

## TN Series Cylinder



### Ordering code

**TN**

Series code  
TN: Dual-rod  
double acting

**20**

Bore

**X**

**50**

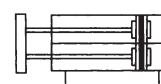
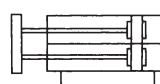
Stroke

**-**

**S**

Magnet  
Blank: Without magnet  
S: With magnet

### Symbol



### Specifications

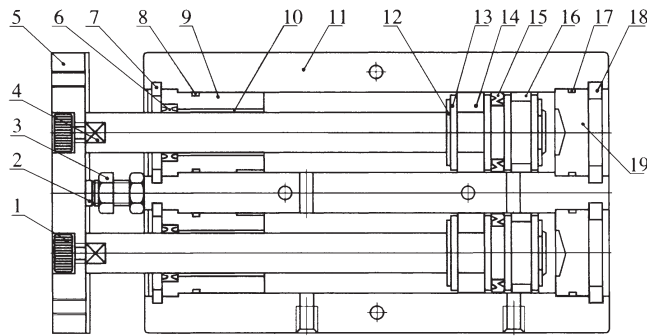
Bore (mm)	10	16	20	25	32
Fluid	Air				
Operation	Double acting				
Operating pressure	0.1~0.9MPa				
Proof pressure	1.35MPa				
Operating temperature	0~70°C				
Operating piston speed	100~500 mm/s				
Adjustable stroke	-10~0 mm				
Cushioning	No	Rubber bumper at both ends			
Non-rotatory precision	0.4°	0.3°			
Port size	M5×0.8				PT1/8"

### Stroke

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

## TN Series Cylinder

### Construction



### Component parts

No.	Name	Material
1	Hexagon socket head cap screw	-
2	Bumper	PU
3	Adjusting screw	-
4	Axes	-
5	Front board	Free machining iron
6	Front compaction	-
7	"C" type clip	Spring steel
8	Front cover "O" ring	NBR
9	Front cover	Aluminum alloy
10	Axes axletree	-
11	Housing	Aluminum alloy

No.	Name	Material
12	Bumper	PU
13	Piston	Aluminum alloy
14	Magnet	Magnetic material
15	Piston "O" ring	NBR
16	Wearing ring	-
17	Rear cover "O" oring	NBR
18	"C" type clip	Spring steel
19	Rear cover	Aluminum alloy

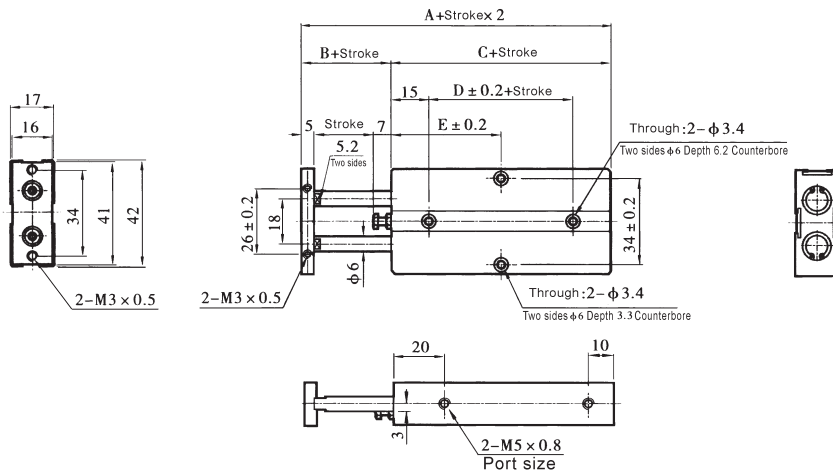
### O-ring list

	Front cover seal ring	Piston "O" ring	Front & rear cover "O" ring	Piston rod "O" ring
Bore/Number	1	2	2	1
10	PDU-6	APA-10	10×1.5	P12
16	PDU-8	APA-16	16×1.5	P16
20	PDU-10	APA-20	20×1.5	P20
25	PDU-12	APA-25	25×1.5	P20
32	PDU-16	APA-32	32×1.5	P25

## TN Series Cylinder

### ● Dimensions

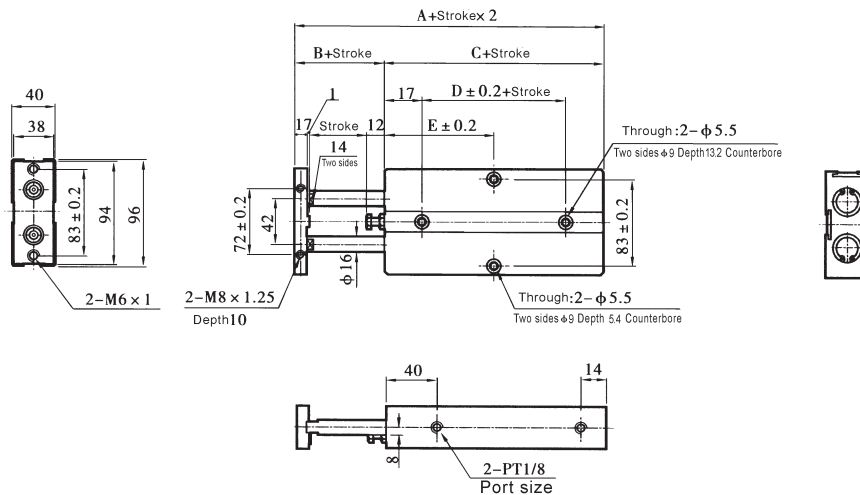
φ 10



Symbol Bore/Symbol	A	B	C	D	E						
					10	20	30	40	50	60	70
10	58	12	46	10	30	30	35	40	45	50	55

### ● Dimensions

φ 32

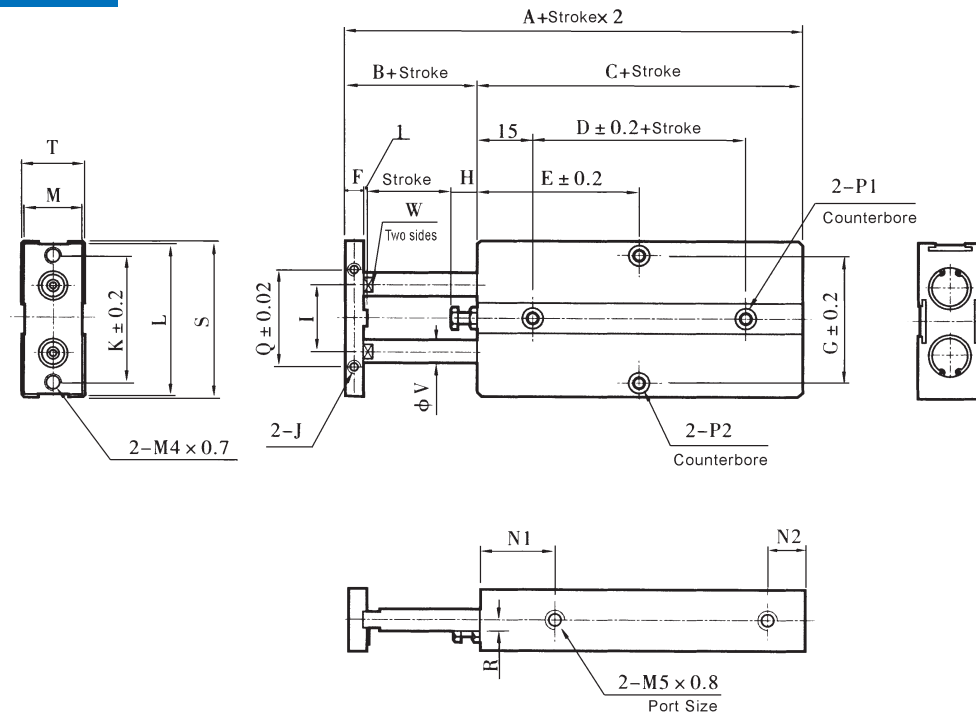


Symbol Bore/Symbol	A	B	C	D	E											
					10	20	30	40	50	60	70	80	90	100	125	150
32	108	30	78	35	45	50	55	60	65	70	75	80	85	90	102.5	115

## TN Series Cylinder

### ● Dimensions

φ 16 ~ φ 25



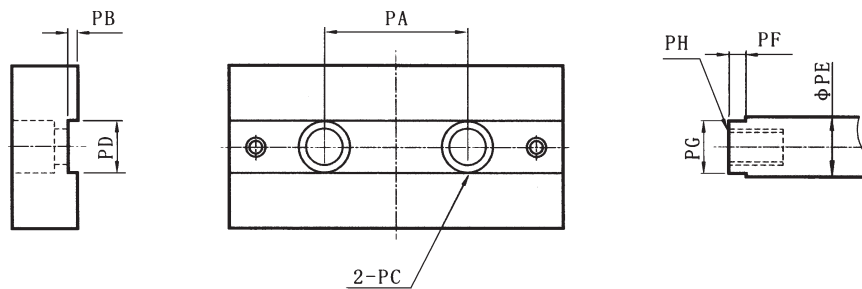
Symbol Bore/Symbol	A	B	C	D	E											F	G	H	I	
					10	20	30	40	50	60	70	80	90	100	125					150
16	68	15	53	20	30	35	40	45	50	55	60	65	70	75	87.5	100	8	47	6	24
20	78	20	58	20	35	35	40	45	50	55	60	65	70	75	87.5	100	10	55	9	28
25	81	19	62	30	40	40	45	50	55	60	65	70	75	80	92.5	105	10	66	8	34

Bore/Symbol	J	K	L	M	N1	N2	P1	P2	Q	R	S	T	V	W
16	M4 × 0.7 Depth 5	47	53	20	22	10	2 Sides φ 7.5 Depth 7.2mm. Through: φ 4.5	2 Sides φ 8 Depth 4.4mm. Through: φ 4.5	34	4	54	21	8	6.2
20	M4 × 0.7 Depth 5	55	61	24	25	12	2 Sides φ 7.5 Depth 7.2mm. Through: φ 4.5	2 Sides φ 8 Depth 4.4mm. Through: φ 4.5	44	6	62	25	10	8.2
25	M4 × 0.8 Depth 6	66	72	29	30	12	2 Sides φ 7.5 Depth 7.2mm. Through: φ 4.5	2 Sides φ 8 Depth 4.4mm. Through: φ 4.5	56	7	73	30	12	10.2

## TN Series Cylinder

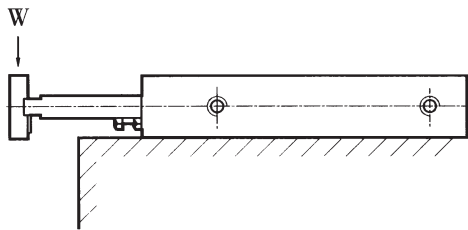
● Front board dimensions

φ 16 ~ φ 25



Bore/Symbol	PA	PB	P1	PD	PE	PF	PG	P2
10	18	0.5	φ 6.2 Depth 3.5mm, Through: φ 4.5	5.2	6	3	5.2	M3×0.5 Depth 5mm
16	24	1	φ 7.8 Depth 4.6mm, Through: φ 4.5	6.2	8	3	6.2	M4×0.7 Depth 46mm
20	28	1	φ 11 Depth 6.8mm, Through: φ 4.5	8.2	10	3	8.2	M6×1 Depth 48mm
25	34	1	φ 11 Depth 6.8mm, Through: φ 4.5	10.2	12	3	10.2	M6×1 Depth 48mm
32	42	2	φ 17 Depth 12mm, Through: φ 4.5	14	16	3	14	M10×1.5 Depth 14mm

● Allow the side toward load



\*1Kgf=9.81N

