

F SERIES

SUBMERSIBLE SEWAGE / EFFLUENT PUMPS

POWER : 0.5~1HP (0.4~0.75kW)

MAX.HEAD : 14.5m (48feet)

MAX.FLOW : 0.6m³/min (36m³/h)



PRODUCT NOMENCLATURE

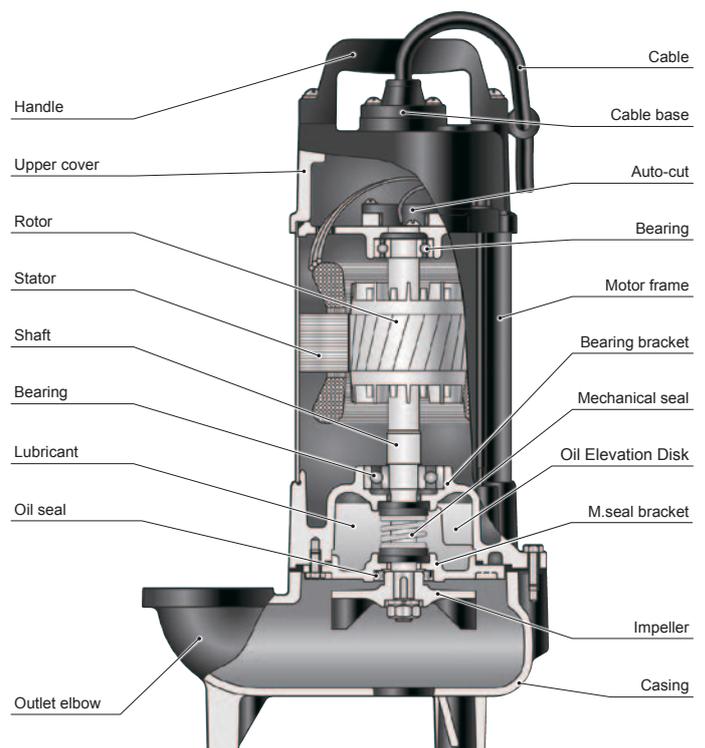
Example : $\frac{F}{\text{Type}} - \frac{2}{\text{Discharge inch}} \frac{1}{\text{HP}} \frac{U}{\text{Impeller}}$

FEATURE

- U/P type impellers are designed to meet the various different operating ranges in wastewater applications.
- F-UL non-clog models, capable passing larger solid.
- HCP's professional assembly line, complimented with a synthetic production test to ensure each IP68 motor with highest level of final pump quality.
- Oil Elevation Disk design in the oil chamber to ensure the mechanical seals lubrication and to extend the service life of pump.
- Standard accessories include : cable with an epoxy resin sealed waterresistant cable base, Auto-cut Protector, double mechanical seals, Food grade lubricant and lip seal design.

APPLICATIONS

- Drainage of sewage from the building basements, hotel industry, and waste water from factories.
- Drainage of sewage from industrial process factories.
- Emptying of septic tanks, cesspits and sewage pump stations.
- Pumping surface and drainage water from garages and sprinkler systems.



F SERIES SUBMERSIBLE SEWAGE / EFFLUENT PUMPS

F-05A · F-04U · F-05U · F-21U · F-31U

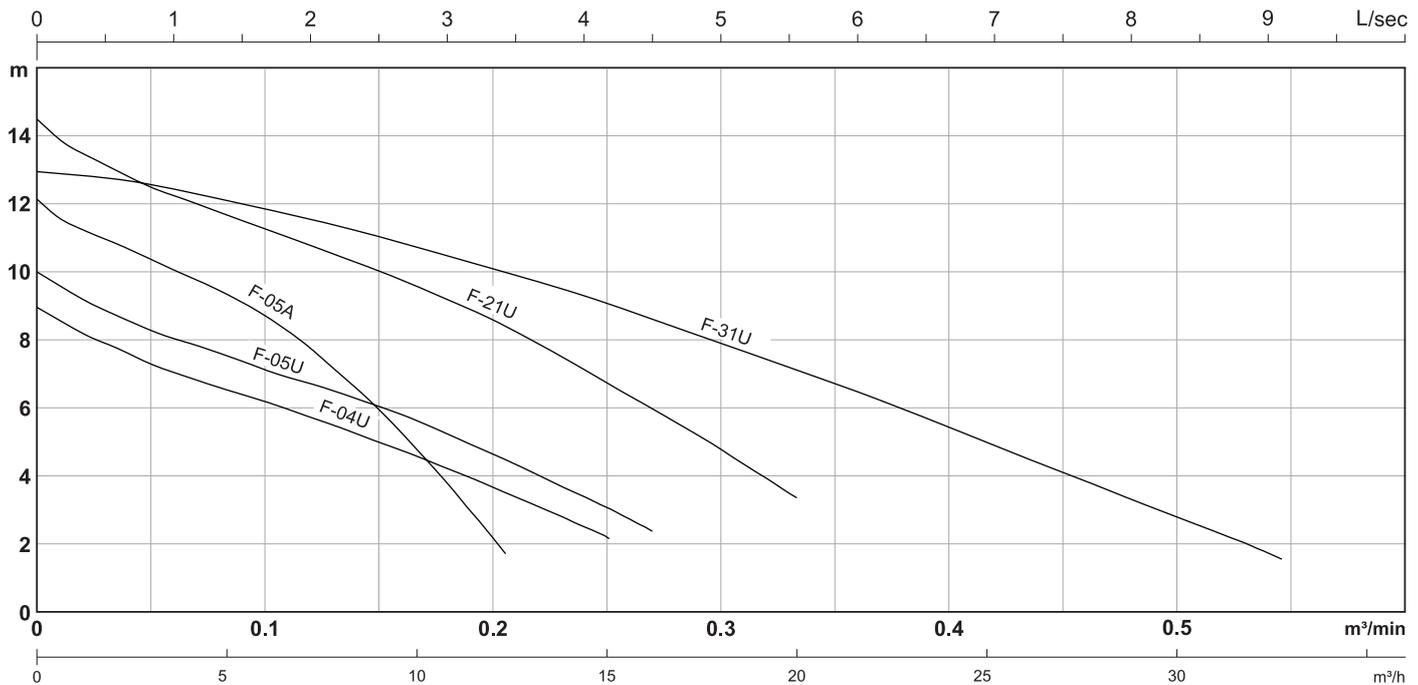
SPECIFICATIONS

Item		Description
Limits of Use	Liquid Temp.	0~40°C(32~104°F)
	Applications	General wastewater · Sewage and Industrial water
Type	Frequency	50Hz
	Motor	2P(3000rpm) · Dry Motor (F-05A:Oil Motor)
	Insulation	Class B
	Protection	IP68
	Protector	Auto-cut (0.5HP 1Ø:Thermal)
	Bearing	Ball type
	M.seal	Double M.seals (F-05A:Single M.seals)
Material	Impeller	Vortex
	Upper Cover	FC200
	Motor Frame	SUS304
	Shaft	SUS410
	M.seal	CA/CE & SiC/SiC (F-05A:CA/CE)
	Casing	FC200
	Impeller	FC200 (F-05A:PA)
	Cable	VCT or H07RN-F or SJOW/SOW
Optional	-	



Model	Power HP(kW)	Discharge inch(mm)	Standard		MAX		Solid Passage mm(inch)	Weight(W/O Cable)		Phase Voltage	Full load Ampere						
			m-m³/min	m-m³/h	m-m³/min	m-m³/h		1Ø-kg(lbs)	3Ø-kg(lbs)		1Ø	1Ø	3Ø	3Ø	3Ø	3Ø	3Ø
F-05A	0.5(0.4)	2"(50)	8-0.12	8-7.2	12-0.24	12-14.4	10(3/8")	12(26)	-	Full load Ampere	220V	230V	230V	380V	400V	415V	525V
F-04U	0.5(0.4)	2"(50)	5-0.15	5-9	9-0.28	9-16.8	35(1 3/8")	15(33)	-		3.1	3.0	-	-	-	-	-
F-05U	0.5(0.4)	2"(50)	6-0.15	6-9	10-0.3	10-18	35(1 3/8")	16(35)	15(33)		2.8	2.6	-	-	-	-	-
F-21U	1(0.75)	2"(50)	8-0.2	8-12	14.5-0.36	14.5-21.6	35(1 3/8")	17(37)	16(35)		3.4	3.3	2.4	1.4	1.3	1.3	1.1
F-31U	1(0.75)	3"(80)	7-0.3	7-18	13-0.6	13-36	30(1 1/8")	18(40)	17(37)		5.4	5.2	3.5	2.0	1.9	1.9	1.5

PERFORMANCE CURVES



Model	Power HP(kW)	Discharge inch(mm)	Q:m³/min	Q:m³/h	H:m										Q:L/sec	H:m									
					0.05	0.1	0.15	0.2	0.25	0.3	0.4	0.5	1	2		3	4	5	6	7	8				
F-05A	0.5(0.4)	2"(50)			10.4	8.7	6.0	2.2	-	-	-	-	-	-	-	-	-	10.1	7.8	3.8	-	-	-	-	-
F-04U	0.5(0.4)	2"(50)			7.3	6.3	5.1	3.7	2.3	-	-	-	-	-	-	-	-	7.1	5.8	4.3	2.5	-	-	-	-
F-05U	0.5(0.4)	2"(50)			8.4	7.2	6.1	4.6	3.0	-	-	-	-	-	-	-	-	8.1	6.8	5.2	3.4	-	-	-	-
F-21U	1(0.75)	2"(50)			12.5	11.3	10.1	8.6	6.8	4.9	-	-	-	-	-	-	-	12.2	10.8	9.3	7.2	4.9	-	-	-
F-31U	1(0.75)	3"(80)			12.5	11.9	11.0	10.1	9.0	7.9	5.5	2.8	-	-	-	-	-	12.4	11.5	10.5	9.3	7.9	6.5	4.9	3.3

F SERIES SUBMERSIBLE SEWAGE / EFFLUENT PUMPS

F-05UL · F-21UL · F-05P · F-21P

SPECIFICATIONS

Item		Description
Limits of Use	Liquid Temp.	0~40°C(32~104°F)
	Applications	General wastewater · Sewage and Industrial water
Type	Frequency	50Hz
	Motor	2P(3000rpm) · Dry Motor
	Insulation	Class B
	Protection	IP68
	Protector	Auto-cut (0.5HP 1Ø:Thermal)
	Bearing	Ball type
	M.seal	Double M.seals
	Impeller	Vortex (F-05P/21P:Open)
Material	Upper Cover	FC200
	Motor Frame	SUS304
	Shaft	SUS410
	M.seal	CA/CE & SiC/SiC
	Casing	FC200
	Impeller	FC200
	Cable	VCT or H07RN-F or SJOW/SOW
	Optional	-



F-05UL · F-21UL

F-05P · F-21P



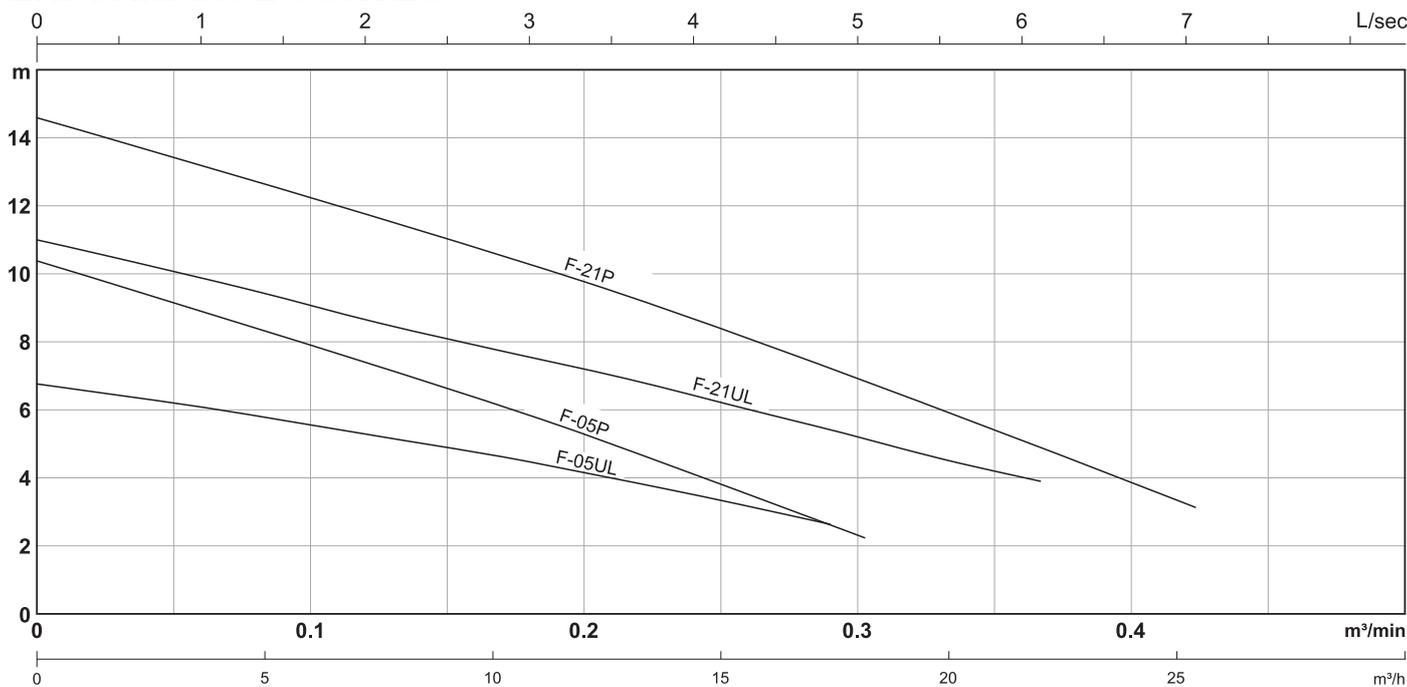
U Type Vortex Impeller



P Type Open Impeller

Model	Power HP(kW)	Discharge inch(mm)	Standard		MAX		Solid Passage mm(inch)	Weight(W/O Cable)		Phase	1Ø	1Ø	3Ø	3Ø	3Ø	3Ø	3Ø
			m-m³/min	m-m³/h	m-m³/min	m-m³/h		1Ø-kg(lbs)	3Ø-kg(lbs)								
F-05UL	0.5(0.4)	2"(50)	4-0.2	4-12	7-0.38	7-22.8	50(2")	17(37)	16(35)	Full load Ampere	3.4	3.3	2.2	1.3	1.2	1.2	1.0
F-21UL	1(0.75)	2"(50)	6-0.25	6-15	11-0.48	11-28.8	50(2")	18(40)	17(37)		5.4	5.2	3.5	2.0	1.9	1.9	1.5
F-05P	0.5(0.4)	2"(50)	5.5-0.2	5.5-12	10.5-0.32	10.5-19.2	22(7/8")	16(35)	15(33)		3.4	3.3	2.4	1.4	1.3	1.3	1.1
F-21P	1(0.75)	2"(50)	9-0.2	9-12	14.5-0.4	14.5-24	26(1")	20(44)	19(42)		5.4	5.2	3.5	2.0	1.9	1.9	1.5

PERFORMANCE CURVES



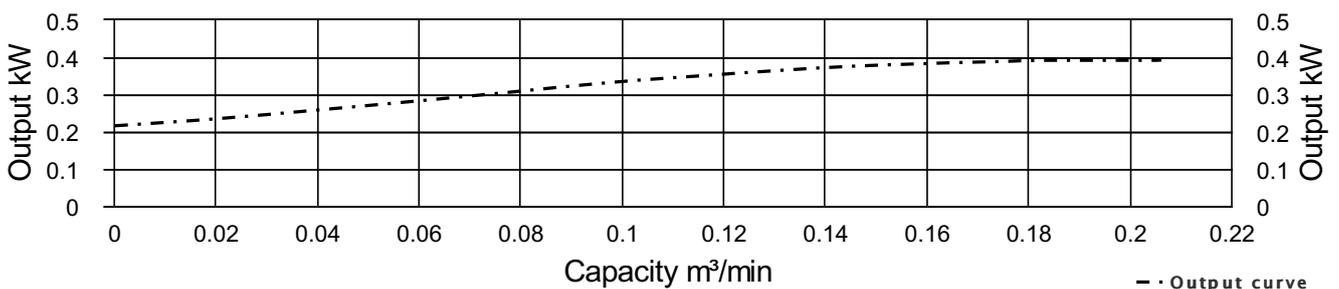
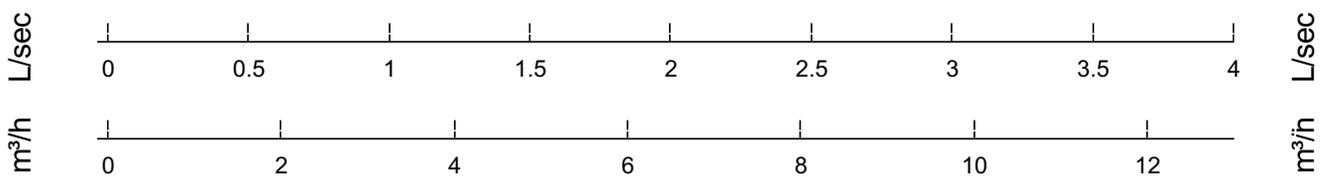
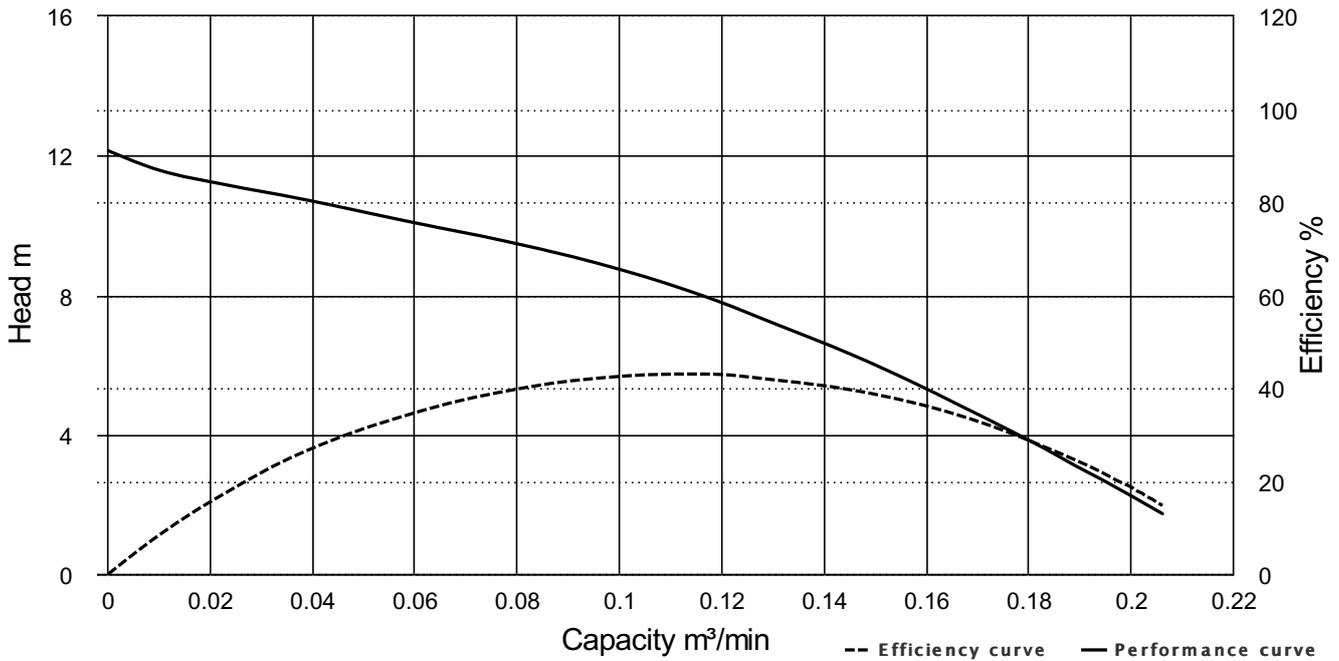
Model	Power HP(kW)	Discharge inch(mm)	Q:m³/min	Q:m³/h	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	Q:L/sec	0.5	1	1.5	2	3	4	5	6
					3	6	9	12	15	18	21	24		6.4	6.1	5.7	5.3	4.5	3.5	-	-
F-05UL	0.5(0.4)	2"(50)	H:m	H:m	6.2	5.6	4.9	4.2	3.3	-	-	-	6.4	6.1	5.7	5.3	4.5	3.5	-	-	
F-21UL	1(0.75)	2"(50)			10.1	9.1	8.1	7.2	6.2	5.2	4.2	-	-	10.5	9.9	9.3	8.6	7.5	6.4	5.2	4.0
F-05P	0.5(0.4)	2"(50)			9.2	7.8	6.6	5.3	3.8	2.3	-	-	-	9.6	8.9	8.2	7.4	5.8	4.1	2.3	-
F-21P	1(0.75)	2"(50)			13.0	11.8	10.5	9.2	7.8	6.2	4.7	-	-	13.5	12.8	12.0	11.3	9.7	8.0	6.2	4.3



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PUMP PERFORMANCE CURVES

Model	F-05A				Ver NO.	BA0407	
Frequency / Phase	50 Hz / 1 Ø				REFERENCE SPECIFICATION		
Discharge	2" / 50 mm						
Power	0.5 HP / 0.4 kW						
Std. Head	8 m						
Std. Capacity	0.12 m³/min						
Volt	110 V	220 V	230 V	240 V			
Rated Current	6.2 A	3.1 A	3 A	2.9 A			
Pole / rpm	2 P / 2780 rpm						
Start Method	CAPACITOR						
Insulation Class	B						



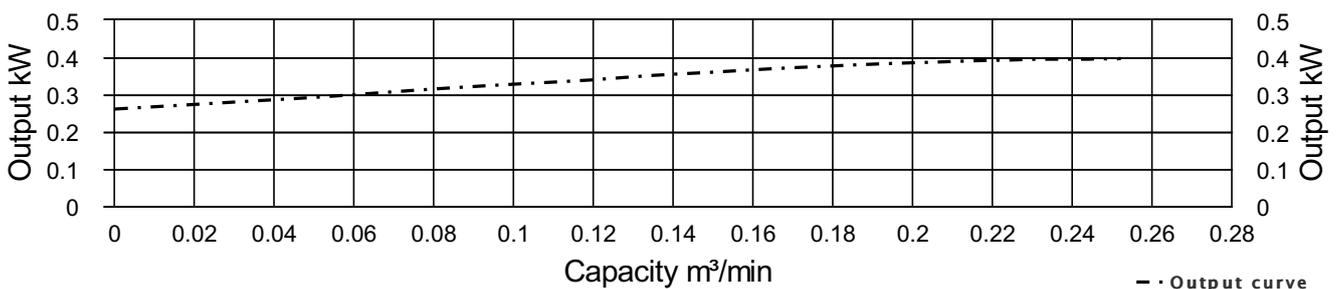
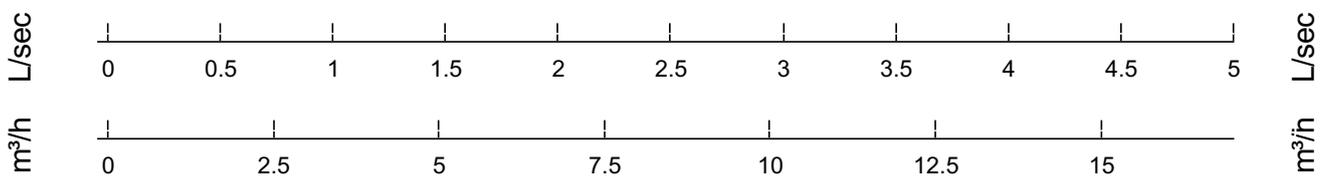
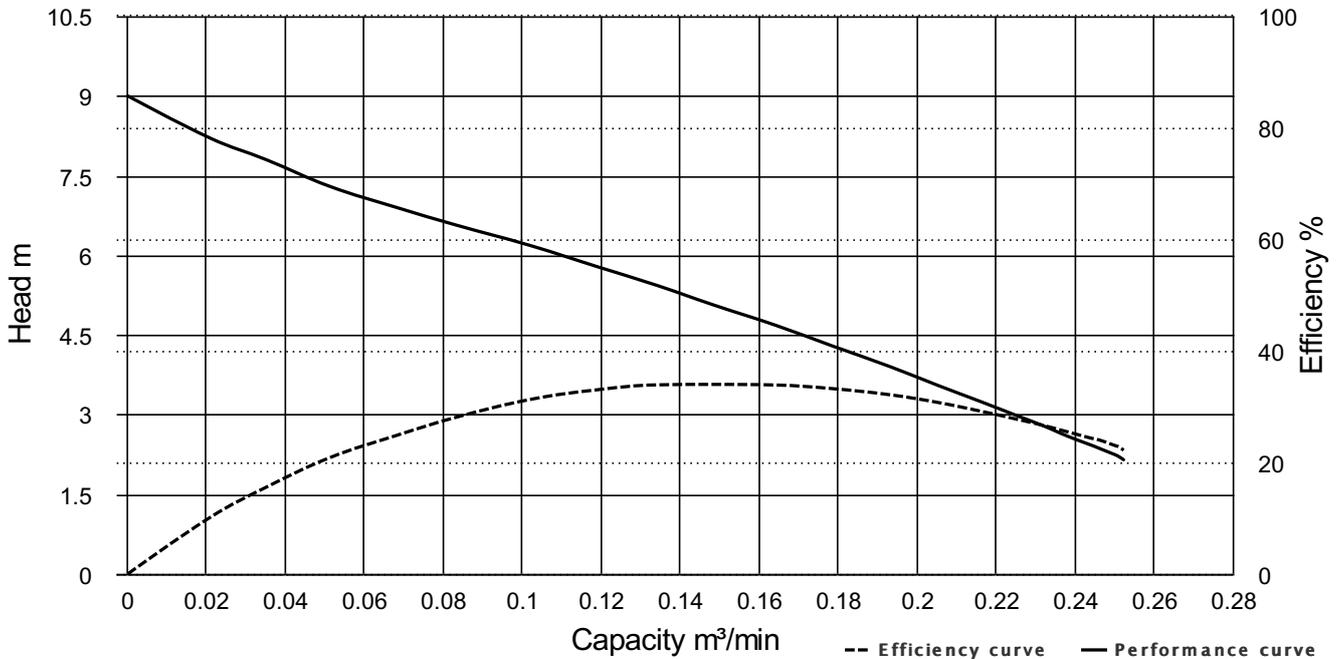
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PUMP PERFORMANCE CURVES

Model	F-04U			Ver NO.	BA0407
Frequency / Phase	50 Hz / 1 Ø			REFERENCE SPECIFICATION	
Discharge	2" / 50 mm				
Power	0.5 HP / 0.4 kW				
Std. Head	5 m				
Std. Capacity	0.15 m ³ /min				
Volt	220 V	230 V	240 V		
Rated Current	2.8 A	2.6 A	2.6 A		
Pole / rpm	2 P / 2800 rpm				
Start Method	CAPACITOR				
Insulation Class	B				



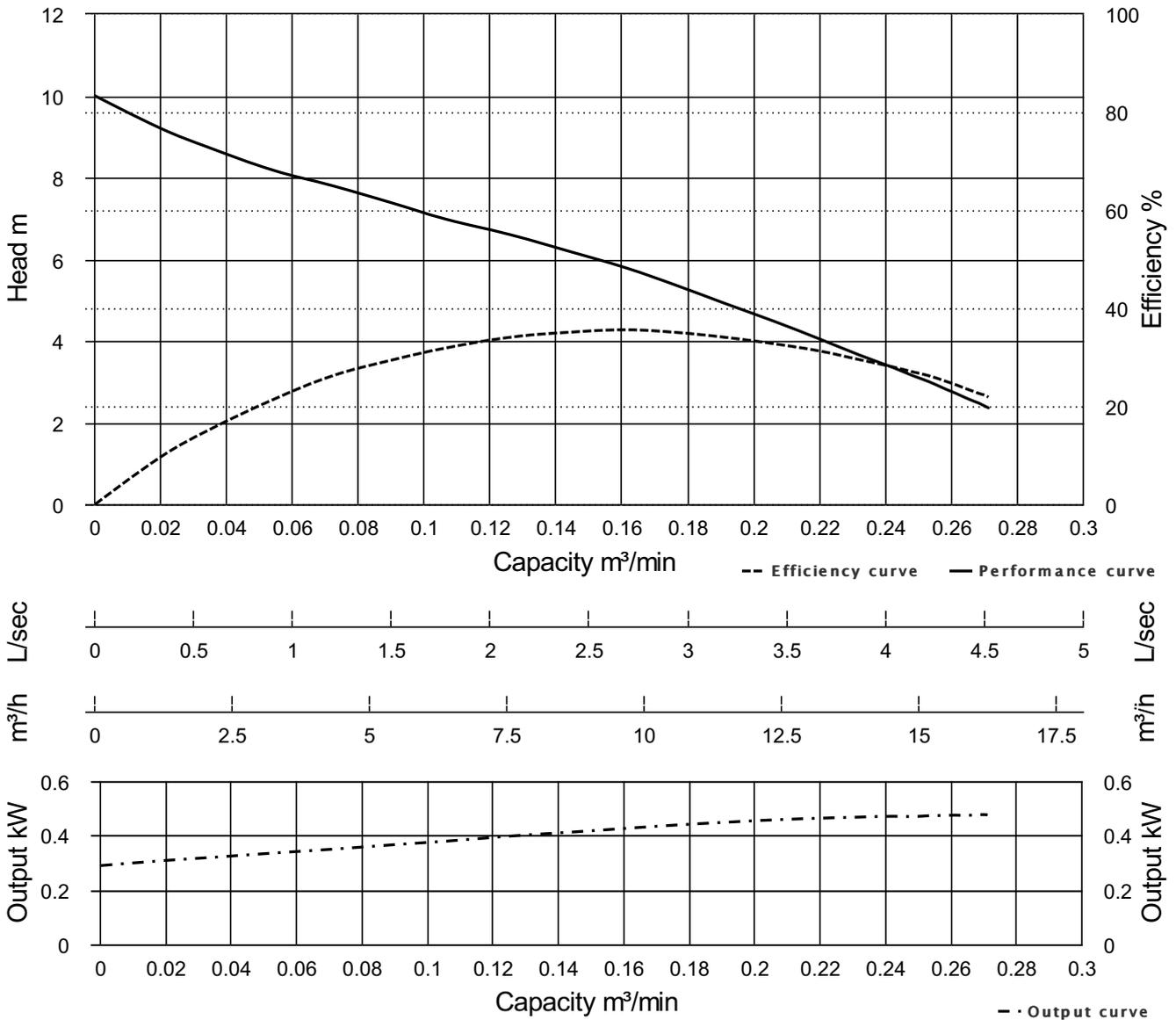
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PUMP PERFORMANCE CURVES

Model	F-05U				Ver NO.	BA0407	
Frequency / Phase	50 Hz / 1 Ø				REFERENCE SPECIFICATION		
Discharge	2" / 50 mm						
Power	0.5 HP / 0.4 kW						
Std. Head	6 m						
Std. Capacity	0.15 m ³ /min						
Volt	110 V	220 V	230 V	240 V			
Rated Current	6.8 A	3.4 A	3.3 A	3.2 A			
Pole / rpm	2 P / 2780 rpm						
Start Method	CAPACITOR						
Insulation Class	B						



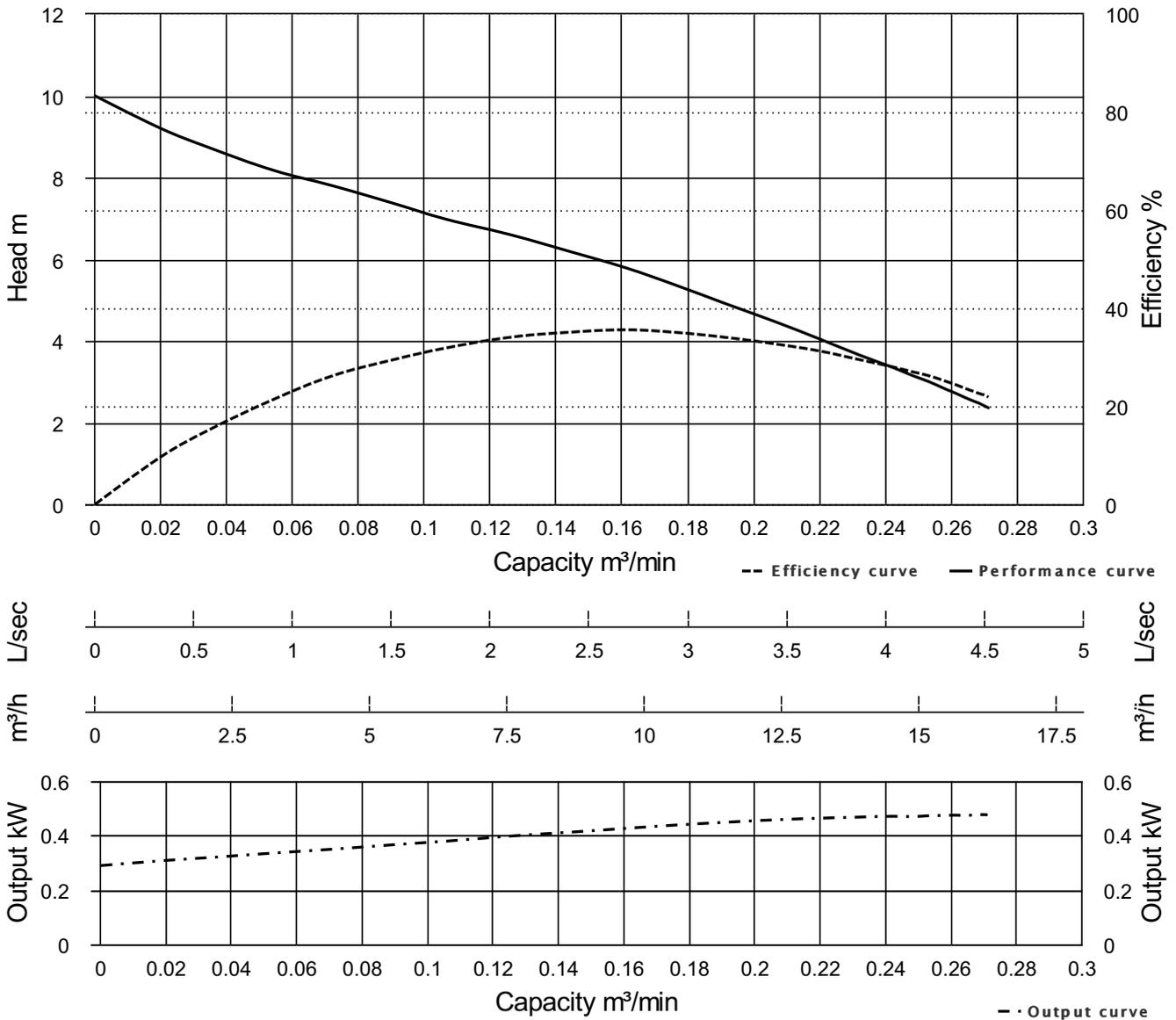
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PUMP PERFORMANCE CURVES

Model	F-05U					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	2" / 50 mm						
Power	0.5 HP / 0.4 kW						
Std. Head	6 m						
Std. Capacity	0.15 m³/min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	2.4 A	1.4 A	1.3 A	1.3 A	1.1 A		
Pole / rpm	2 P / 2780 rpm						
Start Method	DOL						
Insulation Class	B						



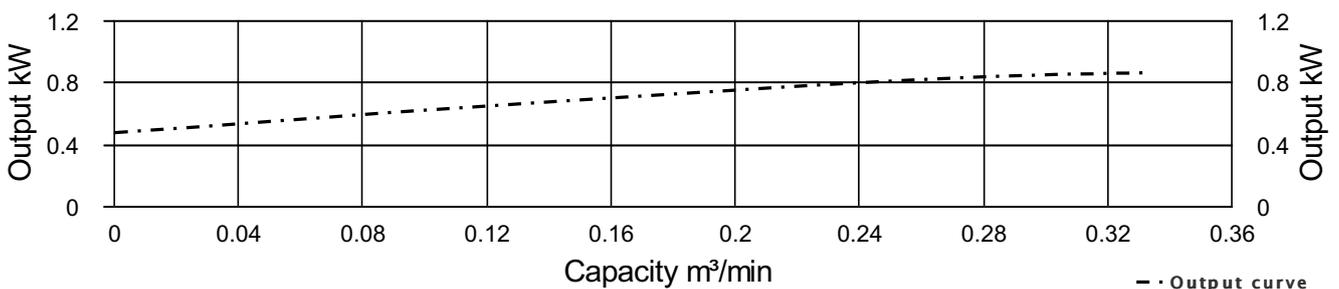
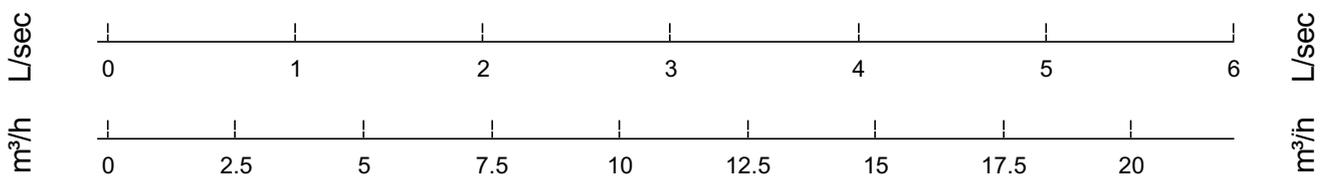
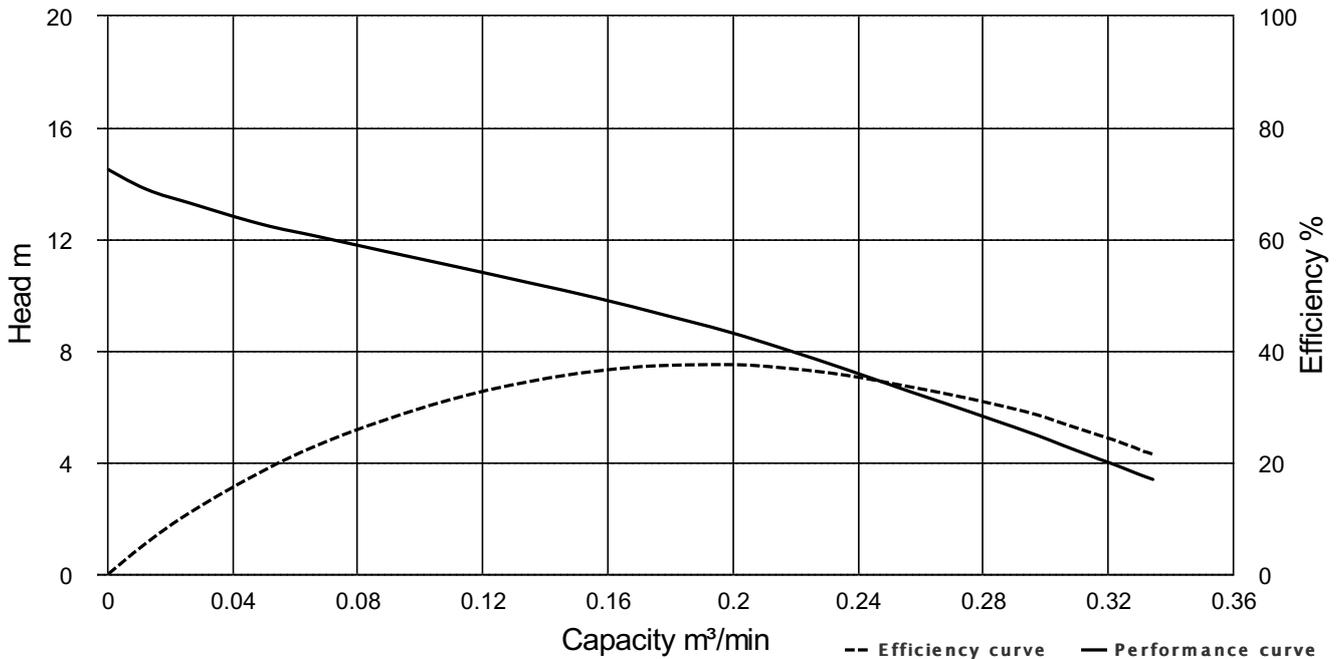
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PUMP PERFORMANCE CURVES

Model	F-21U				Ver NO.	BA0407
Frequency / Phase	50 Hz / 1 Ø				REFERENCE SPECIFICATION	
Discharge	2" / 50 mm					
Power	1 HP / 0.75 kW					
Std. Head	8 m					
Std. Capacity	0.2 m ³ /min					
Volt	110 V	220 V	230 V	240 V		
Rated Current	10.8 A	5.4 A	5.2 A	5 A		
Pole / rpm	2 P / 2800 rpm					
Start Method	CAPACITOR					
Insulation Class	B					



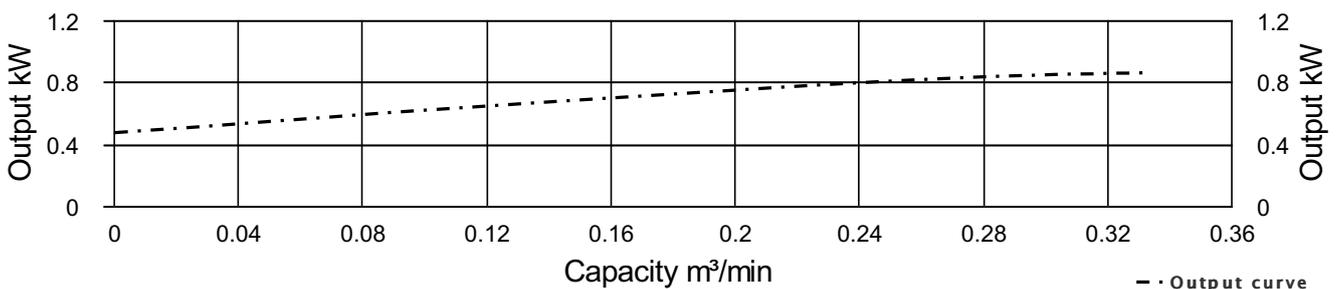
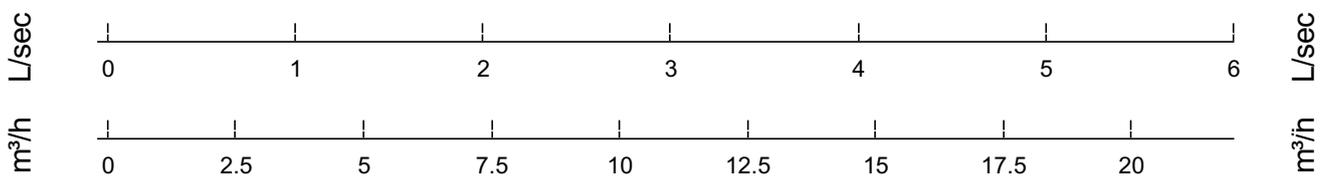
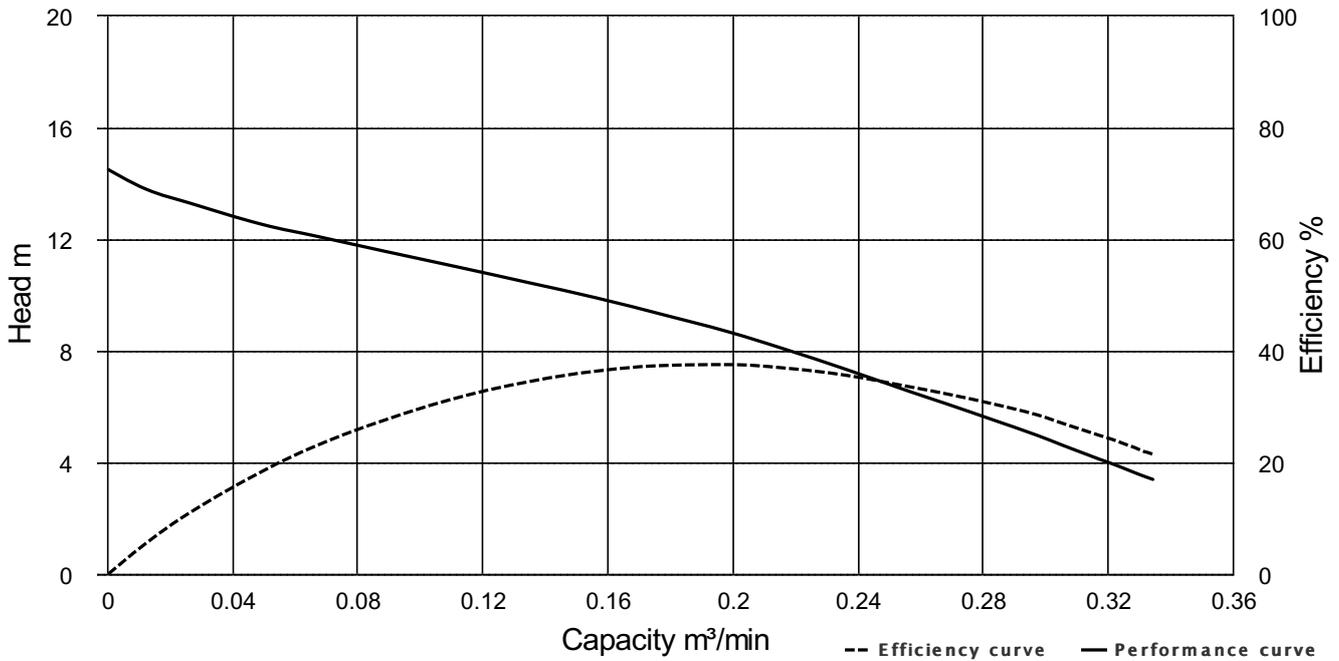
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PUMP PERFORMANCE CURVES

Model	F-21U					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	2" / 50 mm						
Power	1 HP / 0.75 kW						
Std. Head	8 m						
Std. Capacity	0.2 m ³ /min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	3.5 A	2 A	1.9 A	1.9 A	1.5 A		
Pole / rpm	2 P / 2800 rpm						
Start Method	DOL						
Insulation Class	B						



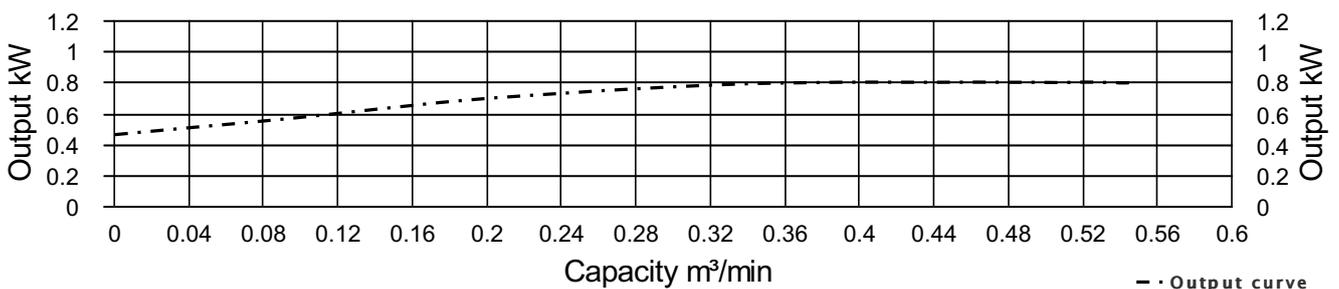
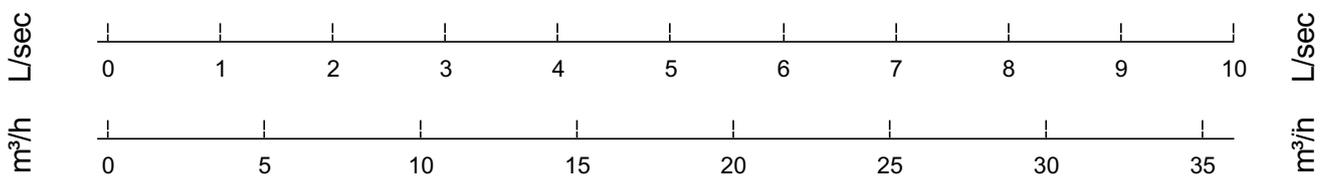
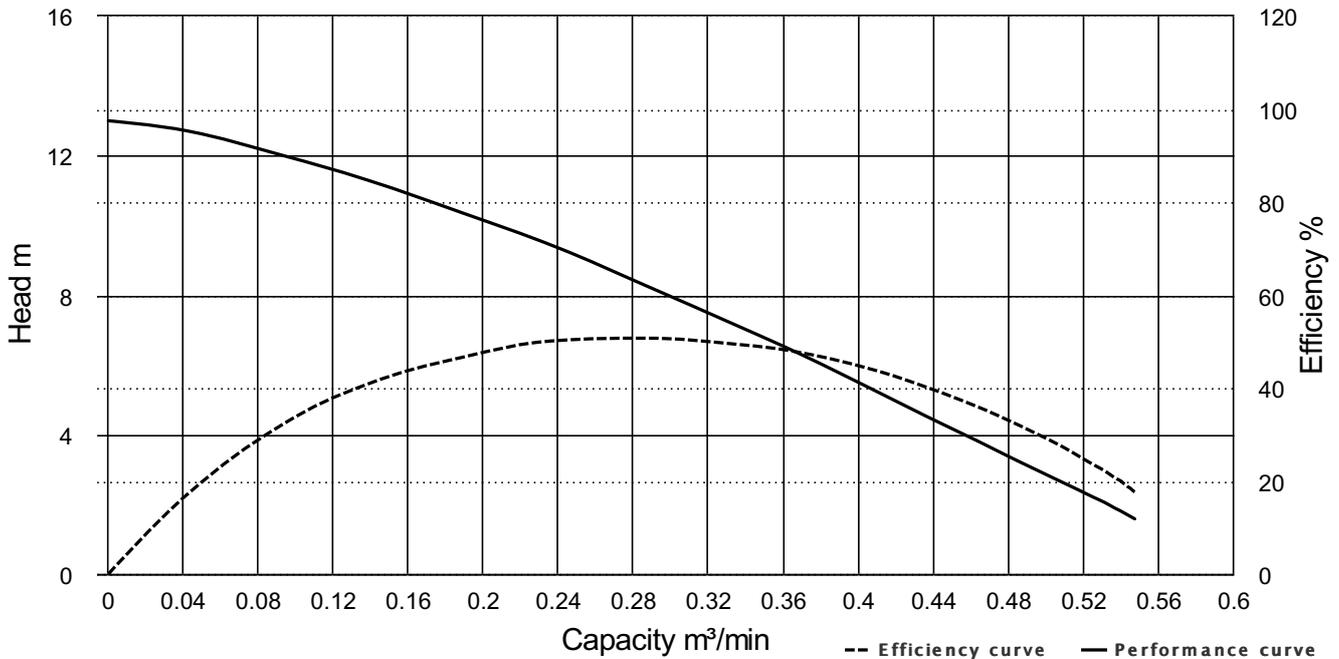
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PUMP PERFORMANCE CURVES

Model	F-31U				Ver NO.	BA0407
Frequency / Phase	50 Hz / 1 Ø				REFERENCE SPECIFICATION	
Discharge	3" / 80 mm					
Power	1 HP / 0.75 kW					
Std. Head	7 m					
Std. Capacity	0.3 m ³ /min					
Volt	110 V	220 V	230 V	240 V		
Rated Current	10.8 A	5.4 A	5.2 A	5 A		
Pole / rpm	2 P / 2800 rpm					
Start Method	CAPACITOR					
Insulation Class	B					



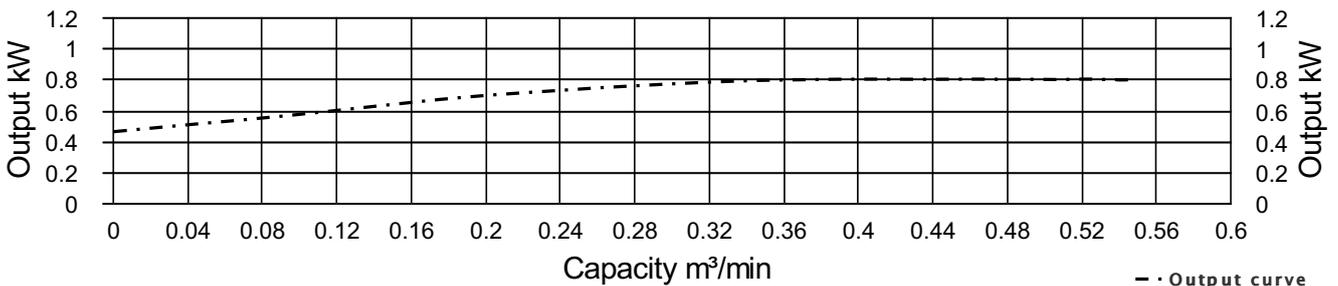
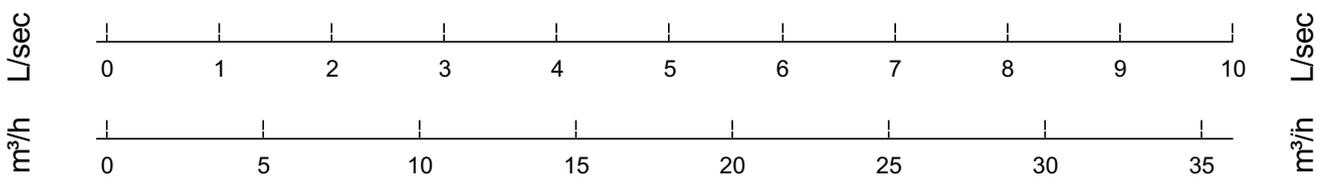
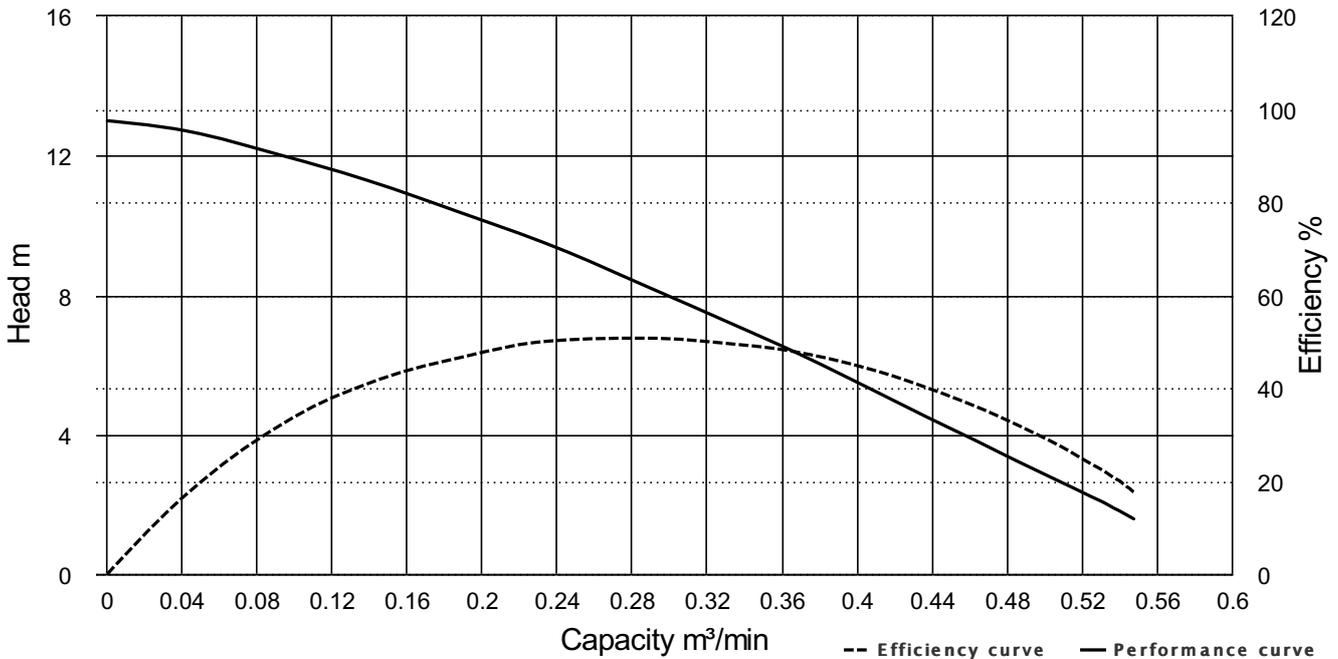
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PUMP PERFORMANCE CURVES

Model	F-31U					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	3" / 80 mm						
Power	1 HP / 0.75 kW						
Std. Head	7 m						
Std. Capacity	0.3 m ³ /min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	3.5 A	2 A	1.9 A	1.9 A	1.5 A		
Pole / rpm	2 P / 2800 rpm						
Start Method	DOL						
Insulation Class	B						



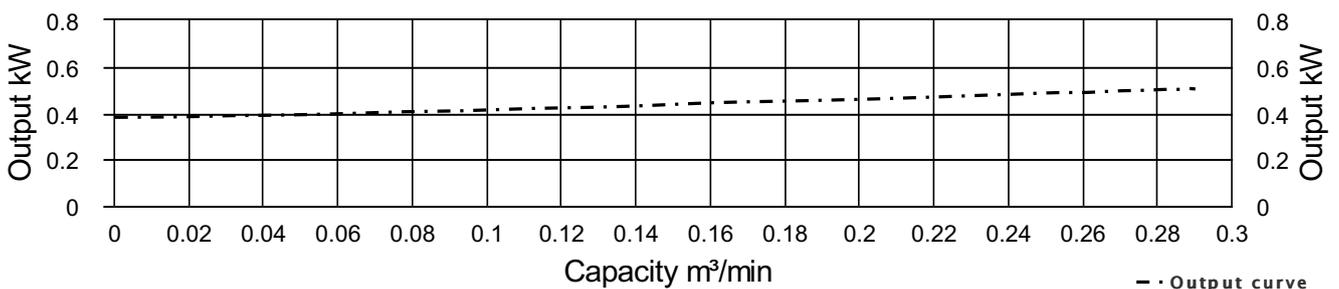
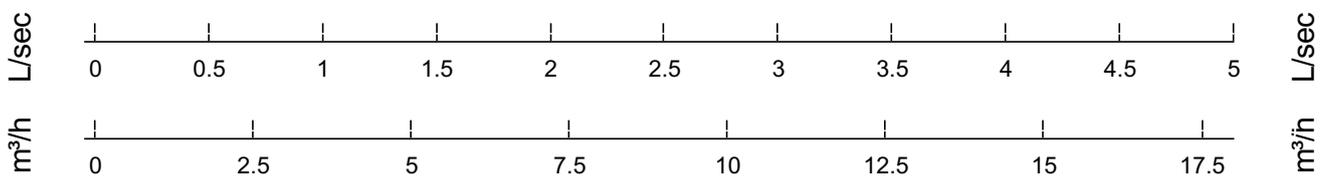
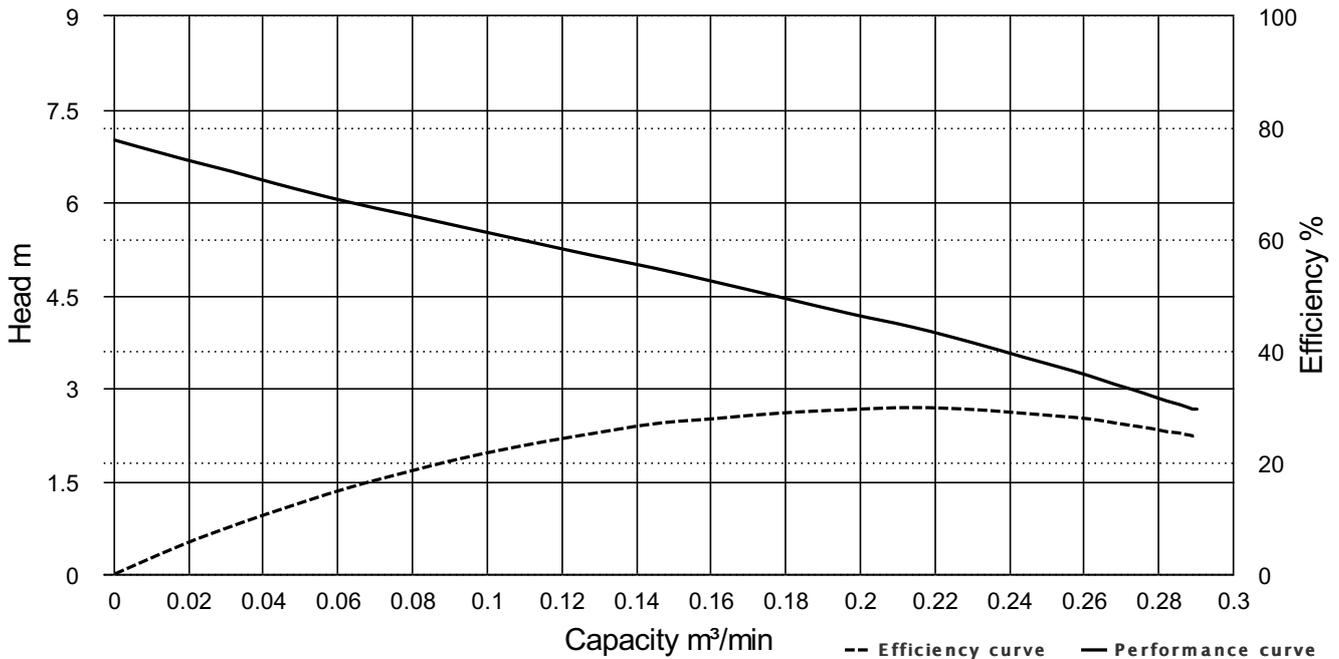
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HCP PUMP

PUMP PERFORMANCE CURVES

Model	F-05UL				Ver NO.	BA0407	
Frequency / Phase	50 Hz / 1 Ø				REFERENCE SPECIFICATION		
Discharge	2" / 50 mm						
Power	0.5 HP / 0.4 kW						
Std. Head	4 m						
Std. Capacity	0.2 m ³ /min						
Volt	110 V	220 V	230 V	240 V			
Rated Current	6.8 A	3.4 A	3.3 A	3.3 A			
Pole / rpm	2 P / 2780 rpm						
Start Method	CAPACITOR						
Insulation Class	B						



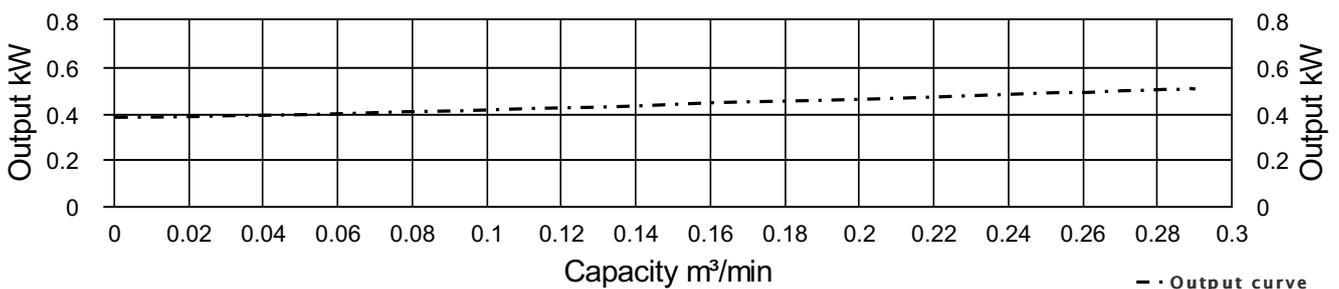
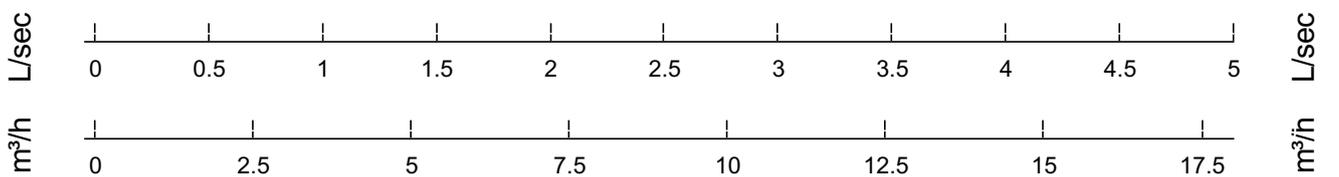
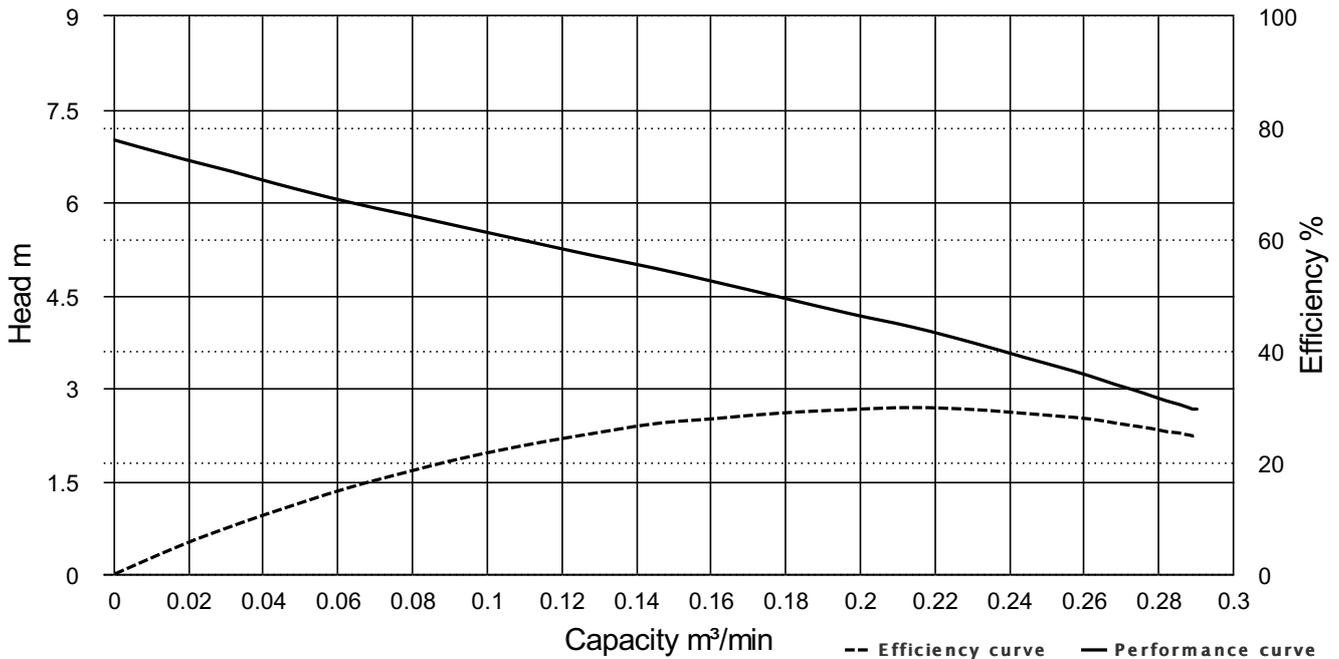
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HCP PUMP

PUMP PERFORMANCE CURVES

Model	F-05UL					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	2" / 50 mm						
Power	0.5 HP / 0.4 kW						
Std. Head	4 m						
Std. Capacity	0.2 m ³ /min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	2.2 A	1.3 A	1.2 A	1.2 A	1 A		
Pole / rpm	2 P / 2780 rpm						
Start Method	DOL						
Insulation Class	B						



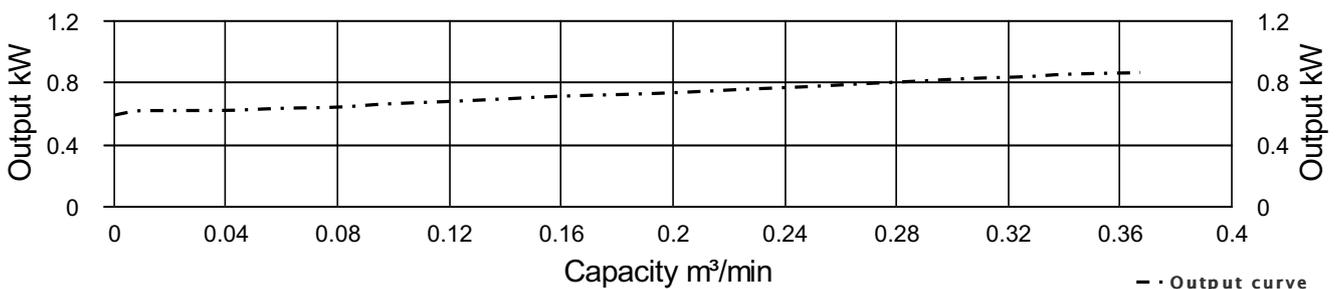
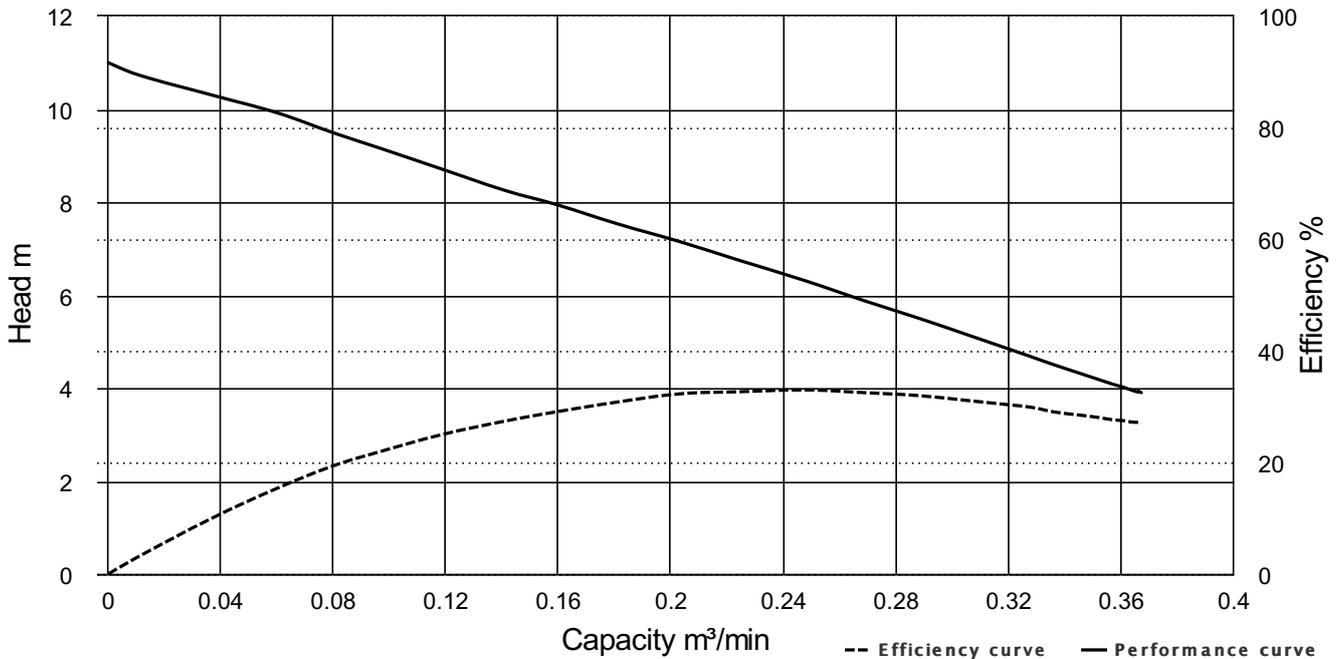
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HCP PUMP

PUMP PERFORMANCE CURVES

Model	F-21UL				Ver NO.	BA0407	
Frequency / Phase	50 Hz / 1 Ø				REFERENCE SPECIFICATION		
Discharge	2" / 50 mm						
Power	1 HP / 0.75 kW						
Std. Head	6 m						
Std. Capacity	0.25 m³/min						
Volt	110 V	220 V	230 V	240 V			
Rated Current	10.8 A	5.4 A	5.2 A	5 A			
Pole / rpm	2 P / 2800 rpm						
Start Method	CAPACITOR						
Insulation Class	B						



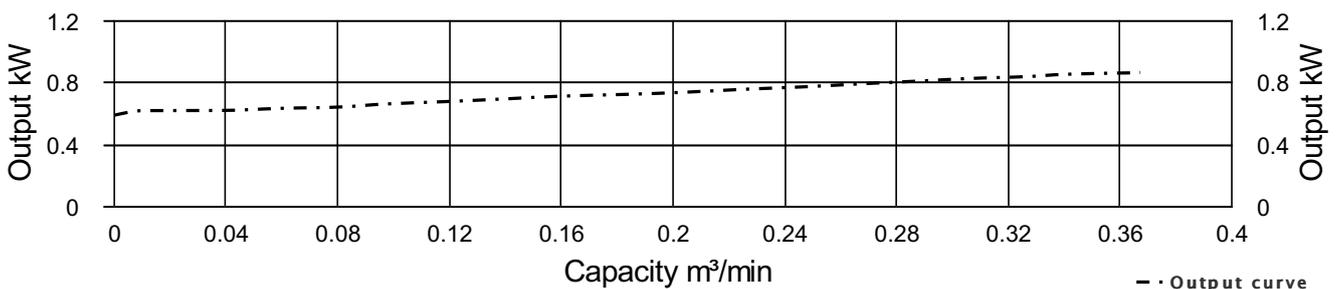
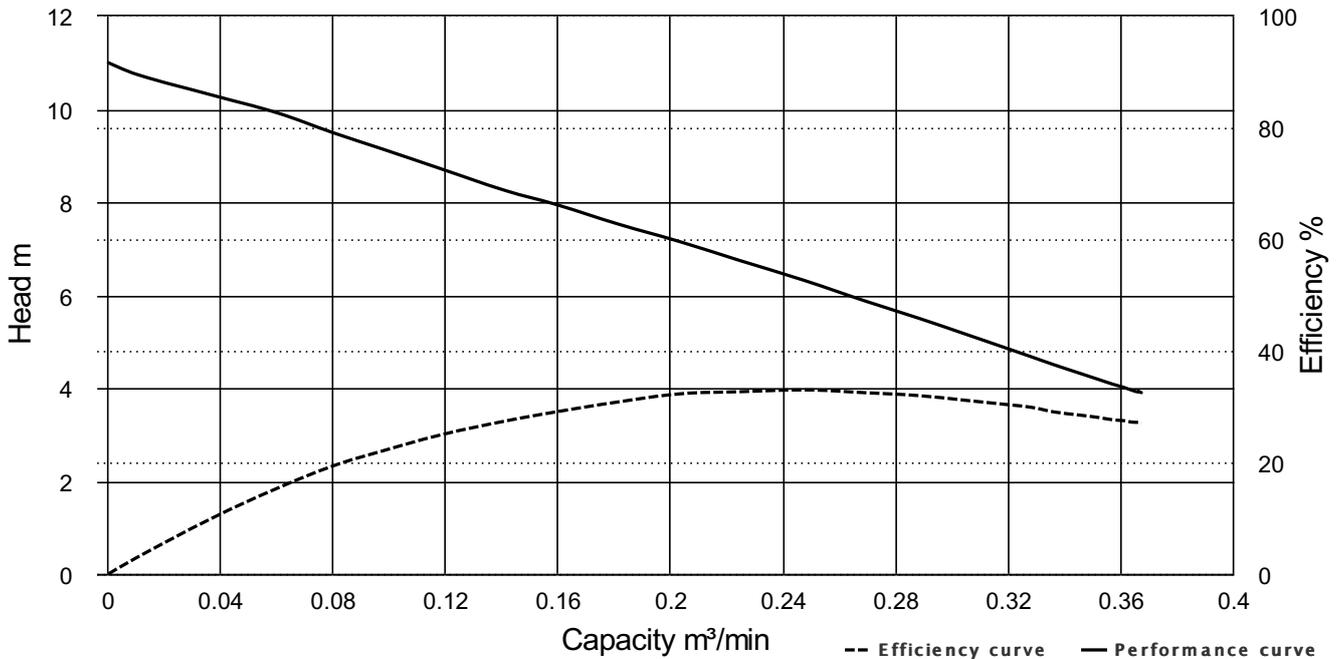
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HCP PUMP

PUMP PERFORMANCE CURVES

Model	F-21UL					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	2" / 50 mm						
Power	1 HP / 0.75 kW						
Std. Head	6 m						
Std. Capacity	0.25 m³/min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	3.5 A	2 A	1.9 A	1.9 A	1.5 A		
Pole / rpm	2 P / 2800 rpm						
Start Method	DOL						
Insulation Class	B						



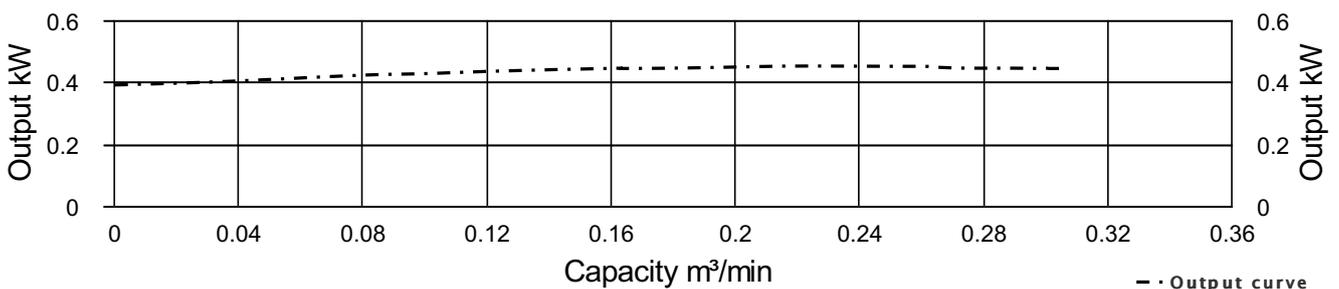
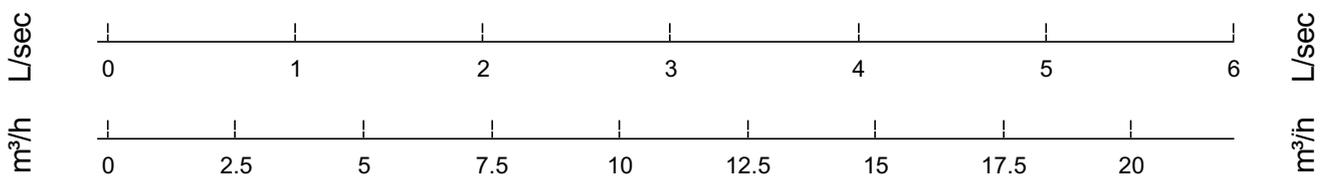
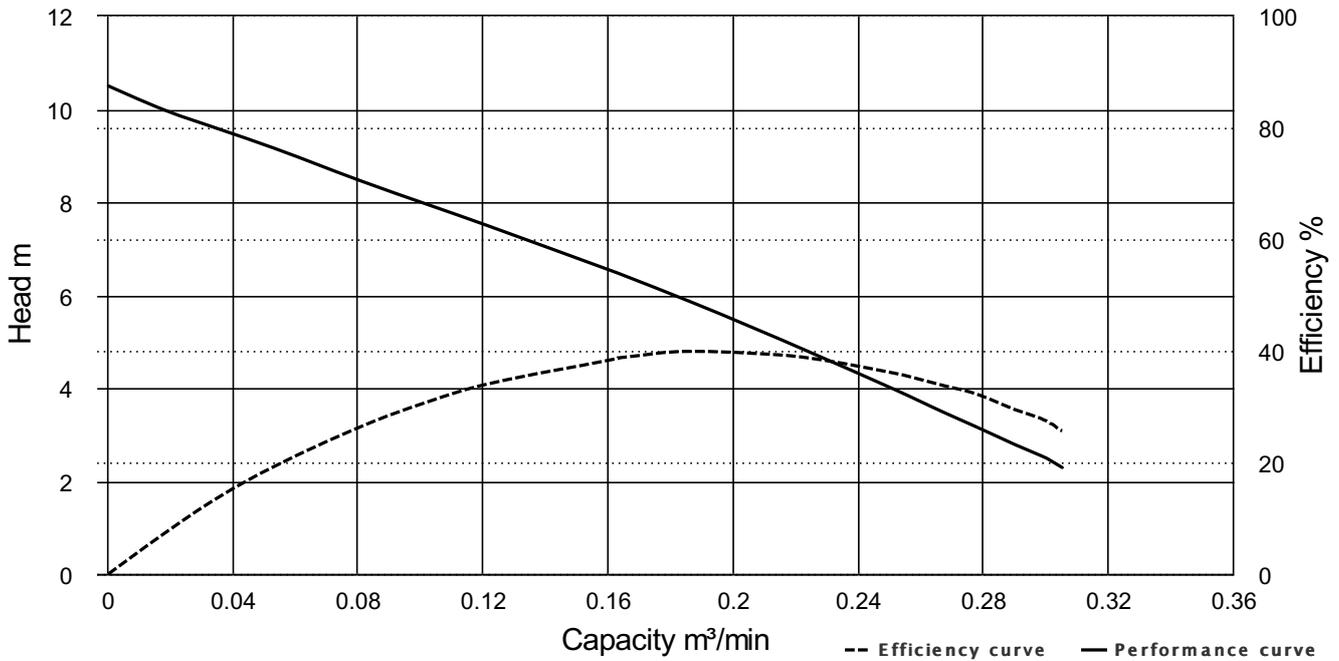
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	F-05P				Ver NO.	BA0407	
Frequency / Phase	50 Hz / 1 Ø				REFERENCE SPECIFICATION		
Discharge	2" / 50 mm						
Power	0.5 HP / 0.4 kW						
Std. Head	5.5 m						
Std. Capacity	0.2 m ³ /min						
Volt	110 V	220 V	230 V	240 V			
Rated Current	6.8 A	3.4 A	3.3 A	3.2 A			
Pole / rpm	2 P / 2780 rpm						
Start Method	CAPACITOR						
Insulation Class	B						



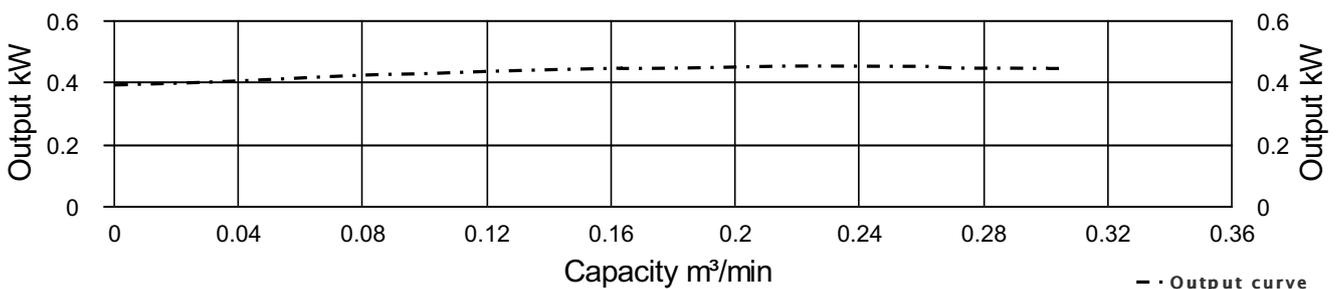
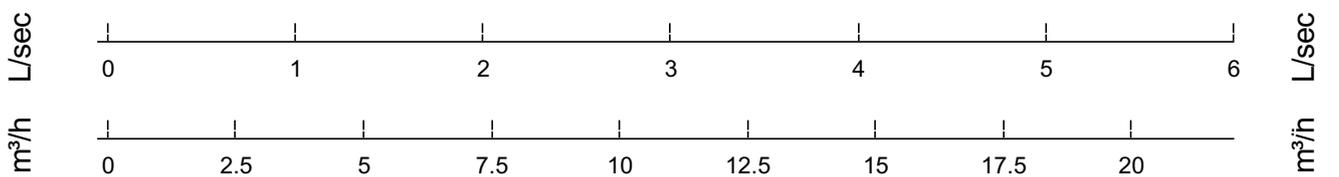
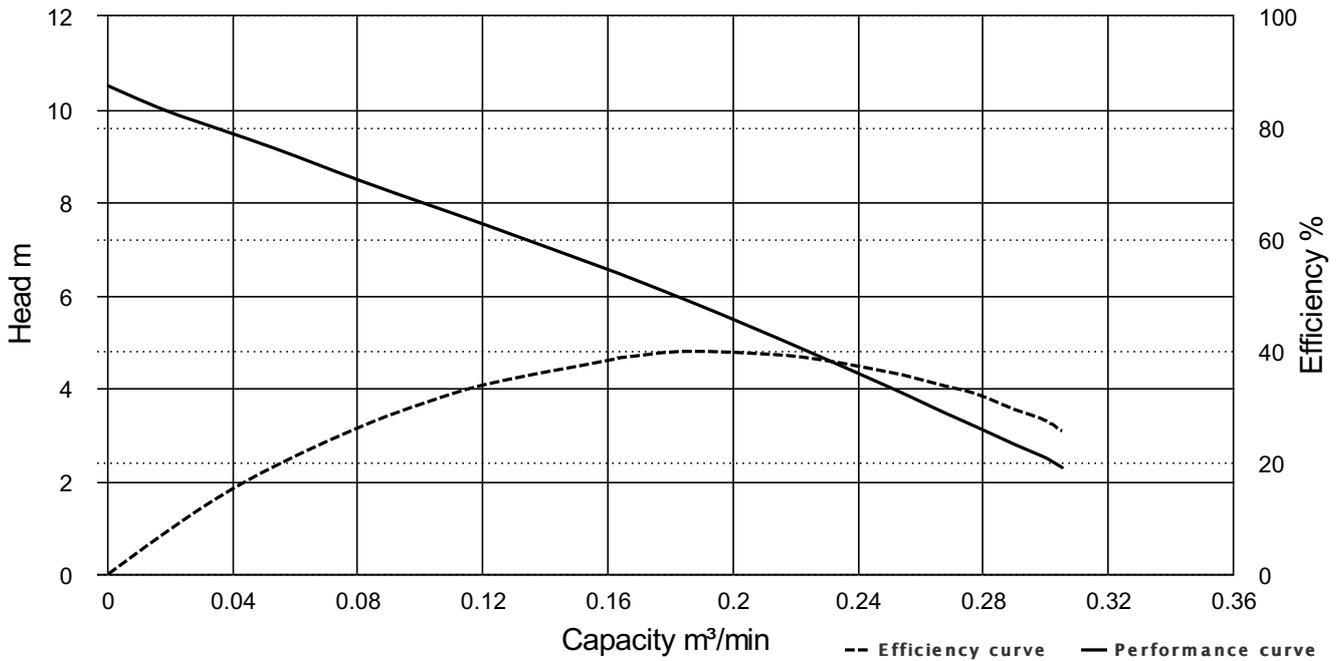
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	F-05P					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	2" / 50 mm						
Power	0.5 HP / 0.4 kW						
Std. Head	5.5 m						
Std. Capacity	0.2 m ³ /min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	2.4 A	1.4 A	1.3 A	1.3 A	1.1 A		
Pole / rpm	2 P / 2780 rpm						
Start Method	DOL						
Insulation Class	B						



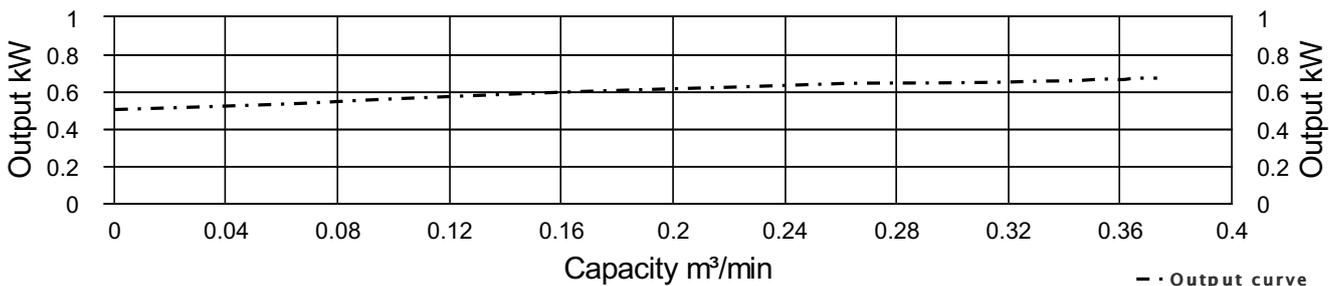
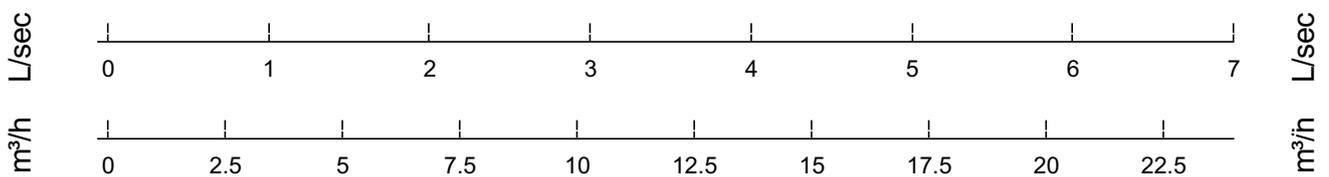
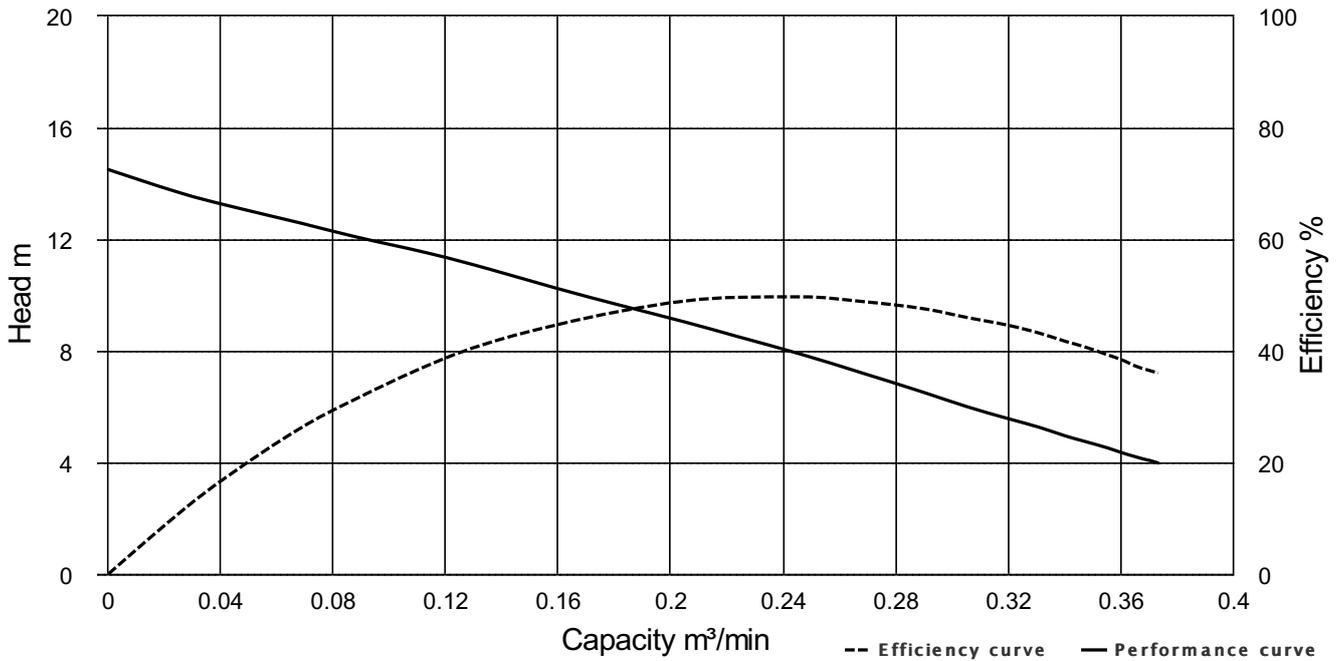
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	F-21P				Ver NO.	BA0407	
Frequency / Phase	50 Hz / 1 Ø				REFERENCE SPECIFICATION		
Discharge	2" / 50 mm						
Power	1 HP / 0.75 kW						
Std. Head	9 m						
Std. Capacity	0.2 m ³ /min						
Volt	110 V	220 V	230 V	240 V			
Rated Current	10.8 A	5.4 A	5.2 A	5 A			
Pole / rpm	2 P / 2800 rpm						
Start Method	CAPACITOR						
Insulation Class	B						



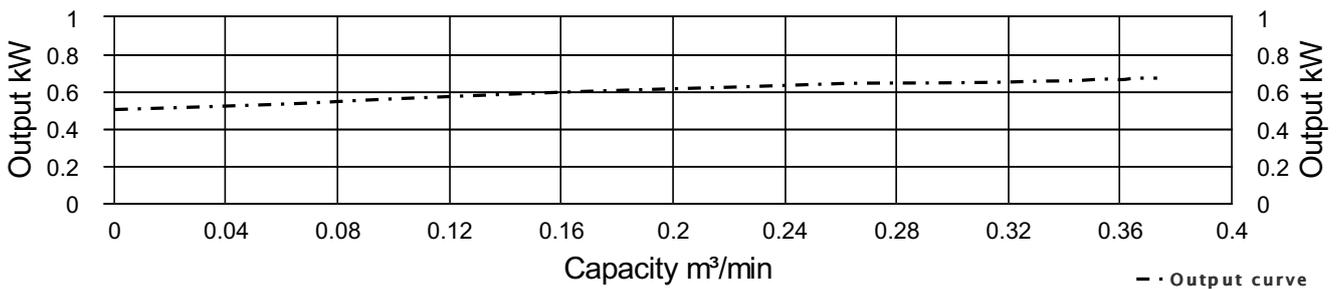
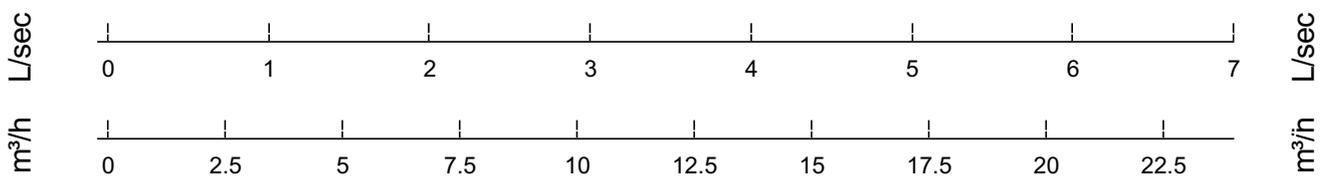
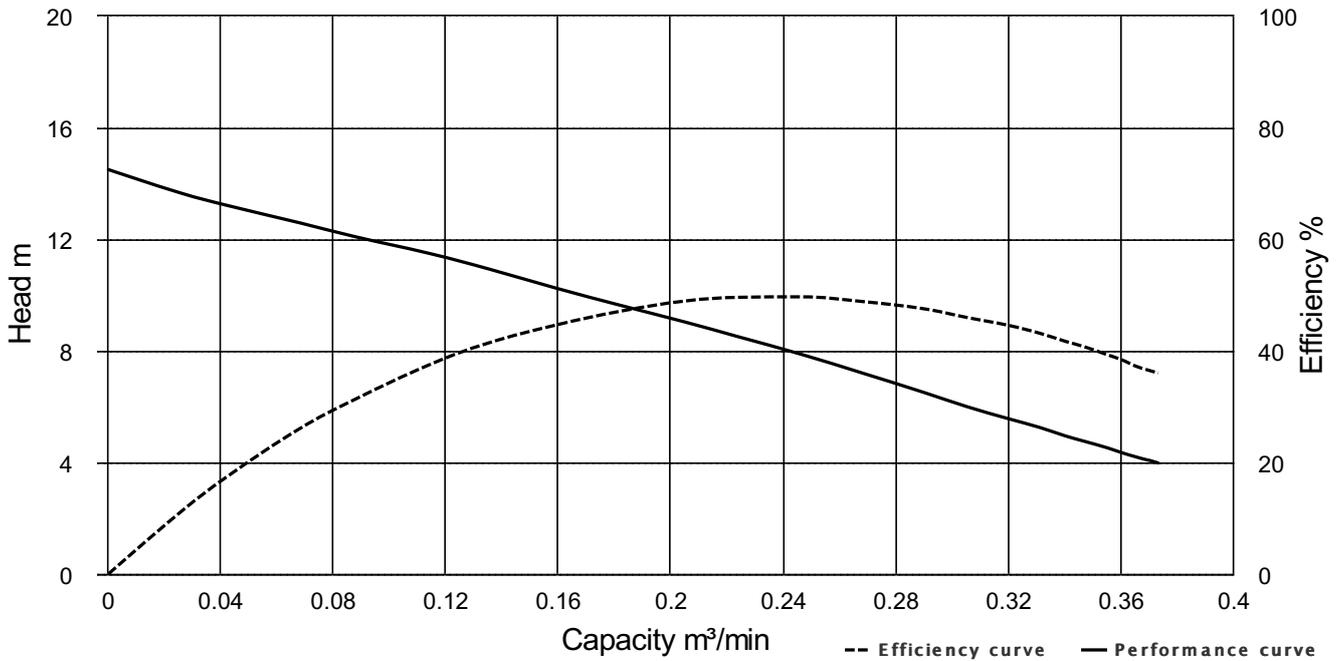
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	F-21P					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	2" / 50 mm						
Power	1 HP / 0.75 kW						
Std. Head	9 m						
Std. Capacity	0.2 m ³ /min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	3.5 A	2 A	1.9 A	1.9 A	1.5 A		
Pole / rpm	2 P / 2800 rpm						
Start Method	DOL						
Insulation Class	B						



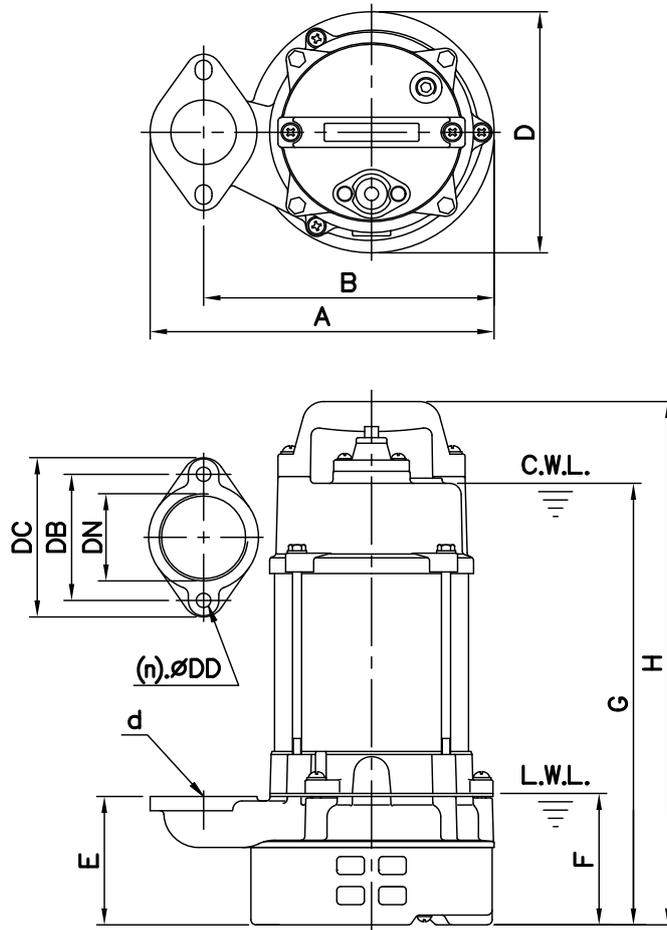
HCP PUMP MANUFACTURER CO., LTD.

DIMENSIONS

NO: S2F00205A12-00

MODEL: F-05A

1Ø



Flange	
Female Thread	
PF	NPT

Dimensions-mm

Weight:kg

Model	d	A	B	D	E	F	G	H	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
F-05A 1Ø	50	225	190	161	86	88	294	349	12	EF2-84	50	84	106	10	2	1

Dimensions-inch

Weight:lb

Model	d	A	B	D	E	F	G	H	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
F-05A 1Ø	2	8 ⁷ / ₈	7 ¹ / ₂	6 ⁵ / ₁₆	3 ³ / ₈	3 ⁷ / ₁₆	11 ¹ / ₁₆	13 ³ / ₄	26	EF2-84	2	3 ³ / ₁₆	4 ³ / ₁₆	3/ ₈	2	1

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

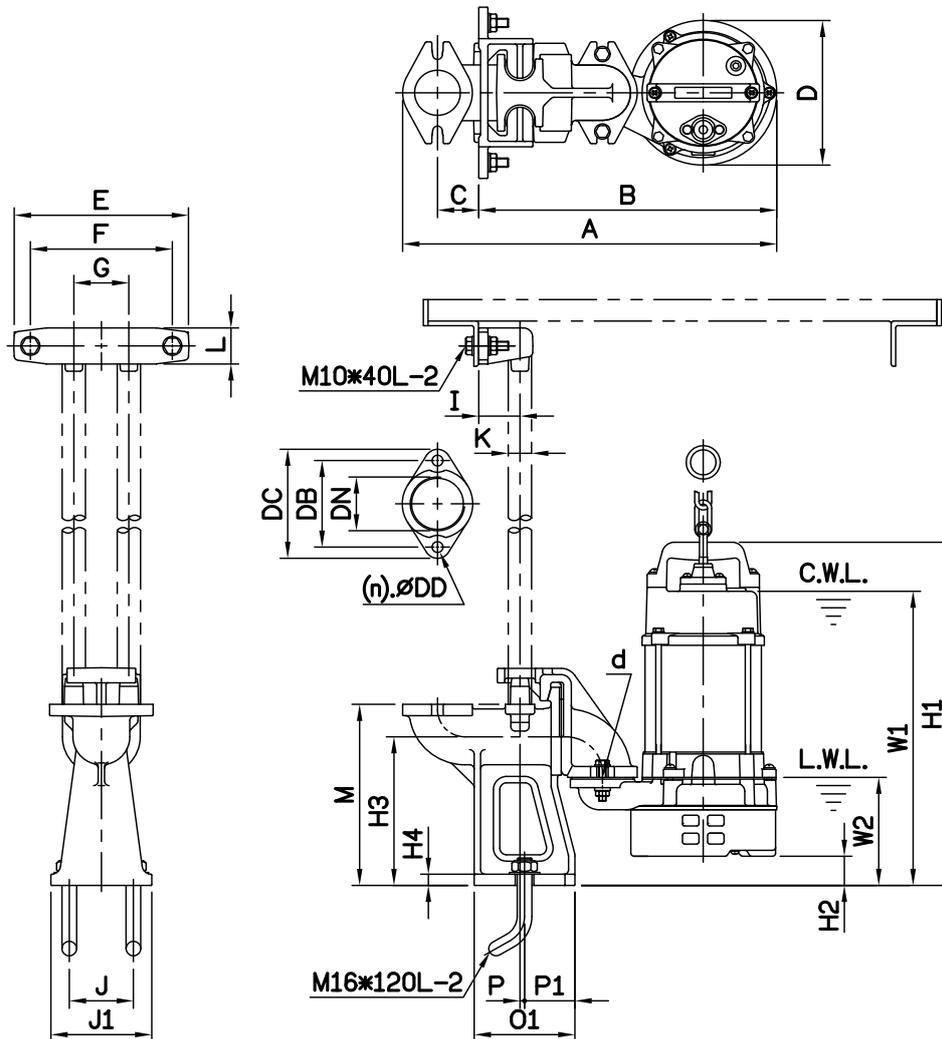
WT1:Pump Weight(Without Cable)
WT2:Elbow Set Weight

DIMENSIONS

NO: T2F00205A12-00

MODEL: F-05A

1Ø



Flange	
Female Thread	
PF	NPT

Dimensions-mm

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF2-96	50	96	121	12	2

Dimensions-inch

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF2-96	2	3 ³ / ₄	4 ³ / ₄	1/2	2

Dimensions-mm

Weight:kg

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	GRS Set	WT2
F-05A 1Ø	50	408	325	45	161	190	155	60	45	70	110	3/4"	40	201	110	5	55	327	120	381	33	165	13	12	T2-50	9

Dimensions-inch

Weight:lb

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	GRS Set	WT2
F-05A 1Ø	2	16 ¹ / ₁₆	12 ³ / ₁₆	1 ³ / ₄	6 ⁵ / ₁₆	7 ¹ / ₂	6 ³ / ₁₆	2 ³ / ₁₆	1 ³ / ₄	2 ³ / ₄	4 ⁵ / ₁₆	3/4	1 ⁹ / ₁₆	7 ¹⁵ / ₁₆	4 ¹ / ₁₆	3/16	2 ³ / ₁₆	12 ⁷ / ₁₆	4 ³ / ₄	15	1 ⁵ / ₁₆	6 ¹ / ₂	1/2	26	T2-50	19

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

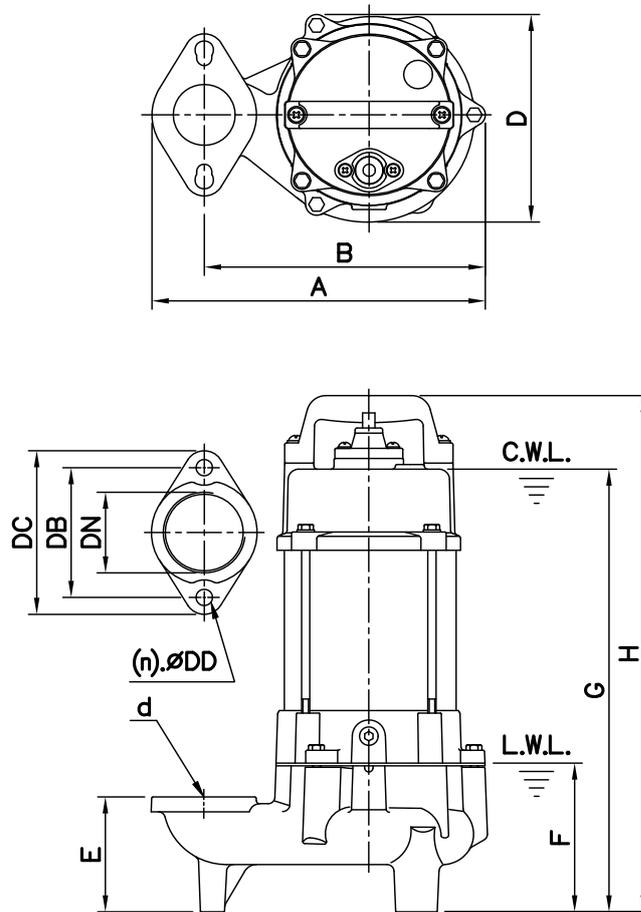
WT1:Pump Weight(Without Cable)
WT2:GRS Set Weight

DIMENSIONS

NO: S2F0U204010-00

MODEL: F-04U

50Hz 1Ø



Flange	
Female Thread	
PF	NPT

Dimensions-mm

Weight:kg

Model	d	A	B	D	E	F	G	H	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
F-04U 1Ø	50	243	205	154	85	110	328	382	15	EF2-96	50	96	121	12	2	1

Dimensions-inch

Weight:lb

Model	d	A	B	D	E	F	G	H	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
F-04U 1Ø	2	9 ⁹ / ₁₆	8 ¹ / ₁₆	6 ¹ / ₁₆	3 ³ / ₁₆	4 ³ / ₁₆	12 ⁵ / ₁₆	15 ¹ / ₁₆	33	EF2-96	2	3 ³ / ₄	4 ³ / ₄	½	2	2

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

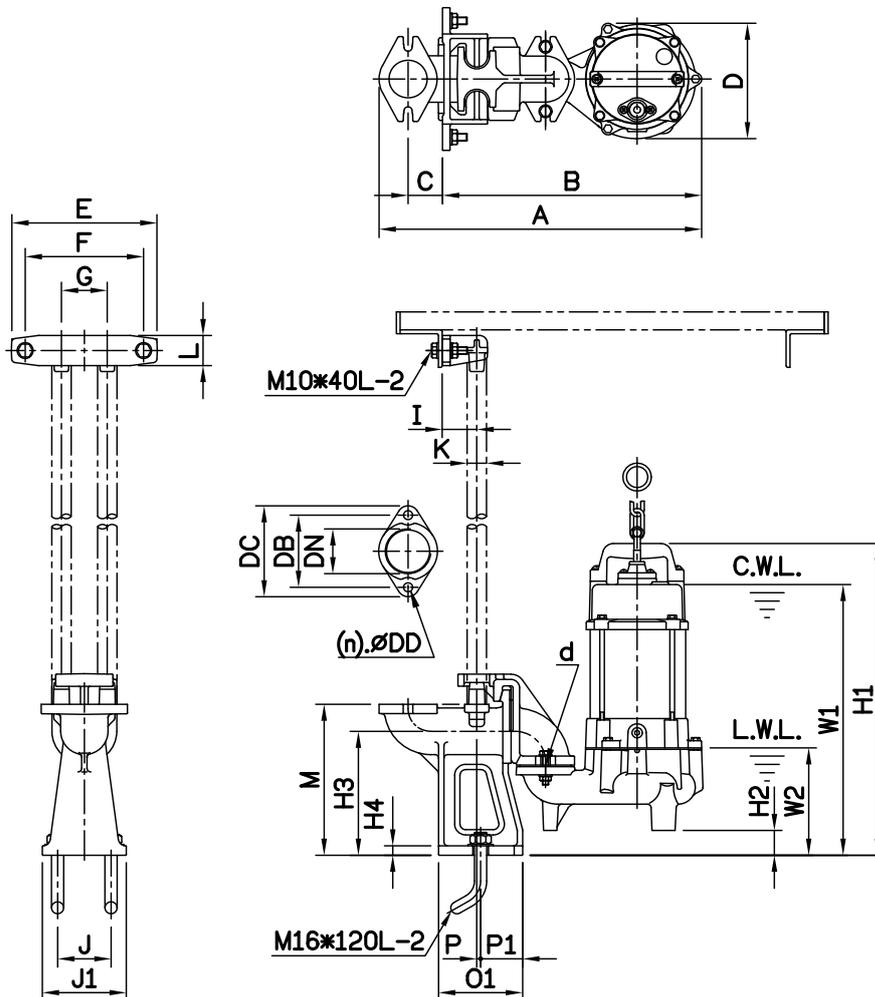
WT1:Pump Weight(Without Cable)
WT2:Elbow Set Weight

DIMENSIONS

NO: T2F0U204010-00

MODEL: F-04U

50Hz 1Ø



Flange	
Female Thread	
PF	NPT

Dimensions-mm

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF2-96	50	96	121	12	2

Dimensions-inch

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF2-96	2	3¾	4¾	½	2

Dimensions-mm

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	Weight:kg	
																									GRS Set	WT2
F-04U 1Ø	50	423	340	45	154	190	155	60	45	70	110	¾"	40	201	110	5	55	361	143	415	33	165	13	15	T2-50	9

Dimensions-inch

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	Weight:lb	
																									GRS Set	WT2
F-04U 1Ø	2	16¾	13¾	1¾	6 ⅙	7½	6 ⅙	2¾	1¾	2¾	4 ⅙	¾	1 ⅞	7 ⅞	4 ⅙	¾	2 ⅞	14 ⅜	5 ⅞	16 ⅞	1 ⅞	6 ½	½	33	T2-50	20

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

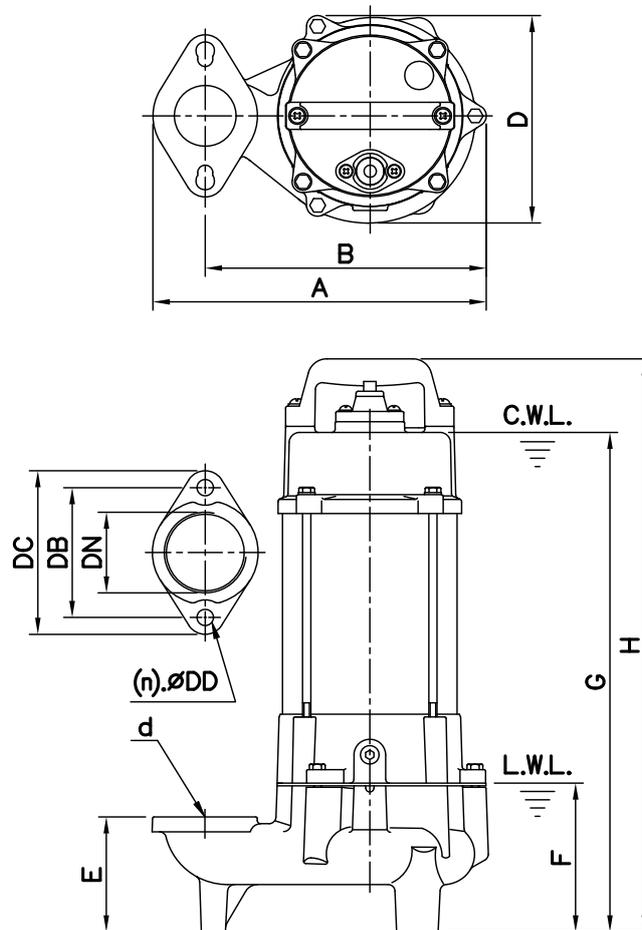
WT1:Pump Weight(Without Cable)
WT2:GRS Set Weight

DIMENSIONS

NO: S2F0U208032-01

MODEL: F-05U / 05UL / 21U / 21UL

1Ø / 3Ø



Flange	
Female Thread	
PF	NPT

Dimensions—mm

Weight:kg

Model	d	A	B	D	E	F	G	H	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
F-05U 1Ø	50	243	205	154	85	110	370	424	16	EF2-96	50	96	121	12	2	1
F-05U 3Ø	50	243	205	154	85	110	370	424	15	EF2-96	50	96	121	12	2	1
F-05UL 1Ø	50	243	205	164	110	135	395	449	17	EF2-96	50	96	121	12	2	1
F-05UL 3Ø	50	243	205	164	110	135	395	449	16	EF2-96	50	96	121	12	2	1
F-21U 1Ø	50	243	205	154	85	110	370	424	17	EF2-96	50	96	121	12	2	1
F-21U 3Ø	50	243	205	154	85	110	370	424	16	EF2-96	50	96	121	12	2	1
F-21UL 1Ø	50	243	205	164	110	135	395	449	18	EF2-96	50	96	121	12	2	1
F-21UL 3Ø	50	243	205	164	110	135	395	449	17	EF2-96	50	96	121	12	2	1

Dimensions—inch

Weight:lb

Model	d	A	B	D	E	F	G	H	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
F-05U 1Ø	2	9 ⁹ / ₁₆	8 ¹ / ₁₆	6 ¹ / ₁₆	3 ³ / ₈	4 ⁵ / ₁₆	4 ⁹ / ₁₆	16 ¹¹ / ₁₆	35	EF2-96	2	3 ³ / ₄	4 ³ / ₄	½	2	2
F-05U 3Ø	2	9 ⁹ / ₁₆	8 ¹ / ₁₆	6 ¹ / ₁₆	3 ³ / ₈	4 ⁵ / ₁₆	4 ⁹ / ₁₆	16 ¹¹ / ₁₆	33	EF2-96	2	3 ³ / ₄	4 ³ / ₄	½	2	2
F-05UL 1Ø	2	9 ⁹ / ₁₆	8 ³ / ₁₆	6 ⁷ / ₁₆	4 ⁷ / ₁₆	5 ⁵ / ₁₆	15 ⁹ / ₁₆	17 ¹¹ / ₁₆	37	EF2-96	2	3 ³ / ₄	4 ³ / ₄	½	2	2
F-05UL 3Ø	2	9 ⁹ / ₁₆	8 ¹ / ₁₆	6 ⁷ / ₁₆	4 ⁷ / ₁₆	5 ⁵ / ₁₆	15 ⁹ / ₁₆	17 ¹¹ / ₁₆	35	EF2-96	2	3 ³ / ₄	4 ³ / ₄	½	2	2
F-21U 1Ø	2	9 ⁹ / ₁₆	8 ¹ / ₁₆	6 ¹ / ₁₆	3 ³ / ₈	4 ⁵ / ₁₆	4 ⁹ / ₁₆	16 ¹¹ / ₁₆	37	EF2-96	2	3 ³ / ₄	4 ³ / ₄	½	2	2
F-21U 3Ø	2	9 ⁹ / ₁₆	8 ¹ / ₁₆	6 ¹ / ₁₆	3 ³ / ₈	4 ⁵ / ₁₆	4 ⁹ / ₁₆	16 ¹¹ / ₁₆	35	EF2-96	2	3 ³ / ₄	4 ³ / ₄	½	2	2
F-21UL 1Ø	2	9 ⁹ / ₁₆	8 ¹ / ₁₆	6 ⁷ / ₁₆	4 ⁷ / ₁₆	5 ⁵ / ₁₆	15 ⁹ / ₁₆	17 ¹¹ / ₁₆	40	EF2-96	2	3 ³ / ₄	4 ³ / ₄	½	2	2
F-21UL 3Ø	2	9 ⁹ / ₁₆	8 ¹ / ₁₆	6 ⁷ / ₁₆	4 ⁷ / ₁₆	5 ⁵ / ₁₆	15 ⁹ / ₁₆	17 ¹¹ / ₁₆	37	EF2-96	2	3 ³ / ₄	4 ³ / ₄	½	2	2

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

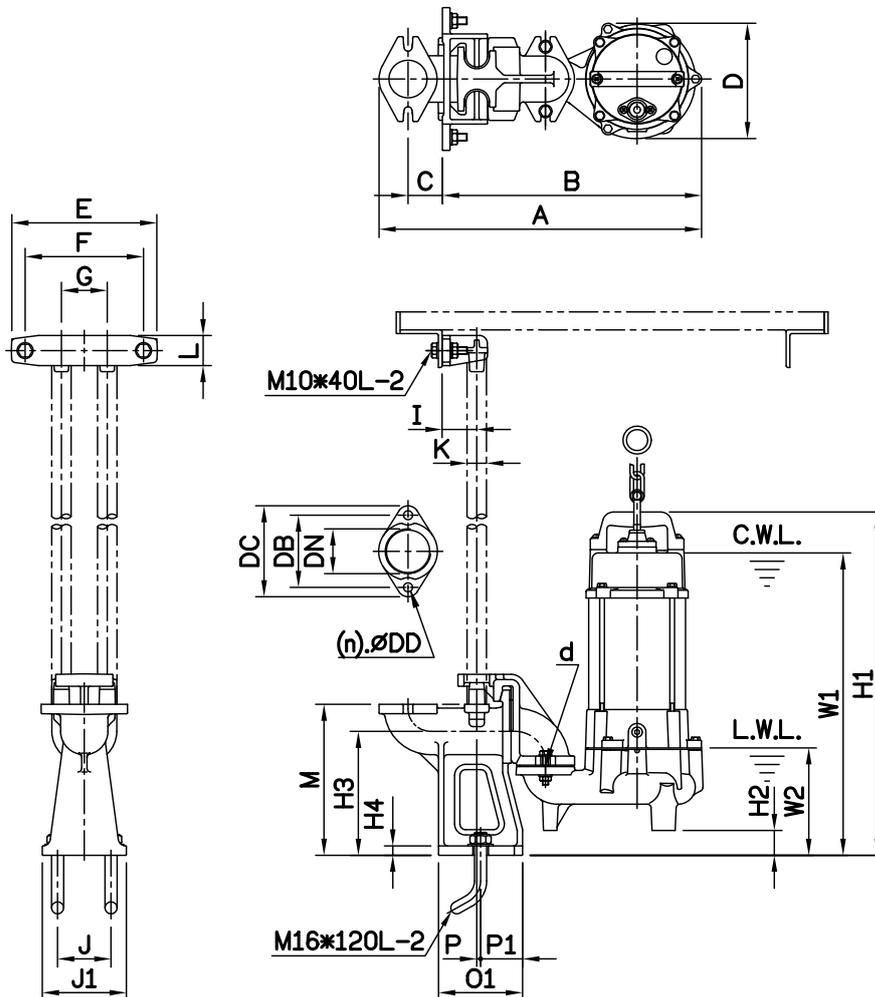
WT1:Pump Weight(Without Cable)
WT2:Elbow Set Weight

DIMENSIONS

NO: T2F0U208032-01

MODEL: F-05U / 05UL / 21U / 21UL

1Ø / 3Ø



Flange	
Female Thread	
PF	NPT

Dimensions-mm

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF2-96	50	96	121	12	2

Dimensions-inch

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF2-96	2	3 3/4	4 3/4	1/2	2

Dimensions-mm

Model	d	Dimensions-mm																			Weight:kg					
		A	B	C	D	E	F	G	I	J	J1	K	L	M	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	GRS Set	WT2
F-05U 1Ø	50	423	340	45	154	190	155	60	45	70	110	3/4"	40	201	110	5	55	403	143	457	33	165	13	16	T2-50	9
F-05U 3Ø	50	423	340	45	154	190	155	60	45	70	110	3/4"	40	201	110	5	55	403	143	457	33	165	13	15	T2-50	9
F-05UL 1Ø	50	423	340	45	164	190	155	60	45	70	110	3/4"	40	201	110	5	55	403	143	457	8	165	13	17	T2-50	9
F-05UL 3Ø	50	423	340	45	164	190	155	60	45	70	110	3/4"	40	201	110	5	55	403	143	457	8	165	13	16	T2-50	9
F-21U 1Ø	50	423	340	45	154	190	155	60	45	70	110	3/4"	40	201	110	5	55	403	143	457	33	165	13	17	T2-50	9
F-21U 3Ø	50	423	340	45	154	190	155	60	45	70	110	3/4"	40	201	110	5	55	403	143	457	33	165	13	16	T2-50	9
F-21UL 1Ø	50	423	340	45	164	190	155	60	45	70	110	3/4"	40	201	110	5	55	403	143	457	8	165	13	18	T2-50	9
F-21UL 3Ø	50	423	340	45	164	190	155	60	45	70	110	3/4"	40	201	110	5	55	403	143	457	8	165	13	17	T2-50	9

Dimensions-inch

Model	d	Dimensions-inch																			Weight:lb					
		A	B	C	D	E	F	G	I	J	J1	K	L	M	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	GRS Set	WT2
F-05U 1Ø	2	16 5/8	13 3/8	1 3/4	6 1/8	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 1/16	7 15/16	4 5/16	3/16	2 1/16	15 7/8	5 5/8	18	1 5/16	6 1/2	1/2	35	T2-50	20
F-05U 3Ø	2	16 5/8	13 3/8	1 3/4	6 1/8	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 1/16	7 15/16	4 5/16	3/16	2 1/16	15 7/8	5 5/8	18	1 5/16	6 1/2	1/2	33	T2-50	20
F-05UL 1Ø	2	16 5/8	13 3/8	1 3/4	6 1/8	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 1/16	7 15/16	4 5/16	3/16	2 1/16	15 7/8	5 5/8	18	5/16	6 1/2	1/2	37	T2-50	20
F-05UL 3Ø	2	16 5/8	13 3/8	1 3/4	6 1/8	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 1/16	7 15/16	4 5/16	3/16	2 1/16	15 7/8	5 5/8	18	5/16	6 1/2	1/2	35	T2-50	20
F-21U 1Ø	2	16 5/8	13 3/8	1 3/4	6 1/8	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 1/16	7 15/16	4 5/16	3/16	2 1/16	15 7/8	5 5/8	18	1 5/16	6 1/2	1/2	37	T2-50	20
F-21U 3Ø	2	16 5/8	13 3/8	1 3/4	6 1/8	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 1/16	7 15/16	4 5/16	3/16	2 1/16	15 7/8	5 5/8	18	1 5/16	6 1/2	1/2	35	T2-50	20
F-21UL 1Ø	2	16 5/8	13 3/8	1 3/4	6 1/8	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 1/16	7 15/16	4 5/16	3/16	2 1/16	15 7/8	5 5/8	18	5/16	6 1/2	1/2	40	T2-50	20
F-21UL 3Ø	2	16 5/8	13 3/8	1 3/4	6 1/8	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 1/16	7 15/16	4 5/16	3/16	2 1/16	15 7/8	5 5/8	18	5/16	6 1/2	1/2	37	T2-50	20

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

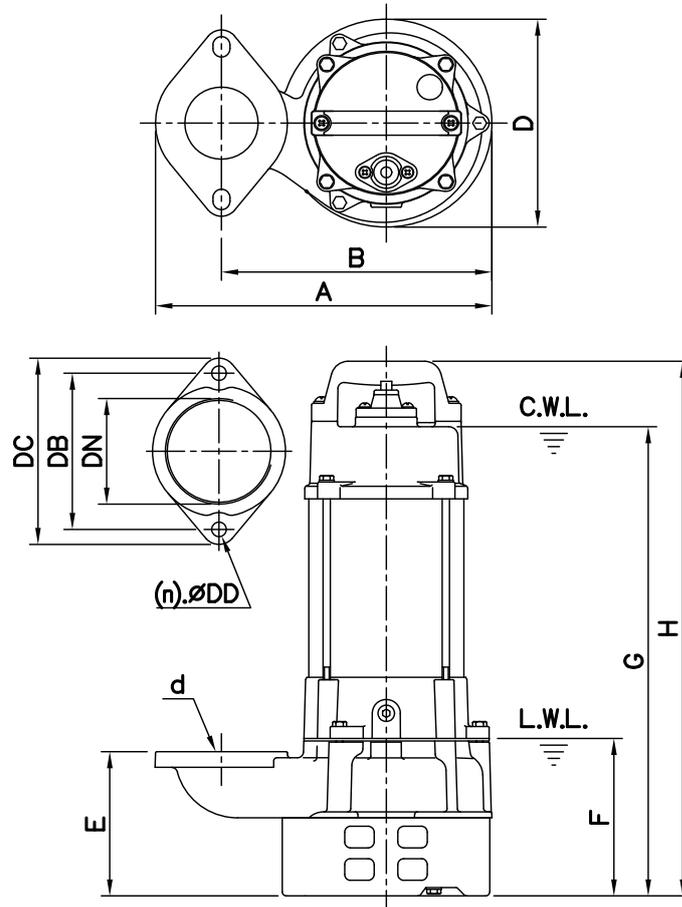
WT1:Pump Weight(Without Cable)
WT2:GRS Set Weight

DIMENSIONS

NO: S3F0U208032-02

MODEL: F-31U

1Ø / 3Ø



Flange	
Female Thread	
PF	NPT

Dimensions-mm

Weight:kg

Model	d	A	B	D	E	F	G	H	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
F-31U 1Ø	80	276	222	173	120	131	391	445	18	EF3-130	80	130	155	12	2	1
F-31U 3Ø	80	276	222	173	120	131	391	445	17	EF3-130	80	130	155	12	2	1

Dimensions-inch

Weight:lb

Model	d	A	B	D	E	F	G	H	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
F-31U 1Ø	3	10 ⁷ / ₈	8 ³ / ₄	6 ¹³ / ₁₆	4 ³ / ₄	5 ³ / ₁₆	15 ³ / ₈	17 ¹ / ₂	40	EF3-130	3	5 ¹ / ₈	6 ¹ / ₈	½	2	2
F-31U 3Ø	3	10 ⁷ / ₈	8 ³ / ₄	6 ¹³ / ₁₆	4 ³ / ₄	5 ³ / ₁₆	15 ³ / ₈	17 ¹ / ₂	37	EF3-130	3	5 ¹ / ₈	6 ¹ / ₈	½	2	2

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

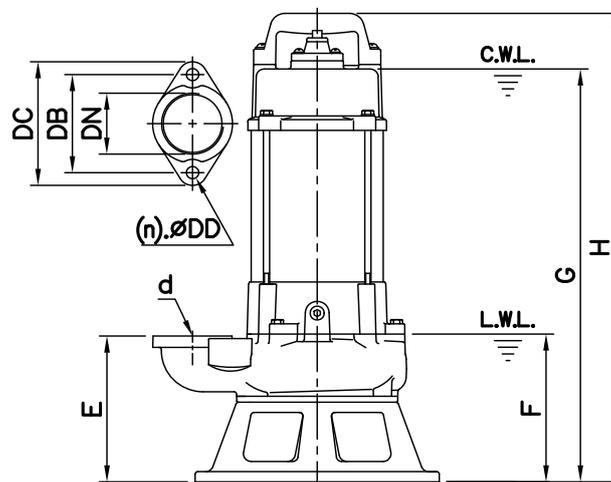
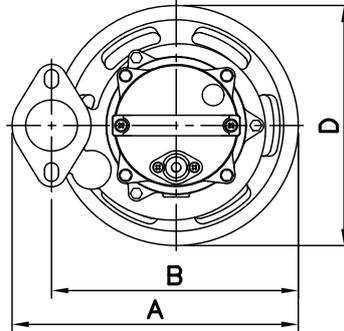
WT1:Pump Weight(Without Cable)
WT2:Elbow Set Weight

DIMENSIONS

NO: S2F0P208030-00

MODEL: F-05P / 21P

50Hz 1Ø / 3Ø



Flange	
Female Thread	
PF	NPT

Dimensions-mm

Weight:kg

Model	d	A	B	D	E	F	G	H	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
F-05P 1Ø	50	276	238	235	143	145	404	459	16	EF2-96	50	96	121	12	2	1
F-05P 3Ø	50	276	238	235	143	145	404	459	15	EF2-96	50	96	121	12	2	1
F-21P 1Ø	50	276	238	235	143	145	404	459	20	EF2-96	50	96	121	12	2	1
F-21P 3Ø	50	276	238	235	143	145	404	459	19	EF2-96	50	96	121	12	2	1

Dimensions-inch

Weight:lb

Model	d	A	B	D	E	F	G	H	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
F-05P 1Ø	2	10 ⁷ / ₈	9 ³ / ₈	9 ³ / ₄	5 ⁵ / ₈	5 ⁷ / ₈	15 ⁷ / ₈	18 ¹ / ₈	35	EF2-96	2	3 ³ / ₄	4 ³ / ₄	1/2	2	1
F-05P 3Ø	2	10 ⁷ / ₈	9 ³ / ₈	9 ³ / ₄	5 ⁵ / ₈	5 ⁷ / ₈	15 ⁷ / ₈	18 ¹ / ₈	33	EF2-96	2	3 ³ / ₄	4 ³ / ₄	1/2	2	1
F-21P 1Ø	2	10 ⁷ / ₈	9 ³ / ₈	9 ³ / ₄	5 ⁵ / ₈	5 ⁷ / ₈	15 ⁷ / ₈	18 ¹ / ₈	44	EF2-96	2	3 ³ / ₄	4 ³ / ₄	1/2	2	1
F-21P 3Ø	2	10 ⁷ / ₈	9 ³ / ₈	9 ³ / ₄	5 ⁵ / ₈	5 ⁷ / ₈	15 ⁷ / ₈	18 ¹ / ₈	42	EF2-96	2	3 ³ / ₄	4 ³ / ₄	1/2	2	1

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

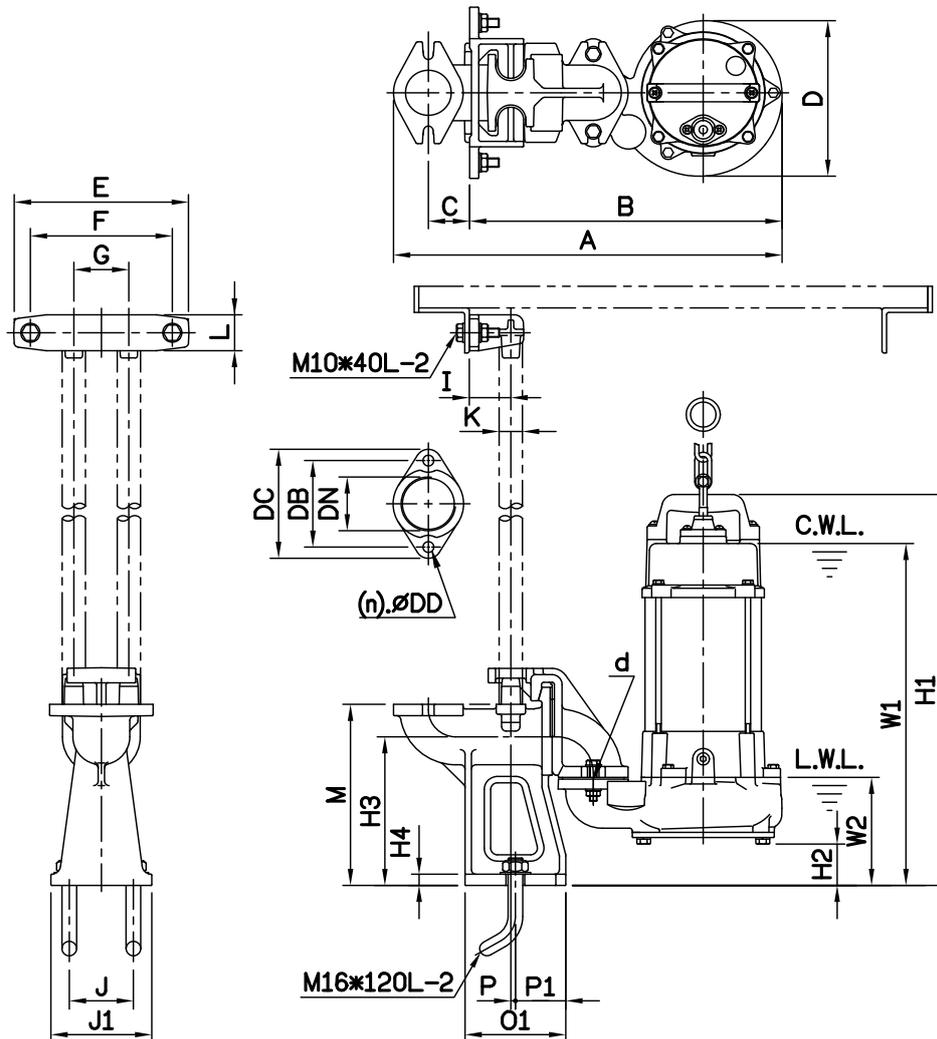
WT1:Pump Weight(Without Cable)
WT2:Elbow Set Weight

DIMENSIONS

NO: T2F0P208030-00

MODEL: F-05P / 21P

50Hz 1Ø / 3Ø



Flange	
Female Thread	
PF	NPT

Dimensions-mm

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF2-96	50	96	121	12	2

Dimensions-inch

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF2-96	2	3 3/4	4 3/4	1/2	2

Dimensions-mm

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	Weight:kg	
																									GRS Set	WT2
F-05P 1Ø	50	424	341	45	173	190	155	60	45	70	110	3/4"	40	201	110	5	55	380	120	434	46	165	13	13	T2-50	9
F-05P 3Ø	50	424	341	45	173	190	155	60	45	70	110	3/4"	40	201	110	5	55	380	120	434	46	165	13	12	T2-50	9
F-21P 1Ø	50	424	341	45	173	190	155	60	45	70	110	3/4"	40	201	110	5	55	380	120	434	46	165	13	18	T2-50	9
F-21P 3Ø	50	424	341	45	173	190	155	60	45	70	110	3/4"	40	201	110	5	55	380	120	434	46	165	13	17	T2-50	9

Dimensions-inch

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	Weight:lb	
																									GRS Set	WT2
F-05P 1Ø	2	16 5/16	13 3/16	1 3/4	6 3/16	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 9/16	7 9/16	4 1/16	3/16	2 3/16	14 1/2	4 3/4	17 1/16	1 13/16	6 1/2	1/2	29	T2-50	19
F-05P 3Ø	2	16 5/16	13 3/16	1 3/4	6 3/16	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 9/16	7 9/16	4 1/16	3/16	2 3/16	14 1/2	4 3/4	17 1/16	1 13/16	6 1/2	1/2	26	T2-50	19
F-21P 1Ø	2	16 5/16	13 3/16	1 3/4	6 3/16	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 9/16	7 9/16	4 1/16	3/16	2 3/16	14 1/2	4 3/4	17 1/16	1 13/16	6 1/2	1/2	40	T2-50	19
F-21P 3Ø	2	16 5/16	13 3/16	1 3/4	6 3/16	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 9/16	7 9/16	4 1/16	3/16	2 3/16	14 1/2	4 3/4	17 1/16	1 13/16	6 1/2	1/2	37	T2-50	19

Remark: Removing strainer before installing connecting with Guide rail system.
 C.W.L.:Continuous Running Water Level WT1:Pump Weight(Without Cable)
 L.W.L.:Lowest Running Water Level WT2:GRS Set Weight



Professionalism • Innovation • Service • Commitment

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FN SERIES

SUBMERSIBLE SEWAGE / EFFLUENT PUMPS

POWER : 2~5HP (1.5~3.7kW)

MAX.HEAD : 26.5m(87feet)

MAX.FLOW : 1.4m³/min (84m³/h)



PRODUCT NOMENCLATURE

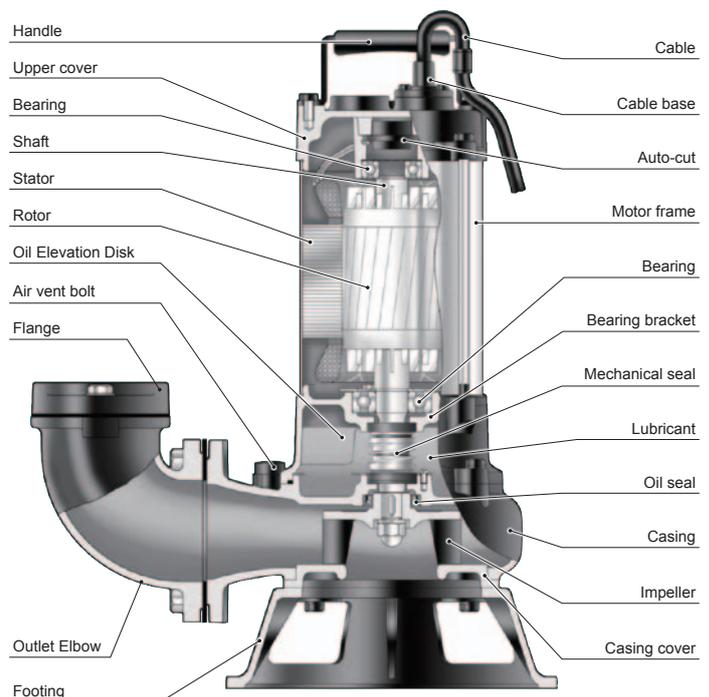
Example : FN – 3 3 U L
Type Discharge inch HP Impeller type Larger solid handling

FEATURE

- U/P type impellers are designed to meet the various different operating ranges in wastewater applications.
- FN-UL non-clog models, capable passing larger solid.
- HCP's professional assembly line, complimented with a synthetic production test to ensure each IP68 motor with highest level of final pump quality.
- Oil Elevation Disk design in the oil chamber to ensure the mechanical seals lubrication and to extend the service life of pump.
- Standard accessories include : cable with an epoxy resin sealed waterresistant cable base, Auto-cut Protector, double mechanical seals, Food grade lubricant and lip seal design.

APPLICATIONS

- Drainage of sewage from the building basements, hotel industry, and waste water from factories.
- Drainage of sewage from industrial process factories.
- Emptying of septic tanks, cesspits and sewage pump stations.
- Pumping surface and drainage water from garages and sprinkler systems.



FN SERIES SUBMERSIBLE SEWAGE / EFFLUENT PUMPS

FN-22U · FN-32U · FN-33U · FN-35U

SPECIFICATIONS

Item		Description
Limits of Use	Liquid Temp.	0~40°C(32~104°F)
	Applications	General wastewater Sewage and Industrial water
Type	Frequency	50Hz
	Motor	2P(3000rpm) · Dry Motor
	Insulation	Class F
	Protection	IP68
	Protector	Auto-cut
	Bearing	Ball type
	M.seal	Double M.seals
	Impeller	Vortex
Material	Upper Cover	FC200
	Motor Frame	SUS304
	Shaft	SUS403
	M.seal	CA/CE & SiC/SiC
	Casing	FC200
	Impeller	FC200
	Footing	FC200
	Cable	VCT or H07RN-F or SJOW/SOW
Optional	-	



FN-22U



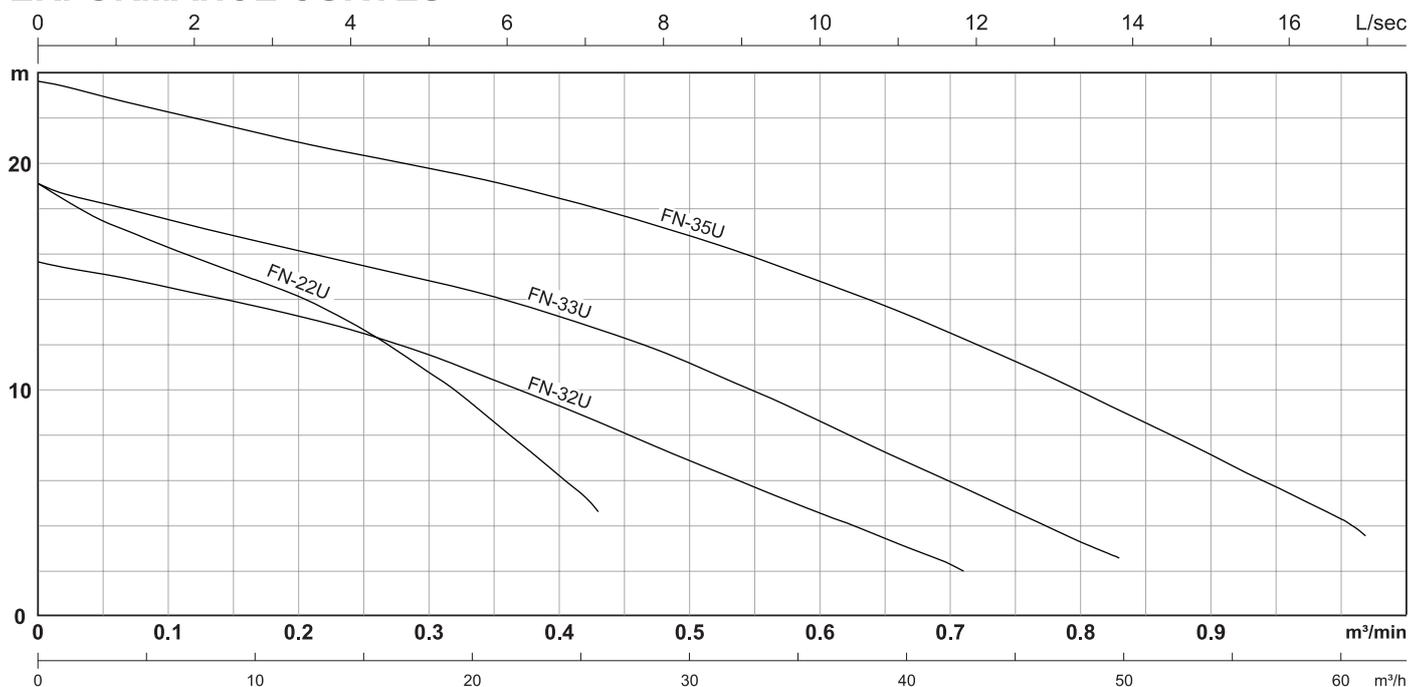
FN-32U · FN-33U · FN-35U



U Type Vortex Impeller

Model	Power HP(kW)	Discharge inch(mm)	Standard		MAX		Solid Passage mm(inch)	Weight(W/O Cable)		Phase Voltage	1Ø	1Ø	3Ø	3Ø	3Ø	3Ø	3Ø
			m-m³/min	m-m³/h	m-m³/min	m-m³/h		1Ø-kg(lbs)	3Ø-kg(lbs)		220V	230V	230V	380V	400V	415V	525V
FN-22U	2(1.5)	2"(50)	14-0.2	14-12	19-0.45	19-27	35(1 3/8")	30 (66)	25 (55)	Full load Ampere	10.2	10.0	6.2	3.6	3.4	3.4	2.7
FN-32U	2(1.5)	3"(80)	8.5-0.4	8.5-24	15.5-0.75	15.5-45	50(2")	32 (71)	28 (62)		10.2	10.0	6.2	3.6	3.4	3.4	2.7
FN-33U	3(2.2)	3"(80)	12.5-0.4	12.5-24	19-0.85	19-51	50(2")	35 (77)	30 (66)		15.0	14.6	8.8	5.0	4.8	4.8	3.8
FN-35U	5(3.7)	3"(80)	16.5-0.5	16.5-30	23.5-1.05	23.5-63	50(2")	-	33 (73)		-	-	14.3	8.3	7.8	7.8	6.2

PERFORMANCE CURVES



Model	Power HP(kW)	Discharge inch(mm)	Q:m³/min	Q:L/sec															
				0.1	0.2	0.3	0.4	0.5	0.6	0.8	1.0	2	4	6	8	10	12	14	16
FN-22U	2 (1.5)	2" (50)	Q:m³/h	6	12	18	24	30	36	48	60	H:m	16.1	12.8	8.0	-	-	-	-
FN-32U	2 (1.5)	3" (80)	16.5	13.9	10.6	6.0	-	-	-	-	14.3		12.6	10.1	7.3	4.6	-	-	-
FN-33U	3 (2.2)	3" (80)	14.5	13.2	11.5	9.3	6.8	4.6	-	-	17.4		15.8	13.8	11.5	8.6	5.4	-	-
FN-35U	5 (3.7)	3" (80)	17.6	16.3	14.8	13.1	11.0	8.6	3.2	-	22.0		20.5	19.0	17.1	14.8	12.0	8.8	5.4

FN SERIES SUBMERSIBLE SEWAGE / EFFLUENT PUMPS

FN-22UL · FN-32UL · FN-33UL · FN-35UL

SPECIFICATIONS

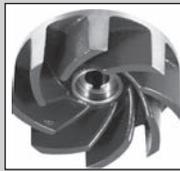
Item		Description
Limits of Use	Liquid Temp.	0~40°C(32~104°F)
	Applications	General wastewater Sewage and Industrial water
Type	Frequency	50Hz
	Motor	2P(3000rpm) · Dry Motor
	Insulation	Class F
	Protection	IP68
	Protector	Auto-cut
	Bearing	Ball type
	M.seal	Double M.seals
	Impeller	Vortex
Material	Upper Cover	FC200
	Motor Frame	SUS304
	Shaft	SUS403
	M.seal	CA/CE & SiC/SiC
	Casing	FC200
	Impeller	FC200
	Footing	FC200
	Cable	VCT or H07RN-F or SJOW/SOW
	Optional	—



FN-22UL



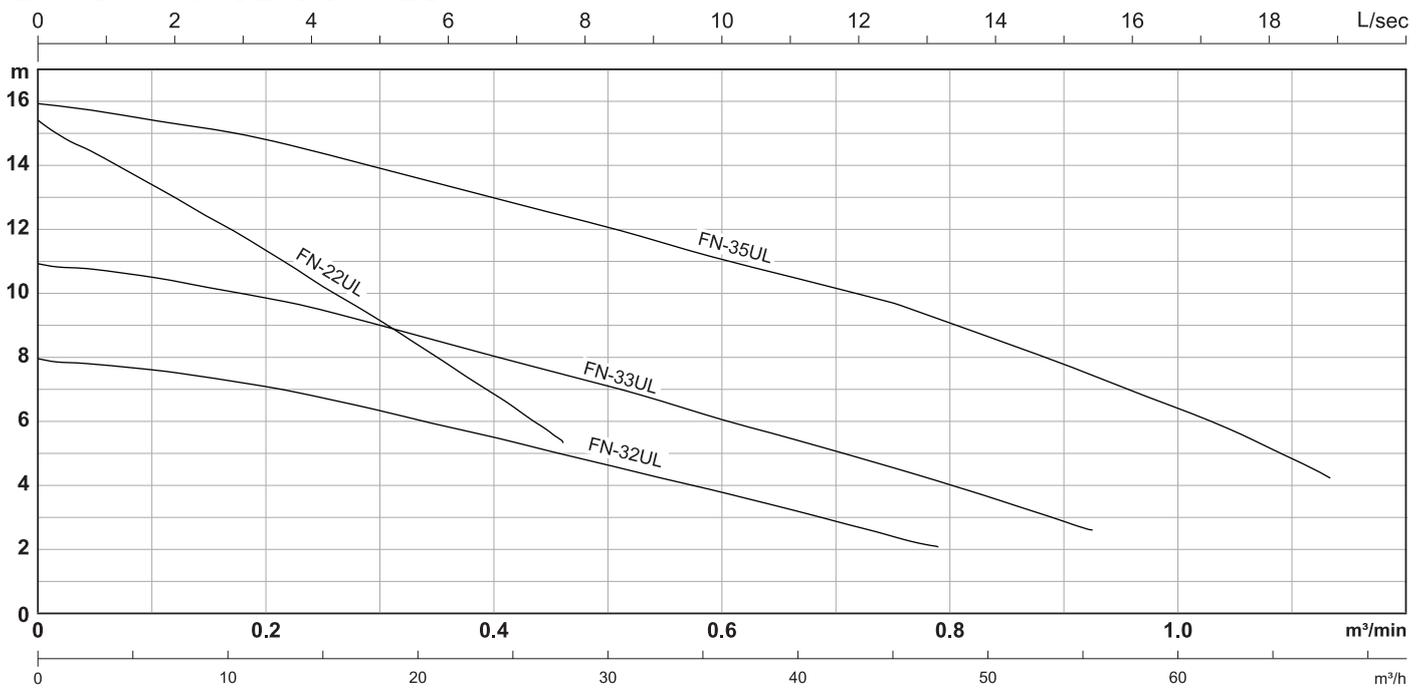
FN-32UL · FN-33UL · FN-35UL



U Type Vortex Impeller

Model	Power HP(kW)	Discharge inch(mm)	Standard		MAX		Solid Passage mm(inch)	Weight(W/O Cable)		Phase	1Ø	1Ø	3Ø	3Ø	3Ø	3Ø	3Ø
			m-m³/min	m-m³/h	m-m³/min	m-m³/h		1Ø-kg(lbs)	3Ø-kg(lbs)								
FN-22UL	2(1.5)	2"(50)	10-0.25	10-15	15.5-0.47	15.5-28.2	50(2")	31(68)	26(57)	Full load Ampere	10.2	10.0	6.2	3.6	3.4	3.4	2.7
FN-32UL	2(1.5)	3"(80)	4.5-0.5	4.5-30	8-0.85	8-51	76(3")	35(77)	30(66)		10.2	10.0	6.2	3.6	3.4	3.4	2.7
FN-33UL	3(2.2)	3"(80)	7-0.5	7-30	11-0.95	11-57	76(3")	37(82)	32(71)		15.0	14.6	8.8	5.0	4.8	4.8	3.8
FN-35UL	5(3.7)	3"(80)	11-0.6	11-36	16-1.15	16-69	76(3")	—	35(77)		—	—	14.2	8.2	7.8	7.8	6.2

PERFORMANCE CURVES



Model	Power HP(kW)	Discharge inch(mm)	Q:m³/min										Q:L/sec							
			0.1	0.2	0.3	0.4	0.5	0.6	0.8	1.0	2	4	6	8	10	12	14	16		
FN-22UL	2(1.5)	2"(50)	13.5	11.4	9.2	6.8	—	—	—	—	H:m	13.0	10.5	7.8	—	—	—	—		
FN-32UL	2(1.5)	3"(80)	7.8	7.2	6.4	5.5	4.7	3.8	—	—		7.7	6.8	5.8	4.8	3.8	2.8	—		
FN-33UL	3(2.2)	3"(80)	10.6	9.9	9.0	8.1	7.1	6.1	4.0	—		10.5	9.6	8.5	7.3	6.1	4.9	3.6		
FN-35UL	5(3.7)	3"(80)	15.5	14.7	13.8	12.9	12.0	11.1	9.0	6.5		15.3	14.3	13.3	12.2	11.1	9.9	8.5	5.2	

FN SERIES SUBMERSIBLE SEWAGE / EFFLUENT PUMPS

FN-32P · FN-33P · FN-35P

SPECIFICATIONS

Item		Description
Limits of Use	Liquid Temp.	0~40°C(32~104°F)
	Applications	General wastewater Sewage and Industrial water
Type	Frequency	50Hz
	Motor	2P(3000rpm) · Dry Motor
	Insulation	Class F
	Protection	IP68
	Protector	Auto-cut
	Bearing	Ball type
	M.seal	Double M.seals
	Impeller	Open
Material	Upper Cover	FC200
	Motor Frame	SUS304
	Shaft	SUS403
	M.seal	CA/CE & SiC/SiC
	Casing	FC200
	Impeller	FC200
	Footing	FCD450
	Cable	VCT or H07RN-F or SJOW/SOW
Optional	-	



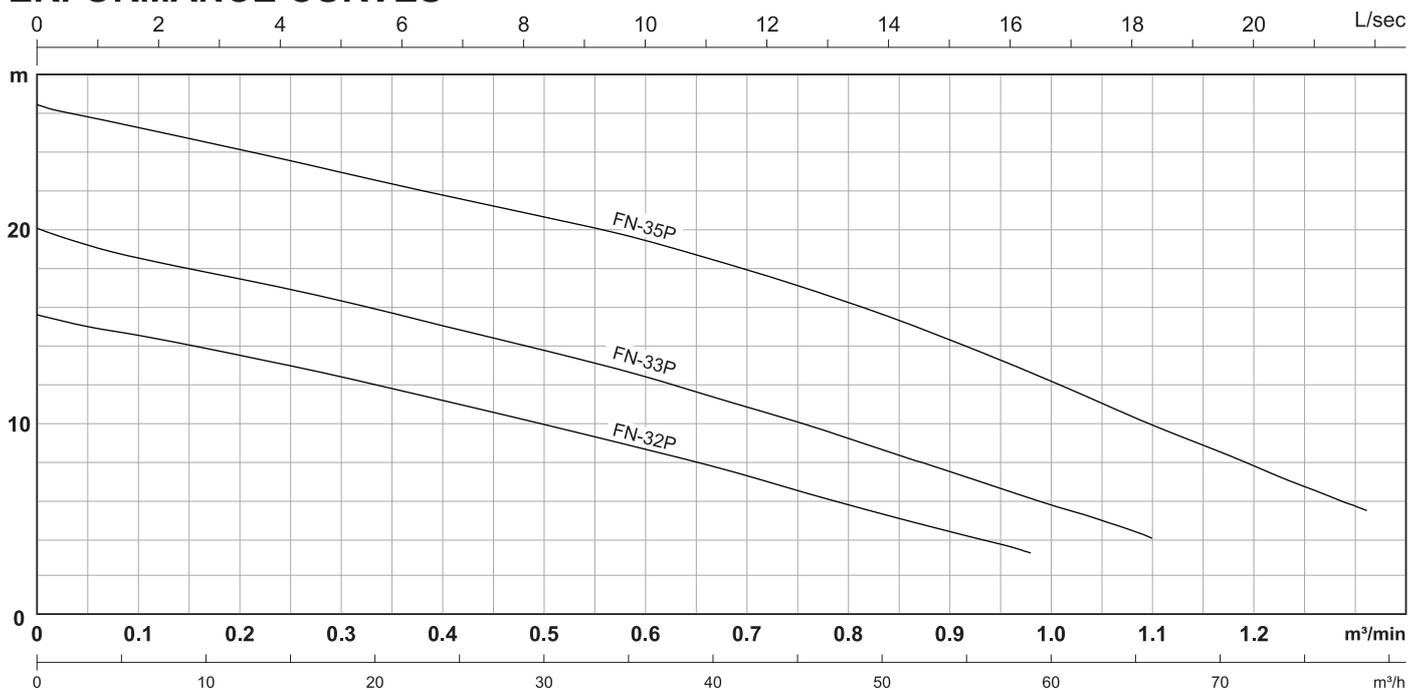
P Type Open Impeller



FN-32P · FN-33P · FN-35P

Model	Power HP(kW)	Discharge inch(mm)	Standard		MAX		Solid Passage mm(inch)	Weight(W/O Cable)		Phase	Voltage						
			m-m³/min	m-m³/h	m-m³/min	m-m³/h		1Ø-kg(lbs)	3Ø-kg(lbs)		220V	230V	230V	380V	400V	415V	525V
FN-32P	2 (1.5)	3"(80)	8.5-0.6	8.5-36	15.5-1.05	15.5-63	35(1 3/8")	34 (75)	30 (66)	Full load Ampere	10.2	10.0	6.2	3.6	3.4	3.4	2.7
FN-33P	3 (2.2)	3"(80)	12-0.6	12-36	20-1.15	20-69	35(1 3/8")	37 (82)	32 (71)		15.0	14.6	8.8	5.0	4.8	4.8	3.8
FN-35P	5 (3.7)	3"(80)	19-0.6	19-36	26.5-1.4	26.5-84	35(1 3/8")	-	35 (77)		-	-	14.2	8.2	7.8	7.8	6.2

PERFORMANCE CURVES



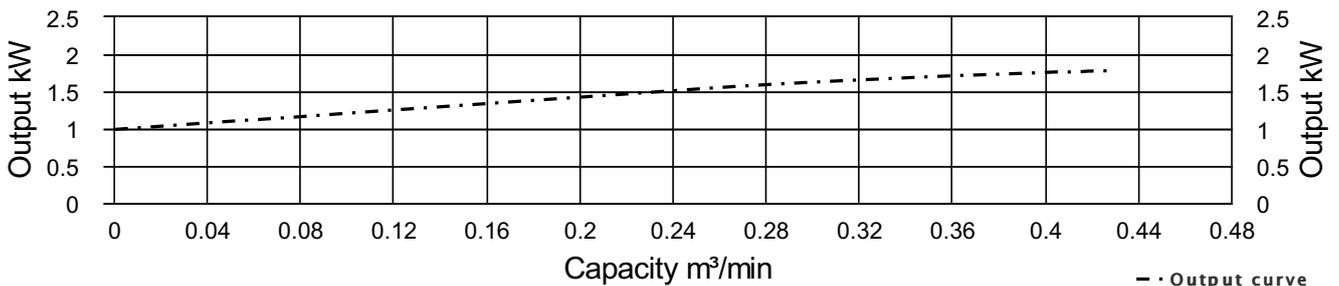
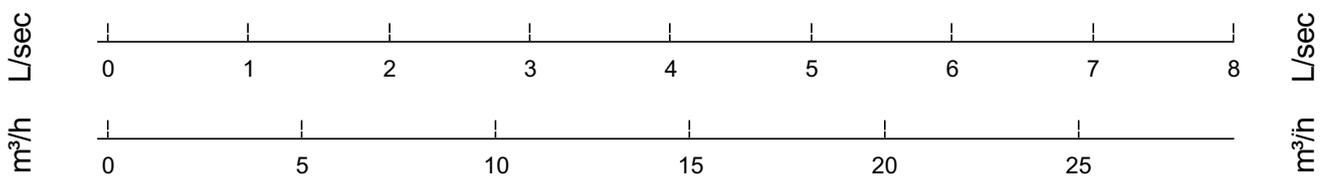
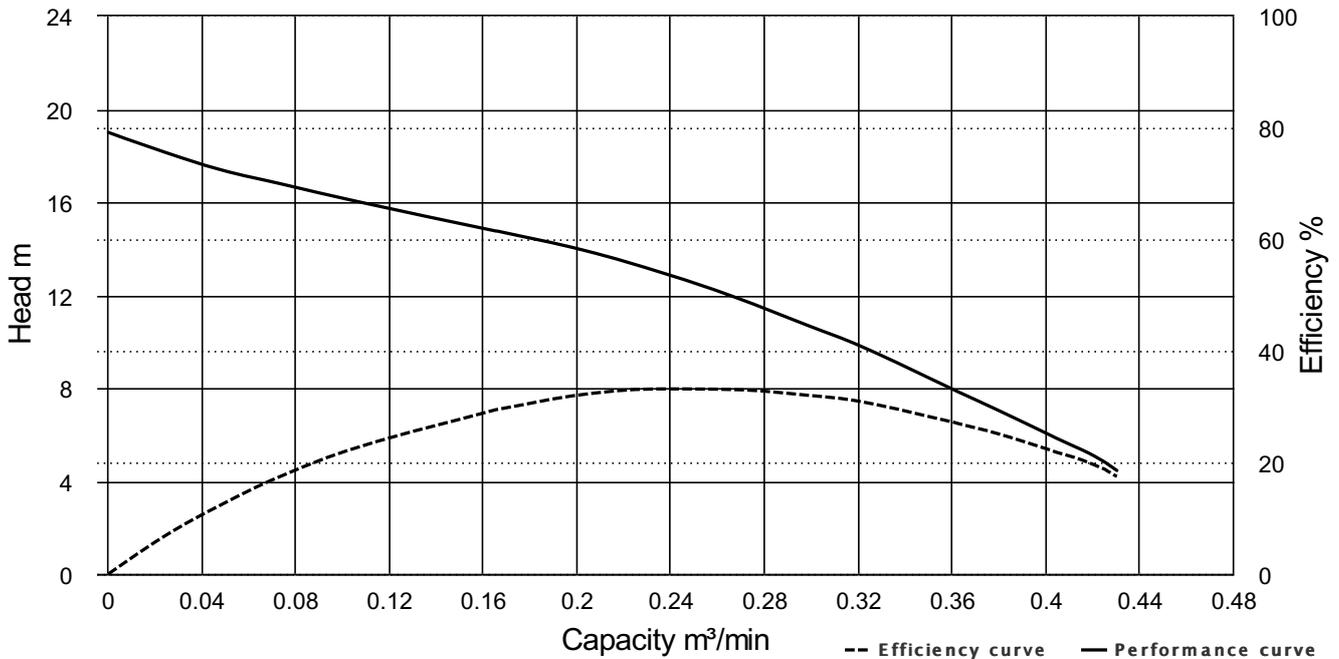
Model	Power HP(kW)	Discharge inch(mm)	Q:m³/min									Q:L/sec	Q:m³/h															
			0.1	0.2	0.3	0.4	0.6	0.8	1.0	1.2	2		4	6	8	10	12	16	20									
FN-32P	2 (1.5)	3" (80)	H:m									H:m	14.1	12.7	11.4	10.0	8.3	6.8	3.3	-								
FN-33P	3 (2.2)	3" (80)											18.8	17.7	16.5	15.3	12.5	9.3	5.8	-	18.6	17.2	15.8	14.2	12.5	10.6	6.5	-
FN-35P	5 (3.7)	3" (80)											25.5	24.5	23.3	22.0	19.4	16.1	12.3	8.2	25.3	24.0	22.5	21.0	19.4	17.5	13.4	8.2



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-22U				Ver NO.	BA0407	
Frequency / Phase	50 Hz / 1 Ø				REFERENCE SPECIFICATION		
Discharge	2" / 50 mm						
Power	2 HP / 1.5 kW						
Std. Head	14 m						
Std. Capacity	0.2 m ³ /min						
Volt	220 V	230 V	240 V				
Rated Current	10.2 A	10 A	9.8 A				
Pole / rpm	2 P / 2820 rpm						
Start Method	CAPACITOR						
Insulation Class	F						



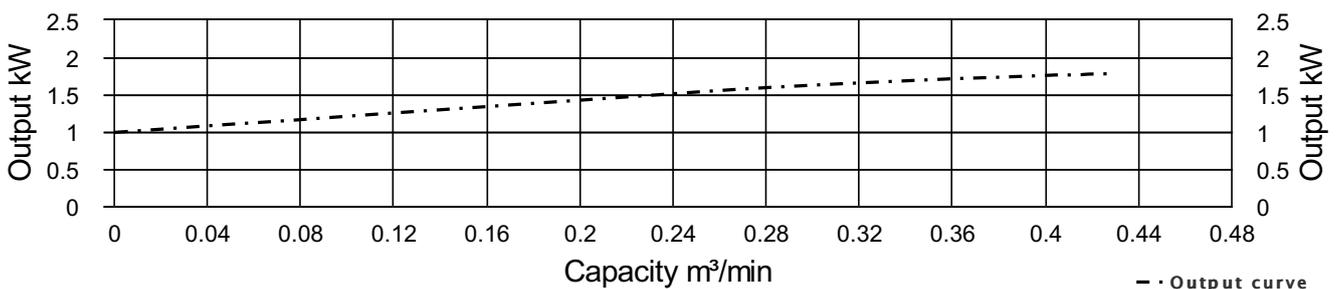
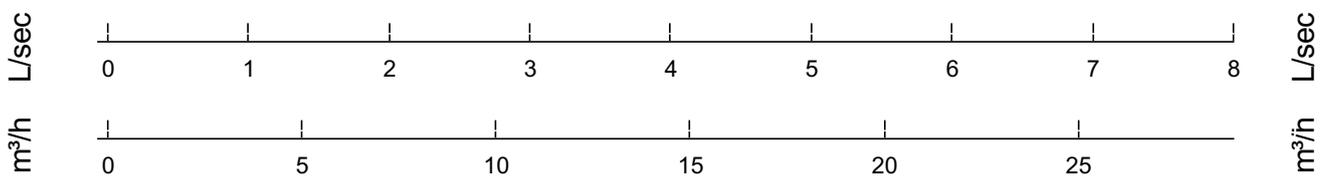
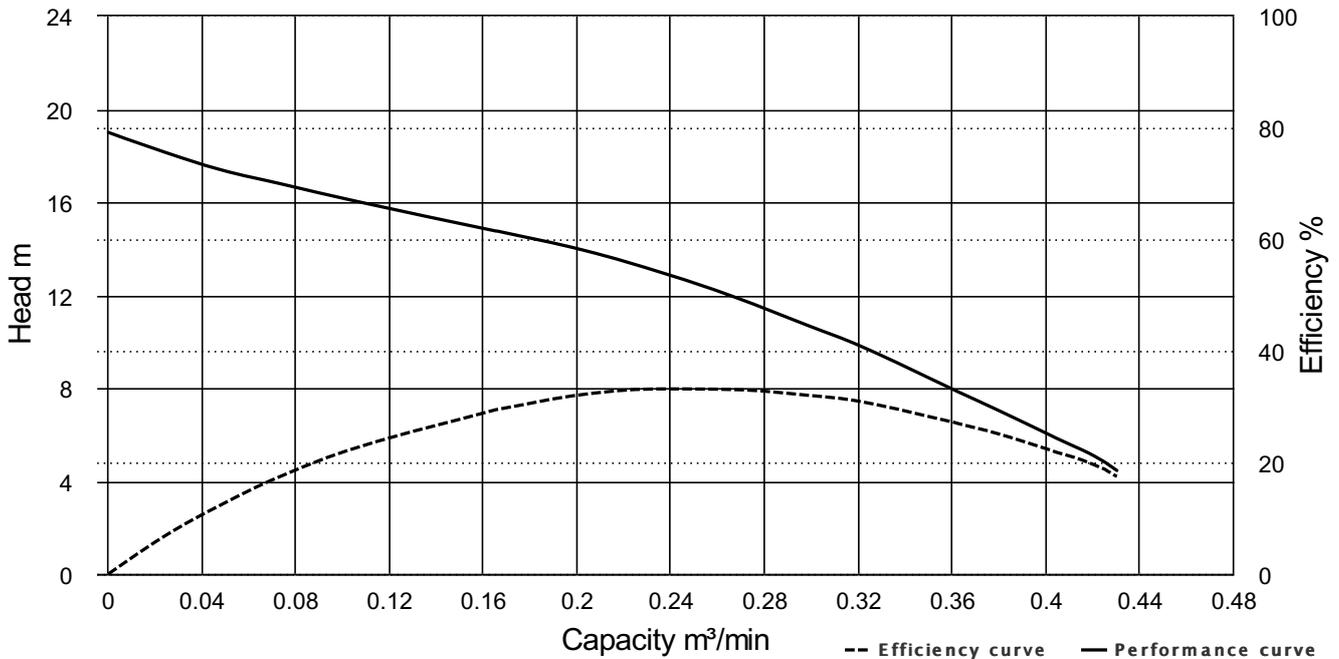
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-22U					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	2" / 50 mm						
Power	2 HP / 1.5 kW						
Std. Head	14 m						
Std. Capacity	0.2 m ³ /min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	6.2 A	3.6 A	3.4 A	3.4 A	2.7 A		
Pole / rpm	2 P / 2820 rpm						
Start Method	DOL						
Insulation Class	F						



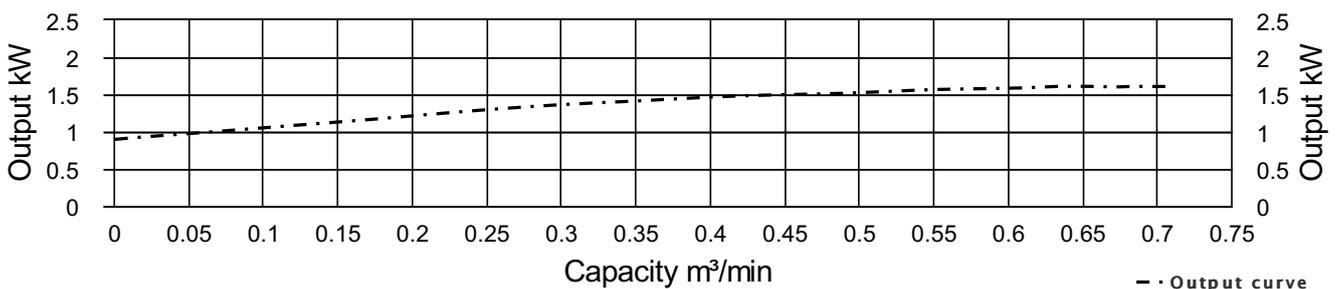
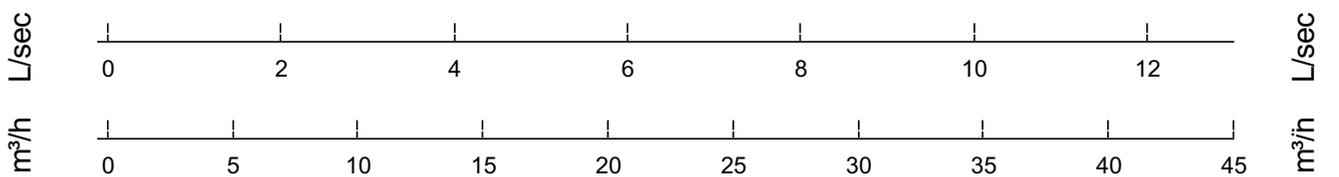
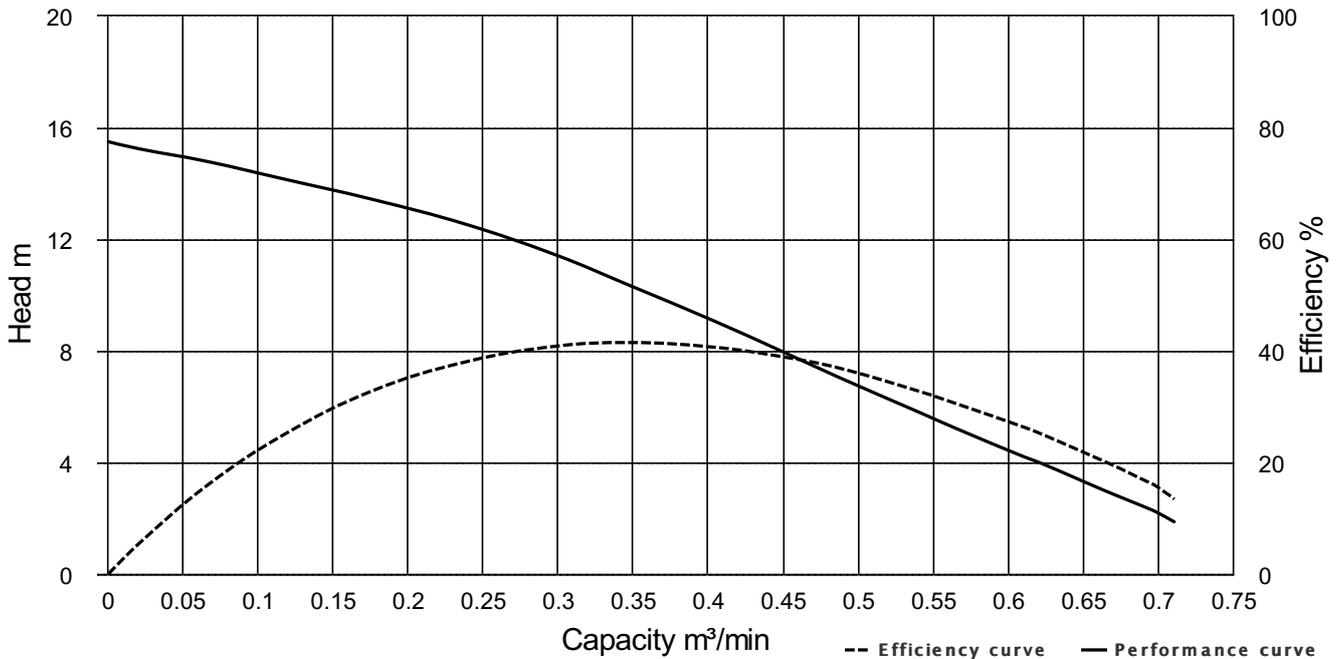
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-32U				Ver NO.	BA0407	
Frequency / Phase	50 Hz / 1 Ø				REFERENCE SPECIFICATION		
Discharge	3" / 80 mm						
Power	2 HP / 1.5 kW						
Std. Head	8.5 m						
Std. Capacity	0.4 m ³ /min						
Volt	220 V	230 V	240 V				
Rated Current	10.2 A	10 A	9.8 A				
Pole / rpm	2 P / 2820 rpm						
Start Method	CAPACITOR						
Insulation Class	F						



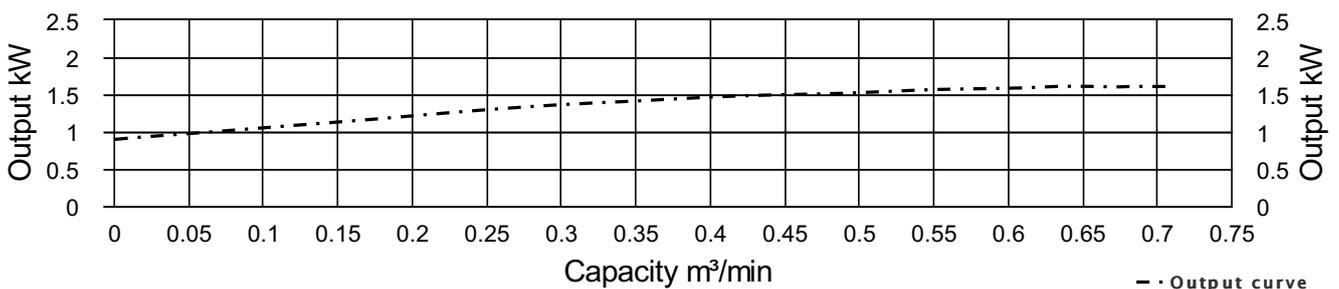
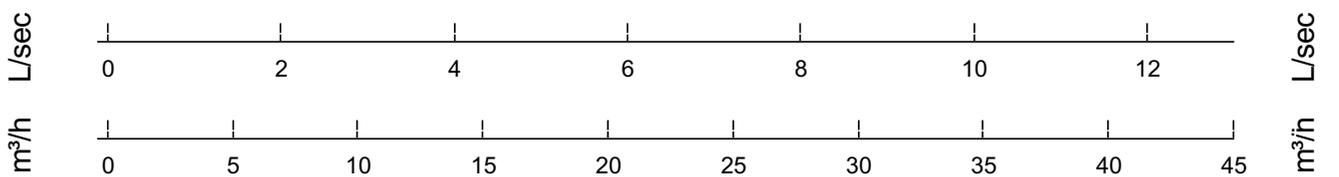
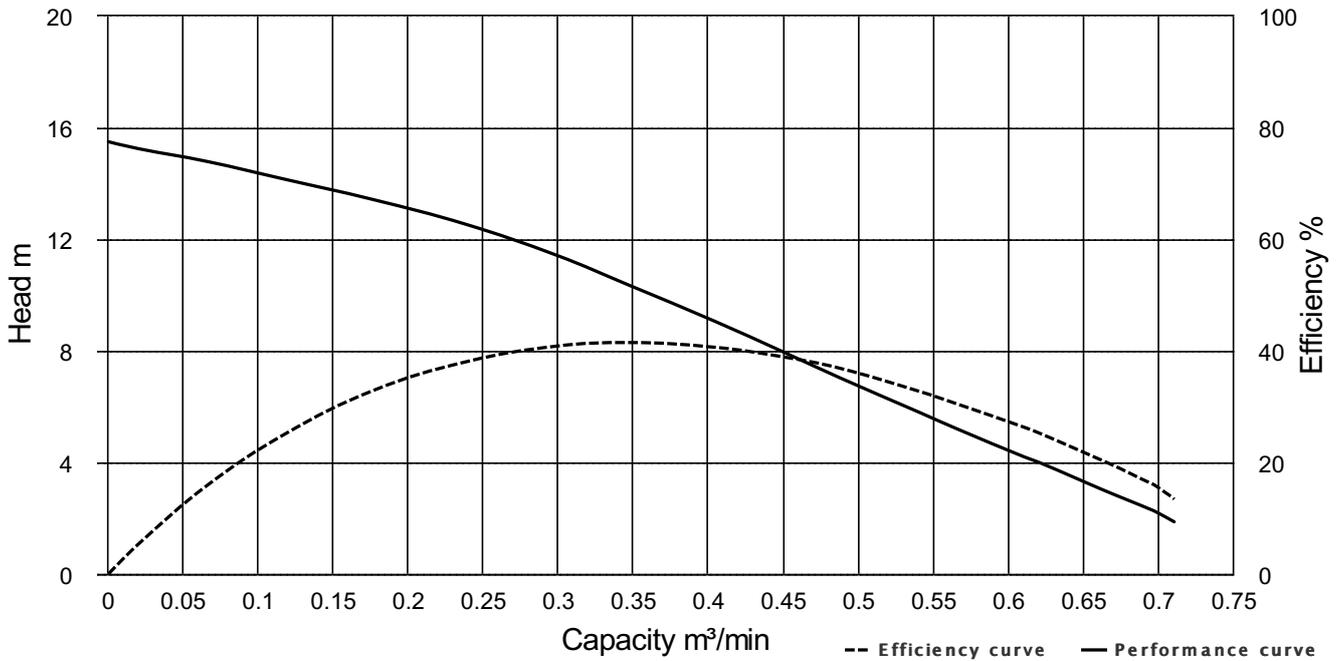
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-32U					Ver NO.	BA0407	
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION		
Discharge	3" / 80 mm							
Power	2 HP / 1.5 kW							
Std. Head	8.5 m							
Std. Capacity	0.4 m ³ /min							
Volt	230 V	380 V	400 V	415 V	525 V			
Rated Current	6.2 A	3.6 A	3.4 A	3.4 A	2.7 A			
Pole / rpm	2 P / 2820 rpm							
Start Method	DOL							
Insulation Class	F							



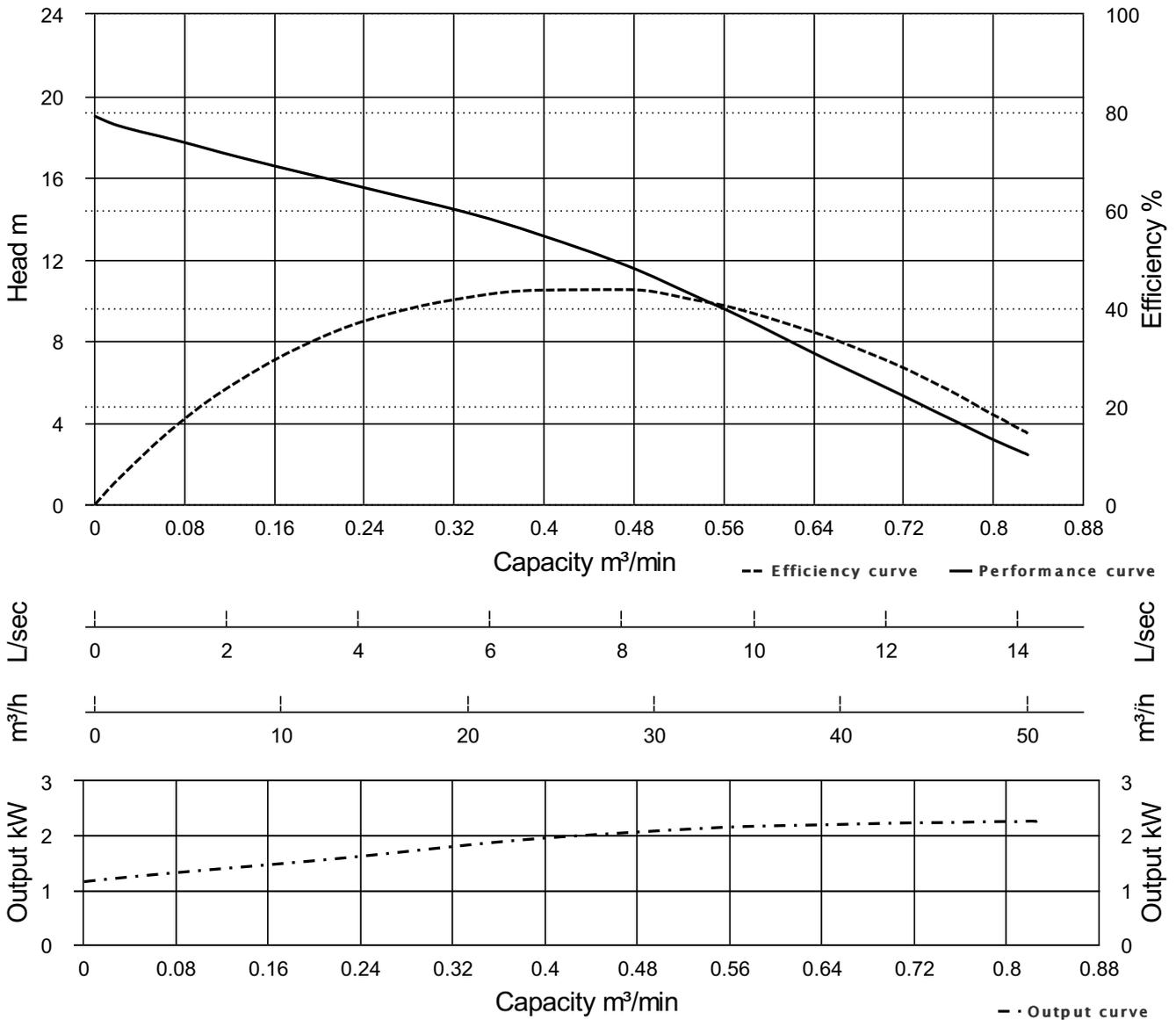
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-33U			Ver NO.	BA0407
Frequency / Phase	50 Hz / 1 Ø			REFERENCE SPECIFICATION	
Discharge	3" / 80 mm				
Power	3 HP / 2.2 kW				
Std. Head	12.5 m				
Std. Capacity	0.4 m ³ /min				
Volt	220 V	230 V	240 V		
Rated Current	15 A	14.6 A	14.4 A		
Pole / rpm	2 P / 2840 rpm				
Start Method	CAPACITOR				
Insulation Class	F				



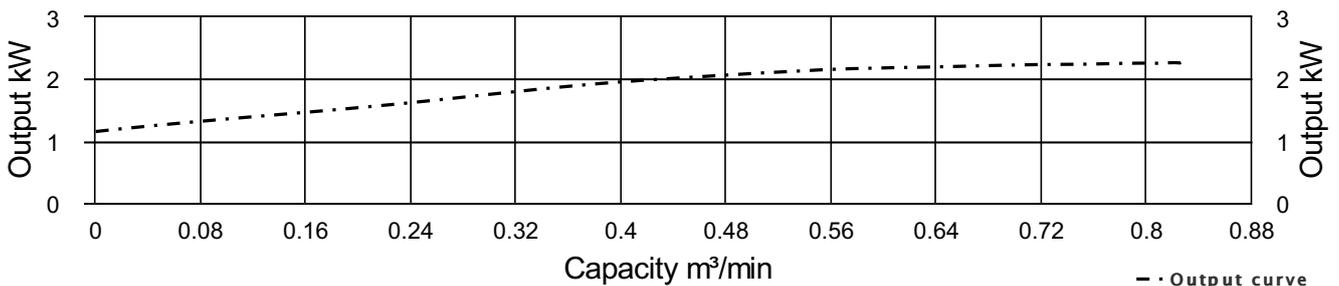
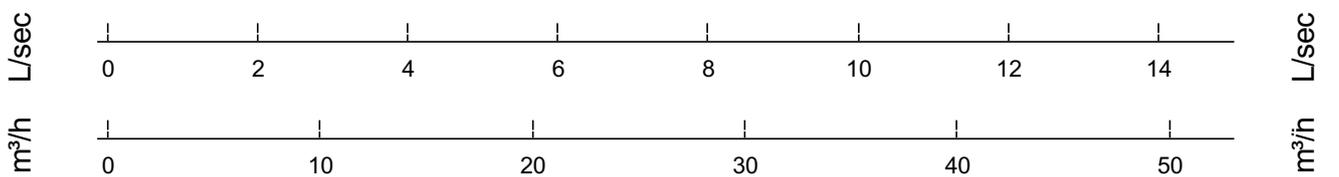
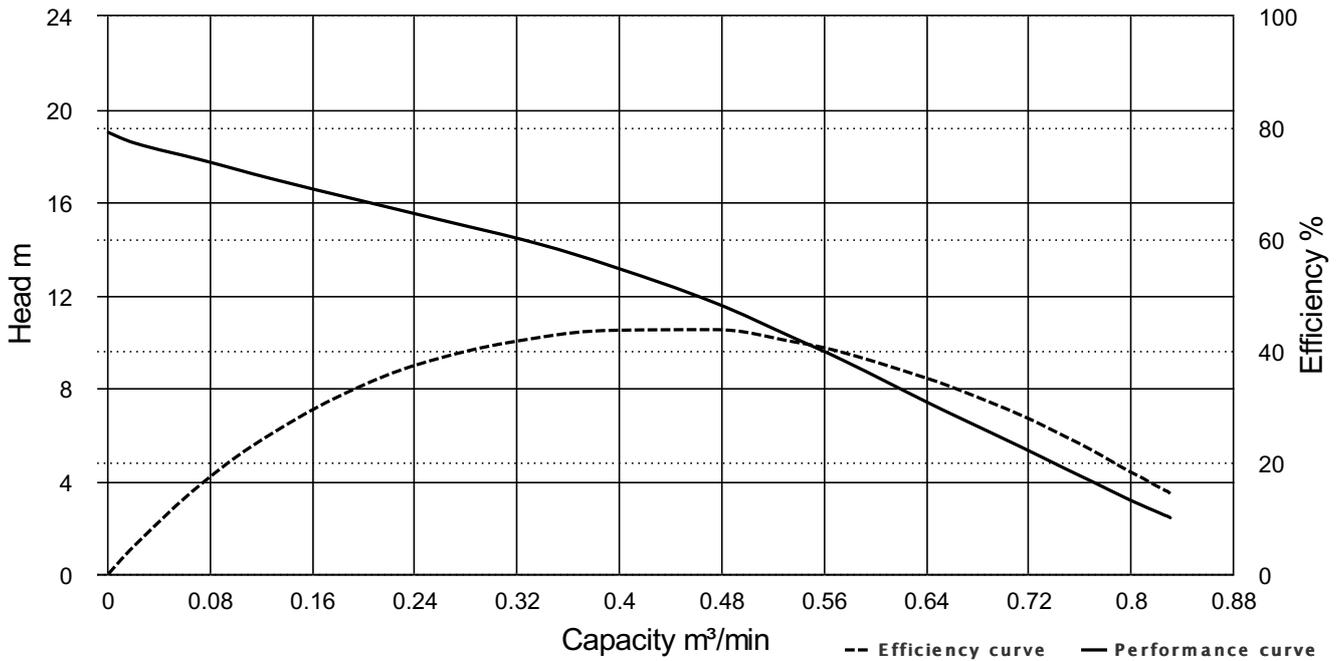
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-33U					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	3" / 80 mm						
Power	3 HP / 2.2 kW						
Std. Head	12.5 m						
Std. Capacity	0.4 m ³ /min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	8.8 A	5 A	4.8 A	4.8 A	3.8 A		
Pole / rpm	2 P / 2840 rpm						
Start Method	DOL						
Insulation Class	F						



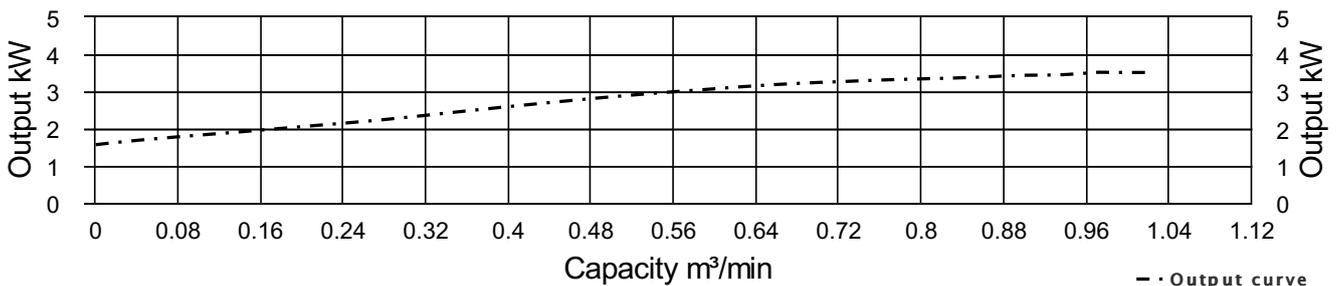
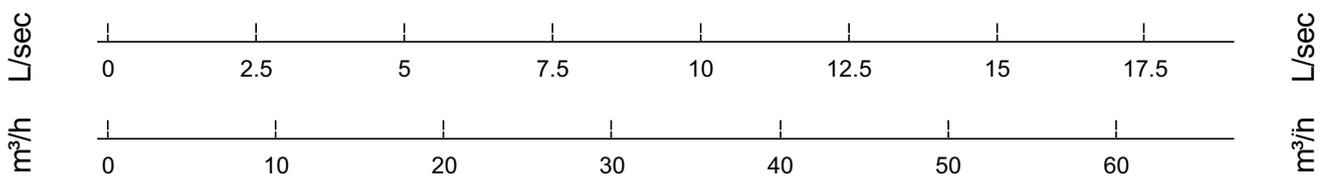
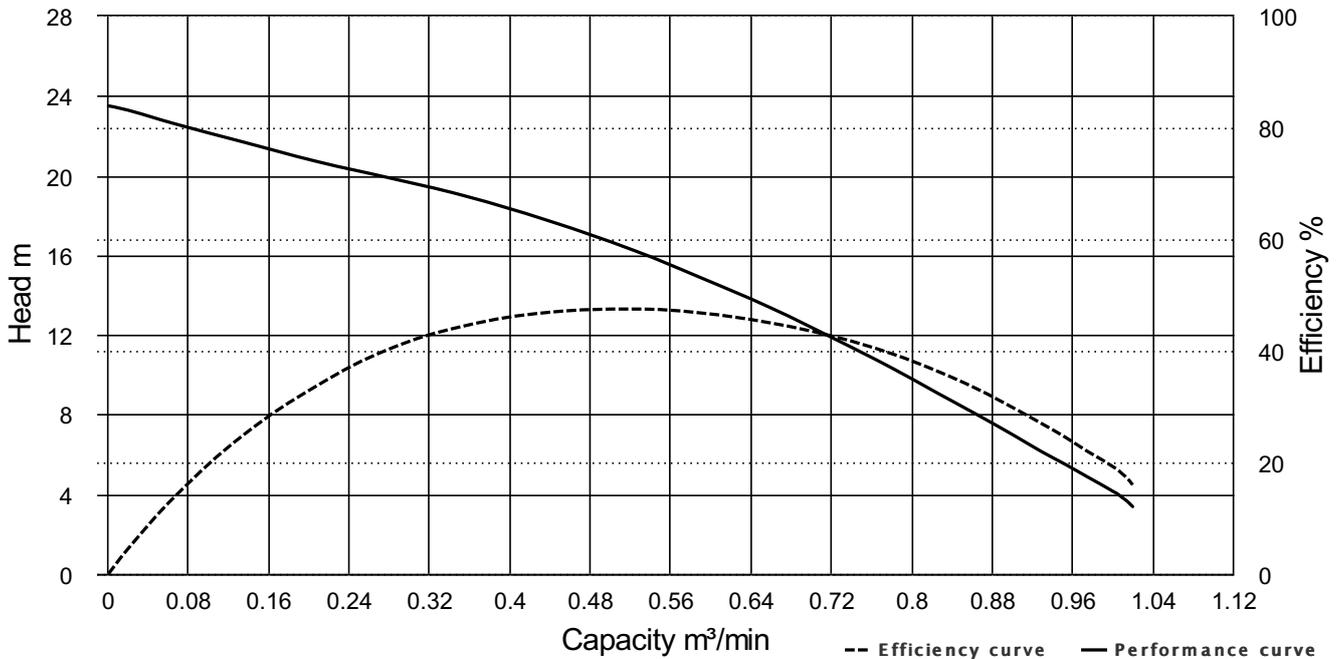
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-35U					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	3" / 80 mm						
Power	5 HP / 3.7 kW						
Std. Head	16.5 m						
Std. Capacity	0.5 m ³ /min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	14.2 A	8.2 A	7.8 A	7.8 A	6.2 A		
Pole / rpm	2 P / 2830 rpm						
Start Method	DOL						
Insulation Class	F						



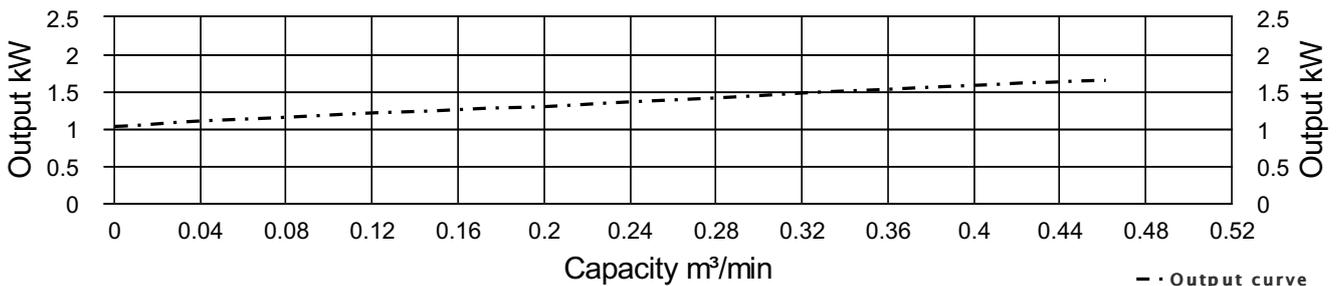
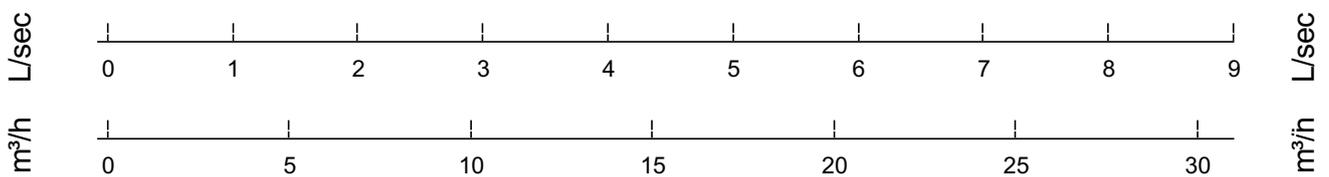
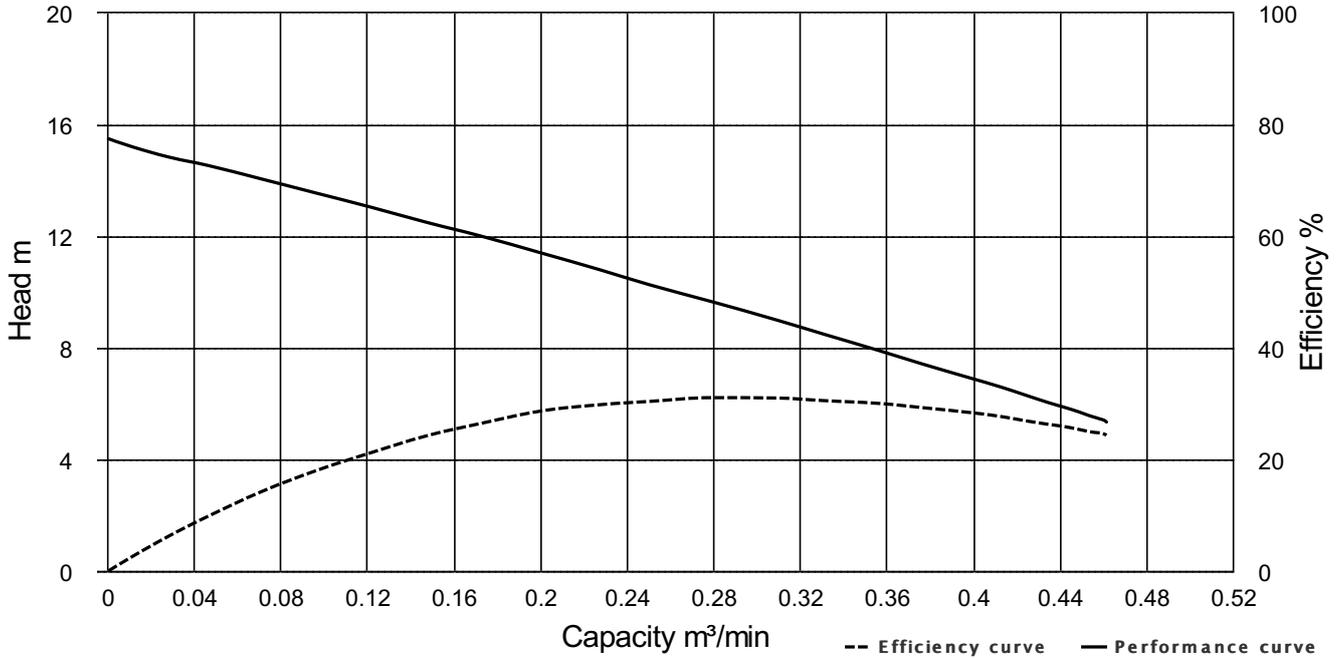
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-22UL				Ver NO.	BA0407	
Frequency / Phase	50 Hz / 1 Ø				REFERENCE SPECIFICATION		
Discharge	2" / 50 mm						
Power	2 HP / 1.5 kW						
Std. Head	10 m						
Std. Capacity	0.25 m ³ /min						
Volt	220 V	230 V	240 V				
Rated Current	10.2 A	10 A	9.8 A				
Pole / rpm	2 P / 2820 rpm						
Start Method	CAPACITOR						
Insulation Class	F						



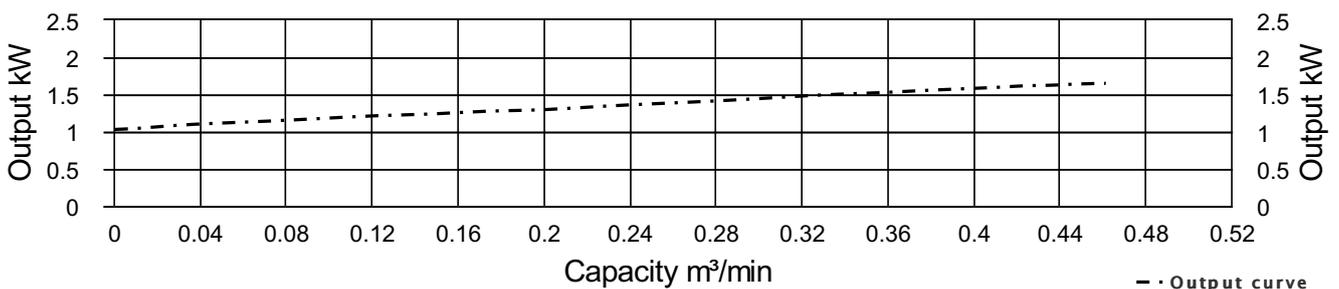
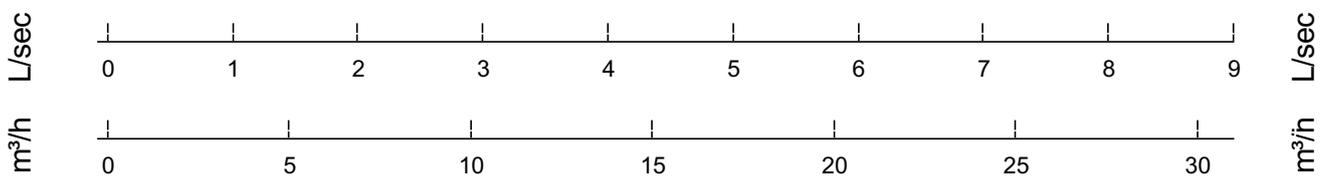
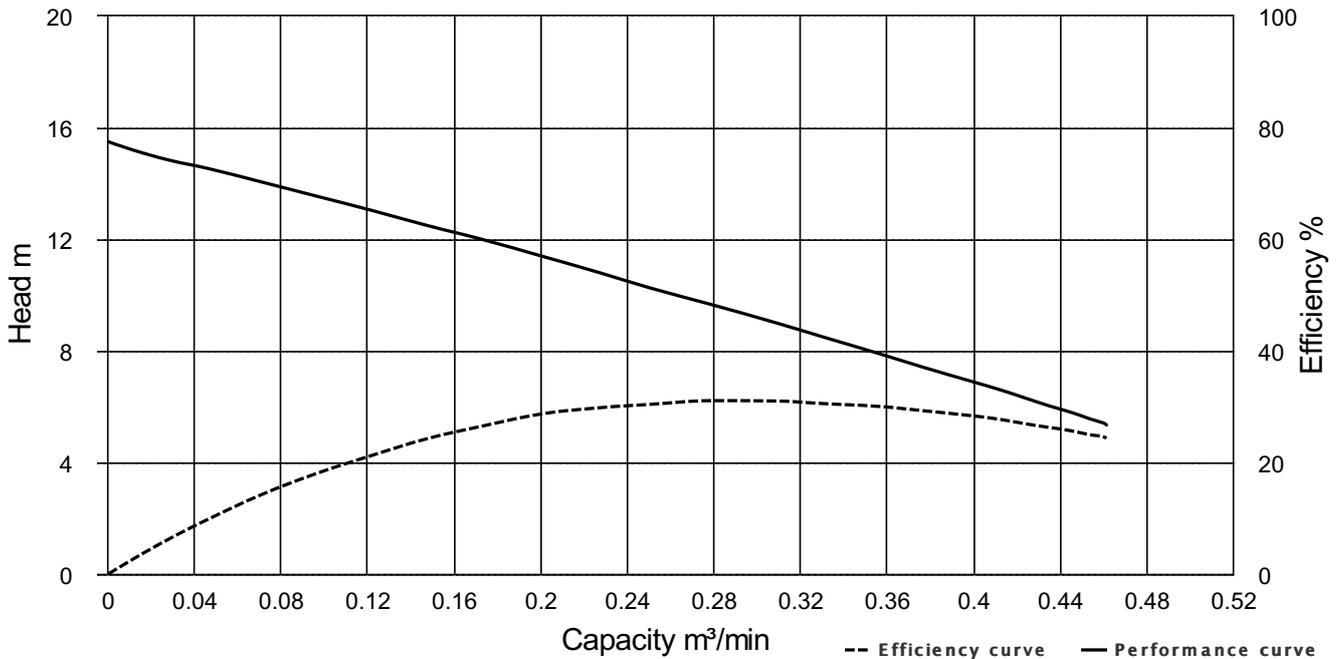
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-22UL					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	2" / 50 mm						
Power	2 HP / 1.5 kW						
Std. Head	10 m						
Std. Capacity	0.25 m³/min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	6.2 A	3.6 A	3.4 A	3.4 A	2.7 A		
Pole / rpm	2 P / 2820 rpm						
Start Method	DOL						
Insulation Class	F						



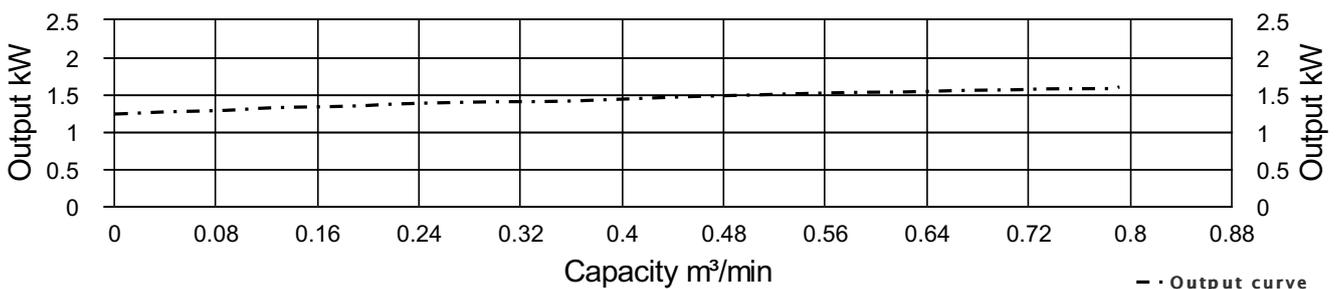
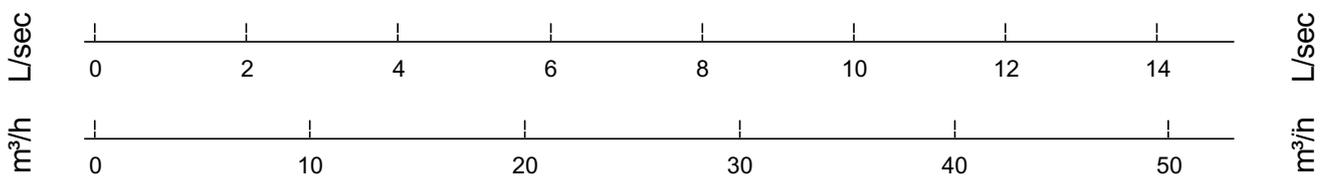
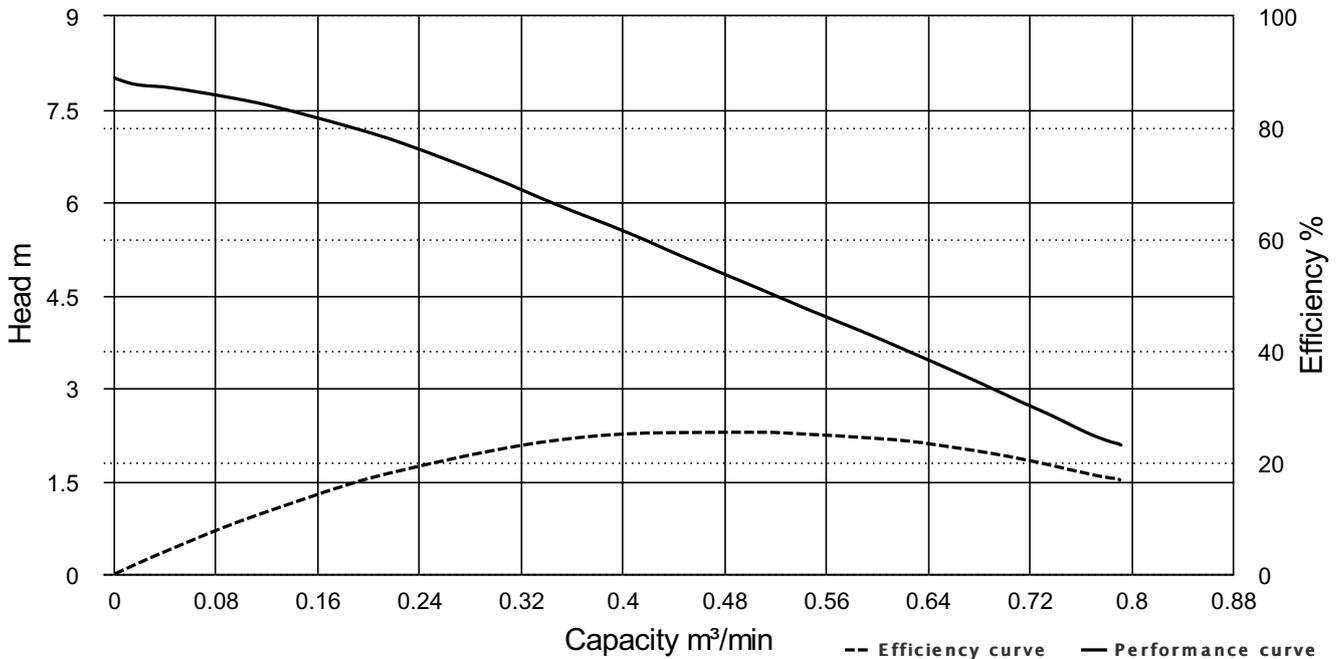
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-32UL			Ver NO.	BA0407
Frequency / Phase	50 Hz / 1 Ø			REFERENCE SPECIFICATION	
Discharge	3" / 80 mm				
Power	2 HP / 1.5 kW				
Std. Head	4.5 m				
Std. Capacity	0.5 m ³ /min				
Volt	220 V	230 V	240 V		
Rated Current	10.2 A	10 A	9.8 A		
Pole / rpm	2 P / 2820 rpm				
Start Method	CAPACITOR				
Insulation Class	F				



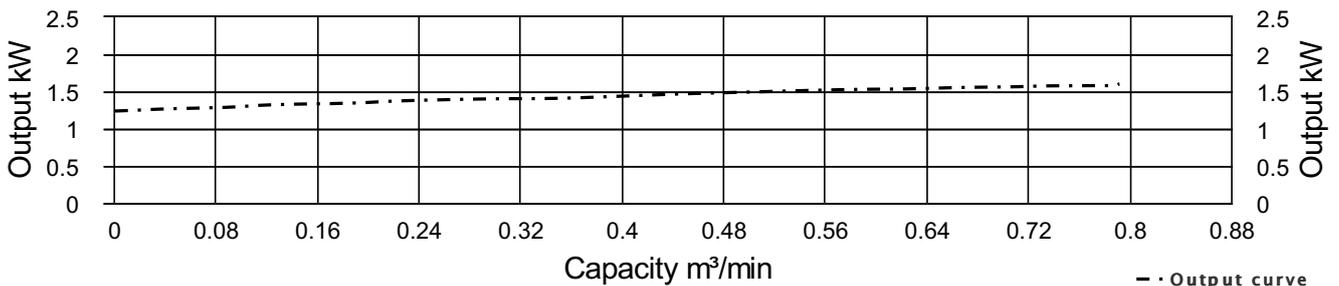
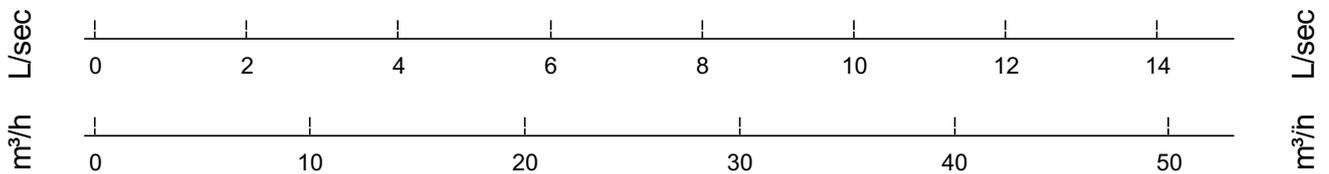
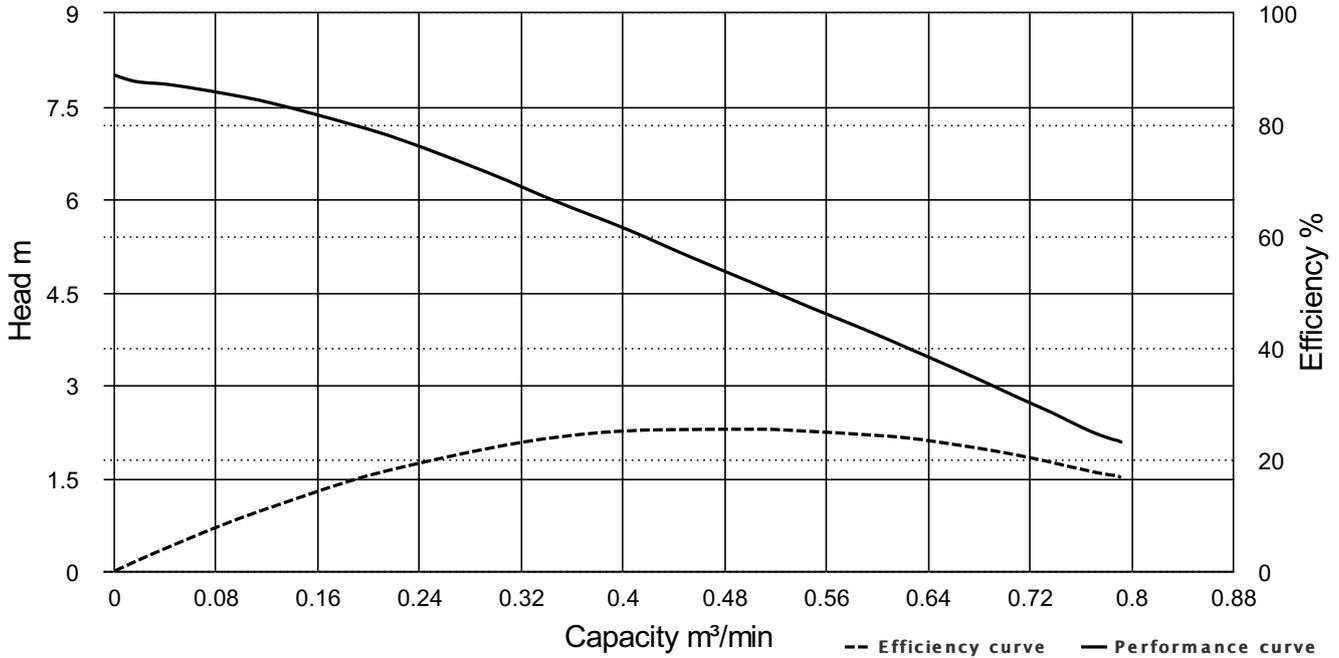
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-32UL					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	3" / 80 mm						
Power	2 HP / 1.5 kW						
Std. Head	4.5 m						
Std. Capacity	0.5 m ³ /min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	6.2 A	3.6 A	3.4 A	3.4 A	2.7 A		
Pole / rpm	2 P / 2820 rpm						
Start Method	DOL						
Insulation Class	F						



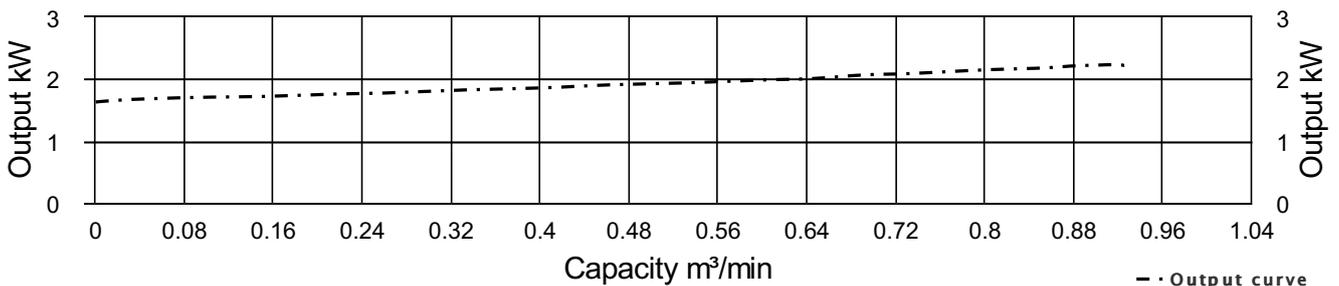
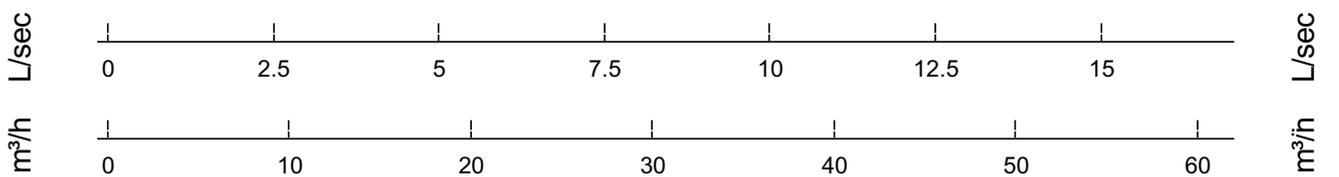
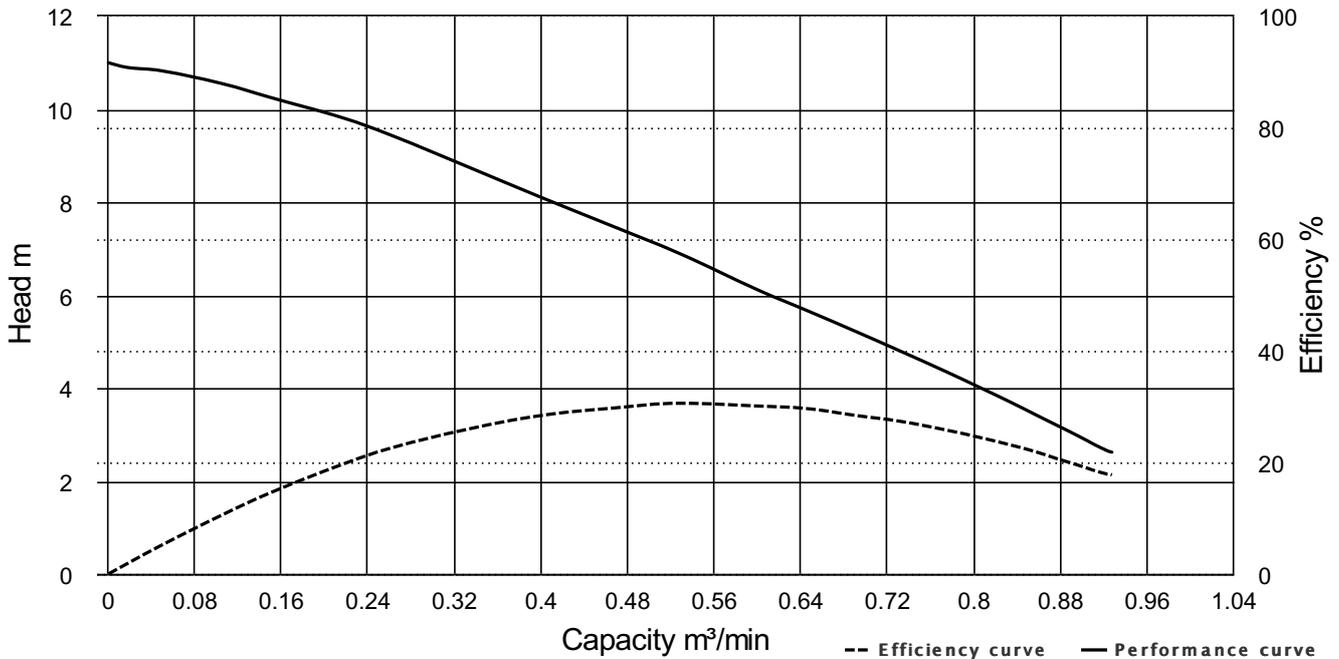
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-33UL				Ver NO.	BA0407	
Frequency / Phase	50 Hz / 1 Ø				REFERENCE SPECIFICATION		
Discharge	3" / 80 mm						
Power	3 HP / 2.2 kW						
Std. Head	7 m						
Std. Capacity	0.5 m ³ /min						
Volt	220 V	230 V	240 V				
Rated Current	15 A	14.6 A	14.4 A				
Pole / rpm	2 P / 2840 rpm						
Start Method	CAPACITOR						
Insulation Class	F						



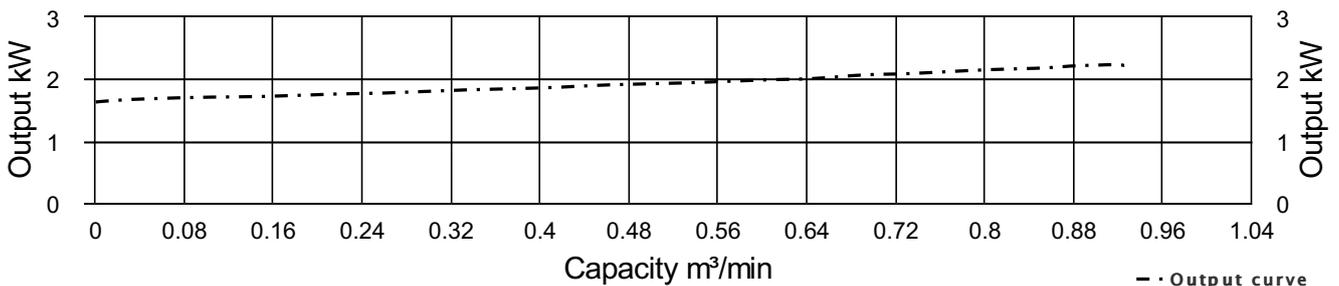
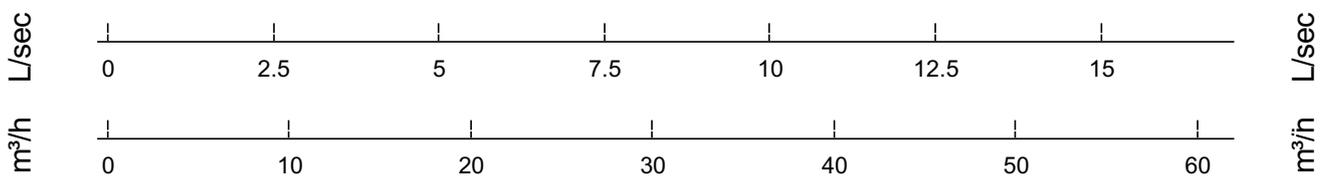
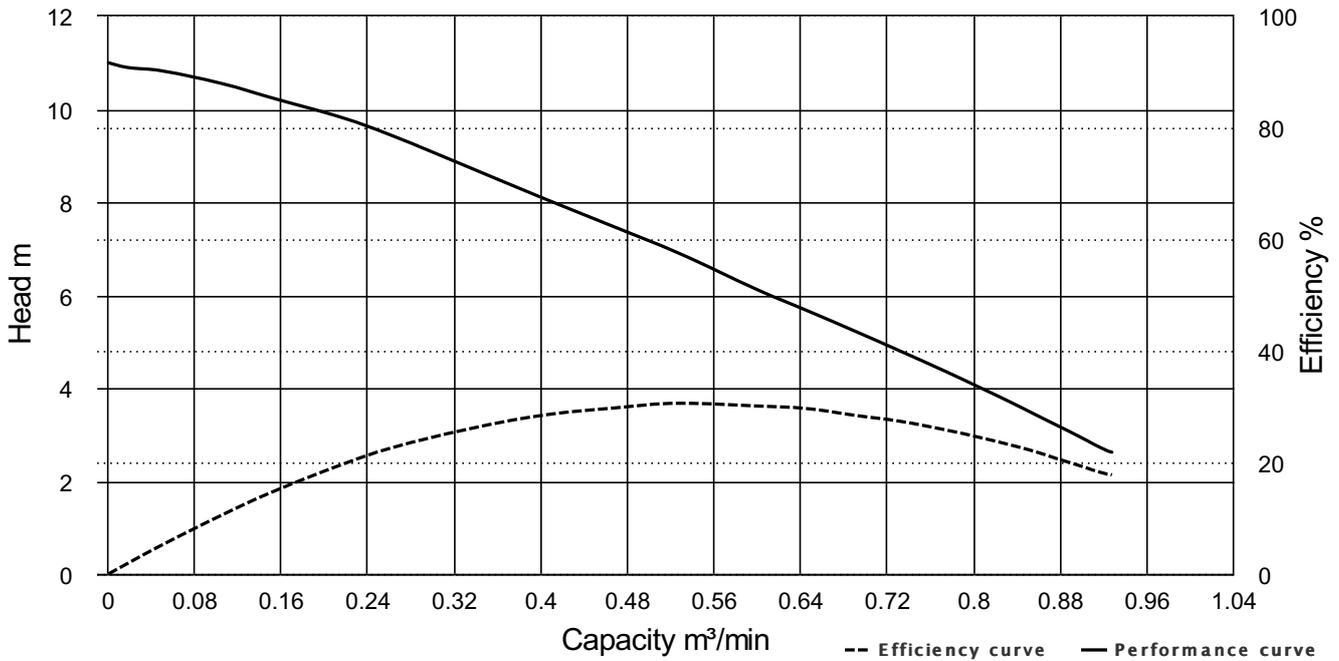
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-33UL					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	3" / 80 mm						
Power	3 HP / 2.2 kW						
Std. Head	7 m						
Std. Capacity	0.5 m ³ /min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	8.8 A	5 A	4.8 A	4.8 A	3.8 A		
Pole / rpm	2 P / 2840 rpm						
Start Method	DOL						
Insulation Class	F						



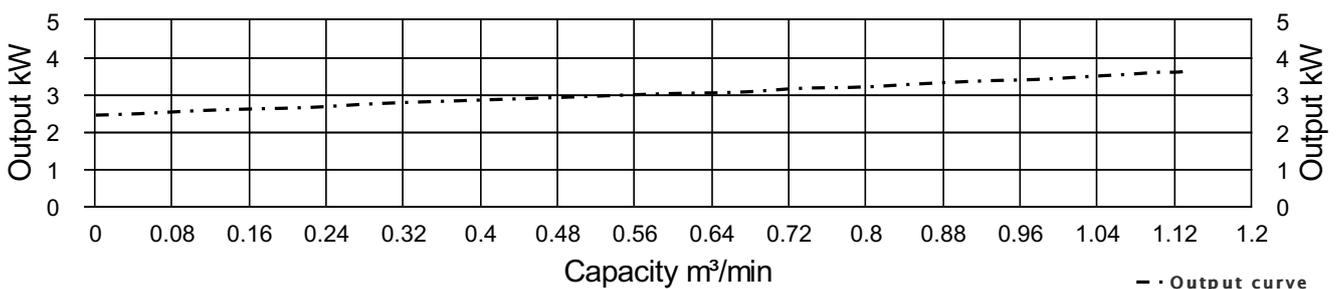
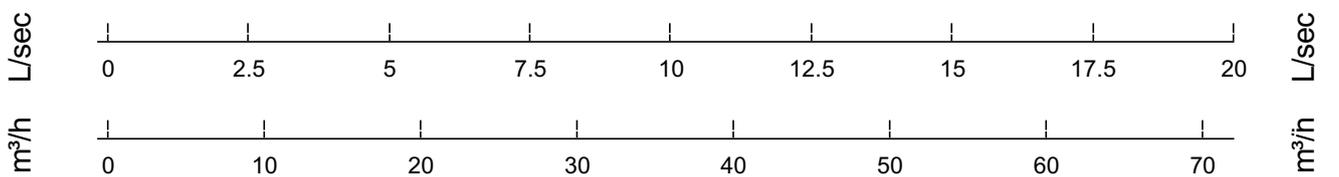
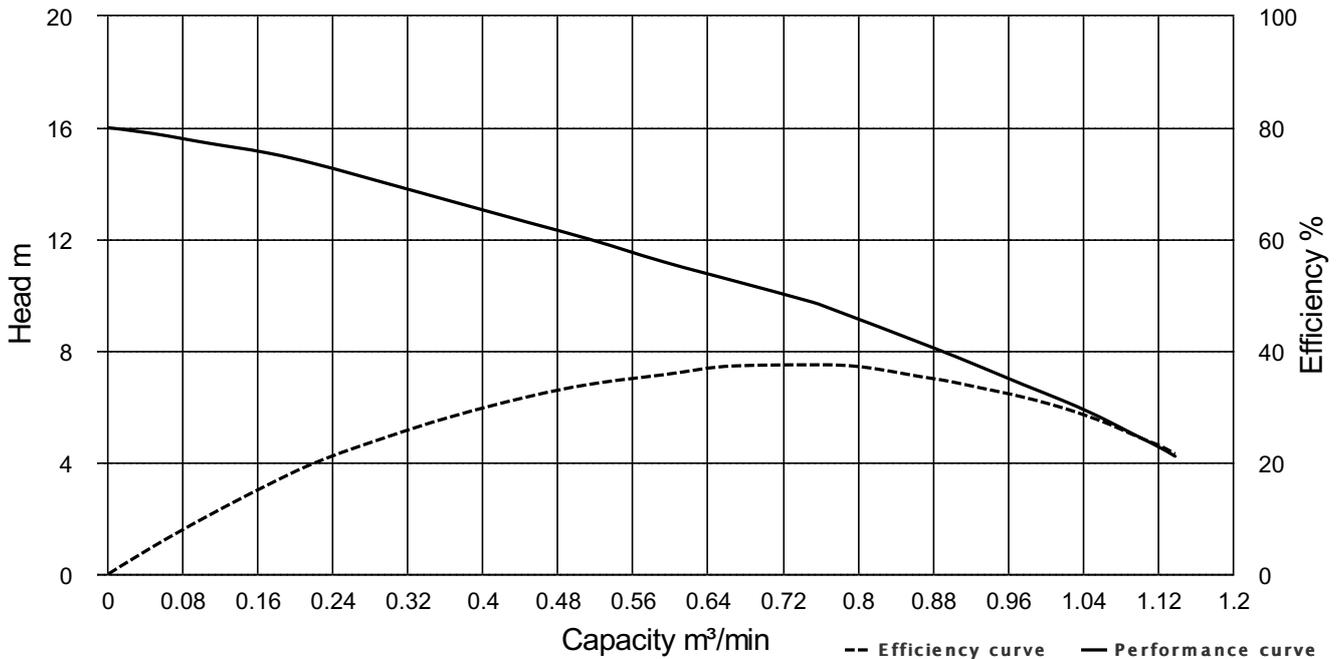
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-35UL					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	3" / 80 mm						
Power	5 HP / 3.7 kW						
Std. Head	11 m						
Std. Capacity	0.6 m ³ /min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	14.2 A	8.2 A	7.8 A	7.8 A	6.2 A		
Pole / rpm	2 P / 2830 rpm						
Start Method	DOL						
Insulation Class	F						



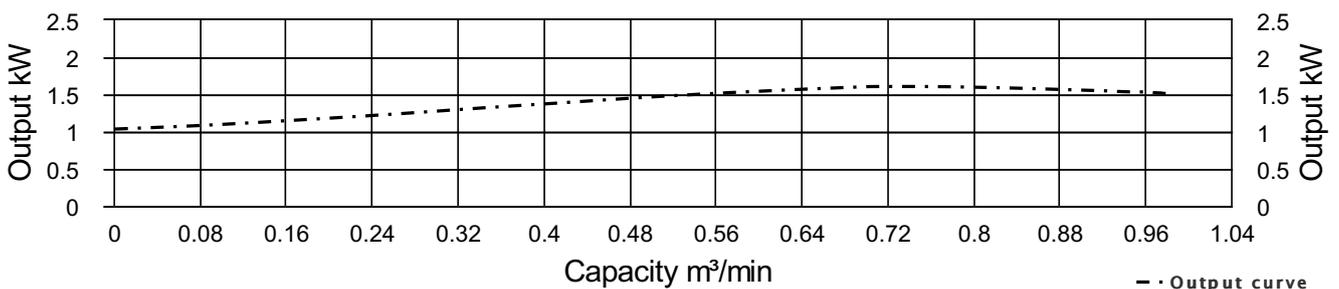
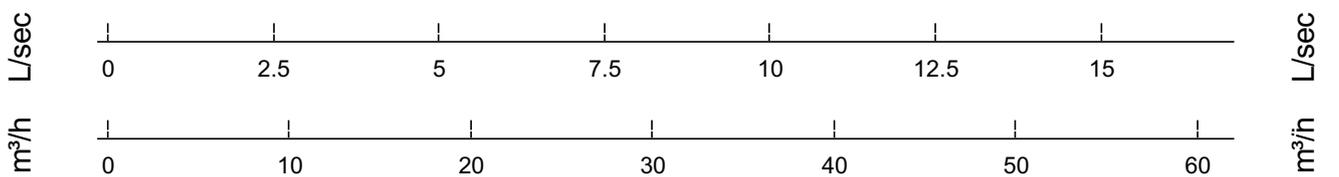
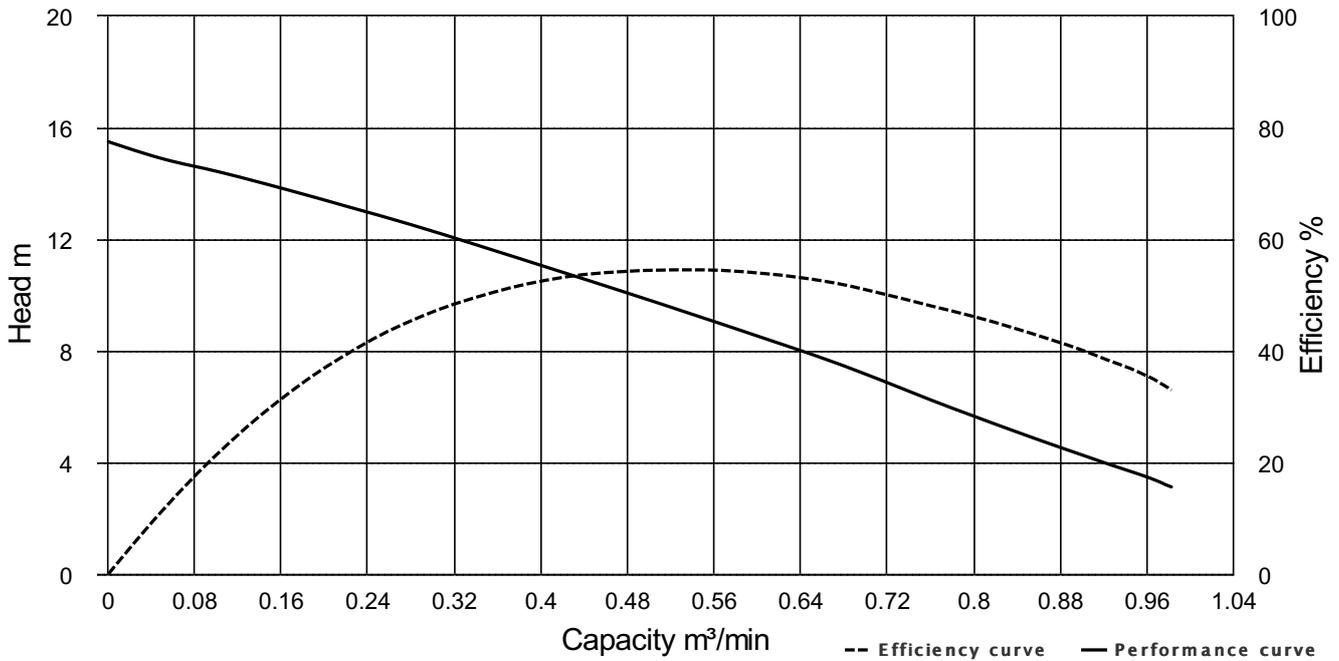
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-32P				Ver NO.	BA0407	
Frequency / Phase	50 Hz / 1 Ø				REFERENCE SPECIFICATION		
Discharge	3" / 80 mm						
Power	2 HP / 1.5 kW						
Std. Head	8.5 m						
Std. Capacity	0.6 m ³ /min						
Volt	220 V	230 V	240 V				
Rated Current	10.2 A	10 A	9.8 A				
Pole / rpm	2 P / 2820 rpm						
Start Method	CAPACITOR						
Insulation Class	F						



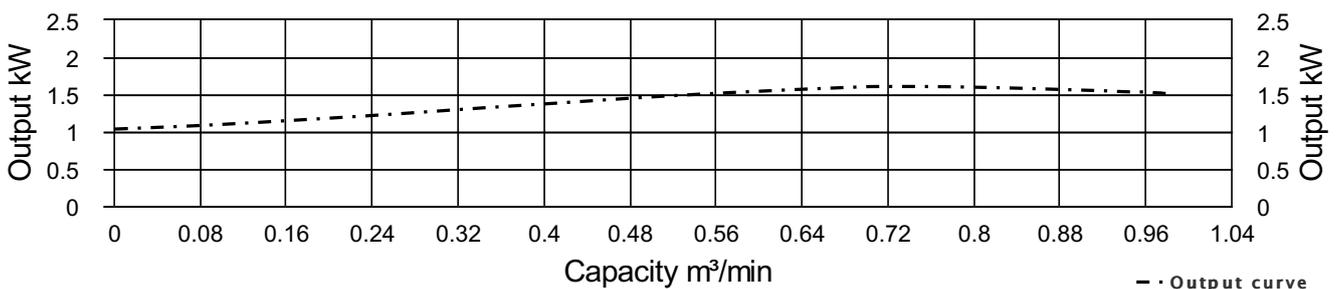
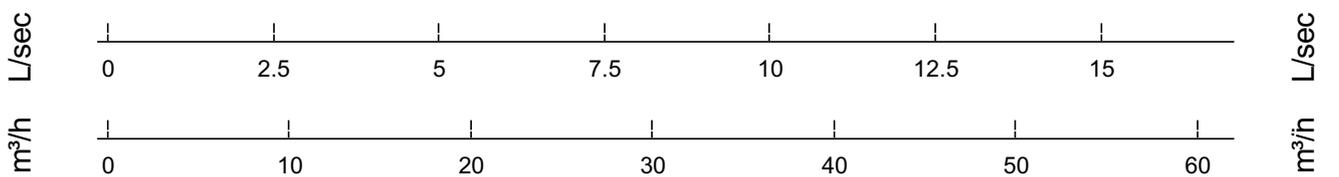
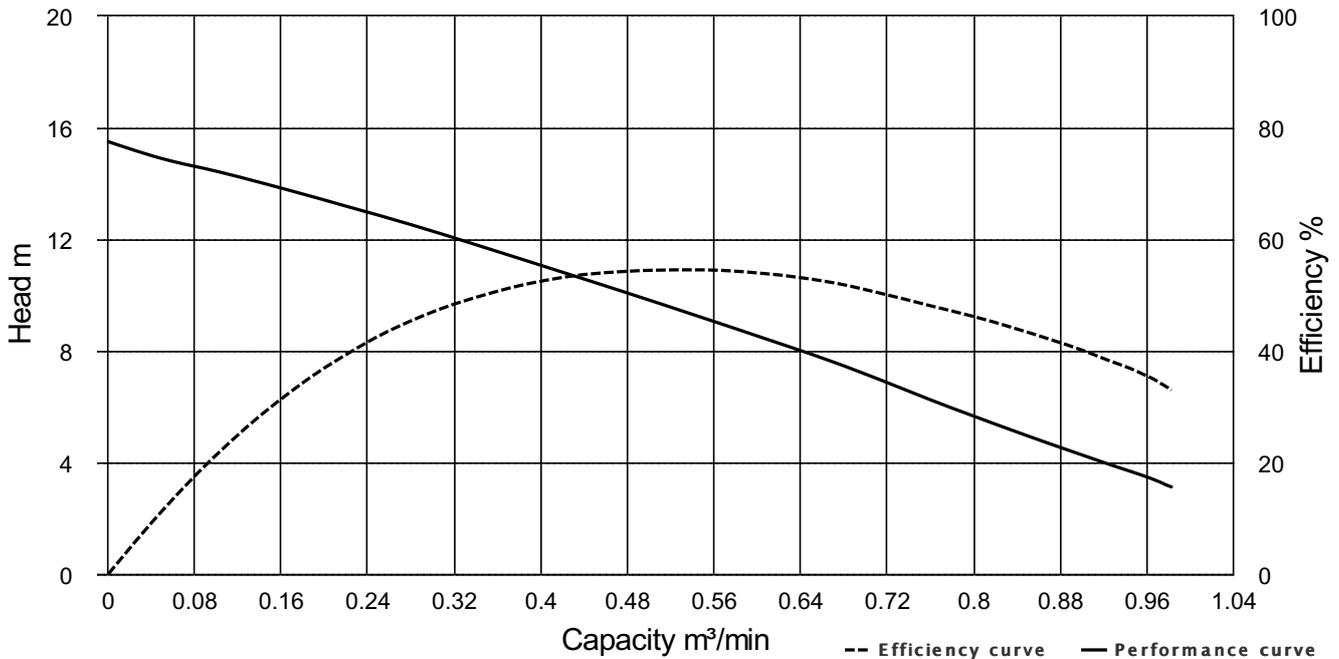
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-32P					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	3" / 80 mm						
Power	2 HP / 1.5 kW						
Std. Head	8.5 m						
Std. Capacity	0.6 m ³ /min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	6.2 A	3.6 A	3.4 A	3.4 A	2.7 A		
Pole / rpm	2 P / 2820 rpm						
Start Method	DOL						
Insulation Class	F						



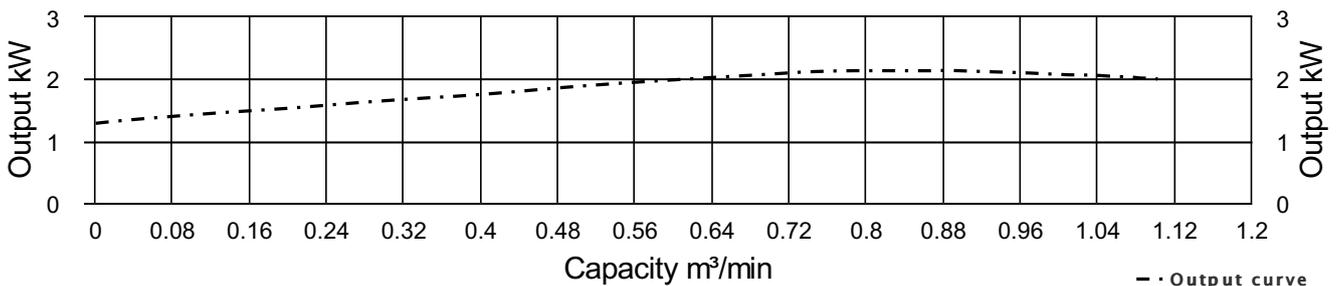
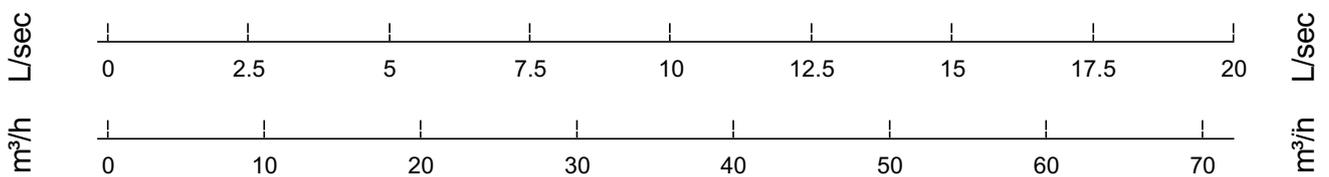
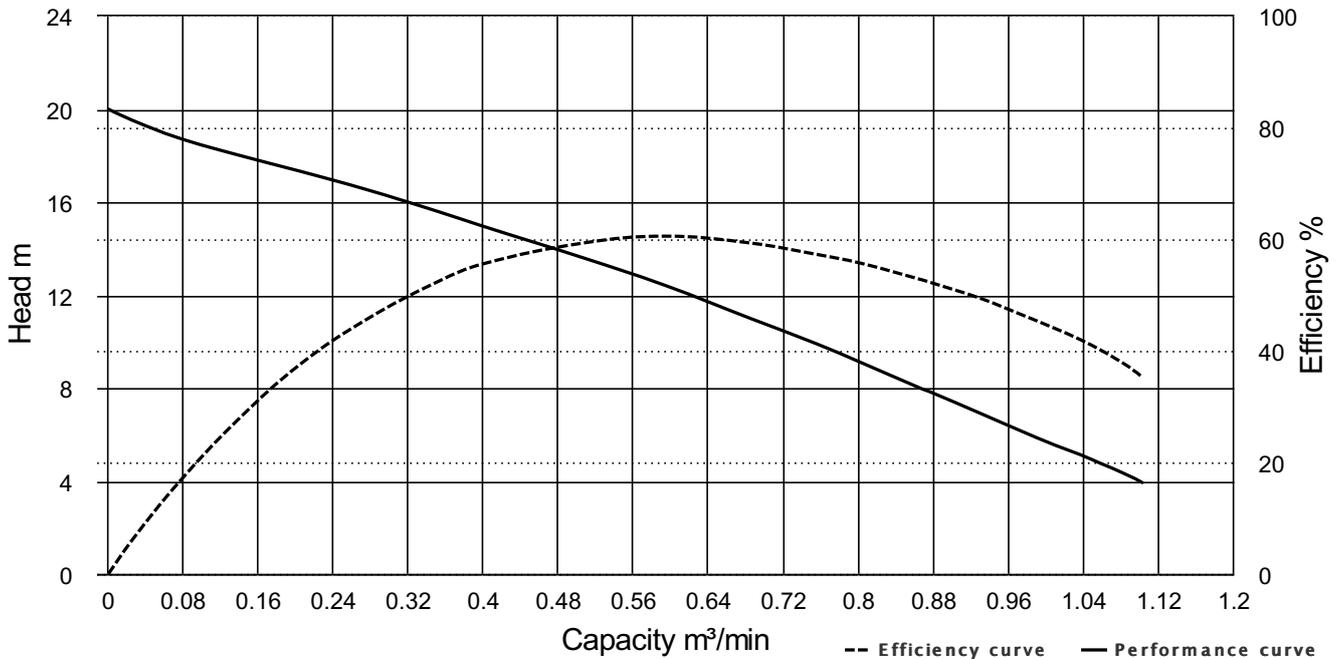
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-33P				Ver NO.	BA0407	
Frequency / Phase	50 Hz / 1 Ø				REFERENCE SPECIFICATION		
Discharge	3" / 80 mm						
Power	3 HP / 2.2 kW						
Std. Head	12 m						
Std. Capacity	0.6 m ³ /min						
Volt	220 V	230 V	240 V				
Rated Current	15 A	14.6 A	14.4 A				
Pole / rpm	2 P / 2840 rpm						
Start Method	CAPACITOR						
Insulation Class	F						



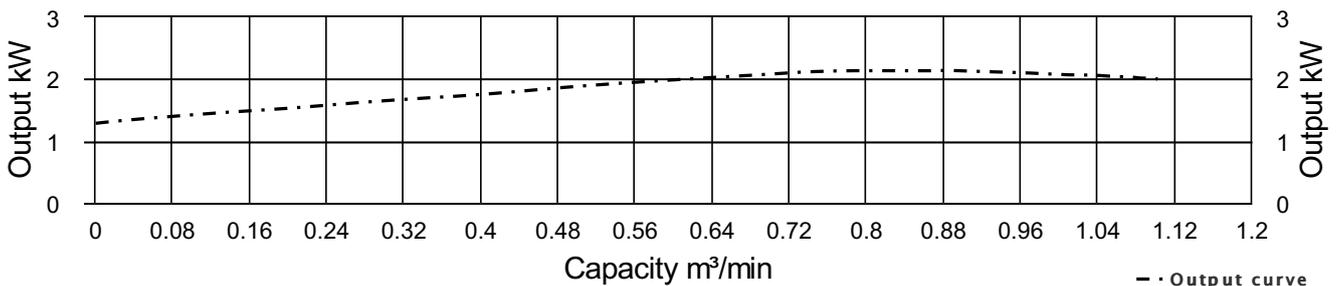
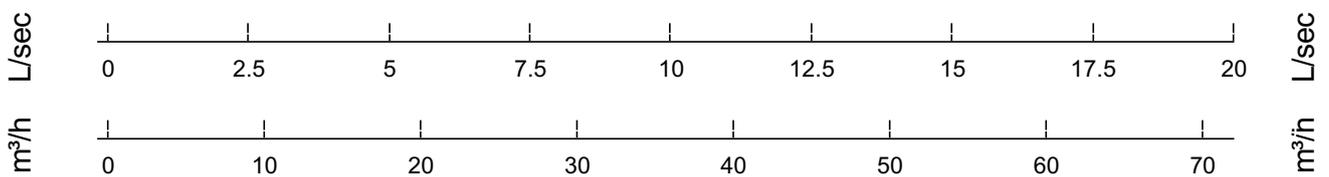
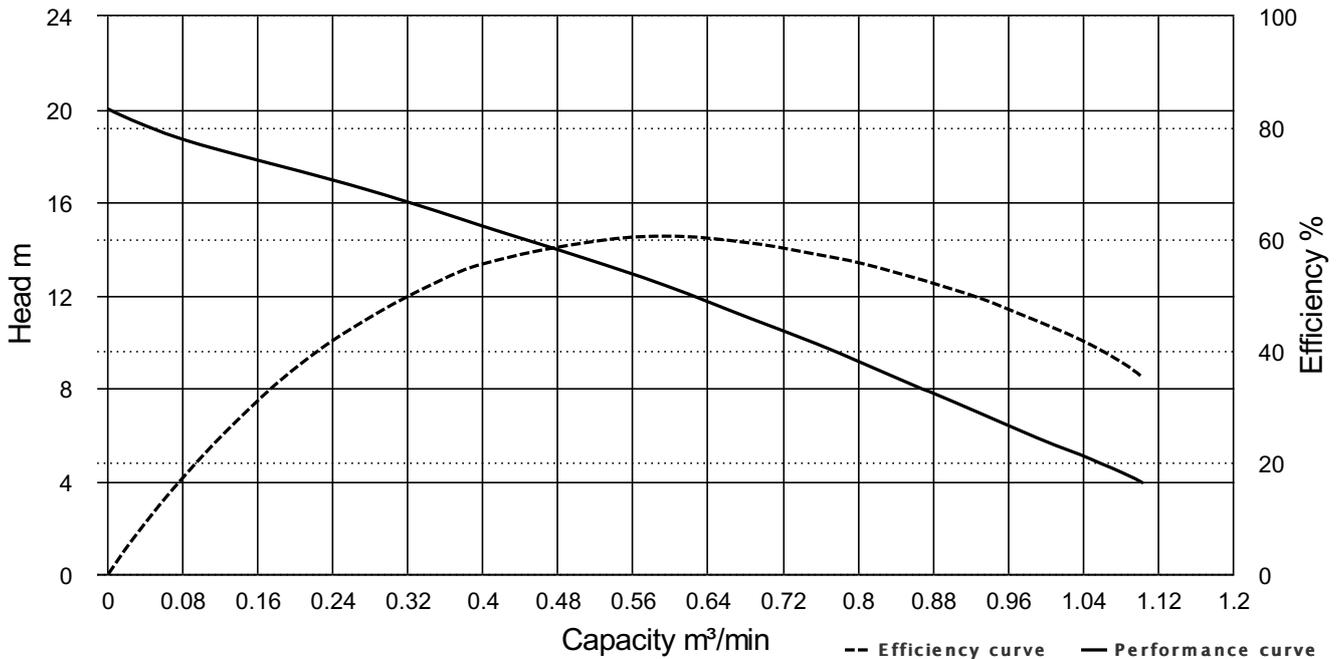
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-33P					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	3" / 80 mm						
Power	3 HP / 2.2 kW						
Std. Head	12 m						
Std. Capacity	0.6 m ³ /min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	8.8 A	5 A	4.8 A	4.8 A	3.8 A		
Pole / rpm	2 P / 2840 rpm						
Start Method	DOL						
Insulation Class	F						



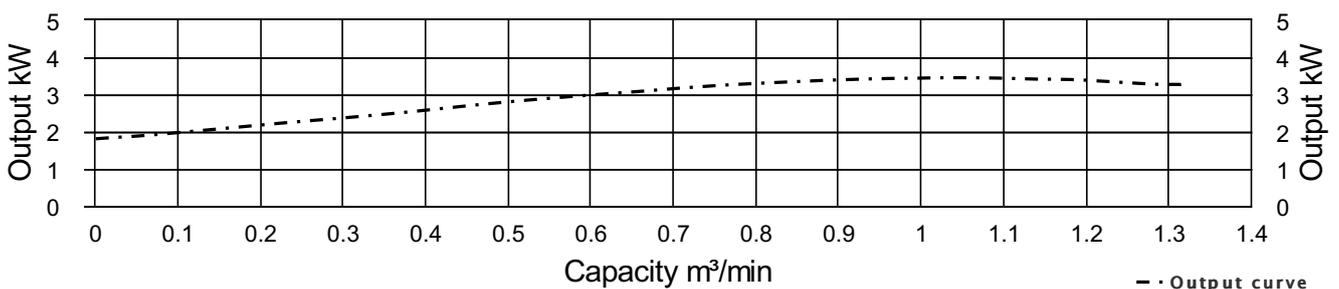
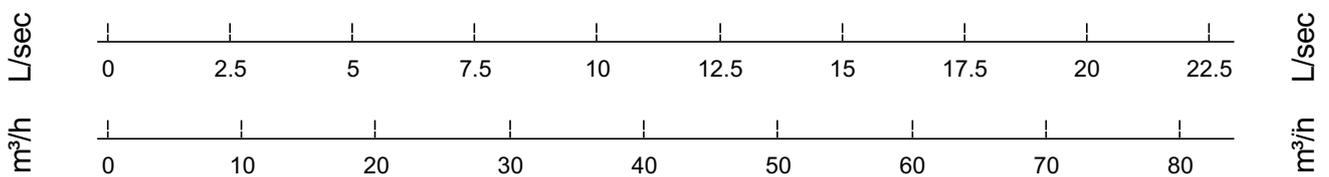
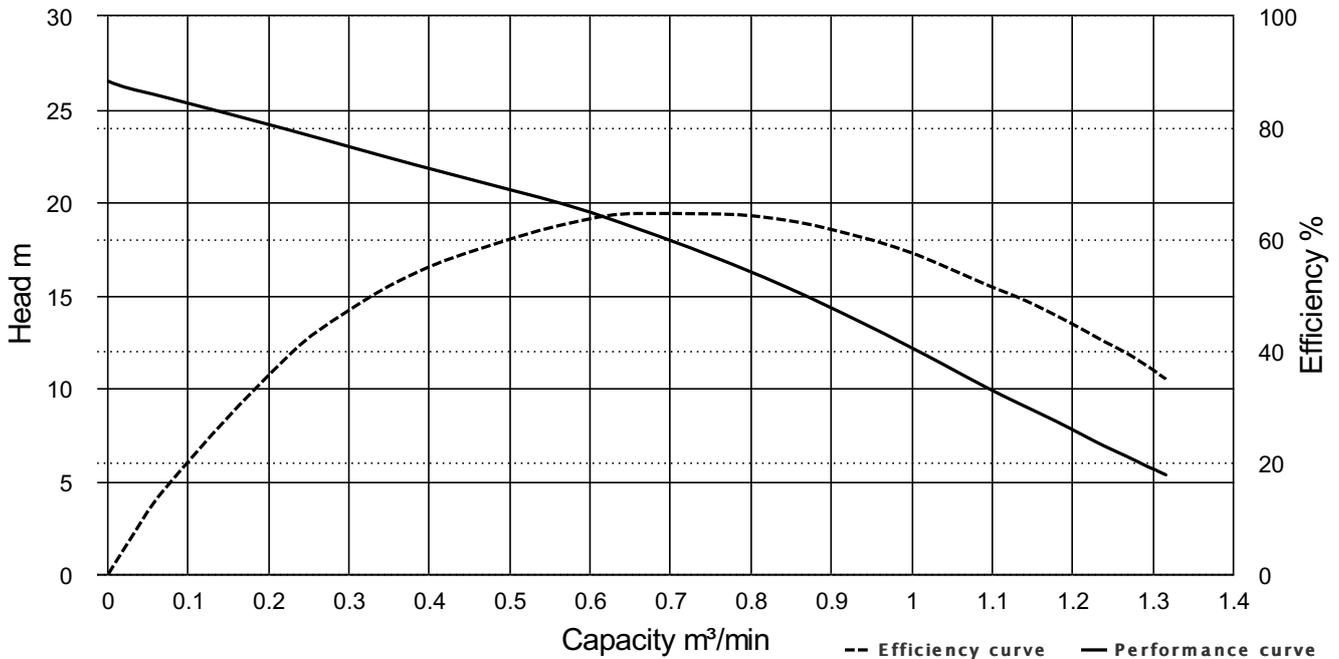
HCP PUMP MANUFACTURER CO., LTD.



HCP PUMP

PUMP PERFORMANCE CURVES

Model	FN-35P					Ver NO.	BA0407
Frequency / Phase	50 Hz / 3 Ø					REFERENCE SPECIFICATION	
Discharge	3" / 80 mm						
Power	5 HP / 3.7 kW						
Std. Head	19 m						
Std. Capacity	0.6 m ³ /min						
Volt	230 V	380 V	400 V	415 V	525 V		
Rated Current	14.2 A	8.2 A	7.8 A	7.8 A	6.2 A		
Pole / rpm	2 P / 2830 rpm						
Start Method	DOL						
Insulation Class	F						



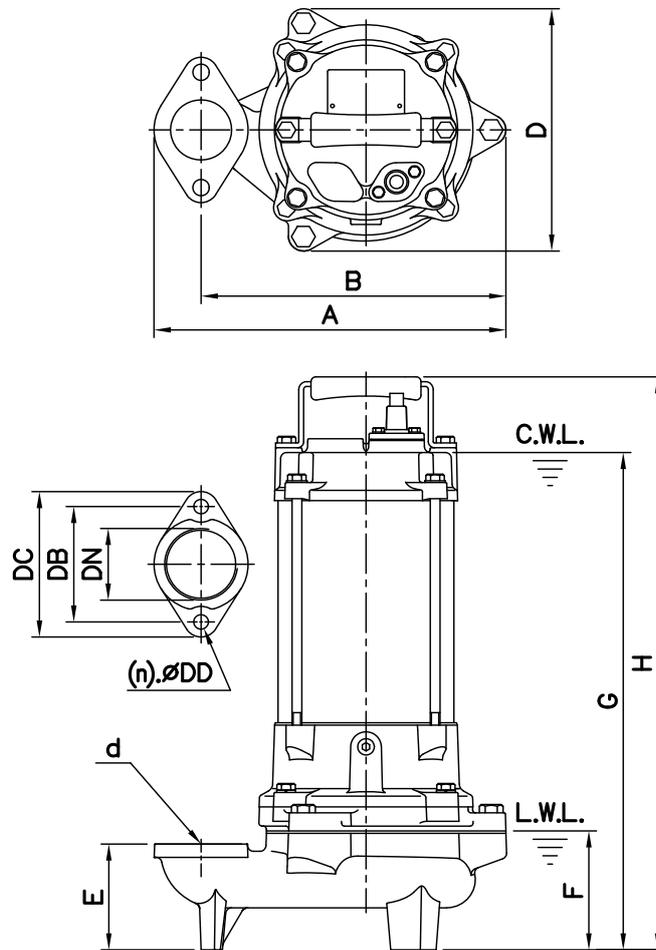
HCP PUMP MANUFACTURER CO., LTD.

DIMENSIONS

NO: S2FNU215032-00

MODEL: FN-22U

1Ø / 3Ø



Flange	
Female Thread	
PF	NPT

Dimensions—mm

Weight:kg

Model	d	A	B	D	E	F	G	H	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
FN-22U 1Ø	50	288	250	202	88	100	483	546	30	EF2-96	50	96	121	12	2	1
FN-22U 3Ø	50	288	250	202	88	100	415	477	25	EF2-96	50	96	121	12	2	1

Dimensions—inch

Weight:lb

Model	d	A	B	D	E	F	G	H	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
FN-22U 1Ø	2	11 ¹ / ₁₆	9 ³ / ₁₆	7 ¹⁵ / ₁₆	3 ⁷ / ₁₆	3 ¹⁵ / ₁₆	19	21 ¹ / ₂	66	EF2-96	2	3 ³ / ₄	4 ³ / ₄	1/2	2	1
FN-22U 3Ø	2	11 ¹ / ₁₆	9 ³ / ₁₆	7 ¹⁵ / ₁₆	3 ⁷ / ₁₆	3 ¹⁵ / ₁₆	16 ⁵ / ₁₆	18 ³ / ₄	55	EF2-96	2	3 ³ / ₄	4 ³ / ₄	1/2	2	1

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

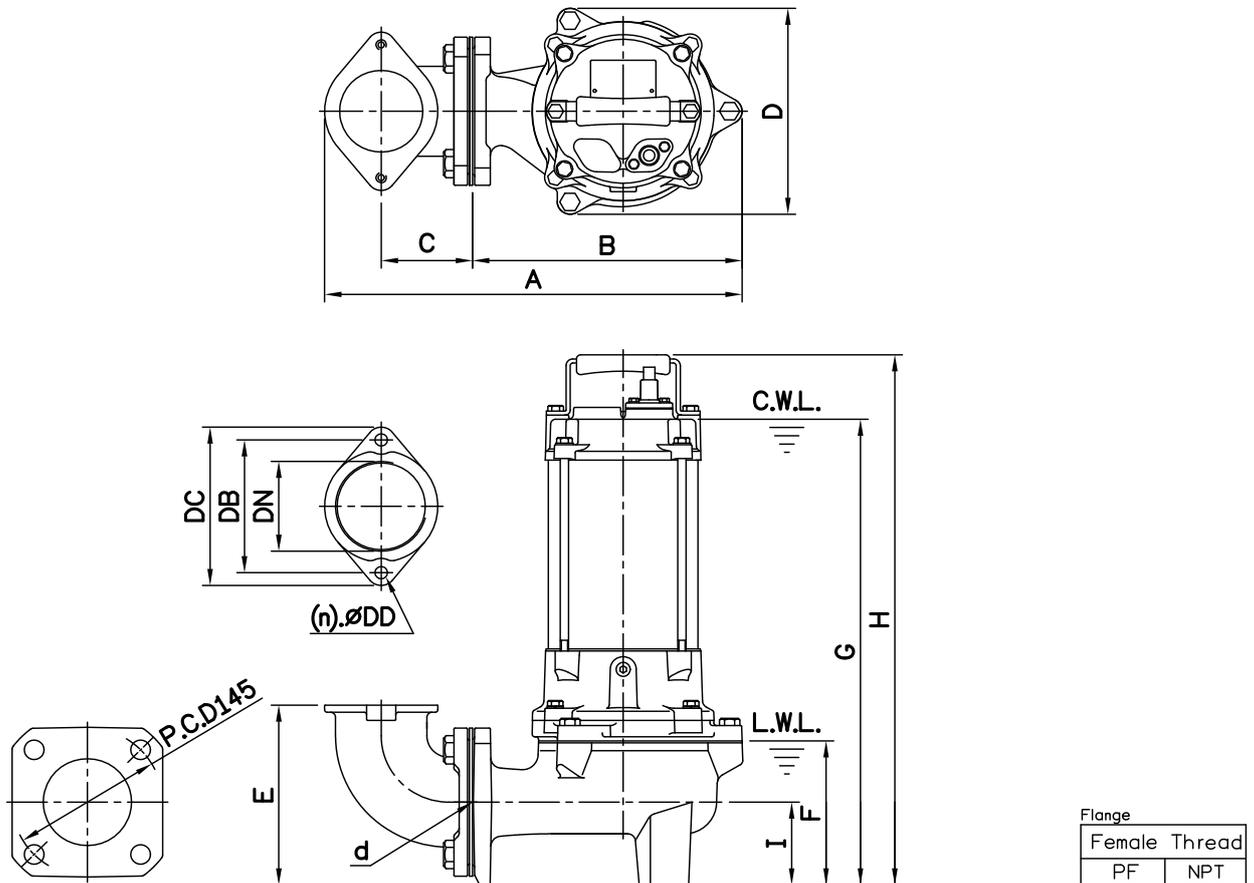
WT1:Pump Weight(Without Cable)
WT2:Elbow Set Weight

DIMENSIONS

NO: S3FNU222032-00

MODEL: FN-32U / 33U / 32UL / 33UL

1Ø / 3Ø



Dimensions—mm

Weight:kg

Model	d	A	B	C	D	E	F	G	H	I	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
FN-32U 1Ø	80	402	260	88	202	176	140	525	588	81	32	EB3-130	80	130	155	12	2	5
FN-33U 1Ø	80	402	260	88	202	176	140	537	600	81	35	EB3-130	80	130	155	12	2	5
FN-32UL 1Ø	80	407	265	88	221	215	193	577	640	120	35	EB3-130	80	130	155	12	2	5
FN-33UL 1Ø	80	407	265	88	221	215	193	589	652	120	37	EB3-130	80	130	155	12	2	5
FN-32U 3Ø	80	402	260	88	202	176	141	456	519	81	28	EB3-130	80	130	155	12	2	5
FN-33U 3Ø	80	402	260	88	202	176	141	456	519	81	30	EB3-130	80	130	155	12	2	5
FN-32UL 3Ø	80	407	265	88	221	215	193	508	571	120	34	EB3-130	80	130	155	12	2	5
FN-33UL 3Ø	80	407	265	88	221	215	193	508	571	120	36	EB3-130	80	130	155	12	2	5

Dimensions—inch

Weight:lb

Model	d	A	B	C	D	E	F	G	H	I	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
FN-32U 1Ø	3	15 ¹³ / ₁₆	10 ³ / ₄	3 ¹ / ₁₆	7 ¹⁵ / ₁₆	6 ¹⁵ / ₁₆	5 ¹ / ₂	22 ¹¹ / ₁₆	23 ³ / ₈	3 ³ / ₁₆	71	EB3-130	3	5 ¹ / ₈	6 ¹ / ₈	1/2	2	11
FN-33U 1Ø	3	15 ¹³ / ₁₆	10 ³ / ₄	3 ¹ / ₁₆	7 ¹⁵ / ₁₆	6 ¹⁵ / ₁₆	5 ¹ / ₂	21 ¹ / ₈	23 ³ / ₈	3 ³ / ₁₆	77	EB3-130	3	5 ¹ / ₈	6 ¹ / ₈	1/2	2	11
FN-32UL 1Ø	3	16	10 ⁷ / ₁₆	3 ¹ / ₁₆	8 ⁷ / ₁₆	8 ⁷ / ₁₆	7 ⁵ / ₈	22 ¹¹ / ₁₆	25 ¹ / ₁₆	4 ³ / ₄	77	EB3-130	3	5 ¹ / ₈	6 ¹ / ₈	1/2	2	11
FN-33UL 1Ø	3	16	10 ⁷ / ₁₆	3 ¹ / ₁₆	8 ⁷ / ₁₆	8 ⁷ / ₁₆	7 ⁵ / ₈	23 ³ / ₁₆	25 ¹ / ₁₆	4 ³ / ₄	82	EB3-130	3	5 ¹ / ₈	6 ¹ / ₈	1/2	2	11
FN-32U 3Ø	3	15 ¹³ / ₁₆	10 ³ / ₄	3 ¹ / ₁₆	7 ¹⁵ / ₁₆	6 ¹⁵ / ₁₆	5 ¹ / ₂	17 ¹ / ₈	20 ¹ / ₁₆	3 ³ / ₁₆	62	EB3-130	3	5 ¹ / ₈	6 ¹ / ₈	1/2	2	11
FN-33U 3Ø	3	15 ¹³ / ₁₆	10 ³ / ₄	3 ¹ / ₁₆	7 ¹⁵ / ₁₆	6 ¹⁵ / ₁₆	5 ¹ / ₂	17 ¹ / ₈	20 ¹ / ₁₆	3 ³ / ₁₆	66	EB3-130	3	5 ¹ / ₈	6 ¹ / ₈	1/2	2	11
FN-32UL 3Ø	3	16	10 ⁷ / ₁₆	3 ¹ / ₁₆	8 ⁷ / ₁₆	8 ⁷ / ₁₆	7 ⁵ / ₈	20	22 ¹ / ₂	4 ³ / ₄	75	EB3-130	3	5 ¹ / ₈	6 ¹ / ₈	1/2	2	11
FN-33UL 3Ø	3	16	10 ⁷ / ₁₆	3 ¹ / ₁₆	8 ⁷ / ₁₆	8 ⁷ / ₁₆	7 ⁵ / ₈	20	22 ¹ / ₂	4 ³ / ₄	79	EB3-130	3	5 ¹ / ₈	6 ¹ / ₈	1/2	2	11

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

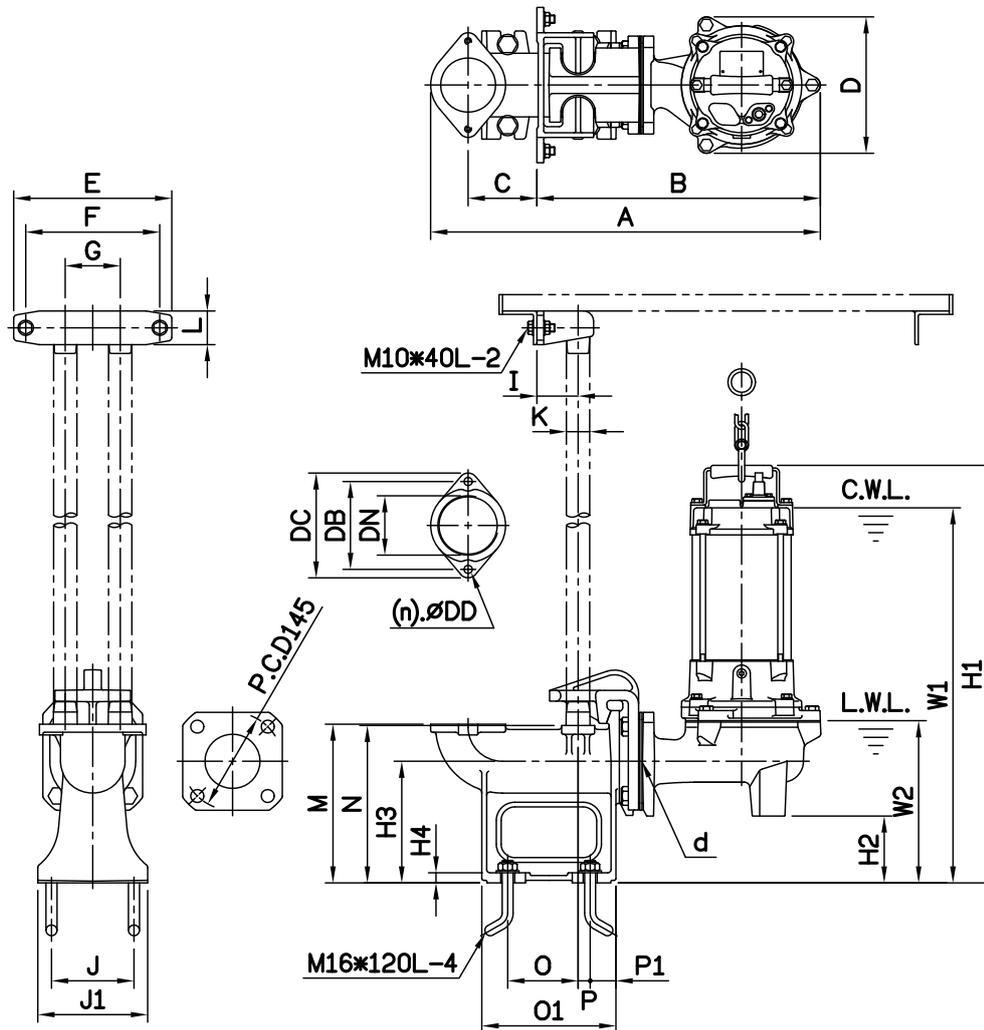
WT1: Pump Weight (Without Cable)
WT2: Elbow Set Weight

DIMENSIONS

NO: T3FNU222032-00

MODEL: FN-32U / 33U / 32UL / 33UL

1Ø / 3Ø



Flange	
Female Thread	
PF	NPT

Dimensions-mm

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF3-130	80	130	155	12	2

Dimensions-inch

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF3-130	3	5 1/8	6 1/8	1/2	2

Dimensions-mm

																				Weight:kg								
Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	N	O	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	GRS Set	WT2
FN-32U 1Ø	80	568	413	100	202	230	195	80	60	120	160	1 1/4	50	235	233	103	195	18	38	624	240	685	99	180	15	32	T2-80	20
FN-33U 1Ø	80	568	413	100	202	230	195	80	60	120	160	1 1/4	50	235	233	103	195	18	38	636	240	697	99	180	15	35	T2-80	20
FN-32UL 1Ø	80	574	420	100	202	230	195	80	60	120	160	1 1/4	50	235	233	103	195	18	38	637	253	700	60	180	15	38	T2-80	20
FN-33UL 1Ø	80	574	420	100	202	230	195	80	60	120	160	1 1/4	50	235	233	103	195	18	38	637	253	700	60	180	15	40	T2-80	20
FN-32U 3Ø	80	568	413	100	202	230	195	80	60	120	160	1 1/4	50	235	233	103	195	18	38	555	240	618	99	180	15	28	T2-80	20
FN-33U 3Ø	80	568	413	100	202	230	195	80	60	120	160	1 1/4	50	235	233	103	195	18	38	555	240	618	99	180	15	30	T2-80	20
FN-32UL 3Ø	80	574	420	100	202	230	195	80	60	120	160	1 1/4	50	235	233	103	195	18	38	568	253	631	60	180	15	34	T2-80	20
FN-33UL 3Ø	80	574	420	100	202	230	195	80	60	120	160	1 1/4	50	235	233	103	195	18	38	568	253	631	60	180	15	36	T2-80	20

Dimensions-inch

																				Weight:lb								
Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	N	O	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	GRS Set	WT2
FN-32U 1Ø	3	22 3/8	16 1/4	3 15/16	7 15/16	9 1/16	7 11/16	3 3/8	2 3/8	4 3/4	6 5/16	1 1/4	2	9 3/4	9 3/16	4 1/16	7 1/2	1 1/16	1 1/2	24 1/16	9 1/16	27	3 7/8	7 1/16	9/16	71	T2-80	43
FN-33U 1Ø	3	22 3/8	16 1/4	3 15/16	7 15/16	9 1/16	7 11/16	3 3/8	2 3/8	4 3/4	6 5/16	1 1/4	2	9 3/4	9 3/16	4 1/16	7 1/2	1 1/16	1 1/2	25 1/16	9 1/16	27 7/16	3 3/8	7 1/16	9/16	77	T2-80	43
FN-32UL 1Ø	3	22 3/8	16 3/16	3 15/16	7 15/16	9 1/16	7 11/16	3 3/8	2 3/8	4 3/4	6 5/16	1 1/4	2	9 3/4	9 3/16	4 1/16	7 1/2	1 1/16	1 1/2	25 1/16	9 1/16	27 7/16	2 3/8	7 1/16	9/16	84	T2-80	43
FN-33UL 1Ø	3	22 3/8	16 3/16	3 15/16	7 15/16	9 1/16	7 11/16	3 3/8	2 3/8	4 3/4	6 5/16	1 1/4	2	9 3/4	9 3/16	4 1/16	7 1/2	1 1/16	1 1/2	25 1/16	9 1/16	27 7/16	2 3/8	7 1/16	9/16	88	T2-80	43
FN-32U 3Ø	3	22 3/8	16 1/4	3 15/16	7 15/16	9 1/16	7 11/16	3 3/8	2 3/8	4 3/4	6 5/16	1 1/4	2	9 3/4	9 3/16	4 1/16	7 1/2	1 1/16	1 1/2	21 1/8	9 1/16	24 5/16	3 3/8	7 1/16	9/16	62	T2-80	43
FN-33U 3Ø	3	22 3/8	16 1/4	3 15/16	7 15/16	9 1/16	7 11/16	3 3/8	2 3/8	4 3/4	6 5/16	1 1/4	2	9 3/4	9 3/16	4 1/16	7 1/2	1 1/16	1 1/2	21 1/8	9 1/16	24 5/16	3 3/8	7 1/16	9/16	66	T2-80	43
FN-32UL 3Ø	3	22 3/8	16 3/16	3 15/16	7 15/16	9 1/16	7 11/16	3 3/8	2 3/8	4 3/4	6 5/16	1 1/4	2	9 3/4	9 3/16	4 1/16	7 1/2	1 1/16	1 1/2	22 3/8	9 1/16	24 13/16	2 3/8	7 1/16	9/16	75	T2-80	43
FN-33UL 3Ø	3	22 3/8	16 3/16	3 15/16	7 15/16	9 1/16	7 11/16	3 3/8	2 3/8	4 3/4	6 5/16	1 1/4	2	9 3/4	9 3/16	4 1/16	7 1/2	1 1/16	1 1/2	22 3/8	9 1/16	24 13/16	2 3/8	7 1/16	9/16	79	T2-80	43

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

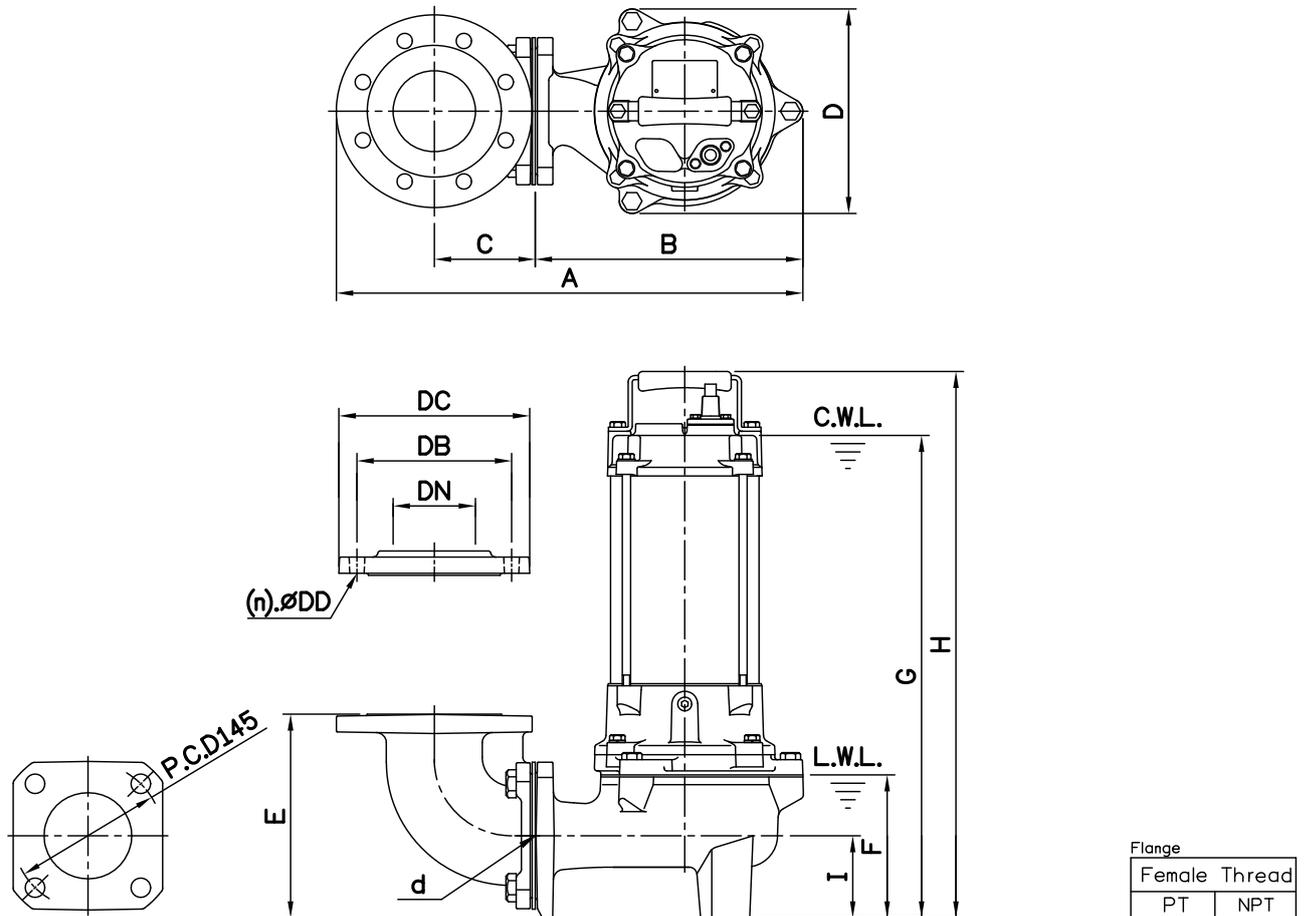
WT1:Pump Weight(Without Cable)
WT2:GRS Set Weight

DIMENSIONS

NO: S3FNU237032-00

MODEL: FN-35U / 35UL

3Ø



Dimensions-mm

Weight:kg

Model	d	A	B	C	D	E	F	G	H	I	WT1	Elbow (Flange) Set	DN	DB	DC	DD	(n)QTY	WT2
FN-35U	80	453	260	98	202	201	140	476	539	81	35	EB3-150A	80	150	185	15	8	12
FN-35UL	80	458	265	98	221	240	193	528	591	120	35	EB3-150A	80	150	185	15	8	12

Dimensions-inch

Weight:lb

Model	d	A	B	C	D	E	F	G	H	I	WT1	Elbow (Flange) Set	DN	DB	DC	DD	(n)QTY	WT2
FN-35U	3	17 ³ / ₁₆	10 ¹ / ₄	3 ⁷ / ₈	7 ¹⁵ / ₁₆	7 ⁷ / ₈	5 ¹ / ₂	18 ³ / ₄	21 ¹ / ₄	3 ³ / ₁₆	77	EB3-150A	3	5 ⁷ / ₈	7 ⁵ / ₁₆	1 ¹ / ₁₆	8	26
FN-35UL	3	18 ¹ / ₁₆	10 ⁷ / ₁₆	3 ⁷ / ₈	8 ¹ / ₁₆	9 ³ / ₁₆	7 ⁷ / ₈	20 ³ / ₁₆	23 ³ / ₄	4 ³ / ₄	77	EB3-150A	3	5 ⁷ / ₈	7 ⁵ / ₁₆	1 ¹ / ₁₆	8	26

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

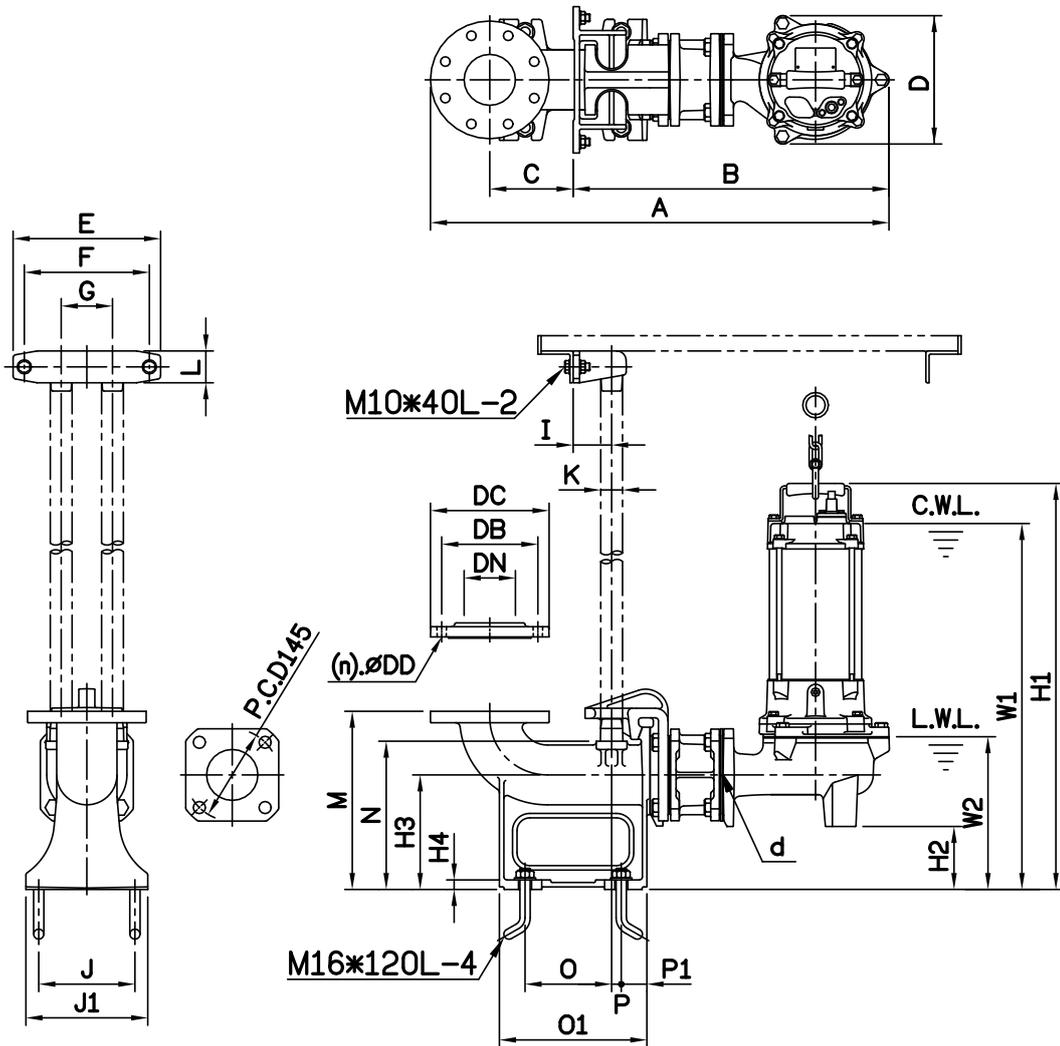
WT1:Pump Weight(Without Cable)
WT2:Elbow Set Weight

DIMENSIONS

NO: T3FNU237032-00

MODEL: FN-35U / 35UL

3Ø



Flange	
Female Thread	
PT	NPT

Dimensions-mm

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF3-150	80	150	185	15	8

Dimensions-inch

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF3-150	3	5 ¹¹ / ₁₆	7 ⁵ / ₁₆	¹ / ₁₆	8

Dimensions-mm

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	N	O	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	Weight:kg	
																											GRS Set	WT2
FN-35U	80	715	493	130	202	230	195	80	60	150	190	1 ¹ / ₄	50	280	233	135	230	15	40	575	240	638	99	180	15	33	T80DH	31
FN-35UL	80	720	498	130	221	230	195	80	60	150	190	1 ¹ / ₄	50	280	233	135	230	15	40	588	253	651	60	180	15	35	T80DH	31

Dimensions-inch

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	N	O	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	Weight:lb	
																											GRS Set	WT2
FN-35U	3	28 ⁵ / ₁₆	19 ⁷ / ₁₆	5 ¹ / ₁₆	7 ¹⁵ / ₁₆	9 ¹ / ₁₆	7 ¹¹ / ₁₆	3 ³ / ₁₆	2 ³ / ₁₆	5 ⁷ / ₁₆	7 ¹ / ₂	1 ¹ / ₄	2	11	9 ³ / ₁₆	5 ⁵ / ₁₆	9 ¹ / ₁₆	⁹ / ₁₆	1 ¹ / ₁₆	22 ⁵ / ₁₆	9 ⁷ / ₁₆	25 ¹ / ₁₆	3 ⁷ / ₁₆	7 ¹ / ₁₆	⁹ / ₁₆	73	T80DH	68
FN-35UL	3	28 ⁵ / ₁₆	19 ⁷ / ₁₆	3 ¹⁵ / ₁₆	7 ¹⁵ / ₁₆	9 ¹ / ₁₆	7 ¹¹ / ₁₆	3 ³ / ₁₆	2 ³ / ₁₆	4 ³ / ₄	6 ⁵ / ₁₆	1 ¹ / ₄	2	9 ¹ / ₄	9 ³ / ₁₆	4 ¹ / ₁₆	7 ¹¹ / ₁₆	1 ¹ / ₁₆	1 ¹ / ₂	23 ³ / ₁₆	9 ¹⁵ / ₁₆	25 ⁵ / ₁₆	7 ¹ / ₁₆	7 ¹ / ₁₆	⁹ / ₁₆	77	T80DH	68

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

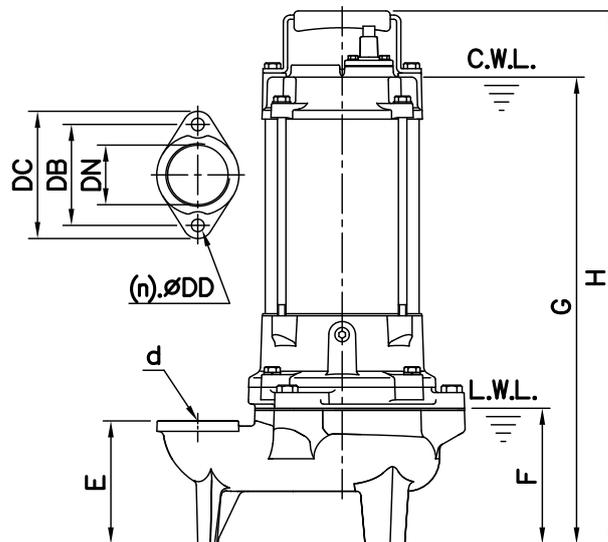
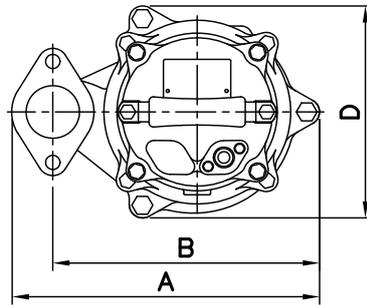
WT1:Pump Weight(Without Cable)
WT2:GRS Set Weight

DIMENSIONS

NO: S2FNU215L32-00

MODEL: FN-22UL

1Ø / 3Ø



Flange	
Female Thread	
PF	NPT

Dimensions-mm

Weight:kg

Model	d	A	B	D	E	F	G	H	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
FN-22UL 1Ø	50	288	250	202	117	129	513	576	31	EF2-96	50	96	121	12	2	1
FN-22UL 3Ø	50	288	250	202	117	129	444	507	26	EF2-96	50	96	121	12	2	1

Dimensions-inch

Weight:lb

Model	d	A	B	D	E	F	G	H	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
FN-22UL 1Ø	2	11 ¹ / ₁₆	9 ³ / ₁₆	7 ¹⁵ / ₁₆	4 ⁵ / ₈	5 ¹ / ₁₆	20 ⁹ / ₁₆	22 ¹ / ₁₆	68	EF2-96	2	3 ³ / ₄	4 ³ / ₄	1/2	2	1
FN-22UL 3Ø	2	11 ¹ / ₁₆	9 ³ / ₁₆	7 ¹⁵ / ₁₆	4 ⁵ / ₈	5 ¹ / ₁₆	17 ¹ / ₂	19 ¹⁵ / ₁₆	57	EF2-96	2	3 ³ / ₄	4 ³ / ₄	1/2	2	1

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

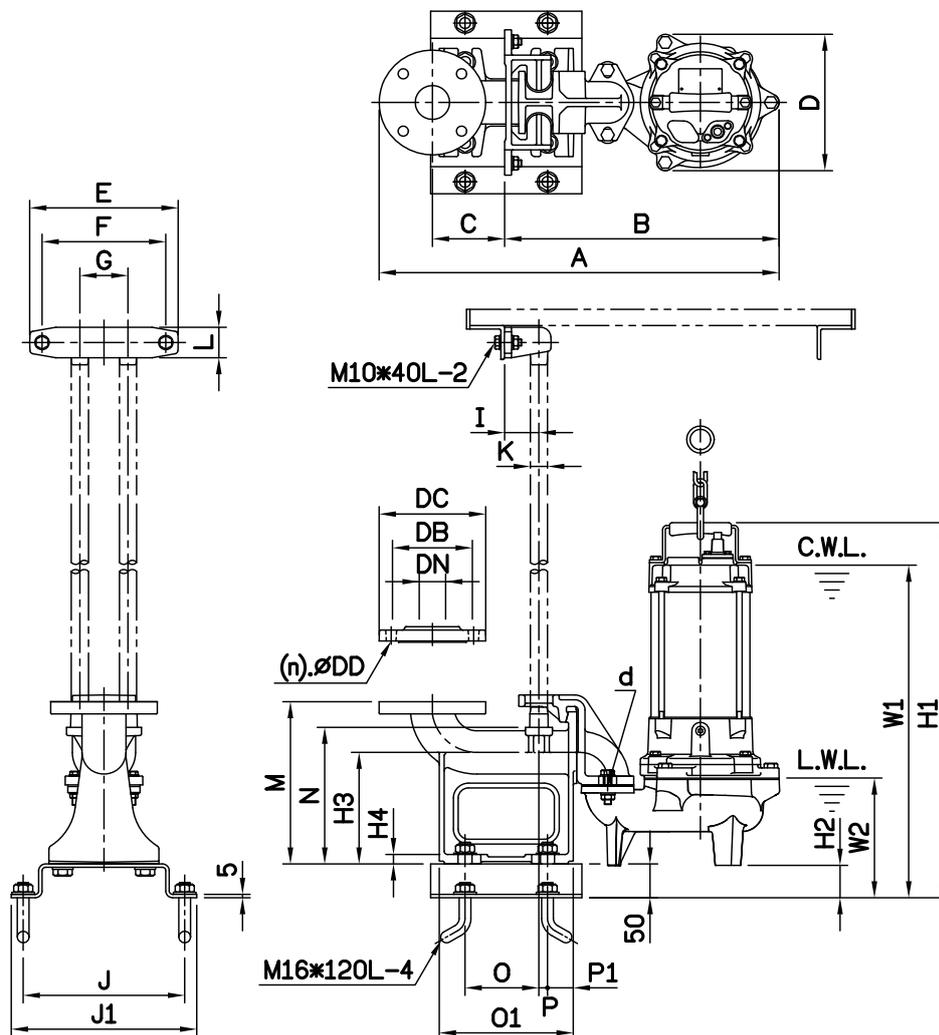
WT1:Pump Weight(Without Cable)
WT2:Elbow Set Weight

DIMENSIONS

NO: T2FNU215L32-00

MODEL: FN-22UL

1Ø / 3Ø



Flange	
Female Thread	
PT	NPT

Dimensions-mm

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF2-120	50	120	155	15	4

Dimensions-inch

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF2-120	2	4 3/4	6 1/8	9/16	4

Dimensions-mm

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	N	O	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	Weight:kg	
																											GRS Set	WT2
FN-22UL 1Ø	50	582	400	105	202	215	180	70	50	235	270	1°	45	240	202	108	195	13	38	561	177	624	48	165	14	31	T50E-E5	21
FN-22UL 3Ø	50	582	400	105	202	215	180	70	50	235	270	1°	45	240	202	108	195	13	38	492	177	555	48	165	14	26	T50E-E5	21

Dimensions-inch

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	N	O	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	Weight:lb	
																											GRS Set	WT2
FN-22UL 1Ø	2	22 7/16	15 3/4	4 1/8	7 7/16	8 7/16	7 1/16	2 3/4	1 7/16	9 3/4	10 5/8	1	1 3/4	9 7/16	7 15/16	4 1/4	7 1/2	1/2	1 1/2	22 1/16	6 15/16	24 9/16	1 7/8	6 1/2	9/16	68	T50E-E5	47
FN-22UL 3Ø	2	22 7/16	15 3/4	4 1/8	7 7/16	8 7/16	7 1/16	2 3/4	1 7/16	9 3/4	10 5/8	1	1 3/4	9 7/16	7 15/16	4 1/4	7 1/2	1/2	1 1/2	19 9/16	6 15/16	21 7/8	1 7/8	6 1/2	9/16	57	T50E-E5	47

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

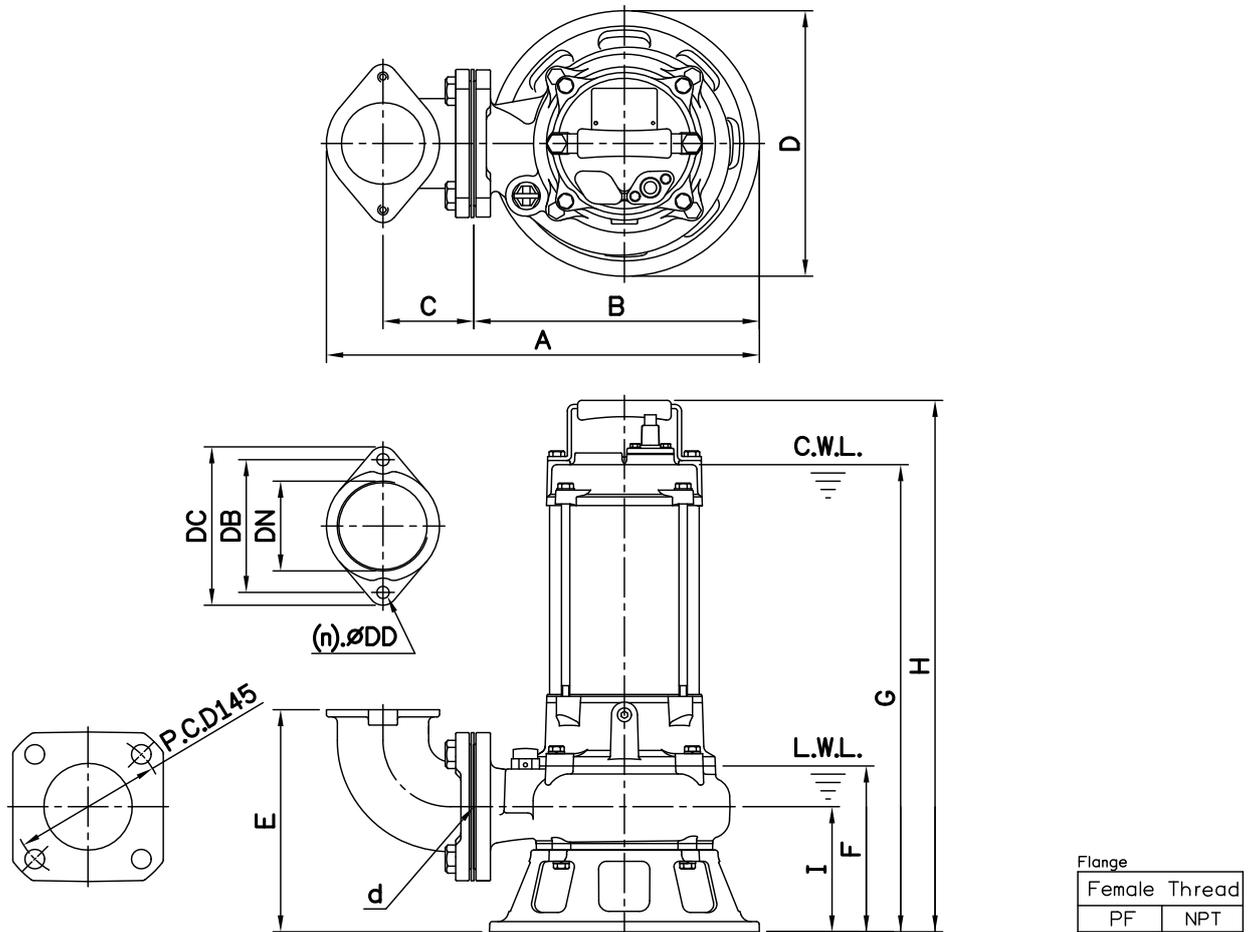
WT1:Pump Weight(Without Cable)
WT2:GRS Set Weight

DIMENSIONS

NO: S3FNP222032-00

MODEL: FN-32P / 33P

1Ø / 3Ø



Dimensions—mm

Weight:kg

Model	d	A	B	C	D	E	F	G	H	I	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
FN-32P 1Ø	80	417	275	88	260	218	163	527	590	123	34	EB3-130	80	130	155	12	2	5
FN-32P 3Ø	80	417	275	88	260	218	163	458	521	123	30	EB3-130	80	130	155	12	2	5
FN-33P 1Ø	80	417	275	88	260	218	163	539	602	123	37	EB3-130	80	130	155	12	2	5
FN-33P 3Ø	80	417	275	88	260	218	163	458	521	123	32	EB3-130	80	130	155	12	2	5

Dimensions—inch

Weight:lb

Model	d	A	B	C	D	E	F	G	H	I	WT1	Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY	WT2
FN-32P 1Ø	3	16 ⁷ / ₁₆	10 ³ / ₁₆	3 ⁷ / ₁₆	10 ¹ / ₄	8 ⁵ / ₁₆	6 ⁷ / ₁₆	20 ³ / ₄	23 ³ / ₄	4 ¹³ / ₁₆	75	EB3-130	3	5 ¹ / ₈	6 ¹ / ₈	1/2	2	11
FN-32P 3Ø	3	16 ⁷ / ₁₆	10 ³ / ₁₆	3 ⁷ / ₁₆	10 ¹ / ₄	8 ⁵ / ₁₆	6 ⁷ / ₁₆	18 ¹ / ₁₆	20 ¹ / ₂	4 ¹³ / ₁₆	66	EB3-130	3	5 ¹ / ₈	6 ¹ / ₈	1/2	2	11
FN-33P 1Ø	3	16 ⁷ / ₁₆	10 ³ / ₁₆	3 ⁷ / ₁₆	10 ¹ / ₄	8 ⁵ / ₁₆	6 ⁷ / ₁₆	21 ¹ / ₄	23 ³ / ₄	4 ¹³ / ₁₆	82	EB3-130	3	5 ¹ / ₈	6 ¹ / ₈	1/2	2	11
FN-33P 3Ø	3	16 ⁷ / ₁₆	10 ³ / ₁₆	3 ⁷ / ₁₆	10 ¹ / ₄	8 ⁵ / ₁₆	6 ⁷ / ₁₆	18 ¹ / ₁₆	20 ¹ / ₂	4 ¹³ / ₁₆	71	EB3-130	3	5 ¹ / ₈	6 ¹ / ₈	1/2	2	11

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

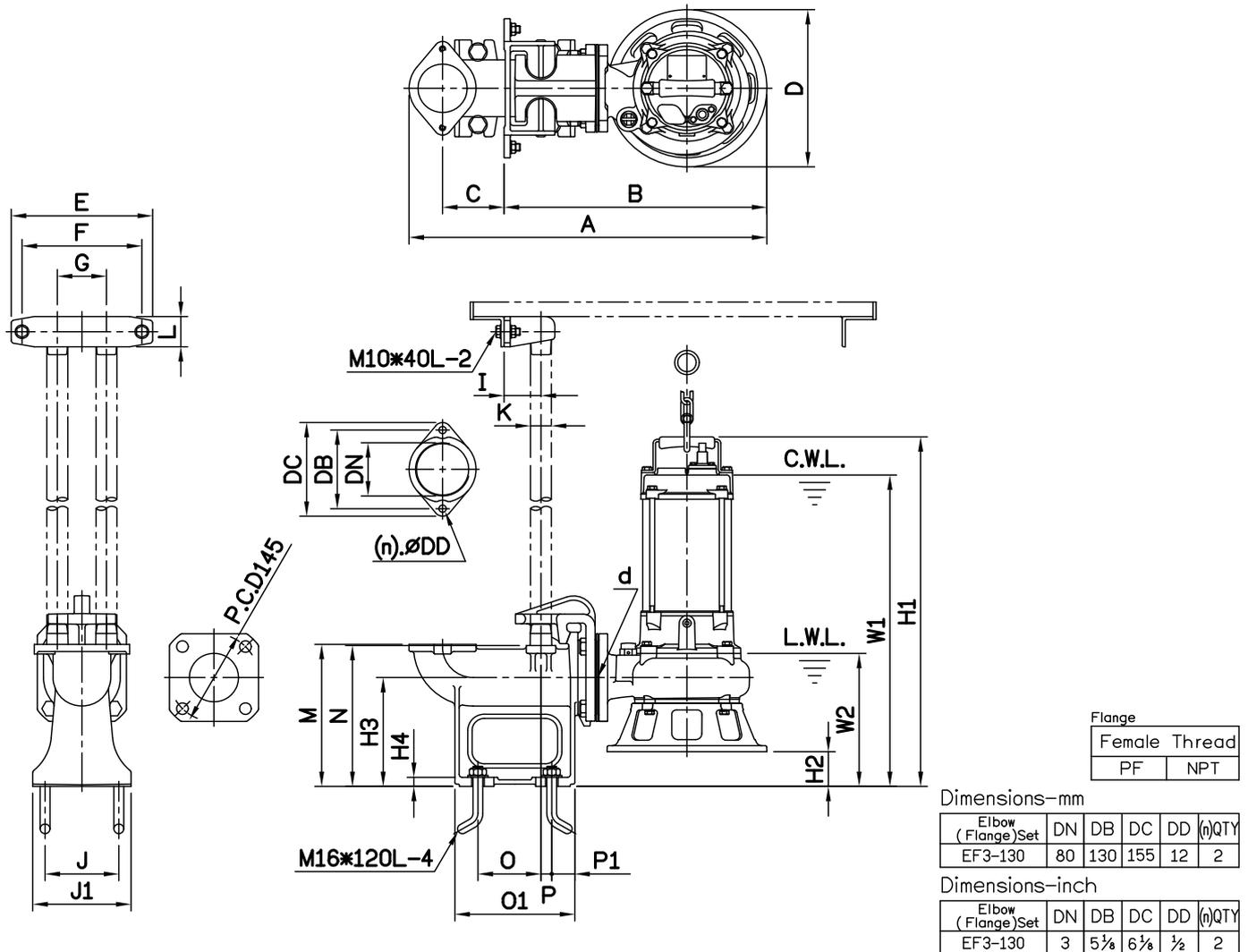
WT1:Pump Weight(Without Cable)
WT2:Elbow Set Weight

DIMENSIONS

NO: T3FNP222032-00

MODEL: FN-32P / 33P

1Ø / 3Ø



Dimensions-mm

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF3-130	80	130	155	12	2

Dimensions-inch

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF3-130	3	5 1/8	6 1/8	1/2	2

Dimensions-mm

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	N	O	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	Weight:kg	
																											GRS Set	WT2
FN-32P 1Ø	80	583	428	100	260	230	195	80	60	120	160	1 1/4	50	235	233	103	195	18	38	584	220	647	58	180	15	34	T2-80	20
FN-33P 1Ø	80	583	428	100	260	230	195	80	60	120	160	1 1/4	50	235	233	103	195	18	38	596	220	659	58	180	15	37	T2-80	20
FN-32P 3Ø	80	583	428	100	260	230	195	80	60	120	160	1 1/4	50	235	233	103	195	18	38	515	220	578	58	180	15	30	T2-80	20
FN-33P 3Ø	80	583	428	100	260	230	195	80	60	120	160	1 1/4	50	235	233	103	195	18	38	515	220	578	58	180	15	32	T2-80	20

Dimensions-inch

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	N	O	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	Weight:lb	
																											GRS Set	WT2
FN-32P 1Ø	3	22 7/8	16 5/8	3 15/16	10 3/4	9 1/16	7 1/2	3 1/8	2 3/8	4 3/4	6 1/8	1 1/4	2	9 3/4	9 3/16	4 1/16	7 1/2	1 1/8	1 1/2	23	8 1/2	25 1/2	2 5/16	7 1/16	5/16	75	T2-80	43
FN-33P 1Ø	3	22 7/8	16 5/8	3 15/16	10 3/4	9 1/16	7 1/2	3 1/8	2 3/8	4 3/4	6 1/8	1 1/4	2	9 3/4	9 3/16	4 1/16	7 1/2	1 1/8	1 1/2	23 7/16	8 1/2	25 5/8	2 5/16	7 1/16	5/16	82	T2-80	43
FN-32P 3Ø	3	22 7/8	16 5/8	3 15/16	10 3/4	9 1/16	7 1/2	3 1/8	2 3/8	4 3/4	6 1/8	1 1/4	2	9 3/4	9 3/16	4 1/16	7 1/2	1 1/8	1 1/2	20 3/4	8 1/2	22 3/4	2 5/16	7 1/16	5/16	66	T2-80	43
FN-33P 3Ø	3	22 7/8	16 5/8	3 15/16	10 3/4	9 1/16	7 1/2	3 1/8	2 3/8	4 3/4	6 1/8	1 1/4	2	9 3/4	9 3/16	4 1/16	7 1/2	1 1/8	1 1/2	20 3/4	8 1/2	22 3/4	2 5/16	7 1/16	5/16	71	T2-80	43

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

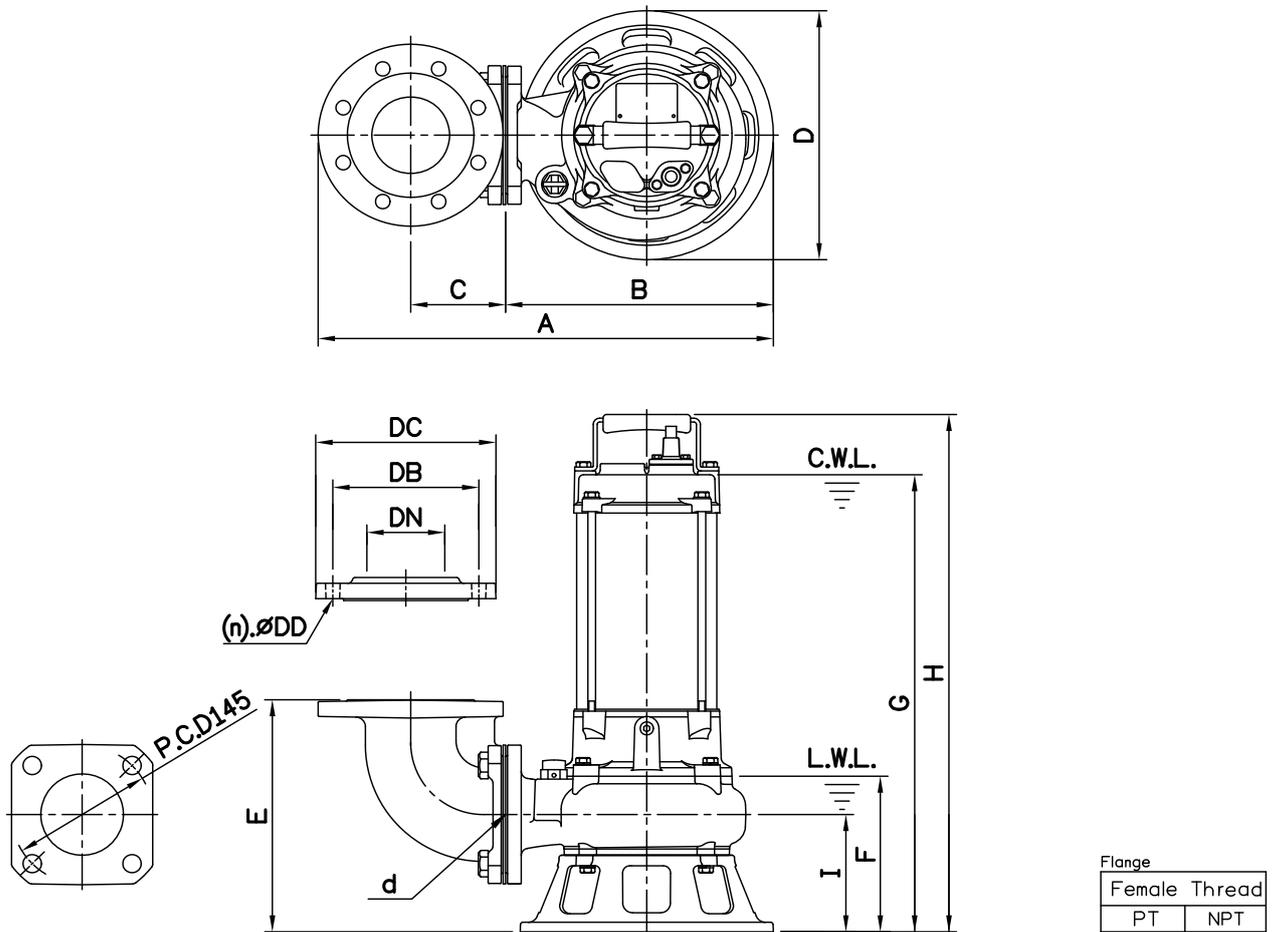
WT1:Pump Weight(Without Cable)
WT2:GRS Set Weight

DIMENSIONS

NO: S3FNP237032-00

MODEL: FN-35P

3Ø



Dimensions—mm

Model	d	A	B	C	D	E	F	G	H	I	WT1	Elbow (Flange) Set	DN	DB	DC	DD	(n)QTY	WT2
FN-35P	80	468	275	98	260	243	163	478	541	123	35	EB3-150A	80	150	185	15	8	12

Weight:kg

Dimensions—inch

Model	d	A	B	C	D	E	F	G	H	I	WT1	Elbow (Flange) Set	DN	DB	DC	DD	(n)QTY	WT2
FN-35P	3	18 ⁷ / ₁₆	10 ³ / ₁₆	3 ⁷ / ₁₆	10 ¹ / ₄	9 ³ / ₁₆	6 ³ / ₁₆	18 ³ / ₁₆	21 ¹ / ₁₆	4 ³ / ₁₆	77	EB3-150A	3	5 ⁵ / ₁₆	7 ³ / ₁₆	3 ¹ / ₁₆	8	26

Weight:lb

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level

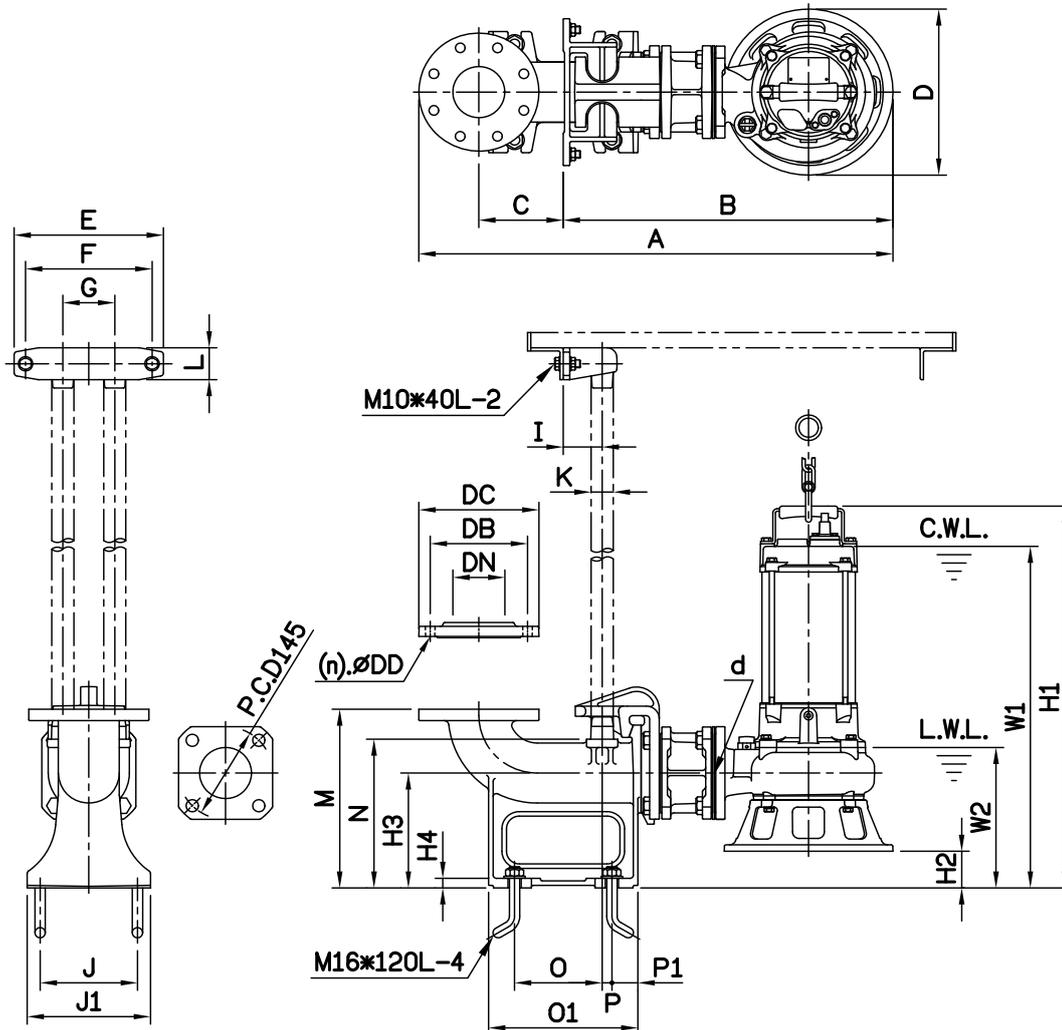
WT1:Pump Weight(Without Cable)
WT2:Elbow Set Weight

DIMENSIONS

NO: T3FNP237032-00

MODEL: FN-35P

3Ø



Flange	
Female Thread	
PT	NPT

Dimensions-mm

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF3-150	80	150	185	15	8

Dimensions-inch

Elbow (Flange)Set	DN	DB	DC	DD	(n)QTY
EF3-150	3	5 ¹⁵ / ₁₆	7 ⁷ / ₁₆	⁹ / ₁₆	8

Dimensions-mm

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	N	O	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	GRS Set	WT2
FN-35P	80	731	508	130	260	230	195	80	60	150	190	1 ¹ / ₄	50	280	233	135	230	15	40	535	220	598	58	180	15	35	T80DH	31

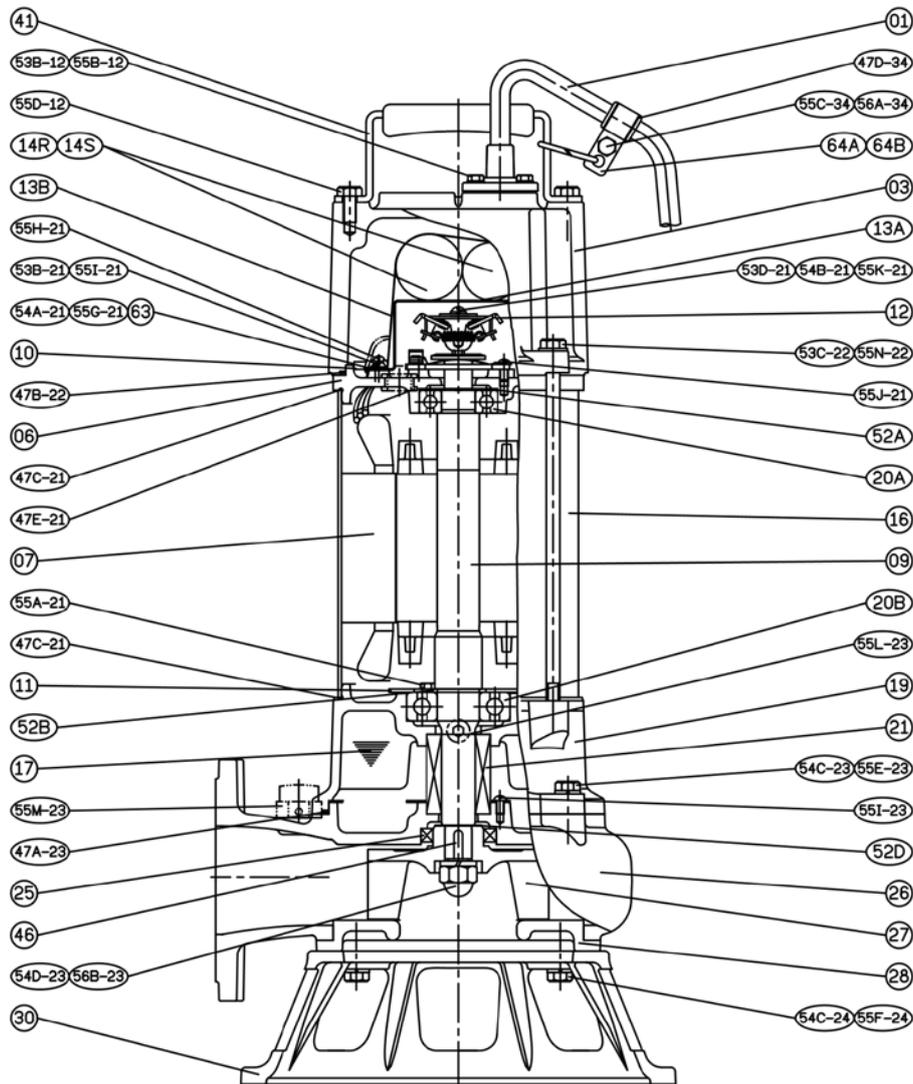
Weight:kg

Dimensions-inch

Model	d	A	B	C	D	E	F	G	I	J	J1	K	L	M	N	O	O1	P	P1	W1	W2	H1	H2	H3	H4	WT1	GRS Set	WT2
FN-35P	3	28 ³ / ₄	20	5 ¹ / ₈	10 ¹ / ₄	9 ¹ / ₁₆	7 ¹¹ / ₁₆	3 ³ / ₈	2 ³ / ₈	5 ¹⁵ / ₁₆	7 ¹ / ₂	1 ¹ / ₄	2	11	9 ³ / ₁₆	5 ³ / ₁₆	9 ¹ / ₁₆	⁹ / ₁₆	1 ¹ / ₁₆	21 ¹ / ₁₆	8 ¹¹ / ₁₆	23 ³ / ₁₆	2 ¹ / ₁₆	7 ¹ / ₁₆	⁷ / ₁₆	77	T80DH	68

Weight:lb

C.W.L.:Continuous Running Water Level
L.W.L.:Lowest Running Water Level
WT1:Pump Weight(Without Cable)
WT2:GRS Set Weight



NO.	Part name	Material	QTY
01	Cable		1
03	Upper Cover	FC200	1
06	Bracket	FC200	1
07	Stator		1
09	Shaft End	SUS403	1
10	Auto-cut Protector		1
11	Bearing Fixer	SPCC	1
12	Centrifugal Switch		1
14R	Capacitor		1
14S	Start Capacitor		1
16	Motor Frame	SUS304	1
17	Lubricant		
19	Bearing Bracket	FC200	1
20A	Bearing		1

NO.	Part name	Material	QTY
20B	Bearing		1
21	M. Seal	CA/CE & SiC/SiC	1
25	Oil Seal	NBR	1
26	Casing	FC200	1
27	Impeller	FC200	1
28	Casing Cover	FC200	1
30	Footing	FCD450	1
41	Handle	SUS304	1
46	Impeller Key	SUS304	1
47	Gasket Kit		



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