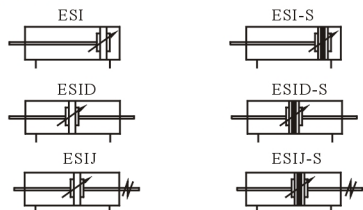


ISO 6431 STANDARD CYLINDER

ESI, ESID, ESIJ SERIES

AirTAC

■ Symbol



■ Specification

Bore size		mm	32	40	50	63	80	100	125	160	200	
Action			Double acting type									
Fluid			Air (to be filtered by 40 μ colander)									
Mounting type	SI、ESI	Basic	FA	FB	CA	CB	CR	LB	TC	FTC	TC-M-1	TC-M-2
	SID、ESID	Basic		FA	LB	TC	FTC	TC-M-1	TC-M-2			
	SIJ、ESIJ	Basic		FA	LB	TC	FTC	TC-M-1	TC-M-2			
Pressure range			1.0~9.0bar (0.1~0.9MPa)(14~128Psi)									
Proof pressure			15.0bar (1.5MPa)(213Psi)									
Temperature range			℃ -5~70									
Speed range			mm/s ESI Series: 50~800 Other Series: 30~800									
Cushion type			Variable cushion									
Adjustable cushion stroke mm			24									
Port size			1/8″	1/4″	3/8″			1/2″			3/4″	

*Refer to PVI-46~VI-47 for details information of sensor switch.

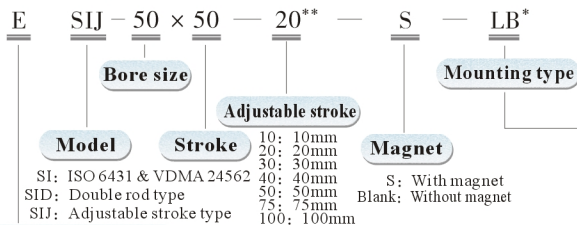
*Note: PT, NPT, BSPP Thread are available.

■ Stroke list

Bore size (mm)	Standard stroke																Max. Stroke	Available Stroke upto					
32	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	1000	2000					
40	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	1200	2000		
50	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1200	2000
63	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
80	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
100	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
125	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
160	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
200	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000

Note: Consult us for non-standard stroke.

■ Ordering code



	Mounting type	Available Series
(Blank)		ESI ESID ESIJ
LB		ESI ESID ESIJ
FA		ESI ESID ESIJ
FB		ESI
CA		ESI
CB		ESI
TC		ESI ESID ESIJ

Piston-rod material

Blank: Carbon steel with 20 μm chrome plated
E: SUS316

* Please refer to Page III-06~III-08 for accessory parts.

** Only ESIJ series have this Item.

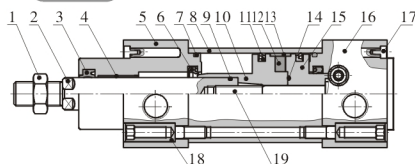
ISO 6431 STANDARD CYLINDER

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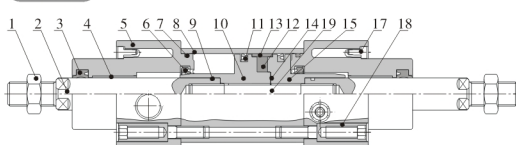
AirTAC

Inner structure

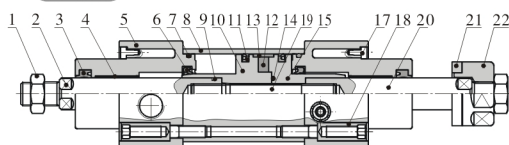
ESI



ESID



ESIJ



NO.	Item	NO.	Item	NO.	Item
1	Rod nut	9	Rod O-ring	17	Plastic cover
2	Piston rod	10	Magnet holder	18	Tie-rod nut
3	Rod packing	11	Magnet holder O-ring	19	Screw
4	Bushing	12	Magnet	20	Piston rod
5	Front cover	13	Wearing	21	Bumper
6	Cushion O-ring	14	Pilot O-ring	22	Adjustable nut
7	Barrel gasket	15	Pilot body		
8	Barrel	16	Back cover		

Bore size 32 is without plastic cover in the front and back cover.

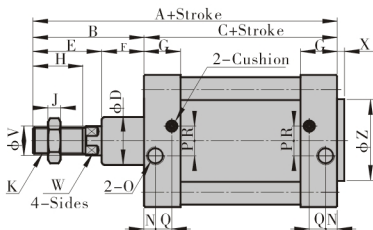
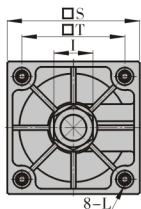
Material of major parts

Bore size(mm)	32	40	50	63	80	100	125	160	200	Bore size(mm)	32	40	50	63	80	100	125	160	200					
Barrel	Aluminum alloy									Cushion gasket	NBR													
Piston	Aluminum alloy									Wearing ring	PTFE+Graphite													
Rod	SI series: Carbon steel with 20μ chrome plated ESI series: SUS316									Bushing	Low-carbon steel +Composite material													
Rod packing	NBR									Front cover	Aluminum alloy													
Rod O-ring	NBR									Magnet	Plastic				Rubber									
Cushion body O-ring	NBR									Cushion body	Aluminum alloy													
Piston O-ring	TPU									Cushion patch	Carbon steel													
Barrel gasket	NBR									Cushion needle	Copper with nickel plated													
Cushion O-ring	NBR									Adjusting nut	Carbon steel													

Dimensions

SI

ESI



Item Bore size	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	V	W	X	Z
32	142	48	94	30	28	20	27.5	22	17	6	M10 × 1.25	M6	13.5	1/8"	4	7.5	7	47	32.5	12	10	3	30
40	159	54	105	35	34	22	32	24	19	7	M12 × 1.25	M6	16	1/4"	6	8.5	9	53	38	16	13	3.5	35
50	175	69	106	40	42	27	31	32	24	8	M16 × 1.5	M8	15.5	1/4"	8.5	7.5	7.5	65	46.5	20	17	3.5	40
63	190	69	121	45	40	29	33	32	24	8	M16 × 1.5	M8	16.5	3/8"	7.5	8.5	9	75	56.5	20	17	4	45
80	214	86	128	45	53	33	33	40	30	10	M20 × 1.5	M10	16.5	3/8"	11	8.5	13.5	95	72	25	22	4	45
100	229	91	138	55	55	36	37	40	30	10	M20 × 1.5	M10	18.5	1/2"	13.5	9.5	14.5	115	89	25	22	4	55
125	279	119	160	60	74	45	46	54	41	13.5	M27 × 2	M12	23	1/2"	14	12	14	140	110	32	27	4	60
160	332	152	180	65	94	58	50	72	55	18	M36 × 2	M16	25	3/4"	15	12	20	180	140	40	36	4	65
200	347	167	180	75	100	67	50	72	55	18	M36 × 2	M16	25	3/4"	15	12	20	220	175	40	36	5	75

The dimensions of magnet type cylinder are exactly the same as non-magnet type cylinder.

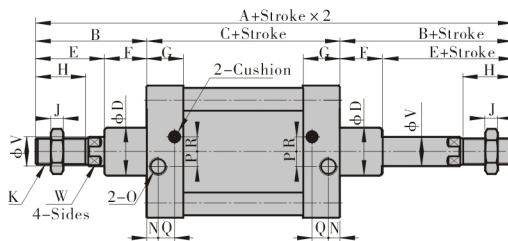
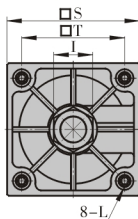
ISO 6431 STANDARD CYLINDER

ESI, ESID, ESIJ SERIES

AirTAC

SID

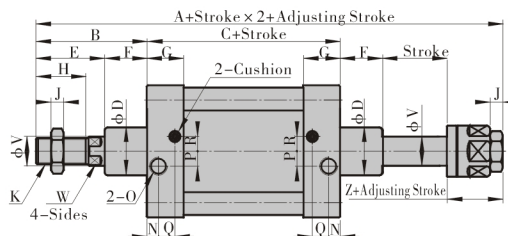
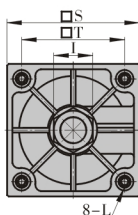
ESID



Item Bore size	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	V	W
32	190	48	94	30	28	20	27.5	22	17	6	M10 × 1.25	M6	13.5	1/8"	4	7.5	7	47	32.5	12	10
40	213	54	105	35	32	22	32	24	19	7	M12 × 1.25	M6	16	1/4"	6	8.5	9	53	38	16	13
50	244	69	106	40	42	27	31	32	24	8	M16 × 1.5	M8	15.5	1/4"	7.5	8.5	8.5	65	46.5	20	17
63	259	69	121	45	40	29	33	32	24	8	M16 × 1.5	M8	16.5	3/8"	7.5	8.5	9	75	56.5	20	17
80	300	86	128	45	53	33	33	40	30	10	M20 × 1.5	M10	16.5	3/8"	11	8.5	13.5	95	72	25	22
100	320	91	138	55	55	36	37	40	30	10	M20 × 1.5	M10	18.5	1/2"	13.5	9.5	14.5	115	89	25	22
125	398	119	160	60	74	45	46	54	41	13.5	M27 × 2	M12	23	1/2"	14	12	14	140	110	32	27
160	484	152	180	65	94	58	50	72	55	18	M36 × 2	M16	25	3/4"	15	12	20	180	140	40	36
200	514	167	180	75	100	67	50	72	55	18	M36 × 2	M16	25	3/4"	15	12	20	220	175	40	36

SIJ

ESIJ



Item Bore size	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	V	W	Z
32	189	48	94	30	28	20	27.5	22	17	6	M10 × 1.25	M6	13.5	1/8"	4.5	6.5	6.5	47	32.5	12	10	21
40	209	54	105	35	32	22	32	24	19	7	M12 × 1.25	M6	16	1/4"	6	8.5	9	53	38	16	13	21
50	234	69	106	40	42	27	31	32	24	8	M16 × 1.5	M8	15.5	1/4"	8.5	7.5	7.5	65	46.5	20	17	23
63	250	69	121	45	40	29	33	32	24	8	M16 × 1.5	M8	16.5	3/8"	7.5	8.5	9	75	56.5	20	17	23
80	286	86	128	45	53	33	33	40	30	10	M20 × 1.5	M10	16.5	3/8"	11	8.5	13.5	95	72	25	22	29
100	304	91	138	55	55	36	37	40	30	10	M20 × 1.5	M10	18.5	1/2"	13.5	9.5	14.5	115	89	25	22	29
125	378	119	160	60	74	45	46	54	41	13.5	M27 × 2	M12	23	1/2"	14	12	14	140	110	32	27	40.5
160	458	152	180	65	94	58	50	72	55	18	M36 × 2	M16	25	3/4"	15	12	20	180	140	40	36	50
200	486	167	180	75	100	67	50	72	55	18	M36 × 2	M16	25	3/4"	15	12	20	220	175	40	36	54

※ The dimensions of magnet type cylinder are exactly the same as non-magnet type cylinder.

