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# MICRA



(Control box only for single-phase version)

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## GENERAL DATA

### Applications

Borehole electric pumps for 3" wells or larger.

These units have a very extensive range of applications for lifting and distribution in domestic and industrial water systems, filling of pressure vessels and tanks, pressurisation and irrigation systems.

### Pump construction features

Multistage centrifugal type. Directly coupled pump and motor with rigid coupling. Impellers and thrust rings in Noryl and diffusers in self-lubricating polyacetyl. Pump liner, shaft and coupling, strainer and cable sheath in stainless steel.

Base support and head in brass with check valve incorporated in head.

### Motor construction characteristics

Submerged asynchronous two-pole motor made entirely of AISI 304 stainless steel with brass bearings.

Squirrel cage rotor in copper mounted on Kingsbury thrust block.

Cooling of the thrust bearing assembly and the bushings is provided by water, thereby eliminating the risk of oil contamination. Canned-type stator in an airtight casing made of AISI 304L stainless steel. The automatic reset thermal protection device is integral with the motor.

Protection rating: IP68

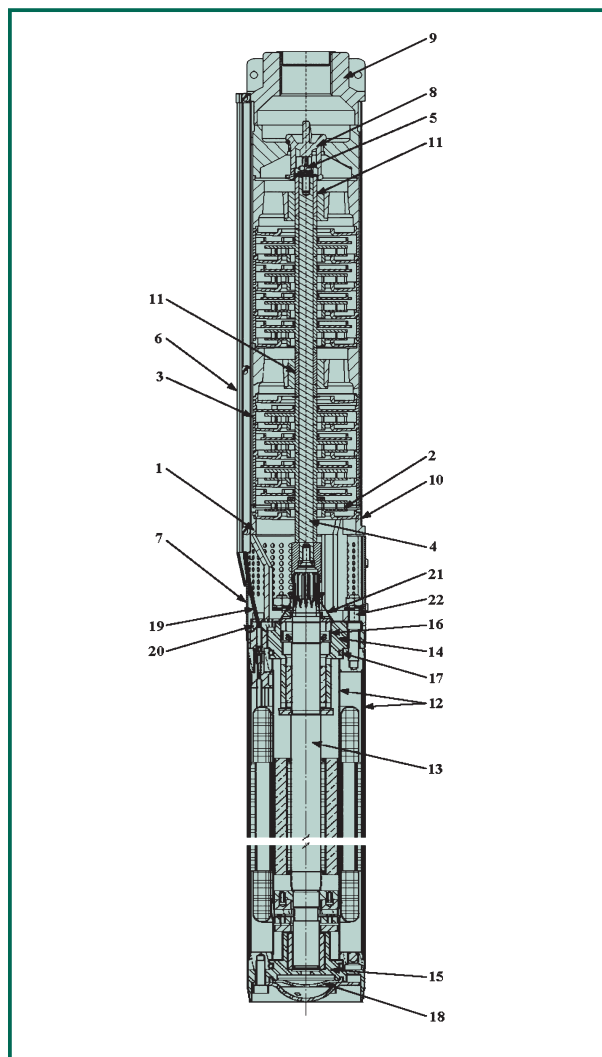
Heat insulation class: F

Input voltage: single-phase 220-230 V / 50Hz  
trifase 400 V / 50Hz

# TECHNICAL DATA

No.	PART*	MATERIAL
<b>PUMP</b>		
1	BASE SUPPORT	BRASS OT58
2	ROTOR	NORYL GFN2
3	DIFFUSER	POLYACETYL
4	SHAFT WITH COUPLING	AISI 430F
5	ROTOR'S LOCKING NUT	AISI 304
6	CABLE SHEATH	AISI 430
7	STRAINER	AISI 430
8	VALVE	POLYACETYL
9	DISCHARGE SECTION	BRASS OT58
10	PUMP LINER	AISI 304
11	BUSHES	AISI 316L
<b>MOTOR</b>		
12	INTERNAL AND OUTER LINER	AISI 304
13	SHAFT	AISI 431
14	UPPER SUPPORT	BRASS OT58
15	LOWER SUPPORT	BRASS OT58
16	LIP SEAL	NBR
17	GASKETS	NBR
18	BELLOW SEAL	EPDM
19	CABLE	EPDM
20	CONNECTOR PLUG	AISI 304
21	SAND GUARD	NBR
22	SCREWS	AISI 304

\* In contact with liquid



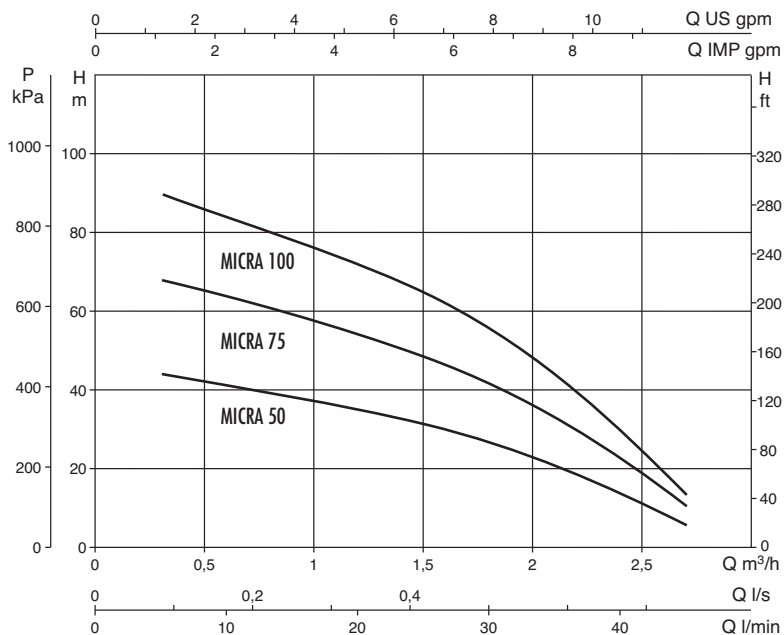
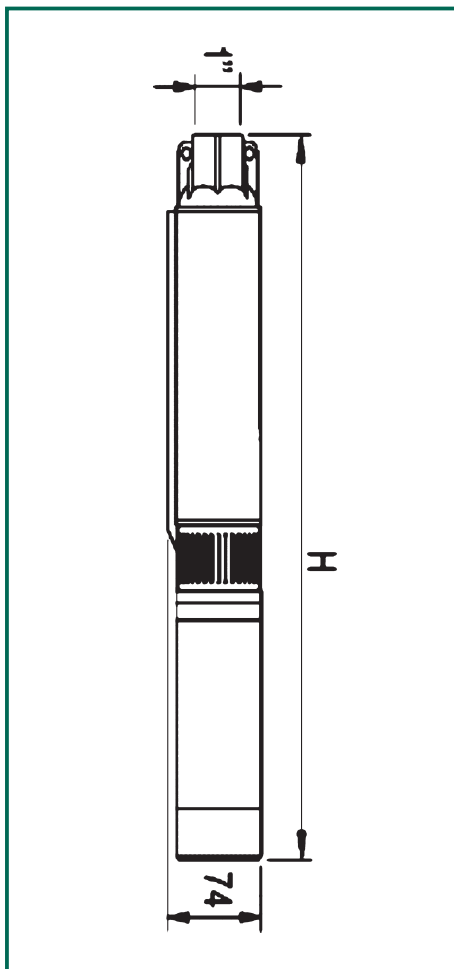
- Operating range: from 0.3 to 2.7 m<sup>3</sup>/h with head of up to 90 m.
- Liquid quality requirements: clean, free of solid or abrasive contaminants, non-viscous, chemically neutral, close to the properties of water.
- Liquid temperature range: from 0°C to +35°C
- Maximum permissible sand quantity: 40g/m<sup>3</sup>
- Input voltage tolerance: +6% / -10%
- Max. no. of starts: 20/h
- Installation: in 3" wells or larger, tanks and cisterns, vertical position. In the event of horizontal installation, ensure a minimum load is applied to the thrust bearing assembly.
- Special executions on request: alternative voltages and/or frequencies.
- Power cable: Micra 50 – 1m  
Micra 75 – 1,2m  
Micra 100 – 1,4m

Single-phase version supplied with CONTROL BOX on request

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# MICRA

Liquid temperature range: from 0°C to +35°C



MODEL	Ø	H	DNM	PACK DIMENSIONS		VOLUME m <sup>3</sup>	GROSS WEIGHT Kg
				Ø	H		
<b>MICRA 50</b>	74	930	1"	86	1150	0,0067	9
<b>MICRA 75</b>	74	1145	1"	86	1350	0,0078	10,2
<b>MICRA 100</b>	74	1390	1"	86	1600	0,0093	13,6

MODEL	ELECTRICAL DATA							HYDRAULIC DATA (n ≈ 2800 1/min)									
	INPUT VOLTAGE 50 Hz	P1 MAX kW	P2 NOMINAL		In A	CAPACITOR		Q m <sup>3</sup> /h l/min	0,3	0,6	0,9	1,2	1,5	1,8	2,1	2,4	2,7
			kW	HP		µF	Vc		5	10	15	20	25	30	35	40	45
<b>MICRA 50 M</b>	1x230 V ~	0,65	0,37	0,5	3,3	12	450	H (m)	45	41	38	35	31	27	21	14	6
<b>MICRA 50 T</b>	3x400 V ~	0,6	0,37	0,5	1,3	-	-		45	41	38	35	31	27	21	14	6
<b>MICRA 75 M</b>	1x230 V ~	0,95	0,55	0,75	5,1	16	450		68	64	59	54	48	42	33	23	11
<b>MICRA 75 T</b>	3x400 V ~	0,9	0,55	0,75	1,9	-	-		68	64	59	54	48	42	33	23	11
<b>MICRA 100 M</b>	1x230 V ~	1,2	0,75	1	6,1	20	450		90	84	78	72	65	56	44	30	14
<b>MICRA 100 T</b>	3x400 V ~	1,15	0,75	1	2,4	-	-		90	84	78	72	65	56	44	30	14

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