

Quality Tools for Smart Cleaning

EVOLUTIONARYWATER FED POLE TECHNOLOGY FOR PROFESSIONALS

PATENT PENDING





HIFLO* HIFLO*

EVOLUTIONARY POLE TECHNOLOGY FOR PROFESSIONALS

INNOVATIVE ENGINEERING

- Perfect balance better rigidity for more control, and yet up to 50% lighter in weight thanks to its carbon fibre technology.
- Hi tech design every part of the system, from Clamps and Levers to Brushes
 has been created to deliver the highest standards with cutting edge looks.

EASE OF USE

- Comfort and safety the weight/rigidity balance makes HiFLOTM nLite easier and more comfortable to use, even for longer periods of time.
- Easy assembly Extension Poles, Goosenecks and Brushes can be added quickly and easily.

ADAPTABILITY

- Mix and match only use as many Extension Poles as you need.
- See page 8 of this Brochure or try **nLite** Configurator on our website for Recommended Pole Combinations.
- Multi-talented system the HiFLOTM nLITE can be used to clean glass and building facades, stainless steel, solar panels, signage and vehicles.

QUICK OVERVIEW



BRUSHES Superlight Brushes feature high quality polyester bristles designed to get into the smallest corner and help with scrubbing actions. Whereas conventional brushes usually only have two jets, HIFLOTM nLITE Brushes feature up to ten quick release Jets, making it much easier to control the water flow and rinse surfaces.

SIZES 27cm, 40cm, 60cm. | **TYPES** Rectangular, Radius, Solar.

BRISTLES Lightweight, solvent resistant polyester. Unflagged single strands, ideal for efficient cleaning of the glass.

JETS Quick release Jets. Interchangeable Pencil or Fan design - mix and match depending on the type

of surface you clean, e.g. 2 Fan Jets + 2 Pencil Jets.

JET Up to 10 different Jet locations, depending on the Brush size. Hundreds of spray patterns possible -POSITIONS use two, four, six or all ten locations at one time, changing between Fan and Pencil Jets as you need!



Strong carbon fibre Gooseneck attachments enable you to achieve any working angle, keeping weight to a minimum.

ASSEMBLY Quickly connected to the Pole and secured using the Clamps. Combine several Goosenecks to reach any working angle. COMBINATION

WEIGHT/MATERIAL Superlight carbon fibre material ensures durability and high rigidity.

CLAMPS

The Clamps, which adjust Pole height or attach the Extensions Poles, are simple to operate - no fiddly allen key-type devices needed – and easily adjustable to ensure the right tension.

DESIGN Easy and fast one handed operation. Intelligent Clamp design combined with consistent strength of the

> tube section along its length enable you to lock the Pole at any height without the risk of damaging or crushing the tube. Sheltering flanges are built-in to protect the Lever from catching on objects, such as

gutters and sills, which would otherwise result in accidental collapsing of the Pole.

FUNCTION Secure the Hose along the length of the Pole using the Clips to avoid tangling, tripping and catching on objects.

SCREW Convenient Unger logo shaped screw for adjusting the tension of the Clamps by hand without tools.

COLOUR Yellow Clamps, identifying the next Modular component (Extension Poles, Goosenecks and Endcap),

are designed to open in the opposite direction (left to right) to prevent unintentional separation.







MASTER POLE

6.63m/22ft - 4 sections. Section 1 - 26mm, Section 2 - 29mm, Section 3 - 32mm, Base Section - 35mm.

Durable plastic prevents accidental damage to end of the Pole. Features side aperture for Hose.

MATERIAL 3 grades of Pole material: Hybrid (Glassfibre/Carbon), Carbon and HiMod Carbon.

Complete specifications, including new Length Deflection Ratio for measuring Pole rigidity. PRINT

QR CODE Scan the QR code using your Smartphone for more information.

EXTENSION POLE

LENGTH 3.41m/11ft - 2 sections. Section 1 - 32mm, Base Section - 35mm.

MATERIAL 3 grades of Pole material: Hybrid (Glassfibre/Carbon), Carbon and HiMod Carbon.

APPLICATION Add on up to 4 Extension Poles to Master Pole to reach the required height.

COLOUR Yellow visual warning area at the top of Extension Pole helps to avoid unintentional separation from the Master Pole.

PRINT Complete specifications, including new Length Deflection Ratio for measuring Pole rigidity. (

QR CODE Scan the QR code using your Smartphone for more information.



















POLE TECHNOLOGY MADE SMARTER

The highest professional cleaning standards are even easier to achieve with the **HIFLOTM INLITE SYSTEM** thanks to its perfect balance between weight and rigidity. Not only are the Poles lighter than conventional versions, the use of cutting edge design and technology means that even when extensions are added rigidity is not compromised, and yet the weight and ergonomics of the system still make it a pleasure to use.

The four section Master Pole has an extended length of 6.63m/22ft, but greater heights can be easily reached and cleaned by adding two-section Extension Poles to the base of the Master Pole. Each extension adds a further 3.41m/11ft of extended length. Crucially, the Extension Poles don't add anything to the width, grip and feel of the Pole which always measures 35mm in diameter – an optimum size that fits easily into the hands of the professional for quick and comfortable cleaning. Even if you're cleaning to a height of around 20m/65ft the HIFLOTM nLITE offers the 'gold standard' in terms of ease of use and results, combining just the right amount of rigidity to control your cleaning, but in a lightweight system that's better for the professional to use.



MASTER POLE

4 SECTION TELESCOPIC POLE. (DIAMETER: 26MM/29MM/32MM/35MM)

The diameter of the Pole section you are holding will never exceed 35mm, irrespective of the number of Extension Poles you add. The diameter of the first section of the Master Pole (holding the Gooseneck and Brush) is 26mm. Wider than industry average, it increases the rigidity of the Master Pole overall, reducing flex usually associated with smaller diameter, thinner tubes. This results in greater stability and control of the Brush. facilitating more efficient cleaning with less effort. Durable plastic Endcap prevents accidental damage to the end of the Pole and features a side apeture for the Hose to exit when used inside the Pole. All Poles, regardless of the grade, are compatible with each other. For instance, combining a Carbon Master Pole with a Hybrid Extension Pole will deliver a great performance at a lower cost than an all-Carbon System, with only a slight increase in weight and deflection.

EXTENSION POLE

2 SECTION TELESCOPIC POLE. (DIAMETER: 32MM/35MM)

Yellow visual warning area at the top of the Extension Pole helps to avoid unintentional separation from the Master Pole. All Poles, regardless of the grade, are compatible with each other.

For instance, combining a Hybrid Extension Pole with a Carbon Master Pole will deliver great performance at a lower cost than an all-Carbon System, with only a slight increase in weight and deflection.

GRADING SYSTEM

HYBRID: Glass Fibre/Carbon Composite Pole. Excellent rigidity and value. Recommended for working at heights of up to 10m/35ft. Ultimate Strength of Material: 65 GPa

CARBON: 100% Carbon Fibre Pole. Superior rigidity, lightweight pole. Recommended for working at heights of up to 16m/53ft. Ultimate Strength of Material: 100 GPa

HIMODULUS CARBON: The ultimate in rigidity, superlight pole. Recommended for working at heights of up to 20m/65ft and higher. Ultimate Strength of Material: 180 GPa

Gpa (gigapascal) is a unit of measure of stiffness material.

POLE STRUCTURE

LENGTHWISE FIBRES: Provide the strength and rigidity needed in the lengthwise direction.

CROSSWISE FIBRES: Secure the tube structure to protect the lengthwise layers of carbon from splitting, thus facilitating low rate of deflection even when the Pole is fully extended.

SURFACE: The woven structure with a special resin reinforces the Pole surface, making it incredibly hard, scratch and wear resistant.



CLAMPS

Easy and fast one handed operation. Convenient Unger logo shaped screw for adjusting the tension of the Clamp without tools. Yellow Clamps identify the next Modular component to prevent unintentional separation.

WATER HOSE MANAGEMENT

Use the practical Hose Clips to secure the Hose along the length of the Pole to avoid tangling and improve safety. The Hose Clips can be removed when the Hose runs on inside of the Pole, and easily fitted back on when required. Durable plastic Endcap prevents accidental damage to end of Pole. Features side aperture for hose. 3 lengths are available - 11, 20 and 25m.

HIFLOTM nLITE WATER FED POLES

PART. NO.	DESCRIPTION	EXTENDED LENGTH	COLLAPSED LENGTH	SECTIONS	WEIGHT	MATERIAL	PACK	PRICE
HT67G	HiFlo™ nLite Hybrid Master Pole, 4 sections	6.63m / 22°	1.87m / 6'	4	1.7kg / 3.7lb	Hybrid (Carbon & Glass Fibre)	1	£199.00
HT35G	HiFlo™ nLite Hybrid Extension Pole, 2 sections	3.41m / 11'	1.91m / 6'	2	0.9kg / 2lb	Hybrid (Carbon & Glass Fibre)	1	£99.00
AK181	HiFlo™ nLite Hybrid Extension Pole, 2 sections, short	1.10m / 4'	0.81m / 3'	2	0.5kg / 1.1lb	Hybrid (Carbon & Glass Fibre)	1	£79.00
CT67G	HiFlo™ nLite Carbon Master Pole, 4 sections	6.63m / 22°	1.87m / 6'	4	1.6kg / 3.5lb	Carbon	1	£329.00
CT35G	HiFlo™ nLite Carbon Extension Pole, 2 sections	3.41m / 11'	1.91m / 6'	2	0.8kg / 1.8lb	Carbon	1	£164.00
UC67G	HiFlo™ nLite HiMod Carbon Master Pole, 4 sections	6.63m / 22°	1.87m / 6'	4	1.5kg / 3.3lb	HiMod Carbon	1	£629.00
UC35G	HiFlo™ nLite HiMod Carbon Extension Pole, 2 sections	3.41m / 11	1.91m / 6'	2	0.7kg / 1.5lb	HiMod Carbon	1	£339.00
FTTHR	HiFlo™ nLite Multilink Thread Adapter					POM (Plastic Polymer)	1	£4.90
TMECP	HiFlo™ nLite Endcap					Plastic	1	£4.50
HTKI4	HiFlo™ nLite Starter Kit Hybrid 1 x HT67G HiFlo™ nLite Hybrid Master Pole 1 x NL27A HiFlo™ nLite Rectangular Brush 27cm, 1 x FTGOS HiFlo™ Multilink Adapter, 1 x NL11G Hose 11m, 1 x NLBJF Set of 2 Fan Jets, 1 x NLBJP Set of 2 Pencil Jets.	6.63m / 22 ⁻	1.87m / 6'				1	£245.00
NL11G	HiFlo™ nLite Hose 11m. Standard Hose Connector CTHLC included.	11m				PVC	1	£13.90
NL20G	HiFlo™ nLite Hose 20m. Standard Hose Connector CTHLC included.	20m	, , ,			PVC	1	£19.90
NL25G	HiFlo™ nLite Hose 25m. Standard Hose Connector CTHLC included.	25m			_	PVC	1	£21.00
NLQUI	HiFlo™ nLite Quick Connection Hose Kit 2 x Hose End Piece, 1 x Quick Connector			/		PVC	1	£9.90

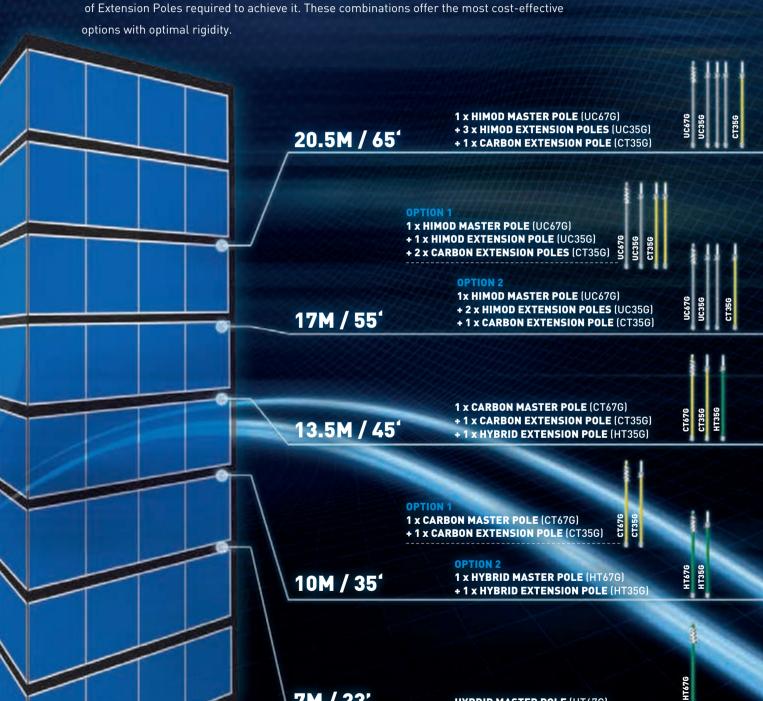




USAGE GUIDE

WHAT LENGTH POLE DO I NEED FOR THIS BUILDING?

The chart below will help you identify the suitable Pole length as well as the grade and number of Extension Poles required to achieve it. These combinations offer the most cost-effective



HYBRID MASTER POLE (HT67G)

Build your complete individual HIFLOTM nLITE System with

nLite CONFIGURATOR on www.ungerglobal.com

7M / 23'



MAINTENANCE GUIDE

LOOKING AFTER YOUR HIFLOTM nLITE SYSTEM

REGULAR CLEANING AND MAINTENANCE

Carefully wipe each Pole section with a microfibre cloth once a week, slightly dampened with pure water. Keep the Hose clean to prevent dirt and grit transfer onto the Pole. Clean your Brushes regularly in a bucket of pure water, using a microfibre cloth, to prevent the build up of debris.

WORKING WITH THE POLE

Do not over-extend the Pole to prevent separating the sections. Keep control of the sections when collapsing the Pole - do not let the upper section drop into a lower section, as this may damage Clamps and injure your hand. Always use the Endcap to protect the end of the Pole from accidental damage.

ADJUSTING CLAMPS

Tighten or loosen the Clamps using the Unger logo shaped screw to adjust the level of tension and hold of the Pole. Do not overtighten the Clamps as this will cause excessive wear to the Pole section. Replacement Clamps are available and easy to install thanks to unique self-locking design - no glue is required. Each Clamp and Lever is marked with the relevant Pole section diameter for making spare part ordering easy.



The Length Deflection Ratio (LDR) has been developed by the Unger Research and Development Team to provide a quantifiable way of measuring the perfect balance between length and rigidity of water fed Poles. The LDR formula accurately measures the deflection (or the rigidity) of the Pole when fully extended, with a 5kg weight attached to the centre of the Pole. This simulates the average force applied to the Pole in operation. The resulting number reflects the rigidity of the Pole: the higher LDR number - the greater the rigidity (or stiffness) of the Pole.

LENGTH DEFLECTION RATIO LDR = $\frac{\text{(overall length)}^3}{\text{(deflection)} \times (7)^2}$

DEFLECTION VALUES

BY MATERIAL The key factor affecting rigidity of the Pole is the material it is made of. The chart below explains the LDR of the 3 grades of material used in the HIFLOTM nLITE range: Hybrid, Carbon and HiModulus Carbon.

DEFLECTION VALUES	HYBRID		- CAR	BON	HiMOD		
	nLite MASTER			nLITE EXTENSION	nLite MASTER	nLite EXTENSION	
EXTENDED LENGTH	6.63m/22'	3.41m/11'	6.63m/22'	3.41m/11'	6.63m/22'	3.41m/11'	
WEIGHT	1.7kg/3.7lb	0.9kg/2lb	1.6kg/3.5lb	0.8kg/1.8lb	1.5kg/3.3lb	0.7kg/1.5lb	
DEFLECTION	32cm/1'	3.5cm/0.1'	21cm/0.7'	2.8cm/0.09'	12cm/0.4'	1.5cm/0.05'	
LDR	18.6	23.1	28.3	28.9	49.6	53.9	







LIGHT, STRONG AND VERSATILE

The HIFLOTM nLITE Brushes and Goosenecks allow you to tackle any cleaning challenge with confidence. Choose between various sizes and models, depending on the size, type and angle of the surfaces you're working on.

GOOSENECKS



SIZES 20cm and 30cm MATERIAL Carbon Fibre

ASSEMBLY Loosen the Clamp at the top

section of the Pole. Insert the Gooseneck into the Pole and secure by closing the Clamp.

Tighten the Clamp, if necessary.

150CM

SIZE 150cm

MATERIAL Hybrid (Glass Fibre & Carbon) **ASSEMBLY** Assemble as described above.

> For secure fit ensure that the yellow warning area is fully inserted into Master Pole.



Rectangular, Radius and Solar

the most stubborn dirt.

Lightweight, solvent resistant synthetic bristles

are hard wearing and effective in removing even

27, 40, 60cm

TYPES

SIZES

BRISTLE GUIDE

JET TYPES

PRESSURE GUIDE

Adding more Jets allows you to clean larger areas quicker and better. The number of Jets you can use depends on the level of water pressure the higher the water pressure, the higher number

of Jets you can use at one time.

Pencil Jets for Hydrophilic Glass

Fan Jets for Hydrophobic Glass

PENCIL JET

FAN JET

BRUSH MATERIAL

BRUSH Plastic porous core

BODY with smooth solid skin on

> the outside - cutting edge engineering ensures structural stability

and lighter weight than solid block manufacturing.

ADAPTER Attach the FTTHR HIFLOTM nLITE Multilink Thread

Adapter to the Gooseneck and screw on the Brush.

BRUSH ROTATION

The Brush can be rotated by 180° and secured in the new position, using the built-in adapter. Changing the position of the Brush will also change the location of the outer Jets row - this option provides greater flexibility and control over cleaning and rinsing different surfaces, angles and structures.



CREATE HUNDREDS OF SPRAY PATTERNS USING FAN OR PENCIL JETS IN ANY COMBINATION, IN UP TO 10 LOCATIONS.









JET CONFIGURATIONS

Using 2 Jets: Included with Brush: 1 x NLBJP Set of HiFlo™ nl ite x NLHPC HiFlo™ nLite



Using 4 Jets: Extra parts required:

1 x Set of HiFlo™ nLite Jets 2 x NLHPC HiFlo™ nLite Hose Brush Connection Kit

Using 6 Jets: Extra parts required: 2 x Sets of HiFlo™ nLite Jets 4 x NLHPC HiFlo™ nLite



HIFLOTM NLITE BRUSHES & SPARE PARTS Weight Complete includes 1 x Set of Jets and 1 x NLBRS Brush Socket

				Every Brush includes one set of Pencil Jets (NEBJP) as standard.						
	PART. NO.	DESCRIPTION	SIZE	WEIGHT BARE	WEIGHT COMPLETE	PACK	LIST PRICE			
	NL27Y	HiFlo™ nLite Solar Radius Brush	27cm / 10.63"	364g	408g	1	£29.90			
Ė	NL40Y	HiFlo™ nLite Solar Radius Brush	40cm / 15.75"	535g	579g	1	£34.90			
	NL60Y	HiFlo™ nLite Solar Radius Brush	60cm / 23.62"	872g	916g	1	£49.90			
	NL27A	HiFlo™ nLite Rectangular Brush	27cm / 10.63"	270g	314g	1	£24.90			
	NL40A	HiFlo™ nLite Rectangular Brush	40cm / 15.75"	408g	452g	1	£29.90			
	NL60A	HiFlo™ nLite Rectangular Brush	60cm / 23.62"	806g	850g	1	£44.90			
	NLR27	HiFlo™ nLite Radius Brush	27cm / 10.63"	364g	408g	1	£29.90			
	NLR40	HiFlo™ nLite Radius Brush	40cm / 15.75"	535g	579g	1	£34.90			
•:	NLHPC	HiFlo™ nLite Hose Brush Connection Kit			40g	1	£2.50			
	NLBJF	HiFlo™ nLite Spare Fan Jets, Set of 2				1 Set	£3.90			
	NLBJP	HiFlo™ nLite Spare Pencil Jets, Set of 2				1 Set	£3.90			
	NLBRS	HiFlo™ nLite Brush Socket				1	£5.20			

HIFLOTM nLITE

MULTILINK GOOSENECKS

PART.NO.	DESCRIPTION	SIZE	WEIGHT	MATERIAL	PACK	LIST PRICE
NLG20	HiFlo™ nLite	20cm / 7.9"	130a / 0.29lb	Carbon Fibre	1	£45.90
	Multilink Gooseneck		3.			
NLG30	HiFlo™ nLite	30cm / 11 8"	1/0a / 0 31lb	Carbon Fibre	1	£49.90
	Multilink Gooseneck	3001117 11.0	140g / 0.51tb			L47.70
NLG15	HiFlo™ nLite			Hybrid (Glass Fibre & Carbon)	1	
	Multilink Gooseneck	150cm / 59"	390g / 0.86lb	(Glass Fibre & Carbon)	_ ' _	£59.00

www.ungerglobal.com



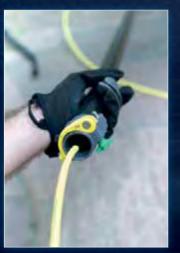


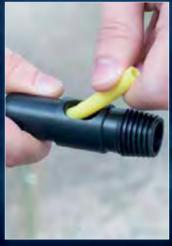


Quality Tools for Smart Cleaning

HOSE MANAGEMENT

The new Hose management system focuses on user safety and convenience - fit the Hose inside of the Pole or secure it along the length of the Pole, using removeable Hose Clips. Whichever option you choose, the Hose is kept under control to eliminate any potential safety risks.



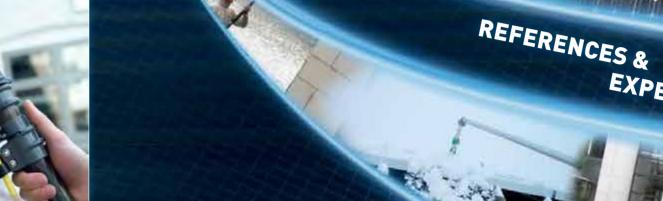




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CHOOSING THE RIGHT SYSTEM





DI400/800

Deionisation

4,000L / 8,000L

£1,720.00 / £2,150.00

The ultimate filter for

frequent cleaning of la

25L / 50L

120L

areas.

www.ungerglobal.com



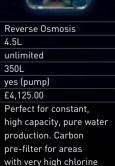
R030G

EXPERIENCE



RO30C

	Reverse Osmosis
	4.5L
	unlimited
	350L
	yes (pump)
	£3,995.00
	Perfect for constant,
qe	high capacity, pure water
,	production.



Recommended Application

no £137.00 domestic cleaning of small to moderate size areas.

100L no £169.00 Ideal entry level solution for professional cleaning.

1,000L

£579.00 Ideal entry level solution for professional cleaning.

1,440L

100L

no

Quality Tools for Smart Cleaning

EVOLUTIONARY WATER FED POLE TECHNOLOGY FOR PROFESSIONALS



HIFLO™ nLITE WATER FED POLES SPARE PARTS

PART. NO.	DESCRIPTION	MASTER POLE	EXTENSION POLE	SIZE	PACK	LIST PRICE
17149	HiFlo™ nLite Hose Clips	х	x		10	£0.50
17152	HiFlo™ nLite 26mm Clamp complete, yellow	x		26mm / 1.02"	1	£4.30
17157	HiFlo™ nLite 29mm Clamp complete, grey	х		29mm / 1.14"	1	£4.60
17162	HiFlo™ nLite 32mm Clamp complete, grey	X		32mm / 1.26"	1	£4.90
17170	HiFlo™ nLite 35mm Clamp complete, grey	X	Х	35mm / 1.38"	1	£5.20
17169	HiFlo™ nLite 35mm Clamp complete, yellow	X	х	35mm / 1.38"	1	£5.20
17252	HiFlo™ nLite Hybrid 26mm Master Section with yellow clamp	Section 1		26mm / 1.02"	1	£49.00
17258	HiFlo™ nLite Hybrid 29mm Master Section with grey clamp	Section 2		29mm / 1.14"	1	£53.00
17264	HiFlo™ nLite Hybrid 32mm Master Section with grey clamp	Section 3		32mm / 1.26"	1	£58.00
17270	HiFlo™ nLite Hybrid 35mm Master Section with grey/yellow clamps	Base Section		35mm / 1.38"	1	£79.00
17277	HiFlo™ nLite Hybrid 32mm Extension Section with yellow connection guide ring		Section 1	32mm / 1.26"	1	£58.00
17395	HiFlo™ nLite Hybrid 35mm Extension Section with grey/yellow clamps		Base Section	35mm / 1.38"	11	£79.00
17253	HiFlo™ nLite Carbon 26mm Master Section with yellow clamp	Section 1		26mm / 1.02"	1	£79.00
17259	HiFlo™ nLite Carbon 29mm Master Section with grey clamp	Section 2		29mm / 1.14"	1	£89.00
17265	HiFlo™ nLite Carbon 32mm Master Section with grey clamp	Section 3		32mm / 1.26"	1	£99.00
17271	HiFlo™ nLite Carbon 35mm Master Section with grey/yellow clamps	Base Section		35mm / 1.38"	1	£109.00
17278	HiFlo™ nLite Carbon 32mm Extension Section with yellow connection guide ring		Section 1	32mm / 1.26"	1	£99.00
17394	HiFlo™ nLite Carbon 35mm Extension Section with grey/yellow clamps		Base Section	35mm / 1.38"	1	£109.00
17254	HiFlo™ nLite HiMod Carbon 26mm Master Section with yellow clamp	Section 1		26mm / 1.02"	1	£149.00
17260	HiFlo™ nLite HiMod Carbon 29mm Master Section with grey clamp	Section 2		29mm / 1.14"	1	£159.00
17266	HiFlo™ nLite HiMod Carbon 32mm Master Section with grey clamp	Section 3		32mm / 1.26"	1	£169.00
17272	HiFlo™ nLite HiMod Carbon 35mm Master Section with grey/yellow clamps	Base Section		35mm / 1.38"	1	£189.00
17279	HiFlo™ nLite HiMod Carbon 32mm Extension Section with yellow connection guide ring	A N	Section 1	32mm / 1.26"	1	£169.00
17396	HiFlo™ nLite HiMod Carbon 35mm Extension Section with grey/yellow clamps		Base Section	35mm / 1.38"	1	£189.00
NL11G	HiFlo™ nLite Hose 11m Standard hose connector included.	1		11m / 36.01'	1	£13.90
NL20G	HiFlo™ nLite Hose 20m Standard hose connector included.	1		20m / 65.62°	1	£19.90
NL25G	HiFlo™ nLite Hose 25m Standard hose connector included.			25m / 82.02'	1	£21.00
NLQUI	HiFlo™ nLite Quick Connection Hose Kit				1	7
	2 x Hose End Piece, 1 x Quick Connector				1	£9.90
NLHPC	HiFlo™ nLite Hose Brush Connection Kit					
	2 x Short Hoses, 1 x T-Piece Connector				1	£2.50

All prices are recommended retail prices, excluding VAT. The general terms of payment and delivery of Unger UK Ltd. apply.



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