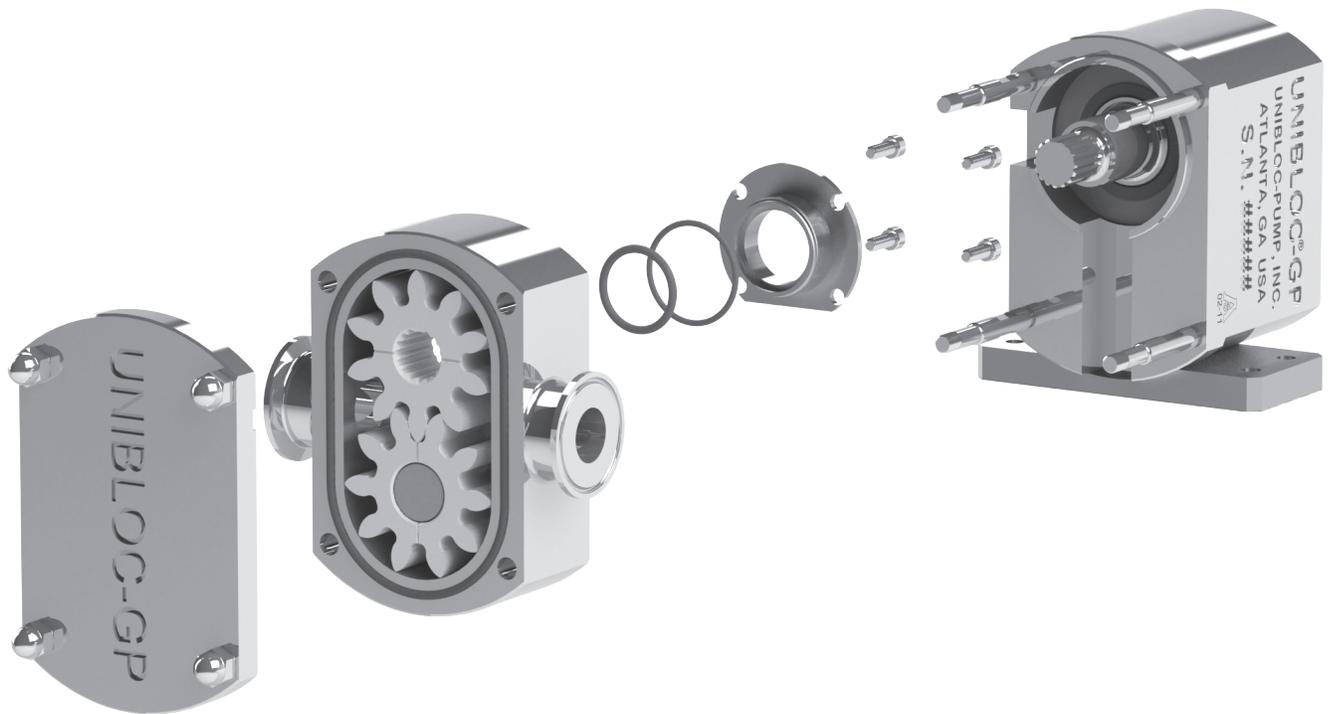


# UNIBLOC<sup>®</sup>-GP

## Operation & Service Manual

Models: 200-375



Original Instructions

MANUAL NO.: GP200-375 REVISION: 01/2017

**UNIBLOC<sup>®</sup>-PUMP**

# **UNIBLOC<sup>®</sup>-PUMP**



## **Unibloc-Pump, Inc.**

1701 Ashborough Road SE • Marietta, Georgia 30067 • USA  
Tel 770-218-8900 Fax 770-218-8442 E-Mail [info@uniblocpump.com](mailto:info@uniblocpump.com)  
[www.uniblocpump.com](http://www.uniblocpump.com)

## **Unibloc-Pump AB**

Lantvärnsgatan 4 • 652 21 Karlstad • Sweden  
Tel +46-54-219000 Fax +46-54-212402 E-Mail [info@uniblocpump.se](mailto:info@uniblocpump.se)  
[www.uniblocpump.se](http://www.uniblocpump.se)

Information contained in this manual is subject to change without notice and does not represent a commitment on the part of Unibloc-Pump. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose, without the express written permission Unibloc-Pump.

Copyright © 2017 Unibloc-Pump.  
All Rights Reserved.

Revision Date: 01/2017  
Manual No.: GP200-375

## OPERATING INSTRUCTIONS:

Check lines for obstructions.

If supply tank is positioned below the pump inlet, prime the pump first.

Check front cover nuts to make sure they are properly tightened.

Open supply and discharge line valves.

Energize drive motor.

Adjust motor speed to achieve desired output flow (consult flow charts for optimum operating range).

## SHAFT SEAL SERVICE:

### PUMP HOUSING

#### REMOVAL:(see drawing on p.6)

Disengage power to the pump drive and the system. System pressure must be relieved before working on the pump. Isolate the pump from the rest of the system by shutting off valves at the pump ports. Use caution when removing the cover (2) as there may be product remaining in the pump. Remove the wing nuts (17) and cover (2). Slide off the gears (3a, 3b). If they will not slide off they can be pulled off together with the pump housing (1). Remove the pump housing (1) by tapping gently with a rubber mallet on the ports. Do not rock the housing back and forth as doing so may damage the shaft seal. Service the shaft seals according to the instructions below.

### UNIBLOC-GP 200-275 SINGLE O-RING SEAL

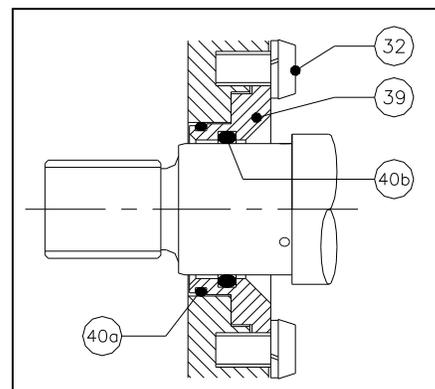
#### REMOVAL:

All seal parts will come off with the housing. Remove the retainer ring (39) by unscrewing the bolts (32). The o-rings (40a, 40b) can now be removed.

#### INSTALLATION:

Check the shaft for wear. If grooves are noticeable, it may have to be replaced or the o-ring (40b) may not seal properly or may fail prematurely. Place new o-rings (40a) into the grooves of the retainer ring (39). Apply a lubricant on the shaft, o-rings, and the pump housing bore with a lubricant approved for use with the pumped product.

Attach the retainer ring to the pump housing with the bolts (32). See the Pump Housing Installation instructions below to complete the service.



### UNIBLOC-GP 200-275 SINGLE LIP® SEAL

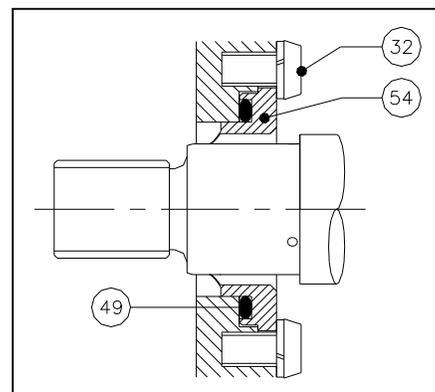
#### REMOVAL:

All seal parts will come off with the housing. Remove the Lip Seal® (54) by unscrewing the bolts (32). O-ring (49) can now be removed.

#### INSTALLATION:

Check the shaft for wear. If grooves are noticeable, it may have to be replaced or the seal may leak or fail prematurely. Place a new o-ring (49) into the groove of the Lip

Seal® (54). Apply a lubricant on the shaft, o-ring, and the pump housing bore with a lubricant approved for use with the pumped product. Attach the the Lip Seal® (54) to the pump housing with the bolts (32). See the Pump Housing Installation instructions below to complete the service.



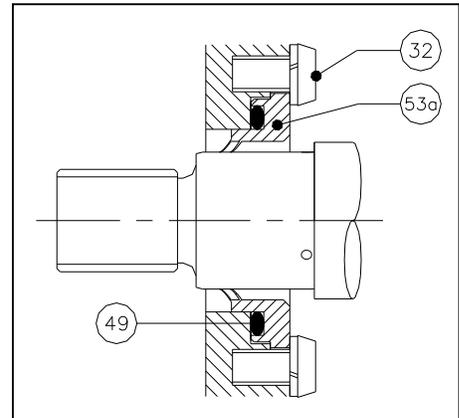
## UNIBLOC-GP 200-275 DOUBLE LIP® SEAL

### REMOVAL:

All seal parts will come off with the housing. Remove the Lip Seal® (53a) by unscrewing the bolts (32). O-ring (49) can now be removed.

### INSTALLATION:

Check the shaft for wear. If grooves are noticeable, it may have to be replaced or the seal may leak or fail prematurely. Place a new o-ring (49) into the groove of the Lip Seal® (54). Apply a lubricant on the shaft, o-ring, and the pump housing bore with a lubricant approved for use with the pumped product. Attach the the Lip Seal® (54) to the pump housing with the bolts (32). See the Pump Housing Installation instructions below to complete the service.



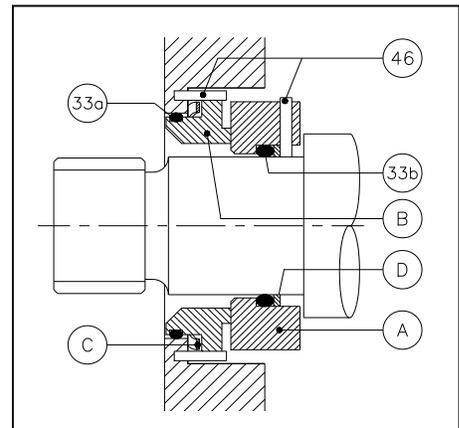
## UNIBLOC-GP 200-275 SINGLE MECHANICAL SEAL

### REMOVAL:

Remove the seal nose ring (B) and o-ring (33a) by pulling them out of the housing. Remove the mating ring (A), the o-ring (33b), and the washer (D) by sliding them off the shaft. To avoid damage, handle and store the loose seal nose ring (B) and the mating ring (A) so that their lapped sealing surfaces do not get scratched.

### INSTALLATION:

If missing, insert the dowel pins (46) in the shaft and pump housing. Coat the shaft and pump housing bore with a product compatible lubricant. Place the o-ring (33b) in the mating ring (A) first, and then the washer (D). Slide the mating ring, slotted side first, on the shaft. Place the spring washer (C) between the pins (46) in the pump housing. Place o-ring (33a) in the groove of the mating ring (B). Align the slots of the mating ring with the pins in the pump housing. Push the mating ring into the pump housing, o-ring side first. Press several times to make sure it slides easily. Place a product compatible lubricant on the mating ring and the seal nose ring sealing surfaces. See the Pump Housing Installation instructions below to complete the service.



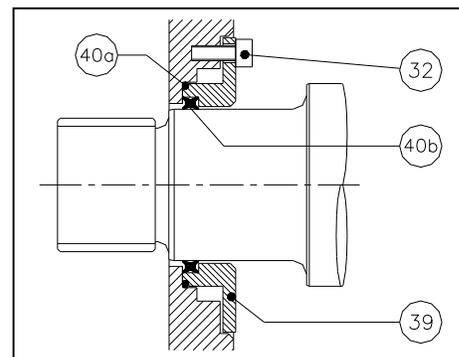
## UNIBLOC-GP 300-375 SINGLE O-RING SEAL

### REMOVAL:

All seal parts will come off with the housing. Remove the retainer ring (39) by unscrewing the bolts (32). The o-rings (40a, 40b) can now be removed.

### INSTALLATION:

Check the shaft for wear. If grooves are noticeable, it may have to be replaced or the seal may leak or fail prematurely. Place new o-rings (40a, 40b) into the grooves of the retainer ring (39). Attach the retainer ring to the pump housing with the bolts (32). Coat the o-rings and the shaft with a lubricant approved for use with the pumped product. See the Pump Housing Installation instructions below to complete the service.



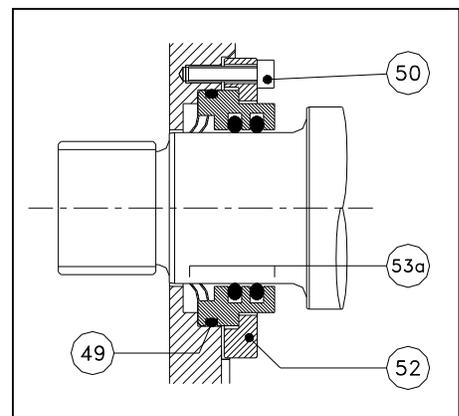
## UNIBLOC-GP 300-375 DOUBLE O- LIP® SEAL

### REMOVAL:

All seal parts will come off with the housing. Remove the bolts (50), the split washers (51), and the retainer ring (52). Pull the cartridge (53a) out of the pump housing bore.

### INSTALLATION:

Check the shaft for wear. If grooves are noticeable, it may have to be replaced. Place new o-rings (49) into the groove of the seal cartridge. Clean the rotor housing seal bore. Apply product compatible lubricant to the bore and shaft. Place the pump housing so that the seal bore is pointing up, push the seal cartridge (53a) in, lip side first. Attach the retainer ring (52) to the pump housing with the split washers (51) and the bolts (52). See the Pump Housing Installation instructions below to complete the service.

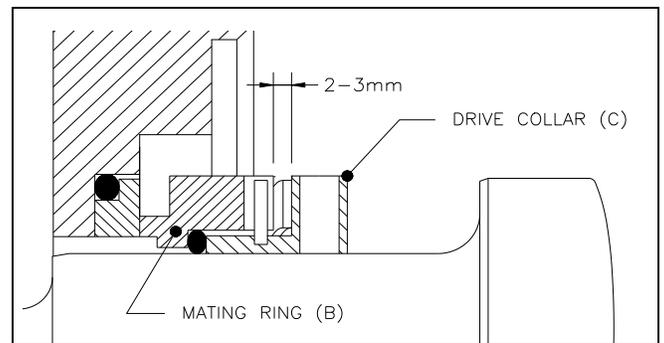
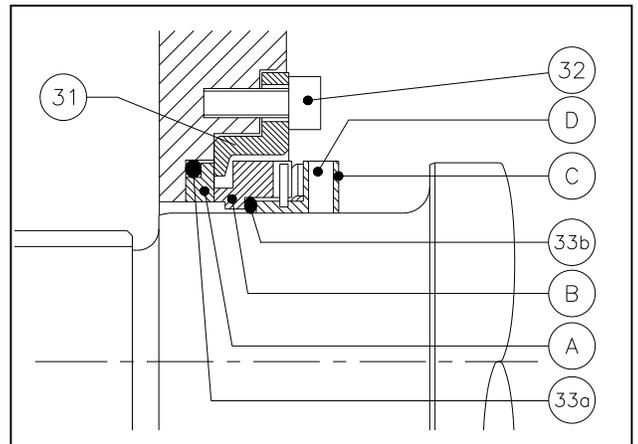


**UNIBLOC-GP 300-375 SINGLE MECHANICAL SEAL REMOVAL:**

The optional retainer ring (31), the bolts (32), the mating ring (A), and the mating ring o-ring (33a) will all come off with the pump housing. Unscrew the bolts (32) to remove the retainer ring (31), the mating ring (A), and the mating ring o-ring (33a). Slide the seal nose ring (B) and the seal nose o-ring (33b) off the shaft. To avoid damage, handle and store the loose seal nose ring and the mating ring so that their lapped sealing surfaces do not get scratched. If not being replaced, the drive collar (C) may remain on the shaft, otherwise loosen the set screws (D) and slide them off the shaft.

**INSTALLATION:**

The shaft and the pump housing bore should be cleaned before installing the seal components. Slide the drive collar (C) on the shaft. Moisten the seal nose o-ring (33b) with water or coat them with a lubricant that is acceptable for use with the product. Slide the seal nose o-ring on the shaft and then the seal nose ring (B), slotted sides first. Align the slots in the seal nose ring with the pins in the drive collar. Push the seal nose ring against the drive collar so that the o-ring seats properly. Place the mating ring o-ring (33a) in the pump housing seal bore. Only lubricate this o-ring with water or alcohol. Push the mating ring into the pump housing so that it seats flat with the step in the housing. Some applications require pins to be used in the mating ring. When placing it in the pump housing align the pins with the holes in the pump housing and press in the ring. Do not use objects to push it in that will scratch the mating ring seal surface. Place a product compatible lubricant on the sealing surfaces. If the retainer ring (31) was supplied with the pump, bolt it to the pump housing. See the Pump Housing Installation instructions below to complete the service. After installing the housing push the drive collar toward it compressing the wave spring and leaving a 2-3mm (0.08"-0.12") gap between the collar and the seal nose ring (B). Tighten the set screws (D).

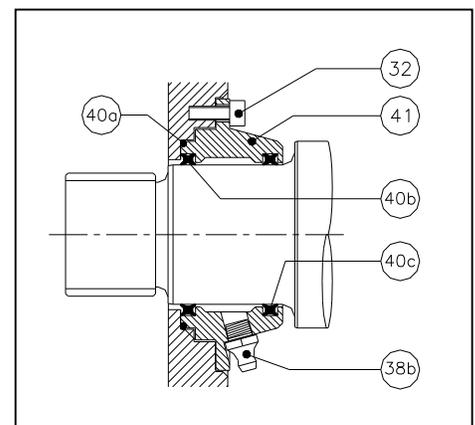


**UNIBLOC-GP 300-375 DOUBLE O-RING SEAL REMOVAL:**

All seal parts will come off with the housing. Remove the seal housing (41) by unscrewing the bolts (32). The o-rings (40a, 40b, 40c) can now be removed.

**INSTALLATION:**

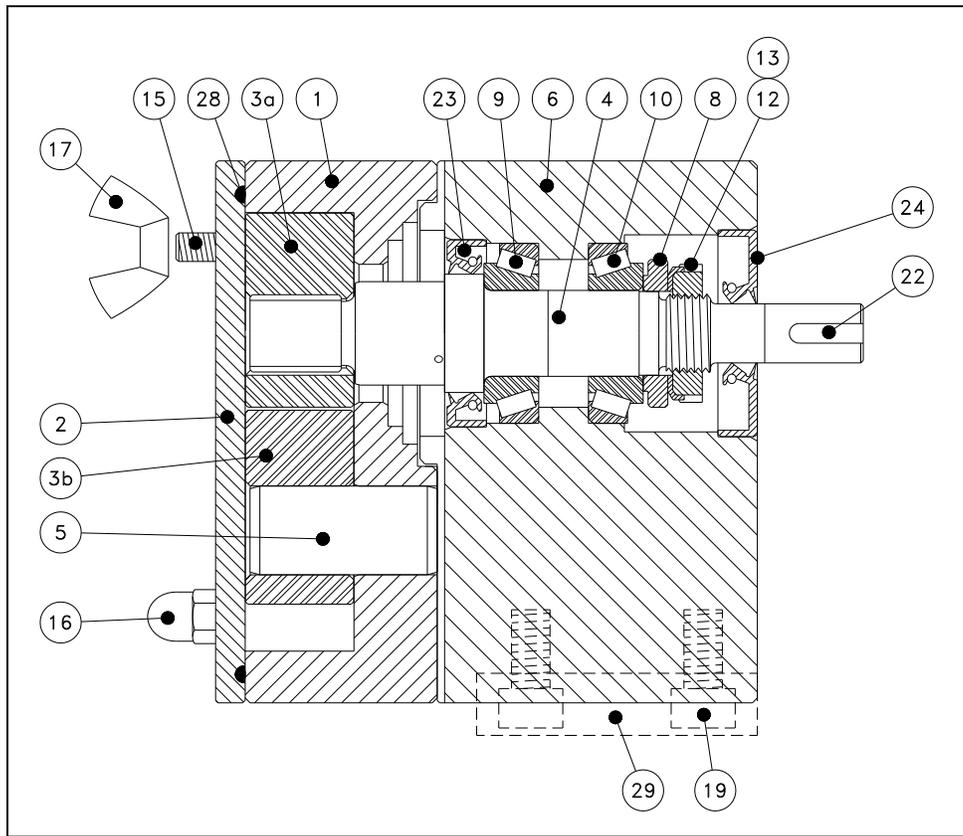
Check the shaft for wear. If grooves are noticeable, it may have to be replaced or the o-rings (40b, 40c) may leak or fail prematurely. Place new o-rings into the grooves of the seal housing (41). Attach the flush housing to the pump housing with the bolts (32). Coat the o-rings and the shaft with a lubricant approved for use with the pumped product. See the Pump Housing Installation instructions below to complete the service. Fill the cavity between the o-rings with product compatible grease before resuming operation.



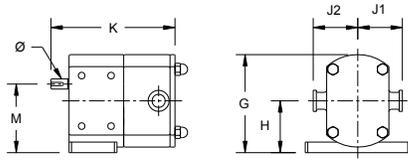
**PUMP HOUSING**

**INSTALLATION:**

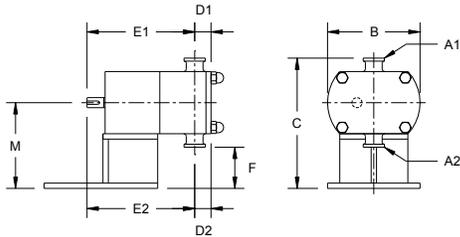
Tighten the studs (15) if needed. Slide the pump housing (1) on the studs (15). Slide on the gears (3a, 3b). With the cover o-ring (28) in place, put the cover (2) on and thread the wing nuts (17) on the stud ends. Tighten them in a cross pattern until there is no clearance between the cover (2) and the pump housing (1) face. Open the valves and then power to the drive may be engaged.



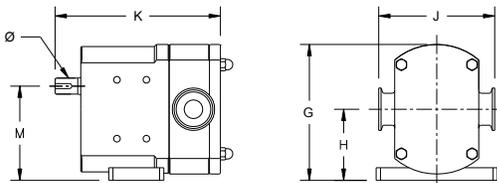
Item	Pcs.	Description	Part Number						
			200/07	200/10	275/22	275/38	300/28	350/40	375/52
1	1	Pump Housing	GP114D	GP116D	GP117D	GP119A	GP3000-1L	GP3020-1L	GP3040-1L
2	1	Cover	3200-1L				3210-1L		
3a	1	Drive Gear	application specific; contact factory or refer to order						
3b	1	Lay Gear							
4	1	Drive Shaft	GP2040-21		GP2070-21		GP3060-21	GP3070-21	GP3080-21
5	1	Pin Shaft	GP101-3		GP104-3		GP3100-3	GP3110-3	GP3120-3
6	1	Bearing Housing (ss)	GP182-2 or GP183-2				GP3151-2 or GP3152-2		
		Bearing Housing (alum.)	GP182-5 or GP183-5				GP3151-5 or GP3152-5		
8	1	Spacer	GP105-3				GP3170-4		
9	1	Front Bearing	3750				3755		
10	1	Rear Bearing							
12	1	Tab Washer	4500-4				4505-4		
13	1	Slotted Nut	4402				4412-4		
15	4	Housing Stud	GP3258-2				GP3600-2	GP3610-2	GP3620-2
16	4	Cover Dome Nut	4400-2				4410-2		
17	4	Cover Wing Nut	4401-2				4411-2		
19	4	Bolt	4316-2						
22	1	Key	4701				4706		
23	1	Front Oil Seal	4105-N				4115-N		
24	1	Rear Oil Seal	4106-N				4111-N		
28	1	Cover O-ring	4200-E				4215-E		
29	1	Foot (optional)	3801-2				3806-2		



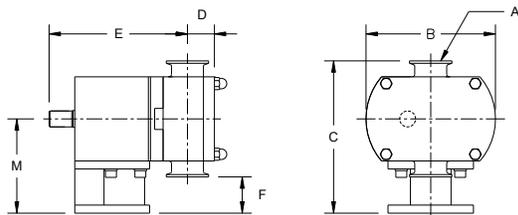
HORIZONTAL THROUGH-PUT



VERTICAL THROUGH-PUT



HORIZONTAL THROUGH-PUT



VERTICAL THROUGH-PUT

## UNIBLOC® - GP 275

	GP275-07/07	GP275-10/07	GP275-10/10	GP275-15/15
A1	3/4" TRI-CLAMP	1" TRI-CLAMP	1" TRI-CLAMP	1.5" TRI-CLAMP
A2		3/4" TRI-CLAMP		
B	110 (4.33)			
C	155 (6.10)	167 (6.57)		
D1	20 (0.79)	26 (1.02)		
D2	20 (0.79)		26 (1.02)	
E1	128 (5.04)	121 (4.76)		
E2	128 (5.04)		121 (4.76)	
F	49 (1.93)		37 (1.46)	
G	117 (4.61)			
H	62 (2.44)			
J1	53 (2.09)	65 (2.56)		
J2	53 (2.09)		65 (2.56)	
K	147 (5.79)			
M	82 (3.23)			
Ø	12 (0.47)			

ALL DIMENSIONS IN MM, INCHES IN ( ).

## UNIBLOC® - GP 300-375

	GP300	GP350	GP375
A	1" TRI-CLAMP	1.5" TRI-CLAMP	2" TRI-CLAMP
B	154 (6.06)		
C	181 (7.13)		
D	32 (1.26)	39 (1.54)	46 (1.81)
E	165 (6.50)	170 (6.69)	175 (6.89)
F	43 (1.69)		
G	162 (6.38)		
H	85 (3.35)		
J	138 (5.43)		
K	197 (7.76)	209 (8.23)	221 (8.70)
M	112 (4.41)		
Ø	19 (0.75)		

ALL DIMENSIONS IN MM, INCHES IN ( ).

# WARRANTY

UNIBLOC-PUMP warrants every part of our product against poor workmanship and defective materials (wear items excluded) for a period of one (1) year from the date of shipment. If during this period the item does not conform to its performance parameters as a result of poor workmanship and/or defective materials, return the faulty item, shipping prepaid and fully insured, to an authorized UNIBLOC-PUMP service facility. If, upon inspection of the item in question, poor workmanship or defective materials are revealed, UNIBLOC-PUMP will repair or replace it, at UNIBLOC-PUMP's option, and will return it by shipping it F.O.B. to the service facility. This warranty is void if the item has not been used as recommended or instructed, has been altered or used with unauthorized accessories, has been subject to misuse, abuse or accident, or has been damaged due to causes not related to poor workmanship or defective materials. All parts or components not manufactured by UNIBLOC-PUMP are warranted only to the extent of the warranty of the respective manufacturers.

ALL IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXPRESSLY EXCLUDED. IN NO EVENT SHALL UNIBLOC-PUMP OR ITS AFFILIATES BE LIABLE TO ANYONE FOR SPECIAL, COLLATERAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER ARISING IN CONTRACT OR IN TORT.

UNIBLOC-PUMP RESERVES THE RIGHT TO MAKE TECHNICAL CHANGES WITHOUT NOTICE.



**UNIBLOC-PUMP**

**Unibloc-Pump, Inc.**

1701 Ashborough Road SE • Marietta, Georgia 30067 • USA  
Tel 770-218-8900 Fax 770-218-8442 E-Mail [info@uniblocpump.com](mailto:info@uniblocpump.com)  
[www.uniblocpump.com](http://www.uniblocpump.com)

**Unibloc-Pump AB**

Lantvärnsgatan 4 • 652 21 Karlstad • Sweden  
Tel +46-54-219000 Fax +46-54-212402 E-Mail [info@uniblocpump.se](mailto:info@uniblocpump.se)  
[www.uniblocpump.se](http://www.uniblocpump.se)