

## NOCCHI DHR MULTI-CELL CENTRIFUGAL PUMPS

LOW ENERGY CONSUMPTION, ULTRA-SILENT OPERATION, IMPELLERS AND DIFFUSERS IN 100% AISI 304 STAINLESS STEEL , THREADED PORTS WITH PROVISION FOR OVAL CONNECTORS (DHR 9 RANGE)

The DHR range features non self-priming horizontal centrifugal pumps. All rotary parts in contact with the pumped liquid are in AISI 304 stainless steel .

### APPLICATION DATA

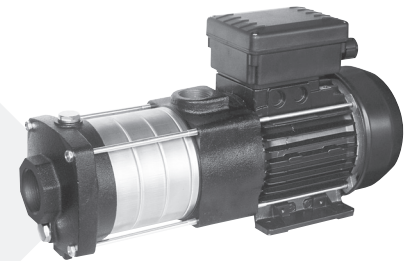
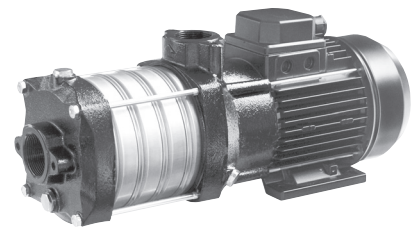
- Type of liquid: clean water without suspended solid bodies or abrasive material.
- Maximum liquid temperature: 90°C.
- Maximum ambient temperature: 50° C
- Maximum recommended suction height: 6 m with foot valve (with liquid temp. at 50° C)
- Maximum operating pressure: 10 bar (with liquid temp. at 50°C) 6 bar (with liquid temp. at 90°C)

### APPLICATIONS

- Lifting and distribution of water in domestic systems, with continuous or intermittent duty.
- Pressure booster systems.
- Washing, garden irrigation, fountains.

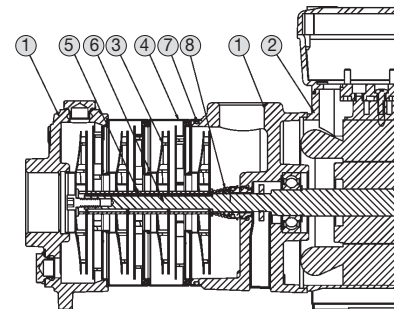
### MOTOR

- Closed, ventilated from exterior.
- Protection rating IP 54.
- Insulation class F.
- Single phase power supply with permanently activated capacitor and thermal cutout protection incorporated in the motor winding.
- Three phase power supply with external protection to be fitted by the user.
- Rotation speed 2850 rpm.
- Continuous duty.
- Maximum ambient temperature: 50° C



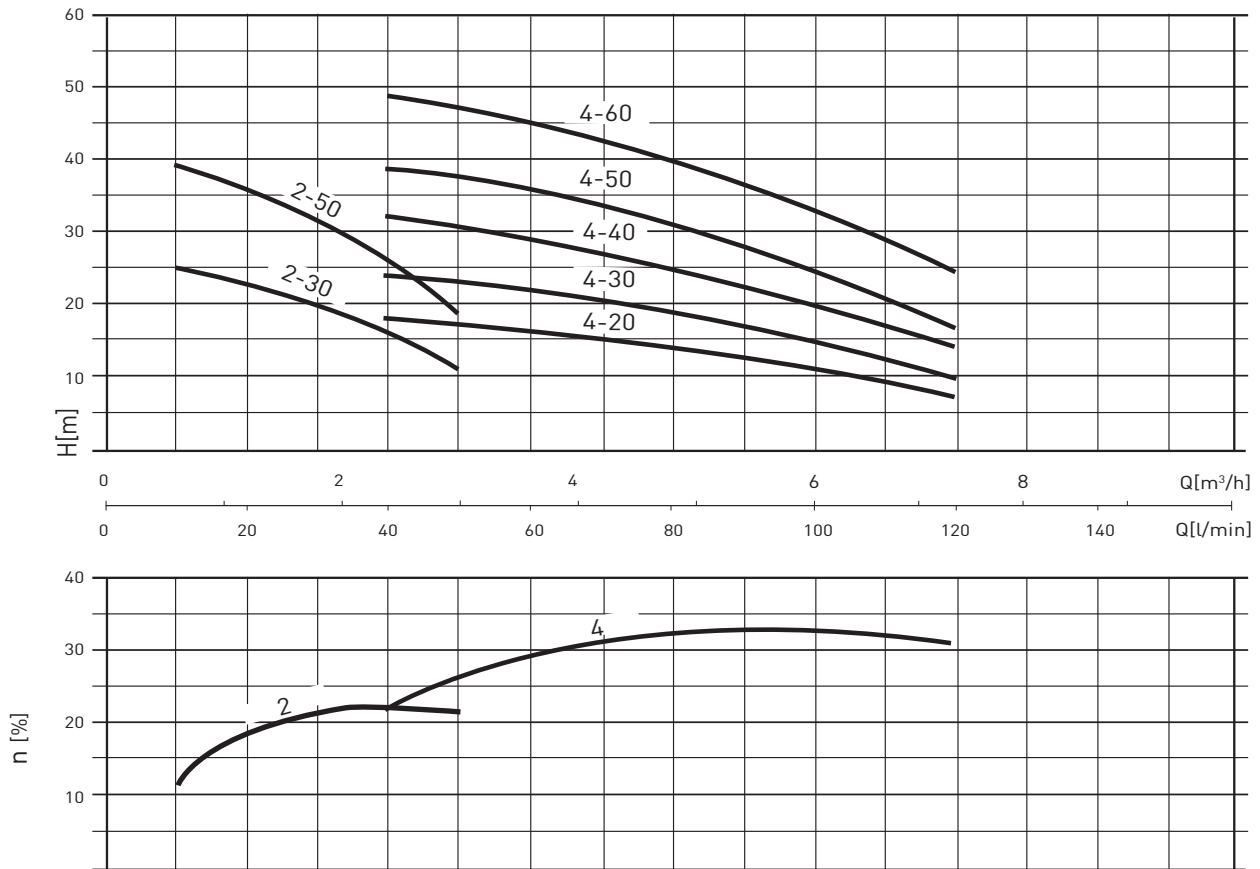
### TABLE OF MATERIALS

Component	Material
1 Suction flange	Die cast aluminum
2 Support	CAST IRON GJL-200 (ASTM Class 35)
3 Impellers	Stainless steel X5CrNi18-10 (AISI 304)
4 Diffusers	Stainless steel X5CrNi18-10 (AISI 304)
5 Sleeve	Stainless steel X5CrNi18-10 (AISI 304)
6 Shaft	Stainless steel X5CrNi18-10 (AISI 304)
7 Seals	NBR
8 Mechanical gasket	Ceramica / Graphite / NBR



# NOCCHI DHR 2 - DHR 4 MULTI-CELL CENTRIFUGAL PUMPS

## HYDRAULIC PERFORMANCE



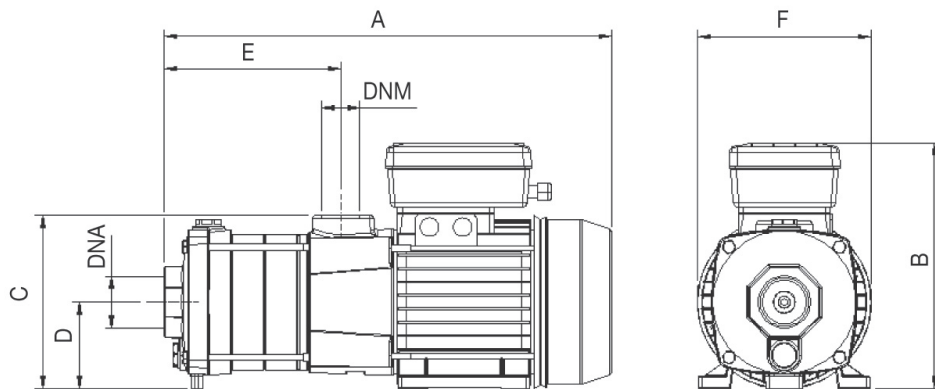
## PERFORMANCE TABLE

MODEL	Motor output		Absorbed power		Volt	In (A)	$\mu$ F.	Q	L/min	10	20	30	40	50
	HP	kW	HP	kW					m³/h	0.6	1.2	1.8	2.4	3
DHR 2-30 M	0.40	0.30	0.7	0.52	1 ~ 230 V	2.6	12.5	m.c.a. / m.w.c.	25	23	19	16	12	
DHR 2-30 T	0.40	0.30	0.67	0.50	3 ~ 230/400 V	1.9-1.1	-		25	23	19	16	12	
DHR 2-50 M	0.67	0.50	1	0.75	1 ~ 230 V	3.5	12.5		39	35	30	24	17	
DHR 2-50 T	0.67	0.50	1	0.75	3 ~ 230/400 V	2.5-1.8	-		39	35	30	24	17	

MODEL	Motor output		Absorbed power		Volt	In (A)	$\mu$ F.	Q	L/min	40	50	60	80	100	120
	HP	kW	HP	kW					m³/h	2.4	3	3.6	4.8	6	7.2
DHR 4-20 M	0.50	0.37	0.75	0.55	1 ~ 230 V	2.7	12.5	m.c.a. / m.w.c.	17	16	15	13	11	7	
DHR 4-20 T	0.50	0.37	0.78	0.53	3 ~ 230/400 V	2.1-1.2	-		17	16	15	13	11	7	
DHR 4-30 M	0.67	0.50	1.10	0.80	1 ~ 230 V	3.7	12.5		24	23	21	18	14	10	
DHR 4-30 T	0.67	0.50	1	0.75	3 ~ 230/400 V	2.5-1.4	-		24	23	21	18	14	10	
DHR 4-40 M	0.94	0.70	1.34	1	1 ~ 230 V	4.5	16		33	31	29	26	21	15	
DHR 4-40 T	0.94	0.70	1.34	1	3 ~ 230/400 V	3.2-1.9	-		33	31	29	26	21	15	
DHR 4-50 M	1.20	0.90	1.68	1.25	1 ~ 230 V	5.8	20		41	39	37	33	27	19	
DHR 4-50 T	1.20	0.90	1.55	1.15	3 ~ 230/400 V	3.4-2	-		41	39	37	33	27	19	
DHR 4-60 M	1.6	1.2	2	1.5	1 ~ 230 V	7	31.5		52	49	47	43	36	26	
DHR 4-60 T	1.6	1.2	2	1.5	3 ~ 230/400 V	5.4-3.1	-		52	49	47	43	36	26	

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## MULTI-CELL CENTRIFUGAL PUMPS



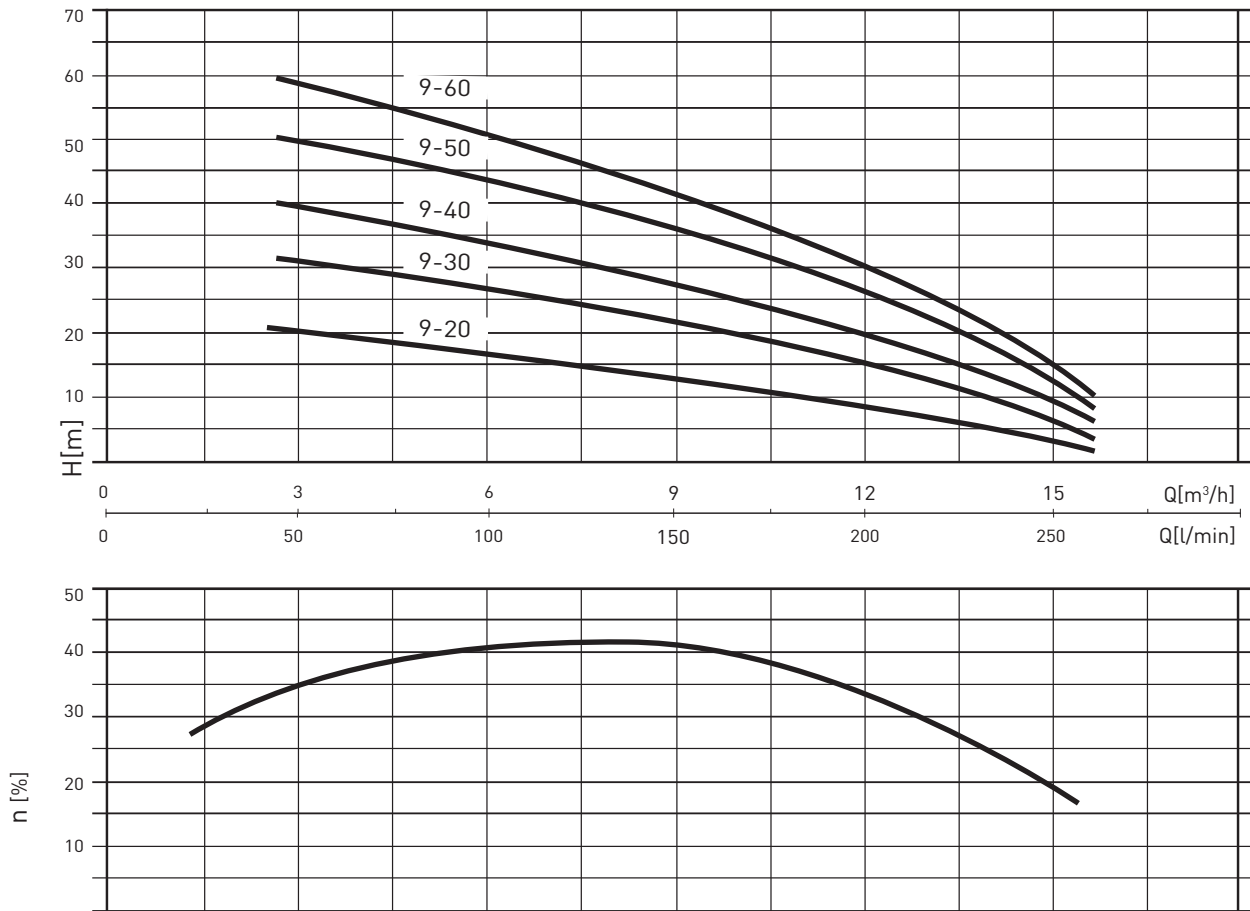
### OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)								Net weight (kg)
	A	B	C	D	E	F	DNA	DNM	
DHR 2-30	326	205/190	137.5	71	105	142	1"	1"	10.2
DHR 2-50	362	205/190	137.5	71	141	142	1"	1"	11.5
DHR 2-20	339	205/190	137.5	71	119	142	1" 1/4	1"	10.5
DHR 4-30	339	205/190	137.5	71	119	142	1" 1/4	1"	10.7
DHR 4-40v	366	205/190	137.5	71	146	142	1" 1/4	1"	12
DHR 4-50	394	205/190	137.5	71	173	142	1" 1/4	1"	13.9
DHR 4-60	445	230/209	149	80	200	160	1" 1/4	1"	17

# NOCCHI DHR 9

## MULTI-CELL CENTRIFUGAL PUMPS

### HYDRAULIC PERFORMANCE

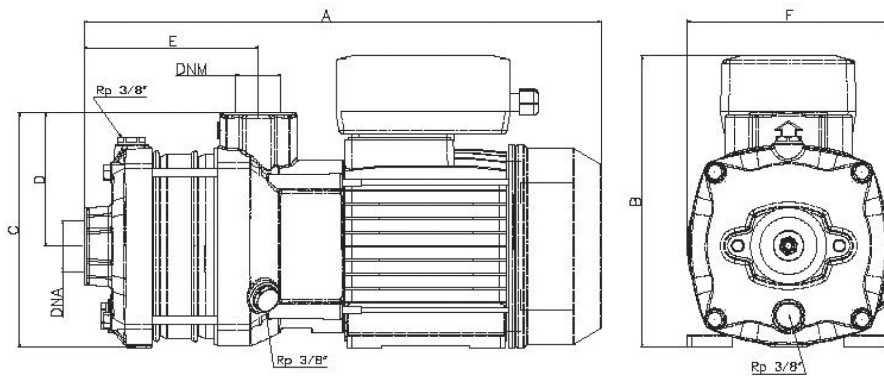


### PERFORMANCE TABLE

MODEL	Motor output		Absorbed power		Volt	In (A)	$\mu F$	Q	L/min	40	80	120	160	200	240	260
	HP	kW	HP	kW					m³/h	2.4	4.8	7.2	9.6	12	14.4	15.6
DHR 9-20 M	0.87	0.65	1.34	1	1 ~ 230 V	4.5	20	m.c.a. / m.w.c.	20	19	16	13	9	5	3	
DHR 9-20 T	0.87	0.65	1.21	0.9	3 ~ 230/400 V	3 - 1.7	20		19	16	13	9	5	3		
DHR 9-30 M	1.27	0.95	1.88	1.4	1 ~ 230 V	6	25		31	29	26	21	16	9	5	
DHR 9-30 T	1.27	0.95	1.81	1.35	3 ~ 230/400 V	4.4 - 2.5	25		31	29	26	21	16	9	5	
DHR 9-40 M	1.74	1.3	2.41	1.8	1 ~ 230 V	8	31.5		40	38	33	27	19	10	5	
DHR 9-40 T	1.74	1.3	2.15	1.6	3 ~ 230/400 V	5.3 - 3	31.5		40	38	33	27	19	10	5	
DHR 9-50 M	2.15	1.6	2.95	2.2	1 ~ 230 V	10	35		51	49	43	36	26	14	6	
DHR 9-50 T	2.15	1.6	2.68	2	3 ~ 230/400 V	6.1 - 3.5	35		51	49	43	36	26	14	6	
DHR 9-60 T	2.55	1.9	3.35	2.5	3 ~ 230/400 V	7.9 - 4.5	35		60	56	49	40	29	14	6	

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## MULTI-CELL CENTRIFUGAL PUMPS



### OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)								Net weight (kg)
	A	B	C	D	E	F	DNA	DNM	
DHR 9-20 M	378	196	185	105	107	160	1 1/2	1 1/4	17.5
DHR 9-20 T	378	227	185	105	107	160	1 1/2	1 1/4	18.8
DHR 9-30 M	378	196	185	105	107	160	1 1/2	1 1/4	18.7
DHR 9-30 T	378	227	185	105	107	160	1 1/2	1 1/4	19
DHR 9-40 M	408	196	185	105	137	160	1 1/2	1 1/4	20
DHR 9-40 T	408	227	185	105	137	160	1 1/2	1 1/4	22
DHR 9-50 M	438	196	185	105	168	160	1 1/2	1 1/4	22.5
DHR 9-50 T	438	227	185	105	168	160	1 1/2	1 1/4	23.5
DHR 9-60 T	468	196	185	105	198	160	1 1/2	1 1/4	24.1