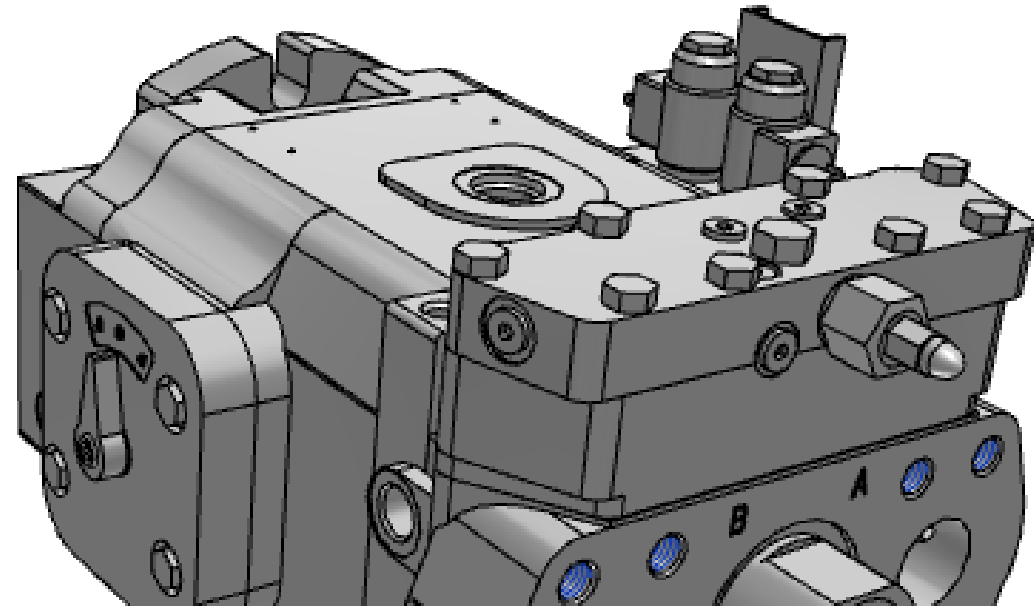


Identifying Gold Cup Port Locations



The following slides provide some common Gold Cup configurations in 3D views with port size and location identified. Please send any suggestions, additions, or corrections to dcebert@parker.com



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Content

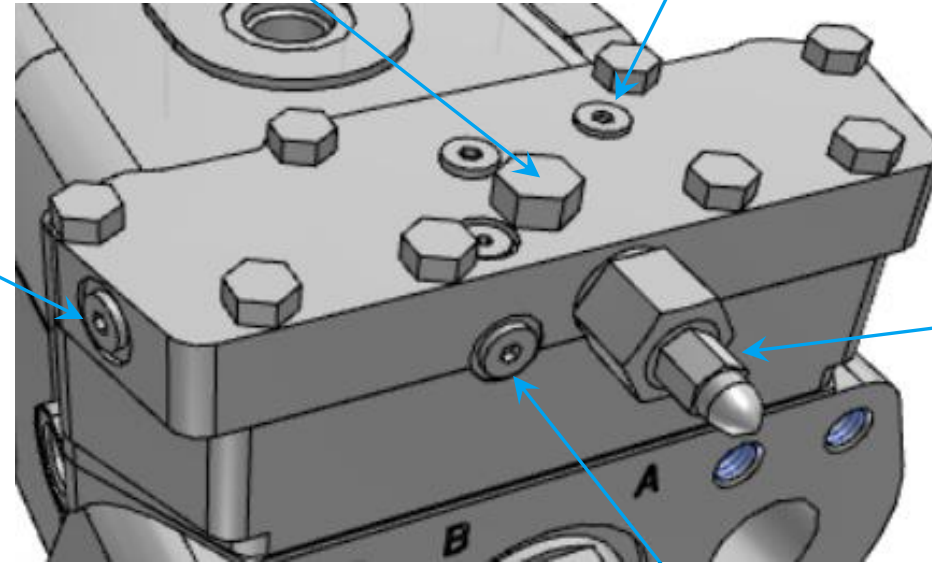
- Valve Block
- **P6/7/8 Reference:**
 - P6P3R1C9A2A00 (rear ported)
 - P6S3R1C9A2A000M0 (side ported, medium torque thru-drive, shuttle package)
 - P6R3R1C8A2A00XC0 (side ported, high torque thru-drive)
 - M7F5N1D0 (rear ported, fixed displacement motor, with SAE-D 4 bolt mount)
 - M6H2N1C2M0A60 (rear ported, variable displacement motor with shuttle flushing valve)
- **P11/14 Reference:**
 - P11P3L1C9A2A00 (rear ported)
 - P11S3R1C8A2A000A0 (side ported, medium torque thru-drive, shuttle package)
 - P11L3R1C4A2A00XB0 (side ported, high torque thru-drive, shuttle package)
 - M11G3N5A02 (rear ported motor, fixed displacement with shuttle flushing valve)
 - M14L3N1A9A02C0 (side ported motor, variable displacement with high torque thru-drive & shuttle flushing valve)
- **P24 Reference:**
 - P24P2L1E4A2A004 (side ported)
 - P24R3R1E8A2A00XF0 (side ported, high torque thru-drive)
 - P24L3R1E8A2A00XF0 (shuttle ports only)
 - M24F2N1D0 (rear ported motor, fixed displacement)
- **P30 Reference:**
 - P30S3R1B9A2A001B0 (side ported, medium torque thru-drive, shuttle package)
 - M30V2N1A8A0A0 (rear ported motor, variable displacement)

Valve Block

KG (SAE-6 STR. THD): Replenish pressure gage connection

V (SAE-4 STR. THD): Common compensator vent connection

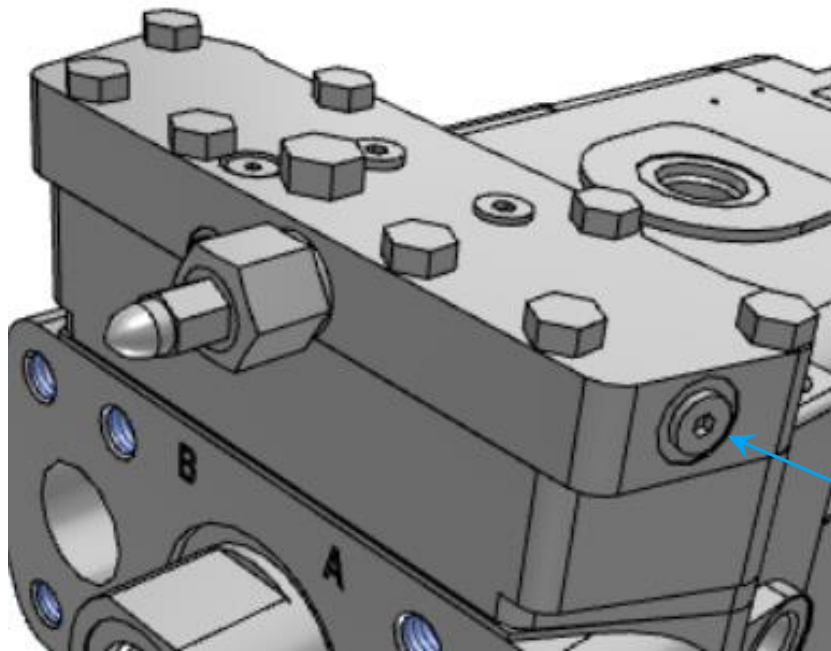
VB (SAE-4 STR. THD): Individual ("B" side) compensator vent connection



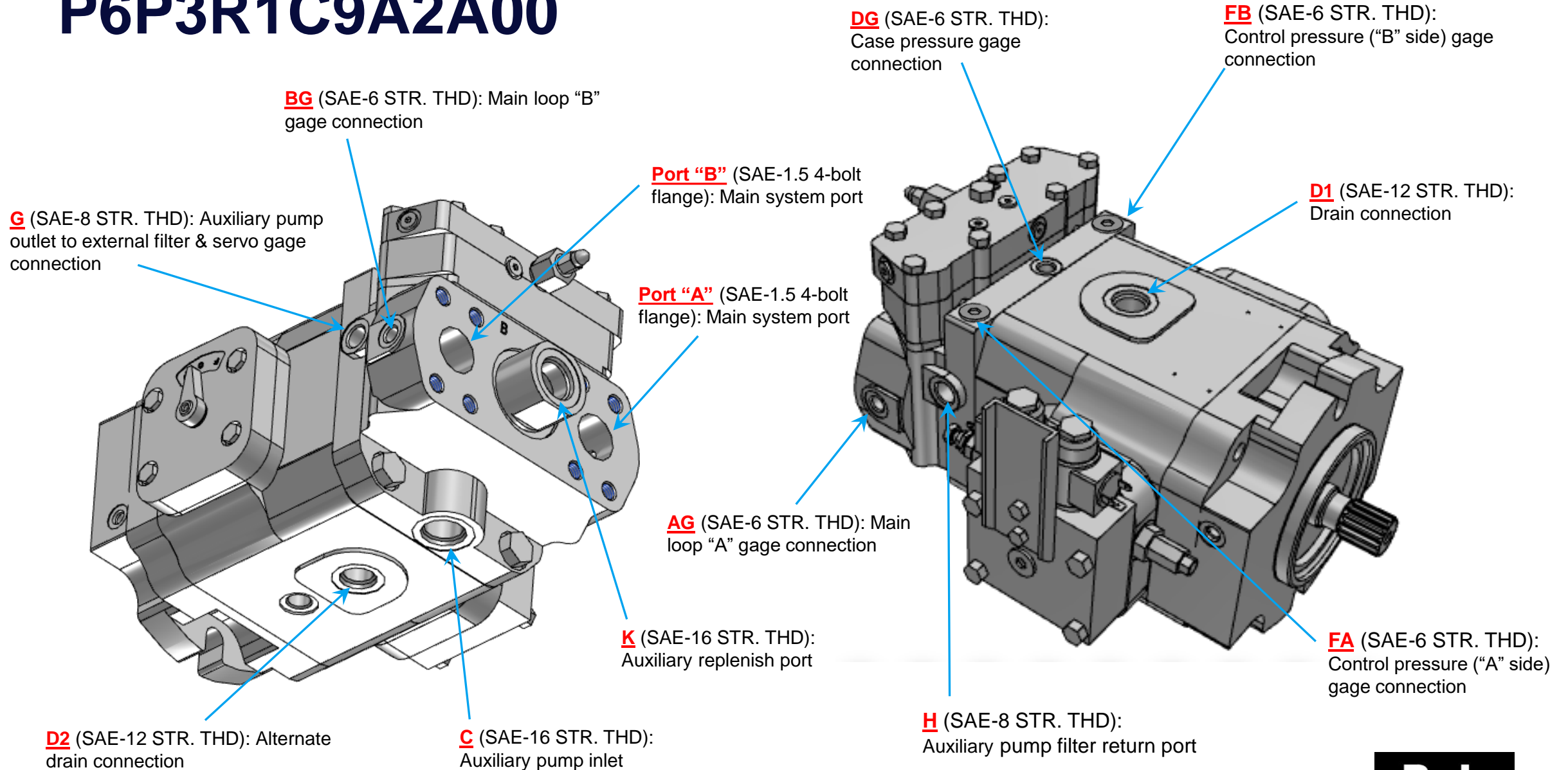
Compensator Adjustment: ½ turn on the adjustment is approximately 1000 psi pressure change.

VA (SAE-4 STR. THD): Individual ("A" side) compensator vent connection

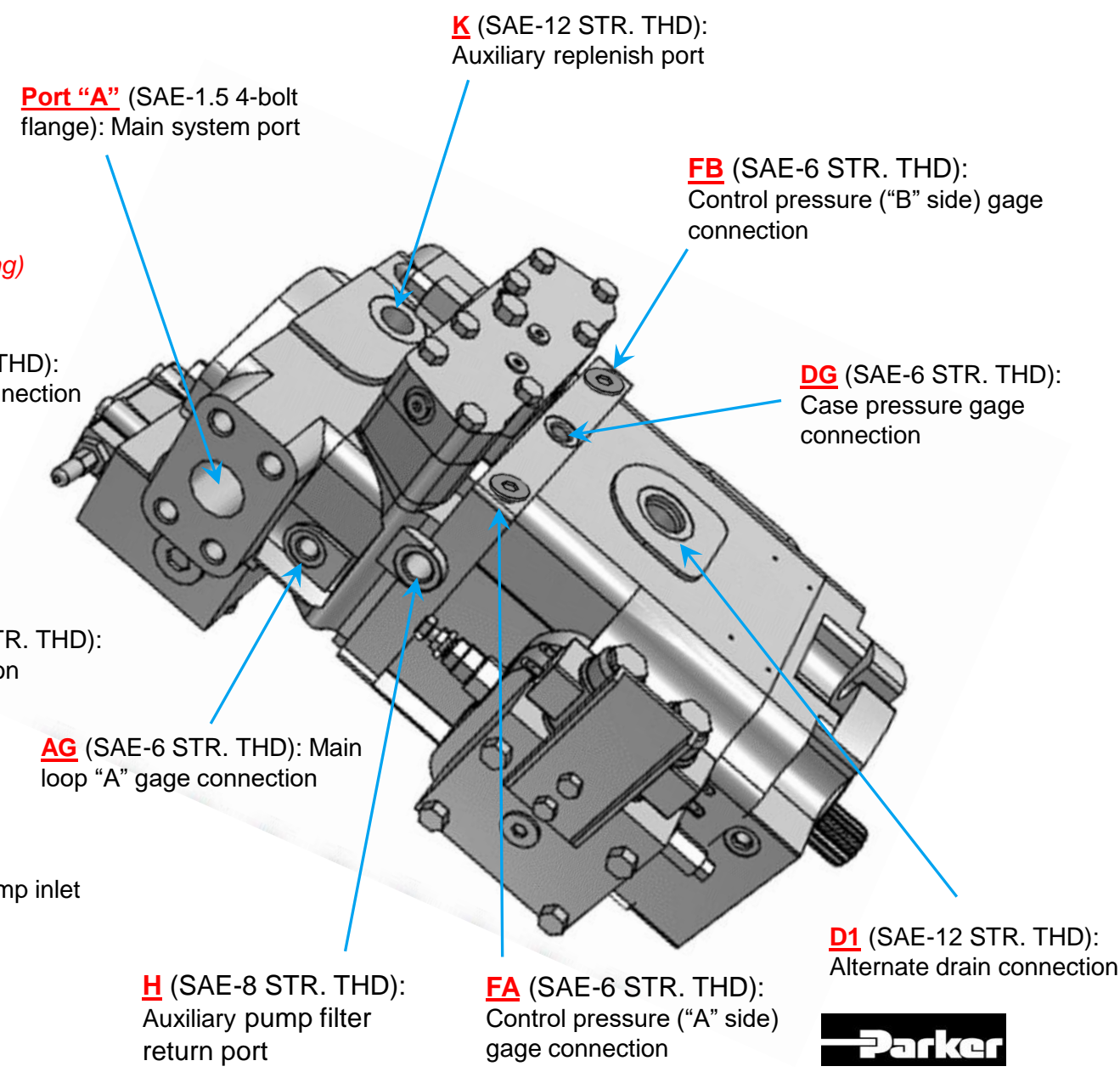
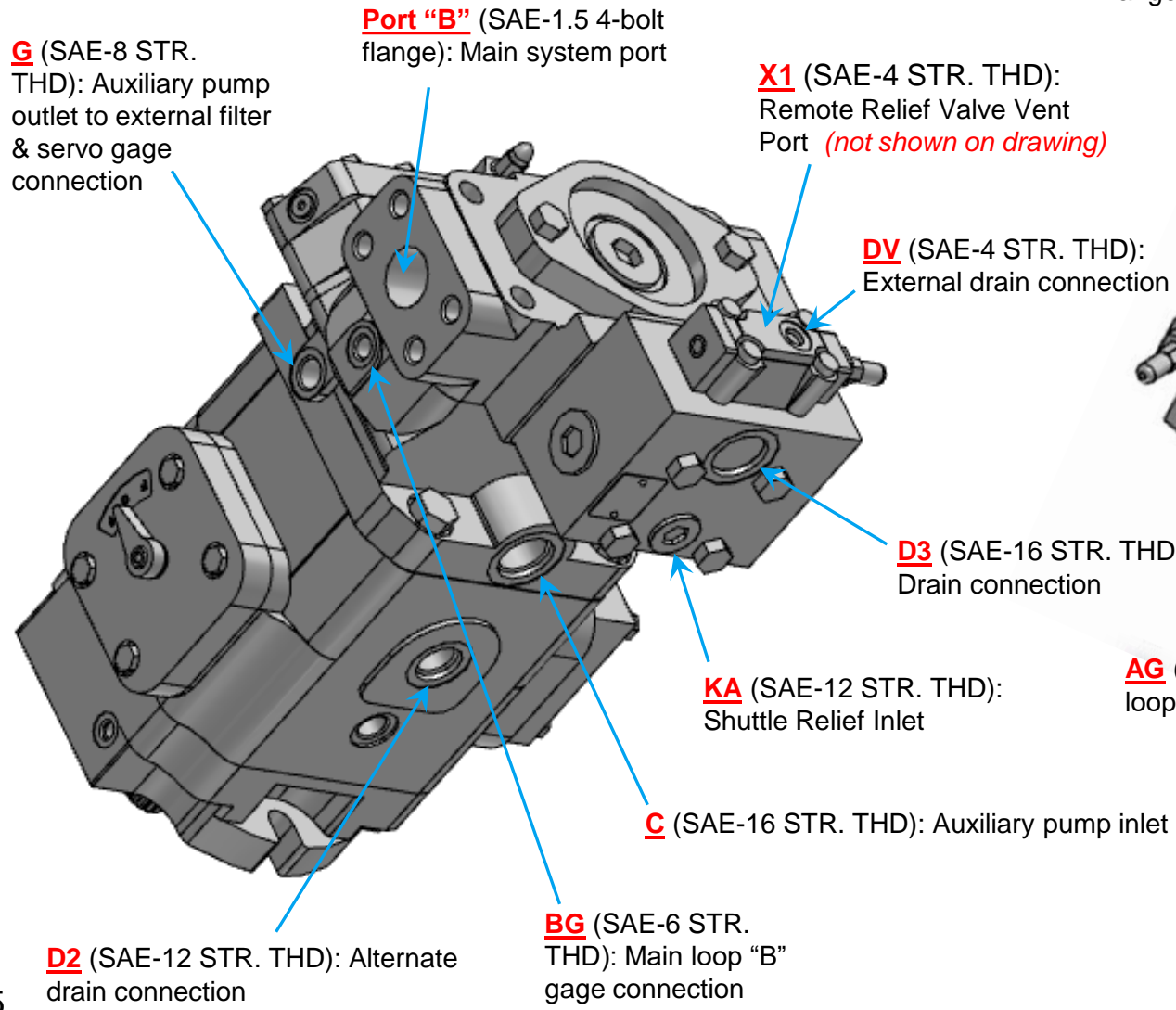
(SAE-3 STR. THD): Access port for replenish relief pilot stage.
Caution: Never open when unit is in operation.



P6P3R1C9A2A00



P6S3R1C9A2A000M0



P6R3R1C8A2A00XC0

H (SAE-4 STR. THD): Servo gage connection

Port "B" (SAE-1.5 4-bolt flange): Main system port

B1 (SAE-6 STR. THD): Main loop "B" gage connection

K (SAE-16 STR. THD): Auxiliary replenish port

A1 (SAE-6 STR. THD): Main loop "A" gage connection

G (SAE-8 STR. THD): External servo pressure inlet connection

D2 (SAE-12 STR. THD): Alternate drain connection

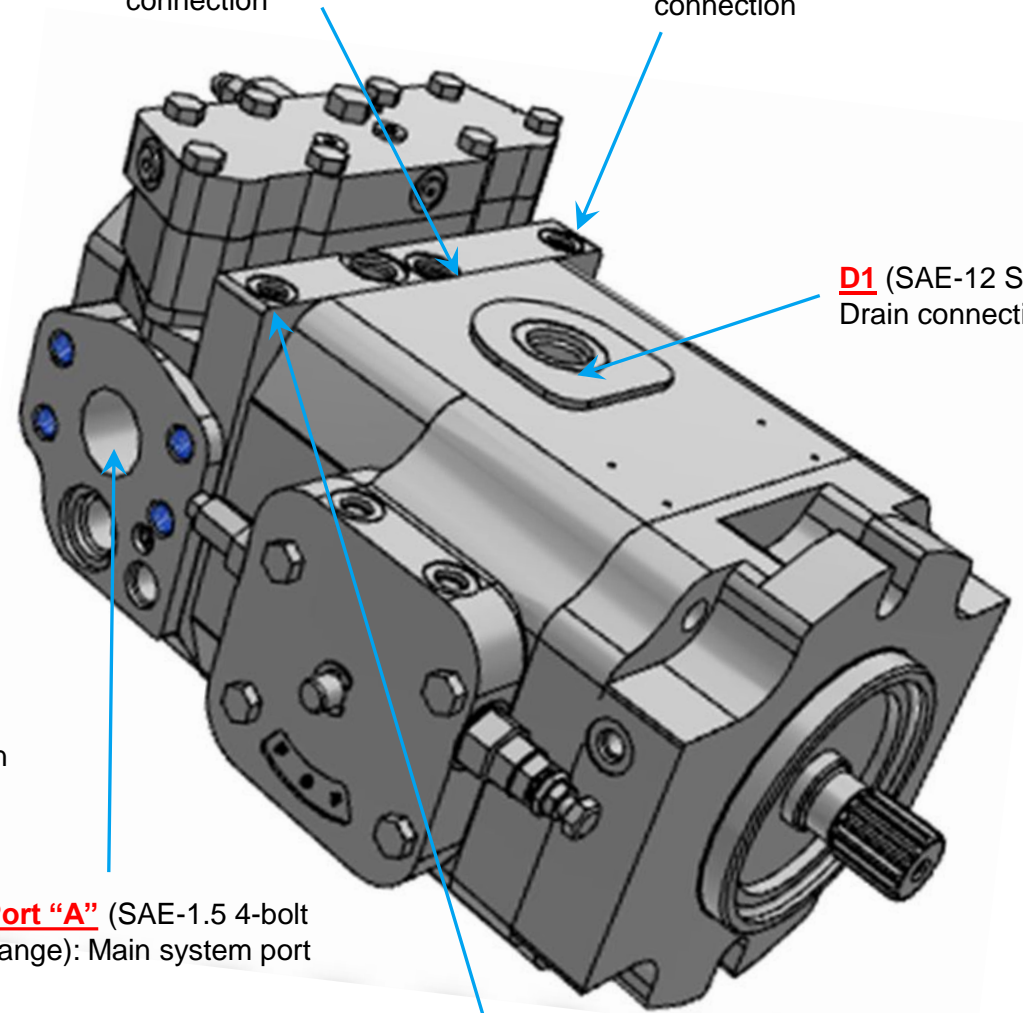
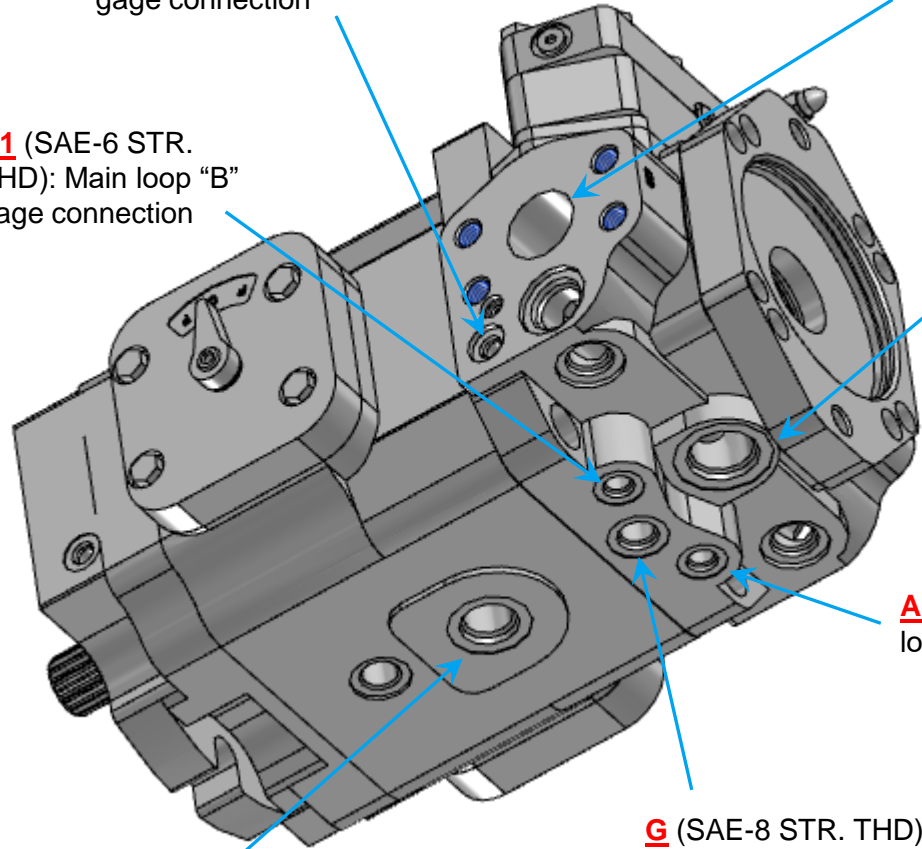
DG (SAE-6 STR. THD): Case pressure gage connection

FB (SAE-4 STR. THD): Control pressure ("B" side) gage connection

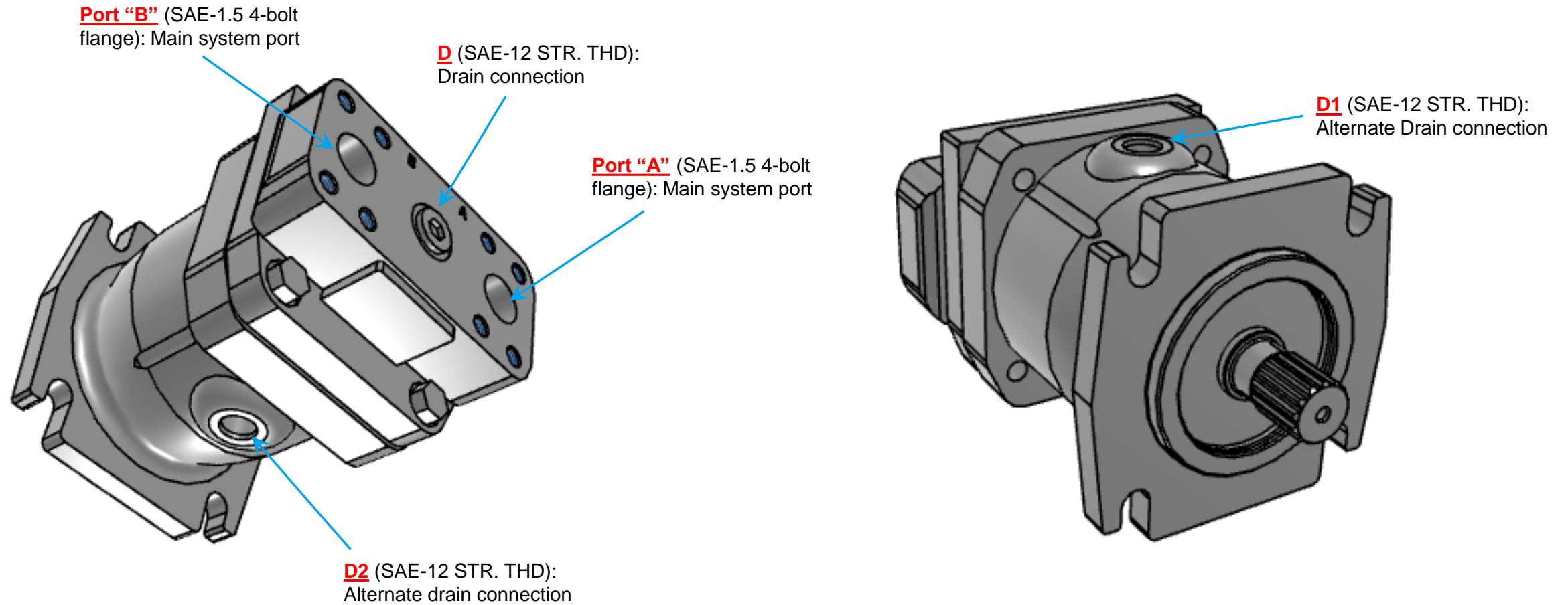
D1 (SAE-12 STR. THD): Drain connection

Port "A" (SAE-1.5 4-bolt flange): Main system port

FA (SAE-4 STR. THD): Control pressure ("A" side) gage connection



M7F5N1D0



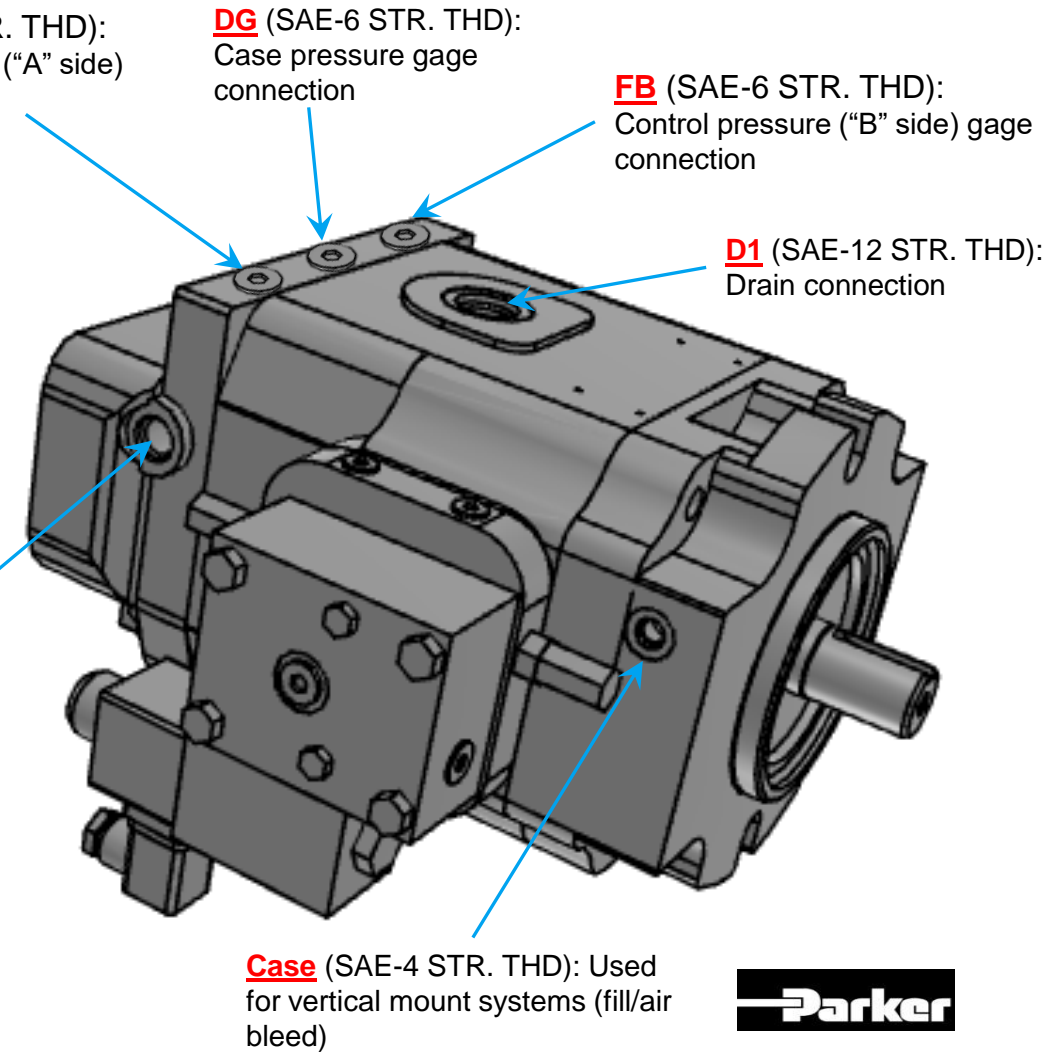
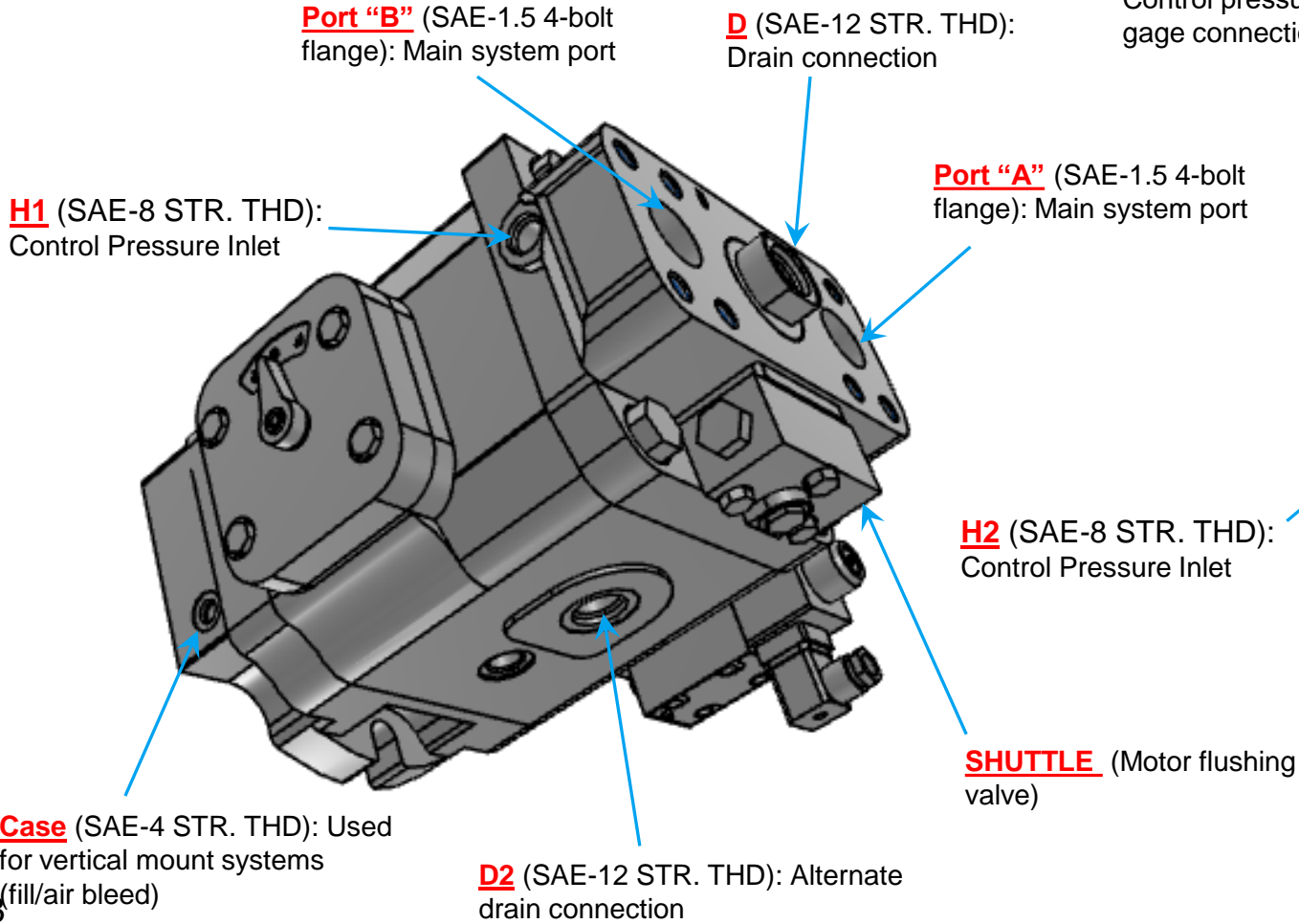
M6H2N1C2M0A60

-A- CONTROL MTG. POSITION					
SPRING OFF SET TO FULL DISPLACEMENT (REDUCED SPEED)					
MOTOR PKG.	CONTROL OPTION	MOTOR ROT	PORT "A"	PORT "B"	SOLENOID ACTUATED (0, 1, 2, 3, 4, 6, AND 7 ONLY)
M6-7-8V	2MO-A *	CW	INLET	OUTLET	FULL SPEED
M6-7-8H	2MO-A * 0 2MO-A * 2				

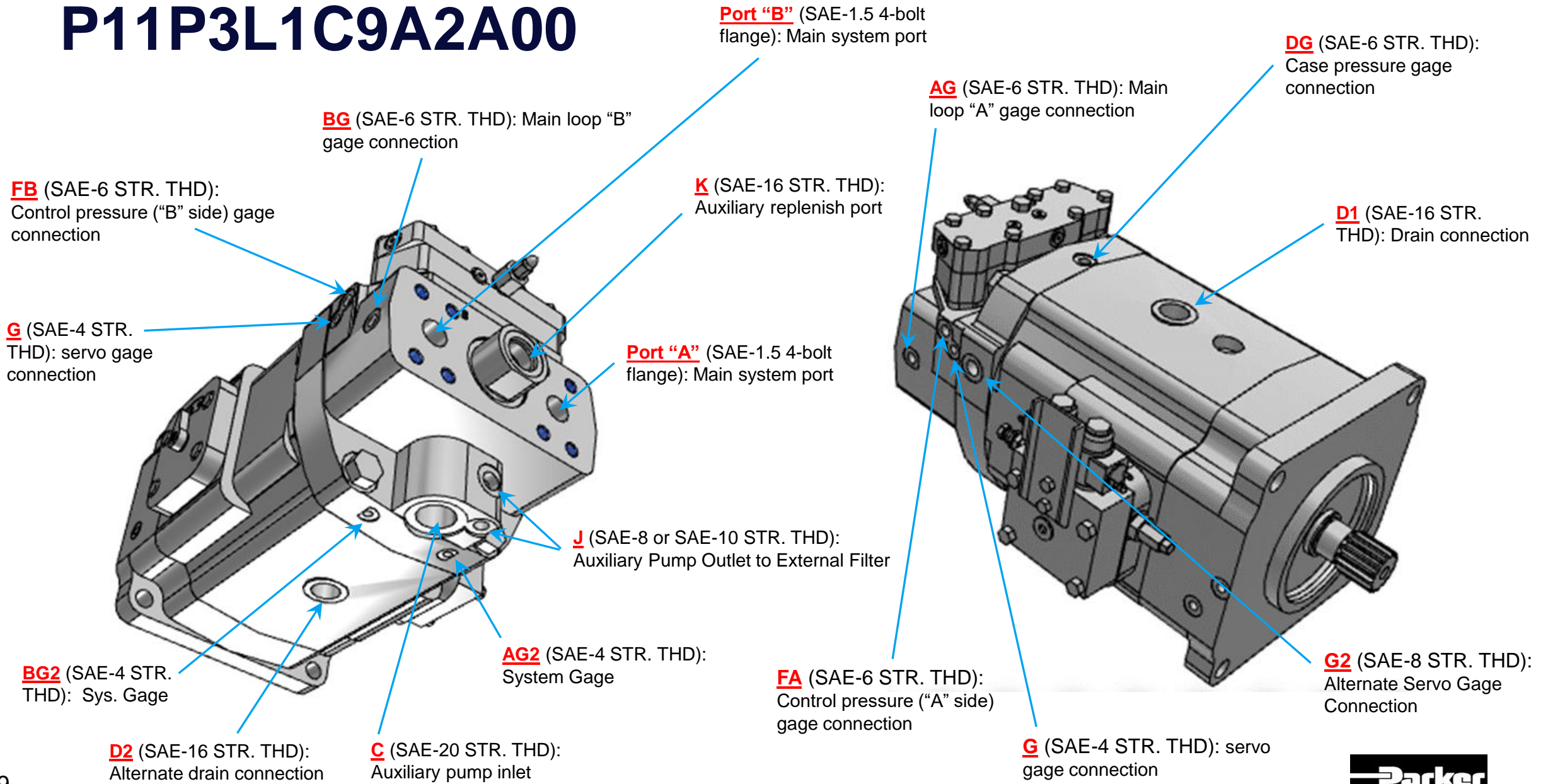
* = 0, 1, 2, 3, 4, 5, 6, 7

-B- CONTROL MTG. POSITION					
SPRING OFF SET TO FULL DISPLACEMENT (REDUCED SPEED)					
MOTOR PKG.	CONTROL OPTION	MOTOR ROT	PORT "A"	PORT "B"	SOLENOID ACTUATED (0, 1, 2, 3, 4, 6, AND 7 ONLY)
M6-7-8V	2MO-B *	CW	INLET	OUTLET	FULL SPEED
M6-7-8H	2MO-B * 0 2MO-B * 2				

* = 0, 1, 2, 3, 4, 5, 6, 7



P11P3L1C9A2A00



P11S3R1C8A2A000A0

Port "A" (SAE-1.5 4-bolt flange): Main system port

K (SAE-12 STR. THD): Auxiliary replenish and pump filter return port

Port "B" (SAE-1.5 4-bolt flange): Main system port

DG (SAE-6 STR. THD): Case pressure gage connection

FB (SAE-6 STR. THD): Control pressure ("B" side) gage connection

X1 (SAE-4 STR. THD): Remote relief valve vent port (*not shown*)

DV (SAE-4 STR. THD): External drain connection

D1 (SAE-16 STR. THD): Alternate drain connection

G (SAE-4 STR. THD): servo gage connection

D3 (SAE-16 STR. THD): Drain connection

KA (SAE-12 STR. THD): Shuttle Relief Inlet

J (SAE-8 or SAE-10 STR. THD "90 degrees to SAE-8 port"): Auxiliary Pump Outlet to External Filter

AG (SAE-6 STR. THD): Main loop "A" gage connection

G2 (SAE-8 STR. THD): Alternate Servo Gage Connection

BG (SAE-6 STR. THD): Main loop "B" gage connection

BG2 (SAE-4 STR. THD): Sys. Gage

AG2 (SAE-4 STR. THD): Sys. Gage

FA (SAE-6 STR. THD): Control pressure ("A" side) gage connection

G (SAE-4 STR. THD): servo gage connection

D2 (SAE-16 STR. THD): Alternate drain connection

C (SAE-16 STR. THD): Auxiliary pump inlet



P11L3R1C4A2A00XB0

Port "B" (SAE-1.5 4-bolt flange): Main system port

Port "A" (SAE-1.5 4-bolt flange): Main system port

FA (SAE-6 STR. THD): Control pressure "A" side gage connection (**FB** located on far side)

BG3 (SAE-6 STR. THD): Sys. Gage

DG (SAE-6 STR. THD): Case pressure gage connection

AG3 (SAE-6 STR. THD): Sys. Gage

D1 (SAE-16 STR. THD): Alternate drain connection

Lip Seal Drain Port (SAE-4 STR. THD): Units with "7", "8", or "9 shafts only.

Case overflow port for submerging bearing on vertical mount units (SAE-4 STR. THD)

Case overflow port for submerging bearing on vertical mount units (SAE-4 STR. THD)

BG (SAE-6 STR. THD): Main loop "B" gage connection

K (SAE-12 STR. THD): Auxiliary Replenish (near & far sides)

X1 (SAE-4 STR. THD): Remote relief valve vent port (*not shown*)

DV (SAE-4 STR. THD): External drain pilot stage valve

D3 (SAE-16 STR. THD): Drain connection

KA (SAE-12 STR. THD): Shuttle Relief Inlet

G (SAE-6 STR. THD): servo gage connection (near & far side)

G2 (SAE-8 STR. THD): External Servo Supply Inlet Connection (near & far side)

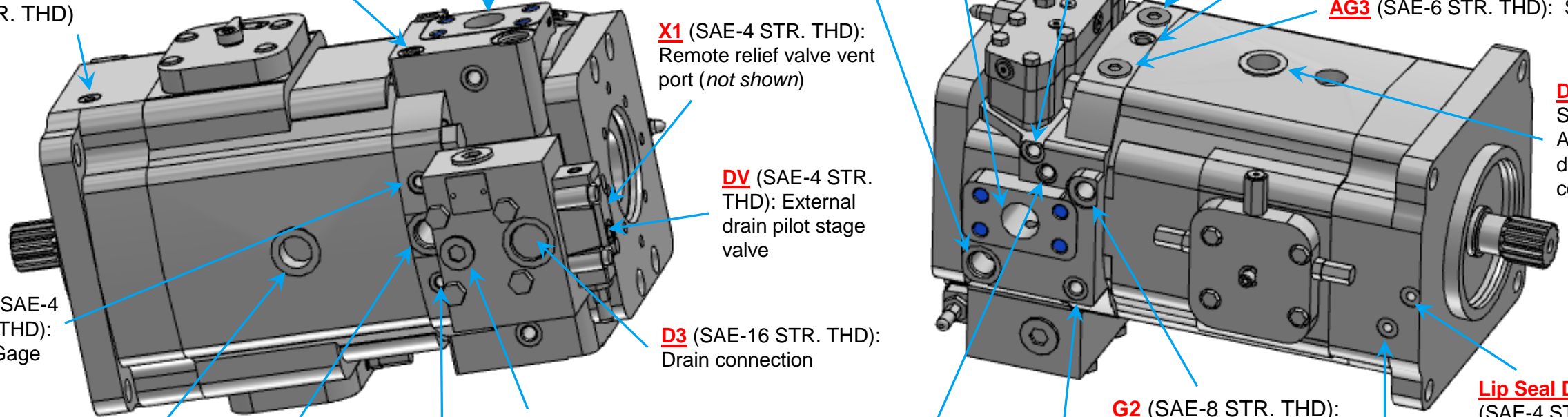
BG2 (SAE-4 STR. THD): Sys. Gage

D2 (SAE-16 STR. THD): Alternate drain connection

K1 (SAE-12 STR. THD): Alternate Auxiliary Replenish

AG2 (SAE-4 STR. THD): Sys. Gage

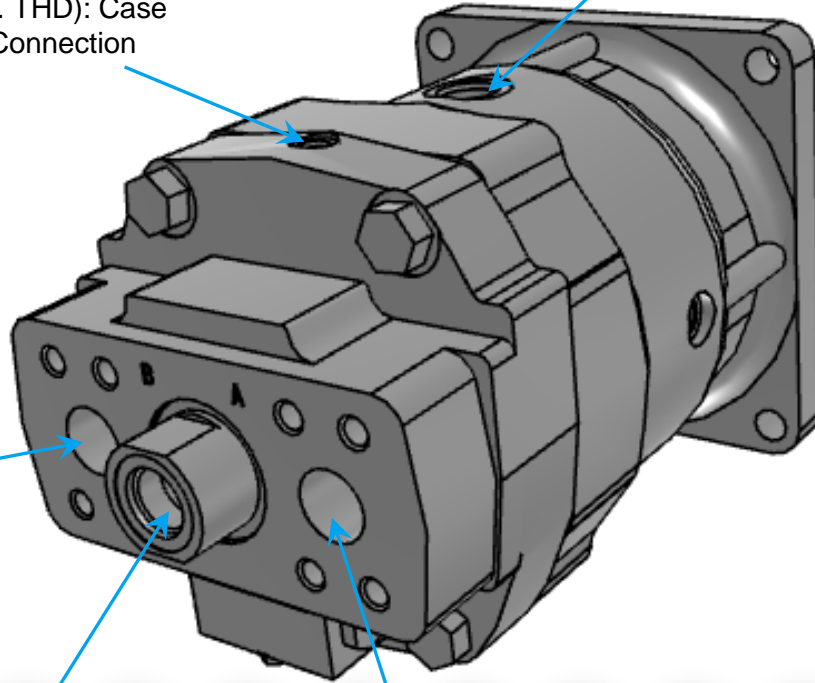
AG (SAE-6 STR. THD): Main loop "A" gage connection



M11G3N5A02

D1 (SAE-16 STR. THD):
Drain connection

DG (SAE-6 STR. THD): Case
Pressure Gage Connection



Port "B" (SAE-1.5 4-bolt
flange): Main system port

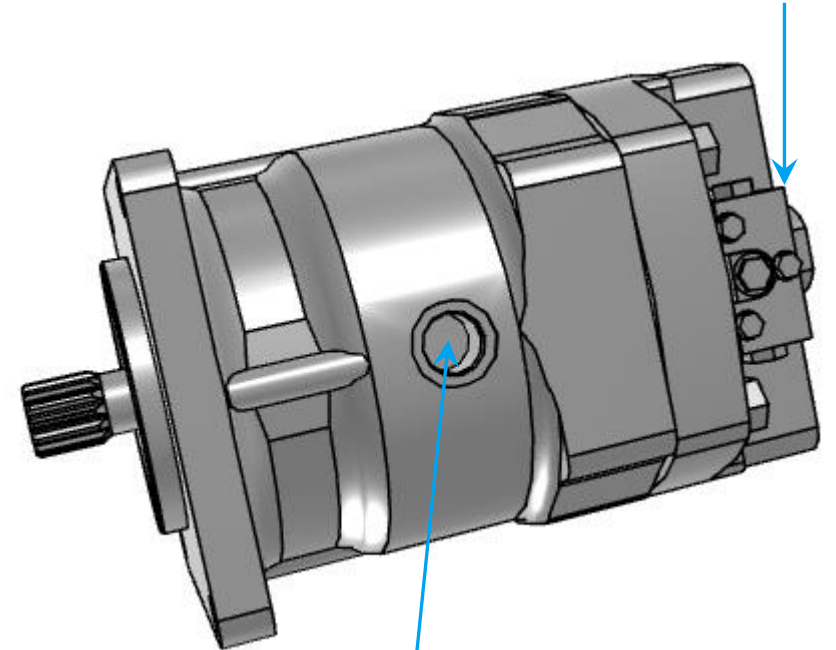
D (SAE-16 STR. THD):
Drain connection

Port "A" (SAE-1.5 4-bolt
flange): Main system port

MOTOR MODEL	MOTOR ROT.	PORT "A"	PORT "B"
M*F or M*G	CW	INLET	OUTLET
	CCW	OUTLET	INLET

ROTATION AS VIEWED FROM SHAFT END
* DISPLACEMENT (11 or 14)

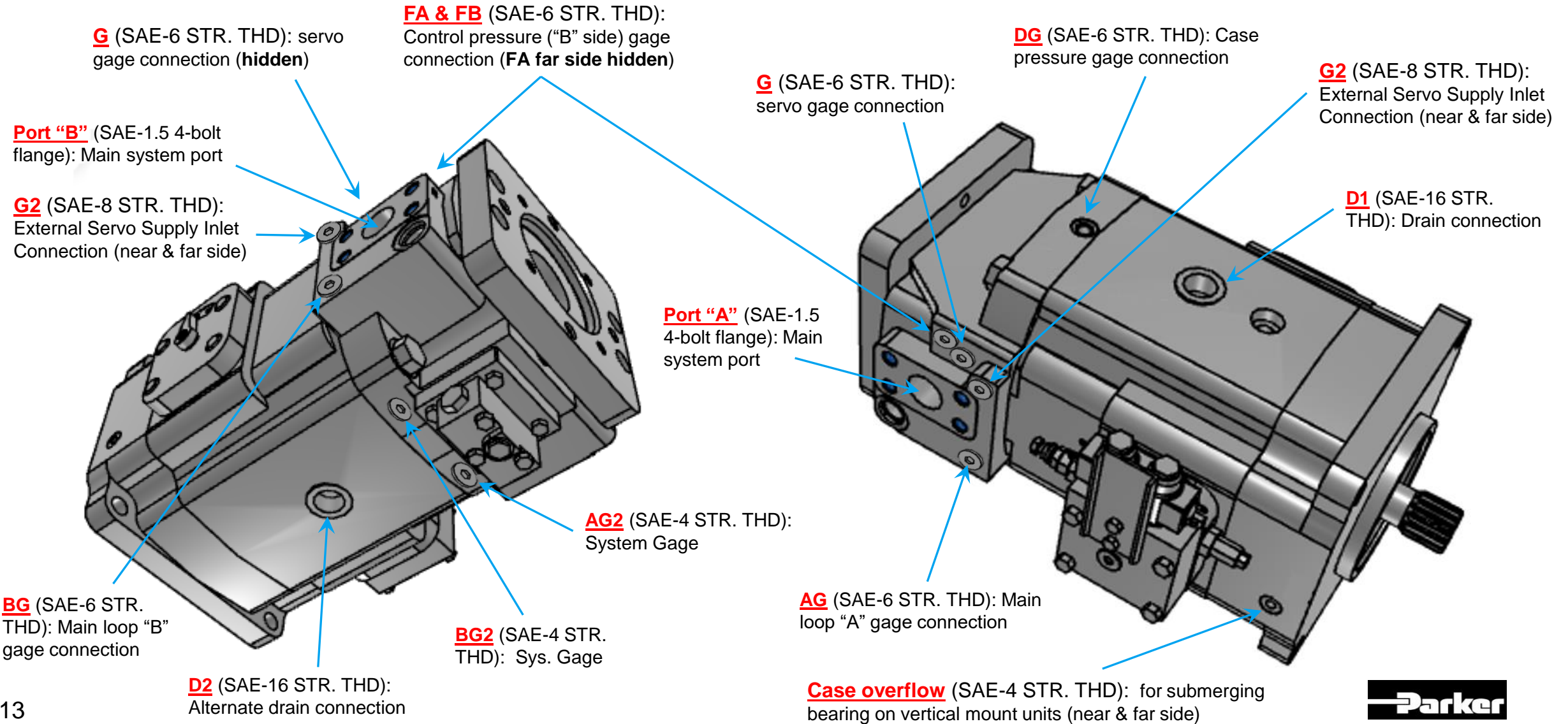
SHUTTLE (Motor flushing
valve with orifices)



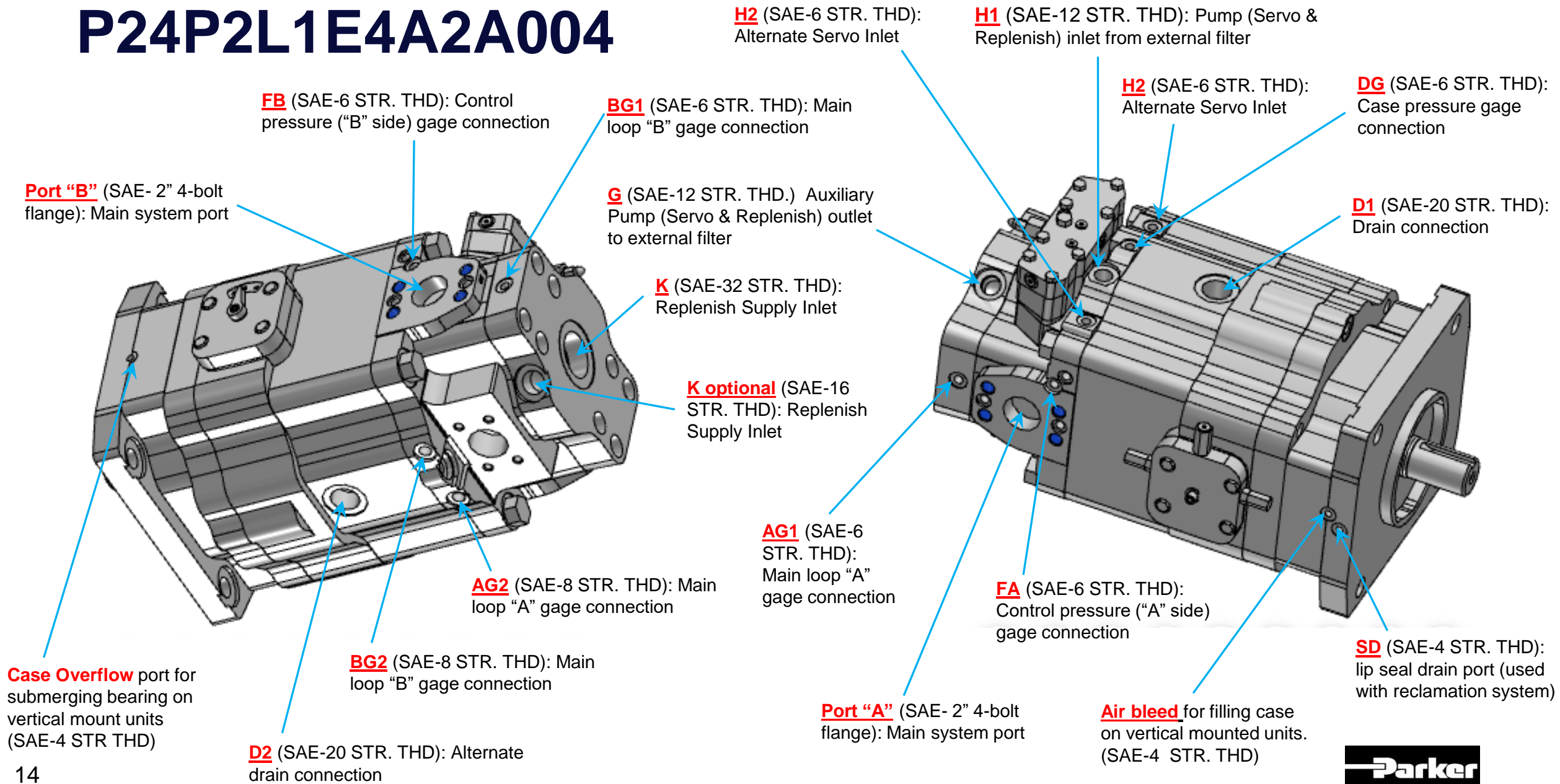
D2 (SAE-16 STR. THD): Alternate
drain connection

M14L3N1A9A0A02C0

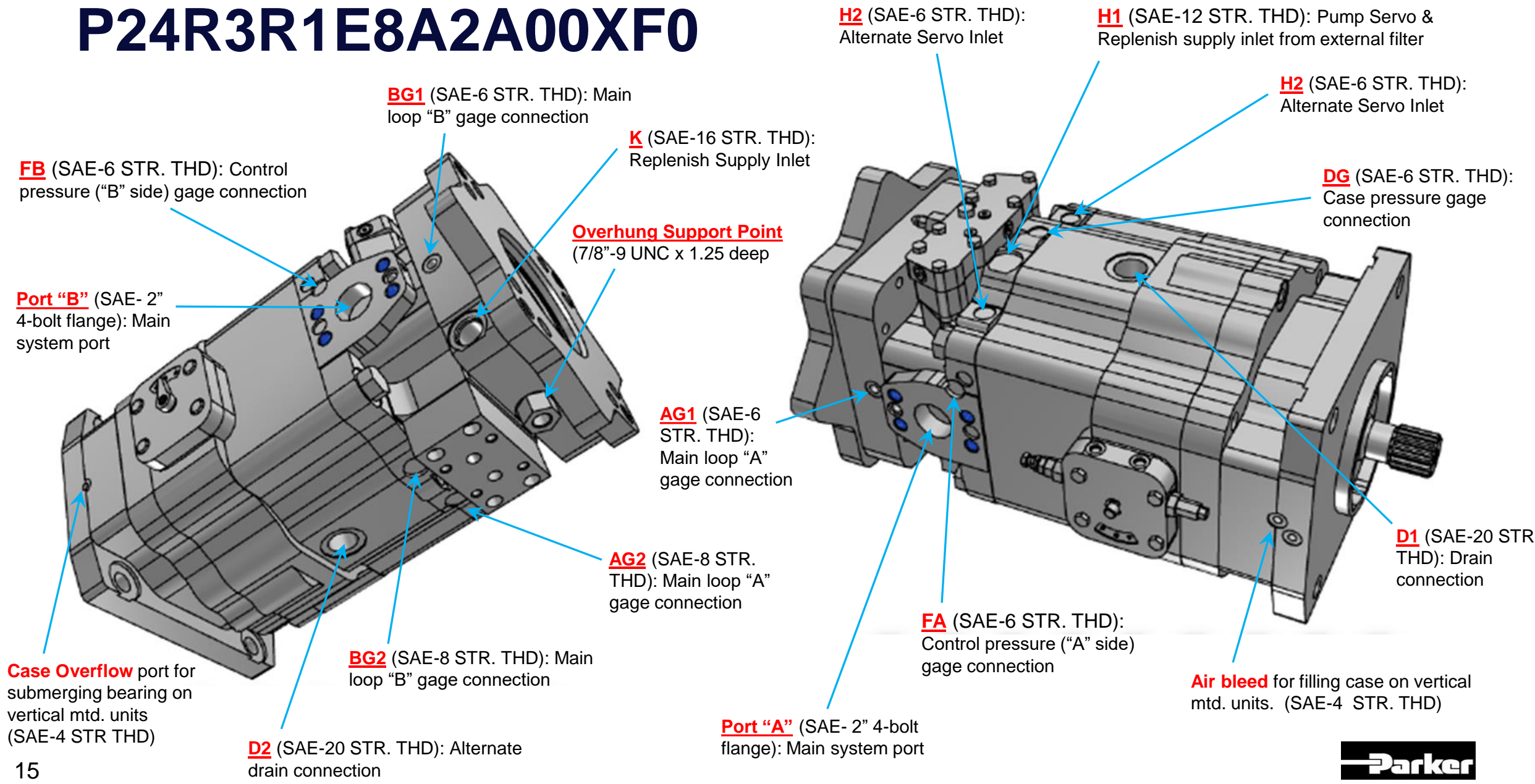
-A- CONTROL MTG. POSITION						-B- CONTROL MTG. POSITION					
SPRING OFF SET TO FULL DISPLACEMENT (REDUCED SPEED)						SPRING OFF SET TO FULL DISPLACEMENT (REDUCED SPEED)					
CONTROL OPTION	MOTOR SERIES	MOTOR ROT.	PORT A	PORT B	ROTARY SHAFT ROT. CW CURRENT TO STROKER	CONTROL OPTION	MOTOR SERIES	MOTOR ROT.	PORT A	PORT B	ROTARY SHAFT ROT. CW CURRENT TO STROKER
"9A2"	M ^H OF M ^V	CCW	OUTLET	INLET	FULL SPEED	"9A2"	M ^H OF M ^V	CW	INLET	OUTLET	FULL SPEED
		CW	INLET	OUTLET	FULL SPEED			CCW	OUTLET	INLET	FULL SPEED



P24P2L1E4A2A004

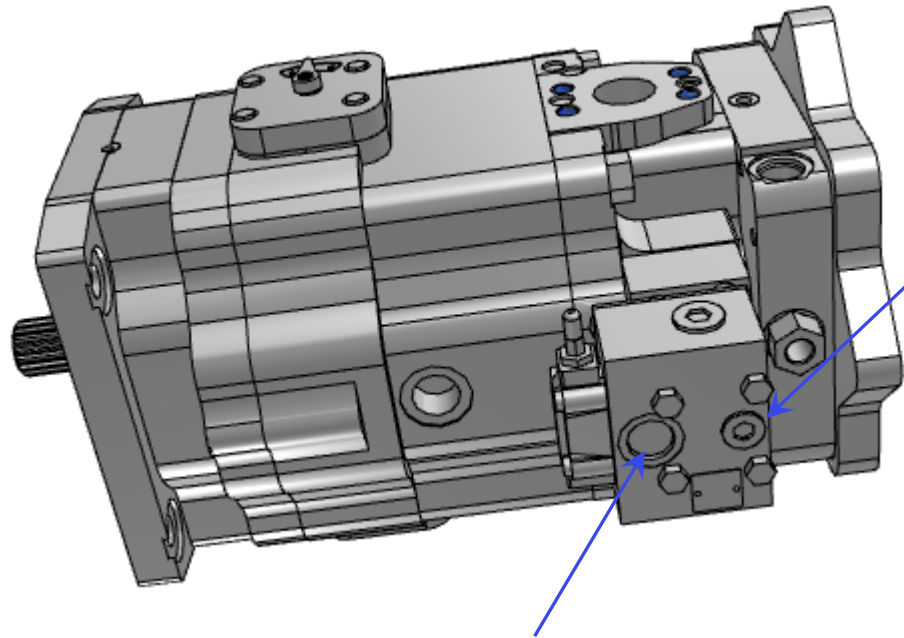


P24R3R1E8A2A00XF0

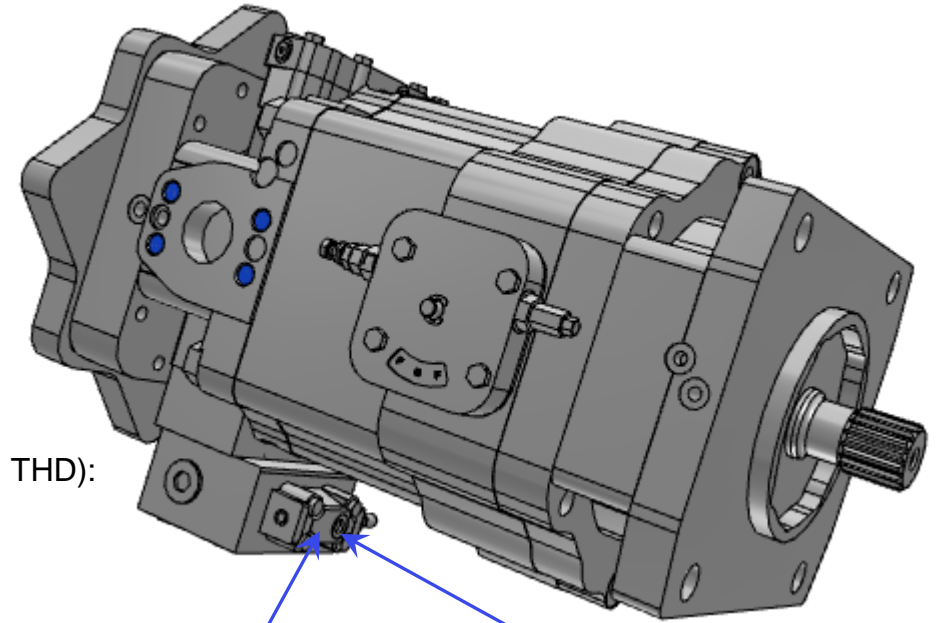


P24L3R1E8A2A00XF0 (Shuttle ports only)

Use P24R drawing for all other port locations



D3 (SAE-16 STR. THD):
Drain connection



KA (SAE-12 STR. THD):
Shuttle Relief Inlet

X1 (SAE-4 STR. THD):
Remote Relief Valve Vent Port
(not shown on drawing)

DV (SAE-4 STR. THD):
External Drain Pilot Stage
Valve

M24F2N1D

ROTATION	PORT "A"	PORT "B"
CW	IN	OUT
CCW	OUT	IN

Port "B" (SAE-2.0 4-bolt flange): Main system port

D (SAE-16 STR. THD): Drain connection

DG (SAE-6 STR. THD): Case pressure gage connection

D1 (SAE-20 STR. THD): Case drain connection

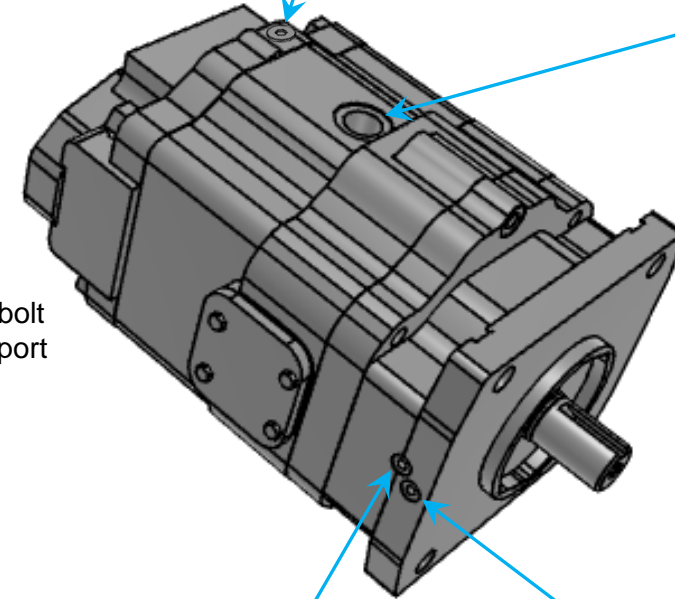
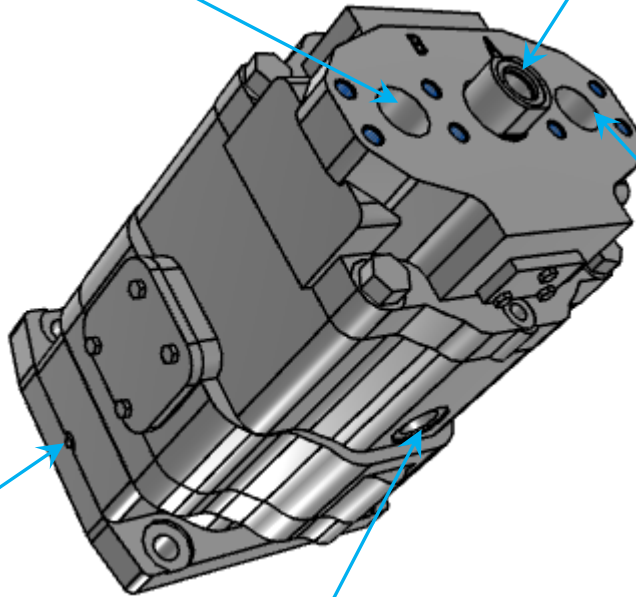
Port "A" (SAE-2.0 4-bolt flange): Main system port

SD (SAE-4 STR. THD): lip seal drain port (used with reclamation system)

Air bleed for filling case on vertical mounted units. (SAE-4 STR. THD)

D2 (SAE-20 STR. THD): Case drain

Case Overflow port for submerging bearing on vertical mount units (SAE-4 STR THD)



P30S3R1B9A2A001B0

FB (SAE-6 STR. THD):
Control pressure ("B" side) gage connection

Port "B" (SAE-2.0 4-bolt flange): Main system port

(SAE-4 STR. THD):
Case overflow port for
submerging bearing on
vertical mounted units

DV (SAE-4 STR. THD):
External
drain pilot stage
valve

D3 (SAE-16 STR. THD):
Drain connection

X1 (SAE-4 STR. THD):
Remote relief valve vent port
(not shown on drawing)

KA (SAE-12 STR. THD):
Shuttle Relief Inlet

G (SAE-12 STR. THD): Aux.
pump (servo & replenish)
outlet to external filter

BG1 (SAE-6 STR. THD):
Main loop "A"
gage connection

K Optional
(SAE-16 STR. THD):
Replenish
supply inlet

AG1 (SAE-6 STR. THD):
Main loop "A"
gage connection

H2 (SAE-6 STR. THD):
Alternate servo inlet – 2 places

DG (SAE-6 STR. THD): Case
pressure gage connection

H1 (SAE-12 STR. THD):
Pump servo & replenish
supply inlet from external filter

FA (SAE-6 STR. THD):
Control pressure ("A" side)
gage connection

D1 (SAE-20 STR. THD):
Case drain
connection

(SAE-4 STR. THD): Air bleed for
filling case on vertical mount units

Port "A" (SAE-2.0 4-bolt
flange): Main system port

18

D2 (SAE-20 STR. THD):
Case drain



M30V2N1A8A0A0

-A- CONTROL MTG. POSITION						
SPRING OFF SET TO FULL DISPLACEMENT (REDUCED SPEED)						
CONTROL OPTION	MOTOR SERIES	MOTOR ROT.	PORT "A"	PORT "B"	ROTARY SHAFT ROT. CCW PRESSURE TO PORT "P1"	ROTARY SHAFT ROT. CW PRESSURE TO PORT "P2"
"BA0"	M ^H OF M ^V	CCW	OUTLET	INLET	FULL SPEED	REDUCED SPEED
		CW	INLET	OUTLET	FULL SPEED	REDUCED SPEED

-B- CONTROL MTG. POSITION						
SPRING OFF SET TO FULL DISPLACEMENT (REDUCED SPEED)						
CONTROL OPTION	MOTOR SERIES	MOTOR ROT.	PORT "A"	PORT "B"	ROTARY SHAFT ROT. CCW PRESSURE TO PORT "P2"	ROTARY SHAFT ROT. CW PRESSURE TO PORT "P1"
"BA0"	M ^H OF M ^V	CW	INLET	OUTLET	FULL SPEED	REDUCED SPEED
		CCW	OUTLET	INLET	FULL SPEED	REDUCED SPEED

