

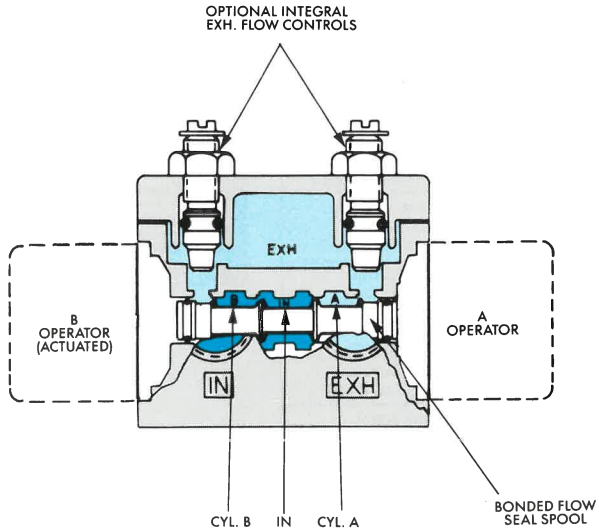


4-WAY, MANUAL, MECHANICAL AND REMOTE AIR PILOT, INDIVIDUAL AND STACKING BODIES

#10-32 & 1/8" —C_v UP TO 0.20
PRESSURE RANGE—VACUUM TO 150 PSI

SERIES FEATURES

- Bonded seal spool for extended life and ease of maintenance.
- One piece precision machined body for long life.
- High flow in a small package.
- Optional integral individual exhaust flow controls with a single common exhaust port.
- Use on lubricated or non-lubricated service.
- Large selection of operators.
- Universal operator mounting holes for easy conversion between operators.
- Remote air operators have ability to use a pilot signal pressure different from main valve pressure. Pilot signal can be 35-150 PSIG, regardless of main valve pressure. Manual operator/indicator is standard.



**INDIVIDUAL BODY SHOWN
ACTUAL SIZE**
(PATENTS & PATENTS PENDING)

FOR VALVE OPERATOR OPTIONS SEE NEXT PAGE

VALVE CONFIGURATIONS AVAILABLE

The MAC 1600 Series is ideal for applications requiring a small 4-way remote air, manual or mechanically operated valve.

- 2-position single or double operators.
- Individual or stacking bodies.
- Single pressure.
- 3-way N.C. or N.O. by plugging a port.

SPECIAL APPLICATIONS

On all models, activating the "A" operator supplies pressure to cylinder port "A" and activating the "B" operator supplies pressure to cylinder port "B". For the following special applications, additional piping considerations are required.

- **VACUUM APPLICATIONS:** Connect the vacuum source to the Exhaust port with the Inlet open to atmosphere. Use models without flow controls only.
- **SELECTOR APPLICATIONS:** When using as a selector valve, connect the higher pressure to the Inlet port and the lower pressure to the Exhaust port. Use models without flow controls only.

OPERATING DATA

Pressures shown are minimum and maximum safe working pressures.

PRESSURE RANGE

MAIN VALVE: VAC to 150 PSIG

REMOTE PILOT OPERATOR SIGNAL:

Single Operator, Spring Return 35 to 150 PSIG
Double Operator 20 to 150 PSIG

FLOW CONSTANT: C_v. (Average all ports)

SIZE	INDIVIDUAL	STACKING
#10-32	0.15	0.20
1/8"	0.20	0.20

FLUIDS: Air or inert gases

LUBRICATION: Not required, but if lubrication is used, a medium range aniline oil is recommended.

AMBIENT TEMPERATURE RANGE: 0° to 120°F. (-18° to 50°C.)
Consult factory outside this range

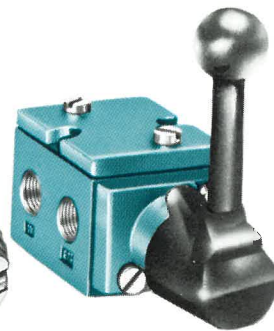
HOW TO ORDER

1600 SERIES

To order a complete valve requires the selection of an Operator B, followed by the selected body, followed by the selected Operator A. The operator numbers for both "A" and "B" are listed below in the left hand table. The 3 digit body numbers are selected from the right hand table, by selecting one digit from body type and two digits from port size.

OPERATOR B
16XXX - **BODY**
YYY - **OPERATOR A**
XXX

OPERATOR "A" AND "B"		BODY			
XXX	DESCRIPTION	Y	BODY TYPE	YY	PORT SIZE
001	Spring	-1	Inline Body	11	1/8" NPTF Side Ports
011	Straight Cam Roller Parallel to Ports	-2	Inline w/Flow Controls	12	1/8" BSPP Side Ports
012	Straight Cam Roller Perpendicular to Ports	-3	Stacking Body	13	1/8" BSPT Side Ports
013	Lever Cam Perpendicular to Ports	-4	Stacking Body w/Flow Controls	14	#10-32 UNF Side Ports
014	Lever Cam Parallel to Ports			15	M5x0.8 Side Ports
015	Lever Cam Parallel to Ports (Override Left)			24	#10-32 UNF Bottom Ports
016	Lever Cam Parallel to Ports (Override Right)			25	M5x0.8 Bottom Ports
017	Lever Cam Perpendicular to Ports (Override Forward)	026*	Lever, Non-Locking Push Parallel to Body		
018	Lever Cam Perpendicular to Ports (Override Backward)	027*	Lever, Locking, Pull Parallel to Body		
021*	Lever, Locking, Push Perpendicular to Body	028*	Lever, Non-Locking Pull Parallel to Body		
022*	Lever, Non-Locking Push Perpendicular to Body	031	Push Button		
023*	Lever, Locking, Pull Perpendicular to Body	032	Push Button, Panel Mounted		
024*	Lever, Non-Locking Pull Perpendicular to Body	033	Push Button w/Guard		
025*	Lever, Locking, Push Parallel to Body	036	Palm Button		
		037	Palm Button, Panel Mount		
		038	Palm Button w/Guard		
		111	Air Pilot 1/8" NPTF Pilot Port		
		112	Air Pilot #10-32 Pilot Port		
		113	Air Pilot M5x0.8 Pilot Port		
		114	Air Pilot 1/8" BSPP Pilot Port		
		115	Air Pilot 1/8" BSPT Pilot Port		



* To order Lever Operators with boot, substitute 2 for 0 in first digit, i.e., -221.

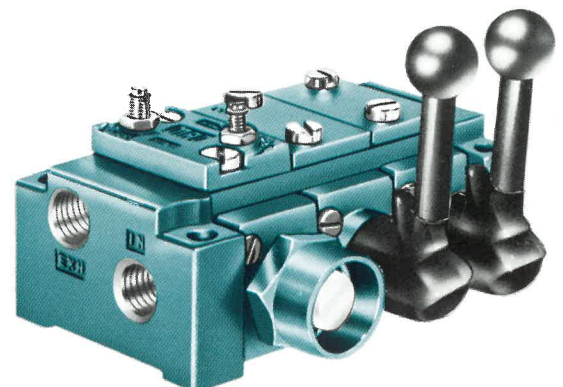
MANIFOLD ACCESSORIES

MANIFOLD END PLATE KIT—For each gang, one kit is required.

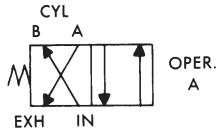
ISOLATORS—Sections of a gang may be isolated permitting different pressures to be fed to either end of the gang.

TO ORDER—Select the appropriate part number from table below.

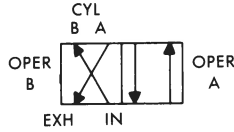
PART NO.	DESCRIPTION
M-06001-01	Manifold End Plate Kit (1/4" NPTF)
M-06001-01P	Manifold End Plate Kit (1/4" BSPP)
N-06005	Isolator Kit—Inlet & Exhaust
N-06006	Isolator Kit—Inlet Only
N-06007	Isolator Kit—Exhaust Only



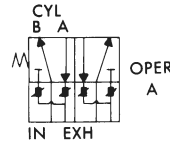
**SINGLE OPERATOR
SPRING RETURN**



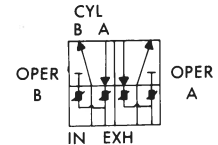
DOUBLE OPERATOR



**SINGLE OPERATOR
SPRING RETURN WITH
INTEGRAL EXHAUST FLOW CONTROLS**

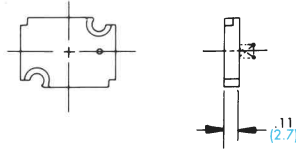


**DOUBLE OPERATOR
W/INTEGRAL EXHAUST
FLOW CONTROLS**

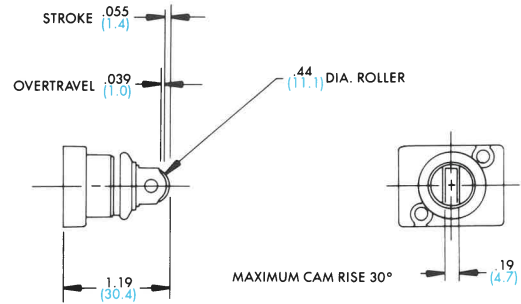


1600 SERIES—ANSI TYPE SYMBOLS

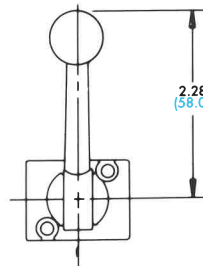
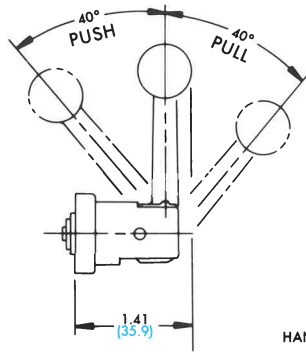
VALVE OPERATORS



001 Spring

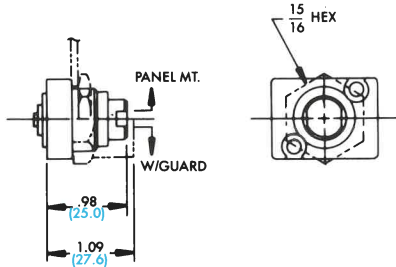


011 Straight Cam Roller Parallel to Ports
012 Straight Cam Roller Perpendicular to Ports

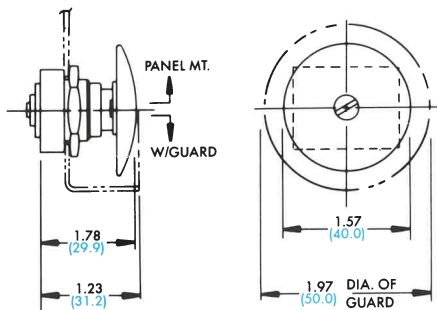


HAND LEVER PERPENDICULAR TO BODY PORTS SHOWN

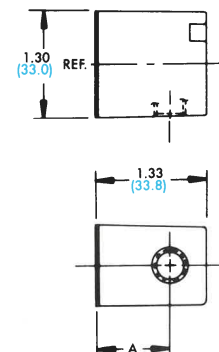
- 021** Lever, Locking, Push Perpendicular to Body
 - 022** Lever, Non-Locking, Push Perpendicular to Body
 - 023** Lever, Locking, Pull Perpendicular to Body
 - 024** Lever, Non-Locking, Pull Perpendicular to Body
 - 025** Lever, Locking, Push Parallel to Body
 - 026** Lever, Non-Locking, Push Parallel to Body
 - 027** Lever, Locking, Pull Parallel to Body
 - 028** Lever, Non-Locking, Pull Parallel to Body
- Lever Operators with boot, substitute 2 for 0 in first digit.



031 Push Button
032 Push Button, Panel Mount
033 Push Button w/Guard



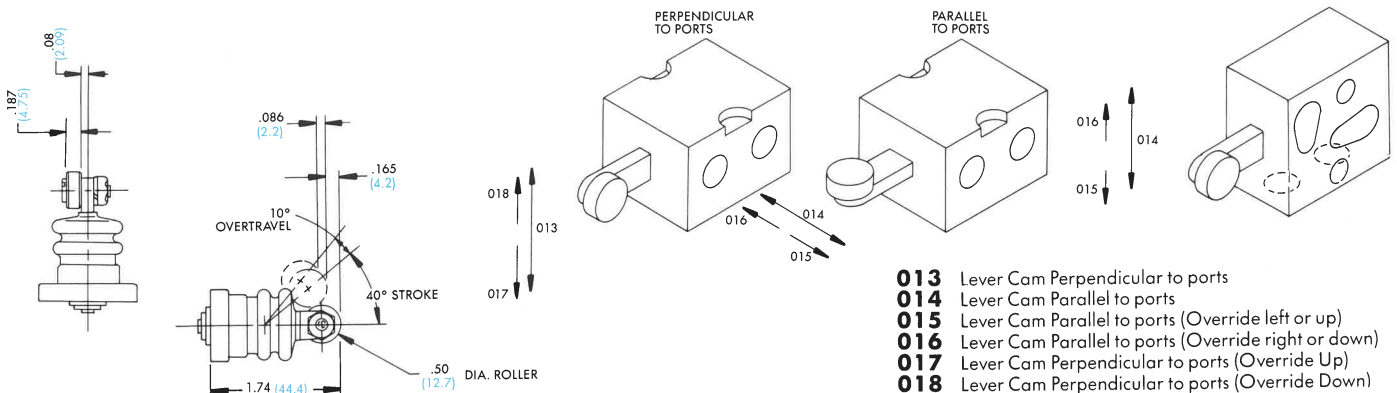
036 Palm Button
037 Palm Button, Panel Mount
038 Palm Button w/Guard



SIZE	DIM. A
1/8 NPTF	.90
1/8 BSPP	(22.6)
1/8 BSPT	
#10-32 UNF	.97
M5x0.8	(24.7)

111 Pilot 1/8" NPTF Pilot Port
112 Pilot #10-32 Pilot Port
113 Pilot M5x0.8 Pilot Port
114 Pilot 1/8" BSPP Pilot Port
115 Pilot 1/8" BSPT Pilot Port

ARROWS INDICATE DIRECTION OF OPERATION



013 Lever Cam Perpendicular to ports
014 Lever Cam Parallel to ports
015 Lever Cam Parallel to ports (Override left or up)
016 Lever Cam Parallel to ports (Override right or down)
017 Lever Cam Perpendicular to ports (Override Up)
018 Lever Cam Perpendicular to ports (Override Down)