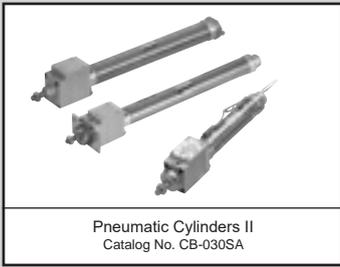


P4 Series



Pneumatic Cylinders II  
Catalog No. CB-030SA

Brake cylinder Double acting/ Single rod

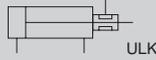
# ULK Series

Brake cylinder Double acting/ Single rod

# ULKP Series

● Bore size:  $\varnothing 16/\varnothing 20/\varnothing 25/\varnothing 32/\varnothing 40$

JIS symbol ● Double acting



ULK



ULKP



## Specifications

Item	ULKP/ULKP-L	ULK			
Bore size mm	$\varnothing 16$	$\varnothing 20$	$\varnothing 25$	$\varnothing 32$	$\varnothing 40$
Actuation	Double acting				
Working fluid	Compressed air				
Max. working pressure MPa	1.0				
Min. working pressure	0.3				
Brake section MPa	0.15				
Cylinder section MPa	0.15				
Proof pressure MPa	1.6				
Ambient temperature °C	-10 to 60 (no freezing)				
Port size	Brake section	M5	Rc1/8		
	Cylinder	M5	Rc1/8		
Stroke tolerance mm	$^{+1.0}_0$	$^{+2.0}_0$ (up to 200)	$^{+2.4}_0$ (201 up)		
Working piston speed mm/s	50 to 500				
Cushion	Rubber cushion				
Lubrication	Not available				
Stopping accuracy mm	$\pm 1.5$ (300mm/s, no load) *1	$\pm 1.0$ (300 mm/s, no load)			
Holding force N	160	251	393	643	1005
Allowable absorbed energy J	0.162	0.166	0.308	0.424	0.639

\*1: If the brake section is left pressurized, a delayed response may occur resulting in misalignment of the stop position.

## Stroke

Model No.	Bore size (mm)	Standard Stroke (mm)	Max. Stroke (mm)	Min. Stroke (mm)
ULKP/ULKP-L	$\varnothing 16$	15/30/45/60	260	5
ULK	$\varnothing 20$	25/50 /75/100/150 200/250/300	700	5
	$\varnothing 25$			
	$\varnothing 32$			
	$\varnothing 40$			

\*1: The custom Stroke is available in 1 mm increments.

## Related products

Speed controller					
Model No.	Appearance	Port size (Rc or R)	Compatible tube O.D.		Page
		M5	4( $\varnothing 4$ )	6( $\varnothing 6$ )	
SC3W-M5- *-P4		●	●	●	530

Specify the compatible tube O.D. code for \*.

## Compatibility table by variation

Applicable bore size	Double acting	
	P4	P40
ø16 to 40	▲	▲

●: Applicable models ○: Semi-applicable models ▲: Contact CKD for details. □: Not applicable

Note: Standard grease used

## How to order

Without switch

ULKP — 00 — 16 — 60 — 0 — P4 P40 — Y

With switch

ULKP-L — 00 — 16 — 60 — 0 — SW71 — R — P4 P40 — Y

H Accessory \*2

A Model

B Mounting

C Bore size

D Stroke

E Head side port direction

F Switch model No.

G Switch quantity

Code	Description	
<b>A Model</b>		
ULKP	Double acting	
ULKP-L	Double acting with switch	
<b>B Mounting</b>		
00	Basic	
LS	Axial foot (one side) (rod side)	
FA	Rod side flange	
CB	Clevis bracket	
<b>C Bore size</b>		
16	ø16	
<b>D Stroke</b>		
Bore size	Stroke	Custom Stroke
ø16	5 to 260	In 1 mm increments
<b>E Head side port direction</b>		
Blank	Vertical	
0	Axial direction (*1)	
<b>F Switch model No.</b>		
Refer to the compatibility table on Intro Pages 23 to 26 for switch model No.		
<b>G Switch quantity</b>		
R	1 on rod side	
H	1 on head side	
D	2	
T	3	
<b>H Accessory</b> *2		
I	Rod eye	
Y	Rod clevis (pin, washer, split pin attached)	
B1	Eye bracket	
B2	Clevis bracket (pin, snap ring attached)	

### ⚠ Precautions for model No. selection

\*1: CB mounting is not available for port direction/axial direction.

\*2: "I" and "Y" cannot be selected together.

\*3: Made-to-order product. Contact CKD Sales for details.

P4 Series

Pneumatic cylinders  
Hand/Chuck  
Related products  
Cylinder Switch

Vacuum components

Pneumatic valves

Clean air components

Pneumatic auxiliary components  
Speed controller  
Fitting  
Auxiliary valve

Silencer

Tube  
Gas generator

Fluid control components

Motor specification  
Motorless specifications  
Electric actuator

**P4**  
Series

## How to order

Without solenoid valve

ULK - 00 - 20 - 100 - SW11 - R - V P4 P40 I

Model No.

**A** Mounting

**B** Bore size

**C** Stroke

**D** Switch model No.

**E** Switch quantity

\*2

**F** Option

**G** Accessory

\*1

Code	Description
<b>A Mounting</b>	
00	Basic
LB	Axial foot
FA	Rod side flange
CA	Eye bracket
CC	Eye bracket integrated
TA	Rod side trunnion
TB	Head side trunnion

<b>B Bore size (mm)</b>	
20	ø20
25	ø25
32	ø32
40	ø40

<b>C Stroke (mm)</b>		
Bore size	Stroke	Custom Stroke
ø20	5 to 700	In 1 mm increments
ø25	5 to 700	
ø32	5 to 700	
ø40	5 to 700	

<b>D Switch model No.</b>
Refer to the compatibility table on Intro Pages 23 to 26 for switch model No.

<b>E Switch quantity</b>	
R	1 on rod side
H	1 on head side
D	2
T	3

<b>F Option</b>	
M	Piston rod, rod nut material (stainless steel)
V	Boss cutoff

<b>G Accessory</b>	
I	Rod eye
Y	Rod clevis (pin, washer, split pin attached)
B2	Clevis bracket (pin, snap ring attached)

### ⚠ Precautions for model No. selection

- \*1: "I" and "Y" cannot be selected together.
- \*2: Up to three switches can be installed. If four or more switches are required, switch mounting brackets for the extra switches must be prepared separately.
- \*3: For made to order specifications of rod end form, Refer to "Pneumatic Cylinders II" (Catalog No. CB-030SA).
- \*4: Made-to-order product. Contact CKD Sales for details.

### Related products

Speed controller						
Model No.	Appearance	Port size (Rc or R)	Compatible tube O.D.			Page
		1/8	4(ø4)	6(ø6)	8(ø8)	
SC3W-6- *-P4		●	●	●	●	530

Specify the compatible tube O.D. code for \*.

### How to order ULKP Series mounting bracket P4/P40

Bore size (mm)	P4	P40
Mounting bracket	ø16	ø16
Foot (LS)	P2-LS-16	P2-LS-16-P40
Flange (FA)	P2-FA-16	P2-FA-16-P40

Note: The foot mounting bracket is provided as 1 pc./set.

### How to order ULK Series mounting bracket P4

Bore size (mm)	ø20	ø25	ø32	ø40
Mounting bracket				
Axial foot (LB)	M1-LB-20	M1-LB-30	M1-LB-30	M1-LB-30
Flange (FA)	M1-FA-20	M1-FA-30	M1-FA-30	M1-FA-30
Eye bracket (CA)	M1-CA-20	M1-CA-30	M1-CA-30	M1-CA-30
Trunnion (TA/TB)	M1-TA-20	M1-TA-30	M1-TA-30	M1-TA-40

\*1: Regarding mounting brackets, mounting nuts and toothed washers are attached with the axial foot type and flange type. Trunnions are supplied with mounting nuts.

\*2: For the axial foot (both sides), two sets of "M1-LB-\*\* or [bore size]" are required in the table above.

### How to order ULK Series mounting bracket P40

Bore size (mm)	ø20	ø25	ø32	ø40
Mounting bracket				
Axial foot (LB)	M1-LB-20-P40	M1-LB-30-P40	M1-LB-30-P40	M1-LB-30-P40
Flange (FA)	M1-FA-20-P40	M1-FA-30-P40	M1-FA-30-P40	M1-FA-30-P40
Eye bracket (CA)	M1-CA-20-P40	M1-CA-30-P40	M1-CA-30-P40	M1-CA-30-P40
Trunnion (TA/TB)	M1-TA-20-P40	M1-TA-30-P40	M1-TA-30-P40	M1-TA-40-P40

\*1: For the axial foot (both sides), two sets of "M1-LB-\*\* or [bore size]-P40" are required in the table above.

\*2: Regarding mounting brackets, mounting nuts are attached with the axial foot type, flange type and trunnion type.

**P4**  
Series

Pneumatic cylinders  
Hand/Chuck  
Pneumatic actuator  
Related products  
Cylinder Switch

Vacuum components

Pneumatic valves

Clean air components  
Pneumatic auxiliary components  
Speed controller

Fitting  
Auxiliary valve

Silencer  
Tube

Gas generator

Fluid control components

Motor specification  
Electric actuator  
Motorless specifications