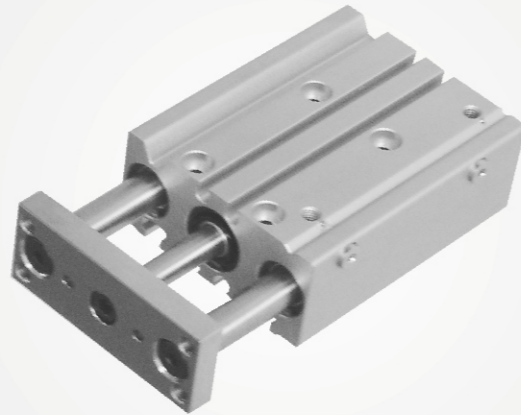


Features

- *Hard anodized aluminum body provides corrosion and wear resistance.
- *Simplified design.
- *Compact size and space saving.
- *Non-rotated.
- *Low deviation.
- *Built-in magnet.



How to order

TRC	M	12	B	50	SS	1
Three rod cylinder	Guide rod	Bore size		Stroke	Sensor type	Number of sensor
	M Bush L Linear	12 ϕ 12 16 ϕ 16 20 ϕ 20 25 ϕ 25 32 ϕ 32			Blank W/O sensor SS Square type SR Round type	1pc 2pcs

AL-11R

AL-07R

*Rod: M-Carbon steel (Bush bearing)
L-Bearing steel (Linear bearing)

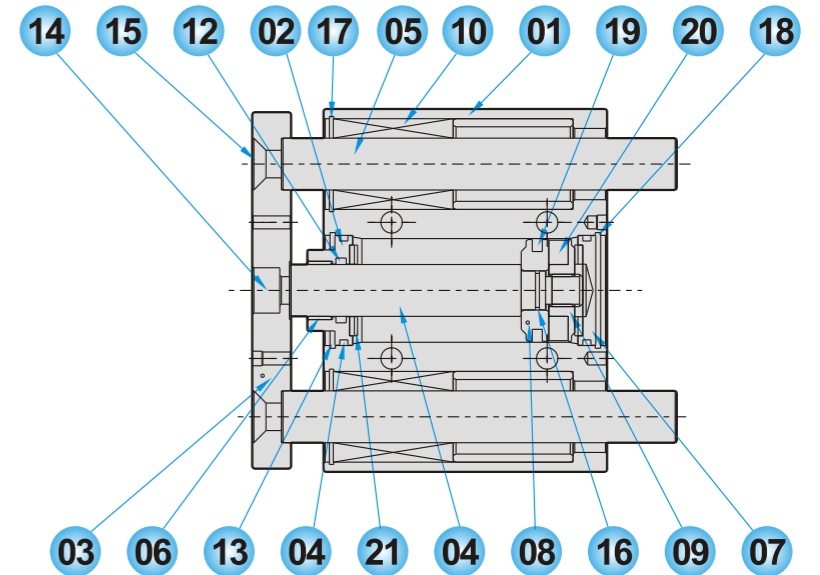
Specifications

Bore size	ϕ 12	ϕ 16	ϕ 20	ϕ 25	ϕ 32
Port size	M5xP0.8		1/8"		
Fluid	Compressed air				
Acting	Double acting				
Operating pressure range	1 ~ 7 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	100~500mm/Sec				

Material of parts

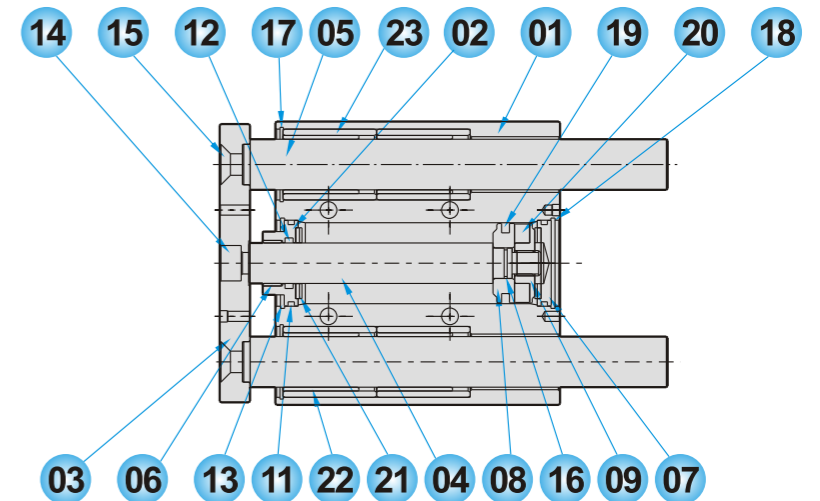
TRC-L

Linear bearing type



TRC-M

Bush bearing type

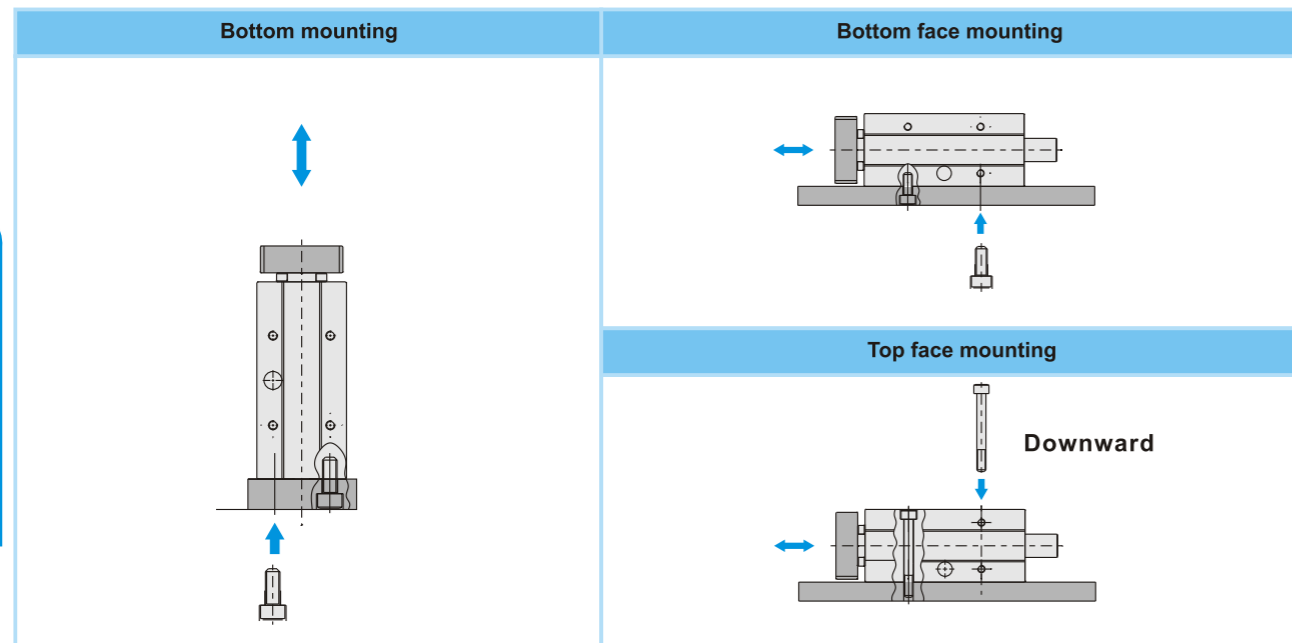


No.	Description	Material	Qty.	No.	Description	Material	Qty.
1	Barrel	Aluminum alloy	1	13	Snap ring	Spring steel	1
2	Front cover	Aluminum alloy	1	14	Fixing screw	Alloy steel	1
3	Front plate	Ferroalloy	1	15	Fixing screw	Alloy steel	2
4	Piston rod	Carbon steel	1	16	Piston O-ring	NBR	1
5	Guide rod	Carbon steel/Bearing steel	2	17	Snap ring	Spring steel	2
6	Bush bearing	Alloy steel	1	18	Snap ring	Spring steel	1
7	Rear cover	Aluminum alloy	1	19	Piston packing	NBR	1
8	Piston	Aluminum alloy	1	20	Magnet	Ferrite magnet	1
9	Magnet holder	Aluminum alloy	1	21	Cushinon plate	NBR	2
10	Linear bearing	Bearing steel	2(4)	22	Bush bearing	Alloy steel	2(4)
11	O-ring	NBR	2	23	Bush bearing support	Aluminum alloy	2(4)
12	Rod packing	NBR	1				

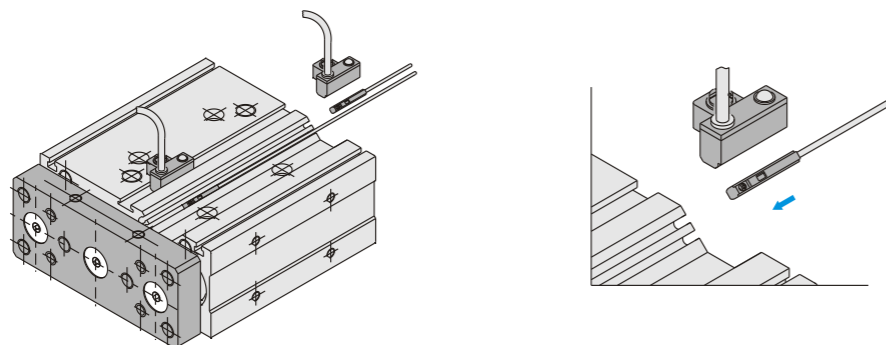
Theoretical force

Bore size	Rod diameter	Acting	Piston area mm ²	Operating pressure MPa								
				0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
φ 12	φ 6	Push	113	23	34	45	57	68	79	90	102	113
		Pull	85	17	26	34	43	51	60	68	77	85
φ 16	φ 8	Push	201	40	60	80	101	121	141	161	181	201
		Pull	151	30	45	60	76	91	106	121	136	151
φ 20	φ 10	Push	314	63	94	126	157	188	220	251	283	314
		Pull	236	47	71	94	118	142	165	189	212	236
φ 25	φ 12	Push	491	98	147	196	246	295	344	393	442	491
		Pull	373	76	113	151	189	227	265	302	340	378
φ 32	φ 16	Push	804	161	241	322	402	482	563	643	724	804
		Pull	603	121	181	241	302	362	422	482	543	603

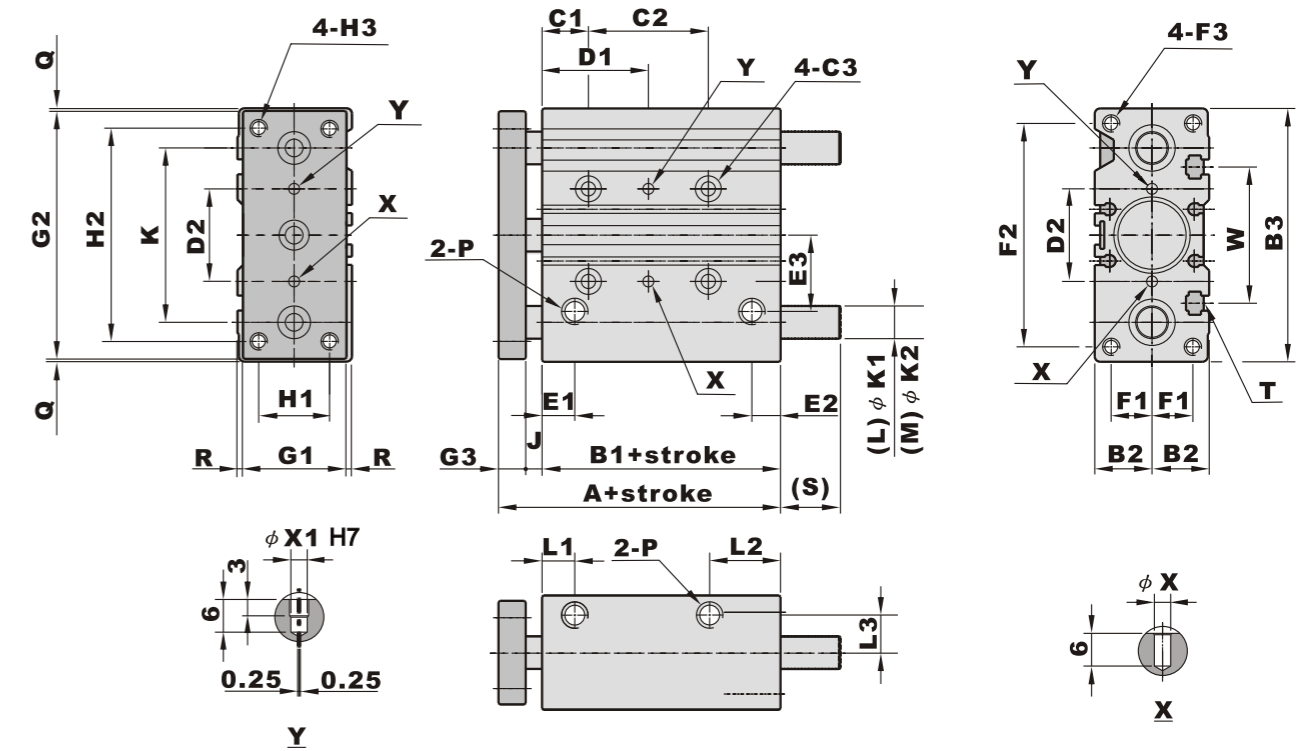
Mounting example



Sensor mounting example



Dimensions



(Unit : mm)

Bore size	A	B1	B2	B3	C1	C2		C3	D1		D2	E1	E2	E3	F1	F2
						Under 30ST	Under 40ST		Over 30ST	Over 40ST						
φ 12	42	29	13	58	5	20	40	M4Countersink,RearM5x0.8Px10dp	15	25	23	11	8	18	9	50
φ 16	46	33	15	64	5	24	44	M4Countersink,RearM5x0.8Px10dp	17	27	24	13	8	17	11	56
φ 20	53	37	18	83	17	24	44	M5Countersink,RearM6x1.0Px12dp	29	39	28	12	9.5	25	12	72
φ 25	53.5	37.5	21	93	17	24	44	M5Countersink,RearM6x1.0Px12dp	29	39	34	12	10.5	28	15	82
φ 32	59.5	37.5	24	112	21	24	48	M6Countersink,RearM8x1.25Px16dp	33	45	42	11	11	32	17	98

Bore size	F3	G1	G2	G3	H1	H2	H3	J	K	K1	K2	L1	L2	L3	P	Q	R	T	W	X1
φ 16	M5x0.8Px12dp	25	62	8	16	54	M4x0.7P	5	46	8	10	13	20	10.5	M5	1	2.5	M4	38	3
φ 20	M5x0.8Px13dp	30	81	10	18	70	M5x0.8P	6	54	10	12	12	24	11.5	PT1/8	1	3	M5	44	3
φ 25	M6x1.0Px15dp	38	91	10	26	78	M5x0.8P	6	64	12	16	12	26	14	PT1/8	1	2	M5	50	4
φ 32	M8x1.25Px20dp	44	110	12	30	96	M8x1.25P	10	78	16	20	11	35	16.5	PT1/8	1	2	M6	63	4

Bore size	S (Linear bearing L)								Bore size	S (Bush bearing M)							
	10	20	25	30	40	50	75	100		10	20	25	30	40	50	75	100
φ 12	1	1	-	1	13	13	13	13	φ 12	0	0	-	0	0	18.5	18.5	18.5
φ 16	3	3	-	3	19	19	19	19	φ 16	0	0	-	0	0	18.5	18.5	18.5
φ 20	-	10	-	10	27	27	27	27	φ 20	-	0	-	0	0	31.5	31.5	31.5
φ 25	-	16	-	16	32	32	32	32	φ 25	-	0	-	0	0	31.5	31.5	31.5
φ 32	-	-	21.5	-	-	21.5	38.5	38.5	φ 32	-	-	37.5	-	-	21.5	42.5	42.5