

Longer Life Cylinder

New technology offers at least **4 times better durability**

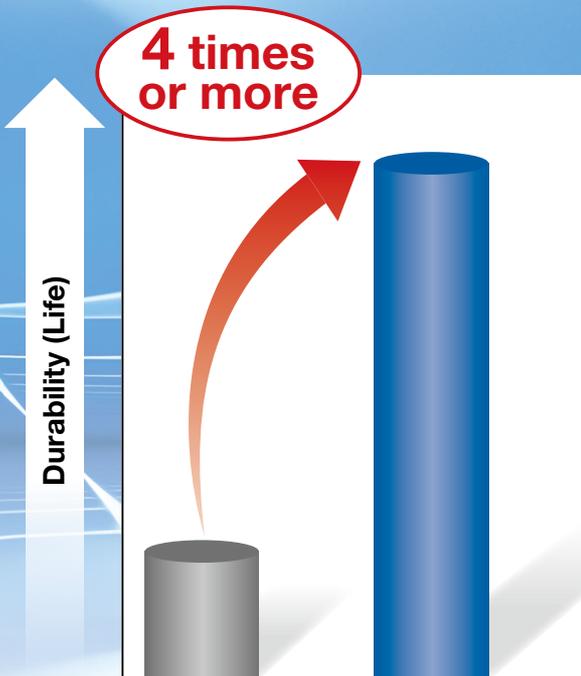
- The maintenance intervals will be extended

ISO Standards (6432)

ISO cylinder
C85-XB24



Air cylinder
C75-XB24



Existing model
(ISO cylinder: C85 series)

* Based on SMC's specific testing conditions

Longer life cylinder

- Employs the same specification and dimensions as the existing models, C85 ISO Cylinder series and C75 Air Cylinder series.

High Durability Series

High Durability Series is the series name for the "special specification" that offers superior durability and environmental resistance compared to standard products.

Series Variations

Series	Action	Model	Bore size [mm]								Cushion	Stroke range	
			8	10	12	16	20	25	32	40			
ISO Standards (6432) ISO cylinder C85 series	Double acting, Single rod	C85-XB24	●	●	●	●	●	●			Rubber bumper	Ø 8: 5 to 200 Ø 10 to Ø 16: 5 to 400 Ø 20, Ø 25: 5 to 1000	
Air cylinder C75 series	Double acting, Single rod	C75-XB24								●	●	Rubber bumper	5 to 1000

C85/C75-XB24



Longer Life Cylinder Double Acting, Single Rod C85-XB24

∅ 8, ∅ 10, ∅ 12, ∅ 16, ∅ 20, ∅ 25



How to Order

Double acting, Single rod **C D 85 N 20 - 40 L V - B - M9BW S - XB24**

Built-in magnet

—	None
D	Built-in magnet

Head cover type

N	Basic (Integrated clevis)
E	Double end boss-cut
F	Boss-cut/Basic
Y	Head cover axial port

Bore size

8	8 mm
10	10 mm
12	12 mm
16	16 mm
20	20 mm
25	25 mm

Cylinder stroke [mm]
Refer to the next page for standard strokes.

Accessory*2

—	None
V	Rod end
W	Double knuckle joint

*2 Refer to Mounting Brackets/Accessories for details of accessories.
* Accessory is shipped together with the product.

Auto switch mounting type*3

A	Rail mounting
B	Band mounting

*3 The symbol is “—” for no magnet.

Number of auto switches

—	2
S	1
n	n

Auto switch

—	Without auto switch
---	---------------------

* For applicable auto switches, refer to the table below.
* Auto switches are shipped together with the product.

Longer life cylinder

Mounting bracket*1

—	None
L	Single foot
M	Double foot
G	Flange
U	Trunnion
N	Clevis

Applicable mounting bracket

Head cover type	Mounting bracket				
	L	M	G	U	N
N	●	●	●	●	●
E	●	●	●	●	—
F	●	—	●	●	—
Y	●	—	●	●	—

*1 Refer to Mounting Brackets/Accessories for details of mounting brackets.
* Mounting bracket is shipped together with the product.

Applicable Auto Switches/Refer to the Web Catalogue for further information on auto switches.

Type	Special function	Electrical entry	Indicator/light	Wiring (Output)	Load voltage		Auto switch model				Lead wire length [m]					Pre-wired connector	Applicable load				
					DC	AC	Band mounting		Rail mounting		0.5 (—)	1 (M)	3 (L)	5 (Z)	None (N)		IC circuit	Relay, PLC			
							Perpendicular	In-line	Perpendicular	In-line											
Solid state auto switch	—	Grommet	—	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	M9NV	M9N	●	●	○	—	—	○	IC circuit	—			
				3-wire (PNP)			M9PV	M9P	M9PV	M9P	●	●	○	—	—	○					
		Connector	2-wire	—			H7C	J79C	—	●	—	●	●	—	—	—					
			—	—			—	—	—	—	—	—	—	—	—	—					
	Diagnostic indication (2-colour indicator)	Grommet	Yes	3-wire (NPN)	5 V, 12 V	—	M9NWV	M9NW	M9NWV	M9NW	●	●	●	○	—	—	○	IC circuit	Relay, PLC		
				3-wire (PNP)			M9PWV	M9PW	M9PWV	M9PW	●	●	●	○	—	—	○				
				2-wire			M9BWW	M9BW	M9BWW	M9BW	●	●	●	○	—	—	○				
		Grommet	3-wire (NPN)	M9NAV *1			M9NA *1	M9NAV *1	M9NA *1	○	○	●	○	—	—	○					
			3-wire (PNP)	M9PAV *1			M9PA *1	M9PAV *1	M9PA *1	○	○	●	○	—	—	○					
			2-wire	M9BAV *1			M9BA *1	M9BAV *1	M9BA *1	○	○	●	○	—	—	○					
Water-resistant (2-colour indicator)	Grommet	—	3-wire (NPN)	5 V, 12 V	—	—	H7NF	—	F79F	●	—	●	○	—	—	○	IC circuit	—			
			2-wire			—	—	—	—	—	—	—	—	—	—	—					
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	5 V	A96V	A96	A96V	A96	●	—	●	—	—	—	IC circuit	—			
				—			—	A72	A72H	●	—	●	—	—	—						
				No			2-wire	100 V	A93V *2	A93	A93V *2	A93	●	●	●	●			—	—	—
								100 V or less	A90V	A90	A90V	A90	●	—	●	—			—	—	—
		Connector	No	No	No	24 V	12 V	—	C73C	A73C	—	●	—	●	●	●	—	—	IC circuit	Relay, PLC	
								—	C80C	A80C	—	●	—	●	●	●	—	—			
								24 V or less	—	C80C	A80C	—	●	—	●	●	●	—			—
								—	—	A79W	—	●	—	●	—	—	—	—			—

*1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance.

*2 1 m lead wire is only applicable to the D-A93.

* Lead wire length symbols: 0.5 m..... — (Example) M9NW 5 m..... Z (Example) M9NWZ
1 m..... M (Example) M9NWM None..... N (Example) H7CN
3 m..... L (Example) M9NWL

* Since there are other applicable auto switches than listed above, refer to the Web Catalogue for details.

* Solid state auto switches marked with “○” are produced upon receipt of order.

* D-A9□/M9□/A7□/A80□/F7□/J7□ auto switches are shipped together, but not assembled. (For band mounting, only the auto switch mounting brackets are assembled before shipment.)

* When mounting a band on bore size ∅ 8, ∅ 10, or ∅ 12, the D-A9□(V) cannot be mounted.

* When mounting a rail on bore size ∅ 8, ∅ 10, or ∅ 12, the D-A9□(V) and A79W cannot be mounted.

* When mounting a rail on bore size ∅ 20 or ∅ 25, the D-M9□(V), M9□W(V), and M9□A(V) cannot be mounted.

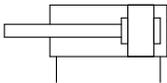
Specifications



Bore size [mm]	8	10	12	16	20	25
Type	Pneumatic					
Action	Double acting, Single rod					
Fluid	Air					
Proof pressure	1.5 MPa					
Max. operating pressure	1.0 MPa					
Min. operating pressure	0.1 MPa	0.08 MPa	0.05 MPa			
Ambient and fluid temperature	Without auto switch: -20 °C to 80 °C (No freezing)					
	With auto switch: -10 °C to 60 °C (No freezing)					
Lubricant	Not required (Non-lube)					
Stroke length tolerance	$^{+1.0}_0$ mm				$^{+1.4}_0$ mm	
Piston speed	50 to 1500 mm/s					
Cushion	Rubber bumper					
Allowable kinetic energy	0.02 J	0.03 J	0.04 J	0.09 J	0.27 J	0.4 J

Symbol

Double acting, Single rod



Strokes

Bore size [mm]	Standard stroke [mm]*1, *2, *3	Stroke range [mm]
8	10, 25, 40, 50, 80, 100	5 to 200
10	10, 25, 40, 50, 80, 100, 125, 160, 200	5 to 400
12		
20	10, 25, 40, 50, 80, 100, 125, 160, 200, 250, 300	5 to 1000
25		

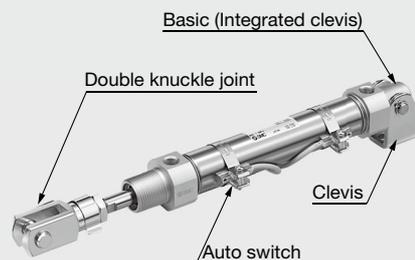
*1 The manufacturing of strokes in 1 mm increments is possible. (Spacers are not used.)
Produced upon receipt of order.

*2 Applicable strokes differ depending on the usage conditions and mounting brackets.
For details, refer to the "Stroke Selection" section of the C85 series in the **Web Catalogue**.
In addition, the products that exceed the standard stroke might not be able to fulfill the specifications due to deflection, etc.

*3 The min. stroke of the type with a magnet varies depending on the switch.

Option: Ordering Example of Cylinder Assembly

Cylinder model: CD85N20-50NW-B-M9BW-XB24



Head cover N: Basic (Integrated clevis)
Mounting bracket N: Clevis
Rod end bracket W: Double knuckle joint
Auto switch D-M9BW: Band mounting, 2 pcs.

* Mounting bracket, double knuckle joint, and auto switch are shipped together with the product.

⚠ Caution

Durability of The Cylinder

The durability of a longer life cylinder has been evaluated by comparison with the existing cylinders under SMC's test conditions.

The durability of a cylinder depends on the customer's operating conditions and operating environment.

Therefore, durability of four times or longer will not be guaranteed under all conditions.

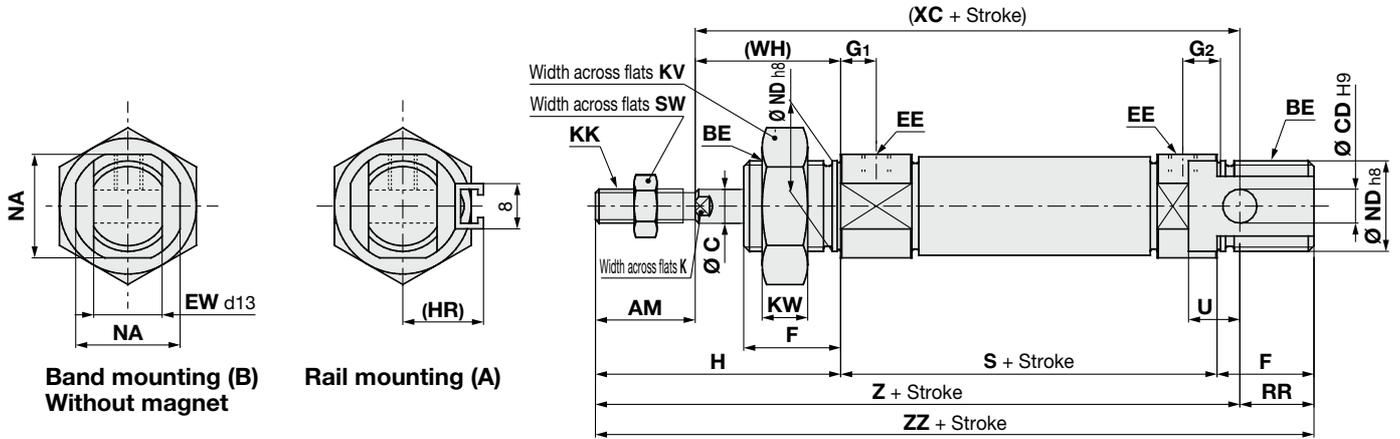
The allowable kinetic energy, allowable lateral loads at the rod end, theoretical output, weight, mounting bracket/parts numbers, and specifications with an auto switch, are equivalent to those of the ISO Cylinder C75 series. For details, refer to the Web Catalogue.

For details on accessories (rod end, double knuckle joint, and floating joint), refer to the **Web Catalogue**.

Dimensions

Basic (Integrated clevis)

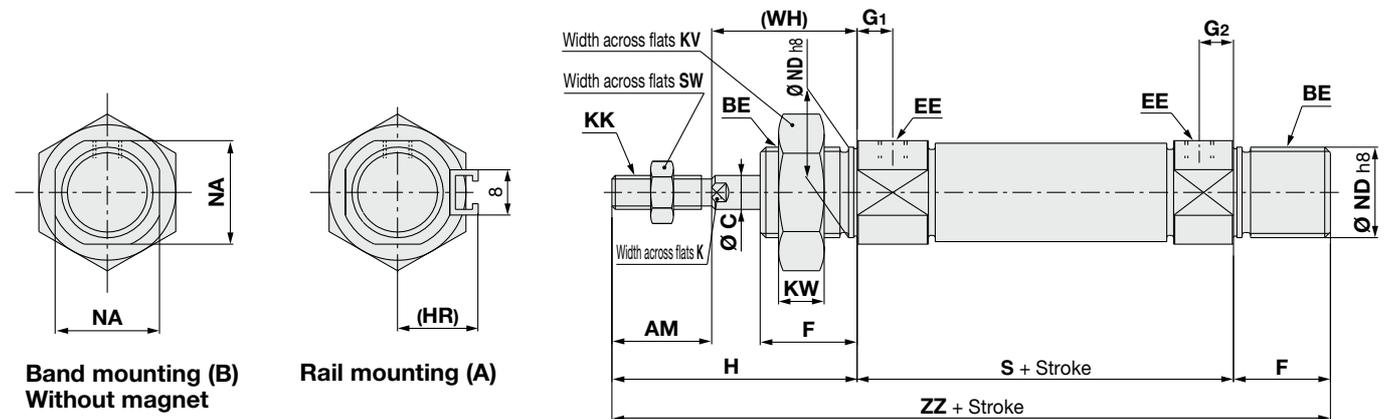
Rubber bumper: C□85N Bore size - Stroke - □ - XB24



Bore size	AM	BE	C	CD	EE	EW	F	G ₁	G ₂	H	(HR)	K	KK	KV	KW	NA	ND	RR	S	SW	U	WA	(WH)	(XC)	Z	ZZ
8	12	M12 x 1.25	4	4	M5 x 0.8	8	12	7	5	28	13.4	—	M4 x 0.7	19	6	15	12	10	46	7	6	—	16	64	76	86
10	12	M12 x 1.25	4	4	M5 x 0.8	8	12	7	5	28	14.2	—	M4 x 0.7	19	6	15	12	10	46	7	6	10.5	16	64	76	86
12	16	M16 x 1.5	6	6	M5 x 0.8	12	17	8	6	38	14.2	5	M6 x 1	24	8	18.3	16	14	50	10	9	9.5	22	75	91	105
16	16	M16 x 1.5	6	6	M5 x 0.8	12	17	8	6	38	14.2	5	M6 x 1	24	8	18.3	16	13	56	10	9	9.5	22	82	98	111
20	20	M22 x 1.5	8	8	G 1/8	16	20	8	8	44	17	6	M8 x 1.25	32	11	24	22	11	62	13	12	13	24	95	115	126
25	22	M22 x 1.5	10	8	G 1/8	16	22	8	8	50	20	8	M10 x 1.25	32	11	30	22	11	65	17	12	13	28	104	126	137

Double end boss-cut

Rubber bumper: C□85E Bore size - Stroke - □ - XB24



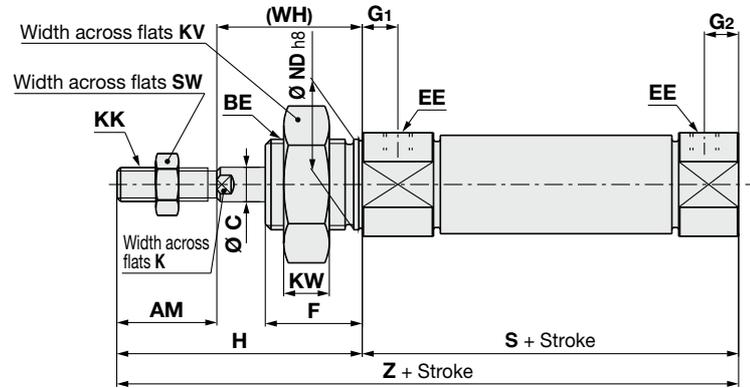
Bore size	AM	BE	C	EE	F	G ₁	G ₂	H	(HR)	K	KK	KV	KW	NA	ND	S	SW	(WH)	ZZ
8	12	M12 x 1.25	4	M5 x 0.8	12	7	5	28	13.4	—	M4 x 0.7	19	6	15	12	46	7	16	86
10	12	M12 x 1.25	4	M5 x 0.8	12	7	5	28	14.2	—	M4 x 0.7	19	6	15	12	46	7	16	86
12	16	M16 x 1.5	6	M5 x 0.8	17	8	6	38	14.2	5	M6 x 1	24	8	18.3	16	50	10	22	105
16	16	M16 x 1.5	6	M5 x 0.8	17	8	6	38	14.2	5	M6 x 1	24	8	18.3	16	56	10	22	111
20	20	M22 x 1.5	8	G 1/8	20	8	8	44	17	6	M8 x 1.25	32	11	24	22	62	13	24	126
25	22	M22 x 1.5	10	G 1/8	22	8	8	50	20	8	M10 x 1.25	32	11	30	22	65	17	28	137

For details on accessories (rod end, double knuckle joint, and floating joint), refer to the **Web Catalogue**.

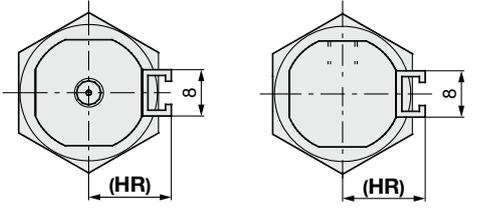
Dimensions

Boss-cut/Basic, Head cover axial port

Rubber bumper: C□85F/Y Bore size - Stroke - □ - XB24



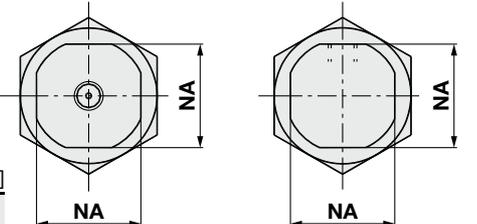
Bore size	AM	BE	C	EE	F	G1	G2	H	(HR)	K	KK	KV/KW	NA	ND	S	SW	(WH)	Z	
8	12	M12 x 1.25	4	M5 x 0.8	12	7	5	28	13.4	—	M4 x 0.7	19	6	15	12	46	7	16	74
10	12	M12 x 1.25	4	M5 x 0.8	12	7	5	28	14.2	—	M4 x 0.7	19	6	15	12	46	7	16	74
12	16	M16 x 1.5	6	M5 x 0.8	17	8	6	38	14.2	5	M6 x 1	24	8	18.3	16	50	10	22	88
16	16	M16 x 1.5	6	M5 x 0.8	17	8	6	38	14.2	5	M6 x 1	24	8	18.3	16	50	10	22	88
20	20	M22 x 1.5	8	G 1/8	20	8	8	44	17	6	M8 x 1.25	32	11	24	22	62	13	24	106
25	22	M22 x 1.5	10	G 1/8	22	8	8	50	20	8	M10 x 1.25	32	11	30	22	65	17	28	115



Head cover axial port

Boss-cut/Basic

Rail mounting (A)



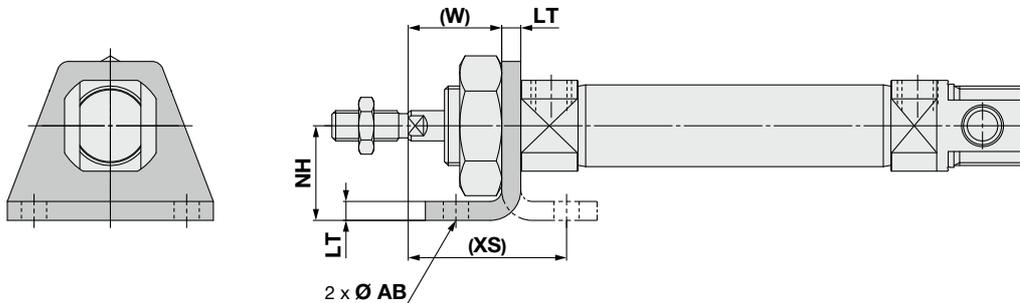
Head cover axial port

Boss-cut/Basic

Band mounting (B)
Without magnet

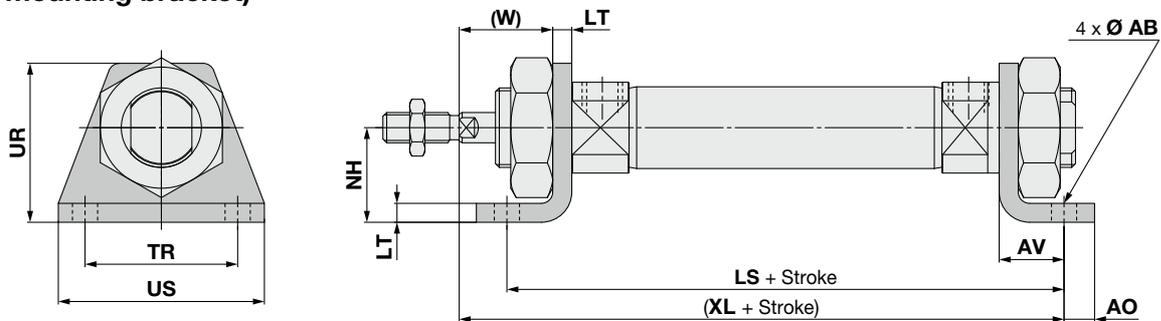
Single foot: C□85N□-□L-XB24

(With mounting bracket)



Double foot: C□85N□-□M-XB24

(With mounting bracket)



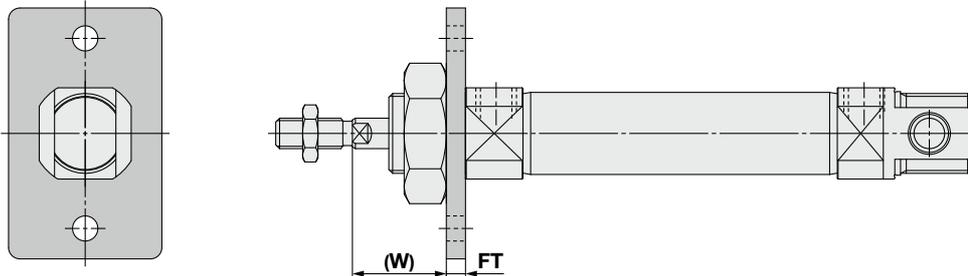
Bore size	AB	AO	AV	LS	LT	NH	TR _{JS14}	UR	US	(W)	(XL)	(XS)
8	4.5	5	11	68	3.2	16	25	26	35	12.8	73	23.8
10	4.5	5	11	68	3.2	16	25	26	35	12.8	73	23.8
12	5.5	6	14	78	4	20	32	33	42	18	86	32
16	5.5	6	14	84	4	20	32	33	42	18	92	32
20	6.6	8	17	96	5	25	40	42	54	19	103	36
25	6.6	8	17	99	5	25	40	42	54	23	110	40

For details on accessories (rod end, double knuckle joint, and floating joint), refer to the **Web Catalogue**.

Dimensions

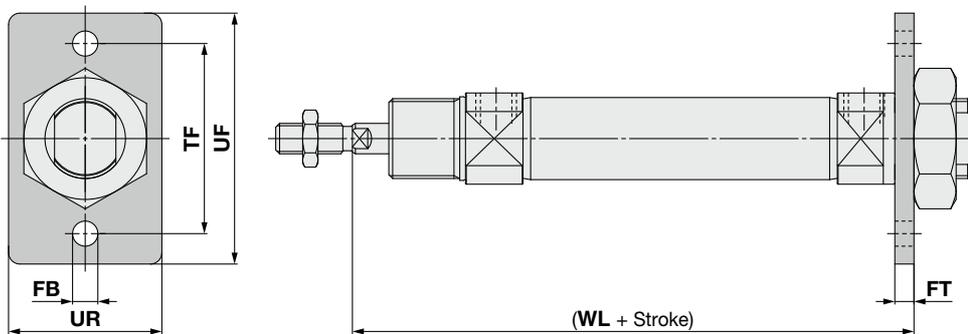
Rod flange: C□85N□-□G-XB24

(With mounting bracket)



Head flange: C□85N□-□G-XB24

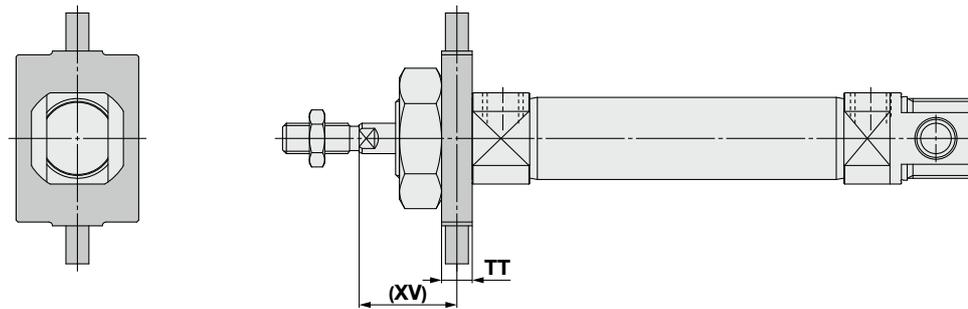
(With mounting bracket)



Bore size	[mm]						
	FB _{H13}	FT	TF	UF	UR	(W)	(WL)
8	4.5	3.2	30	40	22	12.8	65.2
10	4.5	3.2	30	40	22	12.8	65.2
12	5.5	4	40	52	30	18	76
16	5.5	4	40	52	30	18	82
20	6.6	5	50	66	40	19	91
25	6.6	5	50	66	40	23	98

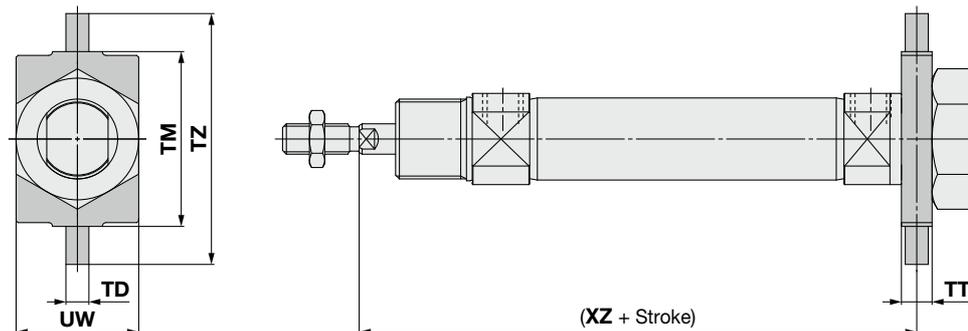
Rod trunnion: C□85N□-□U-XB24

(With mounting bracket)



Head trunnion: C□85N□-□U-XB24

(With mounting bracket)



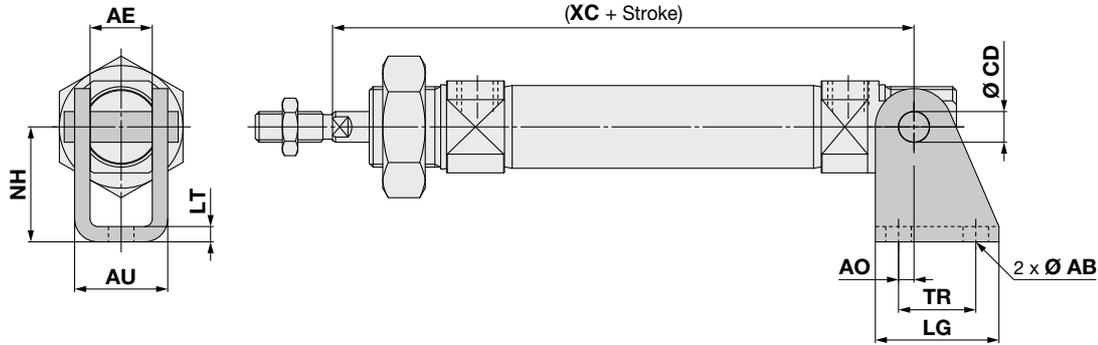
Bore size	[mm]						
	TD _{e8}	TM	TT	TZ	UW	(XV)	(XZ)
8	4	26	6	38	20	13	65
10	4	26	6	38	20	13	65
12	6	38	8	58	25	18	76
16	6	38	8	58	25	18	82
20	6	46	8	66	32	20	90
25	6	46	8	66	32	24	97

For details on accessories (rod end, double knuckle joint, and floating joint), refer to the **Web Catalogue**.

Dimensions

Clevis: C□85N□-□N-XB24

(With mounting bracket)



[mm]

Bore size	AB	AE	AO	AU	CD _{H9}	LG	LT	NH	TR	(XC)
8	4.5	8.1	1.5	13.1	4	20	2.5	24	12.5	64
10	4.5	8.1	1.5	13.1	4	20	2.5	24	12.5	64
12	5.5	12.1	2	18.5	6	25	3.2	27	15	75
16	5.5	12.1	2	18.5	6	25	3.2	27	15	82
20	6.6	16.1	4	24.1	8	32	4	30	20	95
25	6.6	16.1	4	24.1	8	32	4	30	20	104

C85-XB24

C75-XB24

High Durability Series

Longer Life Cylinder Double Acting, Single Rod C75-XB24

∅ 32, ∅ 40



How to Order

Double acting, Single rod **C D 75 E 32 - 100 L V - B - M9BW - XB24**

Built-in magnet

—	None
D	Built-in magnet

Head cover type

E	Double end boss-cut
F	Boss-cut/Basic
Y	Head cover axial port

Bore size

32	32 mm
40	40 mm

Cylinder stroke [mm]
Refer to the next page for standard strokes.

Auto switch mounting type*3

A	Rail mounting
B	Band mounting

*3 The symbol is “—” for no magnet.

Accessory*2

—	None
V	Rod end

*2 Refer to Mounting Brackets/ Accessories for details of accessories.
* Accessory is shipped together with the product.

Mounting bracket*1

—	None
L	Single foot
M	Double foot
G	Flange
U	Trunnion
N	Clevis

*1 Refer to Mounting Brackets/ Accessories for details of mounting brackets.
* Mounting bracket is shipped together with the product.

Number of auto switches

—	2
S	1
n	n

Auto switch

—	Without auto switch
---	---------------------

* For applicable auto switches, refer to the table below.
* Auto switches are shipped together with the product.

Longer life cylinder

Applicable mounting bracket

Head cover type	Mounting bracket				
	L	M	G	U	N
E	●	●	●	●	●
F	●	—	●	●	●
Y	●	—	●	●	●

Applicable Auto Switches/Refer to the Web Catalogue for further information on auto switches.

Type	Special function	Electrical entry	Indicator/light	Wiring (Output)	Load voltage		Auto switch model				Lead wire length [m]					Pre-wired connector	Applicable load		
					DC	AC	Band mounting		Rail mounting		0.5 (—)	1 (M)	3 (L)	5 (Z)	None (N)				
							Perpendicular	In-line	Perpendicular	In-line									
Solid state auto switch	—	Grommet	No	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	F7NV	F79	●	●	●	○	—	○	IC circuit		
				3-wire (PNP)			M9PV	M9P	F7PV	F7P	●	●	●	○	—	○			
		Connector	2-wire	M9BV			M9B	F7BV	J79	●	●	●	○	—	○	—			
			—	H7C			J79C	—	●	—	●	●	—	—	—				
	Diagnostic indication (2-colour indicator)	Grommet	Yes	3-wire (NPN)	5 V, 12 V	—	M9NVV	M9NW	F7NVV	F79W	●	●	●	○	—	○	IC circuit		
				3-wire (PNP)			M9PVV	M9PW	—	F7PW	●	●	●	○	—	○			
				2-wire			M9BWW	M9BW	F7BWW	J79W	●	●	●	○	—	○			
				3-wire (NPN)			M9NAV*1	M9NA*1	—	—	○	○	●	○	—	○			
				3-wire (PNP)			M9PAV*1	M9PA*1	—	—	○	○	●	○	—	○			
				2-wire			M9BAV*1	M9BA*1	F7BAV*1	F7BA*1	○	○	●	○	—	○			
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	5 V	—	A96V	A96	—	A76H	●	—	●	—	—	IC circuit			
				—			—	—	A72	A72H	●	—	●	—	—				
				—			200 V	A93V*2	A93	A73*2	A73H*2	●	●	●	—		—		
				—			100 V	A93V*2	A93	A73*2	A73H*2	●	●	●	—		—		
		Connector	No	Yes	2-wire	24 V	12 V	—	—	C73C	A73C	—	●	—	●	●	—	IC circuit	
								—	—	C80C	A80C	—	●	—	●	●	—		
								—	100 V or less	A90V	A90	A80	A80H	●	—	●	—		—
								—	24 V or less	—	C80C	A80C	—	●	—	●	●		—
Grommet	Yes	No	—	—	—	—	—	A79W	—	●	—	●	—	—	IC circuit				
						—	—	A79W	—	●	—	●	—	—					

*1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance.

*2 1 m lead wire is only applicable to the D-A93.

* Lead wire length symbols: 0.5 m..... — (Example) M9NW 3 m..... L (Example) M9NWL None..... N (Example) H7CN
1 m..... M (Example) M9NWM 5 m..... Z (Example) M9NWZ

* Since there are other applicable auto switches than listed above, refer to the Web Catalogue for details.

* Solid state auto switches marked with “○” are produced upon receipt of order.

* D-A9□/M9□/A7□/A80□/F7□/J7□ auto switches are shipped together, but not assembled. (For band mounting, only the auto switch mounting brackets are assembled before shipment.)

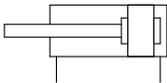


Specifications

Bore size [mm]	32	40
Type	Pneumatic	
Action	Double acting, Single rod	
Fluid	Air	
Proof pressure	1.5 MPa	
Max. operating pressure	1.0 MPa	
Min. operating pressure	0.05 MPa	
Ambient and fluid temperature	Without auto switch: -20 °C to 80 °C (No freezing)	
	With auto switch: -10 °C to 60 °C (No freezing)	
Lubricant	Not required (Non-lube)	
Stroke length tolerance	$^{+1.4}_0$ mm	
Piston speed	50 to 1500 mm/s	
Cushion	Rubber bumper	
Allowable kinetic energy	0.65 J	1.2 J

Symbol

Double acting, Single rod



Strokes

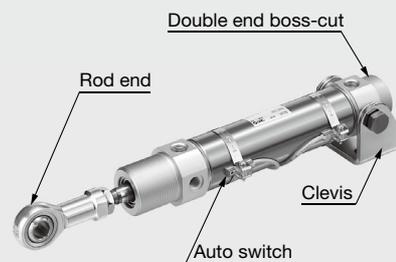
Bore size [mm]	Standard stroke [mm]*1, *2	Stroke range [mm]
32	10, 25, 40, 50, 80, 100, 125, 160, 200, 250, 300	5 to 1000
40		

*1 The manufacturing of strokes in 1 mm increments is possible. (Spacers are not used.)
Produced upon receipt of order.

*2 The min. stroke of the type with a magnet varies depending on the switch.

Option: Ordering Example of Cylinder Assembly

Cylinder model: CD75E40-50NV-B-M9BW-XB24



Head cover E: Double end boss-cut
 Mounting bracket N: Clevis
 Rod end bracket V: Rod end
 Auto switch D-M9BW: Band mounting, 2 pcs.

* Mounting bracket, rod end, and auto switch are shipped together with the product.

⚠ Caution

Durability of The Cylinder

The durability of a longer life cylinder has been evaluated by comparison with the existing cylinders under SMC's test conditions.

The durability of a cylinder depends on the customer's operating conditions and operating environment.

Therefore, durability of four times or longer will not be guaranteed under all conditions.

The allowable kinetic energy, allowable lateral loads at the rod end, theoretical output, weight, mounting bracket/parts numbers, and specifications with an auto switch, are equivalent to those of the ISO Cylinder C75 series. For details, refer to the Web Catalogue.

C85-XB24

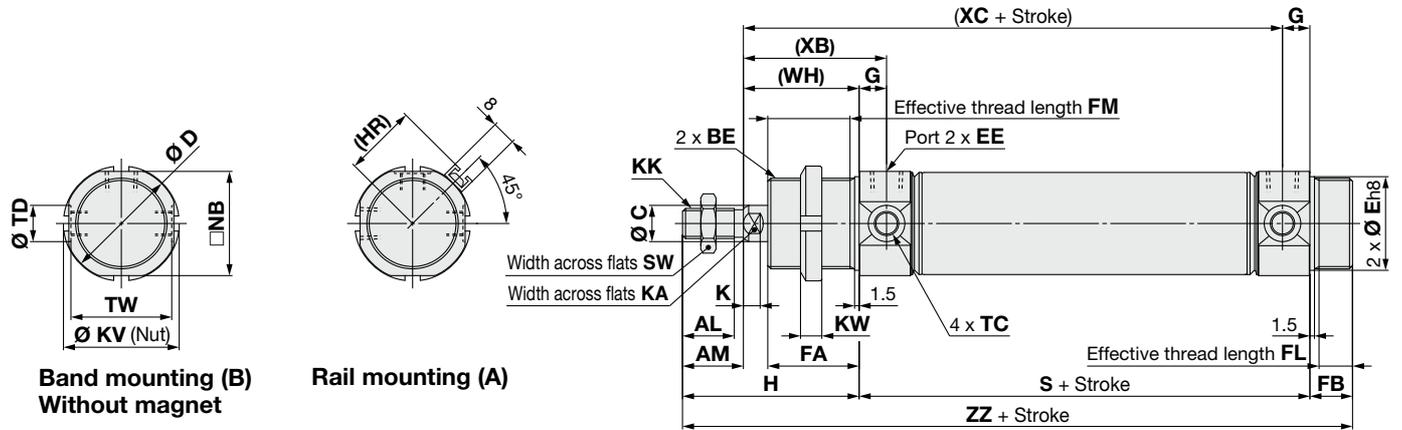
C75-XB24

For details on accessories (rod end and floating joint), refer to the **Web Catalogue**.

Dimensions

Double end boss-cut

Rubber bumper: C□75E Bore size - Stroke - □-XB24



[mm]

Bore size	AL	AM	BE	C	D	E	EE	FA	FB	FM	FL	G	H	(HR)	K	KA	KK	KV
32	17	20	M30 x 1.5	12	37.5	30	G1/8	30	14	27	11	9	58	23.8	5.5	10	M10 x 1.5	38
40	21	24	M38 x 1.5	14	46.5	38	G1/4	35	16	32	13	12	69	28.3	7	12	M12 x 1.75	50

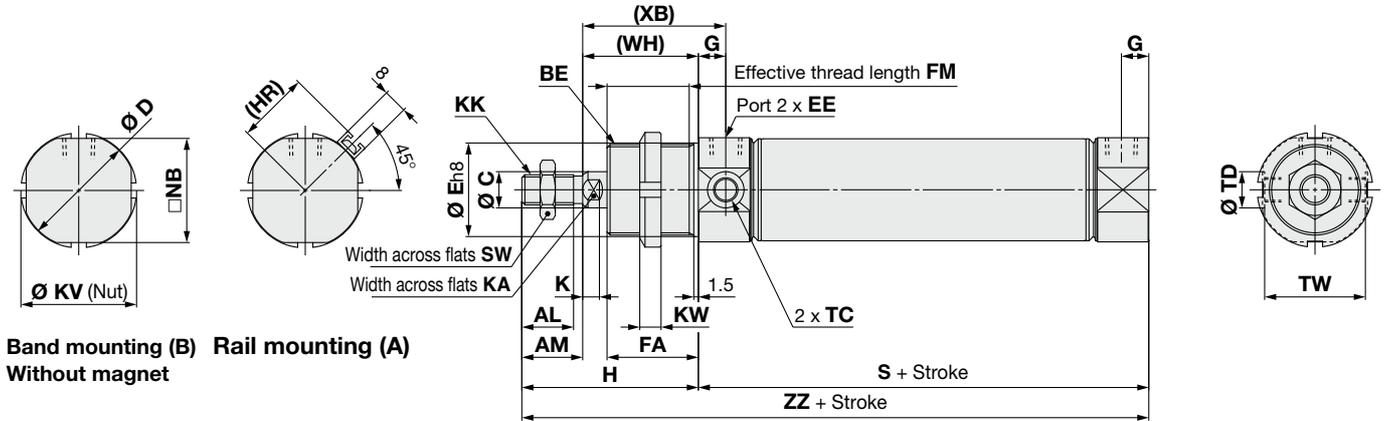
Bore size	KW	NB	S	SW	TC	TD	TW	WA	WH	XB	XC	ZZ
32	7	34.5	68	17	M8 x 1	12 ^{+0.08} ₀	33.1	14	38	47	97	140
40	8	42.5	89	19	M10 x 1	14 ^{+0.08} ₀	39.5	20	45	57	122	174

For details on accessories (rod end and floating joint), refer to the **Web Catalogue**.

Dimensions

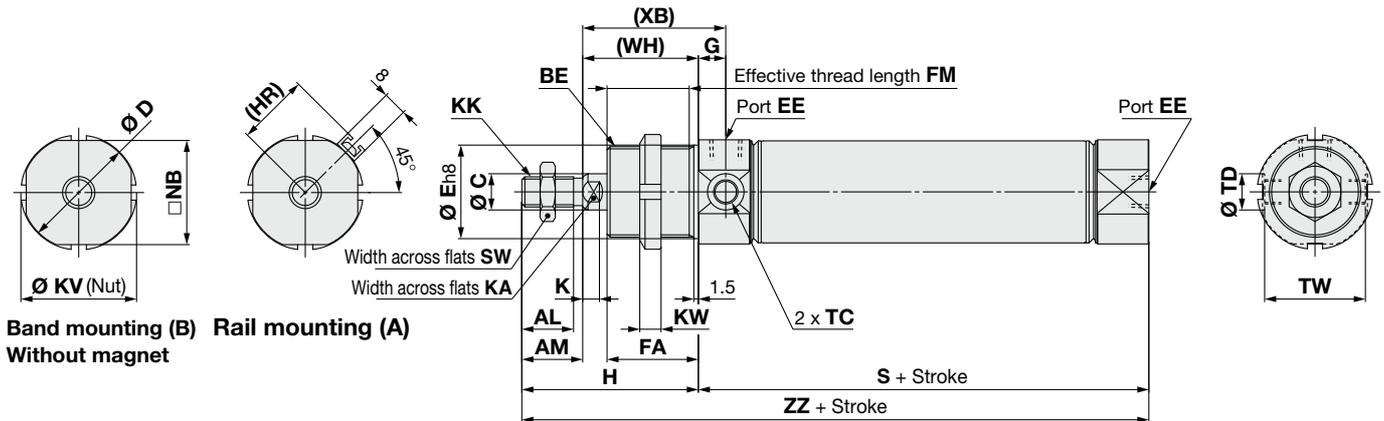
Boss-cut/Basic

Rubber bumper: C□75F Bore size – Stroke – □ – XB24



Head cover axial port

Rubber bumper: C□75Y Bore size – Stroke – □ – XB24



Dimensions

Bore size	AL	AM	BE	C	D	E	EE	FA	FM	G	H	(HR)	K	KA	KK	KV	KW
32	17	20	M30 x 1.5	12	37.5	30	G1/8	30	27	9	58	23.8	5.5	10	M10 x 1.5	38	7
40	21	24	M38 x 1.5	14	46.5	38	G1/4	35	32	12	69	28.3	7	12	M12 x 1.75	50	8

Bore size	NB	S	SW	TC	TD	TW	(WH)	(XB)	ZZ
32	34.5	68	17	M8 x 1	12 ^{+0.08} ₀	33.1	38	47	126
40	42.5	89	19	M10 x 1	14 ^{+0.08} ₀	39.5	45	57	158

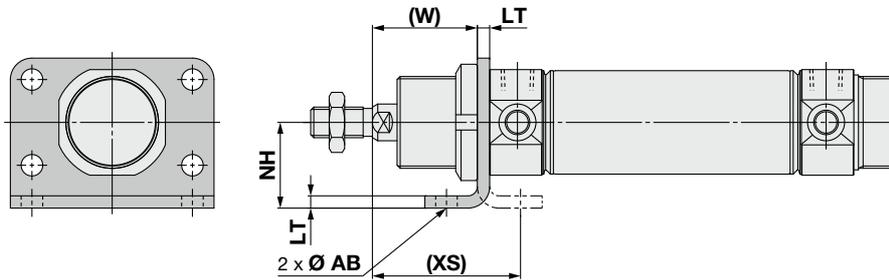
C85-XB24

C75-XB24

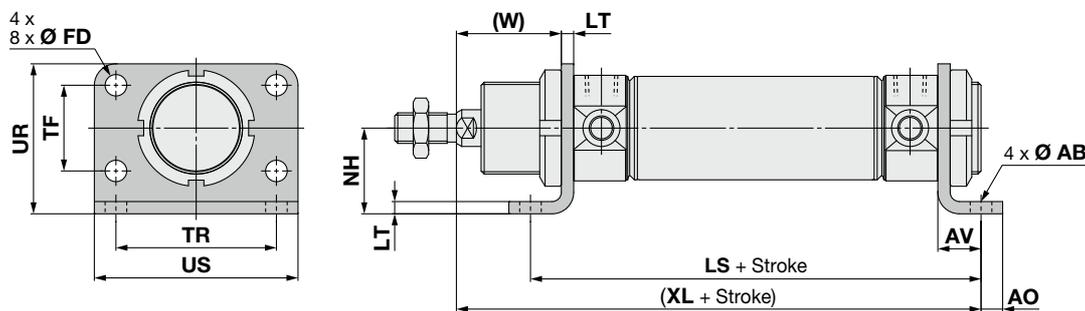
For details on accessories (rod end and floating joint), refer to the **Web Catalogue**.

Dimensions

Single foot: C□75E□ - □L/Flange: C□75E□ - □G (With mounting bracket) - XB24



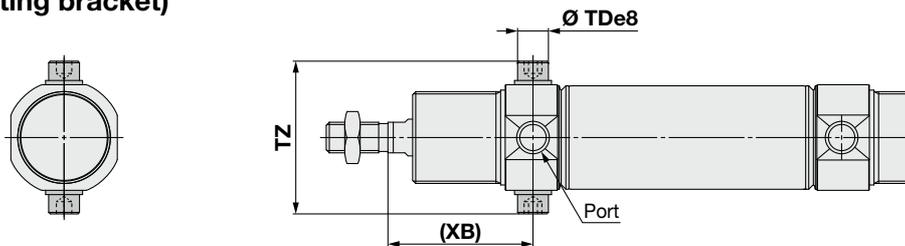
Double foot: C□75E□ - □M (With mounting bracket)



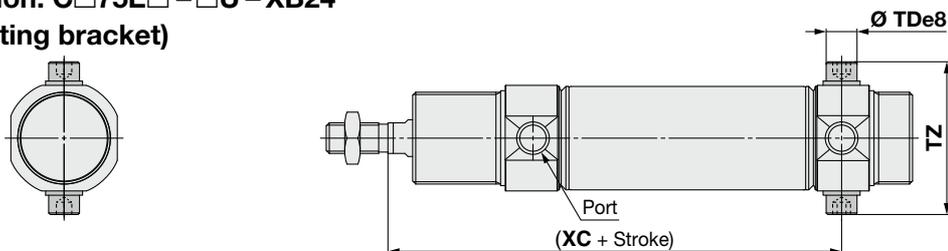
[mm]

Bore size	AB	AO	AV	FD	LS	LT	NH	TF	TR	UR	US	(W)	(XL)	(XS)
32	7	7	14	7	96	4	28	28	52	49	66	34	120	48
40	9	10	20	9	129	5	33	30	60	58	80	40	154	60

Rod trunnion: C□75E□ - □U - XB24
 (With mounting bracket)



Head trunnion: C□75E□ - □U - XB24
 (With mounting bracket)



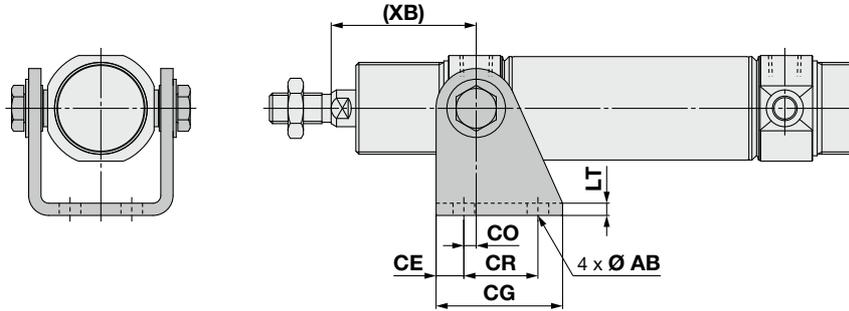
[mm]

Bore size	TDe8	TZ	(XB)	(XC)
32	10 ^{-0.025} _{-0.047}	49.9	47	97
40	12 ^{-0.032} _{-0.059}	62.3	57	122

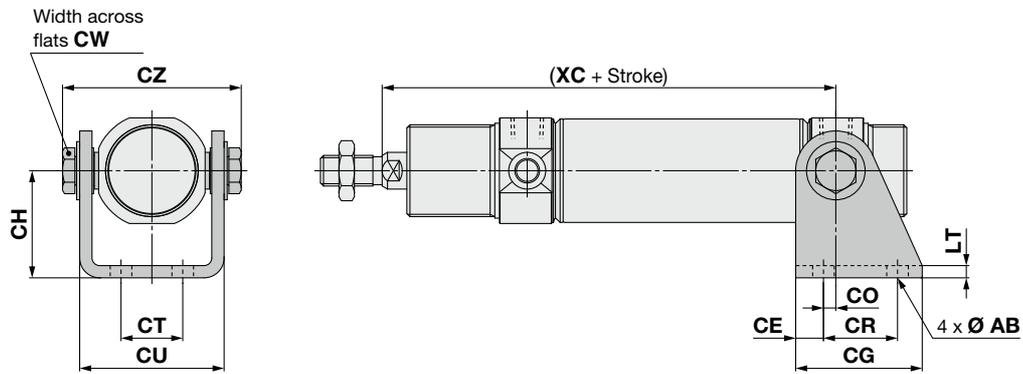
Refer to the **Web Catalogue** for details of accessories (rod end, floating joint).

Dimensions

Rod clevis: C□75E□ - □N - XB24
(With mounting bracket)



Head clevis: C□75E□ - □N - XB24
(With mounting bracket)



Bore size	[mm]												
	AB	CE	CG	CH	CO	CR	CT	CU	CW	CZ	LT	(XB)	(XC)
32	7	9	41	35	4	24	20	46.8	13	57.9	4	47	97
40	9	12	52	40	3	30	28	58.2	17	72.3	5	57	122

C85-XB24

C75-XB24

Safety Instructions

These safety instructions are intended to prevent hazardous situations and/or equipment damage. These instructions indicate the level of potential hazard with the labels of “Caution,” “Warning” or “Danger.” They are all important notes for safety and must be followed in addition to International Standards (ISO/IEC) ¹⁾, and other safety regulations.

Danger:

Danger indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.

Warning:

Warning indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.

Caution:

Caution indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.

- 1) ISO 4414: Pneumatic fluid power – General rules and safety requirements for systems and their components.
- ISO 4413: Hydraulic fluid power – General rules and safety requirements for systems and their components.
- IEC 60204-1: Safety of machinery – Electrical equipment of machines. (Part 1: General requirements)
- ISO 10218-1: Robots and robotic devices - Safety requirements for industrial robots - Part 1: Robots.
- etc.

Warning

1. The compatibility of the product is the responsibility of the person who designs the equipment or decides its specifications.

Since the product specified here is used under various operating conditions, its compatibility with specific equipment must be decided by the person who designs the equipment or decides its specifications based on necessary analysis and test results. The expected performance and safety assurance of the equipment will be the responsibility of the person who has determined its compatibility with the product. This person should also continuously review all specifications of the product referring to its latest catalogue information, with a view to giving due consideration to any possibility of equipment failure when configuring the equipment.

2. Only personnel with appropriate training should operate machinery and equipment.

The product specified here may become unsafe if handled incorrectly. The assembly, operation and maintenance of machines or equipment including our products must be performed by an operator who is appropriately trained and experienced.

3. Do not service or attempt to remove product and machinery/equipment until safety is confirmed.

1. The inspection and maintenance of machinery/equipment should only be performed after measures to prevent falling or runaway of the driven objects have been confirmed.
2. When the product is to be removed, confirm that the safety measures as mentioned above are implemented and the power from any appropriate source is cut, and read and understand the specific product precautions of all relevant products carefully.
3. Before machinery/equipment is restarted, take measures to prevent unexpected operation and malfunction.

4. Our products cannot be used beyond their specifications. Our products are not developed, designed, and manufactured to be used under the following conditions or environments.

Use under such conditions or environments is not covered.

1. Conditions and environments outside of the given specifications, or use outdoors or in a place exposed to direct sunlight.
2. Use for nuclear power, railways, aviation, space equipment, ships, vehicles, military application, equipment affecting human life, body, and property, fuel equipment, entertainment equipment, emergency shut-off circuits, press clutches, brake circuits, safety equipment, etc., and use for applications that do not conform to standard specifications such as catalogues and operation manuals.
3. Use for interlock circuits, except for use with double interlock such as installing a mechanical protection function in case of failure. Please periodically inspect the product to confirm that the product is operating properly.

Caution

We develop, design, and manufacture our products to be used for automatic control equipment, and provide them for peaceful use in manufacturing industries.

Use in non-manufacturing industries is not covered.

Products we manufacture and sell cannot be used for the purpose of transactions or certification specified in the Measurement Act.

The new Measurement Act prohibits use of any unit other than SI units in Japan.

Limited warranty and Disclaimer/Compliance Requirements

The product used is subject to the following “Limited warranty and Disclaimer” and “Compliance Requirements”. Read and accept them before using the product.

Limited warranty and Disclaimer

1. The warranty period of the product is 1 year in service or 1.5 years after the product is delivered, whichever is first. ²⁾ Also, the product may have specified durability, running distance or replacement parts. Please consult your nearest sales branch.
2. For any failure or damage reported within the warranty period which is clearly our responsibility, a replacement product or necessary parts will be provided. This limited warranty applies only to our product independently, and not to any other damage incurred due to the failure of the product.
3. Prior to using SMC products, please read and understand the warranty terms and disclaimers noted in the specified catalogue for the particular products.
- 2) Vacuum pads are excluded from this 1 year warranty.
A vacuum pad is a consumable part, so it is warranted for a year after it is delivered. Also, even within the warranty period, the wear of a product due to the use of the vacuum pad or failure due to the deterioration of rubber material are not covered by the limited warranty.

Compliance Requirements

1. The use of SMC products with production equipment for the manufacture of weapons of mass destruction (WMD) or any other weapon is strictly prohibited.
2. The exports of SMC products or technology from one country to another are governed by the relevant security laws and regulations of the countries involved in the transaction. Prior to the shipment of a SMC product to another country, assure that all local rules governing that export are known and followed.

Safety Instructions

Be sure to read “Handling Precautions for SMC Products” (M-E03-3) before using.

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