

BEST AUTOMATION

Power Clamp Cylinders



Micro Clamp



Manual Handle Type



Compact Type



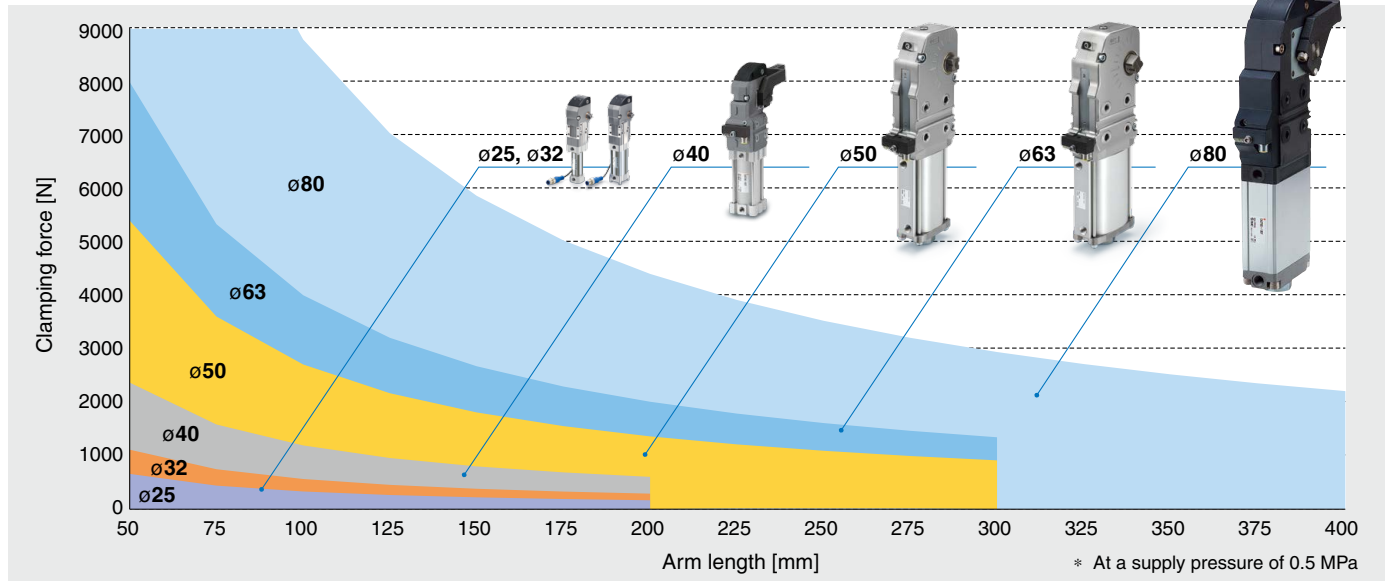
NAAMS Standards Compliant



CAT.E25B

Clamping forces ranging from 100 N

Clamping Force by Bore Size (ø25 to ø80)



1 Micro Clamp Cylinder *CKZM Series* ø16

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Lightweight | **Compact** | **High clamping force** | **High holding force**

Lightweight Weight **250 g** | **Compact** Width **20 mm**
(Base type) | (Base type, Tandem type)

Max. clamping force 200 N | **Max. holding force 300 N**
(Tandem type) | (Base type, Tandem type)
* At an operating pressure of 0.6 MPa | * When operating pressure of 0.2 to 0.6 MPa is applied

Series	Type	Bore size	Arm opening angle	Clamping force* ¹	Body material	Weight
CKZM	Base type	ø16	68°	130 N	Aluminum alloy	0.25 kg
	Tandem type			200 N		0.33 kg

*¹ At 0.6 MPa



2 Power Clamp Cylinder/Compact Type *CKZT Series* ø25, ø32

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Lightweight | **Compact** | **High clamping force** | **Lock function**

Lightweight Weight **580 g** | **Compact** Width **34 mm** Height **192.4 mm**
(ø25, Rubber cover) | (ø25, Arm opening angle: 90°, Rubber cover)

Clamping force 1100 N
(ø32, Arm length: 50 mm, 0.5 MPa pressure)

Series	Bore size	Arm opening angle* ¹	Manual handle	Top cover material		Body material	Weight
				Rubber	Metal		
CKZT	ø25, ø32	90°, 105°	●	●	●	Aluminum alloy	0.58 kg (ø25)

*¹ Please contact SMC for other arm opening angles.

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3 Power Clamp Cylinder *CKZ5T/CKZ3T/CKZT Series*

ø40, ø50, ø63, ø80

CKZT40 [p. 24](#)

CKZ5T50, 63 [p. 38](#)

CKZ3T50, 63 [p. 52](#)

CKZT80 [p. 66](#)

Lightweight **Compact** **High clamping force** **Lock function**

Lightweight Weight **1.6 kg** **Clamping force 1200 N**
(For ø40) (ø40, Arm length: 100 mm, 0.5 MPa pressure)

Series	Bore size	Arm opening angle	Manual handle	Top cover material		Body material	Weight
				Rubber	Metal		
CKZT	ø40	30° to 135°	●	●	●	Aluminum alloy	1.6 kg
CKZ5T	ø50, ø63	15° to 135°	—	—	●	Aluminum alloy	2.8 kg (ø50)
CKZ3T	ø50, ø63	15° to 135°	●	●	●	Aluminum alloy	3.1 kg (ø50)
CKZT	ø80	30° to 135°	●	●	○*1	Steel	17 kg

*1 Please contact SMC for details.



CKZ5T

CKZT40

4 NAAMS Standards Compliant Power Clamp Cylinder *CKZ5N/CKZ3N/CKZ2N Series*

ø50, ø63, ø80

CKZ5N50, 63 [p. 80](#)

CKZ3N50, 63 [p. 96](#)

CKZ2N50, 63, 80 [p. 114](#)

High clamping force **Lock function**

Clamping force 8800 N
(ø80, Arm length: 100 mm, 0.5 MPa pressure)

Series	Bore size	NAAMS Standards	Arm opening angle	Manual handle	Top cover material		Body material	Weight
					Rubber	Metal		
CKZ5N	ø50, ø63	Compliant	15° to 135°	—	—	●	Aluminum alloy	2.8 kg (ø50)
CKZ3N	ø50, ø63	Compliant	15° to 135°	●	●	●	Aluminum alloy	3.2 kg (ø50)
CKZ2N	ø50, ø63, ø80	Compliant	30° to 135°	—	●	—	Steel	5.1 kg (ø50)



CKZ5N

CKZ3N

Related Products

● Pin Clamp Cylinders

	<p>C(L)KQ□50 Series (ø50) Simultaneous positioning and clamping Compatible with a broad range of workpiece configurations (55 types of guide pins)</p>
	<p>C(L)KQ□D-X3256 High-Hardness Type Guide Pin (ø50) 30% increase in guide pin material hardness</p>
	<p>C(L)KQG32/C(L)KU32 Series (ø32) 2 types of clamping heights can be selected: 30 mm, 100 mm Plate cylinder type: Width 29 mm</p>
	<p>Compact Type C(L)KQG32-X3036 (ø32) Lightweight: Weight reduced by 41% (900 g → 530 g) Compact: Overall length reduced by 41.5 mm (183 mm → 141.5 mm) Body width reduced by 4 mm (50 mm → 46 mm)</p>

● Flow Control Equipment

Flame Resistant Speed Controller with One-touch Fitting/**AS-W2**
Flame Resistant Flat Head Screwdriver Adjustable
Speed Controller with One-touch Fitting/**AS-G□-W2D**
Metal Speed Controller with One-touch Fitting/**ASB**
Flat Head Screwdriver Adjustable Metal Speed Controller with One-touch Fitting/**ASB-D**



Spatter cover

● Piping Equipment

Flame Resistant FR One-touch Fittings/**KR-W2**
Metal One-touch Fittings/**KQB2**
Flame Resistant FR Soft Nylon Tubing/**TRS**
Flame Resistant FR Double Layer Tubing/**TRB**
Flame Resistant FR Double Layer
Polyurethane Tubing/**TRBU**
Flame Resistant FR Three-layer
Polyurethane Tubing/**TRTU**



Power Clamp Cylinders

Micro Clamp Cylinder (ø16)
CKZM16 -X2800 (Base Type)
-X2900 (Tandem Type)



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NAAMS Standards Compliant
 Power Clamp Cylinder (ø50, ø63)
CKZ3N -X2742A (Base Type)
-X2568 (With Manual Handle)



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Power Clamp Cylinder **Compact Type** (ø25, ø32)
CKZT -X2797, -X3064 (Base Type)
-X2798, **-X3174** (With Manual Handle)
-X3232, **-X3229** (With Locking Manual Handle)



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NAAMS Standards Compliant
 Power Clamp Cylinder
 (ø50, ø63, ø80)
CKZ2N



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Power Clamp Cylinder (ø40)
CKZT



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Related Products

Pin Clamp Cylinder (ø50)
C(L)KQG/**C(L)KQP**



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Power Clamp Cylinder (ø50, ø63)
CKZ5T



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Pin Clamp Cylinder **High-Hardness Type Guide Pin** (ø50)
C(L)KQD-**X3256**



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Power Clamp Cylinder (ø50, ø63)
CKZ3T -X2734 (Base Type)
-X2568 (With Manual Handle)



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Pin Clamp Cylinder (ø32)
C(L)KQG32/C(L)KU32



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Power Clamp Cylinder (ø80)
CKZT



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Pin Clamp Cylinder **Compact Type** (ø32)
C(L)KQG32-X3036



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NAAMS Standards Compliant
 Power Clamp Cylinder (ø50, ø63)
CKZ5N



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Flow Control
 Equipment



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Piping
 Equipment



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Flow Control Equipment

Flame Resistant (Equivalent to UL-94 Standard V-0) Speed Controller with One-touch Fitting Elbow Type AS-W2 Series



- Flame resistant (Equivalent to UL-94 Standard V-0)

Type	Series	Port size on the cylinder side	Applicable tubing O.D.
Elbow type	AS12□1F-W2 to AS42□1F-W2	M5 to 1/2	ø6 to ø12

Flame Resistant (Equivalent to UL-94 Standard V-0) Flat Head Screwdriver Adjustable Speed Controller with One-touch Fitting (Elbow Type) AS□2□1F-W2D Series



- Flame resistant resin (Equivalent to UL-94 Standard V-0)
- Flat head screwdriver adjustable
Prevent accidental manual operation by making adjustments with a flat head screwdriver.
- Thread type: G thread

Type	Series	Port size on the cylinder side	Applicable tubing O.D.
Elbow type	AS22□1F to AS42□1F	G1/8 to 1/2	ø6 to ø12

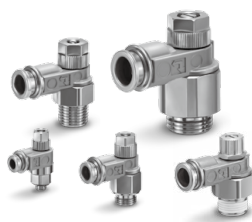
Metal Speed Controller with One-touch Fitting ASB Series



- Improved environmental resistance with the all metal exterior
- For use in environments with welding spatter, dust, ultraviolet, etc.
- Improved installability
More space beneath the tube. Easier installation/removal of the tube

Type	Series	Port size on the cylinder side	Applicable tubing O.D. Metric size	Applicable tubing O.D. Inch size
All metal exterior Elbow type	ASB□2□1-□□-F One-touch fitting type	M5 x 0.8, R1/8, 1/4, 3/8, 1/2	ø4 to ø12	ø5/32" to ø1/2"

Flat Head Screwdriver Adjustable Metal Speed Controller with One-touch Fitting ASB-D Series



- Improved environmental resistance with the all metal exterior
- Flow adjustable by a flat head screwdriver
Prevents accidental manual operation
- Adjustment needle lock nut as standard
Prevents unauthorized adjustment and unwanted operation of the needle from the set position due to vibrations or impacts.
Helps improve safety in your machinery

Type	Series	Port size on the cylinder side	Applicable tubing O.D. Metric size	Applicable tubing O.D. Inch size
Metal body Elbow type	ASB-D	M5 x 0.8 10-32UNF R, G, NPT 1/8 to 1/2	ø4 to ø12	ø5/32" to ø1/2"

CKZM16
CKZT25/32
CKZT40
CKZ5T
CKZ3T
CKZT80
CKZ5N
CKZ3N
CKZ2N
C(L)KQG□
C(L)KQP□
C(L)KQ□D
-X3256
C(L)KQG32
C(L)KU32
C(L)KQG32
-X3036
Related Products
Flow Control Equipment
Piping Equipment

Piping Equipment

Flame Resistant (Equivalent to UL-94 Standard V-0) FR One-touch Fittings KR-W2 Series



- For use where weld spatter is generated/Flame resistant (Equivalent to UL-94 Standard V-0)

Series	Applicable tubing O.D.	Connection thread
KR-W2	ø6, ø8, ø10, ø12	1/8, 1/4, 3/8, 1/2

Metal One-touch Fittings KQB2 Series



- Compact and lightweight
- Fluid temperature: -5 to 150°C
- Brass parts: Electroless nickel-plated
- Grease-free

Series	Size	Applicable tubing O.D.	Connection thread
KQB2	Metric	ø3.2, ø4, ø6, ø8, ø10, ø12, ø16	M5 R, Rc, G 1/8, 1/4, 3/8, 1/2
KQB2	Inch	ø1/8", ø5/32", ø1/4", ø5/16", ø3/8", ø1/2"	UNF10-32 NPT1/8, 1/4, 3/8, 1/2

Flame Resistant (Equivalent to UL-94 Standard V-0) FR Soft Nylon Tubing TRS Series



- Max. operating pressure: 1.2 MPa (at 20°C)
- For use in spatter-generating atmospheres/Flame resistant (Equivalent to UL-94 Standard V-0)

Series	Tubing O.D.	Color	Fluid
TRS	ø6, ø8, ø10, ø12	Black, White, Red, Blue, Green	Air, Water

Flame Resistant (Equivalent to UL-94 Standard V-0) FR Double Layer Tubing TRB Series



- Max. operating pressure: 1.0 MPa (at 20°C)
- For use in spatter-generating atmospheres/Flame resistant (Equivalent to UL-94 Standard V-0)

Series	Tubing O.D.	Color	Fluid
TRB	ø6, ø8, ø10, ø12	Black, White, Red, Blue, Yellow, Green	Air, Water

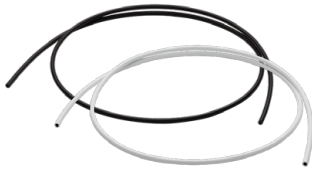
Flame Resistant (Equivalent to UL-94 Standard V-0) FR Double Layer Polyurethane Tubing **TRBU** Series



- Max. operating pressure: 0.8 MPa (at 20°C)
- For use in spatter-generating atmospheres/Flame resistant (Equivalent to UL-94 Standard V-0)
- Superior restoring force compared to the nylon tubing

Series	Tubing O.D.	Color	Fluid
TRBU	ø6, ø8, ø10, ø12	Black, White, Red, Blue, Yellow, Green	Air, Water

Flame Resistant (Equivalent to UL-94 Standard V-0) FR Three-layer Polyurethane Tubing **TRTU** Series



- Spatter resistance has been improved by installing an aluminum layer between the outer layer and the inner tube. (It is twice that of the TRBU series FR double layer polyurethane tubing.)
- For general pneumatic and water piping in environments exposed to sparks from arc welding, etc.
- Flame resistant (Equivalent to UL-94 Standard V-0)

Series	Tubing O.D.	Color	Fluid
TRTU	ø6, ø8, ø10, ø12	Black, White, Red, Blue, Yellow, Green	Air, Water

CKZM16

CKZT25/32

CKZT40

CKZ5T

CKZ3T

CKZT80

CKZ5N

CKZ3N

CKZ2N

Power Clamp Cylinders

C(L)KQG
C(L)KQP

C(L)KQD
-X3256

C(L)KQG32
C(L)KU32

C(L)KQG32
-X3036

Flow Control
Equipment

Piping
Equipment

Related Products