

SPEED CONTROLLERS



Uses	• This valve is used to control the speed of pneumatic driving devices. • Installed mainly in air driving devices	
Features	• Flow control is easy for fine control. • Main body can be rotated 360° after installation. • Tube direction and angle can be adjusted according to piping. • Use screw driver to easily adjust speed in narrow and restricted areas. (NSC [D] type) • Occupies small area when installed.	
Specifications	Applicable fluid	compressed air (Not applicable to gases or liquids)
	Operating pressure	14.2~150PSI / 1~9.9kgf /cm ² (100~990kPa) ※ The combination with the applied tube shall be decided based on maximum operating pressure of the tube.
	Operating temperature range	32~140° F / 0~60° C
	Hose materials used	polyurethane, nylon
Structural drawing	MSC MSF NSC	
Example of use	OUT Type Meter-Out method control Air entering from the screw side is controlled. Air entering from the fitting side is uncontrolled and flows freely. IN Type Meter-In method control Air entering from the fitting side is controlled. Air entering from the screw side is uncontrolled and flows freely.	
CAUTIONS	• Note safety precautions, how to classify warning signs (p. 25), and common precautions for fitting products (p.26) before using. • Not to be used as a stop valve where there should be no leakage. Allows a certain amount of leakage, so avoid using under conditions that require zero leakage.	
WARNINGS	• Check direction of air flow control before using. If used in reverse direction, there is a risk of personal injury as the speed control needle will not work properly, the device may be damaged, and the actuator bounce to go out. • Adjust speed by fully closing the needle and then slowly opening it. • Check the number of turns of the needle valve in use. Rotating the needle too many turns may cause damage. • Do not impact on or forcibly rotate the body or fitting. This may cause product damage or air leakage.	

Product Code System

METRIC - BSPT(R)			
NSC 06-01-MO			
SPEED CONTROLLERS	TUBE DIA	THREAD SIZE	CONTROL METHOD
04	Ø4	M5	METER-OUT
06	Ø6	M5	CODE No Signal
08	Ø8	R(P.T) M5×0.8	METER-IN
10	Ø10	01	CODE IN
12	Ø12	02	
		03	
		04	

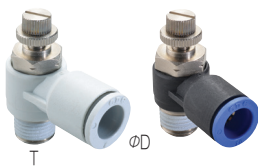
METRIC - BSPP(G)			
NSC 06-G01			
SPEED CONTROLLERS	TUBE DIA	THREAD SIZE	CONTROL METHOD
04	Ø4	G(PF) G1	METER-OUT
06	Ø6	G01	CODE No Signal
08	Ø8	G02	METER-IN
10	Ø10	G03	
12	Ø12	G04	

INCH - BSPT(R)			
NSC-1/4-01			
SPEED CONTROLLERS	TUBE DIA	THREAD SIZE	CONTROL METHOD
3/32	Ø 3/32	M5	METER-OUT
1/16	Ø 1/16	M5	CODE No Signal
1/8	Ø 1/8	R(P.T) M5×0.8	METER-IN
3/16	Ø 3/16	01	CODE IN
1/4	Ø 1/4	02	
5/16	Ø 5/16	03	
3/8	Ø 3/8	04	

INCH - NPT			
NSC 1/4-N1-MO			
SPEED CONTROLLERS	TUBE DIA	THREAD SIZE	CONTROL METHOD
3/32	Ø 3/32	UNF U	METER-OUT
1/16	Ø 1/16	10-32	CODE No Signal
1/8	Ø 1/8	NPT	METER-IN
3/16	Ø 3/16	N1	CODE IN
1/4	Ø 1/4	N2	
5/16	Ø 5/16	N3	
3/8	Ø 3/8	N4	

MSC

Elbow
Swivel rotating type



MODEL(ϕ D-T)

Tube Metric -Thread R		Tube Inch -Thread R	Tube Inch -Thread NPT		Tube Metric -Thread G	
MSC 03-M5	MSC 08-02	NSC 1/4 -M5	NSC 1/8 -U	NSC 1/4 -N03	MSC 04-G01	MSC 10-G01
MSC 04-M3	MSC 08-03	NSC 1/4 -01	NSC 5/32 -U	NSC 5/16 -N01	MSC 04-G02	MSC 10-G02
MSC 04-M5	MSC 08-04	NSC 1/4 -02	NSC 5/32 -N01	NSC 5/16 -N02	MSC 06-G01	MSC 10-G03
MSC 04-01	MSC 10-01	NSC 5/16 -01	NSC 5/32 -N02	NSC 5/16 -N03	MSC 06-G02	MSC 10-G04
MSC 04-02	MSC 10-02	NSC 5/16 -02	NSC 3/16 -U	NSC 5/16 -N04	MSC 06-G03	MSC 12-G02
MSC 06-M5	MSC 10-03	NSC 5/16 -03	NSC 3/16 -N01	NSC 3/8 -N02	MSC 06-G04	MSC 12-G03
MSC 06-01	MSC 10-04	NSC 3/8 -02	NSC 3/16 -N02	NSC 3/8 -N03	MSC 08-G01	MSC 12-G04
MSC 06-02	MSC 12-02	NSC 3/8 -03	NSC 3/16 -N03	NSC 3/8 -N04	MSC 08-G02	
MSC 06-03	MSC 12-03		NSC 1/4 -U	NSC 1/2 -N02	MSC 08-G03	
MSC 06-04	MSC 12-04		NSC 1/4 -N01	NSC 1/2 -N03	MSC 08-G04	
MSC 08-01			NSC 1/4 -N02	NSC 1/2 -N04		

MSC-G

Elbow
Swivel rotating type



NSS

Elbow
Swivel rotating type



MODEL(ϕ D-T)

Tube Metric -Thread R			Tube Metric -Thread G		
NSS 04-M5	NSS 06-03	NSS 10-03	NSS 04-G01	NSS 08-G02	NSS 12-G02
NSS 04-01	NSS 08-01	NSS 10-04	NSS 04-G02	NSS 08-G03	NSS 12-G03
NSS 04-02	NSS 08-02	NSS 12-02	NSS 06-G01	NSS 08-G04	NSS 12-G04
NSS 06-M5	NSS 08-03	NSS 12-03	NSS 06-G02	NSS 10-G02	
NSS 06-01	NSS 08-04	NSS 12-04	NSS 06-G03	NSS 10-G03	
NSS 06-02	NSS 10-02		NSS 08-G01	NSS 10-G04	

NSS-G

Elbow
Swivel rotating type



NSC(D)

Elbow
Swivel rotating type



MODEL(ϕ D-T)

Tube Metric -Thread R		Tube Inch -Thread R	Tube Inch -Thread NPT		Tube Metric -Thread G	
NSC 03-M5(D)	NSC 08-02(D)	NSC 1/4 -M5(D)	NSC 1/8 -U(D)	NSC 1/4 -N03(D)	NSC 04-G01(D)	NSC 08-G04(D)
NSC 04-M5(D)	NSC 08-03(D)	NSC 1/4 -01(D)	NSC 5/32 -U(D)	NSC 5/16 -N01(D)	NSC 04-G02(D)	NSC 10-G01(D)
NSC 04-01(D)	NSC 08-04(D)	NSC 1/4 -02(D)	NSC 5/32 -N01(D)	NSC 5/16 -N02(D)	NSC 06-G01(D)	NSC 10-G02(D)
NSC 04-02(D)	NSC 10-01(D)	NSC 5/16 -01(D)	NSC 5/32 -N02(D)	NSC 5/16 -N03(D)	NSC 06-G02(D)	NSC 10-G03(D)
NSC 06-M5(D)	NSC 10-02(D)	NSC 5/16 -02(D)	NSC 3/16 -U(D)	NSC 5/16 -N04(D)	NSC 06-G03(D)	NSC 10-G04(D)
NSC 06-01(D)	NSC 10-03(D)	NSC 5/16 -03(D)	NSC 3/16 -N01(D)	NSC 3/8 -N02(D)	NSC 06-G04(D)	NSC 12-G02(D)
NSC 06-02(D)	NSC 10-04(D)	NSC 3/8 -02(D)	NSC 3/16 -N02(D)	NSC 3/8 -N03(D)	NSC 08-G01(D)	NSC 12-G03(D)
NSC 06-03(D)	NSC 12-02(D)	NSC 3/8 -03(D)	NSC 3/16 -N03(D)	NSC 3/8 -N04(D)	NSC 08-G02(D)	NSC 12-G04(D)
NSC 06-04(D)	NSC 12-03(D)		NSC 1/4 -U(D)	NSC 1/2 -N03(D)	NSC 08-G03(D)	
NSC 08-01(D)	NSC 12-04(D)		NSC 1/4 -N01(D)	NSC 1/2 -N04(D)		
			NSC 1/4 -N02(D)			

NSC-G(D)

Elbow
Swivel rotating type



NSS(D)

Elbow
Swivel rotating type



MODEL(ϕ D-T)

Tube Metric -Thread R			Tube Metric -Thread G		
NSS 04-M5(D)	NSS 06-03(D)	NSS 10-03(D)	NSS 04-G01(D)	NSS 08-G02(D)	NSS 12-G02(D)
NSS 04-01(D)	NSS 08-01(D)	NSS 10-04(D)	NSS 04-G02(D)	NSS 08-G03(D)	NSS 12-G03(D)
NSS 04-02(D)	NSS 08-02(D)	NSS 12-02(D)	NSS 06-G01(D)	NSS 08-G04(D)	NSS 12-G04(D)
NSS 06-M5(D)	NSS 08-03(D)	NSS 12-03(D)	NSS 06-G02(D)	NSS 10-G02(D)	
NSS 06-01(D)	NSS 08-04(D)	NSS 12-04(D)	NSS 06-G03(D)	NSS 10-G03(D)	
NSS 06-02(D)	NSS 10-02(D)		NSS 08-G01(D)	NSS 10-G04(D)	

NSS-G(D)

Elbow
Swivel rotating type



NSC(DC)

Elbow
Swivel rotating type



MODEL(ϕ D-T)

Tube Metric -Thread R		Tube Inch -Thread R	Tube Inch -Thread NPT		Tube Metric -Thread G	
NSC 03-M5(DC)	NSC 08-03(DC)	NSC 1/4-M5(DC)	NSC 1/8 -U(DC)	NSC 1/4-N03(DC)	NSC 04-G01(DC)	NSC 10-G02(DC)
NSC 04-M5(DC)	NSC 08-04(DC)	NSC 1/4-01(DC)	NSC 5/32 -U(DC)	NSC 5/16 -N01(DC)	NSC 04-G02(DC)	NSC 10-G03(DC)
NSC 04-01(DC)	NSC 10-01(DC)	NSC 1/4-02(DC)	NSC 5/32 -N01(DC)	NSC 5/16 -N02(DC)	NSC 06-G01(DC)	NSC 10-G04(DC)
NSC 04-02(DC)	NSC 10-02(DC)	NSC 5/16 -01(DC)	NSC 5/32 -N02(DC)	NSC 5/16 -N03(DC)	NSC 06-G02(DC)	NSC 12-G02(DC)
NSC 06-M5(DC)	NSC 10-03(DC)	NSC 5/16 -02(DC)	NSC 3/16 -U(DC)	NSC 5/16 -N04(DC)	NSC 06-G03(DC)	NSC 12-G03(DC)
NSC 06-01(DC)	NSC 10-04(DC)	NSC 5/16 -03(DC)	NSC 3/16 -N01(DC)	NSC 3/8 -N02(DC)	NSC 06-G04(DC)	NSC 12-G04(DC)
NSC 06-02(DC)	NSC 12-02(DC)	NSC 3/8 -02(DC)	NSC 3/16 -N02(DC)	NSC 3/8 -N03(DC)	NSC 08-G01(DC)	
NSC 06-03(DC)	NSC 12-03(DC)	NSC 3/8 -03(DC)	NSC 3/16 -N03(DC)	NSC 3/8 -N04(DC)	NSC 08-G02(DC)	
NSC 06-04(DC)	NSC 12-04(DC)		NSC 1/4 -U(DC)	NSC 1/2 -N03(DC)	NSC 08-G03(DC)	
NSC 08-01(DC)			NSC 1/4 -N01(DC)	NSC 1/2 -N04(DC)	NSC 08-G04(DC)	
NSC 08-02(DC)			NSC 1/4 -N02(DC)		NSC 10-G01(DC)	

NSC-G(DC)

Elbow
Swivel rotating type



NSS(DC)

Elbow
Swivel rotating type



MODEL(ϕ D-T)

Tube Metric -Thread R			Tube Metric -Thread G		
NSS 04-M5(DC)	NSS 06-03(DC)	NSS 10-03(DC)	NSS 04-G01(DC)	NSS 08-G02(DC)	NSS 12-G02(DC)
NSS 04-01(DC)	NSS 08-01(DC)	NSS 10-04(DC)	NSS 04-G02(DC)	NSS 08-G03(DC)	NSS 12-G03(DC)
NSS 04-02(DC)	NSS 08-02(DC)	NSS 12-02(DC)	NSS 06-G01(DC)	NSS 08-G04(DC)	NSS 12-G04(DC)
NSS 06-M5(DC)	NSS 08-03(DC)	NSS 12-03(DC)	NSS 06-G02(DC)	NSS 10-G02(DC)	
NSS 06-01(DC)	NSS 08-04(DC)	NSS 12-04(DC)	NSS 06-G03(DC)	NSS 10-G03(DC)	
NSS 06-02(DC)	NSS 10-02(DC)		NSS 08-G01(DC)	NSS 10-G04(DC)	

NSS-G(DC)

Elbow
Swivel rotating type



NSF



MODEL(φD)

Tube Metric	Tube Inch
NSF 04	NSF 5/32
NSF 06	NSF 3/16
NSF 08	NSF 1/4
NSF 10	NSF 5/16
NSF 12	NSF 3/8
	NSF 1/2

MSF



MODEL(φD)

Tube Metric	Tube Inch
MSF 04	
MSF 06	
MSF 08	
MSF 10	
MSF 12	

MEVU



MODEL(T)

Tube Metric
MEVU 04
MEVU 06

MEVS



MODEL(T)

Tube Metric
MEVS 04
MEVS 06

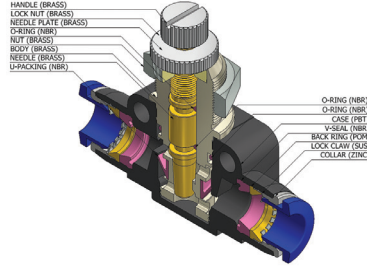


Panel Mount Type Speed Control

Uses and Features

- Union speed control valve of panel mount type
- Convenient to attach and detach using hexagon nuts
- Capable of constant speed control

Structural drawing



Product model Number

NSFB



MODEL(φD)

Tube Metric	Tube Inch
NSFB 04	NSFB 5/32
NSFB 06	NSFB 3/16
NSFB 08	NSFB 1/4
NSFB 10	NSFB 5/16
NSFB 12	NSFB 3/8
	NSFB 1/2

MSFB



MODEL(φD)

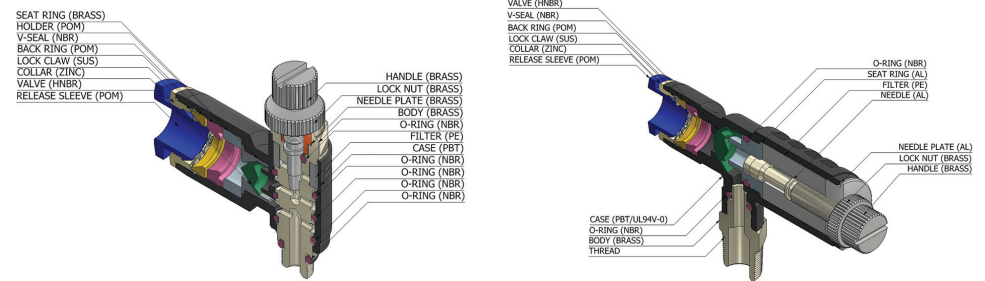
Tube Metric	
MSFB 04	
MSFB 06	
MSFB 08	
MSFB 10	
MSFB 12	

Quick Exhaust Speed Controllers

Uses and Features

- Quick exhaust valve + exhaust speed regulator function
- Capable of high-speed operation of the cylinder
- One-touch fitting with built-in silencer speed control

Structural drawing



Product model Number

ESC



MODEL(φD-T)

Tube Metric -Thread M	Tube Metric -Thread R	Tube Metric -Thread R	Tube Metric -Thread R
ESC 04-M3	ESC 06-S-01	ESC 08-M-01	ESC 10-L-02
ESC 04-M5	ESC 06-S-02	ESC 08-M-02	ESC 10-L-03
ESC 06-M5	ESC 08-S-01	ESC 08-M-03	ESC 10-L-04
	ESC 08-S-02	ESC 10-M-01	ESC 12-L-02
		ESC 10-M-02	ESC 12-L-03
		ESC 10-M-03	ESC 12-L-04

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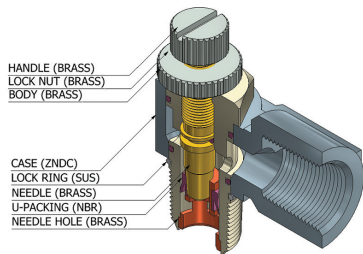
Speed Controllers

Speed Controllers / Elbow Type (Metal Body)

Uses and Features

- Speed control valve of metal body type
- Cost reduced and work man hours minimized
- 360° rotation type allows free setup of piping
- Capable of a constant speed control

Structural drawing



NSCF



NSCF-G



Product model name

Thread R, Rc		MODEL(T)	Thread NPT	Thread G
NSCF 01			NSCF N01	NSCF G01
NSCF 02			NSCF N02	NSCF G02
NSCF 03			NSCF N03	NSCF G03
NSCF 04			NSCF N04	NSCF G04

In-Line Speed Controllers

Uses and Features

- Speed control valve of metal body type to be used in piping.
- Compact size for utilizing small areas.

Structural drawing



NSFF



Product model Number

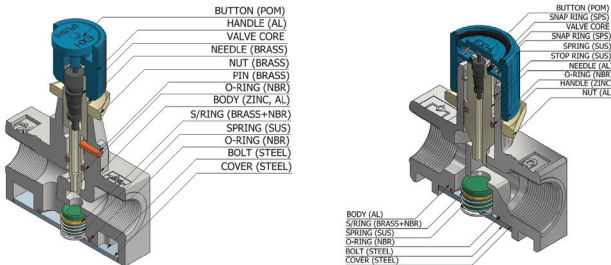
MODEL(T)
Thread Rc
NSFF 01
NSFF 02
NSFF 03
NSFF 04

In-Line Speed Controllers with Exhaust Valve

Uses and Features

- Speed control valve of metal body type to be used in piping.
- Compact size for utilizing small areas.

Structural drawing



Product model Number

NSFP



MODEL(T)

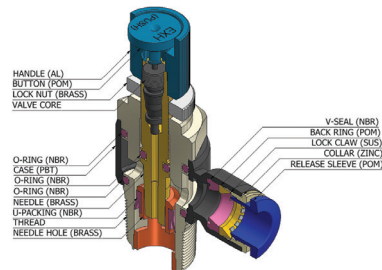
Thread Rc
NSFP 01
NSFP 02
NSFP 03
NSFP 04

Speed Controllers with Quick Exhaust Valve

Uses and Features

- Valve used for speed control and residual pressure release.
- Easy in fine flow control.
- Capable of constant speed control.

Structural drawing



Product model Number

NSCP

Elbow Swivel rotating type



NSCP-G

Elbow Swivel rotating type



MODEL(φD-T)	
Tube Metric -Thread R	Tube Metric -Thread G
NSCP 04-01	NSCP 08-04
NSCP 04-02	NSCP 10-01
NSCP 06-01	NSCP 10-02
NSCP 06-02	NSCP 10-03
NSCP 06-03	NSCP 10-04
NSCP 06-04	NSCP 12-02
NSCP 08-01	NSCP 12-03
NSCP 08-02	NSCP 12-04
NSCP 08-03	
NSCP 04-G01	NSCP 08-G04
NSCP 04-G02	NSCP 10-G01
NSCP 06-G01	NSCP 10-G02
NSCP 06-G02	NSCP 10-G03
NSCP 06-G03	NSCP 10-G04
NSCP 06-G04	NSCP 12-G02
NSCP 08-G01	NSCP 12-G03
NSCP 08-G02	NSCP 12-G04
NSCP 08-G03	

NSSP

Elbow Swivel rotating type



NSSP-G

Elbow Swivel rotating type



MODEL(φD-T)	
Tube Metric -Thread R	Tube Metric -Thread G
NSSP 04-01	NSSP 08-04
NSSP 04-02	NSSP 10-02
NSSP 06-01	NSSP 10-03
NSSP 06-02	NSSP 10-04
NSSP 06-03	NSSP 12-02
NSSP 08-01	NSSP 12-03
NSSP 08-02	NSSP 12-04
NSSP 08-03	
NSSP 04-G01	NSSP 08-G04
NSSP 04-G02	NSSP 10-G02
NSSP 06-G01	NSSP 10-G03
NSSP 06-G02	NSSP 10-G04
NSSP 06-G03	NSSP 12-G02
NSSP 08-G01	NSSP 12-G03
NSSP 08-G02	NSSP 12-G04
NSSP 08-G03	