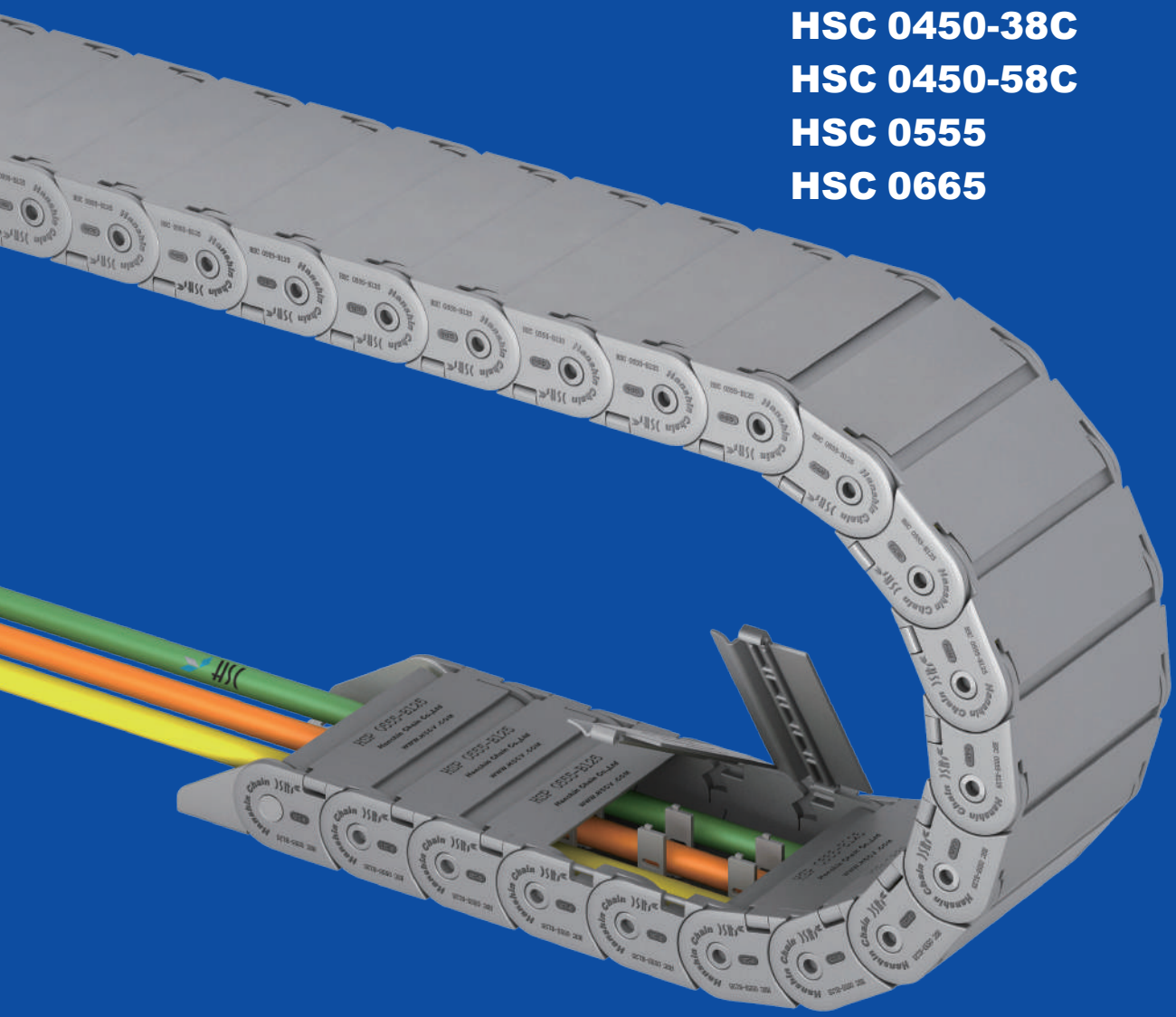
HSC type

공작기계, 용접 ROBOT, 자동차산업, 목공기계, 반도체생산설비, 철강설비에 적용

Machining center, Soldering robot, Automobile industry, Wood work machine, Semiconductor production facility and Steel mill industry

HSC 0450-38C
HSC 0450-58C
HSC 0555
HSC 0665



Features

- 밀폐형으로 이물질로 부터 Cable, Hose를 보호할 수 있습니다.
- 경량이어서 움직임이 원할합니다.
- 본체의 Cover가 안쪽으로 개폐되어 Cable, Hose의 설치가 쉽습니다.
- 50여종의 다양한 모델이 있습니다.
- End Bracket에 Cable, Hose 고정용 Clamp가 있어서 고정용 Tie를 이용할 경우 꼬임을 방지할 수 있습니다.

- *Insulation design prevents cables and hoses from alien materials.*
- *Its light weight provides prompt movement.*
- *Body cover can be open for easy installation of cable and hose.*
- *50 various models are manufactured.*
- *Special orders can be made.*

Operation

HSC Type 의 RoboChain는 모든 구성품이 고강도 엔지니어링 플라스틱으로 설계 제작되어 소음이 적고, 깨끗하며 작고, 가벼운 장점이 있습니다. 특히 밀폐형으로 이물질로부터 Cable, Hose 보호에 적합합니다.

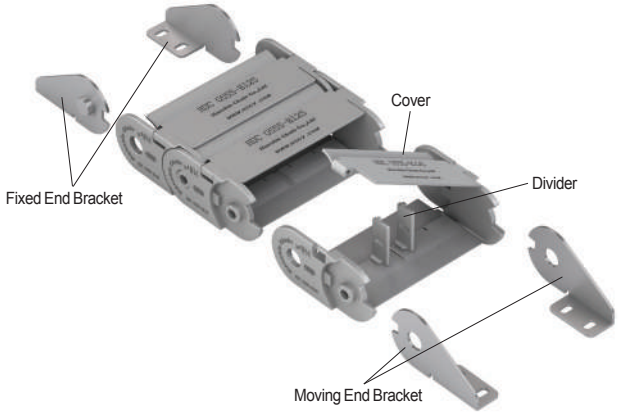
All parts of HSC type RoboChain are made of very high strength engineering plastic, and it is designed for reducing noise and light weight.
In particular, insulation design can prevent cable and hose from alien materials.

Properties

- 운동속도 : 200m/min이하 (Freespan내)
- 사용온도 : -25 ~ 100°C
- 기본색 : Black
- 재질 : 엔지니어링 플라스틱

- *Moving Velocity: below 300m/min (within freespan)*
- *Operating Temperature: -25 ~100℃*
- *Basic Color: Black*
- *Material: Engineering Plastic*

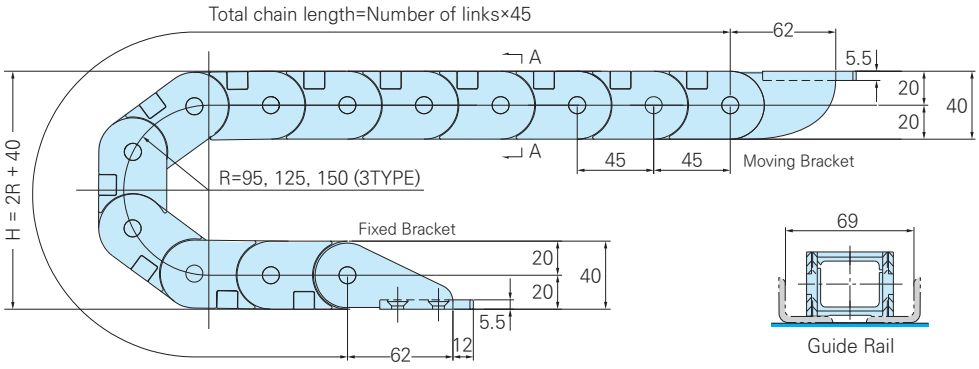
Structure



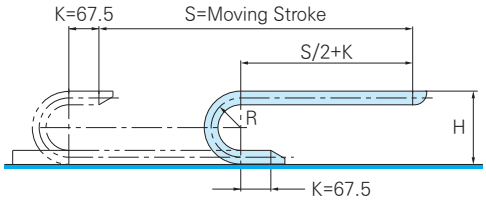
HSC 0450-38C NEW

ORDER EXAMPLE			
HSC 0450-38C	95R	2000L	3SETS
Type	Radius	Length	Q'ty

Chain, Guide Rail



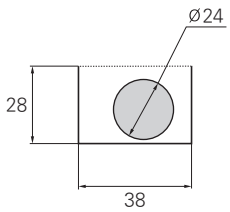
Guide Rail

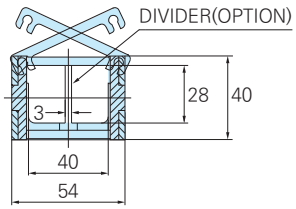


$$\text{Length(L)} = \frac{S}{2} + \pi R + 135$$

Radius(R)	95	125	150
Height(H)	230	290	340

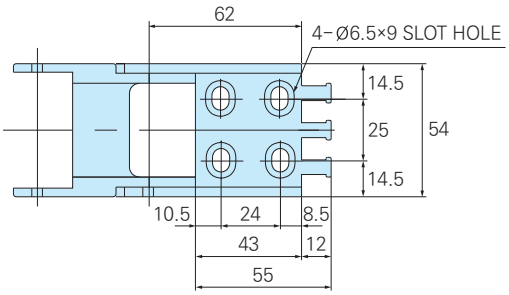
Max. Cable Diameter
Cross Section



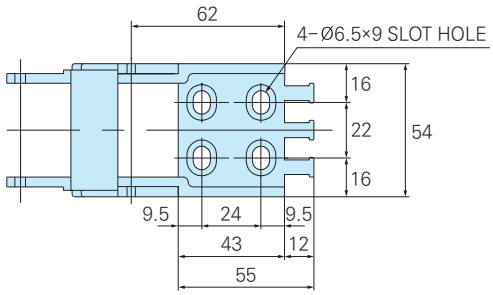


A–A Cross Section

Brackets



Fixed Bracket



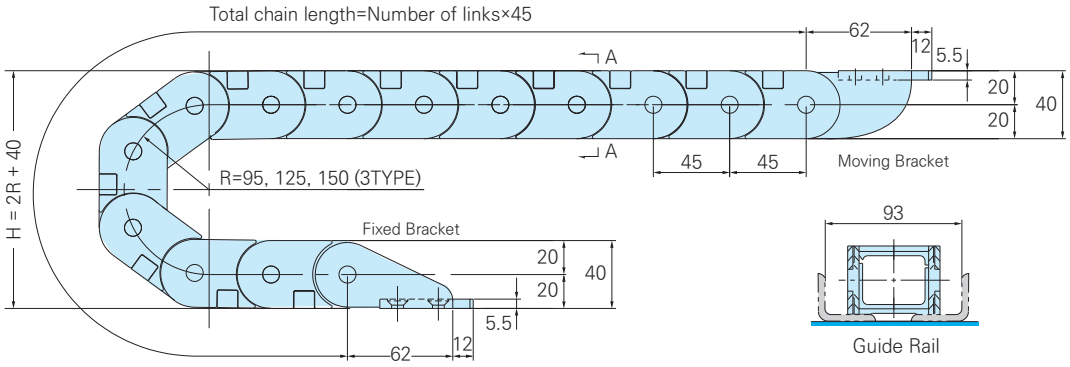
Moving Bracket

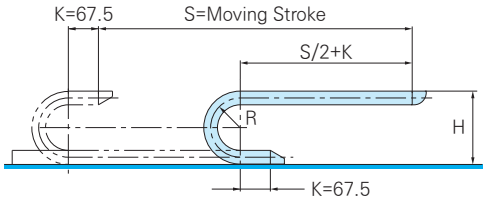
HSC 0450-58C NEW

ORDER EXAMPLE

HSC0450-58C	150R	2000L	3SETS
Type	Radius	Length	Q'ty

Chain, Guide Rail

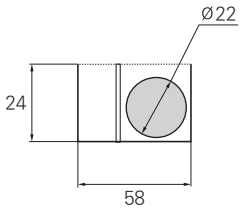


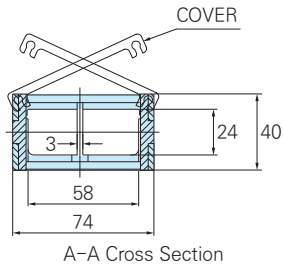


$$\text{Length(L)} = \frac{S}{2} + \pi R + 135$$

Radius(R)	95	125	150
Height(H)	230	290	340

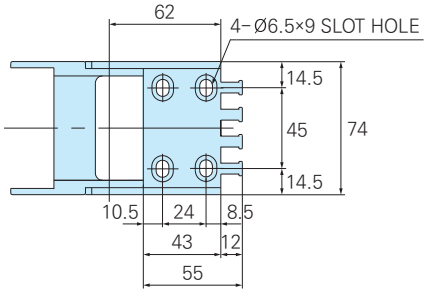
Max. Cable Diameter Cross Section



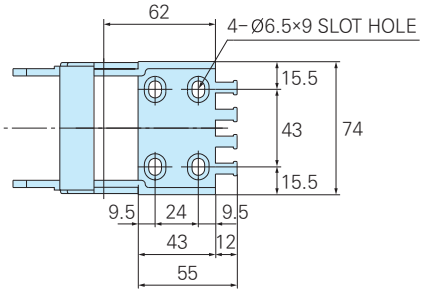


A–A Cross Section

Brackets



Fixed Bracket

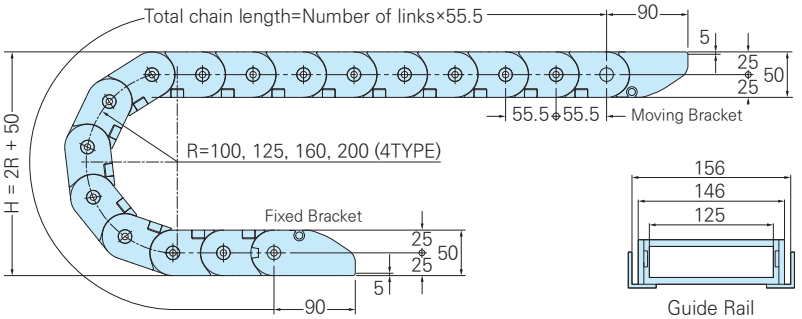


Moving Bracket

HSC 0555

ORDER EXAMPLE				
HSC0555	**160R**	**B125**	**1665L**	**5SETS**
Type	Radius	Width	Length	Q'ty

Chain, Guide Rail

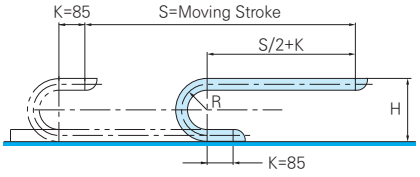


Guide Rail





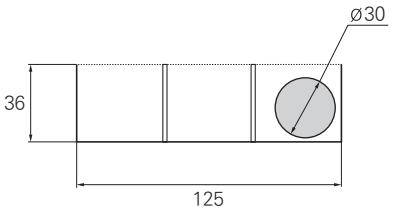
*HSP 0555, 0665(왼쪽)는 반밀폐이며
HSC 0555, 0665(오른쪽)는 완전 밀폐입니다.
*두 타입 모두 커버가 안쪽에서 열립니다.
*두 타입 모두 바깥 부분은 완전 밀폐입니다.

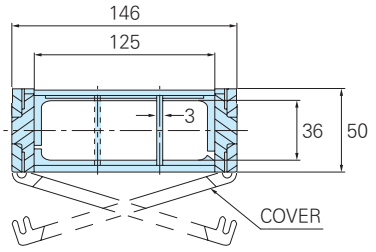


$$\text{Length(L)} = \frac{S}{2} + \pi R + 170$$

Radius(R)	100	125	160	200
Height(H)	250	300	370	450

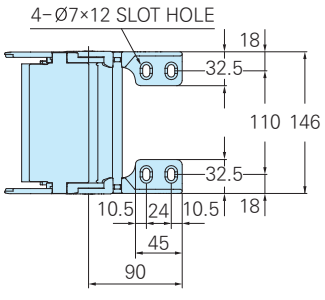
Max. Cable Diameter
Cross Section



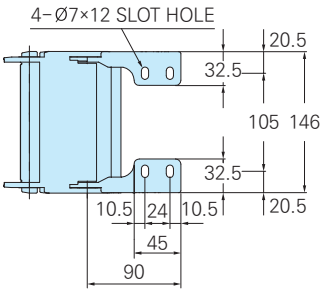


A-A Cross Section

Brackets
(Plastic)



Fixed Bracket



Moving Bracket



1. 우레탄 망치 등을 사용하여 동봉 된 PL-BAR를 엔드 브라켓 홈에 끼워줍니다.

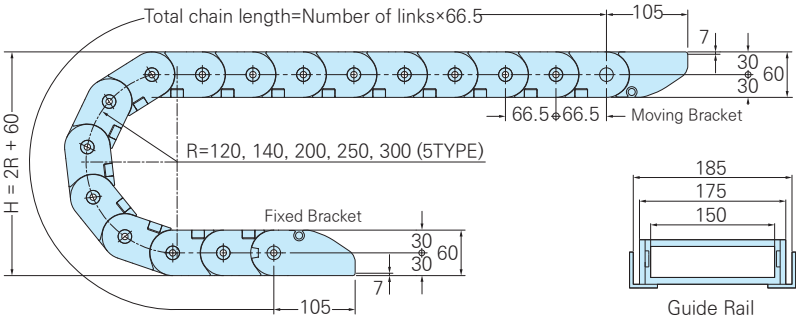


2. 전용 렌치나 기타 공구를 사용하여 90도로 돌려 PL-BAR를 고정 시켜 줍니다.
* 전용 렌치는 요청하시면 제품 출고 시 무상으로 동봉됩니다.

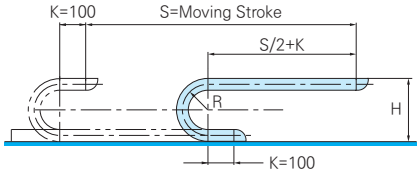
HSC 0665

ORDER EXAMPLE				
HSC0665	140R	B150	1729L	5SETS
Type	Radius	Width	Length	Q'ty

Chain, Guide Rail



Guide Rail



$$\text{Length}(L) = \frac{S}{2} + \pi R + 200$$

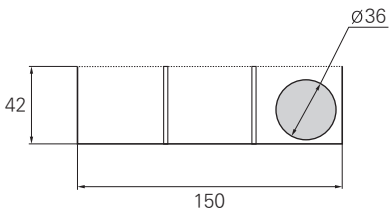
Radius(R)	120	140	200	250	300
Height(H)	300	340	460	560	660

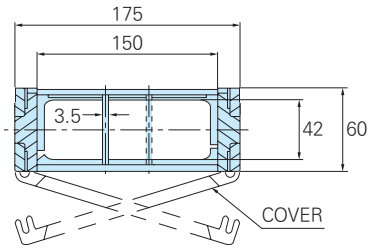




*HSP 0555, 0665(왼쪽)는 반밀폐이며 HSC 0555, 0665(오른쪽)는 완전 밀폐입니다.
*두 타입 모두 커버가 안쪽에서 열립니다.
*두 타입 모두 바깥 부분은 완전 밀폐입니다.

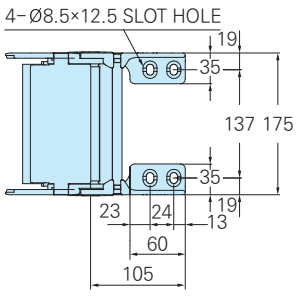
Max. Cable Diameter Cross Section



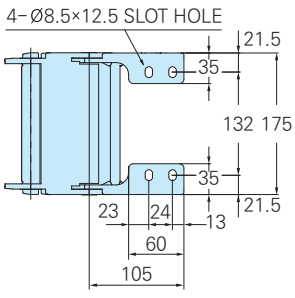


A-A Cross Section

Brackets
(Plastic)



Fixed Bracket



Moving Bracket



1. 우레탄 망치 등을 사용하여 동봉 된 PL-BAR를 엔드 브라켓 홈에 끼워줍니다.



2. 전용 렌치나 기타 공구를 사용하여 90도로 돌려 PL-BAR를 고정 시켜 줍니다.
* 전용 렌치는 요청하시면 제품 출고 시 무상으로 동봉됩니다.

기술 노트 Technical Note

▸ 여유공간

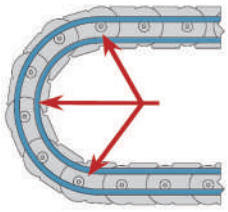
Cable 이나 Hose 삽입 시 사용환경에 따라 허용 용적율에 차이가 있습니다.
아래 표는 사용환경에 따른 허용 용적율을 보여주고 있으며, 허용치를 초과하여 사용할 경우 Cable 및 Hose의 마찰로 분진이 발생되며 단선발생의 주요 원인이 됩니다.

	CLEAN ROOM	NORMAL
허용 용적률(%)	40~50%	50~60%

▸ 곡률반경

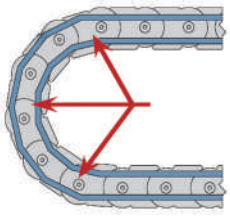
	Cable	Hose
권장 곡률반경(Radius)	외경(Dia) X 7.5	외경(Dia) X 9

아래의 그림을 보면 Cable의 삽입 시 적절한 곡률반경을 선정하여 배치된 사례와 그렇지 않은 사례를 보여주고 있습니다.



Cable이 RoboChain 내 원만한 곡선을 이루도록 해야한다.

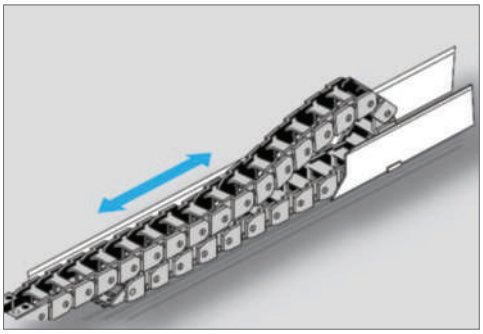
(○)



Cable이 RoboChain 내측에 닿아 각을 이루면서 곡선을 이루게 된다.

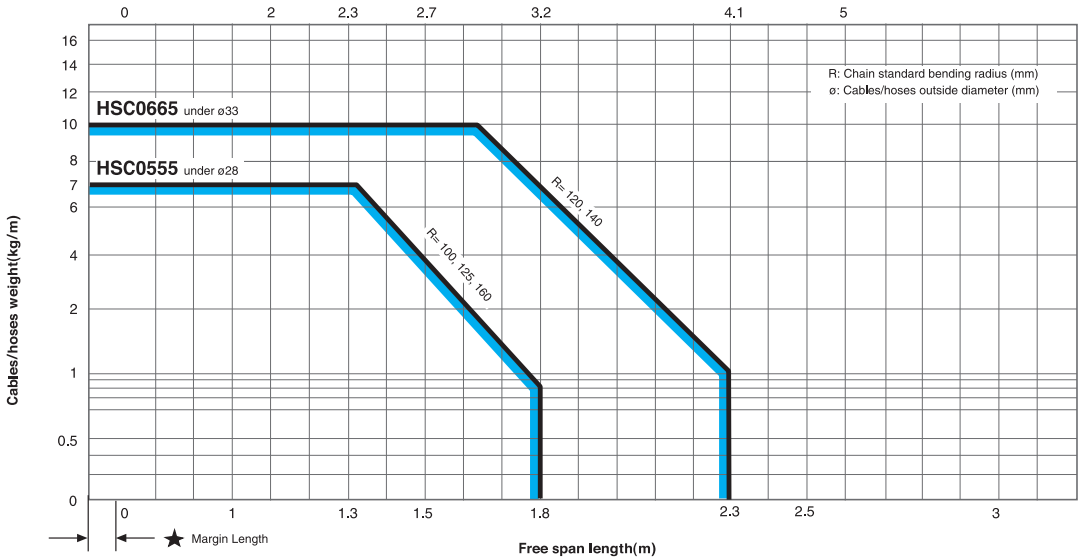
(X)

▸ Guide Rail



Free span(자체 수평 지지가능거리)을 초과하여 사용할 경우 반드시 Guide Rail을 설치하여야 합니다.
Guide Rail은 RoboChain의 이탈을 방지하고, 안정적인 주행을 보장할 수 있는 최선의 방법입니다.
Guide Rail의 형태와 상세치수는 카다로그를 참고하시길 바랍니다.

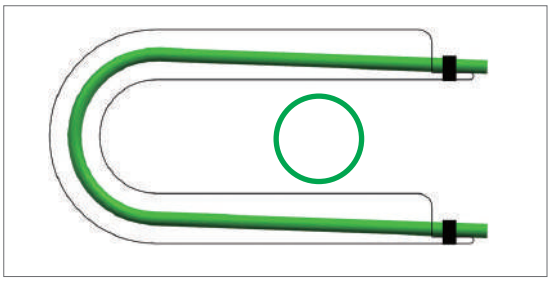
능력선도(HSP) Capability Graph



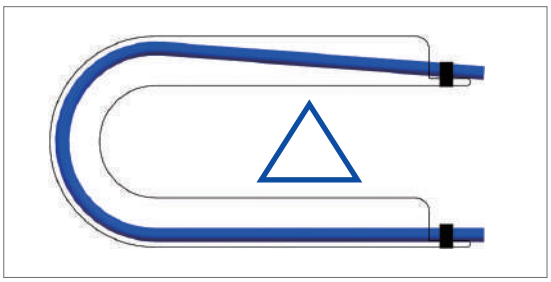
사용환경 Environmental and Application Variables

▸ 케이블·호스 길이 조정

로보체인 가운데 케이블 포설(마모 없음, 적합)



로보체인 바깥쪽 케이블 포설(마모 적음, 적합)



로보체인 안쪽 케이블 포설(마모 많음, 부적합)

