



Note) Leave the box blank for the SI unit COM without SI unit (SD0).



8

With 8 input blocks

Base Mounted

Series VQC1000

How to Order Valves



SMC

2-2-12

Manifold Option





Standard Specifications

	Va	alve Configuration	1	Metal seal	Rubber seal				
	Fl	uid		Air/Inert gas					
	8	Max. operating p	oressure	0.7 MPa (High pressure type: 1.0 MPa) Note 4)					
	/20(Single	0.1 MPa	0.15 MPa				
	80	Min. operating	Double	0.1 MPa					
	S	pressure	3 position	0.1 MPa	0.2 MPa				
ons	2		4 position	—	0.15 MPa				
icati	0	Max. operating p	ressure Note 3)	1.0 MPa (0.7	' MPa)				
oecif	400		Single	0.15 MPa	0.2 MPa				
/e st	Ö	Min. operating pressure	Double	0.15 MPa					
Valv	>		3 position	0.15 MPa	0.2 MPa				
	Pr	oof pressure		1.5 MPa					
	Ar	mbient and fluid te	emperature	-10 to 50°C Note 1)					
	Lu	ubrication		Not required					
	M	anual override		Push type/Locking type (tool required)/Locking type (Manual override) Note 5)/Slide locking type Note 5)					
	Im	pact resistance/Vibra	ation resistance	150/30 m/s ^{2 Note 2)}					
	Er	nclosure		Dust proof (IP67 compliant)					
	Ra	ated coil voltage		24 VDC					
al ions	AI	lowable voltage fl	uctuation	±10% of rated voltage					
ctric	С	oil insulation type		Equivalent to B type					
Ele	Po	ower consumption	24 VDC	1 W DC (42 mA), 0.5	W DC (21 mA)				
х Х	(C	Current)	12 VDC	1 W DC (83 mA), 0.5 W DC (42 mA)					

Note 2) Impact resistance: No malfunction resulted from the impact test using a drop impact tester. The test was performed one time each in the axial and right angle directions of the main valve and armature, for both energized and de-energized states.
 Vibration resistance: No malfunction occurred in a one-sweep test between 45 and 2000Hz. Test was performed in the axial and right angle directions of the main valve and armature for both energized and de-energized states.
 Note 3) Values in () are for the low wattage (0.5 W) specification.
 Note 4) Metal seal type only.
 Note 5) Only for VQC1000/2000.

Manifold Specifications

J

				Piping specificati	ions	Note 2)	Annelleselete	C station	
Series	Base model	Connection type	Port	Port size Note 1)		Applicable	solenoid	weight	
			direction	1, 3 (P, R)	2, 4 (A, B)	Stations	valves	(g)	
VQC1000	VV5QC11-□□□		Side	C8 (For ø8) Options Direct outlet with built-in silencer	C3 (For ø3.2) C4 (For ø4) C6 (For ø6) M5 (M5 threads)	(F, L, M and P kits) 1 to 12 stations) (T kit 1 to 10 stations)	VQC1⊡00-5 VQC1⊡01-5	628 (Single) 759 (Double, 3P)	
VQC2000	VV5QC21-□□□	 F Kit: D-sub connector P Kit: Flat cable T Kit: Terminal block box S Kit: Serial transmission L Kit: Lead wire M Kit: Multiple connector 	Side	C10 (For ø10) Options Direct outlet with built-in silencer Branch type C12 (for ø12)	C4 (For ø4) C6 (For ø6) C8 (For ø8)	S kit 1 to 8 stations: EX500 1 to 12 stations: EX250 1 to 8 stations: EX126	VQC2⊟00-5 VQC2⊡01-5	1051 (Single) 1144 (Double, 3P)	
VQC4000	VV5QC41-□□□		Side Bottom	P: Rc 1/2 R: Rc 3/4	C8 (For ø8) C10 (For ø10) C12 (For ø12) Rc 1/4 Rc 3/8	(F, L, M and P kits) 1 to 12 stations) (T kit 1 to 10 stations) S kit 1 to 12 stations: EX240, EX250 1 to 8 stations: EX500 1 to 8 stations: EX126	VQC4⊟00-5 VQC4⊟01-5	4150 • S kit (without unit) • Solenoid weight is not included.	

Note 1) One-touch fittings in inch sizes are also available. Note 2) An optional specification for special wiring is available to increase the maximum number of stations.





VQC1000/2000/4000 Kit (Serial transmission kit) Decentralized Serial Wiring

Gateway type serial transmission system

• Since wiring is "prepackaged" into one multi-connector type cable, wiring work is not only made easier, but much more accurate.



Gateway (GW) Unit IP65 compliant



How to Order

EX500-G	DN1
---------	-----

Communication protocol

DN1	DeviceNet	AB1-X1	Remote I/O (RIO)
PR1A	PROFIBUS-DP	MJ1	CC-LINK

Specifications								
Model	EX500-GAB1-X1	EX500-GDN1	EX500-GPR1A	EX500-GMJ1				
Applicable PLC/ Communication protocol	Rockwell Automation PLC	DeviceNet Release 2.0	PROFIBUS-DP (EN50170)	CC-LINK Ver. 1.10				
Communication speed	Communication speed 57.6/115.2/ 230.4 kbit/sec 125/250/500 kbit/sec 9.6/19.2/45 187.5/500 1.5/3/6/12		9.6/19.2/45.45/93.75/ 187.5/500 kbit/sec 1.5/3/6/12 Mbit/sec	156/625 kbit/sec 2.5/5/10 Mbit/sec				
Rated voltage		24 VD	C					
Power supply	Input and control Solenoid valve power	unit power supply: 3 supply: 24 VDC + 10%/-	24 VDC ± 10% -5% (with power drop wa	arning at approx. 20 V)				
voltage range	_	Communication power supply for DeviceNet 11 to 25 VDC	_	_				
O	200 mA or less (Single GW unit)							
consumption	_	Communication power supply for DeviceNet 50 mA or less	_	_				
Number of inputs/outputs	r of inputs/outputs Maximum 64 inputs/64 outputs							
Number of input/ output branches	4 branches (16 inputs/16 outputs per branch)							
Branch cable		8 core heav	y duty cable					
Branch cable length	5	m or less (total ext	tension 10 m or less	s)				
Communication connector	M12 connector (8 pins, socket)							
Power connector	M12 connector (5 pins, plug)							
Ambient operating temperature/humidity	+5 to +45°C at 35% to 85% RH (No condensation)							
Enclosure	IP65							
Applicable standard	UL, CSA, CE							
Weight (g)		4	70					

Input Block IP67 compliant

How to Order Input Manifold



-X1



Note) When ordering an input block manifold, enter the Input manifold part no. + Input block part no. together. The input block, end block and DIN rail are included in the input manifold.

How to Order Input Block

Input Block Specifications

Applicable sensor

Sensor connector

Number of inputs

Sensor supply current

Rated voltage

Indication

Insulation

Enclosure

Weight (g)



Current source type (PNP output)

or Current sink type (NPN output)

M8 connector (3 pins) or, M12 connector (4 pins)

2 inputs/8 inputs (M8 only)

24 VDC

Green LED

None

Maximum 30 mA/Sensor

IP65

[For M8: 20] [For M12: 40] [8 point integrated type, for M8: 55]

Input Unit Specifications

Connection block	Current source type input block (PNP input block) or Current sink type input block (NPN input block)
Communication connector	M12 connector (8 pins, plug)
Number of connection blocks	Maximum 8 blocks
Block supply voltage	24 VDC
Block supply current	0.65 A maximum
Current consumption	100 mA or less (at rated voltage)
Short circuit protection	Operates at 1A Typ. (power supply cut) GW unit reset by turning power OFF and back ON.
Enclosure	IP65
Weight (g) Note)	100 (Input unit + end block)

Remote I/O (RIO)

Note) Not including the DIN rail weight.



<u>SI Unit</u>							
How to Order							
E.		SQ					
	• Applicabl	e GW unit	VQ0				
	Nil PF -X1 Rer	aOFIBUS-DP note I/O (RIO)	VQ4				
Specifications			VQ5				
Connection block	Solenoid valve (single, double) Relay output module (1 output, 2 outputs)		VQZ				
Communication connector	M12 connector (8 pins, plug, socket)						
Number of connection block stations	Double solenoid valve Relay output module (2 points): Maximum 8 stations Single solenoid valve Relay output module (1 point): Maximum 16 stations		VQD				
Block supply voltage	24 VDC						
Block supply current	0.65 A maximum						
Current consumption	100 mA or less (at rated voltage)						
Weight (g)	115						

Cable



Series VQC

VQC1000/2000/4000 Kit (Serial transmission kit) Decentralized Serial Wiring IP67 compliant

VV5QC11

SA1 Kit (Serial transmission kit: EX500)



								L1 = 10.5h + 45 (Maximum 16 single wiring stations)						n: Station		
L n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L1	55.5	66	76.5	87	97.5	108	118.5	129	139.5	150	160.5	171	181.5	192	202.5	213
L2	104	114.5	125	135.5	146	156.5	167	177.5	188	198.5	209	219.5	230	240.5	251	261.5
L3	125	137.5	150	162.5	175	187.5	187.5	200	212.5	225	237.5	250	250	262.5	275	287.5
L4	135.5	148	160.5	173	185.5	198	198	210.5	223	235.5	248	260.5	260.5	273	285.5	298

Formulas

....

* With signal cut block, L4 is obtained by adding approximately 30 mm to L2.