



IMP PUMPS[®]

Intelligent Motor Pumps

www.imp-pumps.com

75
YEARS



NMT SMART II

*Electronically controlled high-efficiency pumps
for heating, air conditioning, cooling and sanitary water*



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ErP REGULATION

ErP Regulation (Energy related Products) translates as energy-relevant products. The objective of this Regulation 2009 125 EC, is to reduce energy consumption according to the environmental requirements that are being introduced in the EU in the field of circulation pumps in 2013. In the course of the next seven years the Regulation will be put into practice in the following three steps:

- The first step from 01/08 in 2015 for the energy index up to (max.) 0.23 - Part 2
 - The second step from 01/01/2020 for the energy index up to (max.) 0.23 - Part 2 – including pumps, which are being replaced in HVAC systems
- The benchmark for most efficient circulators is $E_{EEI} \leq 0,15$ - Part 2.

IMP PUMPS complies with environmental requirements according to ErP regulations, offering high efficiency pumps at an affordable price.

GENERAL INFORMATION

ALL PRODUCTS AND COMPONENTS ARE MANUFACTURED FROM ENVIRONMENTALLY FRIENDLY MATERIALS.

UPON DISPOSAL INTERNAL ENVIRONMENTAL REGULATION MUST BE CONSIDERED.

FURTHER INFORMATION ON ALL PUMPING PROGRAMS WITH TECHNICAL DATA ARE AVAILABLE ON WWW.IMP-PUMPS.COM

GENERAL SALES CONDITIONS AND TERMS OF PAYMENT – DEPENDING ON THE AGREEMENT WITH THE FIRM IMP PUMPS.

IMAGES IN CATALOGUE ARE FOR ILLUSTRATIVE PURPOSES ONLY.

TECHNICAL ADJUSTMENTS AND REVISIONS ARE NOT PERMITTED!



ABOUT US

IMP PUMPS is Slovenian manufacturer of pumps and pumping systems located in Komenda in Slovenia. Company designs, develops, manufactures, distributes and maintains pumps and pumping systems. With products and services of its own and from strategic partners, company is positioned as provider of integrated solutions. With specialized skills company resolves the problems relating to the transportation of liquid media. This ensures the comfort of home environment and optimal working conditions in the industry.

More than 96 % of production is sold in over 80 countries around the world. Company is innovator in the field of electro commutated wet-running motors and has the quality certificate ISO 9001:2015.

HISTORY

IMP PUMPS was founded in 1947 and has existed as part of the IMP until the late 1980s. Company successfully survived the change of the economic system and the turbulent nineties and stood on its own feet. Company was privatized in 1997 and 1999. In the year 2000, the company was restructured and renamed in IMP PUMPS d.o.o.. Slovenia's entry into the EU was another initiative for IMP PUMPS intensive development of the sales network in the changing European market, either directly or through its business partners.

At the same time investments in development, marketing, information technology, and philosophy of e-commerce were made.

PRESENT

IMP PUMPS is present with its products and services in many world markets (Eastern and Western Europe, North America, Asia, North Africa and Australia). IMP PUMPS is also a member of EUROPUMP the European Association of Pump Manufacturers. In pump design, high priority is given to the improvement of the energy efficiency of pumps. Excellent results have been reached by the new NMT pump series, using permanent magnets technology for very high efficiency rates. IMP PUMPS is one of the few European manufacturers, which over the years developed and launched a new generation of pumps with electronically controlled wet running motors. This is one of the main reasons that the company IMP PUMPS is ranked among Europe's technological elite.

FUTURE

IMP PUMPS Company employees are aware they have become part of global development and the importance of the environment in which they live. Our products are energy efficient and environmentally friendly. We are constantly developing new and more cost effective pumps replacing the old types and investing in the development of intelligent pumps with an emphasis on digitization and communication. The company plans to further expand its sales on foreign markets and enhance its position among the four largest manufacturer of circulator pumps in Europe. In the spirit of its motto "The honest product for the honest price", IMP PUMPS intends to maintain the excellent quality of its products at the favorable prices for the customer, along with the application of the latest technologies and prompt service.

Product overview

The basic production program of IMP PUMPS consists of circulation pumps for HVAC applications. Pumps are flanged or threaded and single or double design with a bronze or cast iron hydraulic casing. All cast iron hydraulics are covered with cataphoresis.

Wet running circulation pumps



NMT (electronic savings, ECM, SAN - circulation pump for sanitary water)



SAN - for sanitary water



GHN (3-speed pumps)

Dry running circulation pump



CL, ECL, CV, PV
(in-line,
with frequency converter)



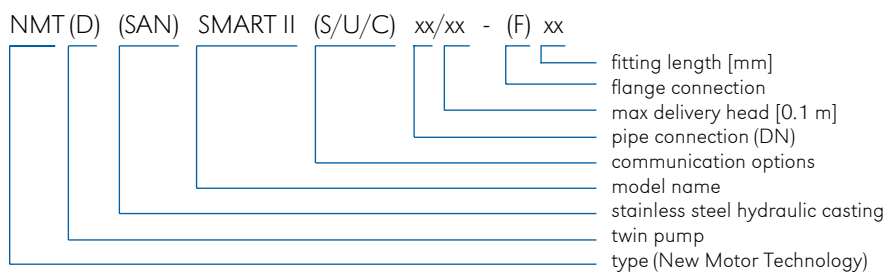
BL, BWJ
(multistage)



PPT BL (pressure boosting unit)



NMT SMART II



Electronically controlled wet running circulating pump

For all heating, air conditioning, refrigeration and industrial systems in accordance with VDI 2035 and ErP, as well as sanitary water systems.

High efficient wet running pump with auto adapt function

- high energy efficient motor with permanent magnet technology (ECM)
- LED display for control
- easy handling and instalation, low noise operation and automatic venting
- robust and compact construction for long life
- thermal insulation included

Automatic operation

- Immediate adaptation to the system

Manual adjustment

- Proportional pressure, constant pressure, constant speed, night mode

Communication options

NMT SMART II
 NMT SMART II S
 NMT SMART II U
 NMT SMART II C

Permissible mediums

Water, mixed with glycol, parameters must be checked in the mixture of water with over 40% of glycol.
 Pure, non-explosive liquid medium free of mineral oils and solid particles. Temperature range of the medium is from -10 to 110°C, with max. surroundings temperature 40°C.
 For NMT SAN SMART II, the maximum ambient temperature is 40°C, and the temperature range of the medium is from 2 to 65°C.

Technical specification

Q _{max}	up to 12 m ³ /h
H _{max}	up to 12 m
PN	PN 6/PN 10
DN	25/32/40/50
Connection	threaded/flange
Insulation class	F
Degree of protection	IP 44
Voltage	1 - 230V, 50 Hz

Minimum inlet pressure

0.05 bar <75 °C (fluid temperature)
 0.28 bar <90 °C (fluid temperature)

Material

Hydraulic casing	cast iron/stainless steel
Impeller	PES
Shaft	stainless steel AISI 316
Bearings	all carbon
Rotor can	stainless steel AISI 316

TRANSITION FROM NMT SMART TO NMT SMART II

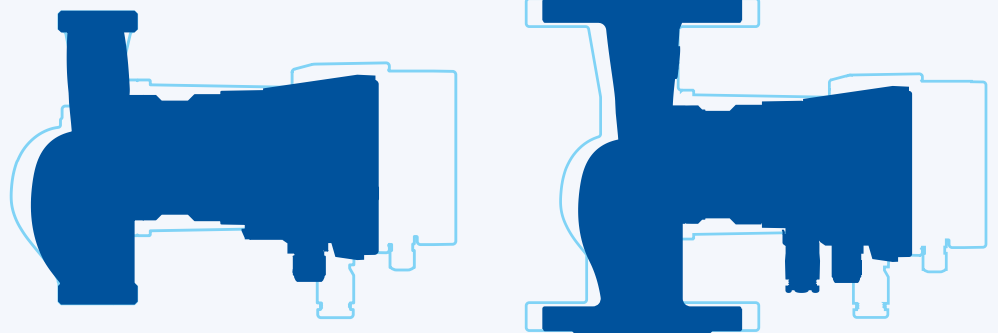
BEFORE  AFTER



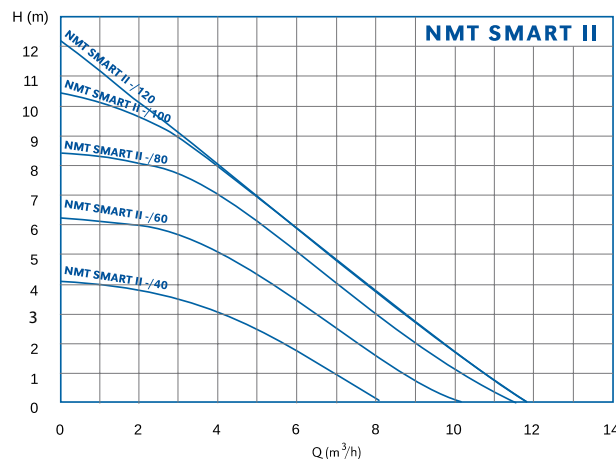
ADVANTAGES:

- The most efficient pump in its class
EEL ≤ 0,18
- Unifying design of the whole NMT SMART II FAMILY
- Easier electrical connection
- Greater variety of model options for competitive price targeting
- Modern and compact design resulting in easier and faster installation
- Easy model upgrade
- The lightest pump in its class

SIZE COMPARISON NMT SMART C VS NMT SMART II C



Performance curves



Type	P [kW]	I [A]	H [m]	Q [m³/h]											
				1	2	3	4	5	6	7	8	9	10	11	12
NMT SMART II -/40	70	0,5		4,0	3,8	3,5	3,0	2,5	1,8	1,0	0,1				
NMT SMART II -/60	100	0,8		6,3	6,1	5,6	5,0	4,2	3,4	2,5	1,6	0,8	0,1		
NMT SMART II -/80	145	1,1		8,4	8,2	7,7	7,0	6,1	5,2	4,1	3,1	2,1	1,2	0,4	
NMT SMART II -/100	160	1,2		10,2	9,6	8,9	8,0	7,0	5,9	4,8	3,6	2,5	1,5	0,6	
NMT SMART II -/120	160	1,2		11,2	10,2	9,1	8,0	6,9	5,8	4,7	3,6	2,6	1,6	0,7	

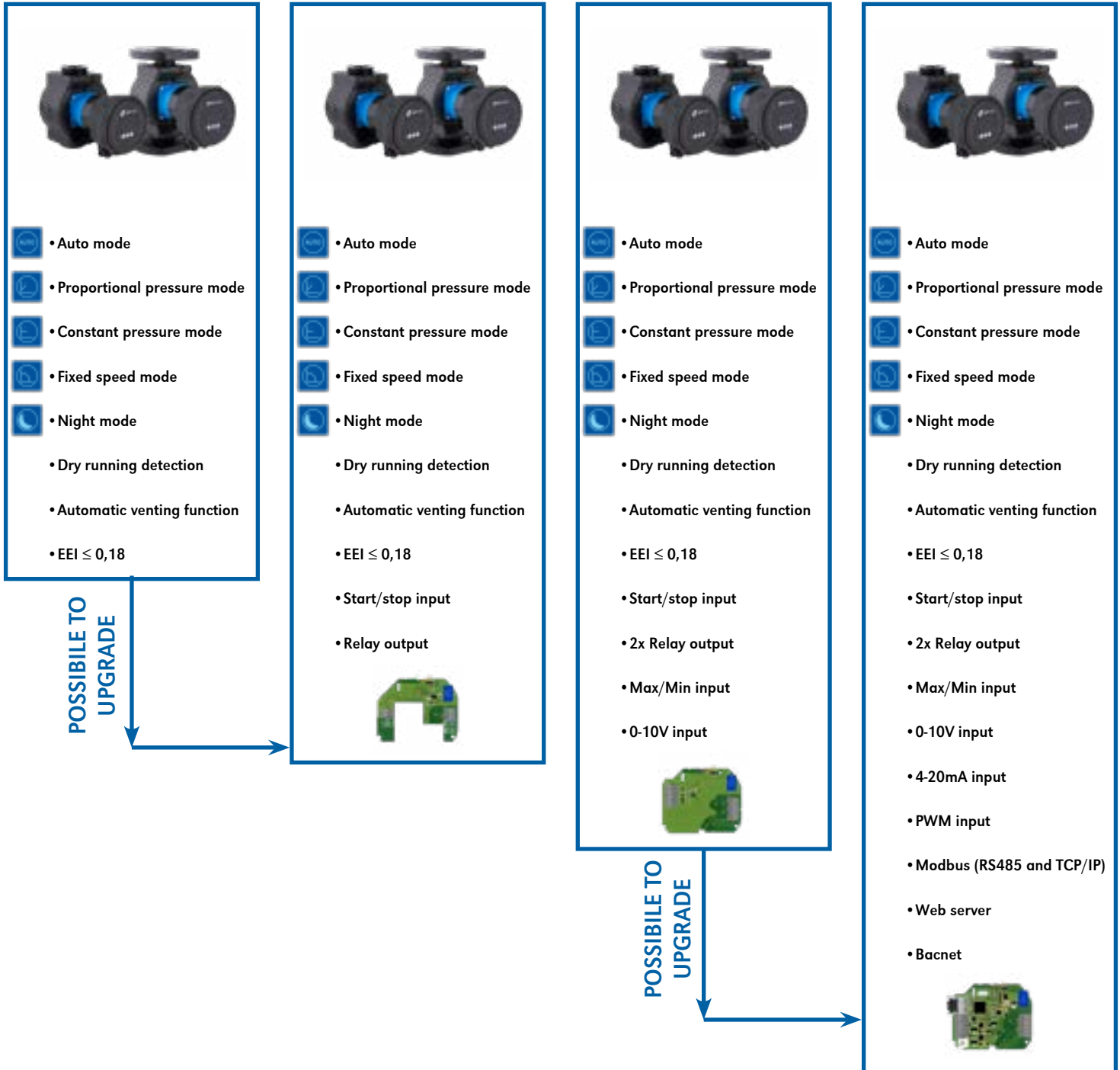
MODEL OVERVIEW

NMT SMART II

NMT SMART II S

NMT SMART II U

NMT SMART II C



Spare/upgradable parts



Type	Communication module S	Communication module U	Communication module C
Single pump codes	979528148	979528149	979528150
Twin pump codes	2x 979528148	979528356	979528155

PUMP MODELS

Threaded single motor pumps



NMT SMART II - Threaded single motor pumps

Code	Type	EEI	Fitting length [mm]	Pipe connection	PN	P _{max} [W]
979528383	NMT SMART II 25/40-180	≤ 0,18	180	DN25	PN6/10	70
979528384	NMT SMART II 25/60-180	≤ 0,18	180	DN25	PN6/10	100
979528385	NMT SMART II 25/80-180	≤ 0,18	180	DN25	PN6/10	145
979528386	NMT SMART II 25/100-180	≤ 0,18	180	DN25	PN6/10	160
979528387	NMT SMART II 25/120-180	≤ 0,18	180	DN25	PN6/10	160
979528388	NMT SMART II 32/40-180	≤ 0,18	180	DN32	PN6/10	70
979528389	NMT SMART II 32/60-180	≤ 0,18	180	DN32	PN6/10	100
979528390	NMT SMART II 32/80-180	≤ 0,18	180	DN32	PN6/10	145
979528391	NMT SMART II 32/100-180	≤ 0,18	180	DN32	PN6/10	160
979528392	NMT SMART II 32/120-180	≤ 0,18	180	DN32	PN6/10	160

NMT SMART II S - Threaded single motor pumps with S communication module

Code	Type	EEI	Fitting length [mm]	Pipe connection	PN	P _{max} [W]
979528408	NMT SMART II S 25/40-180	≤ 0,18	180	DN25	PN6/10	70
979528409	NMT SMART II S 25/60-180	≤ 0,18	180	DN25	PN6/10	100
979528410	NMT SMART II S 25/80-180	≤ 0,18	180	DN25	PN6/10	145
979528411	NMT SMART II S 25/100-180	≤ 0,18	180	DN25	PN6/10	160
979528412	NMT SMART II S 25/120-180	≤ 0,18	180	DN25	PN6/10	160
979528413	NMT SMART II S 32/40-180	≤ 0,18	180	DN32	PN6/10	70
979528414	NMT SMART II S 32/60-180	≤ 0,18	180	DN32	PN6/10	100
979528415	NMT SMART II S 32/80-180	≤ 0,18	180	DN32	PN6/10	145
979528416	NMT SMART II S 32/100-180	≤ 0,18	180	DN32	PN6/10	160
979528417	NMT SMART II S 32/120-180	≤ 0,18	180	DN32	PN6/10	160

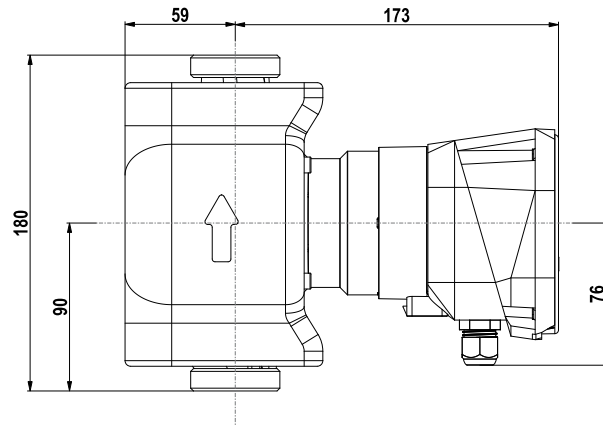
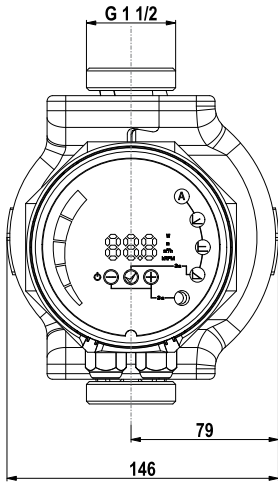
NMT SMART II U - Threaded single motor pumps with U communication module

Code	Type	EEI	Fitting length [mm]	Pipe connection	PN	P _{max} [W]
979528433	NMT SMART II U 25/40-180	≤ 0,18	180	DN25	PN6/10	70
979528434	NMT SMART II U 25/60-180	≤ 0,18	180	DN25	PN6/10	100
979528435	NMT SMART II U 25/80-180	≤ 0,18	180	DN25	PN6/10	145
979528436	NMT SMART II U 25/100-180	≤ 0,18	180	DN25	PN6/10	160
979528437	NMT SMART II U 25/120-180	≤ 0,18	180	DN25	PN6/10	160
979528438	NMT SMART II U 32/40-180	≤ 0,18	180	DN32	PN6/10	70
979528439	NMT SMART II U 32/60-180	≤ 0,18	180	DN32	PN6/10	100
979528440	NMT SMART II U 32/80-180	≤ 0,18	180	DN32	PN6/10	145
979528441	NMT SMART II U 32/100-180	≤ 0,18	180	DN32	PN6/10	160
979528442	NMT SMART II U 32/120-180	≤ 0,18	180	DN32	PN6/10	160

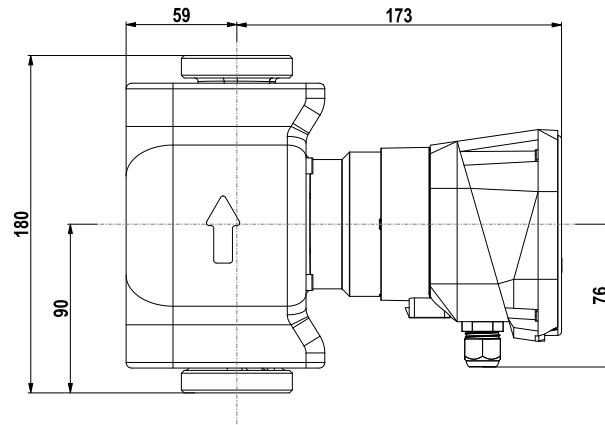
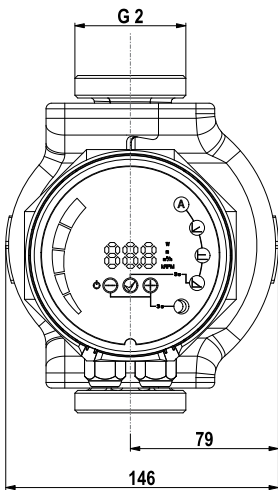
NMT SMART II C - Threaded single motor pumps with C communication module

Code	Type	EEI	Fitting length [mm]	Pipe connection	PN	P _{max} [W]
979528458	NMT SMART II C 25/40-180	≤ 0,18	180	DN25	PN6/10	70
979528459	NMT SMART II C 25/60-180	≤ 0,18	180	DN25	PN6/10	100
979528460	NMT SMART II C 25/80-180	≤ 0,18	180	DN25	PN6/10	145
979528461	NMT SMART II C 25/100-180	≤ 0,18	180	DN25	PN6/10	160
979528462	NMT SMART II C 25/120-180	≤ 0,18	180	DN25	PN6/10	160
979528463	NMT SMART II C 32/40-180	≤ 0,18	180	DN32	PN6/10	70
979528464	NMT SMART II C 32/60-180	≤ 0,18	180	DN32	PN6/10	100
979528465	NMT SMART II C 32/80-180	≤ 0,18	180	DN32	PN6/10	145
979528466	NMT SMART II C 32/100-180	≤ 0,18	180	DN32	PN6/10	160
979528467	NMT SMART II C 32/120-180	≤ 0,18	180	DN32	PN6/10	160

Dimensions



NMT SMART II X 25/XX-180



NMT SMART II X 32/XX-180

Flanged single motor pumps



NMT SMART II F - Flanged single motor pumps

Code	Type	EEI	Fitting length [mm]	Pipe connection	PN	P _{max} [W]
979528393	NMT SMART II 32/40 F220	≤ 0,18	220	DN32	PN6/10	70
979528394	NMT SMART II 32/60 F220	≤ 0,18	220	DN32	PN6/10	100
979528395	NMT SMART II 32/80 F220	≤ 0,18	220	DN32	PN6/10	145
979528396	NMT SMART II 32/100 F220	≤ 0,18	220	DN32	PN6/10	160
979528397	NMT SMART II 32/120 F220	≤ 0,18	220	DN32	PN6/10	160
979528398	NMT SMART II 40/40 F220	≤ 0,18	220	DN40	PN6/10	70
979528399	NMT SMART II 40/60 F220	≤ 0,18	220	DN40	PN6/10	100
979528400	NMT SMART II 40/80 F220	≤ 0,18	220	DN40	PN6/10	145
979528401	NMT SMART II 40/100 F220	≤ 0,18	220	DN40	PN6/10	160
979528402	NMT SMART II 40/120 F220	≤ 0,18	220	DN40	PN6/10	160
979528403	NMT SMART II 50/40 F240	≤ 0,18	240	DN50	PN6/10	70
979528404	NMT SMART II 50/60 F240	≤ 0,18	240	DN50	PN6/10	100
979528405	NMT SMART II 50/80 F240	≤ 0,18	240	DN50	PN6/10	145
979528406	NMT SMART II 50/100 F240	≤ 0,18	240	DN50	PN6/10	160
979528407	NMT SMART II 50/120 F240	≤ 0,18	240	DN50	PN6/10	160

NMT SMART II S F - Flanged single motor pumps with S communication module

Code	Type	EEI	Fitting length [mm]	Pipe connection	PN	P _{max} [W]
979528418	NMT SMART II S 32/40 F220	≤ 0,18	220	DN32	PN6/10	70
979528419	NMT SMART II S 32/60 F220	≤ 0,18	220	DN32	PN6/10	100
979528420	NMT SMART II S 32/80 F220	≤ 0,18	220	DN32	PN6/10	145
979528421	NMT SMART II S 32/100 F220	≤ 0,18	220	DN32	PN6/10	160
979528422	NMT SMART II S 32/120 F220	≤ 0,18	220	DN32	PN6/10	160
979528423	NMT SMART II S 40/40 F220	≤ 0,18	220	DN40	PN6/10	70
979528424	NMT SMART II S 40/60 F220	≤ 0,18	220	DN40	PN6/10	100
979528425	NMT SMART II S 40/80 F220	≤ 0,18	220	DN40	PN6/10	145
979528426	NMT SMART II S 40/100 F220	≤ 0,18	220	DN40	PN6/10	160
979528427	NMT SMART II S 40/120 F220	≤ 0,18	220	DN40	PN6/10	160
979528428	NMT SMART II S 50/40 F240	≤ 0,18	240	DN50	PN6/10	70
979528429	NMT SMART II S 50/60 F240	≤ 0,18	240	DN50	PN6/10	100
979528430	NMT SMART II S 50/80 F240	≤ 0,18	240	DN50	PN6/10	145
979528431	NMT SMART II S 50/100 F240	≤ 0,18	240	DN50	PN6/10	160
979528432	NMT SMART II S 50/120 F240	≤ 0,18	240	DN50	PN6/10	160

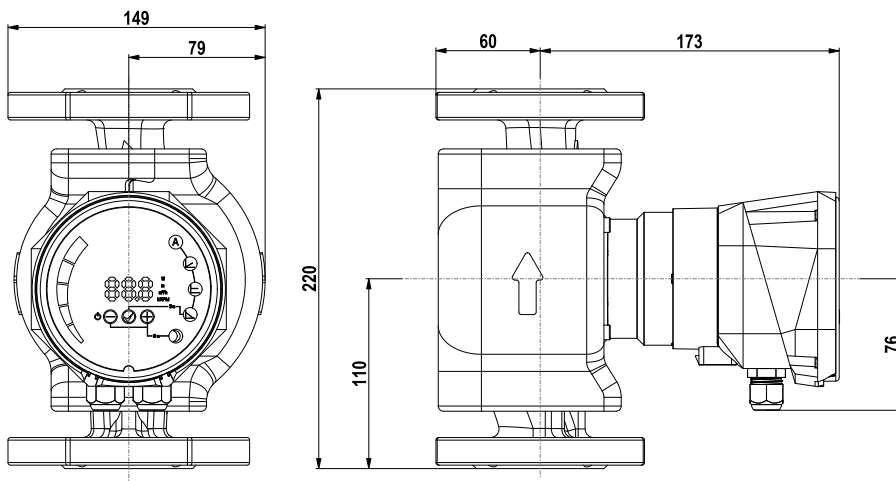
NMT SMART II U F - Flanged single motor pumps with U communication module

Code	Type	EEI	Fitting length [mm]	Pipe connection	PN	P _{max} [W]
979528443	NMT SMART II U 32/40 F220	≤ 0,18	220	DN32	PN6/10	70
979528444	NMT SMART II U 32/60 F220	≤ 0,18	220	DN32	PN6/10	100
979528445	NMT SMART II U 32/80 F220	≤ 0,18	220	DN32	PN6/10	145
979528446	NMT SMART II U 32/100 F220	≤ 0,18	220	DN32	PN6/10	160
979528447	NMT SMART II U 32/120 F220	≤ 0,18	220	DN32	PN6/10	160
979528448	NMT SMART II U 40/40 F220	≤ 0,18	220	DN40	PN6/10	70
979528449	NMT SMART II U 40/60 F220	≤ 0,18	220	DN40	PN6/10	100
979528450	NMT SMART II U 40/80 F220	≤ 0,18	220	DN40	PN6/10	145
979528451	NMT SMART II U 40/100 F220	≤ 0,18	220	DN40	PN6/10	160
979528452	NMT SMART II U 40/120 F220	≤ 0,18	220	DN40	PN6/10	160
979528453	NMT SMART II U 50/40 F240	≤ 0,18	240	DN50	PN6/10	70
979528454	NMT SMART II U 50/60 F240	≤ 0,18	240	DN50	PN6/10	100
979528455	NMT SMART II U 50/80 F240	≤ 0,18	240	DN50	PN6/10	145
979528456	NMT SMART II U 50/100 F240	≤ 0,18	240	DN50	PN6/10	160
979528457	NMT SMART II U 50/120 F240	≤ 0,18	240	DN50	PN6/10	160

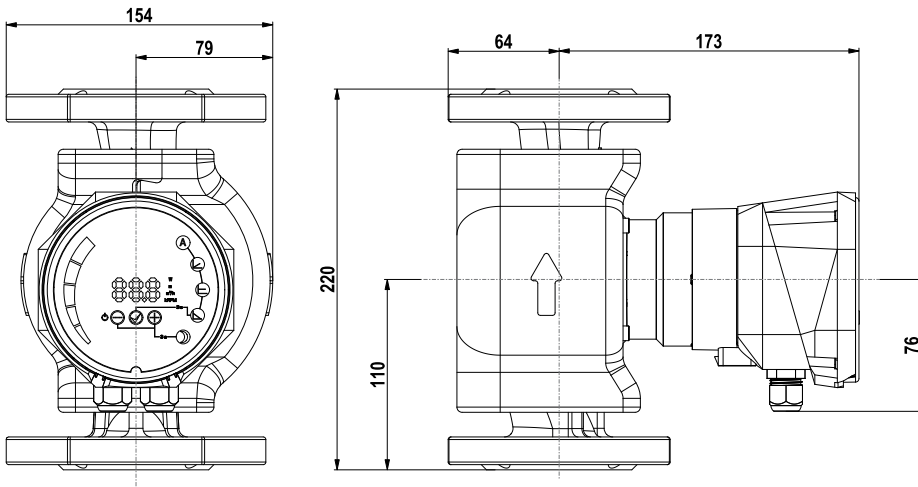
NMT SMART II C F - Flanged single motor pumps with C communication module

Code	Type	EEl	Fitting length [mm]	Pipe connection	PN	P _{max} [W]
979528468	NMT SMART II C 32/40 F220	≤ 0,18	220	DN32	PN6/10	70
979528469	NMT SMART II C 32/60 F220	≤ 0,18	220	DN32	PN6/10	100
979528470	NMT SMART II C 32/80 F220	≤ 0,18	220	DN32	PN6/10	145
979528471	NMT SMART II C 32/100 F220	≤ 0,18	220	DN32	PN6/10	160
979528472	NMT SMART II C 32/120 F220	≤ 0,18	220	DN32	PN6/10	160
979528473	NMT SMART II C 40/40 F220	≤ 0,18	220	DN40	PN6/10	70
979528474	NMT SMART II C 40/60 F220	≤ 0,18	220	DN40	PN6/10	100
979528475	NMT SMART II C 40/80 F220	≤ 0,18	220	DN40	PN6/10	145
979528476	NMT SMART II C 40/100 F220	≤ 0,18	220	DN40	PN6/10	160
979528477	NMT SMART II C 40/120 F220	≤ 0,18	220	DN40	PN6/10	160
979528478	NMT SMART II C 50/40 F240	≤ 0,18	240	DN50	PN6/10	70
979528479	NMT SMART II C 50/60 F240	≤ 0,18	240	DN50	PN6/10	100
979528480	NMT SMART II C 50/80 F240	≤ 0,18	240	DN50	PN6/10	145
979528481	NMT SMART II C 50/100 F240	≤ 0,18	240	DN50	PN6/10	160
979528482	NMT SMART II C 50/120 F240	≤ 0,18	240	DN50	PN6/10	160

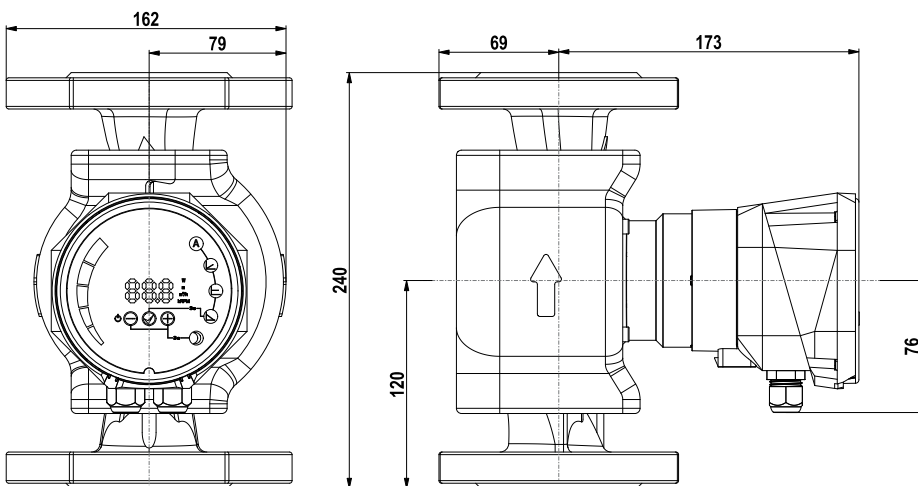
Dimensions



NMT SMART II X 32/XX-F220



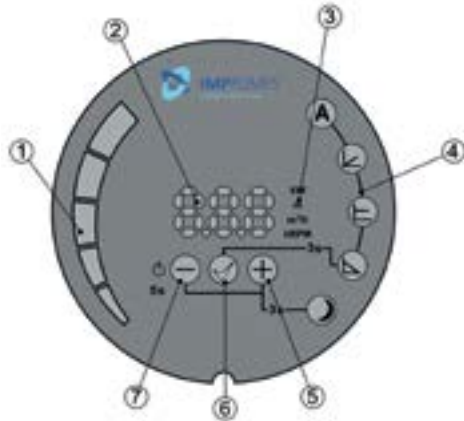
NMT SMART II X 40/XX-F220



NMT SMART II X 50/XX-F240

DISPLAY OPERATION

With the use of the display panel, you can control and overview pump modes, on/off control, pump parameters and errors.



1. Bar graph display of pump parameters
2. Numeric display of values
3. Display of selected parameter
4. Display of selected mode
5. Selection key
6. Confirmation key
7. Selection key

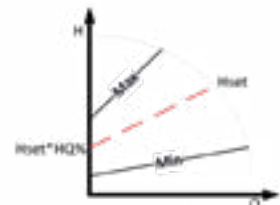
The pump can operate in 5 different modes. We can set the pump in the most appropriate mode, depending on the system where the pump operates.

Automatic mode

In automatic mode the pump automatically sets the operating pressure, depending on the hydraulic system. By doing so, the pump finds the optimal operating position. This mode is recommended in most systems.

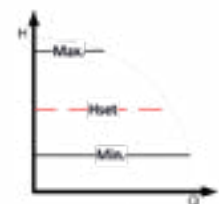
Proportional pressure

The pump maintains the pressure with relation to the current flow. The pressure is equal to the set pressure (H_{set} on the drawing) at maximum power; at 0 flow it is equal to H_Q % (default 50%, H_Q % can be set on the pump webpage) of the set pressure. In between, the pressure changes linearly, relative to the flow. In regulated mode we can only set the pump pressure (H_{set} on the drawing).



Constant pressure

The pump maintains the currently set pressure (H_{set} on the drawing), from 0 flow to maximum power, where the pressure begins to drop. At constant pressure, we can only set the pressure (H_{set} on the drawing) which the pump will maintain.



Constant speed

The pump operates with the currently set speed (RPM_{set} on the drawing). In the unregulated mode, we can only set the speed at which the pump will operate.



Night mode

Night mode can be activated in combination with any of the operating modes listed above, and allows the circulator to operate at a minimum curve (therefore with very low consumption) when it detects a decrease in liquid temperature of 15-20 °C. When temperature rises, it automatically returns to normal operating curve (according to the selected mode).

***THE HONEST PRODUCT
FOR THE HONEST PRICE***

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