

# SALES & ENGINEERING DATA

RATIO SERIES: **9:1**

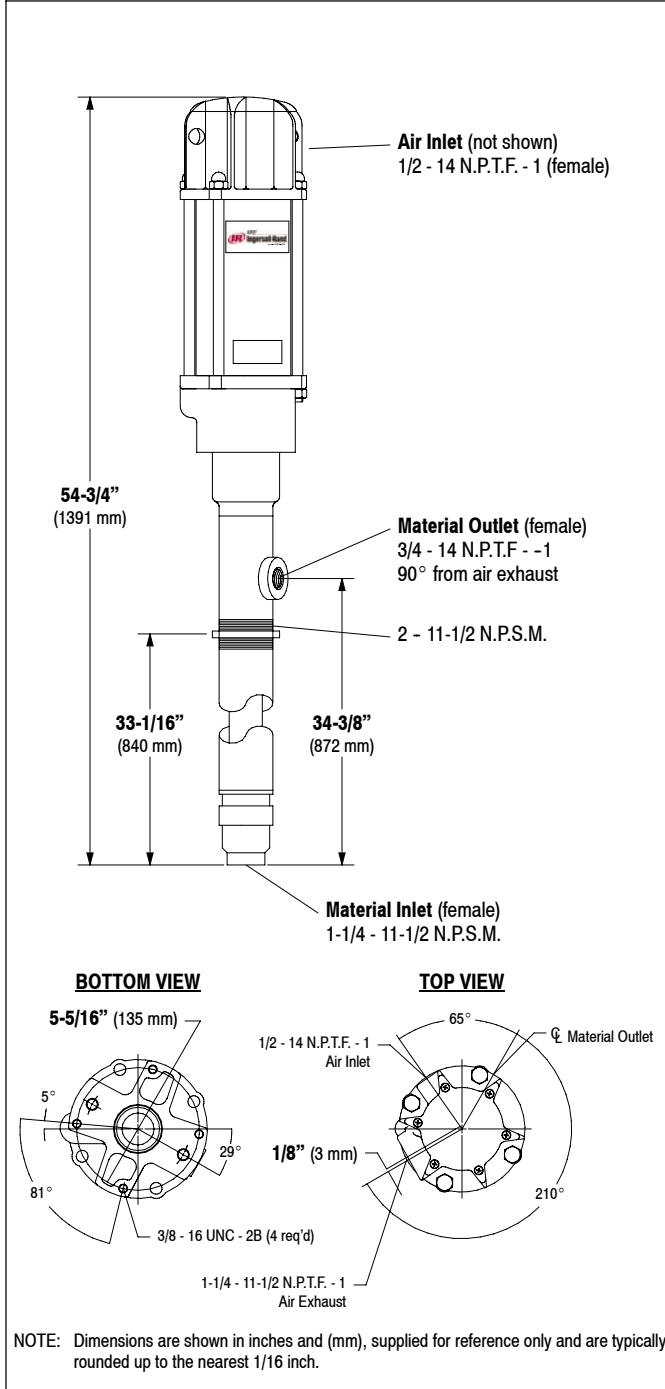
FLUID P.S.I. RANGE: **0 - 1350**

650409-X

TWO - BALL PUMP

RELEASED: 11-6-98  
 REVISED: 5-27-10  
 (REV. 03) S-965

## DIMENSIONAL DATA



## SPECIFICATIONS

### CONSTRUCTION

<b>Model Series</b> (refer to option chart)	650409-X
<b>Pump Type</b>	Air Operated, Two - Ball, Double Acting Pump
<b>Ratio</b>	9:1
<b>Air Motor</b>	65444-B
<b>Motor Repair Kit</b>	61268
<b>Motor Diameter</b>	4-1/4" (107.9 mm)
<b>Stroke</b>	4" (101.6 mm)
<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>	65106-X
<b>Lower Pump Repair Kit</b>	
model 650409	637010
model 650409-4	637010-4

### Packing Options:

650409	PTFE (upper and lower)
650409-4	UHMW-PE (upper and lower)

<b>Material Inlet (female)</b>	1-1/4 - 11-1/2 N.P.S.M.
<b>Material Outlet (female)</b>	3/4 - 14 N.P.T.F. - 1

### MATERIALS OF CONSTRUCTION

<b>Outlet Body</b>	316 Stainless Steel
<b>Cylinder</b>	316 Stainless Steel
<b>Plunger</b>	316 Stainless Steel
<b>Upper Ball</b>	316 Stainless Steel
<b>Upper Seat</b>	316 Stainless Steel
<b>Lower Ball</b>	316 Stainless Steel
<b>Lower Seat</b>	316 Stainless Steel
<b>Inlet Body</b>	316 Stainless Steel
<b>Weight</b>	45 lbs (20.4 kgs)

### PERFORMANCE

<b>Air Inlet Pressure Range</b>	0 - 150 p.s.i. (0 - 10.3 bar)
<b>Fluid Pressure Range</b>	0 - 1350 p.s.i. (0 - 93.1 bar)
<b>Maximum Rec'd Cycles / Minute</b>	60
<b>Displacement In<sup>3</sup> Per Cycle</b>	11.0
<b>Volume / Cycle</b>	6.1 oz. (180.2 ml)
<b>Cycles Per Gallon</b>	21
<b>Flow @ 60 Cycles / Minute</b>	2.9 g.p.m. (10.8 l.p.m.)
<b>Noise Level @ 60 p.s.i. - 40 c.p.m.</b>	80.0 db(A)①

① Tested with 91790 muffler 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.

### ACCESSORIES:

- 66100 Wall Mount Bracket
- 91790 Silencer

**PERFORMANCE CURVES**

