

# MC-10

Multistage Centrifugal Turbo Blower



## MODEL MC-10

### Standard Specifications

Gas	Air, CO <sub>2</sub> , Biogas, Steam, H <sub>2</sub> S, Fuel Gas, N <sub>2</sub> , LNG, Custom
Flow Range	100% to 45% of Rated Flow*
Pressure Range	21 PSIG / 1450 mbar Delta
Maximum Case Pressure	35 PSIG / 2.4 bar
Stages	1 to 11 (12 at 50Hz)
Drive Type	Direct Coupled, Belt Drive
Power Driver Options	Electric 2-Pole Motor, Steam Turbine, Combustion Engine
Cooling	Self Cooled Air, Optional Integral Fan
Lubrication Options	Grease, Splash Lubricated Oil, or Mist Connections
Bearings	Anti-friction type AFBMA L10 up to 300,000 hrs
Enclosure	Optional
Sound Level	< 85 dba*
Sound Level with Enclosure	Job Specific
Filtration Rating (std)	98% at 10 micron, or as required
Seals Air	Labyrinth Type
Seals Gas	Closed Grease with Stuffing Box, Carbon Ring with Purge, Custom Available
Shaft End Dimension	2.25 in (57 mm) diameter at coupling
Inlet / Outlet Flange Size	10" / 8" ASA 125# / ANSI 150# Drilling, Optional DIN 250/200 Adapter Flange

### Control Options

Control Methods	Variable inlet valve, speed control, blow off, or combination
Local Controller	sLOC™ Standard - Custom for Allen Bradley, Modicon, Siemens or Other
HMI	sLOC™ Standard or Custom HMI
Remote Monitoring	sLINK™ or Custom
Control Set Points	Pressure, Flow, Power, Custom Input

### Standard Materials of Construction

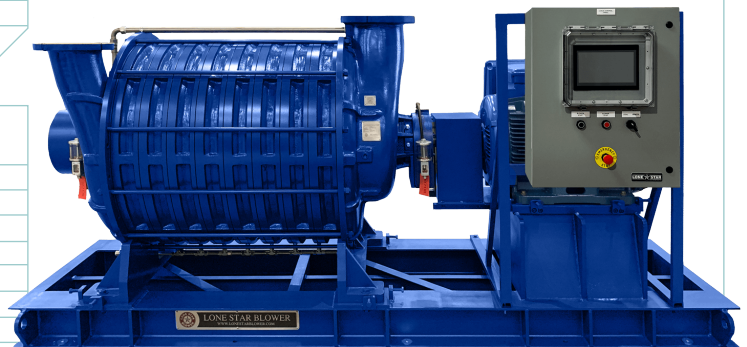
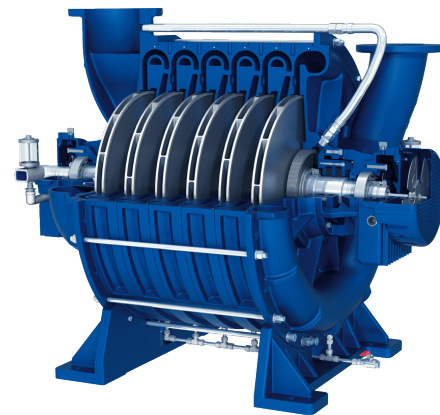
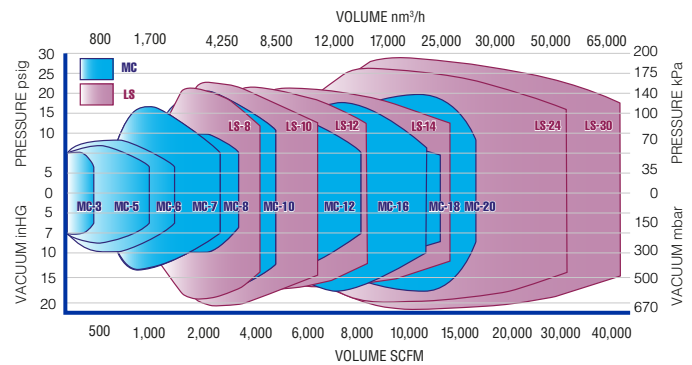
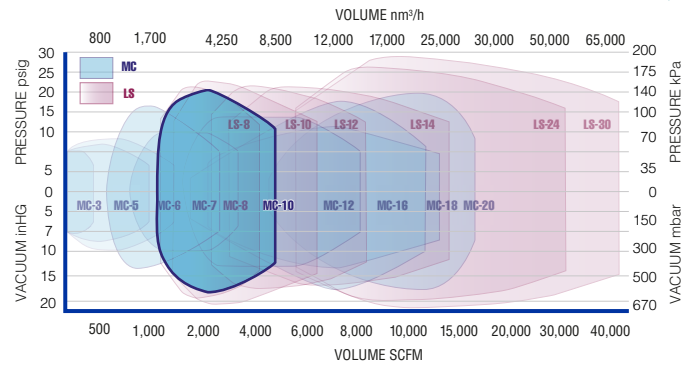
Casing, Volute	ASTM A48 Class 25/30 Cast Iron, Ductile
Bearing Housings	ASTM A48 Class 25/30 Cast Iron, Ductile
Impeller	ASTM A365 T6 Cast Aluminum, ASTM AA-6061 Fabricated, Stainless
Shaft	ASTM A109 1045~, Stainless Steel
Seals Air	ASTM B86 Z25631 Zinc Alloy, Aluminum
Seals Gas	ASTM C695 Molded Graphite
Joint Sealing of Casings	RTV Silicon or O-Ring
Blower Base Skid	ASTM A36 Structural Steel
Isolation Pads	Neoprene Rubber
Finish	2 Part Epoxy Lone Star Blue RAL5005

### Optional Testing & Certifications

API	API 617, API 672 Features
Electrical	UL 508A, CE, CSA, Other
Hazardous Location	ATEX, Class1 - Division 1- Division 2, Zone 0-2
Balancing	ISO 1940, G2.5 grade
Noise Level	OSHA 1910.95, ISO 2151:2004
Performance	ASME PTC-10, PTC-13, ISO 5389
Hydro Testing	1.5 Time MAWP
Overspeed Testing	Optional
Positive Material ID	XRF, OES, Material Certification
NACE Compliance	Optional
Special Coatings	Optional

### Service

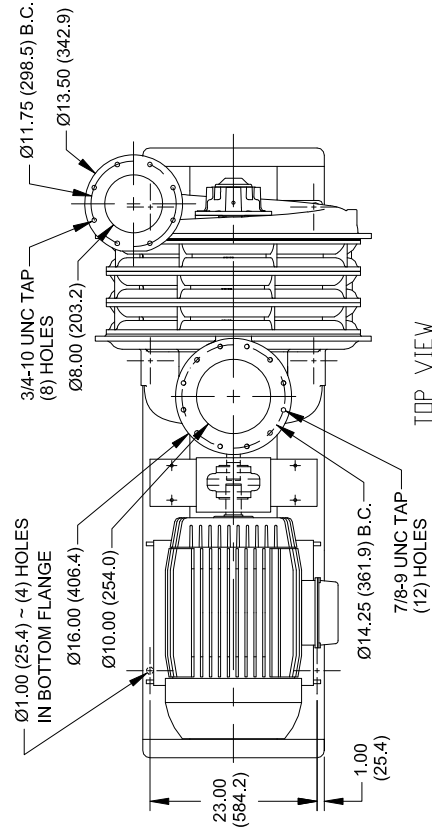
Air, Gas, Pressure, Vacuum



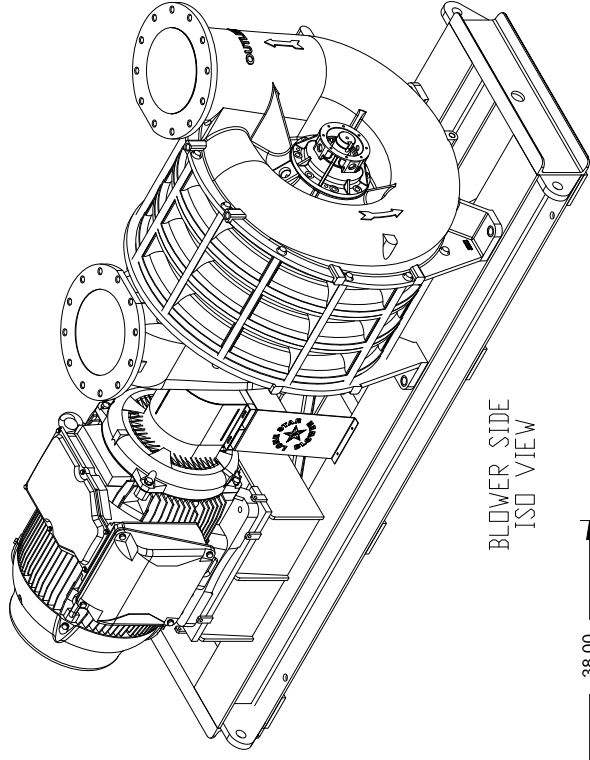
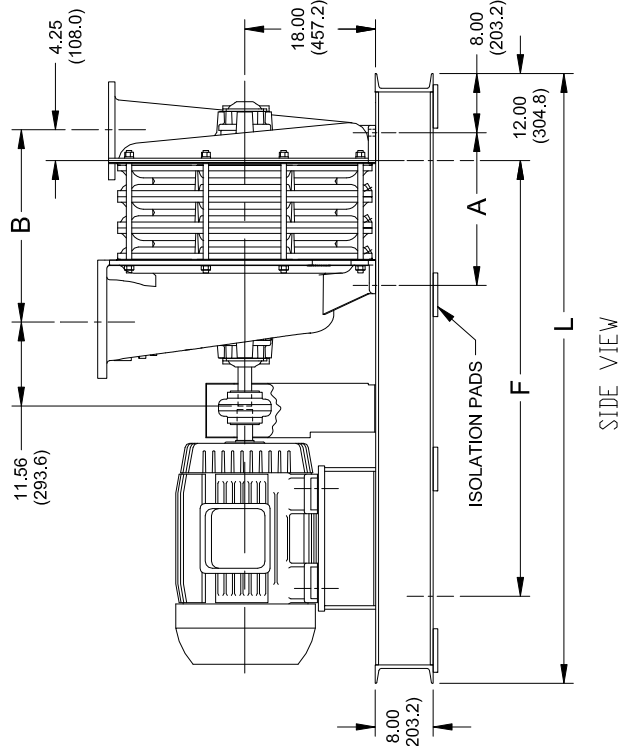
\* Information is approximate and can change without notice  
\* Air Performance Based on 1 Atm, 68F/20C, 36% RH and 3550 rpm

PACKAGED DIMENSIONS				
MODEL	A*	B*	F†	L†
MC10-1	8.25 (210)	13.25 (337)	49 (1245)	73 (1854)
MC10-2	12.56 (319)	17.56 (446)	49 (1245)	73 (1854)
MC10-3	16.88 (429)	21.88 (556)	62 (1575)	86 (2184)
MC10-4	21.19 (538)	26.18 (665)	62 (1575)	86 (2184)
MC10-5	25.50 (648)	30.50 (775)	62 (1575)	86 (2184)
MC10-6	29.81 (757)	34.81 (884)	76 (1930)	100 (2540)
MC10-7	34.12 (867)	39.13 (994)	89 (2261)	113 (2870)
MC10-8	38.44 (976)	43.44 (1103)	89 (2261)	113 (2870)
MC10-9	42.75 (1086)	47.75 (1213)	89 (2261)	113 (2870)
MC10-10	47.06 (1195)	52.06 (1322)	106 (2692)	130 (3302)
MC10-11	51.38 (1305)	56.38 (1432)	106 (2692)	130 (3302)

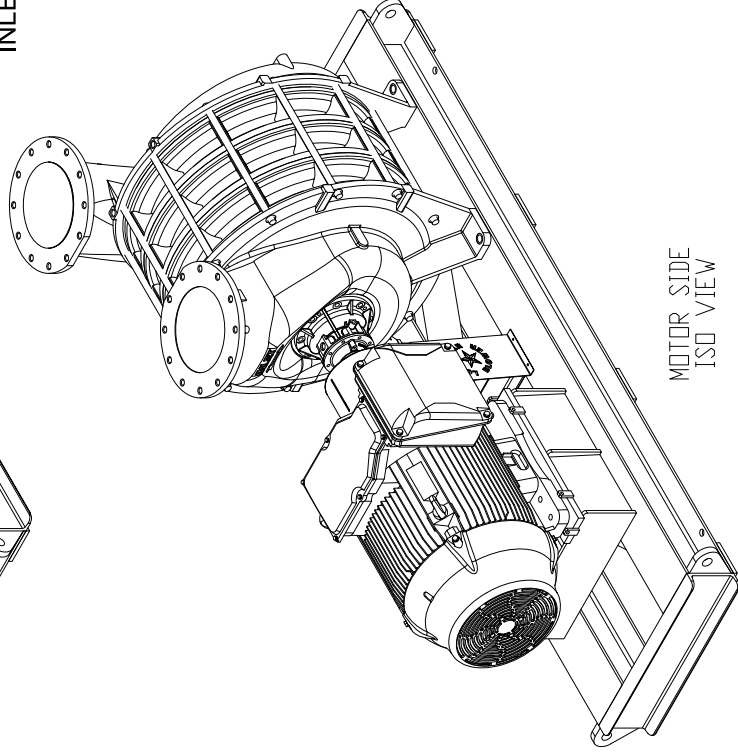
\*DIMENSIONS ARE SHOWN IN INCHES (AND MILLIMETERS) ARE APPROXIMATE.  
 †DO NOT USE FOR CONSTRUCTION PURPOSES.  
 ‡DIMENSIONS VARY DEPENDING ON COUPLING & MOTOR FRAME SIZE.



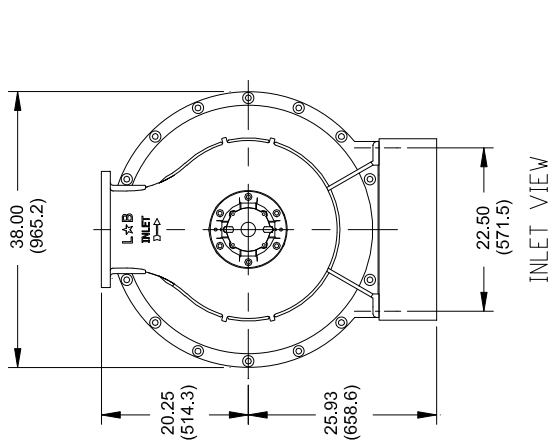
10" INLET 8" OUTLET



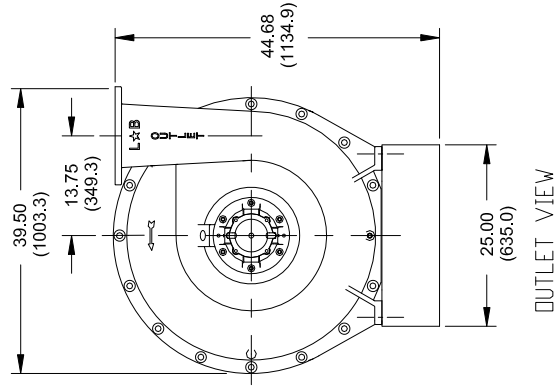
BLOWER SIDE ISO VIEW



MOTOR SIDE ISO VIEW

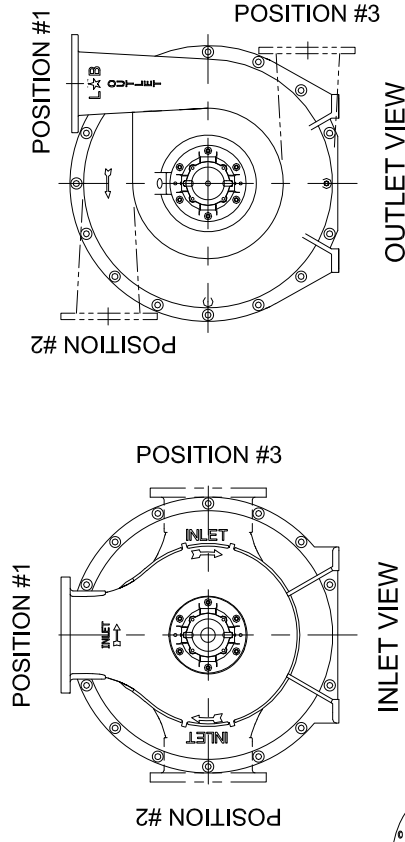


INLET VIEW



OUTLET VIEW

INLET & OUTLET ORIENTATION OPTIONS  
 THE ORIENTATION OF THE INLET AND OUTLET IS SELECTABLE FROM ANY OF THE  
 THREE DIFFERENT POSITIONS, AS VIEWED WHEN FACING THE EXTERIOR OF THE PARTS.



INLET VIEW

OUTLET VIEW

INERTIA BASED ON CAST IMPELLERS.  
 APPROXIMATE WEIGHT FOR BLOWER AND SKID MINUS MOTOR.

MODEL	WEIGHT		WK <sup>2</sup>	
	LB	Kg	LB-ft <sup>2</sup>	Kg-m <sup>2</sup>
MC10-1	1400	635	11	0.48
MC10-2	1800	816	23	0.96
MC10-3	2140	971	34	1.44
MC10-4	2530	1148	45	1.92
MC10-5	2990	1356	57	2.40
MC10-6	3350	1520	68	2.88
MC10-7	3710	1683	79	3.36
MC10-8	4140	1878	91	3.84
MC10-9	4550	2064	102	4.32
MC10-10	5000	2268	113	4.80
MC10-11	6060	2749	125	5.28

INTERPRET ALL GEOMETRIC DIMENSIONING  
 AND TOLERANCING TO ASME Y14.5

ALL DIMENSIONS ARE IN INCHES  
 UNLESS OTHERWISE SPECIFIED

STANDARD TOLERANCES  
 .X ±.015  
 .XX ±.010  
 .XXX ±.005  
 X/X ±1/16  
 ANGLES ±1°

REMOVE BURRS AND BREAK  
 ALL SHARP EDGES  
 MACHINED SURFACES



DRAWING IS FOR REFERENCE ONLY  
 UNLESS SPECIFIED AS APPROVED

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DRAWN BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

THIRD ANGLE  
 PROJECTION



MC 10  
 MULTISTAGE CENTRIFUGAL  
 BLOWER

SIZE **B** DWG. NO. **MARKETING** REV **0**

SCALE: 1:20 DO NOT SCALE SHEET 1 OF 1