

| Features |

• Waterproof Protection

O-Rings are fitted between the body and cover as well as on the modular connections which ensure weatherproof protection.

• Wear Resistant

Self-lubricating bearings are used on piston rod, guide bar and other moving parts, which reduces resistance and extends the life of all moving parts.

• Corrosion Resistant

VTS actuator is sprayed with multiple layers of protective coating to meet the environmental requirements of all kinds of working conditions. A Teflon coating on the inner wall of the cylinder increases the corrosion resistance and the lubrication performance.

• Operating pressure and temperature range

Pneumatic operating pressure: 3~8Bar; Withstand pressure 1MPa

Environment temperature:

Standard type: -20°C-80°C; High temperature type: -10°C-150°C; Low temperature type: -40°C-80°C.

• Easy to install and high pressure ratings

The VTS actuator complies with the latest international specifications, and the flange dimension meets the ISO5211 standard for easy connection with the valve.

• modular design

The VTS actuators uses a modular design, each body module can have different cylinder modules and spring modules to meet the various torque requirements.

• Spring preload

The VTS actuators Use the preload spring and has special locking device, so it will not release the pressure when disassembling.

• Segment control

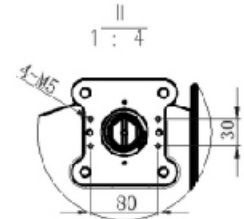
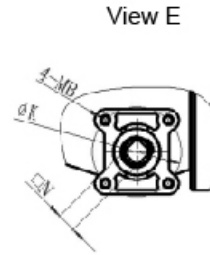
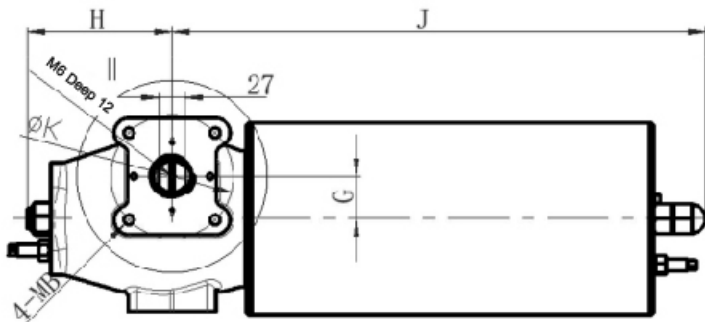
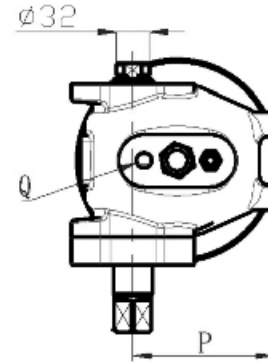
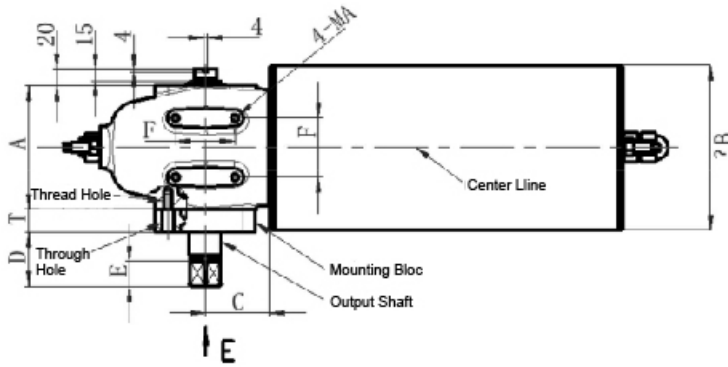
The segment control is used for occasions call for metering line valve and water hammer preventing effect. The opening degree of middle position can be adjusted by 15% to 50%.



Spring Return Acting

Model	Spring Torque (Nm)		Output Torque (Nm)								
			3 Bar	3.5 Bar	4 Bar	4.5 Bar	5 Bar	5.5 Bar	6 Bar	7 Bar	8 Bar
VTS03-125-SR3	Start	308		235	305	375	444	514	584	723	862
	Run	140		101	137	173	210	246	282	355	427
	End	232		152	222	292	361	431	500	640	779
VTS03-125-SR2	Start	423					369	439	509	648	787
	Run	188					158	194	230	303	375
	End	301					236	305	375	514	654
VTS03-125-SR1	Start	559						376	446	585	725
	Run	239						139	175	248	320
	End	358						157	227	366	505
VTS03-160-SR3	Start	507	277	392	507	623	738	853	969	1199	
	Run	231	109	169	229	289	349	409	469	589	
	End	381	140	255	371	486	601	716	832	1062	
VTS03-160-SR2	Start	709			378	493	608	724	839	1070	1300
	Run	315			137	197	258	318	378	498	618
	End	500			150	266	381	496	611	842	1073
VTS03-160-SR1	Start	928						621	737	967	1198
	Run	396						229	289	409	529
	End	594						258	373	604	834
VTS03-180-SR3	Start	643	353	499	646	792	938	1085	1231		
	Run	293	138	214	291	367	443	519	595		
	End	483	178	324	471	617	764	910	1056		
VTS03-180-SR2	Start	915			481	627	773	920	1066		
	Run	403			171	247	323	399	476		
	End	634			175	321	468	614	761		
VTS03-180-SR1	Start	1170						803	949	1242	
	Run	498						296	373	525	
	End	742						336	483	775	
VTS04-180-SR3	Start	816		637	818	999	1180	1361	1542	1903	2265
	Run	363		264	358	452	547	641	735	923	1112
	End	578		378	559	739	920	1101	1282	1644	2005
VTS04-180-SR2	Start	1154					1004	1185	1366	1728	2090
	Run	493					405	499	594	782	970
	End	739					552	733	914	1276	1637
VTS04-180-SR1	Start	1487							1252	1614	1976
	Run	606							470	658	846
	End	843							552	914	1275
VTS04-200-SR3	Start	1012	573	797	1022	1246	1470	1694	1918	2366	
	Run	448	212	329	446	563	679	796	913	1146	
	End	709	243	467	691	915	1139	1364	1588	2036	
VTS04-200-SR2	Start	1434					1255	1479	1703	2152	2600
	Run	609					504	620	737	970	1204
	End	906					680	904	1128	1577	2025
VTS04-200-SR1	Start	1897						1549	1997	2445	
	Run	767						566	799	1032	
	End	1048						624	1072	1521	
VTS04-220-SR3	Start	1222	700	972	1244	1516	1787	2059	2331		
	Run	541	260	402	544	685	827	968	1110		
	End	856	301	573	845	1117	1388	1660	1932		
VTS04-220-SR2	Start	1751					1541	1813	2085	2628	
	Run	738					613	754	896	1179	
	End	1083					813	1085	1357	1901	
VTS04-220-SR1	Start	2309							1908	2451	
	Run	925							692	975	
	End	1245							750	1294	
VTS04-260-SR3	Start	1731	989	1370	1751	2132	2514				
	Run	761	362	561	759	958	1156				
	End	1193	402	784	1165	1546	1927				
VTS04-260-SR2	Start	2497					2181	2563			
	Run	1040					853	1051			
	End	1498					1094	1475			
Model	Spring Torque (Nm)	3 Bar	3.5 Bar	4 Bar	4.5 Bar	5 Bar	5.5 Bar	6 Bar	7 Bar	8 Bar	

Dimension Drawing



Dimension Sheet

Model	Dimension (mm)																Air Volume (L)	Weight (Kg)
	A	ϕB	C	D	E	F	G	H	J	ϕK	$\square N$	P	Q	T	MA	MB		
*VTS03-125-SRxFC	146	132	82	64	30	70	43	148	546	125	27	137	RC3/8	0	M10	M12	3.4	2
*VTS03-125-SRxFO	146	132	82	64	30	70	43	148	546	125	27	137	RC3/8	27	M10	M12	4.5	37
VTS03-160-SRxFC	146	170	82	64	30	70	43	148	546	125	27	137	RC3/8	27	M10	M12	4.5	37
VTS03-160-SRxFO	146	170	82	64	30	70	43	148	546	125	27	137	RC3/8	27	M10	M12	4.5	37
VTS03-180-SRxFC	146	194	82	64	30	70	43	148	546	125	27	137	RC3/8	27	M10	M12	5.4	45
VTS03-180-SRxFO	146	194	82	64	30	70	43	148	546	125	27	137	RC3/8	27	M10	M12	5.4	45
*VTS04-180-SRxFC	212	194	98	84	40	100	52	190	622	140	36	173	RC1/2	0	M12	M16	9	61
*VTS04-180-SRxFO	212	194	98	84	40	100	52	190	622	140	36	173	RC1/2	0	M12	M16	9	61
VTS04-200-SRxFC	212	213	98	84	40	100	52	190	622	140	36	173	RC1/2	34	M12	M16	10.2	69
VTS04-200-SRxFO	212	213	98	84	40	100	52	190	622	140	36	173	RC1/2	34	M12	M16	10.2	69
VTS04-220-SRxFC	212	235	98	84	40	100	52	190	622	140	36	173	RC1/2	34	M12	M16	11.4	78
VTS04-220-SRxFO	212	235	98	84	40	100	52	190	622	140	36	173	RC1/2	34	M12	M16	11.4	78
VTS04-260-SRxFC	212	273	98	84	40	100	52	190	622	140	36	173	RC1/2	34	M12	M16	14.2	90
VTS04-260-SRxFO	212	273	98	84	40	100	52	190	622	140	36	173	RC1/2	34	M12	M16	14.2	90

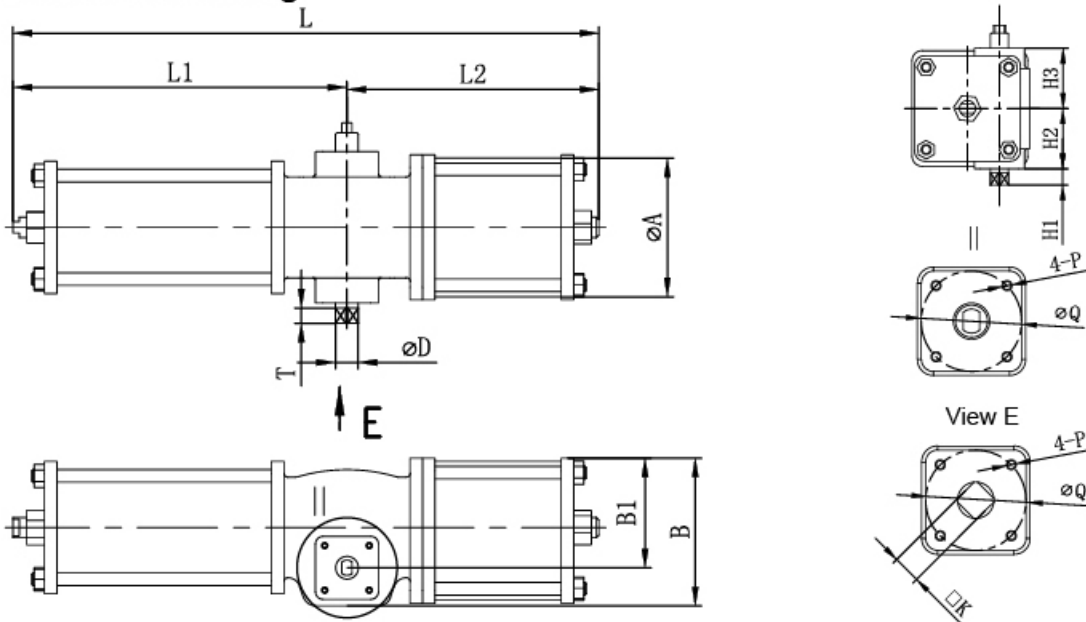
Note:

1. The "X" in the model in the table indicates the spring number. Choose according to the required torque by comparing with the torque meter;
2. The actuator shown in the figure is in the form of air open (FC). In the shape of air closed (FO) actuator, the output shaft should be treated symmetrically with respect to the center line AA, and all other dimensions should be the same;
3. volume is defined as the water volume of the whole air chamber after the actuator spring is compressed to the full stroke;
4. The model with "*" does not need to have a pad height block (so the T size is 0).

Spring Return Acting

Model	Spring Torque (Nm)		Operating pressure											
			3 Bar	3.5 Bar	4 Bar	4.5 Bar	5 Bar	5.5 Bar	6 Bar	7 Bar	8 Bar			
VTS01A-80-SR2	Start	42	44	58	72	87	101							
	Run	27	18	25	32	40	47							
	End	62	24	39	53	67	82							
VTS01A-100-SR1	Start	64	70	93	115	138								
	Run	43	26	37	49	61								
	End	105	30	52	74	97								
VTS02A-100-SR2	Start	80	85	112	139	166	193	220	247					
	Run	55	30	43	57	70	84	97	111					
	End	133	33	60	87	114	141	168	195					
VTS02A-125-SR1	Start	130	132	176	219	263								
	Run	90	45	68	91	113								
	End	219	44	87	131	263								
VTS03A-135-SR2	Start	177	184	243	302	361	420	479						
	Run	125	60	90	119	149	178	208						
	End	307	57	117	176	235	294	353						
VTS03A-160-SR1	Start	255	260	346	432	518								
	Run	181	86	130	174	219								
	End	444	71	157	243	518								

Dimension Drawing



Dimension Sheet

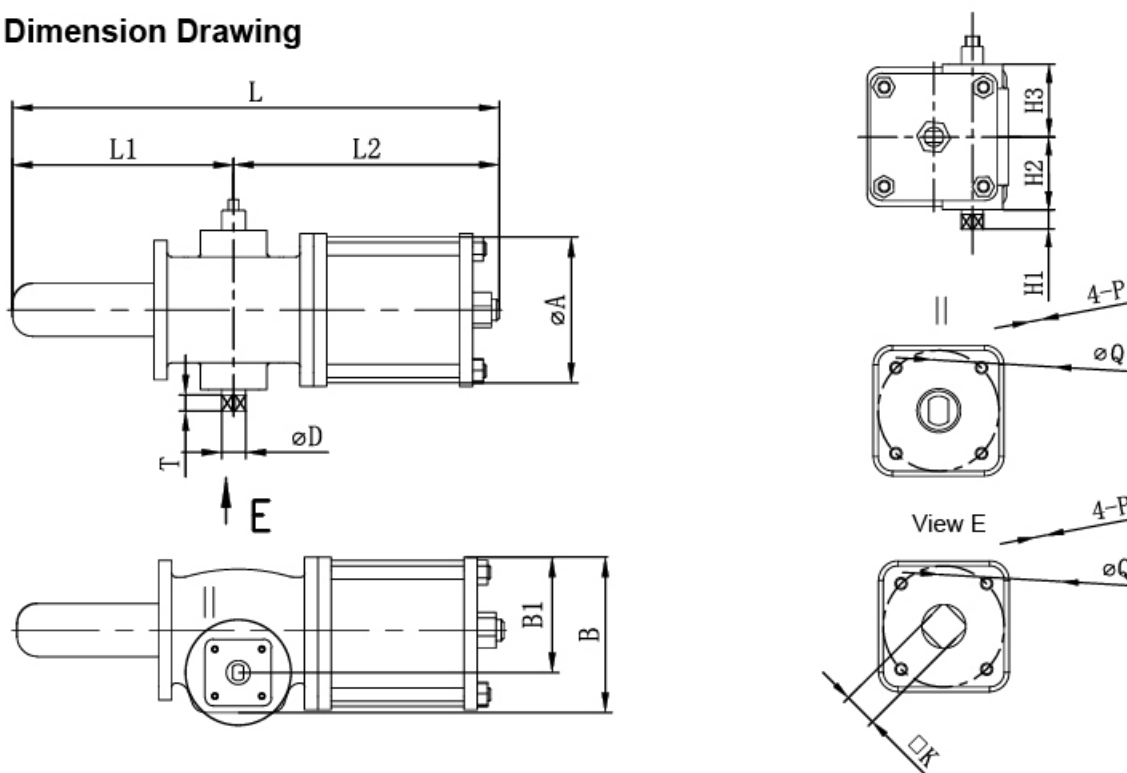
Model	Dimension (mm)														Air Volume (L)
	øA	B	B1	øD	H1	H2	H3	L	L1	L2	T	P	øQ	K	
VTS01A-80-SR2	90	107	77	18	16	60	60	465	265	200	12	M6	50	14	0.4
VTS01A-100-SR1	110	117	87	18	16	60	60	465	265	200	12	M6	50	14	0.63
VTS02A-100-SR2	110	125	95	24	21	75	75	568	326	242	16	M8	70	17	0.79
VTS02A-125-SR1	135	138	108	24	21	75	75	568	326	242	16	M8	70	17	1.23
VTS03A-135-SR2	145	151	113	32	25	100	100	728	431	297	20	M10	102	22	1.72
VTS03A-160-SR1	170	163	125	32	25	100	100	728	431	297	20	M10	102	22	2.41

Note:

- The actuator shown in the figure is in the form of air open (FC). In the shape of air closed (FO) actuator, the output shaft should be treated symmetrically with respect to the center line AA, and all other dimensions should be the same;
- volume is defined as the water volume of the whole air chamber after the actuator spring is compressed to the full stroke.

Model		Output Torque (Nm)						
		3 Bar	3.5 Bar	4 Bar	5 Bar	6 Bar	7 Bar	8 Bar
VTS01A-80	Start	89	104	118	148			
	Run	44	52	59	74			
	End	89	104	118	148			
VTS02A-100	Start	168	196	224				
	Run	84	98	112				
	End	168	196	224				
VTS02A-100	Start	367	428	489				
	Run	183	214	245				
	End	367	428	489				

Dimension Drawing



Dimension Sheet

Model	Dimension (mm)														Air Volume (L)
	øA	B	B1	øD	H1	H2	H3	L	L1	L2	T	P	øQ	K	
VTS01A-80	90	107	77	18	16	60	60	375	175	200	12	M6	50	14	0.4
VTS02A-100	110	125	95	24	21	75	75	458	216	242	16	M8	70	17	0.79
VTS03A-135	145	151	113	32	25	100	100	564	267	297	20	M10	102	22	1.72

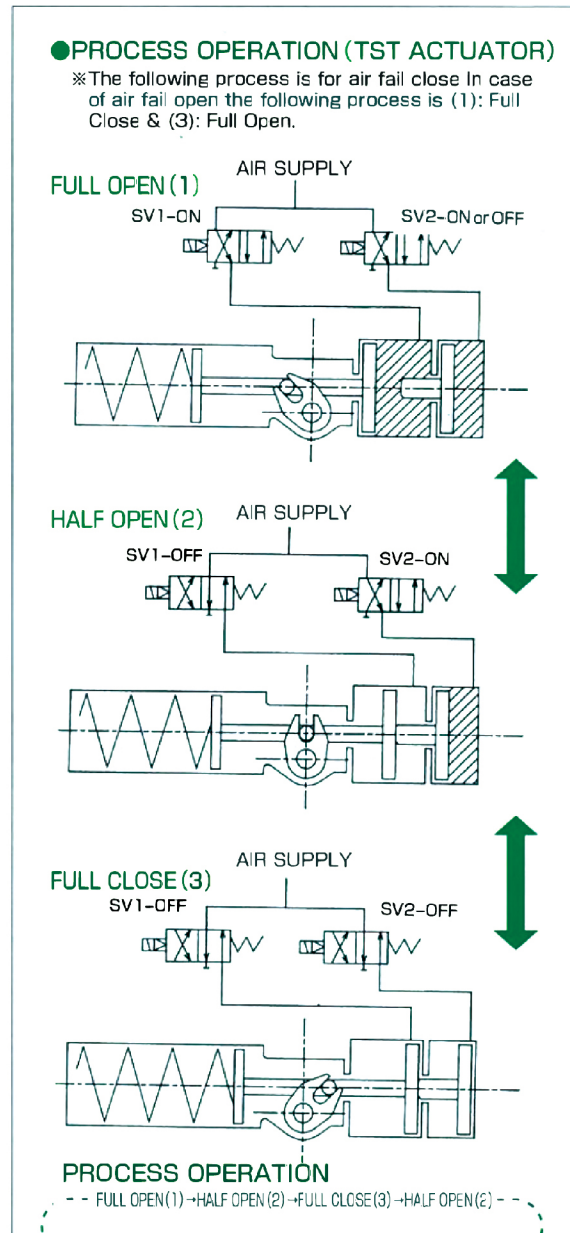
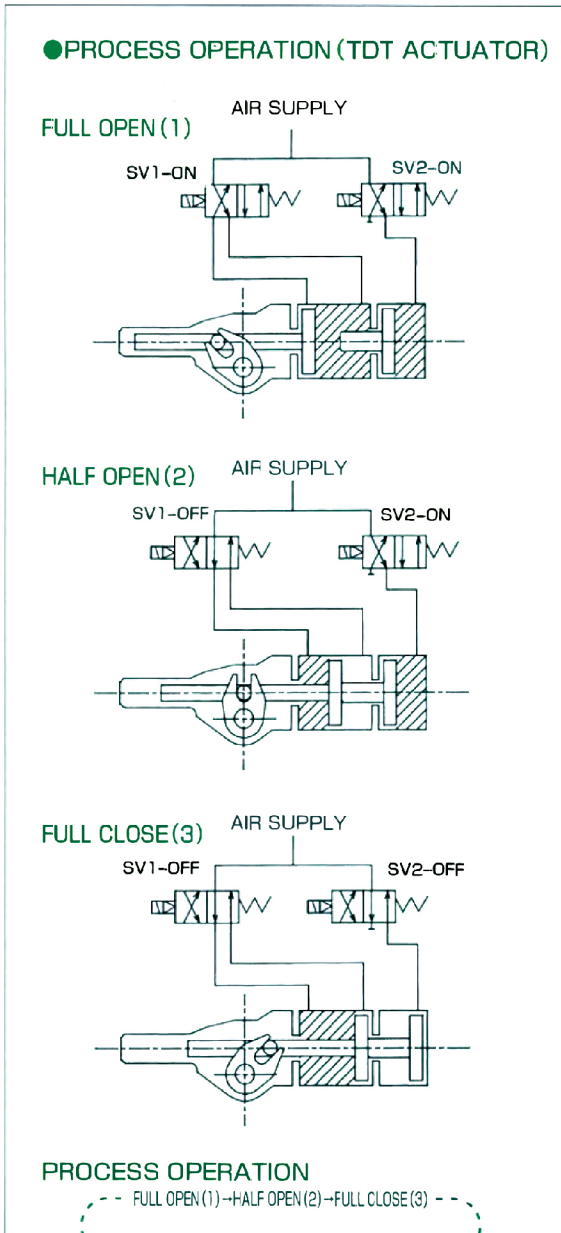
Note:

Volume is defined as the water volume of the whole air chamber after the actuator spring is compressed to the full stroke.

VTSOXA-DA-3P & VTSOXA-SR-3P

(Main Usage)Used for measuring system line
Used for protection water hammering

► **PROCESS DRAWING**



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