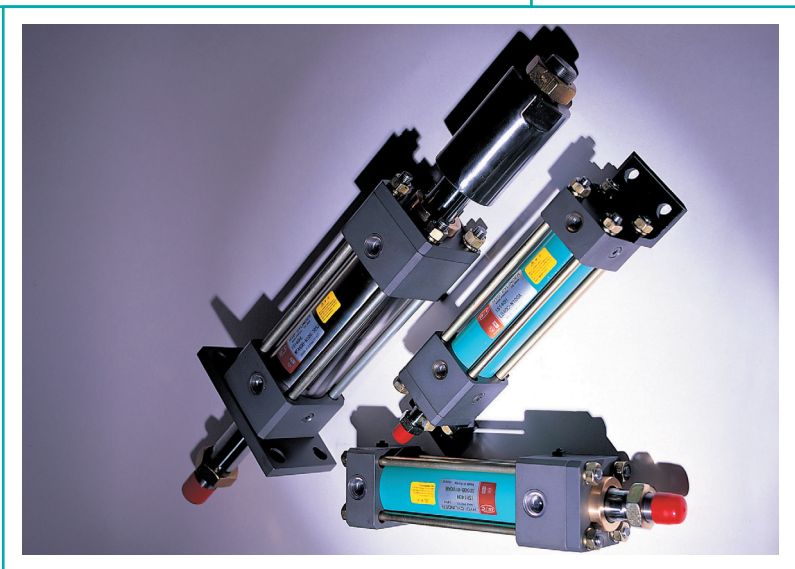


유압 실린더 IS 210H 시리즈

HYDRAULIC CYLINDER
IS 210H SERIES



ISTC CO., LTD



Hydraulic Pneumatic Technology Products

유압 실린더 IS 210H 시리즈 HYDRAULIC CYLINDER IS 210H SERIES

210kgf/cm²용 표준유압 실린더 Hydraulic Cylinder for 210kgf/cm²

> 실린더 사양 Specification of Cylinder

종류 Series	표준형 standard type		
형식 model	IS-210H		
실린더 내경 inside-diameter of cylinder(mm)	Ø40, Ø50, Ø63, Ø80, Ø100, Ø125, Ø140, Ø160		
사용압력 working pressure	210kgf/cm ² (21MPa)		
최고허용압력 Max. allowable pressure	Head side: 180kgf/cm ² (17.625MPa) Rod side: (B) 180kgf/cm ² (17.652MPa) (C) 140kgf/cm ² (13.729MPa)		
시험압력 Test Pressure	315kgf/cm ² (31.5MPa)		
최저작동압력 Min. working pressure	Rod side: 4.5kgf/cm ² (0.45MPa), Head side: 3kgf/cm ² (0.3MPa)		
사용속도범위 Range of working speed	8~300mm/sec		
사용온도범위 Range of working temperature	-10~+80°C(Ambient temperature and oil temperature)		
쿠션방식 Cushion Type	Metal pressure reducing type		
사용작동유 Working oil	General mineral working oil(For other working oil, give instructions).		
나사공차 Screw Tolerance	2nd KS level		
스트로크 허용치 Stroke Allowance	~100mm $\begin{smallmatrix} +0.8 \\ 0 \\ -1.4 \end{smallmatrix}$ 631~1,000mm $\begin{smallmatrix} +1.4 \\ 0 \\ -2.0 \end{smallmatrix}$	101~250mm $\begin{smallmatrix} +1.0 \\ 0 \\ +1.6 \end{smallmatrix}$ 1,001~1,600mm $\begin{smallmatrix} +1.6 \\ 0 \\ +2.2 \end{smallmatrix}$	251~630mm $\begin{smallmatrix} +1.25 \\ 0 \\ +1.8 \end{smallmatrix}$ 1,601~2,000mm $\begin{smallmatrix} +1.8 \\ 0 \\ +2.4 \end{smallmatrix}$
취부형식 Mounted Type	표준형 standard type	SD · LA · FA · FB · CA · CB · TA · TC	
선단부품 Rod-end parts	방진커버 Dust-proofing cover	Standard : Nylon Tarpaulin Semi-standard : Neoprene	
	선단금구 Rod-end	Single thread type(I type) Double thread type(Y type)	
	기타 others	Locknut	

- 주) 1. 사용압력은 실린더를 상용하는 유압회로의 릴리프밸브의 설정압력 최고치
 2. 최고허용압력이란 실린더 내부에 발생하는 압력의 허용가능 최고치
 3. 내압력은 사용압력에 복귀할 때에 성능의 저하를 초래하지 않고 견디어 내지 않으면 안되는 시험압력
 4. 최저작동압력이란 실린더를 수평으로 설치해 무부하 로드(자중분은 별도 고려)의 상태에 있어서 압력을 걸을 때에 실린더가 작동하기 시작하는 압력
 5. 지지형식란의 ()는 사용압력 kgf/cm²이다.
 6. 피스톤 로드 선단나사부에 로크너트를 설치해서 사용하는 경우는 나사길이 A 치수를 길게 해 주십시오.

- Note) 1. The working pressure is the maximum set pressure value of the hydraulic circuit.
 2. The max. allowable pressure is the max. allowable value of pressure that is generated inside of the cylinder.
 3. The bearing pressure is the test pressure to bear without causing a drop in performance when returning to working pressure.
 4. The min. working pressure at which the cylinder starts when the pressure is applied under no load after the cylinder is installed horizontally.
 5. The type in parentheses in the supporting type section is for 70 kgf/cm².
 6. If a locknut is installed and used in the end screw of the piston rod, make the length of the screw(A) longer.

> 행정한계 Stroke limit

I-D(mm)	Ø40	Ø50~Ø160
limit	~1,500	~2,000

- 주) 1. 지지형식에 따른 좌굴은 별도로 계산하여 주십시오.
 2. 이상보다 긴 스트로크는 상담바랍니다.

- Note) 1. Calculate separately the bucking according to the supporting type.
 2. For longer strokes, ask for instructions.

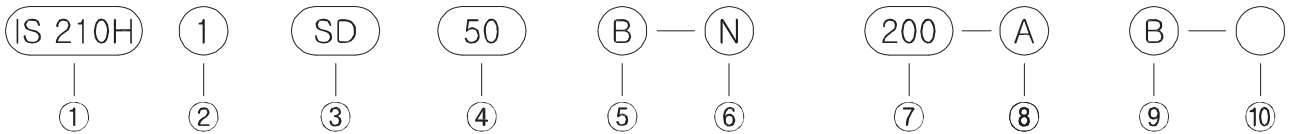
> 표준형 패키징재질 Packing materials for standard type

dimensions	items	materials
Ø40 ~ Ø160	DUST SEAL	URETHANE RUBBER
	ROD SEAL	URETHANE RUBBER
	PISTON SEAL	URETHANE RUBBER
	O-RING	NBR

유압 실린더 IS 210H 시리즈 HYDRAULIC CYLINDER IS 210H SERIES

210kgf/cm²용 표준유압 실린더 Hydraulic Cylinder for 210kgf/cm²

> 형식표시방법 Indication of Model



①시리즈 Series

Single rod	IS 210H	210kgf/cm ²
Double rod	IS 210H-W	210kgf/cm ²
Switch Mounted	IS 210HL	210kgf/cm ²

②패킹재질 Packing materials

notation	materials	remarks
None	materials of our company	standard dimension items
1	NBR	
2	Urethane rubber	
3	Fluorine rubber	

③부착형식 Mounted Type

SD • LA • FA • FB • CA • CB • TA • TC

④실린더내경 Inside diameter of cylinder ⑤ 로드형식 Rod-type

Tube		Rod	
Size	I-D of cylinder	Bseries	Cseries
40	∅40	∅22.4	
50	∅50	∅28	
63	∅63	∅35.5	
80	∅80	∅45	
100	∅100	∅56	
125	∅125	∅71	
140	∅140	∅80	
160	∅160	∅90	

★표준 스트로크 Standard stroke

I-D	Stroke
∅40	~1500
∅50~∅160	~2000

⑥쿠션형식 Cushion Type

B	Both-side cushion
R	Rod-side cushion
H	Head-side cushion
N	No cushion

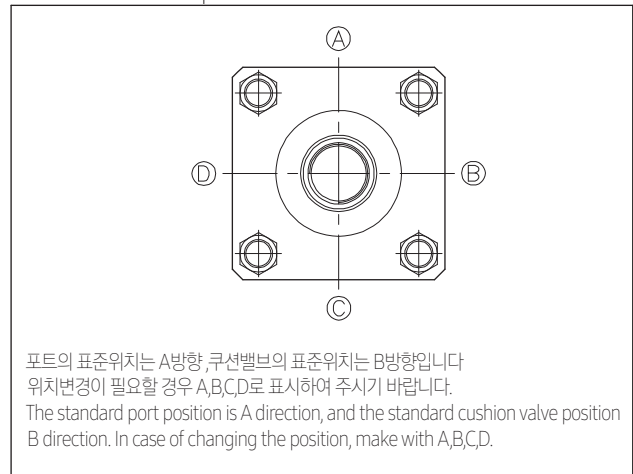
⑦실린더 행정(mm) Cylinder Stroke

⑧포트위치:표준(A) Port position : standard(A)

Port position : standard(A)

⑨쿠션밸브위치:표준(B) Cushion Valve position : standard(B)

Cushion Valve position : standard(B)



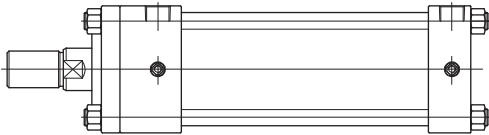
⑩방진커버 Dust-proofing cover

notation	material
J	Nylon Tarpaulin
JN	Neoprene

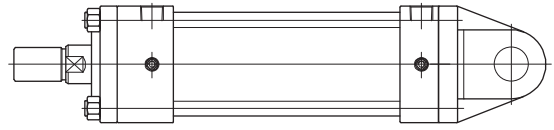
유압 실린더 IS210H 시리즈 HYDRAULIC CYLINDER IS 210H SERIES

외형도 Outside Dimensions Drawings

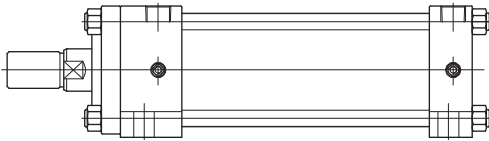
SD 표준형
Standard type



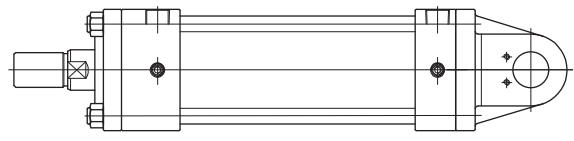
CA 표준형
Standard type



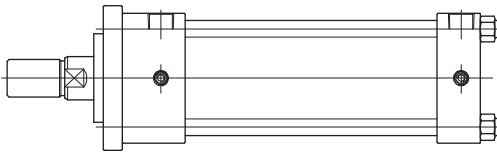
LA 표준형
Standard type



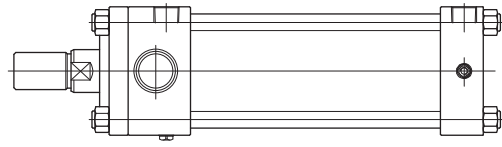
CB 표준형
Standard type



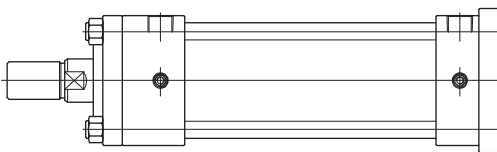
FA 표준형
Standard type



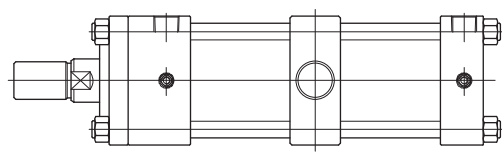
TA 표준형
Standard type



FB 표준형
Standard type



TC 표준형
Standard type



유압 실린더 IS210H 시리즈 HYDRAULIC CYLINDER IS 210H SERIES

외형도 Outside Dimensions Drawings

SD

IS 210 H - 2 SD 4 B - 6 7ST 8 - 9 10

표준형 standard

2 패킹재질 Packing materials
 4 실린더 호칭경(내경) Inside Diameter of Cylinder
 6 쿠션형식 Cushion Type
 7 실린더 행정 Cylinder Stroke
 8 포트위치 Port Position
 9 쿠션밸브위치 Cushion Valve Position
 10 방진커버 Dust-Proofing Cover

★ KL치수 KL dimension

I-D	XX
∅40, ∅50	1/3.5*Stroke
∅63~∅100	1/4*Stroke
∅125~∅160	1/5*Stroke

notation I-D	A	∅B	BB	D	DD	∅E	EE	F	FP	H	J	K	KK	∅MM	P	∅RR	SL	VC	W	ZJ	∅WW	X	LF	SB
∅40	25	40	13	19	M12X1.5	70	PT½	13	43	64	47	32	M20X1.5	22	98	50	11	11	30	186	50	47	156	11
∅50	30	46	14	24	M14X1.5	85	PT½	15	48	68	52	37	M24X1.5	28	106	62	12	14	30	202	63	50	172	14
∅63	35	55	16	30	M16X1.5	100	PT¾	18	56	75	57	37	M30X1.5	35	113	74	16	15	35	222	71	61	187	18
∅80	45	65	18	41	M18X1.5	125	PT¾	24	69	85	67	42	M39X1.5	45	129	92	20	9	35	253	80	55	218	22
∅100	55	80	21	50	M22X1.5	160	PT¾	26	71	95	67	42	M48X1.5	55	139	120	20	14	40	270	100	60	230	26
∅125	75	95	25	65	M27X1.5	190	PT1	33	83	105	77	52	M64X2.0	70	159	145	26	13	45	312	125	69	267	33
∅140	80	105	27	75	M30X1.5	215	PT1	36	86	110	77	52	M72X2.0	80	164	165	30	14	50	325	125	70	275	33
∅160	90	120	29	85	M42X2.0	240	PT1	41	94	132	80	51	M80X2.0	90	186	185	33	14	55	359	140	70	304	36

공기압 원고자료
 공기압 도면기호
 바형 실린더
 소형 실린더
 중형 실린더
 대형 실린더
 오토 스위치
 가이드부착 실린더
 부스터 실린더
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유압 실린더 IS 210H 시리즈 HYDRAULIC CYLINDER IS 210H SERIES

외형도 Outside Dimensions Drawings



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

LA	IS 210 H -	2	LA	4	B -	6	7	ST	8	-	9	10		
축방향 풋트형(일체형) Shaft direction Foot Type (One body Type)	2	패킹재질 Packing materials	4	실린더 호칭경(내경) Inside Diameter of Cylinder	6	쿠션형식 Cushion Type	7	실린더 행정 Cylinder Stroke	8	풋트위치 Port Position	9	쿠션밸브위치 Cushion Valve Position	10	방진커버 Dust-Proofing Cover

★ KL치수 KL dimension

I-D	XX
Ø40, Ø50	1/3.5*Stroke
Ø63~Ø100	1/4*Stroke
Ø125~Ø160	1/5*Stroke

D The back side width

notation I-D	notation																									
	A	ØB	D	□E	KK	FP	EE	K	LH	ØMM	P	SB	SS	ST	SV	SW	SY	SZ	TS	US	VC	W	XS	XW	ØWW	X
Ø40	25	40	19	70	M20X1.5	43	PT $\frac{1}{2}$	32	42 ±0.15	22	98	11	111	15	31	16	16	16	98	122	11	30	59	170	50	47
Ø50	30	46	24	85	M24X1.5	48	PT $\frac{1}{2}$	37	55 ±0.15	28	106	14	120	20	34	18	18	19	118	145	14	30	63	183	63	50
Ø63	35	55	30	100	M30X1.5	56	PT $\frac{1}{2}$	37	63 ±0.15	35	113	18	132	25	39	18	18	19	140	175	15	35	71	203	71	61
Ø80	45	65	41	125	M39X1.5	69	PT $\frac{1}{2}$	42	75 ±0.15	45	129	22	152	30	46	21	21	21	175	210	9	35	80	232	80	55
Ø100	55	80	50	160	M48X1.5	71	PT $\frac{1}{2}$	42	85 ±0.25	55	139	26	162	35	44	23	23	24	215	260	14	40	89	251	100	60
Ø125	75	95	65	190	M64X2.0	83	PT1	52	105 ±0.25	70	159	33	182	45	49	28	28	29	270	330	13	45	106	288	125	69
Ø140	80	105	75	215	M72X2.0	86	PT1	52	112 ±0.25	80	164	33	187	45	49	28	28	29	280	335	14	50	114	301	125	70
Ø160	90	120	85	240	M80X2.0	94	PT1	51	125 ±0.25	90	186	36	212	50	49	31	31	31	315	375	14	55	127	339	140	70

유압 실린더 IS 210H 시리즈 HYDRAULIC CYLINDER IS 210H SERIES

외형도 Outside Dimensions Drawings

<h1 style="font-size: 2em;">FA</h1> <p>로드측 축방향 플랜지형 Rod-side, shaft direction, Flange Type</p>	IS 210 H - 2	FA 4 B - 6	7 ST 8 - 9 10				
	2 패킹재질 Packing materials	4 실린더 호칭경(내경) Inside Diameter of Cylinder	6 쿠션형식 Cushion Type	7 실린더 행정 Cylinder Stroke	8 포트위치 Port Position	9 쿠션밸브위치 Cushion Valve Position	10 방진커버 Dust-Proofing Cover

★ KL치수 KL dimension

I-D	XX
Ø40, Ø50	1/3.5*Stroke
Ø63~Ø100	1/4*Stroke
Ø125~Ø160	1/5*Stroke

D The back side width

notation	A	ØB	D	EE	FE	ØFB	KK	LL	ØMM	LY	P	R	W	TF	UF	WA	WY	Y	YP	ØWW	X
Ø40	25	40	19	PT½	73	11	M20X1.5	143	22	158	98	50	30	98	122	28	43	15	30	50	45
Ø50	30	46	24	PT½	88	14	M24X1.5	157	28	177	106	60	30	118	145	25	45	20	33	63	45
Ø63	35	55	30	PT½	106	18	M30X1.5	169	35	193	113	73	35	140	175	29	53	24	38	71	55
Ø80	45	65	41	PT¾	130	22	M39X1.5	194	45	218	129	90	35	175	210	35	59	24	45	80	55
Ø100	55	80	50	PT¾	165	26	M48X1.5	204	55	235	139	115	40	215	260	35	66	31	45	100	55
Ø125	75	95	65	PT1	205	33	M64X2.0	234	70	271	159	145	45	270	330	41	78	37	50	125	65
Ø140	80	105	75	PT1	218	33	M72X2.0	239	80	280	164	160	50	280	335	45	86	41	50	125	65
Ø160	90	120	85	PT1	243	36	M80X2.0	263	90	309	186	180	55	315	375	50	96	46	53	140	65

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

유압 실린더 IS 210H 시리즈 HYDRAULIC CYLINDER IS 210H SERIES

외형도 Outside Dimensions Drawings



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

FB	IS 210 H -	2	FB	4	B -	6	7 ST	8	-	9	10			
헤드측 축방향 플랜지형 Head-side, shaft direction, Flange Type	2	패킹재질 Packing materials	4	실린더 호칭경(내경) Inside Diameter of Cylinder	6	쿠션형식 Cushion Type	7	실린더 행정 Cylinder Stroke	8	포트위치 Port Position	9	쿠션밸브위치 Cushion Valve Position	10	방진커버 Dust-Proofing Cover

★ KL치수 KL dimension

I-D	XX
φ40, φ50	1/3.5*Stroke
φ63~φ100	1/4*Stroke
φ125~φ160	1/5*Stroke

D The back side width

notation I-D	notation																				
	A	φB	D	EE	EF	φFB	KK	FP	φMM	LF	P	R	W	TF	UF	VC	WY	Y	ZY	φWW	X
Ø40	25	40	19	PT $\frac{1}{2}$	73	11	M20X1.5	43	22	156	98	50	30	98	122	11	43	15	201	50	47
Ø50	30	46	24	PT $\frac{1}{2}$	88	14	M24X1.5	48	28	172	106	60	30	118	145	14	45	20	222	63	50
Ø63	35	55	30	PT $\frac{1}{2}$	106	18	M30X1.5	56	35	187	113	73	35	140	175	15	53	24	246	71	61
Ø80	45	65	41	PT $\frac{1}{2}$	130	22	M39X1.5	69	45	218	129	90	35	175	210	9	59	24	277	80	55
Ø100	55	80	50	PT $\frac{1}{2}$	165	26	M48X1.5	71	55	230	139	115	40	215	260	14	66	31	301	100	60
Ø125	75	95	65	PT1	205	33	M64X2.0	83	70	267	159	145	45	270	330	13	78	37	349	125	69
Ø140	80	105	75	PT1	218	33	M72X2.0	86	80	275	164	160	50	280	335	14	86	41	366	125	70
Ø160	90	120	85	PT1	243	36	M80X2.0	94	90	304	186	180	55	315	375	14	96	46	405	140	70

유압 실린더 IS210H 시리즈 HYDRAULIC CYLINDER IS 210H SERIES

외형도 Outside Dimensions Drawings

CA

1산 클레비스형
Single Thread
CLEVIS Type

IS 210 H - 2 CA 4 B - 6

7 ST 8 - 9 10

2 패킹재질
Packing
materials

4 실린더 호칭경(내경)
Inside Diameter
of Cylinder

6 쿠션형식
Cushion
Type

7 실린더 행정
Cylinder
Stroke

8 포트위치
Port
Position

9 쿠션밸브위치
Cushion Valve Position

10 방진커버
Dust-Proofing Cover

★ KL치수 KL dimension

I-D	XX
Ø40, Ø50	1/3.5*Stroke
Ø63~Ø100	1/4*Stroke
Ø125~Ø160	1/5*Stroke

D The back side width

notation I-D	A	ØB	D	EE	ØCD	KK	FP	ØMM	LF	P	□E	W	L	LR	VC	XC	ØWW	MR	EW	X
Ø40	25	40	19	PT $\frac{1}{8}$	20 ^{H9}	M20X1.5	43	22	156	98	70	30	35	R25	11	221	50	R25	32 ^{-0.1 -0.4}	47
Ø50	30	46	24	PT $\frac{1}{8}$	25 ^{H9}	M24X1.5	48	28	172	106	85	30	45	R32	14	247	63	R30	36 ^{-0.1 -0.4}	50
Ø63	35	55	30	PT $\frac{1}{8}$	31.5 ^{H9}	M30X1.5	56	35	187	113	100	35	55	R40	15	277	71	R35	40 ^{-0.1 -0.4}	61
Ø80	45	65	41	PT $\frac{1}{4}$	40 ^{H9}	M39X1.5	69	45	218	129	125	35	70	R50	9	323	80	R40	50 ^{-0.1 -0.4}	55
Ø100	55	80	50	PT $\frac{1}{4}$	50 ^{H9}	M48X1.5	71	55	230	139	160	40	80	R63	14	350	100	R50	63 ^{-0.1 -0.4}	60
Ø125	75	95	65	PT1	63 ^{H9}	M64X2.0	83	70	267	159	190	45	105	R79	13	417	125	R63	80 ^{-0.1 -0.6}	69
Ø140	80	105	75	PT1	71 ^{H9}	M72X2.0	86	80	275	164	215	50	115	R89	14	440	125	R71	80 ^{-0.1 -0.6}	70
Ø160	90	120	85	PT1	80 ^{H9}	M80X2.0	94	90	304	186	240	55	125	R100	14	484	140	R80	100 ^{-0.1 -0.6}	70

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유압 실린더 IS 210H 시리즈 HYDRAULIC CYLINDER IS 210H SERIES

외형도 Outside Dimensions Drawings

CB

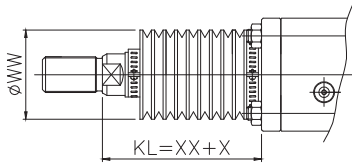
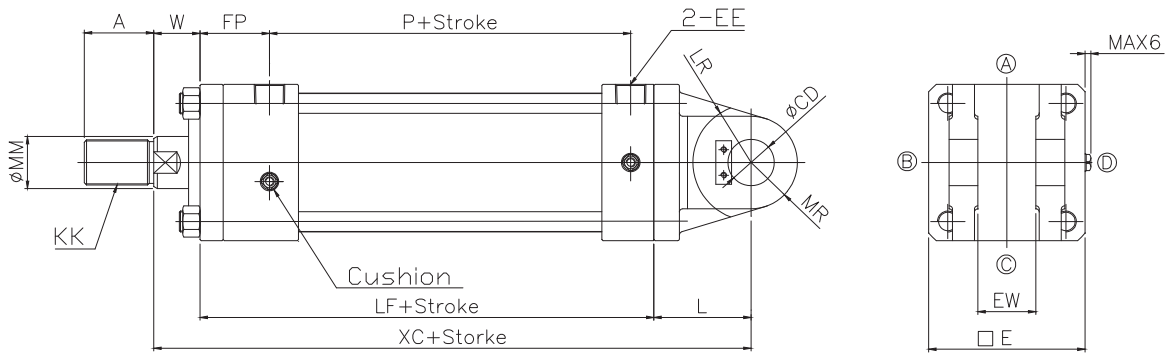
2산 클레비스형
Double Thread
CLEVIS Type

IS 210 H - [2]

CB [4] B - [6]

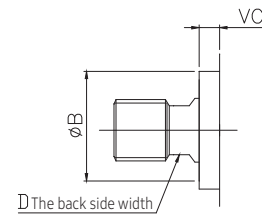
[7]ST [8] - [9] [10]

[2] 패킹재질 Packing materials [4] 실린더 호칭경(내경) Inside Diameter of Cylinder [6] 쿠션형식 Cushion Type [7] 실린더 행정 Cylinder Stroke [8] 포트위치 Port Position [9] 쿠션밸브위치 Cushion Valve Position [10] 방진커버 Dust-Proofing Cover



★ KL치수 KL dimension

I-D	XX
ø40, ø50	1/3.5*Stroke
ø63~ø100	1/4*Stroke
ø125~ø160	1/5*Stroke



notation I-D	notation																			
	A	øB	D	EE	øCD	KK	FP	øMM	LF	P	□E	W	L	LR	VC	XC	øWW	MR	EW	X
Ø40	25	40	19	PT $\frac{1}{8}$	20 $\frac{H9}{T8}$	M20X1.5	43	22	156	98	70	30	35	R25	11	221	50	R25	32 $^{+0.4}$ $^{+0.1}$	47
Ø50	30	46	24	PT $\frac{1}{8}$	25 $\frac{H9}{T8}$	M24X1.5	48	28	172	106	85	30	45	R32	14	247	63	R30	36 $^{+0.4}$ $^{+0.1}$	50
Ø63	35	55	30	PT $\frac{1}{4}$	31.5 $\frac{H9}{T8}$	M30X1.5	56	35	187	113	100	35	55	R40	15	277	71	R35	40 $^{+0.4}$ $^{+0.1}$	61
Ø80	45	65	41	PT $\frac{1}{4}$	40 $\frac{H9}{T8}$	M39X1.5	69	45	218	129	125	35	70	R50	9	323	80	R40	50 $^{+0.4}$ $^{+0.1}$	55
Ø100	55	80	50	PT $\frac{1}{4}$	50 $\frac{H9}{T8}$	M48X1.5	71	55	230	139	160	40	80	R63	14	350	100	R50	63 $^{+0.4}$ $^{+0.1}$	60
Ø125	75	95	65	PT1	63 $\frac{H9}{T8}$	M64X2.0	83	70	267	159	190	45	105	R79	13	417	125	R63	80 $^{+0.6}$ $^{+0.1}$	69
Ø140	80	105	75	PT1	71 $\frac{H9}{T8}$	M72X2.0	86	80	275	164	215	50	115	R89	14	440	125	R71	80 $^{+0.6}$ $^{+0.1}$	70
Ø160	90	120	85	PT1	80 $\frac{H9}{T8}$	M80X2.0	94	90	304	186	240	55	125	R100	14	484	140	R80	100 $^{+0.6}$ $^{+0.1}$	70

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외형도 Outside Dimensions Drawings

TA

로드측 트러니온형
Rod-side Trunnion Type

IS 210 H - [2] TA [4] B - [6] [7]ST [8] - [9] [10]

[2] 패킹재질
Packing materials

[4] 실린더 호칭경(내경)
Inside Diameter of Cylinder

[6] 쿠션형식
Cushion Type

[7] 실린더 행정
Cylinder Stroke

[8] 포트위치
Port Position

[9] 쿠션밸브위치
Cushion Valve Position

[10] 방진커버
Dust-Proofing Cover

★ KL치수 KL dimension

I-D	XX
ø40, ø50	1/3.5*Stroke
ø63~ø100	1/4*Stroke
ø125~ø160	1/5*Stroke

I-D	notation																			
	A	øB	D	EE	TC	KK	FP	øMM	LF	P	□E	W	F	H	VC	J	øWW	K	øTD	X
ø40	25	40	19	PT½	73 ⁰ _{-0.3}	M20X1.5	43	22	156	98	70	30	13	64	11	47	50	32	25 ^{ø9}	47
ø50	30	46	24	PT½	88 ⁰ _{-0.35}	M24X1.5	48	28	172	106	85	30	15	68	14	52	63	37	25 ^{ø9}	50
ø63	35	55	30	PT½	106 ⁰ _{-0.35}	M30X1.5	56	35	187	113	100	35	18	75	15	57	71	37	31.5 ^{ø9}	61
ø80	45	65	41	PT¾	128 ⁰ _{-0.4}	M39X1.5	69	45	218	129	125	35	24	85	9	67	80	42	40 ^{ø9}	55
ø100	55	80	50	PT¾	170 ⁰ _{-0.4}	M48X1.5	71	55	230	139	160	40	26	95	14	67	100	42	50 ^{ø9}	60
ø125	75	95	65	PT1	205 ⁰ _{-0.46}	M64X2.0	83	70	267	159	190	45	33	105	13	77	125	52	63 ^{ø9}	69
ø140	80	105	75	PT1	225 ⁰ _{-0.46}	M72X2.0	86	80	275	164	215	50	36	110	14	90	125	52	71 ^{ø9}	70
ø160	90	120	85	PT1	255 ⁰ _{-0.52}	M80X2.0	94	90	304	186	240	55	41	132	14	100	140	51	80 ^{ø9}	70

I-D	notation			
	TL	TR	UT	XG
ø40	25	2.5	123	66
ø50	25	2.5	138	71
ø63	31.5	2.5	169	81
ø80	40	3	208	92
ø100	50	3	270	99
ø125	63	4	331	116
ø140	71	4	367	131
ø160	80	4	415	146

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외형도 Outside Dimensions Drawings



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부스터 실린더
유압실린더 시리즈

TC

중간측 트러니온형
Middle side Trunnion Type

IS 210 H - [2] TC [4] B - [6] [7]ST [8] - [9] [10]

[2] 패킹재질
Packing materials

[4] 실린더 호칭경(내경)
Inside Diameter of Cylinder

[6] 쿠션형식
Cushion Type

[7] 실린더 행정
Cylinder Stroke

[8] 포트위치
Port Position

[9] 쿠션밸브위치
Cushion Valve Position

[10] 방진커버
Dust-Proofing Cover

I-D	XX
φ40, φ50	1/3.5*Stroke
φ63~φ100	1/4*Stroke
φ125~φ160	1/5*Stroke

I-D	notation																	
	A	φB	D	EE	BD	KK	FP	φMM	LF	P	□E	W	PH	VC	φWW	TM	φTD	X
Ø40	25	40	19	PT½	33	M20X1.5	43	22	156	98	70	30	107	11	50	73 ⁰ _{-0.3}	25 ^{e9}	47
Ø50	30	46	24	PT½	33	M24X1.5	48	28	172	106	85	30	114	14	63	88 ⁰ _{-0.35}	25 ^{e9}	50
Ø63	35	55	30	PT½	43	M30X1.5	56	35	187	113	100	35	132	15	71	106 ⁰ _{-0.35}	31.5 ^{e9}	61
Ø80	45	65	41	PT¾	53	M39X1.5	69	45	218	129	125	35	153	9	80	128 ⁰ _{-0.4}	40 ^{e9}	55
Ø100	55	80	50	PT¾	63	M48X1.5	71	55	230	139	160	40	165	14	100	170 ⁰ _{-0.4}	50 ^{e9}	60
Ø125	75	95	65	PT1	78	M64X2.0	83	70	267	159	190	45	219	13	125	205 ⁰ _{-0.46}	63 ^{e9}	69
Ø140	80	105	75	PT1	88	M72X2.0	86	80	275	164	215	50	232	14	125	225 ⁰ _{-0.46}	71 ^{e9}	70
Ø160	90	120	85	PT1	98	M80X2.0	94	90	304	186	240	55	253	14	140	255 ⁰ _{-0.52}	80 ^{e9}	70

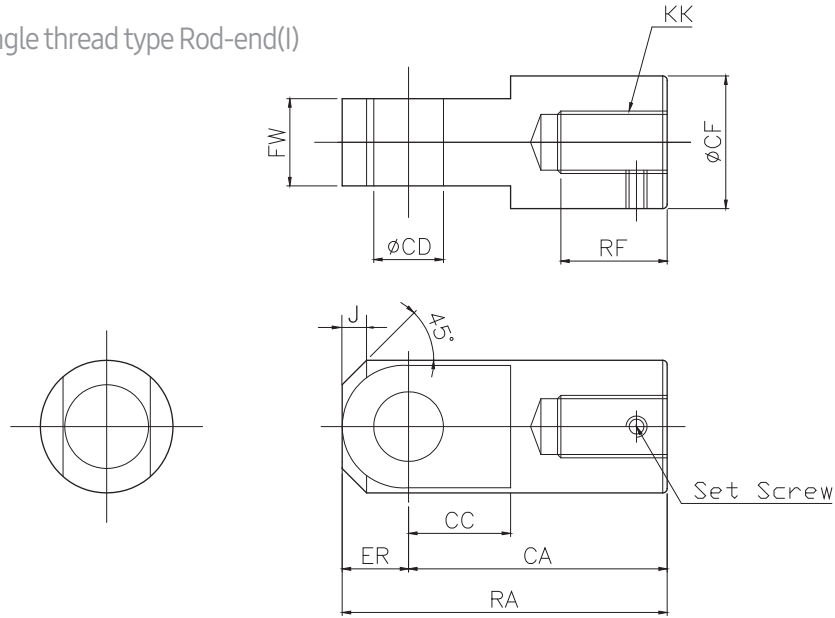
I-D	notation		
	TL	TR	UM
Ø40	25	2.5	123
Ø50	25	2.5	138
Ø63	31.5	2.5	169
Ø80	40	3	208
Ø100	50	3	270
Ø125	63	4	331
Ø140	71	4	367
Ø160	80	4	415

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유압 실린더 IS210H 시리즈 HYDRAULIC CYLINDER IS 210H SERIES

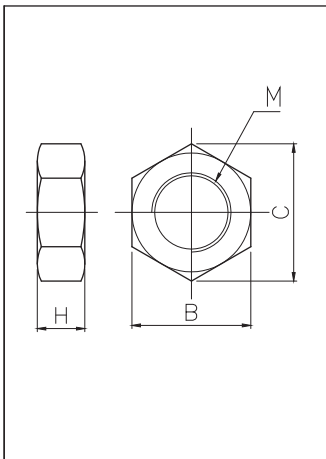
선단금구 Rod -end Parts

>1산 선단금구 Single thread type Rod-end(I)



notation I-D	CA	CC	øCD	øCF	ER	FW	J	KK	RA	RF
Ø40	70	28	20 H10	49	25	31.5 $^{-0.1}$ $^{-0.4}$	10	M20X1.5	95	32
Ø50	85	35	25 H10	55	30	35.5 $^{-0.1}$ $^{-0.4}$	12	M24X1.5	115	35
Ø63	115	43	31.5 H10	62	35	40 $^{-0.1}$ $^{-0.4}$	15	M30X1.5	150	47
Ø80	145	55	40 H10	79	40	50 $^{-0.1}$ $^{-0.4}$	20	M39X1.5	185	62
Ø100	180	65	50 H10	100	50	63 $^{-0.1}$ $^{-0.4}$	30	M48X1.5	230	77
Ø125	225	85	63 H10	130	65	80 $^{-0.1}$ $^{-0.6}$	40	M64X2.0	290	82
Ø140	240	90	71 H10	140	70	80 $^{-0.1}$ $^{-0.6}$	45	M72X2.0	310	97
Ø160	280	100	80 H10	160	80	100 $^{-0.1}$ $^{-0.6}$	50	M80X2.0	360	112

>로크 너트 Lock Nut



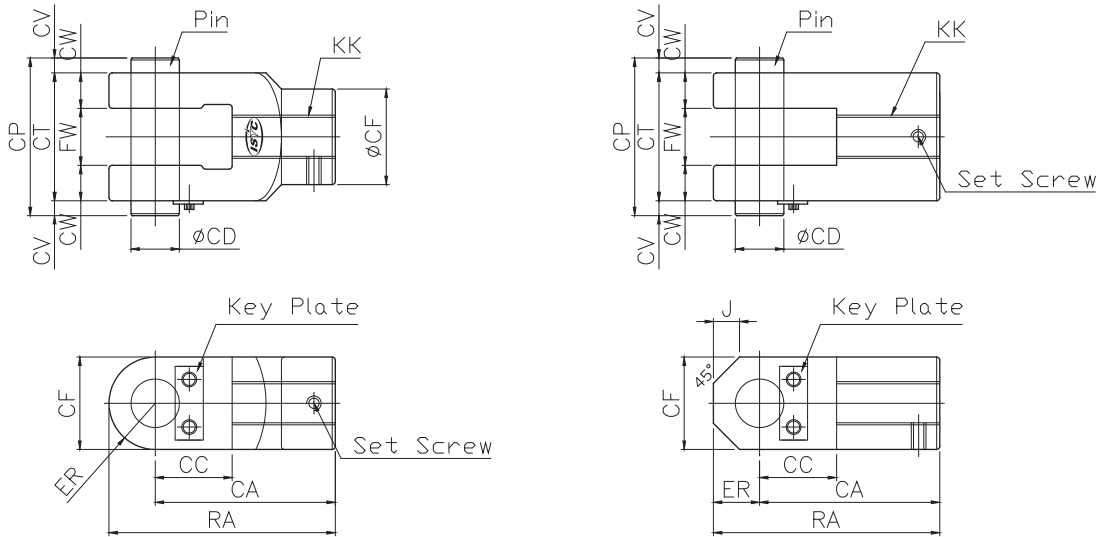
○ 로드 선단 나사에 로크 너트를 사용할 경우는 나사길이(H부 치수)를 길게 할 필요가 있습니다.
○ If Locknut is used in rod and screw, it is necessary to make the length of the screw(H) longer.

notation I-D	B	C	M	H
Ø40	27	31.2	M20*1.5	12
Ø50	32	37	M24*1.5	14
Ø63	41	47.3	M30*1.5	17
Ø80	55	63.5	M39*1.5	20
Ø100	70	80.8	M48*1.5	26
Ø125	90	104	M64*2.0	35
Ø140	100	115	M72*2.0	38
Ø160	110	127	M80*2.0	43

유압 실린더 IS210H 시리즈 HYDRAULIC CYLINDER IS 210H SERIES

선단금구 Rod-end Parts

>2산 선단금구 Double thread type Rod-end(Y)



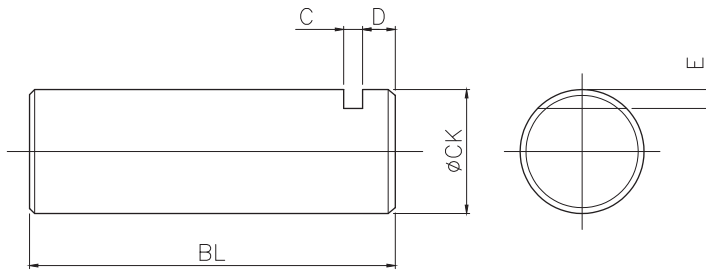
notation ID	CA	CC	ϕCD	ϕCF	CP	FW	CT	KK	CW	CV	ER	RA	J
Ø40	70	32	20 $\frac{H10}{H8}$	40	76.5	31.5 $\frac{+0.1}{+0.4}$	63.5	M20X1.5	16	8	R20	90	10
Ø50	85	45	25 $\frac{H10}{H8}$	50	84.5	35.5 $\frac{+0.1}{+0.4}$	71.5	M24X1.5	18	8	25	115	12
Ø63	115	50	31.5 $\frac{H10}{H8}$	60	93	40 $\frac{+0.1}{+0.4}$	80	M30X1.5	20	8	R30	150	15
Ø80	145	60	40 $\frac{H10}{H8}$	80	117	50 $\frac{+0.1}{+0.4}$	100	M39X1.5	25	12	R40	185	20
Ø100	180	70	50 $\frac{H10}{H8}$	100	143	63 $\frac{+0.1}{+0.4}$	126	M48X1.5	31.5	12	50	230	30
Ø125	225	90	63 $\frac{H10}{H8}$	120	183	80 $\frac{+0.1}{+0.6}$	160	M64X2.0	40	18	65	290	40
Ø140	240	100	71 $\frac{H10}{H8}$	140	183	80 $\frac{+0.1}{+0.6}$	160	M72X2.0	40	18	70	310	45
Ø160	280	110	80 $\frac{H10}{H8}$	160	210	100 $\frac{+0.1}{+0.6}$	180	M80X2.0	40	24	80	360	50

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유압 실린더 IS210H 시리즈 HYDRAULIC CYLINDER IS 210H SERIES
선단금구 Rod -end Parts

단위 unit:mm

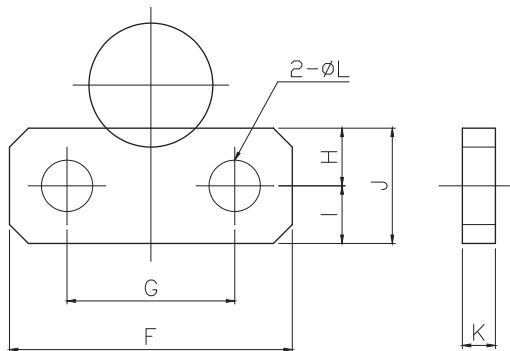
> 핀 pin



notation I-D	BL	C	ØCK	D	E
Ø40	76.5	5	20 _{f8}	3	3
Ø50	84.5	5	25 _{f8}	3	3.5
Ø63	93	5	31.5 _{f8}	3	4.75
Ø80	117	7	40 _{f8}	5	5
Ø100	143	7	50 _{f8}	5	5

단위 unit:mm

> 키 key



notation I-D	CA	CC	H		I		J		K	ØL		J	
			Y type	CB type	Y type	CB type	Y type	CB type		Y type	CB type		
Ø40	32	18	8	8	7	7	15	15	4.5	7	7	M6	M6
Ø50	32	18	8	8	7	7	15	15	4.5	7	7	M6	M6
Ø63	32	18	8	8	7	7	15	15	4.5	7	7	M6	M6
Ø80	50	30	10	12	8	10	18	22	6	10	12	M8	M10
Ø100	65	40	12	12	10	10	22	22	6	12	12	M10	M10