

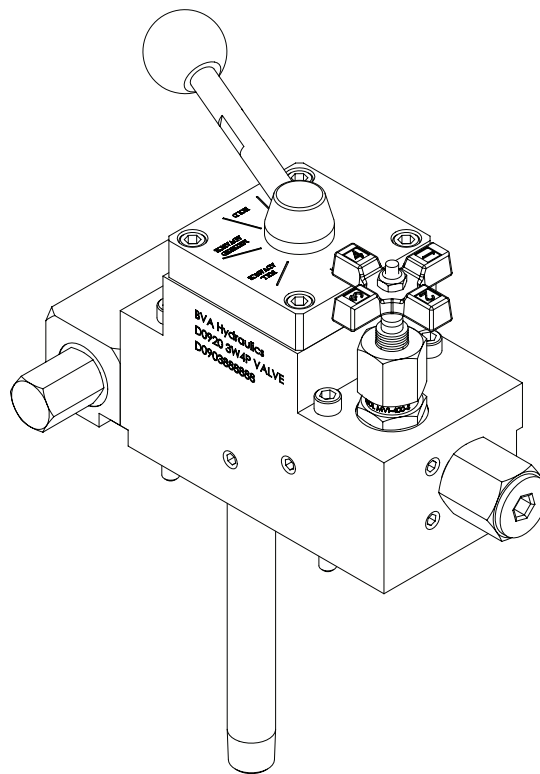


Pressure Compensating Flow Control Valve Instruction Manual

MODEL: PW34M

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Maximum Operating Pressure 10,000 PSI



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

SAFETY AND GENERAL INFORMATION

Save these instructions. For your safety, read and understand the information contained within. The owner and operator shall have an understanding of this product and safe operating procedures before attempting to use this product. Instructions and safety information shall be conveyed in the operator's native language before use of this product is authorized. Make certain that the operator thoroughly understands the inherent dangers associated with the use and misuse of the product. If any doubt exists as to the safe and proper use of this product as outlined in this factory authorized manual, remove from service immediately.

Inspect before each use. Do not use if leaking, broken, bent, cracked or otherwise damaged parts are noted. If the switch has been or suspected to have been damaged, discontinue use until checked out by a BVA Hydraulics authorized service center. Owners and operators of this equipment shall be aware that the use and subsequent repair of this equipment may require special training and knowledge. It is recommended that an annual inspection be done by qualified personnel and that any missing or damaged parts, decals, warning/safety labels or signs be replaced with BVA Hydraulics authorized replacement parts only. Any pressure switch that appears to be damaged in any way, is worn or operates abnormally shall be removed from service immediately until such time as repairs can be made.

PRODUCT DESCRIPTION

BVA Hydraulics Pressure Compensating Flow Control Valve will limit pressure developed by the pump in hydraulic circuit, thus limiting the force imposed on other components. The valve will open when preset pressure is reached. The user ultimately must make the decision regarding suitability of the product for any given task and therefore accept responsibility for that decision.

WARNING: Always wear proper personal protective gear when operating hydraulic equipment (i.e. safety glasses, gloves, etc.)

CAUTION: Always check connections before using. Alteration of these products is strictly prohibited. Use only those equipment and attachments provided and approved by the manufacturer.

WARNING: To reduce the risk of personal injury and/or property damage, ensure that the rated working pressure of each pressurized attachment be equal to or greater than the rated working pressure developed by the hydraulic pump.

CAUTION: Seal all external pipe connections with a high quality, non-hardening thread sealant. Apply tape carefully to prevent it from being pinched by coupler and broken off. Loose pieces of tape could travel through the system and obstruct the flow of oil or cause jamming of precision-fit parts.

OPERATION

System pressure is applied to the piston. Hydraulic pressure on piston acts against the compression spring and lifts the cone off the seat, allowing oil to flow through orifice to the tank. The oil passes through the orifice until the oil pressure is equal to the compressive force of the spring. At that time, the cone will move upon the seat. The process will then be repeated, allowing enough oil to maintain system pressure as set by the valve.

1. To increase pressure, turn the handle clockwise.
2. The handle may be removed to prevent tampering.
3. The PW34M is not a load-holding valve.

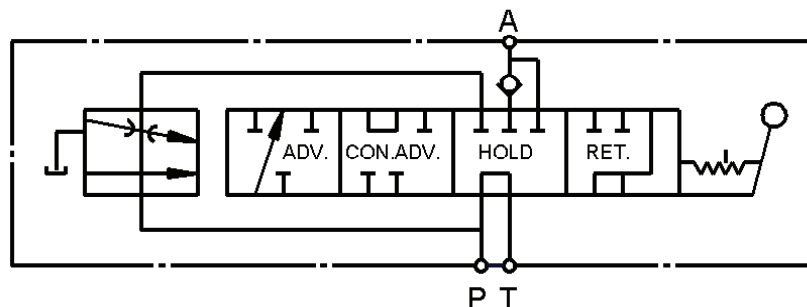


Figure 1 - Pressure Compensating Flow Control Valve Schematic

SPECIFICATIONS

Model Number	Valve Operation	Valve Type	Coupler Size	Adjustable Pressure (psi)	Length (in)	Height (in)	Width (in)	Weight (lb.)
PW34M	Manual	3 Way/4 Position	3/8-18 NPTF	1000 - 10150	7.933	11.335	4.201	8.71

⚠ WARNING



Failure to comply with the following warnings may result in **personal injury** as well as **property damage**.



- Study, understand, and follow all instructions provided with and on this device before use.
- The user must be a qualified operator familiar with the correct operation, maintenance, and use of hydraulic systems.



Wear protective gear when operating hydraulic equipment.



- Do not exceed rated capacity of any equipment in the system. The relief valve is designed for a max. pressure of 10,000 psi.
- Do not connect to a pump with higher pressure rating.
- Do not subject the system to shock loads (a load dropped suddenly causing the system pressure to exceed rated pressure).



The system operating pressure must not exceed the pressure rating of the lowest rated component the system. Install a pressure gauge or other load measuring instrument to monitor the operating pressure. Burst hazard exists if hose, connection or any other component in the system exceed its rated pressure.



Avoid damaging hydraulic hose. Do not allow hose to kink, twist, curl, crush, cut or bend so tightly that fluid flow within the hose is blocked or reduced. Periodically inspect the hose for wear.



Do not pull, position or move system by hydraulic hose. Use carrying handle or other means of safe transport.



Do not handle pressurized hoses. Never attempt to grasp a leaking pressurized hose. Ensure to release the system pressure before disconnecting hydraulic hose or connections.



Hydraulic fluid can ignite and burn. Keep hydraulic equipment away from flames and heat. Excessive heat will soften seals, resulting in fluid leaks. Heat also weakens hose materials.



Never try to disassemble relief valve, refer repairs to qualified, authorized personal. Contact BVA Hydraulics tech service for authorized service center.



Hose material or seals must not come in contact with corrosive materials such as battery acid, creosote-impregnated objects and wet paint. Never paint a coupler or hose.



- No alteration shall be made to this equipment.
- Use only factory authorized fasteners, accessories and hydraulic fluid.

LIMITED LIFETIME WARRANTY

BVA Hydraulics®, represented in the United States by SFA Companies ["SFA"] warrants this product to be free from defects in material and workmanship for the life of the product as long as the original purchaser owns the product. The warranty is non-transferable and is subject to the terms, exclusions, and limitations described below:

- Damaged components, including but not limited to bent rams, dented or crushed cylinder walls, broken welds or couplers as well as worn out seals, o-rings and springs are the result of misuse and not covered by warranty and BVA Hydraulics will not provide any warranty credit for such damaged components.
- This warranty does not cover ordinary wear and tear, overloading, alterations (including repairs or attempted repairs not performed by BVA Hydraulics or one of its authorized personnel), improper fluid use, or use of the product in any manner for which the product was not intended or the use of which is not in accordance with the instructions or warnings provided with the product.
- In the unlikely event that a BVA Hydraulics product fails due to material defect in workmanship, you may contact SFA for disposition. In such cases, the customer's sole and exclusive remedy for any breach or alleged breach of warranty is limited to the repair or replacement of the defective product.
- Under no circumstances is BVA Hydraulics liable for any consequential or incidental damage or loss whatsoever.
- THIS WARRANTY IS LIMITED TO NEW PRODUCTS SOLD THROUGH AUTHORIZED DISTRIBUTORS AND OTHER CHANNELS DESIGNATED BY BVA HYDRAULICS. NO AGENT, EMPLOYEE OR OTHER REPRESENTATIVE OF BVA HYDRAULICS IS AUTHORIZED TO MODIFY THIS WARRANTY.
- THE FOREGOING IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FOR A FITNESS FOR A PARTICULAR PURPOSE.
- Components not manufactured by BVA Hydraulics including certain motor systems, gasoline engines, and other are not covered by this warranty and instead are covered by the manufacturer's separate manufacturer's warranty provided in the package.
- BVA Hydraulics' liability in all cases is limited to, and will not exceed the purchase price paid for the product.



Pressure Compensating Flow Control Valve Service Parts

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Note: Not all components of the switch are replacement items, but are illustrated as a convenient reference for location and position in the assembly sequence. To ensure safe and reliable performance, replace worn or damaged parts with BVA authorized repair parts only.

Item	Part No.	Description	Qty.
1	D09-6-1035-101	Valve Body	1
2	609-1-0075-105	Pipe Plug	7
3	512-2-0075-101	Spring	4
4	D09-4-1012-107	Shear Seal Assy**	4
5	511-7-0600-510	O-ring**	1
6	D09-4-1007-104	Rotor Assy**	1
7	649-1-0063-605	Socket Head Cap Screw*	4
8	D09-4-1008-106	Pressure Compensated Valve* **	1
9	D09-4-1009-108	Needle Valve**	1
10	649-1-0063-807	Socket Head Cap Screw*	4
11	D09-6-1036-103	Poppet	1
12	512-2-0088-200	Spring	1
13	511-7-0118-106	O-ring**	1
14	D09-6-1037-105	Adapter	1
15	A57-6-5002-105	Oil Port Stick	1
16	E05-4-1004-105	Adapter Assy**	1
17	D09-6-1039-109	Drain Line	1
*	D09-3-9920-106	Valve Assy Bolt Repair Kit	1
**	D09-3-9921-108	Valve Assy Repair Kit	1

