## PRODUCT FEATURES **AND FUNCTIONS**

## **BOOSTING SYSTEMS FOR ANY APPLICATION NEEDS**

Grundfos has a wide range of products that comes with different features and functions.

**GRUNDFOS** A SMART SOLUTION **isolutions** | For you

X1 = Only avaliable on selected products













Functionality	Hydro MPC	Control MPC	MULTI-E	MULTI-B	SOLO-E	СМВЕ
Booster variant						
Number of pumps	2-6	2-6	2-4	2-4	1	1-2
Pump type	All	All	CRE, CRIE, CME	CR, CRM, CRE, CME	CRE, CRIE	CME
Motor power, integrated e-pump	0.37 - 22 kW	0.37 - 22 kW	0.37 - 11 kW	0.55 - 7.5 kW	0.37 - 11 kW	0.55 - 1.72 kW
Motor power, external CUE (-EC system)	0.55 - 55 kW	0.55 - 55 kW	÷	÷	÷	÷
Motor power, external CUE (-F system)	0.55 - 55 kW	0.55 - 55 kW	÷	÷	÷	÷
Motor power, external VFD	0.55 - 250 kW	0.55 - 250 kW	÷	÷	÷	÷
Max head	155 m	155 m	153 m	146 m	146 m	100.3 m
Max flow	1080 m³/h	1380 m³/h	140 m³/h	108 m³/h	139 m³/h	20 m³/h
Type of display	High regulation color display	High regulation color display	Numeric display with touch foil			
Communication/integration BMS/SCADA via Grundfos CIM or CIU modules						
Common protocols	х	х	x	(x)	х	(x)
GSM/GPRS (SCADA enabled)	х	х	х	х	х	х
Functions						
Control functions						
Pressure control	х	х	х	х	х	х
Flow control	х	x	÷	÷	0	÷
Differential pressure control	х	х	÷	÷	X1	÷
Temperature control	х	х	÷	÷	0	÷
Cascade control functions for high efficiency & comfort						
Constant pressure, through variable speed of the pumps	х	х	х	х	х	х
Automatic cascade control, constantly adapts no. of pumps to flow demand	х	х	х	х	÷	х
Multi-master function	÷	÷	х	÷	÷	х
Min. time between start/stop, prevents constantly start/stop at low flow	х	х	х	х	÷	х
Standby pump (duty operation), one pump acts as a backup for the system	х	х	х	х	х	х
Pump test run, prevents pump damage at stop situations	х	х	÷	÷	х	÷
Pump stop attempt, system attempt to run most efficient	х	х	х	х	÷	х
Pilot pump, pump that takes over in low flow situations	х	х	÷	÷	÷	÷
Setpoints – (*Alternative/Ramp/*External)	х	x	x (*)	÷	х	÷

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Functions	Hydro MPC	Control MPC	MULTI-E	MULTI-B	SOLO-E	CMBE
Functions that optimize and gives more energy savings						
Proportional pressure	х	х	÷	х	х	х
Pump curve data in controller	x	x	÷	÷	X1	÷
Clock program	х	x	÷	÷	÷	÷
Flow estimation	x	x	÷	÷	X1	÷
Other control functions						
Tank filling, with pressure sensor/level switch	÷	÷	÷	х	÷	х
Reduced operation, in case of emergency power run	х	x	÷	÷	÷	÷
Fixed inlet pressure, if no inlet pressure sensor available	x	x	÷	÷	÷	÷
System and pipe protection						
Dry running protection/water shortage, and inlet pressure measurement	х	x	х	х	x	х
Pressure monitoring min./max.	х	х	÷	÷	x	÷
Stop function, low flow stop protection/hysteresis on min. flow	x	x	x	x	×	x
Non-return valve, NRV fault detection	x	x	÷	÷	÷	÷
Pump outside duty range, alarm only	x	x	÷	÷	X1	÷
Pressure relief, control of release valve	×	x	÷		÷	÷
Fault, primary sensor	x	×	×	x	×	X
Soft pressure buildup	×	×	×	÷	X	x
Emergency run, set-up and function	X	x	÷	÷	÷	÷
Min. performance, ensures circulation at low consumption	X	x	÷	÷	÷	÷
Log values, selectable values	^	^	·	·		•
Estimated flow rate, with no flowmeter	v	x	÷	÷	X1	÷
Pump speed/setpoint/process value etc.	x		÷	÷		÷
	X	X			X	
Fault log	X	X	X	x	X	X
Log graph on controller display	х	Х	÷	÷	÷	÷
Measured values	l					
Power/energy/specific energy consumption, only e-systems	х	Х	Х	÷	Х	÷
Volume	Х	Х	Х	÷	Х	÷
Accumulated flow with pulse meter reading	х	Х	Х	÷	Х	÷
Alerts		l e e e e e e e e e e e e e e e e e e e				
Actual alarms/warnings	х	Х	Х	Х	Х	Х
Reset of alarms or warnings	X	X	X	Х	X	Х
Alarm/warning log, last 24 alerts	24 alerts	24 alerts	5 alerts	х	5 alerts	Х
Remote control	ı	1				
GRM/iSOLUTIONS cloud	х	х	Х	х	Х	Х
VNC ethernet, remote controller and monitoring	X	х	÷	÷	÷	÷
Grundfos GO, app	÷	÷	х	÷	х	Х
Sensor function		1				
Redundant primary sensor	х	х	х	х	х	Х
Secondary sensor, fall back sensor	х	Х	÷	÷	Х	х
Multi sensor, HVAC applications	x	x	÷	÷	÷	÷
Other						
Service contact info	x	х	÷	÷	÷	÷
Access lock with password/access with key lock*	x	х	x*	x*	X1	x*
Wizard for start-up/assist*	х	х	x*	÷	X1	÷
Input/output						
Digital input	3	3	2	2	2	2
Digital input/output	÷	÷	2	2	2	2
Analog input	3	3	3 per pump	2	1	2
Analog output			1 per pump	÷	1	÷
Relay output	2	2	2 per pump	÷	1	÷
Extension of input/output	IO 351 B	IO 351 B	÷	÷	÷	÷
CIM modules	x	x	х	x	×	х



