



**Series 4302 IVS Design Envelope**  
**Models: 08AH2, 08AI2, 08AJ2**

FILE NO: 100.574L  
 DATE: Mar. 03, 2009  
 SUPERSEDES: New  
 DATE: New

**08A\_2**

**SUBMITTAL**

JOB: \_\_\_\_\_ REPRESENTATIVE: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 ENGINEER: \_\_\_\_\_ ORDER NO: \_\_\_\_\_ DATE: \_\_\_\_\_  
 SUBMITTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CONTRACTOR: \_\_\_\_\_ APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

PUMP DESIGN DATA			
NO. OF PUMPS:			
TAG:			
CAPACITY:	L/s (USgpm)	HEAD:	m (ft.)
LIQUID:		VISCOSITY:	
TEMPERATURE:	°C (°F)	SPECIFIC GRAVITY:	

MOTOR DESIGN DATA		
KW:		
FRAME SIZE:	ENCLOSURE:	
VOLTS:	HERTZ: 50 Hz	PHASE: 3
EFFICIENCY: <input type="checkbox"/> EFF 2 <input type="checkbox"/> EFF 1		
FLANGE SIZE: SUCTION: 80 mm (3")		DISCHARGE: 80 mm (3")

DESIGN ENVELOPE CAPABILITY DATA					
MODEL	FLOW Lps (USgpm)	HEAD m (ft)	EFF%	MOTOR kW	RPM
<input type="checkbox"/> 08AH2	13 (206)	20 (67)	60.9	7.5	2175
<input type="checkbox"/> 08AI2	17 (261)	35 (113)	60.9	11	2825
<input type="checkbox"/> 08AJ2	20 (322)	52 (169)	60.9	15	3450

DRIVE DATA		
SENSORLESS CONTROL: <input type="checkbox"/> REQUIRED <input type="checkbox"/> NOT REQUIRED		
*MINIMUM SYSTEM PRESSURE TO BE MAINTAINED _____ m (ft)		
FIELDBUS PROTOCOL: <input type="checkbox"/> ModBUS RTU (standard) <input type="checkbox"/> LonWorks <input type="checkbox"/> BACnet		
ENCLOSURE: IP55		
EMI/RFI CONTROL: Integrated Filter designed to meet EN61800-3		
HARMONIC SUPPRESSION: Integrated DC Link Reactors (<5% THD)		
COOLING: Fan-cooled through back channel		
AMBIENT TEMPERATURE: -10°C to +45°C up to 1000 meters above sea level (-14°F TO +113°F, 3280ft)		
	Units 7.5kW and Below	Units 11.0kW and Above
ANALOG INPUTS:	2, 1 Current or 1 Voltage	2, current or voltage
ANALOG OUTPUTS:	1, current	1, current
DIGITAL INPUTS:	3 Programmable	4 Programmable
DIGITAL OUTPUTS:	1 (shared with Analog output)	2 Programmable (can be configured as additional digital inputs)
PULSE INPUTS:	1 (shared with 1 digital input)	2 Programmable
RELAY OUTPUTS:	1 Programmable	2 Programmable
COMMUNICATION PORT: RS 485		
**EXPANSION CARD OPTION		
Drive A	<input type="checkbox"/> Auxiliary Analog I/O	<input type="checkbox"/> Auxiliary Digital I/O
	<input type="checkbox"/> Auxiliary Relay	<input type="checkbox"/> Real-Time Clock
Drive B	<input type="checkbox"/> Auxiliary Analog I/O	<input type="checkbox"/> Auxiliary Digital I/O
	<input type="checkbox"/> Auxiliary Relay	<input type="checkbox"/> Real-Time Clock

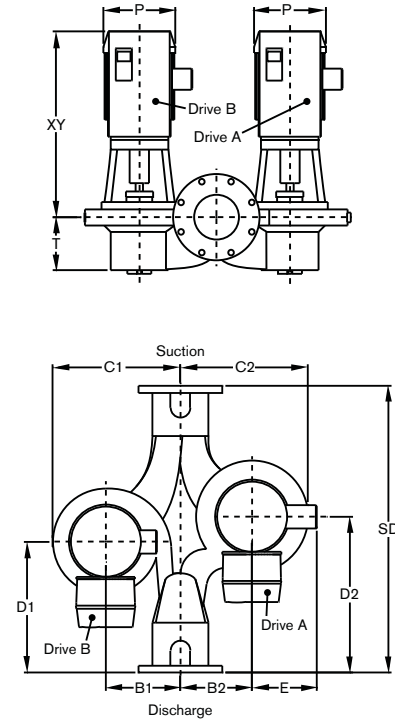
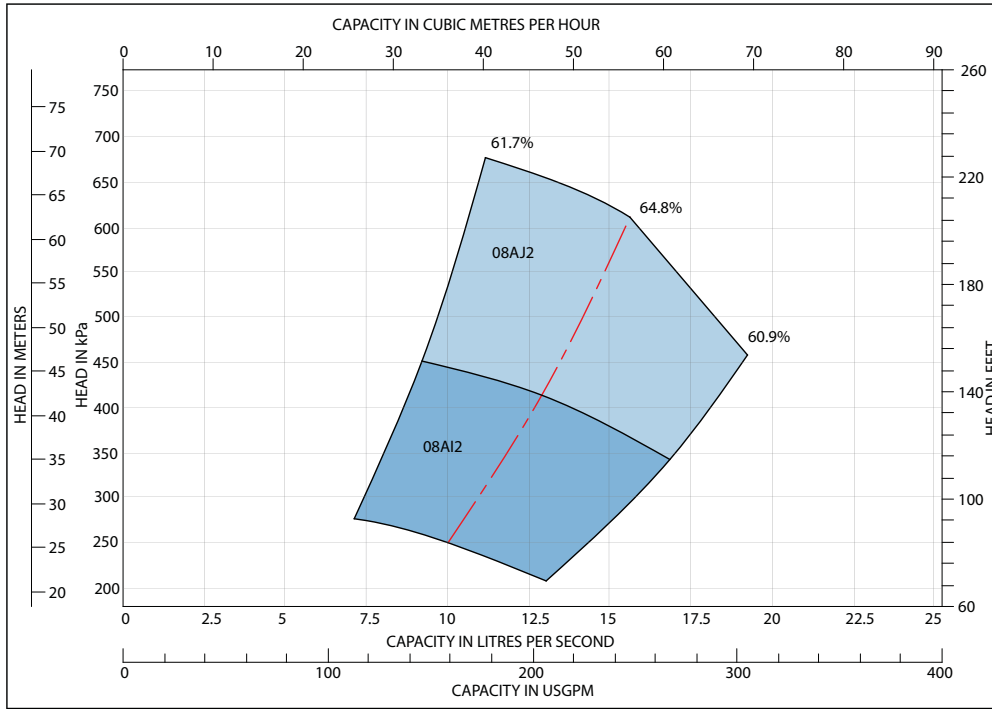
MATERIALS OF CONSTRUCTION		
DIN FLANGE RATING	<input type="checkbox"/> PN16 CAST IRON <input type="checkbox"/> PN25 Ductile Iron	
CONSTRUCTION	BF	DBF
CASING	CAST IRON	DUCTILE IRON
IMPELLER	BRONZE	BRONZE
FLUSH LINE	COPPER	COPPER
PUMP SHAFT	416 STAINLESS STEEL	
COUPLING	HIGH TENSILE ALUMINUM	
GASKET	CONFINED NON-ASBESTOS	

MAXIMUM PUMP OPERATING CONDITIONS	
PN16 Cast Iron	PN25 Ductile Iron
12 bars at 60°C (175 psig at 140°F) 7 bars at 149°C (100 psig at 300°F)	26 bars at 38°C (375 psig at 100°F) 19 bars at 260°C (275 psig at 500°F)
SEE FILE NO. 43.50 FOR MAXIMUM SEAL OPERATING CONDITIONS	

MECHANICAL SEAL DESIGN DATA
See File No. 43.50 for standard mechanical
Armstrong Seal Reference Number
<input type="checkbox"/> C1 (a) Other _____

SEAL DATA OPTIONS

OPTIONAL EQUIPMENT
SEE FILE NO. 43.50 FOR ENVIRONMENTAL ACCESSORIES



### DIMENSION DATA - mm (inches)

Curve No.	Size	Power (kW)	C1	C2	D1	D2	B1	B2	T	SD	ODP motors with UL Type 12 drives			TEFC motors with UL Type 12 drives			Weight in lbs (Kg)	
											P	E	XY	P	E	XY	ODP	TEFC
08AH2	80-200	7.5	318 (12.50)	321 (12.63)	272 (10.69)	272 (10.69)	178 (7.00)	178 (7.00)	129 (5.08)	484 (19.06)	308 (12.13)	193 (7.59)	712 (28.02)	286 (11.25)	210 (8.25)	740 (29.14)	226.8 (500)	254.0 (560)
08AI2	80-200	11	318 (12.50)	321 (12.63)	272 (10.69)	272 (10.69)	178 (7.00)	178 (7.00)	129 (5.08)	484 (19.06)	308 (12.13)	193 (7.59)	712 (28.02)	340 (13.38)	226 (8.90)	866 (34.08)	235.8 (520)	317.5 (700)
08AJ2	80-200	15	318 (12.50)	321 (12.63)	272 (10.69)	272 (10.69)	178 (7.00)	178 (7.00)	129 (5.08)	484 (19.06)	340 (13.38)	252 (9.94)	864 (34.02)	340 (13.38)	226 (8.90)	866 (34.08)	281.2 (620)	335.6 (740)

- COUPLING GUARD (NOT SHOWN) IS SUPPLIED.
- TOLERANCE OF  $\pm 0.125^{\circ}$  ( $\pm 3$  mm) SHOULD BE USED.
- FOR EXACT INSTALLATION DATA PLEASE WRITE FACTORY FOR CERTIFIED DIMENSIONS.
- PUMP EQUIPPED WITH CASING DRAIN PLUG AND 1/4" NPT SUCTION AND DISCHARGE GAUGE PORTS

S. A. Armstrong Limited  
23 Bertrand Avenue  
Toronto, Ontario  
Canada, M1L 2P3  
T: (416) 755-2291  
F (Main): (416) 759-9101

Armstrong Pumps Inc.  
93 East Avenue  
North Tonawanda, New York  
U.S.A. 14120-6594  
T: (716) 693-8813  
F: (716) 693-8970

Armstrong Holden Brooke Pullen  
Wenlock Way  
Manchester  
United Kingdom, M12 5JL  
T: +44 (0) 161 223 2223  
F: +44 (0) 161 220 9660

