

# Tac VP™ Actuator

## IP69K STAINLESS STEEL, HIGH QUALITY, HIGH SPEED, HIGH FORCE

Tac VP series stainless steel linear actuators deliver all the performance advantages of our VT actuators with the added benefit of an IP69K rating and a contoured 316 stainless steel housing. Ideally suited for food-grade applications, severe environments and caustic washdown conditions.



### *Ideal for a Variety of Applications Including:*

- Food and Beverage Conveying / Diverting
- Volumetric Filling / Pumping
- Packaging
- Pneumatic Replacement
- And More

### Key Features:

## IP69K

- IP69K rated for high-pressure, high-temperature washdown
- 316 stainless steel contoured exterior
- Compact actuator with thrust up to 2,000 lbf
- Velocity up to 40 in/sec, Stroke up to 24 inches
- Multiple motor/actuator mounting configurations available
- Piston with anti-rotation, sealed chamber design

# SPECIFICATION CHART FOR THE TAC VP ACTUATOR

Model Number	Thrust Load Rated	Linear Velocity Max. <sup>1</sup>	Travel Length Max. <sup>2</sup>	Frame Size	Lead	Ball Screw Diameter	Ball Screw Max. <sup>1</sup>	Torque @ Ball Screw Max.	Dynamic Capacity Per Million Revs	Dynamic Capacity Per Million Inches	Motor Gearhead Frame Supported Max. <sup>2</sup>
	lb <sup>1</sup>	in/s	in	in	in	in	RPM	in-lb	lb <sup>1</sup>	lb <sup>1</sup>	in
VP204	400	16	24	2.25	0.50	0.50	1,920	35	1,070	850	3.5
VP209	900	9	24	2.25	0.20	0.63	2,700	32	1,410	825	3.5
VP305	500	40	24	3.25	1.00	1.00	2,400	88	2,300	2,300	4.5
VP310	1,000	20	24	3.25	0.50	1.00	2,400	88	5,350	4,250	4.5
VP320	2,000	10	24	3.25	0.25	1.00	2,400	88	5,475	3,450	4.5

Model Number	Inertia 1:1 Zero Stroke <sup>3</sup>	Inertia 1:1 Per Inch of Stroke <sup>3</sup>	Inertia 2:1 Zero Stroke <sup>3</sup>	Inertia 2:1 Per Inch of Stroke <sup>3</sup>	Inertia Inline Zero Stroke <sup>3</sup>	Inertia Inline Per Inch of Stroke <sup>3</sup>	Unit Weight "U" Motor Mount <sup>4</sup>	Unit Weight "L" Motor Mount <sup>4</sup>	Weight Per Inch of Stroke <sup>4</sup>
	lb-in <sup>2</sup>	lb-in <sup>2</sup>	lb-in <sup>2</sup>	lb-in <sup>2</sup>	lb-in <sup>2</sup>	lb-in <sup>2</sup>	lb	lb	lb
VP204	1.61	0.0023	0.17	0.0006	0.16	0.0023	18.0	9.0	0.38
VP209	1.61	0.0031	0.17	0.0008	0.15	0.0031	18.0	9.0	0.38
VP305	4.34	0.0281	2.30	0.0070	0.37	0.0281	33	26.0	0.81
VP310	4.27	0.0234	2.28	0.0059	0.31	0.0234	33	26.0	0.81
VP320	4.25	0.0200	2.27	0.0050	0.28	0.0200	33	26.0	0.81

<sup>1</sup> Maximum velocity and maximum screw speed may not be achievable at maximum stroke.

<sup>2</sup> Larger Motor or Gearhead Frames and longer stroke lengths are available upon request.

<sup>3</sup> All inertia values are at the input shaft and are representative of typical pulleys, bushings, couplers, etc. Actual values may vary due to motor selection.

<sup>4</sup> Weight values are for reference only and vary depending on configuration.

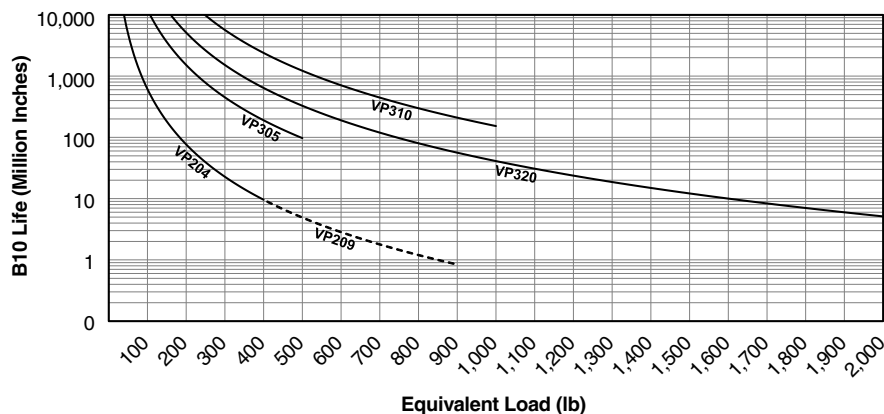
"U" Parallel offset configuration

"L" Inline configuration

\*IP69K rating for static only.

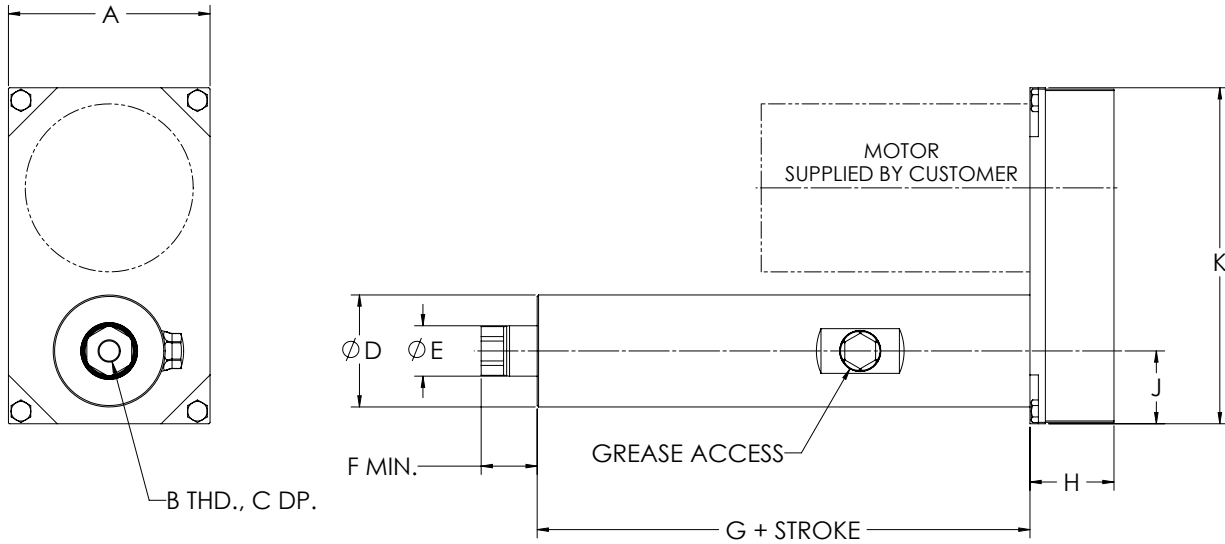
## DATA CURVES FOR THE TAC VP ACTUATOR

**Dynamic Capacity: Life Vs. Load**

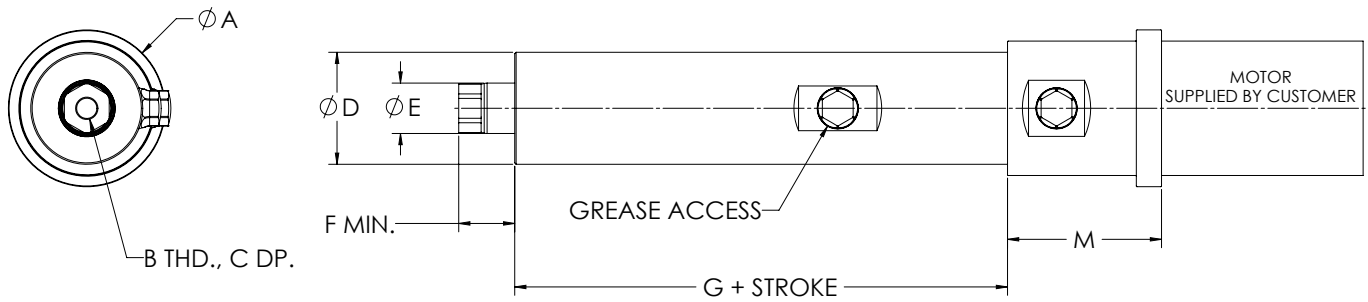


# DIMENSIONED DRAWINGS FOR THE TAG VP ACTUATOR

## U-Parallel Offset Motor Configuration



## L-Inline Motor Configuration



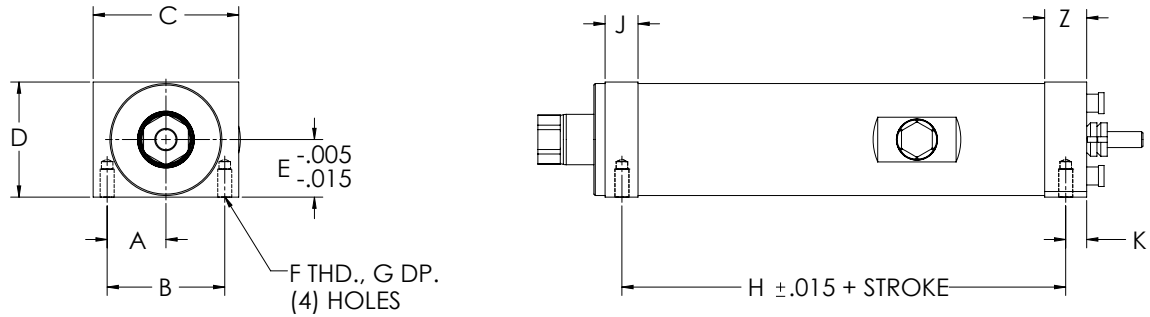
"M" length may vary depending on motor or gearbox.

## VP U-Parallel Offset, L-Inline and Rear Clevis Dimensions

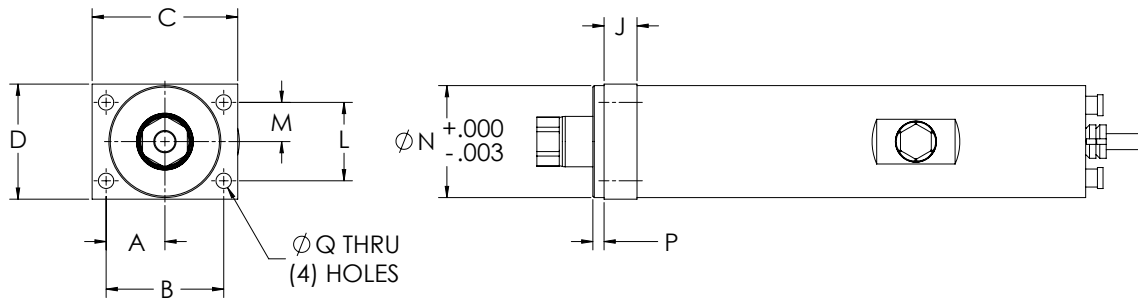
Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
VP204	4.50	1/2-20	0.63	2.50	1.13	1.25	5.03	2.03	1.63	7.50	3.44	3.69	0.50	0.75	1.13	90
VP209	4.50	1/2-20	0.63	2.50	1.13	1.25	5.03	2.03	1.63	7.50	3.44	3.69	0.50	0.75	1.13	90
VP305	5.50	3/4-16	0.88	3.50	1.75	1.50	7.28	2.47	2.44	10.13	3.72	3.72	0.75	1.25	1.88	90
VP310	5.50	3/4-16	0.88	3.50	1.75	1.50	7.28	2.47	2.44	10.13	3.72	3.72	0.75	1.25	1.88	90
VP320	5.50	3/4-16	0.88	3.50	1.75	1.50	7.28	2.47	2.44	10.13	3.72	3.72	0.75	1.25	1.88	90

# DIMENSIONED DRAWINGS FOR THE TAG VP ACTUATOR

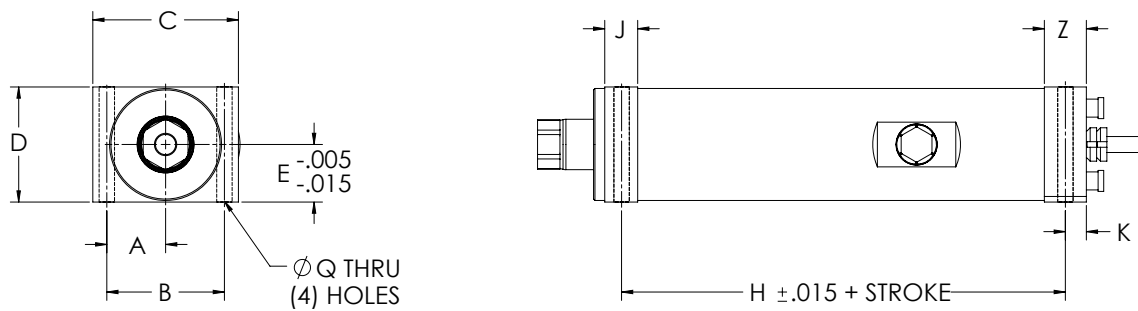
## Bottom Mount Dimensions



## Front Flange Dimensions



## Foot Mount Dimensions



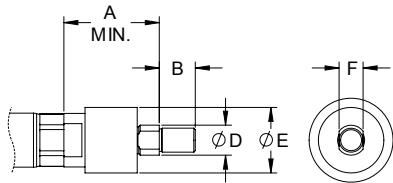
## VP Unit Mounting Dimensions

Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	Z
VP2	1.31	2.63	3.25	2.57	1.29	5/16-18	0.63	3.84	0.74	0.56	1.75	0.88	2.50	0.25	0.34	0.92
VP3	1.88	3.75	4.50	3.63	1.81	3/8-16	0.75	5.78	1.00	0.75	2.63	1.31	3.50	0.25	0.41	1.25

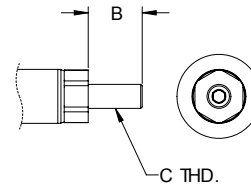
# DIMENSIONED DRAWINGS FOR THE TAG VP ACTUATOR

## Rod End Options

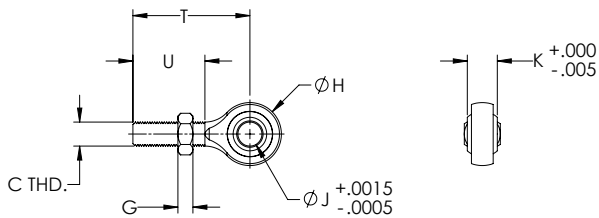
### Self-Aligning Coupler



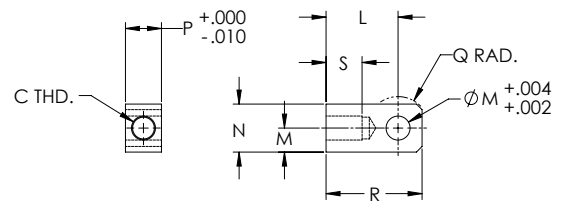
### Male Thread



### Spherical Rod Eye



### Female Eye



## VP Rod End Dimensions

Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
VP2	2.00	0.75	1/2-20	0.63	1.37	0.50	0.31	1.31	0.50	0.63	1.50	0.50	1.00	0.75	0.63	2.00	0.75	2.44	1.50
VP3	2.38	1.13	3/4-16	0.97	1.75	0.88	0.42	1.75	0.75	0.88	2.06	0.75	1.50	1.25	0.88	2.81	1.13	2.88	1.75