

AIR CYLINDER

Series A20, A21

Cat No A20, A21 - 01 - 02

Double End Double Acting Cylinder (Square type) Ø32 - 100 mm

Features

- ❑ Adjustable cushioning at both ends with elastomer pads
- ❑ Wide varieties of mountings as per ISO 15552 / VDMA 24562 standards
- ❑ Magnetic and Non magnetic version
- ❑ Aluminium profile (square) cylinder barrel
- ❑ Magnetic sensor common for all sizes (Refer Magnetic sensor catalogue)



Technical Specifications

Piston dia (mm)	32	40	50	63	80	100
Cushion stroke (mm)	21	23	23	23	28	28
Standard strokes * (mm)	25 50 80 100 125 160 200 250 300 320 400 500					
Medium	Compressed air - filtered - lubricated					
Working pressure	0.5 - 10 bar					
Medium temperature	5° - 60° c					
Materials of construction	Aluminium, Brass, Nitrile, Steel, Acetal, Polyurethane					
Mountings	Basic cylinder,	Foot mounting,	Flange,	Female clevis,	Trunnion,	
Accessories	Trunnion bracket,	Rod end fork,	Rod end aligner,	Rod end spherical eye		

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

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

Bore dia in mm	Rod dia in mm	Working pressure in bar								
		2	3	4	5	6	7	8	9	10
32	12	124	187	249	311	373	435	498	559	621
40	16	190	285	380	475	570	665	760	855	950
50	20	297	445	594	742	891	1039	1187	1336	1484
63	20	505	757	1009	1261	1514	1766	2018	2270	2523
80	25	816	1225	1633	2041	2449	2857	3266	3674	4082
100	25	1325	1988	2650	3313	3976	4640	5300	5965	6625

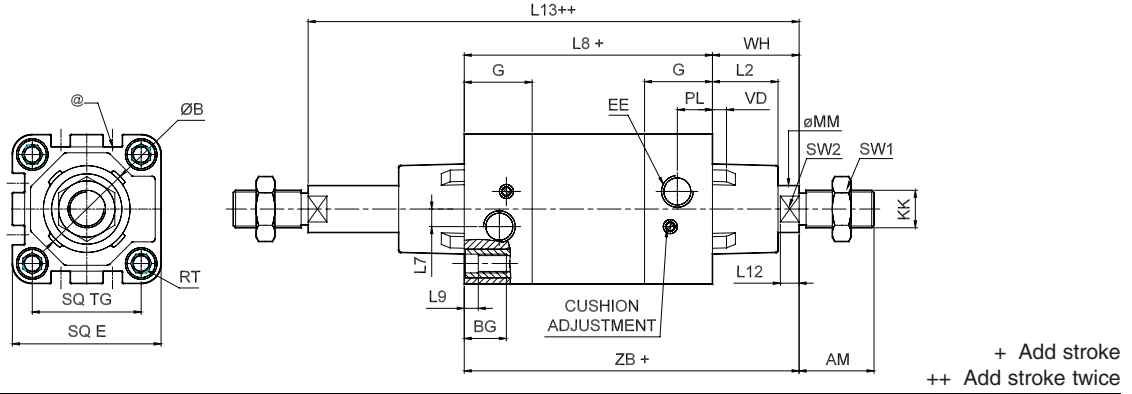
(Above values have been worked out taking frictional loss into consideration)

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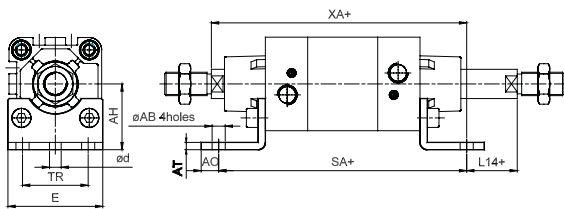
Basic cylinder



Bore dia	KK	AM	MM	SW2	L12	SW1	B e11	VD	L2	E max	G	TG	RT	BG min	EE	PL	L7	WH	TOL	ZB	TOL	L8	TOL	L9	L13	TOL	Stroke tol
32	M10x1.25	22	12	10	6	17	30	6	18.5	45	25.5	32.5	M6	16	G1/8	13	5	26	± 1.3	120	± 1	94	± 0.6	5	147		+ 2 + 0
40	M12x1.25	24	16	13	6.5	19	35	6.5	20.5	51	29	38	M6	16	G1/4	14.5	5	30		135		105		5	166		
50	M16x1.5	32	20	16	8	24	40	6.5	28	64	29	46.5	M8	16	G1/4	15	7.5	37		143		106	± 0.7	6	181	± 1.5	+ 2.5 + 0
63	M16x1.5	32	20	16	8	24	45	6.5	27.5	74	35	56.5	M8	16	G3/8	17	10	37	± 1.5	158	± 1.1	121		6	196		
80	M20x1.5	40	25	21	10	30	45	6.5	34	94	36	72	M10	16	G3/8	18	14	46		174		128	± 0.8	6	221		
100	M20x1.5	40	25	21	10	30	55	6.5	35	111	40	89	M10	16	G1/2	18	10	51		189		138		6	241		

@ - T Groove for magnetic sensor, Refer catalogue series AM4

Foot mounting

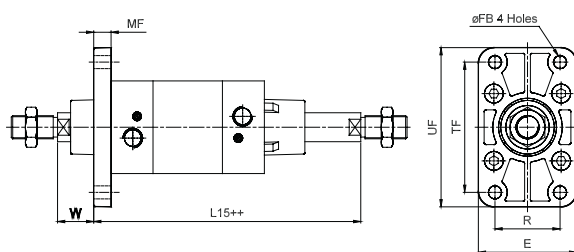


+ Add stroke

Bore dia	TR ±0.3	AB H14	AH JS15	AO max.	AT	E	d*	SA	TOL	L14	TOL	XA	TOL	Recommended Bolt size
32	32	7	32	8	4	46	5.8	142		3	± 1.5	144		M6
40	36	10	36	10	4	52	7.8	161	± 1.25	3		163	± 1.25	M8
50	45	10	45	12	5	65	7.8	170		6		175		M8
63	50	12	50	12	5	75	7.8	185		6	± 1.8	190		M8
80	63	12	63	17	6	95	9.8	210	± 1.6	6		215	± 1.5	M10
100	75	14.5	71	19	6	115	11.8	220		11		230		M12

* Suitable for reaming

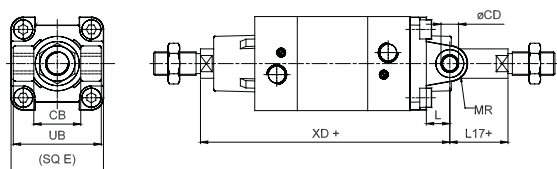
Flange



++ Add stroke twice

Bore dia	TF ± 0.3	R ± 0.3	FB H13	MF	UF	E	W	TOL	L15	TOL	Recommended Bolt size
32	64	32	7	10	80	50	16		131		M6
40	72	36	9	10	90	55	20	± 1.5	146	± 1.25	M8
50	90	45	9	12	110	68	25		156		M8
63	100	50	9	12	125	78	25		171		M8
80	126	63	12	16	155	100	30	± 1.8	191	± 1.5	M10
100	150	75	14	16	185	120	35		206		M12

Female clevis



+ Add stroke

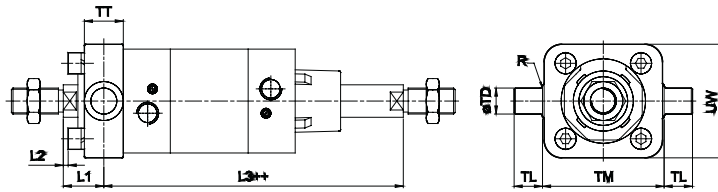
Bore dia	CD	CB H14	L	MR	UB h14	E max.	L17	TOL	XD	TOL
32	10	26	12	11	45	45	5		142	
40	12	28	15	13	52	51	6	± 1.5	160	± 1.25
50	12	32	15	13	60	64	11		170	
63	16	40	20	17	70	74	6	± 1.8	190	
80	16	50	20	17	90	94	11		210	± 1.5
100	20	60	25	21	110	111	11		230	

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Trunnion

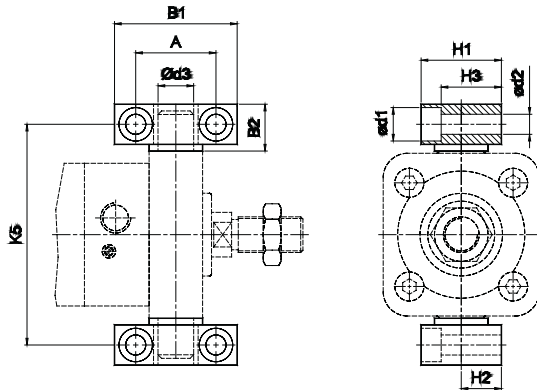


++ Add stroke twice

Bore dia	TD e9	TL h14	TM h14	UW	TT	R	L1	tol	L2 approx	L3	tol
32	12	12	50	48	16	1	18		2	129	
40	16	16	63	55	22	1.5	19	±1.5	0	147	±1.5
50	16	16	75	70	24	1.6	25		3	156	
63	20	20	90	86	28	1.6	23		-1	173	
80	20	20	110	110	32	1.6	30	±1.8	1.8	191	±2
100	25	25	132	135	40	2	31		-1.2	210	

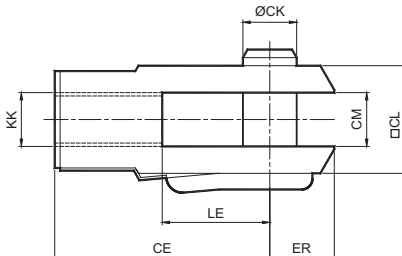
ACCESSORIES FOR AIR CYLINDER Series A20, A21

Trunnion bracket



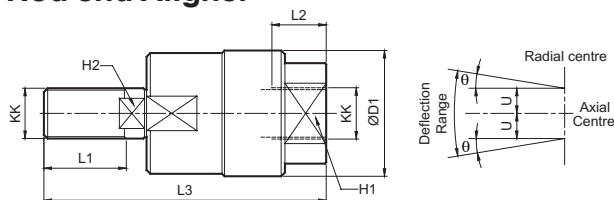
Bore dia	B1	B2	A ± 0.2	d1	d2 H13	d3 H9	H1	H2 ± 0.1	H3	K5 Js14	Ordering no.
32	46	18	32	11	6.6	12	30	15	23	71	AT032
40	55	21	36	15	9	16	36	18	27	87	AT040
50	55	21	36	15	9	16	36	18	27	99	AT040
63	65	23	42	16.5	11	20	40	20	29	116	AT063
80	65	23	42	16.5	11	20	40	20	29	136	AT063
100	75	28.5	50	20	14	25	50	25	37	164	AT100

Rod end Fork (ISO 8140)



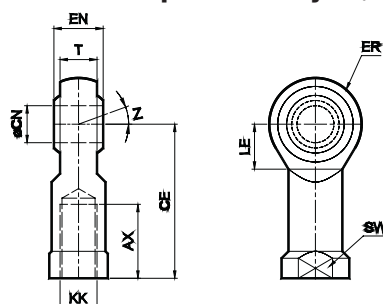
Bore dia	KK	CE	CK f8	CM B12	LE	ER max.	CL	Ordering no.
32	M10x1.25	40	10	10	20	16	20	AF010
40	M12x1.25	48	12	12	24	19	24	AF012
50 / 63	M16x1.5	64	16	16	32	25	32	AF016
80 / 100	M20x1.5	80	20	20	40	32	40	AF020

Rod end Aligner



Bore dia	KK	L1	L2	L3	H1	H2	D1	U	± θ°	Ordering no.
32	M10x1.25	20	14	65	17	8	28	0.75	5	AR010
40	M12x1.25	22	18	75	19	10	32	1	5	AR012
50 / 63	M16x1.5	25	22	91	27	13	41	1	5	AR016
80 / 100	M20x1.5	30	28	112	32	16	50	1.5	5	AR020

Rod end spherical eye (ISO 8139)



Bore dia	KK	CN H9	T	EN h12	CE	LE min	ER max	AX	SW	Z	Ordering no.
32	M10x1.25	10	10.5	14	43	15	14	20	17	13°	AP010
40	M12x1.25	12	12	16	50	17	16	22	19		AP012
50 / 63	M16x1.5	16	15	21	64	22	21	28	22	15°	AP016
80 / 100	M20x1.5	20	18	25	77	26	25	33	30/32		AP020

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How to order

A

Model		Piston Ø (mm)		Stroke (mm)		Mountings	
20	Magnetic cylinder	032	- Ø 32	025	- 25	O	- Basic
21	Standard cylinder	040	- Ø 40	050	- 50	L	- Foot Mounting
		050	- Ø 50	080	- 80	F	- Flange
		063	- Ø 63	100	- 100	B	- Female Clevis
		080	- Ø 80	125	- 125	N	- Trunnion
		100	- Ø 100	160	- 160		
				200	- 200		
				250	- 250		
				300	- 300		
				320	- 320		
				400	- 400		
				500	- 500		

Example:

Ordering no. for standard cylinder with 40 dia bore, 50 mm stroke with female clevis mounting : **A21 040 050 B**



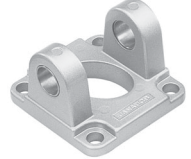

Note:

If ordered as 40 dia, 50 mm stroke cylinder, Basic cylinder **A21 040 050 O** will be supplied.

For repeat order when the details are taken from cylinder nameplate, mention the mounting style separately.

For ordering **Accessories** refer corresponding tables for part numbers.

For ordering individual **Mounting** kits (If needed separately) the order numbers are as below

Piston Ø	Foot mounting *	Flange *	Female clevis *	Trunnion *
				
32	ML1032	MF1032	MB1032	MT1032
40	ML1040	MF1040	MB1040	MT1040
50	ML1050	MF1050	MB1050	MT1050
63	ML1063	MF1063	MB1063	MT1063
80	ML1080	MF1080	MB1080	MT0080
100	ML1100	MF1100	MB1100	MT0100

* Supplied with 4nos. of screws

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

Subject to change