

GRUNDFOS FIRE PROTECTION SYSTEMS

Grundfos is a full-line fire system supplier that fully complies with a globally recognised list of approvals and listings. We design, manufacture and service our fire pump systems all over the world, and our products are renowned for their quality, high performance and reliability.

Grundfos application areas:

- Industrial plants
- Public water supply
- District cooling / heating plants
- Air-con / heating systems
- Fire protection
- Cooling systems
- Irrigation

GRUNDFOS FIRE PROTECTION SYSTEMS FULL RANGE EXPERTISE

FIRE PUMPS FOR EVERY STANDARD



96982928 0609

FIRE PROTECTION SYSTEMS INTRODUCTION

GRUNDFOS FIRE PUMPS SUPPLY HIGH-CLASS SAFETY TO CLIENTS AROUND THE WORLD. OUR EXPERTISE SPANS THE GLOBE AND COVERS ALL UL-FM APPROVED FIRE SYSTEMS

With Grundfos as your fire system supplier, you can rest assured that your system lives up to the highest international standards of quality. We have products that comply with your every need and the following approvals:

- PSB
- VNIPO
- CCCF
- APSAD
- CEPREVEN
- VdS
- UNI
- LPCB
- EN 12845
- CNBOP
- FM
- UL
- NFPA 20



WE HAVE DOUBLED UP THE KNOW-HOW

Two experts for the price of one
Grundfos is a proud company with an extensive history of pump manufacturing and innovation. In order to further develop our expertise within fire systems, we've recently acquired another proud company with a famous 100-year history in the fire pump industry – the American pump icon, Peerless.

Peerless has extensive experience with fire pumps of the NFPA 20 standard and FM-UL approved systems. It is also a company that shares the Grundfos values of superior quality products, strong customer focus, and an in-depth understanding of the realities of fire protection.



Global presence

Grundfos secures efficient and direct deliveries to the construction sites of all our European customers, and with a sales and service centre in every market, Grundfos is never far away. Our competence centre

in Wahlstedt, Germany, is at the heart of fire competence in Europe. Here we manufacture and test FM and VdS approved systems. Comprehensive on-site design, testing and a full range of customer training facilities are also provided.

SERVICE AND EXPERTISE
We cover the world



RELIABILITY ACROSS THE FULL RANGE

Full-line supplier

Grundfos produces fire pump systems for:

- Fire hose reels
- Fire hydrants
- Fire sprinklers

We design and build systems ranging from simple pump-driver systems on a base frame to highly engineered and fully enclosed, packaged systems.

We are proud to have the widest range of fire pump approvals and listings worldwide, and our expertise enables us to engineer, produce, stock, distribute and service our products all over the world.

There are three main reasons for choosing fire pumps that are approved and certified by accredited third party authorities. Firstly, based on the massive experience embodied in leading fire protection, regulations and codes, approved systems reduce the risk of damage to life and property in the case of fire.

Secondly, approved systems provide maximum reliability and superior quality. Thirdly, using approved and listed fire pumps typically reduces insurance rates significantly.

When third party approval is not required for a fire pump installation, Grundfos can supply non-listed fire systems that comply with specific fire standards.

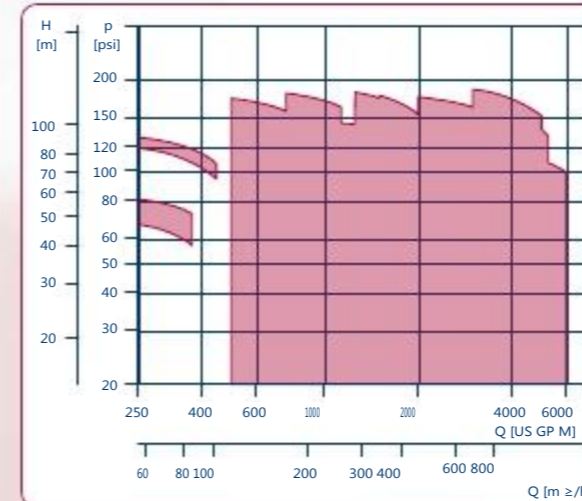


SUPREME PERFORMANCE – UL-LISTED AND FM-APPROVED

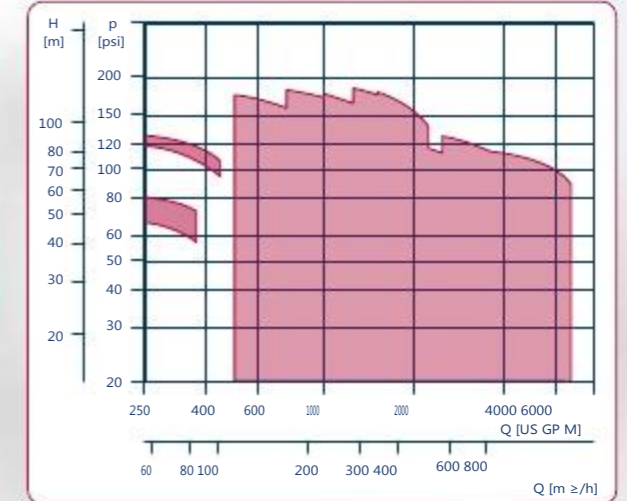
Grundfos provides top performance electric and diesel systems with all the relevant listings and approvals. Our European regional competence centres for fire pumps produce systems manufactured to most local approvals including the NFPA pamphlet 20 code,

which is listed by UL (Underwriters Laboratories) and approved by FM (Factory Mutual). The systems can be supplied as either electric or diesel systems. Below, you can see the standard performance range of our electric and diesel pumps.

Performance range of electric fire pumps 50 Hz



Performance range of diesel fire pumps



Electric fire pump units are built in two different configurations:

Compact: Fire pump and electric motor – complete system mounted on one base including wiring and control panel.

Flex: Fire pump and electric motor mounted on base and control panel separately supplied for wall or floor mounting.

Diesel fire pump units are built in three different configurations:

Compact: Complete diesel fire pump unit including fire pump, diesel engine, fuel tank, batteries and control panel on one base frame.

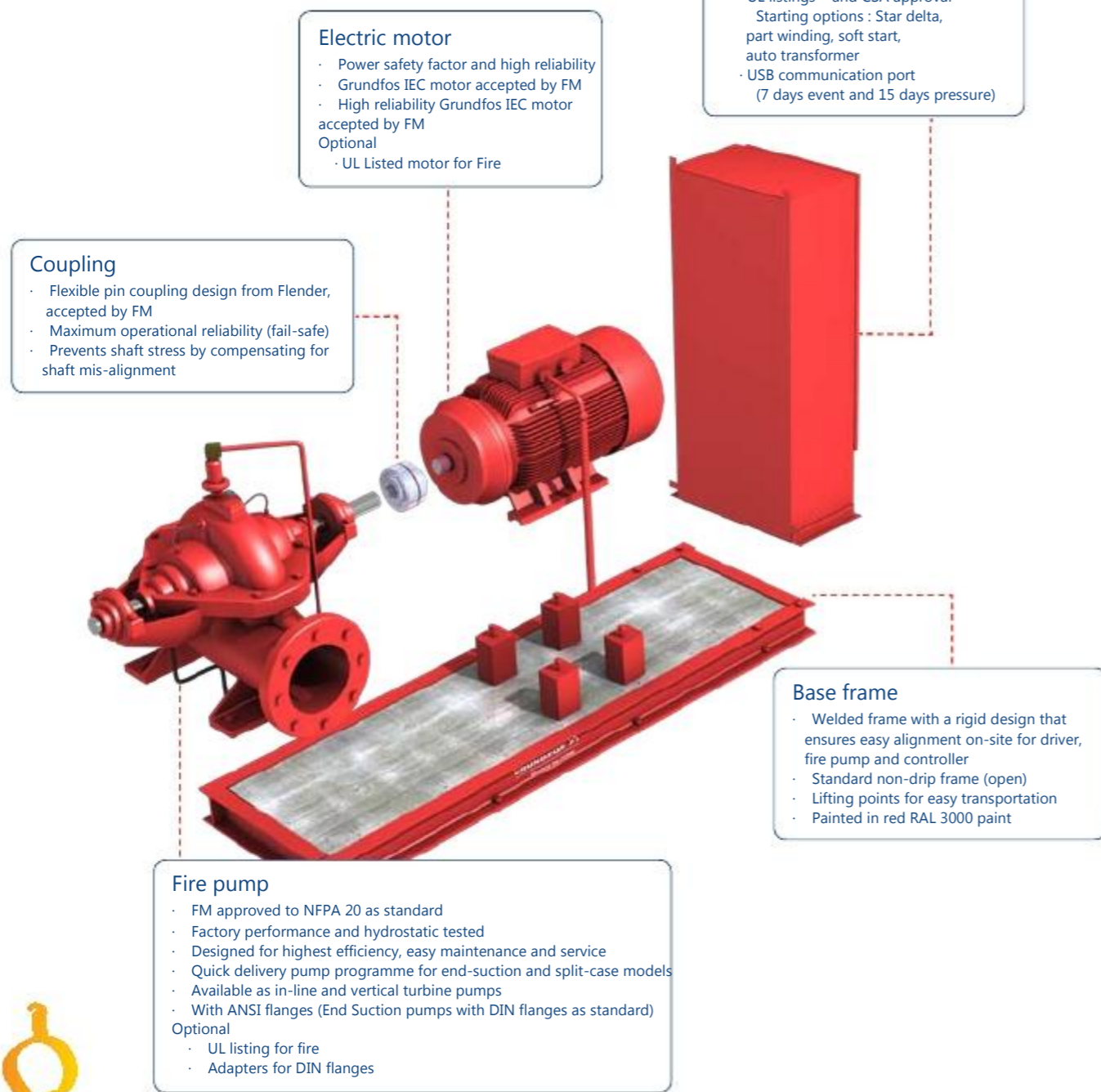
Note: this configuration is not available for all fire pump sizes, since the fuel tank is too big for the largest diesel engines.

Flex: Same as compact, but with separately mounted fuel tank and control panel. Wall or floor mounted.

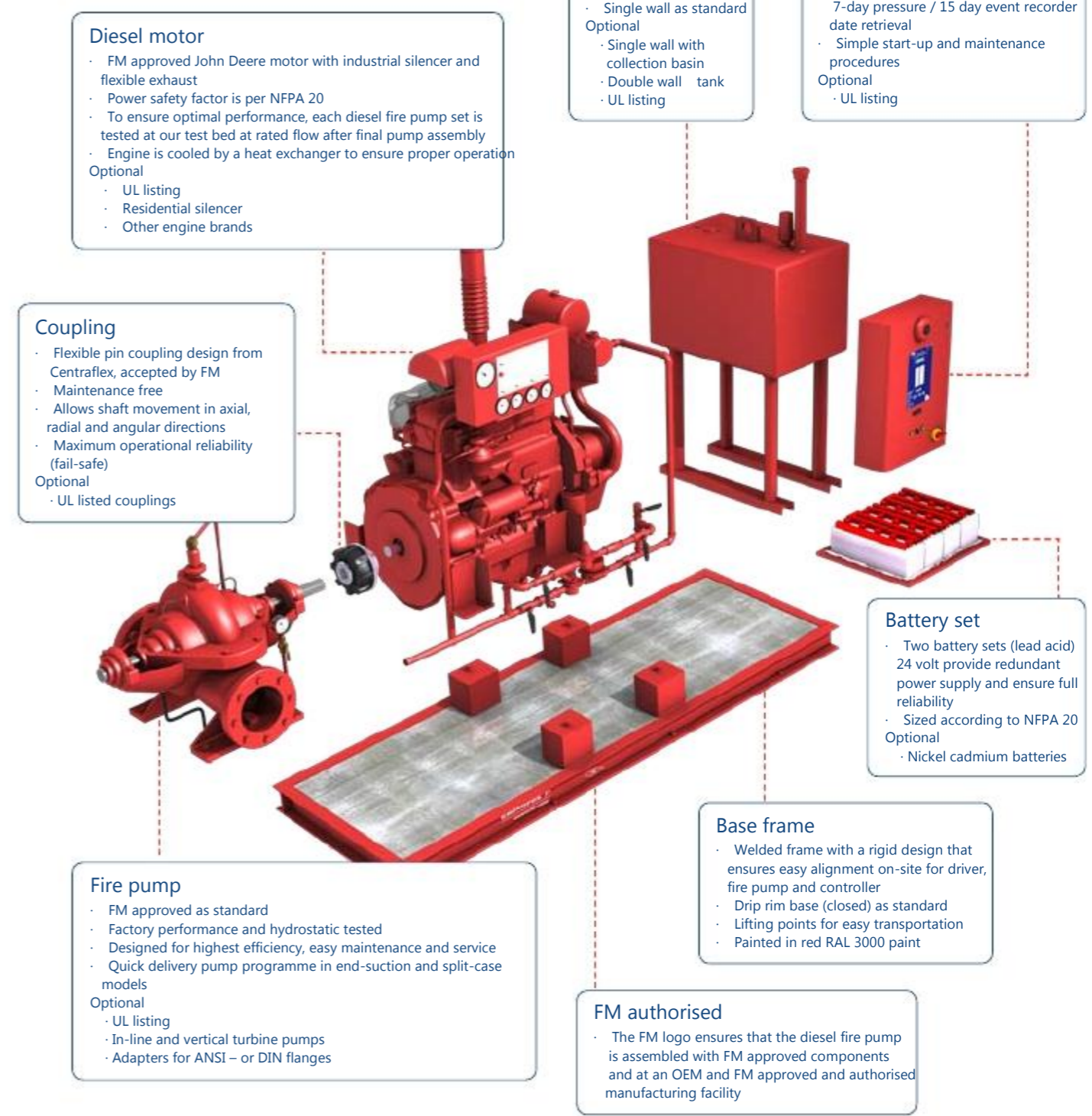
Flex B: Same as Flex, but with the control panel mounted on a base frame.



ELECTRIC FIRE PUMP – FM APPROVED



DIESEL FIRE PUMP – FM APPROVED



FIRE PROTECTION SYSTEMS

CUSTOMISED SOLUTIONS

BEYOND STANDARD PRODUCTS

At Grundfos, we have always considered a complex project a great challenge. That is why we offer completely customised solutions that match the requirements of even the most complicated tasks.

Expanded quick delivery programme

Our quick delivery programme contains more than the electrically or diesel-driven End Suction and Horizontal Split Case pumps. We also supply:

- In-Line fire pumps
- Vertical Turbine pumps (for wet pit applications, or applications where positive inlet pressure is not available)

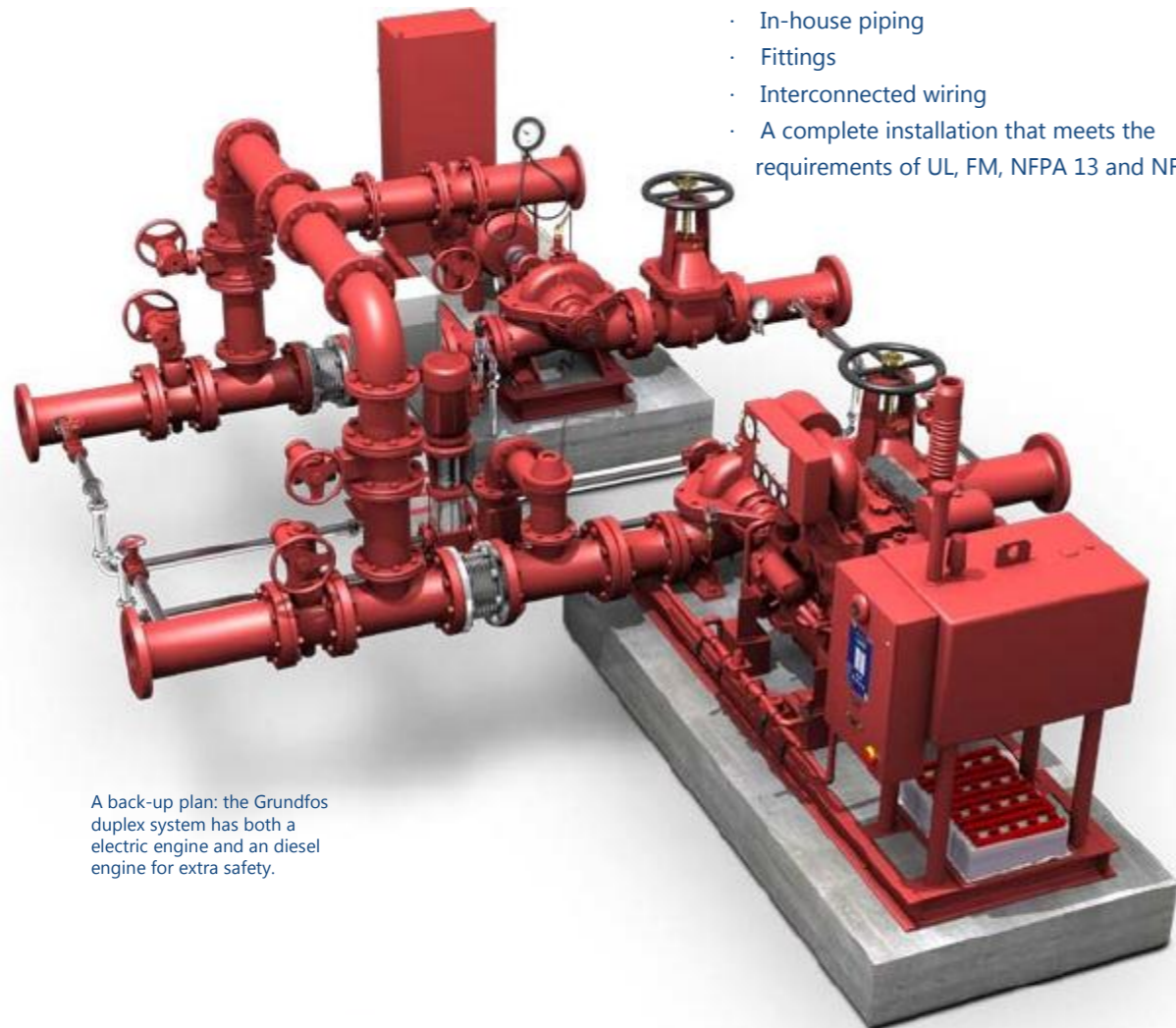
Modularised systems

Grundfos designs and builds customised systems that meet your specific needs. We mount the fire pump, driver, controller and piping with complete interconnected wiring on a common base or a modularised base frame for final assembly on location.

Packaged / containerised systems

With Grundfos' enclosed systems, your installation-to-operation time is minimal. Our enclosed systems are typically built as an integrated pump and control centre with:

- Diesel engine
- All the required controllers
- In-house piping
- Fittings
- Interconnected wiring
- A complete installation that meets the requirements of UL, FM, NFPA 13 and NFPA 20



A back-up plan: the Grundfos duplex system has both a electric engine and an diesel engine for extra safety.

CASE REFERENCES

European projects with Grundfos FM fire systems

Project Name	Location	Country	Application	Equipment
Hotel Beach	Vilamoura	Portugal	Tourist resort	Two electric end-suction
IKEA	Matosinhos	Portugal	Warehouse	Duplex
GDF	Montoir	France	Power plant	Electric vertical turbine
SATO	Athens	Greece	Industrial plant	Duplex
Hager	Athens	Greece	Warehouse	Duplex
Jumbo	Limassol	Cyprus	Warehouse	Duplex
ThyssenKrupp	Terni	Italy	Industrial plant	Diesel split case
Pinewood Campus	Wokingham	England	Office block	Diesel end-suction
Kohler Mira	Cheltenham	England	Factory	Diesel split case
Henkel	Istanbul	Turkey	Industrial plant	Diesel split case

Belchatow Power, Lodz

When Alstom Power built its new power plant in Belchatow near Lodz in Poland, it chose Grundfos to deliver the hydrant and sprinkler installations for the fire fighting system, because we offered a complete solution – with pumps, controls and accessories built into a common base plate.

Pumps installed:

- 2 x FK200-150/320-JU6H-UF30 pump set with fuel tank, controller and engine all mounted together
- 1 x CR3-15 A-A-A-E-HQQE 3x230/400 50HZ
- 1 x UL/FM LISTED JOCKEY PUMP STARTER



FIRE PROTECTION SYSTEMS CUSTOMER SUPPORT

FULL-LINE INCLUDES THE SUPPORT AS WELL

Grundfos service is not limited to delivering a product. We are there all the way from design, installation, maintenance and training.

We are particularly proud of our RAPID system. RAPID is a comprehensive electronic product selection programme that provides unique assistance in the

design phase of a project. The programme features the following benefits:

- Enables sales offices to quickly and accurately select the adequate pump systems for your needs
- Generates quotations with all the necessary commercial and technical information
- Forwards the full design submittal information to our business partners

With RAPID, your project is one step ahead from the beginning.



EXPERTISE AT THE HEART OF EUROPE

Grundfos Wahlstedt – the European competence centre

The Grundfos fire competence centre located in the northern part of Germany, sets the scene for a collection of activities that all promote the technology, production and knowledge behind great fire protection systems.

The Wahlstedt centre features:

- Production, assembly, and test facilities approved by FM and VdS
- Quality accreditations such as ISO 9001, 14001, 18001, and EMAS
- Witness tests where customers can supervise the testing of their products
- Stock facilities for pumps, motors, engine units, and control panels
- Customer support facilities for applications, system design, logistics, sales and service