

# FLOW CONTROL EQUIPMENT

## FLOW CONTROL EQUIPMENT

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## SPEED CONTROLLER WITH ONE-TOUCH FITTINGS: IN-LINE TYPE SERIES (N)AS1001-4001

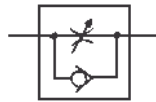
- ✓ Minimizes Installation Time and Cost
- ✓ Accepts Nylon and Polyurethane Tubing
- ✓ Wide Variety Of Sizes
- ✓ Speed may accurately be controlled even at low velocity
- ✓ Constant Speed easily set
- ✓ Retaining prevents accidental loss of needle



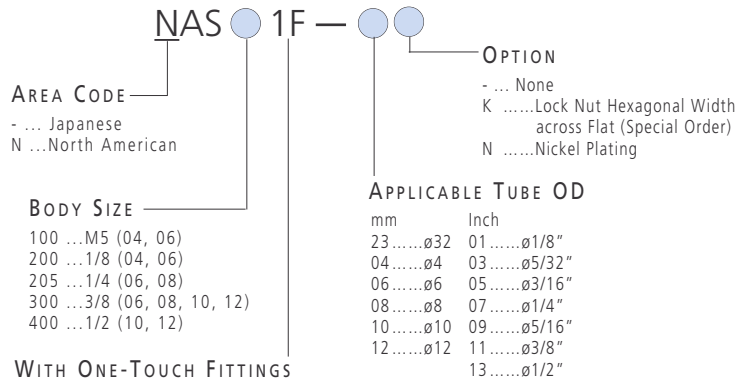
### TECHNICAL SPECIFICATIONS

Proof Pressure	1.05MPa / 150PSI
Max Operating Pressure	0.7MPa / 100PSI
Min Operating Pressure	0.1MPa / 14.5PSI
Ambient and Fluid Temp	0 ~ 60°C / 32 ~ 140°F
No Of Needle Revolutions	10 Turns / 8 Turns (AS1001F)
Applicable Tube Material	Nylon, Soft Nylon, Polyurethane

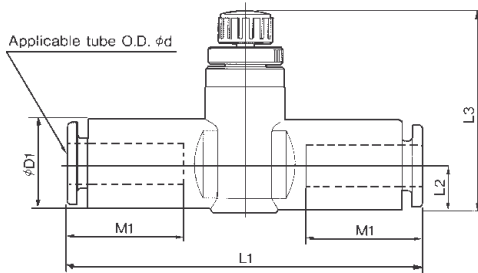
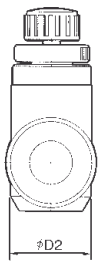
### SYMBOLS



### HOW TO ORDER (N)AS1000-4000



### DIMENSIONS (N)AS1000-4000



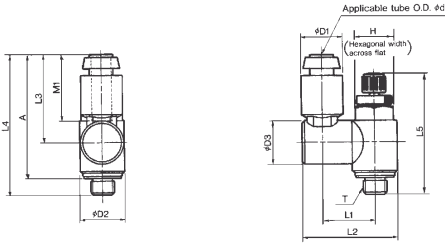
Model (Metric)	Applicable Tube OD : d	D1	D2	L1	L2	L3		M1	Weight gf
						Max	Min		
AS1001F	3.2	7.8		41.1	4.4	23.4	20.6	14.5	5.8
	4	8.9	10	42.3	4.9	24	21.2		6.2
	6	11		47	6	25	22.2	15.5	7.2
AS2001F	4	8.9	11.8	43.8	5.2	32.6	27.6	14.5	11.4
	6	11		48.5	6.3	33.7	28.7	15.5	12.4
AS2051F	6	11	14.8	50.7	6	34.4	29.4	15.5	19.4
	8	15.2		59.8	8.1	36.5	31.5	18	30.3
AS3001F	6	13.2		59	7.4	38.3	33.3	17	40.8
	8	15.2	19.8	64.4	8.2	39.1	34.1	18	45.5
	10	18.5		71.6	9.8	40.6	35.6	21	54.3
	12	20.9		76	11	41.8	36.8	22	60.2
AS4001F	10	18.5	26.5	82.1	11.3	51.1	43.6	21	97.3
	12	20.9				52.1	44.6	22	103.4

Model (Inch)	Applicable Tube OD : d	D1	D2	L1	L2	L3		M1	Weight gf
						Max	Min		
NAS1001F	1/8"	7.8	10	41.1	4.4	23.4	20.6	14.5	5.8
	5/32"	8.9		42.3	4.9	24	21.2		6.2
NAS2001F	5/32"	8.9		43.8	5.2	32.6	27.6	14.5	11.4
	3/16"	11.4	11.8	50	6.2	33.6	28.6	16.5	17.1
NAS2051F	1/4"	13.2		52.2	7.1	34.5	29.5	17	20.1
	3/16"	11.4		52.2	6.2	34.6	29.6	16.5	24
	1/4"	13.2	14.8	54.4	7.1	35.5	30.5	17	25.1
	5/16"	15.2		59.8	8.1	36.5	31.5	18	30.3
NAS3001F	1/4"	13.2		59	7.4	38.3	33.3	17	41.2
	5/16"	15.2	19.8	64.4	8.2	39.1	34.1	18	45.5
	3/8"	17.9		70.8	9.5	40.3	35.3	21	52.9
NAS4001F	3/8"	17.9	26.5	76.9	10.3	51	43.5	21	96.3
	1/2"	21.7		83.1	11.6	52.4	44.9	22	105.9



### DIMENSIONS (MM)

#### AS SERIES WITH ONE TOUCH FITTINGS UNIVERSAL TYPE



Model Elbow Type (Metric)	Applicable Tube OD ød mm	T Uni Thread	H	øD <sub>1</sub>	øD <sub>2</sub>	øD <sub>3</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>	L <sub>5</sub>		*A		M	Weight g
											Max	Min	Max	Min		
AS22□1F-U01-23	3.2	1/8	12	7.8	14.2	9.3	13.4	24.8	18.9	33.2	36.1	31.1	30.5	25.5	14.5	16.9
AS22□1F-U01-04	4			8.9		9.3	13.4	24.8	18.9	33.2					14.5	17
AS22□1F-U01-06	6			11		10.9	14.5	27.1	20.6	34.9					15.5	17.7
AS22□1F-U01-08	8			15.2		12.9	16.2	30.9	24.7	38.2					18.5	20.9
AS22□1F-U02-04	4	1/4	17	8.9	18.5	9.3	15.6	29.2	18.9	36.1	39.4	34.4	32	26.6	14.5	31.7
AS22□1F-U02-06	6			11		10.9	16.7	31.4	20.6	37.8					15.5	32.4
AS22□1F-U02-08	8			15.2		12.9	18.3	35.2	24.4	40.8					18.5	35.7
AS22□1F-U02-10	10			18.5		12.9	19.6	38.1	26.8	43.2					21	39.2
AS32□1F-U03-06	6	3/8	19	11	23	10.9	18.9	35.9	20.6	41.6	45	40	37.6	32.6	15.5	53.6
AS32□1F-U03-08	8			15.2		12.9	20.6	39.7	24.4	42.8					18.5	56.9
AS32□1F-U03-10	10			18.5		16.2	22.5	43.3	28.3	47.7					21	60.4
AS32□1F-U03-12	12			20.9		16.2	23.5	45.5	29.3	48.7					22	62.2
AS42□1F-U04-10	10	1/2	24	18.5	28.6	16.2	25.3	48.9	28.3	50.7	54.6	47.1	44.5	37	21	97.1
AS42□1F-U04-12	12			20.9		19.4	26.8	51.6	30.8	53.2					22	99.8

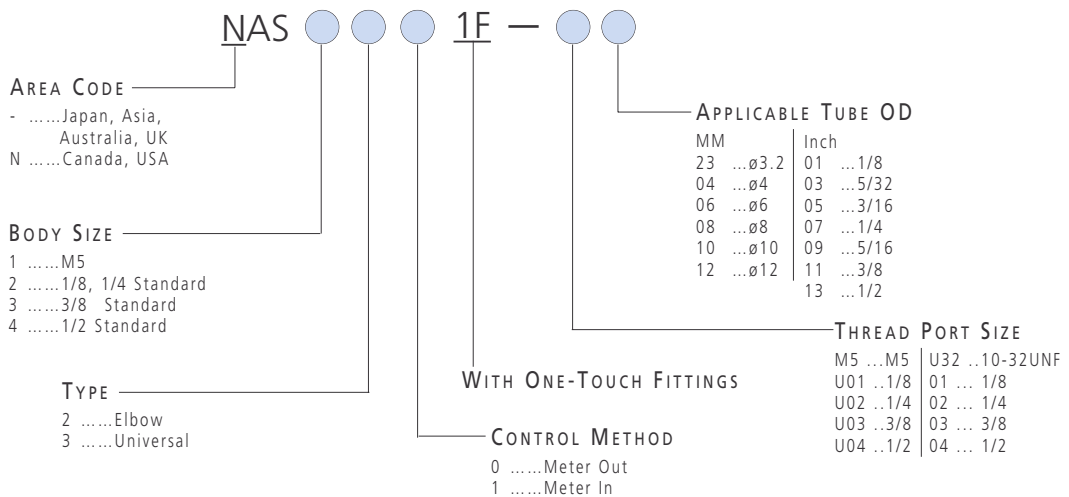
### DIMENSIONS (INCH)

#### AS SERIES WITH ONE TOUCH FITTINGS UNIVERSAL TYPE

Model Elbow Type (Inch)	Applicable Tube OD d Inch	T Uni Thread	H	øD <sub>1</sub>	øD <sub>2</sub>	øD <sub>3</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>	L <sub>5</sub>		*A		M	Weight g
											Max	Min	Max	Min		
NAS23□1F-U01-01	1/8"	1/8	12	7.8	14.2	9.3	13.4	24.8	18.9	33.2	36.1	31.1	30.5	25.5	14.5	16.9
NAS23□1F-U01-03	5/32"			8.9		9.3	13.4	24.8	18.9	33.2					14.5	17
NAS23□1F-U01-05	3/16"			11.4		10.3	14.2	27	21.5	35.9					16.5	18.6
NAS23□1F-U01-07	1/4"			13.2		11.4	15.2	28.9	22.3	36.3					17	19.4
NAS23□1F-U01-09	5/16"			15.2		12.9	16.2	30.9	24.7	38.2					18.5	20.9
NAS23□1F-U02-03	5/32"	1/4	17	8.9	18.5	9.3	15.6	29.2	18.9	36.1	39.4	34.4	32	26.6	14.5	31.7
NAS23□1F-U02-05	3/16"			11.4		10.3	16.4	31.1	21.5	38.8					16.5	33.2
NAS23□1F-U02-07	1/4"			13.2		11.4	17.4	33.2	22.3	39.5					17	33.9
NAS23□1F-U02-09	5/16"			15.2		12.9	18.3	35.2	24.4	40.8					18.5	35.7
NAS23□1F-U02-11	3/8"	3/8	19	17.9	23	12.9	19.6	38.1	26.8	43.2					29.4	39
NAS33□1F-U03-07	1/4"			13.2		11.4	19.6	37.7	22.3	43.3	45	40	37.6	32.6	17	55.4
NAS33□1F-U03-09	5/16"			15.2		12.9	20.6	39.7	24.4	42.8					18.5	56.9
NAS33□1F-U03-11	3/8"			17.9		16.2	22.5	42.9	28.3	47.7					21	60.2
NAS43□1F-U04-11	3/8"	1/2	24	17.9	28.6	16.2	25.3	48.6	28.3	50.7	54.6	47.1	44.5	37	21	96.4
NAS43□1F-U04-13	1/2"			21.7		19.4	26.8	52.5	30.8	53.2					22	99.9

### HOW TO ORDER

#### (N)AS SERIES WITH ONE-TOUCH FITTINGS



# FLOW CONTROL EQUIPMENT

## FLOW CONTROL VALVES

### SPEED CONTROLLER IN-LINE TYPE SERIES (N)AS1000-4000

- ✓ Compact Size saves space
- ✓ Speed may accurately be controlled even at low velocity
- ✓ Constant Speed easily set
- ✓ Retaining prevents accidental loss of needle
- ✓ Panel Mount Option available

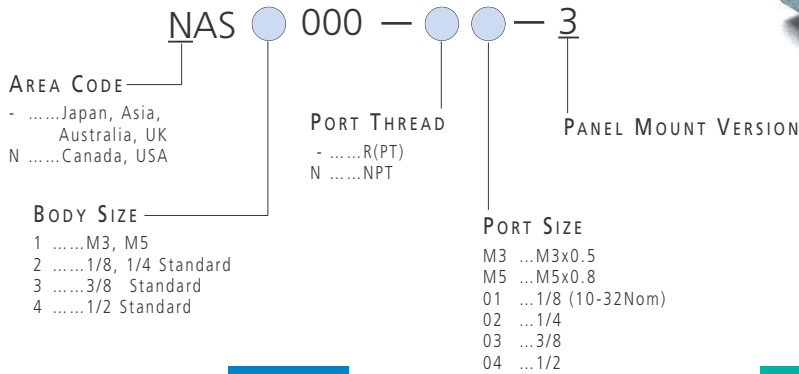


#### SYMBOLS

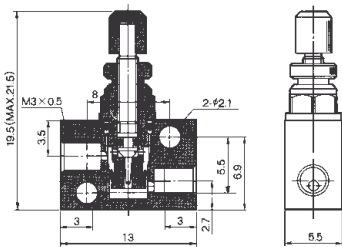


Meter-out

#### HOW TO ORDER SERIES (N)AS1000-4000



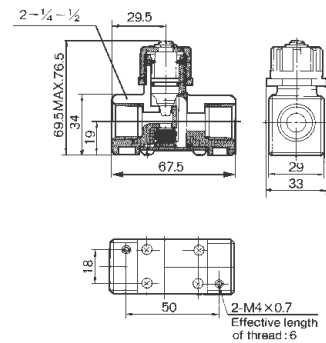
#### DIMENSIONS SERIES (N)AS1000-M3



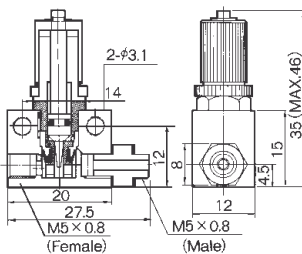
#### TECHNICAL SPECIFICATIONS

Proof Pressure	1.5MPa / 220PSI
Max Operating Pressure	1MPa / 145PSI
Min Operating Pressure	0.05MPa / 8PSI
Ambient and Fluid Temperature	5 ~ 60°C / 40 ~ 140°F
No Of Needle Rotations	8 ~ 10Turns
Panel Cut Out Dimensions	AS1000 Not Applicable AS2000 ø16.5 AS3000 ø16.5 AS4000 ø25

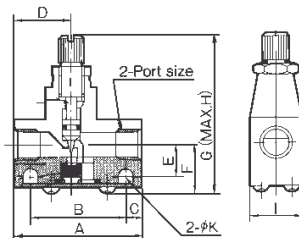
#### DIMENSIONS SERIES (N)AS4000



#### DIMENSIONS SERIES (N)AS1000-M5



#### DIMENSIONS SERIES (N)AS2000, 3000



Model	Port Size	A	B	C	D	E	F	G	H	I	øK
(N)AS2000-01	1/8	40	30	5	17	10	15.5	50	54.5	16	4.5
(N)AS2000-02	3/4	40	30	5	23	11.5	17	51.5	56	20	4.5
(N)AS3000-02, 03	1/4, 3/8	56	45.5	5.25	25	13.2	20.6	61	68	26	5.5



## SPEED CONTROLLER BODY PORTED: ELBOW TYPE SERIES (N)AS1000-4000

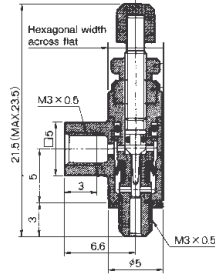


- ✓ Minimizes Installation Time and Cost
- ✓ Body swivels 360°
- ✓ Speed may be accurately controlled even at low velocity
- ✓ Constant Speed easily set
- ✓ Retaining prevents accidental loss of needle
- ✓ Tamper-Resistant Type Available

### TECHNICAL SPECIFICATIONS

Proof Pressure	1.5MPa / 220PSI
Maximum Operating Pressure	1MPa / 145PSI
Minimum Operating Pressure	0.1MPa / 14.5PSI
Ambient and Fluid Temperature	5 ~ 60°C / 40-140°F
Number of Needle Rotations	8 Turns

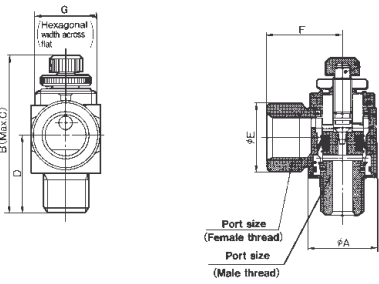
### DIMENSIONS (N)AS1200-M3 ELBOW TYPE



### SYMBOLS



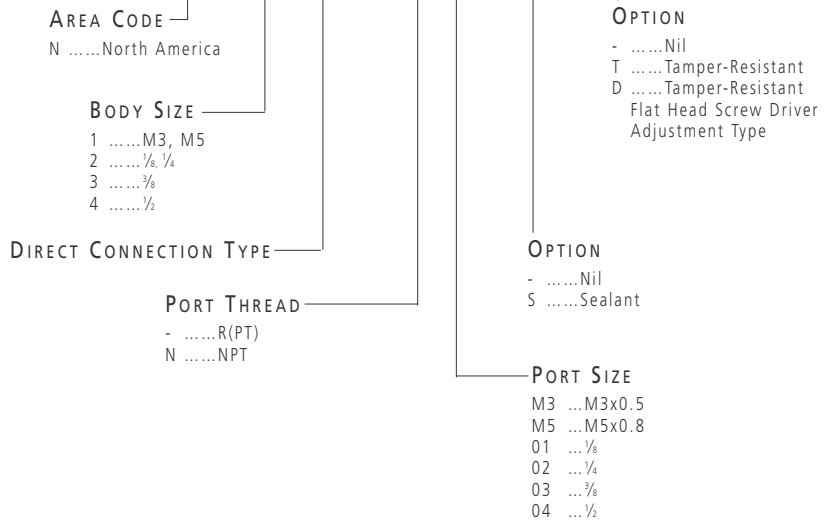
### DIMENSIONS (N)AS1200, 2200, 3200, 4200



Model	Port Size	øA	B	C	D	E	F	G
(N)AS1200-M5	M5x0.8	9	28.3	25.5	10.3	□9	10	8
(N)AS2200-01	1/8	14.6	36.4	31.4	14.1	14.3	18	12
(N)AS2200-02	1/4	19.5	40.8	35.8	18	18	27.2	17
(N)AS3200-03	3/8	24.3	46.9	41.9	20.8	22.6	30	19
(N)AS4200-04	1/2	28.5	55.6	49.4	26.7	27.5	33.5	24

### How To ORDER (N)AS1000-4000

NAS 200 — — — —





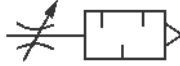
## EXHAUST RESTRICTOR WITH SILENCER SERIES (N)ASN2

- ✓ Over 20dB Sound Reduction
- ✓ Cylinder Speed easily set
- ✓ Retaining prevents accidental loss of needle
- ✓ Increased Flow
- ✓ Increased Silencing Effect
- ✓ Overall Length reduced

### TECHNICAL SPECIFICATIONS

Proof Pressure	1.5MPa / 220 PSI
Operating Pressure Range	0 ~ 1MPa / 145PSI
Ambient & Fluid Temperature	5 ~ 60°C / 40~140°F
Number of Needle Rotations	8 Turns

### SYMBOLS



### HOW TO ORDER

#### SERIES (N)ASN2

**NASN2** — ● — ● — ●

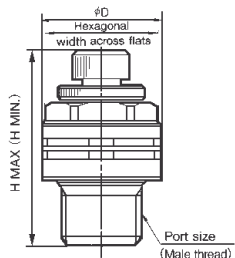
AREA CODE  
 - .....Japanese  
 N .....North America

PORT THREAD  
 - .....R(PT)  
 N .....NPT

OPTION  
 S .....W/Sealant

PORT SIZE  
 M5 ...M5x0.8  
 01 ...1/8  
 02 ...1/4  
 03 ...3/8  
 04 ...1/2

### DIMENSIONS SERIES (N)ASN



Model	Port Size	øD	H		Hexagonal Width Across Flats
			Min	Max	
(N)ASN2-M5	M5x0.8	10	20.5	23.3	8
(N)ASN2-01	1/8	15	30	34	14
(N)ASN2-02	1/4	20	34.2	38.2	17
(N)ASN2-03	3/8	25	37	41	21
(N)ASN2-04	1/2	30	49	55	24