

N-FORCER®

Junior Series

UC025, CL025 / UC075, UCL75, & CLN75 Threaded



Die, Mold & Automation Components, Inc. 14400 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. Our goal is to simply supply our customers with the products they need to help them excel in today's highly competitive market.

N-FORCER® JR BENEFITS

QUALITY CONSTRUCTION

Bodies - Machined from solid bar stock on CNC equipment. Rods - Machined from alloy steel on CNC equipment. Rods are hardened, ground, nitride or chromed plated and superfinished.

ECONOMICAL

- Replaces many die springs.
- Can eliminate costly manifolds.
- Eliminate downtime caused by broken or fatigued die springs.
- Rebuildable and rechargeable.

CUSTOMER SERVICE

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

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 which may cause premature gas spring wear.

VERSATILE

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

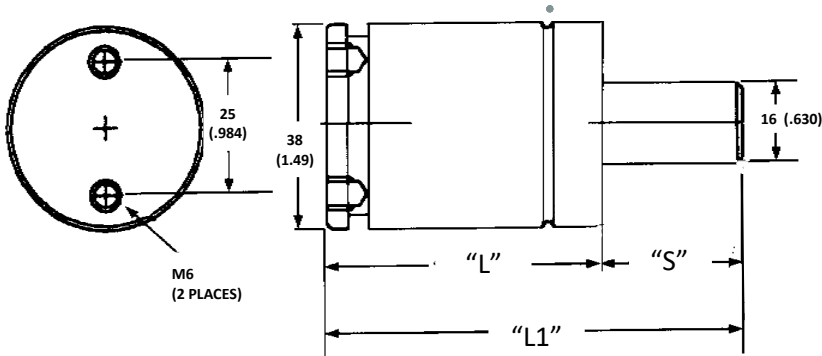
DEPENDABLE

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



N-FORCER®

Ultra Compact UC025 1/4 Ton



Standard Mount

ORDER REPAIR KIT EXAMPLE: UC025-RK-76

FILLING ADAPTER: FA2QD (QUICK DISCONNECT)

ORDERING EXAMPLE

UC025 X 013 - O - 150

Part No.
Series, Model
Stroke

Mounting Option
"O" is standard mount

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

Part Number	"S" MM Inch	L	L1
UC025 x 013	12.5 0.49	42.42 1.67	55.0 2.16
UC025 x 015	15.0 0.59	45.0 1.77	60.0 2.36
UC025 x 019	19.0 0.75	49.0 1.93	68.0 2.68
UC025 x 025	25.0 0.98	55.0 2.17	80.0 3.15
UC025 x 032	33.0 1.30	63.0 2.48	96.0 3.78
UC025 x 038	37.5 1.48	67.5 2.66	105.0 4.13
UC025 x 050	50.0 1.97	80.0 3.15	130.0 5.12
UC025 x 063	62.5 2.46	92.45 3.64	155.0 6.10
UC025 x 075	75.0 2.95	105.0 4.13	180.0 7.09
UC025 x 080	80.0 3.15	110.0 4.33	190.0 7.48
UC025 x 088	88.0 3.46	117.5 4.626	205.5 8.086
UC025 x 100	100.0 3.96	130.5 5.14	230.5 9.1
UC025 x 125	125.0 4.92	155 6.102	280 11.022

Force on Contact - English

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

Force on Contact - Metric

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

NOTE: MAXIMUM TRAVEL RECOMMENDED IS 90% OF STROKE.

N-FORCER®

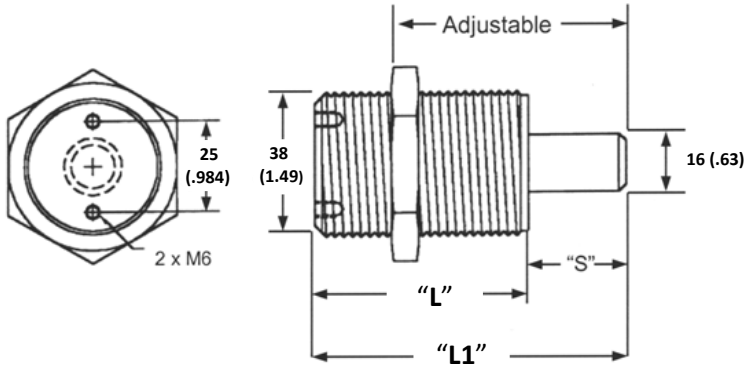
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Ultra Compact UC025 1/4 Ton

N-FORCER

GAS Springs Since 1986



THREADED TUBE

REPAIR KIT P/N: UC025-RK-76

FILLING ADAPTER: FA2QD (QUICK DISCONNECT)

ORDERING EXAMPLE

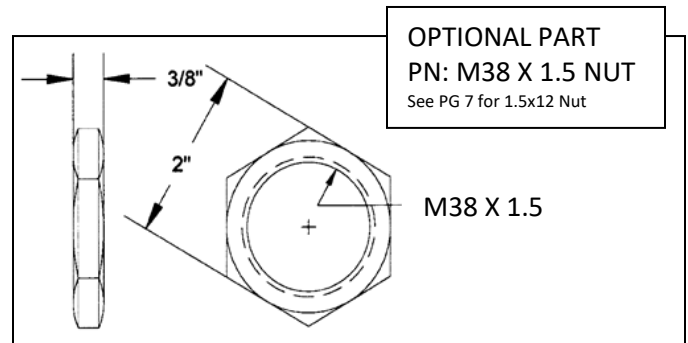
UC025 X 013 - TE - 150

Part Number:
Series, Model, Stroke

Mounting Option
TE = 1 1/2-12 Threaded
TM = M38 x 1.5 Threaded

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

Part Number	"S" MM Inch	L	L1
UC025 x 013	12.5 0.49	42.5 1.67	55.0 2.16
UC025 x 015	15.0 0.59	45.0 1.77	60.0 2.36
UC025 x 019	19.0 0.75	49.0 1.93	68.0 2.68
UC025 x 025	25.0 0.98	55.0 2.17	80.0 3.15
UC025 x 032	33.0 1.30	63.0 2.48	96.0 3.78
UC025 x 038	37.5 1.48	67.5 2.66	105.0 4.13
UC025 x 050	50.0 1.97	80.0 3.15	130.0 5.12
UC025 x 063	62.5 2.46	92.5 3.64	155.0 6.10
UC025 x 075	75.0 2.95	105.0 4.13	180.0 7.09
UC025 x 080	80.0 3.15	110.0 4.33	190.0 7.48
UC025 x 088	88.0 3.46	118 4.65	206 8.11
UC025 x 100	100.0 3.96	130 5.11	231.0 9.09
UC025 x 125	125.0 4.92	155 6.10	280.0 11.02



OPTIONAL PART
PN: M38 X 1.5 NUT
See PG 7 for 1.5x12 Nut

M38 X 1.5

FORCE ON CONTACT ENGLISH

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

FORCE ON CONTACT METRIC

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

NOTE: MAXIMUM TRAVEL RECOMMENDED IS 90% OF STROKE.

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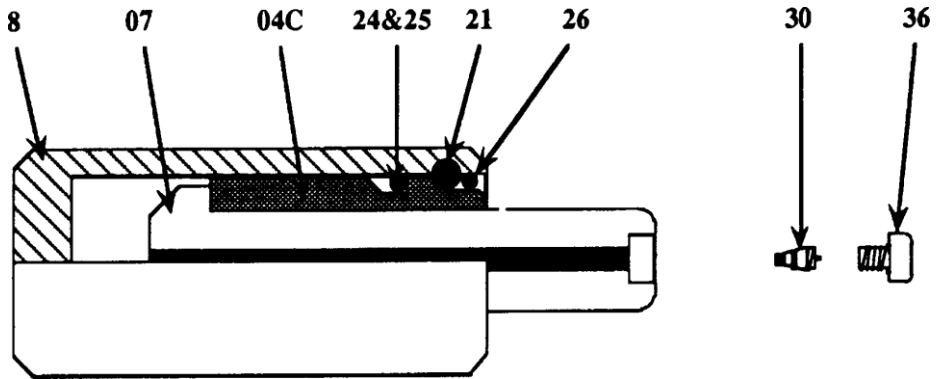
GAS Springs Since 1986

N-FORCER® 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.

CL025-8 (Tube Assembly)
LN025-07 (Piston Rod)
LN025-24 & 25 (O-ring & Backup)
LN025-04C (Seal Cartridge)
LN025-21 (Retaining Ring)
N000-30 (Valve)
LN000-36 (Protective Screw)
LN025-26 (Dust Cover)

CL025 Replacement Parts List

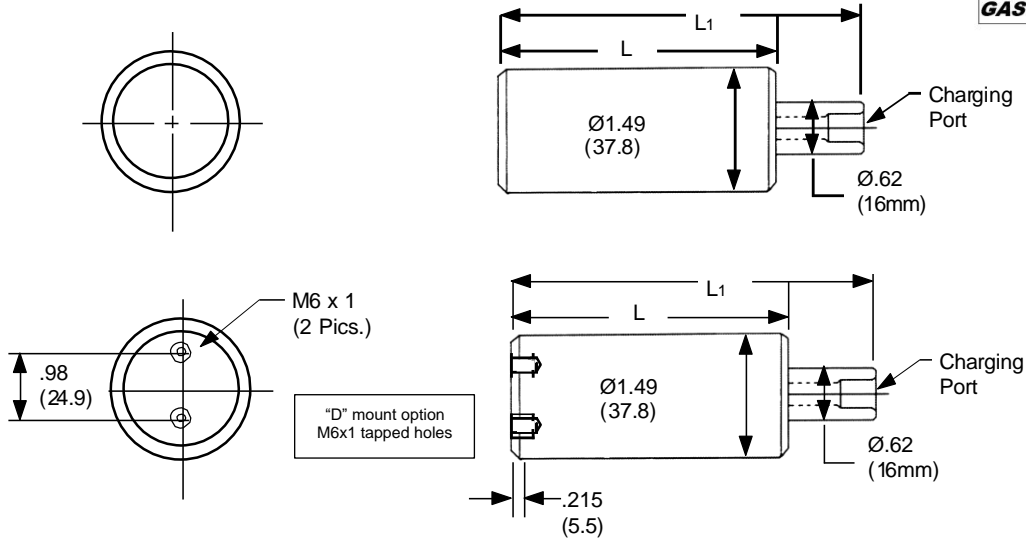


Repair Kit Part number: CL025-RK-66



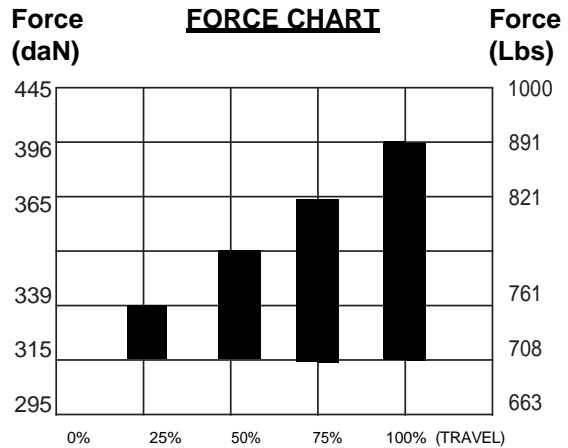
N-FORCER® JR.

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 x 2.00	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.



Stroke lengths up to 8.5" have been machined as special requests.

Initial Force @ 2175 psi is 663 Lbs.

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 x Stroke

Mounting Option

"O" or "Blank" = Basic, no holes (default)
"D" Mount, optional M6x1 tapped holes
"T" THREADED (SEE PAGE 7)

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)

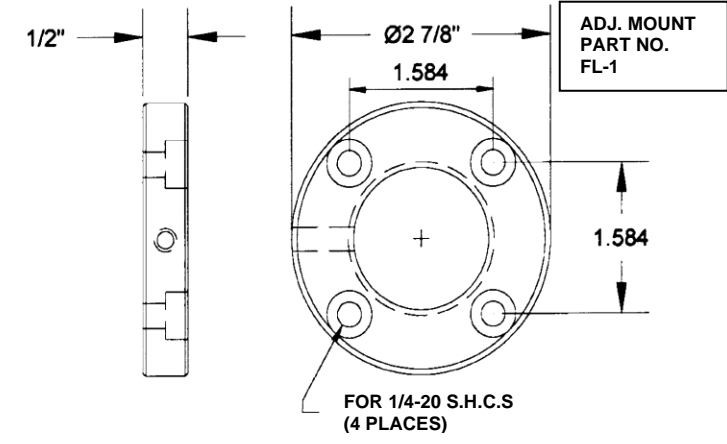
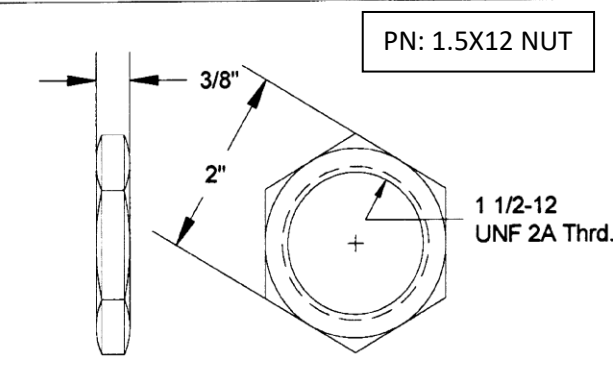
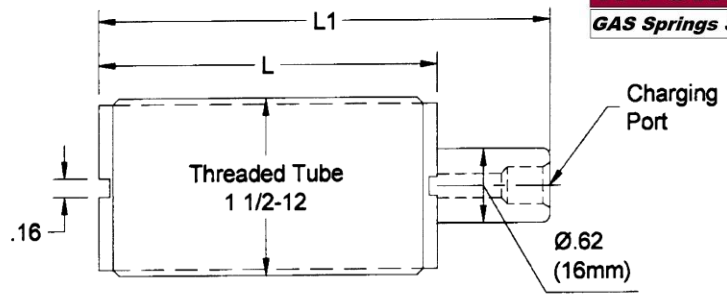
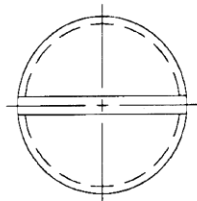
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GAS Springs Since 1986

N-FORCER® CL025 - (1/4 Ton) Threaded Tube

Threaded Tube
Installation Tool
Part Number: UCCL25THR



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.

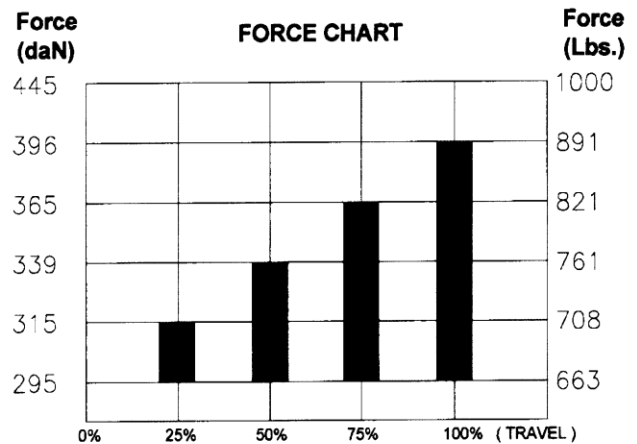
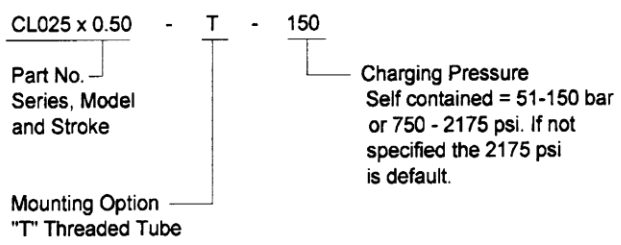


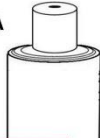
Chart is showing maximum force base on 2175 psi (150 bar) charging pressure. If less than max. the force is reduced proportionally.
Example: Forces on chart are multiplied by .69 at 1500 psi (103 bar), by .46 at 1000 psi (69 bar), etc.

ORDERING EXAMPLE



RELATED MISC. PART NUMBERS
(REPAIR KIT) P/N: CL025-RK-66
(FILLING ADAPTER) P/N: FA-2QD (QUICK DISCONNECT)
(THREADED TUBE INSTALL TOOL) P/N: UCCL25THR
(NUT) P/N: 1.5 X 12 NUT
(ADJUSTABLE MOUNT) P/N: FL-1

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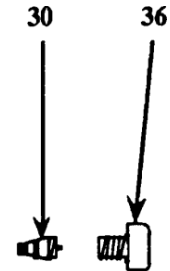
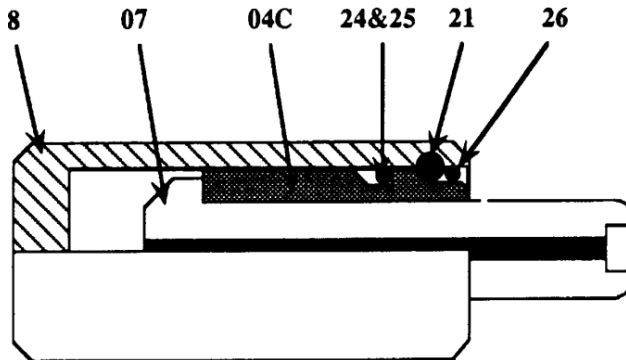
N-FORCER® JR. UC075 (3/4 Ton Initial Contact Force) Cylinder Body Diameter of 2”

Featuring the “NO GROW” Cartridge for efficient
“NO HASSLE” Repairs.

Complete Repair Kit Part Number: UC075-RK-42

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 Ring)



Made in the USA

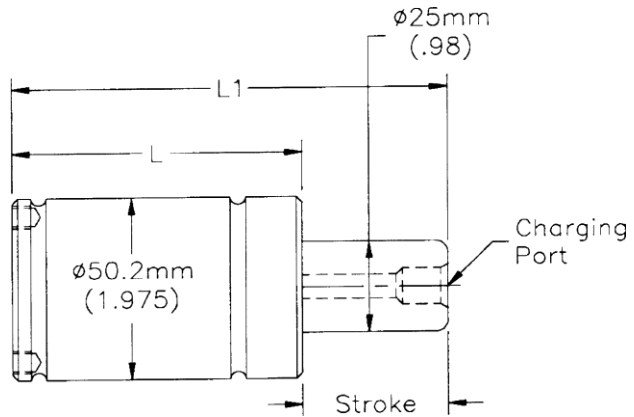
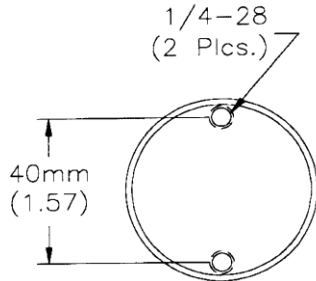


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N-FORCER® UC075 - (3/4 Ton) Basic Mount



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

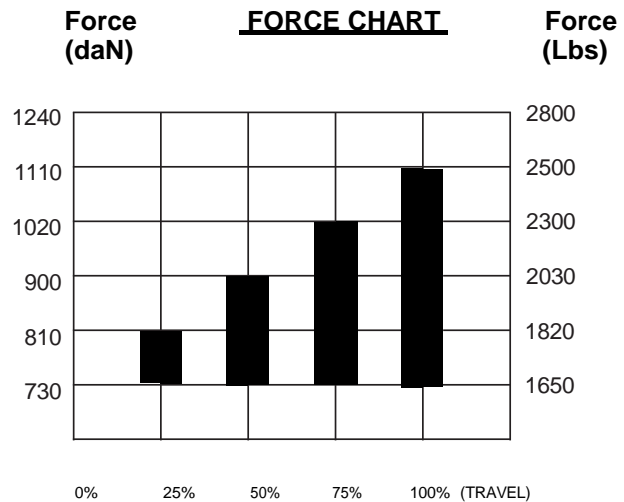


Chart is showing maximum force base on 2175 psi (150 bar) charging pressure. If less than max. the force is reduced proportionally.

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.

ORDERING EXAMPLE
UC075 X 012 - O - 150

Part No.
Series, Model
and Stroke

Mounting type:
"O" or Blank =
1/4-28 Standard

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

ORDER REPAIR KIT EXAMPLE
UC075-RK-42

FILLING ADAPTER
FA-2QD (Quick Disconnect)

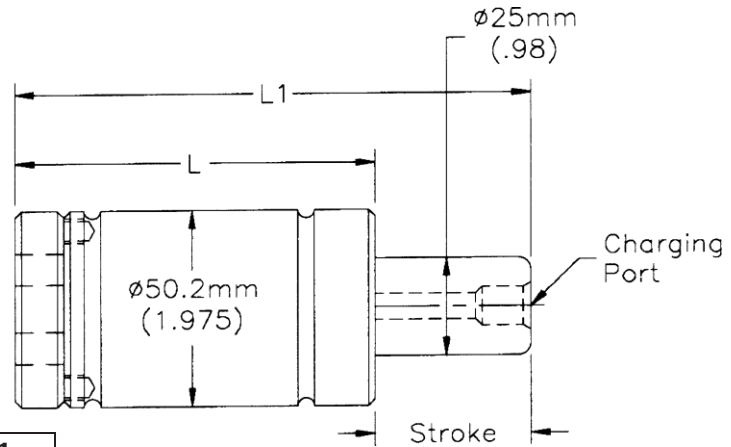
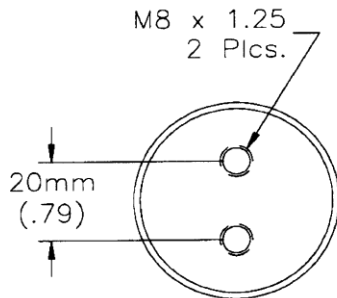
Made in the USA



N-FORCER

GAS Springs Since 1986

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



Part No.	Stroke	L	L1
UCL075 x 012	12.7	62.7	75.4
	.50	2.47	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 032	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

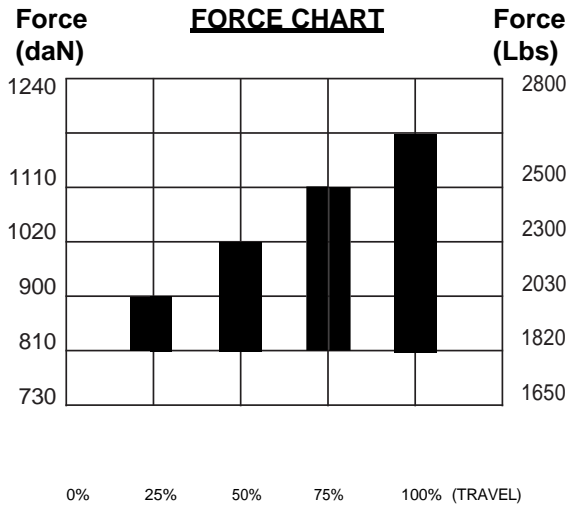


Chart is showing maximum force base on 2175 psi (150 bar) charging pressure. If less than max. the force is reduced proportionally.

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.

ORDERING EXAMPLE

UCL075 X 012 - O -150

Part No.
Series, Model
and Stroke

Mounting type:
"O" or Blank =
M8x1.25 Standard

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

ORDER REPAIR KIT EXAMPLE

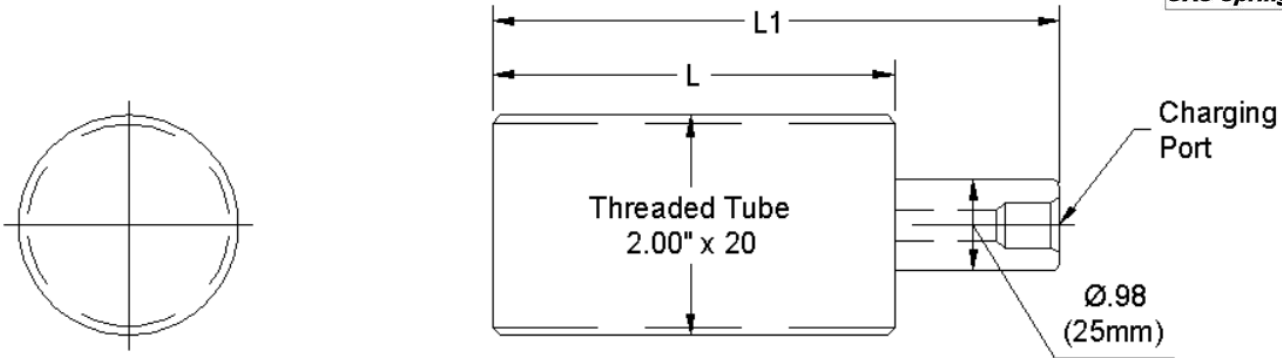
UCL075-RK-42

FILLING ADAPTER

FA-2QD (QUICK DISCONNECT)

N-FORCER®

CLN75 Threaded Body



Part NO.	Stroke	L	L1
CLN75 x .5	12.7	82.6	96.8
	0.5	3.25	3.81
CLN75 x 1.00	25.4	95.3	122.2
	1	3.75	4.81
CLN75 x 1.50	38.1	108.0	147.6
	1.5	4.25	5.81
CLN75 x 2.00	50.8	120.7	173.0
	2	4.75	6.81
CLN75 x 2.50	63.5	133.4	198.4
	2.5	5.25	7.81
CLN75 x 3.00	76.2	146.1	223.8
	3	5.75	8.81

NOTE: MAXIMUM TRAVEL RECOMMENDED IS 90% OF STROKE.

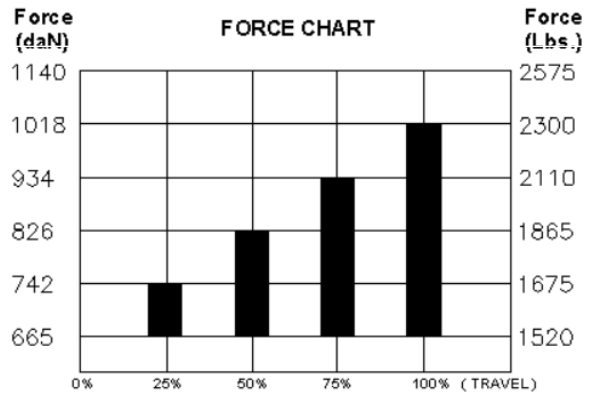
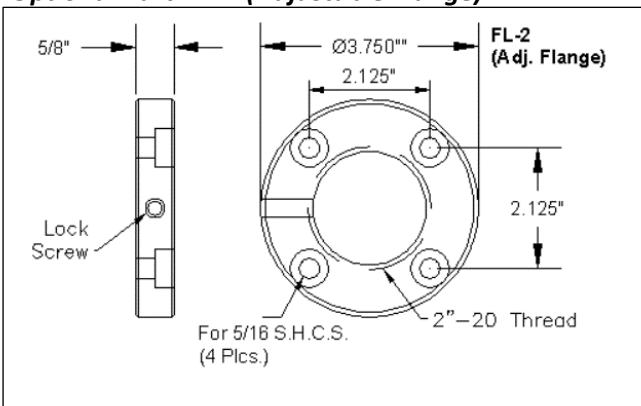


Chart is showing maximum force based on 2000 psi (138 bar) charging pressure. If charging pressure is less, the force is reduced proportionally.
 Example: Forces on the chart are multiplied by .75 at 1500 psi (103 bar), by .5 at 1000 psi (69 bar), etc.

Optional Part: FL-2 (Adjustable Flange)



REPAIR KIT EXAMPLE: CLN75-RK-42

FILLING ADAPTER: FA-2QD (Quick Disconnect)

ORDERING EXAMPLE: **CLN75 X 1.0 x 750**

Series Model

Stroke

Charging Pressure
 Self Contained = 750 to 2000psi
 If not specified, 2000 psi default