

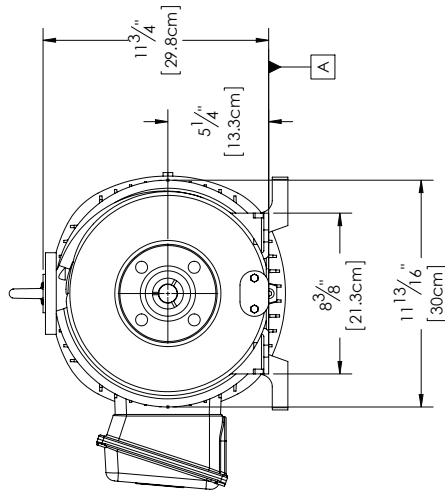
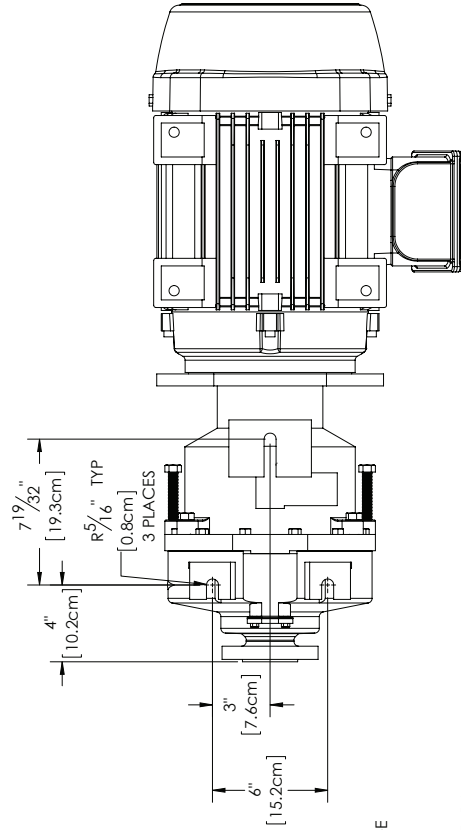
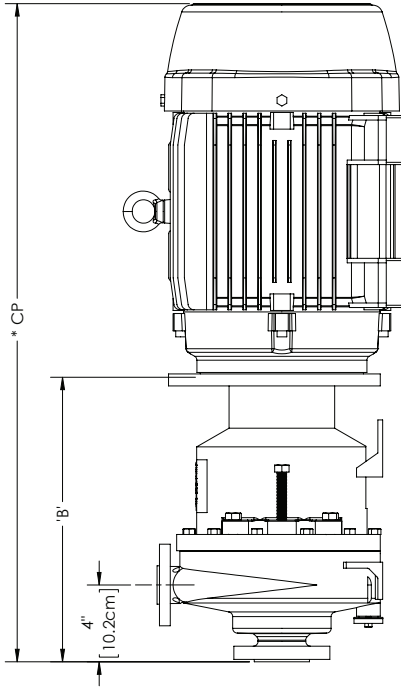
ULTRACHEM[®] SERIES DIMENSIONAL DRAWINGS



FINISH THOMPSON INC.

REVOLUTIONS

REV	DESCRIPTION	DATE	APPRD	TRACK
1	ADDED (L) DESIGNATION	11/25/15	DJB	



ANSI 150#
(4) ϕ 1" THRU
EQUALLY SPACED
ON A ϕ N' B.C.

ISO/DIN PN20
(4) M16 X 2-28 THRU
EQUALLY SPACED 90° STRADLE
ON A 4.75 (120.65 mm) DIA. B.C.

DISCHARGE FLANGE
D ANSI 150#

DISCHARGE FLANGE
D ANSI 150#

(4) ϕ .62 (15.88 mm) THRU.
EQUALLY SPACED
ON A 3.12 (79.24 mm) DIA. B.C.

UC1516 & UC1518

DISCHARGE DETAIL

NEMA 254/6TC	34.9/32	87.1
NEMA 213/5TC	14-13/16	37.6
NEMA 184/4TC	12-5/16	31.3
NEMA 145TC	12-5/16	31.3
MOTOR FRAME	inches	cm
	'B'	'CP'*

UC1516 (L)	1-1/2" (3.8 cm)	5/8" (1.6 cm)	3-7/8" (9.8 cm)	1" (2.5 cm)
UC1518(L)	1-1/2" (3.8 cm)	5/8" (1.6 cm)	3-7/8" (9.8 cm)	1" (2.5 cm)
UC326	3" (7.6 cm)	3/4" (1.9 cm)	6" (15.2 cm)	2" (5.1 cm)
MODEL	S	M	N	D

UNLESS OTHERWISE SPECIFIED
TOLERANCES ARE:
XXX.4 0.00
XXX.4 0.01
FRAC. 1/32
FINISH 125

DATE: 11-1-13
DRAWN: C.M.B.
ENGR: _____

DO NOT SCALE DRAWING.
DO NOT MANUALLY UPDATE.

DISTRIBUTION BLOCK
DEPT: PUMP ASSM
MACH SHOP
WELD SHOP
STILL ASSM
PURCH

REC'D: INJ MOLD
SALES
ADV

THREADED PROJECTION

SCALE: DNS
SHEET: 1 OF 1
CHECKED: _____

INVOICE # 010155-4793
FAX: (864) 455-8151

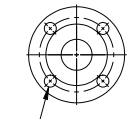
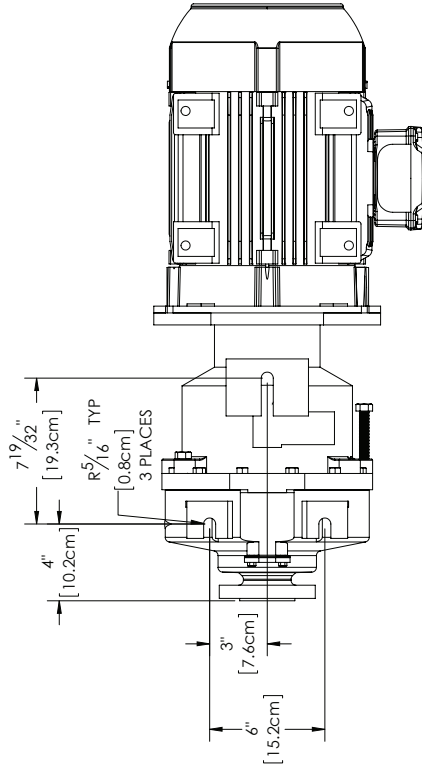
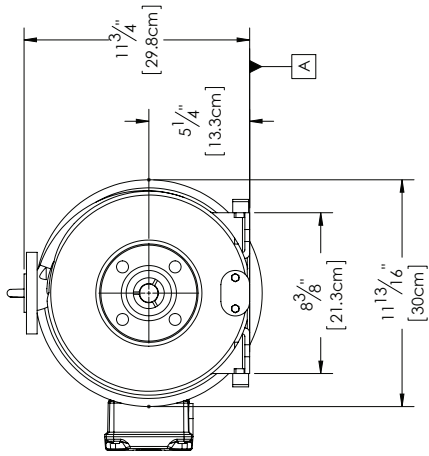
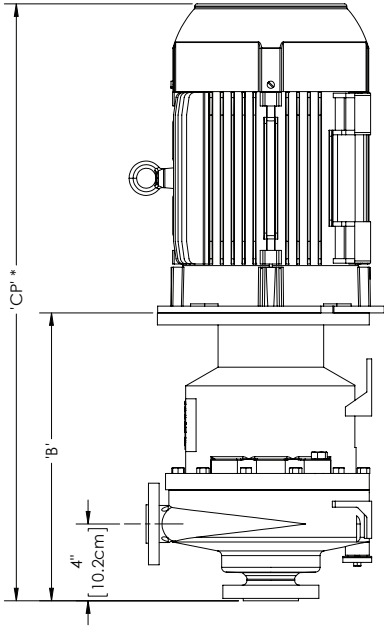
PRODUCT: UC
TITLE: OUTLINE DIM- NEMA MOTORS
PART NUMBER: R101558
REV: 1

- NOTES:
1. DIMENSIONS ARE TO BE USED FOR REFERENCE ONLY
2. 'CP'- DIMENSION MAY VARY DEPENDING ON MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN
3. DATUM 'A' REFERS TO PUMP FOOT
4. ANSI 150# AND ISO/DIN PN20 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY

REVISIONS

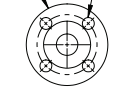
REV	DESCRIPTION	DATE	APPRD	TRACK
1	ADDED (L) DESIGNATION	11/25/15	DJB	

- NOTES:
 1. DIMENSIONS ARE TO BE USED FOR REFERENCE ONLY
 2. *CP- DIMENSION MAY VARY DEPENDING ON MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN
 3. DATUM 'A' REFERS TO PUMP FOOT
 4. ANSI 150# AND ISO/DIN PN20 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY



(4) Ø 1" THRU
EQUALLY SPACED
ON A Ø 1" B.C.

SUCTION DETAIL
S' ANSI 150#



(4) Ø .62 (15.88 mm) THRU.
EQUALLY SPACED
ON A 3.12 (79.24 mm) DIA. B.C.

DISCHARGE DETAIL
D' ANSI 150#

ANSI 150#
(4) 5/8-18 UNC-2B THRU.
EQUALLY SPACED 90° STRADLE
ON A 4.75 (120.65 mm) DIA. B.C.

ISO PN20
(4) M16 X 2-2B THRU.
EQUALLY SPACED 90° STRADLE
ON A 4.75 (120.65 mm) DIA. B.C.

DISCHARGE DETAIL
UC1516 & UC1518

IEC 160 B5	15-5/8"	39.7	34-27-32	88.5
IEC 132 B5	15"	36.1	31-3/32	79
IEC 100/112 B14	12-19/32"	32	25-1/32	63.6
IEC 90 B14	12-19/32"	32	23-19/32	59.9
MOTOR FRAME	inches	cm	inches	cm
	'B'		'CP*'	

MODEL	S	M	N	D
UC1516 (L)	1-1/2" (3.8 cm)	5/8" (1.6 cm)	3-7/8" (9.8 cm)	1" (2.5 cm)
UC1518 (L)	1-1/2" (3.8 cm)	5/8" (1.6 cm)	3-7/8" (9.8 cm)	1" (2.5 cm)
UC326	3" (7.6 cm)	3/4" (1.9 cm)	6" (15.2 cm)	2" (5.1 cm)

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS IN INCHES
 DECIMALS ARE TO BE ROUNDED TO THE NEAREST THOUSANDS
 XXX-4-000
 FINISH: 120
 FINISH: 120

DISTRICTION BLOCK
 DEPT [] REC'D [] INJ MOLD []
 PUMP ASSM [] STILL ASSM [] PURCH []
 WELD SHOP [] SALES [] X
 MACH SHOP [] ADV []
 DATE 12-2-15
 DRAWN C.M.B
 ENGR: []
 DO NOT SCALE DRAWING
 DO NOT MANUALLY UPDATE

10/25/15
 11/25/15
 1

UC
 R101570
 1 OF 1

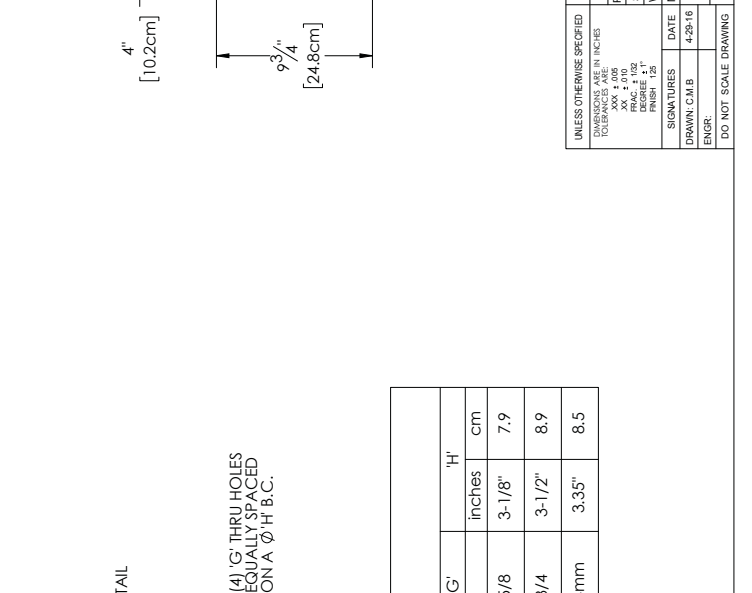
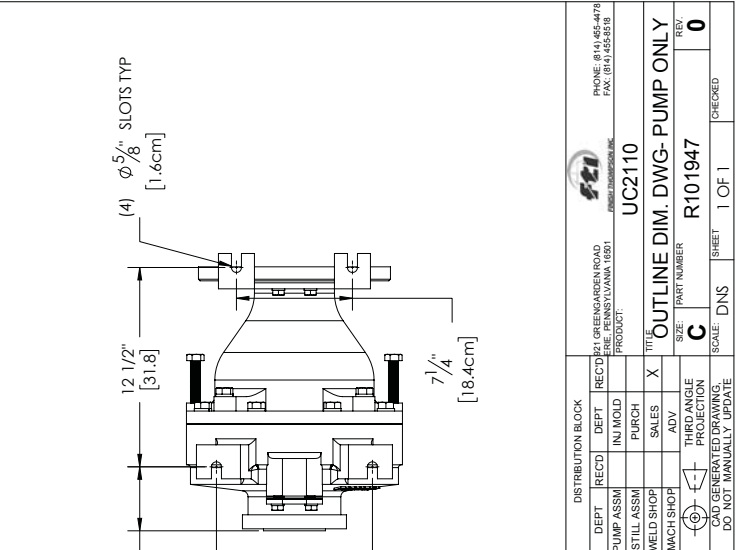
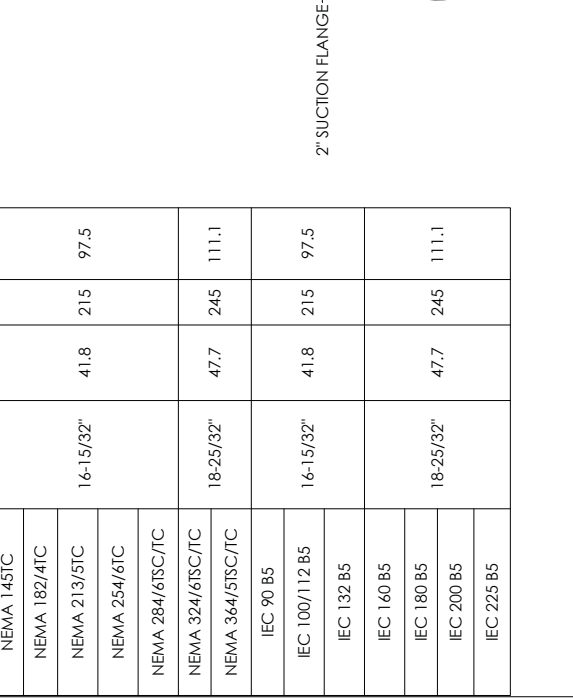
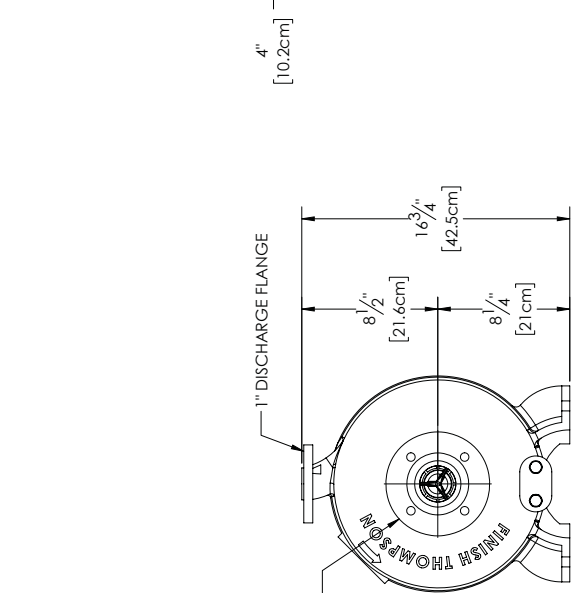
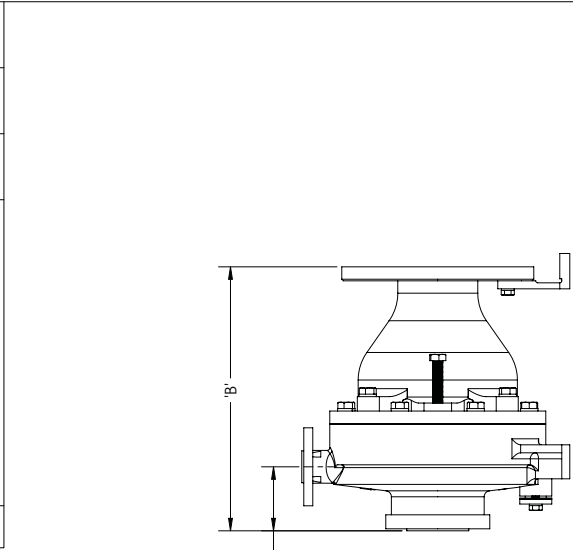
OUTLINE DIM- IEC MOTORS
 PART NUMBER R101570
 REV 1

SCALE: DNS
 SHEET 1 OF 1
 CHECKED

10/25/15
 11/25/15
 1

REV DESCRIPTION		DATE	APPRD	TRACK

Motor Frame	B	PUMP WT
	inches	lbs
	cm	kg
NEMA 145TC		
NEMA 182/4TC		
NEMA 213/5TC	16-15/32"	215 97.5
NEMA 254/6TC		
NEMA 284/6TSC/TC		
NEMA 324/6TSC/TC	18-25/32"	245 111.1
NEMA 364/5TSC/TC		
IEC 90 B5	16-15/32"	215 97.5
IEC 100/112 B5		
IEC 132 B5		
IEC 160 B5		
IEC 180 B5	18-25/32"	245 111.1
IEC 200 B5		
IEC 225 B5		



SUCTION & DISCHARGE FLANGE BOLTING DETAILS									
	D'	E'	F'	G'	F'	G'	H'		
	deg	inches	cm	inches	cm	inches	cm		
150# Flange	45	4	5/8-11	4-3/4"	12.1	4	5/8	3-1/8"	7.9
300# Flange	22.5	8	5/8-11	5"	12.7	8	3/4	3-1/2"	8.9
ISO/DIN PN 40 Flange	45	4	M16-2.0	4.92"	12.5	8	14mm	3.35"	8.5

NOTE:
 1. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY
 2. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES
 TOLERANCES ARE:
 XXX .000
 XXX .002
 XXX .002
 XXX .002
 XXX .002
 XXX .002

DRAWN: C.M.B. 4-29-16
 ENGR. DO NOT SCALE DRAWING. DO NOT MANUALLY UPDATE.

DISTRIBUTION BLOCK
 DEPT () RECD () DEPT () RECD ()
 PUMP ASSM () INT MOLD ()
 STILL ASSM () PURCH ()
 WELD SHOP () SALES ()
 MACH SHOP () ADV ()
 DATE () THIRD ANGLE PROJECTION ()
 SIZE () PART NUMBER ()
 SCALE () SHEET () OF ()
 CHECKED ()

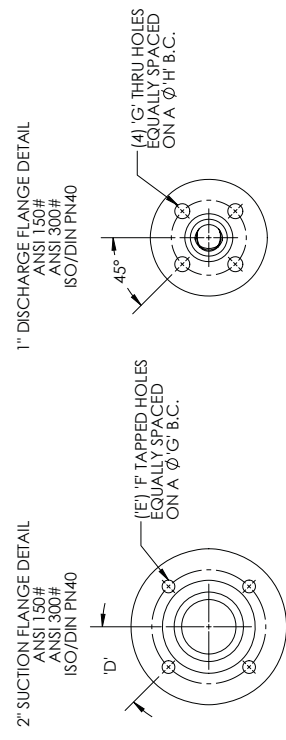
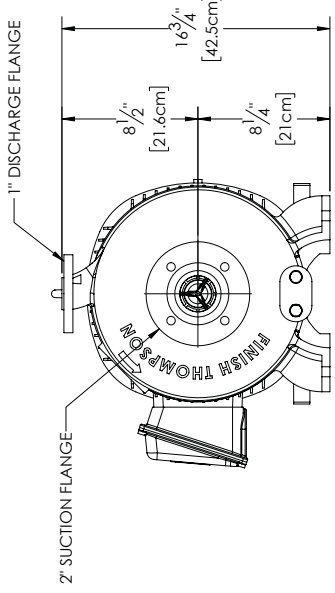
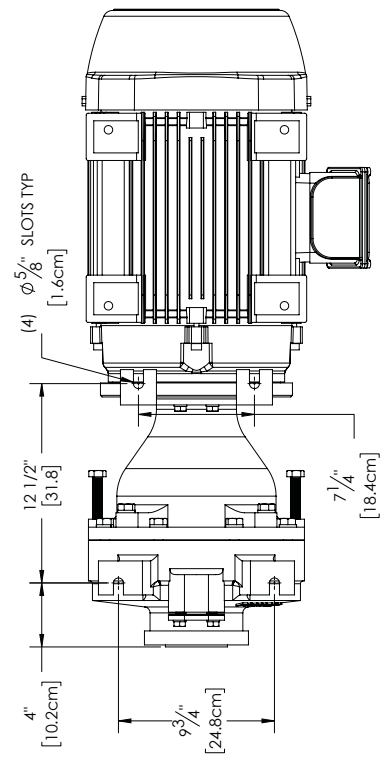
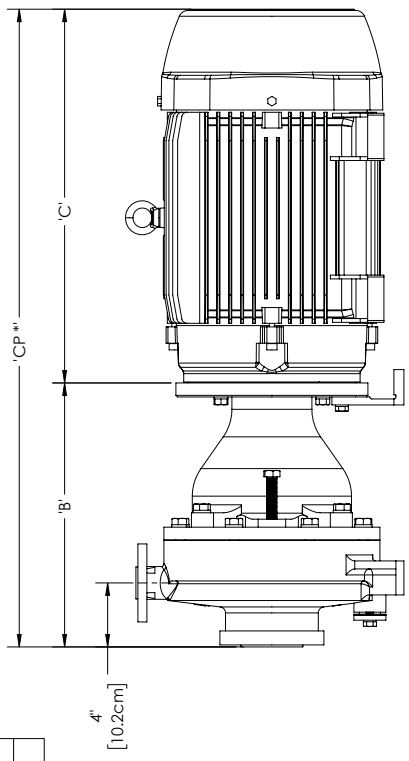
REV. 0

UC2110
 OUTLINE DIM. DWG- PUMP ONLY
 R101947

FTI
 FINE TUBE INDUSTRIES
 1000 PENNSYLVANIA 1080
 PHOENIX, AZ 85016
 PHONE: (602) 945-4799
 FAX: (602) 945-8551

REVISIONS			
REV	DESCRIPTION	DATE	APPRD TRACK

Motor Frame	B		C*		CP*		PUMP WT**		MOTOR WT*	
	inches	cm	inches	cm	inches	cm	lbs	kg	lbs	kg
NEMA 145TC	16-15/32"	41.8	11-7/32"	28.5	27-11/16"	70.3	35	16	35	16
NEMA 182/4TC	16-15/32"	41.8	13-1/16"	33.2	29-9/16"	75.1	91	41	91	41
NEMA 213/5TC	16-15/32"	41.8	16-5/32"	41	32-5/8"	82.9	215	73	160	73
NEMA 254/6TC	16-15/32"	41.8	21-1/32"	53.4	37-1/2"	95.3	257	117	257	117
NEMA 284/6TSC/TC	16-15/32"	41.8	23-3/8"	59.4	39-27/32"	101.2	375	170	375	170
NEMA 324/6TSC/TC	18-25/32"	47.7	25-7/8"	65.7	44-21/32"	113.4	604	274	604	274
NEMA 364/5TSC/TC	18-25/32"	47.7	28-3/32"	71.4	46-27/32"	119.0	773	351	773	351



SUCTION & DISCHARGE FLANGE BOLTING DETAILS									
	D'	E'	F'	G'	F'	G'	H'		
	deg	inches	cm	inches	cm	inches	cm	inches	cm
150# Flange	45	4	5/8-11	4-3/4"	12.1	4	5/8	3-1/8"	7.9
300# Flange	22.5	8	5/8-11	5"	12.7	8	3/4	3-1/2"	8.9
ISO/DIN PN 40 Flange	45	4	M16-2.0	4.92"	12.5	8	14mm	3.35"	8.5

NOTE:
 1. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY
 2. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY
 *. MAY VARY DUE TO MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:
 XXX ± .006 INCHES
 XXX ± .002 INCHES
 XXX ± .002 INCHES
 XXX ± .002 INCHES
 XXX ± .002 INCHES

DISTRICTION BLOCK
 DEPT [RECD] DEPT [RECD] DEPT [RECD]
 PUMP ASSM [INI MOLD]
 STILL ASSM [PURCH]
 WELD SHOP [SALES] X
 MACH SHOP [ADV]
 DATE 4-28-16
 DRAWN C M B
 ENGR: [RECD]
 DO NOT SCALE DRAWING
 DO NOT MANUALLY UPDATE

SCALE: DNS
 SHEET: 1 OF 1
 CHECKED: [RECD]

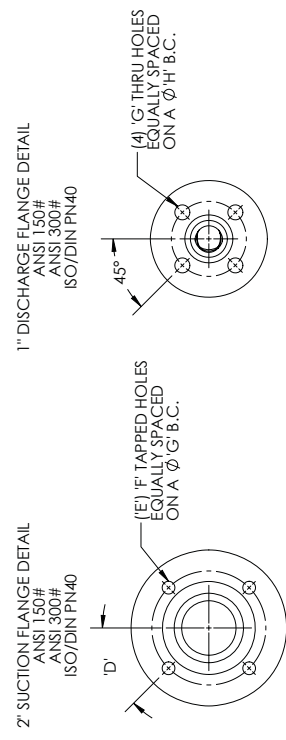
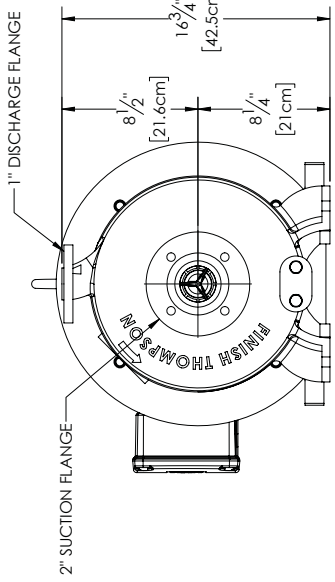
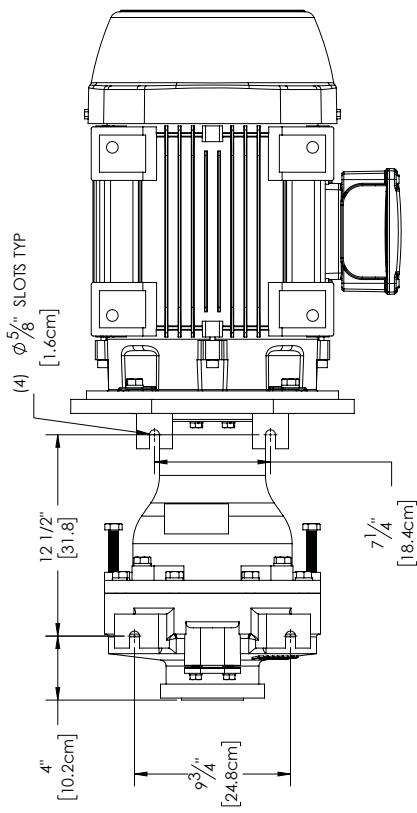
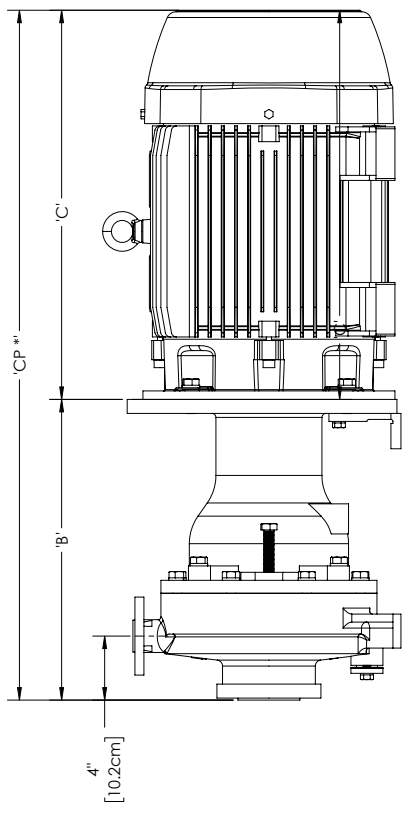
FTI
 FLOTTING TECHNOLOGIES INC.
 1000 PENNSYLVANIA 1081
 PHOENIX, AZ 85016
 PHONE: (602) 942-4799
 FAX: (602) 942-5515

UC2110
 NEMA OUTLINE DIMENSIONAL DWG
 PART NUMBER R101942
 REV: 0

Motor Frame	B		C*		CP*		PUMP WT		MOTOR WT*	
	inches	cm	inches	cm	inches	cm	lbs	kg	lbs	kg
IEC 90 B5	16-15/32"	41.8	11"	27.9	27-15/32"	69.8	39	17.7	39	17.7
IEC 100/112 B5	16-15/32"	41.8	12-7/16"	31.6	28-29/32"	73.4	215	97.5	104	47.2
IEC 132 B5	16-15/32"	41.8	16-3/32"	40.9	32-9/16"	82.7			174	78.9
IEC 160 B5	18-25/32"	47.7	19-1/2"	49.5	38-9/32"	97.2			319	144.7
IEC 180 B5	18-25/32"	47.7	21-25/32"	54.8	40-9/16"	103			380	172.4
IEC 200 B5	18-25/32"	47.7	24-5/16"	61.8	43-3/32"	109.5	245	111.1	531	240.9
IEC 225 B5	18-25/32"	47.7	27-29/32"	70.9	46-21/32"	118.5			630	285.8

REVISIONS

REV	DESCRIPTION	DATE	APPRD	TRACK



	D'	E	F'	F	G'	G	H'	H
	deg	inches	cm	inches	cm	inches	cm	inches
150# Flange	45	4	5/8-11	4-3/4"	12.1	4	5/8	3-1/8"
300# Flange	22.5	8	5/8-11	5"	12.7	8	3/4	3-1/2"
ISO/DIN PN 40 Flange	45	4	M16-2.0	4.92"	12.5	8	14mm	3.35"

NOTE:
 1. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY
 2. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY
 *. MAY VARY DUE TO MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN

FTI
 FINISH THOMPSON INDUSTRIES, INC.
 1500 W. PENNSYLVANIA AVE.
 BETHLEHEM, PA 18015
 PHONE: (610) 426-4798
 FAX: (610) 426-5858

UC2110
 IEC OUTLINE DIMENSIONAL DWG
 PART NUMBER: R101944
 SCALE: DNS
 SHEET: 1 OF 1
 CHECKED: _____

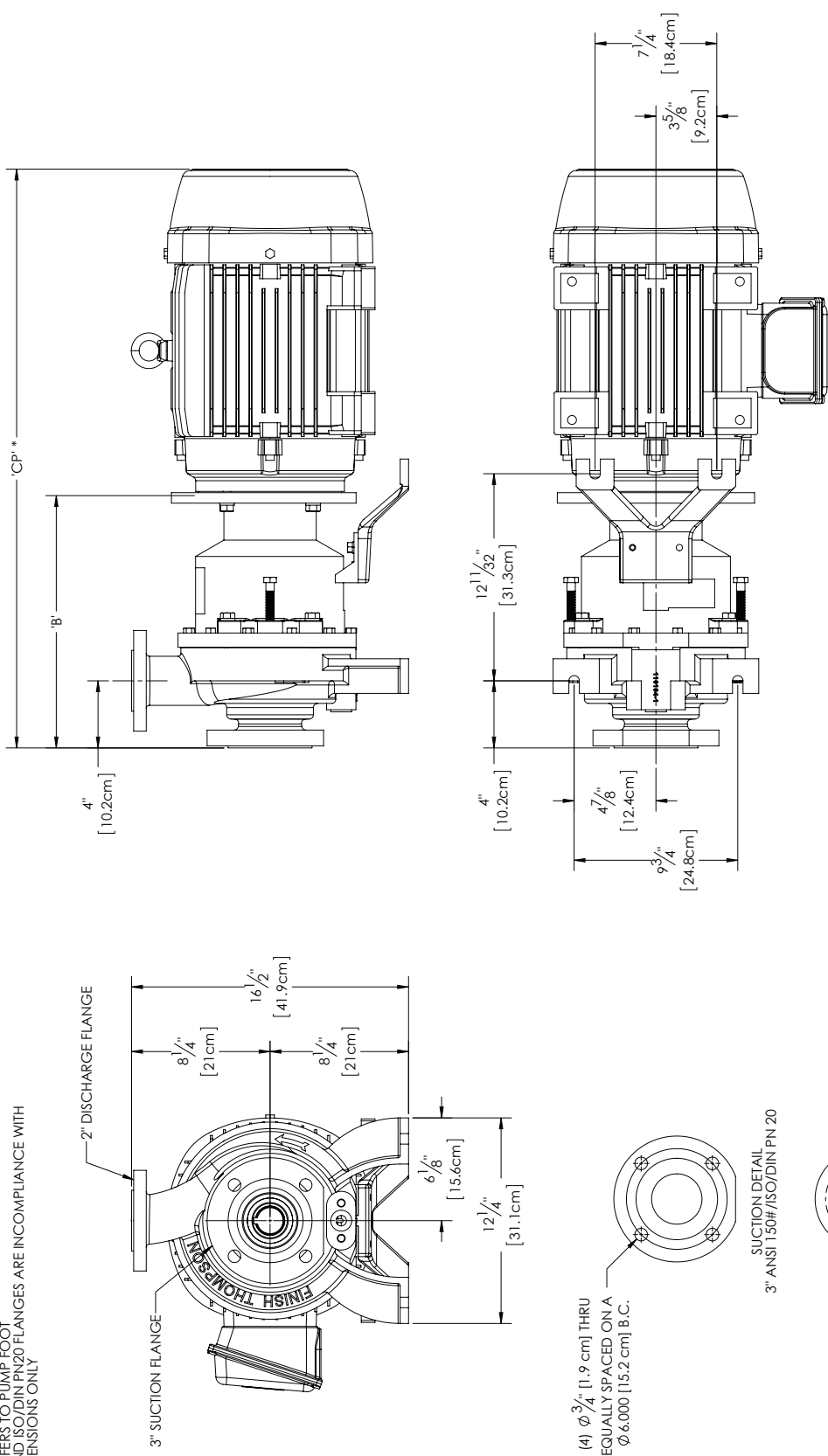
DISTRIBUTION BLOCK		UNLESS OTHERWISE SPECIFIED		TOLERANCES ARE IN INCHES	
DEPT	REC'D	DEPT	REC'D	FINISH	FRAC.
PUMP ASSM	INJ MOLD	XXX 4 006		1/16	
STILL ASSM	PURCH	FRAC. 1 102		1/32	
WELD SHOP	SALES	FINISH 151			
MACH SHOP	ADV	SIGNATURES	DATE		
		DRAWN: C.M.B.	4-27-16		
		ENGR:			

DO NOT SCALE DRAWING
 DO NOT MANUALLY UPDATE

REVOLUTIONS

REV	DESCRIPTION	DATE	APPRD	TRACK
1	8-1/4" WAS 8-3/8"	11-25-15	CMB	

- NOTES:
 1. DIMENSIONS ARE TO BE USED FOR REFERENCE ONLY
 2. *CP- DIMENSION MAY VARY DEPENDING ON MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN
 3. DATUM 'A' REFERS TO PUMP FOOT
 4. ANSI 150# AND ISO/DIN PN20 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY



SUCTION DETAIL
 3" ANSI 150# /ISO/DIN PN 20

DISCHARGE DETAIL
 2" ANSI 150# /ISO/DIN PN 20

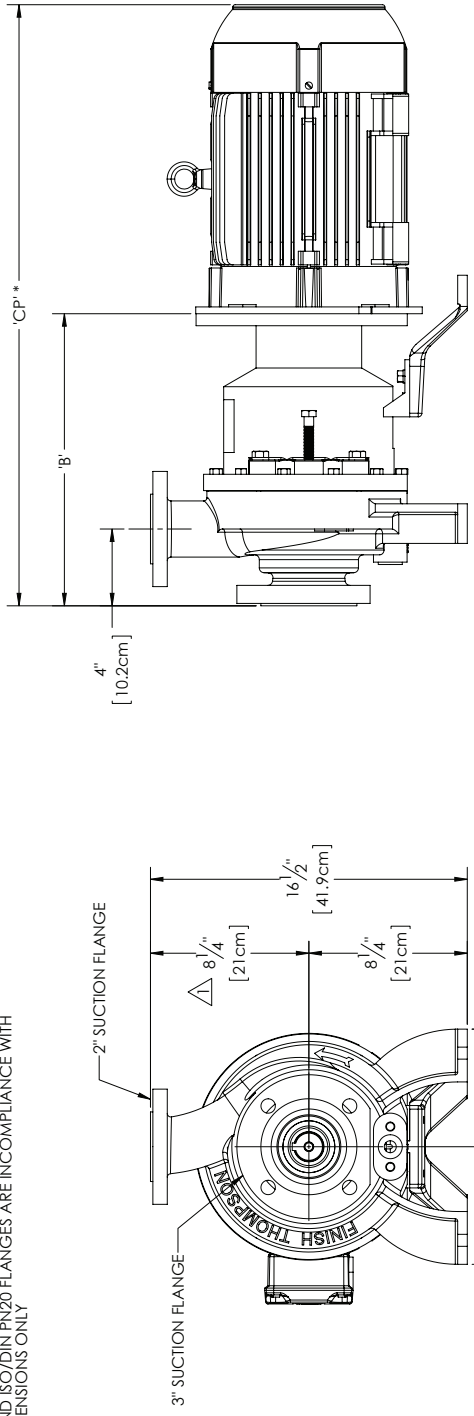
UNLESS OTHERWISE SPECIFIED		DISTRIBUTION BLOCK	
FINISH	100% ± 0.00	DEPT	REC'D
TOLERANCES ARE:	FRAC. ± 0.02	PUMP ASSM	INTI MOLD
	DEC. ± 0.001	STILL ASSM	PURCH
	FINISH 1.25	WELD SHOP	SALES
SIGNATURES	DATE	MACH SHOP	ADV
DRAWN C.M.B	10-24-15	THIRD ANGLE PROJECTION	SCALE
ENGR.		CAD GENERATED DRAWING.	DO NOT MANUALLY UPDATE

FACILITY		ADDRESS	
PENN STATE UNIVERSITY		UNIVERSITY PARK	
1680 UNIVERSITY DRIVE		UNIVERSITY PARK, PA 16802	
TEL: (814) 863-4779		FAX: (814) 863-5151	

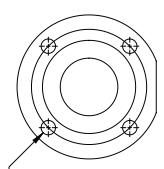
TITLE		PART NUMBER	
UC326H		R101777	
OUTLINE DIM- NEMA MOTORS		REV. 1	
SHEET 1 OF 1		CHECKED	

NEMA 254/6TC	34-9/32	87.1
NEMA 213/5TC	31-5/32	79.1
NEMA 184/4TC	28-3/32	71.3
NEMA 145TC	12-17/32	31.8
MOTOR FRAME	inches	cm
	inches	cm
	CP	

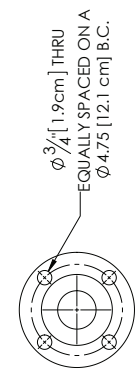
- NOTES:
 1. DIMENSIONS ARE TO BE USED FOR REFERENCE ONLY
 2. *CP- DIMENSION MAY VARY DEPENDING ON MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN
 3. ANSI 150# AND ISO/DIN PN20 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY



(4) $\phi 3/4$ [1.9 cm] THRU
 EQUALLY SPACED ON A
 $\phi 6.000$ [15.2 cm] B.C.



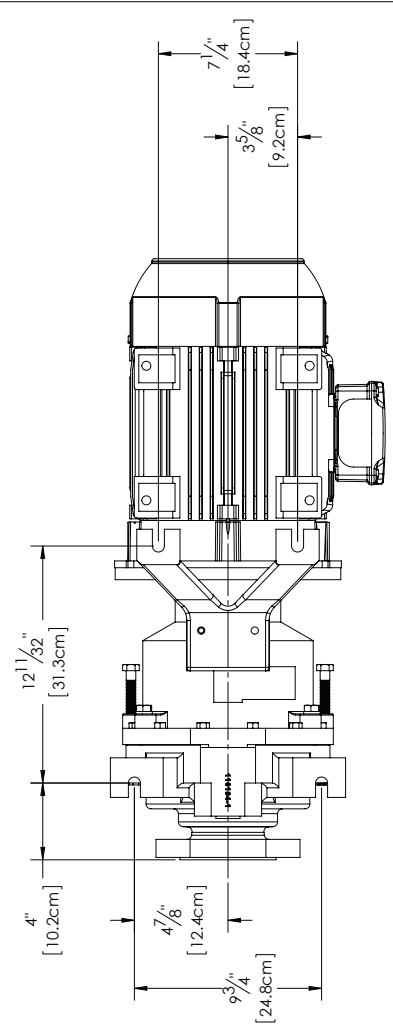
SUCTION DETAIL
 3" ANSI 150# /ISO/DIN PN 20



DISCHARGE DETAIL
 2" ANSI 150# /ISO/DIN PN 20

REVISIONS

REV	DESCRIPTION	DATE	APPRD	TRACK
1	8-1/4" WAS 8-3/8"	11-25-15	CMB	



IEC 160 B5	15-5/8"	39.7	34-27-32	88.5
IEC 132 B5	15"	38.1	31-3/32	79
IEC 100/112 B14	12-19/32"	32	25-1/32	63.6
IEC 90 B14	12-19/32"	32	23-19/32	59.9
MOTOR FRAME	inches	cm	inches	cm
	'B'		'CP'*	

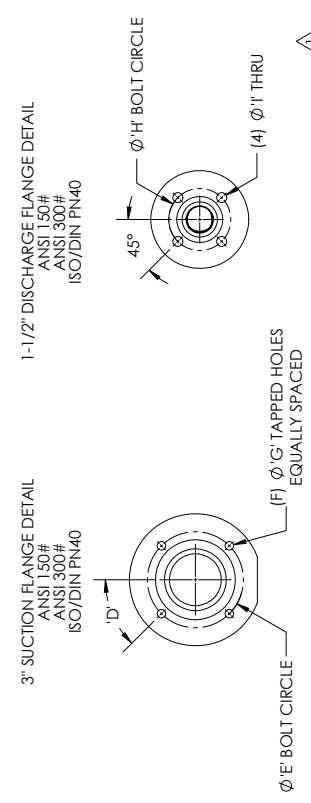
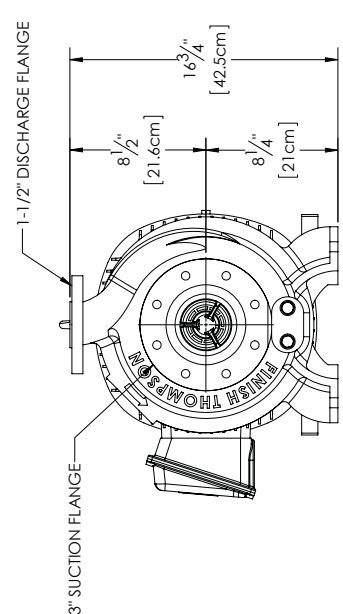
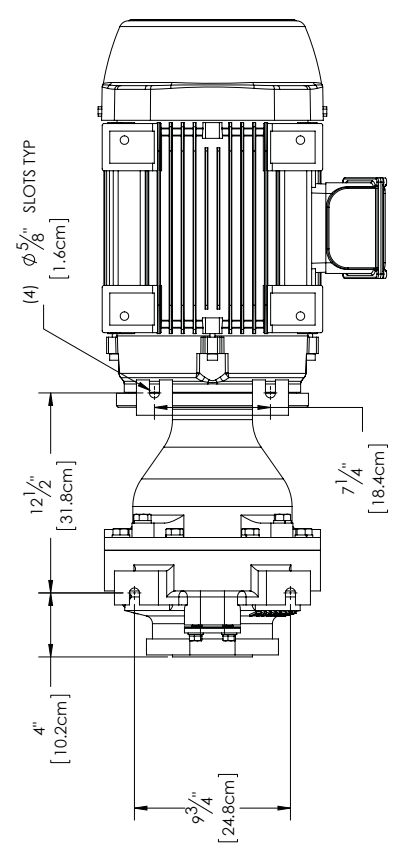
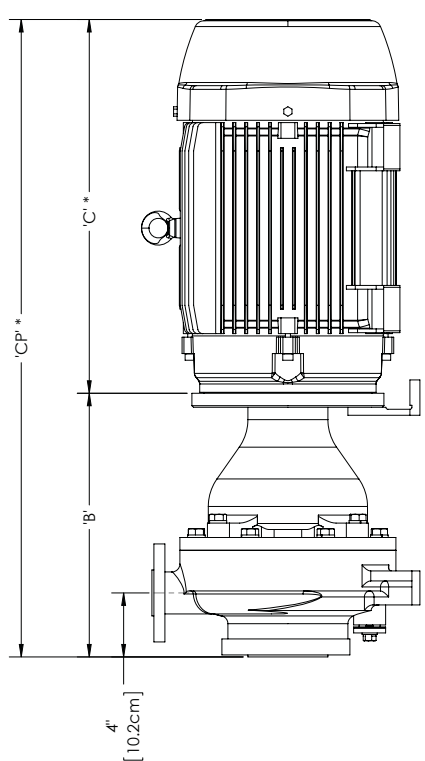
UNLESS OTHERWISE SPECIFIED		DISTRIBUTION BLOCK	
DEPT	RECD	DEPT	RECD
PUMP ASSM	INT MOLD	STILL ASSM	PURCH
WELD SHOP	SALES	MACH SHOP	ADV
SIGNATURES	DATE	THIRD ANGLE PROJECTION	SCALE
DRAWN C.M.B	10-24-15		X
ENGR.		CAD GENERATED DRAWING.	DO NOT MANUALLY UPDATE
TOLERANCES ARE:		FINISHES:	
XXX ± .006	INCHES	XXX ± .006	INCHES
FRAC. ± .002		FRAC. ± .002	
FINISH 125		FINISH 125	
DRAWN TO: 1/8" = 1"		DRAWN TO: 1/8" = 1"	
DRAWN TO: 1/8" = 1"		DRAWN TO: 1/8" = 1"	

1001 BERRY AVE. SUITE 1000
 WILKES BARRE, PENNSYLVANIA 18801
 PHONE: (610) 845-8798
 FAX: (610) 845-8551

UC326H
 OUTLINE DIM- IEC MOTORS
 PART NUMBER R101838
 SHEET 1 OF 1
 CHECKED

Motor Frame	B		C*		Cp*		PUMP WT**		MOTOR WT* (lbs)	
	inches	cm	inches	cm	inches	cm	lbs	kg	lbs	kg
NEMA 145TC	16-15/32"	41.8	11-7/32"	28.5	27-11/16"	70.3			35	16
NEMA 182/4TC	16-15/32"	41.8	13-1/16"	33.2	29-9/16"	75.1			91	41
NEMA 213/5TC	16-15/32"	41.8	16-5/32"	41	32-5/8"	82.9	215	97.5	160	73
NEMA 254/6TC	16-15/32"	41.8	21-1/32"	53.4	37-1/2"	95.3			257	117
NEMA 284/6TSC/TC	16-15/32"	41.8	23-3/8"	59.4	39-27/32"	101.2			375	170
NEMA 324/6TSC/TC	18-25/32"	47.7	25-7/8"	65.7	44-21/32"	113.4	245	111.1	604	274
NEMA 364/5TSC/TC	18-25/32"	47.7	28-3/32"	71.4	46-27/32"	119.0			773	351

REVISIONS			
REV	DESCRIPTION	DATE	APPRD
1	CORRECTED DIM T' IN CHART	3-21-14	CMB
			TRACK 4165



	SUCTION & DISCHARGE FLANGE BOLTING DETAILS					
	D'	E'	F'	G'	H'	I'
150# Flange	deg	inches	cm	inches	cm	inches
300# Flange	deg	inches	cm	inches	cm	inches
ISO/DIN PN 40 Flange	deg	inches	cm	inches	cm	inches

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES
 TOLERANCES ARE:
 XXX .000
 XXX .001
 XXX .002
 XXX .003
 XXX .004
 XXX .005

DRAWN: CMB
 DATE: 1-31-14
 ENGR:

DISTRIBUTION BLOCK
 DEPT: PUMP ASSM
 REC'D: STILL ASSM
 DEPT: WELD SHOP
 REC'D: MACH SHOP
 DEPT: ADV
 REC'D: THIRD ANGLE PROJECTION
 DEPT: CAD GENERATED DRAWING
 REC'D: DO NOT MANUALLY UPDATE

SCALE: DNS
 SHEET: 1 OF 1
 CHECKED:

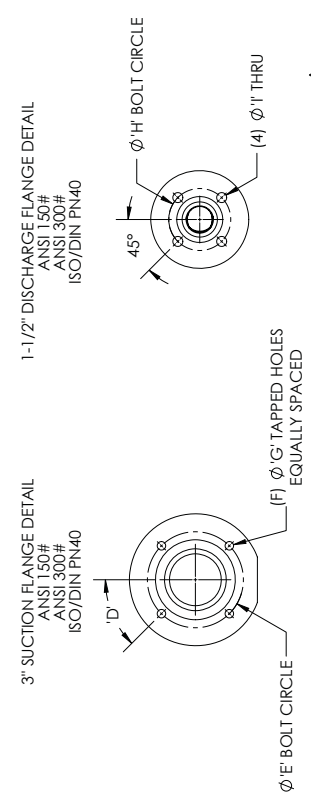
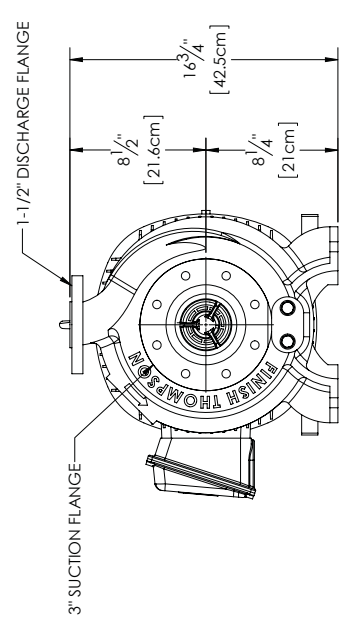
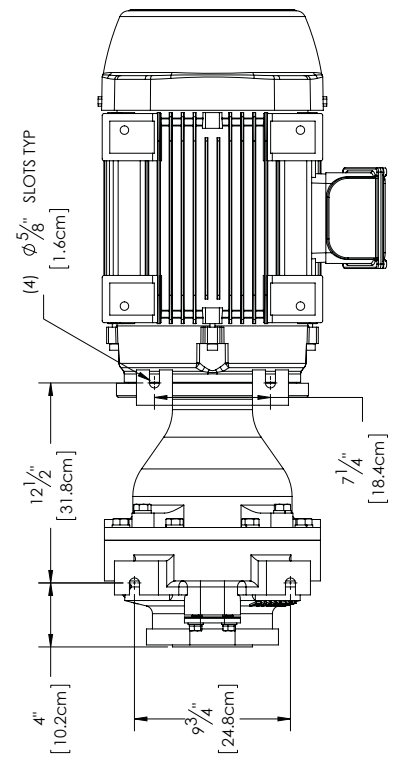
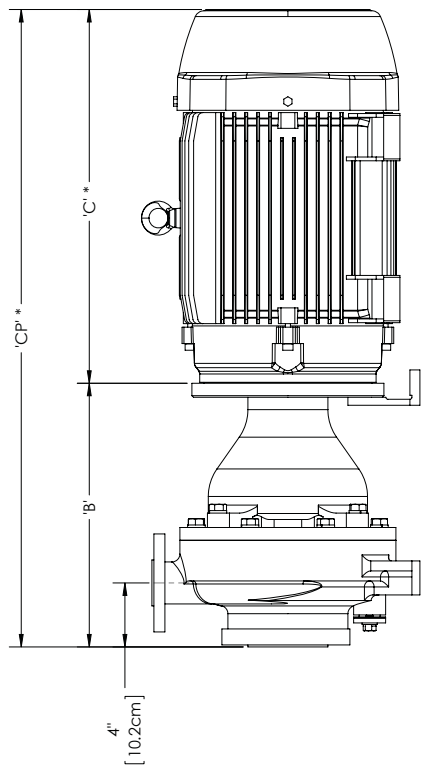
INVOICE # 101592-4798
 FAX: (864) 455-8515

UC3158
 NEMA OUTLINE DIMENSIONAL DWG
 PART NUMBER: R101592
 REV: 1

NOTE:
 1. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY
 2. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY
 *. MAY VARY DUE TO MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN

REVISIONS			
REV	DESCRIPTION	DATE	APPRD
1	CORRECTED DIM 'I' IN CHART	3-21-14	CMB
			4165

Motor Frame	B		C*		CP*		PUMP WT**		MOTOR WT* (lbs)	
	inches	cm	inches	cm	inches	cm	lbs	kg	lbs	kg
IEC 90 B5	16-15/32"	41.8	11"	27.9	27-15/32"	69.8	39	18		
IEC 100/112 B5	16-15/32"	41.8	12-7/16"	31.6	28-29/32"	73.4	215	97.5		
IEC 132 B5	16-15/32"	41.8	16-3/32"	40.9	32-9/16"	82.7	174	79		
IEC 160 B5	18-25/32"	47.7	19-1/2"	49.5	38-9/32"	97.2	319	145		
IEC 180 B5	18-25/32"	47.7	21-25/32"	21.8	40-9/16"	103	380	172		
IEC 200 B5	18-25/32"	47.7	24-5/16"	61.8	43-3/32"	109.5	531	241		
IEC 225 B5	18-25/32"	47.7	27-29/32"	70.9	46-21/32"	118.5	630	286		



SUCTION & DISCHARGE FLANGE BOLTING DETAILS										
	'D'	'E'	'F'	'G'	'H'	'I'				
	deg	inches	cm	inches	inches	cm	inches	cm	inches	cm
150# Flange	45	6"	15.2	4	5/8-11 UNC	3-7/8"	9.5	3/4"	1.9	
300# Flange	22.5	6-5/8"	16.8	8	3/4-10 UNC	4-1/2"	11.4	7/8"	2.2	
ISO/DIN PN 40 Flange	22.5	6.30"	16.0	8	M16-2.0	4-11/32"	11.0	27/32"	2.2	

UNLESS OTHERWISE SPECIFIED
TOLERANCES ARE:
XXX ± .006 INCHES
XXX ± .006 METRIC
FRAC. ± .002
FINISH 125SIGNATURES _____
DATE 1-31-14
DRAWN CMB
ENG. _____

DISTRIBUTION BLOCK
DEPT [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD]
PUMP ASSM [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD]
STILL ASSM [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD]
MACH SHOP [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD]
WELD SHOP [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD]
SALES [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD]
ADV [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD]
SIZE [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD] [RECD]
THIRD ANGLE PROJECTION
DO NOT SCALE DRAWING
DO NOT MANUALLY UPDATE

SCALE: DNS
SHEET: 1 OF 1
CHECKED: _____
REV: _____

FTI
1000 PENNSYLVANIA AVE.
PITTSBURGH, PA 15201
PHONE: (814) 945-4978
FAX: (814) 945-8515

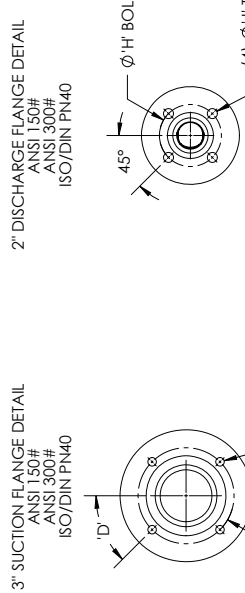
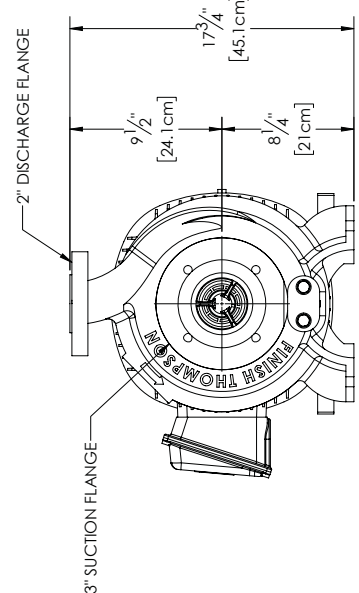
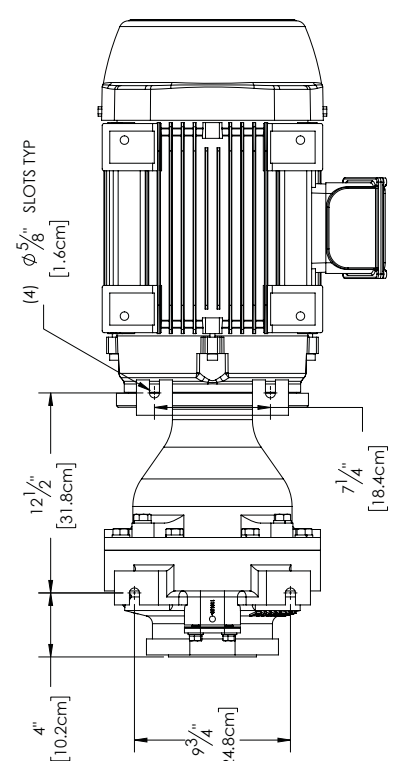
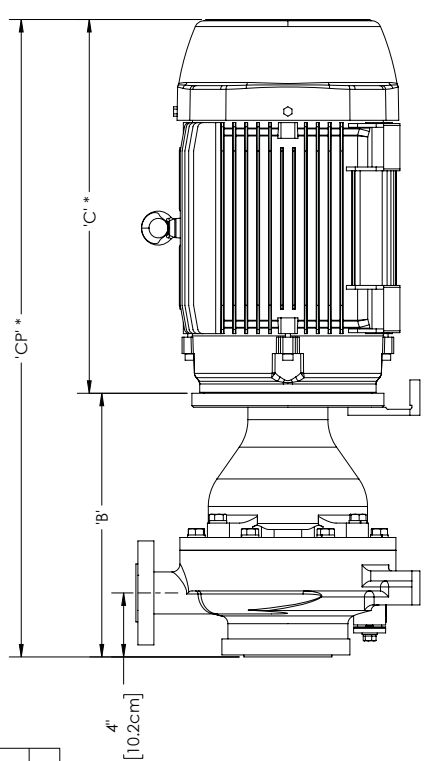
UC3158
IEC OUTLINE DIMENSIONAL DWG
PART NUMBER: R101593
REV: 1

NOTE:
1. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY
2. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY
*. MAY VARY DUE TO MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN

Motor Frame	B		C*		Cp*		PUMP WT**		MOTOR WT*	
	inches	cm	inches	cm	inches	cm	lbs	kg	lbs	kg
NEMA 145TC	16-15/32"	41.8	11-7/32"	28.5	27-11/16"	70.3			35	16
NEMA 182/4TC	16-15/32"	41.8	13-1/16"	33.2	29-9/16"	75.1			91	41
NEMA 213/5TC	16-15/32"	41.8	16-5/32"	41	32-5/8"	82.9	215	97.5	160	73
NEMA 254/6TC	16-15/32"	41.8	21-1/32"	53.4	37-1/2"	95.3			257	117
NEMA 284/6TSC/7C	16-15/32"	41.8	23-3/8"	59.4	39-27/32"	101.2			375	170
NEMA 324/6TSC/7C	18-25/32"	47.7	25-7/8"	65.7	44-21/32"	113.4	245	111.1	604	274
NEMA 364/5TSC/7C	18-25/32"	47.7	28-3/32"	71.4	46-27/32"	119.0			773	351

REVISIONS

REV	DESCRIPTION	DATE	APPRD	TRACK



SUCTION & DISCHARGE FLANGE BOLTING DETAILS						
	'D'	'E'	'F'	'G'	'H'	'J'
	deg	inches	cm	inches	cm	inches/cm
150# Flange	45	6"	15.2	4	5/8-11 UNC	4-3/4" 1.9
300# Flange	22.5	6-5/8"	16.8	8	3/4-10 UNC	5" 1.9
ISO/DIN PN 40 Flange	22.5	6.30"	16.0	8	M16-2.0	4-29/32" 1.8

UNLESS OTHERWISE SPECIFIED
TOLERANCES ARE:
XXX ± .006
FRAG. ± .002
FINISH 125

DRAWN: C.M.B. 7-5-16
ENGR: DO NOT SCALE DRAWING
DO NOT MANUALLY UPDATE

DISTRIBUTION BLOCK
DEPT (REC'D) DEPT (REC'D) INJ MOLD PURCH WELD SHOP MACH SHOP ADV. PROJECTION
PUMP ASSM STILL ASSM WELD SHOP MACH SHOP ADV. PROJECTION
PUMP ASSM STILL ASSM WELD SHOP MACH SHOP ADV. PROJECTION

SCALE: DNS SHEET: 1 OF 1 CHECKED: 0

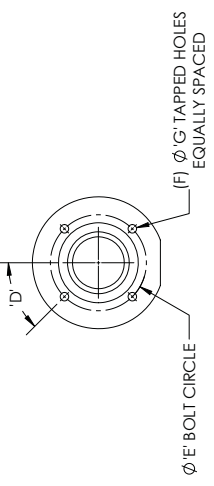
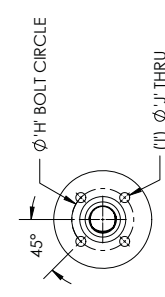
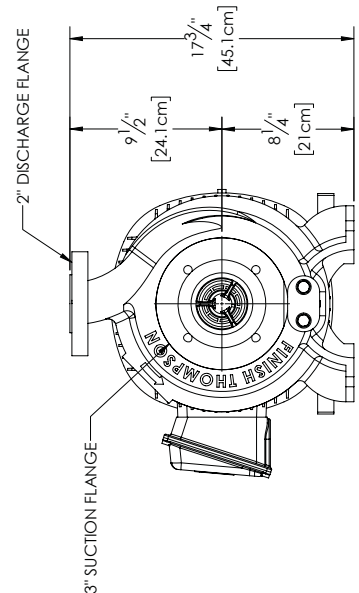
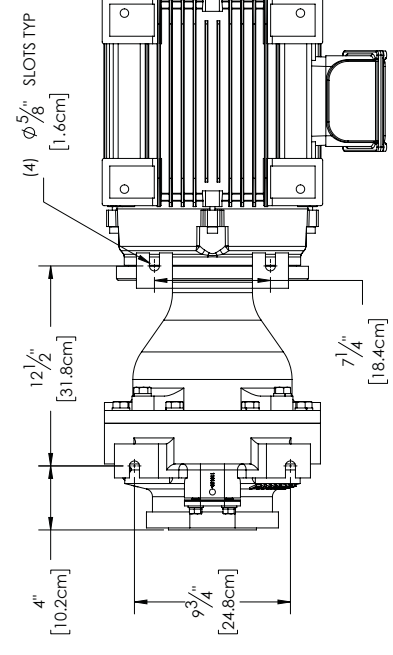
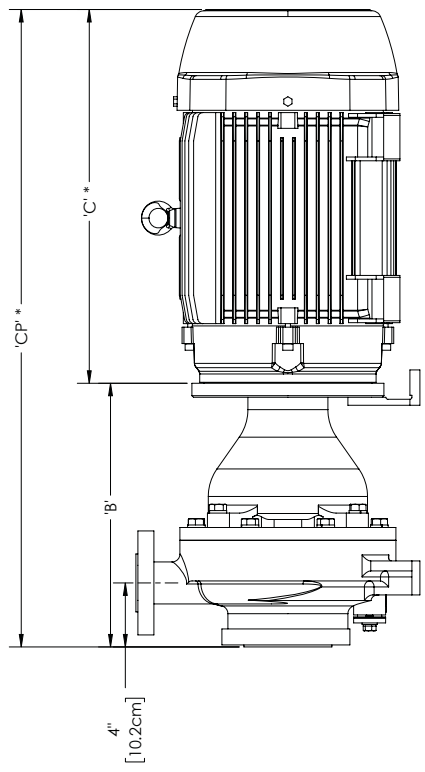
FTI
FISHER TECHNOLOGIES
1801 BIRCHWOOD BLVD
STATE COLLEGE, PENNSYLVANIA 16801
PHONE: (814) 945-4798
FAX: (814) 945-8151

UC328
NEMA OUTLINE DIMENSIONAL DWG
PART NUMBER: R101980
REV: 0

NOTE:
1. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY
2. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY
*. MAY VARY DUE TO MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN

Motor Frame	B		C*		CP*		PUMP WT**		MOTOR WT*	
	inches	cm	inches	cm	inches	cm	lbs	kg	lbs	kg
IEC 90 B5	16-15/32"	41.8	11"	27.9	27-9/32"	69.8	39	18	39	18
IEC 100/112 B5	16-15/32"	41.8	12-7/16"	31.6	28-29/32"	73.4	215	104	47	79
IEC 132 B5	16-15/32"	41.8	16-3/32"	40.9	32-9/16"	82.7	245	111.1	531	241
IEC 160 B5	18-25/32"	47.7	19-1/2"	49.5	38-9/32"	97.2	286	130	60	28
IEC 180 B5	18-25/32"	47.7	21-25/32"	54.8	40-9/16"	103	380	172	380	172
IEC 200 B5	18-25/32"	47.7	24-5/16"	61.8	43-3/32"	109.5	630	286	630	286
IEC 225 B5	18-25/32"	47.7	27-29/32"	70.9	46-21/32"	118.5				

REV	DESCRIPTION	DATE	APPRD	TRACK



	SUCTION & DISCHARGE FLANGE BOLTING DETAILS					
	'D'	'E'	'F'	'G'	'H'	'J'
	deg	inches	cm	inches	cm	inches
150# Flange	45	6"	15.2	4	5/8-11 UNC	4-3/4"
300# Flange		22.5	6-5/8"	16.8	8	3/4-10 UNC
ISO/DIN PN 40 Flange		22.5	6.30"	16.0	8	M16-2.0
						4-29/32"
						12.5
						4
						23/32"
						1.8

NOTE:
 1. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY
 2. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY
 *. MAY VARY DUE TO MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN

UNLESS OTHERWISE SPECIFIED
 TOLERANCES ARE:
 XXX ± .006 INCHES
 XXX ± .002 INCHES
 FINISH 125
 FINISH 125

DRAWN: C.M.B. DATE: 7-6-16
 ENGR: DO NOT SCALE DRAWING
 CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE.

DISTRIBUTION BLOCK
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 PUMP ASSM [RECD] [RECD] [RECD] [RECD] [RECD] [RECD]
 STILL ASSM [RECD] [RECD] [RECD] [RECD] [RECD] [RECD]
 WELD SHOP [RECD] [RECD] [RECD] [RECD] [RECD] [RECD]
 MACH SHOP [RECD] [RECD] [RECD] [RECD] [RECD] [RECD]
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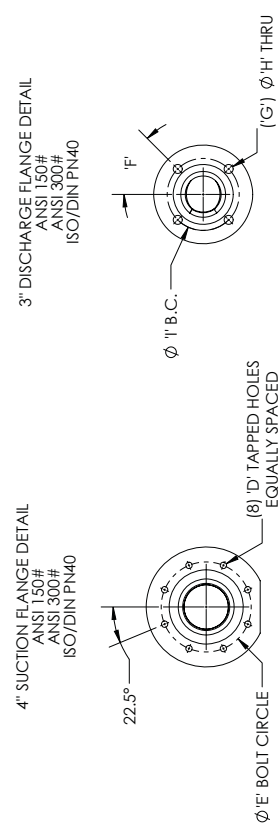
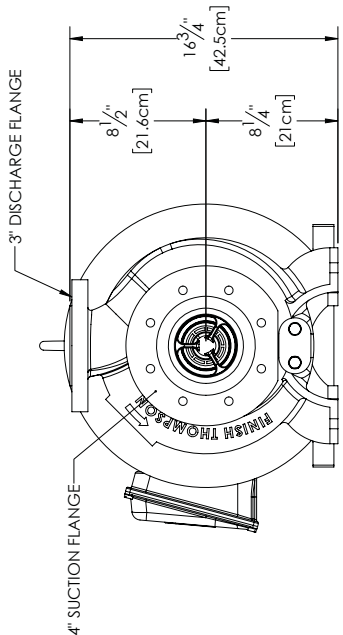
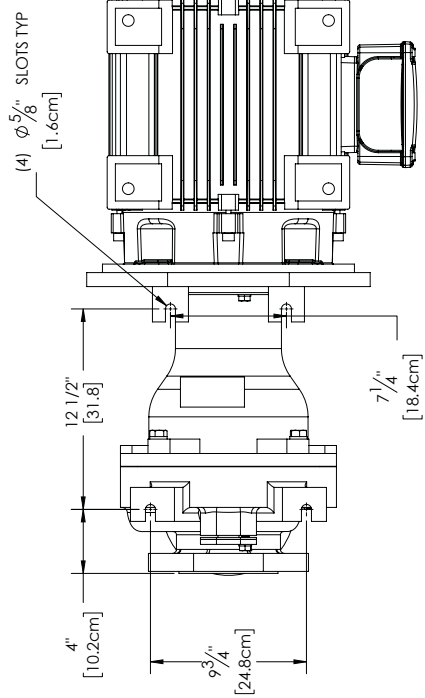
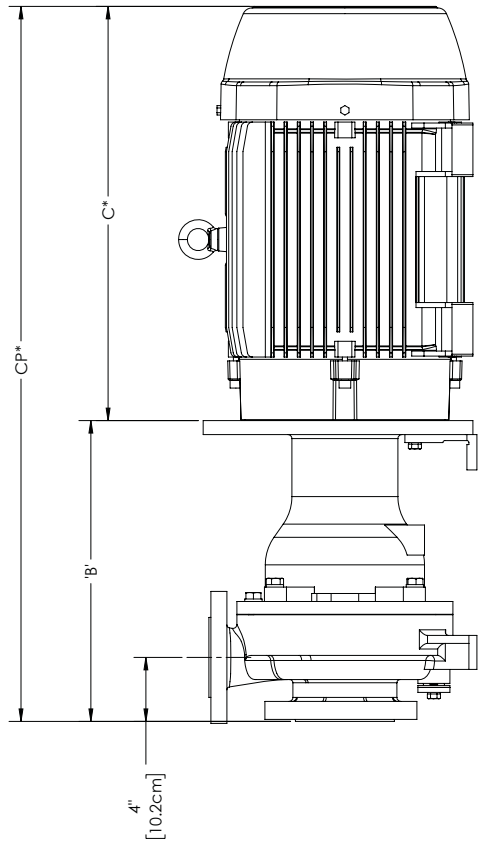
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 PART NUMBER: R 101981
 TITLE: IEC OUTLINE DIMENSIONAL DWG
 PRODUCT: UC328
 PROJECT: IEC OUTLINE DIMENSIONAL DWG
 REVISION: 0

REV: 0
 DATE: 7-6-16
 ENGR: C.M.B.



REVISIONS			
REV	DESCRIPTION	DATE	APPRD
1	REVISED FLANGE DETAIL CHART	2-24-17	CMB

Motor Frame	B	C*	CP*	PUMP WT	MOTOR WT*
	inches	cm	inches	lbs	kg
NEMA 145TC	16-15/32"	41.8	27-11/16"	35	16
NEMA 182/4TC	16-15/32"	41.8	29-9/16"	91	41
NEMA 213/5TC	16-15/32"	41.8	32-5/8"	160	73
NEMA254/6TC	16-15/32"	41.8	37-1/2"	257	117
NEMA 284/6TSC/TC	16-15/32"	41.8	39-27/32"	375	170
NEMA 324/6TSC/TC	18-25/32"	47.7	44-21/32"	604	274
NEMA 364/5TSC/TC	18-25/32"	47.7	46-27/32"	773	351



SUCTION & DISCHARGE FLANGE BOLTING DETAILS							
	D	E	F	G	H	I	J
	inches	cm	deg	inches	cm	inches	cm
150# Flange	5/8-11 UNC	7-1/2"	45	4	3/4"	1.9	6"
300# Flange	3/4-10 UNC	7-7/8"	20.0	22.5	8	7/8"	6-5/8"
ISO/DIN PN 40 Flange	M20-2.5	7-15/32"	19.0	22.5	8	27/32"	6-5/16"

NOTE:
 1. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY
 2. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY
 *. MAY VARY DUE TO MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN

UNLESS OTHERWISE SPECIFIED
 TOLERANCES ARE:
 XXX ± .006
 FRACTION ± .002
 FINISH 125
 SIGNATURES DATE 1-27-15
 DRAWN CMB

DISTRIBUTION BLOCK
 DEPT REC'D REC'D INJ MOLD PURCH SALES ADV THIR ANGLE PROJECTION
 PUMP ASSM STILL ASSM WELD SHOP MACH SHOP DATE 1-27-15
 CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE

SCALE: DNS SHEET 1 OF 1 CHECKED

INVOICE # R101715-4798
 FAX # (844) 455-8151

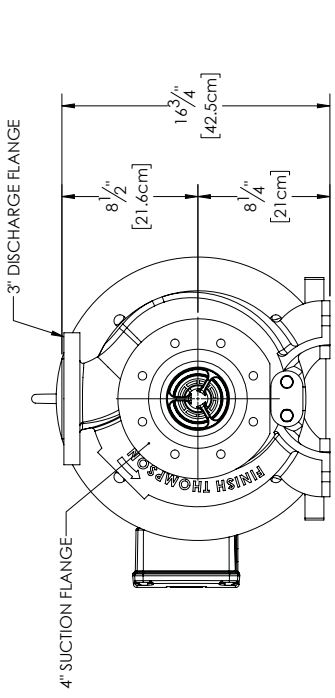
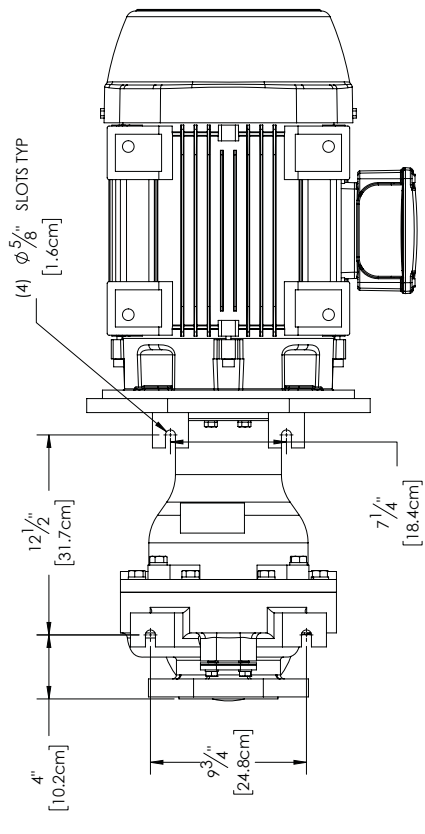
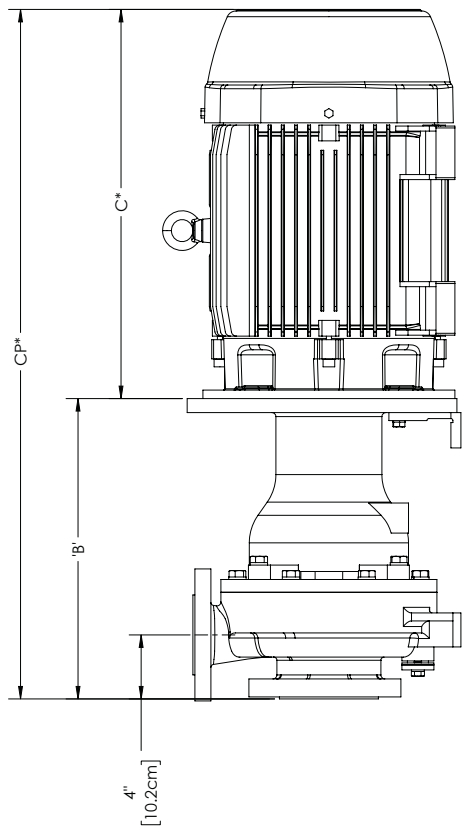
FTI
 FLOW TECHNOLOGIES INC.
 1000 PENNSYLVANIA 1081
 PHILADELPHIA, PA 19104
 PRODUCT: UC4-36

NEMA OUTLINE DIMENSIONAL DWG
 PART NUMBER R101715
 REV 1

Motor Frame	B		C*		CP*		PUMP WT		MOTOR WT*	
	inches	cm	inches	cm	inches	cm	lbs	kg	lbs	kg
IEC 90 B5	16-15/32"	41.8	11"	27.9	27-15/32"	69.8			39	17.7
IEC 100/112 B5	16-15/32"	41.8	12-7/16"	31.6	28-29/32"	73.4	215	97.5	104	47.2
IEC 132 B5	16-15/32"	41.8	16-3/32"	40.9	32-9/16"	82.7			174	78.9
IEC 160 B5	18-25/32"	47.7	19-1/2"	49.5	38-9/32"	97.2			319	144.7
IEC 180 B5	18-25/32"	47.7	21-25/32"	54.8	40-9/16"	103	245	111.1	380	172.4
IEC 200 B5	18-25/32"	47.7	24-5/16"	61.8	43-3/32"	109.5			531	240.9
IEC 225 B5	18-25/32"	47.7	27-29/32"	70.9	46-21/32"	118.5			630	285.8

REVISIONS			
REV	DESCRIPTION	DATE	APPRD
1	REVISED FLANGE DETAIL CHART	2-24-17	CMB

TRACK	
DATE	APPRD
2-24-17	CMB



SUCTION & DISCHARGE FLANGE BOLTING DETAILS									
	D	E	F	G	H	I		J	
						inches	cm	inches	cm
150# Flange	5/8-11 UNC	7-1/2"	19.1	45	4	3/4"	1.9	6"	15.2
300# Flange	3/4-10 UNC	7-7/8"	20.0	22.5	8	7/8"	2.2	6-5/8"	16.8
ISO/DIN PN 40 Flange	M20-2.5	7-15/32"	19.0	22.5	8	27/32"	2.2	6-5/16"	16

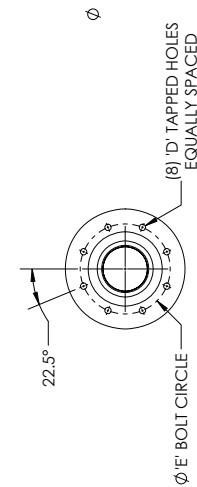
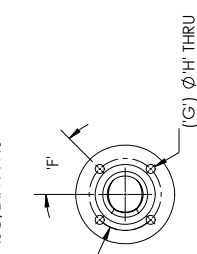
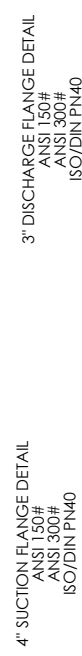
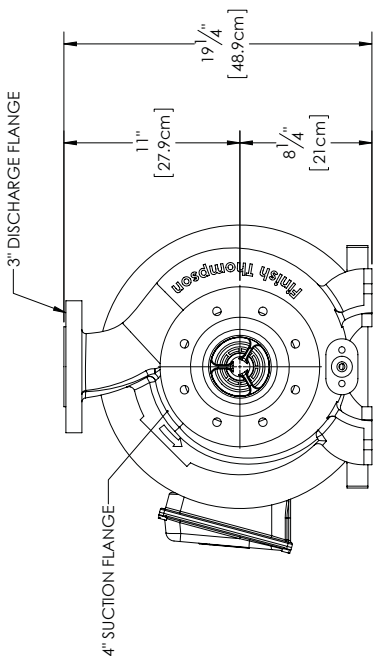
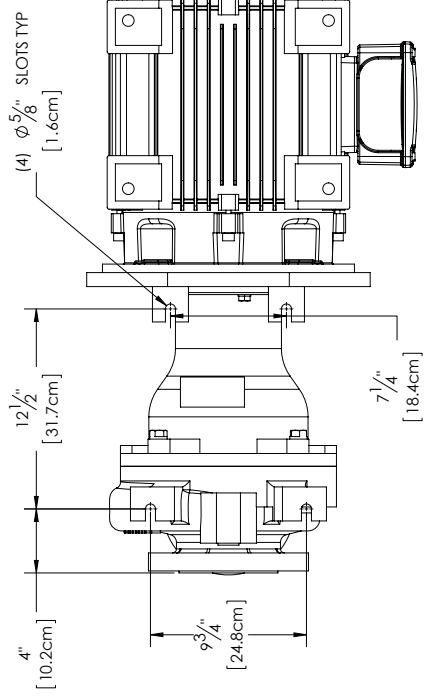
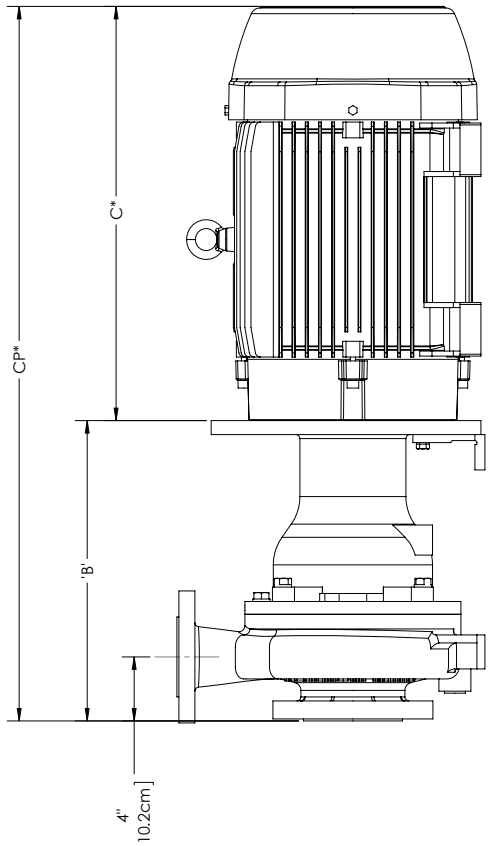
NOTE:
 1. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY
 2. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY
 *. MAY VARY DUE TO MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN

UNLESS OTHERWISE SPECIFIED		DISTRIBUTION BLOCK	
TOOLERANCE ARE:	DEPT	RECD	DEPT
XXX ± .006	PUMP ASSM	INI MOLD	
FRAC ± .002	STILL ASSM	PURCH	
FINISH .125	WELD SHOP	SALES	X
SIGNATURES	MACH SHOP	ADV	
DATE			
1-27-15			
DRAWN C.M.B			
ENG:			
DO NOT SCALE DRAWING			
DO NOT MANUALLY UPDATE			

UCA36
 IEC OUTLINE DIMENSIONAL DWG
 R101716
 1 OF 1
 CHECKED
 SCALE: DNS
 SHEET: 1 OF 1
 PART NUMBER: R101716
 REV: 1
 INVOICE # 10155-4798
 FAX # 8641455851

Motor Frame	B		C*		Cp*		PUMP WT**		MOTOR WT* (lbs)	
	inches	cm	inches	cm	inches	cm	lbs	kg	lbs	kg
NEMA 145TC	16-15/32"	41.8	11-7/32"	28.5	27-11/16"	70.3			35	16
NEMA 182/4TC	16-15/32"	41.8	13-1/16"	33.2	29-9/16"	75.1			91	41
NEMA 213/5TC	16-15/32"	41.8	16-5/32"	41	32-5/8"	82.9	215	97.5	160	73
NEMA 254/6TC	16-15/32"	41.8	21-1/32"	53.4	37-1/2"	95.3			257	117
NEMA 284/6TSC/TC	16-15/32"	41.8	23-3/8"	59.4	39-27/32"	101.2			375	170
NEMA 324/6TSC/TC	18-25/32"	47.7	25-7/8"	65.7	44-21/32"	113.4	245	111.1	604	274
NEMA 364/5TSC/TC	18-25/32"	47.7	28-3/32"	71.4	46-27/32"	119.0			773	351

REVISIONS			
REV	DESCRIPTION	DATE	APPRD TRACK



UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
XXX.4 0.006
XXX.5 0.004
FRAC. 1/16
FINISH 1/32

DRAWN: C.M.B. 1-31-14
ENGR: _____

DISTRIBUTION BLOCK
DEPT () () () () () () () () () ()
PUMP ASSM () () () () () () () () () ()
STILL ASSM () () () () () () () () () ()
WELD SHOP () () () () () () () () () ()
MACH SHOP () () () () () () () () () ()
DATE () () () () () () () () () ()
SIGNATURES () () () () () () () () () ()
SIZE () () () () () () () () () ()
THIRD ANGLE PROJECTION

SCALE: DNS
SHEET: 1 OF 1
CHECKED: _____

DO NOT SCALE DRAWING.
DO NOT MANUALLY UPDATE.

FTI
FLOTTING TECHNOLOGIES, INC.
1000 PENNSYLVANIA BLVD
PHILADELPHIA, PA 19104
PHONE: (814) 945-4798
FAX: (814) 945-8151

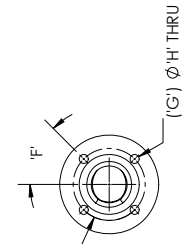
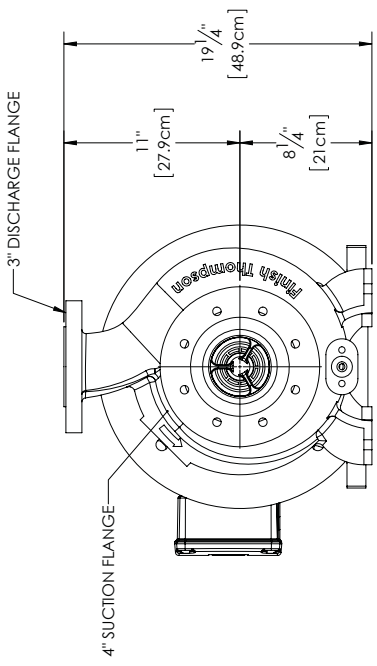
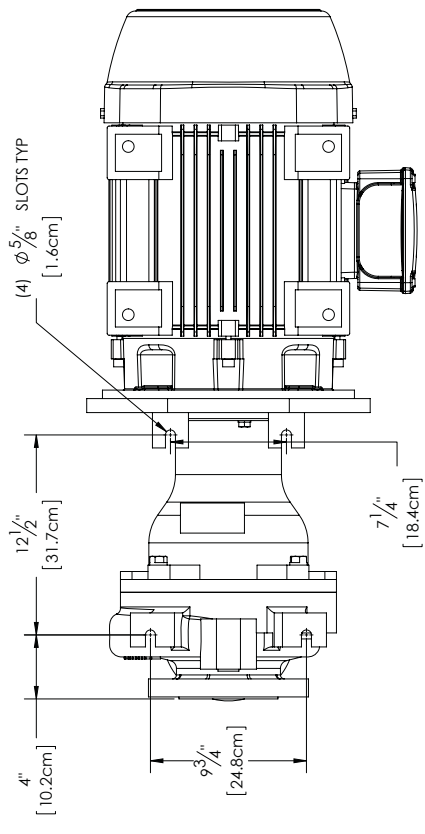
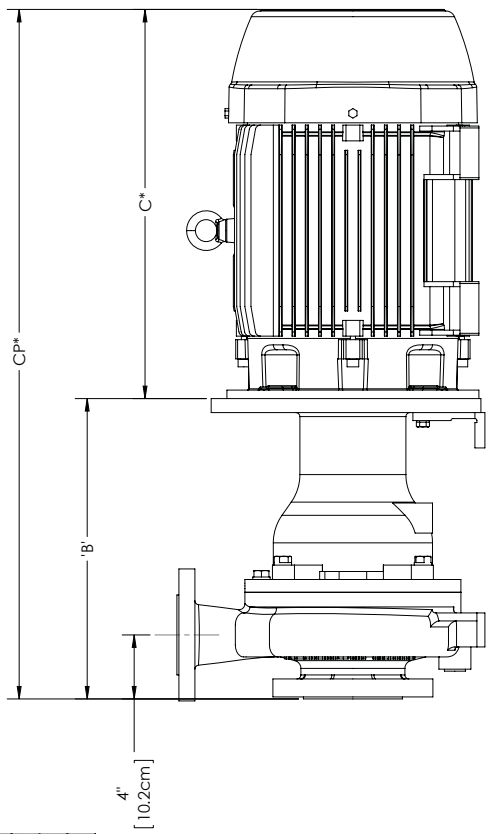
UC4-38

NEMA OUTLINE DIMENSIONAL DWG
PART NUMBER: R 101591
REV: 0

NOTE:
1. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY
2. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY
*. MAY VARY DUE TO MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN

REVISIONS			
REV	DESCRIPTION	DATE	APPRD TRACK

Motor Frame	B		C*		CP*		PUMP WT		MOTOR WT* (lbs)	
	inches	cm	inches	cm	inches	cm	lbs	kg	lbs	kg
IEC 90 B5	16-15/32"	41.8	11"	27.9	27-15/32"	69.8	39	17.7	39	17.7
IEC 100/112 B5	16-15/32"	41.8	12-7/16"	31.6	28-29/32"	73.4	215	97.5	104	47.2
IEC 132 B5	16-15/32"	41.8	16-3/32"	40.9	32-9/16"	82.7	174	78.9	174	78.9
IEC 160 B5	18-25/32"	47.7	19-1/2"	49.5	38-9/32"	97.2	245	111.1	319	144.7
IEC 180 B5	18-25/32"	47.7	21-25/32"	54.8	40-9/16"	103	245	111.1	380	172.4
IEC 200 B5	18-25/32"	47.7	24-5/16"	61.8	43-3/32"	109.5	245	111.1	531	240.9
IEC 225 B5	18-25/32"	47.7	27-29/32"	70.9	46-21/32"	118.5	245	111.1	630	285.8



	SUCTION & DISCHARGE FLANGE BOLTING DETAILS							
	"D"	"E"	"F"	"G"	"H"	"I"	"J"	"K"
150# Flange	5/8-11 UNC	1.9	45	4	3/4"	1.9	6"	15.2
300# Flange	3/4-10 UNC	7-7/8"	2.0	22.5	8	7/8"	2.2	6-5/8"
ISO/DIN PN 40 Flange	M20-2.5	7-15/32"	1.9	22.5	8	27/32"	2.2	6-5/16"

NOTE:
 1. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY
 2. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY
 *. MAY VARY DUE TO MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN

UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 DECIMALS ARE TO THE NEAREST THOUSTH

XXX-4-000
 PUMP ASSM
 FRAC. 1.102
 FINISH 1.25

SIGNATURES DATE 1-31-14
 DRAWN C.M.B.

DEPT [RECD] DEPT [RECD]
 PUMP ASSM INJ MOLD
 STILL ASSM PURCH
 WELD SHOP SALES X
 MACH SHOP ADV

SIZE THIRD ANGLE PROJECTION
 SCALE: DNS

DO NOT SCALE DRAWING
 DO NOT MANUALLY UPDATE

DISTRIBUTION BLOCK
 DEPT [RECD] DEPT [RECD]
 PUMP ASSM INJ MOLD
 STILL ASSM PURCH
 WELD SHOP SALES X
 MACH SHOP ADV

SIZE THIRD ANGLE PROJECTION
 SCALE: DNS

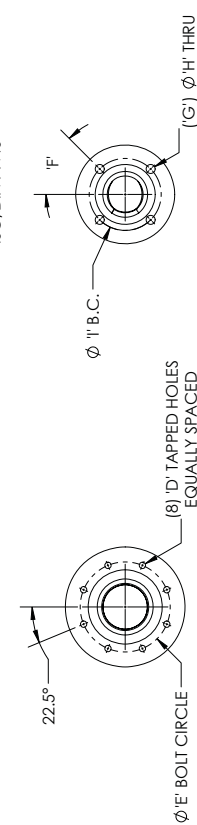
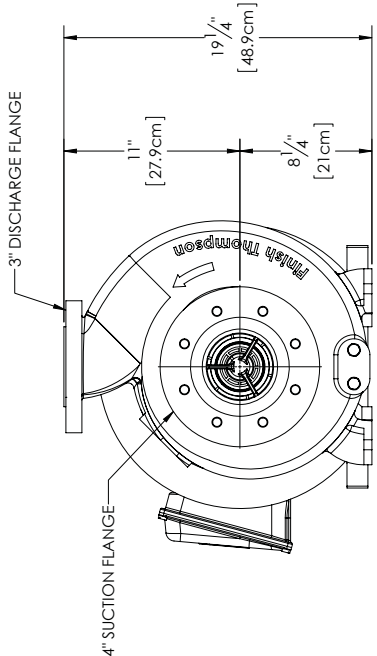
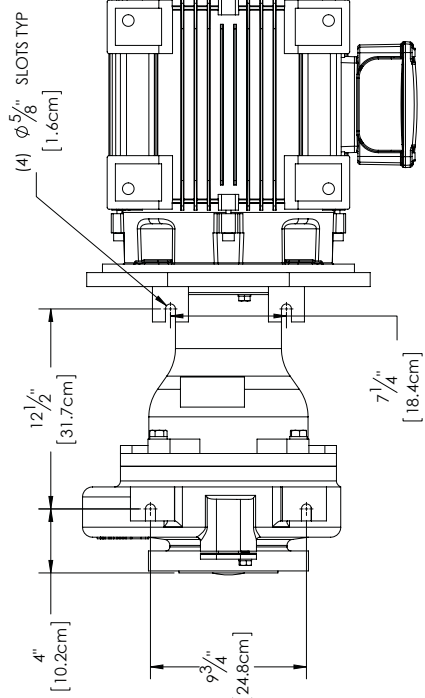
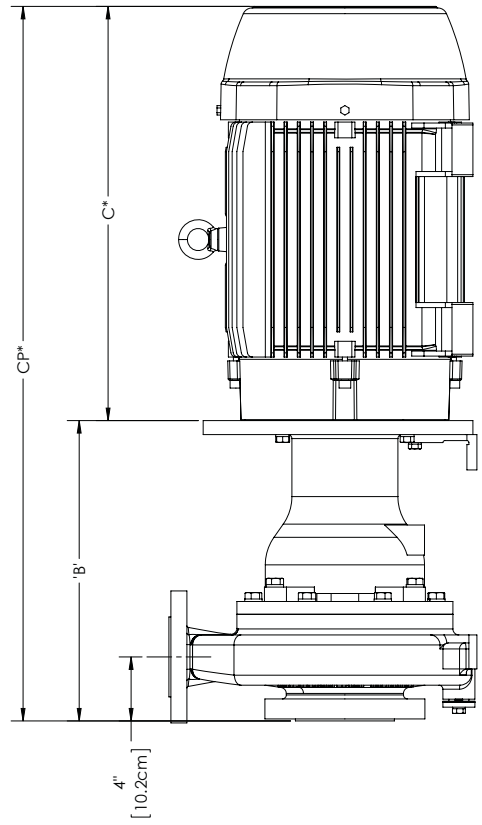
DO NOT SCALE DRAWING
 DO NOT MANUALLY UPDATE

FTI
 FINE TUNING INDUSTRIES
 1000 PENNSYLVANIA 1001
 PHILADELPHIA, PA 19104
 PHONE: (814) 945-4799
 FAX: (814) 945-8151

UC438
 IEC OUTLINE DIMENSIONAL DWG
 PART NUMBER R101589
 SHEET 1 OF 1
 CHECKED

REVISIONS			
REV	DESCRIPTION	DATE	APPRD TRACK

Motor Frame	B	C*	Cp*	PUMP WT	MOTOR WT*			
	inches	inches	inches	lbs	kg			
NEMA 145TC	16-15/32"	41.8	11-7/32"	28.5	27-11/16"	70.3	35	16
NEMA 182/4TC	16-15/32"	41.8	13-1/16"	33.2	29-9/16"	75.1	91	41
NEMA 213/5TC	16-15/32"	41.8	16-5/32"	41	32-5/8"	82.9	160	73
NEMA 254/6TC	16-15/32"	41.8	21-1/32"	53.4	37-1/2"	95.3	257	117
NEMA 284/6TSC/TC	16-15/32"	41.8	23-3/8"	59.4	39-27/32"	101.2	375	170
NEMA 324/6TSC/TC	18-25/32"	47.7	25-7/8"	65.7	44-21/32"	113.4	604	274
NEMA 364/5TSC/TC	18-25/32"	47.7	28-3/32"	71.4	46-27/32"	119	773	351



	SUCTION & DISCHARGE FLANGE BOLTING DETAILS								
	'D'	'E'	'F'	'H'					
	inches	cm	deg	inches					
150# Flange	5/8-11 UNC	7-1/2"	1.9	45	4	3/4"	1.9	6"	15.2
300# Flange	3/4-10 UNC	7-7/8"	2.0	22.5	8	3/4-10 UNC	-	6-5/8"	16.8
ISO/DIN PN 40 Flange	M20-2.5	7-15/32"	1.9	22.5	8	M16-2.0	-	6-5/16"	16

NOTE:
 1. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY
 2. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY
 *. MAY VARY DUE TO MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES
 FINISH: 1.002
 FINISH: 1.25
 SIGNATURES: _____
 DATE: 9-29-15
 DRAWN: C.M.B.

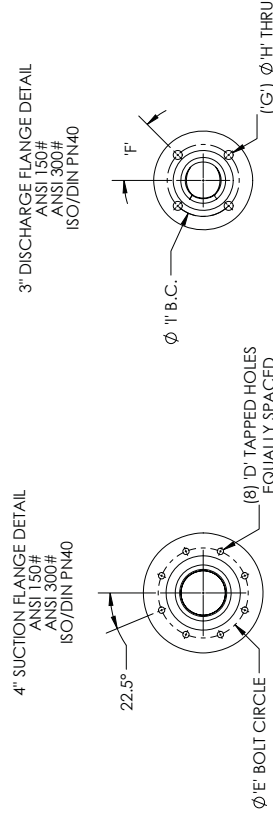
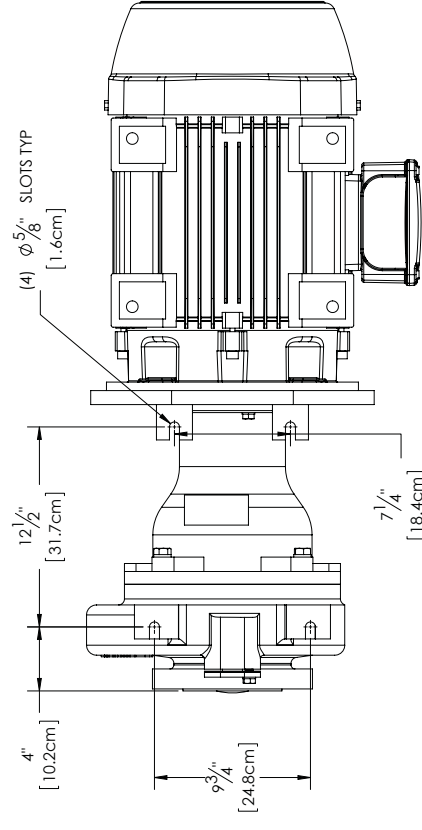
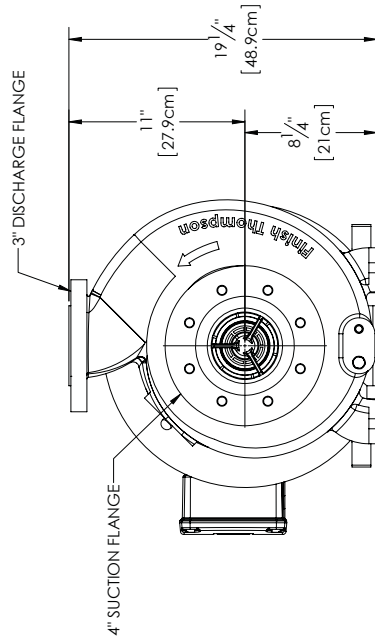
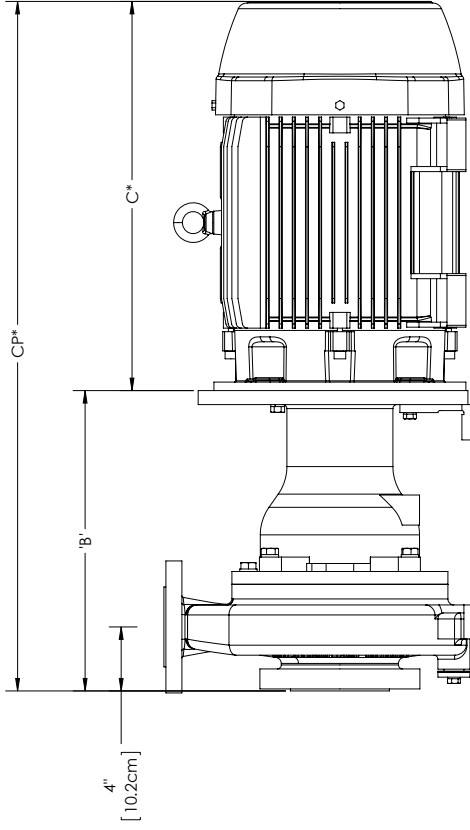
DISTRIBUTION BLOCK
 DEPT [RECD] DEPT [RECD] INJ MOLD PURCH SALES ADV THIRDPARTY PROJECTION
 PUMP ASSM STILL ASSM WELD SHOP MACH SHOP
 SCALE: DNS SHEET: 1 OF 1

UC4310H
 NEMA OUTLINE DIMENSIONAL DWG
 R101770
 0

INVOICE # 0141454879
 FAX # 0841455151

Motor Frame	B		C*		CP*		PUMP WT		MOTOR WT*	
	inches	cm	inches	cm	inches	cm	lbs	kg	lbs	kg
IEC 90 B5	16-15/32"	41.8	11"	27.9	27-15/32"	69.8	39	17.7	39	17.7
IEC 100/112 B5	16-15/32"	41.8	12-7/16"	31.6	28-29/32"	73.4	215	97.5	104	47.2
IEC 132 B5	16-15/32"	41.8	16-3/32"	40.9	32-9/16"	82.7	174	78.9	174	78.9
IEC 160 B5	18-25/32"	47.7	19-1/2"	49.5	38-9/32"	97.2	319	144.7	319	144.7
IEC 180 B5	18-25/32"	47.7	21-29/32"	55.9	40-9/16"	103	380	172.4	380	172.4
IEC 200 B5	18-25/32"	47.7	24-5/16"	61.8	43-3/32"	109.5	531	240.9	531	240.9
IEC 225 B5	18-25/32"	47.7	27-29/32"	70.9	46-21/32"	118.5	630	285.8	630	285.8

REVISIONS			
REV	DESCRIPTION	DATE	APPRD



SUCTION & DISCHARGE FLANGE BOLTING DETAILS									
	D	E	F	G	H	I	J	K	L
	inches	cm	inches	cm	inches	cm	inches	cm	inches
150# Flange	5/8-11 UNC	7-1/2"	1.9	45	4	3/4"	1.9	6"	15.2
300# Flange	3/4-10 UNC	7-7/8"	2.0	22.5	8	7/8"	2.2	6-5/8"	16.8
ISO/DIN PN 40 Flange	M20-2.5	7-15/32"	1.9	22.5	8	27/32"	2.2	6-5/16"	16

UNLESS OTHERWISE SPECIFIED
TOLERANCES ARE:
XXX ± .008
XXX ± .004
FRAG. ± .002
FINISH 125

ENGINEER: _____
DRAWN: C.M.B. 10-24-15
DO NOT SCALE DRAWING
CAD GENERATED DRAWING.
DO NOT MANUALLY UPDATE

DISTRIBUTION BLOCK
DEPT [] REC'D []
PUMP ASSM [] INJ MOLD []
STILL ASSM [] PURCH []
WELD SHOP [] SALES []
MACH SHOP [] ADV []
SIGNATURES [] DATE []
THIRD ANGLE PROJECTION

SCALE: DNS
SHEET: 1 OF 1
CHECKED: _____

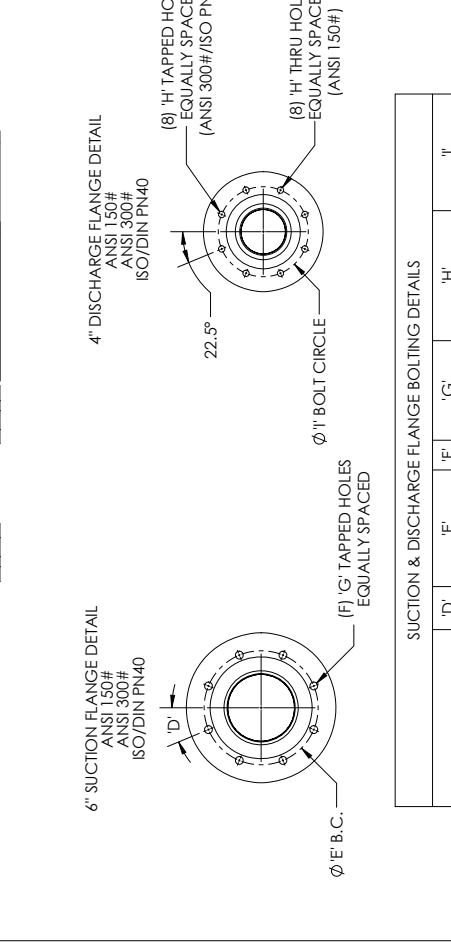
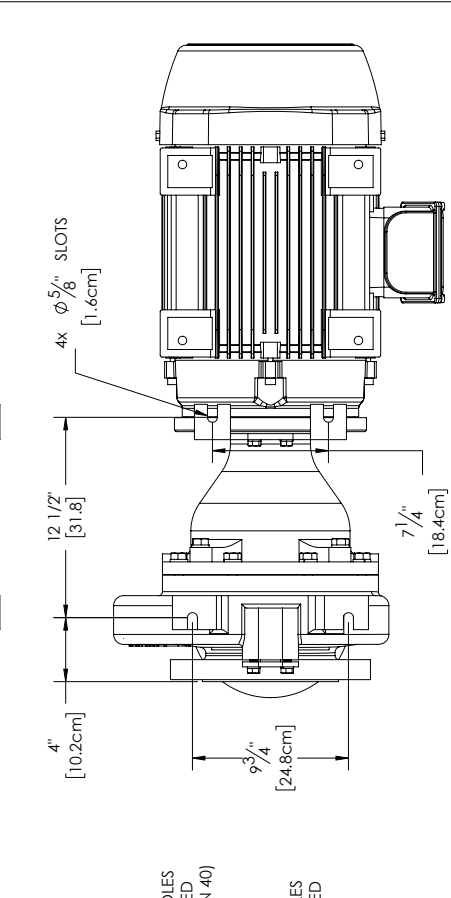
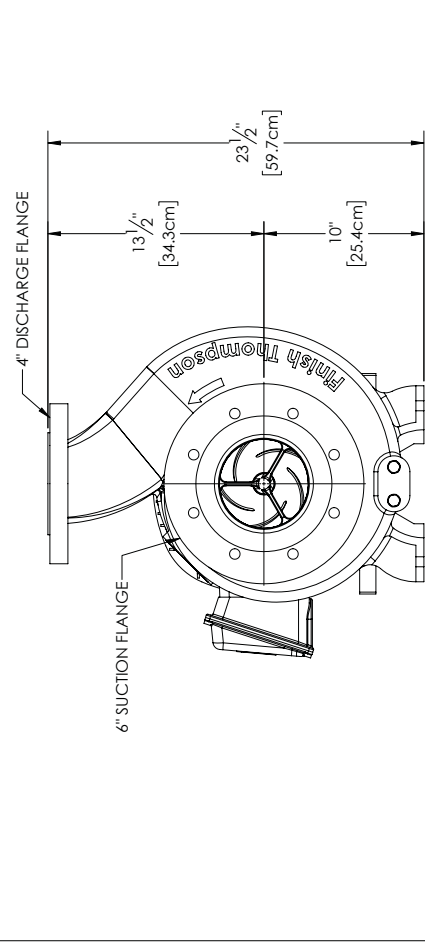
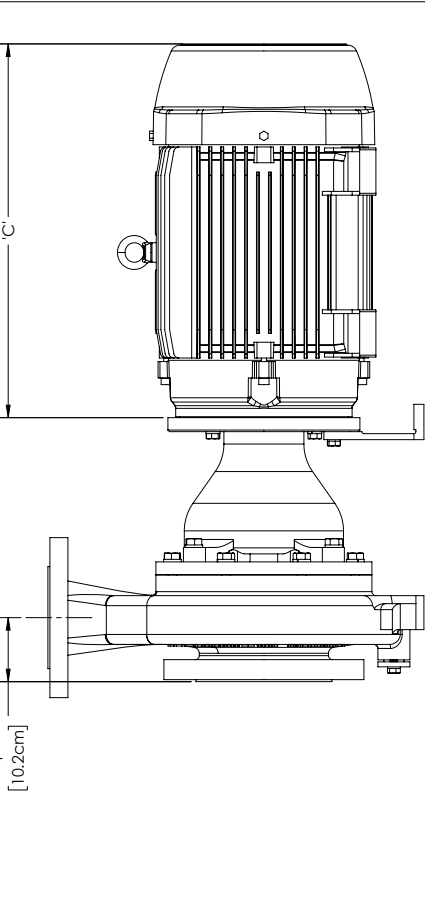
REV: _____
PART NUMBER: R101836
DWG TITLE: IEC OUTLINE DIMENSIONAL DWG
PROJECT: UC4310H
PRODUCT: IEC PUMPS AND MOTOR
REV: _____

REV: _____
PART NUMBER: R101836
DWG TITLE: IEC OUTLINE DIMENSIONAL DWG
PROJECT: UC4310H
PRODUCT: IEC PUMPS AND MOTOR
REV: _____

NOTE:
1. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY
2. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY
*. MAY VARY DUE TO MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN

Motor Frame	B	C*	CP*	PUMP WT	MOTOR WT*
	inches	cm	inches	lbs	kg
NEMA 145TC	16-15/32"	41.8	11-7/32"	28.5	27-11/16"
NEMA 182/4TC	16-15/32"	41.8	13-1/16"	33.2	29-9/16"
NEMA 213/5TC	16-15/32"	41.8	16-5/32"	41	32-5/8"
NEMA 254/6TC	16-15/32"	41.8	21-1/32"	53.4	37-1/2"
NEMA 284/6TSC/TC	16-15/32"	41.8	23-3/8"	59.4	39-27/32"
NEMA 324/6TSC/TC	18-25/32"	47.7	25-7/8"	65.7	44-21/32"
NEMA 364/5TSC/TC	18-25/32"	47.7	28-3/32"	71.4	46-27/32"
				119	
				270	122.5
				604	274
				773	351

REV	DESCRIPTION	DATE	APPRD	TRACK



UNLESS OTHERWISE SPECIFIED		DISTRIBUTION BLOCK	
TOLERANCE A/E	FINISH	DEPT	RECD
XXX ± 0.00		PUMP ASSM	INI MOLD
XXX ± 0.01		STILL ASSM	PURCH
XXX ± 0.02		WELD SHOP	SALES
XXX ± 0.05		MACH SHOP	ADV
XXX ± 0.10		DATE	THIRD ANGLE PROJECTION
XXX ± 0.15		SIGNATURES	SCALE
XXX ± 0.20		DRAWN C M B	12-23-15
XXX ± 0.25		ENG	DO NOT SCALE DRAWING
XXX ± 0.30		DO NOT MANUALLY UPDATE	

DEPT	RECD	DEPT	RECD

SIZE	PART NUMBER	SHEET	OF

REV	DESCRIPTION	DATE	APPRD	TRACK

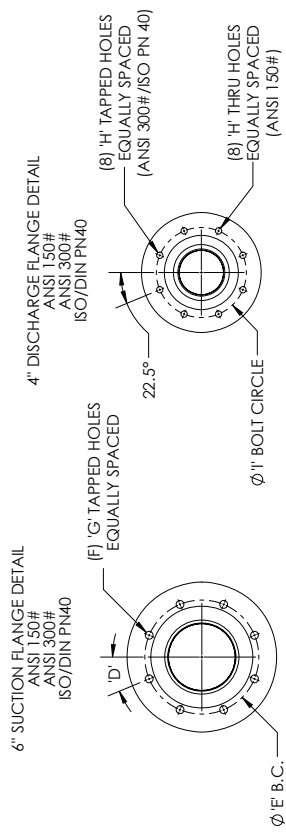
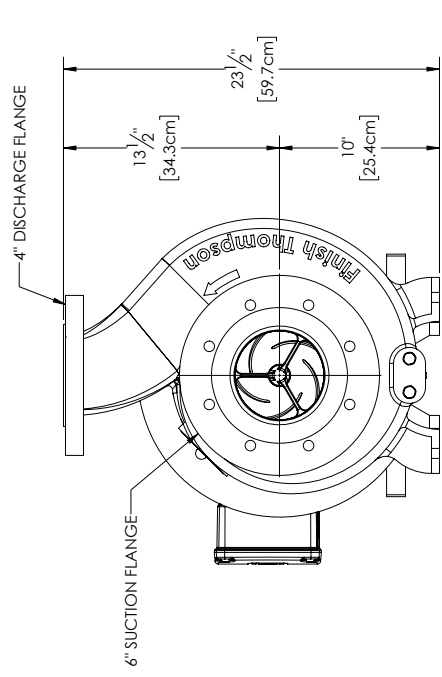
NOTE: ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY

1. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY

2. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY

*. MAY VARY DUE TO MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN

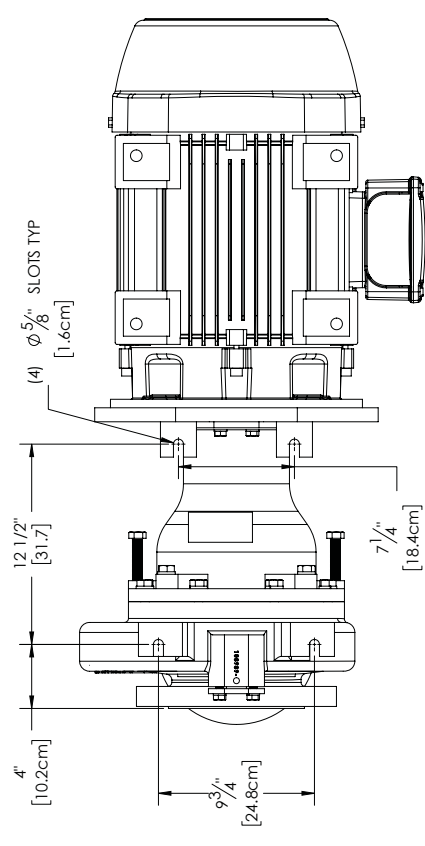
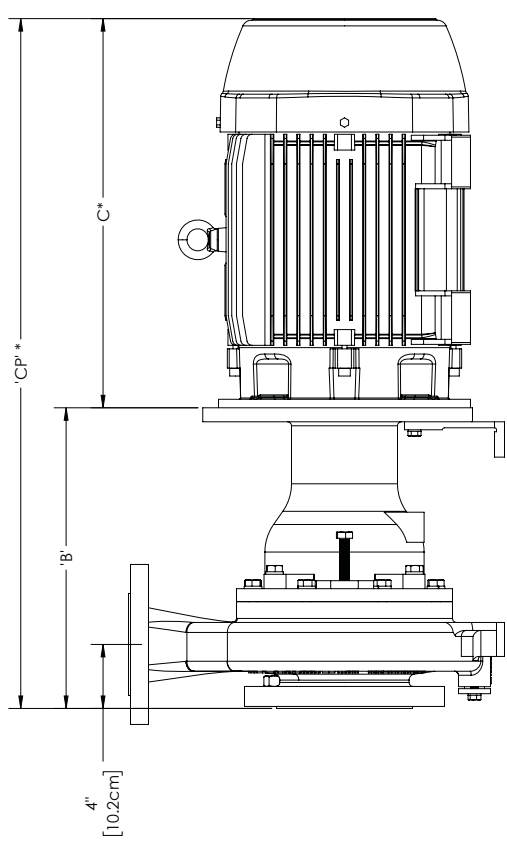
Motor Frame	B		C*		CP*		PUMP WT		MOTOR WT*	
	inches	cm	inches	cm	inches	cm	lbs	kg	lbs	kg
IEC 90 B5	16-15/32"	41.8	11"	27.9	27-15/32"	69.8			39	17.7
IEC 100/112 B5	16-15/32"	41.8	12-7/16"	31.6	28-29/32"	73.4	240	108.9	104	47.2
IEC 132 B5	16-15/32"	41.8	16-3/32"	40.9	32-9/16"	82.7	174	78.9	174	78.9
IEC 160 B5	18-25/32"	47.7	19-1/2"	49.5	38-9/32"	97.2			319	144.7
IEC 180 B5	18-25/32"	47.7	21-29/32"	55.8	40-9/16"	103	270	122.5	380	172.4
IEC 200 B5	18-25/32"	47.7	24-5/16"	61.8	43-3/32"	109.5			531	240.9
IEC 225 B5	18-25/32"	47.7	27-29/32"	70.9	46-21/32"	118.5			630	285.8



	SUCTION & DISCHARGE FLANGE BOLTING DETAILS					
	'D'	'E'	'F'	'G'	'H'	'I'
150# Flange	22.5	9-1/2"	24.1	8	3/4-10 UNC	3/4
300# Flange	15	10-5/8"	27.0	12	3/4-10 UNC	3/4-10 UNC
ISO/DIN PN 40 Flange	22.5	9-27/32"	25.0	8	M24 X 3.0	M20 X 2.5
						7-15/32"
						19.0

NOTE:
 1. ALL DIMENSIONS AND WEIGHTS ARE TO BE USED FOR REFERENCE ONLY
 2. ANSI 150#, 300#, AND ISO/DIN PN40 FLANGES ARE IN COMPLIANCE WITH BOLTING DIMENSIONS ONLY
 *. MAY VARY DUE TO MOTOR MANUFACTURER AND STYLE OF MOTOR CHOSEN

REVISIONS			
REV	DESCRIPTION	DATE	APPRD
1	CORRECTED FLANGE SIZE CALLOUT	4-28-16	CMB



UNLESS OTHERWISE SPECIFIED
 TOLERANCES ARE:
 XXX ± .006 INCHES
 XXX ± .003 INCHES
 FRAC. ± .002 INCHES
 FINISH 125

DRAWN: C.M.B. DATE: 1-8-16
 ENGR: DO NOT SCALE DRAWING
 CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE.

DISTRIBUTION BLOCK
 DEPT [RECD] DEPT [RECD] DEPT [RECD]
 PUMP ASSM INJ MOLD
 STILL ASSM PURCH
 WELD SHOP SALES X
 MACH SHOP ADV
 SIGNATURES DATE

SIZE: PART NUMBER: R101910
 THIRD ANGLE PROJECTION
 SCALE: DNS SHEET 1 OF 1
 CHECKED: REV: 1

IEC OUTLINE DIMENSIONAL DWG
 UC6410
 INVOICE # 010155-4798
 FAX: (864) 625-8551