

# NitroSprings™

## Why Choose NitroSprings?

NitroSprings are a truly revolutionary compression spring for the industrial market. Generating high forces in an ultra compact space, the NitroSpring provides the design engineer with a whole new level of possibilities. In fact, the NitroSpring has far more advantages, no preload is needed to reach the force that you require at the start of the spring travel, the force is available on contact. This further reduces the space required, and even if you are looking for a long travel on a spring, NitroSpring models can be supplied with a travel up to 200mm from stock.

- Full and precise adjustment of force
- Can be pre-set to a force before delivery
- Can be linked together to provide uniform force
- Available with pressure monitoring
- Different mounting options for flexibility
- Supplied from stock
- CAD models available to download

## Standard Technical Specifications

Custom NitroSprings available upon request

	Range Overview								
	MNE16	MNE24	MS12	MS15	NG0	NG1	EX0170	EX0320	HDG0042
Rod Diameter:	6mm	12mm	6mm	7mm	8mm	12mm	11mm	15mm	12mm
Body Diameter:	12mm	20mm	12mm	15mm	19mm	24.9mm	19mm	24.9	24.9
Stroke Lengths:	Up to 125mm		Up to 125mm		Up to 125mm	Up to 200mm	Up to 125mm	Up to 125mm	Up to 50mm
Charge Pressures:	20, 40, 75 & 150BAR		45, 90, 135 & 180BAR		60, 100, 140 & 180BAR		45, 90, 135 & 180BAR	180BAR	150BAR
Force Range:	95 - 715N	390 - 2900N	130 - 727N	180 - 996N	300 - 1285N	500 - 3064N	1700-2800N	3200-5300N	4250-8000N
Force Progression:	70%	71%	45%	42%	43%	53%	65%	66%	85%
Piston Velocity:	1.6m/s		1.6m/s		1.6m/s		1.6m/s		0.8m/s
Working Temp. Range:	-30°C - 80°C		-30°C - 80°C		-30°C - 80°C		-30°C - 80°C		-30°C - 80°C
Certification:	ISO 20928, PED 2014/68/EU		ISO 9001		ISO 9001, PED 2014/68/EU		ISO 9001, PED 2014/68/EU		PED 2014/68/EU
Guarantee:	2 years against manufacturing defects								

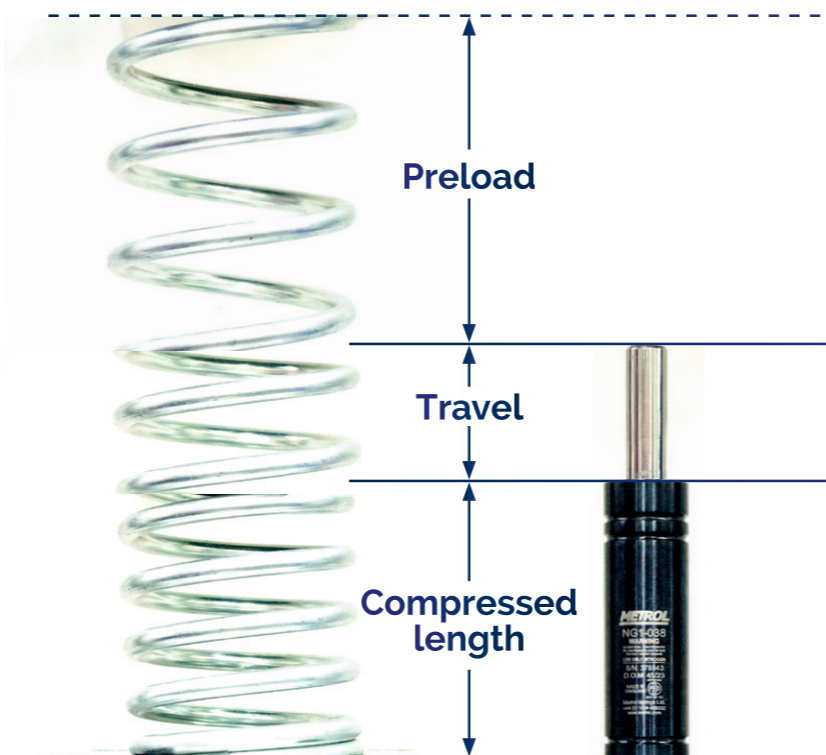


## More Force, Less Space

NitroSprings provide a high force, compact solution.

Up to 275% more force than wire springs with similar dimensions

## NitroSpring Vs Wire Spring



INSTANT FORCES

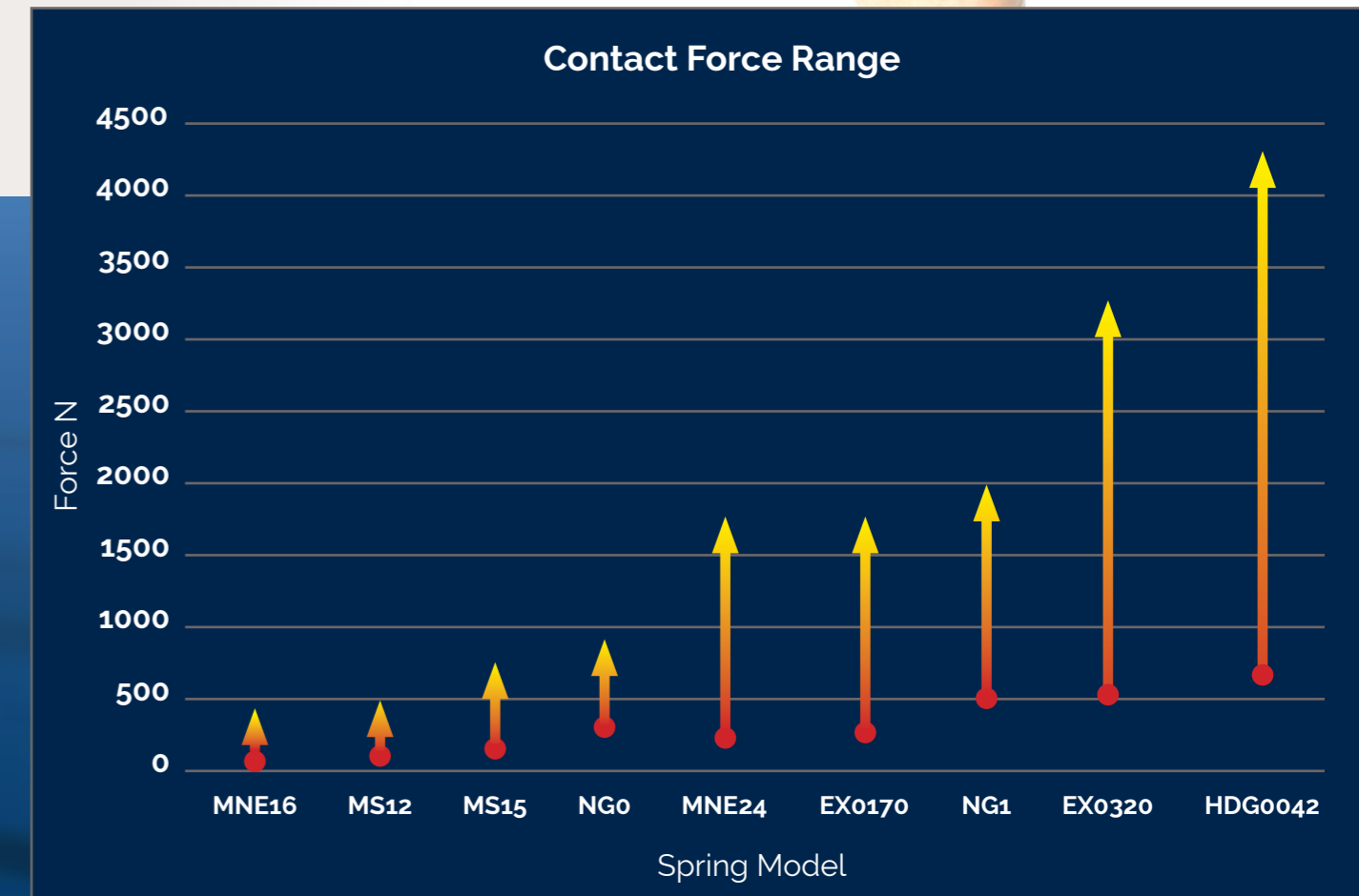
Force on contact means no preload on assembly and ultimately, a more compact spring.



## The Ultimate Flexibility

You can adjust the force in a NitroSpring by simply altering the pressure.

Especially useful when prototyping or you have an application that can use the same type of spring, but requires different forces.



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## Mounting Options

NitroSprings can be mounted in a variety of ways, including stock clamps, threaded holes, or simply dropping into a drilled pocket.

Drop-in pocket    Threaded pocket    Threaded hole in base    Front flange    End support



	Drop-in pocket	Threaded pocket	Threaded hole in base	Front flange	End support
MNE16	✗	✓	✗	✗	✗
MNE24	✗	✓	✗	✗	✗
MS12	✓	✗	✓	✓	✗
MS15	✓	✗	✓	✓	✗
NG0	✓	✗	✓	✓	✗
NG1	✓	✗	✓	✓	✓
EX0170	✓	✗	✓	✓	✗
EX0320	✓	✗	✓	✓	✓
HDG0042	✓	✗	✓	✓	✓

## Lesjöfors worldwide



Available, serviced and supported through the Lesjöfors global distribution network.



**HIGH FORCE, STOCK MINI NITROSPRINGS**



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