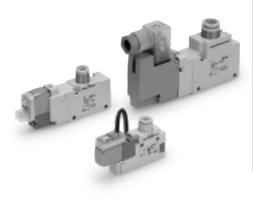


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### Specifications

Valve construction	Metal seal	Rubber seal	VQZ100 (Poppet seal)						
Fluid		Air, Inert gas							
Max. operating pressure (MPa)	0.7 (High pressure type: 1.0)	0.7	0.7 (High pressure type: 1.0)						
Min. operating pressure (MPa)	0.1	0.15	0.15						
Ambient and fluid temperature (°C)	-10 to 50 (No freezing)								
Max. operating frequency (Hz)	20	5	20						
Pilot exhaust method	Individua	l exhaust	Common exhaust						
Lubrication		Not required							
Manual override	Push typ	e, Locking type (Tool r	required)						
Mounting orientation		Free							
Impact/Vibration resistance (m/s <sup>2</sup> ) Note 1)		150/30							
Enclosure	Dustproof (DIN terminal: IP65 Note 2)								

and at the right angles to the main valve and armature in both energized and deenergized states every once for each condition. (Value in the initial state) Vibration resistance: No malfunction occurred in one sweep test between 45 and 2000 Hz. Test was

performed to axis and right angle directions of the main valve and armature when pilot signal is ON and OFF. (Value in the initial state) Note 2) When IP65 compliant DIN terminals are selected: VQZ<sub>3</sub><sup>2</sup>□2□-□Y□□W1-□□

### **Solenoid Specifications**

#### Options

X113

High speed response type
High pressure type (Metal seal type only)
External pilot type*

\* For details on external pilot type, refer to page 15.

Made to Order (For details, refer to page 34.)				
Description				
Pilot valve common exhaust				
Main valve fluoro-rubber				

Electrical entry			Grommet (G) L-type plug connector (L)	M-type plug connector (M) DIN terminal (Y)					
			G, L, M	Y					
Coil rated voltage	[	00	24, 12						
(V)		AC 50/60 Hz	100, 110,	200, 220*					
Allowable voltage f	luctu	ation	±10% of rat	ted voltage*					
		Standard	0.35 [(With light: 0.4 (DIN	I terminal with light: 0.45)]					
Power consumption (W)	DC	High speed response, high pressure	0.9 [(With light: 0.95 (DIN terminal with light: 1.6						
		100 V	0.78 (With light: 0.81)	0.78 (With light: 0.87)					
Apparent power		110 V [115 V]	0.86 (With light: 0.89) [0.94 (With light: 0.97)]	0.86 (With light: 0.87) [0.94 (With light: 1.07)]					
(VA)*	AC	200 V	1.18 (With light: 1.22)	1.15 (With light: 1.30)					
		220 V [230 V]	1.30 (With light: 1.34) [1.42 (With light: 1.46)]	1.27 (With light: 1.46) [1.39 (With light: 1.60)]					
Surge voltage supp	oresso	or	Varistor						
Indicator light	Indicator light			LED (Neon light when AC with DIN terminal)					
	<ul> <li>* In common between 110 VAC and 115 VAC, and between 220 VAC and 230 VAC.</li> <li>* For 115 VAC and 230 VAC, the allowable voltage is -15% to +5% of rated voltage.</li> </ul>								

#### **Flow Characteristics**

All fluoro-rubber

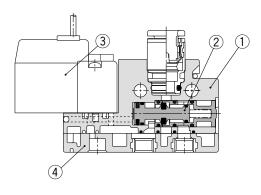
					Fl	ow char	acteristics			Res				
Series	Valve construc-			1→2 (	P→A)		2→3 (		speed	High	AC	Note 2) Weight		
	tion			C [dm³/(s•bar)]	] b Cv C [dm³/(s•bar)] b		Cv	0.35 W	resnonse.	pressure: 0.9 W	70	(g)		
VQZ100	N.C. valve	Poppet	VQZ115	0.59	0.44	0.17	0.56	0.30	0.14	10 or less	_	13 or less	22 or less	24
	N.C.	Metal seal	VQZ212	1.2	0.21	0.30	1.3	0.24	0.33	22 or less	14 or less	18 or less	34 or less	
VQZ200	valve	Rubber seal	VQZ232	1.6	0.33	0.39	1.7	0.37	0.45	22 or less	15 or less	—	36 or less	57
VQZZUU	N.O.	Metal seal	VQZ222	1.2	0.25	0.31	1.3	0.20	0.31	22 or less	14 or less	18 or less	34 or less	57
	valve	Rubber seal	VQZ242	1.6	0.36	0.40	1.7	0.36	0.45	22 or less	15 or less	_	36 or less	
	N.C.	Metal seal	VQZ312	2.7	0.18	0.62	2.4	0.28	0.56	22 or less	17 or less	22 or less	34 or less	
VQZ300	valve	Rubber seal	VQZ332	3.5	0.34	0.87	3.0	0.33	0.72	33 or less	25 or less	—	57 or less	93
VG2300	0 N.O.	Metal seal	VQZ322	2.6	0.21	0.59	2.2	0.16	0.49	22 or less	17 or less	22 or less	34 or less	
	valve	Rubber seal	VQZ342	3.5	0.38	0.88	2.9	0.27	0.69	33 or less	25 or less	—	57 or less	

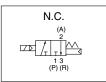
Note 1) Based on JIS B 8375-1981 (Supply pressure: 0.5 MPa; with light/surge voltage suppressor: clean air) Response time values will change depending on pressure and air quality. Note 2) Weight for threaded connection

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### Construction

#### VQZ100 Poppet type

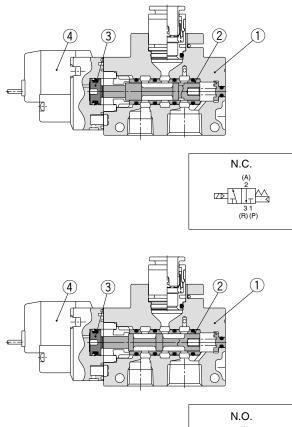




#### **Component Parts**

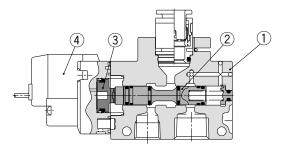
No.	Description	Material	Note					
1	Body	Resin						
2	Spool valve	Aluminum/HNBR						
3	Pilot valve assembly	—						
4	P, R port	Resin/Aluminum	VQZ100-12A (Standard) VQZ100-12B (External pilot type)					

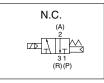
### VQZ200/300 Metal seal type

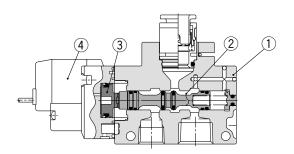


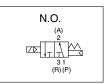
N.O. (A) 2 (B) (P)

#### Rubber seal type







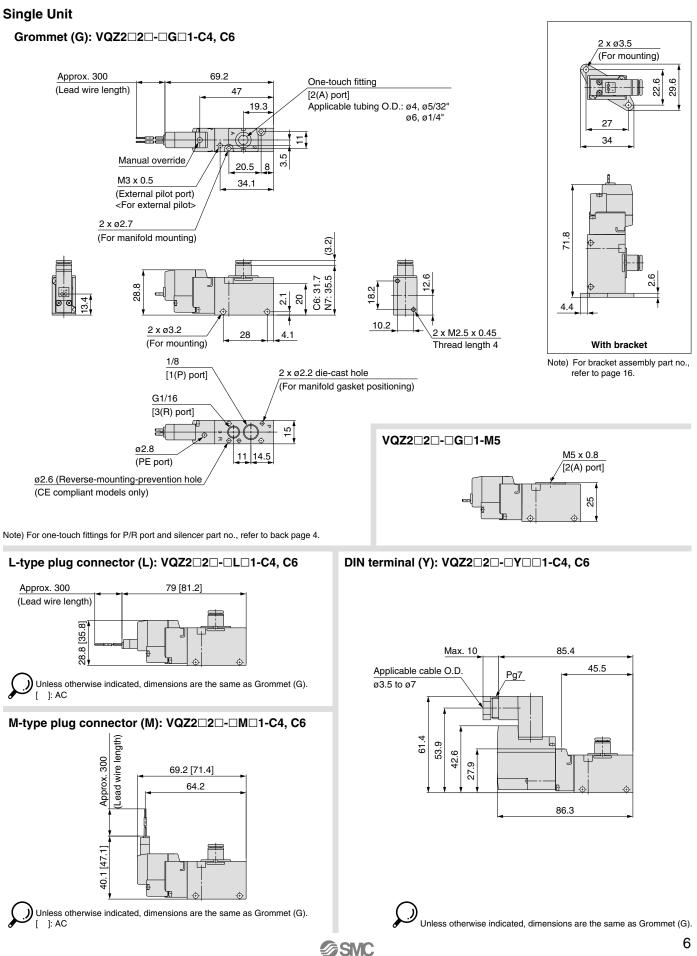


#### **Component Parts**

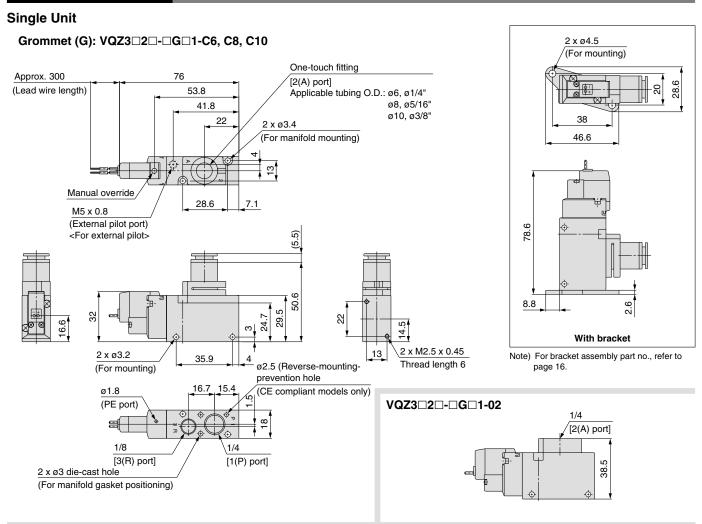
No.	Description	Material	Note			
1	Body	Aluminum die-casted				
	Spool, Sleeve	Stainless steel	Metal seal			
2	Spool valve	Aluminum/HNBR	Rubber seal			
3	Piston	Resin				
4	Pilot valve assembly	_				

Note) For "How to Order Pilot Valve Assembly", refer to page 16.

### Dimensions: VQZ200

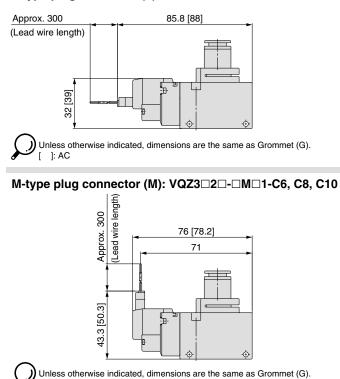


### Dimensions: VQZ300



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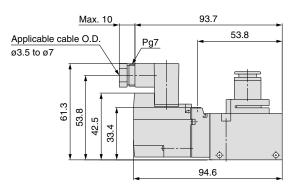
L-type plug connector (L): VQZ3 2 - L 1-C6, C8, C10



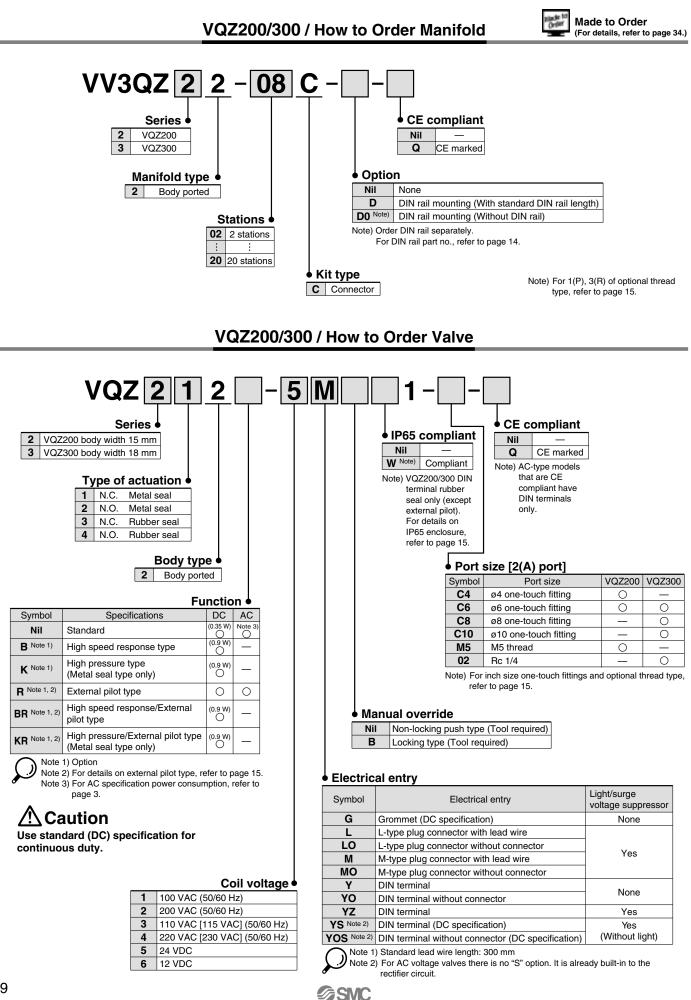
[ ]: AC

7

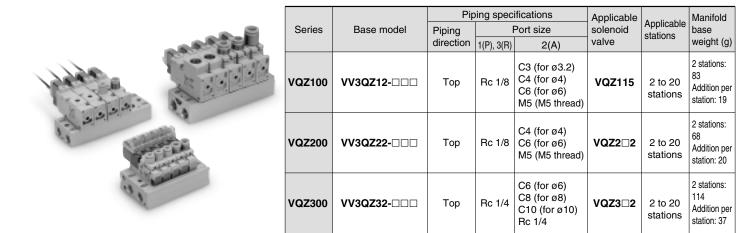
DIN terminal (Y): VQZ3 2 - Y 1-C6, C8, C10



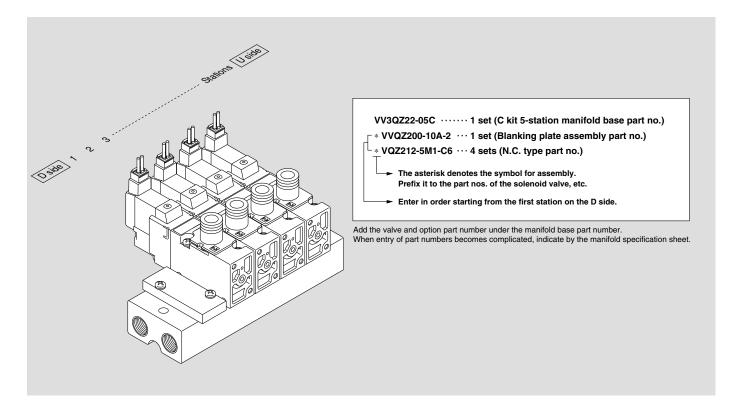
Unless otherwise indicated, dimensions are the same as Grommet (G).



### **Manifold Specifications**

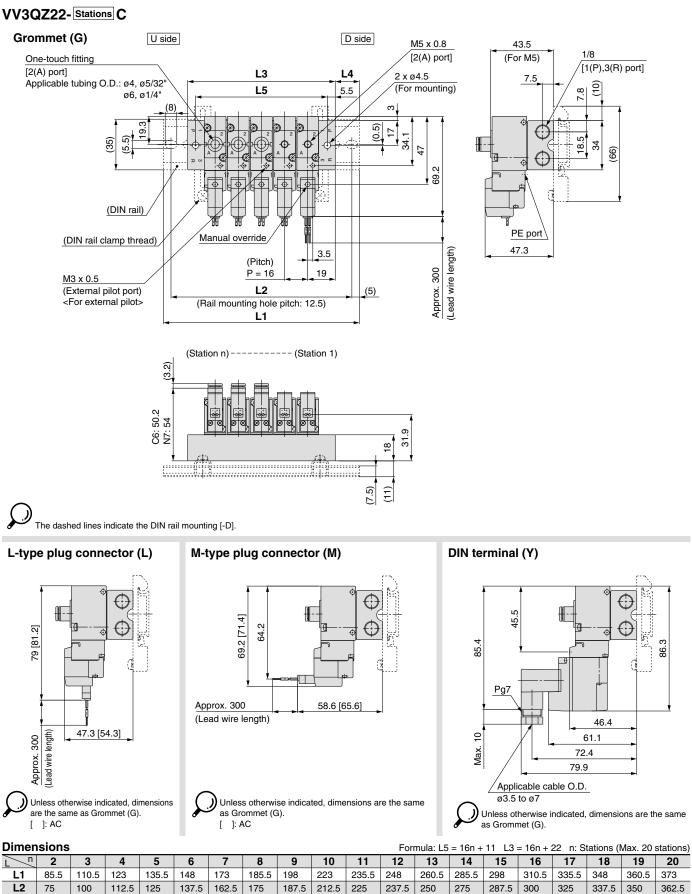


### How to Order Manifold Assembly (Example)



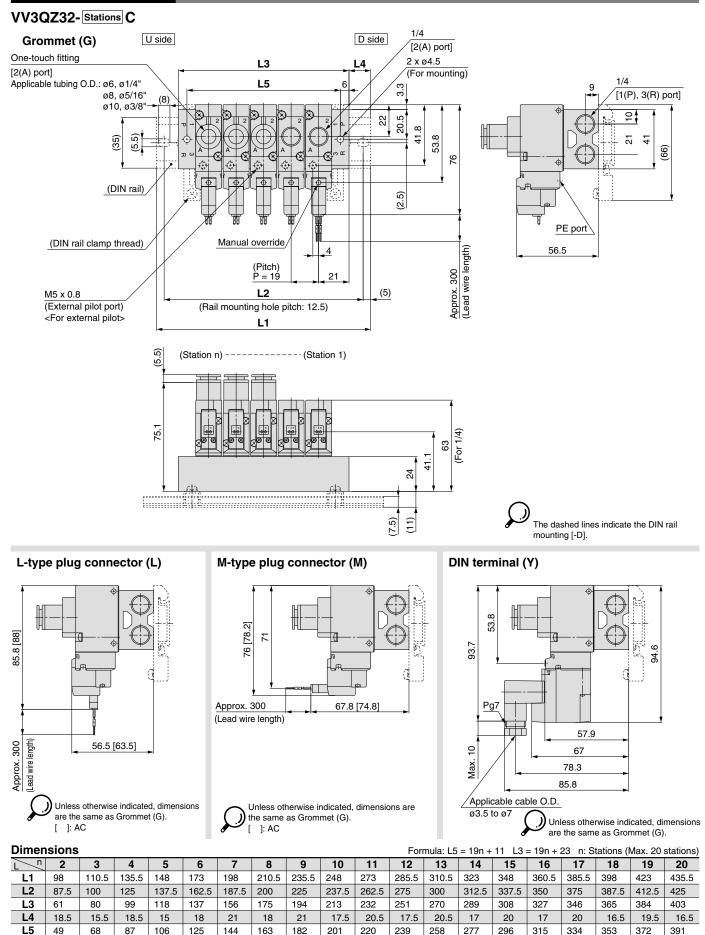
### **Dimensions: VQZ200**

L3 L4 L5



~	<b>_</b>	3		5	0	1	0	9	10		12	13	14	15	10	17	10	19	20
	85.5	110.5	123	135.5	148	173	185.5	198	223	235.5	248	260.5	285.5	298	310.5	335.5	348	360.5	373
	75	100	112.5	125	137.5	162.5	175	187.5	212.5	225	237.5	250	275	287.5	300	325	337.5	350	362.5
	54	70	86	102	118	134	150	166	182	198	214	230	246	262	278	294	310	326	342
	16	20.5	18.5	17	15	19.5	18	16	20.5	19	17	15.5	20	18	16.5	21	19	17.5	15.5
	43	59	75	91	107	123	139	155	171	187	203	219	235	251	267	283	299	315	331
				-	-											-	-		10

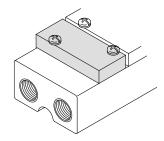
### Dimensions: VQZ300



#### Manifold Options

Blanking plate assembly VVQZ100-10A-5 (for VQZ100) VVQZ200-10A-2 (for VQZ200) VVQZ300-10A-2 (for VQZ300)

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



L		Dimension	S			(mm)
		Applicable fitting size ød	Model	Α	L	D
	$\sim$	3.2	KQ2P-23	16	31.5	3.2
	$\langle \rangle$	4	KQ2P-04	16	32	6
	$\checkmark$	6	KQ2P-06	18	35	8
		8	KQ2P-08	20.5	39	10
		10	KQ2P-10	22	43	12

### DIN rail AXT100-DR-

**Blanking plug KQ2P-23** 

KQ2P-04

KQ2P-06

**KQ2P-08** 

**KQ2P-10** 

\* As for 
, enter the number from the DIN rail dimensions table. For L dimension, refer to the dimensions of each kit.





Each manifold can be mounted on a DIN rail.

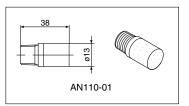
Insert "D" at the end of the manifold part number. The DIN rail is approximately 30 mm longer than the length of manifold.

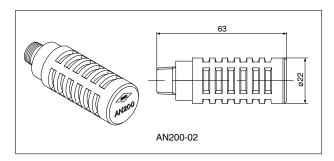
L	Dime	ension

L Dimer	<b>Dimension</b> L = 12.5n + 10.5																			
No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L dimension	23	35.5	48	60.5	73	85.5	98	110.5	123	135.5	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5
No.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
L dimension	273	285.5	298	310.5	323	335.5	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5	473	485.5	498	510.5

#### Silencer (for manifold EXH port)

Silencer is installed in the manifold EXH port.





DI	mer	ารเด	ons
		1310	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

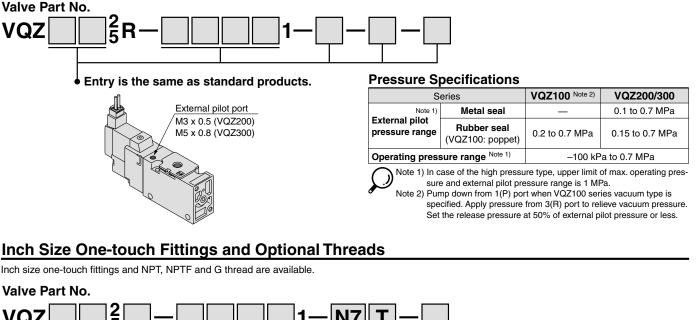
Model	Silencer part no.		
VQZ100	AN110-01		
VQZ200	AN110-01		
VQZ300	AN200-02		

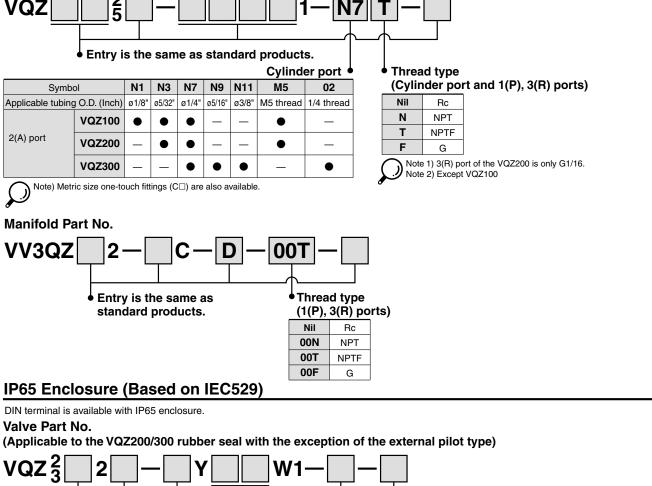
 $\downarrow$  For a silencer to be mounted in a single valve unit, refer to back page 4.



### **External Pilot Specification**

The external pilot specification is used when the operating pressure is below the minimum operating pressure 0.1 to 0.15 MPa or when valve is used for a vacuum application. Order a valve by adding the external pilot specification [R] to the part number.





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• Entry is the same as standard products.

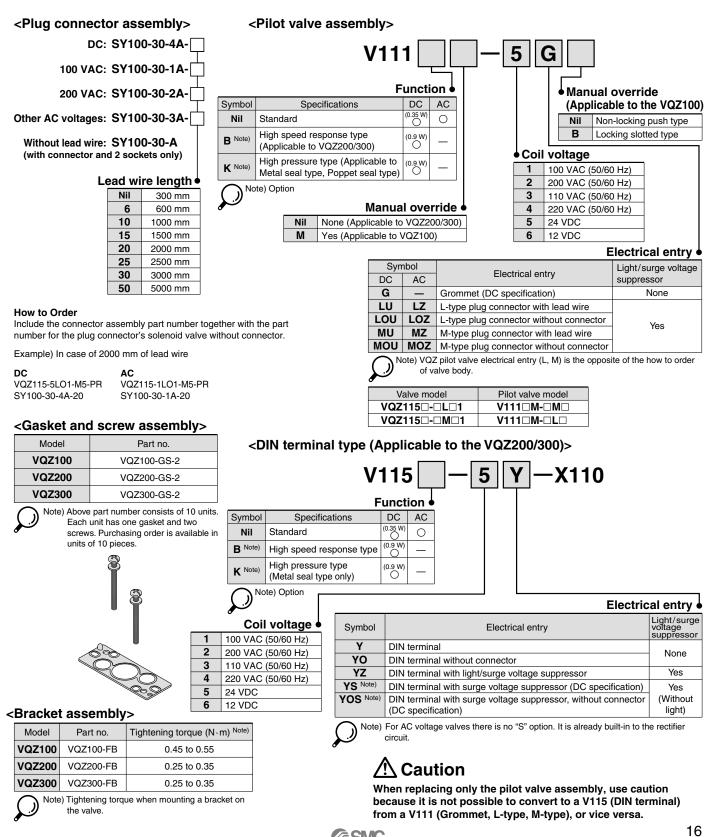
Note) The pilot exhaust IP65 valves is common with main valve exhaust. (The standard valve has an individual exhaust for the pilot valve.)

# Series VQZ Body Ported **Replacement Parts**

#### **One-touch Fitting Assembly (for Cylinder port)**

Fitting size Model	C3	C4	C6	C8	C10	M5 (VQZ100 only)
VQZ100/200	VVQ1000-50A-C3	VVQ1000-50A-C4	VVQ1000-50A-C6	—	_	VVQ1000-50A-M5
VQZ300	—	—	VVQ1000-51A-C6	VVQ1000-51A-C8	VVQ1000-51A-C10	—

Note) Purchasing order is available in units of 10 pieces.



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