



Ductile Iron/Stainless Steel Quarter-turn Spring Return and Double Acting Actuators Output Torques to 115,000 lb.in.

Features and Benefits

- Ductile iron housing, piston and end caps provide long product life with durable, cost effective operation.
- Cylinders of 316 stainless steel provide unrivaled corrosion resistance.
- Output shaft made of high strength alloy steel transmits torque without fatigue.
- Sintered bronze bushings or sealed needle bearings on output shaft eliminate side loading of valve stem to maximize stem packing performance.
- Chrome-plated steel piston rod provides strength and corrosion resistance for enduring high cycle applications.
- Sintered bronze piston rod bushings provide low-friction support and precise alignment of the piston rod to increase efficiency, reduce maintenance and extend actuator life.
- Heat-treated stainless steel thrust pin and rollers transfer piston force to 17-4PH stainless steel yoke by rolling to reduce friction, for longer life and more efficient torque transmission.
- Teflon® guide bands ensure low-friction piston guidance during operation to protect cylinder walls from potential scoring and extend seal performance with a continuous cylinder wiping action.
- Bi-directional travel stops provide accurate valve rotation adjustment.
- ISO 5211 mounting pattern promotes easier valve adaption by utilizing internationally recognized standards.
- Drive slot on output shaft enables accessory-driven components to maintain a compact, low profile assembly and eliminates the need for couplings.



- Tectyl-coated springs can be disarmed without special tools to safely and easily disassemble the actuator in the field, reducing down time and providing a 'man safe' spring.
- Easily removable housing cover provides effortless access for internal inspection of yoke mechanism.

Teflon® is a registered trademark of E.I. duPont de Nemours & Company

General Application

Designed for 'on-off' or modulating control of any quarter-turn ball, butterfly, rotary plug or damper style valve application.

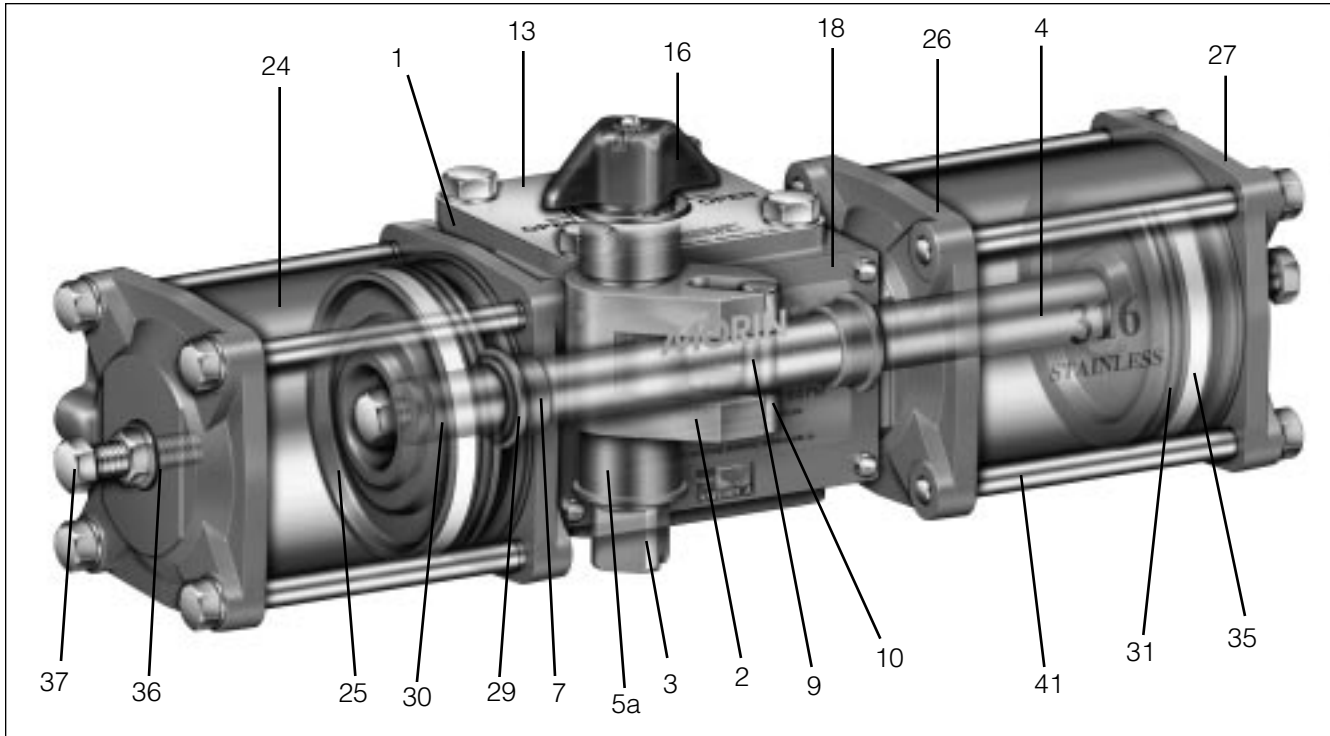
Technical Data

Supply pressure: 40 to 160 psig
Supply medium: Any pneumatic or hydraulic fluid compatible with materials of construction
Temperature rating:
Standard range: -20°F to 210°F
Optional range: -65°F to 300°F
Angular rotation: 90 degrees \pm 8 degrees

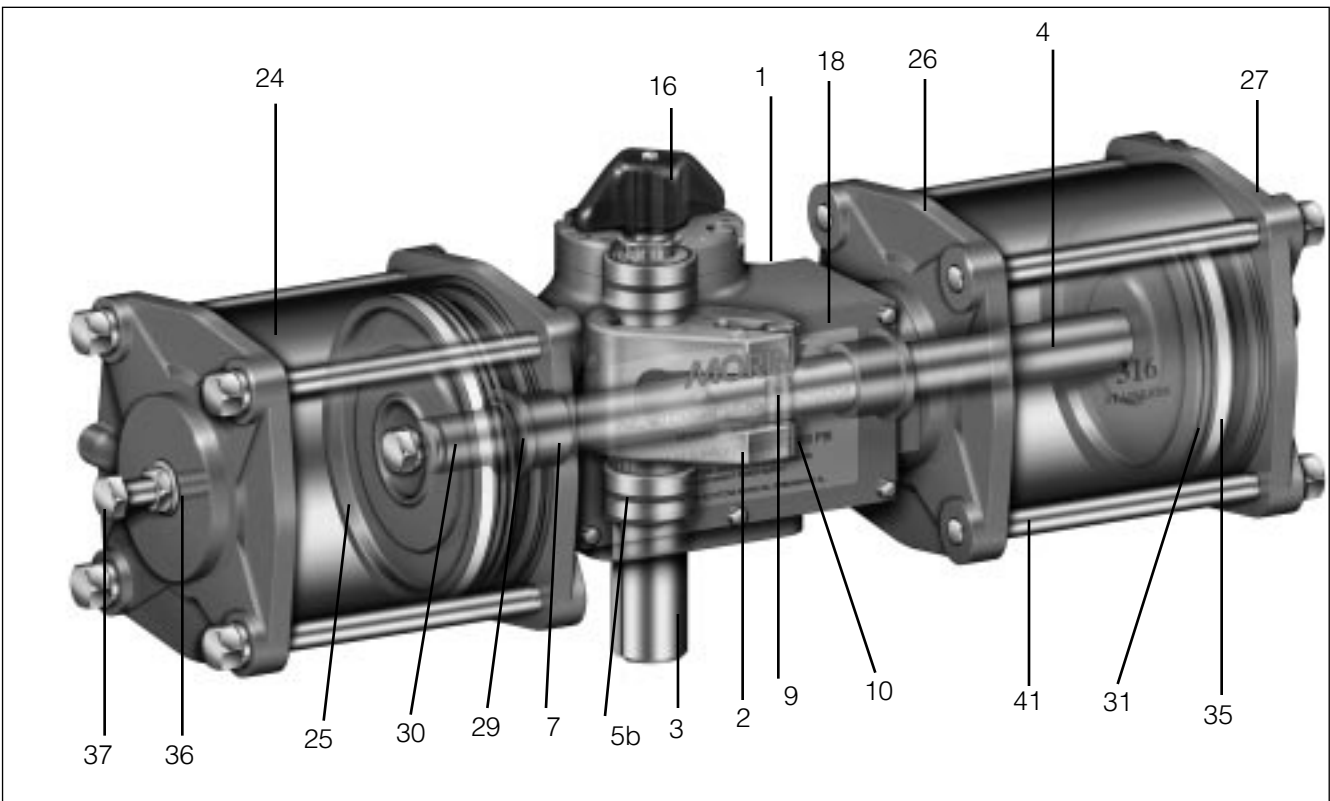
Morin Figure 79B Actuator

Note

For readability, some item numbers have been excluded from drawings.



Double Acting - Models 006 thru 100



Double Acting - Models 135 thru 1150

ACTUATOR FAILURE!

The most common cause of actuator failure is wear on the seals. If condensed water from air lines collects in an aluminum or steel cylinder, pitting will occur. Pitting will eventually destroy a seal and cause piston “blow by” and ultimate failure.

Teflon® piston bearings come in contact with 316 stainless steel cylinders, a standard on all Morin actuators. Lubrication is never required. All moving parts are supported with sintered bronze bushings or sealed needle bearings. Structural members including yoke, thrust pin and roller bearings are made from heat treated stainless steel.

The Morin Actuator is designed to perform in the most demanding corrosive environments.

This includes a “nice, clean, noncorrosive” plant with water in its air lines.

Materials of Construction

Item	Material	Material Standards	
1	Housing	Ductile Iron	A395
2	Yoke	17-4PH Stainless steel*	A564-630
3	Output shaft	Alloy steel, plated*	C4140
4	Piston rod	Steel-chrome plated	C1045
5a	Bushing-output shaft Model 006 thru 100	Sintered bronze	
5b	Needle bearing Model 135 thru 1150	Alloy steel	
6a	Roll pin-yoke Model 006 thru 100	Alloy steel	
6b	Key-yoke Model 135 thru 1150	Steel, plated	
7	Bushing-piston rod	Sintered bronze	
8	Retaining ring-shaft	Steel, plated	
9	Thrust pin	440C Stainless steel*	
10	Roller bearing	440C Stainless steel*	
11	Retaining ring-pin	Steel, plated	
12a	Set screw Model 006 thru 100	Steel, plated***	
12b	Retaining ring-lower bearing Model 135 thru 1150	Alloy steel	
13a	Position indicator Model 006 thru 100	304 Stainless steel	
13b	Thrust plate Model 135 thru 1150	Ductile iron	
14	Hex head bolt	Steel, plated***	
15	Lock washer	Steel, plated***	
16	Pointer	Soft PVC	
17	Round head screw	Steel, plated***	
18	Cover, housing	Steel, plated	
19	Hex head bolt	Steel, plated***	
20	Lock washer	Steel, plated***	
21	Flat washer	Steel, plated***	
22	Thrust washer Model 135 thru 1150	Stainless steel	
23	Cover gasket	Fiber	
24	Cylinder	316 Stainless steel**	A276
25	Piston	Ductile iron	A395
26	Adaptor	Ductile iron	A395
27	End cap	Ductile iron	A395
28	Rod cover	Ductile iron	A395
29	Seal-piston rod	BUNA-N	
30	Seal-piston bolt	BUNA-N	
31	Seal-piston	BUNA-N	
33	Piston bolt	Steel, plated***	
34	Lock washer	Steel, plated***	
35	Bearing-piston	Teflon®	
36	Thread seal	EPDM/steel, plated***	
37	Travel stop bolt	Steel, plated***	
38	Jam nut	Steel, plated***	
39	Socket head cap screw	Steel, plated***	
40	Lock washer	Steel, plated***	
41	Tie rod	Steel, plated***	
43	Lock washer	Steel, plated***	
44	Hex head bolt	Steel, plated***	
45	Thread seal	BUNA-N	
46	Seal-cylinder	BUNA-N	
47	Nameplate label	Mylar	
49	Cylinder-spring side	316 Stainless steel**	A276
50	Tie rod-spring side	Steel, plated****	
51	Hex head bolts	Steel, plated***	
52	Adjusting bolt	Steel, plated***	
53	Flat washer	Steel, plated***	
54	End cap-spring side	Ductile iron	A395
55	Outer spring	Spring steel	
56	Inner spring	Spring steel	
57	Breather	Steel, plated***	
58	Spring label	LEXAN® polycarbonate	

*Heat treated

**Electroless nickel-plated carbon steel on Figure 79C models

***18-8 Stainless Steel on sizes 006 thru 100

****316 Stainless Steel on sizes 006 thru 100

Teflon® is a registered trademark of E.I. duPont de Nemours & Company.

LEXAN® polycarbonate is a registered trademark of the General Electric Company.

Principles of Construction

Using ductile iron and stainless steel, the 79B becomes the standard for low cost valve actuation while providing high quality performance.

The actuator housing, end caps, adaptors and piston are all machined from ductile iron castings. This produces a rugged, low cost product through reduced machining time and by eliminating wasteful excess material. Cylinders of 316 stainless steel provide the ultimate in corrosion resistance and increased piston seal performance while reducing maintenance costs. Any components that rotate or slide during operation, such as the high strength alloy steel plated output shaft, chrome-plated piston rod, stainless steel thrust pin or the ductile iron piston, are all supported by replaceable friction reducing bearings.

ISO 5211 Mounting

To provide the greatest flexibility for valve adaptation, each model has a mounting pattern designed in accordance with International Organization for Standardization (ISO) requirements.

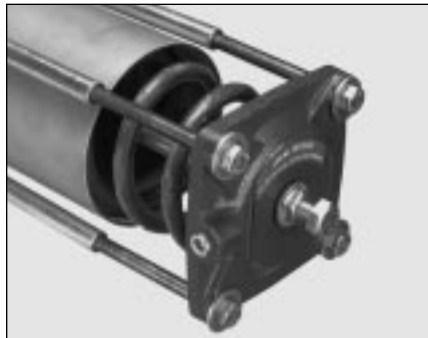
Bi-directional Travel Stops

Adjustable stops on each end cap provide the flexibility of accurate valve rotation positioning at the end of the 'open' and 'close' stroke. Both stops are located on the cylinder centerline, the optimal position to maximize travel adjustment and eliminate any detrimental side loading on the travel stops. Adjustable from 80° to 98°.

Standard Options

- Manual Jackscrew Override
- Metric Mounting Threads
- Viton® Seals
- Low Temperature BUNA-N
- 40 through 160 psig Spring Sets
- Full Stroke Travel Adjustment
- Lock-out Device
- Manual Handpump Override

Viton® is a registered trademark of E.I. duPont de Nemours & Company.



Spring Designed for Safety

All spring return models incorporate a 'man safe' spring design that allows the actuator to be safely assembled and disassembled in the field without the need for special tools. The integral tie rods are bored and tapped to provide a means of loading and unloading the spring in a safe and convenient manner.



Accessory Drive Slot

Each actuator output shaft is provided with a precision machined accessory drive slot for low torque accessory devices such as limit switches and positioners. Various accessories can be directly mounted to the center body of models 135 through 1150 without the need for extra couplings or brackets. The result is a more compact and rigid assembly.



Position Indicator and Pointer

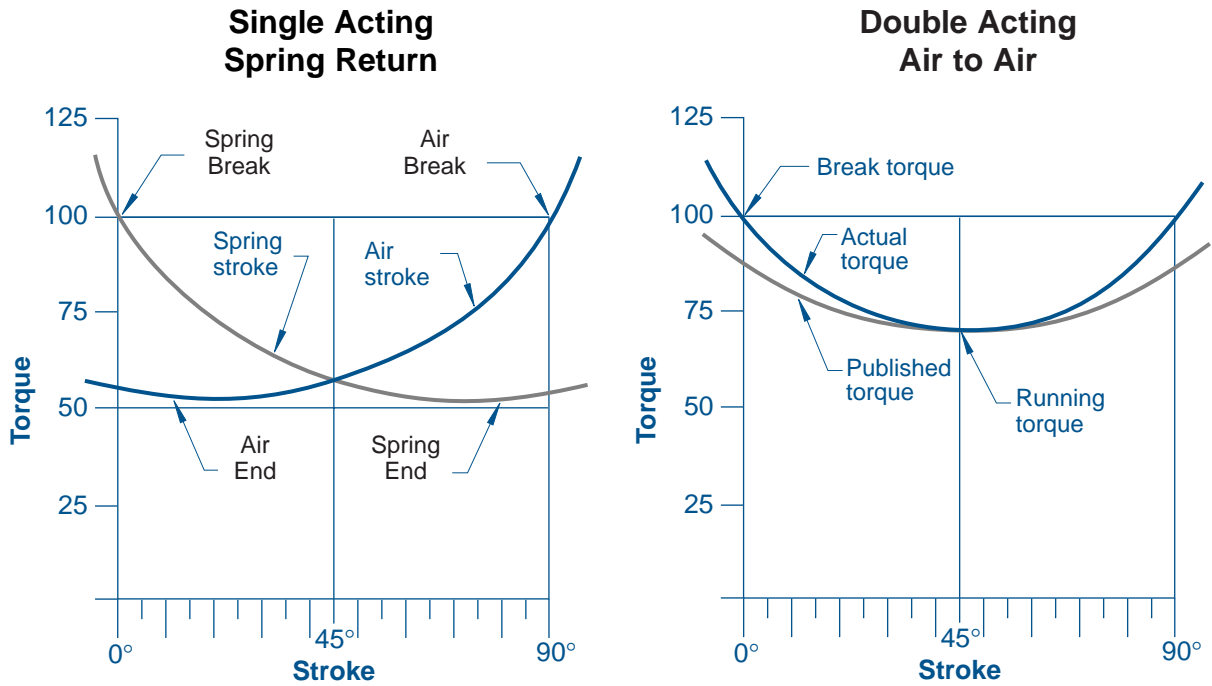
On Models 006 through 100, the 'open-shut-open' indicator plate allows the use of the same indicator and pointer when the failure mode needs to be reversed. When changing from 'fail-close' to 'fail-open' on spring return models, simply mount the stainless steel position indicator plate and pointer on the opposite side of the actuator. The position indicator plate and pointer can be mounted parallel or perpendicular to the actuator centerline.



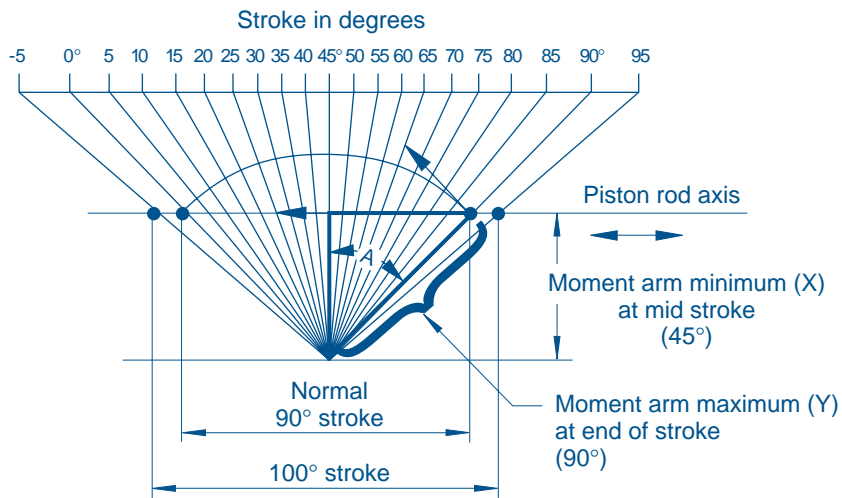
Manual Jackscrew Override

The manual jackscrew override is a low cost alternative to a manual declutchable override. The manual jackscrew provides emergency operation of the valve by rotating the handwheel. Actuator travel stop position is unaffected during operation of the jackscrew override.

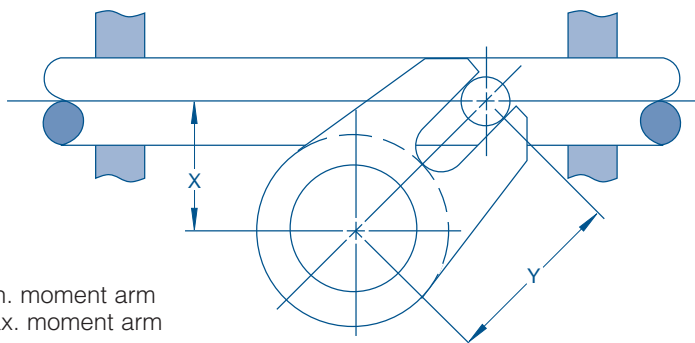
Scotch Yoke Torque Characteristics



Scotch Yoke Mechanics



For max. moment arm at any stroke position multiply min. moment by secant ΔA



X = Min. moment arm
Y = Max. moment arm

CONCLUSION: GREATEST TORQUE OUTPUT IS AT BEGINNING AND END OF STROKE—WHERE IT'S NEEDED!

Morin Figure 79B Actuator

Output Torques (lb.in.) Double Acting - Air to Air

Actuator Model		Air Supply (psig)												
		40	50	60	70	80	90	100	110	120	130	140	150	160
006	Break	300	375	450	525	600	675	750	825	900	975	1050	1125	1200
	Run	235	290	350	405	460	520	575	640	690	750	810	870	940
015	Break	750	935	1125	1310	1500	1685	1875	-	-	-	-	-	-
	Run	590	735	885	1030	1180	1325	1475	-	-	-	-	-	-
023	Break	1150	1450	1725	2010	2300	2585	2875	3160	3450	3740	4020	4300	4600
	Run	855	1070	1285	1500	1710	1925	2140	2350	2570	2780	3000	3210	3420
036	Break	1800	2250	2700	3150	3600	4050	4500	4950	5400	5850	6300	6750	7200
	Run	1370	1710	2055	2400	2740	3080	3425	3770	4110	4450	4800	5140	5480
050	Break	2500	3125	3750	4375	5000	5630	6250	6875	7500	8125	8750	9375	10000
	Run	1840	2300	2760	3220	3680	4140	4600	5060	5520	5980	6440	6900	7360
072	Break	3600	4500	5400	6300	7200	8100	9000	9800	10800	-	-	-	-
	Run	2740	3425	4110	4790	5480	6160	6850	7540	8220	-	-	-	-
100	Break	5000	6250	7500	8750	10000	-	-	-	-	-	-	-	-
	Run	3680	4600	5520	6440	7360	-	-	-	-	-	-	-	-
135	Break	6750	8440	10125	11815	13500	15190	16880	18560	20250	21940	23630	25310	27000
	Run	5250	6565	7875	9185	10500	11810	13125	14440	15750	17060	18375	19690	21000
210	Break	10500	13125	15750	18375	21000	23625	26250	28875	31500	34125	36750	39375	42000
	Run	8160	10200	12240	14280	16320	18360	20400	22440	24480	26520	28560	30600	32640
270	Break	13500	16875	20250	23625	27000	30375	33750	37125	40500	-	-	-	-
	Run	10500	13125	15750	18375	21000	23625	26250	28875	31500	-	-	-	-
370	Break	18500	23125	27750	32375	37000	41625	46250	50875	55500	60125	64750	69375	74000
	Run	13080	16350	19620	22890	26160	29430	32700	35970	39240	42510	45780	49050	52320
420	Break	21000	26250	31500	36750	42000	-	-	-	-	-	-	-	-
	Run	16320	20400	24480	28560	32640	-	-	-	-	-	-	-	-
575	Break	28750	35900	43125	50300	57500	64690	71875	79060	86250	93440	100625	107810	115000
	Run	22440	28050	33660	39270	44880	50490	56100	61710	67320	72930	78540	84150	89760
740	Break	37000	46250	55500	64750	74000	83250	92500	101750	111000	-	-	-	-
	Run	26160	32700	39240	45780	52320	58860	65400	71940	78480	-	-	-	-
1150	Break	57500	71875	86250	100625	115000	-	-	-	-	-	-	-	-
	Run	44880	56100	67320	78540	89760	-	-	-	-	-	-	-	-

Output Torques (lb.in.) Single Acting - Spring Return

Actuator Model		Air Supply (psig)												
		40	50	60	70	80	90	100	110	120	130	140	150	160
006	Break	195	245	290	340	390	-	-	-	-	-	-	-	-
	End	105	130	160	185	210	-	-	-	-	-	-	-	-
015	Break	485	605	730	850	970	-	-	-	-	-	-	-	-
	End	260	325	390	455	525	-	-	-	-	-	-	-	-
023	Break	750	945	1125	1305	1500	1680	1870	-	2250	-	2615	-	3000
	End	400	510	600	705	800	905	1005	-	1200	-	1410	-	1600
036	Break	1170	1460	1755	2050	2340	2630	2925	-	3510	-	4095	-	4700
	End	630	790	950	1100	1260	1415	1575	-	1890	-	2205	-	2500
046	Break	1500	1870	2250	2615	3000	-	-	-	-	-	-	-	-
	End	800	1005	1200	1410	1600	-	-	-	-	-	-	-	-
072	Break	2340	2925	3510	4095	4700	-	-	-	-	-	-	-	-
	End	1260	1575	1890	2205	2500	-	-	-	-	-	-	-	-
100	Break	3250	4060	4880	5690	6500	-	-	-	-	-	-	-	-
	End	1750	2190	2620	3060	3500	-	-	-	-	-	-	-	-
135	Break	4390	5485	6580	7678	8775	9875	10970	-	13160	-	15355	-	17550
	End	2365	2950	3545	4135	4725	5315	5905	-	7090	-	8270	-	9450
210	Break	6825	8530	10240	11945	13650	15350	17060	-	20475	-	23890	-	27300
	End	3675	4590	5510	6430	7350	8270	9190	-	11025	-	12860	-	14700
270	Break	8780	10970	13160	15355	17550	-	-	-	-	-	-	-	-
	End	4730	5905	7090	8270	9450	-	-	-	-	-	-	-	-
370	Break	12025	15030	18040	21045	24050	27055	30060	-	36075	-	42090	-	48100
	End	6475	9085	9710	11330	12950	14570	16190	-	19425	-	22660	-	25900
420	Break	13650	17060	20475	23890	27300	30705	34120	-	-	-	-	-	-
	End	7350	9190	11025	12860	14700	16540	18380	-	-	-	-	-	-
575	Break	18690	23360	28030	32700	37375	42045	46720	-	56060	-	65400	-	74750
	End	10060	12580	15090	17610	20125	22635	25150	-	30190	-	35220	-	40250
740	Break	24050	30060	36075	42090	48100	-	-	-	-	-	-	-	-
	End	12950	16190	19425	22660	25900	-	-	-	-	-	-	-	-
1150	Break	37375	46720	56060	65400	74750	84090	93440	-	-	-	-	-	-
	End	20125	25150	30190	35220	40250	45280	50300	-	-	-	-	-	-

Morin Figure 79B Actuator

Notes

- Air Consumption:
Cubic inches shown in chart represent actual free air volume in cylinder between piston and end cap when furthest apart. Air consumption will vary depending on supply pressure. To determine standard cubic feet per minute use the following formula:

$$\text{SCFM} = \left(\frac{\text{Vol. in}^3}{1728} \right) \left(\frac{\text{Supply Air psig} + 14.7}{14.7} \right) \left(\text{Strokes/Minute} \right)$$

Example: Calculate SCFM for Model 023 double acting using 80 psig air supply and 5 strokes/minute.

$$\text{SCFM} = \left(\frac{52}{1728} \right) \left(\frac{80 + 14.7}{14.7} \right) (5) \quad \text{SCFM} = .97$$

- Cycle times shown represent average time to stroke 90 degrees using standard pilot valves and should be used as a guide only. Cycle times can be increased or decreased dramatically by using speed controls, oversized pilot valves or quick exhaust valves.

How To Order Standard Units:

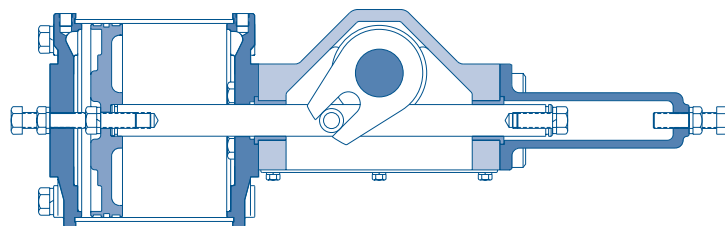
- Double Acting example:
Air supply: 80 psig
Break torque: 7,200 lb.in.
79B-072U-D000
79B: Figure number
072: Model number
U: UNC mounting threads
D000: Double acting
- Spring Return example:
Air supply: 80 psig
Ending torque: 12,950 lb.in.
Fail rotation: Clockwise
79B-370U-S080
79B: Figure number
370: Model number
U: UNC mounting threads
S080: Spring set
- For all spring return models:
 - Use air pressure to determine spring set.
 - All spring sets ending with '0' fail clockwise (40, 50, 60, etc.).
 - All spring sets ending with '1' fail counterclockwise (41, 51, 61, etc.).

Mechanical Data

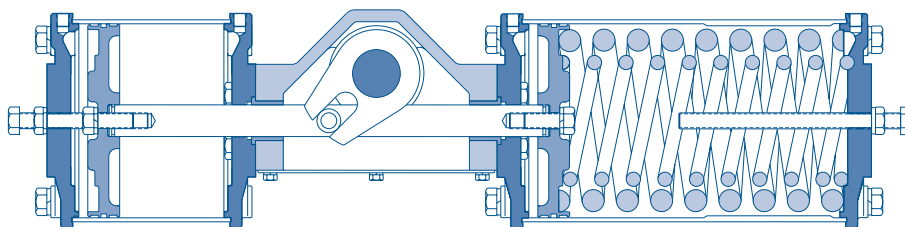
Actuator Model	Number of Pistons	Cylinder Bore (inch)	Stroke (inch)	Volume ¹ Cubic In 95° Stroke	Cycle Time ² Seconds 90° Stroke	Weight (lbs.)
Double Acting						
006	One	2.750	2	14	0.5	11
015	One	4.375	2	35	1.0	14
023	One	4.375	3	52	1.0	30
036	One	5.438	3	78	1.5	33
050	One	6.250	3	104	2.2	39
072	Two	5.438	3	156	2.5	41
100	Two	6.250	3	215	3.0	49
135	One	8.250	5	294	4.5	165
210	One	10.250	5	412	5.0	185
270	Two	8.250	5	588	6.0	210
370	One	12.250	6	780	8.0	390
420	Two	10.250	5	825	8.5	257
575	One	15.500	6	1132	9.5	519
740	Two	12.250	6	1560	10.0	530
1150	Two	15.500	6	2263	12.0	775

Spring Return

006	One	2.750	2	14	0.5	13
015	One	4.375	2	35	1.0	20
023	One	4.375	3	52	1.0	38
036	One	5.438	3	78	1.5	46
046	Two	4.375	3	104	2.0	47
072	Two	5.438	3	156	2.5	60
100	Two	6.250	3	215	3.0	68
135	One	8.250	5	294	4.5	210
210	One	10.250	5	412	5.0	235
270	Two	8.250	5	588	6.0	250
370	One	12.250	6	780	8.0	540
420	Two	10.250	5	825	8.5	379
575	One	15.500	6	1132	9.5	779
740	Two	12.250	6	1560	10.0	660
1150	Two	15.500	6	2263	12.0	1082



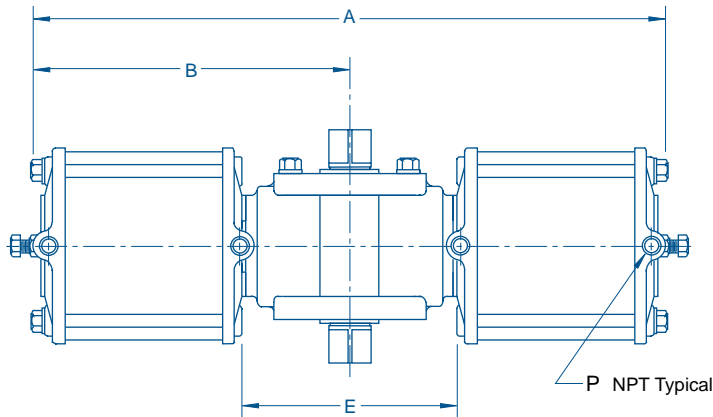
Typical Section - Double Acting/One Piston



Typical Section - Spring Return/Two Pistons

Morin Figure 79B Actuator

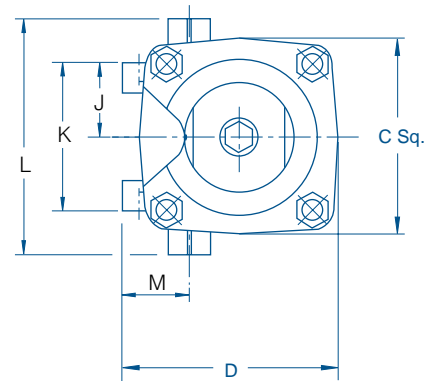
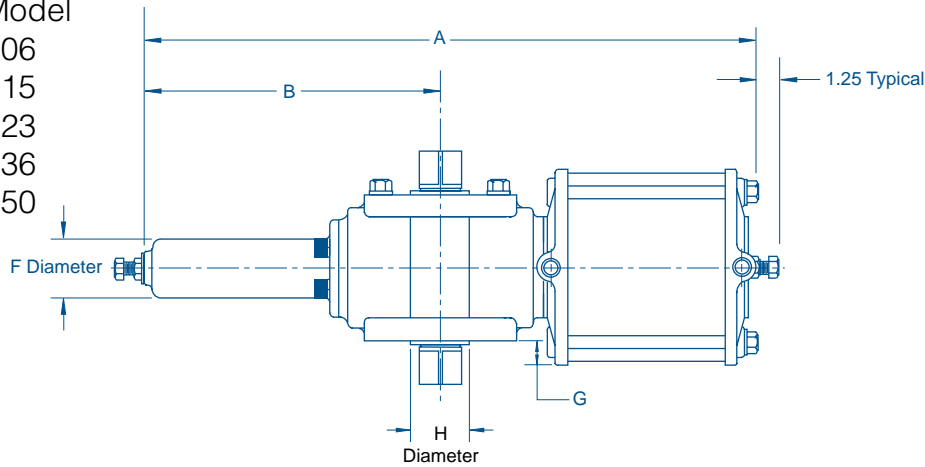
Model
046
072
100



Notes

1. Shown without pointer for clarity.
2. For mounting dimensions, refer to page 10.

Model
006
015
023
036
050



Dimensions (inches)

Model	A	B	C	D	E	F	G	H	J	K	L	M	P
Double Acting													
006DA	12.87	5.28	3.18	3.87	-	1.09	0.18	1.50	1.50	3.00	4.75	1.31	1/8
015DA	12.31	5.28	4.81	4.81	-	1.09	1.00	1.50	1.50	3.00	4.75	1.31	1/4
023DA	18.38	8.81	4.81	6.18	-	1.75	0.25	1.75	2.16	4.31	6.81	2.25	1/4
036DA	18.38	8.81	5.81	6.68	-	1.75	0.75	1.75	2.16	4.31	6.81	2.25	1/4
050DA	18.38	8.81	7.12	7.34	-	1.75	1.32	1.75	2.16	4.31	6.81	2.25	1/4
072DA	19.12	9.56	5.81	6.68	6.31	-	0.75	1.75	2.16	4.31	6.81	2.25	1/4
100DA	19.12	9.56	7.12	7.34	6.31	-	1.32	1.75	2.16	4.31	6.81	2.25	1/4

Spring Return

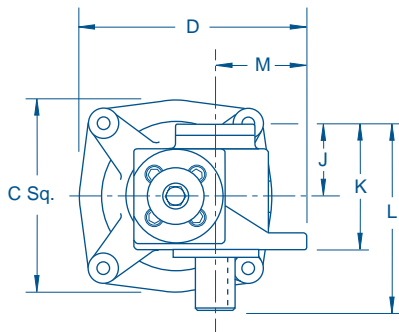
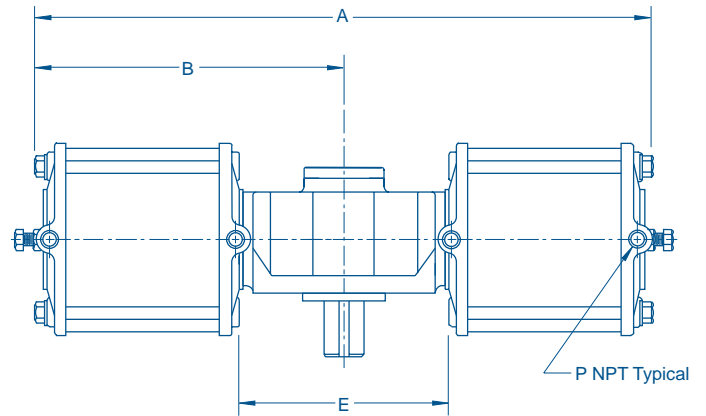
006SR	12.87	5.28	3.18	3.87	-	1.09	0.18	1.50	1.50	3.00	4.75	1.31	1/8
015SR	14.50	5.28	4.81	4.81	-	1.09	1.00	1.50	1.50	3.00	4.75	1.31	1/4
023SR	22.13	8.81	4.81	6.18	-	1.75	0.25	1.75	2.16	4.31	6.81	2.25	1/4
036SR	23.51	8.81	5.81	6.68	-	1.75	0.75	1.75	2.16	4.31	6.81	2.25	1/4
046SR	22.88	9.56	4.81	6.18	6.31	-	0.25	1.75	2.16	4.31	6.81	2.25	1/4
072SR	24.25	9.56	5.81	6.68	6.31	-	0.75	1.75	2.16	4.31	6.81	2.25	1/4
100SR	24.25	9.56	7.12	7.34	6.31	-	1.32	1.75	2.16	4.31	6.81	2.25	1/4

Morin Figure 79B Actuator

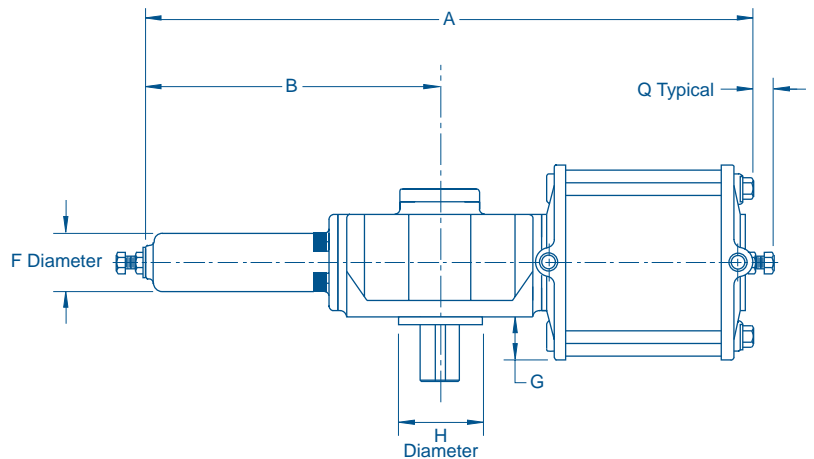
Notes

1. Shown without pointer for clarity.
2. For mounting dimensions, refer to page 10.

Model
270
420
740
1150



Model
135
210
370
575



Dimensions (inches)

Model	A	B	C	D	E	F	G	H	J	K	L	M	P	Q
Double Acting														
135DA	32.00	15.38	9.50	10.44	-	2.75	1.25	-	4.38	8.13	11.82	3.19	3/8	1.75
210DA	32.38	15.88	11.50	11.88	-	2.75	2.00	-	4.38	8.13	11.82	3.19	1/2	2.12
270DA	33.25	16.62	9.50	10.44	11.00	-	1.25	-	4.38	8.13	11.82	3.19	3/8	1.75
370DA	41.50	19.75	13.50	16.75	-	3.50	2.69	5.90	5.44	9.50	14.81	6.88	1/2	1.75
420DA	34.00	17.00	11.50	11.88	10.00	-	2.00	-	4.38	8.13	11.82	3.19	1/2	2.12
575DA	42.25	19.75	17.00	18.50	-	3.50	4.50	5.90	5.44	9.50	14.81	6.88	3/4	2.50
740DA	43.00	21.50	13.50	16.75	14.75	-	2.69	5.90	5.44	9.50	14.81	6.88	1/2	1.75
1150DA	45.00	22.50	17.00	18.50	13.75	-	4.50	5.90	5.44	9.50	14.81	6.88	3/4	2.50

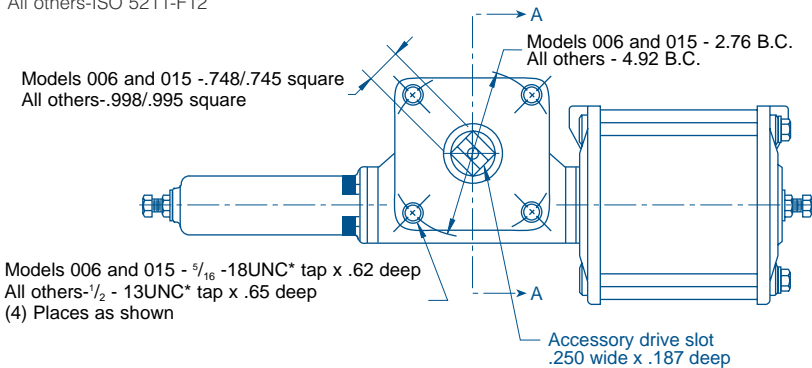
Spring Return

135SR	38.81	15.38	9.50	10.44	-	2.75	1.25	-	4.38	8.13	11.82	3.19	3/8	1.75
210SR	41.88	15.88	11.50	11.88	-	2.75	2.00	-	4.38	8.13	11.82	3.19	1/2	2.12
270SR	40.00	16.62	9.50	10.44	11.00	-	1.25	-	4.38	8.13	11.82	3.19	3/8	1.75
370SR	52.00	19.75	13.50	16.75	-	3.50	2.69	5.90	5.44	9.50	14.81	6.88	1/2	1.75
420SR	43.50	17.00	11.50	11.88	10.00	-	2.00	-	4.38	8.13	11.82	3.19	1/2	2.12
575SR	54.25	19.75	17.00	18.50	-	3.50	4.50	5.90	5.44	9.50	14.81	6.88	3/4	2.50
740SR	53.50	21.50	13.50	16.75	14.75	-	2.69	5.90	5.44	9.50	14.81	6.88	1/2	1.75
1150SR	57.00	22.50	17.00	18.50	13.75	-	4.50	5.90	5.44	9.50	14.81	6.88	3/4	2.50

Morin Figure 79B Actuator

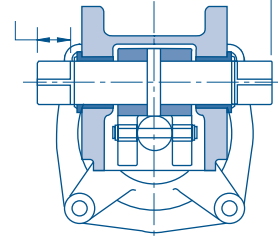
Mounting Details

Models 006 thru 100
 Top and bottom of housing (symmetrical)
 Models 006 and 015 ISO 5211-F07
 All others-ISO 5211-F12

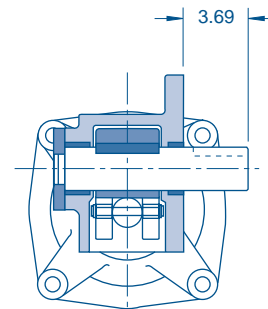
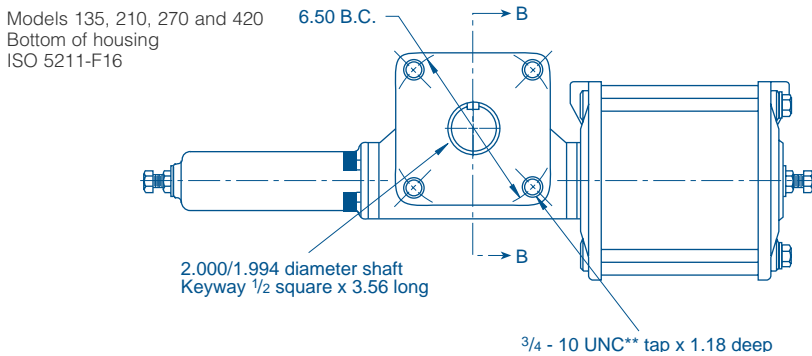


Models 006 and 015 - .68
 All others - 1.00

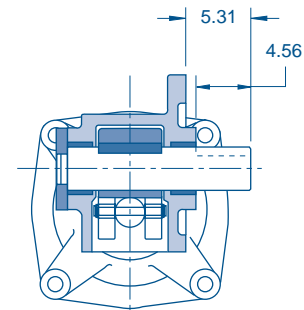
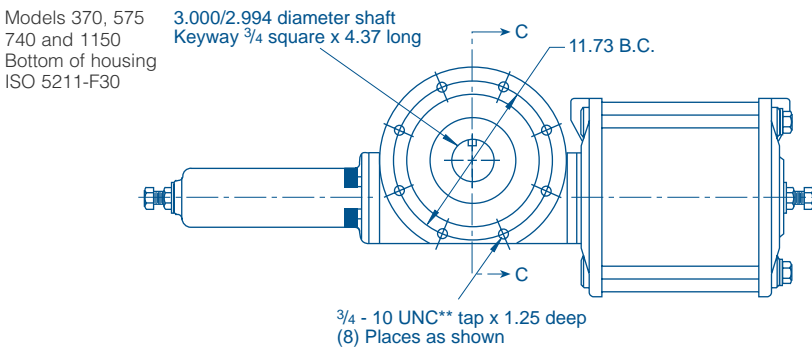
Models 006 and 015 - .87
 All others - 1.25



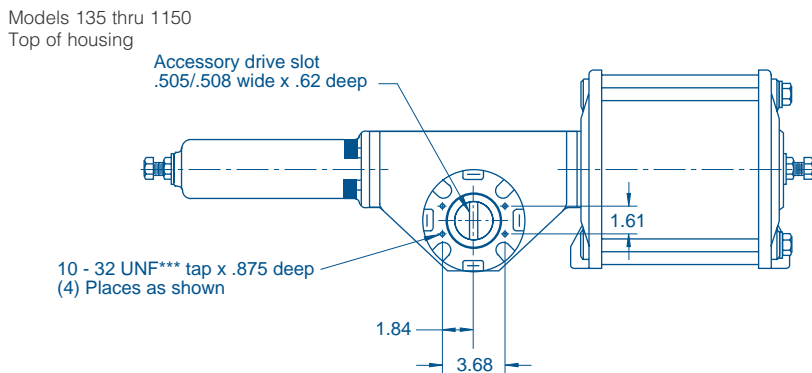
Section A - A



Section B - B



Section C - C



Metric Thread Option

Metric Tap	Model Number
*M8	006 and 015
*M12	023 thru 100
**M20	135 thru 1150
***M5	135 thru 1150

Replace 'U' with 'M' in order number designation (refer to page 7).

Standard Accessories - Available for All Models

LP-Switch

Figure 792L

Low profile, anodized aluminum housing with polyester coating. 2-SPDT mechanical switches with top adjustable cams prewired to a terminal strip. Enclosure rating: NEMA 4 and 4x.

K-Switch™

Figure 792K

Threaded cover and housing of anodized aluminum with powder coat finish. Features V3 switch elements with terminal strip and adjustable K-Cam tripping system. Reflective indicator for visual position indication up to 100 feet. UL Listed NEMA 4, 4x, 7 and 9 for Class I, Div. 1, Groups C & D and Class II, Div. 1, Groups E, F & G.

K-Block™

Figure 792E

Compact enclosure of engineered resin and potting for durability and corrosion resistance. Two inductive switches in a sealed enclosure provide an end-of-travel sensor impervious to moisture, with LED indication. NEMA 3, 4, 4x, 6, 12, 13 & IP67 protection rating.

A-Switch

Figure 792A

Multi-purpose, anodized aluminum housing with polyester coating. Spacious enclosure readily accepts various switch types prewired to a terminal strip. Potentiometer, retransmission module or pneumatic valves are also available. Enclosure rating: NEMA 4, 4x, 6, 7 and 9.

Positioner

Figure 787-4

Pneumatic positioner for double or single acting requirements. Powder coated aluminum housing with visual position indicator. Linear feedback with span and zero adjustment.

High Visibility Indicator

Figure 792H

Provides visual position indication up to 150 feet with 360 degrees of viewing area. Molded housing easily mounts to 792A and 792L switch-boxes.

Typical Mounting for Models 006 thru 100



LP-Switch

Typical Mounting for Models 135 thru 1150



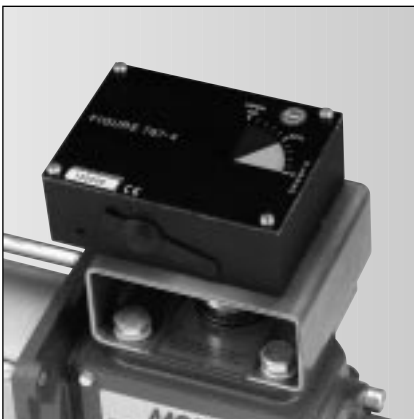
K-Switch



K-Block



A-Switch

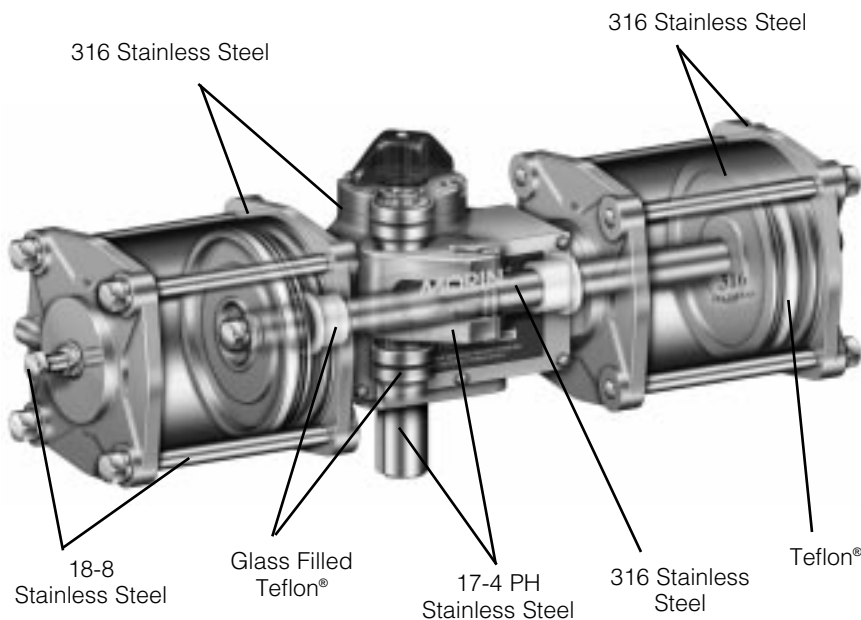


Positioner



High Visibility Indicator

Also available



The 79S Actuator (All Stainless)...

Setting an unrivaled standard in actuation at a price unexpectedly low for stainless steel.

- 160 psig pressure rating
- Double acting break torques to 115,000 lb.in.
- Spring end torques to 50,300 lb.in.

For additional information, refer to Publication M79S.

The 79B-HP Actuator...

High pressure actuation with stainless steel cylinders for superior corrosion resistance.

- 1500 psig pressure rating
- Double acting torques to 105,370 lb.in.
- Spring end torques to 50,300 lb.in.

For additional information, refer to Publication M7BP.



MORIN®
tyco valves & controls

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