



GLOBAL AUTOMATE SOLUTIONS

Increase Your Shop Floor Efficiency With Us!!!

Global Automate Solutions is a Professional Manufacturer of T Slot Aluminum Profiles & Accessories and Non-standard fasteners. The company is located in Pune city Maharashtra –India

The company firmly set up the concept of “quality first, credibility foremost”! Relying on the scientific management method, the company optimizes the supply chain, improves and explores new processing technics, brings in advanced processing equipment, and reduces production cost without compromising the quality of products to really benefit our customers.



**T SLOT
ALUMINIUM
PROFILE &
ACCESSORIES**

Contact Us –

Global Automate Solutions
95/1 Near Swami Samarth temple landgenagar Bhosari Pune 411039
Tel - +917972221755 / 9730382785/ 9850763285
Mail – salesglobalautomate@gmail.com
website - www.globalautomate.in



Aluminium Profiles

Material: Aluminium Alloy 6063 T6
Tensile Strength : ≥ 220 N/mm
Surfacetreatment: Silver/Black Matt Finish
Standard Length : 3 / 6 Meter



15x120

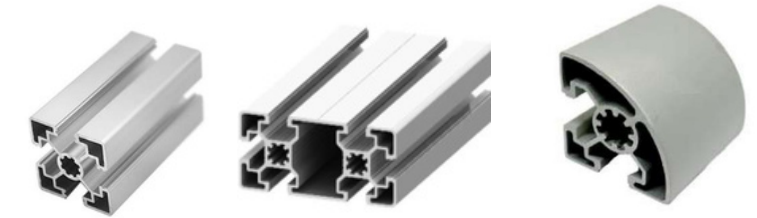
**20x20 T, 20x20 V
20x40 T, 20x40 V,
20x60 T, 20x60 V,**

**30x30, 30x60, 30R,
30x30 2C**

**40x40 L, 40x40 E,
40x40 H, 40x40 EH
40R**

**40X40 1C, 40X40
2C, 40X40 3C**

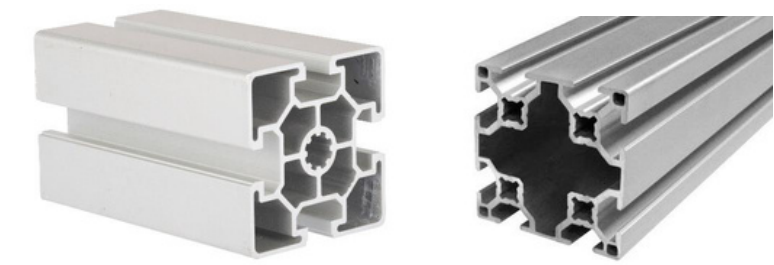
**40x80 E, 40x80 H,
40x120, 40x160**



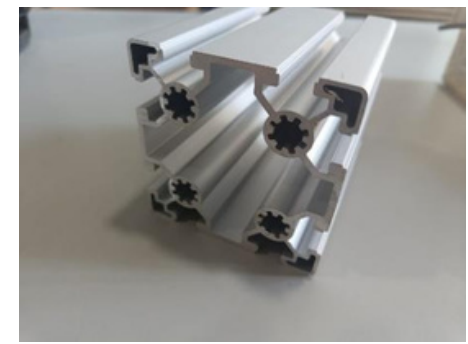
45x45, 45x90, 45R



50x50



**60x60 4 slot
60x60 8 slot**



**80x80
90x90**



80x120



80x160

Aluminium Profiles

Material: Aluminium Alloy 6063 T6

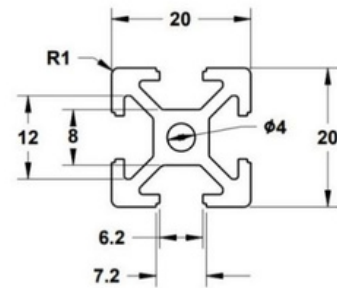
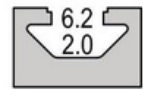
Surfacetreatment: Silver/Black Matt Finish

Profile 20x20 T Slot

GA2020TS



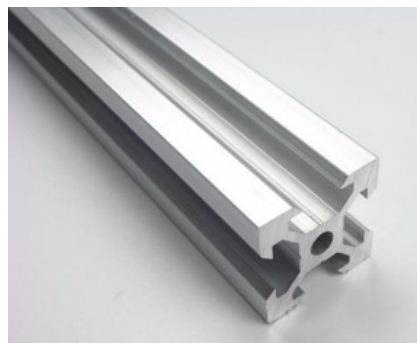
Moment of inertia - (Tx) 0.7cm⁴ (Ty) 0.7 cm⁴
Profile Surface - 146mm²



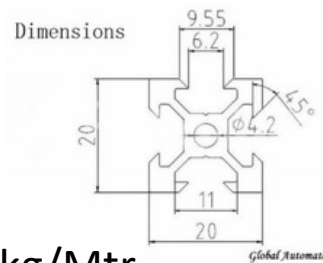
GA2020TS – 0.5 kg/Mtr

Profile 20x20 V Slot

GA2020VS



Moment of inertia - (Tx) 0.7cm⁴ (Ty) 2, 2 cm⁴
Profile Surface - 146mm²



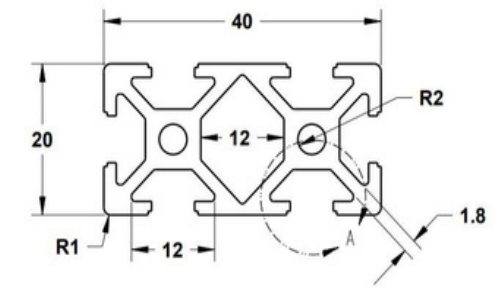
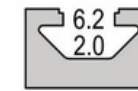
GA2020VS – 0.5 kg/Mtr

Profile 20x40 T Slot

GA2040TS



Moment of inertia - (Tx) 4.6cm⁴ (Ty) 1.2 cm⁴
Profile Surface – 279 mm²



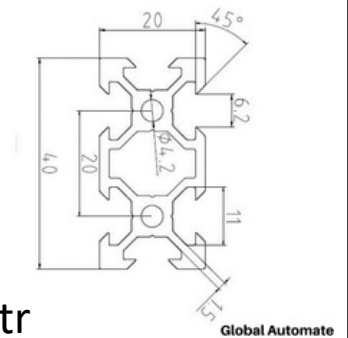
GA2040TS – 0.91 kg/Mtr

Profile 20x40 V Slot

GA2040VS



Moment of inertia - (Tx) 4.6cm⁴ (Ty) 1.2 cm⁴
Profile Surface – 279 mm²



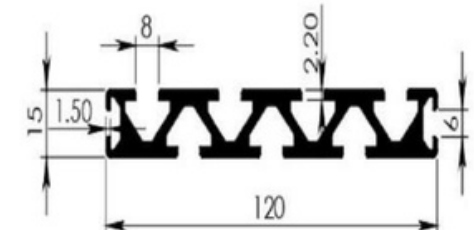
GA2040VS – 0.85 kg/Mtr

Profile 15X120 T Slot

GA15120TS



Moment of inertia - (Tx) 110.4 cm⁴ (Ty) 2.2 cm⁴
Profile Surface – 794 mm²



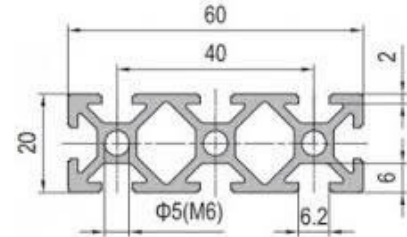
GA2040VS – 2.11 kg/Mtr

Profile 20x60 T Slot

GA2060TS



Moment of inertia - (Tx) 110.4cm⁴ (Ty) 2.2 cm⁴
Profile Surface – 794 mm²



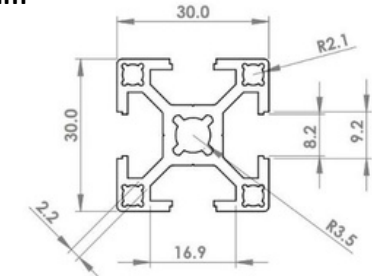
GA2060TS – 1.48 kg/Mtr

Profile 30x30 T Slot

GA3030TES



Moment of inertia - (Tx) 2.7cm⁴ (Ty) 2.7 cm⁴
Profile Surface – 284 mm²



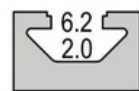
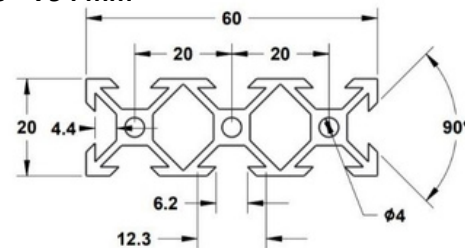
GA3030TS – 0.83 kg/Mtr

Profile 20x60 V Slot

GA2060VS



Moment of inertia - (Tx) 110.4cm⁴ (Ty) 2.2 cm⁴
Profile Surface – 794 mm²



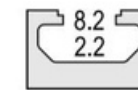
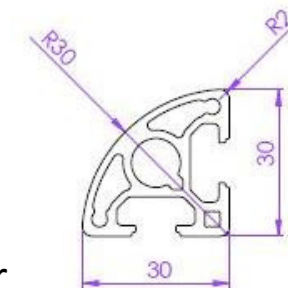
GA2060VS – 1.48 kg/Mtr

Profile 30R T Slot

GA30RTS



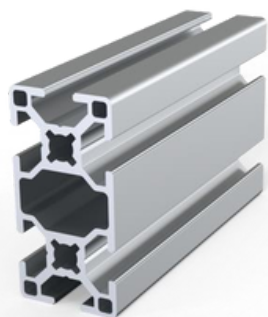
Moment of inertia - (Tx) 2.4cm⁴ (Ty) 2.4 cm⁴
Profile Surface – 300 mm²



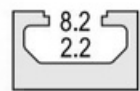
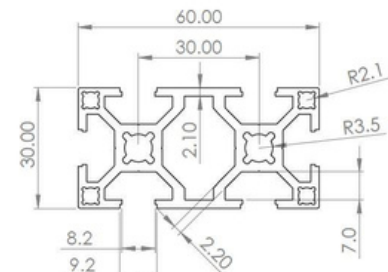
GA30RTS – 0.75 kg/Mtr

Profile 30X60 T Slot

GA3060TES



Moment of inertia - (Tx) 18.8 cm⁴ (Ty) 6.0 cm⁴
Profile Surface – 1002 mm²



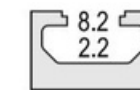
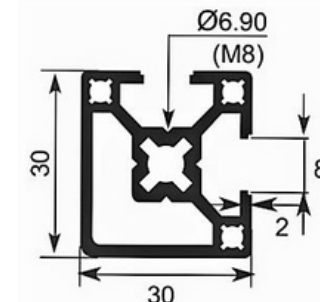
GA3060TS – 1.52 kg/Mtr

Profile 3030 2C

GA30302CTS

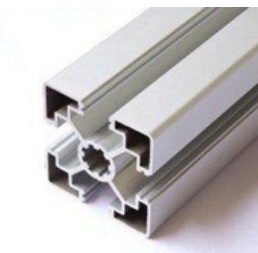


Moment of inertia - (Tx) 3.1 cm⁴ (Ty) 3.1 cm⁴
Profile Surface – 333 mm²

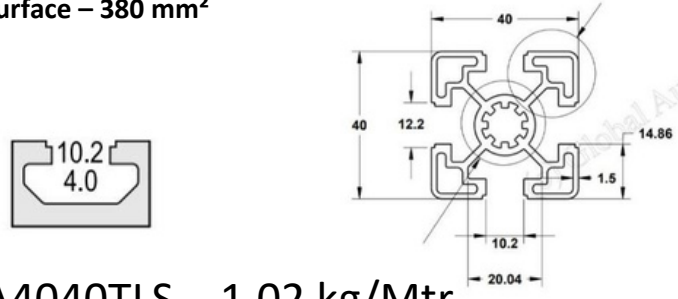


GA30302CTS – 0.99 kg/Mtr

Profile 40x40 T Slot Light GA4040TLS

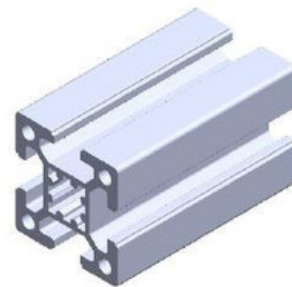


Moment of inertia - (Tx) 6.8 cm⁴ (Ty) 6.8 cm⁴
Profile Surface – 380 mm²

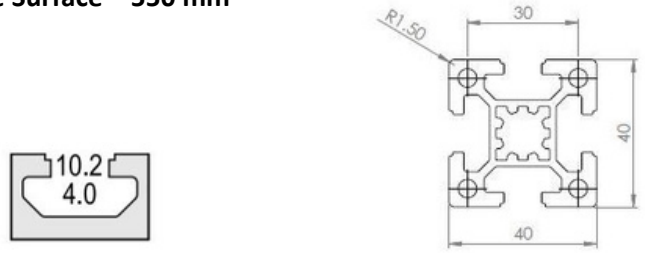


GA4040TLS – 1.02 kg/Mtr

Profile 40x40 T Slot Heavy GA4040THD




Moment of inertia - (Tx) 10.8 cm⁴ (Ty) 10.8 cm⁴
Profile Surface – 550 mm²

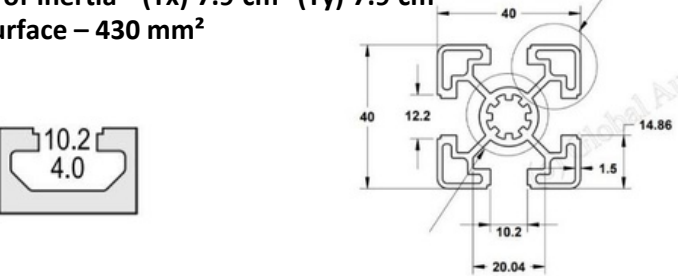


GA4040THDS – 1.695 kg/Mtr

Profile 40x40 T Slot ECO GA4040TES




Moment of inertia - (Tx) 7.9 cm⁴ (Ty) 7.9 cm⁴
Profile Surface – 430 mm²

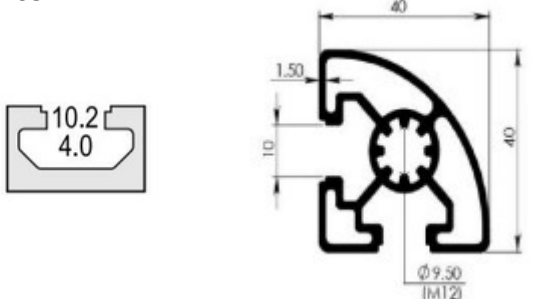


GA4040TES – 1.3 kg/Mtr

Profile 40R T Slot GA40RTS




Moment of inertia - (Tx) 7.2 cm⁴ (Ty) 7.2 cm⁴
Profile Surface – 405 mm²

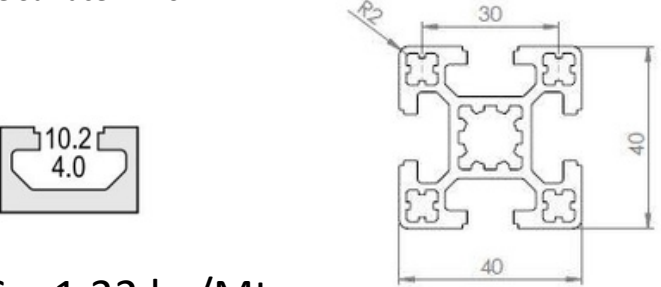


GA40RTS – 1.25 kg/Mtr

Profile 40x40 T Slot Medium GA4040TMD




Moment of inertia - (Tx) 8 cm⁴ (Ty) 8 cm⁴
Profile Surface – 440 mm²

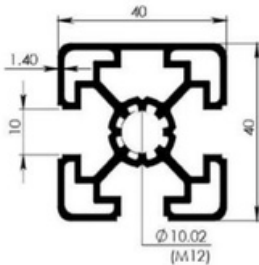


GA4040TMDS – 1.32 kg/Mtr

Profile 40x40 T Slot 1C GA4040T1C



Moment of inertia - (Tx) 9.7 cm⁴ (Ty) 9 cm⁴
Profile Surface – 447 mm²

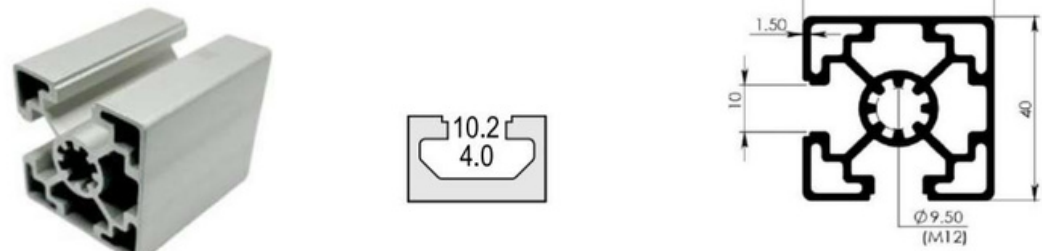


GA4040TMDS – 1.21 kg/Mtr

Profile 40x40 T Slot 2C

GA4040T2C

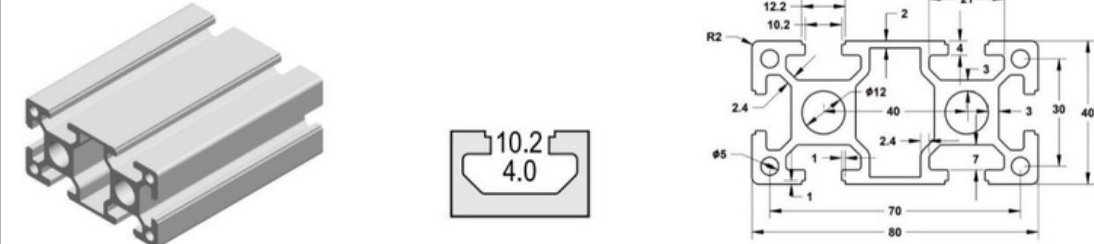
Moment of inertia - (Tx) 9.7 cm⁴ (Ty) 9.7 cm⁴
 Profile Surface – 515 mm²



GA4040TLS – 1.39 kg/Mtr

Profile 40x80 T 8 Slot Heavy GA4080THS

Moment of inertia - (Tx) 69.6 cm⁴ (Ty) 26.3 cm⁴
 Profile Surface – 949 mm²

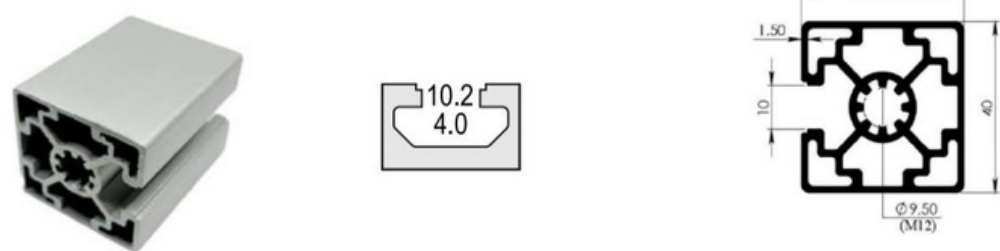


GA4080THS – 3.2 kg/Mtr

Profile 40x40 T Slot 3C

GA4040T3C

Moment of inertia - (Tx) 9.8 cm⁴ (Ty) 10.3 cm⁴
 Profile Surface – 533 mm²

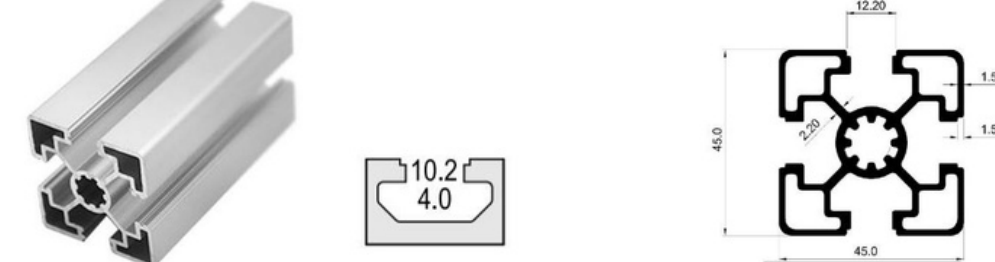


GA4040TES – 1.44 kg/Mtr

Profile 45x45 T 4 Slot

GA4545TES

Moment of inertia - (Tx) 13.7 cm⁴ (Ty) 13.7 cm⁴
 Profile Surface – 601 mm²

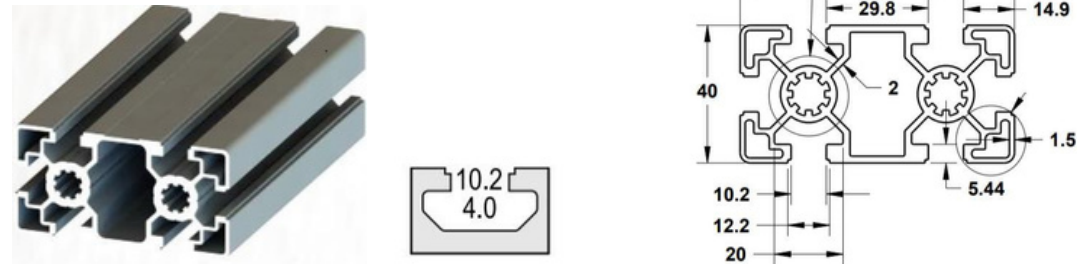


GA4545TS – 1.62 kg/Mtr

Profile 40x80 T Slot ECO

GA4080TES

Moment of inertia - (Tx) 59.6cm⁴ (Ty) 16.3 cm⁴
 Profile Surface – 849 mm²



GA4080TES – 2.4 kg/Mtr

Profile 45R T Slot

GA45RTS

Moment of inertia - (Tx) 8.8 cm⁴ (Ty) 8.8 cm⁴
 Profile Surface – 498 mm²

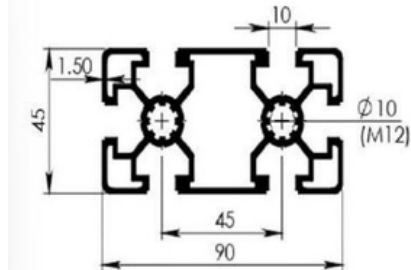
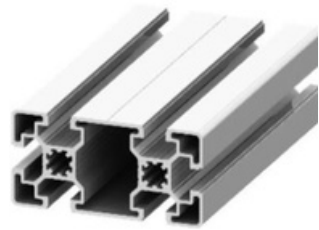


GA45RTS – 1.3 kg/Mtr

Profile 45x90 T Slot

GA4590TES

Moment of inertia - (Tx) 84.2 cm⁴ (Ty) 23.7 cm⁴
Profile Surface – 619 mm²

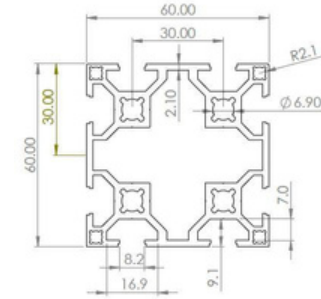
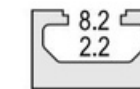


GA4590TS – 2.76 kg/Mtr

Profile 60x60 T 8 Slot

GA60608TS

Moment of inertia - (Tx) 39.2 cm⁴ (Ty) 39.2 cm⁴
Profile Surface – 894 mm²

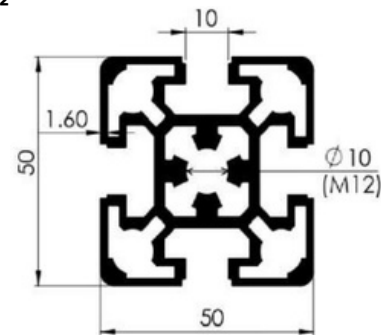
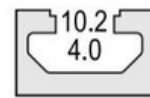


GA60608TS – 2.75 kg/Mtr

Profile 50X50 T Slot

GA5050TES

Moment of inertia - (Tx) 22.18 cm⁴ (Ty) 22.18 cm⁴
Profile Surface – 866 mm²

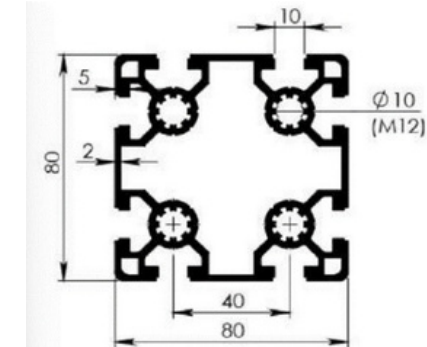


GA5050TS – 2.35 kg/Mtr

Profile 80x80 T Slot

GA8080TES

Moment of inertia - (Tx) 117 cm⁴ (Ty) 117 cm⁴
Profile Surface – 1565 mm²

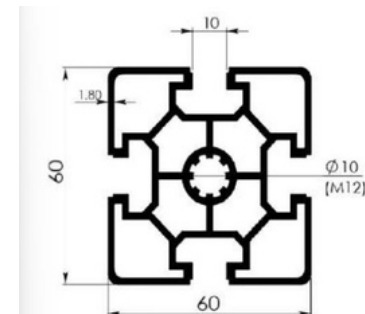


GA8080TS – 4.2 kg/Mtr

Profile 60x60 T 4 Slot

GA60604TS

Moment of inertia - (Tx) 38.7 cm⁴ (Ty) 38.7 cm⁴
Profile Surface – 1010 mm²

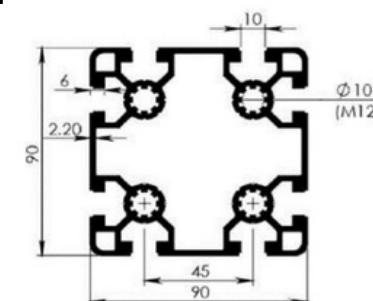


GA60604TS – 2.59 kg/Mtr

Profile 90x90 T Slot

GA9090TES

Moment of inertia - (Tx) 195 cm⁴ (Ty) 195 cm⁴
Profile Surface – 1826 mm²

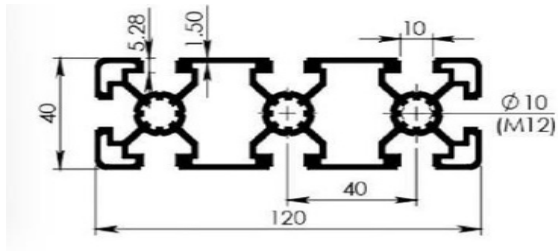


GA9090TS – 4.940 kg/Mtr

Profile 40x120 T Slot

GA40120TES

Moment of inertia - (Tx) 203.2 cm⁴ (Ty) 27.8 cm⁴
 Profile Surface – 1177 mm²



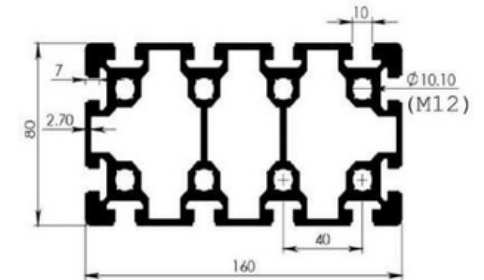
GA40120TES – 3.44 kg/Mtr



Profile 80x160 T Slot

GA80160TS

Moment of inertia - (Tx) 850.7 cm⁴ (Ty) 253.4 cm⁴
 Profile Surface – 3707 mm²



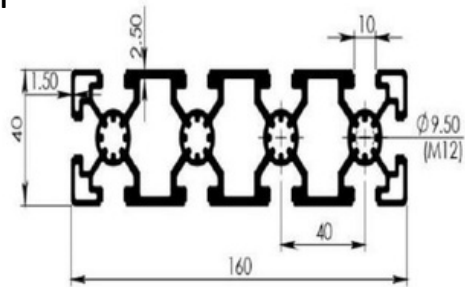
GA80160TS – 10 kg/Mtr



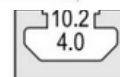
Profile 40x160 T Slot

GA40160TS

Moment of inertia - (Tx) 446.7 cm⁴ (Ty) 37 cm⁴
 Profile Surface – 1816 mm²



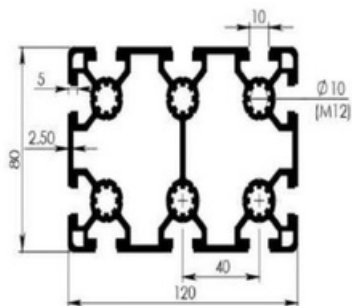
GA40160TS – 4.9 kg/Mtr



Profile 80x120 T Slot

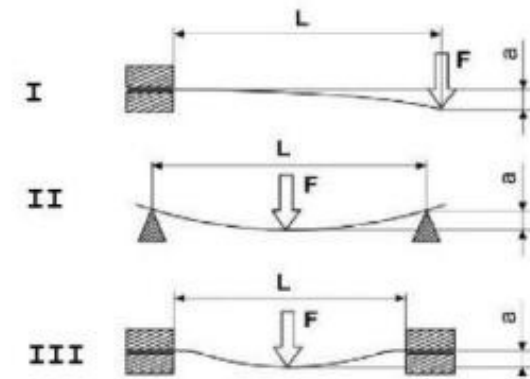
GA80120TS

Moment of inertia - (Tx) 389.2 cm⁴ (Ty) 192.8 cm⁴
 Profile Surface – 1970 mm²



GA80120TS – 6.07 kg/Mtr

PROFILE DEFLECTION



The diagram shown to the side provides a general indication of the bending of an aluminium profile. The sizing of the finished structure will be calculated on a case-by-case basis, and is the customer's responsibility.

$$a_I = \frac{F \times L^3}{3 E \times I \times 10^4}$$

Profile deflection a from force F force static stress cases I, II, III.

$$a_{II} = \frac{F \times L^3}{48 E \times I \times 10^4}$$

$$a_{III} = \frac{F \times L^3}{192 E \times I \times 10^4}$$

$$a_I = \frac{g \times m_L \times L^4}{8 E \times I \times 10^4}$$

Profile deflection a from the profiles's own weight.

$$a_{II} = \frac{5 \times g \times m_L \times L^4}{384 E \times I \times 10^4}$$

$$a_{III} = \frac{g \times mL \times L^4}{384 E \times I \times 10^4}$$

Legend:

- E** = 70,000 N/mm (Modulus of Elasticity) , **F** = Load(N)
- L** = Unsuspended Length(mm)
- a** = Deflection of profile (mm)
- W** = Section Modulus (cm³)
- m_L** = Mass of Profile (Kg/mm)
- I** = Moment of inertia (cm⁴)