

Centrifugal Pump

Multi Eco

Type Series Booklet



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Type Series Booklet Multi Eco

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Domestic Water Supply System

Water Supply Pumps

Multi Eco



Fluids handled

- Clean to turbid water not containing aggressive, abrasive or solid substances
- River water, lake water and groundwater

Main applications

- Spray irrigation systems
- General irrigation systems
- Rainwater harvesting
- Washing plants
- Water supply systems

Operating data

Table 1: Operating properties

Characteristic		Value
Flow rate	Q [m ³ /h]	≤ 8
	Q [l/s]	≤ 2,2
Head	H [m]	≤ 54
Fluid temperature	T [°C]	≤ +50 for continuous duty
		≤ +70 for 10 minutes
Operating pressure	p _a [bar]	≤ 10 or ≤ 6 depending on the size
Suction lift	H _s [m]	≤ 8

Design details

Design

- Centrifugal pump
- Close-coupled design
- Multistage
- Self-priming

Drive

Single-phase AC motor:

- Range of rated voltage: 220 - 240 V
- Frequency 50 Hz
- Thermal overload protection

Three-phase motor:

- Range of rated voltage: 380 - 415 V
- Frequency 50 Hz
- Enclosure IP44
- Thermal class F

Bearings

- Deep groove ball bearings
- Grease-lubricated for life

Designation

Example: Multi Eco 35 E

Table 2: Designation key

Code	Description	
Multi Eco	Type series	
35	Size	
E	D	Three-phase asynchronous motor
	E	Single-phase AC motor
	P	Portable model

Materials

Table 3: Overview of available materials

Part No.	Description	Material
101	Pump casing	Grey cast iron with anti-corrosive coating
160	Discharge cover	Grey cast iron with anti-corrosive coating
230	Impeller/stage casing	Noryl
109	Shroud	Stainless steel
210	Shaft	Chrome steel
801	Motor housing	Aluminium

Product benefits

- Reliable, sturdy pump installation thanks to corrosion-protected pump casing with stainless steel jacket
- Automatic and quick priming once the pump casing has been filled. Suction lift up to 8 m thanks to self-priming design (KSB patent).
- Energy-efficient low-noise operation thanks to wear-resistant multistage hydraulic system with optimised efficiency

Product information

Product information as per Regulation No. 1907/2006 (REACH)

For information as per chemicals Regulation (EC) No. 1907/2006 (REACH), see <https://www.ksb.com/ksb-en/About-KSB/Corporate-responsibility/reach/>.

Certifications

Table 4: Overview

Label	Effective in:	Comment
	France	Approved in accordance with the French drinking water regulation

Technical data

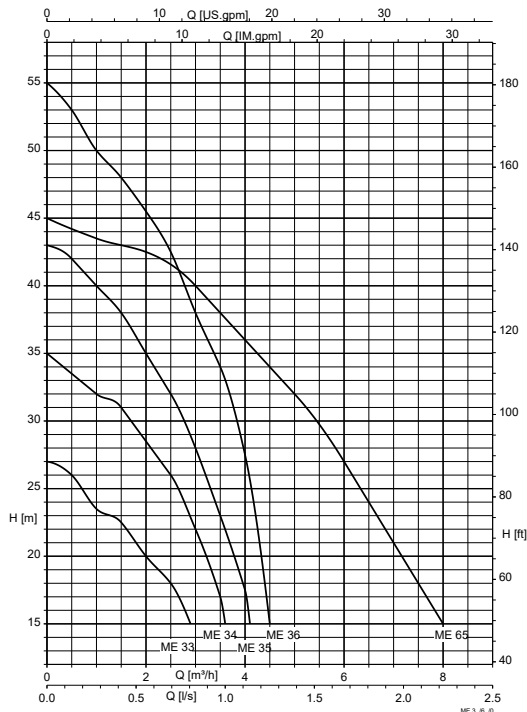
Multi Eco

Table 5: Selection table for 2800 [rpm]

Size	Number of stages	Connection		p _d [bar]	P ₁ [kW]	I _N			Power cable		Mat. No.	[kg]
		Suction side	Discharge side			1~230 V	3~230 V	3~400 V	H07RN-F			
						[A]	[A]	[A]	[m]	[mm ²]		
33 P	3	G 1	G 1	6	0,55	2,7	-	-	1,5	3 × 1	40982844	11
34 P	4	G 1	G 1	6	0,66	3,1	-	-	1,5	3 × 1	40982845	11
35 P	5	G 1	G 1	10	0,80	3,7	-	-	1,5	3 × 1	40982846	11
36 P	6	G 1	G 1	10	1,10	5,5	-	-	1,5	3 × 1	40982847	16
65 P	5	G 1 1/4	G 1	10	1,30	6,1	-	-	1,5	3 × 1	40982848	13
33 E	3	G 1	G 1	6	0,55	2,7	-	-	-	-	40982839	11
34 E	4	G 1	G 1	6	0,66	3,1	-	-	-	-	40982840	11
35 E	5	G 1	G 1	10	0,80	3,7	-	-	-	-	40982841	12
36 E	6	G 1	G 1	10	1,10	5,5	-	-	-	-	40982842	15
65 E	5	G 1 1/4	G 1	10	1,30	6,1	-	-	-	-	40982843	16
33 D	3	G 1	G 1	6	0,55	-	2,1	1,2	-	-	48242852	11,2
34 D	4	G 1	G 1	6	0,66	-	2,3	1,3	-	-	48242853	12,8
35 D	5	G 1	G 1	10	0,80	-	2,8	1,6	-	-	48242854	12,2
36 D	6	G 1	G 1	10	1,00	-	3,1	1,8	-	-	48242855	15,2
65 D	5	G 1 1/4	G 1	10	1,10	-	3,5	2,0	-	-	48242856	15,2

Characteristic curve

Multi Eco 33/34/35/36/65; n = 2800 rpm



The discharge head is the sum of suction lift + pressure head + friction losses in suction and discharge lines + required tap pressure. The flow rate depends on the relevant discharge head. Maximum suction lift for all pump sizes: approx. 8 m.

Dimensions and connections

Multi Eco

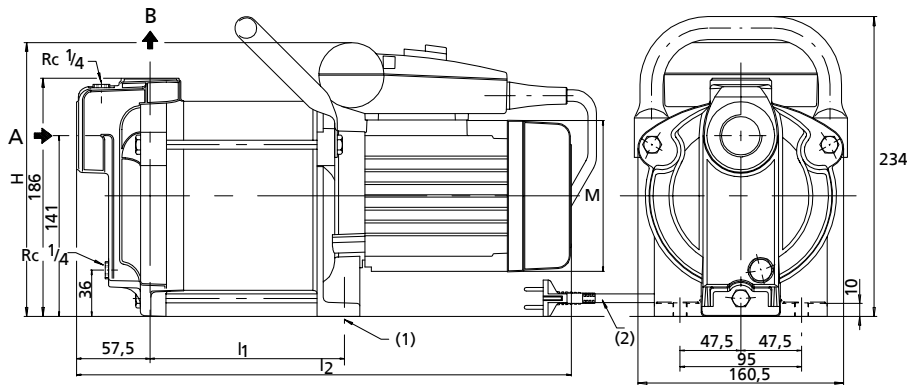


Fig. 1: Dimensions of Multi Eco P [mm]

A	Suction nozzle	(1)	2 holes (8 mm in diameter)
B	Discharge nozzle	(2)	Length 1.5 m

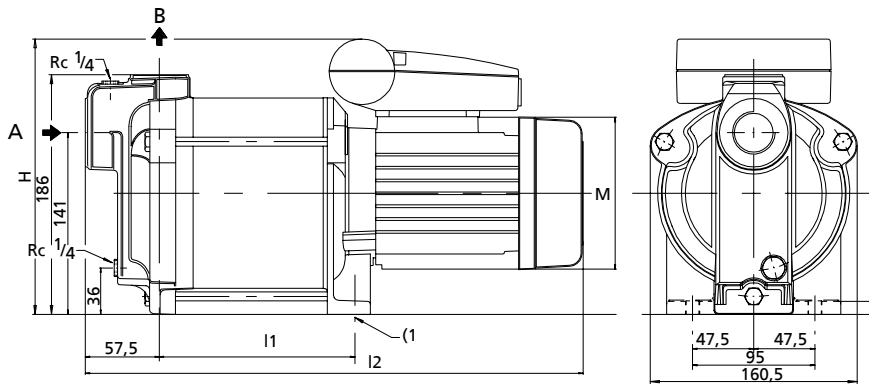









Fig. 2: Dimensions of Multi Eco E / D [mm]

A	Suction nozzle	(1)	2 holes (8 mm in diameter)
B	Discharge nozzle	(2)	Length 1.5 m


Table 6: Dimensions

Size	Connection		l ₁ [mm]	l ₂ [mm]	H [mm]	M [mm]
	A (suction nozzle)	B (discharge nozzle)				
33	G 1	G 1	151,5	387	215	118
34	G 1	G 1	151,5	387	215	118
35	G 1	G 1	180	415	215	118
36	G 1	G 1	208,5	467	230	140
65	G 1 1/4	G 1	208,5	467	230	140



Accessories
Pump accessories

	Description	Connection/ length	Mat. No.	[kg]
		[m]		
	Connection part made of brass for Controlmatic	Rp 1 / G 1	39019415	0,2
		Rp 1 1/4 / G 1	39019530	0,2
	Suction strainer with foot valve, PVC (for pipe of DN 25)	G 1	40980710	0,2
	Suction hose kit, complete with suction strainer and spring-loaded lift check valve, 7 m	G 1	40980203	1,5
	Float switch with shockproof plug Function: circuit closed in upper float position (NO contact) Float switch housing: polypropylene Fluid temperature: 70 °C max. Power cable: H07RN-F3G1	3	11037749	1,1
		5	11037750	1,3
	Float switch with shockproof plug Function: circuit open in upper float position (normally closed contact) Float switch housing: polypropylene Fluid temperature: 70 °C max. Power cable: H07RN-F3G1	3	11037759	0,6
		5	11037760	0,9
	Weight for float switch not suitable for drinking water applications	-	01076688	0,3
	Anti-vibration pump bracket fits all Multi Eco/Multi Eco-Pro	-	18040802	1,6

Control unit / switchgear accessories

	Description	Mat. No.	[kg]
	Safety switch STECKMAT (1~230 V) Trips in approx. 0.03 seconds, from approx. 0.03 A	00534217	0,5

Automatic control units
Table 7: Overview of automatic control units

	Description	Mat. No.	[kg]
	Cervomatic EDP.2 automatic control unit	01185581	2,5
	Controlmatic E automatic control unit	90053395	1,3



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