

HSP type

HSP 0130-1
 HSP 0130-1B
 HSP 0130-2
 HSP 0130-2B
 HSP 0180-1
 HSP 0180-1B[N]
 HSP 0180-2B
 HSP 0180-4B
 HSP 0320-1B[N]
 HSP 0320-2B[N]
 HSP 0320-3B[N]
 HSP 0450-1B[N]
 HSP 0450-2B[N]
 HSP 0450-3B[N]
 HSP 0450-4B[N]
 HSP 0625-1B[N]
 HSP 0625-2B[N]



· 실용신안등록제 093356호
 · 실용신안등록제 134988호

※ [N]은 신형.

● 용도 Application

자동화기계, 목공기계, 식품기계, 취출로봇, 섬유기계, 특장차
 자동차생산설비, 의료기계, 각종 공작기계 및 컴퓨터 관련기계에 적용.

Factory automation, Wood work machine, Food processing, Grabbing-and-extracting robot, Fabric machine, Special purpose vehicle, Automobile industry, Medical Machine, Machining center and Computer related machine

● 특징 Features

- 본체는 개폐형으로 Cable, Hose의 설치가 쉽습니다.
- 경량이어서 움직임이 원활합니다.
- Divider가 좌우로 움직입니다.
- 150여종의 다양한 모델과 특수 규격도 주문가능합니다.
- 자동화기계, 목공기계, 식품기계, 산업용로봇 등 다방면에 적합한 모델입니다.
- *HSP type provides cover lead for easy installation of cable and hose.*
- *Since it is light, movement is prompt.*
- *Divider is adjustable.*
- *150 various models are manufactured. Also special order can be taken place.*
- *Applicable for factory automation, wood work, food processing, industrial robot and many more.*

● 운용환경 Operation

HSP Type은 플라스틱 RoboChain으로 케이블 및 호스의 인입을 용이하게 하는 개폐형으로 설계되어 있습니다. HSP Type의 RoboChain는 모든 구성품이 고강도 엔지니어링 플라스틱으로 설계 제작되어 소음이 적고, 깨끗하며 작고, 가벼운 장점이 있습니다. 특히 HSP 0450-1BN 이상의 Type은 Divider를 부착하여 사용할 수 있습니다. HSP Type은 전자기계, 산업용 로봇 공작기계 및 다방면에 사용되는 이상적인 장치입니다.

Cover in HSP Type provides easy access and installation of cable and hose. All parts are made of highly durable engineering plastic. Therefore, it features less noise, good appearance and light weight. In particular, HSP 0450-1BN and higher types accommodate divider.

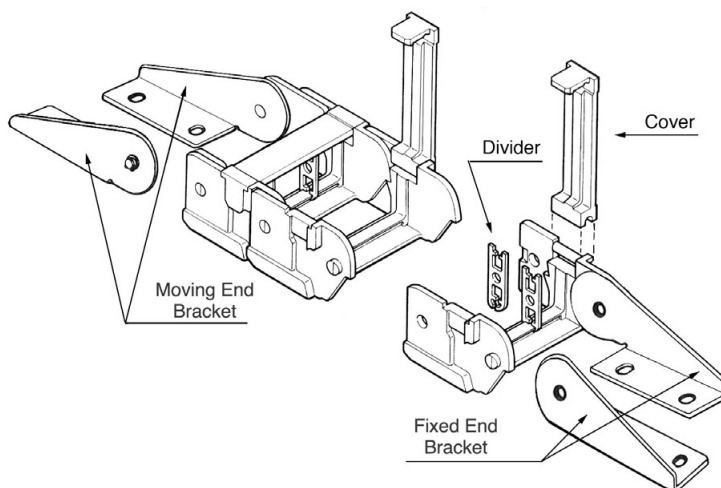
This type is applicable for many area such as electronic and electrical machine, industrial robot, machine center and many more.

● 주요제원 Properties

- 운동속도 : 180m/min이하
- 케이블 호스의 직경 : 36mm 이하
- 사용온도 : -25 ~ 100°C
- 장력 : 190 (건조), 120 (공기습도) N/mm²
- 인장 팽창 : 4 (건조), 6 (공기습도) %
- 탄성계수 : 10000 (건조), 7000 (공기습도) N/mm²
- 미끄럼 마찰 : 0.4 (무윤활시)
- 기본색 : Black (칼라 주문가능)
- 재질 : 엔지니어링 플라스틱

- Moving Velocity: below 180m/min
- Diameter of Cable Hose: less than 36mm
- Operating Temperature: -25 ~ 100°C
- Tension: 190 (in dry), 120 (in moisture) N/mm²
- Stretch: 4 (in dry), 6 (in moisture) %
- Elasticity: 10000 (in dry), 7000 (in moisture) N/mm²
- Sliding Friction: 0.4 (non-greased)
- Basic Color: Black
- Material: Engineering Plastic

● 구조와명칭 Structure

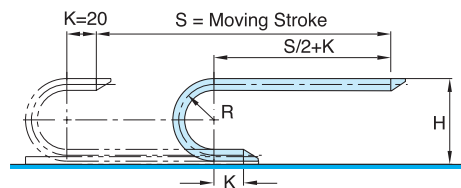
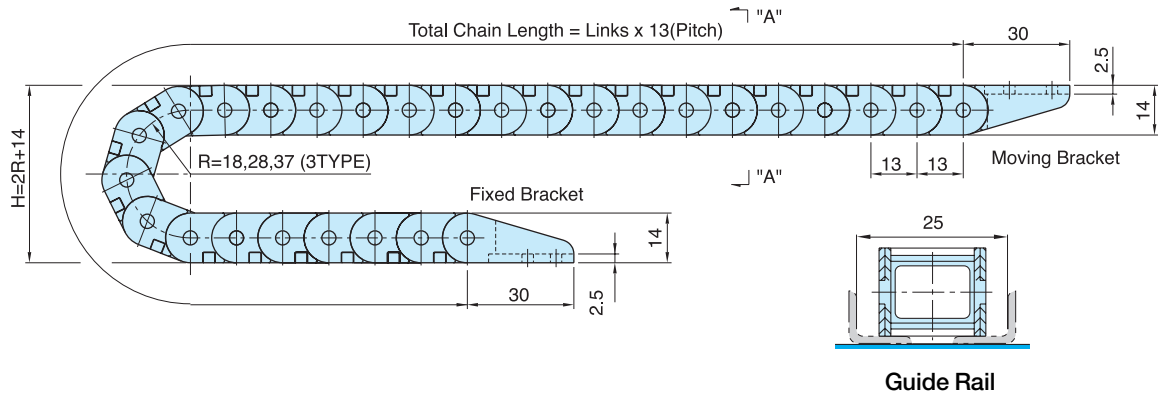


HSP 0130-1B

Order Example (주문예)

HSP0130-1B 37R 1,000L 3SETS
Type Radius Length Q'ty

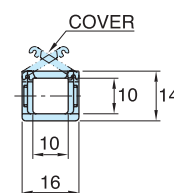
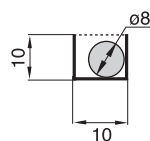
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 40$

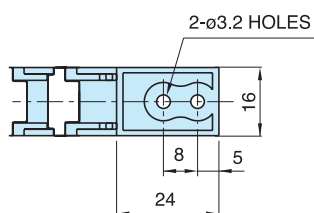
• Radius	R	18	28	37
• Height	H	50	70	88

Max. Cable Diameter Cross Section

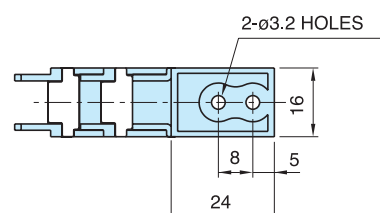


A-A Cross Section

Brackets



Fixed Bracket



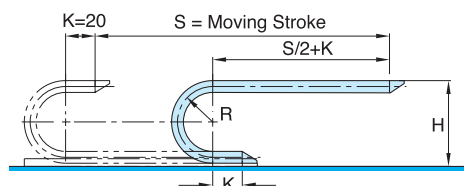
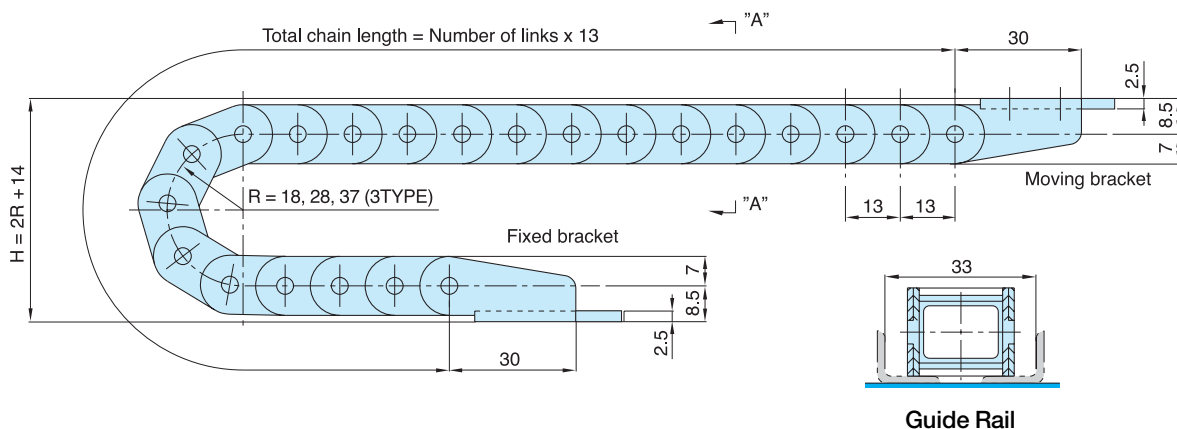
Moving Bracket

Order Example (주문예)

HSP 0130-2

HSP0130-2 28R 2000L 10SETS
Type Radius Length Q'ty

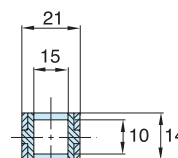
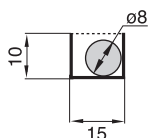
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 40$

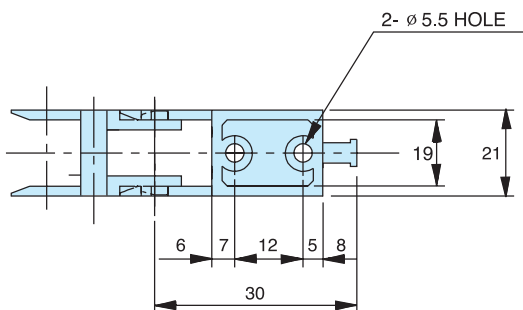
• Radius	R	18	28	37
• Height	H	50	70	88

Max. Cable Diameter Cross Section

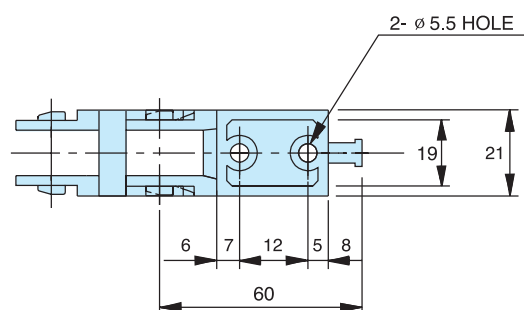


A-A Cross Section

Brackets



Fixed Bracket



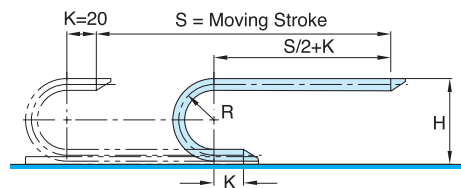
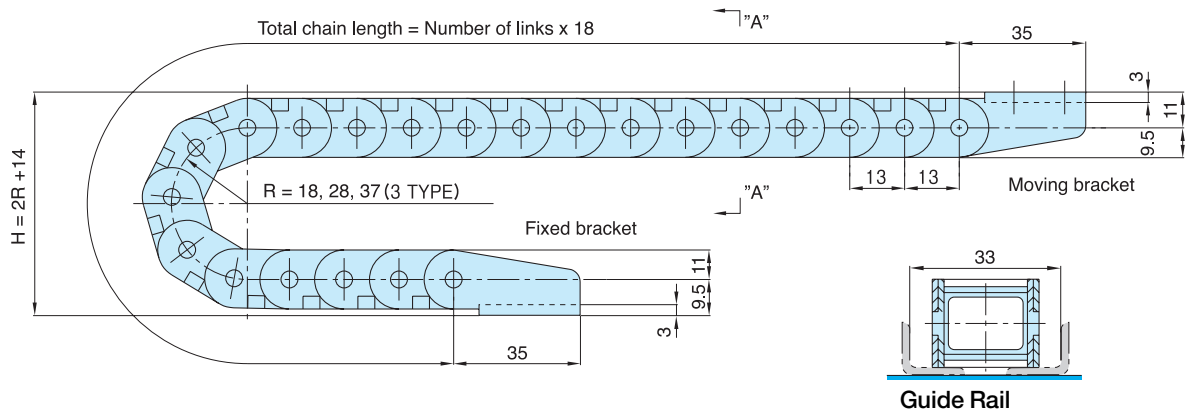
Moving Bracket

HSP 0130-2B

Order Example (주문예)

HSP0130-2B 28R 1000L 7SETS
Type Radius Length Q'ty

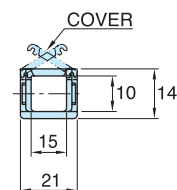
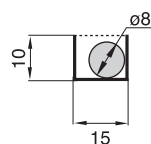
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 40$

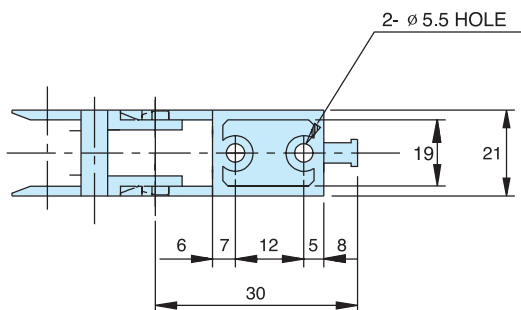
• Radius	R	18	28	37
• Height	H	50	70	88

Max. Cable Diameter Cross Section

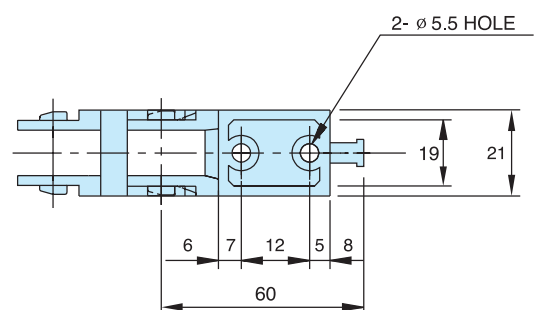


A-A Cross Section

Brackets



Fixed Bracket



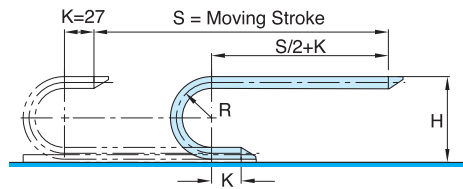
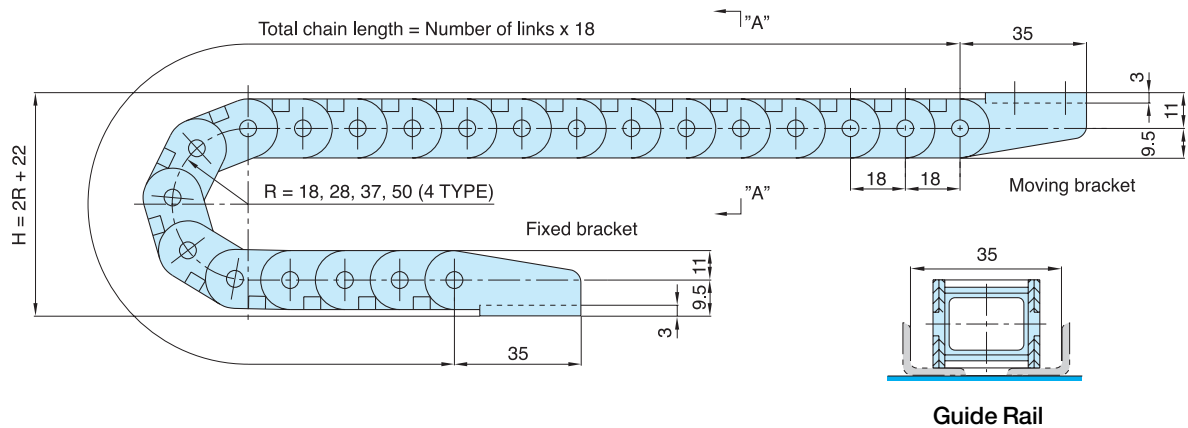
Moving Bracket

HSP 0180-1B

Order Example (주문예)

HSP0180-1B 50R 1000L 3SETS
Type Radius Length Q'ty

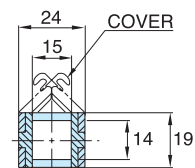
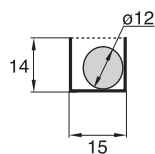
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 54$

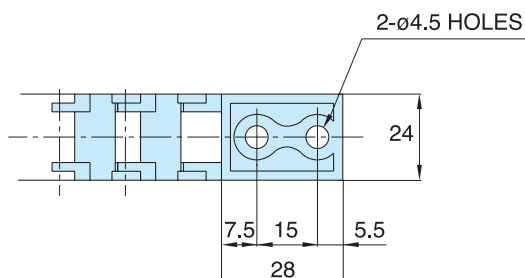
• Radius	R	18	28	37	50
• Height	H	58	78	96	122

Max. Cable Diameter Cross Section

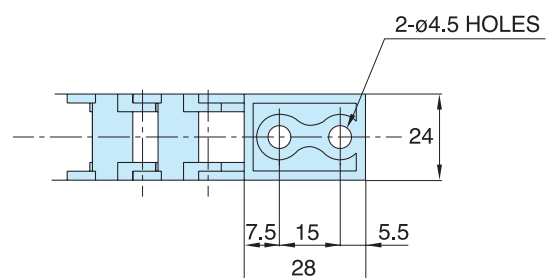


A-A Cross Section

Brackets



Fixed Bracket



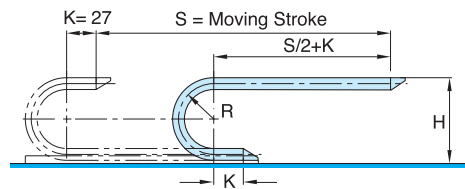
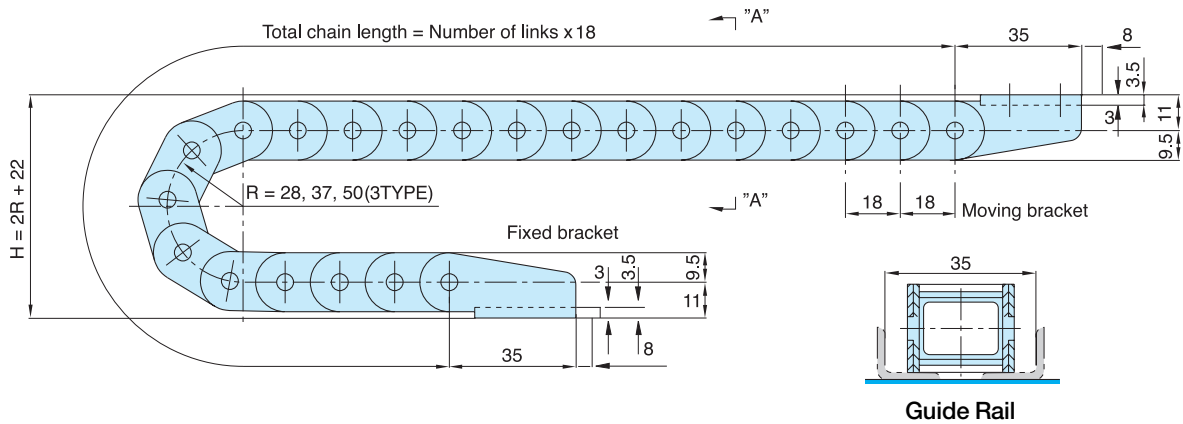
Moving Bracket

HSP 0180-1BN

Order Example (주문예)

HSP0180-1BN 28R 1000L 3SETS
Type Radius Length Q'ty

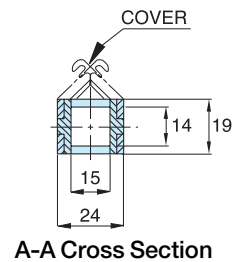
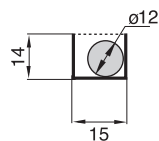
Chain, Guide Rail



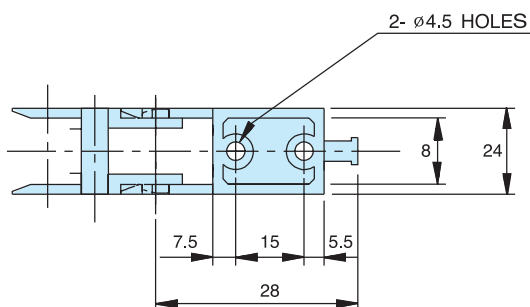
• Length $L = \frac{S}{2} + \pi R + 54$

• Radius	R	37	50	75
• Height	H	99	125	175

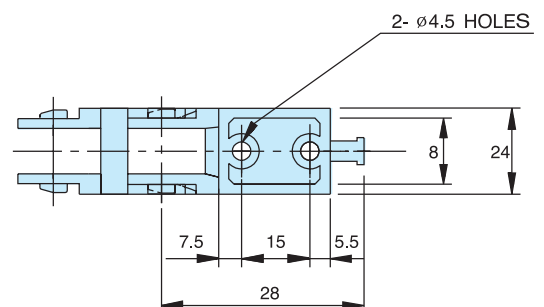
Max. Cable Diameter Cross Section



Brackets



Fixed Bracket



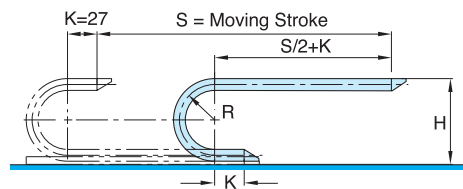
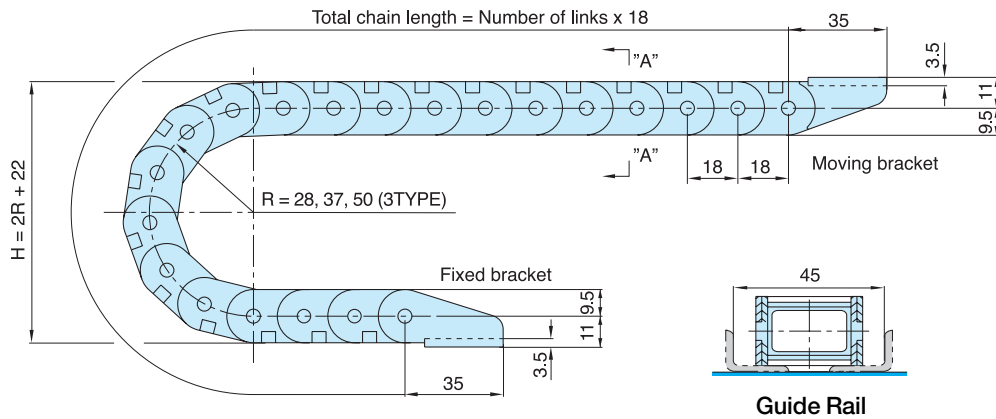
Moving Bracket

HSP 0180-2B

Order Example (주문예)

HSP0180-2B 50R 1500L 3SETS
Type Radius Length Q'ty

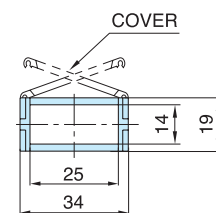
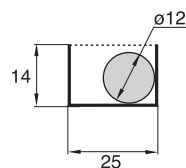
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 54$

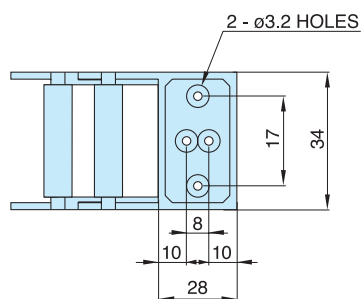
• Radius	R	28	37	50
• Height	H	78	96	122

Max. Cable Diameter Cross Section

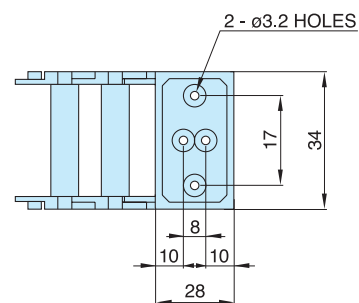


A-A Cross Section

Brackets



Fixed Bracket



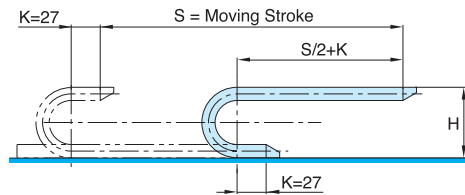
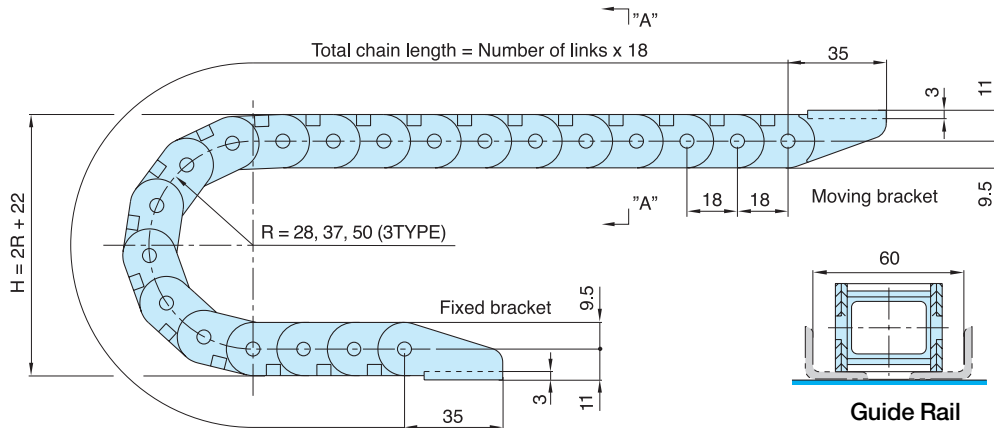
Moving Bracket

HSP 0180-4B

Order Example (주문예)

HSP0180-4B 50R 1000L 3SETS
Type Radius Length Q'ty

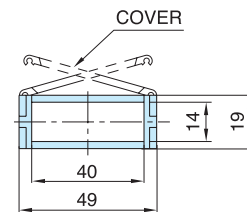
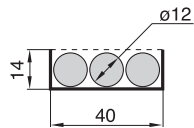
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 54$

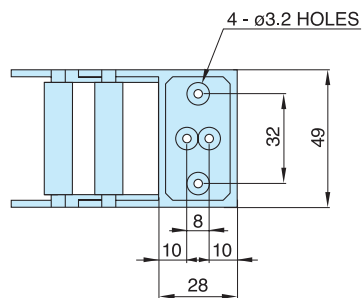
• Radius	R	28	37	50
• Height	H	78	96	122

Max. Cable Diameter Cross Section

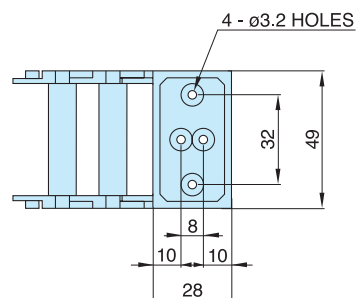


A-A Cross Section

Brackets



Fixed Bracket



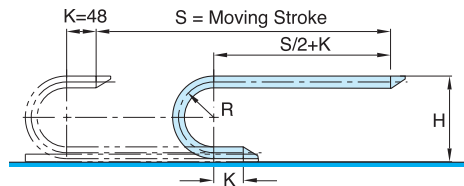
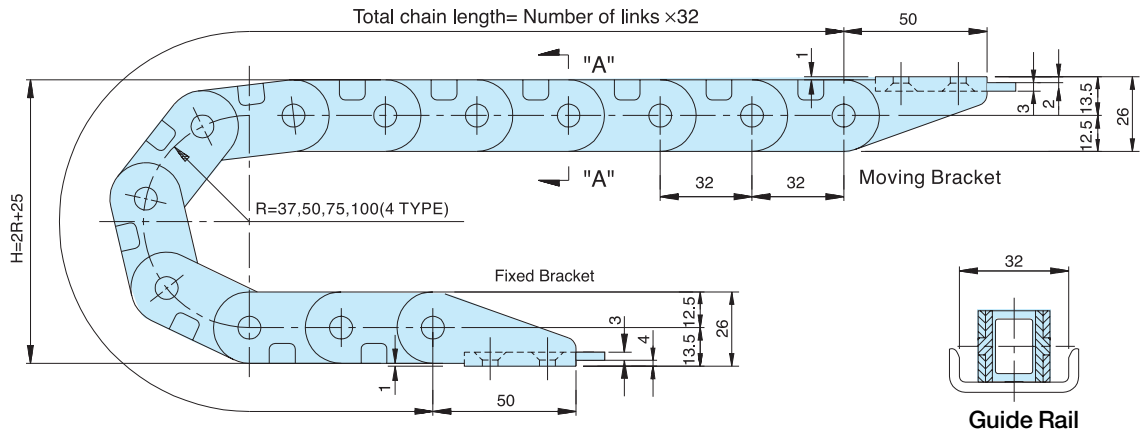
Moving Bracket

HSP 0320-1BN

Order Example (주문예)

HSP0320-2BN 50R 2000L 3SETS
Type Radius Length Q'ty

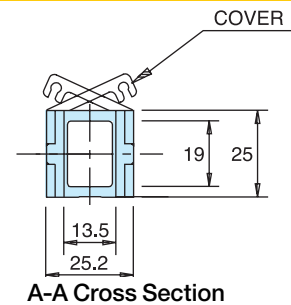
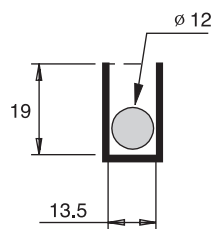
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 96$

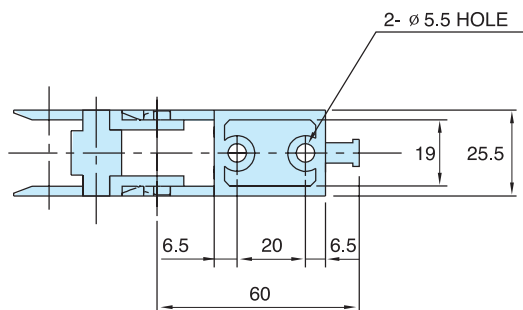
• Radius	R	37	50	75	100
• Height	H	99	125	175	225

Max. Cable Diameter Cross Section

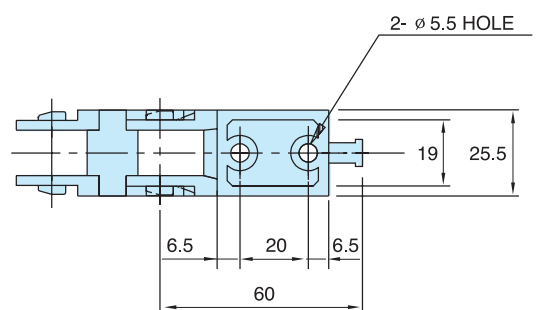


A-A Cross Section

Brackets



Fixed Bracket



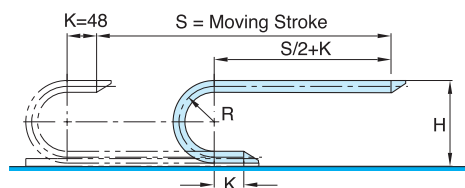
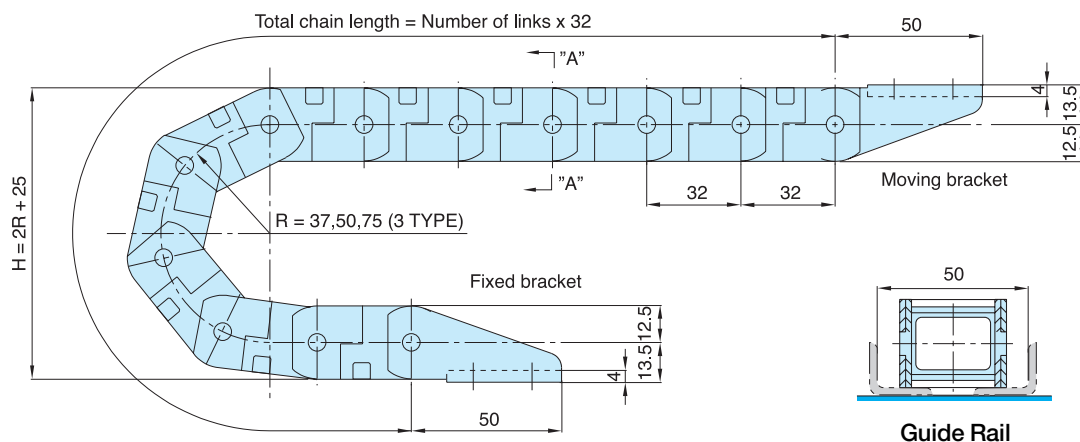
Moving Bracket

HSP 0320-2B

Order Example (주문예)

HSP0320-2B 75R 2000L 3SETS
Type Radius Length Q'ty

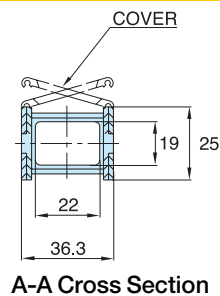
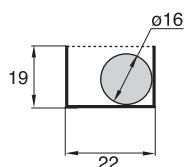
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 96$

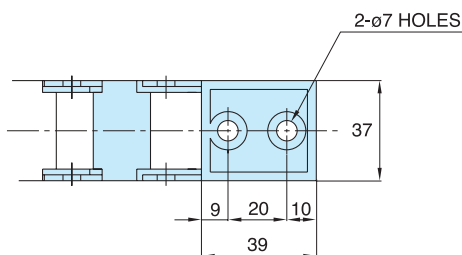
• Radius	R	37	50	75
• Height	H	99	125	175

Max. Cable Diameter Cross Section

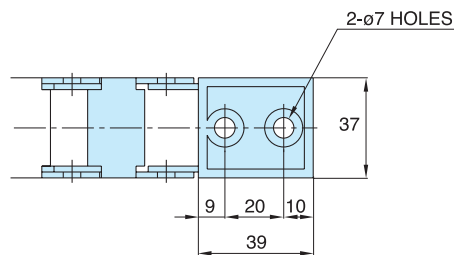


A-A Cross Section

Brackets



Fixed Bracket



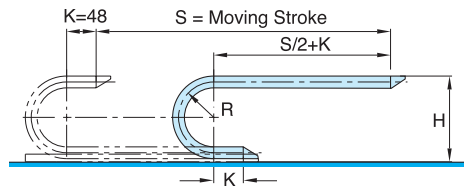
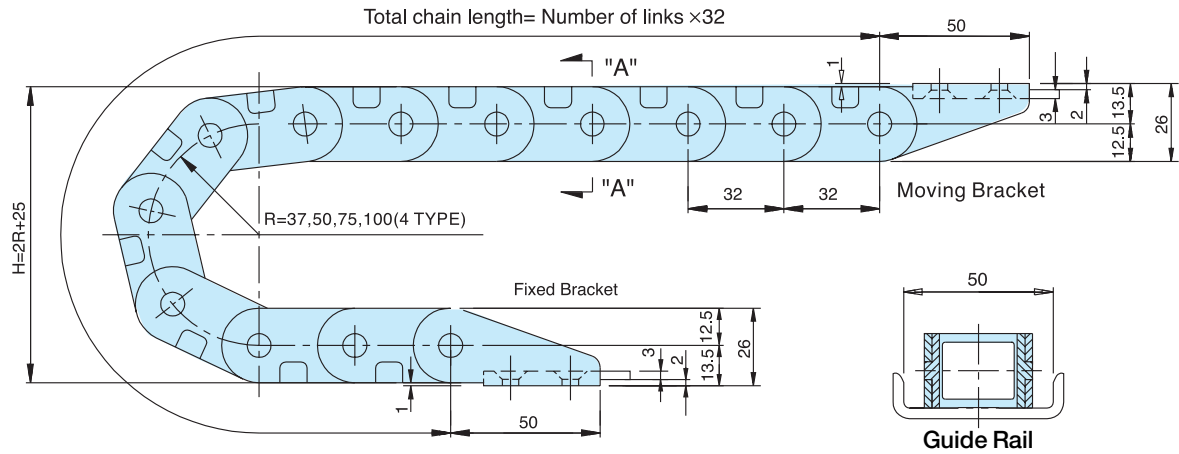
Moving Bracket

HSP 0320-2BN

Order Example (주문예)

HSP0320-2BN 75R 1000L 3SETS
Type Radius Length Q'ty

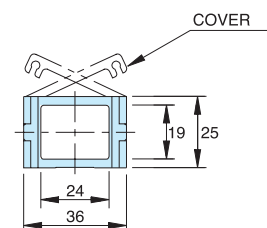
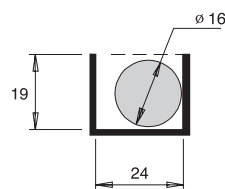
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 96$

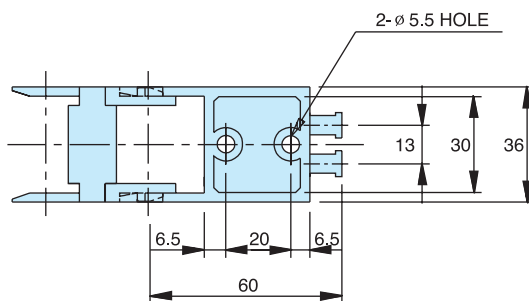
• Radius	R	37	50	75	100
• Height	H	99	125	175	225

Max. Cable Diameter Cross Section

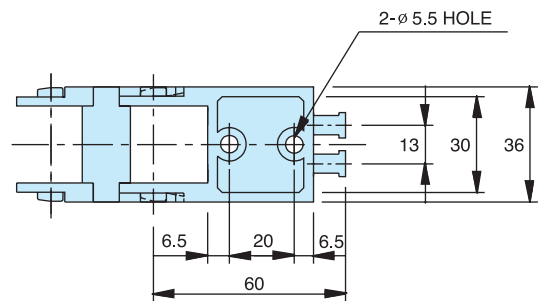


A-A Cross Section

Brackets



Fixed Bracket



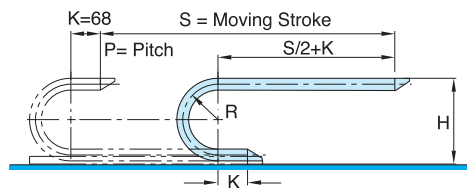
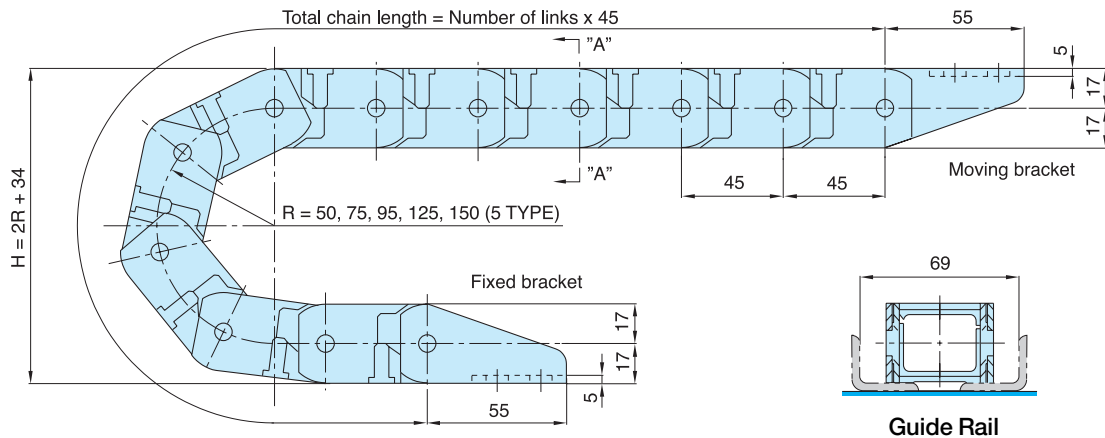
Moving Bracket

HSP 0450-1B

Order Example (주문예)

HSP0450-1B 150R 2000L 3SETS
Type Radius Length Q'ty

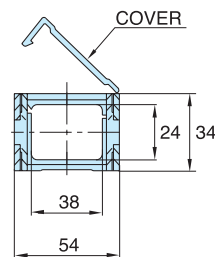
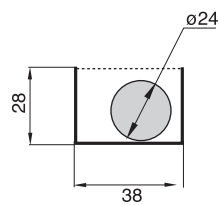
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 136$

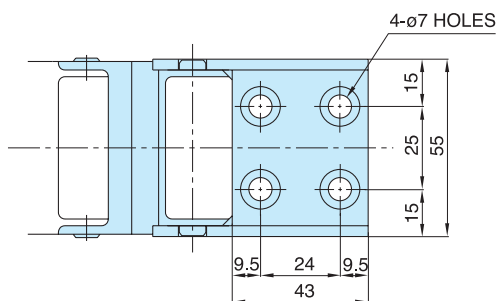
• Radius	R	50	75	95	125	150
• Height	H	134	184	224	284	334

Max. Cable Diameter Cross Section

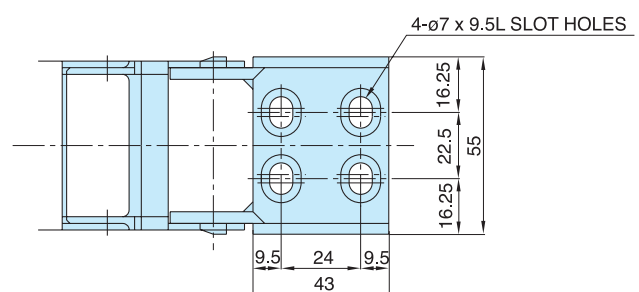


A-A Cross Section

Brackets



Fixed Bracket



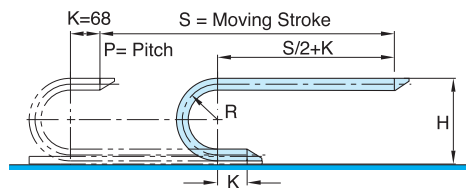
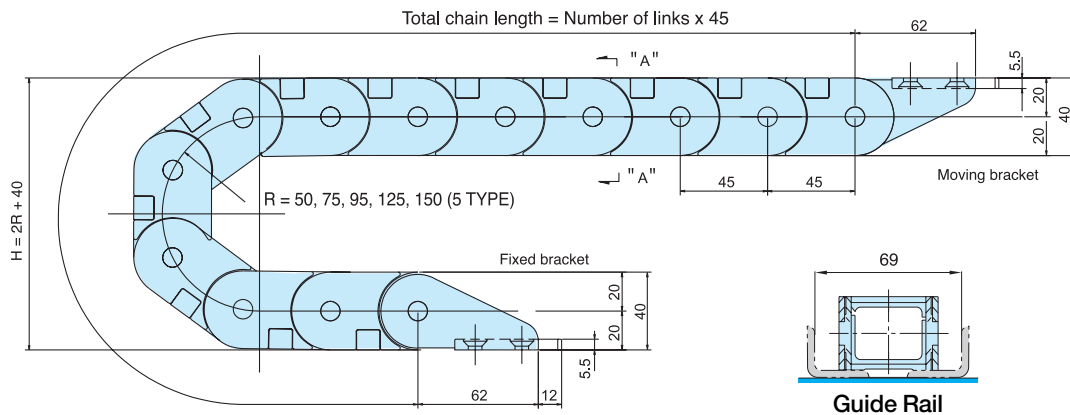
Moving Bracket

Order Example (주문예)

HSP 0450-1BN

HSP0450-1BN 150R 2000L 3SETS
Type Radius Length Q'ty

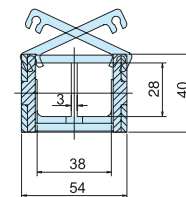
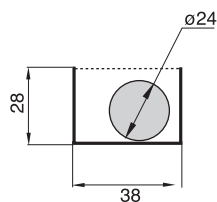
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 136$

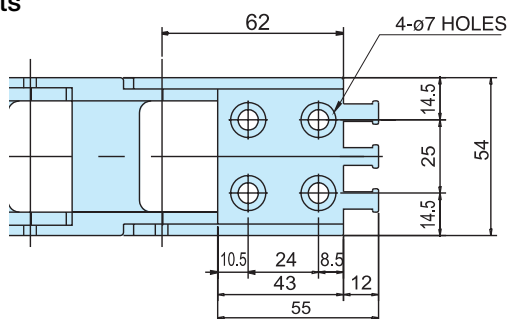
• Radius	R	50	75	95	125	150
• Height	H	140	190	230	290	340

Max. Cable Diameter Cross Section

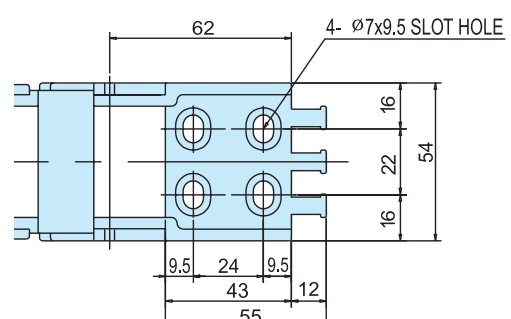


A-A Cross Section

Brackets



Fixed Bracket



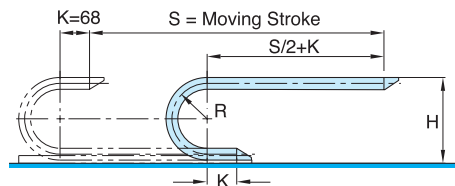
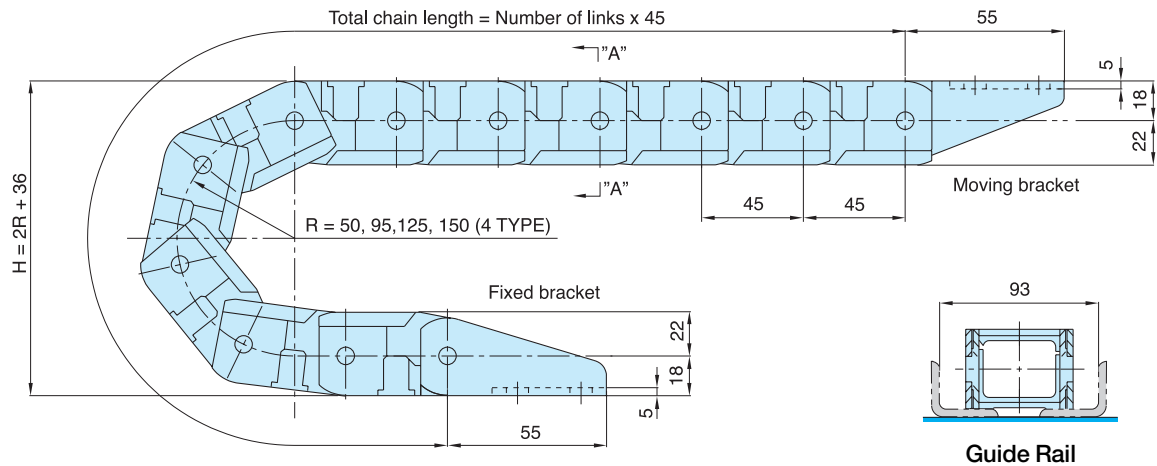
Moving Bracket

HSP 0450-2B

Order Example (주문예)

HSP0450-2B 150R 2000L 3SETS
Type Radius Length Q'ty

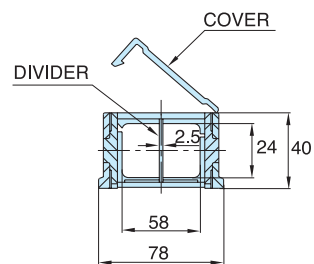
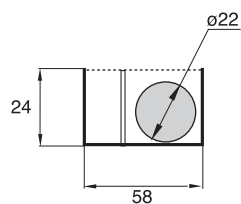
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 136$

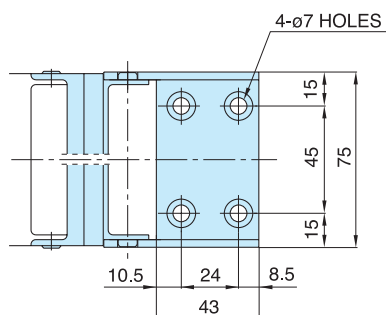
• Radius	R	50	95	125	150
• Height	H	136	226	286	336

Max. Cable Diameter Cross Section

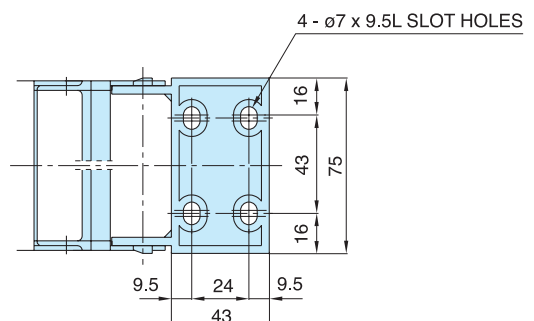


A-A Cross Section

Brackets



Fixed Bracket



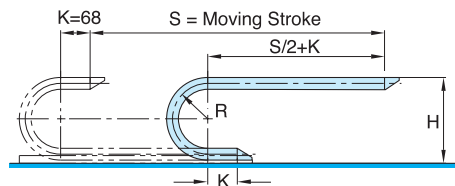
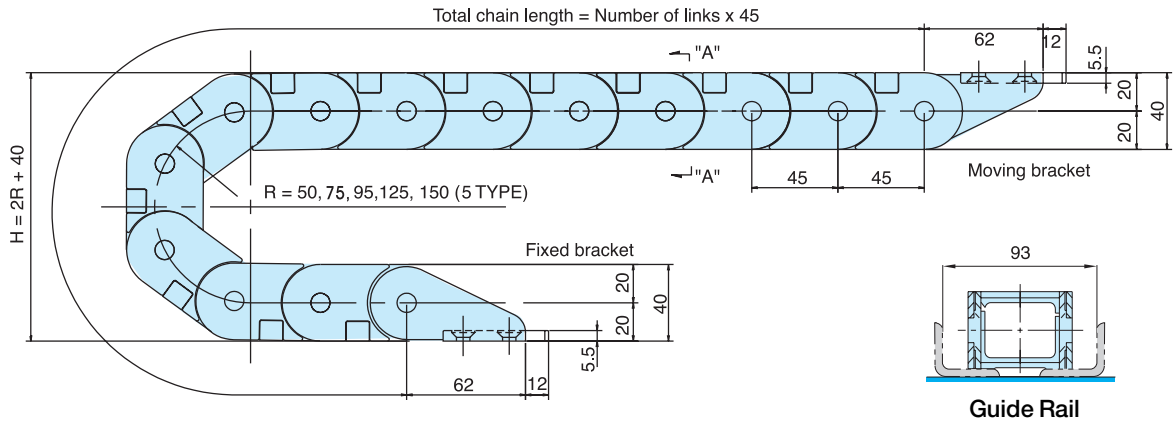
Moving Bracket

HSP 0450-2BN

Order Example (주문예)

HSP0450-2BN 150R 2000L 3SETS
Type Radius Length Q'ty

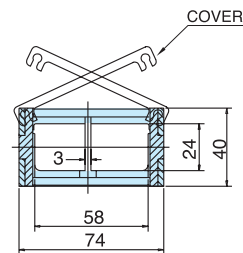
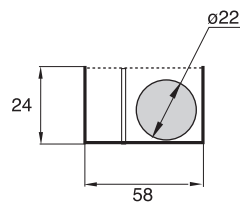
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 136$

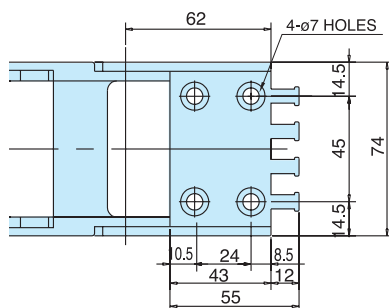
• Radius	R	50	75	95	125	150
• Height	H	140	190	230	290	340

Max. Cable Diameter Cross Section

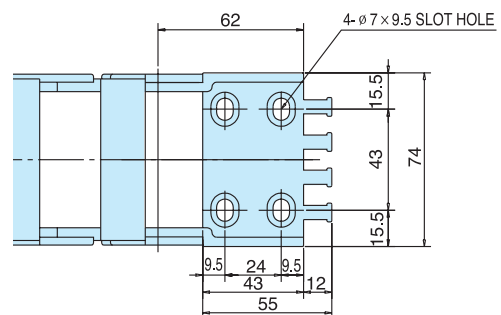


A-A Cross Section

Brackets



Fixed Bracket



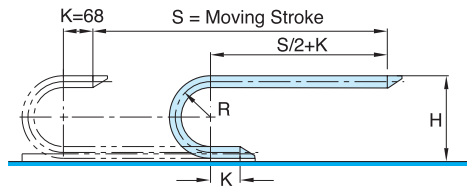
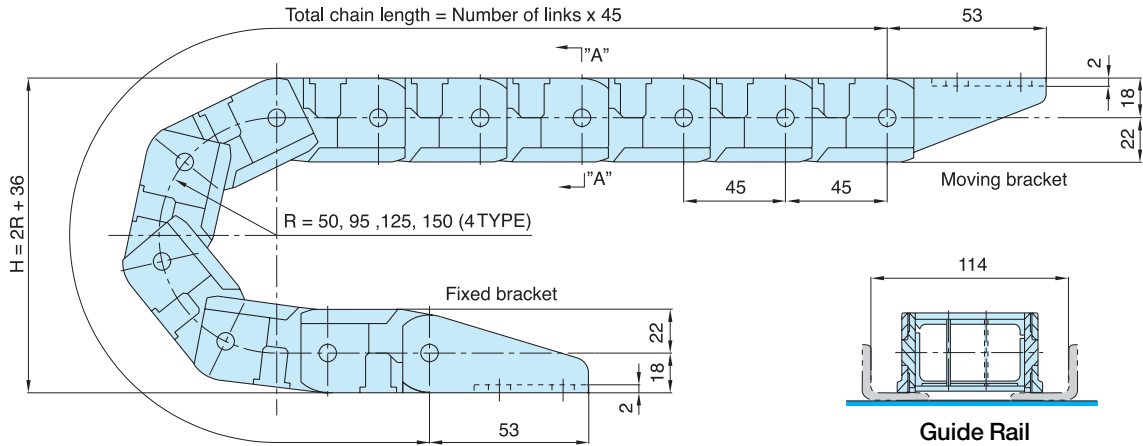
Moving Bracket

HSP 0450-3B

Order Example (주문예)

HSP0450-3B 150R 2000L 3SETS
Type Radius Length Q'ty

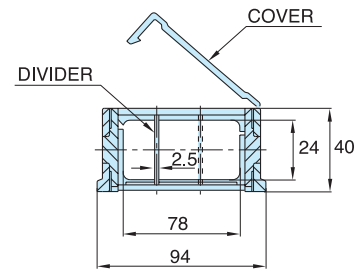
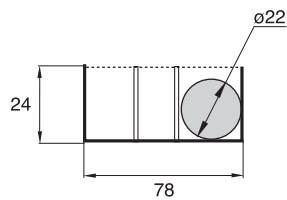
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 136$

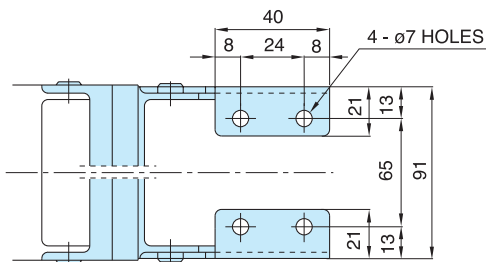
• Radius	R	50	95	125	150
• Height	H	136	226	286	336

Max. Cable Diameter Cross Section

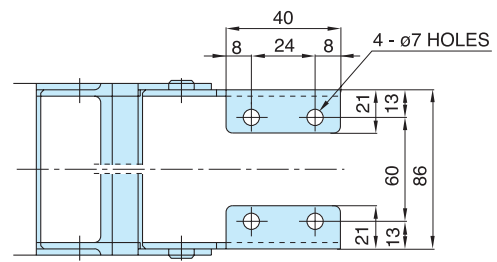


A-A Cross Section

Brackets



Fixed Bracket



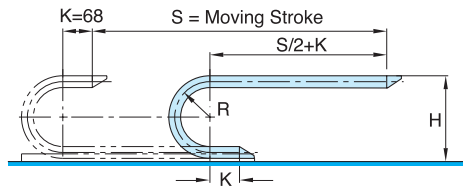
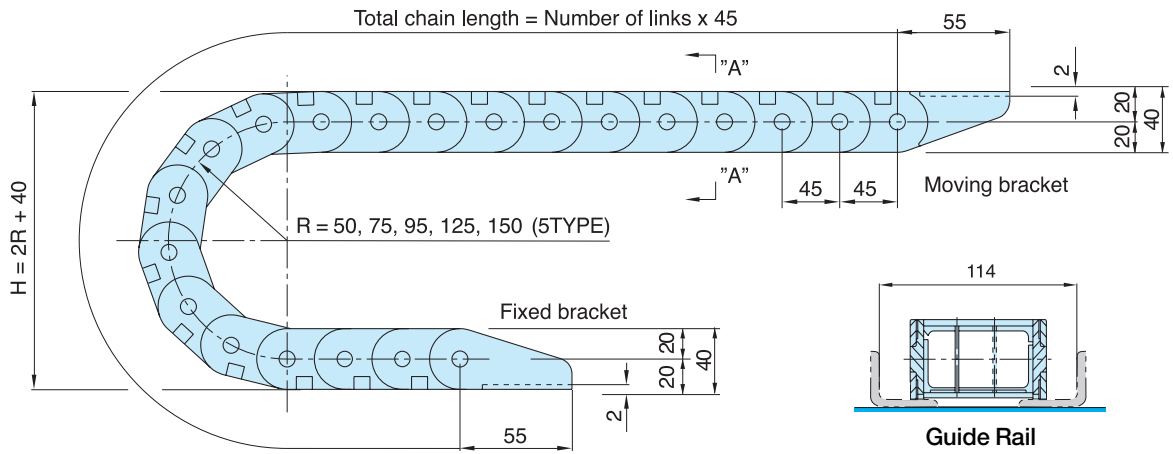
Moving Bracket

Order Example (주문예)

HSP 0450-3BN

HSP0450-3BN 50R 2000L 3SETS
Type Radius Length Q'ty

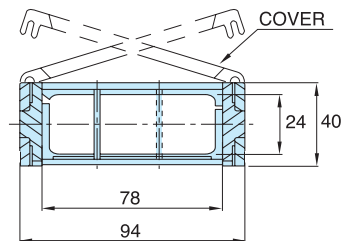
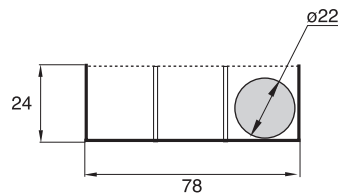
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 136$

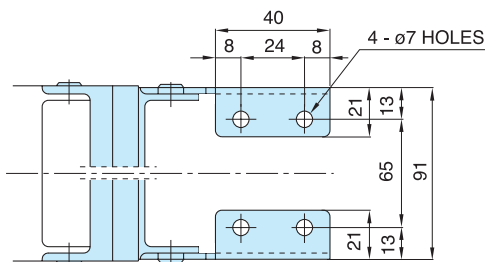
• Radius	R	50	75	95	125	150
• Height	H	140	190	230	290	340

Max. Cable Diameter Cross Section

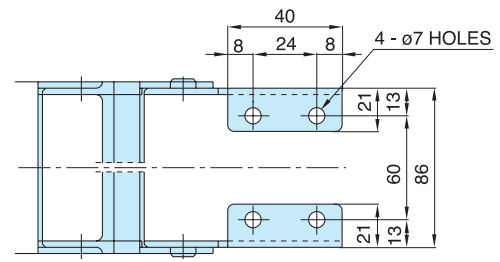


A-A Cross Section

Brackets



Fixed Bracket



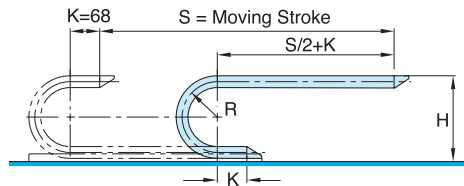
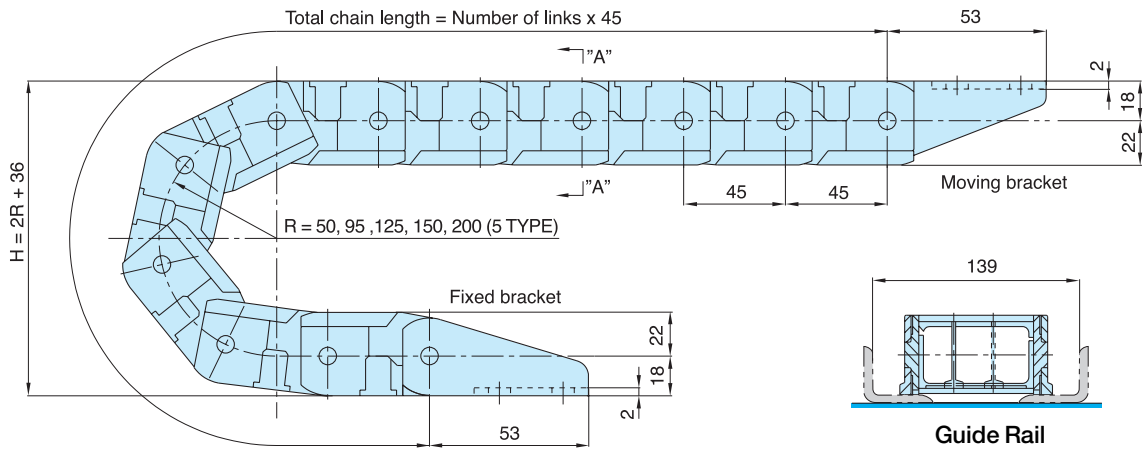
Moving Bracket

HSP 0450-4B

Order Example (주문예)

HSP0450-4B 150R 3000L 3SETS
Type Radius Length Q'ty

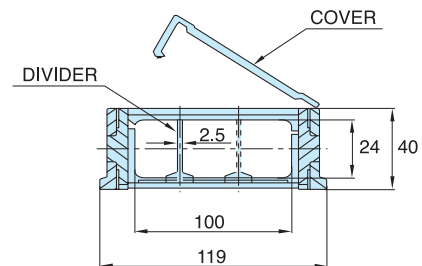
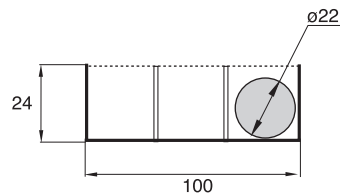
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 136$

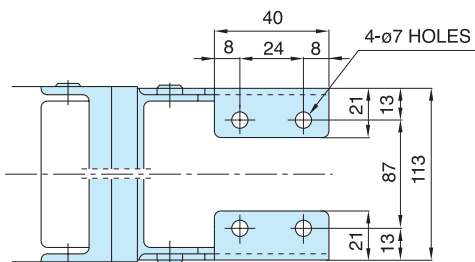
• Radius	R	50	95	125	150	200
• Height	H	136	226	286	336	436

Max. Cable Diameter Cross Section

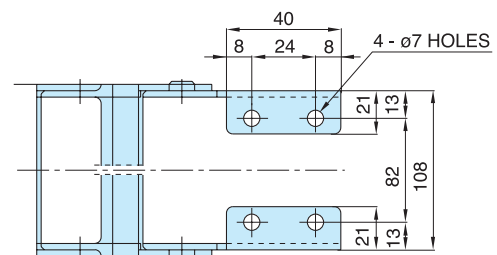


A-A Cross Section

Brackets



Fixed Bracket



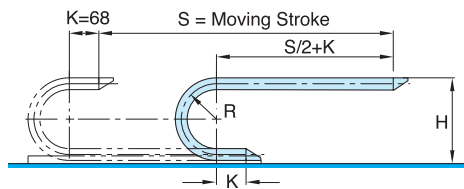
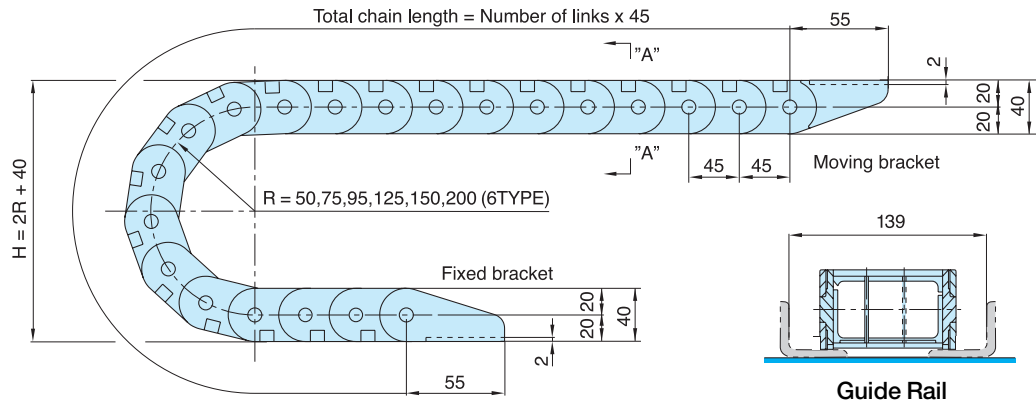
Moving Bracket

Order Example (주문예)

HSP 0450-4BN

HSP0450-4BN 150R 3000L 3SETS
Type Radius Length Q'ty

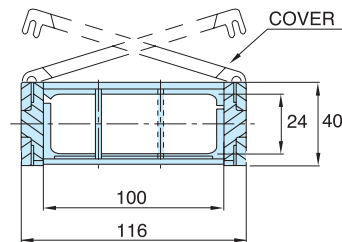
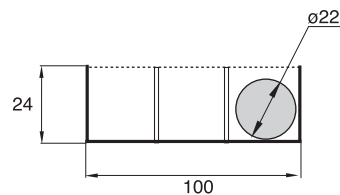
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 136$

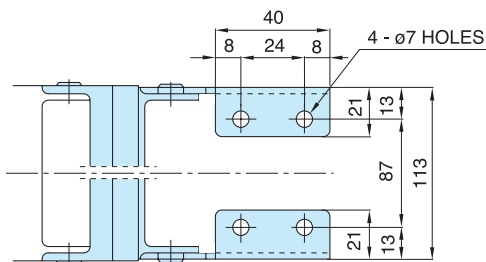
• Radius	R	50	75	90	125	150	200
• Height	H	140	190	230	290	340	440

Max. Cable Diameter Cross Section

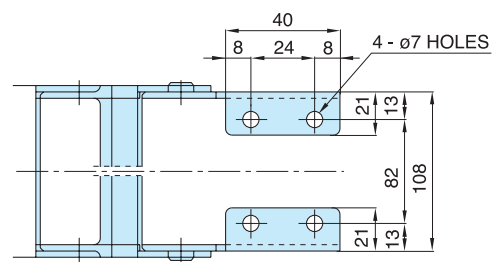


A-A Cross Section

Brackets



Fixed Bracket



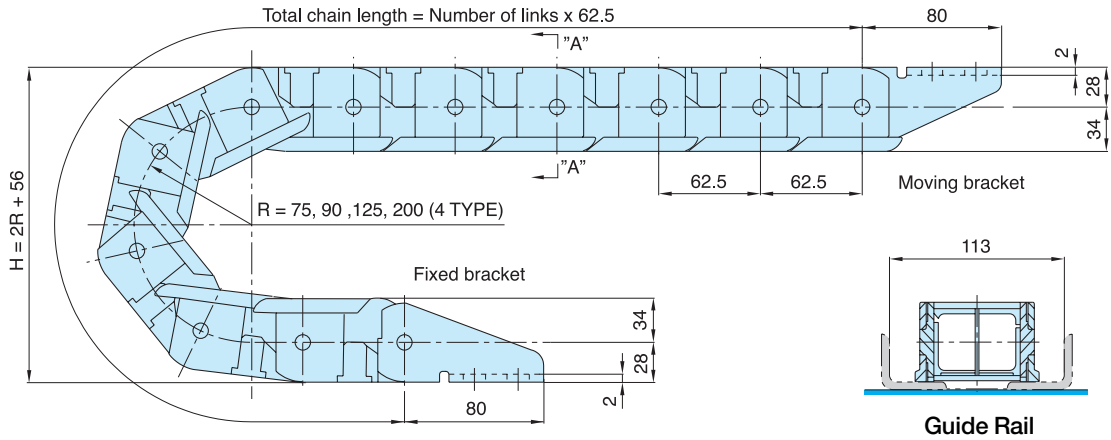
Moving Bracket

Order Example (주문예)

HSP 0625-1B

HSP0625-1B 200R 2000L 3SETS
Type Radius Length Q'ty

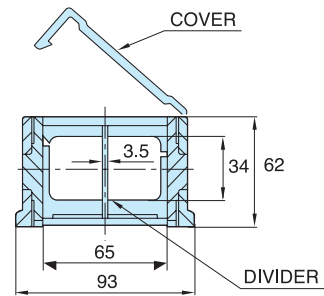
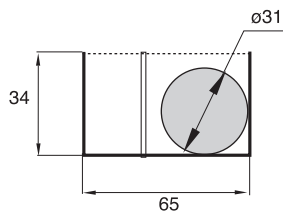
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 188$

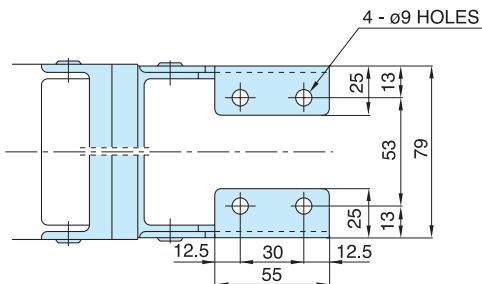
• Radius	R	75	90	125	200
• Height	H	206	236	306	456

Max. Cable Diameter Cross Section

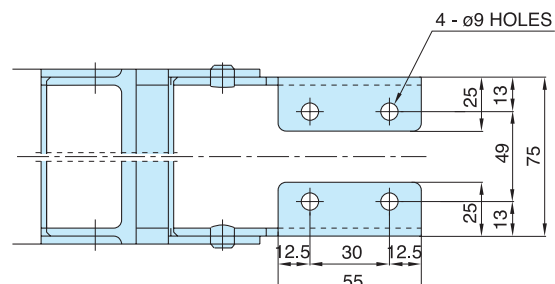


A-A Cross Section

Brackets



Fixed Bracket



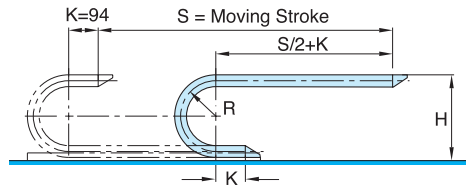
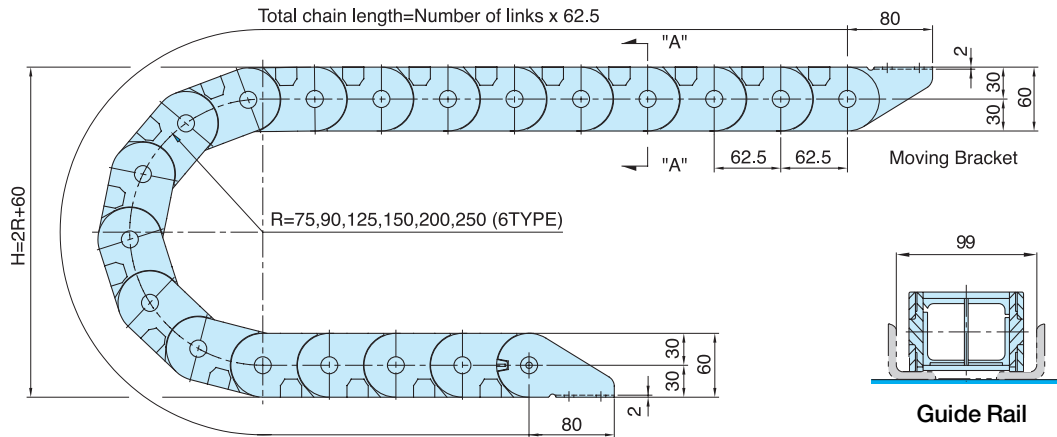
Moving Bracket

Order Example (주문예)

HSP 0625-1BN

HSP0625-1BN 200R 2000L 3SETS
Type Radius Length Q'ty

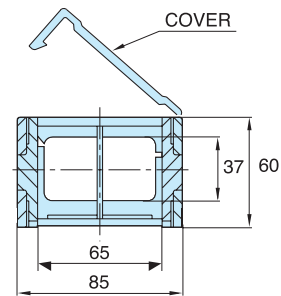
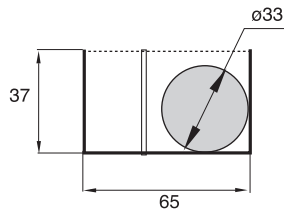
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 188$

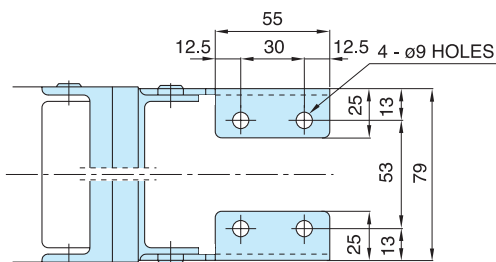
• Radius	R	75	90	125	150	200	250
• Height	H	210	240	310	360	460	560

Max. Cable Diameter Cross Section

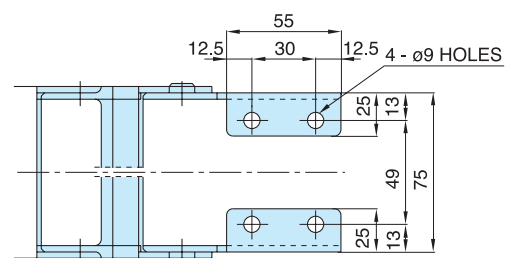


A-A Cross Section

Brackets



Fixed Bracket



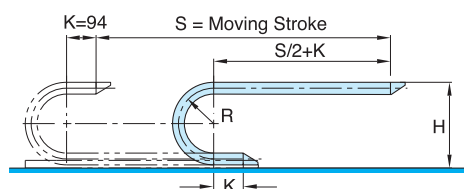
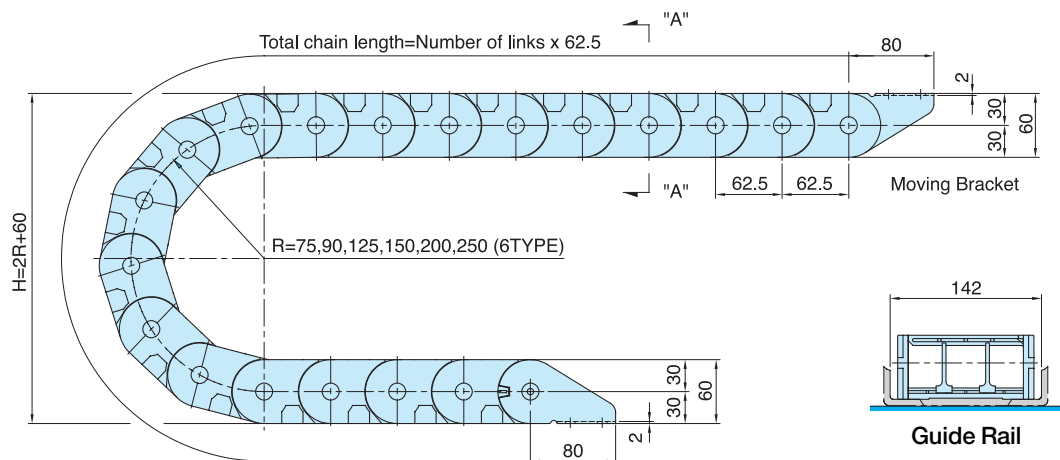
Moving Bracket

HSP 0625-2BN

Order Example (주문예)

HSP0625-2BN 200R 2000L 3SETS
Type Radius Length Q'ty

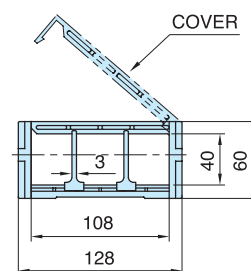
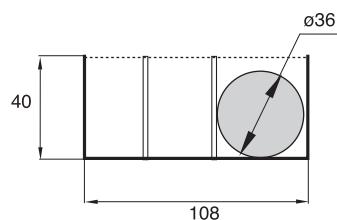
Chain, Guide Rail



• Length $L = \frac{S}{2} + \pi R + 188$

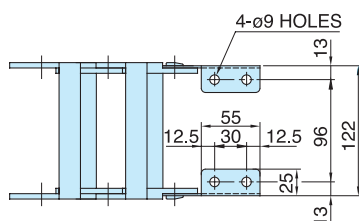
• Radius	R	75	90	125	150	200	250
• Height	H	210	240	310	360	460	560

Max. Cable Diameter Cross Section

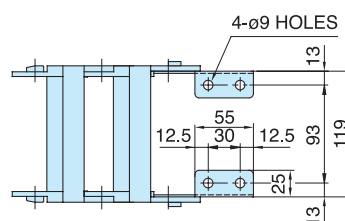


A-A Cross Section

Brackets

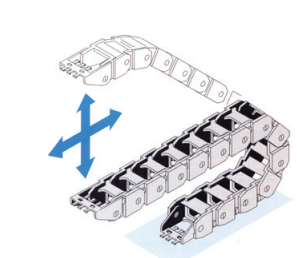
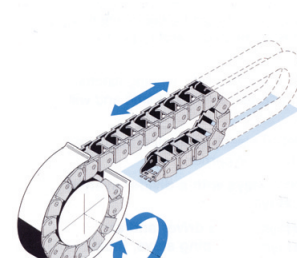
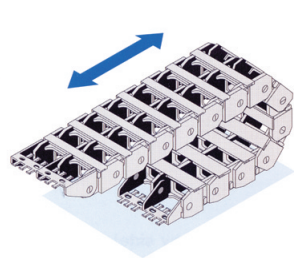
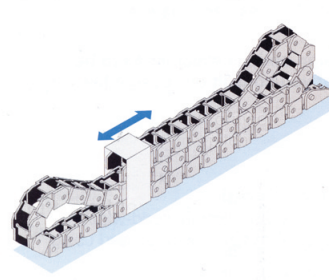
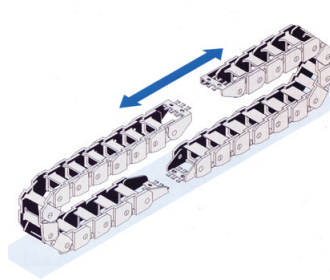
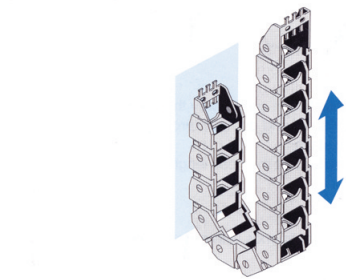
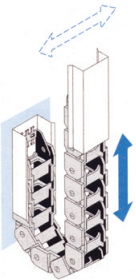
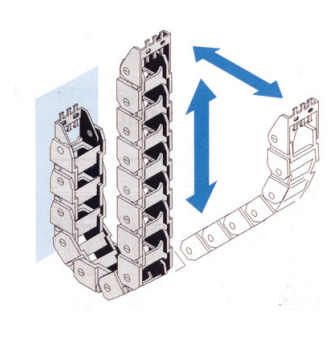
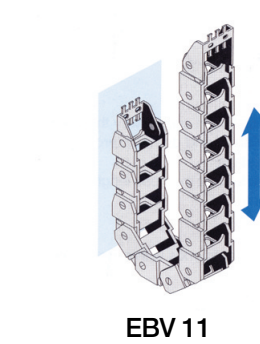
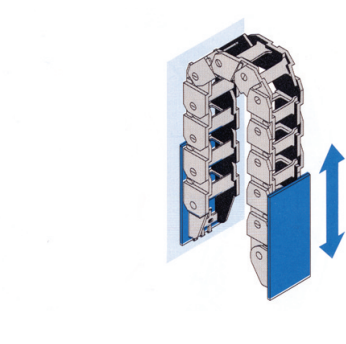
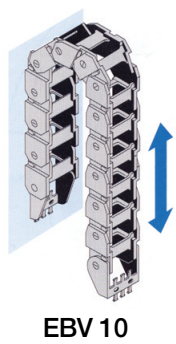
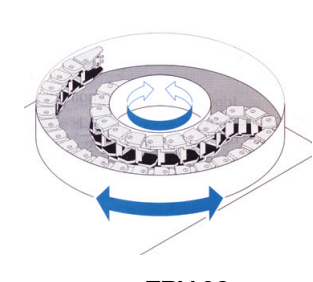
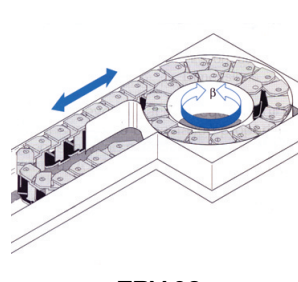
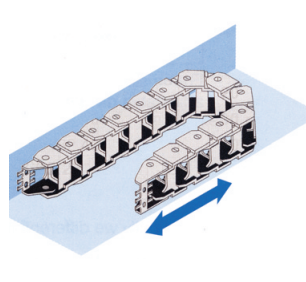
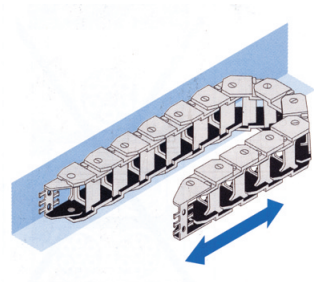
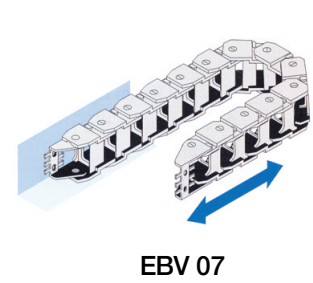
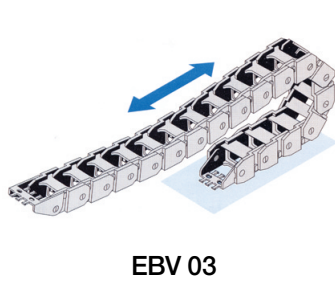
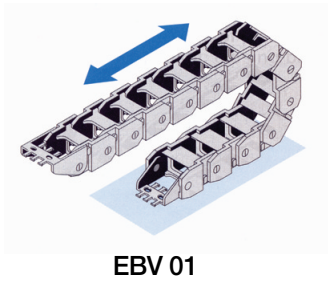


Fixed Bracket



Moving Bracket

응용 예 Application Examples

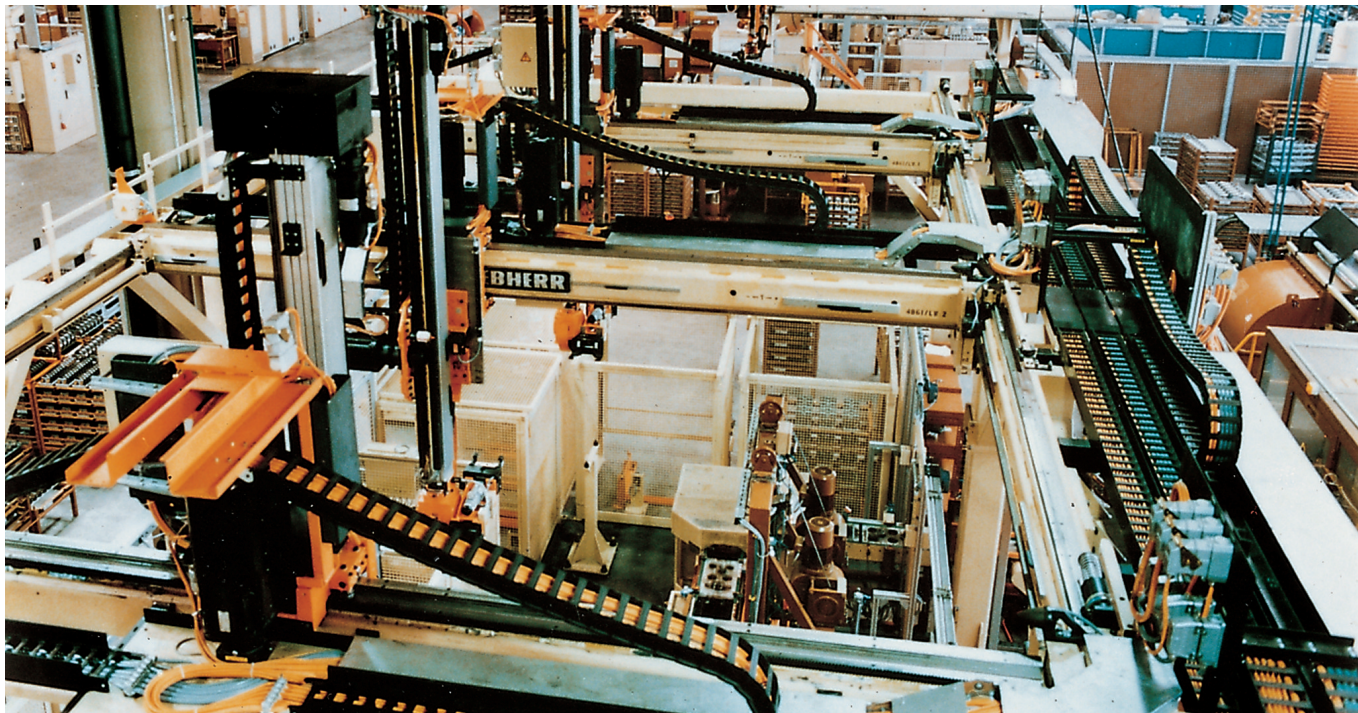


A2

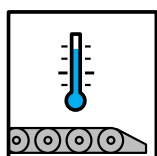
A3

EBV 13

EBV 12



● 사용 환경 Environmental and Application Variables



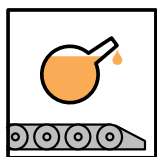
Temperature

Permissible temperature range:
-40°C to +100°C



Flammability

Our standard materials correspond and are in accordance with test procedures VDE 0304 Part 3 (05.70) Class II c and also 94-HB



Chemicals

Plastic robochain are extremely resistant to many common chemicals.
If in any doubt, please ask.



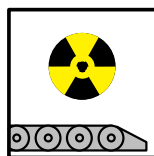
Weathering

Our standard materials are suitable for use outside and are UV resistant.



Cold Storage Systems

A special material is recommended for robochain operating continuously at very low temperatures.



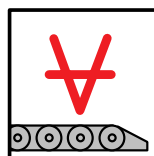
Resistance to Radiation

No material damage occurs up to a radiation dose of **1 megarad**.
For doses of **100 megarad** the material becomes increasingly brittle and mechanical properties are reduced by 30%.



Explosion Resistance

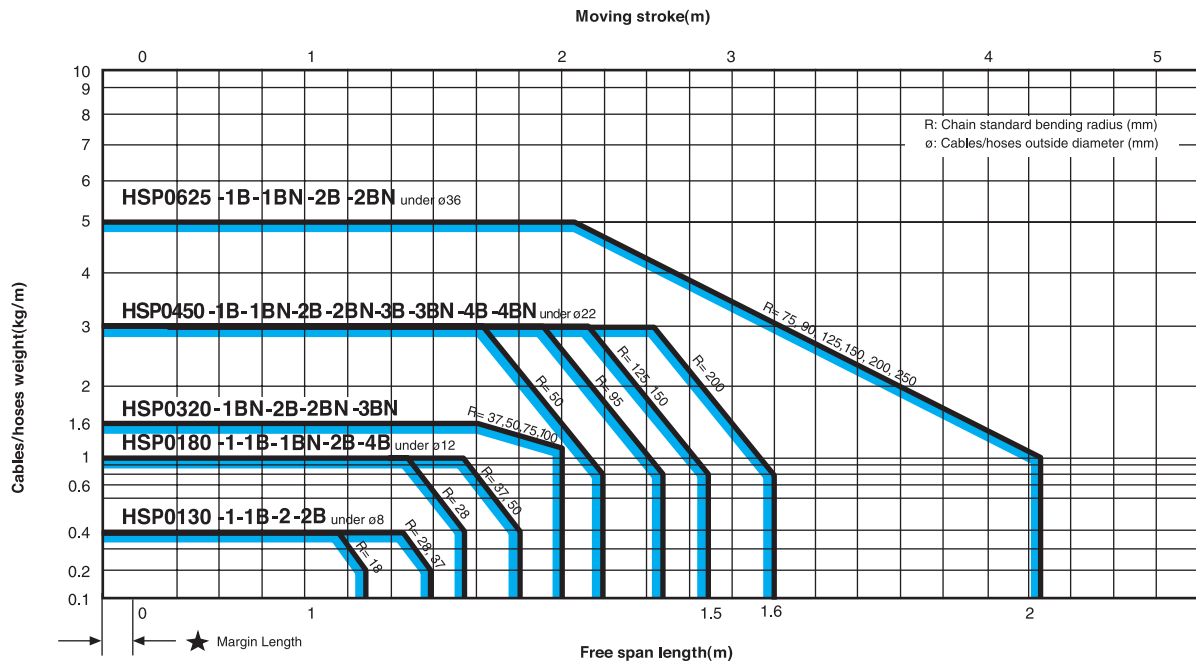
Robochain required for use in explosive environments are available - identified by letters "EX"



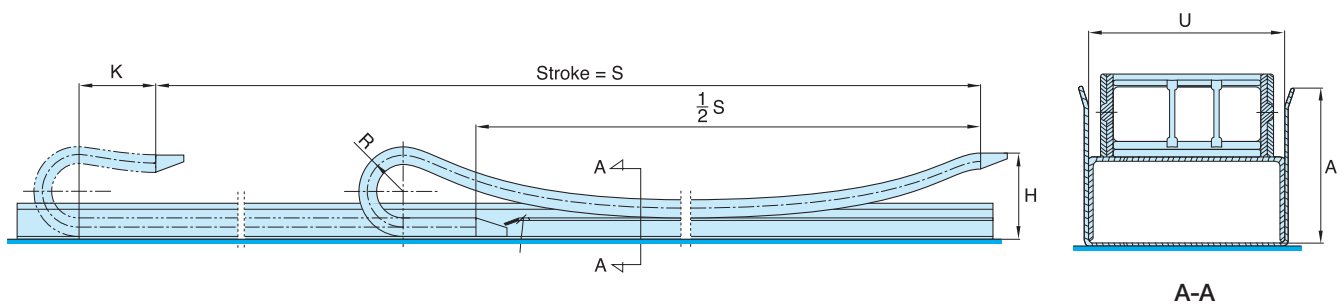
Vacuum

Our plastic robochain are suitable for use in Vacuums.
A 1% reduction in mass is possible

● 능력선도 (HSP) Capability Graph



● 외형치수 Dimension



Type	Stroke	Max. Supporter Weight	H	U (±1)	A	K
HSP 0450-1B(N)	20m	1.5kg/m	136	60	68	150~600
HSP 0450-2B(N)	20m	2 kg/m	138	88	80	200~700
HSP 0450-3B(N)	20m	2 kg/m	140	104	80	200~700
HSP 0450-4B(N)	20m	2.5kg/m	140	130	80	200~700
HSP 0625-1B(N)	20m	3 kg/m	210	103	124	300~900
HSP 0625-2B(N)	30m	3.5kg/m	210	146	124	300~900