

Technische Daten der TECH-CON PROFILES Automatisierungsprofile
Technical data for the TECH-CON PROFILES automation profiles

EN AW – 6063 T6	Werkstoffbezeichnung nach DIN EN 573 <i>Material designation according to DIN EN 573</i>
Rm	245 N/mm ² Mindestzugfestigkeit <i>Minimum tensile strength Rm</i>
Rp 0,2	195 N/mm ² Dehnungsgrenze <i>Proof stress in direction of pressure</i>
A5	10 % Bruchdehnung <i>Ductile yield</i>
A10	8 % Bruchdehnung <i>Ductile yield</i>
E	ca. 70.000 N/mm ² Elastizitätsmodul <i>approx. 70.000 N/mm² Modulus of elasticity</i>
HB	ca. 75 Brinellhärte <i>approx. 75 Brinell hardness</i>
α	23,4 x 10 ⁻⁶ 1/K Längenausdehnungskoeffizient <i>Longitudinal expansion coefficient</i>
Toleranzen <i>Tolerances</i>	DIN EN 12020-2
Eloxal <i>Anodizing process</i>	E6 CO
Schichtdicke <i>Thickness of layer</i>	10 - 15µm

Metric / US / Conversion Chart

Measurement	Multiply	by	to get
Linear	millimeters (mm)	0.03937	inches
	inches	25.4	millimeters (mm)
	meters	3.2808	feet
	feet	0.3048	meters
Area	centimeters ² (cm ²)	0.155	inches ²
	inches ²	6.4516	centimeters ² (cm ²)
Mass	kilogramm (kg)	2.2046	pounds
	pounds	0.4536	kilogram (kg)
Moment of inertia	centimeters ⁴ (cm ⁴)	0.02403	inches
	inches	41.623	centimeters ⁴ (cm ⁴)
Moment of resistance	centimeters ³ (cm ³)	0.06102	inches ³
	inches ³	16.387	centimeters ³ (cm ³)

Profil-Nut Belastbarkeit der TECH-CON PROFILES Automatisierungsprofile Serie 1

Zugbelastung

Statische Zugbelastung-Grenzwerte der Profil-Nut (Beginn von an der Profil-Außenfläche sichtbarer bleiben-der plastischer Verformung) bei Verbindern mit jeweils größtem Gewinde:

Nut	Profil	Hammer-schraube	Hammer-mutter	Zentral-schraube	Nutenstein einschwenkbar	Nutenstein
6	AP B6 2020		1700 N	2000 N		3000 N
8	AP B8 3030	4000 N	4000 N	5000 N		6300 N
10	AP B10 4040L	7000 N	7200 N	10000 N	12000 N	12500 N
10	AP B10 4545L	7000 N	7000 N	10000 N	10000 N	12500 N
10	AP B10 4545	12000 N	12000 N	15000 N	13000 N	17000 N

Alle angegebenen Werte wurden exemplarisch durch physische Ausreißversuche ermittelt!
Sicherheitsfaktoren wurden nicht berücksichtigt!
Gesetzliche Vorschriften und entsprechende Regeln der Technik sind gesondert zu berücksichtigen!

Profile-slot loading capacity of the TECH-CON PROFILES automation profiles series 1

Tensile loading




Static tensile loading capacity limit of the profile-slot (beginning of visible permanent plastic deformation on the outer surface of the profile) each for connectors with the biggest thread-diameter:

Slot	Profile	Hammer-head screw	Hammer-head nut	Central-screw	Roll-In-T-slot nut	T-slot nut
6	AP B6 2020		1700 N	2000 N		3000 N
8	AP B8 3030	4000 N	4000 N	5000 N		6300 N
10	AP B10 4040L	7000 N	7200 N	10000 N	12000 N	12500 N
10	AP B10 4545L	7000 N	7000 N	10000 N	10000 N	12500 N
10	AP B10 4545	12000 N	12000 N	15000 N	13000 N	17000 N

All values have been determined exemplarily by physical pull-out experiments.
Safety factors have not been applied.
All values are ultimate values and the appropriate safety factors have to be applied.

Serie 1 / Series 1

Rastermaß R [mm]
Grid dimension R [mm]

20	30	40, 45, 50, 60
		
Nut 6	Nut 8	Nut 10

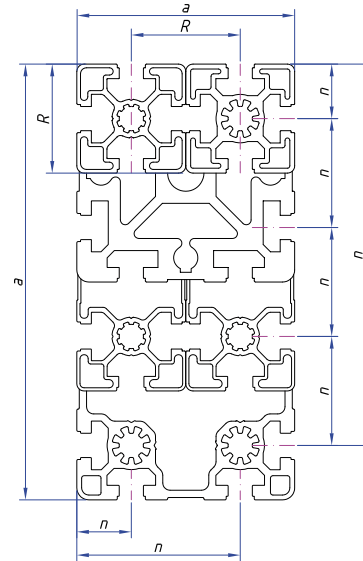
Serie 1 Technische Daten
Series 1 Technical data

Nut	Bezeichnung <i>name TECH-CON PROFILES</i>	Trägheitsmoment <i>moment of inertia</i>		Widerstandsmoment <i>section modulus</i>		Masse <i>mass</i> G (kg/m)	Profilfläche <i>profile surface</i> A (cm ²)	Seite <i>page</i>
		Ix (cm ⁴)	Iy (cm ⁴)	Wx (cm ³)	Wy (cm ³)			
6	AP B6 2020	0,68	0,68	0,68	0,68	0,44	1,64	13
6	AP B6 20203N	0,75	0,67	0,71	0,67	0,46	1,72	13
6	AP B6 20202NE	0,76	0,76	0,72	0,72	0,49	1,83	13
6	AP B6 20202NP	0,68	0,84	0,68	0,84	0,49	1,83	13
6	AP B6 20R90	0,58	0,58	0,55	0,55	0,44	1,62	14
6	AP B6 2040	4,61	1,20	2,31	1,20	0,77	2,87	14
8	AP B8 3030	2,77	2,77	1,85	1,85	0,85	3,14	15
8	AP B8 30303N	3,10	2,78	1,97	1,85	0,90	3,32	15
8	AP B8 30302NE	3,11	3,11	1,98	1,98	0,95	3,50	15
8	AP B8 30302NP	3,48	2,79	2,32	1,86	0,95	3,51	15
8	AP B8 30301N	3,12	3,49	1,99	2,32	1,00	3,69	16
8	AP B8 3060	19,66	5,09	6,55	3,39	1,49	5,53	16
8	AP B8 306060	26,21	26,21	7,57	7,57	2,22	8,22	16
8	AP B8 30453N	8,16	3,98	3,63	2,62	1,09	4,05	16
8	AP B8 30R45	3,70	5,29	2,13	2,37	1,11	4,12	17
8	AP B8 30R60	4,24	3,12	1,95	1,77	1,01	3,73	17
8	AP B8 30R90	2,28	2,28	1,41	1,41	0,78	2,88	17
8	AP B8 1120	0,13	0,52	0,20	0,52	0,28	1,02	17
10	AP B10 4040L	9,06	9,06	4,53	4,53	1,51	5,61	18
10	AP B10 4040L3N	9,69	9,08	4,71	4,54	1,56	5,79	18
10	AP B10 4040L2NE	9,71	9,71	4,72	4,72	1,61	5,96	18
10	AP B10 4040L2NP	10,36	9,10	5,18	4,55	1,61	5,96	18
10	AP B10 4080L	63,24	17,23	15,81	8,61	2,66	9,86	19
10	AP B10 4080L4N	66,01	19,1	16,5	9,16	2,81	10,43	19
10	AP B10 4080L3NE	68,6	19,1	16,88	9,17	2,86	10,61	19
10	AP B10 408080L	91,52	91,52	19,89	19,89	4,17	15,43	19
10	AP B10 40120L	201,95	27,76	33,66	13,88	4,14	15,35	20
10	AP B10 40160L	479,63	37,91	59,95	18,95	5,71	21,18	20
10	AP B10 8080L	132,62	132,62	33,16	33,16	4,98	18,45	20
10	AP B10 8080L6N	141,45	134,9	34,37	33,72	5,17	19,17	20
10	AP B10 8080L4NE	143,3	143,3	34,8	34,8	5,33	19,74	21
10	AP B10 80120L	394,72	194,68	65,78	48,67	7,12	26,39	21
10	AP B10 80160L	867,52	256,3	108,44	64,07	9,22	34,17	21
10	AP B10 40LR90	6,84	6,84	3,06	3,06	1,28	4,75	21
10	AP B10 4545L	11,00	11,00	4,89	4,89	1,55	5,73	22
10	AP B10 4545	13,94	13,94	6,19	6,19	2,03	7,50	22
10	AP B10 4545L3N	11,65	10,87	5,03	4,83	1,57	5,83	22
10	AP B10 4545L2NE	11,82	11,82	5,11	5,11	1,64	6,08	22
10	AP B10 4545L2NP	11,04	12,66	4,91	5,63	1,64	6,08	23
10	AP B10 4545L1N	11,84	12,68	5,13	5,64	1,69	6,25	23
10	AP B10 4590L	81,82	23,53	18,18	10,46	3,05	11,29	23
10	AP B10 4590	124,05	32,25	27,57	14,33	4,11	15,24	23
10	AP B10 4590L2NP	85,89	26,90	19,09	11,96	3,25	12,03	24
10	AP B10 459090L	151,95	151,95	29,34	29,34	5,67	21,01	24
10	AP B10 4590LD	80,82	23,27	17,96	10,34	2,88	10,66	24
10	AP B10 4590L4ND	82,60	24,84	18,36	10,72	2,97	11,01	24

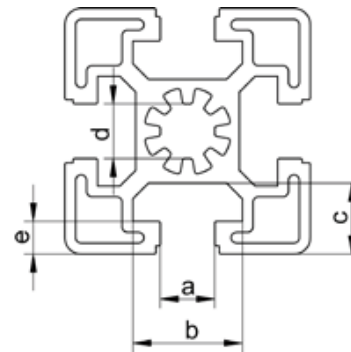


Toleranzen Serie 1
Tolerances Series 1

Profilkantenlänge Edge length of profile		Toleranzen Tolerances	
a [mm]		Außenmaß a bzw. / Sense of proportion a respectively	
über / at	bis / to	Nutmage n ± [mm] Position of nut ± [mm]	
0	20	±0,15	
20	30	±0,2	
	40	+0,6	
40	60	±0,3	
	80	+0,8	
80	100	±0,4	
	120	+1,0	



a	6,0 +0,3/-0	8,0 +0,3/-0	10,0 +0,4/-0
b	12 ±0,2	16,5 ±0,2	20,1 ±0,25
c	5,5 ±0,15	9,0 ±0,15	12,5 ±0,15 *
d	1,5 ±0,15	2,2 ±0,15	10,0 ±0,15
e	5,5 +0,2/-0,1	7,3 +0,2/-0,1	6,0 ±0,15

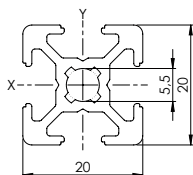


* max. 14,5 ±0,15 bei / for B10 4545L

Serie 1 Raster 20 ⁶
 Series 1 Grid 20 

Artikelnummer
 Product Code

AP B6 2020



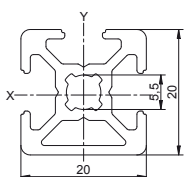
LÄNGE / LENGTH

3060 mm



Artikelnummer
 Product Code

AP B6 20203N



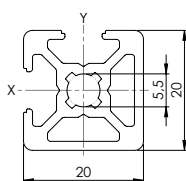
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Artikelnummer
 Product Code

AP B6 20202NE / B6 20202NE SL06

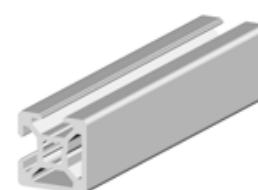


LÄNGE / LENGTH

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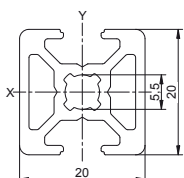
LÄNGE / LENGTH

6060 mm



Artikelnummer
 Product Code

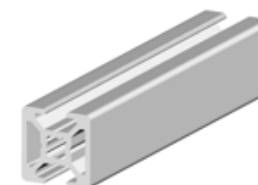
AP B6 20202NP



LÄNGE / LENGTH

20 Stk. /pcs.

3060 mm

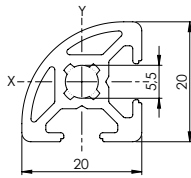


Serie 1 Raster 20
Series 1 Grid 20



Artikelnummer
Product Code

AP B6 20R90



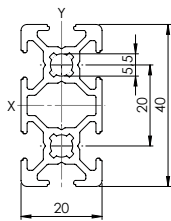
LÄNGE / LENGTH

20 Stk. /pcs.
3060 mm



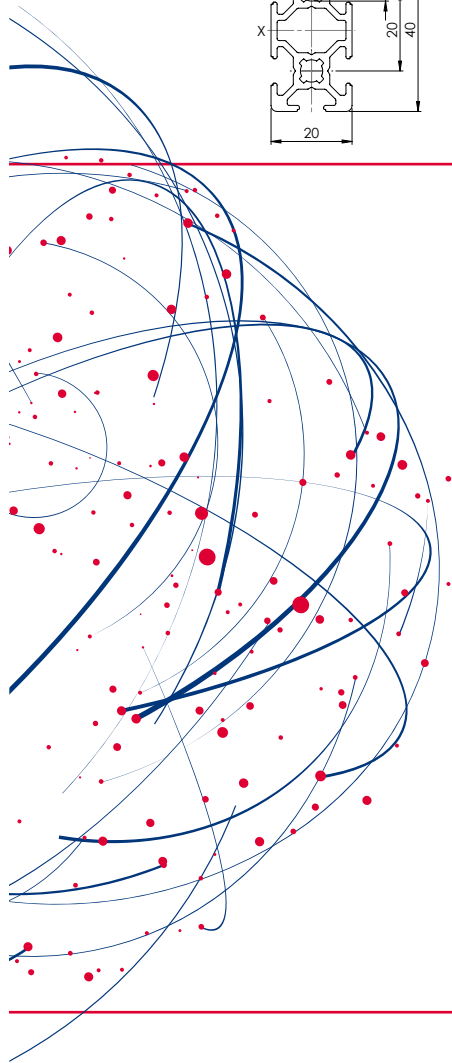
Artikelnummer
Product Code

AP B6 2040



LÄNGE / LENGTH

24 Stk. /pcs.
3060 mm

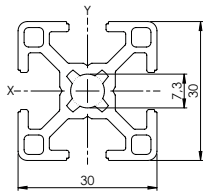


Serie 1 Raster 30
Series 1 Grid 30

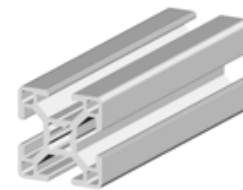


Artikelnummer
Product Code

AP B8 3030 / B8 3030 PAL

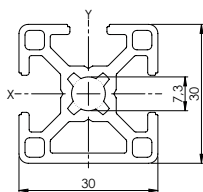


LÄNGE / LENGTH 6060 mm

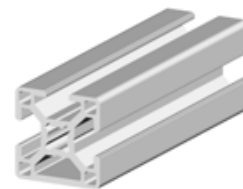


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Product Code

AP B8 30303N

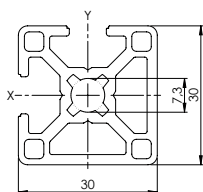


LÄNGE / LENGTH 6060 mm

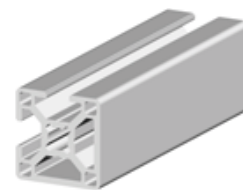


Artikelnummer
Product Code

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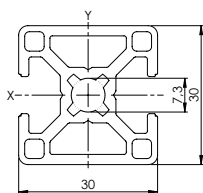


LÄNGE / LENGTH 6060 mm

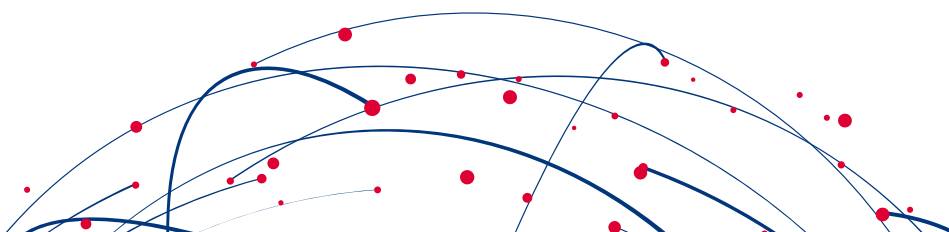
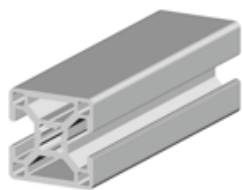


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Product Code

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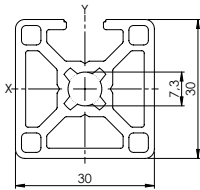
LÄNGE / LENGTH 6060 mm



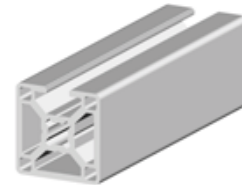
Serie 1 Raster 30 
 Series 1 Grid 30

Artikelnummer
 Product Code

AP B8 30301N

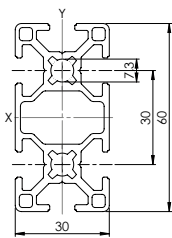


LÄNGE / LENGTH 6060 mm

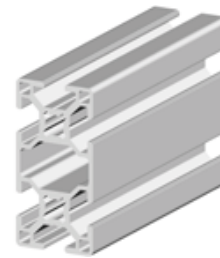


Artikelnummer
 Product Code

AP B8 3060

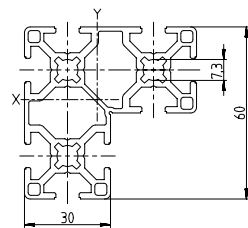


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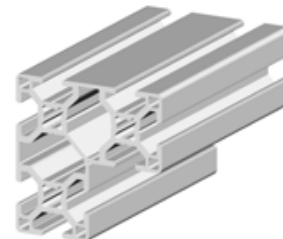


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 Product Code

AP B8 306060

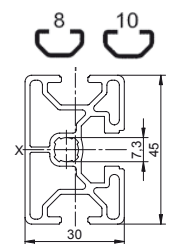


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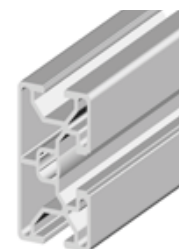


Artikelnummer
 Product Code

AP B8 30453N



LÄNGE / LENGTH 6060 mm



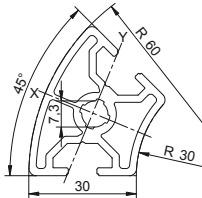
Serie 1 Raster 30 
 Series 1 Grid 30

Artikelnummer
 Product Code

AP B8 30R45

LÄNGE / LENGTH

6060 mm

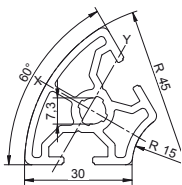


Artikelnummer
 Product Code

AP B8 30R60

LÄNGE / LENGTH

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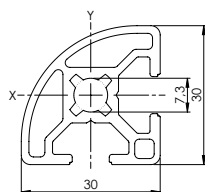


Artikelnummer
 Product Code

AP B8 30R90

LÄNGE / LENGTH

6060 mm

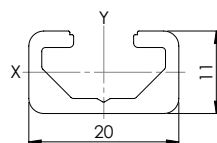


Artikelnummer
 Product Code

AP B8 1120

LÄNGE / LENGTH

2060 mm

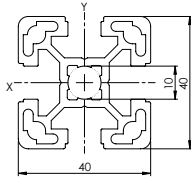


Serie 1 Raster 40
Series 1 Grid 40

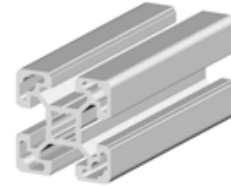


Artikelnummer
Product Code

AP B10 4040L / B10 4040L PAL

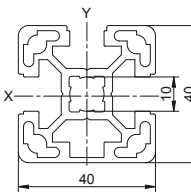


LÄNGE / LENGTH 6060 mm

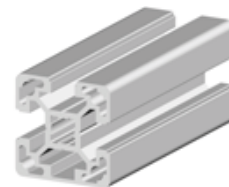


Artikelnummer
Product Code

AP B10 4040L3N

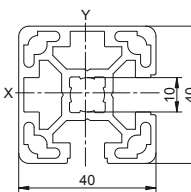


LÄNGE / LENGTH 6060 mm

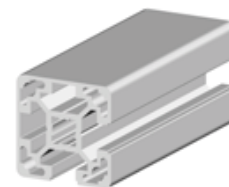


Artikelnummer
Product Code

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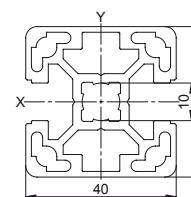


LÄNGE / LENGTH 6060 mm

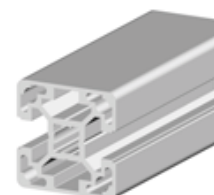


Artikelnummer
Product Code

AP B10 4040L2NP



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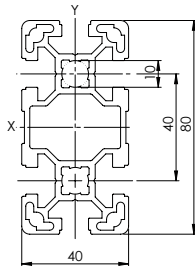


Serie 1 Raster 40
Series 1 Grid 40



Artikelnummer
Product Code

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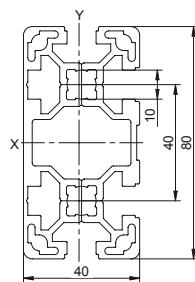


LÄNGE / LENGTH 6060 mm



Artikelnummer
Product Code

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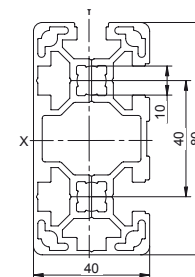


LÄNGE / LENGTH 6060 mm



Artikelnummer
Product Code

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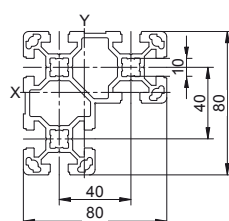


LÄNGE / LENGTH 6060 mm

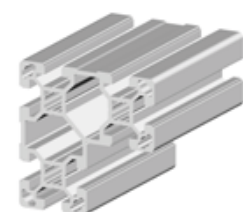


Artikelnummer
Product Code

AP B10 408080L



LÄNGE / LENGTH 6060 mm

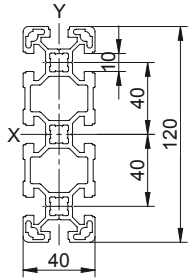


Serie 1 Raster 40
Series 1 Grid 40



Artikelnummer
Product Code

AP B10 40120L



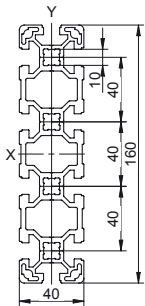
LÄNGE / LENGTH

6060 mm



Artikelnummer
Product Code

AP B10 40160L



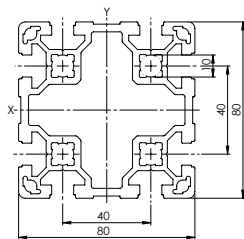
LÄNGE / LENGTH

6060 mm



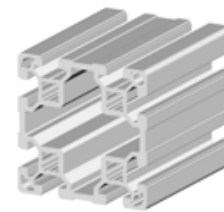
Artikelnummer
Product Code

AP B10 8080L



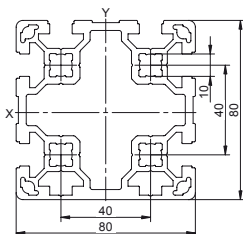
LÄNGE / LENGTH

6060 mm



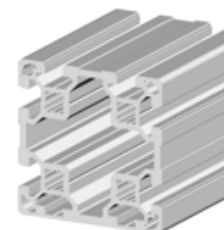
Artikelnummer
Product Code

AP B10 8080L6N



LÄNGE / LENGTH

6060 mm

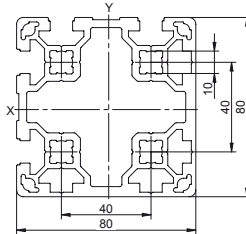


Serie 1 Raster 40
Series 1 Grid 40

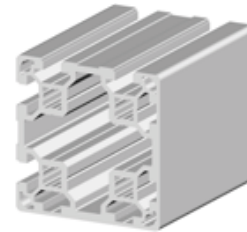


Artikelnummer
Product Code

AP B10 8080L4NE

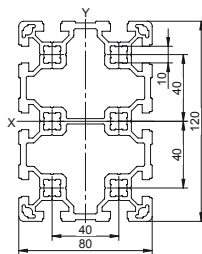


LÄNGE / LENGTH 6060 mm

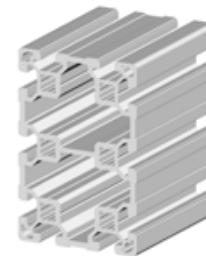


Artikelnummer
Product Code

AP B10 80120L

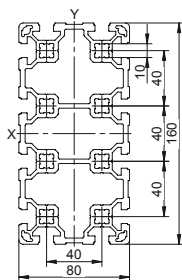


LÄNGE / LENGTH 6060 mm

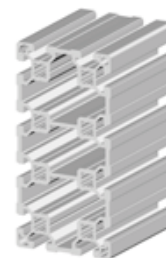


Artikelnummer
Product Code

AP B10 80160L

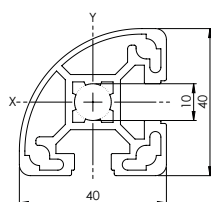


LÄNGE / LENGTH 6060 mm

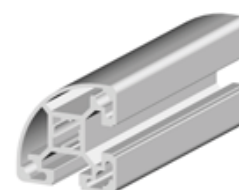


Artikelnummer
Product Code

AP B10 40LR90



LÄNGE / LENGTH 6060 mm

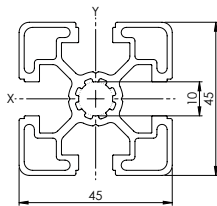


Serie 1 Raster 45
Series 1 Grid 45

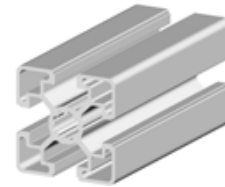


Artikelnummer
Product Code

AP B10 4545L / B10 4545L PAL

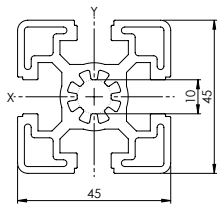


LÄNGE / LENGTH 6060 mm

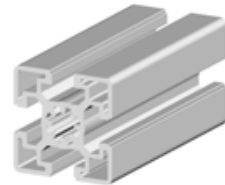


Artikelnummer
Product Code

AP B10 4545

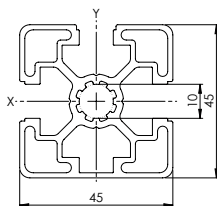


LÄNGE / LENGTH 6060 mm

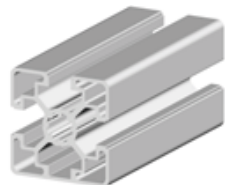


Artikelnummer
Product Code

AP B10 4545L3N

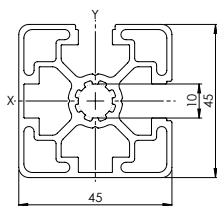


LÄNGE / LENGTH 6060 mm

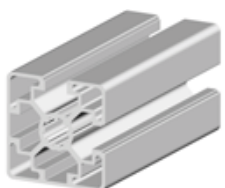


Artikelnummer
Product Code

AP B10 4545L2NE



LÄNGE / LENGTH 6060 mm

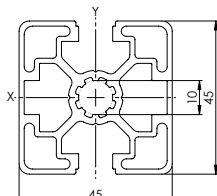


Serie 1 Raster 45
Series 1 Grid 45

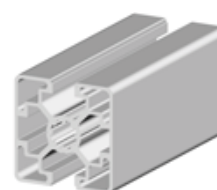


Artikelnummer
Product Code

AP B10 4545L2NP

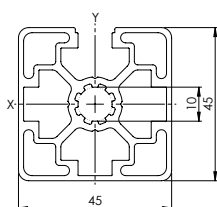


LÄNGE / LENGTH 6060 mm

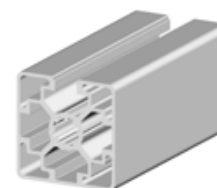


Artikelnummer
Product Code

AP B10 4545L1N

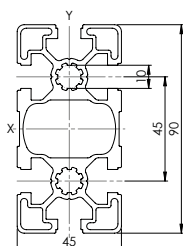


LÄNGE / LENGTH 6060 mm

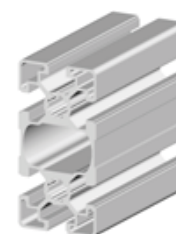


Artikelnummer
Product Code

AP B10 4590L / B10 4590L PAL

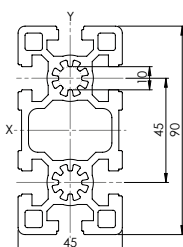


LÄNGE / LENGTH 6060 mm



Artikelnummer
Product Code

AP B10 4590



LÄNGE / LENGTH 6060 mm

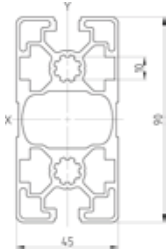


Serie 1 Raster 45
Series 1 Grid 45

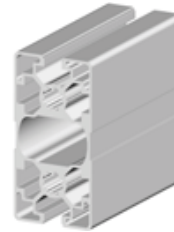


Artikelnummer
Product Code

AP B10 4590L2NP

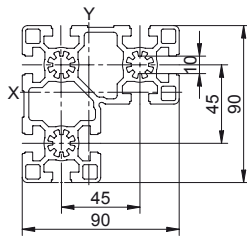


LÄNGE / LENGTH 6060 mm

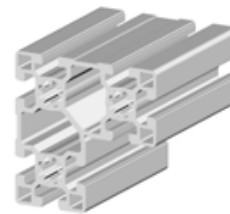


Artikelnummer
Product Code

AP B10 459090L

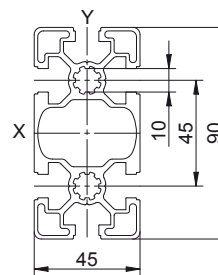


LÄNGE / LENGTH 6060 mm



Artikelnummer
Product Code

AP B10 4590LD (Designvariante)

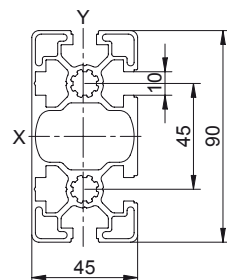


LÄNGE / LENGTH 6060 mm

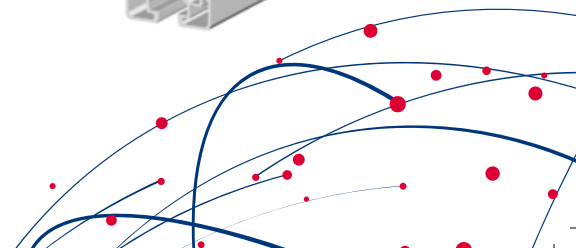
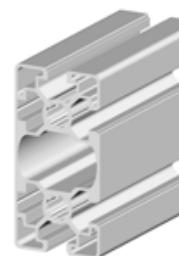


Artikelnummer
Product Code

AP B10 4590L4ND (Designvariante)



LÄNGE / LENGTH 6060 mm

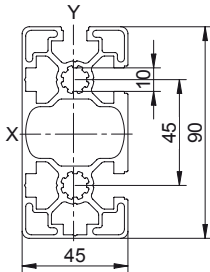


Serie 1 Raster 45
Series 1 Grid 45



Artikelnummer
Product Code

AP B10 4590L2NED (Designvariante)

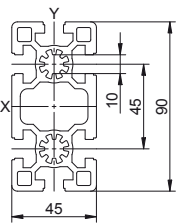


LÄNGE / LENGTH 6060 mm



Artikelnummer
Product Code

AP B10 4590D PAL (Designvariante)

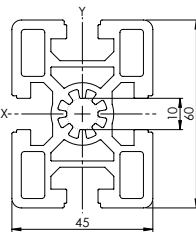


LÄNGE / LENGTH 6060 mm

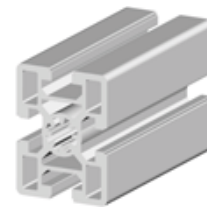


Artikelnummer
Product Code

AP B10 4560

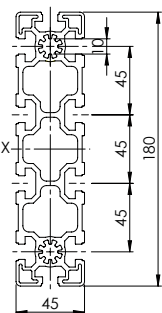


LÄNGE / LENGTH 6060 mm

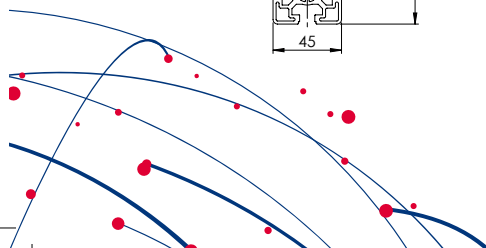


Artikelnummer
Product Code

AP B10 45180



LÄNGE / LENGTH 6060 mm

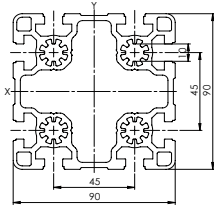


Serie 1 Raster 45
Series 1 Grid 45

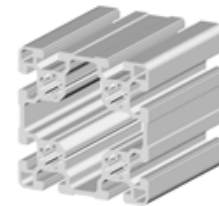


Artikelnummer
Product Code

AP B10 9090L

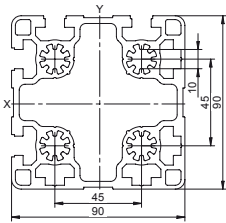


LÄNGE / LENGTH 6060 mm

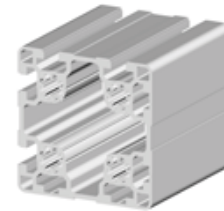


Artikelnummer
Product Code

AP B10 9090L4NE

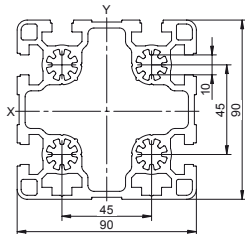


LÄNGE / LENGTH 6060 mm



Artikelnummer
Product Code

AP B10 9090L6N

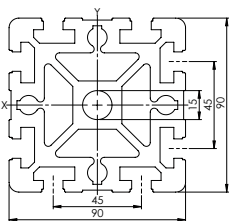


LÄNGE / LENGTH 6060 mm

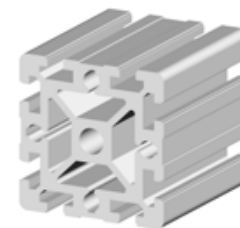


Artikelnummer
Product Code

AP B10 9090



LÄNGE / LENGTH 6060 mm

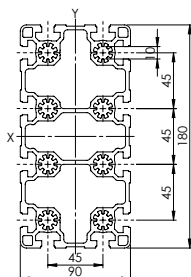


Serie 1 Raster 45
Series 1 Grid 45



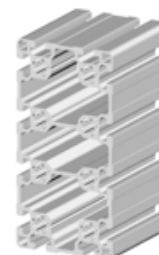
Artikelnummer
Product Code

AP B10 90180L



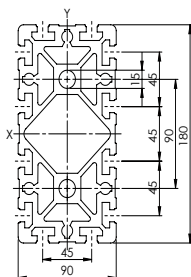
LÄNGE / LENGTH

6060 mm



Artikelnummer
Product Code

AP B10 90180



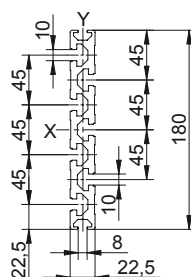
LÄNGE / LENGTH

6060 mm



Artikelnummer
Product Code

AP B10 22,5180



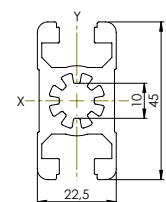
LÄNGE / LENGTH

6060 mm



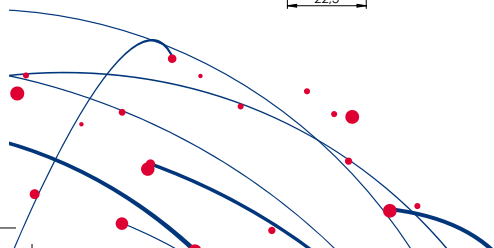
Artikelnummer
Product Code

AP B10 22,545



LÄNGE / LENGTH

6060 mm



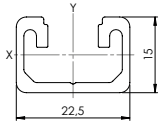
Serie 1 Raster 45
Series 1 Grid 45



Artikelnummer
Product Code

AP B10 1522,5

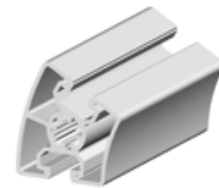
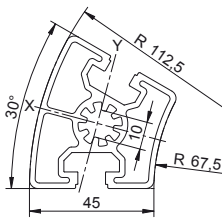
LÄNGE / LENGTH 3060 mm



Artikelnummer
Product Code

AP B10 45R30

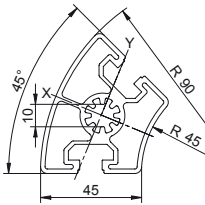
LÄNGE / LENGTH 6060 mm



Artikelnummer
Product Code

AP B10 45R45

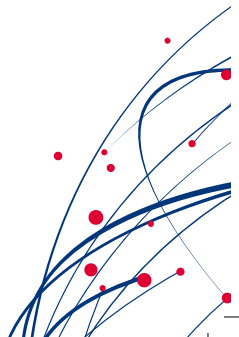
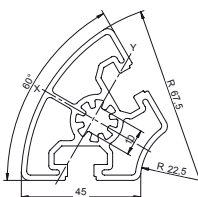
LÄNGE / LENGTH 6060 mm



Artikelnummer
Product Code

AP B10 45R60

LÄNGE / LENGTH 6060 mm



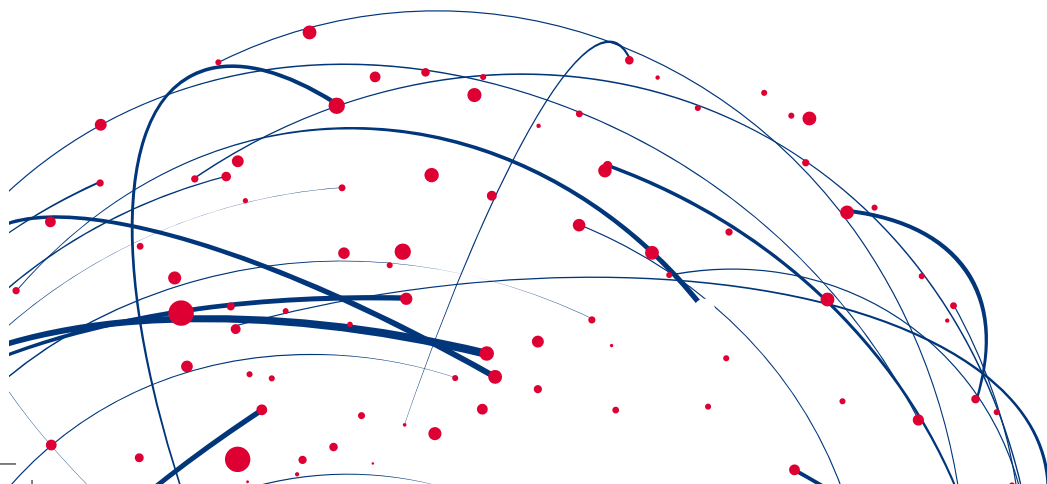
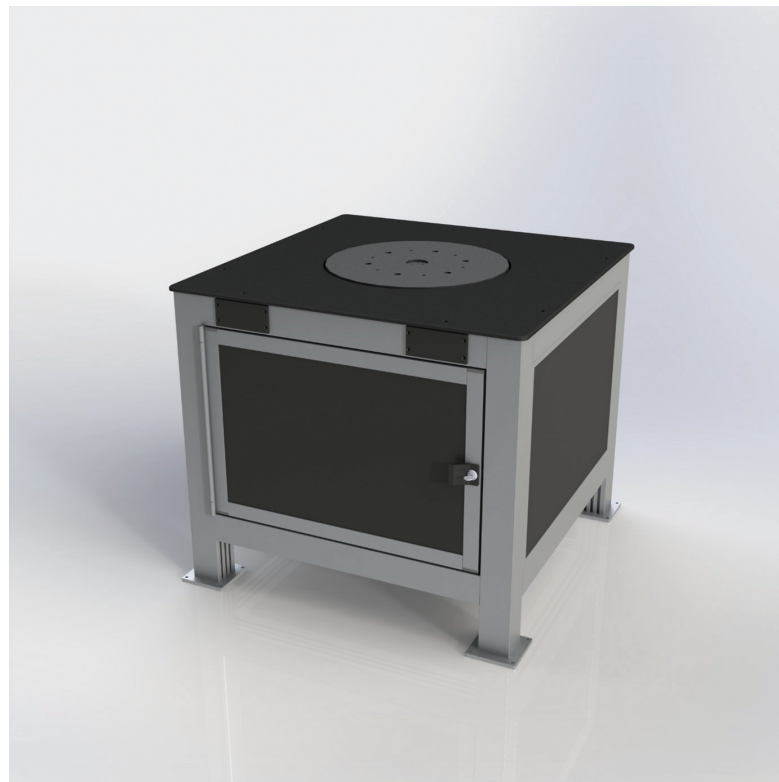
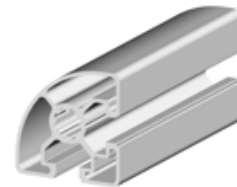
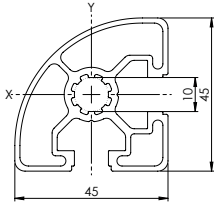
Serie 1 Raster 45
 Series 1 Grid 45



Artikelnummer
 Product Code

AP B10 45LR90

LÄNGE / LENGTH 6060 mm

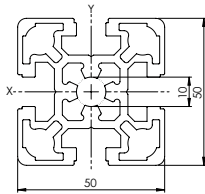


Serie 1 Raster 50
 Series 1 Grid 50

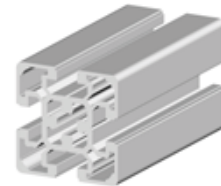


Artikelnummer
 Product Code

AP B10 5050L

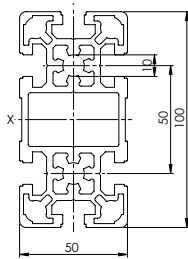


LÄNGE / LENGTH 6060 mm

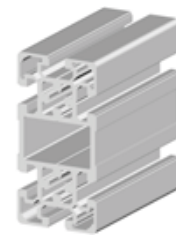


Artikelnummer
 Product Code

AP B10 50100L

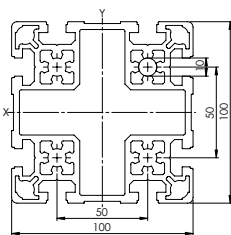


LÄNGE / LENGTH 6060 mm

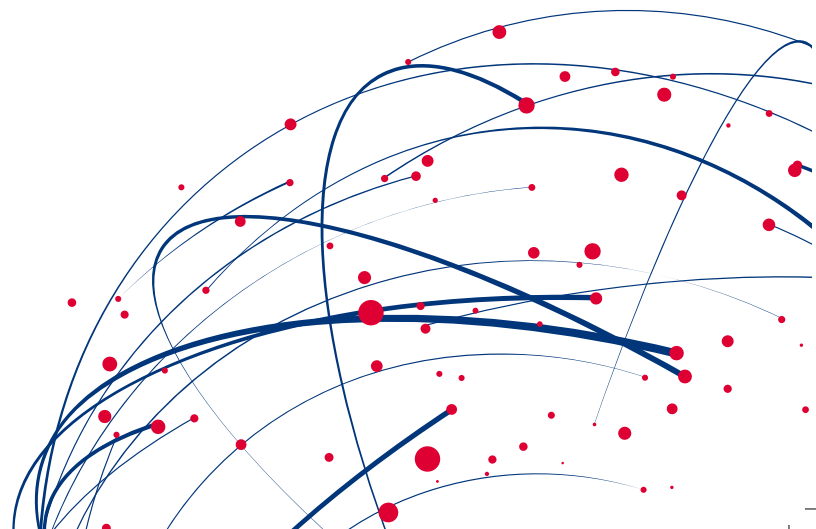
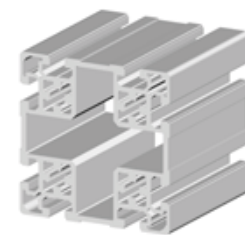


Artikelnummer
 Product Code

AP B10 100100L



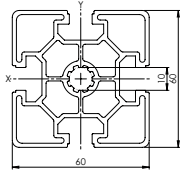
LÄNGE / LENGTH 6060 mm



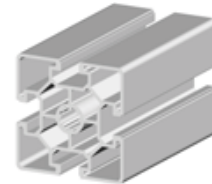
Serie 1 Raster 60 
 Series 1 Grid 60

Artikelnummer
 Product Code

AP B10 6060L

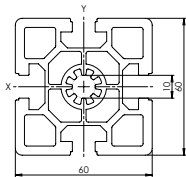


LÄNGE / LENGTH 6060 mm

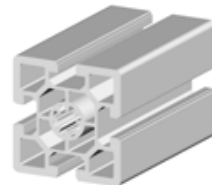


Artikelnummer
 Product Code

AP B10 6060

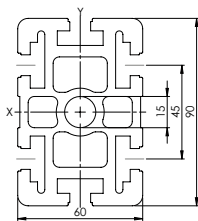


LÄNGE / LENGTH 6060 mm

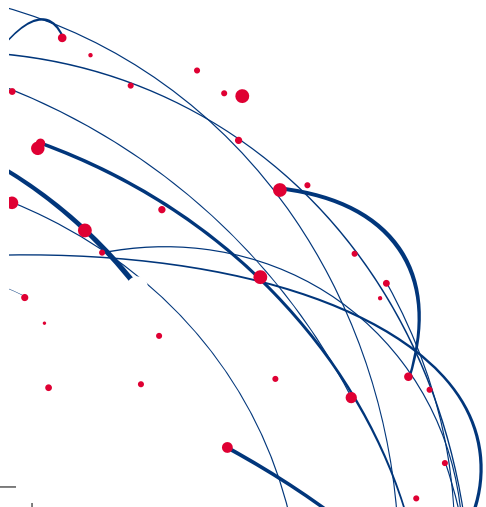
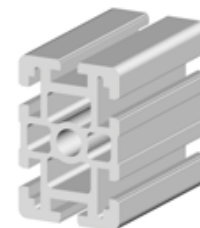


Artikelnummer
 Product Code

AP B10 6090



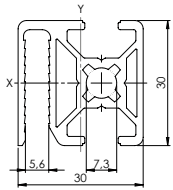
LÄNGE / LENGTH 6060 mm



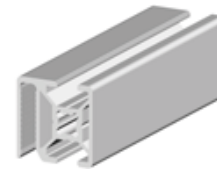
Serie 1 Sonderprofile
Series 1 Special profiles

Artikelnummer
Product Code

AP B8 3030SG30

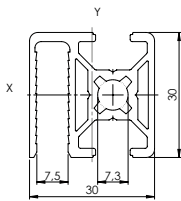


LÄNGE / LENGTH 6060 mm

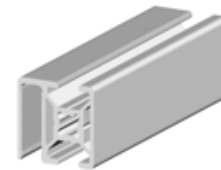


Artikelnummer
Product Code

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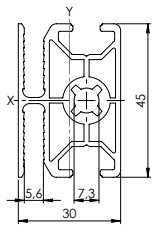


LÄNGE / LENGTH 6060 mm

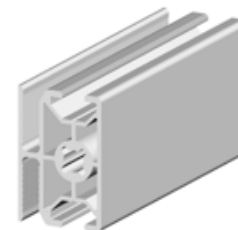


Artikelnummer
Product Code

AP B8 3045SG30

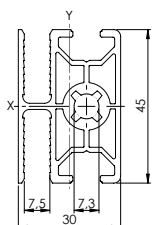


LÄNGE / LENGTH 6060 mm

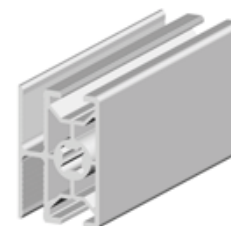


Artikelnummer
Product Code

AP B8 3045SG40



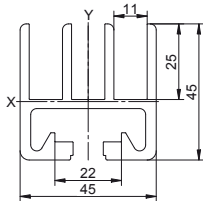
LÄNGE / LENGTH 6060 mm



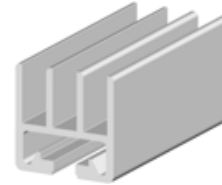
Serie 1 Sonderprofile
Series 1 Special profiles

Artikelnummer
Product Code

AP B10 4545ST

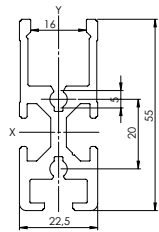


LÄNGE / LENGTH 6060 mm



Artikelnummer
Product Code

AP B8 5522,5SP

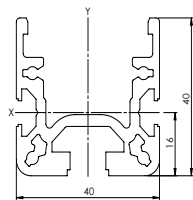


LÄNGE / LENGTH 6060 mm

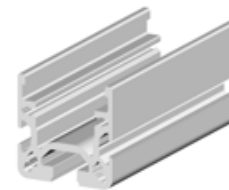


Artikelnummer
Product Code

AP B10 RP01

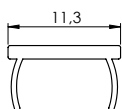


LÄNGE / LENGTH 6060 mm

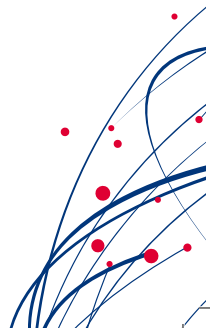
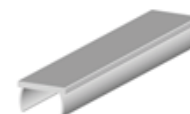


Artikelnummer
Product Code

AP B10 Abdeckpro il AL



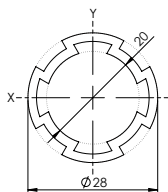
LÄNGE / LENGTH 2000 mm



Serie 1 Sonderprofile
Series 1 Special profiles

Artikelnummer
Product Code

AP B D28L



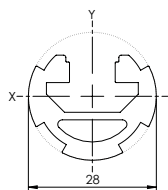
LÄNGE / LENGTH

6060 mm



Artikelnummer
Product Code

AP B10 D28L



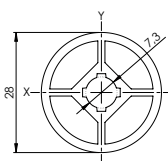
LÄNGE / LENGTH

6060 mm



Artikelnummer
Product Code

AP B D28



LÄNGE / LENGTH

6060 mm

