

Little Champ®

Hydraulic Power Unit Kits

Power Units	Little Champ
Size	3 to 40 gallons
Max Pressure	Up to 4,000 PSI
Flow Rate	.5-15 GPM
Power	.5-20 HP



► DESCRIPTION:

Little Champ® are vertical oriented power units with a small foot print. The pump and motor is mounted vertical in the reservoir and submerged. This makes the pump quiet and provides positive inlet or flooded suction for long pump life.

Economical, easy to configure and stocked components allow for fast delivery. It's basically an intermittent unit, however when equipped with the right features it can run continuously and reliable in rugged condition.

Gear pumps:

Offered are SAE AA and SAE A size (.5 GPM to 15 GPM).

Vane pumps:

PVR6 / PVX8 all sizes with special feature of pressure and flow adjustment through the side of the reservoir.

Piston pumps:

HPVR6 and 15. All with remote compensation options.

Little Champ® Kits

HPU built at your facility at your convenience. Continental supply's the complete set of components and hardware.

Little Champ® Assembled.



► KEY FEATURES:

- Vertical style tank, sizes 3 to 40 gallons for reduced foot print
- Motor sizes: 1/2 to 20HP 460/60/3. Single phase up to 3HP
- Submerged in oil for longer lasting and quieter performance
- Port block to D03 manifold options with up to 6 stations and integrated relief valves
- Pressure / flow adjustments through reservoir wall
- In-tank and in-line filters available
- Case drain and return line heat exchangers

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► SECIFICATIONS:

Specifications	10V	20V	30V	40V
Reservoir Capacity	10 Gal. (37.8 liters)	20 Gal. (75.7 liters)	30 Gal. (113.5 liters)	40 Gal. (151.4 liters)
Surface Area For Heat Transfer	6.67 sq. ft. (6196.4 cm ²)	8.75 sq. ft. (8128.7 cm ²)	12.64 sq. ft. (11742.6 cm ²)	16.53 sq. ft. (15356.4 cm ²)
Heat Dissipation At ΔT	Sq. Ft. of Vertical Steel x ΔT / 1000			
Basic Weight (Less Oil, Pump, and Motor)	77 lbs. (34.9 kg)	103 lbs. (46.7 kg)	120 lbs. (54.4 kg)	145 lbs. (65.8 kg)
Usable Gallons	6.25 Gal. (23.7 liters)	16.00 Gal. (60.6 liters)	25.25 Gal. (95.6 liters)	36.50 Gal. (138.1 liters)
Gallons Per Inch Rise	1.09 Gal. (4.1 liters)	1.33 Gal. (5.0 liters)	1.33 Gal. (5.0 liters)	1.33 Gal. (5.0 liters)
Capacity, Full to Top Plate	16.35 Gal. (61.9 liters)	23.94 Gal. (90.6 liters)	34.58 Gal. (130.9 liters)	45.22 Gal. (171.2 liters)
Capacity, High on Sight Gauge	10.15 Gal. (38.4 liters)	20.62 Gal. (78.0 liters)	29.93 Gal. (113.3 liters)	41.23 Gal. (156.1 liters)
Capacity, Low on Sight Gauge	6.75 Gal. (25.4 liters)	16.63 Gal. (62.9 liters)	25.94 Gal. (98.2 liters)	37.24 Gal. (141.0 liters)
Pump Data (See VANE PUMP CATALOG for complete codes and specifications.)				
Flow Range	Up to 11 gpm (41.6 liters)	Up to 11 gpm (41.6 liters)	Up to 11 gpm (41.6 liters)	Up to 11 gpm (41.6 liters)
Pressure Range	Up to 3000 psi (207 bar)	Up to 3000 psi (207 bar)	Up to 3000 psi (207 bar)	Up to 3000 psi (207 bar)
Power Range	Up to 10 HP (7.5 kW)	Up to 10 HP (7.5 kW)	Up to 10 HP (7.5 kW)	Up to 10 HP (7.5 kW)

► IDENTIFICATION CODE: Ordering Information - Standard



K - - - - - - -

K: UNASSEMBLED Kit

PUMP		
CODE	gpm (lpm) @ 1725 rpm Max. Press.	Max. Pressure psi (bar)
G0.5B36	0.46 (1.7)	3620 (250)
G0.7B37	0.68 (2.6)	3770 (260)
G0.9B37	0.87 (3.3)	3770 (260)
G1.1B37	1.14 (4.3)	3770 (260)
G1.4B37	1.41 (5.3)	3770 (260)
G1.7B37	1.73 (6.6)	3770 (260)
G2.1B34	2.14 (8.1)	3330 (230)
G2.4B34	2.42 (9.2)	3480 (240)
G2.9B33	2.87 (10.9)	3330 (230)
G3.4B26	3.42 (12.9)	2610 (180)
G2.0B37	2.05 (7.8)	3480 (240)
G3.0B37	2.96 (11.2)	3480 (240)
G3.7B37	3.74 (14.2)	3480 (240)
G5.2B37	5.15 (19.5)	3480 (240)
G6.7B37	6.65 (25.2)	3480 (240)
G7.7B37	7.70 (29.2)	3480 (240)
G9.2B30	9.16 (34.7)	3040 (210)
G10.0B29	10.03 (38.0)	2900 (200)
G11.5B26	11.48 (43.5)	2610 (180)
G12.9B23	12.85 (48.6)	2320 (160)
G14.4B21	14.41 (54.7)	2170 (150)
V4B20	4.00 (15.1)	2000 (138)
V6B20	6.00 (22.7)	2000 (138)
V8B20	8.00 (30.3)	2000 (138)
V8B30	8.00 (30.3)	3000 (207)
V10B10	10.00 (37.8)	1000 (69)
V15B20	15.00 (56.8)	2000 (138)
V20B15	20.00 (75.7)	1500 (103)
P6B40	6.00 (22.7)	4000 (276)
P15B40	15.00 (56.8)	4000 (276)

RESERVOIR	
CODE	GALLON SIZE
5VS*	5
10V	10
20V	20
30V	30
40V	40

* Unavailable For:
V15B*, V20B*
P6B40 & P15B40
Pumps.

PRESSURE MANIFOLD	
CODE	DESCRIPTION
P8	Pressure Connection -8 JIC Male Port
P12	Pressure Connection -12 JIC Male Port
PR8A	With Built-In Relief SAE-8 "P" & "T" Female Ports
PR12A	With Built-In Relief SAE-12 "P" & "T" Female Ports
V3M1AR	Single Station Manifold D03 With Built-In Relief, SAE-8 "A" & "B" Female Ports
V3M2AR	Two Station Manifold D03 With Built-In Relief, SAE-8 "A" & "B" Female Ports
V3M3AR	Three Station Manifold D03 With Built-In Relief, SAE-8 "A" & "B" Female Ports
V3M4AR	Four Station Manifold D03 With Built-In Relief, SAE-8 "A" & "B" Female Ports
V3M5AR	Five Station Manifold D03 With Built-In Relief, SAE-8 "A" & "B" Female Ports
V3M6AR	Six Station Manifold D03 With Built-In Relief, SAE-8 "A" & "B" Female Ports

*FOR NO RELIEF VALVE REMOVE THE "R" FROM THE CODE (V3M4AR EQUALS V3M4A)

*FOR D05 VALVES CHANGE THE "3" TO "5" IN MODEL CODE (V3M4A EQUALS V5M4A)

*FOR DUCTILE IRON MANIFOLDS CHANGE THE "A" TO "D" IN THE MODEL CODE (V3M4AR EQUALS V3M4DR OR PR8A TO PR8D)

*FOR SERIES TYPE OF MANIFOLDS CHANGE THE "M" TO "S" FROM THE CODE (V3M4AR EQUALS V3S4AR)

Select valves as required from the appropriate Continental Hydraulics Catalogs.

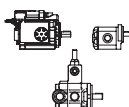
For manifold dimensions and specifications, see the Daman Products LC Manifold Catalog.

OPTIONS	
CODE	DESCRIPTION
Omit	No Options
G1	Pressure Gauge 0 - 1000 psi
G1.5	Pressure Gauge 0 - 1500 psi
G2	Pressure Gauge 0 - 2000 psi
G3	Pressure Gauge 0 - 3000 psi
G5	Pressure Gauge 0 - 5000 psi
N	Needle Valve SAE -4
FRC10	Return Filter 10 gpm Spin On
FRIC10	In-Tank Return Filter 10 GPM, W/Breather, 36 Micron, W/Indicator
FRIC25	In-Tank Return Filter 25 GPM, W/Breather, 12 Micron, W/Indicator
EP*	External Pressure Adjustment (Piston & Vane pumps only)
EV*	External Volume Adjustment (Vane pumps only)
CV08	Check Valve Inline SAE-8, 5000 psi (345 bar) Rated
CV12	Check Valve Inline SAE-12, 5000 psi (345 bar) Rated
LT	Level/Temperature Switch
TH	Tank Heater 30° -100° F. (-1° -38° C.) Adjustment

* If "EP" is Not Selected, Specify Pressure Setting.

** Pump Requires Volume Control Code 6 (PVR6-*B**-RF-0-6)

NOTE: Pump and motor ranges listed for each reservoir size are standard combinations. For special combinations, please discuss your application with your Continental Hydraulics distributor or the factory.



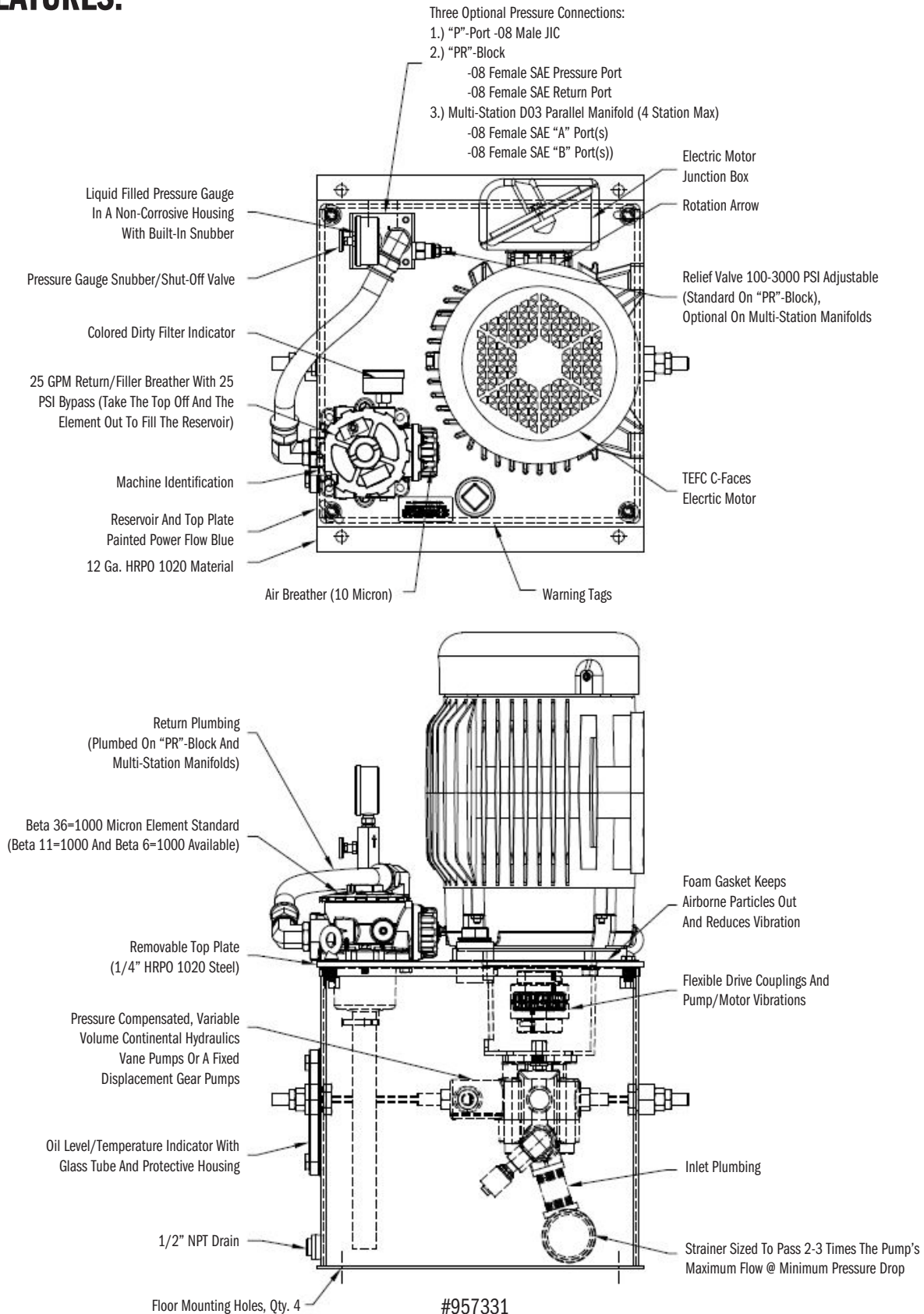
MOTOR			
CODE	H.P.	Voltage 1800 rpm	Frame Size
005T	0.5	208/230/460/60/3	56C
005S	0.5	115/280/230/60/1	56C
007T	.75	208/230/460/60/3	56C
007S	.75	115/280/230/60/1	56C
010T	1	208/230/460/60/3	56C
010S	1	115/280/230/60/1	56C
015T	1.5	208/230/460/60/3	56C
015S	1.5	115/280/230/60/1	56C
020T	2	208/230/460/60/3	56C
020S	2	115/280/230/60/1	56C
030T	3	208/230/460/60/3	182TC
030S	3	115/280/230/60/1	182TC
050T	5	208/230/460/60/3	184TC
075T	7.5	208/230/460/60/3	213TC
100T	10	208/230/460/60/3	215TC
150T	15	230/460/60/3	254TC
200T	20	230/460/60/3	256TC

HEAT EXCHANGER	
CODE	DESCRIPTION
Omit	No Cooler Option
HEA44C	Air-to-Oil Cooler HEA44 for Case Drain, SAE-8 (PVR6 Pump Only)
HEA41R	Air-to-Oil Cooler HEA41 for Return Line, SAE-12
HEW11R	Water-to-Oil Cooler HEA11 Return Line 1/2 NPT Oil Port 1 NPT Water Port

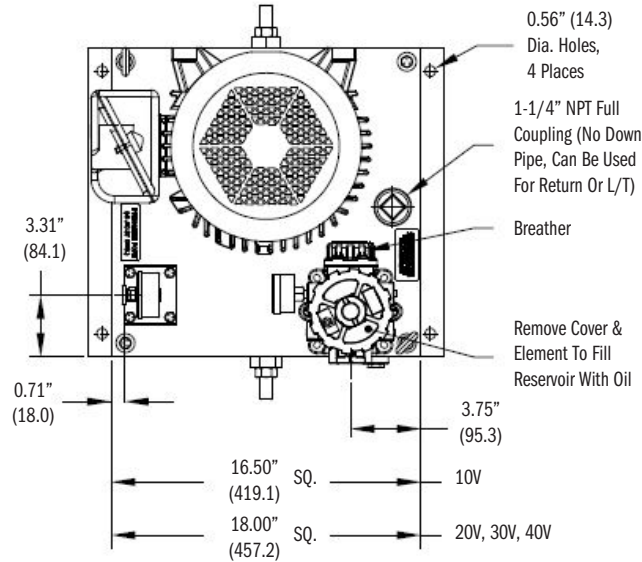
TYPICAL ORDERING CODE:

V6B20-050T-20V-V2-G3N-FRIC14-EP-HEA44C (Power Unit)
VSD03M-3A-GB-60L (Directional Control Valves - Qty. 2)
F03MSV-NDC-AA (Flow Control Valve - Qty. 2)
BD03-250 (Bolt kit - Qty. 2)

► FEATURES:

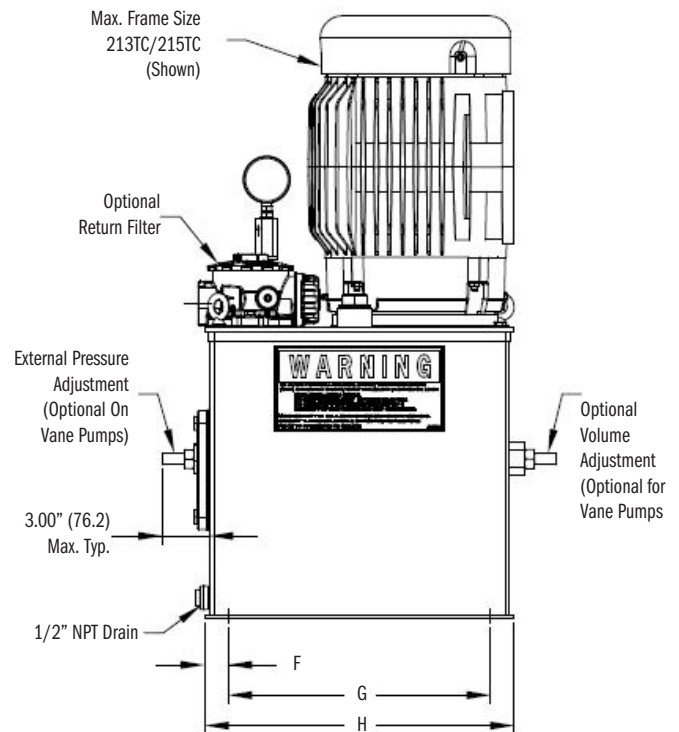
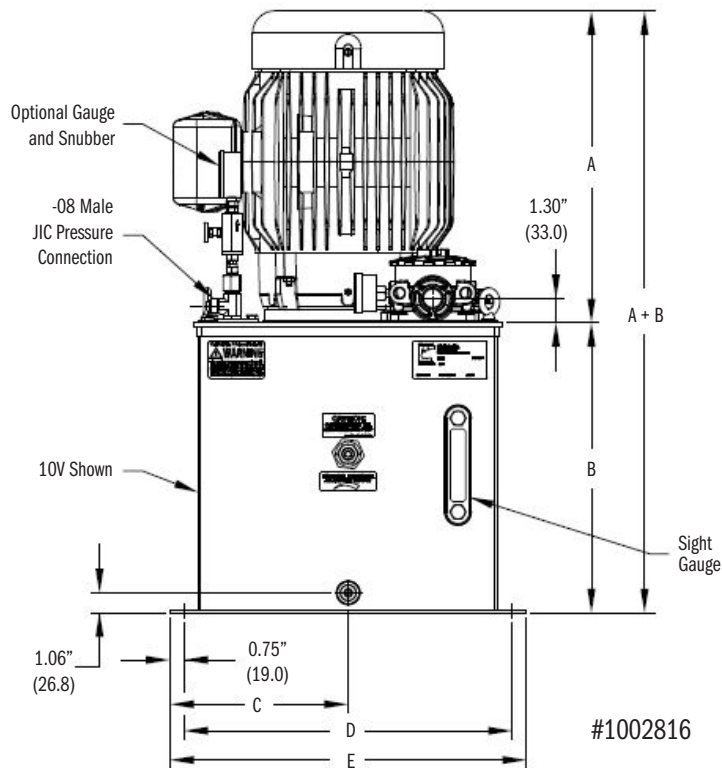


► **FEATURES:**
P8 PRESSURE CONNECTION



DIMENSIONS A		
MOTOR FRAME	CODE	A (± .125")
56C	005T	9.92 (252.0)
56C	005S	10.44 (265.2)
56C	007T	9.92 (252.0)
56C	007S	9.92 (252.0)
56C	010T	9.92 (252.0)
56C	010S	10.92 (277.4)
56C	015T	10.92 (277.4)
56C	015S	12.98 (329.7)
56TC	020T	11.98 (304.3)
56C	020S	12.97 (329.4)
182TC	030T	13.37 (339.6)
184TC	030S	14.43 (366.5)
184TC	050T	15.06 (382.5)
213TC	075T	17.56 (446.0)
215TC	100T	17.56 (446.0)
254TC	150T	23.03 (585.0)
256TC	200T	23.03 (585.0)

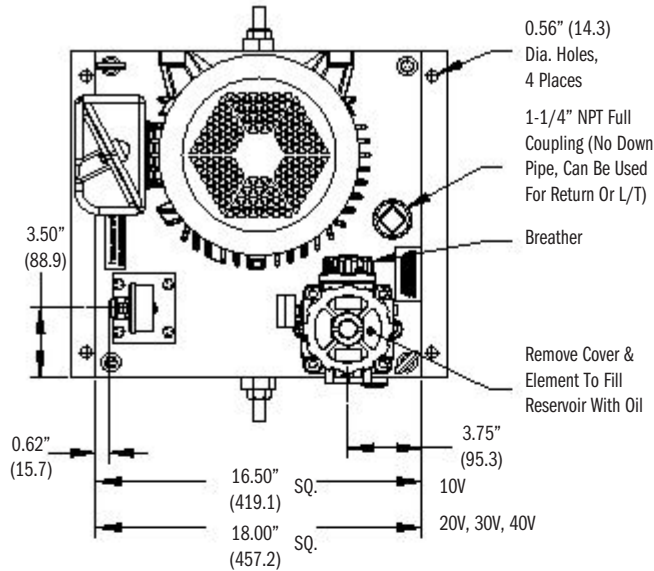
Dimensions:
inches (± .125")
millimeters (± 1 mm)



Dimensions B through H

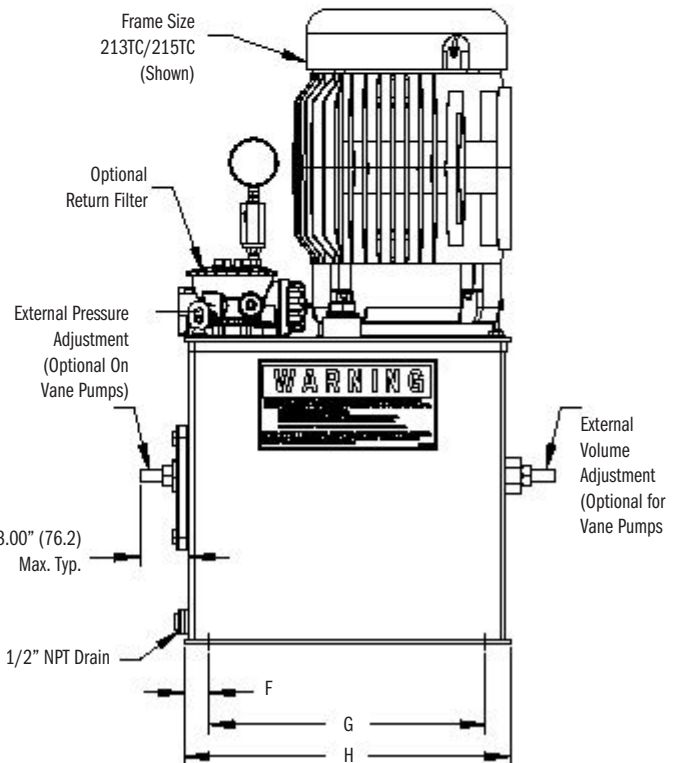
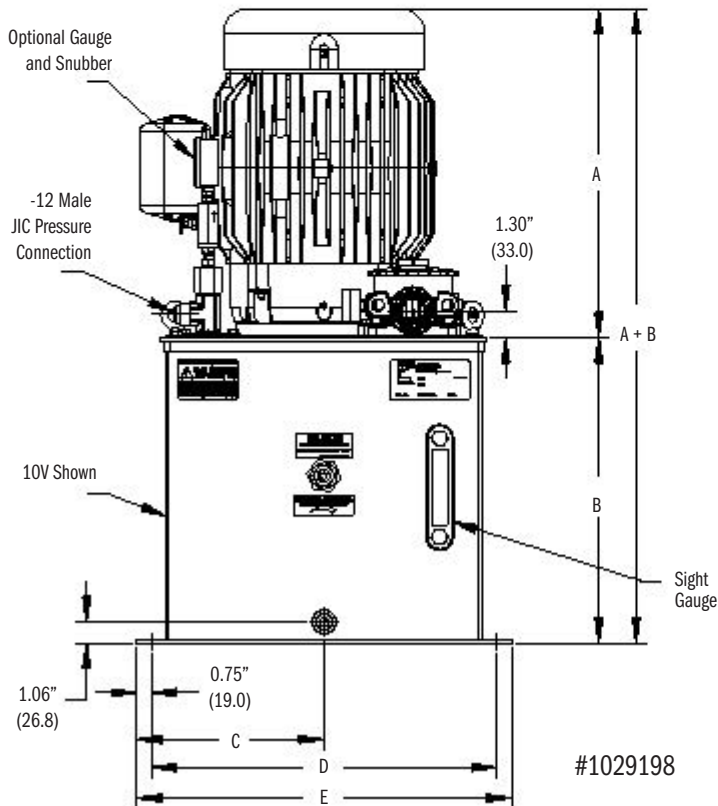
Reservoir	B	C	D	E	F	G	H
10V	15.44 (392.2)	9.50 (241.3)	17.50 (444.5)	19.00 (482.6)	1.25 (31.7)	14.00 (355.6)	16.50 (419.1)
20V	18.44 (468.4)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)
30V	26.44 (671.6)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)
40V	34.44 (874.8)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)

► **FEATURES:
PRESSURE CONNECTION**



DIMENSIONS A		
MOTOR FRAME	CODE	A (± .125")
56C	005T	9.92 (252.0)
56C	005S	10.44 (265.2)
56C	007T	9.92 (252.0)
56C	007S	9.92 (252.0)
56C	010T	9.92 (252.0)
56C	010S	10.92 (277.4)
56C	015T	10.92 (277.4)
56C	015S	12.98 (329.7)
56TC	020T	11.98 (304.3)
56C	020S	12.97 (329.4)
182TC	030T	13.37 (339.6)
184TC	030S	14.43 (366.5)
184TC	050T	15.06 (382.5)
213TC	075T	17.56 (446.0)
215TC	100T	17.56 (446.0)
254TC	150T	23.03 (585.0)
256TC	200T	23.03 (585.0)

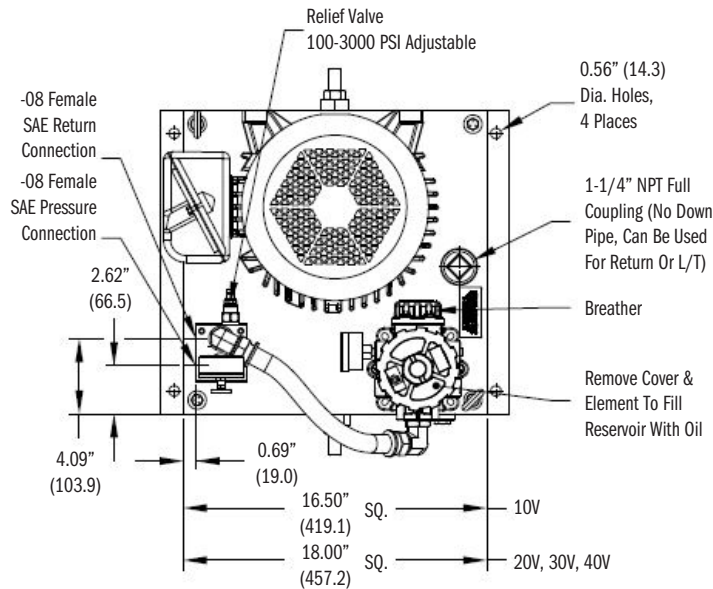
Dimensions:
inches (± .125")
millimeters (± 1 mm)



Dimensions B through H

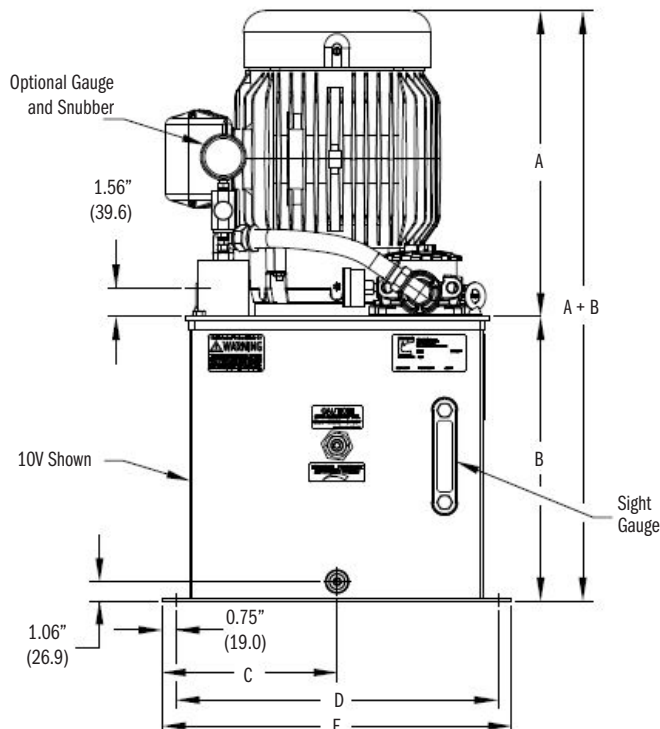
Reservoir	B	C	D	E	F	G	H
10V	15.44 (392.2)	9.50 (241.3)	17.50 (444.5)	19.00 (482.6)	1.25 (31.7)	14.00 (355.6)	15.50 (419.1)
20V	18.44 (468.4)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)
30V	26.44 (671.6)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)
40V	34.44 (874.8)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)

► **FEATURES:**
PR8A PRESSURE/RETURN BLOCK

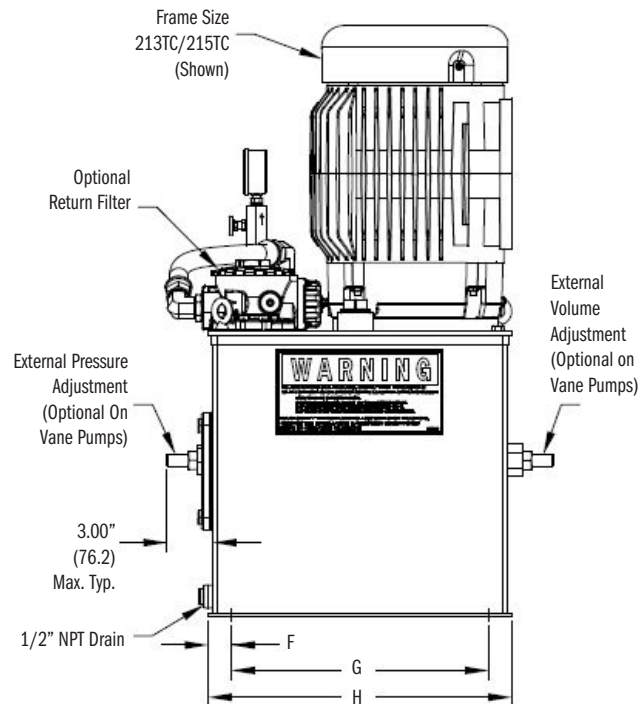


DIMENSIONS A		
MOTOR FRAME	CODE	A (± .125")
56C	005T	9.92 (252.0)
56C	005S	10.44 (265.2)
56C	007T	9.92 (252.0)
56C	007S	9.92 (252.0)
56C	010T	9.92 (252.0)
56C	010S	10.92 (277.4)
56C	015T	10.92 (277.4)
56C	015S	12.98 (329.7)
56TC	020T	11.98 (304.3)
56C	020S	12.97 (329.4)
182TC	030T	13.37 (339.6)
184TC	030S	14.43 (366.5)
184TC	050T	15.06 (382.5)
213TC	075T	17.56 (446.0)
215TC	100T	17.56 (446.0)
254TC	150T	23.03 (585.0)
256TC	200T	23.03 (585.0)

Dimensions:
inches (± .125")
millimeters (± 1 mm)



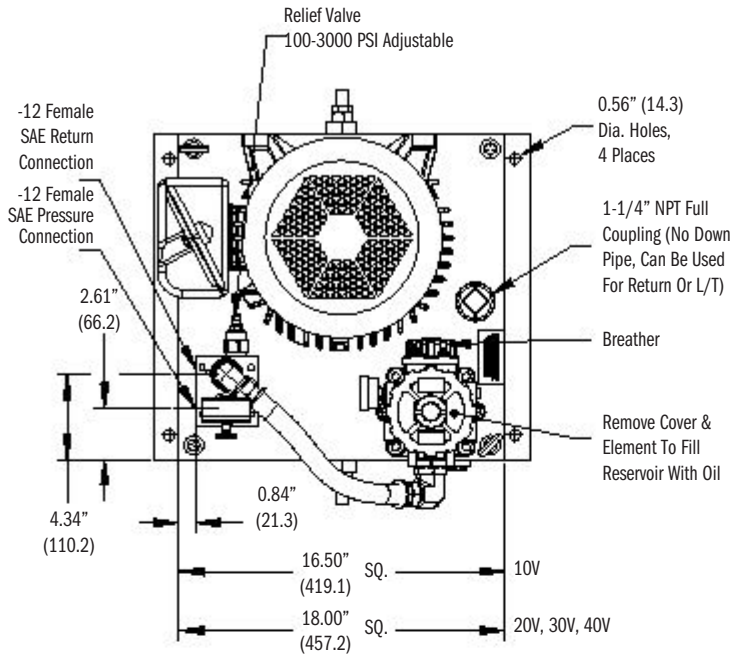
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Dimensions B through H

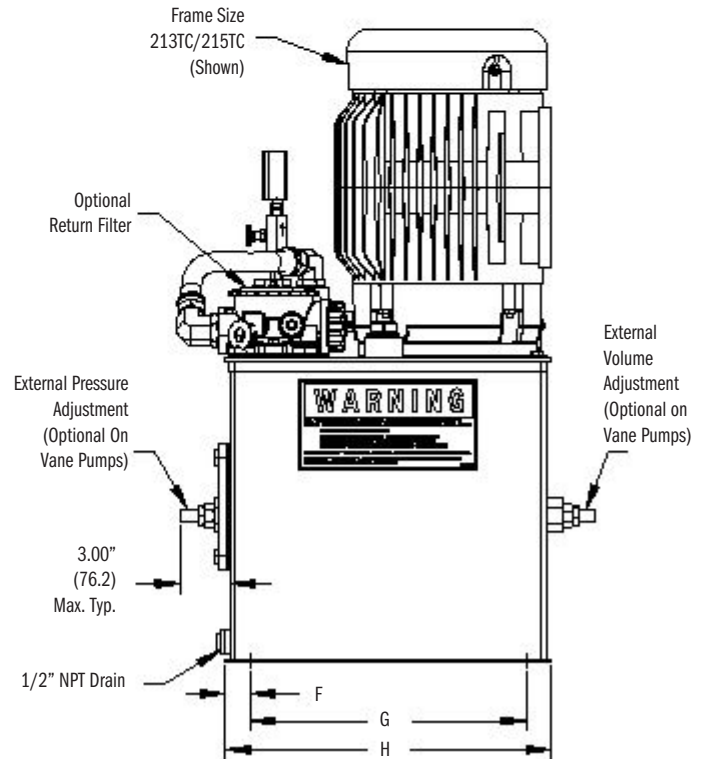
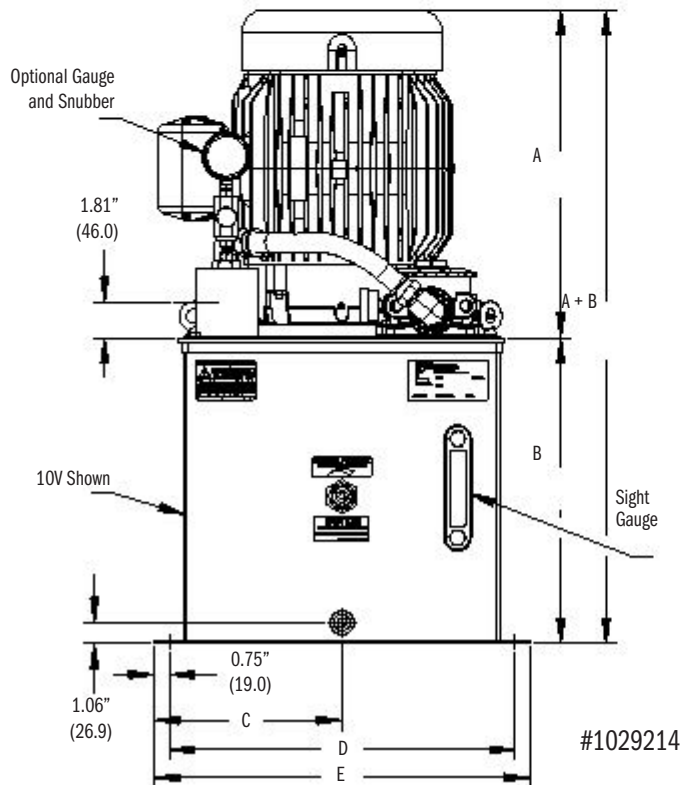
Reservoir	B	C	D	E	F	G	H
10V	15.44 (392.2)	9.50 (241.3)	17.50 (444.5)	19.00 (482.6)	1.25 (31.7)	14.00 (355.6)	15.50 (419.1)
20V	18.44 (468.4)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)
30V	26.44 (671.6)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)
40V	34.44 (874.8)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)

► **FEATURES: PR12A PRESSURE/RETURN BLOCK**



DIMENSIONS A		
MOTOR FRAME	CODE	A (± .125")
56C	005T	9.92 (252.0)
56C	005S	10.44 (265.2)
56C	007T	9.92 (252.0)
56C	007S	9.92 (252.0)
56C	010T	9.92 (252.0)
56C	010S	10.92 (277.4)
56C	015T	10.92 (277.4)
56C	015S	12.98 (329.7)
56TC	020T	11.98 (304.3)
56C	020S	12.97 (329.4)
182TC	030T	13.37 (339.6)
184TC	030S	14.43 (366.5)
184TC	050T	15.06 (382.5)
213TC	075T	17.56 (446.0)
215TC	100T	17.56 (446.0)
254TC	150T	23.03 (585.0)
256TC	200T	23.03 (585.0)

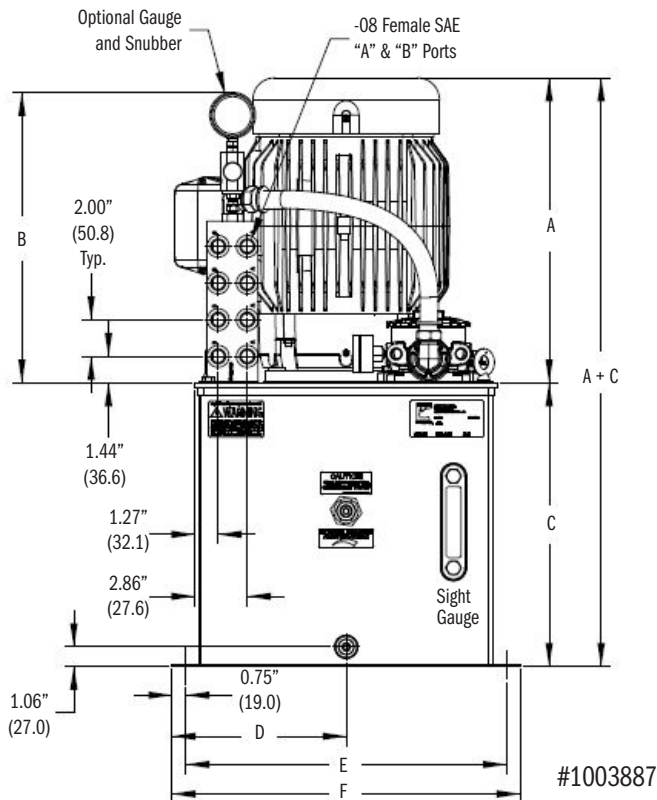
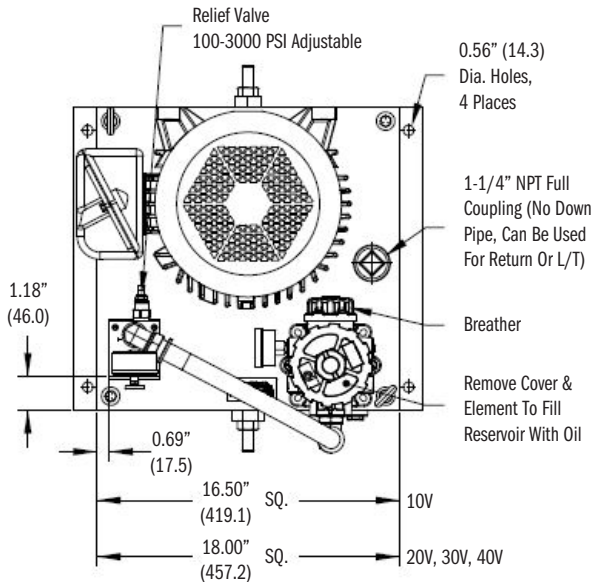
Dimensions:
inches (± .125")
millimeters (± 1 mm)



Dimensions B through H

Reservoir	B	C	D	E	F	G	H
10V	15.44 (392.2)	9.50 (241.3)	17.50 (444.5)	19.00 (482.6)	1.25 (31.7)	14.00 (355.6)	16.50 (419.1)
20V	18.44 (468.4)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)
30V	26.44 (671.6)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)
40V	34.44 (874.8)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)

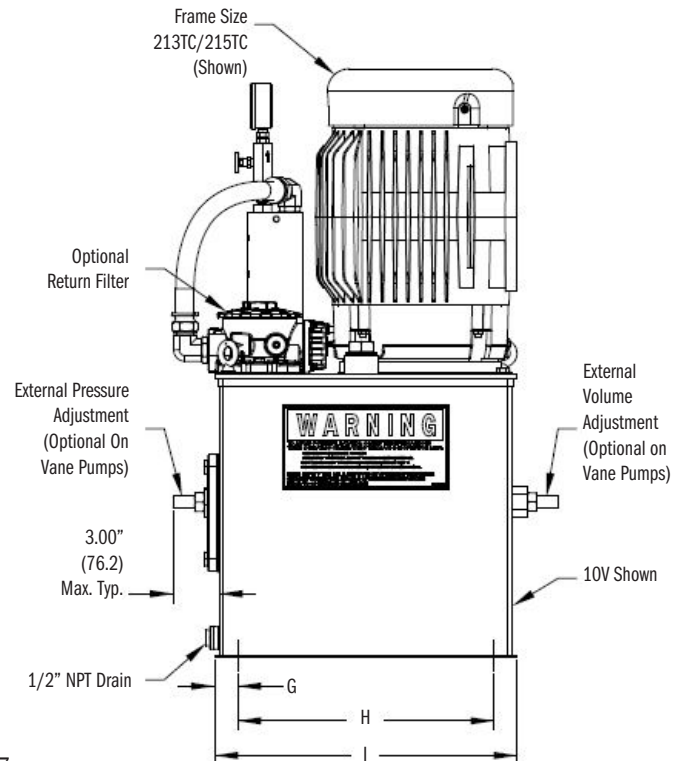
► **FEATURES:
D03 MANIFOLD**



DIMENSIONS A		
MOTOR FRAME	CODE	A (± .125")
56C	005T	9.92 (252.0)
56C	005S	10.44 (265.2)
56C	007T	9.92 (252.0)
56C	007S	9.92 (252.0)
56C	010T	9.92 (252.0)
56C	010S	10.92 (277.4)
56C	015T	10.92 (277.4)
56C	015S	12.98 (329.7)
56TC	020T	11.98 (304.3)
56C	020S	12.97 (329.4)
182TC	030T	13.37 (339.6)
184TC	030S	14.43 (366.5)
184TC	050T	15.06 (382.5)
213TC	075T	17.56 (446.0)
215TC	100T	17.56 (446.0)
254TC	150T	23.03 (585.0)
256TC	200T	23.03 (585.0)

Dimensions:
inches (± .125")
millimeters (± 1 mm)

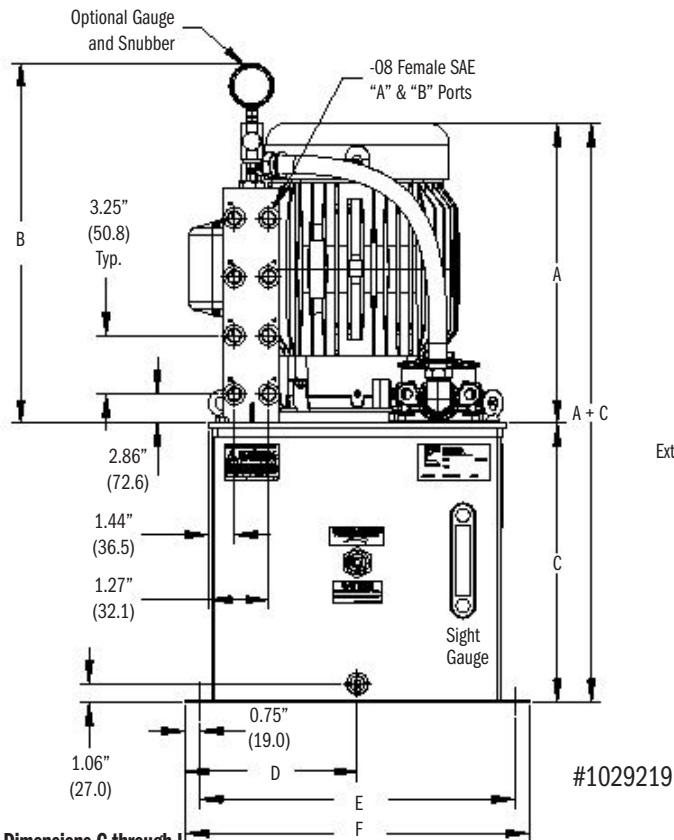
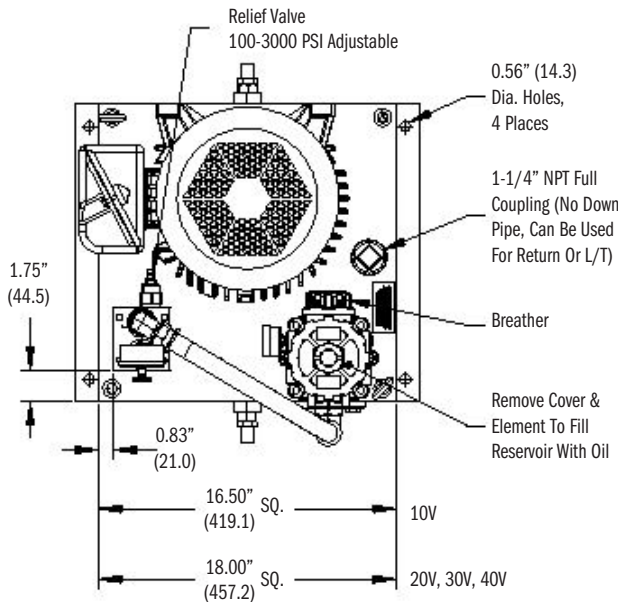
No. of Stations	B
1	10.25 (260.3)
2	12.38 (314.5)
3	14.50 (368.3)
4	16.63 (422.4)



Dimensions C through I

Reservoir	C	D	E	F	G	H	I
10V	15.44 (392.2)	9.50 (241.3)	17.50 (444.5)	19.00 (482.6)	1.25 (31.7)	14.00 (355.6)	16.50 (419.1)
20V	18.44 (468.4)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)
30V	26.44 (671.6)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)
40V	34.44 (874.8)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)

► **FEATURES:
D05 MANIFOLD**



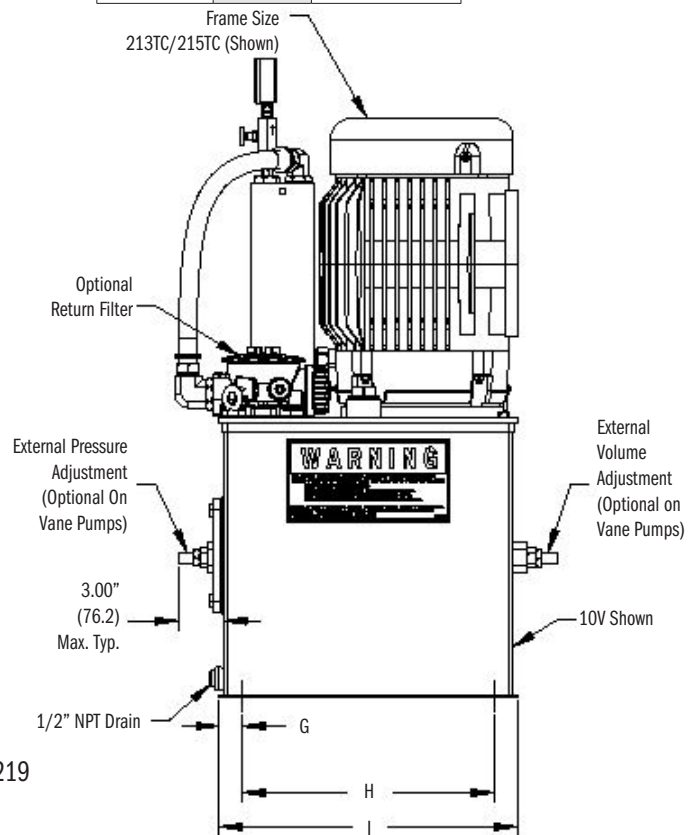
Dimensions C through I

Reservoir	C	D	E	F	G	H	I
10V	15.44 (392.2)	9.50 (241.3)	17.50 (444.5)	19.00 (482.6)	1.25 (31.7)	14.00 (355.6)	16.50 (419.1)
20V	18.44 (468.4)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)
30V	26.44 (671.6)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)
40V	34.44 (874.8)	10.25 (260.3)	19.00 (482.6)	20.50 (520.7)	1.50 (38.1)	15.00 (381.0)	18.00 (457.2)

DIMENSIONS A		
MOTOR FRAME	CODE	A (± .125")
56C	005T	9.92 (252.0)
56C	005S	10.44 (265.2)
56C	007T	9.92 (252.0)
56C	007S	9.92 (252.0)
56C	010T	9.92 (252.0)
56C	010S	10.92 (277.4)
56C	015T	10.92 (277.4)
56C	015S	12.98 (329.7)
56TC	020T	11.98 (304.3)
56C	020S	12.97 (329.4)
182TC	030T	13.37 (339.6)
184TC	030S	14.43 (366.5)
184TC	050T	15.06 (382.5)
213TC	075T	17.56 (446.0)
215TC	100T	17.56 (446.0)
254TC	150T	23.03 (585.0)
256TC	200T	23.03 (585.0)

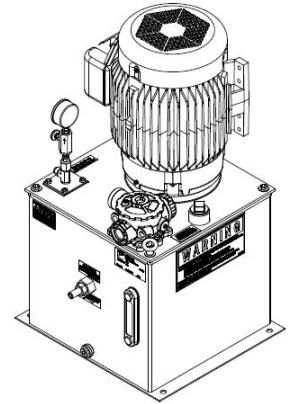
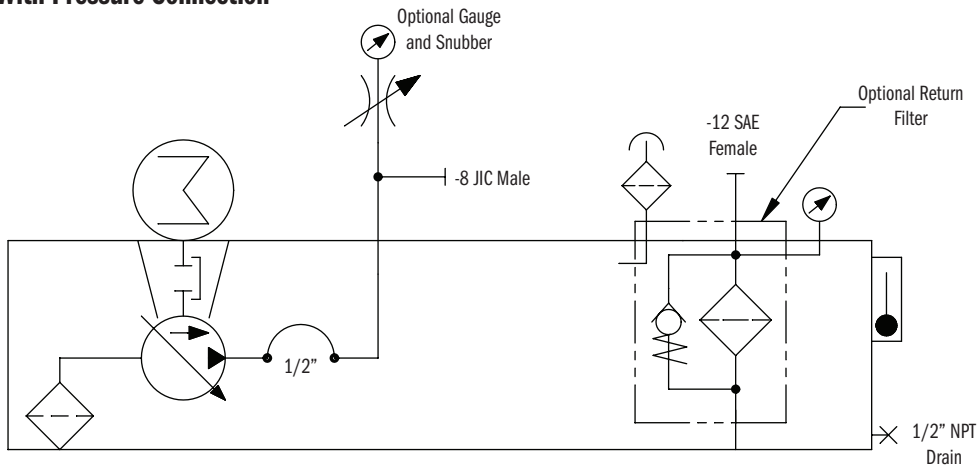
Dimensions:
inches (± .125")
millimeters (± 1 mm)

No. of Stations	B
1	10.25 (260.3)
2	13.50 (342.9)
3	16.75 (425.5)
4	20.00 (508.0)

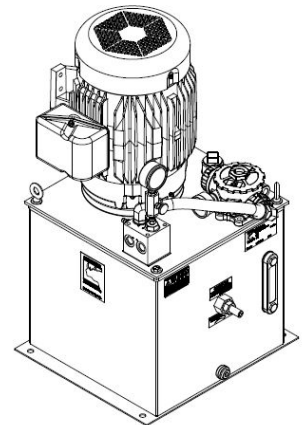
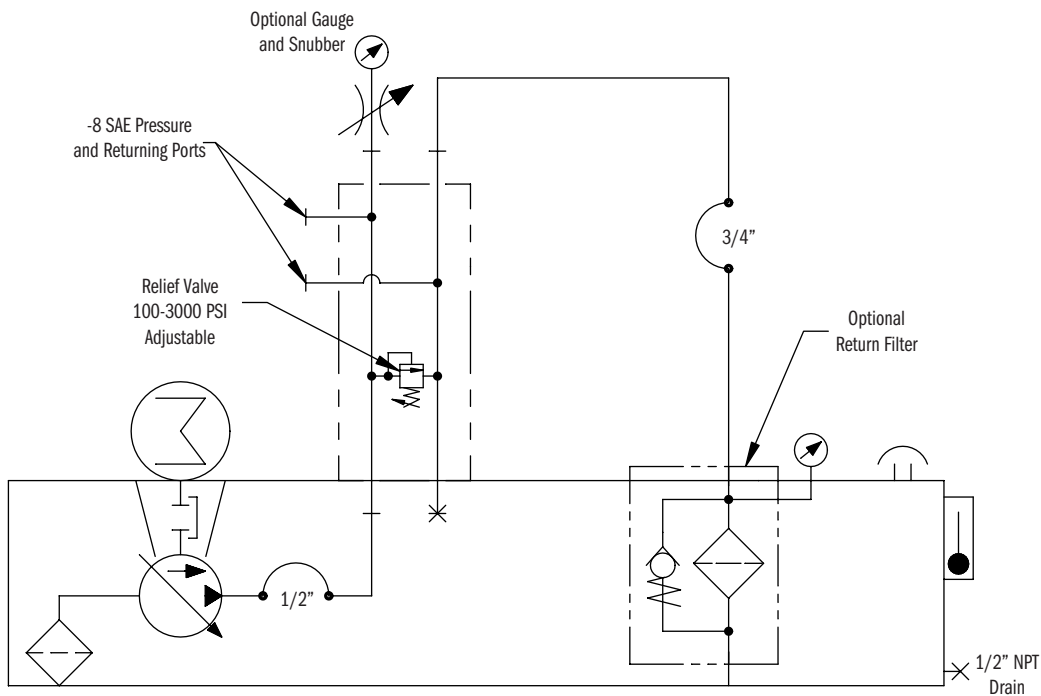


► FEATURES:
BASIC SCHEMATICS - P-PORT* / PR* BLOCK

With Pressure Connection

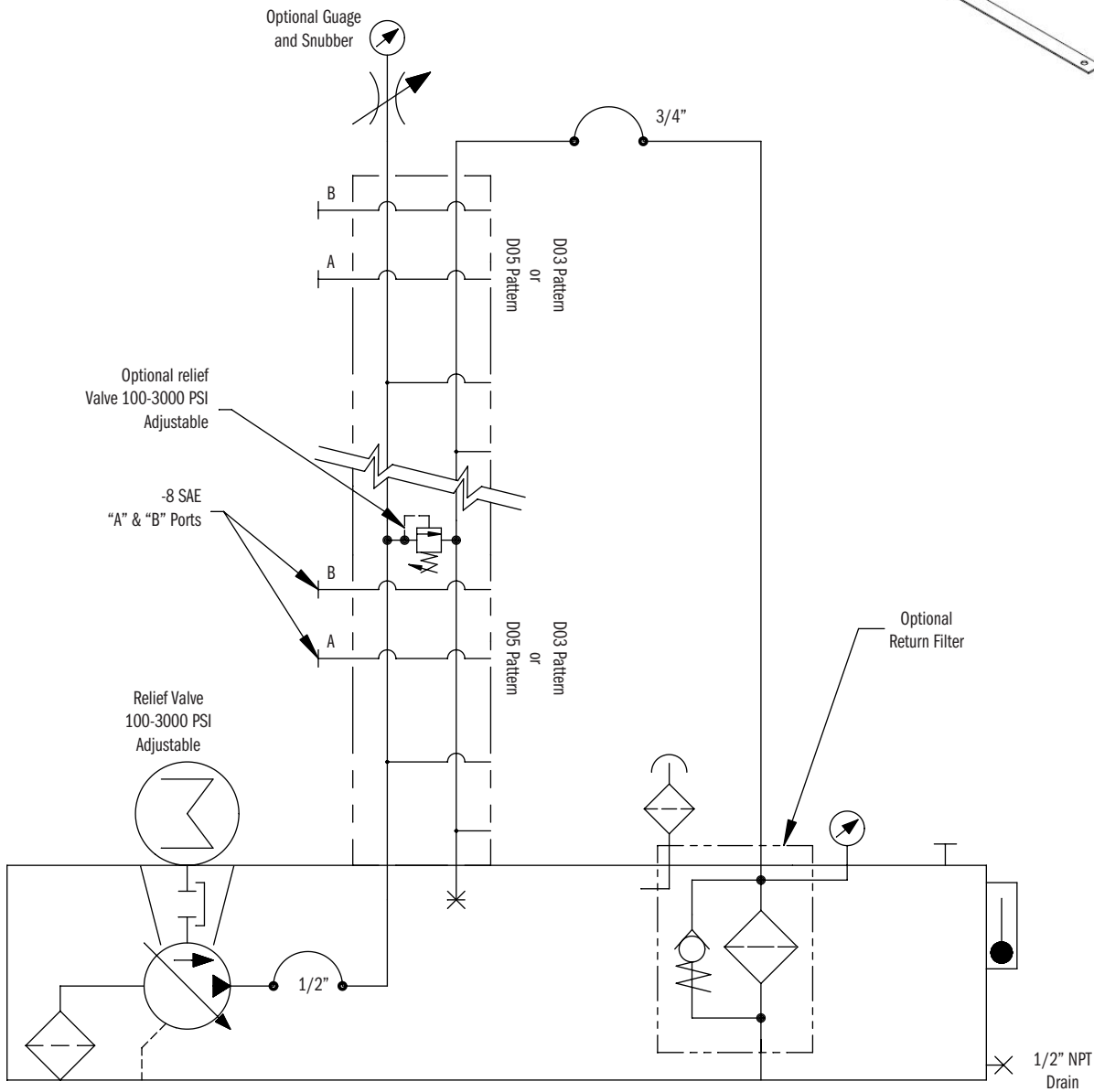
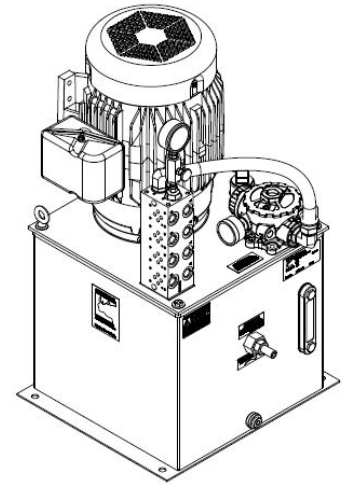


With Pressure Block



► **FEATURES:**
BASIC SCHEMATICS - MANIFOLD

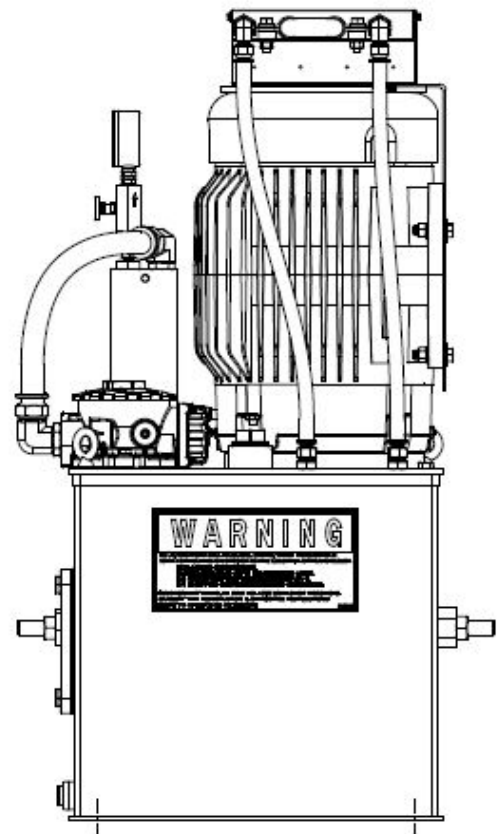
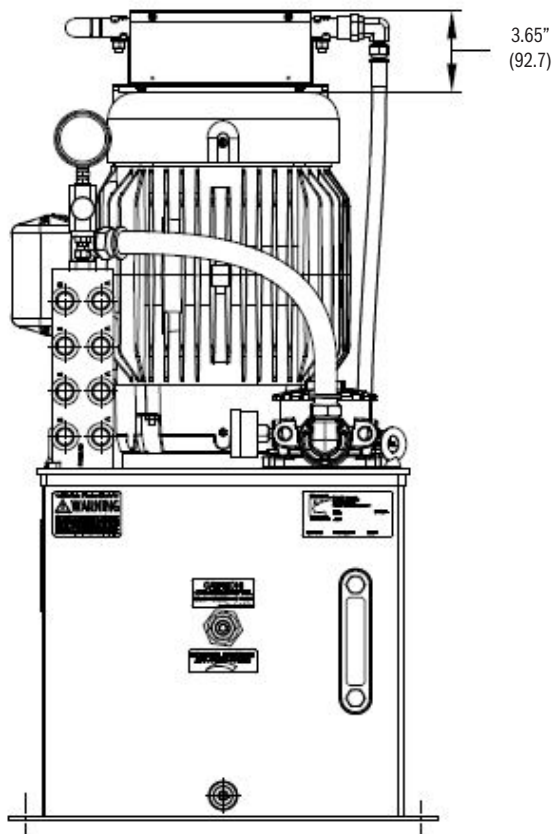
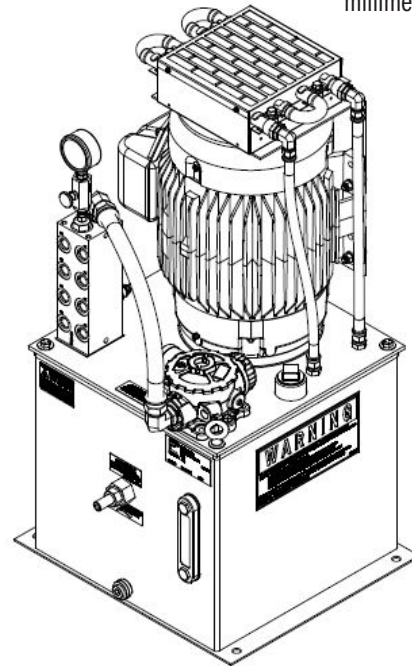
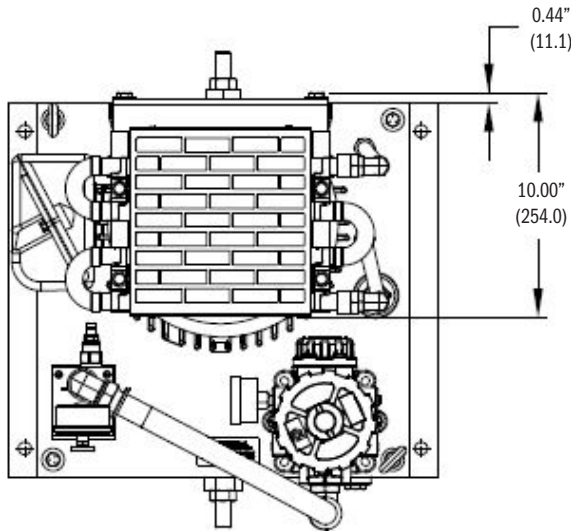
With Manifold



► **FEATURES:**
HEA44C CASE DRAIN COOLER

Works ONLY with Vane or Piston pumps for case drain cooling.

Dimensions:
inches (± .125")
millimeters (± 1 mm)

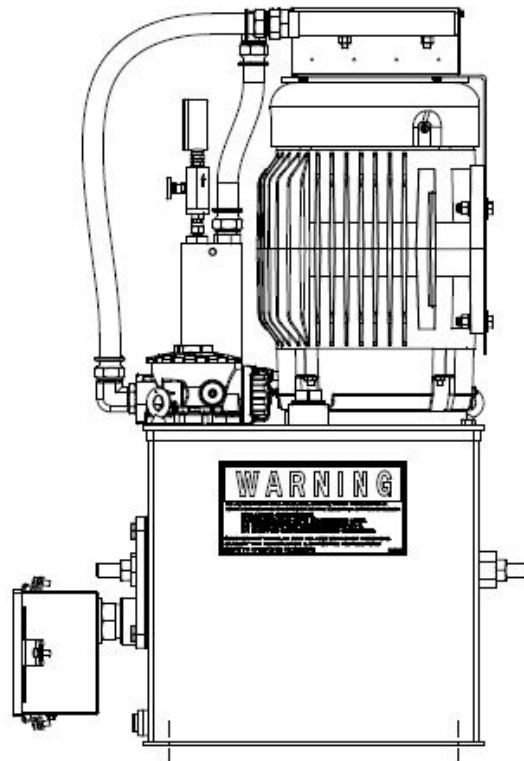
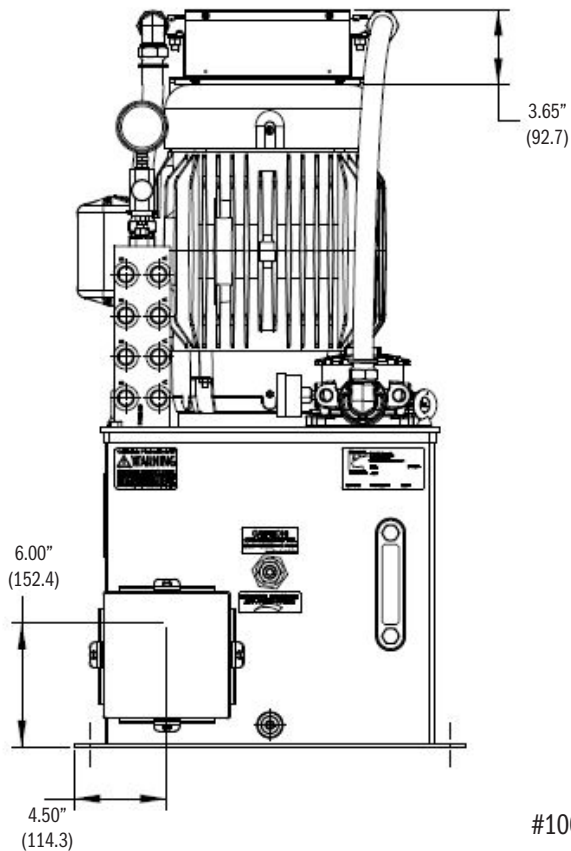
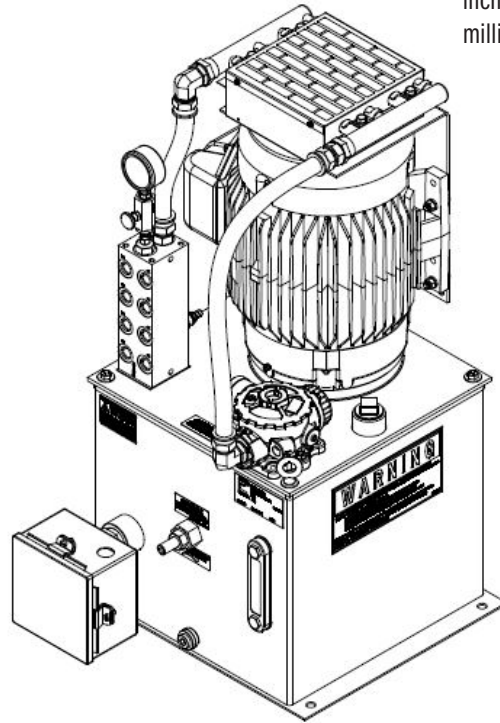
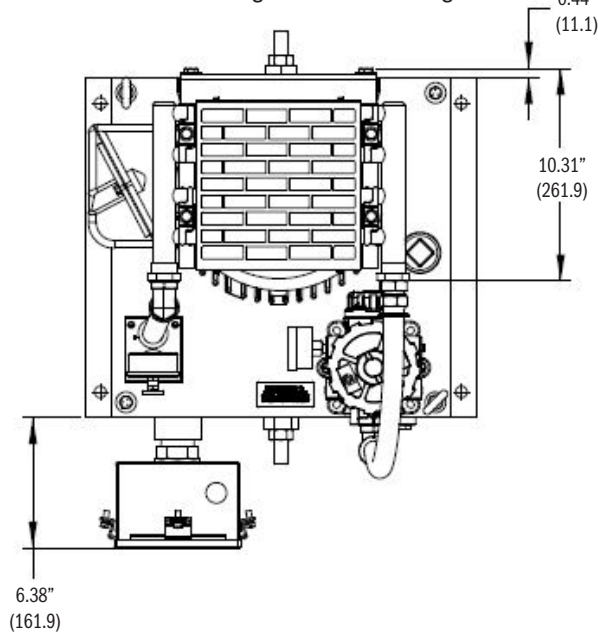


#1004200

► **FEATURES:**
HEA41R & (TH) TANK HEATER

Works with all Vane or Gear pumps & any "P" port, "PR" block or manifold for return oil cooling. Also Tank Heater general location.

Dimensions:
inches (± .125")
millimeters (± 1 mm)

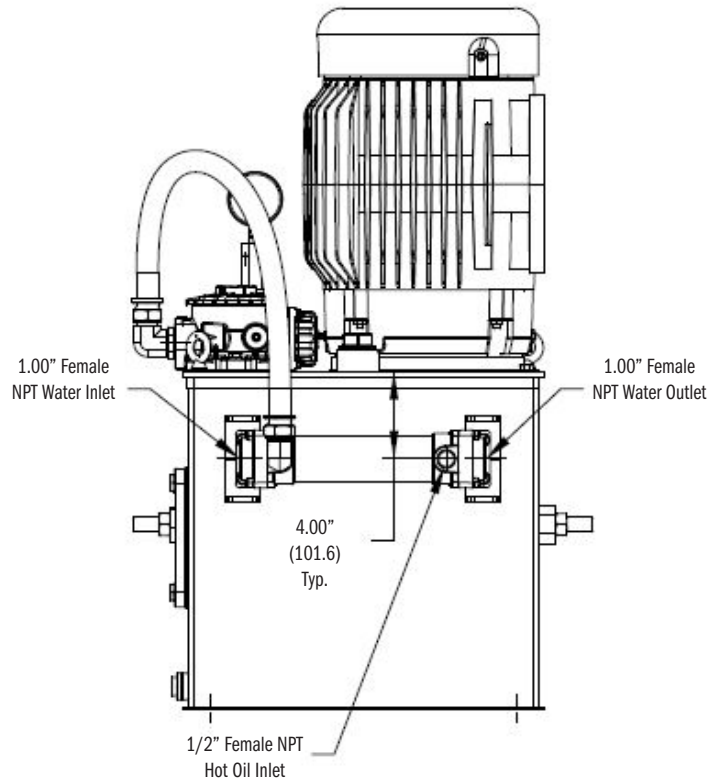
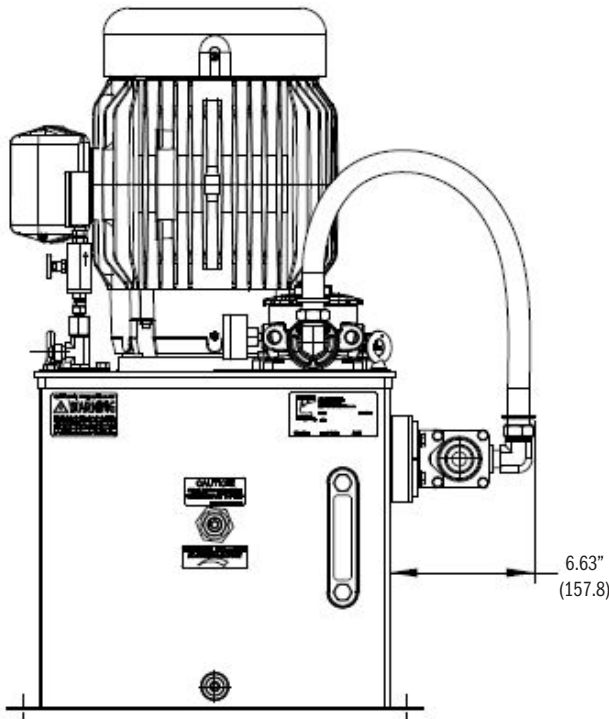
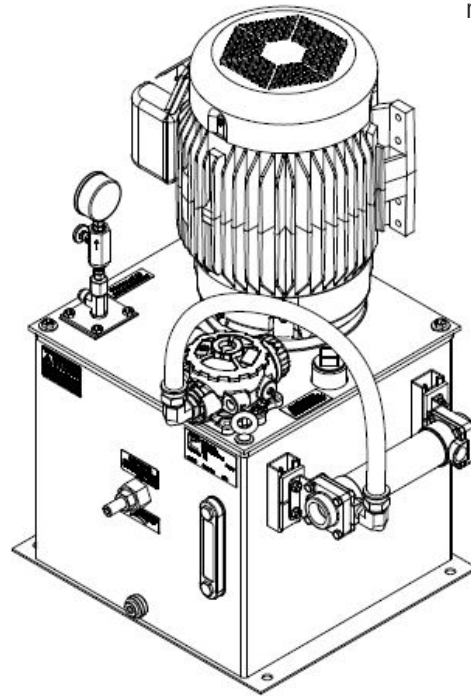
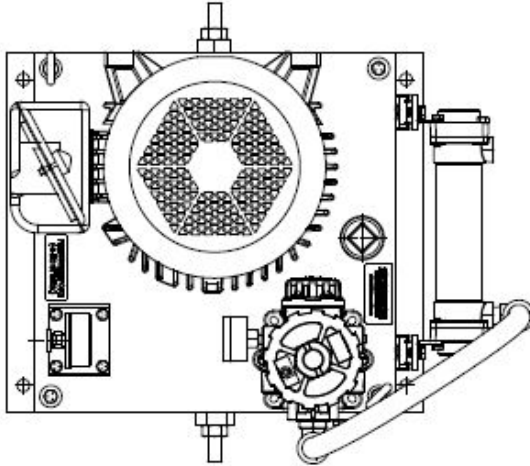


#1004202

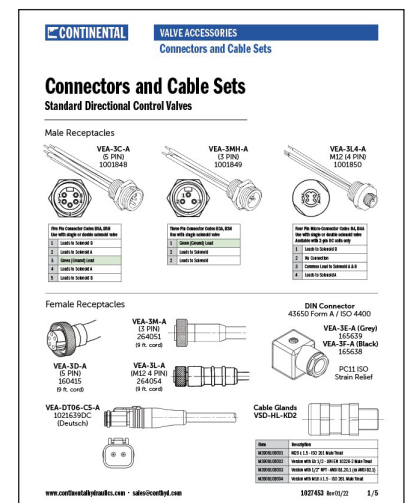
► **FEATURES:**
HEW11R RETURN COOLER

Works with all Vane or Gear pumps & any "P" port, "PR" block or manifold for return oil cooling

Dimensions:
inches (± .125")
millimeters (± 1 mm)



#1004206



Connectors and Cables Sets
Form #1027453

CONTINENTAL HYDRAULICS INC. / HYDRECO HYDRAULICS INC.

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