

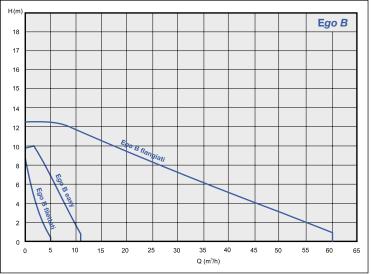
#### THREADED/FLANGED CIRCULATORS

Ego B - Ego B easy - Ego B slim









High performance wet rotor circulation pump suitables for sanitary plants with threaded or flanged connection.

Ego B having bronze pump body and a permanent magnet motor, suitable for sanitary plants.

#### **IMPIEGHI**

- Small sanitary plants
- Medium and big sanitary systems

#### **FEATURES**

- Built-in frequency converter
- Numeric and graphical display for easy setup and visualisation of parameters
- Automatic venting function
- · Built-in overload safety device
- High input torque (with consequent automatic release of the rotor)
- Possibility of four regulation modes (automatic, constant speed, variable  $\Delta p$ , constant  $\Delta p$ ) and Night-time mode\*\*
- Additional functions already integrated with electronic board, as remote control (ON/OFF) or output relay\*\*
- \* Only for Ego B easy and Ego B flanged models
- \*\* By adding module C for Ego B easy models; already included for Ego B flanged

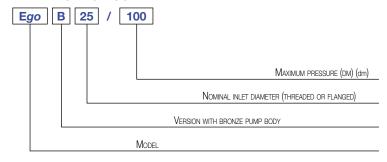
#### **PUMP TECHNICAL DATA**

- Liquid temperature: +5°C ÷ +65°C
- Room temperature: 0 ÷ +40 °C
- Relative air humidity: ≤ 95%
- Allowed fluids: clean, not aggressive and not flammable, free of solid particles or fibres
- Maximum pressure: 10 bar
- Minimum suction pressure:
  - 0,05 bar a 50 °C
- Threaded inlets: G1½ (in accordance with ISO 228)
- Flanged inlets: from DN 40 to DN 65
- Protection degree: IP44

#### **MOTOR TECHNICAL DATA**

- Type: synchronous with permanent magnets
- Motor speed: variable
- Supply voltage: 1~230V
- Frequency: 50/60 Hz
- Insulation class: F

#### **IDENTIFICATION CODE**



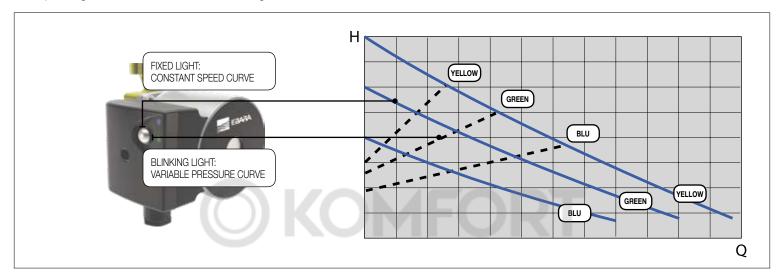


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#### **OPERATING MODES**

Two operating modes that can be selected using the LED button located on terminal box:



#### • ΔP-v Proportional pressure (factory setting)

The circulators of this range can work in variable pressure **mode on 3 preset curves.** When this operating mode is enabled **the LED button blinks**, with a frequency that varies according to instant flow rate. **The colour of the LED identifies the selected curve** ("blue" indicates the lowest curve, "green" the intermediate curve, while "yellow" indicates the highest curve); to switch from one curve to another just press the button briefly.

From variable pressure modes (LED blinking) <u>you can switch to constant speed mode (LED light steadily lit) keeping the LED button pressed for at least 5 seconds.</u>

#### Constant speed

The circulators of this range can work at constant speed **on 3 preset curves.** In this case, the pump works as a usual pump without regulation and the power consumption remains constant. When this mode is active **the LED remains steadily lit;** in this case the colour of the LED **indicates the selected curve** ("blue" the lowest curve, "green" the intermediate curve, and "yellow" the highest curve). To switch from one curve to another, briefly press the button to return to variable pressure mode, select the desired curve (indicated by the colour of the LED) and then press and hold down the button.

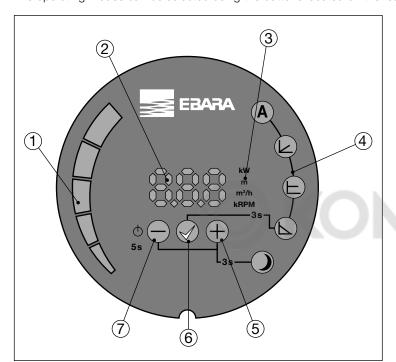


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#### OPERATING MODES - Ego B easy/Ego B flanged

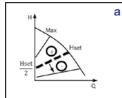
The operating modes can be selected using the buttons located on the rear panel:

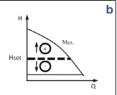


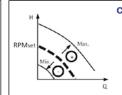
#### **KEY**

- 1 Segment display
- 2 Numeric display
- 3 Display of selected parameter
- 4 Display of selected mode
- 5 Selection key
- 6 Confirmation key
- 7 Selection key

# **1FORT**









#### **AUTO** mode (factory setting)

The circulator automatically adjusts the hydraulic performance depending on the actual requirements of the system, continuously measuring the optimal H/Q point. This operating mode is suitable for most applications and ensures high energy savings.



#### Proportional pressure (ΔP-v) - fig. a

The circulator adjusts the pump head depending on the flow rate, varying the latter linearly from a maximum value (Hset) to a minimum value (equal to  $H_{set}/2$ ). The pressure value (Hset) is set via buttons  $\bigoplus$  and  $\bigoplus$  and is expressed in metres; the minimum value is automatically calculated by the circulator.



#### Constant pressure (\Delta P-c) - fig. b

The circulators maintains the pump head constant when the flow rates varies. The value of the pressure (H<sub>set</sub>) is set via buttons  $\bigoplus$  and  $\bigoplus$  and is expressed in metres.



#### Constant speed - fig. c

The circulators operates according to a constant curve set via buttons (+) and (-) (by selecting the rotation speed in "rpm").



#### Night mode

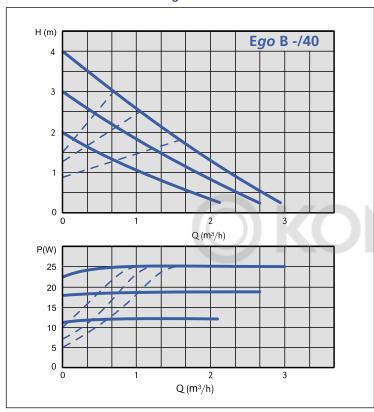
Night mode can be activated in combination with any of the operating modes listed above, and allows the circulator to operate at a minimum curve (therefore with very low consumption) when it detects a decrease in liquid temperature of 15-20 ° C. When temperature rises, it automatically returns to normal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

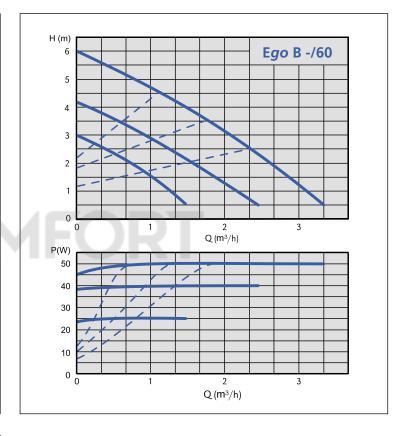


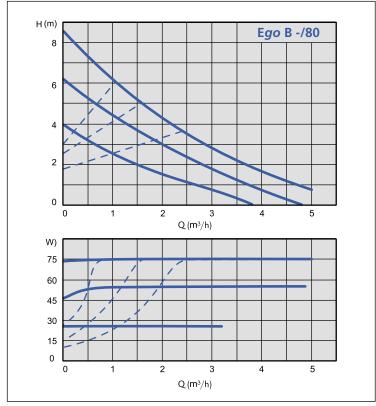
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#### PERFORMANCE CURVES - Ego B filettati





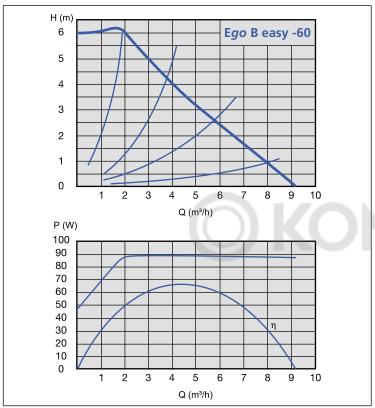


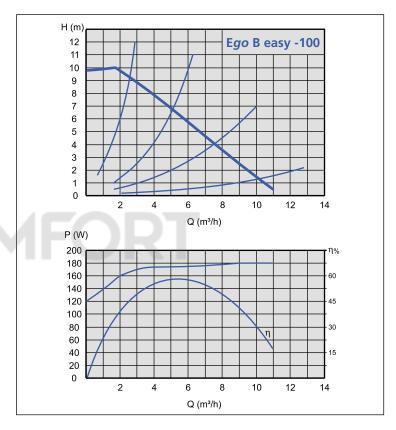


# THREADED/FLANGED CIRCULATORS

Ego B - Ego B easy - Ego B slim

#### PERFORMANCE CURVES - Ego B easy



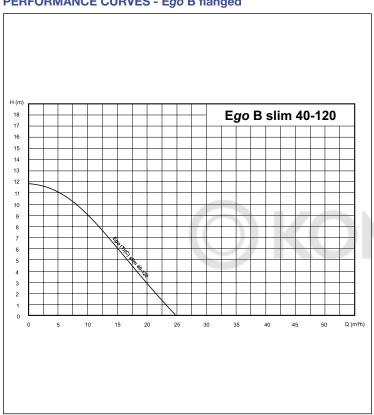


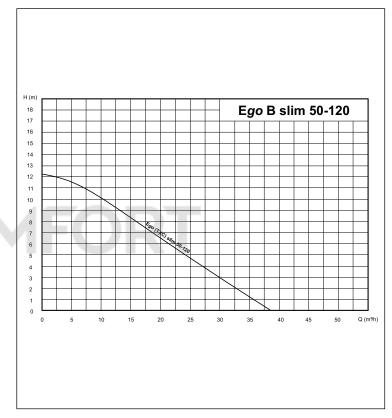


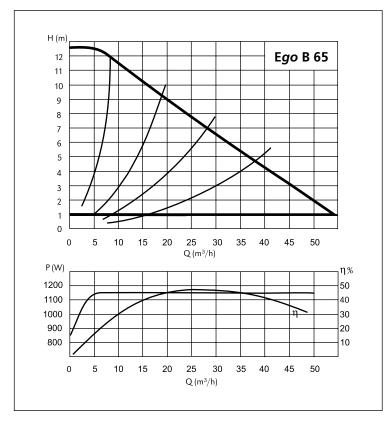
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#### PERFORMANCE CURVES - Ego B flanged





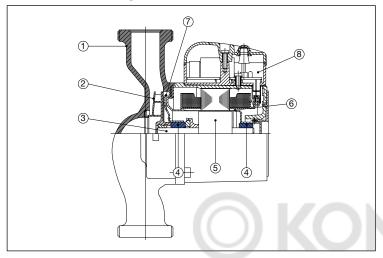




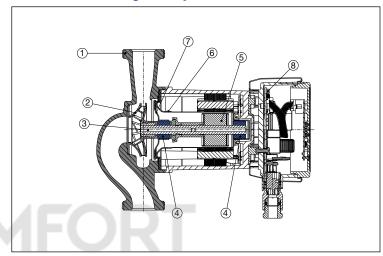
### THREADED/FLANGED CIRCULATORS

Ego B - Ego B easy - Ego B slim

#### SECTIONAL VIEW - Ego B threaded



#### **SECTIONAL VIEW - Ego B easy**



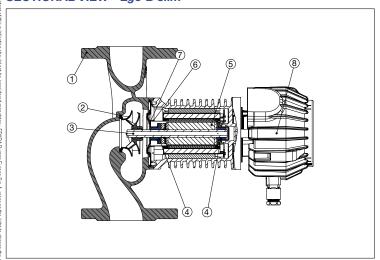
#### **TABLE OF MATERIALS**

Ref.	Part	Material				
1	Pump body	Bronze				
2	Impeller	Technopolymer				
3	Shaft	Ceramic				
4	Bearings	Ceramic				
5	Rotor	Coated in stainless steel				
6	Rotor can	AISI 316 Stainless Steel				
7	Bearing plate	AISI 316 Stainless Steel				
8	Electronic board	-				

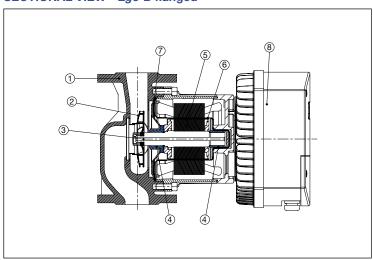
#### **TABLE OF MATERIALS**

Ref.	Part	Material				
1	Pump body	Bronze				
2	Impeller	Technopolymer				
3	Shaft	Stainless steel				
4	Bearings	Graphite				
5	Rotor	Coated in stainless steel				
6	Rotor can	AISI 316 Stainless Steel				
7	Bearing plate	AISI 316 Stainless Steel				
8	Electronic board	-				

### SECTIONAL VIEW - Ego B slim



### SECTIONAL VIEW - Ego B flanged



#### **TABLE OF MATERIALS**

Ref.	Part	Material				
1	Pump body	Bronze				
2	Impeller	Technopolymer				
3	Shaft	Stainless steel				
4	Bearings	Graphite				
5	Rotor	Coated in stainless steel				
6	Rotor can	AISI 316 Stainless Steel				
7	Bearing plate	AISI 316 Stainless Steel				
8	Electronic board	_				

#### **TABLE OF MATERIALS**

Ref.	Part	Material				
1	Pump body	Bronze				
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8	Electronic board	-				



# THREADED/FLANGED CIRCULATORS

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#### **TECHNICAL FEATURES - Ego B threaded**

Model	Pipe connection	Inlet fitting	Power P <sub>1</sub> [W]	Current consumption [A] I <sub>min</sub> - I <sub>max</sub>	Weight [kg]
Ego 25/40-130	G1½	Rp 1"	25	0,05 ÷ 0,2	2,1
Ego 25/60-130	G1½	Rp 1"	50	$0.05 \div 0.4$	2,1
Ego 25/80-130	G1½	Rp 1"	75	0,05 ÷ 0,6	2,1

#### TECHNICAL FEATURES - Ego B easy

Model	Pipe connection	Inlet fitting	Power P <sub>1</sub> [W]	Current consumption [A]	Weight [kg]	
Ego easy 25-80	G1"½	Rp 1"	140	0,1 ÷ 1,15	4,0	
Ego easy 32-80	G2"	Rp 1"1/4	140	0,1 ÷ 1,15	4,1	
Ego easy 25-100	G1"½	Řp 1"	180	0,1 ÷ 1,5	4,0	
Fao easy 32-100	G2"	Bp 1"1/4	180	0.1 ÷ 1.5	4.1	

# TECHNICAL FEATURES - Ego B flangiaed/Ego B slim

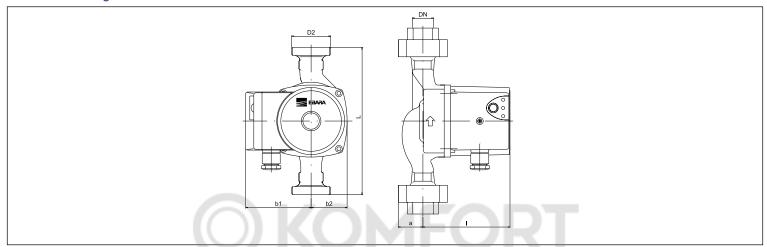
Model	Pipe connection	Power P <sub>1</sub> [W]	Current consumption [A] I <sub>min</sub> - I <sub>max</sub>	Weight [kg]	
Ego B slim 40-120	DN40	480	2,3	12,5	
Ego B slim 50-120	DN50	1100	4,8	16,0	
Ego R 65	DN65	1100	18	36.0	



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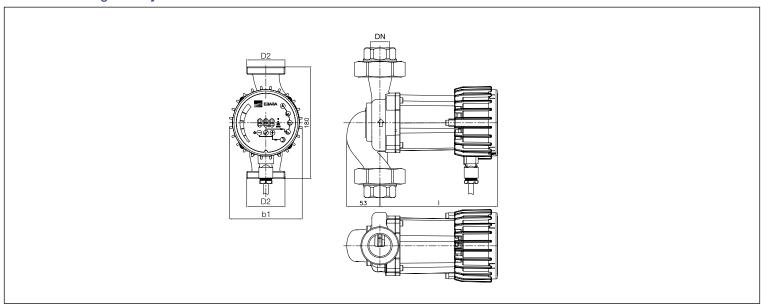
#### **DIMENSIONS - Ego B threaded**



#### TABLE OF DIMENSIONS - Ego B threaded

Model	Dimensions [mm]										
Wodei	L	DN	b1	b2	I	a	D2				
Ego B 25/40-130	130	25	80	48	108	32	1"1/2				
Ego B 25/60-130	130	25	80	48	108	32	1"½				
Ego B 25/80-130	130	25	80	48	108	32	1"½				

#### **DIMENSIONS - Ego B easy**



#### TABLE OF DIMENSIONS - Ego B easy

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2	Model	Dimensions [mm]											
	Model	h	DN	b1	1	а	D1	D2	D3	D4	<b>D</b> 5	n. of holes	
	Ego easy 25-80	180	25	117	190 (222)*	-	-	1"1/2	-	-	-	-	
	Ego easy 32-80	180	32	117	190 (222)*	-	-	2"	-	-	-	-	
	Ego easy 25-100	180	25	117	190 (222)*	-	-	1"1/2	-	-	-	-	
	Ego easy 32-100	180	32	117	190 (222)*	-	-	2"	-	-	-	-	

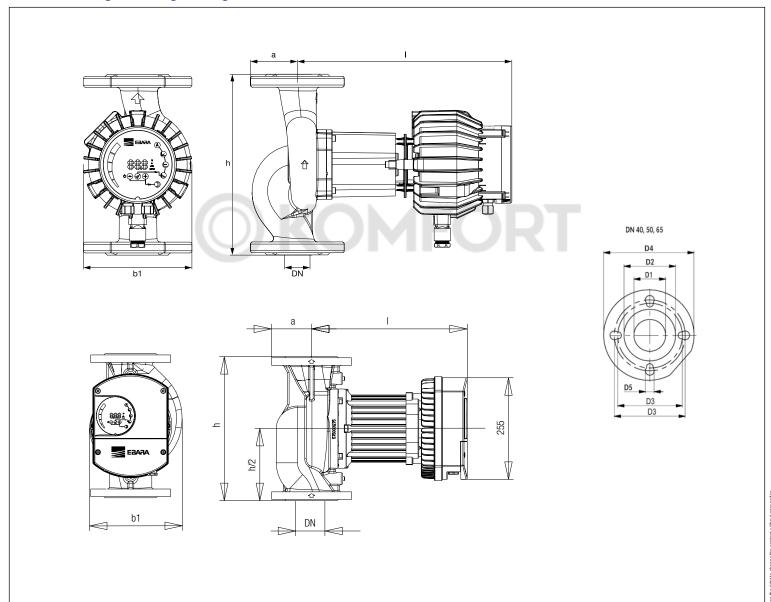
<sup>\*</sup> Dimensions in bracket are referred to Ego slim with communication module



# THREADED/FLANGED CIRCULATORS

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#### DIMENSIONS - Ego B slim/Ego B flanged



### TABLE OF DIMENSIONS - Ego B slim/Ego B flanged

Model		Dimensions [mm]											
	DN	b1	- 1	h	а	D1	D2	D3	D4	<b>D</b> 5	n. of holes		
Ego slim 40-120	40	150	265	250	65	40	90	110/110	150	14/19	4		
Ego slim 50-120	50	167	301	280	72	50	98	110/125	165	14/19	4		
Ego B 65	65	222	369	340	80	65	110	130/145	185	14/19	4		