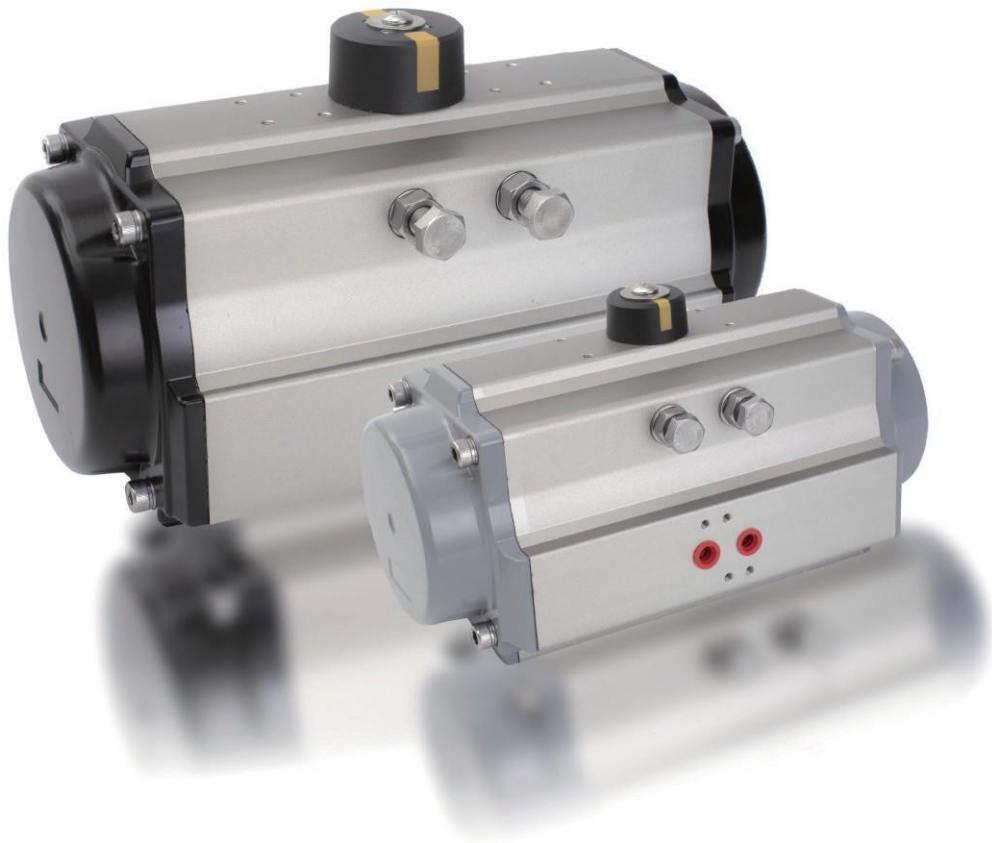
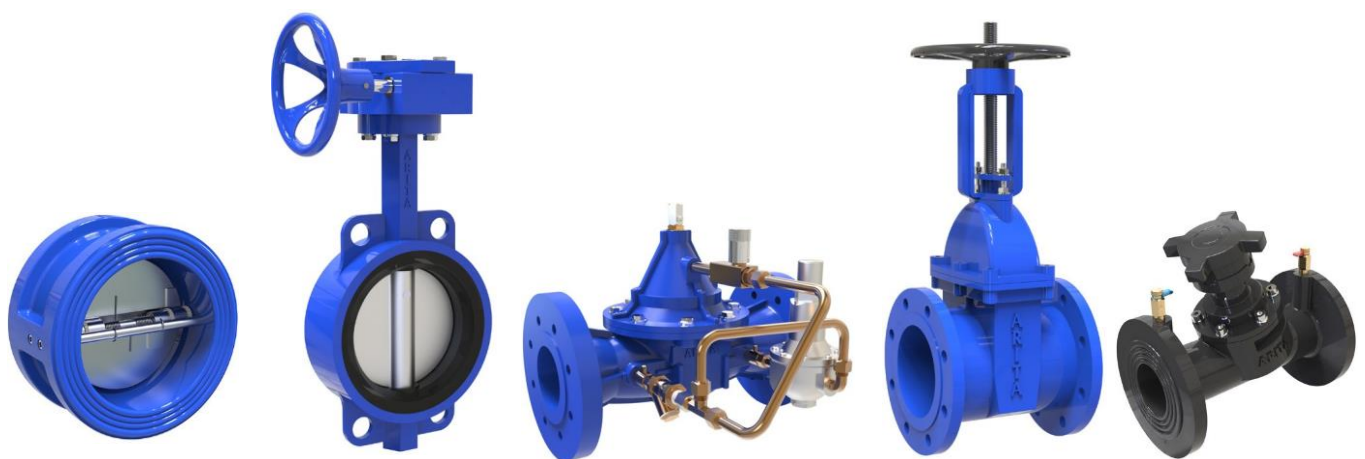


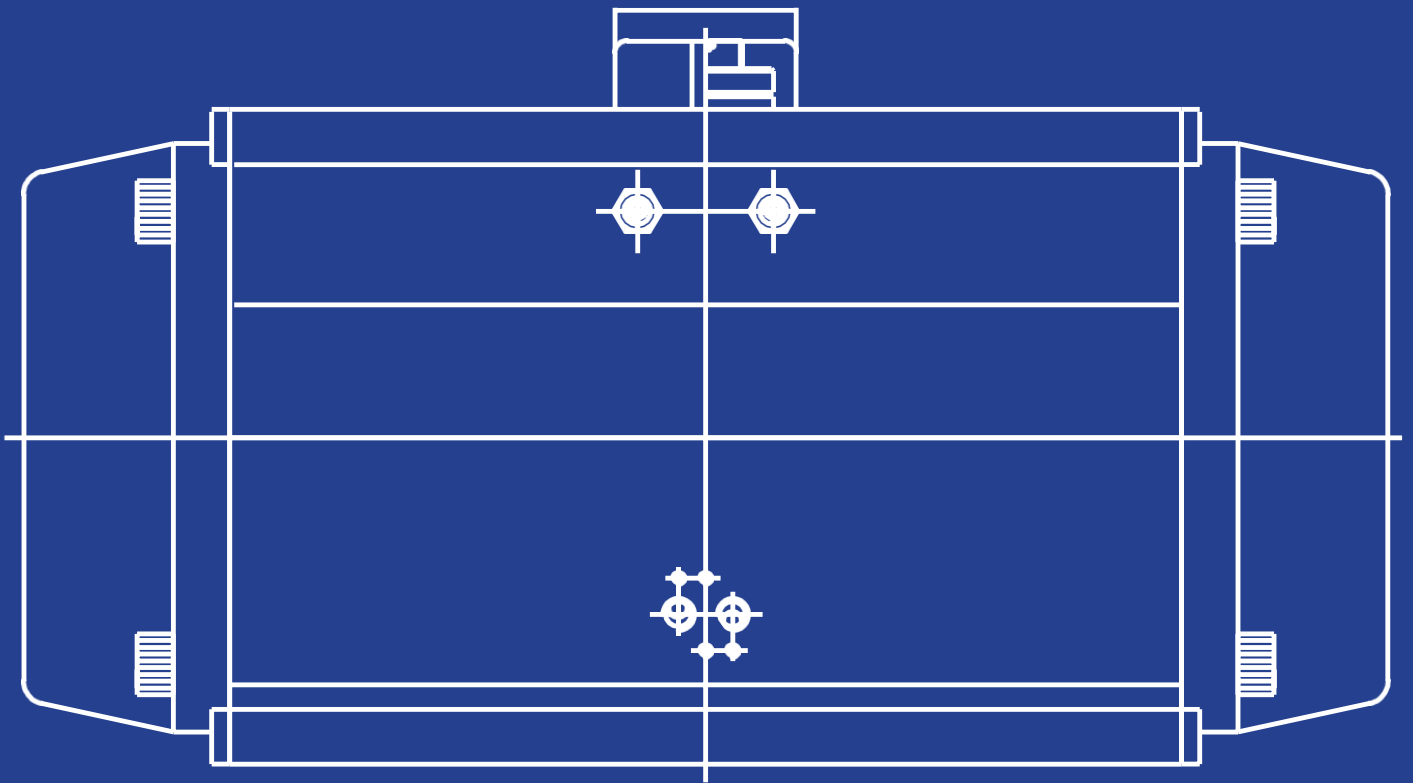


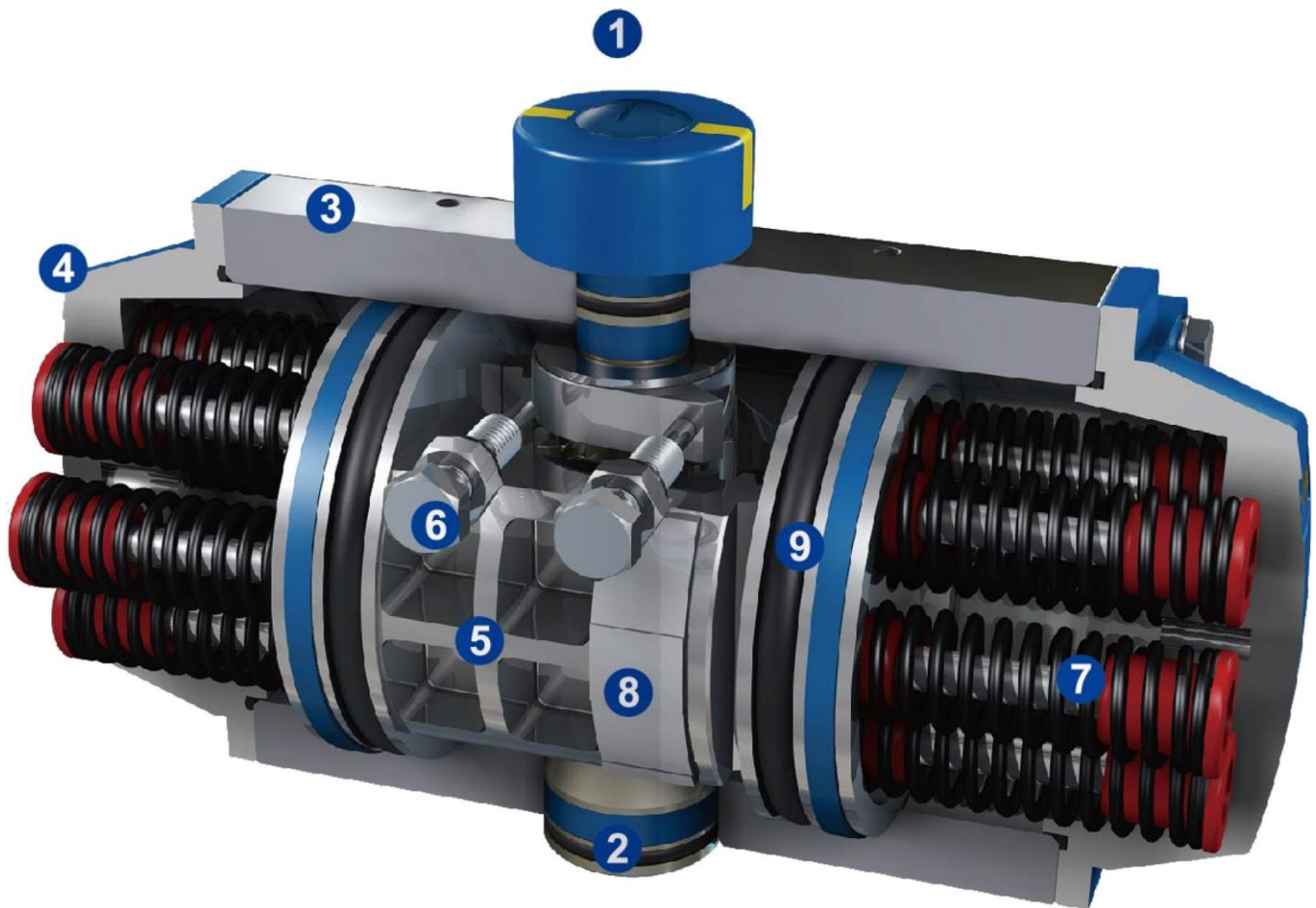
Rack and Pinion Pneumatic Actuator





Rack and Pinion Pneumatic Actuator





1.Indicator

Position indicator with NAMUR is convenient for mounting accessories such as Limit Switch box, Positioner and so on.

2.Pinion

The pinion is high-precision and integrative, made from nickelled-alloy steel, full conform to the latest standards of ISO5211, DIN3337, NAMUR. The dimensions can be customized and the stainless steel is available.

3.Actuator Body

According to the different requirements, the extruded aluminum alloy ASTM 6005 Body can be treated with hard anodized, powder polyester painted (different colours is available such as blue, orange, yellow etc.), PTFE or Nickelplated.

4.End Caps

Die-casting aluminum powder polyester painted in different colours or PTFE.

5.Pistons

The twin rack pistons are made from Die-casting aluminum treated with Hard anodized or made from Cast steel with galvanization. Symmetric mounting position, long cycle life and fast operation, reversing rotation by simply inverting the pistons.

6.Travel Adjustment

The two independent external travel stop adjustment bolts can adjust $\pm 5^\circ$ at both open and close directions easily and precisely.

7.High Performance Springs

Preloaded coating springs are made from the high quality material for resistant to corrosion and longer service life, which can be demounted safely and conveniently to satisfy different requirements of torque by changing quantity of springs.

8.Bearings & Guides

Made from low friction, long-life compound material, to avoid the direct contact between metals. The maintenance and replacement are easy and convenient.

9.O-Rings

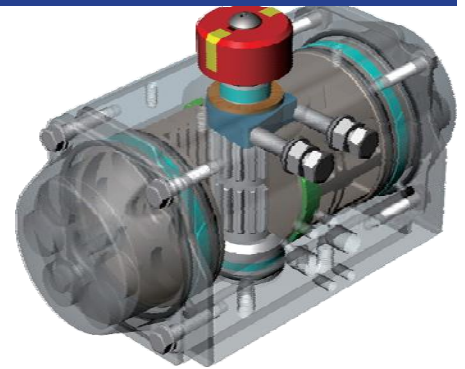
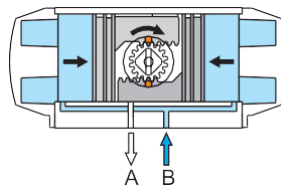
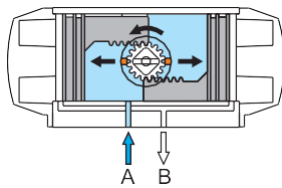
NBR rubber O-rings provide trouble-free operation at standard temperature ranges. For high and low temperature applications Viton or Silicone.

Operating temperatures:Standard(NBR):-20°C ~ 80°C;
Low temperature(Si):-40°C ~ 80°C;
High temperature(Viton):-15°C ~ 150°C.

OPERATING PRINCIPLE

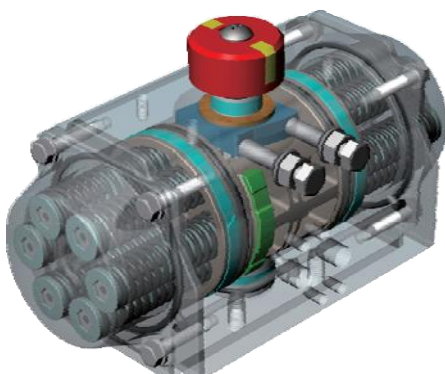
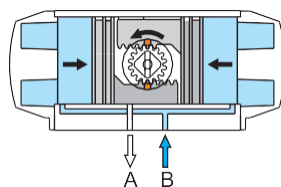
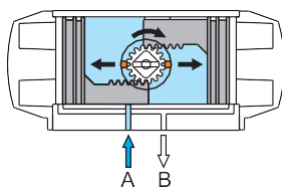
DOUBLE ACTING

Standard Assembly(DP):



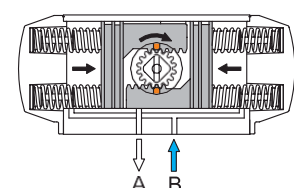
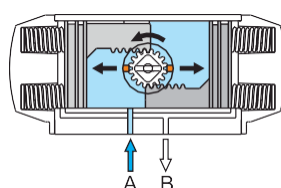
Air to port A forces the pistons outwards, causing the pinion to turn counterclockwise while the air is being exhausted from port B. Air to port B forces the pistons inwards, causing the pinion to turn clockwise while the air is being exhausted from port A.

Reverse Assembly(DR):



SINGLE ACTING (SPRING RETURE)

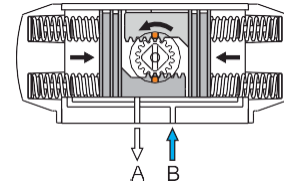
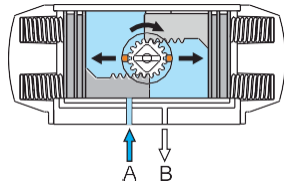
Standard Assembly(SP)(Fail to Close):



OPERATING PRINCIPLE

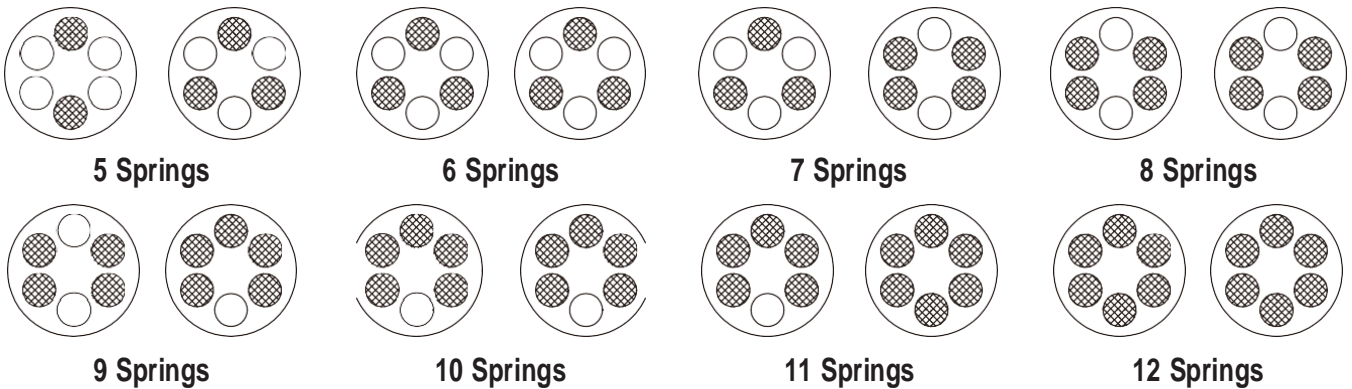
Air to port A forces the pistons outwards, causing the springs to compress, the pinion turns counterclockwise while air is being exhausted from port B. Loss of air pressure on port A, the stored energy in the springs forces the pistons inwards. The pinion turns clockwise while air is being exhausted from port A.

Reverse Assembly(SR)(Fail to Open):

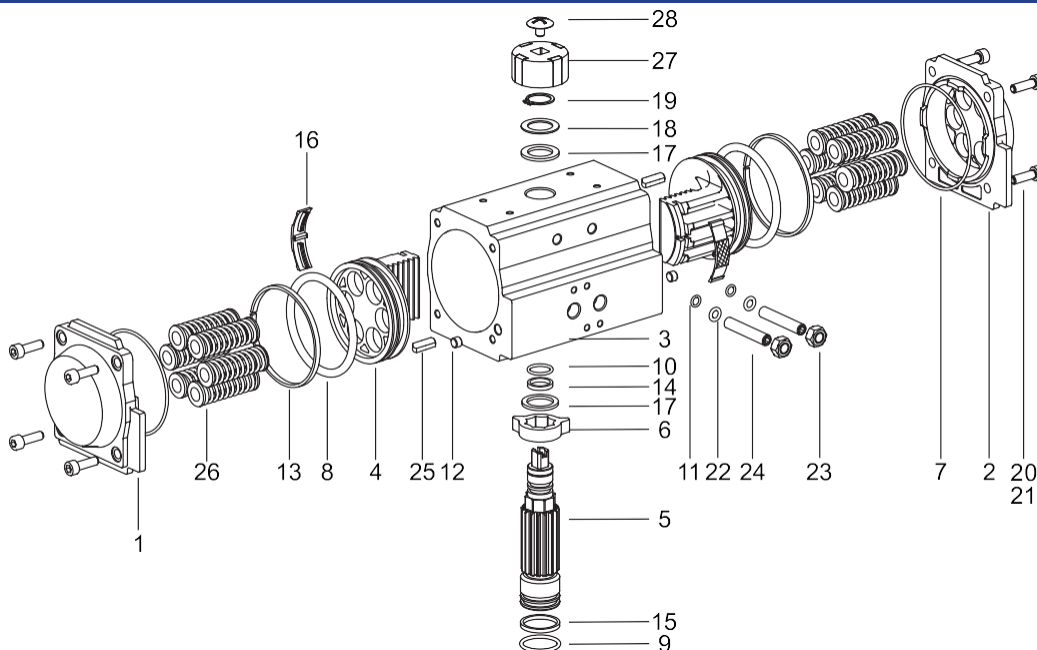


SPRINGS CONFIGURATION

Pneumatic actuators are available to offer spring return acting for emergency shutdown and fail safe operation. Below is the spring configurations for selection accordingly.



PARTS AND MATERIAL



PARTS AND MATERIAL

NO.	Part	Qty.	Standard Material	Optional Material
1	Left End Cap	1	Cast Aluminum	Stainless Steel
2	Right End Cap	1	Cast Aluminum	Stainless Steel
3	Body	1	Extruded Aluminum Alloy	Stainless Steel
4	Piston	2	Cast Aluminum	-
5	Pinion	1	Carbon Steel	Stainless Steel
6	Cam	1	Stainless Steel	-
7	O-Ring(End Cap)	2	NBR	VITON / Silicone
8	O-Ring(Piston)	2	NBR	VITON / Silicone
9	O-Ring(Pinion Bottom)	1	NBR	VITON / Silicone
10	O-Ring(Pinion Top)	1	NBR	VITON / Silicone
11	O-Ring(Adjust Screw)	2	NBR	VITON / Silicone
12	Plug	2	NBR	VITON / Silicone
13	Bearing(Piston)	2	Polyoxymethylene	-
14	Bearing(Piston Top)	1	Nylon 46	-
15	Bearing(Piston Bottom)	1	Nylon 46	-
16	Guide(Piston)	2	Nylon 46	-
17	Washer	2	Nylon 46	-
18	Thrust Washer	1	Stainless Steel	-
19	Circlip	1	Stainless Steel	-
20	End Cap Bolt	8/12/16	Stainless Steel	-
21	End Cap Washer	8/12/16	Stainless Steel	-
22	Washer(Adjust Screw)	2	Stainless Steel	-
23	Nut(Adjust Screw)	2	Stainless Steel	-
24	Adjust Screw	2	Stainless Steel	-
25	Key	2	Nylon 66+30% Glass Fiber	-
26	Spring	0-12	Spring Steel	-
27	Indicator	1	Polypropylene+30% Glass Fiber	-
28	Indicator Screw	1	Stainless Steel	-

SPECIFICATION

Model	Maximum Air Pressure	Rotation angle	Travel Adjust Per 10 Circles	Cylinder diameter(mm)	Cylinder Volume(L)		Switching Time(S)		Weight(Kg)		Model
					Start	End	Start	End	Cylinder	Per Spring	
DP/SP00015	Dry or Lubricated Clean Compressed Air 8 bar	0° - 90° or 90° ± 4°	1/6	50	0.1	0.2	0.2	0.3	1.1	-	DP
							0.3	0.3	1.2	0.01	SP
DP/SP00030			1/6	63	0.2	0.3	0.3	0.3	1.6	-	DP
							0.3	0.4	1.8	0.02	SP
DP/SP00060			1/5	75	0.3	0.5	0.3	0.4	2.8	-	DP
							0.4	0.5	3.2	0.03	SP
DP/SP00100			1/5	88	0.5	0.8	0.4	0.5	4.0	-	DP
							0.5	0.6	4.7	0.06	SP
DP/SP00150			1/5	100	0.7	1.1	0.5	0.6	5.9	-	DP
							0.7	0.9	6.7	0.07	SP
DP/SP00220			1/5	115	1.2	1.8	0.7	0.8	8.5	-	DP
							0.9	1.1	10.0	0.13	SP
DP/SP00300			1/4	125	1.5	2.3	0.9	1.1	10.7	-	DP
							1.2	1.4	12.5	0.16	SP
DP/SP00450			1/4	145	2.4	3.8	1.2	1.4	15.5	-	DP
							1.5	1.8	18.3	0.25	SP
DP/SP00600			1/4	160	3.1	4.9	1.5	1.7	19.5	-	DP
							1.8	2.1	23.3	0.36	SP
DP/SP00900			1/4	180	4.3	6.9	2.0	2.2	26.7	-	DP
							2.4	2.8	32.8	0.5	SP
DP/SP01200	1/4	200	5.9	9.5	2.7	3.2	35.6	-	DP		
					3.5	4.0	43.6	0.62	SP		
DP/SP02000	1/4	240	10.0	15.2	3.5	4.0	58.2	-	DP		
					4.1	4.6	1.0	1.12	SP		
DP/SP03000	1/4	265	14.5	21.4	4.0	4.5	78.8	-	DP		
					4.5	5.0	96.5	1.56	SP		
DP/SP05000	1/4	330	25.0	40.0	6.0	7.0	130.0	-	DP		
					7.5	8.5	163.0	2.95	SP		

1. DP: Double Acting Positive Direction; DR: Double Acting Positive Direction; SP: Single Acting Positive Direction; SR: Single Acting Reverse Direction.
2. The switching time of the actuator is measured under the following conditions:
a. room temperature; b. travel is 90°; c. solenoid valve is 4mm, rate of flow is 400L/min; d. inner diameter of pipe is 8mm; e. neutral clean air; f. air supply pressure is 5.5bar; g. actuator is empty.
3. The weight of model SP is the weight with 10 springs. If the number of springs needs to be increased or reduced, the corresponding weight shall be calculated according to the weight of single spring.

SELECTION GUIDE

SAFETY FACTOR

When selecting the pneumatic actuator, multiply the torque of the determined valve by the safety factor, and multiply the water vapor or non lubricated liquid medium by the safety factor of 1.25; The non lubricated slurry liquid medium is multiplied by the safety factor of 1.3; the non lubricated dry gas medium is multiplied by the safety factor of 1.4; The safety factor of 1.6 for the granular powder medium transported by non lubricating gas; For clean, low friction lubricating media, multiply by a safety factor of 1.2. (The above safety factors are recommended by our company for reference only)

SELECTION OF ACTUATOR

DOUBLE ACTING

Example:

- The torque needed by valve=100Nm
- Safety factor=1.3
- The torque considered safety factor $100 \times 1.3 = 130\text{Nm}$
- Air Supply=5bar

According to the below table, we can choose the minimum model is **DR00150** (output torque is 133Nm at 5 bar).

SINGLE ACTING

There are two types of output torque of single acting actuator:

First, the output torque generated by the compressed air minus the torque required for the spring to be compressed. In this case, the force generated when air supply pressure pushes piston minus the reactive force generated after the spring is compressed, The output torque of the actuator decreases gradually from maximum(0°) to minimum(90°).

Second, the output torque is gained by restoring force of spring. At this time the cylinder exhaust, no output torque. In this case, due to gradual extension of spring, The output torque of the actuator decreases gradually from maximum(90°) to minimum(0°).

During the restoration, the spring return actuators' output torque will not be affected by the inputting air from the port B. On the contrary, it will help the restoration of springs.

Example:

- The torque needed by valve=100Nm
- Safety factor=1.3
- The torque considered safety factor $100 \times 1.3 = 130\text{Nm}$
- Air Supply=5bar

According to the table of single acting actuators' output, we find output torque of **SR00450-08** is:

Air stroke $0^\circ = 272\text{Nm}$

Air stroke $90^\circ = 205\text{Nm}$

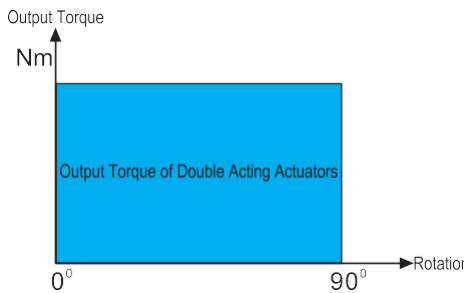
Spring stroke $90^\circ = 206\text{Nm}$

Spring stroke $0^\circ = 132\text{Nm}$

All the output torque is larger than we needed.

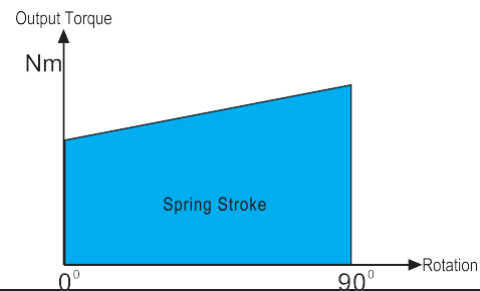
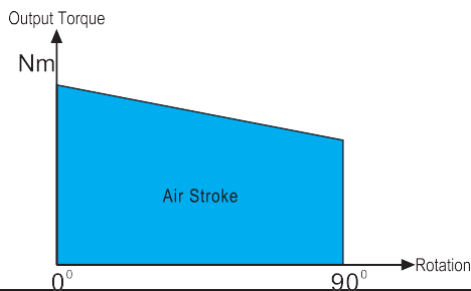
OUTPUT TORQUE

TORQUES OF DOUBLE ACTING



Output Torque Of Pneumatic Actuator With Double Acting(Unit:Nm)										
Model	Air Pressure(bar)									
	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	7.0	8.0
DP00015	8.3	10	11.6	13.3	15	16.6	18.3	19.9	23.3	26.6
DP00030	14.7	17.6	20.5	23.5	26.4	29.3	32.2	35.2	41	46.9
DP00060	29.1	34.9	40.7	46.5	52.3	58.2	64	69.8	81.4	93
DP00100	45.7	54.9	64	73.2	82.3	91.5	101	110	128	146
DP00150	66.5	79.7	93	106	120	133	146	160	186	213
DP00220	107	129	150	172	193	215	236	258	301	344
DP00300	138	166	194	221	249	277	304	332	387	443
DP00450	217	261	304	348	391	434	478	521	608	695
DP00600	283	340	397	453	510	566	623	680	793	907
DP00900	383	459	536	612	689	765	842	918	1071	1224
DP01200	531	638	744	850	956	1063	1169	1275	1488	1700
DP02000	935	1122	1309	1493	1683	1870	2057	2244	2618	2992
DP03000	1347	1617	1886	2156	2425	2695	2964	3234	3772	4311
DP05000	2350	2821	3291	3761	4231	4701	5171	5641	6581	7521

TORQUES OF SINGLE ACTING



Output Torque Of Pneumatic Actuator With Double Acting(Unit:Nm)																							
Model	Spring (Qty.)	Air Pressure(bar)																		Spring's Output			
		2.5		3.0		3.5		4.0		4.5		5.0		5.5		6.0		7.0		8.0		90°	0°
		0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°		
Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End		
SP00015	5	4.4	3.1	6.0	4.6	7.3	6.1	8.9	7.5	10.4	9.0	11.8	10.5									4.9	3.4
	6	3.8	2.2	5.3	3.7	6.8	5.2	8.2	6.6	9.8	8.2	11.2	9.7	12.8	11.1							5.8	4.1
	7			4.6	2.8	6.3	4.3	7.6	5.8	9.2	7.3	10.7	8.8	12.1	10.3	13.6	11.8					6.8	4.7
	8					5.6	3.4	7.1	4.9	8.5	6.5	10.0	7.9	11.5	9.5	13.0	10.9	16.0	14.0			7.8	5.4
	9							6.4	4.0	8.0	5.5	9.4	7.0	10.9	8.5	12.4	10.0	15.4	13.0	18.4	16.0	8.8	6.1
	10									7.3	4.6	8.8	6.7	10.3	7.6	11.8	9.1	14.8	11.1	17.8	15.1	9.7	6.8
	11											8.2	5.3	9.7	6.8	11.2	8.2	14.2	11.2	17.1	14.3	10.7	7.4
	12														9.0	5.9	10.6	7.3	13.5	10.4	16.5	13.4	11.7

OUTPUT TORQUE

TORQUES OF SINGLE ACTING *(Continued)*

Output Torque Of Pneumatic Actuator With Double Acting(Unit:Nm)																							
Model	Spring (Qty.)	Air Pressure(bar)																				Spring's Output	
		2.5		3.0		3.5		4.0		4.5		5.0		5.5		6.0		7.0		8.0		90°	0°
		0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	Start	End
SP00030	5	8.1	5.5	10.8	8.1	13.5	10.8	16.1	13.5	18.7	16.1	21.3	18.7									8.5	5.5
	6	7.2	4.0	9.8	6.6	12.4	9.2	15.1	11.9	17.7	14.5	20.3	17.1	23.0	19.9							10.2	6.7
	7			8.8	5.1	11.4	7.8	14.1	10.4	16.7	13.0	19.3	15.6	22.0	18.3	24.5	20.9					11.8	7.8
	8					10.4	6.3	13.1	8.9	15.7	11.5	18.3	14.2	20.9	16.8	23.6	19.4	28.8	24.7			13.5	8.9
	9							12.0	7.3	14.7	10.0	17.3	12.7	19.9	15.3	22.6	17.9	27.9	23.2	33.2	28.4	15.2	10.0
	10									13.7	8.4	16.3	11.1	18.9	13.7	21.6	16.3	26.9	21.6	32.2	26.9	16.9	11.1
	11											15.3	9.6	18.0	12.2	20.6	14.8	25.9	20.1	31.2	25.3	18.6	12.2
	12													17.0	10.7	19.6	13.3	24.9	18.6	30.1	23.9	20.3	13.3
SP00060	5	16.2	10.5	21.4	15.8	26.6	21.0	31.8	26.2	37.0	31.5	42.3	36.7									17.3	11.1
	6	14.2	7.4	19.4	12.7	24.6	17.9	29.8	23.1	35.1	28.3	40.3	33.5	45.6	38.8							30.9	13.3
	7			17.4	9.5	22.6	14.7	27.9	20.0	33.1	35.2	38.3	30.5	43.5	35.7	48.8	40.9					24.2	15.5
	8					20.7	11.7	25.9	16.9	31.1	22.1	36.3	27.3	41.5	32.5	46.8	37.8	57.3	48.3			27.7	17.7
	9							23.9	13.7	29.1	19.0	34.3	24.3	39.6	29.5	44.8	34.7	55.3	45.1	65.7	55.6	31.1	19.9
	10									27.1	15.9	32.4	21.1	37.6	26.3	42.8	31.5	53.2	42.0	63.8	52.5	34.6	22.1
	11											30.4	18.0	35.6	23.2	40.8	28.5	51.3	38.9	61.8	49.4	38.1	24.3
	12													33.6	20.1	38.8	25.3	49.3	35.8	59.7	46.2	41.5	26.5
SP00100	5	24.6	15.1	32.8	23.4	41.1	31.5	49.3	39.8	57.5	48.0	65.7	56.3									28.9	18.3
	6	21.3	10.0	29.5	18.1	37.8	26.3	45.9	34.6	54.2	42.8	62.4	51.1	70.7	59.3							34.7	22.0
	7			26.2	12.9	34.4	21.2	42.7	29.4	50.9	37.7	59.1	45.9	67.4	54.0	75.6	62.3					40.4	25.7
	8					31.1	16.0	39.4	24.2	47.6	32.4	55.8	40.6	64.0	48.9	72.3	57.1	88.7	73.6			46.2	29.4
	9							36.0	19.0	44.3	27.2	52.5	35.5	60.7	43.7	69.0	51.9	85.5	68.4	101	84.8	52.0	33.0
	10									41.0	22.0	49.2	30.3	57.5	38.5	65.7	46.8	82.1	63.1	99.0	79.6	57.8	36.7
	11											45.9	25.1	54.1	33.3	62.3	41.5	78.8	58.0	95.4	74.5	63.5	40.4
	12													50.8	28.1	59.1	36.3	75.6	52.8	91.8	69.3	69.3	44.0
SP00150	5	36.9	24.3	48.9	36.2	60.9	48.2	72.9	60.1	84.7	72.0	97.2	84.0									39.4	25.3
	6	32.4	17.1	44.3	29.1	56.3	41.1	68.3	53.0	80.2	64.9	92.7	76.9	104	88.9							47.3	30.4
	7			39.8	22.0	51.8	34.0	63.7	45.9	75.6	57.8	87.6	69.8	100	81.8	111	93.6					55.2	35.4
	8					47.2	26.9	59.2	38.8	71.1	50.8	83.0	62.7	95.4	74.7	107	86.6	131	110			63.1	40.5
	9							54.6	31.7	66.6	43.7	78.5	55.7	90.9	67.5	102	79.5	126	103	150	127	71.0	45.5
	10									62.0	36.6	73.9	48.6	85.9	60.5	98.1	72.4	121	96.6	145	120	78.8	50.6
	11											6.9	41.4	84.4	53.4	93.6	65.4	117	89.1	141	113	86.7	55.6
	12													76.8	46.3	88.8	58.3	112	82.8	136	106	94.6	60.7

OUTPUT TORQUE

TORQUES OF SINGLE ACTING *(Continued)*

Output Torque Of Pneumatic Actuator With Double Acting(Unit:Nm)																							
Model	Spring (Qty.)	Air Pressure(bar)																				Spring's Output	
		2.5		3.0		3.5		4.0		4.5		5.0		5.5		6.0		7.0		8.0			
		0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
		Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End
SP00220	5	56.9	37.6	79.0	56.9	98.1	76.2	117	95.4	136	115	156	134									65.6	41.0
	6	52.2	25.8	71.6	45.0	90.9	64.4	110	83.7	129	103	148	122	168	142							78.7	49.3
	7			64.1	33.3	83.5	52.6	102	72.0	122	90.9	141	110	161	129	180	149					91.8	57.5
	8					76.1	40.8	95.4	60.2	115	79.4	134	99.0	153	117	172	137	211	176			105	65.7
	9							88.1	48.4	107	67.6	126	87.0	145	106	165	126	204	164	243	203	118	74.0
	10									99.9	55.8	119	75.2	138	94.5	158	114	197	153	234	190	131	82.0
	11											111	63.4	131	82.8	150	101	189	140	227	178	144	90.3
	12													124	70.9	143	90	181	128	220	167	157	98.5
SP00300	5	77.3	50.3	102	75.6	126	99.9	152	125	177	150	201	174									82.5	52.5
	6	67.8	35.4	92.7	60.3	117	85.5	142	109	167	135	192	160	216	184							98.9	62.9
	7			83.3	45.5	108	70.2	133	94.4	158	120	182	144	207	170	233	195					115	73.4
	8					99	55.8	123	80.4	148	105	173	130	198	155	223	180	273	230			132	83.9
	9							114	65.6	139	90.9	163	115	189	140	214	165	263	215	313	264	148	94.4
	10									129	75.6	154	100	180	126	204	150	254	200	304	250	165	105
	11											144	85.7	170	110	195	135	244	185	294	234	181	115
	12													161	96.3	185	120	235	171	285	220	198	126
SP00450	5	121	79.3	160	118	199	157	238	197	278	235	316	274									129	82.3
	6	107	56.1	145	95.4	184	134	224	173	262	212	302	252	341	290							155	98.7
	7			131	72.0	170	111	208	150	248	189	287	228	326	267	365	306					181	115
	8					155	87.9	194	126	233	166	272	205	311	244	351	283	429	361			206	132
	9							180	103	218	143	257	181	297	221	335	260	414	338	492	416	232	148
	10									204	119	243	159	281	198	321	236	399	315	477	393	258	165
	11											228	135	267	174	306	214	384	291	462	369	284	181
	12													252	151	291	190	369	269	448	347	310	197
SP00600	5	153	105	205	156	256	207	306	258	358	309	409	360									166	112
	6	134	75.6	185	126	235	177	287	228	338	279	388	330	440	381							199	135
	7			164	97.2	216	147	266	198	317	250	369	300	419	351	470	403					233	157
	8					195	117	246	169	297	219	348	270	399	322	450	372	552	475			266	179
	9							226	138	277	189	328	241	379	291	430	342	532	444	634	547	299	202
	10									257	160	308	211	359	261	410	313	512	411	614	517	332	224
	11											288	180	339	232	389	283	492	385	594	486	365	247
	12													318	202	369	252	471	355	574	457	399	267

OUTPUT TORQUE

TORQUES OF SINGLE ACTING *(Continued)*

Output Torque Of Pneumatic Actuator With Double Acting(Unit:Nm)																							
Model	Spring (Qty.)	Air Pressure(bar)																				Spring's Output	
		2.5		3.0		3.5		4.0		4.5		5.0		5.5		6.0		7.0		8.0		90°	0°
		0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	Start	End
SP00900	5	202	131	270	199	340	269	408	337	477	406	546	475									237	158
	6	173	88.4	423	157	311	225	380	295	449	363	518	432	586	501							284	190
	7			214	114	283	183	351	252	421	321	489	389	558	459	627	527					332	221
	8					254	141	323	209	392	279	460	347	530	416	598	485	736	622			379	253
	9							295	167	363	235	432	305	501	373	70	442	708	580	846	718	426	284
	10									335	193	404	261	473	331	541	399	679	537	817	675	474	316
	11											376	219	444	288	513	357	651	495	789	632	521	347
	12													416	245	485	315	622	452	760	590	569	379
SP01200	5	287	194	382	290	478	386	574	481	669	576	765	673									315	212
	6	249	137	344	234	440	329	535	424	631	520	727	616	822	711							378	255
	7			306	177	402	272	497	368	593	446	688	559	784	655	880	750					441	297
	8					363	216	459	311	555	406	650	503	746	598	841	693	1033	885			504	340
	9							421	254	516	350	612	446	708	541	803	637	994	828	1186	1019	567	382
	10									478	293	574	389	669	485	765	580	956	774	1147	963	630	425
	11											535	333	631	428	727	523	918	715	1109	906	693	467
	12													593	371	689	467	880	658	1071	849	756	510
SP02000	5	450	287	619	455	787	623	955	792	1124	960	1292	1128									616	434
	6	372	176	540	344	709	513	877	681	1045	849	1214	1017	1382	1186							740	521
	7			462	233	630	401	788	569	967	738	1135	906	1304	1074	1472	1242					863	608
	8					552	290	720	459	889	623	1057	795	1225	963	1394	1132	1730	1468			986	695
	9							642	348	810	516	979	684	1147	853	1316	1021	1653	1358	1989	1694	1109	782
	10									733	405	901	574	1070	742	1238	910	1575	1247	1911	1584	1233	869
	11											823	462	991	630	1160	799	1496	1135	1833	1472	1356	955
	12													913	520	1081	688	1418	1025	1755	1361	1479	1042
SP03000	5	702	508	945	750	1187	993	1430	1235	1672	1478	1915	1720									783	567
	6	600	367	842	610	1085	852	1327	1095	1570	1337	1812	1580	2055	1822							939	680
	7			740	468	982	711	1225	954	1467	1197	1710	1439	1953	1682	2196	1924					1096	794
	8					881	570	1124	813	1366	1055	1608	1298	1851	1540	2093	1782	2578	2268			1252	907
	9							1021	672	1264	915	1506	1157	1748	1399	1991	1642	2476	2127	2961	2612	1409	1021
	10									1161	774	1404	1017	1647	1259	1890	1501	2374	2986	2859	2471	1565	1134
	11											1302	875	1545	1117	1787	1360	2272	1845	2757	2331	1722	1247
	12													1422	977	1685	1219	2170	1706	2655	2189	1878	1361

PNEUMATIC ACTUATOR

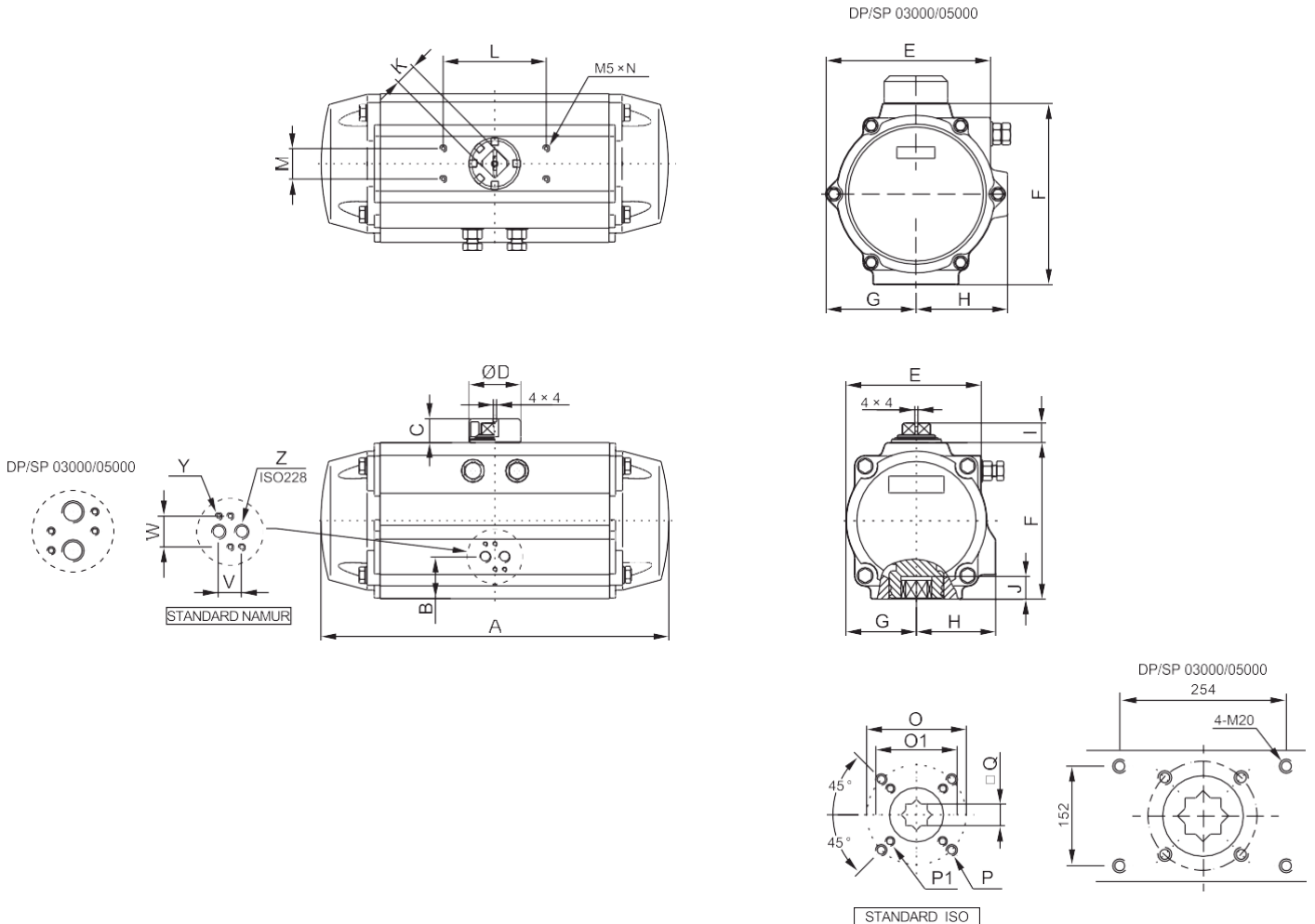


OUTPUT TORQUE

TORQUES OF SINGLE ACTING *(Continued)*

Output Torque Of Pneumatic Actuator With Double Acting(Unit:Nm)																							
Model	Spring (Qty.)	Air Pressure(bar)																				Spring's Output	
		2.5		3.0		3.5		4.0		4.5		5.0		5.5		6.0		7.0		8.0			
		0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	90° Start	0° End
SP05000	5	1199	915	1622	1338	2045	1761	2468	2184	2892	2607	3315	3030									1334	1017
	6	1017	675	1440	1098	1862	1521	2286	1944	2709	2367	3132	2790	3555	3213							1600	1221
	7			1256	858	1679	1281	2103	1704	2526	2127	2949	2550	3372	2973	3795	3396					1867	1424
	8					1496	1041	1919	1464	2342	1887	2765	2310	3188	2733	3611	3157	4458	4003			2134	1628
	9							1737	1224	2160	1647	2583	2070	3006	2493	3429	2916	4275	3762	5121	4608	2400	1831
	10									1976	1407	2399	1830	2822	2253	3246	2676	4092	3522	4938	4368	2667	2035
	11											2216	1590	2639	2013	3062	2436	3908	3283	4754	4129	2934	2238
	12													2456	1773	2880	2196	3726	3042	4572	3888	3200	2442

DIMENSIONS

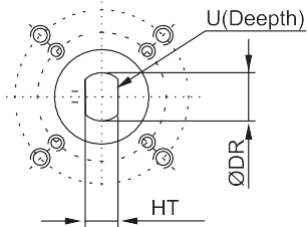


DIMENSIONS

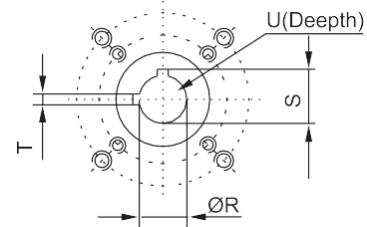
Model	00015	00030	00060	00100	00150	00220	00300	00450	00600	00900	01200	02000	03000	05000
	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP
ISO Flange	F04	F05	F05-F07	F05-F07	F07-F10	F07-F10	F07-F10	F10-F12	F10-F12	F12	F14	F16	F16	F16
A	140.5	158.5	210.5	247.5	268.5	315	345	408.5	437.5	487	543	633	728	876
B	26.5	30	30.5	32.5	37.5	42.5	45	47.5	52	58.5	62.5	78.5	165	187
C	20	20	20	20	20	30	30	30	30	50	50	50	50	50
D	40	40	40	40	40	56	56	65	65	80	80	115	115	115
E	59	72	84.5	97.5	111	127	136	156.5	169	190.5	213	251	298.5	383
F	69	85	102	115	127	145	157	177	196	220.5	245	298.5	330	405
G	29	36	42.5	49.5	56	64	69.5	80	88	99	110	131	163.5	201
H	41.5	47	52	56.8	67	77	82	91.5	99	105	112	131	166	204.5
I	14.5	14.5	14.5	14.5	14.5	24.5	24.5	24.5	24.5	44.5	44.5	44.5	44.5	44.5
J	12	16	16	19	19	24	24	29	29	29	38	38	48	57
K	11	11	17	17	17	27	27	27	27	36	36	36	36	36
L	80	80	80	80	80	80	80	80	80	130	130	130	130	130
M	30	30	30	30	30	30	30	30	30	30	30	30	30	30
N	4	8	8	8	8	8	8	8	8	8	8	8	8	8
∅O1	42	50	50	50	70	70	70	102	102	125	140	165	165	165
∅O	-	-	70	70	102	102	102	125	125	-	-	-	-	-
P1	4-M5	4-M6	4-M6	4-M6	4-M8	4-M8	4-M8	4-M10	4-M10	4-M12	4-M16	4-M20	4-M20	4-M20
P	-	-	4-M8	4-M8	4-M10	4-M10	4-M10	4-M12	4-M12	-	-	-	-	-
□Q	11	14	14	17	17	22	22	27	27	27	36	36	46	55
V	24	24	24	24	24	24	24	24	24	24	24	40	40	40
W	32	32	32	32	32	32	32	32	32	32	32	45	45	45
Y	M5x8	M5x8	M5x8	M5x8	M5x8	M5x8	M5x8	M5x8	M5x8	M5x8	M5x8	M6x10	M6x10	M6x10
Z	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	3/8"	1/2"	1/2"

DIMENSIONS

H:Double D



W:2 Keys



Note: Other dimensions is available upon request.

Model	00015	00030	00060	00100	00150	00220	00300	00450	00600	00900	01200	02000	03000	05000
	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP	DP/SP
ØDR	13	13	13	16.1	19.2	22.4	22.4	28.8	28.8	32	32	33.6	38.4	41.5
HT	10	10	10	12	14	17	17	222	22	24	24	27	27	32
U	32	32	32	32	32	45	45	45	45	45	45	51	51	65
ØR	12.7	12.7	12.7	15.88	19.05	22.23	22.23	28.58	28.58	31.75	31.75	33.34	38.1	41.28
S	14.2	14.2	14.2	18.4	21.6	24.8	24.8	32.1	32.1	35.3	35.3	37.4	42.4	45.3
T	3	3	5	5	5	5	5	8	8	8	8	10	10	12

- LARGE ROTARY STROKE 120° OR 180° (DOUBLE ACTING)

Please contact us for detail information.



- THREE POSITIONS



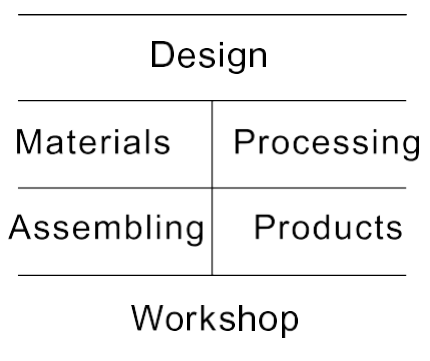
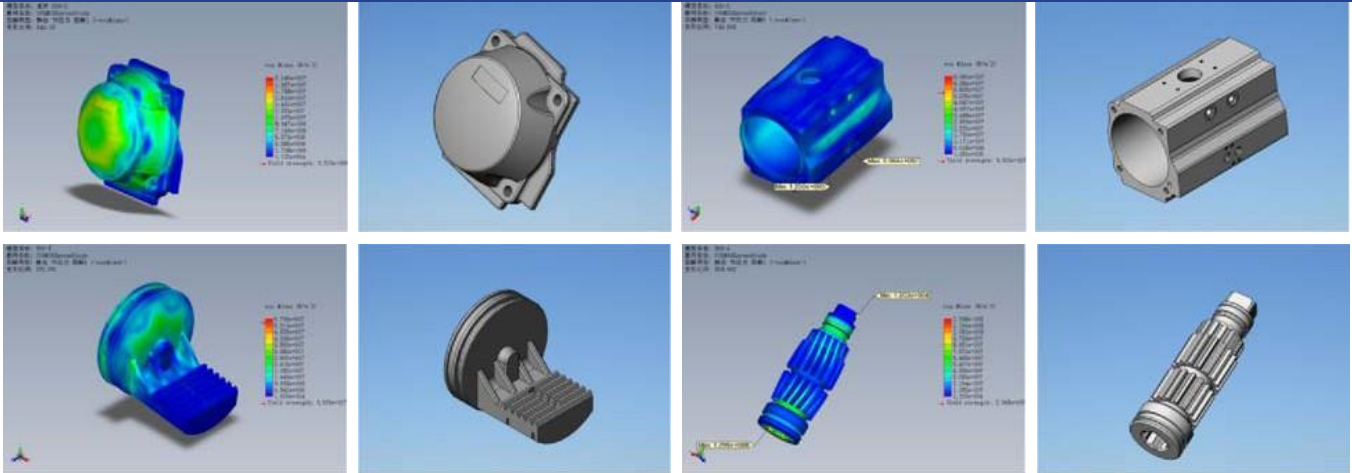
- LARGE ROTARY STROKE 180° (SINGLE ACTING)



PNEUMATIC ACTUATOR



PRODUCTION PROCESS



We keep the right to change the mentioned data at any time without prior or direct notice.
 All the pictures presented are only for reference. | Copyright © 2022 - ARITA

***ARITA** is a professional manufacturer and exporter that is concerned with the design, development and production of.*



*The standard we covered is ANSI & API for US, JIS for Japan, BS for UK, DIN for Germany and GB for China. The lightweight control valves GCV-G of **ARITA** is in the industry leading. High-quality boutique valves are widely used in the water industry, electric power, chemical, mining, petroleum, food, medicine, construction and other industries all over the world.*

Contact Us:

- Add: 34/6E Dinh Tien Hoang, Ward 1, Binh Thanh Dist, HCMC, Vietnam
- Tel: (84) 028.3636.5818
- Email: lc.low@unimechgroup.com