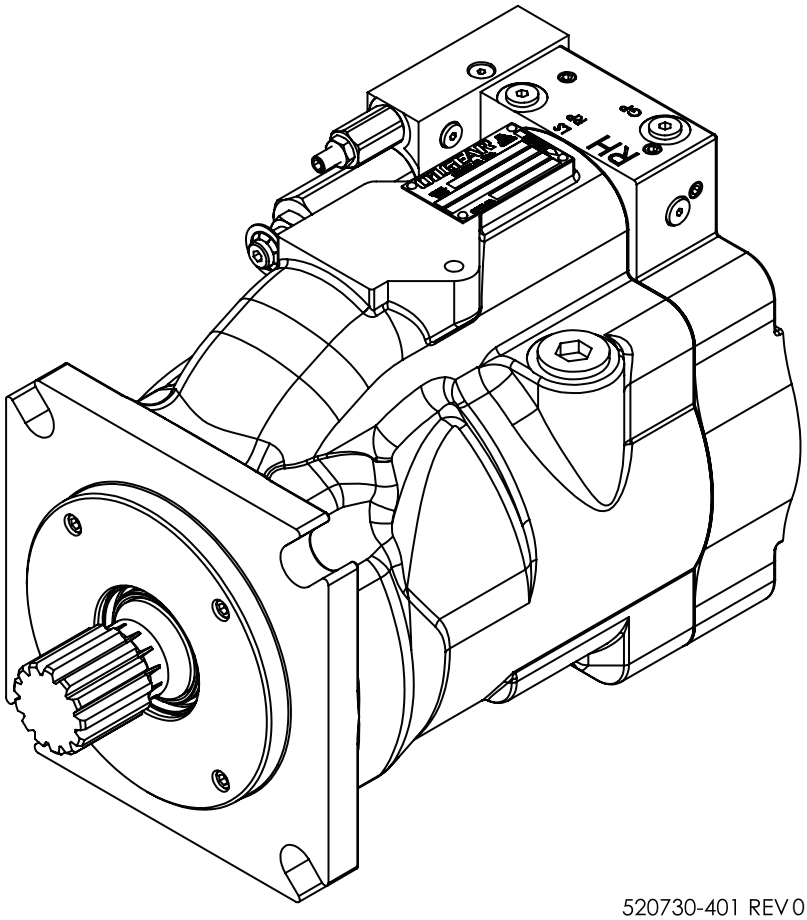
THE WORLD DEMANDS OILGEAR

Installation Bulletin

XD5-150-D1

Variable Displacement Pump



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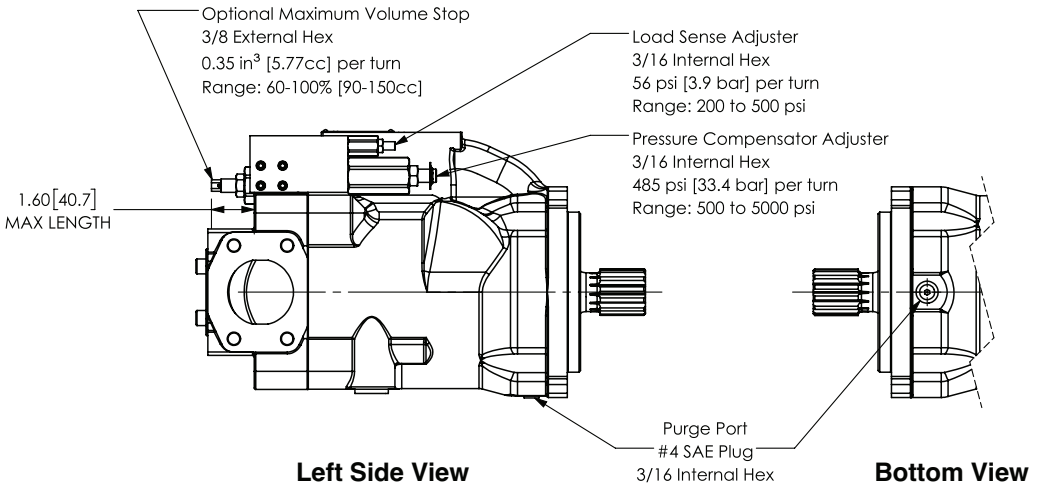
THE OILGEAR COMPANY
905 South Downing Street, Fremont, NE 68025 USA

Issue Date: 11/21/2024
910010

ADJUSTER AND PURGE PORT LOCATIONS



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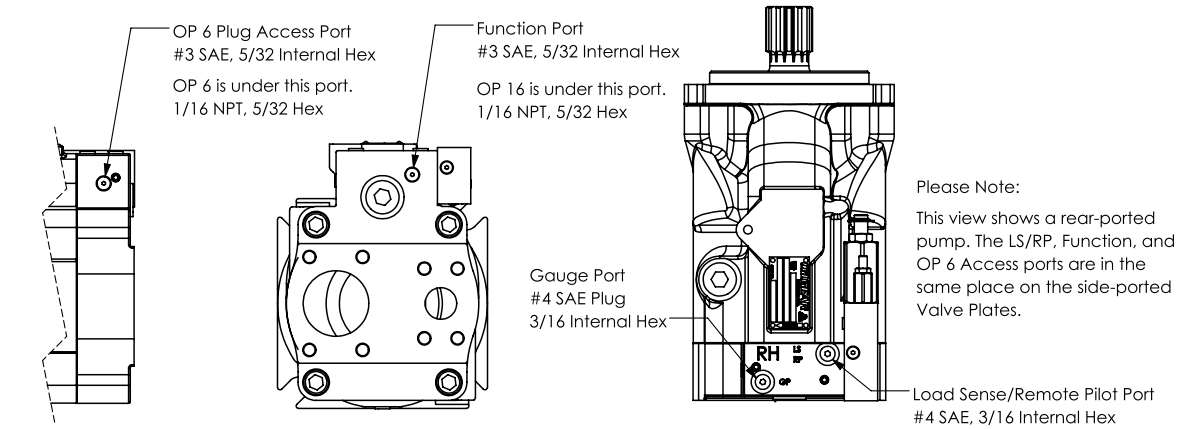
CONTROL PORT LOCATIONS



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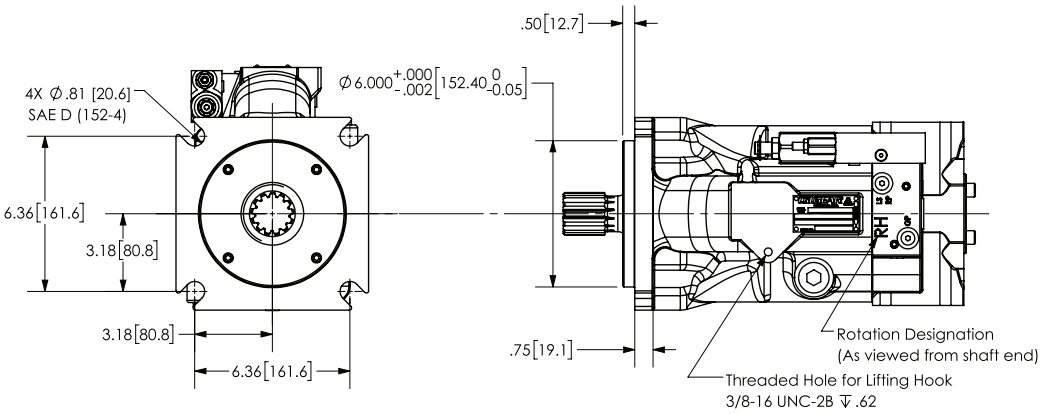
MOUNTING FLANGE, LIFTING HOOK, AND ROTATION DESIGNATION



Mounting Flange View **Top View, Side Port Valve Plate**

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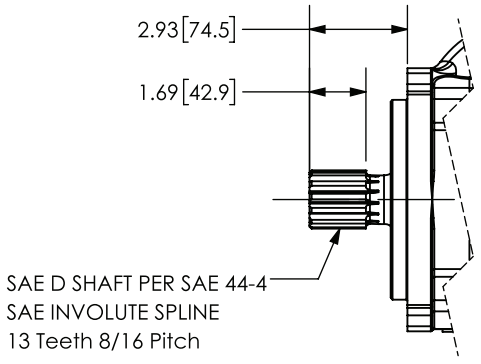
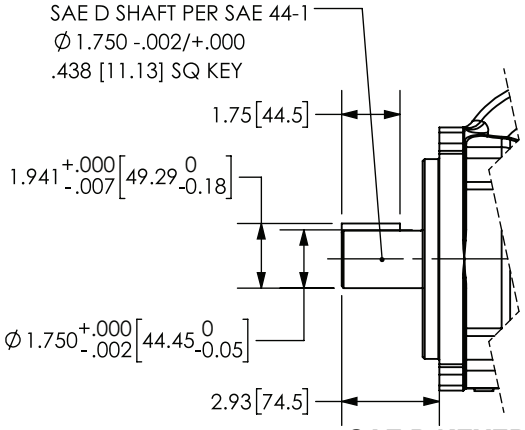
DRIVESHAFTS



SAE D SPLINE
MODEL CODE L



SAE D KEYED
MODEL CODE Y

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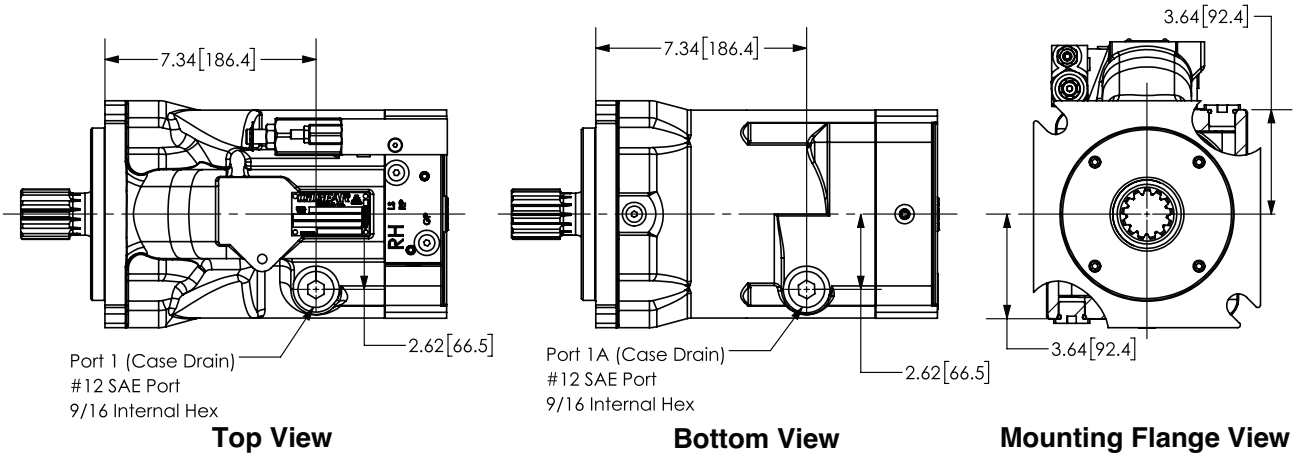
CASE DRAIN LOCATIONS



Top View **Bottom View** **Mounting Flange View**

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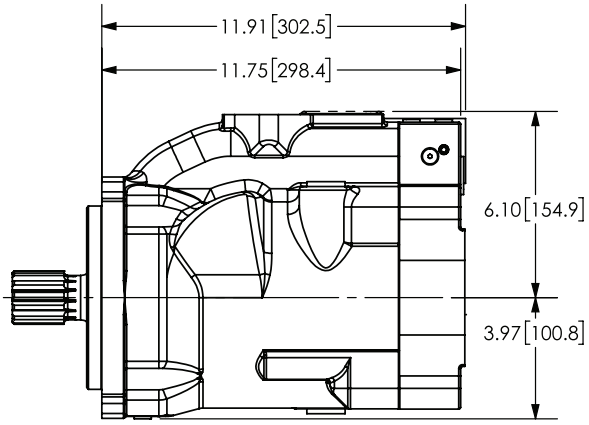
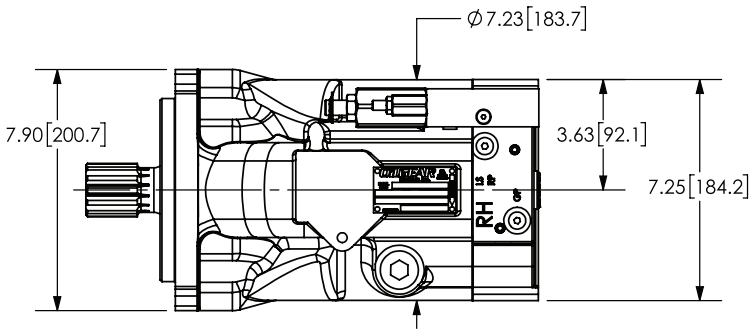
CLEARANCE DIMENSIONS



Right Side View, Rear Ported Valve Plate



Top View, Rear Ported Valve Plate

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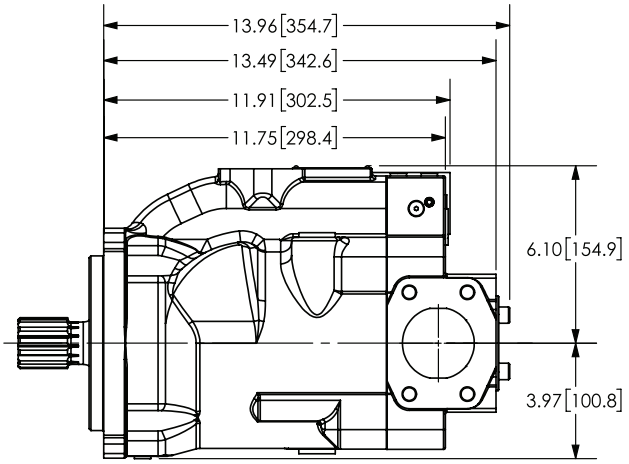
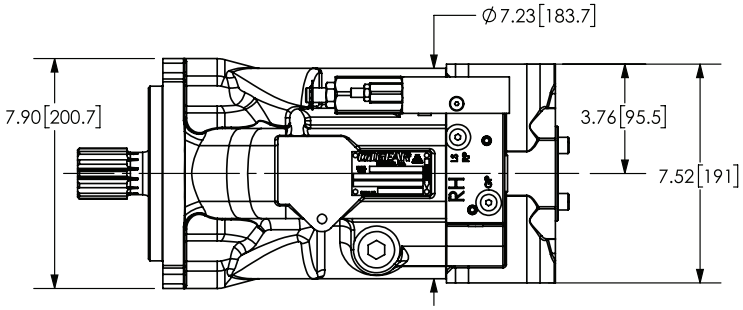


Right Side View, Side Ported Valve Plate



Top View, Side Ported Valve Plate

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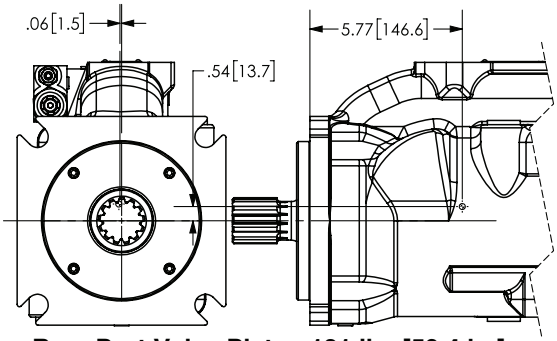
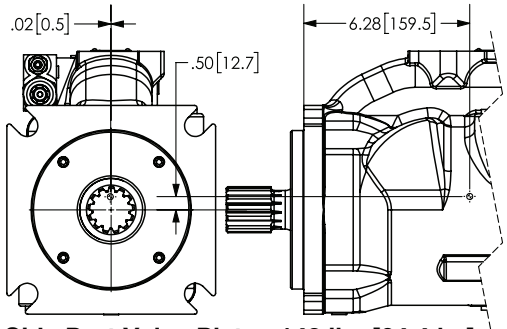
CENTER OF GRAVITY AND DRY WEIGHT



Rear Port Valve Plate - 131 lbs [59.4 kg]



Side Port Valve Plate - 142 lbs [64.4 kg]

Rotational Moment of Inertia: 150 lb*in² [439 kg*cm²]

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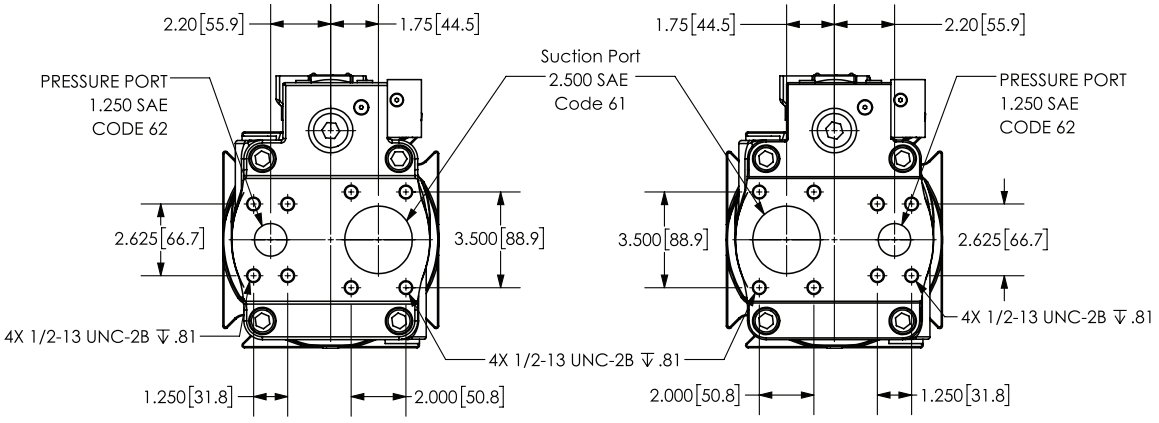
VALVE PLATE VIEWS



Rear Port Valve Plate, Left Hand Rotation (CCW) **Rear Port Valve Plate, Right Hand Rotation (CW)**

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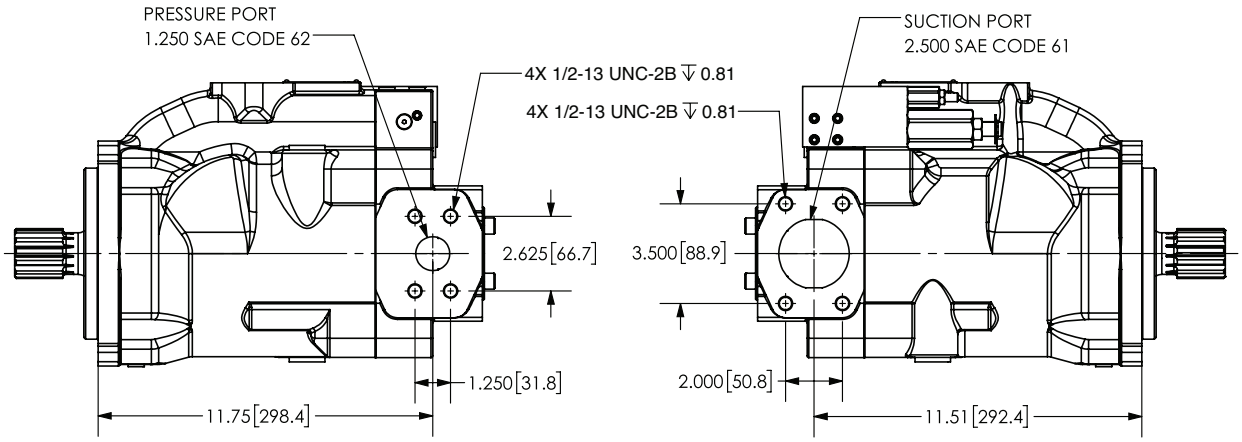

Side Ported Valve Plate, Left Hand Rotation (CCW)

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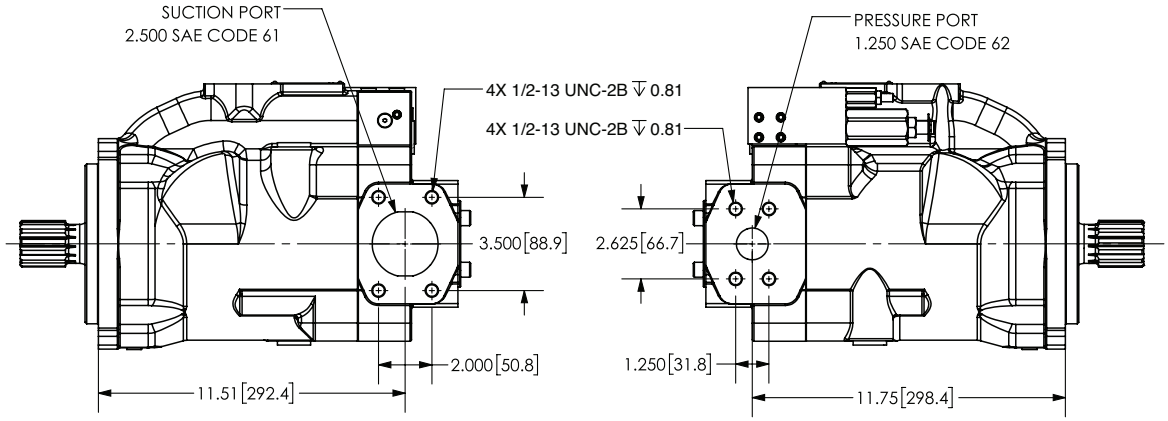

Side Ported Valve Plate, Right Hand Rotation (CW)

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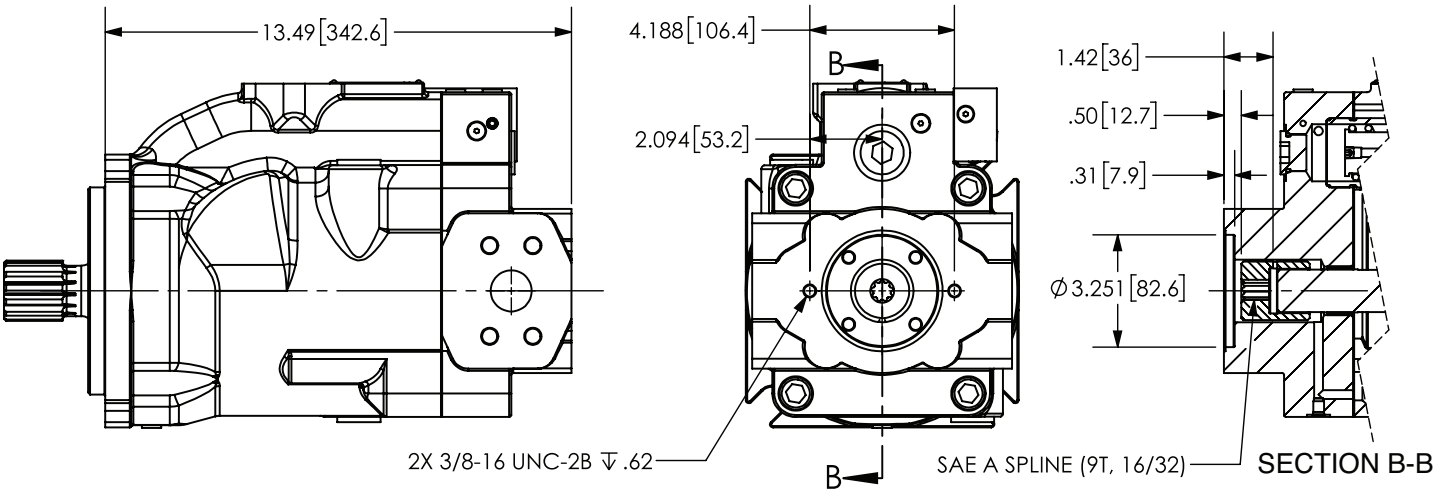
TANDEM PUMP ADAPTERS



SAE A (82-2) MOUNTING ADAPTER

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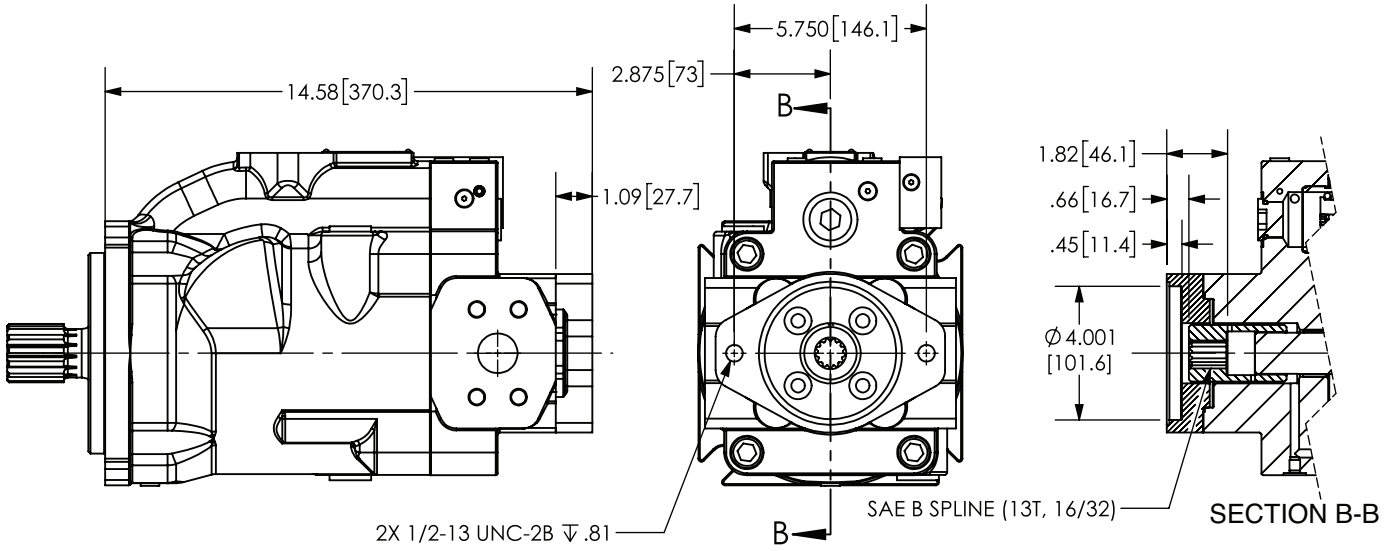

SAE B (101-2) MOUNTING ADAPTER

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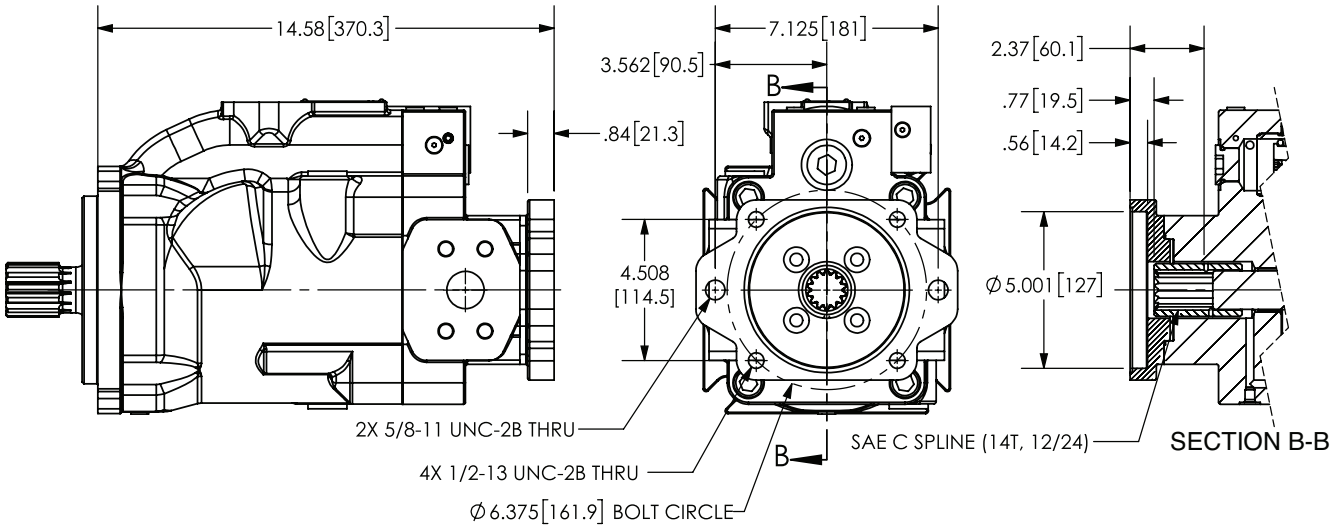
TANDEM PUMP ADAPTERS



SAE C (127-2/4) MOUNTING ADAPTER

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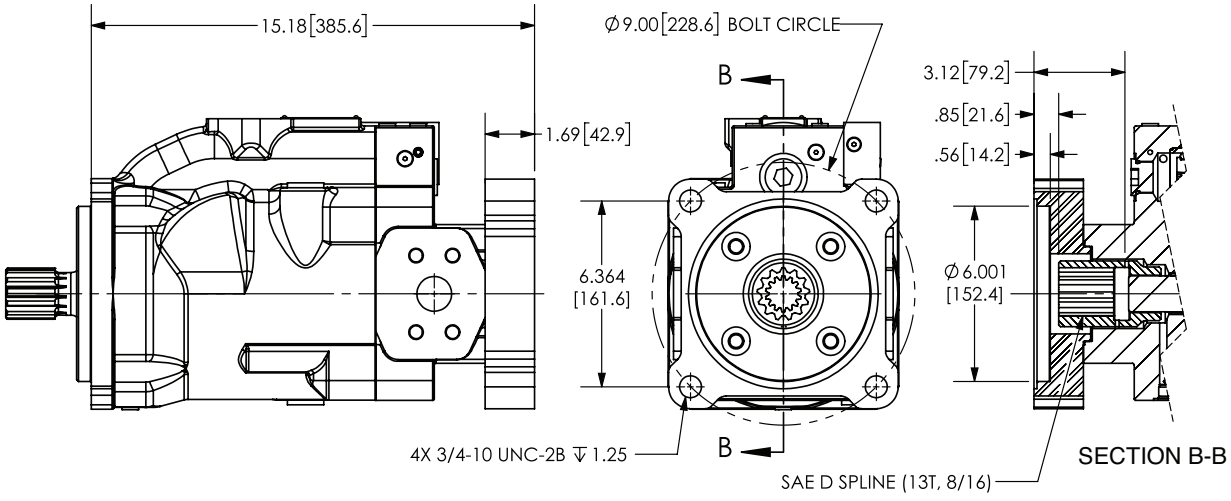

SAE D (152-4) MOUNTING ADAPTER

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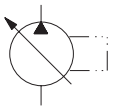


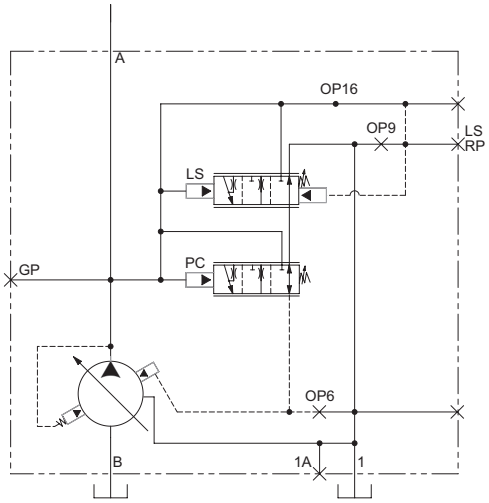
CIRCUIT DIAGRAMS

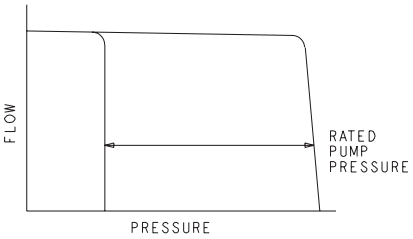
■ Pressure Compensator Only: **P-1NN**

Ensures maximum pump flow until outlet pressure reaches preset control pressure setting, then regulates output flow to match the requirements of the system while maintaining preset output pressure.

- OP 16 is OPEN
- OP 9 is PLUGGED
- OP 6 is PLUGGED
- The LS/RP Port is PLUGGED

All internal plugs and orifices use 1/16 NPT plugs and 5/32 internal hex wrenches.



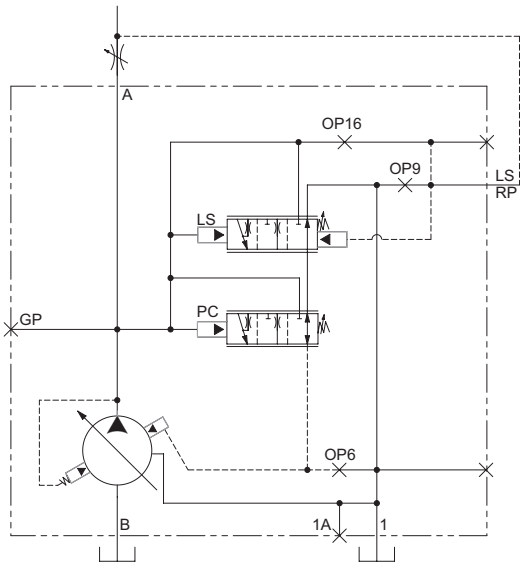


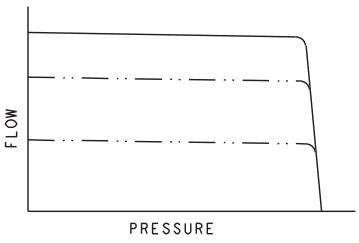
■ Pressure Compensator and Load Sense: **P-1NN/F or P-1NN/B**

A constant flow output is maintained for a given flow control valve setting regardless of changes in drive speed and/or working pressure.

- OP 16 is PLUGGED
- OP 9 is PLUGGED in P-1NN/F, or uses optional orifice in P-1NN/B
- OP 6 is PLUGGED
- The customer-supplied Load Sense circuit is plumbed into the LS/RP Port.

All internal plugs and orifices use 1/16 NPT plugs and 5/32 internal hex wrenches.





CIRCUIT DIAGRAMS

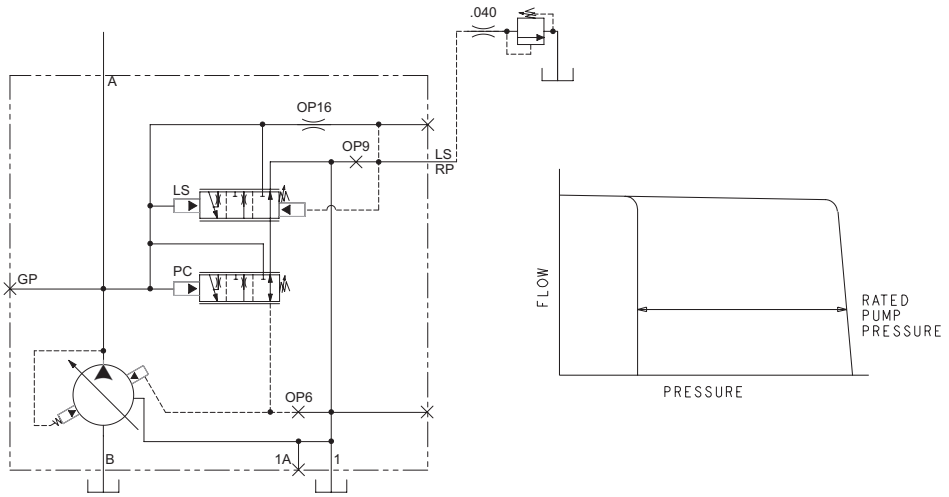
■ Remote Pressure Compensator: **P-RNN**

A customer-supplied remote compensator circuit is plumbed into the LS/RP port on the pump. If the remote compensator opens to vent fluid, then the pump will compensate as if the pump's integral compensator reached its pressure setting.

The on-board compensator is still active, and will independently respond to compensate.

- OP 16 has a Ø 0.031 in ORIFICE
- OP 9 is PLUGGED
- OP 6 is PLUGGED
- The customer-supplied Remote Compensator circuit is plumbed into the LS/RP Port.
- The Remote Compensator requires a flow rate of approximately 0.25 GPM.
- The remote pilot relief valve requires a 0.040 inch stability orifice.
- If a 1/4 inch line is used to connect the remote compensator to the LS/RP port, then the recommended line length is 6 to 30 feet.
- If a 3/8 inch line is used to connect the remote compensator to the LS/RP port, then the recommended line length is 3 to 30 feet.

All internal plugs and orifices use 1/16 NPT plugs and 5/32 internal hex wrenches.



CIRCUIT DIAGRAMS

■ Remote Pressure Compensator and Load Sense: P-1NN/F

A customer-supplied remote compensator circuit is plumbed into the LS/RP port on the pump. If the remote compensator opens to vent fluid, then the pump will compensate.

The on-board compensator and load sense functions are still active, and will independently respond to regulate flow.

- OP 16 is PLUGGED
- OP 9 is PLUGGED
- OP 6 is PLUGGED
- The customer-supplied Remote Compensator/Load Sense circuit is plumbed into the LS/RP Port. The circuit requires a Ø 0.031 in. orifice between the Remote Compensator and Load Sense components.
- The Remote Compensator requires a flow rate of approximately 0.25 GPM.
- The remote pilot relief valve requires a 0.040 inch stability orifice.
- If a 1/4 inch line is used to connect the remote compensator to the LS/RP port, then the recommended line length is 6 to 30 feet.
- If a 3/8 inch line is used to connect the remote compensator to the LS/RP port, then the recommended line length is 3 to 30 feet.

All internal plugs and orifices use 1/16 NPT plugs and 5/32 internal hex wrenches.