

# HYDRAULICALLY ACTUATED DIAPHRAGM METERING PUMPS

## KEY SPECIFICATION FEATURES : MAXROY SERIES

- Hydraulic By pass Drive mechanism
- Steady State Accuracy  $\pm 1\%$  of Rated capacity
- Turn Down Ratio 10:1
- Repeatability  $\pm 3\%$  of Rated capacity
- Hydraulically actuated PTFE Diaphragm Elastomer bonded for long life
- Internal Adjustable hydraulic relief valve
- Long-life, rugged construction, cast-iron housing
- High precision balls and seats for reliable sealing & accuracy
- Manual or automatic flow control, adjustable while running or stopped
- Self Compensating Hydraulic system
- All moving parts operate in an oil bath-Reduced friction & wear
- Conforms to API-675 Standard
- Duplex/ Triplex version Available
- Liquid End Material of Construction in SS-316, PP, PVC.
- Diaphragm Rupture Detection System (DRDS) With (or) Without Pressure Switch - optional
- Capacity Adjustment By
  - Manual Micrometer - Standard
  - Variable Speed Drive - Optional
  - Electronic Capacity Controller - Optional



## MAXROY SERIES HYDRAULICALLY ACTUATED DIAPHRAGM DOSING PUMPS

### MAXROY-B105

PUMP MODEL	TYPE	FLOW (LPH)	PRESSURE (Kg/cm <sup>2</sup> )	MOTOR (HP)	STROKE SPEED* (SPM)	STROKE LENGTH (mm)	PLUNGER DIA (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	DUPLIX	240		1.5	58			
B105D-2		400		1.5	96			
B105D-3		610		2.0	144			
B105D-4		760		3.0	180			

\* at 1440 rpm

### LIQUID END MATERIAL OF CONSTRUCTION

PARTS	MATERIAL**
HEAD	CF8M
DIAPHRAGM	TEFLON FACED NITRILE
BALL	SS
SUCTION BALL GUIDE	CF8M
DISCHARGE BALL GUIDE	CF8M
"Y" - STRAINER	CF8M

\*\* other MOCs on request. Plastic liquid ends (PP, PVC) : Maximum Pr : 10 kg/cm<sup>2</sup>



MAXROY-B105 / B145 (Simplex Pump)  
- with Electronic Capacity Controller



MAXROY-B145D (Duplex Pump)  
- with PP liquid end

### MOTORS

All Motors are TEFC, 415V, 3Phase, 50Hz, Class 'F', IP55, 1440 RPM, Explosion Proof Motors Available on Request.

## MAXROY SERIES HYDRAULICALLY ACTUATED DIAPHRAGM DOSING PUMPS

### MAXROY-B145

PUMP MODEL	TYPE	FLOW (LPH)	PRESSURE (Kg/cm <sup>2</sup> )	MOTOR (HP)	STROKE SPEED* (SPM)	STROKE LENGTH (mm)	PLUNGER DIA (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			

\* at 1440 rpm

NOTE: For Triplex Version contact factory

### LIQUID END MATERIAL OF CONSTRUCTION

PARTS	MATERIAL		
HEAD	PP	PVC	CF8M
DIAPHRAGM	TEFLON FACED NITRILE	TEFLON FACED NITRILE	TEFLON FACED NITRILE
BALL	GLASS	GLASS	SS
SUCTION BALL GUIDE	PVC	PVC	CF8M
DISCHARGE BALL GUIDE	PVC	PVC	CF8M
ANTISYPHON VALVE	PVC	PVC	SS-316
"Y" - STRAINER	PP	PVC (On-Line Strainer)	CF8M



MAXROY-B105 / B145  
- with SS liquid end



MAXROY-B145  
- with PP liquid end

### MOTORS

All Motors are TEFC, 415V, 3Phase, 50Hz, Class 'F', IP55, 1440 RPM, Explosion Proof Motors Available on Request.

# MAXROY SERIES HYDRAULICALLY ACTUATED DIAPHRAGM DOSING PUMPS

## MAXROY-B145

PUMP MODEL	TYPE	FLOW (LPH)	PRESSURE (Kg/cm <sup>2</sup> )	MOTOR (HP)	STROKE SPEED* (SPM)	STROKE LENGTH (mm)	PLUNGER DIA (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			

\* at 1440 rpm

NOTE: For Triplex Version contact factory

## LIQUID END MATERIAL OF CONSTRUCTION

PARTS	MATERIAL		
	HEAD	PP	PVC
DIAPHRAGM	TEFLON FACED NITRILE	TEFLON FACED NITRILE	TEFLON FACED NITRILE
BALL	GLASS	GLASS	SS
SUCTION BALL GUIDE	PVC	PVC	CF8M
DISCHARGE BALL GUIDE	PVC	PVC	CF8M
ANTISYPHON VALVE	PVC	PVC	SS-316
"Y" - STRAINER	PP	PVC (On-Line Strainer)	CF8M



MAXROY-B105 / B145  
- with SS liquid end

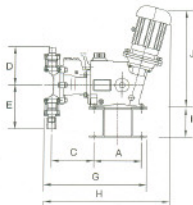
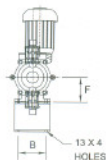


MAXROY-B145  
- with PP liquid end

## MOTORS

All Motors are TEFC, 415V, 3Phase, 50Hz, Class 'F', IP55, 1440 RPM, Explosion Proof Motors Available on Request.

## MAXROY - B105 / B145 SIMPLEX



### PUMP MOUNTING DETAILS (SIMPLEX)

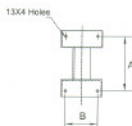
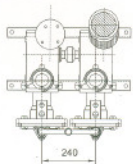
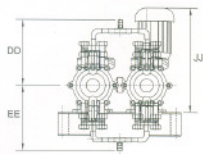


Fig-1

### DIMENSIONS DETAILS (Ref Fig-1)

PUMP MODEL	A	B	C	D	E	F	G	H	I	J	END CONNECTION		WEIGHT (Kg)
											SUCTION	DISCHARGE	
B145 -PP/PVC	240	140	210	180	180	110	525	625 Max	155	520 Max	1-1/2"-BSP-M	1-1/2"-BSP-M	65 Kg
B145-SS	240	140	210	190	225	110	515	625 Max	155	520 Max	1-1/2"-BSP-M	1"-BSP-M	75 Kg
B105-SS	240	140	192	170	200	110	515	625 Max	155	520 Max	3/4"-BSP-M	1/2"-BSP-M	75 Kg

## MAXROY - B105 / B145 DUPLEX



### PUMP MOUNTING DETAILS (DUPLEX)

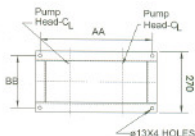


Fig-2

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

NOTE : ALL DIMENSIONS ARE IN "mm"

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

\* Flanged end connection on request



ISO9000  
Certified

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