

AIR CYLINDER

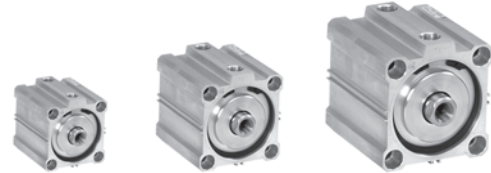
Series A02

Cat No A02 - 01 - 03

COMPACT CYLINDERS Double Acting (Ø12 - 100) mm

Features

- Compact, light weight, and space saving design
- Large clamping force in relation to their size
- Low friction, long life seal design
- Elastomer end cushion



Application

These compact cylinders are widely used in low cost automation, SPMs, industrial machinery, Jigs & fixtures etc.

Technical Specifications

Cylinder bore Ø (mm)	12	16	20	25	32	40	50	63	80	100
Standard strokes* (mm)	5, 10, 15, 20, 25, 30, 40		5, 10, 15, 20, 25, 30, 40, 50		5, 10, 15, 20, 25, 30, 40, 50, 60		10, 20, 30, 40, 50, 60, 70, 80			
Medium	Compressed air - filtered - lubricated									
Working pressure range	0.5 - 10 bar									
Medium temperature	5° - 60° C									

* For Non standard or longer stroke cylinders, contact your regional dealer or JANATICS

Output force (force in N : 1N = 0.1 kgf)

Cylinder bore Ø (in mm)	Rod Ø (in mm)		Working pressure in bar									
			2	3	4	5	6	7	8	9	10	
12	6	Extend	20	30	40	50	60	70	80	90	100	
		Retract	15	22	30	38	46	53	61	68	76	
16	8	Extend	36	54	72	90	108	126	144	162	180	
		Retract	27	40	54	67	81	95	108	122	135	
20	10	Extend	56	84	112	140	169	196	224	254	282	
		Retract	42	63	84	106	127	148	169	190	212	
25	12	Extend	88	132	176	220	264	308	352	396	440	
		Retract	68	102	136	170	204	238	272	306	340	
32	16	Extend	145	217	289	362	434	507	579	651	724	
		Retract	108	162	217	271	325	380	434	488	542	
40	16	Extend	226	339	452	565	678	792	905	1018	1130	
		Retract	190	285	380	475	570	665	760	855	950	
50	20	Extend	353	530	706	884	1060	1237	1414	1590	1767	
		Retract	297	445	594	742	890	1039	1187	1336	1484	
63	20	Extend	561	842	1122	1403	1683	1964	2244	2525	2805	
		Retract	505	757	1009	1261	1514	1766	2018	2270	2523	
80	25	Extend	905	1357	1809	2262	2714	3167	3619	4072	4524	
		Retract	816	1225	1633	2041	2449	2857	3266	3674	4082	
100	30	Extend	1414	2120	2827	3534	4241	4948	5655	6362	7068	
		Retract	1287	1929	2573	3216	3859	4502	5145	5789	6432	

(Above values have been worked out taking frictional loss into consideration)

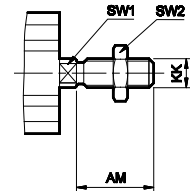
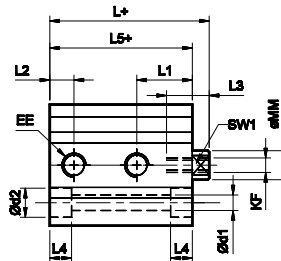
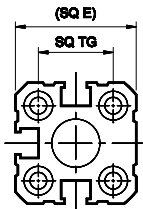
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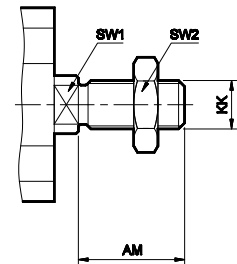
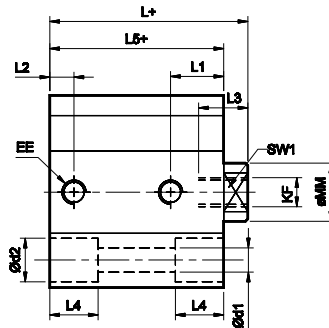
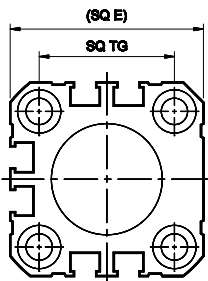
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Basic cylinder

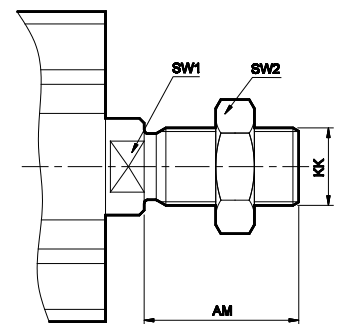
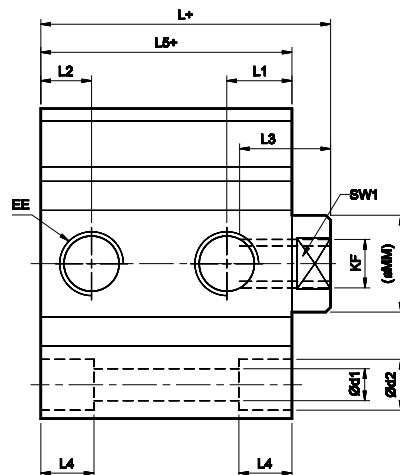
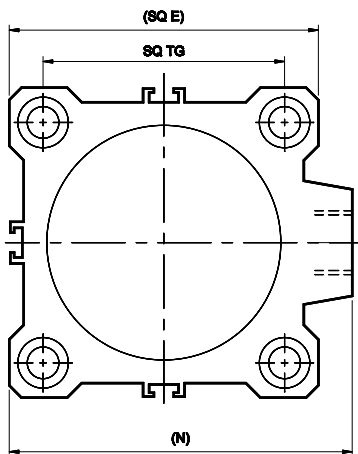
Sizes - Ø12, Ø16



Sizes - Ø20, Ø25



Sizes - Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



+ Add stroke

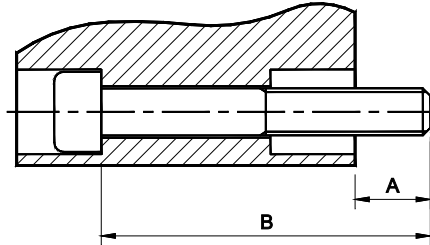
Cylinder bore Ø	KF	MM	L3	d1	d2	L4	SW1	L1	L2	EE	TG	E	N	L5	L	KK	AM	SW2
12	M3 x 0.5	6	6	3.5	6	4.5	5	11.5	5	M5 x 0.8	15.5	25	-	29.5	33	M6 x 1	16	10
16	M4 x 0.7	8	8	3.5	6	5.5	6	11	5.5	M5 x 0.8	20	29	-	30.5	34	M8 x 1.25	20	13
20	M5 x 0.8	10	8	5.5	9	9.5	8	11.5	5	M5 x 0.8	25.5	36	-	31.5	35	M10 x 1.25	22	17
25	M6 x 1	12	12	5.5	9	9	10	11	5	M5 x 0.8	28	40	-	36	41	M10 x 1.25	22	17
32	M8 x 1.25	16	13	5.5	9	9	14	12.5	8	G1/8	34	45	49.5	41	48	M12 x 1.25	24	19
40	M8 x 1.25	16	13	5.5	9	9.5	14	11.5	8	G1/8	40	52	57	36.5	43.5	M12 x 1.25	24	19
50	M10 x 1.5	20	15	6.6	10.5	11	17	14	10.5	G1/4	50	64	71	42	50	M16 x 1.5	32	24
63	M10 x 1.5	20	15	9	13.5	10	17	14	10.5	G1/4	60	77	84	43	51	M16 x 1.5	32	24
80	M16 x 2	25	21	11	16.5	14.5	22	18.5	12.5	G3/8	77	98	104	54.5	64.5	M20 x 1.5	40	30
100	M20 x 2.5	30	27	11	16.5	12.5	27	21	12.5	G3/8	94	117	123.5	57.5	68.5	M20 x 1.5	40	30

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Recommended bolt size for mounting



Ordering no.	A	Bolt size B	Ordering no.	A	Bolt size B	Ordering no.	A	Bolt size B	Ordering no.	A	Bolt size B	Ordering no.	A	Bolt size B
A02 012 005	5	M3 x 35	A02 016 005	5	M3 x 35	A02 020 005	8	M5 x 35	A02 025 005	8	M5 x 40	A02 032 005	8	M5 x 45
010	5	x 40	010	5	x 40	010	8	x 40	010	8	x 45	010	8	x 50
015	5	x 45	015	5	x 45	015	8	x 45	015	8	x 50	015	8	x 55
020	5	x 50	020	5	x 50	020	8	x 50	020	8	x 55	020	8	x 60
025	5	x 55	025	5	x 55	025	8	x 55	025	8	x 60	025	8	x 65
030	5	x 60	030	5	x 60	030	8	x 60	030	8	x 65	030	8	x 70
040	5	x 70	040	5	x 70	040	8	x 70	040	8	x 75	040	8	x 80
						050	8	x 80	050	8	x 85	050	8	x 90
												060	8	x 100
Ordering no.	A	Bolt size B	Ordering no.	A	Bolt size B	Ordering no.	A	Bolt size B	Ordering no.	A	Bolt size B	Ordering no.	A	Bolt size B
A02 040 005	8	M5 x 40	A02 050 010	9	M6 x 50	A02 063 010	12	M8 x 55	A02 080 010	15	M10 x 65	A02 100 010	15	M10 x 70
010	8	x 45	020	9	x 60	020	12	x 65	020	15	x 75	020	15	x 80
015	8	x 50	030	9	x 70	030	12	x 75	030	15	x 85	030	15	x 90
020	8	x 55	040	9	x 80	040	12	x 85	040	15	x 95	040	15	x 100
025	8	x 60	050	9	x 90	050	12	x 95	050	15	x 105	050	15	x 110
030	8	x 65	060	9	x 100	060	12	x 105	060	15	x 115	060	15	x 120
040	8	x 75	070	9	x 110	070	12	x 115	070	15	x 125	070	15	x 130
050	8	x 85	080	9	x 120	080	12	x 125	080	15	x 135	080	15	x 140
060	8	x 95												

How to order

A02



Piston Ø (mm)	
012	- Ø 12
016	- Ø 16
020	- Ø 20
025	- Ø 25
032	- Ø 32
040	- Ø 40
050	- Ø 50
063	- Ø 63
080	- Ø 80
100	- Ø 100

Stroke (mm)	
005	- 5
010	- 10
015	- 15
020	- 20
025	- 25
030	- 30
040	- 40
050	- 50
060	- 60
070	- 70
080	- 80

O - Basic

M - Male thread

Example:

Ordering no. for cylinder with 40 dia bore, 50 mm stroke with Female thread : **A02 040 050 O**

Ordering no. for cylinder with 40 dia bore, 50 mm stroke with Male thread : **A02 040 050 O - M**

For your special requirements of cylinders or for further informations contact your regional dealer or **JANATICS**

Subject to change