



Spring Guards

Avoid Crushing and Kinking

E-HSL

Spring Guards

RoHS Compliant

Spring guards can support the hose to prevent kinking of the hose

Flat hose clamp tightened on one end has two advantages: a flat hose clamp can be used as a hose nipple and a flat hose clamp is strongly attached to the hose, which prevents them from coming off.

Not have to protect the whole hose by spring guards!
★ Very Light Hose

- No Kinking and Crushing
- Flat Hose Clamp Fitted on One End
- Safe Flow of Fluids
- Rustproof Stainless Steel

Before----Yarn-reinforced hoses are easy to be kinked and crushed



After installing the spring guards, kinking or crushing is no longer happening.



Spring guards can be fitted any place of the hose.



| Model Number | Hose Size | Spring Length | Recommended Spring Pitch | Diameter of Spring Wire | Weight (g/piece) | Material |
|--------------|-----------|---------------|--------------------------|-------------------------|------------------|----------|
| | mm | | | | | |
| E-HSL-12 | 12 × 18 | 250 | 4 | φ 1.2 | 80 | SUS304 |
| E-HSL-15 | 15 × 22 | 250 | 5 | φ 1.5 | 100 | |
| E-HSL-19 | 19 × 26 | 300 | 5 | φ 1.5 | 120 | |
| E-HSL-25 | 25 × 33 | 300 | 6 | φ 1.5 | 125 | |
| E-HSL-32 | 32 × 41 | 350 | 7 | φ 2.0 | 220 | |
| E-HSL-38 | 38 × 48 | 400 | 7 | φ 2.0 | 280 | |
| E-HSL-50 | 50 × 62 | 500 | 10 | φ 2.0 | 350 | |

Spring Guards and Hose Size

| Model Number | Hose Size (I.D. × O.D.) (mm) | Applicable Hoses | | | | | | | | |
|--------------|------------------------------|------------------|-------------------------|-------------|----------------|------------------|--------------------|---|---|---|
| | | PRESSURE HOSE | OIL-PROOF PRESSURE HOSE | SPRING HOSE | SUNFOODS® HOSE | KY SUNFOODS HOSE | KY SOFT BRAID HOSE | FLEXIBLE FLUORINE (PVDF) RESIN YARN REINFORCED HOSE | FLEXIBLE FLUORINE (ETFE) RESIN YARN REINFORCED HOSE | FLEXIBLE FLUORINE (ETFE) RESIN SUS SPRING WIRE HOSE |
| E-HSL-12 | 12 × 18 | E-TB-12 | E-STB-12 | E-SP-12 | E-SF-12 | E-KYS-12 | — | E-PDB-12 | E-SJB-12 | E-SJSP-12 |
| E-HSL-15 | 15 × 22 | E-TB-15 | E-STB-15 | E-SP-15 | E-SF-15 | E-KYS-15 | — | E-PDB-15 | E-SJB-15 | E-SJSP-15 |
| E-HSL-19 | 19 × 26 | E-TB-19 | E-STB-19 | E-SP-19 | E-SF-19 | E-KYS-19 | — | E-PDB-19 | E-SJB-19 | E-SJSP-19 |
| E-HSL-25 | 25 × 33 | E-TB-25 | E-STB-25 | E-SP-25 | E-SF-25 | E-KYS-25 | E-OHB-25 | E-PDB-25 | E-SJB-25 | E-SJSP-25 |
| E-HSL-32 | 32 × 41 | E-TB-32 | E-STB-32 | E-SP-32 | E-SF-32 | E-KYS-32 | — | E-PDB-32 | — | E-SJSP-32 |
| E-HSL-38 | 38 × 48 | E-TB-38 | E-STB-38 | E-SP-38 | E-SF-38 | E-KYS-38 | E-OHB-38 | E-PDB-38 | — | E-SJSP-38 |
| E-HSL-50 | 50 × 62 | E-TB-50 | E-STB-50 | E-SP-50 | E-SF-50 | E-KYS-50 | E-OHB-50 | E-PDB-50 | — | — |

How to install spring guards



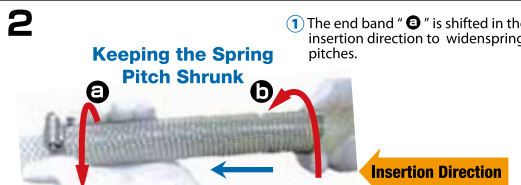
Twist and turn the spring guard in a clockwise fashion. By turning the spring guard in a clockwise fashion, the pitch of the spring guard goes wider, making it easier for you to install.

1 Hold the spring guards and insert the spring guards to the hose gradually.



Twist and turn the spring guards in a clockwise fashion. Thus, the dimension of the spring guards is widened to go into the hose.

When installing the spring guards, hold the end of the spring guards by hand. Turn the flat band in a clockwise fashion and insert the spring guards, keeping the spring diameter widened.



After the spring pitches are widened, shift the flat band "b" again to shrink the spring pitches. Then repeat this process.

After the spring guards are completely inserted, hold the flat bands of both ends with your hands. Also, please turn each flat band in a clockwise fashion and widen spring diameter. Then, after the spring pitches are shrunk as shown on photo 2, shift the flat band "a" to the insertion direction, and widen spring pitches again. (1)

Shift the flat band "b" on the opposite side to shrink the spring pitches. Repeat this process in order to insert the spring guards until it seals against the body base. (2)

3 Tighten and fix a flat band.



Tighten and fix a flat band of one side on a place where you want to fix.

→ Done!