

RECORD OF USE													
Device	FLOW												
Supplier	S. Tec												
Serial Number													
1 st use													
Expiry													
Acquisition date													
User Traceability													
Record of Use and Periodic Examinations													
Users should record details of use.													
Maximum period between Periodic Examinations is 6 months													
Date	User or Examiner	Details of Use-or Result of examination											

Duplicate this sheet for continued recording.
Contact Safe Tec for further information.

www.safetecbr.com.br

Made in Brazil - SAFE TEC INDUSTRIA

- Ø Rope: 10.5 - 11.5 mm
- EN1891 Type A / NBR 15986
- ⚓ Anchor Point Minimum 15 kN Test
- ⚖ Test Mass: 100kg /200Kg - 220lb/440 lb
- ⚖ Weight 515g / 17.5 oz



EN12841: 2006 Type C / EN341: 2011 Type 2 - Class A
FOR USE ON EN1891:1998 TYPE A - LOW STRETCH ROPES

Individually Tested

All users must read and understand this manual before use. This product must be used in accordance with the instructions provided. The product is not a double rope access system. Users accept all risks and responsibilities for all damage, injury or death during all rope access activities involving the use of this product. If users are not able to accept full responsibility or all risks involved they should not use this product. All users must be competent in the use of the device. Users should take great care that their fingers, clothing or other items do not become entangled. DO NOT allow anything to affect the proper function of the device. Do not use the device for any other purpose mis-use can cause damage or serious injury including death.

VERSION AP-GL 001 - 25-01-2019

INSTRUCTIONS FOR USE
AUTO-STOP DESCENDER

WARNING

Stec
SAFETY EQUIPMENT

FLOW

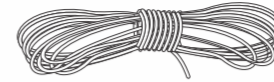


AUTO-STOP DESCENDER
FOR USE ON LOW STRETCH ROPE

FLOW

Individually Tested
EN12841: 2006 Type C
EN341: 2011 Type 2 - Class A

FOR USE ON LOW STRETCH KERNMANTEL ROPES

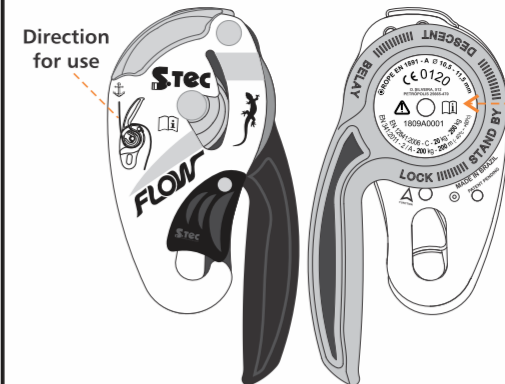


- Ø Rope Diameter: 10.5 - 11.5 mm
- Type of Rope: EN 1891:1998 Type A / NBR 15986
- ⚓ Anchor Point Minimum 15 kN
- ⚖ Test Mass: 100kg /200Kg - 220lb/440 lb
- ⚖ Weight 515g / 17.5 oz

Rua Coronel Duarte da Silveira, Nº 512 - Duarte da Silveira - CEP: 25665-470
Petrópolis - RJ - Brazil - Tel (24) 2249-5339 / e-mail: info@safetecbr.com.br

Notified body - SGS United Kingdom: 202b, Worle Parkway, Weston-Super-Mare, BS22 6WA.

MARKING



EN Standard:
EN 12841: 2006 Type C
EN 341: 2011 Type 2 - Class A

Rope type:

- Ø = Rope Diameter 10.5 - 11.5
- = Kernmantel rope EN 1891 Type A
- ⓘ = Read Instructions
- ⚠ = Warning

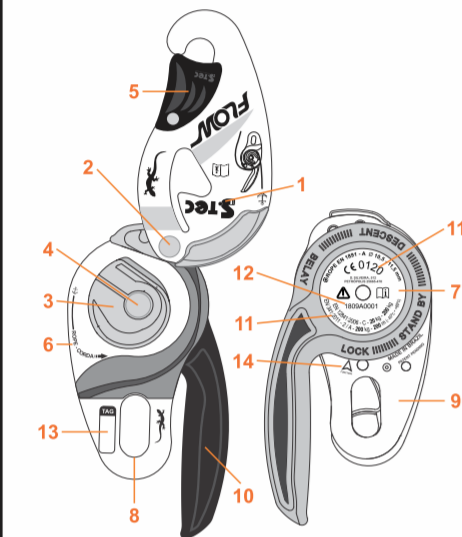
0000 A 0000

Serial Number
Batch Letter
Year / Month

ATTENTION

If marking with user's identification, care must be taken to ensure that full function is maintained and the device is not damaged.

1 NOMENCLATURE - PARTS



- 1 - Moving side plate
- 2 - Moving plate pivot axel
- 3 - Cam
- 4 - Cam axel
- 5 - Opening Gate
- 6 - Direction to anchor point
- 7 - Product Information
- 8 - Attachment Point
- 9 - Fixed Side Plate
- 10 - Control Handle
- 11 - Standards and Certifications
- 12 - Serial and traceability number
- 13 - Tag designated field
- 14 - Indication Arrow pointer

+60°C
Working Temperature Range
-40°C +60°C

Safetec "FLOW" Working Line Descender Devices.



FLOW D05
GREEN

With a panic locking element



FLOW D06
BLACK

without panic locking element



FLOW D07
RED

without panic locking element



SWL = 200 Kg

Information

Minimum slippage load: 4 kN
Max continuous descent: 200m

2 DESCRIPTION AND FIELD OF USE/ APPLICATION

The S.Tec **FLOW** is designed to be used to protect users from falls from height during personal activities using ropes.

The range of **FLOW** Descenders has been developed for use in vertical activities including Rope Access, Rope Rescue Systems, Working at height and Adventure Activities including abseiling, cascade waterfall descent, ravines, etc. Specific training is required for users of all models. The D05(Green) is the top of the range device which includes anti-panic mechanism and auto re-set handle.

The D05(Green) is recommended for all users including beginner's and experts.

The D06(Black) and D07(Red) do not have the anti-panic mechanism which allows continuous controlled descent even when angle of descent and loading varies.

The D06 and D07 are designed for expert usage where all users must be aware that full deployment of the handle with no rope control will result in uncontrolled descent and possible serious injury. D06 and D07 are also designed for tactical use and allow the user to develop almost free - fall speed.

The **FLOW** descenders have been tested in accordance with EN 12841 2006 Type C and EN 341:2011 Type 2, Class A to be used with EN 1891:1998 Type A / NBR 15896 low stretch ropes of diameter between 10.5 and 11.5 mm for loads between 45 and 200 Kg. Certified for 200 meters continuous descents, being able to use for continuous descents of up to 500 meters.

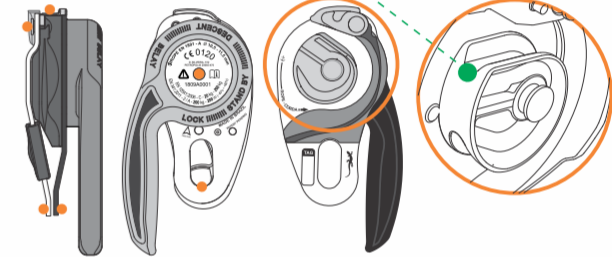
3 INSPECTION

For the safe operation, the **FLOW** requires inspection prior, during and after to each use. Verify that there are no cracks, abrasion, damage, corrosion, heavy marks or sharp parts, signs of falls, deformation etc. Pay special attention to the gate action and security. In addition to these inspections, formal - through inspections are required by a nominated competent person at intervals not exceeding 6 months. Arduous conditions, heavy use or incidents will require additional interim inspections. All formal - thorough and interim inspections should be recorded. Following any fall or sign of damage the device must be removed from service.

Check Points

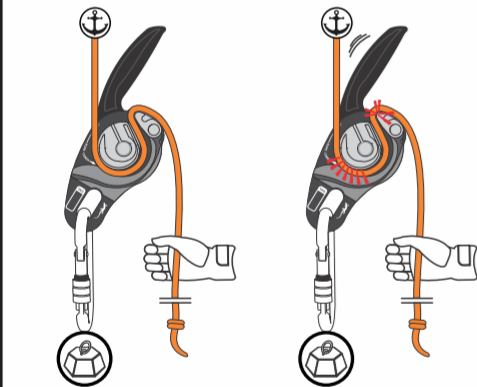


Inspect all check points for sharp points cracks, loose axel, corrosion and wear. Always perform a function test to determine that the device is working properly.



4 PRINCIPLE OF OPERATION

When in use the tension on the rope activates the cam and restricts movement. Holding the rope in the braking (descent) position helps prevent movement.



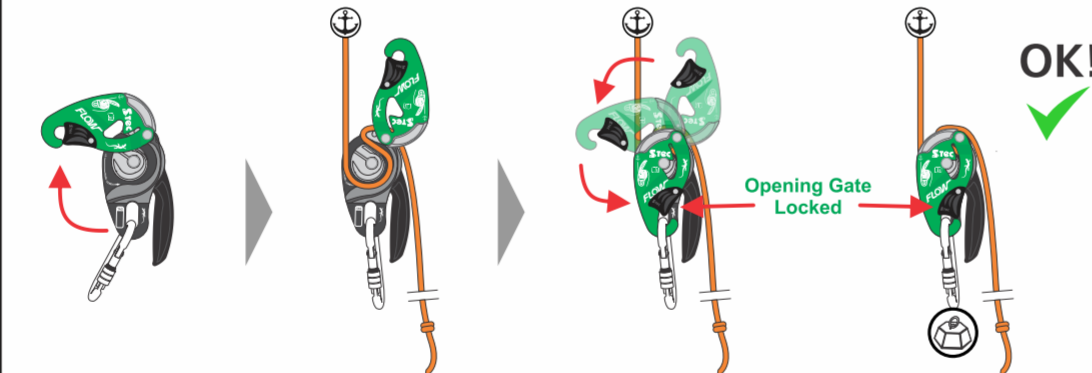
Keep **FLOW** and ropes clear of oils, grease, soil, paint and other contaminants.

5 INSTRUCTIONS FOR USE

The **FLOW** must be used with compatible equipment. Only use the **FLOW** with a suitable harness and in accordance with harness instructions.

Attach to the harness using a suitable locking karabiner(EN 362) installed through the **FLOW** attachment point. Ensure that the karabiner fits through both side plates and that the karabiner is fully secured. Open the device using the gate, turn the side plate and insert the rope as shown. Close the moving side plate as shown, making sure that the rope stays in position and that the side plate is completely closed and that the clippate is fully secured. Remove any slack in the rope between the anchor point and the **FLOW**.

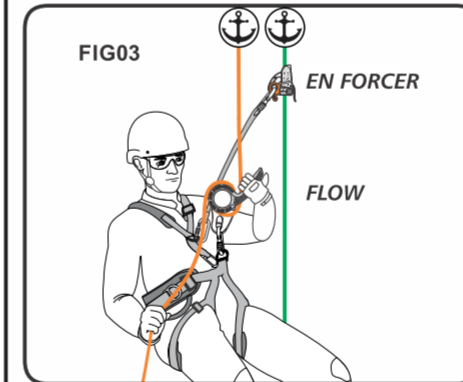
If the rope is installed at wrong direction, the device will not function and may result in damage or injuries.



OK!

6 HOW TO USE

Before each use, users must perform a function test to ensure that the rope is correctly installed and device functions correctly. The function test must be performed in a safe position our when the user is protected by two independent safety systems. 1. Pull on the anchor section of rope - the device must lock and allow no rope to pass through. 2. With one hand hold the lower end of the rope and the other hand on the **FLOW** control handle, apply light pressure to the control handle, check that the rope moves through the **FLOW** at a controlled rate and that the side plates does not open. 3. Release the handle and verify that the rope movement stops. During descents adjusting the pressure applied to the control handle will affect the rate of movement. At all times the control handle is held or operated the user must hold the rope section below the **FLOW** descender.



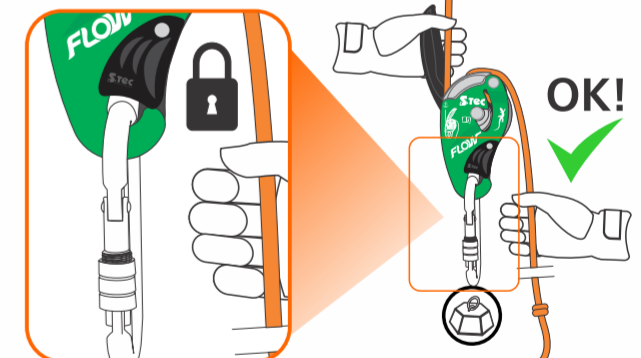
Note: When using the **FLOW**, to ascend (climb) up a rope, this can be performed with the handle in lock position.

WARNING

At all times that the **FLOW** is being operated or not in the locked position the user must hold the 'control' rope below the **FLOW**.

FLOW must be used with compatible equipment. Use appropriate locking connectors EN362, BS EN 12275 or other suitable safety connector.

FLOW - Check Connector gate



Karabiner must be closed

6.1 RESCUE USE - TECHNIQUE 1

S.Tec **FLOW** - Rescue Use EN341:2011 Type2, Class A - Accompanied Abseil Descent

Maximum Descent 500m

400kg Max load - Technique 1 & 2: These are the preferred option all rescues.

200kg Max Load Technique 3 & 4

S.Tec **FLOW** Descenders are only to be used for rescue by competent persons following training the required techniques.

Technique 1 - Two **FLOW** Descenders devices are connected to the casualty. Connections both to the same harness attachment point, either Dorsal (chest) or Ventral (waist) point. Each **FLOW** installed on an independent rescue rope. Max Load using this technique is 400kg.

Technique 2 - Two **FLOW** Descenders devices are connected to the rescuers harness Ventral (waist) point. Each **FLOW** installed on an independent rescue rope. Max Load using this technique is 400kg.

Technique 3 - One **FLOW** Descender is connected to the rescuers harness Ventral (waist) point. The **FLOW** is installed on the main rescuer rope. A suitable back-up device (S.Tec **EN Forcer** or S.Tec **Duck-R**) should be used on an independent back-up rescue rope. Max Load using this technique is 200kg.

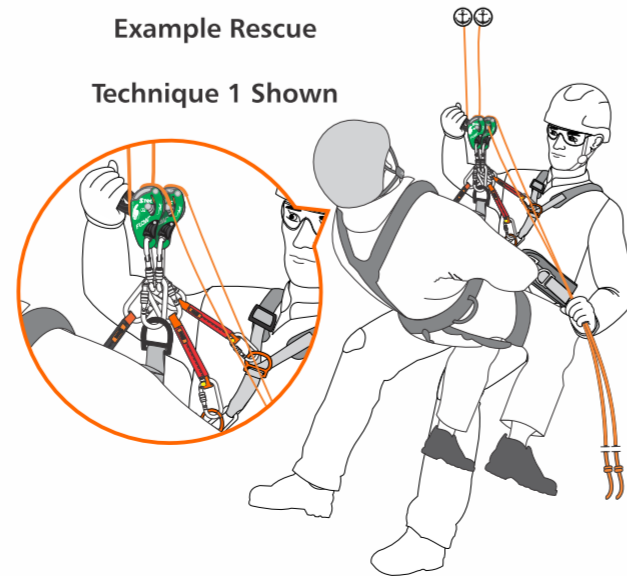
Technique 4 - One **FLOW** Descender is connected to the casualty. Connection to either the Dorsal (chest) or Ventral (waist) point. The **FLOW** is installed on the main rescue rope. A suitable back-up device (S.Tec **EN Forcer** or S.Tec **Duck-R**) should be used on an independant back-up rescue rope. Max Load using this technique is 200kg.

For both techniques 3 & 4 the lower section of the main rescue rope should be fitted through additional friction karabiner that is attached to a secure point below the S.Tec **FLOW**. For loads above 200kg this is an essential requirement.

FUNCTION TESTING IS ESSENTIAL prior to descent. Always begin rescue descents holding the lower sections of both ropes.

Example Rescue

Technique 1 Shown



6.2 LOWERING DESCENT

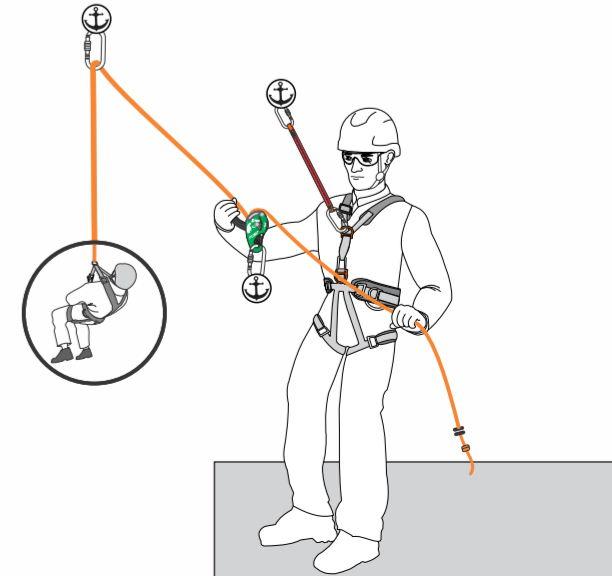
Technique shown using a single **FLOW** device - Max Load 200kg.

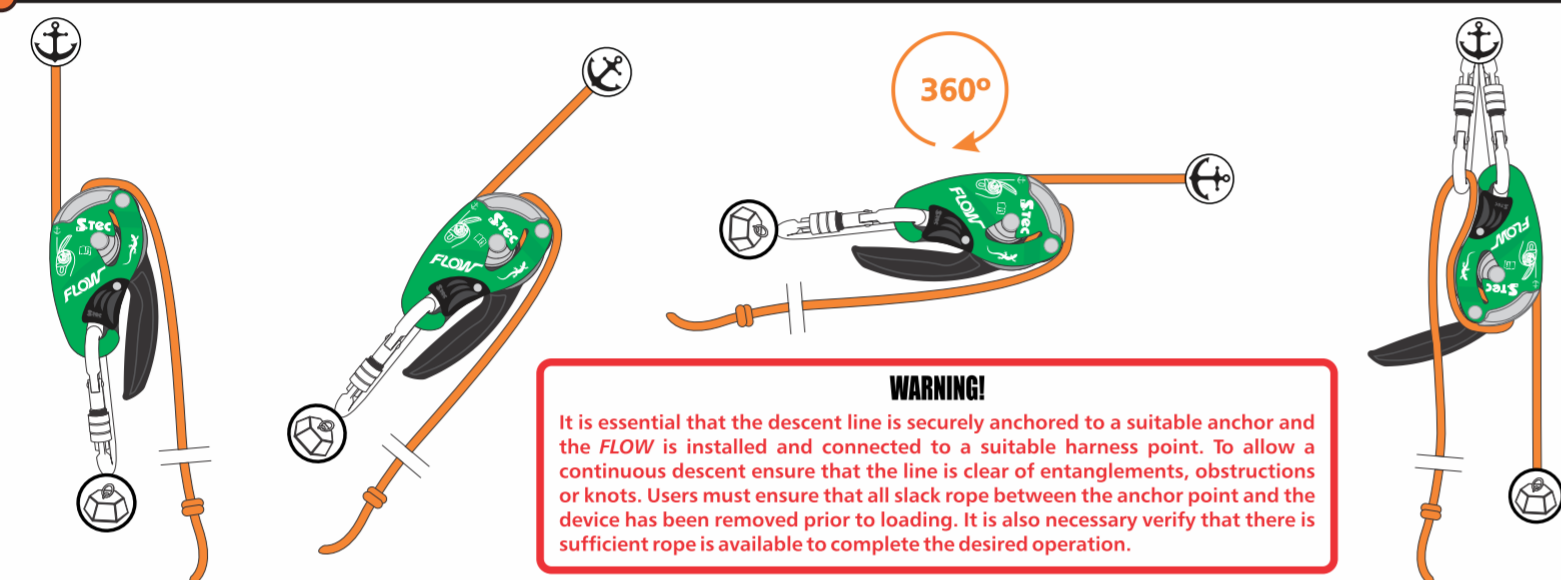
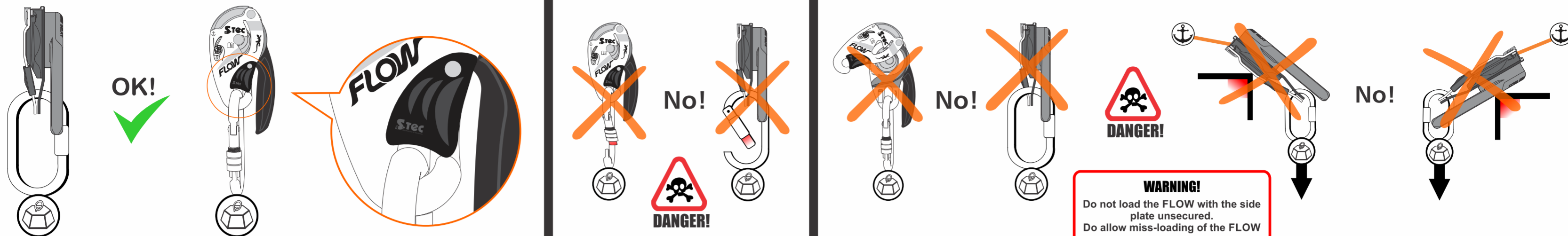
A secondary back up system is recommended.

For loads of up to 400kg two **FLOW** devices are used, installed on independent rescue lowering ropes.

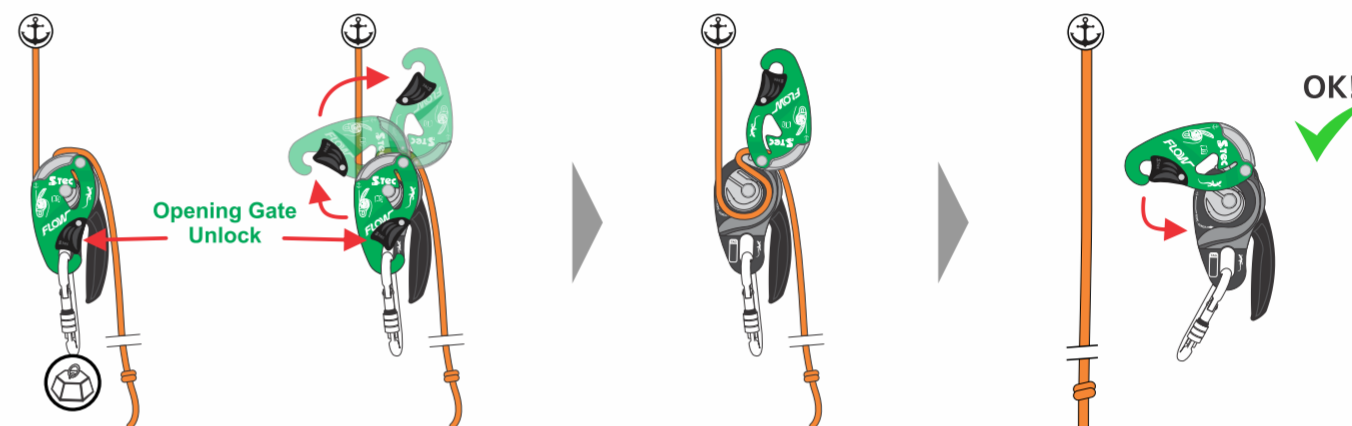
WARNING

When the **FLOW** is used for rescue purposes it falls outside the scope of the certification.





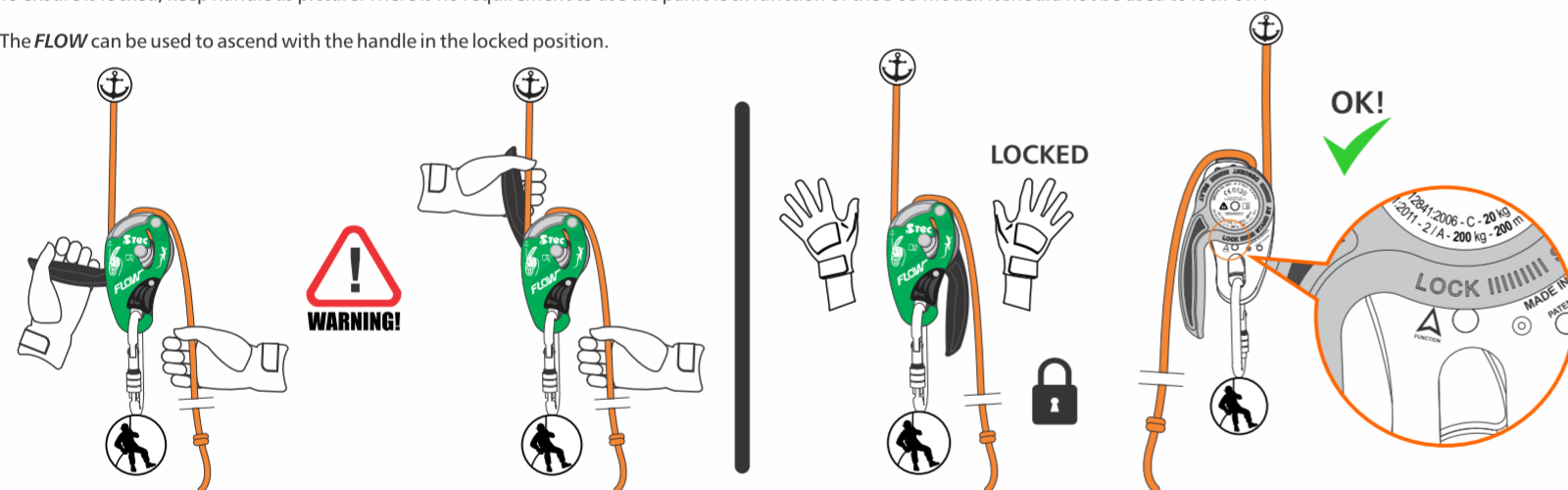
Prior to removal from the rope users must verify personal safety. To remove the rope from the **FLOW**, release any rope tension and then open the side plate. This allows the rope to be removed.



- To avoid accidental droppin of the **FLOW**, always keep it secured to a suitable anchorage.
- When not in use hanging on the harness never leave the Moving Side Plate open.
- The side plates should be in the closed position during storage.

Excluding during planned and controlled descent the **FLOW** must be "Locked-Off". The Auto-Stop function of the **Flow** is not an acceptable way to leave the device when not descending. To ensure is locked, keep handle as picture. There is no requirement to use the panic lock function of the D05 model. It should not be used to lock-off.

The **FLOW** can be used to ascend with the handle in the locked position.



WARNING!
The equipment may become hot and may damage the line during or after long descents.,



All **FLOW** Descenders have the COL feature - new concept (Climb On Lock) mode. This feature allows the device to be adjusted or used to climbed with the handle in the LOCK position.

Flow D05 (Green) - COL

With all features the **FLOW** D05 has: Clip-opening gate to facilitates the installation and removal of the rope, Auto-Stop, anti-panic, COL - climb on lock, adjust on lock mode. Intended for professional use where the users require anti-panic and opening clip gate to facilitates. **FLOW** D05 has GREEN moving side plate.

Flow D06 (Black) - COL (no anti-panic feature)

Clip-opening gate, Auto-Stop (NO anti-panic) COL - climb on lock / adjust on lock mode. Intended for professional use. Opening gate facilitates the placement and removal of the rope. **FLOW** D06 has Black moving side plate and subtle shaded etching.

Flow D07 (Red) - COL (no anti-panic feature)

Clip-opening gate and Auto-Stop (NO anti-panic) Intended for use in professional fixed access systems and rescue systems where **FLOW** is pre-installed ready for deployment. This model is ideal for use in Rescue kits and evacuation systems. **FLOW** D07 has RED moving side plate.

Read and understand this manual prior to use and save for future reference. Only the techniques presented in this manual are authorized. Some examples of miss-use are included, these have a stripe or pictogram of a skull and should be avoided, these are some examples of miss-use, it is impossible to foresee all ways equipment can be miss-used and users should never use equipment in ways that are not 100% verified prior to being used to provide personal safety, in case of doubt contact **SAFETEC**. When any doubt exists regarding its efficiency equipment must not be used.

ROPE CONDITION: Wear, wetness and contaminants will affect the performance of the **FLOW**. Some rope conditions will make control and locking of the **FLOW** more difficult e.g. oil & grease. The effective operation of the **FLOW** should be monitored and checked in all conditions. Where any performance doubt exists, the **FLOW** should not be used.

SEA WATER: It is essential that this the **FLOW** is cleaned as soon as practicable after each exposure to sea water or saline environment.

CHEMICAL REAGENT: Avoid contact with any substance or material that may causes corrosion or other damage to the any material or working action of the device. If contact occurs consult expert advice as to damage and decontamination requirements. Inspect prior to any re-use.

MAINTENANCE: The **FLOW** is not user maintainable without prior authorization from **SAFETEC** with the exception of disinfection, cleaning and lubrication as detailed in this manual.

DISINFECTION: Following any contamination the source of the contamination should be determined and advice obtained as to suitable disinfecting procedure. After disinfection the device should be re-cleaned. Sterilisation may be required.

CLEANING: If soiled rinse in clean warm water of domestic supply quality (maximum temperature 40°C) with mild detergent at appropriate dilution (pH range 5.5 - 8.5). Dry naturally away from direct heat sources. To remove grease use a detergent that has properties that do not affect the metal or plastic components.

LUBRICATION: It is essential to maintain lubrication of the Cam spring. Lubricate regularly and after cleaning with light machine oil or Teflon or silicone lubricant to ensue free movement of the cam. Wipe off the excess to avoid contamination of ropes and textile equipment. Any excess lubricant **MUST** be completely removed from the device before use (Use only lubricant SKF LGWM2).

STORAGE: Do not store wet or when contaminated. Store in a controlled place, secure from un-authorised people.

WARNING – Do not use de-greasing agents as these will remove essential internal lubrication rendering the device inoperable.

LIFESPAN: It is very difficult to define the safe lifespan due to varying use and storage conditions and may be as little as one use, or even earlier if damaged (e.g. in transit or storage) prior to first use. For the product to remain in service it must pass a visual and tactile examination. Maximum lifespan: 10 years from 1st use.

WARRANTY: The **FLOW** has a 3 years warranty against manufacturing defects, proof of purchase required. The warranty does not cover use wear, miss-use, abuse, neglect or any alterations, maintenance or repairs performed outside the factory.

OBSOLESCENCE: This device may become obsolete before the end of its lifespan. Reasons for this may include changes in applicable standards, regulations, legislation, development of new techniques, incompatibility with other equipment etc.

TRANSPORTATION & STORAGE: After cleaning store unpacked in a cool, dry, dark place in a chemically neutral environment away from excessive heat or heat sources, high humidity, sharp edges, corrosives or other possible causes of damage.

DECLARATION OF CONFORMITY: Can be accessed on www.safetecbr.com.br