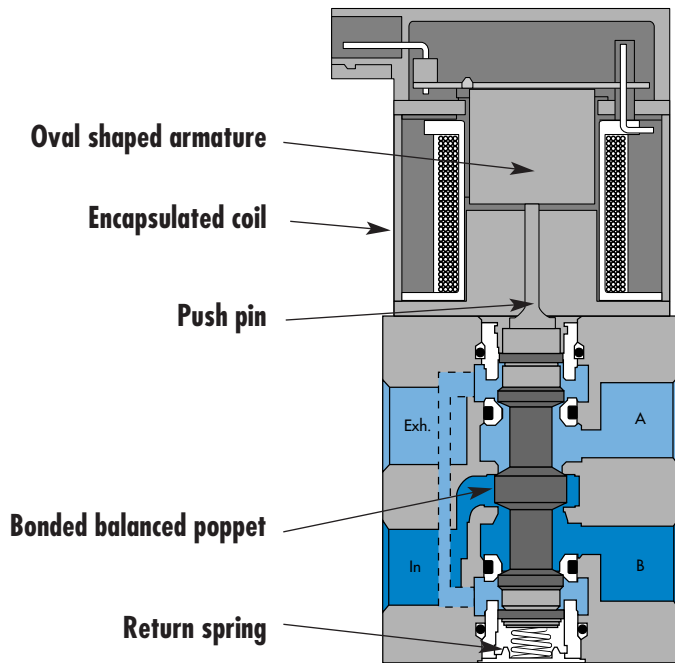


Individual mounting

|        |  |
|--------|--|
| Inline |  |
|--------|--|

Manifold mounting

|          |                         |  |  |                                      |
|----------|-------------------------|--|--|--------------------------------------|
| Stacking | Manifold base "plug-in" | Manifold base "plug-in" with pressure regulators | Manifold base "plug-in" with flow controls | Manifold base "plug-in" with PR & FC |
|----------|-------------------------|--|--|--------------------------------------|



**SERIES FEATURES**

- Patented high force MACSOLENOID® for fastest possible response times.
- Bonded balanced poppet for high flow, precise repeatability, and consistent operation.
- Balanced poppet permits versatility in function — may be used as 3-way or 2-way normally open or normally closed and may be used for vacuum, divertor, or selector applications.
- Extremely high cycle rate capability.
- Use on lube or non-lube service.
- Manual overrides as standard.
- Various solenoid enclosures and plug-in connectors.
- Optional surge suppression available.
- Low wattage DC solenoids — down to 1.3 watts.
- Rectified AC voltage.

Series

33

34

36

32

37

38

52

67

69

44

**46**

42

47

48P

48

400

92

93

ISO 01

ISO 02

ISO 1

ISO 2

ISO 3

| Function   | Port size             | Flow [Max]               | Individual mounting | Series |
|------------|-----------------------|--------------------------|---------------------|--------|
| <b>4/2</b> | <b>1/8" - # 10-32</b> | <b>0.3 C<sub>v</sub></b> | Inline              |        |

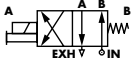
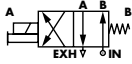
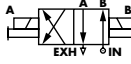
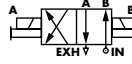
### OPERATIONAL BENEFITS

1. Balanced poppet, immune to variations of pressure.
2. Patented solenoid develops high shifting forces.
3. Short stroke with high flow.
4. Higher forces result in lower wattages for given flow.
5. Powerful return spring.



33  
34  
36  
32  
37  
38  
52  
67  
69  
44

### HOW TO ORDER

| Port size        | Single Operator   |   | Double Operator  |   |
|------------------|---|---|--|---|
|                  | Without flow controls   | With flow controls  | Without flow controls  | With flow controls  |
|                  |  |  |  |  |
| <b>1/8" NPTF</b> | 46A-AA1-J XXX-XXX   | 46A-AA2-J XXX-XXX   | 46A-GA1-J XXX-XXX  | 46A-GA2-J XXX-XXX   |
| <b># 10-32</b>   | 46A-AB1-J XXX-XXX   | 46A-AB2-J XXX-XXX   | 46A-GB1-J XXX-XXX  | 46A-GB2-J XXX-XXX   |

46  
42  
47  
48P

### SOLENOID OPERATOR >

J **XXX-XXX**\* (-G) Add "G" for ground

| XX Voltage                          | X Wire length        | X Manual operator             | XX Electrical connection                          |
|-------------------------------------|----------------------|-------------------------------|---|
| <b>Single &amp; double solenoid</b> | <b>** O</b> No leads | <b>1</b> Non-locking recessed | <b>BA</b> Flying leads                            |
| <b>AA</b> 120 VAC (5.4W)            | <b>A</b> 18"         | <b>2</b> Locking recessed     | <b>GA</b> MAC JAC solenoid plug-in                |
| <b>DA</b> 24 VDC (5.4W)             | <b>B</b> 24"         |                               | <b>GG</b> MAC JAC solenoid plug-in with rectifier |
| <b>DB</b> 12 VDC (5.4W)             | <b>C</b> 36"         |                               | <b>JB</b> Rectangular connector                   |
| <b>Single solenoid only</b>         |                      |                               | <b>JD</b> Rectangular connector with light        |
| <b>DC</b> 24 VDC (2.4W)             |                      |                               | <b>KA</b> Mini square connector                   |
| <b>DD</b> 12 VDC (2.4W)             |                      |                               | <b>KD</b> Mini square connector with light        |

48  
400  
92  
93

\* Other options available, see page 317.

\*\* Use with rectangular and mini connectors

Note: - AC voltage requires connector with rectifier.

- With the MAC JAC, washdown capability is possible. Consult factory for washdown modification number.  
- Double solenoid requires minimum 5.4 watts.

### OPTIONS

46A-AA1-JXXX-XXX

**G** Use with O ring mount (body option 'D' & 'H')

- A** Single operator - 4 port body with side ports
- C** Single operator - 4 port body with bottom ports (No side ports - M5 or #10-32 ONLY)
- D** Single operator - Bottom O ring mount - All ports (No side ports)
- F** Single operator - Bottom O ring mount - Cylinder ports only - Side inlet & exhaust
- G** Double operator - 4 Port body - With side ports
- H** Double operator - Bottom O ring mount - All ports (No side ports)

Examples: 46A-DG1-Jxxx-xxx (Bottom O ring mount - all ports)  
46A-CB1-Jxxx-xxx (4 port body with bottom ports - no side ports)

ISO 01  
ISO 02  
ISO 1  
ISO 2  
ISO 3

**TECHNICAL DATA**

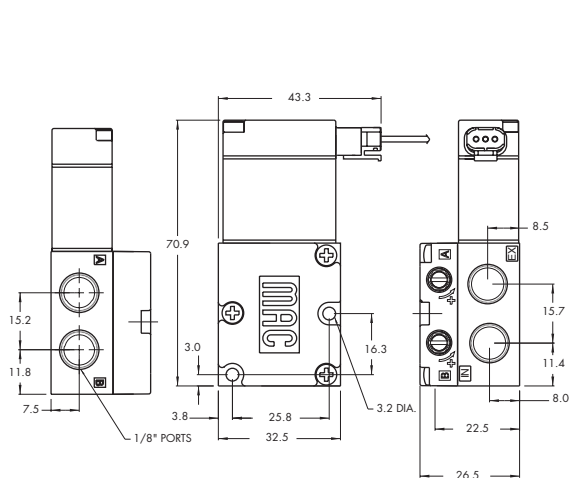
|                            |   |
|----------------------------|---|
| <b>Fluid :</b>             | Compressed air, vacuum, inert gases   |
| <b>Pressure range :</b>    | Vacuum to 100 PSI   |
| <b>Lubrication :</b>       | Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)       |
| <b>Filtration :</b>        | 40 μ  |
| <b>Temperature range :</b> | 0°F to 120°F (-18°C to +50°C)   |
| <b>Orifice :</b>           | 3,3 mm  |
| <b>Flow :</b>              | 1.8W : (0.20 C <sub>v</sub> ) – 2.4W : (0.20 C <sub>v</sub> ) – 5.4W : (0.30 C <sub>v</sub> ) |
| <b>Coil :</b>              | Class A wire (#22 AWG x 18), continuous duty  |
| <b>Voltage range :</b>     | -15% to +10% of nominal voltage   |
| <b>Protection :</b>        | Consult factory   |
| <b>Power :</b>             | 5.4W – 2.4W – 1.8W  |

Options :                   • BSPP threads

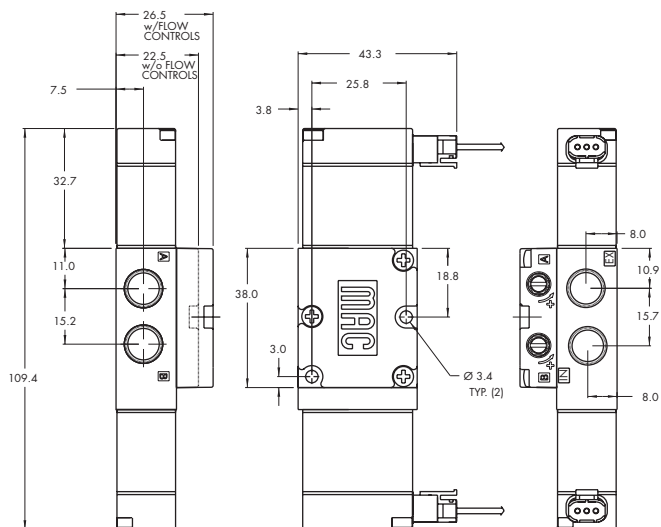
**DIMENSIONS**

Dimensions shown are metric (mm)

**Single solenoid**



**Double solenoid**





# Direct solenoid and solenoid pilot operated valves

| Function   | Port size             | Flow [Max]               | Manifold Mounting | Series |
|------------|-----------------------|--------------------------|-------------------|--------|
| <b>4/2</b> | <b>1/8" - # 10-32</b> | <b>0.3 C<sub>v</sub></b> | Stacking          |        |

### OPERATIONAL BENEFITS

1. Balanced poppet, immune to variations of pressure.
2. Patented solenoid develops high shifting forces.
3. Short stroke with high flow.
4. Higher forces result in lower wattages for given flow.
5. Powerful return spring.



33  
34  
36  
32  
37  
38  
52  
67  
69  
44

### HOW TO ORDER

| Port size        | Without flow controls    | With flow controls       |
|------------------|--------------------------|--------------------------|
|                  |                          |                          |
| <b>1/8" NPTF</b> | 46A-SA1-J <b>XXX-XXX</b> | 46A-SA2-J <b>XXX-XXX</b> |
| <b># 10-32</b>   | 46A-SB1-J <b>XXX-XXX</b> | 46A-SB2-J <b>XXX-XXX</b> |

46

### SOLENOID OPERATOR >

J **XXX-XXX\*** (-G) Add "G" for ground

| XX | Voltage        | X | Wire length | X | Manual operator      | XX | Electrical connection                   |
|----|----------------|---|-------------|---|----------------------|----|---|
| AA | 120 VAC (5.4W) | A | 18"         | 1 | Non-locking recessed | BA | Flying leads                            |
| DA | 24 VDC (5.4W)  | B | 24"         | 2 | Locking recessed     | GA | MAC JAC solenoid plug-in                |
| DB | 12 VDC (5.4W)  | C | 36"         |   |                      | GB | MAC JAC solenoid plug-in with diode     |
| DC | 24 VDC (2.4W)  |   |             |   |                      | GG | MAC JAC solenoid plug-in with rectifier |
| DD | 12 VDC (2.4W)  |   |             |   |                      |    |   |

42  
47  
48P

48  
400

\* Other options available, see page 317.

Note : - AC voltage requires connector with rectifier.

- With the MAC JAC, washdown capability is possible. Consult factory for washdown modification number.

End plate kit required (port size 1/4") : M-46001-01.

92  
93

ISO 01  
ISO 02  
ISO 1  
ISO 2  
ISO 3

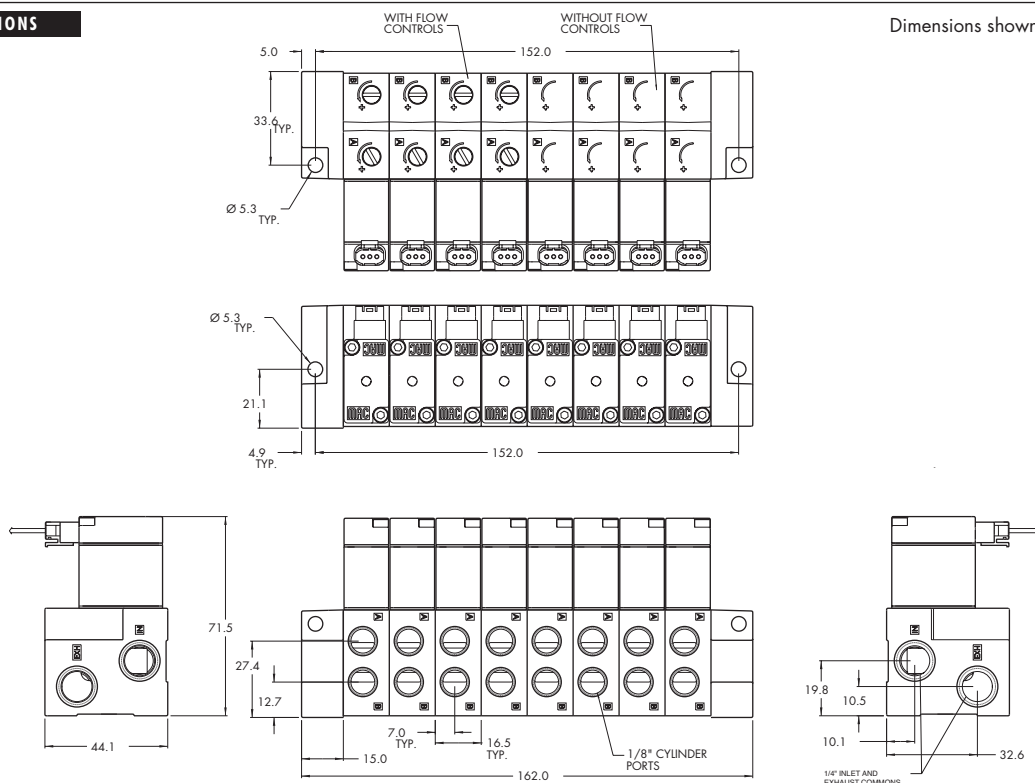
**TECHNICAL DATA**

|                            |   |
|----------------------------|---|
| <b>Fluid :</b>             | Compressed air, vacuum, inert gases   |
| <b>Pressure range :</b>    | Vacuum to 100 PSI   |
| <b>Lubrication :</b>       | Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)       |
| <b>Filtration :</b>        | 40 μ  |
| <b>Temperature range :</b> | 0°F to 120°F (-18°C to +50°C)   |
| <b>Flow :</b>              | 1.8W : (0.20 C <sub>v</sub> ) – 2.4W : (0.20 C <sub>v</sub> ) – 5.4W : (0.30 C <sub>v</sub> ) |
| <b>Coil :</b>              | Class A wire (#22 AWG x 18), continuous duty  |
| <b>Voltage range :</b>     | -15% to +10% of nominal voltage   |
| <b>Protection :</b>        | Consult factory   |
| <b>Power :</b>             | 5.4W – 2.4W – 1.8W  |
| <b>Response times :</b>    | Energize : 7.20 ms  |
| <b>(with 5.4 W coil)</b>   | De-energize : 4.20ms  |

- Options :                   • BSPP threads
- Spare parts :             • Inlet isolator : 28494 • Exhaust isolator : 28493 • Tie rod (x2) : 79411

**DIMENSIONS**

Dimensions shown are metric (mm)



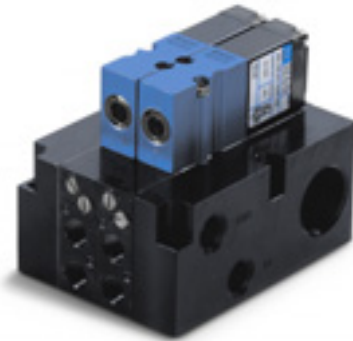


# Direct solenoid and solenoid pilot operated valves

| Function | Port size                                    | Flow [Max]         | Manifold mounting       | Series |
|----------|--|--------------------|-------------------------|--------|
| 4/2      | 1/8" - 5/32 O.D. Pressed-in tube receptacles | 0.3 C <sub>v</sub> | Manifold base "plug-in" |        |

### OPERATIONAL BENEFITS

1. Balanced poppet, immune to variations of pressure.
2. Patented solenoid develops high shifting forces.
3. Short stroke with high flow.
4. Higher forces result in lower wattages for given flow.
5. Powerful return spring.



- 33
- 34
- 36
- 32
- 37
- 38
- 52
- 67
- 69
- 44
- 46**
- 42
- 47
- 48P

### HOW TO ORDER

| Port size                                    | Single solenoid                      | Double solenoid                      |
|--|--------------------------------------|--------------------------------------|
|  |                                      |                                      |
| <b>Valve less base</b>                       | 46A-L00-00-J <b>XX</b> P- <b>XXX</b> | 46A-N00-00-J <b>XX</b> P- <b>XXX</b> |
| <b>1/8" NPTF</b>                             | 46A-LSA-AC-J <b>XX</b> P- <b>XXX</b> | 46A-NSA-BL-J <b>XX</b> P- <b>XXX</b> |
| <b>5/32 O.D. Pressed-in tube receptacles</b> | 46A-LSF-AC-J <b>XX</b> P- <b>XXX</b> | 46A-NSF-BL-J <b>XX</b> P- <b>XXX</b> |

### SOLENOID OPERATOR >

J **XX** P-**XXX**\* (-G) Add "G" for ground

| <b>XX</b> Voltage                   | <b>X</b> Manual operator | <b>XX</b> Electrical connection       |
|-------------------------------------|--------------------------|---------------------------------------|
| <b>Single &amp; double solenoid</b> | <b>1</b> Non-locking     | <b>FA</b> Base plug-in                |
| <b>AA</b> 120 VAC (5,4W)            | <b>2</b> Locking         | <b>FB</b> Base plug-in with diode     |
| <b>AC</b> 24 VAC (5,4W)             |                          | <b>FG</b> Base plug-in with rectifier |
| <b>DA</b> 24 VDC (5,4W)             |                          |                                       |
| <b>DB</b> 12 VDC (5,4W)             |                          |                                       |
| <b>Single solenoid only</b>         |                          |                                       |
| <b>DC</b> 24 VDC (2,4W)             |                          |                                       |
| <b>DD</b> 12 VDC (2,4W)             |                          |                                       |

- 48
- 400
- 92
- 93
- ISO 01
- ISO 02
- ISO 1
- ISO 2
- ISO 3

\* Other options available, see page 317.  
 Note : AC voltage requires connector with rectifier. Double solenoid requires minimum 5.4 watts.

### OPTIONS

46A-LSB-AC-J**XX**P-**XXX**

- C** Single solenoid - Side cylinder ports
- L** Single & double solenoid - Bottom cylinder ports
- O** Base only - no valve
- L** Single solenoid - Base mount body
- M** Single solenoid - Base mount body with gage port
- N** Double solenoid - Base mount body
- P** Double solenoid - Base mount body with gage port

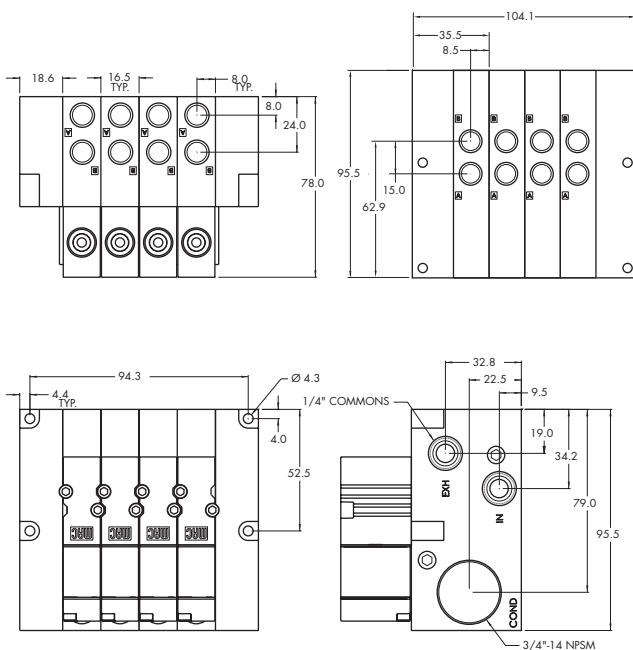
Example : base only : 46A-OSA-AC.  
 End plate kit required (port size 1/4") : M-46003-01.

**TECHNICAL DATA**

|                            |   |
|----------------------------|---|
| <b>Fluid :</b>             | Compressed air, vacuum, inert gases   |
| <b>Pressure range :</b>    | Vacuum to 100 PSI   |
| <b>Lubrication :</b>       | Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)       |
| <b>Filtration :</b>        | 40 µ  |
| <b>Temperature range :</b> | 0°F to 120°F (-18°C to +50°C)   |
| <b>Orific e</b>            | 3.3 mm  |
| <b>Flow :</b>              | 1.8W : (0.20 C <sub>v</sub> ) – 2.4W : (0.20 C <sub>v</sub> ) – 5.4W : (0.30 C <sub>v</sub> ) |
| <b>Coil :</b>              | Epoxy encapsulated – Class A wires – 100% ED  |
| <b>Voltage range :</b>     | -15% to +10% of nominal voltage   |
| <b>Protection :</b>        | IP54 (electrical connection)  |
| <b>Power :</b>             | 5.4W – 2.4W – 1.8W  |
| <b>Response times :</b>    | Energize : 7.20 ms<br>De-energize : 4.20ms  |

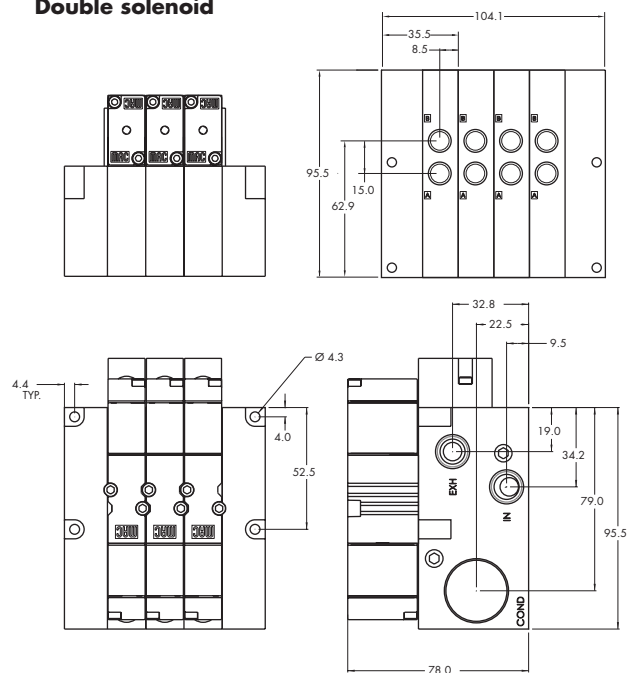
- Options :
- BSPP threads
- Spare parts :
- Inlet isolator : 28501 • Exhaust isolator : 28502 • Valve cover plate : M-46002
  - Tie rod (x2) : 79443

**DIMENSIONS**



Dimensions shown are metric (mm)

**Double solenoid**





# Direct solenoid and solenoid pilot operated valves

| Function   | Port size   | Flow [Max]               | Manifold mounting                                | Series |
|------------|---|--------------------------|--|--------|
| <b>4/2</b> | <b>1/8" - 5/32 O.D. Pressed-in tube receptacles</b> | <b>0.3 C<sub>v</sub></b> | Manifold base "plug-in" with pressure regulators |        |

### OPERATIONAL BENEFITS

1. Balanced poppet, immune to variations of pressure.
2. Patented solenoid develops high shifting forces.
3. Short stroke with high flow.
4. Higher forces result in lower wattages for given flow.
5. Powerful return spring.



- 33
- 34
- 36
- 32
- 37
- 38
- 52
- 67
- 69
- 44

### HOW TO ORDER

| Port size<br>(Bottom ports only)             | Model number                         |
|--|--------------------------------------|
| <b>Valve less base</b>                       | 46A-L00-00-J <b>XX</b> P- <b>XXX</b> |
| <b>1/8" NPTF</b>                             | 46A-LSA-AJ-J <b>XX</b> P- <b>XXX</b> |
| <b>5/32 O.D. Pressed-in tube receptacles</b> | 46A-LSF-AJ-J <b>XX</b> P- <b>XXX</b> |



- 46
- 42

### SOLENOID OPERATOR >

J **XX** P-**XXX**\* (-G) Add "G" for ground

| <b>XX</b> Voltage        | <b>X</b> Manual operator      | <b>XX</b> Electrical connection       |
|--------------------------|-------------------------------|---------------------------------------|
| <b>AA</b> 120 VAC (5.4W) | <b>1</b> Non-locking recessed | <b>FA</b> Base plug-in                |
| <b>DA</b> 24 VDC (5.4W)  | <b>2</b> Locking recessed     | <b>FB</b> Base plug-in with diode     |
| <b>DB</b> 12 VDC (5.4W)  |                               | <b>FG</b> Base plug-in with rectifier |
| <b>DC</b> 24 VDC (2.4W)  |                               |                                       |

- 47
- 48P
- 48

\* Other options available, see page 317.  
Note : AC voltage requires connector with rectifier.

### OPTIONS

46A-LSA-AJ-J**XX**P-**XXX**

- J** Regulator with adjusting knob
- E** Regulator with slotted stem
- G** Regulator with slotted stem with locknut
- O** Base only – no valve
- L** Base mount body
- M** Base mount body with gage port

Example : base only with regulator : 46A-0SA-AJ.  
End plate kit required (port size 1/4") : M-46003-01.

- 400
- 92
- 93
- ISO 01
- ISO 02
- ISO 1
- ISO 2
- ISO 3



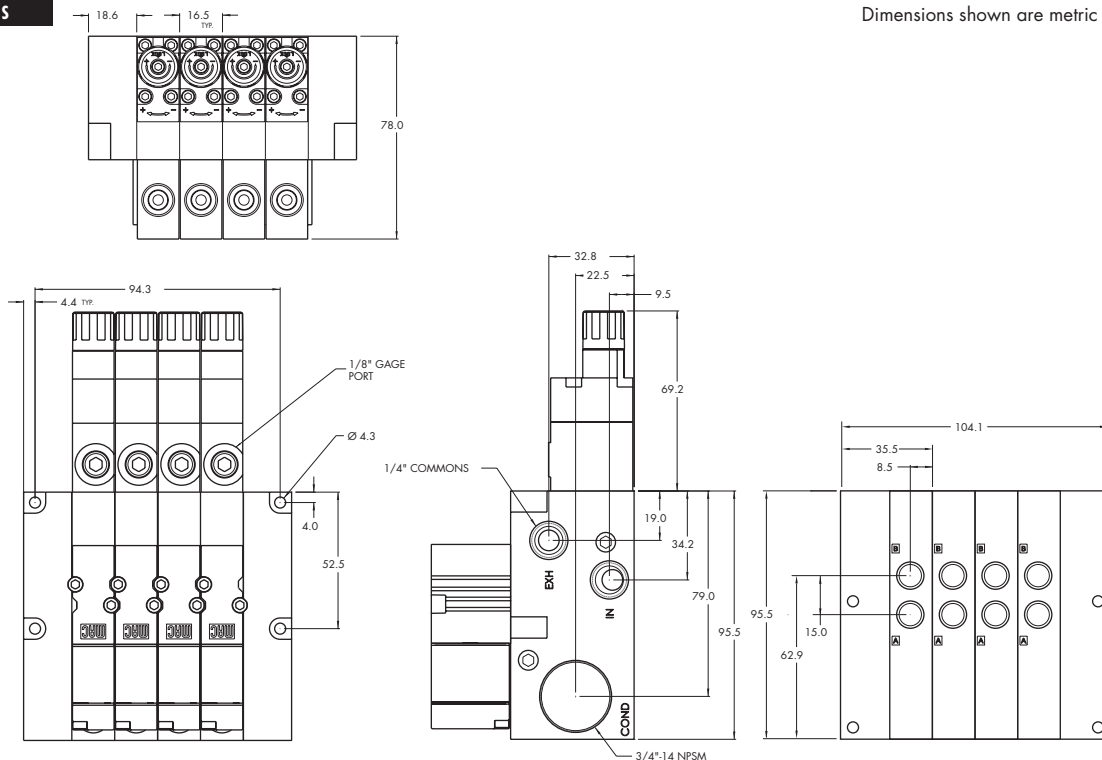
**TECHNICAL DATA**

|                            |   |
|----------------------------|---|
| <b>Fluid :</b>             | Compressed air, vacuum, inert gases   |
| <b>Pressure range :</b>    | Vacuum to 100 PSI   |
| <b>Lubrication :</b>       | Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)       |
| <b>Filtration :</b>        | 40 μ  |
| <b>Temperature range :</b> | 0°F to 120°F (-18°C to +50°C)   |
| <b>Flow :</b>              | 1.8W : (0.20 C <sub>v</sub> ) – 2.4W : (0.20 C <sub>v</sub> ) – 5.4W : (0.30 C <sub>v</sub> ) |
| <b>Coil :</b>              | Class A continuous duty, #22 AWG x 12 base leads  |
| <b>Voltage range :</b>     | -15% to +10% of nominal voltage   |
| <b>Protection :</b>        | Consult factory   |
| <b>Power :</b>             | 5.4W – 2.4W – 1.8W  |
| <b>Response times :</b>    | Energize : 7.20 ms  |
| <b>(with 5.4 W coil)</b>   | De-energize : 4.20ms  |

- Options :  
Spare parts :
- BSPP threads
  - Inlet isolator : 28501 • Exhaust isolator : 28502 • Valve cover plate : M-46002 • Tie rod (x2) : 79443
  - Replacement regulators : PR46A-OAAA (slotted stem)  
PR46A-OBAA (adjusting knob)  
PR46A-OCAA (slotted stem with locknut)
- Regulating range options : • PR46A-xxx**A**
- A** 0 to 120 PSI
  - B** 0 to 80 PSI
  - C** 0 to 30 PSI

**DIMENSIONS**

Dimensions shown are metric (mm)



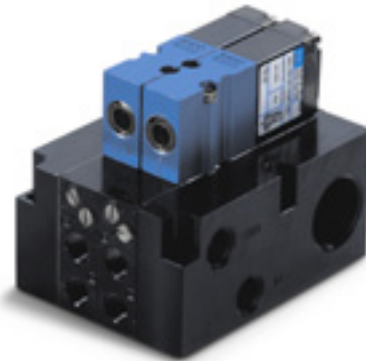


# Direct solenoid and solenoid pilot operated valves

| Function | Port size                                    | Flow [Max]         | Manifold mounting                          | Series |
|----------|--|--------------------|--|--------|
| 4/2      | 1/8" - 5/32 O.D. Pressed-in tube receptacles | 0.3 C <sub>v</sub> | Manifold base "plug-in" with flow controls |        |

### OPERATIONAL BENEFITS

1. Balanced poppet, immune to variations of pressure.
2. Patented solenoid develops high shifting forces.
3. Short stroke with high flow.
4. Higher forces result in lower wattages for given flow.
5. Powerful return spring.



33  
34  
36  
32  
37  
38  
52  
67  
69  
44

46

42

47

48P

48

400

92

93

ISO 01

ISO 02

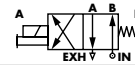
ISO 1

ISO 2

ISO 3

### HOW TO ORDER

| Port size                             | Model number                         |
|---------------------------------------|--------------------------------------|
| Valve less base                       | 46A-L00-00-J <b>XX</b> P- <b>XXX</b> |
| 1/8" NPTF                             | 46A-LSA-AD-J <b>XX</b> P- <b>XXX</b> |
| 5/32 O.D. Pressed-in tube receptacles | 46A-LSF-AD-J <b>XX</b> P- <b>XXX</b> |



### SOLENOID OPERATOR ▶

J **XX** P-**XXX**\* (-G) Add "G" for ground

| XX Voltage        | X Manual operator      | XX Electrical connection       |
|-------------------|------------------------|--------------------------------|
| AA 120 VAC (5.4W) | 1 Non-locking recessed | FA Base plug-in                |
| DA 24 VDC (5.4W)  | 2 Locking recessed     | FB Base plug-in with diode     |
| DB 12 VDC (5.4W)  |                        | FG Base plug-in with rectifier |
| DC 24 VDC (2.4W)  |                        |                                |

\* Other options available, see page 317.  
Note: AC voltage requires connector with rectifier.

### OPTIONS

46A-LSA-AD-J**XX**P-**XXX**

- D** Side cylinder ports
- M** Bottom cylinder ports
- O** Base only – no valve
- L** Base mount body
- M** Base mount body with gage port

Example: base only with flow controls: 46A-OSA-AD.  
End plate kit required (port size 1/4"): M-46003-01.

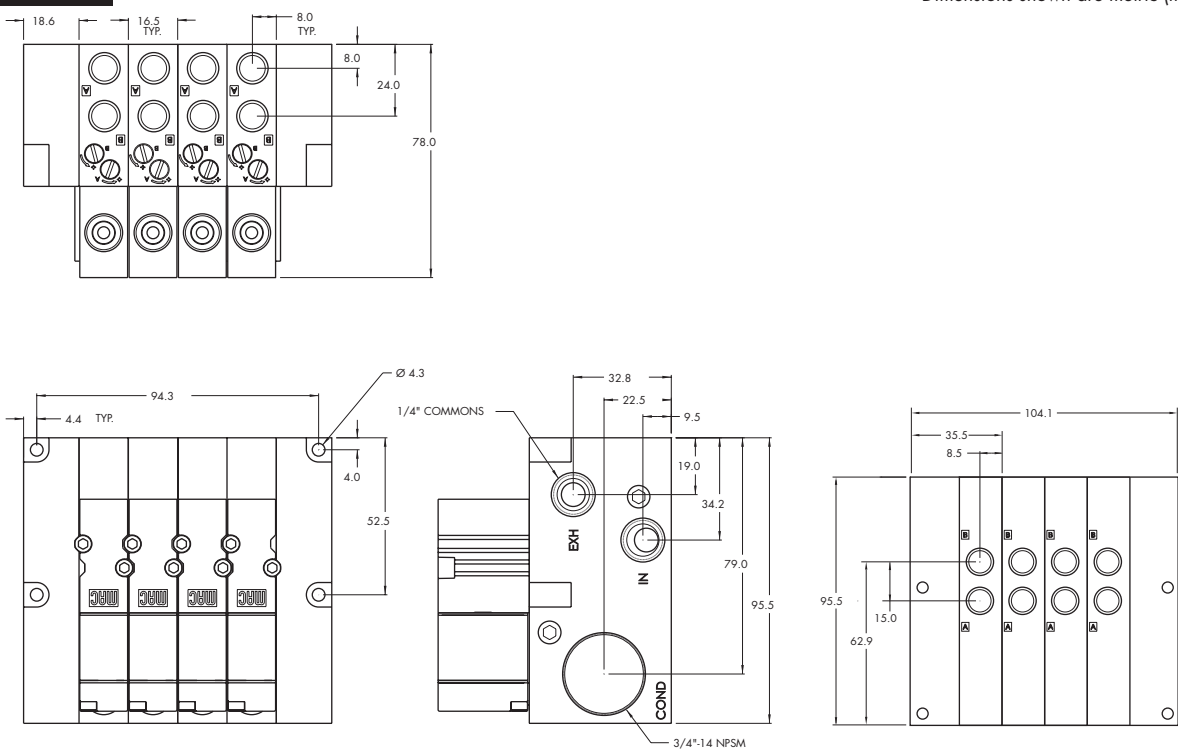
**TECHNICAL DATA**

|                            |   |
|----------------------------|---|
| <b>Fluid :</b>             | Compressed air, vacuum, inert gases   |
| <b>Pressure range :</b>    | Vacuum to 100 PSI   |
| <b>Lubrication :</b>       | Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)       |
| <b>Filtration :</b>        | 40 μ  |
| <b>Temperature range :</b> | 0°F to 120°F (-18°C to +50°C)   |
| <b>Flow :</b>              | 1.8W : (0.20 C <sub>v</sub> ) – 2.4W : (0.20 C <sub>v</sub> ) – 5.4W : (0.30 C <sub>v</sub> ) |
| <b>Coil :</b>              | Class A continuous duty, #22 AWG x 12 base leads  |
| <b>Voltage range :</b>     | -15% to +10% of nominal voltage   |
| <b>Protection :</b>        | Consult factory   |
| <b>Power :</b>             | 5.4W – 2.4W – 1.8W  |
| <b>Response times :</b>    | Energize : 7.20 ms<br>De-energize : 4.20ms  |

- Options :
- BSPP threads
- Spare parts :
- Inlet isolator : 28501 • Exhaust isolator : 28502 • Valve cover plate : M-46002
  - Tie rod (x2) : 79443

**DIMENSIONS**

Dimensions shown are metric (mm)



| Function   | Port size   | Flow [Max]               | Manifold mounting                    | Series |
|------------|---|--------------------------|--------------------------------------|--------|
| <b>4/2</b> | <b>1/8" - 5/32 O.D. Pressed-in tube receptacles</b> | <b>0.3 C<sub>v</sub></b> | Manifold base "plug-in" with PR & FC |        |

**OPERATIONAL BENEFITS**

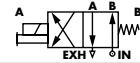
1. Balanced poppet, immune to variations of pressure.
2. Patented solenoid develops high shifting forces.
3. Short stroke with high flow.
4. Higher forces result in lower wattages for given flow.
5. Powerful return spring.



- 33
- 34
- 36
- 32
- 37
- 38
- 52
- 67
- 69
- 44
- 46**

**HOW TO ORDER**

| Port size<br>(Bottom ports only)             | Model number                |
|--|-----------------------------|
| <b>Valve less base</b>                       | 46A-L00-00-J <b>XXP-XXX</b> |
| <b>1/8" NPTF</b>                             | 46A-LSA-AK-J <b>XXP-XXX</b> |
| <b>5/32 O.D. Pressed-in tube receptacles</b> | 46A-LSF-AK-J <b>XXP-XXX</b> |



- 42
- 47
- 48P

**SOLENOID OPERATOR** >

J **XX** P-**XXX**\* (-G) Add "G" for ground

| <b>XX</b> Voltage        | <b>X</b> Manual operator      | <b>XX</b> Electrical connection       |
|--------------------------|-------------------------------|---------------------------------------|
| <b>AA</b> 120 VAC (5.4W) | <b>1</b> Non-locking recessed | <b>FA</b> Base plug-in                |
| <b>DA</b> 24 VDC (5.4W)  | <b>2</b> Locking recessed     | <b>FB</b> Base plug-in with diode     |
| <b>DB</b> 12 VDC (5.4W)  |                               | <b>FG</b> Base plug-in with rectifier |
| <b>DC</b> 24 VDC (2.4W)  |                               |                                       |

- 48
- 400

\* Other options available, see page 317.  
Note : AC voltage requires connector with rectifier.

**OPTIONS**

46A-LSA-AK-J**XX**P-**XXX**

- K** Regulator with adjusting knob & flow controls
- F** Regulator with slotted stem & flow controls
- H** Regulator with slotted stem with locknut & flow controls
- O** Base only – no valve
- L** Base mount body
- M** Base mount body with gage port

Example : base only with regulator : 46A-OSA-AK.  
End plate kit required (port size 1/4") : M-46003-01.

- 92
- 93
- ISO 01
- ISO 02
- ISO 1
- ISO 2
- ISO 3

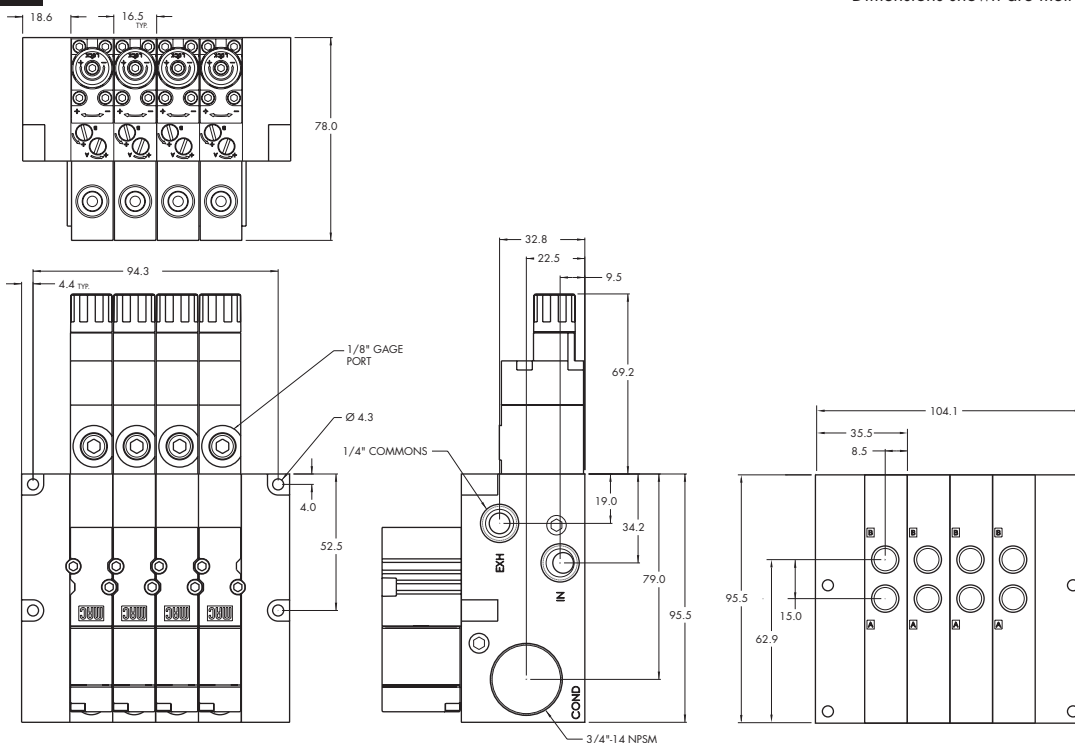
**TECHNICAL DATA**

|                            |   |
|----------------------------|---|
| <b>Fluid :</b>             | Compressed air, vacuum, inert gases   |
| <b>Pressure range :</b>    | Vacuum to 100 PSI   |
| <b>Lubrication :</b>       | Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)       |
| <b>Filtration :</b>        | 40 µ  |
| <b>Temperature range :</b> | 0°F to 120°F (-18°C to +50°C)   |
| <b>Flow :</b>              | 1.8W : (0.20 C <sub>v</sub> ) – 2.4W : (0.20 C <sub>v</sub> ) – 5.4W : (0.30 C <sub>v</sub> ) |
| <b>Coil :</b>              | Class A continuous duty, #22 AWG x 12 base leads  |
| <b>Voltage range :</b>     | -15% to +10% of nominal voltage   |
| <b>Protection :</b>        | Consult factory   |
| <b>Power :</b>             | 5.4W – 2.4W – 1.8W  |
| <b>Response times :</b>    | Energize : 7.20 ms<br>De-energize : 4.20ms  |

- Options :  
Spare parts :
- BSPP threads
  - Inlet isolator : 28501 • Exhaust isolator : 28502 • Valve cover plate : M-46002 • Tie rod (x2) : 79443
  - Replacement regulators : PR46A-OAAA (slotted stem)  
PR46A-OBAA (adjusting knob)  
PR46A-OCAA (slotted stem with locknut)
- Regulating range options : • PR46A-xxx**A**
- A** 0 to 120 PSI
  - B** 0 to 80 PSI
  - C** 0 to 30 PSI

**DIMENSIONS**

Dimensions shown are metric (mm)





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**Codification table for voltages / Manual operators / Electrical connections**

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VALVE CODE >  $J \frac{XX}{1} \frac{X-X}{23} \frac{XX}{4}$

**OPTIONS AVAILABLE FOR**

- Solenoid valves 36, 46, ISO 01 and ISO 02 Series

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**1. VOLTAGE**

| J-XX X-X XX | VOLTAGE       |
|-------------|---------------|
| AA          | 120VAC (5.4W) |
| AC          | 24VAC (5.4W)  |
| DE          | 24VDC (1.8W)  |
| DF          | 12VDC (1.8W)  |
| DJ          | 24VDC (1.3W)  |
| DL          | 12VDC (1.3W)  |
| DR          | 12VDC (1.0W)* |
| DU          | 24VDC (1.0W)* |

\* Not available on 36 series universal valve

**2. WIRE LENGTH**

| J-XX X-X XX | WIRE LENGTH                                  |
|-------------|--|
| A           | 18" coil leads                               |
| B           | 24" coil leads                               |
| C           | 36" coil leads                               |
| D           | 48" coil leads                               |
| E           | 72" coil leads                               |
| F           | 96" coil leads                               |
| P           | Base plug-in                                 |
| O           | No leads (use with J, K & L type connectors) |

**3. MANUAL OPERATOR**

| J-XX X-X XX | MANUAL OPERATOR      |
|-------------|----------------------|
| 0           | No operator          |
| 1           | Non-locking recessed |
| 2           | Locking recessed     |
| 3           | Non-locking extended |
| 4           | Locking extended     |

**4. ELECTRICAL CONNECTION**

| J-XX X-X XX | CONNECTORS FOR NON PLUG-IN VALVES<br>ELECTRICAL CONNECTION    |
|-------------|---|
| BA          | Flying leads  |
| GA          | MAC JAC solenoid plug-in                                      |
| GB          | MAC JAC solenoid plug-in with diode                           |
| GC          | MAC JAC solenoid plug-in with MOV                             |
| GD          | MAC JAC solenoid plug-in with light                           |
| GE          | MAC JAC solenoid plug-in with diode and light                 |
| GF          | MAC JAC solenoid plug-in with MOV and light                   |
| GG          | MAC JAC solenoid plug-in with rectifier                       |
| GH          | MAC JAC solenoid plug-in with rectifier and light             |
| GJ          | MAC JAC solenoid plug-in - Male only                          |
| GK          | MAC JAC solenoid plug-in with diode - Male only               |
| GL          | MAC JAC solenoid plug-in with MOV - Male only                 |
| GM          | MAC JAC solenoid plug-in with light - Male only               |
| GN          | MAC JAC solenoid plug-in with diode and light - Male only     |
| GP          | MAC JAC solenoid plug-in with MOV and light - Male only       |
| GR          | MAC JAC solenoid plug-in with rectifier - Male only           |
| GS          | MAC JAC solenoid plug-in with rectifier and light - Male only |
| *JA         | Square Connector  |
| *JC         | Square Connector with light                                   |
| *JE         | Square Connector with diode                                   |
| *JF         | Square Connector with MOV                                     |
| *JG         | Square Connector with diode/light                             |
| *JH         | Square Connector with MOV/light                               |
| *JK         | Square Connector with Rectifier                               |

**J-XX X-X XX**

|     |   |
|-----|---|
| *JL | Square Connector with Rectifier with light      |
| *JJ | Square Connector Male only (Plain)              |
| *JB | Rectangular Connector                           |
| *JD | Rectangular Connector with light                |
| *JN | Rectangular Connector with diode                |
| *JP | Rectangular Connector with MOV                  |
| *JR | Rectangular Connector with diode/light          |
| *JS | Rectangular Connector with MOV/light            |
| *JT | Rectangular Connector with Rectifier            |
| *JU | Rectangular Connector with Rectifier with light |
| *JM | Rectangular Connector Male only (Plain)         |

\* Not available on manifold or stacking valves

**CONNECTORS FOR NON PLUG-IN VALVES**

| J-XX X-X XX | MINI SQUARE PLUG-IN CONNECTORS<br>9.4 MM SPACING BETWEEN PINS |
|-------------|---|
| KA          | Mini plug-in  |
| KB          | Mini plug-in with diode                                       |
| KC          | Mini plug-in with MOV   |
| KD          | Mini plug-in with light                                       |
| KE          | Mini plug-in with diode and light                             |
| KF          | Mini plug-in with MOV and light                               |
| KG          | Mini plug-in with rectifier                                   |
| KH          | Mini plug-in with rectifier and light                         |
| KJ          | Mini plug-in - Male only                                      |
| KK          | Mini plug-in with diode - Male only                           |
| KL          | Mini plug-in with MOV - Male only                             |
| KM          | Mini plug-in with light - Male only                           |
| KN          | Mini plug-in with diode and light - Male only                 |
| KP          | Mini plug-in with MOV and light - Male only                   |
| KR          | Mini plug-in with rectifier - Male only                       |
| KS          | Mini plug-in with rectifier and light - Male only             |

**CONNECTORS FOR NON PLUG-IN VALVES**

| J-XX X-X XX | MINI SQUARE PLUG-IN CONNECTORS<br>8.0 MM SPACING BETWEEN PINS<br>ISO SPECIFICATION 15217 |
|-------------|--|
| LA          | Mini plug-in   |
| LB          | Mini plug-in with diode  |
| LC          | Mini plug-in with MOV  |
| LD          | Mini plug-in with light  |
| LE          | Mini plug-in with diode and light  |
| LF          | Mini plug-in with MOV and light  |
| LG          | Mini plug-in with rectifier  |
| LH          | Mini plug-in with rectifier and light  |
| LJ          | Mini plug-in - Male only   |
| LK          | Mini plug-in with diode - Male only  |
| LL          | Mini plug-in with MOV - Male only  |
| LM          | Mini plug-in with light - Male only  |
| LN          | Mini plug-in with diode and light - Male only  |
| LP          | Mini plug-in with MOV and light - Male only  |
| LR          | Mini plug-in with rectifier - Male only  |
| LS          | Mini plug-in with rectifier and light - Male only  |

**J-XX X-X XX**

| J-XX X-X XX | CONNECTORS FOR PLUG-IN VALVES         |
|-------------|---------------------------------------|
| FA          | Base plug-in                          |
| FB          | Base plug-in with diode               |
| FC          | Base plug-in with MOV                 |
| FD          | Base plug-in with light               |
| FE          | Base plug-in with diode and light     |
| FF          | Base plug-in with MOV and light       |
| FG          | Base plug-in with rectifier           |
| FH          | Base plug-in with rectifier and light |