

SPEED CONTROLLERS

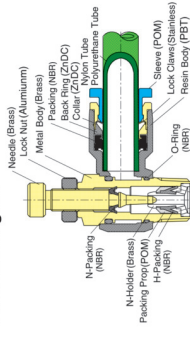
Application

- Valve used for controlling the operation speed of a driving device.
- Used for movement of machines such as cylinder, pneumatic finger, etc.

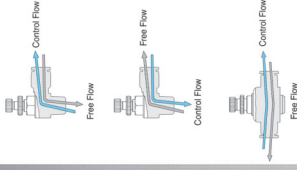
Feature

- Precisely permit the optimal rate of airflow for the smooth cylinder movement of driving devices.
- The Compact and light body permits use in confined space.
- Uni-directional airflow is available for either exhaust or inlet flow control methods.
- The compact design provides a comparable range of speed as the conventional speed controllers do.

Structural Diagram



Case In Use



▶ Out-Type

- The way to control of airflow from the thread to the sleeve.
- Air passes freely from the sleeve to the thread.

▶ In-Type

- The way to control of airflow from the sleeve to the thread.
- Air passes freely from the thread to the sleeve.

▶ Back-Type

- The way to control of Free Flow or Control Flow upon piping in accordance with the signal on the body.
- Air flows from each side of sleeve.

⚠ CAUTION

- Be sure to read "Common Precautions" and "Using Precautions of Fitting Series (P12)" before using.
- Never remove the needle by force. It causes separation of the needle from the body.
- There can be a slight leakage, therefore do not use in applications requiring zero air flow rate.

⚠ WARNING

- Be sure to use after confirming structural diagram and control direction of each controller, otherwise fittings may result in damage.
- Never roll or turn the body by force.
- When controlling the objective machine's speed, slowly open the needle of speed controller from the closed position.

Specification

Fluid	Air(No other gases or liquids)	
Working Pressure Range	0~150PSI	0~9kGf/cm ² (0~900kPa)
Negative Pressure	7.5PSI	0.5kGf/cm ² (50kPa)
Temperature Range	32~140° F	0~60° C
Applicable Tube Material	Polyurethane and Nylon	



Product Code System

NSE O8-O2 O

- ① Type
- ② Tube Dia(2D)
- ③
- ④

Code	03	04	06	10	12	16
Dia	Ø3	Ø4	Ø6	Ø10	Ø12	Ø16

③ Thread Size(T)

Code	M3	M5	01	02	03	04
Size	M3×0.5	M5×0.8	R1/8	R1/4	R3/8	R1/2

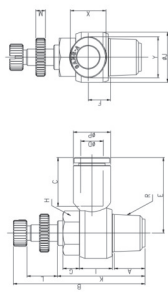
④ Control Method

Type	Meter out		Meter in	
	Standard	Compact	Standard	Compact
Sleeve	Blue	Black	Red	Red
Symbol				

Metric Size R(PT) Thread Type

- One - Touch Fittings
- Compact One - Touch Fittings
- **Speed Controllers**
- Metal Body Speed Controllers
- Rotary Joints
- Stop Fittings
- Check Valves
- Ball Valves
- Main Blocks
- Hand Valves
- Hand Slide Valves
- Two-Touch Fittings

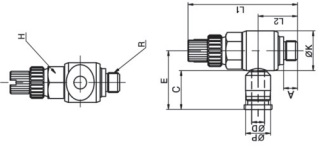
GNSE
Elbow



MODEL(ØD-T) Tube(Metric) - Thread(R)

MODEL	ØD	R	ØP	A	B	C	E	F	G	H	I	ØK	L	M	X	Y	W(G)	ØGW	ØRW	100
GNSE 04M5	4	M5	9	3.5	29.5	14.5	19.1	6.5	4	8	9.1	10.4	19.5	5	2.5	8.6	10.8	8	100	
GNSE 0401	4	R1/8	9	7.7	40.1	14.5	20.9	7	4	10	12.2	14.4	25.6	10.5	3.5	8.6	10.8	17.2	50	
GNSE 0402	4	R1/4	9	11.2	48	14.5	22.8	7	6	14	12	18.4	31.9	11.1	3.5	8.6	10.8	34.4	50	
GNSE 08M5	6	M5	11.2	3.5	29.5	15.5	21	7.7	4	8	9.1	10.4	19.5	5	2.5	8.6	10.8	9.1	100	
GNSE 0801	6	R1/8	11.2	7.7	40.1	15.5	22	7	4	10	12.2	14.4	25.6	10.5	3.5	11	13	17.9	50	
GNSE 0802	6	R1/4	11.2	11.2	48	15.5	24	7	6	14	12	18.4	31.9	11.1	3.5	11	13	35.1	50	
GNSE 0803	6	R3/8	11.2	13.3	54.2	15.5	26	8.7	5	19	15.7	22	37.2	12	3.5	11	13	62.5	25	
GNSE 0804	6	R1/2	11.2	13.3	54.2	15.5	26	8.7	5	19	15.7	22	37.2	12	3.5	11	13	62.5	25	
GNSE 0801	8	R1/8	13.6	7.7	40.1	17.8	25.1	8	4	10	12.2	14.4	25.6	10.5	3.5	13	15	19	50	
GNSE 0802	8	R1/4	13.6	11.2	48	17.8	27.6	8.1	6	14	12	18.4	31.9	11.1	3.5	13	15	36.1	50	
GNSE 0803	8	R3/8	13.6	13.3	54.2	17.8	28.6	8.1	5	19	15.7	22	37.2	12	3.5	15	15	63.5	25	
GNSE 0804	8	R1/2	13.6	16.5	59.8	17.8	31.6	8.4	5.5	24	18	28	42.8	12	3.5	13	15	94	20	
GNSE 1002	10	R1/4	16.3	11.2	48	19.4	29.6	9.6	6	14	12	18.4	31.9	11.1	3.5	16	18.5	38.9	25	
GNSE 1003	10	R3/8	16.3	13.3	54.2	19.4	30	9.7	5	19	15.7	22	37.2	12	3.5	16	18.5	67.8	25	
GNSE 1004	10	R1/2	16.3	16.5	59.8	19.4	32.9	10	5.5	24	18	28	42.8	12	3.5	16	18.5	98.7	20	
GNSE 1202	12	R1/4	19.7	11.2	48	22.4	33.9	11.3	6	14	12	18.4	31.9	11.1	3.5	19.5	22.5	42.5	25	
GNSE 1203	12	R3/8	19.7	13.3	54.2	22.4	35.9	11.4	5	19	15.7	22	37.2	12	3.5	19.5	22.5	70.6	25	
GNSE 1204	12	R1/2	19.7	16.5	59.8	22.4	38.9	11.7	5.5	24	18	28	42.8	12	3.5	19.5	22.5	100.4	20	

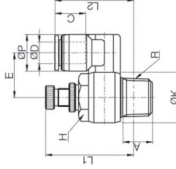
NSE-C
Mini Elbow



MODEL(ØD-T) Tube(Metric) - Thread(R)

MODEL	ØD	R	ØP	A	B	C	E	F	G	H	I	ØK	L	M	X	Y	W(G)	ØGW	ØRW	100
NSE 03-M3C	3	M3	9.5	14	4	8	6.3	10	6.3	10	6.3	10	26.5	6.9	6.7	100				
NSE 03-M5C	4	M5	9.5	14	4	8	6.3	10	6.3	10	6.3	10	2.5	6.4	8.1	100				
NSE 04-M3C	4	M3	11.5	15.7	4	8	8	10	26.5	6.9	17.5	100								
NSE 04-M5C	4	M5	11.5	15.7	4	8	8	10	26.5	6.4	34.7	100								
NSE 04-Ø1C	4	R1/8	11.5	17.8	8	10	8	14	36	11.2	9.1	50								
NSE 06-M3C	6	M3	12.5	16.4	4	8	10.4	10	26.5	6.9	18.2	100								
NSE 06-M5C	6	M5	12.5	16.4	4	8	10.4	10	26.5	6.4	35.4	100								
NSE 06-Ø1C	6	R1/8	12.5	18.2	8	10	10.4	14	36	11.2	63.9	50								
NSE 06-Ø2C	6	R1/4	12.5	20.1	11	14	10.4	18	41.5	11.2	19.1	50								

NSS
Straight



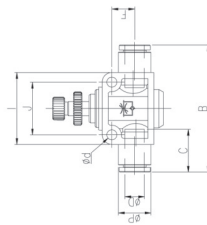
MODEL(ØD-T) Tube(Metric) - Thread(R)

MODEL	ØD	R	ØP	A	B	C	E	F	G	H	I	ØK	L	M	X	Y	W(G)	ØGW	ØRW	100
NSS 04-M5	4	M5	16	15.9	3.5	8	10.4	10.4	10.4	10.4	10.4	10.4	26.5	30.8	8.9	100				
NSS 04-Ø1	4	R1/8	16	18.1	8	10	10.4	10.4	10.4	10.4	10.4	10.4	36	33.9	24.1	50				
NSS 04-Ø2	4	R1/4	16	20.1	11.2	14	10.4	10.4	10.4	10.4	10.4	18.4	41.5	34.9	44.6	50				
NSS 06-M5	6	M5	17	15.9	3.5	8	12.4	10.4	10.4	10.4	10.4	26.5	32.2	9.8	100					
NSS 06-Ø1	6	R1/8	17	18.1	8	10	12.4	10.4	10.4	10.4	10.4	36	35.3	24.8	50					
NSS 06-Ø2	6	R1/4	17	20.1	11.2	14	12.4	10.4	10.4	10.4	10.4	41.5	36.3	45.2	50					
NSS 06-Ø3	6	R3/8	17	22.5	13.3	19	12.4	22	47	37.3	55	25								
NSS 08-Ø1	8	R1/8	18.5	18.1	8	10	14.4	14.4	14.4	14.4	14.4	36	36.8	41.9	50					
NSS 08-Ø2	8	R1/4	18.5	20.1	11.2	14	14.4	14.4	14.4	14.4	14.4	41.5	37.8	46.2	50					
NSS 08-Ø3	8	R3/8	18.5	22.5	13.3	19	14.4	22	47	36.8	57	25								
NSS 08-Ø4	8	R1/2	18.5	24.9	16.5	24	14.4	28	52	39.8	65	25								
NSS 10-Ø2	10	R1/4	21	20.1	11.2	14	17.6	18.4	17.6	18.4	17.6	41.5	40.5	76.7	25					
NSS 10-Ø3	10	R3/8	21	22.5	13.3	19	17.6	22	47	41.5	84.6	25								
NSS 10-Ø4	10	R1/2	21	24.9	16.5	24	17.6	28	52	42.5	88	20								
NSS 12-Ø2	12	R1/4	22.5	20.1	11.2	14	21.2	18.4	21.2	18.4	21.2	42	41.5	84	25					
NSS 12-Ø3	12	R3/8	22.5	22.5	13.3	19	21.2	22	47	43	86.6	20								
NSS 12-Ø4	12	R1/2	22.5	24.9	16.5	24	21.2	28	52	44	95	20								

MODEL(ØD-T) Tube(Metric) - Thread(R)

MODEL	ØD	ØP	A	B	C	E	F	G	I	J	L	M	Ød	X	Y	W(G)	ØGW	ØRW	100	
GNSE 04	4	9	11	36.8	14.5	28.7	6.5	6.5	20	14	5	2.5	3.2	8.6	10.8	11.54	50			
GNSE 06	6	11.2	15	46.7	15.5	40.9	8.5	10.9	28	20	9.5	3.5	4.2	11	13	27.61	25			
GNSE 08	8	13.6	18	53	17.8	46.2	9.5	12	30	22	10.2	3.5	4.2	13	15	40.37	25			
GNSE 10	10	16.3	21	60.6	19.4	52.5	11	12	34	26	11.5	3.5	4.2	16	18.5	66.35	20			
GNSE 12	12	19.7	28	73.8	22.4	55.6	13	16	40	32	11.5	3.5	4.2	19.5	22.5	110.59	12			

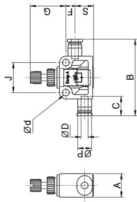
GNSE
Union Straight



MODEL [ØD-T] Tube (inch) - Thread (R)

MODEL	ØD	A	B	Ød	C	F	G	J	ØP	S	W(Ø)	ØV mm
NSF03C	3	11	33	3.2	9.5	4.25	13.5	14	6.3	8.75	8.75	50

NSF-C
Mini Union Straight



MODEL [ØD-T] Tube (Metric) - Thread (R)

MODEL	ØD	R	ØP	A	B	C	E	F	G	H	I	ØI	K	X	Y	W(Ø)	ØV mm
GNSH03M5	3	M5	9	3.5	22.5	14.5	19.5	6.6	3.5	8	11.8	10	21	8.6	10.8	6.6	100
GNSH04M5	4	M5	9	3.5	22.5	14.5	19.5	6.6	3.5	8	11.8	10	21	8.6	10.8	7	100
GNSH0401	4	R1/8	9	8	30	14.5	21.5	8.8	4	13	14.5	14	28.5	8.6	10.8	19.5	50
GNSH0402	4	R1/4	9	11	38	14.5	24	11	4	17	18	19	36.1	8.6	10.8	37.4	50
GNSH0403	4	R3/8	9	12	45.2	14.5	25.7	13.3	5.5	21	21	22.4	42.5	8.6	10.8	70.6	25
GNSH06M5	6	M5	11.2	3.5	22.5	15.5	20.5	7.1	3.5	8	11.8	10	21	8.6	10.8	7.8	100
GNSH0601	6	R1/8	11.2	8	30	15.5	22.5	8.8	4	13	14.5	14	28.5	11	13	20.2	50
GNSH0602	6	R1/4	11.2	11	38	15.5	25	11	4	17	18	19	36.1	11	13	38.2	50
GNSH0603	6	R3/8	11.2	12	45.2	15.5	26.7	13.3	5.5	21	21	22.4	42.5	11	13	71.4	25
GNSH0801	8	R1/8	13.6	8	30	17.8	25.6	9.5	4	13	14.5	14	28.5	13	15	21.5	50
GNSH0802	8	R1/4	13.6	11	38	17.8	28.1	11	4	17	18	19	36.1	13	15	39.5	50
GNSH0803	8	R3/8	13.6	12	45.2	17.8	29.8	13.3	5.5	21	21	22.4	42.5	13	15	71.8	25
GNSH0804	8	R1/2	13.6	15	51.4	17.8	32.1	13.8	7	24	22	27	48.7	13	15	111.7	20
GNSH1002	10	R1/4	16.3	11	38	19.4	28.9	11.7	4	17	18	19	36.1	16	18.5	42.4	25
GNSH1003	10	R3/8	16.3	12	45.2	19.4	30.6	13.3	5.5	21	21	22.4	42.5	16	18.5	73.8	25
GNSH1004	10	R1/2	16.3	15	51.4	19.4	32.9	13.8	7	24	22	27	48.7	16	18.5	112.8	20
GNSH1203	12	R3/8	19.7	12	45.2	22.4	35.9	13.3	5.5	21	21	22.4	42.5	19.5	22.5	78.2	25
GNSH1204	12	R1/2	19.7	15	51.4	22.4	38.2	13.8	7	24	22	27	48.7	19.5	22.5	117.2	20

GNSH
Straight

