



Series 4302 IVS Design Envelope

Models: 11AK4, 11AL4, 11AM4

FILE NO: 100.598L
 DATE: Mar. 03, 2009
 SUPERSEDES: New
 DATE: New

11A_4

SUBMITTAL

JOB: _____ REPRESENTATIVE: _____

ENGINEER: _____ ORDER NO: _____ DATE: _____

CONTRACTOR: _____ SUBMITTED BY: _____ DATE: _____

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: 200 mm (8")		DISCHARGE: 200 mm (8")

DESIGN ENVELOPE CAPABILITY DATA					
MODEL	FLOW Lps (USgpm)	HEAD m (ft)	EFF%	MOTOR kW	RPM
<input type="checkbox"/> 11AK4	63 (990)	16 (52)	71.6	18	1350
<input type="checkbox"/> 11AL4	72 (1133)	21 (68)	71.6	22	1545
<input type="checkbox"/> 11AM4	85 (1345)	29 (95)	71.6	30	1831

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)	
ANALOG INPUTS: 2, current or voltage	
ANALOG OUTPUTS: 1, current	
DIGITAL INPUTS: 4 Programmable	
DIGITAL OUTPUTS: 2 Programmable (can be configured as additional digital inputs)	
PULSE INPUTS: 2 Programmable	
RELAY OUTPUTS: 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

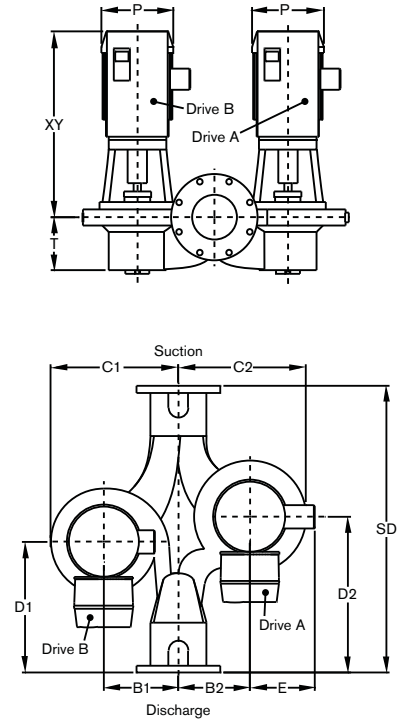
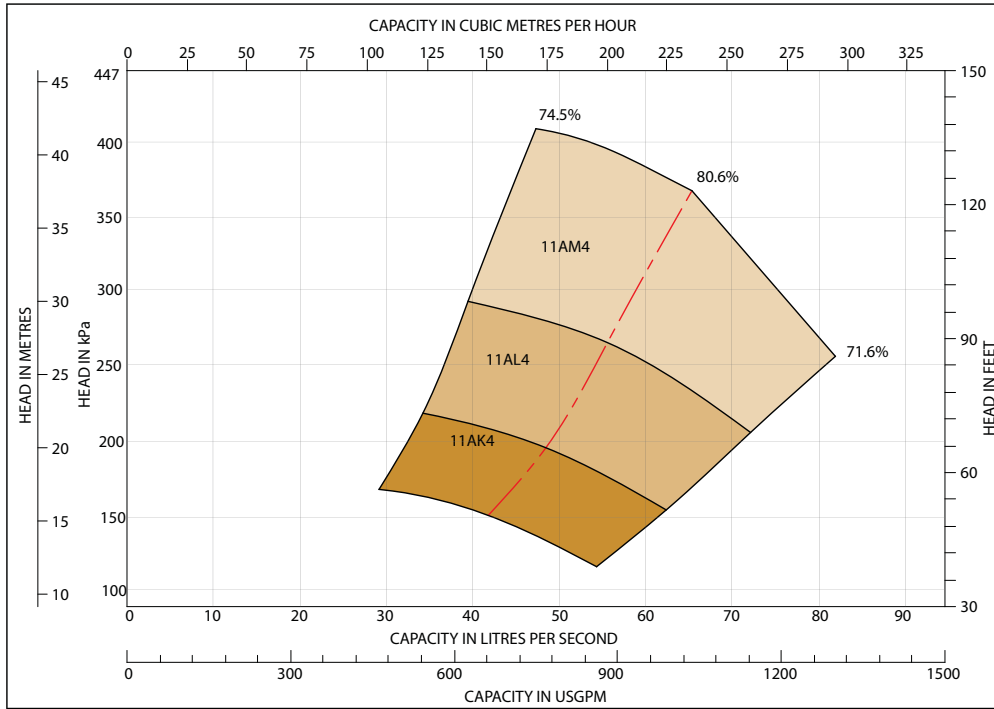
MATERIALS OF CONSTRUCTION		
DIN FLANGE RATING	<input type="checkbox"/> PN16 CAST IRON <input type="checkbox"/> PN25 Ductile Iron	
CONSTRUCTION	BF	DBF
CASING	CAST IRON	DUCTILE IRON
IMPELLER	BRONZE	BRONZE
FLUSH LINE	COPPER	COPPER
PUMP SHAFT	416 STAINLESS STEEL	
COUPLING	HIGH TENSILE ALUMINUM	
GASKET	CONFINED 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
11AK4	200-290	18	511 (20.10)	514 (20.23)	647 (25.48)	525 (20.65)	267 (10.50)	279 (11.00)	224 (8.80)	1192 (46.94)	381 (15.00)	321 (12.63)	965 (38.00)	365 (14.38)	305 (12.00)	930 (36.63)	666.7 (1470)	702.9 (1550)
11AL4	200-290	22	511 (20.10)	514 (20.23)	647 (25.48)	525 (20.65)	267 (10.50)	279 (11.00)	224 (8.80)	1192 (46.94)	381 (15.00)	321 (12.63)	965 (38.00)	365 (14.38)	305 (12.00)	930 (36.63)	684.8 (1510)	721.1 (1590)
11AM4	200-290	30	511 (20.10)	514 (20.23)	647 (25.48)	525 (20.65)	267 (10.50)	279 (11.00)	224 (8.80)	1192 (46.94)	464 (8.25)	384 (15.13)	1054 (41.50)	406 (16.00)	372 (14.63)	940 (37.00)	825.4 (1820)	984.1 (2170)

- COUPLING GUARD (NOT SHOWN) IS SUPPLIED.
- TOLERANCE OF ± 0.125 " (± 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

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