

SUMMARY

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SAFETY SYMBOLS

Notice for safety.
Please give particular care to following signs.



DANGER - ELECTRIC SHOCK RISK

Improper use may lead into electric shock.



DANGER

Improper use may lead into heavy risk for persons and things.



WARNING

Improper use may cause damage to pump or installation.

ATTENTION

Before installing the pump please carefully read this manual. Guarantee will not be activated in case of improper use.

CHAPTER 1

FEATURES

DRENOX range pumps are particularly suitable to pump rain water, drain water; they are used to de-water flooded rooms, to irrigate gardens and back yards, to transfer clear or muddy water, with pumps operating totally or partially immersed.
Each pump is tested and packed very attentively. Please ensure pump has not been damaged during transport; if this occurs please phone the dealer, within 8 days from purchasing day.



CHAPTER 2 USE AND HIS LIMITATIONS



WARNING

Pump cannot be used to move inflammable or dangerous liquids.



WARNING

Ensure pump never runs dry.

- Max. Temp. Of liquid: 50 °C continuous duty
- Max. Immersion height:
- MAX TOTAL HEAD DRENOX 80/7: 7 m
- 7 m with 10 mt. of power cord
- Max. Free passage - 80/70: 3 mm
- MAX TOTAL HEAD DRENOX 250/10: 10 m
- Max. Free passage - 160/8, 250/10, 350/12: 6 mm
- Max.ON/OFF CYCLES/HOUR: 30 equally spaced
- MAX TOTAL HEAD DRENOX 350/12: 13 m

TYPE	MIN. PRIMING LEVEL	MIN. DRAINAGE LEVEL	START LEVEL	STOP LEVEL	WEIGHT Kg.
PICTURE	A	B	C	D	-
DRENOX 80/7	80 mm	3 mm	250 mm	100 mm	5,7
DRENOX 160/8	96 mm	35 mm	320 mm	107 mm	6,5
DRENOX 250/10	96 mm	35 mm	351 mm	111 mm	7
DRENOX 350/12	96 mm	35 mm	351 mm	111 mm	8,5

Pump with less than 10 mt. supply cord cannot be used in open spaces.
The min. priming level refers to completely submerged outlet (See Pict. 1A-1B ref.A).
DRENOX 80/7 can drain water up to 3 mm from ground, once pump is priming (See Pict. 1A ref.B).

CHAPTER 3 INSTALLATION



DANGER - ELECTRIC SHOCK RISK

When installing, please ensure pump is disconnected from electric current network.

- Please use handlebar to remove or lift pump up
- Please use a non-return valve in case pump is connected to fixed installation with rigid piping; this will avoid liquid circulating when pump has been turned off; use of a pipe fitting will allow easy disconnection of pump for maintenance
- Dimensions of drain well must allow max. 30 on/off cycles/hour(See USE AND HIS LIMITATIONS)
- Please use flexible pipe connected to pump by means of plastic fitting in case of temporary use of pump
- Use a rope to immerse pump and fasten it to pump's handlebar
- DRENOX is equipped with a pre-rated float switch (See Pict. 1/A and 1/B); please increase or decrease the free piece of float switch cable by making it sliding through the proper seat on the handlebar, when modifying the rating of float switch
- Pumps used besides or inside swimming pools, garden ponds or similar places may have special requirements



WARNING

Make sure that float switch turns off pump, when at min. level of liquid.



WARNING

Make sure no obstacles stand in the way of float switch, during up/down swinging.



DANGER

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.



DANGER

Pollution of the liquid could occur due to the leakage of lubricants

**CHAPTER 4
ELECTRIC CONNECTION**



WARNING

Ensure tension and frequency of pump (read motor plate) and supply network are same.



DANGER - ELECTRIC SHOCK RISK

Installer must make sure that electric current network has ground wire conforming to current laws.



DANGER - ELECTRIC SHOCK RISK

Make sure that electric current network is provided with a high-sensitivity circuit-breaker $\Delta=30$ mA (DIN VDE 0100T739).

SINGLE PHASE VERSION

Single phase pumps are equipped with double ground contact plug at top end of supply cord ; in this case grounding is done when plugging in.

THREE PHASE VERSION

In this case the ground wire (yellow-green cable) of supply cord must be connected to ground wire of electric current network. Ensure connection to electric current network by using an omnipolar-sectionned magneto thermic circuit-breaker. This will ensure effective disconnection from electric current network.

OVERLOAD PROTECTION

DRENOX range pumps have a built-in thermal overload with automatic reset. Further protections are not required.

DRENOX range three phase pumps can be protected by using a magneto-thermic motor protector or a contactor with thermal relay; in both cases they have to be rated conforming to nominal power showed on motor plate.

Eventual electric float switch must be connected to auxiliary connector buckles.

ROTATION DIRECTION TESTING THREE PHASE PUMPS

Water head and delivery are terribly effected by wrong rotation of shaft of pump motor. Clock wise rotation is correct (upside view of pump). When starting the pump, motor will ungergo an anti-clock wise back-kick.

In this case test is positive; on contrary case, please disconnect pump from network and inverse two phases.

CONNECTIONS DIAGRAM (SEE DIAGRAMS PICT.2) :

A. Single phase manual pump	B. Single phase automatic pump	C. Three phase pump
1. START (green)	5. SUPPLY CORD	9. WHITE
2. RUN (red)	6. GROMMET	10. LIGHT BLUE <LINE>
3. COMMON (black)	7. PLUG	11. BROWN <LINE>
4. CAPACITOR	8. YELLOW-GREEN	12. FLOAT SWITCH

CHAPTER 5
MAINTENANCE AND TROUBLESHOOTING



DANGER - ELECTRIC SHOCK RISK

Before doing any operation, make sure pump is disconnected from electric current network.



DANGER - ELECTRIC SHOCK RISK

Power cord must be replaced by manufacturer or by Customer service, using special tools.

No maintenance is required when DRENOX range pumps operate in normal conditions. Occasionally maintenance of liquid ends and replacement of impeller may be required.

FAULT	POSSIBLE CAUSE	REMEDY
PUMP DOES NOT DELIVER, MOTOR DOES NOT RUN	1) No electric current supplying.	-
	2) Incorrect plugging in .	Verify presence of electric current supply and plug in.
	3) Circuit-breaker come into operation.	Reinforce circuit-breaker. Please call electrician in case circuit-breaker comes again into operation.
	4) Impeller blocked.	Remove obstacle.
	5) Motor or capacitor damaged.	Call dealer.
PUMP DOES NOT DELIVER, MO- TOR RUNS	1) Filter obstructed.	Clean filter.
	2) Non return valve blocked.	Clean or replace valve.
PUMP DELIVERS REDUCED WATER	1) Filter partially obstructed .	Clean filter.
	2) Delivery pipe partially obstructed.	Remove obstacles.
	3) Impeller worn off.	Replace impeller.
	4) Anticlockwise rotation (three phase version).	Inverse two phases.
INTERMITTENT WORKING	1) Solids obstruct impeller.	Remove obstacles.
	2) Too warm liquid.	-
	3) Motor broken.	Call dealer.

① GB

FIGURE / PICTURES

FIGURA / PICTURE 1 A

DRENOX 80/70

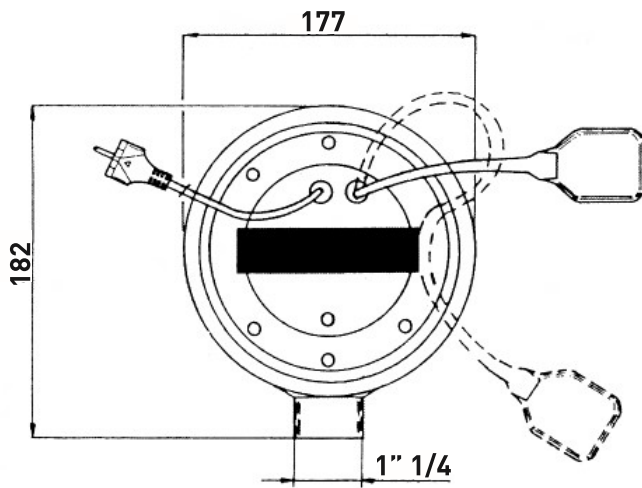
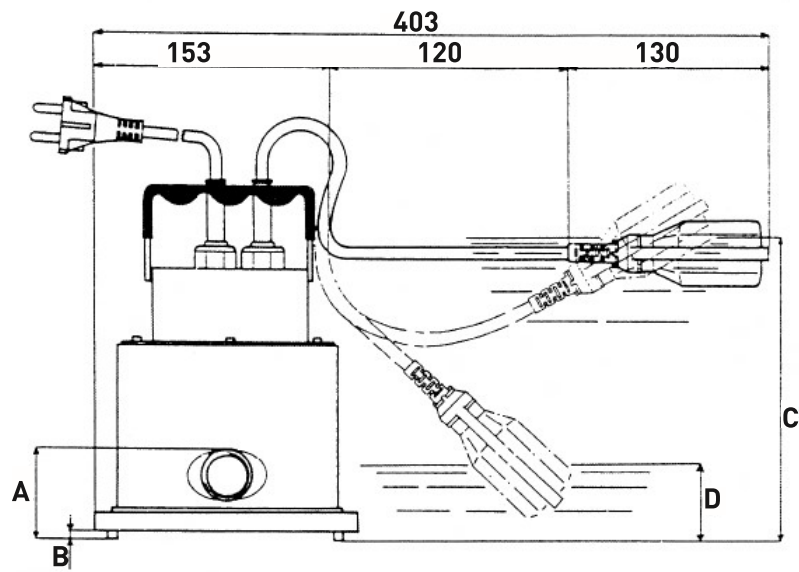
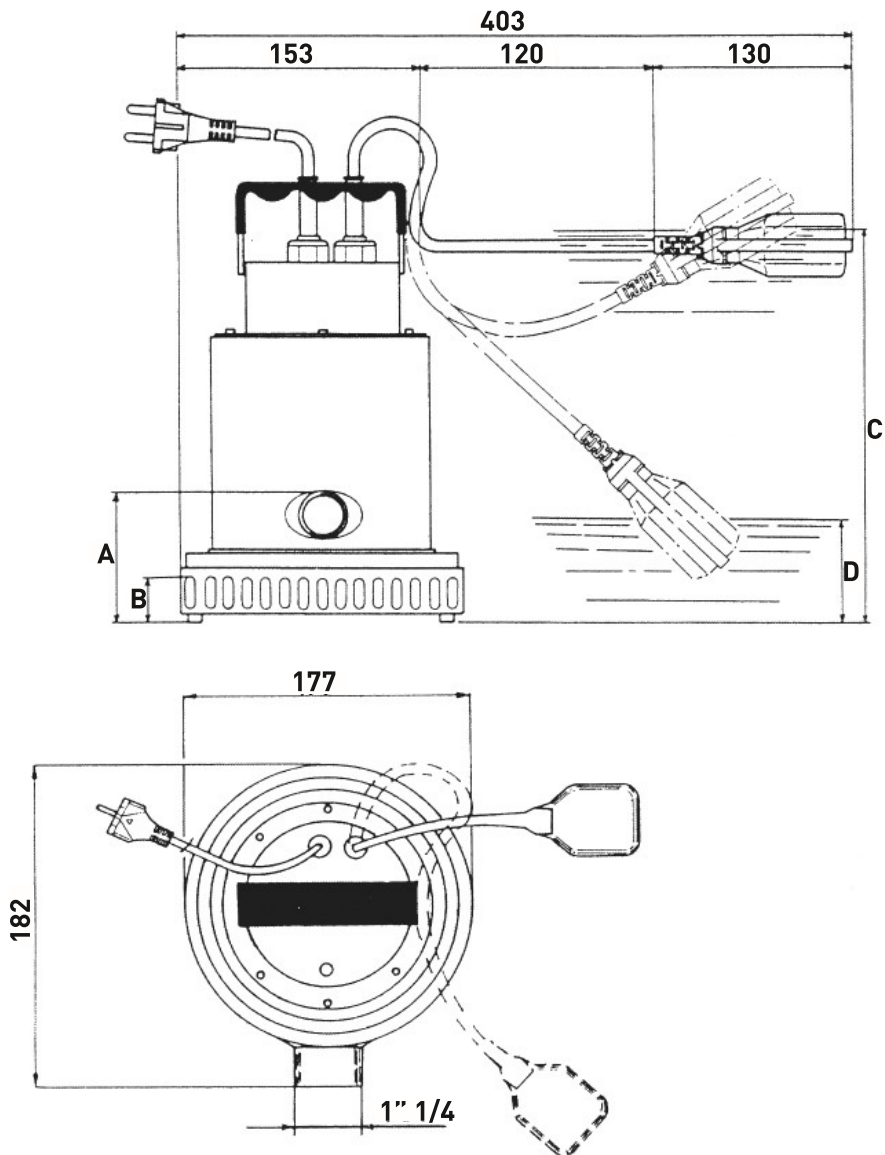


FIGURE / PICTURES

FIGURA / PICTURE 1 B

1 B DRENOX 160/8 - 250/10 - 350/12

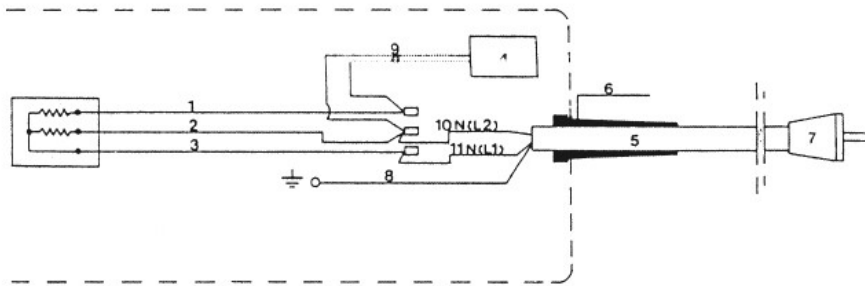


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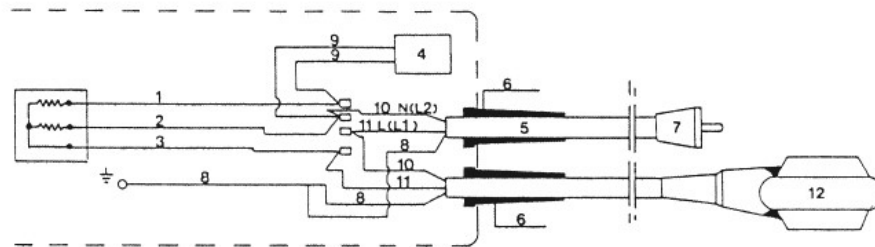
FIGURE / PICTURES

FIGURA / PICTURE 1 B

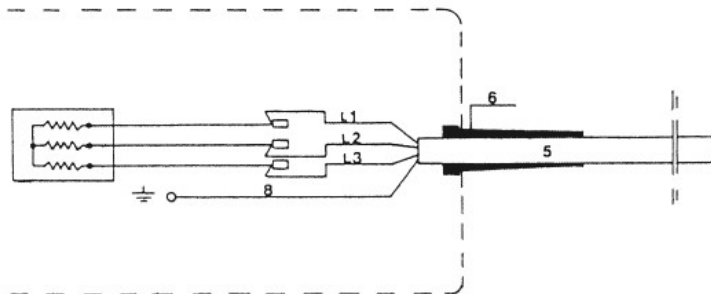
A



B



C





GARANZIA

Questo apparecchio è coperto da garanzia legale in base alle leggi e norme in vigore alla data e nel paese di acquisto, relativamente ai vizi e difetti di fabbricazione e/o del materiale impiegato. La garanzia si limita alla riparazione o alla sostituzione, presso i Centri Assistenza autorizzati da PENTAIR INTERNATIONAL S.a.r.l., della pompa o delle parti riconosciute mal funzionanti o difettose.

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La garanzia decade: se il guasto è provocato da trattamenti o operazioni improprie e messa in opera o magazzinaggio errati, errori di collegamento elettrico o idraulico, mancata o inadeguata protezione. Se l'impianto o l'installazione dell'apparecchio non sono stati eseguiti correttamente. Se il guasto è dovuto a cause di forza maggiore o altri fattori esterni ed incontrollabili. Se il prodotto è utilizzato con liquidi abrasivi o corrosivi o diversi da quelli consentiti e comunque non compatibili con i materiali impiegati nella costruzione delle pompe. Nel caso di utilizzo del prodotto oltre i limiti dichiarati in targa o in condizioni non consentite e di interventi da parte dell'acquirente o di personale non autorizzato per smontaggio anche parziale del prodotto, modifiche o manomissioni.

Se i materiali sono avariati a seguito del naturale logoramento. Ogni uso diverso da quello indicato sul manuale d'uso e manutenzione non è garantito se non espressamente indicato per iscritto dal produttore. Si raccomanda sempre di leggere attentamente e preventivamente il libretto di istruzioni.

Avvertenze:

Qualora il Vostro apparecchio non funzionasse, controllate che il mancato funzionamento non sia provocato da altri motivi, ad esempio interruzione dell'alimentazione di corrente apparecchi di controllo o di comando oppure manipolazione non appropriata. Ricordarsi di allegare all'apparecchio difettoso la seguente documentazione: Ricevuta di acquisto (fattura, scontrino fiscale) descrizione dettagliata del difetto riscontrato.



WARRANTY

This device is covered by legal warranty, based on the regulations and standards in force to date and in the country of purchase, as regards manufacturing and/or material defects. The warranty only covers fixing or replacement of the pump or defective parts, at the PENTAIR INTERNATIONAL S.a.r.l. authorized service centers. Components subject to wear, such as mechanical seal and counter face, sealing rings and gaskets, impeller and hydraulic part, membranes and electric cables are guaranteed for a period not exceeding their useful life. For a proper use and life of the product, and to make use of the warranty rights, have these parts inspected and optionally replaced at the authorized service centers, based on their use. To exercise warranty rights, in the event of fault please contact your retailer and/or the authorized service center. Any defects of the product should be reported as soon as the fault is discovered and in any event, within the terms set forth by law. The warranty is valid as of the date of purchase, as proved by the user submitting a purchase receipt, invoice or delivery note. The warranty becomes void: if the failure is caused by improper treatments or operations, incorrect startup or storage, wrong electric or hydraulic connections, failed or inappropriate protection; if the equipment installation or system were not performed correctly; if the failure is due to force majeure or external non-controllable factors; if the product is used with abrasive or corrosive liquids or other than those allowed, or in any event not compatible with the materials used in the pump construction; if the product is used besides the limits reported on the plate or in conditions not allowed and in the event of unauthorized interventions by the user or other personnel for even partial disassembly of the product, changes or tampering; if the materials are naturally worn. Any use differing from that indicated on the use and maintenance manual is not guaranteed, unless otherwise indicated in writing by the manufacturer. Please read the instruction manual carefully before using the product.

Warnings:

If the unit does not work, check whether the failure is due to other reasons, such as power supply failure, control or command equipment or wrong handling. Please enclose the following documents with the faulty equipment: Purchase receipt (invoice slip) Detailed description of the fault found