



DOUBLE ACTING TYPE... D7W-1




Features

- Compact in width and length with precision guidance.
- High lateral loads can be applied on both slide and linear bearing unit.
- Non rotation is standard.
- Magnetic as standard.

Specification

Type	D7W-1		
Bore	Φ 6、12、16、20、25、32		
Power fluid	Filtered air with or without lubrication		
The range of pressure	Max.	7 kgf/cm ²	
	Min.	Φ 6 : 1.5 kgf/cm ²	Φ 12 ~ 16 : 1.0 kgf/cm ² Φ 20 ~ 32 : 0.5 kgf/cm ²
Proof pressure	10 kgf/cm ²		
The range of temperature	-5 ~ +60 °C (Don't freeze)		
Piston speed	Max. 1 m/s		
Material of cylinder barrel	Aluminium extrusion, Anodised 20 microns		

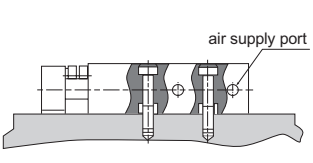
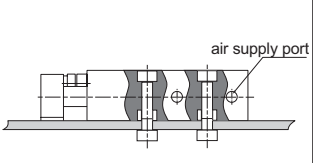
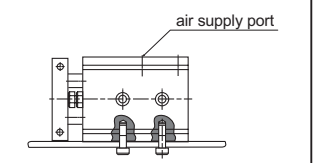
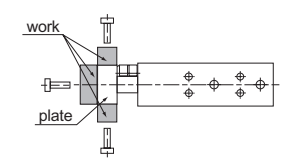
How to order

D7W-1	B	12	50	-	A
Type	Bearing	Bore	Stroke		Sensor switch
 D7W-1	N : Slide bearing B : Linear bush bearings	6 : Φ 6 12 : Φ 12 16 : Φ 16 20 : Φ 20 25 : Φ 25 32 : Φ 32	Please see stroke table		ZE101

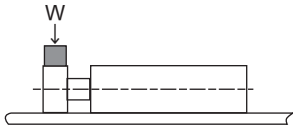
Stroke table

Bore	Stroke (mm)	Max. stroke (mm)
Φ 6	10,20,30	50
Φ 12	10,15,20,25,30,35,40,45,50,60,70	70
Φ 16	10,15,20,25,30,35,40,45,50,60,70,75,80,90,100	120
Φ 20		130
Φ 25		150
Φ 32		150

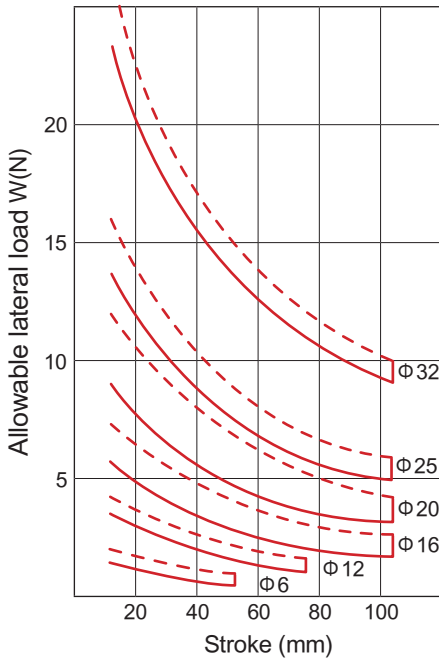
Mounting type

			
Top mounting	Bottom mounting	Side mounting	Work can be mounted on three faces of the rod square plate.

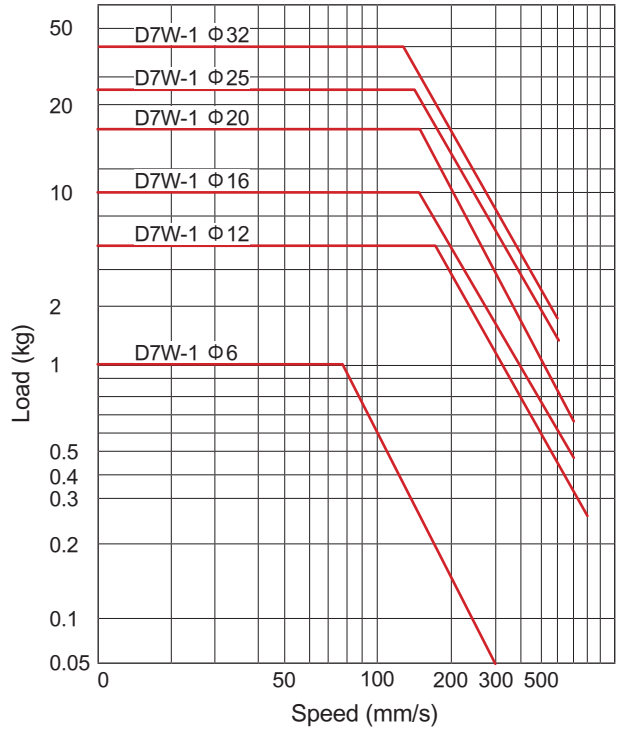
Allowable lateral load



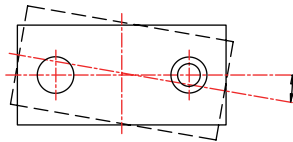
--- Linear bush bearings
— Slide bearing



Capacity graph

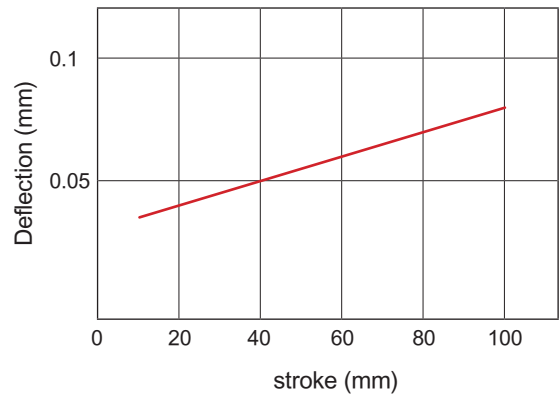


Anti-roll accuracy

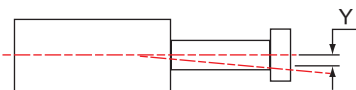


Bore	Φ6 ~ 32
D7W-1N	±0.1°
D7W-1B	±0.15°

Deviation / Stroke Diagram



Capacity for the use as a pusher

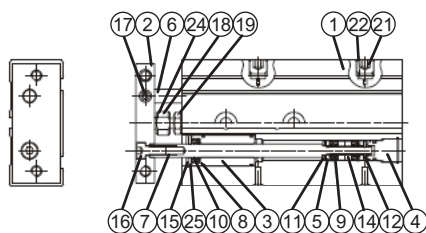


- In the actual operation, load at the top should be below the allowable top load.
- Y → Deflection

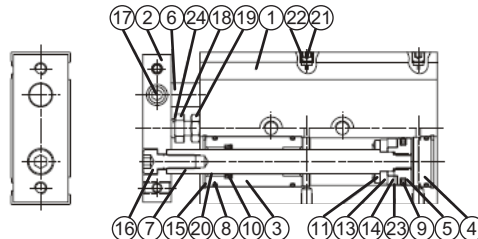
D7W-1

D7W-1N Double acting type / Inside structure

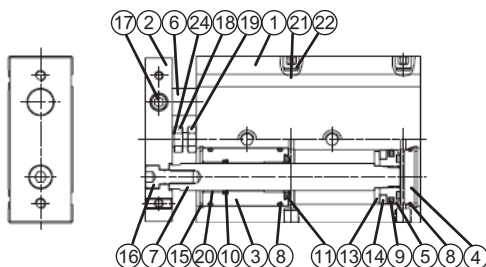
● Bore $\Phi 6$



● Bore $\Phi 12 \sim 20$



● Bore $\Phi 25 \sim 32$

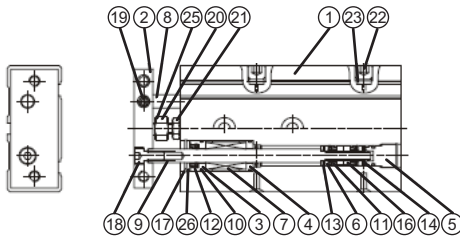


Parts list

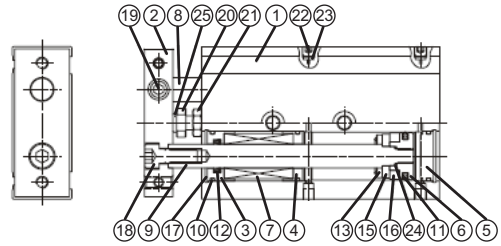
No.	Part name	Material	No.	Part name	Material	No.	Part name	Material
1	Body	Aluminium alloy	10	Rod packing	NBR	19	Nut	Carbon steel
2	Plate	Aluminium alloy	11	Rod cushion	NBR	20	Rod bush	Copper
3	Rod cover	$\Phi 6$: Copper $\Phi 12 \sim 32$: Aluminium	12	End cushion (only $\Phi 6$)	NBR	21	Plug (set screw)	Carbon steel
4	Head cover	Aluminium alloy	13	Magnet holder	Stainless steel	22	Plug ring	NBR
5	Piston	Aluminium alloy	14	Magnet ring	Magnet material	23	O-ring (only $\Phi 20$)	NBR
6	Piston rod #1	$\Phi 6 \sim 20$: Stainless steel $\Phi 25 \sim 32$: Medium carbon steel	15	Snap ring	Spring steel	24	Bumper	Polyurethane
7	Piston rod #2	$\Phi 6 \sim 20$: Stainless steel $\Phi 25 \sim 32$: Medium carbon steel	16	Screw	Stainless steel	25	Rod cover washer (only $\Phi 6$)	Stainless steel
8	Cover ring	NBR	17	Set screw	Stainless steel			
9	Piston packing	NBR	18	Cushion screw	Copper			

D7W-1B Double acting type / Inside structure

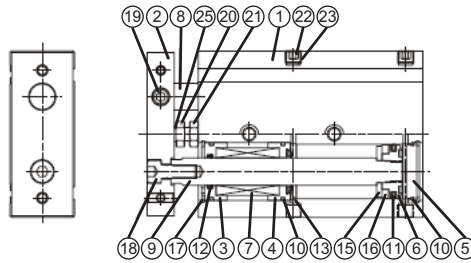
● Bore $\Phi 6$



● Bore $\Phi 12 \sim 20$



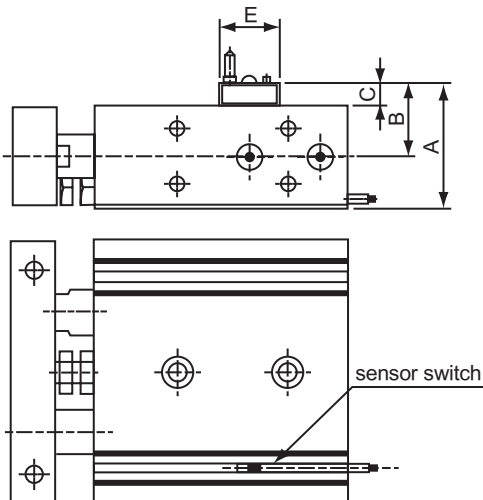
● Bore $\Phi 25 \sim 32$



Parts list

No.	Part name	Material	No.	Part name	Material	No.	Part name	Material
1	Body	Aluminium alloy	10	Cover ring	NBR	19	Set screw	Stainless steel
2	Plate	Aluminium alloy	11	Piston packing	NBR	20	Cushion screw	Copper
3	Rod cover#1	Aluminium alloy	12	Rod packing	NBR	21	Nut	Carbon steel
4	Rod cover#2	Aluminium alloy	13	Rod cushion	NBR	22	Plug (set screw)	Carbon steel
5	End cover	Aluminium alloy	14	End cushion	NBR	23	Plug ring	NBR
6	Piston	Aluminium alloy	15	Magnet holder	Stainless steel	24	O-ring(only $\Phi 20$)	NBR
7	Slide bush	—	16	Magnet ring	Magnet material	25	Bumper	Polyurethane
8	Piston rod #1	Bearing steel	17	Snap ring	Spring steel	26	Rod cover wahser (only $\Phi 6$)	Stainless steel
9	Piston rod #2	Bearing steel	18	Screw	Stainless steel			

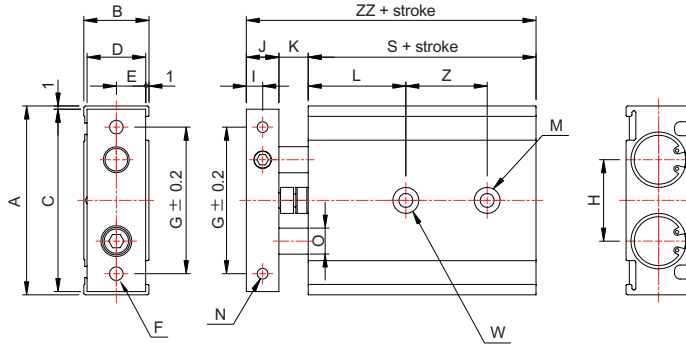
Installation of sensor switches



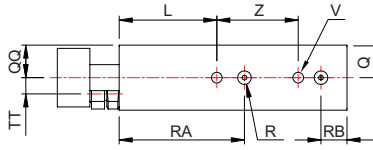
Dimensional table

Mark Bore	A	B	C	D	E
$\Phi 12$	26.5	17.5	8.5	16	22
$\Phi 16$	28.5	18.5	8.5	16	22
$\Phi 20$	33.5	21	8.5	16	22
$\Phi 25$	38.5	23.5	8.5	16	22
$\Phi 32$	46.5	27.5	8.5	16	22

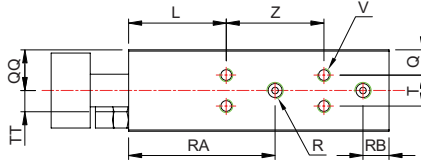
D7W-1 Double acting type / Dimensional features



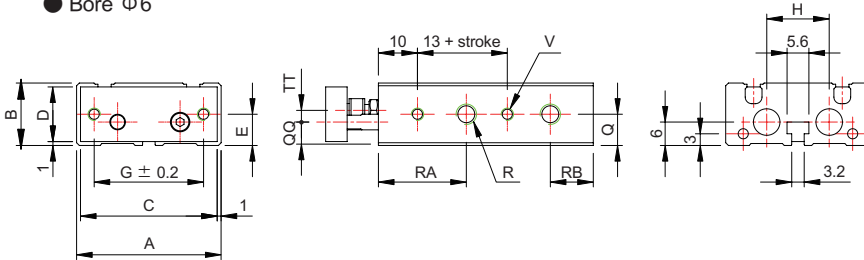
● Bore $\Phi 12 \sim 16$



● Bore $\Phi 20 \sim 32$



● Bore $\Phi 6$



Dimensional features

Mark Bore	A	B	C	D	E	F(Through)	G	H	I	J	K	L	M(Both sides)	N(Both sides)	O	Q	QQ	R	RA
$\Phi 6$	37	16	35	14	7	2-M3x0.5	28	16	2.75	5.5	8	13	2- $\Phi 6.5 \times 3.3$ deep(single side)	2-M3x0.5 through	4	8	6	4-M5x0.8	22.5
$\Phi 12$	46	18	44	16	8	2-M4x0.7	35	19	4	8	9	20	4- $\Phi 6.5 \times 3.3$ deep	2-M3x0.5x5 deep	6	9	10	4-M5x0.8	30
$\Phi 16$	58	20	56	18	9	2-M5x0.8	45	25	5	10	9	30	4- $\Phi 8 \times 4.4$ deep	2-M4x0.7x6 deep	8	10	10	4-M5x0.8	38.5
$\Phi 20$	64	25	62	23	11.5	2-M5x0.8	50	28	6	12	12	30	4- $\Phi 9.5 \times 5.3$ deep	2-M4x0.7x6 deep	10	7.75	12.5	4-M5x0.8	45
$\Phi 25$	80	30	78	28	14	2-M6x1.0	60	35	6	12	12	30	4- $\Phi 11 \times 6.3$ deep	2-M5x0.8x8 deep	12	8.5	15	4-PT1/8	46
$\Phi 32$	98	38	96	36	18	2-M6x1.0	75	44	8	16	14	30	4- $\Phi 11 \times 6.3$ deep	2-M5x0.8x8 deep	16	9	19	4-PT1/8	56

Mark Bore	RB	S	T	TT	V	W	Z (stroke)				ZZ
							10,15,20,25	30,35,40,45,50	60,70,75	80, 90,100	
$\Phi 6$	11	45	—	3	4-M3x0.5x4.5 deep	2- $\Phi 3.4$	10 + 1/2 stroke ($\Phi 6$: stroke 10,20,30)				58.5
$\Phi 12$	8	55	—	3.5	4-M3x0.5x4.5 deep	2-M4x0.7	30	40	50	—	72
$\Phi 16$	8	60	—	5	4-M4x0.7x5 deep	2-M5x0.8	25	35	45	45	79
$\Phi 20$	8	70	9.5	6.5	8-M4x0.7x5.5 deep	2-M6x1.0	30	40	60	60	94
$\Phi 25$	9	72	13	9	8-M5x0.8x7.5 deep	2-M8x1.25	30	40	60	60	96
$\Phi 32$	10	82	20	11.5	8-M5x0.8x7.5 deep	2-M8x1.25	40	50	70	70	112

D7W-1