

Load Holding, Load Control Cartridges

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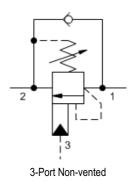


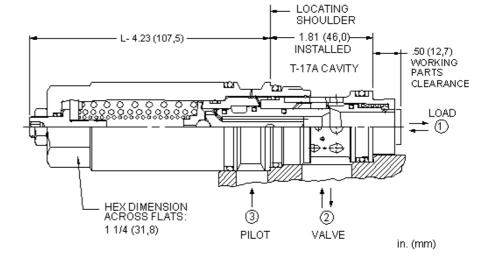
Cavity Information

Series	Ports	Cavities
Series Z Cartridges	3-Port	T-382A
3/8-24 UNF Cartridge Thread		
5 mm Valve Hex Size		
1 - 14 Nm Valve Installation Torque		
Series P Cartridges	2-Port	T-8A
M16 Cartridge Thread	2-Port (Deep)	T-8DP
22.2 mm Valve Hex Size	3-Port	T-9A
27 - 33 Nm Valve Installation Torque		
Series 0 Cartridges	2-Port	T-162A
	2-Port (Deep)	T-162DP
M16 Cartridge Thread 19,1 mm Valve Hex Size	3-Port	T-150A
25,4 mm Valve Hex Size	3-Port	T-163A
27 - 33 Nm Valve Installation Torque	4-Port	T-30A
Series 1 Cartridges	2-Port	T-10A
M20 Cartridge Thread	2-Port	T-13A
vi20 Carmage Thread 22.2 mm Valve Hex Size	3-Port	T-11A
11 - 47 Nm Valve Installation Torque	4-Port	T-21A
The state installation forque	4-Port	T-31A
	6-Port	T-61A
Series 2 Cartridges	2-Port	T-3A
I"-14 UNS Cartridge Thread	2-Port	T-5A
28,6 mm Valve Hex Size	3-Port	T-2A
1 - 68 Nm Valve Installation Torque	4-Port 4-Port	T-22A
	4-Port (Dual path)	T-32A T-52AD
	6-Port	T-52AD T-52A
	6-Port	T-62A
Series 3 Cartridges	2-Port	T-16A
•	3-Port	T-17A
M36 Cartridge Thread 31,8 mm Valve Hex Size	4-Port	T-23A
203 - 217 Nm Valve Installation Torque	4-Port	T-33A
2	4-Port (Dual path)	T-53AD
	6-Port	T-53A
	6-Port	T-63A
Series 4 Cartridges	2-Port	T-18A
M48 Cartridge Thread	2-Port (Undercut)	T-18AU
11,3 mm Valve Hex Size	3-Port	T-19A T-19AU
174 - 508 Nm Valve Installation Torque	3-Port (Undercut) 4-Port	T-19AU T-24A
	4-Port (Undercut)	T-24A T-24AU
	4-Port	T-34A
	4-Port (Dual path)	T-54AD
	6-Port	T-54A
	6-Port	T-64A



sunhydraulics.com/model/MBGB





Load reactive, load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	1.5:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	9
Reseat	≥77% of setting
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006

CONFIGURATION OPTIONS

Model Code Example: MBGBLHN

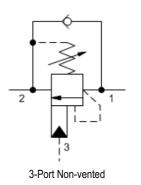
CONTROL (L) FUNCTIONAL SETTING RANGE (H) SEAL MATERIAL (N) MATERIAL/COATING

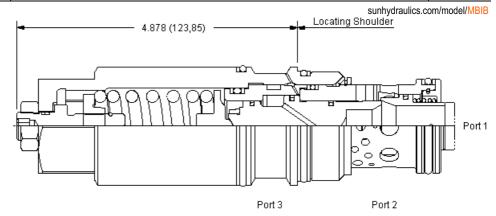
H 1000 - 4000 psi (70 - 280 bar), 3000 psi (210 bar) Standard Setting N Buna-N V Viton Standard Material/Coating
/AP Stainless Steel, Passivated

J 2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

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Load reactive, load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	1.5:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	7
Reseat	≥77% of setting
Locknut Hex Size	19,1 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006

CONFIGURATION OPTIONS

Model Code Example: MBIBLHN

CONTROL (L)

(L) FUNCTIONAL SETTING RANGE

(H) SEAL MATERIAL

(N) MATERIAL/COATING

L Standard Screw Adjustment

H 1000 - 4000 psi (70 - 280 bar), 3000 psi (210 bar) Standard Setting

N Buna-N
V Viton

Standard Material/Coating /AP Stainless Steel, Passivated

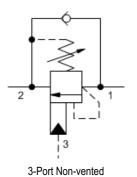
J 2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

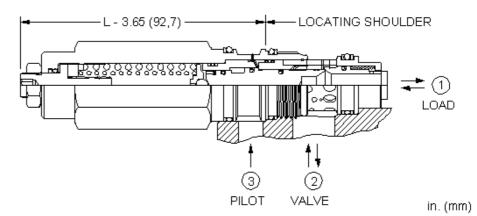
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Load reactive, load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	9
Reseat	≥77% of setting
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990202007
Seal kit - Cartridge	Polyurethane: 990002002
Seal kit - Cartridge	Viton: 990202006

CONFIGURATION OPTIONS

Model Code Example: MBEALHN

CONTROL

(L) FUNCTIONAL SETTING RANGE (H) SEAL MATERIAL

(N) MATERIAL/COATING

L Standard Screw AdjustmentC Tamper Resistant - Factory Set

H 1000 - 4000 psi (70 - 280 bar), 3000 psi (210 bar) Standard Setting

N Buna-N
V Viton

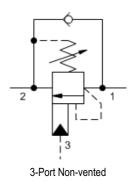
/AP Stainless Steel, Passivated
/LH Mild Steel, Zinc-Nickel

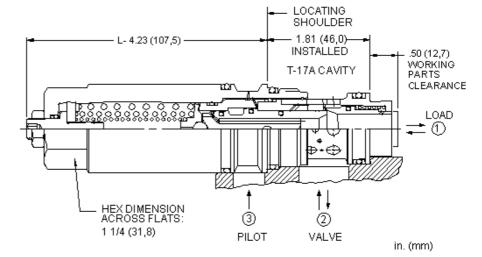
J 2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

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Load reactive, load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	9
Reseat	≥77% of setting
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	EPDM: 990017014
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006

CONFIGURATION OPTIONS

Model Code Example: MBGALHN

CONTROL (L) FUNCTIONAL SETTING RANGE (H) SEAL MATERIAL (N) MATERIAL/COATING

Standard Screw Adjustment

H 1000 - 4000 psi (70 - 280 bar), 3000 psi (

(210 bar) Standard Setting

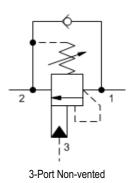
J 2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

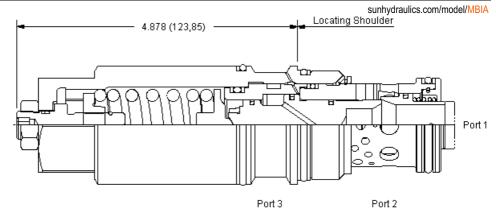
N Buna-NE EPDMV Viton

Standard Material/Coating
/AP Stainless Steel, Passivated
/LH Mild Steel, Zinc-Nickel

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Load reactive, load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	7
Reseat	≥77% of setting
Locknut Hex Size	19,1 mm
Locknut Torque	35 - 40 Nm
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006

CONFIGURATION OPTIONS

Model Code Example: MBIALHN

CONTROL (L

(L) FUNCTIONAL SETTING RANGE

(H) SEAL MATERIAL

(N) MATERIAL/COATING

L Standard Screw Adjustment

H 1000 - 4000 psi (70 - 280 bar), 3000 psi (210 bar) Standard Setting

N Buna-N
V Viton

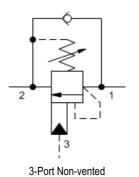
Standard Material/Coating /AP Stainless Steel, Passivated

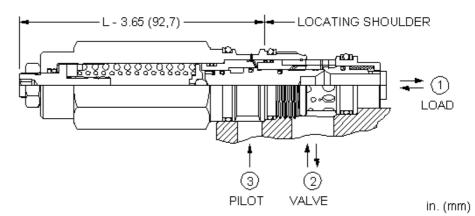
J 2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

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Load reactive, load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	4.5:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	9
Reseat	≥77% of setting
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990202007
Seal kit - Cartridge	Polyurethane: 990002002
Seal kit - Cartridge	Viton: 990202006

CONFIGURATION OPTIONS

Model Code Example: MBEGLHN

CONTROL

(L) FUNCTIONAL SETTING RANGE (

(H) SEAL MATERIAL

(N) MATERIAL/COATING

L Standard Screw AdjustmentC Tamper Resistant - Factory Set

H 1000 - 4000 psi (70 - 280 bar), 3000 psi (210 bar) Standard Setting

N Buna-N
V Viton

/AP Stainless Steel, Passivated
/LH Mild Steel, Zinc-Nickel

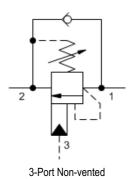
J 2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

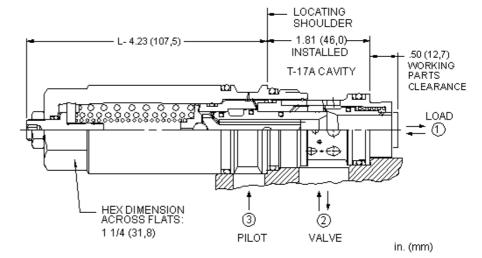
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4.5:1 pilot ratio, load reactive, load control valve SERIES 3 / CAPACITY: 240 L/min. / CAVITY: T-17A



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Load reactive, load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	4.5:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	9
Reseat	≥77% of setting
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006

CONFIGURATION OPTIONS

Model Code Example: MBGGLJN

(J) SEAL MATERIAL

(N) MATERIAL/COATING

CONTROL

2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

(L) FUNCTIONAL SETTING RANGE

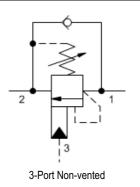
N Buna-N **V** Viton

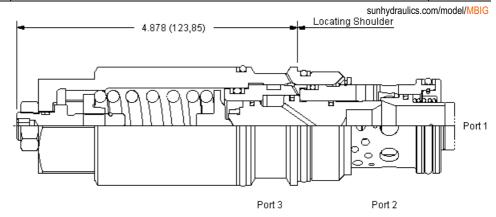
Standard Material/Co /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel

1000 - 4000 psi (70 - 280 bar), 3000 psi (210 bar) Standard Setting

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Load reactive, load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	4.5:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	7
Reseat	≥77% of setting
Locknut Hex Size	19,1 mm
Locknut Torque	35 - 40 Nm
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006

CONFIGURATION OPTIONS

Model Code Example: MBIGLHN

CONTROL (L)

(L) FUNCTIONAL SETTING RANGE

(H) SEAL MATERIAL

(N) MATERIAL/COATING

L Standard Screw Adjustment

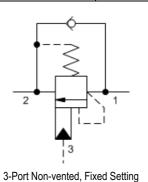
H 1000 - 4000 psi (70 - 280 bar), 3000 psi (210 bar) Standard Setting

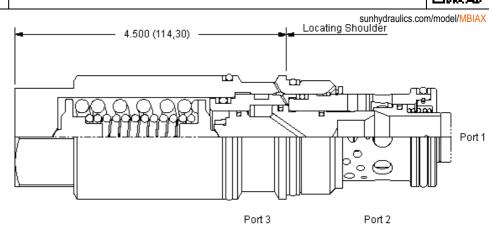
N Buna-N V Viton Standard Material/Coating
//LH Mild Steel, Zinc-Nickel

J 2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

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Fixed setting, load reactive, load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Reseat	≥77% of setting
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006

CONFIGURATION OPTIONS

Model Code Example: MBIAXLN

FACTORY SET (L) SEAL MATERIAL L 4000 psi (280 bar) N Buna-N

K 3000 psi (210 bar)

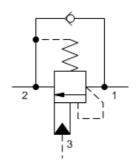
M 5000 psi (350 bar)

V Viton

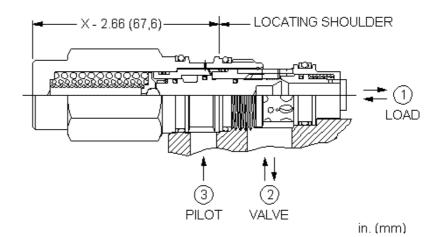
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sunhydraulics.com/model/MBEGX



3-Port Non-vented, Fixed Setting



Fixed setting, load reactive, load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	4.5:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Reseat	≥77% of setting
Seal kit - Cartridge	Buna: 990202007
Seal kit - Cartridge	Polyurethane: 990002002
Seal kit - Cartridge	Viton: 990202006

CONFIGURATION OPTIONS

M 5000 psi (350 bar)

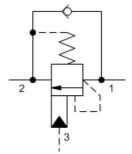
Model Code Example: MBEGXLN

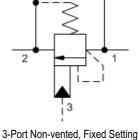
FACTORY SET	(L)	SEAL MATERIAL	(N
L 4000 psi (280 bar)		N Buna-N	
K 3000 psi (210 bar)		V Viton	

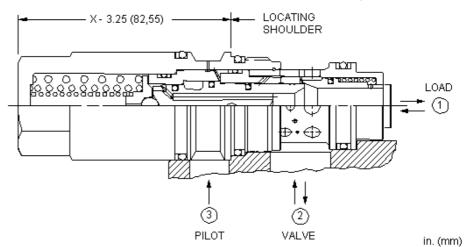
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Fixed setting, load reactive, load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	4.5:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Reseat	≥77% of setting
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006

CONFIGURATION OPTIONS

Model Code Example: MBGGXLN

FACTORY SET (L) SEAL MATERIAL (N) MATERIAL/COATING

L 4000 psi (280 bar)

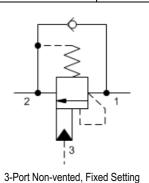
K 3000 psi (210 bar) M 5000 psi (350 bar)

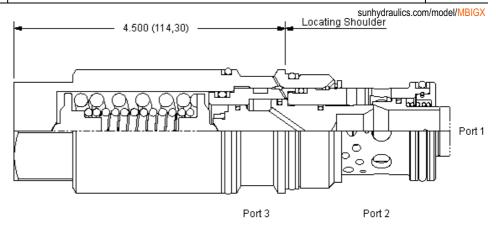
V Viton

/AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel

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Fixed setting, load reactive, load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	4.5:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Reseat	≥77% of setting
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006

CONFIGURATION OPTIONS

Model Code Example: MBIGXMN

FACTORY SET (M) SEAL MATERIAL (N) MATERIAL/COATING

M 5000 psi (350 bar)

K 3000 psi (210 bar)

L 4000 psi (280 bar)

N Buna-N V Viton

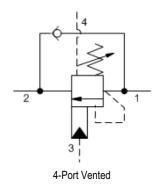
Standard Material/Coating
/AP Stainless Steel, Passivated
/LH Mild Steel, Zinc-Nickel

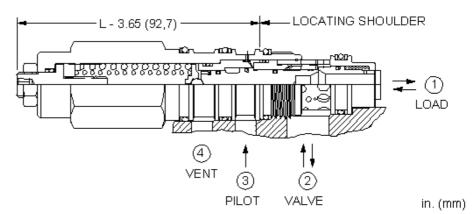
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Vented, 1.5:1 pilot ratio, load reactive, load control valve SERIES 2 / CAPACITY: 120 L/min. / CAVITY: T-22A



sunhydraulics.com/model/MWEB





Vented, load reactive load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilotassisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Backpressure at port 2 does not affect the valve setting because the spring chamber references the vent (port 4).

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	1.5:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	9
Reseat	≥77% of setting
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990022007
Seal kit - Cartridge	Polyurethane: 990022002
Seal kit - Cartridge	Viton: 990022006

CONFIGURATION OPTIONS

Model Code Example: MWEBLHN

CONTROL (L) FUNCTIONAL SETTING RANGE (H) SEAL MATERIAL L Standard Screw Adjustmen H 1000 - 4000 psi (70 - 280 bar), 3000 psi

(N) MATERIAL/COATING

(210 bar) Standard Setting

V Viton

/AP Stainless Steel, Passivated

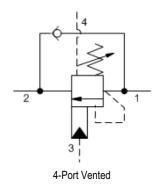
J 2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

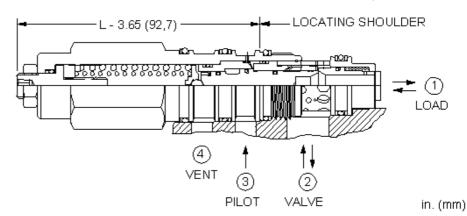
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Vented, 3:1 pilot ratio, load reactive, load control valve SERIES 2 / CAPACITY: 120 L/min. / CAVITY: T-22A



sunhydraulics.com/model/MWEA





Vented, load reactive load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilotassisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Backpressure at port 2 does not affect the valve setting because the spring chamber references the vent (port 4).

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	9
Reseat	≥77% of setting
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990022007
Seal kit - Cartridge	Polyurethane: 990022002
Seal kit - Cartridge	Viton: 990022006

CONFIGURATION OPTIONS

Model Code Example: MWEALHN

CONTROL

(L) FUNCTIONAL SETTING RANGE

(H) SEAL MATERIAL

(N) MATERIAL/COATING

C Tamper Resistant - Factory Set

1000 - 4000 psi (70 - 280 bar), 3000 psi (210 bar) Standard Setting

V Viton

/AP Stainless Steel, Passivated /LH Mild Steel. Zinc-Nickel

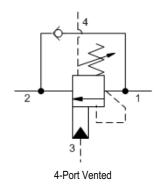
J 2000 - 5000 psi (140 - 350 bar), 3000

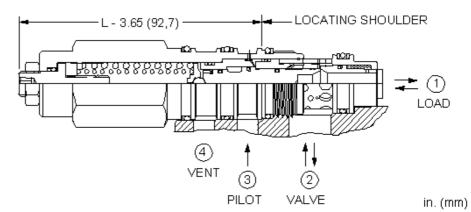
psi (210 bar) Standard Setting

© 2020 Sun Hydraulics 14 of 21 Vented, 4.5:1 pilot ratio, load reactive, load control valve SERIES 2 / CAPACITY: 120 L/min. / CAVITY: T-22A



sunhydraulics.com/model/MWEG





Vented, load reactive load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Backpressure at port 2 does not affect the valve setting because the spring chamber references the vent (port 4).

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	4.5:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	8.5
Reseat	≥77% of setting
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990022007
Seal kit - Cartridge	Polyurethane: 990022002
Seal kit - Cartridge	Viton: 990022006

CONFIGURATION OPTIONS

L Standard Screw Adjustmen

Model Code Example: MWEGLHN

CONTROL (L) FUNCTIONAL SETTING RANGE (H) SEAL MATERIAL (N) MATERIAL/COATING

H 1000 - 4000 psi (70 - 280 bar), 3000 psi (210 bar) Standard Setting

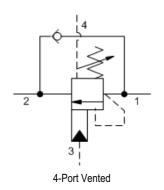
N Buna-N V Viton Standard Material/Coating /AP Stainless Steel, Passivated

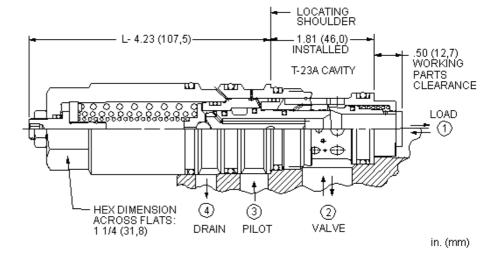
J 2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

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sunhydraulics.com/model/MWGG





Vented, load reactive load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilotassisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Backpressure at port 2 does not affect the valve setting because the spring chamber references the vent (port 4).

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	4.5:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	9
Reseat	≥77% of setting
Seal kit - Cartridge	Buna: 990023007
Seal kit - Cartridge	Polyurethane: 990023002
Seal kit - Cartridge	Viton: 990023006

CONFIGURATION OPTIONS

Model Code Example: MWGGLHN

CONTROL (L) FUNCTIONAL SETTING RANGE N Buna-N

(H) SEAL MATERIAL

L Standard Screw Adjustment

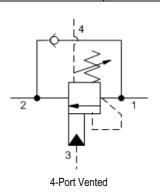
1000 - 4000 psi (70 - 280 bar), 3000 psi (210 bar) Standard Setting

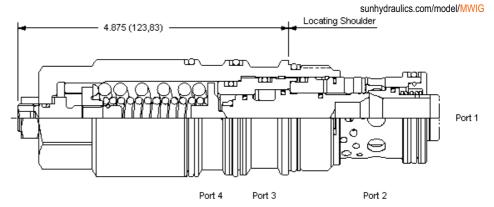
J 2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

V Viton

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Vented, load reactive load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Backpressure at port 2 does not affect the valve setting because the spring chamber references the vent (port 4).

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	4.5:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	8.5
Reseat	≥77% of setting
Locknut Hex Size	19,1 mm
Locknut Torque	35 - 40 Nm
Seal kit - Cartridge	Buna: 990024007
Seal kit - Cartridge	Polyurethane: 990024002
Seal kit - Cartridge	Viton: 990024006

CONFIGURATION OPTIONS

Model Code Example: MWIGLHN

I Standard Screw Adjustment

CONTROL

H 1000 - 4000 psi (70 - 280 bar), 3000 psi (210 bar) Standard Setting

(H) SEAL MATERIAL

Opsi
N Buna-N
V Viton

Standard Material/Coating
/AP Stainless Steel, Passivated
/LH Mild Steel, Zinc-Nickel

(N) MATERIAL/COATING

J 2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

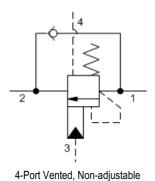
(L) FUNCTIONAL SETTING RANGE

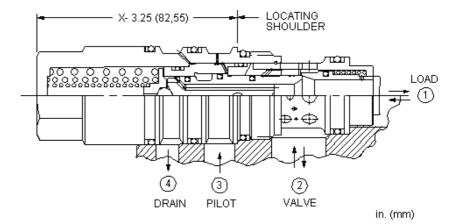
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Fixed setting, vented, load reactive load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Backpressure at port 2 does not affect the valve setting because the spring chamber references the vent (port 4).

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Reseat	≥77% of setting
Seal kit - Cartridge	Buna: 990023007
Seal kit - Cartridge	Polyurethane: 990023002
Seal kit - Cartridge	Viton: 990023006

CONFIGURATION OPTIONS

L 4000 psi (280 bar)

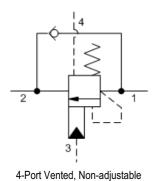
Model Code Example: MWGAXMN

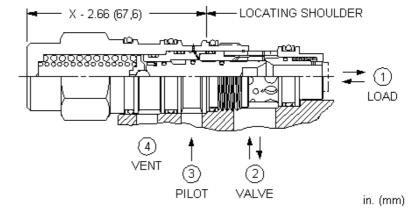
FACTORY SET	(M)	SEAL MATERIAL	(N
M 5000 psi (350 bar)		N Buna-N	
K 3000 psi (210 bar)		V Viton	

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Fixed setting, vented, load reactive load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Backpressure at port 2 does not affect the valve setting because the spring chamber references the vent (port 4).

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	4.5:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Reseat	≥77% of setting
Seal kit - Cartridge	Buna: 990022007
Seal kit - Cartridge	Polyurethane: 990022002
Seal kit - Cartridge	Viton: 990022006

CONFIGURATION OPTIONS

M 5000 psi (350 bar)

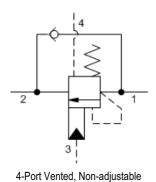
Model Code Example: MWEGXLN

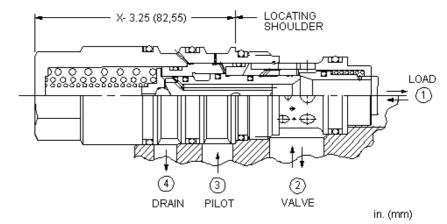
FACTORY SET	(L)	SEAL MATERIAL	(N
L 4000 psi (280 bar)		N Buna-N	
K 3000 psi (210 bar)		V Viton	

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Fixed setting, vented, load reactive load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Backpressure at port 2 does not affect the valve setting because the spring chamber references the vent (port 4).

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	4.5:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Reseat	≥77% of setting
Seal kit - Cartridge	Buna: 990023007
Seal kit - Cartridge	Polyurethane: 990023002
Seal kit - Cartridge	Viton: 990023006

CONFIGURATION OPTIONS

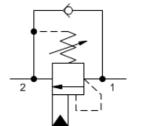
M 5000 psi (350 bar)

Model Code Example: MWGGXLN

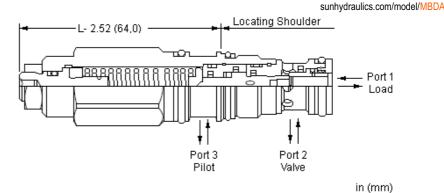
FACTORY SET	(L) SEAL MATERIAL	(N)
L 4000 psi (280 bar)	N Buna-N	
K 3000 psi (210 bar)	V Viton	

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3-Port Non-vented



Load reactive, load control valves with pilot assist combine two valves; a check valve and a relief valve. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Recommended Load Pressure	See Technical Features
Factory Pressure Settings Established at	30 cc/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at Reseat	0,3 cc/min.
Check Cracking Pressure	1,7 bar
Adjustment - No. of CCW Turns from Min. to Max. Setting	6.5
Reseat	≥77% of setting
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990011007
Seal kit - Cartridge	Polyurethane: 990011002
Seal kit - Cartridge	Viton: 990011006

CONFIGURATION OPTIONS

Model Code Example: MBDALHN

CONTROL (N) MATERIAL/COATING (L) FUNCTIONAL SETTING RANGE (H) SEAL MATERIAL L Standard Screw Adjustment

C Tamper Resistant - Factory Set

1000 - 4000 psi (70 - 280 bar), 3000 psi (210 bar) Standard Setting

J 2000 - 5000 psi (140 - 350 bar), 3000 psi (210 bar) Standard Setting

N Buna-N Viton

Standard Material/Coating /AP Stainless Steel, Passivated

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