

The Grundfos range of glandless heating circulators has changed. Older style circulators (UPS models) have been withdrawn in compliance with EU legislative demands.

In response the Grundfos MAGNA3 family was launched in 2012 and in 2013 the range was extended by the introduction a new range of circulator models called MAGNA1. These are high efficiency circulator designs which are comparable to the MAGNA3 models but with a “reduced set” of features.

The older style Magna models are also being phased out and will now be replaced by MAGNA1 models (sizes DN25-DN40) and MAGNA3 models (sizes DN32-DN100).

The following tables show comparisons between the 4 product designs.

MAGNA3 should be compared to the Magna range

MAGNA1 should be compared to the UPS range.



Curve Options and Control Choices

Feature	MAGNA3	Magna	MAGNA1	UPS
AUTOadapt	✓	✓	✗	✗
FLOWadapt	✓	✗	✗	✗
Flow Limit	✓	✗	✗	✗
Proportional Pressure	✓	✓	✓	✗
Constant Pressure	✓	✓	✓	✗
Fixed Pump Speeds	✓	✓	✓	✓
Night Set Back	✓	✓	✗	✗

Communication

Feature	MAGNA3	Magna	MAGNA1	UPS
Analogue Input	✓	✗	✗	✗
Relay Outputs	✓	✓	✗	✗
Digital Inputs	✓	✓	✗	✗
Infra Red (R100)	✗	✓	✗	✗
Wireless (GO remote)	✓	✗	✗	✗

Twin Pump Control Choices

Feature	MAGNA3	Magna	MAGNA1	UPS
Duty/Standby Rotation	✓	✓	✗	✗
Automatic changeover on fault.	✓	✓	✗	✗
Cascade Option	✓	✗	✗	✗

Replacement Notes:

All previous Magna and UPS sizes can be replaced with new MAGNA1/MAGNA3 designs

Port to Port

Some rationalisation of pump casing sizes has been made which may affect replacement options particular on UPS replacements. On DN40 and DN50 sizes there are now two pump casing lengths as indicated.

DN40 sizes up to 40-100 have a **220mm** port to port length.

DN40 sizes from DN40-120 and above have a **250mm** port to port length.

DN50 sizes up to 50-80 have a **240mm** port to port length.

DN50 sizes from DN50-100 sizes and above have a **280mm** port to port length.

It may be necessary to consider the use of a spacer kit to make up the shorter port to port lengths when replacing existing circulator models. Both 40mm and 50mm spacer kits are available as accessories.

Magna D40-100 replacement

There are now a number of new twin pump options in both MAGNA1 and MAGNA3 sizes.

The MAGNA1 D32-100 model has a similar hydraulic performance to the Magna D40-100 model but is supplied with 32mm flanges instead of the 40mm flanges. If offered as a straight replacement then the customer should be made aware of the difference in flange diameters 40mm to 32mm. Alternatively the new MAGNA3 D40-100 could be selected which would fit the existing plumbed in space of the Magna D40-100.

Accessories

Insulation Shells

All single head pump models are supplied with an insulation shell suitable for heating applications. If models are being selected for chilled water applications then insulation shells are available which are better suited for cold water.

Insulation shells are not available for twin pump models.

CIM Module

The Grundfos Communication Interface Modules can be supplied for integration into MAGNA3 models for the following BMS protocols.

Module	Fieldbus protocol	Product number
CIM 050	GENIbus	96824631
CIM 100	LonWorks	96824797
CIM 150	Profibus DP	96824793
CIM 200	Modbus RTU	96824796
CIM 270	GRM	96898815
CIM 300	BACnet MS/TP	96893770

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