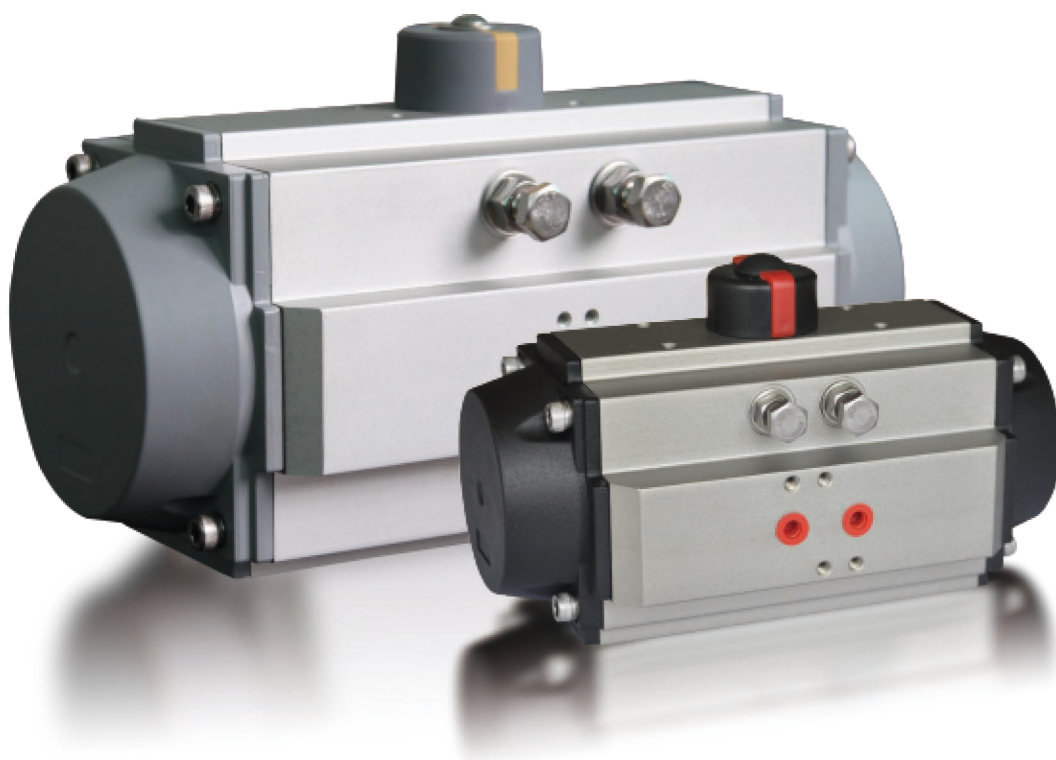


V-TORK®



PNEUMATIC ACTUATOR



Higher performance and reliability

Fully compliance with all the latest international standards

Wide range options in technical specification and highly cost-effective

Compact housing design, suitable for any application and working environment



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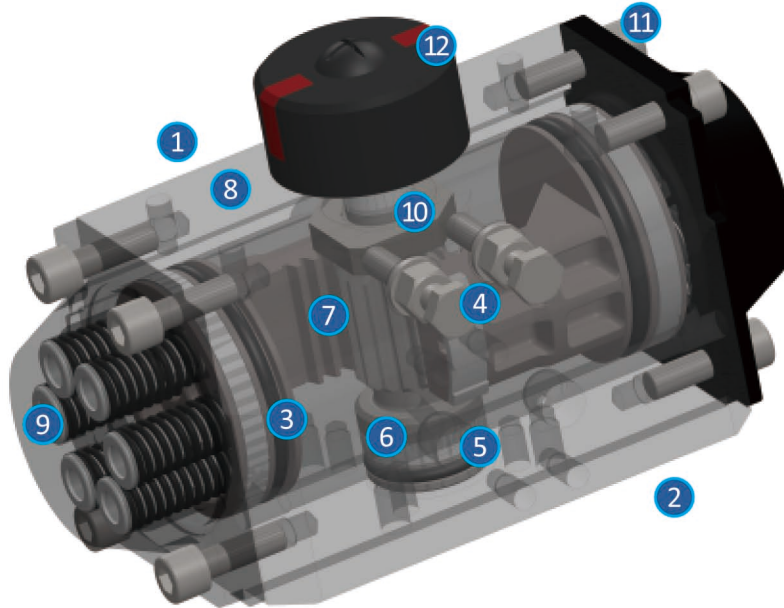
DESIGN

Duria series pneumatic actuators have introduced improvement design for rack and pinion. It is always Duria's mission to offer initiative products by combining the long field experiences in products application and the latest production and materials technology available in the market today. The benefit of new design has long been verified in practice. With new technical features equipped, Duria series pneumatic actuators have advantageous characteristic in:

- Reliability
- High performance
- Fully compliance with all the latest international standards
- Extensive products range allows best versatility at lower price
- Innovations and patented solutions for a universal drive shaft
- Multifunction position indicator
- Compact and light

CONSTRUCTION

1. A single compact design utilizing identical body and end caps for both double acting and spring return models. This feature reduces inventory and allows field conversion, by adding or removing modular spring cartridges.
2. Full conformance to following latest specifications: ISO 5211, DIN 3337 and VDI/VDE 3845 for product interchangeability and easy mounting of solenoids, limit switches and other accessories.
3. Dual piston rack and pinion design for compact construction, symmetric mounting position, high-cycle life and fast operation. Reverse rotation can be accomplished in the field by simply inverting the pistons.
4. Two independent external travel stop adjustments permit easy and precise adjustment of $\pm 4^\circ$ in both directions. This adjustment may be made in either the open or closed position and provides for accurate valve alignment.
5. Multiple bearings and guides on pistons and racks for precise operation, low friction, high cycle life and a blowout proof pinion shaft.
6. Electroless nickel-plated blowout resistant, bearing guided, one-piece pinion shaft for improved safety and maximum cycle life.
7. High precision teeth on piston racks and pinion shaft for accurate positioning, low backlash, and maximum engagement resulting in overall efficient operation.
8. Extruded aluminum body with both internal and external corrosion protections having a honed cylinder surface for longer life and a lower coefficient of friction.
9. Modular preloaded spring cartridges designed with coated springs for simple range versatility, greater safety and corrosion resistance.
10. Selected high quality bearings and seals that provide a wide operating temperature range, low friction, and high cycle life.
11. Internal and external stainless steel fasteners for long term corrosion resistance.
12. Multifunctional position indicator for visual position indication, and a direct, easy, economical way to mount popular sensors.



RANGE OF OPTIONS, QUALITY MANUFACTURING, AND ACCESSORIES

RANGE OF OPTIONS

- A. Stainless steel 304 or 316 drive shafts are available on request for all sizes no matter the type of corrosion protection selected.
- B. For extremely high or low temperature applications, all models may be equipped with FPM or Silicon O rings along with an Duria tested and certified suitable lubricant.
- C. Other than the standard double square bottom drive shaft connection, we can supply a keyed drive connection, a flat head connection or a special personalized drive connection.

QUALITY MANAGEMENT

- Production conforms to ISO9001.
- Each individual actuator has been factory inspected and tested and given a serial number for full traceability.
- Each individual actuator is individually packed in a special cardboard carton for protection, with a product description label for easy identification and includes installation, operation and maintenance instructions.

ACCESSORIES AVAILABLE

- Different Square reductions suitable for drive shaft
- Centering rings for all sizes
- Brackets
- Couplings
- Solenoid valves
- Switch boxes
- Proximity switches
- Gear boxes
- Positioners

The figure consists of two separate coordinate systems, each with a horizontal axis representing the angle θ from 0° to 90° and a vertical axis representing Torque.

- Left Graph:** The vertical axis is labeled "Torque". The curve starts at the origin $(0^\circ, 0)$ and increases linearly to a point labeled "End" at 90° . The word "Start" is placed near the origin.
- Right Graph:** The vertical axis is labeled "Torque". The curve starts at a point labeled "Start" at 0° and decreases linearly to the horizontal axis at 90° , which is labeled "End".

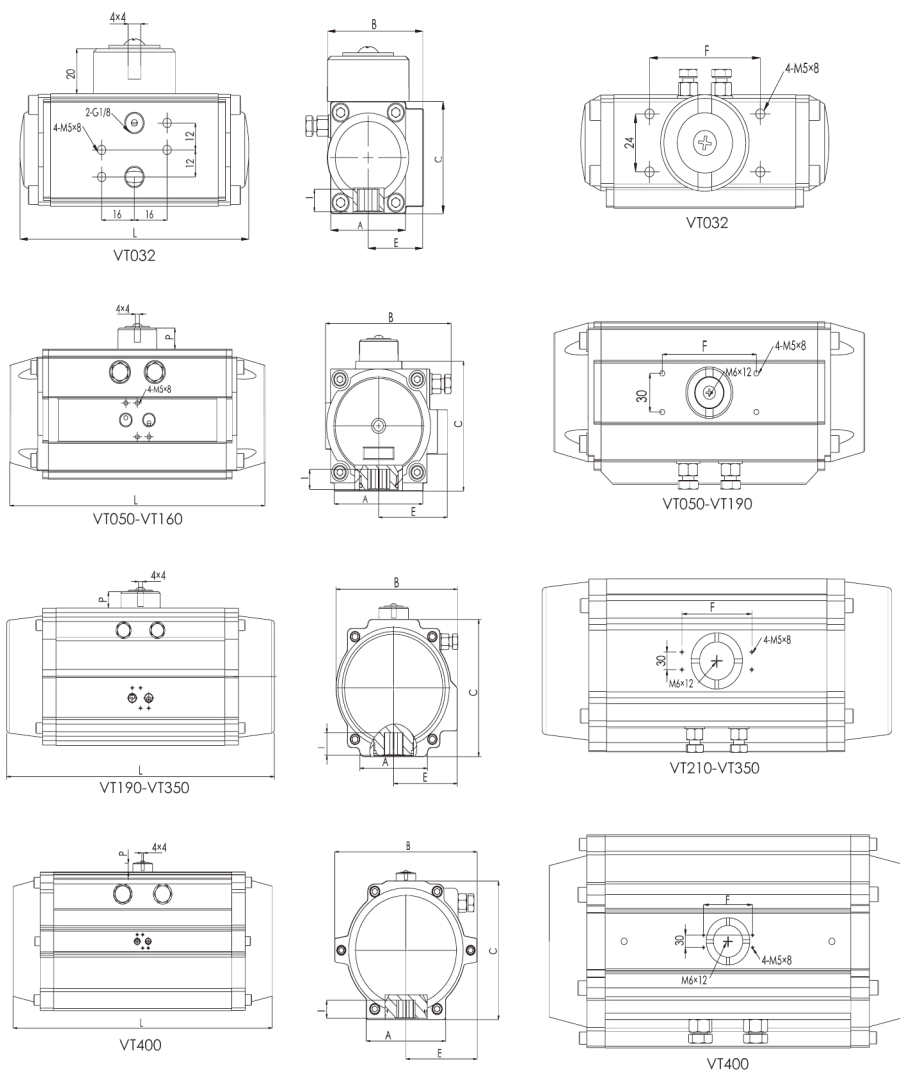
Model	Supply Pressure(Unit:bar)																				Spring stroke	
	2.5		3		3.5		4		4.5		5		5.5		6		7		8			
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
VT050 S05	5.1	3.4	6.9	5.3	8.8	7.2	10.7	9.0	12.5	10.9	14.4	12.8	16.3	14.6	18.1	16.5	21.9	20.2	25.6	23.9	5.2	3.5
VT050 S06	4.4	2.4	6.2	4.3	8.1	6.1	10.0	8.0	11.8	9.9	13.7	11.7	15.6	13.6	17.4	15.5	21.2	19.2	24.9	22.9	6.2	4.2
VT050 S07			5.5	3.2	7.4	5.1	9.3	7.0	11.1	8.8	13.0	10.7	14.9	12.6	16.7	14.4	20.5	18.2	24.2	21.9	7.2	4.9
VT050 S08					6.7	4.1	8.6	5.9	10.4	7.8	12.3	9.7	14.2	11.5	16.0	13.4	19.8	17.1	23.5	20.9	8.2	5.6
VT050 S09							7.9	4.9	9.7	6.8	11.6	8.6	13.5	10.5	15.3	12.4	19.1	16.1	22.8	19.8	9.3	6.3
VT050 S10									9.0	5.7	10.9	7.6	12.8	9.5	14.6	11.3	18.4	15.1	22.1	18.8	10.3	7.0
VT050 S11											10.2	6.6	12.1	8.4	13.9	10.3	17.7	14.0	21.4	17.8	11.3	7.7
VT050 S12													11.4	7.4	13.2	9.3	17.0	13.0	20.7	16.7	12.4	8.4
VT065 S05	8.7	4.3	12.5	8.1	16.3	11.9	20.0	15.6	23.8	19.4	27.6	23.2	31.4	27.0	35.2	30.8	42.7	38.3	50.3	45.9	13.1	8.7
VT065 S06	7.0	1.7	10.7	5.5	14.5	9.2	18.3	13.0	22.1	16.8	25.9	20.6	29.7	24.4	33.4	28.2	41.0	35.7	48.6	43.3	15.7	10.4
VT065 S07			9.0	2.8	12.8	6.6	16.6	10.4	20.4	14.2	24.1	18.0	27.9	21.8	31.7	25.5	39.3	33.1	46.8	40.7	18.3	12.2
VT065 S08					11.0	4.0	14.8	7.8	18.6	11.6	22.4	15.4	26.2	19.1	30.0	22.9	37.5	30.5	45.1	38.1	21.0	13.9
VT065 S09							13.1	5.2	16.9	9.0	20.7	12.7	24.4	16.5	28.2	20.3	35.8	27.9	43.4	35.4	23.6	15.7
VT065 S10									15.1	6.3	18.9	10.1	22.7	13.9	26.5	17.7	34.0	25.2	41.6	32.8	26.2	17.4
VT065 S11											17.2	7.5	21.0	11.3	24.7	15.1	32.3	22.6	39.9	30.2	28.8	19.1
VT065 S12													19.2	8.7	23.0	12.4	30.6	20.0	38.1	27.6	31.4	20.9
VT075 S05	16.3	10.2	22.2	16.0	28.1	21.9	34.0	27.8	39.8	33.7	45.7	39.6	51.6	45.4	57.5	51.3	69.2	63.1	81.0	74.8	16.9	10.7
VT075 S06	14.2	6.8	20.1	12.7	25.9	18.6	31.8	24.4	37.7	30.3	43.6	36.2	49.4	42.1	55.3	47.9	67.1	59.7	78.8	71.4	20.2	12.8
VT075 S07			17.9	9.3	23.8	15.2	29.7	21.1	35.6	26.9	41.4	32.8	47.3	38.7	53.2	44.6	64.9	56.3	76.7	68.1	23.6	15.0
VT075 S08					21.7	11.8	27.5	17.7	33.4	23.6	39.3	29.4	45.2	35.3	51.0	41.2	62.8	53.0	74.5	64.7	27.0	17.1
VT075 S09							25.4	14.3	31.3	20.2	37.1	26.1	43.0	32.0	48.9	37.8	60.7	49.6	72.4	61.3	30.3	19.3
VT075 S10									29.1	16.8	35.0	22.7	40.9	28.6	46.8	34.5	58.5	46.2	70.3	58.0	33.7	21.4
VT075 S11											32.9	19.3	38.7	25.2	44.6	31.1	56.4	42.8	68.1	54.6	37.1	23.5
VT075 S12													36.6	21.8	42.5	27.7	54.2	39.5	66.0	51.2	40.4	25.7
VT085 S05	23.2	13.7	31.8	22.3	40.4	30.9	49.0	39.5	57.6	48.1	66.3	56.8	74.9	65.4	83.5	74.0	100.8	91.3	118.0	108.5	26.1	16.6
VT085 S06	19.8	8.4	28.4	17.0	37.1	25.7	45.7	34.3	54.3	42.9	62.9	51.5	71.6	60.2	80.2	68.8	97.4	86.0	114.7	103.3	31.3	19.9
VT085 S07			25.1	11.8	33.8	20.5	42.4	29.1	51.0	37.7	59.6	46.3	68.3	55.0	76.9	63.6	94.1	80.8	111.4	98.1	36.5	23.2
VT085 S08					30.4	15.2	39.1	23.9	47.7	32.5	56.3	41.1	64.9	49.7	73.6	58.4	90.8	75.6	108.1	92.9	41.7	26.5
VT085 S09							35.8	18.7	44.4	27.3	53.0	35.9	61.6	44.5	70.3	53.2	87.5	70.4	104.8	87.7	46.9	29.8
VT085 S10									41.1	22.1	49.7	30.7	58.3	39.3	67.0	48.0	84.2	65.2	101.5	82.5	52.1	33.1
VT085 S11											46.4	25.5	55.0	34.1	63.6	42.7	80.9	60.0	98.1	77.2	57.3	36.4
VT085 S12													51.7	28.9	60.3	37.5	77.6	54.8	94.8	72.0	62.5	39.7
VT095 S05	33.6	20.9	45.8	33.0	57.9	45.1	70.0	57.3	82.1	69.4	94.3	81.5	106.4	93.6	118.5	105.8	142.7	130.0	167.0	154.2	34.9	22.1
VT095 S06	29.2	13.9	41.4	26.1	53.5	38.2	65.6	50.3	77.7	62.4	89.8	74.5	102.0	86.7	114.1	98.8	138.3	123.0	162.6	147.3	41.8	26.5
VT095 S07			36.9	19.1	49.1	31.2	61.2	43.3	73.3	55.4	85.4	67.6	97.5	79.7	109.7	91.8	133.9	116.1	158.1	140.3	48.8	30.9
VT095 S08					44.6	24.2	56.8	36.4	68.9	48.5	81.0	60.6	93.1	72.7	105.2	84.8	129.5	109.1	153.7	133.3	55.8	35.4
VT095 S09							52.3	29.4	64.5	41.5	76.6	53.6	88.7	65.8	100.8	77.9	125.1	102.1	149.3	126.4	62.7	39.8
VT095 S10									60.0	34.5	72.2	46.7	84.3	58.8	96.4	70.9	120.6	95.1	144.9	119.4	69.7	44.2
VT095 S11											67.7	39.7	79.9	51.8	92.0	63.9	116.2	88.2	140.5	112.4	76.7	48.6
VT095 S12													75.4	44.8	87.6	57.0	111.8	81.2	136.0	105.4	83.6	53.0
VT110 S05	43.4	26.2	60.7	43.4	76.4	59.1	92.0	74.8	107.7	90.4	123.4	106.1	139.0	121.8	154.7	137.4	186.0	168.8	217.3	200.1	45.9	28.6
VT110 S06	37.7	17.0	55.0	34.3	70.6	49.9	86.3	65.6	102.0	81.3	117.6	96.9	133.3	112.6	149.0	128.3	159.6	211.6	190.9	55.0	34.3	
VT110 S07			49.3	25.1	64.9	40.8	80.6	56.4	96.2	72.1	111.9	87.8	127.6	103.4	143.2	119.1	174.6	150.4	205.9	181.8	64.2	40.0
VT110 S08					59.2	31.6	74.9	47.3	90.5	62.9	106.2	78.6	121.9	94.3	137.5	109.9	168.9	141.3	200.2	172.6	73.4	45.8
VT110 S09							69.1	38.1	84.8	53.8	100.5	69.4	116.1	85.1	131.8	100.8	163.1	132.1	194.5	163.4	82.5	51.5
VT110 S10									79.1	44.6	94.8	60.3	110.4	75.9	126.1	91.6	157.4	122.9	188.7	154.2	91.7	57.2
VT110 S11											89.0	51.1	104.7	66.7	120.4	82.4	151.7	113.7	183.0	145.1	100.9	62.9
VT110 S12													82.0	57.6	114.6	73.2	146.0	104.6	177.3	135.9	110.0	68.6



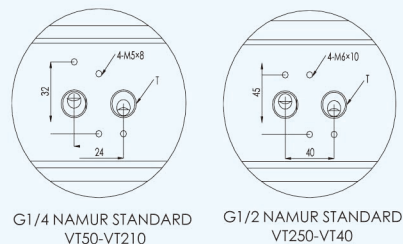
METRIC TORQUE RATINGS

SINGLE ACTING TORQUE RATINGS IN Nm

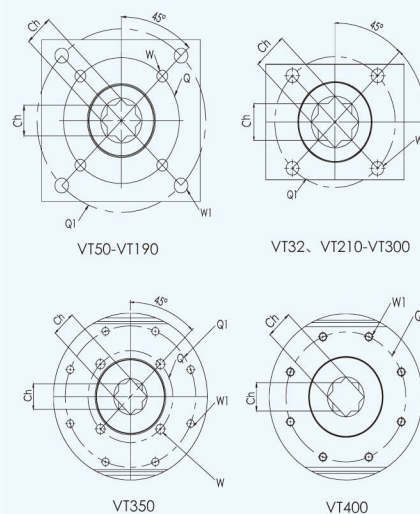
SINGLE ACTING TORQUE RATINGS IN Nm																						
Model	Supply Pressure (Unit: bar)																				Spring stroke	
	2.5		3		3.5		4		4.5		5		5.5		6		7		8			
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
VT125 S05	77.7	48.2	108.5	78.9	136.5	106.9	164.4	134.9	192.4	162.9	220.4	190.9	248.4	218.8	276.4	246.8	332.3	302.8	388.3	358.7	80.6	51.0
VT125 S06	67.5	32.0	98.3	62.8	126.3	90.8	154.2	118.8	182.2	146.8	210.2	174.7	238.2	202.7	266.2	230.7	322.1	286.7	378.1	342.6	96.7	61.2
VT125 S07			88.1	46.7	116.1	74.7	144.0	102.7	172.0	130.7	200.0	158.6	228.0	186.6	256.0	214.6	311.9	270.6	367.9	326.5	112.8	71.4
VT125 S08					105.9	58.6	133.8	86.6	161.8	114.5	189.8	142.5	217.8	170.5	245.8	198.5	301.7	254.4	357.7	310.4	128.9	81.6
VT125 S09							123.6	70.5	151.6	98.4	179.6	126.4	207.6	154.4	235.6	182.4	291.5	238.3	347.5	294.3	145.0	91.8
VT125 S10									141.4	82.3	169.4	110.3	197.4	138.3	225.4	166.3	281.3	222.2	337.3	278.2	161.1	102.0
VT125 S11											159.2	94.2	187.2	122.2	215.2	150.2	271.1	206.1	327.1	262.1	177.2	112.2
VT125 S12													177.0	106.1	205.0	134.0	260.9	190.0	316.9	246.0	193.3	122.4
VT140 S05	114.2	74.1	155.1	115.0	196.1	156.0	237.0	196.9	277.9	237.8	318.8	278.7									122.4	82.3
VT140 S06	97.7	49.6	138.7	90.6	179.6	131.5	220.5	172.4	261.5	213.3	302.4	254.3	343.3	295.2							146.8	98.7
VT140 S07			122.2	66.1	163.2	107.0	204.1	147.9	245.0	188.9	285.9	229.8	326.9	270.7	367.8	311.6					171.3	115.2
VT140 S08					146.7	82.5	187.6	123.5	228.6	164.4	269.5	205.3	310.4	246.2	351.3	287.2	433.2	369.0			195.8	131.6
VT140 S09							171.2	99.0	212.1	139.9	253.0	180.9	294.0	221.8	334.9	262.7	416.7	344.6	498.6	426.4	220.2	148.1
VT140 S10									195.7	115.5	236.6	156.4	277.5	197.3	318.4	238.2	400.3	320.1	482.1	401.9	244.7	164.5
VT140 S11											220.1	131.9	261.1	172.8	302.0	213.8	383.8	295.6	465.7	377.5	269.2	181.0
VT140 S12													244.6	148.4	285.5	189.3	367.4	271.1	449.2	353.0	293.6	197.4
VT160 S05	153.5	101.3	216.6	164.4	273.9	221.7	331.2	279.0	388.5	336.3	445.8	393.6	503.1	450.9	560.4	508.2	675.0	622.8	789.7	737.4	162.3	110.0
VT160 S06	131.5	68.8	194.6	131.9	251.9	189.2	309.2	246.5	366.5	303.8	423.8	361.1	481.1	418.4	538.4	475.7	653.0	590.3	767.7	705.0	194.7	132.0
VT160 S07			172.6	99.5	229.9	156.8	287.2	214.1	344.5	271.4	401.8	328.7	459.1	386.0	516.4	443.3	631.0	557.9	745.7	672.5	227.2	154.0
VT160 S08					207.9	124.3	265.2	181.6	322.5	238.9	379.8	296.2	437.1	353.5	494.4	410.8	609.0	525.4	723.7	640.1	259.6	176.0
VT160 S09							243.2	149.2	300.5	206.5	357.8	263.8	415.1	321.1	472.4	378.4	587.0	493.0	701.7	607.6	292.1	198.0
VT160 S10									278.5	174.0	335.8	231.3	393.1	288.6	450.4	345.9	565.0	460.5	679.7	575.2	324.5	220.0
VT160 S11											313.8	198.9	371.1	256.2	428.4	313.5	543.0	428.1	657.7	542.7	357.0	242.0
VT160 S12													349.1	223.7	406.4	281.0	521.0	395.6	635.7	510.3	389.4	264.0
VT190 S05	257.0	162.8	346.5	252.3	435.8	341.6	525.1	430.9	614.4	520.2	703.8	609.5	793.1	698.8	882.4	788.1	1061.0	966.7	1239.6	1145.4	265.8	171.5
VT190 S06	222.7	109.6	312.2	199.1	401.5	288.4	490.8	377.7	580.1	467.0	669.5	556.4	758.8	645.7	848.1	735.0	1026.7	913.6	1205.3	1092.2	318.9	205.8
VT190 S07			277.9	146.0	367.2	235.3	456.5	324.6	545.8	413.9	635.2	503.2	724.5	592.5	813.8	681.8	992.4	860.4	1171.0	1039.1	372.1	240.1
VT190 S08					332.9	182.1	422.2	271.4	511.5	360.7	600.9	450.1	690.2	539.4	779.5	628.7	958.1	807.3	1136.7	985.9	425.2	274.4
VT190 S09							387.9	218.3	477.2	307.6	566.6	396.9	655.9	486.2	745.2	575.5	923.8	754.1	1102.4	932.8	478.4	308.7
VT190 S10									442.9	254.4	532.3	343.8	621.6	433.1	710.9	522.4	889.5	701.0	1068.1	879.6	531.5	343.0
VT190 S11											498.0	290.6	587.3	379.9	676.6	469.2	855.2	647.8	1033.8	826.5	584.7	377.3
VT190 S12													553.0	326.8	642.3	416.1	820.9	594.7	999.5	773.3	637.8	411.6
VT210 S05	352.8	239.1	477.8	364.1	602.5	488.8	727.2	613.5	851.9	738.2	976.6	862.9	1101.2	987.5	1225.9	1112.2	1475.3	1361.6	1724.7	1611.0	359.1	245.4
VT210 S06	303.7	167.3	428.7	292.3	553.4	417.0	678.1	541.7	802.8	666.4	927.5	791.0	1052.2	915.7	1176.9	1040.4	1426.2	1289.8	1675.6	1539.2	430.9	294.5
VT210 S07			379.6	220.5	504.3	345.2	629.0	469.8	753.7	594.5	878.4	719.2	1003.1	843.9	1127.8	968.6	1377.2	1218.0	1626.5	1467.4	502.7	343.6
VT210 S08					455.3	273.3	579.9	398.0	704.6	522.7	829.3	647.4	954.0	772.1	1078.7	896.8	1328.1	1146.2	1577.5	1395.5	574.6	392.6
VT210 S09							530.9	326.2	655.6	450.9	780.2	575.6	904.9	700.3	1029.6	825.0	1279.0	1074.3	1528.4	1323.7	646.4	441.7
VT210 S10									606.5	379.1	731.2	503.8	855.8	628.4	980.5	753.1	1229.9	1002.5	1479.3	1251.9	718.2	490.8
VT210 S11											682.1	431.9	806.8	556.6	931.5	681.3	1180.8	930.7	1430.2	1180.1	790.0	539.9
VT210 S12													757.7	484.8	882.4	609.5	1131.8	858.9	1381.1	1108.3	861.8	589.0
VT240 S05	517.8	374.3	711.2	567.7	904.6	761.1	1098.0	954.5	1291.4	1147.9	1484.8	1341.3									554.0	410.5
VT240 S06	435.7	263.5	629.1	456.9	822.5	650.3	1015.9	843.7	1209.3	1037.1	1402.7	1230.5	1596.1	1423.9							664.8	492.6
VT240 S07			547.0	346.1	740.4	539.5	933.8	732.9	1127.2	926.3	1320.6	1119.7	1514.0	1313.1	1707.4	1506.5					775.6	574.7
VT240 S08					658.3	428.7	851.7	622.1	1045.1	815.5	1238.5	1008.9	1431.9	1202.3	1625.3	1395.7	2012.1	1782.5			886.4	656.8
VT240 S09							769.6	511.3	963.0	704.7	1156.4	898.1	1349.8	1091.5	1543.2	1284.9	1930.0	1671.7	2316.8	2058.5	997.2	738.9
VT240 S10									880.9	593.9	1074.3	787.3	1267.7	980.7	1461.1	1174.1	1847.9	1560.9	2234.7	1947.7	1108.0	821.0
VT240 S11											992.2	676.5	1185.6	869.9	1379.0	1063.3	1765.8	1450.1	2152.6	1836.9	1218.8	903.1
VT240 S12													1103.5	759.1	1296.9	952.5	1683.7	1339.3	2070.5	1726.1	1329.6	985.2
VT270 S05	745.9	519.4	1017.9	791.4	1289.9	1063.4	1561.8	1335.3	1833.8													



VDI/VDE3845 STANDARD



ISO5211 STANDARD



MODEL	A	B	C	L	E	F	P	I	FLANGE	Q	Q1	W	W1	Ch	T
VT032	37	47	50	110	27	50	20	10	F03	—	36	—	M5×9	9×9	G1/8"
VT050	45	70.5	70	154	41.5	80	20	12	F03/05	36	50	M5×7.5	M6×9	11×11	G1/4"
VT065	62	89.5	89	189	51.5	80	20	16	F05/07	50	70	M6×9	M8×12	14×14	G1/4"
VT075	68	102.5	100	210	59	80	20	16	F05/07	50	70	M6×9	M8×12	14×14	G1/4"
VT085	68	112.5	113	229	63.5	80	20	19	F05/07	50	70	M6×9	M8×12	17×17	G1/4"
VT095	92	126	123	264	71	80	20	19	F07/10	70	102	M8×12	M10×15	17×17	G1/4"
VT110	93	138.5	136	266	76.5	80	20	19	F07/10	70	102	M8×12	M10×15	17×17	G1/4"
VT125	96	157	161	337	85	80	30	25	F07/10	70	102	M8×12	M10×15	22×22	G1/4"
VT140	110	178	178	346	97	80	30	31	F10/12	102	125	M10×15	M12×18	27×27	G1/4"
VT140B	110	178	178	377	97	80	30	31	F10/12	102	125	M10×15	M12×18	27×27	G1/4"
VT160	112	196	200	412	106	130	30	31	F10/12	102	125	M10×15	M12×18	27×27	G1/4"
VT190	136	271	232	488	112	130	30	41	F10/14	102	140	M10×15	M16×24	36×36	G1/4"
VT210	140	310	255	550	120	130	30	40	F14	—	140	—	M16×24	36×36	G1/4"
VT240	159	262	292	602	131	130	30	50	F16	—	165	—	M20×28	46×46	G1/2"
VT270	159	295	331	672	147.5	130	30	50	F16	—	165	—	M20×28	46×46	G1/2"
VT300	180	438	354	784	173	130	30	50	F16	—	165	—	M20×28	46×46	G1/2"
VT350	270	470	410	845	195	130	30	50	F16/F25	165	254	M20×28	M16×30	46×46	G1/2"
VT400	290	520	466	956	260	130	30	60	F25	—	254	—	M16×30	55×55	G1/2"

MODEL	TYPE	SPRING QTY	FLANGE	SQURE	CAP COLOR	SEALING PART
VT032	D=DOUBLE ACTING S=SPRING RETURN	ONLY FOR SPRING REST 4 5 6 7 8 9 10 11 12	F03	9×9	7046 9004 5021 3020 6002 5015	STANDARD NITRILE RUBBER HT FLUORORUBBER (FOR HIGH TEMPERATURE) LT SILASTIC (FOR LOW TEMPERATURE)
VT050			F03/05	11×11		
VT065			F05/07	14×14		
VT075			F05/07	14×14		
VT085			F05/07	17×17		
VT095			F07/10	17×17		
VT110			F07/10	17×17		
VT125			F07/10	22×22		
VT140			F10/12	27×27		
VT160			F10/12	27×27		
VT190			F10/14	36×36		
VT210			F14	36×36		
VT240			F16	46×46		
VT270			F16	46×46		
VT300			F16	46×46		
VT350			F25	46×46		
VT400			F25	55×55		

Note:

- 1.The standard rotation of double acting and spring return is clockwise to close(for double acting when port 4 is pressurised).
- 2.The standard temperature of sealing part is -18 C to 80 C,if high temperature or low temperature required,relevant sealing parts can be used.
- 3.All technical parameters of products please refer to this catalog.Customization for special requirement is available. Please contact the sales.
- 4.Customization including but not limited to the items below:
 - 1)Color combination.
 - 2)Flange and Square custom made.
 - 3)Higher protection level.

Model Selection Example:

Example1:VT095D F07/10 17 7046

Description:Actuator model VT095,double acting ,ISO flange F07&F10,17 mm bottom square with standard indicator ,cap color grey(No.7046),nitrile rubber sealing.

Example2:VT190S12 F10/14 36 5021HT

Description:Actuator model VT190,single acting spring return,with 12 springs ,ISO flange F10&F14,36 mm bottom square ,cap color green(No.5021), fluororubber sealing.



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VTS Valve Position Monitor (Limit Switchbox)



VTS-A/C
IP67 water-proof
IP68 (50M @72hrs
tested by SGS)



VTS-K/KP
IP68 (30M @24hrs tested by TUV)
IP67 & ExdIIBT6 Explosion-proof

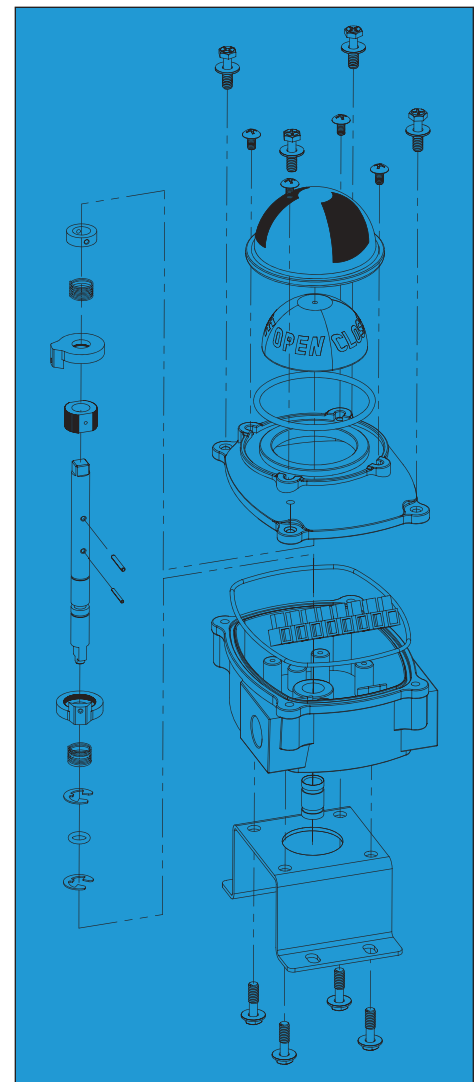


VTS-ES
IP67/ExdIIBT6
Explosion-proof



VTS-H
IP67/ExdIIBT6
Explosion-proof

Housing	Low cooper aluminum die-casting
Coating	Epoxy-Polyester
Sealing	NBR O-rings on each interface (Dome indicator, Lower/Upper Housing, Shaft)
Cams	Poly-Carbonate
Bushings	Bronze
Shaft	AISI304 Stainless Steel
Earth Lug	Stainless Steel
Mounting Bracket	AISI304 Stainless Steel



Material of Construction

Aluminum Alloy Body: NTS-A,C,CP,K,KP. H Series

316SS Body: ES Series

VTS-A,C,CP,K,KP,E,F,H Series General Specification

	VTS-C/CP Series,Weather-Proof - Enclosure: Aluminum Die-casting, weather proof - IP67/NEMA 4 & 4X, IP68 water-proof - Bolts on visual position Indicator - Switches: 2, 3 or 4 x SPDT mechanical switch or proximity - Cable Entry: 2 x 1/2"NPT(std.). Option:M20,PG13.5,PF1/2",PT1/2" - Terminal Strip: 8 points(0.08 – 2.5mm²), Option: 8-16 points - Easy mounting, Namur standard, stainless steel bracket & bolts
	VTS-ES Series,Ex-Proof(EExdIIBT6) - Enclosure: Aluminum Die-casting or 316SS weather proof - IP67/NEMA 4 & 4X & Explosion proof – EExdIIBT6 - Bolts on visual position Indicator - Switches: 2, 3 or 4 x SPDT mechanical switch or proximity - Option: Potentiometer(0-1,5,10K ohm), Position Transmitter(4-20mADC) - Cable Entry: 2 x 3/4"NPT(std.). Option:M20,M25,PF3/4",PT3/4" - Terminal Strip: 8 points(0.08 – 2.5mm²), Option: 8-16 points - Easy mounting, Namur standard, stainless steel bracket & bolts
	VTS-H Series,Ex-Proof(EExdIICT6) - Enclosure:Aluminum Die-casting, weather-proof, IP67/NEMA 4 & 4X & Explosion proof – EExdIICT6 - Bolts on visual position Indicator - Switches: 2, 3 or 4 x SPDT mechanical switch or proximity - Option: Potentiometer(0-1,5,10K ohm), Position Transmitter(4-20mADC) - Cable Entry: 2 x 3/4"NPT(std.). Option:M20,M25,PF3/4",PT3/4" - Terminal Strip: 8 points(0.08 – 2.5mm²), Option: 8-16 points - Easy mounting, Namur Standard, stainless steel bracket & bolts
	VTS-K/KP Series,IP67/IP68 Water-proof, ExdIIBT6 Ex-proof - Enclosure: Aluminum Die-casting, weather proof - IP67/IP68 Water-proof, ExdIIBT6 Ex-proof - Bolts on visual position Indicator - Switches: 2, 3 or 4 x SPDT mechanical switch or proximity - Cable Entry: 2 x 1/2"NPT(std.). Option:M20,PG13.5,PF1/2",PT1/2" - Terminal Strip: 8 points(0.08 – 2.5mm²), Option: 8-16 points - Easy mounting, Namur standard, stainless steel bracket & bolts
	VTS-F Series,Weather-Proof - Enclosure: ABS plastic, weather-proof, IP67/NEMA 4 & 4X - Visual position Indicator - Switches: 2 x SPST magnet reed switch, LED indicator - 0.7 meter lead wire(std.), option: quick coupler - Easy mounting, Namur Standard, stainless steel bracket & bolts

Note: A.Standard Specification: 1.Captive cover bolts. 2.Polyester powder coating(black color).

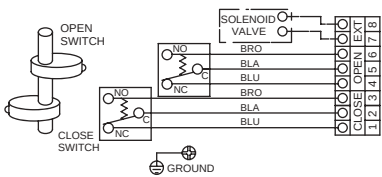
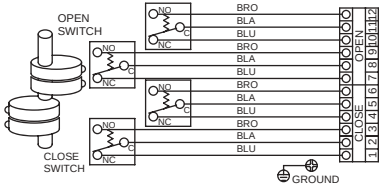
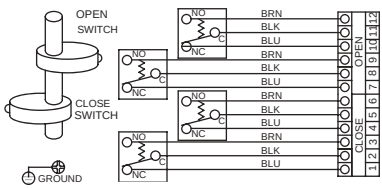
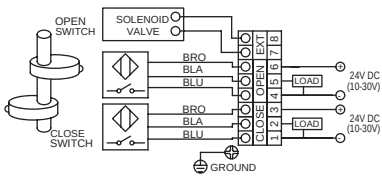
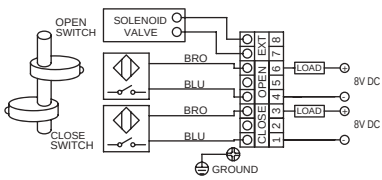
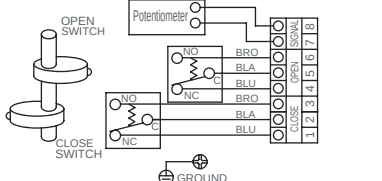
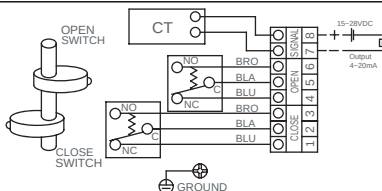
3.Ambient Temp.: -20 ~ +80°C

B.The other paining & colors are available upon request`

VTS Valve Position Monitor (Limit Switchbox)

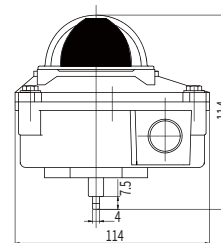
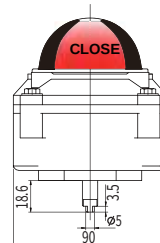
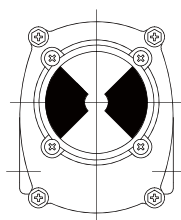


Switches, Wiring and Bracket(VTS-A,C,CP,K,KP,E&H series)

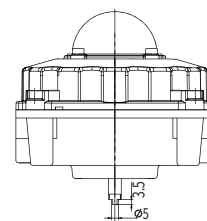
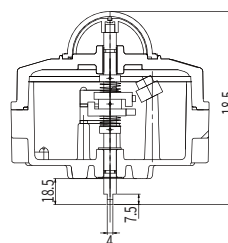
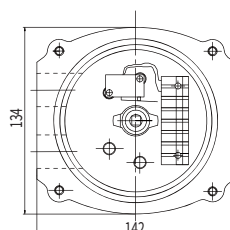
2-SPDT mechanical switches Rating : 16A 1/2HP 125/250VAC, 0.6A 125VDC, 0.3A 250VDC approved by UL, CSA	 
4-SPDT mechanical switches Rating : 5A 125 VAC LT130 0.6A 125VDC approved by UL, CSA	 
2-DPDT mechanical switches Rating : 10A 125 or 250VAC 2A 480VAC 1/8HP 125VAC, 0.25HP 250VAC 0.5A 125VDC, 0.25A 250VDC approved by UL, CSA	 
Autonics proximity sensors PS17-5DNU(NPN, PNP), 3-wire Voltage rating : 10~30VDC Sensing distance : 5mm Ambient temperature : -25~+70°C	 
P & F proximity sensors NJ2-V3-N(Intrinsic safe, 2-wire) Voltage rating : 8V DC Sensing distance : 2mm Ambient temperature : -25~+100°C	 
Potentiometer Providing 0-1K ohm output signal, Options: 0-5K or 10K ohm	 
Position Transmitter Providing 4-20mA DC(or 0~1K ohm) output signal as feedback, 15~28VDC loop power(24V DC input power) Load impedance : 0~600 Ohm, Max output : 35mA DC Adjustment : Zero and span	 
1. SS1 30 x 80 x 20(H) 2. SS2 30 x 80 x 30(H) 3. SS3 30 x 130 x 30(H) 4. SS4 30 x 130 x 50(H) 5. Universal Type	Standard bracket provided together with switch box(included)  SS1~ SS4 Universal Type

Dimension

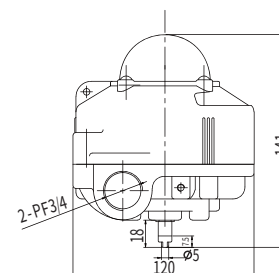
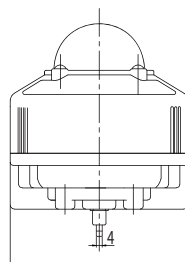
VTS-C/CP Series



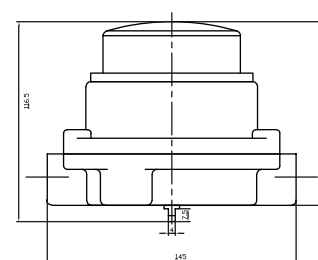
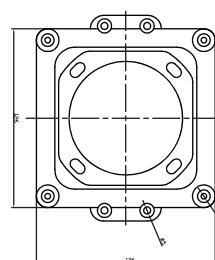
VTS-ES Series



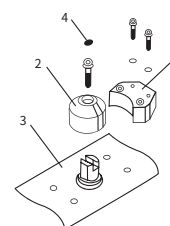
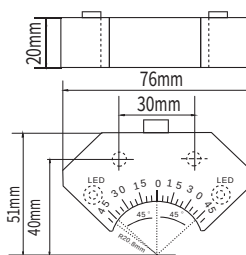
VTS-H Series



VTS-K/KP Series



VTS-F Series



Ordering Information:

