## Submersible pumps

High flow

MC4



Sewage waterCivil useIndustrial use

#### **PERFORMANCE RANGE**

- Flow rate up to **5000 l/min (**300 m<sup>3</sup>/h)
- Head up to 22 m

#### **APPLICATION LIMITS**

- **10 m** maximum immersion depth (with a sufficiently long power cable)
- Maximum liquid temperature +40 °C
- Passage of suspended solids up to Ø 80 mm
- \To have continuous duty, the pump has not to emerge (to be out) of the water for more than 290 mm

#### **CONSTRUCTION AND SAFETY STANDARDS**

• 10 m long power cable

EN 60335-1 IEC 60335-1 CEI 61-150 EN 60034-1 IEC 60034-1 CEI 2-3



#### CERTIFICATIONS

Company with management system certified DNV ISO 9001: QUALITY



#### **INSTALLATION AND USE**

**MC4** series pumps, made from heavy gauge robust cast iron, resistant to abrasion and long-lasting, are fitted with a DOUBLE-CHAN-NEL impeller and are capable of pumping liquids containing short fibred suspended solids. They are ideal for pumping **sewage**, **waste water, water mixed with mud, groundwater and surface water** in locations such as blocks of flats, public buildings, factories, multi-storey and underground car parks, washing areas, etc.

#### **PATENTS - TRADE MARKS - MODELS**

• Registered EU Design n. 003863158-0004

#### **OPTIONS AVAILABLE ON REQUEST**

• Other voltages or 60 Hz frequency



#### CHARACTERISTIC CURVES AND PERFORMANCE DATA

#### 50 Hz n= 1450 min<sup>-1</sup>



MODEL	POWE	ER (P2)	m³/h	0	48	60	90	120	150	180	210	240	252	276	300
Three-phase	kW	HP	l/min	0	800	1000	1500	2000	2500	3000	3500	4000	4200	4600	5000
MC4 90/80	6.7	9		17.5	15.3	14.8	13.4	12.1	10.8	9.3	7.8	6.2	5.5		
MC4 110/80	8	11	H metres	20	17.6	17	15.6	14.2	12.8	11.4	9.8	8.2	7.5	6	
MC4 125/80	9.2	12.5		22	19.8	19.2	17.8	16.4	15	13.5	11.9	10.2	9.5	8.1	6.5

 $\mathbf{Q} = Flow rate \quad \mathbf{H} = Total manometric head$ 

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

# MC4

#### POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	PUMP BODY	Cast iron
2	IMPELLER	DOUBLE-CHANNEL type in cast iron
3	MOTOR CASING	Cast iron
4	CASING	Cast iron
5	MOTOR SHAFT	Stainless steel AISI 431

#### 6 SHAFT WITH DOUBLE MECHANICAL SEAL SEPARATED BY AN OIL CHAMBER

Seal	Shaft	Position			
Model	Diameter		Stationary ring	Rotational ring	Elastomer
AR-35	<b>Ø 35</b> mm	Motor side	Ceramic	Graphite	NBR
MG1-40	<b>Ø 40</b> mm	Pump side	Silicon carbide	Silicon carbide	NBR

7 BEARINGS

6308 2RS-C3 / 3308A 2RS-C3

#### 8 ELECTRIC MOTOR

- three-phase 400 V 50 Hz with thermal overload protector incorporated into the winding
- Insulation: class F
- Protection: IP X8

#### 9 PROBE DETECTING THE PRESENCE OF WATER IN THE OIL CHAMBER

#### 10 POWER CABLE

"H07 RN-F" type Standard length 10 metres





#### **DIMENSIONS AND WEIGHT**







MODEL	Passage		kg				
Three-phase	of solids	а	b	с	h	h1	3~
MC4 90/80							219
MC4 110/80	Ø 80	285	232	395	870	145	220
MC4 125/80							230

#### **FLANGED PORT**



MODEL	FLANGE	К	D	HOLES		
Three-phase	DN	mm	mm	N°	Ø (mm)	
MC4 90/80 MC4 110/80 MC4 125/80	<b>100</b> (PN10)	180	220	8	18	

#### COUNTERFLANGE

(TO BE ORDERED SEPARATELY)



MODEL	FLANGE	F	к	D	но	LES	
Three-phase	DN		mm	mm	N°	Ø (mm)	
MC4 90/80 MC4 110/80 MC4 125/80	100	4"	180	220	8	18	

#### **ABSORPTION**

MODEL	VOLTAGE
Three-phase	400 V
MC4 90/80	<b>14.5</b> A
MC4 110/80	<b>17.5</b> A
MC4 125/80	<b>18.5</b> A

#### BASE

#### (TO BE ORDERED SEPARATELY)





# **SEWAGE LIFTING SYSTEM VXC4 – MC4**





#### **VERTICAL DELIVERY VERSION WITH 2" GUIDE TUBES**

For VXC4, MC4	Cod. ASSPVXC4V	DN 4"

Kit consisting of:

- footing connection complete with counterflange

- slide guide with screws and seals

-support for the guide tubes

#### **STANDARD INSTALLATION**

- 1. Pump
- 2. Footing connection
- 3. Guide tubes
- Support for the guide tubes
- 5. Intermediate support for the guide tubes
- 6. Lifting chain

- 7. Control box
- 8. Stop float switch
- Starting float switch
  Starting float switch auxiliary pump
- 11. Alarm float switch
- 13. Cement base



#### SLIDE GUIDE (Also to be ordered separately)

For VXC4, MC4 Cod. ASSFL100

Complete with screws and seals

#### • INTERMEDIATE SUPPORT (To be ordered separately)

Cod. 859SV349INTFA

Gide tube Ø 2"

In order to ensure stability, insert the intermediate support every three metres of guide tube (recommended



Ø 2"

GUIDE TUBES (AISI 304 stainless steel)

Cod. 54SARTG006

Maximum length of the tube plank: 6 metres



### DIMENSIONS



MODEL	Passage of solids	PORT		DIMENSIONS mm																
Three-phase	mm	DN	a	b	c	d	е	р	h1	h2	h3	h4	i1	i2	i3	i5	Øg	Øm	Øn	Ør
VXC4 /80 MC4 /80	Ø 80	100	435	85.5	104.5	180	220	965	62	275	400	930	250	150	34	187	2"	13.5	22	18