

## 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

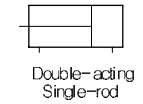


## 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

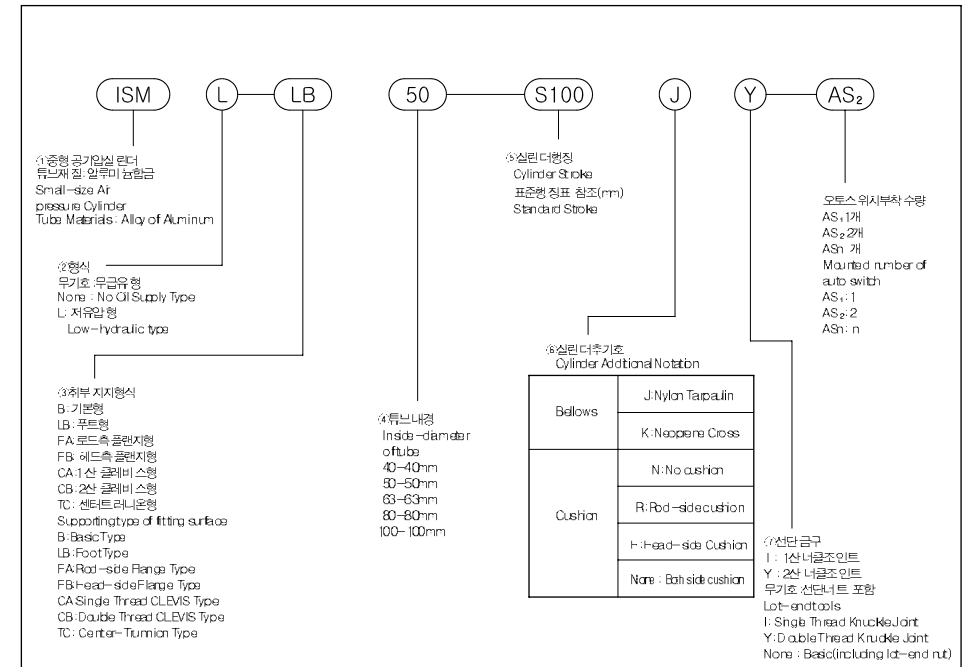
일반형: Ø40, Ø50, Ø63, Ø80, Ø100 General Type : Ø40, Ø50, Ø63, Ø80, Ø100



### 표시기호 Notation



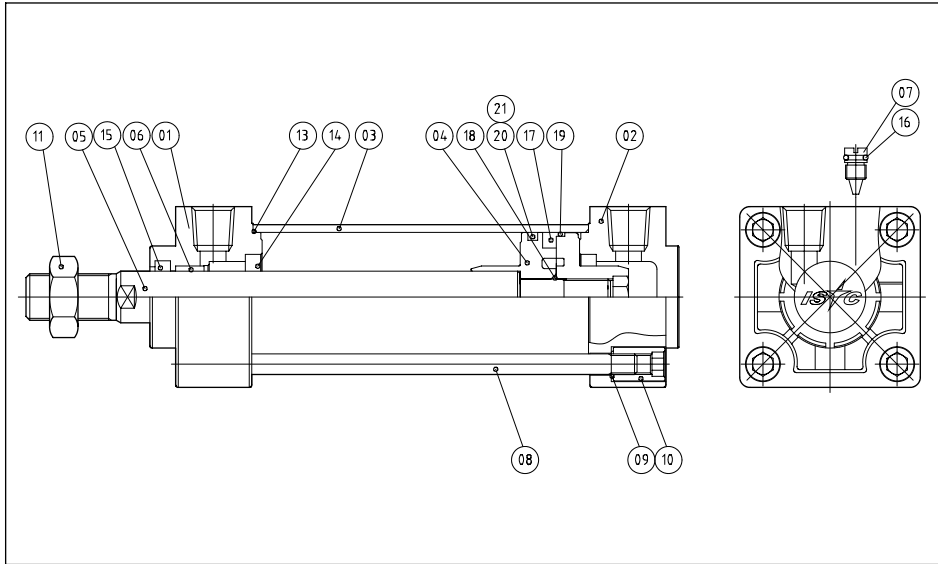
### 형식표시방법 Method for model Indication



# 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

내부구조도 Inside Structure Drawings

## 내부구조도 Inside Structure Drawings



## 부품리스트 Parts List

No	Parts Name	Materials	Remarks
1	ROD COVER	ADC12	
2	HEAD COVER	ADC12	
3	TUBE	A6063	
4	PISTON	DO1C	
5	ROD	S45C	
6	OILLESS	CU+OIL	
7	CUSHION NIDDLE	BSBM	
8	TIE ROD	S10C	
9	SPRING WASHER	SCM4	
10	TIE ROD NUT	S20C	
11	ROD NUT	SS41	

## 무급유형 Oilless Type

■ Packing except 19 and 20 is same with Oil Supply Type.  
19, 20 이외의 패킹은 급유형과 동일

19	WEARING	AC	SBW 40	SBW 50	SBW 63	SBW 80	SBW 100
20	PISTON PACKING	NBR	OPA 40	OPA 50	OPA 63	OPA 80	OPA 100

MID CYLINDER ISM SERIES

# 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

형식 및 사양 기타 Model & Specification and Others

## 사양 Specification

형식 Type	무급유형 No Oil Supply	저유압형 Low-Hydraulic Type
사용유체 Working Oil	공기 Air	유압유 Hydraulic Working Oil
보통 내압력 Bearing pressure	15kgf/cm <sup>2</sup>	
최고내압력 Max. set pressure	9.9kgf/cm <sup>2</sup>	
최저사용압력 Min. set pressure	0.5kgf/cm <sup>2</sup>	1.0kgf/cm <sup>2</sup>
주위온도 및 사용유체온도 Ambient & Working Oil temperature	5~60°C	
사용최고속도 Speed of Working Piston	500~700mm/sec	0.5~300mm/sec
쿠션 Cushion	있음 Cushion	없음 None
나사공차 Screw Tolerance	KS2급 2nd KS Level	
행정길이의 허용차 Allowance of Stroke Length	~250 *1/2	251~800 *1/4
취부 지지 형식 Supporting Type of Fitting Surface	Basic, Foot, Rod-side Flange, Head-side Flange, Single Thread CLB/IS Type, Double Thread CLB/IS Center-Turnon Type	

## 형식 Type

표시기호 Notation	형식 Type	작동방식 Working Type	피스톤 패킹 Piston packing	비고 Remarks
ISM	No Oil Supply	Double-acting Type	Special packing	Basic Built-in type of Magnet
ISM L	Low Hydraulic Type	Double-acting Type	Special packing	

## 표준행정표표 Standard Stroke Table

F-D(mm)	Standard Stroke
φ40	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500
φ50	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600
φ63	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600
φ80	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800
φ100	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800

## 벨로우즈 재질 사용 온도

Working Temperature of Bellows Materials

표시기호 Notation	벨로우즈 재질 Bellows Materials	최고주위온도 Max. Ambient Temperature
J	Nylon Tauplin	60°C
K	Neoprene Cross	110°C

## 부속품 Parts

취부지지형식 Supporting Type of Fitting Surface	Basic Type	Foot Type	Rod-side Flange Type	Head-side Flange Type	Single Thread CLB/IS Type	Double Thread CLB/IS Type	Center-side Turnon Type
기본부속품 Basic Mounted-parts	●	●	●	●	●	●	●
로드선단너트 Rod-end Nut	●	●	●	●	●	●	●
크레바스용 핀 Pin for CLEVIS	-	-	-	-	-	●	-
1선너클조인트 Single Knuckle Joint	●	●	●	●	●	●	●
2선너클조인트(핀포함) Double Knuckle Joint (including Pin)	●	●	●	●	●	●	●
벨로우즈 Bellows	●	●	●	●	●	●	●

## 지지 금구 부품 품번 Supporting Parts No.

Lot-end tools F-D(mm)	40	50	63	80	100
Foot Type	ISM-LB40	ISM-LB50	ISM-LB63	ISM-LB80	ISM-LB100
Flange Type	ISM-F40	ISM-F50	ISM-F63	ISM-F80	ISM-F100
Single Thread CLB/IS Type (Including Pin)	ISM-CA40	ISM-CA50	ISM-CA63	ISM-CA80	ISM-CA100
Double Thread CLB/IS Type (Including Pin)	ISM-CB40	ISM-CB50	ISM-CB63	ISM-CB80	ISM-CB100

\*부품 금구 주문시 1대분의 경우 2개를 주문할 것  
Should order two Foot for one machine

## 선단 금구 품번 Lot-end No.

Lot-end tools F-D(mm)	40	50, 63	80	100
1선너클조인트 Single Knuckle Joint	ISM-40 I	ISM-50, 63 I	ISM-80 I	ISM-100 I
2선너클조인트(핀포함) Double Knuckle Joint (including Pin)	ISM-40 Y	ISM-50, 63 Y	ISM-80 Y	ISM-100 Y

## 패킹리스트 Packing List

No	Parts Name	Materials	F-D(mm)				
			φ40	φ50	φ63	φ80	φ100

## 급유형 Oil Supply Type

### PISTON PACKING

No	TUBE O-RING	N	φ40*W1.5	φ50*W1.5	φ63*W1.5	φ80*W1.5	φ100*W1.5
14	CUSHION PACKING	B	PCS 20	PCS 24	PCS24	PCS30	PCS35
15	ROD PACKING	B	DRP16	DRP20	DRP20	DRP25	DRP30
16	NIDDLE O-RING	R	S6	S6	S6	S6	S9
17	MAGNET		φ40	φ50	φ63	φ80	φ100
18	ROD O-RING		S10	S14	S14	S16	S20
19	WEARING	AC	SBW 40	SBW 50	SBW 63	SBW 80	SBW 100

## 저유압형 Low Hydraulic Type

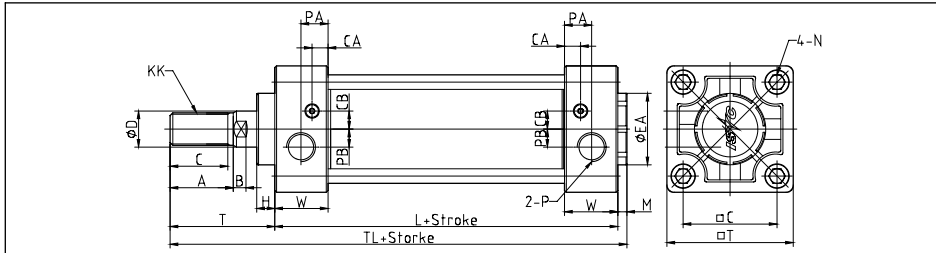
■ Packing except 19 and 21 is same with Oil Supply Type.  
19, 21 이외의 패킹은 급유형과 동일

19	WEARING	AC	SBW 40	SBW 50	SBW 63	SBW 80	SBW 100
21	PISTON PACKING	NBR	HSD 40	HSD 50	HSD 63	HSD 80	HSD 100

# 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

일반형(B, LB) General Type(B, LB)

기본형(B) Basic Type(B) ■ Oil Supply Type ISM-B, Oilless Type ISM N-B, Low Hydraulic Type ISM L-B

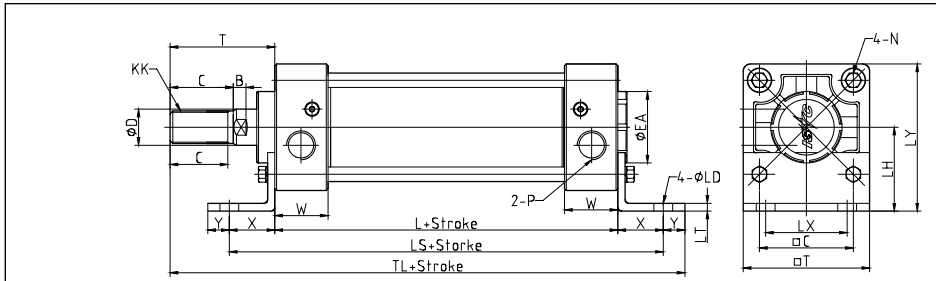


단위 unit:mm

I-D(mm)	Stroke Range	C	A	B	CA	PA	PB	L	N	P(PT)	TL
40	~500	27	30	8	44	61	16	31.5	10	M14XP1.5	84
50	~600	32	35	10	52	70	20	39.5	10	M18XP1.5	90
63	~600	32	35	10	64	83	20	39.5	10	M18XP1.5	97.5
80	~800	37	40	12	78	102	25	51.5	14	M22XP1.5	115.5
100	~800	37	40	12	92	116	30	51.5	14	M26XP1.5	125.5

I-D(mm)	W	T	TL	M	CA	CB
40	26	51	140.5	5.5	6	8
50	27.5	58	153.5	5.5	7.5	10
63	29.5	58	161	5.5	8	10
80	36	71	192	5.5	10	12
100	39	72	203	5.5	10	12

푸트형(LB) Foot Type ■ Oil Supply Type ISM-LB, Oilless Type ISM N-LB, Low Hydraulic Type ISM L-LB



단위 unit:mm

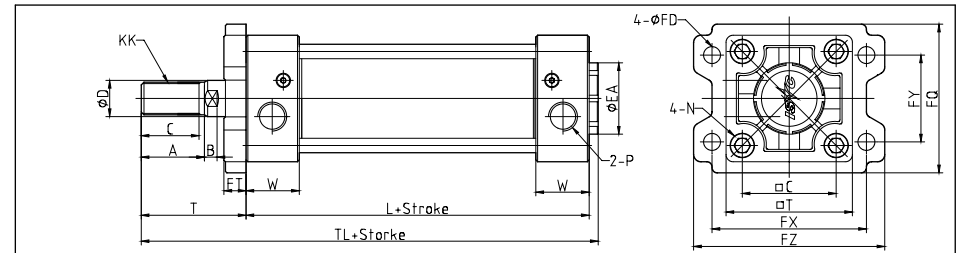
I-D(mm)	Stroke Range	C	A	B	CA	PA	PB	L	N	P(PT)	TL
40	~500	27	30	8	44	61	16	31.5	10	M14XP1.5	84
50	~600	32	35	10	52	70	20	39.5	10	M18XP1.5	90
63	~600	32	35	10	64	83	20	39.5	10	M18XP1.5	97.5
80	~800	37	40	12	78	102	25	51.5	14	M22XP1.5	115.5
100	~800	37	40	12	92	116	30	51.5	14	M26XP1.5	125.5

I-D(mm)	W	ØLD	LH	LS	LT	LX	LY	X	Y
40	26	9.0	40	138	3	42	70	27	13
50	27.5	9.0	45	144	3	50	80	27	13
63	29.5	11.5	50	165.5	3	59	93	34	16
80	36	13.5	65	203.5	5	76	116	44	16
100	39	13.5	75	211.5	5	92	133	43	17

# 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

일반형(FA, FB) General Type(FA, FB)

로드측 플렌지형(FA) Rod-side Flange Type(FA) ■ Oil Supply Type ISM-FA, Oilless Type ISM N-FA, Low Hydraulic Type ISM L-FA

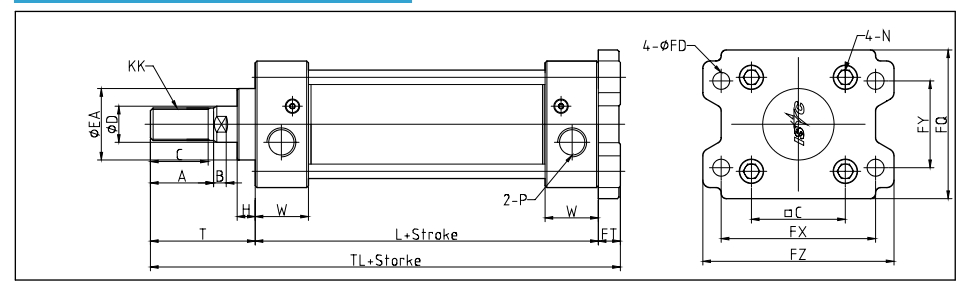


단위 unit:mm

I-D(mm)	Stroke Range	C	A	B	CA	PA	PB	L	N	P(PT)	TL
40	~800	27	30	8	44	61	16	31.5	10	M14XP1.5	84
50	~1000	32	35	10	52	70	20	39.5	10	M18XP1.5	90
63	~1000	32	35	10	64	83	20	39.5	10	M18XP1.5	97.5
80	~1000	37	40	12	78	102	25	51.5	14	M22XP1.5	115.5
100	~1000	37	40	12	92	116	30	51.5	14	M26XP1.5	125.5

I-D(mm)	W	ØFD	FQ	FT	FX	FY	FZ
40	26	9	71	12	80	42	100
50	27.5	9	81	12	90	50	110
63	29.5	11.5	101	15	105	59	130
80	36	13.5	119	18	130	76	160
100	39	13.5	133	18	150	92	180

헤드측 플렌지형(FA) Head-side Flange Type(FA) ■ Oil Supply Type ISM-FB, Oilless Type ISM N-FB, Low Hydraulic Type ISM L-FB



단위 unit:mm

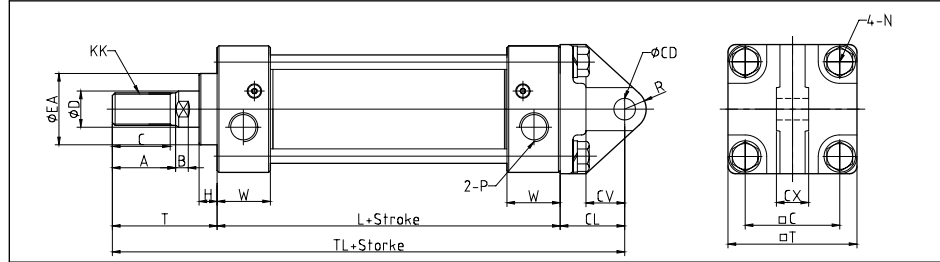
I-D(mm)	Stroke Range	C	A	B	CA	PA	PB	L	N	P(PT)	TL
40	~500	27	30	8	44	61	16	31.5	10	M14XP1.5	84
50	~600	32	35	10	52	70	20	39.5	10	M18XP1.5	90
63	~600	32	35	10	64	83	20	39.5	10	M18XP1.5	97.5
80	~800	37	40	12	78	102	25	51.5	14	M22XP1.5	115.5
100	~800	37	40	12	92	116	30	51.5	14	M26XP1.5	125.5

I-D(mm)	W	ØFD	FQ	FT	FV	FX	FY	FZ
40	26	9	71	12	60	80	42	100
50	27.5	9	81	12	70	90	50	110
63	29.5	11.5	101	15	86	105	59	130
80	36	13.5	119	18	102	130	76	160
100	39	13.5	133	18	116	150	92	180

# 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

일반형(CA, CB) General Type(CA, CB)

1산 클레비스형(CA) Single-Thread CLEVIS Type(CA) ■ Oil Supply Type ISM-CA, Oilless Type ISM N-CA, Low Hydraulic Type ISM L-CA

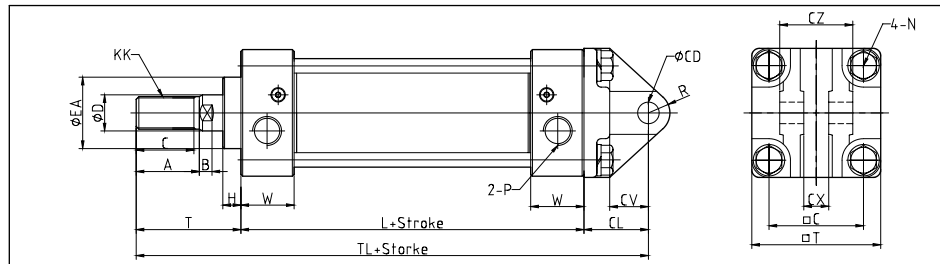


단위 unit:mm

I-D(mm)	Stroke Range	C	A	B	C□	C△	ØD	ØEA	H	KK	L	N	P(PT)	T	TL
40	~500	27	30	8	44	61	16	31.5	10	M14XP1.5	84	M8XP1.25	1/4	51	165
50	~600	32	35	10	52	70	20	39.5	10	M18XP1.5	90	M8XP1.25	3/8	58	183
63	~600	32	35	10	64	83	20	39.5	10	M18XP1.5	97.5	M8XP1.25	3/8	58	195.5
80	~800	37	40	12	78	102	25	51.5	14	M22XP1.5	115.5	M12XP1.75	1/2	71	234.5
100	~800	37	40	12	92	116	30	51.5	14	M26XP1.5	125.5	M12XP1.75	1/2	72	255.5

I-D(mm)	W	ØCD	CL	CV	CX	R
40	26	10 <sup>+0.055</sup> <sub>0</sub>	30	18	15 <sup>-0.1</sup> <sub>-0.3</sub>	10
50	27.5	12 <sup>+0.070</sup> <sub>0</sub>	35	23	18 <sup>-0.1</sup> <sub>-0.3</sub>	12
63	29.5	16 <sup>+0.070</sup> <sub>0</sub>	40	27	25 <sup>-0.1</sup> <sub>-0.3</sub>	16
80	36	20 <sup>+0.085</sup> <sub>0</sub>	48	34	31.5 <sup>-0.1</sup> <sub>-0.3</sub>	20
100	39	25 <sup>+0.085</sup> <sub>0</sub>	58	43	35.5 <sup>-0.1</sup> <sub>-0.3</sub>	25

2산 클레비스형(CB) Double-Thread CLEVIS Type(CB) ■ Oil Supply Type ISM-CB, Oilless Type ISM N-CB, Low Hydraulic Type ISM L-CB



단위 unit:mm

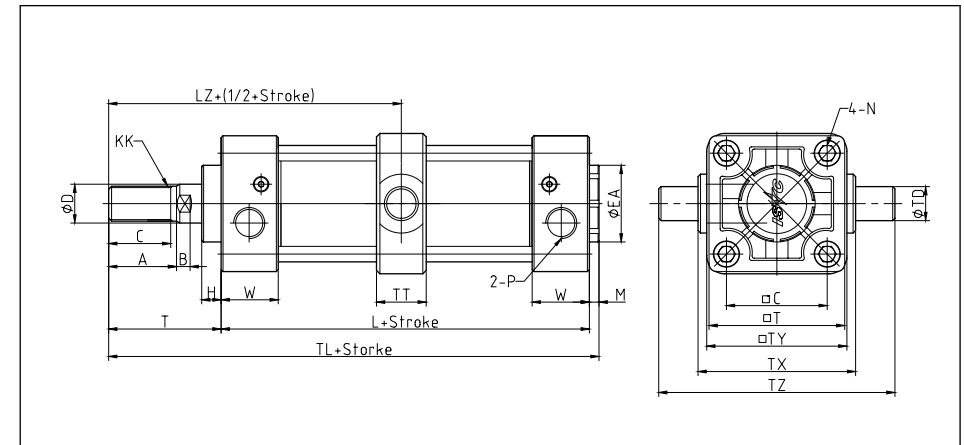
I-D(mm)	Stroke Range	C	A	B	C□	C△	ØD	ØEA	H	KK	L	N	P(PT)	T	TL
40	~500	27	30	8	44	61	16	31.5	10	M14XP1.5	84	M8XP1.25	1/4	51	165
50	~600	32	35	10	52	70	20	39.5	10	M18XP1.5	90	M8XP1.25	3/8	58	183
63	~600	32	35	10	64	83	20	39.5	10	M18XP1.5	97.5	M8XP1.25	3/8	58	196
80	~800	37	40	12	78	102	25	51.5	14	M22XP1.5	115.5	M12XP1.75	1/2	71	235
100	~800	37	40	12	92	116	30	51.5	14	M26XP1.5	125.5	M12XP1.75	1/2	72	256

I-D(mm)	W	ØCD	CL	CV	CX	CZ	R
40	26	10 <sup>+0.055</sup> <sub>0</sub>	30	18	15 <sup>-0.1</sup> <sub>-0.3</sub>	29.5	10
50	27.5	12 <sup>+0.070</sup> <sub>0</sub>	35	23	18 <sup>-0.1</sup> <sub>-0.3</sub>	38	12
63	29.5	16 <sup>+0.070</sup> <sub>0</sub>	40	27	25 <sup>-0.1</sup> <sub>-0.3</sub>	49	16
80	36	20 <sup>+0.085</sup> <sub>0</sub>	48	34	31.5 <sup>-0.1</sup> <sub>-0.3</sub>	61	20
100	39	25 <sup>+0.085</sup> <sub>0</sub>	58	43	35.5 <sup>-0.1</sup> <sub>-0.3</sub>	64	25

# 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

일반형(TC) General Type(TC)

센터트리언형(TC) Center Trinion Type(TC) ■ Oil Supply Type ISM-TC, Oilless Type ISM N-TC, Low Hydraulic Type ISM L-TC



단위 unit:mm

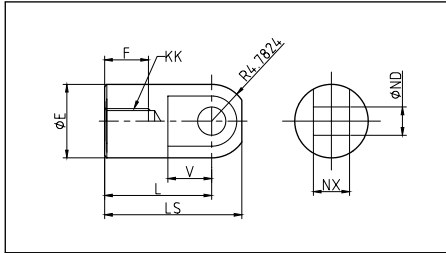
I-D(mm)	Stroke Range	C	A	B	C□	C△	ØD	ØEA	H	KK	L	N	P(PT)	T	TL
40	~500	27	30	8	44	61	16	31.5	10	M14XP1.5	84	M8XP1.25	1/4	51	140.5
50	~600	32	35	10	52	70	20	39.5	10	M18XP1.5	90	M8XP1.25	3/8	58	153.5
63	~600	32	35	10	64	83	20	39.5	10	M18XP1.5	97.5	M8XP1.25	3/8	58	161
80	~800	37	40	12	78	102	25	51.5	14	M22XP1.5	115.5	M12XP1.75	1/2	71	192
100	~800	37	40	12	92	116	30	51.5	14	M26XP1.5	125.5	M12XP1.75	1/2	72	203

I-D(mm)	W	ØTD	TT	TX	TY	TZ	LZ	M
40	26	15 <sup>-0.040</sup> <sub>-0.075</sub>	22	85	62	117	93	5.5
50	27.5	15 <sup>-0.040</sup> <sub>-0.075</sub>	22	95	74	127	103	5.5
63	29.5	18 <sup>-0.040</sup> <sub>-0.075</sub>	28	110	90	148	107	5.5
80	36	25 <sup>-0.040</sup> <sub>-0.075</sub>	34	140	110	192	129	5.5
100	39	25 <sup>-0.040</sup> <sub>-0.075</sub>	40	162	130	214	135	5.5

# 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

부속 금구 Parts-end

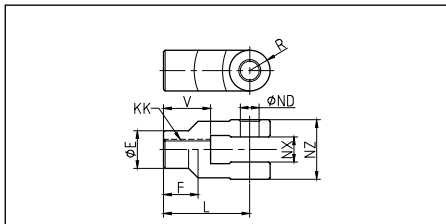
## 1산 너클 조인트 Single-Thread Knuckle Joint



단위 unit:mm

I-D(mm)	F	ØE	L	KK	R	V	ØND	LS	NX
40	22	24	55	M14×1.5	15.5	20	12 <sup>+0.07</sup>	69	16 <sup>+0.1</sup>
50,63	27	28	60	M18×1.5	15.5	20	12 <sup>+0.07</sup>	74	16 <sup>+0.1</sup>
80	37	36	71	M22×1.5	22.5	26	18 <sup>+0.07</sup>	91	28 <sup>+0.1</sup>
100	37	40	83	M26×1.5	24.5	28	20 <sup>+0.08</sup>	105	30 <sup>+0.1</sup>

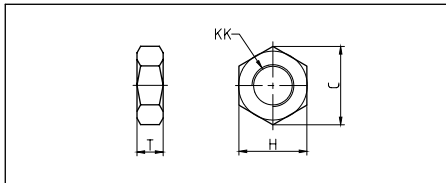
## 2산 너클조인트 Double-Thread Knuckle Joint



단위 unit:mm

I-D(mm)	F	ØE	L	KK	R	V	ØND	NX	NZ
40	22	24	55	M14×1.5	13	30	12 <sup>+0.07</sup>	16 <sup>+0.1</sup>	38
50,63	27	28	60	M18×1.5	15	33	12 <sup>+0.07</sup>	16 <sup>+0.1</sup>	38
80	37	36	71	M22×1.5	19	43	18 <sup>+0.07</sup>	28 <sup>+0.1</sup>	55
100	37	40	83	M26×1.5	21	45	20 <sup>+0.08</sup>	30 <sup>+0.1</sup>	61

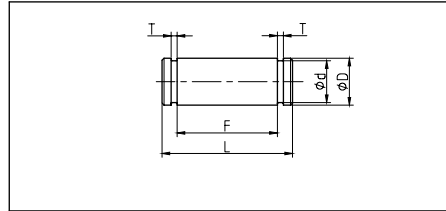
## 로드너트 Rod nut



단위 unit:mm

I-D(mm)	KK	T	H	C
40	M14×1.5	8	22	25.4
50,63	M18×1.5	11	27	31.4
80	M22×1.5	13	32	37
100	M26×1.5	16	41	47.3

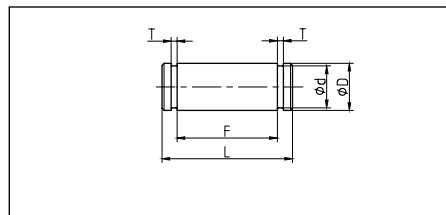
## 크레비스용 핀 Pin for CLEVIS



단위 unit:mm

I-D(mm)	ØD	Ød	L	F	T
40	10 <sup>+0.04</sup>	9	35.8	29.7	1.15
50	12 <sup>+0.04</sup>	11	44.3	38.2	1.15
63	16 <sup>+0.05</sup>	14.5	55.3	49.2	1.15
80	20 <sup>+0.06</sup>	18.5	68.2	61.2	1.35
100	25 <sup>+0.07</sup>	23	71.2	64.2	1.35

## 너클 조인트 핀 Knuckle Joint Pin



단위 unit:mm

I-D(mm)	ØD	Ød	L	F	T
40,50,63	12 <sup>+0.04</sup>	11	44.3	38.2	1.15
80	18 <sup>+0.05</sup>	16.5	62.2	55.2	1.35
100	20 <sup>+0.06</sup>	18.5	68.2	61.2	1.35

# 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

양로드형 Double-rod Type

## 형식 표시 방법 Indication of Model

ISM W 형식Type 부착형식 mounting type 튜브내경 I-D(mm) X 행정 / Stroke 선단금구 / Lot-end

\* ISM 시리즈 일반형 형식 표기 방법 참조  
Refer to General type of ISM SERIES

## 표준행정표 Standard Stroke Table

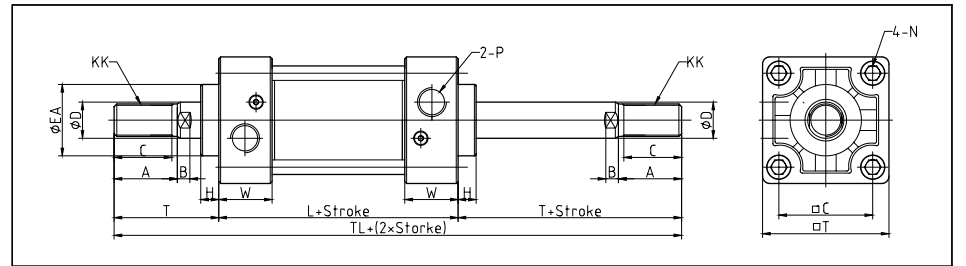
I-D(mm)	표준행정 Standard Stroke
40	25,50,75,100,125,150,175,200,250,300,350,400,450,500
50	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600
63	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600
80	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600,700,800
100	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600,700,800

## 사양 Specification

형식 Type	무급유형 Oilless type	저유압형 Low Hydraulic Type
사용유체 Fluid	공기 Air	유압유 Hydraulic Working Oil
보통내압 Bearing pressure	15kgf/cm <sup>2</sup>	
최고사용압 Max. Working Pressure	9.9kgf/cm <sup>2</sup>	
최저사용압 Min. Working Pressure	0.8kgf/cm <sup>2</sup>	1.6kgf/cm <sup>2</sup>
사용시 최대속도 Working Piston Speed	50~500mm/sec	0.5~300mm/sec
작동온도 범위 Operating Temperature	5~60°C	
쿠션 Cushion	양측 Both-sides	없음 None
나사못차 Screw Tolerance	KS2급 2nd KS Level	
형질 허용치 Allowance of Stroke Length	~250 <sup>+1°</sup>	251~800 <sup>+1°</sup>
취부 지지형식 Supporting Type of Fitting Surfaces	Basic Type, Foot Type, Flange Type, Center Trunnion Type	

## 외형 치수도/기본형 Outside Dimension Drawings/Basic Type

■ Oil Supply Type ISM W-B, Oilless Type ISM WN-B, Low Hydraulic Type ISM WL-B



단위 unit:mm

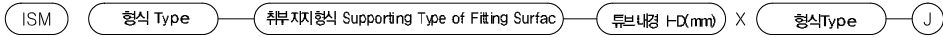
I-D(mm)	Stroke Range	C	A	B	ØD	H	KK	L	N	P(PT)	ØC	ØT	W	T
40	~500	27	30	8	16	10	M14XP1.5	84	M8XP1.25	1/4	44	61	26	51
50	~600	32	35	10	20	10	M18XP1.5	90	M8XP1.25	3/8	52	70	27.5	58
63	~600	32	35	10	20	10	M18XP1.5	97.5	M8XP1.25	3/8	64	83	29.5	58
80	~800	37	40	12	25	14	M22XP1.5	115.5	M12XP1.75	1/2	78	102	36	71
100	~800	37	40	12	30	14	M26XP1.5	125.5	M12XP1.75	1/2	92	116	39	72

I-D(mm)	TL	ØEA			
40	186	31.5			
50	206	39.5			
63	213.5	39.5			
80	257.5	51.5			
100	269.5	51.5			

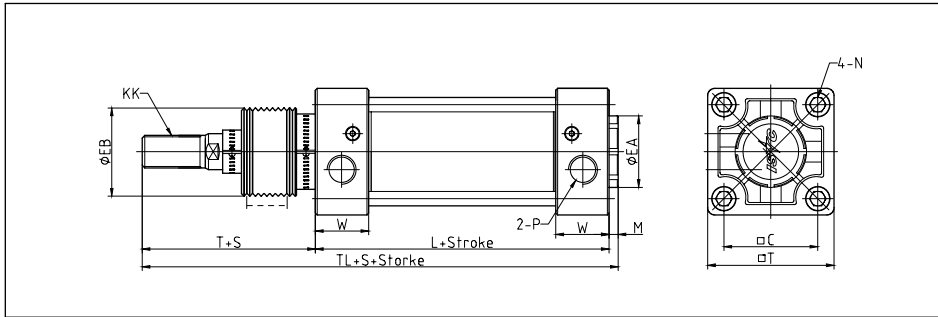
# 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

벨로우즈 부착형 Bellows-Mounted Type

## 형식 표시 방법 Indication of Model



J: 나일론 타폴린 (Nylon Tapulin)  
 J: 네오프렌크로스 (NeoPrenaCross)



단위 Unit:mm

I-D(mm)	Stroke Range	□C	□T	□EA	KK	L	N	P(PT)	TL	M	W	□EB	S	T
40	20-500	44	61	31.5	M14XP1.5	84	M8XP1.25	1/4	148.5	5.5	26	43		59
50	20-600	52	70	39.5	M18XP1.5	90	M8XP1.25	3/8	161.5	5.5	27.5	52		66
63	20-600	64	83	39.5	M18XP1.5	97.5	M8XP1.25	3/8	169	5.5	29.5	52		66
80	20-800	78	102	51.5	M22XP1.5	115.5	M12XP1.75	1/2	201	5.5	36	65		80
100	20-800	92	116	51.5	M26XP1.5	125.5	M12XP1.75	1/2	212	5.5	39	65		81

\*기타 표기하지 않은 치수는 ISM 일반형 과 동일  
 \*The other numbers is same as general ISM series.

# 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

다단 행정 양로드형 Multiple-end Stroke Double-rod Type

## 형식 표시 방법 Method for model Indication



\*SM시리즈 일반형 형식 표기 방법 참조  
 Refer to General type of ISM SERIES

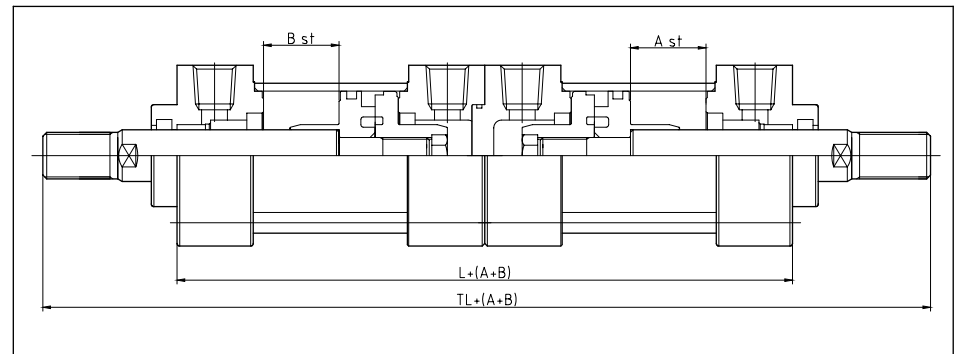
## 표시호 Notation

- 기능 Function
  - (A) 포트에 공기압을 공급하면 A 행정은 후진한다.  
 When supply Air pressure to (A) Port, A Stroke do backward motion.
  - (B) 포트에 공기압을 공급하면 A 행정이 작동한다.  
 When supply Air pressure to (B) Port, A Stroke works.
  - (C) 포트에 공기압을 공급하면 B 행정이 작동한다.  
 When supply Air pressure to (C) Port, B Stroke works.
  - (D) 포트에 공기압을 공급하면 A B 행정이 작동한다.  
 When supply Air pressure to (D) Port, A B Stroke works.

## 사양 Specification

형식 Type	무급유형 Oilless Type
사용유체 Fluid	공기 Air
보정내압력 Bearing pressure	15kgf/cm <sup>2</sup>
최고사용압력 Max Working Pressure	9.9kgf/cm <sup>2</sup>
최저사용압력 Min. Working Pressure	0.5kgf/cm <sup>2</sup>
사용피스톤 속도 Working Piston Speed	50~500mm/sec
작동방식 Working Type	복동 Double-acting
쿠션 Cushion	쿠션 Cushion
부착형식 Mounted Type	Basic Type, Foot Type of shaft direction, Flange Type
적용튜브 직경 Applied inside diameter of tube	□40, □50, □63, □80, □100

## 구조 외형 치수도 / 기본형 Outside Structure Dimension Drawings/Basic Type



단위 Unit:mm

I-D(mm)	L	TL
40	168	270
50	180	296
63	195	311
80	231	373
100	251	395

\*기타 표기하지 않은 치수는 ISM 일반형 과 동일  
 \*The other numbers is same as general ISM series.

# 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

다단 행정 편로드형 Multiple-rod Stroke Single-rod Type

## 형식 표시 방법 Indication of Model



※ISM 시리즈 일반형 형식 표시 방법 참조 Refer to General type of ISM SERIES.  
 ※두개의 실린더를 직렬로 연결, 일체화하여 실린더 행정을 양쪽과 더불어 2배로 제어 가능하고, 2개의 실린더 출력을 얻을 수 있다.  
 Connect two cylinders in series, make onebody, then, can control cylinder stroke by two steps with round trip and get twice outputs.

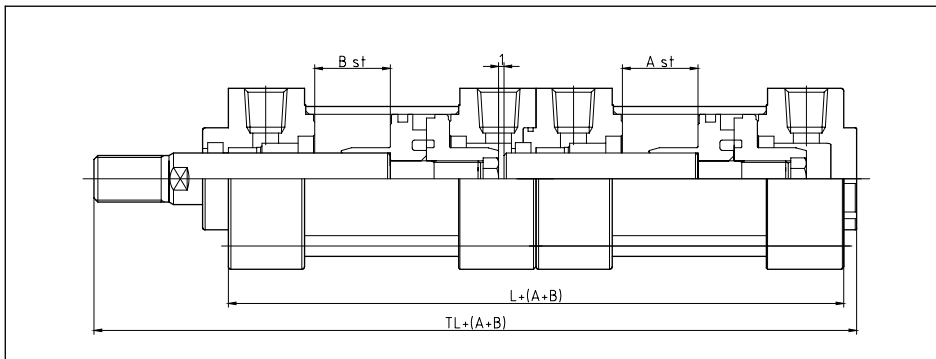
## 표시 기호 Notation

- 기능 Function
  - ① B 포트에 공기압을 공급하면 AB행정은 후진한다.  
When supply Air pressure to B Port, AB Stroke do backward motion.
  - ② A 포트에 공기압을 공급하면 로드와 A행정이 작동한다.  
When supply Air pressure to A Port, A Stroke works.
  - ③ C 포트에 공기압을 공급하면 B-A행정이 작동한다.  
When supply Air pressure to C Port, B-A Stroke works.
  - ④ A, C 양포트에 공기압을 공급하면 A행정의 범위 중에 2배의 출력이 얻어진다.  
When supply Air pressure to A, C Port, A Stroke works.

## 사양 Specification

형식 Type	무급유형 Oilless Type
사용유체 Fluid	공기 Air
보중내압력 Bearing pressure	15kgf/cm <sup>2</sup>
최고사용압력 Max. Working Pressure	9.9kgf/cm <sup>2</sup>
최저사용압력 Mn. Working Pressure	0.5kgf/cm <sup>2</sup>
사용과선 속도 Working Piston Speed	50~500mm/sec
작동방식 Working Type	복동 Double-acting
쿠션 Cushion	Cushion
부착형식 Mounted Type	Basic Type, Foot Type of shaft direction, Rod-side Flange Type, Head-side Flange Type, single Thread, CLEVIS Type, Double Thread, CLEVIS Type
적용분내경 Applied inside-diameter of tube	φ40, φ50, φ63, φ80, φ100

## 구조 외형 치수도/기본형 Outside Structure Dimension Drawings/Basic Type



단위 Unit: mm

F-D(mm)	L	TL
40	168	224.5
50	180	243.5
63	195	258.5
80	231	307.5
100	251	328.5

※기타 표시하지 않은 치수는 ISM 일반형 과 동일  
 Dimension which isn't indicated is same with general type of ISM SERIES

# 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

가변 행정 실린더형 Variable Stroke Cylinder Type/Control type of Forward Motion

## 형식 표시 방법 Indication of Model

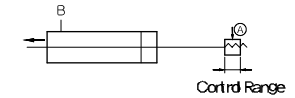


※ISM 시리즈 일반형 형식 표시 방법 참조 Refer to General type of ISM SERIES.  
 실린더 전진시 행정을 전체 행정에서 0~25, 0~50mm까지 가변조정 가능, 헤드측에 행정조정기구를 부착하여 전진시의 행정을 조정한다.  
 Can control variably Stroke at Cylinder Forward-motion from whole stroke to 0~25mm (A), 0~50mm (B).

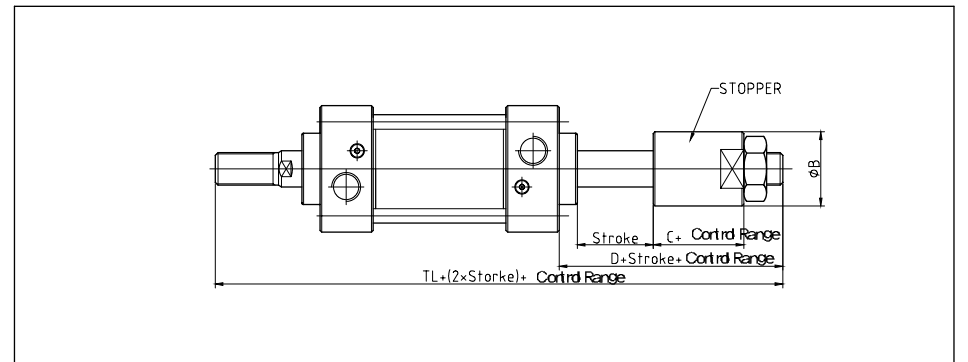
## 사양 Specification

형식 Type	무급유형(기본내장형) Oilless Type (Basic Built-in Regret Type)	저유압형 Low-Hydraulic Type
작동방식 Working type	복동 Double-acting	
사용유체 Fluid	공기 Air	유압작동유 Hydraulic Working Oil
보중내압력 Bearing Pressure	15kgf/cm <sup>2</sup>	
최고사용압력 Max. Working Pressure	9.9kgf/cm <sup>2</sup>	
최저사용압력 Min. Working Pressure	0.5kgf/cm <sup>2</sup>	1.0kgf/cm <sup>2</sup>
사용속도 Working Speed	50~500mm/s	0.5~300mm/s
행정조정범위 Stroke Control Range	A: 0~25mm, B: 0~50mm	
취부 지지형식 Supporting Type of Fitting Surface	Basic Type, Foot Type, Rod-side Flange Type	

## 표시 기호 Notation



## 외형 치수도/기본형 Outside Dimension Drawings/Basic Type



단위 Unit: mm

F-D(mm)	φB	C	D	TL
40	φ30	22	46	181
50	φ40	28	58	206
63		28	58	213.5
80	φ50	35	71	257.5
100		35	72	269.5

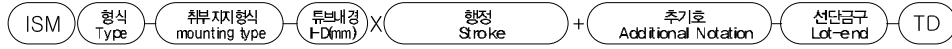
※기타 표시하지 않은 치수는 ISM 일반형 과 동일  
 Dimension which isn't indicated is same with general type of ISM SERIES

# 중형실린더 ISM 시리즈 MID CYLINDER ISM SERIES

탠덤 실린더/내열용 실린더 Tandem Cylinder/Cylinder for Heat-Resist

# MEMO

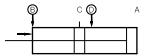
## 형식 표시 방법 Method for model Indication



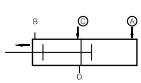
※ISM 시리즈 일반형 형식 표시 방법 참조 Refer to method for indication of general type of ISM series.  
두 개의 실린더를 직렬로 연결한 실린더로 출력을 2배로 얻을 수 있다. Connect two cylinders by series, then, can get twice more outputs.

## 표시 기호 Notation

### 기능 Function



(B)와 (C) 포트에 공기압을 공급하면 추진작동시 2배의 출력이 얻어진다. When supply Air pressure to B and C Port can get twice more outputs at backward motion.



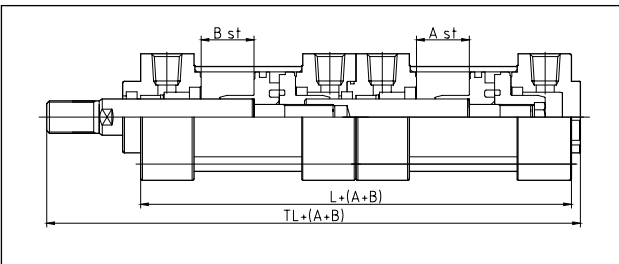
(A)와 (C) 포트에 공기압을 공급하면, 추진작동시 2배의 출력이 얻어진다. When supply Air pressure to A and C Port can get twice more outputs at forward motion.

## 사양 Specification

형식 Type	무급유형 Oilless Type
실린더내경 Applied I-D of Cylinder	Ø40, Ø50, Ø63, Ø80, Ø100
최고사용압력 Max. Working Pressure	9.9kgf/cm <sup>2</sup>
최저사용압력 Min. Working Pressure	1kgf/cm <sup>2</sup>
쿠션 Cushion	쿠션 Cushion
작동방식 Working Type	복동 Double-acting
사용유체 Fluid	공기 Air
사용피스톤 속도 Working Piston Speed	50~500mm/s
취부지지형식 Supporting Type of Fitting Surface	Basic Type, Foot Type, Rod-side Flange Type, Head-side Flange Type, single Thread CLEVIS Type, Double Thread CLEVIS Type

## 외형 치수도/기본형

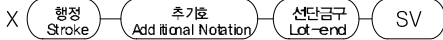
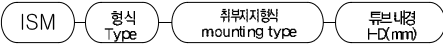
Outside Dimension Drawings/Basic Type



단위 unit:mm

I-D(mm)	L	TL
40	168	224.5
50	180	243.5
63	195	258.5
80	231	307.5
100	251	328.5

## 내열용 실린더 / Cylinder for Heat-Resist



※ 60 까지 고온의 주위조건에서 사용가능하게 내열용 패킹류를 장착한 실린더  
※ It is a cylinder with packing type for heat-resist. Can use in the high-temperature situation of 60°C.

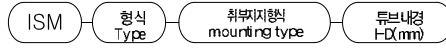
## 사양 Specification

단위 unit:mm

Type	Oil Supply Type
I-D(mm)	Ø40, Ø50, Ø63, Ø80, Ø100
Working Temperature	-20~+150°C
Packing Materials	VITON (Fluoric Rubber)

※오일 스위치 부착은 제작 불가능  
Can't make mounted Auto-Switch

## 피스톤 로드 스테인레스 / Piston-rod Stainless



※피스톤 로드의 끝단이 전진시 충격 수 등으로 인해서 부식의 우려가 있는 경우에 사용  
※ Use this when the Rod-end will be abused by loading at forward motion.

## 사양 Specification

Type	Oil Supply Type
I-D(mm)	Ø40, Ø50, Ø63, Ø80, Ø100
Materials of Piston Rod Nut	Stainless (SUS 304)