

Submersible Pumps

SPECIFICATIONS & ADVANTAGES:

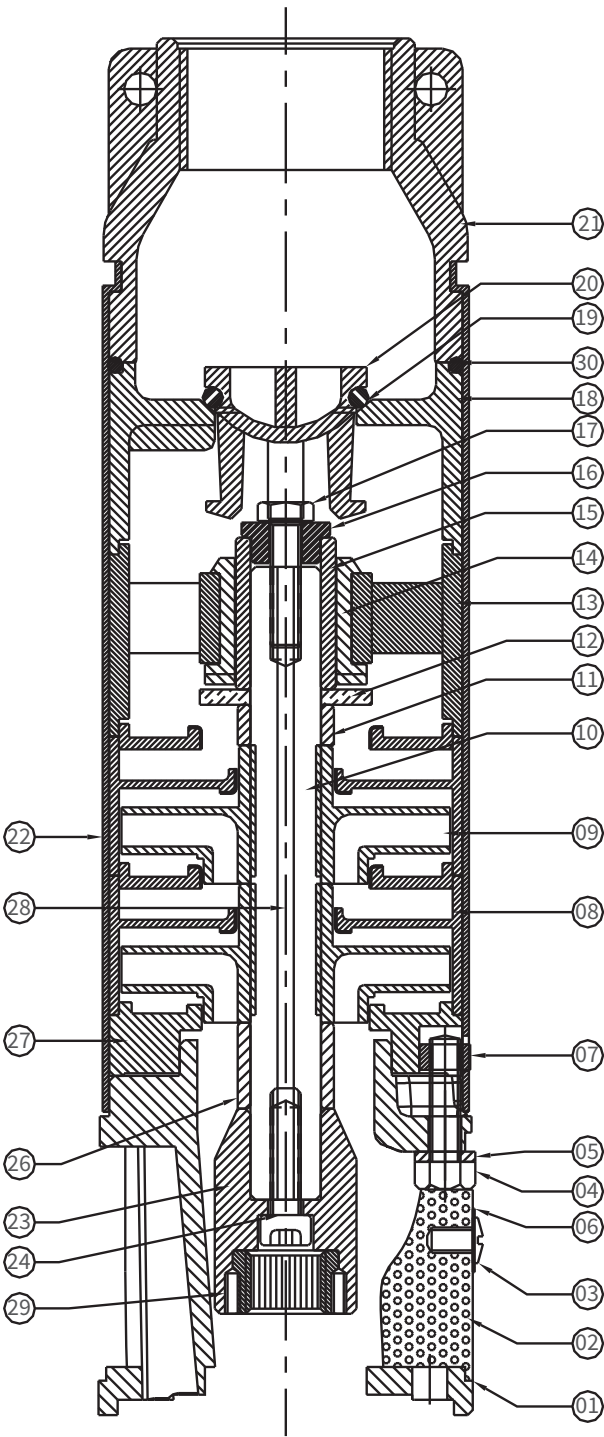
- 1. Suction and discharge outlets are made of cast iron with nickel coating & with a look of steel finish.
- 2. Impellers and Diffusers are of specially engineered Resins to provide wear resistance against sand.
- 3. Pump casing is made of PPO 20% GF.
- 4. Pump shaft is made of Stainless Steel.
- 5. Hexagonal Rubber Bearing Bush and Hard Chrome Sleeves help in long lasting performance.
- 6. Efficient and newly designed Non Return Valve (NRV).
- 7. Cable Guard and Strainer are of stainless steel.
- 8. Maximum level of sand content : 50 gm/m3.
- 9. Application : These pumps are for domestic, agriculture & industrial usage.
- 10. Operating range : 3" - Head range : 3 mtr to 95 mtr
Flow rate : 7 lpm to 90 lpm
Immersion : 1 mtr minimum
4" - Head range : 9 mtr to 288 mtr
Flow rate : 5 lpm to 160 lpm
Immersion : 1 mtr minimum
5" - Head range : 13 mtr to 104 mtr
Flow rate : 650 1pm to 140 1pm
Immersion : 1mtr minimum
6" - Head range : 4 mtr to 444 mtr
Flow rate : 1700 pm to 60 pm
Immersion : 1mtr minimum
7" - Head range : 8 mtr to 112 mtr
Flow rate : 1660 1pm to 500 1pm
Immersion : 1mtr minimum
8" - Head range : 25 mtr to 420 mtr
Flow rate : IOOO pm to 300 1pm
Immersion : 1mtr minimum

* Performance tolerance can be +/- 7%

3RF 300, 3RF 30A, 3RF 300H SERIES PUMP DESIGN

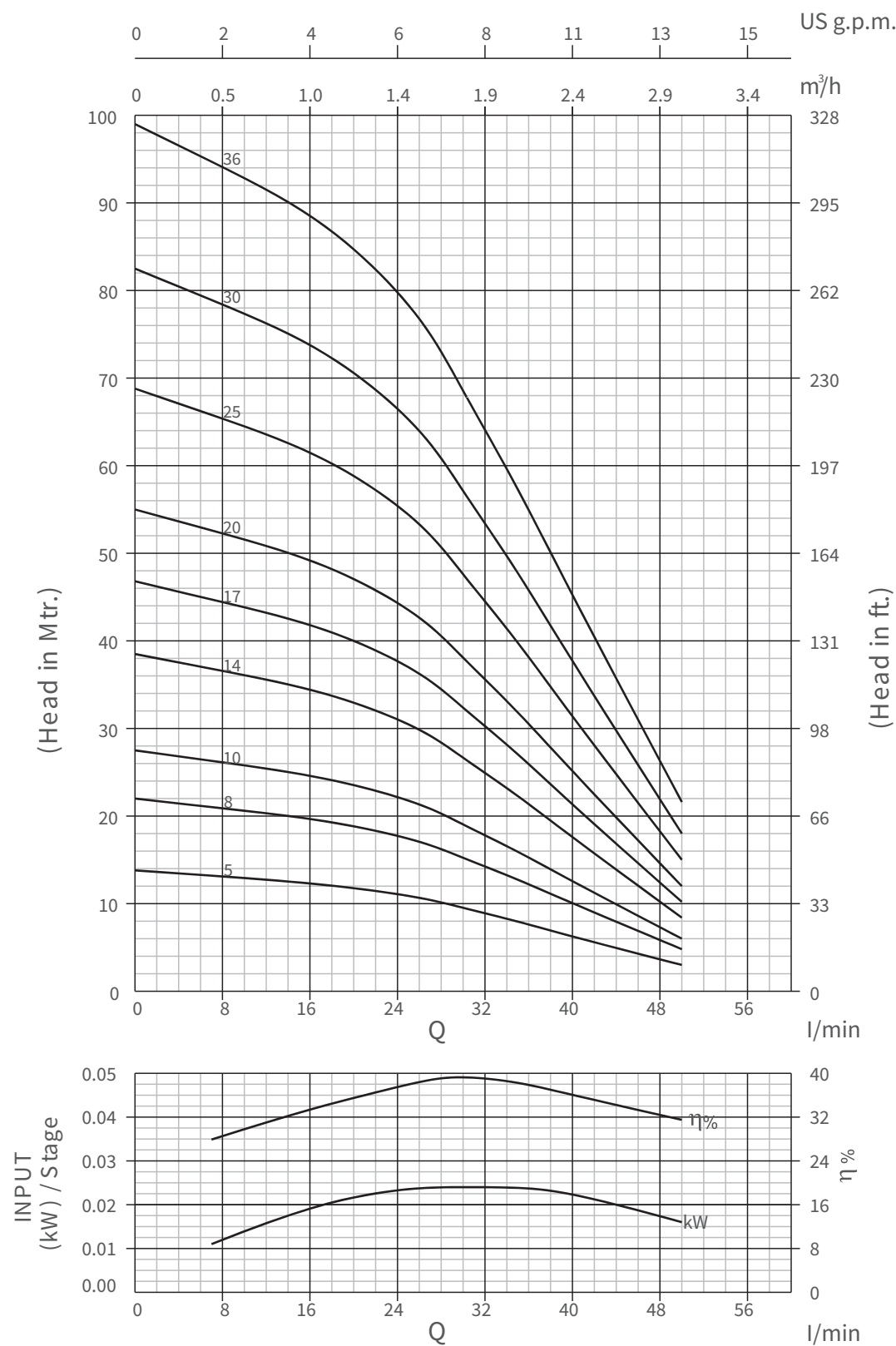
Material Specification

NO.	PART'S NAME	MATERIAL
1	SUCTION	CAST IRON
2	STRAINER	S.S.202
3	SCREW (USE FOR STRAINER)	S.S.304
4	HEX BOLT (USE FOR SUCTION)	S.S.304
5	SPRING WASHER	S.S.304
6	WASHER (USE FOR STRAINER)	S.S.304
7	SQUARE NUT	S.S.304
8	STAGE CASING	P.P.O.(20% G.F)
9	IMPELLER	P.P.O.(20% G.F)
10	PUMP SHAFT	S.S.410
11	DISTANCE SLEEVE	P.P.O.(20% G.F)
12	THRUST PLATE]	S.S.202
13	D.O.L.	P.P.O.(20% G.F)
14	D.O.L.RUBBER BUSH	N.B.R
15	D.O.L SLEEVE	S.S.410
16	TOP COLLER	S.S.410
17	HEX BOLT	S.S.410
18	D.O.L N.R.V	P.P.O.(20% G.F)
19	N.R.V.CONE 'O' RING	N.B.R
20	N.R.V CONE	NYLON
21	DELIVERY CASING	CAST IRON
22	PUMP PIPE	S.S. 202
23	COUPLING (NEMA)	S.S.304
24	ALLEN BOLT	S.S.304
25	KEY (SUCTION SIDE)	S.S.304
26	SLEEVE (USE FOR SUCTION)	P.P.O.(20% G.F)
27	SUCTION PLATE	P.P.O.(20% G.F)
28	KEY	S.S.304
29	GRUB SCREW	S.S.304
30	O' RING	NBR



3RF 300, 50Hz
ISO 9906 Annexure A

Performance Curves



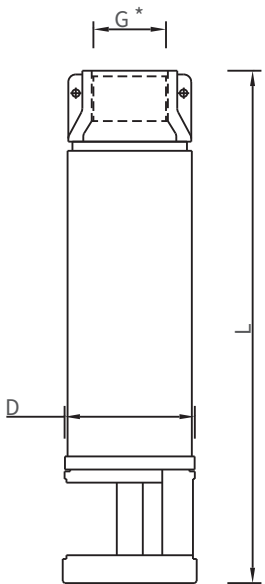
3RF 300, 50Hz
ISO 9906 Annexure A

Performance Chart

Model Name		Rating			Discharge								
Single Phase	Stage	kW	HP	l/min	0	7	15	22	27	30	35	40	50
				m³/h	0	0.42	0.9	1.32	1.62	1.8	2.1	2.4	3.0

3RF 300-05	5	0.25	0.33	HEAD IN Mtrs.	14	13	12.5	12	10.5	10	8	6	3
3RF 300-08	8	0.37	0.50		22	21	20	18	17	15	13	10	5
3RF 300-10	10	0.37	0.50		28	26	25	23	21	19	16	12	6
3RF 300-14	14	0.55	0.75		38	37	35	32	29	27	22	18	8
3RF 300-17	17	0.55	0.75		47	45	42	39	36	32	27	21	10
3RF 300-20	20	0.75	1.00		55	53	50	46	42	38	32	25	12
3RF 300-25	25	0.75	1.00		69	66	62	58	52	48	40	31	15
3RF 300-30	30	1.10	1.50		82	79	75	69	63	57	48	38	18
3RF 300-36	36	1.10	1.50		99	95	90	83	76	68	58	45	22

Dimensions & Weights



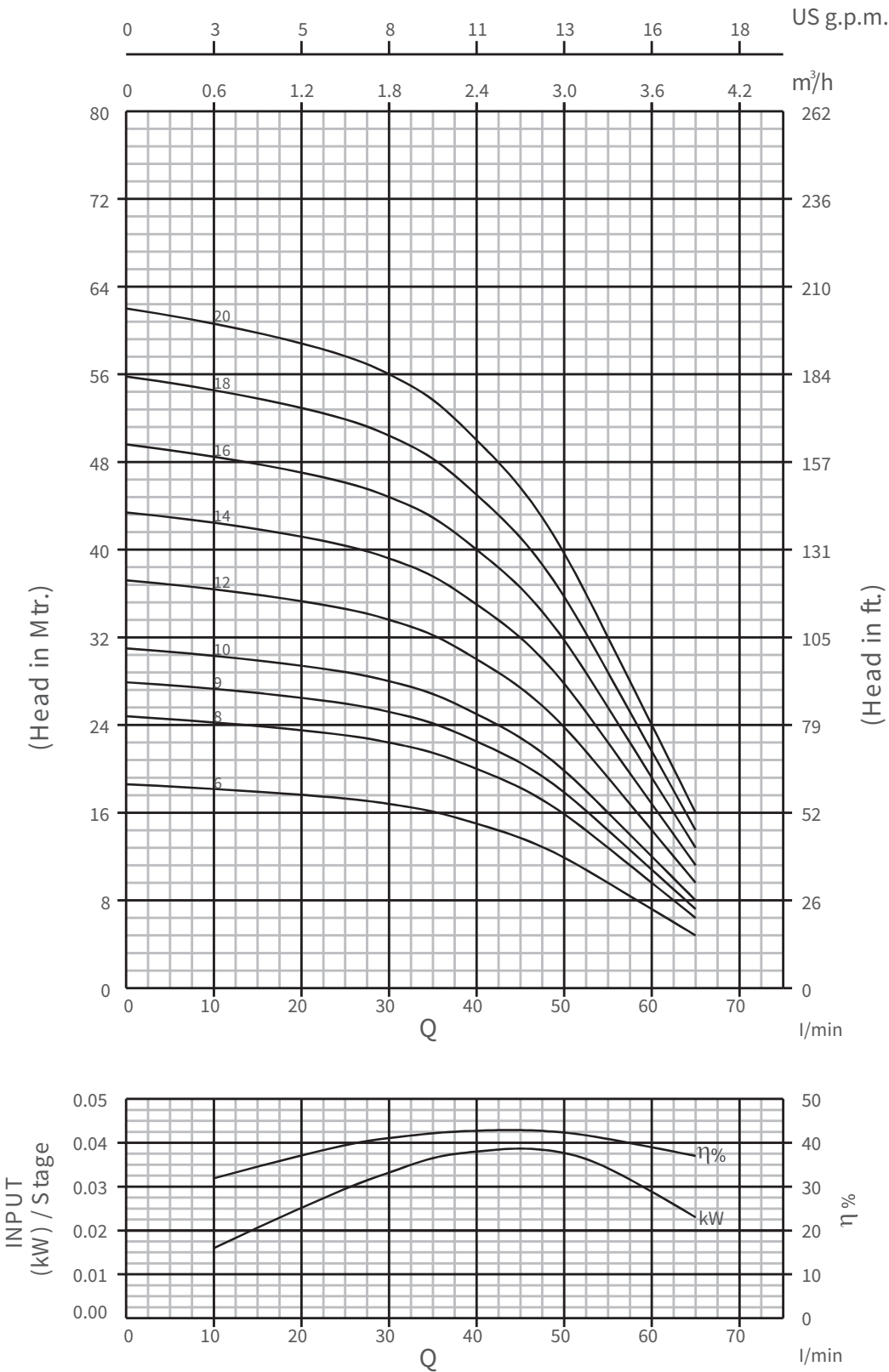
Model name	Specification			
	D(mm)	L(mm)	Weight (kg)	Weight (incl.pkg)[kg]
3RF 300-05	80	338	2.0	4.0
3RF 300-08	80	413	2.5	4.5
3RF 300-10	80	463	3.0	5.0
3RF 300-14	80	563	3.5	5.5
3RF 300-17	80	638	3.5	5.5
3RF 300-20	80	713	4.0	6.0
3RF 300-25	80	838	4.5	6.5
3RF 300-30	80	963	5.0	7.0
3RF 300-36	80	1113	5.5	7.5

*G: Available Outlet Size 1.25"

*D: With Cable Guard

3RF 300, 50Hz
ISO 9906 Annexure A

Performance Curves



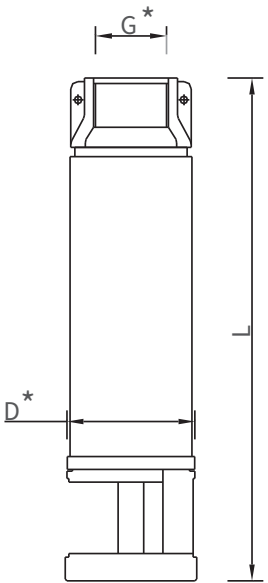
3RF 300, 50Hz
ISO 9906 Annexure A

Performance Chart

Model Name		Rating			Discharge										
Single Phase	Stage	kW	HP	l/min m ³ /h	0	10	25	30	35	40	45	50	55	65	
					0	0.6	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.9	

3RF 30A-06	6	0.37	0.50	HEAD IN Mtrs.	19	18	17.5	17	16	15	14	12	10	5
3RF 30A-08	8	0.37	0.50		25	24	23	22.5	22	20	18	16	13	6
3RF 30A-09	9	0.37	0.50		28	27	26	25	24	22	21	18	14	7
3RF 30A-10	10	0.55	0.75		31	30	29	28	27	25	23	20	16	8
3RF 30A-12	12	0.55	0.75		37	36	35	34	32	30	28	24	19	10
3RF 30A-14	14	0.75	1.00		43	42	41	39	38	35	32	28	22	11
3RF 30A-16	16	0.75	1.00		50	49	46	45	43	40	37	32	26	13
3RF 30A-18	18	1.10	1.50		56	55	52	50	49	45	41	36	29	14
3RF 30A-20	20	1.10	1.50		62	61	58	56	54	50	46	40	32	16

Dimensions & Weights



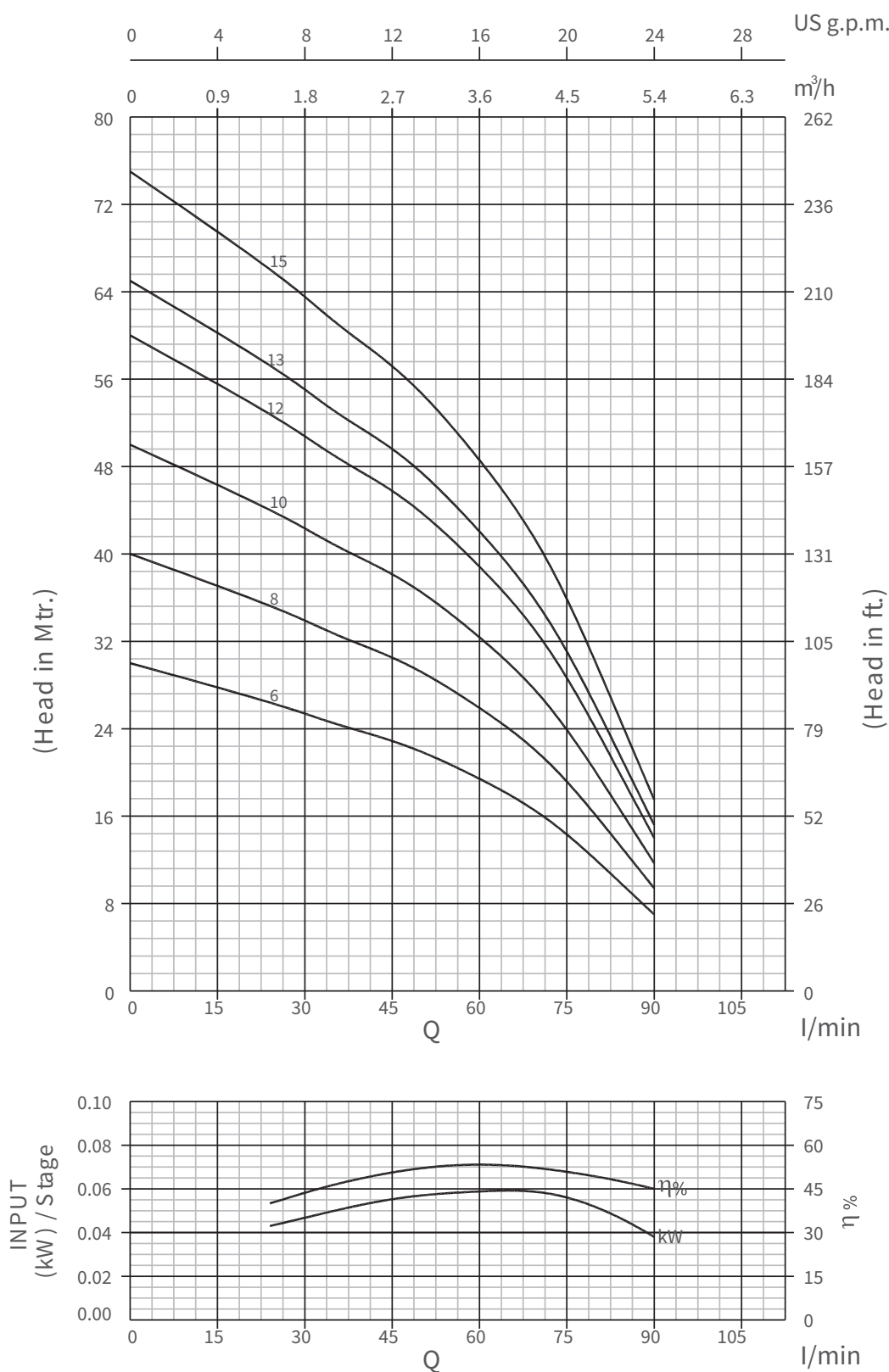
Model name	Specification			
	D (mm)	L (mm)	Pump Weight kg.	Weight (incl.pkg) kg
3RF 30A-06	80	380	2.5	4.5
3RF 30A-08	80	436	3.0	5.0
3RF 30A-09	80	463	3.0	5.0
3RF 30A-10	80	491	3.0	5.0
3RF 30A-12	80	547	3.0	5.0
3RF 30A-14	80	602	3.5	5.5
3RF 30A-16	80	658	3.5	5.5
3RF 30A-18	80	714	4.0	6.0
3RF 30A-20	80	769	4.0	6.0

*G: Available Outlet Size 1.25"

*D: With Cable Guard

3RF 300H, 50Hz
ISO 9906 Annexure A

Performance Curves



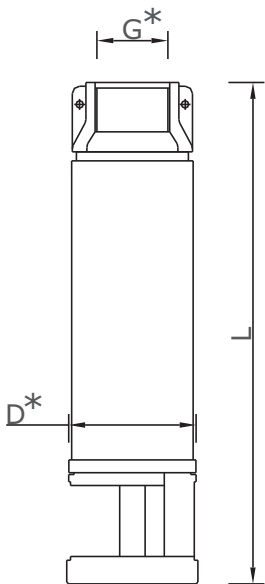
3RF 300H, 50Hz
ISO 9906 Annexure A

Performance Chart

Model Name		Rating			Discharge								
Single Phase	Stage	kW	HP	l/min	0	24	32	38	48	60	72	84	90
				m³/h	0	1.4	1.9	2.3	2.9	3.6	4.3	5.0	5.4

Model Name	Stage	kW	HP	HEAD IN Mtrs.	30	27	25	24	22	20	16	10	7
					40	35	33	32	30	26	21	13	9
					50	44	42	40	38	32	27	17	12
					60	53	50	48	45	39	32	20	14
					65	57	54	52	49	42	35	22	15
					75	66	63	60	56	49	40	25	18

Dimensions & Weights



Model name	Specification			
	D (mm)	L (mm)	Pump Weight kg.	Weight (incl.pkg) kg
3RF 300H-06	80	382	2.5	4.5
3RF 300H-08	80	437	3.0	5.0
3RF 300H-10	80	492	3.0	5.0
3RF 300H-12	80	547	3.5	5.5
3RF 300H-13	80	575	3.5	5.5
3RF 300H-15	80	630	4.0	6.0

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Submersible Pumps

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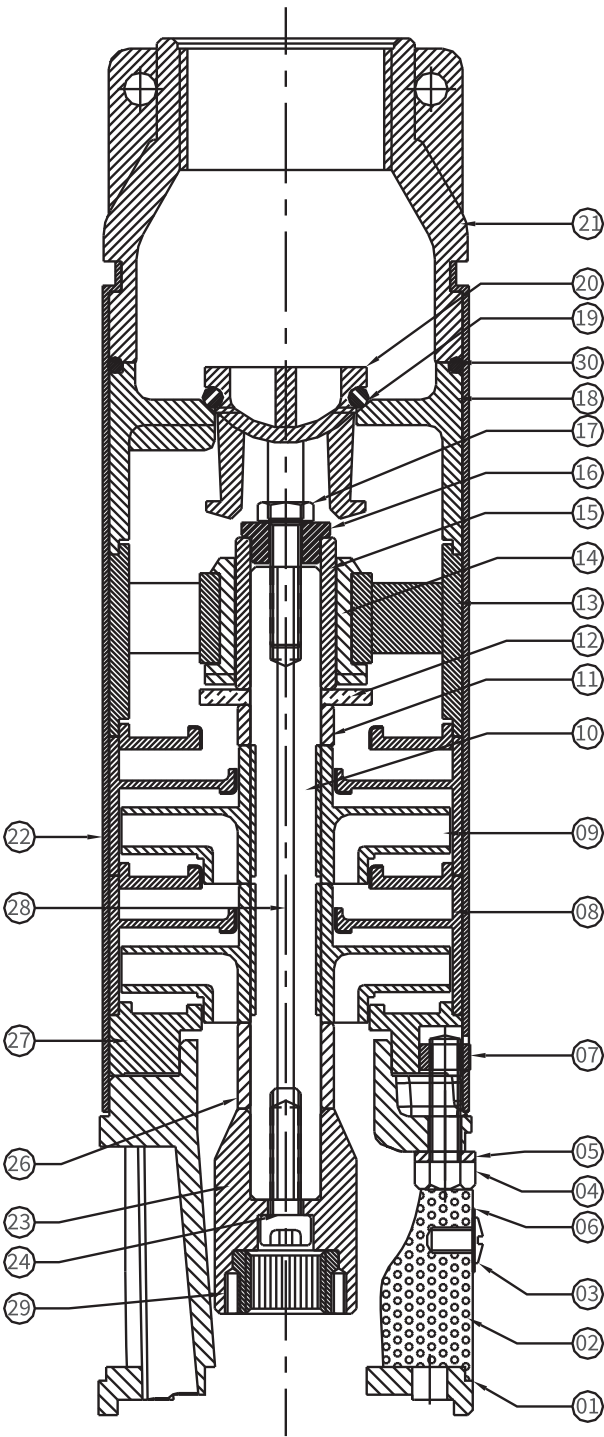
- 1. Suction and discharge outlets are made of cast iron with nickel coating & with a look of steel finish.
- 2. Impellers and Diffusers are of specially engineered Resins to provide wear resistance against sand.
- 3. Pump casing is made of PPO 20% GF.
- 4. Pump shaft is made of Stainless Steel.
- 5. Hexagonal Rubber Bearing Bush and Hard Chrome Sleeves help in long lasting performance.
- 6. Efficient and newly designed Non Return Valve (NRV).
- 7. Cable Guard and Strainer are of stainless steel.
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Flow rate : 7 lpm to 90 lpm
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Flow rate : 5 lpm to 160 lpm
Immersion : 1 mtr minimum
5" - Head range : 13 mtr to 104 mtr
Flow rate : 650 1pm to 140 1pm
Immersion : 1mtr minimum
6" - Head range : 4 mtr to 444 mtr
Flow rate : 1700 pm to 60 pm
Immersion : 1mtr minimum
7" - Head range : 8 mtr to 112 mtr
Flow rate : 1660 1pm to 500 1pm
Immersion : 1mtr minimum
8" - Head range : 25 mtr to 420 mtr
Flow rate : IOOO pm to 300 1pm
Immersion : 1mtr minimum

* Performance tolerance can be +/- 7%

3RF 300, 3RF 30A, 3RF 300H SERIES PUMP DESIGN

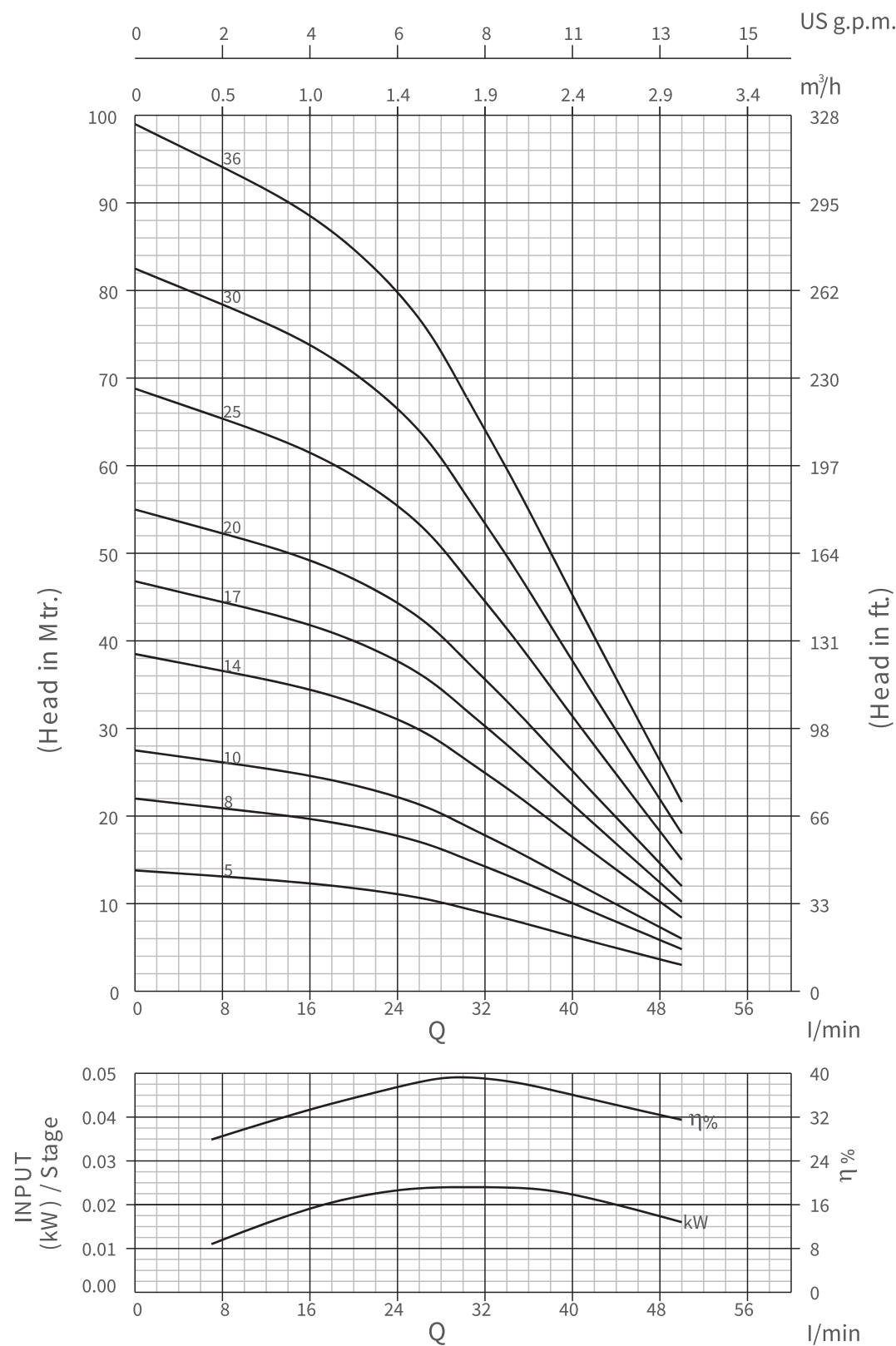
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6	WASHER (USE FOR STRAINER)	S.S.304
7	SQUARE NUT	S.S.304
8	STAGE CASING	P.P.O.(20% G.F)
9	IMPELLER	P.P.O.(20% G.F)
10	PUMP SHAFT	S.S.410
11	DISTANCE SLEEVE	P.P.O.(20% G.F)
12	THRUST PLATE]	S.S.202
13	D.O.L.	P.P.O.(20% G.F)
14	D.O.L.RUBBER BUSH	N.B.R
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3RF 300, 50Hz
ISO 9906 Annexure A

Performance Curves



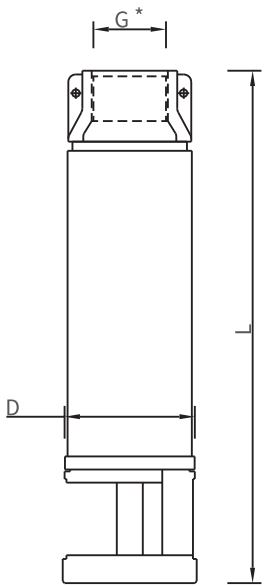
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Performance Chart

Model Name		Rating			Discharge								
Single Phase	Stage	kW	HP	l/min	0	7	15	22	27	30	35	40	50
				m³/h	0	0.42	0.9	1.32	1.62	1.8	2.1	2.4	3.0

3RF 300-05	5	0.25	0.33	HEAD IN Mtrs.	14	13	12.5	12	10.5	10	8	6	3
3RF 300-08	8	0.37	0.50		22	21	20	18	17	15	13	10	5
3RF 300-10	10	0.37	0.50		28	26	25	23	21	19	16	12	6
3RF 300-14	14	0.55	0.75		38	37	35	32	29	27	22	18	8
3RF 300-17	17	0.55	0.75		47	45	42	39	36	32	27	21	10
3RF 300-20	20	0.75	1.00		55	53	50	46	42	38	32	25	12
3RF 300-25	25	0.75	1.00		69	66	62	58	52	48	40	31	15
3RF 300-30	30	1.10	1.50		82	79	75	69	63	57	48	38	18
3RF 300-36	36	1.10	1.50		99	95	90	83	76	68	58	45	22

Dimensions & Weights



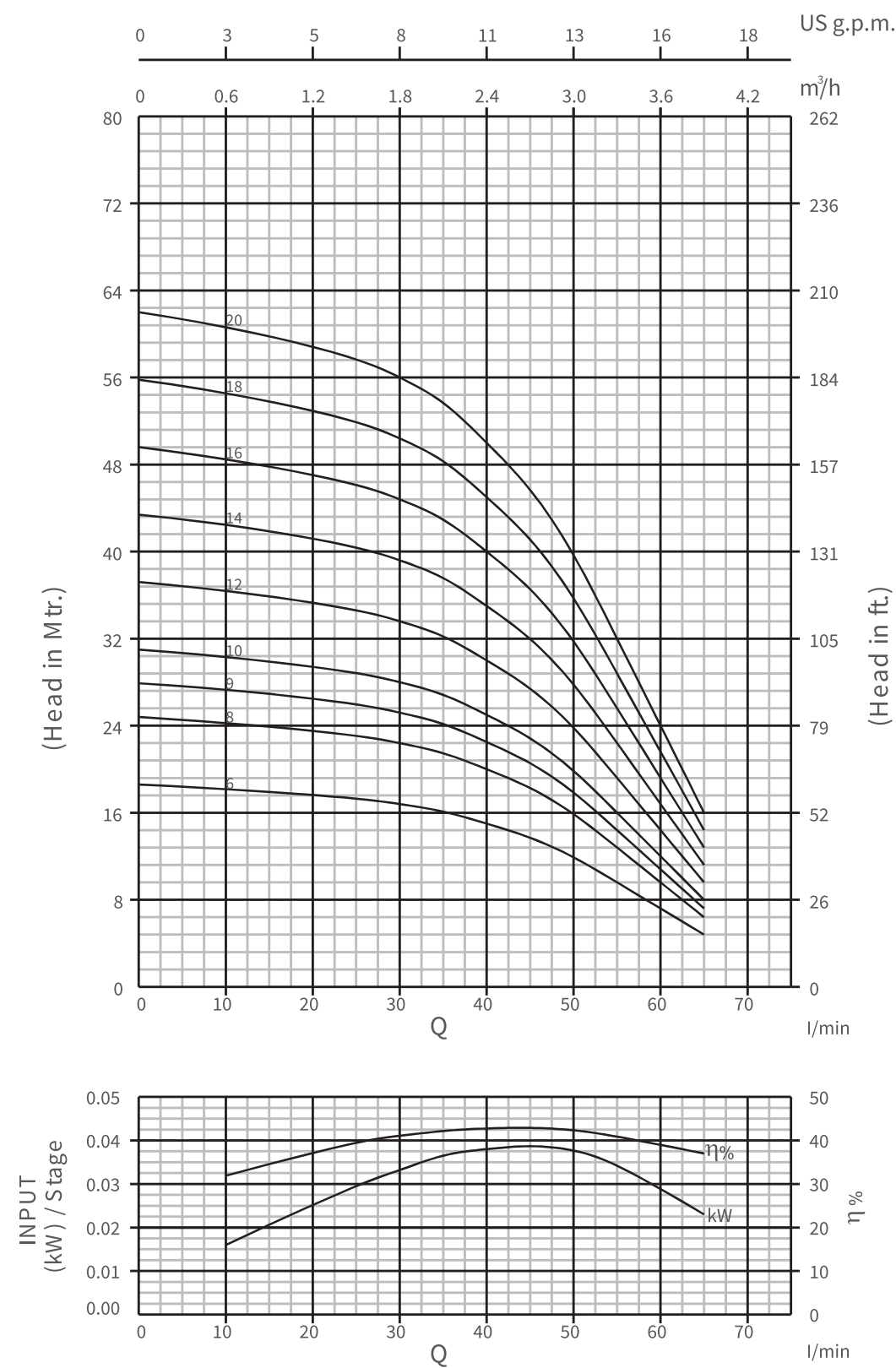
Model name	Specification			
	D(mm)	L(mm)	Weight (kg)	Weight (incl.pkg)[kg]
3RF 300-05	80	338	2.0	4.0
3RF 300-08	80	413	2.5	4.5
3RF 300-10	80	463	3.0	5.0
3RF 300-14	80	563	3.5	5.5
3RF 300-17	80	638	3.5	5.5
3RF 300-20	80	713	4.0	6.0
3RF 300-25	80	838	4.5	6.5
3RF 300-30	80	963	5.0	7.0
3RF 300-36	80	1113	5.5	7.5

*G: Available Outlet Size 1.25"

*D: With Cable Guard

3RF 300, 50Hz
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Performance Curves



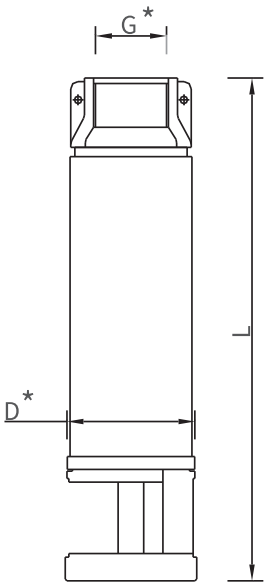
3RF 300, 50Hz
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Performance Chart

Model Name	Stage	Rating		l/min m³/h	Discharge									
		kW	HP		0	10	25	30	35	40	45	50	55	65
Single Phase					0	0.6	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.9

3RF 30A-06	6	0.37	0.50	HEAD IN Mtrs.	19	18	17.5	17	16	15	14	12	10	5
3RF 30A-08	8	0.37	0.50		25	24	23	22.5	22	20	18	16	13	6
3RF 30A-09	9	0.37	0.50		28	27	26	25	24	22	21	18	14	7
3RF 30A-10	10	0.55	0.75		31	30	29	28	27	25	23	20	16	8
3RF 30A-12	12	0.55	0.75		37	36	35	34	32	30	28	24	19	10
3RF 30A-14	14	0.75	1.00		43	42	41	39	38	35	32	28	22	11
3RF 30A-16	16	0.75	1.00		50	49	46	45	43	40	37	32	26	13
3RF 30A-18	18	1.10	1.50		56	55	52	50	49	45	41	36	29	14
3RF 30A-20	20	1.10	1.50		62	61	58	56	54	50	46	40	32	16

Dimensions & Weights



Model name	Specification			
	D (mm)	L (mm)	Pump Weight kg.	Weight (incl.pkg) kg
3RF 30A-06	80	380	2.5	4.5
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3RF 30A-14	80	602	3.5	5.5
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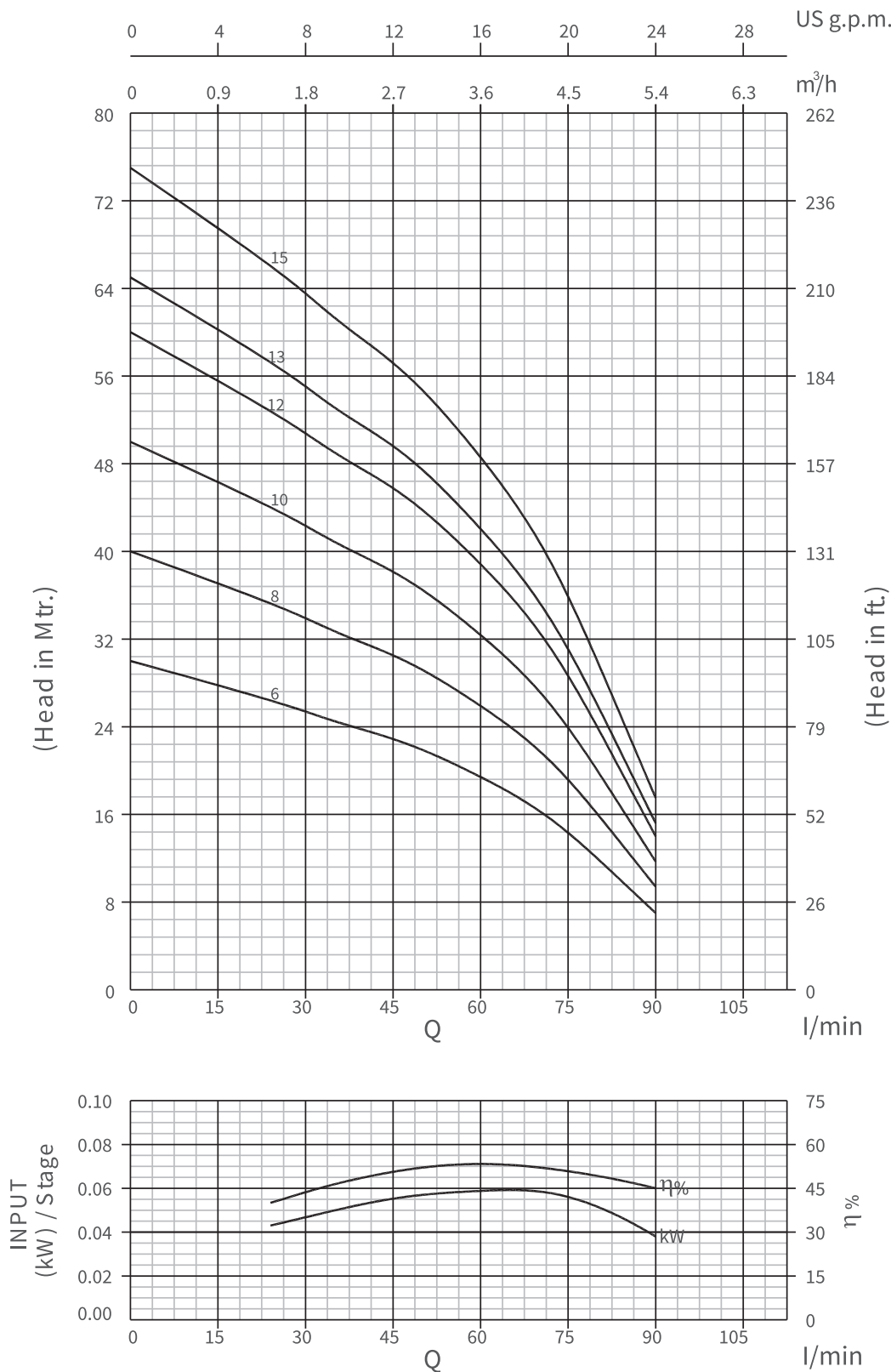
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3RF 300H, 50Hz

ISO 9906 Annexure A

Performance Curves



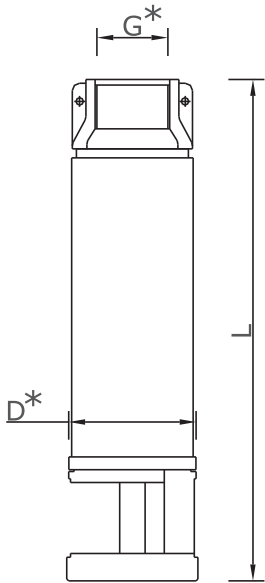
3RF 300H, 50Hz

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Performance Chart

Model Name		Rating		Discharge									
Single Phase	Stage	kW	HP	l/min	0	24	32	38	48	60	72	84	90
				m ³ /h	0	1.4	1.9	2.3	2.9	3.6	4.3	5.0	5.4
3RF 300H-06	6	0.37	0.50	HEAD IN Mtrs.	30	27	25	24	22	20	16	10	7
3RF 300H-08	8	0.55	0.75		40	35	33	32	30	26	21	13	9
3RF 300H-10	10	0.75	1.00		50	44	42	40	38	32	27	17	12
3RF 300H-12	12	0.75	1.00		60	53	50	48	45	39	32	20	14
3RF 300H-13	13	1.10	1.50		65	57	54	52	49	42	35	22	15
3RF 300H-15	15	1.10	1.50		75	66	63	60	56	49	40	25	18

Dimensions & Weights



Model name	Specification			
	D (mm)	L (mm)	Pump Weight kg.	Weight (incl.pkg) kg
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