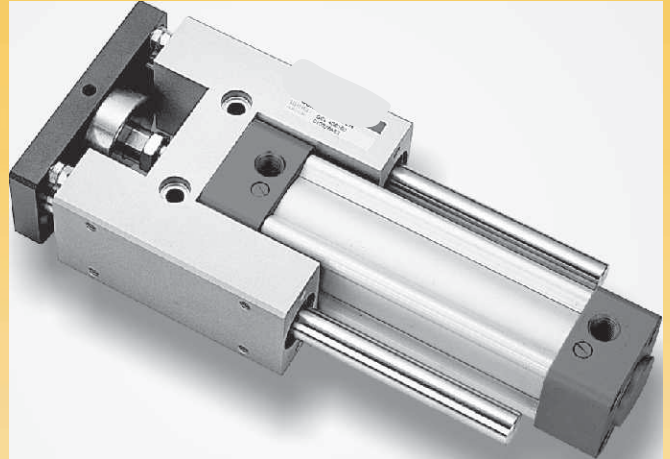


TAN AIR

GUIDE CYLINDER

Feature

- a. Intergration of standard cylinder and guide rod.
- b. Cylinder body connected with guide rod by floating joint, without friction in operation.
- c. Two guide rods offer high non-rotating accuracy.
- d. The linear bearing is applicable to high speed acting and light loads.
- e. The bush bearing is applicable to low speed acting and heavy loads.
- f. Sensor switch and shock absorber are optional accessories.





How to order

GC	L	32	B	50	A1	F	SF	1
Guide cylinder	Guide rod	Bore size		Stroke	Shock absorber/ Number	Shock absorber	Sensor type	Number of sensor
	M Bush bearing	32 Φ32			A1 1 pc	F Assemble in front	Blank	1 pc
	L Linear bearing	40 Φ40			A2 2 pcs	B Assemble in rear	SF LED in front	2 pcs
		50 Φ50						
		63 Φ63						
		80 Φ80						
		100 Φ100						

a. Please refer to page “SHOCK ABSORBER” for specifications of shock absorber.

b. Please add stroke 50mm for assembling cushion in rear.

c. Please indicate shock absorber assembly position(front or rear) when ordering

 AL-20R	SD LED on rear	 AL-21R
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- a. Please refer to page "SHOCK ABSORBER" for specifications of shock absorber.
- b. Please add stroke 50mm for assembling cushion in rear.
- c. Please indicate shock absorber assembly position (front or rear) when ordering guide cylinder with 1pc shock absorber.

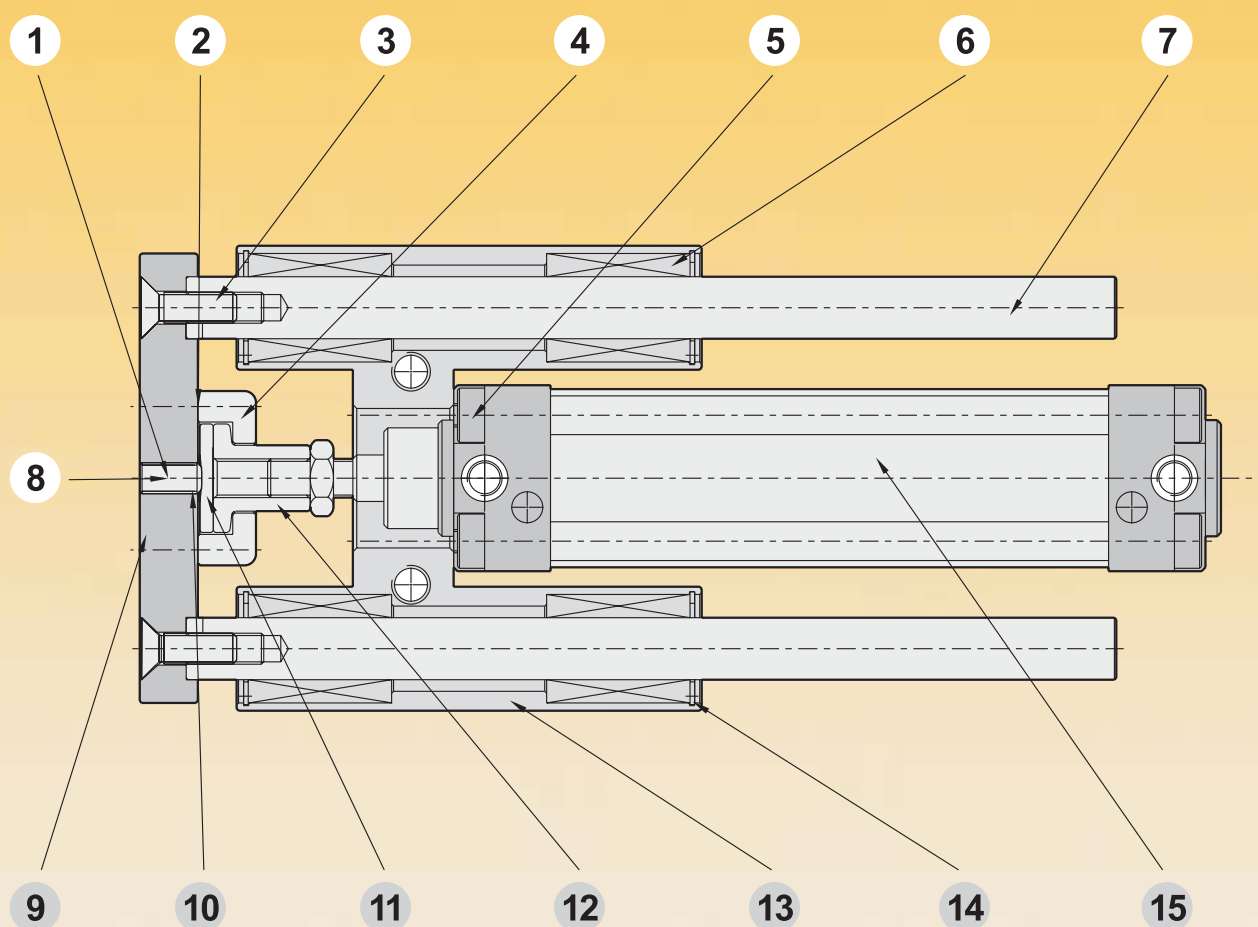
Specifications

Bore size	Φ32	Φ40	Φ50	Φ63	Φ80	Φ100
Port size	1/8"	1/4"		3/8"		1/2"
Fluid	Compressed air					
Acting	Double acting					
Operating pressure range	2 ~ 9 kgf/cm ²					
Max operating pressure	10.5 kgf/cm ²					
Lubrication	Not required					
Barrel material	Aluminum alloy					
Magnet	Built-in					
Ambient temperature	0 °C ~ 60 °C					
Piston speed mm/Sec	100~500mm					

TAN AIR

GUIDE CYLINDER

Material of parts



No.	Description	Material	Qty.	No.	Description	Material	Qty.
1	Press unit	Industrial plastic	1	9	Plate	Aluminum alloy	1
2	Fixing screw	Carbon steel	4	10	Adjustable screw	Carbon steel	1
3	Fixing screw	Carbon steel	2	11	Press unit	Carbon steel	2
4	Cap	Carbon steel	1	12	T type adaptor	Carbon steel	1
5	Fixing screw	Carbon steel	4	13	Guide body	Aluminum alloy	1
6	Linear bearing	Bearing steel	4	14	Snap ring	Carbon steel	4
7	Guide rod	Bearing steel	2	15	ISO6431 standard cylinder	Aluminum alloy	1
8	Adjustable screw	Carbon steel	1				

TANAIR

GUIDE CYLINDER

Theoretical force

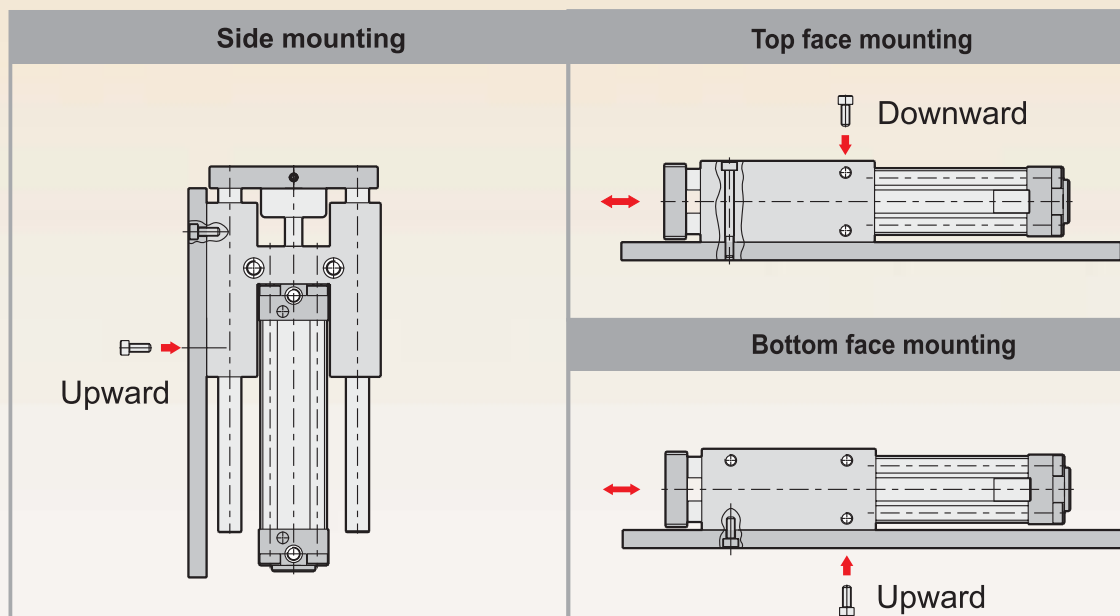
Bore size	Rod diameter	Acting	Piston area cm ²	Operating pressure kgf/cm ²					
				2	3	4	5	6	7
Φ32	Φ12	Push	8.04	16.08	24.12	32.16	40.2	48.24	56.28
		Pull	6.91	13.82	20.73	27.64	34.56	41.46	48.37
Φ40	Φ16	Push	12.57	25.14	37.71	50.28	62.85	75.42	87.99
		Pull	10.56	21.12	31.68	42.24	52.8	63.36	73.92
Φ50	Φ20	Push	19.63	39.26	58.89	78.52	98.15	117.78	137.41
		Pull	16.49	32.98	49.47	65.96	82.45	98.94	115.43
Φ63	Φ20	Push	31.17	62.34	93.51	124.68	155.85	187.02	218.19
		Pull	28.03	56.06	84.09	112.12	140.15	168.18	196.21
Φ80	Φ25	Push	50.27	100.54	150.81	201.08	251.35	301.62	351.89
		Pull	45.36	90.72	136.08	181.44	226.8	272.16	317.52
Φ100	Φ25	Push	78.54	157.08	235.62	314.16	392.7	441.78	549.78
		Pull	73.63	147.26	220.89	294.52	368.15	417.24	515.41

Stroke table

Bore size	Standard stroke (mm)	Max. stroke (mm)
Φ32	50, 100, 150, 200, 250, 300	500
Φ40	50, 100, 150, 200, 250, 300	500
Φ50	50, 100, 150, 200, 250, 300, 350, 400, 450, 500	750
Φ63	50, 100, 150, 200, 250, 300, 350, 400, 450, 500	750
Φ80	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 750	1000
Φ100	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 750	1000

Note: Please contact our sales for non-standard stroke.

Mounting example

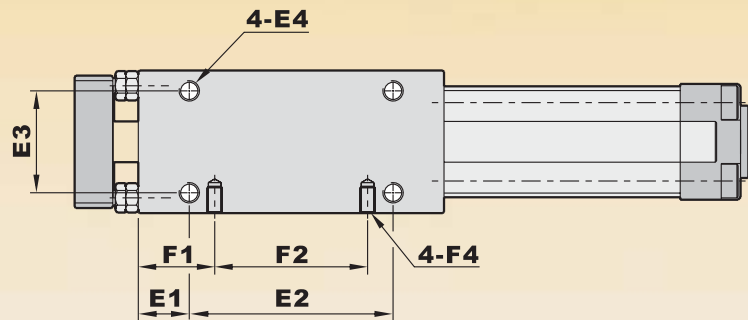
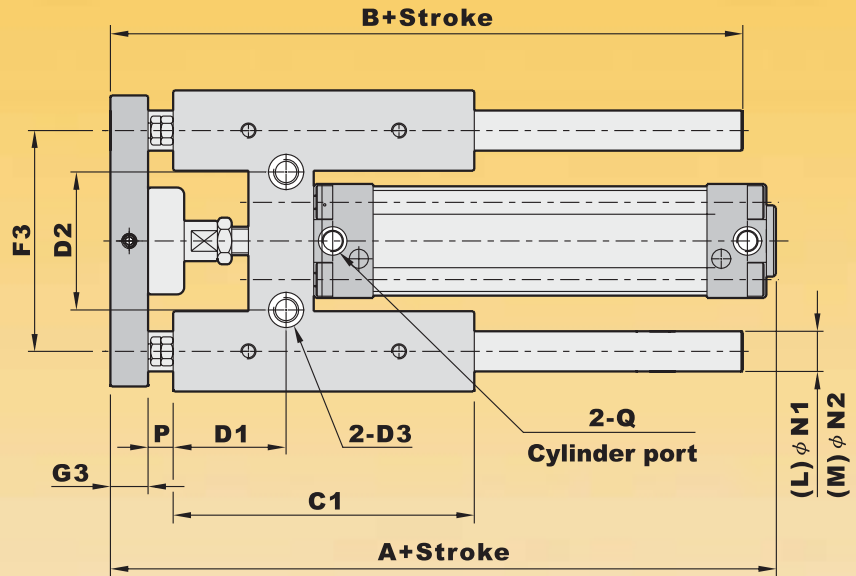
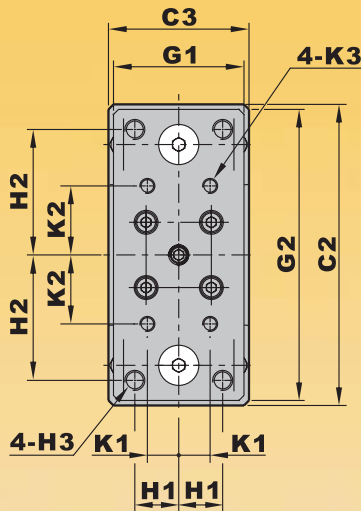


TAN AIR

GUIDE CYLINDER

Dimensions

Standard type



(Unit : mm)

Bore size	A	B	C1	C2	C3	D1	D2	D3	E1	E2	E3	E4	F1	F2	F3
Φ32	179	152	120	120	56	45	55	φ 8.5- φ 14x8.5 Depth	20	80	40	M6xP1.0x15 Depth	30	60	88
Φ40	190	152	120	120	56	45	55	φ 8.5- φ 14x6 Depth	20	80	40	M6xP1.0x15 Depth	30	60	88
Φ50	220	200	160	160	78	65	80	φ 10.5- φ 17x11Depth	30	100	50	M8xP1.25x20 Depth	40	80	120
Φ63	236	200	160	160	78	65	80	φ 10.5- φ 17x7 Depth	30	100	50	M8xP1.25x20 Depth	40	80	120
Φ80	280	270	220	220	115	90	120	φ 12.5- φ 20x13 Depth	40	140	80	M10xP1.5x20 Depth	60	100	170
Φ100	290	270	220	220	115	90	120	φ 12.5- φ 20x12 Depth	40	140	80	M10xP1.5x20 Depth	60	100	170

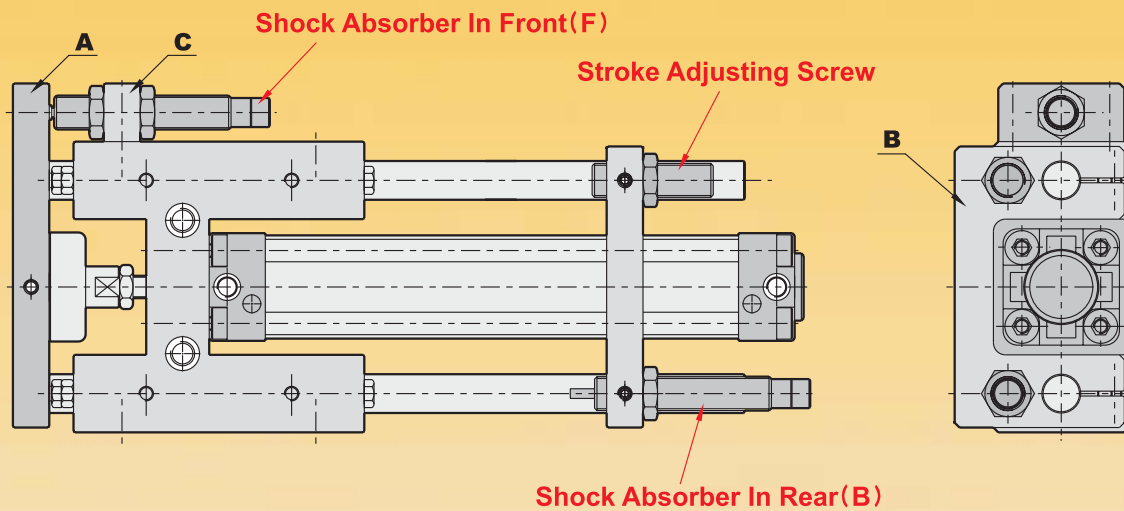
Bore size	F4	G1	G2	G3	H1	H2	H3	K1	K2	K3	N1	N2	P	Q
Φ32	M6xP1.0x10 Depth	52	116	15	17.5	50	M8xP1.25	12.5	27.5	M6xP1.0	16	20	10	G 1/8
Φ40	M6xP1.0x10 Depth	52	116	15	17.5	50	M8xP1.25	12.5	27.5	M6xP1.0	16	20	10	G 1/4
Φ50	M8xP1.25x15 Depth	74	156	20	25	65	M10xP1.5	20	40	M8xP1.25	20	25	10	G 1/4
Φ63	M8xP1.25x15 Depth	74	156	20	25	65	M10xP1.5	20	40	M8xP1.25	20	25	10	G 3/8
Φ80	M10xP1.5x20 Depth	110	216	25	40	90	M12xP1.75	30	55	M10xP1.5	25	30	10	G 3/8
Φ100	M10xP1.5x20 Depth	110	216	25	40	90	M12xP1.75	30	55	M10xP1.5	25	30	10	G 1/2

TAN AIR

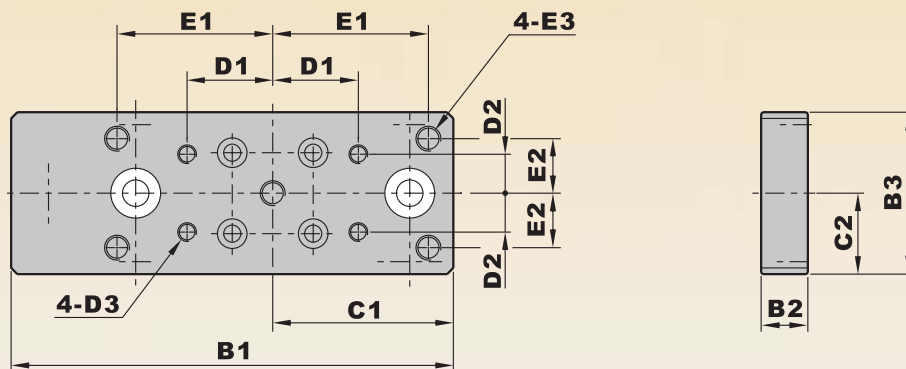
GUIDE CYLINDER

Dimensions

Guide cylinder with shock absorber



A : Front plate



(Unit : mm)

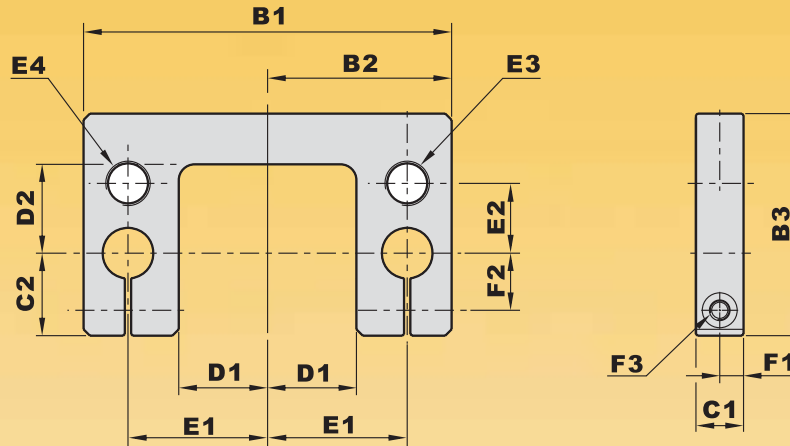
Bore size	B1	B2	B3	C1	C2	D1	D3	E1	E2	E3
Φ32	142	15	52	58	26	27.5	M6xP1.0	50	17.5	M8xP1.25
Φ40	142	15	52	58	26	27.5	M6xP1.0	50	17.5	M8xP1.25
Φ50	190	20	74	78	37	40	M8xP1.25	65	25	M10xP1.5
Φ63	190	20	74	78	37	40	M8xP1.25	65	25	M10xP1.5
Φ80	258	25	110	108	55	55	M10xP1.5	90	40	M12xP1.75
Φ100	258	25	110	108	55	55	M10xP1.5	90	40	M12xP1.75

TAN AIR

GUIDE CYLINDER

Dimensions

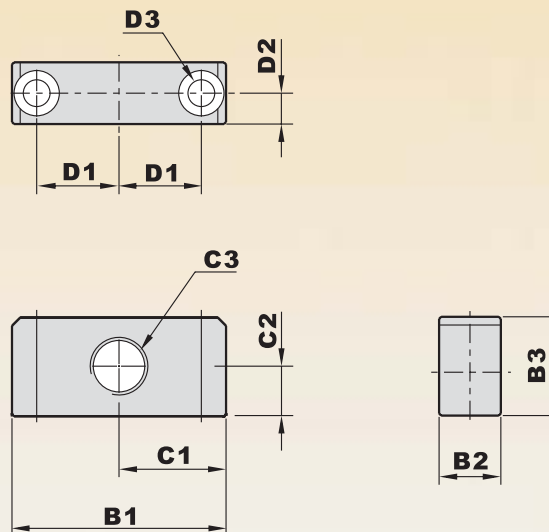
B : End plate



(Unit : mm)

Bore size	B1	B2	B3	C1	C2	D1	D2	E1	E2	E3	E4	F1	F2	F3
Φ32	116	58	70	15	26	28	28	44	22	M14xP1.5	M14xP1.5	7.5	18	φ 6.5- φ 9.5x6.5 Depth
Φ40	116	58	70	15	26	28	28	44	22	M14xP1.5	M14xP1.5	7.5	18	φ 6.5- φ 9.5x6.5 Depth
Φ50	158	78	97	20	37	39	39	60	32	M14xP1.5	M20xP1.5	10	25	φ 8.5- φ 14x8.5 Depth
Φ63	158	78	97	20	37	39	39	60	32	M14xP1.5	M20xP1.5	10	25	φ 8.5- φ 14x8.5 Depth
Φ80	216	108	140	25	55	57.5	57.5	85	48	M14xP1.5	M25xP1.5	12.5	40	φ 10.5- φ 17x11 Depth
Φ100	216	108	140	25	55	57.5	57.5	85	48	M14xP1.5	M25xP1.5	12.5	40	φ 10.5- φ 17x11 Depth

C : Mounting block



(Unit : mm)

Bore size	B1	B2	B3	C1	C2	C3	D1	D2	F3
Φ32	52	15	24	26	12	M14xP1.5	20	7.5	φ 6.5- φ 9.5x6.5 Depth
Φ40	52	15	24	26	12	M14xP1.5	20	7.5	φ 6.5- φ 9.5x6.5 Depth
Φ50	74	20	32	37	16	M20xP1.5	25	10	φ 8.5- φ 14x8.5 Depth
Φ63	74	20	32	37	16	M20xP1.5	25	10	φ 8.5- φ 14x8.5 Depth
Φ80	110	25	40	55	20	M25xP1.5	40	12.5	φ 10.5- φ 17x11 Depth
Φ100	110	25	40	55	20	M25xP1.5	40	12.5	φ 10.5- φ 17x11 Depth