

PERFILES DE ALUMINIO

ALUMINIUM PROFILES

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Serie, canal 6 mm

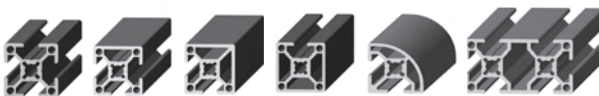
Serie, 6 mm slot



página/page 96

Serie, canal 8 mm

Serie, 8 mm slot

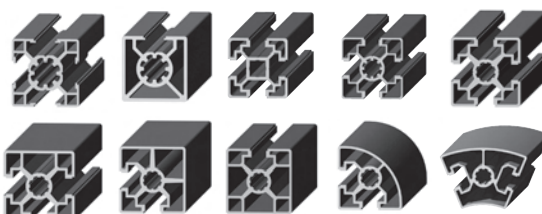


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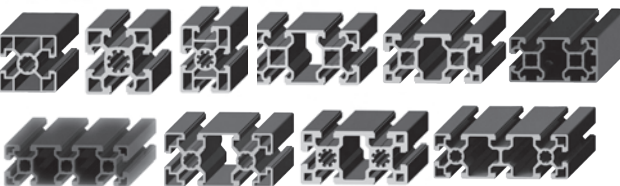
Serie, canal 10 mm

Serie, 10 mm slot

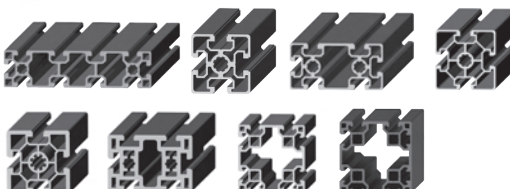
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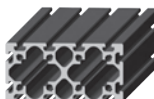
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página/page 101



página/page 101

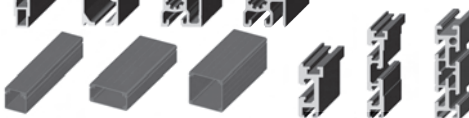
Series especiales

Special series

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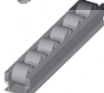
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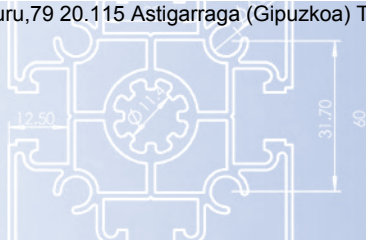
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Datos técnicos Aluminio anodizado color natural

Technical data Aluminium natural anodized

Longitud estándar Standard length	6 m.	Límite elástico Tensile strength	200 N/mm ²
Aleación Alloy	Al Mg Si 0,5 F25 (6060/6063)	Módulo de elasticidad transversal Elasticity module E	aprox. 27000 N/mm ²
Densidad Density	2,7 gr/cm ³	Dureza Brinell Hardness	75 HB
Espesor anodizado Anod. layer thickness	15 µm	Coefficiente de dilatación Coefficient of dilation	23,8 · 10 ⁻⁶ · K ⁻¹
Dureza anodizado Anod. layer hardness	250-350 HV	Punto de tensión Ductile yield	A5 > 10% - A10 > 8%



Cálculo de la flexión del perfil

Determination of profile deflection

Carga Load

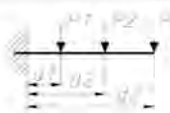
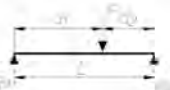
Fórmula Formula

Descripción

f = flexión (m)
 P = Carga (N)
 L = Longitud perfil (m)
 E = Módulo de elasticidad
 $E_{AL} = 7 \cdot 10^8 \text{ N/dm}^2$
 I = Momento inercia (cm^4)

Description

f = deflection (m)
 P = Load (N)
 L = Free profile length (m)
 E = Modulus of elasticity
 $E_{AL} = 7 \cdot 10^8 \text{ N/dm}^2$
 I = Momet of inertia (cm^4)

	$f_{\max} = \frac{PL^3}{3EI}$
	$f_{\max} = F_1 + F_2 + F_3 + \dots$
	$f_{\max} = \frac{PL^3}{8EI}$
	$f_{\max} = \frac{PL^3}{8EI} + \frac{PL^4}{3EI}$
	$f_{\max} = \frac{P(d_1 d_2)^2}{3LEI}$
	$f_{\max} = \frac{PL^3}{48EI}$
	$f_{\max} = \frac{PdL^2}{8EI}$
	$f_{\max} = \frac{P(d_1 d_2)^3}{3EI (d_2 + 3d_1)^2}$
	$f_{\max} = \frac{PL^3}{192EI}$
	$f_{\max} = \frac{PL^3}{384EI}$

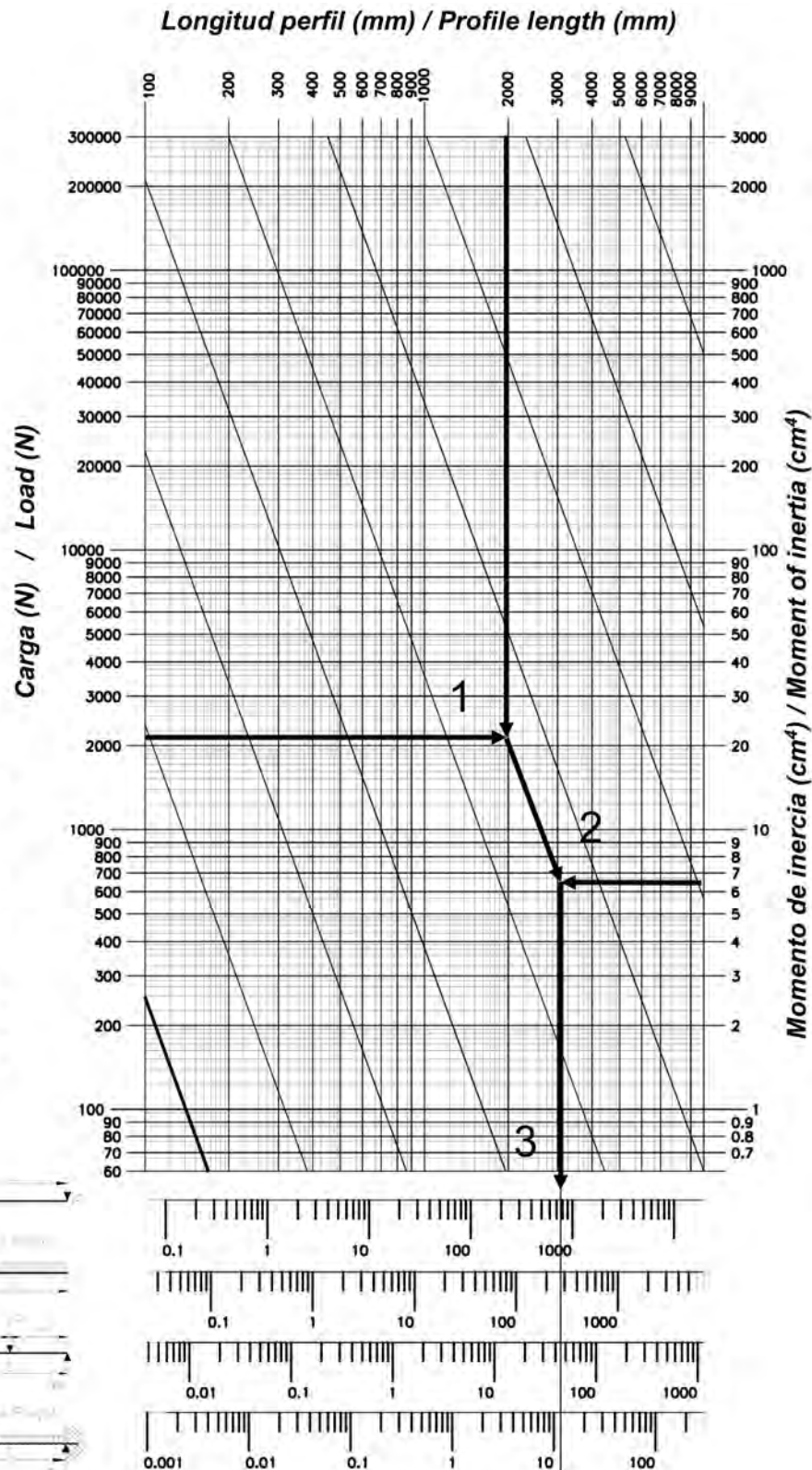
Cálculo de la flexión del perfil Determination of profile deflection

Cómo calcular la flexión:

1. Determinación del punto de intersección entre la carga y la longitud del perfil.
2. Cruce entre la coordenada del momento de inercia del perfil seleccionado con el desplazamiento en diagonal del punto 1.
3. Determinación de la flexión realizando una línea vertical desde el punto dos hasta la distribución de cargas seleccionada.

Calculating deflection:

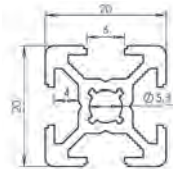
1. Determination of intersection point between load and profile length
2. Crossing between the diagonal of point 1 with the moment of inertia of selected profile coordinate
3. Determination of profile deflection extending a vertical line from point 2 to the selected load distribution formula



Serie, canal 6 mm

Serie, 6 mm slot

Perfil básico 20x20 Basic profile 20x20



lx cm4

ly cm4

Wx cm3

Wy cm3

5049

0,44

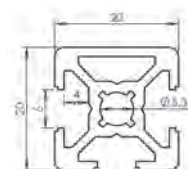
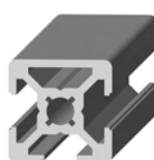
0,66

0,66

0,66

0,66

Perfil básico 20x20 3S Basic profile 20x20 3S



lx cm4

ly cm4

Wx cm3

Wy cm3

5048

0,46

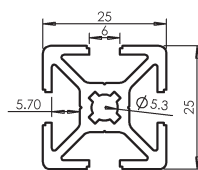
0,66

0,74

0,66

0,74

Perfil básico 25x25 Basic profile 25x25



lx cm4

ly cm4

Wx cm3

Wy cm3

5011

0,7

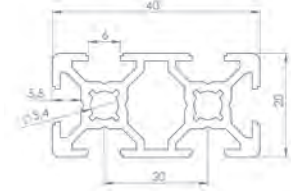
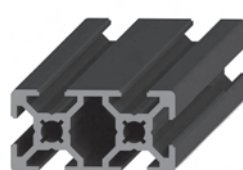
1,6

1,6

1,28

1,28

Perfil básico 20x40 Basic profile 20x40



lx cm4

ly cm4

Wx cm3

Wy cm3

50491

0,8

1,2

4,6

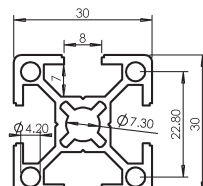
1,4

2,5

Serie, canal 8 mm

Serie, 8 mm slot

Perfil básico 30x30 Basic profile 30x30



lx cm4

ly cm4

Wx cm3

Wy cm3

5010

0,8

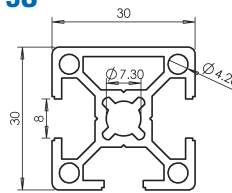
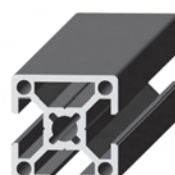
2,7

2,7

1,8

1,8

Perfil 30x30 3S Profile 30x30 3S



lx cm4

ly cm4

Wx cm3

Wy cm3

5029

0,9

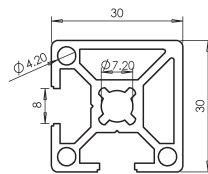
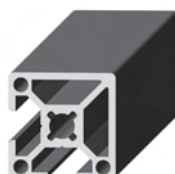
2,7

3,0

1,8

2,0

Perfil 30x30 2S 90º Profile 30x30 2S 90º



lx cm4

ly cm4

Wx cm3

Wy cm3

5028

0,9

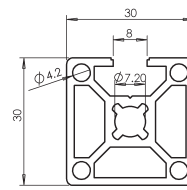
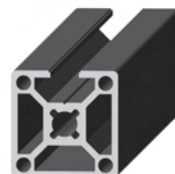
3,0

3,0

2,0

2,0

Perfil 30x30 1S Profile 30x30 1S



lx cm4

ly cm4

Wx cm3

Wy cm3

5027

0,9

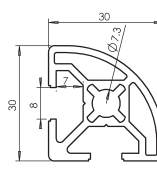
3,0

3,2

2,0

2,1

Perfil MC-30 MC-30 profile



lx cm4

ly cm4

Wx cm3

Wy cm3

5017

0,8

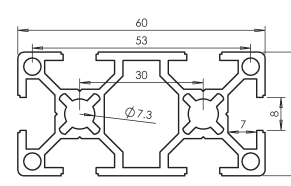
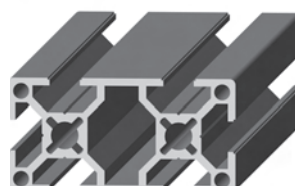
2,3

2,3

1,4

1,4

Perfil básico 30x60 Basic profile 30x60



lx cm4

ly cm4

Wx cm3

Wy cm3

5018

1,5

19,0

5,1

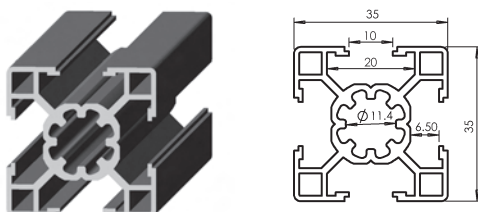
6,3

3,4

Serie, canal 10 mm

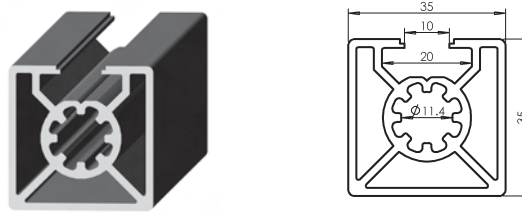
Serie, 10 mm slot

Perfil básico 35x35 Basic profile 35x35



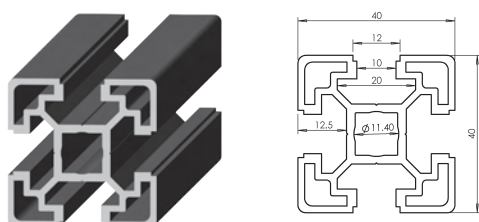
Barcode	kg	Ix cm ⁴	Iy cm ⁴	Wx cm ³	Wy cm ³
5008	0,9	4,1	4,1	2,3	2,3

Perfil 35x35 1S Profile 35x35 1S



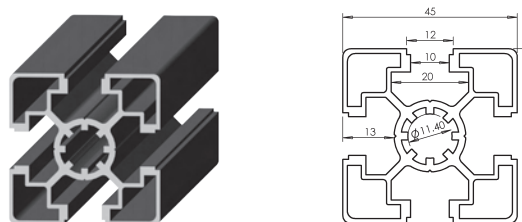
Barcode	kg	Ix cm ⁴	Iy cm ⁴	Wx cm ³	Wy cm ³
50081	1,2	5,3	5,7	3,0	3,2

Perfil básico 40x40 Basic profile 40x40



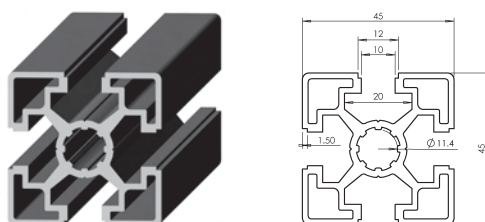
Barcode	kg	Ix cm ⁴	Iy cm ⁴	Wx cm ³	Wy cm ³
5009	1,5	9,0	9,0	4,5	4,5

Perfil ligero 45x45 Light profile 45x45



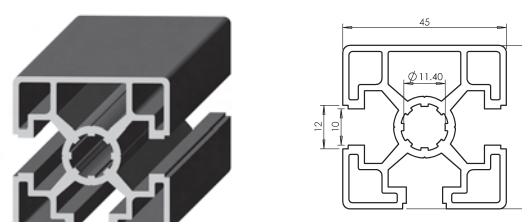
Barcode	kg	Ix cm ⁴	Iy cm ⁴	Wx cm ³	Wy cm ³
5001	1,4	10	10	4,4	4,4

Perfil básico 45x45 Basic profile 45x45



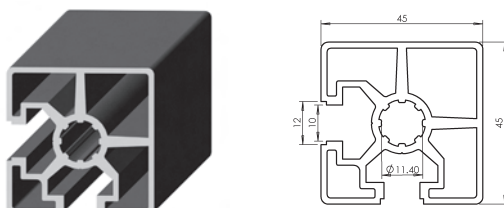
Barcode	kg	Ix cm ⁴	Iy cm ⁴	Wx cm ³	Wy cm ³
5021	1,7	12	12	5,3	5,3

Perfil 45x45 3S Profile 45x45 3S



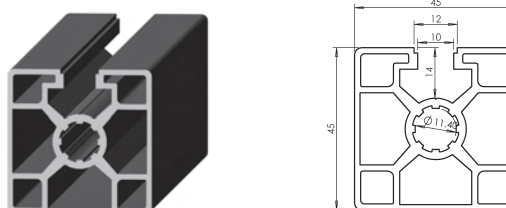
Barcode	kg	Ix cm ⁴	Iy cm ⁴	Wx cm ³	Wy cm ³
5023	1,7	11,9	12,2	5,3	5,4

Perfil 45x45 2S 90º Profile 45x45 2S 90º



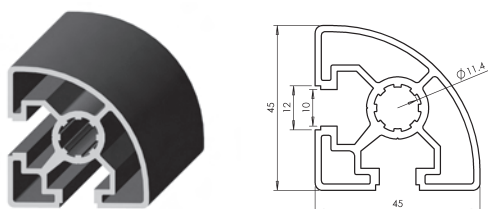
Barcode	kg	Ix cm ⁴	Iy cm ⁴	Wx cm ³	Wy cm ³
5022	1,7	12,2	12,2	5,3	5,3

Perfil 45x45 1S Profile 45x45 1S



Barcode	kg	Ix cm ⁴	Iy cm ⁴	Wx cm ³	Wy cm ³
5043	1,7	12,0	12,1	5,3	5,3

Perfil MC-45 Profile MC-45



Barcode	kg	Ix cm ⁴	Iy cm ⁴	Wx cm ³	Wy cm ³
5024	1,4	3,5	3,5	8,7	8,7

Perfil 45x45º Profile 45x45º



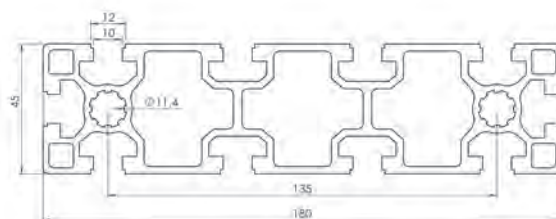
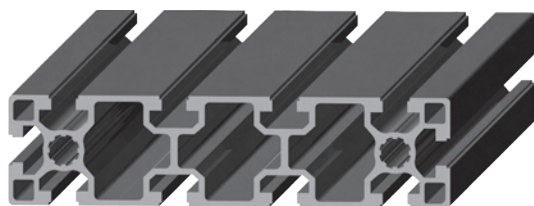
Barcode	kg	Ix cm ⁴	Iy cm ⁴	Wx cm ³	Wy cm ³
5057	1,7	11,6	18,8	4,5	5,6

The technical drawing shows a 3D-printed part with a perspective view on the left and a top-down view on the right. The top-down view includes the following dimensions:

- Overall width: 45
- Inner width: 12
- Inner width: 10
- Inner width: 20
- Inner width: 12.5
- Inner width: 11.4
- Overall height: 45

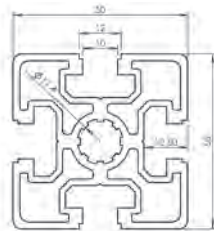
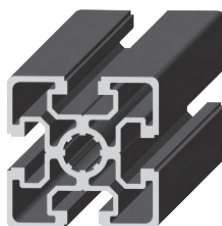
[illegible]98

Perfil 45x180 **Profile 45x180**



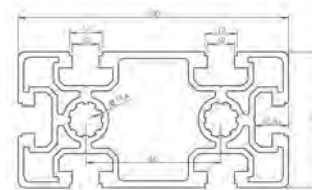
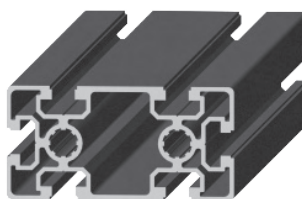
		I_x cm ⁴	I_y cm ⁴	W_x cm ³	W_y cm ³
5056	6,3	55,6	740,5	24,7	82,3

Perfil básico 50x50 **Basic profile 50x50**



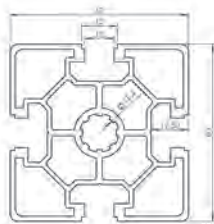
		I_x cm ⁴	I_y cm ⁴	W_x cm ³	W_y cm ³
5053	2,3	19,7	19,7	7,9	7,9

Perfil básico 50x100 **Basic profile 50x100**



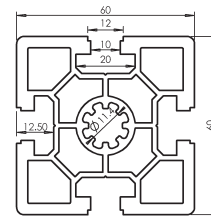
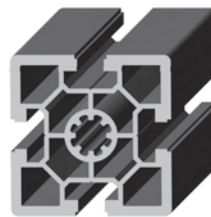
		I_x cm ⁴	I_y cm ⁴	W_x cm ³	W_y cm ³
5054	4	39,8	152,6	16	30,5

Perfil ligero 60x60 **Light profile 60x60**



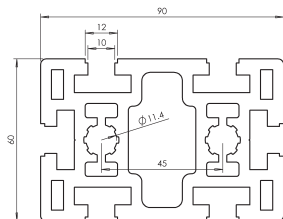
		I_x cm ⁴	I_y cm ⁴	W_x cm ³	W_y cm ³
5006	2,5	29	29	9,6	9,6

Perfil pesado 60x60 **Strong profile 60x60**



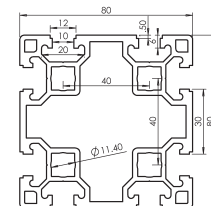
		I_x cm ⁴	I_y cm ⁴	W_x cm ³	W_y cm ³
5013	3,6	49,6	49,6	16,5	16,5

Perfil básico 60x90 **Basic profile 60x90**



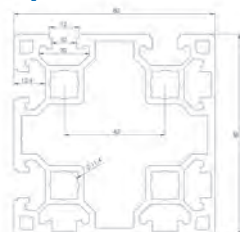
		I_x cm ⁴	I_y cm ⁴	W_x cm ³	W_y cm ³
5044	6,7	89,6	204,5	29,8	45,4

Perfil básico 80x80 **Basic profile 80x80**

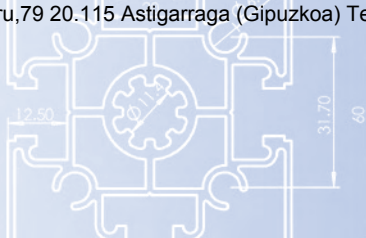


		I_x cm ⁴	I_y cm ⁴	W_x cm ³	W_y cm ³
5014	4,5	124	124	31	31

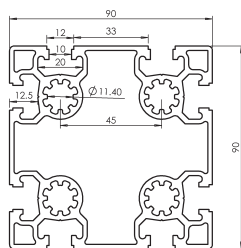
Perfil básico 80x80 2S **Basic profile 80x80 2S**



		I_x cm ⁴	I_y cm ⁴	W_x cm ³	W_y cm ³
501490	4,6	125	125	31	31



Perfil ligero 90x90 **Light profile 90x90**



5004



5,1

Ix cm4

Iy cm4

Wx cm3

Wy cm3

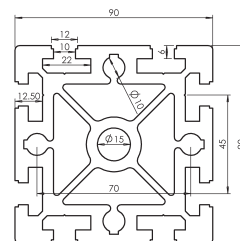
175,1

175,1

38,9

38,9

Perfil pesado 90x90 **Strong profile 90x90**



5015



10,0

Ix cm4

Iy cm4

Wx cm3

Wy cm3

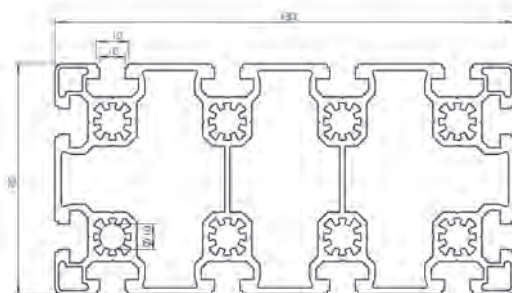
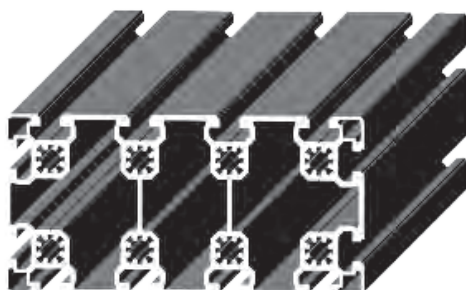
303,1

303,1

67,3

67,3

Perfil ligero 90x180 **Light profile 90x180**



5099



10,2

Ix cm4

Iy cm4

Wx cm3

Wy cm3

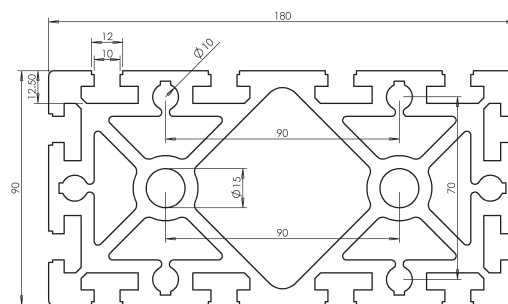
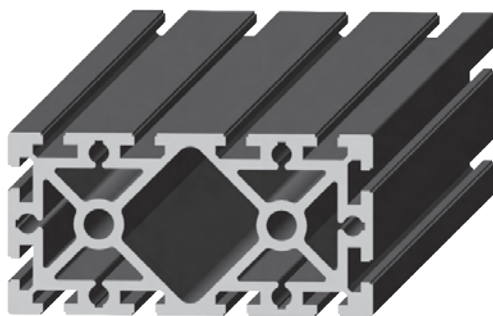
354

1198

78,6

133,1

Perfil pesado 90x180 **Strong profile 90x180**



5033



17,7

Ix cm4

Iy cm4

Wx cm3

Wy cm3

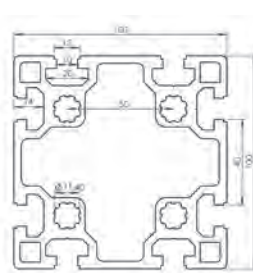
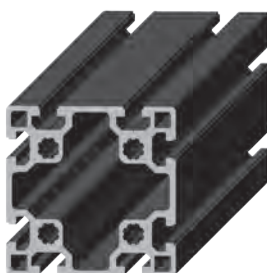
576

2194

128

243,7

Perfil básico 100x100 **Basic profile 100x100**



5055



8,0

Ix cm4

Iy cm4

Wx cm3

Wy cm3

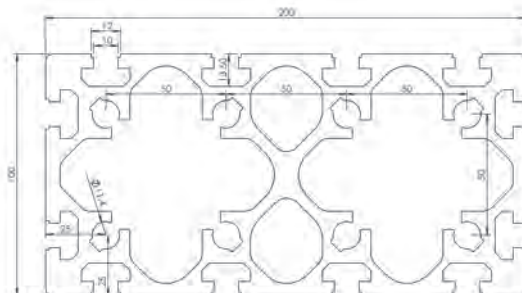
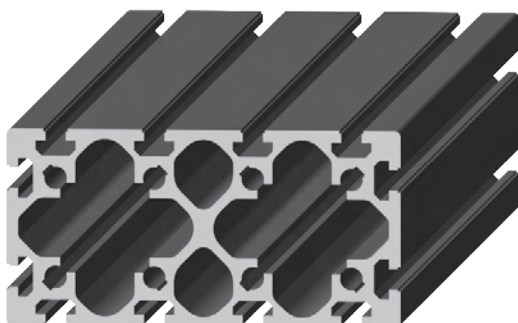
336

336

67,2

67,2

Perfil básico 100x200 Basic profile 100x200

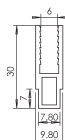


		$I_x \text{ cm}^4$	$I_y \text{ cm}^4$	$W_x \text{ cm}^3$	$W_y \text{ cm}^3$
5052	17,8	792,6	2725,5	158,6	272,5

Series especiales

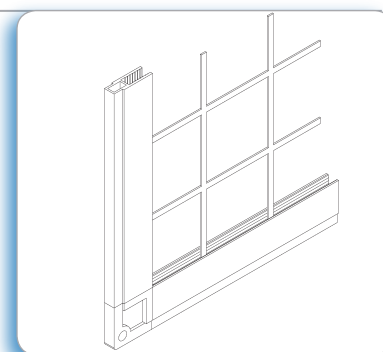
Special series

Perfil en U U profile

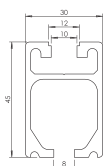


5034

0,3



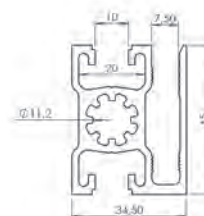
Perfil corredera 45x30 Sliding door profile 45x30



5016

1,1

Perfil perimetral protecciones Protection profile



5007

1,35

$I_x \text{ cm}^4$ 5,8

$I_y \text{ cm}^4$ 9,4

$W_x \text{ cm}^3$ 3,36

$W_y \text{ cm}^3$ 4,17

Perfil perimetral doble Double protection profile



50071

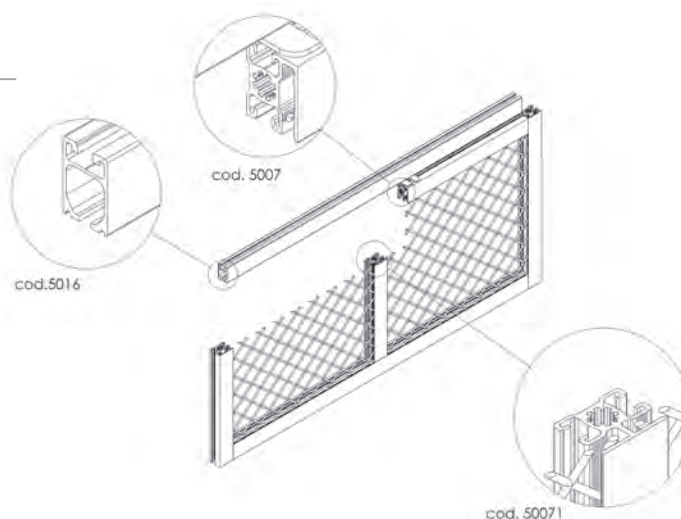
1,40

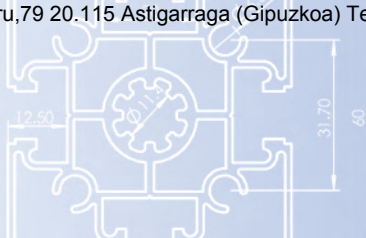
$I_x \text{ cm}^4$ 6,6

$I_y \text{ cm}^4$ 8,3

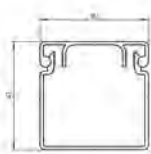
$W_x \text{ cm}^3$ 3,80

$W_y \text{ cm}^3$ 3,70



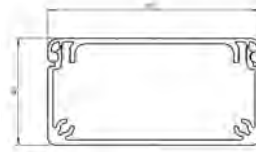
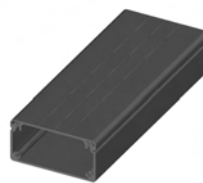


Perfil canaleta 40x40 Conduit profile 40x40



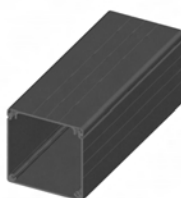
Perfil base / support	5030	0,4
Perfil tapa / cover	5031	0,3
Tapeta / end cover	5507	0,006

Perfil canaleta 40x80 Conduit profile 40x80

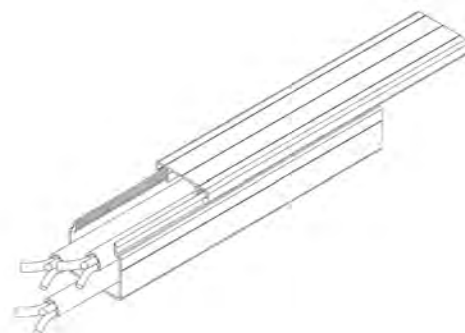


Perfil base / support	5046	0,9
Perfil Tapa / cover	5045	0,6
Tapeta / end cover	55071	0,025

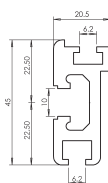
Perfil canaleta 80x80 Conduit profile 80x80



Perfil base / support	5047	1,4
Perfil tapa / cover	5045	0,6
Tapeta / end cover	55072	0,05



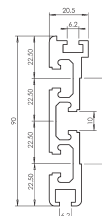
Perfil transportador 45 Conveyor profile 45



5038

1,1

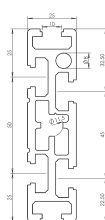
Perfil transportador 90 Conveyor profile 90



5039

2

Perfil transportador 100 Conveyor profile 100



5020

2,9

lx cm4

7,4

ly cm4

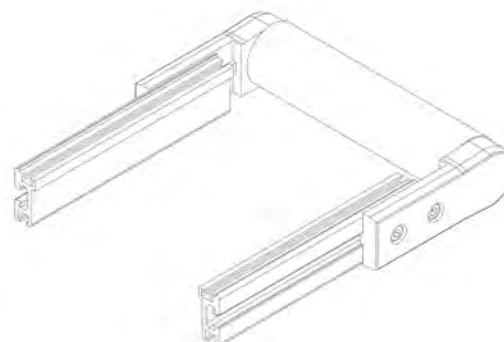
91,7

Wx cm3

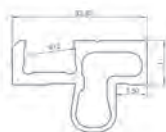
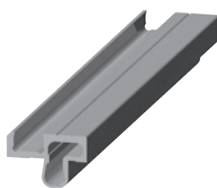
5,9

Wy cm3

18,4



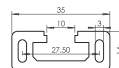
Perfil guía transportador Guiding conveyor profile



50993



0,6



5019



0,8

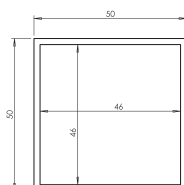
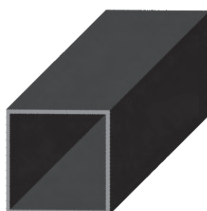
Wv cm³

0,6

3,6

0,35

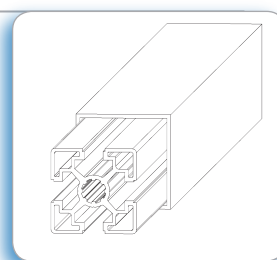
5,15



5084



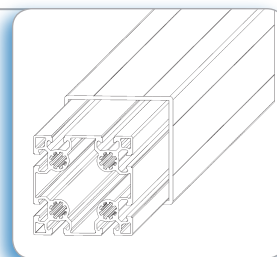
1,05

**Aplicación / Application**

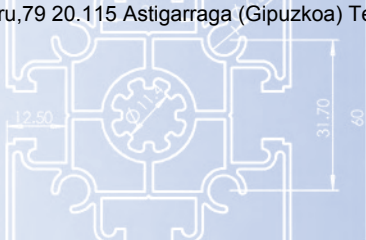
5082



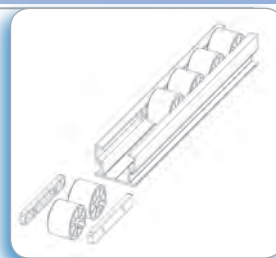
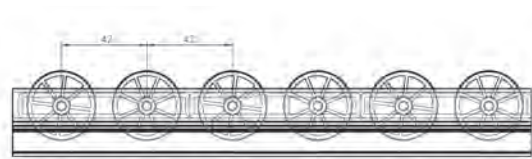
3.60



Aplicación / Application



Perfil minicarril **Minirail** profile



Aplicación / Application

		
Perfil minicarril / minirail profile	5050	0,7

		
Rueda negra / Black wheel	5570	0,013
Rueda amarilla / Yellow wheel	5570A	0,013
Rueda roja / Red wheel	5570R	0,013
Rueda verde / Green wheel	5570V	0,013
Soporte / holder	5571	0,003
Eje / axle	5572	0,004
Tapa / end cover	5573	0,025
Perfil minicarril completo	5574	1,200

