

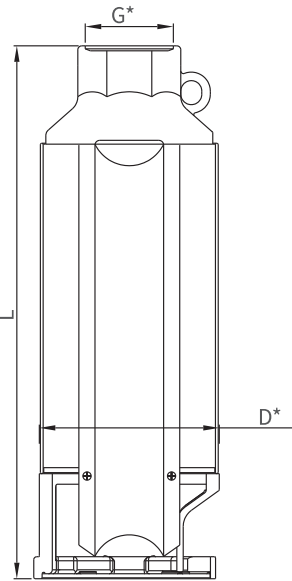
4RF 400, 50Hz
ISO 9906 Annexure A

Performance Chart

Model Name		Stage	Rating		l/min m ³ /h	Discharge							
Single Phase	Three Phase		kW	HP		0	23	42	55	85	100	115	120
						0	1.38	2.52	3.3	5.1	6.0	6.9	7.2

4RF 400-05	4RF 400-05	5	0.55	0.75	HEAD IN Mtrs.	29	28	26	25	20	18	15	13
4RF 400-07	4RF 400-07	7	0.75	1.00		41	39	37	35	29	25	21	18
4RF 400-08	4RF 400-08	8	1.10	1.50		46	44	42	40	33	29	24	21
4RF 400-10	4RF 400-10	10	1.10	1.50		58	56	53	50	41	36	30	26
4RF 400-12	4RF 400-12	12	1.50	2.00		70	67	63	60	49	43	36	31
4RF 400-14	4RF 400-14	14	2.20	3.00		81	78	74	70	57	50	42	36
4RF 400-16	4RF 400-16	16	2.20	3.00		93	89	84	80	66	58	48	42
4RF 400-18	4RF 400-18	18	2.20	3.00		104	100	95	90	74	65	54	47
4RF 400-22	4RF 400-22	22	2.20	3.00		128	122	116	110	90	79	66	57
	4RF 400-25	25	3.00	4.00		145	139	132	125	102	90	75	65
	4RF 400-31	31	4.00	5.50		180	172	164	155	127	112	93	81

Dimensions & Weights



Model name	Specification			
	D (mm)	L (mm)	Pump Weight kg.	Weight (incl.pkg) kg
4RF 400-05	100	383	3.5	5.5
4RF 400-07	100	450	4.0	6.0
4RF 400-08	100	483	4.5	6.5
4RF 400-10	100	550	5.0	7.0
4RF 400-12	100	616	5.0	7.0
4RF 400-14	100	683	5.5	7.5
4RF 400-16	100	730	6.0	8.0
4RF 400-18	100	816	6.5	8.5
4RF 400-22	100	979	7.0	9.0
4RF 400-25	100	1079	8.0	10.0
4RF 400-31	100	1309	12.0	14.0

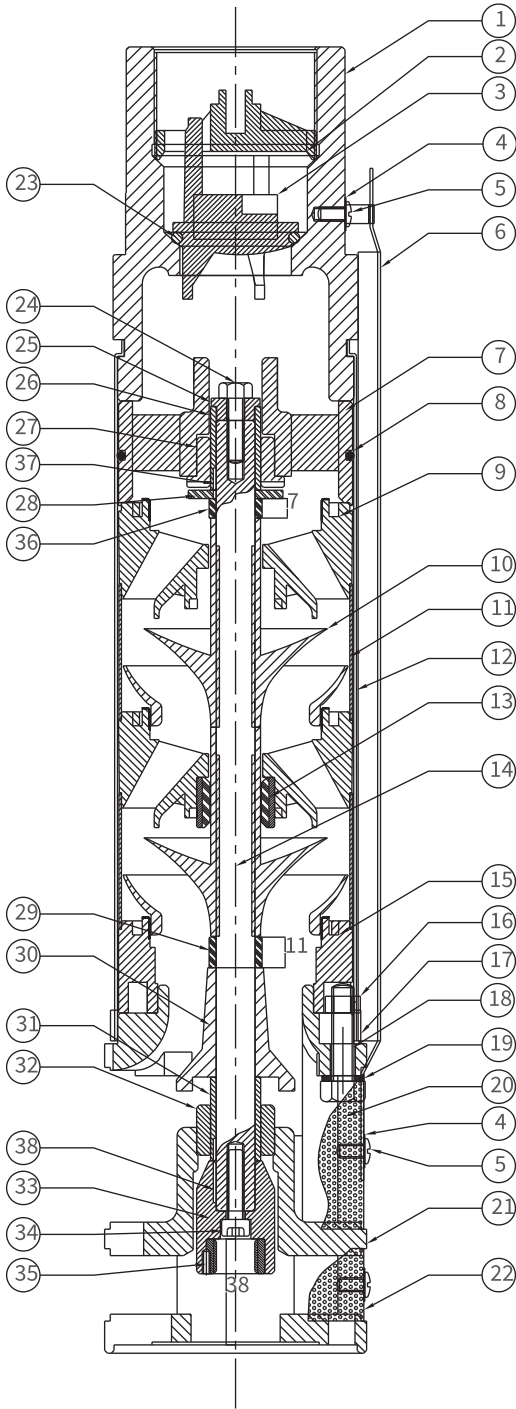
*G:Available Outlet Size 1.50" & 2.0"
*D:With Cable Guard

Submersible Pumps

4MF 440C SERIES PUMP DESIGN

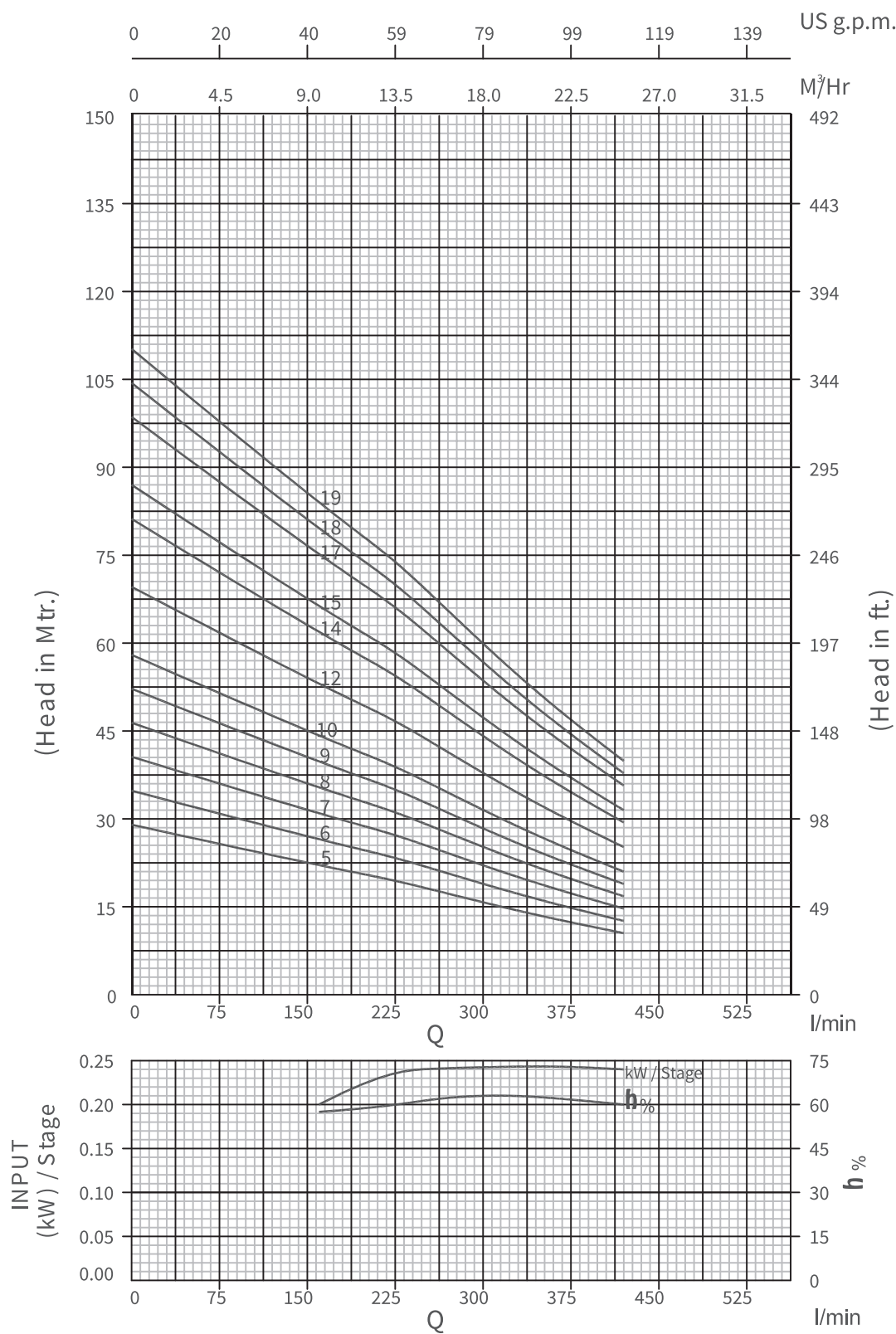
Material Specification

No.	PART'S NAME	MATERIAL	QTY
1	DELIVERY CASING	C.I.(F.G.200)	01
2	N.R.V. THREAD RING	P.P.O (20% G.F)	01
3	N.R.V CONE	NYLON	01
4	WAHSER	S.S.304	04
5	SCREW	S.S.304	04
6	CABLE GUARD	S.S. 202	01
7	D.O.L	P.P.O (20% G.F)	01
8	D.O.L 'O' RING	N.B.R	01
9	STAGE CASING	P.P.O (20% G.F)	1/ST
10	IMPELLER	P.P.O (20% G.F)	1/ST
11	BOWL PIPE	S.S.202	1/ST
12	PUMP PIPE	S.S. 202	01
13	METAL RUBBER BUSH	M.S/ N.B.R	01
14	PUMP SHAFT	S.S.410	01
15	SUCTION PLATE	P.P.O (20% G.F)	01
16	S.Q NUT	S.S.304	04
17	SPOT RING	S.S.202	01
18	HEX BOLT(SUCTION SIDE)	S.S.304	04
19	SPRING WASHER	SPRING STEEL	04
20	STRAINER	S.S.202	01
21	SUCTION	C.I.(F.G.200)	01
22	STRAINER	S.S.202	01
23	N.R.V CONE 'O' RING	N.B.R	01
24	HEX BOLT(TOP SIDE)	S.S.304	01
25	TOP COLLER	S.S.410	01
26	TOP SLEEVE(WITH H/C)	S.S.410	01
27	C.T. BEARING BUSH	L.T.B 4 (2%Ni)	01
28	THRUST PLATE	S.S.202	01
29	DISTANCE SLEEVE	P.P.O (20% G.F)	01
30	DISTANCE SLEEVE	P.P.O (20% G.F)	01
31	SLEEVE (SUCTION)	S.S.410	01
32	BUSH(SUCTION)	L.T.B 4 (2%Ni)	01
33	COUPLING(EXPORT)	S.S.304	01
34	ALLEN BOLT	S.S.304	01
35	GRUB SCREW	S.S.304	01
36	TOP SLEEVE	P.P.O (20% G.F)	01
37	KEY	S.S.410	01
38	KEY	S.S.410	01



4MF 440C, 50Hz
ISO 9906 Annexure A

Performance Curves



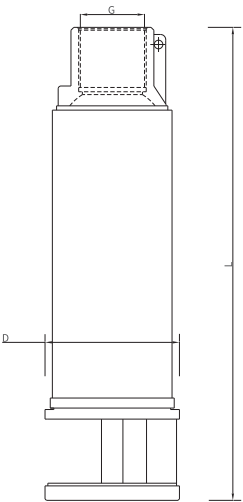
4MF 440C, 50Hz
ISO 9906 Annexure A

Performance Chart

Model Name			Rating			Discharge						
Single Phase	Three Phase	Stage	kW	HP	l/min	0	160	215	255	315	370	420
					m ³ /h	0	9.6	12.9	15.3	18.9	22.2	25.2

Model Name	Stage	kW	HP	HEAD IN Mtrs.	29	22	20	18	15	12	10
4MF 440C-05	5	1.50	2.00		35	26	24	22	18	15	13
4MF 440C-06	6	1.50	2.00		41	31	28	25	21	18	15
4MF 440C-07	7	2.20	3.00		46	35	32	29	24	20	17
4MF 440C-08	8	2.20	3.00		52	40	36	32	27	22	19
	4MF 440C-09	9	3.00	4.00	58	44	40	36	30	25	21
	4MF 440C-10	10	3.00	4.00	70	53	48	43	36	30	25
	4MF 440C-12	12	4.00	5.50	81	62	56	50	42	35	29
	4MF 440C-14	14	4.50	6.00	87	66	60	54	45	38	31
	4MF 440C-15	15	4.50	6.00	99	75	68	61	51	42	36
	4MF 440C-17	17	5.50	7.50	104	79	72	65	54	45	38
	4MF 440C-18	18	5.50	7.50	110	84	76	68	57	48	40
	4MF 440C-19	19	5.50	7.50							

Dimensions & Weights



Model name	Specification			
	D	L	Weight (Kg)	Weight (incl.pkg.)(kg)
4MF-440C-05	98	694	8.5	10.5
4MF-440C-06	98	769	12.5	14.5
4MF-440C-07	98	844	17.0	19.0
4MF-440C-08	98	919	19.0	21.0
4MF-440C-09	98	994	21.0	23.0
4MF-440C-10	98	1069	23.0	25.0
4MF-440C-12	98	1219	27.0	29.0
4MF-440C-14	98	1369	31.0	33.0
4MF-440C-15	98	1519	33.0	35.0
4MF-440C-17	98	1594	37.0	39.0
4MF-440C-18	98	1669	39.0	41.0
4MF-440C-19	98	1744	41.0	43.0

*G:Available Outlet Size 2"

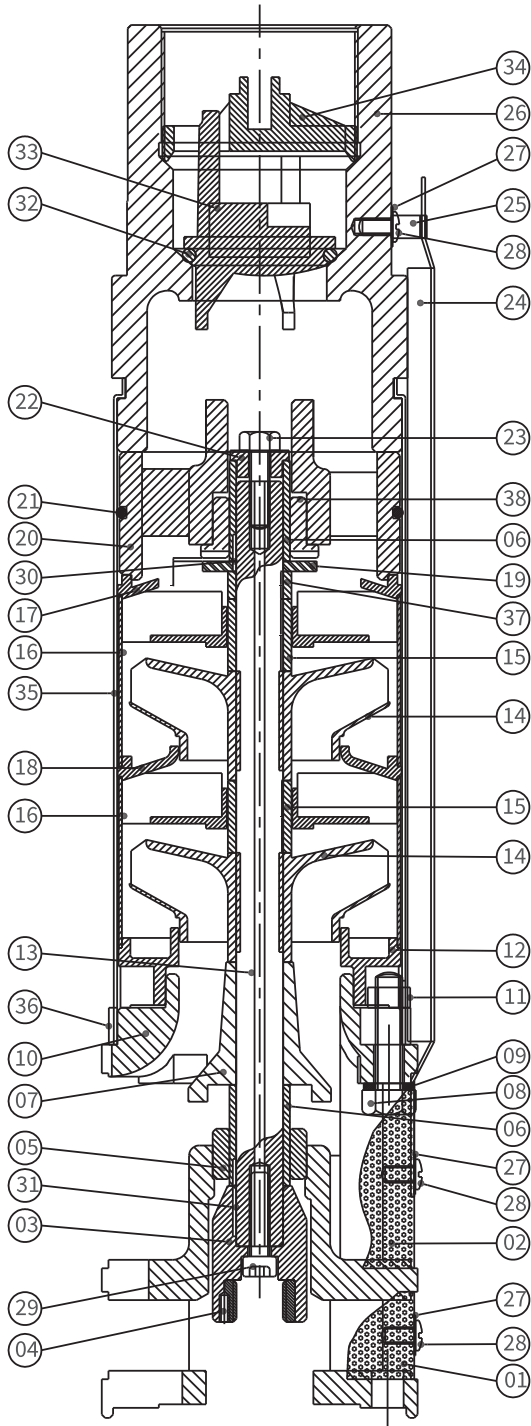
*D:With Cable Guard

Submersible Pumps

4MF 470 SERIES PUMP DESIGN

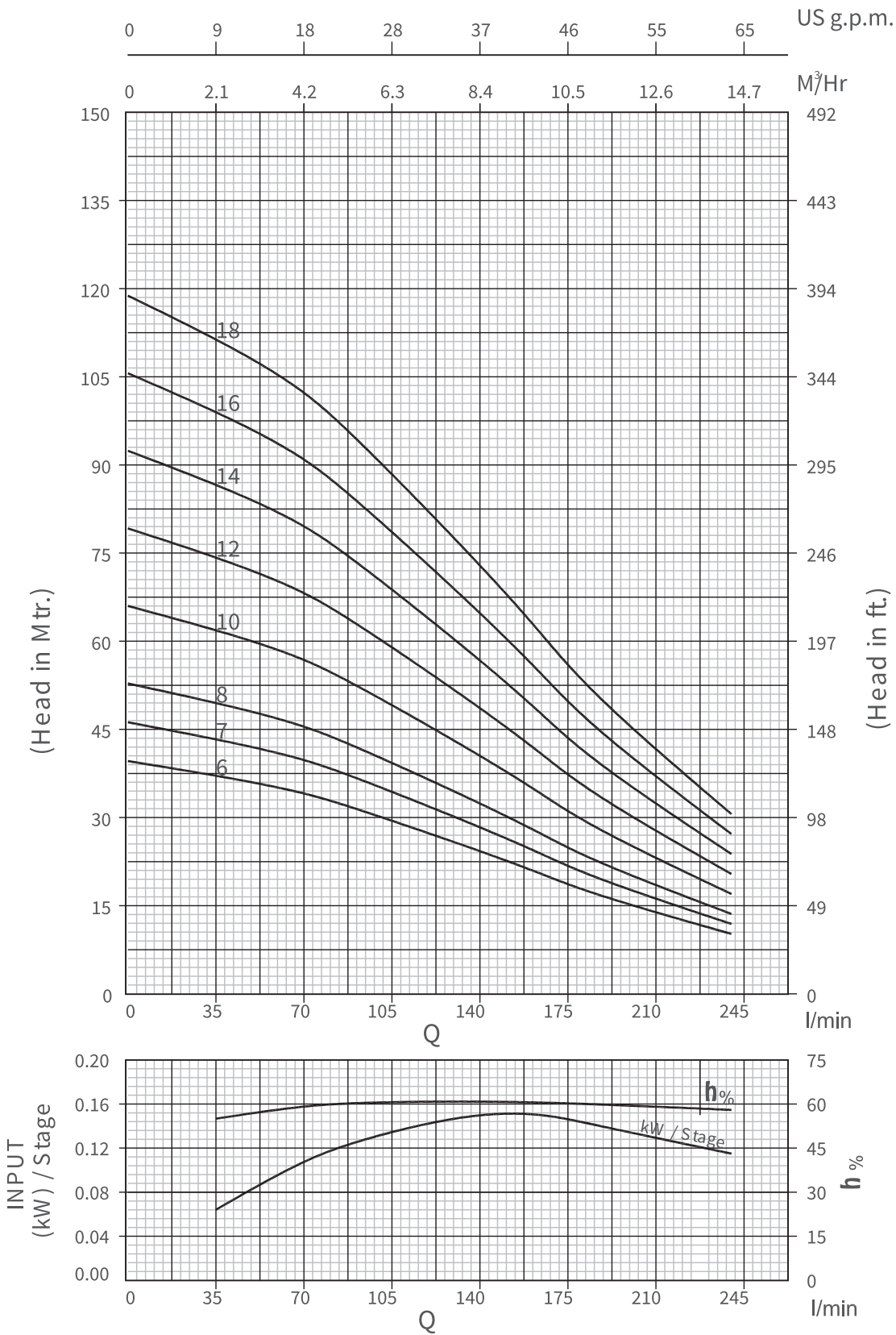
Material Specification

SR	PART NAME	MATERIAL	QTY
1	STRAINER	S.S.202	01
2	STRAINER	S.S.202	01
3	COUPLING	S.S.304	01
4	GRUB SCREW	S.S.304	01
5	SUCTION BUSH	L.T.B.4(2% NI)	01
6	SLEEVE(H/C)	S.S.410	02
7	DISTANCE SLEEVE	P.P.O.(20% G.F.)	01
8	HEX BOLT	S.S.304	04
9	SPRING WASHER	S.S.304	04
10	SUCTION (EXPORT)	C.I.(F.G.200)	01
11	SQUARE NUT	S.S.304	04
12	SUCTION PLATE	P.P.O.(20% G.F.)	01
13	PUMP SHAFT	S.S.410	01
14	IMPELLER	P.P.O.(20% G.F.)	1/ST
15	SLEEVE	P.P.O.(20% G.F.)	1/ST
16	BOWL PIPE	S.S.202	1/ST
17	TOP CASING	P.P.O.(20% G.F.)	01
18	STAGE CASING	P.P.O.(20% G.F.)	1/ST-1
19	THRUST PLATE	S.S. 202	01
20	D.O.L	P.P.O.(20% G.F.)	01
21	D.O.L. 'O' RING	NITRILE RUBBER	01
22	TOP COLLAR	S.S.410	01
23	HEX BOLT	S.S.304	01
24	CABLE GUARD	S.S.202	01
25	CABLE CLIP	S.S.202	01
26	DELIVERY CASING	C.I.(F.G.200)	01
27	WASHER	BRASS	04
28	SCREW	S.S.304	04
29	ALLEN BOLT	S.S.304	01
30	KEY	S.S.410	01
31	KEY	S.S.304	01
32	N.R.V.CONE 'O' RING	NITRILE RUBBER	01
33	N.R.V.CONE	NYLON	01
34	N.R.V. THREAD RING	P.P.O.(20% G.F.)	01
35	PUMP PIPE	S.S.202	01
36	SPOT RING	S.S.202	01
37	TOP SLEEVE	P.P.O.(20% G.F.)	01
38	C.T. BEARING BUSH	L.T.B.4(2% NI)	01



4MF 470, 50Hz
ISO 9906 Annexure A

Performance Curves



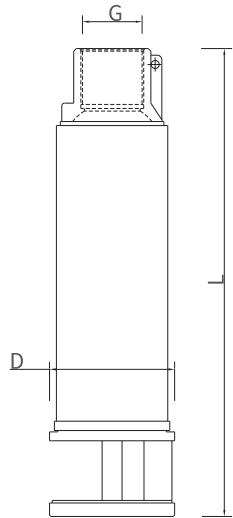
4MF 470, 50Hz
ISO 9906 Annexure A

Performance Chart

Model Name		Rating			Discharge								
Single Phase	Three Phase	Stage	kW	HP	l/min m ³ /h	0	35	65	85	135	165	185	240
						0	2.1	3.9	5.1	8.1	9.9	11.7	14.4

4MF 470-06	4MF 470-06	6	1.10	1.50	HEAD IN Mtrs.	40	37	35	32	25	20	17	10
4MF 470-07	4MF 470-07	7	1.10	1.50		46	43	41	38	29	24	20	12
4MF 470-08	4MF 470-08	8	1.50	2.00		53	50	46	43	34	27	22	14
4MF 470-10	4MF 470-10	10	2.20	3.00		66	62	58	54	42	34	28	17
4MF 470-12	4MF 470-12	12	2.20	3.00		79	74	70	65	50	41	34	20
	4MF 470-14	14	3.00	4.00		92	87	81	76	59	48	39	24
	4MF 470-16	16	4.00	5.50		106	99	93	86	67	54	45	27
	4MF 470-18	18	4.00	5.50		119	112	104	97	75	61	50	31

Dimensions & Weights



Model name	Specification			
	D	L	Weight (Kg)	Weight (incl.pkg.)(kg)
4MF-470-06	98	630	8.5	10.5
4MF-470-07	98	684	8.5	10.5
4MF-470-08	98	738	9.0	11.0
4MF-470-10	98	846	10.0	12.0
4MF-470-12	98	954	10.5	12.5
4MF-470-14	98	1062	11.5	13.5
4MF-470-16	98	1170	12.0	14.0
4MF-470-18	98	1278	12.5	14.5

*G:Available Outlet Size 2"

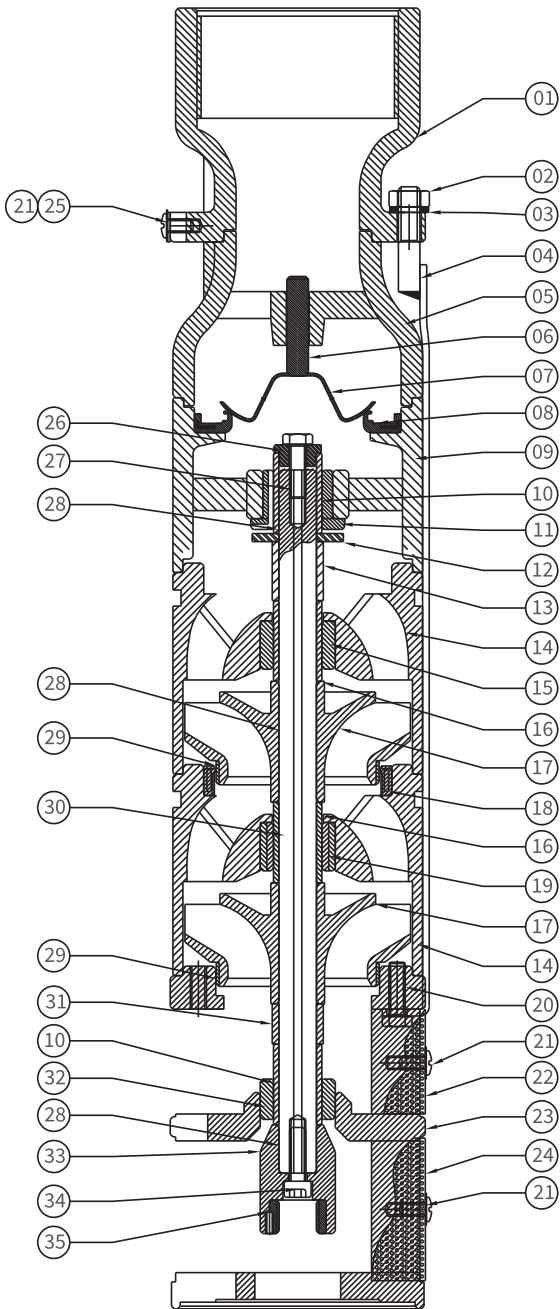
*D:With Cable Guard

Submersible Pumps

4MF 490 SERIES PUMP DESIGN

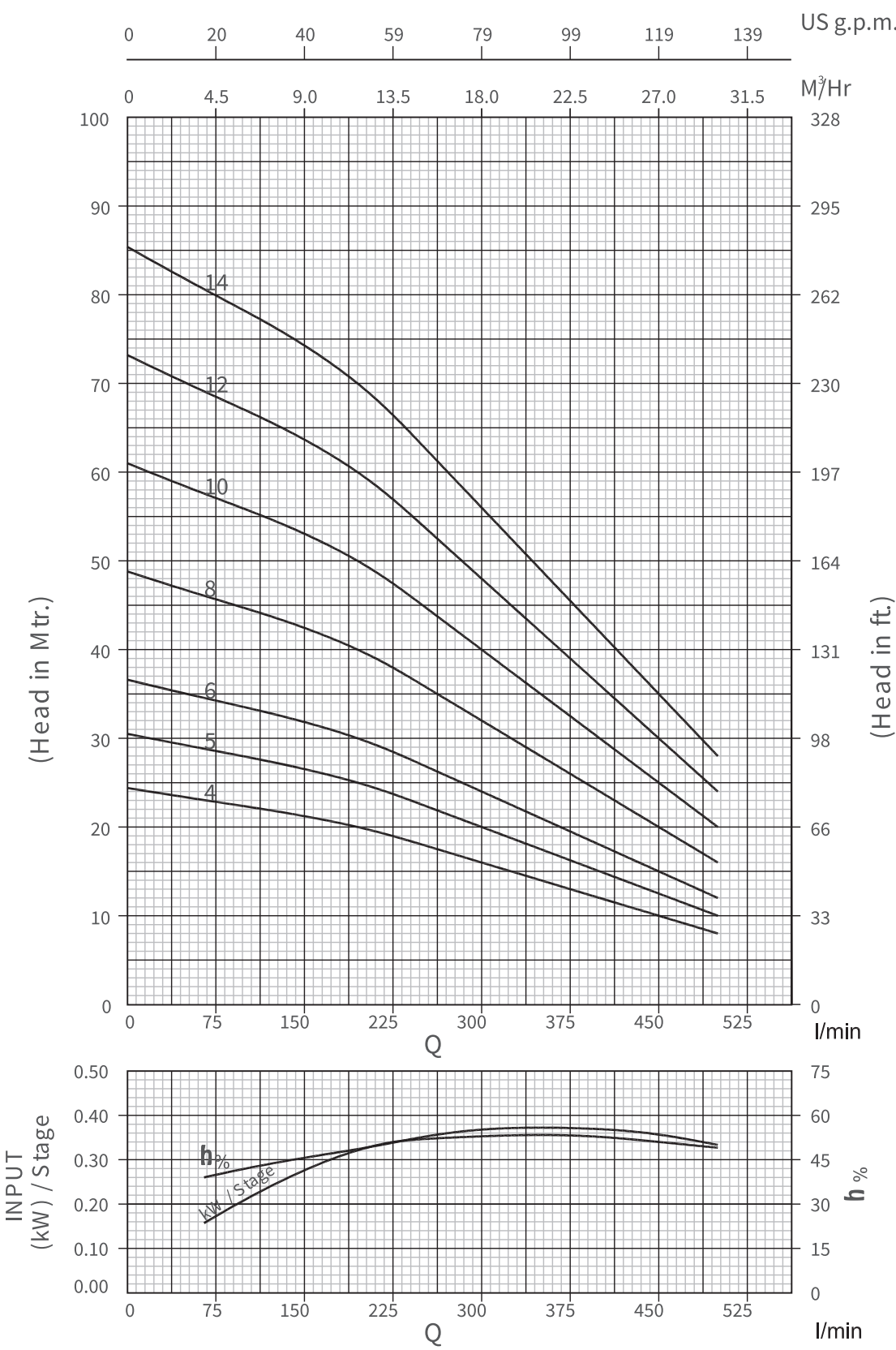
Material Specification

No.	PART'S NAME	MATERIAL	QTY.
1	DELIVERY CASING PART-1	C.I (F.G-200)	01
2	HEX NUT (USE FOR PUMP PATTI)	S.S.304	04
3	WASHER (USE FOR PUMP PATTI)	S.S.304	04
4	PUMP PATTI	S.S.304	04
5	DELIVERY CASING PART-2	C.I (F.G-200)	01
6	N.R.V CONE STUD	S.S.410	01
7	N.R.V CONE	S.S.304	01
8	RUBBER NECKRING (FOR D.O.L)	N.B.R/M.S	01
9	D.O.L	C.I (F.G-200)	01
10	D.O.L SLEEVE	S.S.410	01
10	SLEEVE (SUCTION PLATE)	S.S.410	01
11	C.T BEARING BUSH (USE FOR D.O.L)	L.T.B-4 2% Ni	01
12	THRUST PLATE	S.S.202	01
13	DISTANCE SLEEVE (TOP SIDE)	NYLON	01
14	STAGE CASING	C.I (F.G-200)	1/ST
15	BEARING BUSH	L.T.B-4 2% Ni	1/ST
16	BOWL SLEEVE	S.S.410	1/ST
17	REGULAR IMPELLER	S.S.410	1/st
18	BOWL NECKRING	N.B.R/M.S	1/ST
19	RUBBER MATEL BUSH	N.B.R/M.S	1/ST
20	HEX BOLT (USE FOR PUMP PATTI)	S.S.304	04
21	SCREW	S.S.304	04
21	SCREW WASHER	S.S.304	04
22	STRAINER-1	S.S.202	01
23	SUCTION	C.I (F.G-200)	01
24	STRAINER-2	S.S.202	01
25	CABLE CLIP	S.S.202	01
26	TOP COLLER	S.S.410	01
27	HEX BOLT (TOP SIDE)	S.S.304	01
28	KEY (TOP SLEEVE)	S.S.410	01
28	KEY (BOTTOM SLEEVE)	S.S.410	01
28	KEY (IMPELLER)	S.S.410	/ST
29	IMPELLER NECKRING	S.S.202	01/ST
30	PUMP SHAFT	S.S.410	01
31	DISTANCE SLEEVE (SUCTION SIDE)	P.P.O (20% G.F)	01
32	BEARING BUSH (FOR SUCTION)	L.T.B-4 2% Ni	01
33	COUPLING	S.S.304	01
34	ALLEN BOLT	S.S.304	01
35	GRUB SCREW	S.S.304	01



4MF 490, 50Hz
ISO 9906 Annexure A

Performance Curves



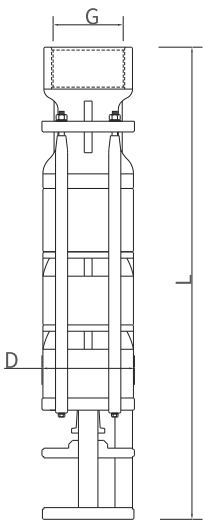
4MF 490, 50Hz
ISO 9906 Annexure A

Performance Chart

Model Name		Stage	Rating		l/min m³/h	Discharge												
Single Phase	Three Phase		kW	HP		0	65	120	200	250	300	350	400	450	500			
						0	3.9	7.2	12	15	18	21	24	27	30			

4MF 490-04	4MF 490-04	4	2.20	3.00	HEAD IN Mtrs.	24	23	22	20	18	16	14	12	10	8			
4MF 490-05	4MF 490-05	5	2.20	3.00		30	29	28	25	22	20	18	15	12	10			
4MF 490-06	4MF 490-06	6	2.20	3.00		37	34	33	30	27	24	21	18	15	12			
	4MF 490-08	8	3.00	4.00		49	46	44	40	36	32	28	24	20	16			
	4MF 490-10	10	4.00	5.50		61	58	55	50	45	40	35	30	25	20			
	4MF 490-12	12	4.50	6.00		73	69	66	60	54	48	42	36	30	24			
	4MF 490-14	14	5.50	7.50		85	80	77	70	63	56	49	42	35	28			

Dimensions & Weights



Model name	Specification			
	D	L	Weight (kg)	Weight (incl.pkg.)(kg)
4MF-490-04	98	635	8.5	10.5
4MF-490-05	98	710	12.0	14.0
4MF-490-06	98	785	15.0	17.0
4MF-490-08	98	935	19.5	21.5
4MF-490-10	98	1085	23.0	25.0
4MF-490-12	98	1235	27.5	29.5

*G:Available Outlet Size 2" & 2.5"

*D:With Cable Guard