



## VERTICAL MULTISTAGE PUMPS RCPS, RCSS, RCSSN, RCDU

### PUMP DESIGN ZERO AXIAL THRUST

The Pumps are non-self priming Vertical Multistage In-Line Centrifugal Pumps designed to occupy minimum floor Space. Un-like other Pumps with sheet metal and plastic fabricated components, our Pumps have components all cast in various metals like Cast Iron, Bronze, Stainless Steel 304 & 316 Excessive Axial thrust is balanced by assembling the Pump stages with equal number of opposed Impellers. Balancing of axial thrust allows the use of standard Flange Mounted Motor without special bearings. Pressure on Mechanical Seal reduces to half the working pressure due to opposed Impellers. The Shaft is well supported in bush Bearings making operation noise less. The Maintenance is easy & in expensive.



### HIGHLY RELIABLE CAST COMPONENTS

The Pumps have components like Base, Impellers & Diffusers are cast in various metals like Bronze, Gunmetal, SS 304(CF8e), SS 316(CF8M) & Duplex.

### STANDARD PUMPS IN EXOTIC METALS

Standard Pumps have a proven record of exceptional reliability. All parts in contact with corrosive media are made from exotic metals such as SS 304(CF8e), SS 316(CF8M), Gunmetal, Duplex etc.

This ensures that the Pumps are impervious to liquids & resistant to highly corrosive & Thermal stresses, depending on the process conditions & fluids involved.

Capacities range from 1 to 90 m<sup>3</sup> / hr & discharge head from 1 bar to 60 bar.

Besides these standard types, we cater for special requirements & develop Pumps which can also be used safely & reliably for more demanding duties. In such cases we work closely with our customers. Our team of experts analyse the required liquid transfer & on this basis develop solutions which optimally meet their requirements in terms of performance, design & economy.

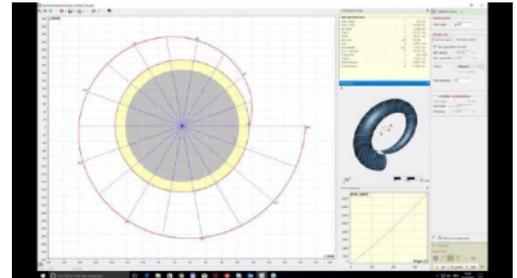




## QUALITY AT EVERY STEP PUMP DESIGN, PRODUCTION & TESTING

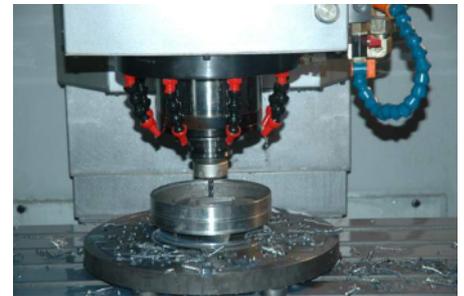
### DESIGN & DEVELOPMENT STEP

Pumps design department is equipped with various 3D Softwares for designing new Pumps, checking performances & the mechanical stresses.



### MACHINING

Our state-of-the-art Production facility is equipped with CNC's, VMC's & other automatic machines to machine all cast components very precisely.



### PRODUCTION

Our Pumps production line is State-of-the-art production line fitted with pneumatic tools. All the parts are fully interchangeable to get similar, effective & fast production of the Pumps.

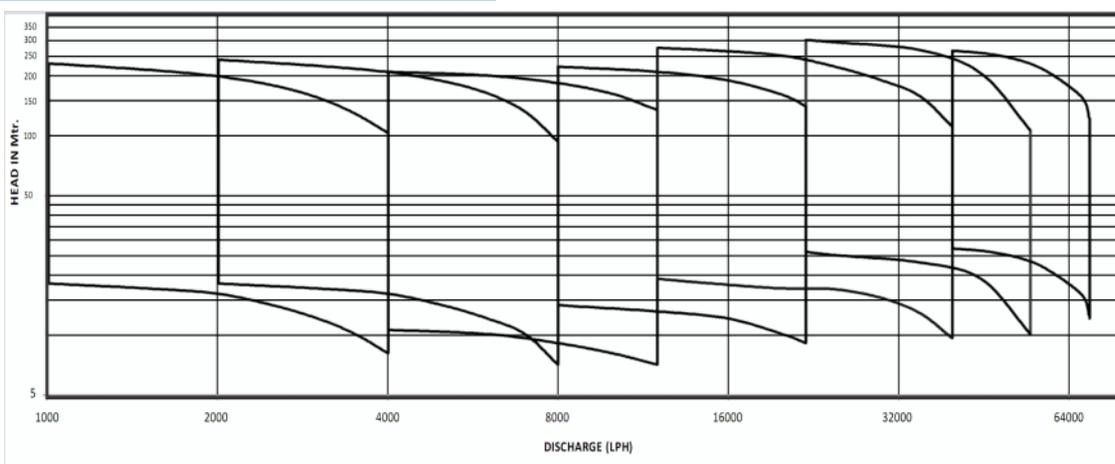


### TESTING FACILITY

Our Pump Production Center is equipped with a Test Bench for testing every Pump of any design. This enables us to meet the customers's specific requirements & ensures excellent quality & reliability in operation.



### GROUP PERFORMANCE





## QUALITY AT EVERY STEP PUMPDESIGN, PRODUCTION & TESTING

### APPLICATIONS

Pressure Boosting  
Cooling Systems  
Air-Conditioning Systems  
Horticultural Irrigation  
Water Treatment Systems

Boiler Feeding Systems  
Fire Fighting Systems  
Industrial Plants  
Reverse Osmosis Systems  
Ultra filtration Systems



**High Pressure Pumps.(Combo)**  
Pressure: 60 Bar. Flow: 90 M<sup>3</sup>/Hr



**Jockey Pump fitted in Fire Fighting System.**



**Hydropneumatic Pressure Booster Pumps**



**Boiler Feed Pumps**



**QUALITY AT EVERY STEP PUMPDESIGN, PRODUCTION & TESTING**

**Water Evaporation Systems for the Mining Industry**



**Space saving vertical Pumps for Shipping Industry**





PUMP COMPONENTS

**Pump Components**

**PUMP WITH BOTTOM BUSH**

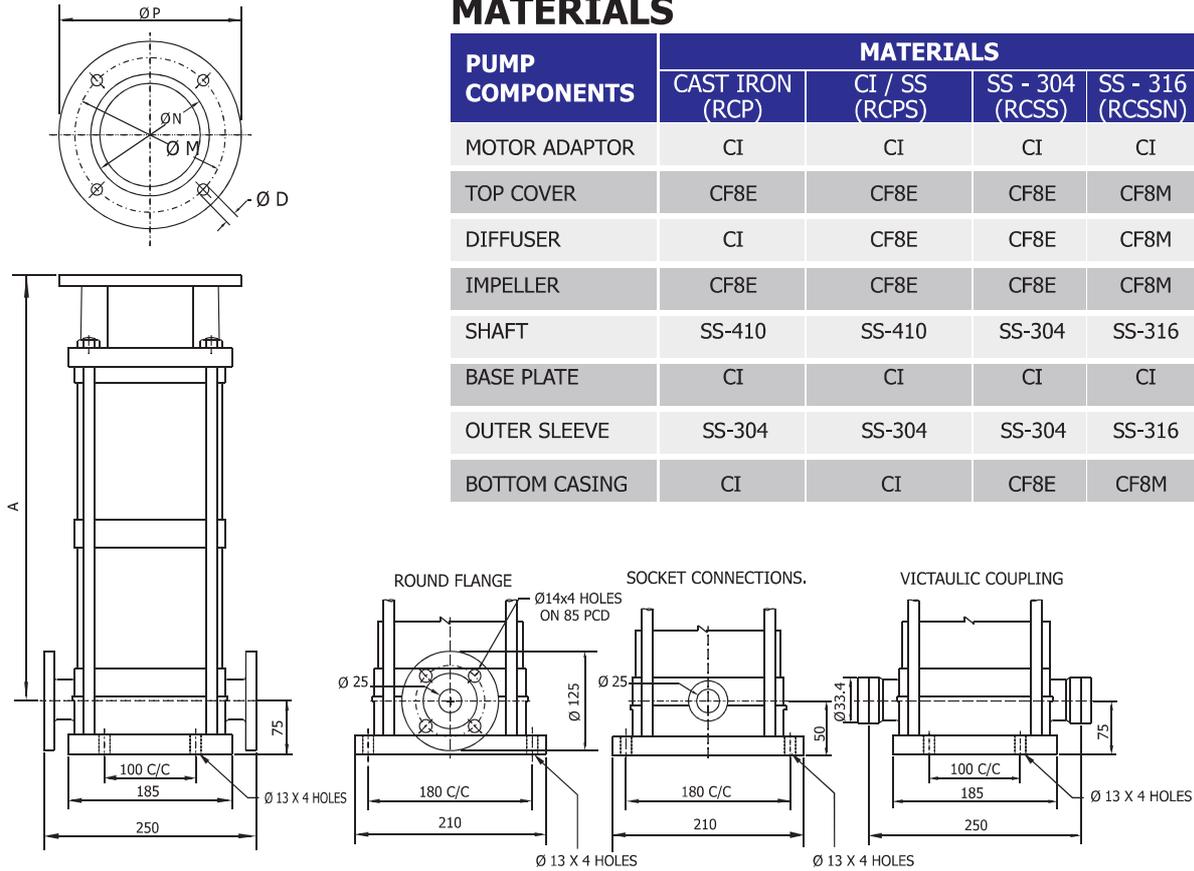
**PUMP WITH REVERSE FLOW STAGE**

ITEM NO	DESCRIPTION
1	MOTOR ADAPTOR
2	RIGID COUPLING
3	TIE ROD & NUT
4	TOP PLATE
5	OUTER SHELL
6	DIFFUSER
7	IMPELLER
8	SHAFT SLEEVE
9	LOCK WASHER
10	RUBBER GASKET
11	MECHANICAL SEAL
12	TOP DIFFUSER
13	LOCK RING
14	KEY
15	SHAFT
16	LOCK NUT
17	BASE PLATE
18	MOTOR
19	BOTTOM CASING(BASE)
20	BUSH HOUSING
21	BOTTOM BUSH
22	HOUSING BOLTS
23	MECH. SEAL JACKET
24	BOTTOM DIFFUSER
25	T C BUSH

ITEM NO	DESCRIPTION
1	MOTOR ADAPTOR
2	RIGID COUPLING
3	TIE ROD & NUT
4	TOP PLATE
5	OUTER SHELL
6	DIFFUSER
7	IMPELLER
8	SHAFT SLEEVE
9	BUSH SPACER
10	LOCK WASHER
11	RUBBER GASKET
12	MECHANICAL SEAL
13	TOP DIFFUSER
14	LOCK RING
15	KEY
16	SHAFT
17	LOCK NUT
18	BASE PLATE
19	MOTOR
20	BOTTOM CASING
21	BUSH HOUSING
22	BOTTOM BUSH
23	HOUSING BOLTS
24	MECH. SEAL JACKET
25	BOTTOM DIFFUSER
26	T C BUSH
27	REVERSE FLOW STAGE



## RC-2



### MATERIALS

PUMP COMPONENTS	MATERIALS			
	CAST IRON (RCP)	CI / SS (RCPS)	SS - 304 (RCSS)	SS - 316 (RCSSN)
MOTOR ADAPTOR	CI	CI	CI	CI
TOP COVER	CF8E	CF8E	CF8E	CF8M
DIFFUSER	CI	CF8E	CF8E	CF8M
IMPELLER	CF8E	CF8E	CF8E	CF8M
SHAFT	SS-410	SS-410	SS-304	SS-316
BASE PLATE	CI	CI	CI	CI
OUTER SLEEVE	SS-304	SS-304	SS-304	SS-316
BOTTOM CASING	CI	CI	CF8E	CF8M

### TECHNICAL DATA

#### VERTICAL MULTISTAGE CENTRIFUGAL PUMPS SERIES RC-2.

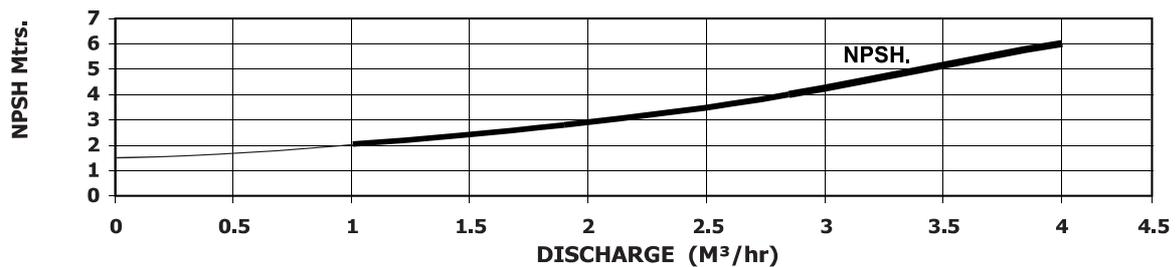
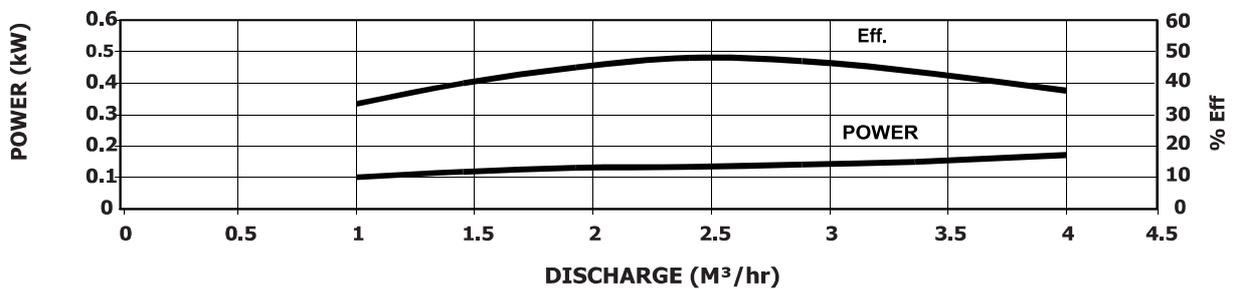
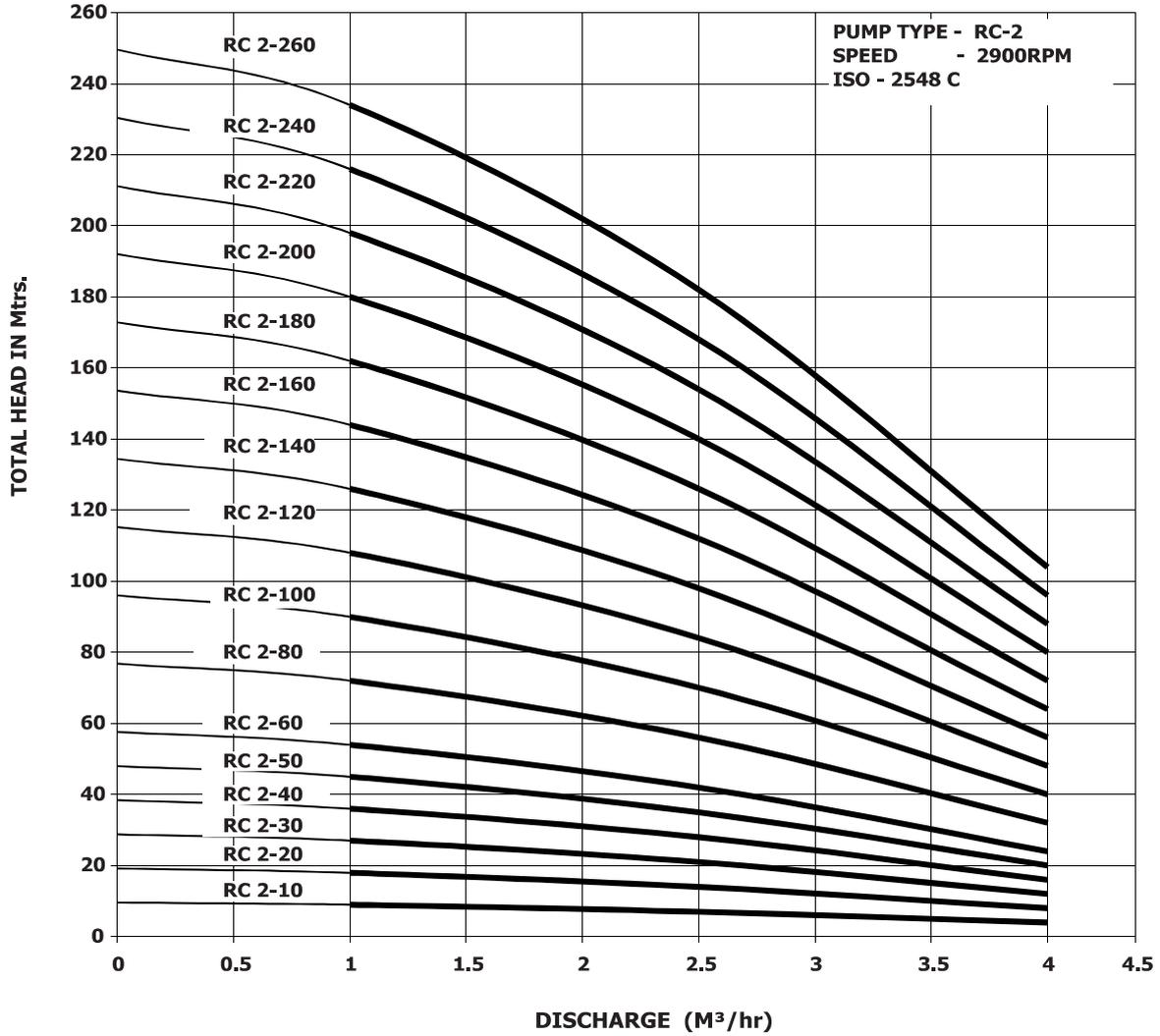
PUMP TYPE	MOTOR			PUMP DIMENSIONS IN MM					SHIPPING DATA	
	FRAME SIZE	KW	HP	A	D	M	N	P	Wt(kg) GROSS	SHIPPING VOLUME M <sup>3</sup>
RC 2-10	71	0.37	0.5	179	10	130	110	160	22	0.0280
RC 2-20	71	0.37	0.5	204	10	130	110	160	25	0.0285
RC 2-30	71	0.37	0.5	229	10	130	110	160	29	0.0311
RC 2-40	71	0.56	0.75	254	10	130	110	160	33	0.0337
RC 2-50	71	0.56	0.75	279	10	130	110	160	36	0.0383
RC 2-60	80	0.75	1	314	12	165	130	200	40	0.0396
RC 2-80	80	1.12	1.5	364	12	165	130	200	46	0.0456
RC 2-100R	90	1.5	2	453	12	165	130	200	52	0.0527
RC 2-120R	90	1.5	2	513	12	165	130	200	58	0.0579
RC 2-140R	90	2.25	3	563	12	165	130	200	62	0.0631
RC 2-160R	90	2.25	3	613	12	165	130	200	68	0.0683
RC 2-180R	100	3	4	663	12	165	130	200	74	0.0735
RC 2-200R	100	3	4	713	15	215	180	250	80	0.0796
RC 2-220R	100	3	4	773	15	215	180	250	84	0.0848
RC 2-240R	100	3.70	5	823	15	215	180	250	90	0.0900
RC 2-260R	100	3.70	5	873	15	215	180	250	95	0.0952

"R" Pumps with opposed Impellers



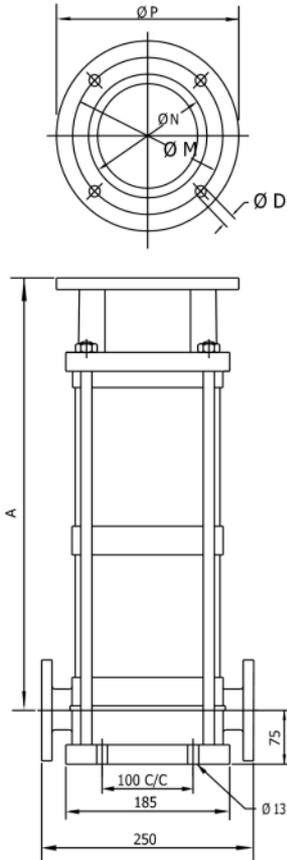
# RC-2

PERFORMANCE CURVES OF PUMP TYPE RC-2



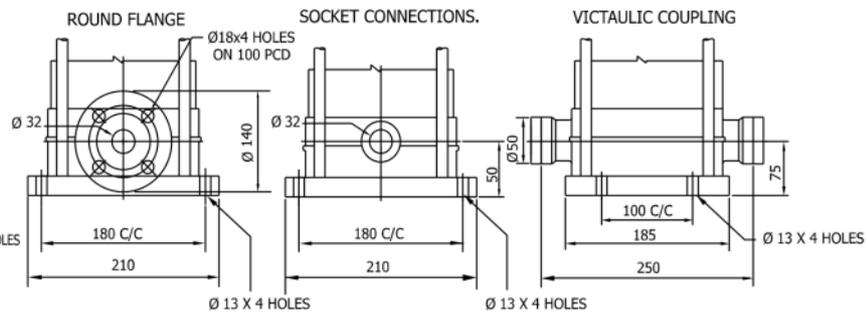


## RC-4



### MATERIALS

PUMP COMPONENTS	MATERIALS			
	CAST IRON (RCP)	CI / SS (RCPS)	SS - 304 (RCSS)	SS - 316 (RCSSN)
MOTOR ADAPTOR	CI	CI	CI	CI
TOP COVER	CF8E	CF8E	CF8E	CF8M
DIFFUSER	CI	CF8E	CF8E	CF8M
IMPELLER	CF8E	CF8E	CF8E	CF8M
SHAFT	SS-410	SS-410	SS-304	SS-316
BASE PLATE	CI	CI	CI	CI
OUTER SLEEVE	SS-304	SS-304	SS-304	SS-316
BOTTOM CASING	CI	CI	CF8E	CF8M



### TECHNICAL DATA

#### VERTICAL MULTISTAGE CENTRIFUGAL PUMPS SERIES RC-4.

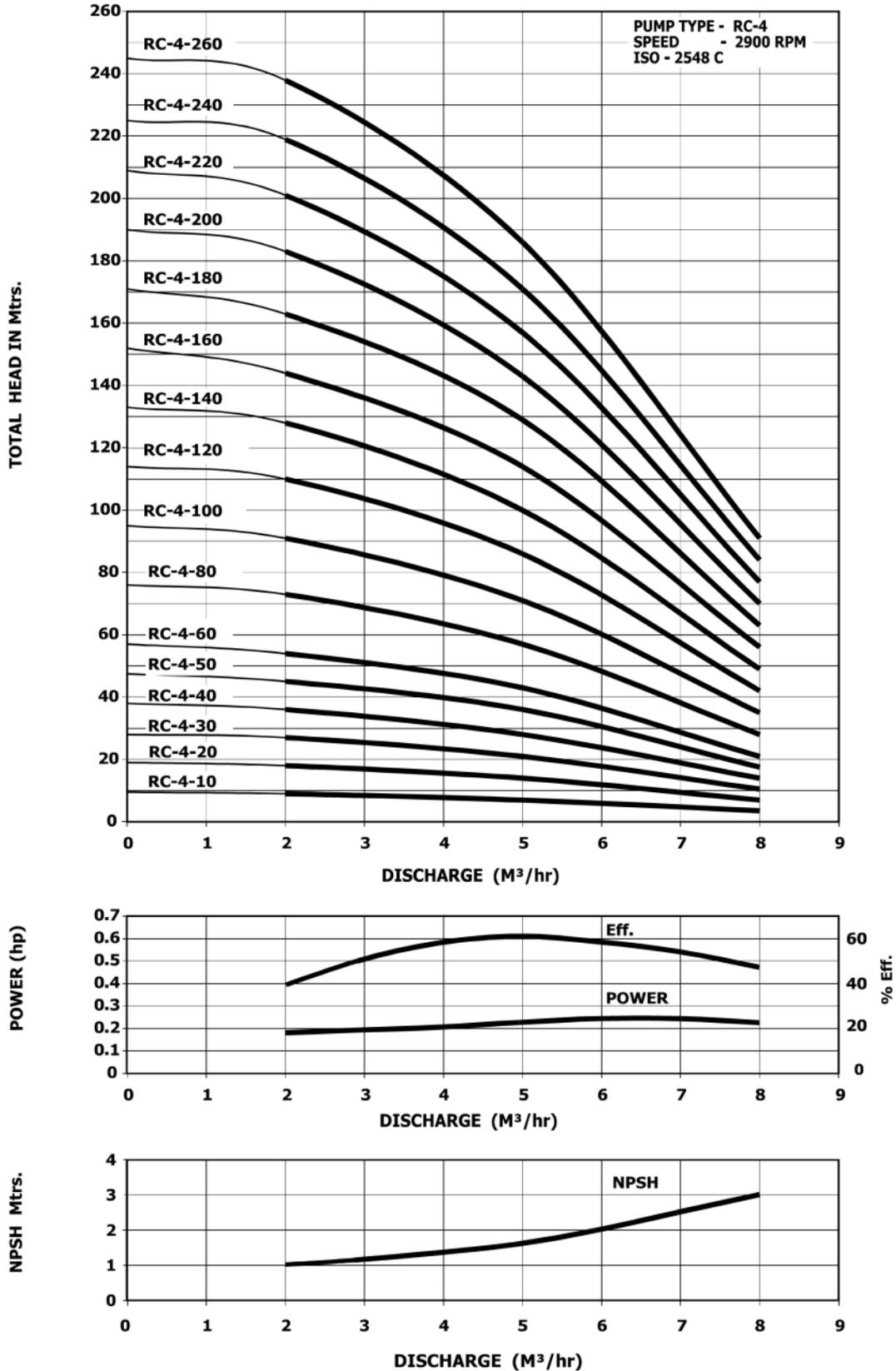
PUMP TYPE	MOTOR			PUMP DIMENSIONS IN MM					SHIPPING DATA	
	FRAME SIZE	KW	HP	A	D	M	N	P	Wt(kg) GROSS	SHIPPING VOLUME M <sup>3</sup>
RC 4-10	71	0.37	0.5	186	10	130	110	160	31	0.0280
RC 4-20	71	0.37	0.5	214	10	130	110	160	33	0.0285
RC 4-30	71	0.55	0.75	243	10	130	110	160	35	0.0311
RC 4-40	80	0.75	1	281	12	165	130	200	38	0.0337
RC 4-50	80	1.1	1.5	310	12	165	130	200	42	0.0383
RC 4-60	80	1.1	1.5	338	12	165	130	200	46	0.0396
RC 4-80	90	1.5	2	405	12	165	130	200	50	0.0456
RC 4-100R	90	2.2	3	488	12	165	180	250	55	0.0527
RC 4-120R	100	3	4	545	12	165	180	250	60	0.0579
RC 4-140R	100	3	4	612	15	215	130	250	65	0.0631
RC 4-160R	100	3.70	5	669	15	215	130	250	70	0.0683
RC 4-180R	132	4.5	6	726	15	215	130	250	75	0.0735
RC 4-200R	132	4.5	6	783	15	215	180	250	83	0.0796
RC 4-220R	132	5.5	7.5	840	15	215	180	250	90	0.0848
RC 4-240R	132	5.5	7.5	917	15	265	230	300	98	0.0900
RC 4-260R	132	5.5	7.5	974	15	265	230	300	108	0.0952

"R" Pumps with opposed Impellers



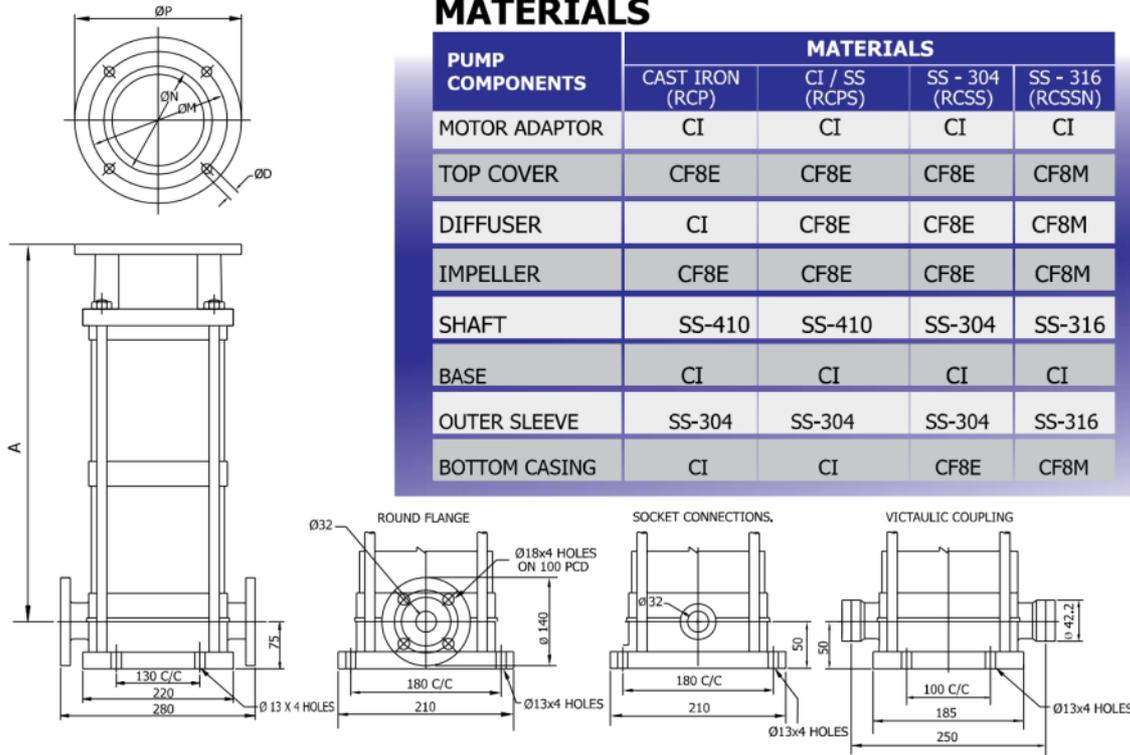
# RC-4

PERFORMANCE CURVES OF PUMP TYPE RC- 4





# RC-8



## MATERIALS

PUMP COMPONENTS	MATERIALS			
	CAST IRON (RCP)	CI / SS (RCPS)	SS - 304 (RCSS)	SS - 316 (RCSSN)
MOTOR ADAPTOR	CI	CI	CI	CI
TOP COVER	CF8E	CF8E	CF8E	CF8M
DIFFUSER	CI	CF8E	CF8E	CF8M
IMPELLER	CF8E	CF8E	CF8E	CF8M
SHAFT	SS-410	SS-410	SS-304	SS-316
BASE	CI	CI	CI	CI
OUTER SLEEVE	SS-304	SS-304	SS-304	SS-316
BOTTOM CASING	CI	CI	CF8E	CF8M

## TECHNICAL DATA

### VERTICAL MULTISTAGE CENTRIFUGAL PUMPS SERIES RC-8.

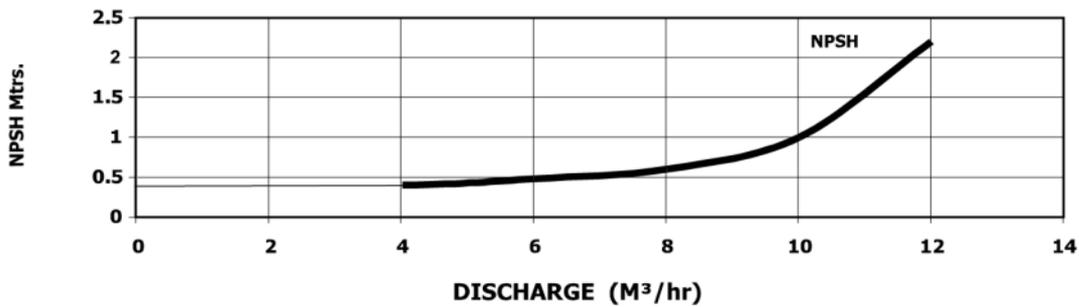
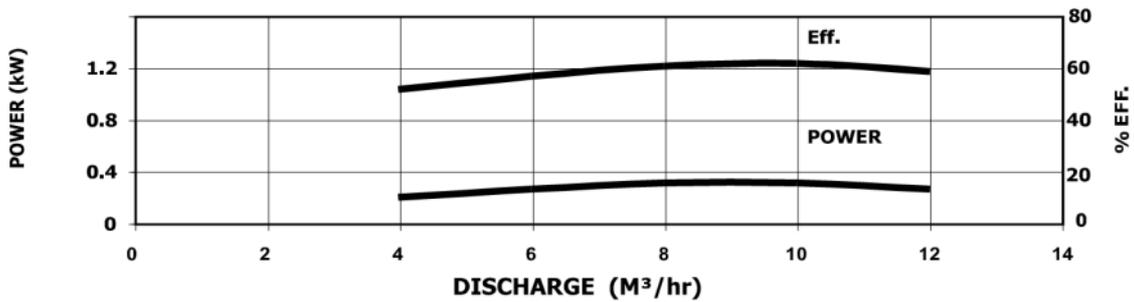
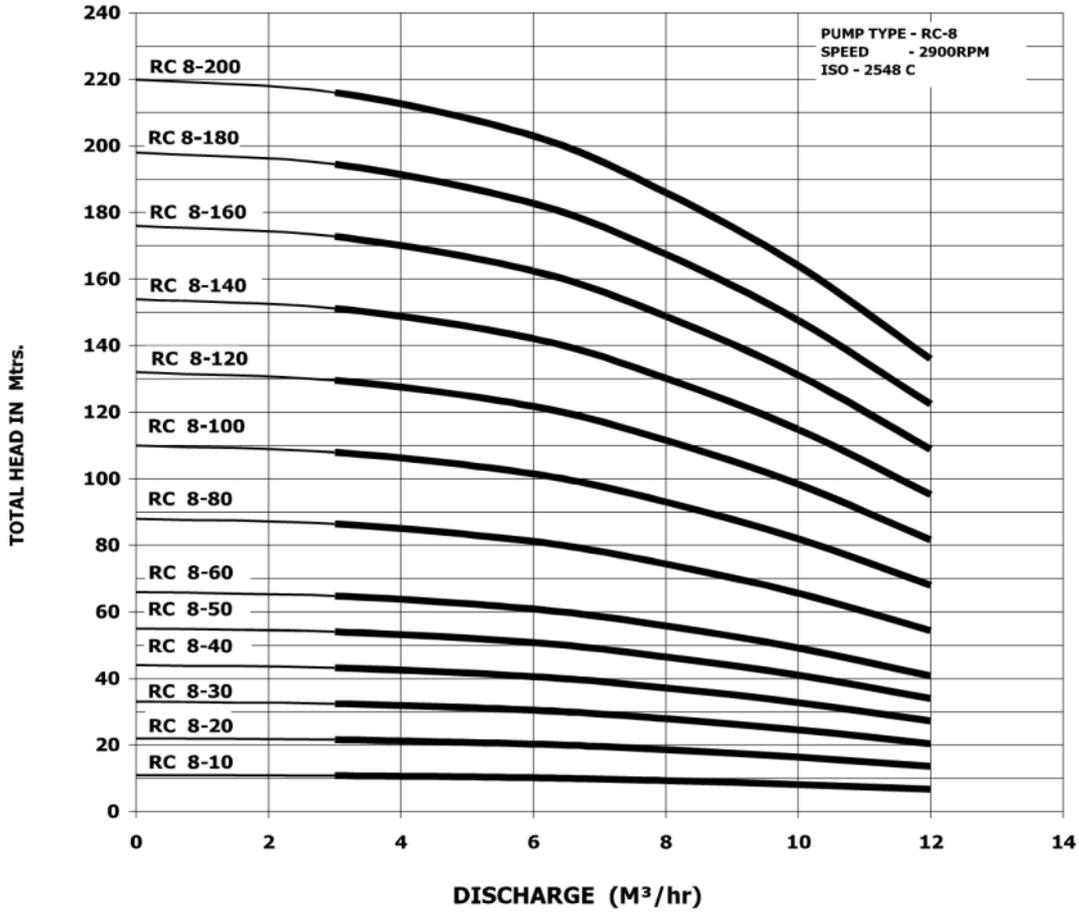
PUMP TYPE	MOTOR			PUMP DIMENSIONS IN MM					SHIPPING DATA	
	FRAME SIZE	KW	HP	A	D	M	N	P	Wt(kg) GROSS	SHIPPING VOLUME M <sup>3</sup>
RC 8-10	71	0.37	0.5	218	10	130	110	160	34	0.0573
RC 8-20	80	0.75	1.0	274	12	165	130	200	40	0.0645
RC 8-30	80	1.10	1.5	310	12	165	130	200	47	0.0701
RC 8-40	90	1.5	2.0	346	12	165	130	200	52	0.0759
RC 8-50	90	2.2	3.0	382	12	165	130	200	59	0.0815
RC 8-60	90	2.2	3.0	418	12	165	130	200	64	0.0873
RC 8-80R	100	3.0	4.0	517	15	215	180	250	79	0.1051
RC 8-100R	132	4.10	5.5	589	15	215	180	250	89	0.1165
RC 8-120R	132	4.0	5.5	661	15	215	180	250	100	0.1279
RC 8-140R	132	5.5	7.5	753	15	265	230	300	116	0.1412
RC 8-160R	132	7.5	10.0	832	15	265	230	300	126	0.1526
RC 8-180R	132	7.5	10.0	904	15	265	230	300	142	0.1640
RC 8-200R	132	8.40	12.5	976	15	265	230	300	152	0.1754

"R" Pumps with opposed Impellers



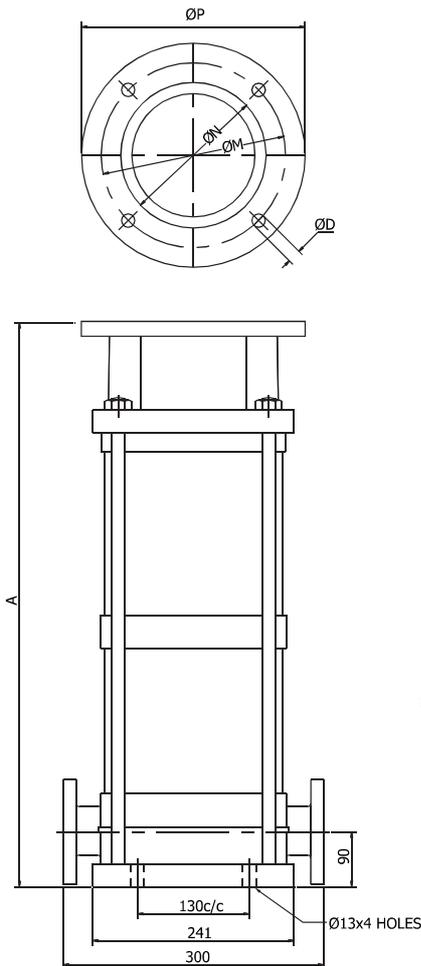
# RC-8

PERFORMANCE CURVES OF PUMP TYPE RC- 8



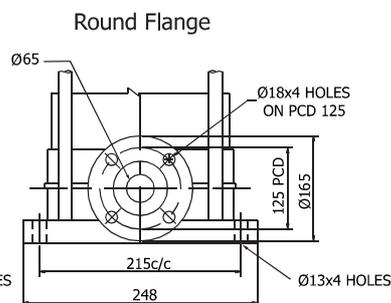


## RC-16



### MATERIALS

PUMP COMPONENTS	MATERIALS			
	CAST IRON (RCP)	CI / SS (RCPS)	SS - 304 (RCSS)	SS - 316 (RCSSN)
MOTOR ADAPTOR	CI	CI	CI	CI
TOP COVER	CF8E	CF8E	CF8E	CF8M
DIFFUSER	CI	CF8E	CF8E	CF8M
IMPELLER	CF8E	CF8E	CF8E	CF8M
SHAFT	SS-410	SS-410	SS-304	SS-316
BASE PLATE	CI	CI	CI	CI
OUTER SLEEVE	SS-304	SS-304	SS-304	SS-316
BOTTOM CASING	CI	CI	CF8E	CF8M



### TECHNICAL DATA

#### VERTICAL MULTISTAGE CENTRIFUGAL PUMPS SERIES RC-16

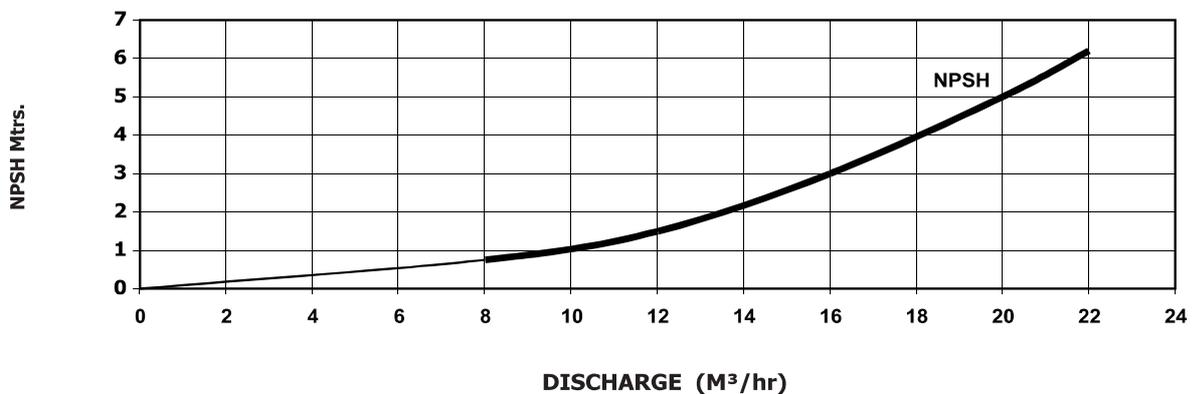
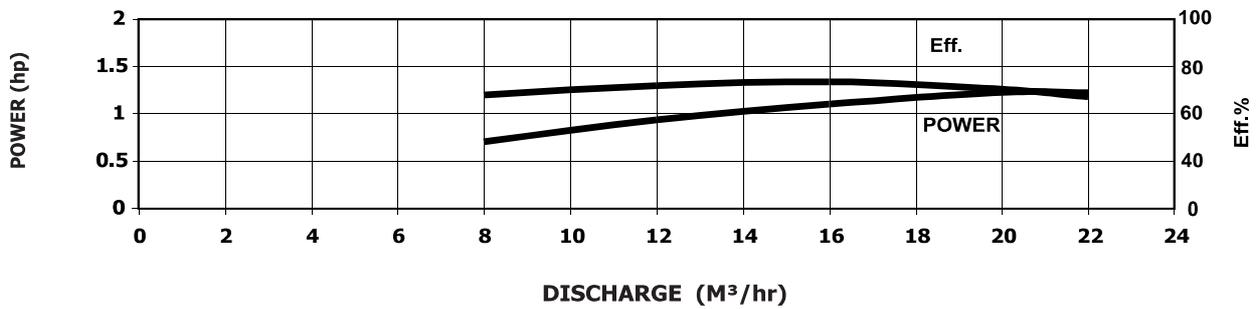
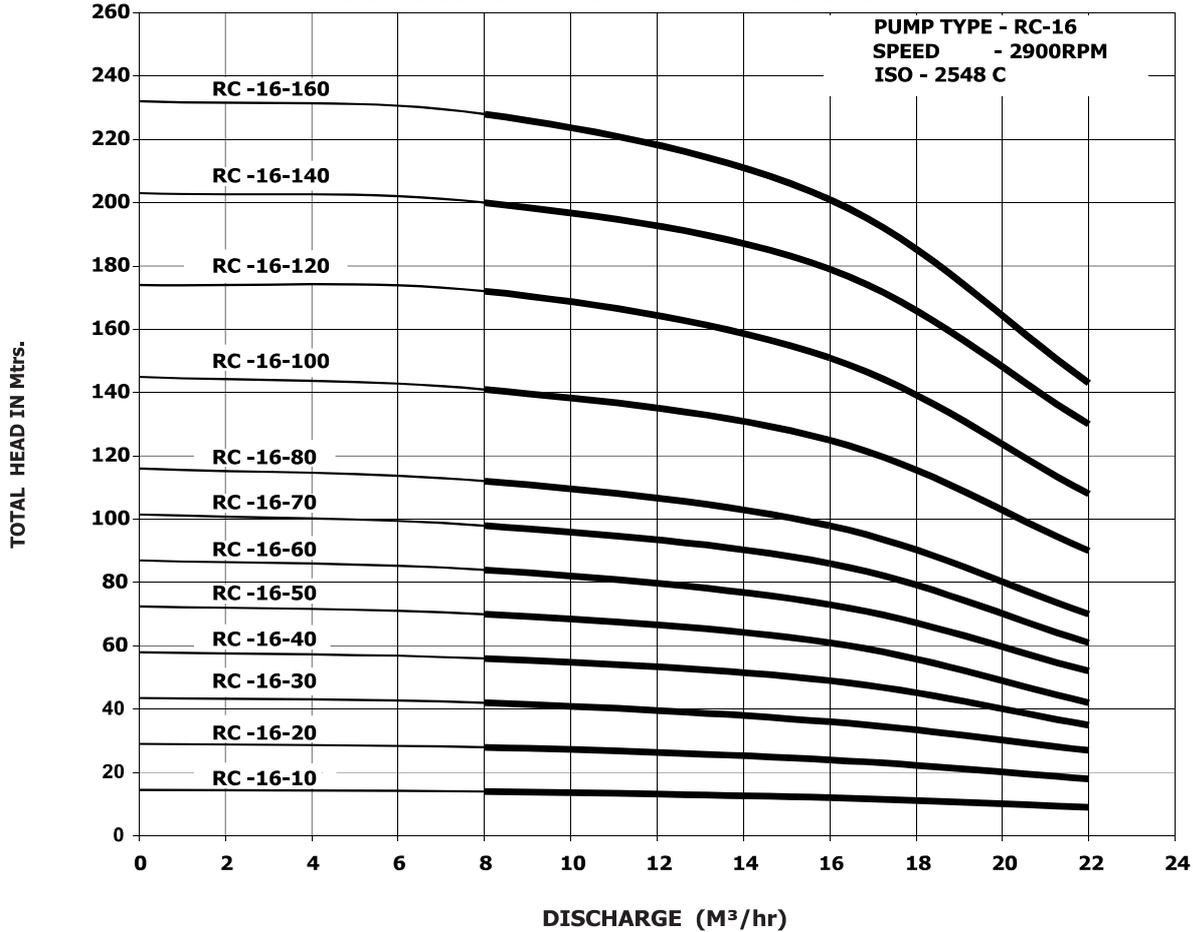
PUMP TYPE	MOTOR			PUMP DIMENSIONS IN MM					SHIPPING DATA	
	FRAME SIZE	KW	HP	A	D	M	N	P	Wt(kg) GROSS	SHIPPING VOLUME M <sup>3</sup>
RC16-20	90	2.2	3.0	411	12	165	130	200	57	0.1062
RC16-30	100	3.7	5.0	468	15	215	180	250	65	0.1188
RC16-40	132	4.1	5.5	514	15	215	180	250	73	0.1290
RC16-50	132	5.5	7.5	580	15	265	230	300	81	0.1435
RC16-60	132	7.45	10.0	626	15	265	230	300	90	0.1537
RC16-70	132	7.45	10.0	672	15	265	230	300	99	0.1639
RC16-80R	132	9.3	12.5	754	15	265	230	300	105	0.1820
RC16-100R	160	11.0	15.0	877	19	300	250	350	125	0.2091
RC16-120R	160	13.1	17.5	970	19	300	250	350	137	0.2297
RC16-140R	160	15.75	21.0	1063	19	300	250	350	155	0.2502
RC16-160R	160	18.5	25.0	1156	19	300	250	350	168	0.2708

"R" Pumps with opposed Impellers



# RC-16

PERFORMANCE CURVES OF PUMP TYPE RC-16

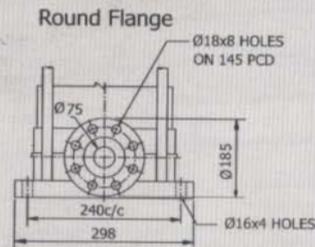
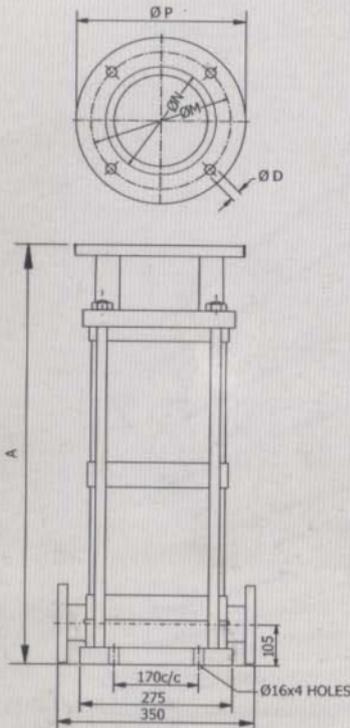




## RC-32

### MATERIALS:

PUMP COMPONENTS	MATERIALS			
	CAST IRON (RCP)	CI / SS (RCPS)	SS - 304 (RCSS)	SS - 316 (RCSSN)
MOTOR ADAPTOR	CI	CI	CI	CI
TOP COVER	CF8(e)	CF8(e)	CF8(e)	CF8M
DIFFUSER	CI	CF8(e)	CF8(e)	CF8M
IMPELLER	CF8(e)	CF8(e)	CF8(e)	CF8M
SHAFT	SS-410	SS-410	SS-304	SS-316
BOTTOM CASING	CI	CI	CF8(e)	CF8M
OUTER SLEEVE	SS-304	SS-304	SS-304	SS-316
BASE PLATE	CI	CI	CI	CI



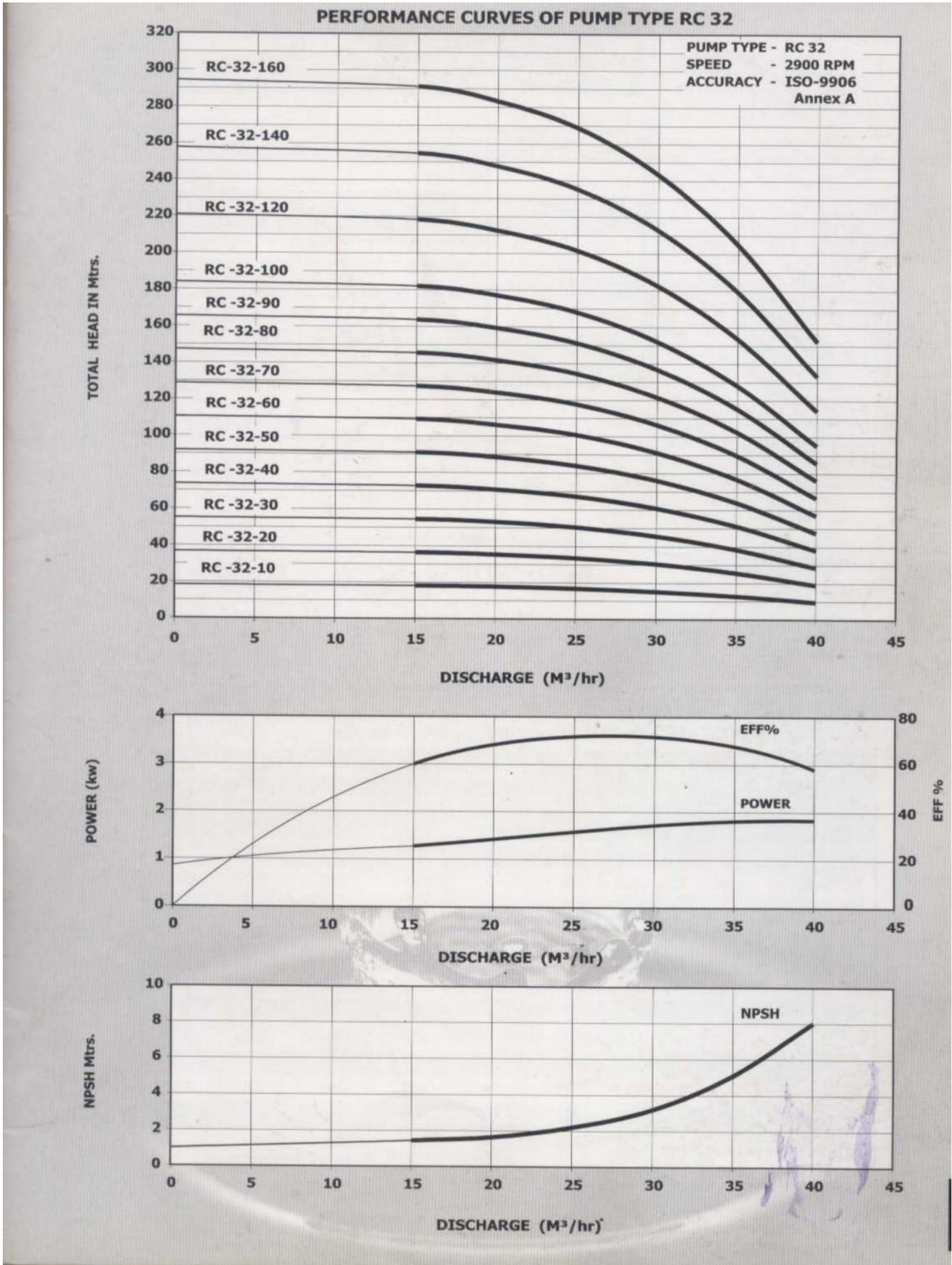
### TECHNICAL DATA

#### VERTICAL MULTISTAGE CENTRIFUGAL PUMPS SERIES RC-32

PUMP	MOTOR		PUMP DIMENSIONS IN MM						VOLUME
	TYPE	FRAME SIZE	KW	HP	A	D	M	N	
RC-32-10	90	2.2	3.0	358	14	165	130	200	0.087
RC-32-20	132	5.5	7.5	430	16	265	230	300	0.102
RC-32-30	132	5.5	7.5	472	16	265	230	300	0.110
RC-32-40	132	7.5	10.0	514	16	265	230	300	0.119
RC-35-50R	160	11.0	15.0	629	16	300	250	350	0.142
RC-32-60R	160	11.0	15.0	671	16	300	250	350	0.151
RC-32-70R	160	15.0	20.0	713	16	300	250	350	0.159
RC-32-80R	160	15.0	20.0	755	16	300	250	350	0.168
RC-32-90R	160	18.5	25.0	797	16	300	250	350	0.176
RC-32-100R	160	18.5	25.0	839	16	300	250	350	0.185
RC16-110R	180	22.0	30.0	881	16	300	250	350	0.193
RC-32-120R	180	22.0	30.0	923	16	300	250	350	0.202
RC-32-130R	200	30.0	40.0	965	19	350	300	400	0.260
RC-32-140R	200	30.0	40.0	1007	19	350	300	400	0.270
RC-32-150R	200	30.0	40.0	1049	19	350	300	400	0.280
RC-32-160R	200	33.0	45.0	1091	19	350	300	400	0.290

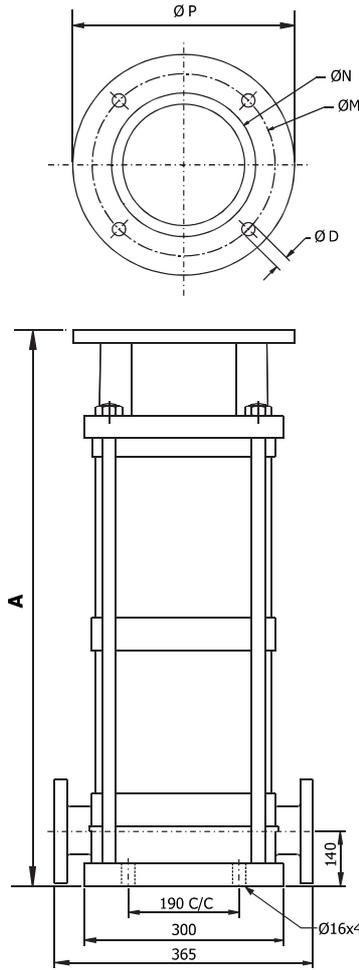


# RC-32





# RC-45



## MATERIALS:

PUMP COMPONENTS	MATERIALS			
	CAST IRON (RCP)	CI / SS (RCPS)	SS - 304 (RCSS)	SS - 316 (RCSSN)
MOTOR ADAPTOR	CI	CI	CI	CI
TOP COVER	CF8E	CF8E	CF8E	CF8M
DIFFUSER	CI	CF8E	CF8E	CF8M
IMPELLER	CF8E	CF8E	CF8E	CF8M
SHAFT	SS-410	SS-410	SS-304	SS-316
BASE PLATE	CI	CI	CI	CI
OUTER SLEEVE	SS-304	SS-304	SS-304	SS-316
BOTTOM CASING	CI	CI	CF8E	CF8M

## TECHNICAL DATA

### VERTICAL MULTISTAGE CENTRIFUGAL PUMPS SERIES RC-45

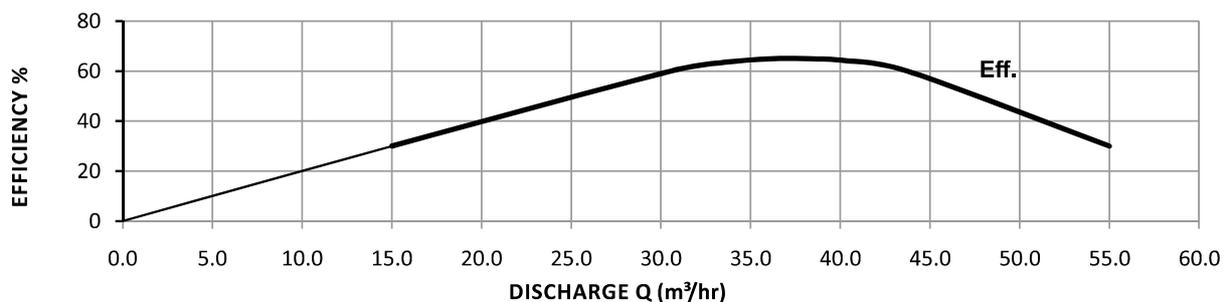
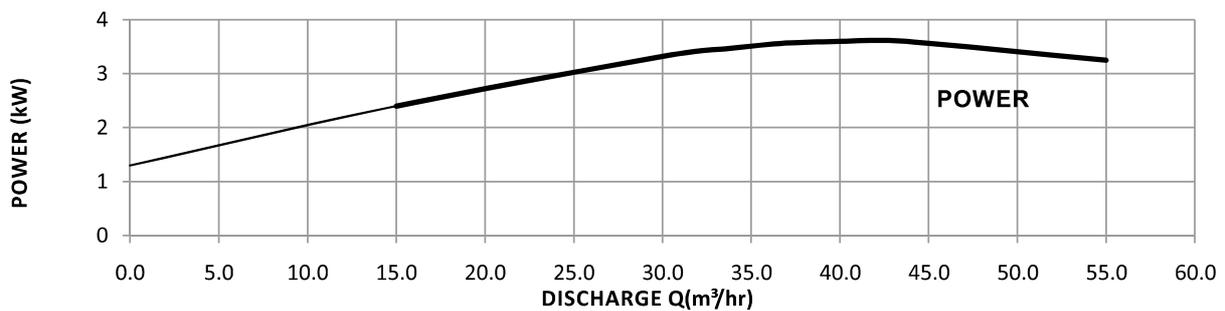
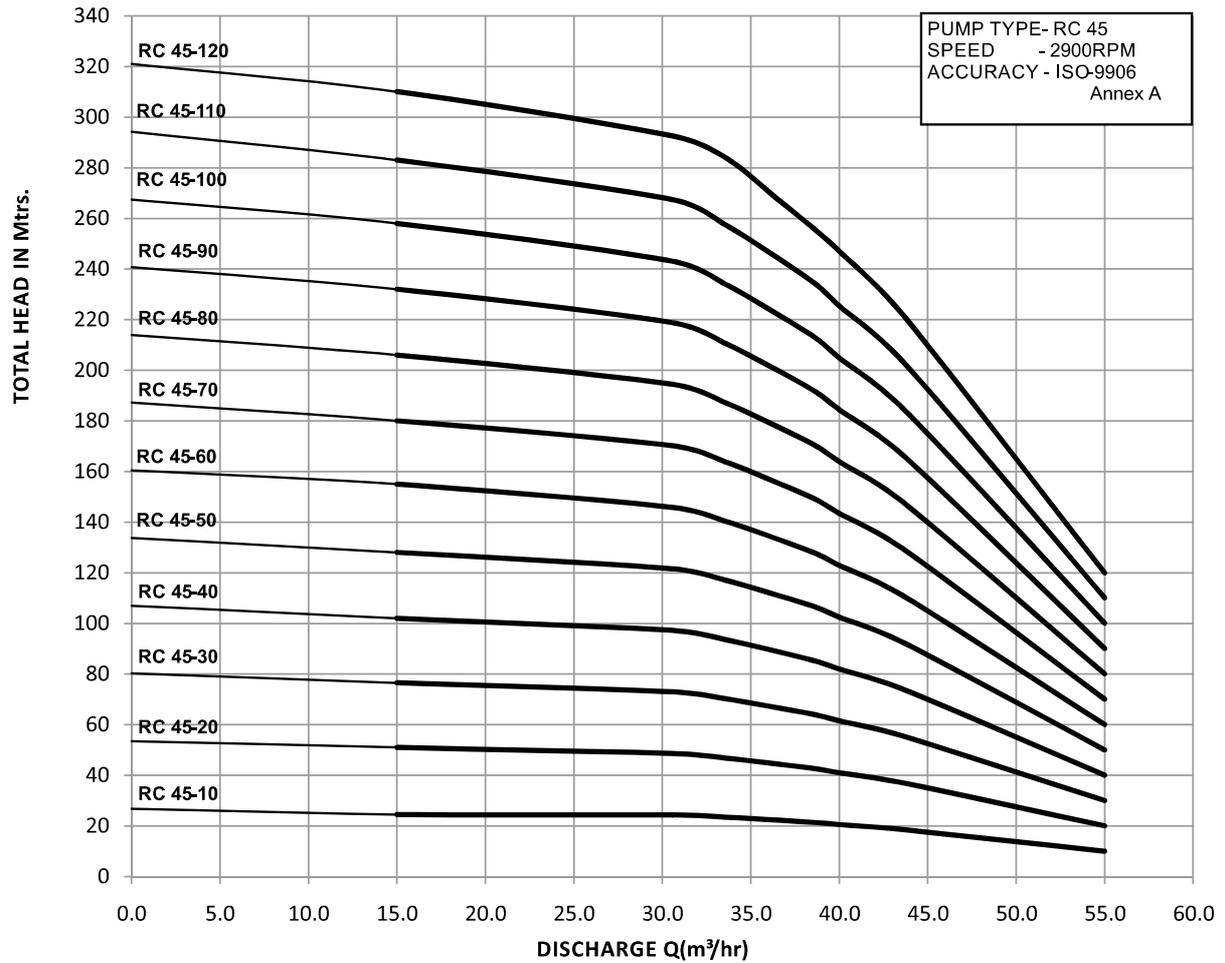
PUMP	MOTOR			PUMP DIMENSIONS IN MM					VOLUME
	TYPE	FRAME SIZE	KW	HP	A	D	M	N	
RC-45-20	132	7.5	10.0	525	16	265	230	300	0.129
RC-45-30	160	11.0	15.0	575	16	265	230	300	0.140
RC-45-40R	160	14.5	20.0	625	16	265	230	300	0.151
RC-45-50R	160	18.0	25.0	725	16	265	230	300	0.173
RC-45-60R	180	21.7	30.0	795	16	300	250	350	0.188
RC-45-70R	200	25.5	40.0	845	16	300	250	350	0.190
RC-45-80R	200	30.0	40.0	895	16	300	250	350	0.209
RC-45-90R	200	33.0	50.0	945	19	350	300	400	0.255
RC-45-100R	200	37.0	50.0	995	19	350	300	400	0.267
RC-45-110R	225	40.0	60.0	1045	19	400	350	450	0.338
RC-45-120R	225	45.0	60.0	1095	19	400	350	450	0.354

"R" Pumps with opposed Impellers



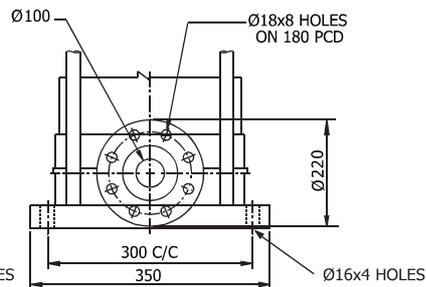
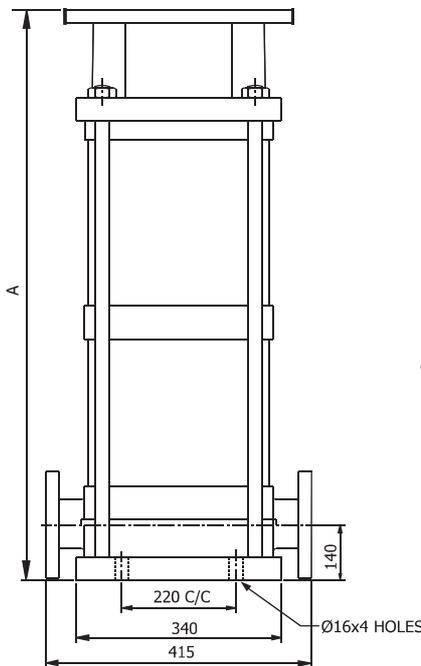
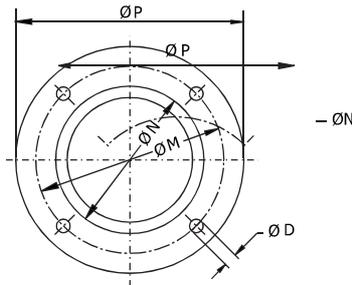
## RC-45

### PERFORMANCE CURVES OF PUMP RC-45





## RC-64



### MATERIALS:

PUMP COMPONENTS	MATERIALS			
	CAST IRON (RCP)	CI / SS (RCPS)	SS - 304 (RCSS)	SS - 316 (RCSSN)
MOTOR ADOPTOR	CI	CI	CI	CI
TOP COVER	CI	CI	CF8E	CF8M
DIFFUSER	CI	CF8E	CF8E	CF8M
IMPELLER	CF8E	CF8E	CF8E	CF8M
SHAFT	SS-410	SS-410	SS-304	SS-316
BASE	CI	CI	CI	CI
OUTER SLEEVE	SS-304	SS-304	SS-304	SS-316
BOTTOM CASING	CI	CI	SS-304	SS-316

### TECHNICAL DATA

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS SERIES RC-64 WITH SOCKET CONNECTIONS.

PUMP TYPE	MOTOR		PUMP DIMENSIONS IN MM						VOLUME M <sup>3</sup>
	FRAME SIZE	KW	HP	A	D	M	N	P	
RC-64-20	132	9.3	12.5	583	16	265	250	300	0.174
RC-64-30	160	18.5	25.0	664	16	300	250	350	0.196
RC-64-40R	180	22.0	30.0	775	16	300	250	350	0.225
RC-64-50R	200	30.0	40.0	835	19	350	300	400	0.241
RC-64-60R	200	37.0	50.0	896	19	350	300	400	0.257
RC-64-70R	225	45.0	60.0	957	19	400	350	450	0.274
RC-64-80R	225	45.0	60.0	1018	19	400	350	450	0.290
RC-64-90R	250	55.0	75.0	1109	19	500	450	550	0.255
RC-64-100R	250	55.0	75.0	1170	19	500	450	550	0.267

"R" Pumps with opposed Impellers



# RC-64

PERFORMANCE CURVES OF PUMP RC- 64

