



NEW PRODUCT INTRODUCTION

HBB and HBH Series Control Reliable Double Valves

Hydraulic Block & Bleed and Block & Hold Safety Valves Designed for External Monitoring



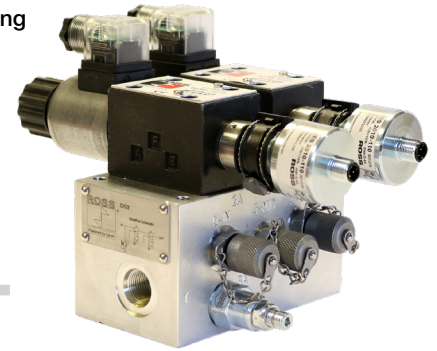
The HBB Series valves are redundant valve systems designed to meet the needs and requirements of safe hydraulic block and bleed applications.

The HBH Series valves are redundant blocking valve systems designed for critical applications where safe load holding is required for hydraulically controlled cylinders.

Both HBB and HBH Series valve systems are equipped with position sensors for external monitoring by an electrical safety control system.

FEATURES & BENEFITS:

- Rapid response for minimum actuating time
- Position sensors for valve fault monitoring – external monitoring required
- Well-proven spool valve design for reliable functionality
- Base mounted design
- Pressure range up to 5000 psi (up to 344 bar)
- Tamper-resistant design prevents unauthorized personnel from altering the valve

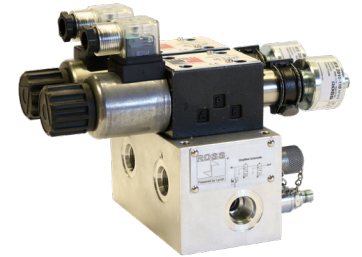


Hydraulic Block & Bleed HBB Series Valves Features

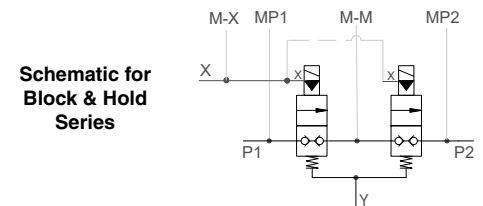
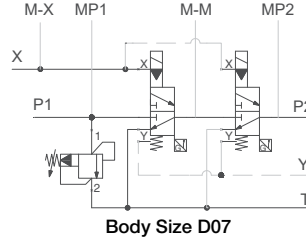
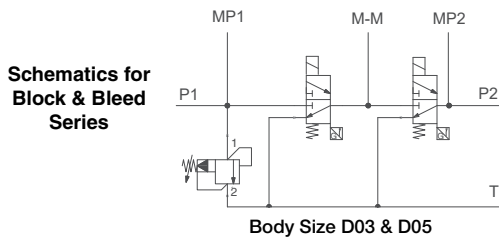
- Blocks hydraulic supply pressure and bleeds downstream pressure back to tank
- Includes relief valve on inlet
- Flow up to 50 gpm
- Body Sizes D03, D05, and D07
- Port Sizes SAE-8, SAE-12, and 1 1/4 Code 61 Flange

Hydraulic Block & Hold HBH Series Valves Features

- Stops cylinder motion and holds the cylinder in position in the event of loss of supply pressure and/or electrical power
- Holds a vertical load in the event of loss of supply pressure or electrical power
- Flow up to 145 gpm
- Two Body Sizes, D25 and D32
- Port Sizes 1 1/2 and 2, Code 62 Flange



APPLICATIONS: Up to Category 4, PL e applications, if properly implemented into the system.



Standard Specifications

Construction Design	Spool type	Inductive Position Switch (2 per system)	PNP
Actuation (Solenoid- 2 per system)	One solenoid per valve element	Current Consumption (each switch)	400mA maximum
	Solenoids must be operated synchronously	Temperature Range (recommended)	Ambient: -4° to 160°F (-20° to 71°C) Media: -4° to 140°F (-20° to 60°C)
Mounting	Body Size D03, D05: Direct Solenoid Operated, spring return	Flow Media	Hydraulic Fluids: Mineral Oil HLP, HL-DIN 51524 Vegetable Oil HETG - VMMA 24568
	Body Size D07: Solenoid Pilot Operated, spring return	Inlet Pressure	5000 psi (344 bar) maximum
Solenoids	Type: Base Orientation: Any, preferably horizontal	Construction Material	Valve Body & Manifold: Ductile Iron Spool: Steel Seals: Buna-N
Standard Voltages	Version as per VDE 0580; Rated for continuous duty Electrical connection according to EN 175301-803 Form A Enclosure rating according to DIN 400 50 IP 65		
Power Consumption (each solenoid)	24 volts DC		
	Body Size D03, D07, D025, D032: 30 watts Body Size D05: 36 watts		

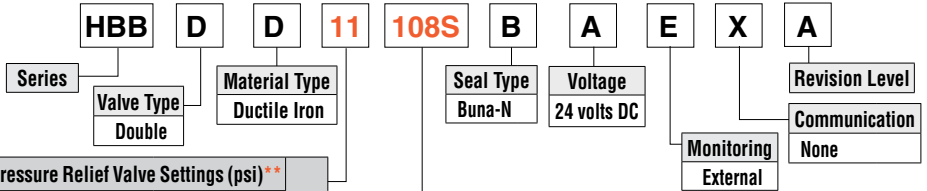
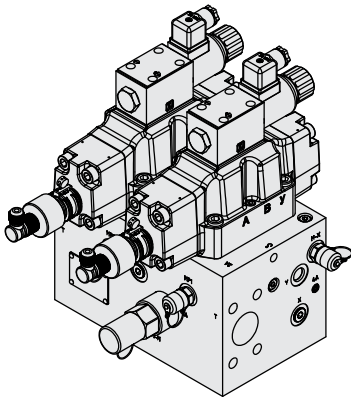
Hydraulic Control Reliable Double Valves

HBB and HBH Series

Hydraulic Block & Bleed Series Valves

HOW TO ORDER

(Choose your options (in red) to configure your valve system model number.)



Pressure Relief Valve Settings (psi)**		
Maximum System Operating Pressure	Relief Valve Factory Preset	
1000	1100	11
1500	1700	17
2000	2200	22
2500	2800	28
3000	3300	33
3500	3900	39
4000	4400	44
4500	5000	50
5000	5500	55
No Pressure Relief Valve		XX
For system parameters outside of this range, please contact ROSS.)		

Body Size	Flow Rate	Port Size	Port Thread/Type	
D03	0 to 10 gpm	SAE-8	SAE	108S
D05	0 to 20 gpm	SAE-12	SAE	212S
D07	0 to 50 gpm	1/4"	Code 61 Flange	371F

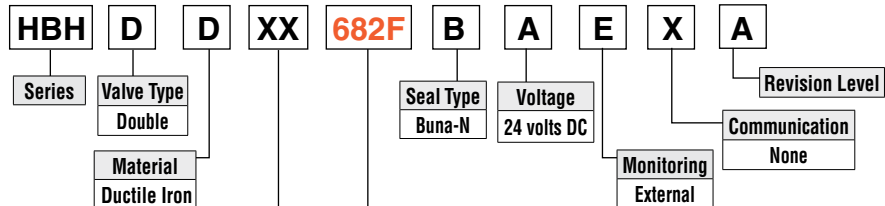
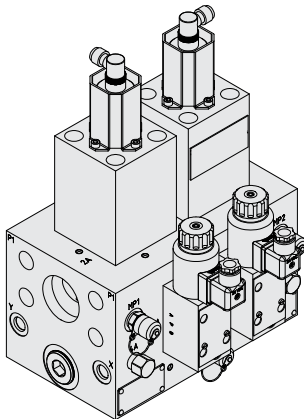
Body Size	Weight lb (kg)
D03	22.7 (10.3)
D05	53.4 (24.2)
D07	131.9 (59.8)

** If your system already incorporates a means of pressure relief, select No Pressure Relief Valve.

Hydraulic Block & Hold Series Valves

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(Choose your options (in red) to configure your valve system model number.)



Body Size	Flow Rate	Port Size	Port Thread/Type	
D25	0 to 90 gpm	1-1/2"	Code 62 Flange	682F
		2"	Code 62 Flange	692F
D32	0 to 145 gpm	2"	Code 62 Flange	792F

ISO Size	Weight lb (kg)
D25	112.3 (50.9)
D32	142.8 (64.8)

FLUID POWER PRODUCTS FOR PNEUMATIC SOLUTIONS:

- Base Mounted Valves and Sub-Bases
- Flow Control Products
- Line Mounted Valves
- Air Preparation Products (F-R-L's)
- Manual & Mechanical Valves
- Safety-Related Products
- Press Safety Products
- ROSS/FLEX® Solution
- ROSS Integrated Systems



WARRANTY, CAUTIONS and WARNINGS

Standard ROSS warranty, cautions and warnings apply, available upon request or at rosscontrols.com.

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