

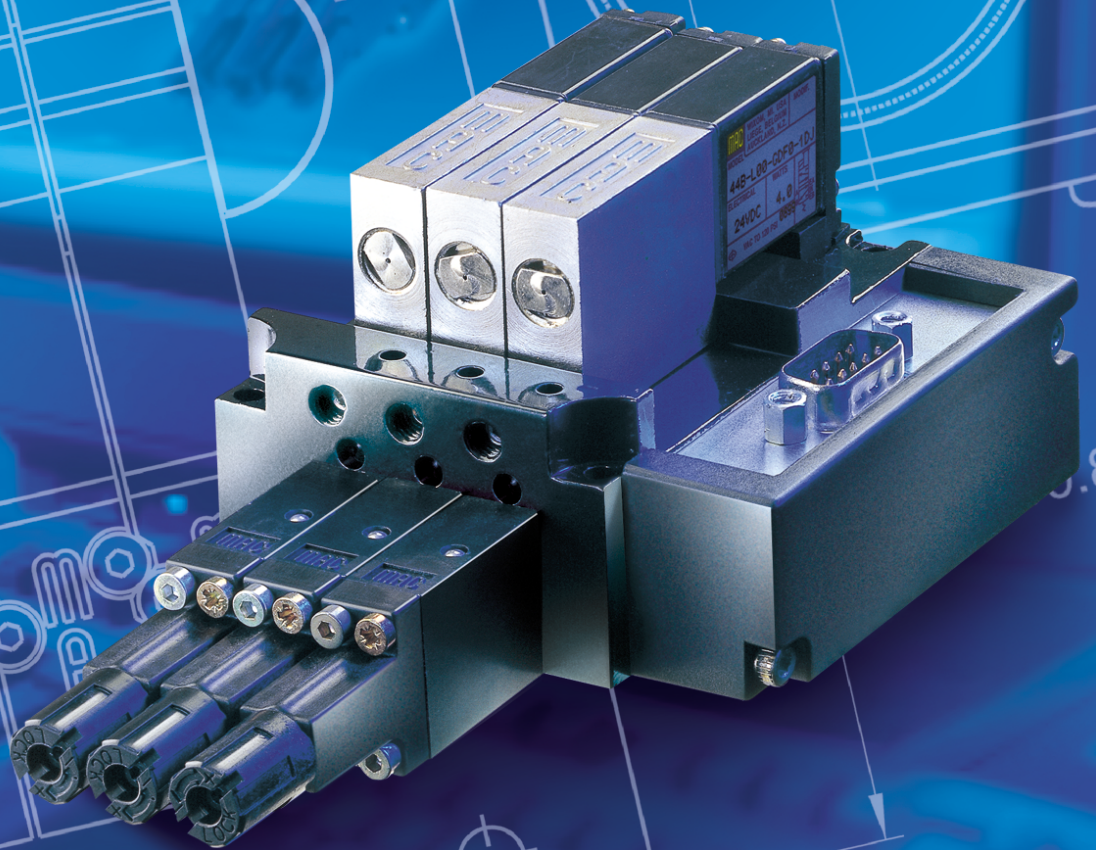
MAC[®]

V A L V E S

8.3
TYP

14.7
TYP

29.5
TYP



C i r c u i t B a r[®]



CIRCUIT BAR®

CIRCUIT BAR® is an extruded block of aluminum with pneumatic circuits machined right in the bar. The design of these circuits can be very simple or complex depending upon the requirements of the application.

CIRCUIT BAR® are a means by which individual components (i.e. valves, regulators and flow controls) comprising a circuit, can be combined into one extruded CIRCUIT BAR®. The CIRCUIT BAR® will eliminate extra piping and fittings, as well as saving space and money.

Contact your local MAC distributor for more information as to how MAC'S CIRCUIT BAR® can satisfy your needs.

Introduction

Section 1 Direct solenoid and solenoid pilot operated valves

Section 2 Options

Let us show you via high performance demonstration kits and animated software,

HOW MAC'S PERFORMANCE ADVANTAGES HELP MAKE YOUR EQUIPMENT MORE RELIABLE - FASTER - MORE REPEATABLE.



TLD

Traveling Lab Demonstration measures critical valve performance characteristics - *Shifting forces, Response Time, Speed, Repeatability and Flow.*



PLD

Proportional Lab Demonstration measures critical proportional regulation characteristics - *Response Time, Accuracy, Hysterisis, Repeatability and Flow.*

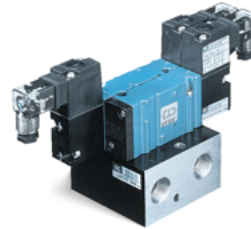


Animation

Animated Software shows inner workings of various Air Valves Designs - *Powerful educational tool for learning about how air valves function.*

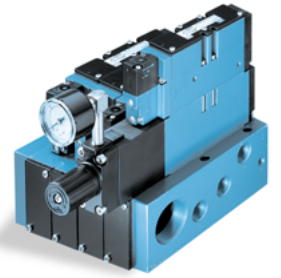
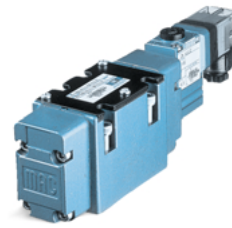
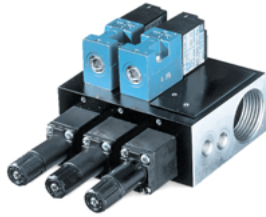
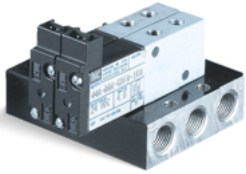
3-way solenoid operated valves

#10-32 to 2 1/2" port size Flow 100 to 6500 NL/min



4-way solenoid operated valves

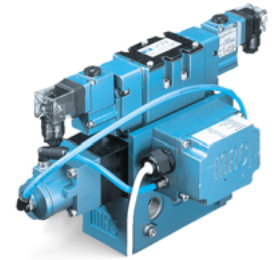
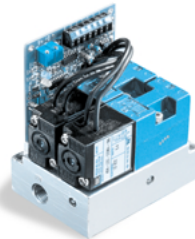
#10-32 to 1 1/2" port size Flow 100 to 15900 NL/min



Proportional pressure control valves

Stand alone or Multi-Pressure Pak[®]

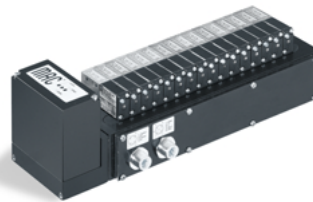
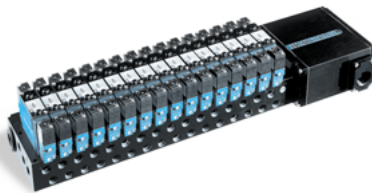
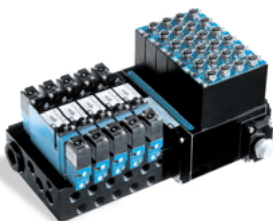
Analog or Digital with an overall accuracy range of $\pm 0.5\%$ to $\pm 2.5\%$ of full scale



Field bus products

Communication Electronics with a variety of MAC Valves' products

Input and Output capability with a variety of protocols





Section 1

Direct solenoid and solenoid pilot operated valves



Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow (Max) NL/min	Circuit bar mounting									Series
			non plug-in cylinder ports in base	non plug-in cylinder ports in valve	plug-in	plug-in with F. C.	plug-in with Pr. Reg.	plug-in with Pr. Reg. and F. C.	add-on style plug-in	add-on style plug-in with F. C.	add-on style plug-in with Pr. Reg.	
3/2	M5 - #10-32	110										34
3/2	M5 - 1/8" BSPP	110										
3/2	M5 - #10-32	100										
3/2	M5 - #10-32	90										
3/2	1/8" BSPP - M5	100										35
3/2	1/4" - 3/8"	500										
3/2	1/8" - 1/4", 6mm tube receptacle	500										37
3/2	1/8" - 1/4"	500										
5/2 - 3/2	M5 - #10-32	93										44
5/2 - 3/2	M5 - 1/8" BSPP	93										
5/2 - 3/2	M5 - #10-32	90										
5/2 - 3/2	M5 - #10-32	80										
5/2 - 3/2	M5 - #10-32	70										45
4/2	1/8" BSPP - M5	100										
5/2	1/8" - 1/4", 6mm tube receptacle	500										47
5/2	1/8" - 1/4"	500										



Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow (Max) NL/min	Circuit bar mounting								Series				
			add-on style plug-in with Pr. Reg. and F. C.	plug-in add-a-unit stations	plug-in add-a-unit stations with F. C.	plug-in add-a-unit stations with Pr. Reg.	plug-in add-a-unit stations with F.C. and Pr.Reg.	non plug-in	non plug-in with Pr. Reg.	plug-in with side Pr. Reg.		plug-in with integral terminal strip			
3/2	M5 - #10-32	90													34
3/2	M5 - #10-32	100													
3/2	1/8" BSPP - M5	100													35
3/2	1/8" - 1/4", 6mm tube receptacle	500													
3/2	1/8" - 1/4"	500													37
3/2	1/8" - 1/4"	500													
5/2 - 3/2	M5 - #10-32	70													44
5/2	M5 - #10-32	90													
5/2	M5 - #10-32	80													45
5/2	M5 - #10-32	70													
4/2	1/8" BSPP - M5	100													47
5/2	1/8" - 1/4", 6mm tube receptacle	500													
5/2	1/8" - 1/4"	500													

Function	Port size	Flow (Max) NL/min	Circuit bar mounting								Series				
			plug-in with integral terminal strip and side Pr. Reg.	non plug-in cylinder ports in base with Pr. Reg.	non plug-in add-on style cylinder ports in base	non plug-in add-a-unit stations	cylinder ports in valve	add-on style cylinder ports in valve	cylinder ports in base	add-on style cylinder ports in base		add-a-unit stations for CBM052A bar			
3/2	1/8" BSPP - M5	100													35
3/2	1/8" - 1/4", 6mm tube receptacle	500													
3/2	1/8" - 1/4"	1200													52
4/2	1/8" BSPP - M5	100													
5/2	1/8" - 1/4", 6mm tube receptacle	500													47
5/2 - 5/3	1/4"	1300													
															800



Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow (Max) NL/min	Circuit bar mounting								Series	
			add-a-unit stations for CBP052A bar	non plug-in with or without F. C.	non plug-in with Pr. Reg. and F. C.	plug-in with sandwich Pr. Reg.	plug-in with integral terminal strip and sandwich Pr. Reg.	plug-in with integral terminal strip with F. C.	plug-in with integral terminal strip with Pr. Reg. and F. C.	non plug-in cyl. ports in valve with opt. F. C.		non plug-in cyl. ports in base with opt. F. C.
3/2	1/8" - 1/4"	1200										52
4/2	1/8" BSP - M5	100										45
5/2	3/8"	500										47
5/2	1/8" - 1/4", 6mm tube receptacle	500										47

Function	Port size	Flow (Max) NL/min	Circuit bar mounting								Series	
			add-on style non plug-in cyl. ports in valve with opt. F. C.	add-on style non plug-in cyl. ports in base with opt. F. C.	non plug-in cyl. ports in valve with opt. Pr. Reg.	add-on style non plug-in cyl. ports in base	add-on style non plug-in cyl. ports in base with Pr. Reg.	low profile cylinder ports in valve	low profile cylinder ports in base	mid profile cylinder ports in valve		mid profile - add on style cylinder ports in valve
5/2	3/8"	500										47
5/2	1/8" - 1/4", 6mm tube receptacle	500										47
5/2 - 5/3	1/8" - 1/4"	1000										400
5/2 - 5/3	1/8"	1000										400

Function	Port size	Flow (Max) NL/min	Circuit bar mounting							Series		
			add-a-unit stations for CBM403A bar	mid profile cylinder ports in base	mid profile - add on style cylinder ports in base	add-a-unit stations for CBM404A bar	high profile cylinder ports in base	high profile - add on style cylinder ports in base	add-a-unit stations for CBM405A bar		standard	add-on style
5/2 - 5/3	1/8" - 1/4"	1000										400
5/2 - 5/3 - 3/2	1/8" - 1/4" - 3/8"	1000										92

Function	Port size	Flow (Max) NL/min	Circuit bar mounting		Series
			add-a-unit stations for CBM092B	with shut-off valve	
5/2 - 5/3 - 3/2	1/8" - 1/4" - 3/8"	1000			92
5/2 - 5/3	1/4"	1300			800