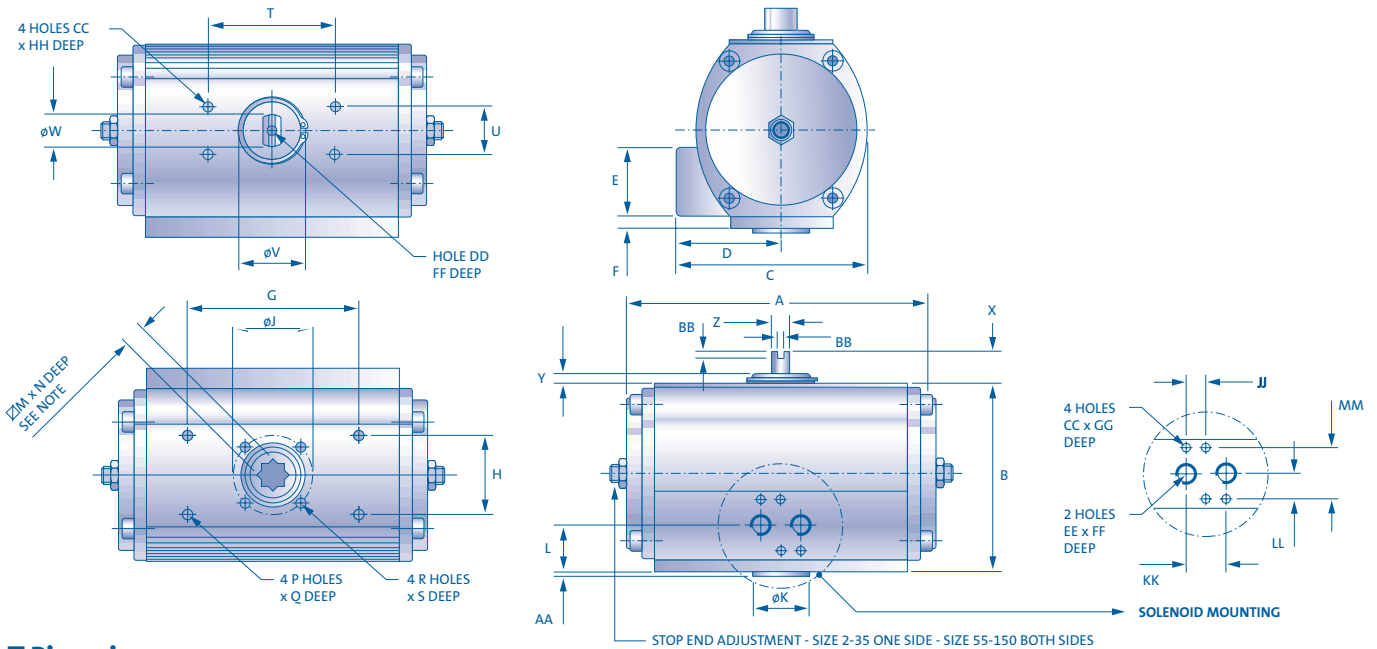




TruTorq Actuator Size 12/20/35/55 C-TYPE Double Acting and Spring Return



Dimensions

Metric		A	B	C	D	E	F	G	H	ØJ	ØK	L	∠M	N	P	Q	R	S	T
TT12	F07	194.0	118.5	121.0	67.0	43.0	8.0	107.0	49.0	70.0	55.0	29.5	17.0	19.0	M6	10.0	M8	10.0	80.0
TT20	F07	218.0	140.5	136.5	72.0	43.0	8.0	108.0	49.0	70.0	55.0	29.5	17.0	19.0	M6	10.0	M8	13.0	80.0
TT35	F10	266.0	166.5	156.0	78.0	43.0	8.5	161.0	73.0	102.0	70.0	30.0	22.0	24.0	M6	12.0	M10	16.0	80.0
TT55	F12	312.0	207.5	191.0	95.5	43.0	20.5	161.0	73.0	125.0	85.0	42.0	27.0	29.0	M8	15.0	M12	20.0	130.0
		U	ØV	ØW	X	Y	Z	AA	BB	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM
TT12	F07	30.0	46.0	20.0	20.0	5.5	11.5	3.0	4.0	M5	M6	G1/4"	12.0	8.0	5.0	12.0	24.0	16.0	32.0
TT20	F07	30.0	50.0	32.0	20.0	6.5	19.0	3.0	4.0	M5	M6	G1/4"	12.0	8.0	5.0	12.0	24.0	16.0	32.0
TT35	F10	30.0	61.0	32.0	20.0	7.0	19.0	3.0	4.0	M5	M6	G1/4"	12.0	8.0	5.0	12.0	24.0	16.0	32.0
TT55	F12	30.0	61.0	40.0	30.0	7.5	25.4	3.0	4.0	M5	M6	G1/4"	12.0	8.0	5.0	12.0	24.0	16.0	32.0
Imperial		A	B	C	D	E	F	G	H	ØJ	ØK	L	∠M	N	P(unc)	Q	R(unc)	S	T
TT12	F07	7.64	4.67	4.76	2.64	1.69	0.31	4.21	1.93	2.76	2.165	1.16	0.669	0.75	1/4-20	0.39	5/16-18	0.47	3.15
TT20	F07	8.58	5.53	5.37	2.83	1.69	0.31	4.21	1.93	2.76	2.165	1.16	0.669	0.75	5/16-18	0.39	5/16-18	0.51	3.15
TT35	F10	10.47	6.56	6.14	3.07	1.69	0.33	6.34	2.87	4.02	2.756	1.18	0.866	0.94	5/16-18	0.47	3/8-16	0.63	3.15
TT55	F12	12.28	8.17	7.52	3.76	1.69	0.81	6.34	2.87	4.92	3.346	1.65	1.06	1.14	5/16-18	0.59	1/2-13	0.79	5.12
		U	ØV	ØW	X	Y	Z	AA	BB	CC(unf)	DD	EE	FF	GG	HH	JJ	KK	LL	MM
TT12	F07	1.18	1.81	0.79	0.79	0.22	0.45	0.12	0.16	10-32	M6	NPT1/4	0.50	0.31	0.20	0.47	0.94	0.63	1.26
TT20	F07	1.18	1.97	1.26	0.79	0.26	0.75	0.12	0.16	10-32	M6	NPT1/4	0.50	0.31	0.20	0.47	0.94	0.63	1.26
TT35	F10	1.18	2.40	1.26	0.79	0.28	0.75	0.12	0.16	10-32	M6	NPT1/4	0.50	0.31	0.20	0.47	0.94	0.63	1.26
TT55	F12	1.18	2.40	1.57	1.18	0.30	1.00	0.12	0.16	10-32	M6	NPT1/4	0.50	0.31	0.20	0.47	0.94	0.63	1.26

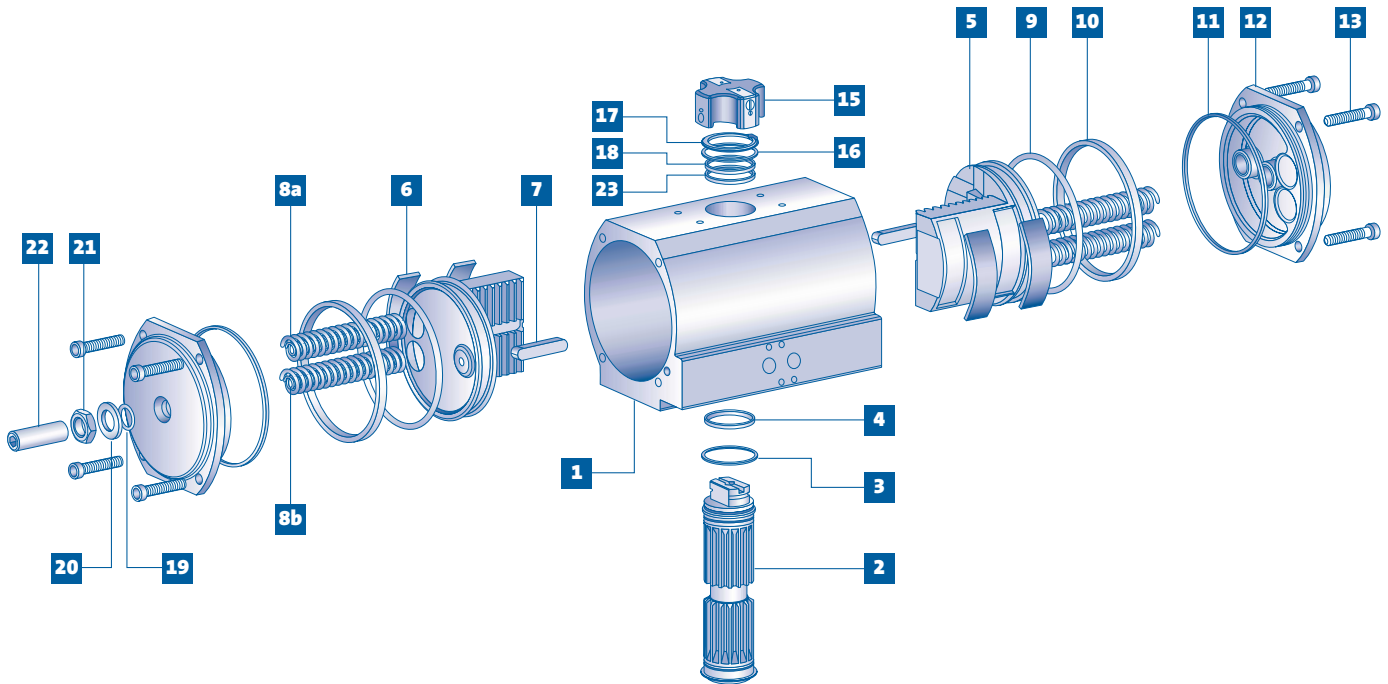
Torque

MODEL	AIR SUPPLY		DA TORQUE	SR TORQUE				
	BAR	PSI		Air-start	Air-end	Spring-start	Spring-end	Spring Qty
TT12	6.0		122.5 Nm	79.31	43.91	78.60	43.20	4x4
TT20	6.0		201.9 Nm	130.33	71.73	130.20	71.60	4x4
TT35	6.0		374.0 Nm	241.54	132.98	241.20	132.64	4x4
TT55	6.0		597.0 Nm	385.21	212.13	384.60	211.52	4x4
TT12		80.0	994 in.lbs	644	356	638	350	4x3
TT20		80.0	1638 in.lbs	1057	582	1056	581	4x3
TT35		80.0	3035 in.lbs	1959	1078	1957	1076	4x3
TT55		80.0	4742 in.lbs	3026	1622	3120	1716	4x3

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	
12	1.5	1.5	1.5	1.0	0.49	0.64	29.90	39.05	4.1	4.7	9.0	10.0	0.5
20	2.0	2.0	2.0	1.5	0.90	1.00	54.92	61.02	6.3	7.0	14.0	15.0	0.5
35	2.5	2.5	2.5	2.0	1.69	1.90	103.12	115.94	10.5	12.0	23.0	26.0	0.5
55	3.5	3.5	3.5	3.0	2.80	3.40	170.86	207.47	18.2	20.6	40.0	45.0	0.8

Parts List


Ref No	Description	Quantity	Material Std Unit	Material CNI® Unit	Comments
1	Body	1	Alum. Anodized	Alum/CNI 530T	
2	Driveshaft	1	Steel	Stainless Steel	Option CNI 530T
3*	Washer	1	Polyethylene	Polyethylene	
4*	'O' ring	1	Buna Nitrile	Buna Nitrile	Option Viton or Silicone
5	Piston	2	Alum. Anodized	Alum/CNI 425	
6*	Wear Pads	4	POM Delrin	POM Delrin	
7*	Guide Bar	2	Steel	Stainless Steel	
8a	Spring Outer/Large	4	SiCr	SiCr	
8b	Spring Inner/Small	4	SiCr	SiCr	
9*	'O' ring	2	Buna Nitrile	Buna Nitrile	Option Viton or Silicone
10*	Back-up Bearing	2	POM Delrin	POM Delrin	
11*	'O' ring	2	Buna Nitrile	Buna Nitrile	Option Viton or Silicone
12	Endcap	2	Alum. Anodized	Alum/CNI 530T	
13	Endcap Bolt	8	Stainless Steel	Stainless Steel	
14*	Ball Seal	2	Composite	Composite	
15	Position Indicator	1	Polyethylene	Nylon	TruVision optional on STD unit
16*	Washer	1	Polyethylene	Polyethylene	
17*	Circlip	2	Steel	Stainless Steel	
18*	'O' ring	1	Polyethylene	Polyethylene	
19	Stop Adjustment 'O' ring	1	Buna Nitrile	Buna Nitrile	Option Viton or Silicone
20	Stop Adjustment Washer	1	Polyethylene	Polyethylene	
21	Stop Adjustment Nut	1	High Tensile Steel	High Tensile Steel	Dacrolit Coated
22	Stop Adjustment Screw	1	High Tensile Steel	High Tensile Steel	Dacrolit Coated
23*	Driveshaft Upper Bearing	1	POM Delrin	POM Delrin	

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