

# Mechanical Booster Pump MBS Series

## Features

- Compact and light weight with direct drive
- Anti-corrosive gas facing parts with special surface treatment
- Low vibration and noise with precise manufacturing technology
- Few contamination in the discharge system due to no oil used in the pumping room

## Applications

- Vacuum dryer
- CO<sub>2</sub> gas lasers
- Vacuum degassing
- Helium leak detector
- Vacuum Heating

### Mechanical Booster Pump(Standard type)

## MBS-010

Actual Pumping Speed

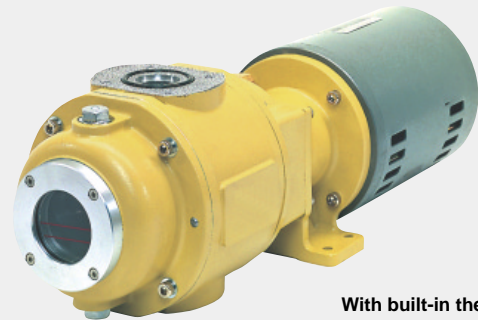


With built-in thermal protector

### Mechanical Booster Pump(Standard type)

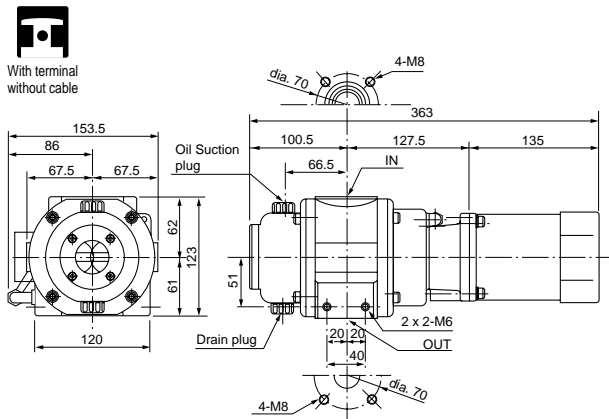
## MBS-030

Actual Pumping Speed

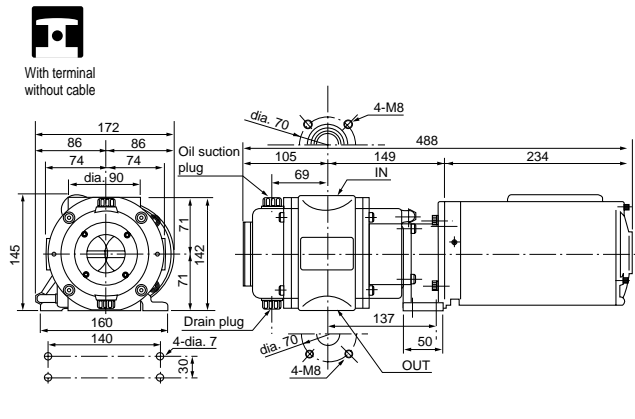


With built-in thermal protector(100V only)

### External Dimension Diagram (unit: mm)



### External Dimension Diagram (unit: mm)



### Specifications

	Unit	MBS-010
Actual Pumping Speed	m <sup>3</sup> /h	10/12 (50Hz/60Hz)
Ultimate pressure	Pa	4.0 x 10 <sup>-2</sup>
Motor		Single phase, 100V, 150W, 2P, Condenser run
Full load current	A	2.8/2.8 (50Hz/60Hz)
Oil capacity	mL	150
Recommended oil		SMR-100
Weight	kg	7.8
Inlet pipe deameter		VG-25
Outlet pipe deameter		VF-25
Operation pressure	Pa	4.0 x 10 <sup>3</sup>
Backing pump		GVD-050A, GLD-051, GCD-051X
Ambient operation temp. range	°C	7 ~ 40
Overall dimensions	mm	153.5(W) x 363(L) x 123(H)

### Specifications

	Unit	MBS-030
Actual Pumping Speed	m <sup>3</sup> /h	30/36 (50/60Hz)
Ultimate pressure	Pa	4.0 x 10 <sup>-2</sup>
Motor		Single phase, 100V/200V, 300W, 2P, Condenser starting
Full load current	A	100V 6.5/6.0 (50/60Hz) 200V 3.3/3.0 (50/60Hz)
Oil capacity	mL	250
Recommended oil		SMR-100
Weight	kg	14.0
Inlet pipe deameter		VG-25
Outlet pipe deameter		VF-25
Operation pressure	Pa	4.0 x 10 <sup>3</sup>
Backing pump		GLD-136A, GLD-136C, GCD-136X
Ambient operation temp. range	°C	7 ~ 40
Overall dimensions	mm	172(W) x 488(L) x 145(H)

• MBS Series

Model	Actual Pumping Speed (m <sup>3</sup> /h)	Ultimate pressure (Pa)	Power required	Weight (kg)	Inlet/Outlet pipe dimensions	Backing pump	Overall dimensions W x L x H (mm)
MBS-010	10/12(50/660Hz)	4.0 x 10 <sup>-2</sup>	Single phase, 100V, 150W, 2P, Condenser run	7.8	VG-25/VF-25	GVD-050A GLD-051 GCD-051X	153.5 x 363 x 123
MBS-030	30/36(50/60Hz)	4.0 x 10 <sup>-2</sup>	Single phase, 100/200V, 300W, 2P, Condenser starting	14	VG-25/VF-25	GLD-136A GLD-136C GCD-136X	172 x 488 x 145
MBS-050	50/60(50/60Hz)	4.0 x 10 <sup>-2</sup>	Single phase, 100/200V, 300W, 2P, Condenser starting	16	VG-40/VF-40	GLD-201A GLD-201B GLD-201X	175 x 518 x 160

Mechanical Booster Pump(Standard type)

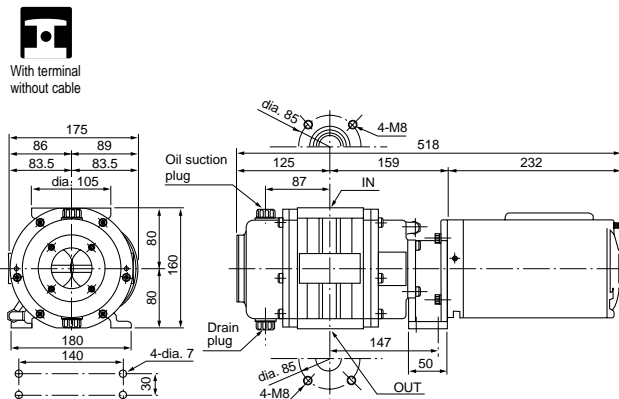
MBS-050

Actual Pumping Speed



With built-in thermal protector  
(100V only)

External Dimension Diagram (unit: mm)



With terminal  
without cable

Specifications

	Unit	MBS-050
Actual Pumping Speed	m <sup>3</sup> /h	50/60 (50/60Hz)
Ultimate pressure	Pa	4.0 x 10 <sup>-2</sup>
Motor		Single phase, 100V/200V, 300W, 2P, Condenser starting
Full load current	A	100V 6.5/6.0 (50/60Hz) 200V 3.3/3.0 (50/60Hz)
Oil capacity	mL	320
Recommended oil		SMR-100
Weight	kg	16.0
Inlet pipe deameter		VG-40
Outlet pipe deameter		VF-40
Operation pressure	Pa	4.0 x 10 <sup>3</sup>
Backing pump		GLD-201A, GLD-201B, GCD-201X
Ambient operation temp. range	°C	7 ~ 40
Overall dimensions	mm	175(W) x 518(L) x 160(H)

Pumping Speed Curve

MBS Series

