

# **N-FORCER®**

## **Junior Series**

**UC025, CL025, UC075 & UCL75**



**Die, Mold & Automation Components, Inc. 14300 Henn Street Dearborn, MI 48126**  
**Phone : 1.800.220.2242 www.n-forcer.com**

# Introduction

We at Die Mold & Automation Components, Inc have dedicated our resources to produce the most trouble-free nitrogen gas springs on today's market. This dedication to quality has enabled our customers to achieve the elite manufacturing status which helps them excel in today's highly competitive market.

## N-FORCER® JR BENEFITS

### **QUALITY CONSTRUCTION**

Bodies - Machined for solid bar stock on CNC equipment. Rods - Machined from alloy steel on CNC equipment. Hardened and chromed plated.

### **CUSTOMER SERVICE**

N-FORCER dedicates all it's resources to supply the customers with the best service and support.

### **VERSATILE**

- Use in pressure pads.
- Use as strippers.
- Use in cam returns.

### **ECONOMICAL**

- Eliminate costly manifolds.
- Eliminate downtime caused by broken or fatigued die springs.
- (1) **N-FORCER** Replaces many die springs.

### **LEAK PROOF DESIGN**

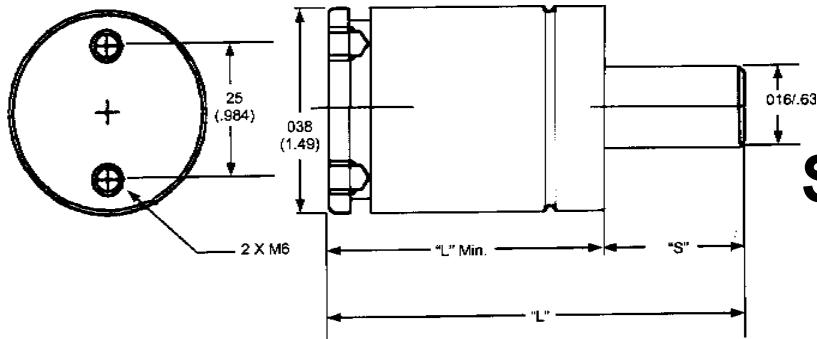
N-FORCER uses a cartridge that contains a double lip rod seal. This unique seal prevents contaminants from entering the gas springs, and also provides an excellent resistance to wear.

### **DEPENDABLE**

Long service life.  
Proven in the field.  
Providing reliable products since 1986.

# N-FORCER®

## Ultra Compact UC025 1/4 Ton



### Standard Mount

#### Force on Contact - English

Pressure (psi)	Force (lb.-f)
2175	667
2000	613
1750	537
1500	460
1250	383
1000	307
500	155

ORDER REPAIR  
KIT EXAMPLE  
UC025-RK-76

Part Number	S MM Inch	L	L Min.
UC025 x 013	12.5 0.49	55.0 2.16	42.5 1.67
UC025 x 015	15.0 0.59	60.0 2.36	45.0 1.77
UC025 x 019	19.0 0.75	68.0 2.68	49.0 1.93
UC025 x 025	25.0 0.98	80.0 3.15	55.0 2.17
UC025 x 032	33.0 1.30	96.0 3.78	63.0 2.48
UC025 x 038	37.5 1.48	105.0 4.13	67.5 2.66
UC025 x 050	50.0 1.97	130.0 5.12	80.0 3.15
UC025 x 063	62.5 2.46	155.0 6.10	92.5 3.64
UC025 x 075	75.0 2.95	180.0 7.09	105.0 4.13
UC025 x 080	80.0 3.15	190.0 7.48	110.0 4.33
UC025 x 100	100.0 3.96	231.0 9.09	130.5 5.14
UC025 x 125	125.0 4.92	280.0 11.02	155.0 6.10

#### Force on Contact - Metric

Pressure (bar)	Force (daN)
150	297
125	247
100	198
75	148
50	99
35	70

FILLING ADAPTER  
FA-2QD  
(Quick Disconnect)

**NOTE: MAXIMUM TRAVEL  
RECOMMENDED IS 90% OF STROKE.**

#### ORDERING EXAMPLE

UC025 X 013 - O - 150

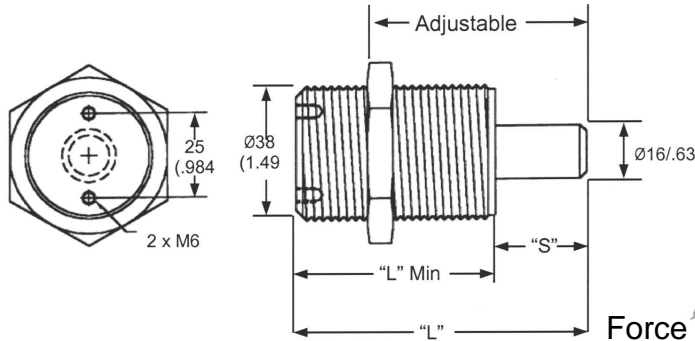
Part No.  
Series, Model  
and Stroke

Mounting Option  
"O" is standard Mount

Charging Pressure  
Self contained = 35-150 bar  
or 500 - 2175 psi. **If not  
specified the 2175 psi is default.**

# N-FORCER®

## Ultra Compact UC025 1/4 Ton



**Threaded**  
1 1/2 - 12 or M38 x 1.5

Force on Contact - English

Part Number	S MM Inch	L	L Min.
UC025 x 013	12.5 0.49	55.0 2.16	42.5 1.67
UC025 x 015	15.0 0.59	60.0 2.36	45.0 1.77
UC025 x 019	19.0 0.75	68.0 2.68	49.0 1.93
UC025 x 025	25.0 0.98	80.0 3.15	55.0 2.17
UC025 x 032	33.0 1.30	96.0 3.78	63.0 2.48
UC025 x 038	37.5 1.48	105.0 4.13	67.5 2.66
UC025 x 050	50.0 1.97	130.0 5.12	80.0 3.15
UC025 x 063	62.5 2.46	155.0 6.10	92.5 3.64
UC025 x 075	75.0 2.95	180.0 7.09	105.0 4.13
UC025 x 080	80.0 3.15	190.0 7.48	110.0 4.33
UC025 x 100	100.0 3.96	231.0 9.09	130.5 5.14
UC025 x 125	125.0 4.92	280.0 11.02	155.0 6.10

Pressure (psi)	Force (lb.-f)
2175	667
2000	613
1750	537
1500	460
1250	383
1000	307
500	155

ORDER REPAIR  
KIT EXAMPLE  
UC025-RK-76

FILLING ADAPTER  
FA-2QD  
(Quick Disconnect)

Force on Contact - Metric

Pressure (bar)	Force (daN)
150	297
125	247
100	198
75	148
50	99
35	70

NUT 1 1/2 -12  
NUT M38 x 1.5

**NOTE: MAXIMUM TRAVEL  
RECOMMENDED IS 90% OF STROKE.**

### ORDERING EXAMPLE

UC025 X 013 - TE - 150

Part No.  
Series, Model  
and Stroke  
Mounting Option  
TE = 1 1/2-12 Threaded  
TM = M38 x 1.5 Threaded

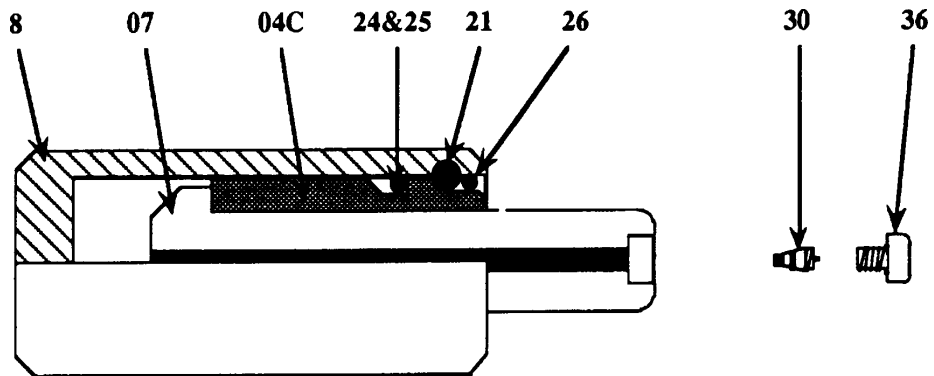
Charging Pressure  
Self contained = 35-150 bar  
or 500 - 2175 psi. **If not  
specified the 2175 psi  
is default.**

**N-FORCER<sup>®</sup> JR.**  
**CL025 (1/4 Ton of Force On Contact)**  
**Cylinder Body diameter of 1 1/2"**

Featuring the "NO GROW" Cartridge for efficient  
"NO HASSLE" Repairs.

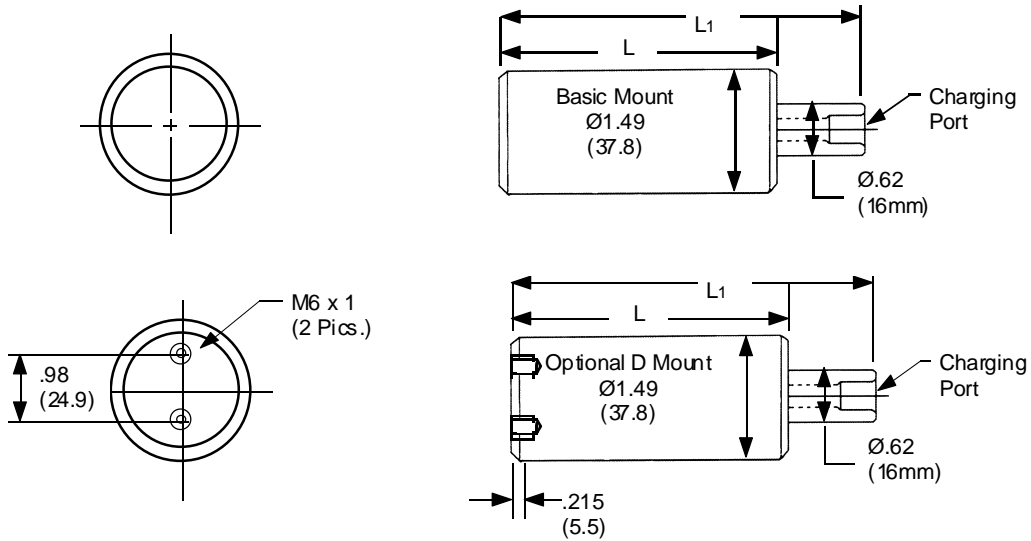
**CL025 Replacement Parts List**

CL025-8 (Tube Assembly)
LN025-07 (Piston Rod)
LN025-25 & 25 (O-ring & Backup)
LN025-04C (Seal Cartridge)
LN025-32 (Retaining Ring)
N000-30 (Valve)
LN000-36 (Protective Screw)
LN025-26 (Large Protective Screw)



# N-FORCER® JR.

## CL025 (1/4 Ton of Force On Contact)



PART NO.	Stroke	L	L1
CL025 x 0.50	12.7	63.5	76.2
	0.50	2.50	3.00
CL025 x 1.00	25	76.2	101.6
	1.00	3.00	4.00
CL025 x 1.50	38.1	88.9	127
	1.50	3.50	5.00
CL025 x2.00	50	101.8	152.4
	2.00	4.00	6.00
CL025 x 2.50	63.5	114.3	177.8
	2.50	4.50	7.00
CL025 x 3.00	75	127	203.2
	3.00	5.00	8.00

**NOTE: MAXIMUM TRAVEL RECOMMENDED IS 90% OF STROKE.**

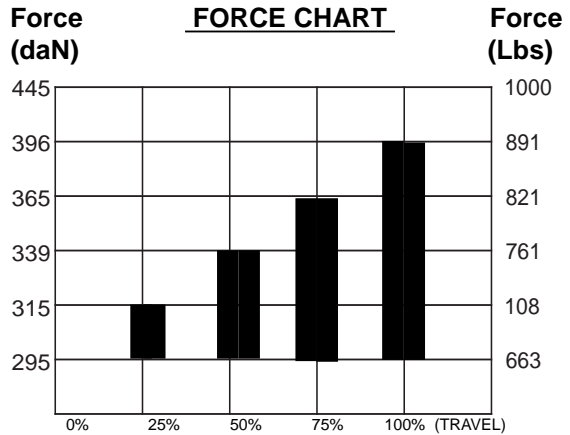


Chart is showing maximum force base on 2175 psi (150 bar) charging pressure. If less than max. the force is reduced proportionally.  
 Example: Forces on chart are multiplied by .69 @ 1500 psi (103 bar), by .46 @ 1000 psi (69 bar), etc.

**ORDERING EXAMPLE**  
**CL025 X 0.50 - O - 150**

Part No. \_\_\_\_\_  
 Series, Model  
 and Stroke

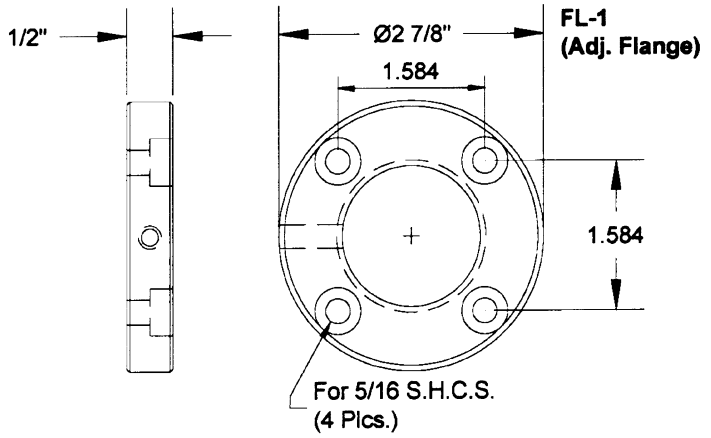
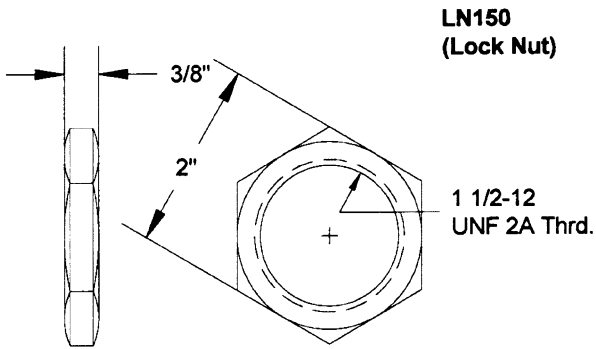
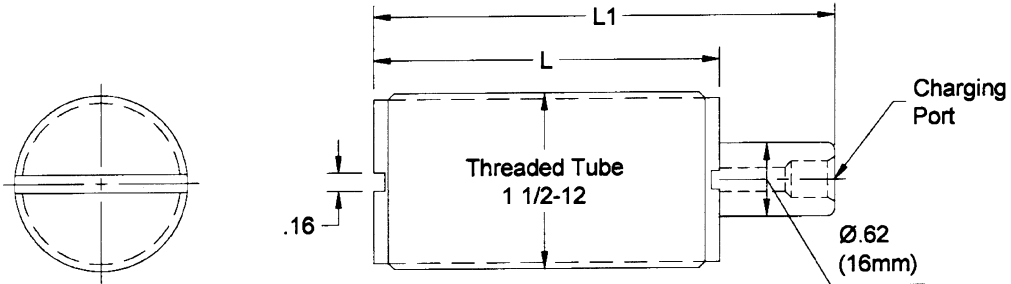
Mounting Option \_\_\_\_\_  
 "O" Basic, optional  
 "D" Mount, if not specified  
 "O" Basic is default

Charging Pressure  
 Self contained = 51-150 bar  
 or 750 - 2175 psi. **If not  
 specified the 2175 psi  
 is default.**

**ORDER REPAIR KIT EXAMPLE**  
 CL025-RK-66

**FILLING ADAPTER**  
 FA-2QD (Quick Disconnect)

# N-FORCER<sup>®</sup> CL025 - (1/4 Ton) Threaded Tube



PART NO.	Stroke	L	L1
CL025 x 0.50	12.7	63.5	76.2
	0.50	2.50	3.00
CL025 x 1.00	25	76.2	101.6
	1.00	3.00	4.00
CL025 x 1.50	38.1	88.9	127
	1.50	3.50	5.00
CL025 x2.00	50	101.8	152.4
	2.00	4.00	6.00
CL025 x 2.50	63.5	114.3	177.8
	2.50	4.50	7.00
CL025 x 3.00	75	127	203.2
	3.00	5.00	8.00

**NOTE: MAXIMUM TRAVEL RECOMMENDED IS 90% OF STROKE.**

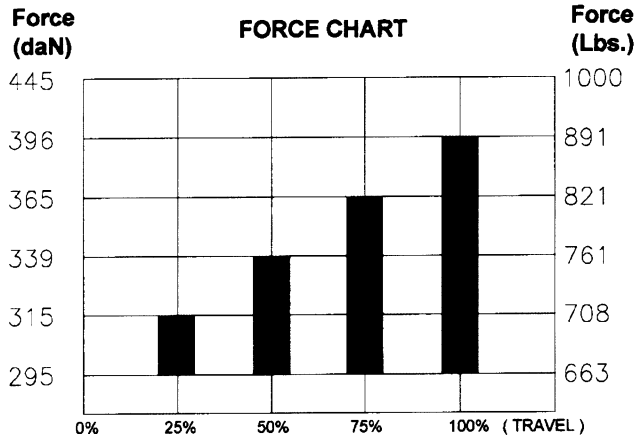


Chart is showing maximum force base on 2175 psi ( 150 bar ) charging pressure. If less than max. the force is reduced proportionally.  
 Example: Forces on chart are multiplied by .69 at 1500 psi ( 103 bar ), by .46 at 1000 psi ( 69 bar ), etc.

### ORDERING EXAMPLE

CL025 x 0.50 - T - 150

Part No.  
Series, Model  
and Stroke

Mounting Option  
"T" Threaded Tube

Charging Pressure  
Self contained = 51-150 bar  
or 750 - 2175 psi. If not  
specified the 2175 psi  
is default.

### ORDER REPAIR KIT EXAMPLE

CL025-RK-66

FILLING ADAPTER

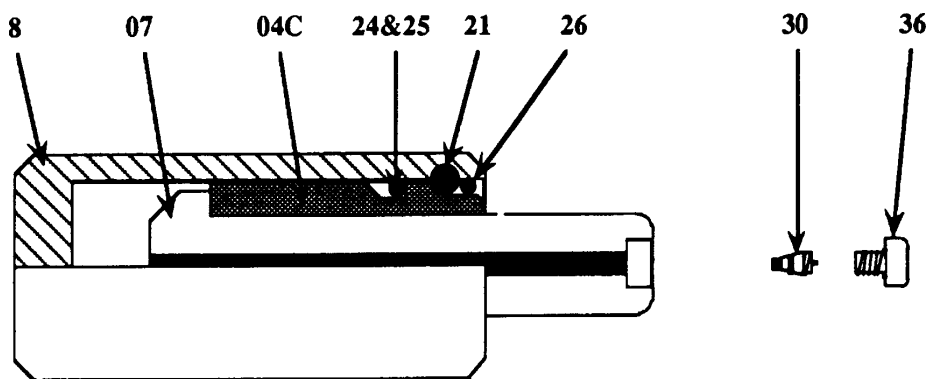
FA-2QD ( Quick Disconnect )

**N-FORCER<sup>®</sup> JR.**  
**UC075 (3/4 Ton of Force On Contact)**  
**Cylinder Body Diameter of 2"**

Featuring the **"NO GROW"** Cartridge for efficient  
**"NO HASSLE"** Repairs.

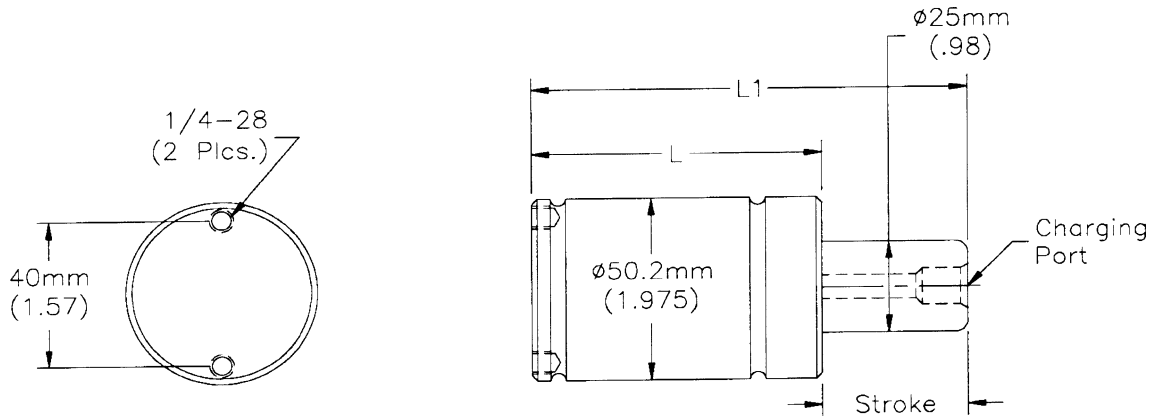
**UC075 Replacement Parts List**

UC075-8 (Tube Assembly)
UC075-07 (Piston Rod)
UC075-24 & 25 (O-ring & Backup)
UC075-04C (Seal Cartridge)
UC075-21 (Retaining Ring)
N000-30 (Valve)
LN000-36 (Protective Screw)
LN025-26 (Large Protective O-ring)





# N-FORCER® UC075 - (3/4 Ton) Basic Mount



Part No.	Stroke	L	L1
UC075 x 012	12.7	50.8	63.5
	.50	2.00	2.50
UC075 x 019	18.8	56.8	75.6
	0.74	2.236	2.976
UC075 x 025	25	63.2	88.1
	0.98	2.49	3.47
UC075 x 032	32	70.2	102.1
	1.26	2.76	4.02
UC075 x 038	38.1	76.2	114.63
	1.50	3.00	4.50
UC075 x 050	50	88.1	138.1
	1.97	3.47	5.44
UC075 x 063	63.5	101.6	165.1
	2.50	4.00	6.50
UC075 x 075	75	113	187.9
	2.95	4.45	7.40
UC075 x 080	80	118.1	197.8
	3.15	4.65	7.79
UC075 x 088	88.9	127	215.9
	3.50	5.00	8.50
UC075 x 100	100	137.9	237.9
	3.94	5.43	9.37

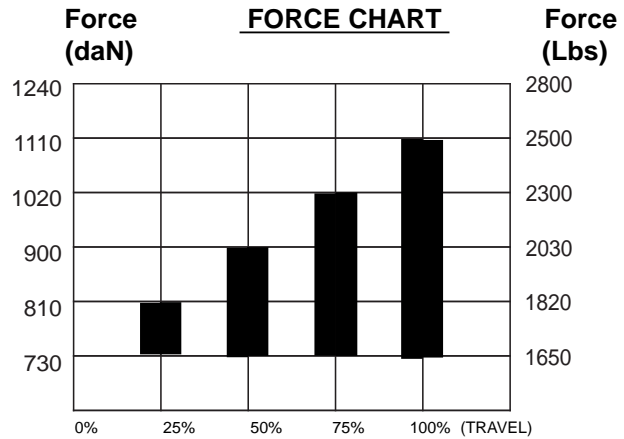


Chart is showing maximum force base on 2175 psi (150 bar) charging pressure. If less than max. the force is reduced proportionally.

Example: Forces on chart are multiplied by .69 @ 1500 psi (103 bar), by .46 @ 1000 psi (69 bar), etc.

**NOTE: MAXIMUM TRAVEL RECOMMENDED IS 90% OF STROKE.**

**ORDER REPAIR KIT EXAMPLE  
UC075-RK=42**

**ORDERING EXAMPLE**  
UC075 X 012 - O - 150

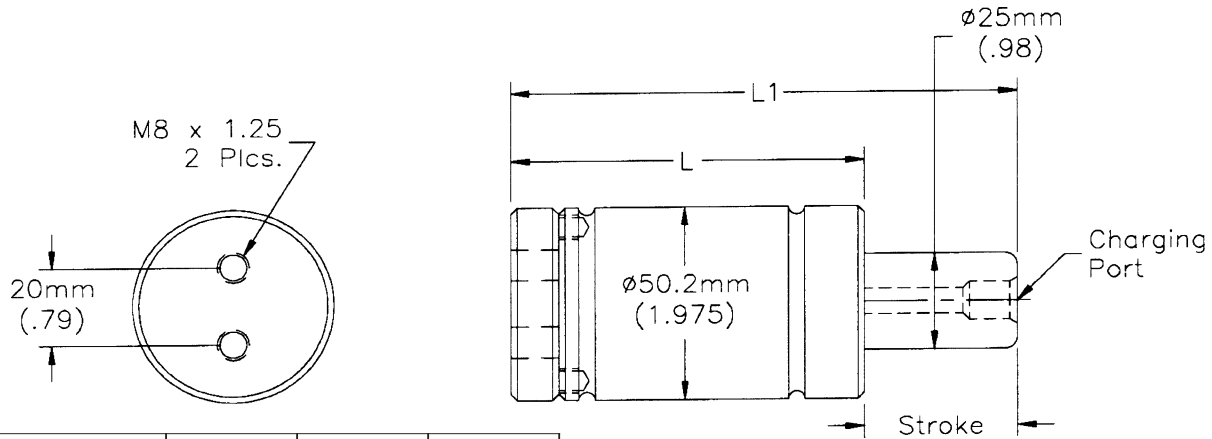
Part No.  
Series, Model  
and Stroke

Charging Pressure  
Self contained = 51-150 bar  
or 750 - 2175 psi. **If not specified the 2175 psi is default.**

Mounting Option  
"O" Basic, optional

**FILLING ADAPTER  
FA-2QD (Quick Disconnect)**

# N-FORCER® UCL75 - (3/4 Ton) Basic Mount



Part No.	Stroke	L	L1
UCL075 x 012	12.7	62.7	75.4
	.50	24.7	2.97
UCL075 x 019	19.0	69.5	88.5
	0.75	2.736	3.484
UCL075 x 025	25	75.2	100.1
	0.98	2.96	3.94
UCL075 x 025	32	82	114
	1.26	3.23	4.49
UCL075 x 038	38.1	88.1	126.2
	1.50	3.47	4.97
UCL075 x 050	50	101.1	150.1
	1.97	3.94	5.91
UCL075 x 063	63.5	113.5	177.0
	2.50	4.47	6.97
UCL075 x 075	75	124.9	199.9
	2.95	4.92	7.87
UCL075 x 080	80	130.0	209.8
	3.15	5.12	8.26
UCL075 x 088	88.9	138.9	227.8
	3.50	5.47	8.97
UCL075 x 100	100	149.8	249.9
	3.94	5.90	9.84

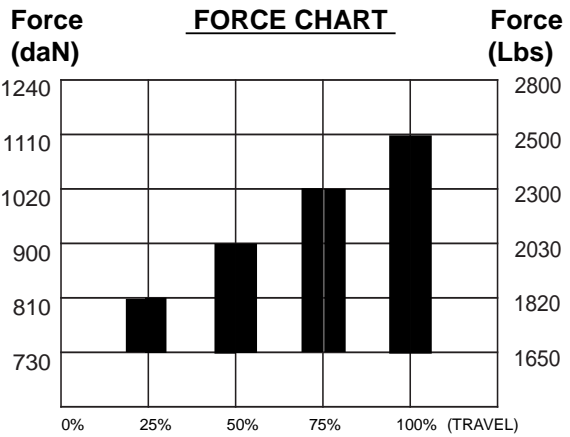


Chart is showing maximum force base on 2175 psi (150 bar) charging pressure. If less than max. the force is reduced proportionally.  
 Example: Forces on chart are multiplied by .69 @ 1500 psi (103 bar), by .46 @ 1000 psi (69 bar), etc.

**NOTE: MAXIMUM TRAVEL RECOMMENDED IS 90% OF STROKE.**

**ORDER REPAIR KIT EXAMPLE**  
UCL075-RK=42

**FILLING ADAPTER**  
FA-2QD (Quick Disconnect)

**ORDERING EXAMPLE**  
UCL075 X 012 - O - 150

Part No.  
Series, Model  
and Stroke

Mounting Option  
"O" Basic, optional

Charging Pressure  
Self contained = 51-150 bar  
or 750 - 2175 psi. **If not specified the 2175 psi is default.**