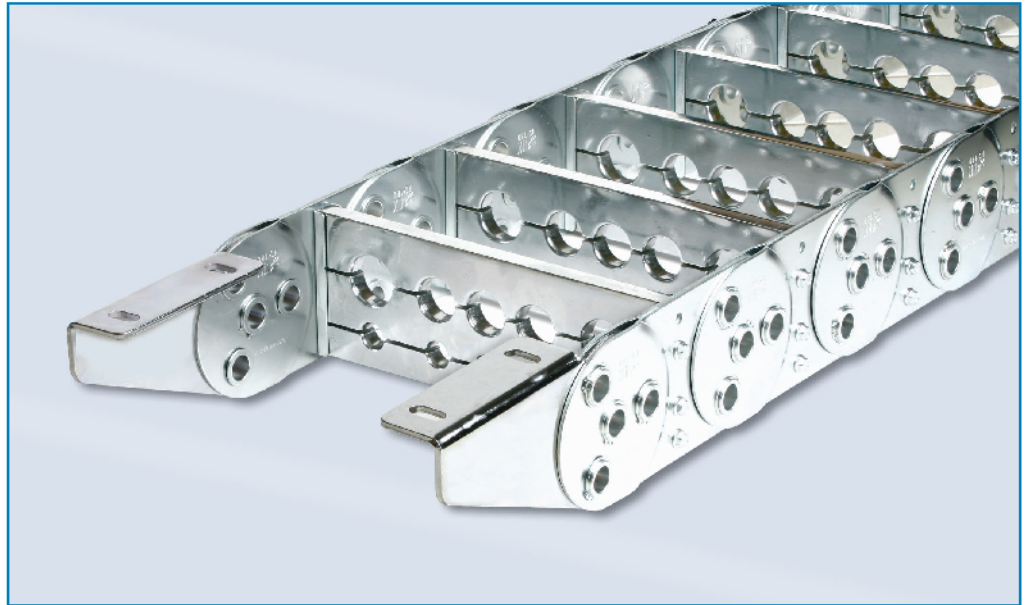


HS type

HS 070
 HS 095
 HS 130
 HS 180
 HS 250



· 실용신안 등록 제 069527호
 · 실용신안 등록 제 121323호
 · 실용신안 등록 제 134987호

● 용도 Application

제철 · 제강설비, 공작기계, 운반기계, 자동차 생산설비
 산업용 플랜트, 냉연 · 압연설비 등 모든 기계에 적용

Iron and steel mill facility, Machining center, Conveying machine, Automobile industry, Industrial Plant Facility, Cold Stripping and Rolling Facilities and most of industrial application

● 특징 Features

- Steel 체인과 알루미늄 Supporter 로 구성되어 강하고 수명이 깁니다.
- 작은판의 링크플레이트는 안전 설계로 되어 있습니다.
- Supporter 구멍을 주문가공하여 Cable, Hose 의 지지가 보다 확실합니다.
- 운동량이 많을 경우는 I형, V형을 권합니다.
- 25종의 다양한 모델이 있습니다.
- 운반기계, 공작기계, 철강설비 및 모든 기계에 적용하는 표준형입니다.

- Long life and durability are ensured from steel chain and aluminum supporter.
- Link plate is designed for the best safety.
- Customized holes of supporter provide better support for cables and hose.
- For extensive motion, I- or V-type is recommended.
- 25 various models are manufactured.
- Standardized design is good for transporting machine, milling machine, iron-mill facility and most of industrial application.

● 운용환경 Operation

HS Type의 Robochain는 여러가지 응용분야에서 사용하기 때문에 내구성을 높이기 위해 Supporter를 알루미늄으로 제작 공급하고 있습니다. 녹이 발생하는 환경에서 사용하실 경우에는 Plate를 스테인레스 강판으로도 제작 가능합니다. Supporter의 Hole은 케이블과 호스의 규격에 맞추어 제작합니다.

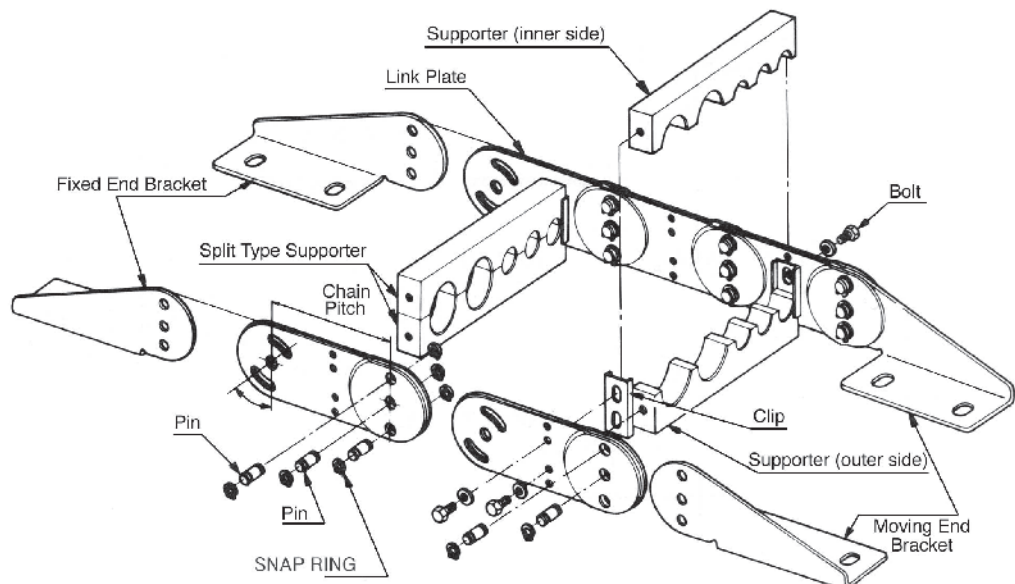
Since HS Type RoboChain is standard model for many use in industrial application, the supporter is made of aluminum to ensure long stroke and durability in harsh environment. For moisture environment, plate can be made of stainless steel.

Hole of supporter is manufactured according to customer's cable and hose specification.

● 주요제원 Properties

- 운동속도: 60m/min 이하
- 케이블 호스의 직경: 100mm 이하 (이상일 경우 문의바람)
- 사용온도: -25 ~ 200°C
- 기본색: 백색 아연 도금
- 재질: S45CM-S, Aluminum
- Moving Velocity: below 60m/min
- Diameter of Cable Hose: less than 100mm
- Operating Temperature: -25 ~ 200°C
- Basic Color: White Zinc Coating
- Material: S45CM-S, Aluminum

● 구조와명칭 Structure

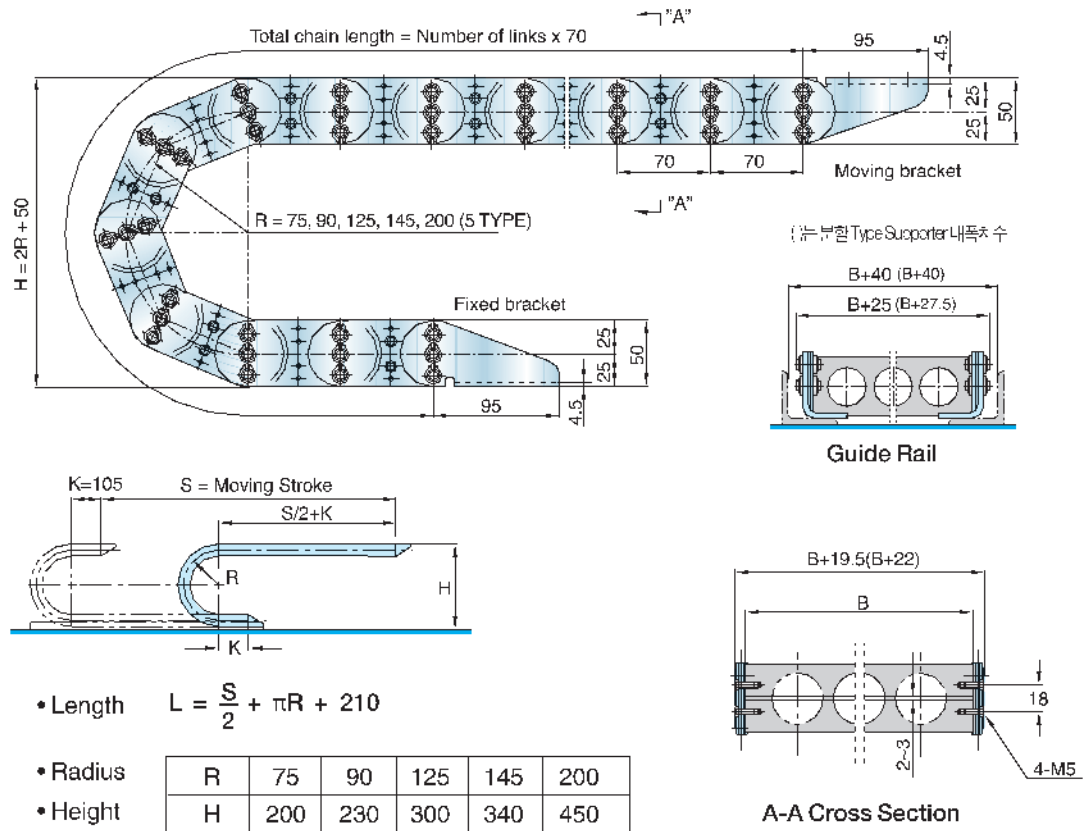


Order Example (주문예)

HS 070

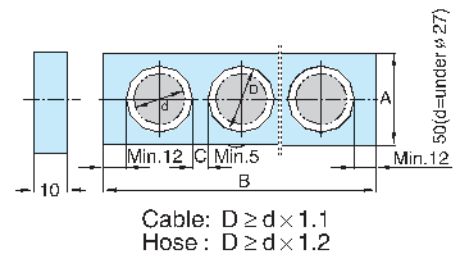
HS070	145R	B200	3500L	3SETS
Type	Radius	Width	Length	Q'ty

Chain, Cross Section, Guide Rail

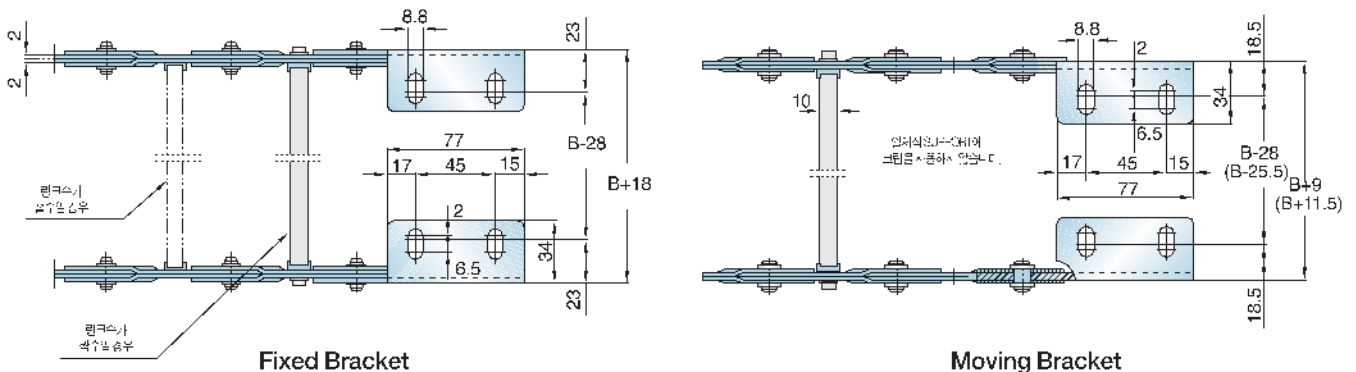


Supporter

Cable/Hose	"A"	"B"						
dmax	60	80	100	125	150	200	250	300
ø27	50	0	0	0	0	0	0	0



Brackets

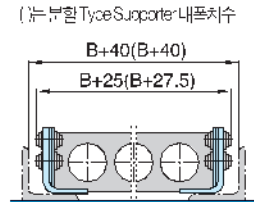
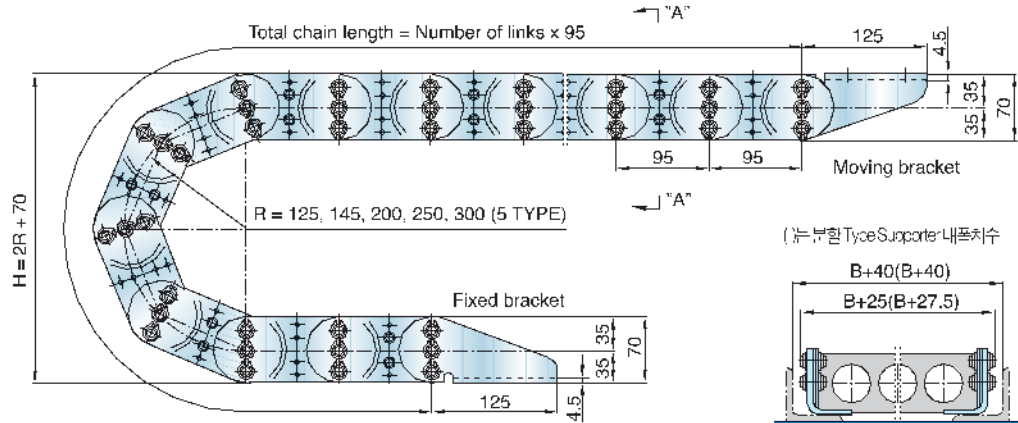


Order Example (주문예)

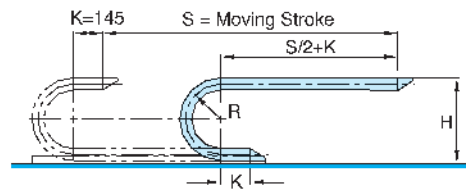
HS 095

HS095	300R	B250	4560L	3SETS
Type	Radius	Width	Length	Q'ty

Chain, Cross Section, Guide Rail

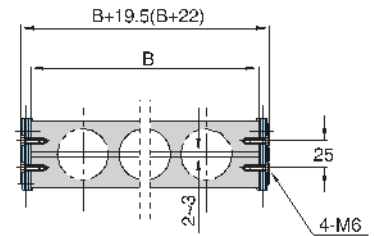


Guide Rail



• Length $L = \frac{S}{2} + \pi R + 290$

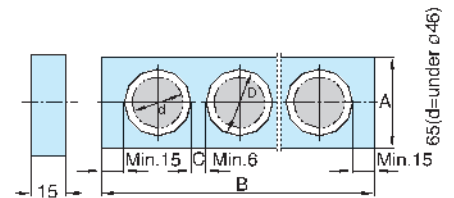
• Radius	R	125	145	200	250	300
• Height	H	320	360	470	570	670



A-A Cross Section

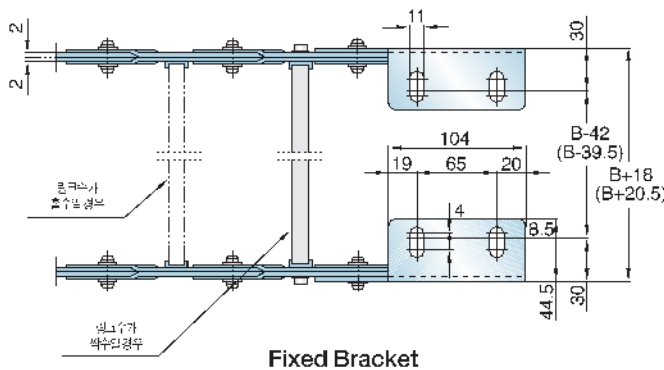
Supporter

Cable/Hose	"A"	"B"								
dmax		80	100	125	150	200	250	300	350	400
ø46	65	-	0	0	0	0	0	0	0	0

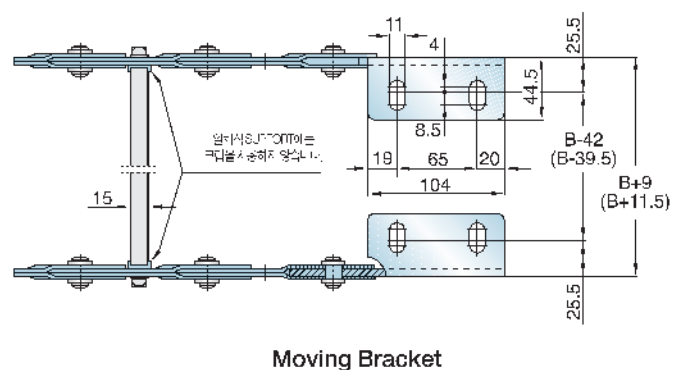


Cable: $D \geq d \times 1.1$
Hose: $D \geq d \times 1.2$

Brackets



Fixed Bracket



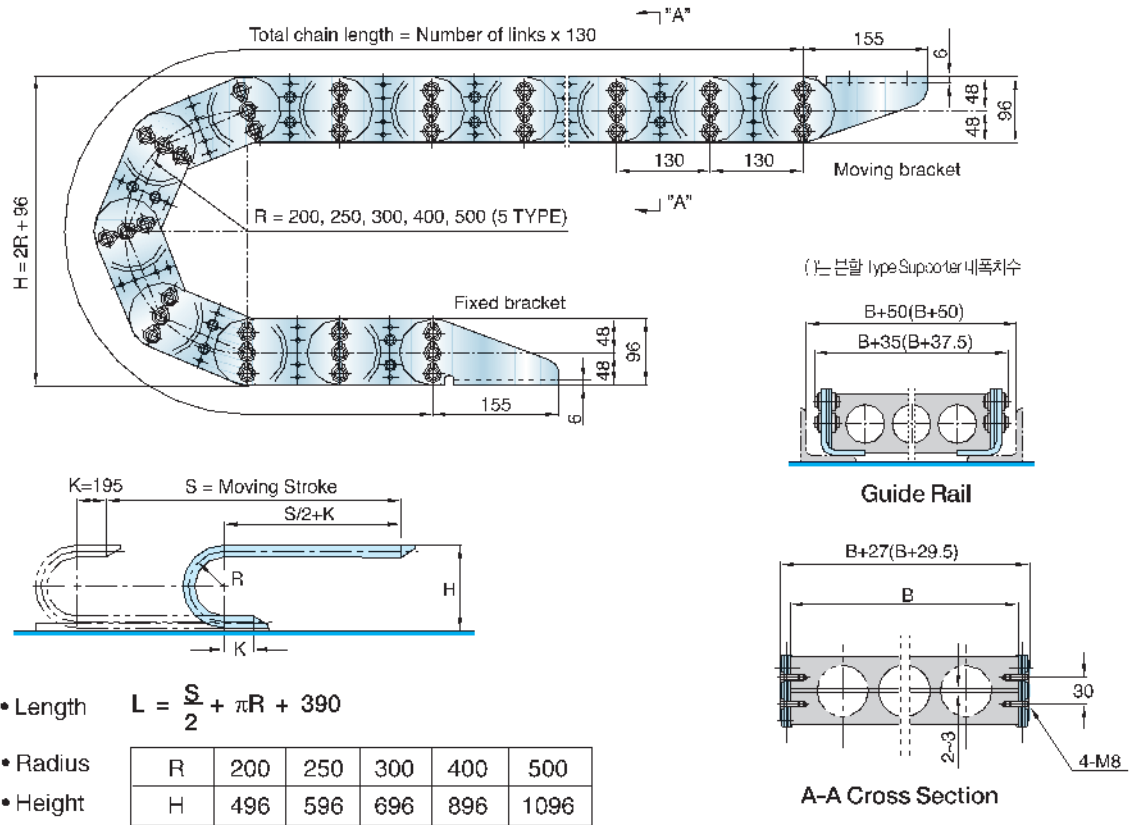
Moving Bracket

Order Example (주문예)

HS 130

HS130	400R	B500	5980L	3SETS
Type	Radius	Width	Length	Q'ty

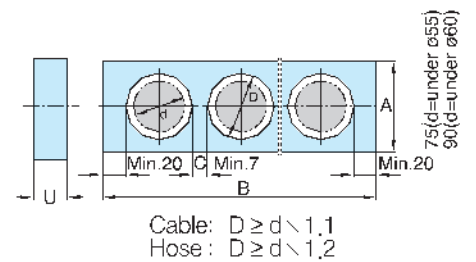
Chain, Cross Section, Guide Rail



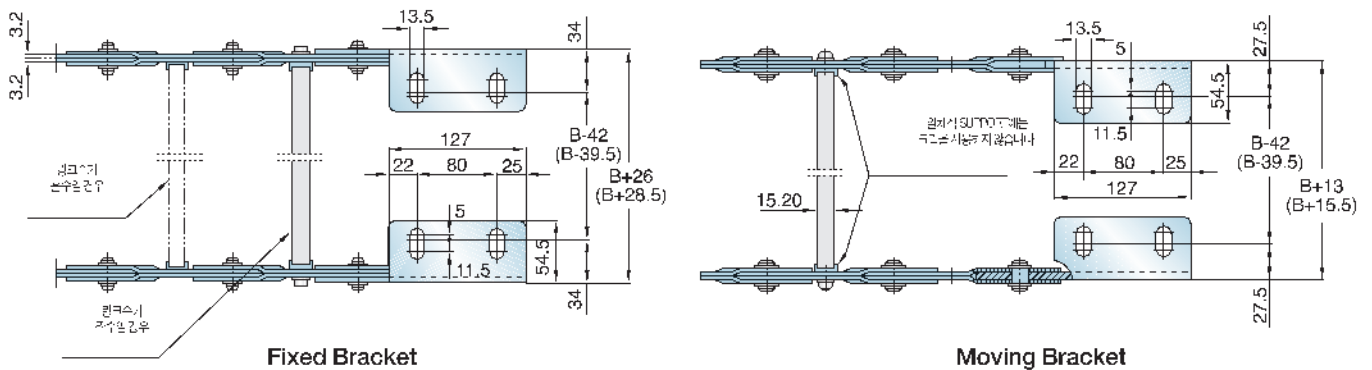
Supporter

(o): U=15, (*): U=20

Cable/Hose	"A"										"B"											
	dmax	100	125	150	200	250	300	350	400	450	500	100	125	150	200	250	300	350	400	450	500	
ø55	75	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
ø60	90	-	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o



Brackets

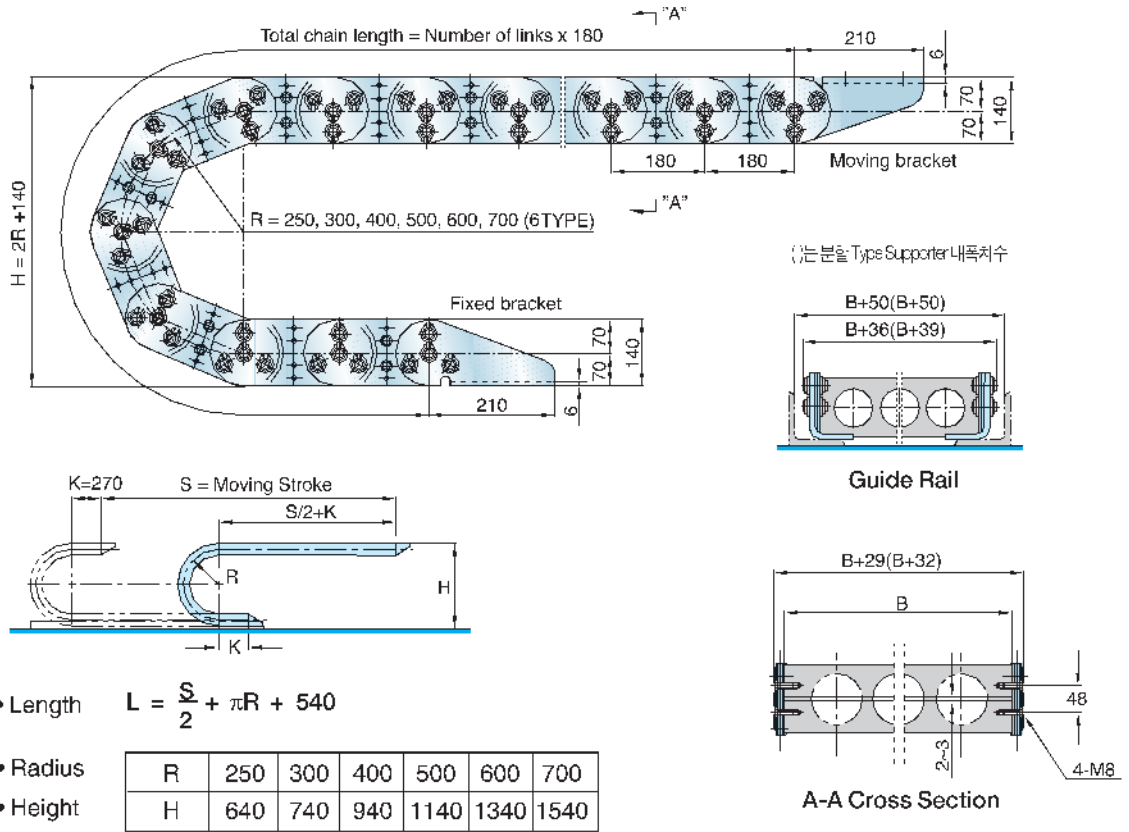


Order Example (주문예)

HS 180

HS180	700R	B600	7920L	3SETS
Type	Radius	Width	Length	Q'ty

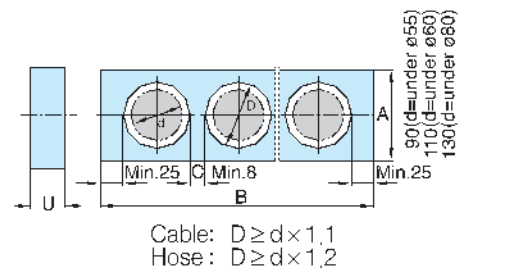
Chain, Cross Section, Guide Rail



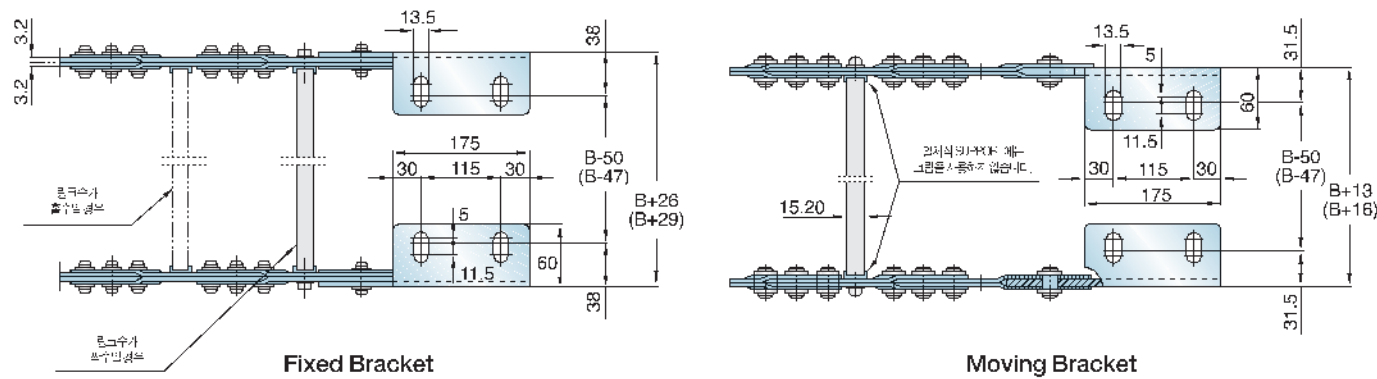
Supporter

(o): U=15, (•): U=20

Cable/Hose	"A"										"B"															
	d _{max}	100	125	150	200	250	300	350	400	450	500	550	600	100	125	150	200	250	300	350	400	450	500	550	600	
ø50	90	o	o	o	o	o	o	o	o	•	•	-	-	o	o	o	o	o	o	o	o	o	•	•	-	-
ø80	120	-	o	o	o	o	o	o	o	o	•	•	•	o	o	o	o	o	o	o	o	o	•	•	•	•
ø90	130	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•



Brackets

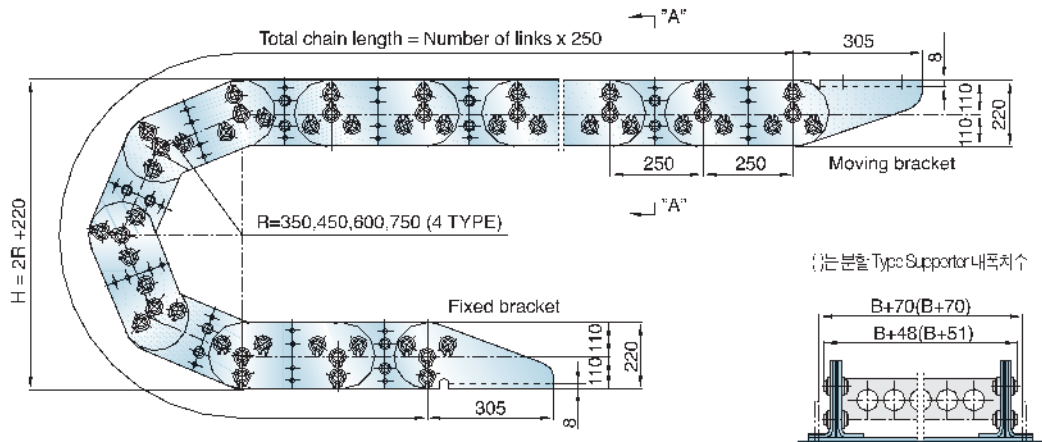


Order Example (주문예)

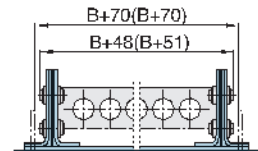
HS 250

HS250	750R	B600	9750L	3SETS
Type	Radius	Width	Length	Q'ty

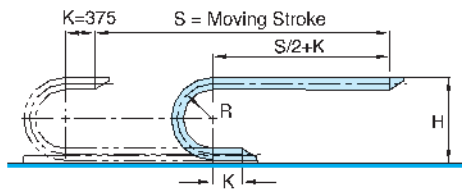
Chain, Cross Section, Guide Rail



()는 분할-Type Supporter내쪽치수

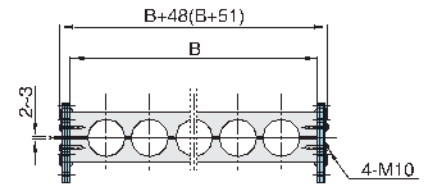


Guide Rail



• Length $L = \frac{S}{2} + \pi R + 750$

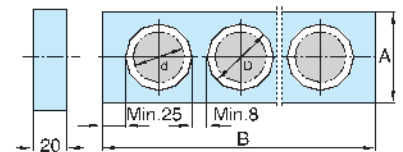
• Radius	R	350	450	600	750
• Height	H	920	1120	1420	1720



A-A Cross Section

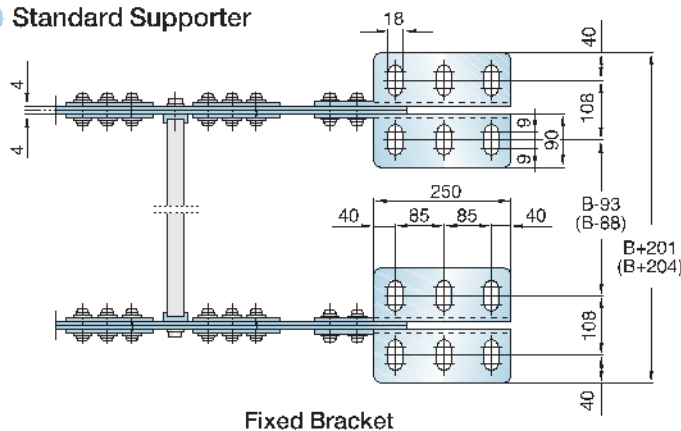
Supporter

Cable/Hose d _{max}	"A"	"B"					
		350	400	450	500	550	600
ø80	150	o	o	o	o	o	o
ø110	150	-	o	o	o	o	o
ø110over	220	-	-	o	o	o	o

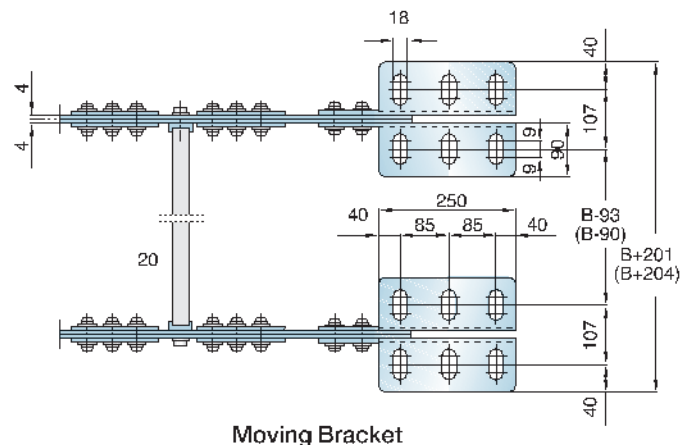


Cable: $D \geq d / 1.1$
Hose: $D \geq d / 1.2$

Standard Supporter

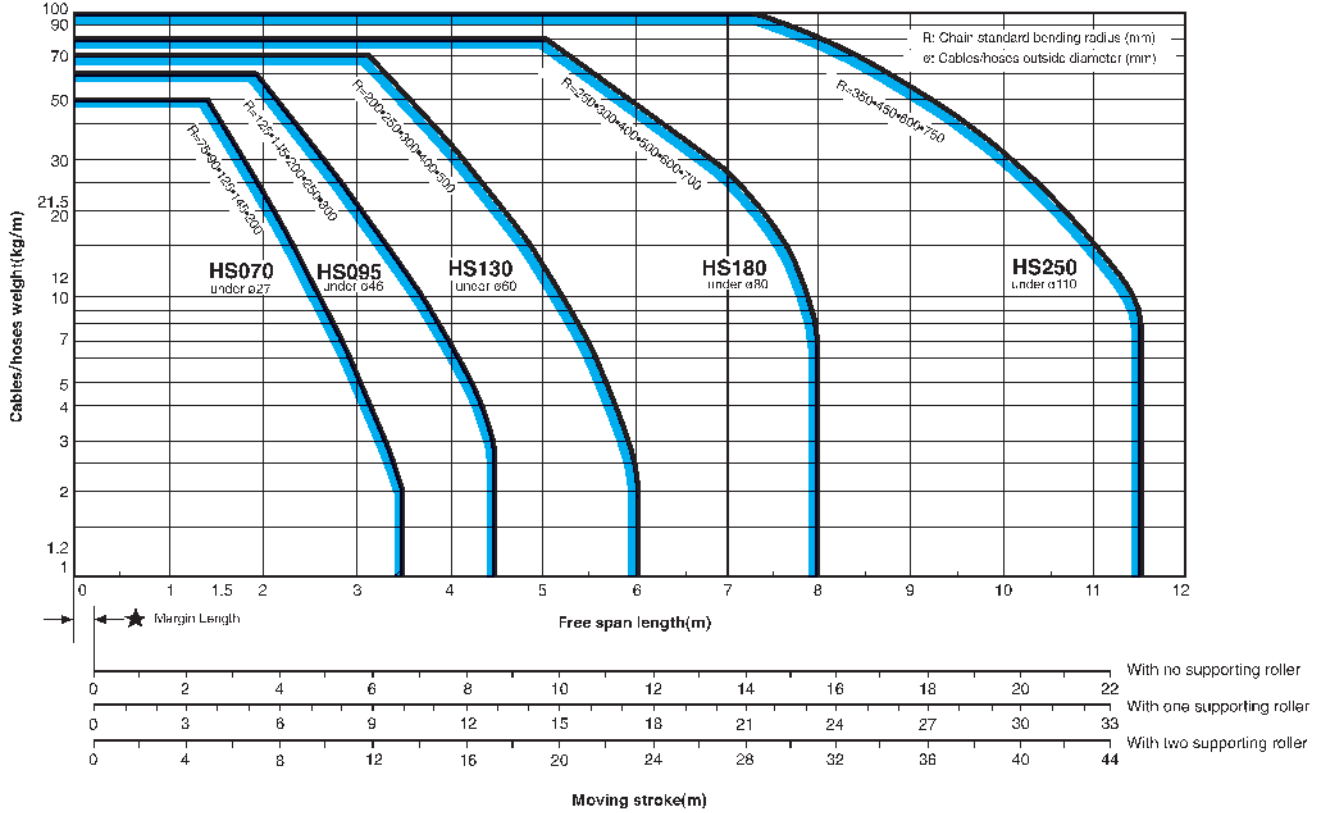


Fixed Bracket



Moving Bracket

● 능력선도 (HS) Capability Graph



● 운동거리와 Support Roller Stroke & Support Roller

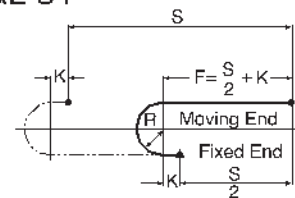
Robochain가 정상적으로 똑바른 (수평)거리를 Free Span이라 합니다. Free Span의 길이는 케이블이나 호스의 무게에 의해 결정됩니다.

기계가 움직이는데 요구되는 거리의 반이 Free Span을 넘으면 Support Roller를 사용하여 운동거리를 증가시켜야 합니다. Support Roller는 Free Span 거리를 확장시켜 줍니다.

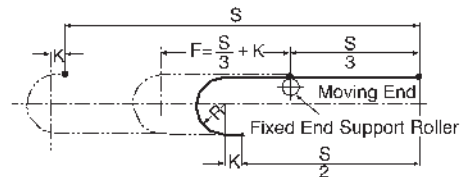
● Support Roller는 37 Page 참조

- S: 운동거리 (Stroke)
- K: 여유거리 (Margin Length)
- F: Free Span

● Support Roller가 없는 경우



● Support Roller가 한개로 Free Span을 3배 확장



● Support Roller가 두개로 Free Span을 4배 확장

