Stopper cylinder

TWG Series

Symbol

| TWG | TWG−S | TTG | TTG−S |

Product feature

1. JIS standard is implemented.
2. Widening the piston rod can effectively improve the impact resistance ability of the cylinder.
3. The installation height is adjustable and several rod end modes can be selected. The cushion effect of the stopper cylinder with shock absorber is better.
4. Shockless stopper cylinder is attached with self-lock device, which can prevent the returning of rebound of rocker caused by bar objects.
5. Several series and specifications for stopper cylinders can be selected.

Ordering code

Model can to be changed Ordering code. Example:
Production type: TWG
Magnet: With magnet
Bore size: 50mm
Stroke: 30mm
Stopper: Shockless stopper(adjustble absorber)
Self-lock function: With self-lock
Thread type: NPT

Model: TWG-S -50×30-KF-T

Ordering code: TWG S 50 K F 0030 T

- **Model**
- **Magnet**

  | Blank: Without magnet |
  | S: With magnet |

- **Bore size**

  | 32: Φ32mm |
  | 40: Φ40mm |
  | 50: Φ50mm |

- **Thread type**

  | P: PT |
  | T: NPT |
  | G: G |

- **Stroke**

  | In 4 digits |

- **Self-lock function**

  | Blank: Without self-lock |
  | F: With self-lock |

- **Stopper**

  | C: Round rod |
  | B: Flat rod |
  | R: Roller |
  | K: Shockless stopper (adjustble absorber) |

Specification

| Bore size(mm)		32	40	50
Fluid		Double acting type、Single acting-pull type		
Action		Air(to be filtered by 40μm filter element)		
Operating pressure	Double acting type	0.15~1.0MPa(23~145psi)		
	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 type		Bumper		
Lubrication		Non required		
Mounting type		Flange(The mounting high can be changed)		
Stopper type		Round rod, Flat rod, Roller shock less stopper(with absorber)		
Port size ①		1/8"		

① PT thread, NPT thread and G thread are available. Add) Refer to Page 403~426 for details of sensor switch.

Example of model

TWG−S−50×20−K□−P

- **Model**

  TWG: Stopper cylinder (Adjustable for height , double acting type)
  TTG: Stopper cylinder (Adjustable for height , single acting-pull type)

- **Magnet**

  | Blank: Without magnet |
  | S: With magnet |

- **Bore size**

  | 32 40 50 |

- **Stroke**

Bore size	Stroke (mm)
32	10 15 20
40, 50	20 25 30

- **Thread type**

  | P: PT |
  | T: NPT |
  | G: G |

- **Self-lock function**

  | Blank: Without self-lock |
  | F: With self-lock |

- **Stopper**

  | C: Round rod |
  | B: Flat rod |
  | R: Roller |
  | K: Shockless stopper (adjustble absorber) |

Lateral Load and Operation pressure

Lateral load & operation pressure

Round rod, Flat rod, Roller

TW

AirTAC
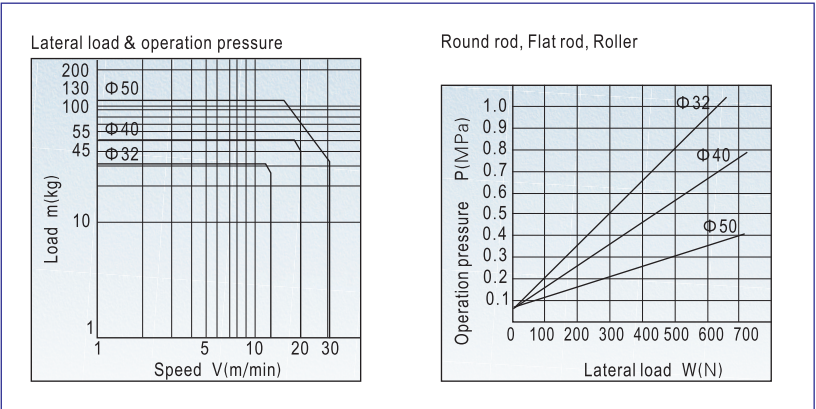
Inner structure and material of major parts

TTG–K
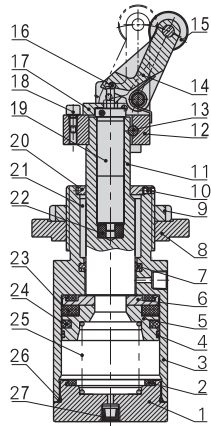
No.	Item	Material
1	Back cover	Aluminum alloy
2	Bumper	TPU
3	Body	Aluminum alloy
4	Wear ring	Wear resistant material
5	Piston	Aluminum alloy
6	Magnet washer	Aluminum alloy
7	Packing	NBR
8	Flange	Aluminum alloy
9	Fixed nut	Carbon steel
10	Countersink screw	Carbon steel
11	Piston rod	Carbon steel with 20 μ m chrome plated
12	Fixed seat	Nodular cast iron
13	Lock pin	Cast steel
14	Rocker	Cast steel
15	Roller	Mild steel
16	Steel ball	Stainless steel
17	Obstruct block	Powder metallurgy
18	Cancel cap	Aluminum alloy
19	Shock absorber	
20	Lock ring	Powder metallurgy
21	Sliding bushing	Wear resistant material
22	Absorber fix and adjust seat	POM
23	Magnet	Plastic
24	Piston seal	NBR
25	Spring	Spring steel
26	O-ring	NBR
27	Silence	Sintered bronze particle

TW

Dimensions

Round rod(TWG-C, TTG-C)
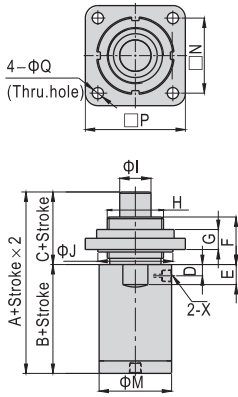
Bore size\Item	A	B	C	D	E	F	G	H
32	95	57	38	9	15	38	16	M36×1.5
40	100	62	38	12	16	38	16	M45×1.5
50	100	62	38	10	16	38	16	M45×1.5

Bore size\Item	I	J	M	N	P	Q	X
32	20	50	40	50	70	9	1/8"
40	25	60	47	60	80	9	1/8"
50	25	60	58	60	80	9	1/8"

Note: The type with magnet and the type without magnet have the same dimension.

Flat rod(TWG-B, TTG-B)
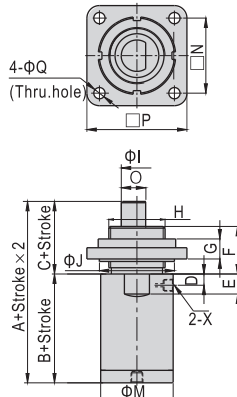
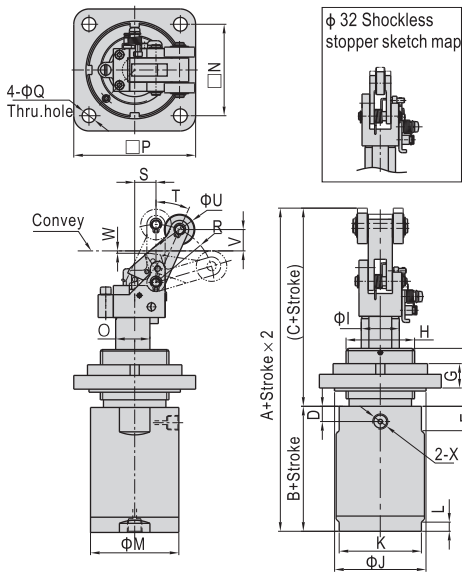| Bore size\Item	A	B	C	D	E	F	G	H
32	95	57	38	9	15	38	16	M36×1.5
40	100	62	38	12	16	38	16	M45×1.5
50	100	62	38	10	16	38	16	M45×1.5

Bore size\Item	I	J	M	N	P	Q	X
32	20	50	40	50	18.5	70	9	1/8"
40	25	60	47	60	22.5	80	9	1/8"
50	25	60	58	60	22.5	80	9	1/8"

Note: The type with magnet and the type without magnet have the same dimension.

Shockless stopper(TWG-K(F), TTG-K(F))

φ 32 Shockless stopper sketch map

Bore size\Item	A	B	C	D	E	F	G	H
32	147.5	57	90.5	9	15	38	16	M36×1.5
40	172	62	110	12	16	38	16	M45×1.5
50	172	62	110	10	16	38	16	M45×1.5

Bore size\Item	I	J	K	L	M	N	O	P	Q
32	20	50	37	6	40	50	18.5	70	9
40	25	60	44	6	47	60	22.5	80	9
50	25	60	54	6	58	60	22.5	80	9

Bore size\Item	R	S	T	U	V	W	X
32	24.5	11.5	28	15	4.4	1	1/8"
40	38	14	24	20	14	1.6	1/8"
50	38	14	24	20	14	1.6	1/8"

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

Roller(TWG-R, TTG-R)
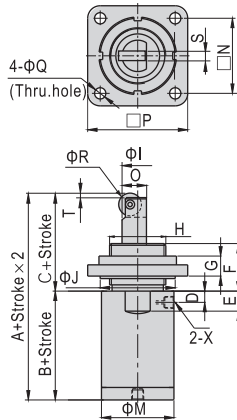
Bore size\Item	A	B	C	D	E	F	G	H	I
32	116	57	59	9	15	38	16	M36×1.5	20
40	123	62	61	12	16	38	16	M45×1.5	25
50	123	62	61	10	16	38	16	M45×1.5	25

Bore size\Item	J	M	N	O	P	Q	R	S	T	X
32	50	40	50	18.5	70	9	20	8	4	1/8"
40	60	47	60	22.5	80	9	20	8	4	1/8"
50	60	58	60	22.5	80	9	20	8	4	1/8"

Note: The type with magnet and the type without magnet have the same dimension.