

# Mechanically Operated **DOSING CHEMICAL PUMP**



INDIA'S MOST TRUSTED  
**IM DP SERIES**

MATERIAL OF CONSTRUCTION

|                |                    |
|----------------|--------------------|
| Reagent head   | PP                 |
| Liquid end     | PP                 |
| NRV seat/cage  | PP                 |
| NRV ball       | GLASS BALL         |
| Seal NRV       | PTFE/Teflon        |
| Worm wheel     | Phosphorous bronze |
| Gear Housing   | IS210 FG 216 CI    |
| Mounting Base  | MS                 |
| Coupling guard | PP                 |
| Metal Gearbox  | Cast Iron          |

MODULAR CONFIGURATIONS

- Turn down ratio 10: 1
- Accuracy ± 1% within 10-100% of rated capacity.
- No Welds on Wet End Parts.
- Flushing or leakage recovery system can be provided.
- Manual stroke length control standard (optional VFD).
- Micro-metric stroke adjustment while pump running or stopped...
- Available in variable / fix stroke
- Process Temperature from – 0°C to 80°C

TECHNICAL SPECIFICATION

|                       |                                |
|-----------------------|--------------------------------|
| Model                 | INFINITY I-M-DP 50/100/150/200 |
| Operating Type        | PLUNGER TYPE MECHANIC          |
| Application Standards | API 675 standards              |
| Duty cycle            | Continuous                     |
| Temperature           | ambient                        |
| Lubrication type      | Oil splash type                |
| Lubricant             | 460 gear oil                   |

DESIGN SPECIFICATION

|                        |                                               |
|------------------------|-----------------------------------------------|
| Flow rate              | 0 to 30 LPH stroke adjustable                 |
| Suction                | flooded                                       |
| Working pressure       | 0-30 bar                                      |
| Design pressure        | 35 bar                                        |
| Hydro testing pressure | 35 bar                                        |
| Speed (SPM)            | 185                                           |
| Stroke length          | 10 mm/20 mm                                   |
| Gear ratio             | 15:1                                          |
| Metering control       | 0-100% Manual with Inbuilt Interlocking Screw |
| Pump rotation          | clockwise                                     |
| NRV                    | ball type NRV                                 |
| Suction discharge size | 15 mm BSP (F) threaded type                   |

MOTOR SPECIFICATION

|                       |                                      |
|-----------------------|--------------------------------------|
| Motor make            | COLIN.                               |
| Supply system         | IE2 / 3PHASE INDUCTION/AC 380 V/50Hz |
| Rating (KW/HP)        | 0.5/2                                |
| Speed (RPM)           | 1440                                 |
| Mounting              | B3 foot mounted                      |
| Pole/ protections     | 4 pole / IP55                        |
| Base frame            | MS fabricated with paint             |
| Insulation/ enclosure | STD TEFC/IP 55                       |

APPLICATION

Oil & Gas,  
Pharmaceuticals,  
Power, Chemicals & Fertilizers,  
Paper Industries,  
Water, Waste Water Treatment, ETP & STP,  
Petrochemicals,  
Paints,  
Steel,  
Detergents,  
Cosmetics,  
Food & Beverages,  
Nuclear Reactor,  
Textiles,  
Mines,  
Institutes,  
Consultancy Agencies

MODELS VS SPECIFICATION

PP (POLY PROPYLENE)

| MODEL         | CAPACITY  | PRESSURE | STROKE | POWER          |
|---------------|-----------|----------|--------|----------------|
| I-M-DP 50 PP  | 0-50 LPH  | 0-08 BAR | 10 mm  | 0.5HP / 0.37KW |
| I-M-DP 100 PP | 0-100 LPH | 0-08 BAR | 10 mm  | 0.5HP / 0.37KW |
| I-M-DP 150 PP | 0-150 LPH | 0-08 BAR | 10 mm  | 0.5HP / 0.37KW |
| I-M-DP 200 PP | 0-200 LPH | 0-08 BAR | 10 mm  | 0.5HP / 0.37KW |
| I-M-DP 500 PP | 0-500 LPH | 0-08 BAR | 10 mm  | 0.5HP / 0.37KW |

MECHANICAL TYPE METERING CHEMICAL DOSING PUMP

Designed For Large-Capacity, High Flow, High pressure Applications  
INFINITY introduce *I-M-DP Series* plunger type chemical dosing pumps  
draws a fixed volume  
Of a chemical into the chamber, and then injects it into a pipe or a tank that  
may contain water  
Or fluid to be dosed. The pump is driven by an air actuator or an electric motor.

## MAJOR ADVANTAGES

- Simple Design, easy to operate*
- Zero leakage Low NPSHR design*
- Flame Proof design*
- Oil bath splash type lubrication for longer life*
- Economical & maintenance free*
- Variable eccentric design to prevent hydraulic shock*
- Stroke adjustment can be adjusted while pump is Running or stopped*
- Designed for Flow volumes up to 7000 LPH*
- Fine-grained capacity adjustment through lockable Micrometer stroke adjustment mechanism*
- Oil bath lubrication for all drive components*
- High strength and corrosion resistance material used*
- PTFE Valve seat ensures long life under most Demanding application*
- Wetted parts suitable for most aggressive chemicals*
- Heavy duty construction designed for several Industrial Applications Internal worm gear mechanism*
- Low investment cost*
- High volumetric efficiency and metering accuracy achieved*
- Wide choice of wetted materials: PP (POLY PROPYLENE)*
- INBILT NON RETURN VALVE WITH GLASS BALL*
- Other materials available upon request*

## PRESSURE RANGE

- PP (POLY PROPYLENE) head standard pressure up to 300 kg/cm<sup>2</sup>*
- Special head up to 1000 kg/cm<sup>2</sup>*
- 0 TO 8 BAR*

## FLOW RANGE

- 100 ml/hr. to 7000 LPH*
- Higher capacities can be achieved by multiplexing head*

## TEMPERATURE RANGE

- 0 TO 80 Degree Celsius*