

Rotary Solenoids

Rotary Solenoids

Type	3B	3E	4E	5B	5S
Dimensions (mm)	Ø 33 × 22	Ø 33 × 20	Ø 40 × 24	Ø 48 × 26	Ø 48 × 27
Duty cycle	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent
Characteristics	<ul style="list-style-type: none"> ■ “Snap” acting engagement ■ maximum versatility ■ on/off operation 	<ul style="list-style-type: none"> ■ “Snap” acting engagement ■ maximum versatility ■ on/off operation 	<ul style="list-style-type: none"> ■ “Snap” acting engagement ■ maximum versatility ■ on/off operation 	<ul style="list-style-type: none"> ■ “Snap” acting engagement ■ maximum versatility ■ on/off operation 	<ul style="list-style-type: none"> ■ “Snap” acting engagement ■ maximum versatility ■ on/off operation
Life	1 M cycles	1 M cycles	1 M cycles	1 M cycles	1 M cycles
Power (W)	10–200	9–180	12.5–250	21–420	21–420
Voltage	2.6–123 VDC	2.6–118 VDC	4.3–187 VDC	6.1–273 VDC	6.1–271 VDC

Rotary Solenoids

Rotary Solenoids

Type	6S	7S
Dimensions (mm)	Ø 57 × 34	Ø 70 × 45
Duty cycle	continuous or intermittent	continuous or intermittent
Characteristics	<ul style="list-style-type: none"> ■ “Snap” acting engagement ■ maximum versatility ■ on/off operation 	<ul style="list-style-type: none"> ■ “Snap” acting engagement ■ maximum versatility ■ on/off operation
Life	1 M cycles	1 M cycles
Power (W)	32–640	35–700
Voltage	10.3–469 VDC	16.3–463 VDC

Linear Solenoids

Soft Shift®



Type	2EPM	3EPM	4EPM	5EPM	6EPM
Dimensions (mm)	Ø 29 × 25	Ø 33 × 31	Ø 40 × 37	Ø 48 × 49	Ø 48 × 49
Duty cycle	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent
Characteristics	<ul style="list-style-type: none"> ■ quiet operation with 3-5 time the starting force of standard solenoids ■ slow, smooth motion ■ snap action ■ closed loop velocity and position control 	<ul style="list-style-type: none"> ■ quiet operation with 3-5 time the starting force of standard solenoids ■ slow, smooth motion ■ snap action ■ closed loop velocity and position control 	<ul style="list-style-type: none"> ■ quiet operation with 3-5 time the starting force of standard solenoids ■ slow, smooth motion ■ snap action ■ closed loop velocity and position control 	<ul style="list-style-type: none"> ■ quiet operation with 3-5 time the starting force of standard solenoids ■ slow, smooth motion ■ snap action ■ closed loop velocity and position control 	<ul style="list-style-type: none"> ■ quiet operation with 3-5 time the starting force of standard solenoids ■ slow, smooth motion ■ snap action ■ closed loop velocity and position control
Life	1 M cycles	1 M cycles	1 M cycles	1 M cycles	1 M cycles
Power (W)	7–70	9–90	12.5–125	21–210	32–320
Voltage	2.2–91 VDC	2.6–83 VDC	4.3–132 VDC	7.2–226 VDC	12.3–394 VDC

Linear Solenoids

Tubular



Type	STA Pull 13 × 27	STA Push 13 × 27	STA Pull 20 × 39	STA Push 20 × 39	STA Pull 26 × 52
Dimensions (mm)	Ø 13 × 27	Ø 13 × 27	Ø 20 × 39	Ø 20 × 39	Ø 26 × 52
Duty cycle	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent
Characteristics	<ul style="list-style-type: none"> ■ push/pull engagement; well-suited to lock/latch operations ■ multiple plunger designs ■ on/off operation 	<ul style="list-style-type: none"> ■ push/pull engagement; well-suited to lock/latch operations ■ multiple plunger designs ■ on/off operation 	<ul style="list-style-type: none"> ■ push/pull engagement; well-suited to lock/latch operations ■ multiple plunger designs ■ on/off operation 	<ul style="list-style-type: none"> ■ push/pull engagement; well-suited to lock/latch operations ■ multiple plunger designs ■ on/off operation 	<ul style="list-style-type: none"> ■ push/pull engagement; well-suited to lock/latch operations ■ multiple plunger designs ■ on/off operation
Life	Exceptionally high life of 25+ million cycles	Exceptionally high life of 25+ million cycles	25 M cycles	25 M cycles	25 M cycles
Power (W)	4–40	4–40	7–70	7–70	10–100
Voltage	2.4–77 VDC	2.4–77 VDC	3.9–76 VDC	3.9–76 VDC	4.4–142 VDC

Linear Solenoids

Tubular



Low Profile



Type	STA Push 26 × 52	STA 125M Pull	STA 150M Pull	0ECM	1ECM
Dimensions (mm)	Ø 26 × 52	Ø 32 × 57	Ø 38 × 63	Ø 19 × 13	Ø 25 × 14
Duty cycle	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent
Characteristics	<ul style="list-style-type: none"> push/pull engagement; well-suited to lock/latch operations multiple plunger designs on/off operation 	<ul style="list-style-type: none"> push/pull engagement; well-suited to lock/latch operations multiple plunger designs on/off operation 	<ul style="list-style-type: none"> push/pull engagement; well-suited to lock/latch operations multiple plunger designs on/off operation 	<ul style="list-style-type: none"> push/pull engagement; well-suited to lock/latch operations high force short stroke applications on/off operation 	<ul style="list-style-type: none"> push/pull engagement; well-suited to lock/latch operations high force short stroke applications on/off operation
Life	25 M cycles	1 M cycles	1 M cycles	5 M cycles	5 M cycles
Power (W)	10–100	13–130	17–170	4,5–45	5–50
Voltage	4,4–142 VDC	6,8–218 VDC	9,8–315 VDC	1,6–78 VDC	2,1–83 VDC

Linear Solenoids

Low Profile



Type	2EFM	2ECM	3EFM	3ECM	4EFM
Dimensions (mm)	Ø 29 × 15	Ø 29 × 15	Ø 33 × 18	Ø 33 × 18	Ø 40 × 21
Duty cycle	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent
Characteristics	<ul style="list-style-type: none"> push/pull engagement; well-suited to lock/latch operations high force short stroke applications on/off operation 	<ul style="list-style-type: none"> push/pull engagement; well-suited to lock/latch operations high force short stroke applications on/off operation 	<ul style="list-style-type: none"> push/pull engagement; well-suited to lock/latch operations high force short stroke applications on/off operation 	<ul style="list-style-type: none"> push/pull engagement; well-suited to lock/latch operations high force short stroke applications on/off operation 	<ul style="list-style-type: none"> push/pull engagement; well-suited to lock/latch operations high force short stroke applications on/off operation
Life	5 M cycles	5 M cycles	5 M cycles	5 M cycles	5 M cycles
Power (W)	7–70	7–70	9–90	9–90	12,5–125
Voltage	2,2–56 VDC	2,2–56 VDC	2,6–83 VDC	2,6–83 VDC	4,3–132 VDC

Linear Solenoids

Low Profile



Type	4ECM	5SFM	5ECM	6SFM	6ECM
Dimensions (mm)	Ø 40 × 21	Ø 48 × 22	Ø 48 × 26	Ø 57 × 29	Ø 57 × 34
Duty cycle	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent
Characteristics	<ul style="list-style-type: none"> ■ push/pull engagement; well-suited to lock/latch operations ■ high force ■ short stroke applications ■ on/off operation 	<ul style="list-style-type: none"> ■ push/pull engagement; well-suited to lock/latch operations ■ high force ■ short stroke applications ■ on/off operation 	<ul style="list-style-type: none"> ■ push/pull engagement; well-suited to lock/latch operations ■ high force ■ short stroke applications ■ on/off operation 	<ul style="list-style-type: none"> ■ push/pull engagement; well-suited to lock/latch operations ■ high force ■ short stroke applications ■ on/off operation 	<ul style="list-style-type: none"> ■ push/pull engagement; well-suited to lock/latch operations ■ high force ■ short stroke applications ■ on/off operation
Life	5 M cycles	5 M cycles	5 M cycles	5 M cycles	1 M cycles
Power (W)	12,5–125	21–210	21–210	32–320	32–320
Voltage	4,3–132 VDC	6,1–192 VDC	7,2–226 VDC	10,3–331 VDC	12,3–394 VDC

Linear Solenoids

Open Frame, DC Operation



Type	B-75M	B-4HDM	B-11M	B-16M	B-17M
Dimensions (mm)	29 × 28 × 41,5	41 × 37 × 55	30 × 24 × 47	13 × 10 × 34	13 × 15 × 24
Duty cycle	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent
Nominal Stroke	12 mm	25,4 mm	20,3 mm	3,8 mm	4,6 mm
Characteristics	<ul style="list-style-type: none"> ■ pull-in engagement (push types available): well-suited to lock/latch operations ■ DC activated ■ continuous or intermittent ■ on/off operation 	<ul style="list-style-type: none"> ■ pull-in engagement (push types available): well-suited to lock/latch operations ■ DC activated ■ continuous or intermittent ■ on/off operation 	<ul style="list-style-type: none"> ■ pull-in engagement (push types available): well-suited to lock/latch operations ■ DC activated ■ continuous or intermittent ■ on/off operation 	<ul style="list-style-type: none"> ■ pull-in engagement (push types available): well-suited to lock/latch operations ■ DC activated ■ continuous or intermittent ■ on/off operation 	<ul style="list-style-type: none"> ■ pull-in engagement (push types available): well-suited to lock/latch operations ■ DC activated ■ continuous or intermittent ■ on/off operation
Typical Force (N)	12 N (@5% duty cycle / 230 VAC/11 mm stroke)	15,6 N (@25% duty cycle / 100% Voltage maximum stroke)	4,4 N (@25% duty cycle / 100% Voltage maximum stroke)	4,1 N (@25% duty cycle / 100% Voltage maximum stroke)	2,1 N (@25% duty cycle / 100% Voltage maximum stroke)
Life	100 000 cycles	1 M cycles	1 M cycles	1 M cycles	1 M cycles

Linear Solenoids

Open Frame, DC Operation



Type	B-22M	B-41M
Dimensions (mm)	37 × 33 × 41	44 × 51,5 × 77,5
Duty cycle	continuous or intermittent	continuous or intermittent
Nominal Stroke	25,4 mm	25,4 mm
Characteristics	<ul style="list-style-type: none"> ■ pull-in engagement (push types available): well-suited to lock/latch operations ■ DC activated ■ continuous or intermittent ■ on/off operation 	<ul style="list-style-type: none"> ■ pull-in engagement (push types available): well-suited to lock/latch operations ■ DC activated ■ continuous or intermittent ■ on/off operation
Typical Force (N)	9,8 N (@25% duty cycle / 100% Voltage maximum stroke)	44,5 N (@25% duty cycle / 100% Voltage maximum stroke)
Life	1 M cycles	1 M cycles

Linear Solenoids

Open Frame, DC Operation



Type	C-8M	C-9M	C-15M	C-26M	C-33M
Dimensions (mm)	21 × 19 × 29	41 × 35 × 27	28 × 27 × 29	29 × 22 × 44	29 × 33 × 34
Duty cycle	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent	continuous or intermittent
Nominal Stroke	12.7 mm	12.7 mm	12.7 mm	19 mm	12.7 mm
Characteristics	<ul style="list-style-type: none"> ■ pull-in engagement (push types available): well-suited to lock/latch operations ■ DC activated ■ continuous or intermittent ■ on/off operation 	<ul style="list-style-type: none"> ■ pull-in engagement (push types available): well-suited to lock/latch operations ■ DC activated ■ continuous or intermittent ■ on/off operation 	<ul style="list-style-type: none"> ■ pull-in engagement (push types available): well-suited to lock/latch operations ■ DC activated ■ continuous or intermittent ■ on/off operation 	<ul style="list-style-type: none"> ■ pull-in engagement (push types available): well-suited to lock/latch operations ■ DC activated ■ continuous or intermittent ■ on/off operation 	<ul style="list-style-type: none"> ■ pull-in engagement (push types available): well-suited to lock/latch operations ■ DC activated ■ continuous or intermittent ■ on/off operation
Typical Force (N)	1.1 N (@25% duty cycle / 100% Voltage maximum stroke)	4.4 N (@25% duty cycle / 100% Voltage maximum stroke)	2.7 N (@25% duty cycle / 100% Voltage maximum stroke)	2.2 N (@25% duty cycle / 100% Voltage maximum stroke)	4.9 N (@25% duty cycle / 100% Voltage maximum stroke)
Life	1 M cycles	1 M cycles	1 M cycles	1 M cycles	1 M cycles

Linear Solenoids

Open Frame, DC Operation



Type	C-34M
Dimensions (mm)	37 × 33 × 42
Duty cycle	continuous or intermittent
Nominal Stroke	25.4 mm
Characteristics	<ul style="list-style-type: none"> ■ pull-in engagement (push types available): well-suited to lock/latch operations ■ DC activated ■ continuous or intermittent ■ on/off operation
Typical Force (N)	4.4 N (@25% duty cycle / 100% Voltage maximum stroke)
Life	1 M cycles