



**VT**

**Pneumatic 1/4 Turn Actuator  
Single Acting (Spring Return)  
2.4Nm - 9665Nm**

**Double Acting  
2.9Nm - 12502.2Nm**



The VT range of rack and pinion pneumatic actuators are designed for quarter turn applications on ball, butterfly, plug valves and dampers. They can be supplied single (spring return) or double acting with a wide range of output torques offering a complete valve automation solution.

All actuators have travel stops for both the open and close positions. All components are of a high quality materials, precision engineered and lubricated to ensure long service life of 1,000,000 operations.

The bodies are manufactured from extruded aluminium alloy and are hard anodized to protect against internal and external corrosion.

**Approvals, Features & Benefits**

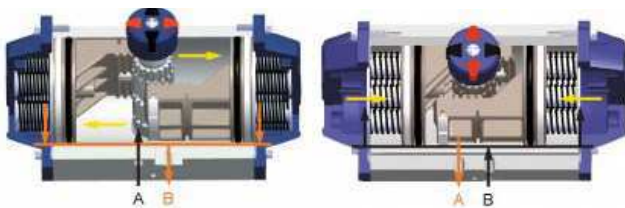
- ATEX, CE, SIL3 rated
- Base to ISO 5211 & DIN 3337 standards
- Air connections to Namur VDI/VDE 3845
- Lightweight aluminium alloy housing
- Wide range of torques & options to meet the demands of any site specification
- All springs are preloaded, to ensure safety when removing end covers
- Machined shaft and pistons
- Shaft has an anti blowout ring

**Pressure & Temperature**

Air pressure range:-  
Single Acting : 2.5 to 8 bar  
Double Acting : 2.5 to 8 bar

Air temperature range:-  
Standard : -15 to 80°C  
Low Option : -40 to 80°C  
High Option : -15 to 150°C

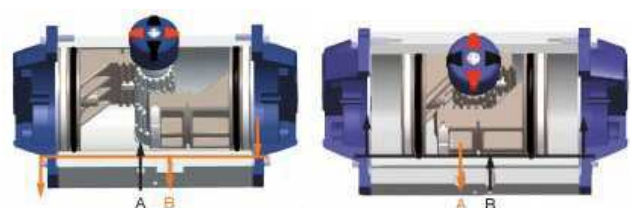
**Single Acting (Spring Return) Operation**



Counter Clockwise  
Air input A  
Air output B

Clockwise  
Air input B  
Air output A

**Double Acting Operation**



Counter Clockwise  
Air input A  
Air output B

Clockwise  
Air input B  
Air output A

**STANDARD SPECIFICATIONS**

<b>Movement</b>	Standard adjustable 90° ± 5%	<b>Springs</b>	High tensile spring sets of alloy steel
<b>Lubrication</b>	All moving parts are lubricated for life-long cycle	<b>Piston Shaft</b>	Nickel plated alloy steel reduces friction
<b>Cycle Life</b>	1,000,000 Operations	<b>Piston Guides</b>	Self lubricating (Polypropylene +GF)
<b>Body</b>	Hard anodized extruded Aluminium alloy	<b>Piston Seals</b>	Nitrile**
<b>Indicator</b>	Open / Close Disc	<b>Piston</b>	Die casted aluminium dual piston
<b>Travel Stops</b>	External adjustable ±5% in both open/closed position	<b>End Caps</b>	Polyester coated die cast aluminium

\*\* Fluororubber for low & Silastic for high temperature duty

**OPTIONAL ANCILLARY PRODUCTS**



**Valve Position Monitor - APL Limit Switchboxes**  
The APL switchboxes are reliable, solidly built and of a compact design. As standard they are IP67 weatherproof, IP68 is available on request.



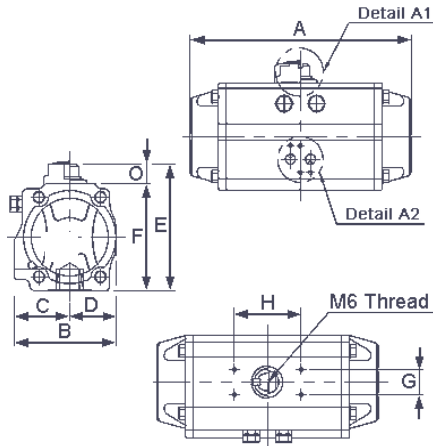
**Brackets**  
For mounting valves to actuators. Also to prevent heat transfer from valve media.



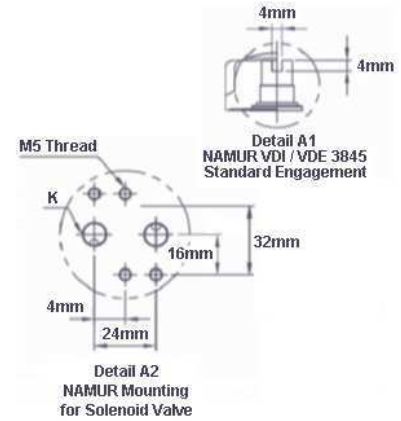
**Solenoid Spool Valve**  
These valves have 1/4" threaded ports connections and NUMAR interfaces. They can be adapted for 3/2 NC or 5/2 functions for controlling double and single acting actuators.



**Pinion Shaft Star Adapters**  
Available from 9mm to 46mm square.



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	A	B	C	E	F	G	H	O	K	Shaft			ISO 5211 Mounting							Weight Kg		
										BSP	Star	Depth	F03	F05	F07	F10	F12	F14	F16	F25	Single	Double
VT050	154	70.5	41.5	90	70	30	80	20	¼	11	12	✓	✓								1.25	1.13
VT065	189	89.5	51.5	109	89	30	80	20	¼	14	16		✓	✓							2.21	1.97
VT075	210	102.5	59	120	100	30	80	20	¼	14	16		✓	✓							3.29	2.93
VT085	229	112.5	63.5	133	113	30	80	20	¼	17	19		✓	✓							4.26	3.78
VT095	264	126	71	143	123	30	80	20	¼	17	19		✓	✓							5.86	5.14
VT110	266	138.5	76.5	156	136	30	80	20	¼	17	19			✓	✓						7.17	6.09
VT125	337	157	85	191	161	30	80	30	¼	22	25			✓	✓						12.54	10.86
VT140	377	178	97	208	178	30	80	30	¼	27	31				✓	✓					15.93	13.77
VT160	412	196	106	230	200	30	130	30	¼	27	31				✓	✓					23.75	20.15
VT190	488	216.5	112	262	232	30	130	30	¼	36	41			✓		✓					33.81	28.41
VT210	550	235.5	120	285	255	30	130	30	¼	36	40					✓					48.43	40.03
VT240	602	262	131	322	292	30	130	30	½	46	50						✓				77.76	52.6
VT270	672	295	147.5	361	331	30	130	30	½	46	50						✓				90.6	73.64
VT300	784	335	173	384	354	30	130	30	½	46	50						✓				135.6	108
VT350	845	385	195	440	410	30	130	30	½	46	50						✓	✓			188.1	146.7
VT400	956	520	260	496	466	30	130	30	½	55	60						✓				283.5	220.5

Max torques based on 5.5 bar supply pressure*	VT050	VT065	VT075	VT085	VT095	VT110	VT125	VT140
Single Acting - Air (Nm)	11.4	19.2	36.6	51.7	75.4	99	177	244.6
Single Acting - Spring (Nm)	12.4	31.4	40.4	62.5	83.6	110	193.3	293.6
Double Acting (Nm)	19.8	40.1	62.3	91.4	128.5	167.6	299.4	442

Max torques based on 5.5 bar supply pressure*	VT160	VT190	VT210	VT240	VT270	VT300	VT350	VT400
Single Acting - Air (Nm)	249.1	528.4	757.7	1103.5	1594.4	2120.2	3221.9	4763
Single Acting - Spring (Nm)	389.4	628.8	861.8	1329.6	1886.4	2476.6	3541.1	5522
Double Acting (Nm)	613.1	964.6	1346.6	2089	2937	3778.9	5608.2	8545.8

\*Contact sales for other torque values when supply pressure differs.