

MT-160 Modal Thruster



GENERAL DESCRIPTION

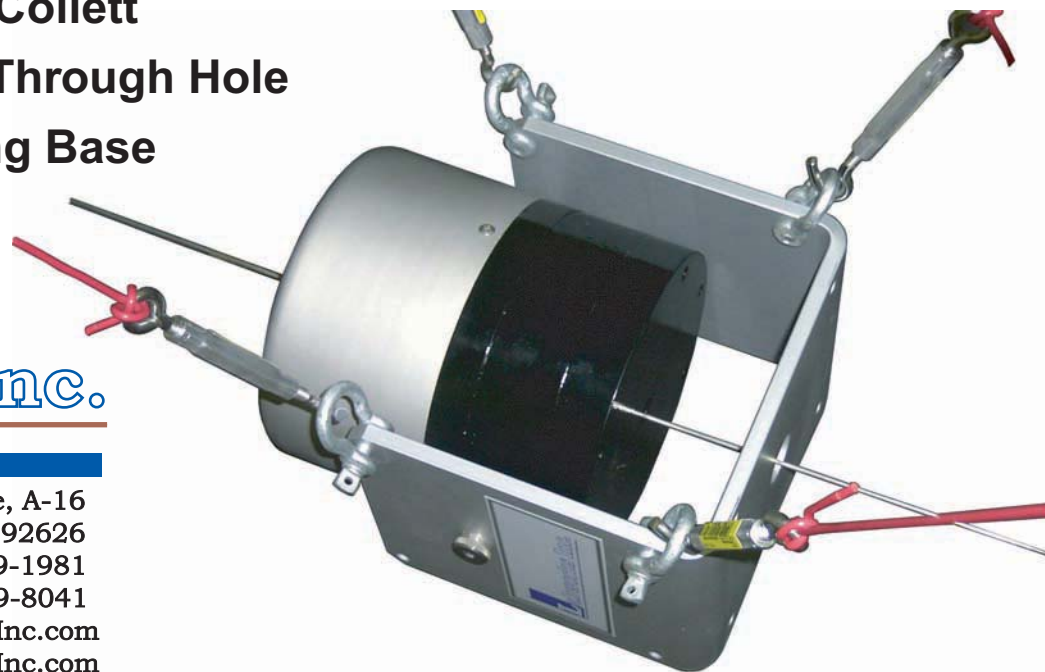
The MT-160 thruster's compact size, long stroke and lightweight armature make it well suited for all types of modal testing. The thruster has a compression collett and features a central through-hole suitable for modal stinger and pre-tensioned wire testing applications. The standard shaker trunnion allows the shaker to be operated in any axis from vertical to horizontal as well as easily mounted in wire tensioning tripods. The trunnion base also facilitates bolting the shaker in place for rigid applications or the use of adjustable mounting feet.

Reliability is assured through the use of the latest composite materials in the unique, all flexure, armature suspension design. The design provides for low axial stiffness while retaining high lateral stiffness and has no rolling or sliding components to wear pit and/or produce unwanted harmonics or distortion. When combined with the correct Labworks linear power amplifier, the system is unmatched for reliability, performance and cost.

- 60 lbf. pk Sine
- 1.4 Inch Stroke
- .005 to .188" Dia. Collett
- Stinger and Wire Through Hole
- Trunnion Mounting Base



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STANDARD FEATURES

- Air Cooled
- Permanent Magnet Design
- High Lateral Stiffness Armature Suspension
- Universal Collett Stinger Attachment
- Multi Axis Trunnion



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MT-160 SPECIFICATIONS¹

PERFORMANCE

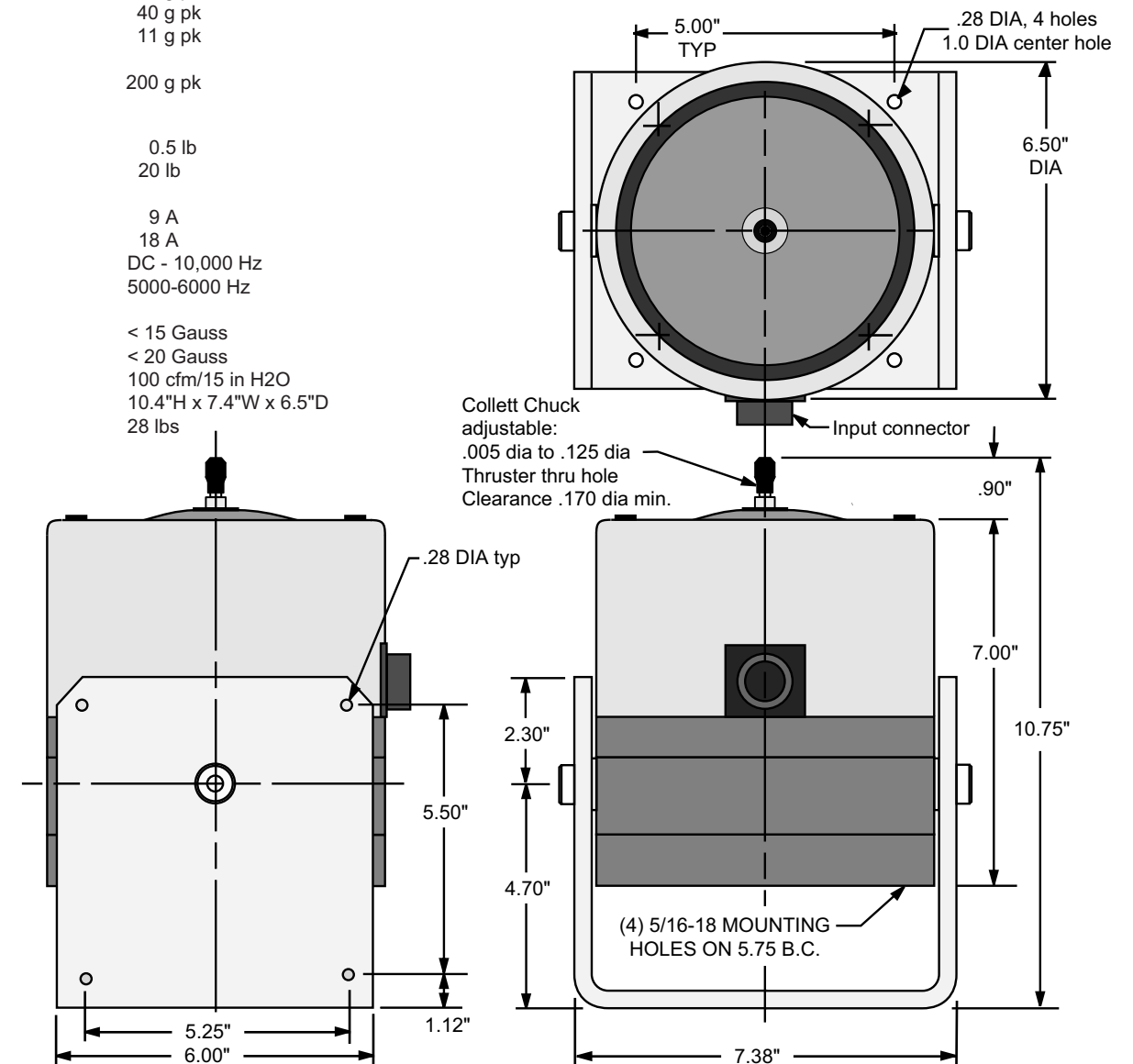
Sine Force	
Natural Cooling	30 lbf pk
With Cooling Vacuum	60 lbf pk
Max. Displacement	
Continuous pk-pk	1.4 in.
Between Stops	1.5 in.
Maximum Velocity	100 ips pk
Acceleration ^{1,2}	
Bare Table	120 g pk
1 lb load	40 g pk
5 lb load	11 g pk
Maximum Acceleration Resonant	200 g pk

PHYSICAL

Armature Weight	0.5 lb
Suspension Stiffness	20 lb
Rated Drive Current	
Natural Cooling	9 A
With Cooling Vacuum	18 A
Frequency Range ²	DC - 10,000 Hz
Fundamental Resonance ²	5000-6000 Hz
Stray Magnetic	
1.5" above collett	< 15 Gauss
1.0" from body	< 20 Gauss
Cooling Air	100 cfm/15 in H ₂ O
Dimensions	10.4"H x 7.4"W x 6.5"D
Shaker Weight	28 lbs

OPTIONS

C-146 Cooling Vacuum:
Required for operation above 30 lbf.
Recommended for continuous operation above 25 lbf.
SI-160 Vibration isolation mounts
MS-129-160 Modal Stinger Kit



1. Please see systems ratings for additional specifications.
2. Load dependent

Specifications subject to change without notice. Contact the Labworks Inc. for current information.