

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

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.

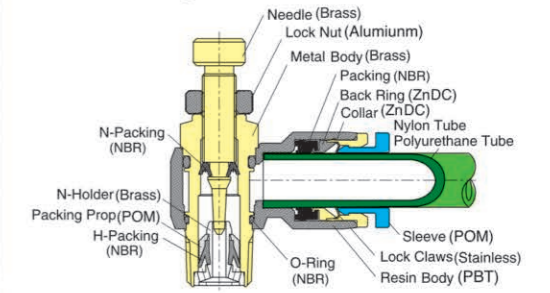
Feature

- 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.

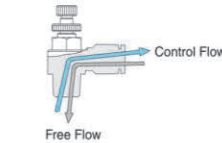
Specification

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	

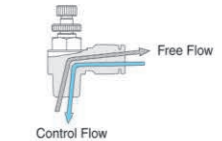
Structural Diagram



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.



- **Flat-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.

Product Code System

NSE O8-O2 O

① ② ③ ④

① Type

② Tube Dia(∅D)

Code	03	04	06	10	12	16
Dia	∅3	∅4	∅6	∅10	∅12	∅16

③ Thread Size(T)

	Metric Size			Taper Pipe Thread		
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				

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

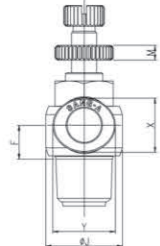
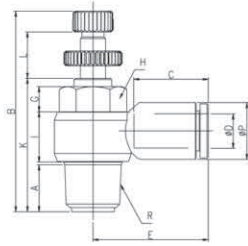
- Be sure to use after confirming structural diagram and control direction of each controller, otherwise fittings may result in damage.
- Never roll or turn the body by force.
- When controlling the objective machine's speed, slowly open the needle of speed controller from the closed position.

GNSE
Elbow



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

MODEL	ØD	R	ØP	A	B	C	E	F	G	H	I	ØJ	K	L	M	X	Y	W.G(g)	Qty/Inbox
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 06M5	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 0601	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 0602	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 0603	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 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	13	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

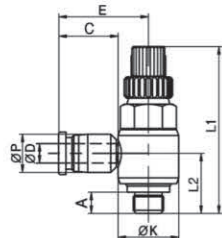
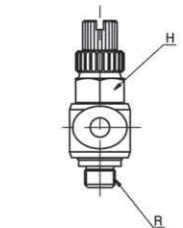


NSE-C
Mini Elbow



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

MODEL	ØD	R	C	E	A	H	ØP	ØK	L1(Max)	L2	W.G(g)	Qty/Inbox
NSE 03-M3C	3	M3	9.5	14	4	8	6.3	10	26.5	6.9	6.7	100
NSE 03-M5C	3	M5	9.5	14	4	8	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 04-01C	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 06-01C	6	R1/8	12.5	18.2	8	10	10.4	14	36	11.2	63.9	50
NSE 06-02C	6	R1/4	12.5	20.1	11	14	10.4	18	41.5	11.2	19.1	50

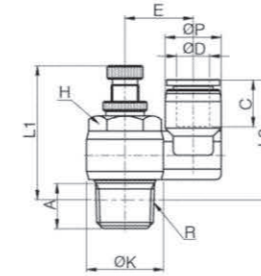


NSS
Straight



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

MODEL	ØD	R	C	E	A	H	ØP	ØK	L1(Max)	L2	W.G(g)	Qty/Inbox
NSS 04-M5	4	M5	16	15.9	3.5	8	10.4	10.4	26.5	30.8	8.9	100
NSS 04-01	4	R1/8	16	18.1	8	10	10.4	14.4	36	33.9	24.1	50
NSS 04-02	4	R1/4	16	20.1	11.2	14	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	26.5	32.2	9.8	100
NSS 06-01	6	R1/8	17	18.1	8	10	12.4	14.4	36	35.3	24.8	50
NSS 06-02	6	R1/4	17	20.1	11.2	14	12.4	18.4	41.5	36.3	45.2	50
NSS 06-03	6	R3/8	17	22.5	13.3	19	12.4	22	47	37.3	55	25
NSS 08-01	8	R1/8	18.5	18.1	8	10	14.4	14.4	36	36.8	41.9	50
NSS 08-02	8	R1/4	18.5	20.1	11.2	14	14.4	18.4	41.5	37.8	46.2	50
NSS 08-03	8	R3/8	18.5	22.5	13.3	19	14.4	22	47	38.8	57	25
NSS 08-04	8	R1/2	18.5	24.9	16.5	24	14.4	28	52	39.8	65	25
NSS 10-02	10	R1/4	21	20.1	11.2	14	17.6	18.4	41.5	40.5	76.7	25
NSS 10-03	10	R3/8	21	22.5	13.3	19	17.6	22	47	41.5	84.6	25
NSS 10-04	10	R1/2	21	24.9	16.5	24	17.6	28	52	42.5	88	20
NSS 12-02	12	R1/4	22.5	20.1	11.2	14	21.2	18.4	41.5	42	84	25
NSS 12-03	12	R3/8	22.5	22.5	13.3	19	21.2	22	47	43	85.6	20
NSS 12-04	12	R1/2	22.5	24.9	16.5	24	21.2	28	52	44	95	20

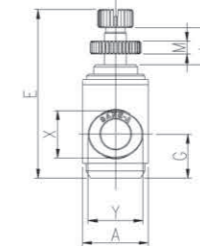
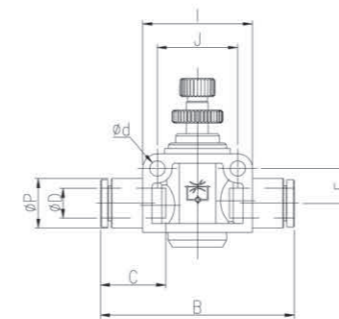


GNSF
Union Straight

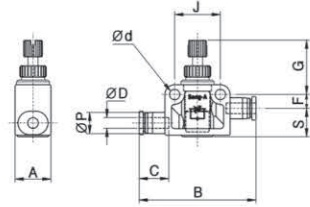


MODEL [ØD-T] Tube (Metric) – Thread (R)

MODEL	ØD	ØP	A	B	C	E	F	G	I	J	L	M	Ød	X	Y	W.G(g)	Qty/Inbox
GNSF 04	4	9	11	38.8	14.5	28.7	6.5	6.5	20	14	5	2.5	3.2	8.6	10.8	11.54	50
GNSF 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
GNSF 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
GNSF 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
GNSF 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



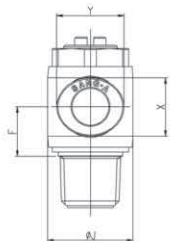
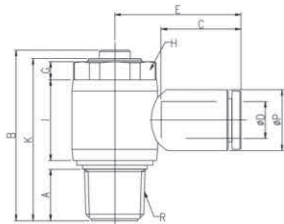
NSF-C
Mini Union Straight



MODEL[ØD-T] Tube(Inch) – Thread(R)

MODEL	ØD	A	B	Ød	C	F	G	J	ØP	S	W.G(g)	Qty/Inbox
NSF 03C	3	11	33	3.2	9.5	4.25	13.5	14	6.3	8.75	8.75	50

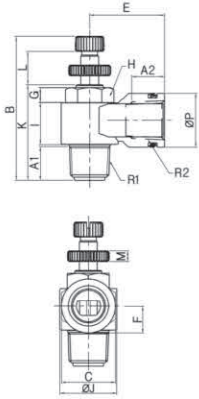
GNSH
Straight



MODEL[ØD-T] Tube(Metric) – Thread(R)

MODEL	ØD	R	ØP	A	B	C	E	F	G	H	I	ØJ	K	X	Y	W.G(g)	Qty/Inbox
GNSH 03M5	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
GNSH 04M5	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
GNSH 0401	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
GNSH 0402	4	R1/4	9	11	38	14.5	24	11	4	17	18	19	36.1	8.6	10.8	37.4	50
GNSH 0403	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
GNSH 06M5	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
GNSH 0601	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
GNSH 0602	6	R1/4	11.2	11	38	15.5	25	11	4	17	18	19	36.1	11	13	38.2	50
GNSH 0603	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
GNSH 0801	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
GNSH 0802	8	R1/4	13.6	11	38	17.8	28.1	11	4	17	18	19	36.1	13	15	39.5	50
GNSH 0803	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
GNSH 0804	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
GNSH 1002	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
GNSH 1003	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
GNSH 1004	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
GNSH 1203	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
GNSH 1204	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

NSL
Straight



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

MODEL	R1	R2	ØP	A1	A2	B	C	E	F	G	H	I	ØJ	K	L	M	W.G(g)	Qty/ Inbox
NSL M5	M5	M5	8	3.5	4.5	29.5	8	10.5	6.0	4	8	9.1	10	19.5	5	2.5	8.7	100
NSL 01	R1/8	R1/8	14	7.7	8.5	40.1	14	18	7.8	4	10	12.2	14.6	25.6	10.5	3.5	23.5	50
NSL 02	R1/4	R1/4	18	11.2	11	48	18	25	9	5	14	14	19	31.9	11.1	3.5	51	50
NSL 03	R3/8	R3/8	22	13.3	12	54.2	22	30	11	5	19	15.7	24	37.2	12	3.5	109.4	25
NSL 04	R1/2	R1/2	27	16.5	15	61.8	27	35.5	13.5	5.5	24	20	29	44.8	12	3.5	167	20

Metric Size G(PF) Thread Type

One -Touch Fittings

Compact One -Touch Fittings

— **Speed Controllers**

Metal Body Speed Controllers

Rotary Joints

Stop Fittings

Check Valves

Ball Valves

Hand Valves

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.

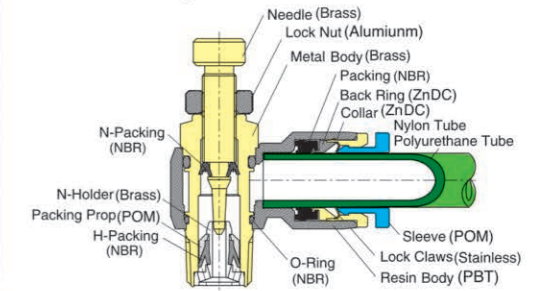
Feature

- 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.

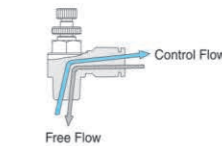
Specification

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	

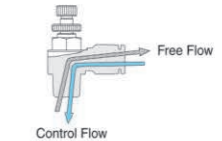
Structural Diagram



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.



- **Flat-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.

Product Code System

NSE 08-G02 O

① ② ③ ④

① Type

② Tube Dia(∅D)

Code	03	04	06	08	10	12
Dia	∅3	∅4	∅6	∅8	∅10	∅12

③ Thread Size(T)

Code	Metric Size		Taper Pipe Thread			
	M3	M5	G01	G02	G03	G04
Size	M3×0.5	M5×0.8	R1/8	R1/4	R3/8	R1/2

④ Control Method

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

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

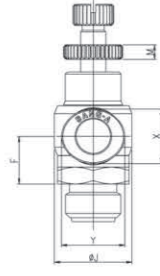
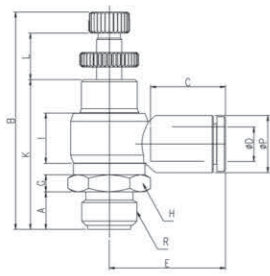
- Be sure to use after confirming structural diagram and control direction of each controller, otherwise fittings may result in damage.
- Never roll or turn the body by force.
- When controlling the objective machine's speed, slowly open the needle of speed controller from the closed position.

GNSE-G
Male Straight



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

MODEL	ØD	R	ØP	A	B	C	E	F	G	H	I	ØJ	K	L	M	X	Y	W.G(g)	Qty/Inbox
GNSE 04G01	4	G1/8	9	6.4	42.6	14.5	20.9	9.9	4	14	12.2	14.4	28.1	10.5	3.5	8.6	10.8	20.8	50
GNSE 04G02	4	G1/4	9	9	51.7	14.5	22.8	12.4	4	17	12	18.4	35.6	11.1	3.5	8.6	10.8	22	50
GNSE 06G01	6	G1/8	11.2	6.4	42.6	15.5	22	9.9	4	14	12.2	14.4	28.1	10.5	3.5	11	13	21.6	50
GNSE 06G02	6	G1/4	11.2	9	51.7	15.5	24	12.4	4	17	12	18.4	35.6	11.1	3.5	11	13	39.8	50
GNSE 06G03	6	G3/8	11.2	10.7	58.3	15.5	26	15.3	5	20	15.7	22	41.3	12	3.5	11	13	72.5	25
GNSE 08G01	8	G1/8	13.6	6.4	42.6	17.8	25.1	8.9	4	14	12.2	14.4	28.1	10.5	3.5	13	15	22.6	50
GNSE 08G02	8	G1/4	13.6	9	51.7	17.8	27.6	11.3	4	17	12	18.4	35.6	11.1	3.5	13	15	44.6	50
GNSE 08G03	8	G3/8	13.6	10.7	58.3	17.8	28.6	15.9	5	20	15.7	22	41.3	12	3.5	13	15	73.4	25
GNSE 08G04	8	G1/2	13.6	13	61.8	17.8	31.6	16.7	6	24	18	28	44.8	12	3.5	13	15	100.1	25
GNSE 10G02	10	G1/4	16.3	9	51.7	19.4	29.6	9.8	4	17	12	18.4	35.6	11.1	3.5	16	18.5	47.6	25
GNSE 10G03	10	G3/8	16.3	10.7	58.3	19.4	30	14.3	5	20	15.7	22	41.3	12	3.5	16	18.5	76.3	25
GNSE 10G04	10	G1/2	16.3	13	61.8	19.4	32.9	15.1	6	24	18	28	44.8	12	3.5	16	18.5	103.2	20
GNSE 12G03	12	G3/8	19.7	10.7	58.3	22.4	35.9	12.6	5	20	15.7	22	41.3	12	3.5	19.5	22.5	79.4	20
GNSE 12G04	12	G1/2	19.7	13	61.8	22.4	38.9	13.4	6	24	18	28	44.8	12	3.5	19.5	22.5	106.1	20

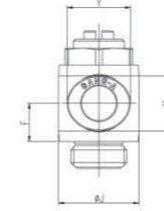
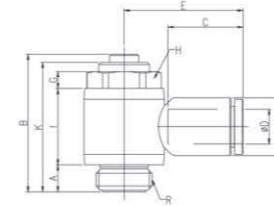


GNSH-G
Elbow G-Thread

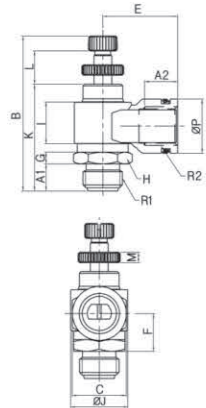


MODEL [ØD-T] Tube (Metric) - Thread (G)

MODEL	ØD	R	ØP	A	B	C	E	F	G	H	I	ØJ	K	X	Y	W.G(g)	Qty/Inbox
GNSH 04G01	4	G1/8	9	5	30	14.5	21.5	7.3	4	13	14.5	14	28.5	8.6	10.8	19.2	50
GNSH 04G02	4	G1/4	9	6	32.5	14.5	24	9	4	16	18	19	30.6	8.6	10.8	31.3	50
GNSH 04G03	4	G3/8	9	7	45.2	14.5	25.7	10.5	6.5	20	21	22.4	42.5	8.6	10.8	71.2	25
GNSH 06G01	6	G1/8	11.2	5	30	15.5	22.5	7.3	4	13	14.5	14	28.5	11	13	19.9	50
GNSH 06G02	6	G1/4	11.2	6	32.5	15.5	25	9	4	16	18	19	30.6	11	13	32.1	50
GNSH 06G03	6	G3/8	11.2	7	45.2	15.5	26.7	10.5	6.5	20	21	22.4	42.5	11	13	72.0	25
GNSH 08G01	8	G1/8	13.6	5	30	17.8	25.6	8	4	13	14.5	14	28.5	13	15	21.2	50
GNSH 08G02	8	G1/4	13.6	6	32.5	17.8	28.1	9	4	16	18	19	30.6	13	15	33.4	50
GNSH 08G03	8	G3/8	13.6	7	45.2	17.8	29.8	10.5	6.5	20	21	22.4	42.5	13	15	72.4	25
GNSH 08G04	8	G1/2	13.6	8.5	51.7	17.8	32.1	11	7	24	22	27	49	13	15	103.8	20
GNSH 10G02	10	G1/4	16.3	6	32.5	19.4	28.9	9.7	4	16	18	19	30.6	16	18.5	36.3	25
GNSH 10G03	10	G3/8	16.3	7	45.2	19.4	30.6	10.5	6.5	20	21	22.4	42.5	16	18.5	74.4	25
GNSH 10G04	10	G1/2	16.3	8.5	51.7	19.4	32.9	11	7	24	22	27	49	16	18.5	104.9	20
GNSH 12G03	12	G3/8	19.7	7	45.2	22.4	35.9	11.9	6.5	20	21	22.4	42.5	19.5	22.5	78.8	25
GNSH 12G04	12	G1/2	19.7	8.5	51.7	22.4	38.2	11.9	7	24	22	27	49	19.5	22.5	109.3	20



NSL-G
Elbow G-Thread



MODEL [ØD-T] Tube (Metric) – Thread (G)

MODEL	R1	R2	ØP	A1	A2	B	C	E	F	G	H	I	ØJ	K	L	M	W.G(g)	Qty/ Inbox
NSL G01	G1/8	G1/8	14	6.4	8.5	42.6	14	18	9.1	4	14	12.2	14.6	28.1	10.5	3.5	29.7	50
NSL G02	G1/4	G1/4	18	9	11	51.7	18	25	12.6	4	17	14	19	35.6	11.1	3.5	65.1	50
NSL G03	G3/8	G3/8	22	10.7	12	58.3	22	30	14.5	5	20	15.7	24	41.3	12	3.5	110.5	25
NSL G04	G1/2	G1/2	27	13	15	61.8	27	35.5	15.7	6	24	20	29	44.8	12	3.5	165.5	20