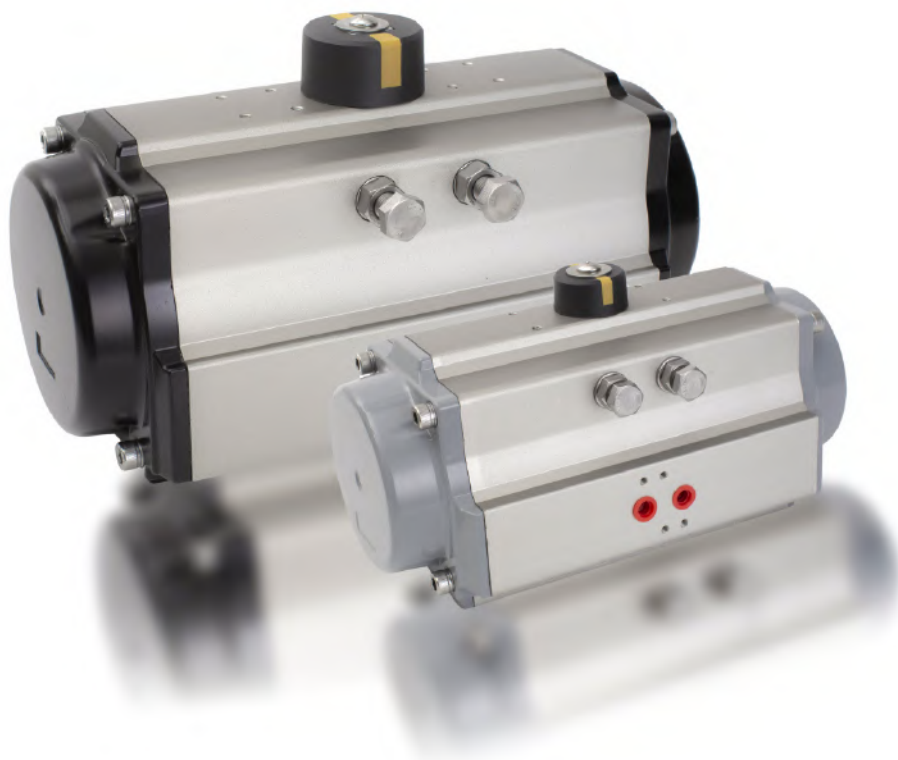


VtekTM

Controls

SERIES VR

Rack & Pinion Actuator



Design and Structure

Design

VR 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 NAMUR 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.

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

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

8. Extruded aluminum body is processed with corrosion resistance internally and externally. Fine ground cylinder surface lead to low friction coefficient and high cycle life.

6. The dedicated sealing ring fitted between body and cylinder avoids the failure caused by suction of rubber plug initially which enhances security, leakproofness and longer service life.

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

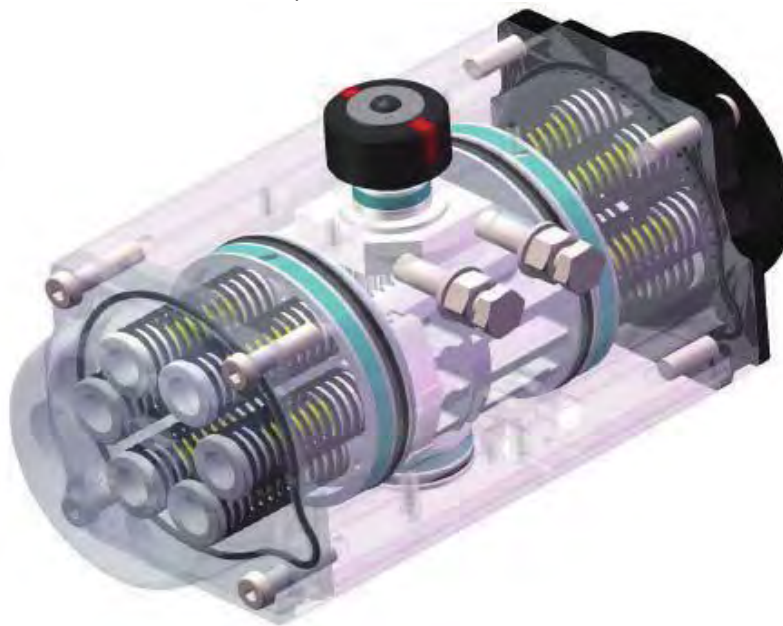
10. High-quality bearings are of reliable sealing, low friction, high cycle life and wide range of application temperature.

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

12. 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.

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

14. Under normal operating conditions, the safety factor of 20%-30% 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 temperatures, 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 customer's specific requirements is also available. Please Contact Vtek for details.

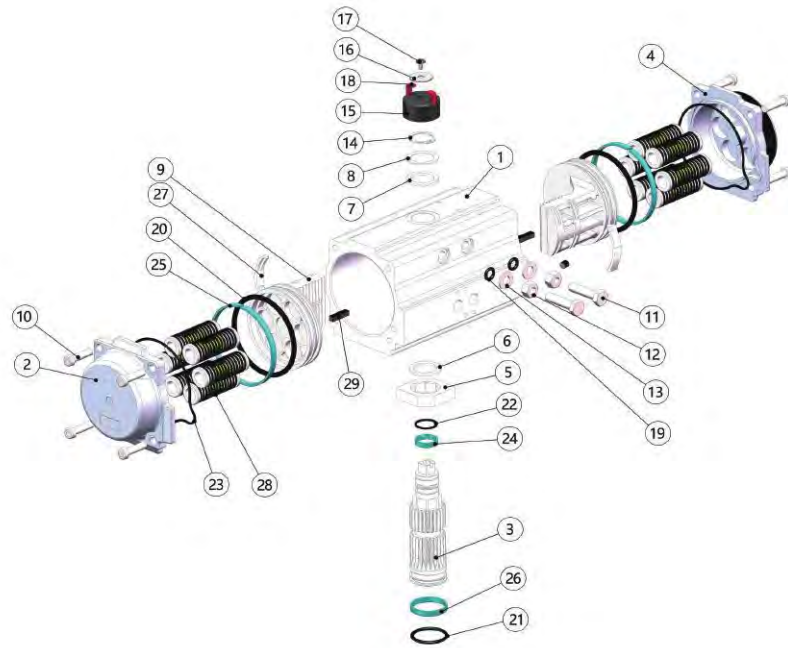
Quality Management:

- * VR new series pneumatic actuator production process is fully compliant to 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.

Part and Material



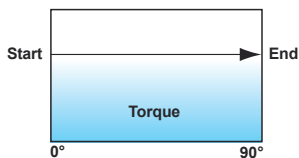
Item No.	Description	Materials	Qty.	Item No.	Description	Materials	Qty.	Item No.	Description	Materials	Qty.
1	Body	Aluminum Alloy	1	12	Travel Stop Nut	Stainless Steel	2	23	O-ring (End Cap)	NBR	2
2	Left End Cap	Aluminum Alloy	1	13	Travel Stop Washer	Stainless Steel	2	24	Upper Pinion Bearing	Advanced Polymer	1
3	Pinion	45# Steel	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	45# Steel	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	Stainless Steel	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	Stainless Steel	8	21	O-ring (Lower Pinion)	NBR	1				
11	Travel Stop	Stainless Steel	2	22	O-ring (Upper Pinion)	NBR	1				

Technical Data

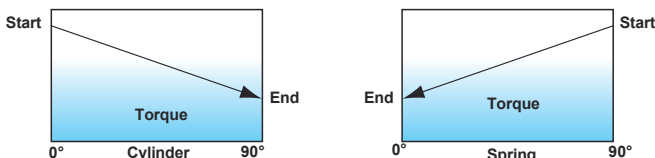
MODEL	VR032		VR050		VR065		VR075		VR085		VR095		VR110		VR125		VR140		VR160		VR190		VR210		VR240		VR270		VR300		VR350		VR400	
	DN	I	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN	DN	SN
Diameter(Inch)	1.26		1.97		2.56		2.95		3.35		3.74		4.13		4.92		5.51		6.3		7.48		8.27		9.45		10.63		11.81		13.78		15.75	
Air Volume Opening(In³)	1.83		6.10		13.43		15.26		27.46		57.97		65.30		89.71		129.98		237.38		375.91		501.62		748.15		964.18		1058.76		1687.31		2612.43	
Air Volume Closing(In³)	2.44		9.15		15.87		25.02		37.22		59.80		75.67		113.50		187.95		286.81		524.19		668.21		976.99		1147.25		1515.22		2691.15		3786.53	
Opening Time(S)	0.3	/	0.3	0.9	0.4	0.9	0.4	0.9	0.9	1	0.9	1.4	0.9	1.4	1.3	2.4	1.3	2.8	2	4.8	2.2	2.4	2.9	3.4	3.2	3.81	4.4	5	5	6	6.2	7.4	7.5	9.6
Closing Time(S)	0.4	/	0.4	0.7	0.4	0.8	0.4	0.9	0.9	1.2	1	1.4	1	1.6	1.4	2.4	1.4	3	2.4	4.9	2.6	3	3.8	4.1	3.7	4	4.9	5.5	6	6.8	7.2	8.4	8.5	10.6
Weight(Lbs)	1.04	/	2.38	2.65	4.21	4.74	5.31	6.17	7.32	8.71	10.98	12.79	14.4	17.53	22.58	26.68	33.29	35.12	46.96	56.44	64.6	74.54	83.12	106.77	119.5	171.4	180.78	199.8	238.1	230	323.4	414.7	486.2	625.1

Actuator Torque Double-Acting (in-lbs)

Double Acting Torque Output Diagram



Spring Return Torque Output Diagram



DOUBLE ACTING TORQUE RATING IN-LBS

MODEL	SUPPLY PRESSURE PSIG							
	40	50	60	70	80	90	100	115
VR032D	28	35	42	50	58	65	72	83
VR050D	91	114	136	160	182	205	228	261
VR065D	185	230	277	323	369	416	462	531
VR075D	246	308	369	430	492	553	615	707
VR085D	395	493	592	691	789	888	987	1135
VR095D	592	739	888	1036	1183	1331	1480	1702
VR110D	804	1004	1205	1406	1607	1807	2008	2309
VR125D	1281	1601	1921	2241	2561	2882	3202	3682
VR140D	2074	2593	3112	3630	4148	4667	5186	5955
VR160D	3161	3951	4742	5532	6322	7112	7902	9087
VR190D	5094	6367	7641	8912	10188	11462	12736	14646
VR210D	7001	8751	10501	12253	14002	15753	17503	20129
VR240D	9144	11430	13717	16003	18288	20574	22861	26290
VR270D	13888	17360	20832	24304	27776	31248	34720	39928
VT300D	16392	20745	24985	29299	33546	37798	42099	48501
VT350D	24339	30787	37080	43482	49786	56096	62479	71981
VT400D	37089	46913	56503	66258	75864	85478	95206	109685

SPRING RETURN TORQUE RATING IN-LBS

MODEL	SUPPLY PRESSURE PSIG																SPRING	
	40		50		60		70		80		90		100		115			
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
VR050S05	59	40	82	64	105	86	128	109	150	132	173	155	196	177	230	211	50	32
VR050S06	53	30	76	54	98	76	122	99	144	121	167	145	189	167	223	201	61	38
VR050S07			70	44	92	66	115	89	137	111	160	134	183	157	217	191	71	45
VR050S08			63	34	85	56	109	79	131	101	154	124	177	147	210	181	81	51
VR050S09			57	23	79	46	102	69	125	91	148	114	170	137	204	171	91	57
VR050S10					73	36	96	59	118	81	141	104	164	127	198	161	101	64
VR050S11							90	49	112	71	135	94	157	117	191	150	111	70
VR050S12									106	61	129	84	151	106	185	140	121	76
VR065S05	121	85	166	131	214	178	259	224	306	270	352	317	398	363	467	432	99	64
VR065S06	108	66	154	112	201	159	247	204	293	251	340	297	386	344	455	412	119	76
VR065S07			141	91	188	138	234	184	280	230	326	277	373	323	441	392	139	89
VR065S08			128	72	176	119	221	165	268	211	314	257	360	304	429	372	158	102
VR065S09			115	51	162	99	208	144	254	191	301	237	347	283	416	352	179	115
VR065S10					150	172	196	125	242	171	288	217	335	264	403	333	198	127
VR065S11							183	105	229	152	276	198	322	244	391	313	218	140
VR065S12									216	131	263	178	309	224	378	293	238	153
VR075S05	165	104	226	165	288	226	348	287	410	349	472	410	533	472	626	565	142	81
VR075S06	149	75	210	137	272	198	332	259	394	321	456	382	517	444	610	536	171	97
VR075S07			194	109	255	170	316	231	378	293	439	354	501	416	593	508	199	114
VR075S08			178	79	239	141	300	201	362	263	423	325	485	386	577	479	228	130
VR075S09			161	51	222	112	283	173	345	235	406	296	468	358	560	450	257	147
VR075S10					206	84	267	145	329	207	390	268	452	330	544	422	285	163
VR075S11							251	117	313	179	374	240	436	301	528	394	313	179
VR075S12									296	150	357	211	419	273	512	366	342	196
VR085S05	262	164	361	263	460	362	558	461	656	559	755	658	854	757	1003	905	230	133
VR085S06	235	118	334	217	433	316	532	415	630	513	729	612	828	711	976	859	276	159
VR085S07			308	171	406	270	505	369	603	487	702	566	801	665	949	813	322	186
VR085S08			281	125	380	224	479	323	577	440	676	520	775	619	923	767	368	212
VR085S09			255	79	353	178	452	277	550	394	649	474	748	573	896	721	414	239
VR085S10					327	132	426	231	524	348	623	428	721	527	870	675	460	265
VR085S11							399	185	497	302	596	382	695	481	843	629	506	292
VR085S12									471	256	569	336	668	435	817	583	552	319
VR095S05	375	267	523	415	671	563	819	711	967	859	1114	1006	1263	1155	1485	1377	325	217
VR095S06	332	202	479	350	628	499	775	646	923	794	1071	942	1219	1090	1442	1313	389	260
VR095S07			436	284	584	433	732	581	880	728	1028	876	1176	1025	1398	1247	455	304
VR095S08			392	220	541	369	689	516	836	664	984	812	1133	960	1355	1183	519	347
VR095S09			349	154	498	303	645	451	793	598	941	746	1089	895	1312	1117	585	390
VR095S10					454	238	602	386	750	534	897	682	1046	830	1268	1052	650	434
VR095S11							559	321	706	469	854	617	1003	765	1225	988	714	477
VR095S12									663	404	811	551	959	700	1182	922	780	520
VR110S05	518	349	719	550	919	750	1120	951	1321	1152	1521	1352	1722	1553	2023	1854	455	286
VR110S06	460	258	661	458	861	659	1062	860	1263	1061	1464	1261	1665	1462	1966	1763	546	343
VR110S07			604	367	805	568	1006	768	1207	970	1407	1170	1608	1371	1909	1672	637	400
VR110S08			547	277	747	477	948	678	1149	879	1350	1080	1550	1281	1852	1582	727	458
VR110S09			490	186	691	386	891	587	1093	788	1293	989	1494	1189	1795	1491	819	514
VR110S10					633	295	834	496	1035	697	1235	897	1436	1098	1737	1399	910	572
VR110S11							776	405	978	606	1178	806	1379	1007	1680	1308	1001	629
VR110S12									921	515	1121	715	1322	916	1623	1217	1092	686

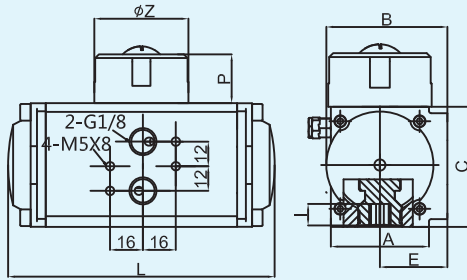
Torque-Spring Return (in-lbs)

MODEL	SPRING RETURN TORQUE RATING IN-LBS																	
	SUPPLY PRESSURE PSIG																SPRING	
	40		50		60		70		80		90		100		115			
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
VR125S05	803	586	1123	905	1443	1225	1763	1546	2083	1866	2404	2186	2724	2506	3204	2987	696	478
VR125S06	708	447	1027	766	1347	1086	1668	1407	1988	1727	2308	2047	2628	2367	3109	2848	835	573
VR125S07			932	627	1252	947	1572	1268	1892	1588	2213	1908	2533	2228	3013	2709	973	669
VR125S08			836	487	1156	807	1477	1128	1796	1448	2117	1769	2437	2088	2918	2569	1113	765
VR125S09			741	349	1060	668	1381	989	1701	1309	2022	1630	2341	1949	2822	2430	1252	860
VR125S10					965	530	1285	850	1605	1170	1926	1491	2246	1810	2726	2291	1391	956
VR125S11							1190	711	1510	1031	1831	1352	2150	1671	2631	2152	1530	1051
VR125S12									1414	892	1735	1213	2055	1533	2535	2013	1669	1147
VR140S05	1317	889	1836	1408	2355	1927	2873	2445	3392	2963	3910	3482	4429	4001	5199	4770	1185	757
VR140S06	1166	652	1685	1171	2204	1690	2722	2208	3240	2726	3759	3245	4278	3764	5047	4533	1422	908
VR140S07			1534	934	2052	1452	2570	1970	3089	2489	3608	3008	4127	3527	4896	4296	1659	1059
VR140S08			1382	697	1901	1216	2419	1734	2938	2253	3456	2771	3975	3290	4745	4060	1896	1211
VR140S09			1231	460	1750	979	2268	1497	2786	2016	3305	2534	3824	3053	4593	3823	2133	1362
VR140S10					1598	742	2116	1260	2635	1778	3154	2297	3673	2816	4442	3585	2370	1513
VR140S11							1965	1023	2484	1541	3002	2060	3521	2579	4291	3348	2607	1665
VR140S12									2332	1304	2851	1823	3370	2342	4139	3111	2844	1816
VR160S05	2050	1315	2841	2105	3632	2896	4421	3686	5211	4476	6002	5266	6791	5266	7977	7241	1846	1111
VR160S06	1828	946	2619	1736	3409	2527	4199	3317	4989	4106	5780	4897	6569	4897	7755	6872	2215	1333
VR160S07			2396	1367	3187	2158	3977	2948	4767	3737	5557	4528	6347	4528	7532	6503	2584	1555
VR160S08			2174	997	2965	1788	3755	2578	4545	3368	5335	4158	6125	4158	7310	6133	2954	1777
VR160S09			1952	628	2743	1419	3533	2209	4322	2999	5113	3789	5903	3789	7088	5764	3323	1999
VR160S10					2521	1050	3310	1840	4100	2629	4891	3420	5681	3420	6866	5395	3692	2221
VR160S11							3088	1471	3878	2260	4669	3051	5458	3051	6644	5026	4061	2443
VR160S12									3656	1891	4447	2682	5236	2682	6422	4657	4430	2665
VR190S05	3360	2351	4633	3624	5907	4898	7177	6168	8454	7445	9727	8718	11001	9992	12912	11903	2743	1735
VR190S06	3013	1802	4286	3075	5560	4349	6830	5620	8107	6896	9380	8170	10654	9443	12565	11354	3292	2081
VR190S07			3939	2527	5213	3801	6483	5071	7760	6348	9033	7621	10307	8895	12218	10805	3841	2428
VR190S08			3592	1978	4866	3252	6137	4522	7413	5799	8686	7072	9960	8346	11871	10257	4389	2775
VR190S09			3245	1429	4519	2703	5790	3974	7066	5250	8340	6524	9613	7797	11524	9708	4938	3122
VR190S10					4172	2155	5443	3425	6719	4702	7993	5975	9266	7249	11177	9159	5487	3469
VR190S11							5096	2876	6373	4153	7646	5426	8920	6700	10830	8611	6035	3816
VR190S12									6026	3604	7299	4878	8573	6151	10483	8062	6584	4163
VR210S05	4540	3638	6291	5388	8041	7139	9792	8890	11542	10639	13292	12390	15043	14140	17668	16766	3363	2460
VR210S06	4048	2965	5799	4716	7549	6466	9300	8217	11050	9967	12800	11717	14551	13468	17176	16093	4035	2952
VR210S07			5307	4043	7057	5793	8808	7545	10558	9294	12308	11045	14059	12795	16684	15421	4708	3444
VR210S08			4815	3371	6565	5121	8316	6872	10066	8622	11816	10372	13567	12122	16192	14748	5381	3936
VR210S09			4323	2698	6073	4448	7824	6200	9574	7949	11324	9699	13075	11450	15700	14075	6053	4428
VR210S10					5581	3776	7332	5527	9082	7277	10832	9027	12583	10777	15208	13403	6726	4920
VR210S11							6840	4854	8590	6604	10340	8354	12091	10105	14716	12730	7398	5412
VR210S12									8098	5931	9848	7682	11599	9432	14224	12058	8071	5904
VR240S05	5834	3895	8121	6182	10407	8468	12693	10754	14978	13039	17265	15326	19551	17612	22980	21041	5249	3310
VR240S06	5172	2846	7459	5132	9745	7418	12031	9705	14316	11990	16603	14276	18889	16562	22318	19992	6298	3972
VR240S07			6797	4083	9083	6369	11369	8655	13654	10940	15941	13227	18227	15513	21656	18942	7348	4634
VR240S08			6135	3032	8421	5318	10707	7605	12993	9890	15279	12176	17565	14462	20994	17892	8398	5296
VR240S09			5473	1983	7759	4269	10045	6555	12331	8840	14617	11127	16903	13413	20332	16842	9448	5958
VR240S10					7097	3219	9383	5505	11669	7791	13955	10077	16241	12363	19671	15793	10497	6619
VR240S11							8721	4456	11007	6741	13293	9027	15579	11314	19009	14743	11547	7281
VR240S12									10345	5692	12631	7978	14917	10264	18347	13694	12596	7943
VR270S05	8440	6341	11912	9813	15384	13285	18856	16757	22328	20229	25800	23701	29272	27173	34480	32381	7547	5448
VR270S06	7351	4831	10823	8303	14294	11775	17767	15247	21239	18720	24711	22191	28183	25663	33391	30871	9057	6537
VR270S07			9733	6794	13205	10266	16677	13738	20150	17211	23621	20682	27093	24154	32301	29363	10565	7627
VR270S08			8643	5285	12115	8756	15587	12228	19059	15701	22531	19173	26003	22645	31211	27853	12075	8717
VR270S09			7554	3776	11025	7247	14497	10720	17970	14192	21442	17664	24914	21136	30122	26344	13584	9806
VR270S10					9936	5738	13408	9210	16881	12682	20352	16154	23824	19626	29032	24834	15094	10896
VR270S11							12319	7700	15791	11173	19263	14644	22735	18116	27943	23324	16604	11985
VR270S12									14702	9664	18173	13135	21646	16608	26854	21816	18112	13074
VR300S05	10276	7260	14629	11613	18869	15853	23183	20167	27430	24415	31682	28666	35983	32967	42385	39369	9132	6116
VR300S06	9053	5433	13406	9786	17646	14027	21960	18340	26207	2								

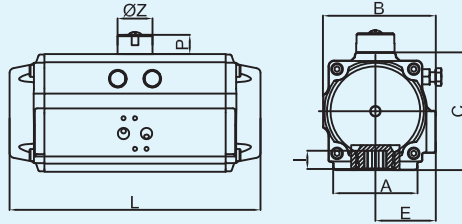
Installation Information

Sample Reference

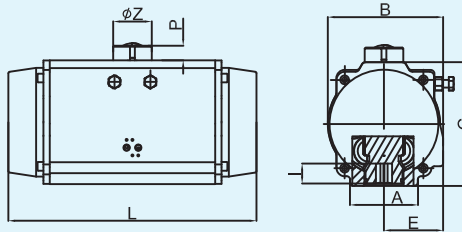
Applicable
Specification :032



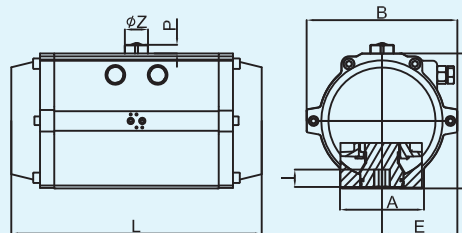
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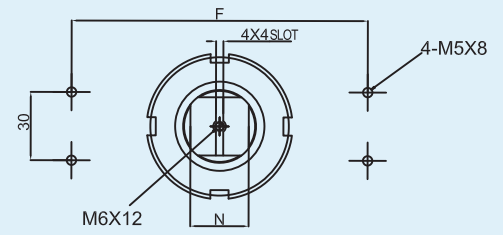
Applicable
Specification :300、350



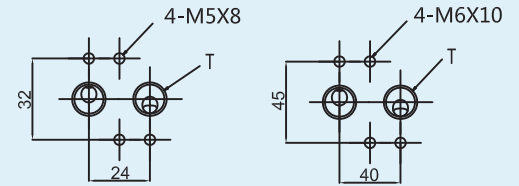
Applicable
Specification :400



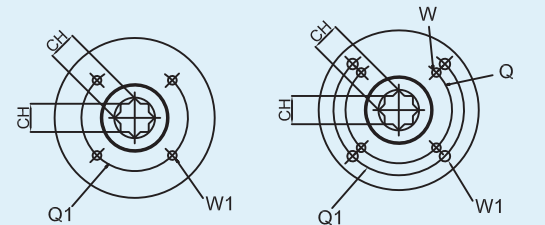
Top View



Air Supply Interface

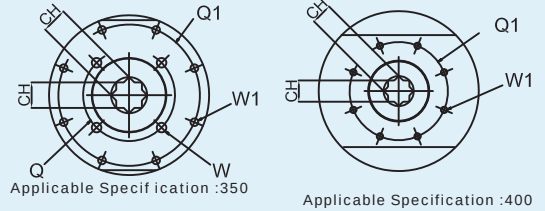


Bottom View



Applicable Specification :032/190-300

Applicable Specification :050-160



Applicable Specification :350

Applicable Specification :400

VR New Series Pneumatic Actuator Dimension Table (Unit in):

Dimensions (inches)

MODEL	A	B	C	L	E	F	P	Z	N	I	ISO	Q	Q1	W	W1	Ch	T
VR032	1.46	1.85	1.97	4.33	1.06	3.15	0.79	1.57	0.39	0.39	F03	/	1.42	/	#10-24UNC*0.29	0.35	NPT1/8"
VR050	1.81	2.80	2.76	5.94	1.63	3.15	0.79	1.57	0.39	0.47	F03/F05	1.42	1.97	#10-24UNC*0.29	1/4-20UNC*0.35	0.43	NPT1/4"
VR065	2.52	3.33	3.50	6.61	1.83	3.15	0.79	1.57	0.39	0.63	F05/F07	1.97	2.76	1/4-20UNC*0.35	5/16-18UNC*0.47	0.55	NPT1/4"
VR075	2.68	3.89	3.94	7.17	2.17	3.15	0.79	1.57	0.55	0.63	F05/F07	1.97	2.76	1/4-20UNC*0.35	5/16-18UNC*0.47	0.55	NPT1/4"
VR085	2.68	4.27	4.45	8.27	2.34	3.15	0.79	1.57	0.55	0.75	F05/F07	1.97	2.76	1/4-20UNC*0.35	5/16-18UNC*0.47	0.67	NPT1/4"
VR095	3.46	4.63	4.84	10.31	2.48	3.15	0.79	1.57	0.55	0.75	F05/F07	1.97	2.76	1/4-20UNC*0.35	5/16-18UNC*0.47	0.67	NPT1/4"
VR110	3.66	5.20	5.35	11.23	2.87	3.15	0.79	1.57	0.55	0.75	F07/F10	2.76	4.02	5/16-18UNC*0.47	3/8-16UNC*0.59	0.67	NPT1/4"
VR125	3.78	5.98	6.26	12.60	3.19	5.12	1.18	2.20	0.87	0.98	F07/F10	2.76	4.02	5/16-18UNC*0.47	3/8-16UNC*0.59	0.87	NPT1/4"
VR140	4.33	6.77	7.01	15.79	3.58	5.12	1.18	2.20	0.87	1.22	F10/F12	4.02	4.92	3/8-16UNC*0.59	1/2-13UNC*0.71	1.06	NPT1/4"
VR160	4.41	7.44	7.87	18.07	3.94	5.12	1.18	2.20	0.87	1.22	F10/F12	4.02	4.92	3/8-16UNC*0.59	1/2-13UNC*0.71	1.06	NPT1/4"
VR190	5.35	8.54	9.13	19.49	4.41	5.12	1.18	2.20	0.87	1.61	F10/F14	4.02	5.51	3/8-16UNC*0.59	5/8-11UNC*0.94	1.42	NPT1/4"
VR210	5.51	9.29	10.04	20.83	4.80	5.12	1.18	2.20	1.28	1.57	F14	/	5.51	/	5/8-11UNC*0.94	1.42	NPT1/4"
VR240	6.30	10.57	11.50	24.33	5.47	5.12	1.18	2.20	1.28	1.97	F16	/	6.50	/	3/4-10UNC*0.98	1.81	NPT1/2"
VR270	6.30	11.65	13.03	29.02	5.94	5.12	1.18	2.20	1.28	1.97	F16	/	6.50	/	3/4-10UNC*0.98	1.81	NPT1/2"
VR300	7.09	13.19	13.94	30.87	6.81	5.12	1.18	2.20	1.28	1.97	F16	/	6.50	/	3/4-10UNC*0.98	1.81	NPT1/2"
VR350	10.63	15.16	16.14	33.27	7.68	5.12	1.18	2.20	1.28	1.97	F16/F25	6.50	10.00	3/4-10UNC*0.98	5/8-11UNC*0.94	1.81	NPT1/2"
VR400	11.42	20.47	18.35	37.64	10.24	5.12	1.18	2.20	1.28	2.36	F25	/	10.00	/	5/8-11UNC*0.94	2.17	NPT1/2"

Selection Method

Model	Type	Spring Qty.	Flange Type	Square	Option	Sealing Part
VR032	D=Double Acting S=Spring Return	—	F03	9×9	End Cap Color RAL	Standard Nitrile Rubber -18℃~+80℃ HT Fluororubber (High Temperature) -18℃~+150℃ LT Silastic (Low Temperature) -40℃~+80℃ LLT fluorosilicone (Ultra Low Temp) -60℃~+80℃
VR050		Dedicated to Spring Return	F03/05	11×11	 7046	
VR065			F05/07	14×14		
VR075			F05/07	14×14		
VR085			F05/07	17×17		
VR095		4	F05/07	17×17	 5015	
VR110		5	F07/10	17×17	Cylinder Type	
VR125		6	F07/10	22×22	P Smooth Surface& Hard Anodized	
VR140		7	F10/12	27×27	S Sandblasted Surface&Hard Anodized (Color:Grey)	
VR160		8	F10/12	27×27	H Sandblasted Surface&Hard Anodized (Color:Dark Grey)	
VR190		9	F10/14	36×36	F Sandblasted Surface&Hard Anodized&PTFE Coated	
VR210		10	F14	36×36		
VR240		11	F16	46×46		
VR270		12	F16	46×46		
VR300			F16	46×46		
VR350			F16/25	46×46		
VR400			F25	55×55		

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°C to 80°C. Corresponding sealing types are available for environment at high or low temperature.
- 3.Please refer to brochure for technical parameter details. Vtek has the capability to provide customized service based on standard products. Please contact Vtek for details.
- 4.Customized service including but not limited to:
 - Color combination;
 - Flange and square;
 - Higher protection grade;

Model Selection Example:

Example1: VR095D F05/07 17 P7046

Description: Actuator model VR095D, double acting, ISO flange F05&F07, 17 mm diagonal square with standard indicator as well as standard nitrile rubber sealing, P body, cap color grey(RAL7046).

Example2:VR190S12S F14 36 S5021 HT F0

Description:Actuator model VR190S,single acting spring return,12springs, ISO flange F14,36 mm diagonal square, S body, cap color green (RAL5021), fluororubber rubber sealing.

⚠ Notice

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