



Offers a wide range of signalling options in a zinc alloy fully enclosed corrosion resistant case available for direct mounting onto Kinetrol rotary actuators, or discrete mounting via an industry standard VDI/VDE interface onto any make of rotary actuator. Easy to wire and set up with real industrial quality robustness. Internally fitted options include AS Interface digital communication and a 4-20mA 2-wire modulating angle retransmit circuit.

The range of switch and terminal arrangements includes 2 or 4 switches, extra connections allowing single point termination of wiring for limit switches and solenoid valves, ATEX approved Eexed (Category 2) explosion proof and Eexia intrinsically safe packages (Category 1). Integral sealed Clear Cone Monitor and red/green LED indicator options also give excellent external visual indication of position.

See KF487 for full details.

**Specification**

**Casing**

Precision diecast zinc alloy

**Finish**

Epoxy stove enamel

**Seals**

Nitrile rubber 'O' ring seals

**Weight**

1.4 kg

**Cable entry options**

2 or 4 entries

M20 x 1.5 Conduit thread

or  
1/2 NPS Conduit thread

4 Way plug DIN 43650A  
(fits any conduit thread)

4 Way M12 Connector  
(M20 Conduit thread only)

**Temperature Range**

Standard -20°C to +80°C

High Temp Seals  
up to 100°C

Also see switch  
temperatures on  
page 8

**Dimensions**

See page 51

- All units sealed to IP65/NEMA 4X IP67 options available.
- Robust corrosion resistant epoxy painted diecast zinc alloy box
- Easy and accurate setting of switch position
- Available for direct mounting to Kinetrol models 03 to 14, for minimum height
- Quick access - No special tools required
- Discrete VDI/VDE (NAMUR) interface option for use with industry standard actuators
- Two or four cable entries as standard to allow back wiring of solenoid valves
- Many switch options available for general and hazardous areas
- AS Interface bus circuit option inside box reads up to 4 switch inputs, drives up to 2 solenoids powered by bus only (see pages 11 & 12)
- Optional Clear Cone monitor available
- Integral LED indicator lamps and angle retransmit circuit options are available
- Compact SPST version of type 004 available for model 02 actuator

**LOAD RATINGS FOR  
STANDARD MICROSWITCHES (type 004)**

Voltage	Resistive Load
125 V AC	15A
250 V AC	15A
up to 12 V DC	15A
up to 24 V DC	10A
up to 48 V DC	3A
up to 250 V DC	0.25A

**MULTIPLICATION FACTORS  
FOR NON-RESISTIVE LOADS**

- Steady state tungsten lamp load - x 0.1
- Steady state inductive load - x 0.2
- Peak inductive load - x 1.0



## Ordering Codes

### Switch Type 001

2 intrinsically safe 2 wire inductive proximity sensors for hazardous areas (ATEX CAT 1), -20° to 80°C, normally closed.  
Ambient temperature range -20°C to +80°C

### Switch Type 002

2 pneumatic switches with G1/8 THREADS (ATEX CAT 2).  
Ambient temperature range -20°C to +80°C

### Switch Type 003

Certificated unit to EEx ed II T6 for hazardous areas to Zone 1 (ATEX CAT 2) 2 x 3 wire switches for SPDT.  
Ambient temperature range -20°C to +70°C

### Switch Type 004

With 2 x 3 wire microswitches for SPDT.  
Ambient temperature range -40°C to +80°C

### Switch Type 005

2 x 2 wire proximity sensors 20-260 volts AC, normally open.  
Ambient temperature range -25°C to +70°C

### Switch Type 006

2 x 2 wire proximity sensors 5-60 volts DC, normally open, with LED switch status indicators.  
Ambient temperature range -20°C to +80°C

### Switch Type 007

With 4 microswitches wired for DPDT.  
Ambient temperature range -40°C to +80°C

### Switch Type 008

With 2 intrinsically safe 2 wire slotted proximity sensors, normally open.  
Ambient temperature range -20°C to +80°C

### Switch Type 009

2 x 3 wire gold plated contacts intrinsically safe microswitches for SPDT (ATEX CAT 1).  
Ambient temperature range -20°C to +80°C

### Switch Type 00E

2 x 2 wire proximity sensors 20-140 volts AC / 10-140 volts DC.  
Ambient temperature range -25°C to +80°C

### Switch Type 00N

2 x 3 wire proximity sensors 10-30 volts DC, normally open.  
Ambient temperature range -20°C to +70°C

### Option B - E

AS interface options are available with both the two and four entry Kinetrol Universal limit switch boxes. Options B to E allow for different extended addressing options. For more information on the Kinetrol AS interface card see page 11 & 12.

### Option P

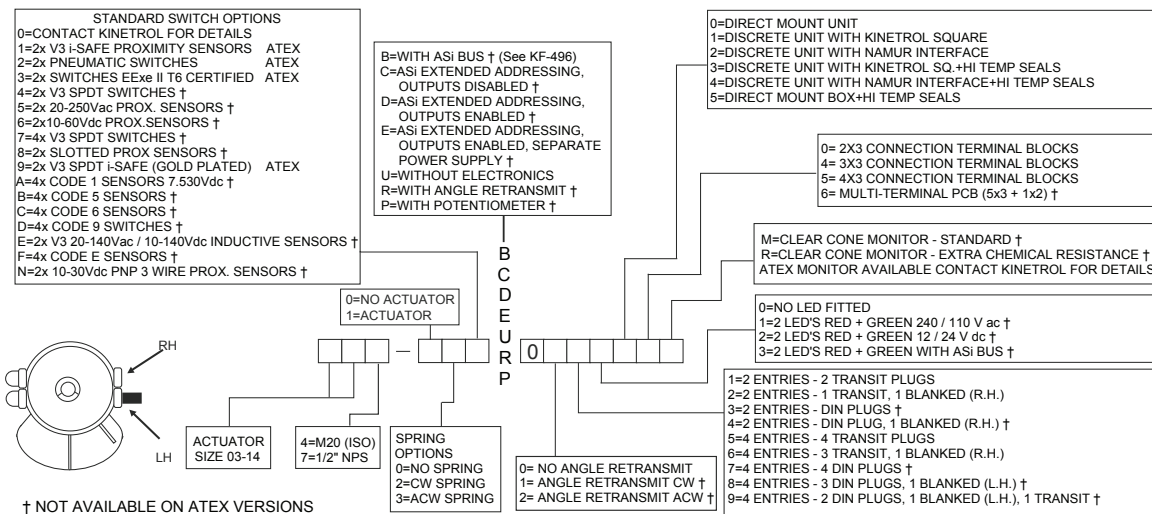
Two or four way Universal limit switch box fitted with potentiometer (20K ohms conductive plastic type).

### Option R

Two or four entry Universal limit switch fitted with angle retransmit, loop powered two wire circuit passes 4-20mA current, proportional to 0-90° position of actuator.

### Option U

Two or four entry Universal limit switch box without AS interface card, Angle Retransmit or Potentiometer.



**EXAMPLES:**  
 054 - 001U001000 = 05 ULS BOX WITH 2 X V3 i-SAFE PROXIMITY SENSORS, 2 TRANSIT PLUGS & 2 X 3 WAY TERMINALS ATEX APPROVED  
 054 - 001R011000 = 05 ULS BOX WITH 2 X V3 i-SAFE PROXIMITY SENSORS, 2 TRANSIT PLUGS & 2 X 3 WAY TERMINALS, AR CW NOT APPROVED  
 074 - 004R022000 = 07 ULS BOX WITH 2 X V3 SPDT SWITCHES + 1 TRANSIT & 1 BLANKING PLUG & ANGLE RETRANSMIT ACW NOT APPROVED  
 074 - 004U001200 = 07 ULS BOX WITH 2 X V3 SPDT SWITCHES + 2 TRANSIT PLUGS + LED'S RED / GREEN 12 / 24 V dc NOT APPROVED  
 074 - 009C001000 = 07 ULS BOX WITH 2 X V3 i-SAFE MECH.SWITCHES G / PLATED, ASI WITH EXTENDED ADDRESSING OUTPUTS DISABLED + 2 TRANSIT PLUGS NOT APPROVED  
 094 - 124B00A00M = 09 SPRING RETURN ACTUATOR & ULS BOX WITH 2 X V3 SPDT SWITCHES + STANDARD ASI & ASI TERMINALS + M12 PLUG + TRANSIT PLUG + CLEAR CONE MONITOR NOT APPROVED  
 074 - 009B001300 = 07 ULS BOX WITH 2 X V3 i-SAFE MECH.SWITCHES G / PLATED, STANDARD ASI + 2 TRANSIT PLUGS & ASI TERMINALS + 2 LED'S RED & GREEN NOT APPROVED

Further switch options are available upon request - contact Kinetrol for details

For more information see KF-487

