Speed Controller with One-touch Fitting Stainless Steel Series

Elbow Type/Universal Type

Series AS-FG





Models

					A	۱рр	ical	ole t	tube	outs	ide d	liam	eter			Applicable
Elbow type		Port size	Metric size								cylinder bore size					
	type		3.2	4	6	8	10	12	1/8"	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"	(mm)
AS12□1FG-M5	AS13□1FG-M5	M5	•	•	•											6, 10, 16, 20
AS22□1FG-01	AS23□1FG-01	R(PT) 1/8	•	•	•	•	•*									20, 25, 32
AS22□1FG-02	AS23□1FG-02	R(PT) 1/4		•	•	•	•									20, 25, 32, 40
AS32□1FG-02	AS33□1FG-02	R(PT) 1/4			•	•	•	•								40, 50, 63
AS32□1FG-03	AS33□1FG-03	R(PT) 3/8			•	•	•	•								40, 50, 63
AS42□1FG-04	AS43□1FG-04	R(PT) 1/2					•	•								63, 80, 100
AS12□1FG-U10/32	AS13□1FG-U10/32	10-32UNF							•	•	•	•				6, 10, 16, 20
AS22□1FG-N01	AS23□1FG-N01	NPT1/8							•	•	•	•	•			20, 25, 32
AS22□1FG-N02	AS23□1FG-N02	NPT1/4								•	•	•	•	•		20, 25, 32, 40
AS32□1FG-N02	AS33□1FG-N02	NPT1/4										•	•	•		40, 50, 63
AS32□1FG-N03	AS33□1FG-N03	NPT3/8										•	•	•		40, 50, 63
AS42□1FG-N04	AS43□1FG-N04	NPT1/2												•	•	63, 80, 100

Note 1) The meter-out and meter-in types can be visually determined by the flow direction symbol on the resin body. Note 2) * Elbow type only



Universal type

Specifications

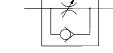
Proof pressure	1.5MPa
Maximum operating pressure	1MPa
Minimum operating pressure	0.1MPa
Ambient & fluid temperature	−5 to 60°C (with no freezing)
Number of needle revolutions	10 revolutions (8 revolutions Note 1))
Applicable tube material Note 2)	Nylon, Soft nylon, Polyurethane, Soft polyurethane

Note 1) For types AS12□1FG and AS13□1FG

Note 2) Use caution regarding the maximum operating pressure with soft nylon, polyurethane and soft polyurethane.

(For details, refer to CAT.E501-B "Air Fittings and Tubing" pages 7-146 through 7-147.)





Flow direction symbols on body

	Meter-out type	Meter-in type
Symbol		
JIS symbol	*	*

Flow Rate and Effective Area

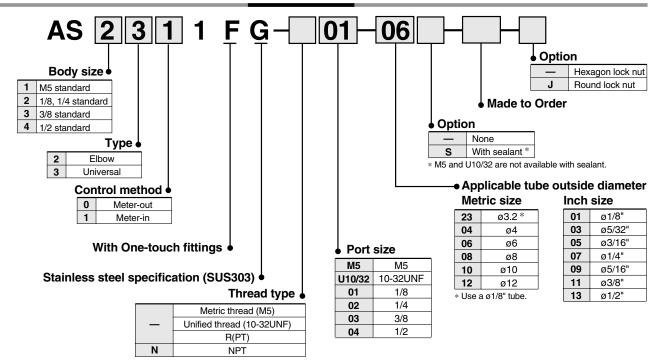
	An alal	AS12□1FG	AS22□1	FG-□01	AS22	.□1FG	-□02	AS	32□1F	G	AS42□1FG		
I N	Model	AS13□1FG	AS23□1	FG-□01	AS23	□1FG	-□02	AS	33□1F	AS43□1FG			
		ø3.2	ø3.2	ø6	ø4	ø6	ø8	ø6	ø8	ø10	ø10	ø12	
	Metric size	ø4	ø4	ø8			ø10			ø12			
		ø6		ø10									
Tube		ø1/8"	ø1/8"	ø3/16"	ø5/32"	ø3/16"	ø1/4"	ø1/4"	ø5/16"	ø3/8"	ø3/8"	ø1/2"	
O.D.	luada aima	ø5/32"	ø5/32"	ø1/4"			ø5/16"						
	Inch size	ø3/16"		ø5/16"			ø3/8"						
		ø1/4"											
Controlled (Free)	Flow rate \ell/min (ANR)	100	180	230	260	390	460	660	790	920	1580	1710	
flow	Effective area mm ²	1.5	2.7	3.5	4	6	7	10	12	14	12	26	

Note) The flow rate values are at a pressure of 0.5MPa and temperature of 20°C.





How to Order



Made to Order



X12

Grease-free (Seal: Fluorine Coating) + Throttle Valve (Without Check Valve)

X21

Ex.) AS1201FG-M5-23-X12

Throttle Valve (Without Check Valve)

Note 1) Not particle-free

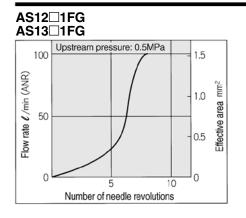
Ex.) AS1201FG-M5-23-X21

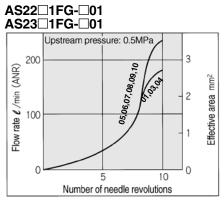
Note 2) Throttle valve is only compatible with the part no. of the meter-out type.

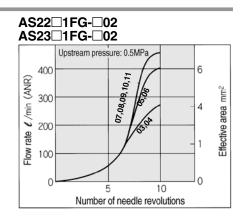
Ex.) AS1201FG-M5-23-X214

Note) Throttle valve is only compatible with the part no. of the meter-out type.

Needle Valve/Flow Rate Characteristics

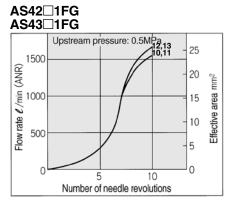






AS33□1FG Upstream pressure: 0.5MPa 16 0.11.12 14 (ANR) 12 18.09 6.07 10 6/min Effective area 8 rate 6 Flow 2

Number of needle revolutions

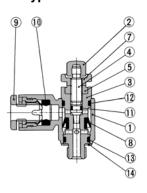


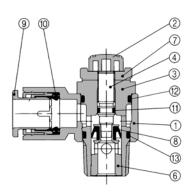
AS32□1FG

0

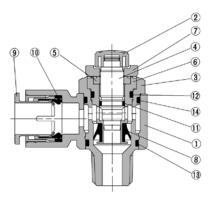
Construction/Elbow Type

Meter-out type M5 type U10/32 type

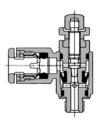


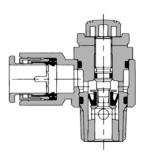


AS3201FG-02

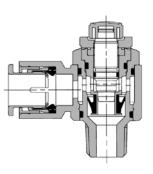


Meter-in type M5 type U10/32 type





AS3211FG-02



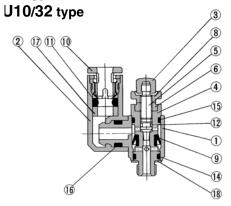
Parts list

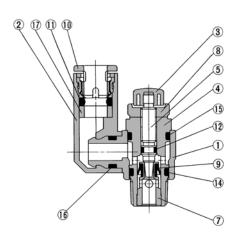
No.	Description	Material	Note
1	Body A	PBT	
2	Knob	PBT	
3	Body B	SUS303	
4	Needle	SUS303	
5	Needle guide	SUS303	
6	Seat ring	SUS303	
7	Lock nut	SUS303	
8	U seal	NBR	
9	Cassette	POM, Stainless steel	
10	Seal	NBR	
11	O-ring	NBR	
12	O-ring	NBR	
13	O-ring	NBR	
14	O-ring	NBR	
15	Gasket	NBR/SUS304	M5 type only

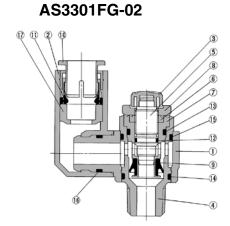
Series AS-FG

Construction/Universal Type

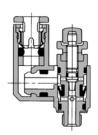
Meter-out type M5 type

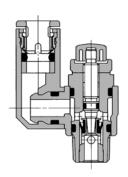




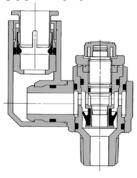


Meter-in type M5 type U10/32 type





AS3311FG-02

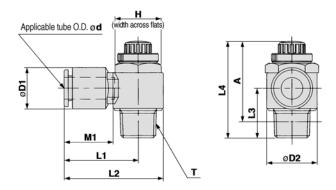


Parts List

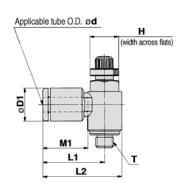
No.	Description	Material	Note
1	Body A	PBT	
2	Elbow body	PBT	
3	Knob	PBT	
4	Body B	SUS303	
5	Needle	SUS303	
6	Needle guide	SUS303	
7	Seat ring	SUS303	
8	Lock nut	SUS303	
9	U seal	NBR	
10	Cassette	POM, Stainless steel	
11	Seal	NBR	
12	O-ring	NBR	
13	O-ring	NBR	
14	O-ring	NBR	
15	O-ring	NBR	
16	O-ring	NBR	
17	Spacer	POM Note 1)	
18	Gasket	NBR, Stainless steel	

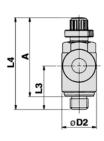
Note 1) ø3/16", ø3/8" and ø1/2" are SUS303.





M5 type U10/32 type





Metric size

Model	d	т	н	D1	D2	L1	L2	L3	L	.4	A *		М1	Weight
Model	u		п	יט	UZ			L3	Max.	Min.	Max.	Min.	IVII	g
AS12□1FG-M5-23	3.2	M5	8	8.4	9.6	17.3	22.1	12.3	28.6	25.8	25	22.2	12.7	7
AS22□1FG-01-23	3.2	R(PT)1/8	12	9.3	14.2	20.4	27.5	14.3	36.1	31.1	32.1	27.1	12.7	16
AS12□1FG-M5-04	4	M5	8	9.3	9.6	17.3	22.1	12.3	28.6	25.8	25	22.2	12.7	7
AS12□1FG-M5-06	6	CIVI	0	11.6	0.0	18.1	22.9	11.7	20.0	25.0	25	22.2	13.5	,
AS22□1FG-01-04	4			9.3		20.4	27.5						12.7	17
AS22□1FG-01-06	6	R(PT)	12	11.6	14.2	20.4	27.5	13.4	35.2	20.2	20.1	27.1	13.5	17
AS22□1FG-01-08	8	1/8	12	15.2	14.2	25.3	32.4			30.2	32.1		18.5	19
AS22□1FG-01-10	10		18.	18.5		33.1	40.2	14.1					21	21
AS22□1FG-02-04	4			10.4		25.2	34.4				34.4	29.4	16	32
AS22□1FG-02-06	6	R(PT)	17	12.8	18.5	25.2	34.4	19.7	40.1	35.1			17	32
AS22□1FG-02-08	8	1/4	17	15.2	10.5	27.2	36.4		40.1				18.5	34
AS22□1FG-02-10	10			18.5		33.9	43.2	19.5					21	36
AS32□1FG-02-06	6			12.8		27.8	39.3		48.3 43.3		40.0	37.8	17	60
AS32□1FG-02-08	8	R(PT)	19	15.2	23	29.5	41	21 2		40.0			18.5	63
AS32□1FG-02-10	10	1/4	10	18.5	20	31.8	43.3	21.5	40.5	40.0	42.0	37.0	21	67
AS32□1FG-02-12	12			20.9		32.8	44.3						22	69
AS32□1FG-03-06	6			12.8		27.8	39.3						17	55
AS32□1FG-03-08	8	R(PT)	19	15.2	23	29.5	41	10.0	45.4	40 A	40.2	35.2	18.5	57
AS32□1FG-03-10	10	3/8	13	18.5	20	31.8	43.3	13.0	45.4	70.7	40.2	00.2	21	59
AS32□1FG-03-12	12			20.9		32.8	44.3	-					22	61
AS42□1FG-04-10	10	R(PT)	24	18.5	28.6	33.6	47.9	24.5	5 56.7 49	49.2 49.6	10.6	10.1	21	100
AS42□1FG-04-12	12	1/2		20.9	20.0	34.6	48.9				49.6	42.1	22	101

^{*} Reference dimensions for threads after installation.

Inch size

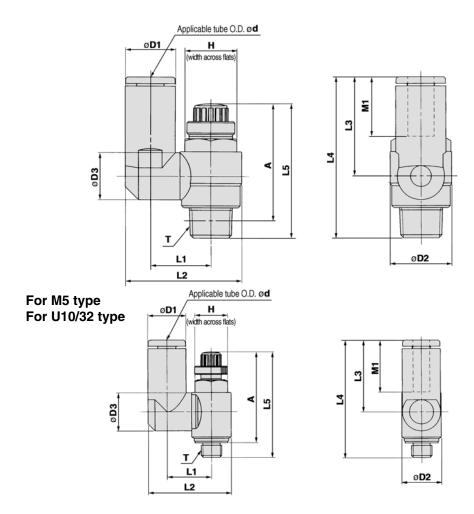
		-			ъ.				L	.4	A *		M1	Weight
Model	d	Т	н	D1	D2	L1	L2	L3	Max.	Min.	Max.	Min.	IVIT	g
AS12 TFG-U10/32-01	1/8"			8.4		172	22.1	100					40.7	
AS12□1FG-U10/32-03	5/32"	10-32UNF	8	9.3		17.3	22.1	12.3	00.0	25.8	25	22.2	12.7	_
AS12□1FG-U10/32-05	3/16"	10-32UNF	0	11.4	9.6	21.3	26.1	11.7	20.0	25.0	23	22.2	16.5	7
AS12□1FG-U10/32-07	1/4"			12		18.3	23.1						13.5	
AS22 TFG-N01-01	1/8"			9.3		20.4	27.5		35.2			27.1	12.7	16
AS22 TFG-N01-03	5/32"			9.3		20.4	27.5	13.4			32.1		12.7	17
AS22 TFG-N01-05	3/16"	NPT 1/8	12.7	11.4	14.2	23.1	30.2	13.4		30.2			16.5	17
AS22□1FG-N01-07	1/4"			13.2		23.9	31						18.5	19
AS22 TFG-N01-09	5/16"			15.2		25.3	32.4	14.1					21	21
AS22□1FG-N02-03	5/32"			10.4		25.2	34.4	17.7	39.9	34.9	34.4	29.4	16	32
AS22□1FG-N02-05	3/16"			11.4		24.9	34.2						17	32
AS22□1FG-N02-07	1/4"	NPT 1/4	17.5	13.2	18.5	25.2	34.5						18.5	34
AS22□1FG-N02-09	5/16"	17-1		15.2		27.2	36.4						21	36
AS22□1FG-N02-11	3/8"			17.9		33.9	43.2	13.3					21	30
AS32□1FG-N02-07	1/4"			13.2		27.8	39.3						17	60
AS32□1FG-N02-09	5/16"	NPT 1/4	19	15.2	23	29.5	41	21.3	48.3	43.3	42.8	37.8	18.5	63
AS32□1FG-N02-11	3/8"	17-7		17.9		31.8	43.3						21	67
AS32□1FG-N03-07	1/4"	NDT		13.2		27.8	39.3						17	55
AS32□1FG-N03-09	5/16"	NPT . 3/8	19	15.2	23	29.5	41	19.8	45.4	40.4	40.2	35.2	18.5	57
AS32□1FG-N03-11	3/8"			17.9		31.8	43.3	-					21	59
AS42□1FG-N04-11	3/8"	NPT a	23.8	17.9	00.0	33.6	47.9	24.5	5 56.7	40.2	40.6	40.1	21	100
AS42□1FG-N04-13	1/2"	1/2	23.8	21.7	28.6	35.2	49.5			49.2	49.0	42.1	22	101

^{*} Reference dimensions for 10-32UNF and NPT threads after installation.



Series AS-FG

Dimensions/Universal Type



Metric size

		т	н		D 0	D 0	L1	L2	L3	14	L	5	A *		M1	Weight
Model	d		"	D1	D2	D3	LI	LZ	L3	L4	Max.	Min.	Max.	Min.	IVII	g
AS13□1FG-M5-23	3.2			8.4				19.8	17.5						12.7	
AS13□1FG-M5-04	4	M5	8	9.3	9.6	9.3	10.8	20.3	17.5	28.7	28.6	25.8	25	22.2	12.7	7
AS13□1FG-M5-06	6			11.6				21.4	20.6	31.8					13.5	
AS23□1FG-01-23	3.2			8.4			13.1	24.4	17.5	00.0					12.7	17
AS23□1FG-01-04	4	R(PT)	12	9.3	14.2	9.3	13.1	24.9	17.5	30.9	35.2	30.2	32.1	27.1	12.7	18
AS23□1FG-01-06	6	1/8	12	11.6	14.2	10.9	14	26.9	22.9	36.3	33.2	30.2	32.1	21.1	13.5	10
AS23□1FG-01-08	8			15.2		12.9	16.2	30.9	28.2	40.8					18.5	21
AS23□1FG-02-04	4			10.4		10.9	16.2	30.6	0.6 21.9	39.6			34.4	29.4	16	32
AS23□1FG-02-06	6	R(PT) 1/4	17	12.8	18.5	12.9	18.4	34	25.2	42.1	39.9	34.9			17	33
AS23□1FG-02-08	8		''	15.2	10.5		18.3	35.2	28.2	45.1					18.5	36
AS23□1FG-02-10	10			18.5			20.2	38.7	31	47.9					21	40
AS33□1FG-02-06	6			12.8		12.9	00.0	38.5	25.2	46.5		43.3	40.0		17	60
AS33□1FG-02-08	8	R(PT)	19	15.2	23		9 20.6	39.7	28.2	49.5	48.3			37.8	18.5	63
AS33□1FG-02-10	10	1/4	19	18.5		16.2	00	43.7	32.6	53.9	40.0	40.0	42.0	37.0	21	67
AS33□1FG-02-12	12			20.9		10.2	23	44.9	34.4	55.7					22	69
AS33□1FG-03-06	6			12.8		12.9	00.0	38.5	25.2	45					17	56
AS33□1FG-03-08	8	R(PT)	10	15.2	23	12.9	20.6	39.7	28.2	48	45.4	40.4	40	35	18.5	59
AS33□1FG-03-10	10	3/8 19 1	19	18.5		16.2	00	43.7	32.6	52.4	40.4	40.4	40	35	21	63
AS33□1FG-03-12	12		20.9		10.2	23	44.9	34.4	54.2					22	65	
AS43□1FG-04-10	10	R(PT)		18.5	28.6	16.2	25.8	49.4	32.6	57.1	56.7	49.2	49.6	42.1	21	104
AS43□1FG-04-12	12	1/2	24	20.9		19.4	26.8	52	36.3	60.8	30.7	49.2	49.0	42.1	22	105

^{*} Reference dimensions for M5 and R(PT) threads after installation.

Inch size

Mandal	d	т	н	D1	D2	D3	L1	L2	L3	L4	L	5	Α	*	M1	weight
Model	а	'	"	וטן	D2	נט	LI	L2	L3	L4	Max.	Min.	Max.	Min.	IVII	g
AS13□1FG-U10/32-01	1/8"			8.4				19.8	17.5	28.7					12.7	7
AS13□1FG-U10/32-03	5/32"	10-32UNF	8	9.3	9.6		10.8	20.3	17.5	20.7	28.6	25.8	25	22.2	12.7	/
AS13□1FG-U10/32-05	3/16"	10-32UNF	ľ	11.4	11.4	9.3	10.6	21.3	23.3	34.5	20.0	25.0	23	22.2	16.5	8
AS13□1FG-U10/32-07	1/4"			12				21.6	20.7	31.9					13.7	
AS23□1FG-N01-01	1/8"			8.4		0.3	13.1	24.4	17.5						12.7	17
AS23□1FG-N01-03	5/32"			9.3		3.5	13.1	24.9	17.5	30.9	35.2	30.2	32.1	27.1	12.7	18
AS23□1FG-N01-05	3/16"	NPT 1/8	12.7	11.4	14	10.9	14	26.8	23.9						16.5	10
AS23□1FG-N01-07	1/4"			13.2		12.9	16.2	29.9	25.6	5.6 36.3					18.5	19
AS23□1FG-N01-09	5/16"			15.2		12.5	10.2	30.9	28.2	40.8					21	21
AS23□1FG-N02-03	5/32"			10.4		10.9	16.2	30.6	21.9	39.6					16	32
AS23□1FG-N02-05	3/16"			11.4				31.1	23.9	42.1					17	33
AS23□1FG-N02-07	1/4"	NPT 1/4	17.5	13.2 19		18.3	34.2	25.6	45.1	39.9	34.9	34.4	29.4	18.5	36	
AS23□1FG-N02-09	5/16"	., .		15.2		12.9	10.3	35.2	28.2	47.9					21	39
AS23□1FG-N02-11	3/8"			17.9			20.2	38.7	31	46.5					21	40
AS33□1FG-N02-07	1/4"	NDT		13.2		12.9	20.6	38.7	25.6	46.9					17	60
AS33□1FG-N02-09	5/16"	NPT 1/4	19	15.2	23	12.9	20.0	39.7	28.2	49.5	48.3	43.3	42.8	37.8	18.5	63
AS33□1FG-N02-11	3/8"	., .		17.9		16.2	23	43.7	32.6	53.9					21	69
AS33□1FG-N03-07	1/4"	NOT		13.2		12.9	20.6	38.7	25.6	45					17	56
AS33□1FG-N03-09	5/16"	NPT 3/8	19	15.2	23	12.9	20.0	39.7	28.2	48	45.4	40.4	40.2	35.2	18.5	59
AS33□1FG-N03-11	3/8"	3/8		17.9		16.2	23	43.7	32.6	52.4					21	65
AS43□1FG-N04-11	3/8"	NPT	00.0	17.9	29	16.2 19.4	25.8	49.4	32.6	54.4	56.7	49.2	49.6	42.1	21	104
AS43□1FG-N04-13	1/2"	1/2	23.8	21.7			26.8	52	36.3	57.1	30.7	43.2	49.0	42.1	22	106

^{*} Reference dimensions for 10-32UNF and NPT threads after installation.



⚠ Safety Instructions

These safety instructions are intended to prevent hazardous situations and/or equipment damage. These instructions indicate the level of potential hazard with the labels of "Caution," "Warning" or "Danger." They are all important notes for safety and must be followed in addition to International Standards (ISO/IEC) ¹⁾, and other safety regulations.

Caution indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate

injury.

Warning indicates a hazard with a medium level of riskWarning: which, if not avoided, could result in death or serious

injury.

Danger indicates a hazard with a high level of risk which, if not avoided, will result in death or serious

njury.

ISO 4414: Pneumatic fluid power – General rules relating to systems.
 ISO 4413: Hydraulic fluid power – General rules relating to systems.
 IEC 60204-1: Safety of machinery – Electrical equipment of machines.
 (Part 1: General requirements)

ISO 10218-1: Manipulating industrial robots - Safety.

Marning

 The compatibility of the product is the responsibility of the person who designs the equipment or decides its specifications.

Since the product specified here is used under various operating conditions, its compatibility with specific equipment must be decided by the person who designs the equipment or decides its specifications based on necessary analysis and test results. The expected performance and safety assurance of the equipment will be the responsibility of the person who has determined its compatibility with the product. This person should also continuously review all specifications of the product referring to its latest catalogue information, with a view to giving due consideration to any possibility of equipment failure when configuring the equipment.

2. Only personnel with appropriate training should operate machinery and equipment.

The product specified here may become unsafe if handled incorrectly. The assembly, operation and maintenance of machines or equipment including our products must be performed by an operator who is appropriately trained and experienced.

- 3. Do not service or attempt to remove product and machinery/ equipment until safety is confirmed.
 - The inspection and maintenance of machinery/equipment should only be performed after measures to prevent falling or runaway of the driven objects have been confirmed.
 - When the product is to be removed, confirm that the safety measures as mentioned above are implemented and the power from any appropriate source is cut, and read and understand the specific product precautions of all relevant products carefully.
 - 3. Before machinery/equipment is restarted, take measures to prevent unexpected operation and malfunction.
- Contact SMC beforehand and take special consideration of safety measures if the product is to be used in any of the following conditions
 - 1. Conditions and environments outside of the given specifications, or use outdoors or in a place exposed to direct sunlight.
 - 2. Installation on equipment in conjunction with atomic energy, railways, air navigation, space, shipping, vehicles, military, medical treatment, combustion and recreation, or equipment in contact with food and beverages, emergency stop circuits, clutch and brake circuits in press applications, safety equipment or other applications unsuitable for the standard specifications described in the product catalogue.
 - 3. An application which could have negative effects on people, property, or animals requiring special safety analysis.
 - 4. Use in an interlock circuit, which requires the provision of double interlock for possible failure by using a mechanical protective function, and periodical checks to confirm proper operation.

∧ Caution

1. The product is provided for use in manufacturing industries.

The product herein described is basically provided for peaceful use in manufacturing industries.

If considering using the product in other industries, consult SMC beforehand and exchange specifications or a contract if necessary. If anything is unclear, contact your nearest sales branch.

Limited warranty and Disclaimer/Compliance Requirements

The product used is subject to the following "Limited warranty and Disclaimer" and "Compliance Requirements". Read and accept them before using the product.

Limited warranty and Disclaimer

- The warranty period of the product is 1 year in service or 1.5 years after the product is delivered, whichever is first. ²⁾
 Also, the product may have specified durability, running distance or replacement parts. Please consult your nearest sales branch.
- 2. For any failure or damage reported within the warranty period which is clearly our responsibility, a replacement product or necessary parts will be provided. This limited warranty applies only to our product independently, and not to any other damage incurred due to the failure of the product.
- Prior to using SMC products, please read and understand the warranty terms and disclaimers noted in the specified catalogue for the particular products.
- 2) Vacuum pads are excluded from this 1 year warranty. A vacuum pad is a consumable part, so it is warranted for a year after it is delivered. Also, even within the warranty period, the wear of a product due to the use of the vacuum pad or failure due to the deterioration of rubber material are not covered by the limited warranty.

Compliance Requirements

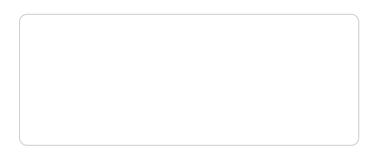
- The use of SMC products with production equipment for the manufacture of weapons of mass destruction (WMD) or any other weapon is strictly prohibited.
- The exports of SMC products or technology from one country to another are governed by the relevant security laws and regulations of the countries involved in the transaction. Prior to the shipment of a SMC product to another country, assure that all local rules governing that export are known and followed.

∧ Caution

SMC products are not intended for use as instruments for legal metrology.

Measurement instruments that SMC manufactures or sells have not been qualified by type approval tests relevant to the metrology (measurement) laws of each country.

Therefore, SMC products cannot be used for business or certification ordained by the metrology (measurement) laws of each country.



SMC Corporation (Europe)

Austria +43 (0)2262622800 www.smc.at Belgium +32 (0)33551464 Bulgaria +359 (0)2807670 Croatia +385 (0)13707288 Czech Republic +420 541424611 Denmark +45 70252900 Estonia +372 651 0370 Finland +358 207513513 +33 (0)164761000 France +49 (0)61034020 Germany Greece +30 210 2717265 Hungary +36 23513000 Ireland +353 (0)14039000 +39 03990691 Italy Latvia +371 67817700

www.smc.be www.smc.bg www.smc.hr www.smc.cz www.smcdk.com www.smcee.ee www.smc.fi www.smc-france.fr www.smc.de www.smchellas.gr www.smc.hu www.smcautomation.ie www.smcitalia.it www.smc.lv

office@smc.at info@smc.be office@smc.bg office@smc.hr office@smc.cz smc@smcdk.com info@smcee.ee smcfi@smc.fi supportclient@smc-france.fr info@smc.de sales@smchellas.gr office@smc.hu sales@smcautomation.ie mailbox@smcitalia.it info@smc.lv

Lithuania +370 5 2308118 www.smclt.lt Netherlands +31 (0)205318888 www.smc.nl +47 67129020 Norway www.smc-norge.no Poland +48 222119600 www.smc.pl +351 214724500 Portugal www.smc.eu Romania +40 213205111 www.smcromania.ro Russia +7 (812)3036600 www.smc.eu Slovakia +421 (0)413213212 www.smc.sk Slovenia +386 (0)73885412 www.smc.si +34 945184100 Spain www.smc.eu Sweden +46 (0)86031240 www.smc.nu **Switzerland** +41 (0)523963131 www.smc.ch Turkey +90 212 489 0 440 www.smcturkey.com.tr UK +44 (0)845 121 5122 www.smc.uk

info@smclt.lt info@smc.nl post@smc-norge.no office@smc.pl apoioclientept@smc.smces.es smcromania@smcromania.ro sales@smcru.com office@smc.sk office@smc.si post@smc.smces.es smc@smc.nu info@smc.ch satis@smcturkey.com.tr sales@smc.uk

South Africa +27 10 900 1233 www.smcza.co.za zasales@smcza.co.za