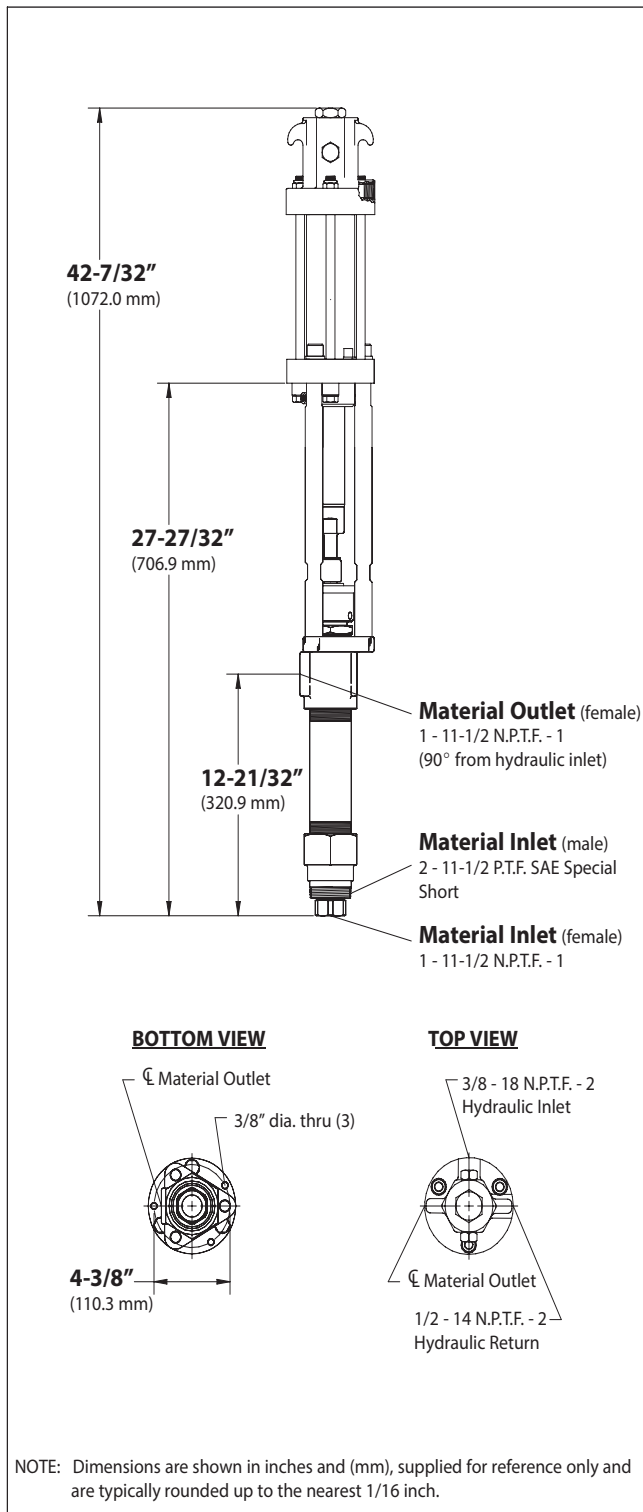


# SALES AND ENGINEERING DATA

## 650945-XXX-B TWO - BALL PUMP

|                       |           |
|-----------------------|-----------|
| RATIO:<br>SERIES:     | 1.7:1     |
| FLUID PSIG:<br>RANGE: | 85 - 2040 |
| RELEASED:             | 9-20-01   |
| REVISED:              | 8-18-17   |
| (REV: G)              | S-1232    |

### DIMENSIONAL DATA



### SPECIFICATIONS

#### CONSTRUCTION

|                                      |                                                    |
|--------------------------------------|----------------------------------------------------|
| Model Series (refer to option chart) | 650945-XXX-B                                       |
| Pump Type                            | Hydraulic Operated, Two - Ball, Double Acting Pump |
| Ratio                                | 1.7:1                                              |
| Hydraulic Motor                      | 67147-B                                            |
| Motor Repair Kit                     | 637449                                             |
| Motor Size                           | 2.062 sq." (13.3 sq. cm)                           |
| Stroke                               | 6" (15.2 cm)                                       |
| Hydraulic Inlet (female)             | 3/8 - 18 NPTF - 2                                  |
| Hydraulic Return (female)            | 1/2 - 14 NPTF - 2                                  |
| Lower Pump End Series                | 66300-XXX                                          |
| Lower Pump Repair Kit                | 637305-X43                                         |
| Packing Options:                     |                                                    |

3 - Glass filled PTFE  
C - UHMW-PE  
G - UHMW-PE / Leather staggered  
P - UHMW-PE / Glass filled PTFE staggered upper • UHMW-PE lower  
R - Glass filled PTFE / UHMW-PE staggered upper • Glass filled PTFE lower

|                          |                                |
|--------------------------|--------------------------------|
| Material Inlet (female)  | 1 - 11-1/2 NPTF - 1            |
| (male)                   | 2 - 11-1/2 PTF SAE spec. short |
| Material Outlet (female) | 1 - 11-1/2 NPTF - 1            |

#### MATERIALS OF CONSTRUCTION

|                           |                         |
|---------------------------|-------------------------|
| Outlet Body               | CF-8M Stainless Steel   |
| Cylinder (650945-XX3-B)   | 316 SS, Hard Chrome     |
| (650945-XXB-B)            | 316 SS, Ceramic coated  |
| Plunger (650945-XX3-B)    | 17-4 SS, Hard Chrome    |
| (650945-XXB-B)            | 17-4 SS, Ceramic coated |
| Upper Ball (650945-X4X-B) | 316 Stainless Steel     |
| (650945-X7X-B)            | 440 Stainless Steel     |
| Upper Seat                | Tungsten Carbide        |
| Lower Ball (650945-X4X-B) | 316 Stainless Steel     |
| (650945-X7X-B)            | 440 Stainless Steel     |
| Lower Seat                | Tungsten Carbide        |
| Inlet Body                | CF-8M Stainless Steel   |
| Weight                    | 41.3 lbs (18.7 kgs)     |

#### PERFORMANCE

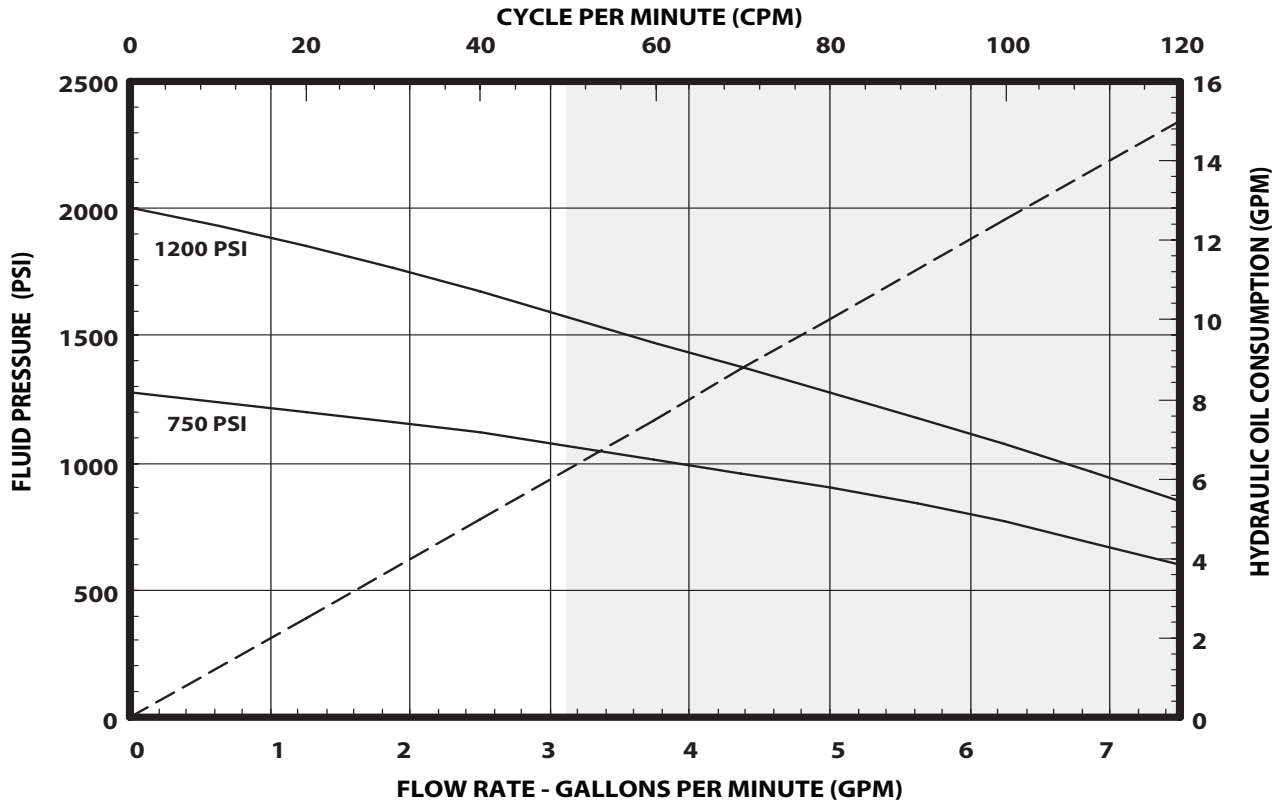
|                                  |                                  |
|----------------------------------|----------------------------------|
| Hydraulic Inlet Pressure Range   | 50 - 1200 psig (3.4 - 82.8 bar)  |
| Fluid Pressure Range             | 85 - 2040 psig (5.9 - 140.7 bar) |
| Required H-power @ 50 cpm        | 3.2 @ 1200 psig (82.8 bar)       |
| Hydraulic flow required @ 50 cpm | 4.9 gpm (18.5 lpm)               |
| Maximum Rec'd Cycles / Minute    | 50                               |
| Displacement Per Cycle           | 14.5 In <sup>3</sup> (238 cc)    |
| Cycles Per Gallon                | 15.9                             |
| Flow @ 50 Cycles / Minute        | 3.1 gpm (11.9 lpm)               |
| Noise Level                      | N / A                            |
| Maximum Temperature Limit        | 130° F (54° C)                   |

#### ACCESSORIES:

67069 Wall Mount Bracket

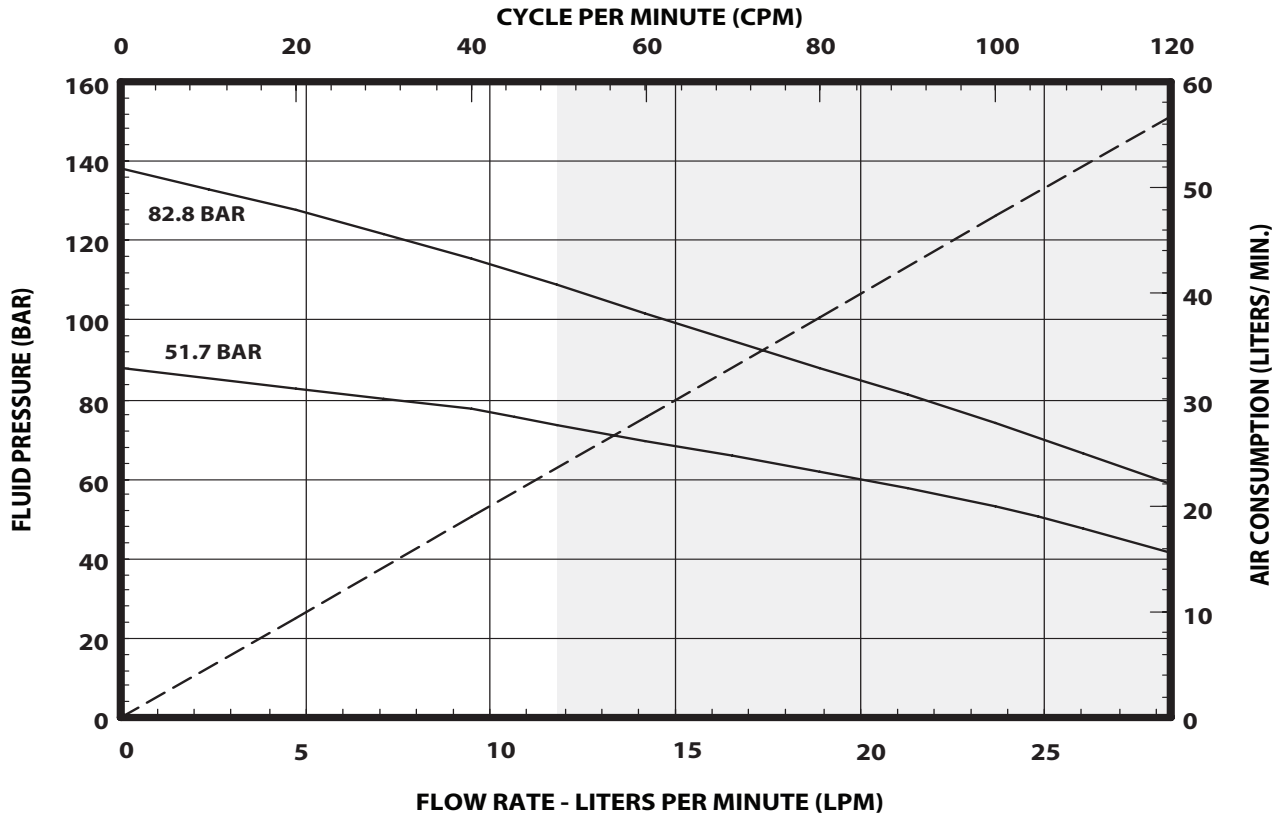
## PERFORMANCE CURVES

### PERFORMANCE BASED ON 30wt. OIL (100cSt) AT 40°C TEMPERATURE



NOTE: NON SHADED AREA OF THE GRAPH REPRESENTS RECOMMENDED OPERATING RANGE

### PERFORMANCE BASED ON 30wt. OIL (100cSt) AT 40°C TEMPERATURE



NOTE: NON SHADED AREA OF THE GRAPH REPRESENTS RECOMMENDED OPERATING RANGE