

Cylinder: Standard/Non-rotating Type Double Acting, Single/Double Rod

Series C76

ø32, ø40

How to Order

**Double acting
Single rod**

**Double acting
Double rod**

C D 76 **K E 32-100 C** **J A R2**

C D 76 W **E 32-100 C** **JJ B**

Built-in magnet

Nil	None
D	Built-in magnet

Type

Nil	Standard
K	Non-rotating rod (Rubber cushion only)

Mounting style

Symbol	Mounting
E*	Double end
F**	Front nose
Y**	Front nose in line port

* Double acting, Double rod type: Only double end type. (E)
** Except air cushion type.

Auto switch mounting type

A	Rail mounting
B	Band mounting

Applicable auto switches and bands are shown on pages 6-10-45 to 6-10-46. Please order auto switches and bands separately.

Option

R	Stainless steel piston rod, rod end nut and mounting nut
R2	Stainless steel piston rod and rod end nut

Note) Please refer to page 6-10-46 for additional options. Only one option can be selected.

Rod boot

Nil	Without rod boot
J	Nylon tarpaulin one side
K	Heat resistant tarpaulin one side
JJ*	Nylon tarpaulin both sides
KK*	Heat resistant tarpaulin both sides

* In the case of double acting/double rod.

Cushion

Nil	Rubber cushion (Standard)
C	Air cushion (Only "E" execution)

Bore size **Stroke**

Bore size (mm)	Standard stroke (mm)	Max. stroke (mm)
32	10, 25, 40, 50, 80, 100,	1000
40	125, 160, 200, 250, 300	

Mounting Bracket Part No.

Bore size (mm)		32	40
Mounting bracket	Flange, Foot (1 pc.)	C76F32A	C76F40A
	Flange, Foot (2 pcs. with mounting nut 1 pc.)	C76F32B	C76F40B
	Trunnion	C76T32	C76T40
	Clevis	C76C32	C76C40
Accessory	Single knuckle joint	KJ10DA	KJ12DA
	Double knuckle joint	GKM10-20A	GKM12-24A
	Floating joint	JA25-10-150	JA40-12-175

Replacement Parts

Bore size (mm)	Part no.		Note
	Standard	Non-rotating	
32	C76-32PS	C76K-32PS	Every set includes: 1 rod seal 1 seal retaining washer 1 retaining ring
40	C76-40PS	C76K-40PS	

Suitable also C76 series

Example of How to Order

- Cylinder without auto switch, Bore size: 32, Stroke: 100, Double acting/Single rod and Double end type.
C76E32-100 1 pc. Cylinder
- Cylinder without auto switch, Bore size: 32, Stroke: 50, Double acting/Double rod type and Rod and head foot mounting.
C76WE32-50 1 pc. Cylinder
C76F32B 2 pcs. Foot bracket
- Cylinder with auto switch (Band mounted type, 2 pcs.), Bore size: 40, Stroke: 100, Double acting/Single rod, Front nose in line port type and Flange mounting.
CD76Y40-100-B 1 pc. Cylinder
C76F40A 1 pc. Flange mounting
D-C73L 2 pcs. Auto switch
BM2-040 2 pcs. For auto switch mounting band
- Cylinder with auto switch (Rail mounted type, 2 pcs.), Bore size: 40, Stroke: 50, Single acting/Spring return, Front nose type and Trunnion mounting.
CD76F40-50S-A 1 pc. Cylinder
C76T40 1 pc. Trunnion mounting
D-A73L 2 pcs. Auto switch
- Non-rotating: Cylinder without auto switch, Bore size: 32, Stroke: 100, Double acting/Single rod and Double end type.
C76KE32-100 1 pc. Cylinder

CJ1

CJP

CJ2

CM2

CG1

MB

MB1

CA2

CS1

C76

C85

C95

CP95

NCM

NCA

D-

-X

20-

Data

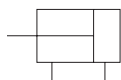
Series C76



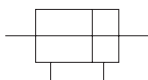
JIS Symbol

Standard: Double acting

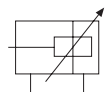
Rubber bumper
Single rod



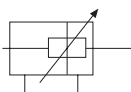
Rubber bumper
Double rod



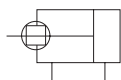
Air cushion
Single rod



Air cushion
Double rod



Non-rotating: Double acting, Single rod



Specifications

Bore size (mm)		32	40
Piston rod dia. (mm)		12	14
Piston rod thread		M10 x 1.5	M12 x 1.75
Port size		G 1/8	G 1/4
Action		Double acting, Single/Double rod	
Fluid		Air	
Proof pressure		1.5 MPa	
Max. operating pressure		1.0 MPa	
Min. operating pressure		0.05 MPa	
Ambient and fluid temperature		-20 to 80°C (Built-in magnet type: -10 to 60°C)	
Cushion		Rubber cushion, Air cushion	
Lubrication		Not required. Use turbine oil Class 1 ISO VG32, if lubricated.	
Rod boot	Nylon tarpaulin	Max. ambient temperature 60°C	
	Heat resistant tarpaulin	Max. ambient temperature 110°C *	
Piston speed		50 to 1500 mm/s	
Allowable kinetic energy	Rubber cushion	0.65J	1.2J
	Air cushion	1.07J	2.35J
Non-rotating accuracy		±0.5°	±0.5°
Stroke tolerance (mm)		0/+1.4	

* Maximum ambient temperature of rod boots only.

Weight (Standard, Non-rotating)

(g)

Bore size (mm)		32	40	
Basic weight	Single rod	340 (375)	655 (725)	
	Double rod	420	810	
Additional weight for each 10 mm of stroke	Single rod	16.8	26.6	
	Double rod	25.6	96.5	
Mounting bracket	C75F□A	110	200	
	C75F□B	240	455	
	C75T□	15	25	
	C85C□	165	305	
Accessory	Single knuckle joint	KJ□D	70	105
	Double knuckle joint	GKM□-□	100	165
	Floating joint	JA□-□-□	70	160

Calculation: (Example) C76E32-50, C76F32A
 Basic weight 340 (ø32) g
 Additional weight 16.8/10 mm of stroke
 Cylinder stroke 50 mm
 Mounting bracket 110 g
 340 + 16.8 x 50/10 = 424 g 424 + 110 = 534 g

() : In the case of air cushion

Auto Switch Mounting, Minimum Possible Cylinder Stroke

Band Mounting Type

(mm)

Auto switch model	No. of auto switches				1 pc.
	2 pcs.		n pcs.		
	Different sides	Same side	Different sides	Same side	
D-C7□ D-C80	15	50	$15 + 45(\frac{n-2}{2})$ (n = 2, 4...)	$50 + 45(n - 2)$	10
D-C73C D-C80C D-H7C	15	65	$15 + 50(\frac{n-2}{2})$ (n = 2, 4...)	$65 + 50(n - 2)$	10
D-H7□ D-H7□W D-H7BAL D-H7NF	15	60	$15 + 45(\frac{n-2}{2})$ (n = 2, 4...)	$60 + 45(n - 2)$	10

Rail Mounting Type

(mm)

Auto switch model	No. of auto switches				1 pc.
	2 pcs.		n pcs.		
	Different sides	Same side	Different sides	Same side	
D-A7□/A80 D-A7□H/A80H D-A73C/A80C D-F7□/F7□V D-J79/J79C	—	10	—	$10 + 35(\frac{n-2}{2})$ (n = 2, 4...)	5
D-A79W, D-J79W D-F7□W, D-F7BAL D-F79F, F7□WV D-F7BAVL	—	15	—	$15 + 35(\frac{n-2}{2})$ (n = 2, 4...)	10

Cylinder: Standard/Non-rotating Type Double Acting, Single/Double Rod **Series C76**

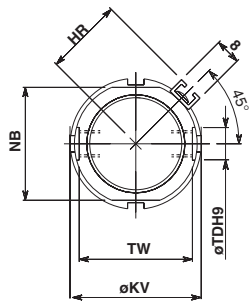
Dimensions

[First angle projection]

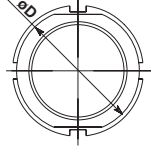
Double acting, Single rod

Rubber cushion: C□76E **Bore** **Stroke** □

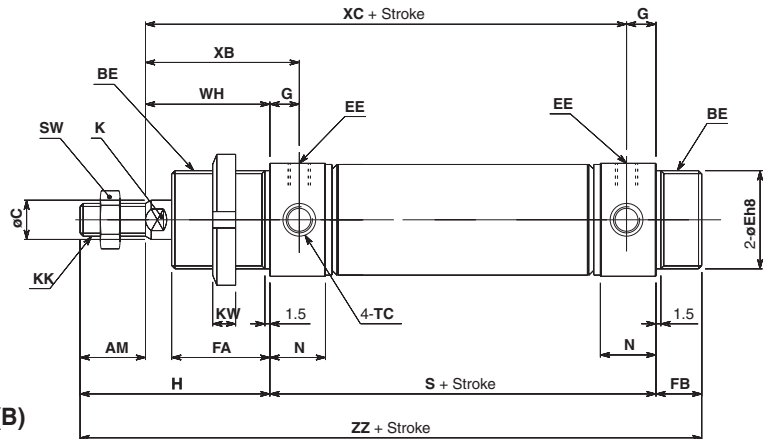
Without magnet, Built-in magnet



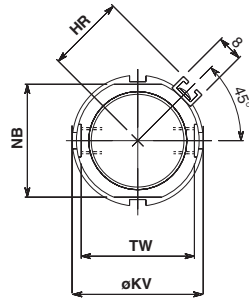
Rail mounting type (A)



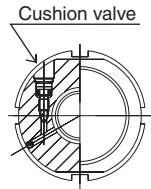
Band mounting type (B)
or non-magnet



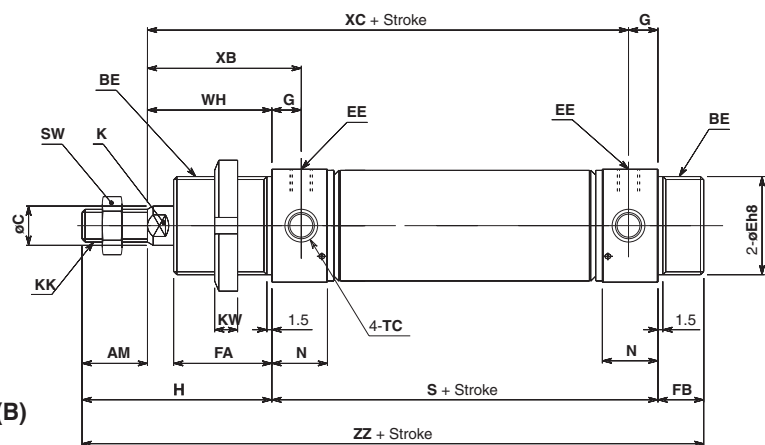
Air cushion: C□76E **Bore** **Stroke** C-□
Without magnet, Built-in magnet



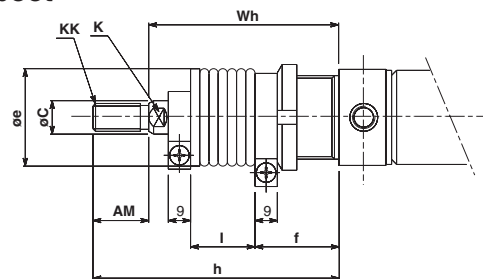
Rail mounting type (A)



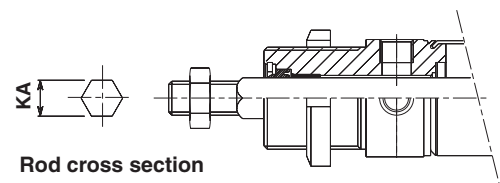
Band mounting type (B)
or non-magnet



With rod boot



C□76KE **Bore** **Stroke** C-□
Non-rotating, Piston rod (Rubber cushion only)



Rod cross section

(mm)

Bore	AM	BE	øC	øD	øEh8	EE	FA	FB	G	H	HR	K	KA	KK	øKV	KW	N	NB	S	SW	TC	øTDH9	TW	WH	XB	XC	ZZ
32	20	M30 x 1.5	12	37.5	30 ⁰ _{-0.033}	G 1/8	30	14	9	58	23.8	10	12.2	M10 x 1.5	38	7	17(19)	34.5	68	17	M8 x 1	10 ^{+0.036} ₀	34.5	38	47	97	140
40	24	M38 x 1.5	14	46.5	38 ⁰ _{-0.039}	G 1/4	35	16	12	69	28.3	12	14.2	M12 x 1.75	50	8	22(25)	42.5	89	19	M10 x 1	12 ^{+0.043} ₀	42.5	45	57	122	174

() : In the case of air cushion

With Rod Boot

(mm)

Bore	Stroke	AM	øC	øE	f	K	KK	h						
								1 to 50	51 to 100	101 to 150	151 to 200	201 to 300	301 to 400	401 to 500
32		20	12	35	30	10	M10 x 1.5	77	90	102	115	140	165	190
40		24	14	46	35	12	M12 x 1.75	88	101	113	126	151	176	201

Bore	Stroke	l							Wh						
		1 to 50	51 to 100	101 to 150	151 to 200	201 to 300	301 to 400	401 to 500	1 to 50	51 to 100	101 to 150	151 to 200	201 to 300	301 to 400	401 to 500
32		12.5	25	37.5	50	75	100	125	57	70	82	95	120	145	170
40		12.5	25	37.5	50	75	100	125	64	77	89	102	127	152	177

CJ1

CJP

CJ2

CM2

CG1

MB

MB1

CA2

CS1

C76

C85

C95

CP95

NCM

NCA

D-

-X

20-

Data