

# Pneumatic Actuator

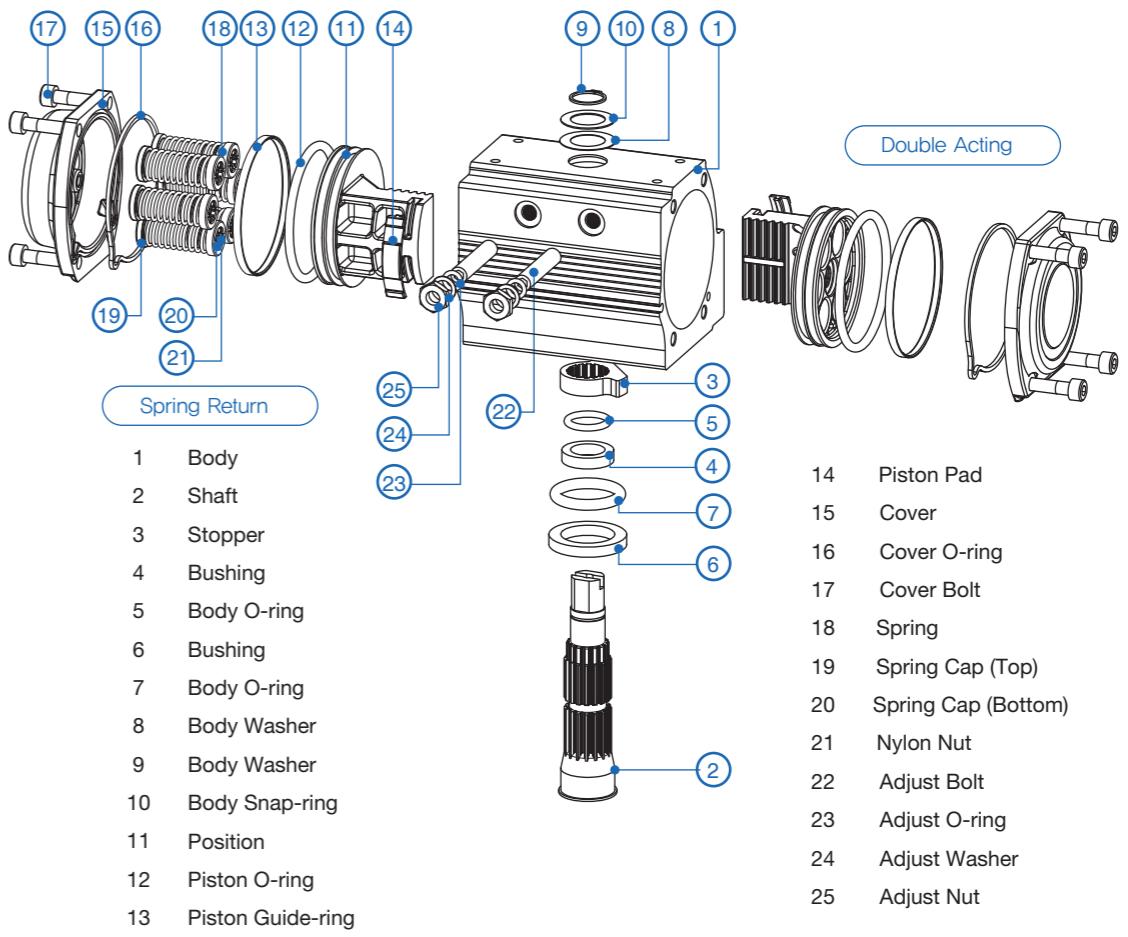
## RD/RS Series



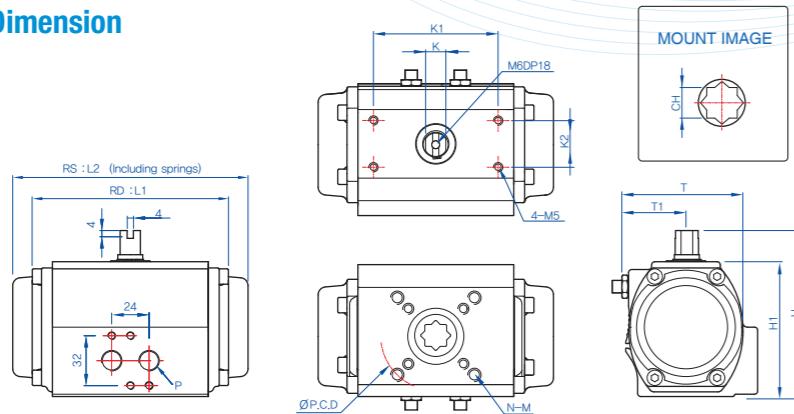
### Operating Mechanism

Double Acting	Acting "A"		
Spring Return	Acting "A" (Fail Close)		
	Acting "A" (Fail Open)		

### Part List



### Dimension



P	
RD(S)32,40	PT1/8
RD(S)50~210	PT1/4
K1	K2
RD(S)32	25.5
RD(S)40	50
RD(S)50~160	80
RD(S)210	130
	30

Model	ISO	P.C.D	N-G	K	L1 (RD)	L2 (RS)	T	T1	H	H1	CH	Stem depth	RD Wt(kg)	RS Wt(kg)
@RD/RS32	F03	36	4-M5	7	66	-	45	25	55	45	9x9	9	0.3	-
@RD/RS40	F03/F05	36/50	4-M5/4-M6	9	97	97	63	32	75	55	9x9	9	0.5	0.6
RD/RS50	F03/F05/F07	36/50/70	4-M5/ 4-M6/4-M8	9	119	133	75	40	90	70	11x11	13	1.0	1.1
RD/RS65	F05/F07	50/70	4-M6/4-M8	13	131	154	89	46	106.5	86.5	14x14	16	1.4	1.5
RD/RS80	F07	70	4-M8	19	189	220	101	49.5	126	106	17x17	19	2.9	3.3
RD/RS90	F07	70	4-M8	19	188	223	104	54.5	136	116	17x17	19	3.4	3.8
RD/RS100	F07/F10	70/102	4-M8/4-M10	19	229	256	132	61.5	148	128	22x22	26	4.7	5.4
											#17x17	19		
RD/RS115	F07/F10	70/102	4-M8/4-M10	19	264	302	137	67.5	163	143	22x22	26	6.7	7.5
RD/RS125	F07/F10	70/102	4-M8/4-M10	19	299	330	151	71.5	174	154	22x22	26	8.6	9.9
RD/RS140	F10/F12	102/125	4-M10/4-M12	24	332	389	164	77	192	172	27x27	30	12.4	14.5
											#22x22	26		
RD/RS160	F10/F12	102/125	4-M10/4-M12	30	364	416	188	103.5	216	196	27x27	30	16.9	19.5
RD/RS185	F14	140	4-M16	36	431	445	217	102	254	224	36x36	30	24.2	29.0
RD/RS210	F14	140	4-M16	36	444	527	231	115	284	254	36x36	30	32.3	37.9

- Model with '@' is compact type. They don't have angle stopper. - Model with '#' is optional.

### RD Series (Rack & Pinion Type) Torque Table

Unit : Nm

Model	Supply Air						
	3Bar	4Bar	4.5Bar	5Bar	6Bar	7Bar	8Bar
RD32	2.4	3.1	3.5	3.9	4.8	5.7	6.6
RD40	5.5	7.4	8.4	9.2	11.1	13.0	14.8
RD50	9.4	12.5	14.3	15.9	19.1	22.5	25.8
RD65	18.3	24.7	27.8	30.8	36.8	42.9	49.2
RD80	44.5	58.9	66.5	74.4	89.3	104.3	117.8
RD90	57.2	76.2	85.7	95.2	114.2	133.2	152.2
RD100	79.5	105.5	118.8	132.1	158.7	185.3	211.9
RD115	123.5	166.3	187.2	209.0	251.8	294.5	337.3
RD125	161.5	218.5	247.0	270.8	327.8	384.8	437.0
RD140	237.5	318.3	361.0	399.0	479.8	560.5	641.3
RD160	327.8	441.8	494.0	551.0	669.8	779.0	893.0
RD185	475.0	641.3	722.0	802.8	964.3	1125.8	1287.3
RD210	679.3	912.0	1030.8	1144.8	1382.3	1615.0	1847.8

### RS Series (Rack & Pinion Type) Torque Table

UNIT:Nm

Model	Spring Unit	Supply Air															
		3Bar		4Bar		4.5Bar		5Bar		6Bar		7Bar		8Bar			
		0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°		
RS40	Weak Middle	3.2	1.5	5.0	3.1	5.0	3.8	6.0	4.6	6.9	5.9	8.8	7.1	10.7	8.2	2.4	1.6
	Weak Strong	2.7	0.7	4.6	1.7	5.4	2.3	6.4	2.9	8.2	4.1	10.1	5.2	12.0	6.3	3.0	2.1
	Middle	2.6	0.8	4.6	2.4	5.4	3.2	6.3	4.1	8.1	5.9	10.0	7.7	11.9	9.3	4.1	2.8
	Middle Strong	1.9	-	3.7	1.0	4.6	1.8	5.4	2.5	7.3	4.2	9.1	5.6	11.0	6.7	4.9	3.0
	Strong	1.0	-	2.9	0.5	3.8	1.2	4.8	2.1	6.7	3.8	8.6	5.1	10.5	6.4	5.9	3.9
RS50	4	7.4	6.1	10.8	9.5	12.4	11.1	14.2	12.8	17.5	16.2	20.9	19.6	24.1	22.9	3.6	2.3
	5	6.7	5.0	10.2	8.5	11.9	10.2	13.4	11.8	16.8	15.3	20.1	18.5	23.6	22.0	4.4	2.8
	6	6.3	4.0	9.6	7.5	11.3	9.0	12.8	10.7	16.3	14.3	19.6	17.6	22.9	20.9	5.2	3.3
	7	5.6	3.2	8.9	6.6	10.6	8.4	12.3	10.0	15.6	13.4	19.0	16.8	22.4	20.2	6.3	3.8
	8	4.1	1.2	7.4	4.4	9.0	6.1	10.3	7.6	14.2	11.1	17.3	14.5	20.8	18.0	8.1	5.2
	9	3.6	-	6.9	3.4	8.6	5.2	9.5	6.9	13.6	10.2	16.9	13.6	20.3	17.0	9.1	6.0
	10	2.9	-	6.1	2.7	7.8	4.3	8.9	5.9	12.8	9.3	16.2	12.6	19.5	16.1	10.1	6.5
	11	2.3	-	5.6	1.5	7.3	3.1	8.5	4.8	12.4	8.2	15.7	11.5	19.0	14.9	11.0	7.0
	12	1.8	-	5.2	0.6	6.8	2.2	6.8	3.9	11.9</							

**RS Series (Rack & Pinion Type) Torque Table**

UNIT:Nm

Model	Spring Unit	Supply Air															
		3Bar		4Bar		4.5Bar		5Bar		6Bar		7Bar		8Bar		Spring	
		0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	0°
RS115	4	95.0	71.3	137.8	114.0	161.5	137.8	180.5	161.5	223.3	204.3	266.0	247.0	308.8	289.8	42.8	23.8
	5	85.5	61.8	128.3	104.5	147.3	123.5	171.0	147.3	213.8	190.0	256.5	232.8	299.3	275.5	52.3	33.3
	6	76.0	52.3	118.8	90.3	142.5	114.0	161.5	133.0	204.3	175.8	247.0	218.5	289.8	261.3	61.8	38.0
	7	66.5	33.3	114.0	76.0	133.0	99.8	156.8	118.8	194.8	161.5	237.5	204.3	285.0	247.0	76.0	47.5
	8	61.8	23.8	104.5	66.5	128.3	85.5	147.3	109.3	190.0	152.0	232.8	190.0	275.5	237.5	85.5	52.3
	9	52.3	9.5	95.0	52.3	118.8	71.3	137.8	95.0	185.3	142.5	228.0	180.5	270.8	223.3	99.8	61.8
	10	42.8	-	85.5	42.8	109.3	61.8	128.3	80.8	175.8	123.5	218.5	166.3	256.5	209.0	114.0	66.5
	11	38.0	-	80.8	28.5	104.5	47.5	123.5	71.3	166.3	114.0	209.0	156.8	251.8	199.5	123.5	76.0
RS125	12	33.3	-	71.3	14.3	95.0	38.0	114.0	57.0	156.8	99.8	199.5	142.5	242.3	185.3	133.0	80.8
	4	114.0	95.0	171.0	152.0	194.8	180.5	223.3	209.0	275.5	261.3	327.8	318.3	384.8	375.3	57.0	33.3
	5	104.5	80.8	161.5	133.0	190.0	161.5	213.8	190.0	270.8	247.0	327.8	304.0	380.0	356.3	71.3	42.8
	6	95.0	61.8	152.0	118.8	175.8	147.3	204.3	171.0	256.5	228.0	313.5	285.0	370.5	337.3	85.5	52.3
	7	85.5	47.5	142.5	99.8	166.3	128.3	194.8	156.8	247.0	213.8	304.0	266.0	356.3	323.0	99.8	61.8
	8	76.0	28.5	128.3	80.8	156.8	109.3	180.5	137.8	237.5	194.8	289.8	247.0	346.8	304.0	114.0	71.3
	9	66.5	9.5	118.8	66.5	147.3	95.0	175.8	123.5	228.0	175.8	280.3	232.8	332.5	285.0	133.0	85.5
	10	52.3	-	109.3	47.5	137.8	76.0	161.5	104.5	218.5	161.5	270.8	213.8	323.0	270.8	147.3	95.0
RS140	11	42.8	-	99.8	33.3	128.3	61.8	152.0	85.5	209.0	142.5	261.3	199.5	313.5	251.8	161.5	104.5
	12	33.3	-	90.3	19.0	114.0	42.8	142.5	71.3	194.8	123.5	251.8	180.5	304.0	232.8	175.8	114.0
	4	166.3	137.8	247.0	218.5	285.0	261.3	327.8	299.3	408.5	384.8	489.3	465.5	570.0	546.3	760.0	52.3
	5	156.8	109.3	237.5	194.8	280.3	232.8	318.3	275.5	399.0	361.0	479.8	441.8	560.5	522.5	104.5	61.8
	6	142.5	90.3	223.3	175.8	261.3	213.8	304.0	256.5	384.8	337.3	465.5	418.0	546.3	498.8	123.5	71.3
	7	128.3	66.5	209.0	147.3	247.0	190.0	289.8	228.0	370.5	313.5	451.3	394.3	532.0	470.3	147.3	90.3
	8	114.0	42.8	194.8	123.5	237.5	166.3	275.5	204.3	356.3	289.8	437.0	370.5	517.8	451.3	175.8	104.5
	9	95.0	14.3	175.8	99.8	218.5	142.5	256.5	180.5	337.3	266.0	418.0	346.8	498.8	427.5	194.8	118.8
RS160	10	85.5	-	166.3	76.0	204.3	118.8	242.3	156.8	323.0	242.3	408.5	323.0	484.5	403.8	218.5	137.8
	11	66.5	-	147.3	47.5	190.0	90.3	228.0	133.0	308.8	213.8	389.5	299.3	470.3	380.0	242.3	152.0
	12	52.3	-	133.0	28.5	175.8	66.5	213.8	109.3	294.5	194.8	375.3	275.5	456.0	356.3	266.0	166.3
	4	223.3	180.5	337.3	289.8	394.3	346.8	451.3	403.8	565.3	513.0	679.3	622.3	793.3	731.5	114.0	80.3
	5	213.8	152.0	327.8	261.3	384.8	318.3	441.8	375.3	555.8	484.5	669.8	593.8	783.8	703.0	142.5	95.0
	6	190.0	118.8	304.0	237.5	361.0	294.5	418.0	346.8	532.0	465.5	646.0	579.5	760.0	693.5	175.8	118.8
	7	166.3	85.5	285.0	194.8	337.3	251.8	394.3	334.4	513.0	422.8	622.3	541.5	736.3	660.3	204.3	137.8
	8	147.3	52.3	261.3	166.3	318.3	218.5	375.3	280.3	489.3	394.3	603.3	508.3	712.5	622.3	242.3	161.5
RS185	9	123.5	14.3	242.3	128.3	299.3	185.3	356.3	242.3	470.3	356.3	584.3	470.3	698.3	584.3	275.5	185.3
	10	104.5	-	218.5	99.8	270.8	152.0	327.8	209.0	446.5	323.0	560.5	437.0	669.8	551.0	313.5	204.3
	11	80.8	-	194.8	61.8	251.8	114.0	308.8	175.8	422.8	289.8	532.0	403.8	650.8	517.8	337.3	228.0
	12	66.5	-	175.8	28.5	232.8	88.5	289.8	142.5	403.8	256.5	513.0	365.8	627.0	479.8	365.8	247.0
	4	342.0	270.8	503.5	432.3	584.3	513.0	665.0	593.8	826.5	755.3	988.0	912.0	1144.8	1073.5	180.5	118.8
	5	308.8	218.5	470.3	384.8	551.0	460.8	627.0	546.3	788.5	707.8	950.0	869.3	1111.5	1026.0</td		