

EF30.50.09.Ex.2.50B

Grundfos pump 96115116



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<https://www.lenntech.com/grundfos/EFFAM/96115116/EF30-50-09-EX-2-50B.html>

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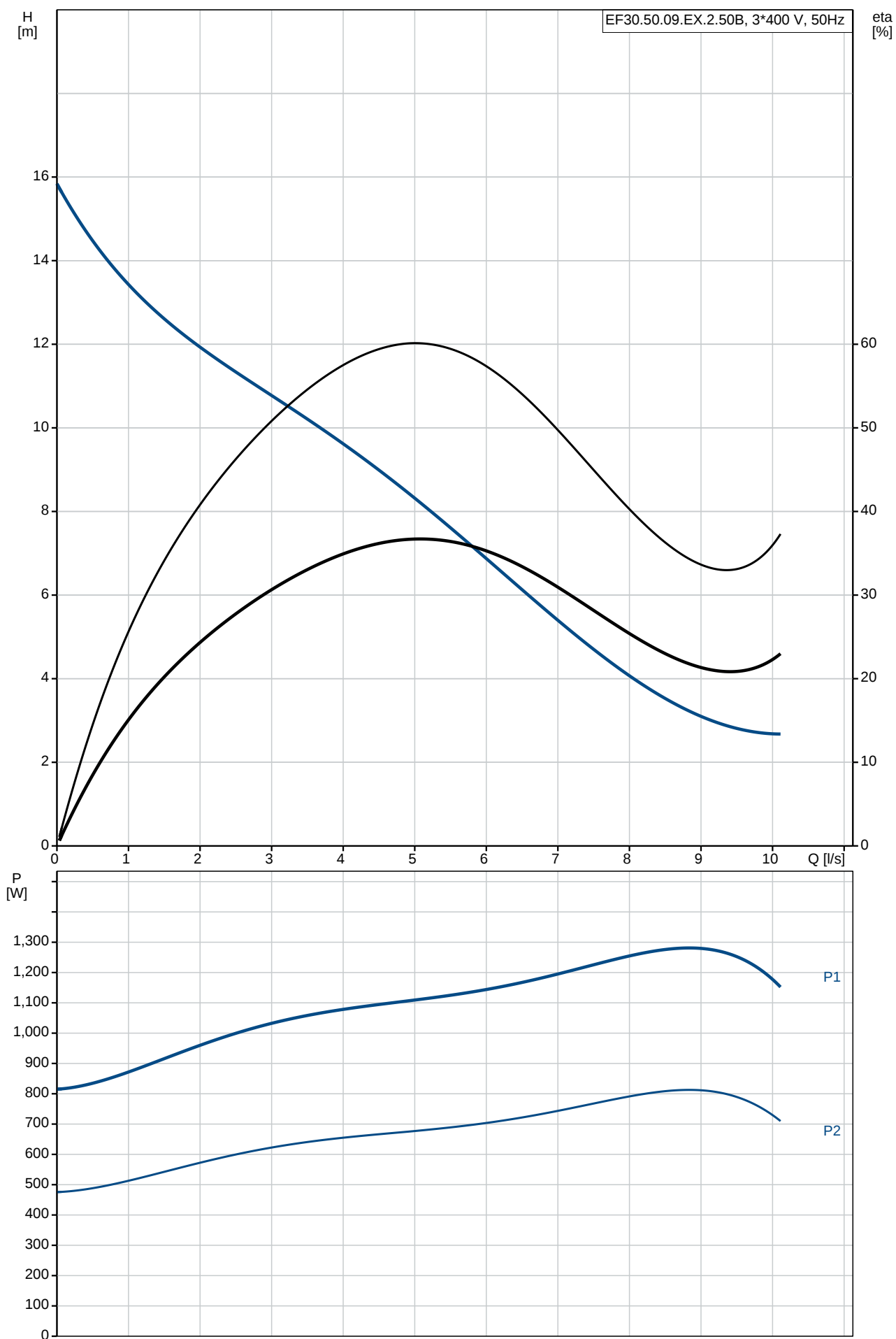
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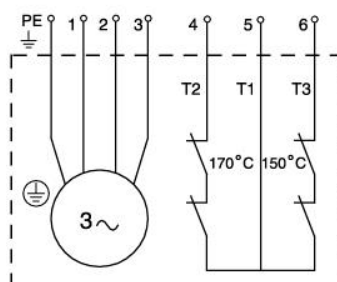
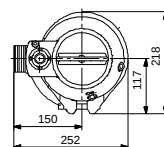
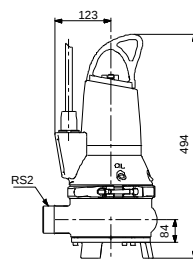
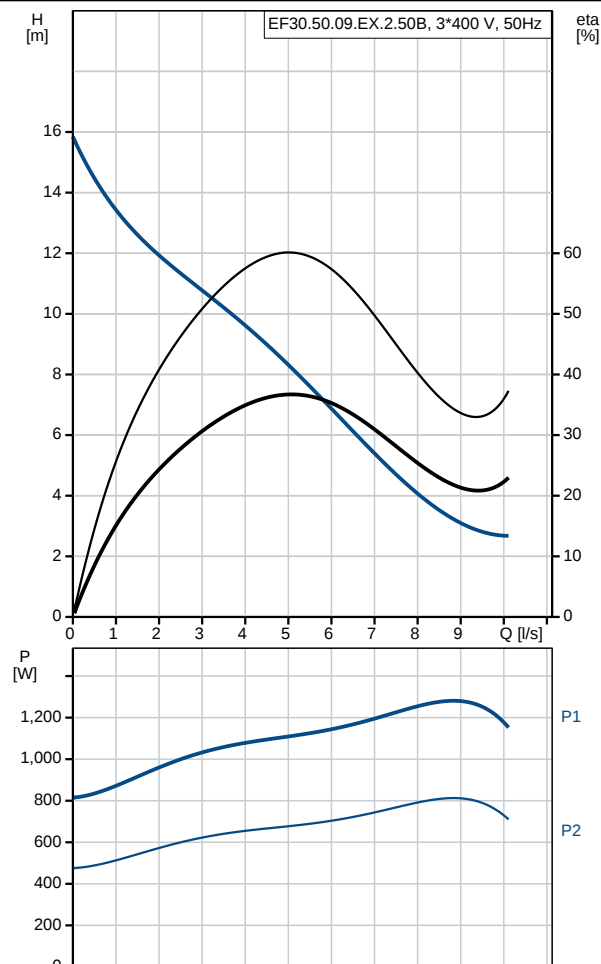
Position	Qty.	Description																										
	1	 Product No.: On request GRUNDFOS EF pump is a portable pump for both domestic and industrial applications. The pump has a single-vane, semi-open impeller for 30 mm free passage and is suitable for pumping • drainage and surface water with small impurities • wastewater with fibres, e.g. from laundries • wastewater without discharge from toilets • wastewater from commercial buildings without discharge from toilets. The compact design makes the pump suitable for both temporary and permanent installation. The pump is a cast iron submersible pump with integrated submersible explosion-proof 3-phase motor. Approvals: LGA, ATEX The pump has an intermediate oil chamber pre-filled with non-toxic special oil. The pump is fitted with a cable plug for easy dismantling. This plug is hermetically sealed with polyurethane to prevent water from penetrating through the cable into the motor. A clamp between pump housing and motor ensures easy and safe dismantling and assembly. Inspection can be done in the field without any special tools. The pump is fitted with a double shaft seal in the unique cartridge design. This makes it easy to replace the shaft seal very quickly in the field without any special tools. It also eliminates the risk of faulty installation. The motor is insulation class F and has long-life, deep-groove, greased-for-life ball bearings. The pump has R 2 discharge port and is ready for installation either free-standing or on an auto-coupling system. Controls: <table><tr><td>Moisture sensor:</td><td>without moisture sensors</td></tr><tr><td>Water-in-oil sensor:</td><td>without water-in-oil sensor</td></tr></table> Liquid: <table><tr><td>Liquid temperature range:</td><td>0 .. 40 °C</td></tr><tr><td>Density:</td><td>998.2 kg/m³</td></tr></table> Technical: <table><tr><td>Type of impeller:</td><td>SEMI OPEN</td></tr><tr><td>Maximum particle size:</td><td>30 mm</td></tr><tr><td>Primary shaft seal:</td><td>SIC/SIC</td></tr><tr><td>Secondary shaft seal:</td><td>LIPSEAL</td></tr><tr><td>Max. hydraulic efficiency:</td><td>59 %</td></tr><tr><td>Approvals on nameplate:</td><td>LGA, ATEX</td></tr><tr><td>Curve tolerance:</td><td>ISO9906:2012 3B2</td></tr></table> Materials: <table><tr><td>Pump housing:</td><td>Cast iron EN-GJL-200</td></tr><tr><td>Impeller:</td><td>Cast iron EN-GJS-500-7</td></tr></table>	Moisture sensor:	without moisture sensors	Water-in-oil sensor:	without water-in-oil sensor	Liquid temperature range:	0 .. 40 °C	Density:	998.2 kg/m³	Type of impeller:	SEMI OPEN	Maximum particle size:	30 mm	Primary shaft seal:	SIC/SIC	Secondary shaft seal:	LIPSEAL	Max. hydraulic efficiency:	59 %	Approvals on nameplate:	LGA, ATEX	Curve tolerance:	ISO9906:2012 3B2	Pump housing:	Cast iron EN-GJL-200	Impeller:	Cast iron EN-GJS-500-7
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Impeller:	Cast iron EN-GJS-500-7																											

Position	Qty.	Description
		Installation: Maximum ambient temperature: 40 °C Maximum operating pressure: 6 bar Pump outlet: R 2 Maximum installation depth: 10 m Auto-coupling: Y Electrical data: Power input - P1: 1.4 kW Rated power - P2: 0.9 kW Mains frequency: 50 Hz Rated voltage: 3 x 400-415 V Voltage tolerance: +6/-10 % Max starts per. hour: 30 Rated current: 2.8/2.8 A Rated current at 3/4 load: 2.5 A Rated current at 1/2 load: 2.1 A Starting current: 21 A Rated current at no load: 1.9 A Cos phi - power factor: 0.76 Cos phi - p.f. at 3/4 load: 0.68 Cos phi - p.f. at 1/2 load: 0.58 Rated speed: 2870 rpm Locked-rotor torque: 11 Nm Breakdown torque: 12 Nm Moment of inertia: 0.0037 kg m² Motor efficiency at full load: 65 % Motor efficiency at 3/4 load: 61 % Motor efficiency at 1/2 load: 58 % Number of poles: 2 Start. method: direct-on-line Enclosure class (IEC 34-5): IP68 Insulation class (IEC 85): F Explosion proof: yes Ex-protection standard: EN50014/EN50018, class EEx d IIB T4 Length of cable: 10 m Cable type: H07RN-F Type of cable plug: NO PLUG Others: Net weight: 38 kg Danish VVS No.: 391293532

On request EF30.50.09.EX.2.50B 50 Hz

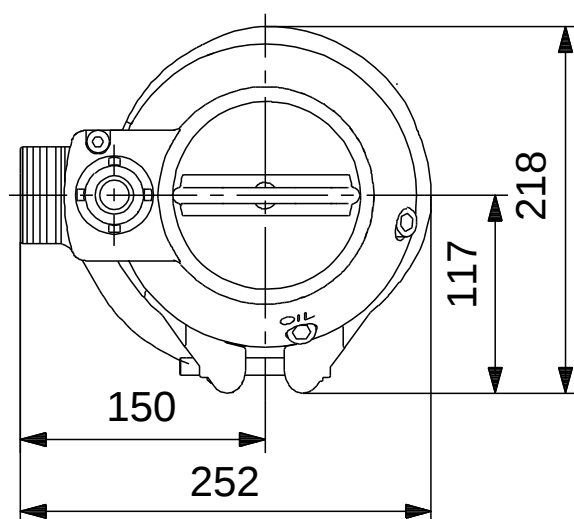
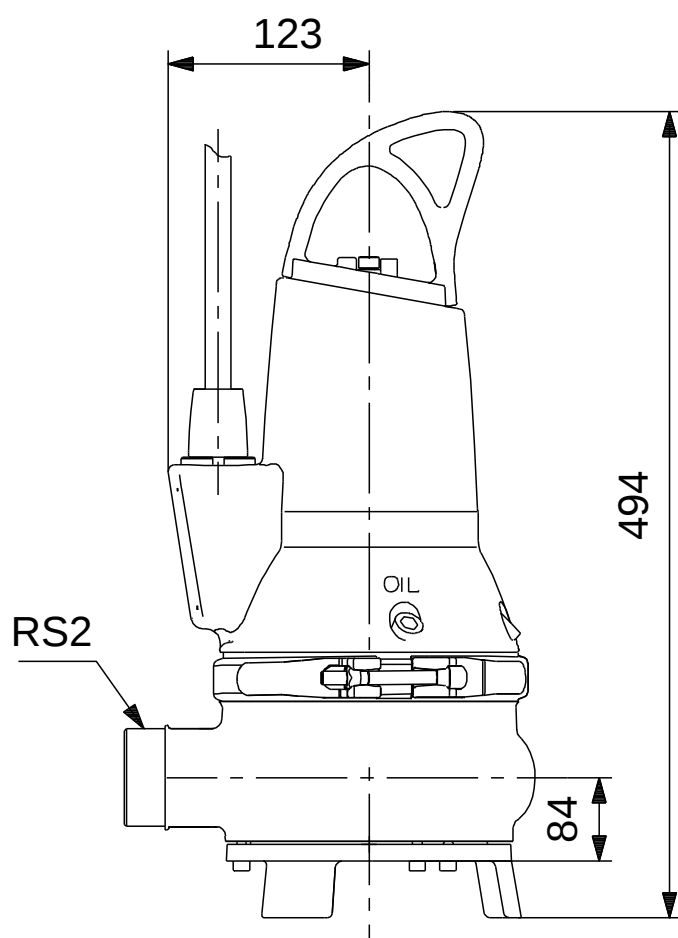


Description	Value
General information:	
Product name:	EF30.50.09.EX.2.50B
Product No:	On request
EAN number:	On request
Technical:	
Max flow:	10.9 l/s
Head max:	16.8 m
Type of impeller:	SEMI OPEN
Maximum particle size:	30 mm
Primary shaft seal:	SIC/SIC
Secondary shaft seal:	LIPSEAL
Max. hydraulic efficiency:	59 %
Approvals on nameplate:	LGA, ATEX
Curve tolerance:	ISO9906:2012 3B2
Materials:	
Pump housing:	Cast iron
	EN-GJL-200
Impeller:	Cast iron
	EN-GJS-500-7
Installation:	
Maximum ambient temperature:	40 °C
Maximum operating pressure:	6 bar
Pump outlet:	R 2
Maximum installation depth:	10 m
Inst dry/wet:	S
Installation:	vertical
Auto-coupling:	Y
Liquid:	
Liquid temperature range:	0 .. 40 °C
Density:	998.2 kg/m ³
Electrical data:	
Power input - P1:	1.4 kW
Rated power - P2:	0.9 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 400-415 V
Voltage tolerance:	+6/-10 %
Max starts per. hour:	30
Rated current:	2.8/2.8 A
Rated current at 3/4 load:	2.5 A
Rated current at 1/2 load:	2.1 A
Starting current:	21 A
Rated current at no load:	1.9 A
Cos phi - power factor:	0.76
Cos phi - p.f. at 3/4 load:	0.68
Cos phi - p.f. at 1/2 load:	0.58
Rated speed:	2870 rpm
Locked-rotor torque:	11 Nm
Breakdown torque:	12 Nm
Moment of inertia:	0.0037 kg m ²
Motor efficiency at full load:	65 %
Motor efficiency at 3/4 load:	61 %
Motor efficiency at 1/2 load:	58 %
Number of poles:	2
Start. method:	direct-on-line
Enclosure class (IEC 34-5):	IP68
Insulation class (IEC 85):	F
Explosion proof:	yes
Ex-protection standard:	EN50014/EN50018, class EEx d IIB T4
Motor protec:	THERMAL SWITCH
Thermal protec:	internal
Length of cable:	10 m
Cable type:	H07RN-F
Type of cable plug:	NO PLUG



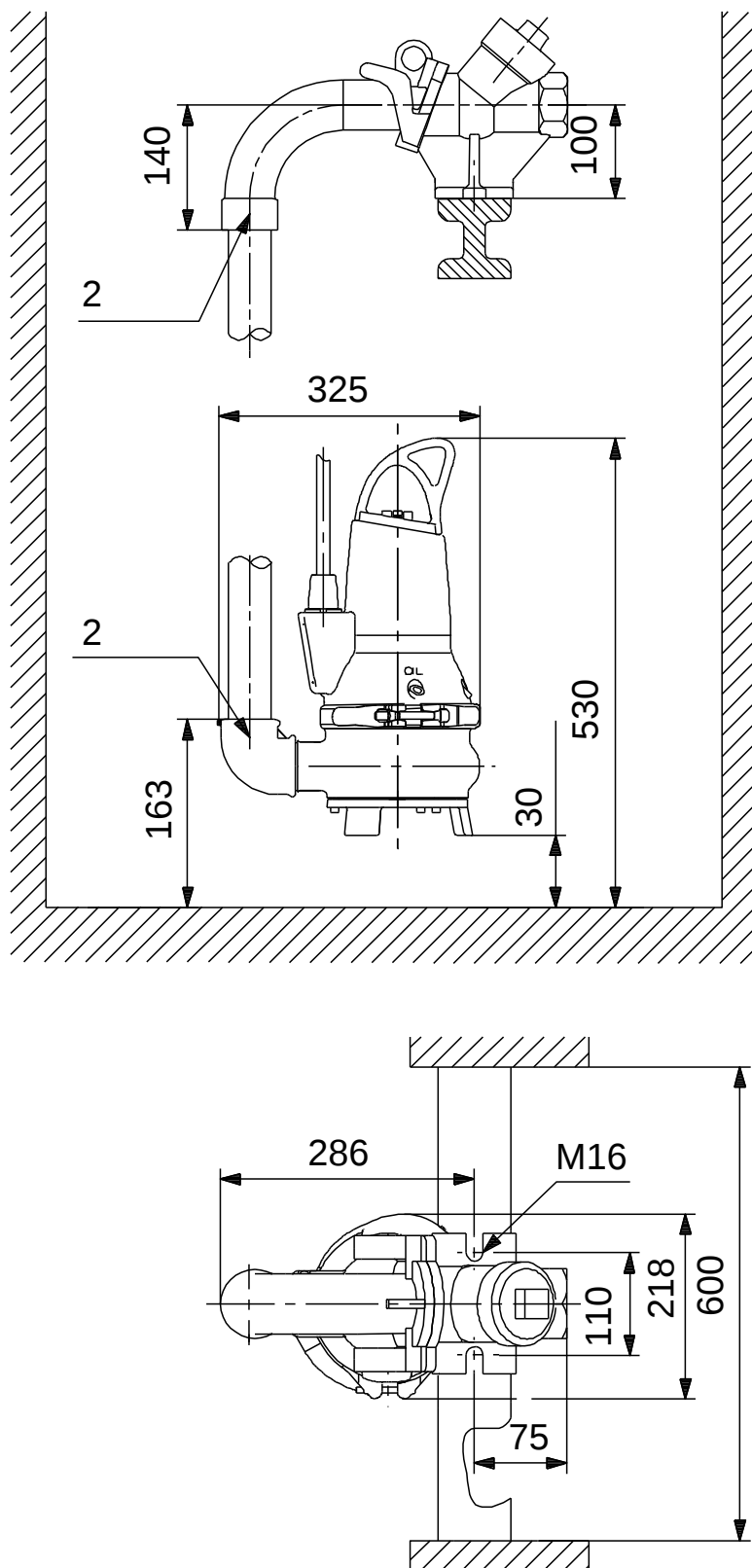
Description	Value
Controls:	
Control box:	not included
Additional I/O:	External
Moisture sensor:	without moisture sensors
Water-in-oil sensor:	without water-in-oil sensor
Others:	
Net weight:	38 kg
Danish VVS No.:	391293532

On request EF30.50.09.EX.2.50B 50 Hz



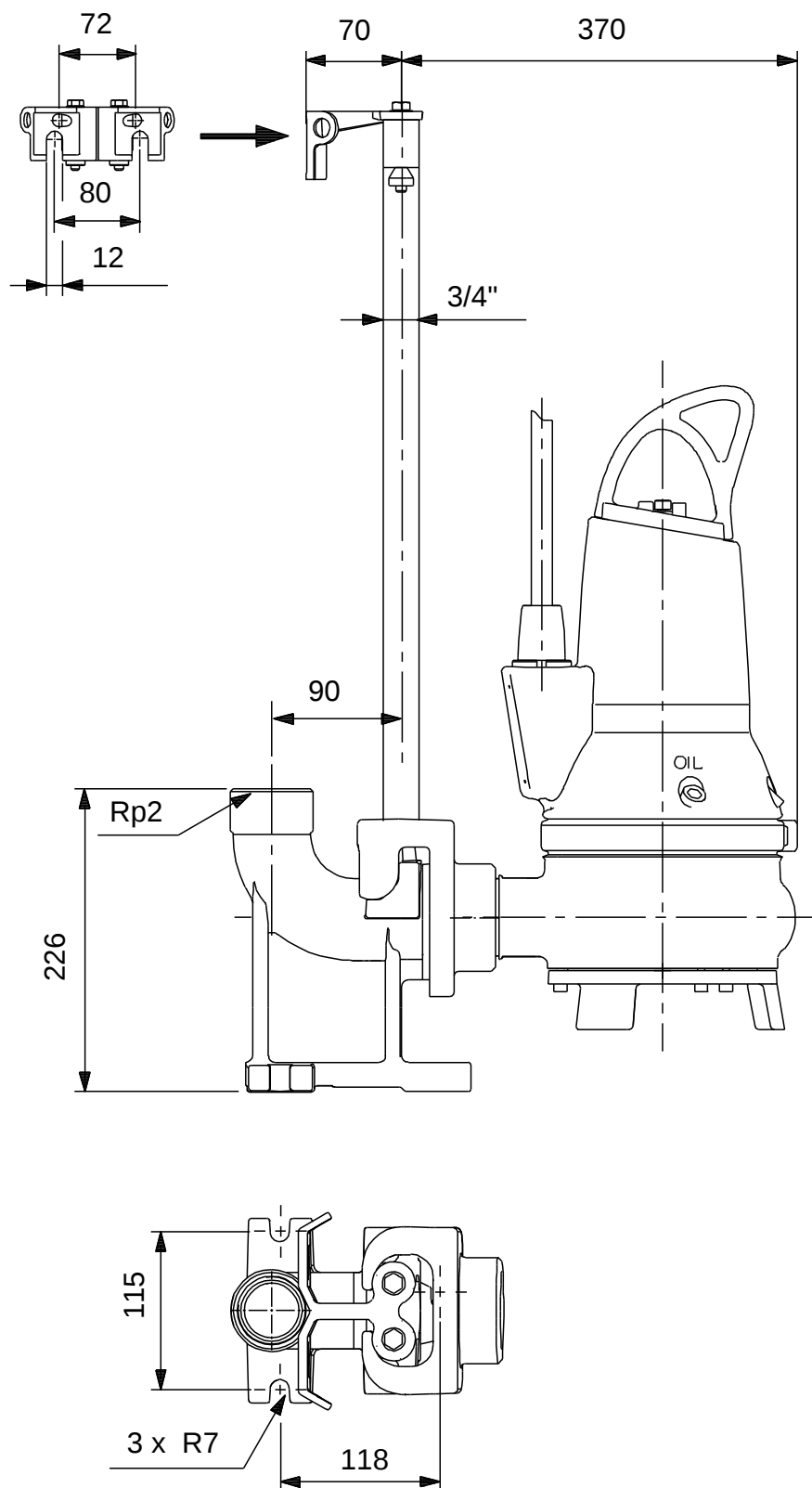
Note! All units are in [mm] unless others are stated.
Disclaimer: This simplified dimensional drawing does not show all details.

On request EF30.50.09.EX.2.50B 50 Hz



Note! All units are in [mm] unless others are stated.
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On request EF30.50.09.EX.2.50B 50 Hz



Note! All units are in [mm] unless others are stated.
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Exploded view



Sectional drawing (TM058200 for TPE2,TPE3)



TM058200

Exploded view (TM057026 for MGE model H/I)



Parts list EF30.50.09.EX.2.50B, Product No. On request
Valid from 1.8.2004 (0431)

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
7a	Rivet				4	pcs
9a	Key		Dimension: 5X5X12		1	pcs
26.a	O-ring		Diameter: 32		1	pcs
			Material type: NBR			
			Thickness: 4			
37	O-ring		Diameter: 164		1	pcs
			Material type: NBR			
			Thickness: 3			
37a	O-ring		Diameter: 114		2	pcs
			Material type: NBR			
			Thickness: 3			
37b	O-ring		Diameter: 135		1	pcs
			Material type: 72NBR872			
			Thickness: 4			
49	Impeller				1	pcs
50	Pump housing				1	pcs
66	Wedge lock washer		Designation: M8 A4		1	pcs
76	Nameplate				2	pcs
92	Clamp				1	pcs
102	O-ring		Diameter: 19		1	pcs
			Material type: 72NBR872			
			Thickness: 1.5			
103	Bush				1	pcs
- 105	Shaft seal				1	pcs
58	Shaft seal retainer				1	
104	Seal ring				1	
105a	Shaft seal				1	
107	O-ring		Diameter: 47		1	
			Material type: NBR			
			Thickness: 3			
107	O-ring		Diameter: 50		1	
			Material type: NBR			
			Thickness: 3			
- 150a	Stator w/housing cpl.				1	pcs
48	Stator		Winding resistance: 4,55		1	
48a	Cover				1	
55	Stator housing				1	
66	Wedge lock washer		Designation: M8 A4		1	
154	Ball bearing				1	
158	Waved washer				1	
159	O-ring				1	
173	Cross recess Pan head screw		Designation: CROSS-HEAD SCREW		1	
173a	Lock washer				1	
- 176	Plug				1	
	Pin				1	
153b	O-ring		Diameter: 28		1	
			Material type: NBR			
			Thickness: 2			
185	O-ring		Diameter: 31		1	
			Material type: NBR			
			Thickness: 2			
188.a	Hex socket head cap screw		Length (mm): 25		1	
			Thread: M8			
153	Ball bearing		Designation: 6204 2CS C3 SYN		1	pcs
153b	Washer		Internal diameter: 20		1	pcs
			Outer diameter: 28			
			Thickness: 2			
154	Ball bearing				1	pcs
155	Oil chamber				1	pcs

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
158	Waved washer				1	pcs
162	Suction cover				1	pcs
172	Shaft w/rotor				1	pcs
- 181	Cable Ex				1	pcs
198	O-ring		Diameter: 34.2		1	
			Material type: NBR			
			Thickness: 3			
188.a	Hex socket head cap screw		Length (mm): 25		8	pcs
			Thread: M8			
188b	Hex socket head cap screw		Designation: INNER HEXAGON		3	pcs
			Length (mm): 25			
			Thread: M8			
189	Socket set screw		Designation: INNER HEXAGON		3	pcs
			Length (mm): 12			
			Thread: M12			
190	Lifting bracket				1	pcs
193	Hex socket head cap screw		Designation: A2-70		2	pcs
			Length (mm): 20			
			Thread: M12			
193a	Oil		Material type: ONDINA 15		1	pcs
			Type: SHELL			
194	Washer		Internal diameter: 19		2	pcs
			Outer diameter: 12.2			
			Thickness: 4.4			

Disclaimer: The information about the Grundfos pump in this document may be outdated.

Data may be subject to alterations without further notice.

Please contact us to verify the data above is still accurate/up-to-date.

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