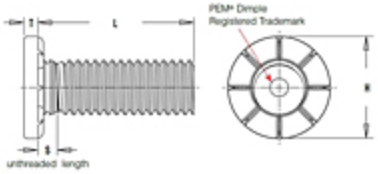
PennEngineering
Corporate Headquarters – Danboro, PA
5190 Old Easton Rd.
Danboro, PA 18916
Phone: 215-766-8853
Toll-Free Phone: 1-800-237-4736 (U.S. only)
Email: info@pemnet.com
Website: www.pemnet.com

Part # HFLH-M8-15ZI, Type HFLH™ Hard Panel Studs - Metric

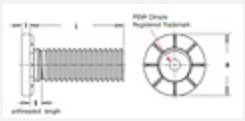
- Installs into thinner, harder, high strength steel materials (high strength steel sheets up to 700 MPa maximum ultimate tensile)
- Allows overall weight reduction for all vehicles
- Provides lower installed cost

Compare to other thin sheet fastening devices:

- Addresses environmental concerns
- Lighter weight
- Close to edge of panel mounting
- No embossing required
- Hardened stud material provides stronger thread strength
- Can be installed automatically using press or in-die technology



Specifications	
Thread Size x Pitch	M8 x 1.25
Thread Code	M8
Length Code	15
Min. Sheet Thickness	1.5 mm

Hole Size in Sheet + 0.13	8 mm
L - Length ± 0.4	15 mm 
H ± 0.25	15.3 mm
S Max.[1]	3.3 mm
T Max.	2.13 mm
Max. Hole in Attached Parts	10.3 mm
Min. Dist. Hole C/L to Edge	14.5 mm
Tensile strength	900 MPa
For Use in Sheet Hardness[2]	HRB 96 / HB 216 or Less
Thread Specification	External, ASME B1.13M, 6g B1.1, 2A / ASME
Fastener Material	Heat-Treated Alloy Steel
Standard Finish	Zinc plated per ASTM B633, SC1 (5µm), Type III, colorless
CAD Supplier	PennEngineering® (PEM®)

[1] Threads are gageable to within 2 pitches of the "S" Max. dimension. A class 3B/5H maximum material commercial nut shall pass up to the "S" Max. dimension.

[2] HRB - Hardness Rockwell "B" Scale. HB - Hardness Brinell