

Алматы (7273)495-231
 Ангарск (3955)60-70-56
 Архангельск (8182)63-90-72
 Астрахань (8512)99-46-04
 Барнаул (3852)73-04-60
 Белгород (4722)40-23-64
 Благовещенск (4162)22-76-07
 Брянск (4832)59-03-52
 Владивосток (423)249-28-31
 Владикавказ (8672)28-90-48
 Владимир (4922)49-43-18
 Волгоград (844)278-03-48
 Вологда (8172)26-41-59
 Воронеж (473)204-51-73
 Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
 Ижевск (3412)26-03-58
 Иркутск (395)279-98-46
 Казань (843)206-01-48
 Калининград (4012)72-03-81
 Калуга (4842)92-23-67
 Кемерово (3842)65-04-62
 Киров (8332)68-02-04
 Коломна (4966)23-41-49
 Кострома (4942)77-07-48
 Краснодар (861)203-40-90
 Красноярск (391)204-63-61
 Курск (4712)77-13-04
 Курган (3522)50-90-47
 Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
 Москва (495)268-04-70
 Мурманск (8152)59-64-93
 Набережные Челны (8552)20-53-41
 Нижний Новгород (831)429-08-12
 Новокузнецк (3843)20-46-81
 Ноябрьск (3496)41-32-12
 Новосибирск (383)227-86-73
 Омск (3812)21-46-40
 Орел (4862)44-53-42
 Оренбург (3532)37-68-04
 Пенза (8412)22-31-16
 Петрозаводск (8142)55-98-37
 Псков (8112)59-10-37
 Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
 Рязань (4912)46-61-64
 Самара (846)206-03-16
 Санкт-Петербург (812)309-46-40
 Саратов (845)249-38-78
 Севастополь (8692)22-31-93
 Саранск (8342)22-96-24
 Симферополь (3652)67-13-56
 Смоленск (4812)29-41-54
 Сочи (862)225-72-31
 Ставрополь (8652)20-65-13
 Сургут (3462)77-98-35
 Сыктывкар (8212)25-95-17
 Тамбов (4752)50-40-97
 Тверь (4822)63-31-35

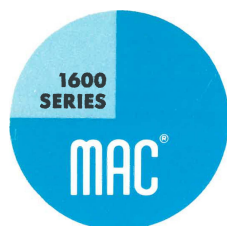
Тольятти (8482)63-91-07
 Томск (3822)98-41-53
 Тула (4872)33-79-87
 Тюмень (3452)66-21-18
 Ульяновск (8422)24-23-59
 Улан-Удэ (3012)59-97-51
 Уфа (347)229-48-12
 Хабаровск (4212)92-98-04
 Чебоксары (8352)28-53-07
 Челябинск (351)202-03-61
 Череповец (8202)49-02-64
 Чита (3022)38-34-83
 Якутск (4112)23-90-97
 Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

<https://mac.nt-rt.ru> || mcp@nt-rt.ru



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.

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

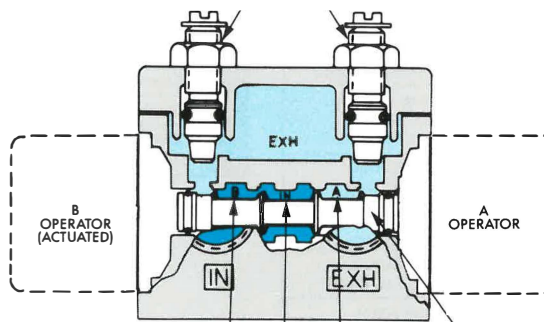
On all models, activating the "A" operator supplies pressure to cylinder port "A" and activating the "B" operator supplies pressure to cylinder port "B". For the following special applications, additional piping considerations are required.

- **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.

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

OPTIONAL INTEGRAL EXH. FLOW CONTROLS



CYL. B IN CYL. A

BONDED FLOW SEALPOOL

INDIVIDUAL BODY SHOWN ACTUAL SIZE

(PATENTS & PATENTS PENDING)

FOR VALVE OPERATOR OPTIONS SEE NEXT PAGE

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
001	Spring	-1	Inline Body
011	Straight Cam Roller Parallel to Ports	-2	Inline w/Flow Controls
012	Straight Cam Roller Perpendicular to Ports	-3	Stacking Body
013	Lever Cam Perpendicular to Ports	-4	Stacking Body w/Flow Controls
014	Lever Cam Parallel to Ports		
015	Lever Cam Parallel to Ports (Override Left)		
016	Lever Cam Parallel to Ports (Override Right)		
017	Lever Cam Perpendicular to Ports (Override Forward)		
018	Lever Cam Perpendicular to Ports (Override Backward)		
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		
031	Push Button		
032	Push Button, Panel Mounted		
033	Push Button w/Guard		
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		
YY	PORT SIZE		
11	1/8" NPTF Side Ports		
12	1/8" BSPP Side Ports		
13	1/8" BSPT Side Ports		
14	#10-32 UNF Side Ports		
15	M5x0.8 Side Ports		
24	#10-32 UNF Bottom Ports		
25	M5x0.8 Bottom Ports		

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

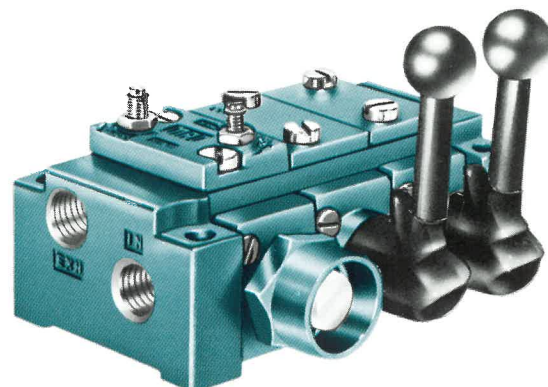
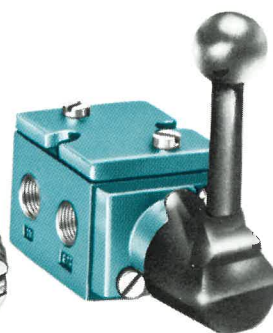
MANIFOLD ACCESSORIES

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

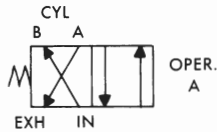
ISOLATORS—Sections of a gang may be isolated permitting different pressures to be fed to either end of the gang.

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

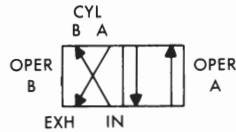
PART NO.	DESCRIPTION
M-06001-01	Manifold End Plate Kit (1/4" NPTF)
M-06001-01P	Manifold End Plate Kit (1/4" BSPP)
N-06005	Isolator Kit—Inlet & Exhaust
N-06006	Isolator Kit—Inlet Only
N-06007	Isolator Kit—Exhaust Only



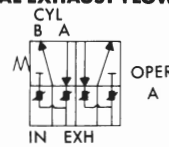
SINGLE OPERATOR SPRING RETURN



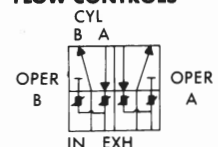
DOUBLE OPERATOR



SINGLE OPERATOR SPRING RETURN WITH INTEGRAL EXHAUST FLOW CONTROLS

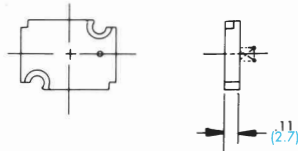


DOUBLE OPERATOR W/INTEGRAL EXHAUST FLOW CONTROLS

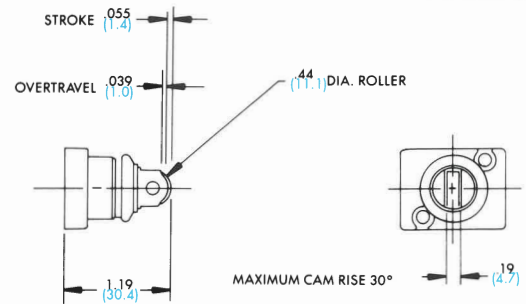


1600 SERIES—ANSI TYPE SYMBOLS

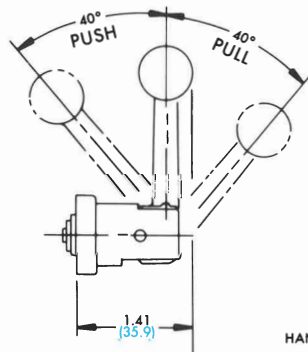
VALVE OPERATORS



001 Spring



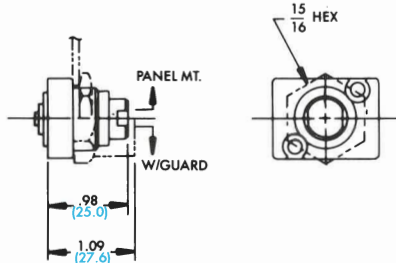
011 Straight Cam Roller Parallel to Ports
012 Straight Cam Roller Perpendicular to Ports



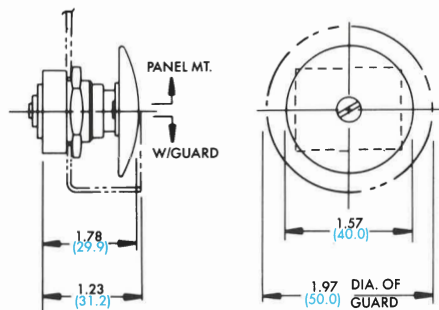
HAND LEVER PERPENDICULAR TO BODY PORTS SHOWN

- 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

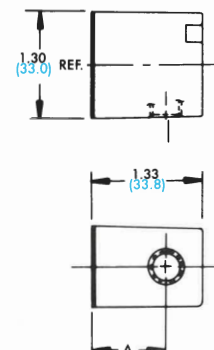
Lever Operators with boot, substitute 2 for 0 in first digit.



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



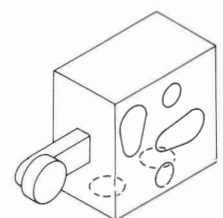
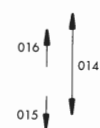
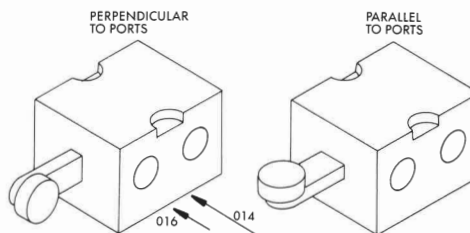
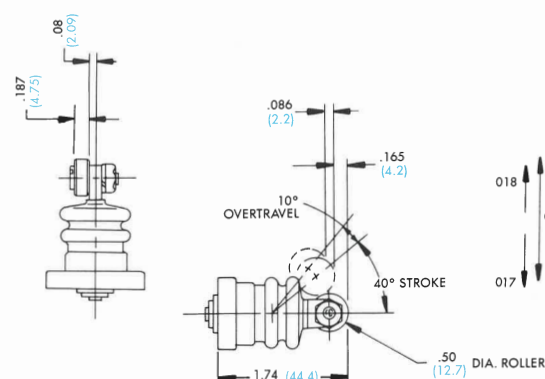
036 Palm Button
037 Palm Button, Panel Mount
038 Palm Button w/Guard



SIZE	DIM. A
1/8 NPTF	
1/8 BSPP	.90 (22.8)
1/8 BSPT	
#10-32 UNF	.97 (24.7)
M5x0.8	

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)

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

<https://mac.nt-rt.ru> || mcp@nt-rt.ru