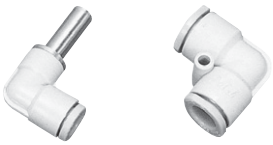
Metric One-Touch Fittings

SQH

SQL



SQT

SQY

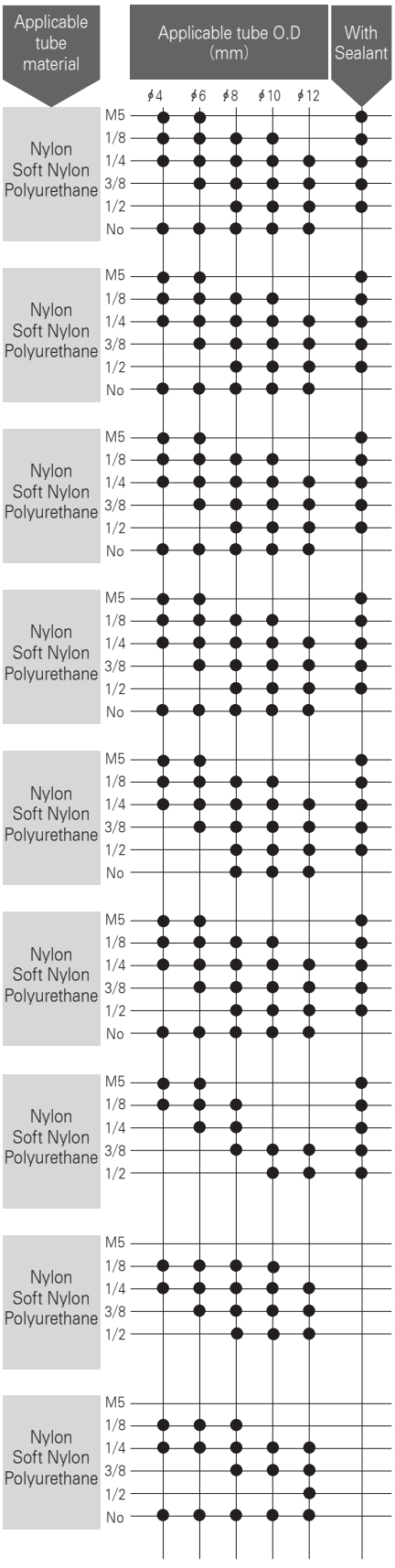
SQU

SQW

SQV

SQF

SQE



Series SQ

Tube/Metric, Thread/M, Rc(PT)

● CONNECTION AND DISCONNECTION OF TUBING

TUBE AND JOINT ARE COMPLETLY JOINED BY INSERTING THE TUBE.
THEY ARE ALSO EASILY SEPARATED WITHIN 1~2 SECONDS BY PRESSING DOWN ON THE SLEEVE WITH FINGERS AND PULLING THE TUBE, WITHOUT ANY TOOLS.

● EASY PIPING IN A NARROW SPACE

HEX WRENCHES CAN BE USED FOR PIPING THE SQH-T TYPE 4, 6, 8 SIZES.
SEAL TREATED SCREW MAKES OPERATION SIMPLE. (SCREW COATED WITH CHEMI SEAL)

Structures

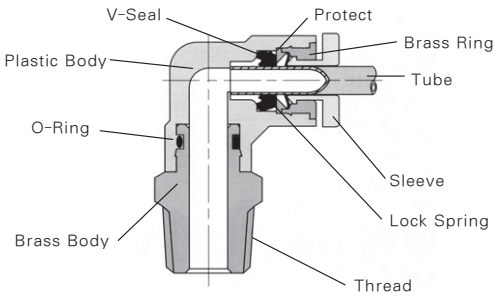
SQ H 04 — 02 ○
1 2 3 4

1 Model

2 Applicable tube o.D
- 04 : ϕ4
- 06 : ϕ6
- 08 : ϕ8
- 10 : ϕ10
- 12 : ϕ12

3 Port Size
- 01 : R(PT)1/8
- 02 : R(PT)1/4
- 03 : R(PT)3/8
- 04 : R(PT)1/2

4 Option
- Blank : Standard Type
- S : Sealent



Installation Torque

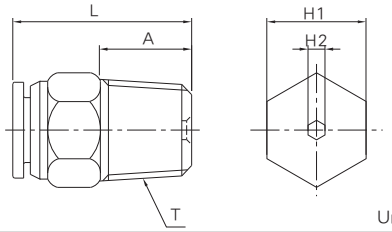
Thread Size	Torque/kg • cm
PT 1/8	70~90
PT 1/4	120~140
PT 3/8	220~240
PT 1/2	280~300
M5	12

Specifications

Fluid	Air
Max.operating pressure	1.0MRa(140.8psi)
Proof pressure	1,250 KPa(177.75psi)
Ambient and fluid temperature	0~60℃(32~140°F)

Dimensions

Male Connector



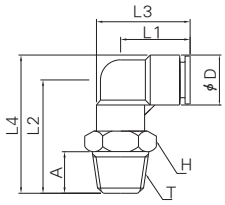
SQH Type

Unit: mm

Model	Tube size	T(Thread)	L	A	H1	H2
SQH04-01S	4	PT1/8	18.9	8	10	2
SQH04-02S	4	PT1/4	20.4	11	14	2.5
SQH04-M5	4	M5	21	4	10	2
SQH04-M5A	4	M5	21	4	10	2
SQH06-01S	6	PT1/8	20.9	8	12	4
SQH06-02S	6	PT1/4	22.9	11	14	4
SQH06-03S	6	PT3/8	22.9	12	17	4
SQH06-M5	6	M5	21.3	4	12	2
SQH06-M5A	6	M5	21.3	4	12	2
SQH08-01S	8	PT1/8	25.9	8	14	4
SQH08-02S	8	PT1/4	24.9	11	14	6
SQH08-03S	8	PT3/8	22.9	12	17	6
SQH08-04S	8	PT1/2	26.7	15	22	6
SQH10-01S	10	PT1/8	28.5	8	17	ϕ5
SQH10-02S	10	PT1/4	29.8	11	17	ϕ6
SQH10-03S	10	PT3/8	26.3	12	17	ϕ8
SQH10-04S	10	PT1/2	26.1	15	22	ϕ8
SQH12-02S	12	PT1/4	33.3	11	19	ϕ8
SQH12-03S	12	PT3/8	30.7	12	19	ϕ10
SQH12-04S	12	PT1/2	31.9	15	22	ϕ10

Dimensions

Male Elbow



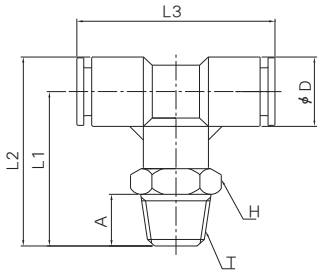
SQL Type

Unit: mm

Model	Tube size	T (Thread)	L1	L2	L3	L4	A	H	D
SQL04-01S	4	PT1/8	17.1	24.9	22.2	30	8	10	10.2
SQL04-02S	4	PT1/4	17.1	27.9	22.2	33	11	14	10.2
SQL04-M5	4	M5	17	17.9	21.1	23	4	8	10.2
SQL06-01S	6	PT1/8	18.4	26	24.3	32.3	8	12	12.6
SQL06-02S	6	PT1/4	18.4	29	24.3	35.3	11	14	12.6
SQL06-03S	6	PT3/8	18.4	30	24.3	36.3	12	17	12.6
SQL06-M5	6	M5	18	17.9	22.1	24.2	4	8	12.6
SQL08-01S	8	PT1/8	20.4	27	27.2	34.4	8	14	14.7
SQL08-02S	8	PT1/4	20.4	29.9	27.2	37.3	11	14	14.7
SQL08-03S	8	PT3/8	20.4	30.9	27.2	38.3	12	17	14.7
SQL08-04S	8	PT1/2	20.4	35.4	27.2	42.8	15	22	14.7
SQL10-01S	10	PT1/8	23.9	30	32.4	38.8	8	17	17.6
SQL10-02S	10	PT1/4	23.9	33	32.4	41.8	11	17	17.6
SQL10-03S	10	PT3/8	23.9	34	32.4	42.8	12	17	17.6
SQL10-04S	10	PT1/2	23.9	38.5	32.4	47.3	11	22	17.6
SQL12-02S	12	PT1/4	24.9	35	34	45	11	19	20
SQL12-03S	12	PT3/8	24.9	35	34	46	12	19	20
SQL12-04S	12	PT1/2	24.9	40.5	34	50.5	15	22	20

Dimensions

Branch Tee



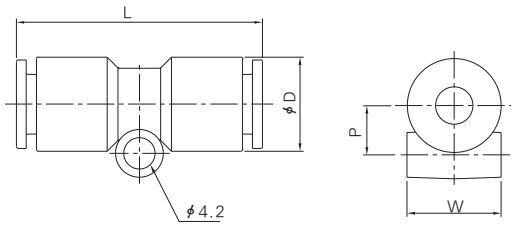
SQT Type

Unit: mm

Model	Tube size	T (Thread)	L1	L2	L3	A	H	D
SQT04-01S	4	PT1/8	24.9	30	34.2	8	10	10.2
SQT04-02S	4	PT1/4	27.9	33	34.2	11	14	10.2
SQT04-M5	4	M5	22.4	27.5	34.2	4	10	10.2
SQT06-01S	6	PT1/8	26	32.3	36.8	8	12	12.6
SQT06-02S	6	PT1/4	29	35.3	36.8	11	14	12.6
SQT06-03S	6	PT3/8	30	36.3	36.8	12	17	12.6
SQT06-M5	6	M5	23.5	29.8	36.8	4	12	12.6
SQT08-01S	8	PT1/8	27	34.4	40.8	8	14	14.7
SQT08-02S	8	PT1/4	29.9	37.3	40.8	11	14	14.7
SQT08-03S	8	PT3/8	30.9	38.3	40.8	12	17	14.7
SQT08-04S	8	PT1/2	35.4	42.8	40.8	15	22	14.7
SQT10-01S	10	PT1/8	30	38.8	47.8	8	17	17.6
SQT10-02S	10	PT1/4	33	41.8	47.8	11	17	17.6
SQT10-03S	10	PT3/8	34	42.8	47.8	12	17	17.6
SQT10-04S	10	PT1/2	38.5	47.3	47.8	15	22	17.6
SQT12-02S	12	PT1/4	35	45	49.8	11	19	20
SQT12-03S	12	PT3/8	36	46	49.8	12	19	20
SQT12-04S	12	PT1/2	40.5	50.5	49.8	15	22	20

Dimensions

Straight Union



SQH Type

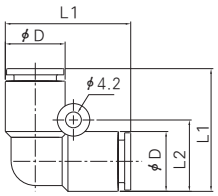
Unit: mm

Model	Tube size	L	P	D	W
SQH04-00	4	31.8	5.8	10.2	10.2
SQH06-00	6	33.6	6.6	12.6	12.6
SQH08-00	8	35.8	7.6	14.7	14.7
SQH10-00	10	41.2	8.9	17.6	17.6
SQH12-00	12	43.2	9.8	20	20

Dimensions

Union Elbow

SQL Type



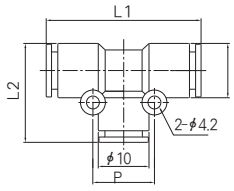
Unit: mm

Model	Tube size	L1	L2	D
SQL04-00	4	22.2	12.2	10.2
SQL06-00	6	24.6	14.7	12.6
SQL08-00	8	27.8	16.8	14.7
SQL10-00	10	32.7	19.6	17.6
SQL12-00	12	35.4	22	20

Dimensions

Union Tee

SQT Type



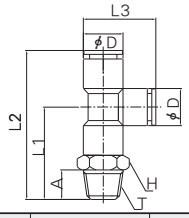
Unit: mm

Model	Tube size	L1	L2	P	D
SQT04-00	4	34.2	22.2	14.2	10.2
SQT06-00	6	36.6	24.6	16.8	12.6
SQT08-00	8	40.8	27.8	18.8	14.7
SQT10-00	10	47.8	32.7	21.6	17.6
SQT12-00	12	46.8	34.9	24	20

Dimensions

Male Run Tee

SQY Type

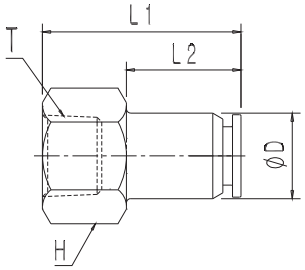


Unit: mm

Model	Tube size	T (Thread)	L1	L2	L3	A	H	D
SQY04-01S	4	PT1/8	24.8	41.9	22.2	8	10	10.2
SQY04-02S	4	PT1/4	27.8	44.9	22.2	11	14	10.2
SQY04-M5	4	M5	22.3	39.4	22.2	4	10	10.2
SQY06-01S	6	PT1/8	26	44.3	24.6	8	12	12.6
SQY06-02S	6	PT1/4	29	47.3	24.6	11	14	12.6
SQY06-03S	6	PT3/8	30	48.3	24.6	12	17	12.6
SQY06-M5	6	M5	23.5	41.8	24.6	4	12	12.6
SQY08-01S	8	PT1/8	27	47.4	27.8	8	14	14.7
SQY08-02S	8	PT1/4	29.9	50.3	27.8	11	14	14.7
SQY08-03S	8	PT3/8	30.9	51.3	27.8	12	17	14.7
SQY08-04S	8	PT1/2	35.4	55.8	27.8	15	22	14.7
SQY10-01S	10	PT1/8	30	53.9	32.7	8	17	17.6
SQY10-02S	10	PT1/4	33	56.9	32.7	11	17	17.6
SQY10-03S	10	PT3/8	34	57.9	32.7	12	17	17.6
SQY10-04S	10	PT1/2	38.5	62.4	32.7	15	22	17.6
SQY12-02S	12	PT1/4	35	59.9	34.9	11	19	20
SQY12-03S	12	PT3/8	36	60.9	34.9	12	19	20
SQY12-04S	12	PT1/2	40.5	65.4	34.9	15	22	20

Dimensions

Female Union



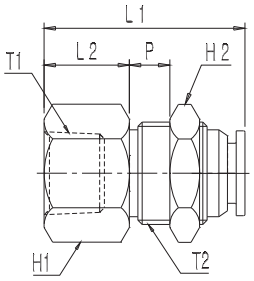
SQF Type

Unit: mm

Model	Tube size	T (Thread)	L1	L2	A	H	D
SQF04-01	4	PT1/8	24	14	6.5	14	10.2
SQF04-02	4	PT1/4	27	13.5	9.5	17	10.2
SQF06-01	6	PT1/8	26	16	6.5	14	12.6
SQF06-02	6	PT1/4	29	15	9.5	17	12.6
SQF06-03	6	PT3/8	30.1	15.1	10.5	21	12.6
SQF08-01	8	PT1/8	28.1	18.1	6.5	17	14
SQF08-02	8	PT1/4	31.1	17.2	9.5	17	14
SQF08-03	8	PT3/8	32.1	17.1	10.5	21	14
SQF08-04	8	PT1/2	36	17	13.5	24	14
SQF10-01	10	PT1/8	30.3	20.3	6.5	17	16.4
SQF10-02	10	PT1/4	33.3	19.4	9.5	17	16.4
SQF10-03	10	PT3/8	34.3	19.3	10.5	21	16.4
SQF10-04	10	PT1/2	37.3	18.3	13.5	24	16.4
SQF12-02	12	PT1/4	35.9	22	9.5	21	19
SQF12-03	12	PT3/8	36.9	22	10.5	21	19
SQF12-04	12	PT1/2	39.9	20.9	13.5	24	19

Dimensions

Bulkhead Female Union



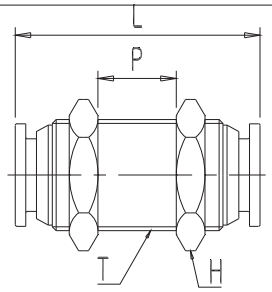
SQE Type

Unit: mm

Model	Tube size	T (Thread)	T2 (Thread)	L1	L2	A	H1	H2	P
SQE04-01	4	PT1/8	12×P1	24	10	6.5	14	14	4.5
SQE06-01	6	PT1/8	14×P1	26	10	6.5	17	17	6.5
SQE06-02	6	PT1/4	14×P1	29	13	9.5	17	17	6.5
SQE08-01	8	PT1/8	16×P1	28.1	10	6.5	19	19	7.5
SQE08-02	8	PT1/4	16×P1	31.1	13.9	9.5	19	19	6.5
SQE08-03	8	PT3/8	16×P1	32.1	15	13.5	19	19	6.5
SQE10-02	10	PT1/4	20×P1	33.3	13.9	9.5	24	24	9
SQE10-03	10	PT3/8	20×P1	34.3	15	10.5	24	24	9
SQE12-02	12	PT1/4	22×P1	35.9	13.9	9.5	26	26	10.5
SQE12-03	12	PT3/8	22×P1	36.9	14.9	10.5	26	26	10.5
SQE12-04	12	PT1/2	22×P1	39.9	19	13.5	26	26	9.5

Dimensions

Bulkhead Union



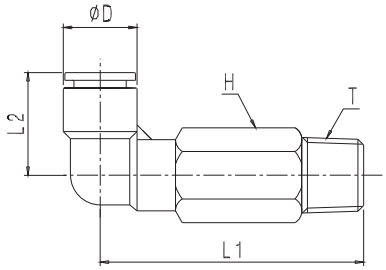
SQE Type

Unit: mm

Model	Tube size	T (Thread)	L	H1	P
SQE04-00	4	12×P1	30.5	14	12.4
SQE06-00	6	14×P1	31.5	17	13.5
SQE08-00	8	16×P1	34.2	19	14.2
SQE10-00	10	20×P1	38.6	24	18.6
SQE12-00	12	22×P1	40.6	26	16.9

Dimensions

Extended Male Elbow



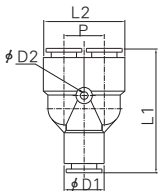
SQW Type

Unit: mm

Model	Tube size	T (Thread)	L1	L2	A	H	D
SQW04-01S	4	PT1/8	43.9	17.1	8	10	10.2
SQW04-02S	4	PT1/4	41.9	17.1	11	14	10.2
SQW04-M5	4	M5	29.7	17	4	8	10.2
SQW06-01S	6	PT1/8	40	18.4	8	12	12.6
SQW06-02S	6	PT1/4	43	18.4	11	14	12.6
SQW06-03S	6	PT3/8	44	18.4	12	17	12.6
SQW06-M5	6	M5	31.8	18	4	8	12.6
SQW08-01S	8	PT1/8	42.9	20.4	8	14	14.7
SQW08-02S	8	PT1/4	45.9	20.4	11	14	14.7
SQW08-03S	8	PT3/8	46.9	20.4	12	17	14.7
SQW08-04S	8	PT1/2	51.4	20.4	15	22	14.7
SQW10-01S	10	PT1/8	49	23.9	8	17	17.6
SQW10-02S	10	PT1/4	52	23.9	11	17	17.6
SQW10-03S	10	PT3/8	54	23.9	12	17	17.6
SQW10-04S	10	PT1/2	59.5	23.9	15	22	17.6
SQW12-02S	12	PT1/4	57	24.9	11	19	20
SQW12-03S	12	PT3/8	58	24.9	12	19	20
SQW12-04S	12	PT1/2	61.5	24.9	15	22	20

Dimensions

Union "Y"



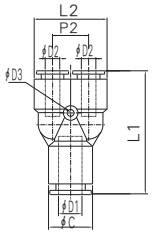
SQU Type

Unit: mm

Model	Tube size	L1	L2	P	D1	D2
SQU04-00	4	33.8	20.4	10.2	10.2	3.5
SQU06-00	6	35.1	25	12.4	12.6	3.2
SQU08-00	8	39.3	29.1	14.4	14.7	4.3
SQU10-00	10	45.2	34.8	17.2	17.6	4.3
SQU12-00	12	47.3	39.4	19.4	20	4.3

Dimensions

"Y" Reducer



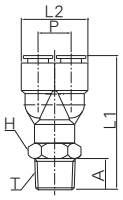
SQU Type

Unit: mm

Model	Tube O/D		D3	L1	L2	P	C
	D1	D2					
SQU04-06	6	4	3.5	34.4	20.4	10.2	12.6
SQU06-08	8	6	4.2	36.2	25	12.4	14.7
SQU08-10	10	8	4.3	41	29.1	14.4	17.6
SQU10-12	12	10	4.3	46.2	46.2	17.2	20

Dimensions

Branch "Y"



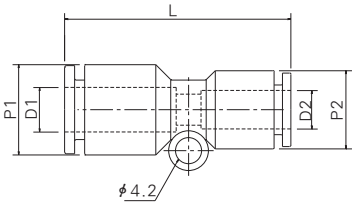
SQU Type

Unit: mm

Model	Tube size	T (Thread)	L1	L2	A	H	P
SQU04-01S	4	PT1/8	41.5	20.4	8	10	10.1
SQU04-02S	4	PT1/4	44.5	20.4	11	14	10.1
SQU04-M5	4	M5	39	20.4	4	10	10.1
SQU06-01S	6	PT1/8	42.5	24.8	8	12	12.2
SQU06-02S	6	PT1/4	45.5	24.8	11	14	12.2
SQU06-03S	6	PT3/8	46.5	24.8	12	17	12.2
SQU06-M5	6	M5	40	24.8	4	12	12.2
SQU08-01S	8	PT1/8	44.8	29.1	8	14	14.4
SQU08-02S	8	PT1/4	47.7	29.1	11	14	14.4
SQU08-03S	8	PT3/8	48.7	29.1	12	17	14.4
SQU08-04S	8	PT1/2	53.2	29.1	15	22	14.4
SQU10-01S	10	PT1/8	49.9	34.8	8	17	17.2
SQU10-02S	10	PT1/4	52.9	34.8	11	17	17.2
SQU10-03S	10	PT3/8	53.9	34.8	12	17	17.2
SQU10-04S	10	PT1/2	58.4	34.8	15	22	17.2
SQU12-02S	12	PT1/4	53.9	39.4	11	19	19.4
SQU12-03S	12	PT3/8	54.9	39.4	12	19	19.4
SQU12-04S	12	PT1/2	59.4	39.4	15	22	19.4

Dimensions

Straight Reducer



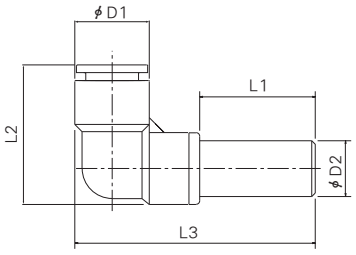
SQH Type

Unit: mm

Model	Tube O/D		L	P1	P2
	D1	D2			
SQH04-06	6	4	33.1	12.6	10.2
SQH06-08	8	6	34.7	14.7	12.6
SQH08-10	10	8	38	17.6	14.7
SQH10-12	12	10	41.2	20	17.6

Dimensions

Plug-in Elbow



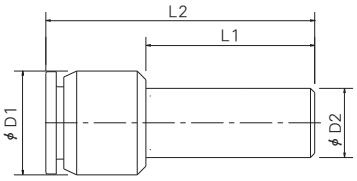
SQL Type

Unit: mm

Model	Tube size	D1	D2	L1	L2	L3
SQL04-99	4	10.2	4	17.2	22.2	36.7
SQL06-99	6	12.6	6	19.5	24.3	40.8
SQL08-99	8	14.7	8	22	27.2	43.35
SQL10-99	10	17.6	10	23.5	32.4	50.3
SQL12-99	12	20	12	27	34	55.5

Dimensions

Plug-in Straight



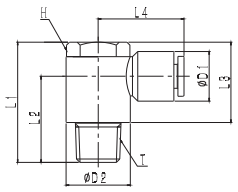
SQJ Type

Unit: mm

Model	Tube size	L1	L2	D1	D2
SQJ04-06	4	19.5	31.5	10	6
SQJ04-08	4	21	33	10	8
SQJ06-08	6	22	35	12	8
SQJ06-10	6	23.5	36.5	12	10
SQJ06-12	6	27	40	12	12
SQJ08-10	8	26.5	36.5	14	10
SQJ08-12	8	27	41.1	14	12
SQJ10-12	10	27	43.3	17	12

Dimensions

Universal Male Elbow



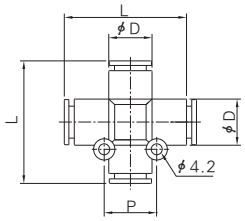
SQV Type

Unit : mm

Model	Tube size	T (Thread)	D1	D2	L1	L2	L3	L4	H
SQV04-M5	04	M5	10.2	10	21.2	13.7	16	19.3	8
SQV04-01S	04	PT1/8	10.2	15	29.3	20.3	21.7	21.8	14
SQV04-02S	04	PT1/4	10.2	19	35.6	26.3	23.8	23.8	17
SQV06-M5	06	M5	12.6	10	21.2	13.7	16	19.8	8
SQV06-01S	06	PT1/8	12.6	15	29.3	20.3	21.7	22.3	14
SQV06-02S	06	PT1/4	12.6	19	35.6	26.3	23.8	24	17
SQV06-03S	06	PT3/8	12.6	24	40.6	29.5	28.5	26.8	21
SQV08-01S	08	PT1/8	14.7	15	29.3	19.5	21.7	23.4	14
SQV08-02S	08	PT1/4	14.7	19	35.6	25.5	23.8	25.4	17
SQV08-03S	08	PT3/8	14.7	24	40.6	29.7	28.5	27.8	21
SQV08-04S	08	PT1/2	14.7	28	41.3	25.8	26	29.9	24
SQV10-02S	10	PT1/4	17.6	19	39.6	27.5	23.8	28.2	21
SQV10-03S	10	PT3/8	17.6	24	40.5	28.5	28.6	30.1	21
SQV10-04S	10	PT1/2	17.6	28	41.3	25.8	26	31.3	24
SQV12-02S	12	PT1/4	20	24.4	39.6	26.1	28.4	31.3	21
SQV12-03S	12	PT3/8	20	24.4	40.5	27.1	28.4	31.3	21
SQV12-04S	12	PT1/2	20	28	41.3	25.8	26	32.3	24

Dimensions

"+" Reducer(Cross)



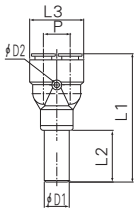
SQZ Type

Unit: mm

Model	Tube O/D	D	P	L
SQZ04-00	4	10.2	14.2	34.2
SQZ06-00	6	12.6	16.8	36.6
SQZ08-00	8	14.7	18.8	40.8
SQZ10-00	10	17.6	21.6	47.8
SQZ12-00	12	20	24	50.8

Dimensions

Plug-in "Y"



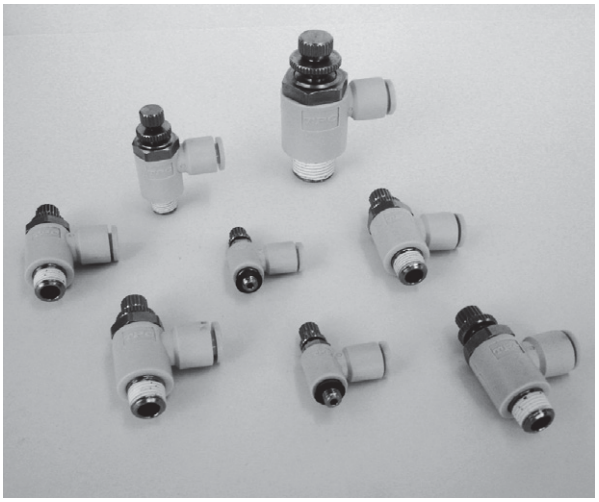
SQU Type

Unit: mm

Model	Tube size	L1	L2	L3	P	D1	D2
SQU04-99	4	49.5	39.1	20.4	10.2	4	3.5
SQU06-99	6	52.6	40.4	25	12.4	6	3.2
SQU08-99	8	57.3	44.8	29.1	14.4	8	4.3
SQU10-99	10	65.7	52.7	34.8	17.2	10	4.3
SQU12-99	12	69.8	54.8	39.4	19.4	12	4.3

Series SP

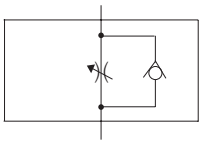
Speed Controller with One-Touch Fittings Direct Connection Type



FEATURES

- EXCELLENT AIR FLOW CHARACTERISTICS BECAUSE OF EAST FINE ADJUSTMENT OF AIR FLOW IS EASY.
- NYLON TUBE AND URETHANE TUBE CAN BE USED IN COMMON.
- EASY CONTROL OF AIR FLOW SPEED AND RATE.
- EASY SET UP OF CONNECTING DIRECTION.
- SEAL TREATED SCREW MAKES OPERATION SIMPLE (SCREW COATED WITH CHEMI SEAL).
- SLEEVE COLOR MAKES APPLICATION CLEAR.

Symbol



How to Order

SP 2 2 0 1F — 02 — 06 — ○

1 2 3 4 5 6 7

1 Body Size
- 1 : M5
- 2 : 1/8, 1/4
- 3 : 3/8
- 4 : 1/2

2 Type
- 2 : Elbow

3 Controlled Method
- 0 : Meter-out
- 1 : Meter-in

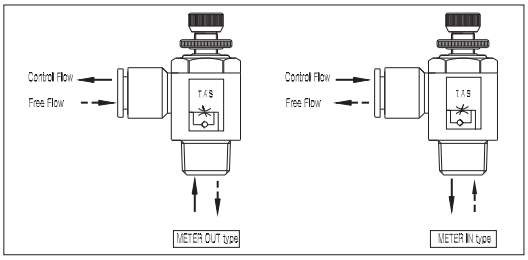
4 With One-touch Fittings

5 Port Size
- M5 : M5X0.8
- 01 : R(PT)1/8
- 02 : R(PT)1/4
- 03 : R(PT)3/8
- 04 : R(PT)1/2

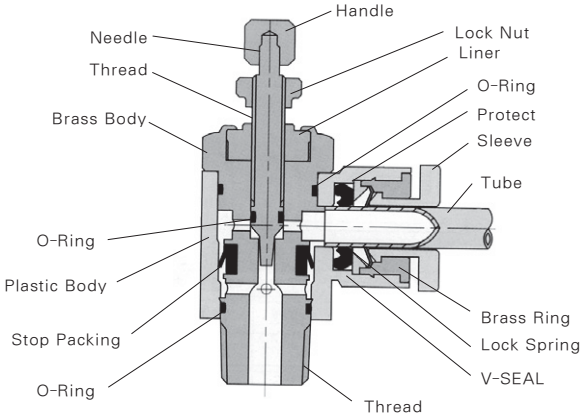
6 Applicable Tube O.D.
- 04 : ϕ4
- 06 : ϕ6
- 08 : ϕ8
- 10 : ϕ10
- 12 : ϕ12

7 Option
- Blank : Standard Type
- N : Sealent

8 Option
- Blank : Standard Type
- N : Nickel Plated



Structures

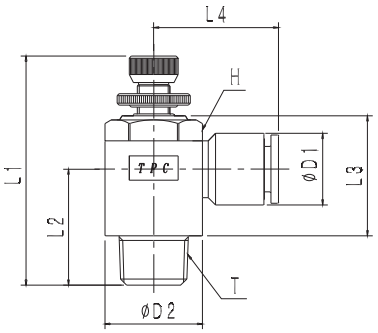


Specifications

Proof Pressure	149.3psi {1,050 kPa}
Max. Operating Pressure	99.5psi {700 kPa}
Min. Operating Pressure	14.2psi {100 kPa}
Ambient and Fluid Temperature	5~60℃(41~140°F)
Number of Needle Rotation	9 Turns

Dimensions

Elbow Type



Unit: mm

Model	Tube size	T (Thread)	L1 (MAX)	L2	L3	L4	D1	D2	H
SP1201F-M5-04	04	M5×0.8	33.7	13.7	16.4	19.3	10.2	10	8
SP1201F-M5-06	06	M5×0.8	33.7	13.7	16.4	19.8	12.6	10	8
SP2201F-01-04S	04	PT1/8	46.4	20.3	22.4	21.8	10.2	15	14
SP2201F-02-04S	04	PT1/4	49.4	26.3	24.4	23.8	10.2	19	17
SP2201F-01-06S	06	PT1/8	46.4	20.3	22.4	22.3	12.6	15	14
SP2201F-02-06S	06	PT1/4	49.4	26.3	24.4	23.6	12.6	19	17
SP2201F-01-08S	08	PT1/8	46.4	19.5	22.4	23.4	14.7	15	14
SP2201F-02-08S	08	PT1/4	49.4	25.5	24.4	25.4	14.7	19	17
SP2201F-02-10S	10	PT1/4	49.4	24.3	24.4	28.2	17.6	19	17
SP3201F-02-06S	06	PT1/4	57.5	28.5	29.5	26.8	12.6	19	21
SP3201F-03-06S	06	PT3/8	58.5	29.5	29.5	26.8	12.6	24	21
SP3201F-02-08S	08	PT1/4	57.5	28.7	29.5	27.8	14.7	19	21
SP3201F-03-08S	08	PT3/8	58.5	29.6	29.5	27.8	14.7	24	21
SP3201F-02-10S	10	PT1/4	57.5	27.5	29.5	30.1	17.6	19	21
SP3201F-03-10S	10	PT3/8	58.5	28.5	29.5	30.1	17.6	24	21
SP3201F-03-12S	12	PT3/8	58.5	27.1	29.4	31.3	20	24	21
SP4201F-04-08S	08	PT1/2	63.9	25.8	26	29.9	14.7	28	24
SP4201F-04-10S	10	PT1/2	63.9	25.8	26	31.3	17.6	28	24
SP4201F-04-12S	12	PT1/2	63.9	25.8	26	32.3	20	28	24

※ Spxx 01(Meter Out) and SPxx 11(Meter in) are same dimension.

Fitings with Sealant

Caution

- The table below shows the standard thread torques of the fittings. Briefly, lighten by hand, it is needed to then turn it two or three revolutions with a wrench.

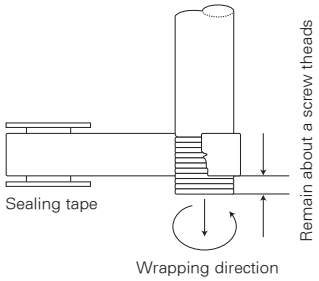
Thread Size	Standard torque(Nm)
NPT 1/16, NPT, R(PT)1/8	7 to 9
NPT, R(PT)1/4	12 to 14
NPT, R(PT)3/8	22 to 24
NPT, R(PT)1/2	28 to 30

- When over torque is applied as the fitting is threaded, a large amount of sealant could seep out. In this case, it is preferred to remove the excess sealant.
- Threads could be loosened by insufficient tightening, resulting in air leakage.
- Reuse
  - Preferably, the use may be possible at least two or three times.
  - So as to prevent all leakage caused by entering sealant, it is needed to remove loose sealant stuck to the fitting by blowing sir over the threaded portion of the fitting.
  - When it is judged that the sealant no longer provides an effective seal, it is needed to wrap seating tape over sealant before reuse. (In any form other than tape, the sealant could not be effective in work)
- When the fitting is performed with enough tightening, supporting it out to its original position could cause the sealant to be come defective, so that air leakage could happen.

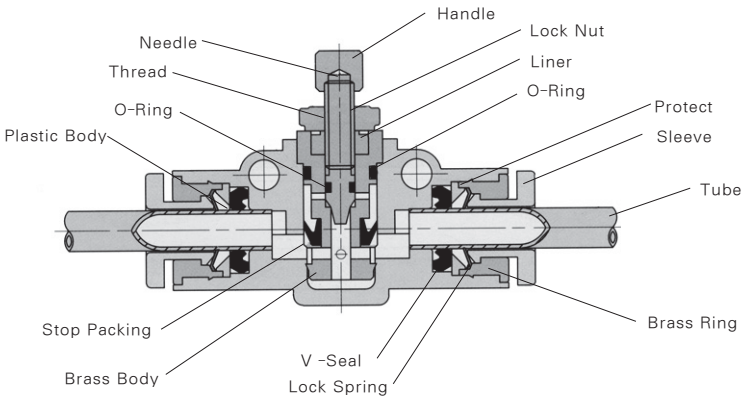
Installation

Caution

- It is needed to confirm whether tubing is not damaged prior to installing. It is needed to check model size, etc.
- It is needed to take the change in tubing length due to applied pressure into consideration when piping.
- The unnecessary forces such as twisting, pulling, moment loads, etc. on fittings or tubing should not be applied. Otherwise, damage to fittings could occur, or crush, burst or release tubing could happen.
- Wear-out of tubing, twisted piping or damage to tubing should be avoided so as to prevent crushing, bursting or release of tubing.
- In event that screwing is performed together pipes and fittings etc.,it is preferred to be sure that cutting dust from the pipe threads and sealing material are prevented from being inputted into inside the piping. In addition, it is needed to leave 1.5 to 2 thread ridges exposed at the end during the use of pipe tape.

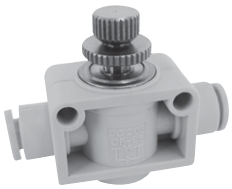


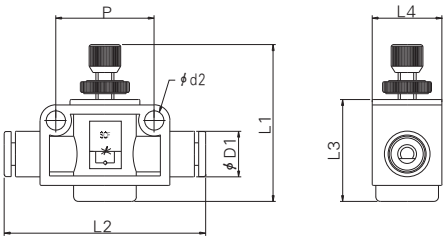
Structures



Dimensions

SP Type



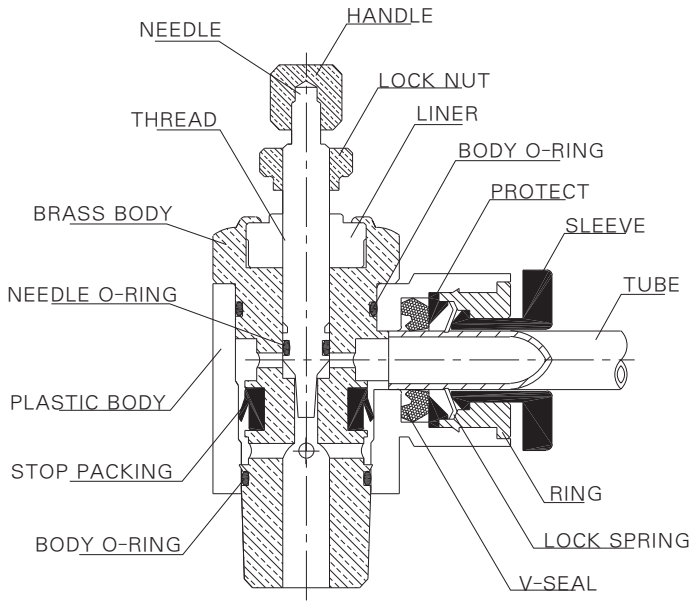


Unit: mm

Model	Tube size	L1	L2	L3	L4	D1	P	d2
SP100F-04	4	30.5	42	17.5	12.6	10.2	16	3.2
SP100F-06	6	30.5	43	17.5	12.6	12.6	16	3.2
SP200F-04	4	39.1	46	22.8	15.6	10.2	22	4.3
SP200F-06	6	39.1	46	22.8	15.6	12.6	22	4.3
SP205F-04	4	40	49.2	25.5	18.8	10.2	24	4.3
SP205F-06	6	40	50.2	25.5	18.8	12.6	24	4.3
SP205F-08	8	40	52.4	25.5	18.8	14.7	24	4.3
SP300F-06	6	47.8	54	29.5	23	12.6	28	4.3
SP300F-08	8	47.8	56	29.5	23	14.7	28	4.3
SP300F-10	10	47.8	61	29.5	23	17.6	28	4.3
SP300F-12	12	47.8	62.4	29.5	23	20	28	4.3

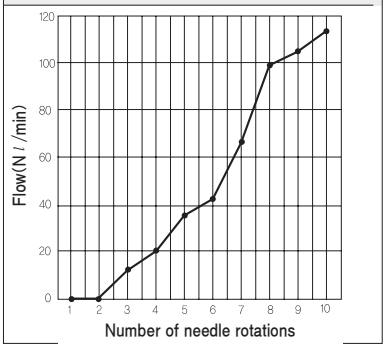
Structure/Parts List

SPEED CONTROLLER (Elow Type)

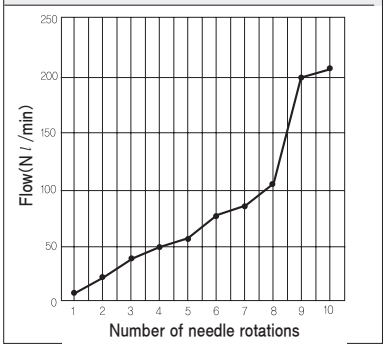


Flow Characteristics

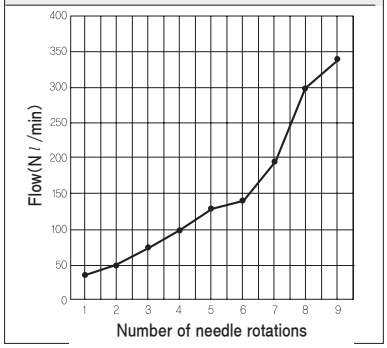
SP12 01(11)Flow Characteristics graph



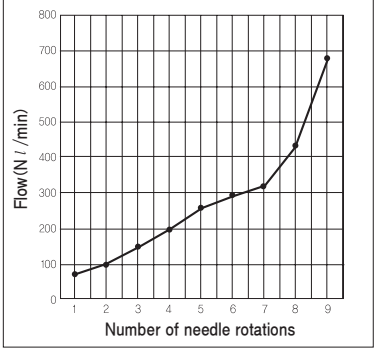
SP22 01(11)Flow Characteristics graph



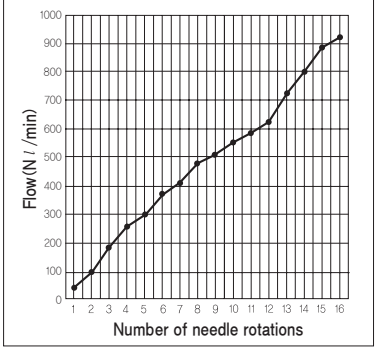
SP22 01(11)Flow Characteristics graph



SP32 01(11) Characteristics graph



SP42 01(11)Flow Characteristics graph



Series SC

Speed Controller / Built-In One Touch Fitting

- Speed Controller with built-In One Touch Fitting.
- Easy Fine Tuning from low flow to high flow rate range.
- Nickel Body Plating as a standard specification.
- Fastening convenience with Sealing Treatment at the Screw.

How to Order

SQ H 04 — 02 ○

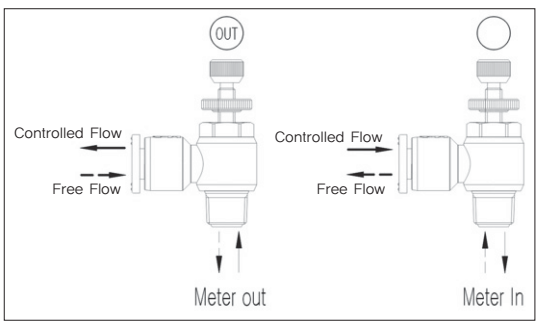
1 2 3 4

1 Size of Body
- 1 : M5
- 2 : R(PT) 1/8, R(PT) 1/4
- 3 : R(PT) 3/8
- 4 : R(PT) 1/2

2 Type
- 2 : Elbow Type
- 0 : Direct Piping Type

3 Direction of Flow Control
- 0 : Meter OUT
  〈Control to Tube Assembly direction from Screw Fastening Section(Port).〉
- 1 : Meter IN
  〈Control to Screw Fastening Section(Port) direction from Tube Assembly.〉

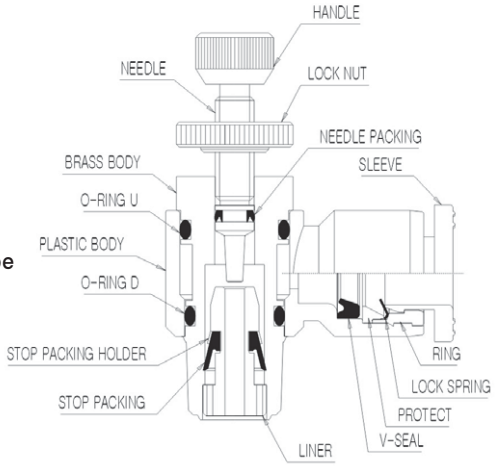
4 Built-In One Touch Model



5 Size of Screw(Port)
- M5 : M5×0.8
- 01 : R(PT) 1/8
- 02 : R(PT) 1/4
- 03 : R(PT) 3/8
- 04 : R(PT) 1/2

6 External Diameter of Tube
- 04 : ϕ04
- 06 : ϕ06
- 08 : ϕ08
- 10 : ϕ10
- 12 : ϕ12

Construction Layout

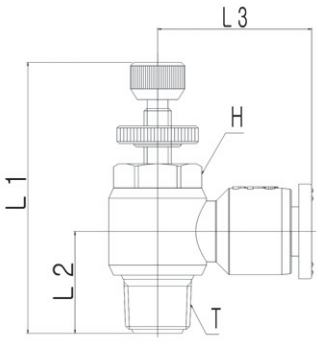


Specifications

Applied Fluid	Air
Min. Operating Pressure	0.1MRa(1kgf/cm²)
Max. Operating Pressure	0.7MRa(7kgf/cm²)
Operating Temperature	5~60℃
Tube to be used	Polyurethane Tube, Nylon Tube

Dimensions

Elbow Type



nit: mm

Model	Tube size	T (Thread)	L1 (MAX)	L2	L3	H(HEXA)
SC1201F-M5-04	04	M5×0.8	40.0	9.2	19.5	8
SC1201F-M5-06	06	M5×0.8	40.0	10.0	22.1	8
SC2201F-01-04S	04	R(PT) 1/8	41.0	15.0	21.4	10
SC2201F-01-06S	06	R(PT) 1/8	41.0	15.0	22.7	10
SC2201F-01-08S	08	R(PT) 1/8	41.0	16.0	24.9	10
SC2201F-02-04S	04	R(PT) 1/4	48.0	18.7	23.3	14
SC2201F-02-06S	06	R(PT) 1/4	48.0	18.4	24.8	14
SC2201F-02-08S	08	R(PT) 1/4	48.0	19.6	26.9	14
SC2201F-02-10S	10	R(PT) 1/4	48.0	20.4	29	14
SC3201F-03-06S	06	R(PT) 3/8	54.0	21.3	26.9	19
SC3201F-03-08S	08	R(PT) 3/8	54.0	21.3	27.7	19
SC3201F-03-10S	10	R(PT) 3/8	54.0	22.2	29.9	19
SC3201F-03-12S	12	R(PT) 3/8	54.0	23.5	34.	19
SC4201F-04-08S	08	R(PT) 1/2	63.9	26.2	29.9	24
SC4201F-04-10S	10	R(PT) 1/2	63.9	26.2	31.3	24
SC4201F-04-12S	12	R(PT) 1/2	63.9	26.2	32.3	24

※ Exterior dimensions of Meter Out(SC••01F) & Meter In(SC••01F) classified as per the flow control direction are identical.

□ Special Caution by Product

Make sure to digest in full prior to use of product and refer to the safety Instruction & Common Cautions

Piping

Warning

Thread Size(Fastening Screw)	Torque / kg · cm
M5	3
R(PT) 1/8	10
R(PT) 1/4	15
R(PT) 3/8	40
R(PT) 1/2	100

※ Fasten with correct Torque shown on above table when fixing the screws

- Make sure not to engage excessive Bending Moment when installing the piping of product or operating the handle, as it may cause the damage of product.

Handling · Adjustment

Warning

- Make sure to execute set-up continuously checking the pressure indications of primary & secondary pressure gauges. Excessive turning of Handle above the required level may cause the damage of components inside.

Caution

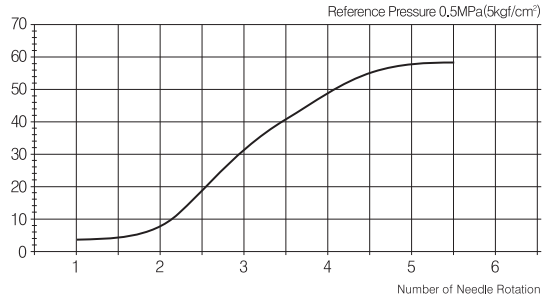
- Make sure to execute the pressure adjustment after releasing the Lock and lock again after the adjustment. Incorrect procedure may cause the damage of Handle & variation of secondary pressure.

(Lock Handling Procedure)

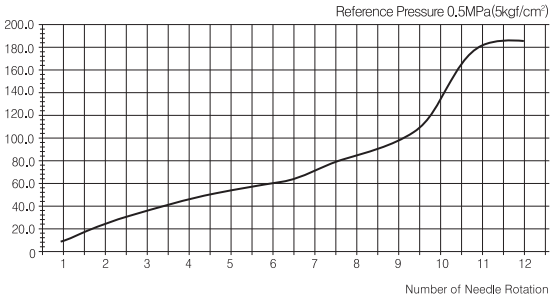
Lock Released as loosening the Lock Nut & Locked as fastening

Flow Characteristic Graph

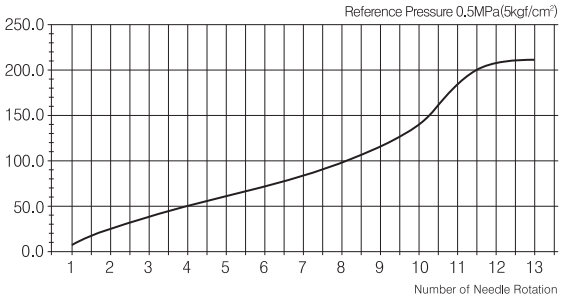
SC1201F-M5 Type



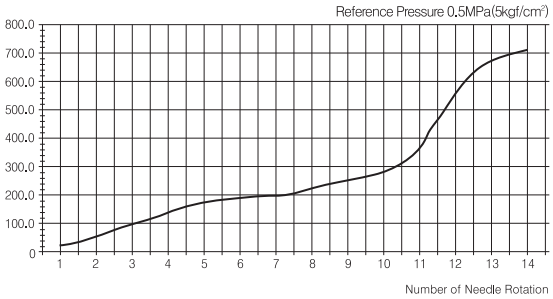
SC2201F-01 Type



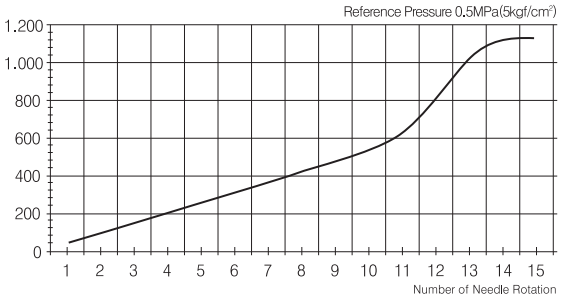
SC2201F-02 Type



SC3201F-03 Type



SC4201F-04 Type

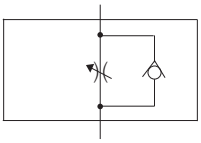


Series SPM

Speed Controller/Threaded Elbow Type(Metal Version)

- Minimizes Installation Time and Cost
- Body Swivels 360°
- Speed Can be Accurately Controlled Even at Low Speeds
- Constant Speed is Easily Set

Symbol



How to Order

SPM 1 2 0

1 2 3 4

1 Speed Controller
(Threaded Elbow Type)

2 Port Size
1 : Rc(PT)1/8
2 : Rc(PT)1/4
3 : Rc(PT)3/8
4 : Rc(PT)1/2

3 Type
2 : Direct connection type

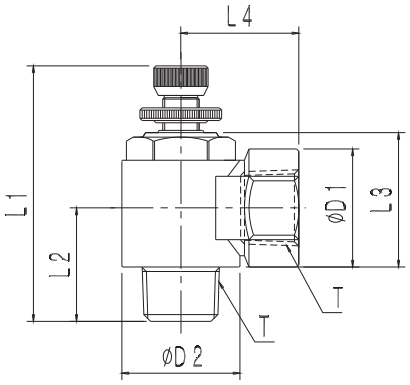
4 Controll Method
0 : Meter-Out
1 : Meter-In

Specifications

Model			SPM12□	SPM22□	SPM32□	SPM42□
Port Size		Cylinder	Rc(PT)1/8	Rc(PT)1/4	Rc(PT)3/8	Rc(PT)1/2
		Tube	Rc(PT)1/8	Rc(PT)1/4	Rc(PT)3/8	Rc(PT)1/2
Proof Pressure			1.05MPa(149.3psi)			
Max. Operating Pressure			0.7MPa(99.5psi)			
Min. Operating Pressure			0.1MPa(14.2psi)			
Ambient and Fluid Temperature			5~60°C(41~140°F)			
Number of Needle Rotations			8 turns			
Weight (g)			36	74	141	238
Flow	Free	Flow Rate (N *l* /min)	280	420	840	1680
		Effective Orifice(mm^2)	4	6.5	13	25.8
	Control	Flow Rate (N *l* /min)	190	240	840	1680
		Effective Orifice(mm^2)	2.9	3.7	13	25.8

Dimensions

Casting Type



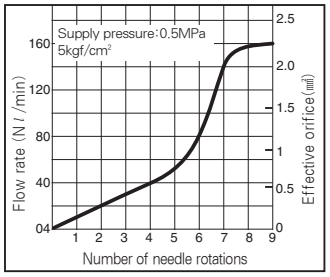
Unit: mm

Model	T (Thread)	L1 (MAX)	L2	L3	L4	D1	D2
SPM120	PT1/8	46.4	18.3	18.7	17	14	15
SPM220	PT1/4	49.4	23.1	23.2	22	20	20
SPM320	PT3/8	58.5	25	29.6	26	26	26
SPM420	PT1/2	63.9	27.7	28.3	38.5	27.5	28.3

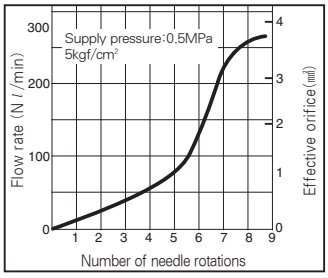
※ SPM XX0(Meter out) and SPM XX1(Meter in) are same dimension.

Flow Characteristics

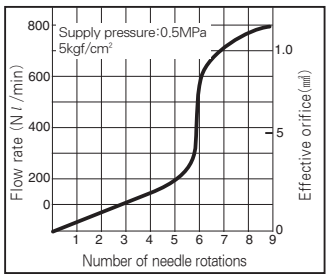
SPM12□



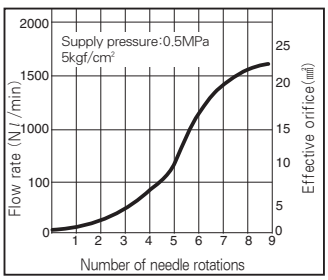
SPM22□



SPM32□

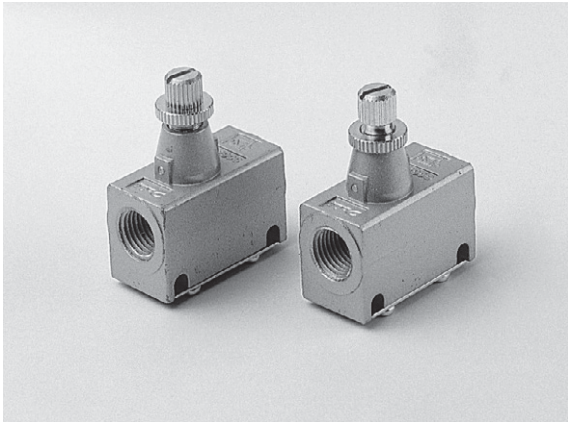


SPM42□



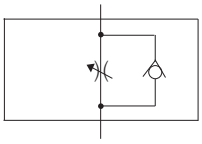
Series SP2000

Speed Controller – Inline Type

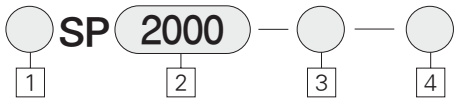


- RETAINER PREVENTS ACCIDENTAL LOSS OF NEEDLE
- COMPACT SIZE SAVES SPACE
- SPEED SHALL BE ACCURATELY CONTROLLED EVEN AT LOW SPEED
- LOCK NUT
- COPPER FREE TYPE FOR THE ELECTRONIC INDUSTRY (OPTION)

Symbol



How to Order



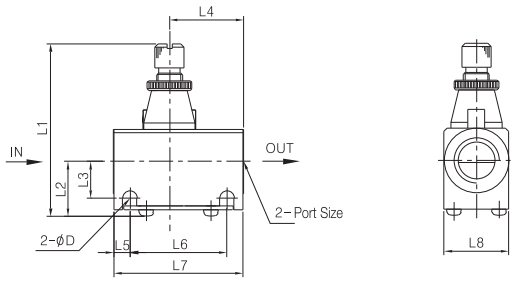
1 **Blank** : Rc(PT)
U : NPT

2 **Body Size**
2000 : 1/4

3 **Port Size**
02 : 1/4

4 **Application**
Blank : Standard Type
X2 : Copper Free Type

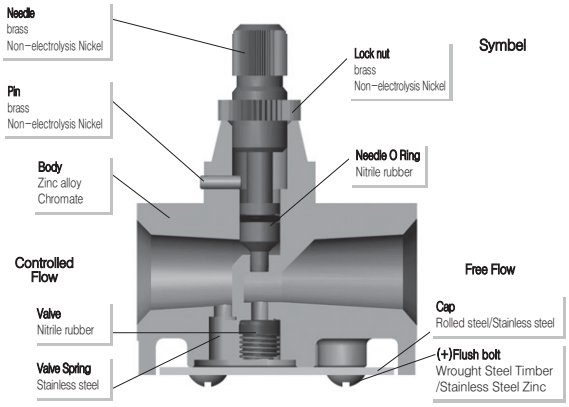
Dimesions



Dimensions

Model	Port Size	L1 MAX	L1 MIN	L2	L3	L4	L5	L6	L7	L8	D
SP2000-2	Rc(PT)/NPT	56	51.5	17	11.5	23	5	30	40	20	4.5

Construction



Model Specifications

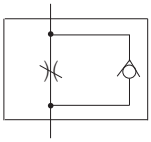
Description	Specification
Fluid	Air
Proof Pressure	1.5Mpa(213.3psi)
Max. Operating Pressure	1.0Mpa(140.8psi)
Min. Operating Pressure	0.05Mpa(7.1psi)
Ambient and Fluid Temperature	5~60℃(41~140°F)
Number of Needle Rotations	Max. 8turns

Series SP4000

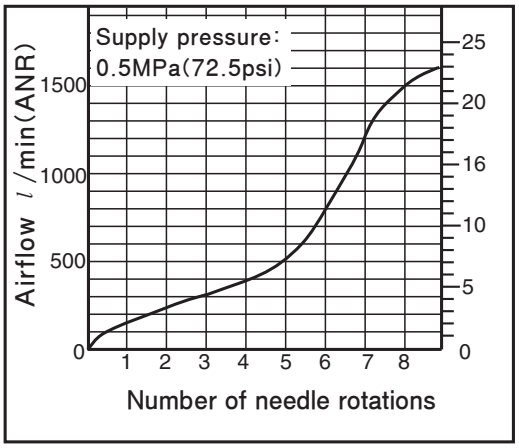
Speed Controller-Inline Type

- COMPACT SIZE SAVES SPACE
- SPEED SHALL BE ACCURATELY CONTROLLED EVEN AT LOW SPEED
- CONSTANT SPEED EASILY SET
- RETAINER PREVENTS ACCIDENTAL LOSS OF NEEDLE

Symbol



Flow Characteristics



How to Order

□SP 4000— 02

1 2

1 Series
Blank : PT
U : NPT

2 Port Size
02 : 1/4"
03 : 3/8"
04 : 1/2"

Specifications

Proof pressure	1.5MPa(213.3psi)
Max. operating pressure	1.0MPa(140.8psi)
Min. operating pressure	0.05MPa(7.11psi)
Ambient and fluid temperature	5~60℃(41~140°F)
Number of needle rotations	8 turns

Dimensions (Unit:mm)