

## Linear Solenoids

Tubular	Type	Preferred Products	Page
	STA Pull 13 x 27 mm STA Pull 13 x 27 mm	195222-232 195222-132	94
	STA Push 13 x 27 mm STA Push 13 x 27 mm	195223-232 195223-132	97
	STA Pull 20 x 39 mm STA Pull 20 x 39 mm	195224-229 195224-129	100
	STA Push 20 x 39 mm STA Push 20 x 39 mm	195225-229 195225-129	103
	STA Pull 26 x 52 mm STA Pull 26 x 52 mm	195224-229 195224-129	106
	STA Push 26 x 52 mm STA Push 26 x 52 mm	195225-229 195225-129	109
	STA 125 M Pull 32 x 57 mm	282366-024	112
	STA 150 M Pull 38 x 63 mm	282367-023	115

# STA 13 x 27

## Linear Solenoid

Tubular – Pull

### STA 13 x 27

Dimensions (mm)	∅ 13 x 27
Duty cycle	continuous or intermittent
Stroke	Nominal Stroke 2.5 mm
Operation	Pull engagement; well-suited to lock/latch operations
Max. force (N)	Up to 4,45 N (@ 10% Duty Cycle)
Life	Extraordinary life of 25+ million actuations
Power (W)	4–40
Supply (V)	2,4–77 VDC
Functional Advantages	Economical STA® Series design for volume applications; multiple plunger designs; on/off operation



### Technical Data

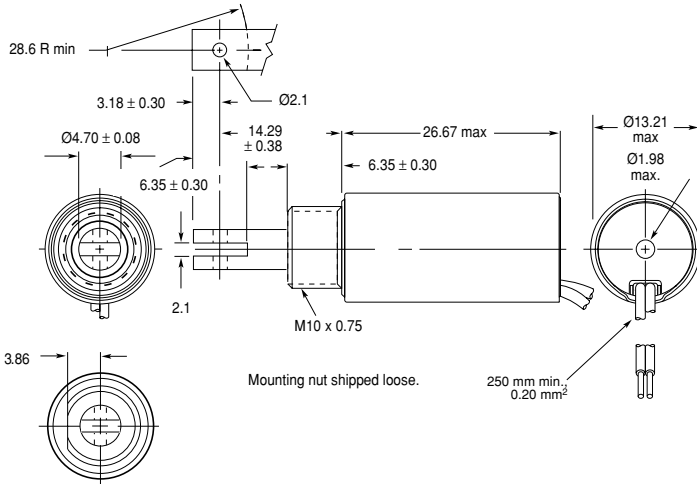
Dielectric Strength	500 VRMS
Recommended Minimum Heat Sink	Maximum watts dissipated by solenoid are based on an unrestricted flow of air at 20°C, with solenoid mounted on the equivalent of an aluminium plate measuring 51 x 3.2 mm
Coil Resistance	±5% tolerance
Holding Force	Flat Face: 5,25 N @20°C 60°: 4,00 N @20°C
Weight	24,7 g
Plunger Weight	4,54 g

### Preferred Range

Type	Size	Function	Duty Cycle	Max. Stroke	Nominal voltage	Force@Nominal Stroke	Nominal power	max. "On time"
195222-232	∅ 13 X 27 mm	Pull	100%	12,7 mm	8,1 VDC	0,6–0,8 N	4 W @20°C	∞ sec
195222-132	∅ 13 X 27 mm	Pull	100%	12,7 mm	8,1 VDC	0,6–0,8 N	4 W @20°C	∞ sec

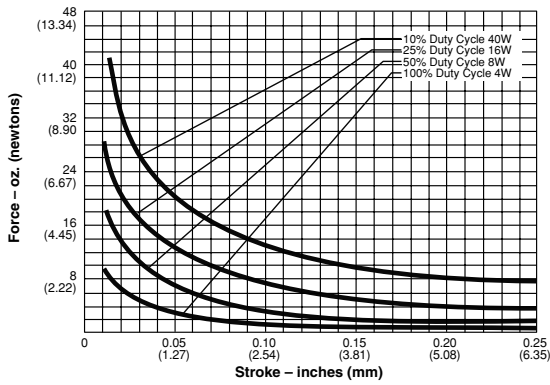
# STA Series Pull 13 x 27

## Dimensions

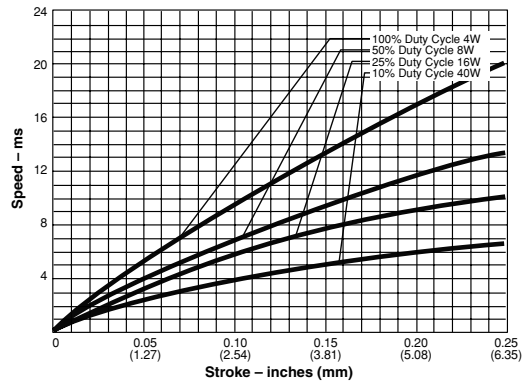


## Performance chart

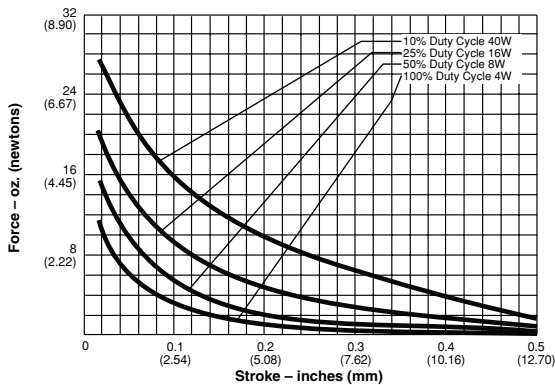
### Flat face Plunger, Force



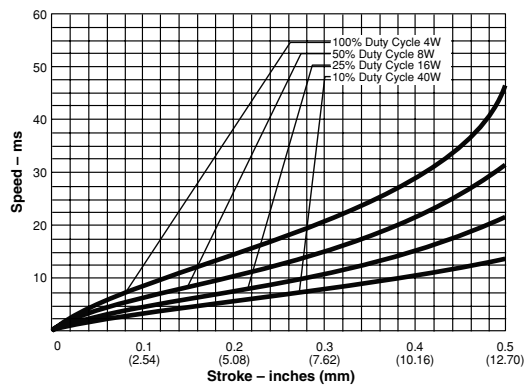
### Flat face Plunger, Speed



### 60° Plunger, Force



### 60° Plunger, Speed



## STA Series Pull 13 x 27

### Ordering Reference

Type 195222-(0) Plunger (XX) Coil Data awg (wire diameter)

Plunger Configurations and anti-rotation flat on mounting

- 1 Flat face plunger without anti-rotation flat
- 2 60° plunger without anti-rotation flat
- 5 Flat face plunger with anti-rotation flat
- 6 60° plunger with anti-rotation flat

Performance		100%	50%	25%	10%		
Maximum ON Time (sec) when pulsed continuously <sup>1</sup>		∞	50	5	2		
Force@Nominal Stroke (N)		0.6– 0.8	1.1– 1.4	2.0– 2.5	3.6– 4.5		
Watts (@20°C)		4	8	16	40		
Ampere Turns (@20°C)		497	704	994	1573		
Coil Data	awg (XX) <sup>2</sup>	Resistance (@20°C)	# Turns <sup>3</sup>	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
	27	1.43	306	2.4	3.4	4.8	7.6
	28	1.95	342	2.8	3.9	5.6	8.8
	29	3.84	508	3.9	5.5	7.8	12.4
	30	5.29	572	4.6	6.5	9.2	14.5
	31	9.56	795	6.2	8.8	12.4	19.6
	32	16.54	1068	8.1	11.5	16.3	25.7
	33	22.60	1194	9.5	13.4	19.0	30.0
	34	37.41	1547	12.2	17.3	24.0	39.0
	35	60.71	1976	15.6	22.0	31.0	49.0
	36	96.19	2475	19.6	28.0	39.0	62.0
	37	149.93	3060	24.5	35.0	49.0	77.0

<sup>1</sup> Continuously pulsed at stated watts and duty cycle

<sup>2</sup> Other coil awg (wire diameter) sizes available — please enquire

<sup>3</sup> Reference number of turns

All data is at 20°C coil temperature. Force outputs degrade with increased temperatures.

# STA 13 x 27

## Linear Solenoid

Tubular – Push

### STA 13 x 27

Dimensions (mm)	∅ 13 x 27
Duty cycle	continuous or intermittent
Stroke	Nominal Stroke 2.5 mm
Operation	Push engagement; well-suited to lock/latch operations
Max. force (N)	Up to 4,18 N (@ 10% Duty Cycle)
Life	Extraordinary life of 25+ million actuations
Power (W)	4–40
Supply (V)	2,4–77 VDC
Functional Advantages	Economical STA® Series design for volume applications; multiple plunger designs; on/off operation



### Technical Data

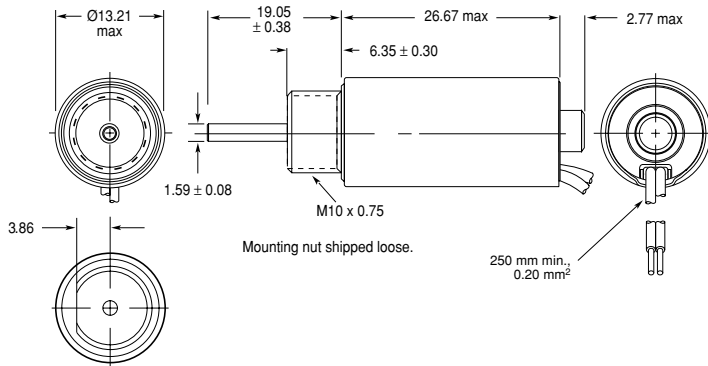
Dielectric Strength	500 VRMS
Recommended Minimum Heat Sink	Maximum watts dissipated by solenoid are based on an unrestricted flow of air at 20°C, with solenoid mounted on the equivalent of an aluminium plate measuring 51 x 3.2 mm
Coil Resistance	±5% tolerance
Holding Force	Flat Face: 4,45 N @20°C 60°: 3,16 N @20°C
Weight	25,2 g
Plunger Weight	3,12 g

### Preferred Range

Type	Size	Function	Duty Cycle	Max. Stroke	Nominal voltage	Force@Nominal Stroke	Nominal power	max. "On time"
195223-232	∅ 13 X 27 mm	Push	100%	12,7 mm	8,1 VDC	0,3–0,6 N	4 W @20°C	∞ sec
195223-132	∅ 13 X 27 mm	Push	100%	12,7 mm	8,1 VDC	0,3–0,6 N	4 W @20°C	∞ sec

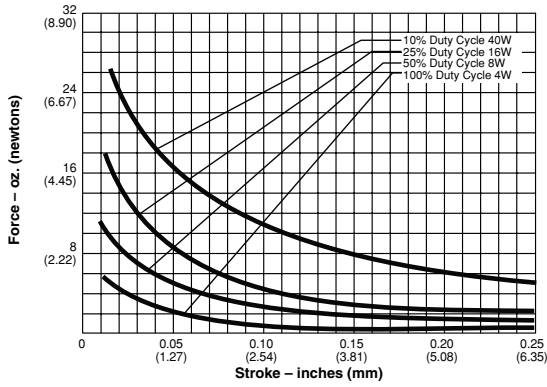
# STA Series Push 13 x 27

## Dimensions

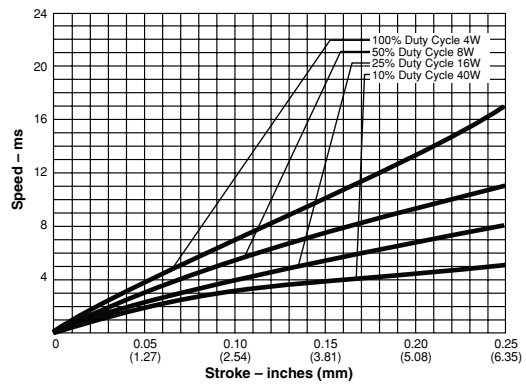


## Performance chart

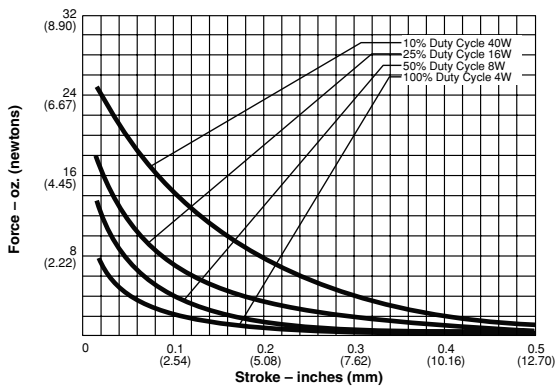
### Flat face Plunger, Force



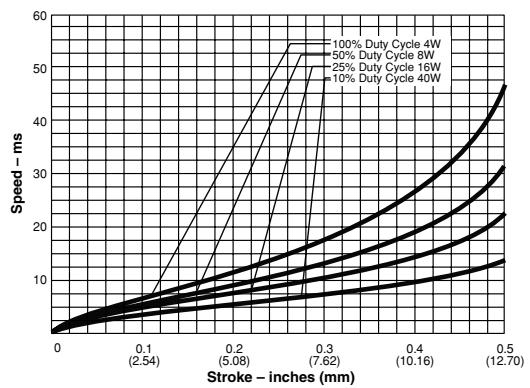
### Flat face Plunger, Speed



### 60° Plunger, Force



### 60° Plunger, Speed



## STA Series Push 13 x 27

### Ordering Reference

Type 195223-(0) Plunger (XX) Coil Data awg (wire diameter)

Plunger Configurations and anti-rotation flat on mounting

- 1 Flat face plunger without anti-rotation flat
- 2 60° plunger without anti-rotation flat
- 5 Flat face plunger with anti-rotation flat
- 6 60° plunger with anti-rotation flat

Performance		100%	50%	25%	10%		
Maximum ON Time (sec) when pulsed continuously <sup>1</sup>		∞	50	5	2		
Force@Nominal Stroke (N)		0.27- 0.58	0.62- 1.11	1.38- 2.14	3.07- 4.18		
Watts (@20°C)		4	8	16	40		
Ampere Turns (@20°C)		497	704	994	1573		
Coil Data	awg (XX) <sup>2</sup>	Resistance (@20°C)	# Turns <sup>3</sup>	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
	27	1.43	306	2.4	3.4	4.8	7.6
	28	1.95	342	2.8	3.9	5.6	8.8
	29	3.84	508	3.9	5.5	7.8	12.4
	30	5.29	572	4.6	6.5	9.2	14.5
	31	9.56	795	6.2	8.8	12.4	19.6
	32	16.54	1068	8.1	11.5	16.3	25.7
	33	22.60	1194	9.5	13.4	19.0	30.0
	34	37.41	1547	12.2	17.3	24.0	39.0
	35	60.71	1976	15.6	22.0	31.0	49.0
	36	96.19	2475	19.6	28.0	39.0	62.0
	37	149.93	3060	24.5	35.0	49.0	77.0

<sup>1</sup> Continuously pulsed at stated watts and duty cycle

<sup>2</sup> Other coil awg (wire diameter) sizes available — please enquire

<sup>3</sup> Reference number of turns

All data is at 20°C coil temperature. Force outputs degrade with increased temperatures.

# STA 20 x 39

## Linear Solenoid

Tubular – Pull

### STA 20 x 39

Dimensions (mm)	∅ 20 x 39
Duty cycle	continuous or intermittent
Stroke	Nominal Stroke 5.1 mm
Operation	Pull engagement; well-suited to lock/latch operations
Max. force (N)	Up to 11.9 N (@ 10% Duty Cycle)
Life	25 M cycles
Power (W)	7–70
Supply (V)	3.9–76 VDC
Functional Advantages	Economical STA® Series design for volume applications; multiple plunger designs; on/off operation



### Technical Data

Dielectric Strength	1000 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 aluminium plate measuring 3" 1/8"
Coil Resistance	±5% tolerance
Holding Force	Flat Face: 23.31 N @20°C 60°: 12.81 N @20°C
Weight	83.6 g
Plunger Weight	20.13 g

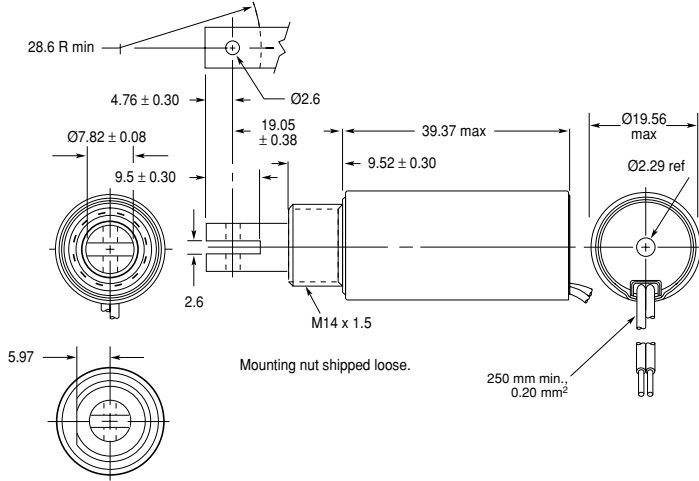
### Preferred Range

Type	Size	Function	Duty Cycle	Max. Stroke	Nominal voltage	Force@Nominal Stroke	Nominal power	max. "On time"
195224-229	∅ 20 X 39 mm	Pull	100%	17.8 mm	9.4 VDC	1.7–2.2 N	7 W @20°C	∞ sec
195224-129	∅ 20 X 39 mm	Pull	100%	17.8 mm	9.4 VDC	1.7–2.2 N	7 W @20°C	∞ sec



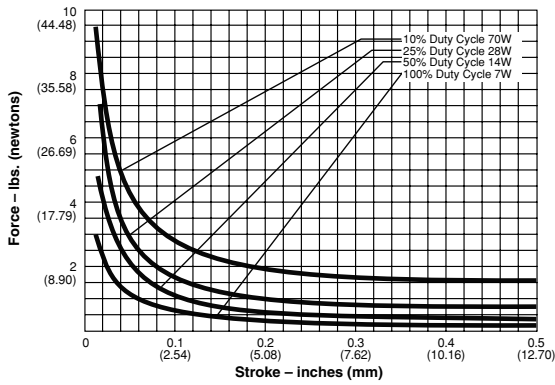
# STA Series Pull 20 x 39

## Dimensions

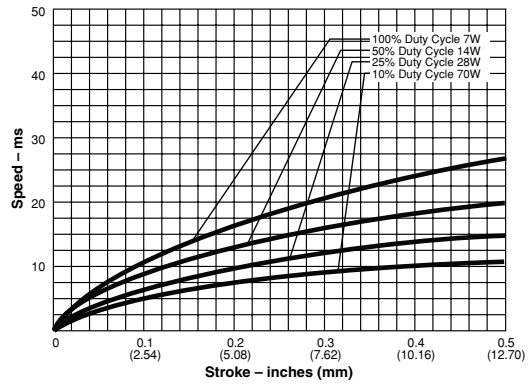


## Performance chart

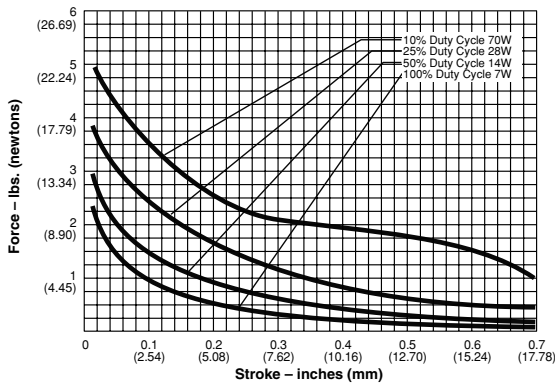
### Flat face Plunger, Force



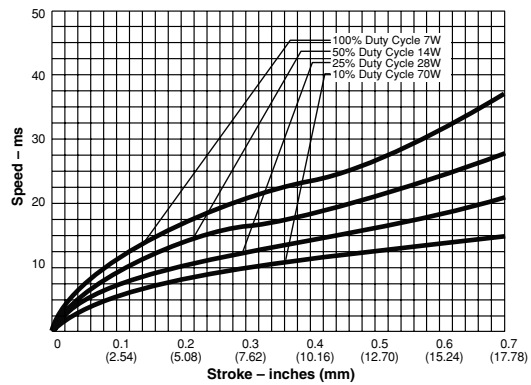
### Flat face Plunger, Speed



### 60° Plunger, Force



### 60° Plunger, Speed



## STA Series Pull 20 x 39

### Ordering Reference

Type 195224-(0) Plunger (XX) Coil Data awg (wire diameter)

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

Performance		100%	50%	25%	10%		
Maximum ON Time (sec) when pulsed continuously <sup>1</sup>		∞	230	25	6		
Force@Nominal Stroke (N)		1.69- 2.22	3.34- 4.45	5.56- 7.25	9.48- 11.97		
Watts (@20°C)		7	14	28	70		
Ampere Turns (@20°C)		855	1200	1700	2700		
Coil Data	awg (XX) <sup>2</sup>	Resistance (@20°C)	# Turns <sup>3</sup>	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
	25	2.13	488	3.9	5.5	7.7	12.2
	26	2.90	544	4.5	6.4	9.0	14.2
	27	5.27	760	6.1	8.6	12.1	19.2
	28	9.15	1026	8.0	11.3	16.0	25.0
	29	12.50	1146	9.4	13.2	18.7	30.0
	30	20.70	1491	12.0	17.0	24.0	38.0
	31	33.60	1904	15.0	22.0	31.0	48.0
	32	53.50	2394	19.4	27.0	39.0	61.0
	33	83.50	2970	24.0	34.0	48.0	76.0

<sup>1</sup> Continuously pulsed at stated watts and duty cycle

<sup>3</sup> Other coil awg (wire diameter) sizes available — please enquire

<sup>4</sup> Reference number of turns

All data is at 20°C coil temperature. Force outputs degrade with increased temperatures.

# STA 20 x 39

## Linear Solenoid

Tubular – Push

### STA 20 x 39

Dimensions (mm)	∅ 20 x 39
Duty cycle	continuous or intermittent
Stroke	Nominal Stroke 5.1 mm
Operation	Push engagement; well-suited to lock/latch operations
Max. force (N)	Up to 12.2 N (@ 10% Duty Cycle)
Life	25 M cycles
Power (W)	7–70
Supply (V)	3.9–76 VDC
Functional Advantages	Economical STA® Series design for volume applications; multiple plunger designs; on/off operation



### Technical Data

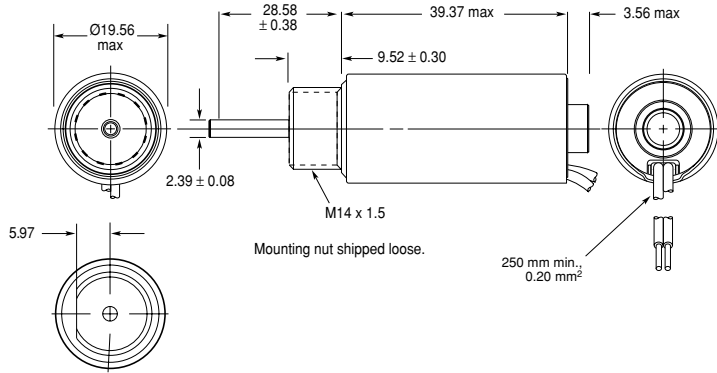
Dielectric Strength	1000 VRMS
Recommended Minimum Heat Sink	Maximum watts dissipated by solenoid are based on an unrestricted flow of air at 20°C, with solenoid mounted on the equivalent of an aluminium plate measuring 76 x 3.2 mm
Coil Resistance	±5% tolerance
Holding Force	Flat Face: 22.02 N @20°C 60°: 12.68 N @20°C
Weight	87.3 g
Plunger Weight	15.03 g

### Preferred Range

Type	Size	Function	Duty Cycle	Max. Stroke	Nominal voltage	Force@Nominal Stroke	Nominal power	max. "On time"
195225-229	∅ 20 X 39 mm	Push	100%	17,8 mm	9,4 VDC	1,1–1,7 N	7 W @20°C	∞ sec
195225-129	∅ 20 X 39 mm	Push	100%	17,8 mm	9,4 VDC	1,1–1,7 N	7 W @20°C	∞ sec

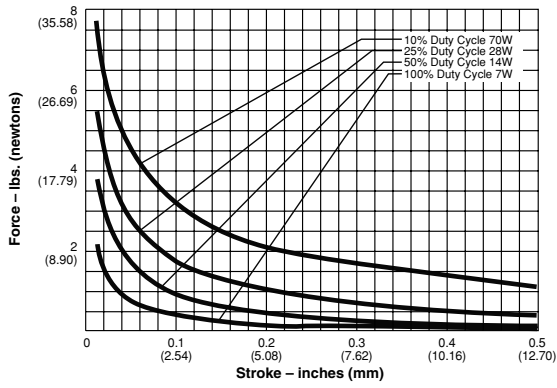
# STA Series Push 20 x 39

## Dimensions

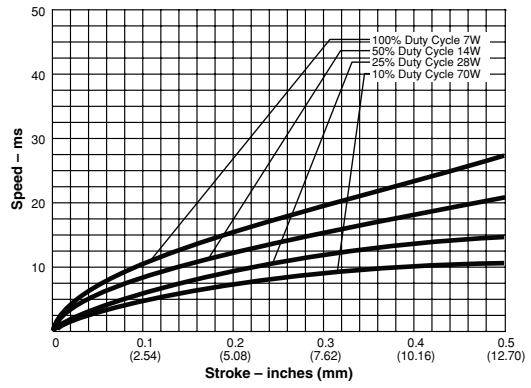


## Performance chart

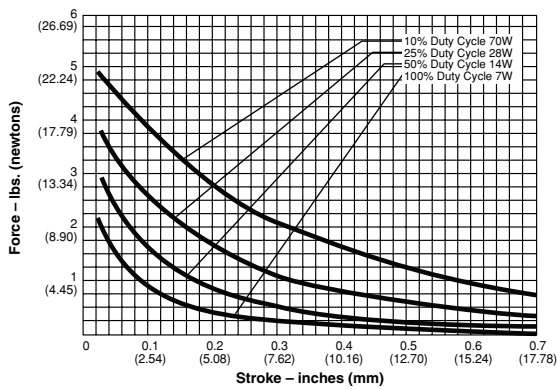
### Flat face Plunger, Force



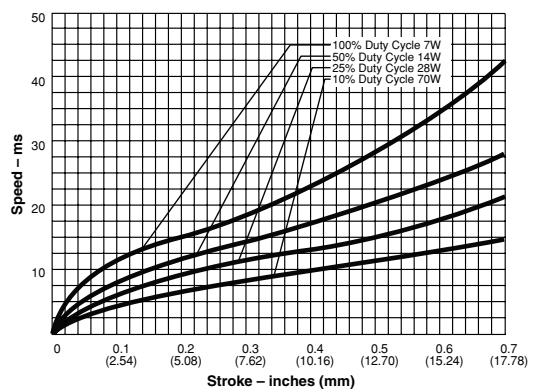
### Flat face Plunger, Speed



### 60° Plunger, Force



### 60° Plunger, Speed



# STA Series Push 20 x 39

## Ordering Reference

Type 195225-(0) Plunger (XX) Coil Data awg (wire diameter)

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

Performance		100%	50%	25%	10%		
Maximum ON Time (sec) when pulsed continuously <sup>1</sup>		∞	230	25	6		
Force@Nominal Stroke (N)		1.11- 1.69	2.22- 3.56	4.90- 6.68	9.79- 12.24		
Watts (@20°C)		7	14	28	70		
Ampere Turns (@20°C)		855	1200	1700	2700		
Coil Data	awg (XX) <sup>2</sup>	Resistance (@20°C)	# Turns <sup>3</sup>	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
	25	2.13	488	3.9	5.5	7.7	12.2
	26	2.90	544	4.5	6.4	9.0	14.2
	27	5.27	760	6.1	8.6	12.1	19.2
	28	9.15	1026	8.0	11.3	16.0	25.0
	29	12.50	1146	9.4	13.2	18.7	30.0
	30	20.70	1491	12.0	17.0	24.0	38.0
	31	33.60	1904	15.0	22.0	31.0	48.0
	32	53.50	2394	19.4	27.0	39.0	61.0
	33	83.50	2970	24.0	34.0	48.0	76.0

<sup>1</sup> Continuously pulsed at stated watts and duty cycle

<sup>2</sup> Other coil awg (wire diameter) sizes available — please enquire

<sup>3</sup> Reference number of turns

All data is at 20°C coil temperature. Force outputs degrade with increased temperatures.

# STA 26 x 52

## Linear Solenoid

Tubular – Pull

### STA 26 x 52

Dimensions (mm)	∅ 26 x 52
Duty cycle	continuous or intermittent
Stroke	Nominal Stroke 7.6 mm
Operation	Pull engagement; well-suited to lock/latch operations
Max. force (N)	Up to 23.1 N (@ 10% Duty Cycle)
Life	25 M cycles
Power (W)	10–100
Supply (V)	4.4–142 VDC
Functional Advantages	Economical STA® Series design for volume applications; multiple plunger designs; on/off operation



### Technical Data

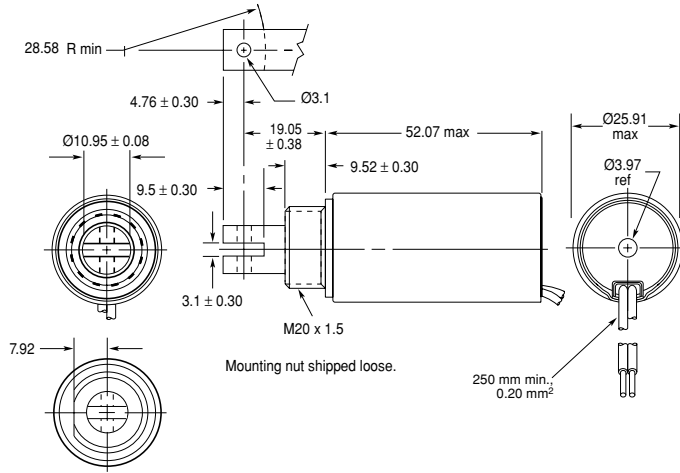
Dielectric Strength Recommended	1000 VRMS Maximum watts dissipated by solenoid are based on an unrestricted flow of air at 20°C, with solenoid mounted on the equivalent of an aluminium plate measuring 102 x 3.2 mm
Coil Resistance	±5% tolerance
Holding Force	Flat Face: 61.52 N @20°C 60°: 29.40 N @20°C
Weight	197.3 g
Plunger Weight	45.36 g

### Preferred Range

Type	Size	Function	Duty Cycle	Max. Stroke	Nominal voltage	Force@Nominal Stroke	Nominal power	max. "On time"
195224-229	∅ 26 X 52 mm	Pull	100%	17.8 mm	9.2 VDC	3.4–4.0 N	10 W @20°C	∞ sec
195224-129	∅ 26 X 52 mm	Pull	100%	17.8 mm	9.4 VDC	3.4–4.0 N	10 W @20°C	∞ sec

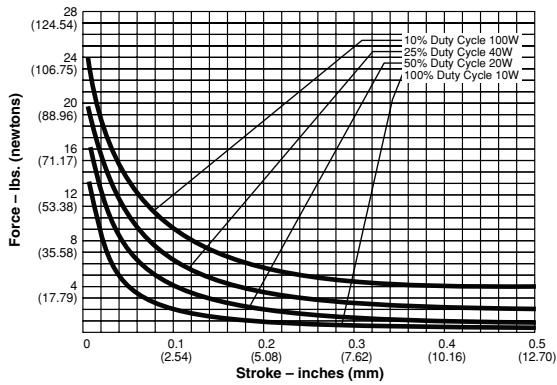
# STA Series Pull 26 x 52

## Dimensions

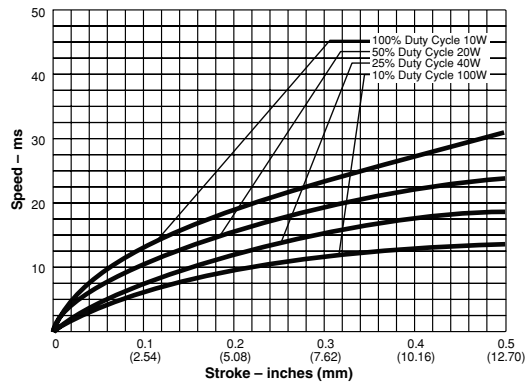


## Performance chart

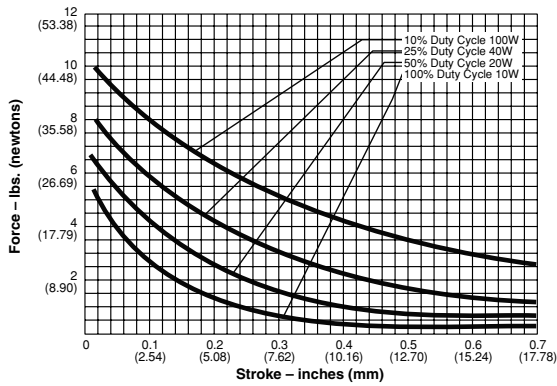
### Flat face Plunger, Force



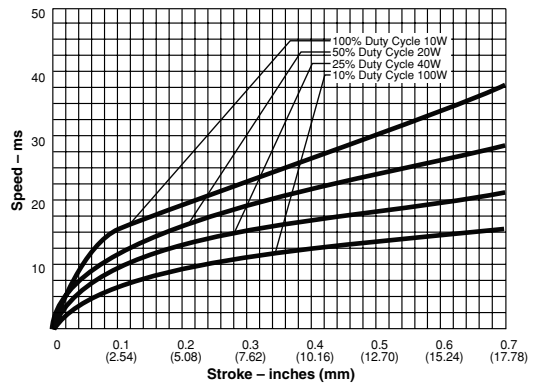
### Flat face Plunger, Speed



### 60° Plunger, Force



### 60° Plunger, Speed



## STA Series Pull 26 x 52

### Ordering Reference

Type 195226-(0) Plunger (XX) Coil Data awg (wire diameter)

Plunger Configurations and anti-rotation flat on mounting

- 1 Flat face plunger without anti-rotation flat
- 2 60° plunger without anti-rotation flat
- 5 Flat face plunger with anti-rotation flat
- 6 60° plunger with anti-rotation flat

Performance		100%	50%	25%	10%		
Maximum ON Time (sec) when pulsed continuously <sup>1</sup>		∞	360	32	8		
Force@Nominal Stroke (N)		3.34- 4.00	6.68- 7.79	11.57- 13.35	21.36- 23.14		
Watts (@20°C)		10	20	40	100		
Ampere Turns (@20°C)		1166	1649	2332	3688		
Coil Data	awg (XX) <sup>2</sup>	Resistance (@20°C)	# Turns <sup>3</sup>	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
	23	1.96	536	4.4	6.3	8.9	14.0
	24	2.69	600	5.2	7.3	10.4	16.4
	25	4.89	840	7.0	9.9	14.0	22.0
	26	8.44	1128	9.2	13.0	18.4	29.0
	27	11.50	1260	10.7	15.2	21.0	34.0
	28	19.20	1645	13.8	19.6	28.0	44.0
	29	31.20	2104	17.7	25.0	35.0	56.0
	30	49.60	2646	22.0	31.0	45.0	70.0
	31	77.40	3280	28.0	39.0	56.0	88.0
	32	119.00	4026	35.0	49.0	69.0	109.0
	33	202.00	5317	45.0	64.0	90.0	142.0

<sup>1</sup> Continuously pulsed at stated watts and duty cycle

<sup>2</sup> Other coil awg (wire diameter) sizes available — please enquire

<sup>3</sup> Reference number of turns

All data is at 20°C coil temperature. Force outputs degrade with increased temperatures.



# STA 26 x 52

## Linear Solenoid

Tubular – Push

### STA 26 x 52

Dimensions (mm)	∅ 26 x 52
Duty cycle	continuous or intermittent
Stroke	Nominal Stroke 7.6 mm
Operation	Push engagement; well-suited to lock/latch operations
Max. force (N)	Up to 23,14 N (@ 10% Duty Cycle)
Life	25 M cycles
Power (W)	10–100
Supply (V)	4,4–142 VDC
Functional Advantages	Economical STA® Series design for volume applications; multiple plunger designs; on/off operation



### Technical Data

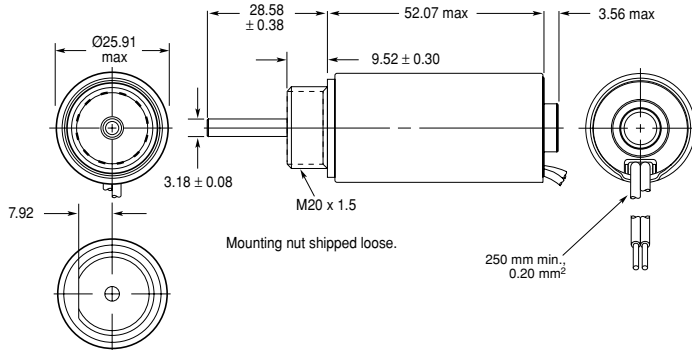
Dielectric Strength	1000 VRMS
Recommended Minimum Heat Sink	Maximum watts dissipated by solenoid are based on an unrestricted flow of air at 20°C, with solenoid mounted on the equivalent of an aluminium plate measuring 102 x 3.2 mm
Coil Resistance	±5% tolerance
Holding Force	Flat Face: 52,58 N @20°C 60°: 28,87 N @20°C
Weight	190.8 g
Plunger Weight	33.74 g

### Preferred Range

Type	Size	Function	Duty Cycle	Max. Stroke	Nominal voltage	Force@Nominal Stroke	Nominal power	max. "On time"
195225-229	∅ 26 X 52 mm	Push	100%	17,8 mm	9.2 VDC	2,2–3,3 N	10 W @20°C	∞ sec
195225-129	∅ 26 X 52 mm	Push	100%	17,8 mm	9.2 VDC	2,2–3,3 N	10 W @20°C	∞ sec

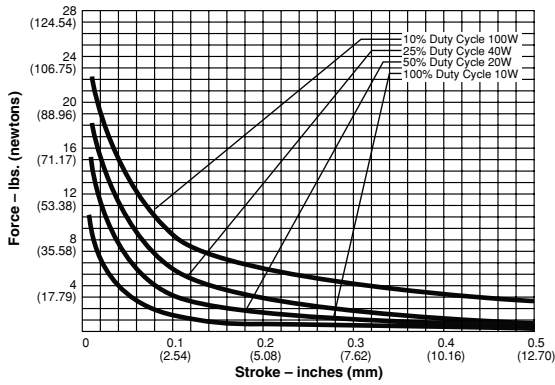
# STA Series Push 26 x 52

## Dimensions

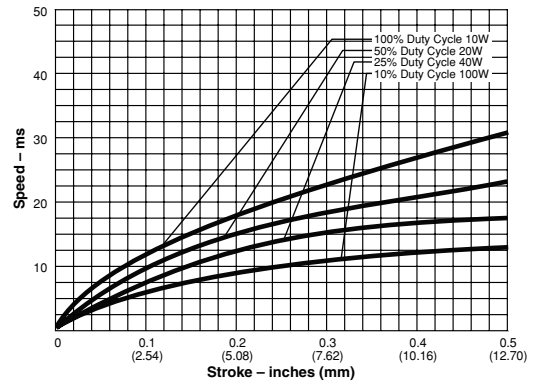


## Performance chart

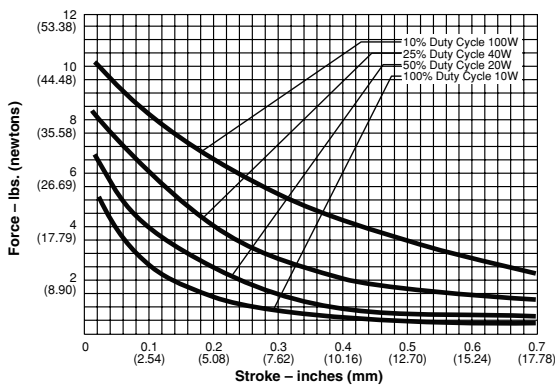
### Flat face Plunger, Force



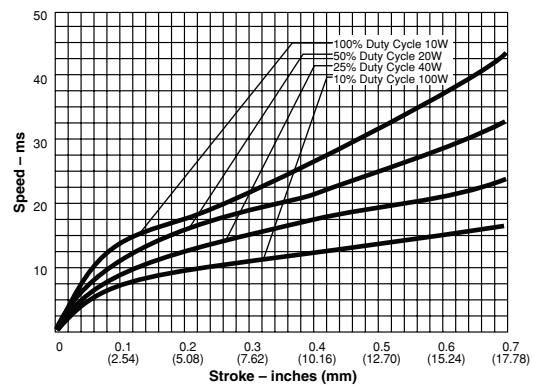
### Flat face Plunger, Speed



### 60° Plunger, Force



### 60° Plunger, Speed



## STA Series Push 26 x 52

### Ordering Reference

Type 195227-(0) Plunger (XX) Coil Data awg (wire diameter)

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

Performance		100%	50%	25%	10%		
Maximum ON Time (sec) when pulsed continuously <sup>1</sup>		∞	360	32	8		
Force@Nominal Stroke (N)		2.22- 3.34	4.45- 8.37	8.9- 12.9	17.9- 23.14		
Watts (@20°C)		10	20	40	100		
Ampere Turns (@20°C)		1166	1649	2332	3688		
Coil Data	awg (XX) <sup>2</sup>	Resistance (@20°C)	# Turns <sup>3</sup>	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
	23	1.96	536	4.4	6.3	8.9	14.0
	24	2.69	600	5.2	7.3	10.4	16.4
	25	4.89	840	7.0	9.9	14.0	22.0
	26	8.44	1128	9.2	13.0	18.4	29.0
	27	11.50	1260	10.7	15.2	21.0	34.0
	28	19.20	1645	13.8	19.6	28.0	44.0
	29	31.20	2104	17.7	25.0	35.0	56.0
	30	49.60	2646	22.0	31.0	45.0	70.0
	31	77.40	3280	28.0	39.0	56.0	88.0
	32	119.00	4026	35.0	49.0	69.0	109.0
	33	202.00	5317	45.0	64.0	90.0	142.0

<sup>1</sup> Continuously pulsed at stated watts and duty cycle

<sup>2</sup> Other coil awg (wire diameter) sizes available — please enquire

<sup>3</sup> Reference number of turns

All data is at 20°C coil temperature. Force outputs degrade with increased temperatures.

# STA 125 M

## Linear Solenoid

Tubular – Pull

### STA 125 M

Dimensions (mm)	∅ 32 x 57
Duty cycle	continuous or intermittent
Stroke	Nominal Stroke 10.2 mm
Operation	Pull
Max. force (N)	Up to 28.9 N (@ 10% Duty Cycle)
Life	1 million cycles
Power (W)	13–130
Supply (V)	6.8–218 VDC
Functional Advantages	Economical STA® Series design for volume applications; multiple plunger designs; on/off operation



### Technical Data

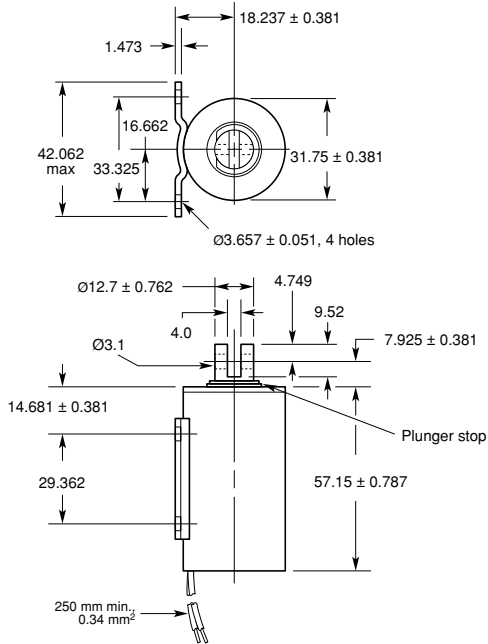
Dielectric Strength	1000 VRMS
Recommended Minimum Heat Sink	Maximum watts dissipated by solenoid are based on an unrestricted flow of air at 20°C, with solenoid mounted on the equivalent of an aluminium plate measuring 127 x 3.2 mm
Coil Resistance	±5% tolerance
Holding Force	40.03 N @20°C
Weight	295 g

### Preferred Range

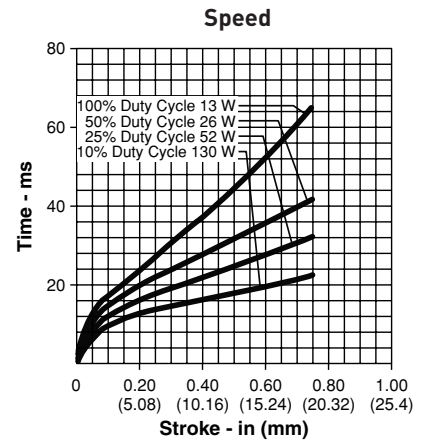
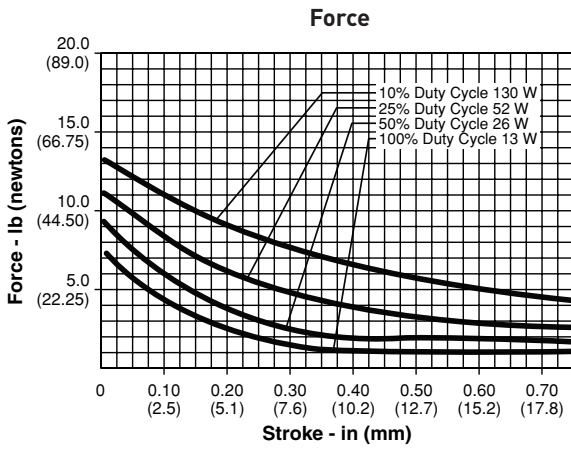
Type	Size	Function	Duty Cycle	Max. Stroke	Nominal voltage	Force@Nominal Stroke	Nominal power	max. "On time"
282366-024	∅ 32 X 57 mm	Pull	100%	19 mm	8.6 VDC	4.5 N	13 W @20°C	∞ sec

# STA 125 M Pull

## Dimensions



## Performance chart



# STA 125 M Pull

## Ordering Reference

Type 282366-(0XX) Coil Data awg (wire diameter)

Performance		100%	50%	25%	10%		
Maximum ON Time (sec) when pulsed continuously <sup>1</sup>		∞	390	60	18		
Force@Nominal Stroke (N)		4.45	8.90	17.80	28.9		
Watts (@20°C)		13	26	52	130		
Ampere Turns (@20°C)		1500	2121	3000	4743		
Coil Data	awg (0XX) <sup>2</sup>	Resistance (@20°C)	# Turns <sup>3</sup>	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
	023	3.52	780	6.8	9.6	13.6	22.0
	024	6.04	1056	8.6	12.2	17.2	27.0
	025	8.47	1176	10.9	15.4	22.0	34.0
	026	14.10	1540	13.8	19.5	28.0	44.0
	027	22.50	1970	17.3	24.0	35.0	55.0
	028	36.10	2484	22.0	31.0	44.0	69.0
	029	55.10	3060	27.0	38.0	54.0	86.0
	030	88.10	3805	35.0	49.0	70.0	110.0
	031	147.00	5044	44.0	62.0	88.0	139.0
	032	214.00	5992	54.0	76.0	107.0	170.0
	033	354.00	7744	69.0	98.0	138.0	218.0

<sup>1</sup> Continuously pulsed at stated watts and duty cycle

<sup>2</sup> Other coil awg (wire diameter) sizes available — please enquire

<sup>3</sup> Reference number of turns

All data is at 20°C coil temperature. Force outputs degrade with increased temperatures.

# STA 150 M

## Linear Solenoid

Tubular – Pull

### STA 150 M

Dimensions (mm)	∅ 38 x 63
Duty cycle	continuous or intermittent
Stroke	Nominal Stroke 10.2 mm
Operation	Pull
Max. force (N)	Up to 43,6 N (@ 10% Duty Cycle)
Life	1 million cycles
Power (W)	17–170
Supply (V)	9,8–315 VDC
Functional Advantages	Economical STA® Series design for volume applications; multiple plunger designs; on/off operation



### Technical Data

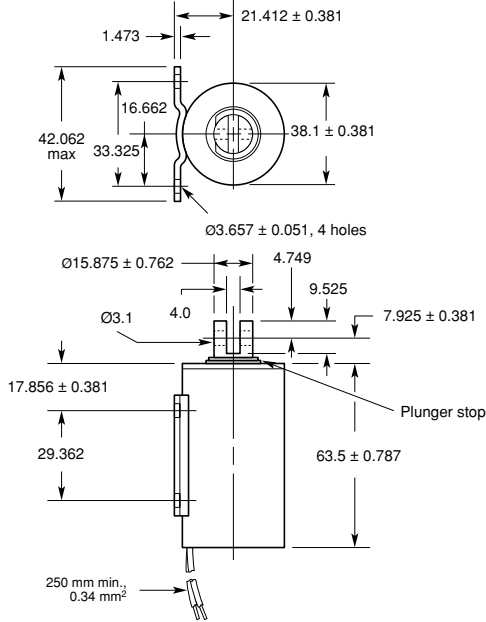
Dielectric Strength	1000 VRMS
Recommended Minimum Heat Sink	Maximum watts dissipated by solenoid are based on an unrestricted flow of air at 20°C, with solenoid mounted on the equivalent of an aluminium plate measuring 152 x 3.2 mm
Coil Resistance	±5% tolerance
Holding Force	64,50 N at 20°C
Weight	481,8 g

### Preferred Range

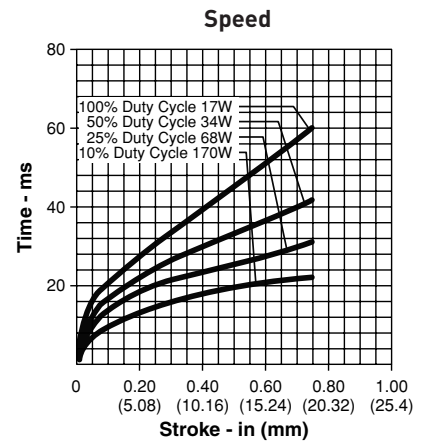
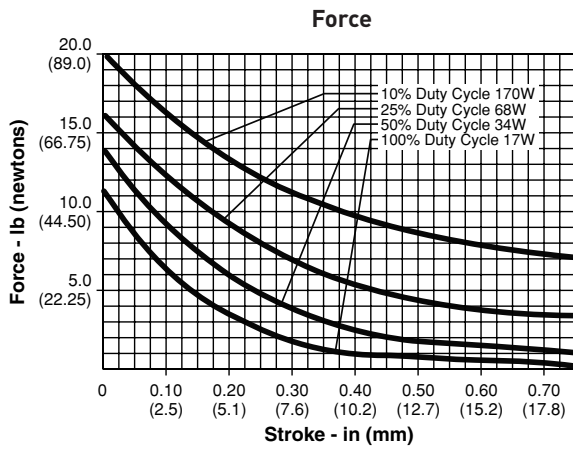
Type	Size	Function	Duty Cycle	Max. Stroke	Nominal voltage	Force@Nominal Stroke	Nominal power	max. "On time"
282367-023	∅ 38 X 63 mm	Pull	100%	19 mm	9,8 VDC	4,5 N	17 W @20°C	∞ sec

# STA 150 M Pull

## Dimensions



## Performance chart





# STA 150 M Pull

## Ordering Reference

Type 282367-(0XX) Coil Data awg (wire diameter)

Performance		100%	50%	25%	10%		
Maximum ON Time (sec) when pulsed continuously <sup>1</sup>		∞	420	100	25		
Force@Nominal Stroke (N)		4.45	11.12	23.14	43.61		
Watts (@20°C)		17	34	68	170		
Ampere Turns (@20°C)		1800	2546	3600	5692		
Coil Data	awg (0XX) <sup>2</sup>	Resistance (@20°C)	# Turns <sup>3</sup>	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
	023	5.58	1030	9.8	13.9	19.7	31.0
	024	9.30	1344	12.4	17.6	25.0	39.0
	025	14.90	1712	15.7	22.0	31.0	50.0
	026	24.00	2180	19.9	28.0	40.0	63.0
	027	36.90	2680	25.0	35.0	50.0	79.0
	028	58.40	3322	32.0	45.0	63.0	100.0
	029	87.50	4008	39.0	56.0	79.0	124.0
	030	148.00	5292	50.0	71.0	101.0	159.0
	031	224.00	6360	63.0	90.0	127.0	200.0
	032	344.00	7956	78.0	110.0	155.0	246.0
	033	554.00	10070	100.0	141.0	199.0	315.0

<sup>1</sup> Continuously pulsed at stated watts and duty cycle

<sup>2</sup> Other coil awg (wire diameter) sizes available — please enquire

<sup>3</sup> Reference number of turns

All data is at 20°C coil temperature. Force outputs degrade with increased temperatures.