

Centrifugal Pump

MultiEco

Type Series Booklet



Legal information/Copyright

Type Series Booklet MultiEco

All rights reserved. The contents provided herein must neither be distributed, copied, reproduced, edited or processed for any other purpose, nor otherwise transmitted, published or made available to a third party without the manufacturer's express written consent.

Subject to technical modification without prior notice.

© KSB SE & Co. KGaA, Frankenthal 2024-01-08

Contents

Domestic Water Supply System.....	4
Water Supply Pumps.....	4
MultiEco.....	4
Fluids handled	4
Main applications.....	4
Operating data.....	4
Design details.....	4
Designation	5
Materials.....	5
Product benefits.....	5
Product information	5
Technical data	6
Characteristic curve.....	6
Dimensions and connections	7
Accessories.....	8

Domestic Water Supply System

Water Supply Pumps

MultiEco



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-packed bearings sealed for life

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 [m³/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 _d [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

Designation

Example: MultiEco 35 E

Table 2: Designation key

Code	Description	
MultiEco	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 European chemicals regulation (EC) No. 1907/2006 (REACH) see <https://www.ksb.com/en-global/company/corporate-responsibility/reach>.

Technical data

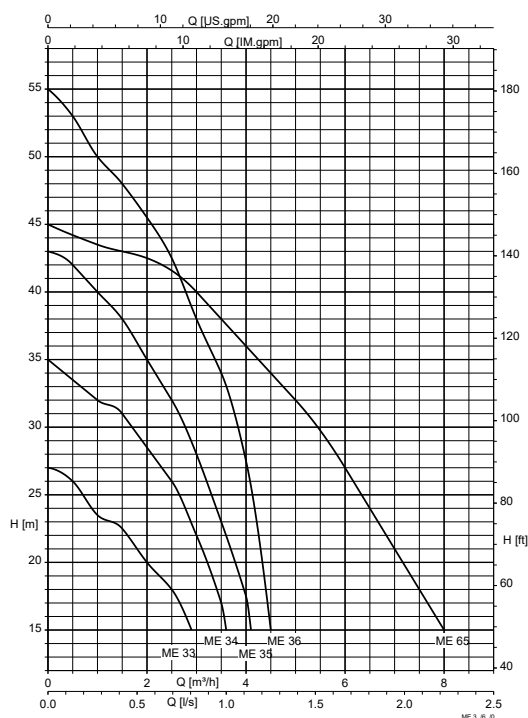
MultiEco

Table 4: Selection table for 2800 [rpm]

Size	Number of stages	Connection		p _d	P ₁	I _N			Power cable		Mat. No.	[kg]
		Suc-tion side	Dis-charge side			1~230 V	3~230 V	3~400 V	H07RN-F			
				[bar]	[kW]	[A]	[A]	[A]	[m]	[mm ²]		
33 P	3	G 1	G 1	6	0,53	2,5	-	-	1,5	3 × 1	05216869	11
34 P	4	G 1	G 1	6	0,64	3,0	-	-	1,5	3 × 1	05216413	11
35 P	5	G 1	G 1	10	0,81	3,7	-	-	1,5	3 × 1	05216847	11
36 P	6	G 1	G 1	10	1,03	4,8	-	-	1,5	3 × 1	05216849	16
65 P	5	G 1 1/4	G 1	10	1,22	5,6	-	-	1,5	3 × 1	05216861	13
33 E	3	G 1	G 1	6	0,53	2,5	-	-	-	-	05216397	11
34 E	4	G 1	G 1	6	0,64	3,0	-	-	-	-	05216398	11
35 E	5	G 1	G 1	10	0,81	3,7	-	-	-	-	05216846	12
36 E	6	G 1	G 1	10	1,03	4,8	-	-	-	-	05216848	15
65 E	5	G 1 1/4	G 1	10	1,22	5,6	-	-	-	-	05216860	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

MultiEco 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

MultiEco

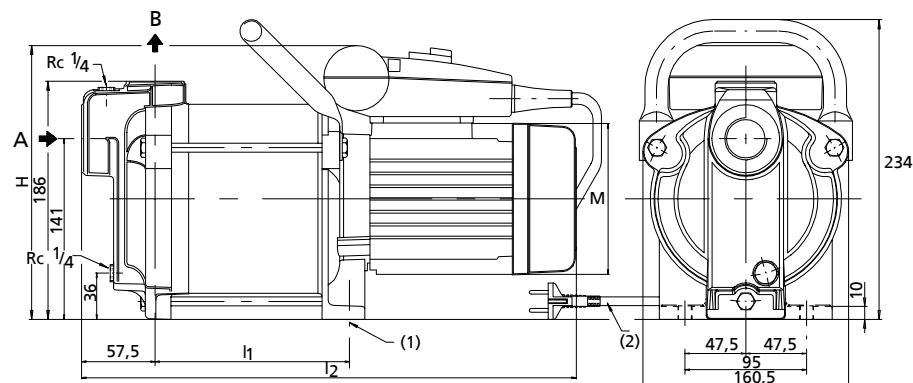


Fig. 1: MultiEco P dimensions [mm]

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

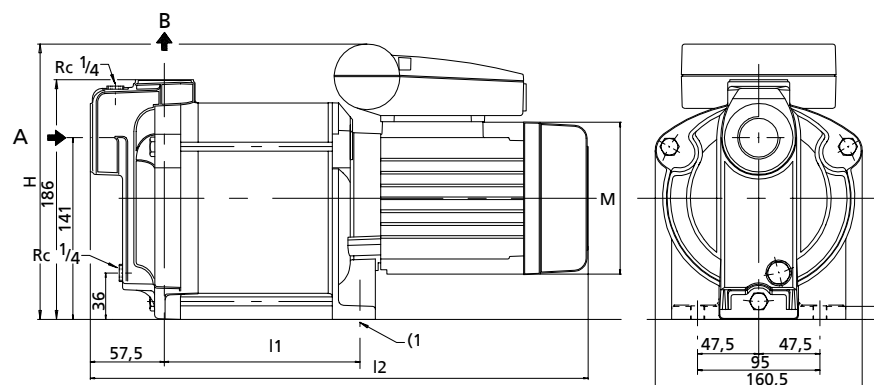


Fig. 2: MultiEco E / D dimensions [mm]

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

Table 5: Dimensions

Size	Connection		l ₁ [mm]	l ₂ [mm]	H [mm]	M [mm]
	A (suction nozzle)	B (discharge nozzle)				
33 P	G 1	G 1	151,5	387	215	118
34 P	G 1	G 1	151,5	387	215	118
35 P	G 1	G 1	180	419	215	118
36 P	G 1	G 1	208,5	478	230	140
65 P	G 1 1/4	G 1	208,5	478	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 MultiEco / MultiEco 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 6: 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



KSB SE & Co. KGaA
Johann-Klein-Straße 9 • 67227 Frankenthal (Germany)
Tel. +49 6233 86-0
www.ksb.com