

Size 50–STA®-Mini Pull Tubular Solenoids — 1/2" Dia. x 1/2"

LINEAR Tubular

Part Number: 195200 - X XX

All products are RoHS Compliant

Coil AWG Number
(from performance chart below)

Plunger Configurations and anti-rotation flat on mounting
2 60° plunger without anti-rotation flat
6 60° plunger with anti-rotation flat

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously ¹	∞	50	5	2
Maximum ON Time (sec) for single pulse ²	∞	140	30	8
Watts (@ 20°C)	3	6	12	30
Ampere Turns (@ 20°C)	268	379	536	847

Coil Data

avg (0XX) ³	Resistance (@20°C)	# Turns ⁴	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
27	0.48	108	1.2	1.7	2.4	3.8
28	0.67	123	1.5	2.1	2.9	4.6
29	1.33	184	1.9	2.7	3.9	6.1
30	1.80	204	2.4	3.3	4.7	7.5
31	3.33	290	3.1	4.4	6.2	9.7
32	4.57	325	3.8	5.3	7.5	11.9
33	7.80	432	4.8	6.8	9.7	15.3
34	13.10	567	6.2	8.8	12.4	19.6
35	17.80	630	7.6	11.0	15.0	24.0
36	29.05	808	9.6	14.0	19.0	30.0
37	45.70	1008	12.2	17.0	24.0	38.0

- ¹ Continuously pulsed at stated watts and duty cycle
- ² Single pulse at stated watts (with coil at ambient room temperature 20°C)
- ³ Other coil awg sizes available — please consult factory
- ⁴ Reference number of turns

Specifications

Dielectric Strength	500 VRMS
Recommended Minimum Heat Sink	Maximum watts dissipated by solenoid are based on an unrestricted flow of air at 20°C, with solenoid mounted on the equivalent of an aluminum plate measuring 2" square by 1/8" thick
Coil Resistance	±5% tolerance
Weight	0.51 oz (14.5 g)
Plunger Weight	0.088 oz (2.5 g)

How to Order

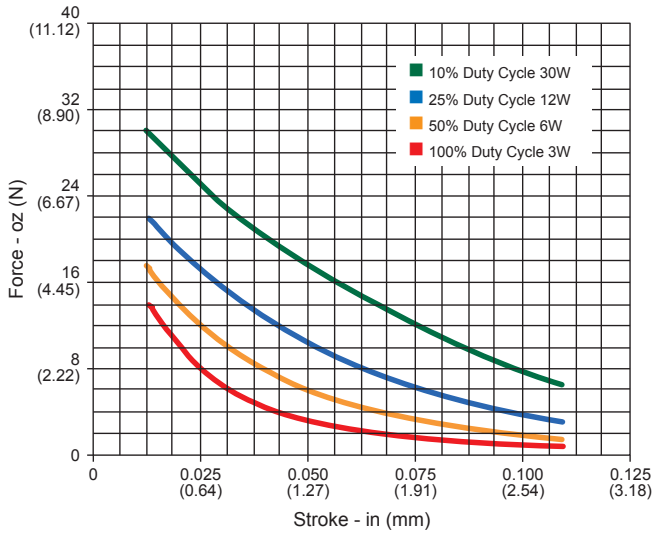
Add the plunger configuration, anti-rotation flat number, and the coil awg number to the part number (for example: to order a unit with a 60° plunger configuration without an anti-rotation flat rated for 4.7 VDC at 25% duty cycle, specify 195200-230).

Please see www.johnsonelectric.com for our list of stock products available through distribution.

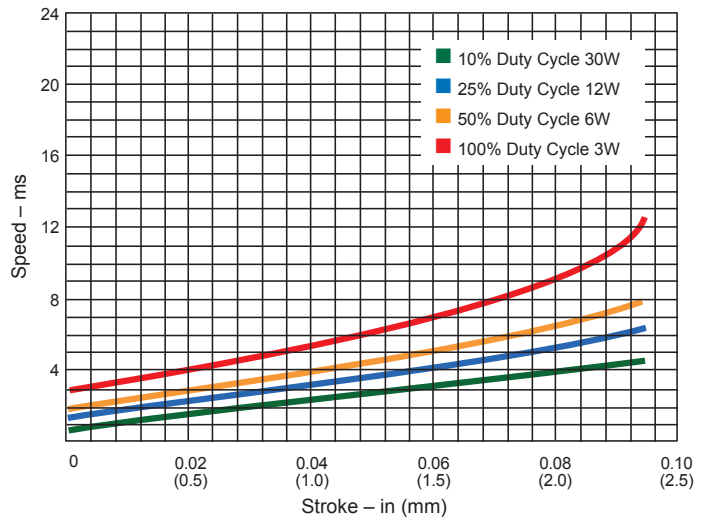
All specifications subject to change without notice.

Size 50–STA®-Mini Pull Tubular Solenoids — 1/2" Dia. x 1/2"

Typical Force @ 20°C



Typical Speed @ No Load, 20°C

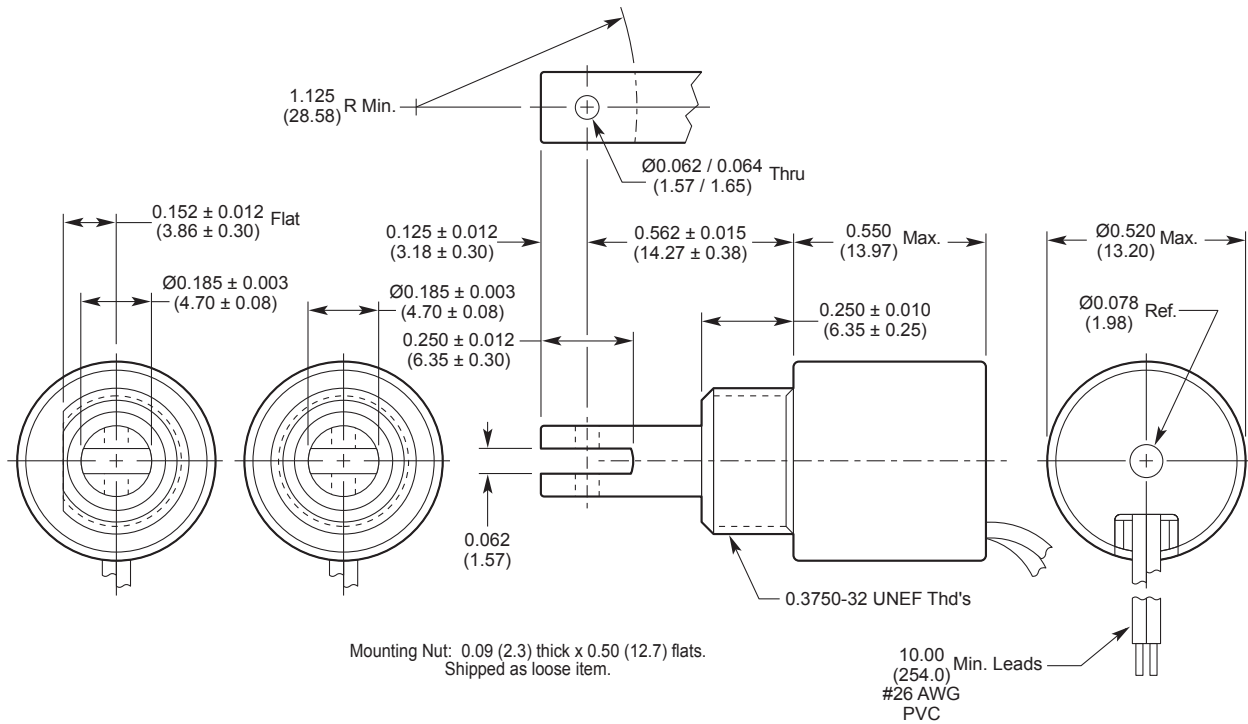


Force values for reference only.

Dimensions

Inches (mm)

All solenoids are illustrated in energized state



Size 50–STA®-Mini Pull Magnetic Latching Solenoid — 1/2" Dia. x 1/2"

Part Number: 151082 - X XX

All products are RoHS Compliant

LINEAR Tubular

Coil AWG Number
(from performance chart below)

Plunger Configurations and anti-rotation flat on mounting
 1 Flat Face plunger without anti-rotation flat on mounting
 2 60° plunger without anti-rotation flat on mounting
 5 Flat Face plunger with anti-rotation flat on mounting
 6 60° plunger with anti-rotation flat on mounting

Performance

	Unlatched Voltage	50%	25%	10%
Maximum Duty Cycle				
Maximum ON Time (sec) when pulsed continuously ¹	n/a	50	5	2
Watts (@ 20°C)	3	6	12	30
Ampere Turns (@ 20°C)	268	379	536	847

Coil Data

awg (0XX) ²	Resistance (@20°C)	# Turns ³	Unlatched VDC VDC	VDC (Nom)	VDC (Nom)	VDC (Nom)
27	0.48	108	1.2	1.7	2.4	3.8
28	0.67	123	1.5	2.1	2.9	4.6
29	1.33	184	1.9	2.7	4.0	6.1
30	1.80	204	2.4	3.3	4.7	7.5
31	3.33	290	3.1	4.4	6.2	9.7
32	4.57	325	3.8	5.3	7.5	11.9
33	7.80	432	4.8	6.8	9.7	15.3
34	13.10	567	6.2	8.8	12.4	20.0
35	17.80	630	7.6	11.0	15.0	24.0
36	29.05	808	9.6	14.0	19.0	30.0
37	45.70	1008	12.2	17.0	24.0	38.0

- ¹ Continuously pulsed at stated watts and duty cycle
- ² Other coil awg sizes available — please consult factory
- ³ Reference number of turns

Specifications

Operation	Pull
Dielectric Strength	500 VRMS
Recommended Minimum Heat Sink	Maximum watts dissipated by solenoid are based on an unrestricted flow of air at 20°C, with solenoid mounted on the equivalent of an aluminum plate measuring 2" square by 1/8" thick
Unlatch Voltage	See schematic and coil data
Magnet Hold Force	7.5 oz (with return spring)
Spring Force	35.2 oz/in; 4.47 oz latched position
Weight	0.52 oz (14.7 g)
Plunger Weight	0.093 oz (2.6 g)

How to Order

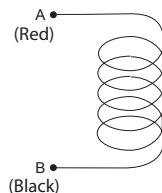
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Coil Polarity

Latch: A+ B-

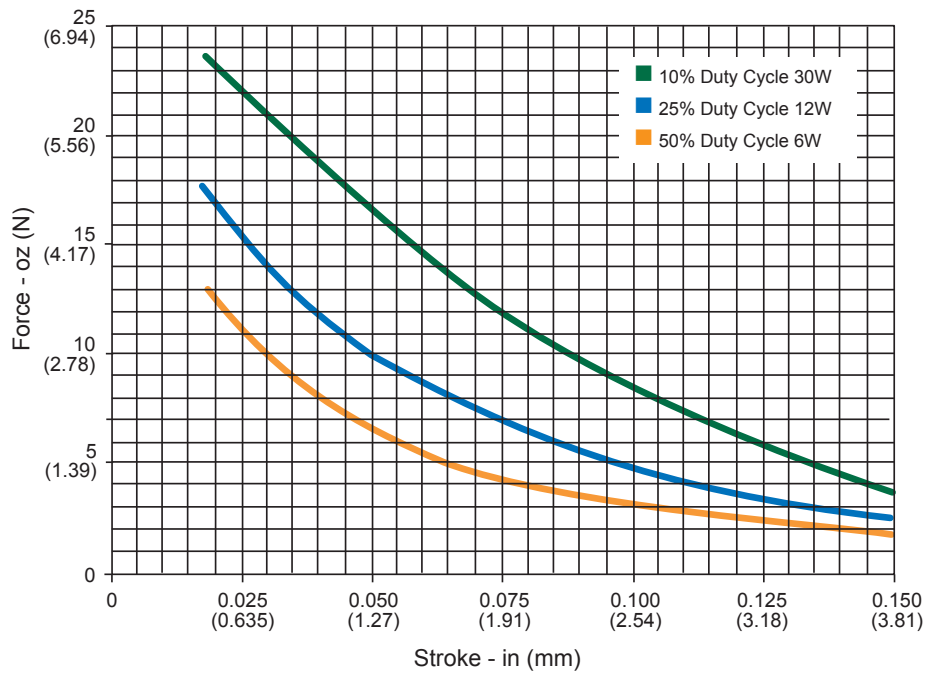
Unlatch: A- B+



All specifications subject to change without notice.

Size 50–STA®-Mini Pull Magnetic Latching Solenoid — 1/2" Dia. x 1/2"

Typical Force @ 20°C (Net, with Spring)

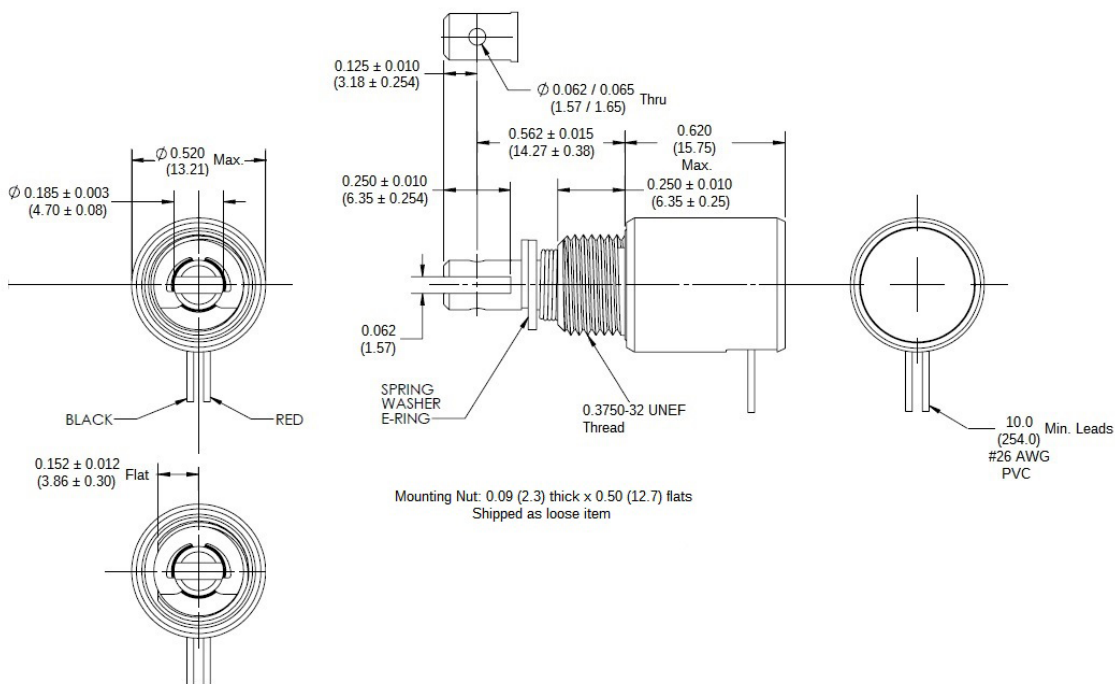


Force values for reference only.

Dimensions

Inches (mm)

All solenoids are illustrated in energized state



Size 50–STA®-Mini Push Tubular Solenoids — 1/2" Dia. x 1/2"

Part Number: 195201-**X****XX**

All products are RoHS Compliant

LINEAR Tubular

Coil AWG Number
(from performance chart below)

Plunger Configurations and anti-rotation flat on mounting
2 60° plunger without anti-rotation flat
6 60° plunger with anti-rotation flat

Performance

	100%	50%	25%	10%
Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously ¹	∞	50	5	2
Maximum ON Time (sec) for single pulse ²	∞	140	30	8
Watts (@ 20°C)	3	6	12	30
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Coil Data

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- Other coil awg sizes available — please consult factory
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Specifications

Dielectric Strength	500 VRMS
Recommended Minimum Heat Sink	Maximum watts dissipated by solenoid are based on an unrestricted flow of air at 20°C, with solenoid mounted on the equivalent of an aluminum plate measuring 2" square by 1/8" thick
Coil Resistance	±5% tolerance
Weight	0.51 oz (14.5 g)
Plunger Weight	0.04 oz (1.2 g)

How to Order

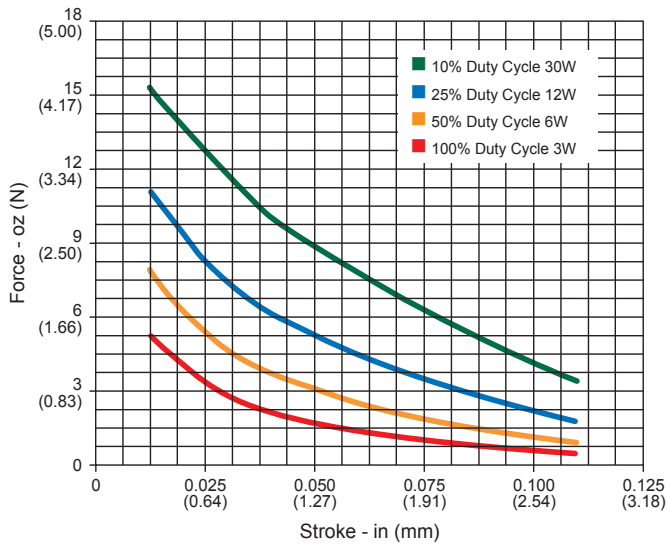
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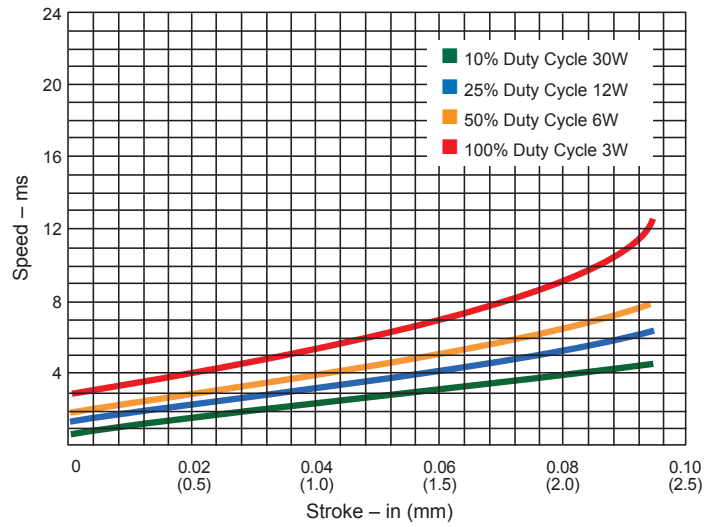
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Size 50-STA®-Mini Push Tubular Solenoids — 1/2" Dia. x 1/2"

Typical Force @ 20°C



Typical Speed @ No Load, 20°C



Dimensions

Inches (mm)

All solenoids are illustrated in energized state

