

Centrifugal Pump

Multi Eco

Type Series Booklet



Legal information/Copyright

Type Series Booklet Multi Eco

KSB Aktiengesellschaft

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 KSB's express written consent.

Subject to technical modification without prior notice.

© KSB Aktiengesellschaft Frankenthal 18.10.2012

Domestic Water Supply System

Water Supply Pump

Multi Eco



Fluids handled

Pump for handling clean to turbid water not containing aggressive, abrasive or solid substances.

- River, lake and groundwater

Main applications

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

Operating data

Overview of operating data

Characteristic		Value
Flow rate	Q	Up to 8 m ³ /h (2.22 l/s)
Head	H	Up to 54 m
Temperature of the fluid pumped	t	Up to 50 °C in continuous operation, 70 °C for 10 minutes
Operating pressure	p _d	Up to 6 and/or 10 bar depending on pump size (see table)
Suction lift	H _s	Up to 8 m

Designation

Example: Multi Eco 35 E

Key to the designation

Code	Description
Multi Eco	Type series
33	Size
E	Single-phase AC motor

Design details

Design

Pump

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

Drive

- Single-phase AC motor
- 220 - 240 V / 50 Hz with thermal overload protection
- Three-phase motor
- 380 - 415 V / 50 Hz
- Motor IP 44
- Insulation class F

Bearings

- Deep-groove ball bearings
- Grease-lubricated for life

Materials

Overview of available materials

Component	Material
Pump casing	Cast iron coated with anti-corrosive
Discharge cover	Cast iron coated with anti-corrosive
Impellers/stage casing	Noryl
Jacket	Stainless steel
Shaft	Chrome steel
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 good efficiency

Certification

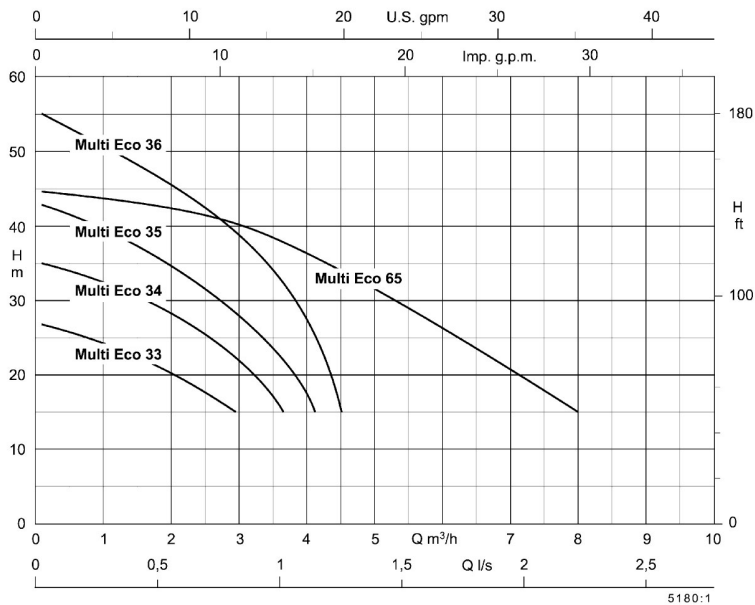
Conformity mark	Effective for:	Comment
	Europe EN 12 050-2	
ACS	France	French drinking water regulations

Technical data

Selection table

Size	Number of stages	Ø		p _d ¹⁾ [bar]	P ₁ [kW]	2800 rpm			Mat. No.	[kg]
		Suction side	Discharge side			1~230 V	3~230 V	3~400 V		
						I _N [A]	I _N [A]	I _N [A]		
Multi Eco 33 P	3	G 1	G 1	6	0,55	2,7	-	-	40982844	11
Multi Eco 34 P	4	G 1	G 1	6	0,66	3,1	-	-	40982845	11
Multi Eco 35 P	5	G 1	G 1	10	0,8	3,7	-	-	40982846	11
Multi Eco 36 P	6	G 1	G 1	10	1,1	5,0	-	-	40982847	14
Multi Eco 65 P	5	G 1 1/4	G 1	10	1,5	6,1	-	-	40982848	14
Multi Eco 33 E	3	G 1	G 1	6	0,55	2,7	-	-	40982839	11
Multi Eco 34 E	4	G 1	G 1	6	0,66	3,1	-	-	40982840	11
Multi Eco 35 E	5	G 1	G 1	10	0,8	3,7	-	-	40982841	11
Multi Eco 36 E	6	G 1	G 1	10	1,1	5,0	-	-	40982842	14
Multi Eco 65 E	5	G 1 1/4	G 1	10	1,3	6,1	-	-	40982843	14
Multi Eco 33 D	3	G 1	G 1	6	0,55	-	1,7	1,0	40982849	11
Multi Eco 34 D	4	G 1	G 1	6	0,66	-	2,0	1,1	40982850	11
Multi Eco 35 D	5	G 1	G 1	10	0,66	-	2,5	1,4	40982851	10.5
Multi Eco 36 D	6	G 1	G 1	10	1,1	-	3,4	1,9	40982852	12
Multi Eco 65 D	5	G 1 1/4	G 1	10	1,3	-	4,0	2,3	40982853	12

Characteristic curves



The discharge head is the sum of suction lift + pressure head + friction losses in suction and discharge lines + required tap pressure.

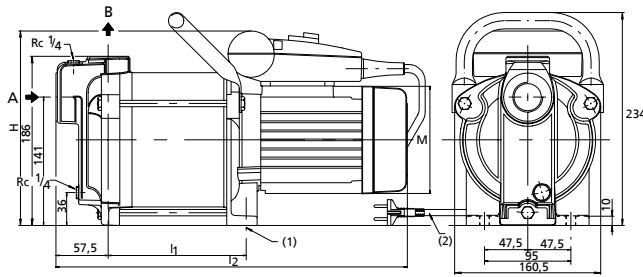
The flow rate depends on the relevant discharge head.

Maximum suction lift for all pump sizes: approx. 8 m.

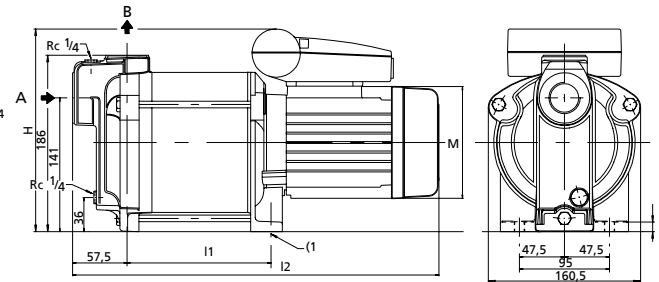
1) p_d = max. pressure at pump discharge nozzle

Dimensions

Multi Eco P



Multi Eco E and D



A	Suction nozzle	(1)	Two holes Ø 8
B	Discharge nozzle	(2)	Length 1.5 m

Dimensions in mm

Multi Eco	Ø A Suction side	Ø B Discharge side	l ₁	l ₂	H	ØM
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 for Multi Eco

Pump accessories

	Description	Connection	Mat. No.	[kg]
	Connection part made of brass for Controlmatic	Rp 1 / G 1 Rp 1 1/4 / G 1	39019415 39019530	0.2 0.2
	Suction strainer with foot valve, PVC (for pipe of DN 25)	G 1 G 1 1/4	40980710 40980711	0.2 0.2
	Suction hose kit, complete with suction strainer and spring-loaded non-return valve, 7 m	G 1 Rp 1 1/4 / G 1	40980203 40980204	1.5 4
	Float switch for filling, with shockproof plug (NC contact), circuit open in upper float position, 230 V AC, 50 Hz, max. 8 A (H 07 RN-F3G1)	3 m 5 m	11037759 11037760	0.6 0.9
	Weight for float switch Not suitable for drinking water applications		01076688	0.3
	Anti-vibration pump mount fits all Multi Eco/Multi Eco-Pro		18040802	1.6

Electrical accessories

	Description	Mat. No.	[kg]
	Safety switch STECKMAT (1~ 230 V) Tripping in approx. 0.03 s even in the event of minor and harmless leakage currents as low as approx. 0.03 A	00534217	0.5

	Description	Mat. No.	[kg]
	Cervomatic EDP.2 control and monitoring unit	01185581	2.5
	Controlmatic E control and monitoring unit	90053395	1.8



KSB Aktiengesellschaft

P.O. Box 1361 • 91253 Pegnitz • Bahnhofplatz 1, 91257 Pegnitz (Germany)

Tel. +49 9241 71-0 • Fax +49 9241 71-1793

www.ksb.com

18.10.2012

5180.5/04-EN