

## Data sheet



Customer pos. no.: PU-ME 64  
Purchase order date: 2009-08-10  
Your P/O no.: B09M0170  
Quantity: 6,000

Number: 9971598635 - 044  
Line: 000900  
Date: 2009-08-26  
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**Etanorm G 065-250 SP**  
Standardpump acc. EN 733

Version no.: 9

### Operating data

Requested flow rate	120.00 m <sup>3</sup> /h	Actual flow rate	120.03 m <sup>3</sup> /h
Requested developed head	62.00 m	Actual developed head	62.03 m
Pumped medium	Water, drinking water / tap water Clean water Materials are not affected by chemical and mech. substances	Efficiency	74.2 %
Fluid temperature	52.0 °C	Power absorbed	26.98 kW
Fluid density	987 kg/m <sup>3</sup>	Pump speed of rotation	2975 rpm
Fluid viscosity	0.54 mm <sup>2</sup> /s	NPSH required	4.82 m
		Permissible operating pressure	16.00 bar.g
		Discharge press.	6.10 bar.g
Suction pressure max.	0.10 bar.g	Max. power on curve	29.12 kW
Suction pressure min.	0.10 bar.g	Min. allow. flow rate	16.92 m <sup>3</sup> /h
NPSH available	9.94 m	Min. allow. mass flow rate	4.64 kg/s
Mass flow rate	32.90 kg/s	Shutoff head	75.92 m

### Design

Pump standard	EN 733	Sealing plan	P1 Gland packing, internal sealing liquid (Na)
Design	Baseplate mounted, long-coupled	A liquid free of solids is assumed.	
Orientation	Horizontal	Seal chamber design	Standard seal chamber with
Suction nominal dia.	DN 80	Contact guard	
Suction nominal pressure	PN 16	Wear ring	Casing wear ring
Suction position	axial	Impeller diameter	229.0 mm
Suction Flange standard	EN 1092-2	Free passage size	13.0 mm
Discharge nominal dia.	DN 65	Direction of rotation from drive	Clockwise
Discharge nominal pressure	PN 16	Silicon free pump assembly	Yes
Pump discharge position	top (0°/360°)	Bearing bracket construction	Standard (normal)
Connection standard discharge	EN 1092-2	Bearing bracket size	WE35
Shaft seal	Gland packing	Bearing seal	Lip seal
Manufacturer	KSB	Bearing type	Anti-friction bearings
Type	RT-P	Lubrication type	Oil
Material code	RT/P	Lubrication monitoring	Oil level sight glass
Shaft seal code	1	Colour	Ultramarine blue (RAL 5002) KSB-blue

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### Driver, accessories

Manufacturer	Flender	Motor size	250M
Coupling type	Eupex NH	Efficiency class	Eff1
Nominal size	140	Frequency	50 Hz
Spacer length	140.0 mm	Operating voltage	400 V
Coupling guard type	Lightweight, not treadproof (ZN79)	Rated power P2	55.00 kW
Guard size	B189	Rated current	93.0 A
Guard material	Galvanised steel ST TZN	Starting current ratio	6.8
Baseplate type	U-beam / folded plate	Insulation class	F to IEC 34-1
Baseplate size	10B	Motor enclosure	IP55
Baseplate fixing	Foundation bolts galvanized steel	Cos phi at 4/4 load	0.90
Driver type	Electric motor	Temperature sensor	3 PTC resistors
Model (make)	KSB	Motor winding	400 / 690 V
Drive supplied by	Standard motor supplied by KSB - mounted by KSB	Number of poles	2
Motor const. type	B3	Operating mode	Delta
		Motor cooling method	Surface cooling
		Motor material	Grey cast iron GG/CAST IRON

### Materials G

Notes		Casing wear ring (502.1)	Grey cast iron GG/CAST IRON
general criteria for a water analysis: pH-value $\geq 7$ ; chloride content (Cl) $\leq 250$ mg/kg. chlorine (Cl2) $\leq 0.6$ mg/kg.		Casing wear ring (502.2)	Grey cast iron GG/CAST IRON
Volute casing (102)	Grey cast iron JL 1040	Shaft protecting sleeve (524)	Chrome steel 1.4122+QT750
Discharge cover (163)	Grey cast iron JL 1040	Stud (902)	Steel 8.8
Shaft (210)	Steel/Tempered steel E335/C45	Screwed plug (903)	Steel ST
Impeller (230)	Grey cast iron JL 1040	Impeller nut (922)	Steel 8
Bearing bracket (330)	Grey cast iron JL 1040	Lockwasher (931)	Stainless steel 1.4301
Joint ring (411)	DPAF Sealing plate asbestos-free		

### Packaging

Packaging for transport	Ship	Packaging for country	Germany
Packaging for storage	Outdoor	Packaging category	B1 Wooden or plywood case, cover provided with polypropylene cellular sheet, outdoor storage up to 3 months

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### Certifications

#### Hydrostatic pressure test with water

Range	Complete pump with shaft seal
Test pressure	21.00 bar.g
Certificate	Inspection cert. 3.1 to EN 10204
Test time	10.0 min

#### Hydraulic performance test

Test participation	Without customer
Acceptance standard	ISO 9906 class 2, annex A
Quantity meas. points Q-H	5

Quantity meas. points NPSH	0
Certificate	Report
Test participation	Without customer
Quantity without customer	6
Quantity with customer	0
Bearing temperature test	No

#### Material tests for Volute casing, pressure cover, impeller (etanorm)

Certificate	Test report 2.2 to EN 10204
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### Order documentation

The following documents will be supplied with the order:

Operating manual  
General arrangement drawing  
Manufacturer's or conformity declaration  
Performance curve  
Inspection reports/ certificates  
Material certificates

Sectional drawing of pump  
Detail drawing mech. seal  
Spare parts list  
Schematic drawing with allowable forces and moments  
Auxiliary connection plan  
Technical data sheet  
Languages German, English

### Address

Engineer

Operator	
No. copies	5 English