

Individual mounting

sub-base non "plug-in"	sub-base "plug-in"
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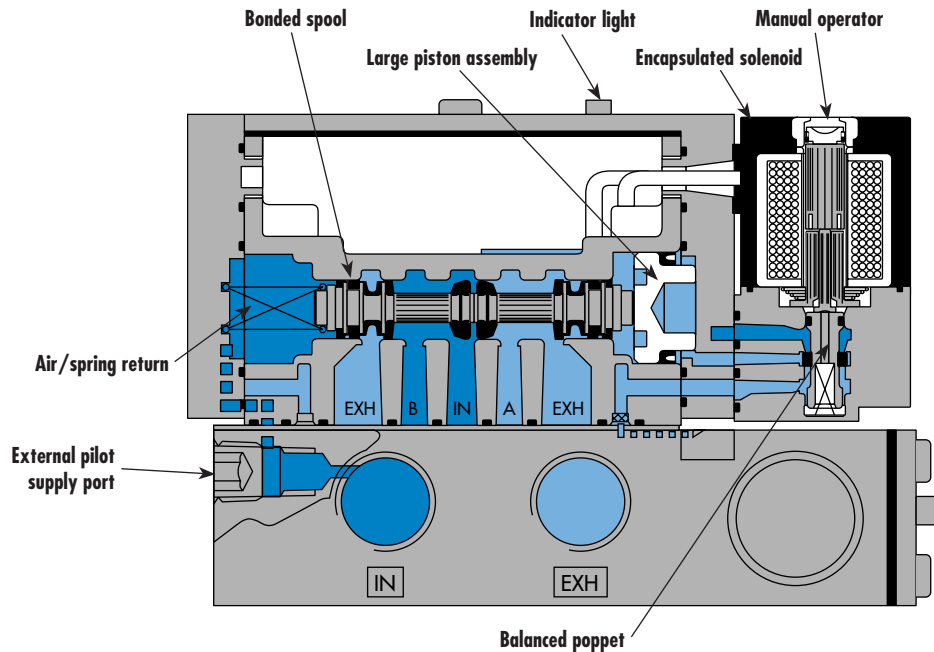
Series

Manifold mounting

sub-base non "plug-in"	sub-base "plug-in"
------------------------	--------------------

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100



200

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700

900

82

**SERIES FEATURES**

- Unique patented MACSOLENOID® for fastest possible response times.
- Balanced poppet pilot valve for high flow, precise repeatability, and consistent operation.
- Large spool piston for maximum shifting force even at minimum operating pressure.
- Air/spring return for consistent shifting on single solenoid models.
- MAC spool and bore combination for wiping away contamination, eliminating sticking, and use on non-lube service.
- Patented virtually burn-out proof AC solenoid.
- Plug-in design of valves, bases, flow controls, and regulators for modular assembly and ease of maintenance.
- Optional low wattage DC solenoids down to 1.8 watts.
- Indicator lights in valve body or base and non-plug-in models available.
- Very high flow in a very compact package.

6300

6500

6600

1300

800

ISO 1

ISO 2

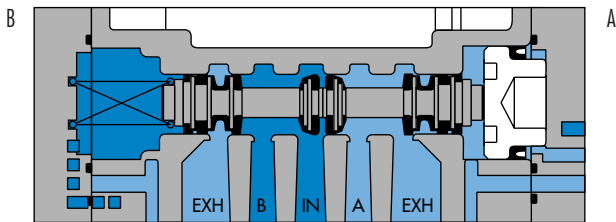
ISO 3

MAC 125A

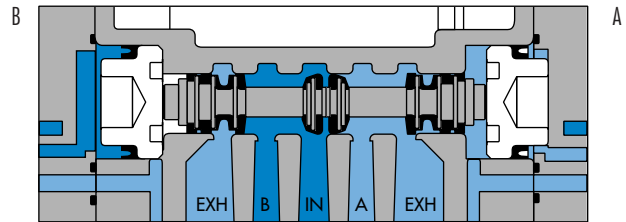
MAC 250A

MAC 500A

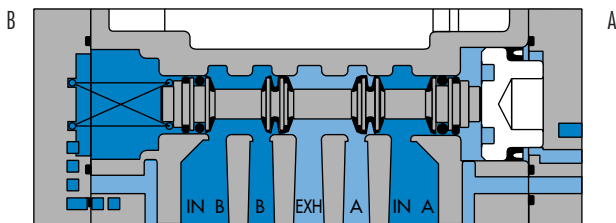
**SPOOL CONFIGURATIONS**



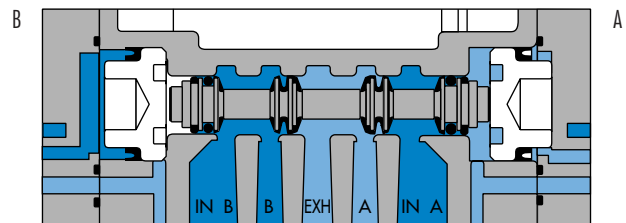
SINGLE OPERATOR  
SINGLE INLET - DUAL EXHAUST  
SHOWN WITH "B" OPERATOR ENERGIZED



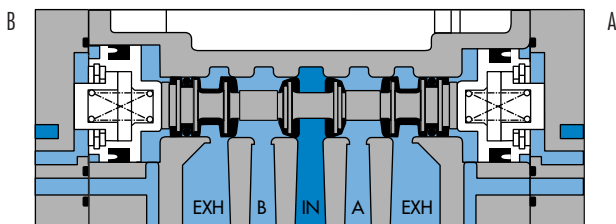
DOUBLE OPERATOR  
SINGLE INLET - DUAL EXHAUST  
SHOWN WITH "B" OPERATOR ENERGIZED



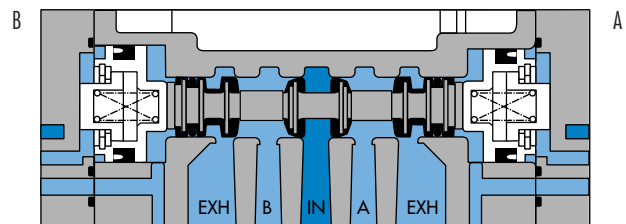
SINGLE OPERATOR  
DUAL INLET - SINGLE EXHAUST  
SHOWN WITH "B" OPERATOR ENERGIZED



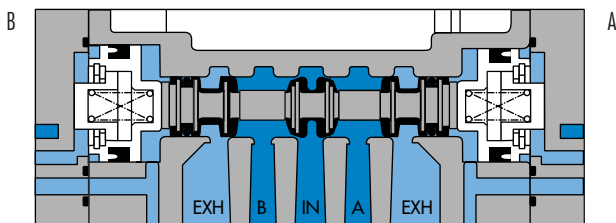
DOUBLE OPERATOR  
DUAL INLET - SINGLE EXHAUST  
SHOWN WITH "B" OPERATOR ENERGIZED



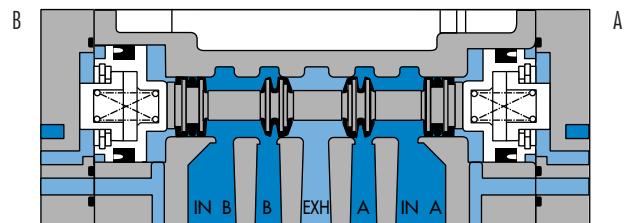
3 POSITION CLOSED CENTER



3 POSITION OPEN CENTER



3 POSITION SINGLE PRESSURE  
PRESSURE CENTER



3 POSITION DUAL PRESSURE  
PRESSURE CENTER

Function	Port size	Flow [Max]	Individual mounting	Series
<b>4/2 - 4/3</b>	<b>1/8" - 1/4" - 3/8"</b>	<b>1.35 C<sub>v</sub></b>	sub-base non "plug-in"	

### OPERATIONAL BENEFITS

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



35  
100  
200  
55  
56  
57  
58  
59

### HOW TO ORDER

Port size	Pilot air	4/2 Single operator	4/2 Double operator	4/3 Closed center	4/3 Open center	4/3 Pressure center
<b>Valve less base</b>		82A-AB-000-TM-Dxxx-xxx	82A-BB-000-TM-Dxxx-xxx	82A-EB-000-TM-Dxxx-xxx	82A-FB-000-TM-Dxxx-xxx	82A-GB-000-TM-Dxxx-xxx
<b>sub-base</b>	Internal	82A-AB-AAA-TM-Dxxx-xxx	82A-BB-AAA-TM-Dxxx-xxx	82A-EB-AAA-TM-Dxxx-xxx	82A-FB-AAA-TM-Dxxx-xxx	82A-GB-AAA-TM-Dxxx-xxx
<b>1/8" NPTF</b>	External	82A-AB-AAD-TM-Dxxx-xxx	82A-BB-AAD-TM-Dxxx-xxx	82A-EB-AAD-TM-Dxxx-xxx	82A-FB-AAD-TM-Dxxx-xxx	82A-GB-AAD-TM-Dxxx-xxx
<b>sub-base</b>	Internal	82A-AB-BAA-TM-Dxxx-xxx	82A-BB-BAA-TM-Dxxx-xxx	82A-EB-BAA-TM-Dxxx-xxx	82A-FB-BAA-TM-Dxxx-xxx	82A-GB-BAA-TM-Dxxx-xxx
<b>1/4" NPTF</b>	External	82A-AB-BAD-TM-Dxxx-xxx	82A-BB-BAD-TM-Dxxx-xxx	82A-EB-BAD-TM-Dxxx-xxx	82A-FB-BAD-TM-Dxxx-xxx	82A-GB-BAD-TM-Dxxx-xxx
<b>sub-base</b>	Internal	82A-AB-CAA-TM-Dxxx-xxx	82A-BB-CAA-TM-Dxxx-xxx	82A-EB-CAA-TM-Dxxx-xxx	82A-FB-CAA-TM-Dxxx-xxx	82A-GB-CAA-TM-Dxxx-xxx
<b>3/8" NPTF</b>	External	82A-AB-CAD-TM-Dxxx-xxx	82A-BB-CAD-TM-Dxxx-xxx	82A-EB-CAD-TM-Dxxx-xxx	82A-FB-CAD-TM-Dxxx-xxx	82A-GB-CAD-TM-Dxxx-xxx

45  
700  
900

### SOLENOID OPERATOR ▶

D **XX X- X XX**\*

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<b>AA</b> 120/60, 110/50	<b>A</b> 18" (Flying leads)	<b>1</b> Non-locking	<b>KA</b> Square connector
<b>AB</b> 240/60, 220/50	<b>J</b> Connector	<b>2</b> Locking	<b>KD</b> Square connector with light
<b>AC</b> 24/60, 24/50			<b>JB</b> Rectangular connector
<b>FB</b> 24 VDC (1.8 W)			<b>JD</b> Rectangular connector with light
<b>DA</b> 24 VDC (5.4 W)			<b>BA</b> Flying leads
<b>DF</b> 24 VDC (12.7 W)			

Note : KD connector shown in photo.

\* Other options available, see page 361.

### OPTIONS

82A-AB-000-TM-Dxxx-xxx

- For dual pressure valves, replace A by C, B by D, E by M, F by L, G by H. (Requires sandwich regulator, see pressure regulator section.)

82A-AB-000-TM-Dxxx-xxx

- TP (Piped pilot exhaust)
- For pilot exhaust out main exhaust, replace B by E. Also, TM pilot body is replaced by TU pilot body. - Main exhaust cannot be restricted. Available only on single pressure valves.

82A-XX-BAA-TM-Dxxx-xxx

- Replace A by B for bottom ports (1/8" or 1/4" only)
- Replace A by C for side and bottom ports (1/8" or 1/4" only)

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6300  
6500  
6600  
1300  
800  
ISO 1  
ISO 2  
ISO 3  
MAC 125A  
MAC 250A  
MAC 500A

### TECHNICAL DATA

<b>Fluid :</b>	Compressed air, vacuum, inert gases		
<b>Pressure range :</b>	Internal pilot : single operator and 3 positions : 25-150 PSI	double operator : 10-150 PSI	
	External pilot : vacuum to 150 PSI		
<b>Pilot pressure :</b>	Single operator and 3 positions : 25-150 PSI Double operator : 10-150 PSI		
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
<b>Filtration :</b>	40 µ		
<b>Temperature range :</b>	0°F to 120°F (-18°C to 50°C)		
<b>Flow (at 6 bar, ΔP=1bar) :</b>	1/8" : (0.9 C <sub>v</sub> ), 1/4" : (1.3 C <sub>v</sub> ), 3/8" : (1.35 C <sub>v</sub> )		
<b>Leak rate :</b>	100 cm <sup>3</sup> /min		
<b>Coil :</b>	Epoxy encapsulated - class A wires - Continuous duty.		
<b>Voltage range :</b>	-15% to +10% of nominal voltage		
<b>Protection :</b>	Consult factory		
<b>Power :</b>	- Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
<b>Response times :</b>	24 VDC (5.4 W)	Energize : 9 ms	De-energize : 6 ms
	120/60	Energize : 5-12 ms	De-energize : 6-13 ms

### Spare parts :

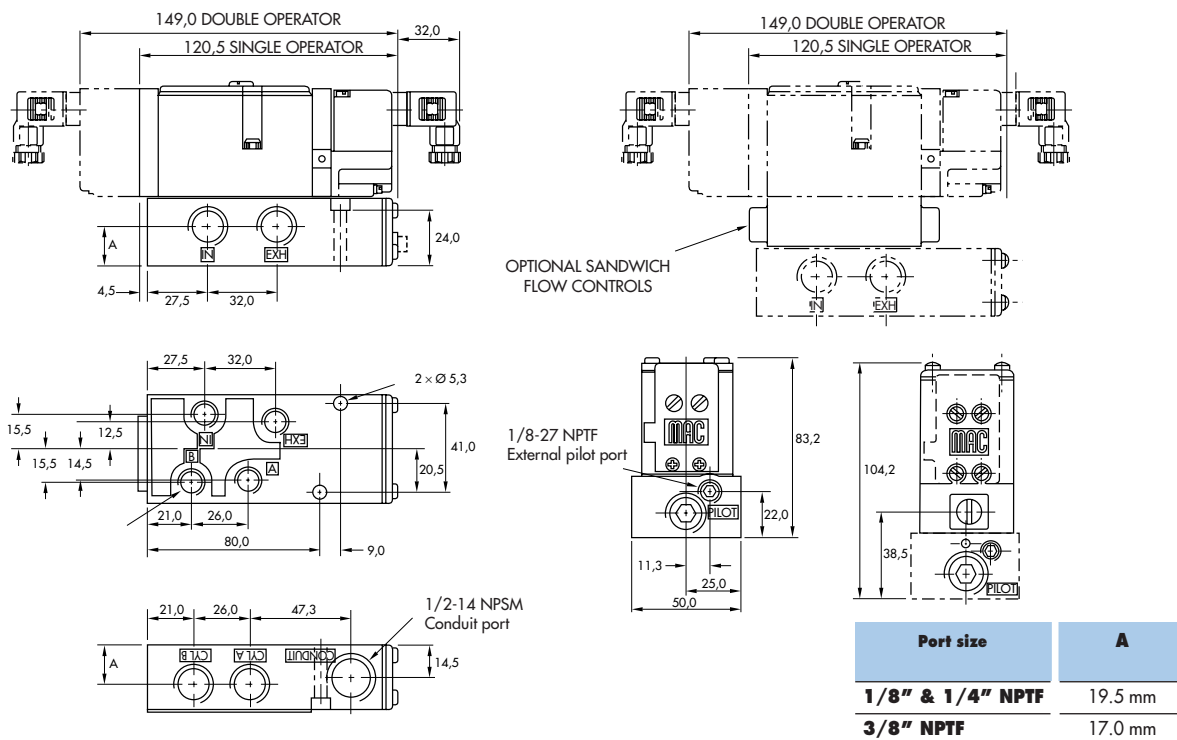
- Solenoid operator (power ≥ 5.4 W) : DXXX-XXX, including mounting screws 35013.
- Seal between solenoid and pilot body : 16402. • Pilot valve : TM-DXXX-XXX, including seal 16447.
- Mounting screw pilot to main valve : 35023. • Pressure seal between valve and base : 16446.
- Mounting screw valve to base (x2) : 35211.

### Options :

- BSPP threads. • Flow controls (Part N°. FC82A-BA) • Explosion-proof model.

### DIMENSIONS

Dimensions shown are metric (mm)



Function	Port size	Flow [Max]	Individual mounting	Series
<b>4/2 - 4/3</b>	<b>1/8" - 1/4" - 3/8"</b>	<b>1.35 C<sub>v</sub></b>	sub-base "plug-in"	

### OPERATIONAL BENEFITS

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



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200  
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### HOW TO ORDER

Port size	Pilot air	4/2 Single operator	4/2 Double operator	4/3 Closed center	4/3 Open center	4/3 Pressure center
<b>Valve less base</b>		82A-AA-000-TM-DxxP-xDA	82A-BA-000-TM-DxxP-xDA	82A-EA-000-TM-DxxP-xDA	82A-FA-000-TM-DxxP-xDA	82A-GA-000-TM-DxxP-xDA
<b>sub-base</b>	Internal	82A-AA-AAA-TM-DxxP-xDA	82A-BA-AAA-TM-DxxP-xDA	82A-EA-AAA-TM-DxxP-xDA	82A-FA-AAA-TM-DxxP-xDA	82A-GA-AAA-TM-DxxP-xDA
<b>1/8" NPTF</b>	External	82A-AA-AAD-TM-DxxP-xDA	82A-BA-AAD-TM-DxxP-xDA	82A-EA-AAD-TM-DxxP-xDA	82A-FA-AAD-TM-DxxP-xDA	82A-GA-AAD-TM-DxxP-xDA
<b>sub-base</b>	Internal	82A-AA-BAA-TM-DxxP-xDA	82A-BA-BAA-TM-DxxP-xDA	82A-EA-BAA-TM-DxxP-xDA	82A-FA-BAA-TM-DxxP-xDA	82A-GA-BAA-TM-DxxP-xDA
<b>1/4" NPTF</b>	External	82A-AA-BAD-TM-DxxP-xDA	82A-BA-BAD-TM-DxxP-xDA	82A-EA-BAD-TM-DxxP-xDA	82A-FA-BAD-TM-DxxP-xDA	82A-GA-BAD-TM-DxxP-xDA
<b>sub-base</b>	Internal	82A-AA-CAA-TM-DxxP-xDA	82A-BA-CAA-TM-DxxP-xDA	82A-EA-CAA-TM-DxxP-xDA	82A-FA-CAA-TM-DxxP-xDA	82A-GA-CAA-TM-DxxP-xDA
<b>3/8" NPTF</b>	External	82A-AA-CAD-TM-DxxP-xDA	82A-BA-CAD-TM-DxxP-xDA	82A-EA-CAD-TM-DxxP-xDA	82A-FA-CAD-TM-DxxP-xDA	82A-GA-CAD-TM-DxxP-xDA

45  
700  
900

### SOLENOID OPERATOR ▶

D **XX** P- **X** DA\*

<b>XX Voltage</b>	<b>X Manual operator</b>
<b>AA</b> 120/60, 110/50	<b>1</b> Non-locking
<b>AB</b> 240/60, 220/50	<b>2</b> Locking
<b>AC</b> 24/60, 24/50	
<b>FB</b> 24 VDC (1.8 W)	
<b>DA</b> 24 VDC (5.4 W)	
<b>DF</b> 24 VDC (12.7 W)	

82

\* Other options available, see page 361.

### OPTIONS

82A-AA-000-TM-DxxP-xDA

- For light in body replace A by C.
- For pilot exhaust out main exhaust replace A by D. For light replace A by F. Use TU pilot body for pilot exhaust to main exhaust, main exhaust cannot be restricted (NO flow controls) available with single pressure valve only. TU replaces TM.
- For piped pilot exhaust replace TM by TP.
- For dual pressure valves, replace A by C, B by D, E by M, F by L, G by H. (Requires sandwich regulator - see pressure regulator section)

82A-AA-BAA-TM-DxxP-xDA

- Replace A by B for bottom ports (1/8" or 1/4" only)
- Replace A by C for side and bottom ports (1/8" or 1/4" only)

6300  
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800  
ISO 1  
ISO 2  
ISO 3  
MAC 125A  
MAC 250A  
MAC 500A

### TECHNICAL DATA

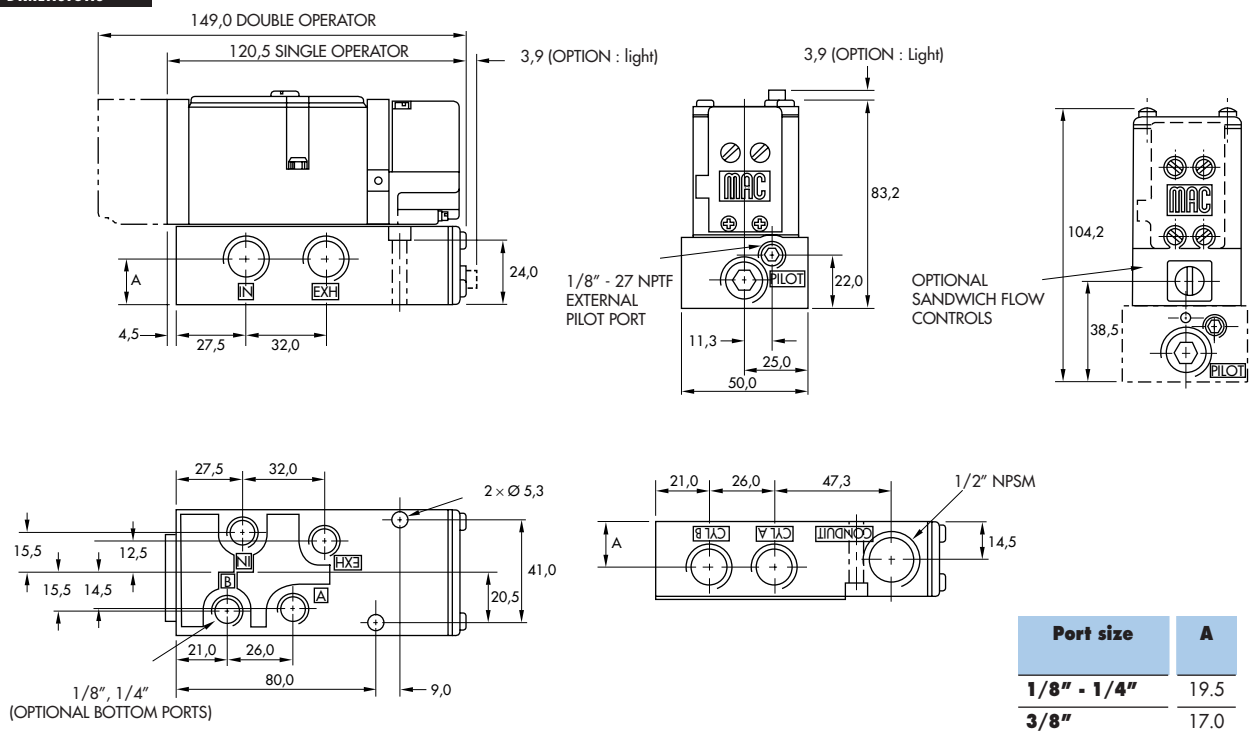
<b>Fluid :</b>	Compressed air, vacuum, inert gases		
<b>Pressure range :</b>	Internal pilot : single operator and 3 positions : 25-150 PSI	double operator : 10-150 PSI	
	External pilot : vacuum to 150 PSI		
<b>Pilot pressure :</b>	Single operator and 3 positions : 25-150 PSI Double operator : 10-150 PSI		
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
<b>Filtration :</b>	40 µ		
<b>Temperature range :</b>	0°F to 120°F (-18°C to 50°C)		
<b>Flow (at 6 bar, ΔP=1bar) :</b>	1/8" : (0.9 C <sub>v</sub> ), 1/4" (1.3 C <sub>v</sub> ), 3/8" : (1.35 C <sub>v</sub> )		
<b>Leak rate :</b>	100 cm <sup>3</sup> /min		
<b>Coil :</b>	Epoxy encapsulated - class A wires - Continuous duty.		
<b>Voltage range :</b>	-15% to +10% of nominal voltage		
<b>Protection :</b>	Consult factory		
<b>Power :</b>	- Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
<b>Response times :</b>	24 VDC (5.4 W)	Energize : 9 ms	De-energize : 6 ms
	120/60	Energize : 5-12 ms	De-energize : 6-13 ms

Spare parts : • Solenoid operator (power ≥ 5.4 W) : DXXP-XDA, including mounting screws 35013. • Seal between solenoid and pilot body : 16402.  
 • Pilot valve : TM-DXXP-XDA, including seal 16447. • Mounting screw pilot to main valve : 35023. • Pressure seal between valve and base : 16446.  
 • Mounting screw valve to base (x2) : 35211.

Options : • BSPP threads. • Flow controls (Part N°. FC82A-AA) • Explosion-proof model. • Lights in base.

### DIMENSIONS

Dimensions shown are metric (mm)



Function	Port size	Flow [Max]	Manifold mounting	Series
<b>4/2 - 4/3</b>	<b>1/4" - 3/8"</b>	<b>1.35 C<sub>v</sub></b>	sub-base non "plug-in"	

### OPERATIONAL BENEFITS

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



35  
100  
200  
55  
56  
57  
58  
59

### HOW TO ORDER

Port size	Pilot air	4/2 Single operator	4/2 Double operator	4/3 Closed center	4/3 Open center	4/3 Pressure center
<b>Valve less base</b>		82A-AB-000-TM-Dxxx-xxx	82A-BB-000-TM-Dxxx-xxx	82A-EB-000-TM-Dxxx-xxx	82A-FB-000-TM-Dxxx-xxx	82A-GB-000-TM-Dxxx-xxx
<b>sub-base</b>	Internal	82A-AB-BKA-TM-Dxxx-xxx	82A-BB-BKA-TM-Dxxx-xxx	82A-EB-BKA-TM-Dxxx-xxx	82A-FB-BKA-TM-Dxxx-xxx	82A-GB-BKA-TM-Dxxx-xxx
<b>1/4" NPTF</b>	External	82A-AB-BKD-TM-Dxxx-xxx	82A-BB-BKD-TM-Dxxx-xxx	82A-EB-BKD-TM-Dxxx-xxx	82A-FB-BKD-TM-Dxxx-xxx	82A-GB-BKD-TM-Dxxx-xxx
<b>sub-base</b>	Internal	82A-AB-CKA-TM-Dxxx-xxx	82A-BB-CKA-TM-Dxxx-xxx	82A-EB-CKA-TM-Dxxx-xxx	82A-FB-CKA-TM-Dxxx-xxx	82A-GB-CKA-TM-Dxxx-xxx
<b>3/8" NPTF</b>	External	82A-AB-CKD-TM-Dxxx-xxx	82A-BB-CKD-TM-Dxxx-xxx	82A-EB-CKD-TM-Dxxx-xxx	82A-FB-CKD-TM-Dxxx-xxx	82A-GB-CKD-TM-Dxxx-xxx

45

### SOLENOID OPERATOR ▶

D **XX X - X XX\***

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<b>AA</b> 120/60, 110/50	<b>A</b> 18" (Flying leads)	<b>1</b> Non-locking	<b>KA</b> Square connector
<b>AB</b> 240/60, 220/50	<b>J</b> Connector	<b>2</b> Locking	<b>KD</b> Square connector with light
<b>AC</b> 24/60, 24/50			<b>JB</b> Rectangular connector
<b>FB</b> 24 VDC (1.8 W)			<b>JD</b> Rectangular connector with light
<b>DA</b> 24 VDC (5.4 W)			<b>BA</b> Flying leads
<b>DF</b> 24 VDC (12.7 W)			

\* Other options available, see page 361.

Note : KD connector shown in photo.

700  
900  
82

### OPTIONS

#### 82A-AB-000-TM-Dxxx-xxx

- For pilot exhaust out main exhaust replace B by E. Also, TM pilot body is replaced by TU pilot body. Main exhaust cannot be restricted (No flow controls) available with single pressure valve only.
- For piped pilot exhaust replace TM by TP.
- For dual pressure valves, replace A by C, B by D, E by M, F by L, G by H. (Requires sandwich regulator - see pressure regulator section)

#### 82A-XX-BKA-TM-Dxxx-xxx

- Replace K by L for bottom cyl. ports
- Replace K by M for bottom inlet port
- Replace K by N for bottom inlet and cyl. ports
- Replace K by P for bottom and end cyl. ports
- Replace K by R for bottom and end cyl. ports w/bottom inlet
- Replace K by S for selector base with side ports

6300  
6500  
6600  
1300  
800  
ISO 1  
ISO 2  
ISO 3  
MAC 125A  
MAC 250A  
MAC 500A

### TECHNICAL DATA

<b>Fluid :</b>	Compressed air, vacuum, inert gases	
<b>Pressure range :</b>	Internal pilot : single operator and 3 positions : 25-150 PSI	double operator : 10-150 PSI
	External pilot : vacuum to 150 PSI	
<b>Pilot pressure :</b>	Single operator and 3 positions : 25-150 PSI Double operator : 10-150 PSI	
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)	
<b>Filtration :</b>	40 μ	
<b>Temperature range :</b>	0°F to 120°F (-18°C to 50°C)	
<b>Flow (at 6 bar, ΔP=1bar) :</b>	1/4" (1.3 C <sub>v</sub> ), 3/8" : (1.35 C <sub>v</sub> )	
<b>Leak rate :</b>	100 cm <sup>3</sup> /min	
<b>Coil :</b>	Epoxy encapsulated - class A wires - Continuous duty.	
<b>Voltage range :</b>	-15% to +10% of nominal voltage	
<b>Protection :</b>	Consult factory	
<b>Power :</b>	- Inrush : 10.9 VA Holding : 7.7 VA = 1.8 to 12.7 W	
<b>Response times :</b>	24 VDC (5.4 W)	Energize : 9 ms De-energize : 6 ms
	120/60	Energize : 5-12 ms De-energize : 6-13 ms

#### Spare parts :

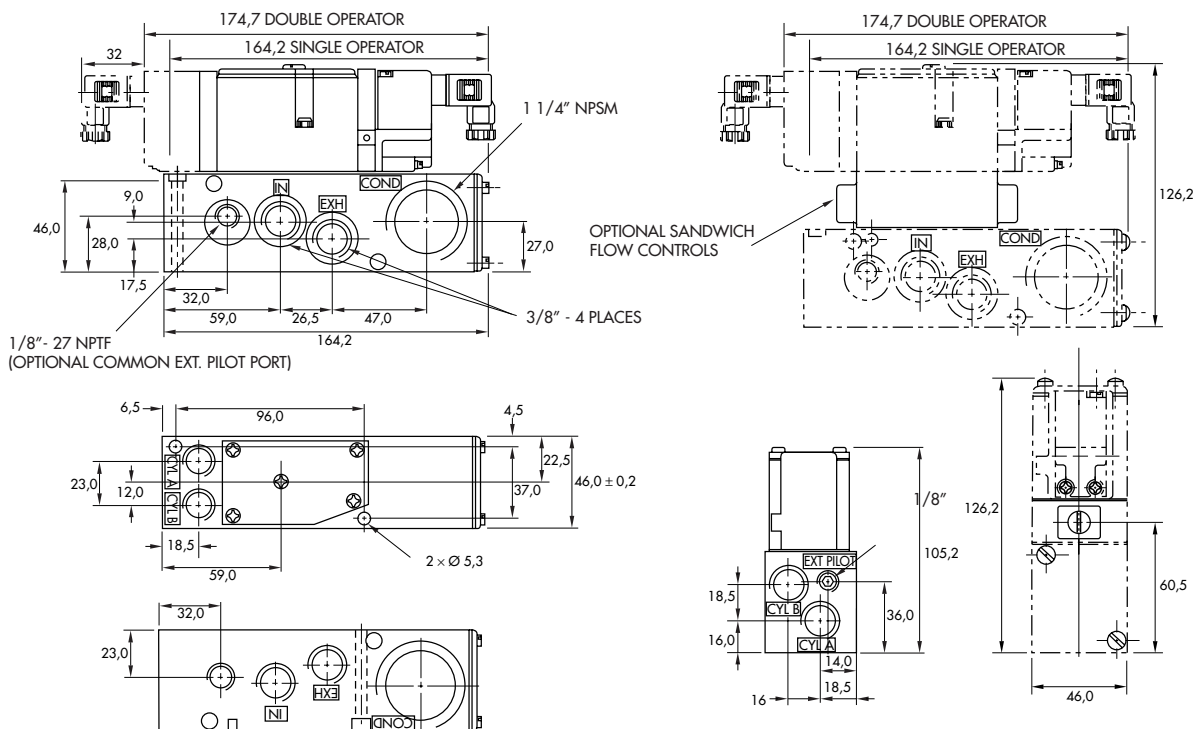
- Solenoid operator (power ≥ 5.4 W) : DXXX-XXX, including mounting screws 35013.
- Seal between solenoid and pilot body : 16402. • Pilot valve : TM-DXXX-XXX, including seal 16447.
- Mounting screw pilot to main valve : 35023. • Pressure seal between valve and base : 16446.
- Mounting screw valve to base (x2) : 35211. • Tie-rod (x2) : 19731. • Fastening kit : N-82005-01.

#### Options :

- BSPP threads. • Flow controls (Part N°. FC82A-BA) • Explosion-proof model.

### DIMENSIONS

Dimensions shown are metric (mm)



Function	Port size	Flow [Max]	Manifold mounting	Series
<b>4/2 - 4/3</b>	<b>1/4" - 3/8"</b>	<b>1.35 C<sub>v</sub></b>	sub-base "plug-in"	

### OPERATIONAL BENEFITS

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



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100

200

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700

900

82

6300

6500

6600

1300

800

ISO 1

ISO 2

ISO 3

MAC 125A

MAC 250A

MAC 500A

### HOW TO ORDER

Port size	Pilot air	4/2 Single operator	4/2 Double operator	4/3 Closed center	4/3 Open center	4/3 Pressure center
<b>Valve less base</b>		82A-AA-000-TM-DxxP-xDA	82A-BA-000-TM-DxxP-xDA	82A-EA-000-TM-DxxP-xDA	82A-FA-000-TM-DxxP-xDA	82A-GA-000-TM-DxxP-xDA
<b>sub-base</b>	Internal	82A-AA-BKA-TM-DxxP-xDA	82A-BA-BKA-TM-DxxP-xDA	82A-EA-BKA-TM-DxxP-xDA	82A-FA-BKA-TM-DxxP-xDA	82A-GA-BKA-TM-DxxP-xDA
<b>1/4" NPTF</b>	External	82A-AA-BKD-TM-DxxP-xDA	82A-BA-BKD-TM-DxxP-xDA	82A-EA-BKD-TM-DxxP-xDA	82A-FA-BKD-TM-DxxP-xDA	82A-GA-BKD-TM-DxxP-xDA
<b>sub-base</b>	Internal	82A-AA-CKA-TM-DxxP-xDA	82A-BA-CKA-TM-DxxP-xDA	82A-EA-CKA-TM-DxxP-xDA	82A-FA-CKA-TM-DxxP-xDA	82A-GA-CKA-TM-DxxP-xDA
<b>3/8" NPTF</b>	External	82A-AA-CKD-TM-DxxP-xDA	82A-BA-CKD-TM-DxxP-xDA	82A-EA-CKD-TM-DxxP-xDA	82A-FA-CKD-TM-DxxP-xDA	82A-GA-CKD-TM-DxxP-xDA

### SOLENOID OPERATOR ▶

D **XX** P- **X** DA\*

<b>XX Voltage</b>	<b>X Manual operator</b>
<b>AA</b> 120/60, 110/50	<b>1</b> Non-locking
<b>AB</b> 240/60, 220/50	<b>2</b> Locking
<b>AC</b> 24/60, 24/50	
<b>FB</b> 24 VDC (1.8 W)	
<b>DA</b> 24 VDC (5.4 W)	
<b>DF</b> 24 VDC (12.7 W)	

\* Other options available, see page 361.

### OPTIONS

#### 82A-AA-000-TM-DxxP-xDA

- For light in body replace A by C.
- For pilot exhaust out main exhaust replace A by D. For light replace A by F. Use TU pilot body for pilot exhaust to main exhaust, main exhaust cannot be restricted (No flow controls) available with single pressure valve only. TU replaces TM.
- For piped pilot exhaust replace TM by TP.
- For dual pressure valves, replace A by C, B by D, E by M, F by L, G by H. (Requires sandwich regulator - see pressure regulator section)

#### 82A-XX-BKA-TM-DxxP-xDA

- Replace K by L for bottom cyl. ports
- Replace K by M for bottom inlet port
- Replace K by N for bottom inlet and cyl. ports
- Replace K by P for bottom and end cyl. ports
- Replace K by R for bottom and end cyl. ports w/bottom inlet
- Replace K by S for selector base with side ports

### TECHNICAL DATA

<b>Fluid :</b>	Compressed air, vacuum, inert gases	
<b>Pressure range :</b>	Internal pilot : single operator and 3 positions : 25-150 PSI	double operator : 10-150 PSI
	External pilot : vacuum to 150 PSI	
<b>Pilot pressure :</b>	Single operator and 3 positions : 25-150 PSI Double operator : 10-150 PSI	
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)	
<b>Filtration :</b>	40 µ	
<b>Temperature range :</b>	0°F to 120°F (-18°C to 50°C)	
<b>Flow (at 6 bar, ΔP=1bar) :</b>	1/4" (1.3 C <sub>v</sub> ), 3/8" : (1.35 C <sub>v</sub> )	
<b>Leak rate :</b>	100 cm <sup>3</sup> /min	
<b>Coil :</b>	Epoxy encapsulated - class A wires - Continuous duty.	
<b>Voltage range :</b>	-15% to +10% of nominal voltage	
<b>Protection :</b>	Consult factory	
<b>Power :</b>	- Inrush : 10.9 VA Holding : 7.7 VA = 1.8 to 12.7 W	
<b>Response times :</b>	24 VDC (5.4 W) Energize : 9 ms De-energize : 6 ms	120/60 Energize : 5-12 ms De-energize : 6-13 ms

#### Spare parts :

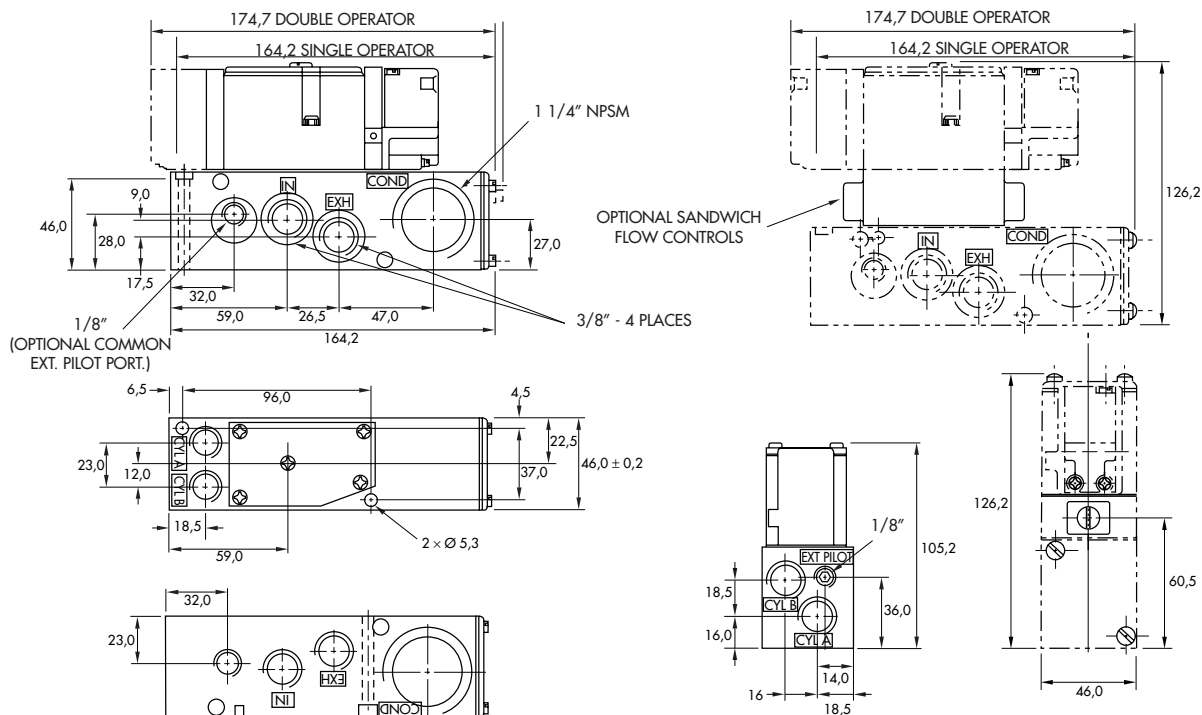
- Solenoid operator (power ≥ 5.4 W) : DXXP-XDA, including mounting screws 35013.
- Seal between solenoid and pilot body : 16402. • Pilot valve : TM-DXXP-XDA, including seal 16447.
- Mounting screw pilot to main valve : 35023. • Pressure seal between valve and base : 16446.
- Mounting screw valve to base (x2) : 35211. • Tie-rod (x2) : 19731. • Fastening kit : N-82005-01.

#### Options :

- BSPP threads. • Flow controls (Part N° : FC82A-AA) • Explosion-proof model. • Lights in base.

### DIMENSIONS

Dimensions shown are metric (mm)



### HOW TO ORDER

82A - XX - XXX - (XX - DXXX - XXX)

#### SPOOL TYPE - VALVE FUNCTION

- O** Individual base or manifold only
- A** Single Operator - single pressure
- B** Double operator - single pressure
- C** Single operator - dual pressure
- D** Double operator - dual pressure
- E** 3-position closed center
- F** 3-position open center
- G** 3-position single pressure, pressure center
- H** 3-position dual pressure, \* pressure center
- J** Single solenoid single pressure solenoid on B end
- K** Single solenoid dual pressure solenoid on B end
- L** 3-position dual pressure, \* open center
- M** 3-position dual pressure, \* closed center

\* Note: For dual pressure w/o regulators consult factory.

#### BODY TYPE

- A** Plug-in body
- B** Non Plug-in body

#### PORT SIZE - THREAD TYPE

- O** Valve only - no base
- A** 1/8" NPTF
- B** 1/4" NPTF
- C** 3/8" NPTF
- D** 1/8" BSPPL
- E** 1/4" BSPPL
- F** 3/8" BSPPL

#### BODY OPTIONS

#### BASE OPTIONS

#### PILOT VALVE

#### IND. & MANIFOLD BASE PORT CONFIG.

##### --Individual Base--

- O** Valve only - no base
  - A** Standard side ports (1/8", 1/4", or 3/8")
  - B** Bottom ports only\*
  - C** Side and bottom ports\*
  - D** Side inlet, side exhaust, bottom cylinder ports\*
- \* Bottom ports available in 1/8" & 1/4" only in individual base

##### --Manifold Base--

- K** Standard ports (1/4" or 3/8" only)
- L** Bottom cylinder ports\*
- M** Bottom inlet port
- N** Bottom inlet and cylinder ports\*
- P** Bottom and end cylinder ports\*
- R** Bottom cylinder & end cylinder ports w/bottom inlet port\*
- S** Selector base - standard side ports

\* Bottom parts available in 1/4" & 3/8" only on manifold. Bottom inlet available 1/4" only. For bottom O-ring ports, consult factory.

#### INT. OR EXT. PILOT\*

##### --Internal Pilot--

- O** Valve only - no base

##### --External Pilot--

- O** Valve only - no base

##### --External Pilot--

- D** No light in base

\* Use internal for main valve pressures of 25-150 PSIG. Use external for main valve pressures of 28" Hg vacuum - 25 PSIG

### PILOT VALVE OPTIONS - (XX - DXXX - XXX)

#### PILOT EXHAUST

- FA** Muffled exhaust

#### VOLTAGE

- FR** 12VDC (0,6w)
- FS** 24VDC (0,6w)

#### LEAD WIRE LENGTH

##### --Plug-in Valve/Base--

- P** Plug-in 8" - standard
- 1** 18"    **4** 48"
- 2** 24"    **5** 72"
- 3** 36"    **6** 96"

##### --Non Plug-in Valve/Base--

- A** 18"    **E** 72"
- B** 24"    **F** 96"
- C** 36"    **J** 6"
- D** 48"

\* Lead wire length for external plug-in connectors must be "J"

#### ELECTRICAL CONN.

##### --Plug-in Valve/Base--

- DA** Plug-in (standard)
- CA** Conduit 1/2" NPS
- BA** Grommet
- CM** Metal conduit 1/2" NPS
- CN** Metal conduit w/grd. 1/2" NPS

##### --External Plug-in--

- JB** Rectangular plug-in
- JM** Rectangular male only
- KA** Mini plug-in
- KJ** Mini plug-in male only
- TA** Dual tabs (.110) w/ receptables
- TJ** Dual tabs (.110) w/o receptables

#### MANUAL OPERATOR

- 0** No manual operator
- 1** Nonlocking operator
- 2** Locking operator
- 3** Nonlocking extended operator
- 4** Locking extended operator

### HOW TO ORDER 82 SERIES FLOW CONTROL MODULE\*

FC 82A-AA	Plug-in flow control assembly
FC 82A-BA	Non plug-in flow control assembly

\*If flow control module is to be installed between valve and base or valve and manifold at the factory, add -9 after the flow control model number, i.e., FC82A-AA-9. The flow control model number should follow the valve model number on which it is to be installed.

NOTE: Reference regulator ordering section if a sandwich regulator is required.

NOTE: If a flow control assembly is used with the dual pressure regulator option, only the flow control on the "A" end is functional. (Controls both cylinder ports.)



## 1. VOLTAGE

- D XX	X - X XX	VOLTAGE
<b>AA</b>		120/60, 110/50
<b>AB</b>		240/60, 220/50
<b>AC</b>		24/60, 24/50
<b>AD</b>		24/60
<b>AE</b>		200/60
<b>AF</b>		240/50
<b>AG</b>		100/50, 100/60, 110/60
<b>DA</b>		24 VDC (5.4 W)
<b>DB</b>		12 VDC (5.4 W)
<b>DC</b>		12 VDC (7.5 W)
<b>DD</b>		24 VDC (7.3 W)
<b>DE</b>		12 VDC (12.7 W) - CLSFonly
<b>DF</b>		24 VDC (12.7 W) - CLSF only
<b>DK</b>		110 VDC (4.7 W)
<b>DL</b>		64 VDC (6 W)
<b>DM</b>		36 VDC (5.3 W)
<b>DN</b>		6 VDC (6 W)
<b>DP</b>		48 VDC (5.8 W)
<b>DU</b>		24 VDC (6 W)
<b>EA</b>		12 VDC (6 W)
<b>FA</b>		12 VDC (1.8 W)
<b>FB</b>		24 VDC (1.8 W)
<b>FE</b>		12 VDC (2.4 W)
<b>FF</b>		24 VDC (2.4 W)

## 2. WIRE LENGTH

- D XX	X - X XX	WIRE LENGTH
<b>A</b>		18"
<b>B</b>		24"
<b>C</b>		36"
<b>D</b>		48"
<b>E</b>		72"
<b>F</b>		96"
<b>J</b>		For external plug-in connector ("J", "K" & "T" type electrical connection)
<b>P</b>		For plug-in valves (82 Series only)

### 3. MANUAL OPERATOR

**- D XX X - X XX      MANUAL OPERATOR**

<b>0</b>	No operator
<b>1</b>	Non-locking recessed
<b>2</b>	Locking recessed
<b>3</b>	Non-locking extended
<b>4</b>	Locking extended

### 4. ELECTRICAL CONNECTION

**- D XX X - X XX      ELECTRICAL CONNECTION**

<b>BA</b>	Flying leads
<b>BK</b>	BA with protection diode
<b>BL</b>	BA with protection varistor (M.O.V.)
<b>** CA</b>	1/2" NPS conduit
<b>** CM</b>	1/2" NPS metal conduit
<b>** CN</b>	1/2" NPS metal conduit w/ground
<b>** JB</b>	Rectangular connector
<b>** JD</b>	Rectangular connector with light
<b>** JM</b>	Rectangular connector, male only
<b>KA</b>	Square connector
<b>KB</b>	Square connector with protection diode
<b>KC</b>	Square connector with protection varistor (M.O.V.)
<b>KD</b>	Square connector with light
<b>KE</b>	Square connector with light and protection diode
<b>KF</b>	Square connector with light and protection varistor (M.O.V.)
<b>KG</b>	Square connector with LED light & diode
<b>KJ</b>	Square connector (male only)
<b>KK</b>	Square connector with protection diode (male only)
<b>KL</b>	Square connector with protection varistor (male only) (M.O.V.)
<b>*** MA</b>	Electrical common conduit
<b>TA</b>	Dual tabs
<b>TB</b>	TA with protection diode
<b>TD</b>	TA with light
<b>TE</b>	TA with light and protection diode
<b>TJ</b>	Dual tabs (male only)
<b>TK</b>	TJ with protection diode
<b>TM</b>	TJ with light
<b>TN</b>	TJ with light and protection diode
<b>DA*</b>	Plug-in connector
<b>DK*</b>	DA with protection diode
<b>DL*</b>	DA with protection varistor (M.O.V.)
<b>FM</b>	Plug-in
<b>FN</b>	Plug-in with diode
<b>FP</b>	Plug-in with M.O.V.

\* To be used with 82 Series only  
 \*\* Inline valves only for 35 & 45 series. No restrictions for 82 series.  
 \*\*\* Stacking valves only for 35 & 45 series. Conduit end plate kit required, one per stack.

35 series : M-35002-01  
 45 series : M-45005-01