

Stopper cylinder

TWQ Series



Specification

Bore size(mm)	20	25	32	40	50
Fluid	Double acting type、Single acting-pull type				
Action	Air(to be filtered by 40 μ m filter element)				
Operating pressure	Double acting type	0.15~1.0MPa(23~145psi)			
	Single acting-pull type	Φ20: 0.25~1.0MPa(35~145psi) others: 0.2~1.0MPa(28~145psi)			
Proof pressure	1.5MPa(215psi)				
Temperature °C	-20~80				
Range of stroke tolerance	+1.0 0				
Cushion type	Bumper				
Lubrication	Non required				
Mounting type	Thru hole or screw hole				
Stopper type	Round rod, Flat rod/Roller	Round rod, Flat rod/Roller, Shock less stopper(with absorber)			
Port size ①	M5×0.8			1/8"	

① PT thread, NPT thread and G thread are available. Add) Refer to Page 419~442 for details of sensor switch.

Symbol



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 stopper cylinder with shock absorber has a better cushion effect.
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

TWQ 50 × 20 S K □ □

- Model**
 - TWQ: Stopper cylinder (Height locked, double acting type)
 - TTQ: Stopper cylinder (Height locked, single acting-pull type)
- Bore size**
 - 20 25 32 40 50
- Stroke**

Bore size	Stroke (mm)
20, 25, 32	10 15 20
40, 50	20 25 30
- Thread type** ①
 - Blank: 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 (adjustable absorber)
- Magnet**
 - Blank: Without magnet
 - S: With magnet

① When the thread is standard, the code is blank.

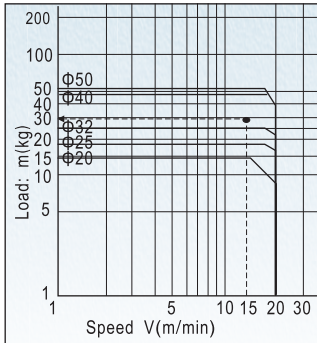


Stopper cylinder

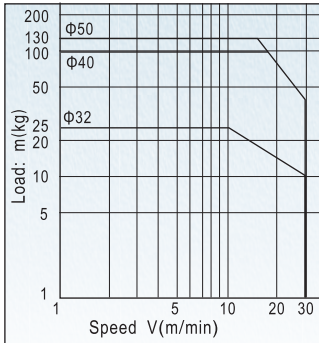
TWQ Series

How to select

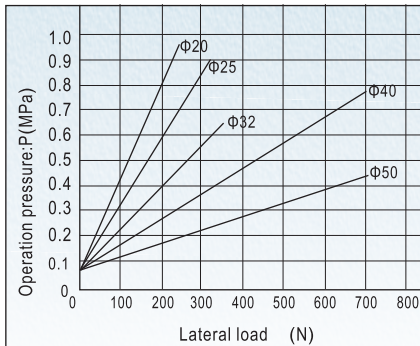
Round rod, Flat rod, roller



Shockless stopper (With adjustable absorber)



Lateral load & operation pressure Round rod, Flat rod, Roller

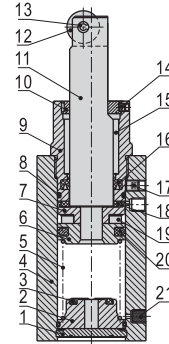


Installation and application

Please refer to page 411 for details.

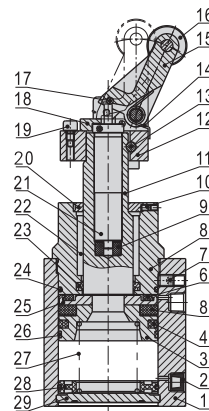
Inner structure and material of major parts

TTQ-R



No.	Item	Material
1	Back cover	Aluminum alloy
2	Spring holder	Aluminum alloy
3	Bumper	TPU
4	Body	Aluminum alloy
5	Spring	Spring steel
6	Piston	Aluminum alloy
7	Magnet holder	Aluminum alloy
8	O-ring	NBR
9	Front cover	Aluminum alloy
10	Lock ring	Powder metallurgy
11	Piston rod	Carbon steel with 20 μm chrome plated
12	Roller	Cast steel
13	Spring pin	Spring steel
14	Countersink screw	Carbon steel
15	Sliding bushing	Bronze powder metallurgy
16	Packing	NBR
17	Countersink screw	Carbon steel
18	Bumper	TPU
19	Magnet	Plastic
20	Piston seal	NBR
21	Silencer	Sintered bronze particle

TTQ-K (Φ32~Φ50)



No.	Item	Material
1	Body	Aluminum alloy
2	Silencer	Sintered bronze particle
3	Piston	Aluminum alloy
4	Piston seal	NBR
5	Magnet	Plastic
6	Bumper	TPU
7	Countersink screw	Carbon steel
8	Front cover	Aluminum alloy
9	Absorber fix and adjust seat	POM
10	Countersink screw	Carbon steel
11	Piston rod	Carbon steel with 20 μm chrome plated
12	Mounting seat	Nodular cast iron
13	Lock pin	Cast steel
14	Torsion spring	Spring steel
15	Rocker	Cast steel
16	Roller	Mild steel
17	Steel ball	Free cutting steel
18	Obstruct block	Powder metallurgy
19	Cancel cap	Aluminum alloy
20	Locking cushion	Powder metallurgy
21	Shock absorber	
22	Bushing	Sintered bronze particle
23	O-ring	NBR
24	O-ring	NBR
25	Magnet washer	Aluminum alloy
26	Bumper	Wear resistant material
27	Spring	Spring steel
28	Cushion	POM
29	Back cover	Aluminum alloy



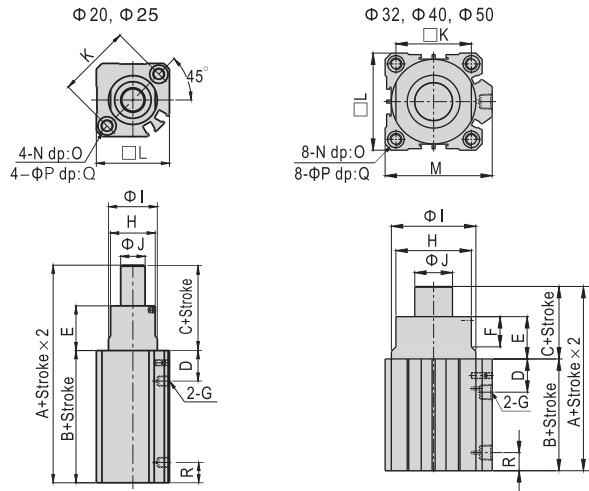
TW

Stopper cylinder

TWQ Series

Dimensions

Round rod (TWQ-C, TTQ-C)

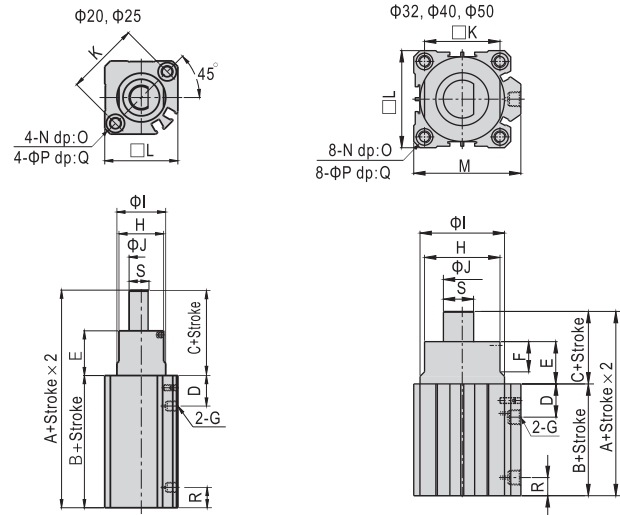


Bore size/Item	A	B	C	D	E	F	G	H	I
20	67	45	22	16.5	22	11	M5	22	24
25	68	48	20	18	20	15	M5	28	30
32	68	48	20	20	20	15	1/8"	34	36
40	80.5	52.5	28	20	28	18	1/8"	41	44
50	82	54	28	22	28	20	1/8"	50	56

Bore size/Item	J	K	L	M	N	O	P	Q	R
20	12	36	36	-	M6×1.0	10	9	7	9
25	16	40	40	-	M6×1.0	10	9	7	9
32	20	34	45	49.5	M6×1.0	10	9	7	10
40	25	40	53	57	M6×1.0	10	9	7	11
50	25	50	64	71	M8×1.25	14	11	8	12

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

Flat rod (TWQ-B, TTQ-B)



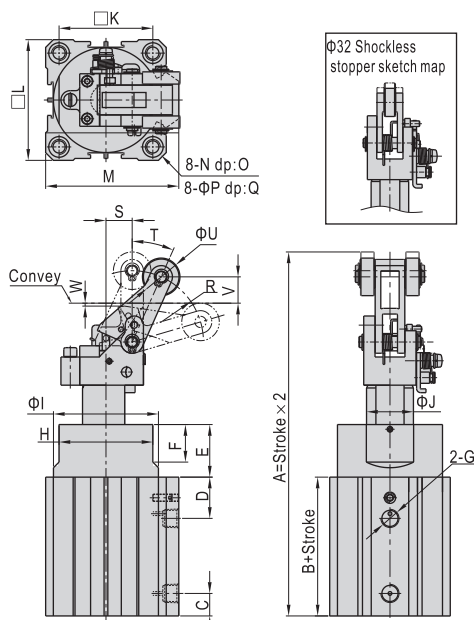
Bore size/Item	A	B	C	D	E	F	G	H	I	J
20	67	45	22	16.5	22	11	M5	22	24	12
25	68	48	20	18	20	15	M5	28	30	16
32	68	48	20	20	20	15	1/8"	34	36	20
40	80.5	52.5	28	20	28	18	1/8"	41	44	25
50	82	54	28	22	28	20	1/8"	50	56	25

Bore size/Item	K	L	M	N	O	P	Q	R	S
20	36	36	-	M6×1.0	10	9	7	9	10
25	40	40	-	M6×1.0	10	9	7	9	14
32	34	45	49.5	M6×1.0	10	9	7	10	18.5
40	40	53	57	M6×1.0	10	9	7	11	22.5
50	50	64	71	M8×1.25	14	11	8	12	22.5

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

Shockless stopper (TWQ-K(F), TTQ-K(F))

Φ32, Φ40, Φ50

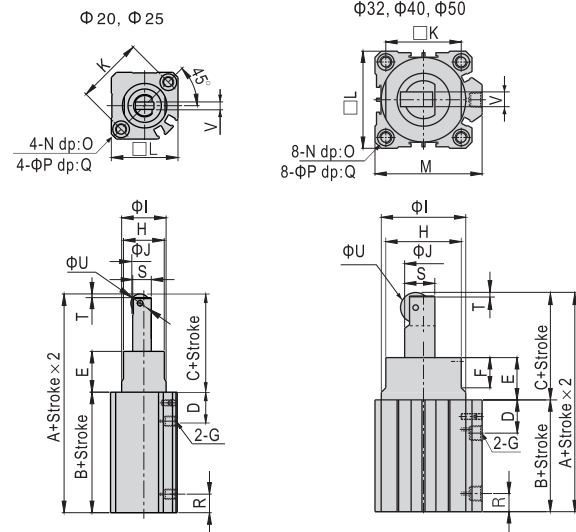


Bore size/Item	A	B	C	D	E	F	G	H	I	J	K
32	120.5	48	10	20	20	15	1/8"	34	36	20	34
40	152.5	52.5	11	20	28	18	1/8"	41	44	25	40
50	154	54	12	22	28	20	1/8"	50	56	25	50

Bore size/Item	L	M	N	O	P	Q	R	S	T	U	V	W
32	45	49.5	M6×1.0	10	9	7	24.5	11.5	28	15	4.4	1
40	53	57	M6×1.0	10	9	7	38	14	24	20	14	1.6
50	64	71	M8×1.25	14	11	8	38	14	24	20	14	1.6

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 (TWQ-R, TTQ-R)



Bore size/Item	A	B	C	D	E	F	G	H	I	J	K
20	78	45	33	16.5	22	11	M5	22	24	12	36
25	81	48	33	18	20	15	M5	28	30	16	40
32	87	48	39	20	20	15	1/8"	34	36	20	34
40	103.5	52.5	51	20	28	18	1/8"	41	44	25	40
50	105	54	51	22	28	20	1/8"	50	56	25	50

Bore size/Item	L	M	N	O	P	Q	R	S	T	U	V
20	36	-	M6×1.0	10	9	7	9	10	2	10	4
25	40	-	M6×1.0	10	9	7	9	14	2	12	6
32	45	49.5	M6×1.0	10	9	7	10	18.5	3	20	8
40	53	57	M6×1.0	10	9	7	11	22.5	4	20	8
50	64	71	M8×1.25	14	11	8	12	22.5	4	20	8

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

