

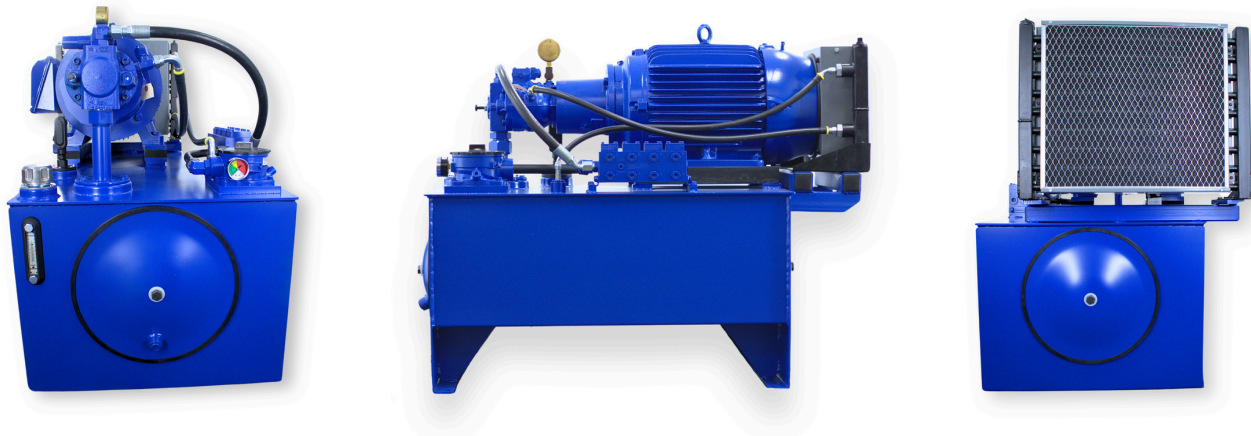


HYSPECO

**PRE-ENGINEERED
HYDRAULIC
POWER UNITS**



Introducing the Hyspeco “HyPak”



HyPak: TPD Top Mount Series Pre-Engineered Hydraulic Power Units

- Easy to Order
- Easy to Configure
- Design Flexibility for Varying Applications
- Easy to Maintain
- Heavy Duty Design
- Parker Pumps & Filtration



Hyspeco HyPak – Standard Features

Standard Features with Every Hyspeco HyPak Unit:

- Heavy Duty Design for 24/7 Operation
- Painted & Pre-tested at Maximum Operating Pressure Before Shipment
- Heavy Duty Steel Reservoir w/ Internal Baffle, Clean-out Covers, Sight-glass w/ Thermometer, and Filler/Breather
- Electric Motor: 230/460//380vac 3ph 60//50hz IC411 TEFC C-face
- Motor Vibration Dampening Mounting Bars
- Liquid Filled Pressure Gauge w/ Shut-off
- Weld Risers On Tank Suction, Return Filter, Temp/Level Switch, and Filler/Breather Tank Penetration Points
- Safety Relief Valve (preset)
- Pump Pressure Compensator – Field Adjustable (Shipped @ 1500 psi)
- Ductile Manifolds w/ Internal Safety Relief
 - **A Series Units** - D03/NG6 Valve Mounting Interface – Capped (10-24 UNC Thds.)
 - **B & C Series Units** - D05/NG10 Valve Mounting Interface – Capped (1/4"-20 UNC Thds.)
- Manifold Connections: SAE -8
- Temp/Level Switch (SPDT) - Temp Trip @ 140°F/60°C
- Rear Mounted Pump Case Drain Cooler
- Tank Mounted Return Filter w/ Visual Clogging Indicator
- Spare Return Filter Replacement Element (Shipped Loose)
- Spare Return Connection w/ Down-Pipe (SAE -12)

Two Model Options

Model F - Utilizes a Single Station Valve Manifold:

- Nine part numbers/versions to choose from.
- All Model F units are supplied with a P-to-A / B-to-T crossover plate installed. Simply utilize the A port for the pressure supply connection and the B port for the return connection....or....
- If desired, bolt a directional control valve in place of the supplied cross-over plate, and the A and B ports become standard work ports.

Model G - Utilizes a Four Station Valve Manifold:

- Nine part numbers/versions to choose from.
- All Model G units are supplied with cover plates on all four valve stations. Simply remove cover plates and install ISO interface valve stacks (sold separately) on desired stations. Any unused stations can remain capped without affecting system operation.

A-Series

**8.5 GPM
(32.3 LPM)**

**10HP - 1800 PSI (124.1 BAR)
15HP - 2700 PSI (186.2 BAR)
20HP - 3550 PSI (244.8 BAR)**

*Order by Hyspeco Assembly Number

A Series - Model F - Single Station Manifold

*Hyspeco Assembly Number	Reservoir Capacity GAL [Liters]	Electric Motor HP	Max Flow GPM [LPM] (@ 1800 RPM)	Max Continuous Operating Pressure PSI [Bar]	Directional Valve Mounting Interface	Valve Mounting THD.
A10F0001	30 [114]	10	8.5 [32.3]	1800 [124.1]	D03/NG6	10-24-UNC
A15F0002	30 [114]	15	8.5 [32.3]	2700 [186.2]	D03/NG6	10-24-UNC
A20F0003	30 [114]	20	8.5 [32.3]	3550 [244.8]	D03/NG6	10-24-UNC

A Series - Model G - Four Station Manifold

*Hyspeco Assembly Number	Reservoir Capacity GAL [Liters]	Electric Motor HP	Max Flow GPM [LPM] (@ 1800 RPM)	Max Continuous Operating Pressure PSI [Bar]	Directional Valve Mounting Interface	Valve Mounting THD.
A10G0004	30 [114]	10	8.5 [32.3]	1800 [124.1]	D03/NG6	10-24-UNC
A15G0005	30 [114]	15	8.5 [32.3]	2700 [186.2]	D03/NG6	10-24-UNC
A20G0006	30 [114]	20	8.5 [32.3]	3550 [244.8]	D03/NG6	10-24-UNC

- The pump pressure compensator can be adjusted to the maximum operating pressure noted in the charts above (**Units are shipped with the compensator set @ 1500 psi [103.5 bar]**).
- **Minimum system operating pressure is 350 psi [24 bar]**. To prevent pump damage, do not divert pump flow to tank (0 psi) for extended periods of time. If the pump must operate for extended periods of time in a "standby" mode, contact the Hyspeco engineering department for circuit modification requirements.
- Contact the Hyspeco engineering department for flow and/or operating pressure capabilities outside of the noted values in the charts above.
- These systems are designed for operation with standard petroleum-based hydraulic fluid (ISO 46 or ISO 68).
- The systems are **NOT** designed for use with water-glycol or high-water content fluids.

B-Series

**13.2 GPM
(50.2 LPM)**

**20HP - 2300 PSI (158.6 BAR)
25HP - 2900 PSI (200.0 BAR)
30HP - 3400 PSI (234.5 BAR)**

*Order by Hyspeco Assembly Number

B Series - Model F - Single Station Manifold

*Hyspeco Assembly Number	Reservoir Capacity GAL [Liters]	Electric Motor HP	Max Flow GPM [LPM] (@ 1800 RPM)	Max Continuous Operating Pressure PSI [Bar]	Directional Valve Mounting Interface	Valve Mounting THD.
B20F0001	40 [152]	20	13.2 [50.2]	2300 [158.6]	D05/NG10	1/4" -20-UNC
B25F0002	40 [152]	25	13.2 [50.2]	2900 [200]	D05/NG10	1/4" -20-UNC
B30F0003	40 [152]	30	13.2 [50.2]	3400 [234.5]	D05/NG10	1/4" -20-UNC

B Series - Model G - Four Station Manifold

*Hyspeco Assembly Number	Reservoir Capacity GAL [Liters]	Electric Motor HP	Max Flow GPM [LPM] (@ 1800 RPM)	Max Continuous Operating Pressure PSI [Bar]	Directional Valve Mounting Interface	Valve Mounting THD.
B20G0004	40 [152]	20	13.2 [50.2]	2300 [158.6]	D05/NG10	1/4" -20-UNC
B25G0005	40 [152]	25	13.2 [50.2]	2900 [200]	D05/NG10	1/4" -20-UNC
B30G0006	40 [152]	30	13.2 [50.2]	3400 [234.5]	D05/NG10	1/4" -20-UNC

- The pump pressure compensator can be adjusted to the maximum operating pressure noted in the charts above (**Units are shipped with the compensator set @ 1500 psi [103.5 bar]**).
- **Minimum system operating pressure is 350 psi [24 bar]**. To prevent pump damage, do not divert pump flow to tank (0 psi) for extended periods of time. If the pump must operate for extended periods of time in a "standby" mode, contact the Hyspeco engineering department for circuit modification requirements.
- Contact the Hyspeco engineering department for flow and/or operating pressure capabilities outside of the noted values in the charts above.
- These systems are designed for operation with standard petroleum-based hydraulic fluid (ISO 46 or ISO 68).
- The systems are **NOT** designed for use with water-glycol or high-water content fluids.

C-Series

**21.0 GPM
(79.8 LPM)**

**25HP - 1800 PSI (124.1 BAR)
30HP - 2200 PSI (151.7 BAR)
40HP - 3000 PSI (206.9 BAR)**

*Order by Hyspeco Assembly Number

C Series - Model F - Single Station Manifold

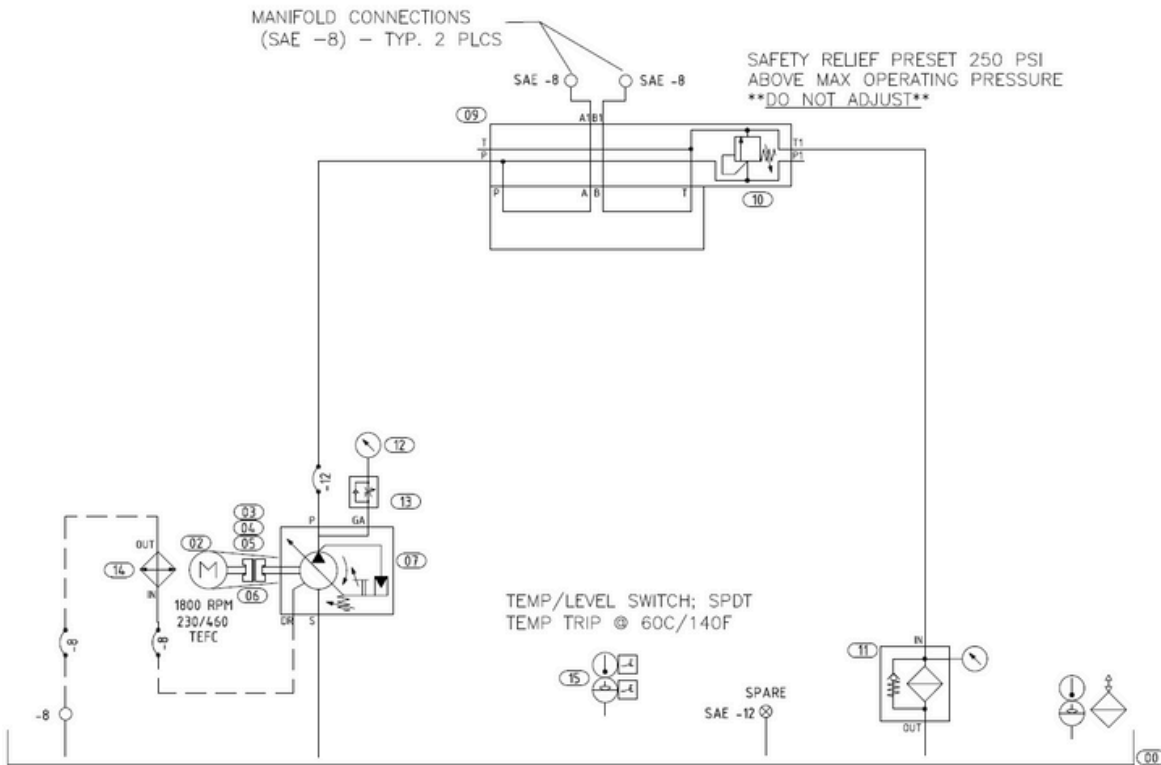
*Hyspeco Assembly Number	Reservoir Capacity GAL [Liters]	Electric Motor HP	Max Flow GPM [LPM] (@ 1800 RPM)	Max Continuous Operating Pressure PSI [Bar]	Directional Valve Mounting Interface	Valve Mounting THD.
C25F0001	60 [228]	25	21.0 [79.8]	1800 [124.1]	D05/NG10	1/4" -20-UNC
C30F0002	60 [228]	30	21.0 [79.8]	2200 [151.7]	D05/NG10	1/4" -20-UNC
C40F0003	60 [228]	40	21.0 [79.8]	3000 [206.9]	D05/NG10	1/4" -20-UNC

C Series - Model G - Four Station Manifold

*Hyspeco Assembly Number	Reservoir Capacity GAL [Liters]	Electric Motor HP	Max Flow GPM [LPM] (@ 1800 RPM)	Max Continuous Operating Pressure PSI [Bar]	Directional Valve Mounting Interface	Valve Mounting THD.
C25G0004	60 [228]	25	21.0 [79.8]	1800 [124.1]	D05/NG10	1/4" -20-UNC
C30G0005	60 [228]	30	21.0 [79.8]	2200 [151.7]	D05/NG10	1/4" -20-UNC
C40G0006	60 [228]	40	21.0 [79.8]	3000 [206.9]	D05/NG10	1/4" -20-UNC

- The pump pressure compensator can be adjusted to the maximum operating pressure noted in the charts above (**Units are shipped with the compensator set @ 1500 psi [103.5 bar]**).
- **Minimum system operating pressure is 350 psi [24 bar]**. To prevent pump damage, do not divert pump flow to tank (0 psi) for extended periods of time. If the pump must operate for extended periods of time in a "standby" mode, contact the Hyspeco engineering department for circuit modification requirements.
- Contact the Hyspeco engineering department for flow and/or operating pressure capabilities outside of the noted values in the charts above.
- These systems are designed for operation with standard petroleum-based hydraulic fluid (ISO 46 or ISO 68).
- The systems are **NOT** designed for use with water-glycol or high-water content fluids.

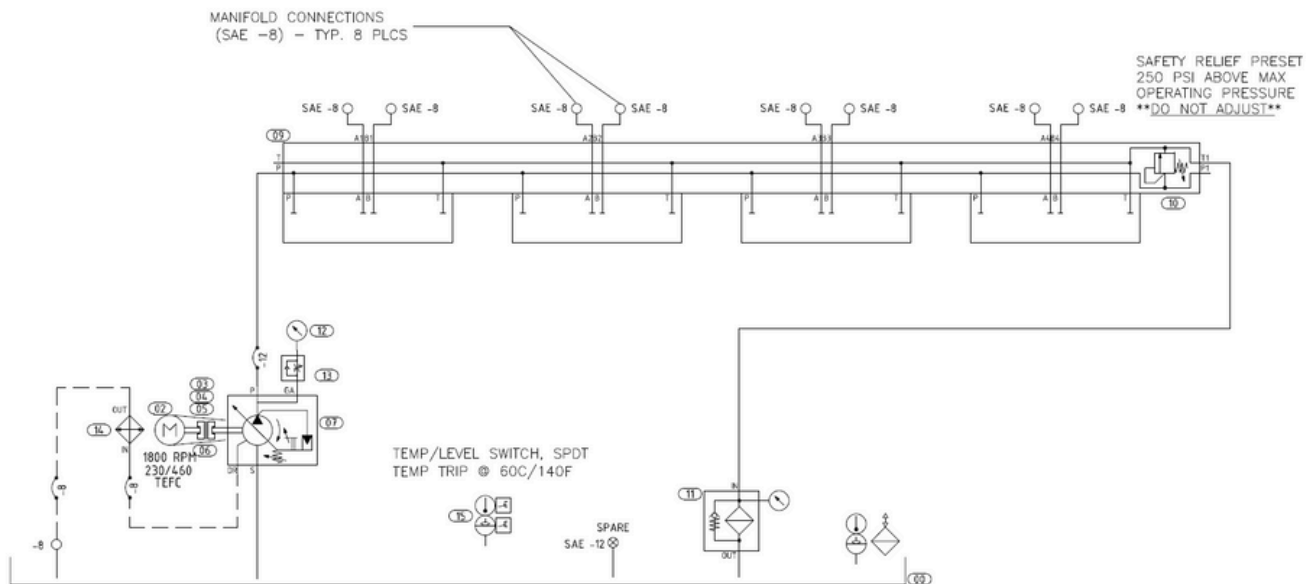
Model F Circuit



Model F - General Bill of Material

Item ID	QTY	Description
00	1	Carbon Steel Reservoir with Sight-Glass and Filler Breather
02	1	Electric Motor; 1800 RPM 230/460 3PH/60HZ [1500RPM - 380VAC 3PH/50HZ]; IC411; TEFC
03	1	Motor Coupling
04	1	Pump Coupling
05	1	Coupling Insert
06	1	Pump/Motor Adapter
07	1	Parker PD Series Piston Pump with AM Compensator and Stroke Limiter
09	1	Ductile Single STA. Manifold With Relief Cavity
10	1	Relief Valve Cartridge (Preset 300 PSI Above Max Compensator Setting)
11	1	Parker GLF Series Tank Mounted Return Filter with Visual Clogging IND.
11.1	1	Spare Filter Element (For Above) - Shipped Loose
12	1	Liquid Filled Pressure Gauge
13	1	Gauge Shut-Off with Integral Snubber
14	1	Rear Mounted Case Drain Cooler
15	1	Temp Level Switch Assembly; SPDT; Temp Trip @ 60C/140F

Model G Circuit

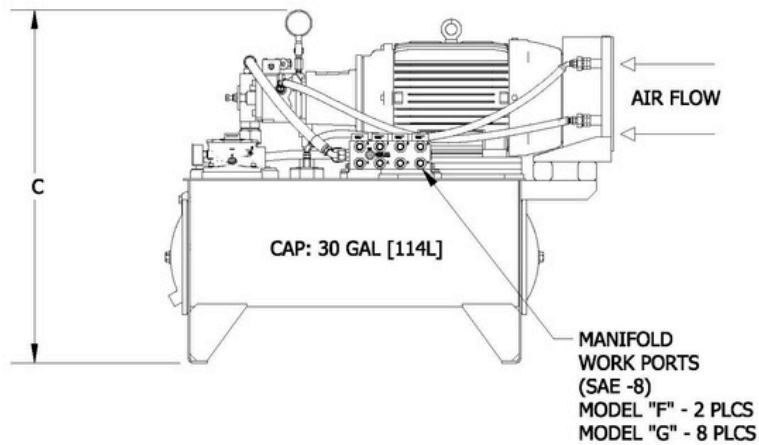
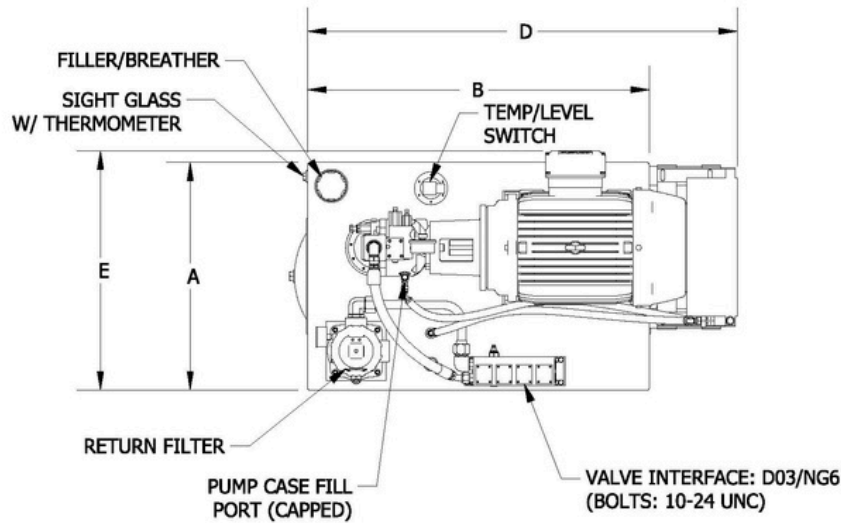


Model G - General Bill of Material

Item ID	QTY	Description
00	1	Carbon Steel Reservoir with Sight-Glass and Filler Breather
02	1	Electric Motor; 1800 RPM 230/460 3PH/60HZ [1500RPM - 380VAC 3PH/50HZ]; IC411; TEFC
03	1	Motor Coupling
04	1	Pump Coupling
05	1	Coupling Insert
06	1	Pump/Motor Adapter
07	1	Parker PD Series Piston Pump with AM Compensator and Stroke Limiter
09	1	Ductile Four STA. Parallel Manifold With Relief Cavity
10	1	Relief Valve Cartridge (Preset 300 PSI Above Max Compensator Setting)
11	1	Parker GLF Series Tank Mounted Return Filter with Visual Clogging IND.
11.1	1	Spare Filter Element (For Above) - Shipped Loose
12	1	Liquid Filled Pressure Gauge
13	1	Gauge Shut-Off with Integral Snubber
14	1	Rear Mounted Case Drain Cooler
15	1	Temp Level Switch Assembly; SPDT; Temp Trip @ 60C/140F

A-Series

A-SERIES UNITS

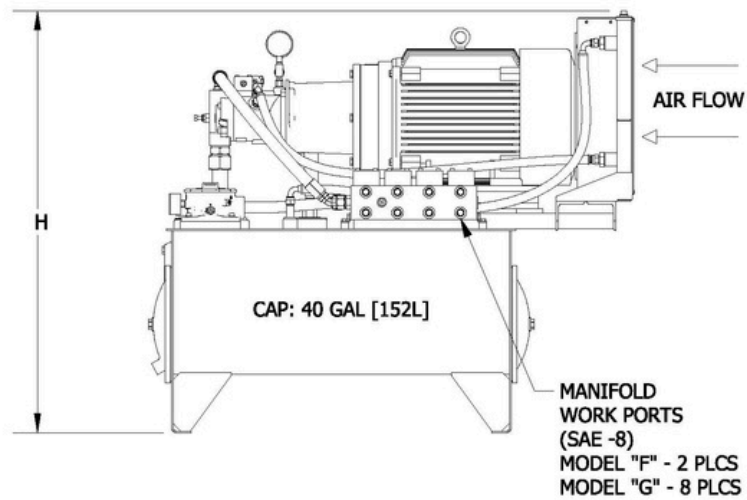
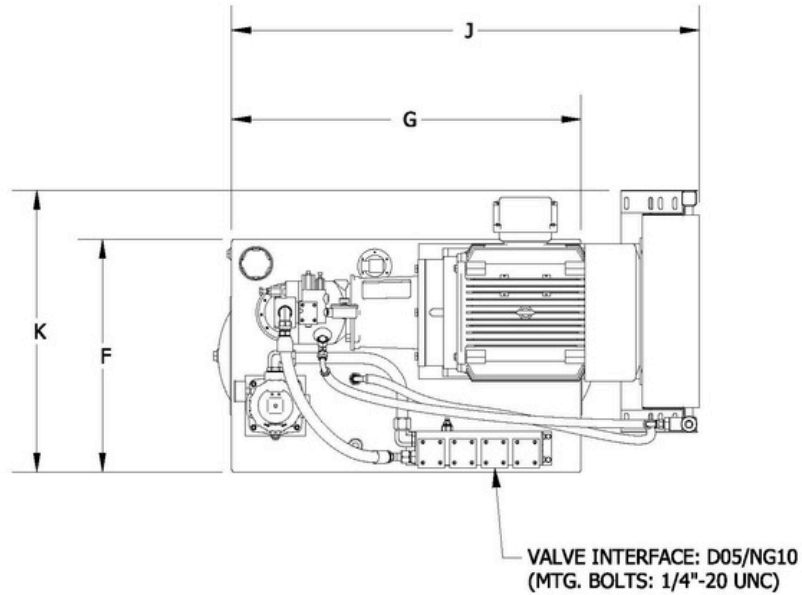


*INCHES[MM] SERIES A (SINGLE AND FOUR STATION)						
SIZE	A	B	C	D	E	EST. DRY WEIGHT LBS [KG]
A10	24.00 [609.6]	36.00 [914.4]	35.92 [912.5]	38.25 [971.6]	N/A	477 [216.4]
A15	24.00 [609.6]	36.00 [914.4]	37.13 [943.1]	45.25 [1149.4]	25.20 [640.1]	612 [277.6]
A20	24.00 [609.6]	36.00 [914.4]	37.13 [943.1]	45.25 [1149.4]	25.20 [640.1]	659 [298.9]

All noted weight estimates are based on a 4-station unit (Model G), with cover plates installed on all manifold valve positions.

B-Series

B-SERIES UNITS

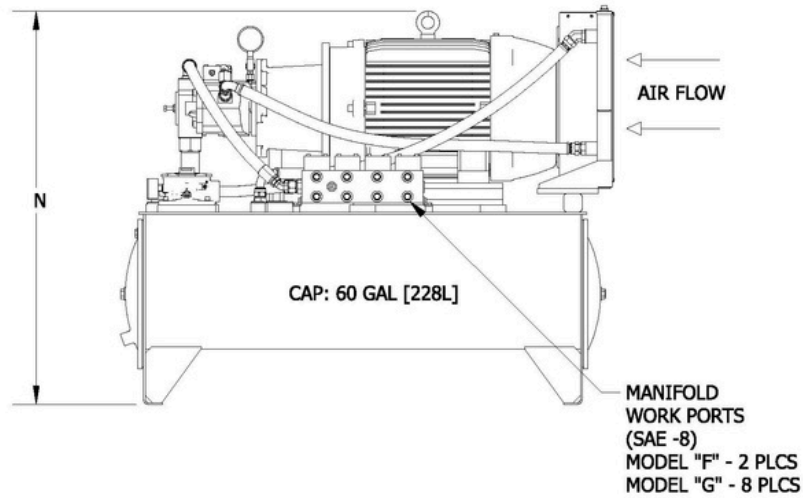
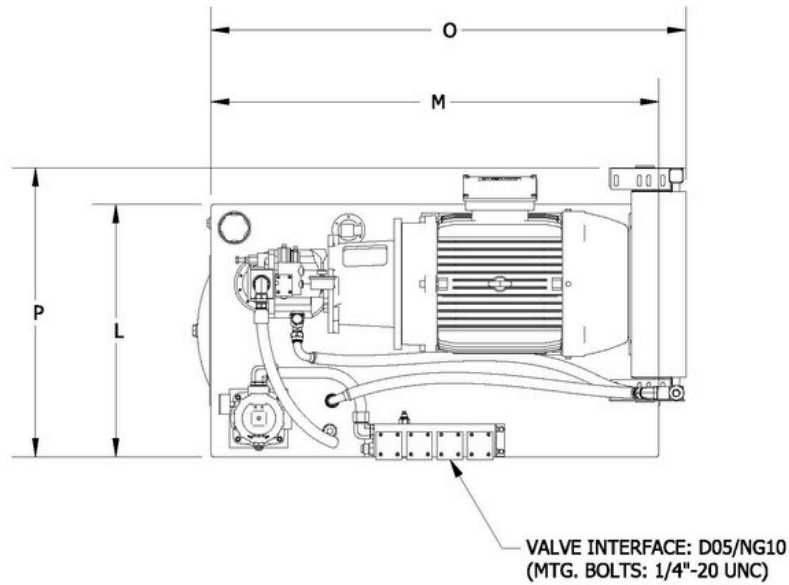


*INCHES [MM]		SERIES B (SINGLE AND FOUR STATION)					EST. DRY WEIGHT LBS [KG]
SIZE	F	G	H	J	K		
B20	24.00 [609.6]	36.00 [914.4]	40.57 [1030.5]	44.88 [1139.9]	28.98 [736.0]	725 [328.9]	
B25	24.00 [609.6]	36.00 [914.4]	43.45 [1103.6]	46.68 [1185.6]	29.12 [739.7]	864 [391.9]	
B30	24.00 [609.6]	36.00 [914.4]	43.45 [1103.6]	48.17 [1223.6]	29.12 [739.7]	904 [410]	

All noted weight estimates are based on a 4-station unit (Model G), with cover plates installed on all manifold valve positions.

C-Series

C-SERIES UNITS



*INCHES [MM]		SERIES C (SINGLE AND FOUR STATION)					EST. DRY WEIGHT LBS [KG]
SIZE	L	M	N	O	P		
C25	27.00 [685.8]	48.00 [1219.2]	43.18 [1096.8]	N/A	31.62 [803.1]	924 [419.1]	
C30	27.00 [685.8]	48.00 [1219.2]	43.18 [1096.8]	49.83 [1265.8]	31.37 [796.8]	967 [438.6]	
C40	27.00 [685.8]	48.00 [1219.2]	43.65 [1108.6]	50.49 [1282.5]	30.86 [783.9]	1083 [491.2]	

All noted weight estimates are based on a 4-station unit (Model G), with cover plates installed on all manifold valve positions.

HyPak TPD Series FAQ's

Q: How quickly can I get my HyPak after the order is placed?

A: The aim of the HyPak program is to offer standardized hydraulic units that are either in stock for immediate delivery or within a 2-3 week time frame. This of course is subject to current stock levels of parts and materials, and the sale of inventory. Please contact your Hyspeco representative to check the availability of the desired assembly number. If we don't have your particular part number in stock, or can't deliver it in 2-3 weeks, our engineering team may be able to offer an alternative option that is more readily available.

Q: Are there resources available to help me with installation and start-up?

A: Yes. Hyspeco provides a documentation packet for each unit, including start-up and general commissioning guidelines, a schematic, and a list of recommended spare parts. Our Hyspeco employee-owners are also available to assist you with questions and guidance. (Hyspeco is a 100% employee-owned company, so every employee has a vested interest in making sure that you receive the assistance that you need.)

Q: Can I get a 3D model of my power unit?

A: Yes. Hyspeco has STEP files available for all standard HyPak assembly numbers. Please check our website or contact your sales representative.

Q: Do the units come with motor starters or electrical controls?

A: Due to many different preferences and regulations regarding the control of industrial equipment and hydraulic systems, the HyPak units are not supplied with motor starters or electrical controls. This flexibility allows the end user to configure the controls for their particular application and code requirements. If you need assistance with motor starters, VFD'S, or controls, please contact us. We can supply those items separately and can also assist with questions related to VFD control of the standard HyPak units.

Q: I plan to use the HyPak unit to provide hydraulic control of a hydraulic motor. Is the case drain rear-mount cooler supplied with the HyPak unit enough to cool the system?

A: Due to the nature of the application, hydraulic motor control circuits typically require more cooling capacity than cylinder control circuits. If the HyPak unit is being utilized to operate a hydraulic motor, an additional inline cooler (heat exchanger) will likely be required in the hydraulic oil return line. Please contact your Hyspeco representative for assistance in specifying a heat exchanger for your specific system requirements.

HyPak TPD Series FAQ's

Q: Can I order the HyPak unit with the directional valves already installed?

A: At this time, the noted HyPak assembly part numbers are shipped without any valving installed; however, your Hyspeco representative can assist you in selecting and quoting the required valving for your application needs and can also offer guidance and assistance for proper installation of the valving on the HyPak manifold. A list of common directional valves and sandwich modules is also included on the following pages of this brochure.

Q: Can I operate the hydraulic unit below the maximum noted pressure?

A: Yes. All of the units can be adjusted to operate between 400 psi [27.6 bar] and the maximum noted operating pressure for the given unit size.

Q: Can the HyPak units be operated with bio-degradable polyol ester fluids?

A: It is possible to utilize the HyPak units with most name-brand high-quality bio-degradable polyol ester-type fluids. Please contact your Hyspeco representative, or the Hyspeco engineering team, for information and approval regarding your specific fluid.

Q: Can the HyPak units be operated with water-glycol or phosphate ester type fluids?

A: No. The HyPak units are not suitable for use with high-water base fluids or phosphate esters.

Q: Can I operate my system above the noted max pressure in the chart, or at other flow rates?

A: It depends. Some of the units are capable of operating at higher pressures, and all of the units are provided with a pump max volume stop adjustment. If the adjustments are not performed correctly, however, severe system overheating and damage can occur. Contact your Hyspeco account representative for the operation of the units outside of the noted pressure and flow ranges.

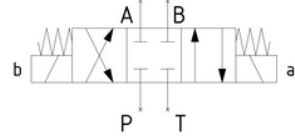
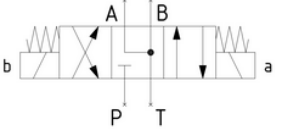
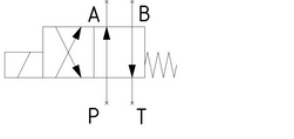
The Hyspeco HyPak pre-engineered hydraulic power units are intended for stationary industrial applications only. They are not designed for use on equipment intended for, but not limited to, the following: any machines or equipment intended for the transport or movement of people; any on-board aerospace applications; any on-highway or off-highway vehicle applications. The purchaser assumes all responsibility for verification that the hydraulic unit and any attached external components and/or equipment will satisfy the specific application, and for ensuring that the application adheres to all applicable safety codes and local, state, and federal laws, codes, and requirements. Hyspeco, Inc. assumes no responsibility for the proper application, installation, or operation of these hydraulic power units, nor is any related process or machine performance implied or guaranteed.

A-Series

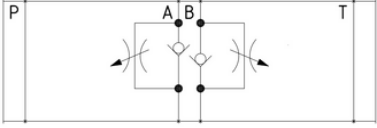
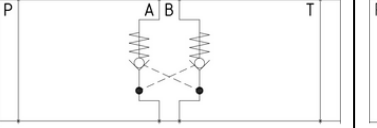
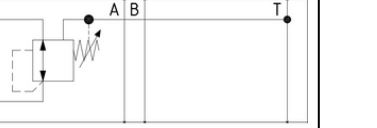
A-Series Valve Options:

The listings below detail common valves and modules that can be **ordered separately** and bolted in place of the cover plates on the HyPak A-Series Hydraulic units. Other versions are available, so please contact your Hyspeco representative if you do not see the particular valve or control option that you are wanting.

Common Directional Valves (D03/NG6) – DIN Plug Electrical Connection

					
	CLOSED-CENTER	FLOAT-CENTER	SPRING RETURNED		
	Dbl. Sol - Closed Center		Dbl. Sol - Float Center		Sgl. Sol - Spring Return
	24vdc	120vac	24vdc	120vac	24vdc 120vac
Directional Valve Part Number	D1VW001CNJW	D1VW001CNYW	D1VW004CNJW	D1VW004CNYW	D1VW020BNJW D1VW020BNYW

Common Sandwich Valve Modules (D03/NG6)

			
	Dual Flow Control	Dual P.O Check Valve (see note below)	P-Port Pressure Reducing/Relieving Valve
Sandwich Module Part Number	FM2DDSN	CPOM2DDN	PRDM2PP21SNS (Adj. Range: 116 psi - 3045 psi [8 to 210 bar])

**** NOTE:** When utilizing a pilot-operated check valve module, it is **strongly** recommended that a flow control module also be installed between the P.O. check valve and the directional valve to prevent "chattering".

Bolt Kits and Electrical Cables

	Directional Valve Only	Directional Valve & One Sandwich Module	Directional Valve & Two Sandwich Modules	Directional Valve & Three Sandwich Modules
Bolt Kit Part Number	BK209H	BK243H	BK225H	BK244H
Torque: 50 in-lb [5.6 Nm]	qty (4) 10-24 x 1.25" SHCS	qty (4) 10-24 x 2.88" SHCS	qty (4) 10-24 x 4.38" SHCS	qty (4) 10-24 x 6.00" SHCS

	24vdc	120vac
Molded Electrical Cable w/LED	7000-18021-2160500	7000-18041-2160500

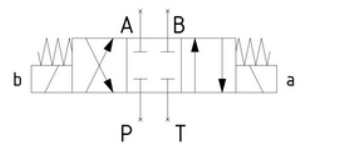
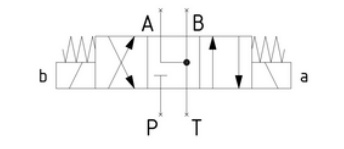
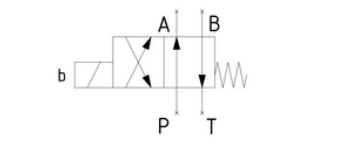
Above noted DIN connector cable assemblies are pre-molded with a 5m cord, which can be cut to length for field wiring. The assemblies have an indicating LED and surge suppression diodes (**Double-Solenoid valves require qty-2 cable assemblies. Single-Solenoid valve require qty-1 cable assembly**).

B & C-Series

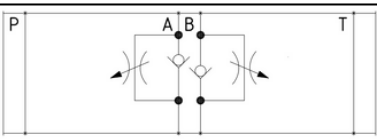
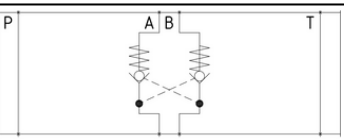
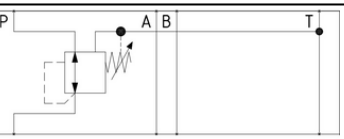
B & C-Series Valve Options:

The listings below detail common valves and modules that can be **ordered separately** and bolted in place of the cover plates on the HyPak B & C-Series Hydraulic units. Other versions are available, so please contact your Hyspeco representative if you do not see the particular valve or control option that you are wanting.

Common Directional Valves (D05/NG10) – DIN Plug Electrical Connection

						
	CLOSED-CENTER	FLOAT-CENTER	SPRING RETURNED			
	Dbl. Sol - Closed Center		Dbl. Sol - Float Center		Sgl. Sol - Spring Return	
	24vdc	120vac	24vdc	120vac	24vdc	120vac
Directional Valve Part Number	D3W001CNJW	D3W001CNYW	D3W004CNJW	D3W004CNYW	D3W020BNJW	D3W020BNYW

Common Sandwich Valve Modules (D05/NG10)

			
	Dual Flow Control	Dual P.O Check Valve (see note below)	P-Port Pressure Reducing/Relieving Valve
Sandwich Module Part Number	FM3DDSN	CPOM3DDN	PRDM3PP21SNS (Adj. Range: 116 psi - 3045 psi [8 to 210 bar])

**** NOTE:** When utilizing a pilot-operated check valve module, it is **strongly** recommended that a flow control module also be installed between the P.O. check valve and the directional valve to prevent "chattering".

Bolt Kits and Electrical Cables

	Directional Valve Only	Directional Valve & One Sandwich Module	Directional Valve & Two Sandwich Modules	Directional Valve & Three Sandwich Modules
Bolt Kit Part Number	BK98H	BK141H	BK142H	BK143H
Torque: 50 in-lb [5.6 Nm]	qty (4) 1/4"-20 x 1.62" SHCS	qty (4) 1/4"-20 x 3.50" SHCS	qty (4) 1/4"-20 x 5.50" SHCS	qty (4) 1/4"-20 x 7.50" SHCS

	24vdc	120vac
Molded Electrical Cable w/LED	7000-18021-2160500	7000-18041-2160500

Above noted DIN connector cable assemblies are pre-molded with a 5m cord, which can be cut to length for field wiring. The assemblies have an indicating LED and surge suppression diodes (**Double-Solenoid valves require qty-2 cable assemblies. Single-Solenoid valve require qty-1 cable assembly**).

What if I don't see a TPD HyPak unit that meets my application needs?

The Hyspeco hydraulic system engineering team specializes in custom hydraulic system and power unit designs of all types and sizes, for many different industries.

With over 100 years of combined design experience, our IFPS certified engineers and specialists work closely with our talented shop fabrication teams to ensure that the proper design and assembly is configured for your specific application.

Please contact your Hyspeco representative for more information.
We are eager to help and would appreciate the opportunity to assist you.

- Accumulator Racks
- Custom Manifolds
- Motion Control Systems
- Custom Hydraulic Power Units & Systems
- Pneumatic Control Circuits
- Test Stands
- Valve Racks
- Industrial Carts & Ground Support Equipment

