VEHICLE PARTS MANUFACTURING

GRM Clamp for Hot-Forming or Hot-Stamping

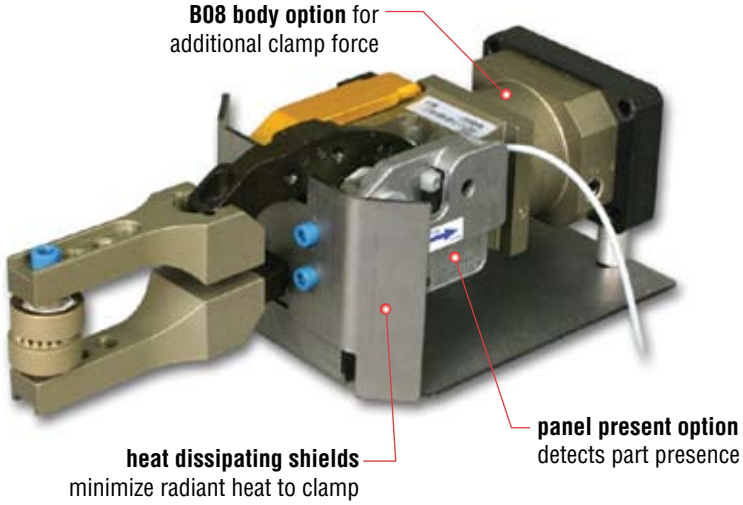
C4556

DEFINITION

Hot-forming or hot-stamping is the process of heating steel to approximately 1700°F where it is then formed in water-cooled dies for eight to ten seconds. The end result is a part that is two to three times the strength of conventionally stamped parts. Automotive parts that utilize this process may include A and B pillars, frame tunnels, side-impact supports, roof rails, and panel rockers.

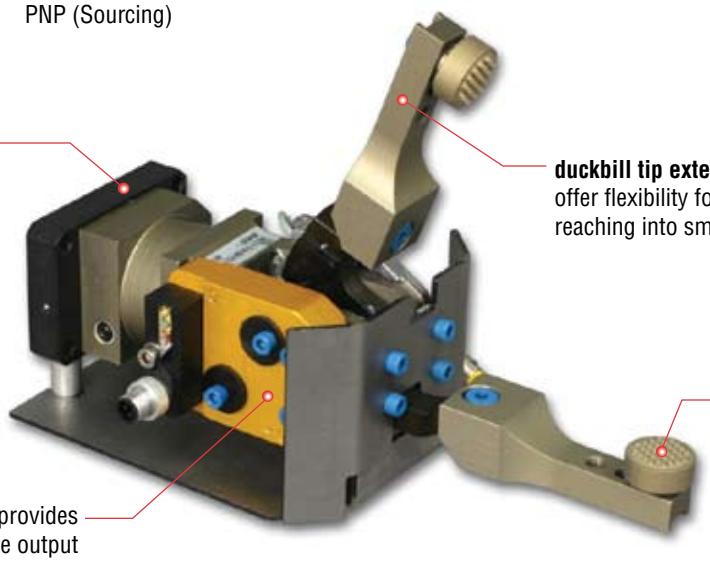
APPLICATION

Body panels come out of an oven heated up to 1742°F. The panels arrive on a conveyor in random orientations. A camera (vision system) scans the panels and a robot aligns the clamps to them. The GRM Clamps then place the re-oriented panels into the transfer press.



SPECIFICATIONS

Bore:	40 mm
Unit Weight:	5.0 lb [2.3 kg]
Total Clamp Force @ 87 psi [6.0 bar]:	192.0 lb [854.0 N]
Jaw Rotation:	75° x 00°
Seals:	Fluoro-Elastomer
Lubrication:	High-Temp
Operating Voltage:	10-30 VDC
Output:	PNP (Sourcing)



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DIMENSIONS: HOT-FORMING OR HOT-STAMPING GRM CLAMP

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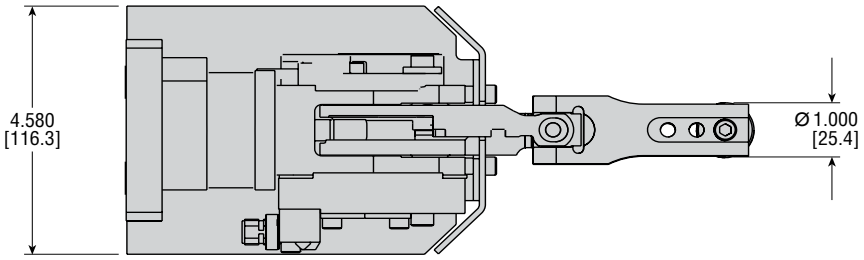
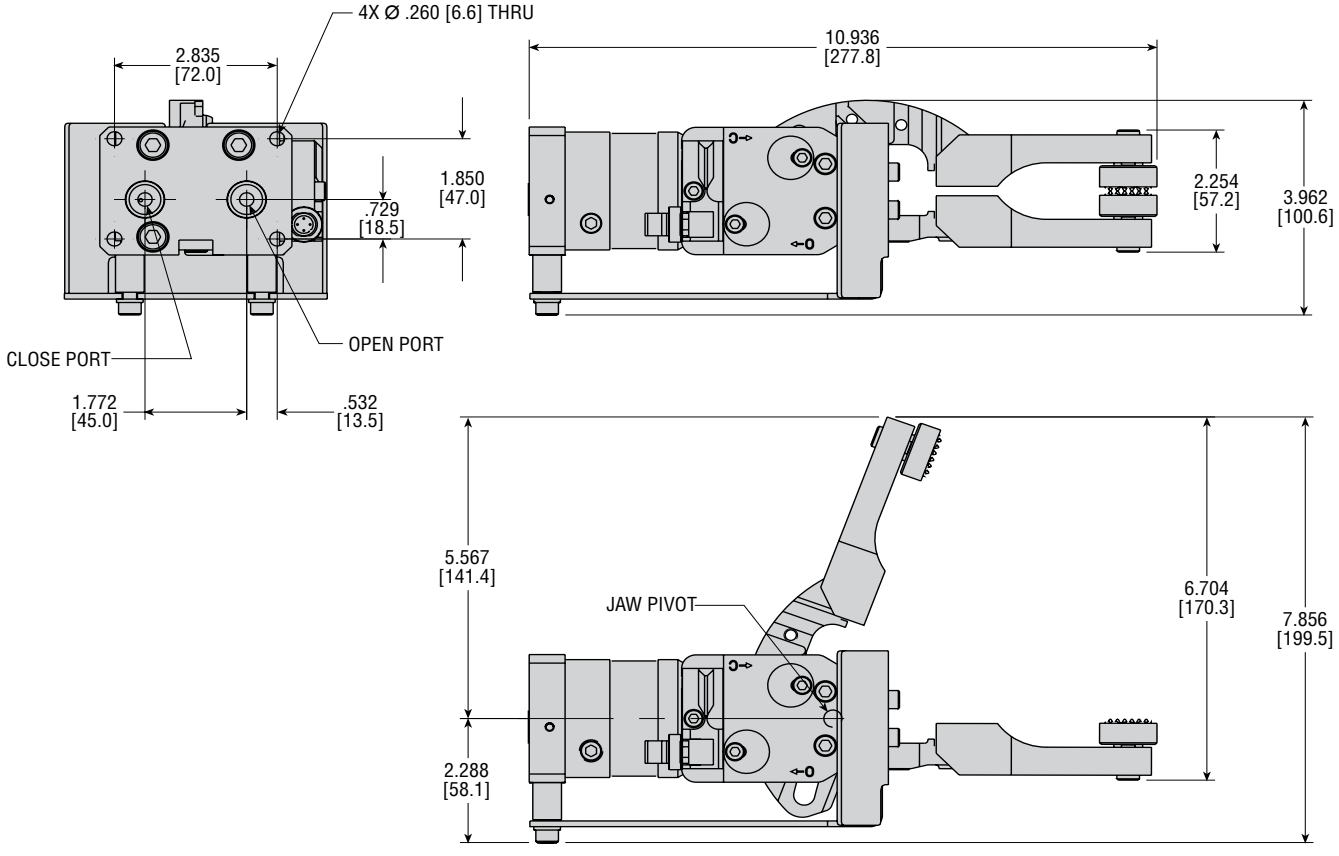


NOTES:
1) ALL DIMENSIONS ARE REFERENCE UNLESS SPECIFICALLY TOLERANCED
2) DIMENSIONS IN [ ] ARE IN mm



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