

OPTIMUM PERFORMANCE AND APPLICATION FIT

for pressure boosting applications



ALWAYS-OPTIMISED OPERATION FROM A HIGHLY EFFICIENT BOOSTER SET

The Grundfos Hydro Solo-E Optimum range brings substantially more than an efficient pump with additional equipment to pressure-boosting applications.

You get a fully-optimised package with constant pressure control, flow estimation and plug-and-pump installation, for immediate, always-optimised operation. And the graphical display built into the pump provides a real-time overview of booster set performance.

- Easy and quick installation – simple plug-and-pump
- High comfort and operational safety – dry-running and anti-cavitation protection
- Flow monitoring and system protection – advanced flow estimation algorithm
- Easy performance overview – built-in graphical display

Quite simply, the delivery of a single, optimised package means a more efficient solution is possible than if you tried to combine the elements yourself. You avoid ending up with an oversized pump, or a system that is expensive to maintain and is ultimately more expensive over the system lifetime.

EFFECTIVE PRESSURE-BOOSTING WHERE YOU NEED IT

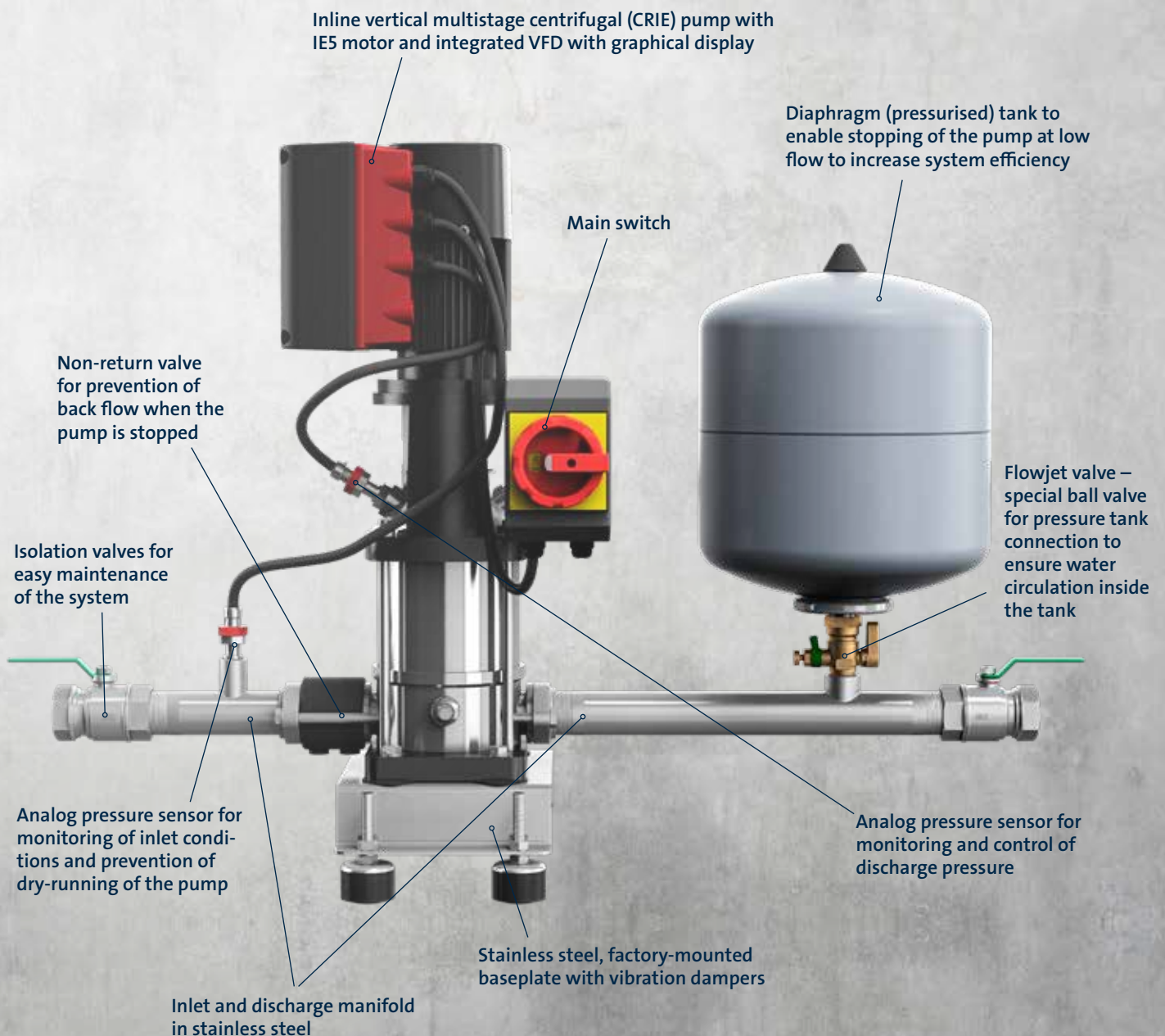
These booster sets are designed for the transfer and pressure boosting of clean water in light commercial buildings or as pressure boosting in other systems, such as process water systems and irrigation.

A COMPLETE BOOSTER SET, READY TO INSTALL

The Grundfos Hydro Solo-E Optimum booster set is a combined unit consisting of one Grundfos CR pump fitted with isolating valve, discharge pipe, pressure sensor and diaphragm tank.

They are supplied as complete, pre-assembled and thoroughly tested booster sets, ready to install.

The system Includes:



AN IMPRESSIVE MIX OF TECHNOLOGY, EFFICIENCY AND EASE-OF-USE

UNIQUE GRAPHICAL DISPLAY ON THE PUMP

The system is pre-programmed and tested from the factory and offers easy access to pump operation data and configuration.



PRE-PROGRAMMED FUNCTIONS THAT GIVE YOU PEACE-OF-MIND

A number of required and unique functions is pre-programmed, ensuring immediately-optimised operation and cost savings over a long system lifetime:

• Constant pressure control

Perfect water pressure regardless of consumption with energy-efficient operation and reduced water hammer

• Dry-running protection

Less risk for pump damage and lower maintenance costs

• Flow estimation

A flow estimation algorithm in the software for Grundfos E-motors calculates flow from inlet and outlet pressure, pump speed, power and the pump curve characteristics

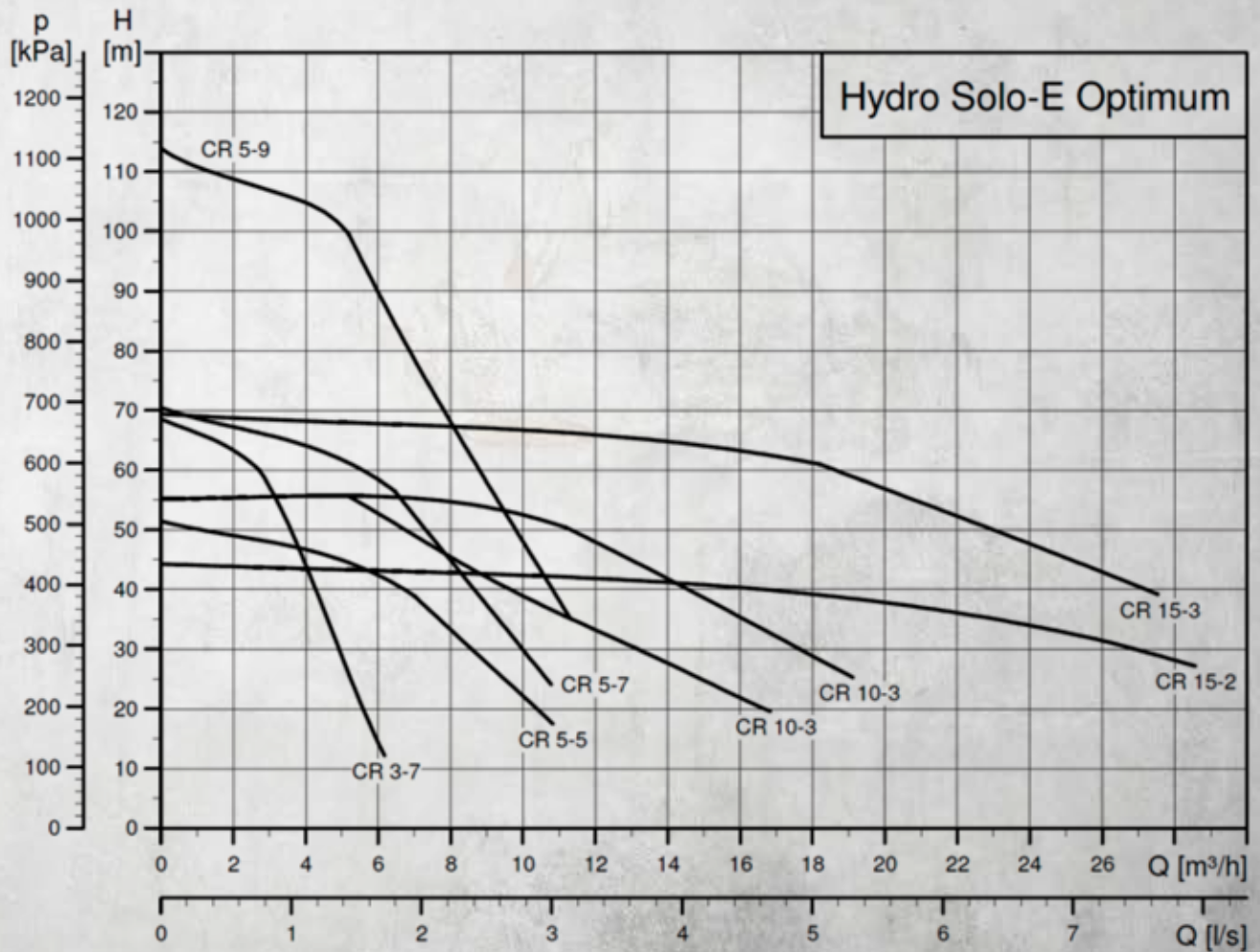
• Anti-cavitation protection (flow limit)

Protects pump operation outside of the recommended flow range and reduces the risk of cavitation

• Running/Alarm relay output

Easy and simple integration into a BMS system, for example

A correctly-sized pump for an efficient and optimised pressure-boosting system



When the load of the motor reaches maximum, the motor derates in speed to keep the power constant. This means that all available power in the motors is utilised, and the overall efficiency of the system is improved.

Accessories

A number of accessories are available for the Grundfos Hydro Solo-E Optimum booster set.

FIELDBUS COMMUNICATION INTERFACES

The Grundfos fieldbus concept is the ideal solution for complete control of pumps and pump systems. The Communication Interface Module (CIM) enables data communication via open and interoperable networks.

Protocol	Name	PN
LON	CIM 100	96824797
Profibus DP	CIM 150	96824793
Modbus RTU	CIM 200	96824796
GSM/GRPS	CIM 250	96824795
GRM*	CIM 270	96898815
BACnet	CIM 300	96893770
PROFITNET IO MODBUS TCP BACnet IP GRM*IP	CIM 500	98301408



* Grundfos Remote Management

GRUNDFOS GO – MOBILE PUMP CONTROL

Designed to save time and effort for the pump owner, Grundfos GO is the most comprehensive platform for mobile pump control on the market, offering intuitive, handheld assistance and access to Grundfos online tools, saving valuable time in reporting and data collection.

Grundfos GO Remote variant	Project number
Grundfos MI 301	98046408



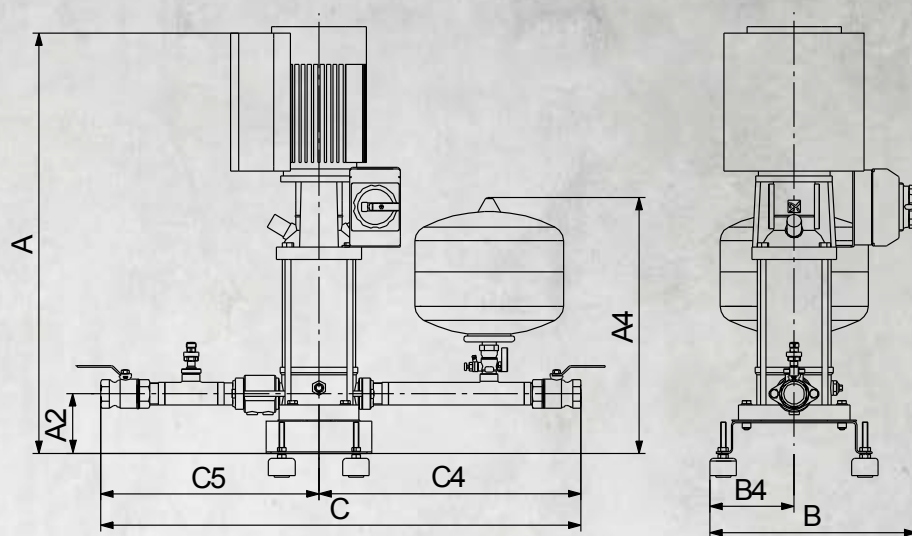
LIQTEC SENSOR – DRY-RUNNING AND TEMPERATURE SENSOR IN ONE

In addition to protecting against dry running, the LiqTec sensor prevents excessive liquid temperatures from damaging the pump. If LiqTec senses a liquid temperature above 130° C (266° F), it stops the pump immediately. LiqTec is a failsafe device, meaning that the pump stops as soon as the sensor detects an error on the sensor cable or in the electronics.

Product Number: 99337830
Connection 1/2"



Technical data



Note: All Units are in [mm] unless others are stated.

Disclaimer: This simplified dimensional drawing does not show all details and might not show the exact configuration of the system. Only for dimensional reference use.

Product No.	Pump Type	Motor [kW]	Full-Load Current [A]	Supply Voltage [V]	Tank Volume [L]	Connection In/Outlet	A	A2	A4	B	B4	C	C4	C5
99432874	CRIE 3-7	0.75	4.70 - 3.90	1 x 200-240	18	Rp 1" 1/4	611	112	465	402.5	158.5	912	568	344
99432875	CRIE 5-5	1.1	6.70 - 5.60	1 x 200-240	18	Rp 1" 1/4	620	112	465	402.5	158.5	912	568	344
99432876	CRIE 5-7	1.5	9.10 - 7.60	1 x 200-240	18	Rp 1" 1/4	710	112	465	402.5	158.5	912	568	344
99432877	CRIE 5-9	2.2	4.15 - 3.40	3 x 380-500	18	Rp 1" 1/4	804	112	465	402.5	158.5	912	568	344
99432878	CRIE 10-3	1.5	9.10 - 7.60	1 x 200-240	18	Rp 1" 1/2	699	142	465	479	220	969	599	370
99432879	CRIE 10-3	2.2	4.15 - 3.40	3 x 380-500	18	Rp 1" 1/2	739	142	465	479	220	969	599	370
99432880	CRIE 15-2	3.0	6.20 - 5.00	3 x 380-500	18	Rp 2"	816	152	465	479	220	1188	681	507
99432881	CRIE 15-3	4.0	7.60 - 6.20	3 x 380-500	18	Rp 2"	861	152	465	479	220	1188	681	507

For additional information, see the Hydro Solo-E Data booklet, available from Grundfos Product Center.

USE GRUNDFOS PRODUCT CENTER TO SIZE YOUR PRESSURE-BOOSTER SYSTEM

See product-selection.grundfos.com

The Grundfos Product Center is a free digital product catalogue and sizing tool, offering one-point access for all product information including pump curves, CAD drawings, and service manuals. Available online and as a desktop (offline) edition, Grundfos Product Center is optimised for viewing on mobile devices such as your smartphone or tablet.



About Grundfos Building Services

From family homes to commercial buildings
and at all levels of the district energy network,
Grundfos supplies a complete solution.