

# THW GEAR PUMPS



Make	Model
THW	High Pressure Gear Pumps
THW	High Pressure Double Pumps
THW	Changing Rotation

# GEAR PUMPS



## High Pressure Gear Pumps

P1B0 Group 1 DIN Mount

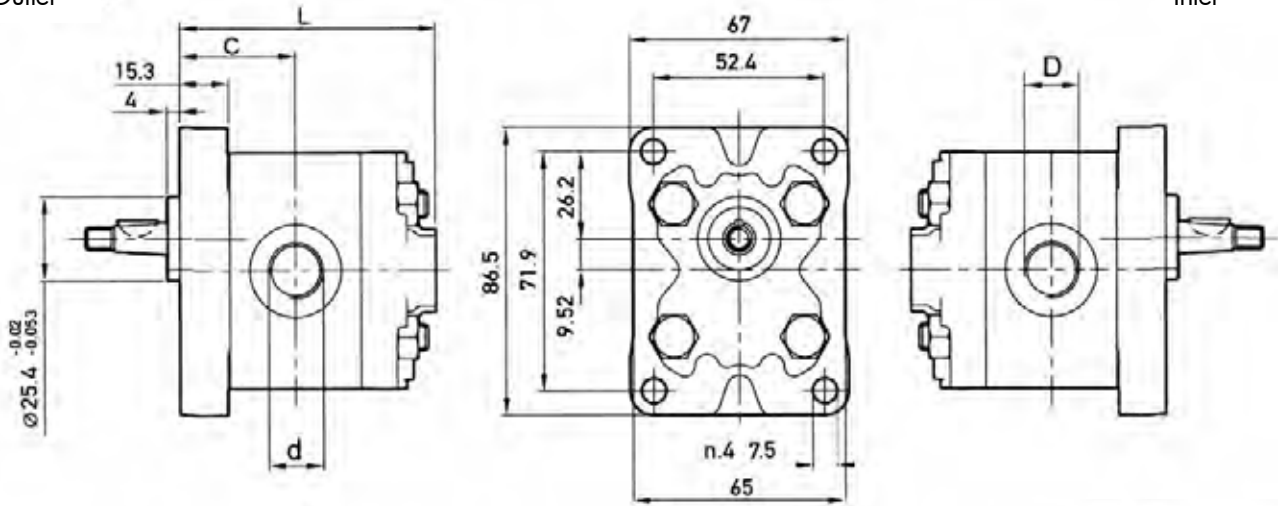
DIN Mount Group 1 with 1:8 Tapered Shaft - Clockwise Rotation

Part Number	Displacement (cm <sup>3</sup> /rev)	Continuous Pressure (bar)	Intermittent Pressure (bar)	Max Speed (rpm)	Min Speed (rpm)	L (mm)	C (mm)	Inlet D	Outlet d	Unpacked weight (kg)
P1B0D1.1TOG	1.1	230	250	6000	1000	74	33	G3/8	G1/4	1
P1B0D1.6TOG	1.6	230	250	6000	1000	76	34	G3/8	G1/4	1
P1B0D2.1TOG	2.1	230	250	6000	1000	78	35	G3/8	G1/4	1.1
P1B0D3.2TOG	3.2	210	230	5000	800	82	37	G3/8	G1/4	1.1
P1B0D4.2TOG	4.2	210	230	4000	800	86	39	G3/8	G1/4	1.2
P1B0D5.8TOG	5.8	190	210	3000	600	92	42	G3/8	G1/4	1.2

## Dimensions

Outlet

Inlet

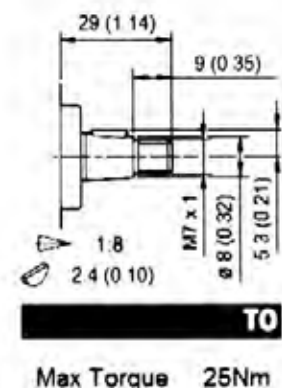


## Features

- Aluminium construction with aluminium front and rear housings
- Rotation is field reversible
- Torque shaft retaining Nut M7 to 8 Nm

## Seal Kit

Part Number
P1



# THW GEAR PUMPS



## High Pressure Gear Pumps

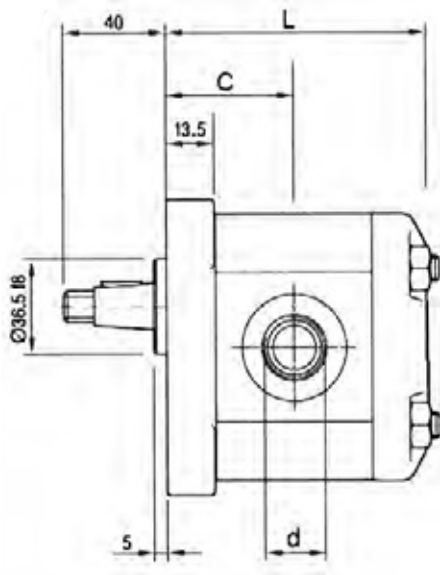
P2B0 Group 2 DIN Mount

DIN Mount Group 2 with 1:8 Tapered Shaft - Clockwise Rotation

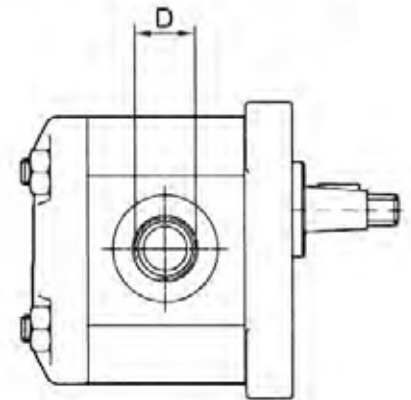
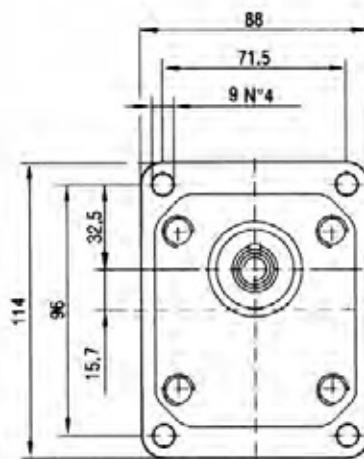
Part Number	Displacement (cm <sup>3</sup> /rev)	Continuous Pressure (bar)	Intermittent Pressure (bar)	Max Speed (rpm)	Min Speed (rpm)	L (mm)	C (mm)	Inlet D	Outlet d	Unpacked weight (kg)
P2B0D4TOG	4	270	285	4000	600	92.7	44.4	G1/2	G1/2	3.5
P2B0D6TOG	6	270	285	4000	600	96	46	G1/2	G1/2	3.6
P2B0D8TOG	8	270	285	3500	500	99.3	47.7	G3/4	G1/2	3.7
P2B0D12TOG	12	270	285	3000	500	105.9	51	G3/4	G1/2	3.8
P2B0D16TOG	16	250	265	4000	500	112.7	54.4	G3/4	G1/2	4
P2B0D20TOG	20	220	235	3200	400	119.3	57.7	G3/4	G1/2	4.2
P2B0D25TOG	25	200	215	3000	400	127.6	61.8	G3/4	G1/2	4.4

## Dimensions

Outlet



Inlet

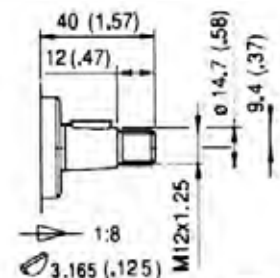


## Features

- Aluminium construction with cast iron front and rear housings
- Can be used as front of a tandem pump
- Rotation is field reversible
- Torque shaft retaining Nut M12 to 50 Nm

## Seal Kit

Part Number
P2



**TO**

Max Torque 200Nm

# GEAR PUMPS



## High Pressure Gear Pumps

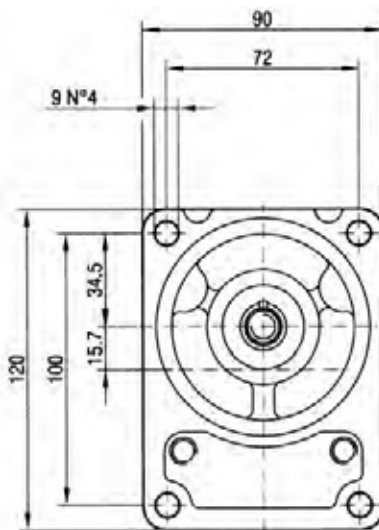
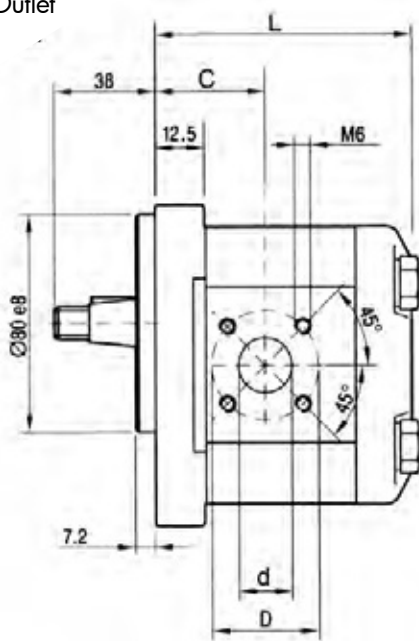
### P2B2 Group 2 'Bosch' Mount

#### Bosch Mount Group 2 with 1:5 Tapered Shaft - Clockwise Rotation

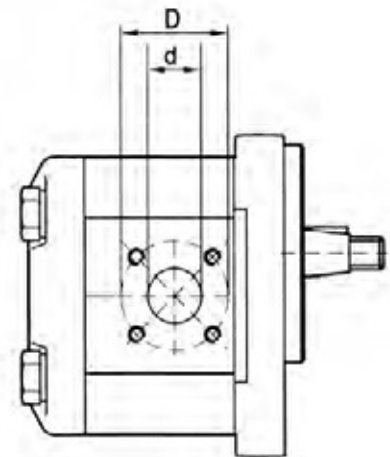
Part Number	Displacement (cm <sup>3</sup> /rev)	Continuous Pressure (bar)	Intermittent Pressure (bar)	Max Speed (rpm)	Min Speed (rpm)	L (mm)	C (mm)	Inlet D (mm)	Inlet d (mm)	Outlet D (mm)	Outlet d (mm)	Unpacked weight (kg)
P2B2D4T1F	4	270	285	4000	600	92.7	39.9	40	15	35	15	3.5
P2B2D6T1F	6	270	285	4000	600	96	41.1	40	15	35	15	3.6
P2B2D8T1F	8	270	285	3500	500	99.3	43.2	40	15	35	15	3.7
P2B2D12T1F	12	270	285	3000	500	105.9	47.5	40	20	35	15	3.8
P2B2D14T1F	14	250	265	4000	500	109.3	47.5	40	20	35	15	4
P2B2D16T1F	16	250	265	4000	500	112.7	47.5	40	20	35	15	4.2
P2B2D20T1F	20	220	235	3200	400	119.3	47.5	40	20	35	15	4.4
P2B2D20T1F	22	220	235	3000	400	122.6	55.1	40	20	35	15	4.6

## Dimensions

### Outlet



### Inlet

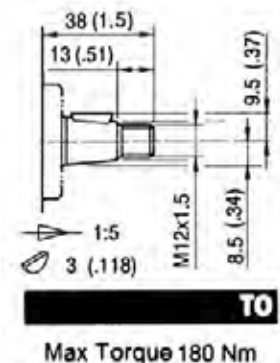


## Features

- Aluminium construction with cast iron front and rear housings
- Rotation is field reversible
- Torque shaft retaining Nut M12 x 1.5 to 50 Nm

## Seal Kit

Part Number
P2



# THW GEAR PUMPS

## High Pressure Gear Pumps

### P2A0 SAE-A 2 Bolt Mount

### SAE-A 2 Bolt Mount with 5/8" or 3/4" Straight Key - Clockwise Rotation



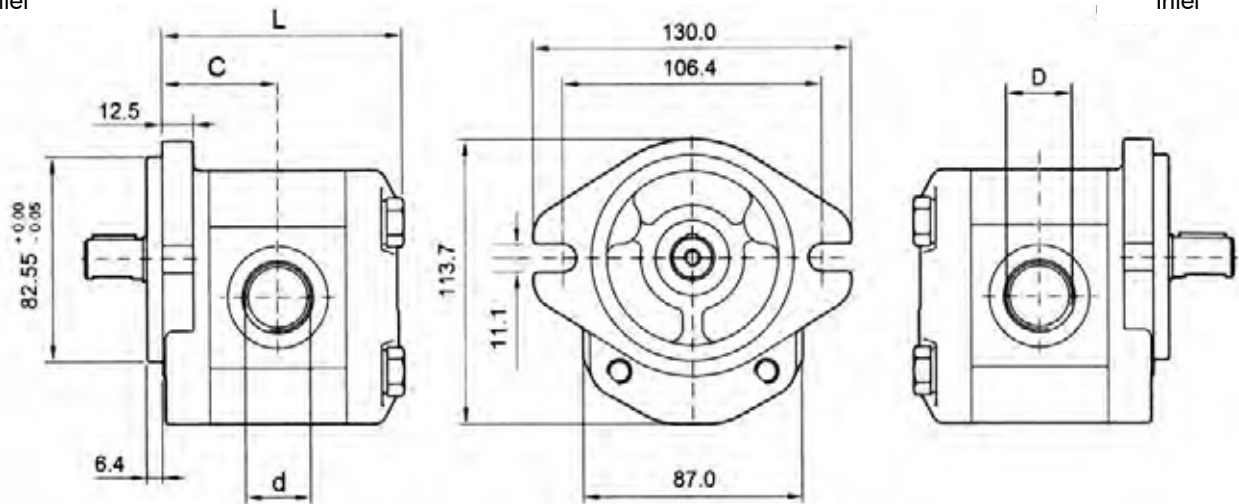
Part Number	Displacement (cm <sup>3</sup> /rev)	Continuous Pressure (bar)	Intermittent Pressure (bar)	Max Speed (rpm)	Min Speed (rpm)	L (mm)	C (mm)	Inlet D	Outlet d	Unpacked weight (kg)
P2A0D4**U	4	270	285	4000	600	92.7	44.4	1-1/16" UNO	7/8" UNO	3.7
P2A0D6**U	6	270	285	4000	600	96	46	1-1/16" UNO	7/8" UNO	3.8
P2A0D8**U	8	270	285	3500	500	99.3	47.7	1-1/16" UNO	7/8" UNO	3.9
P2A0D12**U	12	270	285	3000	500	105.9	51	1-1/16" UNO	7/8" UNO	4.0
P2A0D16**U	16	250	265	4000	500	112.7	54.4	1-1/16" UNO	7/8" UNO	4.3
P2A0D20**U	20	220	235	3200	400	119.3	57.7	1-1/16" UNO	7/8" UNO	4.4
P2A0D25**U	25	200	215	3000	400	127.6	61.8	1-1/16" UNO	7/8" UNO	4.7

\*\*Note: Insert Shaft Code C0 for 5/8" Straight Key, or C1 for 3/4" Straight Key

### Dimensions

Outlet

Inlet

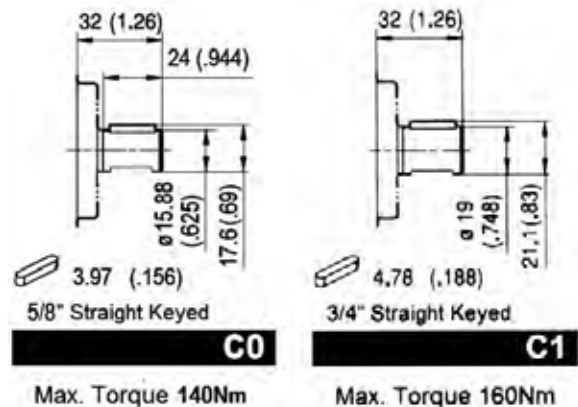


### Features

- Aluminium construction with cast iron front and rear housings
- Rotation is field reversible
- Can be used as front of a tandem pump

### Seal Kit

Part Number
P2



Max. Torque 140Nm

Max. Torque 160Nm

# GEAR PUMPS



## High Pressure Gear Pumps

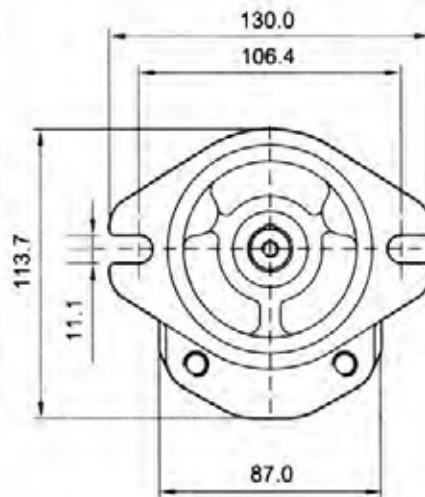
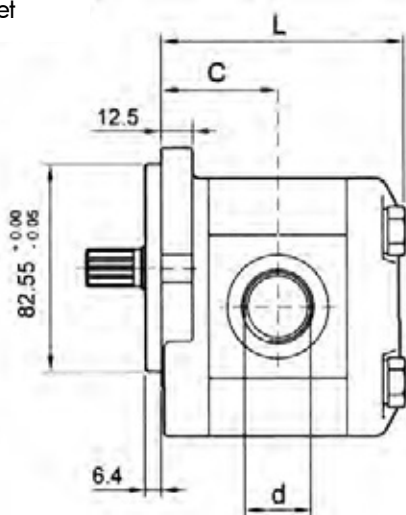
P2A0 SAE-A 2 Bolt Mount

SAE-A 2 Bolt Mount with 5/8" 9 Tooth Spine - Clockwise Rotation

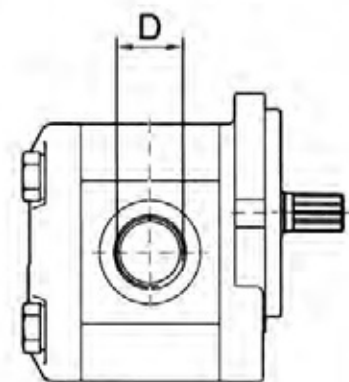
Part Number	Displacement (cm <sup>3</sup> /rev)	Continuous Pressure (bar)	Intermittent Pressure (bar)	Max Speed (rpm)	Min Speed (rpm)	L (mm)	C (mm)	Inlet D	Outlet d	Unpacked weight (kg)
P2A0D4S0U	4	270	285	4000	600	92.7	44.4	1-1/16" UNO	7/8" UNO	3.7
P2A0D6S0U	6	270	285	4000	600	96	46	1-1/16" UNO	7/8" UNO	3.8
P2A0D8S0U	8	270	285	3500	500	99.3	47.7	1-1/16" UNO	7/8" UNO	3.9
P2A0D12S0U	12	270	285	3000	500	105.9	51	1-1/16" UNO	7/8" UNO	4.0
P2A0D16S0U	16	250	265	4000	500	112.7	54.4	1-1/16" UNO	7/8" UNO	4.3
P2A0D20S0U	20	220	235	3200	400	119.3	57.7	1-1/16" UNO	7/8" UNO	4.4
P2A0D25S0U	25	200	215	3000	400	127.6	61.8	1-1/16" UNO	7/8" UNO	4.7

## Dimensions

Outlet



Inlet

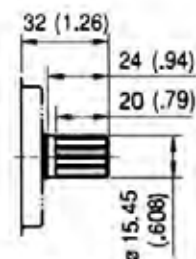


## Features

- Aluminium construction with cast iron front and rear housings
- Rotation is field reversible
- Can be used as front of a tandem pump

## Seal Kit

Part Number
P2



5/8 9 Tooth 16/32-30°  
FLAT ROOT SIDE FIT

**S0**

Max. Torque 185 Nm

# THW GEAR PUMPS



## High Pressure Gear Pumps

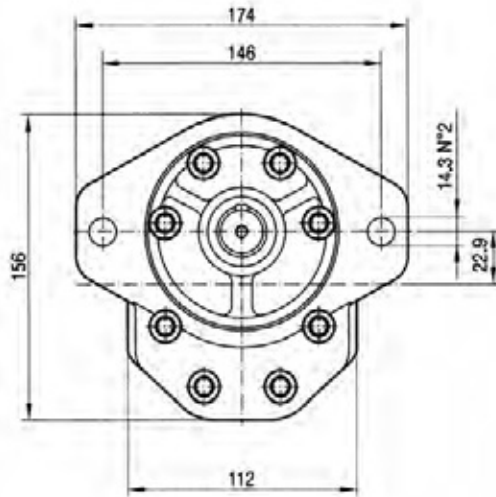
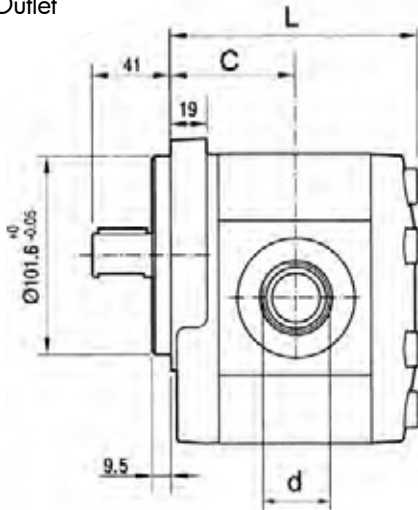
### P3A0 SAE-B 2 Bolt Mount

#### SAE-B Bolt Mount with 7/8" Straight Key - Clockwise Rotation

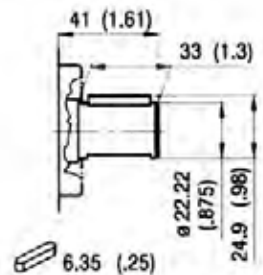
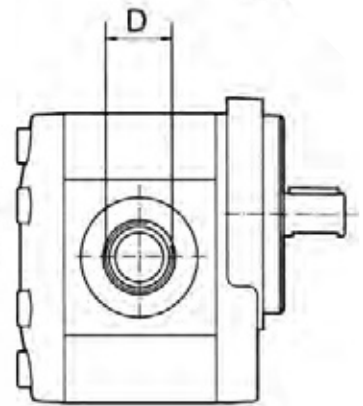
Part Number	Displacement (cm <sup>3</sup> /rev)	Continuous Pressure (bar)	Intermittent Pressure (bar)	Max Speed (rpm)	Min Speed (rpm)	L (mm)	C (mm)	Inlet D	Outlet d	Unpacked weight (kg)
P3A0D22C2U	22	250	265	3500	600	130	64	1-5/16" UNO	1-1/16" UNO	9
P3A0D33C2U	33	230	250	3000	500	139	68	1-5/16" UNO	1-1/16" UNO	9.6
P3A0D46C2U	46	230	250	3000	500	152	75	1-5/8" UNO	1-1/16" UNO	10.2
P3A0D52C2U	52	220	240	3000	500	156	78	1-5/8" UNO	1-1/16" UNO	10.5
P3A0D63C2U	63	200	230	2800	400	168	83	1-7/8" UNO	1-5/16" UNO	10.8

## Dimensions

Outlet



Inlet



7/8 Straight Keyed

C2

Max Torque 400Nm

## Features

- Aluminium construction with cast iron front and rear housings
- Rotation is field reversible

## Seal Kit

Part Number
P3

# GEAR PUMPS



## High Pressure Gear Pumps

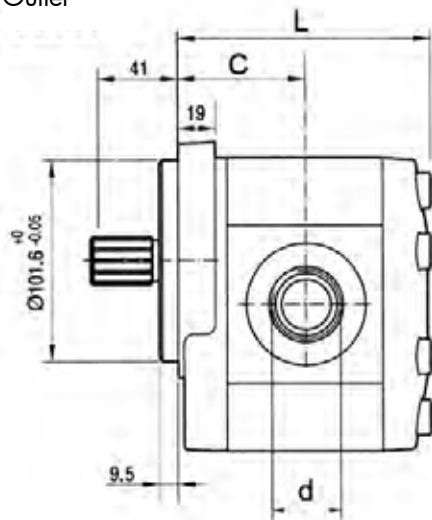
### P3A0 SAE-B 2 Bolt Mount

#### SAE-B 2 Bolt Mount with 7/8" 13 Tooth Spline - Clockwise Rotation

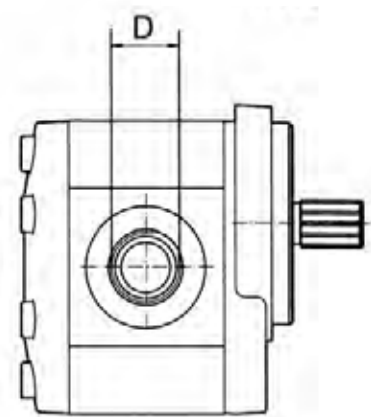
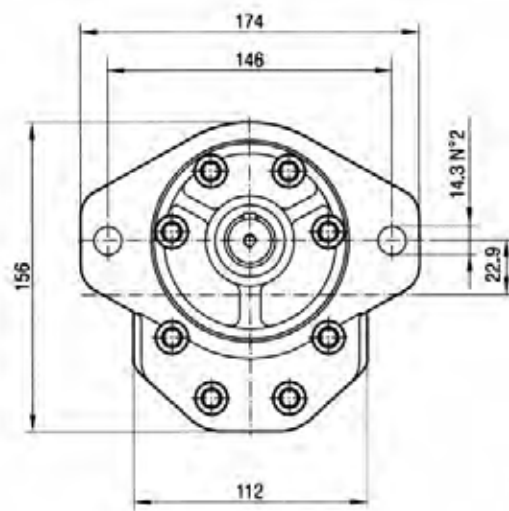
Part Number	Displacement (cm <sup>3</sup> /rev)	Continuous Pressure (bar)	Intermittent Pressure (bar)	Max Speed (rpm)	Min Speed (rpm)	L (mm)	C (mm)	Inlet D	Outlet d	Unpacked weight (kg)
P3A0D22S0U	22	250	265	3500	600	130	64	1-5/16" UNO	1-1/16" UNO	9
P3A0D33S0U	33	230	250	3000	500	139	68	1-5/16" UNO	1-1/16" UNO	9.6
P3A0D46S0U	46	230	250	3000	500	152	75	1-5/8" UNO	1-1/16" UNO	10.2
P3A0D52S0U	52	220	240	3000	500	156	78	1-5/8" UNO	1-1/16" UNO	10.5
P3A0D63S0U	63	200	230	2800	400	168	83	1-7/8" UNO	1-5/16" UNO	10.8

### Dimensions

#### Outlet



#### Inlet

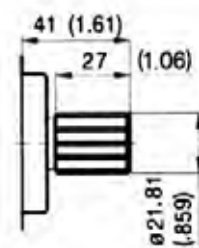


### Features

- Aluminium construction with cast iron front and rear housings
- Rotation is field reversible

### Seal Kit

Part Number
P3



7/8 13 Tooth 16/32-30°  
FLAT ROOT SIDE FIT

50

Max Torque 500Nm



# THW GEAR PUMPS



## High Pressure Double Pumps

### Rear Pumps

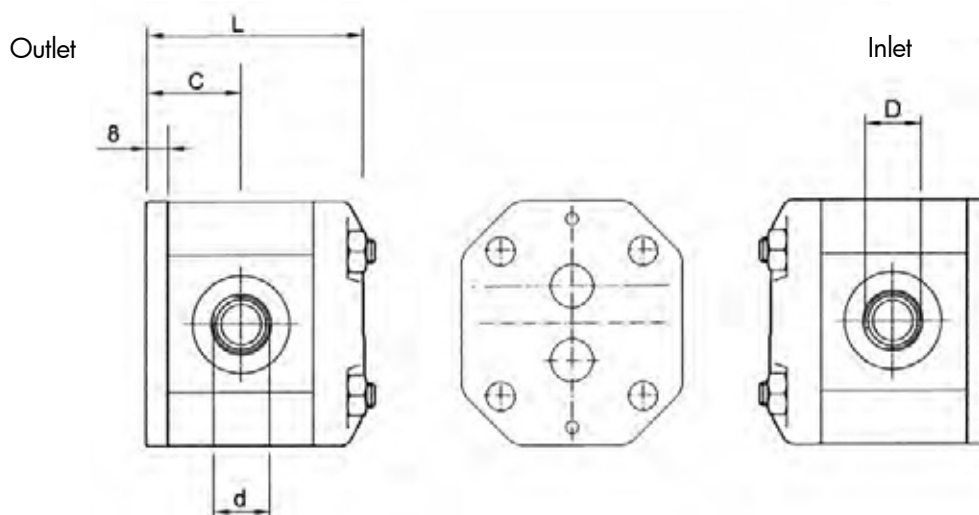
Rear of Tandem Group 2 with Female Spline - Clockwise Rotation - BSP Ported (Recommended for P2B0- type pumps)

Part Number	Displacement (cm <sup>3</sup> /rev)	Continuous Pressure (bar)	Intermittent Pressure (bar)	Max Speed (rpm)	Min Speed (rpm)	L (mm)	C (mm)	Inlet D	Outlet d	Unpacked weight (kg)
P2FAD4L0	4	270	285	4000	600	90.2	37.4	G1/2	G1/2	2.4
P2FAD6L0	6	270	285	4000	600	93.5	38.6	G1/2	G1/2	2.5
P2FAD8L1	8	270	285	3500	500	96.8	40.7	G3/4	G1/2	2.6
P2FAD12L1	12	270	285	3000	500	103.4	45	G3/4	G1/2	2.7
P2FAD16L1	16	250	265	4000	500	110.2	45	G3/4	G1/2	3
P2FAD20L1	20	220	235	3200	400	116.8	45	G3/4	G1/2	3.2

Rear of Tandem Group 2 with Female Spline - Clockwise Rotation - UNO Ported (Recommended for P2A0- type pumps)

Part Number	Displacement (cm <sup>3</sup> /rev)	Continuous Pressure (bar)	Intermittent Pressure (bar)	Max Speed (rpm)	Min Speed (rpm)	L (mm)	C (mm)	Inlet D	Outlet d	Unpacked weight (kg)
P2FAD4U0	4	270	285	4000	600	90.2	37.4	1-1/16" UNO	7/8" UNO	2.4
P2FAD6U0	6	270	285	4000	600	93.5	38.6	1-1/16" UNO	7/8" UNO	2.5
P2FAD8U0	8	270	285	3500	500	96.8	40.7	1-1/16" UNO	7/8" UNO	2.6
P2FAD12U0	12	270	285	3000	500	103.4	45	1-1/16" UNO	7/8" UNO	2.7
P2FAD16U0	16	250	265	4000	500	110.2	45	1-1/16" UNO	7/8" UNO	3
P2FAD20U0	20	220	235	3200	400	116.8	45	1-1/16" UNO	7/8" UNO	3.2

### Dimensions



# GEAR PUMPS



## High Pressure Double Pumps

### Joining Kits

Part Number	Joining Kits
GRP2-GRP2	Group 2+Group 2

Note: Joining Kits and Tie Rod Kits are sold separately. Please select correct length Tie Rod Kit from the below chart.

### Tie Rod Kits - Group 2 to Group 2

Tie Rod Kit	Front Pump (cc/rev)	Rear Pump (cc/rev)
BK170	4	4
BK170	6	4
BK170	6	6
BK170	8	4
BK170	8	6
BK180	8	8
BK180	12	4
BK180	12	6
BK180	12	8
BK180	16	4
BK190	12	12
BK190	16	6
BK190	16	8
BK190	20	4
BK190	20	6
BK200	16	12
BK200	16	16
BK200	20	8
BK200	20	12
BK200	25	4
BK200	25	6
BK200	25	8
BK215	20	16
BK215	20	20
BK215	25	12
BK215	25	16

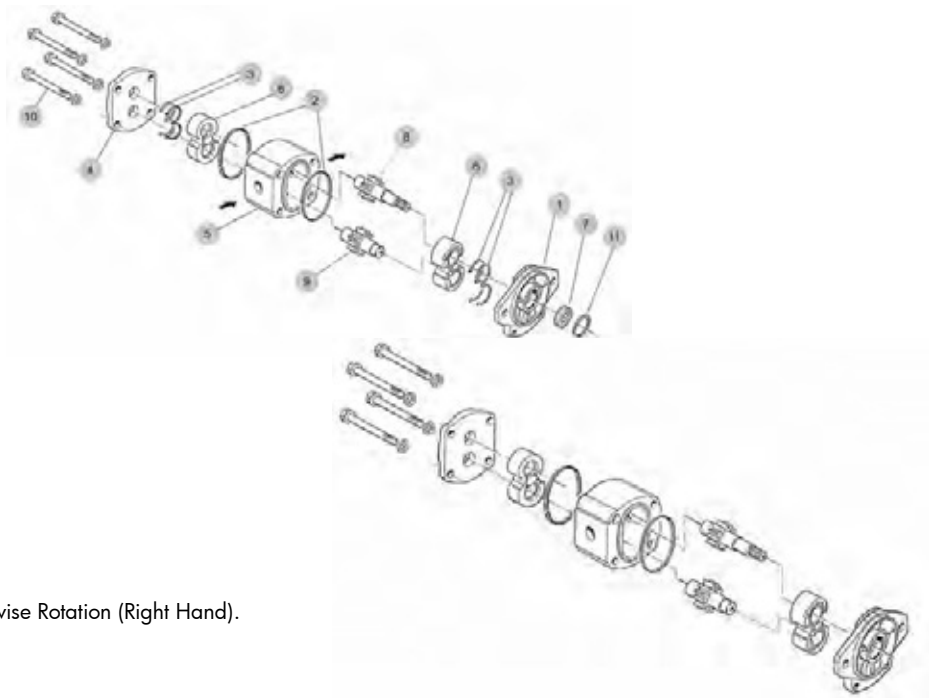
Note: When assembling, tighten the bolts to the recommended Torque 44Nm.

# THW GEAR PUMPS

## Changing Rotation

### Components

- 1 – Front Housing
- 2 – Body Seals
- 3 – Seals and back ups
- 4 – Rear housing
- 5 – Middle Housing
- 6 – Bushing
- 7 – Pressure Seal
- 8 – Drive Shaft
- 9 – Driven Shaft
- 10 – Bolts (qty 4)



Note: The pump shown above is Clockwise Rotation (Right Hand).

## Disassembly

- Step One:** Take out the four Bolts (item 10). Make sure Key is removed from shaft, if applicable
- Step Two:** Remove Front Cover (item 1) and Rear Cover (item 4).
- Step Three:** Pull out the Drive Shaft (item 8) this will also take pull out the Bushing (items 3 & 6).
- Step Four:** Take out the Driven Shaft (item 9) and the other Bushing (items 3 & 6), if it's still inside the Middle Housing (item 5). There should now be a clear hole through the Middle Housing.

## Reassembly

- Step Five:** Rotate the Middle Housing (item 5) 180 degrees so that the arrow is still on top pointing in the opposite direction.
- Step Six:** Put the Driven Shaft (item 9) back inside the bottom part of the Middle Housing (item 5) so that the through drive spline is facing the rear.
- Step Seven:** Now put the Drive Shaft (item 8) back inside the top part of the Middle Housing (item 5) so that the shaft is facing the front.
- Step Eight:** Connect the Bushings (items 3 & 6) back onto each side of the Middle Housing (item 5) making sure the seals are facing outwards and towards the outlet pressure port (see below pictures), otherwise the gears will cut the seals.
- Step Nine:** Assemble the Front and Rear Covers (items 1 & 4), then tighten the Bolts (item 10) to the recommended Torque 44 Nm.

