

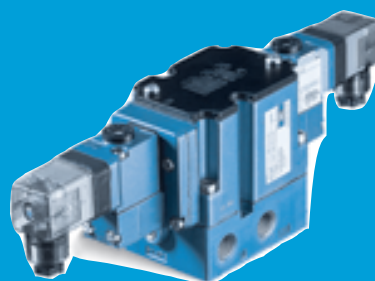
Handhabungstechnik
Motore & Getriebe
Pneumatik
Hydraulik
Systemlösungen

as-tec
Mechatronik GmbH

Produktkatalog

MAC 4/2 - 4/3 Wegeventile

Serie 6300 - 1/4" bis 1/2"



Über Uns

Die Firma **as-tec Mechatronik GmbH** ist ein herstellerunabhängiger Lieferant von Systemlösungen und Komponenten für pneumatische, hydraulische und elektrische Antriebs- und Steuerungstechnik.

Wir bieten unseren Kunden für ihre Projekte im Maschinen- und Anlagenbau, beziehungsweise für die Instandhaltung ihrer Fertigungseinrichtungen die am besten geeigneten Produkte aus unserem herstellerübergreifenden Produktportfolio.

In unserer Werkstätte produzieren wir kundenspezifische Lösungen wie zum Beispiel Ventileinheiten, Schaltschränke und Sonderzylinder. Weiters halten wir sowohl Standardkomponenten als auch speziell für Kunden bevorratete Produkte auf Lager.



Direct solenoid and solenoid pilot operated valves

Individual mounting

Series

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

35

sub-base non "plug-in"	sub-base "plug-in"
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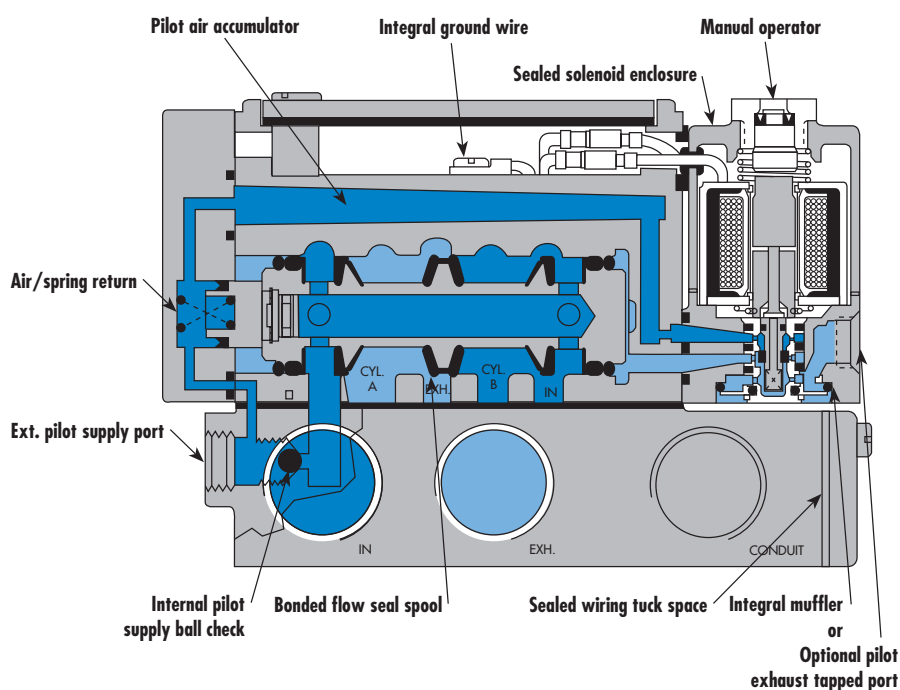
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ISO 1

ISO 2

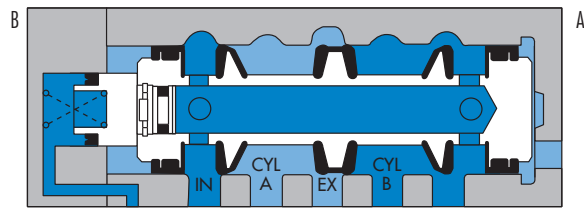
ISO 3



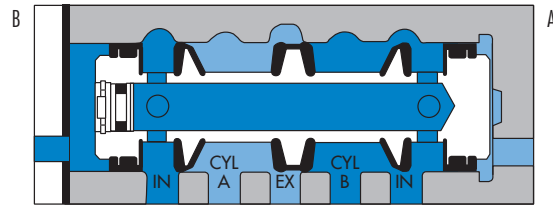
SERIES FEATURES

- 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 wattage 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.

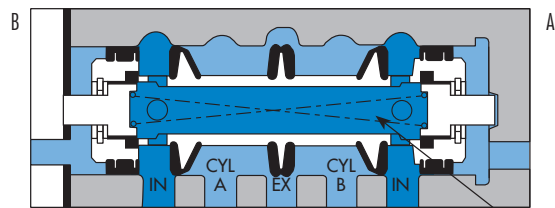
SPOOL CONFIGURATIONS



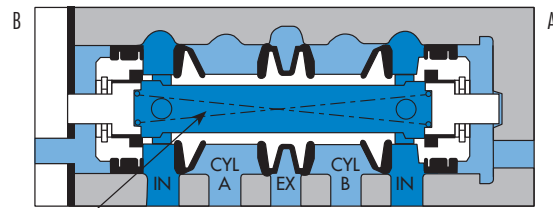
2 POS. SINGLE OPERATOR SPRING RETURN
B ACTUATED SHOWN



2 POS. DOUBLE OPERATOR
B ACTUATED SHOWN



3 POS. OPEN CENTER
CENTER POSITION SHOWN



3 POS. CLOSED CENTER
CENTER POSITION SHOWN

AIR/SPRING
CENTERING

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 1.7 bar 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 large 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.

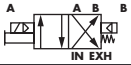
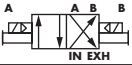
Pilot signal can be from 1.3 to 10 bar, regardless of main valve pressure.

Function	Port size	Flow (Max)	Individual mounting	Series
4/2 - 4/3	G1/4" - G3/8" - G1/2"	3000 NI/min	sub-base non "plug-in"	

OPERATIONAL BENEFITS

1. Balanced spool, immune to variations of pressure.
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	4/3 Closed center	4/3 Open center
					
Valve less base		6312D-000-PM- XXYYZZ	6322D-000-PM- XXYYZZ	6332D-000-PM- XXYYZZ	6342D-000-PM- XXYYZZ
sub-base	Internal	6312D-171-PM- XXYYZZ	6322D-171-PM- XXYYZZ	6332D-171-PM- XXYYZZ	6342D-171-PM- XXYYZZ
G1/4"	External	6312D-181-PM- XXYYZZ	6322D-181-PM- XXYYZZ	6332D-181-PM- XXYYZZ	6342D-181-PM- XXYYZZ
sub-base	Internal	6312D-271-PM- XXYYZZ	6322D-271-PM- XXYYZZ	6332D-271-PM- XXYYZZ	6342D-271-PM- XXYYZZ
G3/8"	External	6312D-281-PM- XXYYZZ	6322D-281-PM- XXYYZZ	6332D-281-PM- XXYYZZ	6342D-281-PM- XXYYZZ
sub-base	Internal	6312D-371-PM- XXYYZZ	6322D-371-PM- XXYYZZ	6332D-371-PM- XXYYZZ	6342D-371-PM- XXYYZZ
G1/2"	External	6312D-381-PM- XXYYZZ	6322D-381-PM- XXYYZZ	6332D-381-PM- XXYYZZ	6342D-381-PM- XXYYZZ

Note : Above codes shown are for side ports.

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		

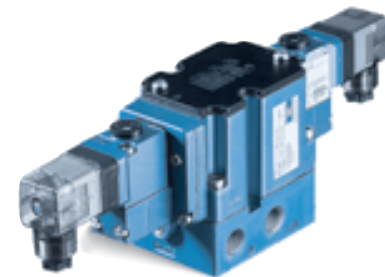
* Other options available, see page 305.

OPTIONS

6312D-XXX-PM-**XXYYZZ**

- For piped pilot exhaust replace M by P.
- For bottom cylinder ports (excluding G1/2"), 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 6300D-171.



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ISO 1
ISO 2
ISO 3

TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Internal pilot : single operator and 3 positions : 1.7-10 bar double operator : 0.7-10 bar External pilot : vacuum to 10 bar		
Pilot pressure :	Single operator and 3 positions : 1.7-10 bar Double operator : 0.7-10 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) :	G1/4" : 2000 NI/min, G3/8" : 2600 NI/min, G1/2" : 3000 NI/min		
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 V=8.5 W	Energize : 10 ms	De-energize : 11 ms
	50Hz/6 W	Energize : 4-13 ms	De-energize : 10-17 ms

Spare parts :

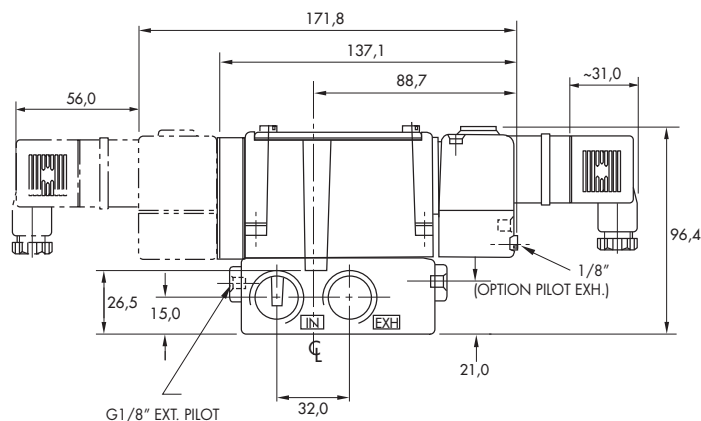
- Solenoid operator (power ≥ 4 W) : D1-XXAA, cover mounting screws 35206 and seal 16234.
- Pilot valve : PME-XXYZZ, including seal 16337. • Pressure seal between valve and base : 16298.
- Mounting screw valve to base (x4) : 35303.

Options :

- NPTF threads.

DIMENSIONS

Dimensions shown are metric (mm)

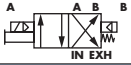
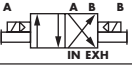
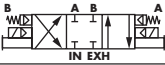


Function	Port size	Flow [Max]	Individual mounting	Series
4/2 - 4/3	G1/4" - G3/8" - G1/2"	3000 NI/min	sub-base "plug-in"	

OPERATIONAL BENEFITS

1. Balanced spool, immune to variations of pressure.
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	4/3 Closed center	4/3 Open center
					
Valve less base		6311D-000-PM- XXY DA	6321D-000-PM- XXY DA	6331D-000-PM- XXY DA	6341D-000-PM- XXY DA
sub-base	Internal	6311D-151-PM- XXY DA	6321D-151-PM- XXY DA	6331D-151-PM- XXY DA	6341D-151-PM- XXY DA
G1/4"	External	6311D-161-PM- XXY DA	6321D-161-PM- XXY DA	6331D-161-PM- XXY DA	6341D-161-PM- XXY DA
sub-base	Internal	6311D-251-PM- XXY DA	6321D-251-PM- XXY DA	6331D-251-PM- XXY DA	6341D-251-PM- XXY DA
G3/8"	External	6311D-261-PM- XXY DA	6321D-261-PM- XXY DA	6331D-261-PM- XXY DA	6341D-261-PM- XXY DA
sub-base	Internal	6311D-351-PM- XXY DA	6321D-351-PM- XXY DA	6331D-351-PM- XXY DA	6341D-351-PM- XXY DA
G1/2"	External	6311D-361-PM- XXY DA	6321D-361-PM- XXY DA	6331D-361-PM- XXY DA	6341D-361-PM- XXY DA

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

SOLENOID OPERATOR >

XX Y DA *

XX	Voltage	Y	Manual operator
11	110V~/50Hz	1	Non-locking
12	220V~/50Hz	2	Locking
22	24V~/50Hz		
59	24V=/2,5W		
87	24V=/17,1W		
61	24V=/8,5W		

* Other options available, see page 305.

OPTIONS

6311D-XXX-PM-**XXY**DA

- For piped pilot exhaust replace M by P.
- For bottom ports (excluding G1/2"), 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-151.



TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Internal pilot : single operator and 3 positions : 1.7-10 bar double operator : 0.7-10 bar External pilot : vacuum to 10 bar		
Pilot pressure :	Single operator and 3 positions : 1.7-10 bar Double operator : 0.7-10 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) :	G1/4" : 2000 NI/min, G3/8" : 2600 NI/min, G1/2" : 3000 NI/min		
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 V=8.5 W	Energize : 10 ms	De-energize : 11 ms
	50Hz/6 W	Energize : 4-13 ms	De-energize : 10-17 ms

Spare parts :

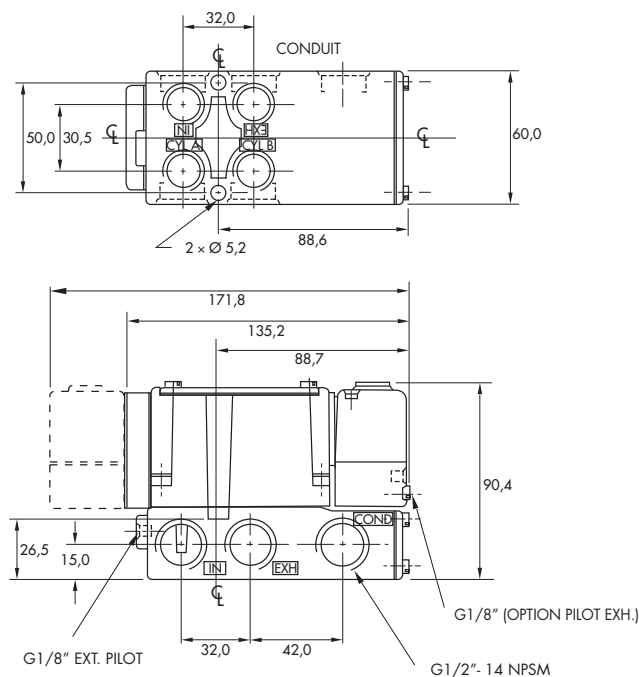
- Solenoid operator (power ≥ 4 W) : D1-XXBE, cover mounting screws 35206 and seal 16234.
- Pilot valve : PME-XXYDA-BE, including seal 16337. • Pressure seal between valve and base : 16298.
- Mounting screw valve to base (x4) : 35303.

Options :

- NPTF threads.

DIMENSIONS

Dimensions shown are metric (mm)

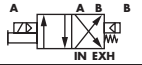
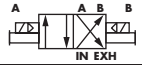


Function	Port size	Flow [Max]	Manifold mounting	Series
4/2 - 4/3	G3/8" - G1/2"	3000 NI/min	sub-base non "plug-in"	

OPERATIONAL BENEFITS

1. Balanced spool, immune to variations of pressure.
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	4/3 Closed center	4/3 Open center	4/3 Pressure center
						
Valve less base		6312D-000-PM- XXYYZZ	6322D-000-PM- XXYYZZ	6332D-000-PM- XXYYZZ	6342D-000-PM- XXYYZZ	6352D-000-PM- XXYYZZ
sub-base	Internal	6312D-571-PM- XXYYZZ	6322D-571-PM- XXYYZZ	6332D-571-PM- XXYYZZ	6342D-571-PM- XXYYZZ	6352D-571-PM- XXYYZZ
G3/8"	External	6312D-581-PM- XXYYZZ	6322D-581-PM- XXYYZZ	6332D-581-PM- XXYYZZ	6342D-581-PM- XXYYZZ	6352D-581-PM- XXYYZZ
sub-base	Internal	6312D-671-PM- XXYYZZ	6322D-671-PM- XXYYZZ	6332D-671-PM- XXYYZZ	6342D-671-PM- XXYYZZ	6352D-671-PM- XXYYZZ
G1/2"	External	6312D-681-PM- XXYYZZ	6322D-681-PM- XXYYZZ	6332D-681-PM- XXYYZZ	6342D-681-PM- XXYYZZ	6352D-681-PM- XXYYZZ

Note : Above codes shown are for side cylinder ports.

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.

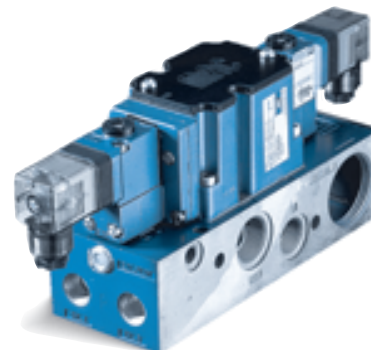
OPTIONS

6312D-XXX-PM-**XXYYZZ**

- 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-571-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-671.
 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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6600

1300

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ISO 1

ISO 2

ISO 3

TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Internal pilot : single operator and 3 positions : 1.7-10 bar double operator : 0.7-10 bar External pilot : vacuum to 10 bar		
Pilot pressure :	Single operator and 3 positions : 1.7-10 bar Double operator : 0.7-10 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) :	G3/8" : 2600 NI/min, G1/2" : 3000 NI/min		
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 V=8.5 W	Energize : 10 ms	De-energize : 11 ms
	50Hz/6 W	Energize : 4-13 ms	De-energize : 10-17 ms

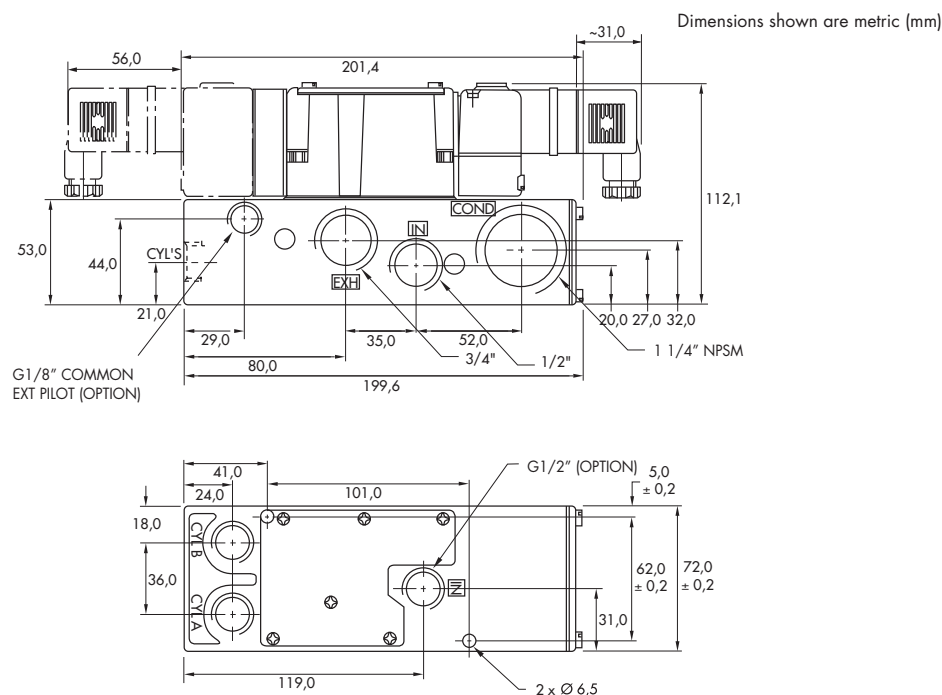
Spare parts :

- Solenoid operator (power ≥ 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.
- 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 :

- NPTF threads.

DIMENSIONS

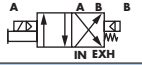
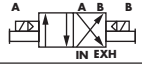


Function	Port size	Flow [Max]	Manifold mounting	Series
4/2 - 4/3	G3/8" - G1/2"	3000 NI/min	sub-base "plug-in"	

OPERATIONAL BENEFITS

1. Balanced spool, immune to variations of pressure.
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	4/3 Closed center	4/3 Open center	4/3 Pressure center
						
Valve less base		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-551-PM- XXY DA	6321D-551-PM- XXY DA	6331D-551-PM- XXY DA	6341D-551-PM- XXY DA	6351D-551-PM- XXY DA
G3/8"	External	6311D-561-PM- XXY DA	6321D-561-PM- XXY DA	6331D-561-PM- XXY DA	6341D-561-PM- XXY DA	6351D-561-PM- XXY DA
sub-base	Internal	6311D-651-PM- XXY DA	6321D-651-PM- XXY DA	6331D-651-PM- XXY DA	6341D-651-PM- XXY DA	6351D-651-PM- XXY DA
G1/2"	External	6311D-661-PM- XXY DA	6321D-661-PM- XXY DA	6331D-661-PM- XXY DA	6341D-661-PM- XXY DA	6351D-661-PM- XXY DA

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

SOLENOID OPERATOR ►

XX	Voltage	Y	Manual operator
11	110V~/50Hz	1	Non-locking
12	220V~/50Hz	2	Locking
22	24V~/50Hz		
87	24V=/17,1W		
59	24V=/2,5W		
61	24V=/8,5W		

* Other options available, see page 305.

OPTIONS

6311D-XXX-PM- XXY DA	- 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.
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MODIFICATIONS - MOD 0210 Bottom inlet port in addition to side inlet port - TO ORDER : 6311D-551-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-551.
 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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6600

1300

800

ISO 1

ISO 2

ISO 3

TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Internal pilot : single operator and 3 positions : 1.7-10 bar double operator : 0.7-10 bar External pilot : vacuum to 10 bar		
Pilot pressure :	Single operator and 3 positions : 1.7-10 bar Double operator : 0.7-10 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) :	G3/8" : 2600 NI/min, G1/2" : 3000 NI/min		
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 V=8.5 W	Energize : 10 ms	De-energize : 11 ms
	50Hz/6 W	Energize : 4-13 ms	De-energize : 10-17 ms

Spare parts :

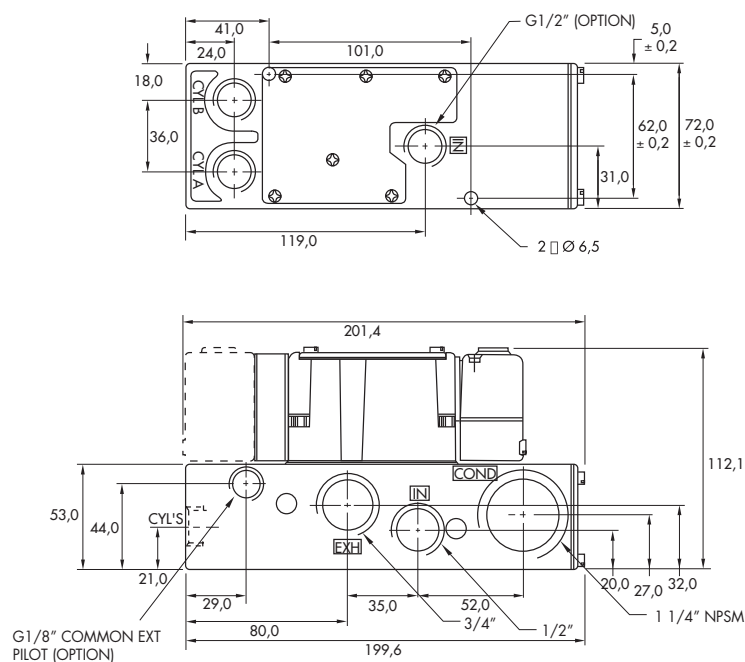
- Solenoid operator (power ≥ 4 W) : D1-XXBE, cover mounting screws 35206 and seal 16234.
- Pilot valve : PME-XXYDA-BE, including seal 16337. • Pressure seal between valve and base : 16396.
- Mounting screw valve to base (x4) : 35303. • Tie-rod (x2) : 19624. • Fastening kit : N-63002-01
- Inlet isolator : 32839. • Exhaust isolator : 28309. • Blank station cover plate : M-63014.

Options :

- NPTF threads.

DIMENSIONS

Dimensions shown are metric (mm)

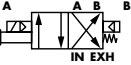
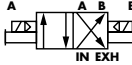


Function	Port size	Flow [Max]	Individual mounting	Series
4/2 - 4/3	1/4" - 3/8" - 1/2"	3.0 C_v	sub-base non "plug-in"	

OPERATIONAL BENEFITS

1. Balanced spool, immune to variations of pressure.
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	4/3 Closed center	4/3 Open center
					
Valve less base		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.

SOLENOID 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 connector with light
87 24 VDC (17.1 W)		BA Flying leads (18")
61 24 VDC (8.5 W)		

* Other options available, see page 357.

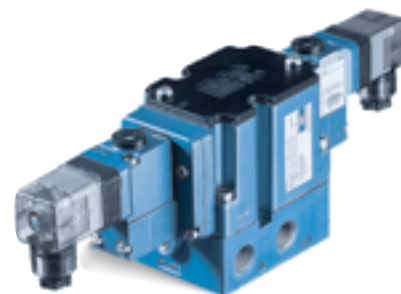
OPTIONS

6312D-XXX-PM-**XXYZZ**

- 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 6300D-131.



35

100

200

55

56

57

58

59

45

700

900

82

6300

6500

6600

1300

800

ISO 1

ISO 2

ISO 3

MAC 125A

MAC 250A

MAC 500A

TECHNICAL DATA

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) :	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 :

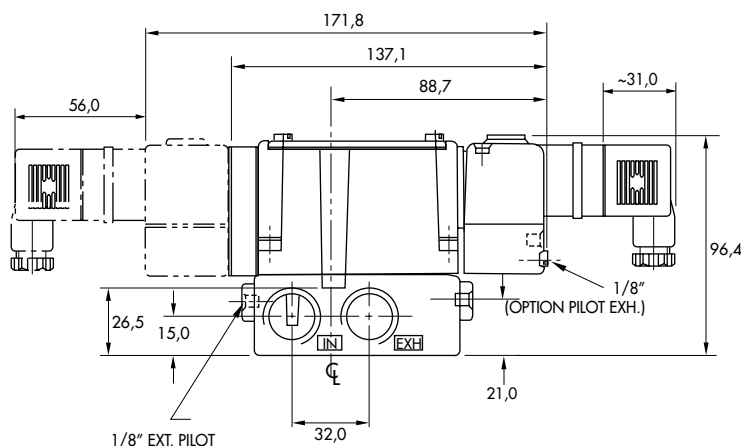
- Solenoid operator (power ≥ 4 W) : D1-XXAA, cover mounting screws 35206 and seal 16234.
- Pilot valve : PME-XXYZZ, including seal 16337. • Pressure seal between valve and base : 16298.
- Mounting screw valve to base (x4) : 35303.

Options :

- BSPP threads.

DIMENSIONS

Dimensions shown are metric (mm)



Function	Port size	Flow [Max]	Individual mounting	Series
4/2 - 4/3	1/4" - 3/8" - 1/2"	3.0 C_v	sub-base "plug-in"	

OPERATIONAL BENEFITS

1. Balanced spool, immune to variations of pressure.
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	4/3 Closed center	4/3 Open center
Valve less base		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.

SOLENOID 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)	
87 24 VDC (17.1 W)	
61 24 VDC (8.5 W)	

* Other options available, see page 357.

OPTIONS

6311D-XXX-PM-**XXY**DA

- 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-111.



35

100

200

55

56

57

58

59

45

700

900

82

6300

6500

6600

1300

800

ISO 1

ISO 2

ISO 3

MAC 125A

MAC 250A

MAC 500A

TECHNICAL DATA

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) :	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 :

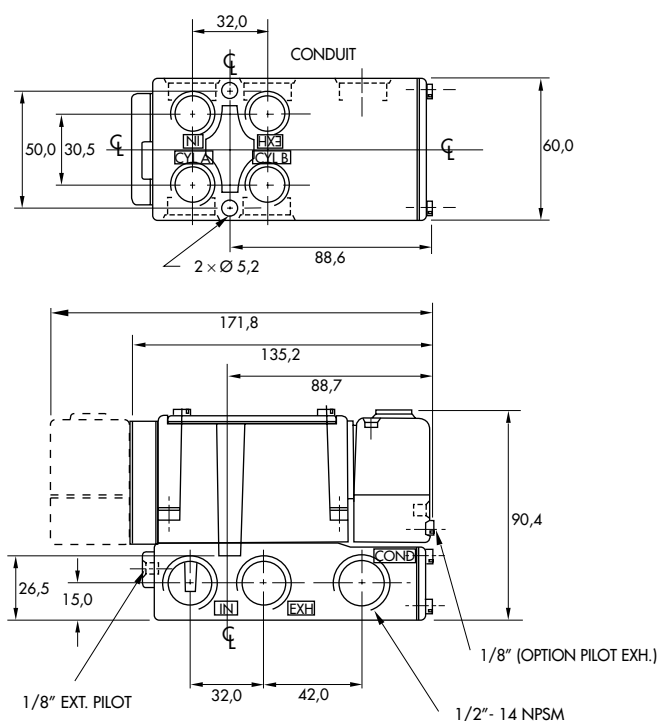
- Solenoid operator (power ≥ 4 W) : D1-XXBE, cover mounting screws 35206 and seal 16234.
- Pilot valve : PME-XXYDA-BE, including seal 16337. • Pressure seal between valve and base : 16298.
- Mounting screw valve to base (x4) : 35303.

Options :

- BSPP threads.

DIMENSIONS

Dimensions shown are metric (mm)



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"	

OPERATIONAL BENEFITS

1. Balanced spool, immune to variations of pressure.
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	4/3 Closed center	4/3 Open center	4/3 Pressure center
Valve less base		6312D-000-PM- XXYYZZ	6322D-000-PM- XXYYZZ	6332D-000-PM- XXYYZZ	6342D-000-PM- XXYYZZ	6352D-000-PM- XXYYZZ
sub-base	Internal	6312D-531-PM- XXYYZZ	6322D-531-PM- XXYYZZ	6332D-531-PM- XXYYZZ	6342D-531-PM- XXYYZZ	6352D-531-PM- XXYYZZ
3/8" NPTF	External	6312D-541-PM- XXYYZZ	6322D-541-PM- XXYYZZ	6332D-541-PM- XXYYZZ	6342D-541-PM- XXYYZZ	6352D-541-PM- XXYYZZ
sub-base	Internal	6312D-631-PM- XXYYZZ	6322D-631-PM- XXYYZZ	6332D-631-PM- XXYYZZ	6342D-631-PM- XXYYZZ	6352D-631-PM- XXYYZZ
1/2" NPTF	External	6312D-641-PM- XXYYZZ	6322D-641-PM- XXYYZZ	6332D-641-PM- XXYYZZ	6342D-641-PM- XXYYZZ	6352D-641-PM- XXYYZZ

Note : Above codes shown are for side cylinder ports.

SOLENOID 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 connector with light
87 24 VDC (17.1 W)		BA Flying leads (18")
61 24 VDC (8.5 W)		

* Other options available, see page 357.

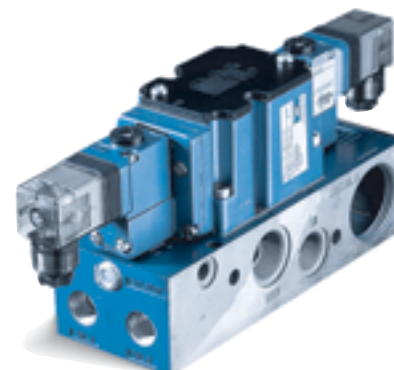
OPTIONS

6312D-XXX-PM-**XXYYZZ**

- 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.



35

100

200

55

56

57

58

59

45

700

900

82

6300

6500

6600

1300

800

ISO 1

ISO 2

ISO 3

MAC 125A

MAC 250A

MAC 500A

TECHNICAL DATA

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 :

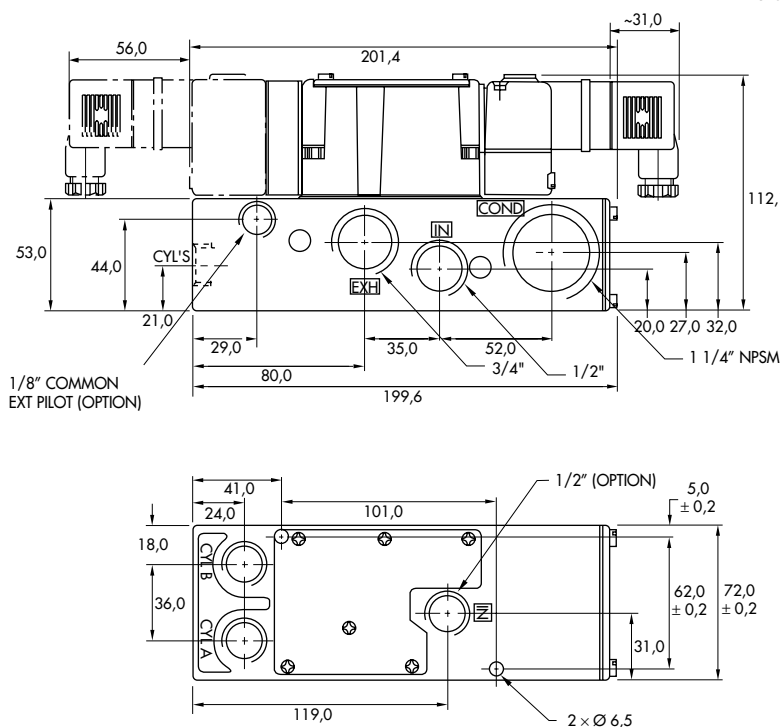
- Solenoid operator (power ≥ 4 W) : D1-XXAA, cover mounting screws 35206 and seal 16234.
- Pilot valve : PME-XYZZ, including seal 16337. • Pressure seal between valve and base : 16396.
- Mounting screw valve to base (x4) : 35303. • Tie-rod (x2) : 19624. • Fastening kit : N-63002-01
- Inlet isolator : 32839. • Exhaust isolator : 28309. • Blank station cover plate : M-63014.

Options :

- BSPP threads.

DIMENSIONS

Dimensions shown are metric (mm)

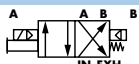
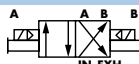


Function	Port size	Flow [Max]	Manifold mounting	Series
4/2 - 4/3	3/8" - 1/2"	3.0 C_v	sub-base "plug-in"	

OPERATIONAL BENEFITS

1. Balanced spool, immune to variations of pressure.
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	4/3 Closed center	4/3 Open center	4/3 Pressure center
						
Valve less base		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 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)		
87	24 VDC (17.1 W)		
61	24 VDC (8.5 W)		

* Other options available, see page 357.

OPTIONS

6311D-XXX-PM-**XXY**DA

- 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.

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.

TECHNICAL DATA

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 :

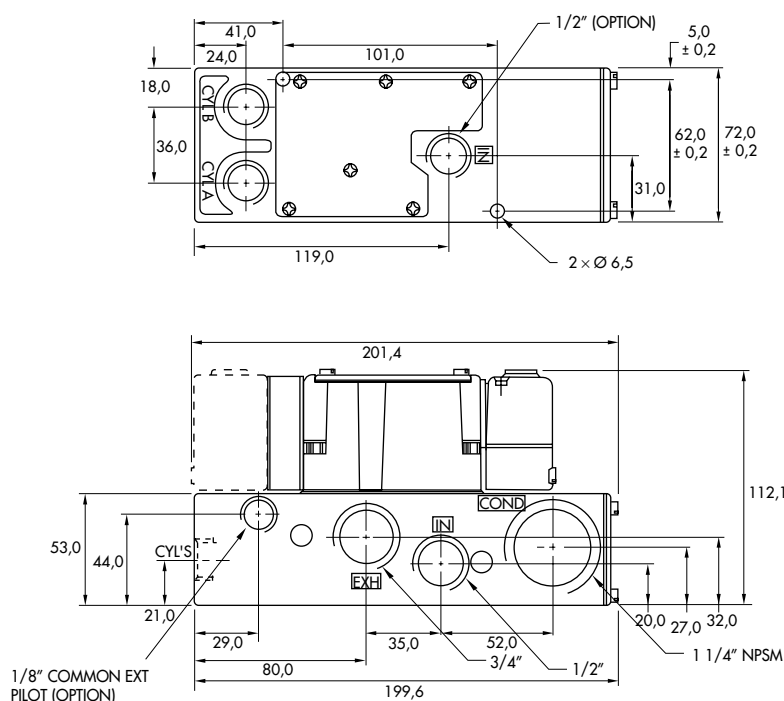
- Solenoid operator (power ≥ 4 W) : D1-XXBE, cover mounting screws 35206 and seal 16234.
- Pilot valve : PME-XXYDA-BE, including seal 16337. • Pressure seal between valve and base : 16396.
- Mounting screw valve to base (x4) : 35303. • Tie-rod (x2) : 19624. • Fastening kit : N-63002-01
- Inlet isolator : 32839. • Exhaust isolator : 28309. • Blank station cover plate : M-63014.

Options :

- BSPP threads.

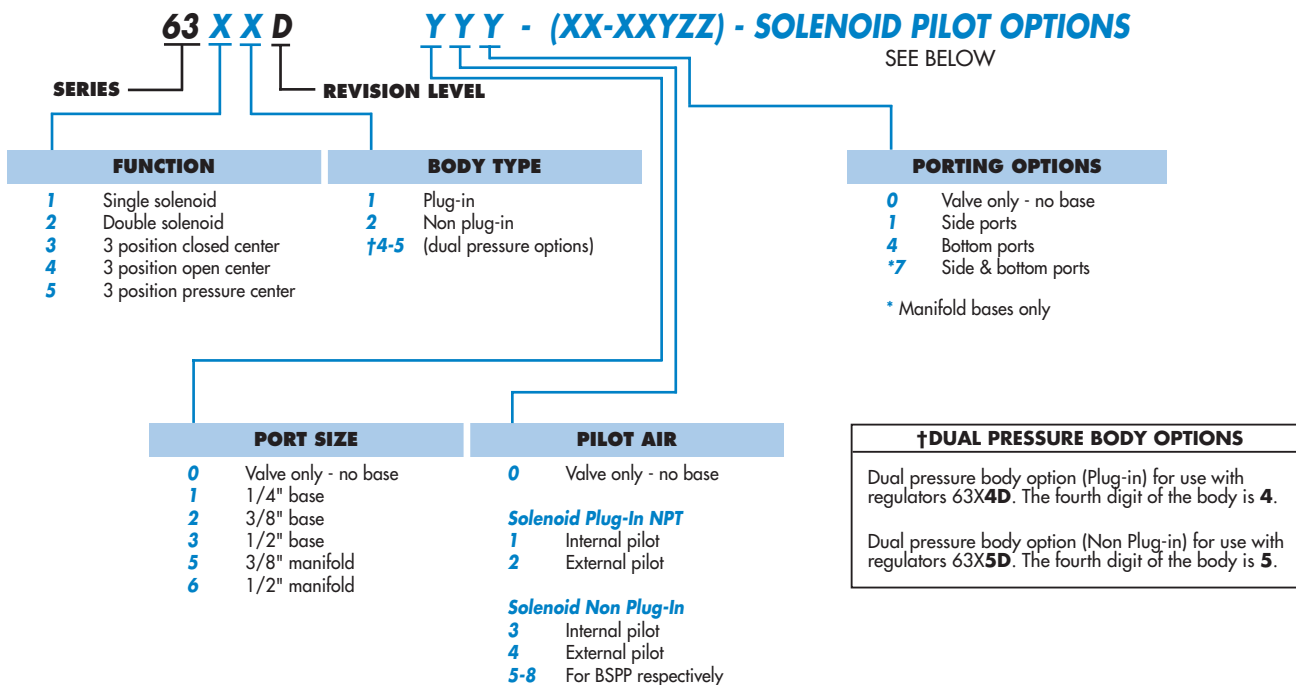
DIMENSIONS

Dimensions shown are metric (mm)

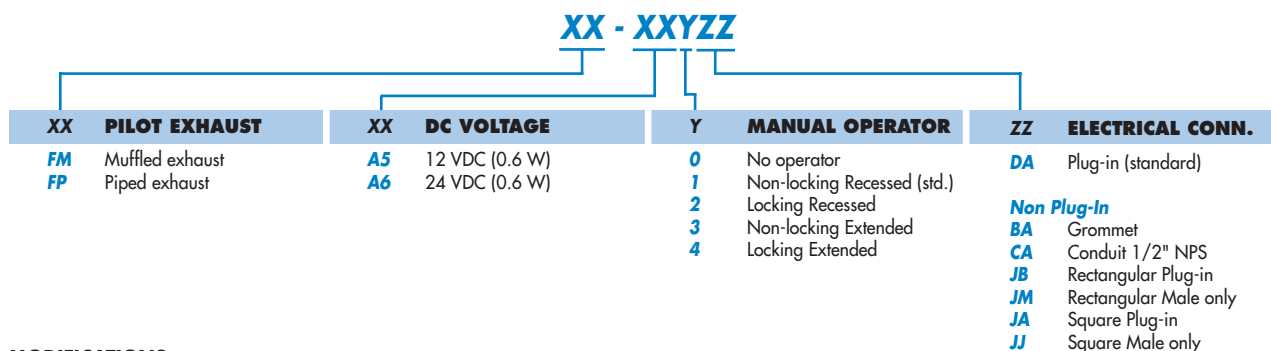


HOW TO ORDER

BODY/BASE OPTIONS



PILOT VALVE OPTIONS



MODIFICATIONS

MOD 0210 Bottom inlet port in addition to side inlet port (manifolds only)

TO ORDER: 6311D-511-FM-A51DA **MOD 0210**

Manifold Accessories: Inlet Isolators #32839. Exhaust Isolator #28309.

- NOTE:**
1. The valve less base is always the same for internal or external pilot. These options are effected in the base or manifold.
 2. When ordering an external pilot connection for manifold bases, a common external pilot is standard. One connection only is required for all the valves in the manifold whether single or double solenoid.

Codification table for voltages / Manual operator / Electrical connection / Wire length

VALVE CODE ► **- XX Y ZZ (-VV)**
1 2 3 4

OPTIONS AVAILABLE FOR	OPTIONS AVAILABLE FOR
- valves type 100 Series - pilot valves "CNOMO"	- valves type 200 Series
- Pilot operated valves with pilots type 100 Series - Series : 55 - 56 - 700 - 800 - 900 - 6300 - 6500 - 6600 - 1300 - ISO 1 - ISO 2 - ISO 3. - MAC 125 - MAC 250 - MAC 500	- pilot operated valves with pilots type 200 Series - Series : 200 - 57 - 58 - 59.
- Pilot operated valves with pilots "CNOMO" - Series : ISO1 - ISO2 - ISO3	

Used on valve series: 100, 55, 56, 700, 800, 900, 6300, 6500, 6600, 1300, MVA1C, MVA2B, MVA3B, MAC125, MAC250, MAC500.

Used on valve series: 200, 57, 58, 59.

1. VOLTAGE (100 Serie type coil)

- XX Y ZZ	VOLTAGE
11	120/60, 110/50
12	240/60, 220/50
13	100/60, 100/50
15	200/60, 200 /50
16	10/60
20	6/60
21	12/50, 12/60
22	24/60, 24/50
23	32/60, 32/50
24	48/60, 42/50
26*	380/50, 440/50, 440/60, 480/60
29	220/60
34	127/50, 120/50
35	48/50
36	16/60
81	24/50
50	24 VDC (6 W)
51	24 VDC (4 W)
54	12 VDC (4 W)
55	12 VDC (6 W)
57	12 VDC (2.5 W)
59	24 VDC (2.5 W)
60	12 VDC (8.5 W)
61	24 VDC (8.5 W)
64	6 VDC (6 W)
65	32 VDC (7 W)
66	48 VDC (5.8 W)
67	64 VDC (7.5 W)
68	120 VDC (6.4 W)
69*	220 VDC (8.7 W), 250 VDC (11.2 W)
75	90 VDC (8.8 W)
76*	100 VDC (6.9 W)
84*	125 VDC (10.9 W)
87*	24 VDC (17.1 W)
88*	12 VDC (17.4 W)
89*	36 VDC (18.8 W)
90	28 VDC (8.2 W)
91*	6 VDC (10.6 W)
92	190 VDC (6.5 W)
94	3 VDC (7 W)
95	38 VDC (6.4 W)
A1	24 VDC (1 W)
A2	12 VDC (1 W)
A3	9 VDC (1 W)

MOD. DD01 : Protection diode (DC) - MAX. 8.5W

MOD. MOV1 : Protection varistor (AC) - MAX. 8.5W

* Voltages are CLSF only

1. VOLTAGE (200 Serie type coil)

- XX Y ZZ	VOLTAGE
11	120/60, 110/50, 24 VDC (6 W)
12	240/60, 220/50
13	100/60, 100/50
14	200/60, 200/50
20	6/60
21	12/60
22	24/60, 24/50
23	32/60, 32/50
24	48/60, 42/50
25	240/50
26	480/60, 440/50
27	127/60
28	415/50
29	220/60
30	380/50
31	550/60, 550/50
32	120/60, 110/50
33	600/60
34	127/50
35	48/50
50	24 VDC (6 W)
51	24 VDC (4.5 W)
52	24 VDC (2.5 W)
53	24 VDC (1.0 W)
55	12 VDC (6 W)
57	12 VDC (2.5 W)
58	48 VDC (2.5 W)
60	12 VDC (9.5 W)
61	24 VDC (8.5 W)
64	6 VDC (8.5 W)
65	32 VDC (10 W)
66	48 VDC (11.5 W)
67	64 VDC (10.5 W)
68	120 VDC (12.3 W)
69	250 VDC (9.2 W)
71	8 VDC (8.2 W)
72	24 VDC (12 W)
73	198 VDC (10 W)
74	72 VDC (11.3 W)
75	90 VDC (11.3 W)
76	100 VDC (9 W)
77	220 VDC (10 W), 230 VDC (11.6 W)
78*	24 VDC (24 W)
80	55 VDC (10.6 W)
82	170 VDC (11.1 W)
83	15 VDC (8.1 W)
84	125 VDC (10 W)
86	36 VDC (11 W)
93*	12 VDC (24 W)

2. MANUAL OPERATOR (Common options for 100 & 200 Series type coils)

- XX Y ZZ	MANUAL OPERATOR		
0	No operator	5*	No Operator with Light
1	Non-locking recessed	6*	Non-Locking Recessed with Light
2	Locking recessed	7*	Locking Recessed with Light
3	Non-locking extended	8*	Non-Locking Extended with Light
4	Locking extended	9*	Locking Extended with Light

* Lights used with "AA" electrical connection

3. ELECTRICAL CONNECTION (100 Serie type coil)

- XX Y ZZ	ELECTRICAL CONNECTION
AA	Wiring box with 1/2" NPS conduit
BA	Flying leads
CA	1/2" NPS conduit
CC	1/2" NPT conduit
FA	Military type 2 PIN
GA	Military type 3 PIN
HA	AA with ground wire
JA*	Square connector
JB	Rectangular connector
JC*	Square connector with light
JD	Rectangular connector with light
JE	Square connector on top (ISO2, ISO3)
JF	Rectangular connector on top (ISO1, ISO2, ISO3)
JG	JE with light
JH	JF with light
JJ	Square connector, male only
JM	Rectangular connector, male only
MA	Electrical common conduit (100 Series-Manifold/900 Series)
MB	Electrical common conduit (100 Series-Stacking/700 Series)
NA	CA with ground wire
NC	CC with ground wire
RA	3/8" NPS conduit

* Not to be used with 100, 800 and 900 Series manifold mounting

3. ELECTRICAL CONNECTION (200 Serie type coil)

- XX Y ZZ	ELECTRICAL CONNECTION
AA	Wiring box with 1/2" NPS conduit
BA	Flying leads
CA	1/2" NPS conduit
CC	1/2" NPT conduit
EA	Explosion proof (200 Series)
EA	Explosion proof (57, 58 & 59 Series)
FA	Military type 2 PIN
GA	Military type 3 PIN
HA	AA with ground wire
JA*	Square connector
JC	Square connector with light
JJ	Square connector, male only
NA	CA with ground wire
NC	CC with ground wire

4. COIL WIRE LENGTH (Common options for 100 & 200 Serie type coils)

- XX Y ZZ (-VV)	WIRE LENGTH
AA	18"
AB	24"
AD	36"
AE	48"
AF	72"
AG	6"
AR	12"
AU	120"
BA	60"
BB	144"
Series 6000 : wire length, from the base	
MOD L024	24"
MOD L036	36"
MOD L048	48"
MOD L060	60"
MOD L072	72"
MOD L120	120"

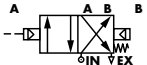
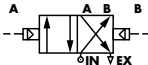
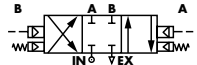
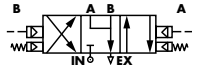
Function	Port size	Flow [Max]	Individual mounting	Series
4/2 - 4/3	1/4" - 3/8" - 1/2"	3.0 C_v	sub-base	

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	4/2 Single operator	4/2 Double operator	4/3 Closed center	4/3 Open center
				
Valve less base	6312D-000-RA	6322D-000-RA	6332D-000-RA	6342D-000-RA
Sub-base 1/4" NPTF	6312D-131-RA	6322D-141-RA	6332D-141-RA	6342D-141-RA
Sub-base 3/8" NPTF	6312D-231-RA	6322D-241-RA	6332D-241-RA	6342D-241-RA
Sub-base 1/2" NPTF	6312D-331-RA	6322D-341-RA	6332D-341-RA	6342D-341-RA

OPTIONS

6312D-131-RA

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

1100

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56

57

58

59

700

900

82

6300

6500

6600

2700

1800

ISO 1

ISO 2

ISO 3

TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 150 PSI
Air signal pressure :	Single operator and 3 positions : 25 to 150 PSI $\geq$ main valve pressure Double operator : 10 to 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, $\Delta P=1$ bar) :	1/4" : (2.0 C _v), 3/8" : (2.6 C _v), 1/2" : (3.0 C _v)

Spare parts :

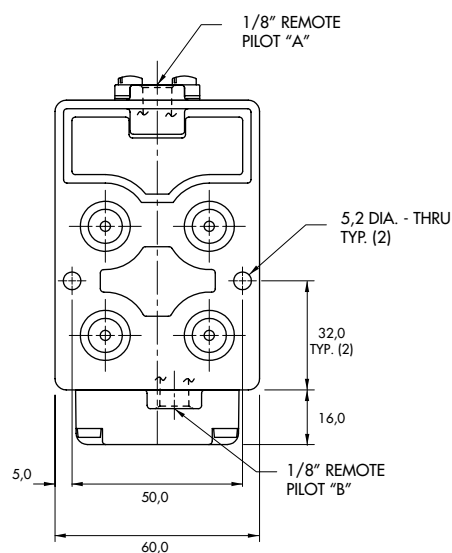
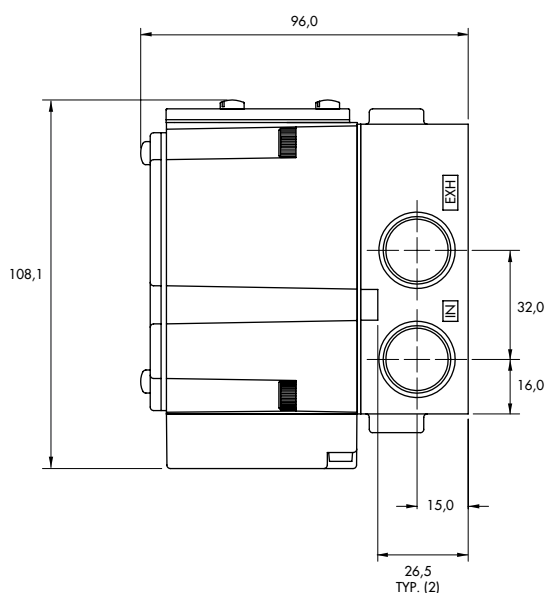
- Remote air operator (A side) : R-63004A. • Remote air operator (B side) : R-63005A.
- Seal between valve and base : 16298. • Mounting screw valve to base (x4) : 35303.

Options :

- BSPP threads.

DIMENSIONS

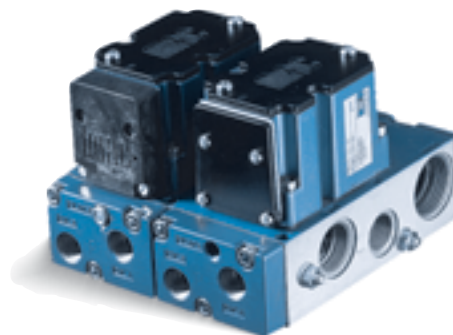
Dimensions shown are metric (mm)



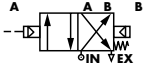
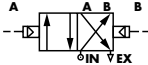
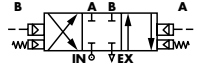
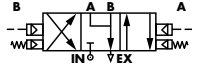
Function	Port size	Flow [Max]	Manifold mounting	Series
4/2 - 4/3	1/4" - 3/8" - 1/2"	3.0 C_v	sub-base	

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	4/2 Single operator	4/2 Double operator	4/3 Closed center	4/3 Open center
				
Valve less base	6312D-000-RA	6322D-000-RA	6332D-000-RA	6342D-000-RA
Sub-base 1/4" NPTF	6312D-431-RA	6322D-441-RA	6332D-441-RA	6342D-441-RA
Sub-base 3/8" NPTF	6312D-531-RA	6322D-541-RA	6332D-541-RA	6342D-541-RA
Sub-base 1/2" NPTF	6312D-631-RA	6322D-641-RA	6332D-641-RA	6342D-641-RA

OPTIONS

6312D-431-RA

- For bottom cylinder ports, replace by 4.

Fastening kit : N-63002-01

1100

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700

900

82

6300

6500

6600

2700

1800

ISO 1

ISO 2

ISO 3

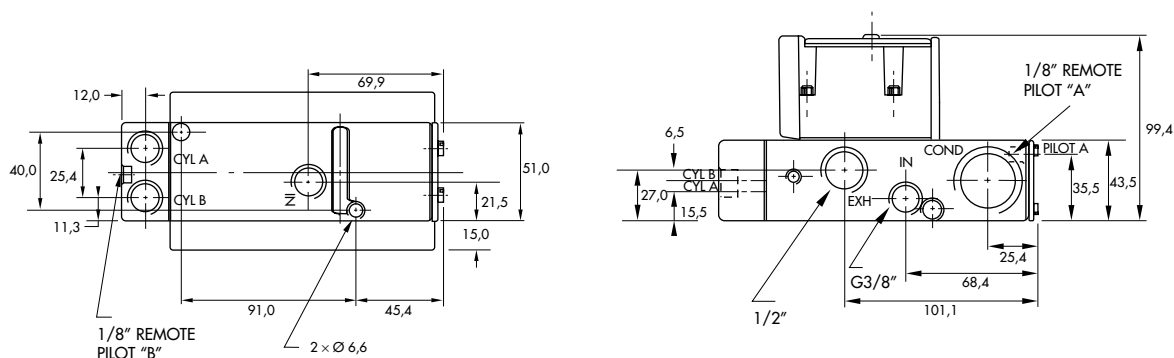
TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 150 PSI
Air signal pressure :	Single operator and 3 positions : 25 to 150 PSI $\geq$ main valve pressure Double operator : 10 to 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, $\Delta P=1$ bar) :	1/4" : (2.0 C _v), 3/8" : (2.6 C _v), 1/2" : (3.0 C _v)

- Spare parts :
- Remote air operator (A side) : R-63004A. • Remote air operator (B side) : R-63005A. • Seal between valve and base : 16298.
 - Mounting screw valve to base (x4) : 35303. • Tie-rod (x2) : 19624.
- Options :
- BSPP threads.

DIMENSIONS

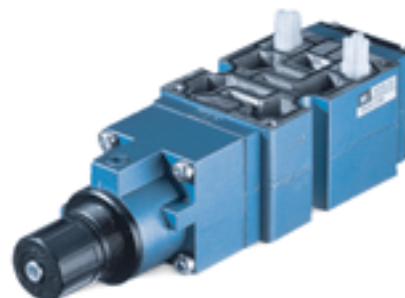
Dimensions shown are metric (mm)



Sandwich pressure regulator with manual adjust knob.

OPERATIONAL BENEFITS

1. Easy mounting : saves on installation costs in comparison with inline regulators.
2. Allows to have compact, all-included units.
3. Large orifice provides high flow.
4. Various functions available.
5. Simple, reliable and solid design.



PR82A

PR63D

PR65C

HOW TO ORDER

REGULATORS FOR "PLUG-IN" VALVES

Gauges	Single pressure Regulator A end Same regulated pressure to ports A and B	Single pressure Regulator B end Same regulated pressure to ports A and B	Dual pressure Regulator A end Regulated pressure to port B	Dual pressure Regulator B end Regulated pressure to port A	Dual pressure Dual regulator Two regulated pressures to ports A and B
No gauge	PR63D-22AA	PR63D-21AA	PR63D-24AA	PR63D-23AA	PR63D-25AA
Glycerine filled gauge on regulator(s)	PR63D-22BA	PR63D-21BA	PR63D-24BA	PR63D-23BA	PR63D-25DA
Glycerine filled gauge opposite to regulator	PR63D-22CA	PR63D-21CA	PR63D-24CA	PR63D-23CA	-----
Non-filled gauge on regulator(s)	PR63D-22FA	PR63D-21FA	PR63D-24FA	PR63D-23FA	PR63D-25HA
Non-filled gauge opposite to regulator	PR63D-22GA	PR63D-21GA	PR63D-24GA	PR63D-23GA	-----

Note : above models are coded for use with double solenoid plug-in valves.

REGULATORS FOR "NON PLUG-IN" AND REMOTE AIR VALVES

Gauges	Single pressure Regulator A end Same regulated pressure to ports A and B	Single pressure Regulator B end Same regulated pressure to ports A and B	Dual pressure Regulator A end Regulated pressure to port B	Dual pressure Regulator B end Regulated pressure to port A	Dual pressure Dual regulator Two regulated pressures to ports A and B
No gauge	PR63D-32AA	PR63D-31AA	PR63D-34AA	PR63D-33AA	PR63D-35AA
Glycerine filled gauge on regulator(s)	PR63D-32BA	PR63D-31BA	PR63D-34BA	PR63D-33BA	PR63D-35DA
Glycerine filled gauge opposite to regulator	PR63D-32CA	PR63D-31CA	PR63D-34CA	PR63D-33CA	-----
Non-filled gauge on regulator(s)	PR63D-32FA	PR63D-31FA	PR63D-34FA	PR63D-33FA	PR63D-35HA
Non-filled gauge opposite to regulator	PR63D-32GA	PR63D-31GA	PR63D-34GA	PR63D-33GA	-----

Note : regulating range for above models is 0-150 PSI.
For other ranges see technical data page.

* To be used with dual pressure valves (manifolds only).

PLUG-IN OPTIONS

PR63D-xxxx

- Replace by 1 for single solenoid plug-in with knob adjustment.

ADJUSTMENT OPTIONS

PR63D-xxxx

- Replace by A for slotted stem adjustment for single solenoid plug-in.
- Replace by B for slotted stem adjustment for double solenoid plug-in.
- Replace by C for slotted stem adjustment for non plug-in valves.
- Replace by E for slotted stem with locknut for single solenoid plug-in.
- Replace by F for slotted stem with locknut for double solenoid plug-in.
- Replace by G for slotted stem with locknut for non plug-in valves.

Consult "Precautions" page 364 before use, installation or service of MAC Valves

PRA1A

PRA2D

PRA3C

PR125A

PR250B

TECHNICAL DATA

Fluid :	Compressed air, inert gases
Pressure range :	0 to 150 PSI
Regulating range :	0 to 150 PSI (other ranges see below)
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 :	(2.4 C _v)

Spare parts :

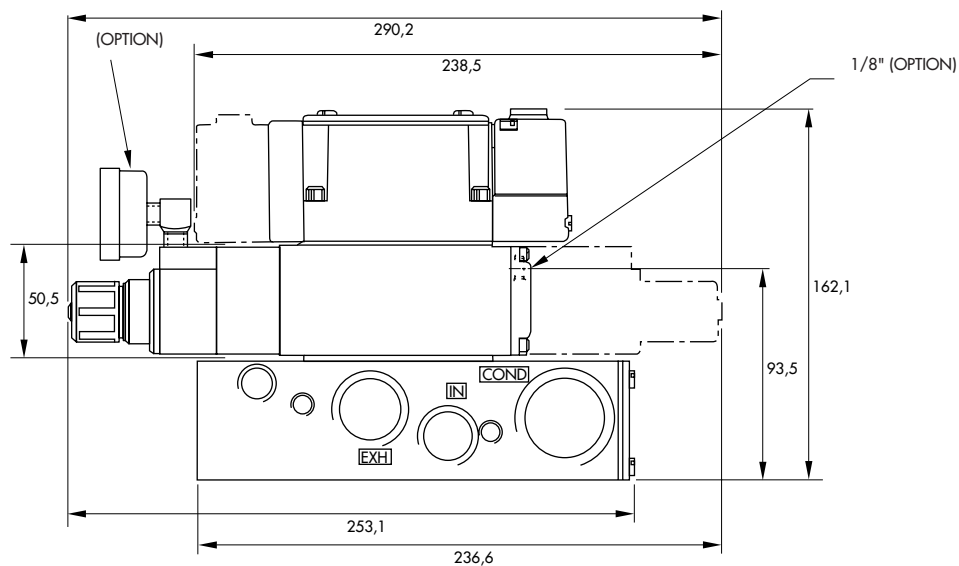
- Pressure regulator (less sandwich block) : PR63D-41AA (KNOB), PR63D-D1AA (SLOTTED STEM), PR63D-H1AA (SLOTTED STEM WITH LOCKNUT).
- Gauges :
 - Glycerine filled : N-62015-01
 - Non filled : N-62016-01

Regulating range options : PR63D-XXXX

Replace by B - 0 to 100 PSI
 Replace by C - 0 to 45 PSI

DIMENSIONS

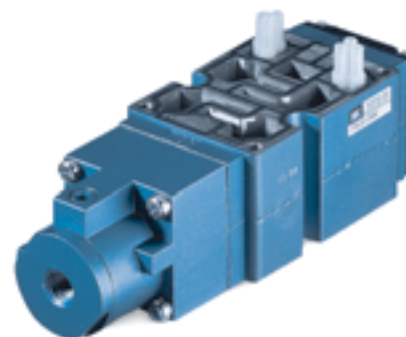
Dimensions shown are metric (mm)



Sandwich pressure regulator with air pilot adjust.

OPERATIONAL BENEFITS

1. Easy mounting : saves on installation costs in comparison with inline regulators.
2. Allows to have compact, all-included units.
3. Large orifice provides high flow.
4. Various functions available.
5. Simple, reliable and solid design.



PR82A
PR63D
PR65C

HOW TO ORDER

REGULATORS FOR "PLUG-IN" VALVES

Gauges	Single pressure Regulator A end Same regulated pressure to ports A and B	Single pressure Regulator B end Same regulated pressure to ports A and B	Dual pressure Regulator A end Regulated pressure to port B *	Dual pressure Regulator B end Regulated pressure to port A *	Dual pressure Dual regulator Two regulated pressures to ports A and B *
No gauge	PR63D-2BAA	PR63D-2AAA	PR63D-2DAA	PR63D-2CAA	PR63D-2EAA
Glycerine filled gauge on regulator(s)	PR63D-2BBA	PR63D-2ABA	PR63D-2DBA	PR63D-2CBA	PR63D-2EDA
Glycerine filled gauge opposite to regulator	PR63D-2BCA	PR63D-2ACA	PR63D-2DCA	PR63D-2CCA	-----
Non-filled gauge on regulator(s)	PR63D-2BFA	PR63D-2AFA	PR63D-2DFA	PR63D-2CFA	PR63D-2EHA
Non-filled gauge opposite to regulator	PR63D-2BGA	PR63D-2AGA	PR63D-2DGA	PR63D-2CGA	-----

Note : above models are coded for use with double solenoid plug-in valves.

REGULATORS FOR "NON PLUG-IN" AND REMOTE AIR VALVES

Gauges	Single pressure Regulator A end Same regulated pressure to ports A and B	Single pressure Regulator B end Same regulated pressure to ports A and B	Dual pressure Regulator A end Regulated pressure to port B *	Dual pressure Regulator B end Regulated pressure to port A *	Dual pressure Dual regulator Two regulated pressures to ports A and B *
No gauge	PR63D-3BAA	PR63D-3AAA	PR63D-3DAA	PR63D-3CAA	PR63D-3EAA
Glycerine filled gauge on regulator(s)	PR63D-3BBA	PR63D-3ABA	PR63D-3DBA	PR63D-3CBA	PR63D-3EDA
Glycerine filled gauge opposite to regulator	PR63D-3BCA	PR63D-3ACA	PR63D-3DCA	PR63D-3CCA	-----
Non-filled gauge on regulator(s)	PR63D-3BFA	PR63D-3AFA	PR63D-3DFA	PR63D-3CFA	PR63D-3EHA
Non-filled gauge opposite to regulator	PR63D-3BGA	PR63D-3AGA	PR63D-3DGA	PR63D-3CGA	-----

* To be used with dual pressure valves (available only on manifolds).

PLUG-IN OPTIONS

PR63D-xxxx

- Replace by 1 for single solenoid plug-in.

PRA1A
PRA2D
PRA3C

PR125A
PR250B

TECHNICAL DATA

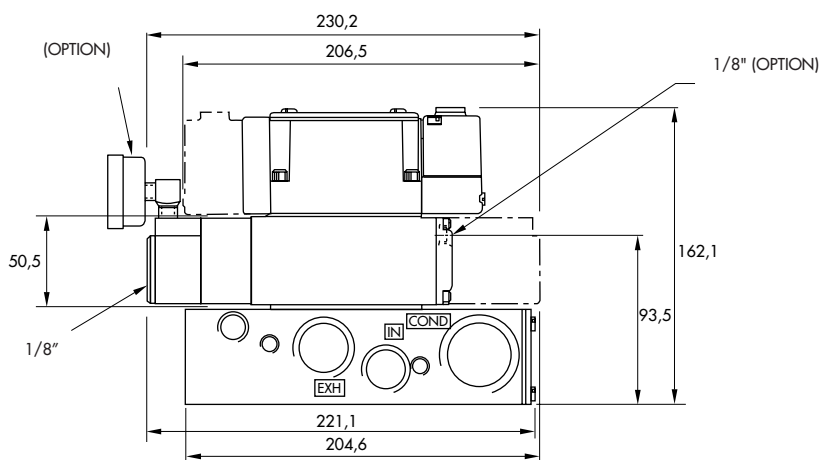
Fluid :	Compressed air, inert gases
Pressure range :	0 to 150 PSI
Regulating range :	0 to 150 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to 50°C)
Flow (at 6 bar, ΔP=1bar) :	(2.4 C _v)

Spare parts :

- Pressure regulator (less sandwich block) : PR63D-4AAA.
- Gauges :
 - Glycerine filled : N-62015-01
 - Non filled : N-62016-01

DIMENSIONS

Dimensions shown are metric (mm)



Notizen

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