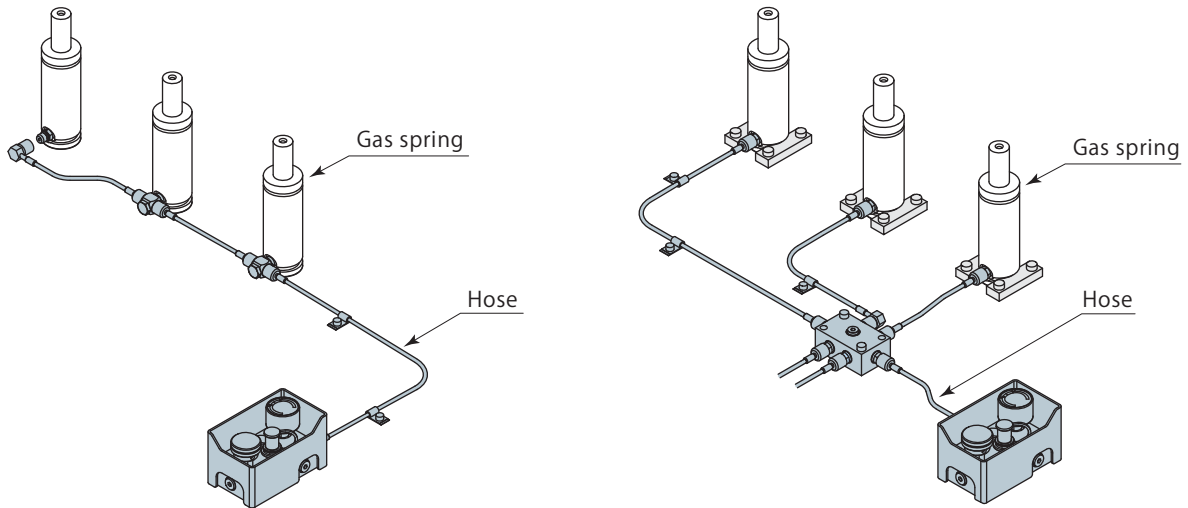
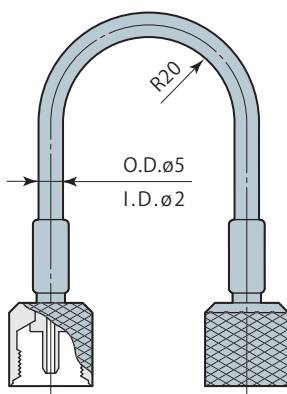


Piping example · Features of hose

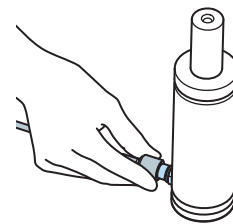
Piping example (Refer to page 65 and 66 for the details.)



Features of hose



Hose has a thin O.D. and small bending radius of R20 so that flexible piping can be done.



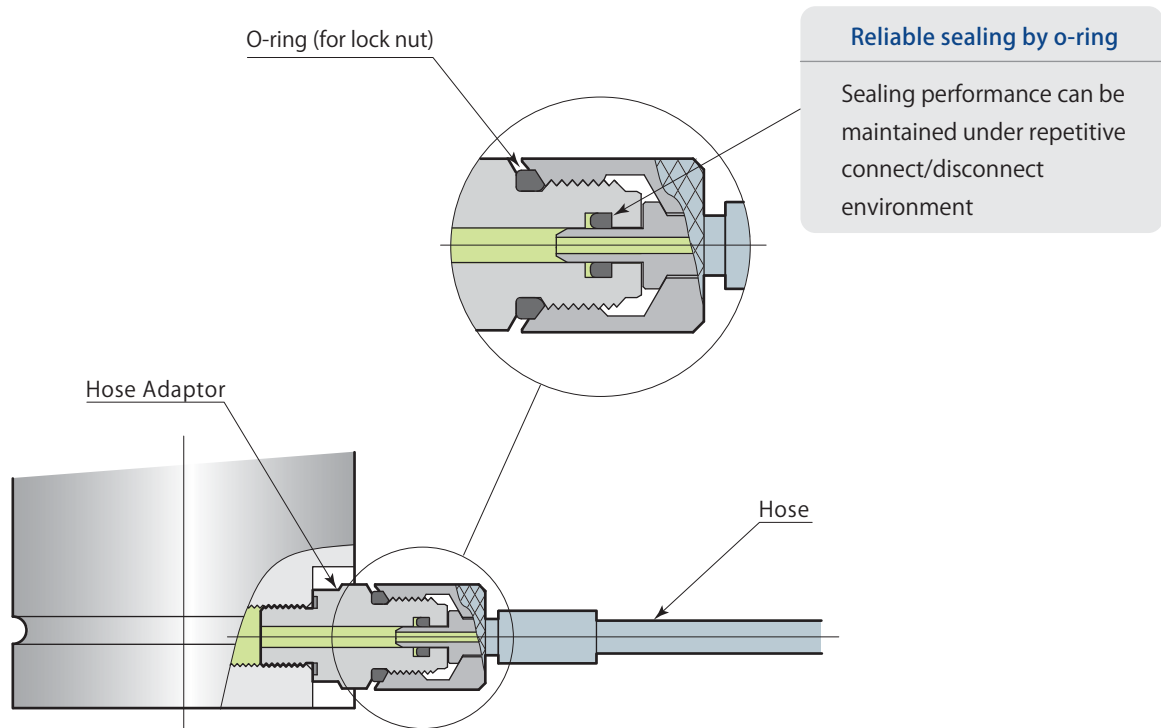
Hose can be connected by finger with no tool. Be sure to securely tighten it.

Fluid Used	N ₂ (Nitrogen) Gas
Proof Pressure	42 MPa(50 °C)
Operating Temperature	0~70 °C
Inside Diameter of Hose	ø2 mm
Material	Hose Core, Outer Coating : Polyamide Resin
	Reinforcing Layer : Aramid Fiber

Proof pressure varies according to the temperature of hose	
0 °C	51 MPa
30 °C	46 MPa
50 °C	42 MPa
70 °C	38 MPa

Gas spring and piping port size

Pascal Hose Link System is prepared for a handy and speedy piping for Gas springs.



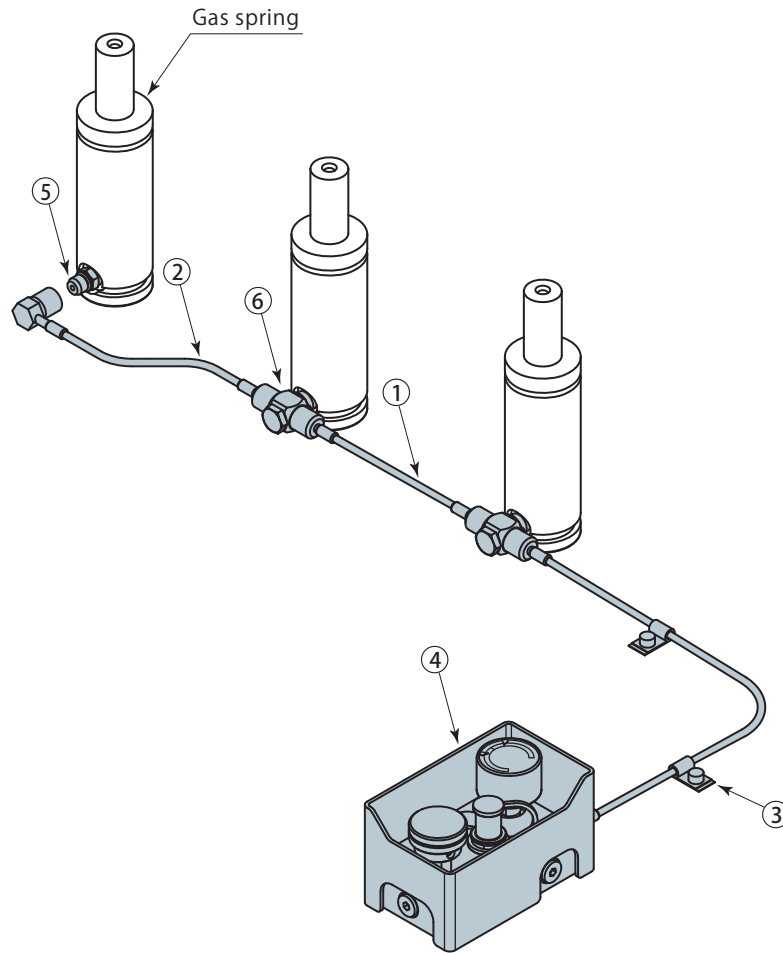
Gas spring model	Piping port size	Hose Adaptor
DNK0750~DNK9500 DNR4200~DNR9500 DNA	G1/8(BSPP)	page 74~78
DNB DNF	SAE#4(7/16-20UNF)	page 80~84
DNK0350 · DNK0500 DNR0350~DNR2400	M6×1	page 85

Notes

- Sealing tape or agent should not be used for hose adaptor (gas pressure shall be sealed by packing).
- For the mount of hose adaptor, be sure to use the tool to tighten it.
- Hose should be tightened till the lock nut o-ring is compressed by the hose nut.

Piping example 1 (Flangeless Mounting)

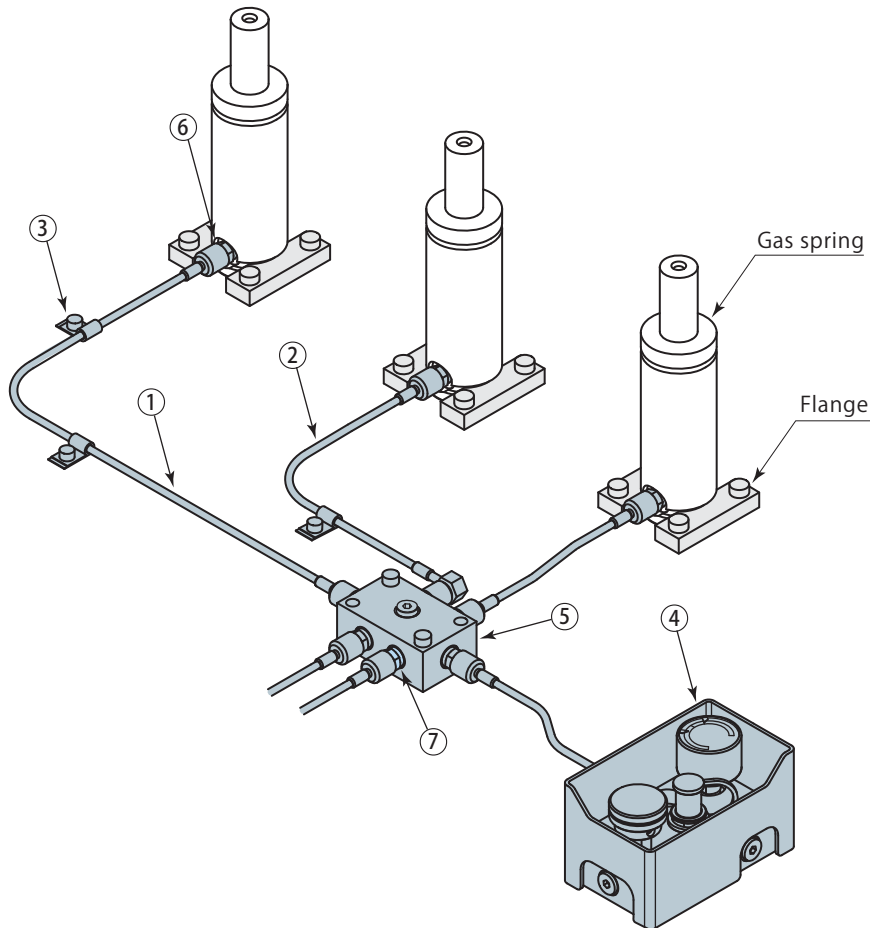
It takes minimum space for the gas springs to be mounted in tandem however there should be the time-lag when inflating the cylinders.



No.	Name	DNK	DNR	DNA	DNP	DNB	DNF	DNK0350-0500	DNR0350~2400
		Model			Page	Model	Page	Model	Page
①	Hose (Straight - Straight)	DNH-SS-200			67	DNH-SS-200	67	DNH-SS-200	67
②	Hose (Straight - 90°)	DNH-SE-300			68	DNH-SE-300	68	DNH-SE-300	68
③	Hose Clip	DNH-D6			70	DNH-D6	70	DNH-D6	70
④	Control Panel	DNH-CP			71	DNH-CP	71	DNH-CP	71
⑤	Straight Adaptor	DNH-GA			74	DNH-SA	80	DNH-MA	85
⑥	Short Tee Adaptor	DNH-GC			75	DNH-SC	81	—	—

Piping example 2 (Flange Mounting)

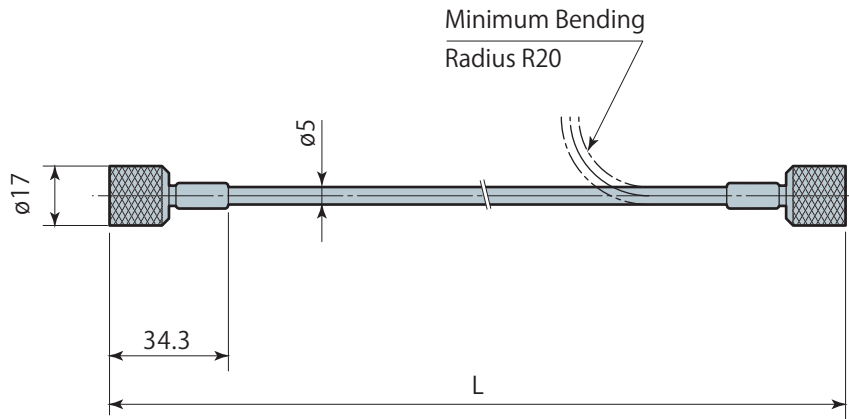
Inflating time can be equalized by the piping with the multi-coupling block since a big size of gas spring has a large volume of cylinder and needs time to fully charge the gas.



No.	Name	DNK DNR DNA DNP		DNB DNF		DNK0350-0500 DNR0350~2400	
		Model	Page	Model	Page	Model	Page
①	Hose (Straight - Straight)	DNH-SS-500	67	DNH-SS-500	67	DNH-SS-500	67
②	Hose (Straight - 90°)	DNH-SE-400	68	DNH-SE-400	68	DNH-SE-400	68
③	Hose Clip	DNH-D6	70	DNH-D6	70	DNH-D6	70
④	Control Panel	DNH-CP	71	DNH-CP	71	DNH-CP	71
⑤	Multi Coupling Block	DNH-F07	72	DNH-F07	72	DNH-F07	72
⑥	Straight Adaptor	DNH-GA	74	DNH-SA	80	DNH-MA	85
⑦	Straight Adaptor	DNH-GA	74	DNH-GA	74	DNH-GA	74

Hose (Straight - Straight)

model DNH-SS



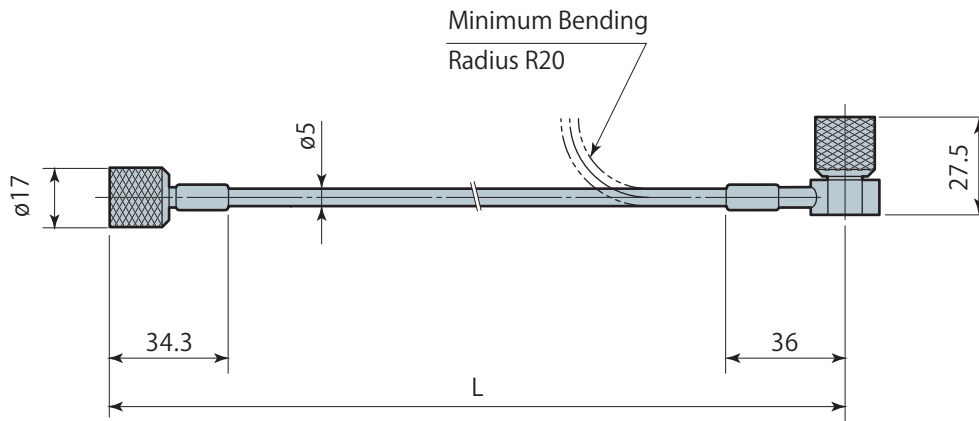
Model	L mm	Mass g	Model	L mm	Mass g
DNH-SS-0150	150	70	DNH-SS-0350	350	70
DNH-SS-0160	160	70	DNH-SS-0400	400	70
DNH-SS-0170	170	70	DNH-SS-0450	450	70
DNH-SS-0180	180	70	DNH-SS-0500	500	70
DNH-SS-0190	190	70	DNH-SS-0550	550	70
DNH-SS-0200	200	70	DNH-SS-0600	600	70
DNH-SS-0210	210	70	DNH-SS-0650	650	70
DNH-SS-0220	220	70	DNH-SS-0700	700	70
DNH-SS-0230	230	70	DNH-SS-0800	800	80
DNH-SS-0240	240	70	DNH-SS-0900	900	80
DNH-SS-0250	250	70	DNH-SS-1000	1000	80
DNH-SS-0260	260	70	DNH-SS-1100	1100	80
DNH-SS-0270	270	70	DNH-SS-1300	1300	80
DNH-SS-0280	280	70	DNH-SS-1500	1500	90
DNH-SS-0290	290	70	DNH-SS-2000	2000	100
DNH-SS-0300	300	70	DNH-SS-XXXX	XXXX	-

Minimum hose length is L=150mm.

Hose of non-standard length can be provided (made-to-order). Specify per 50mm.

Hose (Straight - 90°)

model DNH-SE



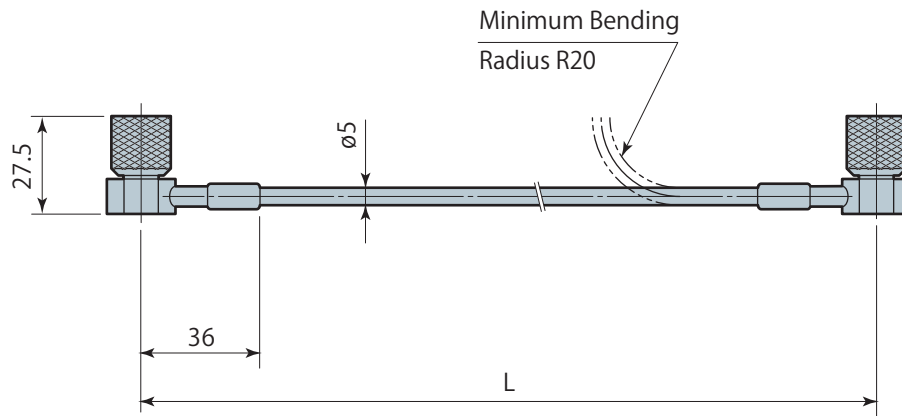
Model	L mm	Mass g	Model	L mm	Mass g
DNH-SE-0150	150	90	DNH-SE-0350	350	90
DNH-SE-0160	160	90	DNH-SE-0400	400	90
DNH-SE-0170	170	90	DNH-SE-0450	450	90
DNH-SE-0180	180	90	DNH-SE-0500	500	90
DNH-SE-0190	190	90	DNH-SE-0550	550	90
DNH-SE-0200	200	90	DNH-SE-0600	600	90
DNH-SE-0210	210	90	DNH-SE-0650	650	90
DNH-SE-0220	220	90	DNH-SE-0700	700	90
DNH-SE-0230	230	90	DNH-SE-0800	800	100
DNH-SE-0240	240	90	DNH-SE-0900	900	100
DNH-SE-0250	250	90	DNH-SE-1000	1000	100
DNH-SE-0260	260	90	DNH-SE-1100	1100	100
DNH-SE-0270	270	90	DNH-SE-1300	1300	100
DNH-SE-0280	280	90	DNH-SE-1500	1500	110
DNH-SE-0290	290	90	DNH-SE-2000	2000	120
DNH-SE-0300	300	90	DNH-SE-XXXX	XXXX	-

Minimum hose length is L=150mm.

Hose of non-standard length can be provided (made-to-order). Specify per 50mm.

Hose (90° & 90°)

model DNH-EE

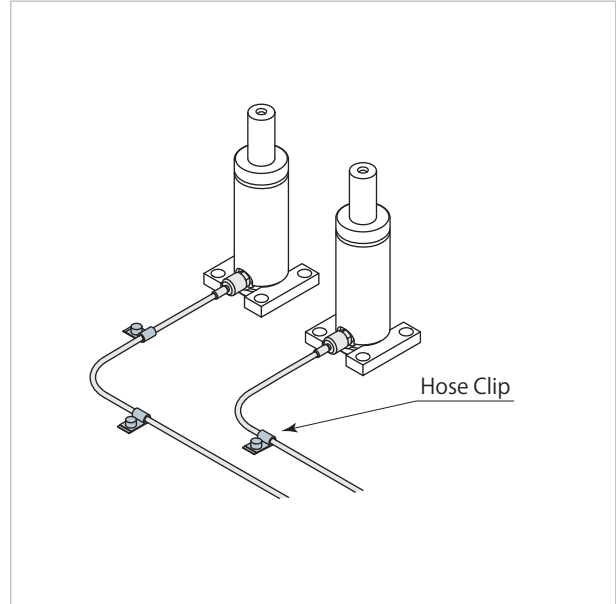
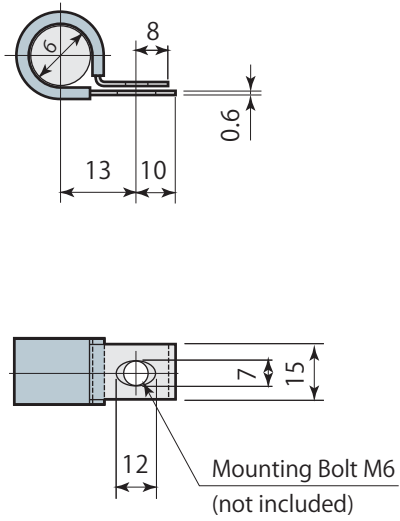


Model	L mm	Mass g
DNH-EE-0150	150	110
DNH-EE-0200	200	110
DNH-EE-0250	250	110
DNH-EE-0300	300	110
DNH-EE-0350	350	110
DNH-EE-0400	400	110
DNH-EE-0500	500	110
DNH-EE-0600	600	110
DNH-EE-0700	700	110
DNH-EE-0800	800	120
DNH-EE-0900	900	120
DNH-EE-1000	1000	120
DNH-EE-1100	1100	120
DNH-EE-1300	1300	120
DNH-EE-1500	1500	130
DNH-EE-2000	2000	140
DNH-EE-XXXX	XXXX	-

Minimum hose length is L=150mm.

Hose of non-standard length can be provided (made-to-order). Specify per 50mm.

Example

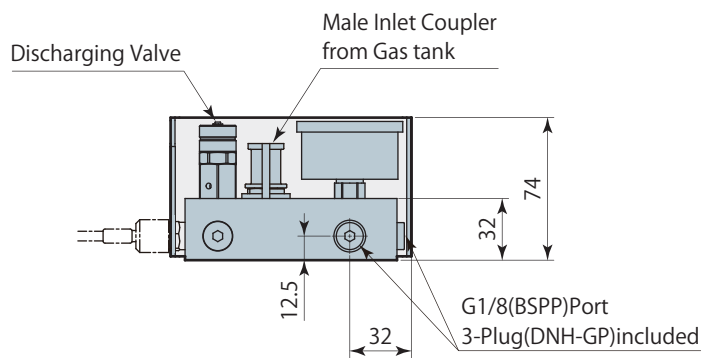
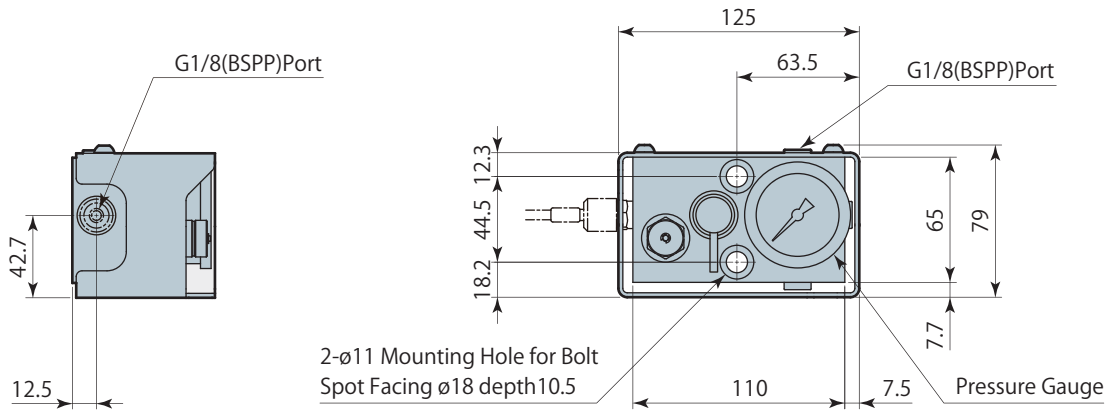


Mass : 5g

- Mount G-thread type adapter (Refer to Page 74 to 78). Plug the open ports as necessity.



Maximum charging pressure	18 MPa
Operating Temperature	0~70 °C
Mass	1300 g



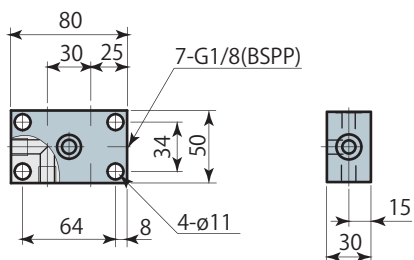
Multi Coupling Block

model DNH-F

- Mount G-thread type adapter (Refer to Page 74 to 78). Plug the open ports as necessity.
- Mounting holes (4 places) are provided on the block however 2- place mount is feasible.

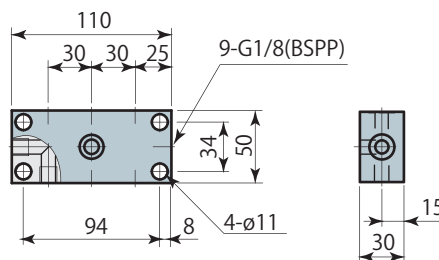
Number of port 7

model DNH-F07
Mass:750g



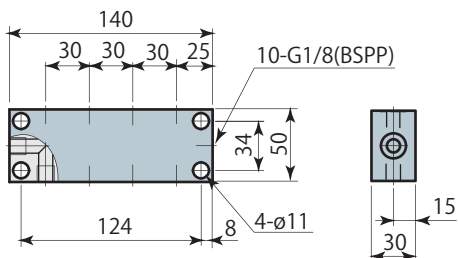
Number of port 9

model DNH-F09
Mass:1100g



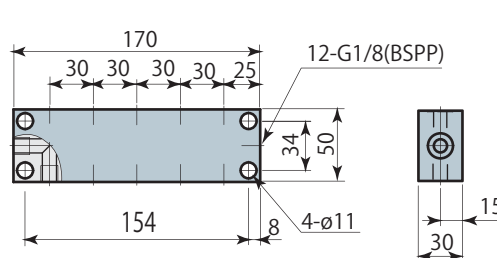
Number of port 10

model DNH-F10
Mass:1400g



Number of port 12

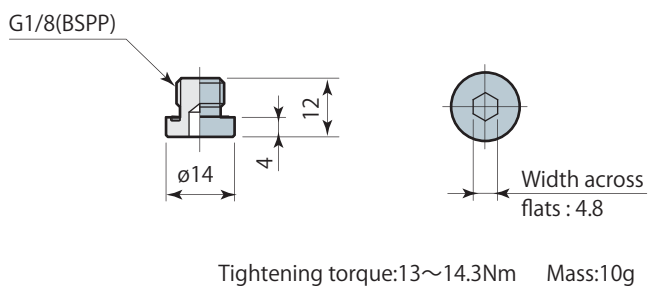
model DNH-F12
Mass:1700g



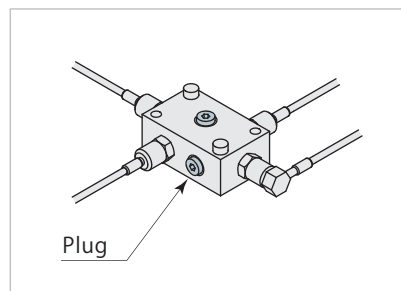
Piping
Multi Coupling Block

Plug

model DNH-GP



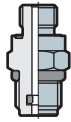
Example



G Thread type adapter

model DNH-GA

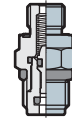
Straight Adapter
(Check valve not built-in)



page 74

model DNH-GB

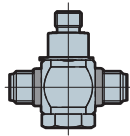
Straight Adapter
(Check valve built-in)



page 74

model DNH-GC

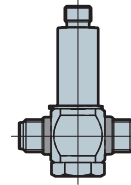
Short Tee Adapter



page 75

model DNH-GD

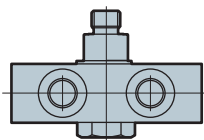
Long Tee Adapter



page 76

model DNH-GF

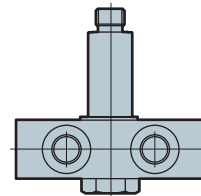
Short Multi Way Adapter



page 77

model DNH-GG

Long Multi Way Adapter



page 78

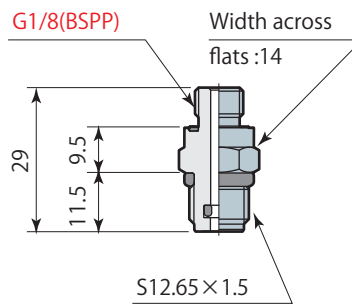
G Thread Type Straight Adapter

model DNH-GA DNH-GB

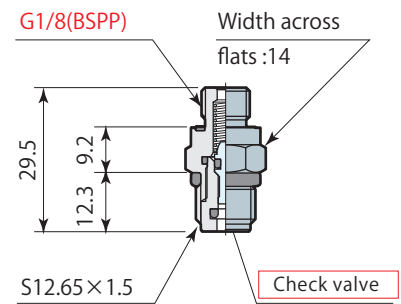
● model DNH-GA (Check valve not built-in), model DNH-GB (Check valve built-in) are available.



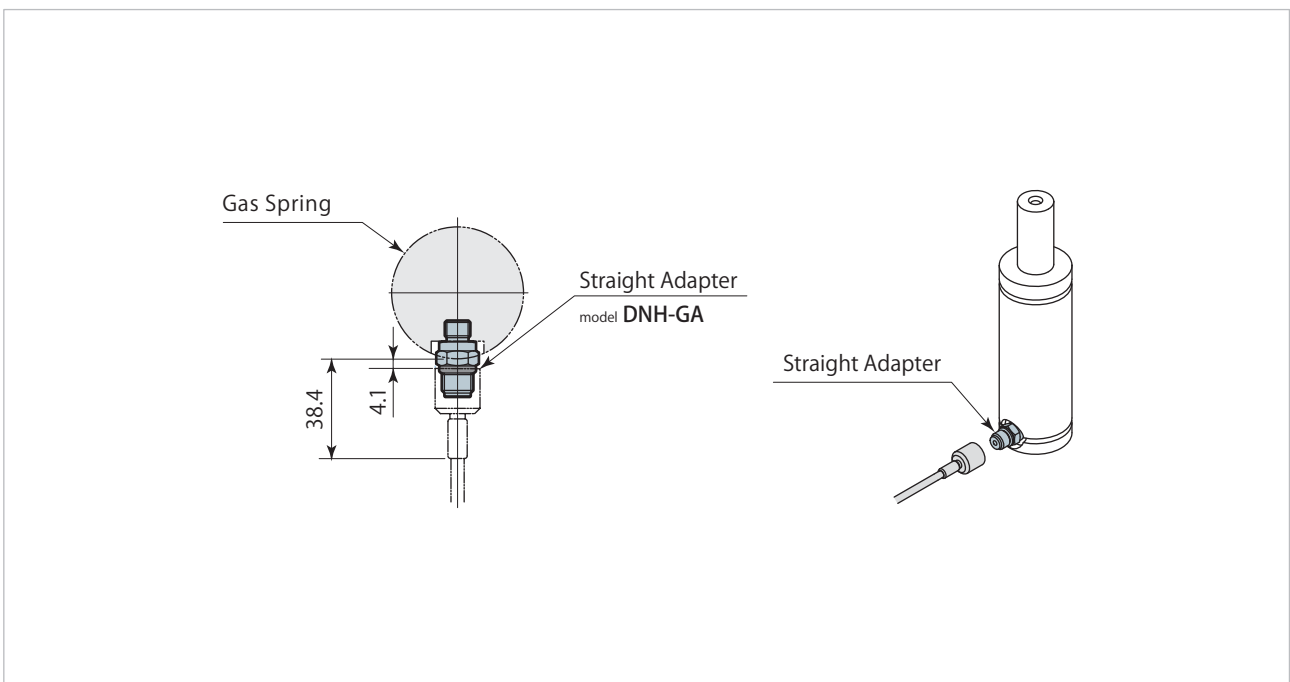
model **DNH-GA**
 (Check valve not built-in)
 Mass:30g
 Tightening torque:13~14.3Nm



model **DNH-GB**
 (Check valve built-in)
 Mass:30g
 Tightening torque:13~14.3Nm



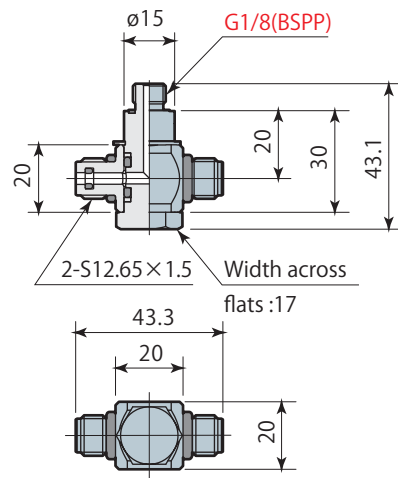
Example



G Thread Type Short Tee Adapter

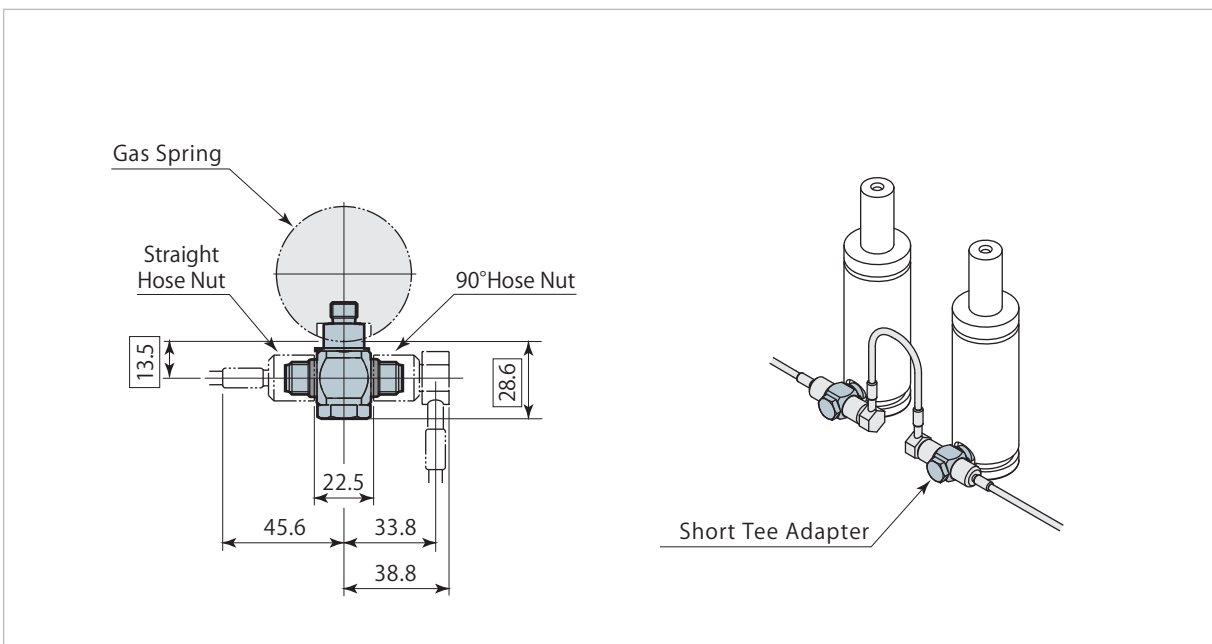
model DNH-GC

- Check valve not built-in.
- Ask Pascal for the details of the adapter with check valve.



Tightening torque:13~14.3Nm Mass:100g

Example

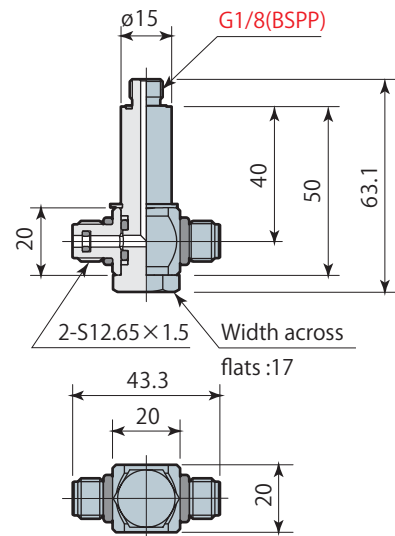


Piping Adapter(G Thread Type)

G Thread Type Long Tee Adapter

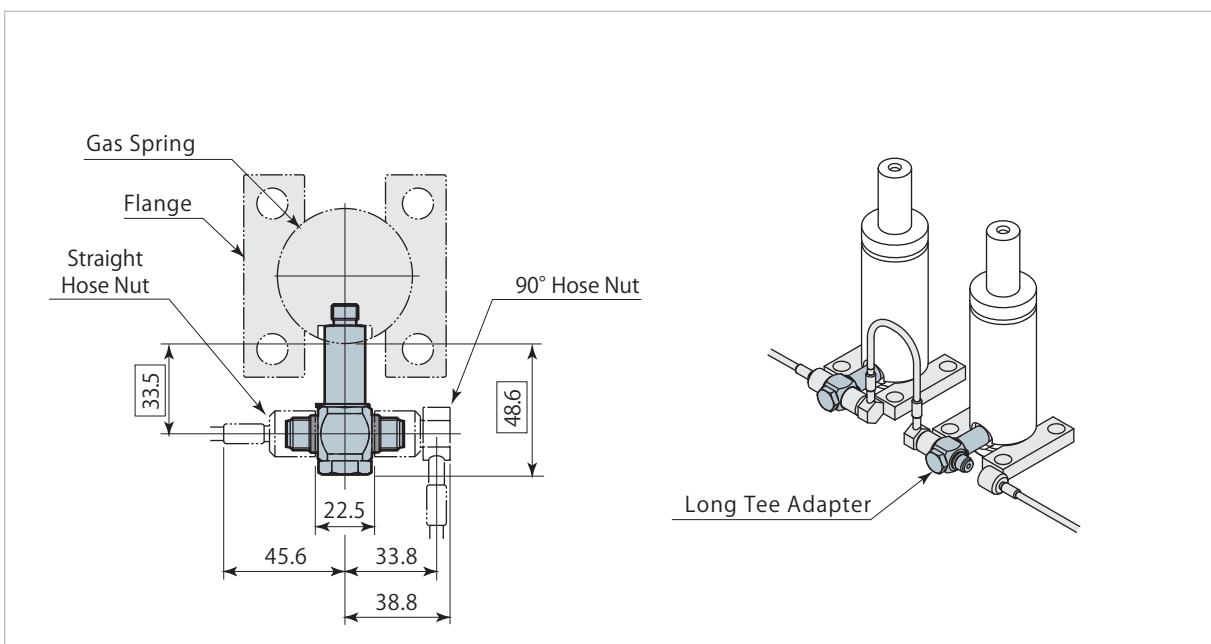
model DNH-GD

- Check valve not built-in.
- Ask Pascal for the details of the adapter with check valve.



Tightening torque:13~14.3Nm Mass:130g

Example

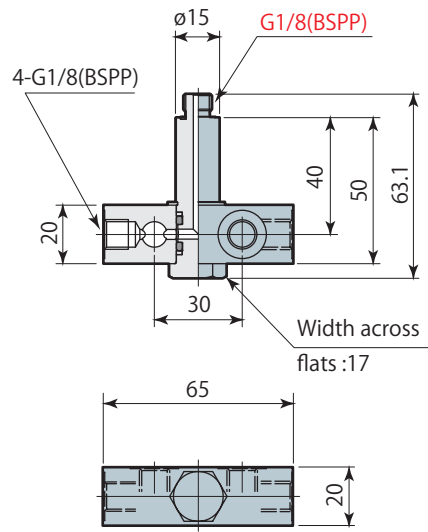


Piping
Adaptor(G Thread Type)

G Thread Type Long Multi Way Adapter

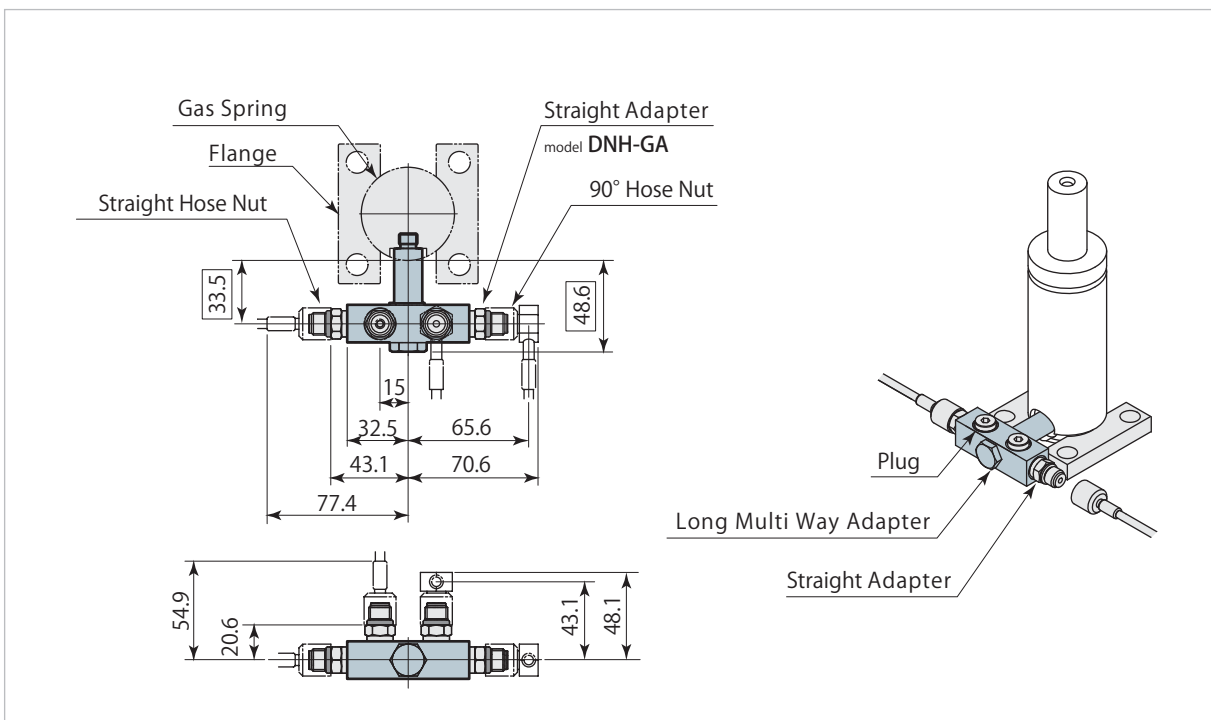
model DNH-GG

- Mount G-thread straight adapter.(Refer to Page 74) Plug the open ports as necessity. (Refer to Page 72)



Tightening torque:13~14.3Nm Mass:220g

Example

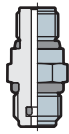


Piping
Adaptor(G Thread Type)

SAE Thread type adapter

model **DNH-SA**

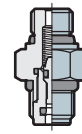
Straight Adapter
(Check valve not built-in)



page 80

model **DNH-SB**

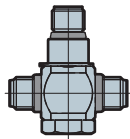
Straight Adapter
(Check valve built-in)



page 80

model **DNH-SC**

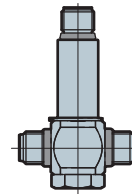
Short Tee Adapter



page 81

model **DNH-SD**

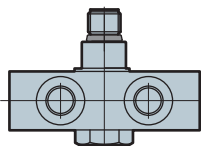
Long Tee Adapter



page 82

model **DNH-SF**

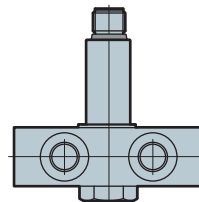
Short Multi Way Adapter



page 83

model **DNH-SG**

Long Multi Way Adapter



page 84

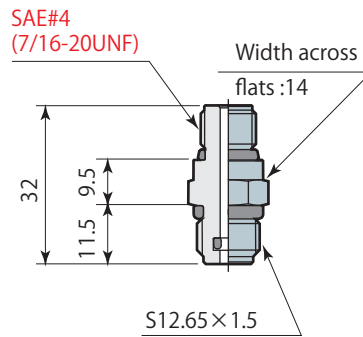
SAE Thread Type Straight Adapter

model **DNH-SA DNH-SB**

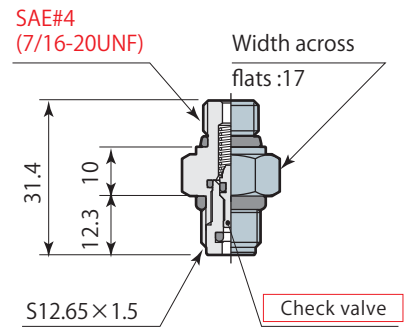
● model DNH-SA (Check valve not built-in), model DNH-SB (Check valve built-in) are available.



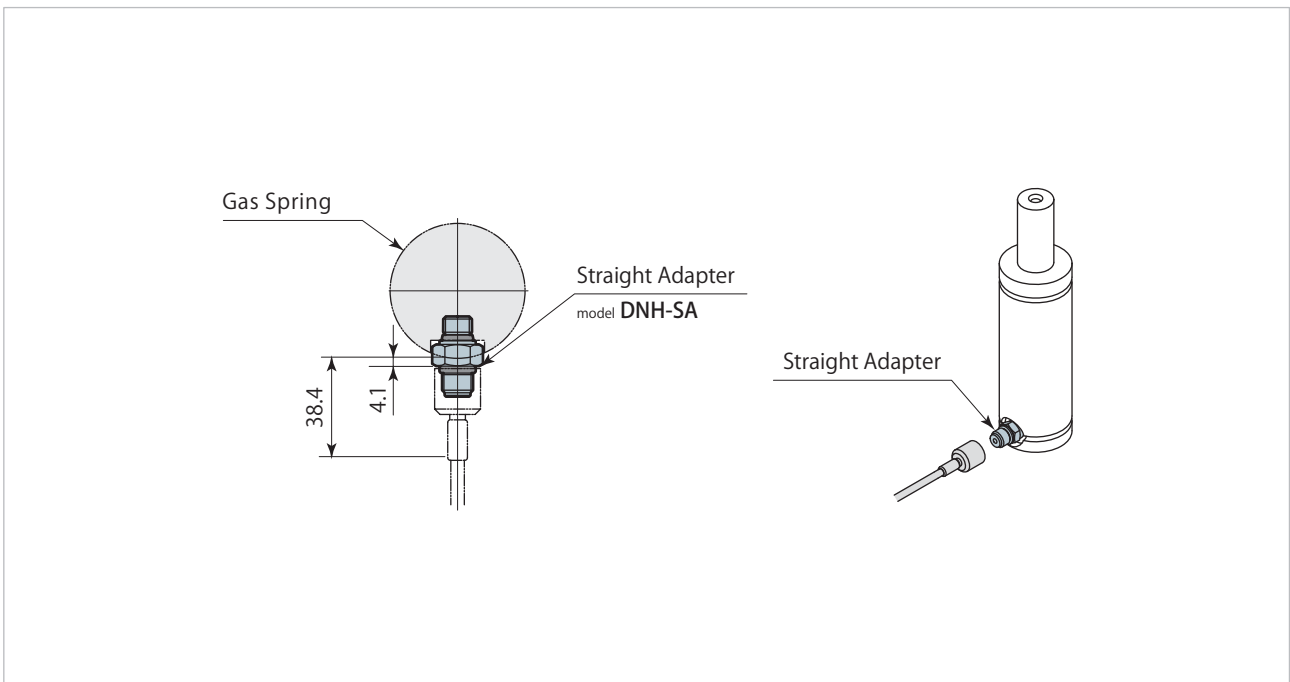
model **DNH-SA**
 (Check valve not built-in)
 Mass:30g
 Tightening torque:13~14.3Nm



model **DNH-SB**
 (Check valve built-in)
 Mass:40g
 Tightening torque:13~14.3Nm

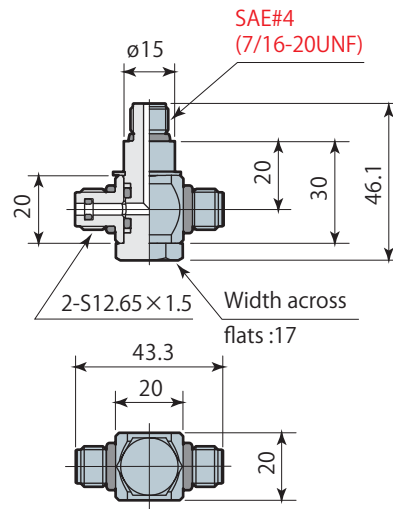


Example



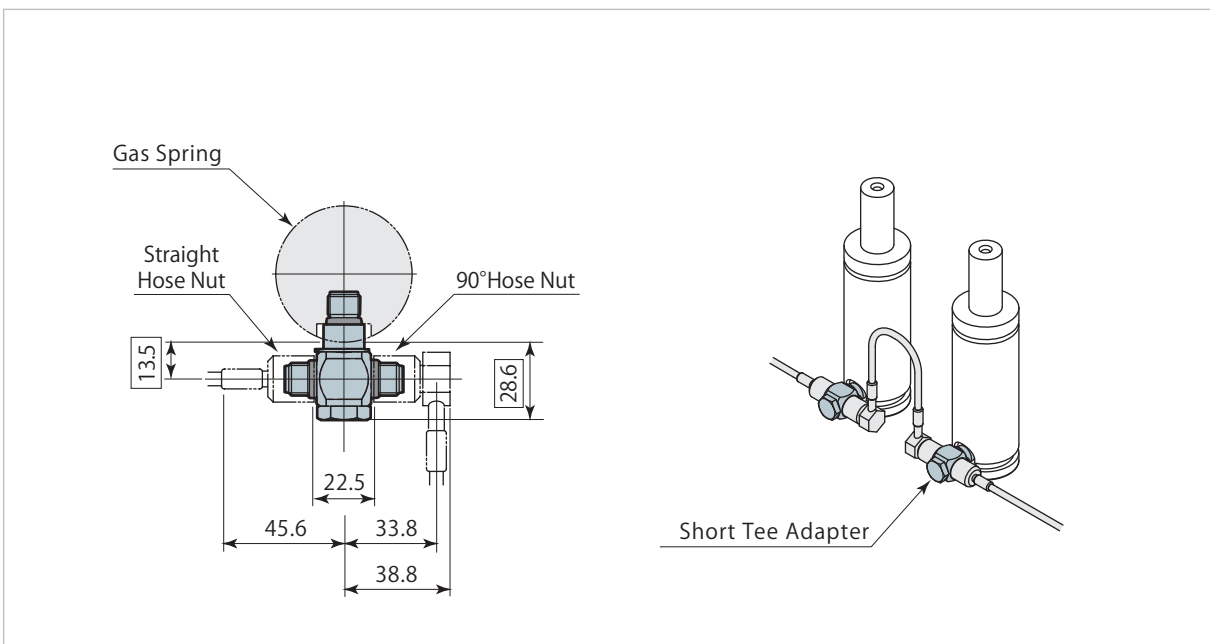
Piping
 Adaptor(SAE Thread Type)

- Check valve not built-in.
- Ask Pascal for the details of the adapter with check valve.



Tightening torque: 13~14.3Nm Mass: 100g

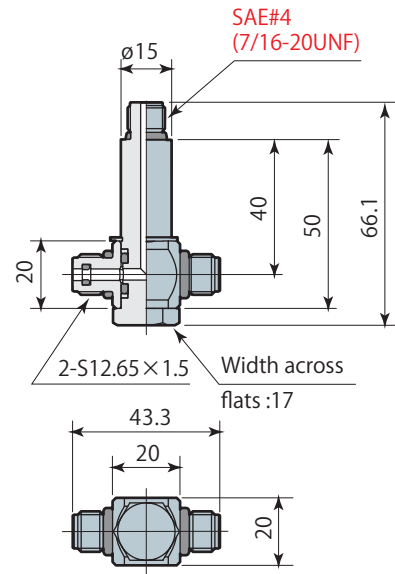
Example



SAE Thread Type Long Tee Adapter

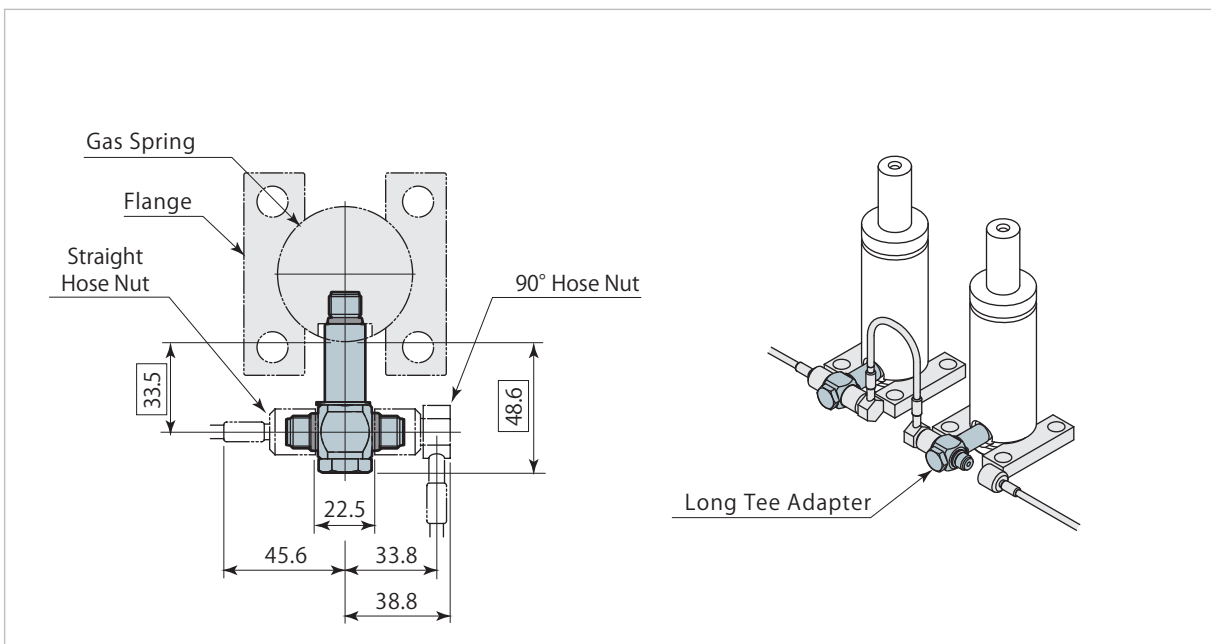
model DNH-SD

- Check valve not built-in.
- Ask Pascal for the details of the adapter with check valve.



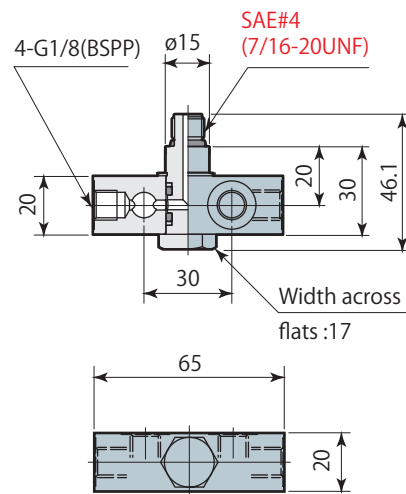
Tightening torque: 13~14.3Nm Mass: 130g

Example



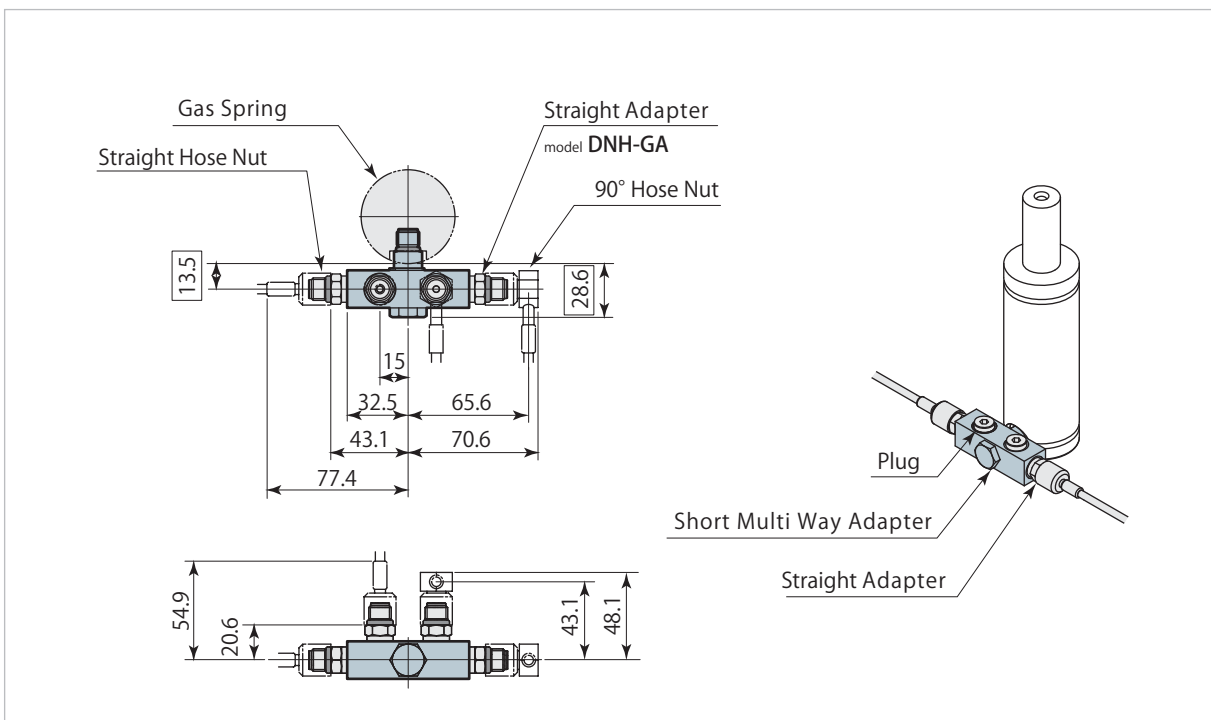
Piping
Adaptor(SAE Thread Type)

- Mount G-thread straight adapter.(Refer to Page 74) Plug the open ports as necessity. (Refer to Page 72)



Tightening torque:13~14.3Nm Mass:200g

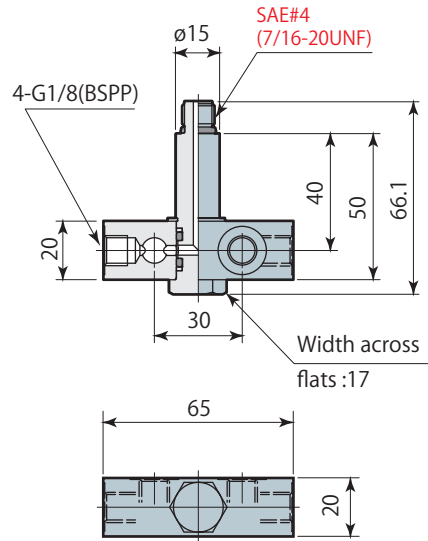
Example



SAE Thread Type Long Multi Way Adapter

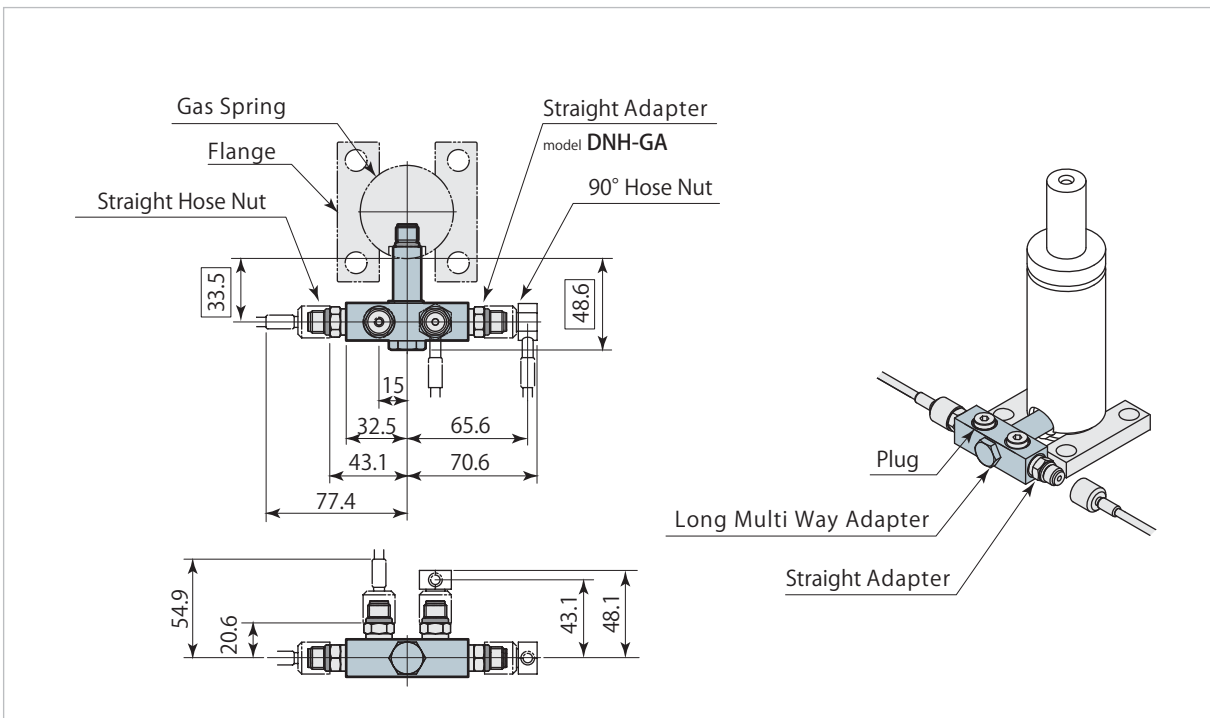
model **DNH-SG**

- Mount G-thread straight adapter.(Refer to Page 74) Plug the open ports as necessity. (Refer to Page 72)



Tightening torque:13~14.3Nm Mass:220g

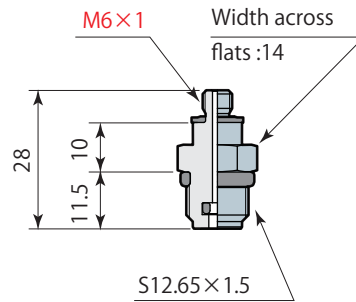
Example



M6 Thread Type Straight Adapter

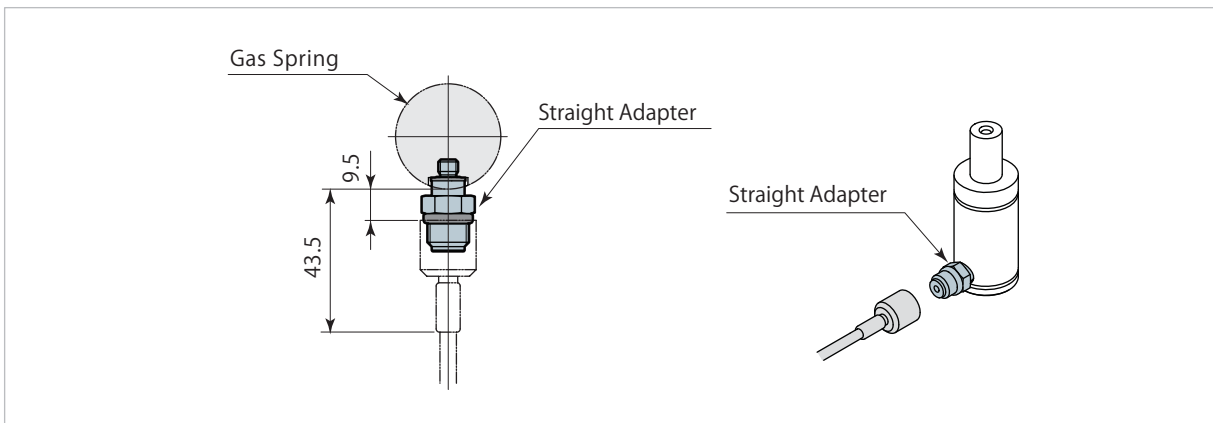
model DNH-MA

- Check valve not built-in

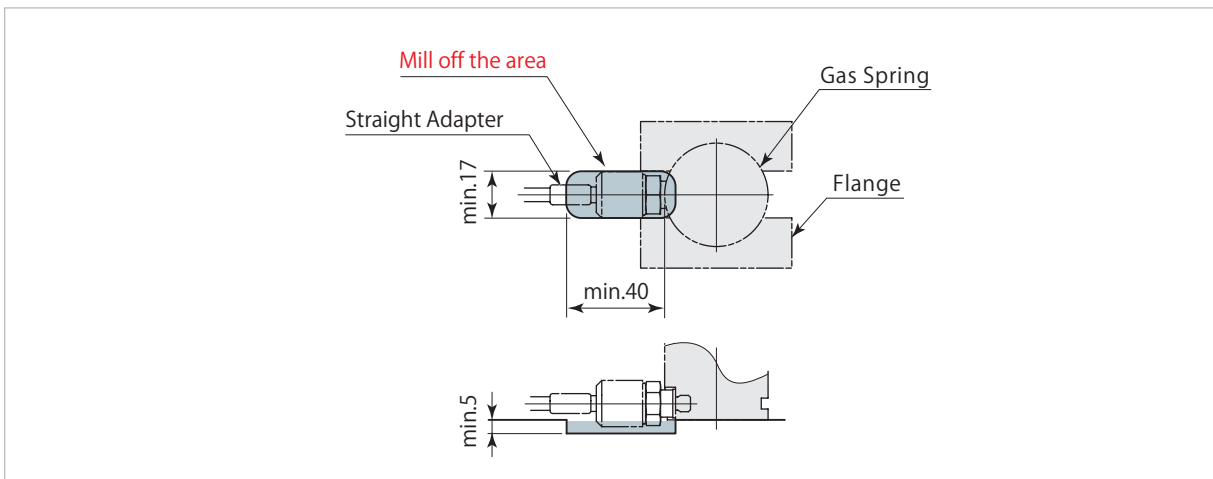


Tightening torque:8.0~8.8Nm Mass:20g

Example



Mill off the blue-colored area as shown below sketch in case of using hose adapter for model DNR.



Piping Adapter(M Thread Type)