

# Standard Power Packs Variable Displacement

The Drive & Control Company



Designed for  
Industrial  
Applications . . .

Delivered in  
Minimal Time . . .

**Standard Features:**

- Pressures up to 3000 PSI max.
- Flow: 4.2 to 31 GPM
- Variable displacement pumps
- Electric Motor:  
2 - 50 HP @ 1750 rpm
- System Relief Valve and Gauge
- 20µ absolute  
In-tank return filter/filler/breather
- In-tank return down line
- Tank Capacities: 20 to 100 gal.

**Options:**

- D03 and D05 bar manifold up to six stations
- Heat exchangers/water regulator valve
- Heater/temperature switch
- Level/temperature switch

## Features & Benefits

### Factory Built Units

This is Rexroth's version of a truly standard power unit, incorporating variable displacement piston pumps and valve options. We also offer a complete line of related power unit accessories, such as heat exchangers, heaters, temperature and level indicators. These all come supplied with our factory built warranty and international serviceability.

### Standard Power Packs

Consideration was taken to supply all standard industrial grade hydraulic components and accessories. This results in ease of maintenance and availability of replacement parts. Rexroth has also incorporated some of its latest technology in its power units. This includes the close coupled motor pump group, which eliminates couplings and bellhousings, and provides for a quieter, more cost efficient assembly.

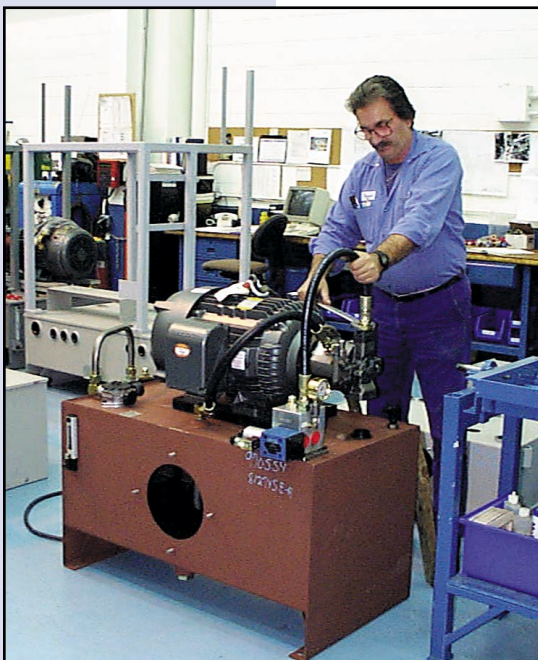
### Availability

These pre-engineered power units allow us to offer a competitively priced unit with a minimal delivery time. Rexroth still maintains its high standards of quality, workmanship and dependability, which include the rigid standards set by ISO 9001.

These units are designed for use with standard **petroleum oil** (DTE 26 or equivalent), and working pressures up to **3000 PSI max.** Electric motors are standard TEFC, 1750 RPM, 3 phase.

### Operation

Fill reservoir and pump case housing with high grade petroleum oil based hydraulic fluid. Fluid level should be above sight gauge on reservoir before starting. Electric motor connection must conform to motor nameplate. Rotation direction is checked by jogging the motor. See Rexroth data sheet RA 70 900 for start-up instructions.

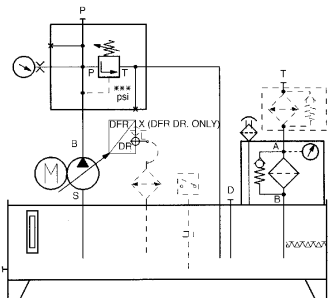


# Variable Displacement Power Pack Model Code

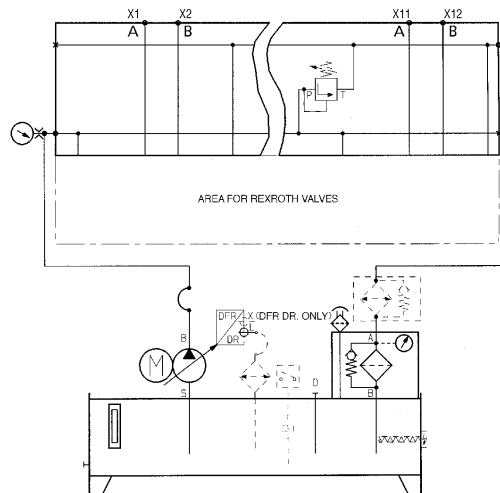
PPV									*
Power Pack Variable									Specify Flow & Pressure
Reservoir Size	= 20								Level/Temp. Switch Options 0 = None LT = Level / Temp. Switch
	= 40								
	= 60								Heater Options 0 = None 2 = Electric Heater, 3 phase with Temperature Switch 3 = Electric Heater, single phase with Temperature Switch
	= 100								
Pump Size									Heat Exchanger Options 0 = None 1 = Air/Oil, Leakage Line 2 = Water/Oil, Leakage Line 3 = Water/Oil, Return Line 4 = Air/Oil, 3-phase Motor, Return Line with Temperature Switch
A10VSO 10 DR	(20 Gallon)	= A							
A10VSO 10 DFR	(20 Gallon)	= B							
A10VSO 18 DR	(20 Gallon)	= 1							
A10VSO 18 DFR	(20 Gallon)	= 2							
AA10VSO 28 DR	(40 Gallon)	= 3							
AA10VSO 28 DFR	(40 Gallon)	= 4							
AA10VSO 45 DR	(60 Gallon)	= 5							
AA10VSO 45 DFR	(60 Gallon)	= 6							
A10VO 71 DR	(100 Gallon)	= 7							
A10VO 71 DFR	(100 Gallon)	= 8							
Motor Horsepower									Pressure Gauge Option 1 = 0 - 3000 PSI 2 = 0 - 5000 PSI
See basic unit table for horsepower (hp based on reservoir & pump size)									
Valve Options									
Relief Valve and Gauge								= RV	
D03 Parallel Bar Manifold, one thru six stations w/ pressure gauge and relief								= 3BMR1 - 6	
D05 Parallel Bar Manifold, one thru six stations w/ pressure gauge and relief								= 5BMR1 - 6	

**Example: PPV403103BMR1120LT - 10 GPM / 1000 PSI**

## Circuits: (see Page 10 for Connection Sizes)

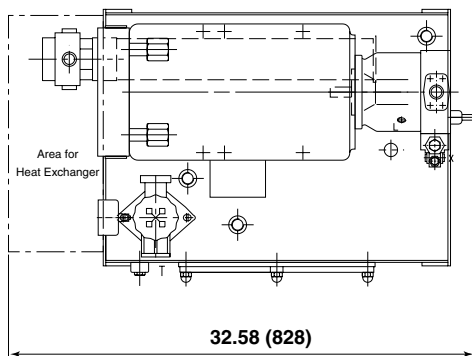


Relief Valve Option (RV)

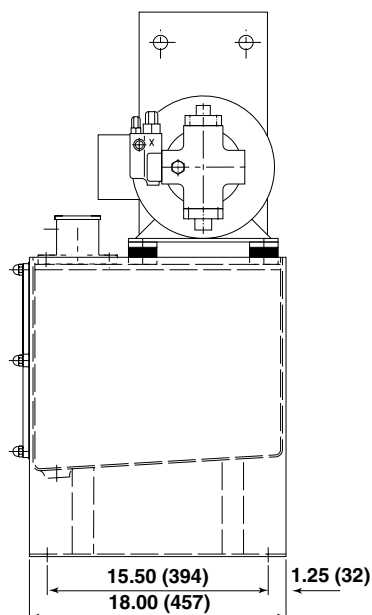
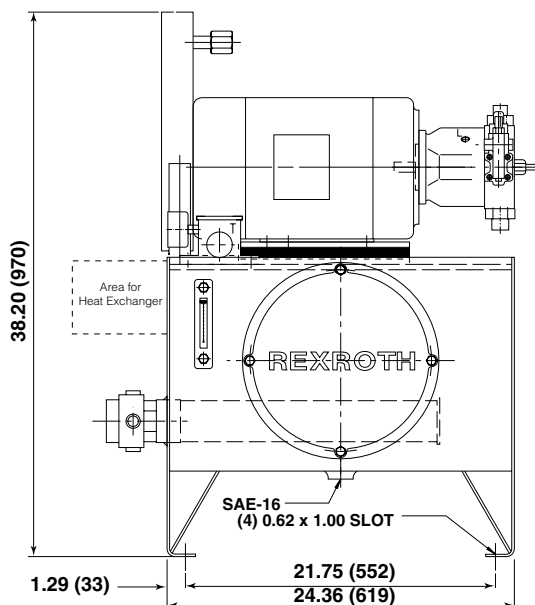


Bar Manifold (BMR) Option with D03 or D05, with Relief Valve

# 20 Gallon Steel Reservoir



Model PPV20153BMR21100



Dimensions - measurement in inches (mm)

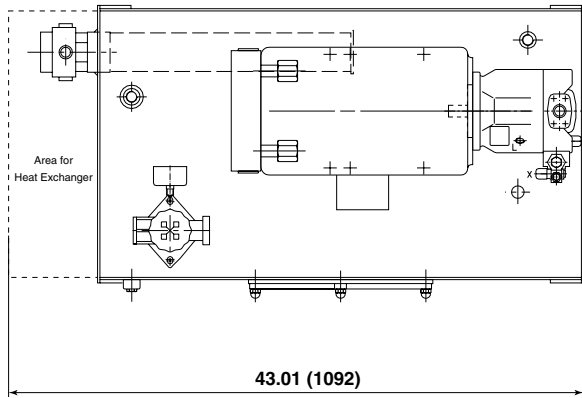
Model Code	Pump Model	Motor Frame	Power* hp (kw)	Displacement in <sup>3</sup> /rev (cm <sup>3</sup> /rev)	Max. Flow GPM (L/min)	Max. Pressure PSI (bar)
PPV20/ $\frac{A}{B}$ /2	A10VSO10	145	2.0 (1.4)	.64 (10)	4.2 (16)	3000 (200)
PPV20/ $\frac{A}{B}$ /3	A10VSO10	182	3.0 (2.2)	.64 (10)	4.2 (16)	3000 (200)
PPV20/ $\frac{A}{B}$ /5	A10VSO10	184	5.0 (3.7)	.64 (10)	4.2 (16)	3000 (200)
PPV20/ $\frac{A}{B}$ /7.5	A10VSO10	213	7.5 (5.5)	.64 (10)	4.2 (16)	3000 (200)
PPV20/ $\frac{A}{B}$ /10	A10VSO10	215	10.0 (7.4)	.64 (10)	4.2 (16)	3000 (200)
PPV20/ $\frac{1}{2}$ /2	A10VSO18	145	2.0 (1.4)	1.1 (18)	8.0 (30)	3000 (200)
PPV20/ $\frac{1}{2}$ /3	A10VSO18	182	3.0 (2.2)	1.1 (18)	8.0 (30)	3000 (200)
PPV20/ $\frac{1}{2}$ /5	A10VSO18	184	5.0 (3.7)	1.1 (18)	8.0 (30)	3000 (200)
PPV20/ $\frac{1}{2}$ /7.5	A10VSO18	213	7.5 (5.5)	1.1 (18)	8.0 (30)	3000 (200)
PPV20/ $\frac{1}{2}$ /10	A10VSO18	215	10.0 (7.4)	1.1 (18)	8.0 (30)	3000 (200)

( ) = Metric equivalent

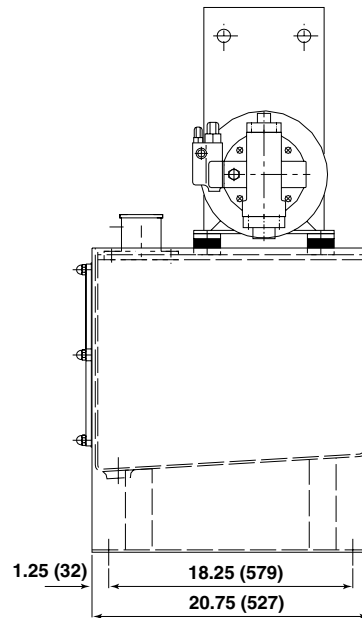
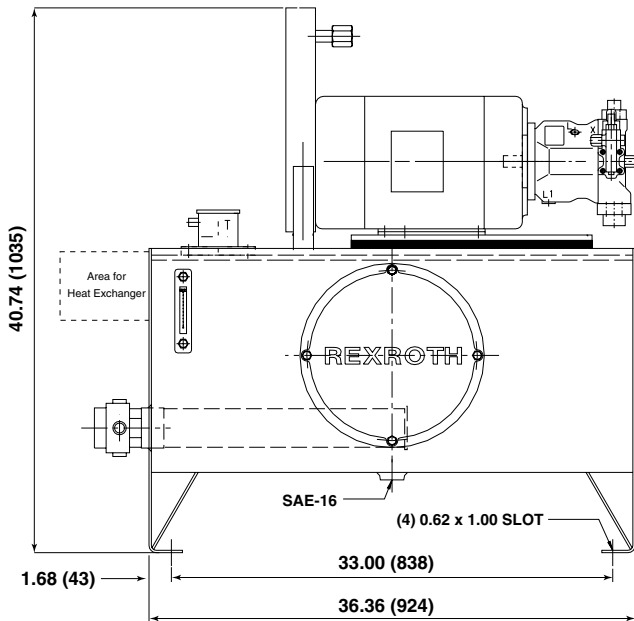
**Note:** Flows and pressures are factory set according to customer specifications

\* - Motors are closed-coupled, 3 phase, 1750, 230/460 volt, 1.15 S.F.

# 40 Gallon Steel Reservoir



Model PPV403105BMR21000



Dimensions - measurement in inches (mm)

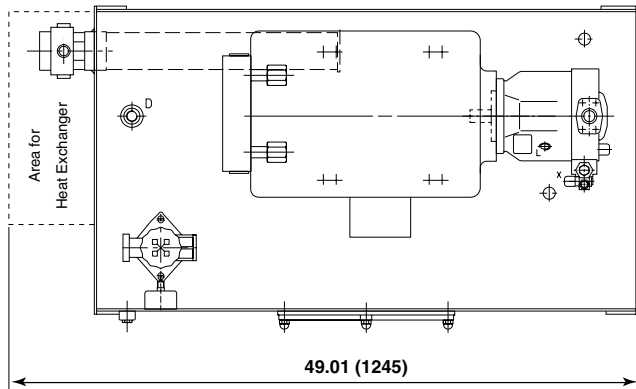
Model Code	Pump Model	Motor Frame	Power* hp (kw)	Displacement in <sup>3</sup> /rev (cm <sup>3</sup> /rev)	Max. Flow GPM (L/min)	Max. Pressure PSI (bar)
PPV40/ $\frac{3}{4}$ /5	AA10VSO28	213	5.0 (3.7)	1.7 (28)	12.0 (45)	3000 (200)
PPV40/ $\frac{3}{4}$ /7.5	AA10VSO28	213	7.5 (5.5)	1.7 (28)	12.0 (45)	3000 (200)
PPV40/ $\frac{3}{4}$ /10	AA10VSO28	215	10.0 (7.4)	1.7 (28)	12.0 (45)	3000 (200)
PPV40/ $\frac{3}{4}$ /15	AA10VSO28	254	15.0 (11.1)	1.7 (28)	12.0 (45)	3000 (200)
PPV40/ $\frac{3}{4}$ /20	AA10VSO28	256	20.0 (14.9)	1.7 (28)	12.0 (45)	3000 (200)
PPV40/ $\frac{3}{4}$ /25	A10VO28	284	25.0 (18.6)	1.7 (28)	12.0 (45)	3000 (200)

( ) = Metric equivalent

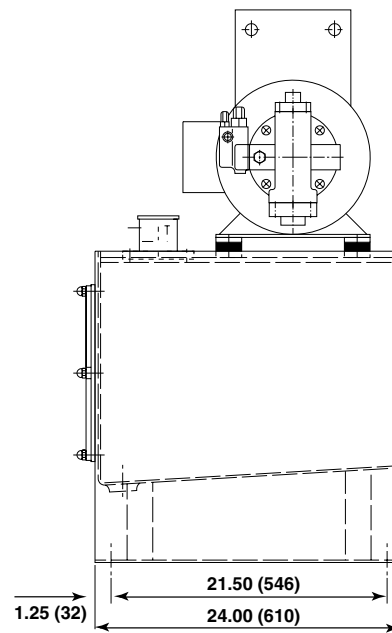
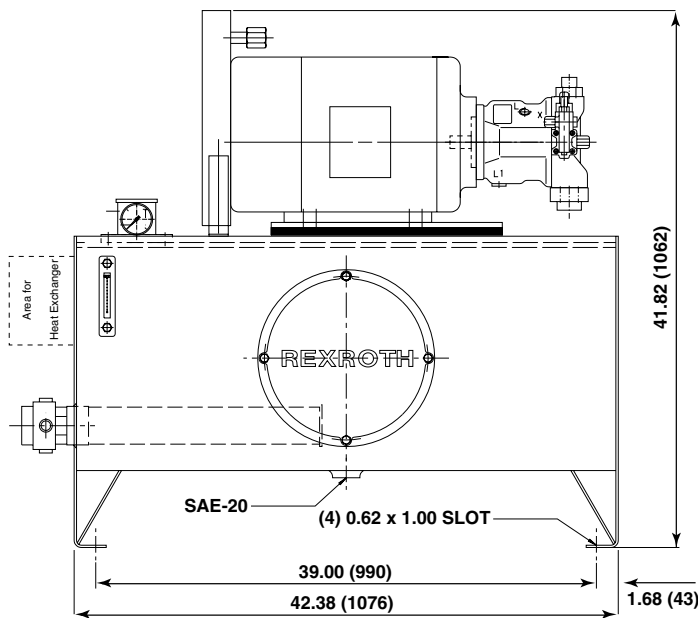
**Note:** Flows and pressures are factory set according to customer specifications

\* - Motors are closed-coupled, 3 phase, 1750, 230/460 volt, 1.15 S.F.

# 60 Gallon Steel Reservoir



Model PPV60510RV1300



Dimensions - measurement in inches (mm)

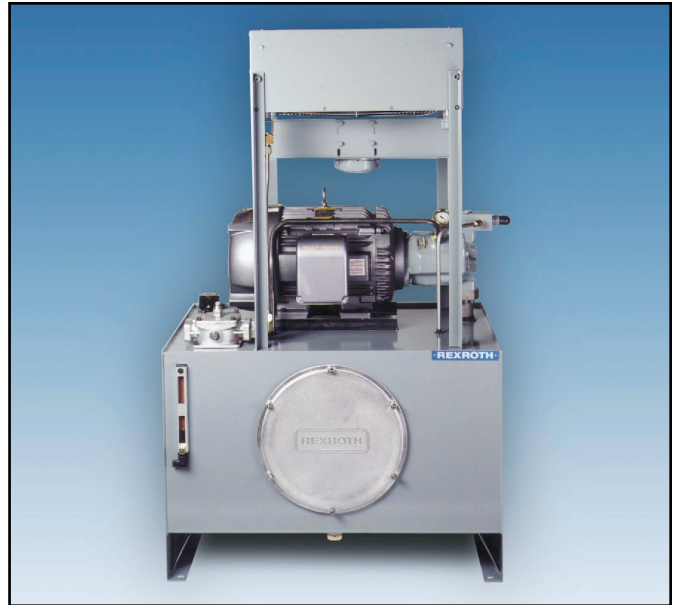
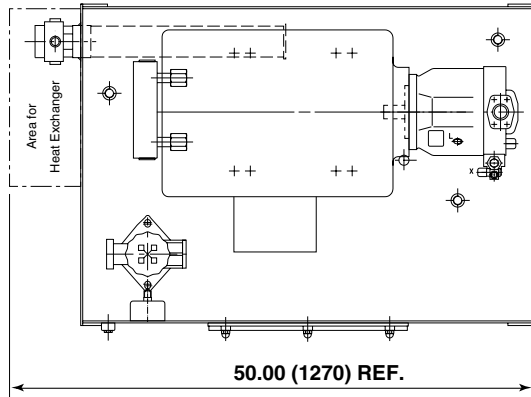
Model Code	Pump Model	Motor Frame	Power* hp (kw)	Displacement in <sup>3</sup> /rev (cm <sup>3</sup> /rev)	Max. Flow GPM (L/min)	Max. Pressure PSI (bar)
PPV60/ $\frac{5}{6}$ /7.5	AA10VSO45	213	7.5 (5.5)	2.7 (45)	19.5 (74)	3000 (200)
PPV60/ $\frac{5}{6}$ /10	AA10VSO45	213	10.0 (7.4)	2.7 (45)	19.5 (74)	3000 (200)
PPV60/ $\frac{5}{6}$ /15	AA10VSO45	254	15.0 (11.1)	2.7 (45)	19.5 (74)	3000 (200)
PPV60/ $\frac{5}{6}$ /20	AA10VSO45	256	20.0 (14.9)	2.7 (45)	19.5 (74)	3000 (200)
PPV60/ $\frac{5}{6}$ /25	A10VO45	284	25.0 (18.6)	2.7 (45)	19.5 (74)	3000 (200)
PPV60/ $\frac{5}{6}$ /30	A10VO45	286	30.0 (22.4)	2.7 (45)	19.5 (74)	3000 (200)

( ) = Metric equivalent

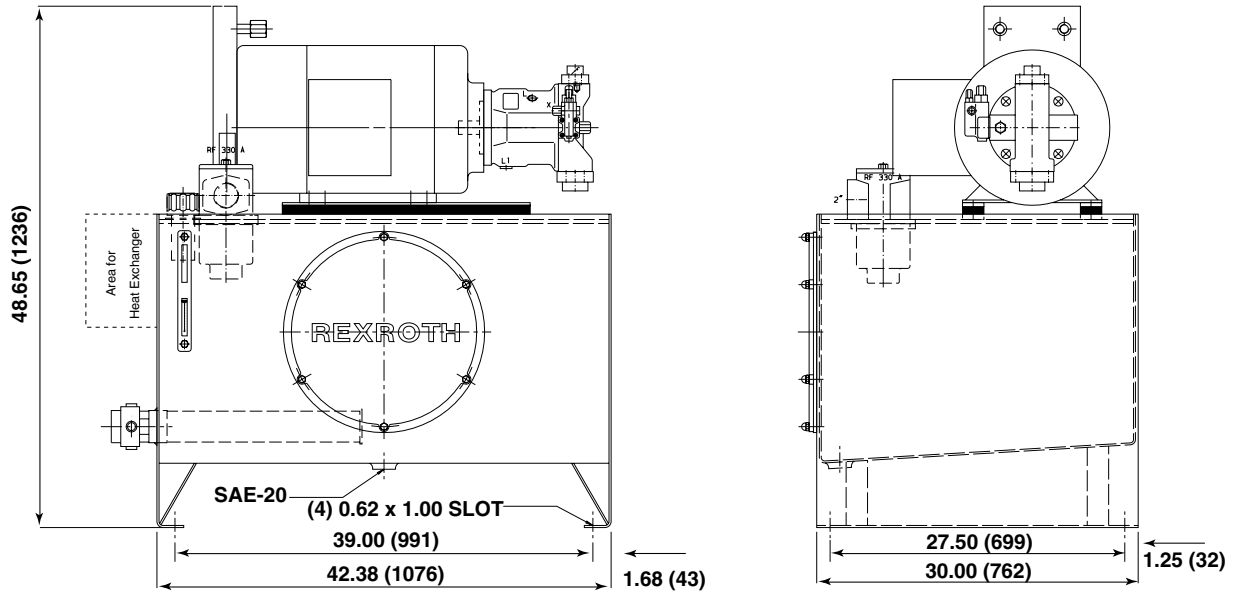
**Note:** Flows and pressures are factory set according to customer specifications

\* - Motors are closed-coupled, 3 phase, 1750, 230/460 volt, 1.15 S.F.

# 100 Gallon Steel Reservoir



Model PPV100730RV1400



Dimensions - measurement in inches (mm)

Model Code	Pump Model	Motor Frame	Power* hp (kw)	Displacement in <sup>3</sup> /rev (cm <sup>3</sup> /rev)	Max. Flow GPM (L/min)	Max. Pressure PSI (bar)
PPV100/ <sup>7</sup> / <sub>8</sub> /25	A10VO71	284	25.0 (11.1)	4.3 (71)	31.0 (117)	3000 (200)
PPV100/ <sup>7</sup> / <sub>8</sub> /30	A10VO71	286	30.0 (14.9)	4.3 (71)	31.0 (117)	3000 (200)
PPV100/ <sup>7</sup> / <sub>8</sub> /40	A10VO71	324	40.0 (18.6)	4.3 (71)	31.0 (117)	3000 (200)
PPV100/ <sup>7</sup> / <sub>8</sub> /50	A10VO71	326	50.0 (22.4)	4.3 (71)	31.0 (117)	3000 (200)

( ) = Metric equivalent

**Note:** Flows and pressures are factory set according to customer specifications

\* - Motors are closed-coupled, 3 phase, 1750, 230/460 volt, 1.15 S.F.

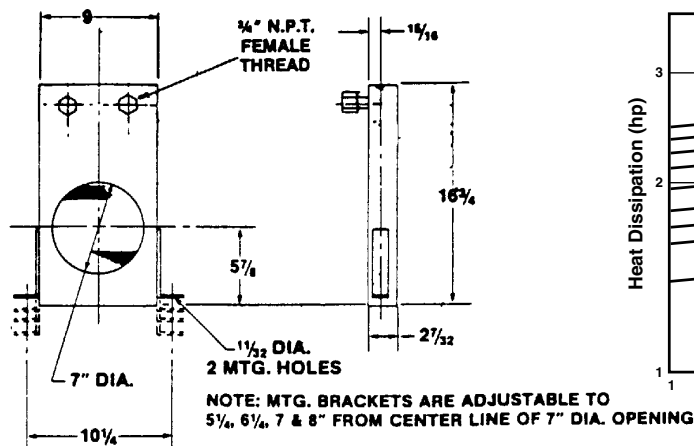
# Power Pack Accessory List

	Option	20 Gallon	40 Gallon	60 Gallon	100 Gallon
Heat Exchangers / Water Regulator Valve / Temp. Switch	1	US00 808 140 = Exchanger	US00 808 140 = Exchanger	US00 808 140 = Exchanger	US00 808 140 = Exchanger
	2	US00 808 105 = H <sub>2</sub> O Valve US00 884 023 = Exchanger	US00 808 105 = H <sub>2</sub> O Valve US00 884 023 = Exchanger	US00 808 105 = H <sub>2</sub> O Valve US00 884 023 = Exchanger	US00 808 105 = H <sub>2</sub> O Valve US00 888 744 = Exchanger
	3	US00 808 105 = H <sub>2</sub> O Valve US00 888 727 = Exchanger	US00 808 106 = H <sub>2</sub> O Valve US00 888 738 = Exchanger	US00 808 106 = H <sub>2</sub> O Valve US00 888 738 = Exchanger	US00 808 107 = H <sub>2</sub> O Valve US00 888 744 = Exchanger
	4	US00 881 427 = Temp. Switch US00 907 474 = Exchanger	US00 881 427 = Temp. Switch US00 907 475 = Exchanger	US00 881 427 = Temp. Switch US00 907 476 = Exchanger	US00 881 427 = Temp. Switch US00 907 477 = Exchanger
Electric Heaters Level / Temperature Switch	2	US00 881 427 = Temp. Switch US00 805 726 = Heater 3PH, 1 kw, 480 Volt	US00 881 427 = Temp. Switch US00 805 726 = Heater 3PH, 1 kw, 480 Volt	US00 881 427 = Temp. Switch US00 805 727 = Heater 3PH, 2 kw, 480 Volt	US00 881 427 = Temp. Switch US00 805 728 = Heater 3PH, 3 kw, 480 Volt
	3	US00 881 427 = Temp. Switch US00 802 712 = Heater Single PH, 1 kw, 120 Volt	US00 881 427 = Temp. Switch US00 802 712 = Heater Single PH, 1 kw, 120 Volt	US00 881 427 = Temp. Switch US00 802 714 = Heater Single PH, 1 kw, 120 Volt	US00 881 427 = Temp. Switch US00 802 716 = Heater Single PH, 1 kw, 120 Volt
	**LT	US00 903 431	US00 903 431	US00 903 432	US00 903 432

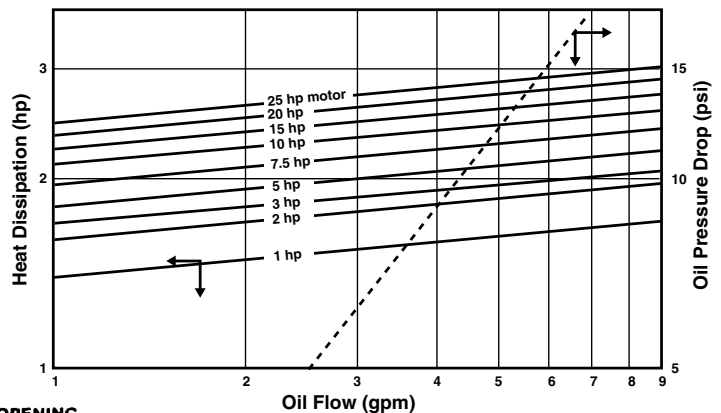
\*\* - Temperature Switch, fixed setting at 135°F Level Switch, non-adjustable, set at low level alarm.



**Heat Exchanger - Option 1**  
US00 808 140



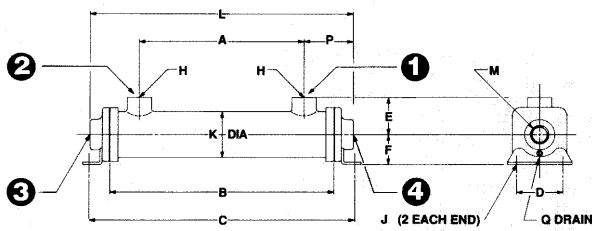
MATERIAL : ALUMINUM, CABINET STEEL



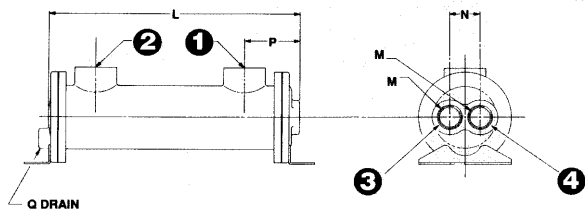


# Heat Exchanger - Options 2 and 3

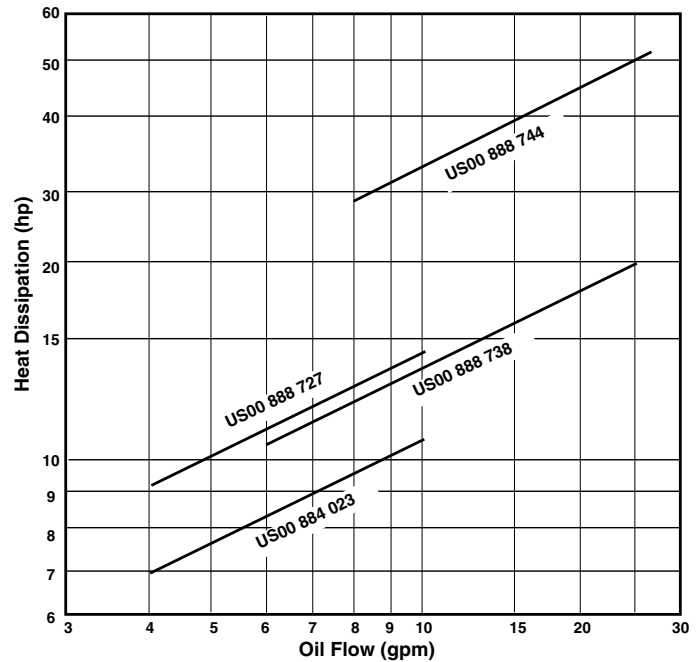
## One Pass



## Two Pass



- 1 - Hot oil in
- 2 - Cool oil out
- 3 - Cooling water in
- 4 - Cooling water out

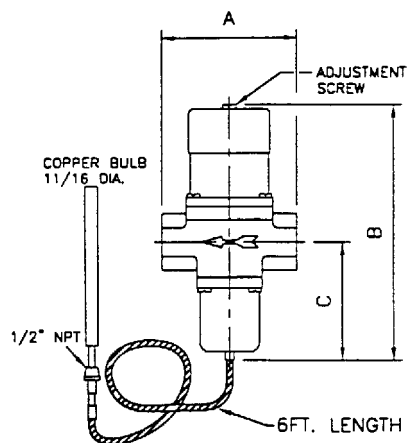


## Common Dimensions - measurements in inches (mm)

Rexroth Part Number	A	B	C	D	E	F	H SAE	J	K Dia.
US00 884 023	3.85 (98)	8.19 (208)	10.44 (262)	2.5 (64)	2.28 (57)	1.62 (41)	#12 1 1/16 - 12 UN-2B	.34 (9) x .62 (16)	2.55 (65)
US00 888 727	7.85 (199)	12.19 (310)	14.14 (363)	2.5 (64)	2.28 (57)	1.62 (41)	#12 1 1/16 - 12 UN-2B	.34 (9) x .62 (16)	2.55 (65)
US00 888 738	3.00 (76)	8.19 (208)	10.71 (272)	3.0 (76)	2.84 (72)	2.59 (66)	#24 1 7/8 - 12 UN-2B	.44 (11) x .75 (19)	3.52 (89)
US00 888 744	6.18 (157)	12.02 (305)	15.45 (392)	4.0 (102)	3.12 (79)	4.0 (102)	#32 2 1/2 - 12 UN-2B	.44 (11) x 1.0 (25)	5.05 (128)

Rexroth Part Number	L	M NPT	N	P	Q NPT
US00 884 023	10.38 (263)	.75	N/A	3.26 (82)	2 (1/4")
US00 888 727	14.38 (365)	.75	N/A	3.26 (82)	2 (1/4")
US00 888 738	9.69 (246)	1.00	1.62 (41)	3.46 (87)	1/4"
US00 888 744	14.33 (363)	1.50	2.38 (60)	4.45 (113)	1/4"

## Water Regulating Valve



Size (NPT)	Rexroth Part Number	A	B	C
3/4"	US00 808 105	3.56	7.66	3.80
1"	US00 808 106	4.84	10.70	4.72
1-1/4"	US00 808 107	4.86	11.08	4.91

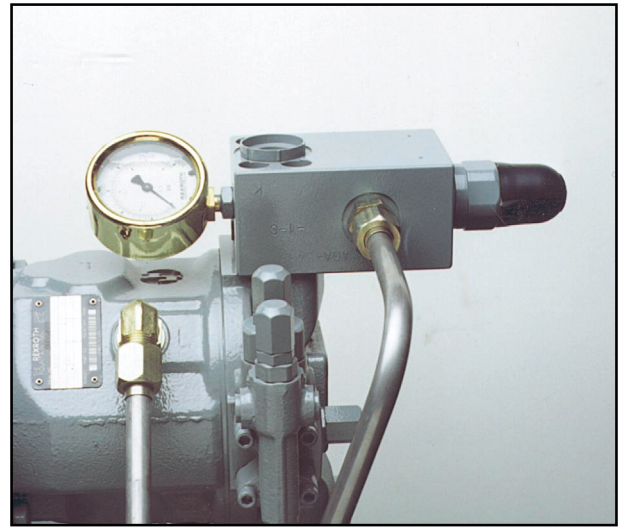
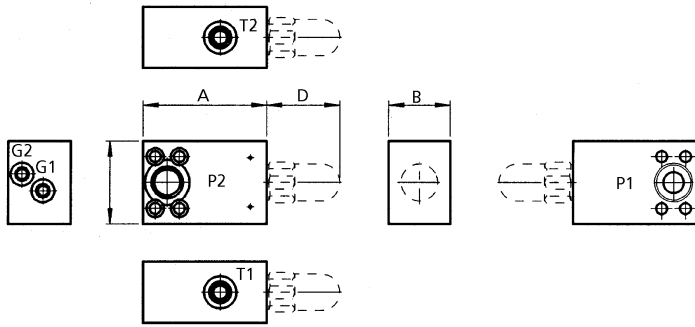
### Max. Water Flow:

Size	GPM
3/4"	40
1"	55
1-1/4"	75

### Temperature:

Size	Range Opening Pt.
3/4" - 1-1/4"	75° - 135°F

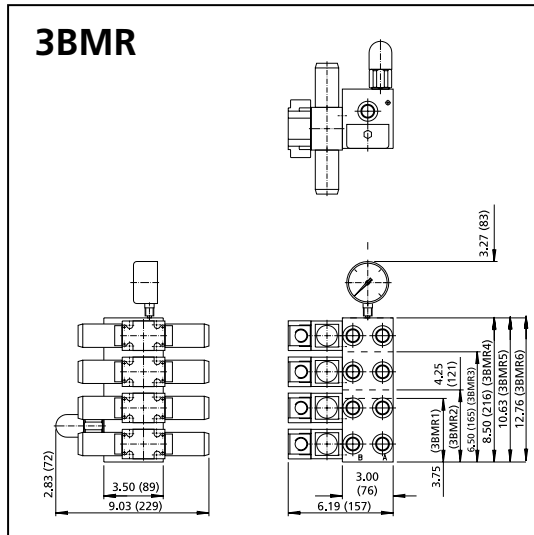
## Relief Valve Option - RV



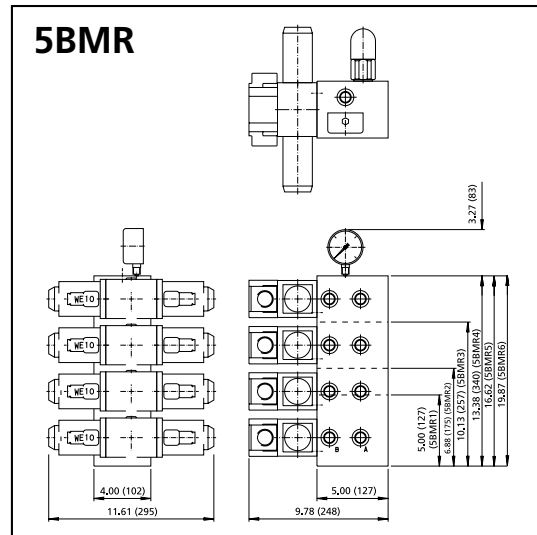
Flange Mounted Relief Valve with Pressure Gauge

Part No.	P1	P2	T1,T2	G1, G2	A	B	C	D	Relief Valve Size
US00 904 345 Relief Block	3/4" Code 61	-12 SAE (1-1/16-12)	-8 SAE (3/4-16)	-4 SAE (7/16-20)	4.50 (115)	2.25 (57)	3.00 (76)	2.68 (68)	DBD10 RR00 424 149
US00 904 347 Relief Block	1" Code 61	-16 SAE (1-5/16-12)	-12 SAE (1-1/16-16)	-4 SAE (7/16-20)	4.50 (115)	2.25 (57)	3.00 (76)	2.68 (68)	DBD10 RR00 424 149

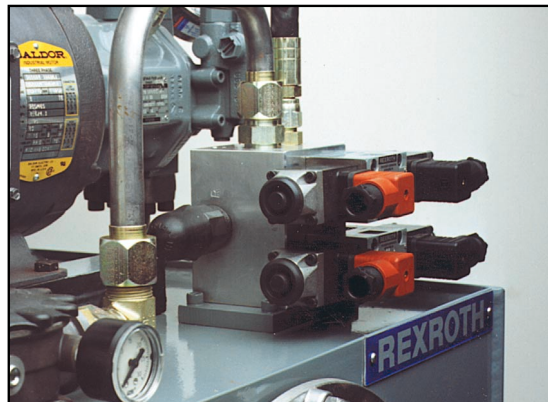
## Bar Manifold Options



Dimensions - measurement in inches (mm)



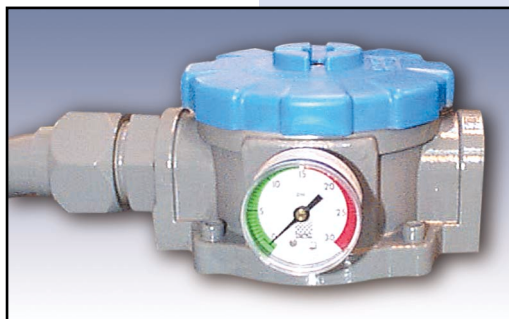
Dimensions - measurement in inches (mm)



Bar Manifold with Cartridge Relief

# In-Tank Return Line Filter Replacement Cartridge

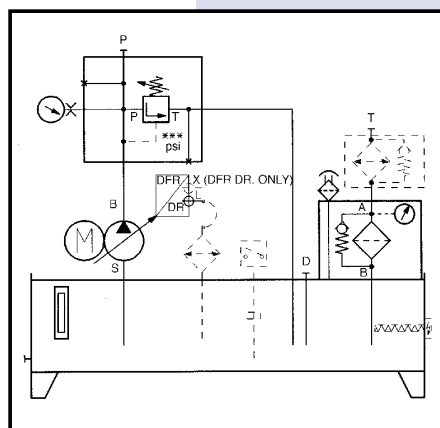
- PPV 20 = P/N US00 889 084
- PPV 40 & 60 = P/N US00 906 175
- PPV 100 = P/N US00 906 176



## Customer Connection Port Sizes

### RV Option (Relief Valve w/Gauge)

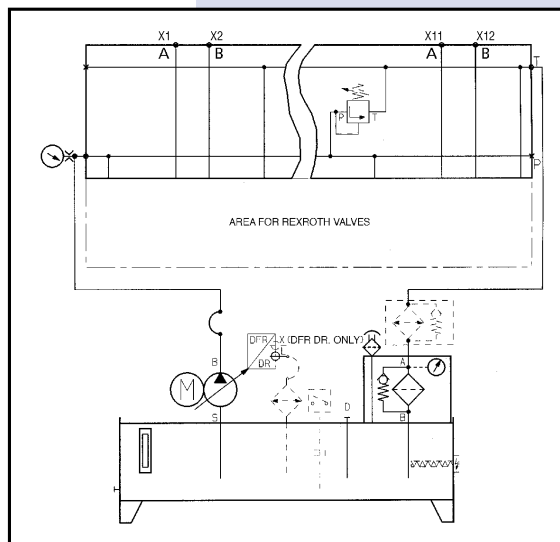
- PPV 20 P = 1-1/16-12 (SAE-12)  
T = 1-1/16-12 (SAE-12)  
D = 3/4-16 (SAE-8)
- PPV 40 P = 1-1/16-12 (SAE-12)  
T = 1-5/16-12 (SAE 16)  
D = 1-1/16-12 (SAE-12)
- PPV 60 P = 1-5/16-12 (SAE-16)  
T = 1-5/16-12 (SAE-16)  
D = 1-1/16-12 (SAE-12)
- PPV 100 P = 1-5/16-12 (SAE-16)  
T = 1-7/8-12 (SAE 24)  
D = 1-5/16-16 (SAE-16)



### 3BMR & 5BMR Options

(D03 or D05 Parallel Bar Manifold w/Relief Valve & Gauge)

- 3BMR1 - 6 X1 - X12 = 3/4-16 (SAE-8)
- 5BMR1 - 6 X1 - X12 = 1-1/16-12 (SAE-12)



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Telephone (330) 263-3300  
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RA 09 855/08.99  
Replaces: 12.98

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