

# SALES & ENGINEERING DATA

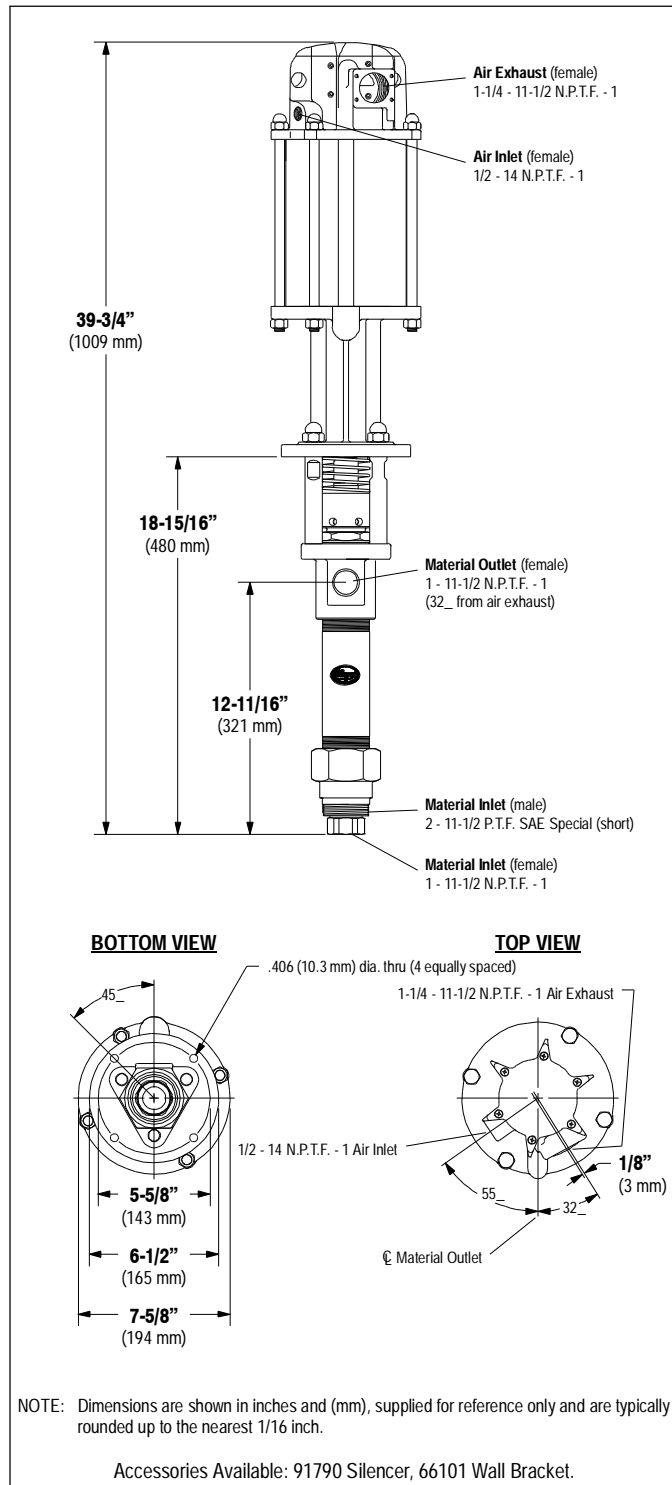
RATIO SERIES: **60:1**

FLUID P.S.I. RANGE: **1800 - 6172**

## 650685-XXX TWO-BALL PUMP SERIES

RELEASED: 12-12-95  
 REVISED: 5-27-10  
 (REV. 02) S-838

### DIMENSIONAL DATA



### SPECIFICATIONS

#### CONSTRUCTION

<b>Model Series</b> (refer to option chart below)	650685-XXX
<b>Pump Type</b>	Air Operated, Two-Ball
<b>Ratio</b>	60:1
<b>Air Motor</b>	65665-B
<b>Motor Repair Kit</b>	61355
<b>Motor Diameter</b>	6" (15.2 cm)
<b>Stroke</b>	6"
<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 Series</b>	66302-XXX
<b>Lower Pump Repair Kit</b>	637307-X43
<b>Packing Options:</b>	

- 3 - Glass Filled PTFE (upper and lower)
- C - UHMW-PE (upper and lower)
- G - UHMW-PE / Leather staggered (upper and 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 - 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>Lower Pump End Materials:</b> ①	
<b>Outlet Body</b>	CF8M Stainless Steel
<b>Cylinder (-XX3)</b>	316 Stainless Steel Hard Chrome
<b>(-XXB)</b>	316 Stainless Steel Ceramic Coated
<b>Plunger (-XX3)</b>	17-4 Stainless Steel Hard Chrome
<b>(-XXB)</b>	17-4 Stainless Steel Ceramic Coated
<b>Upper Ball</b>	316 Stainless Steel
<b>Upper Seat</b>	Tungsten Carbide
<b>Lower Ball</b>	316 Stainless Steel
<b>Lower Seat</b>	Tungsten Carbide
<b>Inlet Body</b>	CF8M Stainless Steel
<b>Weight</b>	46.2 lbs (21 kgs)

#### PERFORMANCE

<b>Air Inlet Pressure Range</b>	30 - 100 p.s.i. (2 - 6.9 bar)
<b>Fluid Pressure Range</b>	1800 - 6172 p.s.i. (124 - 426 bar)
<b>Maximum Rec'd Cycles / Minute</b>	60
<b>Displacement In<sup>3</sup> Per Cycle</b>	5.5
<b>Volume / Cycle</b>	3 oz. (90 ml)
<b>Cycles Per Gallon</b>	41.9
<b>Flow @ 60 Cycles / Minute</b>	1.4 g.p.m. (5.4 l.p.m.)
<b>Noise Level @ 60 p.s.i. - 40 c.p.m.②</b>	84.8 db(A)

① All wetted components are passivated or electro-polished and have corrosion resistance characteristics of 300 Series stainless steel.  
 ② 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

TWO-BALL PUMP, 6" AIR MOTOR, 6" STROKE, 60:1 RATIO

