



FILE NO: 100.532
 DATE: Feb. 9, 2009
 SUPERSEDES: New
 DATE: New

Series 4300 IVS Design Envelope
Models: 10AJ2, 10AK2, 10AL2, 10AM2

10A_2

SUBMITTAL

JOB: _____ REPRESENTATIVE: _____

 ENGINEER: _____ ORDER NO: _____ DATE: _____
 SUBMITTED BY: _____ DATE: _____
 CONTRACTOR: _____ APPROVED BY: _____ DATE: _____

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

MOTOR DESIGN DATA		
HP:		
FRAME SIZE:	ENCLOSURE:	
VOLTS:	HERTZ: 60 Hz	PHASE: 3
EFFICIENCY: NEMA PREMIUM		
FLANGE SIZE: SUCTION: 2" (50 mm)		DISCHARGE: 2" (50 mm)

DESIGN ENVELOPE CAPABILITY DATA					
MODEL	FLOW Usgpm (Lps)	HEAD ft (m)	EFF%	MOTOR HP	RPM
<input type="checkbox"/> 10AJ2	156 (9.8)	146 (44.6)	57.7	20	2225
<input type="checkbox"/> 10AK2	179 (11.3)	192 (58.4)	57.7	25	2525
<input type="checkbox"/> 10AL2	202 (12.7)	244 (74.4)	57.7	30	2850
<input type="checkbox"/> 10AM2	247 (15.6)	367 (111.9)	57.7	40	3520

DRIVE DATA	
SENSORLESS CONTROL:	<input type="checkbox"/> REQUIRED <input type="checkbox"/> NOT REQUIRED
*MINIMUM SYSTEM PRESSURE TO BE MAINTAINED _____ ft (m)	
FIELD BUS PROTOCOL: <input type="checkbox"/> ModBUS RTU (standard) <input type="checkbox"/> LonWorks <input type="checkbox"/> BACnet	
ENCLOSURE: UL Type 12	
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	

MATERIALS OF CONSTRUCTION		
ANSI FLANGE RATING	<input type="checkbox"/> 125 lb. CAST IRON <input type="checkbox"/> 250 lb. 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	
125 lb. CAST IRON	250 lb. DUCTILE IRON
175 psig at 140°F (12 bars at 60°C) 100 psig at 300°F (7 bars at 149°C)	375 psig at 100°F (26 bars at 38°C) 275 psig at 500°F (19 bars at 260°C)
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

CHASSIS SIZE:				
MODEL	hp	VFD Chassis Size		
		200V-240V	380V-480V	600V
10AJ2	20	B2	B1	B1
10AK2	25	C1	B1	B1
10AL2	30	C1	B2	B2
10AM2	40	C1	B2	B2

*If minimum maintained system pressure is not known: Default to 40% of design head

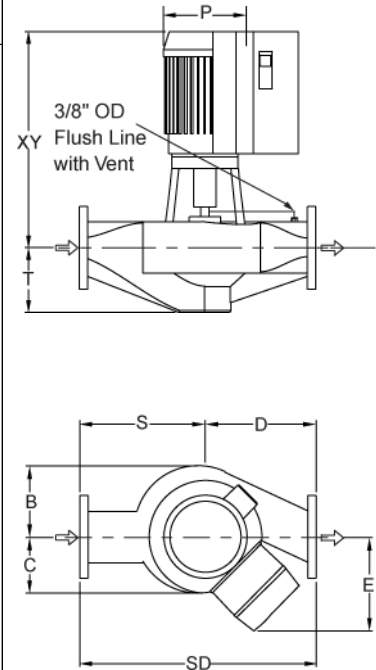
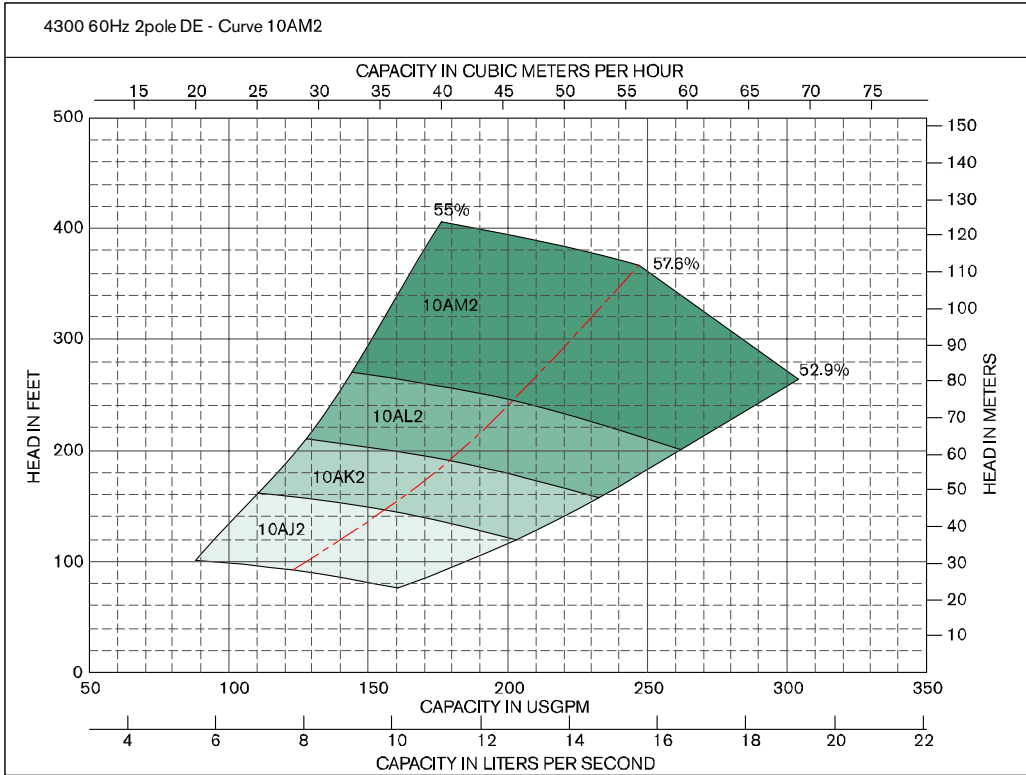
OPTIONAL EQUIPMENT
SEE FILE NO. 43.50 FOR ENVIRONMENTAL ACCESSORIES



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10A_2



DIMENSION DATA - inches (mm)														
Curve No.	Size	Power (HP)	Motor Frame		B	C	D	S	T	SD	E Max	P	XY	Weight lbs (Kg)
			ODP	TEFC										
10AJ2	2x2x10	20	254TC	256TC	6.75 (171)	6.75 (171)	9.00 (229)	10.00 (254)	5.35 (136)	19.00 (483)	17.42 (442)	13.38 (340)	34.10 (866)	470 (214)
10AK2	2x2x10	25	256TC	284TC	6.75 (171)	6.75 (171)	9.00 (229)	10.00 (254)	5.35 (136)	19.00 (483)	20.73 (527)	15.31 (389)	43.36 (1101)	530 (241)
10AL2	2x2x10	30	284TC	286TC	6.75 (171)	6.75 (171)	9.00 (229)	10.00 (254)	5.35 (136)	19.00 (483)	20.73 (527)	15.31 (389)	43.36 (1101)	620 (282)
10AM2	2x2x10	40	286TC	324TC	6.75 (171)	6.75 (171)	9.00 (229)	10.00 (254)	5.35 (136)	19.00 (483)	21.39 (543)	17.00 (432)	44.29 (1125)	850 (386)

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