VQZ200/300 / How to Order Manifold

Made to Order
(For details, refer to page 34.)

VV3QZ **2** **5** – **08** **C6** **C** – ☐ – ☐

Series

2	VQZ200
3	VQZ300

Manifold type

5	Base mounted

Stations

02	2 stations
:	:
20	20 stations

Port size [2(A) port]

Symbol	Port size	VQZ200	VQZ300
C4	ø4 one-touch fitting	○	—
C6	ø6 one-touch fitting	○	○
C8	ø8 one-touch fitting	○	○
C10	ø10 one-touch fitting	—	○
01	Rc 1/8	○	—
02	Rc 1/4	—	○
CM Note 1)	Mixed port sizes	○	○

Note 1) Specify port mixture/with port plug by means of the manifold specification sheet. Port mixture and port plug are available only for one-touch fitting type.
Note 2) For inch size one-touch fittings, refer to page 32.

Kit type

C	Connector

Option

Nil	None
D	DIN rail mounting (With standard DIN rail length)
D0 Note)	DIN rail mounting (Without DIN rail)
R	External pilot type

Note 1) Order DIN rail separately.
For DIN rail part no., refer to page 31.
Note 2) When two or more symbols are specified, indicate them alphabetically.

CE compliant

Nil	—
Q	CE marked

VQZ200/300 / How to Order Valve

VQZ **2** **1** **5** ☐ – **5** **M** ☐ ☐ **1** – ☐

Series

2	VQZ200 body width 15 mm
3	VQZ300 body width 18 mm

Type of actuation

1	N.C.	Metal seal
2	N.O.	Metal seal
3	N.C.	Rubber seal
4	N.O.	Rubber seal

Body type

5	Base mouned

Function

Symbol	Specifications	DC	AC
Nil	Standard	(0.35 W) ○	Note 3) ○
B Note 1)	High speed response type	(0.9 W) ○	—
K Note 1)	High pressure type (Metal seal type only)	(0.9 W) ○	—
R Note 1, 2)	External pilot type	○	○
BR Note 1, 2)	High speed response/External pilot type	(0.9 W) ○	—
KR Note 1, 2)	High pressure/External pilot type (Metal seal type only)	(0.9 W) ○	—

Note 1) Option
Note 2) For details on external pilot type, refer to page 32.
Note 3) For AC specification power consumption, refer to page 19.

⚠ **Caution**
Use standard (DC) specification for continuous duty.

Coil voltage

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC [115 VAC] (50/60 Hz)
4	220 VAC [230 VAC] (50/60 Hz)
5	24 VDC
6	12 VDC

Electrical entry

Symbol	Electrical entry	Light/surge voltage suppressor
G	Grommet (DC specification)	None
L	L-type plug connector with lead wire	Yes
LO	L-type plug connector without connector	Yes
M	M-type plug connector with lead wire	Yes
MO	M-type plug connector without connector	Yes
Y	DIN terminal	None
YO	DIN terminal without connector	None
YZ	DIN terminal	Yes
YS Note 2)	DIN terminal (DC specification)	Yes (Without light)
YOS Note 2)	DIN terminal without connector (DC specification)	Yes (Without light)

Note 1) Standard lead wire length: 300 mm
Note 2) For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.

Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)

IP65 compliant

Nil	—
W Note)	Compliant

Note) VQZ200/300 DIN terminal rubber seal only (except external pilot). For details on IP65 enclosure, refer to page 32.

CE compliant

Nil	—
Q	CE marked

Note) AC-type models that are CE compliant have DIN terminals only.

SMC

Manifold Specifications

Series	Base model	Piping specifications			Applicable solenoid valve	Applicable stations	Manifold base weight (g) Note)
		Piping direction	Port size				
			1(P), 3(R)	2(A)			
VQZ100	VV3QZ15-□□	Side/Top	Rc 1/8	C3 (for ø3.2) C4 (for ø4) C6 (for ø6) M5 (M5 thread)	VQZ115	2 to 20 stations	2 stations: 83 Addition per station: 19
VQZ200	VV3QZ25-□□	Side	Rc 1/4	C4 (for ø4) C6 (for ø6) C8 (for ø8) Rc 1/8	VQZ2□5	2 to 20 stations	2 stations: 126 Addition per station: 38
VQZ300	VV3QZ35-□□	Side	1(P) port Rc 3/8 3(R) port Rc 1/4	C6 (for ø6) C8 (for ø8) C10 (for ø10) Rc 1/4	VQZ3□5	2 to 20 stations	2 stations: 209 Addition per station: 60

Note) Weight for threaded connection.

How to Order Manifold Assembly (Example)

VQZ215-5L1 4 sets

VV3QZ25-05C6C ···· 1 set (C kit 5-station manifold base part no.)
∗ VVQZ200-10A-5 ··· 1 set (Blanking plate assembly part no.)
∗ VQZ215-5L1 ······· 4 sets (N.C. type part no.)

The asterisk denotes the symbol for assembly.
Prefix it to the part nos. of the solenoid valve, etc.

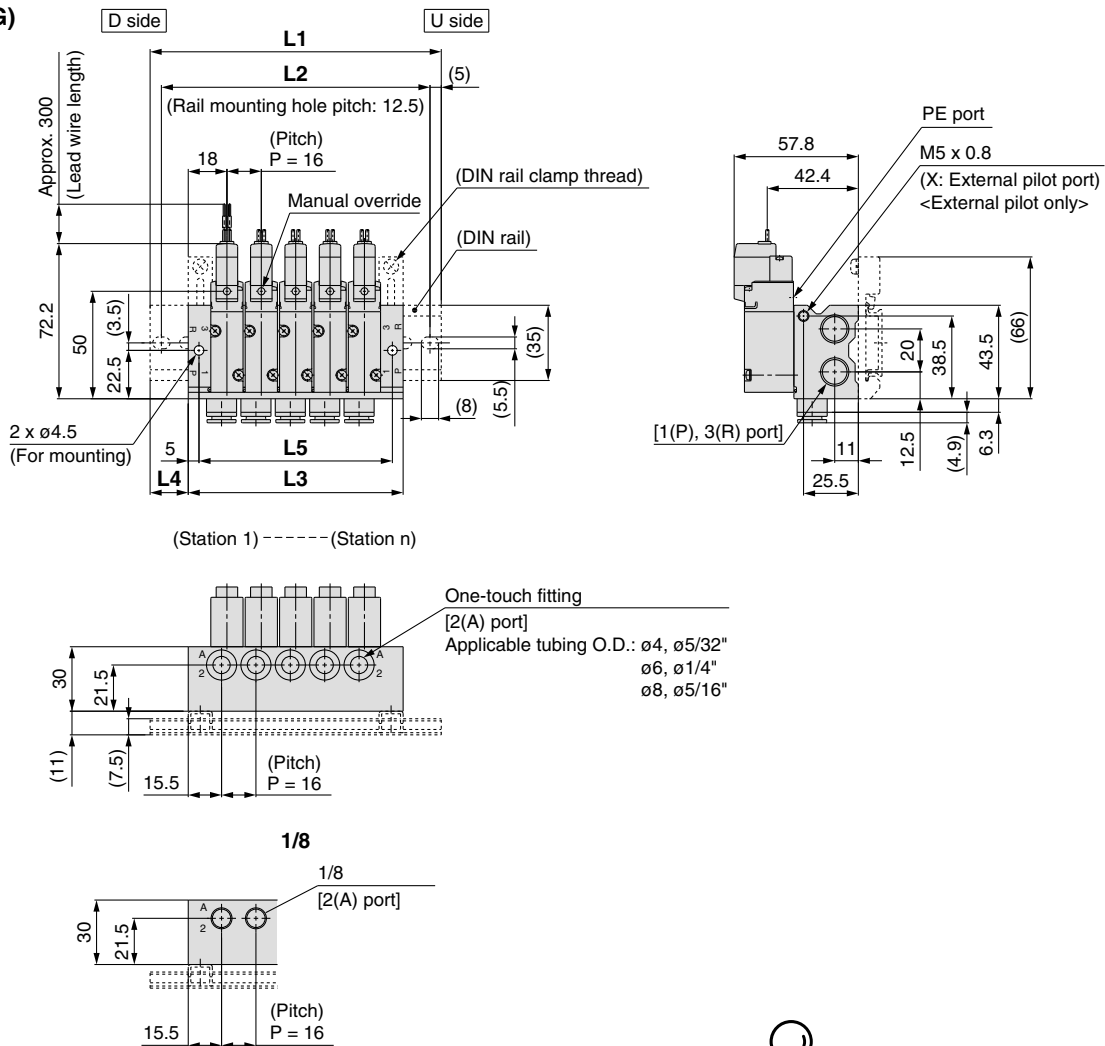Enter in order starting from the first station on the D side.

Add the valve and option part number under the manifold base part number.
When entry of part numbers becomes complicated, indicate by the manifold specification sheet.

C6: One-touch fitting for ø6

VVQZ200-10A-5

Dimensions: VQZ200

VV3QZ25- [Stations] [Port size] **C**

Grommet (G)

D side | L1 | U side

L2

(Rail mounting hole pitch: 12.5)

Approx. 300 (Lead wire length)

(5)

(Pitch) P = 16

18

Manual override

(DIN rail clamp thread)

(DIN rail)

72.2

50 (3.5)

22.5

2 x ø4.5 (For mounting)

5

L4

L3

L5

(35)

(8) (5.5)

(Station 1) ------ (Station n)

PE port

M5 x 0.8

(X: External pilot port) <External pilot only>

57.8

42.4

20

38.5

43.5

(66)

[1(P), 3(R) port]

11

12.5 (4.9) 6.3

25.5

One-touch fitting
[2(A) port]
Applicable tubing O.D.: ø4, ø5/32"
ø6, ø1/4"
ø8, ø5/16"

30

21.5

(11) (7.5)

15.5

(Pitch) P = 16

1/8

1/8
[2(A) port]

30

21.5

15.5

(Pitch) P = 16

The dashed lines indicate the DIN rail mounting [-D].

L-type plug connector (L)

Approx. 300 (Lead wire length)

57.8 [64.8]

82 [84.2]

Unless otherwise indicated, dimensions are the same as Grommet (G).
[ ]: AC

M-type plug connector (M)

Approx. 300 (Lead wire length)

69.1

72.2 [74.4]

67.2

Unless otherwise indicated, dimensions are the same as Grommet (G).
[ ]: AC

DIN terminal (Y)

Applicable cable O.D.
ø3.5 to ø7

90.4

82.9

71.6

Max. 10

Pg7

88.4

48.5

89.3

56.9

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

Dimensions

Formula: L5 = 16n + 10   L3 = 16n + 20   n: Stations (Max. 20 stations)

n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	85.5	98	123	135.5	148	173	185.5	198	210.5	235.5	248	260.5	285.5	298	310.5	323	348	360.5	373
L2	75	87.5	112.5	125	137.5	162.5	175	187.5	200	225	237.5	250	275	287.5	300	312.5	337.5	350	362.5
L3	52	68	84	100	116	132	148	164	180	196	212	228	244	260	276	292	308	324	340
L4	17	15	19.5	18	16	20.5	19	17	15.5	20	18	16.5	21	19	17.5	15.5	20	18.5	16.5
L5	42	58	74	90	106	122	138	154	170	186	202	218	234	250	266	282	298	314	330

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Dimensions: VQZ300

VV3QZ35- [Stations] [Port size] C

Grommet (G)

(Station 1) -------- (Station n)

1/4
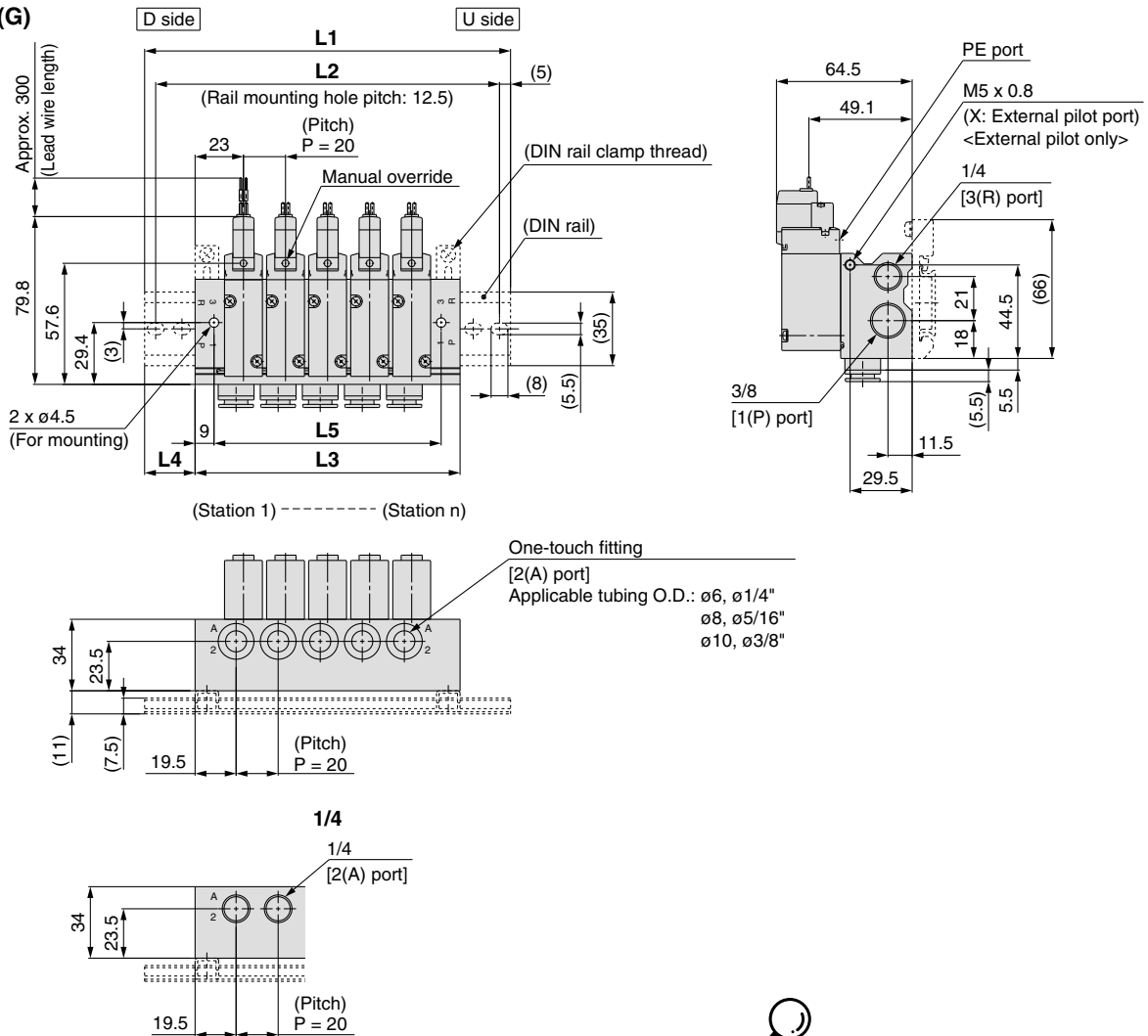
The dashed lines indicate the DIN rail mounting [-D].

L-type plug connector (L)
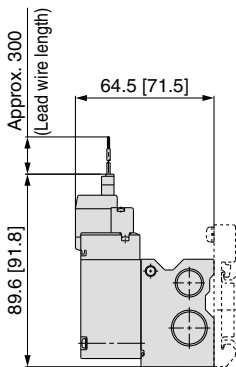
Unless otherwise indicated, dimensions are the same as Grommet (G).
[ ]: AC

M-type plug connector (M)

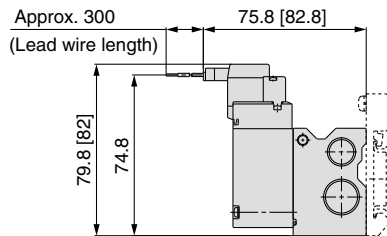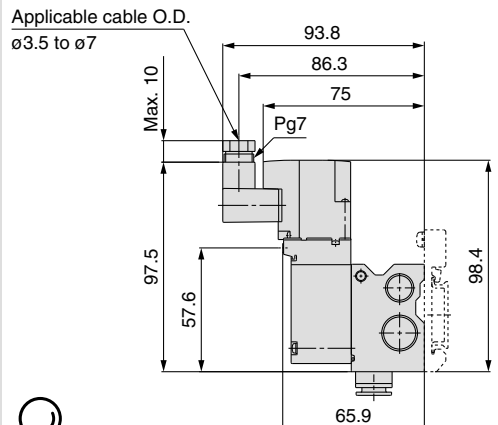Unless otherwise indicated, dimensions are the same as Grommet (G).
[ ]: AC

DIN terminal (Y)

Applicable cable O.D.
ø3.5 to ø7

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

Dimensions

Formula: L5 = 20n + 8   L3 = 20n + 26   n: Stations (Max. 20 stations)

| n L	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	98	123	148	160.5	185.5	198	223	248	260.5	285.5	298	323	348	360.5	385.5	398	423	448	460.5
L2	87.5	112.5	137.5	150	175	187.5	212.5	237.5	250	275	287.5	312.5	337.5	350	375	387.5	412.5	437.5	450
L3	66	86	106	126	146	166	186	206	226	246	266	286	306	326	346	366	386	406	426
L4	16	18.5	21	17.5	20	16	18.5	21	17.5	20	16	18.5	21	17.5	20	16	18.5	21	17.5
L5	48	68	88	108	128	148	168	188	208	228	248	268	288	308	328	348	368	388	408

Series *VQZ100/200/300*

Manifold Options

Blanking plate assembly
VVQZ100-10A-5 (for VQZ100)
VVQZ200-10A-5 (for VQZ200)
VVQZ300-10A-5 (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.
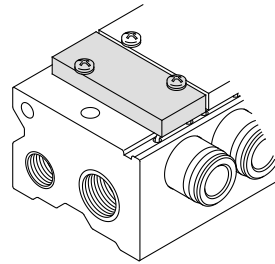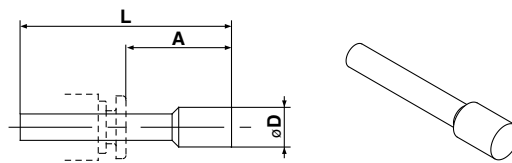
### Blanking plug
KQ2P-23
KQ2P-04
KQ2P-06
KQ2P-08
KQ2P-10

Dimensions (mm)

Applicable fitting size ød	Model	A	L	D
3.2	**KQ2P-23**	16	31.5	3.2
4	**KQ2P-04**	16	32	6
6	**KQ2P-06**	18	35	8
8	**KQ2P-08**	20.5	39	10
10	**KQ2P-10**	22	43	12

DIN rail
AXT100-DR-□

∗ 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.
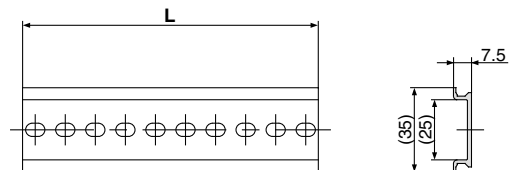
**L Dimension**   L = 12.5n + 10.5

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.
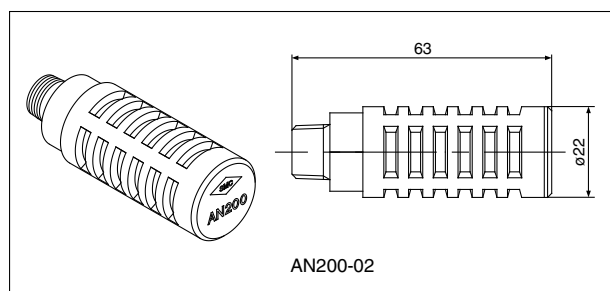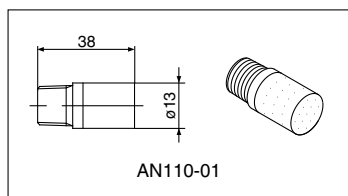
AN110-01

AN200-02

Dimensions

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

Port plug
VVQZ100-CP (for VQZ100)
This is used when changing piping location. (Side or Top)

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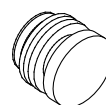
Options

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.
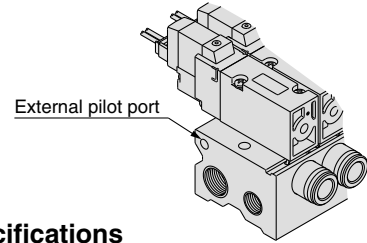
Valve Part No.

VQZ ☐ ☐ 5R — ☐ ☐ ☐ ☐ 1 — ☐ — ☐

● **Entry is the same as standard products.**

External pilot port

Manifold Part No.

VV3QZ ☐ 5 — ☐ ☐ C — ☐ R — ☐

● **Entry is the same as standard products.**

Pressure Specifications

| Series		VQZ100 Note 2)	VQZ200/300
External pilot pressure range Note 1)	Metal seal	—	0.1 to 0.7 MPa
	Rubber seal (VQZ100: poppet)	0.2 to 0.7 MPa	0.15 to 0.7 MPa
Operating pressure range Note 1)		−100 kPa to 0.7 MPa	

Note 1) In case of the high pressure type, upper limit of max. operating pressure and external pilot pressure range is 1 MPa.
Note 2) When using the VQZ100 series for a vacuum application, vacuum air through its 1(P) port. When supplying vacuum-release air, supply it through its 3(R) port. But do not supply vacuum-release air exceeding 50% for the external pilot pressure.

Inch Size One-touch Fittings and Optional Threads

Inch size one-touch fittings and NPT, NPTF and G thread are available.

Manifold Part No.

VV3QZ ☐ 5 — ☐ N7 T C — ☐ — ☐
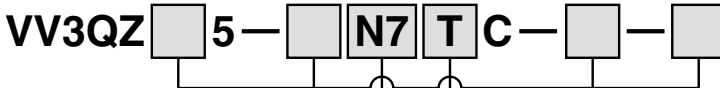
● **Entry is the same as standard products.**

● **Cylinder port**

Symbol	N1	N3	N7	N9	N11	NM Note 1)	M5	01	02
Applicable tubing O.D.	ø1/8"	ø5/32"	ø1/4"	ø5/16"	ø3/8"	Mixed	M5 thread	1/8 thread	1/4 thread
Cylinder port VQZ100	●	●	●	—	—	●	●	—	—
Cylinder port VQZ200	—	●	●	●	—	●	—	●	—
Cylinder port VQZ300	—	—	●	●	●	●	—	—	●

● **Thread type (Cylinder port and 1(P), 3(R) ports)**

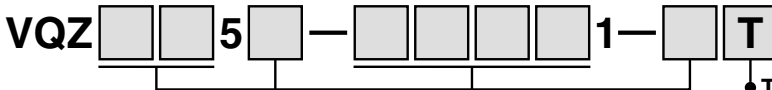| Nil	Rc
N	NPT
T	NPTF
F	G

Note 1) Except VQZ100, mixing one-touch fittings and thread types is impossible.
Note 2) Metric size one-touch fittings (C☐) are also available.

Optional Threads Other than Rc

Rc specifications are standard for all ports, however, NPT, NPTF and G are available for overseas markets. Add the appropriate symbol following the port size in the standard part number.

Valve Part No.

VQZ ☐ ☐ 5 ☐ — ☐ ☐ ☐ ☐ 1 — ☐ T

● **Entry is the same as standard products.**

● **Thread type (Cylinder port and 1(P), 3(R) ports of sub-plate)**
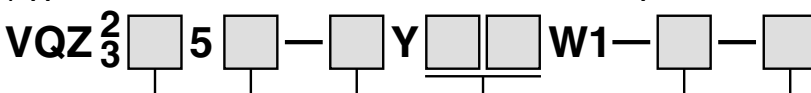
Nil	Rc
N	NPT
T	NPTF
F	G

IP65 Enclosure (Based on IEC529)

DIN terminal is available with IP65 enclosure.

Valve Part No.
(Applicable to the VQZ200/300 rubber seal with the exception of the external pilot type)

VQZ ²/₃ ☐ 5 ☐ — ☐ Y ☐ ☐ W1 — ☐ — ☐

● **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.)