



GN

Thin Panel Guide Pin

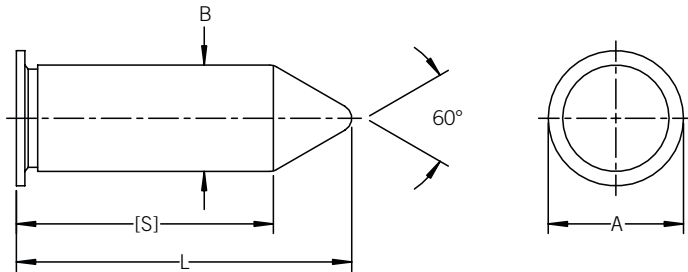
FEATURES & BENEFITS

- Precisely locates stacked and/or mating panels
- Self-clinching design provides permanent installation in panels as thin as 0.63 mm
- Wide range of pin diameters and lengths accommodates most alignment requirements. Custom sizes available by request
- Choice of materials and finishes
- RoHS compliant
- See GPN self-clinching guide pin nuts for a complete alignment solution



PART DESCRIPTION EXAMPLE

GNST — M3 — 12 — Z
 T T T T
 Material Diameter Length Finish



GENERAL

Pin Size	Panel Mounting Hole +0.08/-0.00	Minimum Sheet Thickness	Hole Center to Edge Distance Min.	A Nom.	B +0.00/-0.08
M3	3.02	0.63	5.6	4.00	3.00
M4	4.01	0.63	6.7	5.00	3.99
M5	5.00	0.63	7.0	6.00	4.98
M6	5.99	0.63	7.7	7.00	5.97

All dimensions in millimeters

LENGTH

Pin Size	(L) Length Code +0.00/-0.25						
	6	8	10	12	15	20	25
	S Ref.						
M3	4.15	6.15	8.15	10.15	13.15	18.15	23.15
M4	3.30	5.30	7.30	9.30	12.30	17.30	22.30
M5	2.40	4.40	6.40	8.40	11.40	16.40	21.40
M6	—	3.55	5.55	7.55	10.55	15.55	20.55

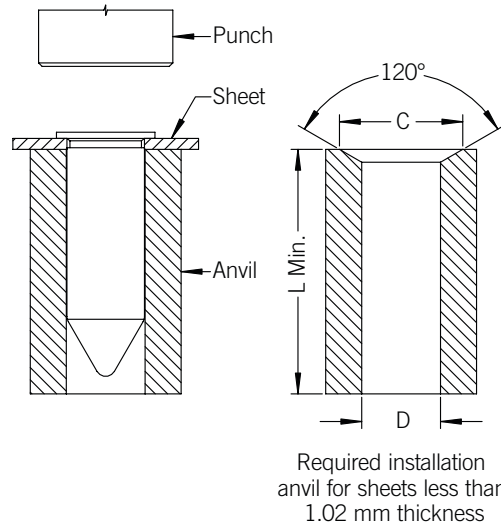
All dimensions in millimeters

MATERIAL & FINISH

Material Code	Description	Finish Code	Description
ST	Carbon Steel	Z	Zinc (SC1) with Type III Clear Chromate per ASTM B 633
SS	300-Series Stainless Steel	P	Passivate and/or test per ASTM A 967

INSTALLATION GUIDE

1. Punch or drill hole in sheet. Do not deburr edges.
2. Insert guide pin through hole in sheet and into the anvil as shown.
3. Squeeze the sheet and guide pin head between parallel punch anvils. Use only enough pressure to seat the guide pin head flush with the sheet.
4. A chamfered anvil is required for sheets less than 1.02 mm thick only.



ANVIL DIMENSIONS

Pin Size	Anvil Dimensions	
	C	D
M3	4.18/4.00	3.13/3.05
M4	5.18/5.00	4.12/4.04
M5	6.18/6.00	5.11/5.03
M6	7.18/7.00	6.10/6.02

All dimensions in millimeters

PERFORMANCE

Pin Size	Sheet Thickness (mm)	Sheet Material			
		5052-H32 Aluminum		1008 Carbon Steel ²	
		Installation (kN)	Push-out (N)	Installation (kN)	Push-out (N)
M3	0.63-1.01	2.4-3.3	200	3.4-4.6	220
	1.02 Min.	3.8-5.1	460	5.1-6.9	480
M4	0.63-1.01	2.5-3.4	280	4.8-6.5	370
	1.02 Min.	3.8-5.2	540	7.2-9.7	680
M5	0.63-1.01	2.9-3.9	340	5.7-7.7	390
	1.02 Min.	4.0-5.5	620	8.2-11.1	720
M6	0.63-1.01	3.2-4.4	390	6.2-8.4	410
	1.02 Min.	4.6-6.2	700	9.2-12.4	760

- (1) Performance data represents the average destructive result when all installation specifications are strictly followed. Variations in panel hole size, thickness, material and installation methods will affect the loads. Values may not be consistent with loading in an assembly. Pencom strongly encourages testing in the application.
- (2) Maximum sheet hardness HRB 60.

This information may be updated periodically. Contact Pencom for current information or see www.pencomsf.com