

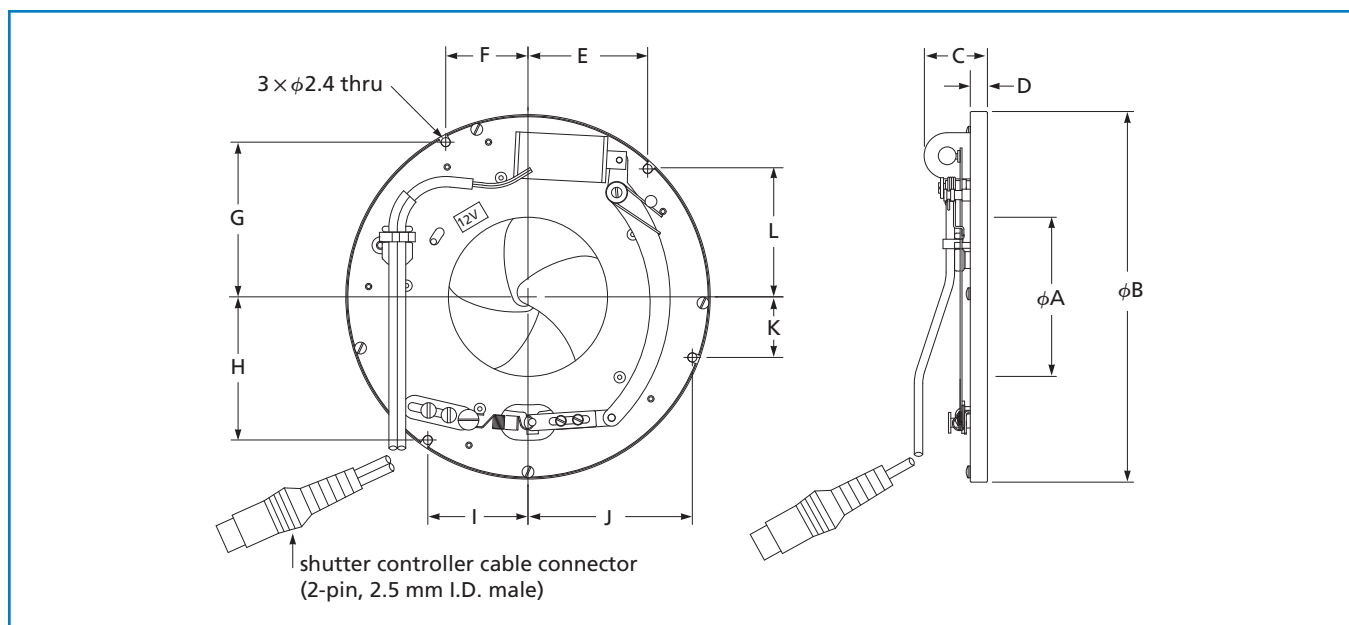


UltraThin™ Electronic Shutters

UltraThin™-series electronic shutters are optimized for OEM applications which require compact size, low weight, and low-voltage operation. Ultra-Thin shutters may be mounted in any orientation via three mounting holes (see diagram). It is important that the receiving mount be designed so that it does not bend or distort the shutter. Electrical connection for 12-Vdc shutters is made with a supplied connector.

UltraThin™ Electronic Shutters, Mechanical Dimensions

Dimension Code	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	J (mm)	K (mm)	L (mm)
Type 1	25.2	57.8	13.6	3.4	17.6	17.5	18.8	–	–	3.4	25.1	18.0
Type 1a	25.2	57.8	13.6	3.4	17.8	23.7	9.3	25.1	4.3	–	–	18.2
Type 2	34.9	82.5	16.5	4.2	–	15.2	35.2	23.5	29.9	31.9	20.9	–
Type 3	42.7	99.4	17.2	4.8	–	24.2	40.3	39.8	24.8	44.9	13.9	–
Type 4	63.5	126.0	24.3	6.6	22.9	–	–	7.5	58.2	35.0	47.2	53.9



04 UTS-series UltraThin™ electronic shutter

continued

UltraThin™ Electronic Shutters

Clear Aperture		Maximum Speed* (sec)	Shutter Blades	Peak Pulse Current (mA)	Rated Solenoid Voltage (Vdc)	Resistance** (Ω)	Inductance (mH)	Connector Included	Dimension Code	PART NUMBER
(mm)	Configuration									
25.2	Normally Closed	1/60	5	4000	3	3	2.67	No	Type 1	04 UTS 206
25.2	Normally Closed	1/60	5	2000	6	12	12.6	No	Type 1	04 UTS 208
25.2	Normally Closed	1/60	5	1000	12	50	54.9	Yes	Type 1	04 UTS 201
25.2	Normally Closed	1/60	5	1000	12	50	54.9	No	Type 1	04 UTS 210
25.2	Normally Closed	1/60	5	460	24	208	233	No	Type 1	04 UTS 212
25.2	Normally Closed	1/60	5	230	48	830	817	No	Type 1	04 UTS 214
25.2	Normally Open	1/60	5	4000	3	3	2.67	No	Type 1a	04 UTS 216
25.2	Normally Open	1/60	5	2000	6	12	12.6	No	Type 1a	04 UTS 218
25.2	Normally Open	1/60	5	1000	12	50	54.9	No	Type 1a	04 UTS 220
25.2	Normally Open	1/60	5	460	24	208	233	No	Type 1a	04 UTS 222
25.2	Normally Open	1/60	5	230	48	830	817	No	Type 1a	04 UTS 224
34.9	Normally Closed	1/60	5	2800	6	8.5	10.3	No	Type 2	04 UTS 226
34.9	Normally Closed	1/60	5	1600	12	30	35.6	Yes	Type 2	04 UTS 203
34.9	Normally Closed	1/60	5	1600	12	30	35.6	No	Type 2	04 UTS 228
34.9	Normally Closed	1/60	5	740	24	130	157	No	Type 2	04 UTS 230
34.9	Normally Closed	1/60	5	380	48	500	596	No	Type 2	04 UTS 232
34.9	Normally Open	1/60	5	2800	6	8.5	10.3	No	Type 2	04 UTS 234
34.9	Normally Open	1/60	5	1600	12	30	35.6	No	Type 2	04 UTS 236
34.9	Normally Open	1/60	5	740	24	130	157	No	Type 2	04 UTS 238
34.9	Normally Open	1/60	5	380	48	500	596	No	Type 2	04 UTS 240
42.7	Normally Closed	1/30	5	2800	6	8.5	10.3	No	Type 3	04 UTS 242
42.7	Normally Closed	1/30	5	1600	12	30	35.6	Yes	Type 3	04 UTS 204
42.7	Normally Closed	1/30	5	1600	12	30	35.6	No	Type 3	04 UTS 244
42.7	Normally Closed	1/30	5	740	24	130	157	No	Type 3	04 UTS 246
42.7	Normally Closed	1/30	5	380	48	500	596	No	Type 3	04 UTS 248
42.7	Normally Open	1/30	5	2800	6	8.5	10.3	No	Type 3	04 UTS 250
42.7	Normally Open	1/30	5	1600	12	30	35.6	No	Type 3	04 UTS 252
42.7	Normally Open	1/30	5	740	24	130	157	No	Type 3	04 UTS 254
42.7	Normally Open	1/30	5	380	48	500	596	No	Type 3	04 UTS 256
63.5	Normally Closed	1/30	6	4000	6	6	11.4	No	Type 4	04 UTS 258
63.5	Normally Closed	1/30	6	2000	12	24	45.7	Yes	Type 4	04 UTS 205
63.5	Normally Closed	1/30	6	2000	12	24	45.7	No	Type 4	04 UTS 260
63.5	Normally Closed	1/30	6	1100	24	86	143	No	Type 4	04 UTS 262
63.5	Normally Closed	1/30	6	460	48	416	655	No	Type 4	04 UTS 264
63.5	Normally Open	1/30	6	4000	6	6	11.4	No	Type 4	04 UTS 266
63.5	Normally Open	1/30	6	2000	12	24	45.7	No	Type 4	04 UTS 268
63.5	Normally Open	1/30	6	1100	24	86	143	No	Type 4	04 UTS 270
63.5	Normally Open	1/30	6	460	48	416	655	No	Type 4	04 UTS 272

*Typical

** Resistance is nominal (+/- 10%) at 20 degrees Celcius and will vary approximately 0.393% per degree Celcius.

Note: Solenoid properties are nominal and apply at a 10% duty cycle as calculated by the formula: Duty Cycle (% of rated power) for a 20-msec pulse = $100 \times (0.32 + 0.25 \times \text{hold time}) / (\text{total cycle time})$. To achieve specified performance, duty cycle, calculated by the preceding formula, should not exceed 100%

UltraThin™-Series Electronic Shutter Features

- Compact size and low weight for OEM applications including photography, night-vision/thermal cameras and sensors.
- Easily mountable in any orientation via three mounting holes.
- Available in normally closed (standard) and normally open configurations.
- Available in 12 Vdc (standard) 3, 6, 24, and 48 Vdc.