



NAUTILUS

Rosenbauer Technical Equipment

**Small pump. Powerful performance.
Certified according to DIN 14425,
submersible pumps for fire departments**

The first choice for high water and flooding.

 **rosenbauer**

NAUTILUS. Small pump. Powerful performance.

Small assistant with a big impact.

Every second counts when high water or flooding occurs. Reacting quickly and pumping the water out of spaces and trenches prevents consequential damage as well as consequential costs. The NAUTILUS submersible pump from Rosenbauer gets into every nook and cranny and even pumps waste water away with virtually no residue. Developed for use under the most difficult conditions, the NAUTILUS even works well in small, cramped spaces, low-lying cellars, underpasses, parking garages, or tight shafts.

Sleek in its design and equipped with a reliable electric motor, the NAUTILUS is easy to carry and can be deployed wherever large pumps or portable fire pumps cannot go. It can even be quickly and easily transported and operated by just one person.



Rapid help for high water and floods.

The NAUTILUS submersible pump from Rosenbauer is certified according to DIN 14425.

The benefits of the NAUTILUS in operation:

Ease of use

- Easy to transport by one or two people
- Standing, lying, or submerged operation
- Broad range of applications thanks to compact design

Rapid intervention

- Immediate startup in just a few simple steps
- High output and low weight
- Rapid elimination of water, sludge, and sand

Residue-free pumping

- Maximum suction performance down to 4 mm (5/32") water level with the NAUTILUS 4/1 and 4/1 ECO, 8 mm (5/16") water level with the NAUTILUS 8/1
- Making clean-up work easier
- Saving time and effort



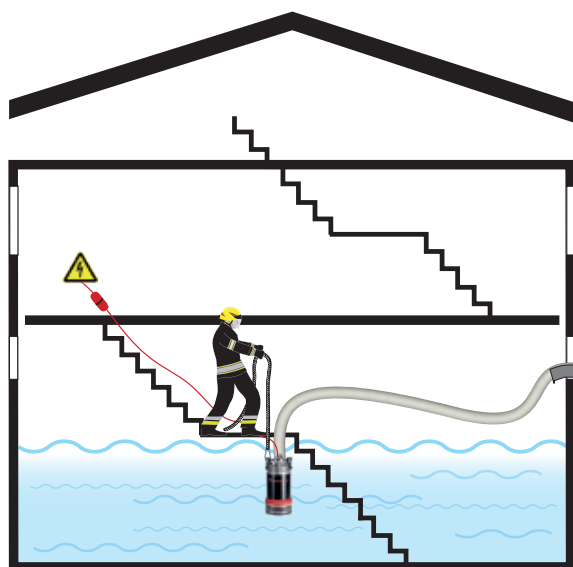
Small, light, and powerful.

The NAUTILUS submersible pump from Rosenbauer has been successfully used in disasters for many years. It contains all of Rosenbauer's know-how from over 100 years of experience in pump technology. With its many benefits in operation, the high carrying comfort, and the excellent pump performance even in difficult terrain, it is the pump of choice for fire departments in cases of high water and flooding. Rapidly on-site, it is immediately ready to use and pumps the water away quickly and effectively.

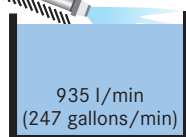
Minimum weight. Maximum performance.

The submersible pump for quick results.

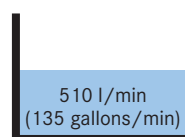
The NAUTILUS from Rosenbauer is one of the most powerful electrical submersible motor pumps of its class. The extra power and performance is crucial in operation. Because the faster the water is pumped out, the lower the consequential damage. To meet the different operational requirements, the NAUTILUS submersible pump is available in three different models. They are distinguished by their flow rate and the electric power supply required.



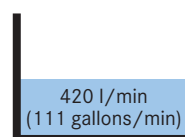
**Pump flow rate at 10 m (33 feet)
discharge height:**
Corresponds to 1 bar (14.5 psi)



NAUTILUS 8/1



NAUTILUS 4/1



NAUTILUS 4/1 ECO

Integrated flat suction without retrofitting

The integrated flat suction device enables water to be pumped out down to a few millimeters. The NAUTILUS 4/1 and 4/1 ECO pumps suck out down to 4 mm (5/32") residual water and the NAUTILUS 8/1 down to 8 mm (5/16") residual water.

The big advantage: In contrast to many submersible pumps on the market, no additional components have to be added to or taken off the NAUTILUS.





Powerful and flexible: even dirty water is pumped out virtually without residue.

Powerful at startup

Thanks to its starting capacitor, the pump is powerful at startup even with little nominal current. There are suitable NAUTILUS submersible pumps for generators from only 3 kVA .

Wastewater-capable pump performance

A powerful submersible pump must also be able to pump contaminated water with sand, mud or grit. The NAUTILUS 4/1 and 4/1 ECO convey dirty water up to a grain size of 8 mm (5/16"), and for the NAUTILUS 8/1 up to 10 mm (25/64").



Small Pump – Great Job.

Easy to transport. Even easier to use.

The NAUTILUS submersible pumps are THE pumps for flood operations. Small and cramped spaces, flooding in low-lying cellars or narrow shafts, these are precisely the operational scenarios for the NAUTILUS submersible pumps. Where larger pumps or portable fire pumps are difficult to transport, the NAUTILUS submersible pumps are perfect for use thanks to their small size and low weight.



Low weight

A real advantage of the NAUTILUS submersible pump is its low weight. The combination of light weight, compact design, and powerful flow rate make it unbeatable.

Easy to carry

Thanks to the ergonomically shaped carrying handle, the NAUTILUS submersible pump is easy and comfortable to carry by a single person or two crew members.

Service-friendly and low-maintenance

For maintenance work in the area of the impeller, the pump is simply placed on its head, without the help of a second person. As the suction strainer is only fixed with three screws, it can easily be removed to clean the impeller as quickly as possible of wedged or stuck foreign material. For a maximum service life, the pump is simply flushed with clear water after every operation.



Robust and durable

The robust NAUTILUS submersible pump is virtually indestructible and extremely durable. As the pump only has a few electronic components and these are doubly separated from the wet area, it is extremely reliable and fail-safe. If the impeller should block, the motor protection automatically turns the motor off and saves the pump from possible motor damage.

**Indestructible, durable,
and always reliable in
flooding operations.**

Slim design

A crucial benefit of the NAUTILUS submersible pump is its compact design. This predestines it for all operational purposes in tight spaces, narrow shafts, and low-lying wells. Its streamlined shape also ensures for easy and space-saving fastening in the fire fighting vehicles.



100% waterproof

To enable the NAUTILUS submersible pump to work under water, it must be completely sealed. Thanks to the two-part protection of the electronics area from the wet area of the pump, not a single drop of water gets into the motor housing or the electronics. An inspection opening in the area of the wet zone enables a regular check of the operational readiness.

Tried and tested technology – compact design.

High tech submersible pump with the simplest operation.

To make the NAUTILUS even more flexible, user-friendly, and faster, Rosenbauer has modified the design of the tried and tested submersible pump. What was kept is the Rosenbauer pump technology, which has been tested in practice. The ergonomics and safety are an added plus. In particular the cover of the submersible pump shows the benefits of the re-design.

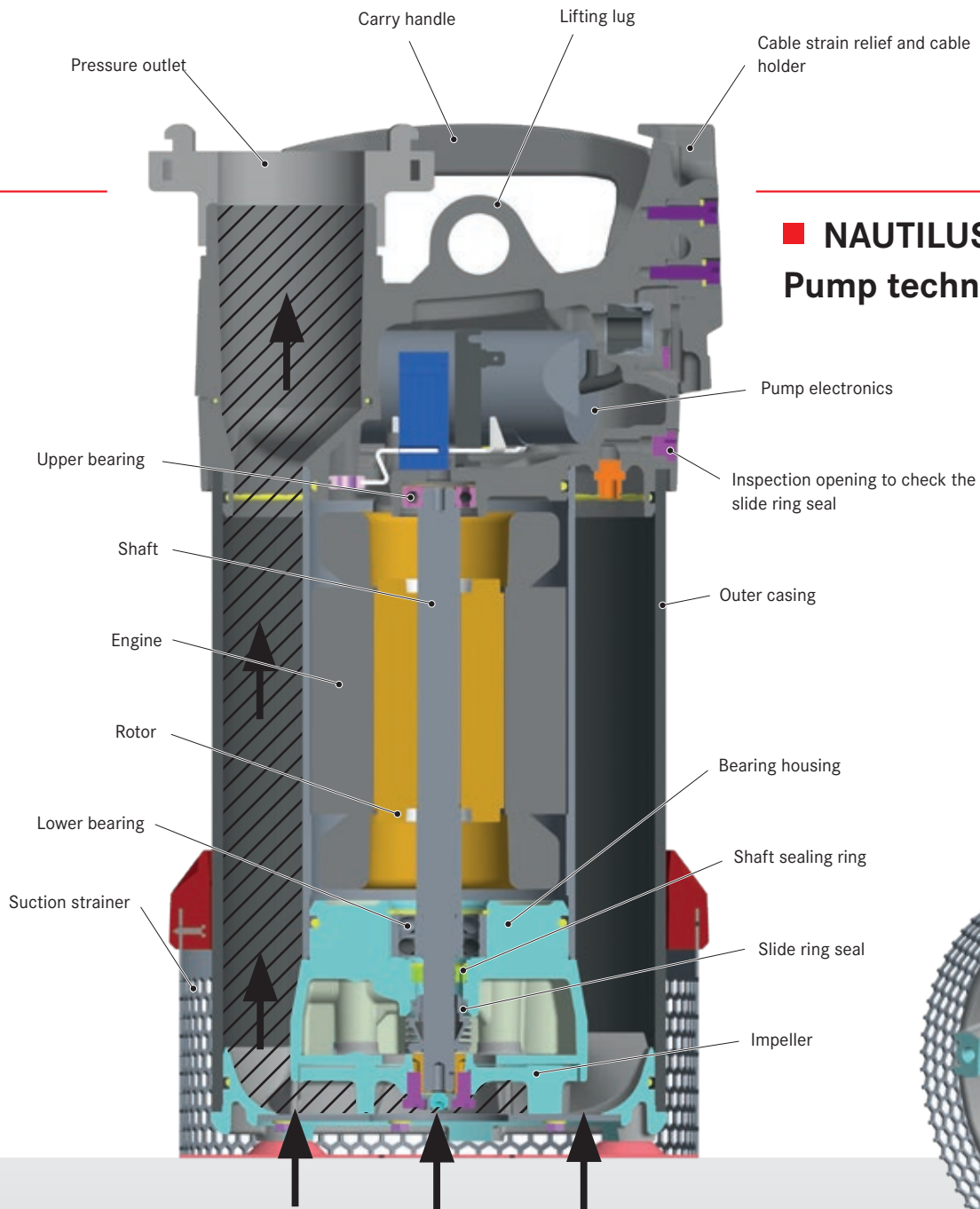


The ergonomics and safety are an added plus.

■ Pump cover with many extras

Ergonomic: Handling the cover of the NAUTILUS submersible pump is oriented to the ergonomic requirements of the user. A lot of space was created in the area of the coupling, to enable easy, quick, and user-friendly coupling and decoupling of the hoses. The NAUTILUS is compatible with all current coupling systems.

Compatible: If the access is barred or the manual placement of the NAUTILUS is not possible, the pump is brought to its usage location via a working rope. In addition, the rope serves to secure the submersible pump and prevents it from being swept away in water. In order to secure the working rope to the NAUTILUS quickly and reliably, the pump cover has its own lifting lug and a lot of space for attachment. That guarantees 100% compatibility with any carabiner.



NAUTILUS Pump technology

Safe: The NAUTILUS submersible pump is equipped with a 20 meter (65 feet) long type H07RN-F cable. The length of the cable ensures that no plug connectors are located in the wet area. To ensure that no damage occurs in the area of the cable routing, the pump cover with cable holder including integrated strain relief is an added benefit.

Comfortable: The large carrying handles on the right and left of the pump cover are equipped with cold protection. This prevents the handles from freezing in winter and ensures comfortable transport of the submersible pump. Due to its low weight and the ergonomically shaped carrying handles, the NAUTILUS can easily be carried by just one person.

One idea – three options.

Innovative submersible pumps for every requirement.

It is one of Rosenbauer's main missions to always offer emergency crews the maximum in performance and quality. The performance data of the NAUTILUS submersible pump models is well above the required values of DIN standard 14425 for portable submersible motor pumps with electric drive for fire departments.



NAUTILUS 4/1 ECO

- Specially developed for operation with generators from 3 kVA
- Electric motor with a power consumption of 1.84 kVA
- Lower startup current due to weight-optimized plastic impeller
- Supply voltage of 230 V and 1 phase
- Certified according to DIN 14425

NAUTILUS 4/1

- Operation with generators from 5 kVA
- 20 % higher performance than required by the DIN standard
- Supply voltage of 230 V and 1 phase
- Certified according to DIN 14425 Type 4/1
- Additionally tested according to EN 60335-2 for household use

NAUTILUS 8/1

- Submersible pump with maximum performance
- 17 % higher performance than required by the DIN standard
- Supply voltage of 400 V and 3 phases
- ON-OFF switch
- Certified according to DIN 14425 Type 8/1 and ÖBFV standards sheet
- Display for wrong direction of rotation and polarity reversing switch for change of rotation direction



Technical data

Type	NAUTILUS 4/1 ECO				NAUTILUS 4/1				NAUTILUS 8/1	
Supply voltage	230 V / 1 ~ / 50 Hz		115 V / 1 ~ / 50 Hz		230 V / 1 ~ / 50 Hz		230 V / 1 ~ / 60 Hz		400 V / 3~ / 50 Hz	
Power input	1.84 kVA cos ϕ 0.98		1.73 kVA cos ϕ 0.98		2.07 kVA cos ϕ 0.99				4.2 kVA cos ϕ 0.8	
Power output	1.2 kW		1.1 kW		1.49 kW		1.54 kW		2.8 kW	
Nominal current	8 A		15 A		9 A				6 A	
Connection cable	H07RN-F3G1.5		H07BQ-F 3G2.5		H07RN-F 3G1.5				H07RN-F 4G1.5	
Cable length	20 m (65')									
Discharge connection	G 2 ½ " ext. thread									
Particle screen (Ø)	8 mm (5/16")								10 mm (25/64")	
Flat suction down to	4 mm (5/32")								8 mm	
Weight with cable	22 kg (48.5 Lbs)				23 kg (50.7 Lbs)				30 kg (66 Lbs)	
Dimensions (Ø x H)	250 x 436 mm (9.8" x 17.2")				250 x 455 mm (9.8" x 17.9")				259 x 485 mm (10.2" x 19.1")	
Nominal delivery rate	400 l/min at 1 bar = 10 m discharge height (106 gpm at 14.5 psi = 32.8' discharge height)		—		400 l/min at 1 bar = 10 m discharge height (106 gpm at 14.5 psi = 32.8' discharge height)				800 l/min at 1 bar = 10 m discharge height (211 gpm at 14.5 psi = 32.8' discharge height)	
Performance data*	Flow l/min (GMP)	Pres-sure bar (PSI)	Flow l/min (GMP)	Pres-sure bar (PSI)	Flow l/min (GMP)	Pres-sure bar (PSI)	Flow l/min (GMP)	Pres-sure bar (PSI)	Flow l/min (GMP)	Pres-sure bar (PSI)
	670 (177)	0	700 (184.9)	0	710 (187.6)	0	740 (195.5)	0	1,210 (319.6)	0
	600 (158.5)	0.5 (7.3)	580 (153.2)	0.5 (7.3)	640 (169.1)	0.5 (7.3)	620 (163.8)	0.6 (8.7)	1,090 (287.9)	0.5 (7.3)
	420 (111)	1 (14.5)	360 (95.1)	1 (14.5)	510 (134.7)	1 (14.5)	480 (126.8)	1 (14.5)	935 (247)	1 (14.5)
	150 (39.6)	1.5 (21.8)	250 (66)	1.25 (18.1)	260 (68.7)	1.5 (21.8)	250 (66)	1.5 (21.8)	600 (158.5)	1.5 (21.8)
	0	1.7 (24.7)	0	1.6 (23.2)	0	1.6 (23.2)	0	1.75 (25.4)	120 (31.7)	2 (29)
									0 (30.5)	2.1 (30.5)
Ambient temperature	-15 to 35 °C (5 to 95 °F)									
Temp. pumped medium	0 to 35 °C, temporary up to max. 60 °C (32 to 95 °F, temporary up to max. 140 °F)									
pH value pumped medium	6 to 8									
Immersion depth	18 m (59 ft)									
Motor coil insulation class	F (155 °C/311 °F)									
Protection class	Pump without plug IP 68									

*Information based on ISO 9906 Class 3

NAUTILUS

The first choice for high water and flooding.



NAUTILUS 4/1 pump set

- NAUTILUS 4/1 with Storz B coupling
- Coupling key ABC DIN 14882
- Firefighting hose B 20, length: 20 m (65.6')
- Outlet pipe B
- B-elbow 90°
- Hose kink protection
- Rope hose holder
- Working rope with carabiner and linen bag, length: 20 m (65.6')
- PRCD-S safety switch
- Wire protection cage with 2 carry handles, can be used as transport and suction protection basket (dimensions 615 x 455 x 410 mm (24.2" x 17.9" x 17.7"))



93200001

PRCD safety switch for NAUTILUS 4/1 and 4/1 ECO

Submersible pumps should only be operated with a safety switch (PRCD). Please observe country-specific regulations! Mobile IP 68 circuit protection switch in aluminum die-cast housing each with 1.5 m connection cables 3G1.5 mm² and Schuko plug or Schuko coupling IP 68 (suitable for NAUTILUS 4/1). Resistant to high-pressure water. 230 V, 16 A, 30 mA, IP 68.

PRCD-S safety switch for NAUTILUS 8/1

If 400 V submersible pumps are not operated via generator as per DIN 14685 but instead are connected to a house installation, the mobile operator protection circuit breaker should be connected like an extension cable between consumer and socket. Please observe country-specific regulations! PRCD-S 5-pole, 400 V, IP 44, in robust CEE rubber distributor with carrying handle.

Order data

	NAUTILUS 4/1 ECO	NAUTILUS 4/1	NAUTILUS 8/1
NAUTILUS with Storz B coupling	16 146A-101	977234-101	52470A-001
NAUTILUS with connection thread G 2 1/2" ext. thread	16 146A-103	977234-103	52470A-003
Pump set	-	93200001	-
Personnel protection equipment PRCD-S (operated via house installation)	-	933001	933007
Personnel protection equipment PRCD-K (operated via power generator)	-	933002	-
Level switch	-	933060	933085
B-elbow 90°	-	268020	268020
Vehicle mount	970334-101	970334-101	970334-102



933007



970334-101 / 970334-102



933001 / 933002