

-  Clear waters
-  Domestic use
-  Civil use
-  Industrial use

※ **High-quality materials and robust construction ensure superior performance and reliability**



#### PERFORMANCE RANGE

- Flow rate up to **550 l/min** (33 m<sup>3</sup>/h)
- Head up to **38 m**

#### INSTALLATION AND USE

DC submersible pumps are constructed from thick cast iron, offering exceptional robustness, abrasion resistance, and longevity. Perfect for **draining both clear and slightly dirty water**, their durability and reliability set them apart. Designed for automated fixed installations, the DC series guarantees continuous operation, even in conditions where they are not fully submerged.

#### INCLUDES

- ※ Power cable length **10 m**
- ※ Float switch (exclusive to single-phase models)
- ※ Switchbox compatible with DCm42, DCm43 (exclusive to single-phase models)

#### APPLICATION LIMITS

- Maximum operating depth below water level up to **10 m** (with an appropriately sized power cable)
- Liquid temperature up to **+40 °C**
- Capable of processing suspended solids up to **Ø 10 mm**
- Draining capability:
  - up to **17 mm** from the bottom for DC 10-20-30
  - up to **25 mm** from the bottom for DC 42-43-44
- **Minimum immersion for continuous service:**
  - **220 mm DC 10-20-30**
  - **300 mm DC 42-43-44**

#### AVAILABLE UPON REQUEST

- ※ Different voltage requirements 60 Hz frequency

#### WARRANTY

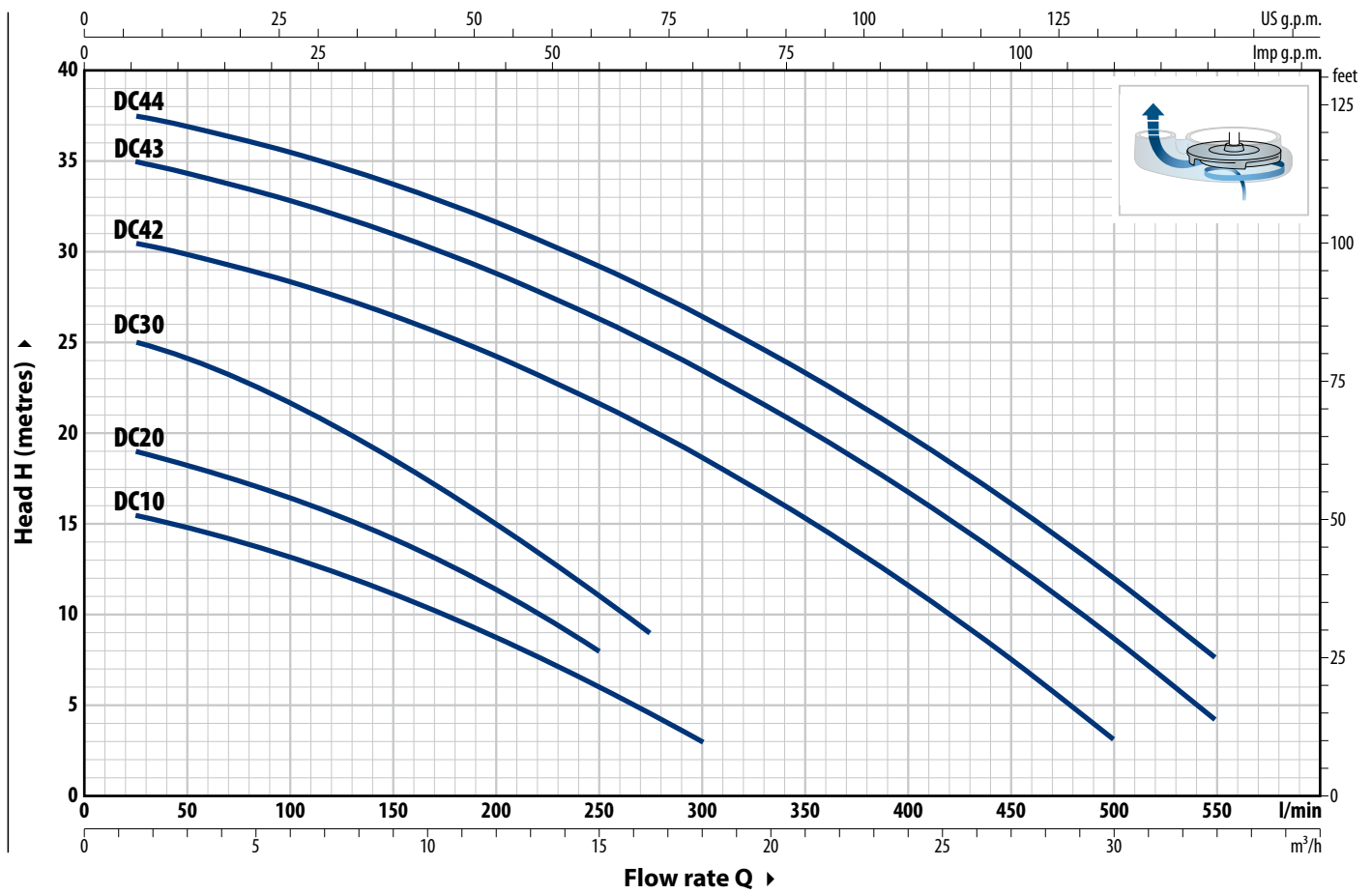
- ※ **The warranty for the Three-Phase DC 42-43-44 models remains valid only if the motor's built-in thermal protector is properly connected to the control panel. This connection is essential for the warranty's applicability**

#### PATENTS - TRADE MARKS - MODELS

- Patent No. IT0001428923
- Registered Community Model No. 002501486-0001

## CURVES AND PERFORMANCE DATA

50 Hz



TYPE		POWER (P <sub>2</sub> )		Q	Flow rate																
Single-ph.	Three-ph.	kW	HP		m <sup>3</sup> /h	0	1.5	3.0	6.0	9.0	12.0	15.0	16.5	18.0	21.0	24.0	27.0	30.0	33.0		
				l/min	0	25	50	100	150	200	250	275	300	350	400	450	500	550			
DCm 10	DC 10	0.75	1	H metres	16	15.5	14.8	13.2	11.2	8.8	6	4.5	3								
DCm 20	DC 20	0.75	1		20	19	18.5	16.5	14.3	11.5	8										
DCm 30	DC 30	1.1	1.5		26	25	24.4	21.8	18.7	15	11.1	9									
DCm 42	DC 42	1.5	2		31	30.5	30	28.4	26.5	24.3	21.6	20.2	18.6	15.3	11.6	7.5	3				
DCm 43	DC 43	2.2	3		35.5	35	34.4	33	31	28.8	26.3	25	23.5	20.3	16.7	12.8	8.5	4			
-	DC 44	3	4		38	37.5	37	35.5	33.7	31.6	29.2	27.8	26.4	23.3	20	16	12	7.5			

Q = Flow rate H = Total manometric head

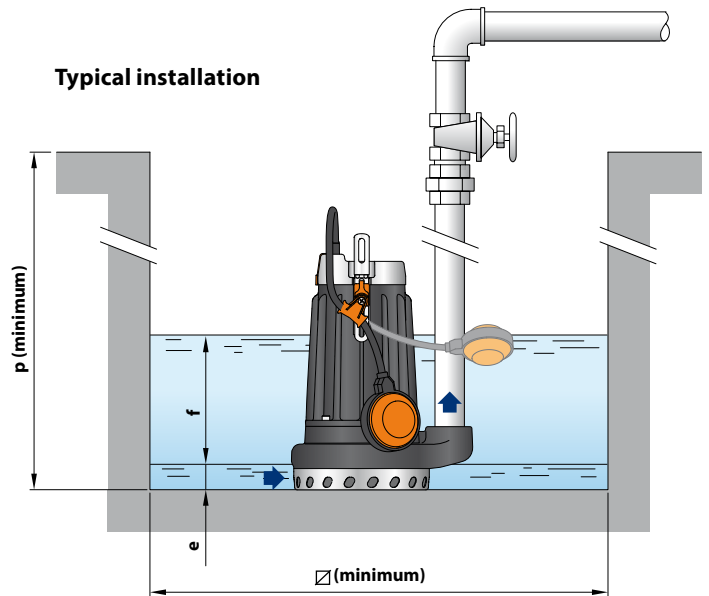
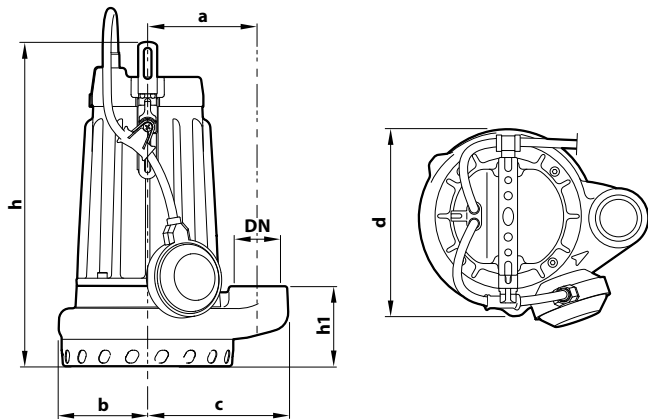
Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

## ABSORPTION

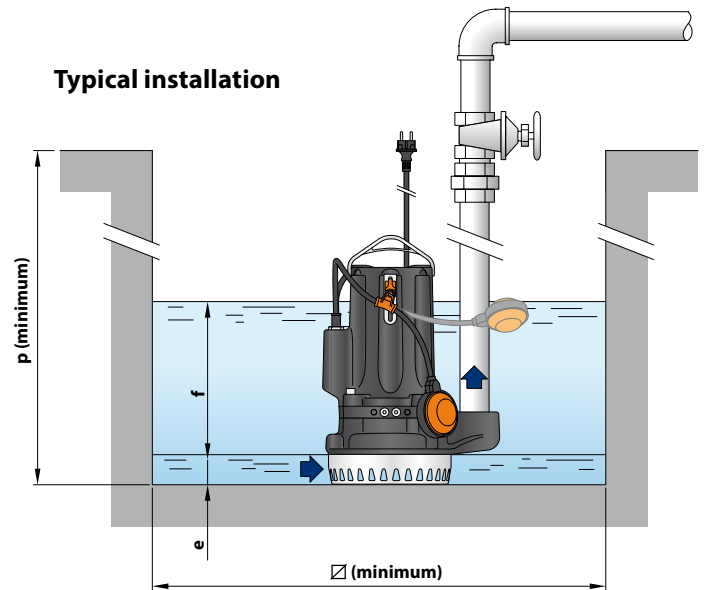
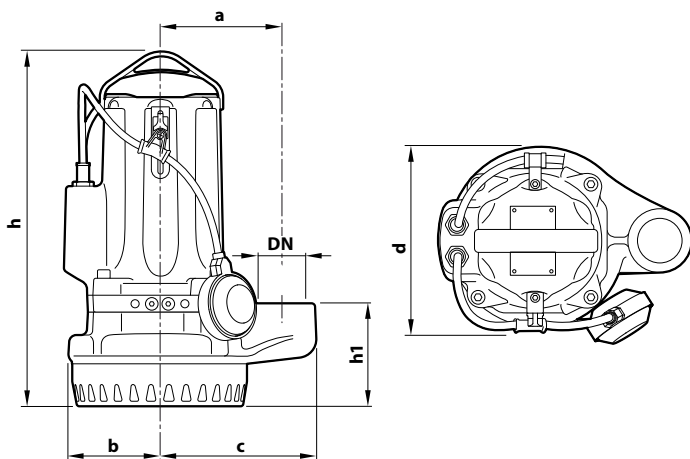
TYPE	VOLTAGE
<b>Single-phase</b>	<b>230 V</b>
DCm 10	5.0 A
DCm 20	5.7 A
DCm 30	7.2 A
DCm 42	13.0 A
DCm 43	16.0 A

TYPE	VOLTAGE
<b>Three-phase</b>	<b>400 V</b>
DC 10	2.0 A
DC 20	2.4 A
DC 30	3.0 A
DC 42	5.2 A
DC 43	6.2 A
DC 44	6.8 A

## DIMENSIONS AND WEIGHT



TYPE		PORT DN	DIMENSIONS mm										kg	
Single-ph.	Three-ph.		a	b	c	d	h	h1	e	f	p	Ø	1~	3~
DCm 10	DC 10	1½"	115	85	147	177	336	73	17	adjustable	500	500	16.9	15.8
DCm 20	DC 20			93									16.9	15.9
DCm 30	DC 30			19.0	17.7									



TYPE		PORT DN	DIMENSIONS mm										kg	
Single-ph.	Three-ph.		a	b	c	d	h	h1	e	f	p	Ø	1~	3~
DCm 42	DC 42	2"	150	112	190	230	434	125	25	adjustable	800	800	42.0	41.0
DCm 43	DC 43						460   434						47.0	42.0
-	DC 44						460						-	47.0

## PALLET CAPACITY

TYPE		NO. OF PUMPS
Single-ph.	Three-ph.	
DCm 10	DC 10	60
DCm 20	DC 20	60
DCm 30	DC 30	60

TYPE		NO. OF PUMPS
Single-ph.	Three-ph.	
DCm 42	DC 42	16
DCm 43	DC 43	16
-	DC 44	16

## MATERIALS AND COMPONENTS

### DC 10-20-30

<b>1 Pump body</b>	Cast iron with cataphoresis		
<b>2 Grid</b>	Stainless steel <b>AISI 304</b>		
<b>3 Cover</b>	Stainless steel <b>AISI 304</b>		
<b>4 Impeller</b>	Open type in technopolymer		
<b>5 Motor holder</b>	Cast iron with cataphoresis		
<b>6 Motor cover</b>	Stainless steel <b>AISI 304</b>		
<b>7 Motor shaft</b>	Stainless steel <b>AISI 431</b>		
<b>8 Double mechanical seal in oil chamber</b>	Pump	Seal	Shaft
	DC10	<b>MG1-14D SIC</b>	Ø 14 mm
	DC20		
	Double shaft seal with sealing ring Ø 16 x Ø 24 x H 5 mm		
	DC30	<b>ST1-14 SIC</b>	Ø 14 mm
			Ceramic / C. silicon / NBR

### 9 Electric Motor

**DCm** :single-phase 230 V - 50 Hz  
with thermal motor protection

**DC**: three-phase 400 V - 50Hz  
– Insulation: class F – Protection rating: IP X8

### 10 Power cord

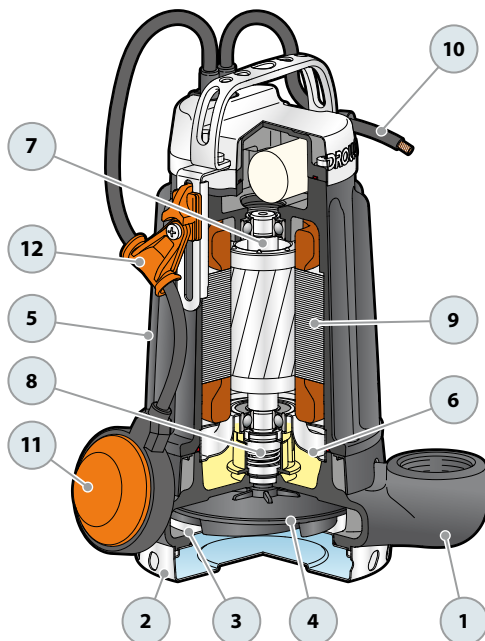
(Schuko plug exclusive to single-phase models)

※ 10 metres 'H07 RN-F' type

### 11 Float switch

### 12 Tilting device for the float cable

(exclusive to single-ph. models) Patent No. IT0001428923



### DC 42-43-44

<b>1 Pump body</b>	Cast iron with cataphoresis		
<b>2 Grid</b>	Stainless steel <b>AISI 304</b>		
<b>3 Cover</b>	Cast iron with cataphoresis		
<b>4 Impeller</b>	Stainless steel <b>AISI 304</b> micro-cast		
<b>5 Motor holder</b>	Cast iron with cataphoresis		
<b>6 Motor cover</b>	Cast iron with cataphoresis		
<b>7 Motor shaft</b>	Stainless steel <b>AISI 431</b>		
<b>8 Double mechanical seal with interposed oil chamber</b>	Seal	Shaft	Location
	<b>STA-24</b>	Ø 24 mm	Motor side
	<b>STA-22 SIC</b>	Ø 22 mm	Motor side
			Materials
			Ceramic / Graphite / NBR
			SIC / SIC / NBR

### 9 Electric Motor

**DCm** :single-phase 230 V - 50 Hz  
with thermal motor protection

**DC**: three-phase 400 V - 50 Hz  
with winding integrated thermal motor protection  
to be connected to the control panel

– Insulation: class F – Protection rating: IP X8

### 10 Power cord

※ 10 metres 'H07 RN-F' type

### 11 Float switch

**12 Switch cabinet** for DCM 42, DCM 43  
(exclusive to single-phase models)

### 13 Tilting device for the float cable

(exclusive to single-ph. models) Patent No. IT0001428923

