
















## spring plunger

 <a href="#"><u>KE5 spring plunger</u></a>	 <a href="#"><u>KI5 spring plunger</u></a>	 <a href="#"><u>KE18 spring plunger</u></a>
 <a href="#"><u>KI18 spring plunger</u></a>	 <a href="#"><u>KE14 spring plunger</u></a>	 <a href="#"><u>KI14 spring plunger</u></a>
 <a href="#"><u>KE38 spring plunger</u></a>	 <a href="#"><u>KI38 spring plunger</u></a>	 <a href="#"><u>KE12 spring plunger</u></a>
 <a href="#"><u>KI12 spring plunger</u></a>		
 <a href="#"><u>MTE spring plunger</u></a>	 <a href="#"><u>MTI spring plunger</u></a>	 <a href="#"><u>MTA spring plunger</u></a>



KE5 spring plunger



■ Features

Built-in cushioning spring that automatically adjusts for height differences when conveying objects with varying heights. Multiple thread connections and various stroke specifications, suitable for standard-sized suction cups, with a wide range of applications. Spring cushioning provides flexible contact with delicate or easily damaged workpieces.

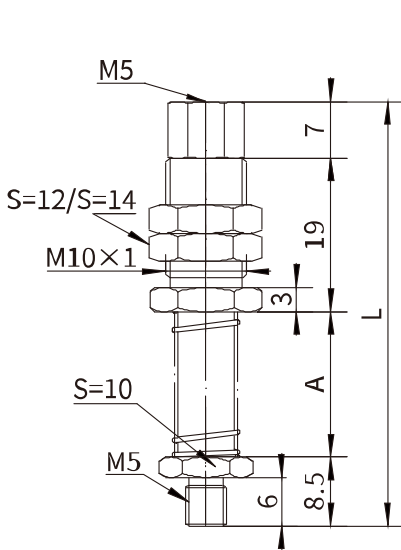
Wear-resistant guide rods for an extended lifespan.

■ Order Code

KE 5 10 - V - A10  
① ② ③ ④ ⑤

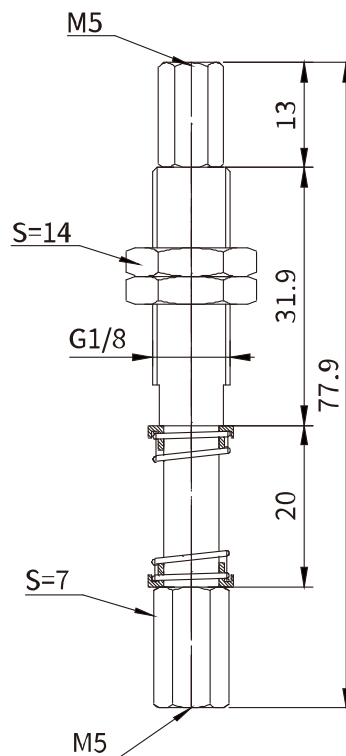
① Model	② air tube end specifications	③ buffer stroke	④ suction cup end specifications	⑤ installation with external thread connection
KE-external spring	5-M5	10-10mm stroke 20-20mm stroke 25-25mm stroke	blank-external threadM5 V-internal threadM5	A01-G1/8 A10-M10X1 A12-M12X1

■ Dimensions

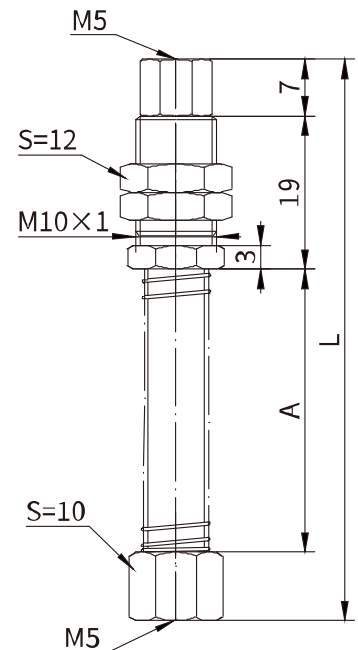


KE5 10-A10  
① ②

① buffer stroke	② bushing specifications	A	L
07	A10(A12)	18	52.5
15	A10(A12)	28	62.5



KE5 10-V-A01



KE5 10-V-A10  
①

① buffer stroke	A	L
10	20	54.5
20	30	64.5
25	35	69.5



# KI5 spring plunger



## ■ Features

Built-in cushioning spring for automatic height adjustment when conveying objects with varying heights. Various thread connections and different stroke specifications, suitable for standard-sized suction cups, with a wide range of applications. Spring cushioning for flexible contact with delicate or easily damaged workpieces. Wear-resistant guide rods for extended lifespan.

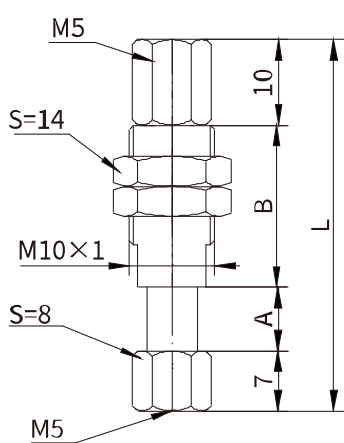
## ■ Order Code

**KI 5 10 - V - A10**

①      ②      ③      ④      ⑤

① Model	② air tube end specifications	③ buffer stroke	④ suction cup end specifications	⑤ installation with external thread connection
KI-built-in spring	5-M5	06-06mm stroke 07-07mm stroke 10-10mm stroke 12-12mm stroke 15-15mm stroke 20-20mm stroke 25-25mm stroke	blank-external thread M5 V-internal thread M5 F-anti-rotation M5	A10-M10X1

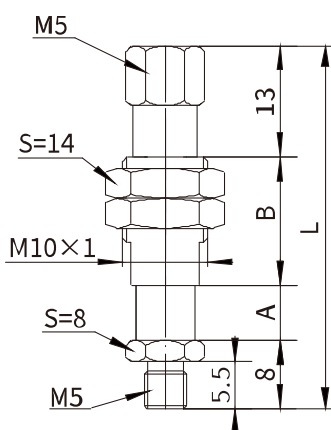
## ■ Dimensions



KI5 07-V-A10

①

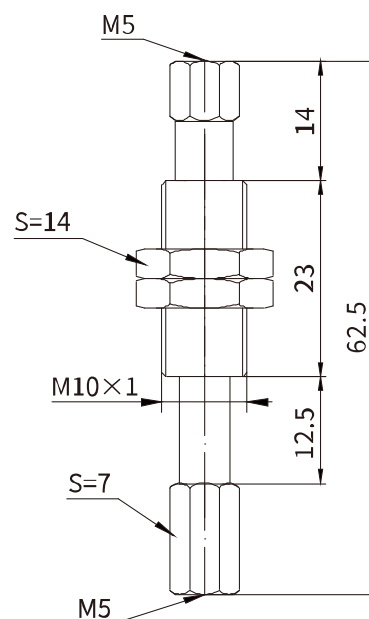
① buffer stroke	A	B	L
07	7.5	19	43.5
15	15.5	23	55.5
20	20.5	36	73.5
25	25.5	41.5	84



KI5 06-A10

①

① buffer stroke	A	B	L
06	6.5	15	42.5
10	10.5	44	75.5
25	25.5	44	90.5



KI5 12-F-V-A10



KE18 spring plunger



■ Features

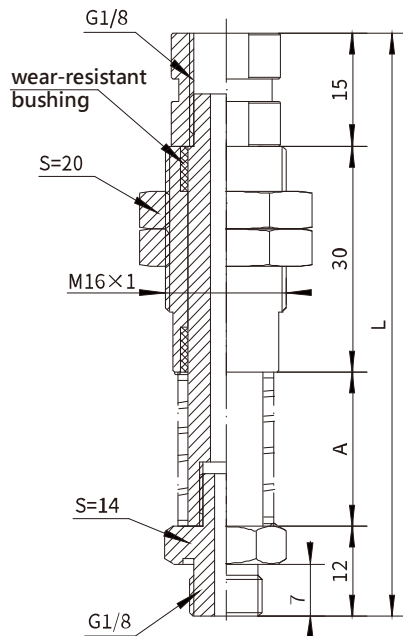
External cushioning spring for automatic height adjustment when conveying objects with varying heights. Various thread connections and different stroke specifications, suitable for standard-sized suction cups, with a wide range of applications. Spring cushioning for flexible contact with delicate or easily damaged workpieces. Wear-resistant guide rods for an extended lifespan.

■ Order Code

KE 18 10 - □ - A16  
① ② ③ ④ ⑤

① Model	② threaded connection specifications	③ buffer stroke	④ specification method	⑤ bushing external thread
KE-external spring	18-G1/8	10-10mm stroke 20-20mm stroke 30-30mm stroke 50-50mm stroke	blank-external thread V-internal thread	A16-M16X1 A18-M18X1

■ Dimensions



KE18 10-□-A16  
① ②

① buffer stroke	② blank/default/V	A	L
10	standard connector/internal thread connector	20.5	77.5
20	standard connector/internal thread connector	35.5	92.5
30	standard connector/internal thread connector	50.5	107.5
50	standard connector/internal thread connector	70.5	127.5



KI18 spring plunger



■ Features

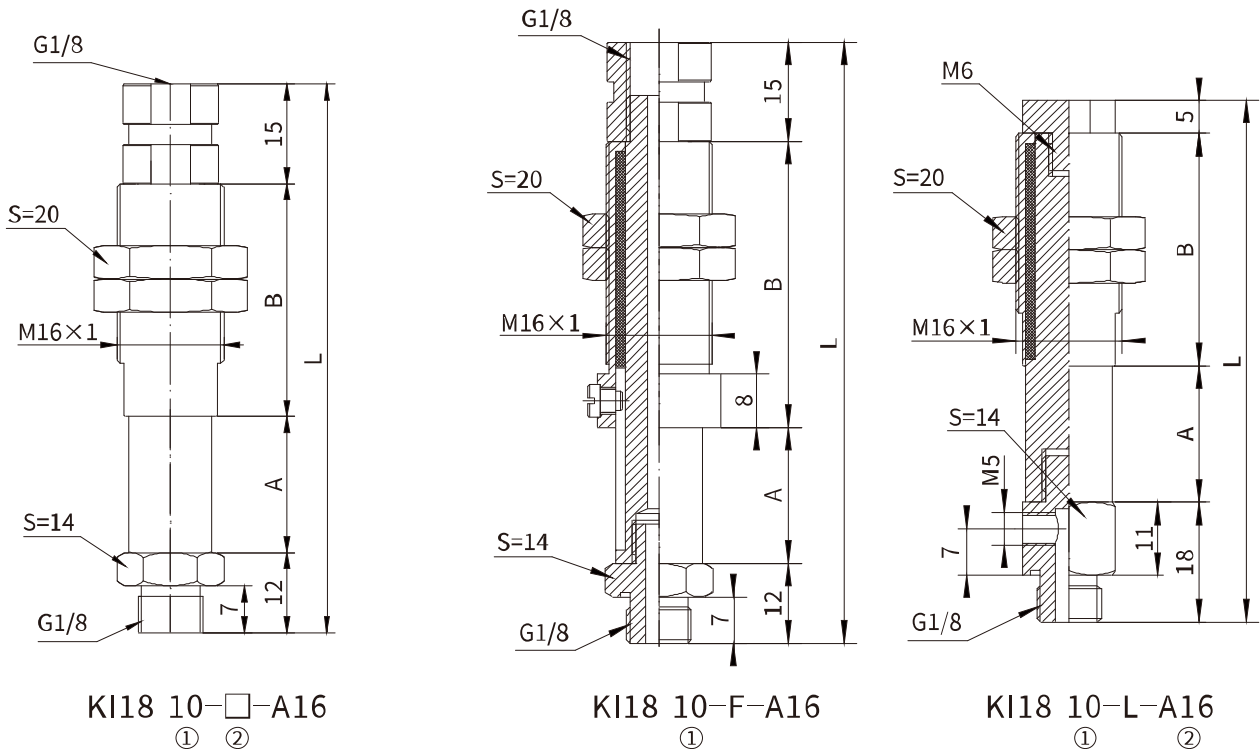
Built-in cushioning spring for automatic height adjustment when conveying objects with varying heights. Various thread connections and different stroke specifications, suitable for standard-sized suction cups, with a wide range of applications. Spring cushioning provides flexible contact with delicate or easily damaged workpieces. Wear-resistant guide rods for an extended lifespan.

■ Order Code

KI 18 10 - □ - A16  
① ② ③ ④ ⑤

① Model	② threaded connection specifications	③ buffer stroke	④ specification method	⑤ bushing external thread
KI-built-in spring	18-G1/8	10-10mm stroke 20-20mm stroke 30-30mm stroke 50-50mm stroke	blank-external thread V-internal thread F-anti-rotation L-side air inlet	A16-M16X1 A18-M18X1

■ Dimensions



① buffer stroke	② blank default/V	A	B	L
10	standard connector/internal thread connector	10.5	25	62.5
20	standard connector/internal thread connector	20.5	35	82.5
30	standard connector/internal thread connector	30.5	45	102.5
50	standard connector/internal thread connector	50.5	65	142.5

① buffer stroke	A	B	L
10	10.5	33	70.5
20	20.5	43	90.5
30	30.5	53	110.5
50	50.5	73	150.5

① buffer stroke	A	B	L
10	10.5	25	58.5
20	20.5	35	78.5
30	30.5	45	98.5
50	50.5	65	138.5

**KE14 spring plunger**



**■ Features**

- External cushioning spring for automatic height adjustment when conveying objects with varying heights.
- Various thread connections and different stroke specifications, suitable for standard-sized suction cups, with a wide range of applications.
- Spring cushioning for flexible contact with delicate or easily damaged workpieces.
- Wear-resistant guide rods for an extended lifespan. Optional anti-rotation feature.

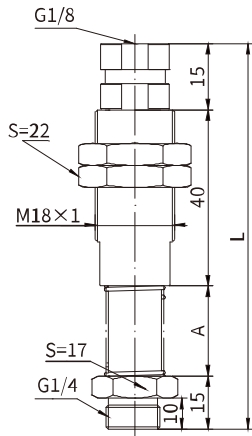
**■ Order Code**

**KE 14 10 - V - A18**  
 ①      ②      ③      ④      ⑤

① Model	② threaded connection specifications	③ buffer stroke	④ specification method	⑤ bushing external thread
KE-external spring	14-G1/4	10-10mm stroke 20-20mm stroke 25-25mm stroke 30-30mm stroke 50-50mm stroke 70-70mm stroke 75-75mm stroke	blank-external thread V-internal thread F-anti-rotation	A18-M18X1 A20-M20X1.5

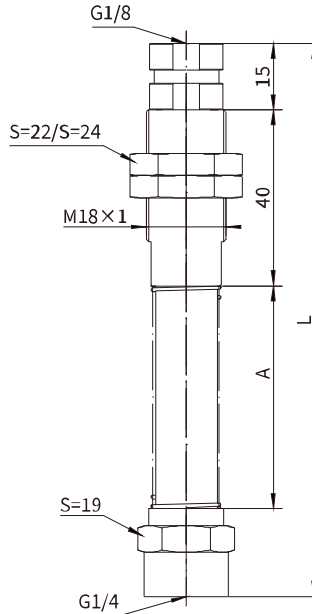


■ Dimensions



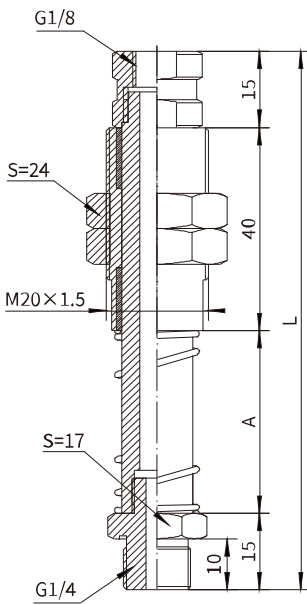
KE14 10-A18  
①

① buffer stroke	A	L
10	20.5	90.5
20	35.5	105.5
30	50.5	120.5
50	70.5	140.5



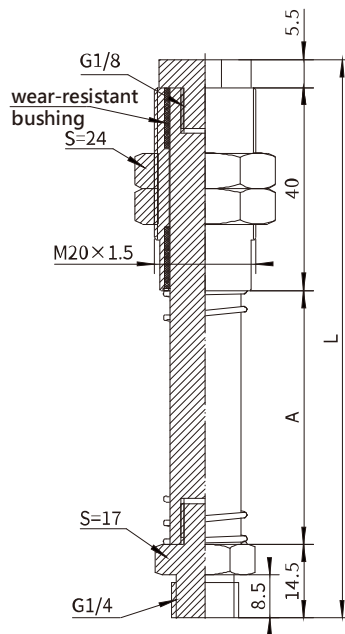
KE14 10-V-A18  
① ②

① buffer stroke	② bushing specifications	A	L
10	A18/A20	20.5	95.5
20	A18/A20	35.5	110.5
30	A18/A20	50.5	125.5
50	A18/A20	70.5	145.5



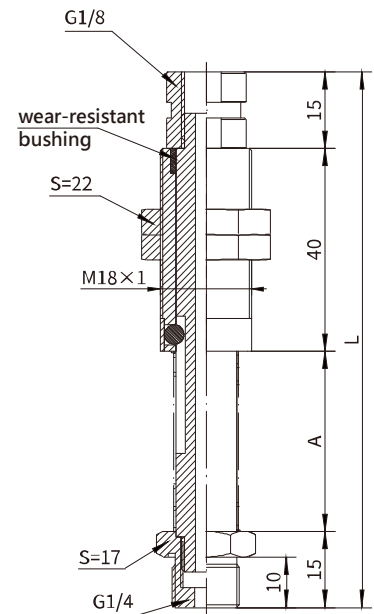
KE14 10-A20  
①

① buffer stroke	A	L
10	20.5	90.5
20	35.5	105.5
30	50.5	120.5
50	70.5	140.5
70	90.5	160.5



SKE14 25-A20  
① ②

① S	② buffer stroke	A	L
solid guide rod	25	50	110
solid guide rod	50	70	130
solid guide rod	75	94	154



KE14 10-F-A18  
①

① buffer stroke	A	L
10	20.5	90.5
20	35.5	105.5
30	50.5	120.5
50	70.5	140.5

**KI14 spring plunger**



■ **Features**

- Built-in cushioning spring for automatic height adjustment when conveying objects with varying heights.
- Various thread connections and different stroke specifications.
- Suitable for standard-sized suction cups, with a wide range of applications.
- Spring cushioning for flexible contact with delicate or easily damaged workpieces. Wear-resistant guide rods for an extended lifespan.

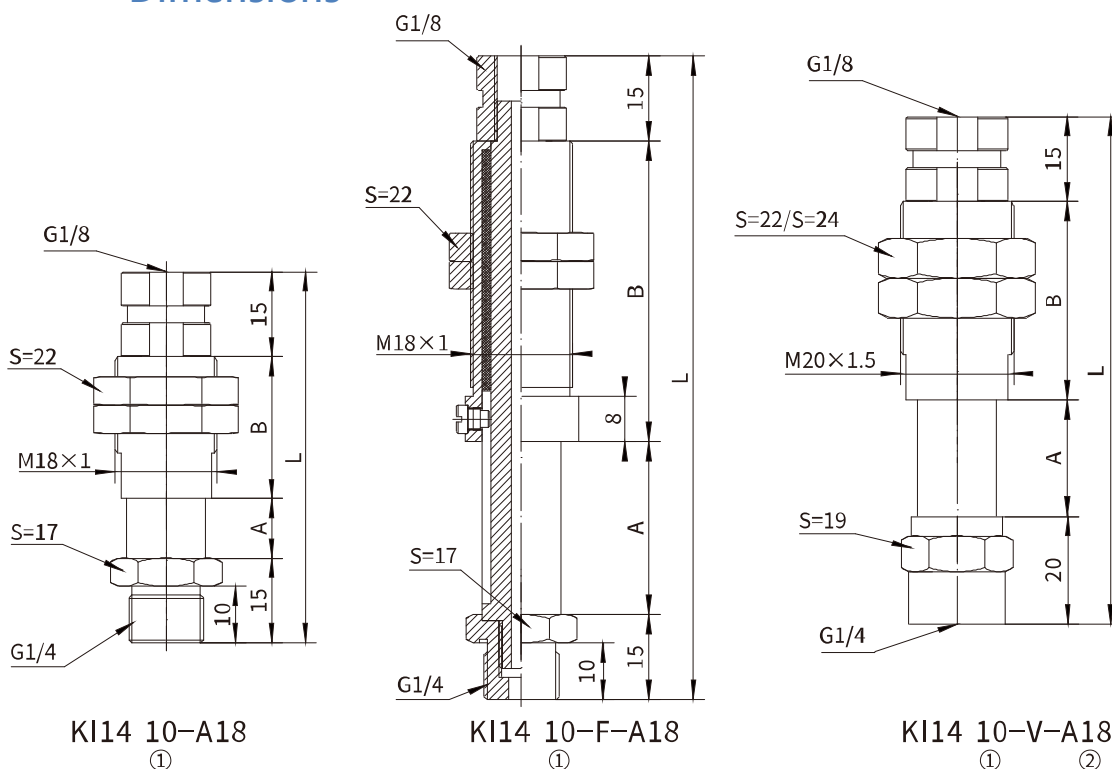
■ **Order Code**

**KI 14 10 - V - A18**

①      ②      ③      ④      ⑤

① Model	② threaded connection specifications	③ buffer stroke	④ specification method	⑤ bushing external thread
KI-built-in spring	14-G1/4	10-10mm stroke 20-20mm stroke 30-30mm stroke 50-50mm stroke	blank-external thread V-internal thread F-anti-rotation	A18-M18X1 A20-M20X1.5

■ **Dimensions**



① buffer stroke	A	B	L
10	10.5	25	65.5
20	20.5	35	85.5
30	30.5	45	105.5
50	50.5	75	155.5

① buffer stroke	A	B	L
10	10.5	33	73.5
20	20.5	43	93.5
30	30.5	53	113.5
50	50.5	83	163.5

① buffer stroke	② bushing specifications	A	B	L
10	A18/A20	10.5	25	70.5
20	A18/A20	20.5	35	90.5
30	A18/A20	30.5	45	110.5
50	A18/A20	50.5	75	160.5





KE38 spring plunger



■ Features

- External cushioning spring for automatic height adjustment when conveying objects with varying heights.
- Various thread connections and different stroke specifications, suitable for standard-sized suction cups, with a wide range of applications.
- Spring cushioning for flexible contact with delicate or easily damaged workpieces.
- Wear-resistant guide rods for an extended lifespan. Optional anti-rotation feature.

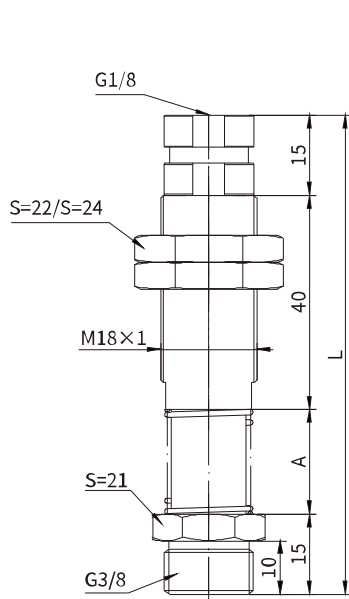
■ Order Code

**KE**    **38**    **10**    **-**    **V**    **-**    **A18**    **-**    **D**  
 ①        ②        ③        ④        ⑤        ⑥

① Model	② threaded connection specifications	③ buffer stroke	④ specification method
KE-external spring	38-G3/8	10-10mm stroke 20-20mm stroke 30-30mm stroke 50-50mm stroke 70-70mm stroke 75-75mm stroke 100-100mm stroke	blank-external thread V-internal thread F-anti-rotation
⑤ bushing external thread		⑥ upper connector specifications	
A18-M18X1 A20-M20X1.5		Internal thread 1/8	



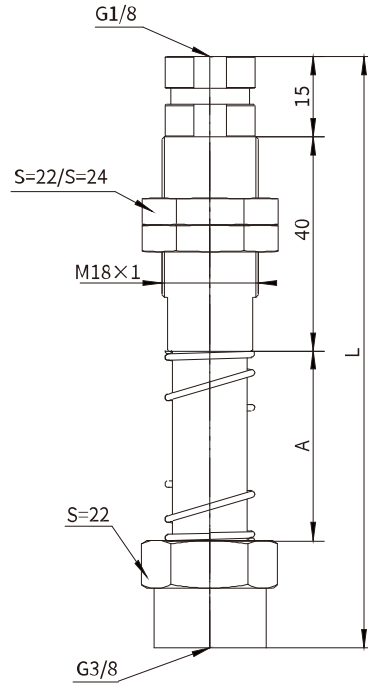
■ Dimensions



KE38 10-A18  
① ②

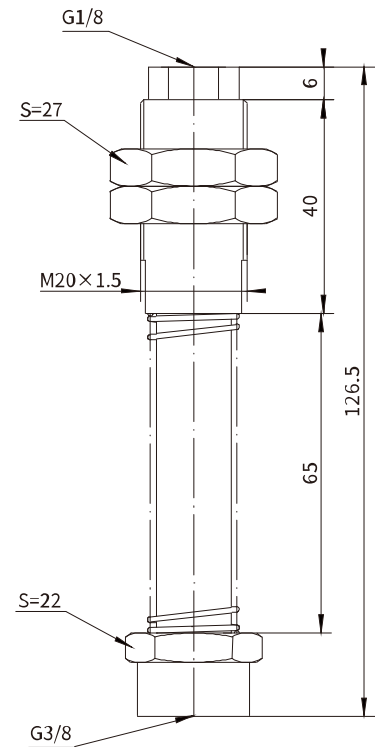
① buffer stroke	② bushing specifications	A	L
10	A18/A20	20.5	90.5
20	A18/A20	35.5	105.5
30	A18/A20	50.5	120.5
50	A18/A20	70.5	140.5
70	A20	90.5	150.5
100	A20	130.5	200.5

A20 added wear-resistant sleeve

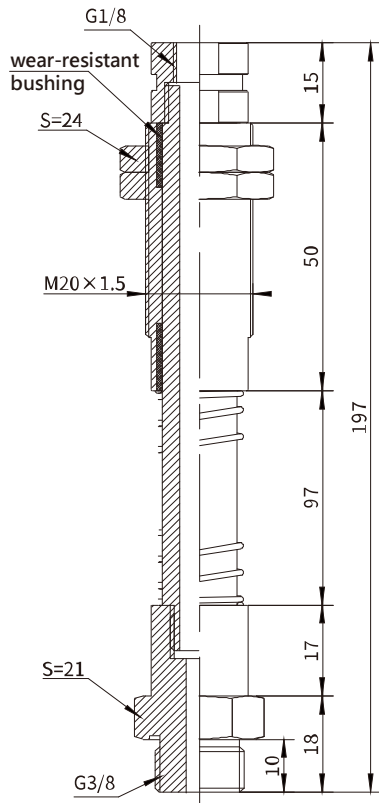


KE38 10-V-A18  
① ②

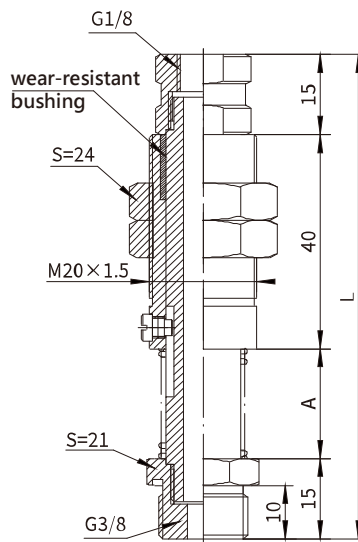
① buffer stroke	② bushing specifications	A	B
10	A18/A20	20.5	95.5
20	A18/A20	35.5	110.5
30	A18/A20	50.5	125.5
50	A18/A20	70.5	145.5



KE38 50-V-A20-D



KE38 70-A20



KE38 10-F-A20  
①

① buffer stroke	A	L
10	20.5	90.5
20	35.5	105.5
30	50.5	120.5
50	70.5	140.5

**KI38 spring plunger**



**■ Features**

- Built-in cushioning spring for automatic height adjustment when conveying objects with varying heights.
- Various thread connections and different stroke specifications, suitable for standard-sized suction cups, with a wide range of applications.
- Spring cushioning for flexible contact with delicate or easily damaged workpieces. Wear-resistant guide rods for an extended lifespan.

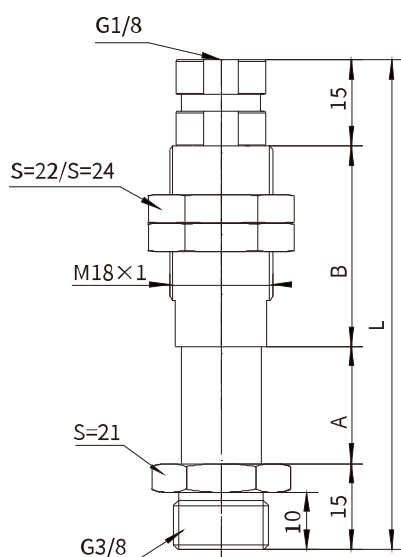
**■ Order Code**

**KI 38 10 - V - A18**

①      ②      ③      ④      ⑤

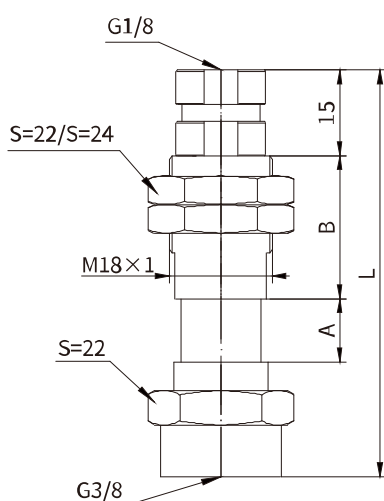
① Model	② threaded connection specifications	③ buffer stroke	④ specification method	⑤ bushing external thread
KI-built-in spring	38-G3/8	10-10mm stroke 20-20mm stroke 30-30mm stroke 50-50mm stroke	blank-external thread V-internal thread F-anti-rotation	A18-M18X1 A20-M20X1.5

**■ Dimensions**



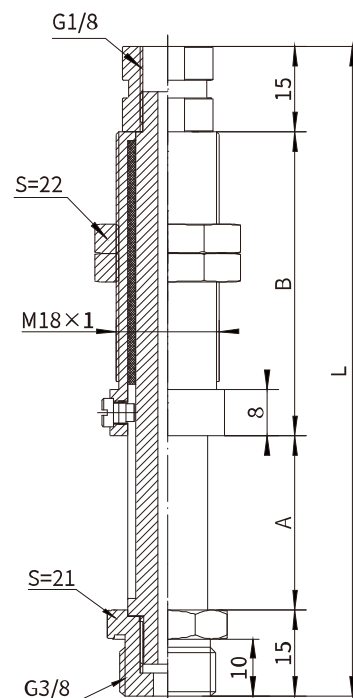
**KI38 10-A18**

①      ②



**KI38 10-V-A18**

①      ②



**KI38 10-F-A18**

①      ②

① buffer stroke	② bushing specifications	A	B	L
10	A18/A20	10.5	25	65.5
20	A18/A20	20.5	35	85.5
30	A18/A20	30.5	45	105.5
50	A18/A20	50.5	75	155.5

① buffer stroke	② bushing specifications	A	B	L
10	A18/A20	11	25	71
20	A18/A20	21	35	91
30	A18/A20	31	45	111
50	A18/A20	51	75	161

① buffer stroke	② bushing specifications	A	B	L
10	A18/A20	10.5	33	73.5
20	A18/A20	20.5	43	93.5
30	A18/A20	30.5	53	113.5
50	A18/A20	50.5	83	163.5

KE12 spring plunger



■ Features

- Built-in cushioning spring for automatic height adjustment when conveying objects with varying heights.
- Various thread connections and different stroke specifications, suitable for standard-sized suction cups, with a wide range of applications.
- Spring cushioning for flexible contact with delicate or easily damaged workpieces. Wear-resistant guide rods for an extended lifespan.

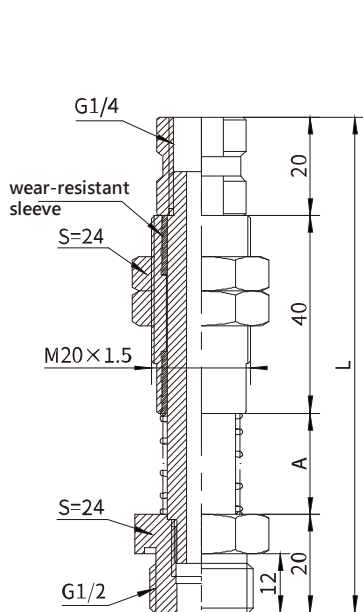
■ Order Code

**S KE 12 10 - □ - A20**

⑥      ①      ②      ③      ④      ⑤

① Model	② threaded connection specifications	③ buffer stroke	④ specification method	⑤ bushing external thread	⑥ guide rod specifications
KE-external spring	12-G1/2	10-10mm stroke 20-20mm stroke 25-25mm stroke 30-30mm stroke 50-50mm stroke 75-75mm stroke	blank-external thread	A20-M20X1.5 A30-M30X2	blank-standard S-solid

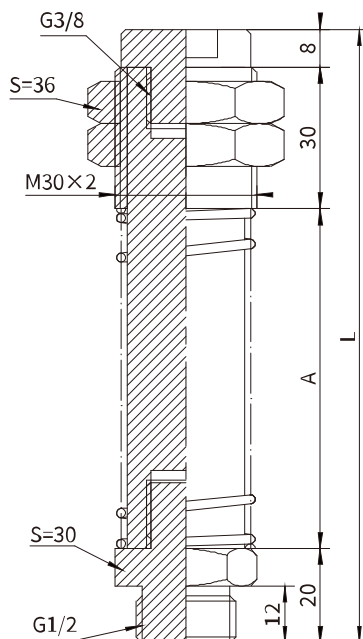
■ Dimensions



KE12 10-A20

①

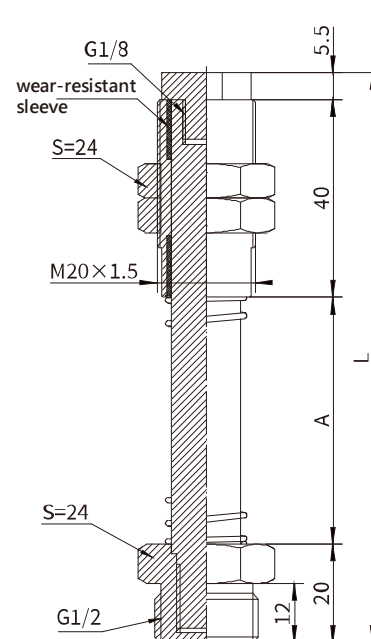
① buffer stroke	A	L
10	20.5	100.5
20	35.5	115.5
30	50.5	130.5
50	70.5	150.5



S KE12 50-A30

①

① S	② buffer stroke	A	L
solid guide rod	25	52	110
solid guide rod	50	72	130
solid guide rod	75	92	150



S KE12 25-A20

①

① S	② buffer stroke	A	L
solid guide rod	25	50	115.5
solid guide rod	50	70	135.5
solid guide rod	75	94	159.5

KI12 spring plunger



■ Features

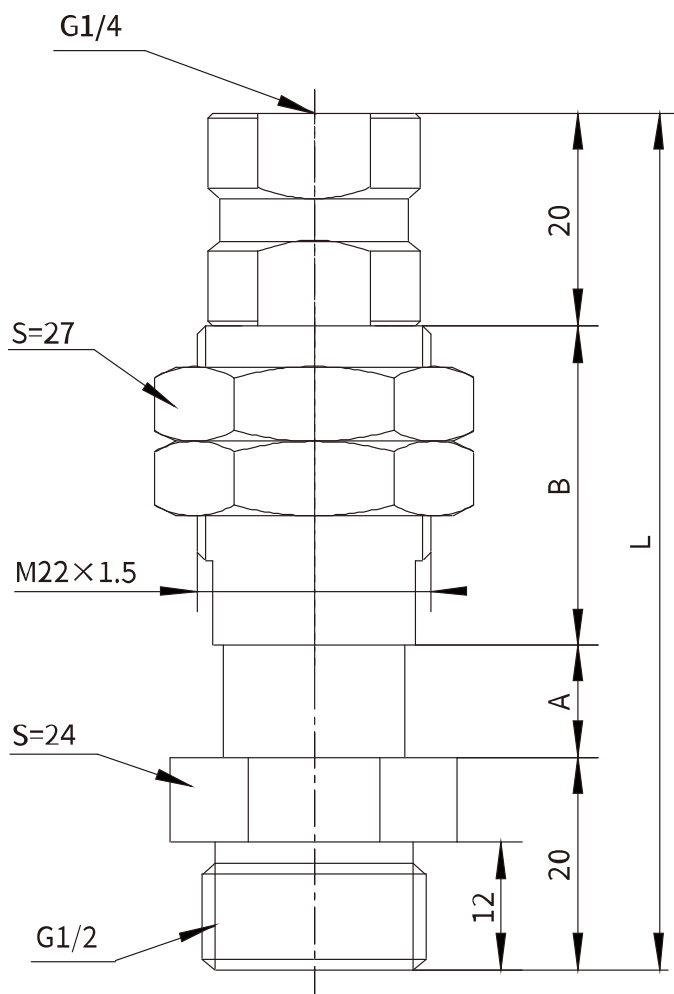
- Built-in cushioning spring for automatic height adjustment when conveying objects with varying heights.
- Various thread connections and different stroke specifications, suitable for standard-sized suction cups, with a wide range of applications.
- Spring cushioning for flexible contact with delicate or easily damaged workpieces. Wear-resistant guide rods for an extended lifespan.

■ Order Code

**KI 12 10 - □ - A22**  
 ①      ②      ③      ④      ⑤

① Model	② threaded connection specifications	③ buffer stroke	④ specification method	⑤ bushing external thread
KI-built-in spring	12-G1/2	10-10mm stroke 20-20mm stroke 30-30mm stroke 50-50mm stroke	blank-external thread	A22-M22X1.5

■ Dimensions



KI12 10-A22  
①

① buffer stroke	A	B	L
10	10.5	30	80.5
20	20.5	35	95.5
30	30.5	50	120.5
50	50.5	70	160.5



## MTE spring plunger

### ■ Introduction

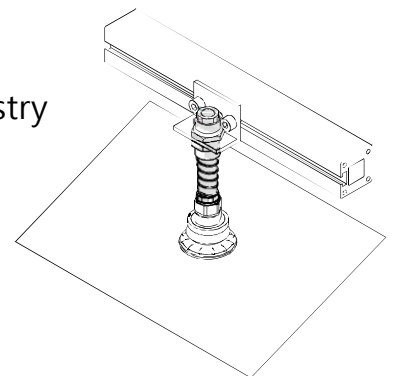
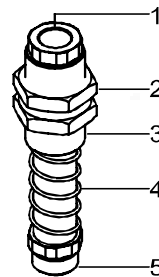
- Guide sleeve lined with non-oiled well-wearing Guide sleeve
- Externally-loaded buffer spring
- Anti-rotating models available
- A plurality of stroke specifications available
- Less product wear, longer product service life, less noise
- Suitable for the operating condition with uneven surface and height difference compensation needed
- Suitable for various operating conditions

### ■ Application

- Applicable to handling workpieces with surface height difference
- Suitable for the operating condition in which vibration needs to be reduced when the handled object is contacted
- Suitable for short-cycle quick handling
- Anti-rotating buffer plunger
- Especially suitable for handling in the automotive industry

### ■ Structure

- (1) Generator connecting end
- (2) Mounting and fastening nut
- (3) Guide sleeve
- (4) Spring
- (5) Suction cup connecting end





■ purchase guide

**MTE G1/8-AG - 15 - M16 - VG**

①                      ②                      ③                      ④                      ⑤

① Product series	② Connecting thread of buffer plunger	③ Buffering stroke	④ Guide sleeve thread	⑤ Additional function
MTE	G1/8-AG - G1/8 male thread G1/4-AG - G1/4 male thread G3/8-AG - G3/8 male thread G1/2-AG - G1/2 male thread G1/8- IG - G1/8 female thread G1/4- IG - G1/4 female thread G3/8- IG - G3/8 female thread G1/2- IG - G1/2 female thread	15mm 25mm 30mm 50mm 75mm 90mm	M16 M20 M22 M30	Null – Not anti-rotating VG - Anti-rotating

Note: AG male thread; IG female thread

■ Model specifications

Model specification	G1/8-AG	G1/8-IG	G1/4-AG	G1/4-IG	G3/8-AG	G3/8-IG	G1/2-AG	G1/2-IG
MTE □ -15-M16(-VG)	●	●	-	-	-	-	-	-
MTE □ -25-M16(-VG)	●	●	-	-	-	-	-	-
MTE □ -50-M16(-VG)	●	●	-	-	-	-	-	-
MTE □ -25-M20(-VG)	-	-	●	●	-	-	-	-
MTE □ -50-M20(-VG)	-	-	●	●	-	-	-	-
MTE □ -75-M20(-VG)	-	-	●	●	-	-	-	-
MTE □ -30-M22(-VG)	-	-	-	-	●	●	-	-
MTE □ -50-M22(-VG)	-	-	-	-	●	●	-	-
MTE □ -25-M30(-VG)	-	-	-	-	-	-	●	●
MTE □ -75-M30(-VG)	-	-	-	-	-	-	●	●
MTE □ -90-M30(-VG)	-	-	-	-	-	-	●	●

Note: AG male thread; IG female thread; VG (anti-rotating)

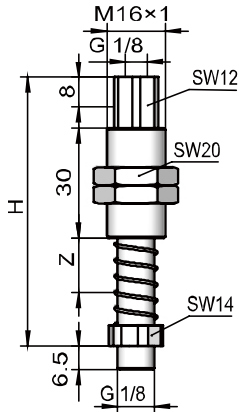
■ Technical parameters

Model	Spring rate N/mm	Spring prestressing N	Elastic force N	Vertical load N	Horizontal load N	Weight g
MTE G1/8-□-15-M16(-VG)	0.221	3.53	5.19	3700	385	80
MTE G1/8-□-25-M16(-VG)	0.143	3.57	5.36	3700	283	90
MTE G1/8-□-50-M16(-VG)	0.097	2.92	5.34	3700	173	110
MTE G1/4-□-25-M20(-VG)	0.711	6.47	15.36	2400	747	145
MTE G1/4-□-50-M20(-VG)	0.452	1.40	12.70	2400	466	175
MTE G1/4-□-75-M20(-VG)	0.262	5.38	15.20	2400	340	190
MTE G3/8-□-30-M22(-VG)	0.985	7.72	28.8	2800	360	174
MTE G3/8-□-50-M22(-VG)	0.738	5.77	31.6	2800	360	194
MTE G1/2-□-25-M30(-VG)	3.829	25.64	73.50	4900	1870	400
MTE G1/2-□-75-M30(-VG)	1.072	37.20	77.40	4900	800	530
MTE G1/2-□-90-M30(-VG)	1.072	24.38	75.30	4900	730	544



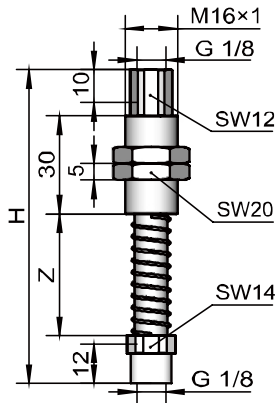
### ■ Design parameters

MTE G1/8-AG-□ M16(-VG)



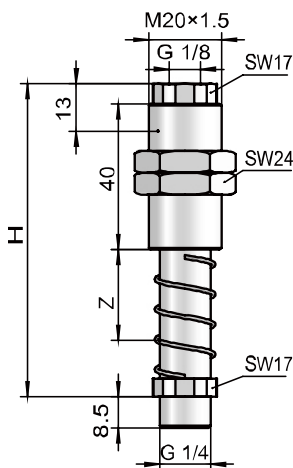
Model	Size (mm)	
	H	Z
MTE G1/8-AG-15-M16(-VG)	73.5	15
MTE G1/8-AG-25-M16(-VG)	86.5	25
MTE G1/8-AG-50-M16(-VG)	117.5	50

MTE G1/8-IG-□ M16(-VG)



Model	Size (mm)	
	H	Z
MTE G1/8-IG-15-M16(-VG)	82.5	15
MTE G1/8-IG-25-M16(-VG)	95.5	25
MTE G1/8-IG-50-M16(-VG)	126.5	50

MTE G1/4-AG-□ M20(-VG)

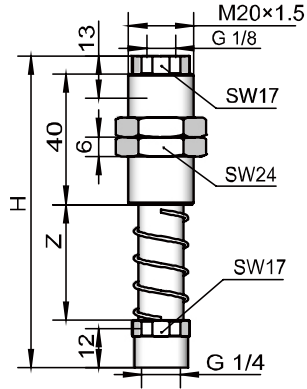


Model	Size (mm)	
	H	Z
MTE G1/4-AG-25-M20(-VG)	86	25
MTE G1/4-AG-50-M20(-VG)	115.5	50
MTE G1/4-AG-75-M20(-VG)	145	75



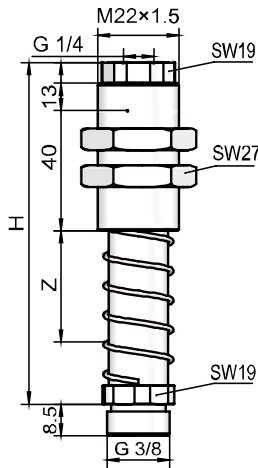


MTE G1/4-IG- □ -M20(-VG)



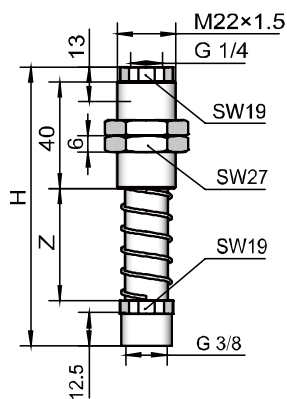
Model	Size (mm)	
	H	Z
<b>MTE G1/4-IG-25-M20(-VG)</b>	95	25
<b>MTE G1/4-IG-50-M20(-VG)</b>	124.5	50
<b>MTE G1/4-IG-75-M20(-VG)</b>	154	75

MTE G3/8-AG- □ M22(-VG)



Model	Size (mm)	
	H	Z
<b>MTE G3/8-AG-30-M22(-VG)</b>	92.5	30
<b>MTE G3/8-AG-50-M22(-VG)</b>	112.5	50

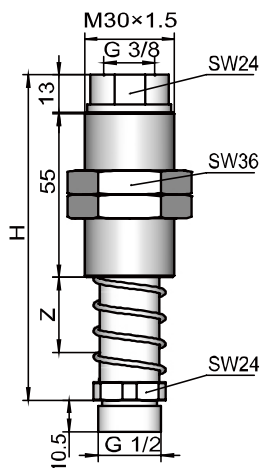
MTE G3/8-IG- □ -M22(-VG)



Model	Size (mm)	
	H	Z
<b>MTE G3/8-IG-30-M22(-VG)</b>	104.5	30
<b>MTE G3/8-IG-50-M22(-VG)</b>	124.5	50

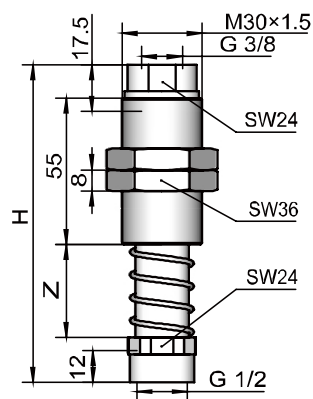


MTE G1/2-AG-□ M30(-VG)



Model	Size (mm)	
	H	Z
MTE G1/2-AG-25-M30(-VG)	105.5	25
MTE G1/2-AG-75-M30(-VG)	176.5	75
MTE G1/2-AG-90-M30(-VG)	188.5	90

MTE G1/2-IG-□ -M30(-VG)



Model	Size (mm)	
	H	Z
MTE G1/2-IG-25-M30(-VG)	119.5	25
MTE G1/2-IG-75-M30(-VG)	190.5	75
MTE G1/2-IG-90-M30(-VG)	202.5	90



## MTI spring plunger

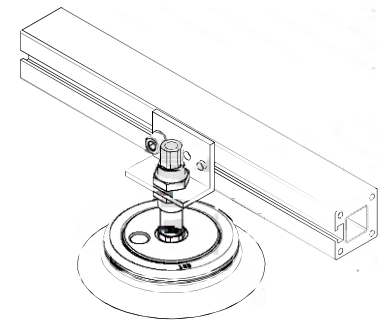
### ■ Introduction

- Internally-loaded buffer spring
- Economical and practical, maintenance-free
- Gentle contact with vulnerable workpieces; the spring protection structure can prevent dust entry and avoid damage caused by external force



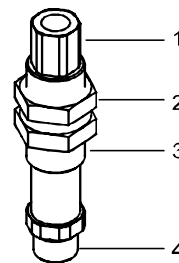
### ■ Application

- Handles workpieces with surface height difference (such as metal sheets with curved surfaces)
- Handles workpieces sensitive to pressure (such as glass) and ensures gentle contact
- Especially suitable for handling in the automotive industry



### ■ Structure

- (1) Generator connecting end
- (2) Mounting and fastening nut
- (3) Guide sleeve
- (4) Suction cup connecting end





## ■ purchase guide

### MTI G1/8-AG 20 M16

① ② ③ ④

① Product series	② Connecting thread of buffer plunger	③ Buffering stroke	④ Guide sleeve thread
MTI	G1/8-AG - G1/8 male thread G1/4-AG - G1/4 male thread G3/8-AG - G3/8 male thread <small>Note: AG male thread</small>	20mm 30mm 50mm	M16 - M16× 1 M18 - M18× 1

## ■ Model specifications

Model specification	G1/8-AG	G1/4-AG	G3/8-AG
MTI G1/8-AG-20-M16	●	-	-
MTI G1/8-AG-30-M16	●	-	-
MTI G1/8-AG-50-M16	●	-	-
MTI G1/4-AG-20-M18	-	●	-
MTI G1/4-AG-30-M18	-	●	-
MTI G1/4-AG-50-M18	-	●	-
MTI G3/8-AG-20-M18	-	-	●
MTI G3/8-AG-30-M18	-	-	●
MTI G3/8-AG-50-M18	-	-	●

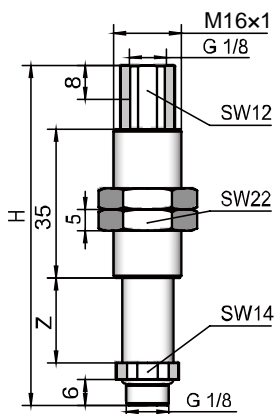
## ■ Technical parameters

Model	Spring rate N/mm	Spring prestressing N	Elastic force N	Vertical load N	Horizontal load N	Weight g
MTI G1/8-AG-20-M16	0.11	2.2	4.5	1000	700	60
MTI G1/8-AG-30-M16	0.11	2.3	3.8	1000	700	70
MTI G1/8-AG-50-M16	0.11	2.1	3.6	1000	700	90
MTI G1/4-AG-20-M18	0.26	5.2	6.8	1000	700	120
MTI G1/4-AG-30-M18	0.26	4.3	5.5	1000	700	135
MTI G1/4-AG-50-M18	0.26	3.1	4.3	1000	700	170
MTI G3/8-AG-20-M18	0.26	5.2	6.8	1000	700	130
MTI G3/8-AG-30-M18	0.26	4.3	5.5	1000	700	145
MTI G3/8-AG-50-M18	0.26	3.1	4.3	1000	700	180



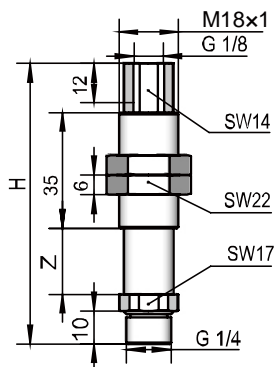
### ■ Design parameters

MTI G1/8-AG-□-M16



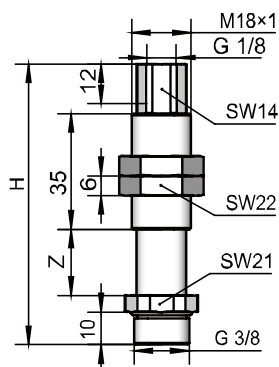
Model	Size (mm)	
	H	Z
<b>MTI G1/8-AG-20-M16</b>	80	20
<b>MTI G1/8-AG-30-M16</b>	100	30
<b>MTI G1/8-AG-50-M16</b>	140	50

MTI G1/4-AG-□-M18



Model	Size (mm)	
	H	Z
<b>MTI G1/4-AG-20-M18</b>	85	20
<b>MTI G1/4-AG-30-M18</b>	105	30
<b>MTI G1/4-AG-50-M18</b>	145	50

MTI G3/8-AG-□-M18



Model	Size (mm)	
	H	Z
<b>MTI G3/8-AG-20-M18</b>	85	20
<b>MTI G3/8-AG-30-M18</b>	105	30
<b>MTI G3/8-AG-50-M18</b>	145	50



MTA spring plunger

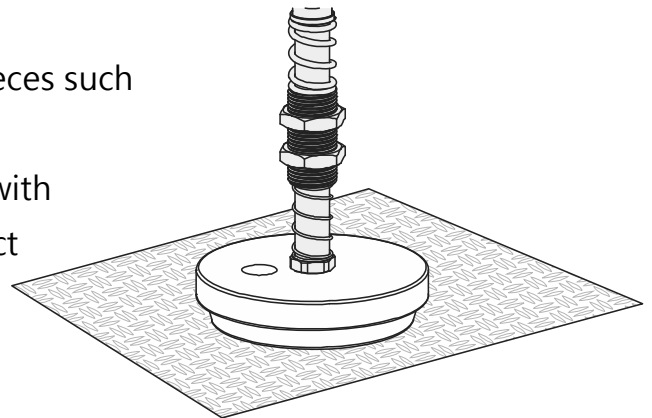
Introduction

- Shaft sleeve lined with non-oiled well-wearing Guide sleeve
- Equipped with upper and lower buffer springs
- Anti-rotating models available
- A plurality of stroke specifications available
- Less product wear, longer product service life, less noise
- Shock and vibration absorbed gentle contact with vulnerable workpieces, suitable for operating condition with height compensation needed
- Suitable for various operating conditions



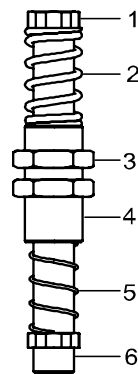
Application

- Applicable to handling heavy workpieces such as steel plates
- Suitable for the operating condition with vibration reduction and gentle contact needed during handling, e.g. glass
- Applicable to harsh environments
- Anti-rotating buffer plunger
- Double buffer springs to prevent shock on the plunger end when the workpiece is turned over



Structure

- (1) Generator connecting end
- (2) Spring
- (3) Mounting and fastening nut
- (4) Guide sleeve
- (5) Spring
- (6) Suction cup connecting end





## ■ purchase guide

### MTA G1/4-AG - 25 - M20 - VG

①                      ②                      ③                      ④                      ⑤

① Product series	② Connecting thread of buffer plunger	③ Buffering stroke	④ Guide sleeve thread	⑤ Bushing thread
MTA	G1/4-AG - G1/4 male thread	25mm	M20	Null – Not anti-rotating
	G1/2-AG - G1/2 male thread	50mm	M30	
	Note: AG male thread	90mm		VG - Anti-rotating

## ■ Model specifications

Model specification	G1/4-AG	G1/2-AG
MTA □-25-M20(-VG)	●	-
MTA □-50-M20(-VG)	●	-
MTA □-25-M30(-VG)	-	●
MTA □-50-M30(-VG)	-	●
MTA □-90-M30(-VG)	-	●

Note: VG anti-rotating

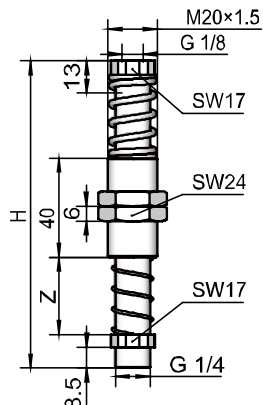
## ■ Technical parameters

Model	Spring rate N/mm	Spring prestressing N	Elastic force N	Vertical load N	Horizontal load N	Weight g
MTA G1/4-AG-25-M20(-VG)	0.711	8.95	17.8	2400	800	185
MTA G1/4-AG-50-M20(-VG)	0.262	14.10	20.6	2400	490	210
MTA G1/2-AG-25-M30(-VG)	3.828	25.65	73.5	4900	1870	493
MTA G1/2-AG-50-M30(-VG)	1.810	3.95	49.2	4900	1200	539
MTA G1/2-AG-90-M30(-VG)	1.072	24.38	75.3	4900	730	645



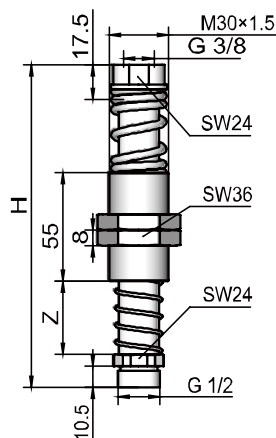
### ■ Design parameters

MTA G1/4-AG □ -M20(-VG)



Model	Size (mm)	
	H	Z
MTA G1/4-AG-25-M20(-VG)	123	25
MTA G1/4-AG-50-M20(-VG)	152.5	50

MTA G1/2-AG □ -M30(-VG)



Model	Size (mm)	
	H	Z
MTA G1/2-AG-25-M30(-VG)	157	25
MTA G1/2-AG-50-M30(-VG)	187	50
MTA G1/2-AG-90-M30(-VG)	240	90