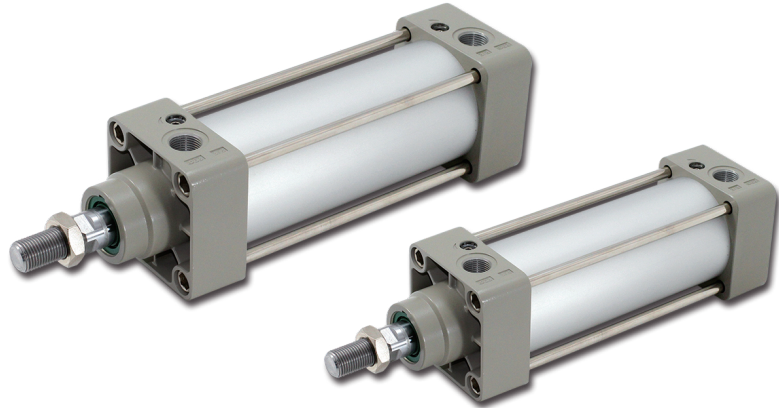


DNG ISO 15552 Standard cylinder

Features and specifications

CHELIC PNEUMATIC

► Feature



- ISO15552 (original ISO6431) standard cylinder.
- The piston seal is composed of two Y shape seals of single direction structure which has compensation function long service life and low startup pressure.
- The buffer adjustment of cylinder is smooth and steady.
- Variety of cylinder and installation accessories are available.

► Specification

Item	Bore size (mm)	125	160	200	250	320
Action		Double acting				
Fluid		Air				
Mounting type	DNG	FA, FB, CA, CB, LNG, LB				
	DNGD	FA, LB				
	DNGL	FA, LB				
Pressure range	Kgf/cm ²	0.1 ~ 1.0 MPa (14 ~ 145 Psi)				
Proof pressure	Kgf/cm ²	1.5 MPa (215 Psi)				
Ambient and fluid temperature	°C	-20 ~ 80				
Piston speed	mm/s	30 ~ 500			20 ~ 300	
Stroke tolerance		0 ~ 250 ^{+1.0} ₀	251 ~ 1000 ^{+1.4} ₀	1001 ~ 1500 ^{+1.8} ₀	1750 ~ 2500 ^{+1.8} ₀	
Cushion		Adjustable cushion				
Cushion Stroke	mm	40	50			
Port size		G1/2	G3/4		G 1	

► Stroke

Bore size (mm)	Standard stroke																Max. stroke	Allowable stroke			
125	25	50	75	100	125	150	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	1800
160	25	50	75	100	125	150	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
200	25	50	75	100	125	150	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
250	25	50	75	100	125	150	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
320	25	50	75	100	125	150	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000

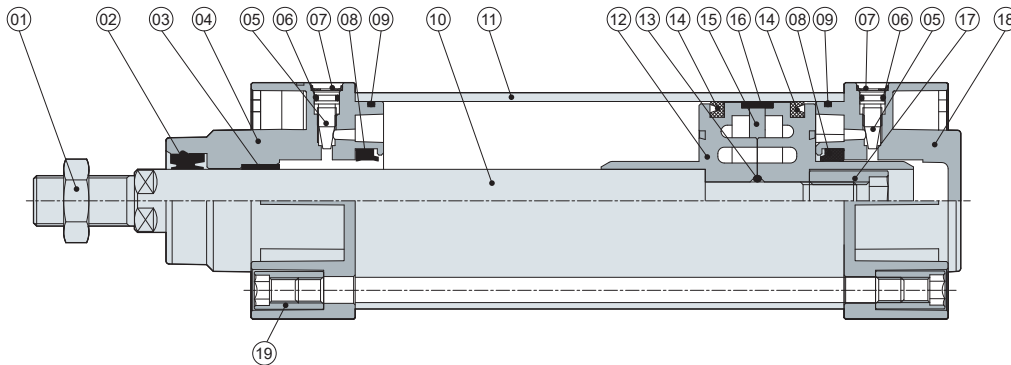
※ Please contact sales person for special strokes for cylinder.

DNG ISO 15552 Standard cylinder

Internal structure and Code of order

CHELIC PNEUMATIC

Internal structure



Components and material list

No.	Item	Material	No.	Item	Material
01	Nut	Carbon steel	11	Cylinder tube	Aluminum alloy
02	Dust proof seal	NBR	12	Piston	Aluminum alloy
03	Oil bearing	Alloyed steel	13	Rod washer	NBR
04	Front cover	Aluminum alloy	14	Piston seal	NBR
05	Needle valve	Copper	15	Magnet	Ferrite
06	O-ring	NBR	16	Wear ring	POM
07	Snap ring	Spring steel	17	Piston rod screw	Carbon steel
08	Cushion seal	NBR	18	Rear cover	Aluminum alloy
09	Cylinder seal	NBR	19	Nut	Carbon steel
10	Piston rod	Carbon steel			

Code of order

1	2	3	4	5	6	7	8	9
DNG	125 × 200	L1	LB	Y	DT7-1	9D	2	
Model	Bore size	Stroke	Adjustable stroke	Mounting type	Accessory	Sensor bracket	Sensor switch	Sensor quantity
	125-Ø250 mm 160-Ø160 mm 200-Ø200 mm 250-Ø250 mm 320-Ø320 mm	Ø125-25 ~ 1000 mm Ø160-25 ~ 1000 mm Ø200-25 ~ 1000 mm Ø250-25 ~ 1000 mm Ø320-25 ~ 1000 mm	L1 : 25 mm L2 : 50 mm L3 : 75 mm	None: without Accessory Axial foot Front flange End flange Single clevis Double clevis Single clevis fixed plate	None: without Accessory I connector Rod clevis Rod end	DT7-□ ■ Sensor bracket please refer to page 189 Model Bore size DT7-1 Ø32-Ø40 DT7-2 Ø50-Ø100 DT7-3 Ø125 DT7-4 Ø160-Ø200	CS-9D None: Without sensor switch 9D : Sensor switch mark(CS-9D) 9B : Sensor switch mark(CS-9B)	1 : 1 PCS 2 : 2 PCS
DNG : Standard type (Tie rod)								
DNGD : Double rod (Tie rod)								
DNGL : Adjustable stroke (Tie rod)								

DAC

DAU

DAI

DNG

DMB2

Sensor mounting bracket

DNF

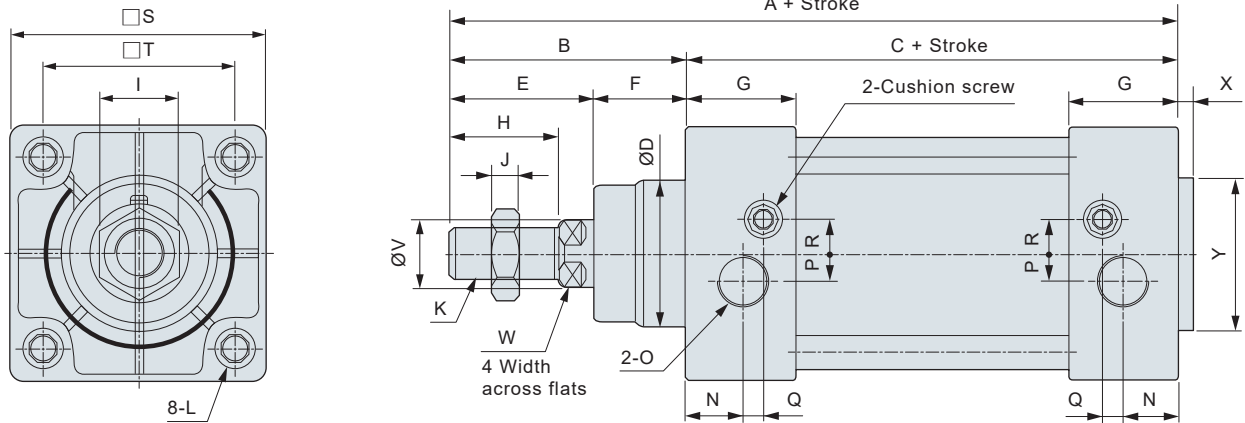
PCB3

DNG ISO 15552 Standard cylinder

External dimensions

CHELIC PNEUMATIC

► DNG Ø125 ~ Ø320 (Standard type)



※ The dimensions of magnetic type cylinder are the same as non-magnetic type cylinder.

► Dimension

Unit: mm

Bore size \ Mark	A	B	C	D	E	F	G	H	I	J	K	L	N
125	279	119	160	60	79	40	45	54	41	13.5	M27 x 2	M12	23
160	332	152	180	65	94	55	50	72	55	18	M36 x 2	M16	25
200	347	167	180	75	100	65	50	72	55	18	M36 x 2	M16	25
250	389	189	200	90	114	75	60	84	64	20	M42 x 2	M20	30
320	436	216	220	100	126	90	65	96	72	20	M48 x 2	M24	30

Unit: mm

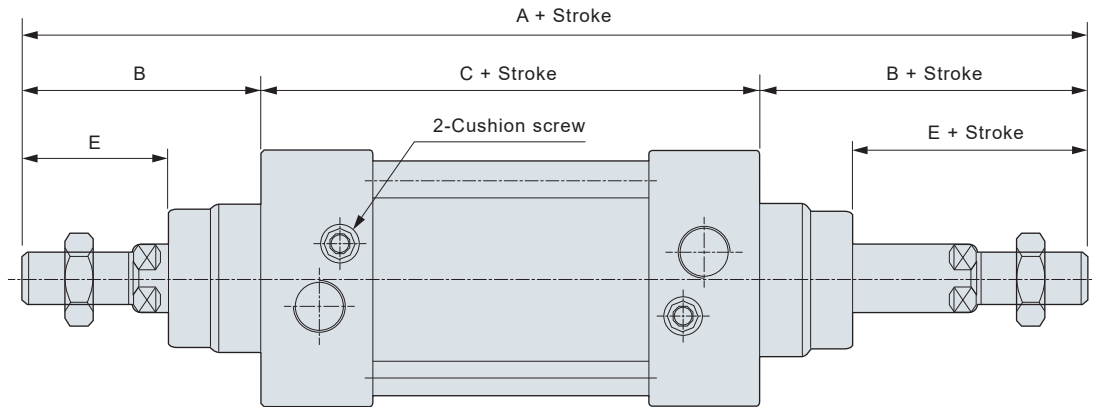
Bore size \ Mark	O	P	Q	R	S	T	V	W	X	Y
125	G1/2	14	12	14	140	110	32	27	4	60
160	G3/4	15	12	20	180	140	40	36	4	65
200	G3/4	15	12	20	220	175	40	36	5	75
250	G 1	25	10	25	270	220	50	46	8	90
320	G 1	30	15	30	350	270	63	55	10	110

DNGD / DNGL ISO 15552

Standard cylinder - External dimensions

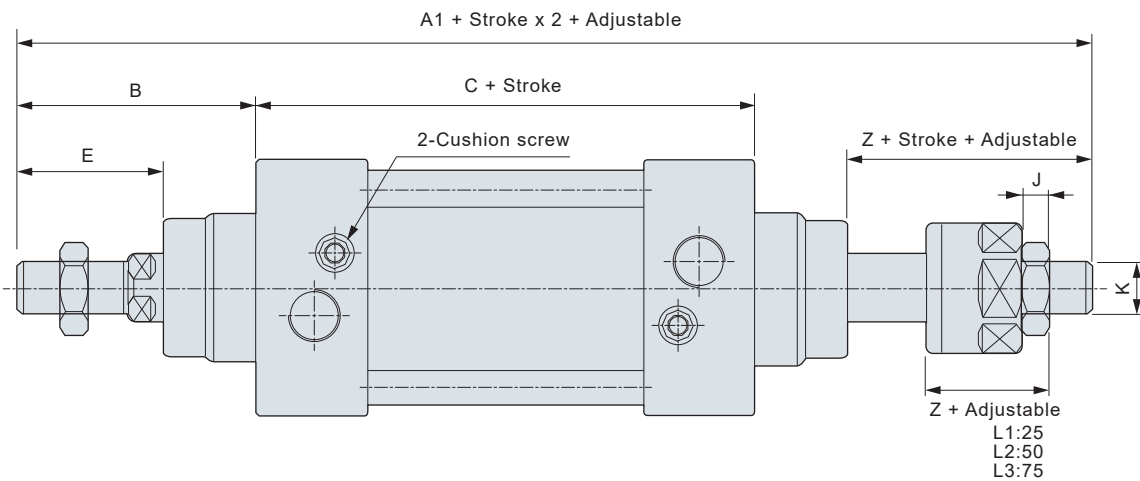
CHELIC PNEUMATIC

► DNGD Ø125 ~ Ø320 (Double rod type)



► DNGL Ø125 ~ Ø320 (Adjustable stroke)

- ※ 1. The dimensions of magnetic type cylinder are the same as non-magnetic type cylinder.
- 2. The unmarked dimension is same as DNG standard type.



► Dimension

Unit: mm

Bore size	Mark	A	A1	B	C	E	Z	J	K
125		398	366.5	119	160	79	42.5	13.5	M27 x 2
160		484	458	152	180	94	68	18	M36 x 2
200		514	482	167	180	100	68	18	M36 x 2
250		578	544	189	200	122	80	20	M42 x 2
320		652	616	216	220	134	90	17	M48 x 2

DAC

DAU

DAI

DNG

DMB2

Sensor
mounting
bracket

DNF

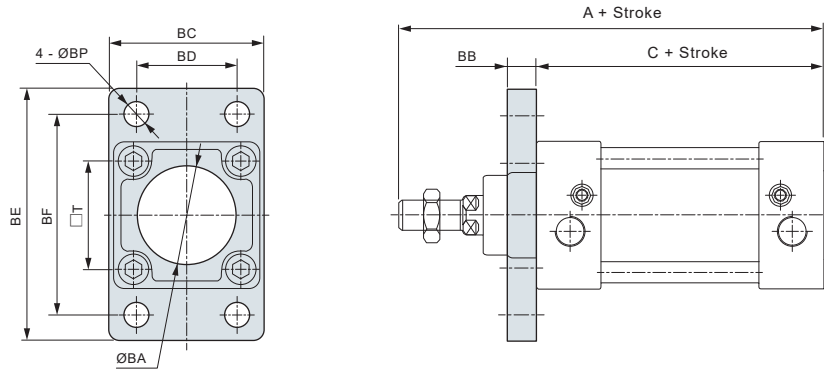
PCB3

DNG ISO 1552 Standard cylinder

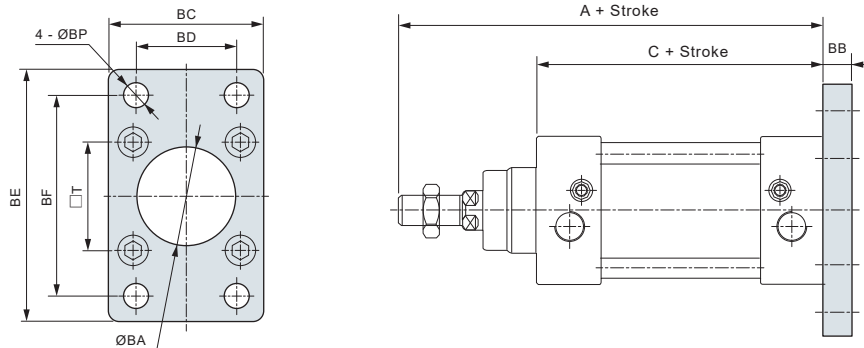
Mounting options

CHELIC PNEUMATIC

Flange – FA Front flange



Flange – FB End flange

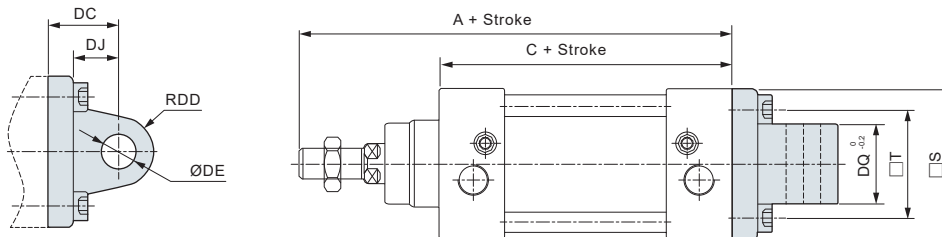


Dimension

Unit: mm

Bore size	Mark	A	C	BA	BB	BC	BD	BE	BF	BP	T
125		279	160	61	20	139	90	220	180	16	110
160		332	180	66	20	180	115	280	230	18	140
200		347	180	76	25	220	135	320	270	22	175
250		389	200	91	25	270	165	390	330	26	220
320		436	220	110	30	349	200	470	400	33	270

Clevis – CA Single clevis



Dimension

Unit: mm

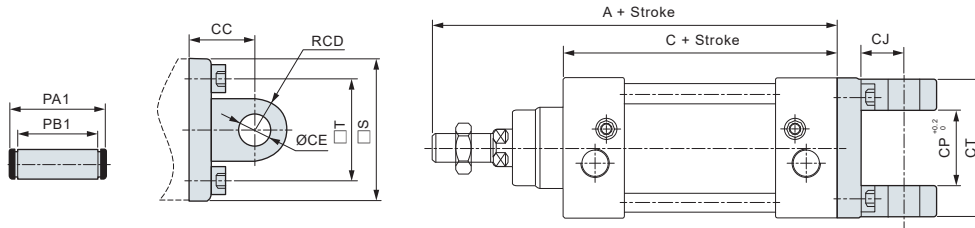
Bore size	Mark	A	C	S	T	DC	DD	DE	DJ	DQ
125		279	160	139	110	50	22	25	33	69.7
160		332	180	180	140	55	25	30	35	90
200		347	180	220	175	60	25	30	35	90
250		389	200	210	220	70	40	40	47	110
320		436	220	350	270	80	45	45	52	120

DNG ISO 1552 Standard cylinder

Mounting options

CHELIC PNEUMATIC

► Clevis – **CB** Double clevis

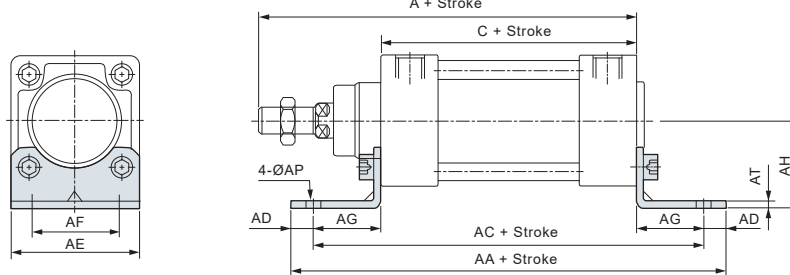


► Dimension

Unit: mm

Bore size	Mark	A	C	CC	CD	CE	CJ	CP	CT	PA1	PB1	S	T
125		279	160	50	21.5	25	31	70	130	139	130.5	139	110
160		332	180	55	30	30	35	90	170	186	172	180	140
200		347	180	60	30	30	35	90	170	186	172	220	175
250		389	200	70	40	40	47	110	200	220	202	270	220
320		436	220	80	45	45	52	120	220	240	222	350	270

► Axial foot – **LB**

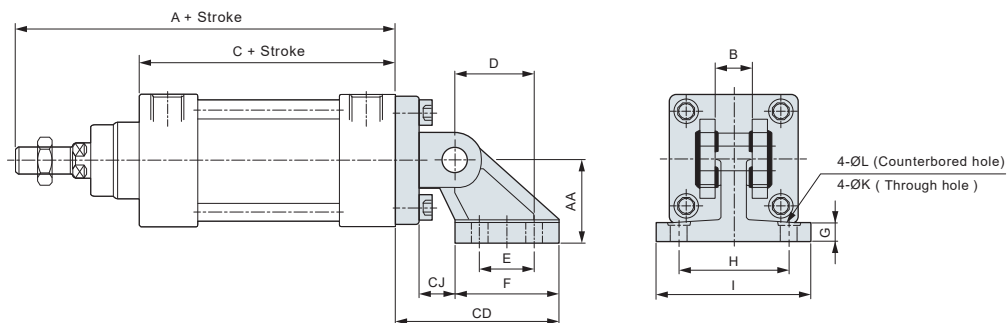


► Dimension

Unit: mm

Bore size	Mark	A	C	AA	AC	AD	AE	AF	AG	AH	AP	AT
125		279	160	290	250	20	140	90	45	90	16.5	8
160		332	180	340	300	20	180	115	60	115	18	8
200		347	180	380	320	30	220	135	70	135	22	9
250		389	200	420	350	35	270	165	75	165	28	20
320		436	220	470	390	40	350	200	85	185	35	23

► LNG - Single clevis fixed plate (LNG can't be used alone, it must be used with CB)



► Dimension

Unit: mm

Bore size	Mark	A	AA	B	C	CD	CJ	D	E	F	G	H	I	K	L
125		279	90	70	160	135	26	70	60	90	20	94	124	14	21
160		332	115	90	180	172	25	97	88	126	25	118	156	14	21
200		347	135	90	180	185	31	105	90	130	30	122	162	18	26

DAC

DAU

DAI

DNG

DMB2

Sensor mounting bracket

DNF

PCB3

DNG ISO 1552 Standard cylinder

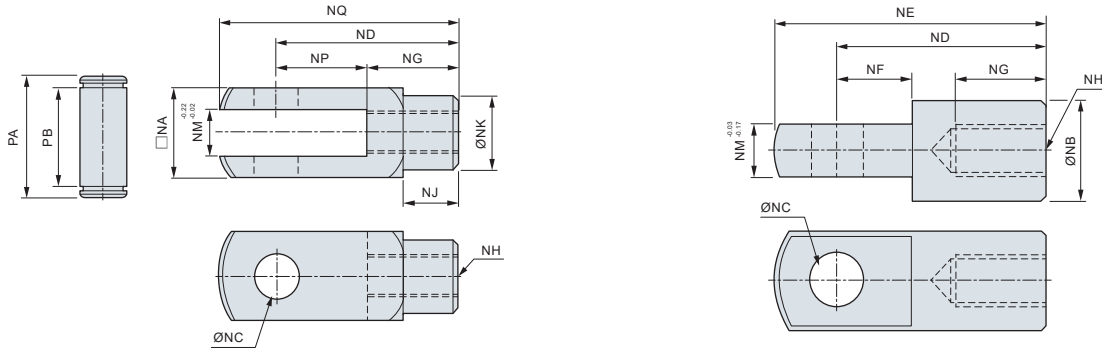
Rod end joint

CHELIC PNEUMATIC

Joint specification

Rod clevis

I connector

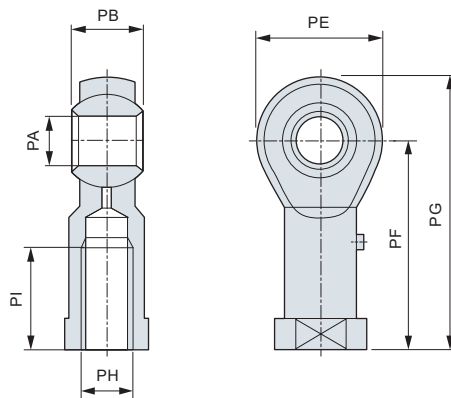


Dimension

Unit: mm

Bore size	Mark	NA	NB	NC	ND	NE	NF	NG	NH	NJ	NK	NM	NP	NQ	PA	PB
125		55	55	30	110	155	50	55	M27 x 2.0	40	42	30	55	148	64.2	54.8
160		70	-	35	144	-	-	74	M36 x 2.0	54	60	35	72	188	80.2	70.8
200		70	-	35	144	-	-	74	M36 x 2.0	54	60	35	72	188	80.2	70.8
250		85	-	40	168	-	-	84	M42 x 2.0	63.5	70	40.3	84	232	115	93
320		90	-	50	192	-	-	96	M48 x 2.0	73	80	40.3	96	265	120	100

Rod end



Dimension

Unit: mm

Bore size	Mark	PA	PB	PE	PF	PG	PH	PI
125		28	35	66	103	136	M27 x 2.0	51
160		35	43	81	125	165.5	M36 x 2.0	56
200		35	43	81	125	165.5	M36 x 2.0	56
250		40	49	91	142	187.5	M42 x 2.0	60
320		50	60	117	160	218.5	M48 x 2.0	65

Sensor mounting bracket

External dimensions

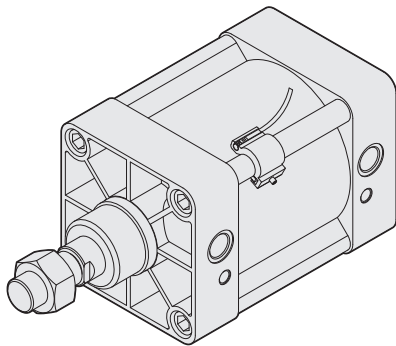
CHELIC PNEUMATIC

► Applicable to sensor switch

CS-8G, CS-8B, CS-8GN(P), CS-9D/CS-9B/CS-9H, CS-9DN(P), CS-7B, CS-7BN(P), CS-190, CS-7BF, CS-8GF, CS-9BF, CS-9DF series sensor switch.

► PF7 series

Applicable to ISO profile cylinder (ISOprofile)

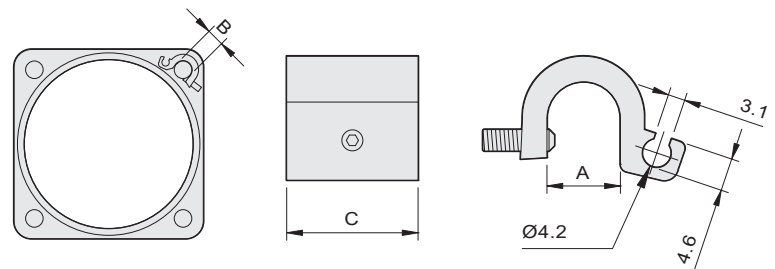
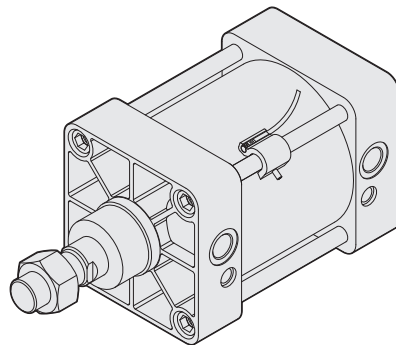


Unit: mm

Model	A	B	C	Bore size
PF7-1	12.1	10.4	25	Ø32~Ø40
PF7-2	15.9	13.5	25	Ø50~Ø63
PF7-3	16.3	15	25	Ø80
PF7-4	17.9	16	25	Ø100
PF7-3	19.7	18.7	25	Ø125
PF7-4	27.6	25.7	25	Ø160~Ø200

► DT7 series

Applicable to tie-rod cylinder. (Tie-rod)



Unit: mm

Model	A	B	C	Bore size
DT7-1	7.9	Ø4~Ø6	25	Ø32~Ø40
DT7-2	10.4	Ø8~Ø10	25	Ø50~Ø100
DT7-3	15.1	Ø12~Ø14	25	Ø125
DT7-4	20.6	Ø16~Ø18	25	Ø160~Ø200