

# **HCP PUMP**

<b>Model</b>	<b>F-05U</b>
<b>Series</b>	<b>F/FN</b>
<b>Frequency</b>	<b>50</b>
<b>Phase</b>	<b>1</b>
<b>Discharge</b>	<b>50 mm (2")</b>



## **Motor Data**

Input Power—P1	0.72 kW
Rated Power—P2	0.4 kW
Insulation Class	B
Voltage Range	220~240V
Max. Starts Per Hour	10
Rated Speed (rpm)	2780
Start Method	CAPACITOR
Ingress Protection Code	CAPACITOR
Explosion-Proof	IP68

## **Technology**

Impeller Type	Vortex
Mechanical Seal	Double
Lubricating Oil VG32	160 CC
Solid Passage	35 mm
Cooling Type	External cooling

## **Material**

Motor Frame	SUS304 (X5CrNi18-10)
Shaft	SUS410 (X10Cr13)
Casing	FC200 (GG-20)
Impeller	FC200 (GG-20)
Mechanical Seal	CA/CE&SiC/SiC
Cable	VCT,H07RN-F
Upper and Lower Bearing	6202ZZ,6303ZZ

## **Liquid**

Maximum Ambient Temperature	0~40°C (32~104°F)
Maximum Installation Depth	10m (33ft)
Highest Liquid Temperature	40 °C (104°F)
Liquid Transported	Sewage

## **Others**

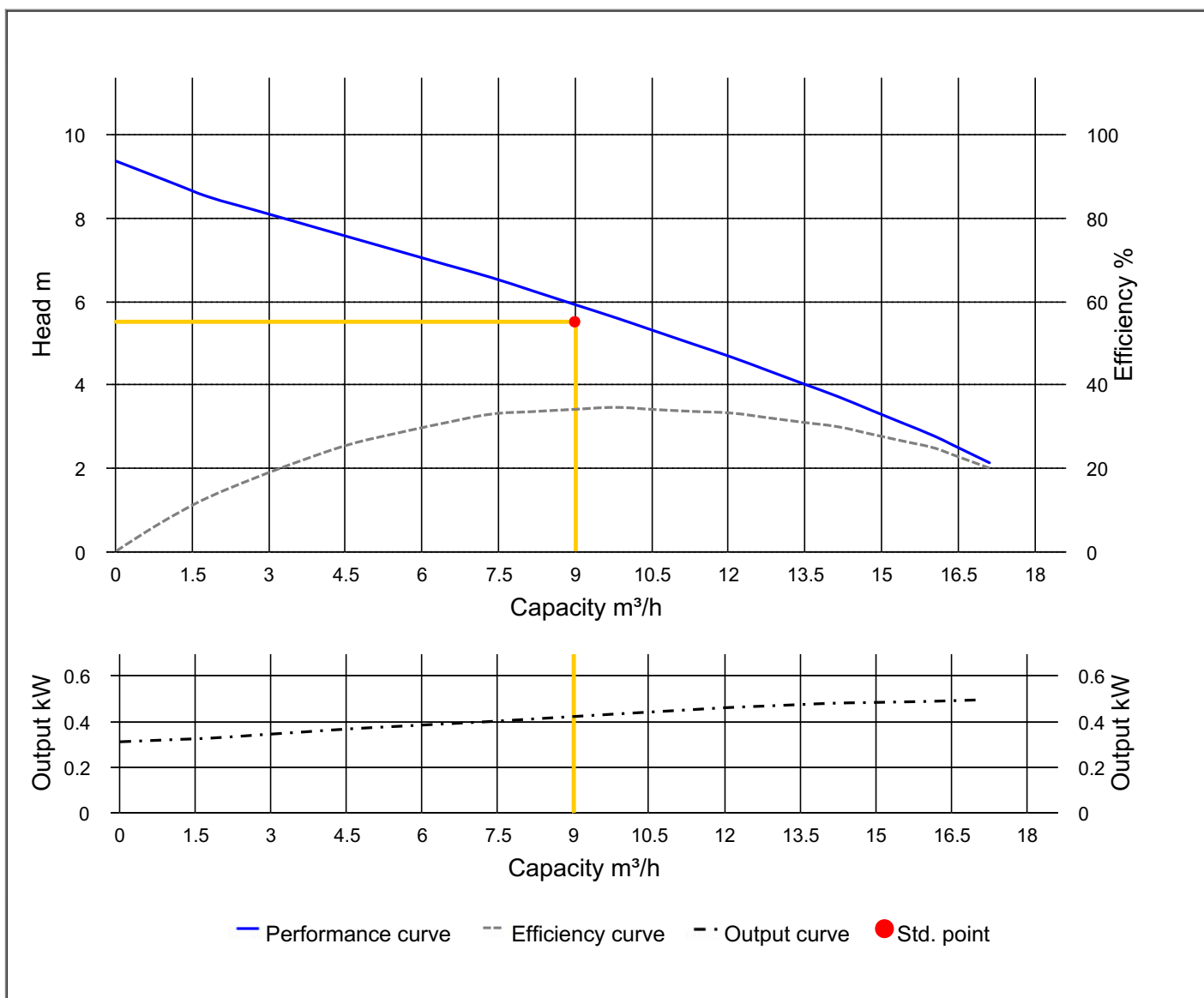
Protection Device	Motor Thermal Protector
Moisture Sensor	



# HCP PUMP

## PUMP PERFORMANCE CURVES

Model	F-05U	File NO.	20210303221045
Frequency	50 Hz	Ver NO.	202003060911
Discharge	2" / 50 mm	<b>REFERENCE SPECIFICATION</b>	
Output	0.5 HP / 0.4 kW	Output	0.42 kW
Std. Head	5.5 m	Efficiency	34.2 %
Std. Capacity	9 m <sup>3</sup> /h		
Phase / Volt	1 Ø / 220 V		
Rated Current	3.40 A		
Pole / rpm	2 P / 2780 rpm		
Start Method	CAPACITOR		
Insulation Class	B		

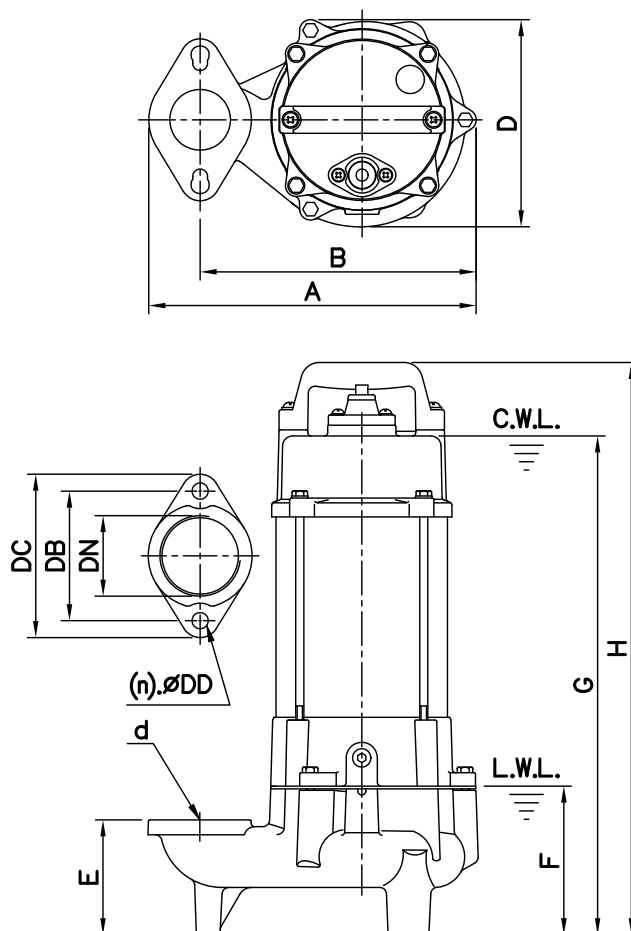


## DIMENSIONS

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 <sup>9</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>16</sub>	4 <sup>9</sup> / <sub>16</sub>	16 <sup>11</sup> / <sub>16</sub>	35	EF2-96	2	3 <sup>3</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>	1/2	2	2
F-05U 3Ø	2	9 <sup>9</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>16</sub>	4 <sup>9</sup> / <sub>16</sub>	16 <sup>11</sup> / <sub>16</sub>	33	EF2-96	2	3 <sup>3</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>	1/2	2	2
F-05UL 1Ø	2	9 <sup>9</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	6 <sup>7</sup> / <sub>16</sub>	4 <sup>7</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	15 <sup>9</sup> / <sub>16</sub>	17 <sup>11</sup> / <sub>16</sub>	37	EF2-96	2	3 <sup>3</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>	1/2	2	2
F-05UL 3Ø	2	9 <sup>9</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	6 <sup>7</sup> / <sub>16</sub>	4 <sup>7</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	15 <sup>9</sup> / <sub>16</sub>	17 <sup>11</sup> / <sub>16</sub>	35	EF2-96	2	3 <sup>3</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>	1/2	2	2
F-21U 1Ø	2	9 <sup>9</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>16</sub>	4 <sup>9</sup> / <sub>16</sub>	16 <sup>11</sup> / <sub>16</sub>	37	EF2-96	2	3 <sup>3</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>	1/2	2	2
F-21U 3Ø	2	9 <sup>9</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>16</sub>	4 <sup>9</sup> / <sub>16</sub>	16 <sup>11</sup> / <sub>16</sub>	35	EF2-96	2	3 <sup>3</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>	1/2	2	2
F-21UL 1Ø	2	9 <sup>9</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	6 <sup>7</sup> / <sub>16</sub>	4 <sup>5</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	15 <sup>9</sup> / <sub>16</sub>	17 <sup>11</sup> / <sub>16</sub>	40	EF2-96	2	3 <sup>3</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>	1/2	2	2
F-21UL 3Ø	2	9 <sup>9</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>16</sub>	6 <sup>7</sup> / <sub>16</sub>	4 <sup>7</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	15 <sup>9</sup> / <sub>16</sub>	17 <sup>11</sup> / <sub>16</sub>	37	EF2-96	2	3 <sup>3</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>	1/2	2	2

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

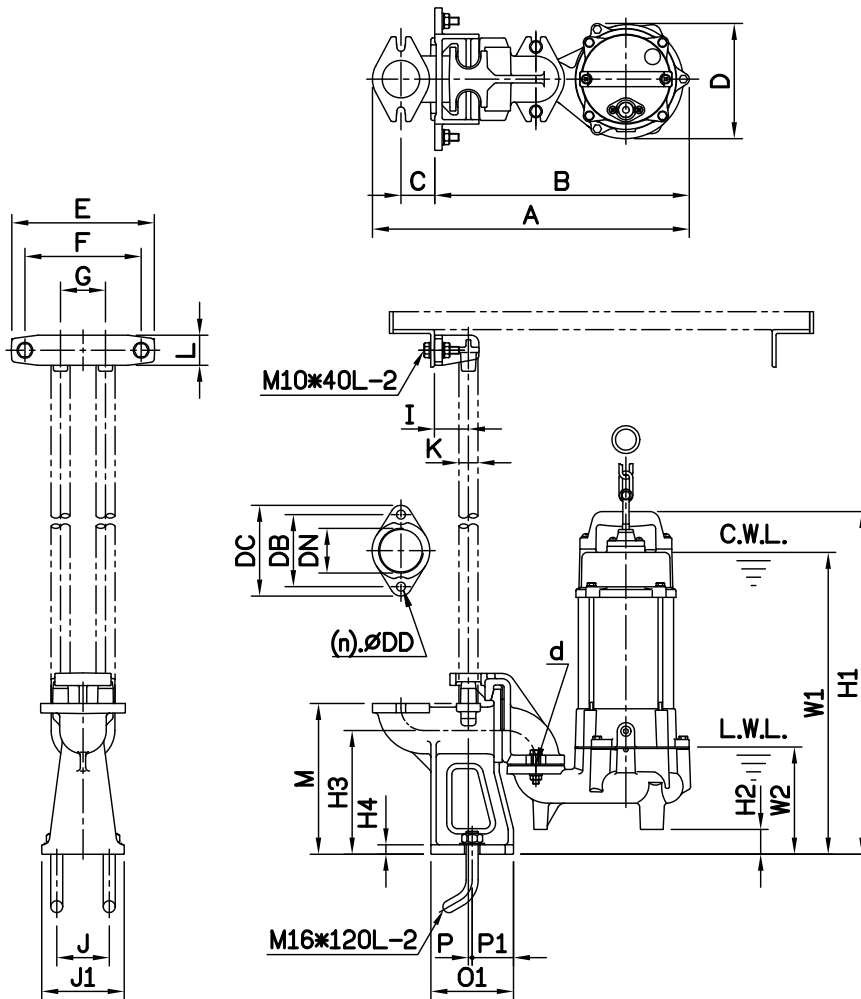
WT1:Pump Weight(Without Cable)  
WT2:Elbow Set Weight

## 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	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

Weight:kg

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	GRS Set	WT2
F-05U 1Ø	2	16 5/8	13 3/8	1 3/4	6 1/16	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 9/16	7 15/16	4 5/16	3/16	2 3/16	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 1/16	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 9/16	7 15/16	4 5/16	3/16	2 3/16	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 1/16	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 9/16	7 15/16	4 5/16	3/16	2 3/16	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 1/16	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 9/16	7 15/16	4 5/16	3/16	2 3/16	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 1/16	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 9/16	7 15/16	4 5/16	3/16	2 3/16	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 1/16	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 9/16	7 15/16	4 5/16	3/16	2 3/16	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 1/16	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 9/16	7 15/16	4 5/16	3/16	2 3/16	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 1/16	7 1/2	6 1/8	2 3/8	1 3/4	2 3/4	4 5/16	3/4	1 9/16	7 15/16	4 5/16	3/16	2 3/16	15 7/8	5 5/8	18	5/16	6 1/2	1/2	37	T2-50	20

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

