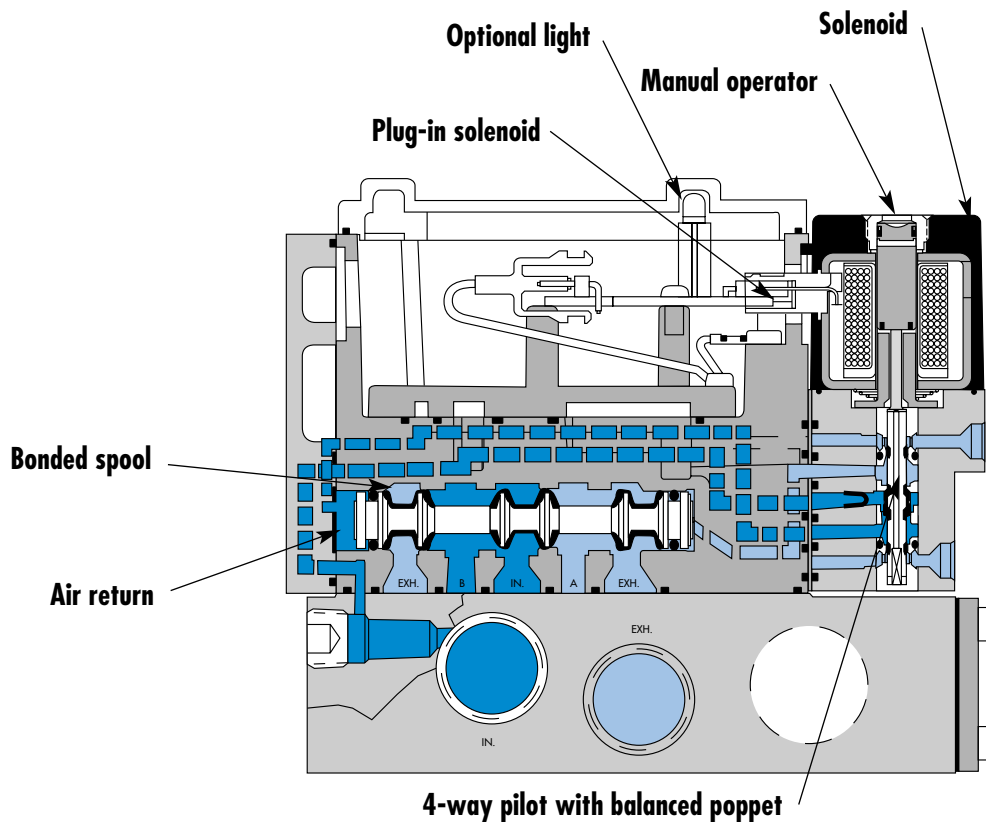


Circuit bar mounting

standard	add-on style	add-a-unit stations for CBM092B
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SERIES FEATURES

- Patented MACSOLENOID[®] for fastest possible response times and virtually burn-out proof AC solenoid operation.
- Optional low watt DC solenoids.
- Optional memory spring.
- Plug-in design of valves and bases for ease of maintenance.
- 2 position or 3 position valve configurations.

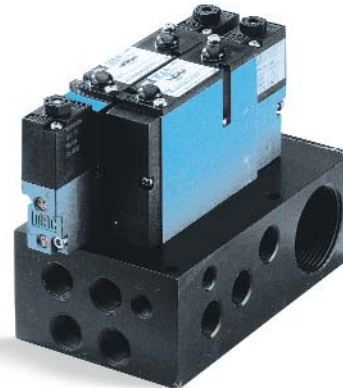
Function	Port size	Flow [Max]	Circuit bar mounting
5/2 - 5/3 - 3/2	1/8 - 1/4 - 3/8	1.0C_v	standard

OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting forces both ways.
2. Memory spring available.
3. Balanced spool, immune to variations of pressure, also provides high flow.
4. Short stroke with high flow.
5. Bonded seal spool with minimum friction, shifting in a glass-like finished bore.
6. Pilot with balanced poppet, high flow, short and consistent response times.
7. Wiping effect eliminates sticking.
8. Long service life.

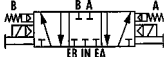
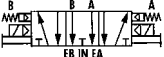
Reset

92B-xxx-000-DM-DxxP-xxx



HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

SINGLE PRESSURE MODELS

Port size (see circuit bar)	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
					
Valve less base	☐ 92B-AAA-000-DM-DxxP-xxx	☐ 92B-BAA-000-DM-DxxP-xxx	☐ 92B-EAA-000-DM-DxxP-xxx	☐ 92B-FAA-000-DM-DxxP-xxx	☐ 92B-GAA-000-DM-DxxP-xxx

DUAL PRESSURE MODELS (REQUIRES SANDWICH PRESSURE REGULATOR)

Port size (see circuit bar)	5/2 Single operator	5/2 Double operator
		
Valve less base	☐ 92B-CAA-000-DM-DxxP-xxx	☐ 92B-DAA-000-DM-DxxP-xxx

SOLENOID OPERATOR >

DM-DxxP- x xx*

XX Voltage	X Manual operator	XX Electrical connection
☐ JB 240/60, 220/50	☐ 1 Non-locking	☐ DM Plug-in
☐ JA 120/60, 110/50	☐ 2 Locking	☐ DG Plug-in w/ground
☐ JC 24/60, 24/50	☐ xx Other Options	Note : Ground wire required for solenoids 30 volts and above.
☐ FB 24VDC (1.8 W)		☐ xx Other Options
☐ DA 24VDC (5.4 W)		
☐ DF 24VDC (12.7 W)		
☐ xx Other Options		

HOW TO ORDER CIRCUIT BAR

CBM092B-01xxx-AOxx

Port size	Pilot air	Side cylinder ports (25 mm)	Bottom cylinder ports (25 mm)
1/8 NPTF	Internal	☐ CBM092B-01AAA-A0*xx	☐ CBM092B-01BAA-A0*xx
	Common external	☐ CBM092B-01CAA-A0*xx	☐ CBM092B-01DAA-A0*xx
1/4 NPTF	Internal	☐ CBM092B-01AAD-A0*xx	☐ CBM092B-01BAD-A0*xx
	Common external	☐ CBM092B-01CAD-A0*xx	☐ CBM092B-01DAD-A0*xx
3/8 NPTF	Internal	☐ CBM092B-01AAG-A0*xx	☐ CBM092B-01BAG-A0*xx
	Common external	☐ CBM092B-01CAG-A0*xx	☐ CBM092B-01DAG-A0*xx

Number of stations (03=3 stations)

Note : ☐ clic for valves mounted on base at the factory (add - 9 to the model number).
for multi-pin connector (9, 15 or 25).

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

* If replaced by BO : circuit bar for single operator valves only.

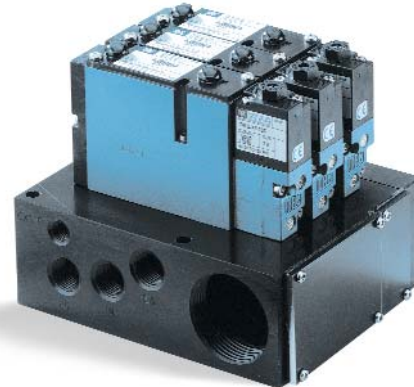
Function	Port size	Flow [Max]	Circuit bar mounting
5/2 - 5/3 - 3/2	1/8 - 1/4 - 3/8	1.0C_v	add-on style

OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting forces both ways.
2. Memory spring available.
3. Balanced spool, immune to variations of pressure, also provides high flow.
4. Short stroke with high flow.
5. Bonded seal spool with minimum friction, shifting in a glass-like finished bore.
6. Pilot with balanced poppet, high flow, short and consistent response times.
7. Wiping effect eliminates sticking.
8. Long service life.

Reset

92B-xxx-000-DM-DxxP-xxx



HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

SINGLE PRESSURE MODELS

Port size (see circuit bar)	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
Valve less base	92B-AAA-000-DM-DxxP-xx	92B-BAA-000-DM-DxxP-xx	92B-EAA-000-DM-DxxP-xx	92B-FAA-000-DM-DxxP-xx	92B-GAA-000-DM-DxxP-xx

DUAL PRESSURE MODELS (REQUIRES SANDWICH PRESSURE REGULATOR)

Port size (see circuit bar)	5/2 Single operator	5/2 Double operator
Valve less base	92B-CAA-000-DM-DxxP-xxx	92B-DAA-000-DM-DxxP-xxx

SOLENOID OPERATOR >

DM-DxxP- x xx*

XX Voltage	X Manual operator	XX Electrical connection
JB 240/60, 220/50	1 Non-locking	DM Plug-in
JA 120/60, 110/50	2 Locking	DG Plug-in w/ground
JC 24/60, 24/50	xx Other Options	Note : Ground wire required for solenoids 30 volts and above.
FB 24VDC (1.8 W)		xx Other Options
DA 24VDC (5.4 W)		
DF 24VDC (12.7 W)		
xx Other Options		

HOW TO ORDER CIRCUIT BAR

CBM092B-01xxx-AOxx

Port size	Pilot air	Side cylinder ports (25 mm)	Bottom cylinder ports (25 mm)
1/8 NPTF	Internal	CBM092B-01ABA-A0*xx	CBM092B-01BBA-A0*xx
	Common external	CBM092B-01CBA-A0*xx	CBM092B-01DBA-A0*xx
1/4 NPTF	Internal	CBM092B-01ABD-A0*xx	CBM092B-01BBD-A0*xx
	Common external	CBM092B-01CBD-A0*xx	CBM092B-01DBD-A0*xx
3/8 NPTF	Internal	CBM092B-01ABG-A0*xx	CBM092B-01BBG-A0*xx
	Common external	CBM092B-01CBG-A0*xx	CBM092B-01DBG-A0*xx

Number of stations (03=3 stations)

Note : clic for valves mounted on base at the factory (add - 9 to the model number).
for multi-pin connector (9, 15 or 25).

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

* If replaced by BO : circuit bar for single operator valves only.

Note : add-a-unit stations may be added to above bars. See
page for model numbers

OPTIONS

Sandwich flow controls available, consult factory.

92B-AAA-000-DM-DXXP-1DM

- For lights on valve, replace by B.
- For lights and diode on valve, replace by F.
- For lights and MOV on valve, replace by H.

TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Internal pilot : 20 to 120 PSI 3 positions : 35 to 120 PSI External pilot : vacuum to 120 PSI 3 positions : 35 to 120 PSI		
Pilot pressure :	20 to 120 PSI 3 positions : 35 to 120 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)		
Orifice :	6.2 mm		
Flow (at 6 bar, ΔP=1bar) :	1.0 C _v		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	NEMA 4		
Power :	~ Inrush : 7.6 VA Holding : 4.8 VA = 1.8 to 12.7 W		
Response times :	24 V=5.4 W Energize : 8 ms De-energize : 7 ms 60Hz/2.9 W Energize : 7-13 ms De-energize : 12-20 ms		

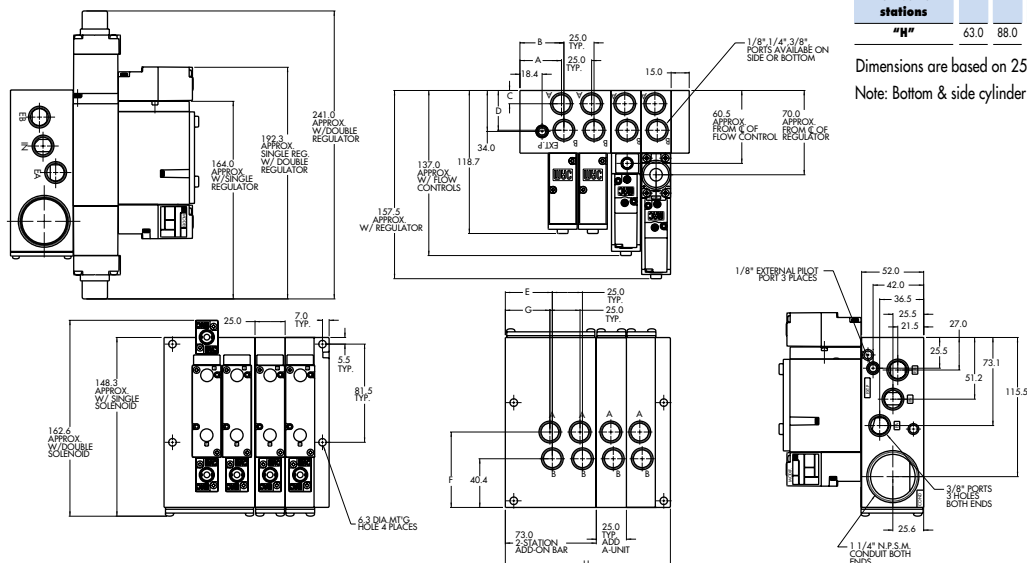
Spare parts :

- Pilot valve : DMB-DXXP-XXX-1 including mounting screws 35069 (x2) and seal 16544.
- Pressure seal between valve and base : 16543. • Mounting screws valve to base (x2) : 35050. • Blanking plate : M-92002.
- End plate kit : M-92001-01 • Isolator disc between add-a-units : 28413.

Options :

- BSPP threads. • Isolation of inlet and/or exhaust. • Circuit bar for number of stations > 24.

DIMENSIONS



Number of stations	1	2	3	4	5	6	7	8	9	10
"H"	63.0	88.0	113.0	138.0	163.0	188.0	213.0	238.0	263.0	288.0

Dimensions are based on 25 mm centerline spacing

Note: Bottom & side cylinder ports not available on the same station

Dim.	1/8"	1/4"	3/8"
"A"	32.0	32.0	34.5
"B"	39.0	39.0	36.5
"C"	10.0	10.0	11.0
"D"	33.4	33.4	33.0
"E"	40.9	37.9	36.5
"F"	61.1	61.1	62.6
"G"	30.1	31.9	34.5

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

Function	Port size	Flow [Max]	Circuit bar mounting
5/2 - 5/3 - 3/2	1/8 - 1/4 - 3/8	1.0C_v	add-a-unit stations for CBM092B

OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting forces both ways.
2. Memory spring available.
3. Balanced spool, immune to variations of pressure, also provides high flow.
4. Short stroke with high flow.
5. Bonded seal spool with minimum friction, shifting in a glass-like finished bore.
6. Pilot with balanced poppet, high flow, short and consistent response times.
7. Wiping effect eliminates sticking.
8. Long service life.

Reset

92B-xxx-000-DM-DxxP-xxx



HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

SINGLE PRESSURE MODELS

Port size (see circuit bar)	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
Valve less base	92B-AAA-000-DM-DxxP-xx	92B-BAA-000-DM-DxxP-xx	92B-EAA-000-DM-DxxP-xx	92B-FAA-000-DM-DxxP-xx	92B-GAA-000-DM-DxxP-xx

DUAL PRESSURE MODELS (REQUIRES SANDWICH PRESSURE REGULATOR)

Port size (see circuit bar)	5/2 Single operator	5/2 Double operator
Valve less base	92B-CAA-000-DM-DxxP-xxx	92B-DAA-000-DM-DxxP-xxx

SOLENOID OPERATOR >

DM-DxxP-xxx*

XX Voltage	X Manual operator	XX Electrical connection
JB 240/60, 220/50	1 Non-locking	DM Plug-in
JA 120/60, 110/50	2 Locking	DG Plug-in w/ground
JC 24/60, 24/50	xx Other Options	Note : Ground wire required for solenoids 30 volts and above.
FB 24VDC (1.8 W)		xx Other Options
DA 24VDC (5.4 W)		
DF 24VDC (12.7 W)		
xx Other Options		

HOW TO ORDER CIRCUIT BAR

CBM092B-01xxx-AOxx

Port size	Side cylinder ports (25 mm)	Bottom cylinder ports (25 mm)
1/8 NPTF	CBM092B-01ACA-A0*xx	CBM092B-01BCA-A0*xx
1/4 NPTF	CBM092B-01ACD-A0*xx	CBM092B-01BCD-A0*xx
3/8 NPTF	CBM092B-01ACG-A0*xx	CBM092B-01BCG-A0*xx

Number of stations (01=1 stations). Available in one (1) or two (2) station lengths.

Note : ☐ clic for valves mounted on base at the factory (add - 9 to the model number).
when add-a-units are added to bars with a multi-pin connector, MOD SD03 should be included with add-a-unit model number.

* If replaced by BO : circuit bar for single operator valves only.

OPTIONS

Sandwich flow controls available, consult factory.

92B-AAA-000-DM-DXXP-1DM

- For lights on valve, replace by B.
- For lights and diode on valve, replace by F.
- For lights and MOV on valve, replace by H.

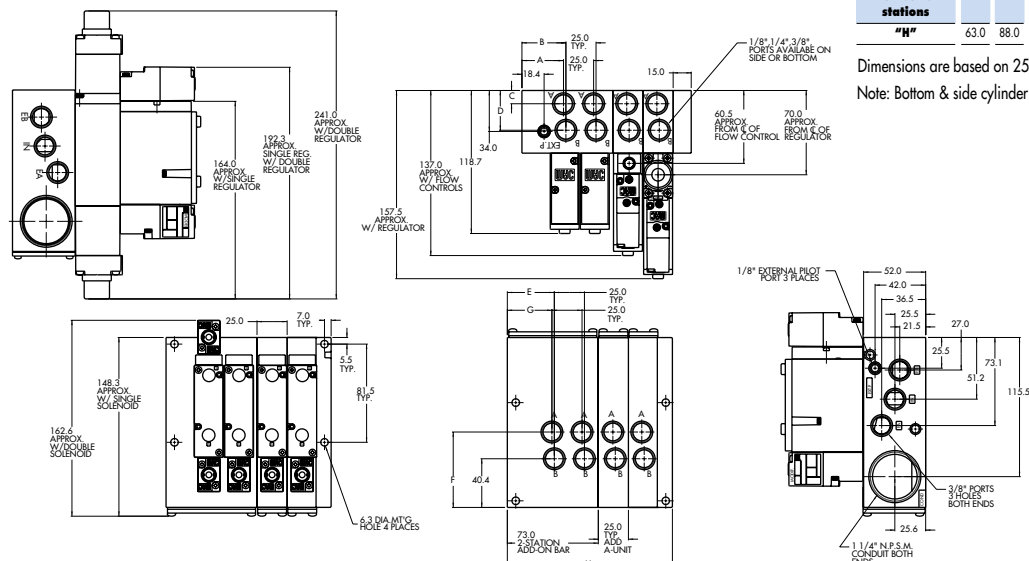
TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Internal pilot : 20 to 120 PSI 3 positions : 35 to 120 PSI External pilot : vacuum to 120 PSI 3 positions : 35 to 120 PSI		
Pilot pressure :	20 to 120 PSI 3 positions : 35 to 120 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)		
Orifice :	6.2 mm		
Flow (at 6 bar, ΔP=1bar) :	1.0 C _v		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	NEMA 4		
Power :	~ Inrush : 7.6 VA Holding : 4.8 VA = 1.8 to 12.7 W		
Response times :	24 V= / 5.4 W Energize : 8 ms De-energize : 7 ms 60Hz/2.9 W Energize : 7-13 ms De-energize : 12-20 ms		

Spare parts :
 • Pilot valve : DMB-DXXP-XXX-1 including mounting screws 35069 (x2) and seal 16544.
 • Pressure seal between valve and base : 16543. • Mounting screws valve to base (x2) : 35050. • Blanking plate : M-92002.

Options :
 • BSPP threads. • Isolation of inlet and/or exhaust. • Circuit bar for number of stations > 24.

DIMENSIONS



Number of stations	1	2	3	4	5	6	7	8	9	10
"H"	63.0	88.0	113.0	138.0	163.0	188.0	213.0	238.0	263.0	288.0

Dimensions are based on 25 mm centerline spacing
 Note: Bottom & side cylinder ports not available on the same station

Dim.	1/8"	1/4"	3/8"
"A"	32.0	32.0	34.5
"B"	39.0	39.0	36.5
"C"	10.0	10.0	11.0
"D"	33.4	33.4	33.0
"E"	40.9	37.9	36.5
"F"	61.1	61.1	62.6
"G"	30.1	31.9	34.5

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



Section 2

Options

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

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

VALVE CODE ➤

DM-DXX X - X XX
1 2 3 4

OPTIONS AVAILABLE FOR

- pilot operated valves 400, 52 & 92 Series

1. VOLTAGE

- D XX X - X XX VOLTAGE

☐ DB	12 VDC (5.4 W)
☐ DC	12 VDC (7.5 W)
☐ DD	24 VDC (7.3 W)
☐ DE	12 VDC (12.7 W)
☐ DK	110 VDC (5.8 W)
☐ DJ	28 VDC (5.7 W)
☐ DL	64 VDC (6.0 W)
☐ DM	36 VDC (5.8 W)
☐ DN	6 VDC (6.0 W)
☐ DR	90 VDC (6.6 W)
☐ DS	110 VDC (7.3 W), 100 VDC (6.0 W)
☐ DT	75 VDC (5.6 W)
☐ DP	48 VDC (5.8 W)
☐ FA	12 VDC (1.8 W)
☐ FE	12 VDC (2.4 W)
☐ FF	24 VDC (2.4 W)
☐ JD	100/60, 100/50, 110/60

2. WIRE LENGTH

- D XX X - X XX WIRE LENGTH

☐ B	24"
☐ C	36"
☐ D	48"
☐ E	72"
☐ F	96"

3. MANUAL OPERATOR

- D XX X - X XX MANUAL OPERATOR

☐	0	No operator
☒	1	Non-locking recessed
☐	2	Locking recessed
☐	3	Non-locking extended
☐	4	Locking extended

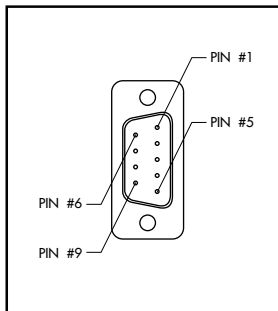
4. ELECTRICAL CONNECTION

- D XX X - X XX ELECTRICAL CONNECTION

☐	BA	Flying leads
☐	BK	BA with protection diode
☐	BL	BA with protection varistor
☒	CA	1/2" NPS conduit
☐	JB	Rectangular connector
☐	JD	Rectangular connector with light
☐	JM	Rectangular connector, male only
☐	KA	Square connector
☐	KB	Square connector with protection diode
☐	KC	Square connector with protection varistor
☐	KD	Square connector with light
☐	KE	Square connector with light and protection diode
☐	KF	Square connector with light and protection varistor
☐	KJ	Square connector (male only)
☐	KK	Square connector with protection diode (male only)
☐	KL	Square connector with protection varistor (male only)
☐	TA	Dual tabs
☐	TB	TA with protection diode
☐	TD	TA with light
☐	TE	TA with light and protection diode
☐	TJ	Dual tabs (male only)
☐	TK	TJ with protection diode
☐	TM	TJ with light
☐	TN	TJ with light and protection diode
☐	*DN	Plug-in with diode
☐	*DP	Plug-in with M.O.V.
☐	*DH	Plug-in with diode & ground
☐	*DJ	Plug-in with M.O.V & ground

* These options only apply to the 92 series. All others are for the 400 and 52 series.

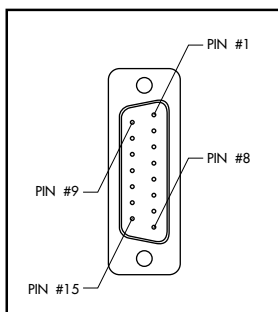
MOD. S009



TECHNICAL DATA

- Type «SUB_D»
- Number of contacts : 9
- Solder termination (Dia. 0.6 mm/0.14 mm²/26-22 AWG)
- Operating current 5 A/contact
- Rated voltage 125 V~
- Temp. range -40° to +125°C
- Insulation resistance $\geq 5.0^9 \Omega$
- Protection class IP40 (DIN 40050)
- Number of solenoids : 7 max.
- Max. 24 V=/5.4 W per solenoid
- 2 common wires

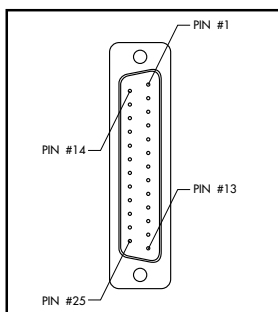
MOD. S015



TECHNICAL DATA

- Type «SUB_D»
- Number of contacts : 15
- Solder termination (Dia. 0.6 mm/0.14 mm²/26-22 AWG)
- Operating current 5 A/contact
- Rated voltage 125 V~
- Temp. range -40° to +125°C
- Insulation resistance $\geq 5.0^9 \Omega$
- Protection class IP40 (DIN 40050)
- Number of solenoids : 12 max.
- Max. 24 V=/5.4 W per solenoid
- 3 common wires

MOD. S025



TECHNICAL DATA

- Type «SUB_D»
- Number of contacts : 25
- Solder termination (Dia. 0.6 mm/0.14 mm²/26-22 AWG)
- Operating current 5 A/contact
- Rated voltage 125 V~
- Temp. range -40° to +125°C
- Insulation resistance $\geq 5.0^9 \Omega$
- Protection class IP40 (DIN 40050)
- Number of solenoids : 20 max.
- Max. 24 V=/5.4 W per solenoid
- 5 common wires

Note : Use desired MOD. number after circuit bar part number

Connector termination details

