

Data sheet



Customer pos. no.: PU XM 85 A/B
Purchase order date: 2009-08-12
Your P/O no.: B09M0172
Quantity: 2,000

Number: 9971599122 - 044
Line: 000400
Date: 2009-08-27
Page: 31 / 78

Etanorm G 040-315 SP
Standardpump acc. EN 733

Version no.: 10

Operating data

Requested flow rate	10.00 m ³ /h	Actual flow rate	10.00 m ³ /h
Requested developed head	25.00 m	Actual developed head	25.00 m
Pumped medium	Water, cooling water closed cooling circuit Materials are not affected by chemical and mech. substances	Efficiency	30.0 %
Fluid temperature	63.0 °C	Power absorbed	2.22 kW
Fluid density	981 kg/m ³	Pump speed of rotation	1435 rpm
Fluid viscosity	0.46 mm ² /s	NPSH required	1.02 m
Suction pressure max.	0.50 bar.g	Permissible operating pressure	16.00 bar.g
Suction pressure min.	0.50 bar.g	Discharge press.	2.91 bar.g
NPSH available	13.23 m	Max. power on curve	2.61 kW
Mass flow rate	2.73 kg/s	Min. allow. flow rate	3.23 m ³ /h
		Min. allow. mass flow rate	0.88 kg/s
		Shutoff head	25.56 m

Execution

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 65	Contact guard	
Suction nominal pressure	PN 16	Wear ring	Casing wear ring
Suction position	axial	Impeller diameter	276.0 mm
Suction Flange standard	EN 1092-2	Direction rotation from drive	Clockwise
Discharge nominal dia.	DN 40	Silicon free pump assembly	Yes
Discharge nominal pressure	PN 16	Bearing bracket construction	Standard (normal)
Pump discharge position	top (0°/360°)	Bearing bracket size	WE35
Flange standard	EN 1092-2	Bearing seal	Lip seal
Shaft seal	Gland packing	Bearing type	Anti-friction bearings
Manufacturer	KSB	Lubrication type	Oil
Type	RT-P	Lubrication monitoring	Constant level oiler
Material code	RT/P	Colour	Ultramarine blue (RAL 5002)
Shaft seal code	1		KSB-blue

Customer pos. no.: PU XM 85 A/B
 Purchase order date: 2009-08-12
 Your P/O no.: B09M0172
 Quantity: 2,000

Number: 9971599122 - 044
 Line: 000400
 Date: 2009-08-27
 Page: 32 / 78

Etanorm G 040-315 SP
 Standardpump acc. EN 733

Version no.: 10

Driver, accessories

Manufacturer	Flender	Motor size	100L
Coupling type	Eupex NH	Efficiency class	Eff1
Nominal size	95	Frequency	50 Hz
Spacer length	100.0 mm	Operating voltage	400 V
Coupling guard type	Lightweight, not treadproof (ZN79)	Rated power P2	3.00 kW
Guard size	A148	Rated current	6.1 A
Guard material	Galvanised steel ST TZN	Starting current ratio	7
Baseplate type	U-beam / folded plate	Insulation class	F to IEC 34-1
Baseplate size	3A	Motor enclosure	IP55
Mounting type	Foundation bolts galvanized steel	Cosphi at 4/4 load	0.81
Driver type	Electric motor	PTC resistor	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	4
Motor const. type	B3	Operating mode	Delta
		Motor cooling method	Surface cooling
		Motor material	Aluminium

Materials G

Volute casing (102)	Grey cast iron JL 1040	Casing wear ring (502.2)	Stainless steel 1.4408
Discharge cover (163)	Grey cast iron JL 1040	Shaft protecting sleeve (524)	Chrome steel 1.4122+QT750
Shaft (210)	Chrome steel 1.4057+QT800	Stud (902)	Steel 8.8
Impeller (230)	Stainless steel 1.4408	Screwed plug (903)	Steel ST
Bearing bracket (330)	Grey cast iron JL 1040	Impeller nut (922)	CrNiMo steel A4
Joint ring (411)	DPAF Sealing plate asbestos-free	Lockwasher (931)	Stainless steel 1.4301
Casing wear ring (502.1)	Grey cast iron GG/CAST IRON		

Packaging

Packaging for transport	Ship	Packaging for country	Iran
Packaging for storage	Outdoor	Packaging category	B2 With desiccants in PE-plastic sheeting, heat-sealed water-proof, in wooden/plywood case, outdoor storage up to 12 months

Certifications

Hydrostatic pressure test with water		Quantity meas. points NPSH	0
Range	Complete pump with shaft seal	Certificate	Report
Test pressure	21.00 bar.g	Test participation	Without customer
Certificate	Inspection cert. 3.1 to EN 10204	Quantity without customer	2
Test time	10.0 min	Quantity with customer	0
Hydraulic performance test		Bearing temperature test	No
Test participation	Without customer	Material tests for Volute casing, pressure cover, impeller (etanorm)	
Acceptance standard	ISO 9906 class 2, annex A	Certificate	Test report 2.2 to EN 10204
Quantity meas. points Q-H	5		

Data sheet



Customer pos. no.: PU XM 85 A/B
Purchase order date: 2009-08-12
Your P/O no.: B09M0172
Quantity: 2,000

Number: 9971599122 - 044
Line: 000400
Date: 2009-08-27
Page: 33 / 78

Etanorm G 040-315 SP
Standardpump acc. EN 733

Version no.: 10

Order documentation

The following documents will be supplied with the order:

General arrangement drawing
Spare parts list
Operating manual
Performance curve
Material certificates
Sectional drawing of pump

Detail drawing mech. seal
Inspection reports/ certificates
Technical data sheet
Schematic drawing with allowable forces and moments
Manufacturer's or conformity declaration
Languages German, English