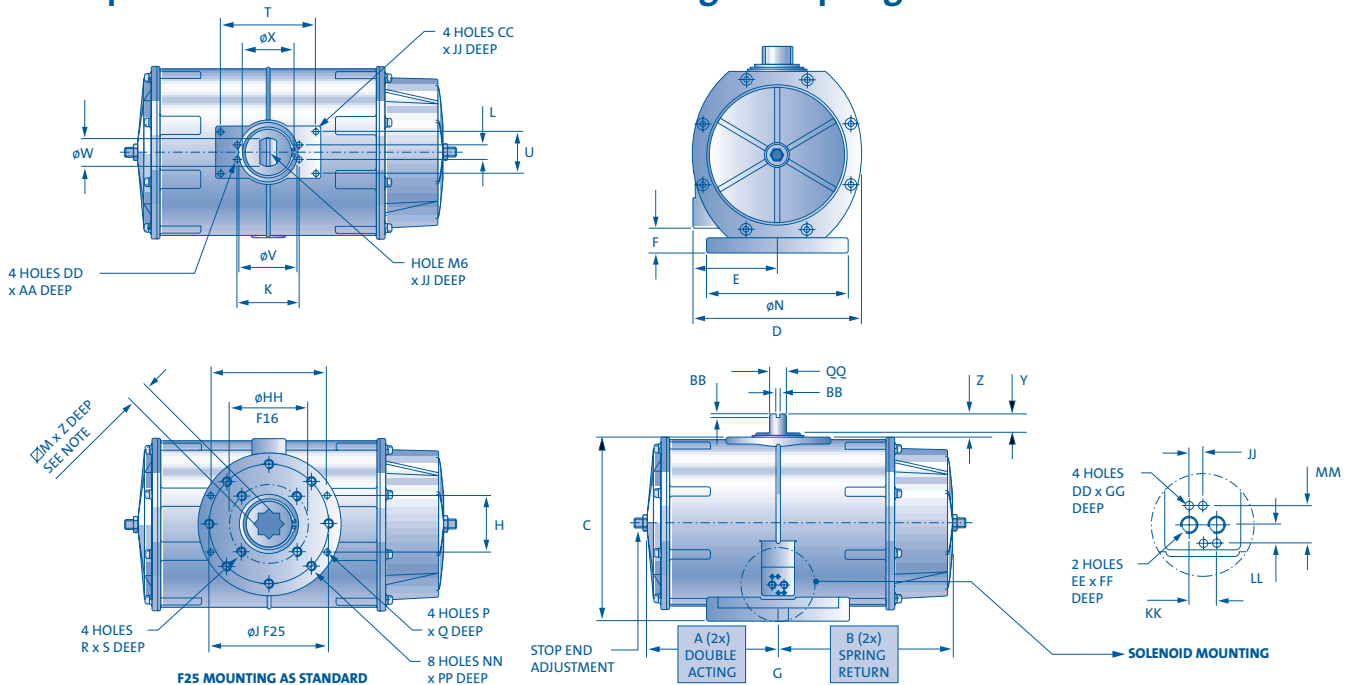


# TruTorq Actuator Size 400 F25 Double Acting and Spring Return



## Dimensions

Metric	A	B	C	D	E	F	G	H	øJ	K	L	∅M	øN	P	Q	R	S	T	U	øV
Size 400 F25	300	371	385	360	180	53	244	117	254	130	30	55	300	M12	22	M20	35	200	90	120
	øW	øX	Y	Z	AA	BB	CC	DD	EE	FF	GG	øHH	JJ	KK	LL	MM	NN	PP	QQ	
Size 400 F25	60	111	40	60	9	4	M8	M5	G 1/4"	12	8	165	12	24	16	32	M16	25	36	
Imperial	A	B	C	D	E	F	G	H	øJ	K	L	∅M	øN	P(UNC)	Q	R	S	T	U	øV
Size 400 F25	11.8	14.6	15.16	14.2	7.1	2.1	9.61	4.61	10.0	5.12	1.18	2.165	ø11.81	1/2-13	0.86	3/4-11	1.38	7.87	3.54	4.72
	øW	øX	Y	Z	AA	BB	CC(UNC)	DD	EE	FF	GG	øHH	JJ	KK	LL	MM	NN	PP	QQ	
Size 400 F25	2.36	4.37	1.57	2.36	0.35	0.16	5/16-18	10-24	NPT 1/4"	0.50	0.31	6.5	0.47	0.94	0.63	1.26	M16	5/8-11	1.42	

## Torque

Air Supply Model: TDA400 Model: TSR400	40psi 19486 in.lbs		50psi 24357 in.lbs		60psi 29228 in.lbs		70psi 34100 in.lbs		80psi 38971 in.lbs		90psi 43842 in.lbs		100psi 48714 in.lbs			
Springs	Spring Torque		Air Stroke													
Quantity	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End		
3	4833	3133	16353	14653	21224	19524	26095	24395	30967	29267	35838	34138	40709	39009	45581	43881
6	9665	6267	13219	9821	18090	14692	22961	19563	27833	24435	32704	29306	37575	34177	42447	39049
9	14498	9400			14957	9859	19828	14730	24700	19602	29571	24473	34442	29344	39314	34216
12	19331	12533					16695	9897	21567	14769	26438	19640	31309	24511	36181	29383
14	22552	14622							19478	11548	24349	16419	29220	21290	34092	26162
16	25774	16711									22260	13197	27131	18068	32003	22940

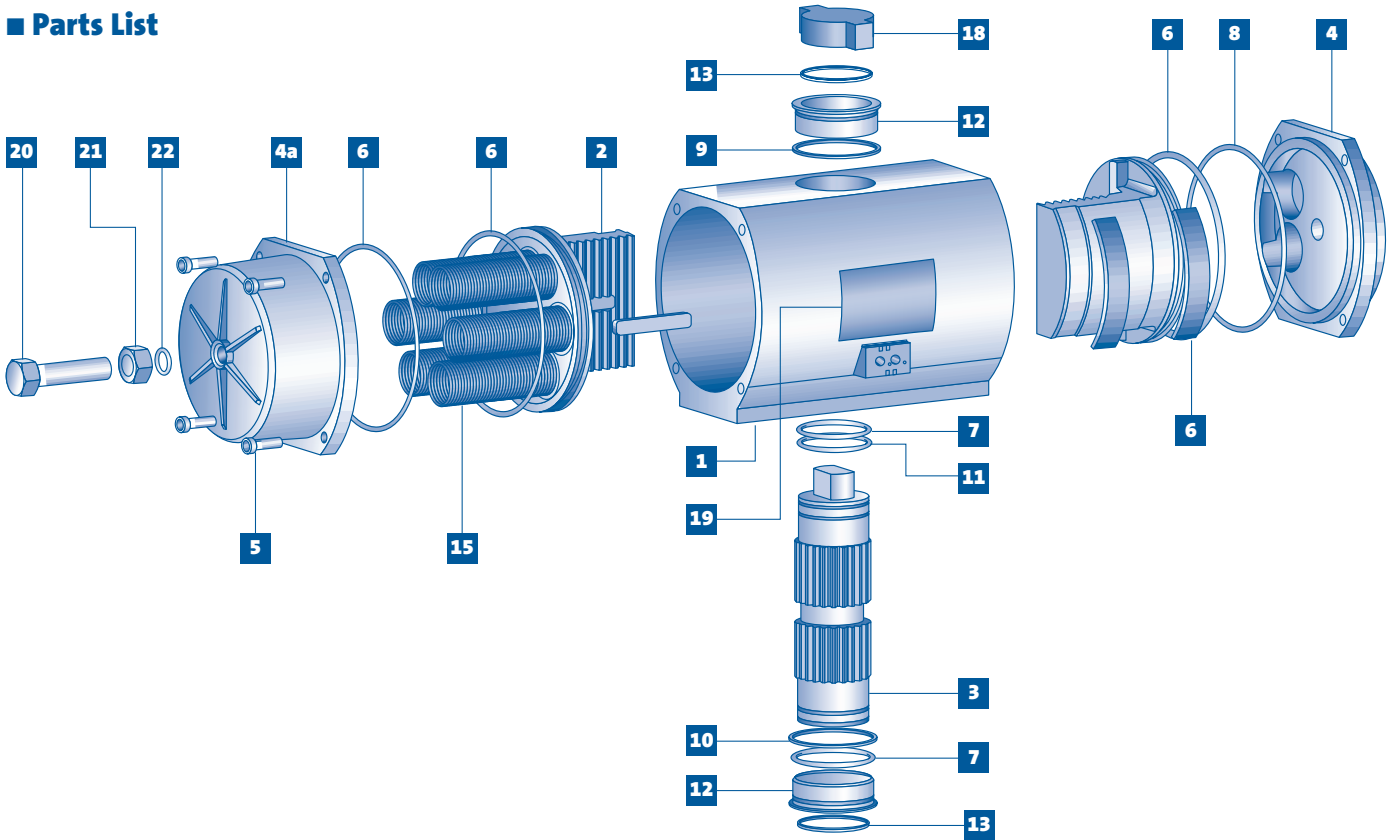
Air Supply Model: TDA400 Model: TSR400	2 bar 1601 Nm		3 bar 2402 Nm		4 bar 3202 Nm		5 bar 4003 Nm		5.5 bar 4403 Nm		6 bar 4803 Nm		7 bar 5604 Nm			
Springs	Spring Torque		Air Stroke													
Quantity	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End		
3	546	354	1247	1055	2048	1856	2848	2656	3649	3457	4049	3857	4449	4257	5250	5058
6	1092	708	893	509	1694	1310	2494	2110	3295	2911	3695	3311	4095	3711	4896	4512
9	1638	1062			1340	764	2140	1564	2941	2365	3341	2765	3741	3165	4542	3966
12	2184	1416					1786	1018	2587	1819	2987	2219	3387	2619	4188	3420
14	2548	1652							2351	1455	2751	1855	3151	2255	3952	3056
16	2912	1888									2515	1491	2915	1891	3716	2692

## Basic Operating Detail

- TDA = Double Acting
- Port 'A' = Air To Open (Anti-Clockwise)
- Port 'B' = Air To Close (Clockwise)
- TSR = Spring Return
- Port 'A' = Air To Open (Anti-Clockwise compressing springs)
- Port 'B' = Spring To Close (Clockwise)
- Fail Safe Open = Rotate Pistons 180° About Own Axis
- Drive Medium = Air (Dry or Lubricated); Non Corrosive Gas; Light Hydraulic Oil
- Temperature = Buna Nitrile 'O' Seals -40 to +100°C or -40 to +212°F  
Viton 'O' Seals -25 to +250°C or -13 to +482°F

Actuator Size	Operating Time				Air Consumption				Overall Weight				Sol. Vv Min. Cv
	DA Open	DA Close	SR Open	SR Close	Open (l)	Close (l)	Open (ci)	Close (ci)	DA Kg	SR Kg	DA lbs	SR lbs	
400	12	12	13	10	13.6	17.5	829.92	1067.92	107	135	235	297	1.4

■ Parts List



Ref No	Description	Quantity	Material Std Unit	Material CNI® Unit	Comments
1	Body	1	Alum. Anodized	Alum/CNI 530T	
2	Piston	2	Alum. Anodized	Alum/CNI 425	
3	Driveshaft	1	Steel / Zinc	CNI 530T	
4	Endcap - DA	2	Powder Epoxy	Alum/CNI 530T	
4a	Endcap - SR	2	Powder Epoxy	Alum/CNI 530T	
5*	Bolt - 400	16	Stainless Steel	Stainless Steel	
6*	'O' Ring	2	Buna Nitrile	Buna Nitrile	Option Viton or Silicone
7*	'O' Ring	2	Buna Nitrile	Buna Nitrile	Option Viton or Silicone
8*	'O' Ring	2	Buna Nitrile	Buna Nitrile	Option Viton or Silicone
9*	Washer	1	Polyethylene	Polyethylene	
10*	Washer	1	Polyethylene	Polyethylene	
11*	'O' Ring	2	Buna Nitrile	Buna Nitrile	Option Viton or Silicone
12*	Bushing	1	Bronze	Bronze/Cni 530T	
13*	Circlip	2	Steel	Stainless Steel	
14*	Wear Pad	4	POM Delrin	POM Delrin	
15	Spring	16 max	SiCr	SiCr	
16*	Guide Bar	2	Steel	Stainless Steel	
17*	Ball Bearing	2	Composite	Composite	
18	Position Indicator	1	Polyethylene	Nylon	TruVision Puck optional on Std
19	Product Label	1	3M	3M	
20	Stop Adjustment Screw	2	Stainless Steel	Stainless Steel	
21	Stop Adjustment Nut	2	Stainless Steel	Stainless Steel	
22	Stop Adjustment 'O' Ring	2	Buna Nitrile	Buna Nitrile	Option Viton or Silicone

\* Items marked with an asterisk are included in repair kit.