

# Dosing pump Maxroy Series - B105/145

- Maximum Flow rate: 2000 l/h • Maximum Pressure: 28 Kg/cm<sup>2</sup>g • hydraulically actuated diaphragm
- Conforms to API-675 Standard



## Technical characteristics

- Flow rate up to:
  - 2000 l/h for Maxroy B145
  - 760 l/h for Maxroy B105
- Pressure up to:
  - 28 Kg/cm<sup>2</sup>g for Maxroy B105
  - 10 Kg/cm<sup>2</sup>g for Maxroy B145
- Maximum temperature of pumped liquid:
  - +90 °C for metallic liquid end
  - +45 °C for plastic liquid end
- Manual or automatic flow control, adjustment of flow rate while running : from 0 to 100%
- High-efficiency, hydraulically actuated PTFE diaphragm elastomer bonded for long life
- Steady state accuracy ±1% of the rated capacity
- Repeatability ±3% of the rated capacity
- Turndown ratio 10:1
- Suction lift: up to 1 M of the water column
- Maximum suction pressure condition: 2 bar
- Duplex/Triplex version available
- Diaphragm Rupture Detection System (DRDS) with or without pressure switch/transmitter optional

### Options:

- Variable speed drive & Electronic capacity controller (ECC)/Automatic capacity controller (ACC)

## Characteristics of motors

### Standard Motor Data:

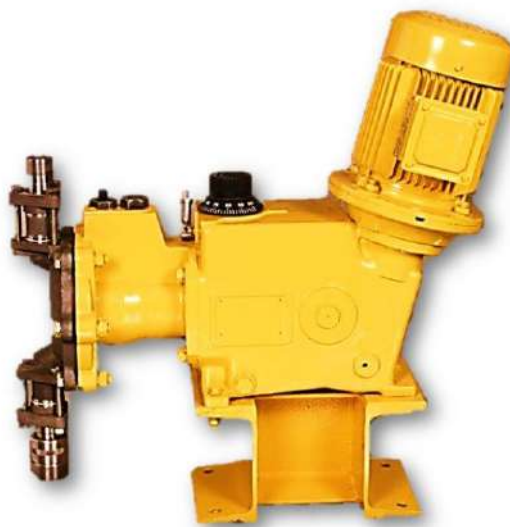
- Power Supply: 415V – 50 Hz – 3 phase, IE2
- Degree of protection: IP 55
- Insulation: class F
- Motor Speed: 1440 rpm
- Enclosure: TEFC

### Options:

- Flame/Explosion proof motors

## Accessories

To meet your installation needs a large range of accessories are available on request (Pulsation dampeners, safety and back pressure valves), consult us.



Maxroy - B105/145 - Metallic Liquid End

## Liquid end construction

Components	Materials			
Model	B-105			
Head	CF8M	PP**	PVC**	PVDF**
Diaphragm	TFN*	TFN*	TFN*	TFN*
Ball	SS	PVC/GLASS/ TEFLON	PVC/ TEFLON	GLASS/ TEFLON
Suction Ball Guide	CF8M	PVC	PVC	PVDF
Discharge Ball Guide	CF8M	PVC	PVC	PVDF
Strainer	CF8M	PP	PVC	PVDF

Components	Materials		
Model	B-145		
Head	PP	PVC	CF8M
Diaphragm	TFN*	TFN*	TFN*
Ball	GLASS	GLASS	SS
Suction Ball Guide	PVC	PVC	CF8M
Discharge Ball Guide	PVC	PVC	CF8M
Strainer	PP	PVC	CF8M
Antisiphon valve	PVC	PVC	SS-316

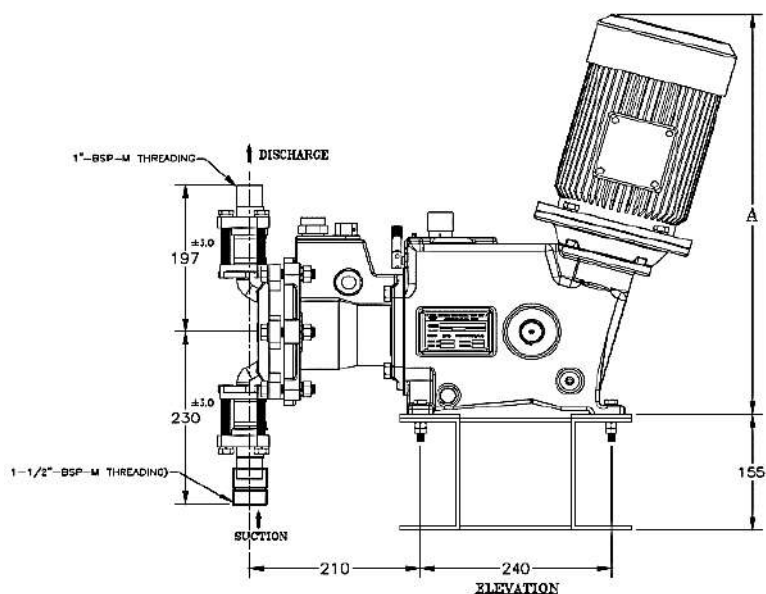
TFN\* - Teflon Faced Nitrile and \*\*Plastic Liquid End – Max. Pr. 10Kg/cm2g

## Performances - Maxroy B105

Pump model	Type	Flow (LPH)	Pressure (Kg/cm <sup>2</sup> g)	Motor (HP)	Stroke speed* (spm)	Stroke length (mm)	Plunger $\Phi$ (mm)	Diaphragm Size
B105-1	Simplex	125	28.0	1.0	58	34	41.5	105
B105-2		210		1.0	96			
B105-3		320		1.5	144			
B105-4		400		2.0	180			
B105D-1	Duplex	240		1.5	58			
B105D-2		400		1.5	96			
B105D-3		610		2.0	144			
B105D-4		760		3.0	180			

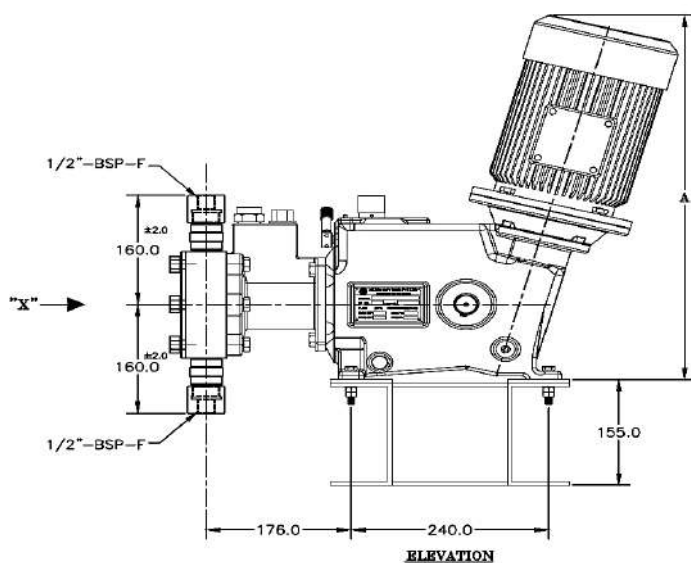
## Dimensions in mm - Maxroy B105 (Metallic Liquid End)

Pump model	A (Max) in mm	Weight (approx)	Overall Length	Overall Width
B105-1	510	65 Kgs	630	270
B105-2	510			
B105-3	515			
B105-4	525			



## Dimensions - Maxroy B105 (Plastic Liquid End)

Pump model	A (Max) in mm	Weight (approx)	Overall Length	Overall Width
B105-1	510	65 Kgs	615	278
B105-2	510			
B105-3	515			
B105-4	525			

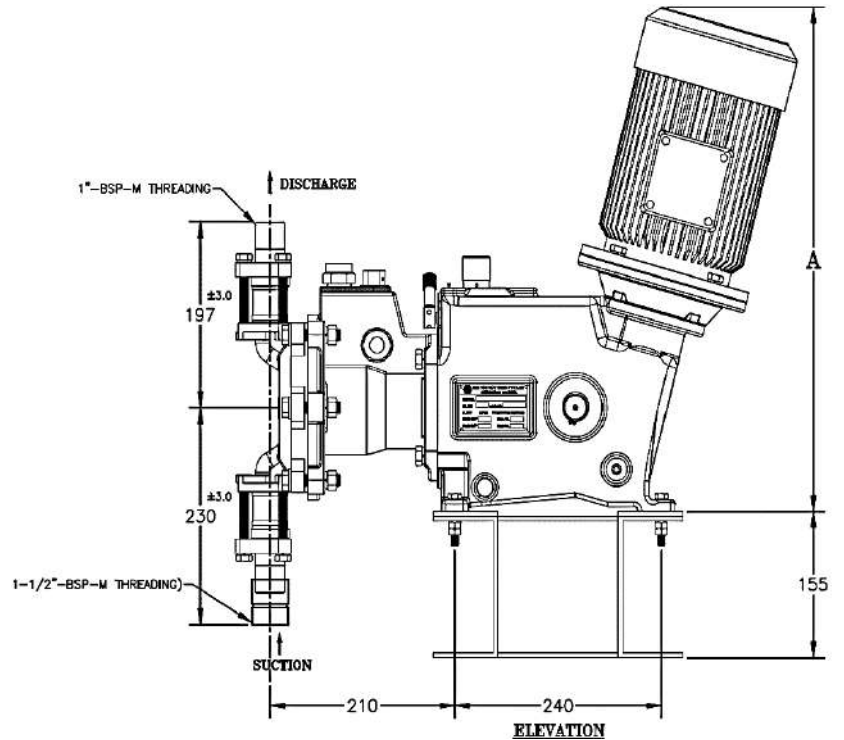


## Performances - Maxroy B145

Pump model	Type	Flow (LPH)	Pressure (Kg/cm <sup>2</sup> g)	Motor (HP)	Stroke speed* (spm)	Stroke length (mm)	Plunger Φ (mm)	Diaphragm Size
B145-1	Simplex	350	10.0	1.0	58	34	66.5	145
B145-2		600		1.0	96			
B145-3		850		1.5	144			
B145-4		1050		2.0	180			
B145D-1	Duplex	700		1.5	58			
B145D-2		1200		1.5	96			
B145D-3		1700		2.0	144			
B145D-4		2000		3.0	180			

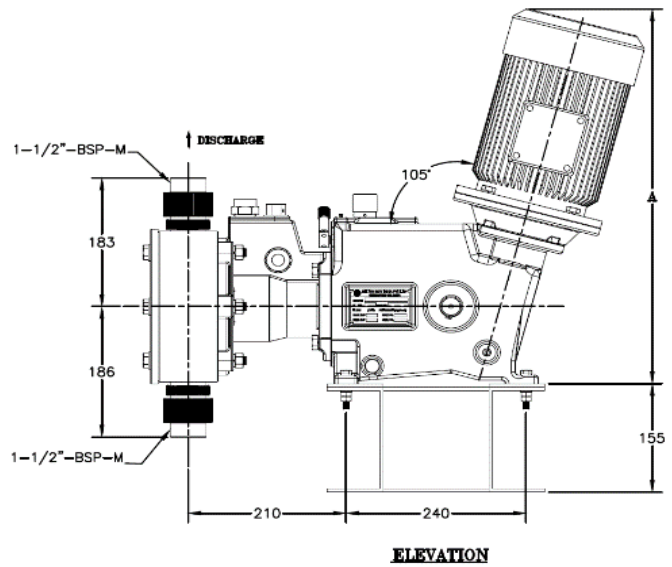
## Dimensions in mm - Maxroy B145 (Metallic Liquid End)

Pump model	A (Max)	Weight (approx)	Overall Length	Overall Width
B145-1	525	75 Kgs	680	350
B145-2	525			
B145-3	550			
B145-4	570			



## Dimensions - Maxroy B145 (Plastic Liquid End)

Pump model	A (Max)	Weight (approx)	Overall Length	Overall Width
B145-1	525	75 Kgs	670	300
B145-2	525			
B145-3	550			
B145-4	570			



## Dimensions - Maxroy B105/145 Duplex

### MAXROY - B105 / B145 DUPLEX

### PUMP MOUNTING DETAILS (DUPLEX)

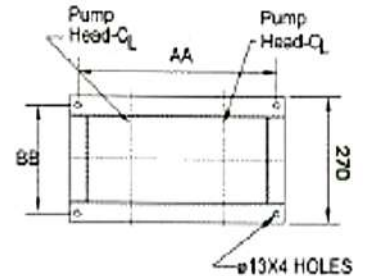
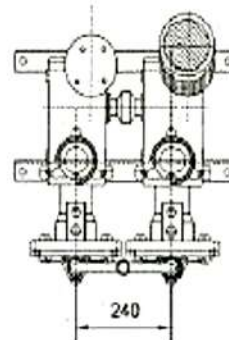
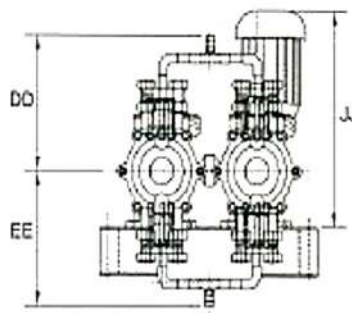


Fig-2

NOTE : ALL DIMENSIONS ARE IN "mm"

### DIMENSIONS DETAILS (Ref fig-1 & 2)

PUMP MODEL	AA	BB	C	DD	EE	F	G	H	I	JJ	END CONNECTION		WEIGHT (Kg)
											SUCTION	DISCHARGE	
B145D-PP/PVC	510	240	210	420	420	110	525	625 Max	155	520 Max	1-1/2"-BSP-M	1-1/2"-BSP-M	125 Kg
B145D-SS	510	240	210	360	380	110	515	625 Max	155	520 Max	1-1/2"-BSP-M	1"-BSP-M	150 Kg
B105D-SS	510	240	192	310	310	110	515	625 Max	155	520 Max	3/4"-BSP-M	1/2"-BSP-M	150 Kg

\*Any changes in this catalogue applicable without prior Information

Plot No: 45/1, 8th Avenue, Domestic Tariff Area,  
Mahindra World City, Kanchipuram District,  
Chengalpet – 603004, Tamilnadu, India.  
Tel Ph. No: +91-44-71113111  
[mr-sales@miltonroy.com](mailto:mr-sales@miltonroy.com) | [www.miltonroyindia.com](http://www.miltonroyindia.com)