



Helo Lanyard™ Operator Retention System

- *Operator Safety*
- *Ease Of Use*
- *Simple & Secure*
- *Thoroughly Tested*
- *Approved For Use And Used By Canadian Special Forces*





Helo Lanyard™ - Major Features

- **Design Inspired By And For Tier 1 Operators**
- **Design-Input & Testing By Tier-1 Operators**
- **Purpose-Built As Tactical Position/Retention Lanyard For Military & SWAT Operators**
- **Approved And Integrated By Canadian Special Forces**
- **Calibrated Force-Limiting**
 - Limits Forces to ~4kN / 900 lbf. In The Event Of An Un-Planned Landing
- **Emergency Release At The Body**
- **One-Handed Adjustment**
 - Adjustable At The Body
- **Use With Light To Heavy Gloves**
- **Direct Connection To Harness Or Rigger's Belt**
 - Connect to Soft Loop Or Hard Ring
- **Rated System Strength of 13.5kN / 3,000 lbf**



Helo Lanyard™ - Purpose-Built

Operator Safety

- Force-Limiting
- Quick-Disconnect
- Environmental Factors

- *In The Event Of An Unplanned Landing The Forces Need To Be Limited For Operator Survivability.*
 - Calibrated ~4kN / 900 lbf. Slip-Force
 - Operator Can Survive Initial Forces
 - Anchor Points In Helicopter Are Maintained (Typically Rated To 12kN / 2,700 lbf.)
 - Operator Is Kept Inside
 - Even If Hanging Can Be Quickly & Easily Disconnected
 - Designed To Shed Beach Sand/Grit From Internal Components

Quick-Disconnect

*Video Demonstrates
The Two-Stage Quick-
Release At ~1,400
Newtons / 310 LBF*





Helo Lanyard™ - Purpose-Built

Ease Of Use

○ **Clean And Simple**

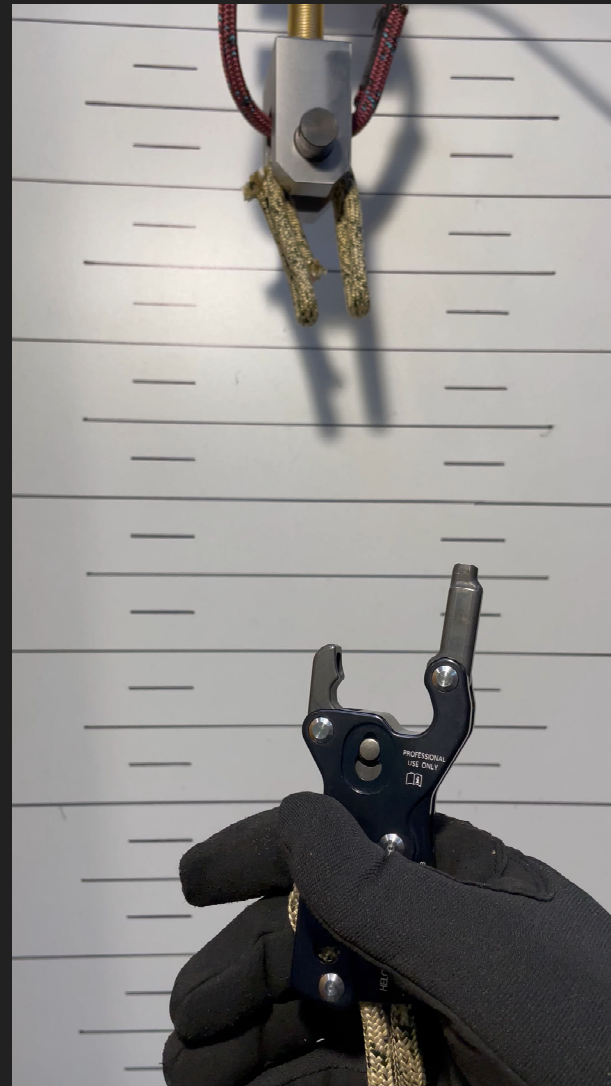
○ **Adjustable**

○ **Fast**

- *Quick, Multiple Attachment Options*
 - *Soft And Hard Harness Points And Accommodates A Carabiner*
- *Easy To Keep Tidy*
- *One-Handed Adjustment At The Body Both In And Out*
- *Quick And Simple To Learn And Use*

Ease Of Attachment

Video Demonstrates The Ease Of Locking The Gate For Attachment To Harness Or Riggers Belt





Helo Lanyard™ - Purpose-Built

Details

○ Purposeful Rope Selection

- *OpLux 8mm Rope Specifically Chosen To Engineer The Helo Lanyard™*
 - *Easily Distinguished From All The Webbing And Straps An Operator Already Carries*
 - *Strong, Light, Cut & Abrasion Resistant*
 - *In Deliberate Rescue, Rope Is Easier To Cut Than Flat Webbing When Loaded Against Floor Or Edge*
 - *Hydrophobic*
 - *Outer Sheath Identifiable At Close Range With NVG*
 - *Triple Overhand Knot At Adjustment-End To Further-Strengthen The System*



Helo Lanyard™ - Purpose-Built

Details

- **Multiple Lengths Available**
- **Options Include 2-Stage And 3-Stage Carabiners**
- *Standard Lengths Available*
 - *Operator: 18 – 20 Inches Adjustment, 2-Stage Carabiner: SRP - \$298*
 - *Ariel Medic: 29 – 31 Inches Adjustment, 3-Stage Carabiner: SRP - \$310*
 - *Jump Master: 86 – 88 Inches Adjustment, 3-Stage Carabiner: SRP - \$320*
- *Anchor Connector Options*
 - *Kong 2-Stage Locking Carabiner*
 - *ISC 3-Stage Locking Carabiner*

Helo Lanyard™ - Comparison

Operator Personal Retention Lanyard Comparison



Features	Helo Lanyard™	Purcell Prusik (6mm cord)	Snap-Shackle Style	Petzl Helo Adjust Lanyard
Calibrated Slip Force:	Yes. ~4kN / 900 lbf	No	2.5kN/600lbf (If Purchased With Option)	No
Quick Release:	Yes. Easy, Safe Double-Action At the Operator	No	Yes. Less Secure Release Mechanism At The Operator	Yes. Less Secure Release Mechanism At The Operator
Adjustable Length:	Yes. Simple, Efficient One-handed In And Out at the Operator	Yes. Two-handed, half its length	Dependant on Model. 2-Handed To Lengthen, One-handed To Shorten. Awkward Use At Anchor Point	Yes. 2-Handed To Lengthen, One-handed To Shorten. Awkward Use At Anchor Point
Breaking Strength (system):	13.5 kN / 3000 lbf	10kn / 2250 lbf	15kN / 3300 lbf	13.3kN / 3000 lbf
Standard Adjustment Lengths:	Operator:18 - 20 inches, Ariel Medic:29-31inches, Rappel Master:86-88inches	Determined by Cord Length	16 inches	18 - 30 inches
Custom Length Available:	Yes	Yes	Limited	No
Cut Resistance:	Yes. Cut-Resistant Spectra Core/Technora Sheath	No	No	No
Visible with NVG:	Yes	No	No	No
Weight:	Operator: 385 grams /13.6oz (With Calibrated Slip-Force, Adjustable Length)	Approx. 475g/16.76oz (With 2-Stage carabiners)	Approx. 400g/14.1oz (Non-Adjustable & No Slip-Force Protection Options)	405g/14.2oz (No Slip-Force Protection)
Multiple Connection Options:	Yes	Dependant on User-Choice	Yes	No



Helo Lanyard™ - Comparison

○ Helo Lanyard™

- **Quick, Safe, Double-Action Emergency Release**
- **Calibrated Slip Force To Protect Operator From Potential Excessive Forces**
- **Easily Adjustable Length (In And Out) Using One Hand**
- **Cut/Abrasion-Resistant 8mm Rope Used Which Easily Distinguishes It From Other Webbing On The Operator**
- **Visible With NVG**
- **Three Standard Lengths Available**
- **Custom Lengths Available**
- **2-Stage And 3-Stage Snap-Hooks Available**

○ Purcell Prusik

- Only Meant As A Restraint
- Not Meant To Be Fallen On Or Shock-Loaded
- Testing (100kg) Demonstrates The Purcell Going To Full Extension. Depending On Length Will Not Keep You Inside The Helo Or Other Craft
- Easily Tangles With Everything Around Your Gun Belt
- If Used With Snap-Hooks On Each End It Is Extremely Difficult To Release From If Hanging/Loaded
- If Used With "Pelican-Style" Single-Stage Release;
 - No Safety Redundancy For Release
 - When Hanging/Loaded It Must Be Pulled Within A Couple Of Degrees Of Optimal Angle Or It Will Not Release
 - Difficult To Use With Heavy Gloves
 - Most Are Cheap, Mass-Produced And Are Known To Inadvertently Release



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○ Webbing Style Lanyard

- *If Used With "Pelican-Style" Single-Stage Release;*
 - *No Safety Redundancy For Release*
 - *When Hanging/Loaded It Must Be Pulled Within A Couple Of Degrees Of Optimal Angle Or It Will Not Release*
 - *Difficult To Use With Heavy Gloves*
 - *Most Are Cheap, Mass-Produced And Are Known To Inadvertently Release*
- *If Used With Snap-Hooks On Each End It Is Extremely Difficult To Release From If Hanging/Loaded*
- *More Webbing So Not Easily Distinguished From Other Accessories*
- *If Adjustable, That Hardware Is Only Rated To ~6kN / 1,350lbf. After That Force-Point The Operator Will Instantly Go To Full Extension Of System And Potentially Fail The Anchor*
- *If Not Adjustable There Is Very Little Force-Reduction On The Operator*



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○ Petzl Helo Adjust Lanyard

- *Semi-Static Rope Offers Little to No Force-Protection For The Operator Or Anchors*
- *Two-Hand Adjustment To Shorten*
- *One Standard Length Available*
- *If Used With "Pelican-Style" Single-Stage Release;*
 - *No Safety Redundancy For Release*
 - *When Hanging/Loaded It Must Be Pulled Within A Couple Of Degrees Of Optimal Angle Or It Will Not Release*
 - *Difficult To Use With Heavy Gloves*
 - *Most Are Cheap, Mass-Produced And Are Known To Inadvertently Release*
- *If Used With Snap-Hooks On Each End It Is Extremely Difficult To Release From If Hanging/Loaded*



Helo Lanyard™

Focused On Operator Safety



Helo Lanyard™ Testing

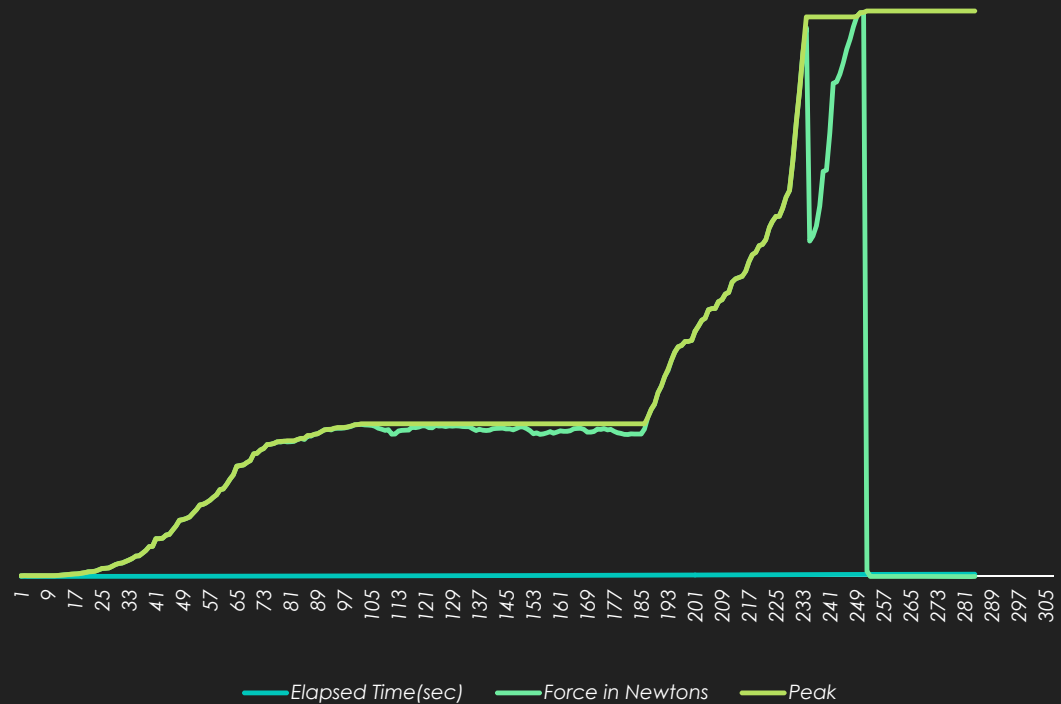
**Extensively
Tested**

Pull-Testing

Testing For Slip-Force

Ultimate Strength Testing

Test #067 Rev.23 Helo Lanyard
Slip Force & Peak Force, Nov. 15, 2022



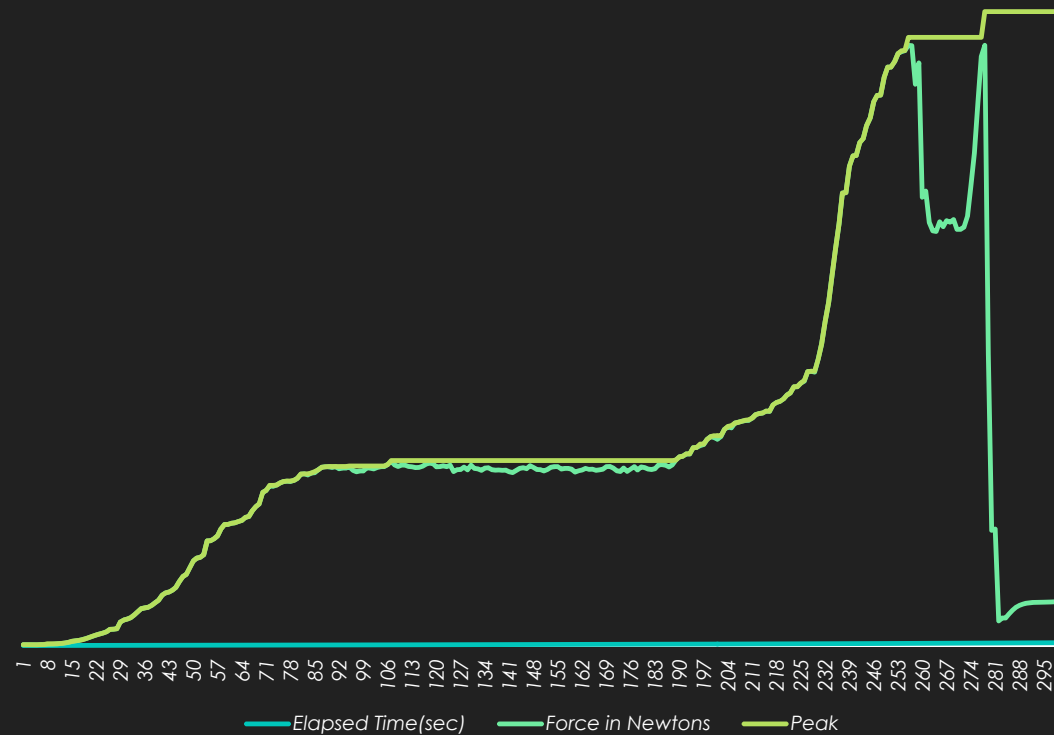
Helo Lanyard™ Testing

**Extensively
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Pull-Testing

- Slip-Force
- Ultimate Strength Testing

Test #068 Rev.23 Helo Lanyard
Slip-Force & Peak Force, Nov. 15, 2022



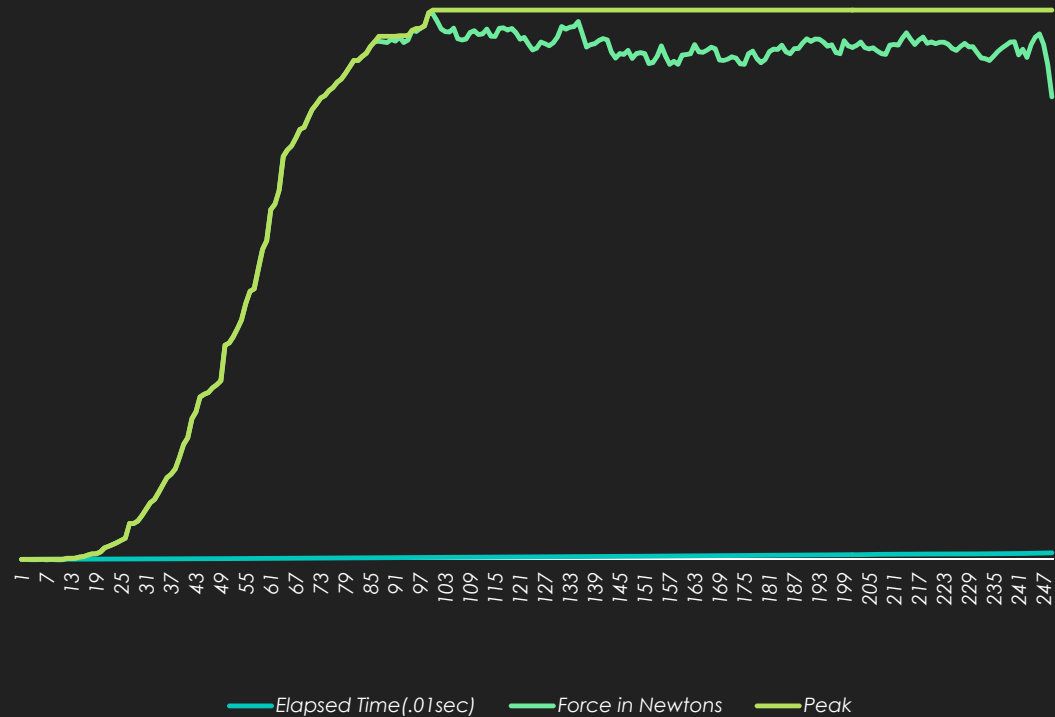
Helo Lanyard™ Testing

**Extensively
Tested**

Pull-Testing

- Slip-Force
- Ultimate Strength Testing

Test #069 Rev.23 Helo Lanyard
Slip-Force Test, May 3, 2023



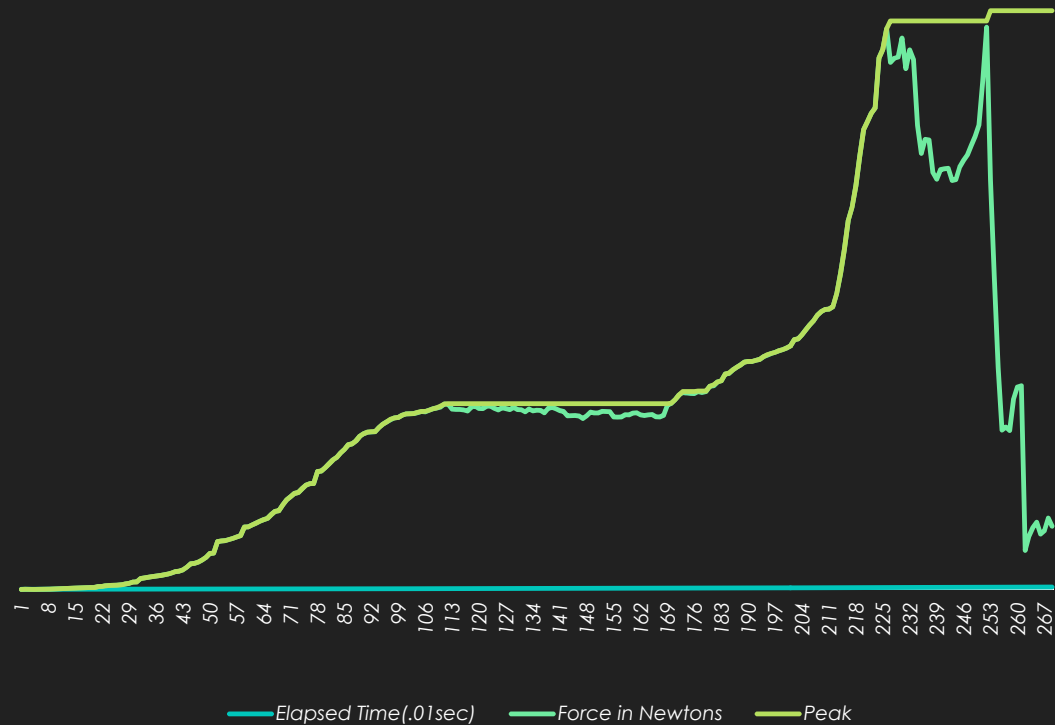
Helo Lanyard™ Testing

**Extensively
Tested**

Pull-Testing

- Slip-Force
- Ultimate Strength Testing

Test #071 Rev.23 Helo Lanyard
Slip Force & Peak Force, May 3, 2023



Helo Lanyard™ Testing

**Extensively
Tested**

Pull-Testing

- Slip-Force
- Ultimate Strength Testing

Test #072 Rev.23 Helo Lanyard
Slip Force & Peak Force, May 3, 2023

