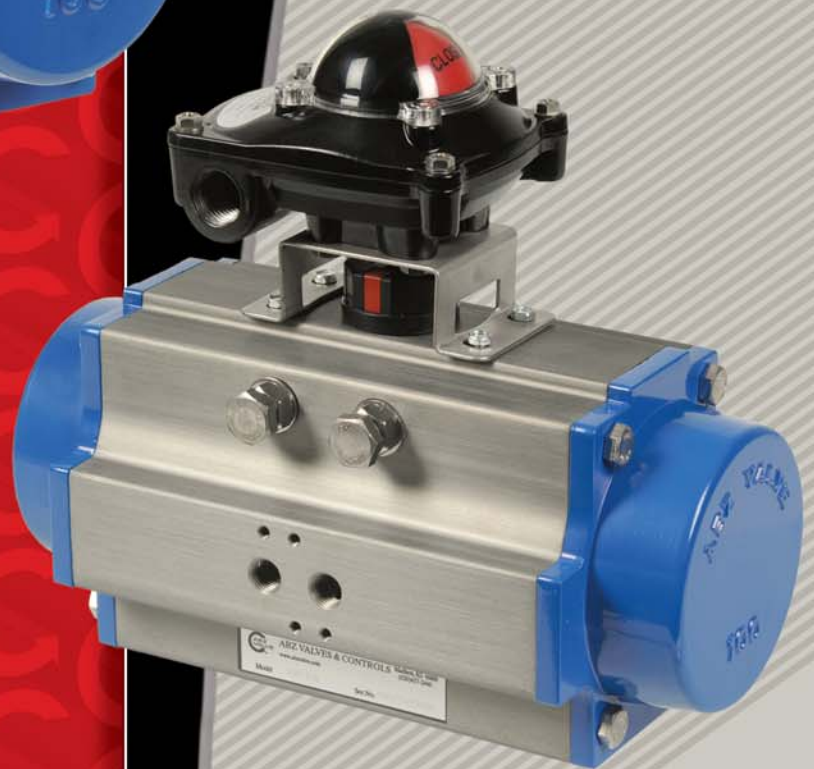
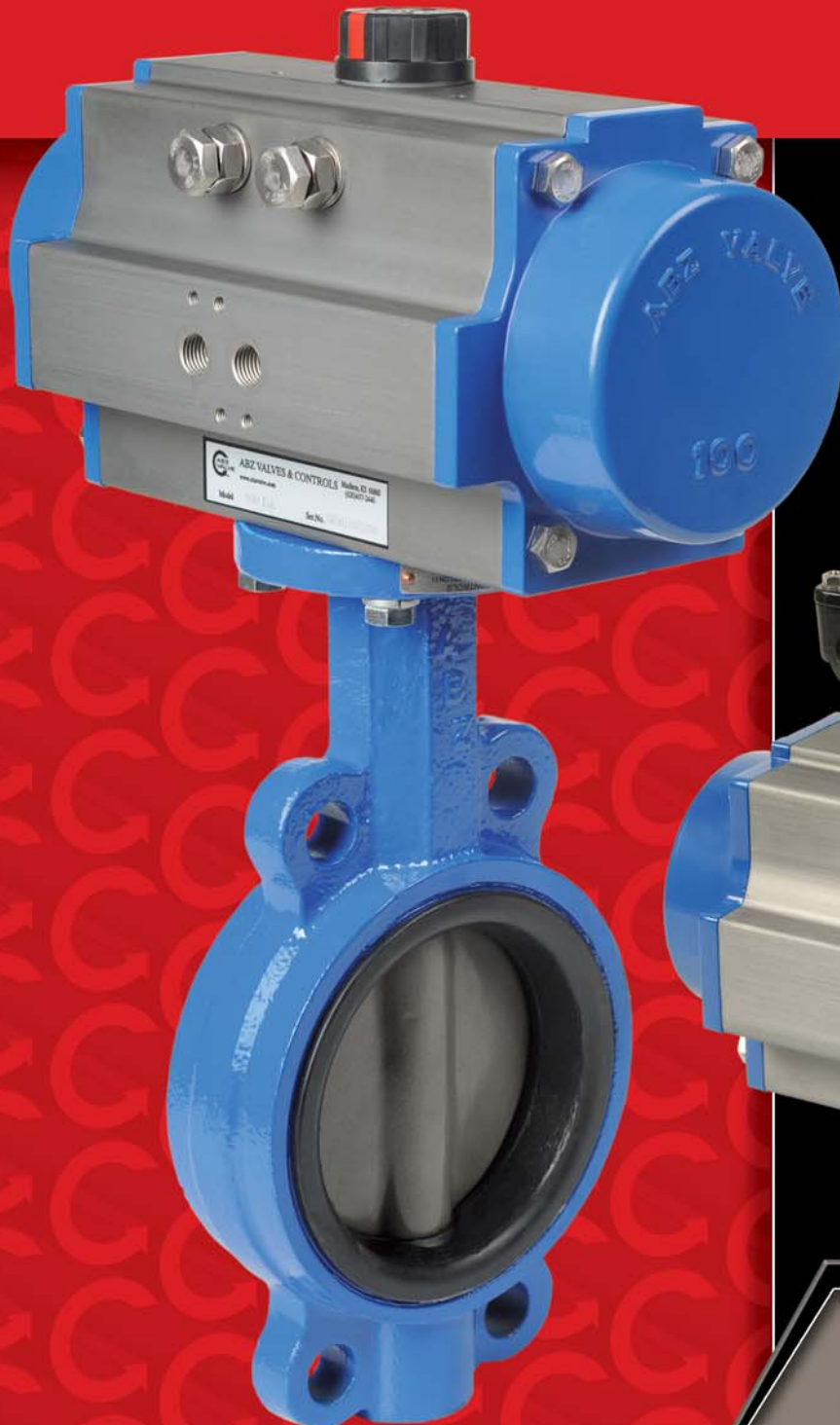


Pneumatic Actuator
Technical Data Sheet



Series 227



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ABZ Series 227 Technical Information

FEATURES

- Eleven Sizes
- Rack and Pinion
- Double Acting and Spring Return
- Four different BREAK and SEAT torque combinations per body size using the pre-loaded spring cartridges
- NAMUR interface for easy solenoid mounting
- Mid body NAMUR interface for easy air and electrical connections
- Anodized cylinders and epoxy coated end-caps secured with stainless steel fasteners for corrosion resistance
- Large piston guides and rings provide minimum cylinder wear and optimum contact between the rack and pinion
- Dual travel stops

ABZ SERIES 227
DOUBLE ACTING TORQUE CHART

MODEL	40 psi	60 psi	80 psi	100 psi	120 psi	Weight		Volume Cu. In.	
						LBS.	Kg	CW	CCW
ABZ-50DA	77	115	154	192	231	2.9	1.3	7.9	6.2
ABZ-63DA	136	203	272	340	409	3.5	1.6	16.0	10.8
ABZ-75DA	269	404	539	673	808	6.4	2.9	29.5	21.2
ABZ-88DA	424	636	847	1060	1272	9.3	4.2	45.8	35.9
ABZ-100DA	614	921	1227	1534	1842	12.3	5.6	65.0	50.0
ABZ-115DA	997	1494	1992	2490	2989	20.0	9.1	105.0	79.8
ABZ-125DA	1282	1922	2562	3202	3844	22.0	10.0	137.9	103.7
ABZ-145DA	2016	3023	4031	5039	6047	30.4	13.8	224.5	165.8
ABZ-160DA	2630	3944	5259	6574	7889	46.9	21.3	288.8	213.7
ABZ-180DA	3551	5326	7101	8877	10652	59.0	26.8	420.0	279.4
ABZ-210DA	4929	7394	9858	12323	14789	80.8	36.7	569.6	382.0

Air Consumption (scf per 90 Deg) = (Volume/1728) x (Supply Pressure + 14.7)/14.7

Specifications

Pressure Range 40 to 120 psi

*Temperature Range -4 to 176 degrees F

Stroke 90 degrees +/- 5 degrees

Media Dry or lubricated air.
Use of lubricated air, once started, cannot be discontinued.

Lubrication All moving parts are factory lubricated
No additional lubrication required.

Construction Suitable for indoor and outdoor installation.

Mounting Dimension ABZ standard for direct mounting capabilities.
ABZ 210 is designed to ISO mount standards.

**High temp and low temp configurations available.*



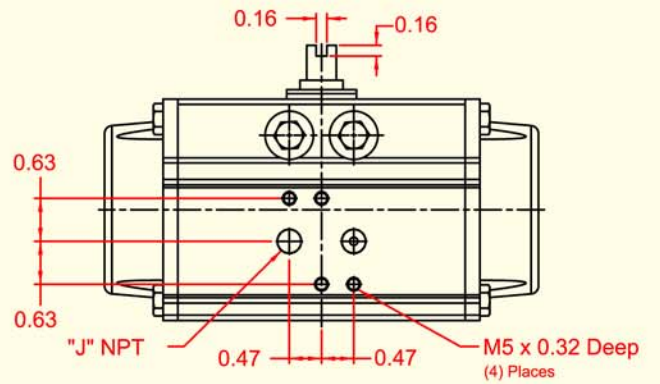
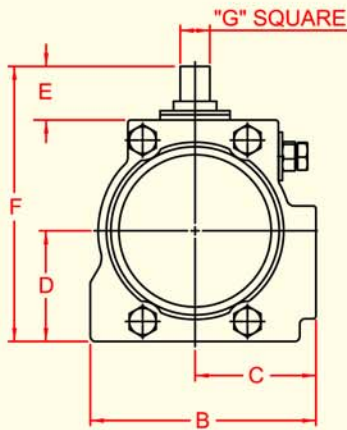
ABZ Series 227 Data Sheet

ABZ SERIES 227 SPRING RETURN TORQUE CHART

MODEL	Set	Spring Torque Inch LBS.		40 psi		60 psi		80 psi		100 psi		120 psi		Weight		Volume Cu. In.	
		Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	LBS.	Kg	Spring	Air
ABZ-50SR	3/3	48	33	44	29	83	67	109	89	148	128	166	141	3.1	1.4	7.9	6.2
	4/4	66	46														
	5/5	82	56														
	6/6	99	68														
ABZ-63SR	3/3	85	59	80	49	148	118	198	158	266	226	299	249	3.7	1.7	16.0	10.8
	4/4	114	76														
	5/5	142	93														
	6/6	170	112														
ABZ-75SR	3/3	175	112	158	95	294	231	391	307	526	442	590	485	7.0	3.2	29.5	21.2
	4/4	233	149														
	5/5	291	186														
	6/6	349	223														
ABZ-88SR	3/3	292	185	239	133	451	345	602	461	815	670	912	734	10.4	4.7	45.8	35.9
	4/4	389	246														
	5/5	486	309														
	6/6	583	370														
ABZ-100SR	3/3	398	256	361	219	670	528	884	697	1201	1012	1347	1111	14.1	6.4	65.0	50.0
	4/4	530	340														
	5/5	662	427														
	6/6	794	511														
ABZ-115SR	3/3	661	413	582	335	1081	834	1441	1112	1939	1609	2176	1764	21.1	9.6	105.0	79.8
	4/4	883	551														
	5/5	1101	690														
	6/6	1320	827														
ABZ-125SR	3/3	831	530	754	454	1395	1093	1859	1458	2499	2099	2804	2303	25.3	11.5	137.9	103.7
	4/4	1110	706														
	5/5	1387	883														
	6/6	1664	1059														
ABZ-145SR	3/3	1302	832	1185	718	2195	1728	2926	2304	3936	3314	4416	3638	37.4	17.0	224.5	165.8
	4/4	1732	1110														
	5/5	2169	1387														
	6/6	2597	1664														
ABZ-160SR	3/3	1673	1134	1496	951	2812	2268	3749	3023	5065	4339	5673	4766	54.0	24.5	288.8	213.7
	4/4	2236	1513														
	5/5	2791	1883														
	6/6	3354	2261														
ABZ-180SR	3/3	2387	1597	1958	1164	3733	2937	4976	3916	6750	5691	7551	6226	70.5	32.0	420.0	279.4
	4/4	3186	2127														
	5/5	3985	2660														
	6/6	4775	3186														
ABZ-210SR	3/3	3178	2143	2790	1756	5257	4224	7009	5631	9476	8098	10612	8889	94.3	42.8	569.6	382.0
	4/4	4237	2858														
	5/5	5296	3573														
	6/6	6356	4287														

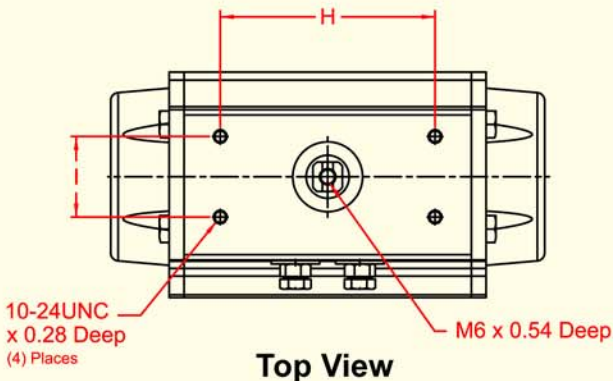
Air Consumption (scf per 90 Deg) = (Volume/1728) x (Supply Pressure +14.7)/14.7

ABZ Series 227 Dimensional Information

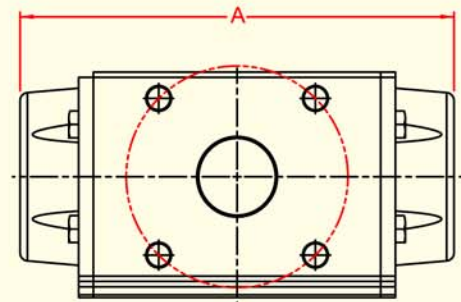


ABZ SERIES 227

MODEL	DIMENSIONS									
	A	B	C	D	E	F	G	H	I	J
ABZ50	5.43	3.11	1.57	1.54	.079	3.82	0.43	3.15	1.18	1/8"
ABZ63	6.43	3.31	1.77	1.62	.079	4.07	0.43	3.15	1.18	1/8"
ABZ75	8.17	3.72	2.07	1.91	.079	4.72	0.67	3.15	1.18	1/8"
ABZ88	9.56	4.30	2.37	2.22	.079	5.33	0.67	3.15	1.18	1/4"
ABZ100	10.60	4.88	2.72	2.52	.079	5.89	0.67	3.15	1.18	1/4"
ABZ115	12.09	5.41	2.87	2.85	.079	6.52	0.67	3.15	1.18	1/4"
ABZ125	13.37	5.69	3.15	3.11	1.18	7.38	1.06	5.12	1.18	1/4"
ABZ145	15.84	6.63	3.54	3.52	1.18	8.23	1.06	5.12	1.18	1/4"
ABZ160	16.97	7.34	3.94	3.82	1.18	8.74	1.06	5.12	1.18	1/4"
ABZ180	18.74	8.03	4.02	4.37	1.18	9.92	1.42	5.12	1.18	1/4"
ABZ210	21.13	8.78	4.39	4.80	1.18	10.79	1.42	5.12	1.18	1/4"

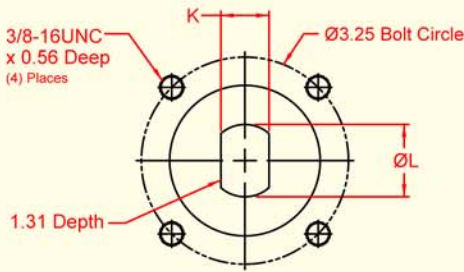


Top View



Bottom View

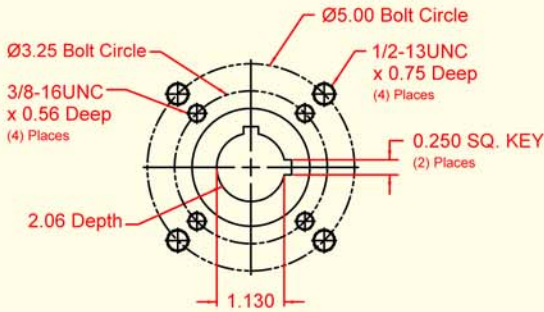
ABZ Series 227 Mounting Pad Information



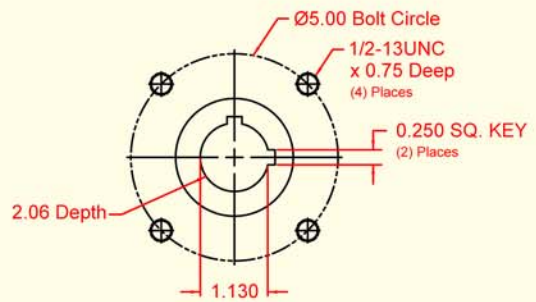
ACTUATOR MOUNTING
MODELS 50 thru 100

ABZ SERIES 227

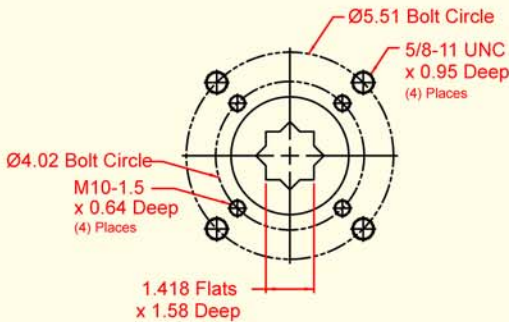
MODEL	DIMENSIONS	
	K	L
ABZ50	0.378	0.568
ABZ63	0.378	0.568
ABZ75	0.503	0.755
ABZ88	0.503	0.755
ABZ100	0.503	0.755



ACTUATOR MOUNTING
MODELS 115 thru 160



ACTUATOR MOUNTING
MODEL 180



ACTUATOR MOUNTING
MODEL 210

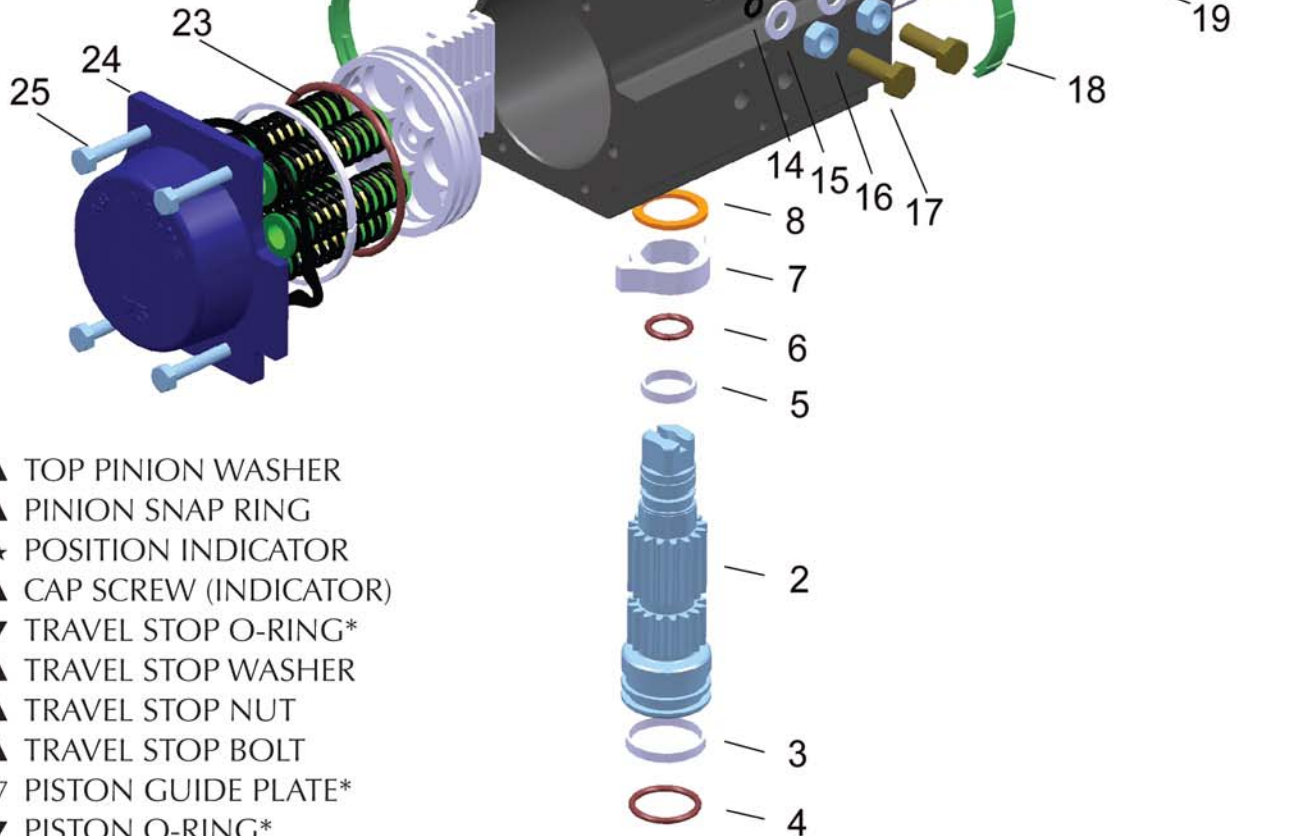
Notes:

Stem adaptors available for direct mounting.

SERIES 227 PARTS LIST

NO. NAME

- 1 □ BODY
- 2 ○ ANTI-BLOWOUT PINION
- 3 ▽ BOTTOM PINION BUSHING*
- 4 ▼ BOTTOM PINION O-RING*
- 5 ▽ TOP PINION BUSHING*
- 6 ▼ TOP PINION O-RING*
- 7 ▲ TRAVEL STOP CAM
- 8 ▽ STOP CAM SPACER*
- 9 ▽ TOP PINION SPACER*



- 10 ▲ TOP PINION WASHER
- 11 ▲ PINION SNAP RING
- 12 ★ POSITION INDICATOR
- 13 ▲ CAP SCREW (INDICATOR)
- 14 ▼ TRAVEL STOP O-RING*
- 15 ▲ TRAVEL STOP WASHER
- 16 ▲ TRAVEL STOP NUT
- 17 ▲ TRAVEL STOP BOLT
- 18 ▽ PISTON GUIDE PLATE*
- 19 ▼ PISTON O-RING*
- 20 ▽ PISTON GUIDE RING*
- 21 ▼ END CAP SEALS*
- 22 ● PISTON
- 23 △ SPRING CARTRIDGE
- 24 ■ END CAP
- 25 ▲ END CAP BOLTS

*Recommended Spare Parts Kit

Materials of Construction

- Extruded Aluminum alloy.....Hard Anodized
- Die Cast Aluminum.....Blue Epoxy Coated
- Steel.....Nickel Plated
- Die Cast Aluminum alloy.....Natural
- ▽ POM.....Natural
- ▼ NBR70.....Natural
- △ Spring Steel.....Electrophoretic
- ▲ Stainless Steel.....Natural
- ★ Nylon.....Natural



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