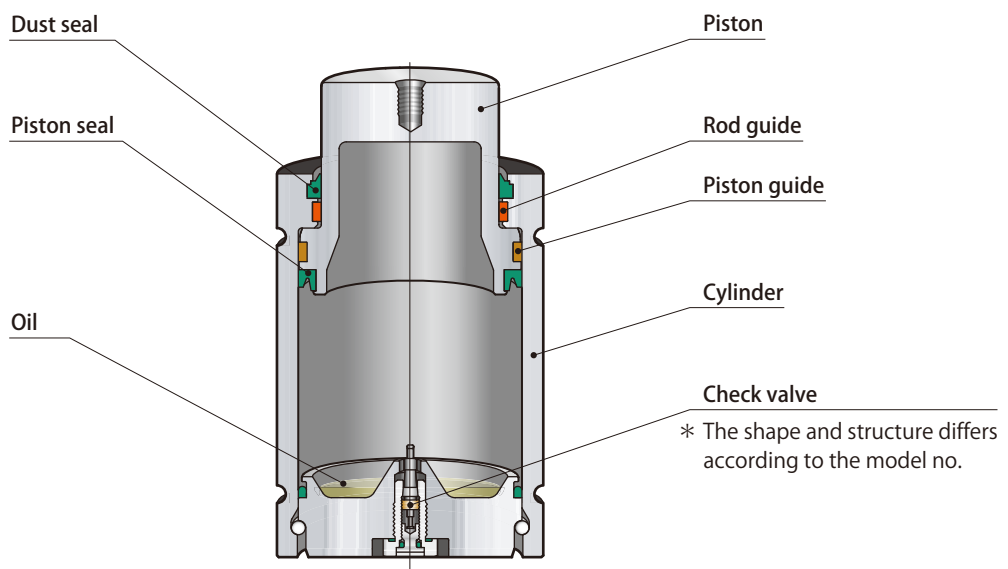


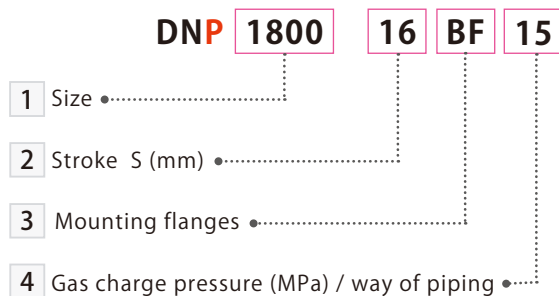
model **DNP**



Gas spring  
DNP



Model designation



1 Size Refer to **Page → 29 ~ 30** for details

0420 1000 1800 4700 7500 11800 18300

2 Stroke S Refer to **Page → 29 ~ 30** for details

6 : 6 mm ~ 50 : 50 mm ( 32 , 40 , 50 DNP1000,1800,4700only)

3 Mounting flanges Refer to **Page → 31 ~ 34** for details

P : Manifold base FC : FC flange PSC : Manifold base + SC flange BF : without flange

4 Gas charge pressure (MPa) / way of piping

For self-contained use, Choose and specify one of the recommended gas pressure levels shown above.  
(For the charging pressure other than above, specify the pressure to one digit after the decimal point.)

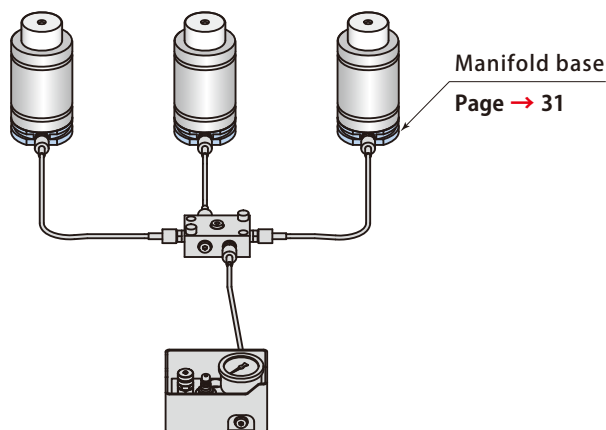
3.4 : 3.4 MPa Gas Charging Pressure: 3.4 6.9 10.3 13.7 15  
S

15 : 15 MPa The gas charging range: 3.4 ~ 15MPa (20°C)

- T : For charging type, specify "-T". common to domestic and overseas (outside Japan) use. (Charging pressure is not necessary to specify) Check valve is not mounted at shipment. Piping type is not available on model DNP0420.
- OS : Specify "- OS" in case self-contained gas spring without gas charge.

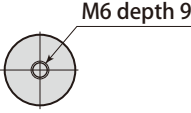
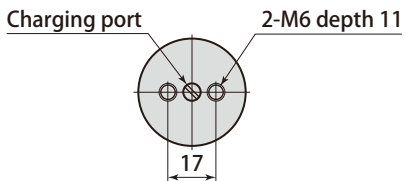
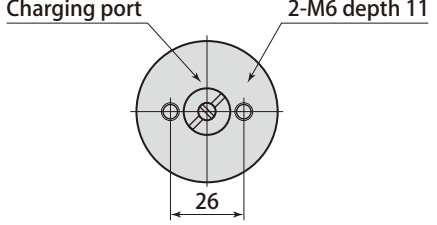
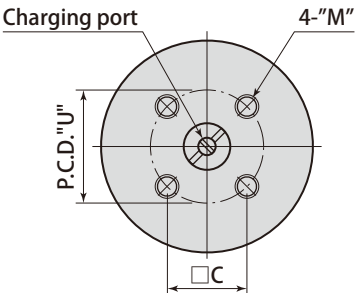
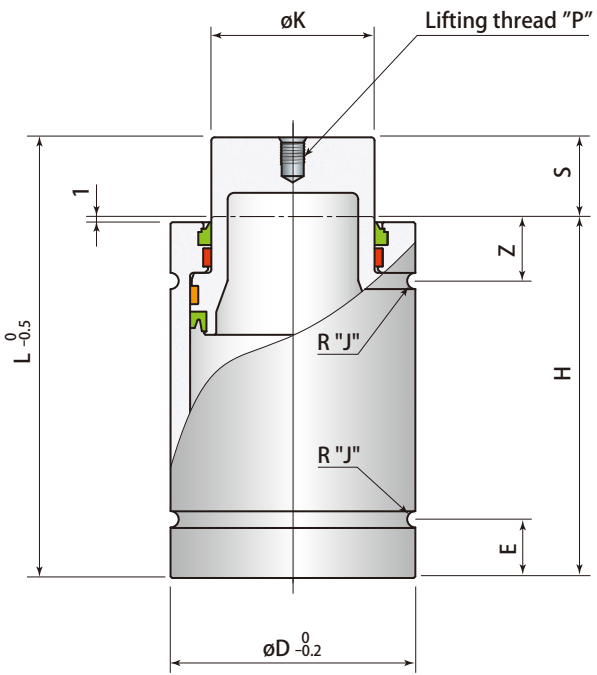
DNP Piping example

When piping with manifold base and manifold blocks



Model	Strokes mm	Initial force kN	Full stroke load kN	Compression ratio	Mass kg	L mm	H mm	Dimensions mm	
DNP0420-	6	6	4.71	8.03	1.70	0.1	56	50	K = 12 D = 25 E = 6.2 J = 1 Z = 11.5
	10	10	4.71	7.86	1.67	0.2	70	60	
	16	16	4.71	7.77	1.65	0.2	91	75	
	25	25	4.71	7.92	1.68	0.2	120	95	
DNP1000-	6	6	10.6	17.8	1.68	0.4	61	55	K = 20 D = 38 E = 10.5 J = 1 Z = 11.5
	10	10	10.6	16.3	1.54	0.4	78	68	
	16	16	10.6	16.1	1.52	0.5	100	84	
	25	25	10.6	15.9	1.50	0.6	135	110	
	32 *	32	10.6	15.4	1.45	0.7	167	135	
	40 *	40	10.6	15.6	1.47	0.8	195	155	
50 *	50	10.6	15.7	1.48	0.9	230	180		
DNP1800-	6	6	18.8	31.2	1.66	0.7	66	60	K = 30 D = 50 E = 14.5 J = 2 Z = 15.5
	10	10	18.8	30.3	1.61	0.8	80	70	
	16	16	18.8	28.0	1.49	0.9	106	90	
	25	25	18.8	28.8	1.53	1.0	135	110	
	32 *	32	18.8	28.4	1.50	1.2	162	130	
	40 *	40	18.8	28.4	1.50	1.3	190	150	
50 *	50	18.8	29.0	1.54	1.4	220	170		
DNP4700-	10	10	46.8	76.3	1.63	1.7	80	70	K = 50 D = 75 E = 18 J = 2.5 Z = 19 C = 28.3 U = 40 M = M8 depth9.5 P = M8 depth8
	16	16	46.8	70.0	1.50	2.0	106	90	
	25	25	46.8	71.5	1.53	2.2	135	110	
	32 *	32	46.8	68.5	1.47	2.5	167	135	
	40 *	40	46.8	67.7	1.45	2.8	200	160	
	50 *	50	46.8	67.2	1.44	3.2	240	190	
DNP7500-	10	10	75.4	121.2	1.61	3.2	90	80	K = 55 D = 95 E = 21 J = 2.5 Z = 22 C = 36.8 U = 52 M = M8 depth12 P = M8 depth9
	16	16	75.4	113.0	1.50	3.6	116	100	
	25	25	75.4	116.6	1.55	4.0	145	120	
DNP11800-	10	10	117.8	174.7	1.48	5.8	100	90	K = 70 D = 120 E = 22.5 J = 2.5 Z = 23.5 C = 48.1 U = 68 M = M10 depth13 P = M8 depth9
	16	16	117.8	169.6	1.44	6.4	126	110	
	25	25	117.8	176.8	1.50	7.0	155	130	
DNP18300-	10 *	10	184.1	267.5	1.45	10.3	110	100	K = 90 D = 150 E = 24.5 J = 2.5 Z = 25.5 C = 63.6 U = 90 M = M10 depth15 P = M8 depth10
	16 *	16	184.1	262.2	1.42	11.3	136	120	
	25 *	25	184.1	274.1	1.49	12.4	165	140	

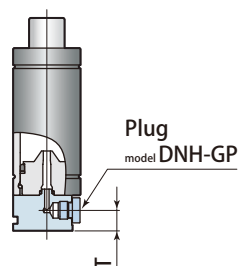
- \* made to order
- Showing the figures at initial charging pressure 15MPa at 20°C .

Cylinder base mm	Dimensions mm
 <p>M6 depth 9</p>	
 <p>Charging port</p> <p>2-M6 depth 11</p> <p>17</p>	
 <p>Charging port</p> <p>2-M6 depth 11</p> <p>26</p>	
 <p>Charging port</p> <p>4-"M"</p> <p>P.C.D. "U"</p> <p>C</p>	 <p>øK</p> <p>Lifting thread "P"</p> <p>L</p> <p>L-0.5</p> <p>S</p> <p>Z</p> <p>H</p> <p>E</p> <p>øD <sup>0</sup>/<sub>-0.2</sub></p> <p>R "J"</p> <p>R "J"</p>
<p><b>⚠ Tips for stroke selection</b></p> <p>Use gas spring stroke as long as possible to ensure optimal performance of lubrication inside the cylinder.</p>	

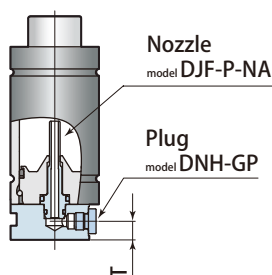
For piping use

Without check valve

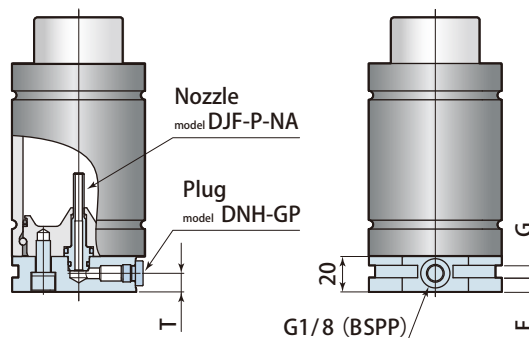
DNP1000



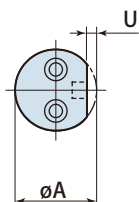
DNP1800



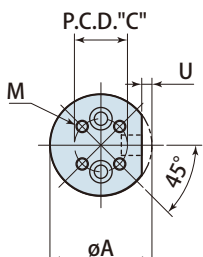
DNP4700 DNP11800  
DNP7500 DNP18300



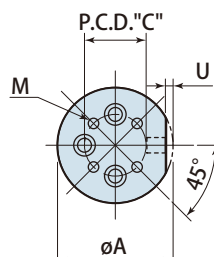
DNP1000



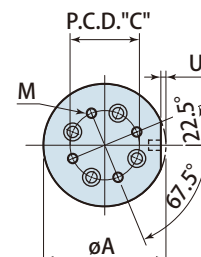
DNP1800



DNP4700 DNP7500



DNP11800 DNP18300



- In case of ordering model DNP□-□P-T with a manifold base, delivery style is like a sketch shown above.
- Be sure to use DNP1000 manifold base when it is used hose link system.
- Model DNP1000 does not have the tapholes at the bottom. Fix it with manifold base. **Page → 34**

mm

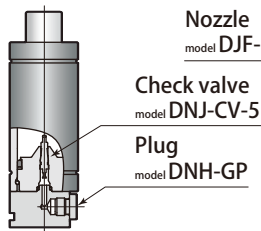
Model no for combination of gas spring and manifold base (for piping)	A	C	F	G	T	U	Mounting hole for bolt M	Mass of Manifold base
DNP1000-□P-T	38	-	4	4	11.5	4.5	-	0.16kg
DNP1800-□P-T	50	26	8	7	10.5	5.5	4-M 6depth11	0.26kg
DNP4700-□P-T	75	40	8	7	10.5	5	4-M 8depth13	0.61kg
DNP7500-□P-T	95	52	8	7	10.5	5	4-M 8depth13	1.00kg
DNP11800-□P-T	120	68	8	7	10.5	5	4-M 10depth13	1.70kg
DNP18300-□P-T *	150	90	8	7	10.5	6.5	4-M 10depth13	2.60kg

- \* made to order

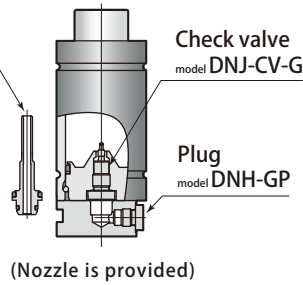
For self-contained use

With check valve

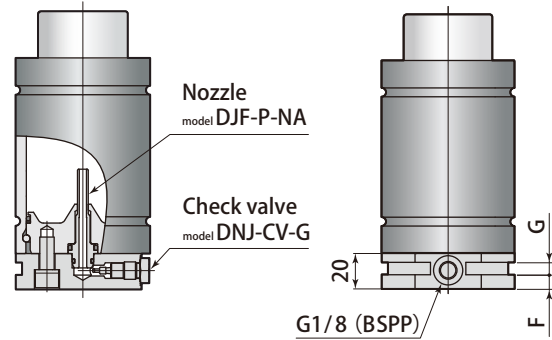
DNP1000



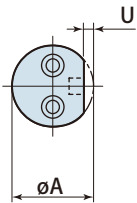
DNP1800



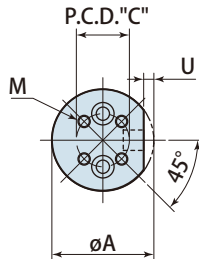
DNP4700 DNP11800  
DNP7500 DNP18300



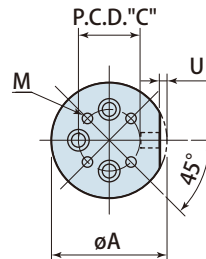
DNP1000



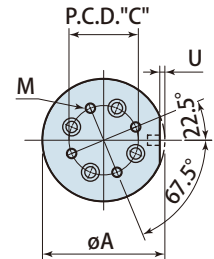
DNP1800



DNP4700  
DNP7500



DNP11800  
DNP18300



- In case of ordering model DNP□-□P□ with a manifold base, delivery style is like a sketch shown above.
- Model DNP1000 does not have the tapholes at the bottom. Fix it with manifold base. **Page → 34**

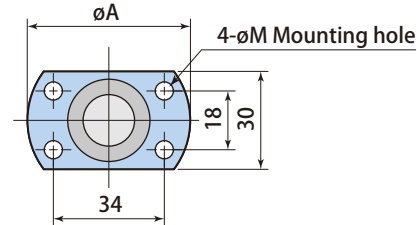
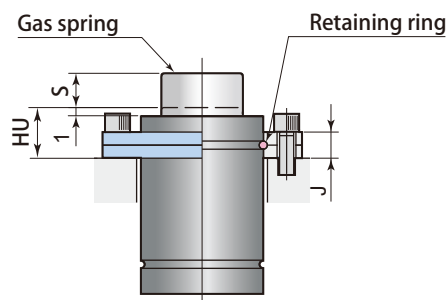
mm

Model no for combination of gas spring and manifold base (for self-contained)	A	C	F	G	U	Mounting hole for bolt M	Mass of Manifold base
DNP1000-□P□	38	-	4	4	4.5	-	0.16kg
DNP1800-□P□	50	26	8	7	5.5	4-M 6depth11	0.26kg
DNP4700-□P□	75	40	8	7	5	4-M 8depth13	0.61kg
DNP7500-□P□	95	52	8	7	5	4-M 8depth13	1.00kg
DNP11800-□P□	120	68	8	7	5	4-M 10depth13	1.70kg
DNP18300-□P□ *	150	90	8	7	6.5	4-M 10depth13	2.60kg

- \* made to order

Upper Mount (U)

DNP0420 only



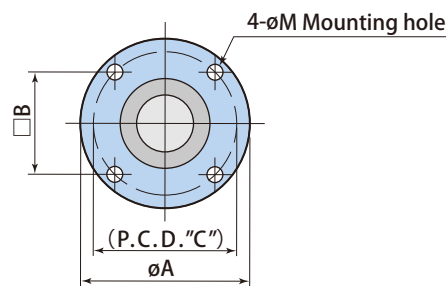
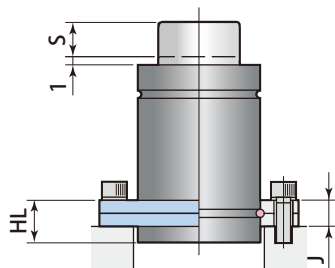
Flange model

DJF 050 - FC

1 Flange size

025	095
038	120
050	150
075	

Lower Mount (L)



DNP1000 DNP7500  
DNP1800 DNP11800  
DNP4700 DNP18300

⚠ Caution for mounting



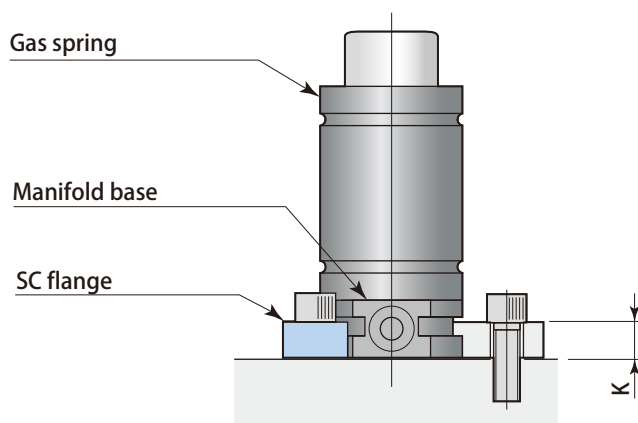
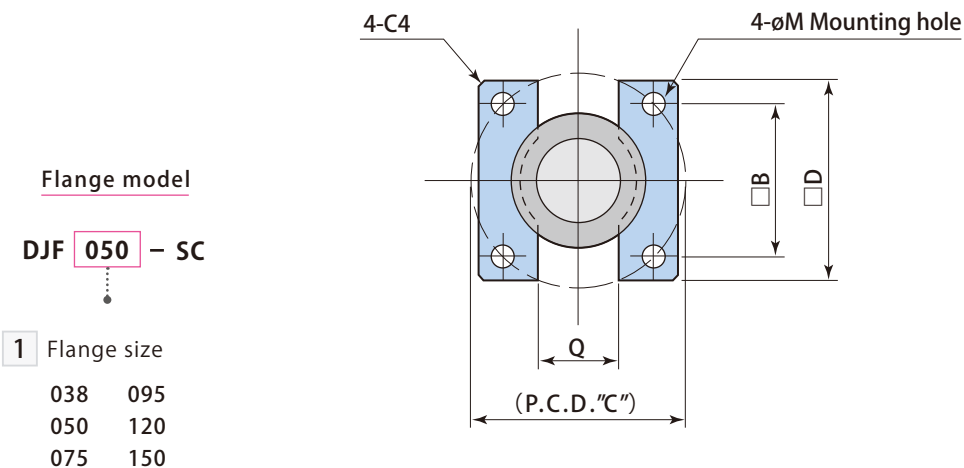
Do not mount the flange so the tensile forces react against the screws.

- FC flange employs enough strength to receive the load solely but the flange must be bolted 4 places to receive the load full face of the flange.
- Only U type is available for model DJF025-FC

Gas spring model	Flange model	A	B	C	HU	HL	J	M	Mass of flange
DNP0420	DJF025-FC	50	-	-	16	-	9	6.8	0.08 kg
DNP1000	DJF038-FC	68	40	56.5	16	15	9	6.8	0.17 kg
DNP1800	DJF050-FC	95	56.5	80	22	21	13	9	0.50 kg
DNP4700	DJF075-FC	122	73.5	104	27	26	16	11	0.88 kg
DNP7500	DJF095-FC	150	92	130	31	30	18	14	1.44 kg
DNP11800	DJF120-FC	175	109.5	155	34	33	21	14	2.03 kg
DNP18300	DJF150-FC	220	138	195	39	38	27	18	4.13 kg

- Flange mounting screws are not included.

Available for all of size except 0420



Gas spring **DNP**  
SC flange

- Manifold base is needed extra when using SC flanges to mount model DNP. **Page → 31 ~ 32**
- When ordering **DNP□-□PSC**, model **DNP□-□P** being equipped with manifold base and SC flange is shipped together.
- When SC flange is used, avoid any load to mount screws. The load should be received at the bottom face.
- Contact Pascal for th details for selection of hose adaptor when SC flange is selected in piping use.

mm

Model no for combination of gas spring, manifold base and SC flage	Flange model	B	C	D	K	M	Q	Mass of flange
<b>DNP1000-□PSC</b>	<b>DJF038-SC</b>	40	56.5	55	6	6.8	17	0.07 kg
<b>DNP1800-□PSC</b>	<b>DJF050-SC</b>	56.5	80	75	12	9	31	0.22 kg
<b>DNP4700-□PSC</b>	<b>DJF075-SC</b>	73.5	104	100	12	11	36	0.39 kg
<b>DNP7500-□PSC</b>	<b>DJF095-SC</b>	92	130	120	12	14	32	0.54 kg
<b>DNP11800-□PSC</b>	<b>DJF120-SC</b>	109.5	155	140	12	14	40	0.64 kg
<b>DNP18300-□PSC *</b>	<b>DJF150-SC *</b>	138	195	190	12	18	40	1.52 kg

- \* made to order
- Flange mounting screws are not included.