

N₂ GAS SPRINGS

model **DNB**

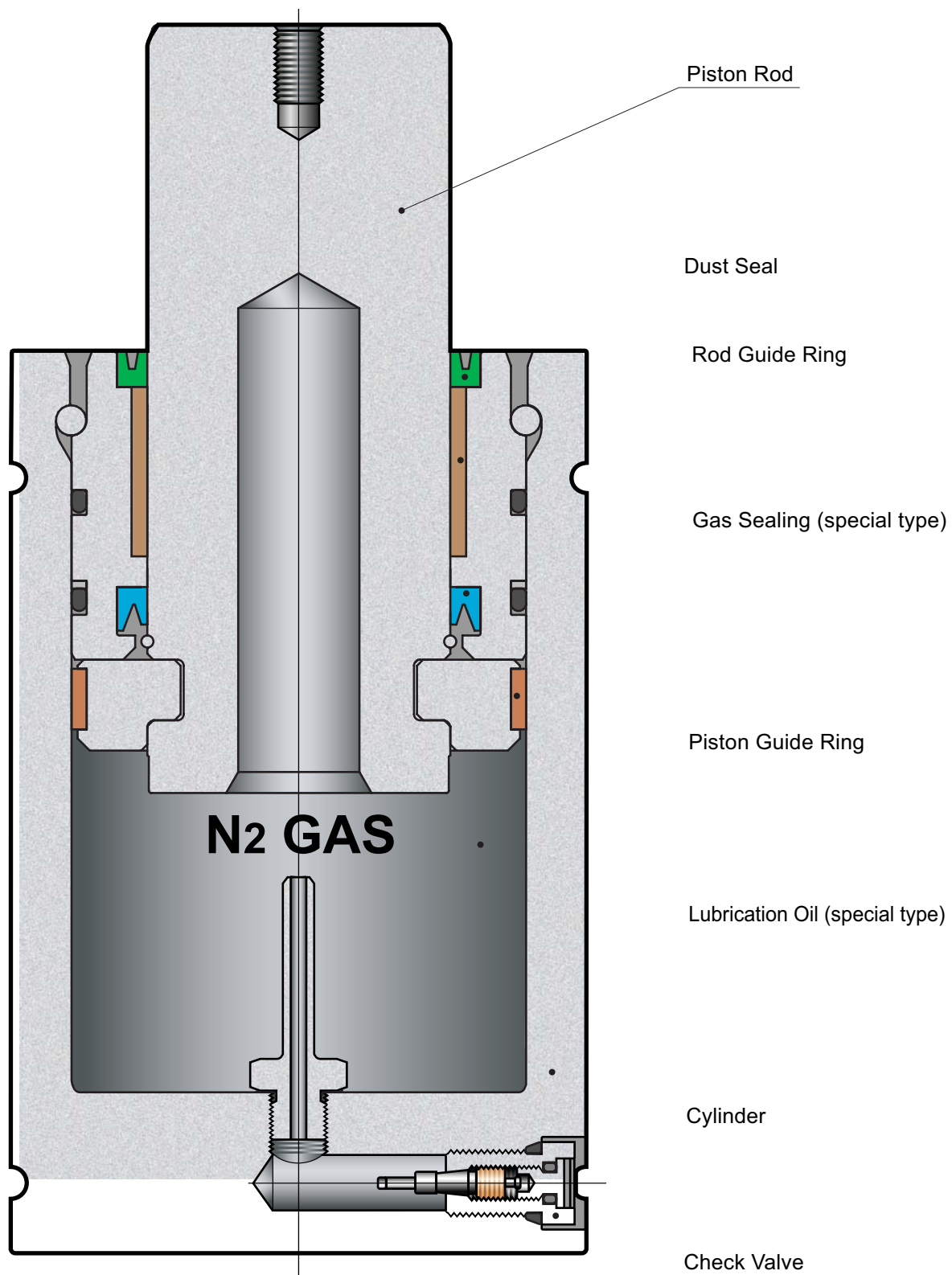
Inch stroke SAE port model



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corporation

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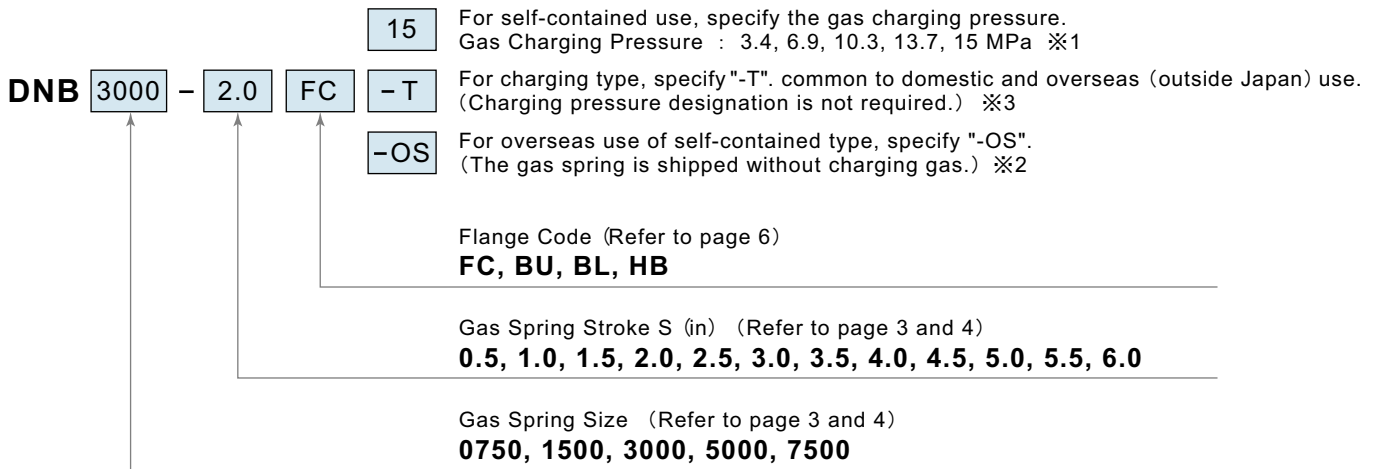
model **DNB** Inch stroke
SAE port model



Ordering gas spring and flange by the set

Example : DNB3000-2.0FC-T

In case requiring a gas spring and a flange by the set, please specify the set model name as below.

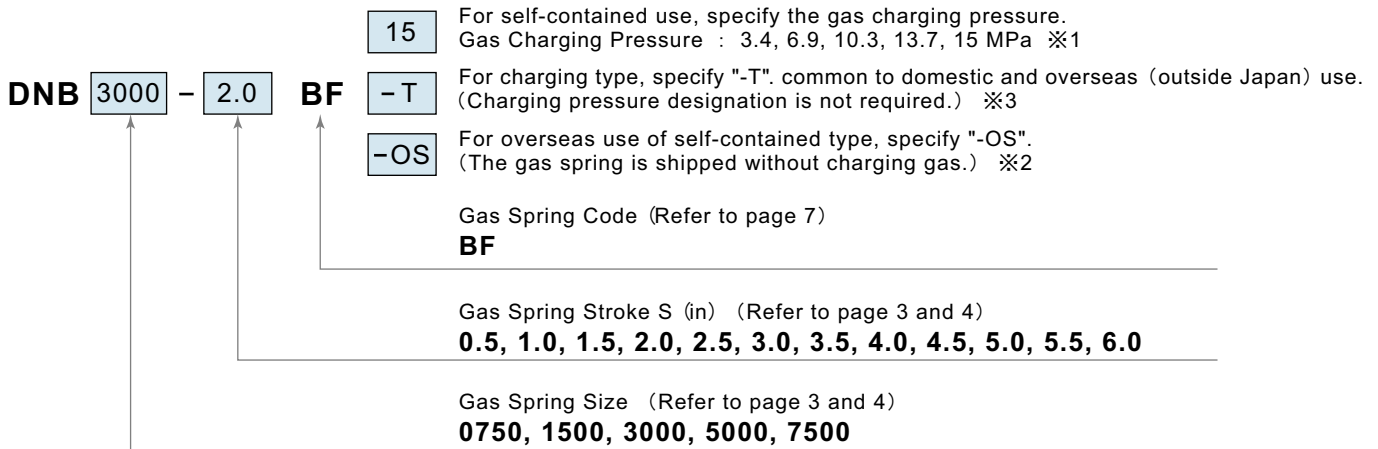


- ※1 : Choose one of the recommended gas pressure levels shown above. For the charging pressure other than above, specify the pressure to one digit after the decimal. The gas charging range is 3.4 MPa to 15 MPa at 20°C.
- ※2 : Charging gas to those gas springs to be shipped to outside Japan is prohibited by law.
- ※3 : Check valve is not mounted at shipment.

Ordering gas spring by itself

Example : DNB3000-2.0BF15

In case requiring only the gas spring, please specify BF as a gas spring code.

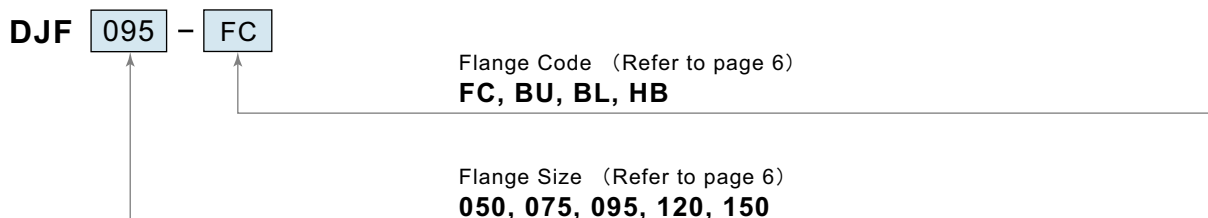


- ※1 : Choose one of the recommended gas pressure levels shown above. For the charging pressure other than above, specify the pressure to one digit after the decimal. The gas charging range is 3.4 MPa to 15 MPa at 20°C.
- ※2 : Charging gas to those gas springs to be shipped to outside Japan is prohibited by law.
- ※3 : Check valve is not mounted at shipment.

Ordering flange by itself

Example : DJF095-FC

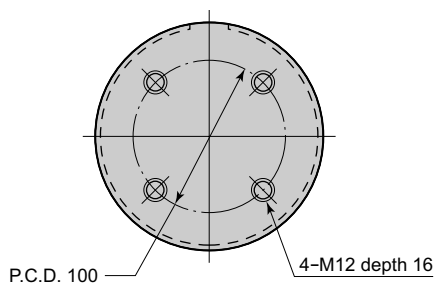
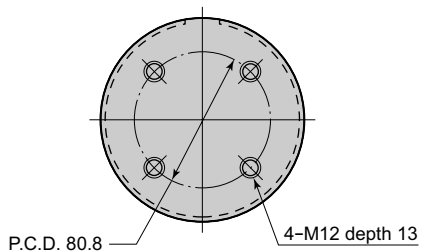
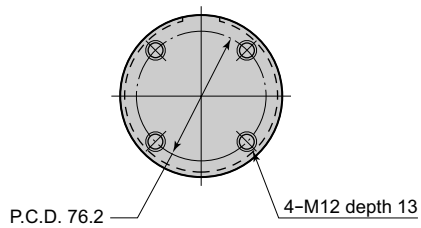
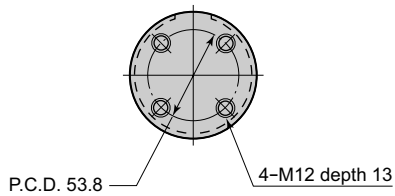
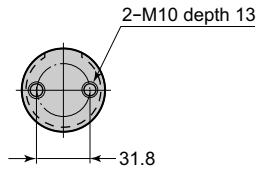
In case requiring only the flange, please specify the model name of the flange as below.



Specifications / Dimensions

※3 Model	Stroke S mm	※1 Initial Force kN	※1 Full stroke Load kN	Compression Ratio	Mass kg	※2 L mm	※2 H mm	K mm	D mm	J mm	Z mm	
DNB0750-0.5	12.7	7.36	10.2	1.38	1.3	120.4	107.7					
	1.0	25.4	7.36	10.8	1.47	1.4	145.8	120.4				
	1.5	38.1	7.36	11.0	1.50	1.5	171.2	133.1				
	2.0	50.8	7.36	11.2	1.52	1.6	196.6	145.8				
	2.5	63.5	7.36	11.3	1.54	1.8	222.0	158.5				
	3.0	76.2	7.36	11.4	1.55	1.9	247.4	171.2	25	50	2	17.5
	3.5	88.9	7.36	11.4	1.55	2.0	272.8	183.9				
	4.0	101.6	7.36	11.5	1.56	2.1	298.2	196.6				
	4.5	114.3	7.36	11.5	1.57	2.2	323.6	209.3				
	5.0	127.0	7.36	11.5	1.57	2.3	349.0	222.0				
	5.5	139.7	7.36	11.6	1.57	2.4	374.4	234.7				
6.0	152.4	7.36	11.6	1.58	2.6	399.8	247.4					
DNB1500-0.5	12.7	15.3	22.3	1.46	3.1	127.0	114.3					
	1.0	25.4	15.3	22.7	1.49	3.4	152.4	127.0				
	1.5	38.1	15.3	22.9	1.50	3.6	177.8	139.7				
	2.0	50.8	15.3	22.9	1.50	3.9	203.2	152.4				
	2.5	63.5	15.3	23.0	1.51	4.1	228.6	165.1				
	3.0	76.2	15.3	23.0	1.51	4.4	254.0	177.8	36	75	2.5	21
	3.5	88.9	15.3	23.0	1.51	4.6	279.4	190.5				
	4.0	101.6	15.3	23.1	1.51	4.9	304.8	203.2				
	4.5	114.3	15.3	23.1	1.51	5.1	330.2	215.9				
	5.0	127.0	15.3	23.1	1.51	5.4	355.6	228.6				
	5.5	139.7	15.3	23.1	1.51	5.6	381.0	241.3				
6.0	152.4	15.3	23.1	1.51	5.9	406.4	254.0					
DNB3000-0.5	12.7	29.5	42.0	1.42	5.2	127.0	114.3					
	1.0	25.4	29.5	45.2	1.54	5.6	152.4	127.0				
	1.5	38.1	29.5	46.7	1.59	6.2	177.8	139.7				
	2.0	50.8	29.5	47.6	1.62	6.5	203.2	152.4				
	2.5	63.5	29.5	48.2	1.64	6.9	228.6	165.1				
	3.0	76.2	29.5	48.6	1.65	7.4	254.0	177.8	50	95	2.5	24
	3.5	88.9	29.5	48.9	1.66	7.9	279.4	190.5				
	4.0	101.6	29.5	49.1	1.67	8.3	304.8	203.2				
	4.5	114.3	29.5	49.3	1.67	8.7	330.2	215.9				
	5.0	127.0	29.5	49.4	1.68	9.2	355.6	228.6				
	5.5	139.7	29.5	49.6	1.68	9.6	381.0	241.3				
6.0	152.4	29.5	49.7	1.69	10.1	406.4	254.0					
DNB5000-0.5	12.7	49.8	72.4	1.45	8.3	127.0	114.3					
	1.0	25.4	49.8	78.2	1.57	9.0	152.4	127.0				
	1.5	38.1	49.8	80.8	1.62	9.7	177.8	139.7				
	2.0	50.8	49.8	82.3	1.65	10.5	203.2	152.4				
	2.5	63.5	49.8	83.3	1.67	11.1	228.6	165.1				
	3.0	76.2	49.8	84.0	1.69	11.9	254.0	177.8	65	120	2.5	25.5
	3.5	88.9	49.8	84.5	1.70	12.6	279.4	190.5				
	4.0	101.6	49.8	84.9	1.71	13.3	304.8	203.2				
	4.5	114.3	49.8	85.2	1.71	14.0	330.2	215.9				
	5.0	127.0	49.8	85.5	1.72	14.8	355.6	228.6				
	5.5	139.7	49.8	85.7	1.72	15.5	381.0	241.3				
6.0	152.4	49.8	85.9	1.73	16.2	406.4	254.0					
DNB7500-0.5	12.7	75.4	92.6	1.23	19.4	180.4	167.7					
	1.0	25.4	75.4	102.1	1.36	20.5	205.8	180.4				
	1.5	38.1	75.4	108.2	1.44	21.8	231.2	193.1				
	2.0	50.8	75.4	112.4	1.49	22.8	256.6	205.8				
	2.5	63.5	75.4	113.1	1.50	23.6	282.0	218.5				
	3.0	76.2	75.4	113.8	1.51	24.7	307.4	231.2	80	150	2.5	27.5
	3.5	88.9	75.4	113.7	1.51	25.3	332.8	243.9				
	4.0	101.6	75.4	114.7	1.52	26.3	358.2	256.6				
	4.5	114.3	75.4	115.7	1.54	27.5	383.6	269.3				
	5.0	127.0	75.4	116.8	1.55	28.5	409.0	282.0				
	5.5	139.7	75.4	117.5	1.56	29.6	434.4	294.7				
6.0	152.4	75.4	118.3	1.57	30.6	459.8	307.4					

Cylinder Base
mm



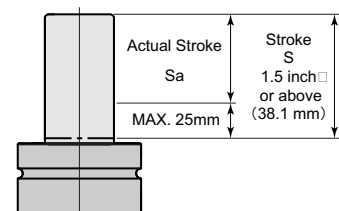
- ※1 : Figures at initial charging pressure 15MPa (20°C).
- ※2 : For DNB1500, 3000 and 5000, for same strokes, size of L&H are all same.
- ※3 : Stroke of 6.5~10.0 inch (6.5~8.0 inch for DNB0750 only) are available by 0.5 inch. (made to order) Dimension and performance diagram are separately available. Please contact us.



Outline drawing for 2D/3D CAD can be downloaded from our URL <http://www.pascaleng.co.jp>

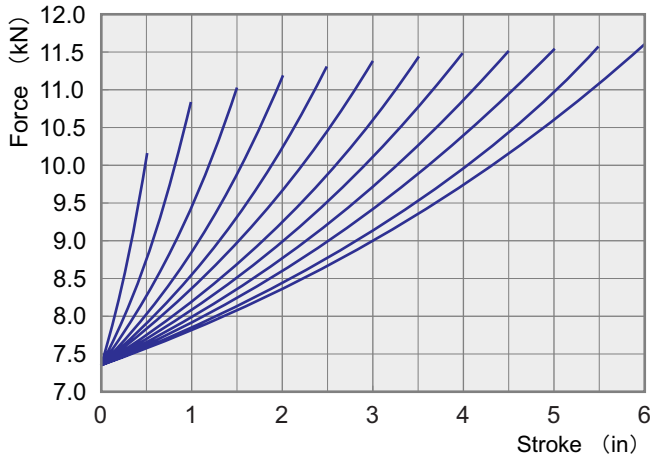
⚠ Caution at stroke selection

In case of a gas spring with 1.5 inch (38.1 mm) or longer stroke, the actual stroke "Sa" should be within the range of "S-25 ≤ Sa ≤ S" to maintain the effect of lubricant.

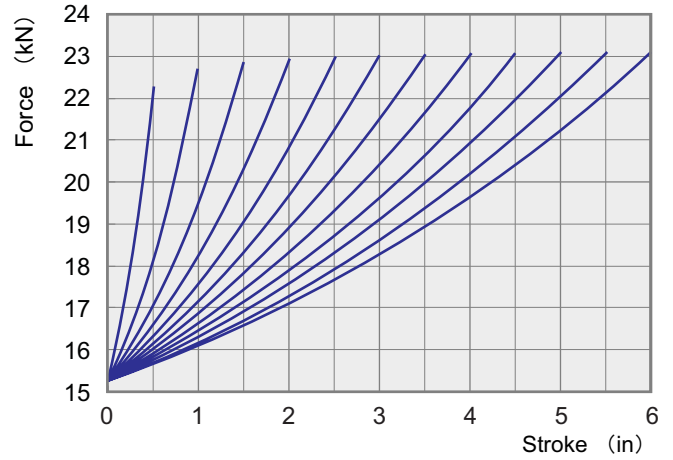


※ The performance of lubricant may differ depending on working environment.

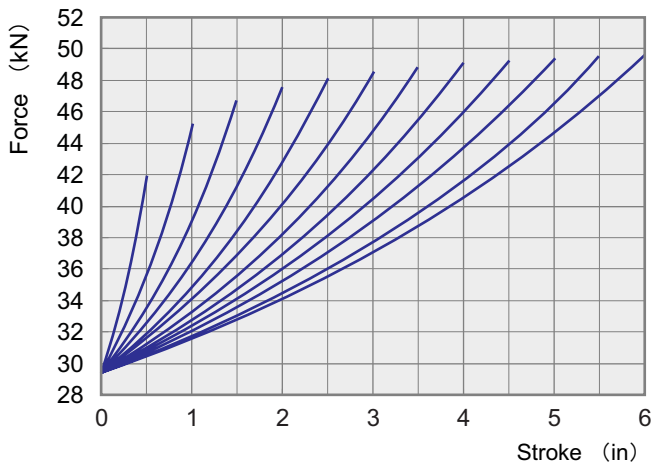
DNB0750



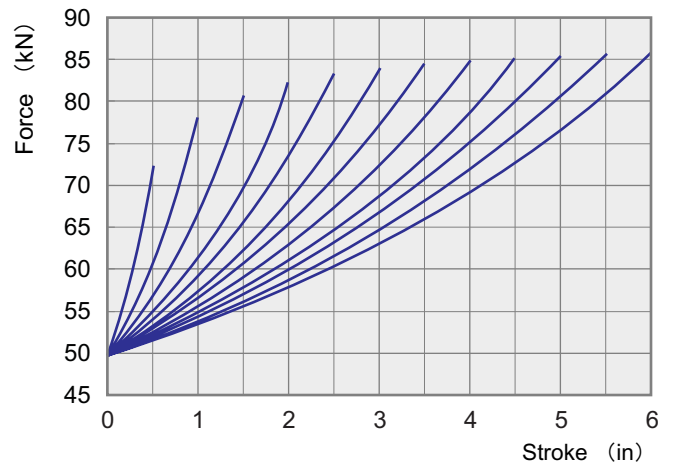
DNB1500



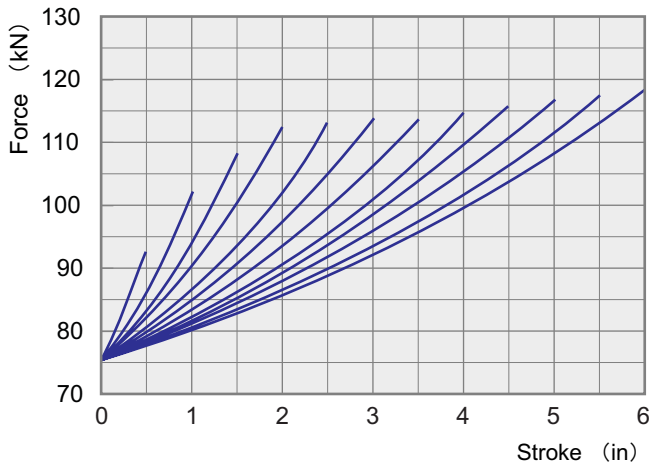
DNB3000



DNB5000



DNB7500



Force Variation of Different Charging Pressure

Above drawings are showing cushion forces F0 by applying the maximum charging pressure of 15MPa. When applying a charging pressure less than 15MPa, use following formula to adjust the cushion force F1. (Min. charging pressure : 3.4MPa)

$$F1 = F0 \times \frac{\text{Charging pressure (MPa)}}{15}$$