



ISTC CO., LTD



Hydraulic Pneumatic Technology Products

편박형 실린더 ICUD 시리즈

THIN-TYPE
CYLINDER ICUD
SERIES



편박형 실린더 ICUD 시리즈 THIN-TYPE CYLINDER ICUD SERIES

Ø10, Ø16, Ø20, Ø25



>표준사양 Standard Specification

형식 Type	무급유형 Oilless Type
사용유체 Fluid	공기 Air
시험압력 Test Pressure	10.5kgf/cm ²
최고사용압력 Max. set pressure	7kgf/cm ²
사용온도 Working Temperature	5°C ~ +60°C
나사공차 Screw tolerance	KS2급 2nd KS level
행정길이의 허용차 Allowance of stroke length	+1.0 0
사용속도 Working Speed	50~500mm/s
쿠션 Cushion	Rubber cushion
로드끝단나사 Rod-end screw	수나사 male screw

>실린더표준행정표 Standard Stroke Table of Cylinder

I-D(mm)	Standard stroke(mm)
Ø10	5, 10, 15, 20, 25, 30
Ø16	5, 10, 15, 20, 25, 30
Ø20	5, 10, 15, 20, 25, 30, 40, 50
Ø25	5, 10, 15, 20, 25, 30, 40, 50

>표시기호 Symbol

■ 복동 편로드 / double-acting single-rod



>형식표시방법 Indication of Model

<p>ICUD</p> <p>복동편로드 편박형 실린더 마그네트 쿠션 기본내장 Basic built-in of Double-acting single-rod, Thin type cylinder Basic Built-in of magnet and cushion</p>	<p>10</p> <p>튜브내경 Inside-diameter of Tube 10-10mm 16-16mm 20-20mm 25-25mm</p>	<p>S20</p> <p>실린더행정 표준행정표참조 Cylinder Stroke Refer to table of standard stroke</p>	<p>D</p> <p>작동방식 D:복동형 Operating type D:Double-action type</p>	<p>59C</p> <p>무기호:오토 스위치 없음 None: No Auto Switch 오토스위치 종류-유점점 kind of auto switch - Owned Contact Point</p> <table border="1"> <tr> <td>LY59C</td> <td>Owned Contact Point</td> </tr> <tr> <td>LY59B</td> <td>No Contact Point</td> </tr> <tr> <td>LY59A</td> <td>No Contact Point</td> </tr> </table>	LY59C	Owned Contact Point	LY59B	No Contact Point	LY59A	No Contact Point	<p>S1</p> <p>무기호:오토 스위치 없음 None: No Auto Switch S1 : 1EA S2 : 2EA S3 : 3EA</p>	<p>A</p> <p>몸체사양 무기호:표준형 동계불가형 :A Body specification None: standard A No accept Copper-related Type :A</p>
LY59C	Owned Contact Point											
LY59B	No Contact Point											
LY59A	No Contact Point											

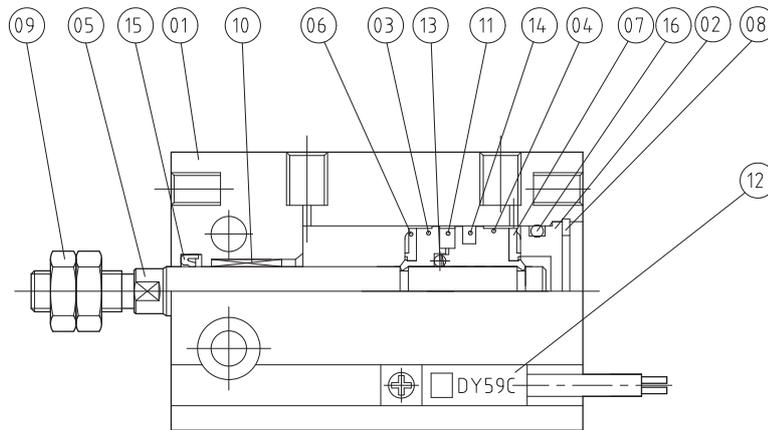
공기압 참고자료
공기압 도면기호
박형 실린더
소형 실린더
중형 실린더
대형 실린더
오토 스위치
가이드부착 실린더
부스터 실린더
유압실린더 시리즈

편박형 실린더 ICUD 시리즈 THIN-TYPE CYLINDER ICUD SERIES

내부구조도 Inside Structure Drawings

>편로드형 Single-rod type

■ ICUD $\varnothing 10, \varnothing 16, \varnothing 20, \varnothing 25$



>부품리스트 Parts List

No	Name	Materials	Remarks
1	BODY TUBE	A6063	
2	HEAD COVER	A6063	
3	PISTON-A	A2024	$\varnothing 6, \varnothing 10$ BRASS
4	PISTON-B	A2024	
5	ROD	NBR	
6	DAMPER-1	URETHANE	
7	DAMPER-2	URETHANE	
8	SNAP RING	SCM4	
9	LOCK NUT	S20C	
10	BUSH	DU	
11	MAGNET	STEEL	

No	Name	Materials	Remarks
12	AUTO S/W		

>패킹리스트 Packing List

No	Name	Materials	I-D(mm)			
			$\varnothing 10$	$\varnothing 16$	$\varnothing 20$	$\varnothing 25$
13	ROD O-RING	NBR	$\varnothing 2.8+0.7$	S5	S6	S8
14	PISTON PACKING	NBR	PSD10	PSD16	OPA20	OPA25
15	ROD PACKING	NBR	DYR 4K	DYR 6K	DYR 10SK	DYR 12
16	COVER O-RING	NBR	S10	S14	S18	S22

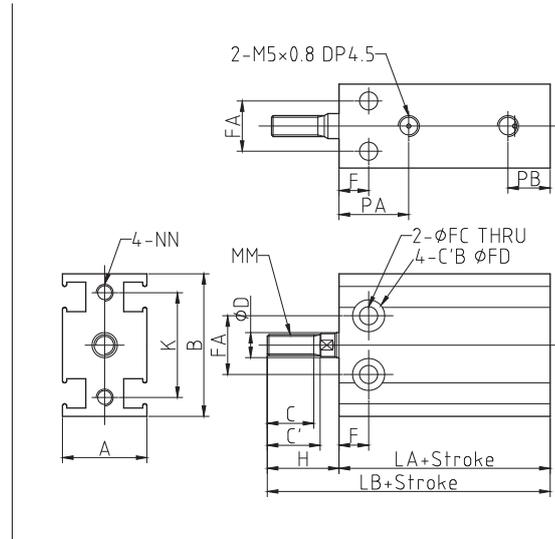
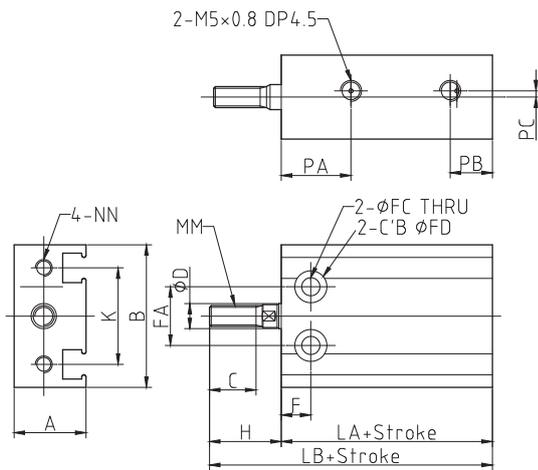
편박형 실린더 ICUD 시리즈 THIN-TYPE CYLINDER ICUD SERIES

복동형 Double-acting Type

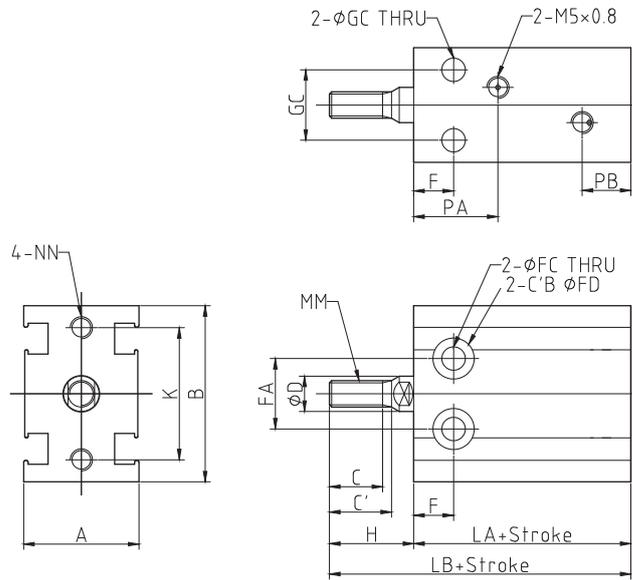
>복동/편로드형 Double-acting Type/ Single-rod Type

ICUD $\varnothing 10$

ICUD $\varnothing 16$



ICUD $\varnothing 20, \varnothing 25$



단위 unit:mm

I-D(mm)	A	B	C	C'	D	F	FA	FC	FD	H	K	G	GC	MM	NN	PA	PB	PC	PD	LA	LB
10	15	28	10		4	7	11	3.2	$\varnothing 6$ DP5	16	18	9	7	M4X0.7	M3X0.5 DP5	16.5	9	1		35	51
16	20	34	11	12.5	6	7	14	4.3	$\varnothing 7.6$ DP6.5	16	25	12	9	M5X0.8	M4X0.7 DP6	16.5	10			40	56
20	26	40	12	14	8	9	16	5.3	$\varnothing 9.3$ DP8	19	30	16	12	M6X1.0	M5X0.8 DP8	19	11	4	8	44	63
25	32	50	15.5	18	10	10	20	5.3	$\varnothing 9.3$ DP9	23	38	20	16	M8X1.25	M5X0.8 DP8	21.5	13	4.5	9	48	71

편박형 실린더 ICUW 시리즈 THIN-TYPE CYLINDER ICUW SERIES

Ø10, Ø16, Ø20, Ø25

>표준 사양 Standard Specification

형식 Type	무급유형 Oilless Type
사용유체 Working Fluid	공기 Air
시험압력 Test Pressure	10.5kgf/cm ²
최고사용압력 Max. set pressure	7kgf/cm ²
사용온도 Working Temperature	-10°C ~ +60°C
나사공차 Screw tolerance	KS2급 2nd KS level
행정조정범위 Range of Control Stroke	+1.0
사용피스톤 속도 Working Piston Speed	50~500mm/s
쿠션 Cushion	Rubber cushion
로드끝단나사 Rod-end screw	수나사 male screw

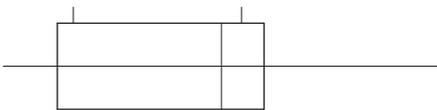
> 실린더 표준 행정표

Standard Stroke Table of Cylinder

I-D(mm)	Standard stroke(mm)
Ø10	5, 10, 15, 20, 25, 30
Ø16	5, 10, 15, 20, 25, 30
Ø20	5, 10, 15, 20, 25, 30, 40, 50
Ø25	5, 10, 15, 20, 25, 30, 40, 50

>표시 기호 Symbol

■ 복동 양로드 / Double-acting Double-rod



>형식 표시 방법 Indication of Model

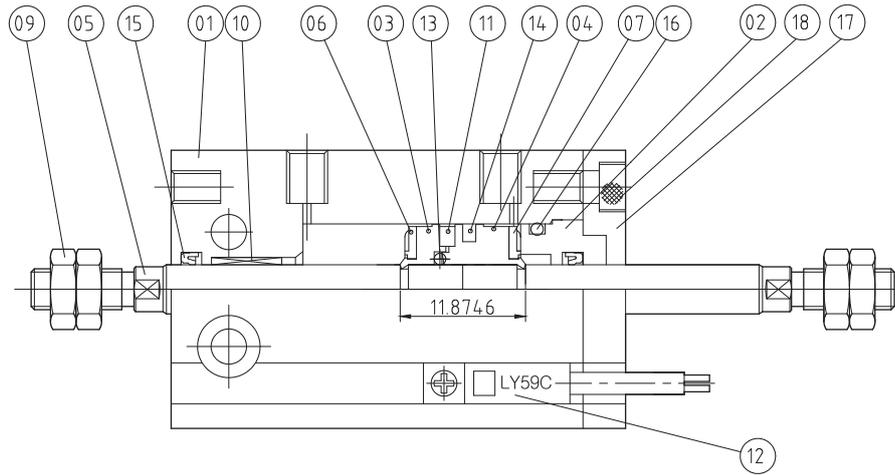
<p>ICUW</p> <p>복동양로드 편박형 실린더 마그네트 쿠션 기본내장 Basic built-in of double-acting double-rod, Thin type cylinder magnet, and cushion</p>	<p>10</p> <p>튜브내경 Inside-diameter of Tube 10-10mm 16-16mm 20-20mm 25-25mm</p>	<p>S20</p> <p>실린더행정 표준행정표참조 Cylinder Stroke Refer to table of standard stroke</p>	<p>D</p> <p>작동방식 D:복동형 working type Double-action type</p>	<p>59C</p> <p>무기호:오토 스위치 없음 None: No Auto Switch 오토스위치 종류-유점점 kind of auto switch - Owned Contact Point</p> <table border="1"> <tr> <td>LY59C</td> <td>Owned Contact Point</td> </tr> <tr> <td>LY59B</td> <td>No contact point</td> </tr> <tr> <td>LY59A</td> <td>No contact point</td> </tr> </table>	LY59C	Owned Contact Point	LY59B	No contact point	LY59A	No contact point	<p>S1</p> <p>무기호:오토스위치 없음 None : no auto switch S1 : 1EA S2 : 2EA S3 : 3EA</p>	<p>A</p> <p>몸체사양 무기호:표준형 동계불가형 :A Body specification None: standard A No accept Copper-related Type :A</p>
LY59C	Owned Contact Point											
LY59B	No contact point											
LY59A	No contact point											

편박형 실린더 ICUW 시리즈 THIN-TYPE CYLINDER ICUW SERIES

내부구조도 Inside Structure Drawings

>양로드형 Double-rod Type

■ ICUW $\Phi 10, \Phi 16, \Phi 20, \Phi 25$



>부품리스트 Parts List

No	Name	Materials	Remarks
1	BODY TUBE	A6063	
2	ROD BUSH	A6063	
3	PISTON-A	A2024	ø6, ø10 BRASS
4	PISTON-B	A2024	
5	ROD	NBR	
6	DAMPER-1	URETHANE	
7	DAMPER-2	URETHANE	
8	SNAP RING	SCM4	
9	LOCK NUT	S20C	
10	BUSH	DU	
11	MAGNET	STEEL	

No	Name	Materials	Remarks
12	AUTO S/W		
17	RETAINER	A6063	
18	BOLT	SCM4	

>패킹리스트 Packing List

No	Name	Materials	Inside-diameter of Tube(mm)			
			ø10	ø16	ø20	ø25
13	ROD O-RING	NBR	ø2.8*0.7	S5	S6	S8
14	PISTON PACKING	NBR	PSD10	PSD16	OPA20	OPA25
15	ROD PACKING	NBR	DYR 4K	DYR 6K	DYR 10SK	DYR 12
16	COVER O-RING	NBR	S10	S14	S18	S22

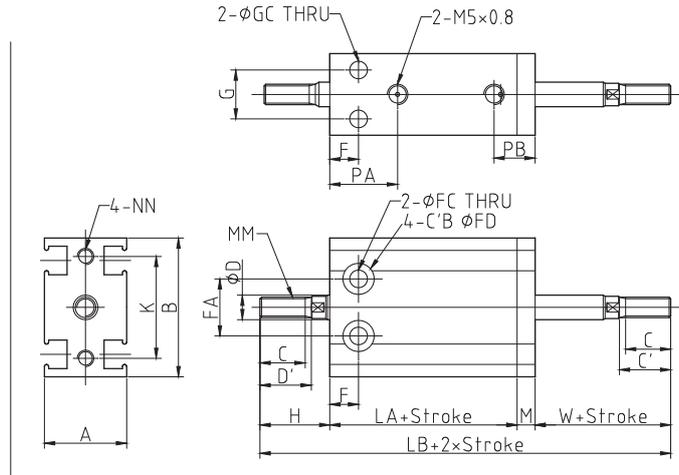
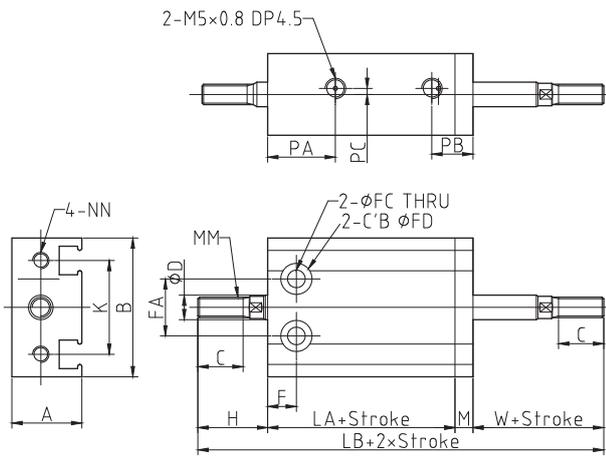
편박형 실린더 ICUW 시리즈 THIN-TYPE CYLINDER ICUW SERIES

복동형 Double-acting Type

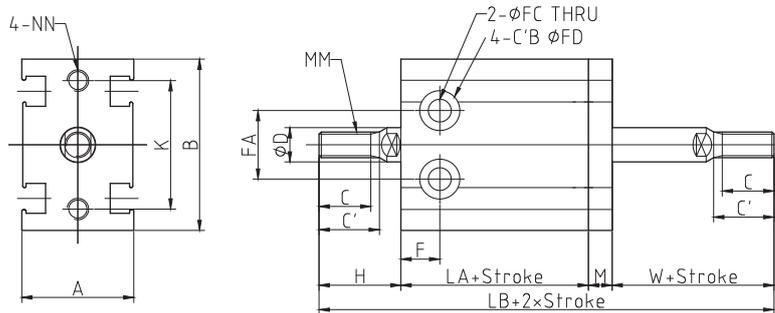
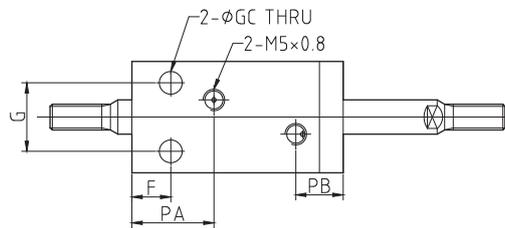
>복동/양로드형 Double-acting Type/ Double-rod Type

ICUW Φ 10

ICUW Φ 16



ICUW Φ 20, Φ 25



단위 unit :mm

I-D(mm)	A	B	C	C'	D	F	FA	FC	FD	H	K	G	GC	M	MM	NN	W	PA	PB	PC	PD	LA	LB
10	15	28	10		4	7	11	3.2	∅6 DP5	16	18	9	7	6	M4X0.7	M3X0.5 DP5	16	16.5	15	1		35	73
16	20	34	11	12.5	6	7	14	4.3	∅7.6 DP6.5	16	25	12	9	7.5	M5X0.8	M4X0.7 DP6	16	16.5	17.5			40	79.5
20	26	40	12	14	8	9	16	5.3	∅9.3 DP8	19	30	16	12	9	M6X1.0	M5X0.8 DP8	19	19	20	4	8	44	91
25	32	50	15.5	18	10	10	20	5.3	∅9.3 DP9	23	38	20	16	9	M8X1.25	M5X0.8 DP8	23	21.5	22	4.5	9	48	103

편박형 실린더 ICUK 시리즈 THIN-TYPE CYLINDER ICUK SERIES

형식 및 사양 Model & Specification

> 표준 사양 Standard Specification

형식 Type	무급유형 Oilless Type
사용유체 Fluid	공기 Air
시험압력 Test Pressure	10.5kgf/cm ²
최고사용압력 Max. set pressure	7kgf/cm ²
사용온도 Working Temperature	-10°C ~ +60°C
나사공차 Screw tolerance	KS2급 2nd KS level
행정길이의 허용차 Allowance of stroke length	$\begin{matrix} +1.0 \\ 0 \end{matrix}$
사용속도 Working Speed	50~500mm/s
쿠션 Cushion	Rubber cushion
로드끝단나사 Rod-end screw	수나사 male screw

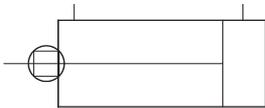
> 실린더 표준 행정표

Standard Stroke Table of Cylinder

I-D(mm)	Standard stroke(mm)
∅10	5, 10, 15, 20, 25, 30
∅16	5, 10, 15, 20, 25, 30
∅20	5, 10, 15, 20, 25, 30, 40, 50
∅25	5, 10, 15, 20, 25, 30, 40, 50

> 표시기호 Symbol

■ 회전방지형 복동 편로드 / Un-Rotation double-acting single-rod



> 형식 표시 방법 Indication of Model

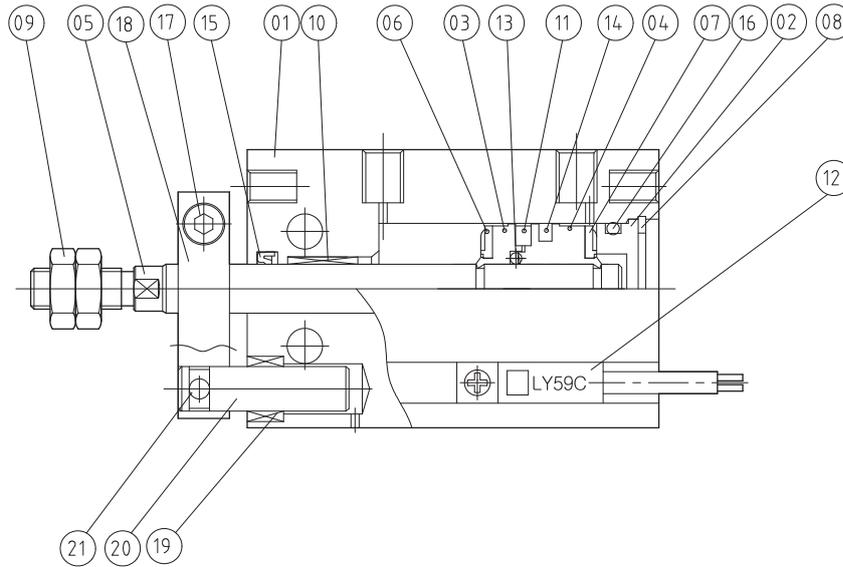
<p>ICUK</p> <p>회전방지형 편박형 실린더 마그네트 쿠션 기본내장 Un-Rotation Double-acting Single-rod, Thin type cylinder Basic Built-in of magnet and cushion</p>	<p>10</p> <p>튜브내경 Inside-diameter of Tube 10-10mm 16-16mm 20-20mm 25-25mm</p>	<p>S20</p> <p>실린더행정 표준행정표참조 Cylinder Stroke Refer to table of standard stroke</p>	<p>D</p> <p>작동방식 D:복동형 Operating Type D:Double-action type</p>	<p>59C</p> <p>무기호:오토 스위치 없음 None: No Auto Switch 오토스위치 종류 유점점 kind of auto switch - Owned Contact Point</p> <table border="1"> <tr> <td>LY59C</td> <td>Owned Contact Point</td> </tr> <tr> <td>LY59B</td> <td>No contact point</td> </tr> <tr> <td>LY59A</td> <td>No contact point</td> </tr> </table>	LY59C	Owned Contact Point	LY59B	No contact point	LY59A	No contact point	<p>S1</p> <p>무기호:오토스위치 없음 None : no auto switch S1 : 1EA S2 : 2EA S3 : 3EA</p>	<p>A</p> <p>몸체사양 무기호:표준형 동계불가형 :A Body specification None: standard A No accept Copper-related Type :A</p>
LY59C	Owned Contact Point											
LY59B	No contact point											
LY59A	No contact point											

편박형 실린더 ICUK 시리즈 THIN-TYPE CYLINDER ICUK SERIES

내부구조도 Inside Structure Drawings

>편로드 회전방지형 Single-rod Un-Rotation Type

■ ICUK Φ10, Φ16, Φ20, Φ25



>부품리스트 Parts List

No	Name	Materials	Remarks
1	BODY TUBE	A6063	
2	HEAD COVER	A6063	
3	PISTON-A	A2024	∅6, ∅10 BRASS
4	PISTON-B	A2024	
5	ROD	NBR	
6	DAMPER-1	URETHANE	
7	DAMPER-2	URETHANE	
8	SNAP RING	SCM4	
9	LOCK NUT	S20C	
10	DU BUSH	DU	
11	MAGNET	STEEL	

No	Name	Materials	Remarks
12	AUTO S/W		
17	LOCK BOLT	SCM4	
18	LOCK PLATE	A6063	
19	GUIDE BUSH	CU	
20	GUIDE PIN	SUS	
21	SET BOLT	SCM4	

>패킹 리스트 Packing List

No	Name	Materials	Inside-diameter of Tube(mm)			
			∅10	∅16	∅20	∅25
13	ROD O-RING	NBR	∅2.8*0.7	S5	S6	S8
14	PISTON PACKING	NBR	PSD10	PSD16	OPA20	OPA25
15	ROD PACKING	NBR	DYR 4K	DYR 6K	DYR 10SK	DYR 12
16	COVER O-RING	NBR	S10	S14	S18	S22

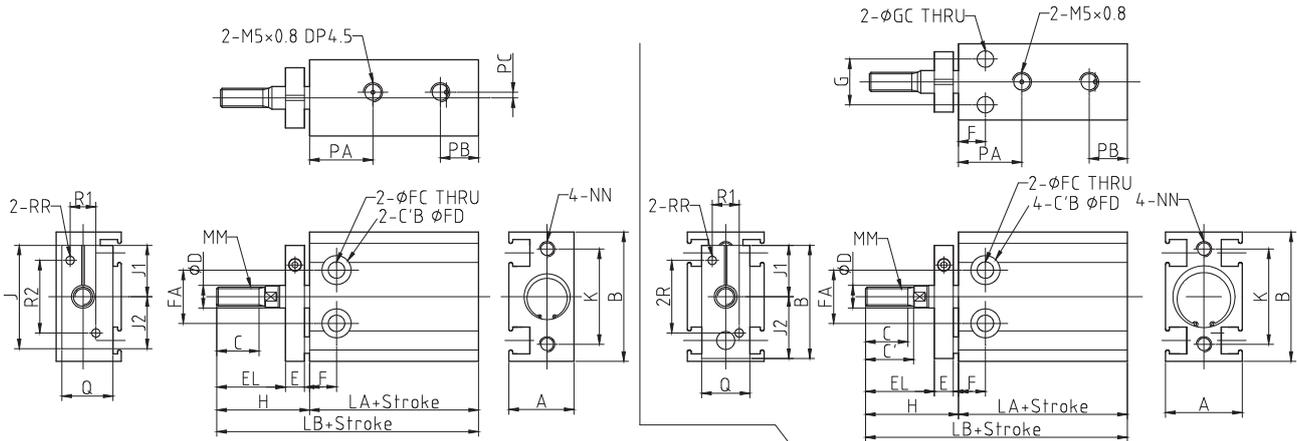
편박형 실린더 ICUK 시리즈 THIN-TYPE CYLINDER ICUK SERIES

복동/편로드 회전방지형 Double-acting Type/Single-rod Un-Rotation Type

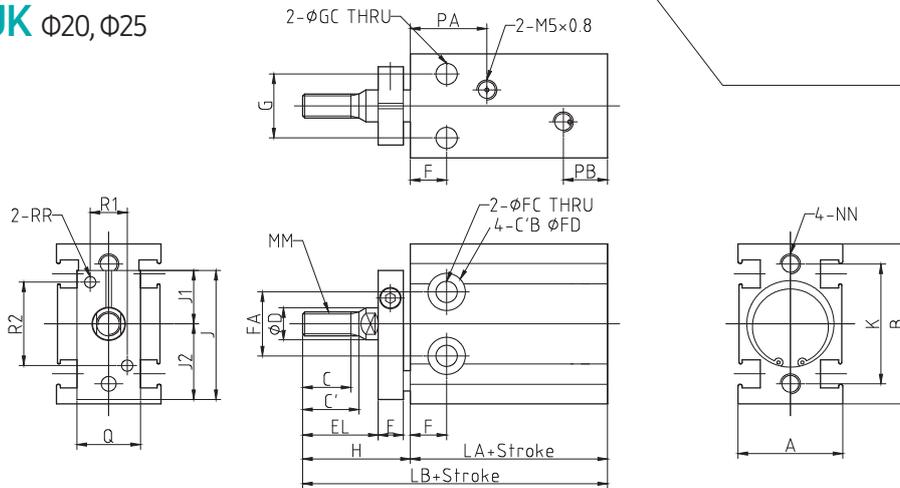
>복동/편로드 회전방지형 Double-acting Type/Single-rod for Un-Rotation Type

■ ICUK Φ10

■ ICUK Φ16



■ ICUK Φ20, Φ25



단위 unit:mm

I-D(mm)	A	B	C	C'	D	F	FA	FC	FD	H	K	G	GC	MM	NN	PA	PB	PC	PD	LA	LB
10	15	28	10		4	7	11	3.2	∅6 DP5	21	18	9	7	M4X0.7	M3X0.5 DP5	16.5	9	1		35	56
16	20	34	11	12.5	6	7	14	4.3	∅7.6 DP6.5	26	25	12	9	M5X0.8	M4X0.7 DP6	16.5	10			40	66
20	26	40	12	14	8	9	16	5.3	∅9.3 DP8	29	30	16	12	M6X1.0	M5X0.8 DP8	19	11	4	8	44	73
25	32	50	15.5	18	10	10	20	5.3	∅9.3 DP9	33	38	20	16	M8X1.25	M5X0.8 DP8	21.5	13	4.5	9	48	81

I-D(mm)	E	EL	J	J1	J2	Q	R1	R2	RR
10	8	12	22	10.5	11.5	12	7	15	M3X0.5
16	8	17	28	12.5	15.5	13	6	18	M4X0.7
20	8	20	23	13.5	19.5	16	8	20	M4X0.7
25	10	22	43.5	19	24.5	20	10	28	M5X0.8

편박형 실린더 ICUKW 시리즈 THIN-TYPE CYLINDER ICUKW SERIES

Ø10, Ø16, Ø20, Ø25

>표준사양 Standard Specification

형식 Type	무급유형 Oilless Type
사용유체 Working Fluid	공기 Air
시험압력 Test Pressure	10.5kgf/cm ²
최고사용압력 Max. set pressure	7kgf/cm ²
사용온도 Working Temperature	-10°C ~ +60°C
나사공차 Screw tolerance	KS2급 2nd KS level
행정길이의 허용차 Allowance of stroke length	+1.0 0
사용속도 Working Speed	50~500mm/s
쿠션 Cushion	Rubber cushion
로드끝단나사 Rod-end screw	수나사 male screw

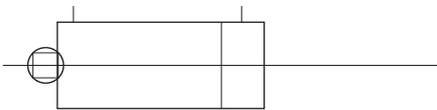
> 실린더 표준 행정표

Standard Stroke Table of Cylinder

I-D(mm)	Standard stroke(mm)
Ø10	5, 10, 15, 20, 25, 30
Ø16	5, 10, 15, 20, 25, 30
Ø20	5, 10, 15, 20, 25, 30, 40, 50
Ø25	5, 10, 15, 20, 25, 30, 40, 50

>표시기호 Symbol

■ 회전방지형 복동 양로드 / Un-Rotation double-acting double-rod



>형식표시방법 Indication of Model

ICUKW

회전방지형 편박형 실린더
마그네트 쿠션 기본내장
Un-rotation Type,
Thin Type Cylinder,
Basic built-in of magnet
and cushion

10

튜브내경 Inside-diameter of Tube
10-10mm
16-16mm
20-20mm
25-25mm

S20

실린더행정
표준행정표참조
Cylinder Stroke
Refer to table of
standard stroke

D

작동방식
D:복동형
Operating
D:Double-action
type

59C

무기호:오토스위치 없음 None: No Auto Switch
오토스위치 종류-유점점 kind of auto switch - Owned Contact Point

LY59C	Owned Contact Point
LY59B	No contact point
LY59A	No contact point

S1

무기호:오토스위치 없음
None : no auto switch
S1 : 1EA
S2 : 2EA
S3 : 3EA

A

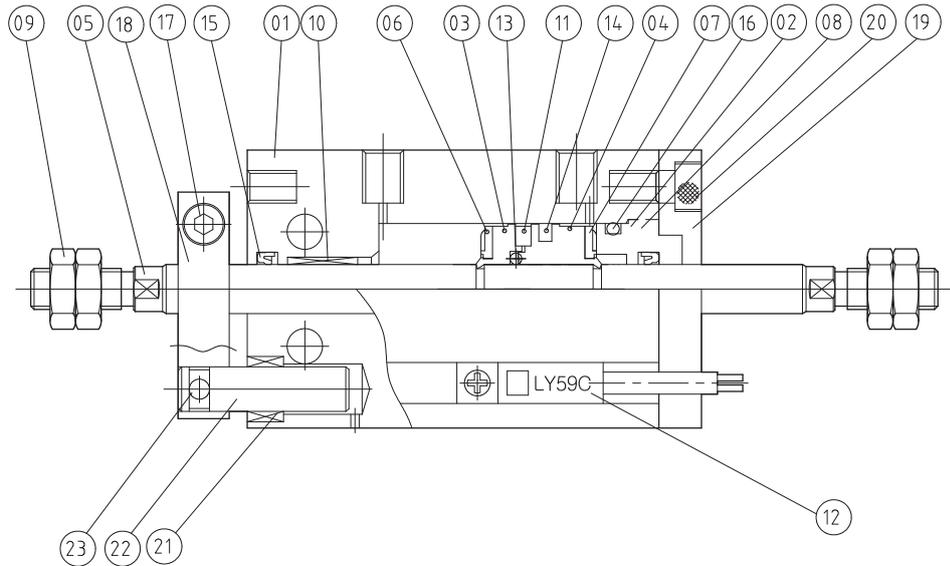
몸체사양
무기호:표준형
동계불가형 :A
Body specification
None: standard
A No accept
Copper-related Type :A

편박형 실린더 ICUKW 시리즈 THIN-TYPE CYLINDER ICUKW SERIES

내부구조도 Inside Structure Drawings

>양로드 회전방지형 Double-rod Un-Rotation Type

■ ICUKW $\Phi 10, \Phi 16, \Phi 20, \Phi 25$



>부품리스트 Parts List

No	Name	Materials	Remarks
1	BODY TUBE	A6063	
2	HEAD COVER	A6063	
3	PISTON-A	A2024	φ6, φ10 BRASS
4	PISTON-B	A2024	
5	ROD	NBR	
6	DAMPER-1	URETHANE	
7	DAMPER-2	URETHANE	
8	SNAP RING	SCM4	
9	LOCK NUT	S20C	
10	DU BUSH	DU	
11	MAGNET	STEEL	

No	Name	Materials	Remarks
12	AUTO S/W		
17	LOCK BOLT	SCM4	
18	LOCK PLATE	A6063	
19	RETAINER	A6063	
20	BOLT	SCM4	
21	BUSH	CU	
22	GUIDE PIN	SUS	
23	SET BOLT	SCM4	

>패킹리스트 Packing List

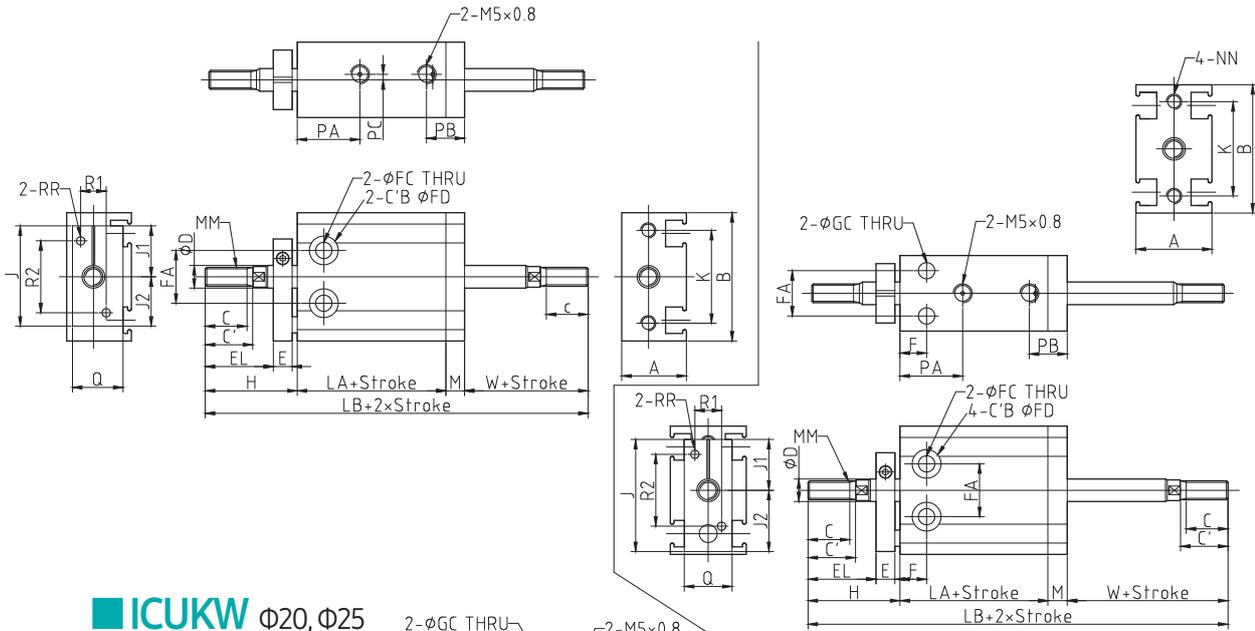
No	Name	Materials	Inside-diameter of Tube(mm)			
			φ10	φ16	φ20	φ25
13	ROD O-RING	NBR	φ2.8*0.7	S5	S6	S8
14	PISTON PACKING	NBR	PSD10	PSD16	OPA20	OPA25
15	ROD PACKING	NBR	DYR 4K	DYR 6K	DYR 10SK	DYR 12
16	COVER O-RING	NBR	S10	S14	S18	S22

편박형 실린더 ICUKW 시리즈 THIN-TYPE CYLINDER ICUKW SERIES
 복동 양로드 회전방지형 Double-acting Type Double-rod un-rotation type

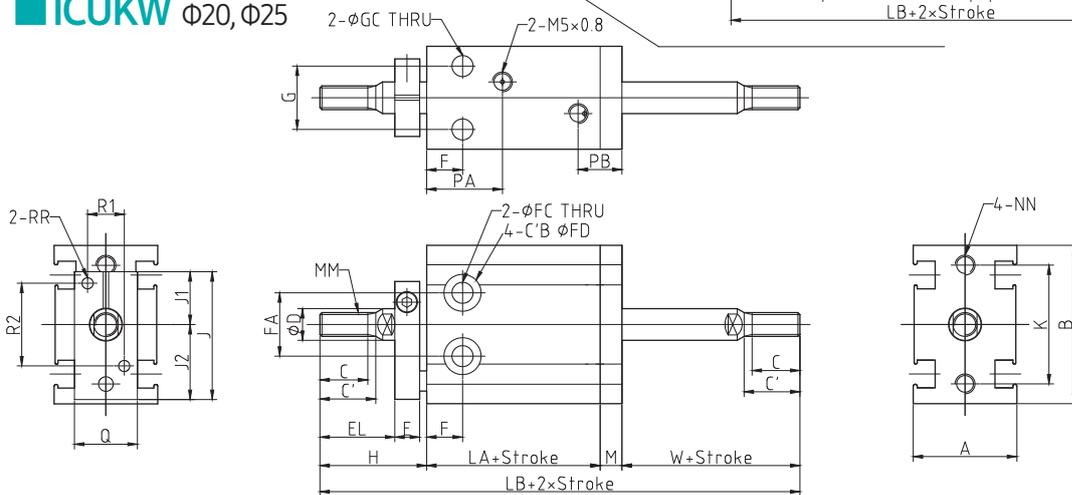
>복동/양로드 회전방지형 Double-acting Type/Double-rod un-rotation type

■ ICUKW $\Phi 10$

■ ICUKW $\Phi 16$



■ ICUKW $\Phi 20, \Phi 25$



단위 unit:mm

I-D(mm)	A	B	C	C'	D	F	FA	FC	FD	H	K	G	GC	M	MM	NN	W	PA	PB	PC	PD	LA	LB
10	15	28	10		4	7	11	3.2	∅6 DP5	21	18	9	7	6	M4X0.7	M3X0.5 DP5	16	16.5	15	1		35	78
16	20	34	11	12.5	6	7	14	4.3	∅7.6 DP6.5	26	25	12	9	7.5	M5X0.8	M4X0.7 DP6	16	16.5	17.5			40	89.5
20	26	40	12	14	8	9	16	5.3	∅9.3 DP8	29	30	16	12	9	M6X1.0	M5X0.8 DP8	19	19	20	4	8	44	101
25	32	50	15.5	18	10	10	20	5.3	∅9.3 DP9	33	38	20	16	9	M8X1.25	M5X0.8 DP8	23	21.5	22	4.5	9	48	113

I-D(mm)	E	EL	J	J1	J2	Q	R1	R2	RR
10	8	12	22	10.5	11.5	12	7	15	M3X0.5
16	8	17	28	12.5	15.5	13	6	18	M4X0.7
20	8	20	23	13.5	19.5	16	8	20	M4X0.7
25	10	22	43.5	19	24.5	20	10	28	M5X0.8

공기압 참고자료

공기압 도면기호

박형 실린더

소형 실린더

중형 실린더

대형 실린더

오토 스위치

가이드부착 실린더

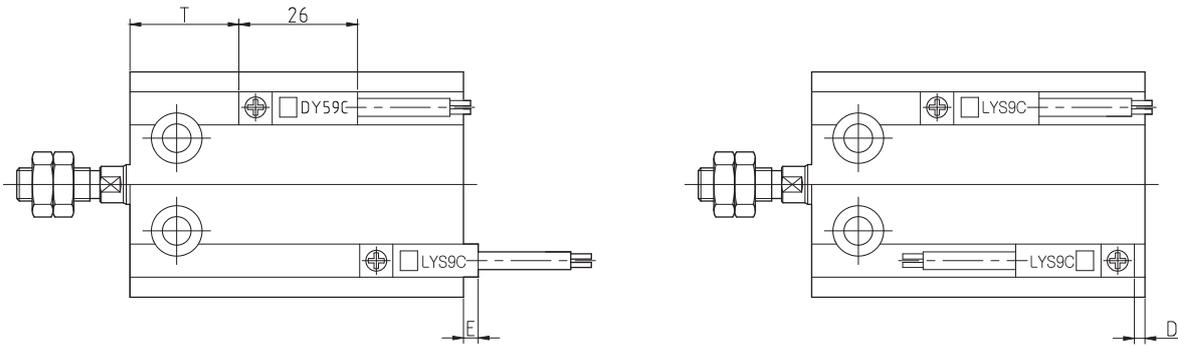
부스터 실린더

유압실린더 시리즈

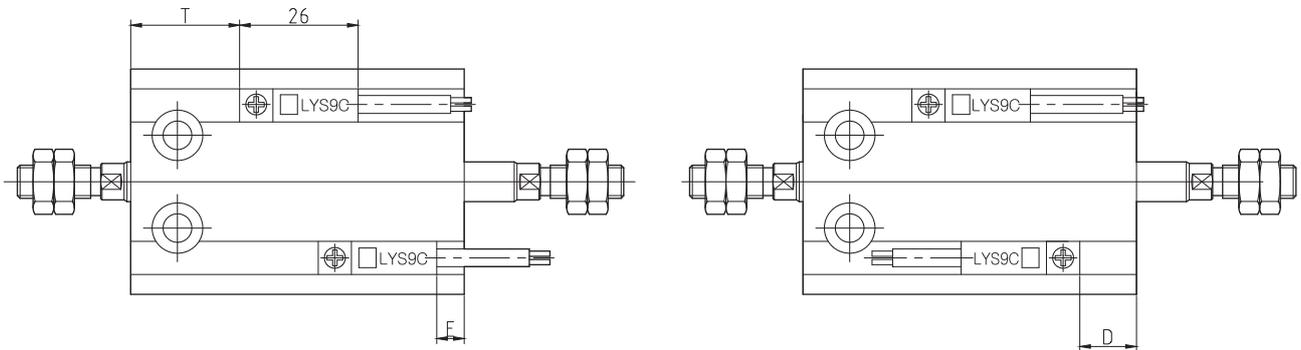
편박형 실린더 ICU 시리즈 THIN-TYPE CYLINDER ICU SERIES

오토스위치 부착 위치 Atuo switch-mounted Position

>편로드형/오토스위치 부착 Single-rod type/ Atuo switch-mounted



>양로드형/오토스위치 부착 Double-rod type/ Atuo switch-mounted



단위 unit : mm

I-D(mm)	Double-acting Single-rod type			Double-acting Double-rod type		
	T	D	E	T	D	E
10	13	-1	-7	13	5	-1
16	13	0.5	-6	13	8	1.5
20	16	1	-4.5	16	10	4.5
25	19.5	3	-3	19.5	12	6