

# SALES & ENGINEERING DATA

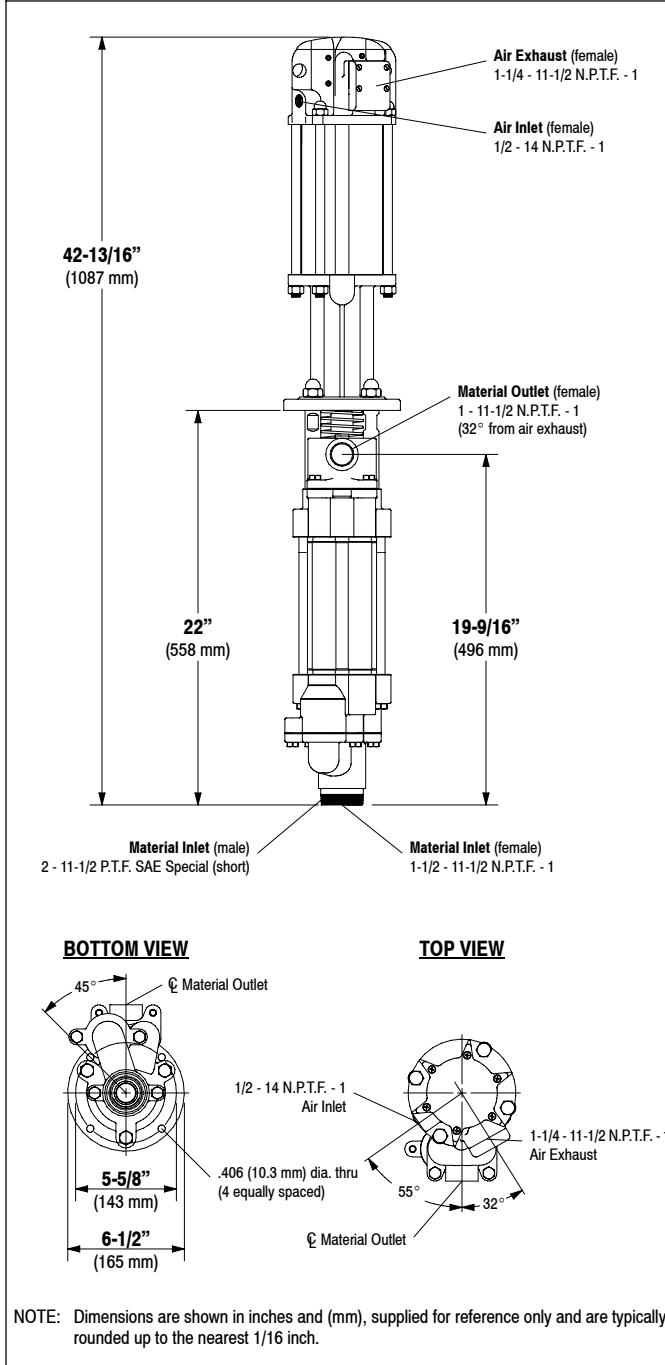
RATIO SERIES: **2:1**

FLUID P.S.I. RANGE: **60 - 312**

## 650439-X4X FOUR-BALL PUMP

RELEASED: 9-25-98  
REVISED: 5-27-10  
REV. 04 S-936

### DIMENSIONAL DATA



**ACCESSORIES:**  
66101 Wall Mount Bracket  
67187-1 Mounting Post  
91790 Silencer

### SPECIFICATIONS

#### CONSTRUCTION

<b>Model Series</b> (refer to option chart)	650439-X4X
<b>Pump Type</b>	Air Operated, Four-Ball
<b>Ratio</b>	2:1
<b>Air Motor</b>	65465-B
<b>Motor Repair Kit</b>	61268
<b>Motor Diameter</b>	4-1/4" (10.8 cm)
<b>Stroke</b>	6" (15.2 cm)
<b>Air Inlet (female)</b>	1/2 - 14 N.P.T.F. - 1
<b>Air Exhaust (female)</b>	1-1/4 - 11-1/2 N.P.T.F. - 1
<b>Lower Pump End</b>	67200-X4X
<b>Lower Pump Repair Kit</b>	637317-X4B
<b>Packing Options:</b>	

- 7 - Glass Filled PTFE (upper)  
Virgin PTFE (lower)
- C - UHMW-PE (upper and lower)
- F - UHMW-PE / Leather staggered (upper)  
UHMW-PE (lower)
- P - UHMW-PE / Glass Filled PTFE staggered (upper)  
UHMW-PE (lower)
- R - Glass Filled PTFE / UHMW-PE staggered (upper)  
Glass Filled PTFE (lower)

<b>Material Inlet (female)</b>	1-1/2 - 11-1/2 N.P.T.F. - 1
<b>(male)</b>	2 - 11-1/2 P.T.F. SAE (short)
<b>Material Outlet (female)</b>	1 - 11-1/2 N.P.T.F. - 1

#### MATERIALS OF CONSTRUCTION

<b>Outlet Body</b>	CF8M Stainless Steel
<b>Cylinder</b> (650439-X4B)	304 Stainless Steel ceramic coated
(650439-X43)	304 Stainless Steel hard chrome plated
<b>Plunger</b> (650439-X4B)	17-4 Stainless Steel ceramic coated
(650439-X43)	17-4 Stainless Steel hard chrome plated
<b>Upper Ball</b>	316 Stainless Steel
<b>Upper Seat</b>	17-4 Stainless Steel
<b>Lower Ball</b>	316 Stainless Steel
<b>Lower Seat</b>	17-4 Stainless Steel
<b>Inlet Body</b>	CF8M Stainless Steel
<b>Weight</b>	68 lbs (30.8 kgs)

#### PERFORMANCE

<b>Air Inlet Pressure Range</b>	30 - 150 p.s.i. (2.1 - 10.3 bar)
<b>Fluid Pressure Range</b>	60 - 312 p.s.i. (4.1 - 21.5 bar)
<b>Maximum Rec'd Cycles / Minute</b>	60
<b>Displacement In<sup>3</sup> Per Cycle</b>	82.1
<b>Volume / Cycle</b>	45.5 oz. (1344 ml)
<b>Cycles Per Gallon</b>	2.8
<b>Flow @ 60 Cycles / Minute</b>	21.3 g.p.m. (80.6 l.p.m.)
<b>Noise Level @ 60 p.s.i. - 40 c.p.m.①</b>	81.8 db(A)

① Tested with 91790 silencer installed. The pump sound pressure level has been updated to an Equivalent Continuous Sound Level (L<sub>Aeq</sub>) to meet the intent of ANSI S1.13-1971, CAGI-PNEUROP S5.1 using four microphone locations.

# PERFORMANCE CURVES

