

대형실린더 ISL시리즈

LARGE-SIZE
ISL SERIES



ISTC CO., LTD



Hydraulic Pneumatic Technology Products

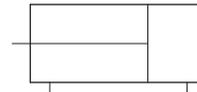
대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

자석 내장형: Ø125, Ø140, Ø150, Ø160 Magnet Built-in Type: Ø125, Ø140, Ø150, Ø160

일반형: Ø125, Ø140, Ø150, Ø160, Ø180, Ø200, Ø250, Ø300 General Type: Ø125, Ø140, Ø150, Ø160, Ø180, Ø200, Ø250, Ø300

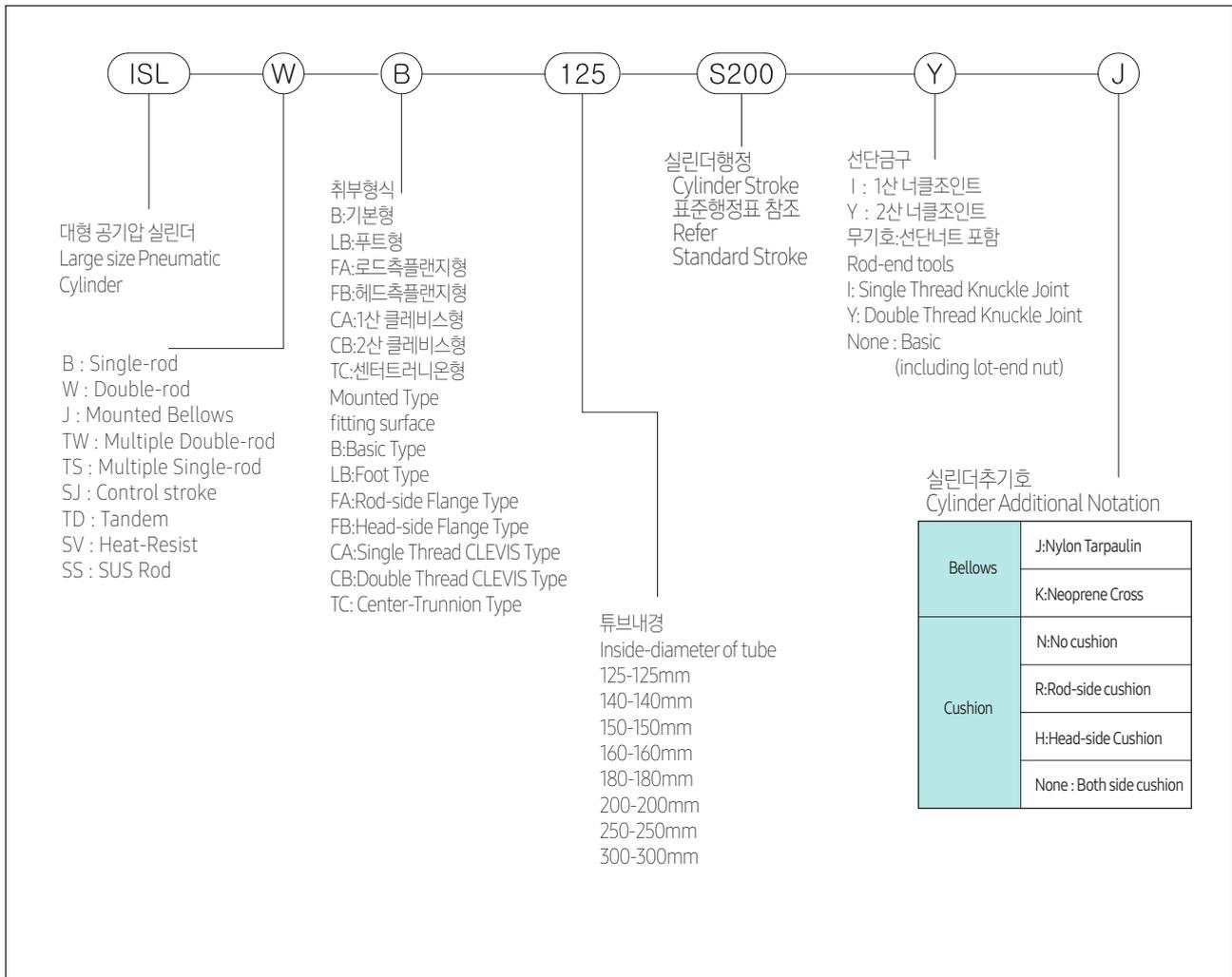


> 표시기호 Symbol



Double-acting
Single-rod

> 형식표시방법 Indication of Model

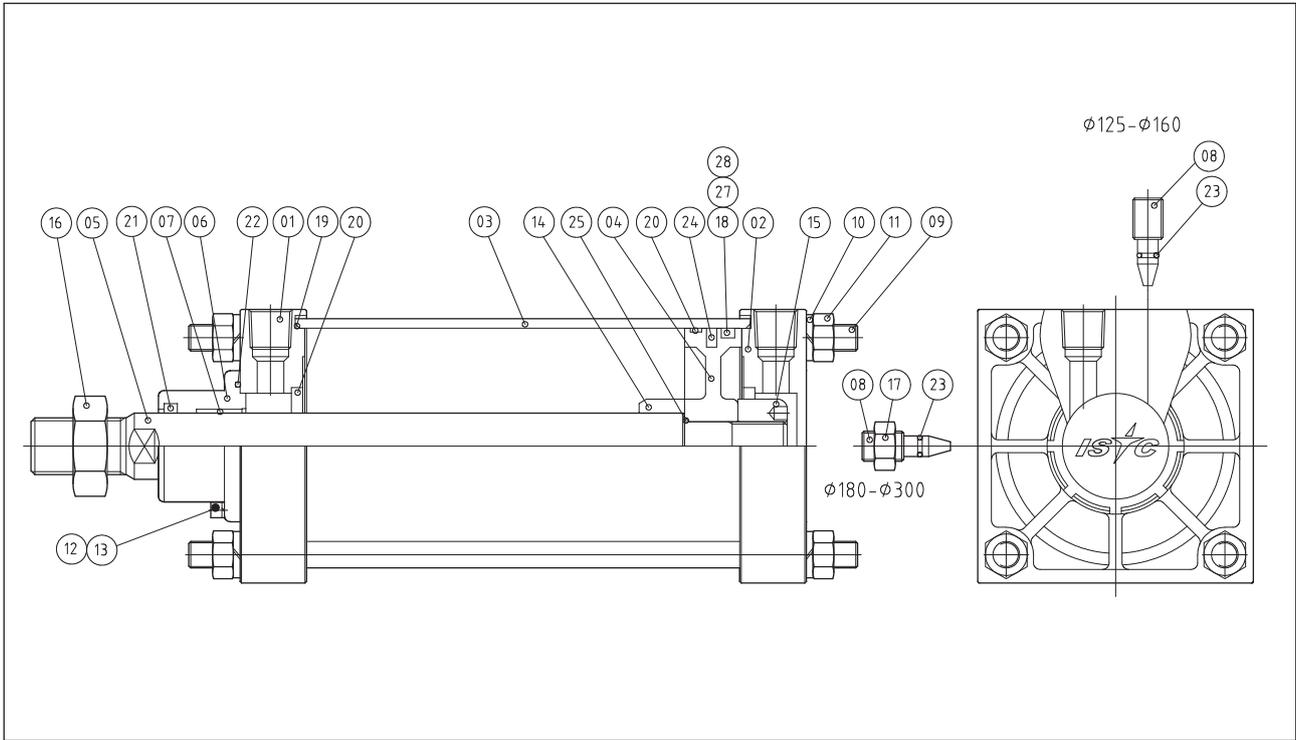


공기압 참고자료
공기압 도면기호
바형 실린더
소형 실린더
중형 실린더
대형 실린더
오토 스위치
가이드부착 실린더
부스터 실린더
유압실린더 시리즈

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

내부구조도 Inside Structure Drawings

>내부구조도 Inside Structure Drawings



>부품리스트 Parts List

No	Parts Name	Materials	Remarks
1	ROD COVER	AC4C	φ125~φ160
		FCD	φ180~φ200
		SS41	φ250~φ300
2	HEAD COVER	AC4C	φ125~φ160
		SS41	φ180~φ300
3	TUBE	A6063	φ125~φ160
		STKM13C	φ180~φ300
4	PISTON	AC4C	φ125~φ160
		SS41	φ180~φ300
5	ROD	S45C	
6	SUB BLOCK	FC20	
7	BUSH	DU	
8	CUSHION NIDDLE	BSBM	
9	TIE ROD	SS41	
10	SPRING WASHER	SS41	
11	TIE ROD NUT	S20C	
12	SUB BLOCK BOLT	SCM4	
13	" WASHER	SCM4	
14	CUSHION RING(R)	SS41	
15	CUSHION RING(H)	SS41	
16	ROD NUT	SS41	
17	CUSHION NUT	S20C	

>패킹리스트 Packing List

No	Parts Name	Materials	I-D(mm)							
			125	140	150	160	180	200	250	300

>급유형 Oil Supply Type

No	Parts Name	Materials	125	140	150	160	180	200	250	300
			(OPA125)	(OPA140)	(OPA150)	(OPA160)	(OPA180)	(OPA200)	(OPA250)	(OPA300)
18	PISTON PACKING									
19	TUBE O-RING	N	Ø125+ S125	Ø140+ S140	Ø150+ S150	Ø160+ S160	Ø180+ S180	Ø200+ S200	Ø250+ S250	Ø300+ S300
20	CUSHION PACKING		CS50	CS50	CS55	CS55	CS60	CS60	CS75	CS80
21	ROD PACKING	B	DRP35	DRP35	DRP40	DRP40	DRP45	DRP50	DRP60	DRP70
22	BUSH O-RING		AP56	AP56	AP58	AP58	AP63	AP67	AP80	AP85
23	MIDDLE O-RING	R	P9							
24	MAGNET									
25	ROD O-RING		S26	S26	S30	S30	S35	S40	S48	S50

>무급유형 Oilless Type

No	Parts Name	Materials	SBW125	SBW140	SBW150	SBW160	SBW180	SBW200	SBW250	SBW300
			AC							
26	WEARING	AC								
27	PISTON PACKING	NBR	PSD 125	PSD 140	PSD 150	PSD 160	DXP 180	DXP 200	DXP 250	DXP 300

>저유압형 Low Hydraulic Type

No	Parts Name	Materials	DXP 125	DXP 140	DXP 150	DXP 160				
28	PISTON PACKING	NBR								

■ 26,27,28 이외의 패킹은 급유형과 동일(단, 18은 제외)
Packing except 26,27,28 is same with Oil Supply Type (except 18).

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

형식 및 기타사양 Type and Others Specification

> 사양 Specification

형식 Type	무급유형 Oilless Type	저유압형 Low-Hydraulic Type
사용유체 Working Fluid	공기 Air	유압작동유 Hydraulic Working Oil
시험압력 Test Pressure	16kgf/cm ²	
최고사용압력 Max. set pressure	9.9kgf/cm ²	
최저사용압력 Min. set pressure	0.5kgf/cm ²	1kgf/cm ²
사용속도 Working Speed	50~500mm/s	0.5~200mm/s
쿠션 Cushion	있음 Cushion	없음 None
사용온도 Working Temperature	-10~70°C	
나사공차 Screw Tolerance	KS2급 2nd KS Levell	
행정길이의 허용차 Allowance of stroke length	~250 ^{+1.0} ₀	250~1,000 ^{+1.4} ₀ 1,001~1,500 ^{+1.8} ₀
취부형식 Mounted Type	Basic Type, Foot Type, Rod-side Flange Type, Head-side Flange Type Single Thread CLEVIS Type, Double Thread CLEVIS Type, Trunnion Type	

> 선단금구 Rod-end Parts

취부지지형식 Supporting Type of Fitting Surface		Basic Type	Basic Type	Rod-side Flange Type	Head-side Flange Type	Single Thread CLEVIS Type	Double Thread CLEVIS Type	Center-side Trunnion Type
기본부착품 Basic Mounted-parts	크레비스용 핀 Pin for CLEVIS	-	-	-	-	-	●	-
	로드선단너트 Rod-end Nut	●	●	●	●	●	●	●
주문품 Special Order	1산너클조인트 Single Knuckle Joint	●	●	●	●	●	●	●
	2산너클조인트 Double Knuckle Joint	●	●	●	●	●	●	●
	벨로우즈 Bellows	●	●	●	●	●	●	●

> 표준행정표 Standard Stroke Table

I-D(mm)	표준 행정 Standard Stroke	최대행정범위 Max. Stroke Range
125	50, 100, 150, 200, 250, 300	1000
140	50, 100, 150, 200, 250, 300	1000
150	50, 100, 150, 200, 250, 300	1000
160	50, 100, 150, 200, 250, 300	1200
180	50, 100, 150, 200, 250, 300	1400
200	50, 100, 150, 200, 250, 300	1600
250	50, 100, 150, 200, 250, 300, 400	1800
300	50, 100, 150, 200, 250, 300, 400	2000

> 벨로우즈 재질 사용온도

Working Temperature of Bellows Materials

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

> 형식 Type

Type	Working	Packing	I-D(mm)
ISL	Oil Supply	Double-acting	O-Ring Ø125, Ø140, Ø150, Ø160
ISL N	Oilless Type	Double-acting	Special Ø180, Ø200, Ø250, Ø300
ISL L	Low-Hydraulic	Double-acting	Special Ø125, Ø140, Ø150, Ø160

> 취부 부품 형식 Mounted Type

I-D(mm)	125	140	150	160	180	200	250	300
선단금구 Rod-end								
푸트형 Foot Type	ISL-LB 125	ISL-LB 140	ISL-LB 150	ISL-LB 160	ISL-LB 180	ISL-LB 200	ISL-LB 250	ISL-LB 300
플랜지형 Flange Type	ISL-F 125	ISL-F 140	ISL-F 150	ISL-F 160	ISL-F 180	ISL-F 200	ISL-F 250	ISL-F 300
1산클레비스형 1 Thread CLEVIS	ISL-CA 125	ISL-CA 140	ISL-CA 150	ISL-CA 160	ISL-CA 180	ISL-CA 200	ISL-CA 250	ISL-CA 300
2산클레비스형 2 Thread CLEVIS	ISL-CB 125	ISL-CB 140	ISL-CB 150	ISL-CB 160	ISL-CB 180	ISL-CB 200	ISL-CB 250	ISL-CB 300

> 선단금구 형식 Rod-end Type

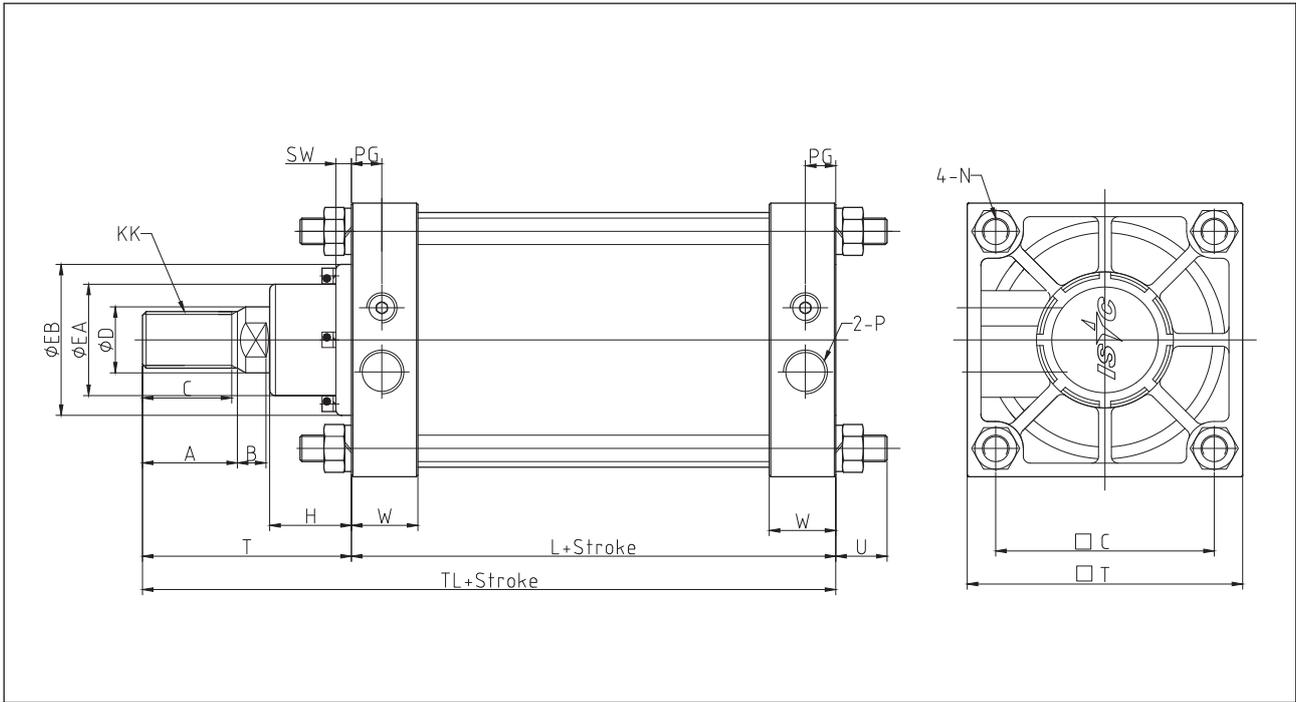
I-D(mm)	125	140	150, 160	180	200	250	300
선단금구 Rod-end							
1산클레비스형 1 Thread CLEVIS	ISL-125 I	ISL-140 I	ISL-150, 160 I	ISL-180 I	ISL-200 I	ISL-250 I	ISL-300 I
2산클레비스형 2 Thread CLEVIS	ISL-125 Y	ISL-140 Y	ISL-150, 160 Y	ISL-180 Y	ISL-200 Y	ISL-250 Y	ISL-300 Y

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

일반형 General Type(B)

>기본형(B) Basic Type(B)

■ Oil Supply Type ISL-B / Oiless Type ISL N-B / Low Hydraulic Type ISL L-B



단위 unit:mm

I-D(mm)	Stroke Range	C	A	B	□C	ØD	ØEB	ØEA	H	KK	L	N	PG	P(PT)	SW	□T
125	~1000	47	50	15	115	35	90	59	43	M30X1.5	98	M14X1.5	16	1/2	14	145
140	~1000	47	50	15	128	35	90	59	43	M30X1.5	98	M14X1.5	16	1/2	14	161
150	~1200	53	56	17	132	40	90	59	43	M36X1.5	106	M16X1.5	17	3/4	14	170
160	~1200	53	56	17	144	40	90	59	43	M36X1.5	106	M16X1.5	17	3/4	14	184
180	~1400	60	63	20	162	45	115	70	48	M40X1.5	111	M18X1.5	17	3/4	17	204
200	~1600	60	63	20	182	50	115	74	48	M45X1.5	111	M20X1.5	17	3/4	17	226
250	~1800	67	71	25	225	60	140	96	60	M56X2.0	141	M24X1.5	22	1	20	277
300	~2000	76	80	30	270	70	140	96	60	M64X2.0	146	M30X1.5	23	1	20	330

※Ø EB,SW 치수는 알루미늄 블록에는 적용 안됨
Can't apply EB and SW numbers to Aluminum Block

I-D(mm)	T	TL	U	W
125	110	208	27	35
140	110	208	27	35
150	120	226	30.5	39
160	120	226	30.5	39
180	135	246	35	39
200	135	246	35	39
250	160	301	41.5	49
300	175	321	51.5	49

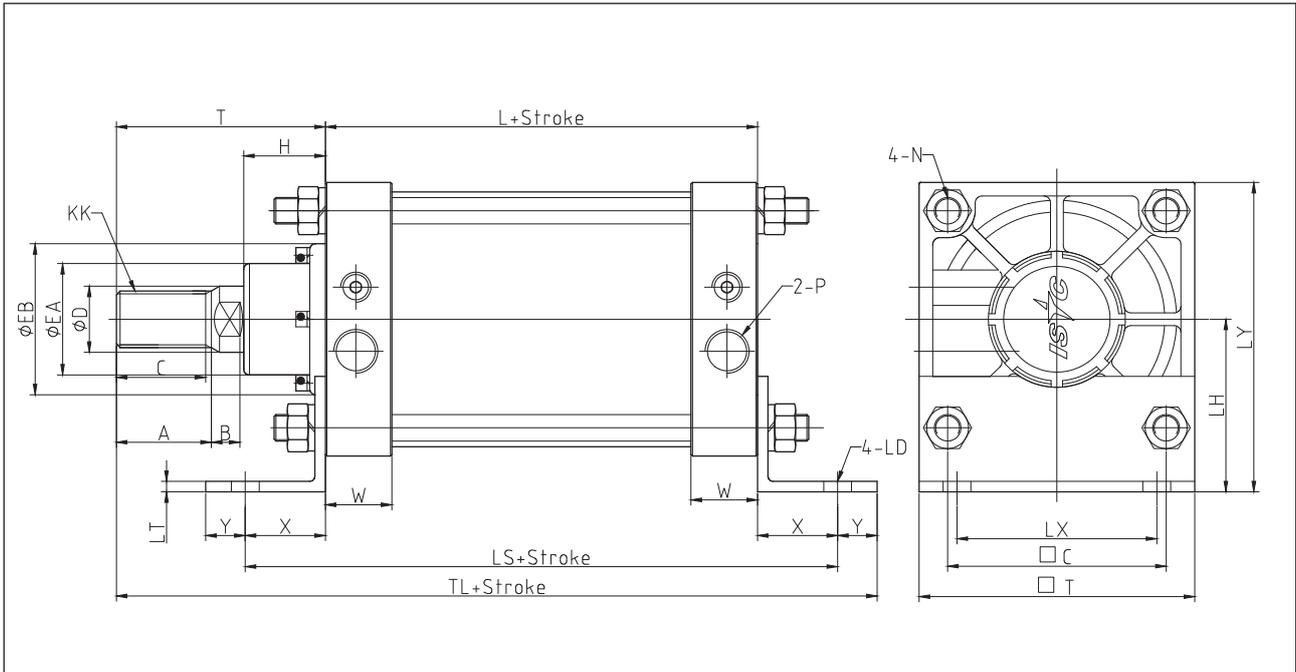
공기압 취급자요
공기압 도면기호
박형 실린더
소형 실린더
중형 실린더
대형 실린더
오토 스위치
가이드부착 실린더
부스터 실린더
유압실린더 시리즈

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

일반형(LB) General Type(LB)

>푸트형(LB) Foot Type(LB)

■ Oil Supply Type ISL-LB / Oiless Type ISL N-LB / Low Hydraulic Type ISL L-LB



단위 unit:mm

I-D(mm)	Stroke Range	C	A	B	□C	ØD	ØEA	ØEB	H	KK	L	ØLD	LH	LS	LT	LX	LY
125	~1000	47	50	15	115	35	59	90	43	M30X1.5	98	19	85	188	8	100	157.5
140	~1000	47	50	15	128	35	59	90	43	M30X1.5	98	19	100	188	9	112	180.5
150	~1200	53	56	17	132	40	59	90	43	M36X1.5	106	19	105	206	9	118	190
160	~1200	53	56	17	144	40	59	90	43	M36X1.5	106	19	106	206	9	118	197
180	~1400	60	63	20	162	45	70	115	48	M40X1.5	111	24	125	231	10	132	227
200	~1600	60	63	20	182	50	74	115	48	M45X1.5	111	24	132	231	10	150	245
250	~1800	67	71	25	225	60	96	140	60	M56X2.0	141	29	160	301	12	180	298.5
300	~2000	76	80	30	270	70	96	140	60	M64X2.0	146	33	200	326	15	212	365

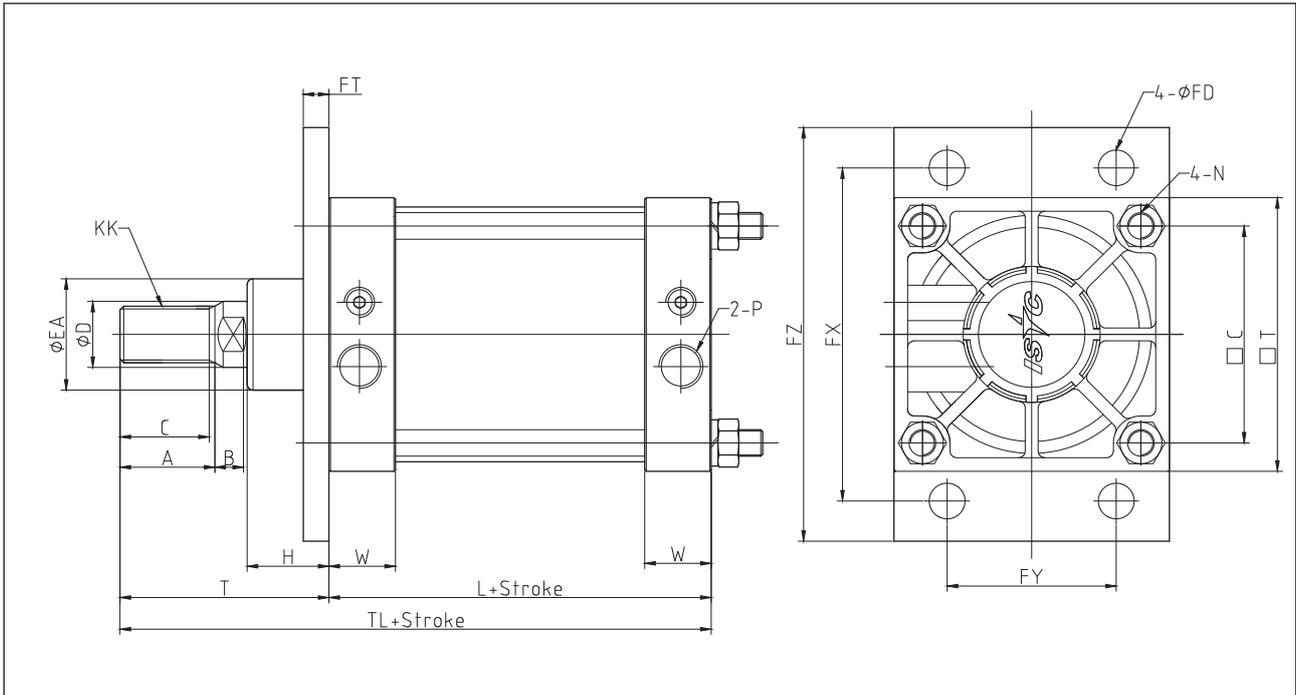
I-D(mm)	N	P(PT)	□T	T	TL	W	X	Y
125	M14X1.5	1/2	145	110	273	35	45	20
140	M14X1.5	1/2	161	110	273	35	45	20
150	M16X1.5	3/4	170	120	301	39	50	25
160	M16X1.5	3/4	184	120	301	39	50	25
180	M18X1.5	3/4	204	135	336	39	60	30
200	M20X1.5	3/4	226	135	336	39	60	30
250	M24X1.5	1	277	160	421	49	80	40
300	M30X1.5	1	330	175	451	49	90	40

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

일반형(FA) General Type(FA)

>로드측 플랜지형 (FA) Rod-side Flange Type(FA)

■ Oil Supply Type ISL-FA / Oiless Type ISL N-FA / Low Hydraulic Type ISL L-FA



단위 unit:mm

I-D(mm)	Stroke Range	C	A	B	□C	∅D	∅EA	∅FD	FT	FX	FY	FZ	H	KK	L	P(PT)
125	~1000	47	50	15	115	35	59	19	14	190	100	230	43	M30X1.5	98	1/2
140	~1000	47	50	15	128	35	59	19	20	212	112	255	43	M30X1.5	98	1/2
150	~1200	53	56	17	132	40	59	19	20	228	115	265	43	M36X1.5	106	3/4
160	~1200	53	56	17	144	40	59	19	20	236	118	275	43	M36X1.5	106	3/4
180	~1400	60	63	20	162	45	70	24	25	265	132	320	48	M40X1.5	111	3/4
200	~1600	60	63	20	182	50	74	24	25	280	150	335	48	M45X1.5	111	3/4
250	~1800	67	71	25	225	60	96	29	30	355	180	420	60	M56X2.0	141	1
300	~2000	76	80	30	270	70	96	33	30	400	212	475	60	M64X2.0	146	1

I-D(mm)	N	□T	T	TL	W
125	M14X1.5	145	110	208	35
140	M14X1.5	161	110	208	35
150	M16X1.5	170	120	226	39
160	M16X1.5	184	120	226	39
180	M18X1.5	204	135	246	39
200	M20X1.5	226	135	246	39
250	M24X1.5	277	160	301	49
300	M30X1.5	330	175	321	49

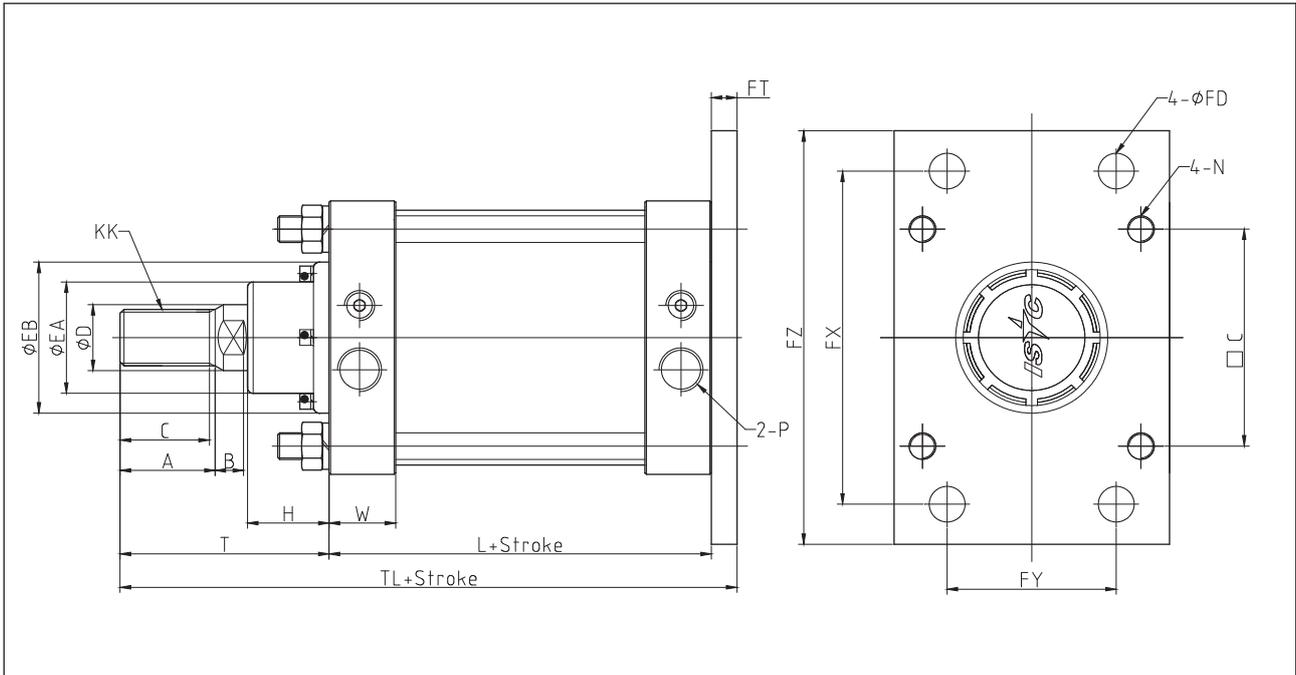
공기압 참고자료
공기압 도면기호
박형 실린더
소형 실린더
중형 실린더
대형 실린더
오토 스위치
가이드부착 실린더
부스터 실린더
유압실린더 시리즈

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

일반형(FB) General Type(FB)

> 헤드측 플랜지형 (FB) Head-side Flange Type(FB)

■ Oil Supply Type ISL-FB / Oiless Type ISL N-FB / Low Hydraulic Type ISLL-FB



단위 unit:mm

I-D(mm)	Stroke Range	C	A	B	□C	ØD	ØEA	ØEB	ØFD	FT	FX	FY	FZ	H	KK	L	P(PT)
125	~1000	47	50	15	115	35	59	90	19	14	190	100	230	43	M30X1.5	98	1/2
140	~1000	47	50	15	128	35	59	90	19	20	212	112	255	43	M30X1.5	98	1/2
150	~1200	53	56	17	132	40	59	90	19	20	228	115	265	43	M36X1.5	106	3/4
160	~1200	53	56	17	144	40	59	90	19	20	236	118	275	43	M36X1.5	106	3/4
180	~1400	60	63	20	162	45	70	115	24	25	265	132	320	48	M40X1.5	111	3/4
200	~1600	60	63	20	182	50	74	115	24	25	280	150	335	48	M45X1.5	111	3/4
250	~1800	67	71	25	225	60	96	140	29	30	355	180	420	60	M56X2.0	141	1
300	~2000	76	80	30	270	70	96	140	33	30	400	212	475	60	M64X2.0	146	1

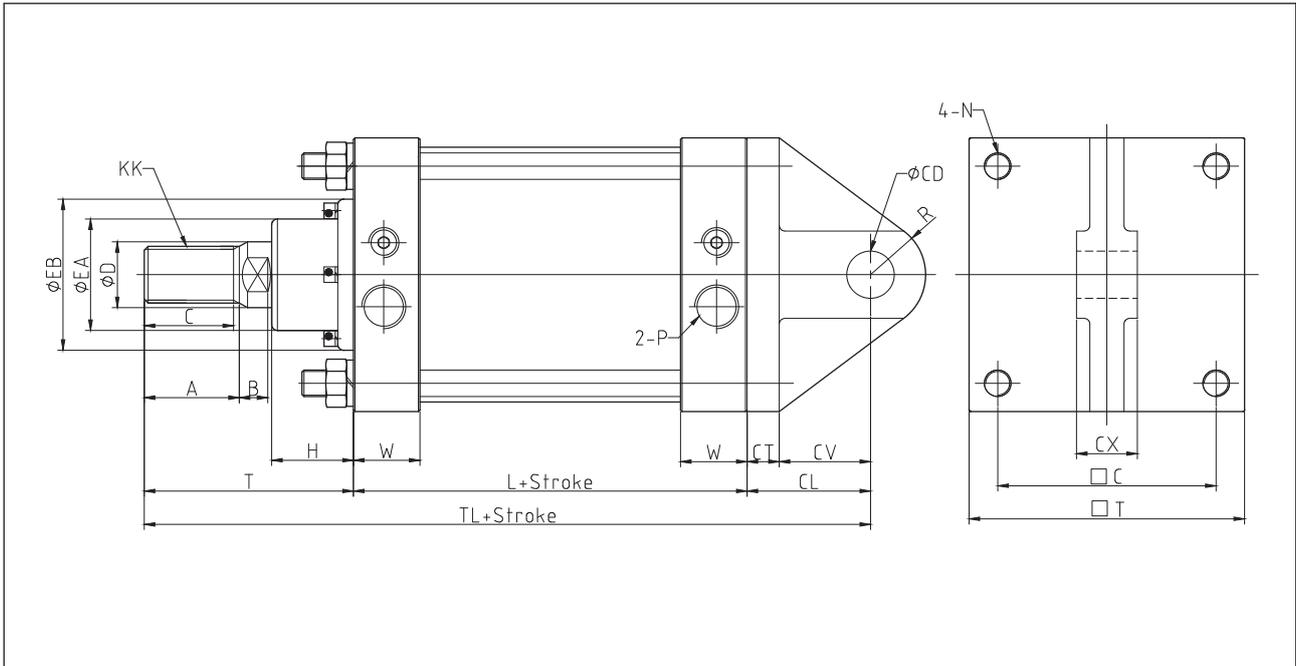
I-D(mm)	N	T	TL	W
125	M14X1.5	110	222	35
140	M14X1.5	110	228	35
150	M16X1.5	120	246	39
160	M16X1.5	120	246	39
180	M18X1.5	135	271	39
200	M20X1.5	135	271	39
250	M24X1.5	160	331	49
300	M30X1.5	175	351	49

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

일반형(CA) General Type(CA)

>1산 클레비스(CA) Single-Thread CLEVIS Type(CA)

Oil Supply Type ISL-CA / Oilless Type ISL N-CA / Low Hydraulic Type ISL L-CA



단위 unit:mm

I-D(mm)	Stroke Range	C	A	B	□C	ØCD	CL	CT	CV	CX	ØD	ØEA	ØEB	H	KK	L
125	~1000	47	50	15	115	25 ^{+0.08} ₀	65	17	48	32 ^{-0.1} _{-0.3}	35	59	90	43	M30X1.5	98
140	~1000	47	50	15	128	28 ^{+0.08} ₀	75	17	58	36 ^{-0.1} _{-0.3}	35	59	90	43	M30X1.5	98
150	~1200	53	56	17	132	32 ^{+0.10} ₀	80	20	60	40 ^{-0.1} _{-0.3}	40	59	90	43	M36X1.5	106
160	~1200	53	56	17	144	32 ^{+0.10} ₀	80	20	60	40 ^{-0.1} _{-0.3}	40	59	90	43	M36X1.5	106
180	~1400	60	63	20	162	40 ^{+0.10} ₀	90	23	67	50 ^{-0.1} _{-0.3}	45	70	115	48	M40X1.5	111
200	~1600	60	63	20	182	40 ^{+0.10} ₀	100	25	65	50 ^{-0.1} _{-0.3}	50	74	115	48	M45X1.5	111
250	~1800	67	71	25	225	50 ^{+0.10} ₀	110	30	80	63 ^{-0.1} _{-0.3}	60	96	140	60	M56X2.0	141
300	~2000	76	80	30	270	63 ^{+0.12} ₀	130	37	93	80 ^{-0.1} _{-0.3}	70	96	140	60	M64X2.0	146

I-D(mm)	N	P(PT)	R	□T	T	TL	W
125	M14X1.5	1/2	29	145	110	273	35
140	M14X1.5	1/2	32	161	110	283	35
150	M16X1.5	3/4	36	170	120	306	39
160	M16X1.5	3/4	36	184	120	306	39
180	M18X1.5	3/4	44	204	135	336	39
200	M20X1.5	3/4	44	226	135	336	39
250	M24X1.5	1	55	277	160	411	49
300	M30X1.5	1	68	330	175	451	49

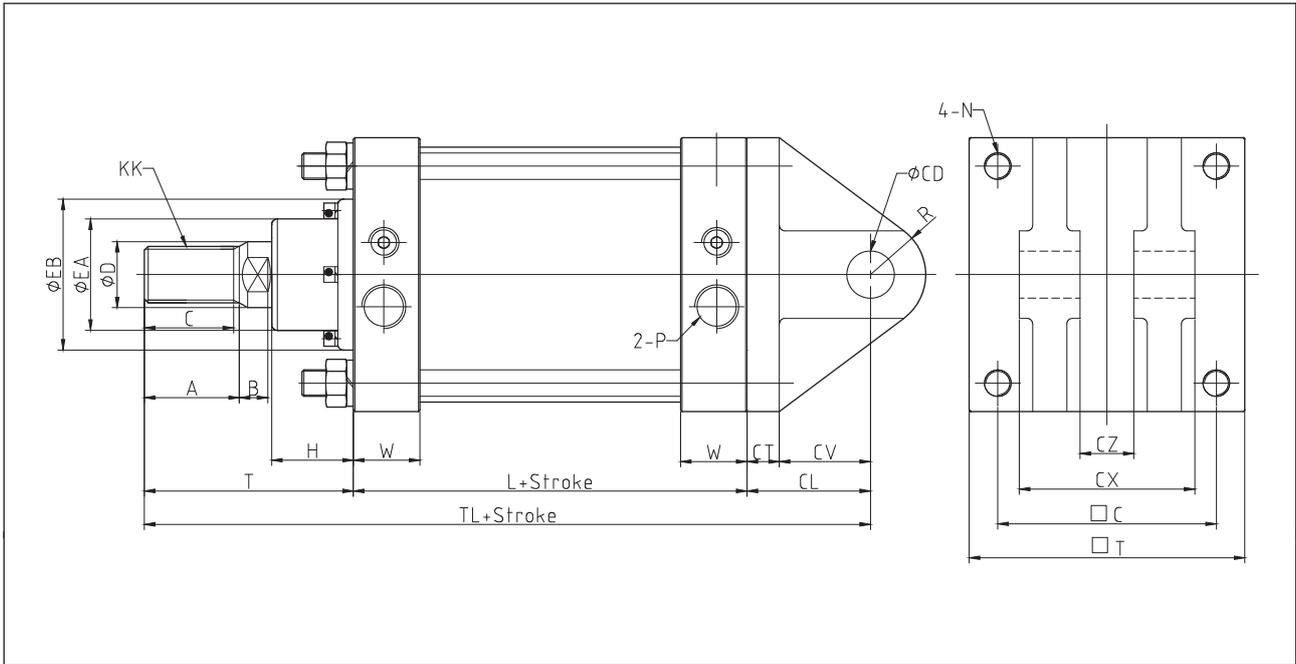
유압실린더 시리즈
부스터 실린더
가이드부착 실린더
오토 스위치
대형 실린더
중형 실린더
소형 실린더
박형 실린더
공기압 도면기호
공기압 참고자료

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

일반형(CB) General Type(CB)

> 2산 클레비스(CB) Double-Thread CLEVIS Type(CB)

■ Oil Supply Type ISL-CB / Oilless Type ISL N-CB / Low Hydraulic Type ISL L-CB



단위 unit:mm

I-D(mm)	Stroke Range	C	A	B	□C	ØCD	CL	CT	CV	CX	CZ	ØD	H	KK	L
125	~1000	47	50	15	115	25 ^{+0.08} ₀	65	17	48	64 ^{-0.1} _{-0.3}	32 ^{+0.3} _{+0.1}	35	43	M30X1.5	98
140	~1000	47	50	15	128	28 ^{+0.08} ₀	75	17	58	72 ^{-0.1} _{-0.3}	36 ^{+0.3} _{+0.1}	35	43	M30X1.5	98
150	~1200	53	56	17	132	32 ^{+0.10} ₀	80	20	60	80 ^{-0.1} _{-0.3}	40 ^{+0.3} _{+0.1}	40	43	M36X1.5	106
160	~1200	53	56	17	144	32 ^{+0.10} ₀	80	20	60	80 ^{-0.1} _{-0.3}	40 ^{+0.3} _{+0.1}	40	43	M36X1.5	106
180	~1400	60	63	20	162	40 ^{+0.10} ₀	90	23	67	100 ^{-0.1} _{-0.3}	50 ^{+0.3} _{+0.1}	45	48	M40X1.5	111
200	~1600	60	63	20	182	40 ^{+0.10} ₀	100	25	65	100 ^{-0.1} _{-0.3}	50 ^{+0.3} _{+0.1}	50	48	M45X1.5	111
250	~1800	67	71	25	225	50 ^{+0.10} ₀	110	30	80	126 ^{-0.1} _{-0.3}	63 ^{+0.3} _{+0.1}	60	60	M56X2.0	141
300	~2000	76	80	30	270	63 ^{+0.12} ₀	130	37	93	160 ^{-0.1} _{-0.3}	80 ^{+0.3} _{+0.1}	70	60	M64X2.0	146

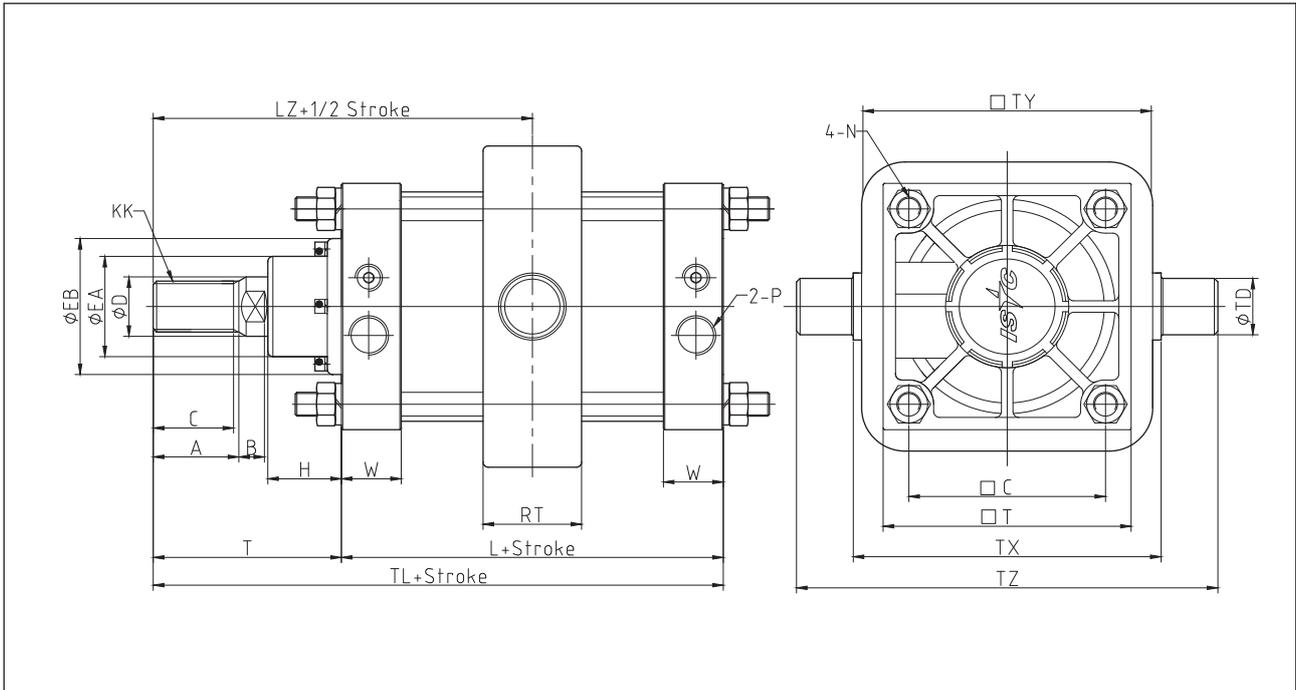
I-D(mm)	N	P(PT)	R	□T	T	TL	W	ØEA	ØEB
125	M14X1.5	1/2	29	145	110	273	35	59	90
140	M14X1.5	1/2	32	161	110	283	35	59	90
150	M16X1.5	3/4	36	170	120	306	39	59	90
160	M16X1.5	3/4	36	184	120	306	39	59	90
180	M18X1.5	3/4	44	204	135	336	39	70	115
200	M20X1.5	3/4	44	226	135	336	39	74	115
250	M24X1.5	1	55	277	160	411	49	96	140
300	M30X1.5	1	68	330	175	451	49	96	140

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

일반형(TC) General Type(TC)

>센터 트러니온형(TC) Center Trunnion Type(TC)

Oil Supply Type ISL-TC / Oiless Type ISL N-TC / Low Hydraulic Type ISL L-TC



단위 unit:mm

I-D(mm)	Stroke Range	C	A	B	□C	∅D	∅EA	∅EB	H	KK	L	LZ	N	P(PT)	□T	T
125	~1000	47	50	15	115	35	59	90	43	M30X1.5	98	159	M14X1.5	1/2	145	110
140	~1000	47	50	15	128	35	59	90	43	M30X1.5	98	159	M14X1.5	1/2	161	110
150	~1200	53	56	17	132	40	59	90	43	M36X1.5	106	173	M16X1.5	3/4	170	120
160	~1200	53	56	17	144	40	59	90	43	M36X1.5	106	173	M16X1.5	3/4	184	120
180	~1400	60	63	20	162	45	70	115	48	M40X1.5	111	190.5	M18X1.5	3/4	204	135
200	~1600	60	63	20	182	50	74	115	48	M45X1.5	111	190.5	M20X1.5	3/4	226	135
250	~1800	67	71	25	225	60	96	140	60	M56X2.0	141	230.5	M24X1.5	1	277	160
300	~2000	76	80	30	270	70	96	140	60	M64X2.0	146	248	M30X1.5	1	330	175

I-D(mm)	RT	∅TD	TL	TX	□TY	TZ	W
125	50	32 ^{-0.05} _{-0.09}	208	170	164	234	35
140	55	36 ^{-0.05} _{-0.09}	208	190	184	262	35
150	59	40 ^{-0.05} _{-0.09}	226	200	192	275	39
160	59	40 ^{-0.05} _{-0.09}	226	212	204	292	39
180	60	45 ^{-0.05} _{-0.09}	246	236	228	326	39
200	60	45 ^{-0.05} _{-0.09}	246	265	257	355	39
250	69	56 ^{-0.06} _{-0.10}	301	335	325	447	49
300	79	67 ^{-0.06} _{-0.10}	321	400	390	534	49

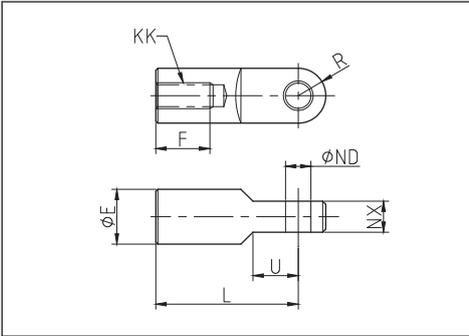
공기압 참고자료
공기압 도면기호
바형 실린더
소형 실린더
중형 실린더
대형 실린더
오토 스위치
가이드부착 실린더
부스터 실린더
유압실린더 시리즈

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

선단금구 Rod-end Parts

>1산너클 조인트 Single-Thread Knuckle Joint

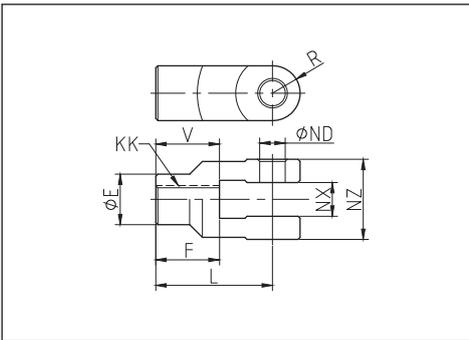
단위 unit:mm



I-D(mm)	ØE	F	KK	L	ØND	NX	R	U
125	46	54	M30X1.5	100	25 ^{+0.08} ₀	32 ^{-0.1} _{-0.3}	27	33
140	48	54	M30X1.5	105	28 ^{+0.08} ₀	36 ^{-0.1} _{-0.3}	30	39
150,160	55	60	M36X1.5	110	32 ^{+0.10} ₀	40 ^{-0.1} _{-0.3}	34	39
180	70	67	M40X1.5	125	40 ^{+0.10} ₀	50 ^{-0.1} _{-0.3}	42.5	44
200	70	67	M45X1.5	125	40 ^{+0.10} ₀	50 ^{-0.1} _{-0.3}	42.5	44
250	86	75.5	M56X2	160	50 ^{+0.10} ₀	63 ^{-0.1} _{-0.3}	53	66
300	105	84.5	M64X2	175	63 ^{+0.12} ₀	80 ^{-0.1} _{-0.3}	66	71

>2산너클조인트 Double-Thread Knuckle Joint

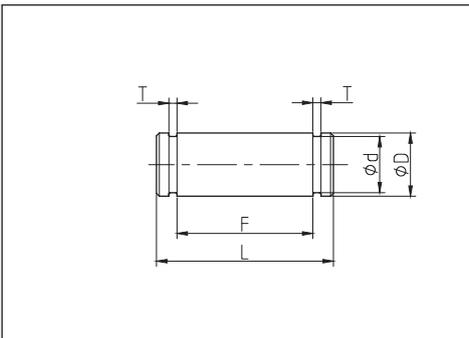
단위 unit:mm



I-D(mm)	ØE	KK	L	ØND	NX	NZ	R	F	V
125	46	M30X1.5	100	25 ^{+0.08} ₀	32 ^{-0.3} _{-0.1}	64 ^{-0.1} _{-0.3}	27	38	58
140	48	M30X1.5	105	28 ^{+0.08} ₀	36 ^{-0.3} _{-0.1}	72 ^{-0.1} _{-0.3}	30	38	58
150,160	55	M36X1.5	110	32 ^{+0.10} ₀	40 ^{-0.3} _{-0.1}	80 ^{-0.1} _{-0.3}	34	40	64
180	70	M40X1.5	125	40 ^{+0.10} ₀	50 ^{-0.3} _{-0.1}	100 ^{-0.1} _{-0.3}	42.5	43	71
200	70	M45X1.5	125	40 ^{+0.10} ₀	50 ^{-0.3} _{-0.1}	100 ^{-0.1} _{-0.3}	42.5	43	71
250	86	M56X2	160	50 ^{+0.10} ₀	63 ^{-0.3} _{-0.1}	126 ^{-0.1} _{-0.3}	53	47	79
300	105	M64X2	175	63 ^{+0.12} ₀	80 ^{-0.3} _{-0.1}	160 ^{-0.1} _{-0.3}	66	50	78

>너클 클레비스형 핀 Knuckle CLEVIS Type Pin

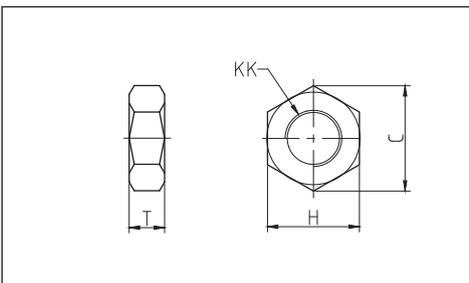
단위 unit:mm



I-D(mm)	ØD	Ød	L	F	T
125	25 ^{-0.06} _{-0.11}	23.5	72	64.3	1.35
140	28 ^{-0.06} _{-0.11}	26	80.6	72.3	1.65
150,160	32 ^{-0.08} _{-0.14}	29.5	89.6	80.3	1.65
180,200	40 ^{-0.08} _{-0.14}	37	110.1	100.3	1.9
250	50 ^{-0.08} _{-0.14}	46	138.9	126.5	2.2
300	63 ^{-0.10} _{-0.17}	59	172.9	160.5	2.2

>로크너트 Lock nut

단위 unit:mm



I-D(mm)	C	H	KK	T
125,140	53.1	46	M30X1.5	18
150,160	63.5	55	M36X1.5	21
180	69.3	60	M40X1.5	23
200	80.8	70	M45X1.5	27
250	98.1	85	M56X2	34
300	110	95	M64X2	38

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

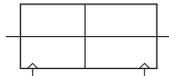
양로드형 Double-rod Type

>형식표시방법 Indication of Mode

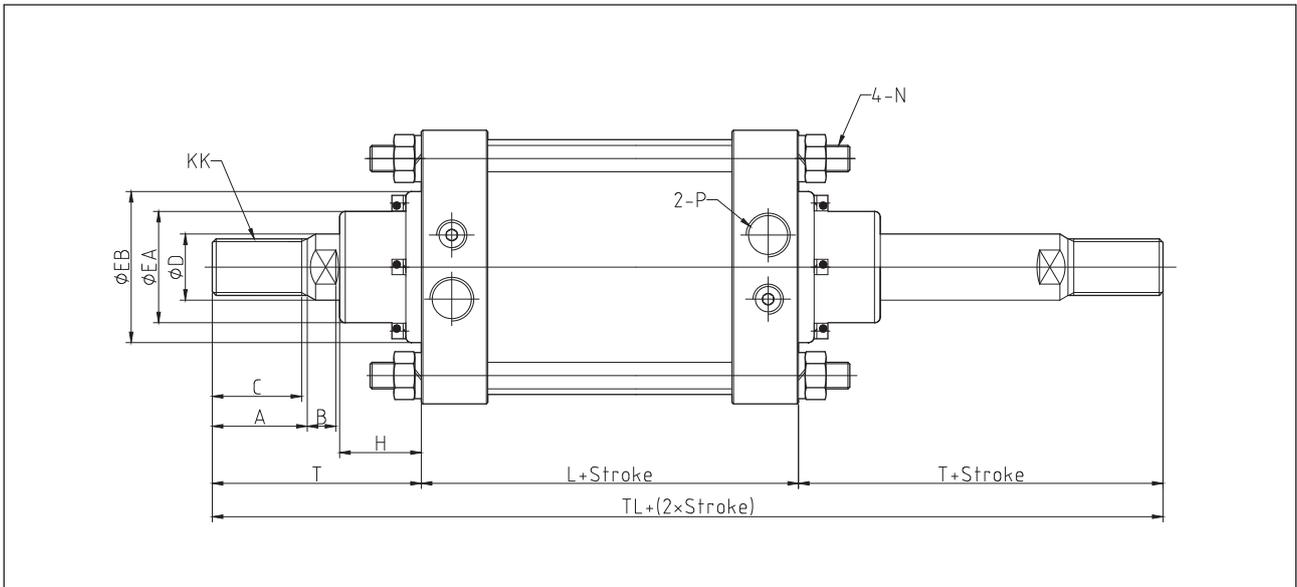


※ISL 시리즈 일반형 형식 표기 방법 참조
Refer to method for indication of general type of ISL series.

>표시기호 Symbol



>외형 치수도/기본형 Outside Dimension Drawings/Basic Type



단위 unit :mm

I-D(mm)	Stroke Range	C	A	B	T	ØD	ØEA	ØEB	H	KK	L	N	P(PT)	TL
125	~1000	47	50	15	110	35	59	90	43	M30X1.5	98	M14X1.5	1/2	318
140	~1000	47	50	15	110	35	59	90	43	M30X1.5	98	M14X1.5	1/2	318
150	~1200	53	56	17	120	40	59	90	43	M36X1.5	106	M16X1.5	3/4	346
160	~1200	53	56	17	120	40	59	90	43	M36X1.5	106	M16X1.5	3/4	346
180	~1400	60	63	20	135	45	70	115	48	M40X1.5	111	M18X1.5	3/4	381
200	~1600	60	63	20	135	50	74	115	48	M45X1.5	111	M20X1.5	3/4	381
250	~1800	67	71	25	160	60	96	140	60	M56X2.0	141	M24X1.5	1	461
300	~2000	76	80	30	175	70	96	140	60	M64X2.0	146	M30X1.5	1	496

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

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

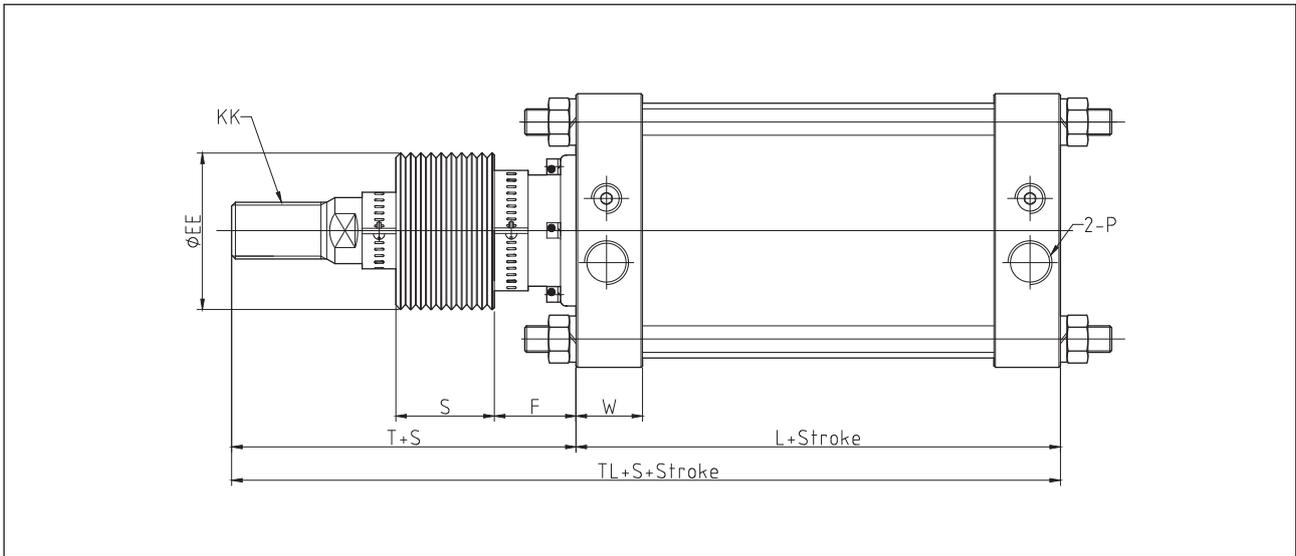
벨로우즈 부착형 Bellows-Mounted Type

>형식표시방법 Indication of Model



※벨로우즈 부착 Bellows-Mounted Type
 J: 나일론 타폴린60°C Nylon Tarpaulin
 K: 네오프렌크로스110°C Neoprene Cross

>외형 치수도/기본형 Outside Dimension Drawings/Basic Type



단위 unit :mm

I-D(mm)	ØEE	F	KK	N	L	P(PT)	T	TL	S	W
125	90	40	M30X1.5	M14X1.5	98	1/2	133	231	0.2× stroke(mm)	35
140	90	40	M30X1.5	M14X1.5	98	1/2	133	231		35
150	90	40	M36X1.5	M16X1.5	106	3/4	141	247		39
160	90	40	M36X1.5	M16X1.5	106	3/4	141	247		39
180	115	45	M40X1.5	M18X1.5	111	3/4	153	264		39
200	115	45	M45X1.5	M20X1.5	111	3/4	153	264	39	
250	140	55	M56X2.0	M24X1.5	141	1	176	317	0.17× stroke(mm)	49
300	140	55	M64X2.0	M30X1.5	146	1	190	336		49

※기타 표시하지 않은 치수는 ISL 기본형 참조
 Dimension which isn't indicated is same with general type of ISL SERIES

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

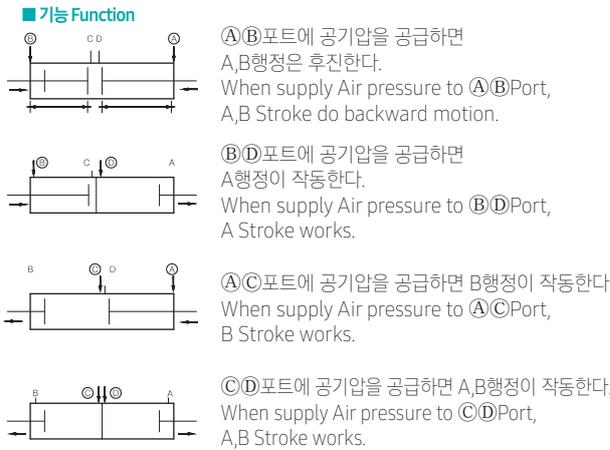
다단 행정 양로드형 Multiple Stroke Double-rod Type

>형식표시방법 Indication of Model



※ISL 시리즈 일반형 형식 표기 방법 참조 Refer to method for indication of general type of ISL series.
 헤드측을 조합, 2개의 실린더를 일체화시켜 실린더 행정을 양복과 더불어 3단계로 제어할 수 있다.
 Assemble Head-side, make one body the Cylinder, conduct double Cylinder Stroke and control it by 3 steps.

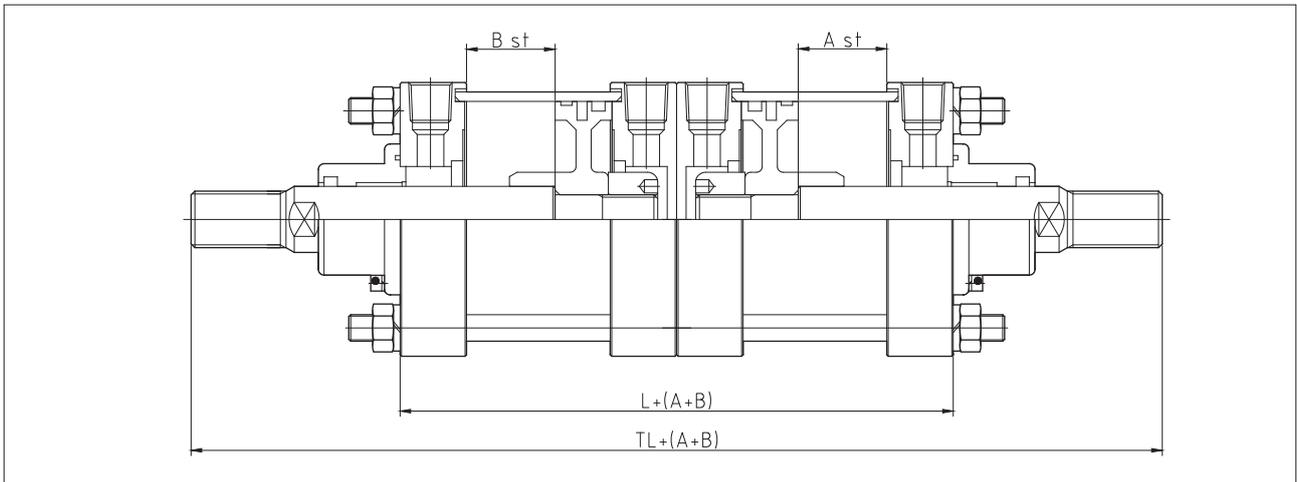
>표시기호 Symbol



>사양 Specification

형식 Type	무급유형 Oilless type
사용유체 Fluid	공기 Air
보증내압력 Bearing pressure	15kgf/cm ²
최고사용압력 Max. Working Pressure	9.9kgf/cm ²
최저사용압력 Min. Working Pressure	0.8kgf/cm ²
사용피스톤 속도 Working Piston Speed	50~750mm/s
작동방식 Operating Type	복동 Double-acting
쿠션 Cushion	Cushion
부착형식 Mounted Type	Basic Type, Foot Type of shaft direction, Flange Type

>외형 치수도/기본형 Outside Dimension Drawings/Basic Type



단위 unit : mm

I-D(mm)	L	TL
125	196	416
140	196	416
150	212	452
160	212	452
180	222	492
200	222	492
250	282	602
300	292	642

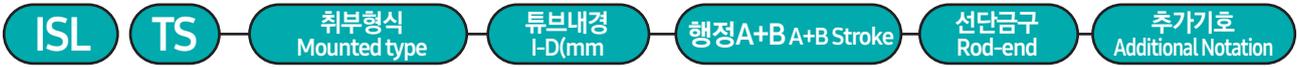
※기타 표시하지 않은 치수는 ISL 기본형 참조
 Dimension which isn't indicated is same with general type of ISL SERIES

공기압 원고저본
공기압 도면기호
바탕 실린더
스텝 실린더
중형 실린더
대형 실린더
오토 스위치
가이드부착 실린더
부스터 실린더
유압실린더 시리즈

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

다단 행정 편로드형 Multiple Stroke Single-rod Type

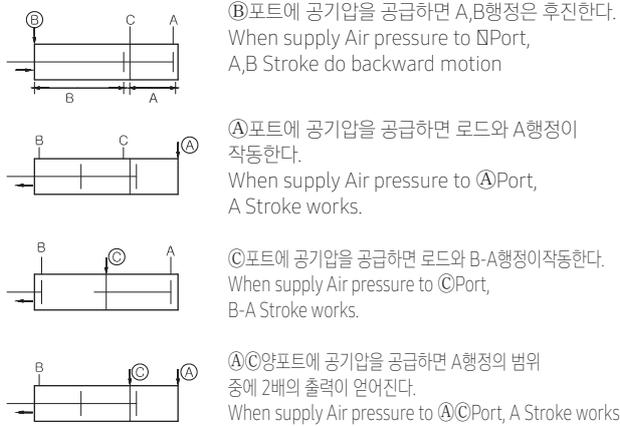
>형식표시방법 Indication of Model



※ISL 시리즈 일반형 형식 표기 방법 참조 Refer to method for indication of general type of ISL series.
 두 개의 실린더를 직렬로 연결, 일체화하여 실린더 행정을 양복과 더불어 2단계로 제어 가능하고, 2배의 실린더 출력을 얻을 수 있다.
 Connect two cylinder by series, make one body, then, can control cylinder stroke by two steps with round trip and get twice more outputs.

>표시기호 Symbol

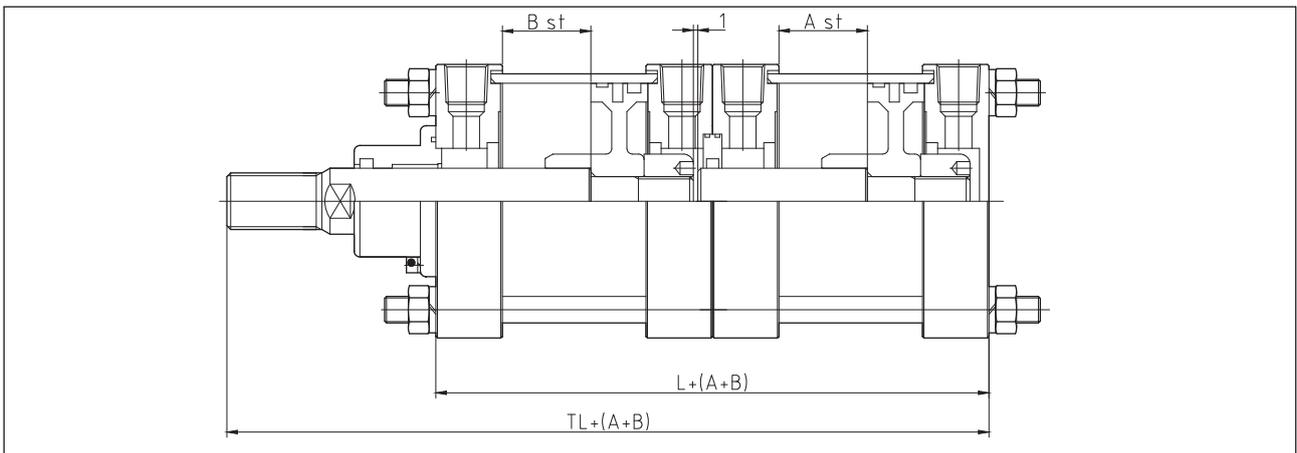
■ 기능 Function



>사양 Specification

형식 Type	무급유형 Oilless type
사용유체 Fluid	공기 Air
시험압력 Test Pressure	15kgf/cm ²
최고사용압력 Max. Working Pressure	9.9kgf/cm ²
최저사용압력 Min. Working Pressure	0.8kgf/cm ²
사용속도 Working Speed	50~750mm/s
작동방식 Operating 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

>외형 치수도/기본형 Outside Dimension Drawings/Basic Type



단위 unit :mm

I-D(mm)	L	TL
125	196	306
140	196	306
150	212	332
160	212	332
180	222	357
200	222	357
250	282	442
300	292	467

※기타 표시하지 않은 치수는 ISL 기본형 참조
 Dimension which isn't indicated is same with general type of ISL SERIES

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

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

가변 행정 실린더/전진시 조정형 Control Stroke Cylinder Type/Control Type at Forward Motion

>형식표시방법 Indication of Model

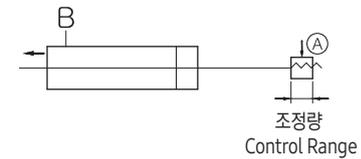


※ISL 시리즈 일반형 형식 표기 방법 참조취부지지형식 ※Refer to method for indication of general type of ISL series.
 실린더 전진시 행정을 전체 행정에서 0-25mm(A),0-50mm(B)까지 가변조정하여 전진축의 행정을 조정할 수 있다.
 Can control variably Stroke at Cylinder Forward-motion from whole stroke to 0-25mm and 0-50mm. Then, can control stroke at forward-motion.

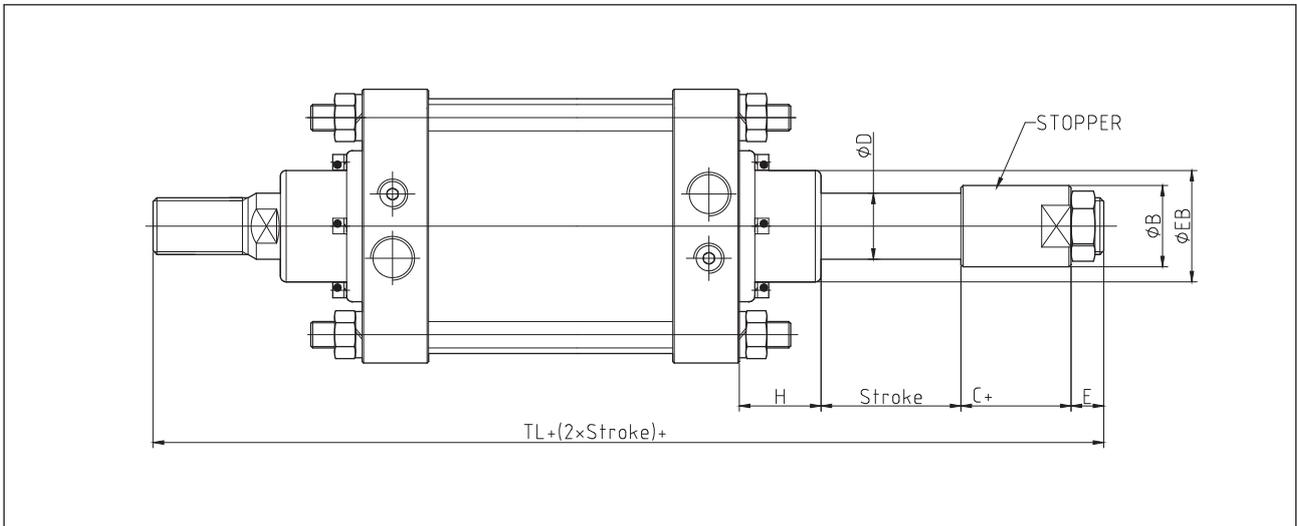
>사양 Specification

형식 Type	무급유형 Oilless type	저유압형 Low-Hydraulic Type
사용유체 Fluid	공기 Air	유압작동유 Hydraulic Working Oil
시험압력 Test Pressure	15kgf/cm ²	
최고사용압력 Max. Working Pressure	9.9kgf/cm ²	
최저사용압력 Min. Working Pressure	0.8kgf/cm ²	1kgf/cm ²
취부형식 Mounted Type	Basic Type, Foot Type, Rod-side Flange Type	

>표시기호 Symbol



>외형 치수도/기본형 Outside Dimension Drawings/Basic Type



단위 unit:mm

I-D(mm)	ØB	C	ØD	E	ØEB	H	TL
125	60	37	35	30	90	43	318
140	60	37	35	30	90	43	318
150	60	46	40	26	90	43	341
160	60	46	40	26	90	43	341
180	70	52	45	30	115	48	376
200	70	52	50	30	115	48	376
250	86	60	60	35	140	60	456
300	86	60	70	55	140	60	496

※기타 표시하지 않은 치수는 ISL 기본형 참조
 Dimension which isn't indicated is same with general type of ISL SERIES

대형실린더 ISL 시리즈 LARGE-SIZE ISL SERIES

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

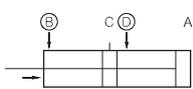
>형식표시방법 Indication of Model



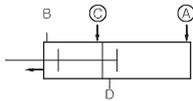
※ISL 시리즈 일반형 형식 표기 방법 참조 Refer to method for indication of general type of ISL series.
 두 개의 실린더를 직렬로 연결한 실린더로 출력을 2배로 얻을 수 있다.
 Connect two cylinder by series, then, can get twice more outputs.

>표시기호 Symbol

■ 기능 Function



Ⓑⓓ포트에 공기압을 공급하면 후진작동시 2배의 출력을 낸다.
 When supply Air pressure to Ⓑ and ⓓ Port, can get twice more outputs at backward motion.

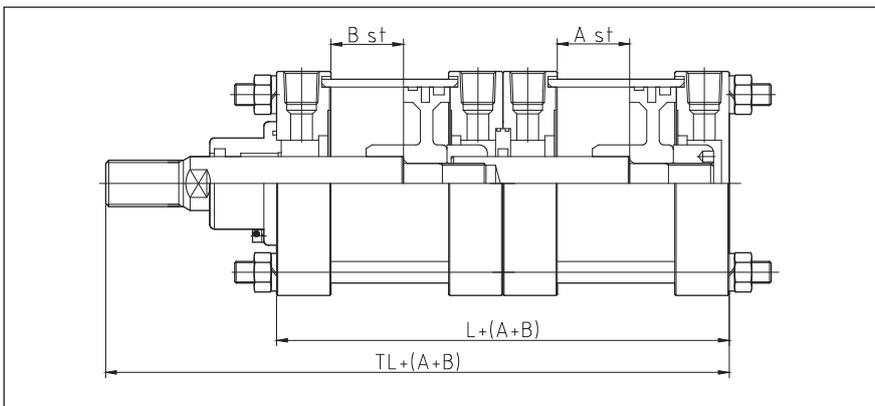


Ⓐⓒ포트에 공기압을 공급하면, 후진작동시 2배의 출력을 낸다.
 When supply Air pressure to Ⓐ and ⓒ Port, can get twice more outputs at forward motion.

>사양 Specification

형식 Type	무급유형 Oilless type	무급유형 Oilless type
사용유체 Fluid	공기 Air	Hydraulic Working Oil
시험압력 Test Pressure	15kgf/cm ²	
최고사용압력 Max. Working Pressure	9.9kgf/cm ²	
최저사용압력 Min. Working Pressure	0.8kgf/cm ²	1 kgf/cm ²
취부형식 Mounted Type	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



	L	TL
125	196	306
140	196	306
150	212	332
160	212	332
180	222	357
200	222	357
250	282	442
300	292	467

■ 내열용 실린더 Cylinder for Heat-Resist



150°C 까지 고온의 주위조건에서 사용할 수 있는 실린더
 It is a Cylinder with packing type for Heat-Resist.
 Can use in the high-temperature situation to 150°C.

■ 피스톤 로드 스테인레스 Piston-rod Stainless



피스톤 로드의 끝단이 전진시 물에 침수 등으로 인해서 부식의 우려가 있는 경우에 사용
 Use this when the Rod-end will be rusted by flooding at forward motion.

>사양 Specification

단위 unit:mm

Type	Oil Supply Type
Inside-diameter	∅125, ∅140, ∅150, ∅160, ∅180, ∅200
Working Temperature	-20~+150°C
Packing Materials	VITON (Fluoric Rubber)

>사양 Specification

단위 unit:mm

Type	Oil Supply Type / Oilless Type
Inside-diameter	∅125, ∅140, ∅150, ∅160, ∅180, ∅200, ∅250, ∅300
Piston Rod	Stainless Steel