

TOP

submersible **DRAINAGE pumps**
(for clear water)

PERFORMANCE RANGE

Flow rate up to 200 l/min (12 m³/h)

Dynamic head up to 10.5 m

OPERATING LIMITS

Maximum operating depth 3 m below water level

Maximum fluid temperature + 40°C

Maximum passage for suspended solids Ø 10 mm

Maximum emptying level 14 mm from the bottom

Innovative design and advanced technology are the main features behind these new pumps, designed to be easy to use and extremely reliable.



TOP

WORKING PRINCIPLE

TOP pumps are open impeller centrifugal SUBMERSIBLE DRAINAGE PUMPS, designed for automatic use. The impeller, mounted on the end of the drive shaft, consists of a back disk and blades. The fluid enters the rotating blade channel via the suction strainer, where it moves radially from the centre outwards, acquiring energy both in the form of pressure and increased speed. When it leaves the impeller the fluid is conveyed into the volute. Here part of the kinetic energy is transformed into pressure energy, and the fluid leaves the pump via the vertical delivery opening in the pump body. Correct motor cooling is ensured by the fluid being pumped.

PUMP INSTALLATION AND APPLICATIONS

TOP pumps are suitable for lifting clear water not containing abrasive substances. These pumps have been designed for easy use and are extremely reliable even when subjected to continuous use (e.g. in fountains), since the motor is fully cooled and has an ample reserve of power plus a double mechanical seal. The motor and the pump are easily removed, making maintenance and repair more simple.

THESE PUMPS ARE PARTICULARLY SUITABLE FOR DRAINING FLOODING IN CONFINED AREAS (BASEMENTS, GARAGES, ETC.), EMPTYING SWIMMING POOLS, TANKS AND AQUARIUMS, WASTE HOUSEHOLD WATER DISPOSAL (DISHWASHERS, WASHING MACHINES), SUPPLYING GARDEN FOUNTAINS, SMALL-SCALE IRRIGATION FOR GARDENS IN GENERAL FROM COLLECTION TANKS AND EMPTYING SUMP PITS.

PERFORMANCE

When designing performance levels for **TOP** pumps, special attention was given to typical requirements for domestic usage.

- Performance curves specially designed for high delivery rates at the low installed power rating.

Curve tolerance according to ISO 2548.

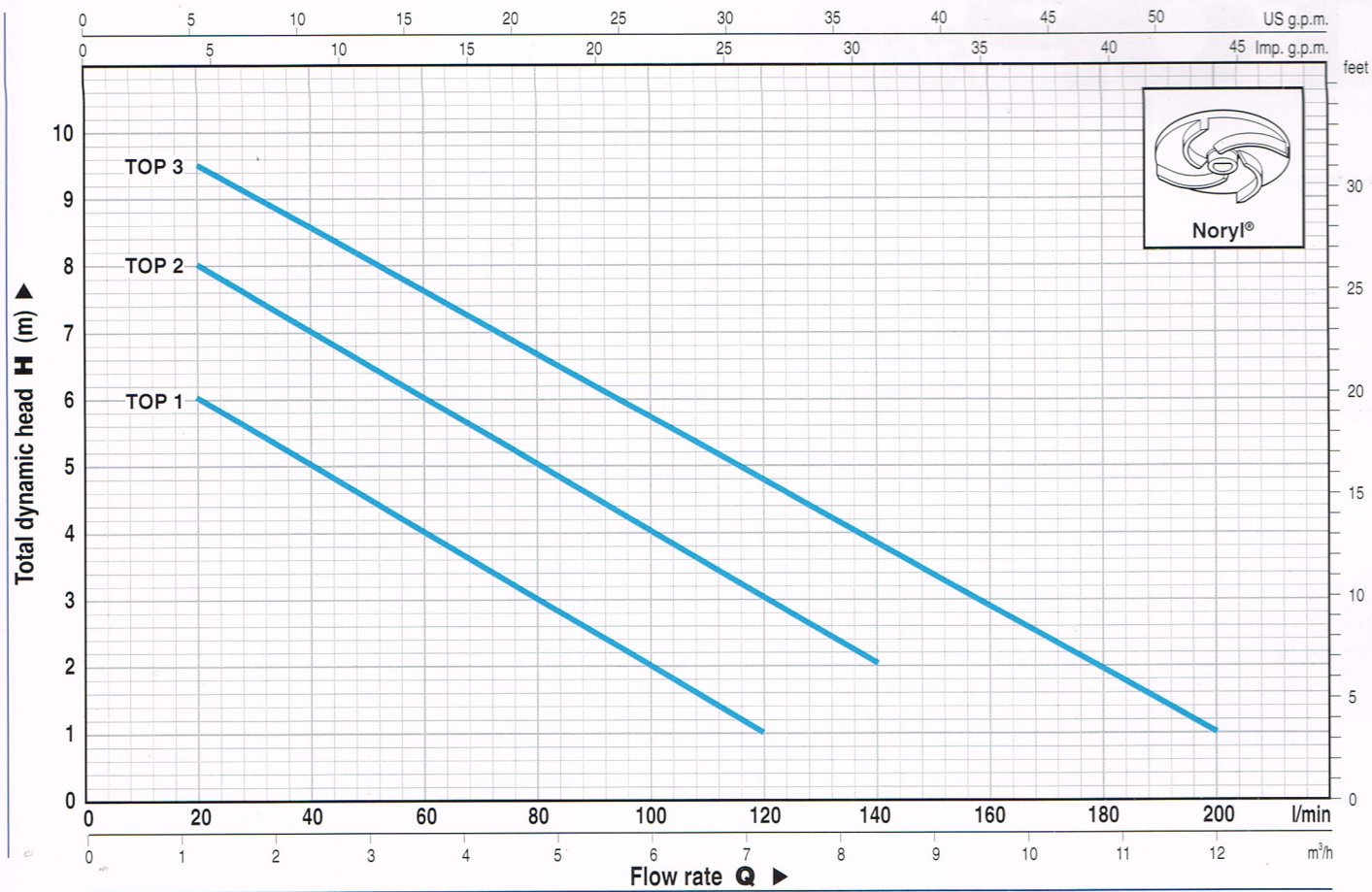
STRUCTURAL CHARACTERISTICS

- DELIVERY BODY** made from fiberglass reinforced technopolymer, particularly resistant to mechanical stress, knocks and corrosion, fitted with UNI ISO 228/1 1" or 1 1/4" gas threaded vertical delivery opening.
- SUCTION STRAINER** made from fiberglass reinforced technopolymer, providing the support base for the pump.
- Technopolymer **HOSE JOINT** with screw fitting.
- General Electric® Noryl® GFN2V** technopolymer open **IMPELLER**.
- EXTERNAL FLOAT SWITCH** for automatic pump operation.
- AISI 416 stainless steel MOTOR SHAFT**.
- DOUBLE MECHANICAL SEAL** carbon/alumina on the pump side and sealing ring on the motor side (with barrier oil chamber to lubricate and cool the sealing surfaces in the absence of water).
- Sealed induction **MOTOR**, suitable for continuous duty with built-in thermal cutout relay (motor protector). **INSULATION Class F** (provides the motor with a considerable overload tolerance and substantially increases the service life of the motor itself). Cooling of motor assured by the liquid in which the pump is immersed.
- PROTECTION IP 68**.
- "H05 RN-F" Neoprene submersible **SUPPLY CABLE**. Supplied standard with 5 meters of cable and SCHUKO plug (10 meters on request).
- CONSTRUCTION AND SAFETY STANDARDS** in compliance with the EN 60 335-1 (IEC 335-1, CEI 61-150) EN 60034-1 (IEC 34-1, CEI 2-3).
- REGISTERED MODEL**.

WARRANTY: 1 YEAR (according to our general sales conditions).

 **PEDROLLO®**

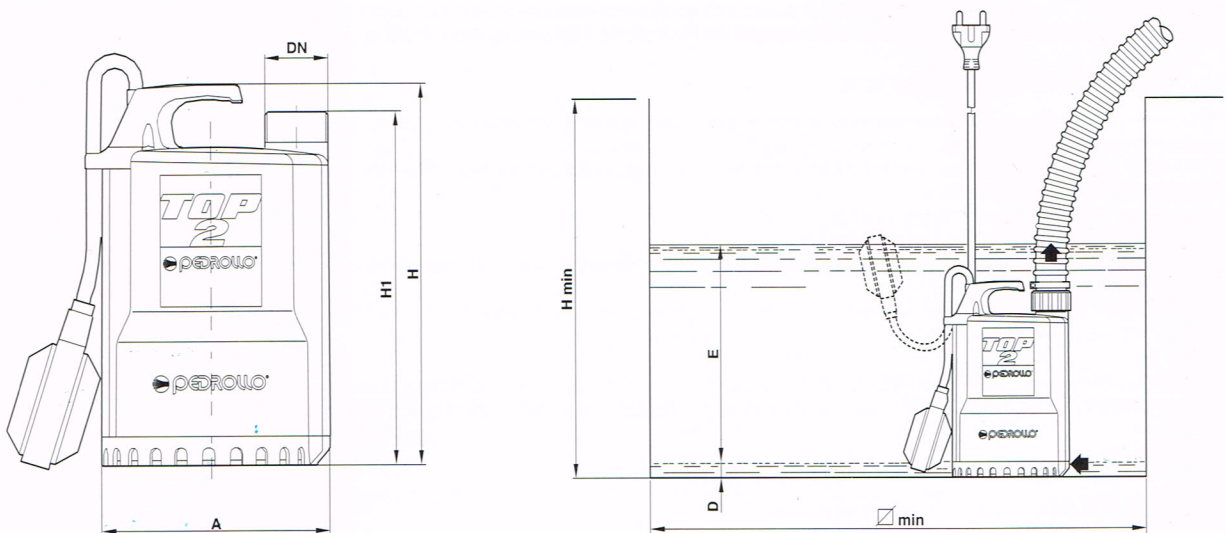
PERFORMANCE CHART AT n= 2900 1/min



PERFORMANCE DATA AT n= 2900 1/min

PUMP MODEL	POWER		Flow rate Q																						
	kW	HP	0	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8	12	0	20	40	60	80	100	120	140	160	180	200	
Single phase																									
TOP 1	0.25	0.33	7	6	5	4	3	2	1																
TOP 2	0.37	0.50	9	8	7	6	5	4	3	2															
TOP 3	0.50	0.70	10.5	9.5	8.5	7.6	6.6	5.7	4.8	3.8	2.8	2	1												

H = TOTAL DYNAMIC HEAD IN METERS
Q = FLOW RATE



PUMP MODEL	DN	DIMENSIONS mm						
		A	H	H1	D min	E	H min	∅ min
Single phase								
TOP 1	1"	152	234	217	14	Adjustable	350	350
TOP 2	1 1/4"	152	254	237	14	Adjustable	350	350
TOP 3	1 1/4"	152	284	267	14	Adjustable	350	350