



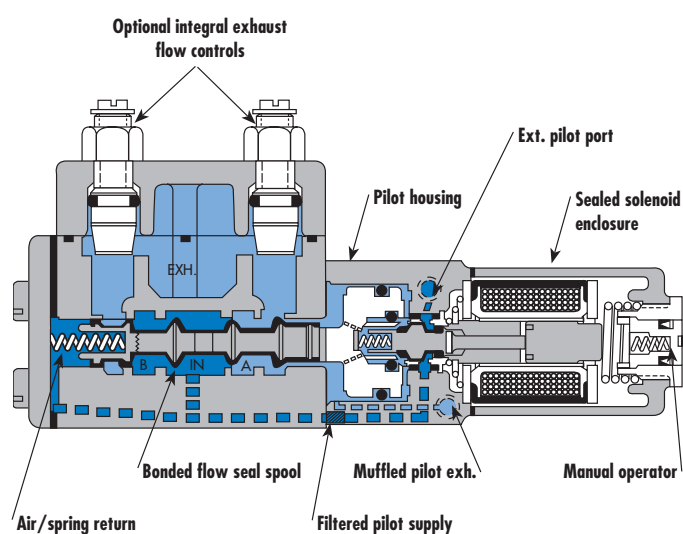
Direct solenoid and solenoid pilot operated valves

Individual mounting

inline

Manifold mounting

stacking



SERIES FEATURES

- The patented MACSOLENOID with its non-burn out feature on AC service.
- Air/spring return for consistent shifting on single solenoid internal pilot valves.
- Use on lube or non-lube service.
- Optional integral adjustable exhaust flow controls with a single common exhaust port.
- Optional low wattage DC solenoids down to 1 watt.
- Various types of manual operators and solenoid enclosures.



VALVE CONFIGURATIONS AVAILABLE

The 700 Series is a compact 4-way valve with a flow of up to 800 NL/min. This series provides fast response, long life and high flow not commonly found in this size valve.

- 2-Pos., single or double operator (solenoid or remote air).
- Individual body or stacking body (2 common ports).
- Integral adjustable exhaust flow control models.
- Internal pilot or external pilot for vacuum to 1.3 bar main valve pressures.
- Manual and mechanical operators available.

SERIES FEATURES-REMOTE AIR PILOT OPERATED VALVES

The remote air versions feature:

- Air/spring return for consistent shifting on single remote air valves for main valve pressures of 1.3 bar or more.
- Optional integral adjustable exhaust flow controls.

SERIES FEATURES-REMOTE AIR PILOT, PILOT OPERATED VALVES

These special air versions have the same features as the remote air pilot operated models, but additionally feature:

- Ability to use a pilot signal pressure different from the main valve pressure. Pilot signal can be from 1.3-10 bar, regardless of main valve pressure.
- A manual operator/position indicator.

SPECIAL APPLICATIONS:

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

- **INTERNAL PILOT**-Utilized for main valve pressures equal to or greater than minimum pilot pressures. Pilot supply is fed to both the pilot valves and the air/spring return from the inlet.
- **EXTERNAL PILOT**-Required for all solenoid pilot operated models when main valve pressures are below 1.3 bar on single operator or 0.7bar on double operator models. Single operators require MOD 158-heavy duty spring. Pipe using either an M5x0.8 or a M5 fitting to the external pilot port. To convert from internal to external pilot, simply rotate pilot housing 180° and install heavy duty spring.
- **VACUUM APPLICATIONS**-Use external pilot models only, without flow controls and connect vacuum source to the exhaust port and leave the inlet open to atmosphere.
- **SELECTOR APPLICATIONS**-Use models without flow controls, connect the higher pressure to the inlet port and lower pressure to the exhaust port.

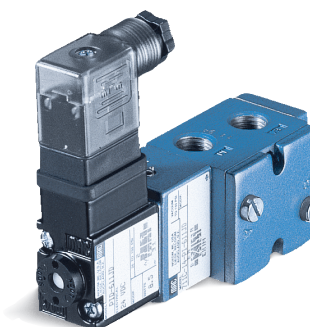


Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow [Max]	Individual mounting
4/2	G1/8" - G1/4"	700 NI/min	inline

OPERATIONAL BENEFITS

1. Balanced spool, immune to variations of pressure.
2. Short stroke with high flow.
3. The piston (booster) provides maximum shifting forces.
4. Powerful return force thanks to the combination of mechanical and air springs.
5. Bonded spool with minimum friction, shifting in a glass-like finished bore.
6. Wiping effect eliminates sticking.
7. Pilot valve with balanced poppet, high flow, short and consistent response times.
8. Long service life.



HOW TO ORDER

Port size	Pilot air	Single operator	Double operator
G1/8"	Internal	711C-13-PI- XXYZZ	721C-13-PI- XXYZZ
G1/4"	Internal	711C-14-PI- XXYZZ	721C-14-PI- XXYZZ
G1/8"	External	711C-13-PE- XXYZZ	721C-13-PE- XXYZZ
G1/4"	External	711C-14-PE- XXYZZ	721C-14-PE- XXYZZ

HOW TO ORDER VALVE WITH FLOW CONTROLS

Port size	Pilot air	Single operator	Double operator
G1/8"	Internal	712C-13-PI- XXYZZ	722C-13-PI- XXYZZ
G1/4"	Internal	712C-14-PI- XXYZZ	722C-14-PI- XXYZZ
G1/8"	External	712C-13-PE- XXYZZ	722C-13-PE- XXYZZ
G1/4"	External	712C-14-PE- XXYZZ	722C-14-PE- XXYZZ

SOLENOID OPERATOR >

XX Y ZZ*

XX Voltage	Y Manual operator	ZZ Electrical connection
11 110V~/50Hz	1 Non-locking	JB Rectangular connector
12 220V~/50Hz	2 Locking	JD Rectangular connector with light
22 24V~/50Hz		JA Square connector
59 24V~/2,5W		JC Square connector with light
87 24V~/17,1W		BA Flying leads (45 cm)
61 24V~/8,5W		

* Other options available, see page 305.

OPTIONS

7XXC-XX-PX-**XXYZZ**

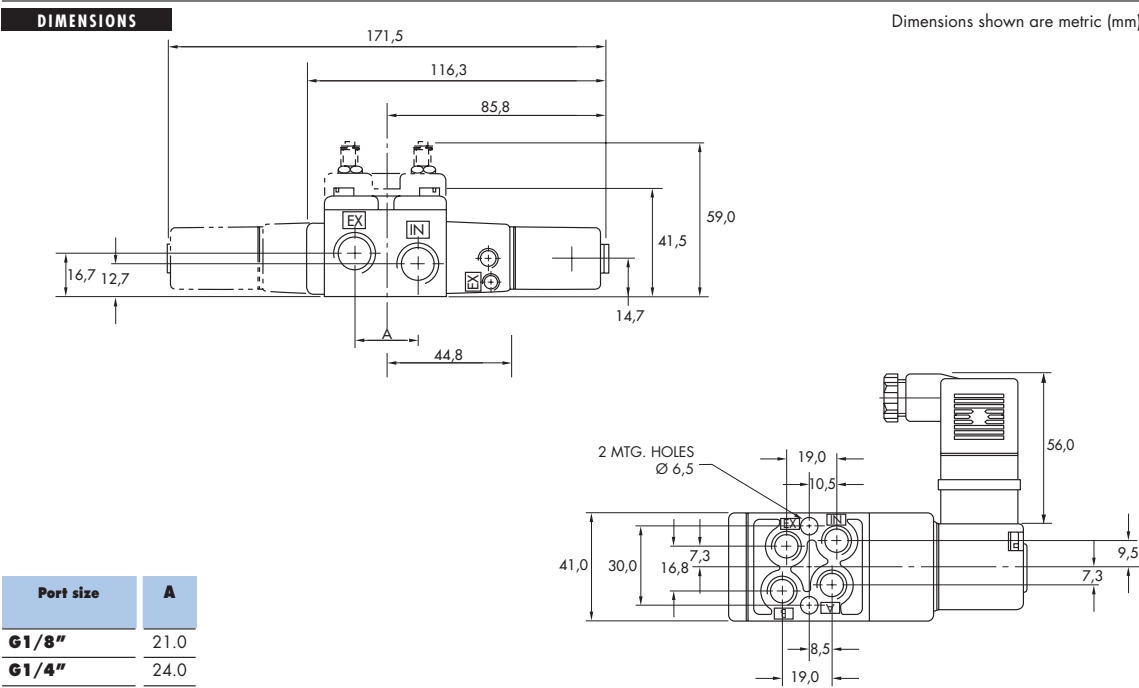
- For bottom ports (G1/8" only) replace by 2.



TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal pilot : single operator : 1.3 to 10 bar double operator : 0.7 to 10 bar External pilot : vacuum to 10 bar
Pilot pressure :	Single operator : 1.3 to 10 bar Double operator : 0.7 to 10 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C to 100°C)
Filtration :	40 µ
Temperature range :	-18°C to 50°C (0°F to 120°F)
Flow (at 6 bar, ΔP=1bar) :	G1/8" : 600 NI/min, G1/4" : 700 NI/min
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Protection :	Consult factory
Power :	~ Inrush : 14.8 VA Holding : 10.9 VA = 1 to 17.1 W
Response times :	24 V= /8.5 W Energize : 6.4 ms De-energize : 8.5ms 50Hz/6 W Energize : 4-10 ms De-energize : 7-13 ms

- Spare parts :
- Solenoid operator (power ≥ 4 W) : D1-XXAA, cover mounting screws 35206 and seal 16234.
 - Pilot valve : PID-XXYZZ, including mounting screws 35214 and seal 16363.
 - Valve cover plate with integral flow controls : N-07002.

- Options :
- NPTF threads.



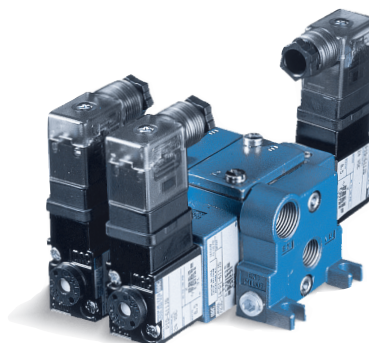


Direct solenoid and solenoid pilot operated valves

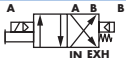
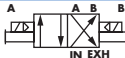
Function	Port size	Flow [Max]	Manifold mounting
4/2	G1/8" - G1/4"	800 NI/min	stacking

OPERATIONAL BENEFITS

1. Balanced spool, immune to variations of pressure.
2. Short stroke with high flow.
3. The piston (booster) provides maximum shifting forces.
4. Powerful return force thanks to the combination of mechanical and air springs.
5. Bonded spool with minimum friction, shifting in a glass-like finished bore.
6. Wiping effect eliminates sticking.
7. Pilot valve with balanced poppet, high flow, short and consistent response times.
8. Long service life.



HOW TO ORDER

Port size	Pilot air	Single operator	Double operator
G1/8"	Internal	 713C-13-PI- XXYZZ	 723C-13-PI- XXYZZ
G1/4"		713C-14-PI- XXYZZ	723C-14-PI- XXYZZ

HOW TO ORDER VALVE WITH FLOW CONTROLS

Port size	Pilot air	Single operator	Double operator
G1/8"	Internal	 714C-13-PI- XXYZZ	 724C-13-PI- XXYZZ
G1/4"		714C-14-PI- XXYZZ	724C-14-PI- XXYZZ

SOLENOID OPERATOR ►

XX Y ZZ*

XX Voltage	Y Manual operator	ZZ Electrical connection
11 110V~/50Hz	1 Non-locking	JB Rectangular connector
12 220V~/50Hz	2 Locking	JD Rectangular connector with light
22 24V~/50Hz		JA Square connector
59 24V~/2,5W		JC Square connector with light
87 24V~/17,1W		BA Flying leads (45 cm)
61 24V~/8,5W		

* Other options available, see page 305.

End plate kit required (Port size G1/4") : M-07001-01-01P (internal pilot).
M-07001-02-01P (external pilot).



100%
OF
PRODUCTION
TESTED
100%

WARRANTY
18
MONTHS

TECHNICAL DATA

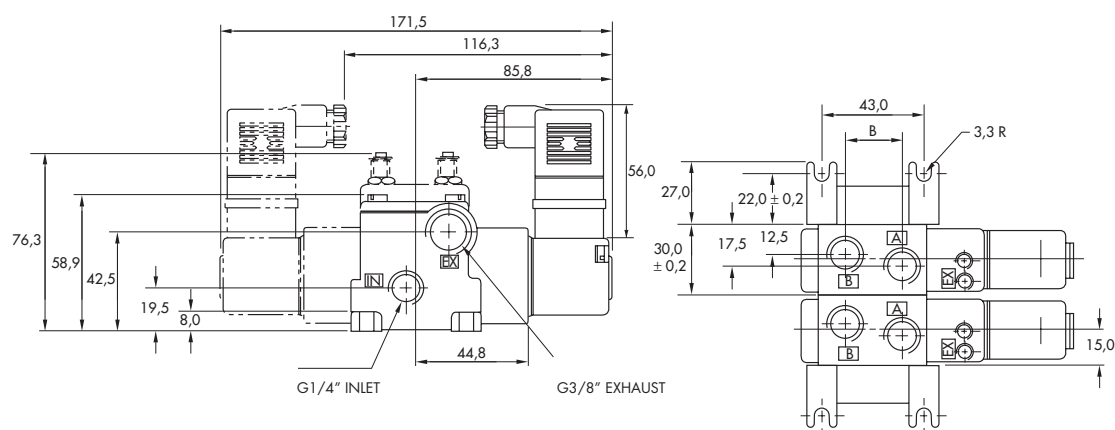
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal pilot : single operator : 1.3 to 10 bar double operator : 0.7 to 10 bar External pilot : vacuum to 10 bar
Pilot pressure :	Single operator : 1.3 to 10 bar Double operator : 0.7 to 10 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C to 100°C)
Filtration :	40 µ
Temperature range :	-18°C to 50°C (0°F to 120°F)
Flow (at 6 bar, ΔP=1bar) :	G1/8" : 700 NI/min, G1/4" : 800 NI/min
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Protection :	Consult factory
Power :	~ Inrush : 14.8 VA Holding : 10.9 VA = 1 to 17.1 W
Response times :	24 V=/8.5 W Energize : 6.4 ms De-energize : 8.5 ms 50Hz/6 W Energize : 4-10 ms De-energize : 7-13 ms

- Spare parts :
- Solenoid operator (power ≥ 4 W) : D1-XXAA, cover mounting screws 35206 and seal 16234.
 - Pilot valve : PID-XXYZZ, including mounting screws 35214 and seal 16363.
 - Valve cover plate with integral flow controls : N-07004. • Inlet & exhaust isolator : N-07005. • Inlet isolator : N-07006.
 - Exhaust isolator : N-07007.

- Options :
- NPTF threads.

DIMENSIONS

Dimensions shown are metric (mm)



Port size	B
G1/8"	21.0
G1/4"	24.0

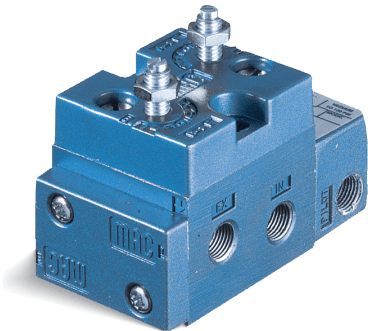


R e m o t e a i r v a l v e s

Function	Port size	Flow (Max)	Individual mounting
4/2	G1/8" - G1/4"	700 NI/min	Inline

OPERATIONAL BENEFITS

1. Balanced spool, immune to variations of pressure.
2. Short stroke with high flow.
3. The piston (booster) provides maximum shifting forces.
4. Powerful return thanks to the combination of mechanical and air springs.
5. Bonded spool with minimum friction, shifting in a glass-like finished bore.
6. Wiping effect eliminates sticking.
7. Low leakage rate.



HOW TO ORDER

Port size	Single operator	Double operator
G1/8"	711C-13-RA	721C-13-RA
G1/4"	711C-14-RA	721C-14-RA

HOW TO ORDER VALVE WITH FLOW CONTROLS

Port size	Single operator	Double operator
G1/8"	712C-13-RA	722C-13-RA
G1/4"	712C-14-RA	722C-14-RA

Air pilot port : G1/8".

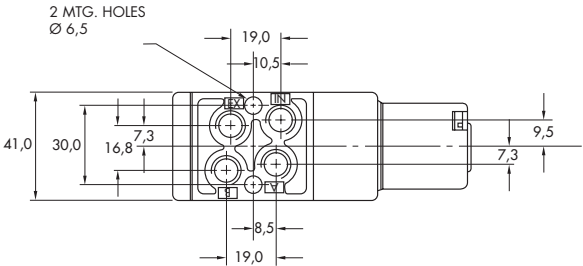
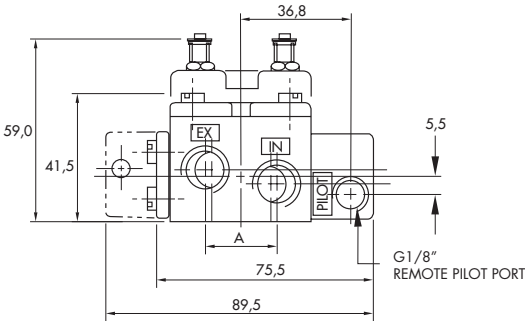


TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 10 bar
Air signal pressure :	Single operator : 1.3 to 10 bar ≥ main valve pressure Double operator : 0.7 to 10 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C to 100°C)
Filtration :	40 µ
Temperature range :	-18°C to 50°C (0°F to 120°F)
Flow (at 6 bar, ΔP=1bar) :	G1/8" : 600 NI/min, G1/4" : 700 NI/min

- Spare parts :
- Remote air operator : R-07002.
 - Valve cover plate with integral flow controls : N-07002.
- Options :
- NPTF threads.

DIMENSIONS

Dimensions shown are metric (mm)



PORT SIZE	A
G1/8"	21.0
G1/4"	24.0

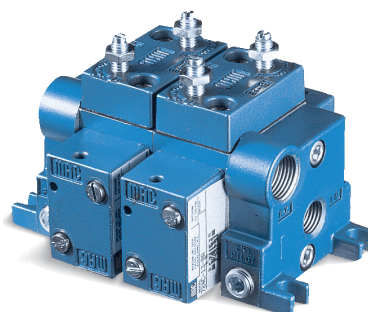


R e m o t e a i r v a l v e s

Function	Port size	Flow (Max)	Manifold mounting
4/2	G1/8" - G1/4"	800 NI/min	stacking

OPERATIONAL BENEFITS

1. Balanced spool, immune to variations of pressure.
2. Short stroke with high flow.
3. The piston (booster) provides maximum shifting forces.
4. Powerful return thanks to the combination of mechanical and air springs.
5. Bonded spool with minimum friction, shifting in a glass-like finished bore.
6. Wiping effect eliminates sticking.
7. Low leakage rate.



HOW TO ORDER

Port size	Single operator	Double operator
G1/8"	713C-13-RA	723C-13-RA
G1/4"	713C-14-RA	723C-14-RA

HOW TO ORDER VALVE WITH FLOW CONTROLS

Port size	Single operator	Double operator
G1/8"	714C-13-RA	724C-13-RA
G1/4"	714C-14-RA	724C-14-RA

End plate kit (Port size G1/4") : M-07001-01-01P, internal pilot.
M-07001-02-01P, external pilot.

Air pilot port : G1/8".



TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 10 bar
Air signal pressure :	Single operator : 1.3 to 10 bar $\geq$ main valve pressure Double operator : 0.7 to 10 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C to 100°C)
Filtration :	40 μ
Temperature range :	-18°C to 50°C (0°F to 120°F)
Flow (at 6 bar, $\Delta P=1$ bar) :	G1/8" : 700 NI/min, G1/4" : 800 NI/min

- Spare parts :
- Remote air operator : R-07002. • Valve cover plate with integral flow controls : N-07004.
 - Pressure seal between valves : 16368. • Tie-rod (x2) : 19674.
- Options :
- NPTF threads.

DIMENSIONS

Dimensions shown are metric (mm)

