



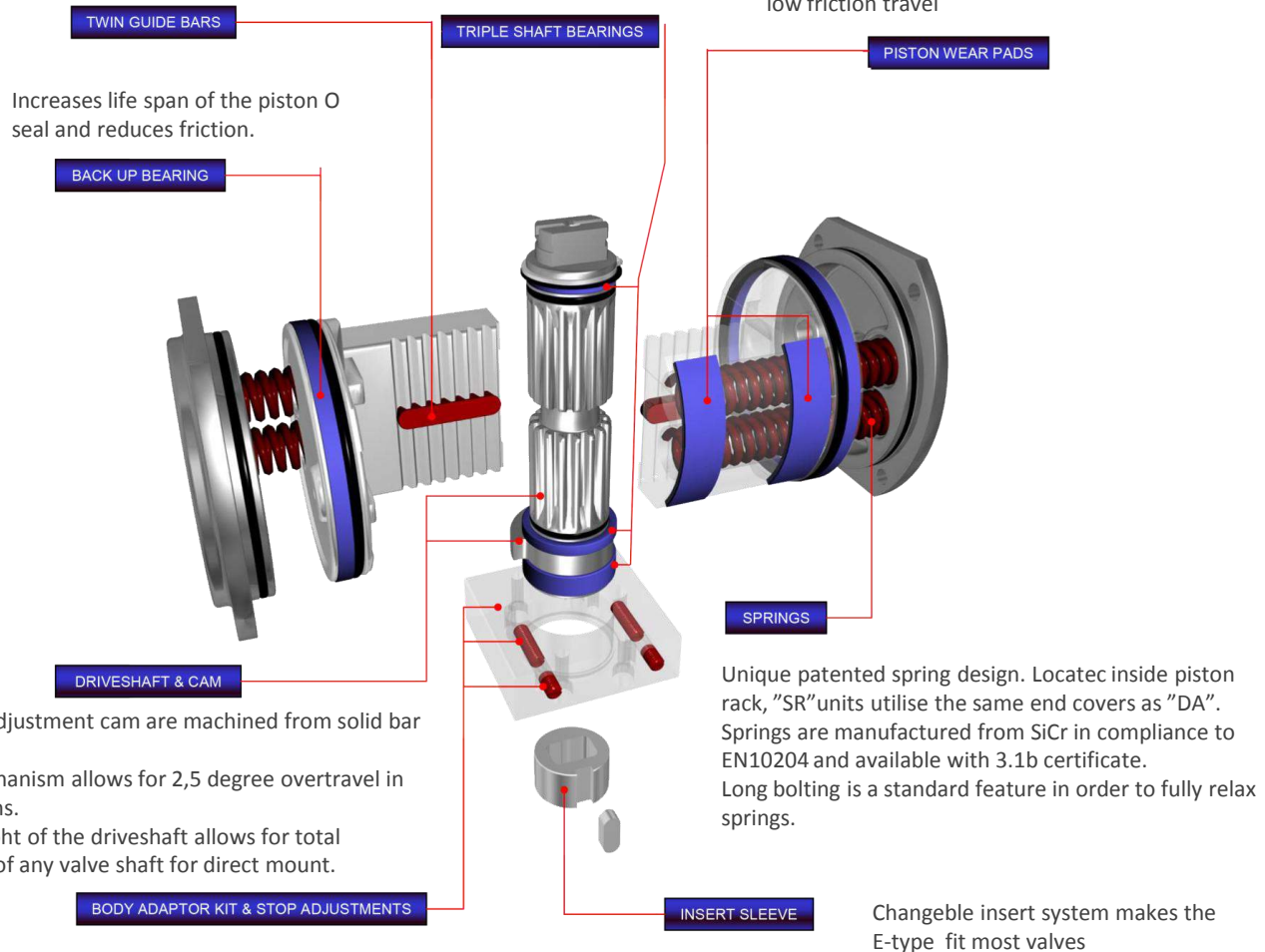
VALVE AUTOMATION
SINCE 1976

TECHNICAL SUMMARY E-TYPE

Unique twin guide bar absorbs adverse side loading from rack at the start of each stroke and maintains even engagement between rack & pinion for smooth operation.

Eliminates metal to metal contact & absorbs the impact load on the stop cam drive mechanism.

The dual encapsulated "POM" wear pads absorb the adverse side loading at start of each stroke. The 4 off encapsulated "POM" wear pads also ensure no metal to metal contact thus providing low friction travel



Material standard

Anodized Aluminium, Black.
CNI, Chemically Nickel Impregnated.
Other treatments upon request.

Movement

0-90 Degrees

End Stop Adjustment

Over travel, +2,5 degree Open & Closed
Dual end stop adjustment.

Sizes

E-Type: 8,12,20,35,55,70,100 & 150.

Torque Output at 80 PSI

Double Acting: 730 to 6689 in. lbs
Spring Return: 350 to 4758 in. lbs

Drive Medium

Standard: Air (Dry or lubricated) or inert gases.
Options: Oxygen, Hydraulic (requires rebuilding)

Temperature Range

-40 to +212° F (Standard execution)
-13 to +482° F (High temp)
-58 to +140° F (Arctic temperature)

Standard Connections

Solenoid Valves – Namur
Fitting Accessories – ISO 5211, DIN 3337, VDI/VDE 3845, Namur.
Stardrive Shaft – ISO 5211 (90), DIN 79 (45), Namur.

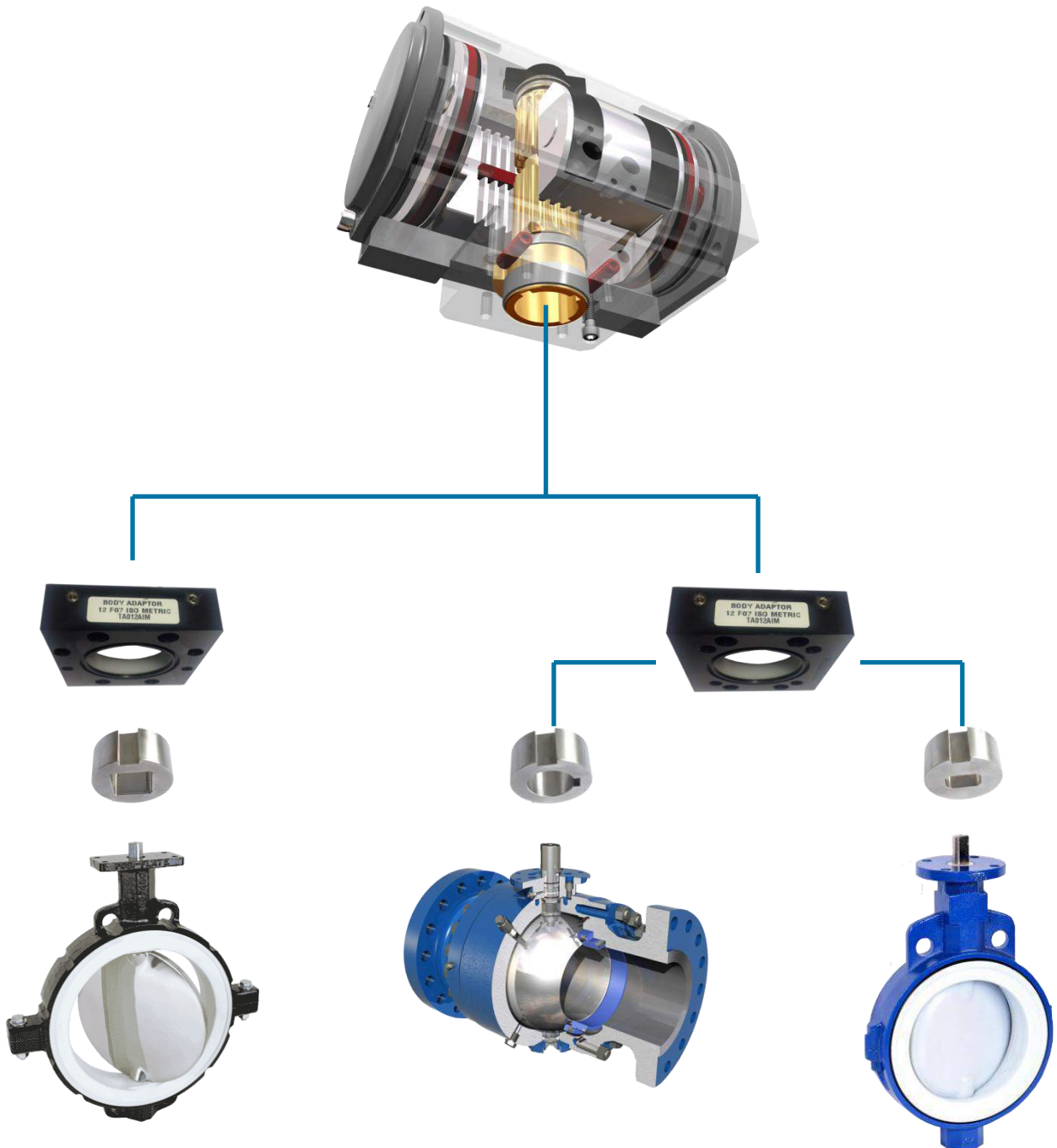
Operating Pressure

30-150 PSI



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E-TYPE: FLEXIBILITY – DIRECT MOUNTING



The flexibility of the E-type actuator makes it the perfect actuator for stock keeping. One engine (Approx 90% of the actuator cost) in combination with different Body adaptors and Inserts (BAK) makes it possible to cover a range of valves, saving money and space.

www.TruTorq-us.com



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E-type: Flexibility – direct mounting



Because of the flexibility the interchangeable adaptor plate and insert system provides, the E-type actuator can be customized for direct mounting on most valves.



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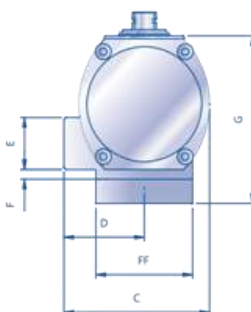
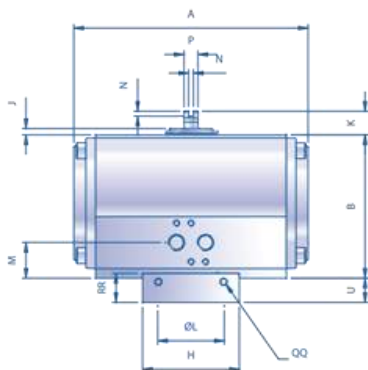
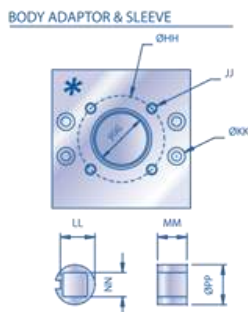
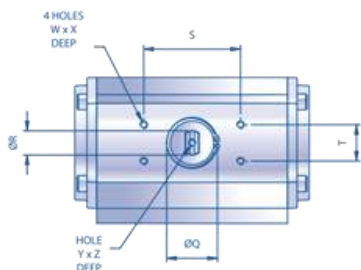


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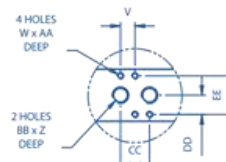
PNEUMATIC ACTUATORS

E-TYPE

TRUTORQ ACTUATOR SIZE 55/70/100/150
E-TYPE DOUBLE ACTING & SPRING RETURN



SOLENOID MOUNTING



* Bak's may be dual drilled.
Please refer to Bak Datasheet
for more information.

•Dimensions

Imperial	*	A	B	C	D	E	F	G	H	J	K	ØL	□ M	N	P	ØQ	ØR	S	T	U	V
TT 55 F10	F12	12,28	8,17	7,52	3,76	1,69	0,81	9,55	5,51	0,30	1,18	3,35	1,65	0,16	1,00	1,57	1,57	5,12	1,18	1,38	0,47
TT 55 F12	F10	12,28	8,17	7,52	3,76	1,69	0,81	9,55	5,51	0,30	1,18	3,35	1,65	0,16	1,00	1,57	1,57	5,12	1,18	1,38	0,47
TT 70 F10	F12	13,39	8,30	7,52	3,76	1,69	0,81	9,72	5,51	0,28	1,18	3,35	1,65	0,16	1,00	2,83	1,57	5,12	1,18	1,42	0,47
TT 70 F12	F10	13,39	8,30	7,52	3,76	1,69	0,81	9,72	5,51	0,28	1,18	3,35	1,65	0,16	1,00	2,83	1,57	5,12	1,18	1,42	0,47
TT 100 F14		14,21	9,97	8,94	4,47	1,69	1,56	11,93	6,30	0,28	1,18	3,94	2,40	0,16	1,00	3,07	1,57	5,12	1,18	1,96	0,47
TT 150 F14		15,35	11,89	11,02	5,51	1,69	2,22	13,82	6,30	0,28	1,18	3,94	3,07	0,16	1,00	3,07	1,57	5,12	1,18	1,93	0,47

*Additional drilling

Imperial	W(unc)	X	Y	Z	AA	BB	CC	DD	EE	FF	ØGG	ØHH	JJ (unc)	ØKK	LL	MM	NN	ØPP	QQ	RR
TT 55	10-32	0,20	M6	0,50	0,31	NPT 1/4	0,94	0,63	1,26	5,51	2,40	4,02	3/8-16	0,43	1,54	0,98	0,87	1,73	M10	1,57
TT 55	10-32	0,20	M6	0,50	0,31	NPT 1/4	0,94	0,63	1,26	5,51	2,95	4,92	1/2-13	0,43	1,97	0,98	1,06	2,16	M10	1,57
TT 70	10-32	0,20	M6	0,50	0,31	NPT 1/4	0,94	0,63	1,26	5,51	2,40	4,02	3/8-16	0,43	1,54	0,98	0,87	1,73	M10	1,57
TT 70	10-32	0,20	M6	0,50	0,31	NPT 1/4	0,94	0,63	1,26	5,51	2,95	4,92	1/2-13	0,43	1,97	0,98	1,06	2,16	M10	1,57
TT 100	10-32	0,20	M6	0,50	0,31	NPT 1/4	0,94	0,63	1,26	6,30	3,46	5,51	5/8-11	0,55	2,46	1,38	1,42	2,68	M14	2,24
TT 150	10-32	0,20	M6	0,50	0,31	NPT 1/4	0,94	0,63	1,26	6,30	3,46	5,51	5/8-11	0,55	2,46	1,38	1,42	2,68	M14	2,24

•Torque

Model	AIR SUPPLY PSI	DA TORQUE in.lbs	SR TORQUE - in.lbs				SPRING QTY
			AIR-START	AIR-END	SPRING-START	SPRING-END	
TT 55	80,0	4742	3026	1622	3120	1716	4x3
TT 70	80,0	6689	4320	2381	4308	2369	4x3
TT 100	80,0	9105	8667	4774	8651	4758	4x3

•Basic Operating Detail

Drive Medium = Air (Dry or lubricated); Non corrosive Gas; Light Hydraulic Oil

Temperature = -40 to +212°F. High & Low temp versions available

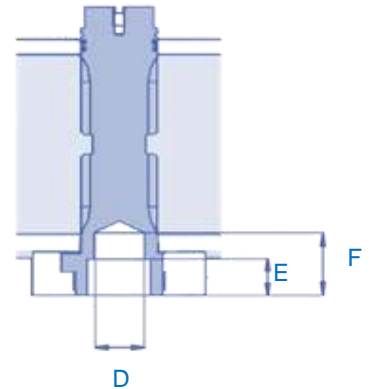
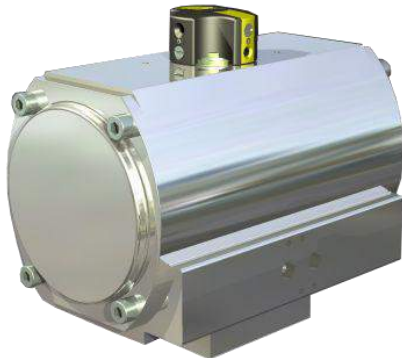
Model	Operating Time (5.5 barg/80 psig)				Air Consumption		Overall Weight		Sol. VV
	DA Open	DA Close	SR Open	SR Close	Open (ci)	Close (ci)	DA lbs	SR lbs	Min Cv
TT55	3,5	3,5	3,5	3	170,86	207,47	40	45	0,8
TT70	4	4	4	3	186,12	225,79	49,3	58,3	0,8
TT100	4,5	4,5	5,5	3	336,85	360,04	68,6	78,8	1,1
TT150	5,0	5,0	7,0	4,0	463,78	585,83	97,7	116,2	1,1



VALVE AUTOMATION
SINCE 1976

PNEUMATIC ACTUATORS: E-TYPE

DIMENSIONS FOR DIRECT MOUNTING



•Dimensions

<i>Imperial</i>	A	B*	C	D	E	F
TT8	F05	F07	0,551	0,788	0,788	1,576
TT8	F07	-	0,669	0,906	0,788	1,379
TT12	F05	F07	0,551	0,788	0,788	1,576
TT12	F07	-	0,669	0,985	0,788	1,379
TT20	F07	-	0,669	1,024	0,906	1,576
TT35	F07	F10	0,669	1,024	0,906	1,576
TT35	F10	F12	0,866	1,1182	1,142	2,16
TT55	F12	F10	1,06	1,497	1,142	1,97
TT70	F12	F10	1,06	1,576	1,142	2,36
TT100	F14	-	1,418	1,97	1,615	2,44
TT150	F14	-	1,418	1,97	1,615	2,56

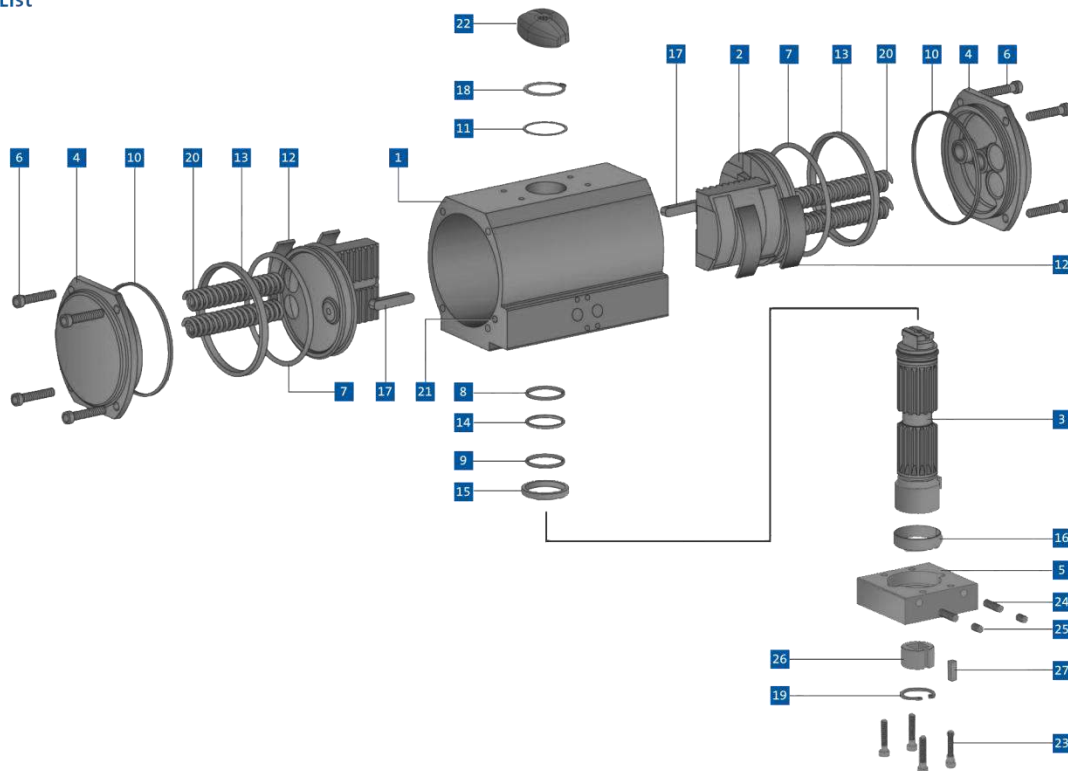
* Dual drilled, additional hole pattern



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PNEUMATIC ACTUATORS: E-TYPE

■ Parts List



Ref No	Description	Quantity	Material Std Unit	Material CNI® unit	Comments
1	Cylinder	1	Alum. Anodized	Alum/CNI 530T	
2	Piston	2	Aluminium	Alum/CNI 425	
3	Driveshaft	1	Steel Zinc Plated	Eniflon Coating	
4	Endcap	2	Alum. Painted	Alum/CNI 530T	
5	Body Adaptor	1	Alum. Anodized	Alum/CNI 530T	
6	Endcap Bolt	8	Stainless Steel	Stainless Steel	
7*	Piston 'O' ring	2	Buna Nitrile	Buna Nitrile	Option Viton or Silicone
8*	Driveshaft upper 'O' ring	1	Buna Nitrile	Buna Nitrile	Option Viton or Silicone
9*	Driveshaft lower 'O' ring	1	Buna Nitrile	Buna Nitrile	Option Viton or Silicone
10*	Endcap 'O' ring	2	Buna Nitrile	Buna Nitrile	Option Viton or Silicone
11*	Washer	1	Polyethylene	Polyethylene	
12*	Wear Pads	4	POM Delrin	POM Delrin	
13*	Backup Bearing	2	POM Delrin	POM Delrin	
14*	Driveshaft Upper Bearing	1	POM Delrin	POM Delrin	
15*	Driveshaft Lower Bearing	1	POM Delrin	POM Delrin	
16*	Body Adaptor Bearing	1	POM Delrin	POM Delrin	
17*	Guide Bar	2	Steel	Steel	
18*	Circlip Upper	1	Steel Zinc Plate	Stainless Steel	
19	Circlip Lower	1	Steel Zinc Plate	Stainless Steel	
20	Spring	4/4	SiCr	SiCr	made by eibach®
21*	Ball Bearing	2	Composite	Composite	
22	TruVision Indicator	1	POM Delrin	POM Delrin	
23	Body Adaptor Bolts	4	Stainless Steel	Stainless Steel	
24	Stop Adjustment Screws	2	Stainless Steel	Stainless Steel	
25	Lock Screws	2	Steel	Steel	
26	Insert Sleeve	1	Stainless Steel	Stainless Steel	
27	Insert Sleeve Key	1	Keysteel	Keysteel	

REPAIR KIT INCLUDES ITEMS MARKED WITH AN ASTERISK