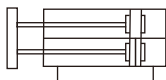


Product feature

1. Enterprises standard is implemented.
2. Embedded installation and fixation mode saves the installation space.
3. It is good resistance to bending and twisting moments.
4. Mounting holes on three sides facilitates multi-position mounting.
5. Bumper in front of the barrel can adjust the stroke of cylinder and relieve impact.
6. Standard configuration of this series has magnet and the type without magnet is not available.

Symbol



Specification

Bore size(mm)	10	16	20	25	32
Acting type	Double acting				
Fluid	Air(to be filtered by 40μm filter element)				
Operating pressure	0.15~1.0MPa(22~145psi)				
Proof pressure	1.5MPa(215psi)				
Temperature	-20~70				
Speed range mm/s	30~500				
Adjustable stroke mm	-10~0				
Stroke tolerance	≤100 $^{+1.0}_0$ > 100 $^{+1.5}_0$				
Cushion type	Bumper				
Non-rotating tolerance [Note 1]	±0.4°		±0.3°		
Port size	M5×0.8				G1/8

[Note 1] Retract position.

Standard Stroke

Bore size (mm)	Standard stroke (mm)	Max.std stroke
10	10 20 30 40 50 60 70 80 90 100	100
16	10 20 30 40 50 60 70 80 90 100 125 150 175 200	200
20	10 20 30 40 50 60 70 80 90 100 125 150 175 200	200
25	10 20 30 40 50 60 70 80 90 100 125 150 175 200	200
32	10 20 30 40 50 60 70 80 90 100 125 150 175 200	200

[Note] When the stroke less then or equal to 100mm, The dimensions of non-std stroke cylinder has the same dimensions as the next longer stroke std. stroke cylinder. e.g. 35mm stroke cylinder has the same dimensions of 40 std. stroke cylinder.

Ordering code

TN - 25 × 50 - S - □

① ② ③ ④ ⑤

① Model

TN: Twin-rod cylinder (Double acting type)

② Bore size

10 16 20 25 32

③ Stroke

Refer to stroke table for details

④ Magnet [Note1]

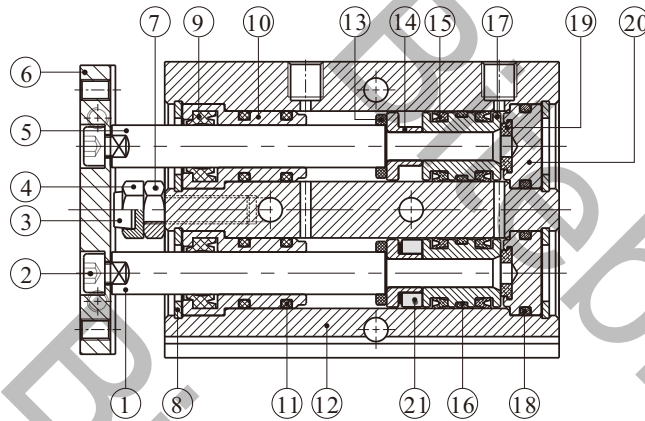
S: With magnet

⑤ Thread type [Note2]

Blank: G thread

[Note1] TN Series are all with magnet. [Note2] When the thread is standard, the code is blank.

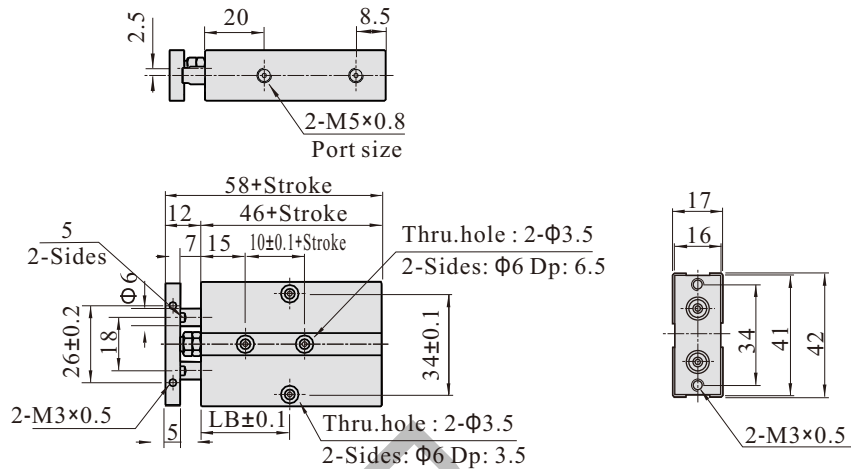
Inner structure and material of major parts



NO.	Item	Material	NO.	Item	Material	
1	Piston rod B	Φ32	12	Body	Aluminum alloy	
		Other	SUS304	13	Bumper	TPU
2	Screw	Carbon steel	14	Magnet holder	Φ10	SUS303
3	Bumper	POM			Other	Aluminum alloy
4	Adjustable nut	Carbon steel	15	Piston seal	NBR	
5	Piston rod A	S45C	16	Wear ring	Wear resistant material	
6	Fixing plate	Free cutting steel	17	Piston	Φ10	SUS303
7	Screw	Carbon steel			Other	Aluminum alloy
8	C clip	Spring steel	18	Seal ring	NBR	
9	Wiper seal	NBR	19	Bumper	TPU	
10	Front cover	Aluminum alloy	20	Back cover	Aluminum alloy	
11	O-ring	NBR	21	Magnet	Sintered metal(Neodymium-iron-boron)	

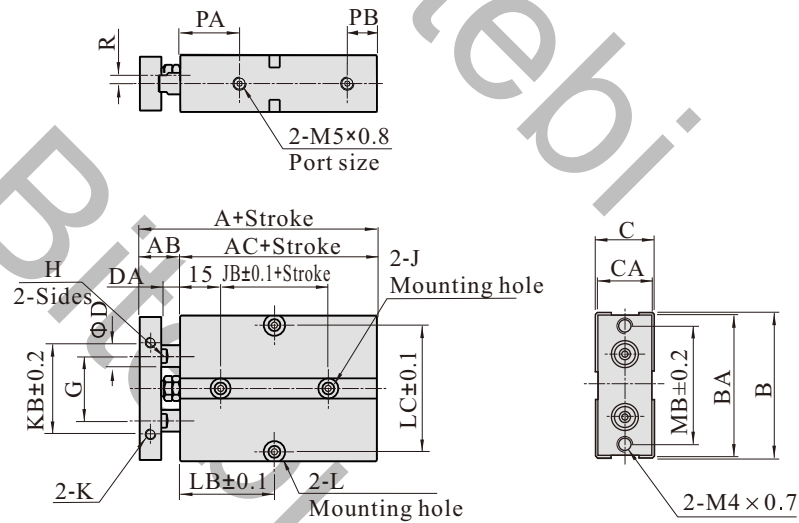
Dimensions

TN10



Item\Stroke	10	20	30	40	50	60	70	80	90	100
LB	30	30	35	40	45	50	55	60	65	70

TN16~25



Bore size\Item	A	AB	AC	B	BA	C	CA	D	DA	G	H	J
16	68	15	53	54	53	21	20	8	7	24	6	Both sides:Φ7.5Dp:7.5Thru.hole:Φ4.5
20	78	20	58	62	61	25	24	10	10	28	8	Both sides:Φ7.5Dp:7.5Thru.hole:Φ4.5
25	81	19	62	73	72	30	29	12	9	34	10	Both sides:Φ7.5Dp:7.5Thru.hole:Φ4.5

Bore size\Item	JB	K	KB	PA	PB	L	LC	MB	R
16	20	M4×0.7Dp:5	34	22	11	Both sides:Φ8Dp:4.5Thru.hole:Φ4.5	47	47	3
20	20	M4×0.7Dp:5	44	25	12	Both sides:Φ8Dp:4.5Thru.hole:Φ4.5	55	55	3.5
25	30	M4×0.7Dp:6	56	27	12	Both sides:Φ8Dp:4.5Thru.hole:Φ4.5	66	66	6

Bore size\Item	LB													
Stroke ≤	10	20	30	40	50	60	70	80	90	100	125	150	175	200
16	30	35	40	45	50	55	60	65	70	75	87.5	100	112.5	125
20	35	35	40	45	50	55	60	65	70	75	87.5	100	112.5	125
25	40	40	45	50	55	60	65	70	75	80	92.5	105	117.5	130

