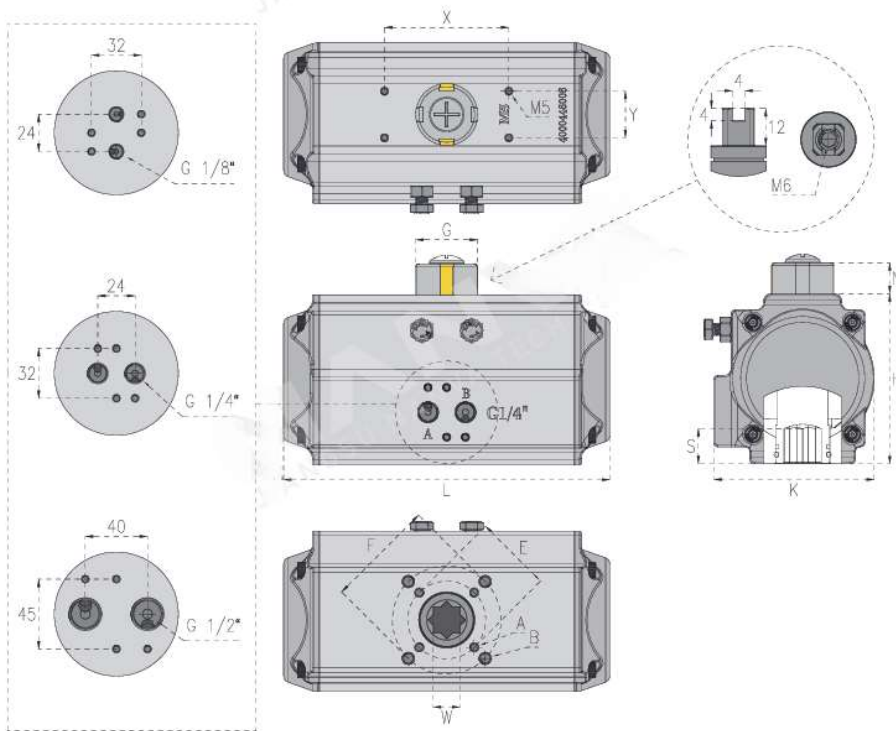


VAT- Pneumatic actuator



Model number:	VAT-QS (NBR) VAT-QN (FKM) VAT-QY (NBR+Spring) VAT-QH (FKM+Spring)
Manufacturing standard	ASME B16.34 / Manufacturer's standard
Driving mode	Compressed air
Air source pressure	0.3~0.8Mpa
Air source requirement	Dry or wet clean air
Connection standard	ISO5211 / NAMUR
Ambient temperature	-20~+80°C / -20~+180°C
Stroke Angle	0~90° (±5°)

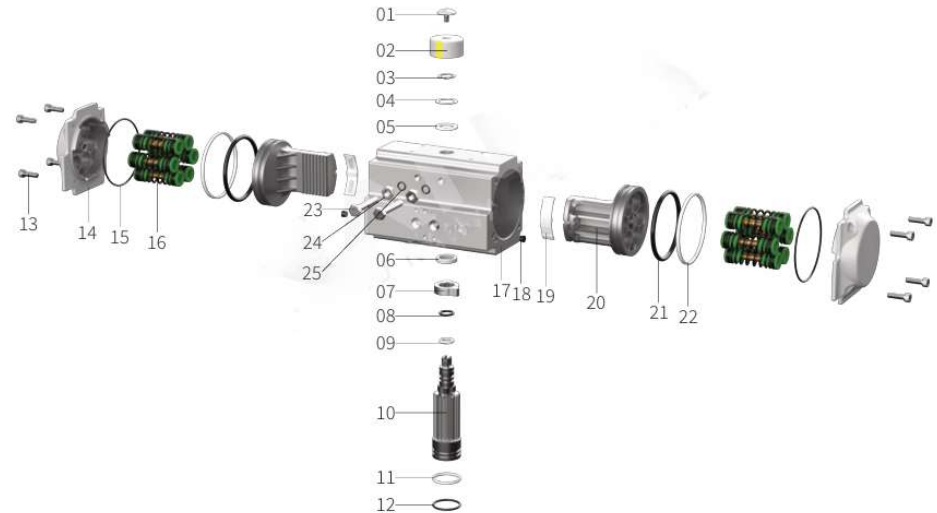
Shape And Connection Size



specification	dimensioning code											unit: mm		
	L	H	N	K	G	S	X	Y	F	E	A	B	W	
VAT32	110	46	20	46	G 1/8"	11	50	25	36	-	-	M5×8	9	
VAT40	124	61	20	65	G 1/4"	14	80	30	50	36	M5×8	M6×10	11	
VAT52	147	72	20	71.5	G 1/4"	14	80	30	50	36	M5×8	M6×10	11	
VAT63	168	88	20	83	G 1/4"	18	80	30	70	50	M6×10	M8×13	14	
VAT75	186	99.5	20	95	G 1/4"	18	80	30	70	50	M6×10	M8×13	14	
VAT83	212	108.7	20	103	G 1/4"	21	80	30	70	50	M6×10	M8×13	17	
VAT92	262	116.5	20	108.5	G 1/4"	21	80	30	70	50	M6×10	M8×13	17	
VAT105	268	133	20	121.5	G 1/4"	26	80	30	102	70	M8×13	M10×16	22	
VAT125	301	155	20	142	G 1/4"	26	130	30	102	70	M8×13	M10×16	22	
VAT140	390	172	20	152	G 1/4"	31	130	30	125	102	M10×16	M12×20	27	
VAT160	458	197	20	174	G 1/4"	31	130	30	125	102	M10×16	M12×20	27	
VAT190	534	230	30	206	G 1/4"	50	130	30	140	-	-	M16×23	36	
VAT210	538	255	30	226	G 1/4"	50	130	30	140	-	-	M16×23	36	
VAT240	602	289	30	260	G 1/4"	60	130	30	165	-	-	M20×25	46	
VAT270	718	326	30	294	G 1/2"	60	130	30	165	-	-	M20×25	46	
VAT300	782	350	30	336	G 1/2"	60	130	30	165	-	-	M20×25	46	
VAT350	920	410	30	385	G 1/2"	60	130	30	254	165	M20×25	8×M16×25	46	
VAT400	940	466	30	520	G 1/2"	60	130	30	254	165	M20×25	8×M16×25	46	

Please contact the manufacturer for more diameter sizes or other sizes.

Materials For Main Parts



AT- Pneumatic actuator

ID	Quantity	Part name	Main material
01	1	Indicator screw	PA66+SUS304
02	1	Indicator	PA66
03	1	Circlip	SUS304
04	1	Metal gasket	SUS304
05	1	Shaft gasket	ABS
06	1	Inner gasket	ABS
07	1	CAM	Alloy steel
08	1	Upper axis O-ring	NBR / FKM
09	1	Upper axle support ring	ABS
10	1	Shaft	Alloy steel
11	1	Lower axle support ring	ABS
12	1	Lower axis O-ring	NBR / FKM
13	8	End cover fastening bolt	SUS304

ID	Quantity	Part name	Main material
14	2	End cover	Pack alloy
15	2	End cap O-ring	NBR / FKM
16	0~12	Spring	Alloy spring steel
17	1	Cylinder block	Pack alloy
18	2	Chock plug	NBR / FKM
19	2	Piston guide	ABS
20	2	Piston	Pack alloy
21	2	Piston O-ring	NBR / FKM
22	2	Piston support ring	ABS
23	2	Adjusting bolt	SUS304
24	2	Adjusting nut	SUS304
25	2	Adjusting screw O-ring	NBR / FKM

specification	Air source pressure (bar)										unit: N.m	
	2	2.5	3	4	4.5	5	5.5	6	7	8		
VAT32	3	4	5	6	7	8	8	9	11	12		
VAT40	5	6	7	10	11	12	13	14	17	19		
VAT52	8	10	12	16	18	20	22	24	28	32		
VAT63	15	18	22	29	33	36	40	44	51	58		
VAT75	20	25	30	40	45	50	55	60	70	80		
VAT83	31	39	47	63	70	78	86	94	110	125		
VAT92	45	56	68	90	102	113	124	135	158	181		
VAT105	66	83	99	132	149	165	182	198	231	264		
VAT125	100	125	150	200	226	251	276	301	351	401		
VAT140	171	214	256	342	385	427	470	513	598	684		
VAT160	266	332	399	532	598	665	731	798	931	1064		
VAT190	426	532	638	851	958	1064	1170	1277	1490	1702		
VAT210	532	665	798	1064	1197	1330	1463	1596	1862	2128		
VAT240	769	962	1154	1539	1731	1924	2116	2308	2693	3078		
VAT270	1170	1462	1754	2339	2632	2924	3216	3509	4094	4679		
VAT300	1526	1908	2289	3052	3434	3815	4197	4578	5341	6104		
VAT350	2285	2856	3427	4570	5141	5712	6283	6854	7997	9139		
VAT400	3256	4070	4884	6512	7326	8140	8954	9768	11396	13024		

Please contact the manufacturer for more diameter sizes or other sizes.

specification	Number of springs	Air source pressure (bar)																unit: N.m	
		2.5		3		4		5		6		7		8					
VAT40	K2	1.3		2.7		5.0	1.4	7.5	3.1	9.8	4.5					7.5	4.8		
VAT52	K5	5.7	3.8	7.6	5.7											6.2	4.3		
	K6	4.9	2.5	6.9	4.5	10.9	8.5									7.4	5.0		
	K7	4.0	1.3	6.0	3.3	9.8	7.3	14.0	10.4							8.6	5.9		
	K8			5.2	2.0	9.2	6.0	13.2	9.1	17.2	14.1					9.9	6.7		
	K9			4.3	0.8	8.3	4.8	12.3	7.9	16.3	12.8	20.3	16.8			11.1	7.6		
VAT63	K10			7.4	3.6	11.5	6.7	15.5	11.6	19.5	15.6					12.4	8.5		
	K11			6.6	2.3	10.6	5.4	14.6	10.4	18.6	14.3	22.6	18.3			13.6	9.3		
	K12							9.7	4.2	13.8	9.1	17.8	12.2	21.8	17.1	14.8	10.2		
	K5	11.4	7.7	15.0	11.4	22.3	14.9									10.4	6.8		
	K6	10.1	5.7	13.6	9.3	20.9	16.6	28.3	23.9							12.5	8.2		
VAT75	K7	8.6	3.6	12.5	7.2	19.5	14.5	26.8	21.9							14.6	9.6		
	K8			10.9	5.1	18.2	12.4	25.5	19.8	32.8	27.0	40.1	34.3			16.7	10.9		
	K9			16.8	10.4	24.1	17.7	31.4	24.9	38.7	32.2					18.8	12.3		
	K10					14.0	8.2	22.8	15.6	30.0	22.8	37.3	30.1	44.7	37.4	20.9	13.7		
	K11							21.5	13.5	28.7	20.7	36.0	28.0	43.3	35.3	22.9	15.0		
VAT83	K12							20.0	11.4	27.3	18.6	34.6	25.9	41.9	33.3	25.0	16.4		
	K5	14.5	10.6	19.4	15.5	29.5	25.7									14.5	10.5		
	K6	20.1	7.6	17.3	12.6	27.4	22.7	37.5	32.8							17.4	12.7		
	K7	17.0	4.8	15.2	9.7	25.3	19.9	35.4	29.9							20.3	14.8		
	K8			13.1	6.8	23.1	16.9	33.3	27.0	43.2	37.0	53.3	47.0			23.2	16.9		
VAT92	K9					21.0	14.1	31.2	24.1	41.1	34.1	51.2	44.2			26.1	19.0		
	K10					19.0	11.1	28.8	21.2	39.0	31.2	49.1	41.2	59.1	51.2	29.0	21.1		
	K11							27.0	18.3	37.0	28.3	47.0	38.4	57.0	48.4	31.9	23.2		
	K12							24.9	15.4	34.9	25.4	44.9	35.4	54.9	45.4	34.7	25.3		
	K5	23.3	16.1	31.1	24.0	46.8	39.7									23.0	15.8		
VAT105	K6	20.1	11.5	28.0	19.3	43.7	35.1	59.4	50.7							27.6	19.0		
	K7	17.0	6.9	24.8	14.8	40.5	30.5	56.2	46.2							32.2	22.1		
	K8			21.7	10.1	37.4	25.8	53.1	41.5	68.8	57.2	84.5	72.9			36.8	25.3		
	K9					34.2	21.3	49.9	37.0	65.6	52.6	81.2	68.3			41.4	28.5		
	K10					31.0	16.6	46.7	32.3	62.4	48.0	78.1	63.7	93.8	79.3	46.0	31.6		
VAT125	K11					43.6	27.7	59.3	43.4	75.0	59.1	90.6	74.8	50.6	34.8				
	K12					40.4	23.2	56.1	38.9	71.7	54.5	87.4	70.2	55.2	38.0				
	K5	33.1	22.0	44.2	33.2	66.8	55.9									34.4	23.3		
	K6	28.4	15.2	39.6	26.4	62.2	49.0	84.8	71.6							41.2	28.0		
	K7	23.8	8.2	34.9	19.4	57.5	42.1	80.2	64.7							48.1	32.7		
VAT160	K8			31.3	12.6	52.9	35.2	75.5	57.9	98.1	80.5	120.7	103.0			55.0	37.3		
	K9					48.2	28.4	70.9	51.0	93.5	73.6	116.0	96.1			61.9	42.0		
	K10					43.6	21.5	66.2	44.1	88.8	66.7	111.3	89.2	134.0	111.8	68.7	46.0		
	K11					61.5	37.2	84.1	59.9	106.6	82.4	129.2	105.0	75.6	51.4				
	K12					56.8	30.4	79.4	53.0	101.9	75.5	124.5	98.1	82.5	56.0				
VAT190	K5	51.0	33.4	67.5	49.9	100.6	83.0									49.2	31.6		
	K6	44.7	23.5	61.1	40.0	94.2	73.2	127.3	106.2							59.1	38.0		
	K7	38.4	13.7	54.9	30.3	87.9	63.4	121.0	96.4							68.9	44.3		
	K8			48.5	20.4	81.6	53.5	114.7	86.5	147.7	119.6	180.8	152.7			78.7	50.6		
	K9					75.3	43.7	108.4	76.8	141.5	109.8	174.5	142.9			88.6	56.9		
VAT210	K10					68.9	33.4	102.0	66.5	135.1	99.6	168.2	132.6	201.2	165.7	98.4	63.3		
	K11							95.7	57.0	128.7	90.1	161.8	123.1	194.8	156.2	108.3	69.6		
	K12					89.4	47.5	122.5	80.6	155.5	113.6	188.6	146.7			118.1	75.9		
	K5	73.0	47.0	98.0	72.0	148.0	122.0									79.0	52.0		
	K6	63.0	31.0	88.0	56.0	138.0	107.0	188.0	157.0							94.0	63.0		
VAT240	K7	52.0	15.0	77.0	40.0	127.0	90.0	178.0	141.0							110.0	73.0		
	K8			67.0	25.0	117.0	75.0	167.0	125.0	217.0	176.0	268.0	226.0			125.0	84.0		

specification	Number of springs	Air source pressure (bar)																unit: N.m	
		2.5		3		4		5		6		7		8		90°	0°		
		0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°				
VAT125	K9					107.0	59.0	157.0	109.0	207.0	159.0	257.0	210.0			141.0	94.0		
	K10					96.0	44.0			146.0	94.0	196.0	144.0	247.0	194.0	297.0	245.0	157.0	105.0
	K11							136.0	78.0	186.0	128.0	236.0	178.0	286.0	228.0	173.0	115.0		
	K12							125.0	63.0	176.0	113.0	226.0	163.0	276.0	213.0	188.0	125.0		
VAT140	K5	128.0	85.0	171.0	127.0	256.0	213.0									129.0	86.0		
	K6	111.0	59.0	154.0	102.0	239.0	187.0	325.0	273.0							155.0	103.0		
	K7	94.0	33.0	137.0	76.0	222.0	162.0	308.0	247.0							181.0	120.0		
	K8			120.0	50.0	205.0	136.0	291.0	221.0	376.0	307.0	462.0	392.0			206.0	137.0		
	K9					187.0	110.0	273.0	196.0	358.0	281.0	444.0	367.0			232.0	155.0		
	K10					170.0	84.0	256.0	169.0	341.0	255.0	427.0	340.0	512.0	426.0	258.0	172.0		
	K11							238.0	143.0	324.0	229.0	409.0	314.0	495.0	400.0	284.0	189.0		
K12							221.0	118.0	307.0	203.0	392.0	289.0	478.0	374.0	310.0	206.0			
VAT160	K5	193.0	124.0	259.0	191.0	392.0	324.0									208.0	140.0		
	K6	165.0	83.0	232.0	149.0	365.0	282.0	498.0	415.0							250.0	168.0		
	K7	137.0	41.0	203.0	107.0	336.0	240.0	469.0	373.0							292.0	196.0		
	K8			176.0	66.0	309.0	199.0	442.0	237.0	575.0	465.0	708.0	598.0			333.0	223.0		
	K9					280.0	157.0	413.0	290.0	546.0	423.0	679.0	556.0			375.0	251.0		
	K10					253.0	115.0	386.0	248.0	519.0	381.0	652.0	514.0	785.0	647.0	417.0	279.0		
	K11							358.0	207.0	491.0	340.0	624.0	473.0	757.0	606.0	458.0	307.0		
K12							330.0	165.0	463.0	298.0	596.0	431.0	729.0	564.0	500.0	335.0			
VAT190	K5	332.0	222.0	438.0	329.0	651.0	542.0									309.0	200.0		
	K6	292.0	161.0	398.0	267.0	611.0	480.0	824.0	693.0							371.0	240.0		
	K7	252.0	99.0	358.0	205.0	571.0	418.0	784.0	631.0							433.0	280.0		
	K8			318.0	143.0	531.0	356.0	744.0	569.0	957.0	782.0	1169	995.0			495.0	320.0		
	K9					491.0	295.0	704.0	507.0	917.0	720.0	1130	933.0			557.0	360.0		
	K10					451.0	233.0	664.0	446.0	877.0	658.0	1090	871.0	1302	1084	618.0	400.0		
	K11							624.0	384.0	837.0	597.0	1050	809.0	1263	1022	680.0	440.0		
K12							584.0	322.0	797.0	535.0	1010	748.0	1223	960.0	742.0	480.0			
VAT210	K5	390.0	285.0	523.0	418.0	789.0	684.0									380.0	275.0		
	K6	335.0	209.0	468.0	342.0	734.0	608.0	1000	874.0							456.0	330.0		
	K7	280.0	133.0	413.0	266.0	679.0	532.0	945.0	798.0							532.0	385.0		
	K8			358.0	190.0	624.0	456.0	890.0	722.0	1156	988.0	1422	1254			608.0	440.0		
	K9					569.0	380.0	835.0	646.0	1101	912.0	1367	1178			684.0	495.0		
	K10					514.0	304.0	780.0	570.0	1046	836.0	1312	1102	1578	1368	760.0	550.0		
	K11							725.0	494.0	991.0	760.0	1257	1026	1523	1292	836.0	605.0		
K12							670.0	418.0	936.0	684.0	1202	950.0	1468	1216	912.0	660.0			
VAT240	K5	552.0	409.0	744.0	600.0	1129	985.0									554.0	410.0		
	K6	470.0	297.0	662.0	489.0	1047	874.0	1432	1259							665.0	492.0		
	K7	388.0	187.0	580.0	379.0	964.0	764.0	1349	1149							775.0	575.0		
	K8			498.0	268.0	883.0	653.0	1267	1037	1652	1422	2037	1807			886.0	656.0		
	K9					800.0	542.0	1185	926.0	1569	1311	1954	1696			998.0	739.0		
	K10					718.0	431.0	1103	816.0	1488	1201	1872	1586	2257	1970	1108	821.0		
	K11							1021	705.0	1406	1090	1791	1474	2176	1859	1219	903.0		
K12							939.0	594.0	1323	979.0	1708	1363	2093	1748	1330	985.0			
VAT270	K5	903.0	675.0	1195	968.0	1779	1552									787.0	560.0		
	K6	790.0	519.0	1083	811.0	1667	1396	2252	1981							943.0	672.0		
	K7	679.0	361.0	972.0	654.0	1556	1238	2141	1823							1101	783.0		
	K8			860.0	497.0	1444	1081	2029	1666	2614	2252	3199	2836			1258	895.0		
	K9					1332	923.0	1917	1509	2502	2094	3087	2678			1416	1007		
	K10					1220	767.0	1805	1352	2390	1937	2974	2521	3560	3107	1572	1119		
	K11							1693	1194	2278	1779	2862	2364	3448	2949	1730	1231		
K12							1582	1037	2167	1623	2751	2207	3336	2792	1887	1342			
VAT300	K5	1097	729.0													1061	730.0		
	K6	935.0	494.0	1316	875.0											1273	876.0		
	K7	772.0	258.0	1153	639.0	1916	1402									1485	1022		
	K8			991.0	403.0	1754	1166	2517	1929							1697	1168		

specification	Number of springs	Air source pressure (bar)																unit: N.m									
		2.5		3		4		5		6		7		8		90°	0°										
		0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°												
VAT300	K9															1592	930.0	2355	1693	3118	2456			1909	1314		
	K10															1430	695.0	2193	1458	2956	2221	3719	2984	4482	3747	2122	1460
	K11																	2030	1222	2793	1985	3556	2748	4319	3511	2334	1606
	K12																	1868	986.0	2631	1749	3394	2512	4157	3275	2546	1752
VAT350	K5	1553	964.0																							1702	1173
	K6	1292	586.0	1863	1157																					2043	1408
	K7	1031	208.0	1602	779.0	2745	1922																			2383	1642
	K8			1341	401.0	2484	1544	3336	2307							3626	2686									2724	1877
	K9					2224	1165	3105	2307	4508	3449															3064	2112
	K10					1963	787.0	3105	1929	4247	3071	5390	4214	6532	5356	3405	2346									3604	2346
K11							2844	1551	3986	2693	5129	3836	6271	4978	3745	2581									4745	3148	
K12							2584	1172	3726	2314	4869	3457	6011	4599	4086	2816									4086	2816	
VAT400	K7	2028	869.0																							2880	1837
	K8	1736	411.0	2550	1225																					3292	2100
	K9			2259	768.0	3887	2396																			3703	2362
	K10			1967	311.0	3595	1939									5223	3567									4115	2624
	K11					3303	1482	4931	3110	6559	4738															4526	2887
	K12							4640	2653	6268	4281	7895	5908	9523	7536	4938	3149									5349	3412
	K13									4348	2195	5976	3823	7603	5450	9231	7078	5349	3412							5349	3412
K14									4057	1738	5685	3366	7312	4993	8940	6621	5761	3674							5761	3674	
K15									3765	1281	5393	2909	7020	4536	8648	6164	6172	3927							6172	3927	
K16															5101	2452	6728	4079	8356	5707	6584	4199			6584	4199	

Please contact the manufacturer for more diameter sizes or other sizes.

specification	Weight / kg		Air consumption / L	
	Double			