

# **PULSAR** **Shadow**<sup>®</sup>

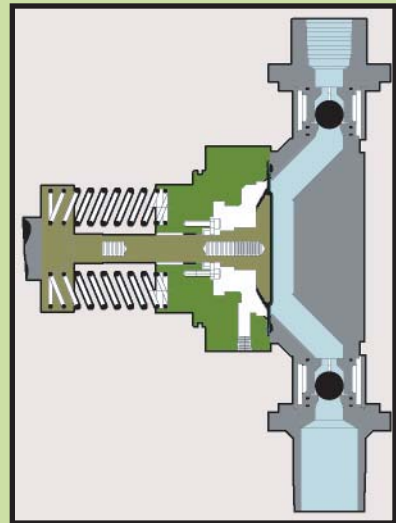
Mechanical Diaphragm Metering Pump



The Pulsar Shadow<sup>®</sup> features a rugged and reliable construction designed for simplicity of operation and maintenance. The Pulsar Shadow<sup>®</sup> sets a new standard for the mechanically actuated diaphragm metering pump.

## **KEY FEATURES:**

- Robust PTFE faced diaphragm is designed for 2 years of un-interrupted service
- Simple maintenance involving no hydraulic oil
- Four bolt tie-bar design provides ultimate resistance to piping moments and forces
- 5 year warranty on the gearbox
- Maximum pressure rating of 305 psig including non-metallic reagent heads



**PULSAFEEDER**  
A Unit of IDEX Corporation



## Performance Specifications:

| Pump Model & Head Size      | Maximum Capacity Range<br>Metal Wetted Ends Only<br>Consult your Pulsafeeder sales representative for non-metallic wetted ends |               |              |               | Rated Pressure |      |
|-----------------------------|--|---------------|--------------|---------------|----------------|------|
|                             | 60 HZ<br>GPH   | 60 HZ<br>LPH  | 50 HZ<br>GPH | 50 HZ<br>LPH  | PSIG           | BAR  |
| Includes all stroking rates |  |               |              |               |                |      |
| 25BB<br>B Head              | 2.8 – 8.5  | 10.8 – 32.1   | 2.4 – 8.7    | 8.9 – 33.0    | 305            | 21.0 |
| 25BB<br>C Head              | 6.5 – 19.5   | 24.7 – 73.6   | 5.4 – 20.0   | 20.4 – 75.8   | 160            | 11.0 |
| 25BD<br>C Head              | 9.8 – 29.2   | 37.0 – 110.0  | 8.1 – 30.0   | 30.6 – 114.0  | 160            | 11.0 |
| 55BD<br>C Head              | 8.6 – 25.7   | 32.7 – 97.5   | 7.1 – 26.5   | 27.0 – 100.0  | 250            | 17.2 |
| 55BD<br>D Head              | 15.4 – 45.8  | 58.2 – 173.0  | 12.7 – 47.2  | 48.1 – 178.0  | 150            | 10.3 |
| 55BF<br>D Head              | 25.6 – 76.4  | 96.9 – 289.0  | 21.2 – 78.6  | 80.2 – 298.0  | 150            | 10.3 |
| 55 BF<br>E Head             | 55.3 – 165.0   | 210.0 – 625.0 | 45.8 – 170.0 | 173.0 – 643.0 | 75             | 5.2  |

Pulsar Shadow pumps are available with PTFE/elastomer composite and leak detection diaphragms.

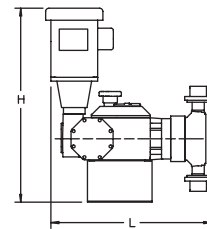
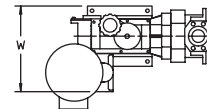
## Standard Features:

- Stainless Steel hardware on liquid end
- Three component check valves
- Steady-state accuracy of +/- 1%
- Manual stroke length adjustment
- Mechanically actuated diaphragm for simple maintenance

## Optional Features:

- Microprocessor based controllers
- MODBUS serial communication
- PULSAlarm<sup>®</sup> leak detection system
- Multiplex systems for engineered applications
- Stainless Steel Base

## Approximate Overall Dimensions:



| DIM             | MODEL 25 |        | MODEL 55 |        |
|-----------------|----------|--------|----------|--------|
|                 | INCH     | MM     | INCH     | MM     |
| L               | 19.3     | 489.7  | 20.0     | 507.5  |
| W               | 10.6     | 269.3  | 10.6     | 269.3  |
| H               | 32.1     | 816.2  | 32.1     | 816.2  |
| APPROX SHIP WT. | 125LBS   | 56.7Kg | 140LBS   | 63.5Kg |

## Liquid End Materials of Construction:

| Const. Ref.                    | Reagent Head | Flat Diaphragm | Check Valves |       |        | Cap & Guide |
|--------------------------------|--------------|----------------|--------------|-------|--------|-------------|
|                                |              |                | Ball         | Seat  | Gasket |             |
| 316SS                          | 316SS        | TFE FACED      | 316SS        | 316SS | PTFE   | 316SS       |
| H <sub>2</sub> SO <sub>4</sub> | 316SS        | TFE FACED      | HCO          | 020SS | PTFE   | 316SS       |
| 20SS                           | 020SS        | TFE FACED      | HCO          | 020SS | PTFE   | 020         |
| PVC                            | PVC          | TFE FACED      | ALA          | PVC   | PTFE   | PVC         |
| PVDF                           | PVDF         | TFE FACED      | HCO          | PVDF  | PTFE   | PVDF        |

ALA = Alumina Ceramic HCO = Alloy C H<sub>2</sub>SO<sub>4</sub> = Sulfuric Acid Construction 020 = Alloy 20



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