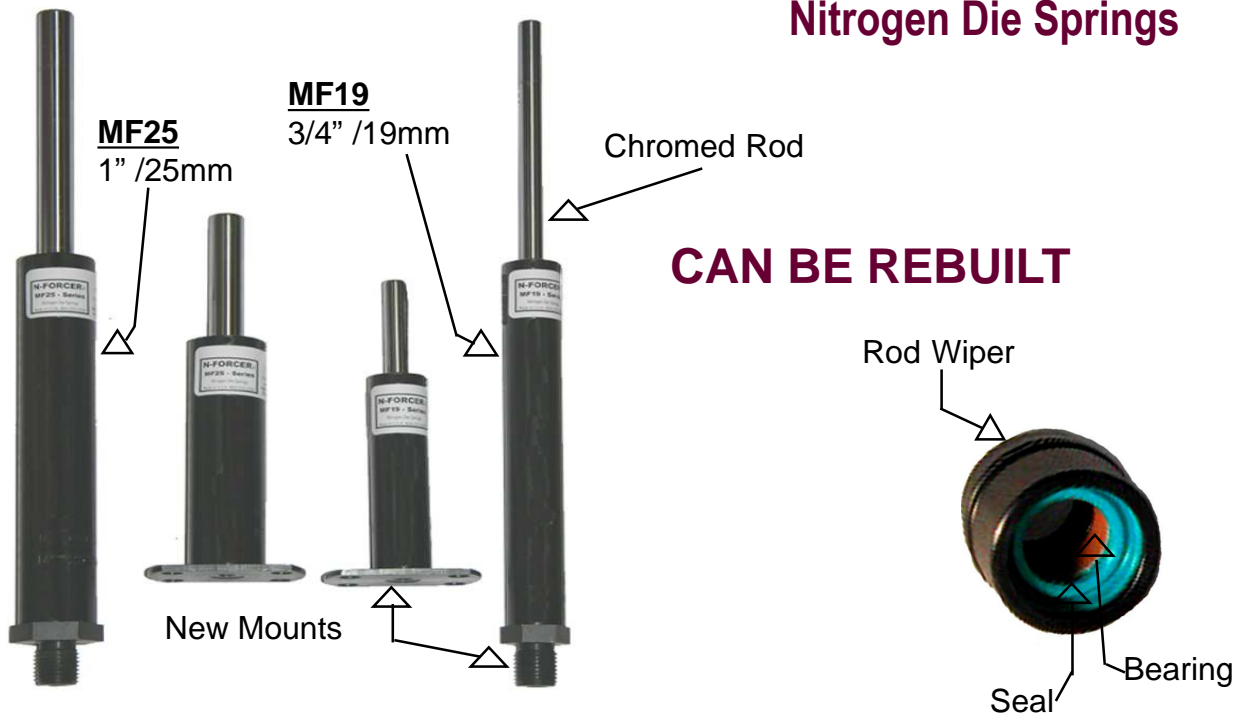


N-FORCER®

Nitrogen Die Springs



CAN BE REBUILT



Our Mini Cylinder (1"/25mm) MF25 & MF19 (3/4"/19mm) Series are available in all standard strokes. Also available in (1-1/4"/32mm) stroke with approximate height of 4" die spring.



Now offered in a Bottom Threaded Mount (BTM) or Bottom Flange Mount (BFM), as well as "drop in" and standard top mount.



Bottom Threaded Mount and Bottom Flange can be hosed, the Threaded Mount can be threaded in a block for use as manifold by adding an o-ring.



Special Heights and Strokes are Available. Rebuild kits are available.



Made in the U.S.A.

www.n-forcer.com

Die, Mold & Automation Components, Inc
N-Forcer

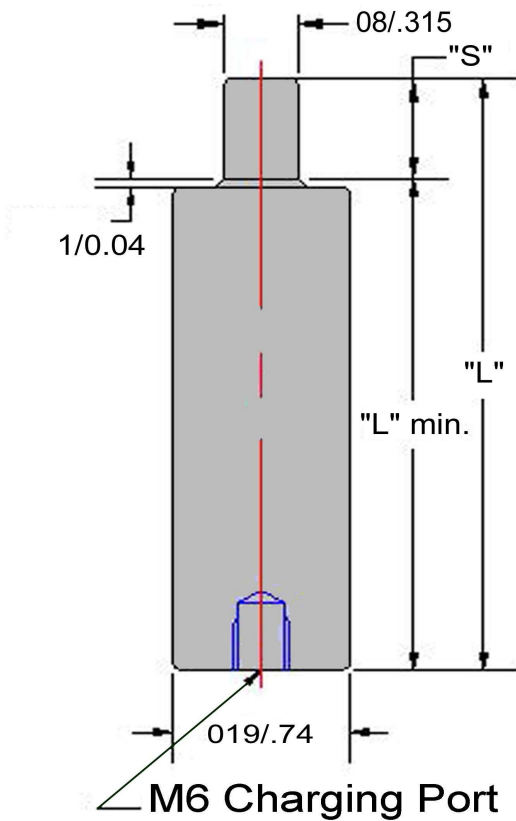
14300 Henn St Dearborn, MI 48126

Ph:313.581.6510 Fax: 313.945.0435

Email: customerservice@n-forcer.com

N-FORCER® Mini-Forcer

All MF-19's are Pressure Adjustable



Variable Force on Contact			
Pressure (psi)	Force (lb.-f)	Pressure (bar)	Force (daN0)
2560	200	177	89
2200	172	150	75
2000	156	125	63
1750	137	100	50
1500	117	75	38
1000	78	50	25
500	39	34	17
$P=F \div .078$	$F=P \times .078$	$P=F \div 0.50$	$P=FX0.50$

Order Number	S Maximum Stroke	L	L min
MF19-007	7 0.28	56.0 2.20	49.0 1.93
MF19-010	10 0.39	62.0 2.44	54.7 2.15
MF19-012	12.7 0.50	67.4 2.65	57.0 2.24
MF19-015	15.0 0.59	72.0 2.83	58.0 2.28
MF19-025	25.0 0.98	92.0 3.62	67.0 2.64
MF19-032	32.0 1.26	106.0 4.17	74.0 2.91
MF19-038	38.1 1.50	118.2 4.65	80.1 3.15
MF19-050	50.0 1.97	142.0 5.59	92.0 3.62
MF19-063	63.5 2.50	172.0 6.77	108.5 4.27
MF19-080	80.0 3.15	205.0 8.07	125.0 4.92
MF19-100	100.0 3.94	245.0 9.65	145.0 5.71
MF19-125	125.0 4.92	295.0 11.61	170.0 6.69

Order Force by Color Code			
Color Coding	Initial Force Lb. daN	Final Force Lb. daN	Pressure Psi Bar
Yellow - YW	200 89	260 166	2560 177
Red - RD	150 67	195 87	1920 132
Blue - BL	100 44	130 58	1280 88
Green - GR	50 22	65 29	640 44
Black - BK	See Chart Above		

Ordering Example: MF19-025-(Color)

1. MF19-025 is the part number
2. (Color) is the required charging pressure.

Mounts Are Ordered Separately (see next Page)

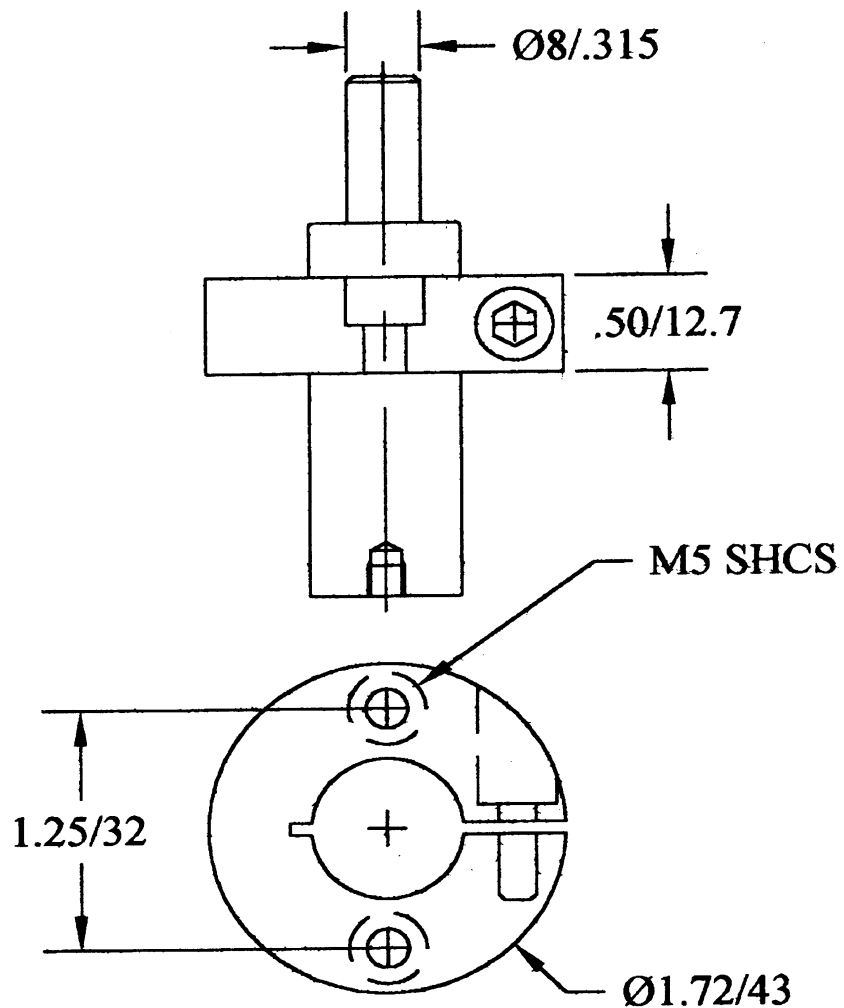
To Increase Pressure: Connect nitrogen to charging port at bottom of gas spring and charge to correct pressure.

To Decrease Pressure: Insert 3mm Hex Key into tapped hole in bottom of gas spring. Turn clockwise (maximum of 3 turns), making sure opening is away from your face and body. After all pressure is exhausted, turn the screw in the bottom of the gas spring **counterclockwise** until tight. You can now recharge the gas spring to a lower pressure.

**N-FORCER®
Mini-Forcer**

**Optional Mount
Mount Part Number is BNF19**

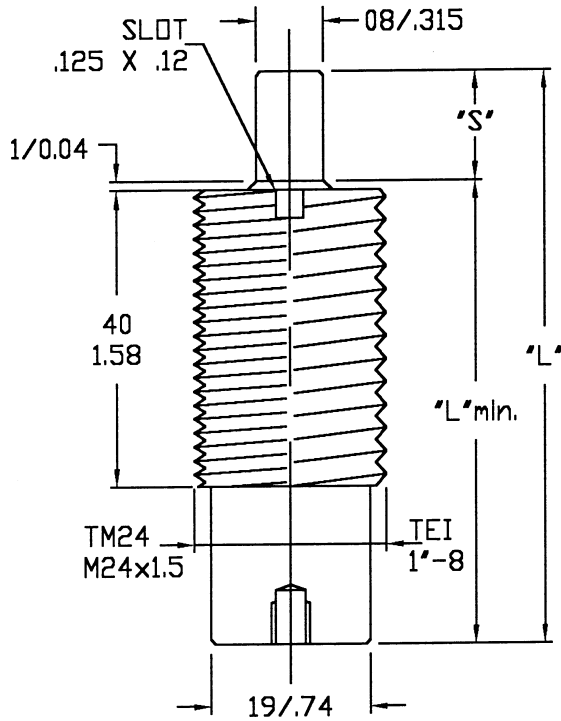
The cylinder can be mounted from 3 different locations, but the bottom should be supported when either of the two top locations are utilized.



N-FORCER®

Mini-Forcer MF19 THREADED

All MF-19's are Pressure Adjustable



Variable Force on Contact			
Pressure (psi)	Force (lb.-f)	Pressure (bar)	Force (daN0)
2560	200	177	89
2200	172	150	75
2000	156	125	63
1750	137	100	50
1500	117	75	38
1000	78	50	25
500	39	34	17
$P=F \cdot 0.078$	$F=P \cdot 0.078$	$P=F \cdot 0.50$	$P=F \cdot 0.50$

Order Number	S Maximum Stroke	L	L min
MF19-007	7 0.28	56.0 2.20	49.0 1.93
MF19-010	10 0.39	62.0 2.44	54.7 2.15
MF19-012	12.7 0.50	67.4 2.65	57.0 2.24
MF19-015	15.0 0.59	72.0 2.83	58.0 2.28
MF19-025	25.0 0.98	92.0 3.62	67.0 2.64
MF19-032	32.0 1.26	106.0 4.17	74.0 2.91
MF19-038	38.1 1.50	118.2 4.65	80.1 3.15
MF19-050	50.0 1.97	142.0 5.59	92.0 3.62
MF19-063	63.5 2.50	172.0 6.77	108.5 4.27
MF19-080	80.0 3.15	205.0 8.07	125.0 4.92
MF19-100	100.0 3.94	245.0 9.65	145.0 5.71
MF19-125	125.0 492	295.0 11.61	170.0 6.69

Order Force by Color Code			
Color Coding	Initial Force Lb. daN	Final Force Lb. daN	Pressure Psi Bar
Yellow - YW	200 89	260 166	2560 177
Red - RD	150 67	195 87	1920 132
Blue - BL	100 44	130 58	1280 88
Green - GR	50 22	65 29	640 44
Black - BK	See Chart Above		

Ordering Example: MF19-025-(TM or TE)-(Color)

1. MF19-025 is the part number
2. TM is for Metric - TE is for English Thread
3. (Color) is the required charging pressure.

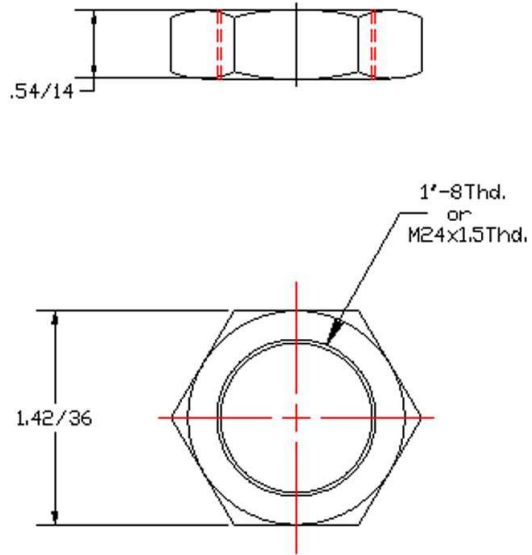
Mounts Are Ordered Separately (see next Page)

To Increase Pressure: Connect nitrogen to charging port at bottom of gas spring and charge to correct pressure.

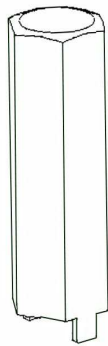
To Decrease Pressure: Insert 3mm Hex Key into tapped hole in bottom of gas spring. Turn clockwise (maximum of 3 turns), making sure opening is away from your face and body. After all pressure is exhausted, turn the screw in the bottom of the gas spring **counterclockwise** until tight. You can now recharge the gas spring to a lower pressure.

N-FORCER®

MF19 Threaded Nuts



Part # 1"-8 Nut
Part # M24 x 1.5 Nut

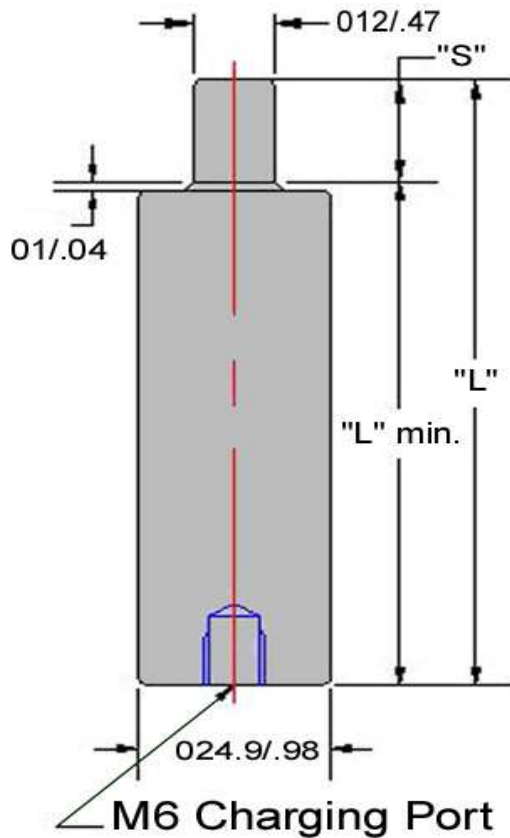


N-FORCER® MF19 Theaded Tool Installer

Part # MF19-Tool

N-FORCER® Mini-Forcer

All MF-25's are Pressure Adjustable



Variable Force on Contact			
Pressure (psi)	Force (lb.-f)	Pressure (bar)	Force (daN0)
2560	450	177	201
2200	387	150	170
2000	351	125	142
1750	307	100	113
1500	264	75	85
1000	176	50	57
500	88	34	39
$P=F \div .176$	$F=PX.1176$	$P=F \div 1.13$	$P=FX 1.13$
Order Number	S Maximum Stroke	L	L min
MF25-007	7.0 .27	56.0 2.20	49.0 1.93
MF25-010	10.0 0.39	62.0 2.44	52.0 2.05
MF25-012	12.7 0.50	67.4 2.65	54.7 2.15
MF25-015	15.0 0.59	72.0 2.83	57.0 2.24
MF25-016	16.0 0.625	74.0 2.91	58.0 2.28
MF25-025	25.0 0.98	92.0 3.62	67.0 2.64
MF25-032	32.0 1.26	106.0 4.17	74.0 2.91
MF25-038	38.1 1.50	118.2 4.65	80.1 3.15
MF25-050	50.0 1.97	142.0 5.59	92.0 3.62
MF25-063	63.5 2.50	172.0 6.77	108.5 4.27
MF25-080	80.0 3.15	205.0 8.07	125.0 4.92
MF25-100	100.0 3.94	245.0 9.65	145.0 5.71
MF25-125	125.0 4.92	295.0 11.61	170.0 6.69
** MF25-178	177.8 7.0	400.6 15.77	223.0 8.77

Order Force by Color Code

Color Coding	Initial Force Lb. daN	Final Force Lb. daN	Pressure Psi Bar
Yellow - YW	450 200	612 272	2560 177
Red - RD	337 150	459 204	1920 132
Blue - BL	225 100	305 136	1280 88
Green - GR	112 50	153 68	640 44
Black - BK	See Chart Above		

Ordering Example: MF25-025-(Color)

1. MF25-025 is the part number
2. (Color) is the required charging pressure.

Mounts Are Ordered Separately (see next Page)

To Increase Pressure: Connect nitrogen to charging port at bottom of gas spring and charge to correct pressure.

To Decrease Pressure: Insert 3mm Hex Key into tapped hole in bottom of gas spring. Turn clockwise (maximum of 3 turns), making sure opening is away from your face. After all pressure is exhausted, turn the screw in the bottom of the gas spring **counter-clockwise** until tight. You can now recharge the gas spring to a lower pressure.

**Limited speed and stroke life.

N-FORCER® Mini-Forcer

Optional Mount Mount Part Number is BNF25

The bottom should be supported at all times.

