

# Actuator Unit – DCQ, DCQS series

Pin clamp cylinder

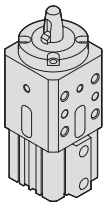
CHELIC



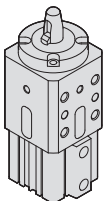
DCQ, DCQS series  
Provide CAD external dimension.

### Feature:

The front of the seal with telescopic scraper can clean the dust and welding residues to avoid scratching the seal.



**DCQ series** ----- Pin clamp cylinder ---- **Ø50** ----- **P.6-6.60**



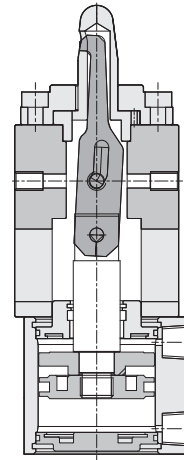
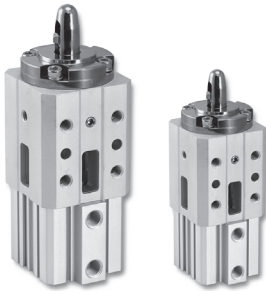
**DCQS series** ----- Pin clamp cylinder ---- **Ø50** ----- **P.6-6.62**  
(Strong magnet type)

# DCQ series Pin Clamp Cylinder

## Product features

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### Internal structure



### Features :

- Cylinder tube was aluminum material , with aluminum oxide treatment , hard-wearing and hard-corrosiveness.
- Adopt no oil bearing and hard-wearing gasket to make lifetime be longer.
- The copper scraper attached to the front of the seal can scrape the particles or the particles left by welding sparks to prevent the seal from being scratched.
- With cushion can slow down the impact of cylinder cover.
- The cylinder has maget embedded to activate the sensor switch.

DN

DMB

DU

DNK

DNE

DCK2

DQ

DCQ

### Specification

Unit: mm

Item	Bore size	Ø50
Action		Double acting
Fluid		Air
Pressure range	kgf/cm <sup>2</sup> (kPa)	1 ~ 7 ( 100 ~ 700 )
Max. operating pressure	kgf/cm <sup>2</sup> (kPa)	8 (800)
Ambient and fluid temperature	℃	0 ~ 60
Piston speed	mm/s	100 ~ 500
Port size		PT 1/8
Sensing device		With magnet

### Guide pin diameter

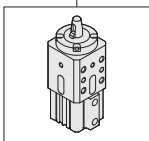
Unit: mm

Applicable hole diameter of workpiece	Guide pin diameter	Order mark
Ø15	Ø14.5	145
	Ø14.7	147
Ø18	Ø17.5	175
	Ø17.7	177

### Code of order

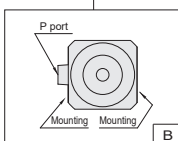
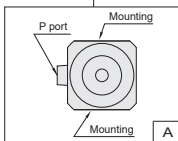
DCQ - A - 50 - 177 - A - SE 2

Model



DCQ :  
Pin clamp cylinder

Installing position



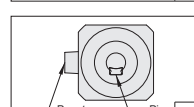
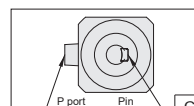
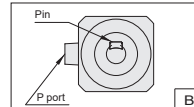
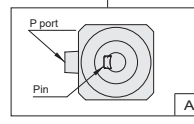
Bore size

50 - Ø50

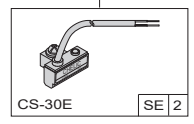
Guide pin diameter

145 - Ø14.5  
147 - Ø14.7  
175 - Ø17.5  
177 - Ø17.7

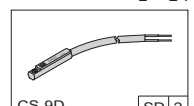
Guide pin diameter



Sensor switch



None :  
Without sensor switch  
[SE] : Sensor switch mark (CS-30E)  
[2] : Sensor switch q'ty  
1 = 1 PCS  
2 = 2 PCS



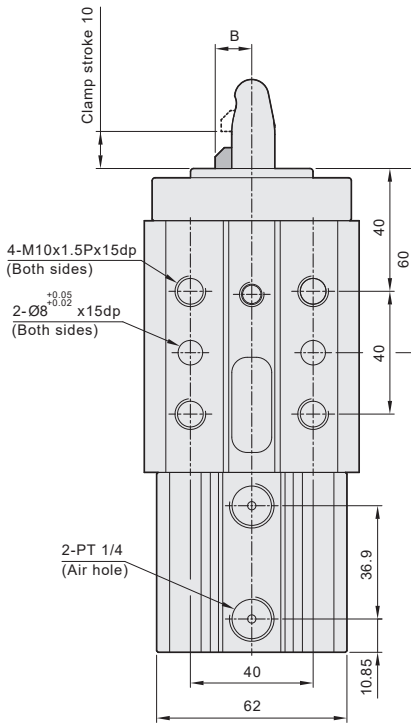
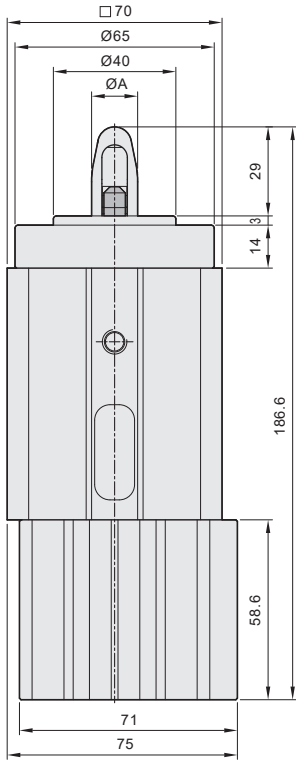
None :  
Without sensor switch  
[SD] : Sensor switch mark (CS-9D)  
[SB] : Sensor switch mark (CS-9B)  
[2] : Sensor switch q'ty  
1 = 1 PCS  
2 = 2 PCS

# DCQ series Pin Clamp Cylinder

## Dimensions

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### DCQ Ø50



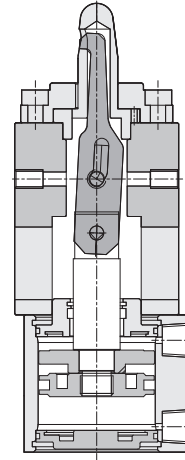
Mark \ Size	145	147	175	177
A	14.5	14.7	17.5	17.7
B	11.4		11.9	

# DCQS series Pin Clamp Cylinder (strong magnet type)

## Product features

CHELIC

### Internal structure



#### Features :

- The barrel made of aluminum material with anodizing treatment is to give high wearables and to prevent corrosion.
- Adopt the non-lubrication bearing and wearable seal to extend the life cycle.
- The reduced length structure is space-saving.
- With rubber cushioning design to reduce impact to cylinder cap.
- The embedded strong magnet is to adopting in a high magnetic environment.

### Specification

Unit : mm

Item	Bore size	Ø50
Action		Double acting
Fluid		Air
Pressure range	kgf/cm <sup>2</sup> (kPa)	1 ~ 7 ( 100 ~ 700 )
Max. operating pressure	kgf/cm <sup>2</sup> (kPa)	8 (800)
Ambient and fluid temperature	℃	0 ~ 60
Piston speed	mm/s	100 ~ 500
Port size		PT 1/8
Sensing device		With magnet

### Guide pin diameter

Unit: mm

Applicable hole diameter of workpiece	Guide pin diameter	Order mark
Ø15	Ø14.5	145
	Ø14.7	147
Ø18	Ø17.5	175
	Ø17.7	177

### Code of order

**DCQ** — **A** — **50** — **177** — **A** — **SE** — **2**

Model — Installing position — Bore size — Guide pin diameter — Guide pin diameter — Sensor switch

**DCQS :**  
Pin clamp cylinder  
( Strong magnet type )

**A**

**B**

**50 - Ø50**

**177**

145 - Ø14.5  
147 - Ø14.7  
175 - Ø17.5  
177 - Ø17.7

**A**

**B**

**C**

**D**

**SE**

None :  
Without sensor switch  
**SS** : Sensor switch mark (CS-180)  
**2** : Sensor switch q'ty  
1 = 1 PCS  
2 = 2 PCS

DN

DMB

DU

DNK

DNE

DCK2

DQ

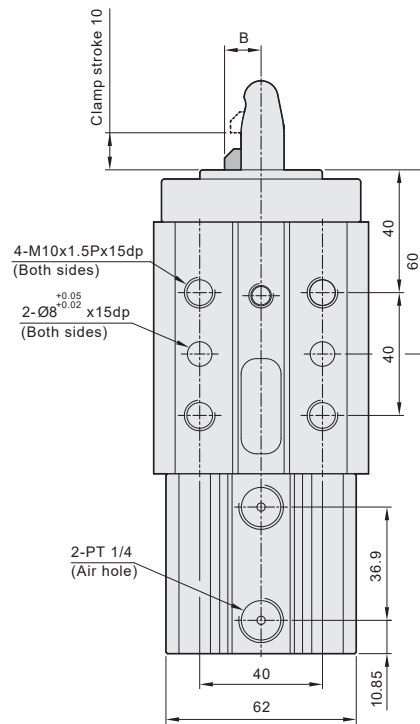
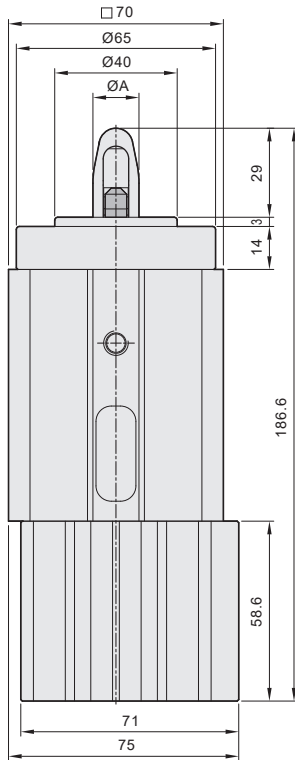
DCQ

# DCQS series Pin Clamp Cylinder (strong magnet type)

## Dimensions

CHELIC

### DCQS Ø50



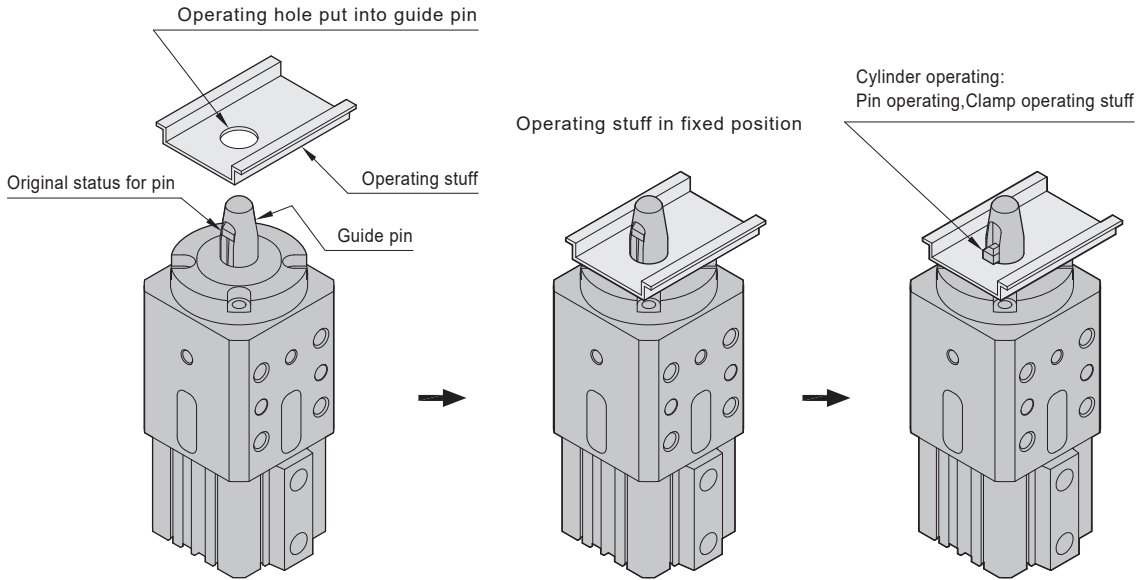
Mark \ Size	145	147	175	177
A	14.5	14.7	17.5	17.7
B	11.4		11.9	

# DCQS series Pin Clamp Cylinder (strong magnet type)

Application example, Sensor switch introduction

**CHELIC**

## Application example



- DN
- DMB
- DU
- DNK
- DNE
- DK2
- DQ
- DCQ

Model	Guide pin dimension	Hole diam
145	14.5	Ø15
147	14.7	
175	17.5	Ø18
177	17.7	

Note : Guide pin will be changed by the diam of hole in order to get accurate position for operating stuff.

## Sensor switch introduction

● Applicable to the working environment, such as automotive manufacturing welding area generates the magnetic. By applying the sensor switch - the CS 181 can detect the accuracy position and movement.

