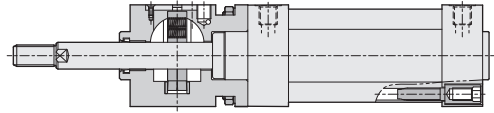
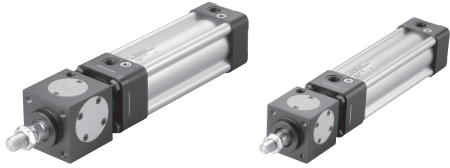


DNK series Braking Type Cylinder

Product features

CHELIC

Internal structure

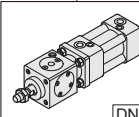
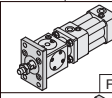
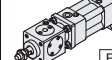
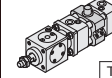
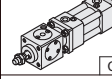
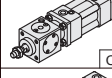
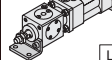
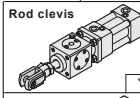
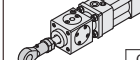
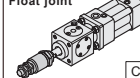
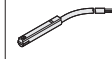
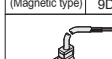
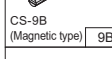

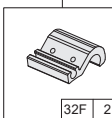


Specification

Item	Bore size (mm)	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100
Standard stroke	mm	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500 (700, 1000)					
Fluid		Air					
Material		Aluminum alloy					
Pressure range	Kgf/cm ² (kPa)	4 ~ 6.5 (400 ~ 650)					
Min operated pressure for anchor	Kgf/cm ² (kPa)	4 (400)	4 (400)	3.5 (350)	3.5 (350)	3 (300)	3 (300)
Anchor operated direction		Two sides					
Locking retention forces (None 1)	Kgf	52	88	137	206	310	471
Lock braking precision (mm)	(mm/s)	Weight load(Horizontal)-Retentionx70%					
	50	±0.7	±0.8	±0.9	±0.8	±0.8	±1
	100	±1	±1	±1	±1	±1.2	±1.4
	200	±1.3	±1.6	±1.4	±1.8	±2.1	±2.4
Ambient and fluid temperature	°C	-10 ~ 60					

None1: Maximum design static load-horizontal installation site.

Code of order

DNK	50	150	LB	Y	9D	32U	2
Model	Bore size	Stroke	Mounting type	Accessory	Sensor switch	Sensor bracket	Sensor switch qty
 DNK: Standard cylinder	32 - Ø32mm 40 - Ø40mm 50 - Ø50mm 63 - Ø63mm 80 - Ø80mm 100 - Ø100mm	25 - 25 mm 50 - 50 mm 75 - 75 mm 100 - 100 mm 125 - 125 mm 150 - 150 mm 175 - 175 mm 200 - 200 mm 250 - 250 mm 300 - 300 mm 350 - 350 mm 400 - 400 mm 450 - 450 mm 500 - 500 mm	 FA  FB  TC  CA  CB  LB	 Rod clevis Y  Rod end G  Float joint CJ	 CS-9D (Magnetic type) 9D  CS-9B (Magnetic type) 9B  CS-8G (Solid state) 8G  CS-8B (Solid state) 8B	 32F 2 None: without sensor bracket 32F: Applicable to Ø32, Ø40 50F: Applicable to Ø50, Ø63 80F: Applicable to Ø80, Ø100	1 = 1 PCS 2 = 2 PCS

Sensor switch mark:
 : None (without Sensor switch)
 9D:CS-9D
 9B:CS-9B
 8G:CS-8G
 8B:CS-8B

DNK series Braking Type Cylinder

Product features

CHELIC

Order code of seal kit

DNKP

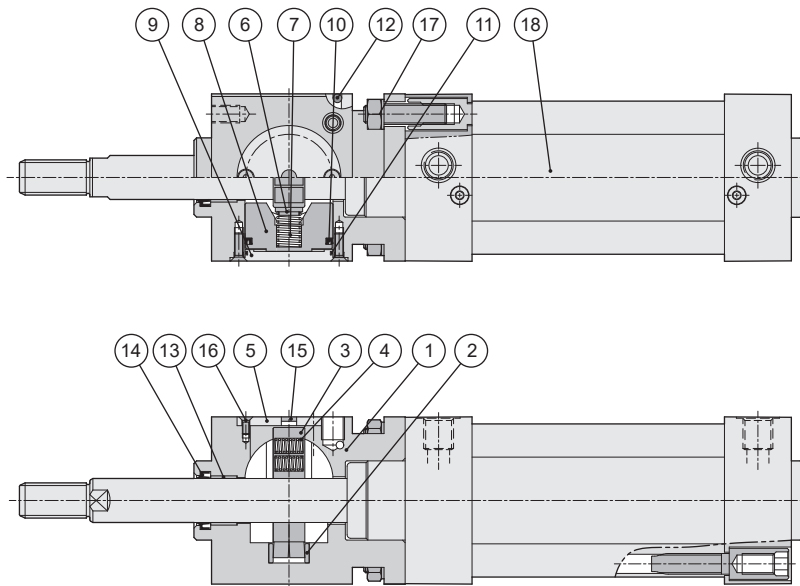
Bore size	Seal kit components
32	DNKP 32 - Include No. 10,11,14
40	DNKP 40 - Include No. 10,11,14
50	DNKP 50 - Include No. 10,11,14
63	DNKP 63 - Include No. 10,11,14
80	DNKP 80 - Include No. 10,11,14
100	DNKP 100 - Include No. 10,11,14

DN

DMB

DU

Internal structure



DNK

DNE

DCK2

DQ

DCQ

Components and material list

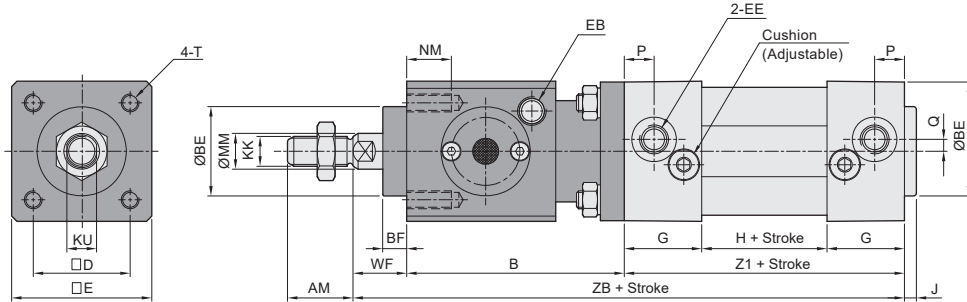
No.	Item	Quantity	No.	Item	Quantity
01	Body	1	10	Piston Packing	2
02	Shaft sleere	1	11	O-ring	2
03	Plate	2	12	Stainless ball	1
04	Spring	5	13	Bearing	1
05	Dust cover	1	14	Rod packing	1
06	Pin plate	2	15	Silence slice	1
07	Spring	2	16	Hexagon socket head cap screw	10
08	Piston	2	17	Screw set	4
09	End cover	2	18	Cylinder set	1

DNK series Braking Type Cylinder

Dimensions

CHELIC

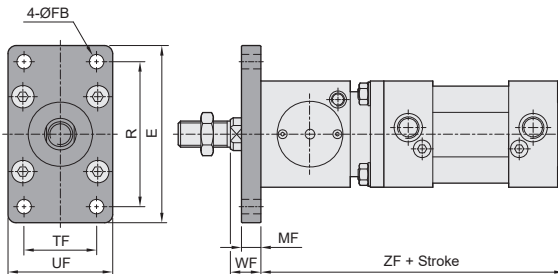
DNK Ø32 ~ Ø100



Bore size (mm)	AM	B	BE	BF	D	E	EE	EB	G	H	J	KK	KU	MM	NM	P	Q	WF	T	Z1	ZB
Ø32	22	73	30	8	32.5	47	G 1/8	G 1/8	26	42	4	M10x1.25P	10	12	12	10	4	18	M6	94	185
Ø40	24	76	35	8	38	53	G 1/4	G 1/8	30	45	5	M12x1.25P	14	16	12	15	4	18	M6	105	199
Ø50	32	90	40	8	46.5	65	G 1/4	G 1/8	30	46	5	M16x1.5P	17	20	14	15	4	20	M8	106	216
Ø63	32	92	45	10	56.5	75	G 3/8	G 1/8	32	57	4	M16x1.5P	17	20	14	16	7	22	M8	121	235
Ø80	40	110	45	10	72	95	G 3/8	G 1/4	38	52	6	M20x1.5P	22	25	16	19	7	24	M10	128	262
Ø100	40	130	55	10	89	115	G 1/2	G 1/4	40	58	6	M20x1.5P	22	25	16	20	7	26	M10	138	294

Accessory dimension

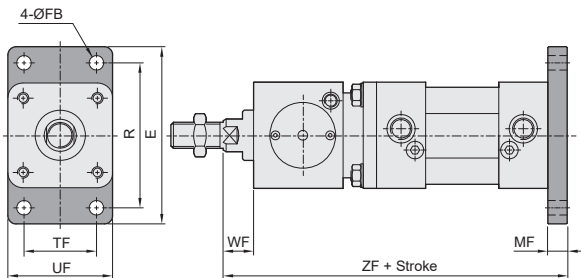
- Flange – **FA** Front flange



Unit: mm

Bore size	Mark						
	E	FB	MF	R	TF	UF	ZF
Ø32	79	7	10	64	32	50	18
Ø40	90	9	10	72	36	55	18
Ø50	110	9	12	90	45	65	20
Ø63	120	9	12	100	50	75	22
Ø80	153	12	16	126	63	95	24
Ø100	178	14	16	150	75	115	26

- Flange – **FB** End flange



Unit: mm

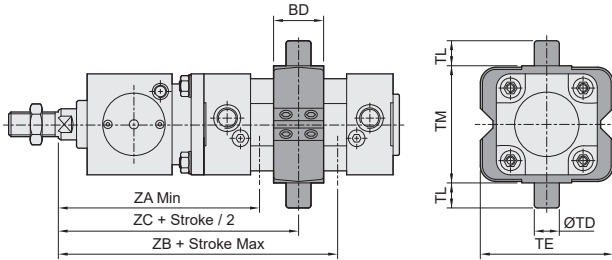
Bore size	Mark						
	E	FB	MF	R	TF	UF	ZF
Ø32	79	7	10	64	32	50	18
Ø40	90	9	10	72	36	55	18
Ø50	110	9	12	90	45	65	20
Ø63	120	9	12	100	50	75	22
Ø80	153	12	16	126	63	95	24
Ø100	178	14	16	150	75	115	26

DNK series Braking Type Cylinder

Bracket dimensions

CHELIC

Central trunnion type – TC



Unit: mm

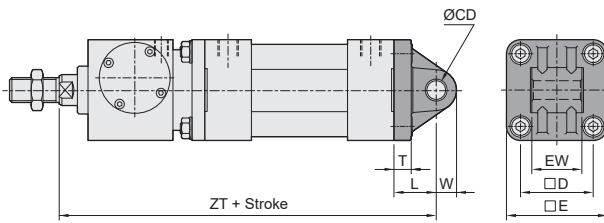
Mark	BD	TD	TE	TL	TM	ZA	ZB	ZC
Ø32	22	12	58	12	50	131	145	138
Ø40	28	16	70	16	63	141	152	146.5
Ø50	32	16	85	16	75	159	167	163
Ø63	35	20	100	20	90	166.5	182.5	174.5
Ø80	40	20	120	20	110	195	201	198
Ø100	45	25	145	25	132	221.5	228.5	225

DN

DMB

DU

Clevis – CA Single clevis



Unit: mm

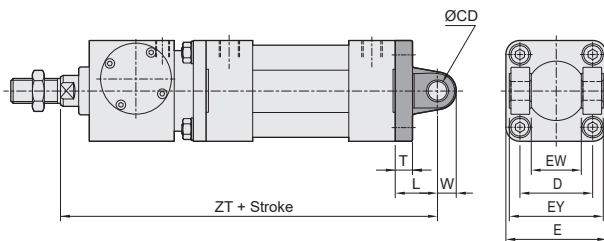
Mark	CD	D	E	EW	L	T	W	ZT
Ø32	10	32.5	47	26	22	10	10.5	207
Ø40	12	38	53	28	25	10	13	224
Ø50	12	46.5	65	32	27	12	13	243
Ø63	16	56.5	75	40	32	12	17	267
Ø80	16	72	95	50	36	16	17	298
Ø100	20	89	115	60	41	16	21	335

DNK

DNE

DNK2

Clevis – CB Double clevis



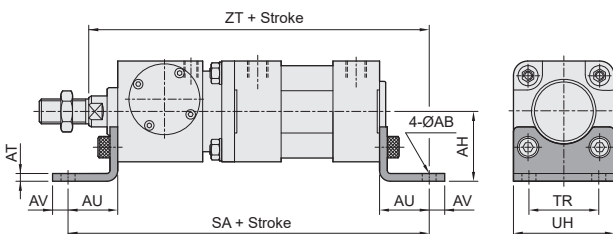
Unit: mm

Mark	CD	D	E	EW	EY	L	T	W	ZT
Ø32	10	32.5	47	26	45	22	10	10.5	207
Ø40	12	38	53	28	52	25	10	11	224
Ø50	12	46.5	65	32	60	27	12	12	243
Ø63	16	56.5	75	40	70	32	12	15	267
Ø80	16	72	95	50	90	36	16	17	298
Ø100	20	89	115	60	110	41	16	21	335

DQ

DCQ

Axial foot – LB



Unit: mm

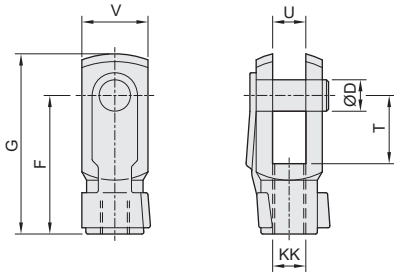
Mark	AB	AH	AT	AU	AV	SA	TR	UH	ZT
Ø32	7	32	5	24	8	215	32	47	209
Ø40	9	36	5	28	10	237	36	53	227
Ø50	9	45	5	32	10	260	45	65	248
Ø63	9	50	5	32	10	277	50	75	267
Ø80	12	63	6	41	13	320	63	95	303
Ø100	14	71	6	41	15	350	75	115	335

DNK series Braking Type Cylinder

Dimensions-Accessory

CHELIC

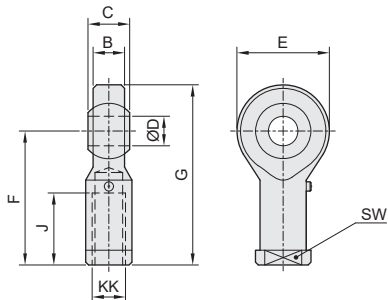
◉ Rod clevis



Model	Bore size	D	F	G	KK
Y - M10×1.25	Ø32	10	40	52	M10 × 1.25
Y - M12×1.25	Ø40	12	48	62	M12 × 1.25
Y - M16×1.5	Ø50, Ø63	16	64	83	M16 × 1.5
Y - M20×1.5	Ø80, Ø100	20	80	105	M20 × 1.5

Model	Bore size	T	U	V	
Y - M10×1.25	Ø32	20	10	20	
Y - M12×1.25	Ø40	24	12	24	
Y - M16×1.5	Ø50, Ø63	32	16	32	
Y - M20×1.5	Ø80, Ø100	40	20	40	

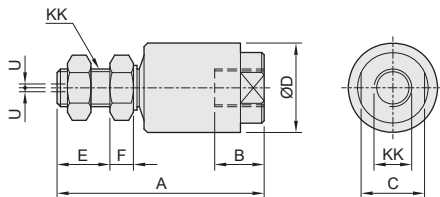
◉ Rod end



Model	Bore size	B	C	D	E	F
G - M10×1.25	Ø32	10.5	14	10	26	43
G - M12×1.25	Ø40	12	16	12	30	50
G - M16×1.5	Ø50, Ø63	15	21	16	38	64
G - M20×1.5	Ø80, Ø100	18	25	20	46	77

Model	Bore size	G	J	KK	SW
G - M10×1.25	Ø32	56	21	M10 × 1.25	17
G - M12×1.25	Ø40	65	24	M12 × 1.25	19
G - M16×1.5	Ø50, Ø63	83	33	M16 × 1.5	22
G - M20×1.5	Ø80, Ø100	100	40	M20 × 1.5	30

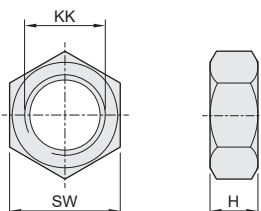
◉ Float joint



Model	Bore size	A	B	C	D	E
CJ - M10×1.25	Ø32	54	13	24	25.5	14.4
CJ - M12×1.25	Ø40	71	17	29	31	18.8
CJ - M16×1.5	Ø50, Ø63	88	21	27	38	31
CJ - M20×1.5	Ø80, Ø100	105	25	32	50	27.5

Model	Bore size	F	KK	U	
CJ - M10×1.25	Ø32	4.5	M10 × 1.25	1	
CJ - M12×1.25	Ø40	8	M12 × 1.25	1.15	
CJ - M16×1.5	Ø50, Ø63	8	M16 × 1.5	1.65	
CJ - M20×1.5	Ø80, Ø100	15.5	M20 × 1.5	2.15	

◉ Rod nut



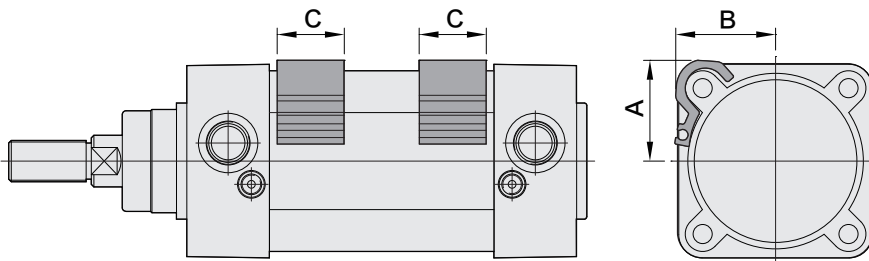
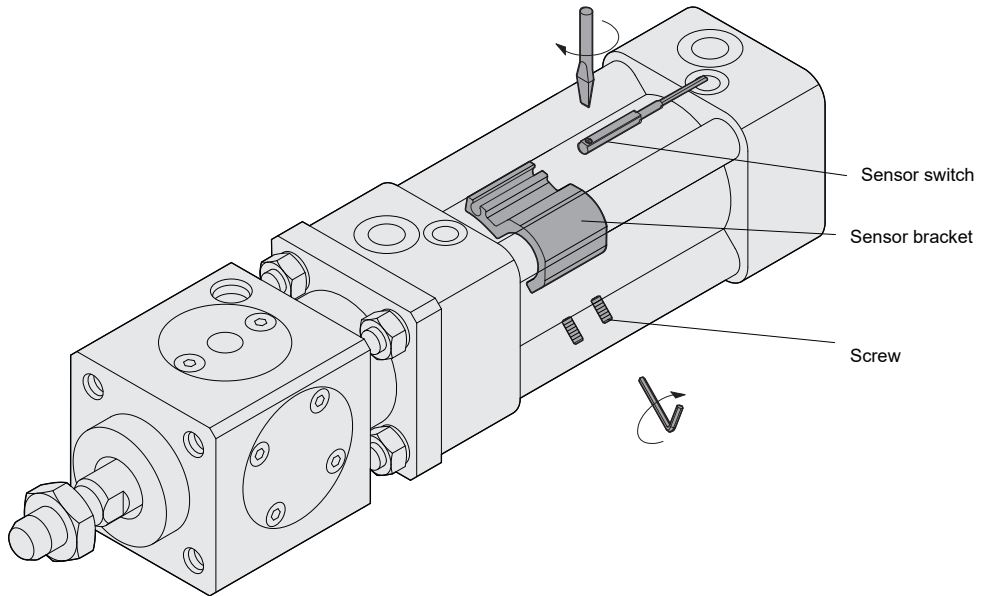
Model	Bore size	H	KK	SW
M10×1.25	Ø32	6	M10 × 1.25	17
M12×1.25	Ø40	7	M12 × 1.25	19
M16×1.5	Ø50, Ø63	8	M16 × 1.5	24
M20×1.5	Ø80, Ø100	8	M20 × 1.5	27

DNK series Braking Type Cylinder

Mounting type of sensor switch

CHELIC

▣ Sensor switch mounting type



▣ Sensor switch bracket dimension

Unit: mm

Bore size	32	40	50	63	80	100
A	24.2	27.3	34.4	39	49.4	57.8
B	25	28	33.4	38.7	48	57
C	26	26	26	26	26	26

DN

DMB

DU

DNK

DNE

DCK2

DQ

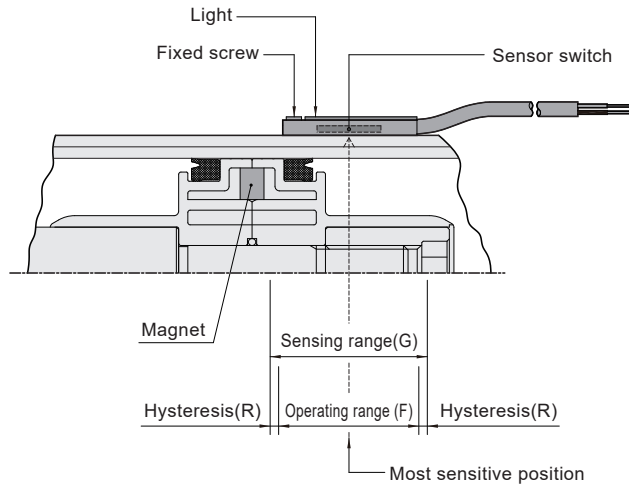
DCQ

DNK series Braking Type Cylinder

Sensor switch operating range and the setting

CHELIC

◉ Sensor switch setting and operating range



◉ Sensing range

Sensor switch is fixed on the cylinder body. The magnetic piston head will activate the sensor switch when it enters the operating range. It has 0.5mm differential.

◉ Operating range

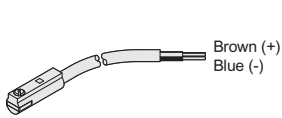
When piston head moves the switch setting and adjustment will be based on the responding range generated by the magnetic field and the switch. (Please refer to the right table)

Unit: mm

Model	CS-9D(B)	
Bore size	Operating range (F)	Hysteresis (R)
32	12	2 ~ 3
40	12	2 ~ 3
50	15	3 ~ 3
63	15	2 ~ 3
80	20	2 ~ 3
100	20	2 ~ 3

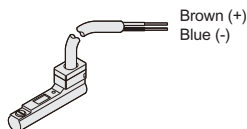
◉ Sensor switch introduction

● CS-8G

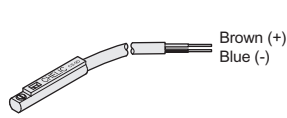


Voltage: DC 5~30V

● CS-8B



● CS-9D



Voltage: DC 5~120V
AC 5~120V

● CS-9B

