



VTX Series Stainless Steel Pneumatic Actuator



High performance and high reliability

Fully compliant with the latest international standards and regulations

More applicable to a wide range of specifications and higher cost performance

Compact design is better suited for a variety of industrial applications



Design and Structure

Design

VTX new series pneumatic actuator applies innovative rack and pinion drive mechanism, integrating the latest pneumatic actuator technology and materials. The series is designed as per extensive field mounting and application experience with following product strengths:

- ☆ High performance and high reliability
- ☆ Fully compliant with the latest international standards and regulations
- ☆ More applicable to a wide range of specifications and higher cost performance
- ☆ Compact design is better suited for a variety of industrial applications

Structure

1. Integrate and compact design utilizes the same body and end caps for the same double acting and spring return actuator models. It also benefits less spare parts inventory and is greatly convenient for customers' field application by adding or removing spring cartridges.

2. Fully compliant with the latest international standards including ISO5211, DIN3337 and VDI/VDE3845, etc. Fully compliant with NUMAR standard and interchangeability, convenient to replace or mount accessories including solenoid valves, limit switches.

3. Apply rack and pinion with double pistons in advantages of compact structure, high cycle life, and swift operation. The piston tooth surface processed by CNC machining center performs with optimized gearing efficiency and transmission precision, as well as stable operation and reliable performance. It is convenient to switch rotation direction only by inverting the pistons for symmetrical mounting position design.

4. Dual independent travel stoppers can be conveniently and precisely implement $\pm 5^\circ$ adjustments externally in two directions, allowing actuators in alignment with valve on both the opening and closing phases of the stroke.

5. The composite bearings and guides on pinion and piston ensure precise operation, low friction and high life cycle, preventing output shaft from fractures.

6. Rack and pinion tooth in high precision is designed in outstanding tooth profile ratio to realize less clearance, accurate drive and high output power.

7. Modularized preload spring cartridges with special coating is applicable to a wide range of scenarios with high security and anti-corrosion.

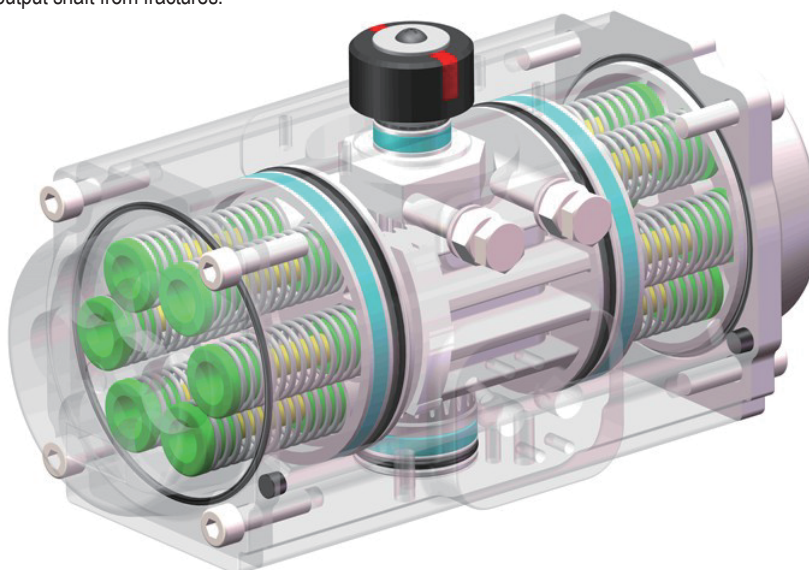
8. High-quality bearings are of reliable sealing, low friction, high cycle life and wide range of application temperature.

9. All of the internal and external fasteners are made in long term corrosion-resistant stainless steel.

10. Multifunctional position indicator with slot in compliance with NAMUR standard offers simplicity and clarity for visual indication. Connection to a variety of standard and common sensors can be easily realized.

11. Under normal operating conditions, the safety factor of 20%-30% increase of valve torque should be considered when selecting double-acting actuators.

12. Under normal operating conditions, the safety factor of 30%-50% increase of valve torque should be considered when selecting single-acting actuators.



Product Selection Range、Accessories and Quality Management

Selection Range:

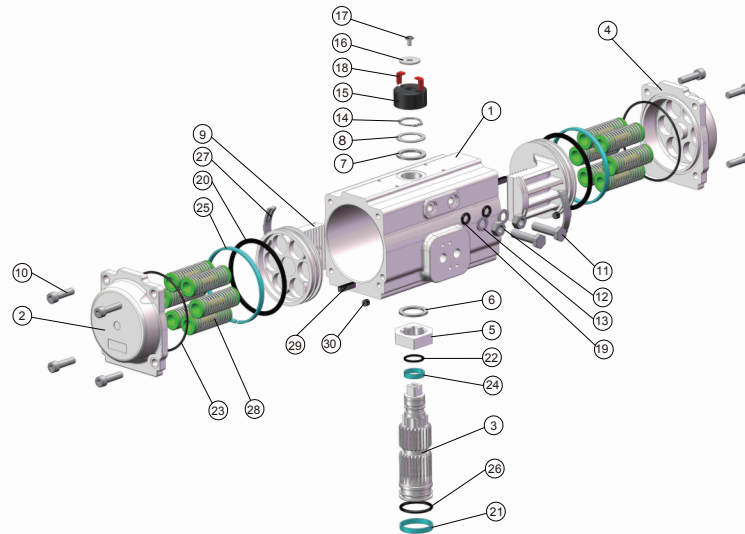
- A. Actuators in all specifications are supplied with 304 or 316 stainless steel output shafts as requested.
- B. For applications under extremely high and low temperature, all models are supplied with corresponding FPM or silicone rubber O-ring with special lubricant.
- C. Except for the octagon output drive at the bottom, the customized design as per customers' specific requirements is also available. Please contact VTORK for details.

Quality Management:

- VTX series pneumatic actuator production process is fully compliant with ISO9001.
- 100% of all units are factory pressure and leak tested and externally marked with dedicated serial number for traceability.
- 100% of all units are individually boxed with suitable cardboard carton for protection and appropriately labeled in detail for identification.

Accessories Options:

Bracket、Connector、Solenoid Valve、Limit Switch Box、Proximity Sensor、Gear Box(Manual Gear Override)、Positioner、Complete set of square output shaft sleeves in reduced sizes .



Item No.	Description	Materials	Qty.	Item No.	Description	Materials	Qty.	Item No.	Description	Materials	Qty.
1	Body	Aluminum Alloy	1	12	Travel Stop Nut	Stainless Steel	2	23	O-ring (End Cap)	NBR	2
2	Left End Cap	Aluminum Alloy	1	13	Travel Stop Washer	Stainless Steel	2	24	Upper Pinion Bearing	Advanced Polymer	1
3	Pinion	Aluminum Alloy	1	14	Retaining Ring	Spring Steel	1	25	Piston Wear Bearing	Advanced Polymer	2
4	Right End Cap	Aluminum Alloy	1	15	Indicator	Advanced Polymer	1	26	Lower Pinion Bearing	Advanced Polymer	1
5	OCTI-CAM	Aluminum Alloy	1	16	Indicator Thrust Bearing	Stainless Steel	1	27	Piston Skate	Advanced Polymer	2
6	Upper Pinion Thrust Bearing	Advanced Polymer	1	17	Flat Cross Bolt	Stainless Steel	1	28	Spring	Spring Steel	0-12
7	Thrust Bearing	Advanced Polymer	1	18	Color Code	Advanced Polymer	2	29	Guide Key	Advanced Polymer	2
8	Thrust Washer	Aluminum Alloy	1	19	O-ring (Travel Stop)	NBR	2				
9	Travel Stop Piston	Aluminum Alloy	2	20	O-ring (Piston)	NBR	2				
10	End Cap Bolt	Aluminum Alloy	8	21	O-ring (Lower Pinion)	NBR	1				
11	Travel Stop	Aluminum Alloy	2	22	O-ring (Upper Pinion)	NBR	1				

Technical Data (Metric Unit)

型号	VTX 050		VTX 065		VTX 075		VTX 085		VTX 095		VTX 110		VTX 125		VTX 140		VTX 160		VTX 190		VTX 210		VTX 240		VTX 270	
	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S
Diameter(mm)	50		65		75		85		95		105		125		140		160		190		210		240		270	
Air Volume Opening(L)	0.1		0.22		0.25		0.45		0.95		1.07		1.47		2.13		3.89		6.16		8.22		12.26		17.35	
Air Volume Closing(L)	0.15		0.26		0.41		0.61		0.98		1.24		1.86		3.08		4.7		8.59		10.95		16.01		24.83	
Opening Time(S)	0.3	0.9	0.4	0.9	0.4	0.9	0.9	1.0	0.9	1.4	0.9	1.4	1.3	2.4	1.3	2.8	2.0	4.8	2.2	2.4	2.9	3.4	3.2	3.81	4.4	5.0
Closing Time(S)	0.4	0.7	0.4	0.8	0.4	0.9	0.9	1.2	1.0	1.4	1.0	1.6	1.4	2.4	1.4	3.0	2.4	4.9	2.6	3.0	3.8	4.1	3.7	4.0	4.9	5.5
Weight(kg)	1.08	1.2	1.91	2.15	2.41	2.8	3.32	3.95	4.98	5.8	6.53	7.95	10.24	12.1	15.1	15.93	21.3	25.6	29.3	33.81	37.7	48.43	54.2	77.76	82.0	90.6

Notice: (A) The operation time above are measured in following experimental conditions:

1.For model 50-160

(1)Room temperature

(5) Neutral clean air

(2)Actuator stroke 90°

(6)Air supply pressure 5.5 bar

(3)Solenoid valve with orifice of 4 mm and a flow capacity Qn400L/min

(7)Actuator without external resistance load

(4)Inside pipe diameter 6 mm

2.For model 190-270

(1)Room temperature

(5)Neutral clean air

(2)Actuator stroke 90°

(6)Air supply pressure 5.5 bar

(3)Solenoid valve with orifice of 12 mm and a flow capacity Qn5100L/min

(7)Actuator without external resistance load

(4)Inside pipe diameter 8 mm

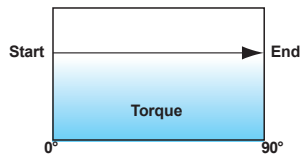
Cautions: obviously on the field applications when one or more parameters are different from above, the operation time will be different. Air consumption rest with air supply, open/switch stroke, air volume and action cycle times. Expressions:

$$L/min = \text{Air volume}(\text{opening air volume} + \text{closing air volume}) \times \frac{[\text{Air Supply}(Kpa) \times 101.3]}{101.3} \times \text{Action times}(/min)$$

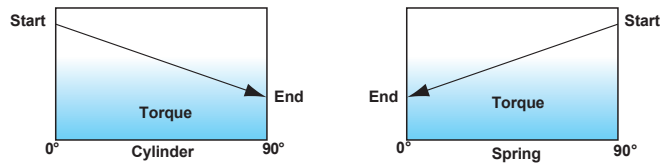
扭矩—公制力矩输出



Double Acting Torque Output Diagram



Spring Return Torque Output Diagram



Double Acting Actuator Torque (N.m)

Model	Air Supply (Unit: Bar)									
	2.5	3	3.5	4	4.5	5	5.5	6	7	8
VTX065D	19.1	22.9	26.7	30.6	34.4	38.2	42	45.9	53.5	61.2
VTX075D	25.2	30.2	35.3	40.3	45.3	50.4	55.4	60.4	70.5	80.6
VTX085D	40.8	49	57.2	65.4	73.5	81.7	89.9	98.1	114.4	130.7
VTX095D	61.2	73.5	85.7	100	110.2	122.5	134.7	147	171.5	196
VTX110D	83.1	99.7	116.4	133	149.6	166.2	182.9	199.5	232.7	266
VTX125D	132.5	159	185.5	212	238.6	265.1	291.6	318.1	371.1	424.1
VTX140D	219.3	263.2	307.1	351	394.9	438.7	482.6	526.4	614.2	702
VTX160D	334.2	401.1	468	534.8	601.7	668.5	735.4	802.2	935.9	1069.6
VTX190D	505	606	707	808	909	1010	1111	1212	1414	1616.1
VTX210D	658	789.7	921.3	1052.9	1184.5	1316.1	1447.8	1579.4	1842.6	2105.8
VTX240D	967	1160.3	1353.7	1547.1	1740.5	1934	2127.3	2320.7	2707.5	3094.3
VTX270D	1468.6	1762.3	2056	2349.7	2643.4	2937.2	3230.9	3524.6	4112	4699.5

Spring Return Actuator Torque (N.m)

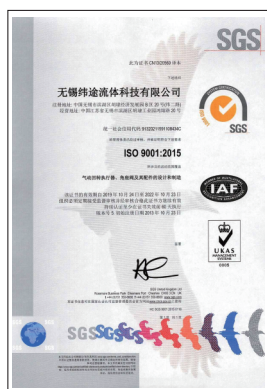
Model	AirSupply (Unit: Bar)																				Spring Return	
	2.5		3		3.5		4		4.5		5		5.5		6		7		8			
			0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
VTX050S05	5.8	3.7	7.7	5.6	9.6	7.5	11.5	9.4	13.4	11.3	15.2	13.1	17.1	15.0	19.0	16.9	22.8	20.7	26.6	24.5	5.7	3.6
VTX050S06	5.1	2.6	7.0	4.5	8.9	6.4	10.8	8.3	12.7	10.2	14.5	12.0	16.4	13.9	18.3	15.8	22.1	19.6	25.9	23.4	6.8	4.3
VTX050S07			6.3	1.4	8.2	5.2	10.1	7.1	12.0	9.0	13.8	10.8	15.7	12.7	17.6	14.6	21.4	18.4	25.2	22.2	8.0	5.0
VTX050S08					7.4	4.1	9.3	6.0	11.2	7.9	13.0	9.7	14.9	11.6	16.8	13.5	20.6	17.3	24.4	21.1	9.1	5.8
VTX050S09							8.6	4.8	10.5	6.7	12.3	8.5	14.2	10.4	16.1	12.3	19.9	16.1	23.7	19.9	10.3	6.5
VTX050S10									9.8	5.6	11.6	7.4	13.5	9.3	15.4	11.2	19.2	15.0	23.0	18.8	11.4	7.2
VTX050S11											10.9	6.3	12.8	8.2	14.7	10.1	18.5	13.9	22.3	17.7	12.5	7.9
VTX050S12													12.1	7.0	14.0	8.9	17.8	12.7	21.6	16.5	13.7	8.6
VTX065S05	11.9	7.9	15.7	11.7	19.5	15.5	23.4	19.4	27.2	23.2	31.0	27.0	34.8	30.8	38.7	34.7	46.3	42.3	54.0	50.0	11.2	7.2
VTX065S06	10.2	5.7	14.3	9.5	18.1	13.3	22.0	17.2	25.8	21.0	29.6	24.8	33.4	28.6	37.3	32.5	44.9	40.1	52.6	47.8	13.4	8.6
VTX065S07			12.8	7.2	16.6	11.0	20.5	14.9	24.3	18.7	28.1	22.5	31.9	26.3	35.8	30.2	43.4	37.8	51.1	45.5	15.7	10.1
VTX065S08					15.2	8.8	19.1	12.7	22.9	16.5	26.7	20.3	30.5	24.1	34.4	28.0	42.0	35.6	49.7	43.3	17.9	11.5
VTX065S09							17.6	10.4	21.4	14.2	25.2	18.0	29.0	21.8	32.9	25.7	40.5	33.3	48.2	41.0	20.2	13.0
VTX065S10									20.0	12.0	23.8	15.8	27.6	19.6	31.5	23.5	39.1	31.1	46.8	38.8	22.4	14.4
VTX065S11											22.4	13.6	26.2	17.4	30.1	21.3	37.7	28.9	45.4	36.6	24.6	15.8
VTX065S12													24.7	15.1	28.6	19.0	36.2	26.6	43.9	34.3	26.9	17.3
VTX075S05	16.0	9.1	21.0	14.1	26.1	19.2	31.1	24.2	36.1	29.2	41.2	34.3	46.2	39.3	51.2	44.3	61.3	54.4	71.4	64.5	16.1	9.2
VTX075S06	14.2	5.9	19.2	10.9	24.3	16.0	29.3	21.0	34.3	26.0	39.4	31.1	44.4	36.1	49.4	41.1	59.5	51.2	69.6	61.3	19.3	11.0
VTX075S07			17.3	7.7	22.4	12.8	27.4	17.8	32.4	22.8	37.5	27.9	42.5	32.9	47.5	37.9	57.6	48.0	67.7	58.1	22.5	12.9
VTX075S08					20.6	9.5	25.6	14.5	30.6	19.5	35.7	24.6	40.7	29.6	45.7	34.6	55.8	44.7	65.9	54.8	25.8	14.7
VTX075S09							23.7	11.3	28.7	16.3	33.8	21.4	38.8	26.4	43.8	31.4	53.9	41.5	64.0	51.6	29.0	16.6
VTX075S10									26.9	13.1	32.0	18.2	37.0	23.2	42.0	28.2	52.1	38.3	62.2	48.4	32.2	18.4
VTX075S11											30.2	15.0	35.2	20.0	40.2	25.0	50.3	35.1	60.4	45.2	35.4	20.2
VTX075S12													33.3	16.8	38.3	21.8	48.4	31.9	58.5	42.0	38.6	22.1
VTX085S05	25.8	14.8	34.0	23.0	42.2	31.2	50.4	39.4	58.5	47.5	66.7	55.7	74.9	63.9	83.1	72.1	99.4	88.4	115.7	104.7	26.0	15.0
VTX085S06	22.8	9.6	31.0	17.8	39.2	26.0	47.4	34.2	55.5	42.3	63.7	50.5	71.9	58.7	80.1	66.9	96.4	83.2	112.7	99.5	31.2	18.0
VTX085S07			28.0	12.6	36.2	20.8	44.4	29.0	52.5	37.1	60.7	45.3	68.9	53.5	77.1	61.7	93.4	78.0	109.7	94.3	36.4	21.0
VTX085S08					33.2	15.6	41.4	23.8	49.5	31.9	57.7	40.1	65.9	48.3	74.1	56.5	90.4	72.8	106.7	89.1	41.6	24.0
VTX085S09							38.4	18.6	46.5	26.7	54.7	34.9	62.9	43.1	71.1	51.3	87.4	67.6	103.7	83.9	46.8	27.0
VTX085S10									43.5	21.5	51.7	29.7	59.9	37.9	68.1	46.1	84.4	62.4	100.7	78.7	52.0	30.0
VTX085S11											48.7	24.5	56.9	32.7	65.1	40.9	81.4	57.2	97.7	73.5	57.2	33.0
VTX085S12													53.9	27.5	62.1	35.7	78.4	52.0	94.7	68.3	62.4	36.0
VTX095S05	36.7	24.5	49.0	36.8	61.2	49.0	75.5	63.3	85.7	73.5	98.0	85.8	110.2	98.0	122.5	110.3	147.0	134.8	171.5	159.3	36.7	24.5
VTX095S06	31.8	17.2	44.1	29.5	56.3	41.7	70.6	56.0	80.8	66.2	93.1	78.5	105.3	90.7	117.6	103.0	142.1	127.5	166.6	152.0	44.0	29.4
VTX095S07			39.2	22.1	51.4	34.3	65.7	48.6	75.9	58.8	88.2	71.1	100.4	83.3	112.7	95.6	137.2	120.1	161.7	144.6	51.4	34.3
VTX095S08					46.5	27.0	60.8	41.3	71.0	51.5	83.3	63.8	95.5	76.0	107.8	88.3	132.3	112.8	156.8	137.3	58.7	39.2
VTX095S09							55.9	33.9	66.1	44.1	78.4	56.4	90.6	68.6	102.9	80.9	127.4	105.4	151.9	129.9	66.1	44.1
VTX095S10									61.2	36.8	73.5	49.1	85.7	61.3	98.0	73.6	122.5	98.1	147.0	122.6	73.4	49.0
VTX095S11											68.6	41.8	80.8	54.0	93.1	66.3	117.6	90.8	142.1	115.3	80.7	53.9
VTX095S12													75.9	46.6	88.2	58.9	112.7	83.4	137.2	107.9	88.1	58.8
VTX110S05	50.8	31.7	67.4	48.3	84.1	65.0	100.7	81.6	117.3	98.2	133.9	114.8	150.6	131.5	167.2	148.1	200.4	181.3	233.7	214.6	51.4	32.3
VTX110S06	44.3	21.4	60.9	38.0	77.6	54.7	94.2	71.3	110.8	87.9	127.4	104.5	144.1	121.2	160.7	137.8	193.9	171.0	227.2	204.3	61.7	38.8
VTX110S07			54.5	27.7	71.2	44.4	87.8	61.0	104.4	77.6	121.0	94.2	137.7	110.9	154.3	127.5	187.5	160.7	220.8	194.0	72.0	45.2
VTX110S08					64.7	34.2	81.3	50.8	97.9	67.4	114.5	84.0	131.2	100.7	147.8	117.3	181.0	150.5	214.3	183.8	82.2	51.7
VTX110S09							74.9	40.5	91.5	57.1	108.1	73.7	124.8	90.4	141.4	107.0	174.6	140.2	207.9	173.5	92.5	58.1
VTX110S10									85.0	46.8	101.6	63.4	118.3	80.1	134.9	96.7	168.2	129.9	201.4	163.2	102.8	64.6
VTX110S11											95.1	53.1	111.8	69.8	128.4	86.4	161.6	119.6	194.9	152.9	113.1	71.1
VTX110S12													105.4	59.5	122.0	76.1	155.2	109.3	188.5	142.6	123.4	77.5

Torque-Metric Torque Output



Spring Return Actuator Torque (N.m)																						
Model	Air Supply (Unit: Bar)																				Spring Return	
	2.5		3		3.5		4		4.5		5		5.5		6		7		8			
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
VTX125S05	78.5	53.9	105.0	80.4	131.5	106.9	158.0	133.4	184.6	160.0	211.1	186.5	237.6	213.0	264.1	239.5	317.1	292.5	370.1	345.5	78.6	54.0
VTX125S06	67.7	38.2	94.2	64.7	120.7	91.2	147.2	117.7	173.8	144.3	200.3	170.8	226.8	197.3	253.3	223.8	306.3	276.8	359.3	329.8	94.3	64.8
VTX125S07			83.4	49.0	109.9	75.5	136.4	102.0	163.0	128.6	189.5	155.1	216.0	181.6	242.5	208.1	295.5	261.1	348.5	314.1	110.0	75.6
VTX125S08					99.1	59.7	125.6	86.2	152.2	112.8	178.7	139.3	205.2	165.8	231.7	192.3	284.7	245.3	337.7	298.3	125.8	86.4
VTX125S09							114.8	70.5	141.4	97.1	167.9	123.6	194.4	150.1	220.9	176.6	273.9	229.6	326.9	282.6	141.5	97.2
VTX125S10									130.6	81.4	157.1	107.9	183.6	134.4	210.1	160.9	263.1	213.9	316.1	266.9	157.2	108.1
VTX125S11											146.3	92.2	172.8	118.7	199.3	145.2	252.3	198.2	305.3	251.2	172.9	118.8
VTX125S12													162.0	103.0	188.5	129.5	241.5	182.5	294.5	235.5	188.6	129.6
VTX140S05	133.8	85.4	177.7	129.3	221.6	173.2	265.5	217.1	309.4	261.0	353.2	304.8	397.1	348.7	440.9	392.5	528.7	480.3	616.5	568.1	133.9	85.5
VTX140S06	116.7	58.6	160.6	102.5	204.5	146.4	248.4	190.3	292.3	234.2	336.1	278.0	380.0	321.9	423.8	365.7	511.6	453.5	599.4	541.3	160.7	102.6
VTX140S07			143.5	75.7	187.4	119.6	231.3	163.5	275.2	207.4	319.0	251.2	362.9	395.1	406.7	338.9	494.5	426.7	582.3	514.5	187.5	119.7
VTX140S08					170.3	92.9	214.2	136.8	258.1	180.7	301.9	224.5	345.8	268.4	389.6	312.2	477.4	400.0	565.2	487.8	214.2	136.8
VTX140S09							197.1	110.0	241.0	153.9	284.8	197.7	328.7	241.6	372.5	285.4	460.3	373.2	548.1	461.0	241.0	153.9
VTX140S10									223.9	127.1	267.7	170.9	311.6	214.8	355.4	258.6	443.2	346.4	531.0	434.2	267.8	171.0
VTX140S11											250.6	144.1	294.5	188.0	338.3	231.8	426.1	319.6	513.9	407.4	294.6	188.1
VTX140S12													277.4	161.2	321.2	205.0	409.0	292.8	496.8	380.6	321.4	205.2
VTX160S05	208.7	125.6	275.6	192.5	342.5	259.4	409.3	326.2	476.2	393.1	543.0	459.9	609.9	526.8	676.7	593.6	810.4	727.3	944.1	861.0	208.6	125.5
VTX160S06	183.6	83.9	250.5	150.8	317.4	217.7	384.2	284.5	451.1	351.4	517.9	418.2	584.8	485.1	651.6	551.9	785.3	686.6	919.0	819.3	250.3	150.6
VTX160S07			225.4	109.1	292.3	176.0	359.1	242.8	426.0	309.7	492.8	376.5	559.7	443.4	626.5	510.2	760.2	643.9	893.9	777.6	292.0	175.7
VTX160S08					267.2	134.2	334.0	201.0	400.9	267.9	467.7	334.7	534.6	401.6	601.4	468.4	735.1	602.1	868.8	735.8	333.8	200.8
VTX160S09							308.9	159.3	375.8	226.2	442.6	293.0	509.5	359.9	576.3	426.7	710.0	560.4	843.7	694.1	375.5	225.9
VTX160S10									350.7	184.5	417.5	251.3	484.4	318.2	551.2	385.0	684.9	518.7	818.6	652.4	417.2	251.0
VTX160S11											392.4	209.6	459.3	276.5	526.1	343.3	659.8	477.0	793.5	610.7	458.9	276.1
VTX160S12													434.2	234.8	501.0	301.6	634.7	435.3	768.4	569.0	500.6	301.2
VTX190S05	309.0	195.0	410.0	296.0	511.0	397.0	612.0	498.0	713.0	599.0	814.0	700.0	915.0	801.0	1016.0	902.0	1218.0	1104.0	1420.1	1306.1	310.0	196.0
VTX190S06	269.8	133.0	370.8	234.0	471.8	335.0	572.8	436.0	673.8	537.0	774.0	638.0	875.8	739.0	976.8	840.0	1178.8	1042.0	1380.9	1244.1	372.0	235.2
VTX190S07			331.6	172.0	432.6	273.0	533.6	374.0	634.6	475.0	735.6	576.0	836.6	677.0	937.6	778.0	1139.6	980.0	1341.7	1182.1	434.0	274.4
VTX190S08					393.4	211.0	494.4	312.0	595.4	413.0	696.4	514.0	797.4	615.0	898.4	716.0	1100.4	918.0	1302.5	1120.1	496.0	313.6
VTX190S09							455.2	250.0	556.2	351.0	657.2	452.0	758.2	553.0	859.2	654.0	1061.2	856.0	1263.3	1058.1	558.0	352.8
VTX190S10									517.0	289.0	618.0	390.0	719.0	491.0	820.0	592.0	1022.0	794.0	1224.1	996.1	620.0	392.0
VTX190S11											578.8	328.0	679.8	429.0	780.8	530.0	982.8	732.0	1184.9	934.1	682.0	431.2
VTX190S12													640.6	367.0	741.6	468.0	943.6	670.0	1145.7	872.1	744.0	470.4
VTX210S05	380.0	278.0	511.7	409.7	643.3	541.3	774.9	672.9	906.5	804.5	1038.1	936.1	1169.8	1067.8	1301.4	1199.4	1564.6	1462.6	1827.8	1725.8	380.0	278.0
VTX210S06	324.4	202.0	456.1	333.7	587.7	465.3	719.3	596.9	850.9	728.5	982.5	860.1	1114.2	991.8	1245.8	1123.4	1509.0	1386.6	1772.2	1649.8	456.0	333.6
VTX210S07			400.5	257.7	532.1	389.3	663.7	520.9	795.3	652.5	926.9	784.1	1058.6	915.8	1190.2	1047.4	1453.4	1310.6	1716.6	1573.8	532.0	389.2
VTX210S08					476.5	313.3	608.1	444.9	739.7	576.5	871.3	708.1	1003.0	839.8	1134.6	971.4	1397.8	1234.6	1661.0	1497.8	608.0	444.8
VTX210S09							552.5	368.9	684.1	500.5	815.7	632.1	947.4	763.8	1079.0	895.4	1342.2	1158.6	1605.4	1421.8	684.0	500.0
VTX210S10									628.5	424.5	760.1	556.1	891.8	687.8	1023.4	819.4	1286.6	1082.6	1549.8	1345.8	760.0	556.0
VTX210S11											704.5	480.1	836.2	611.8	967.8	743.4	1231.0	1006.6	1494.2	1269.8	836.0	611.6
VTX210S12													780.6	535.8	912.2	667.4	1175.4	930.6	1438.6	1193.8	912.0	667.2
VTX240S05	593.0	373.9	786.3	567.2	979.7	760.6	1173.1	954.0	1366.5	1147.4	1560.0	1340.9	1753.3	1534.2	1946.7	1727.6	2333.5	2114.4	2720.3	2501.2	593.1	374.0
VTX240S06	518.2	255.3	711.5	448.6	904.9	642.0	1098.3	835.4	1291.7	1028.8	1485.2	1222.3	1678.5	1415.6	1871.9	1609.0	2258.7	1995.8	2645.5	2382.6	711.7	448.8
VTX240S07			636.7	330.0	830.1	523.4	1023.5	716.8	1216.9	910.2	1410.4	1103.7	1603.7	1297.0	1797.1	1490.4	2183.9	1877.2	2570.7	2264.0	830.3	523.6
VTX240S08					755.3	404.7	948.7	598.1	1142.1	791.5	1335.6	985.0	1528.9	1178.3	1722.3	1371.7	2109.1	1758.5	2495.9	2145.3	949.0	598.4
VTX240S09							873.9	479.5	1067.3	672.9	1260.8	866.4	1454.1	1059.7	1647.5	1253.1	2034.3	1639.9	2421.1	2026.7	1067.6	673.2
VTX240S10									992.5	554.3	1186.0	747.8	1379.3	941.1	1572.7	1134.5	1959.5	1521.3	2346.3	1908.1	1186.2	748.0
VTX240S11											1111.2	629.2	1304.5	822.5	1497.9	1015.9	1884.7	1402.7	2271.5	1789.5	1304.8	822.8
VTX240S12													1229.7	703.9	1423.1	897.3	1809.9	1284.1	2196.7	1670.9	1423.4	897.6
VTX270S05	853.0	615.8	1146.7	909.5	1440.4	1203.2	1734.1	1496.9	2027.8	1790.6	2321.6	2084.4	2615.3	2378.1	2909.0	2671.8	3496.4	3259.2	4083.9	3846.7	852.8	615.6
VTX270S06	729.9	445.2	1023.6	738.9	1317.3	1032.6	1611.0	1326.3	1904.7	1620.0	2198.5	1913.8	2492.2	2207.5	2785.9	2501.2	3373.3	3088.6	3960.8	3676.1	1023.4	738.7
VTX270S07			900.5	568.4	1194.2	862.1	1487.9	1155.8	1781.6	1449.5	2075.4											

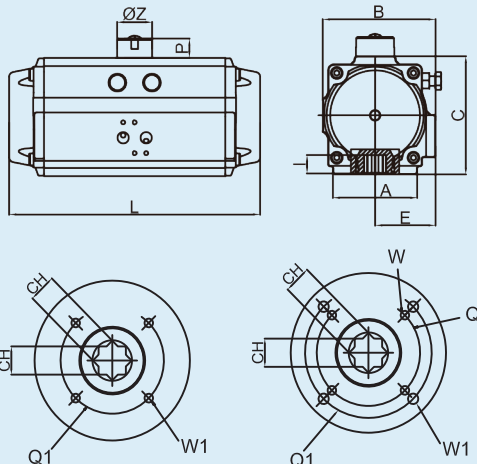
Various Qualifications And Certifications Verified By International Authorities



Installation Information



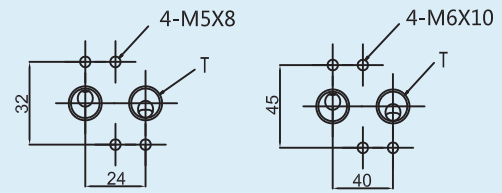
Sample Reference



Applicable Specification :190-270

Applicable Specification :050-160

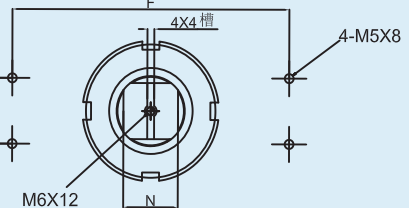
Air Supply Interface



G1/4 NAMUR Standard
Applicable Specification :050-210

G1/2 NAMUR Standard
Applicable Specification :240-400

Top View



VTX series stainless steel pneumatic actuator Dimension Table (Unit: mm)

Model	A	B	C	L	E	F	P	Z	N	I	Flange Type	Q	Q1	W	W1	Ch	T
050	46	71	70	151	41.5	80	20	40	10	12	F03/F05	36	50	M5x7.5	M6x9	11x11	G1/4"
065	64	84.5	89	168	46.5	80	20	40	10	16	F05/F07	50	70	M6x9	M8x12	14x14	G1/4"
075	68	98.8	100	182	55	80	20	40	14	16	F05/F07	50	70	M6x9	M8x12	14x14	G1/4"
085	68	108.5	113	210	59.5	80	20	40	14	19	F05/F07	50	70	M6x9	M8x12	17x17	G1/4"
095	88	117.7	123	261.8	63	80	20	40	14	19	F05/F07	50	70	M6x9	M8x12	17x17	G1/4"
110	93	132	136	285.2	73	80	20	40	14	19	F07/F10	70	102	M8x12	M10x15	17x17	G1/4"
125	96	152	159	320	81	80/130	30	56	22	25	F07/F10	70	102	M8x12	M10x15	22x22	G1/4"
140	110	172	178	401	91	80/130	30	56	22	31	F10/F12	102	125	M10x15	M12x18	27x27	G1/4"
160	112	189	200	459	100	80/130	30	56	22	31	F10/F12	102	125	M10x15	M12x18	27x27	G1/4"
190	136	217	232	495	112	130	30	56	22	41	F10/F14	102	140	M10x15	M16x24	36x36	G1/4"
210	140	236	255	529	122	130	30	80	32.5	40	F14	-	140	-	M16x24	36x36	G1/4"
240	160	268.5	292	618	139	130	30	80	32.5	50	F16	-	165	-	M20x25	46x46	G1/2"
270	160	296	331	737	151	130	30	80	32.5	50	F16	-	165	-	M20x25	46x46	G1/2"

Numerous Invention Patent Certifications



Model	Type	Spring Qty.	Flange Type	Square	Option	Sealing Part
VTX050	D=Double Acting S=Spring Return	Dedicated to Spring Return 4 5 6 7 8 9 10 11 12	F03/05	11×11	Body Material A: 304SS B: 316SS	Standard Nitrile Rubber -18℃~+80℃ HT Fluororubber (High Temperature) -18℃~+150℃ LT Silastic (Low Temperature) -40℃~+80℃
VTX065			F05/07	14×14		
VTX075			F05/07	14×14		
VTX085			F05/07	17×17		
VTX095			F05/07	17×17		
VTX110			F07/10	17×17		
VTX125			F07/10	22×22		
VTX140			F10/12	27×27		
VTX160			F10/12	27×27		
VTX190			F10/14	36×36		
VTX210			F14	36×36		
VTX240			F16	46×46		
VTX270			F16	46×46		

Remarks:

- 1.The standard rotation of double acting and spring return is clockwise to close.
- 2.Sealing parts come standard with normal temperature ranges of -18℃ to 80℃. Corresponding sealing types are available for environment at high or low temperature.
- 3.Please refer to brochure for technical parameter details. VTORK has the capability to provide customized service based on standard products. Please contact VTORK for details.
- 4.Customized service including but not limited to:

- Flange and square;
- Higher protection grade;

Model Selection Example:

Example1: VTX095D F05/07 17 A

Description: Actuator model VTX095, double acting, ISO flange F05&F07, 17 mm diagonal square with standard indicator as well as standard nitrile rubber sealing,the body is made of 304 stainless steel.

Example2:VTX190S12 F14 36 B FO HT

Description:Actuator model VTX190,single acting spring return,12springs, ISO flange F14,36 mm diagonal square,the body is made of 316 stainless steel. FO,fluororubber rubber sealing.

⚠ Notice

Pressure-temperature ratings and other performance data published in this catalog have been developed from our design calculation, in-house testing, field reports provided by our customers and/or published official standards or specifications. They are good only to cover typical applications as a general guideline to users of VTORK products introduced in this catalog. For any specific application, users are kindly requested to contact VTORK for technical advice, or to carry out their own study and evaluation for proving suitability of these products to such an application. Failure to follow this request could result in property damage and/or personal injury, for which we shall not be liable. While this catalog has been compiled with the utmost care, we assume no responsibility for errors, impropriety or inadequacy. Any information provided in this catalog is subject to from-time-to-time change without notice for error rectification, product discontinuation, design modification, new product introduction or any other cause that VTORK considers necessary. This edition cancels all previous issues.

The final interpretation right of this sample belongs to VTORK Technology(Wuxi) Co.,Ltd.



No.55 Lianhe Road, Hudai Industrial Park, Binhu District, Wuxi, Jiangsu Province, China
Tel: 0510-85581533 Fax: 0510-85581532 E-mail: info@vtork.cn Website: www.vtork.cn