



Series 4302 IVS Design Envelope

Models: 10AC4, 10AD4, 10AF4

10A_4

FILE NO:	100.584
DATE:	Feb. 09, 2009
SUPERSEDES:	New
DATE:	New

SUBMITTAL

JOB: _____	REPRESENTATIVE: _____
ENGINEER: _____	ORDER NO: _____ DATE: _____
CONTRACTOR: _____	SUBMITTED BY: _____ DATE: _____
	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: 3" (80 mm)	DISCHARGE: 3" (80 mm)

DESIGN ENVELOPE CAPABILITY DATA					
MODEL	FLOW USgpm (Lps)	HEAD ft (m)	EFF%	MOTOR HP	RPM
<input type="checkbox"/> 10AC4	68 (4.3)	25 (7.7)	58.6	2	925
<input type="checkbox"/> 10AD4	90 (5.7)	45 (13.6)	58.6	3	1225
<input type="checkbox"/> 10AF4	129 (8.1)	90 (27.5)	58.6	5	1740

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	
VFD BRIDGE: <input type="checkbox"/> Automatic Standby - Alternation Control	
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	<input type="checkbox"/> BF	<input type="checkbox"/> 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

OPTIONAL EQUIPMENT
SEE FILE NO. 43.50 FOR ENVIRONMENTAL ACCESSORIES

CHASSIS SIZE:				
MODEL	hp	VFD Chassis Size		
		200V-240V	380V-480V	600V
10AC4	2	A5	A5	A5
10AD4	3	A5	A5	A5
10AF4	5	A5	A5	A5

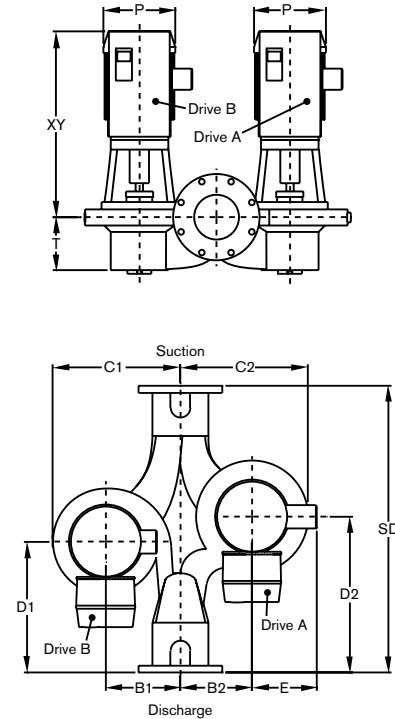
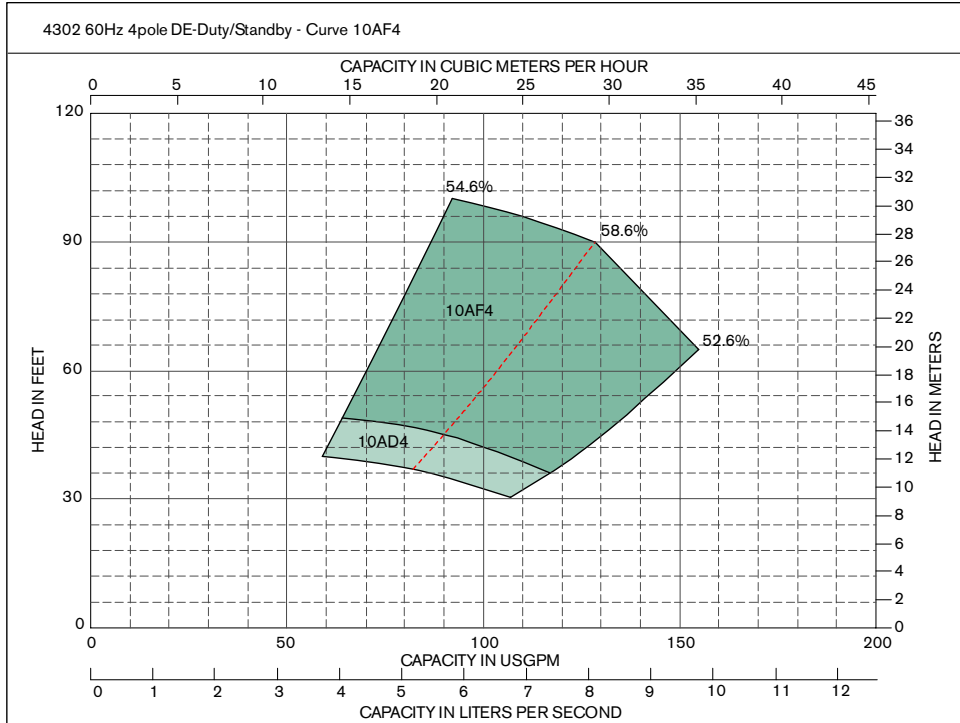
*If minimum maintained system pressure is not known: Default to 40% of design head



Series 4302 IVS Design Envelope

Models: 10AC4, 10AD4, 10AF4

10A_4



DIMENSION DATA - inches (mm)

Curve No.	Size	Power (HP)	Motor Frame		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)	
			ODP	TEFC									P	E	XY	P	E	XY	ODP	TEFC
10AC4	3X3X10	2	145TC	145TC	15.63 (397)	15.75 (400)	10.87 (276)	15.87 (403)	9.00 (229)	9.00 (229)	5.60 (142)	25.75 (654)	8.63 (219)	4.13 (105)	22.27 (566)	7.28 (185)	6.09 (155)	20.77 (528)	530 (240.4)	530 (240.4)
10AD4	3X3X10	3	182TC	182TC	15.63 (397)	15.75 (400)	10.88 (276)	15.87 (403)	9.00 (229)	9.00 (229)	5.60 (142)	25.75 (654)	10.38 (264)	6.84 (174)	26.77 (680)	9.56 (243)	7.50 (191)	26.65 (677)	600 (272.1)	620 (281.2)
10AF4	3X3X10	5	184TC	184TC	15.63 (397)	15.75 (400)	10.88 (276)	15.87 (403)	9.00 (229)	9.00 (229)	5.60 (142)	25.75 (654)	10.38 (264)	6.84 (174)	26.77 (680)	9.56 (243)	7.50 (191)	26.65 (677)	620 (281.2)	640 (290.2)

- 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

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



© S.A. Armstrong Limited 2009

For Armstrong locations worldwide, please visit www.armstrongpumps.com