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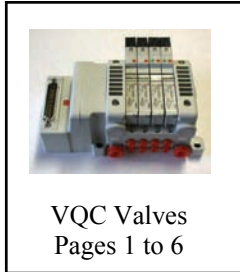
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Fax: 616-538-6847

Website: www.rapidcontrol.com

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PNEUMATIC AIR VALVE GUIDE



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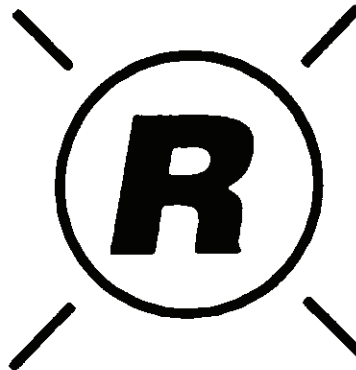
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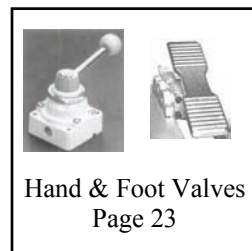
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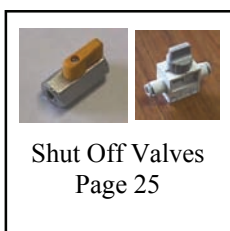
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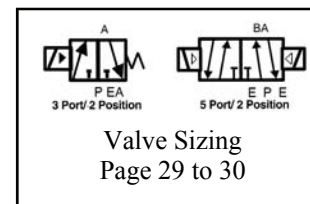
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Page 26



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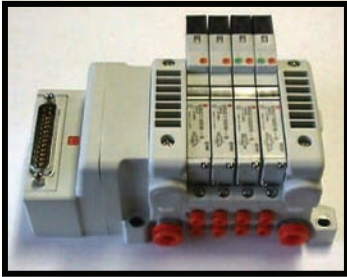
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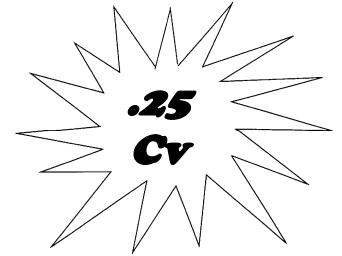
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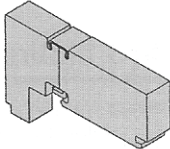


VQC1000 Series

**5 Port, Plug-in, Rubber Seal,
With Indicator Light**

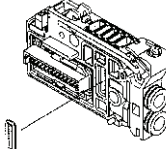


Position	No. of Solenoid	Part Number		Volts	CV
		24VDC PNP	24VDC NPN		
2 Position	Single	VQC1101-51	VQC1101N-51	24 DC	.25
2 Position	Double	VQC1201-51	VQC1201N-51	24 DC	.25
3 Position	Closed Center	VQC1301-51	VQC1301N-51	24 DC	.25
3 Position	Open Center	VQC1401-51	VQC1401N-51	24 DC	.25
3 Position	Pressure Center	VQC1501-51	VQC1501N-51	24 DC	.25



Blank Plate

Part Number
VVQ1000-10A-1

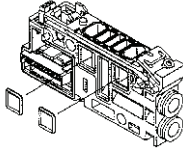


SUP Block Disk

Part Number
VVQ1000-16A

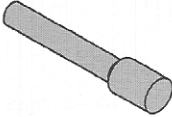
Fitting Assembly

Part Number	
VVQ1000-50A-N1	1/8
VVQ1000-50A-N7	1/4



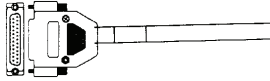
EXH Block Disk

Part Number
VVQ1000-19A



Port Plug

Part Number
KQ2P-07
1/4



D-Sub Cable

Part Number	
AXT100-DS25-050	5m
DSUB050SMC	5m



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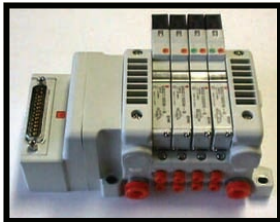
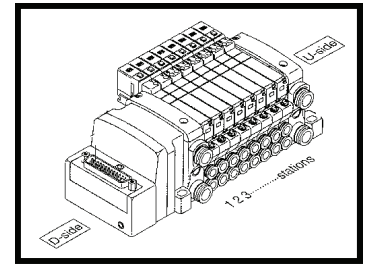


VQC1000 Series

- D-SUB BASES
- TERMINAL BOX
- I/O BASES

Manifolds

- Connector on D side
- Sup/Exh ports 5/16"
- Cylinder ports 1/4"
- Built In Exhaust



D-SUB BASES



TERMINAL BOX BASES
IP67 compliant

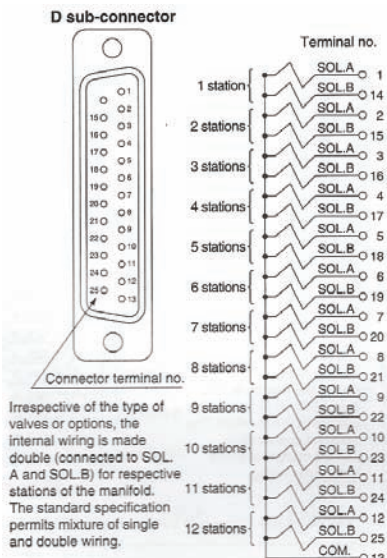


I/O BASES

No of Stations	Part Number
2	VV5QC11-02N7FD0-S
3	VV5QC11-03N7FD0-S
4	VV5QC11-04N7FD0-S
5	VV5QC11-05N7FD0-S
6	VV5QC11-06N7FD0-S
7	VV5QC11-07N7FD0-S
8	VV5QC11-08N7FD0-S
9	VV5QC11-09N7FD0-S
10	VV5QC11-10N7FD0-S
11	VV5QC11-11N7FD0-S
12	VV5QC11-12N7FD0-S

No of Stations	Part Number
2	VV5QC11-02N7TD0-S
3	VV5QC11-03N7TD0-S
4	VV5QC11-04N7TD0-S
5	VV5QC11-05N7TD0-S
6	VV5QC11-06N7TD0-S
7	VV5QC11-07N7TD0-S
8	VV5QC11-08N7TD0-S
9	VV5QC11-09N7TD0-S
10	VV5QC11-10N7TD0-S
11	VV5QC11-11N7TD0-S
12	VV5QC11-12N7TD0-S

No of Stations	Part Number Includes Device Net For Inputs See Below
2	VV5QC11-02N7SDQN0-S-X160US
3	VV5QC11-03N7SDQN0-S-X160US
4	VV5QC11-04N7SDQN0-S-X160US
5	VV5QC11-05N7SDQN0-S-X160US
6	VV5QC11-06N7SDQN0-S-X160US
7	VV5QC11-07N7SDQN0-S-X160US
8	VV5QC11-08N7SDQN0-S-X160US
9	VV5QC11-09N7SDQN0-S-X160US
10	VV5QC11-10N7SDQN0-S-X160US
11	VV5QC11-11N7SDQN0-S-X160US
12	VV5QC11-12N7SDQN0-S-X160US



Inputs



M12 2 Inputs
EX250-IE1



M12 4 Inputs
EX250-IE2



M8 4 Inputs
EX250-IE3

End Plate
EX250-EA1

DeviceNet (Replacement Number)



EX250 DeviceNet
EX250-SDN1-X102
Replacement fuse LM05(Black)



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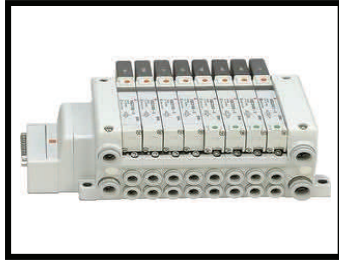
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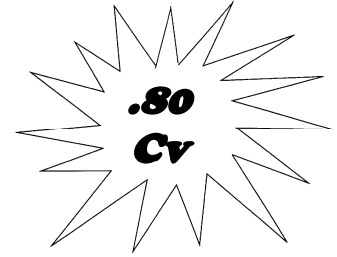
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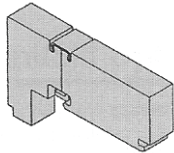


VQC2000 Series

**5 Port, Plug-in, Rubber Seal,
With Indicator Light**

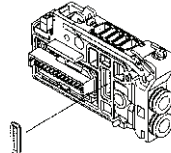


Position	No. of Solenoid	Part Number		Volts	CV
		24VDC PNP	24VDC NPN		
2 Position	Single	VQC2101-51	VQC2101N-51	24 DC	.80
2 Position	Double	VQC2201-51	VQC2201N-51	24 DC	.80
3 Position	Closed Center	VQC2301-51	VQC2301N-51	24 DC	.80
3 Position	Open Center	VQC2401-51	VQC2401N-51	24 DC	.80
3 Position	Pressure Center	VQC2501-51	VQC2501N-51	24 DC	.80



Blank Plate

Part Number
VVQ2000-10A-1

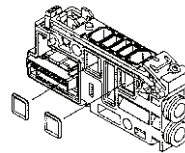


SUP Block Disk

Part Number
VVQ2000-16A

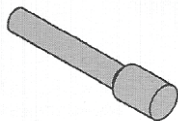
Fitting Assembly

Part Number	
VVQ2000-50A-N1	1/8
VVQ2000-50A-N7	1/4



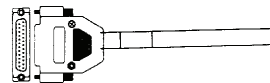
EXH Block Disk

Part Number
VVQ2000-19A



Port Plug

Part Number	
KQ2P-07	1/4



D-Sub Cable

Part Number	
AXT100-DS25-050	5m
DSUB050SMC	5m

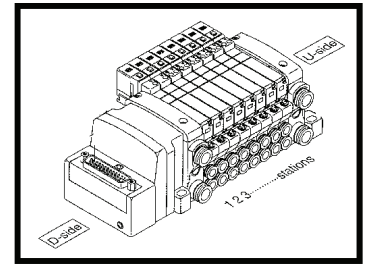


VQC2000 Series

- D-SUB BASES
- TERMINAL BOX
- I/O BASES

Manifolds

- Connector on D side
- Sup/Exh ports 3/8"
- Cylinder ports 1/4"
- Built In Exhaust



D-SUB BASES



TERMINAL BOX BASES
IP67 compliant



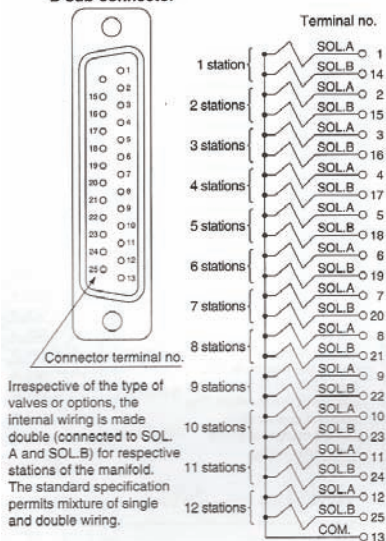
I/O BASES

No of Stations	Part Number
2	VV5QC21-02N7FD0-S
3	VV5QC21-03N7FD0-S
4	VV5QC21-04N7FD0-S
5	VV5QC21-05N7FD0-S
6	VV5QC21-06N7FD0-S
7	VV5QC21-07N7FD0-S
8	VV5QC21-08N7FD0-S
9	VV5QC21-09N7FD0-S
10	VV5QC21-10N7FD0-S
11	VV5QC21-11N7FD0-S
12	VV5QC21-12N7FD0-S

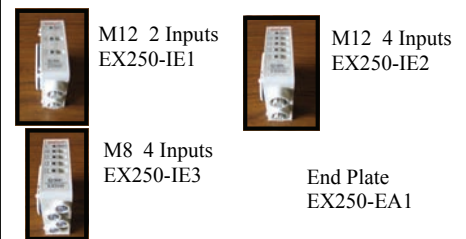
No of Stations	Part Number
2	VV5QC21-02N7TD0-S
3	VV5QC21-03N7TD0-S
4	VV5QC21-04N7TD0-S
5	VV5QC21-05N7TD0-S
6	VV5QC21-06N7TD0-S
7	VV5QC21-07N7TD0-S
8	VV5QC21-08N7TD0-S
9	VV5QC21-09N7TD0-S
10	VV5QC21-10N7TD0-S
11	VV5QC21-11N7TD0-S
12	VV5QC21-12N7TD0-S

No of Stations	Part Number Includes Device Net For Inputs See Below
2	VV5QC21-02N7SDQN0-S-X160US
3	VV5QC21-03N7SDQN0-S-X160US
4	VV5QC21-04N7SDQN0-S-X160US
5	VV5QC21-05N7SDQN0-S-X160US
6	VV5QC21-06N7SDQN0-S-X160US
7	VV5QC21-07N7SDQN0-S-X160US
8	VV5QC21-08N7SDQN0-S-X160US
9	VV5QC21-09N7SDQN0-S-X160US
10	VV5QC21-10N7SDQN0-S-X160US
11	VV5QC21-11N7SDQN0-S-X160US
12	VV5QC21-12N7SDQN0-S-X160US

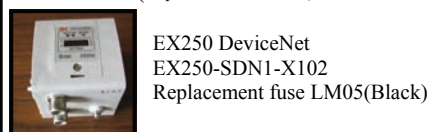
D sub-connector



Inputs



DeviceNet (Replacement Number)





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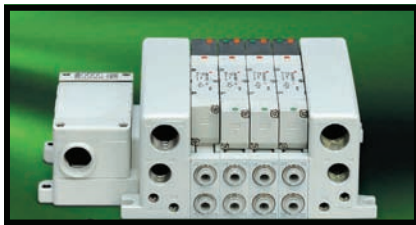
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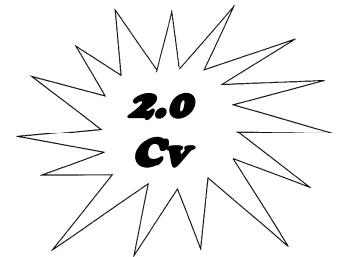
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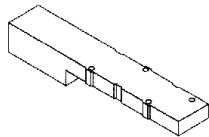


VQC4000 Series

**5 Port, Plug-in, Rubber Seal,
With Indicator Light**



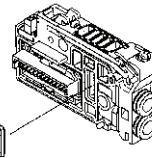
Position	No. of Solenoid		Volts	CV
			24VDC	
2 Position	Single	VQC4101-5	24 DC	2.0
2 Position	Double	VQC4201-5	24 DC	2.0
3 Position	Closed Center	VQC4301-5	24 DC	2.0
3 Position	Open Center	VQC4401-5	24 DC	2.0
3 Position	Pressure Center	VQC4501-5	24 DC	2.0



Blank Plate

Part Number

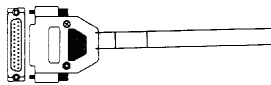
VVQ4000-10A-1



**SUP Block
Disk**

Part Number

VVQ4000-16A

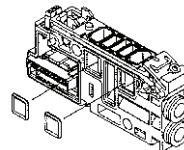


**D-Sub
Cable**

Part Number

AXT100-DS25-050 5m

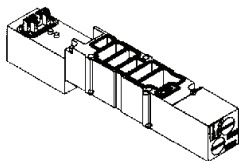
DSUB050SMC 5m



**EXH Block
Disk**

Part Number

VVQ4000-16A



**Interface Speed Control
Plug-in**

Part Number

VVQ4000-20A-1



Regulator

Part Number

ARBQ4000-N0-A-1

ARBQ4000-N0-P-1

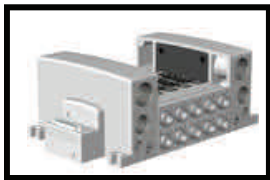
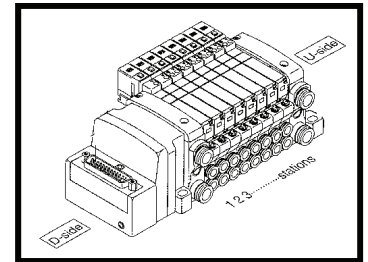


VQC4000 Series

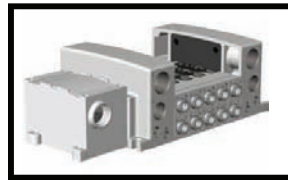
- D-SUB BASES
- TERMINAL BOX
- I/O BASES

Manifolds

- Connector on D side
- Sup/Exh ports 1/2"
- Cylinder ports 3/8"



D-SUB BASES



TERMINAL BOX BASES
IP67 compliant



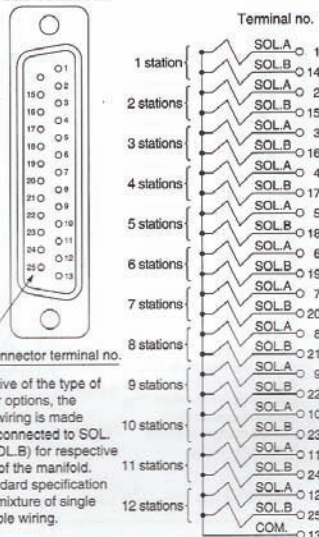
I/O BASES

No of Stations	Part Number
2	VV5QC41-0203TFD0-S
3	VV5QC41-0303TFD0-S
4	VV5QC41-0403TFD0-S
5	VV5QC41-0503TFD0-S
6	VV5QC41-0603TFD0-S
7	VV5QC41-0703TFD0-S
8	VV5QC41-0803TFD0-S
9	VV5QC41-0903TFD0-S
10	VV5QC41-1003TFD0-S
11	VV5QC41-1103TFD0-S
12	VV5QC41-1203TFD0-S

No of Stations	Part Number
2	VV5QC41-0203TTD0-S
3	VV5QC21-0303TTD0-S
4	VV5QC21-0403TTD0-S
5	VV5QC21-0503TTD0-S
6	VV5QC21-0603TTD0-S
7	VV5QC21-0703TTD0-S
8	VV5QC21-0803TTD0-S
9	VV5QC21-0903TTD0-S
10	VV5QC21-1003TTD0-S
11	VV5QC21-1103TTD0-S
12	VV5QC21-1203TTD0-S

No of Stations	Part Number Includes Device Net For Inputs See Below
2	VV5QC21-0203TSDQN0-S-X160US
3	VV5QC21-0303TSDQN0-S-X160US
4	VV5QC21-0403TSDQN0-S-X160US
5	VV5QC21-0503TSDQN0-S-X160US
6	VV5QC21-0603TSDQN0-S-X160US
7	VV5QC21-0703TSDQN0-S-X160US
8	VV5QC21-0803TSDQN0-S-X160US
9	VV5QC21-0903TSDQN0-S-X160US
10	VV5QC21-1003TSDQN0-S-X160US
11	VV5QC21-1103TSDQN0-S-X160US
12	VV5QC21-1203TSDQN0-S-X160US

D sub-connector



Irrespective of the type of valves or options, the internal wiring is made double (connected to SOL.A and SOL.B) for respective stations of the manifold. The standard specification permits mixture of single and double wiring.

Inputs



M12 2 Inputs
EX250-IE1



M12 4 Inputs
EX250-IE2



M8 4 Inputs
EX250-IE3

End Plate
EX250-EA1

DeviceNet(Replacement Number)



EX250 DeviceNet
EX250-SDN1-X102
Replacement fuse LM05(Black)



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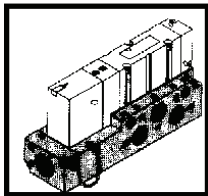
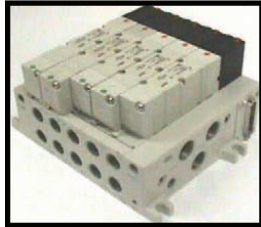
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VQ4000 Series

**5 Port, Plug-in, Rubber Seal,
With Indicator Light
Available 110VAC and 24VDC**



Sub-Base

**Sub-Base
3/8" Ports**

Part Number	Port
VQ4000-P-03T	3/8"

**Sub-Base
With 4 Pin Connector**

Part Number
RC-VQ4000-P-CNP4



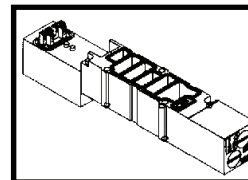
4 Pin 5m Cable

Part Number
R-FS4TZ-V075



Regulator

Part Number
ARBQ4000-N0-A-1
ARBQ4000-N0-P-1



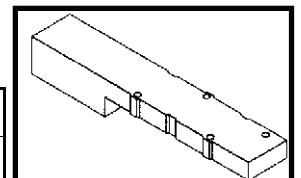
**Interface Speed Control
Plug-in**

Part Number
VVQ4000-20A-1

Larger Gauge Option	
RC-4400	Long Stem
RC-4401	Short Stem

Blank Plate

Part Number
VVQ4000-10A-1

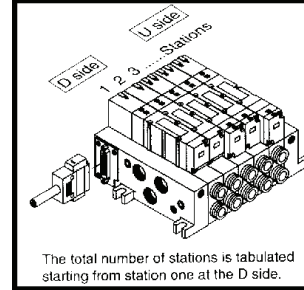
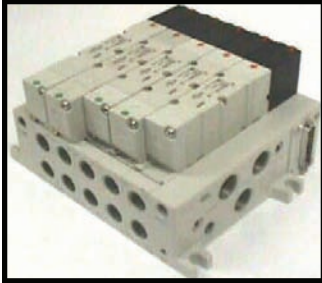




VQ4000 Series

D-Sub Connector Manifold With Built-in Exhaust

MANIFOLDS



No of Stations	Part Number	Connector Side	Sup/Exh Port	Cyl Port
2 Station Manifold	VV5Q41-0203TFD0-SU VV5Q41-0203TFU0-SD	D-Side U-Side	1/2	3/8
3 Station Manifold	VV5Q41-0303TFD0-SU VV5Q41-0303TFU0-SD	D-Side U-Side	1/2	3/8
4 Station Manifold	VV5Q41-0403TFD0-SU VV5Q41-0403TFU0-SD	D-Side U-Side	1/2	3/8
5 Station Manifold	VV5Q41-0503TFD0-SU VV5Q41-0503TFU0-SD	D-Side U-Side	1/2	3/8
6 Station Manifold	VV5Q41-0603TFD0-SU VV5Q41-0603TFU0-SD	D-Side U-Side	1/2	3/8
7 Station Manifold	VV5Q41-0703TFD0-SU VV5Q41-0703TFU0-SD	D-Side U-Side	1/2	3/8
8 Station Manifold	VV5Q41-0803TFD0-SU VV5Q41-0803TFU0-SD	D-Side U-Side	1/2	3/8
9 Station Manifold	VV5Q41-0903TFD0-SU VV5Q41-0903TFU0-SD	D-Side U-Side	1/2	3/8
10 Station Manifold	VV5Q41-1003TFD0-SU VV5Q41-1003TFU0-SD	D-Side U-Side	1/2	3/8
11 Station Manifold	VV5Q41-1103TFD0-SU VV5Q41-1103TFU0-SD	D-Side U-Side	1/2	3/8
12 Station Manifold	VV5Q41-1203TFD0-SU VV5Q41-1203TFU0-SD	D-Side U-Side	1/2	3/8



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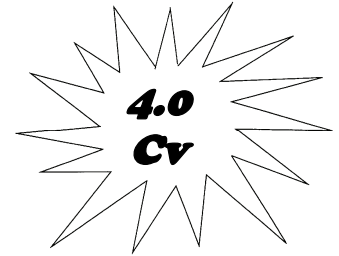
Website: www.rapidcontrol.com

E-Mail: sales@rapidcontrol.com



VQ5000 Series

**5 Port, Plug-in, Metal Seal,
With Indicator Light**



Position	No. of Solenoid	Part Number	Volts	CV
24V DC				
2 Position	Single	VQ5100-5W	24 DC	4.0
2 Position	Double	VQ5200-5W	24 DC	4.0
3 Position	Closed Center	VQ5300-5W	24 DC	4.0
3 Position	Open Center	VQ5400-5W	24 DC	4.0
3 Position	Pressure Center	VQ5500-5W	24 DC	4.0

Position	No. of Solenoid	Part Number	Volts	CV
110V DC				
2 Position	Single	VQ5100-3W	110 VAC	4.0
2 Position	Double	VQ5200-3W	110 VAC	4.0
3 Position	Closed Center	VQ5300-3W	110 VAC	4.0
3 Position	Open Center	VQ5400-3W	110 VAC	4.0
3 Position	Pressure Center	VQ5500-3W	110 VAC	4.0

Sub Base



Part Number	Port Size
VQ5000-P-04T	1/2 npt



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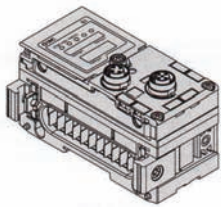


Now in Stock at Rapid Control

EX600 Components



SI Unit



EX600-SEN1
EtherNet Protocol

EX600-SEN1-DU001911
With Web Interface

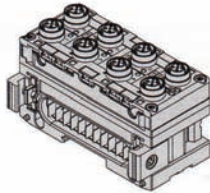
Valve Plate



EX600-ZMV1
For VQC & SV

EX600-ZMV2
For SY

Digital Input Unit



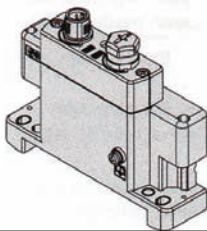
EX600-DXPD
PNP Input
M12 (5-Pin) Socket
24 VDC

Reinforcing Brace



EX600-ZMB1
For Direct Mounting

End Plate



EX600-ED2
M12 (5-Pin) Plug
24 VDC

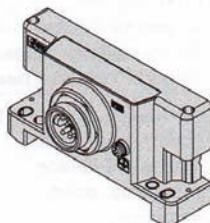
Power Cable



Z-FS5KAV435
5-Pin • 7/8" -16 • 5Meters

Z-FS4KAV425
4-Pin • 7/8" -16 • 5Meters

End Plate



EX600-ED3
7/8" (5-Pin) Plug
24 VDC

EX600-ED3-X2
7/8" (4-Pin) Plug
24 VDC
4 Pin DeviceNet Plug

Power Cable



PCA-1564930
5-Pin • M12 • 5Meters

Communication Cable



EX9-AC020EN-PSRJ
4-Pin • M12 • RJ 45 • 2Meters



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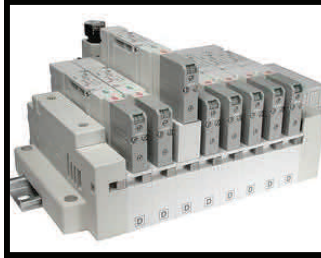
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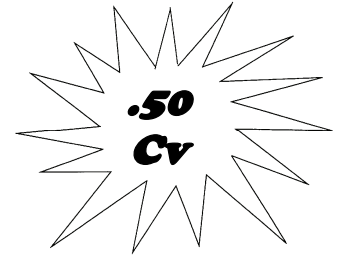
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E-Mail: sales@rapidcontrol.com

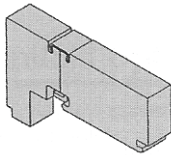


SV2000 Series

**5 Port, Plug-in,
With Indicator Light
24VDC**



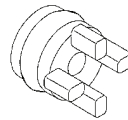
Position	No. of Solenoid	Part Number	Volts	CV
24V DC				
2 Position	Single	SV2100-FU	24 DC	.50
2 Position	Double	SV2200-5FU	24 DC	.50
3 Position	Closed Center	SV2300-5FU	24 DC	.50
3 Position	Open Center	SV2400-5FU	24 DC	.50
3 Position	Pressure Center	SV2500-5FU	24 DC	.50



Blank Plate

Part Number

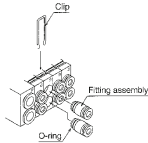
SV2000-67-1A



**SUP & EXH
Block Disk**

Part Number

SV2000-59-3A

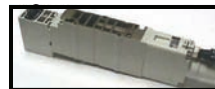


**Fitting
Assembly**

Part Number

VVQ1000-51A-N7 1/4

VVQ1000-51A-N9 5/16
8mm



Regulator

Part Number

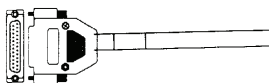
SV2000-00-A1

Ports

A

SV2000-N0-P

Both



**D-Sub
Cable**

Part Number

AXT100-DS25-050 5m

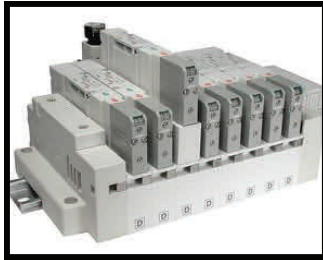
DSUB050SMC 5m



Din Rail

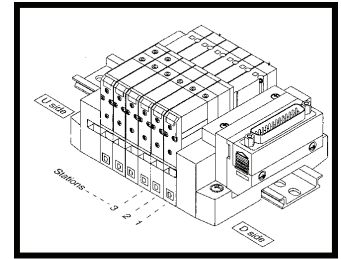
Part Number

RC-DIN RAIL



SV2000 Series

**Manifolds with D-Sub Connector
 And Built-in Exhaust
 3/8" Supply Ports
 1/4 Cylinder Ports**

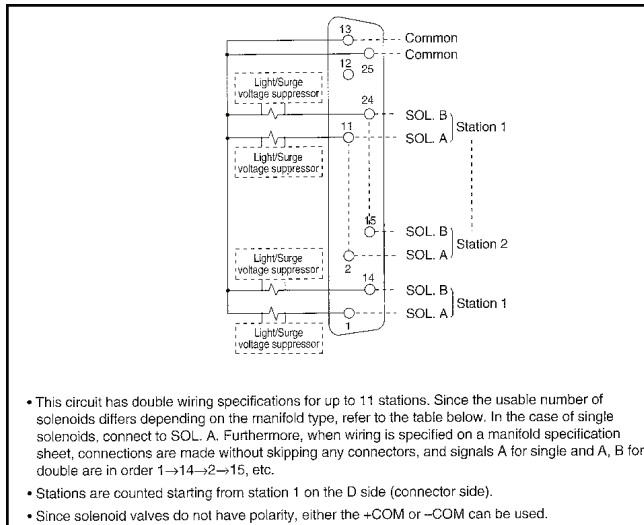


Tie Rod Style Manifold

Cassette Style Manifold

No of Stations	Part Number	Connector Side
2 Station Manifold	SS5V2-10FD1-02US-N7	D-Side
3 Station Manifold	SS5V2-10FD1-03US-N7	D-Side
4 Station Manifold	SS5V2-10FD1-04US-N7	D-Side
5 Station Manifold	SS5V2-10FD1-05US-N7	D-Side
6 Station Manifold	SS5V2-10FD1-06US-N7	D-Side
7 Station Manifold	SS5V2-10FD1-07US-N7	D-Side
8 Station Manifold	SS5V2-10FD1-08US-N7	D-Side
9 Station Manifold	SS5V2-10FD1-09US-N7	D-Side
10 Station Manifold	SS5V2-10FD1-10US-N7	D-Side
11 Station Manifold	SS5V2-10FD1-11US-N7	D-Side
12 Station Manifold	SS5V2-10FD1-12US-N7	D-Side

No of Stations	Part Number	Connector Side
2 Station Manifold	SS5V2-16FD1-02US-N7	D-Side
3 Station Manifold	SS5V2-16FD1-03US-N7	D-Side
4 Station Manifold	SS5V2-16FD1-04US-N7	D-Side
5 Station Manifold	SS5V2-16FD1-05US-N7	D-Side
6 Station Manifold	SS5V2-16FD1-06US-N7	D-Side
7 Station Manifold	SS5V2-16FD1-07US-N7	D-Side
8 Station Manifold	SS5V2-16FD1-08US-N7	D-Side
9 Station Manifold	SS5V2-16FD1-09US-N7	D-Side
10 Station Manifold	SS5V2-16FD1-10US-N7	D-Side
11 Station Manifold	SS5V2-16FD1-11US-N7	D-Side
12 Station Manifold	SS5V2-16FD1-12US-N7	D-Side





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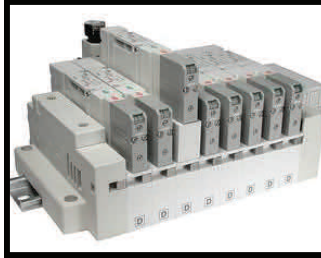
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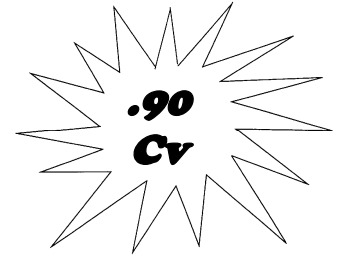
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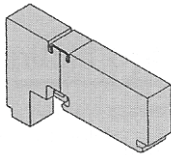


SV3000 Series

5 Port, Plug-in,
With Indicator Light
24VDC



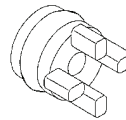
Position	No. of Solenoid	Part Number	Volts	CV
24V DC				
2 Position	Single	SV3100-FU	24 DC	.90
2 Position	Double	SV3200-5FU	24 DC	.90
3 Position	Closed Center	SV3300-5FU	24 DC	.90
3 Position	Open Center	SV3400-5FU	24 DC	.90
3 Position	Pressure Center	SV3500-5FU	24 DC	.90



Blank Plate

Part Number

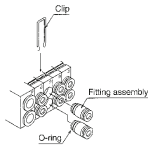
SV3000-67-1A



**SUP & EXH
Block Disk**

Part Number

SV3000-59-3A



**Fitting
Assembly**

Part Number

VVQ2000-51A-N7 1/4

VVQ2000-51A-N11 3/8



Regulator

Part Number

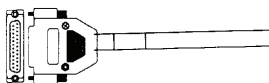
SV3000-N0-A1

Ports

A

SV3000-N0-P

Both



**D-Sub
Cable**

Part Number

AXT100-DS25-050 5m

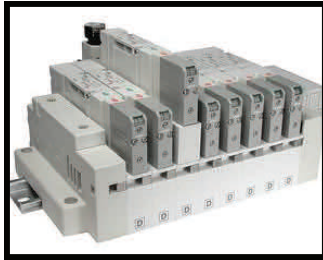
DSUB050SMC 5m



Din Rail

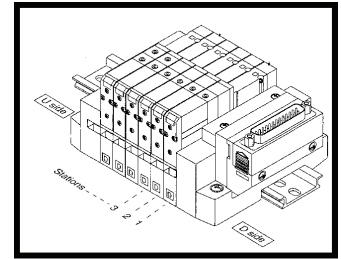
Part Number

RC-DIN RAIL



SV3000 Series

**Manifolds with D-Sub Connector
 And Built-in Exhaust
 3/8" Supply Ports
 1/4 Cylinder Ports**

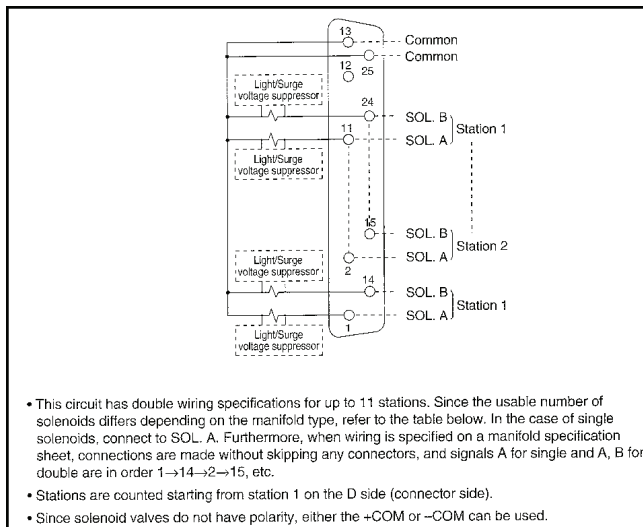


Tie Rod Style Manifold

Cassette Style Manifold

No of Stations	Part Number	Connector Side
2 Station Manifold	SS5V3-10FD1-02US-N7	D-Side
3 Station Manifold	SS5V3-10FD1-03US-N7	D-Side
4 Station Manifold	SS5V3-10FD1-04US-N7	D-Side
5 Station Manifold	SS5V3-10FD1-05US-N7	D-Side
6 Station Manifold	SS5V3-10FD1-06US-N7	D-Side
7 Station Manifold	SS5V3-10FD1-07US-N7	D-Side
8 Station Manifold	SS5V3-10FD1-08US-N7	D-Side
9 Station Manifold	SS5V3-10FD1-09US-N7	D-Side
10 Station Manifold	SS5V3-10FD1-10US-N7	D-Side
11 Station Manifold	SS5V3-10FD1-11US-N7	D-Side
12 Station Manifold	SS5V3-10FD1-12US-N7	D-Side

No of Stations	Part Number	Connector Side
2 Station Manifold	SS5V3-16FD1-02US-N7	D-Side
3 Station Manifold	SS5V3-16FD1-03US-N7	D-Side
4 Station Manifold	SS5V3-16FD1-04US-N7	D-Side
5 Station Manifold	SS5V3-16FD1-05US-N7	D-Side
6 Station Manifold	SS5V3-16FD1-06US-N7	D-Side
7 Station Manifold	SS5V3-16FD1-07US-N7	D-Side
8 Station Manifold	SS5V3-16FD1-08US-N7	D-Side
9 Station Manifold	SS5V3-16FD1-09US-N7	D-Side
10 Station Manifold	SS5V3-16FD1-10US-N7	D-Side
11 Station Manifold	SS5V3-16FD1-11US-N7	D-Side
12 Station Manifold	SS5V3-16FD1-12US-N7	D-Side





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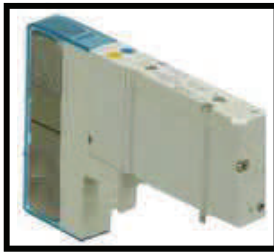
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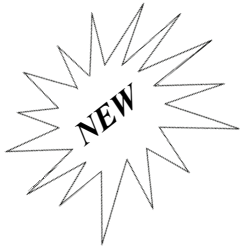
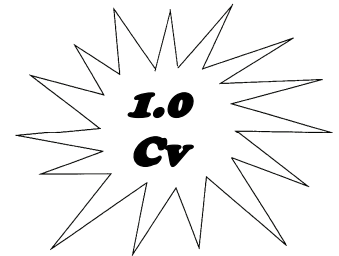
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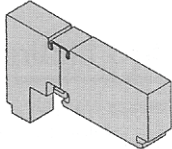


SY5000 Series

**5 Port, Plug-in,
With Indicator Light
24VDC**




Position	No. of Solenoid	Part Number	Volts	CV
24V DC				
2 Position	Single	SY5100-FU1	24 DC	1.0
2 Position	Double	SY5200-5FU1	24 DC	1.0
3 Position	Closed Center	SY5300-5FU1	24 DC	1.0
3 Position	Open Center	SY5400-5FU1	24 DC	1.0
3 Position	Pressure Center	SY5500-5FU1	24 DC	1.0
4 Position	Dual 3 Port (NC/NC)	SY5A00-5U1	24 DC	1.0



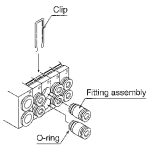
Blank Plate

Part Number
SY50M-26-1A



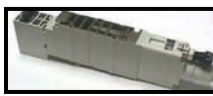
**SUP & EXH
Block Disk**

Part Number
SV2000-59-2A



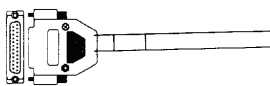
**Fitting
Assembly**

Part Number	
VVQ1000-51A-N7	1/4
VVQ1000-51A-N11	3/8



Regulator

Part Number	Ports
SY50M-N0-P	Both



**D-Sub
Cable**

Part Number	
AXT100-DS25-050	5m
DSUB050SMC	5m



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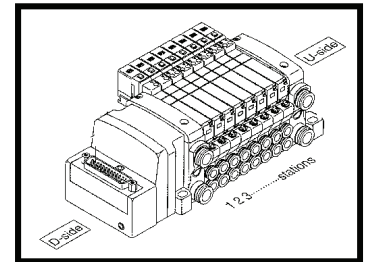
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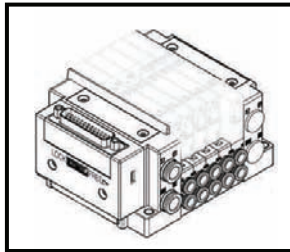
SY5000 Series

Manifolds

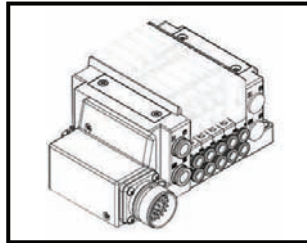
- Connector on D side
- Sup/Exh ports 1/4"
- Cylinder ports 3/8"



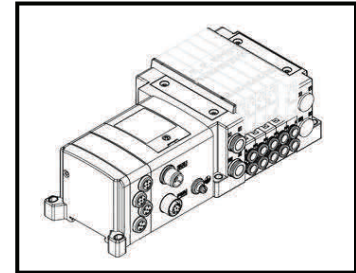
- D-SUB BASES
- CIRCULAR CONNECTOR
- I/O BASES



D-SUB BASES



CIRCULAR CONNECTOR
IP67 compliant



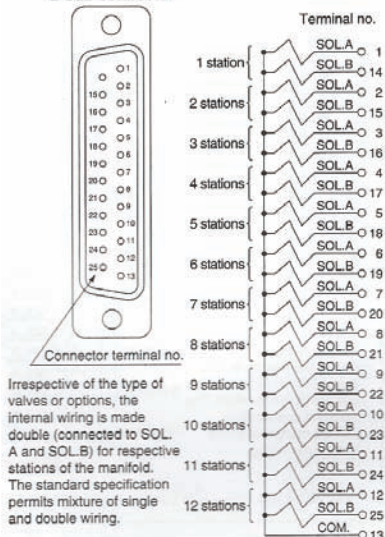
I/O BASES

No of Stations	Part Number
2	SS5Y5-10F1-02BS-N7
3	SS5Y5-10F1-03BS-N7
4	SS5Y5-10F1-04BS-N7
5	SS5Y5-10F1-05BS-N7
6	SS5Y5-10F1-06BS-N7
7	SS5Y5-10F1-07BS-N7
8	SS5Y5-10F1-08BS-N7
9	SS5Y5-10F1-09BS-N7
10	SS5Y5-10F1-10BS-N7
11	SS5Y5-10F1-11BS-N7
12	SS5Y5-10F1-12BS-N7

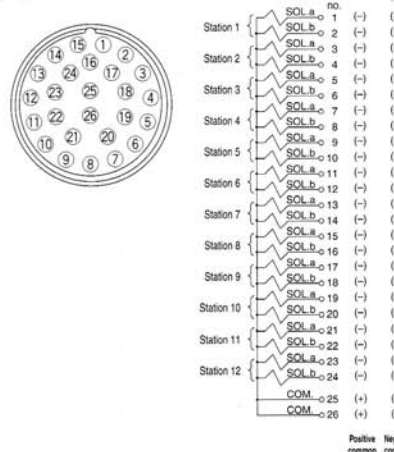
No of Stations	Part Number
2	SS5Y5-10M-02BS-N7
3	SS5Y5-10M-03BS-N7
4	SS5Y5-10M-04BS-N7
5	SS5Y5-10M-05BS-N7
6	SS5Y5-10M-06BS-N7
7	SS5Y5-10M-07BS-N7
8	SS5Y5-10M-08BS-N7
9	SS5Y5-10M-09BS-N7
10	SS5Y5-10M-10BS-N7
11	SS5Y5-10M-11BS-N7
12	SS5Y5-10M-12BS-N7

No of Stations	Part Number Includes Device Net For Inputs See Below
2	SS5Y5-10SQ-02B-N7
3	SS5Y5-10SQ-03B-N7
4	SS5Y5-10SQ-04B-N7
5	SS5Y5-10SQ-05B-N7
6	SS5Y5-10SQ-06B-N7
7	SS5Y5-10SQ-07B-N7
8	SS5Y5-10SQ-08B-N7
9	SS5Y5-10SQ-09B-N7
10	SS5Y5-10SQ-10B-N7
11	SS5Y5-10SQ-11B-N7
12	SS5Y5-10SQ-12B-N7

D sub-connector



Circular connector



Inputs



M12 2 Inputs
EX250-IE1



M12 4 Inputs
EX250-IE2



M8 4 Inputs
EX250-IE3

End Plate
EX250-EA1

DeviceNet (Replacement Number)



EX250 DeviceNet
EX250-SDN1-X102
Replacement fuse LM05(Black)

Note) When using a valve with no polarity, either positive common or negative common can be used.



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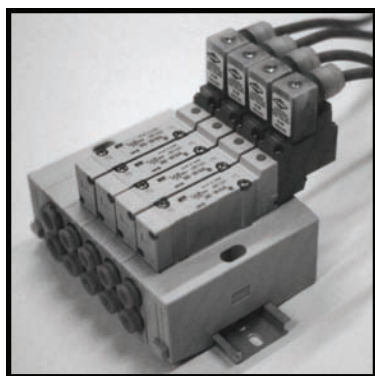
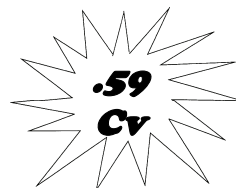
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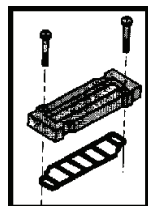
SY5000 Series Manifold Valves

5 Port, Rubber Seal Solenoid Valve



3' Lighted Cord Included

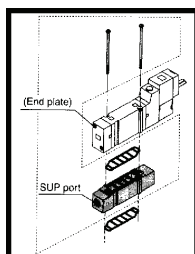
Position	No. of Solenoid	Part Number	Volts	CV
110VAC 50/60 Hz				
2 Position	Single	SY5140-3D	110V	.59
2 Position	Double	SY5240-3D	110V	.59
3 Position	Closed Center	SY5340-3D	110V	.59
3 Position	Open Center	SY5440-3D	110V	.59
3 Position	Pressure Center	SY5540-3D	110V	.59
24V DC				
2 Position	Single	SY5140-5D	24 DC	.59
2 Position	Double	SY5240-5D	24 DC	.59
3 Position	Closed Center	SY5340-5D	24 DC	.59
3 Position	Open Center	SY5440-5D	24 DC	.59
3 Position	Pressure Center	SY5540-5D	24 DC	.59



Blank Plate

Part Number

SX5000-76-1A

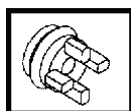
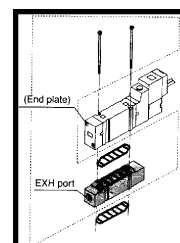


Individual Supply & Exhaust

Part Number

SY5000-38-2TA
Supply (1/8)

SY5000-39-2TA
Exhaust (1/8)



Blocking Disk

Part Number

SX5000-77-1A



Din Rail

Part Number

RC-DIN RAIL



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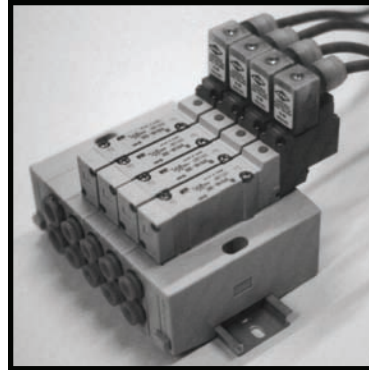
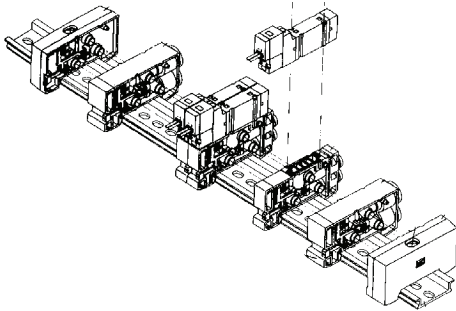
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SY5000 Series Manifold Bases

Manifold for Individual Lead Wires



No of Stations	Part Number	Sup/Exh Port	Cyl Port
2 Station Manifold	SS5Y5-45-02D-N7	$\frac{3}{8}$	$\frac{1}{4}$
3 Station Manifold	SS5Y5-45-03D-N7	$\frac{3}{8}$	$\frac{1}{4}$
4 Station Manifold	SS5Y5-45-04D-N7	$\frac{3}{8}$	$\frac{1}{4}$
5 Station Manifold	SS5Y5-45-05D-N7	$\frac{3}{8}$	$\frac{1}{4}$
6 Station Manifold	SS5Y5-45-06D-N7	$\frac{3}{8}$	$\frac{1}{4}$
7 Station Manifold	SS5Y5-45-07D-N7	$\frac{3}{8}$	$\frac{1}{4}$
8 Station Manifold	SS5Y5-45-08D-N7	$\frac{3}{8}$	$\frac{1}{4}$
9 Station Manifold	SS5Y5-45-09D-N7	$\frac{3}{8}$	$\frac{1}{4}$
10 Station Manifold	SS5Y5-45-10D-N7	$\frac{3}{8}$	$\frac{1}{4}$
11 Station Manifold	SS5Y5-45-11D-N7	$\frac{3}{8}$	$\frac{1}{4}$
12 Station Manifold	SS5Y5-45-12D-N7	$\frac{3}{8}$	$\frac{1}{4}$



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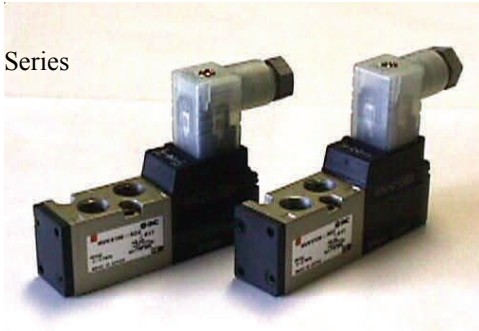
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5 Port Solenoid Valve • Body Ported

NVK Series



**.15
Cv**

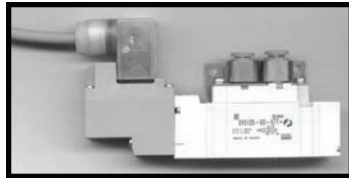


**1.0
Cv**

NVFS Series

Position	Part Number	Volts	Ports	CV
2 Position	NVK3120-5DZ-01T	24 DC	1/8	.15
2 Position	NVK3120-3DZ-01T	110V	1/8	.15
Mounting Bracket	VK300-43-2A			
2 Position	NVFS2120-5D-02T	24 DC	1/4	1.0
2 Position	NVFS2120-3D-02T	110V	1/4	1.0

SY 5000 Series



**.59
Cv**

Position	No. of Solenoid	Part Number	Volts	Ports	CV
2 Position	Single	SY5120-3D-N7T-F2	110V	1/4	.59
2 Position	Double	SY5220-3D-N7T-F2	110V	1/4	.59
2 Position	Single	SY5120-5D-N7T-F2	24 DC	1/4	.59
2 Position	Double	SY5220-5D-N7T-F2	24 DC	1/4	.59



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2 Port Valves

Solenoid Operated



Position	Part Number		Ports	Volts
2 Way	VXZ2230-02N-5D	N/C	1/4	24 vdc
2 Way	VXZ2230-03N-5D	N/C	3/8	24 vdc
2 Way	VXZ2240-04N-5D	N/C	1/2	24 vdc
2 Way	VXZ2350-06N-5D	N/C	3/4	24 vdc
2 Way	VXZ2230-02N-3D	N/C	1/4	110 vac
2 Way	VXZ2230-03N-3D	N/C	3/8	110 vac
2 Way	VXZ2240-04N-3D	N/C	1/2	110 vac
2 Way	VXZ2350-06N-3D	N/C	3/4	110 vac
110VAC Coil for VXZ Valves	VX021-002DB-03			
Bracket For VXZ Valves	VX070-022			
2 Way	9N204.K501	N/C	1/2	110 vac



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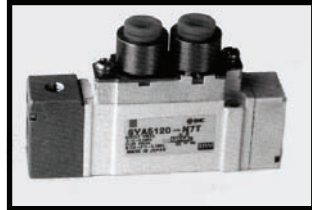
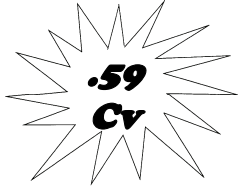
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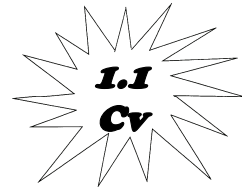
Air Pilot Valves



SYA5120-N7T-F2

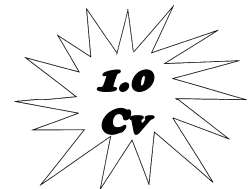
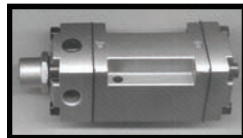


SYA7120-02T-F2



VTA301-02-N

Position	Part Number	EXT Ports	Pilot Ports	CV	
Single Pilot	SYA5120-N7T-F2	1/8 Push In	10-32	.59	With Bracket
Double Pilot	SYA5220-N7T-F2	1/8 Push In	10-32	.59	With Bracket
Single Pilot	SYA7120-02T-F2	1/4 NPT	1/8	1.1	With Bracket
Double Pilot	SYA7220-02T-F2	1/4 NPT	1/8	1.1	With Bracket
3 Port Pilot	VTA301-02-N	1/4	1/8	.66	



Part Number	Description	Cv	Class
NVSA4114-00A	Single Pilot	1.0	Class 1
NVSA4214-00A	Double Pilot	1.0	Class 1
SPA0115	Base 3/8"		Class 1



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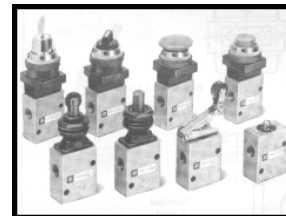
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Mechanical Air Valves

NVM Series



NVM230-N02-01
Roller Lever Valve
3-Ways; 2 Ports
1/4" Ports



NVM230-N02-02
One Way Roller Lever
3-Way; 2 Ports
1/4" Ports



NVM230-N02-05
Straight Plunger
3-Way; 2 Ports
1/4" Ports



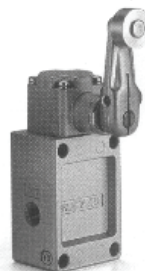
NVM230-N02-06
Roller Plunger
3-Way; 2 Ports
1/4" Ports



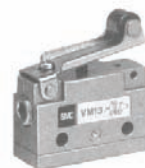
NVM130-N01-30R, B, G
Push Button (mushroom)
3-Way; 2 Ports
1/8" Ports
Available in red, black, or
green buttons



NVM230-N02-34B
Twist Selector
3-Way; 2 Ports
1/4" Ports



NVM830-N01-13
Adjustable Roller Lever
3 Ports
1/8" Ports



NVM131-N01-01S
Cam Lever Valve
3-Way, 2 Ports
1/8" Ports



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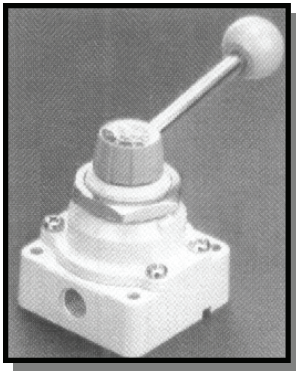
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ROTARY HAND VALVES



Position	Part Number	EXT Ports	CV
2 Position	VH202-N02	1/4	0.4
3 Position Closed Center	VH300-N02	1/4	0.9
3 Position Closed Center	VH300-N03	3/8	1.1

HAND & FOOT VALVES

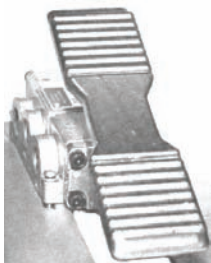


Hand Valves



Position		Part Number	Ports
3 Position Spring Center	Closed center	HY2	1/4
3 Position Spring Center	Closed center	HY3	3/8
3 Position Click Detent	Closed center	HD2	1/4
2 Position Friction Pos.		HE2	1/4

Foot Valves



Position		Part Number	Ports
2 Position Friction Pos.	Treadle Actuated	TE2	1/4
2 Position Friction Pos.	Treadle Actuated	TE3	3/8
2 Position Spring Return	Pedal Actuated	FO2	1/4
3 Position Spring Return	Treadle Actuated	TY2	1/4



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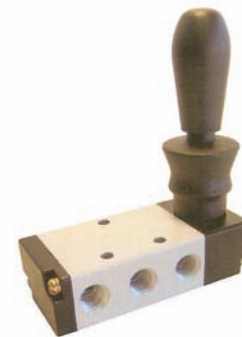
Solenoid Valve

Model	M3V1-06-24VDC	M3V1-06-120VAC
Port Size	1/8" NPT	1/8" NPT
Type	3 Port 2 Position	3 Port 2 Position
Flow	Cv .051	Cv .051
Coil Volts	24VDC	110VAC
Connection	DIN Connector	DIN Connector



Hand Lever Valve

Model	M4H210-06	M4H310-08
Type	5 Ports 2 Position Detent	5 Ports 2 Position Detent
Flow	Cv 0.78	Cv 1.39
Port Size	1/8" NPT	1/4" NPT



Foot Valve W/ Guard

Model	M4F210-08G
Type	5 Ports 2 Position
Port Size	1/4" NPT





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Shut Off Valves



Part Number	Ports
MV609-2	1/8
MV609-4	1/4
MV609-3	3/8



Part Number	Ports
VHK2-04F-04F	4mm
VHK2-06F-06F	6mm
VHK2-08F-08F	8mm
VHK2-07F-07F-X205	1/4



Part Number	Ports	EXH Ports
VHS20-N02-Z	1/4	1/8
VHS30-N03-Z	3/8	1/4
VHS40-N04-Z	1/2	3/8



Part Number	Ports
21104F	1/8
21106F	1/4
21108F	3/8
21112F	1/2



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MUFFLERS EXHAUST



Part Number		Size
AN200-N02	NYLON	1/4
AN300-N03	NYLON	3/8
AN400-N04	NYLON	1/2
SQF-2	NYLON	1/4
SQF-3	NYLON	3/8
SQF-4	NYLON	1/2
ASQF-1M	METAL	1/8
ASQF-2M	METAL	1/4
ASQF-3M	METAL	3/8
ASQF-4M	METAL	1/2
ASQF-6M	METAL	3/4
ASQF-8M	METAL	1
AN202-N02	High Noise Reduction	1/4
AN402-N04	High Noise Reduction	1/2
1000-2-F	High Noise Reduction	1/4
1000-3-F	High Noise Reduction	3/8
1000-3-4-F	High Noise Reduction	1/2
1000-4-F	High Noise Reduction	1/2
1000-4-6-F	High Noise Reduction	3/4
1000-8-6-F	High Noise Reduction	3/4

Part Number		Size
ASP-1	Sintered Body	1/8
ASP-2	Sintered Body	1/4
ASP-3	Sintered Body	3/8
ASP-4	Sintered Body	1/2
ASP-6	Sintered Body	3/4
ASP-8	Sintered Body	1
ASP-1BV	Beather Vents	1/8
ASP-2BV	Beather Vents	1/4
ASP-3BV	Beather Vents	3/8
ASP-4BV	Beather Vents	1/2
ASP-6BV	Beather Vents	3/4
ASP-8BV	Beather Vents	1
ASP-1SC	Speed Control	1/8
ASP-2SC	Speed Control	1/4
ASP-3SC	Speed Control	3/8
ASP-4SC	Speed Control	1/2
ASP-6SC	Speed Control	3/4





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RECTANGULAR MULTI-CONNECTOR



KDM10S



KDM10P



Substantial reduction in mounting space

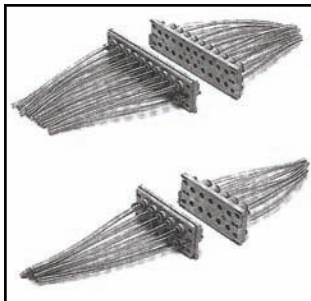
- In comparison with a model requiring many union joints for panels and partitions, this model needs only a small space.

One-touch tube connection

- Multiple pipes can be connected/ disconnected in one touch operation without connection error. Thus man-hours for connection/disconnection is cut down substantially.

One-touch tube connection

- One-touch fittings substantially cuts down man-hour for piping



CONNECTORS

Number of connecting tubes	Plug	Socket
10	KDM10P-N	KDM10S-N
20	KDM20P-N	KDM20S-N

PLUGS & SOCKETS

Plug Fittings	KDMP-01	1/8	Socket Fittings	KDMS-01	1/8
	KDMP-03	5/32		KDMS-03	5/32
	KDMP-07	1/4		KDMS-07	1/4
	KDMP-09	5/16		KDMS-09	5/16
	KDMP-06	6		KDMS-06	6





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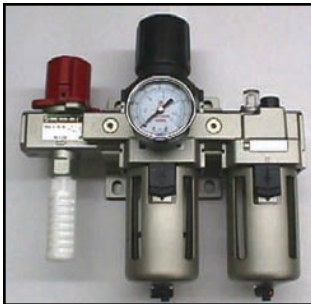
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PNEUMATIC COUNTER



Part Number		Inlet Port
PVT-1170-C-4	Without Key	1/4
PVT-1170-C-4-K	With Key	1/4

FILTER • REGULATOR • LUBRICATOR COMBO



Part Number	Ports
RC-FRL-2-LV	1/4
RC-FRL-3-LV	3/8
RC-FRL-4-LV	1/2



STOP VALVE

Part Number	Ports
NVM430-N01-30R/MOD	1/8

3 Way palm button w/ air pilot return

Cylinder Force Chart

Force = Area x Pressure

Bore	Piston Area (in ²)	Operating Pressure (psi)					
		25 psi	50 psi	75 psi	100 psi	125 psi	150 psi
1/4" (6mm)	0.04	1 lbf	2 lbf	3 lbf	4 lbf	5 lbf	6 lbf
8mm	0.08	2	4	6	8	10	12
3/8" (10mm)	0.12	3	6	9	12	15	18
5/8" (16mm)	0.27	7	14	20	27	34	41
3/4" (20mm)	0.44	11	22	33	44	55	66
1" (25mm)	0.79	20	40	59	79	99	119
1 1/8"	0.99	25	50	74	99	124	149
30mm	1.10	28	55	83	110	138	165
1 1/4" (32mm)	1.23	31	62	92	123	154	185
1 1/2" (40mm)	1.77	44	89	133	177	221	266
1 3/4"	2.41	60	121	181	241	301	362
2" (50mm)	3.14	79	157	236	314	393	471
2 1/2" (63mm)	4.91	123	246	368	491	614	737
3 1/4" (80mm)	8.3	208	415	623	830	1038	1245
4" (100mm)	12.57	314	629	943	1257	1571	1886
4 1/2"	15.9	398	795	1196	1590	1988	2385
5" (125mm)	19.64	491	982	1473	1964	2455	2946
140mm	23.85	596	1193	1789	2385	2981	3576
6"	28.27	707	1414	2120	2827	3534	4241
160mm	31.15	779	1558	2336	3115	3894	4673
7" (180mm)	38.48	962	1924	2886	3848	4810	5772
8" (200mm)	50.27	1256	2514	3770	5027	6284	7541
10" (250mm)	78.54	1963	3927	5891	7854	9818	11781
12"	113.1	2827	5655	8482	11310	14137	16965



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Figuring Cv for Valve Sizing

$$C_v = \frac{\text{Piston Area (in}^2\text{)} \times \text{Stroke (in)} \times \text{Compression Factor}}{\text{Pressure Drop Factor} \times \text{Cycle Time (sec)} \times 29}$$

EXAMPLE

We want to extend a 3 1/4" bore cylinder 12" in one second.
We have a supply pressure of 80 psi.

Piston area: **8.3**

Cylinder Stroke: **12 in**

Compression Factor: **6.4**

Pressure drop factor: **20.5**

Cycle time (sec): **1**

X 29

$$\frac{8.3 \times 12 \times 6.4}{20.5 \times 1 \times 29} = 1.05 C_v$$

Inlet Pressure	Compression Factor	Pressure Drop Factors for Various Pressure Drops				
		2 psi	5 psi	10 psi	15 psi	20 psi
10	1.7	6.5				
20	2.4	7.8	11.8			
30	3.0	8.9	13.6	18.0		
40	3.7	9.9	15.3	20.5	23.6	
50	4.4	10.8	16.7	22.6	26.4	29.0
60	5.1	11.7	18.1	24.6	29.0	32.0
70	5.8	12.5	19.3	26.5	31.3	34.8
80	6.4	13.2	20.5	28.2	33.5	37.4
90	7.1	13.9	21.6	29.8	35.5	39.9
100	7.8	14.5	22.7	31.3	37.4	42.1
110	8.5	15.2	23.7	32.8	39.3	44.3
120	9.2	15.8	24.7	34.2	41.0	46.4
130	9.8	16.4	25.6	35.5	42.7	48.4
140	10.5	16.9	26.5	36.8	44.3	50.3

Note: Pressure drop factor is based on the inlet pressure of the valve and the allowable pressure drop across the valve. For average conditions use a 70 psi inlet pressure and a 10 psi pressure drop



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Valve Order Sheet

- How Many Port? _____
- How Many Positions? _____
- Flow? _____
- Rubber or Metal Seal? _____
- What is the application? _____
- Cylinder bore? _____ Stroke? _____
- Speed? _____ Blow off? _____
- Single or Double Solenoid? _____
- Voltage? _____
- Style of Connector? _____
- Plug – In, Din or Grommet?
- Serial or Discrete?
- Body Ported, Sub plate or Manifold?
- Foot bracket, Mounting holes or Din Rail?
- Port Size? _____ Threaded or One Touch Fitting
- How Many Stations? _____
- Operating Pressure? _____
- Temperature? _____
- Environment? _____

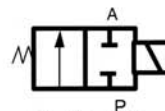
Installation Guide for Valves

“Standard port call out”

Port ID	Description of Function
P	Inlet – Supply Pressure
A	Output – Normally Closed at rest (Unless specified in a 2 or 3 port valve) (A → EA)
B	Output – Normally Open at rest (P → B)
EA & EB	Exhaust ports
X	External Pilot Supply (Used to supply pilot for low pressure or vacuum applications)
EX	Pilot Exhaust (Never plug. Leave open or use a silencer)

From time to time different manufactures use different call outs listed is the most recognized call outs. (Read across)

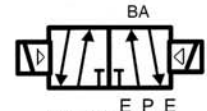
Supply	NC Output	NO Output	Exhaust Of NC	Exhaust Of NO	Pilot For NC	Pilot For NO
P	A	B	R	S	Z	Y
P	A	B	R1	R2	Z	Y
P	A	B	EA	EB	PA	PB
P	A	B	EA	EB	X	X2
1	2	4	3	5	12	14



**2 Port / 2 Position
Normally Closed**



3 Port / 2 Position



5 Port / 2 Position

Each square represents a position or state that the valve will perform. The square that has the call outs will always show the valve at rest.

At Rest Action

2 port NC	P → Blocked	A → Blocked	
2 port NO	P → A		
3 Port NC	P → Blocked	A → E	
3 Port NO	P → A	E → Blocked	
5 Port / 2 Position	P → B	A → EA	EB → Blocked
5 Port / 3 Pos – Closed	P, B & A → Blocked	EA & EB → Blocked	
5 Port / 3 Pos – Exhaust	P → Blocked	B → EB	A → EA
5 Port / 3 Pos – Open	P → B & A	EA & EB → Blocked	



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