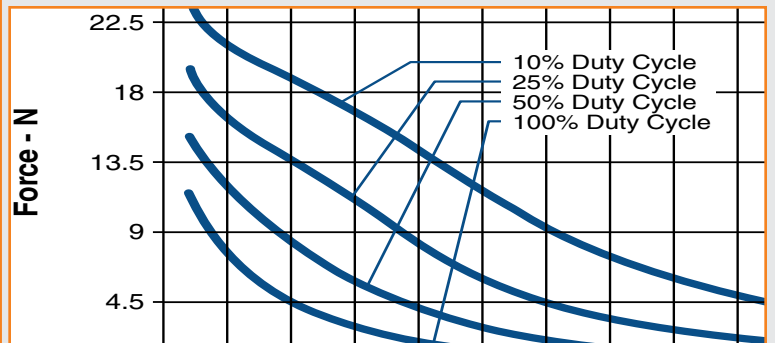


Ledex[®] Open Frame Solenoids



Ledex® Open Frame Solenoids

The open frame solenoid is the simplest solenoid device consisting of an open iron frame, an overmolded or taped coil, and a movable plunger in the centre of the coil. Open frame solenoids are the most economical of all the solenoid types, and are typically selected for applications in which extremely long life and precise positioning are not critical.

Applications for Ledex® DC open frame devices are numerous. As with all types of solenoids, open frame models are well suited for applications which require either locking or latching functions.

Applications for DC open frame solenoids include residential and commercial door locks, credit card key “smart” locks, pharmaceutical compartment locks, circuit breakers, pinch valves, and many more.

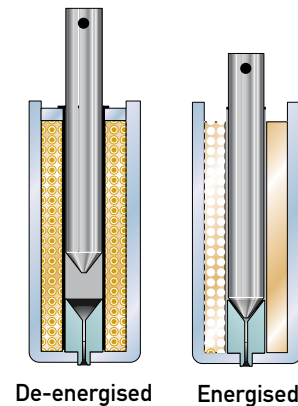
- Low cost, high volume products
- Strokes to 32 mm
- Custom design work is our strength

Applications

- Printers
- Coin dispensers
- Security door locks
- Storage/retrieval systems
- PC board insertion equipment
- Vending

Principle of Operation

The open frame solenoid consists of an open iron frame, a coil, and a movable plunger in the centre of the coil.



Design Considerations

Construction

Open frame solenoids are designed with two frame styles, the C Frame style, in which the coil is enclosed on one side, and the Box Frame style in which the coil is enclosed on two sides. The Box Frame style provides slightly higher force output and is more rugged in design.

Tapped mounting holes are used for easy installation and interchangeability.

Most models have slotted and cross drilled plungers for easy load attachment.

The plunger is plated for corrosion resistance, and provides a low coefficient of friction and long life.

Over molded coils are available in both Box Frame and C Frame solenoids and offer excellent protection from moisture and humidity. Some solenoids are UL recognised. Most have UL recognised coil insulation systems.

Life

When selecting an open frame solenoid, as with any other solenoid style, it is important to consider the effects of heat, since an increase in coil temperature reduces the work output and the life of the unit. Standard life is 50,000 to 100,000 operations. Consult the factory for longer life of 500,000 or more cycles, and other special requirements.

Duty Cycle

Duty cycle is determined by solenoid ON time/(ON + OFF time).

For example: a solenoid is actuated for 30 seconds, then off for 90 seconds.

$30 \text{ sec ON} / (30 \text{ Sec ON} + 90 \text{ sec OFF}) = 30/120 = 1/4$ or *25% duty cycle.*

Performance Curves

The Force/Stroke performance curves in this section serve as guides to determine the solenoid size needed to produce a desired force at a given stroke, duty cycle, and power source. All Force/Stroke curves are performed under standard test conditions: ambient temperature of 20°C. A design safety factor of 1.3 to 1.5 is recommended. For example, when a 20 N pull force is required, select a model with a safety factor of 1.3 to 1.5 times (26.3 N).



Ledex® Open Frame Solenoids

On-Off DC Open Frame Solenoids

DC actuated units are available in box frame and C frame design styles in a variety of models and sizes.

Models are available for continuous use and intermittent duty.

For low duty cycle applications, consider a magnetic latching open frame.

Box Frame

This solenoid has a 4-sided closed box frame and solid plunger and is, therefore, more electrically efficient than the C Frame solenoid. The closed, box frame also provides improved mechanical strength.

C Frame

C Frame solenoids consist of a formed C-shaped steel frame and solid plunger. Therefore, these solenoids are less efficient and less costly than their Box Frame counterparts.

Size	Frame Type	Coil Type ⁽¹⁾	Height (mm)	Width (mm)	Length (mm)	Max. Stroke (mm)	Nominal Stroke (mm)	Typical Force (N)		Page
								Nominal Stroke and 100% Rated Voltage @ 100% Duty	25% Duty	
B4HDM	Box	OM	41.4	36.8	55.4	25.4	12.7	3.6	15.6	H6
B11M	Box	OM	30.0	23.9	47.2	20.3	10.2	0.9	4.4	H7
B14M ●	Box	T	25.9	20.1	36.8	15.2	5.1	2.2	8.5	H8
B16M ●	Box	T	12.2	9.8	25.1	3.8	1.3	0.4	1.3	H10
B17M ●	Box	T	15.0	13.0	20.0	4.6	1.3	0.9	2.7	H12
B20M ●	Box	T	23.9	20.6	29.0	12.7	6.4	0.4	1.8	H14
B21M	Box	T	33.3	33.3	30.5	12.7	6.4	2.7	9.8	H15
B22M	Box	OM	37.3	33.3	40.9	25.4	10.2	2.7	9.8	H16
B27M	Box	T	28.9	25.4	41.4	15.2	5.1	4.9	15.1	H18
B41M	Box	T	51.6	43.9	77.5	25.4	12.7	13.3	48.9	H19
B75M ●	Box	T	27.9	25.4	41.4	15.2	5.1	4.9	15.1	H20
C5M ●	C	T	11.7	10.4	23.9	5.1	1.3	0.9	3.1	H21
C8M ●	C	OM	20.6	19.1	28.7	12.7	6.4	0.2	1.3	H23
C9M	C	T	31.8	35.1	26.9	12.7	6.4	1.3	4.4	H24
C15M ●	C	T	25.4	26.9	29.0	12.7	6.4	0.4	2.7	H25
C26M	C	OM	26.9	21.6	43.9	19.1	12.7	0.4	2.2	H26
C33M	C	OM	29.0	33.3	34.5	12.7	6.4	1.3	4.9	H27
C34M	C	OM	36.5	33.3	42.2	25.4	12.7	0.9	4.4	H28

⁽¹⁾ OM = Overmolded; T = Taped

● Well-suited for battery operation.



See the "Battery Operated Solenoids" section for complete information.

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

All specifications subject to change without notice.

Ledex® Open Frame Solenoids

Magnetic Latching DC Open Frame Solenoids

Magnetic latching solenoids are designed for low duty cycle applications where the solenoid's energised position is needed for an extended period of time.

When power is applied to the solenoid, the plunger moves to its energised position. The plunger latches magnetically in this position and remains there, consuming no power, until a negative

electrical pulse is applied to allow the plunger to unlatch.

The reverse voltage applied is dependent on the load attached to the plunger but must be well below the initial energizing value.

While continuous duty, on/off solenoids tend to develop heat, magnetic latching solenoids do not since no power is consumed in the energised state.

Since magnetic latching solenoids are typically used in low duty cycle applications, they are also perfect candidates for battery operation. These products are therefore catalogued as standard as low as 3-6 volts.

Typical applications for magnetic latching solenoids include door closers, locks, latches and security devices. Almost any solenoid type can be developed as a magnetic latching version. We offer open frame and tubular varieties as catalogue standard products.

Size	Frame Type	Coil Type ⁽¹⁾	Height (mm)	Width (mm)	Length (mm)	Max. Stroke (mm)	Nominal Stroke (mm)	Typical Force (N)		Page
								Nominal Stroke ⁽²⁾ and 100% Rated Voltage @ 25% Duty		
B14M-L ●	Box - Latching	T	25.9	20.1	36.8	15.2	2.5	8.9		H9
B16M-L ●	Box - Latching	T	12.2	9.9	25.1	3.8	1.3	0.7		H11
B17M-L ●	Box - Latching	T	15.0	13.0	20.0	4.1	2.0	0.9		H13
B22M-L	Box - Latching	OM	37.3	33.3	40.9	8.9	2.5	14.7		H17
C5M-L ●	C - Latching	T	11.7	10.4	23.9	5.1	1.3	1.8		H22

⁽¹⁾ OM = Overmolded; T = Taped

⁽²⁾ Using flat face plunger

- Well-suited for battery operation.



See the "Battery Operated Solenoids" section for complete information.

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

All specifications subject to change without notice.

Ledex® Box Frame Size B4HDM — DC Operation

Part Number: B4HDM - **XXX** - M-36

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	100% at 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	52 N at 20°C
Coil Insulation	Class "A": 105°C max. temperature standard. Other temperature classes are available
Coil Termination	3/16" QC
Plunger Weight	66.6 g
Total Weight	382.7 g
Dimensions	See page H29

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	83	34	13
Maximum ON Time (sec) for single pulse	∞	609	207	66
Watts (@ 20°C)	12.5	25	50	125
Ampere Turns (@ 20°C)	1536	2174	3073	4860

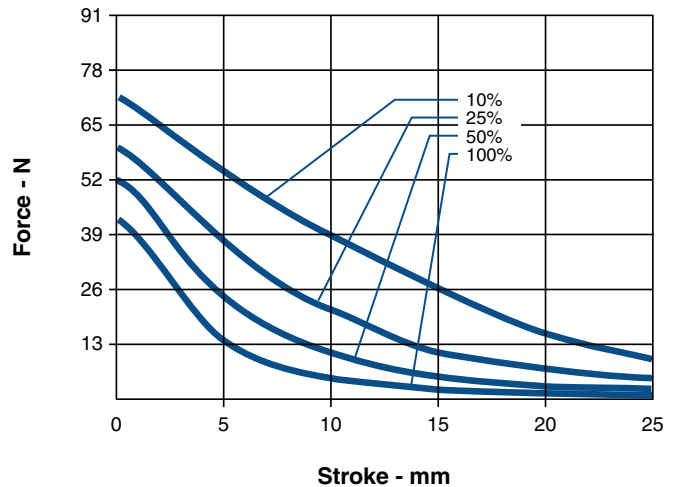
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
B4HDM-255-M-36	2.94	754	6	8.5	12	19
B4HDM-254-M-36	11.42	1467	12	17	24	38
B4HDM-253-M-36	46.83	2964	24	34	48	76
B4HDM-252-M-36	181	5724	48	68	96	152
B4HDM-251-M-36	1157	14239	120	170	240	380

NOTES:

- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Magnetic latching versions available. Pull versions standard; push versions available.
- Other coil terminations available.
- All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify B4HDM-253-M-36.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

Ledex® Box Frame Size B11M — DC Operation

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Specifications

Continuous Duty Cycle	100% at 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	15.5 N at 20°C
Coil Insulation	Class "A": 105°C max. temperature standard. Other temperature classes are available
Coil Termination	3/16" QC
Plunger Weight	17.0 g
Total Weight	144.5 g
Dimensions	See page H29

Maximum Duty Cycle	100%	50%	25%	10%

LINEAR Open Frame

Force values for reference only.

All specifications subject to change without notice.

Ledex® Box Frame Size B14M — DC Operation

Part Number: B14M - XXX - B- 1

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	100% at 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	15.6 N at 20°C
Coil Insulation	Class " B": 130°C max.
Coil Termination	250 mm PVC lead wires
Plunger Weight	12 g
Total Weight	90 g
Dimensions	See page H30

- Well-suited for battery operation.



See the "Battery Operated Solenoids" section for complete information.

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	100	36	7
Maximum ON Time (sec) for single pulse	∞	480	180	45
Watts (@ 20°C)	5.2	10.4	20.8	52.2
Ampere Turns (@ 20°C)	750	1060	1500	2370

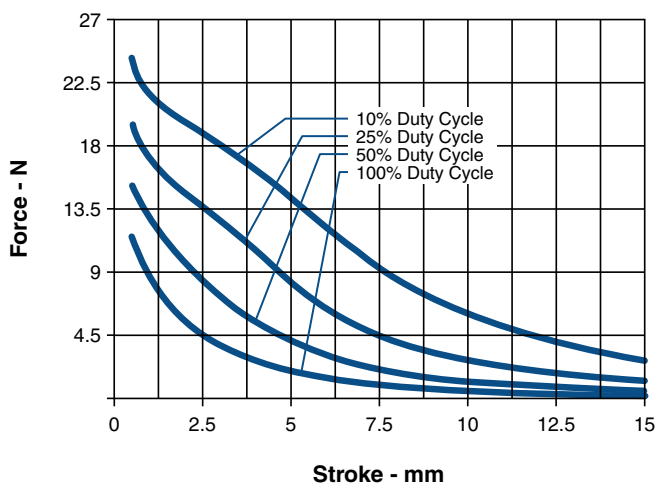
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
B14M-255-B-1	6.9	871	6	8.5	12	19
B14M-254-B-1	28.6	1791	12	17	24	38
B14M-253-B-1	110	3450	24	34	48	76

NOTES:

- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Other coil terminations available.
- All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify B14M-253-B-1.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

Force values for reference only.

All specifications subject to change without notice.

Ledex® Box Frame Size B14M-L — DC Operation

Magnetic Latching

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Specifications

Operation	Pull
Dielectric Strength	500 VRMS for one second
Unlatch Voltage	See schematic and coil data below
Magnet Hold Force*	
Flat Face:	9.3 N (with return spring)
50° Conical:	5.6 N (with return spring)
Coil Insulation	Class " B": 130°C max. (standard); other temperature classes available
Coil Termination	Flt Face:

Typical Force @ 20°C – 50° Conical Armature
(net with spring)

LINEAR Open Frame

Force values for reference only.

All specifications subject to change without notice.

Ledex® Box Frame Size B16M — DC Operation

Part Number: B16M - **XXX** - B- 1

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	100% at 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	3.99 N at 20°C
Coil Insulation	Class "B": 130°C max.
Coil Termination	Lead wires
Plunger Weight	2.6 g
Total Weight	12.5 g
Dimensions	See page H31

● Well-suited for battery operation.



See the "Battery Operated Solenoids" section for complete information.

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	40	15	5
Maximum ON Time (sec) for single pulse	∞	253	78	19
Watts (@ 20°C)	1.43	2.86	5.72	14.3
Ampere Turns (@ 20°C)	270	383	575	855

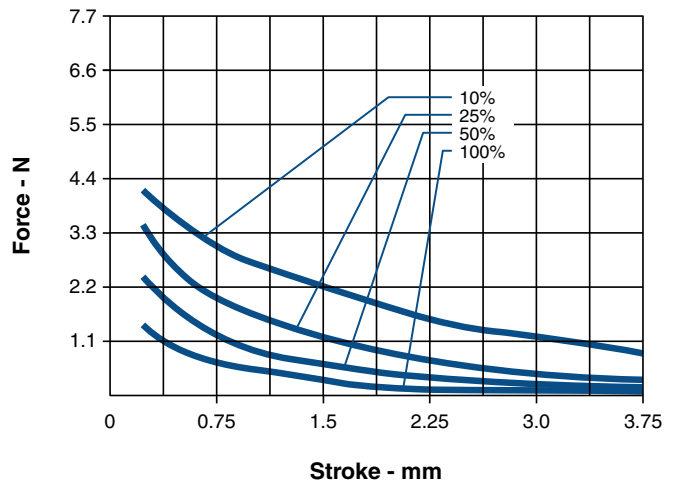
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
B16M-258-B-1	6.35	531	3	4.3	6	9.5
B16M-256-B-1	54.2	1644	9	12.5	17.6	27.8
B16M-255-B-1	22.71	1100	6	8.5	12	19
B16M-254-B-1	100.79	2035	12	17	24	38
B16M-253-B-1	394.5	3944	24	34	48	76
B16M-252-B-1	1630	9827	48	68	96	153

NOTES:

1. All data is typical.
2. Force testing is done with the solenoid in the horizontal position.
3. All data reflects operation with no heatsink.
4. Other coil terminations available.
5. All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify B16M-253-B-1.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

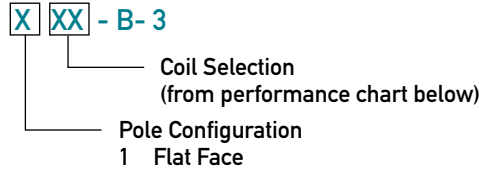
Force values for reference only.

All specifications subject to change without notice.

Ledex® Box Frame Size B16M-L — DC Operation


Magnetic Latching

Part Number: B16M - L - X XX - B-3



All catalogue products manufactured after April 1, 2006 are RoHS Compliant

● Well-suited for battery operation.



See the "Battery Operated Solenoids" section for complete information.

Specifications

Operation	Pull
Dielectric Strength	500 VRMS for one second
Unlatch Voltage	See schematic and coil data below
Magnet Hold Force*	1.8 N (with return spring)
Coil Insulation	Class " B": 130°C max. (standard); other temperature classes available
Coil Termination	250 mm PVC lead wires
Spring Force	0.2 N; 0.3 N latched position
Plunger Pole Face	Flat face (other options available)
Plunger Weight	2.46 g
Total Weight	10.12 g
Dimensions	See page H31

*In no power, latched position.

Performance

Maximum Duty Cycle	Unlatched			
	Voltage	50%	25%	10%
Maximum ON Time (sec)	n/a	253	78	19
Watts (@ 20°C)	1.43	2.86	5.72	14.3
Ampere Turns (@ 20°C)	270	383	575	855

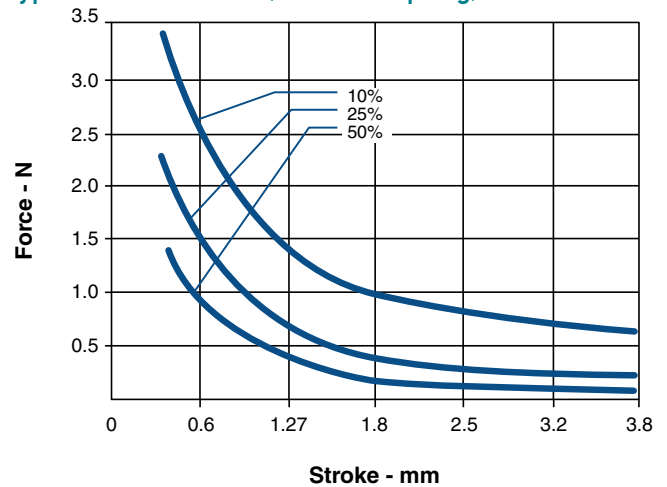
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	Unlatch VDC	VDC (Nom)	VDC (Nom)	VDC (Nom)
B16M-L-158-B-3	6.35	531	3	4.3	6	9.5
B16M-L-155-B-3	22.71	1100	6	8.5	12	19
B16M-L-156-B-3	54.20	1644	9	12.5	17.6	27.8
B16M-L-154-B-3	100.79	2035	12	17	24	38
B16M-L-153-B-3	394.50	3944	24	34	48	76
B16M-L-152-B-3	1630.00	9827	48	68	96	153

NOTES:

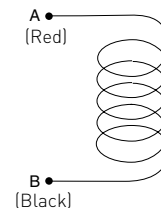
- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Other coil terminations available.
- All specifications subject to change without notice.

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



Coil Polarity

Latch: A+ B-
Unlatch: A- B+



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify B16M-L-153-B-5.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

Force values for reference only.

All specifications subject to change without notice.

Ledex® Box Frame Size B17M — DC Operation

Part Number: B17M - XXX - A- 1

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	100% at 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	3.9 N at 20°C
Coil Insulation	Class "B": 130°C max.
Coil Termination	250 mm PVC lead wires
Plunger Weight	2.84 g
Total Weight	18.4 g
Dimensions	See page H32

- Well-suited for battery operation.



See the "Battery Operated Solenoids" section for complete information.

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	15	6	2
Maximum ON Time (sec) for single pulse	∞	112	36	10.5
Watts (@ 20°C)	1.6	3.2	6.4	16
Ampere Turns (@ 20°C)	292	414	584	923

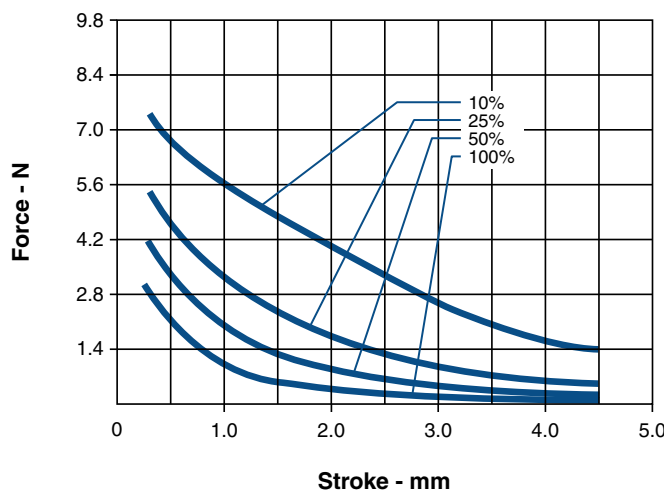
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
B17M-258-A-1	5.40	520	2.9	4	6	9
B17M-256-A-1	50.2	1624	9	12	18	28.3
B17M-255-A-1	21.93	1112	6	8.5	12	19
B17M-254-A-1	88.95	2219	12	17	24	38
B17M-253-A-1	337	3687	24	34	48	76
B17M-252-A-1	1465	9177	48	68	96	153

NOTES:

- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Other coil terminations available.
- All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify B17M-253-A-1.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

Force values for reference only.

All specifications subject to change without notice.

Ledex® Box Frame Size B17M-L — DC Operation

Magnetic Latching

Part Number: B17M - L - X XX - B- 3

Coil Selection
(from performance chart below)

Pole Configuration
1 Flat Face

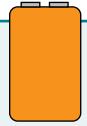
All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Specifications

Operation	Pull
Dielectric Strength	500 VRMS for one second
Unlatch Voltage	See schematic and coil data below
Magnet Hold Force*	2.5 N (with return spring)
Coil Insulation	Class " B": 130°C max. (standard); other temperature classes available
Coil Termination	250 mm PVC lead wires
Spring Force	0.4 N/mm; 0.1 N latched position
Plunger Pole Face	Flat face (other options available)
Plunger Weight	2.46 g
Total Weight	19.85 g
Dimensions	See page H32

*In no power, latched position.

- Well-suited for battery operation.



See the "Battery Operated Solenoids" section for complete information.

Performance

Maximum Duty Cycle	Unlatched			
	Voltage	50%	25%	10%
Maximum ON Time (sec)	n/a	112	36	10.5
Watts (@ 20°C)	1.6	3.2	6.4	16
Ampere Turns (@ 20°C)	292	414	584	923

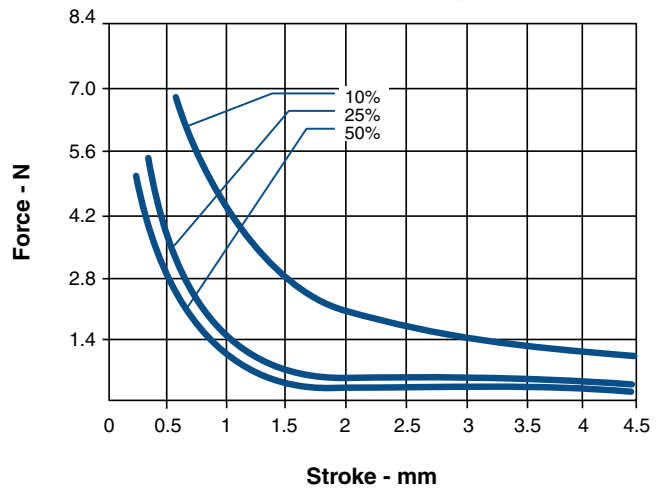
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	Unlatch VDC	VDC (Nom)	VDC (Nom)	VDC (Nom)
B17M-L-158-B-3	5.40	520	3	4	6	9
B17M-L-155-B-3	21.93	1112	6	8.5	12	19
B17M-L-156-B-3	50.20	1624	9	12	18	28.3
B17M-L-154-B-3	88.95	2219	12	17	24	38
B17M-L-153-B-3	337.00	3687	24	34	48	76
B17M-L-152-B-3	1465.00	9177	48	68	96	153

NOTES:

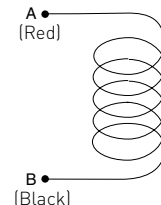
- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Other coil terminations available.
- All specifications subject to change without notice.

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



Coil Polarity

Latch: A+ B-
Unlatch: A- B+



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify B17M-L-153-B-3.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

Force values for reference only.

All specifications subject to change without notice.

Ledex® Box Frame Size B20M — DC Operation

Part Number: B20M - **XXX** - A-3

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	100% at 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	10.2 N at 20°C
Coil Insulation	Class "A": 105°C max.
Coil Termination	Lead wires
Plunger Weight	16.4 g
Total Weight	61.6 g
Dimensions	See page H33

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	65	28	7
Maximum ON Time (sec) for single pulse	∞	190	80	28
Watts (@ 20°C)	4.5	9.0	18.0	45.0
Ampere Turns (@ 20°C)	429	608	858	1358

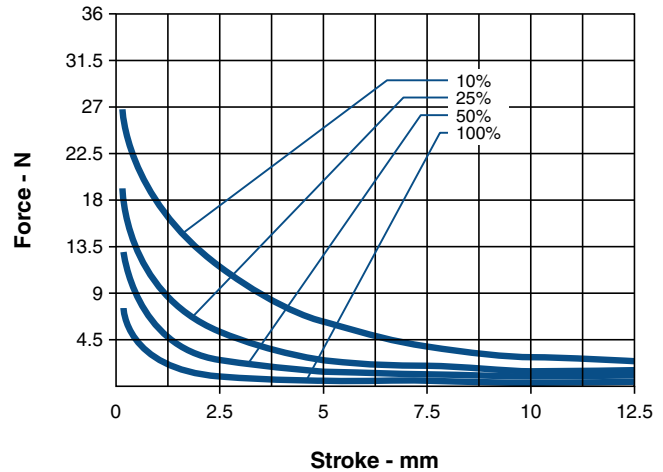
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
B20M-255-A-3	8	572	6	8.5	12	19
B20M-254-A-3	32	1222	12	17	24	38
B20M-253-A-3	128	2269	24	34	48	76
B20M-252-A-3	512	4496	48	68	96	152
B20M-251-A-3	3200	10944	120	170	240	380

NOTES:

1. All data is typical.
2. Force testing is done with the solenoid in the horizontal position.
3. All data reflects operation with no heatsink.
4. Other coil terminations available.
5. All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify B20M-253-A-3.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

Ledex® Box Frame Size B21M — DC Operation

Part Number: B21M - **XXX** - A- 3

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	100% at 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	36.9 N at 20°C
Coil Insulation	Class "A": 105°C max. temperature standard. Other temperature classes are available
Coil Termination	Lead wires
Plunger Weight	24.0 g
Total Weight	132.4 g
Dimensions	See page H33

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	98	45	17
Maximum ON Time (sec) for single pulse	∞	338	115	36
Watts (@ 20°C)	8	16	32	80
Ampere Turns (@ 20°C)	869	1231	1738	2752

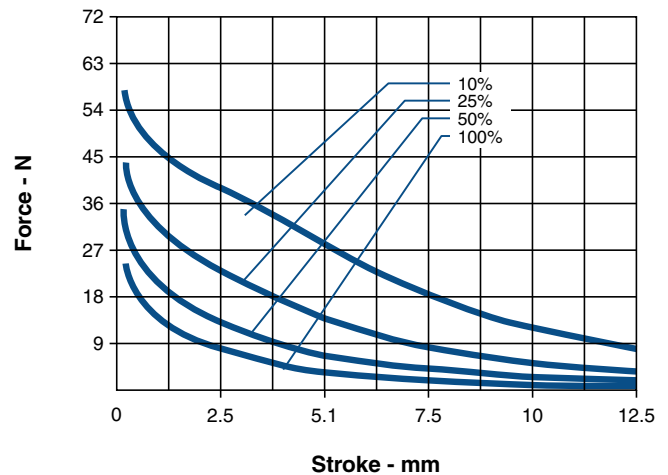
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
B21M-255-A-3	4.5	660	6	8.5	12	19
B21M-254-A-3	18	1316	12	17	24	38
B21M-253-A-3	72	2631	24	34	48	76
B21M-252-A-3	288	5170	48	68	96	152
B21M-251-A-3	1800	12740	120	170	240	380

NOTES:

- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Magnetic latching versions available. Pull versions standard; push versions available.
- Other coil terminations available.
- All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify B21M-253-A-3.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

LINEAR Open Frame

Ledex® Box Frame Size B22M — DC Operation

Part Number: B22M - **XXX** - M- 36

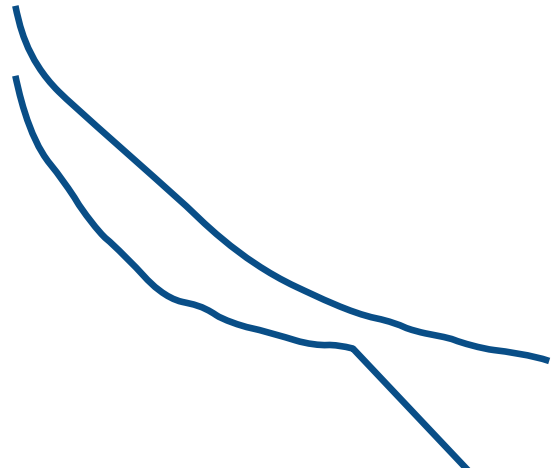
All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	100% at 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	35.6 N at 20°C
Coil Insulation	Class "A": 105°C max. temperature standard. Other temperature classes are available
Coil Termination	3/16" QC
Plunger Weight	39.7 g
Total Weight	212.6 g
Dimensions	See page H34

Typical Force @ 20°C



Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	52	23	9
Maximum ON Time (sec) for single pulse	∞	485	167	47
Watts (@ 20°C)	9.9	19.8	39.6	99
Ampere Turns (@ 20°C)	1046	1482	2093	3314

How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify B22M-253-M-36.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
B22M-255-M-36	3.64	635	6	8.5	12	19
B22M-254-M-36	14.55	1300	12	17	24	38
B22M-253-M-36	58.18	2578	24	34	48	76
B22M-252-M-36	232.73	5103	48	68	96	152
B22M-251-M-36	1493	12744	120	172	240	385

NOTES:

1. All data is typical.
2. Force testing is done with the solenoid in the horizontal position.
3. All data reflects operation with no heatsink.
4. Magnetic latching versions available. Pull versions standard; push versions available.
5. Other coil terminations available.
6. All specifications subject to change without notice.

Force values for reference only.

All specifications subject to change without notice.

Ledex® Box Frame Size B22M-L — DC Operation

Magnetic Latching

Part Number: B22M - L - **X** **XX** - M- 36

Coil Selection
(from performance chart below)

Pole Configuration
1 Flat Face
2 60° Conical

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Specifications

Operation	Pull
Dielectric Strength	1500 VRMS for one second
Unlatch Voltage	See schematic and coil data below
Magnet Hold Force*	
Flat Face:	22 N (with return spring)
60° Conical:	4.5 N (with return spring)
Coil Insulation	Class " B": 130°C max. (standard); other temperature classes available
Coil Termination	3/16" QC
Spring Force	0.4 N/mm; 4.8 N latched position
Plunger Pole Face	Flat face with return spring 60° with return spring (other options available)
Plunger Weight	35.2 g
Total Weight	212.8 g
Dimensions	See page H34

*In no power, latched position.

Performance

Maximum Duty Cycle	Unlatched			
	Voltage	50%	25%	10%
Maximum ON Time (sec)	n/a	485	167	47
Watts (@ 20°C)	9.9	19.8	39.6	99
Ampere Turns (@ 20°C)	1046	1482	2093	3314

Coil Data

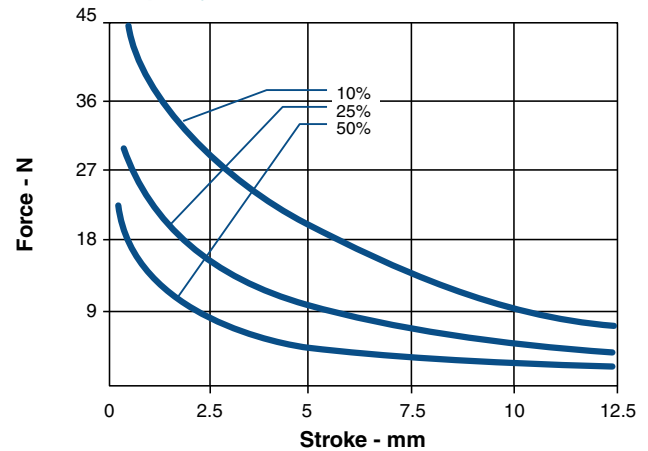
Part Number	Resistance (@20°C)	Ref # Turns	Unlatch VDC	VDC (Nom)	VDC (Nom)	VDC (Nom)
B22M-L-X55-M-36	3.64	635	6	8.5	12	19
B22M-L-X54-M-36	14.55	1300	12	17	24	38
B22M-L-X53-M-36	58.18	2578	24	34	48	76
B22M-L-X52-M-36	232.73	5103	48	68	96	152
B22M-L-X51-M-36	1493.00	12744	120	172	240	385

NOTES:

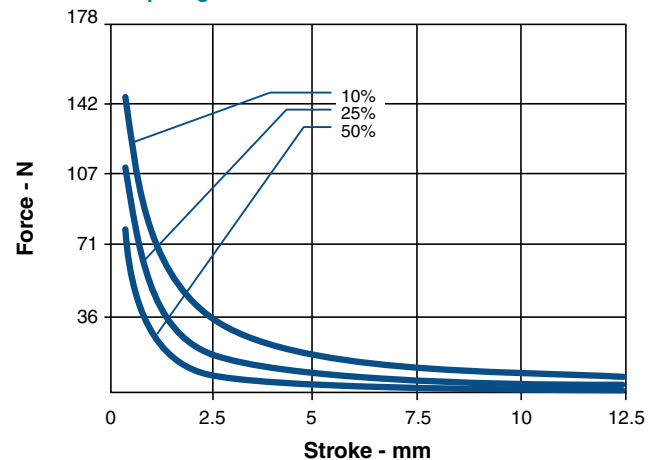
- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Other coil terminations available.
- All specifications subject to change without notice.

Force values for reference only.

Typical Force @ 20°C – 60° Armature (Net, with Spring)

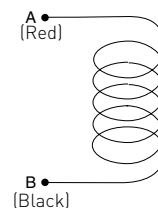


Typical Force @ 20°C – Flat Face Armature (Net, with Spring)



Coil Polarity

Latch: A+ B-
Unlatch: A- B+



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle flat face unit rated at 48 VDC, specify B22M-L-153-M-36.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

All specifications subject to change without notice.

LINEAR Open Frame

Ledex® Box Frame Size B27M — DC Operation

Part Number: B27M - **XXX** - A-3

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	100% at 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	22.12 N at 20°C
Coil Insulation	Class "A": 105°C max. temperature standard. Other temperature classes are available
Coil Termination	250 mm PVC lead wires
Plunger Weight	20.4 g
Total Weight	90.7 g
Dimensions	See page H35

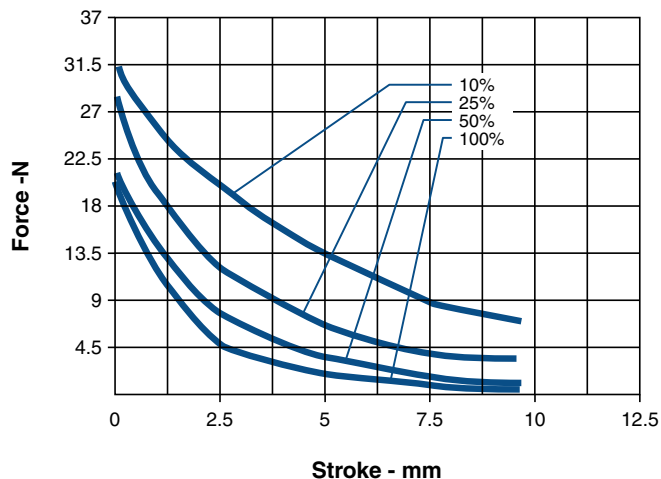
Performance

Maximum Duty Cycle	100%	50%	25%	10%		
Maximum ON Time (sec) when pulsed continuously	∞	190	62	19		
Maximum ON Time (sec) for single pulse	∞	480	180	45		
Watts (@ 20°C)	7.2	14.4	28.8	72.2		
Ampere Turns (@ 20°C)	918	1300	1836	2907		
Coil Data						
Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
B27M-255-A-3	5	765	6	8.5	12	19
B27M-254-A-3	20	1533	12	17	24	38
B27M-253-A-3	80	3060	24	34	48	76
B27M-252-A-3	320	6120	48	68	96	152
B27M-251-A-3	2000	15300	120	170	240	380

NOTES:

- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Other coil terminations available.
- All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify B27M-253-A-3.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

Ledex® Box Frame Size B41M — DC Operation

Part Number: B41M - **XXX** - B- 1

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	100% at 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	71.2 N at 20°C
Coil Insulation	Class "A": 105°C max. temperature standard . Other temperature classes are available
Coil Termination	Solder lugs
Plunger Weight	158.8 g
Total Weight	878.9 g
Dimensions	See page H35

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	95	60	14
Maximum ON Time (sec) for single pulse	∞	1548	491	139
Watts (@ 20°C)	19	38	76	190
Ampere Turns (@ 20°C)	1981	2807	3963	6274

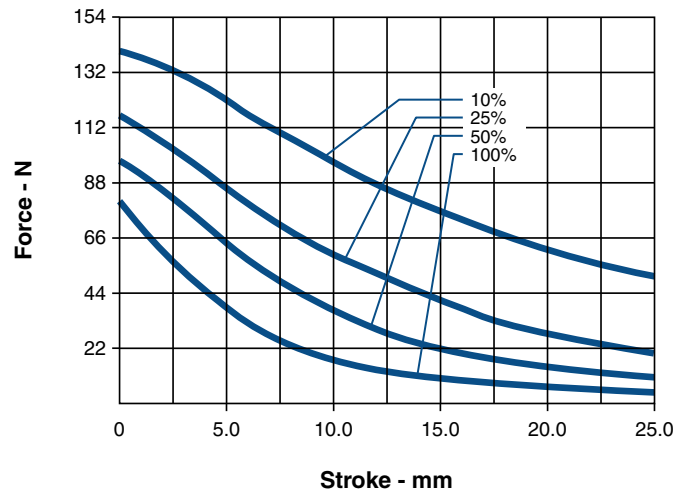
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
B41M-255-B-1	1.84	608	6	8.5	12	19
B41M-254-B-1	7.67	1432	12	17	24	38
B41M-253-B-1	30.19	2814	24	34	48	76
B41M-252-B-1	121.5	5610	48	68	96	152
B41M-251-B-1	793.46	14259	120	173	240	388

NOTES:

- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Magnetic latching versions available. Pull versions standard; push versions available.
- Other coil terminations available.
- All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify B41M-253-B-1.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

LINEAR Open Frame

Ledex® Box Frame Size B75M — DC Operation

Part Number: B75M - XXX - B-3

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	100% at 20°C ambient temperature
Intermittent Duty Cycle	See chart
Holding Force	20 N at 20°C
Coil Insulation	Class "B": 130°C max. temperature standard
Coil Termination	Lead wires
Plunger Weight	30 g
Total Weight	160 g
Dimensions	See page H36

● Well-suited for battery operation.



See the "Battery Operated Solenoids" section for complete information.

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	90	27	5
Maximum ON Time (sec) for single pulse	∞	436	144	36
Watts (@ 20°C)	6	12	24	60
Ampere Turns (@ 20°C)	800	1133	1500	2528

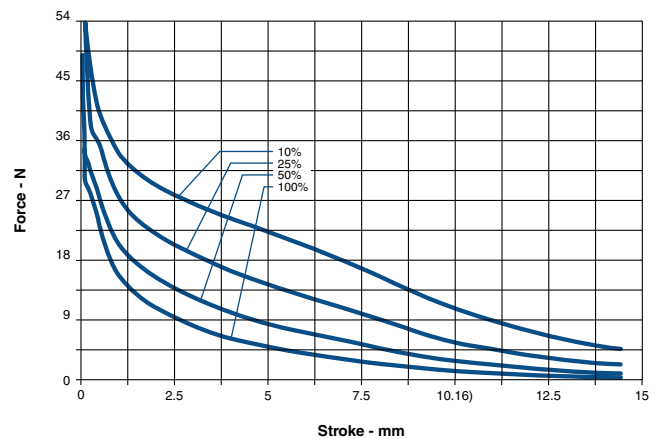
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
B75M-255-B-3	5.9	800	6	8.4	11.9	18.8
B75M-254-B-3	24	1600	12	17	24	38
B75M-253-B-3	96	3280	24	34	48	76
B75M-252-B-3	384	6480	48	67.9	96	153

NOTES:

- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Magnetic latching versions available. Pull versions standard; push versions available.
- Other coil terminations available.
- All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify B75M-253-B-3.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

Force values for reference only.

All specifications subject to change without notice.

Ledex® C Frame Size C5M — DC Operation

Part Number: C5M - **XXX** - B- 1

Select from performance chart below

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Specifications

Operation	Pull
Dielectric Strength	500 VRMS for one second
Continuous Duty Cycle	100% At 20°C ambient temperature
Intermittent Duty Cycle	See below
Coil Insulation	Class "B": 130°C max. temperature standard. Other temperature classes are available
Coil Termination	0.025 inch square pin terminals
Plunger Pole Face	60° conical
Plunger Weight	2.2 g
Total Weight	11.9 g
Dimensions	See page H37

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec)	∞	145	47	14
Watts (@ 20°C)	3	6	12	30
Ampere Turns (@ 20°C)	422	564	844	1268

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
C5M-273-B-1	2.88	406	3	4	6	9
C5M-272-B-1	11.52	795	6	8	12	19
C5M-271-B-1	25.77	1222	9	12	18	28
C5M-270-B-1	48.65	1642	12	17	24	38
C5M-269-B-1	72.84	1968	15	21	30	47
C5M-268-B-1	152.20	2860	21	30	43	68
CM5-267-B-1	191.73	3202	24	34	48	76

NOTES:

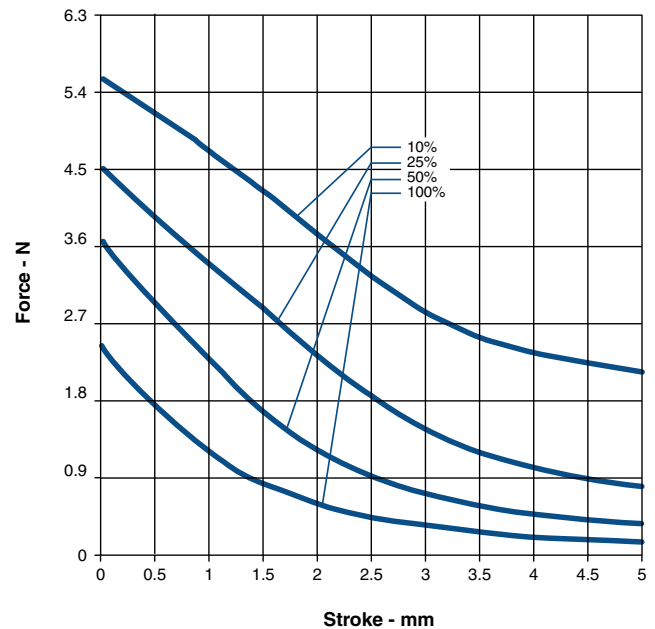
1. All data is typical.
2. Force testing is done with the solenoid in the horizontal position.
3. All data reflects operation with no heatsink.
4. Other coil terminations available.
5. All specifications subject to change without notice.

- Well-suited for battery operation.



See the "Battery Operated Solenoids" section for complete information.

Force (Gross, Without Spring)



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify C5M-267-B-1.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

LINEAR Open Frame

Force values for reference only.

All specifications subject to change without notice.

Ledex® C Frame Size C5M-L — DC Operation

Magnetic Latching

Part Number: C5M - L - **XXX** - B - 1

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Operation	Pull
Dielectric Strength	500 VRMS for one second
Unlatch Voltage	See schematic and coil data below
Magnet Hold Force*	5.7 N (with return spring)
Coil Insulation	Class "B": 130°C max. temperature standard. Other temperature classes are available
Coil Termination	0.025 inch square pin terminals
Plunger Pole Face	Flat face with return spring (other options available upon request)
Spring Force	0.1 N/mm; 0.7 N latched position
Plunger Weight	2.8 g
Total Weight	11.9 g
Dimensions	See page H37

*In no power, latched position.

Performance

Maximum Duty Cycle	Unlatch			
	Voltage	50%	25%	10%
Maximum ON Time (sec)	∞	145	47	14
Watts (@ 20°C)	3	6	12	30
Ampere Turns (@ 20°C)	422	564	844	1268

Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
C5M-L-273-B-1	2.88	406	3	4	6	9
C5M-L-272-B-1	11.52	795	6	8	12	19
C5M-L-271-B-1	25.77	1222	9	12	18	28
C5M-L-270-B-1	48.65	1642	12	17	24	38
C5M-L-269-B-1	72.84	1968	15	21	30	47
C5M-L-268-B-1	152.20	2860	21	30	43	68
C5M-L-267-B-1	191.73	3202	24	34	48	76

NOTES:

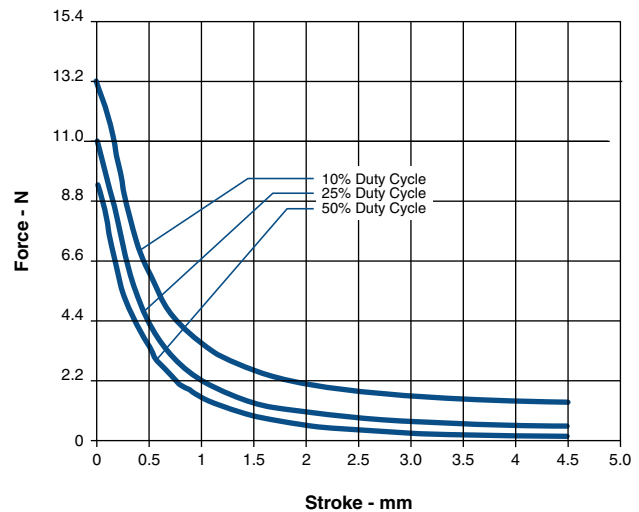
1. All data is typical.
2. Force testing is done with the solenoid in the horizontal position.
3. All data reflects operation with no heatsink.
4. Other coil terminations available.
5. All specifications subject to change without notice.

- Well-suited for battery operation.



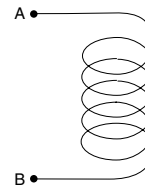
See the "Battery Operated Solenoids" section for complete information.

Force (Net, With Spring)



Coil Polarity

Latch: A+ B-
Unlatch: A- B+



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify C5M-L-267-B-1.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

Force values for reference only.

All specifications subject to change without notice.

Ledex® C Frame Size C8M — DC Operation

Part Number: C8M - **XXX** - M-36

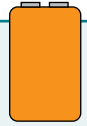
All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	100% at 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	9.96 N at 20°C
Coil Insulation	Class "A": 105°C max. temperature standard. Other temperature classes are available
Coil Termination	3/16" QC
Plunger Weight	11.3 g
Total Weight	45.4 g
Dimensions	See page H38

- Well-suited for battery operation.



See the "Battery Operated Solenoids" section for complete information.

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	19	9	3
Maximum ON Time (sec) for single pulse	∞	286	92	27
Watts (@ 20°C)	3.6	7	14	35
Ampere Turns (@ 20°C)	464	657	929	1470

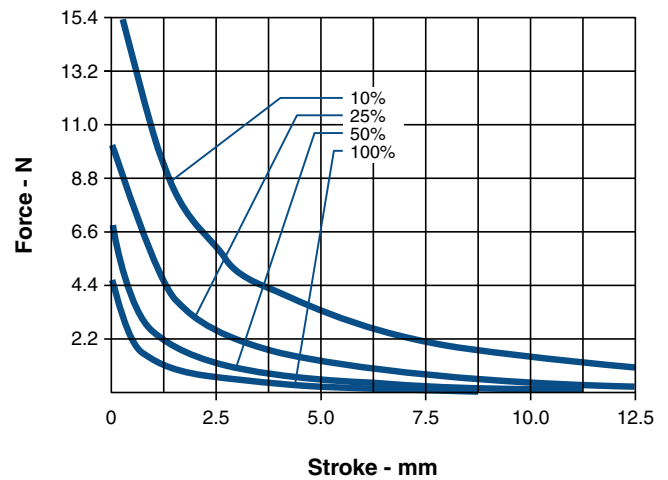
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
C8M-276-M-36	2.56	404	3.0	4.2	5.9	9.3
C8M-274-M-36	23.2	1252	9.0	12.7	18.0	28.5
C8M-273-M-36	9.30	752	6	8.5	12	19
C8M-272-M-36	37.12	1581	12	17	24	38
C8M-271-M-36	150.73	2736	24	34	48	76
C8M-270-M-36	621.54	5544	48	68	96	152
C8M-269-M-36	3824	15035	120	164	231	366

NOTES:

- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Magnetic latching versions available. Pull versions standard; push versions available.
- Other coil terminations available.
- All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify C8M-271-M-36.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

Force values for reference only.

All specifications subject to change without notice.

Ledex® C Frame Size C9M — DC Operation

Part Number: C9M - **XXX** - A-3

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	100% at 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	19.6 N at 20°C
Coil Insulation	Class "A": 105°C max. temperature standard. Other temperature classes are available
Coil Termination	Leadwires
Plunger Weight	21.8 g
Total Weight	128.7 g
Dimensions	See page H38

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	38	17	4
Maximum ON Time (sec) for single pulse	∞	497	160	42
Watts (@ 20°C)	7	14	28	70
Ampere Turns (@ 20°C)	721	1022	1444	2286

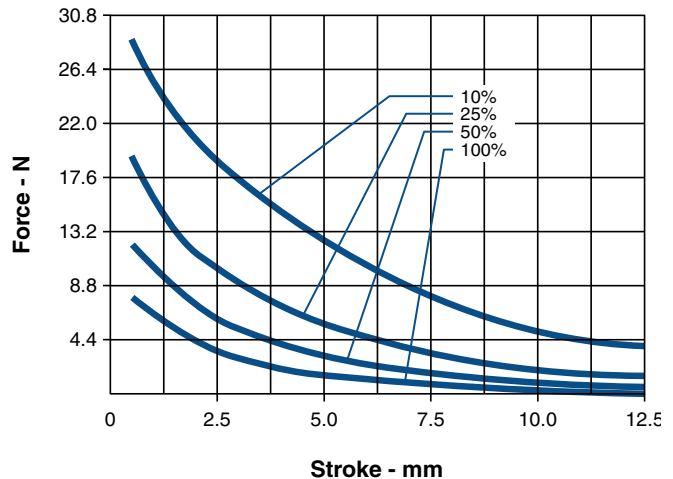
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
C9M-273-A-3	5.05	648	6	8.5	12	19
C9M-272-A-3	19.88	1275	12	17	24	38
C9M-271-A-3	78.41	2502	24	34	48	76
C9M-270-A-3	338.48	4641	48	68	96	152
C9M-269-A-3	2081	11187	120	170	240	381

NOTES:

- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Magnetic latching versions available. Pull versions standard; push versions available.
- Other coil terminations available.
- All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify C9M-271-A-3.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

LINEAR Open Frame

Force values for reference only.

All specifications subject to change without notice.

Ledex® C Frame Size C15M — DC Operation

Part Number: C15M - **XXX** - A- 3

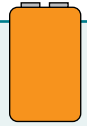
All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	At 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	11.1 N at 20°C
Coil Insulation	Class "A": 105°C max. temperature, standard
Coil Termination	Lead wires
Plunger Weight	14.2 g
Total Weight	70.9 g
Dimensions	See page H39

- Well-suited for battery operation.



See the "Battery Operated Solenoids" section for complete information.

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	28	11	4
Maximum ON Time (sec) for single pulse	∞	217	72	24
Watts (@ 20°C)	4.5	9	18	45
Ampere Turns (@ 20°C)	617	870	1229	1947

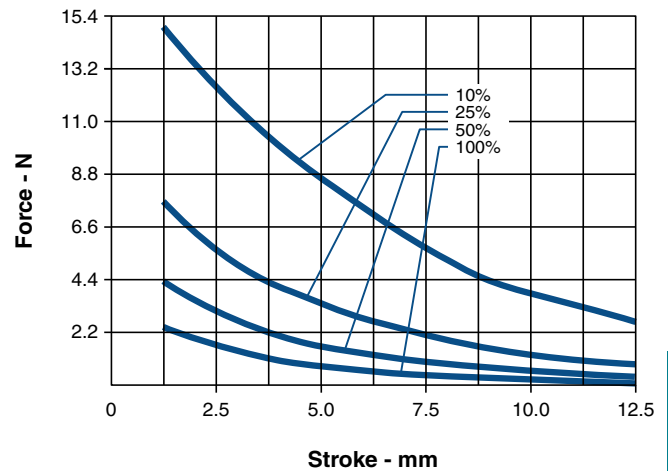
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
C15M-273-A-3	7.77	855	6	8.5	12	19
C15M-272-A-3	22.4	1749	12	17	24	38
C15M-271-A-3	123.02	3330	24	33	48	74
C15M-270-A-3	514	5985	48	68	96	152
C15M-269-A-3	3106	14690	120	170	240	381

NOTES:

- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Magnetic latching versions available. Pull versions standard; push versions available.
- Other coil terminations available.
- All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify C15M-271-A-3.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

Force values for reference only.

All specifications subject to change without notice.

Ledex® C Frame Size C26M — DC Operation

Part Number: C26M - **XXX** - M-36

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	100% at 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	12.2 N at 20°C
Coil Insulation	Class "A": 105°C max. temperature standard. Other temperature classes are available
Coil Termination	3/16" QC
Plunger Weight	14.2 g
Total Weight	87.9 g
Dimensions	See page H39

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	31	14	5
Maximum ON Time (sec) for single pulse	∞	554	189	56
Watts (@ 20°C)	7	14	28	70
Ampere Turns (@ 20°C)	963	1364	1926	3050

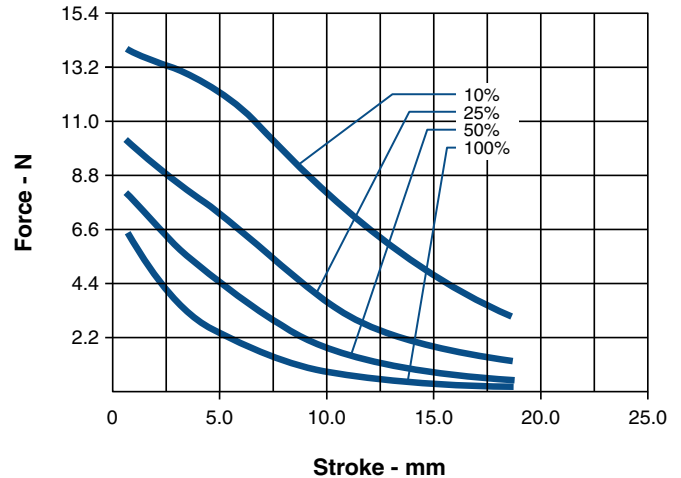
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
C26M-273-M-36	5.45	874	6	8.5	12	19
C26M-272-M-36	20.75	1672	12	17	24	38
C26M-271-M-36	81.13	3255	24	34	48	76
C26M-270-M-36	311.42	6235	48	68	96	152
C26M-269-M-36	2092	14117	120	171	240	382

NOTES:

- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Magnetic latching versions available. Pull versions standard; push versions available.
- Other coil terminations available.
- All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify C26M-271-M-36.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

Ledex® C Frame Size C33M — DC Operation

Part Number: C33M - **XXX** - M-33

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	At 20°C ambient temperature.
Intermittent Duty Cycle	See below
Holding Force	18.9 N at 20°C
Coil Insulation	Class "A": 105°C max. temperature standard. Other temperature classes are available
Coil Termination	1/4" QC
Plunger Weight	14.2 g
Total Weight	110.6 g
Dimensions	See page H40

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	38	16	6
Maximum ON Time (sec) for single pulse	∞	379	145	38
Watts (@ 20°C)	7	14	28	70
Ampere Turns (@ 20°C)	828	1172	1656	2622

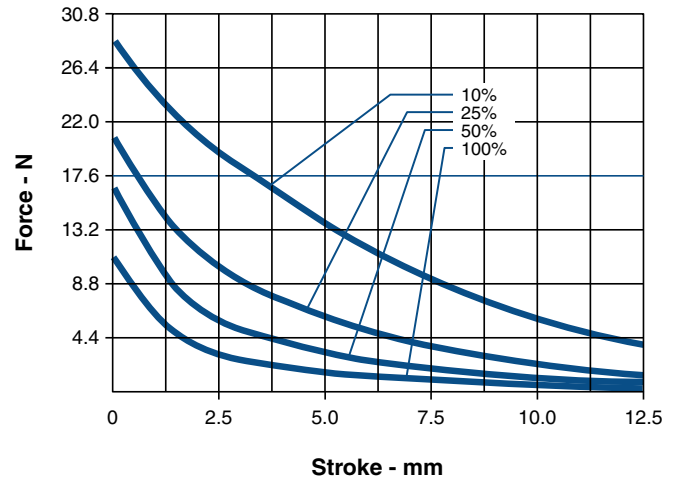
Coil Data

Part Number (Nom)	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
C33M-273-M-33	5.38	747	6	8.5	12	19
C33M-272-M-33	21.00	1458	12	17	24	38
C33M-271-M-33	81.20	2812	24	34	48	76
C33M-270-M-33	329.25	5616	48	68	96	152
C33M-269-M-33	2043	13623	120	169	240	378

NOTES:

- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Magnetic latching versions available. Pull versions standard; push versions available.
- Other coil terminations available.
- All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify C33M-271-M-33.

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

LINEAR Open Frame

Ledex® C Frame Size C34M — DC Operation

Part Number: C34M - **XXX** - M-33

All catalogue products manufactured after April 1, 2006 are RoHS Compliant

Select from performance chart below

Specifications

Continuous Duty Cycle	At 20°C ambient temperature
Intermittent Duty Cycle	See below
Holding Force	26.7 N at 20°C
Coil Insulation	Class "A": 105°C max. temperature standard. Other temperature classes are available
Coil Termination	1/4" QC
Plunger Weight	34 g
Total Weight	192.8 g
Dimensions	See page H40

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously	∞	45	20	7
Maximum ON Time (sec) for single pulse	∞	453	160	47
Watts (@ 20°C)	10	20	40	100
Ampere Turns (@ 20°C)	1188	1684	2377	3763

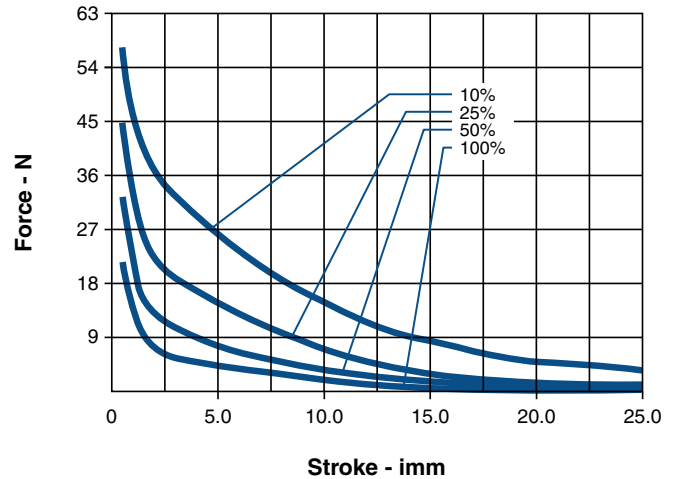
Coil Data

Part Number	Resistance (@20°C)	Ref # Turns	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
C34M-273-M-33	3.64	632	6	8.5	12	19
C34M-272-M-33	14.47	1224	12	17	24	38
C34M-271-M-33	57.65	2424	24	34	48	76
C34M-270-M-33	229.17	4777	48	68	96	152
C34M-269-M-33	1428	11907	120	169	240	378

NOTES:

- All data is typical.
- Force testing is done with the solenoid in the horizontal position.
- All data reflects operation with no heatsink.
- Magnetic latching versions available. Pull versions standard; push versions available.
- Other coil terminations available.
- All specifications subject to change without notice.

Typical Force @ 20°C



How to Order

Select the part number from the table provided. (For example, to order a 25% duty cycle unit rated at 48 VDC, specify C34M-271-M-33.

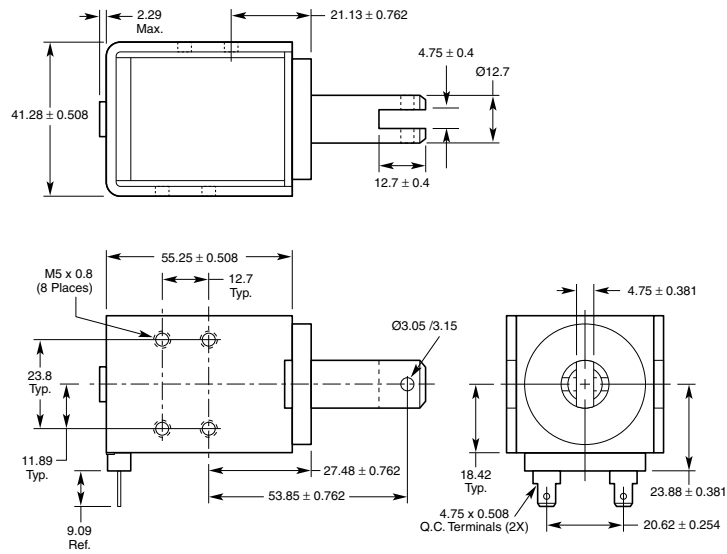
Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our distributors.

Ledex® Box Frame Dimensions

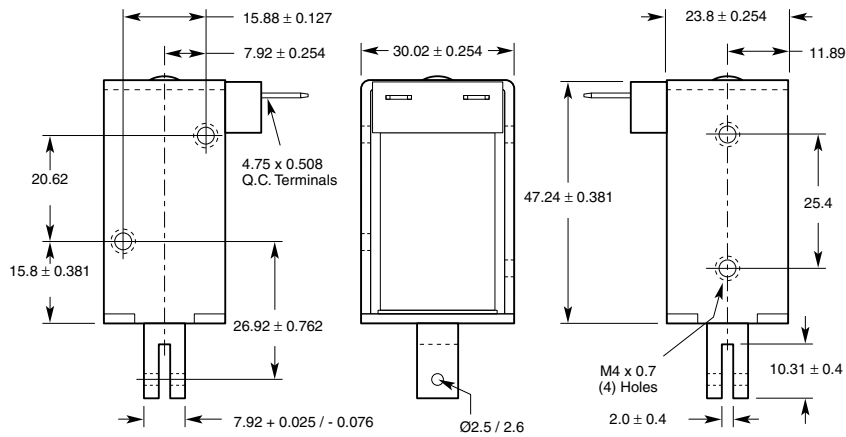
mm

All solenoids are illustrated in energised state

B4HDM



B11M



LINEAR Open Frame

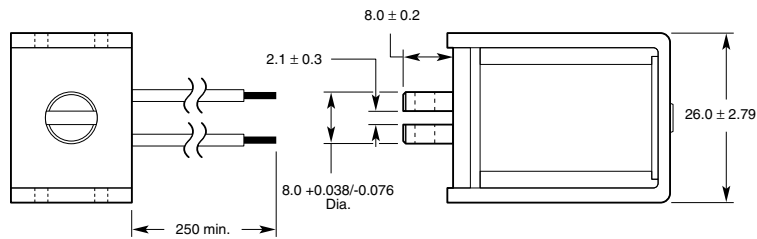
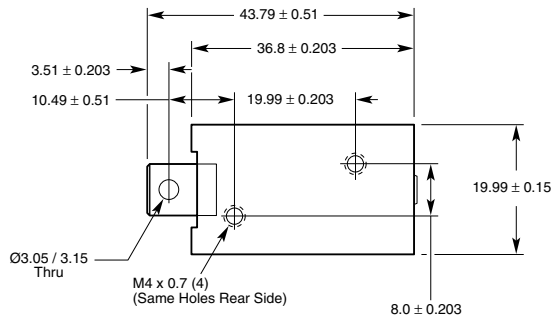
All specifications subject to change without notice.

Ledex® Box Frame Dimensions

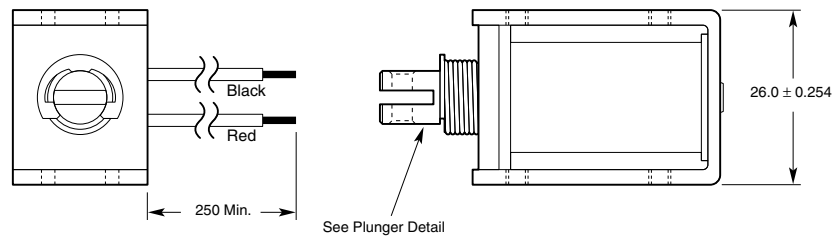
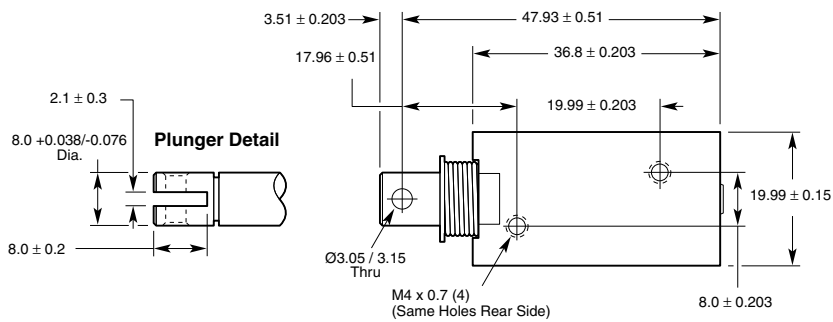
mm

All solenoids are illustrated in energised state

B14M



B14M-L



LINEAR Open Frame

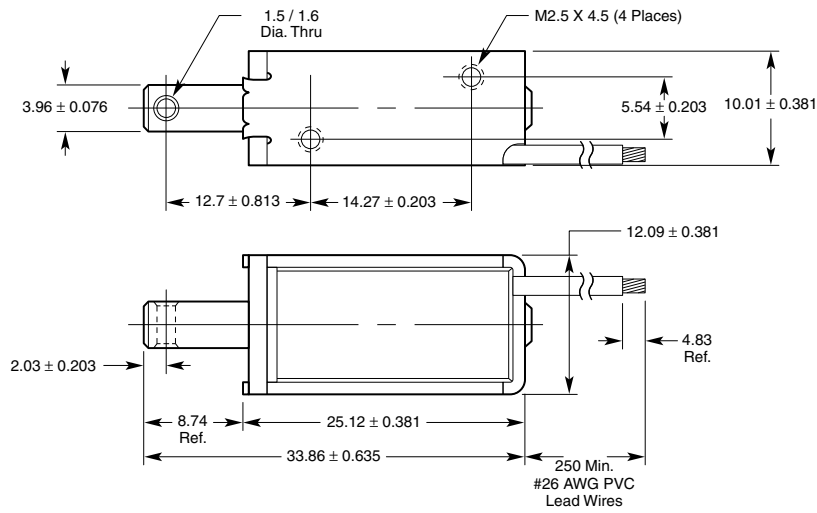
All specifications subject to change without notice.

Ledex® Box Frame Dimensions

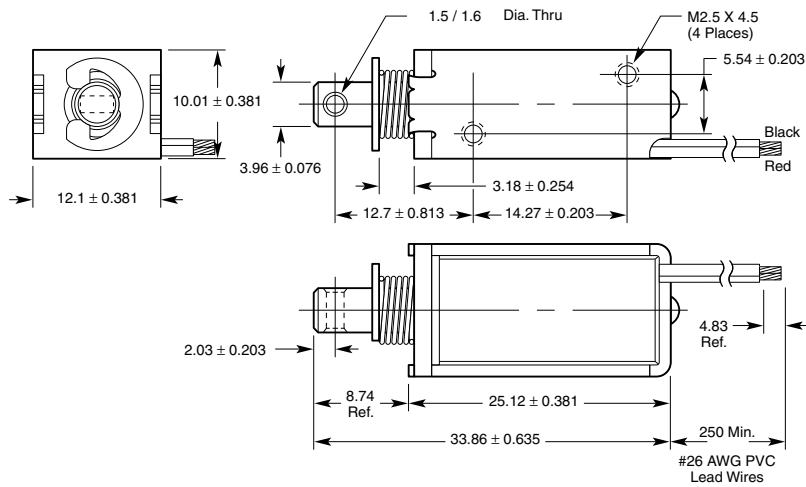
mm

All solenoids are illustrated in energised state

B16M



B16M-L



LINEAR Open Frame

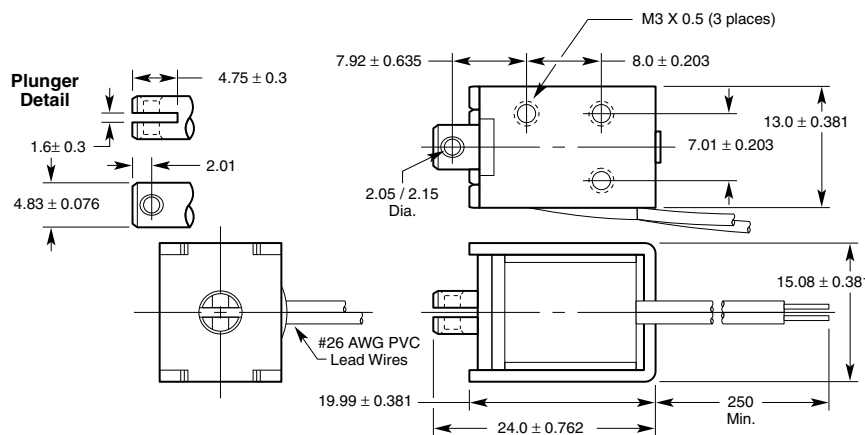
All specifications subject to change without notice.

Ledex® Box Frame Dimensions

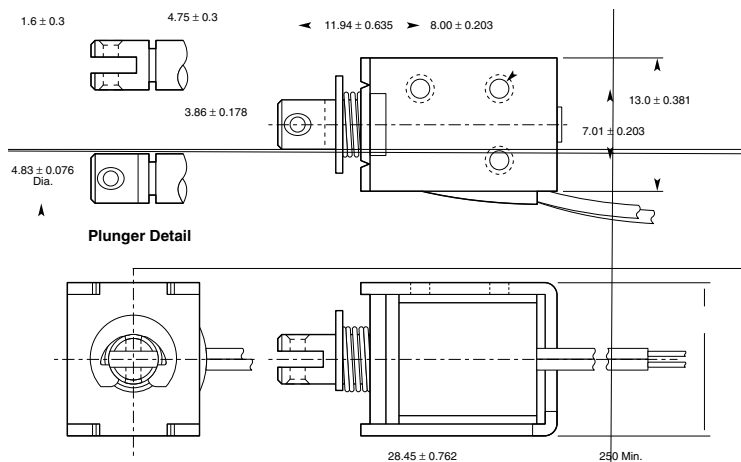
mm

All solenoids are illustrated in energised state

B17M



B17M-L



LINEAR Open Frame

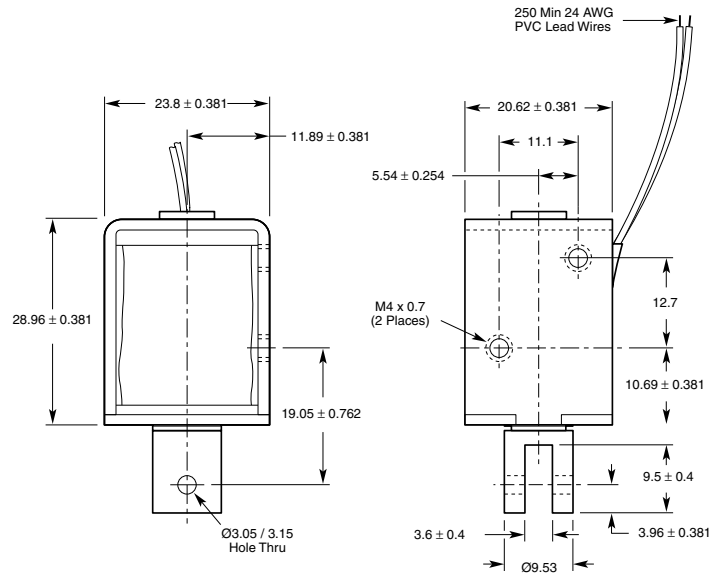
All specifications subject to change without notice.

Ledex® Box Frame Dimensions

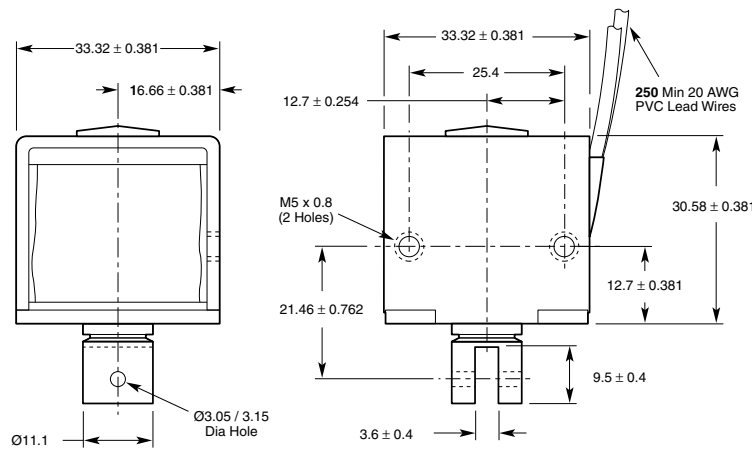
mm

All solenoids are illustrated in energised state

B20M



B21M



LINEAR Open Frame

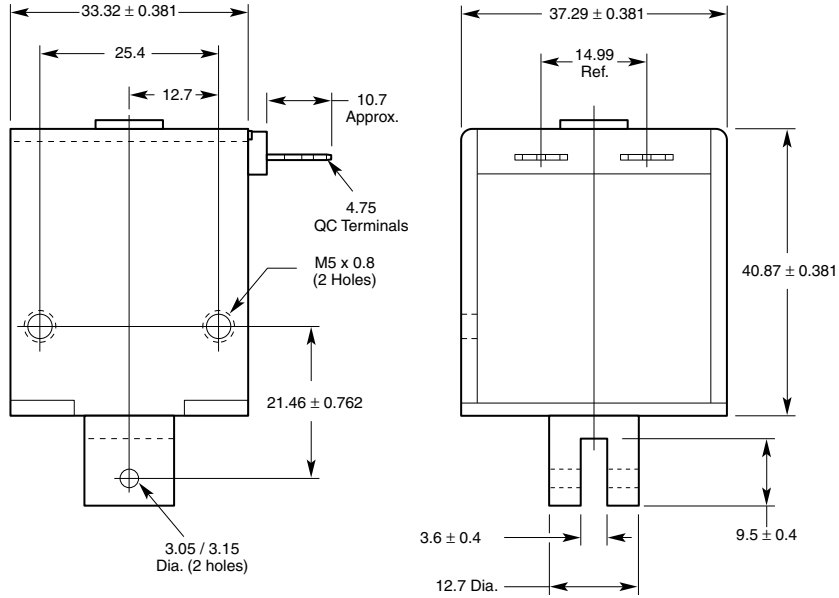
All specifications subject to change without notice.

Ledex® Box Frame Dimensions

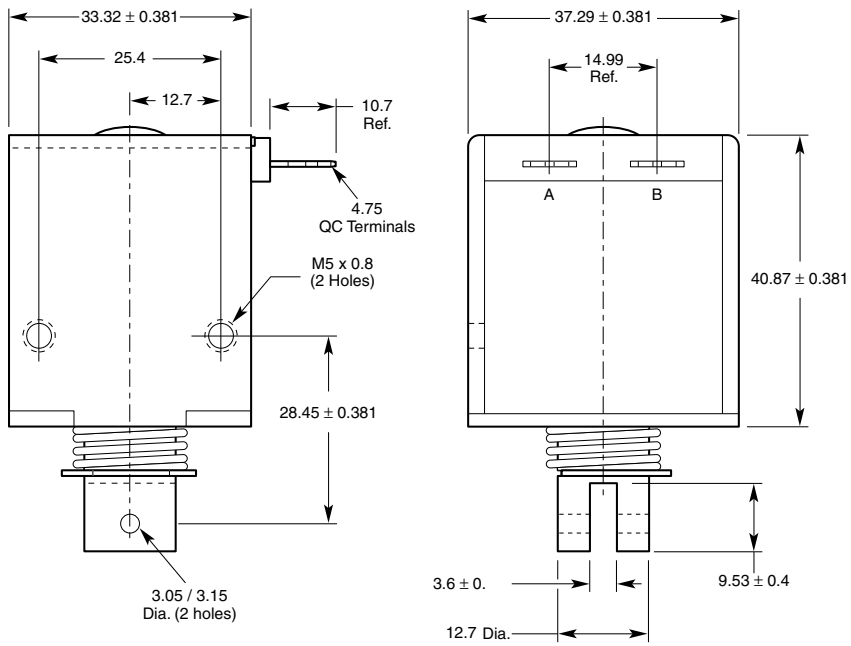
mm

All solenoids are illustrated in energised state

B22M



B22M-L



LINEAR Open Frame

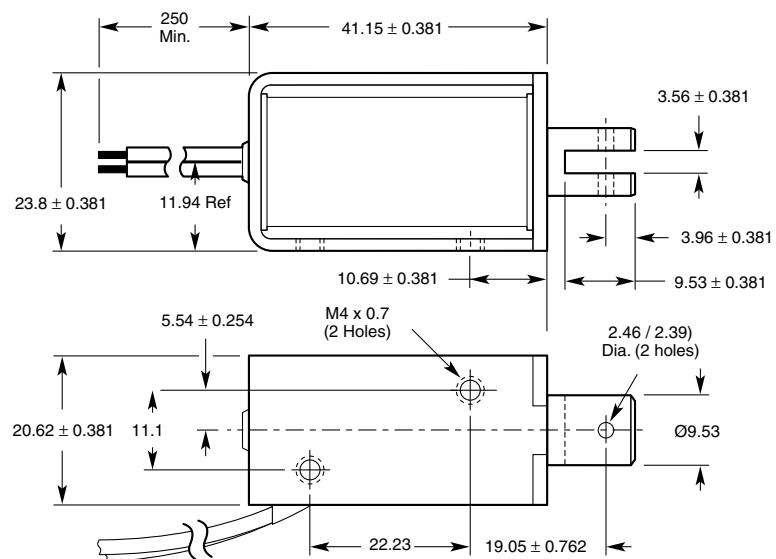
All specifications subject to change without notice.

Ledex® Box Frame Dimensions

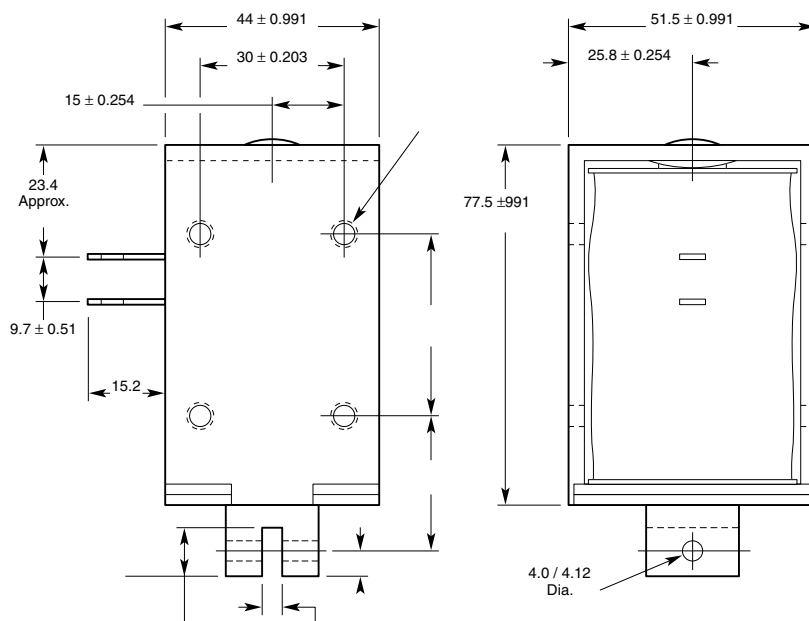
mm

All solenoids are illustrated in energised state

B27M



B41M



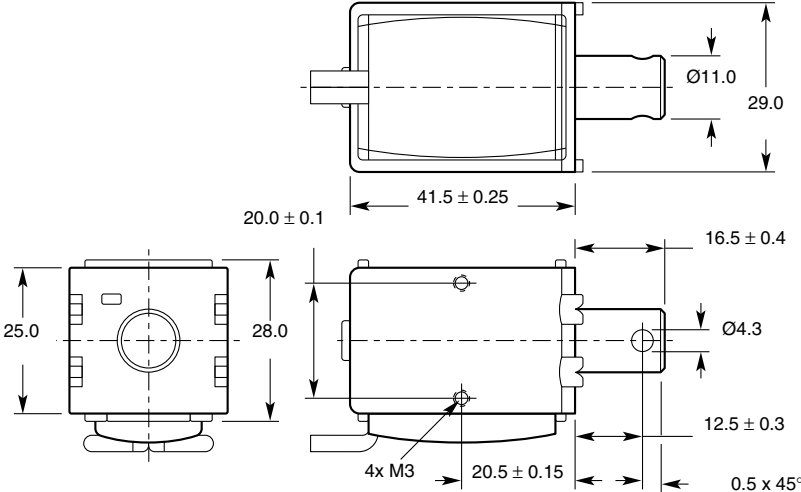
LINEAR Open Frame

Ledex® Box Frame Dimensions

mm

All solenoids are illustrated in energised state

B75M



LINEAR Open Frame

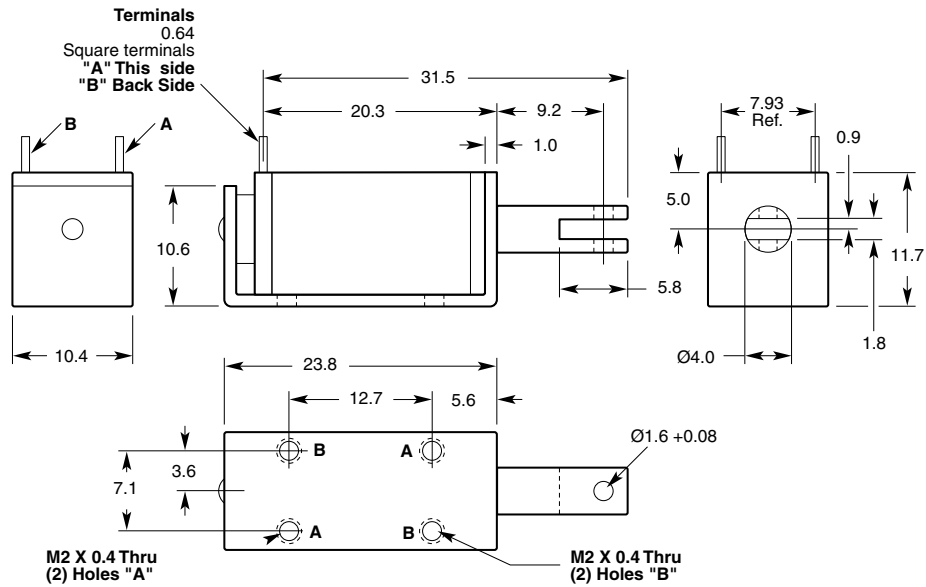
All specifications subject to change without notice.

Ledex® C Frame Dimensions

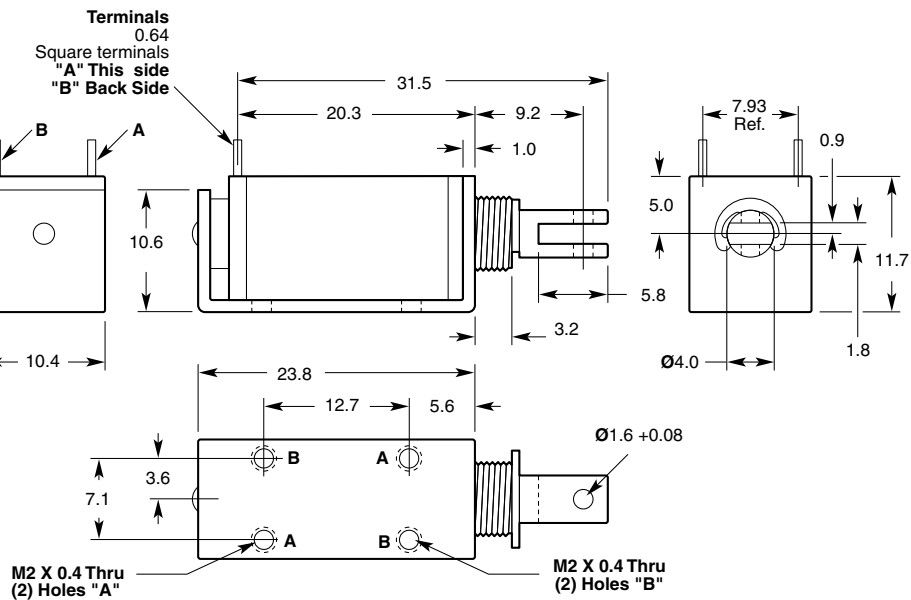
mm

All solenoids are illustrated in energised state

C5M



C5M-L



LINEAR Open Frame

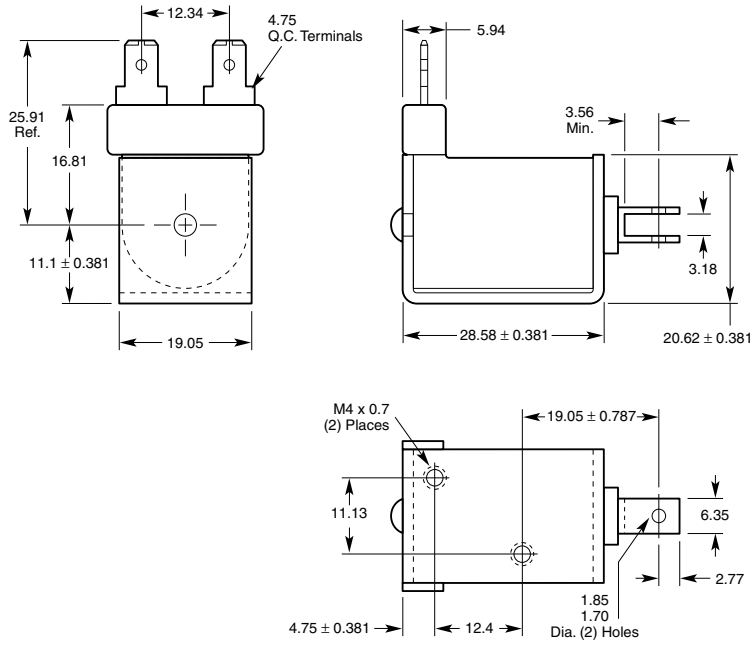
All specifications subject to change without notice.

Ledex® C Frame Dimensions

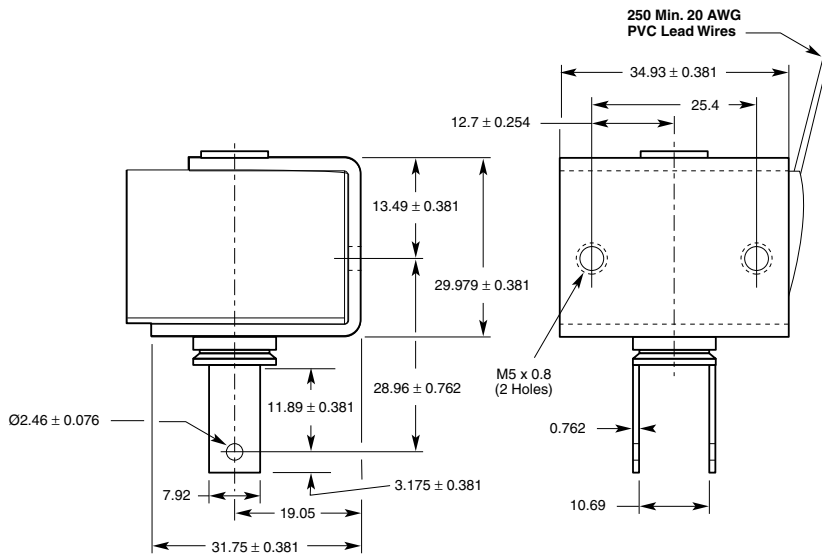
mm

All solenoids are illustrated in energised state

C8M



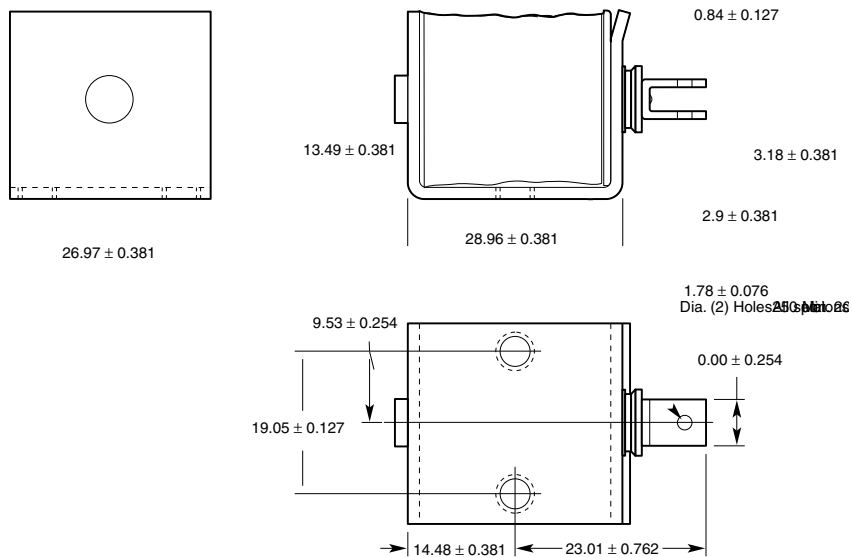
C9M



All specifications subject to change without notice.

Ledex® C Frame Dimensions

C15M



C26M

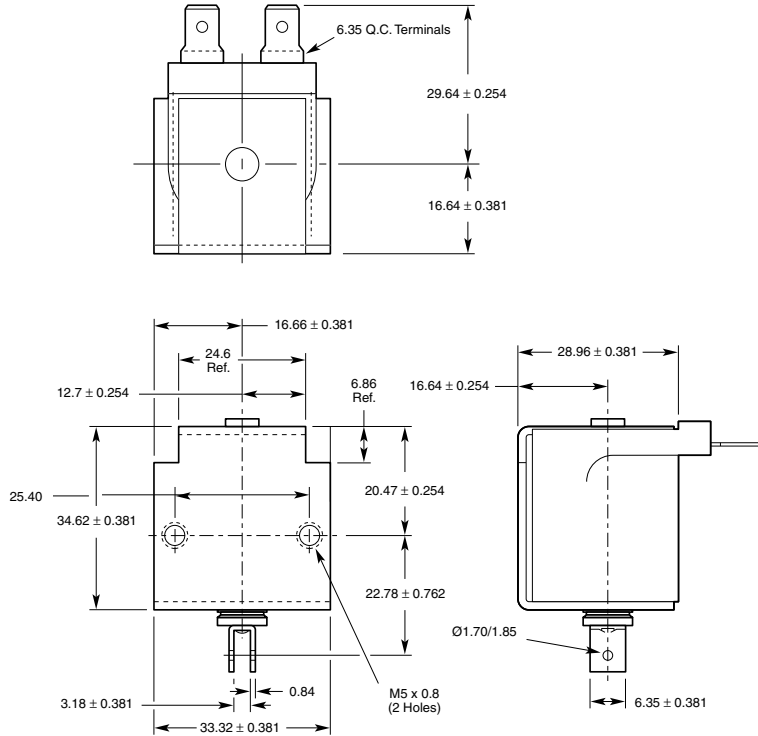
LINEAR Open Frame

Ledex® C Frame Dimensions

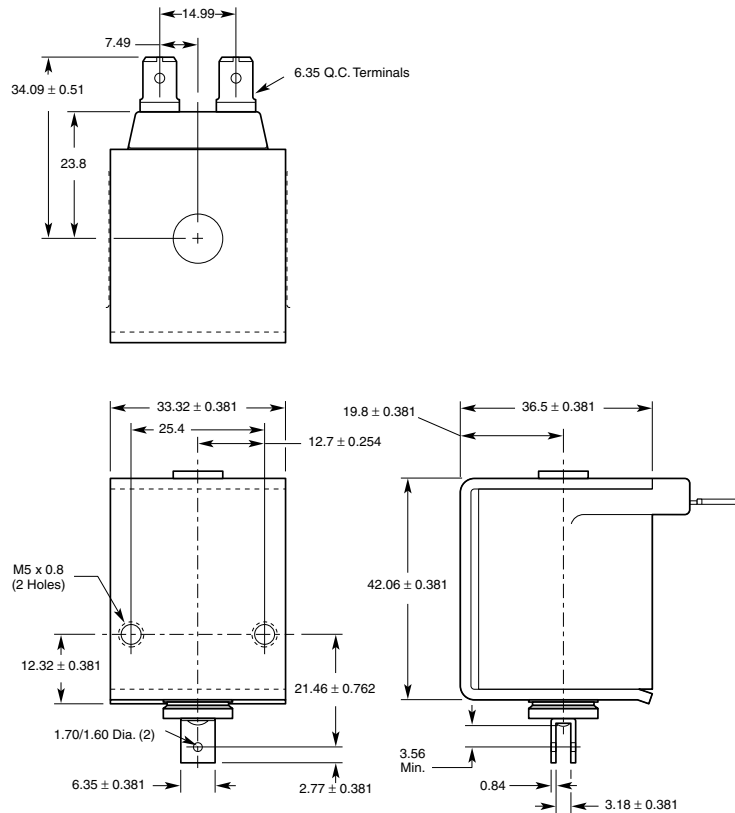
mm

All solenoids are illustrated in energised state

C33M



C34M



LINEAR Open Frame

All specifications subject to change without notice.