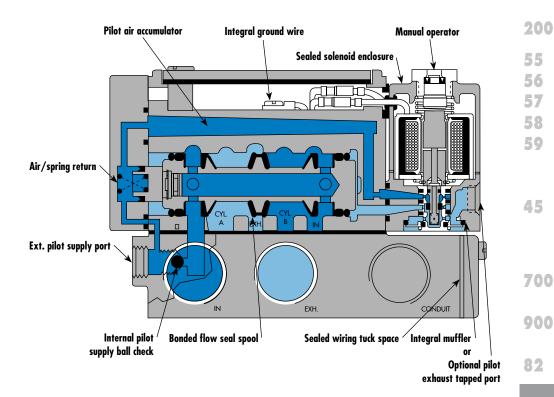


Individual mounting sub-base non "plug-in" Manifold mounting sub-base non "plug-in" sub-base non "plug-in" sub-base "plug-in" sub-base "plug-in"



SERIES FEATURES

- The patented MACSOLENOID® with its non-burn out feature on AC service.
- A large checked accumulator for consistent shifting on single and double solenoid models.
- A plug-in design that provides for internal or external pilot with or without lights and all electrical
 and air plumbing in the base the valve portion is the same.
- Non-lubricated or lubricated service.
- Optional low watttage DC solenoids down to 1 watt.
- Optional indicator lights, and various types of manual operators.
- Non plug-in or external plug-in models are available.

6300

6500

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1300

800

ISO 1

ISO 3

MAC 125A MAC 250A

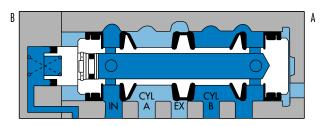
MAC 500A



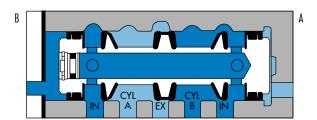




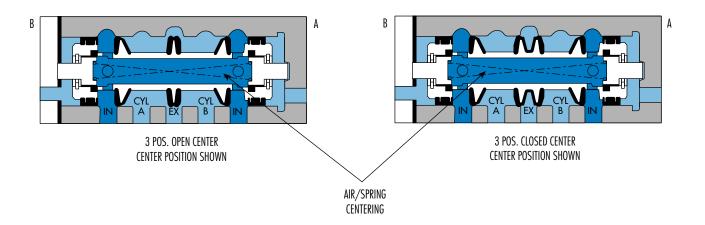
SPOOL CONFIGURATIONS



2 POS. SINGLE OPERATOR SPRING RETURN B ACTUATED SHOWN



2 POS. DOUBLE OPERATOR B ACTUATED SHOWN



VALVE CONFIGURATIONS AVAILABLE

The versatile 6300 Series provides high flow, extremely fast response, and long life in a compact package and is available in the following configurations:

- 2-Pos., single or double operators (solenoid or remote air).
- 3-Pos., double operator-Closed Center, Open Center or Pressure Center (solenoid or remote air).
- Single pressure.
- Dual pressure on manifolds with sandwich regulators.
- Individual base or add-a-unit manifold base.
- Internal pilot or for Vacuum to 25 PSI main valve pressures, external pilot.
- Manual and mechanical operators available.
- All models available with sandwich regulators (Except remote air pilot).

REMOTE AIR PILOT OPERATED VALVES

These remote air versions feature:

- A larged checked accumulator for air/spring return on single remote air models.
- Non-lubricated or lubricated service.
- All piping connections, including the remote air pilot supply, in the base.

REMOTE AIR PILOT, PILOT OPERATED VALVES

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

- A manual operator and indicator.
- Ability to use a pilot signal pressure different from the main valve pressure. Pilot signal can be from 20 to 150 PSIG, regardless of main valve pressure.



		()		
Function	Port size	Flow (Max)	Individual mounting	Series

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



HOW TO ORDER

Port size	Pilot air	4/2 Single operator	4/2 Double operator		
		A B B IN EXH	A B B IN EXH	B A B A SINW IN EXH	B B B B A B A B A B A B A B A B A B A B
Valve less b	ase	6312D-000-PM- XXYZZ	6322D-000-PM- XXYZZ	6332D-000-PM- XXYZZ	6342D-000-PM- XXYZZ
sub-base	Internal	6312D-131-PM- XXYZZ	6322D-131-PM- XXYZZ	6332D-131-PM- XXYZZ	6342D-131-PM- XXYZZ
1/4" NPTF	External	6312D-141-PM- XXYZZ	6322D-141-PM- XXYZZ	6332D-141-PM- XXYZZ	6342D-141-PM- XXYZZ
sub-base	Internal	6312D-231-PM- XXYZZ	6322D-231-PM- XXYZZ	6332D-231-PM- XXYZZ	6342D-231-PM- XXYZZ
3/8" NPTF	External	6312D-241-PM- XXYZZ	6322D-241-PM- XXYZZ	6332D-241-PM- XXYZZ	6342D-241-PM- XXYZZ
sub-base	Internal	6312D-331-PM- XXYZZ	6322D-331-PM- XXYZZ	6332D-331-PM- XXYZZ	6342D-331-PM- XXYZZ
1/2" NPTF	External	6312D-341-PM- XXYZZ	6322D-341-PM- XXYZZ	6332D-341-PM- XXYZZ	6342D-341-PM- xxyzz

Note: Above codes shown are for side ports.

SOLEN	OID OPERATOR ➤		XX Y ZZ ·		
XX	Voltage	Y	Manual operator	ZZ	Electrical connection
11	120/60, 110/50	1	Non-locking	JB	Rectangular connector
12	240/60, 220/50	2	Locking	JD	Rectangular connector with light
22	24/60, 24/50			JA	Square connector
59	24 VDC (2.5 W)			JC	Square connectorwith light
87	24 VDC (17.1 W)			BA	Flying leads (18")
61	24 VDC (8.5 W)			1	1

Other options available, see page 357.

OPTIONS

6312D-XXX-Р<u>М</u>-**хху**zz

- - For piped pilot exhaust replace M by P.

- For bottom cylinder ports (excluding 1/2"), replace by 4.

- For dual pressure valves (see page 293 for use with sandwich regulators), replace by 5.

Note: 1. The valve less base is always the same for internal or external pilot. These options are effected in the base.

2. To order bases without the valve, choose the base from the above table, then add 6300D as a prefix. Example <math>6300D-131.



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6300

6500

6600 1300

800

ISO 1

ISO 2 ISO 3

MAC 125A MAC 250A

MAC 500A

Note: Photo shown with JC connector.







Fluid: Compressed air, vacuum, inert gases

Pressure range: Internal pilot: single operator and 3 positions: 25-150 PSI double operator: 10-150 PSI

External pilot : vacuum to 150 PSI

Pilot pressure: Single operator and 3 positions: 25-150 PSI Double operator: 10-150 PSI

Lubrication : Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)

Filtration: 40 µ

Temperature range: 0°F to 120°F (-18°C to 50°C)

Flow (at 6 bar, $\Delta P=1bar$): 1/4" (2.0 C_v), 3/8" : (2.6 C_v), 1/2" (3.0 C_v)

Coil: Epoxy encapsulated - class A wires - Continuous duty.

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 VDC (8.5 W) Energize: 10 ms De-energize: 11 ms

120/60 Energize : 4-13 ms De-energize : 10-17 ms

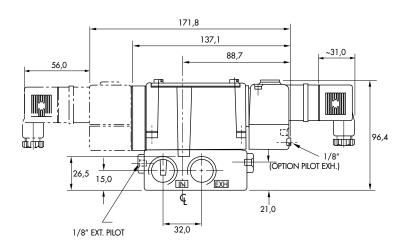
Spare parts : • Solenoid operator (power \geq 4 W) : D1-XXAA, cover mounting screws 35206 and seal 16234.

• Pilot valve: PME-XXYZZ, including seal 16337. • Pressure seal between valve and base: 16298.

• Mounting screw valve to base (x4): 35303.

Options : • BSPP threads.

DIMENSIONS





Function	Port size	Floш (Max)	Individual mounting	Series
4/2 - 4/3	1/4" - 3/8" - 1/2"	3.0 C _v	sub-base "plug-in"	

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

HOW TO ORDER

Port size	Pilot air	4/2 Single operator	4/2 4/3 Double operator Closed center		4/3 Open center
		A B B IN EXH	A B B D IN EXH	B A B A SINW IN EXH	B A B SIM IN EXH
Valve less b	ase	6311D-000-PM- xxy DA	6321D-000-PM- xxy DA	6331D-000-PM- xxy DA	6341D-000-PM- xxy DA
sub-base	Internal	6311D-111-PM- XXY DA	6321D-111-PM- XXY DA	6331D-111-PM- xxy DA	6341D-111-PM- xxy DA
1/4" NPTF	External	6311D-121-PM- XXY DA	6321D-121-PM- XXY DA	6331D-121-PM- xxy DA	6341D-121-PM- xxy DA
sub-base	Internal	6311D-211-PM- xxy DA	6321D-211-PM- XXY DA	6331D-211-PM- xxy DA	6341D-211-PM- xxy DA
3/8" NPTF	External	6311D-221-PM- XXY DA	6321D-221-PM- XXY DA	6331D-221-PM- xxy DA	6341D-221-PM- xxy DA
sub-base	Internal	6311D-311-PM- xxy DA	6321D-311-PM- XXY DA	6331D-311-PM- xxy DA	6341D-311-PM- xxy DA
1/2" NPTF	External	6311D-321-PM- xxy DA	6321D-321-PM- XXY DA	6331D-321-PM- xxy DA	6341D-321-PM- xxy DA

Note: Above codes shown are for side ports without lights.

SOLENG	DID OPERATOR ➤	XX Y DA	•
XX	Voltage	Y	Manual operator
11	120/60, 110/50	1	Non-locking
12	240/60, 220/50	2	Locking
22	24/60, 24/50		
59	24 VDC (2.5 W)		
<i>87</i>	24 VDC (17.1 W)		
61	24 VDC (8.5 W)		

Other options available, see page 357.

OPTIONS

631 <u>1</u>D-XXX-PM-xxyDA

- For piped pilot exhaust replace M by P.

- For bottom ports (excluding 1/2"), replace by 4 (no light), by 5 (sgl. light), by 6 (dbl. light).

- For side ports with lights on base, replace by 2 (sgl. light), by 3 (dbl. light).

- For lights on valve body, replace by 3.

- For dual pressure valves with lights on valve body (see page 293 for use with sandwich regulators), replace by 6.

Note: 1. The valve less base is always the same for internal or external pilot. These options are effected in the base.

2. To order bases without the valve, choose the base from the above table, then add 6300D as a prefix. Example 6300D-1111.



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1300

800

ISO 1

ISO 2 ISO 3

MAC 125A

MAC 250A MAC 500A







Fluid: Compressed air, vacuum, inert gases

Pressure range: Internal pilot: single operator and 3 positions: 25-150 PSI double operator: 10-150 PSI

External pilot : vacuum to 150 PSI

Pilot pressure: Single operator and 3 positions: 25-150 PSI Double operator: 10-150 PSI

Lubrication: Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)

Filtration: 40

Temperature range: 0°F to 120°F (-18°C to 50°C)

Flow (at 6 bar, $\Delta P=1$ bar): 1/4" (2.0 C_v), 3/8" : (2.6 C_v), 1/2" (3.0 C_v)

Coil: Epoxy encapsulated - class A wires - Continuous duty.

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 VDC (8.5 W) Energize: 10 ms De-energize: 11 ms

120/60 Energize : 4-13 ms De-energize : 10-17 ms

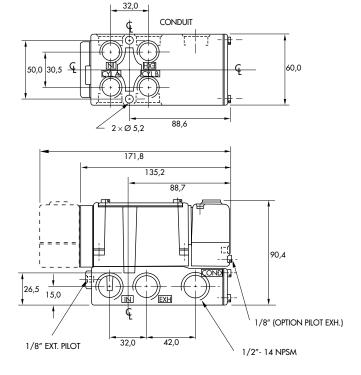
Spare parts : • Solenoid operator (power ≥ 4 W) : D1-XXBE, cover mounting screws 35206 and seal 16234.

• Pilot valve: PME-XXYDA-BE, including seal 16337. • Pressure seal between valve and base: 16298.

• Mounting screw valve to base (x4): 35303.

Options : • BSPP threads.

DIMENSIONS





Function	Port size	Flow (Max)	Manifold mounting	Series
4/2 - 4/3	3/8" - 1/2"	3.0 C _v	sub-base non "plug-in"	

- 1. Balanced spool, immune to variations of
- 2. Short stroke with high flow.
- 3. High shifting forces.
- 4. Checked accumulator guarantees maximum pilot pressure.
- 5. Powerful return force thanks to the combination of mechanical and air springs.
- 6. Bonded spool with minimum friction, shifting in a glass-like finished bore.
- 7. Wiping effect eliminates sticking.

HOW TO ORDER

8. Pilot valve with balanced poppet, high flow, short and consistent response times.



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100

200

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700

900

Port size	Pilot air	4/2 Single operator	4/2 Double operator	4/3 Closed center	4/3 Open center	4/3 Pressure center
		A B B B IN EXH	A B B B IN EXH	B A B A A A A A A A A A A A A A A A A A	B A B A A A A A A A A A A A A A A A A A	B A B A SIM IN EXH
Valve less k	ase	6312D-000-PM- XXYZZ	6322D-000-PM- XXYZZ	6332D-000-PM- XXYZZ	6342D-000-PM- XXYZZ	6352D-000-PM- XXYZZ
sub-base	Internal	6312D-531-PM- XXYZZ	6322D-531-PM- XXYZZ	6332D-531-PM- XXYZZ	6342D-531-PM- XXYZZ	6352D-531-PM- XXYZZ
3/8" NPTF	External	6312D-541-PM- XXYZZ	6322D-541-PM- XXYZZ	6332D-541-PM- XXYZZ	6342D-541-PM- XXYZZ	6352D-541-PM- XXYZZ
sub-base	Internal	6312D-631-PM- XXYZZ	6322D-631-PM- XXYZZ	6332D-631-PM- XXYZZ	6342D-631-PM- XXYZZ	6352D-631-PM- XXYZZ
1/2" NPTF	External	6312D-641-PM- XXYZZ	6322D-641-PM- XXYZZ	6332D-641-PM- XXYZZ	6342D-641-PM- XXYZZ	6352D-641-PM- XXYZZ

Note: Above codes shown are for side cylinder ports.

XX	Voltage	Y	Manual operator	ZZ	Electrical connection
11	120/60, 110/50	1	Non-locking	JB	Rectangular connector
12	240/60, 220/50	2	Locking	JD	Rectangular connector with light
22	24/60, 24/50		-	JA	Square connector
59	24 VDC (2.5 W)			JC	Square connector with light
87	24 VDC (17.1 W)			BA	Flying leads (18")
61	24 VDC (8.5 W)			Note : Ph	oto shown with JC connector.

Other options available, see page 357.

631<u>2</u>D-XX<u>X</u>-Р<u>М</u>-**хху**zz

OPTIONS

- For piped pilot exhaust replace M by P.

- For bottom cylinder ports, replace by 4.

- - For bottom and side cylinder ports, replace by 7.

- For dual pressure valves (see page 293 for use with sandwich regulators), replace by 5.

MODIFICATIONS - MOD 0210 Bottom inlet port in addition to side inlet port - TO ORDER: 6312D-531-PM-111JA MOD 0210

- Note: 1. The valve less base is always the same for internal or external pilot. These options are effected in the manifold.
 - 2. To order manifolds without the valve, choose the manifold from the above table, then add 6300D as a prefix. Example 6300D-631.
 - 3. When ordering an external pilot connection for manifold bases, a common external pilot port is standard. One connection only is required for all the valves in the manifold whether single or double solenoid.
 - 4. Manifolds for solenoid and remote air operated valves must be ganged separately.

82

6300

6500 6600

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ISO 1

MAC 125A MAC 250A

MAC 500A







Fluid: Compressed air, vacuum, inert gases

Pressure range: Internal pilot: single operator and 3 positions: 25-150 PSI double operator: 10-150 PSI

External pilot : vacuum to 150 PSI

Pilot pressure: Single operator and 3 positions: 25-150 PSI Double operator: 10-150 PSI

Lubrication: Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)

Filtration: 40 µ

Temperature range: 0°F to 120°F (-18°C to 50°C)

Flow (at 6 bar, ΔP=1bar): 3/8": (2.6 C_v), 1/2" (3.0 C_v)

Coil: Epoxy encapsulated - class A wires - Continuous duty.

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 VDC (8.5 W) Energize: 10 ms De-energize: 11 ms

120/60 Energize : 4-13 ms De-energize : 10-17 ms

Spare parts : • Solenoid operator (power \geq 4 W) : D1-XXAA, cover mounting screws 35206 and seal 16234.

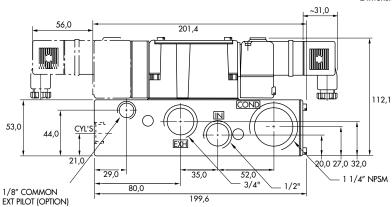
• Pilot valve: PME-XXYZZ, including seal 16337. • Pressure seal between valve and base: 16396.

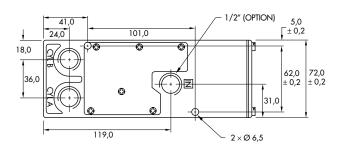
 $\bullet \ \, \text{Mounting screw valve to base (x4)}: 35303. \, \bullet \ \, \text{Tie-rod (x2)}: 19624. \, \bullet \ \, \text{Fastening kit}: N-63002-01$

• Inlet isolator : 32839. • Exhaust isolator : 28309. • Blank station cover plate : M-63014.

Options : • BSPP threads.

DIMENSIONS







Function	Port size	Flow (Max)	Manifold mounting	Series
4/2 - 4/3	3/8" - 1/2"	3.0 C _v	sub-base "plug-in"	

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



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700

900

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
		A B B B IN EXH	A B B S S S S S S S S S S S S S S S S S	B A B A B A B A A B A A A A A A A A A A	B A B A A B A A A A A A A A A A A A A A	B A B A A A A A A A A A A A A A A A A A
Valve less b	ase	6311D-000-PM- xxy DA	6321D-000-PM- xxy DA	6331D-000-PM- xxy DA	6341D-000-PM- xxy DA	6351D-000-PM- xxy DA
sub-base	Internal	6311D-511-PM- xxy DA	6321D-511-PM- xxy DA	6331D-511-PM- xxy DA	6341D-511-PM- xxy DA	6351D-511-PM- XXY DA
3/8" NPTF	External	6311D-521-PM- XXY DA	6321D-521-PM- xxy DA	6331D-521-PM- xxy DA	6341D-521-PM- xxy DA	6351D-521-PM- XXY DA
sub-base	Internal	6311D-611-PM- XXY DA	6321D-611-PM- xxy DA	6331D-611-PM- xxy DA	6341D-611-PM- xxy DA	6351D-611-PM- XXY DA
1/2" NPTF	External	6311D-621-PM- XXY DA	6321D-621-PM- XXY DA	6331D-621-PM- XXY DA	6341D-621-PM- XXY DA	6351D-621-PM- XXY DA

Note: Above codes shown are for side cylinder ports without lights.

SOLENOID O	DED ATOD 🐷

XX	Voltage
11	120/60, 110/50
12	240/60, 220/50
22	24/60, 24/50
59	24 VDC (2.5 W)
<i>87</i>	24 VDC (17.1 W)
61	24 VDC (8.5 W)

ther options available, see page 35

OPTIONS

6311D-XXX-PM-xxyDA

- - For piped pilot exhaust replace M by P.

- For bottom cylinder ports, replace by 4 (no light), by 5 (sgl. light), by 6 (dbl. light).

- For side cylinder ports with light, replace by 2 (sgl. light), by 3 (dbl. light).

- For bottom and side cylinder ports, replace by 7 (no light), by 8 (sgl. light), by 9 (dbl. light).

- For lights on valve body, replace by 3.

- - For dual pressure valves with lights on valve body (see page 293 for use with sandwich regulators), replace by 6.

Manual operator

Non-locking Locking

MODIFICATIONS - MOD 0210 Bottom inlet port in addition to side inlet port - TO ORDER: 6311D-511-PM-111DA MOD 0210

Note: 1. The valve less base is always the same for internal or external pilot. These options are effected in the manifold.

- 2. To order manifolds without the valve, choose the manifold from the above table, then add 6300D as a prefix. Example 6300D-511.
- 3. When ordering an external pilot connection for manifold bases, a common external pilot port is standard. One connection only is required for all the valves in the manifold whether single or double solenoid.
- 4. Manifolds for solenoid and remote air operated valves must be ganged separately.

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800

ISO 1 **ISO 2**

ISO 3

MAC 125A

MAC 250A MAC 500A







Fluid: Compressed air, vacuum, inert gases

Pressure range: Internal pilot: single operator and 3 positions: 25-150 PSI double operator: 10-150 PSI

External pilot : vacuum to 150 PSI

Pilot pressure: Single operator and 3 positions: 25-150 PSI Double operator: 10-150 PSI

Lubrication: Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)

Filtration: 40

Temperature range: 0°F to 120°F (-18°C to 50°C)

Flow (at 6 bar, ΔP=1bar): 3/8": (2.6 C_V), 1/2" (3.0 C_V)

Coil: Epoxy encapsulated - class A wires - Continuous duty.

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 VDC (8.5 W) Energize : 10 ms De-energize : 11 ms

120/60 Energize : 4-13 ms De-energize : 10-17 ms

Spare parts : • Solenoid operator (power ≥ 4 W) : D1-XXBE, cover mounting screws 35206 and seal 16234.

• Pilot valve: PME-XXYDA-BE, including seal 16337. • Pressure seal between valve and base: 16396.

• Mounting screw valve to base (x4): 35303. • Tie-rod (x2): 19624. • Fastening kit: N-63002-01

• Inlet isolator : 32839. • Exhaust isolator : 28309. • Blank station cover plate : M-63014.

Options : • BSPP threads.

DIMENSIONS

