

TP 40-190/2-A-F-A-BUBE 400Y 50HZ

Grundfos pump 96463769



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https://www.lenntech.com/grundfos/TP000/96463769/TP-40-190-2-A-F-A-BUBE.html

info@lenntech.com

tel. +31 152 610 900 fax. +31 152 616 289

Position | Qty. | Description

1

TP 40-190/2 A-F-A-BUBE



Product No.: On request

Single-stage, close-coupled, volute pump with in-line suction and discharge ports of identical diameter. The pump is of the top-pull-out design, i.e. the power head (motor, pump head and impeller) can be removed for maintenance or service while the pump housing remains in the pipework.

The pump is fitted with an unbalanced rubber bellows seal. The shaft seal is according to EN 12756. Pipework connection is via PN 16 DIN flanges (EN 1092-2 and ISO 7005-2).

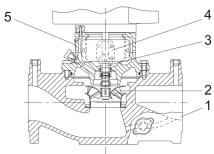
The pump is fitted with a fan-cooled asynchronous motor.

Further product details Pump

Pump housing and pump head are electrocoated to improve the corrosion resistance.

Electrocoating includes:

- 1) Alkaline-based cleaning.
- 2) Pretreatment with zinc phosphate coating.
- 3) Cathodic electrocoating (epoxy).
- 4) Curing of paint film at 200-250 °C.



- 1: Pump housing
- 2: Impeller
- 3: Shaft
- 4: Coupling
- 5: Pump head

The pump housing is provided with a replaceable stainles steel/PTFE neck ring to reduce the amount of liquid running from the discharge side of the impeller to the suction side. The impeller is secured with a split cone with nut.

The pump is fitted with an unbalanced rubber bellows seal with torque transmission across the spring and around the bellows. Due to the bellows, the seal does not wear the shaft, and the axial movement is not prevented by deposits on the shaft.

Primary seal:

- Rotating seal ring material: tungsten carbide (WC)
- Stationary seat material: carbon graphite, resin-impregnated

This is a widely used material pairing. If the pumped liquid contains particles, wear on the seal faces must be expected. Due to the favourable lubricating properties of carbon graphite, the seal is suitable for use even under poor lubricating conditions, such as hot water. However, under such conditions, wear on the carbon graphite face reduces seal life.

Secondary seal material: EPDM (ethylene-propylene rubber)

EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.

A circulation of liquid through the duct of the air vent screw ensures lubrication and cooling of the shaft seal.

The flanges have tappings for mounting of pressure gauges.

Position | Qty. | Description

The motor stool forms connection between the pump housing and the motor, and is equipped with a manual air vent screw for venting of the pump housing and the shaft seal chamber. The sealing between motor stool and pump housing is an O-ring.

The central part of the motor stool is provided with guards for protection against the shaft and coupling. Motor and pump shaft are connected via a shell coupling.

Moto

The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.

The motor is flange-mounted with tapped-hole flange (FT).

Motor-mounting designation in accordance with IEC 60034-7: IM B 14, IM V 18 (Code I) / IM 3601, IM 3611 (Code II).

The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.

The motor does not incorporate motor protection and must be connected to a motor-protective circuit breaker which can be manually reset. The motor-protective circuit breaker must be set according to the rated current of the motor (I1/1).

Technical data

Liquid:

Pumped liquid: Water
Liquid temperature range: 0 .. 140 °C
Liquid temperature during operation: 20 °C
Density: 998.2 kg/m³

Technical:

Rated flow: 10.5 m³/h
Rated head: 13.2 m
Actual impeller diameter: 124 mm
Primary shaft seal: BUBE

Curve tolerance: ISO9906:2012 3B

Materials:

Pump housing: Cast iron

EN-JL1040 ASTM A48-40 B

Impeller: Stainless steel

DIN W.-Nr. 1.4301

AISI 304

Installation:

Range of ambient temperature: -30 .. 60 °C Maximum operating pressure: 16 bar Flange standard: DIN Pipe connection: **DN 40** Pump inlet: **DN 40** Pump outlet: **DN 40** Pressure rating: PN 16 (@):320 mm Flange size for motor: FT100

Electrical data:

Motor type: 80A
IE Efficiency class: IE3
Rated power - P2: 0.75 kW
Power (P2) required by pump: 0.75 kW
Mains frequency: 50 Hz

Rated voltage: 3 x 220-240D/380-415Y V

 Rated current:
 3.30/1.90 A

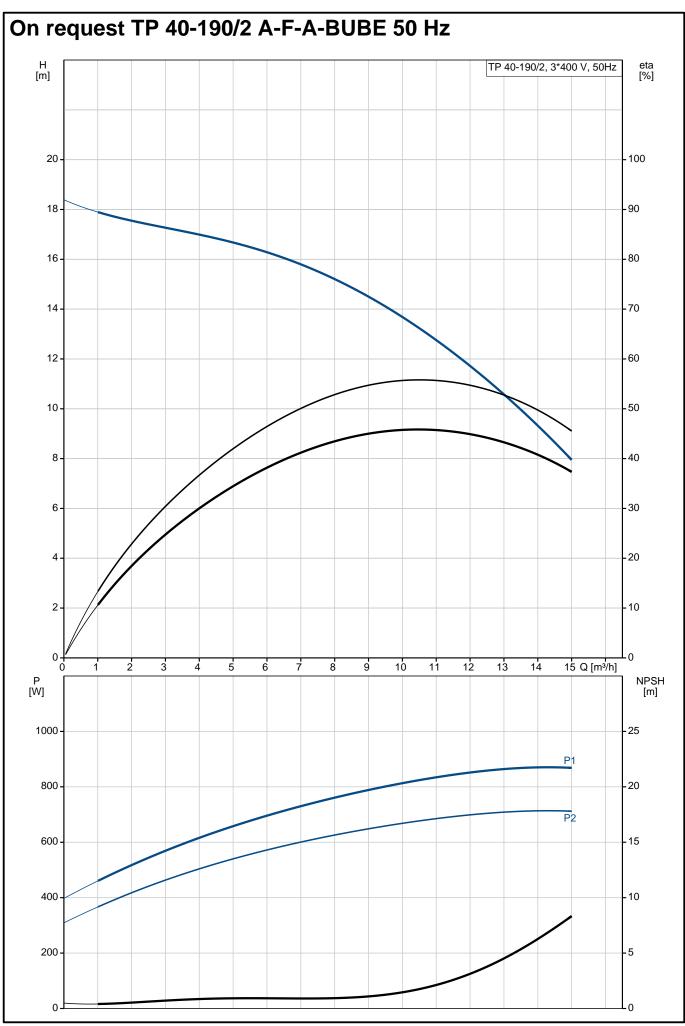
 Starting current:
 580-620 %

 Cos phi - power factor:
 0.81-0.71

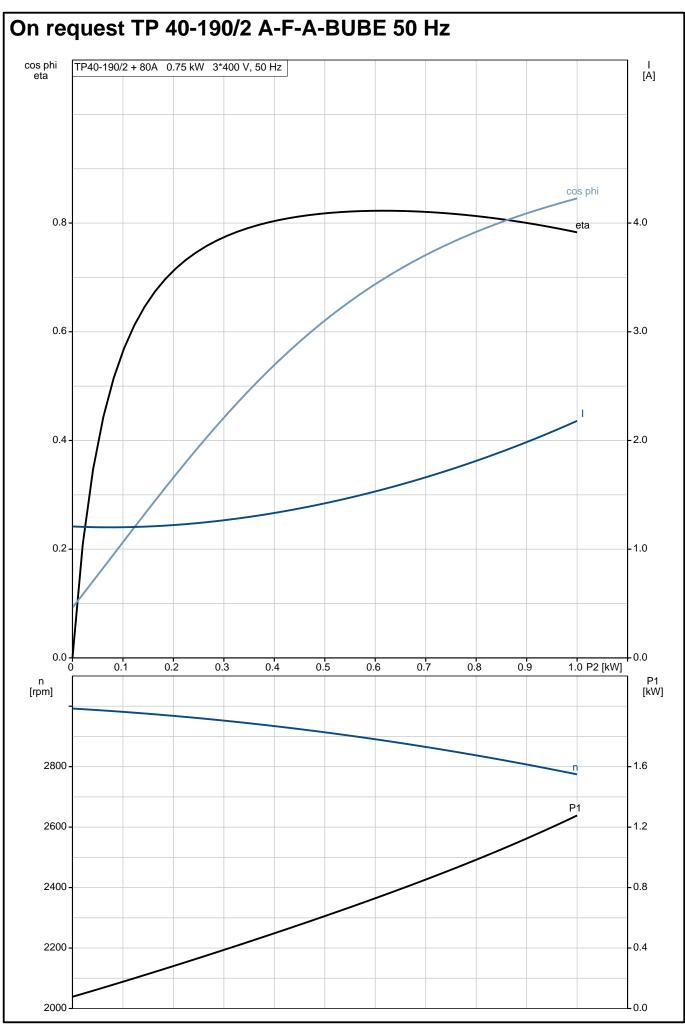
 Rated speed:
 2840-2870 rpm

 Efficiency:
 IE3 80,7%

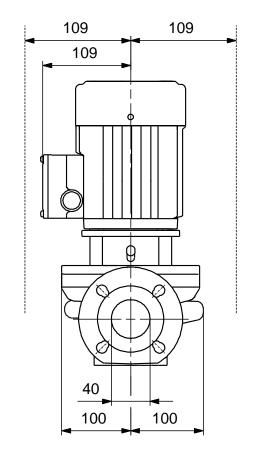
Position	Qty.	Description	
		Motor efficiency at full load: Motor efficiency at 3/4 load: Motor efficiency at 1/2 load: Number of poles: Enclosure class (IEC 34-5): Insulation class (IEC 85):	80.7 % 82.7 % 81.7 % 2 55 Dust/Jetting F
		Others: Minimum efficiency index, MEI ErP status: Net weight: Gross weight: Shipping volume:	: 0.44 EuP Standalone/Prod. 27.5 kg 30 kg 0.06 m³

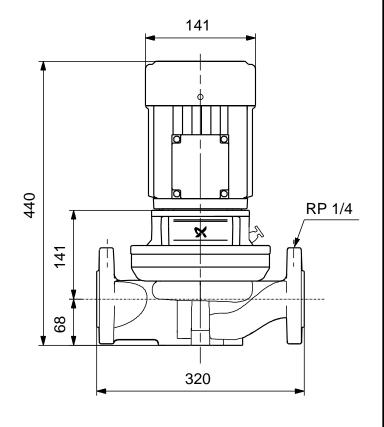


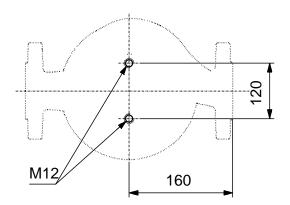
Description	Value	H [m]		TP 40	0-190/2, 3*400 V, 5	50Hz eta [%]
General information:		-				
Product name:	TP 40-190/2 A-F-A-BUBE					
Product No:	On request	20 -				100
EAN number:	On request	18 -				-90
Technical:	· · · · · · · · · · · · · · · · · · ·	- '``]				
Rated flow:	10.5 m³/h	16				80
Rated head:	13.2 m	-				
Head max:	190 dm	14 -				70
Actual impeller diameter:	124 mm	12 -				-60
Primary shaft seal:	BUBE	12				- 60
Curve tolerance:	ISO9906:2012 3B	10				- 50
Pump version:	A	-			//	•
Model:	A	- 8				40
Materials:	A	-				
	Cast iron	6				-30
Pump housing:		4 -				-20
	EN-JL1040	_ "]				
	ASTM A48-40 B	2 //	/			10
Impeller:	Stainless steel	_				
	DIN WNr. 1.4301	_ o <u>\</u>	1		10 0:	0
	AISI 304	0 P [2 4 6	8 10) 12 Q[ı	m³/h] NPSH
Material code:	A	[W]				[m]
Installation:		1000 -				- 25
Range of ambient temperature:	-30 60 °C				P	•
Maximum operating pressure:	16 bar	800 -				- 20
Flange standard:	DIN	-			P	
Pipe connection:	DN 40	600 -				15
Pump inlet:	DN 40	400				10
Pump outlet:	DN 40	400				• 10
Pressure rating:	PN 16	200				-5
(@)	320 mm	- 200				
Flange size for motor:	FT100	ـــــا₀				\coprod_{0}
Connect code:	F	16				
Liquid:	Г	109	109	14	1	
	Mater		¬ •			
Pumped liquid:	Water	- ,,, ,,		\ 		
Liquid temperature range:	0 140 °C	╴ ┊ ╿╌ ┞			4	
Liquid temperature during operation:	20 °C	- 				
Density:	998.2 kg/m³		4		RP 1/4	
Electrical data:					i i	
Motor type:	80A	-				
IE Efficiency class:	IE3					
Rated power - P2:	0.75 kW	40	-	32	0	
Power (P2) required by pump:	0.75 kW	100 1	00		— <u>=</u>	
Mains frequency:	50 Hz			J		
Rated voltage:	3 x 220-240D/380-415Y V			n/		
Rated current:	3.30/1.90 A			1		
Starting current:	580-620 %					
Cos phi - power factor:	0.81-0.71			M12	160	
Rated speed:	2840-2870 rpm			<u> </u>	160	
Efficiency:	IE3 80,7%					
Motor efficiency at full load:	80.7 %	(d)	HIGH VOLTAG DIRECTION OF ROT	E ATION		
Motor efficiency at 3/4 load:	82.7 %	- (@	()			
Motor efficiency at 1/2 load:	81.7 %	_				
Number of poles:	2		(M)	_		
Enclosure class (IEC 34-5):	55 Dust/Jetting	_ 🖢	I KINTH	–≌		
	F Dusi/Jelling	_		- 9		
Insulation class (IEC 85):		-	**************************************			
Motor protec:	NONE	- '	(2) (G)	TO		
Motor No:	85U05104		LOW VOLTAGE DIRECTION OF ROT	-		
Others:		6	DIRECTION OF ROT	A I'ION		
Minimum efficiency index, MEI :	0.44					
ErP status:	EuP Standalone/Prod.		[
Net weight:	27.5 kg	~		_≘		
Gross weight:	30 kg	_ _	**************************************	_9		
Shipping volume:	0.06 m ³		· B A			
· · · · ·			(S)(S)			
		\Box	<u> </u>	(A) (B)		



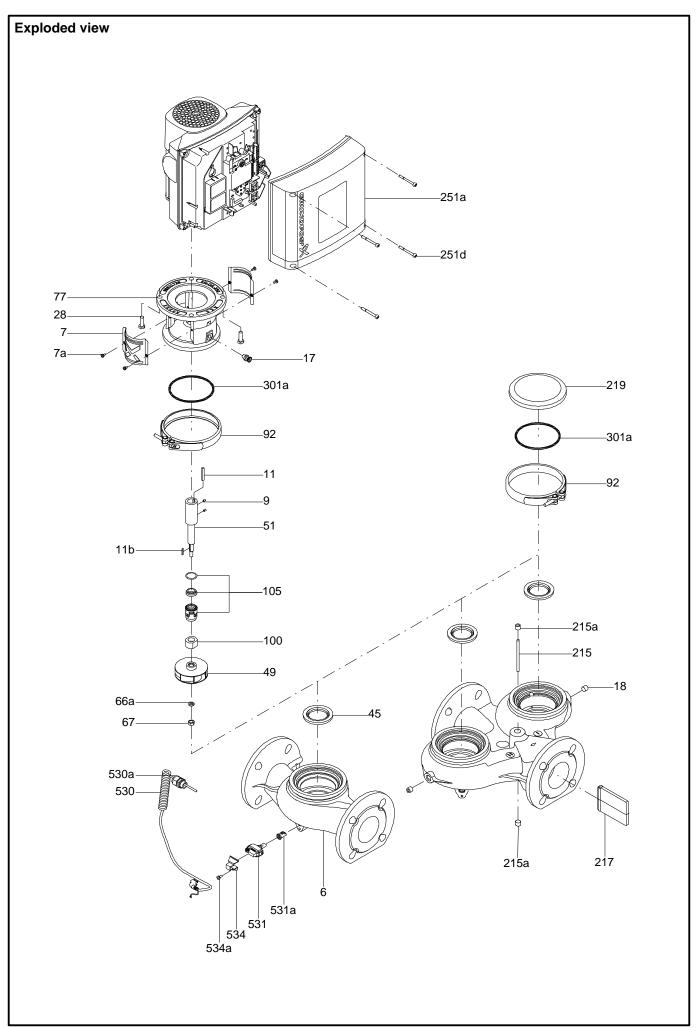
On request TP 40-190/2 A-F-A-BUBE 50 Hz

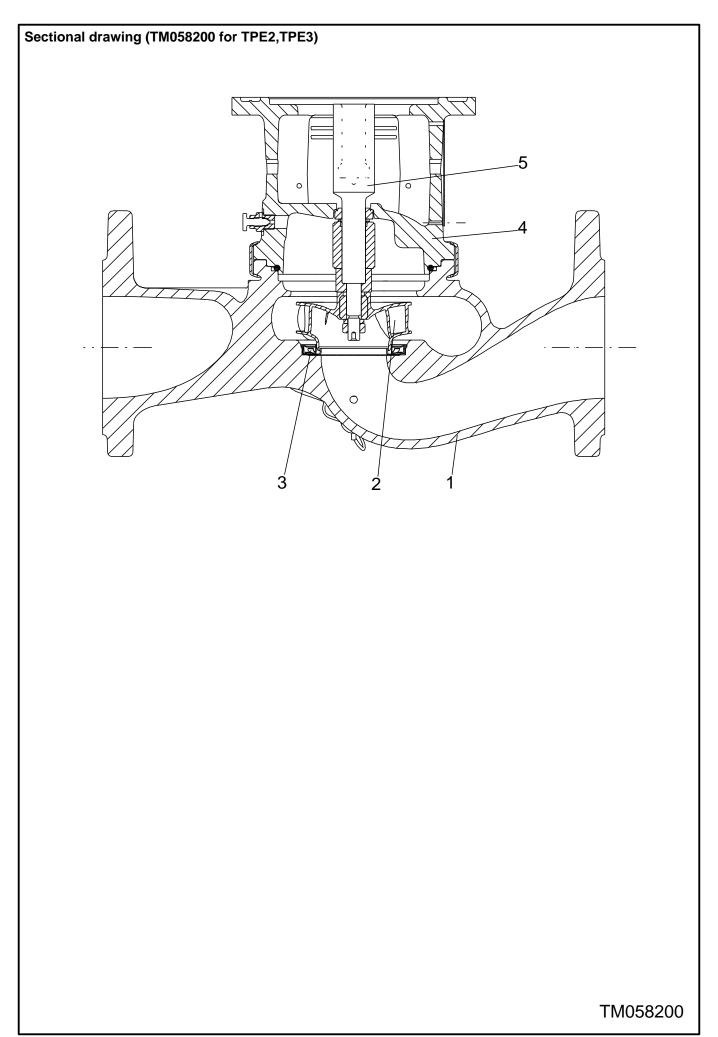


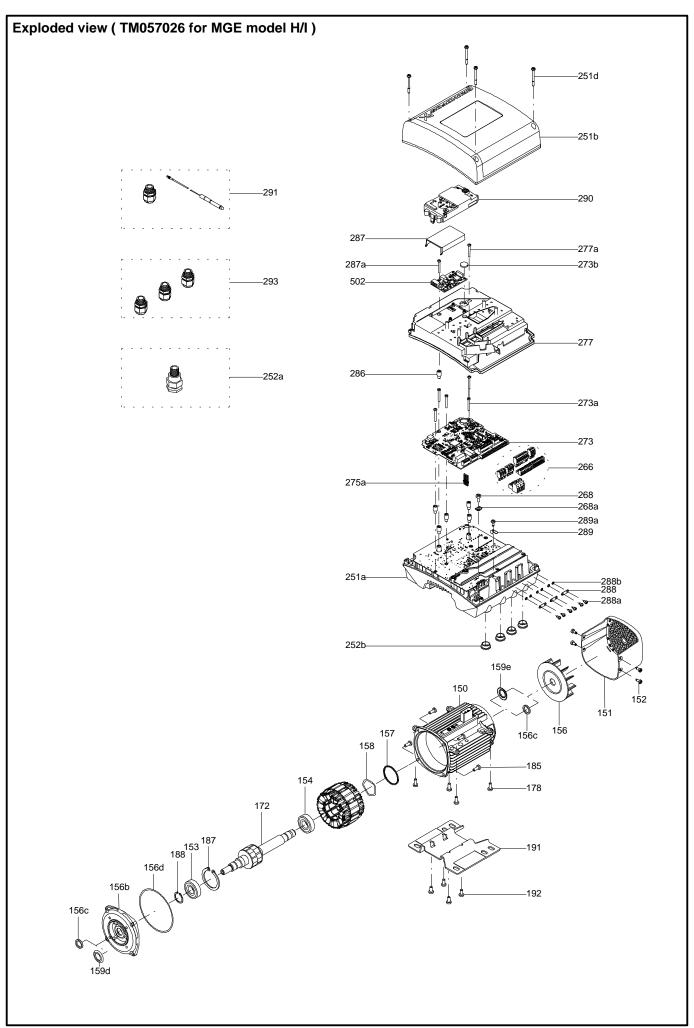




Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.







Parts list TP 40-190/2, Product No. On request Valid from 1.1.2011 (1152)

Pos	s Description	Annotation	Données de classification	Référence	Quant	té Unité
+	Motor				1	pcs
-	Coupling cpl.				1	pcs
9	Hex socket head cap screw		Designation: DIN 912		4	
			Length (mm): 20			
			Thread: M6			
10	Shaft pin		Diameter: 5		1	
			Length (mm): 26			
10a	3				2	
-	Motor stool cpl.				1	pcs
2	Motor stool				1	
26	Hex head screw		Length (mm): 25		8	
			Thread: M10			
28	Hex head screw				4	
-	Pump housing cpl.				1	pcs
- 6	Pump housing				1	
	Pump housing					1
45	Neck ring					1
-	Coupling guard cpl.				1	pcs
7	Coupling guard				2	
7a	Pan head screw				4	
-	Shaft w/impeller cpl.				1	pcs
49	Impeller cpl.				1	
49b	Split cone				1	
49b	Split cone nut				1	
51	Pump shaft				1	
18	Air vent screw		Thread: 1/4"		1	pcs
19	Plug				2	pcs
72a	a O-ring		Diameter: 154		1	pcs
			Material type: EPDM			
			Thickness: 4			
105	5 Shaft seal		Material type: EPDM		1	pcs

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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info@lenntech.com https://www.lenntech.com tel. +31 152 610 900 fax. +31 152 616 289