

# SALES AND ENGINEERING DATA

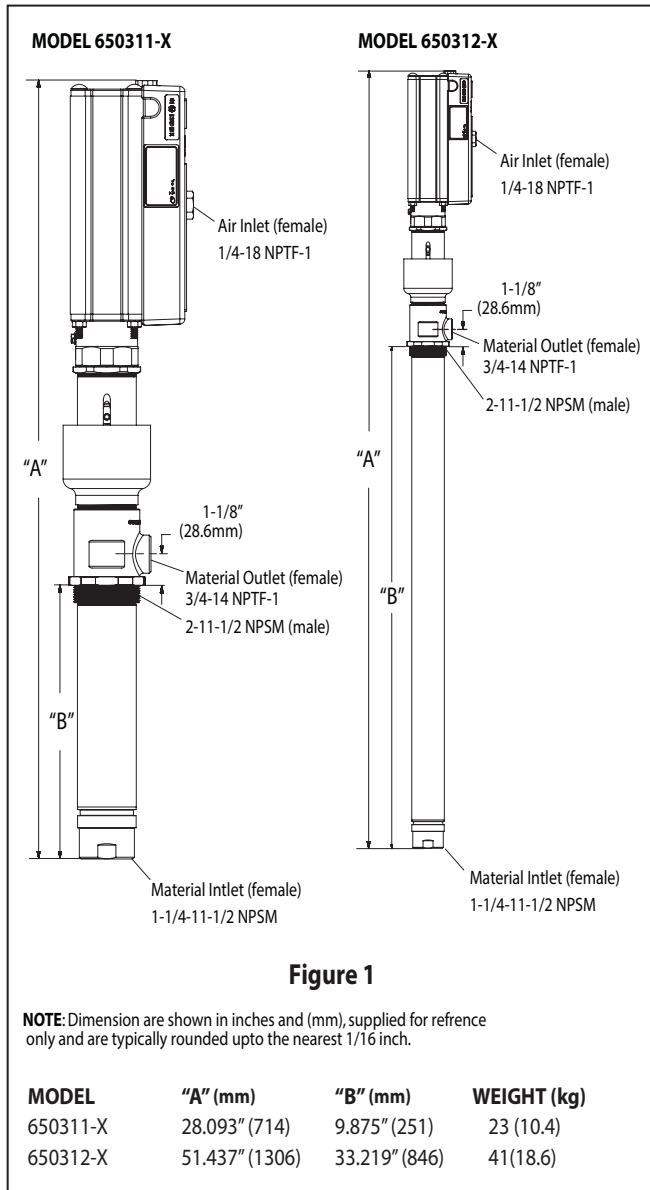
RATIO SERIES: **2:1**

FLUID PSIG RANGE: **30 - 343**

RELEASED: 1-3-11  
 REVISED: 8-4-17  
 (REV: E) S-1480

## 650311-X AND 650312-X TWO BALL PUMP

### DIMENSIONAL DATA



### SPECIFICATIONS

**Model Series** (refer to option chart) ..... 650311-X and 650312-X  
**Pump Type** ..... Air Operated, Two Ball, Stainless Steel Pump  
**Ratio** ..... 2:1  
**Air Motor** ..... 67400  
 Motor Repair Kit ..... 637377  
 Motor Diameter ..... 2" (5.08 cm)  
 Stroke ..... 3" (7.62 cm)  
 Air Inlet (female) ..... 1/4 - 18 NPTF - 1  
**Lower Pump End Series** ..... K1875C11XXXX  
**Lower Pump Repair Kit**  
 650311-4/-6, 650312-4 ..... K1875C11FF00  
 650311/650311-5, 650312 ..... K1875C11SS00  
 650311-8 ..... K1875C11VS00  
 650311-7/-9 ..... K1875C11VF00  
**Ball and Seat Service Kit** ..... 637011  
**Material Inlet (female)** ..... 1-1/4 - 11-1/2 NPSM  
**Material Outlet (female)** ..... 3/4 - 14 NPTF - 1

### MATERIALS OF CONSTRUCTION

**Outlet Body** ..... 316 Stainless Steel  
**Cylinder**  
 650311/ 650311-4/-8, 650312/650312-4 ..... 316 Stainless Steel  
 650311-5/-6/-7/-9 ..... Ceramic Coated 316 Stainless Steel  
**Plunger**  
 650311/ 650311-4/-8, 650312/650312-4 ..... 316 Stainless Steel  
 650311-5/-6/-7/-9 ..... Ceramic Coated 316 Stainless Steel

**Upper Packing**  
 650311-4/-6, 650312-4 ..... UHMW-PE  
 650311/650311-5, 650312 ..... PTFE  
 650311-7/-8/-9 ..... Viton

**Lower Packing**  
 650311-4/-6/-7/-9, 650312-4 ..... UHMW-PE  
 650311/650311-5, 650312 ..... PTFE  
 650311-8 ..... PTFE

**Upper Ball** ..... 316 Stainless Steel  
**Upper Seat** ..... 316 Stainless Steel  
**Lower Ball** ..... 316 Stainless Steel  
**Inlet Body** ..... 316 Stainless Steel

### PUMP PERFORMANCE

**Air Inlet Pressure Range** ..... 30 - 150 psig (2.1 - 10.3 bar)  
**Fluid Pressure Range** ..... 60 - 343 psig (4.1 - 23.6 bar)  
**Maximum Rec'd Cycles / Minute** .... 120  
**Flow Rate @ 120 Cycles / Minute** ... 4.26 gpm (16.121 lpm)  
**Displacement / Cycle @ 100 psig** ... 8.2 In.<sup>3</sup> (134 cc)  
**Cycles Per Gallon** ..... 28  
**Noise Level @ 100 psig- 60 cpm** ..... 80 dB(A)<sup>①</sup>

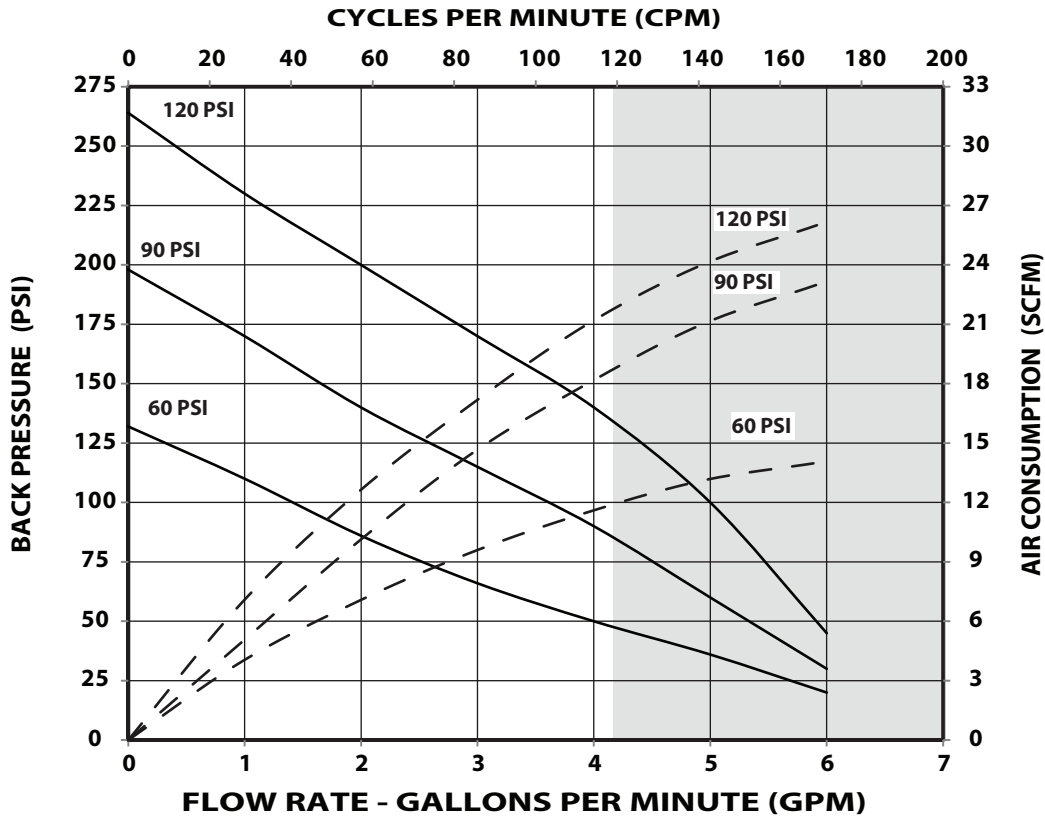
① The pump sound pressure level has been updated to an Equivalent Continuous Sound Level (LA<sub>eq</sub>) to meet the intent of ANSI S1.13-1971, CAGI-PNEUROP S5.1 using four microphone locations.

### Accessories Available

61113 Wall Mount Bracket  
 66073-1 AirLine Connection Kit

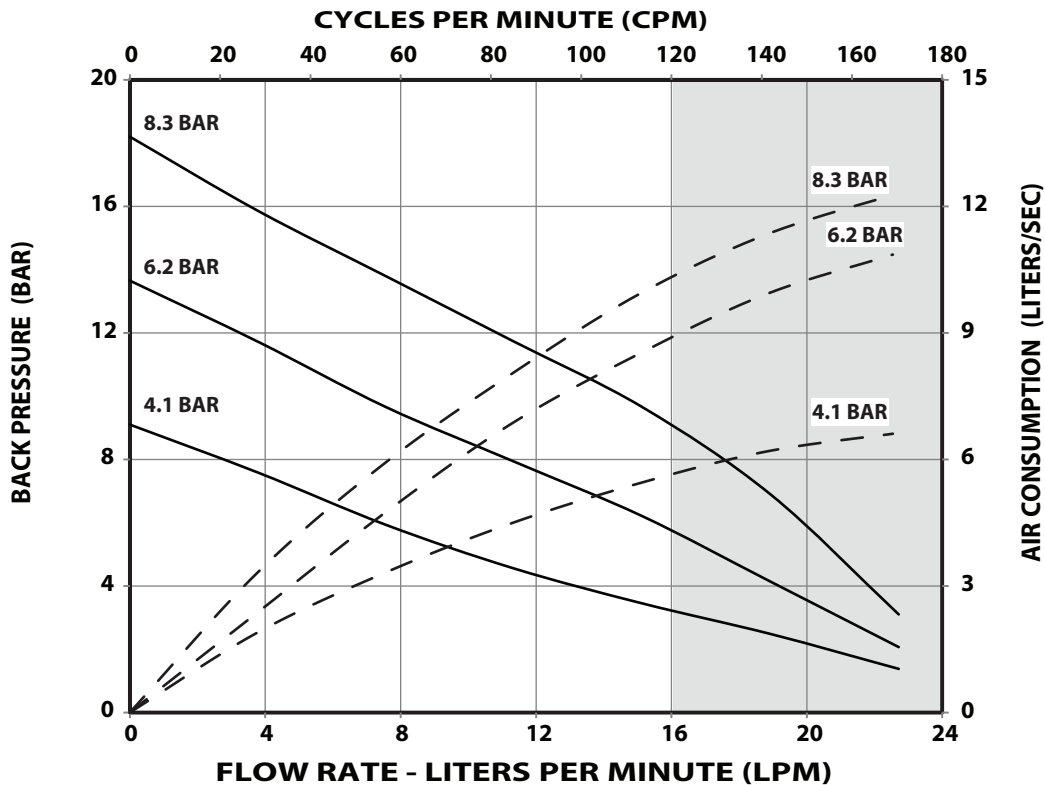
## PERFORMANCE CURVES

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



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

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