

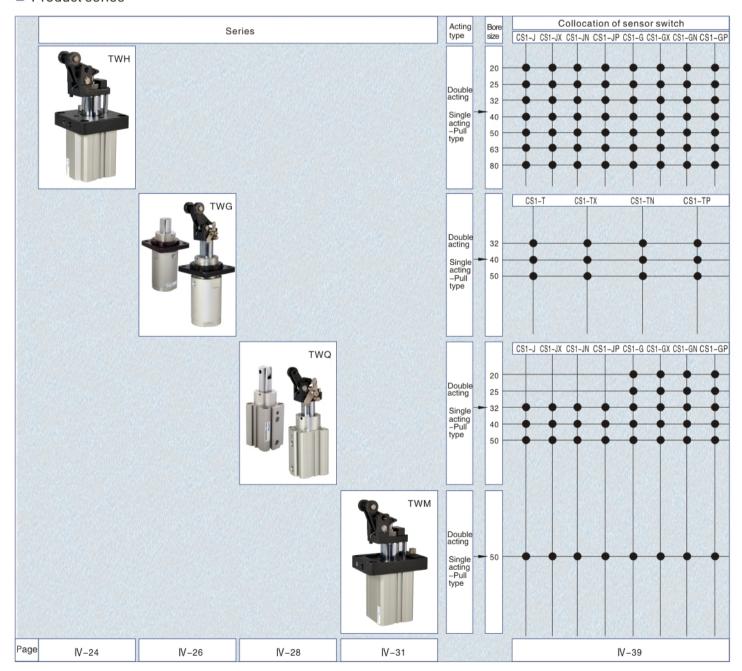
Stopper cylinder ——TWH、TWG、TWQ、TWM Series

Installation and application



- 1. When load changes in the work, the cylinder with abundant output capacity shall be selected;
- 2. Relative cylinder with high temperature resistance or corrosion resistance shall be chosen under the condition of high temperature or corrosion;
- 3. Necessary protection measure shall be taken in the environment with larger humidity, much dust or water drops, oil dust and welding dregs;
- 4. Dirty substances in the pipe must be cleared away before cylinder is connected with pipeline. Sundries must be prevented from entering the cylinder;
- 5. The medium used by cylinder shall be filtered by the filter core of above 40um;
- 6. The lateral load of the cylinder shall not exceed the allowable value in operation so as to maintain its normal operation and extend its service life;
- 7, Anti-freezing measure shall be adopted under low temperature environment to prevent the water freezing in cylinder;
- 8、 If the cylinder is dismantled and stored for a long time, please conduct anti-rust treatment to the surface. Antidust cap shall be added in air intake and outlet orifices.

Product series



TWH Series



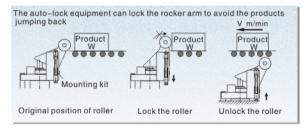
Symbol



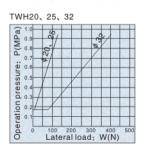
Product feature

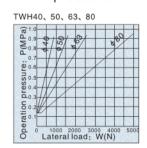
- 1. JIS standard is implemented;
- Widening the piston rod can effectively improve the impact resistance ability of the cylinder;
- Heavy type stopper cylinder has shock absorber adjustable shock absorber, which can reliably absorb the impact energy;
- Shockless stopper cylinder is equipped with self-lock device, which can prevent the returning of rebound of rocker caused by bar objects;
- Several series and specifications for stopper cylinders can be selected.

Auto-lock equipment



Lateral Load and Operation pressure





Specification

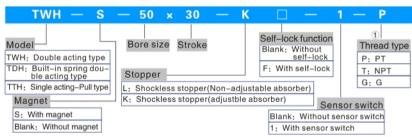
Bore size (mm)		20	25 32	40		63			
Action Fluid			Double acting type、Single acting-pull type						
			Air						
Operating	Double acting type		0.15~1.0MPa(23~145Psi)						
pressure	Single acting- pull type	20; 0.25~1.0MPa(35~145Psi) Other; 0.2~1.0MPa(28~145Psi)							
Proof pressure		1.5MPa(215Psi)							
Temperature °C		-20-80							
Range of stroke tolerance		+1.0							
Cushion type		Bumper							
Lubrication	1	Non required							
Mounting type		Flange							
Stopper type		Shock less stopper (With non adjustable absorber) (With adjustable absorber)							
Port size ①		M5 × 0.8		1/8"		1/4	1"		
Sensor's thread			M5 × 0.5	Salar Salar		M8×1.0			

① PT thread、NPT thread and G thread are available; Add: Refer to PVI-39~VI-50 for detail of sensor switch.

Stroke

Bore size (mm)	20	25	32	40	50	63	80
Standard stroke (mm)	15	15	20	30	30	30	40

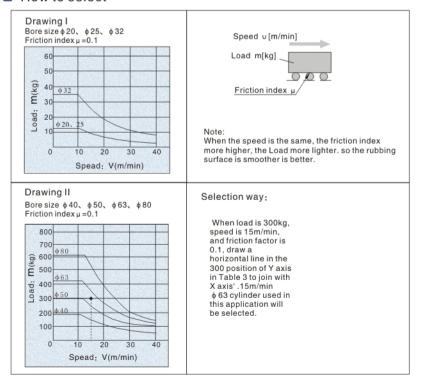
Ordering code



① When it is M5 thread, it is blank here.

Note: The buffer is not adjustable if the bore size is 20 and 25. It is adjustable if the bore is over 32.

How to select

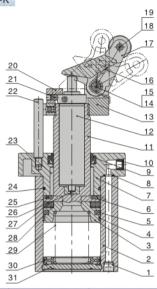




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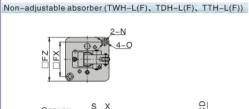
Inner structure and material of major parts

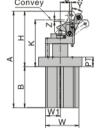
TTH-K

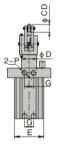


NO.	Item	Material
1	Countersink screw	Carbon steel
2	Body	Aluminum alloy
3	Piston	Aluminum alloy
4	Wear ring	Wear resistant material
5	Piston O-ring	NBR
6	Magnet washer	Aluminum alloy
7	Front cover	Aluminum alloy
8	O-ring	NBR
9	Packing	NBR
10	Silencer	Sintered bronze particle
11	Piston rod	Carbon steel with 20um chrome plated
12	Shock absorber	
13	Fixed seat	Nodular Cast iron
14	PIN	S45C grinding rod
15	Clip	Spring steel
16	Torsion spring	Spring steel
17	Rocker	Cast steel
18	PIN	S45C grinding rod
19	PIN gasket	S45C grinding rod
20	Obstruct block	Powder metallurgy
21	Countersink screw	Carbon steel
22	Leader	Carbon steel with 20um chrome plated
23	Sliding bushing	Wear resistant material
24	O-ring	NBR
25	Bumper	TPU
26	Absorber fix and adjust seat	РОМ
27	Magnet	Plastic
28	Magnet washer	NBR
29	Spring	Spring steel
30	Cushion	POM
31	Back cover	Aluminum alloy

Dimensions

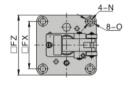


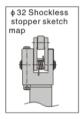


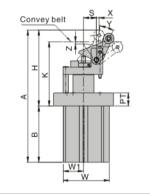


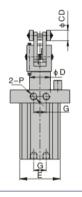
Item\Bore size	20	25	Item\Bore size	20	25
A	129	135.5	K	59.8	63.8
В	55	57.5	N	4.5	6.6
CD	12	12	0	-	-
D	16	16	P	M5	M5
E	36	40	S	12	12
PT	8	12	X	4	4
FX	40	47	Υ	28	28
FZ	48	58	W	40	45
G	12	16	Z	2.4	2.4
Hamman	74	78	W1	18	20

Adjustable absorber (TWH-K(F), TDH-K(F), TTH-K(F))









Item\Bore size	32	40	50	63	80
A	152.5	191	211	245.5	299.5
В	65.5	79	83	101	128
CD	12	20	20	20	25
D	20	25	32	40	50
E	46	53	64	77	98
PT	16	16	20	25	25
FX	53	65	73	90	110
FZ	67	82	93	114	138
G	16	16	18	24	30
Н	87	112	128	144.5	171.5
K	73.4	92.3	107.4	122	145.4
N	6.6	6.6	9	11	13
0	11	11	14	18	20
p	1/8"	1/8"	1/8"	1/4"	1/4"
S	12	16	21	25	31
X	3.5	5	5	5	6
Υ	28	26	24	24	23
W	51.5	62	72	87.5	109
Z	1.7	3.7	2.2	3.2	3.6
W1	23	26.5	32	38.5	49

Note: The type with magnet and the type without magnet have the same dimension;
The type with self-lock and the type without selflock have the same dimension.



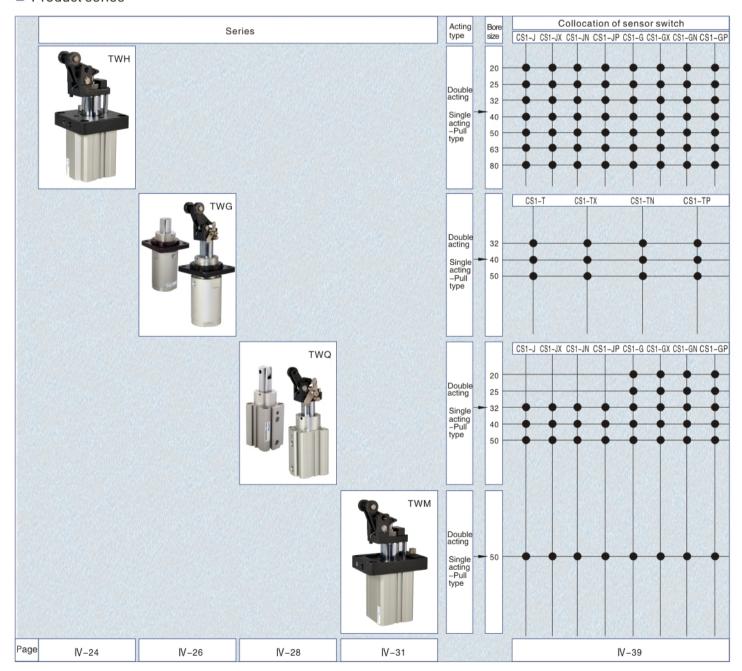
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Product series



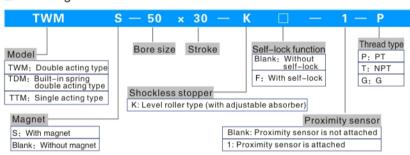


Specification

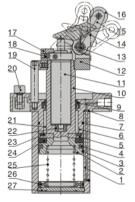
Bore size (mm)						
Action		Double acting type、Single acting-pull type				
Fluid		Air				
Pressure	Double acting type	0.15~1.0MPa(23~145Psi)				
range	Single acting-Pull type	0.2~1.0MPa (28~145psi)				
Proof pressure		1.5MPa(215Psi)				
Temperature ℃		-20~80				
Range of stroke tolerance		+1.0 0				
Cushion		Bumper				
Lubrication		Not required				
Mounting t	type	Flange				
Stopper type		Roller(with cushion)				
Port size 1		1/8"				
Standard stroke mm		30				
Sensor switch thread		M8×1.0				

① PT thread、NPT thread and G thread are available; Add: Refer to PVI-39~VI-50 for detail of sensor switch.

■Ordering code

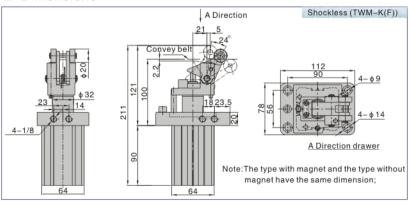


Inner structure and material of major parts



NO.	Item	Material	NO.	Item	Material
1	Body	Aluminum alloy	15	Rocker	Cast steel
2	Piston	Aluminum alloy	16	Roller	Free cutting steel
3	Wear ring	Wear resistant material	17	Obstruct black	Powder metallurgy
4	Piston O-ring	NBR	18	Countersink screw	Carbon steel
5	Magnet washer	Aluminum alloy	19	Leader	Carbon steel with 20um chrome plated
6	Front cover	Aluminum alloy	20	Cancel cap	Aluminum alloy
7	O-ring	NBR	21	Sliding bushing	Bronze powder metallurgy
8	O-ring	NBR	22	Absorber fix and adjust seat	РОМ
9	Gasket	NBR	23	Bumper	TPU
10	Piston rod	Carbon steel with 20um chrome plated	24	Magnet	Plastic
11	Shock absorber		25	Spring	Spring steel
12	Mounting seat	Nodular cast iron	26	Bumper	TPU
13	PIN	Carbon steel with 20um chrome plated	27	Back cover	Aluminum alloy
14	Torsion	Spring steel		CARAGORIA	SAAAAAAA

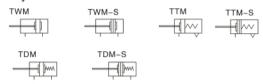
Dimensions







Symbol



Product feature

- 1. JIS standard is implemented.
- 2. Widening the piston rod can effectively improve the impact resistance ability of the cylinder.
- Heavy load type. The cushion effect of the stopper cylinder with shock absorber is better.
- Shockless stopper cylinder is attached with self-lock device, which can prevent the returning of rebound of rocker caused by bar objects.

How to select

