



metalexTM

REFRIGERATION COMPRESSOR



Metalex Cryogenics Limited



www.metalexgroup.com

MX-SERIES RECIPROCATING COMPRESSORS



Compressor Package

The MX Series compressors are manufactured by one of India's leading refrigeration companies using the most modern computerized, calculations & simulations techniques.

Intense communication with customers, production specialist and constant research has led to a design which will suit the needs of customers now and in future.

MX Series is a range of high quality, heavy duty, open type reciprocating refrigeration compressors. These are designed to operate with ammonia, R22, R134a, R404A, and other common new refrigerants. The MX Series is therefore ideal for all types of industrial refrigeration and freezing installation.

● Six Single Stage models with swept volumes from 135 m³/h for the cylinder to 1195 m³/h for the nine cylinder model.

● Six Two Stage models with different LP/HP volume ratio's and LP swept volumes from 265 m³/h up to 929 m³/h.

And now now successfully manufacturing 12 Cylinder Compressor in both Single and Two Stage

The MX-Series at a glance :

- ✓ Better Price/ -Performance Ratio
- ✓ Compact
- ✓ Robust
- ✓ Reliable
- ✓ Efficient
- ✓ Service Friendly
- ✓ Low noise factor
- ✓ Light weight > Cast Iron

REFRIGERATION CAPACITIES

UNIQUE FEATURES

Single Stage	Ammonia (Nh3)		Freon (R-22)		Ice making capacity Tonnes/24 Hrs. with NH ₃		Two Stage	Ammonia (NH ₃) *		Freon (R-22) **		
	Capacity TR	Power HP	Capacity TR	Power HP	TPD	KW		Capacity TR	Power HP	Capacity TR	Power HP	
MX - 100	49.0	25.0	40.0	25.0	8.0	20.0	MX - 210	18.8	34.0	11.8	33.2	
MX - 200	97.0	51.5	81.3	55.0	17.6	39.5	MX - 310	26.8	47.1	16.9	45.2	
MX - 300	145.5	76.5	121.9	82.0	26.4	58.0	MX - 420	37.4	65.9	23.6	64.2	
MX - 400	194.0	101.5	162.6	108.0	35.2	75.0	MX - 510	40.2	72.1	25.6	69.0	
MX - 600	291.0	151.22	242.0	161.0	52.8	110.2	MX - 630	55.7	97.0	35.0	95.0	
MX - 900	436.5	230.0	364.0	246.0	74.4	166.0	MX - 720	60.4	104.0	37.9	100.0	
MX - 1200	600.0	412.1	485.3	335.8	100.0	220.0	MX - 930	80.5	137.0	79.0	167.6	
	*Air Cooled Compressors available in all single stage models							MX - 1020	75.2	140.2	70.2	170.4

Notes : Figures mentioned here are at 1000 RPM. The performance data is just a guideline. For Specific details please contact us.

1. Capacity at (+) 10°C Evaporation & (+) 40°C, 0°C Superheating. * At (-) 30°C Evaporating & (+) 40°C Condensing, 0°C Superheating.

2. Ice making Capacity at (-) 15°C Evaporating & (+) 40°C, 0°C Superheating. ** At (-) 40°C Evaporating & (+) 40°C Condensing, 0°C Superheating.

BENEFITS

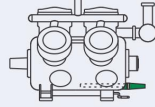
MX-Package of Benefits

- ✓ Most Power - Efficient
- ✓ State of the Art Manufacturing Facility
- ✓ Modular Design
- ✓ Interchangeability of Components across range
- ✓ Less Torque ensures no load starting required
- ✓ Single Stop for complete Project

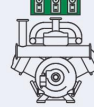
Valves



Crankcase Heater



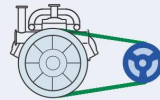
Pressure Gauge & Cutouts



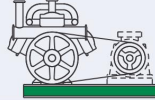
Spare Parts & Special Tools



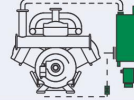
V Belts, flywheel & Motor Pulley



Base Frame



Oil Separator



SS Head Cover
Oil Cooler
Automated Panel

DIMENSIONAL DATA

OPTIONAL SYSTEM ACCESSORIES

Type of Compressor	MX100	MX200	MX300	MX400	MX600	MX900	MX 1200	MX210	MX310	MX420/ MX510	MX630/ MX720	MX 930/ MX1020
Cylinder Arrangement	Vertical	V	W	2 x V	2 x W	3 x W	4 x W	1 x W	2 x V	2 x W	3 x W	4 x W
Number of Cylinders	1	2	3	4	6	9	12	3	4	6	9	12
Cylinder bore	(160 mm)							(160 mm)				
Piston Stroke	(110 mm)							(110 mm)				
Permissible speed RPM	Min. 500 RPM		V - BELT DRIVE			Max. 1000 RPM		Min. 500 RPM		V - BELT DRIVE		Max. 1000 RPM

TECHNICAL DATA

Swept volume of Suction gas at 1000 RPM cu.ft/min (Cu.m/hr)	78 (135)	156.88 (265.9)	235.11 (398.5)	313.34 (531.1)	469.93 (796.5)	692.6 (1195)	939.86 (1621.6)	Two Stage		235.11 (398.5)	313.34 (531.1)	461.7 (796.2)	626.68 (1662.19)
								Low Stage					
								Nil	Nil	391.86 (664.2)	538.7 (928.9)		
Wt. of Compressor with flywheel in Pounds (kg)	714 (324)	1260 (572)	1340 (609)	1534 (697)	1950 (886)	2816 (1280)	3900 (1772.7)	1177 (535)	1463 (665)	1980 (900)	2893 (1315)	3960 (1799.99)	
Direction of Rotation/ from oil pump side	CLOCKWISE							CLOCKWISE					
Maximum discharge pressure (Bar)	16							16					

