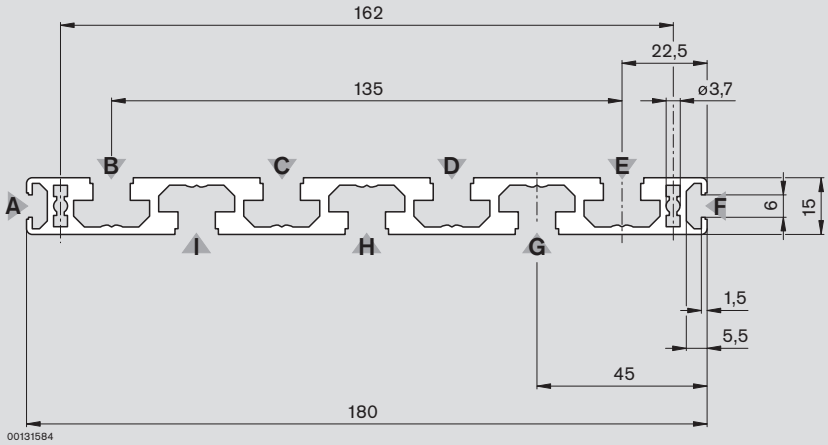
90x360



15x22.5



15x180



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
90x360	1	**3 842 993 678**	80 ≤ L ≤ 6000	**M17/D17** (C,D,E,F,I,J,K,L)*/ **D17** (C,D,E,F,I,J,K,L)*/**DB17/F1** (A,G)*			
15x22.5 [3)]	1	**3 842 993 689**	50 ≤ L ≤ 2000	**D9.8/D17**	10	**3 842 513 576**	2000
15x180	1	**3 842 993 686**	80 ≤ L ≤ 5600	**D9.8** (B,C,D,E,G,H,I)*/**D17** (B,C,D,E,G,H,I)*	6	**3 842 526 821**	5600

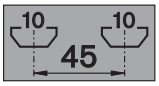
* Standard profile finishes possible at the indicated grooves.
[1)] Note any deviating minimum lengths for the profile finishes, (☞🗎22). In the case of overlapping, the larger value applies.
[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞🗎22).
[3)] Individual profile finishes not possible.

Technical data

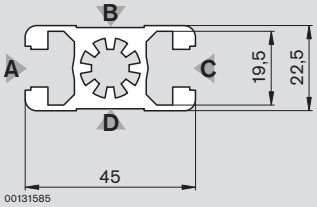
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
90x360	14065.0	710.0	781.4	157.7	90.2	24.4
15x22.5	0.8	0.3	0.7	0.4	1.2	0.3
15x180	303.5	3.1	-	-	11.6	3.1

☞🗎22, 23
☞🗎Cover fold-out page

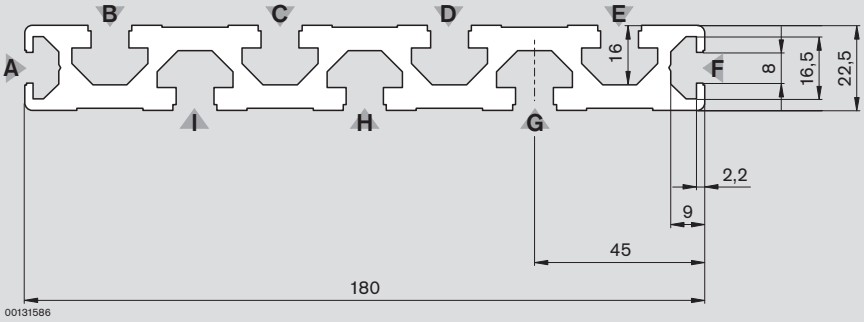
Strut profiles with 10 mm groove



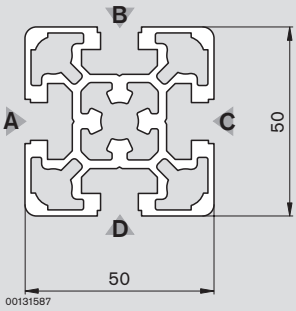
22.5x45



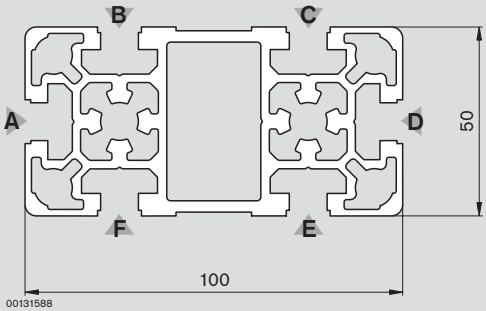
22.5x180

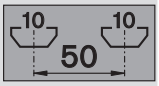


50x50L

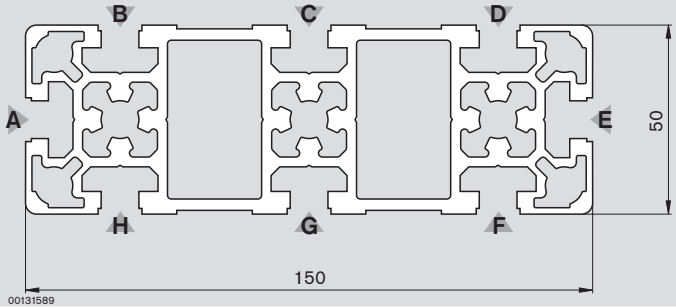


50x100L





50x150L



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
22.5x45	1	**3 842 993 700**	50 ≤ L ≤ 6000	**M12/D9.8** (A,C)*/**D17/DB17** (A,C)*	24	**3 842 537 812**	6070
22.5x180	1	**3 842 993 699**	80 ≤ L ≤ 5600	**D9.8** (B,C,D,E,G,H,I)*/**D17** (B,C,D,E,G,H,I)*	6	**3 842 509 179**	5600
50x50L	1	**3 842 993 665**	50 ≤ L ≤ 6000	**M12/M16/D9.8/D17/DB17**	20	**3 842 529 351**	6070
50x100L	1	**3 842 993 663**	50 ≤ L ≤ 6000	**M12/M16/D9.8/D17/DB17/F1** (A,D)*	10	**3 842 537 825**	6070
50x150L	1	**3 842 993 664**	80 ≤ L ≤ 6000	**M12/M16/D9.8** (B,C,D,F,G,H)*/ **D17** (B,C,D,F,G,H)*/**DB17/F1** (A,E)*	4	**3 842 537 826**	6070

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞22). In the case of overlapping, the larger value applies.

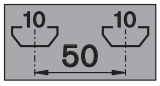
[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞22).

Technical data

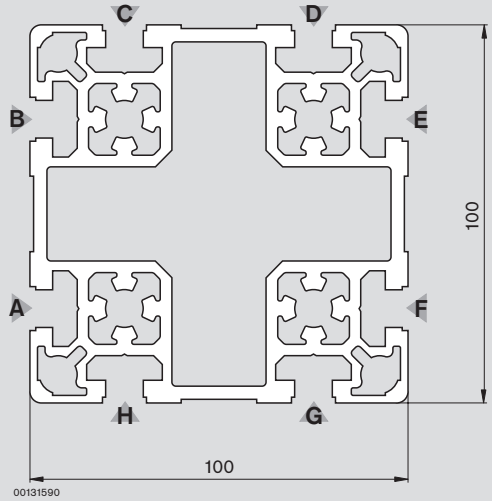
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
22.5x45	7.1	2.9	3.6	2.6	4.6	1.3
22.5x180	581.0	11.8	66.8	14.7	21.6	5.8
50x50L	21.2	21.2	8.5	8.5	9.3	2.5
50x100L	162.8	42.6	32.6	17.0	17.2	4.6
50x150L	540.0	64.2	72.0	25.7	25.7	6.9

☞22, 23
☞Cover fold-out page

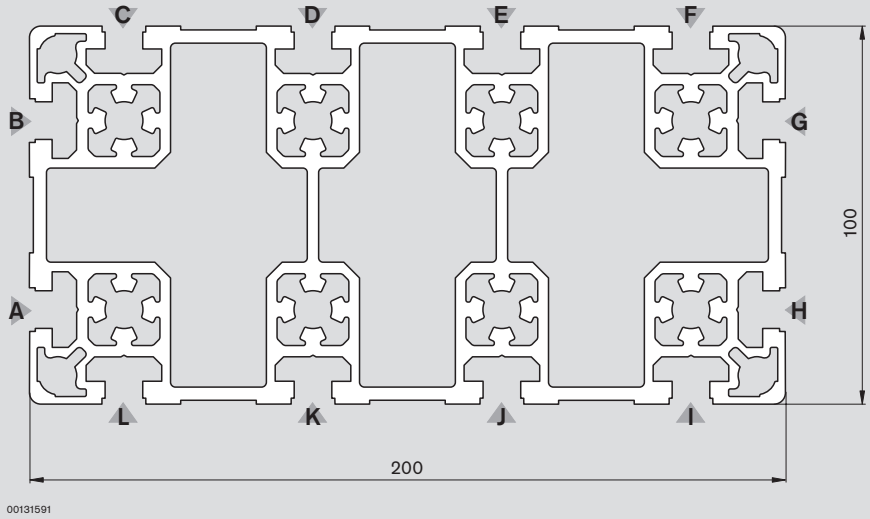
Strut profiles with 10 mm groove



100x100L



100x200L



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
100x100L	1	**3 842 993 685**	50 ≤ L ≤ 6000	**M12/M16/D9.8/D17/DB17/F1**	6	**3 842 529 355**	6070
100x200L	1	**3 842 993 687**	50 ≤ L ≤ 6000	**M12/M16/D9.8** (C,D,E,F,I,J,K,L)*/ **D17** (C,D,E,F,I,J,K,L)*/**DB17/F1** (A,G)*	3	**3 842 529 357**	6070

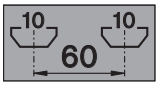
* Standard profile finishes possible at the indicated grooves.
[1)] Note any deviating minimum lengths for the profile finishes, (☞🗎22). In the case of overlapping, the larger value applies.
[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞🗎22).

Technical data

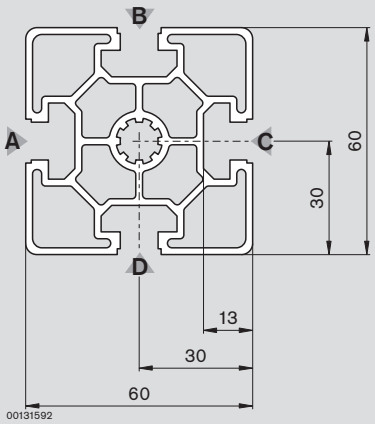
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
100x100L	318.3	318.3	63.7	63.7	29.9	8.1
100x200L	2133.1	602.1	213.3	120.4	54.0	14.6

☞🗎22, 23
☞🗎Cover fold-out page

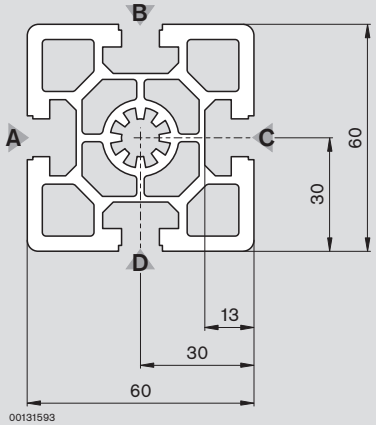
Strut profiles with 10 mm groove



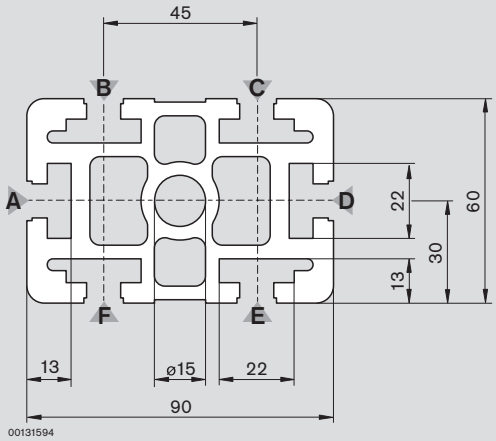
60x60L



60x60



60x90



	Custom profiles				Delivery units		
	LE	No.	L[1) 2)] (mm)	Standard profile finishes	LE	No.	L (mm)
60x60L	1	**3 842 993 670**	50 ≤ L ≤ 5600	**M12 / D9.8 / D17 / DB17**	20	**3 842 511 872**	5600
60x60	1	**3 842 993 668**	50 ≤ L ≤ 5600	**M12 / M16 / D9.8 / D17 / DB17**	20	**3 842 509 185**	5600
60x90	1	**3 842 993 671**	50 ≤ L ≤ 5600	**M16 / D9.8 / D17 / DB17 / F1** (A,D)*	10	**3 842 509 183**	5600

* Standard profile finishes possible at the indicated grooves.

[1)] Note any deviating minimum lengths for the profile finishes, (☞🗎22). In the case of overlapping, the larger value applies.

[2)] Note the reduced maximum profile lengths for individual profile finishes, (☞🗎22).

Technical data

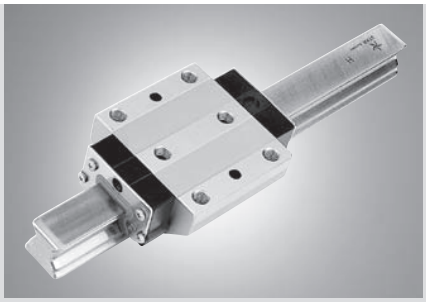
	I_x (cm^4)	I_y (cm^4)	W_x (cm^3)	W_y (cm^3)	A (cm^2)	m (kg/m)
60x60L	32.4	32.4	10.8	10.8	9.6	2.6
60x60	52.0	52.0	17.3	17.3	14.4	3.9
60x90	212.4	88.5	47.2	29.5	25.3	6.8

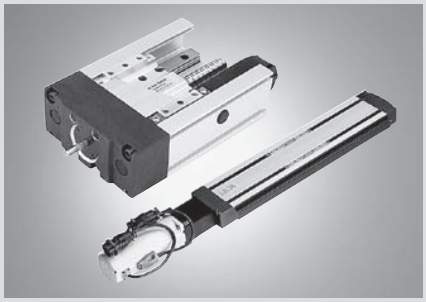
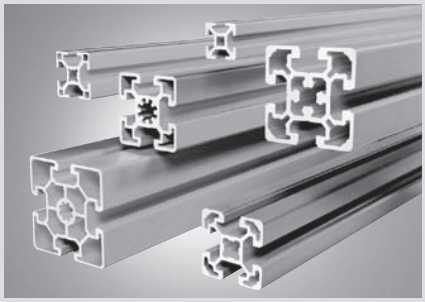
☞🗎22, 23
☞🗎Cover fold-out page

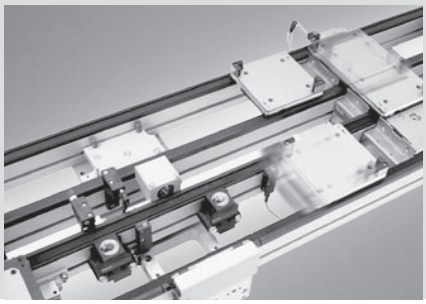
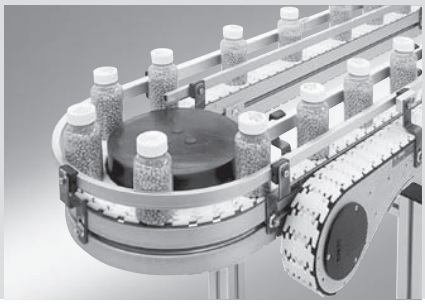
Linear Motion and Assembly Technologies

Please send me/us, without any obligation, more information about:

- ☐ Ball Rail Systems
- ☐ Roller Rail Systems
- ☐ Linear Bushings and Shafts
- ☐ Ball Screw Drives
- ☐ Linear Motion Systems
- ☐ Basic Mechanical Elements
- ☐ Manual Production Systems
- ☐ Transfer Systems

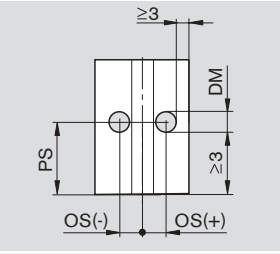
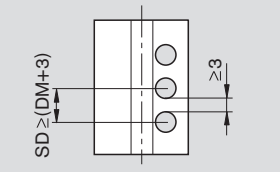



Sender

www.boschrexroth.com/dcl

Bore DI, bore sequence DIS

Material number/length/[groove designation=DI; PS=...; *OS=...*; DM=...; *HT=...*]; *[...]*
Material number/length/[groove designation=DIS; PS=...; *OS=...*; DM=...; *HT=...*; SN=...; SD=...]; *[...]*

End finishing	Abbrev.	Parameter	
Bore	**DI**	**PS**	Center point of bore
			PS_{min} = DM/2 + 3 mm; PS_{max} = L - (DM/2 + 3 mm)
		OS (optional)	Offset starting point
			Select the OS so that the bore does not cut through any groove edges
		DM	Bore diameter
			See table for DM
		HT (optional)	Depth of bore. Through bores provided if no information indicated.
			See table for HT_{max}
Bore sequence	**DIS**	**PS, OS, DM, HT**	As with bore DI
		**SN**	Number of finishes
			SN_{max} = INT ((L - 3 - PS - DM/2)/SD) + 1
		SD	Distance between adjacent finishes
			SD_{min} = DM + 3

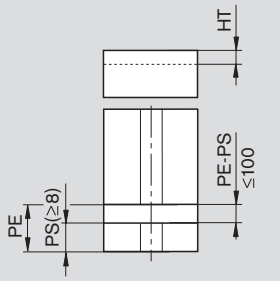
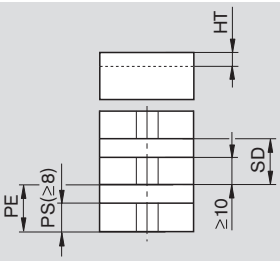
Permissible bore diameters, permissible bore depths (in mm)

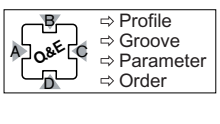
DM	5.8	6.4	7.8	8.0	8.4	9.8	11.0	17.0
HT_{max}	40.0	45.0	45.0	45.0	45.0	50.0	60.0	75.0

ATTENTION: If HT_{max} is not sufficient to drill through the profile, you must order two opposite bores!

Cross milling MT, cross milling sequence MTS

Material number/length/[groove designation=MT; PS=...; HT=...; PE=...]; *[...]*
Material number/length/[groove designation=MTS; PS=...; HT=...; PE=...; SN=...; SD=...]; *[...]*

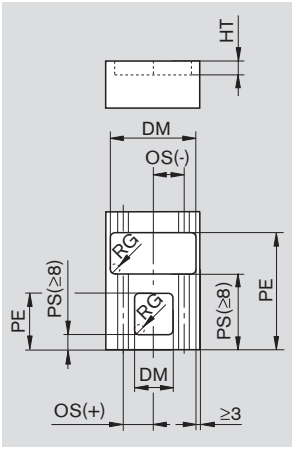
End finishing	Abbrev.	Parameter	
Cross milling	**MT**	**PS**	Starting point of milling (distance between profile cutting area - cross milling front edge)
			PS_{min} = 8 mm PS_{min} = 60 mm on the bottom of the profile
		HT	Depth of milling
			HT_{max} = 5.5 mm (6 mm groove) HT_{max} = 9.0 mm (8 mm groove) HT_{max} = 12.5 mm (10 mm groove)
		PE	Ending point of milling (distance between profile cutting area - cross milling rear edge)
			PE_{max} = L - 8 mm 8 mm ≤ PE - PS ≤ 100 mm
Cross milling sequence	**MTS**	**PS, HT, PE**	As with cross milling MT
		**SN**	Number of finishes
			SN_{max} = INT((L - 8 - PE)/SD)+1
		SD	Distance between adjacent finishes
			SD_{min} = (PE - PS) + 10

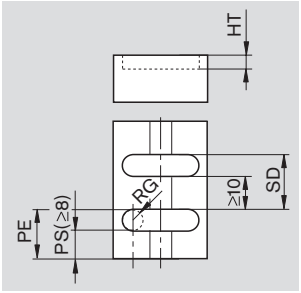


Lengthwise milling MI, lengthwise milling sequence MIS

Material number/length/[groove designation=MI; PS=...; *OS=...*; **DM=...; HT=...; PE=...; RG=R..];** *[...]*
Material number/length/[groove designation=MIS; PS=...; *OS=...*; **DM=...; HT=...; PE=...; RG=R..; SN=...; SD=...];** *[...]*

End finishing	Abbrev.	Parameter	
Lengthwise milling	**MI**	**PS**	Starting point of milling
			PS_{min} = 8 mm PS_{min} = 60 mm on the bottom of the profile (see order tables for orientation)
		OS (optional)	Offset starting point
		DM	Milling width
			DM_{min} = 8 mm DM_{max} = profile width/height - 6 mm At least 3 mm of profile must remain on both sides
		HT	Depth of milling
			HT_{max} = 5.5 mm (6 mm groove) HT_{max} = 9.0 mm (8 mm groove) HT_{max} = 12.5 mm (10 mm groove)
		PE	Ending point of milling
			PE_{max} = L - 8 mm 8 mm ≤ PE - PS ≤ 100 mm
		RG	Radius of milling geometry
			RG = 3 mm; 4 mm; 5 mm; 8 mm
Lengthwise milling sequence	**MIS**	**PS, *OS*, DM, HT, PE, RG**	As with lengthwise milling MI
		SN	Number of finishes
			SN_{max} = INT(L - 8 - PE/SD) + 1
		SD	Distance between adjacent finishes
			SD_{min} = (PE - PS) + 10

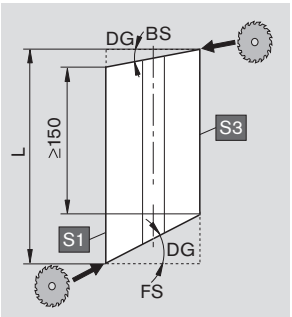


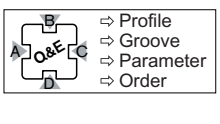


Miter cuts

Material number/length/[FS=side; DG=miter angle]; *[BS=side; DG=miter angle]*

End finishing	Abbrev.	Parameter	
Miter cuts	-	**FS**	Front side - designation of the profile end on which the miter cut should be made S1, S3 - profile side on which the miter cut begins
			FS = S1; FS = S3
		BS	Back side - opposite profile end S1, S3 - profile side on which the miter cut begins
			BS = S1; BS = S3
		DG	Miter angle
			DG > 0 The angle is always indicated positively; the orientation results from FS/BS and the side on which the miter cut begins. Note the maximum permissible miter angle.





Standard profile finishes

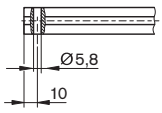
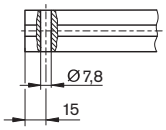
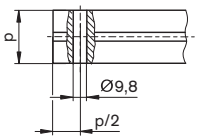
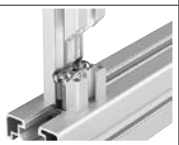
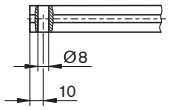
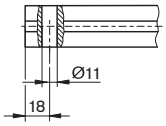
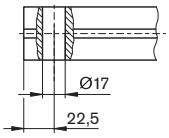
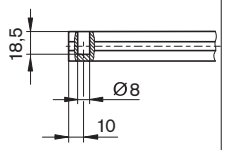
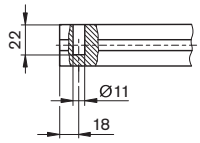
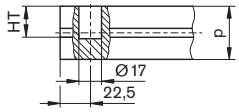
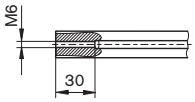
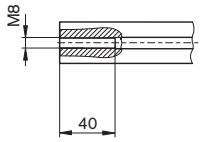
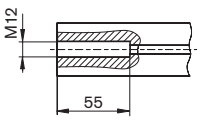
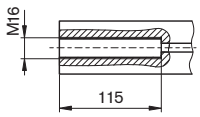
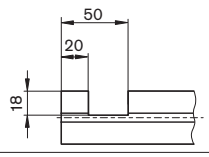
Order syntax for through holes, blind hole bores, standard milling

Material number/length/groove designation = finishing at profile start/finishing at profile end; ...

Order syntax for threads

Material number/length/Z = Mx at profile start/Mx at profile end

Standard profile finishes

		6 mm groove	8 mm groove	10 mm groove
		6	8	10
Through hole for corner connections with central bolts		**D5.8** 	**D7.8** 	**D9.8** 
Through hole for bolt connectors and quick connectors		**D8** 	**D11** 	**D17** 
Blind hole bore for longitudinal end connectors and quick connectors in closed profiles		**DB8** 	**DB11** 	**DB17** 
				p 40 45 50 60 **HT** 31 34 36 41
Threads in all core holes for accessories		**M6** 	**M8** 	**M12** 
				M16 
Standard milling for cross connectors				**F1** 

Minimum profile lengths (mm) for standard profile finishes on one or both sides

6	–	M6	D5.8	D8/ DB8
–	50	50	50	50
M6	50	60	50	50
D5.8	50	50	50	50
D8/ DB8	50	50	50	50

8	–	M8	D7.8	D11/ DB11
–	50	50	50	50
M8	50	80	62	66
D7.8	50	62	50	50
D11/ DB11	50	66	50	52

10	–	M12	M16	D9.8	D17/ DB17	F1
–	50	55	115	50	50	53
M12	55	110	170	85	89	108
M16	115	170	230	145	149	168
D9.8	50	85	145	60	64	83
D17/ DB17	50	89	149	64	68	87
F1	53	108	168	83	87	106

Note:

In the case of overlapping with the values from the order table, the larger value applies.

Rexroth
Bosch Group

Bosch Rexroth AG
Linear Motion and
Assembly Technologies
Postfach 30 02 07
70442 Stuttgart, Germany
Tel. +49 711 811-30698
Fax +49 711 811-30364
www.boschrexroth.com/dcl

Find your local contact person here:
www.boschrexroth.com/addresses-dcl

Subject to technical modifications

Printed in Germany
3 842 540 386 (2010.07)
EN • DCL/MKT