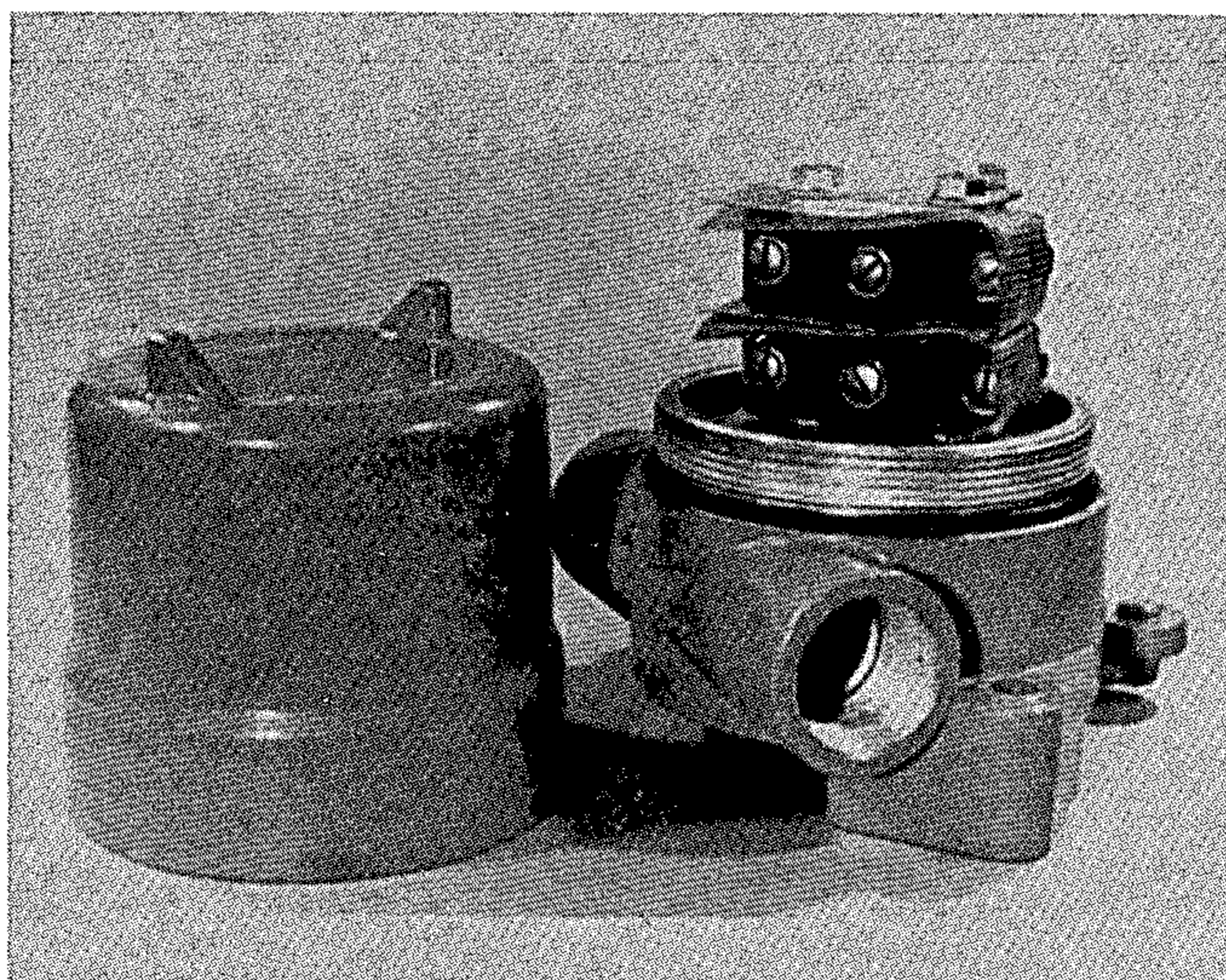


# BETTI SWITCH

BULLETIN 3R-1  
SEPT. 1 1976



## 3R — BETTISWITCH

3R switches utilize a rotary cam type tripping mechanism with precision adjustment and are designed for position indication in hazardous atmospheres and outdoor use.

### Flexibility of operation:

- Elements are individually adjustable
- On direct coupled switches, elements can be precisely set for activation at any point of the operating cycle.
- Operation of the switch is bi-directional, allowing trip-point adjustment in either direction.
- Individual switches are field adjustable utilizing a remote lever and adjusting screw — not requiring the element to move from its original installation.
- Elements are rigidly mounted providing for excellent resolution and interchangeability.

### Standard elements:

- 2 circuits — 2 SPDT elements (15 amp)
- 4-circuits — 2-DPDT-elements-(10-amps)

### Special elements:

- Hermetically sealed elements, gold alloy contacts, magnetic blow-out elements and other special requirements can be furnished.

### Choice of operating mechanism:

- Direct coupled rotational shaft adjustable in either direction through 360°.
- Spring to center nonsparking roller lever adjustable to 55° either side of center.

### Enclosures are weather and explosion proof:

- Aluminum.
- Two (2) ¾" NPT conduit openings located inline.
- All units have rain tight covers.
- Flush mount units are available for sealed operating mechanism on actuators.
- All units have a 3" diameter cover allowing for more wiring space.
- All enclosures are designed to NEMA VII Standards for Class I (Group C and D) and Class II (Groups E, F and G) hazardous locations.

### Construction:

- Standard construction consists of cast aluminum enclosures.
- All internal parts are plated for maximum corrosion resistance.

### Caution:

To prevent ignition of hazardous atmospheres, break circuits before opening, keep tightly closed when operating.



# Dimensions and Specifications

## Standard Units

| MODEL NO.  | DESCRIPTION                               |
|------------|---|
| 3R-021-AFC | DIRECT COUPLED, 2-SPDT SWITCHING ELEMENTS |
| 3R-022-AFC | DIRECT COUPLED, 2-DPDT SWITCHING ELEMENTS |
| 3R-321-AFC | LEVER OPERATED, 2-SPDT SWITCHING ELEMENTS |
| 3R-322-AFC | LEVER OPERATED, 2-DPDT SWITCHING ELEMENTS |

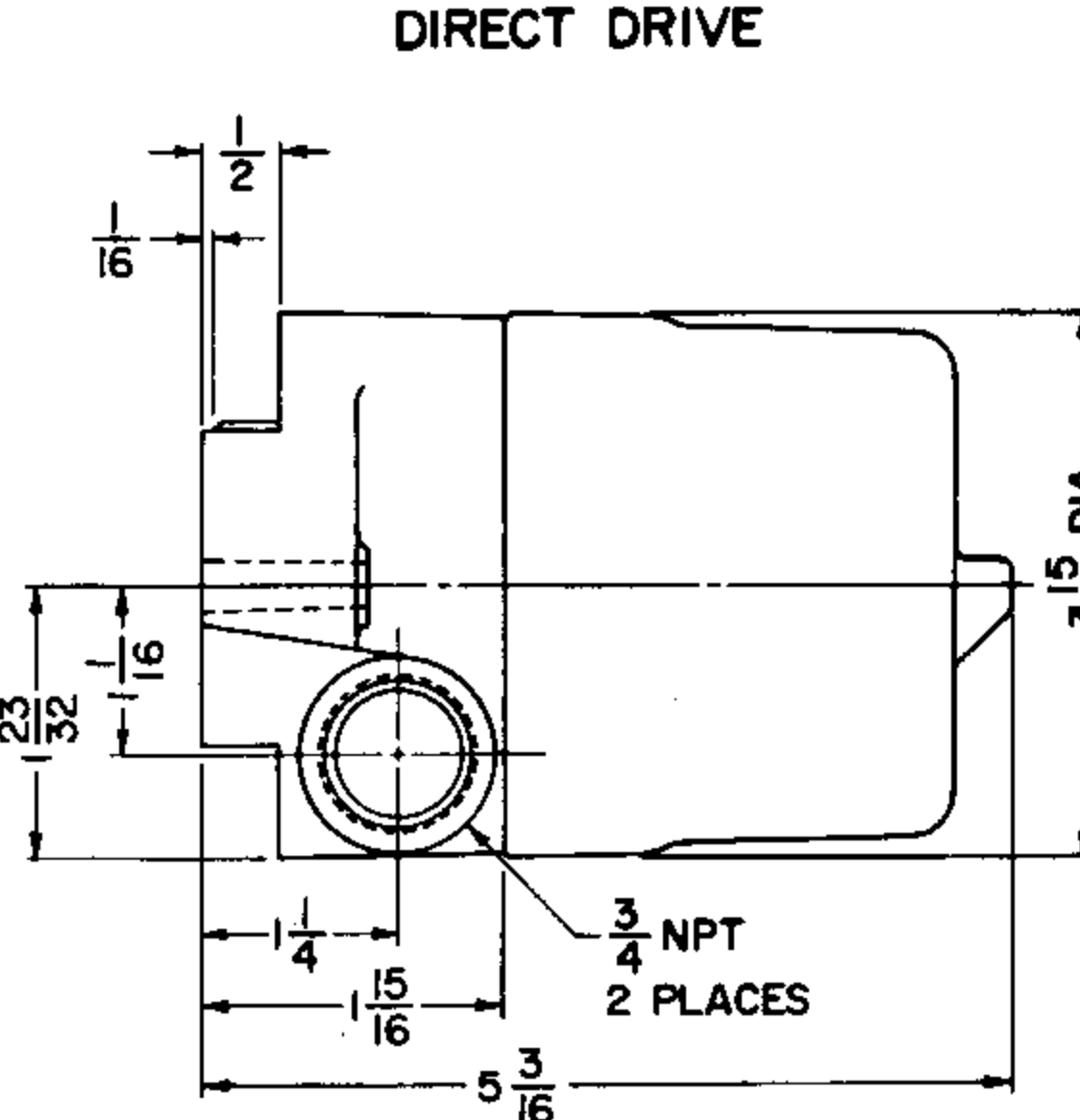
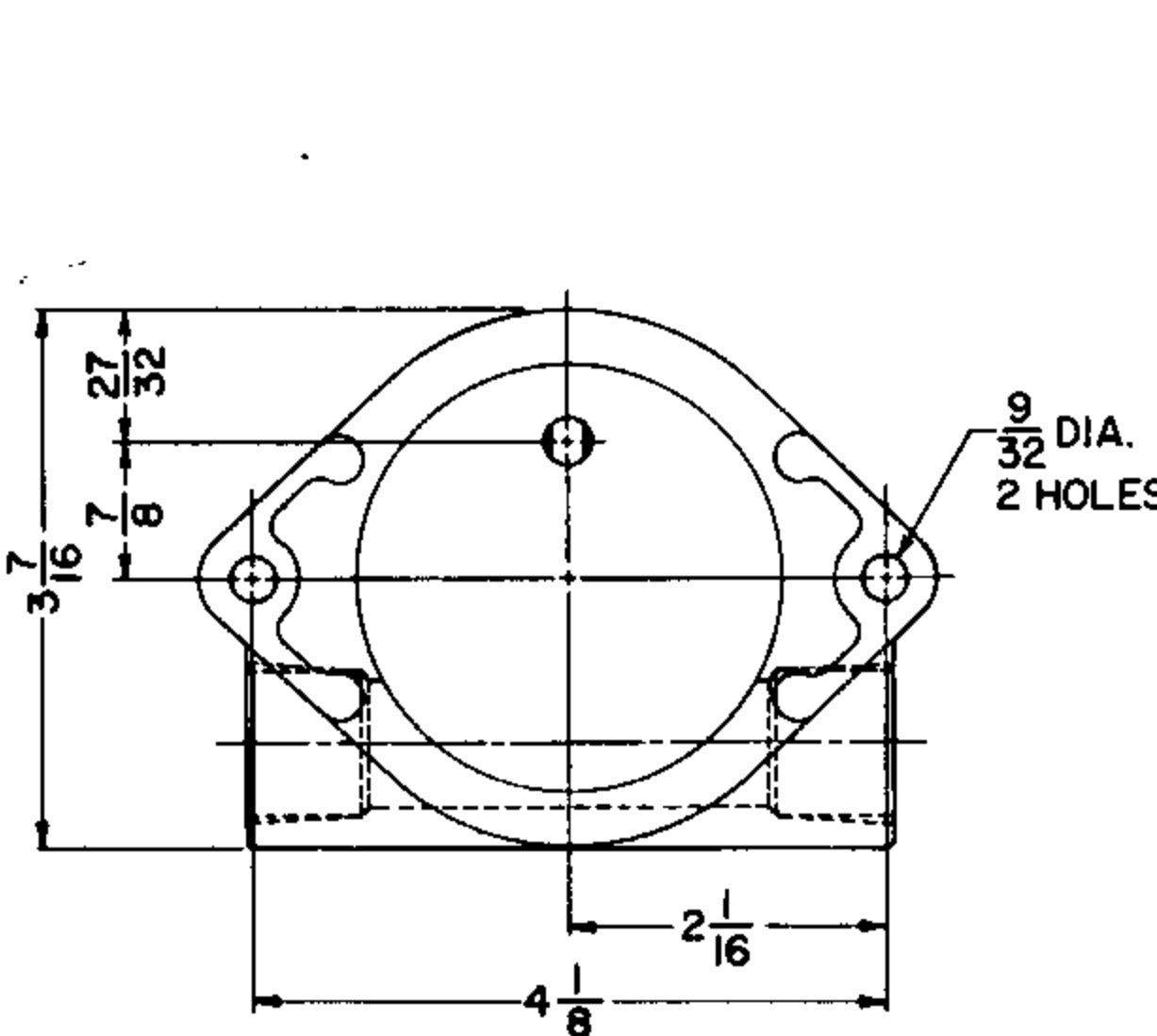
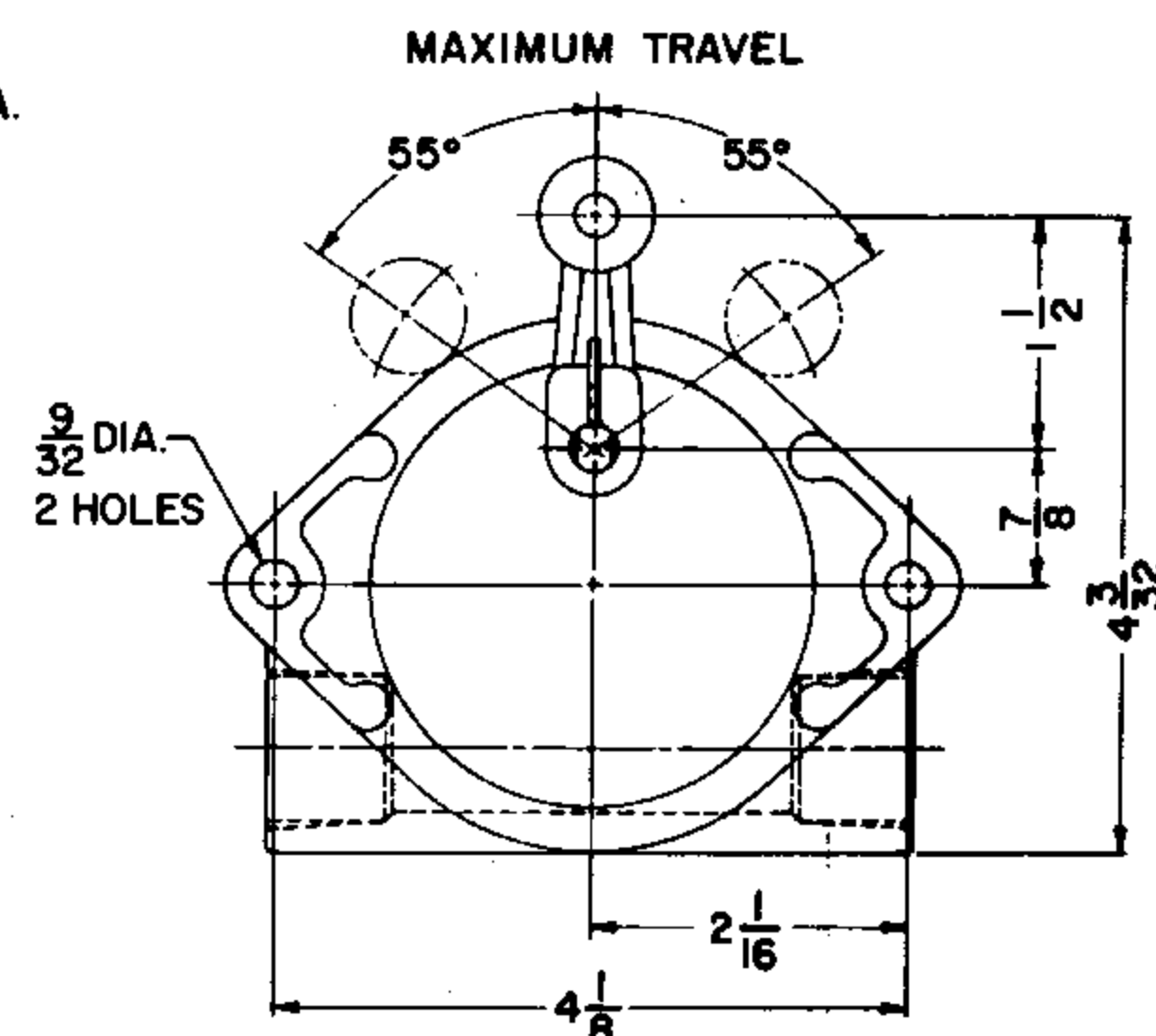
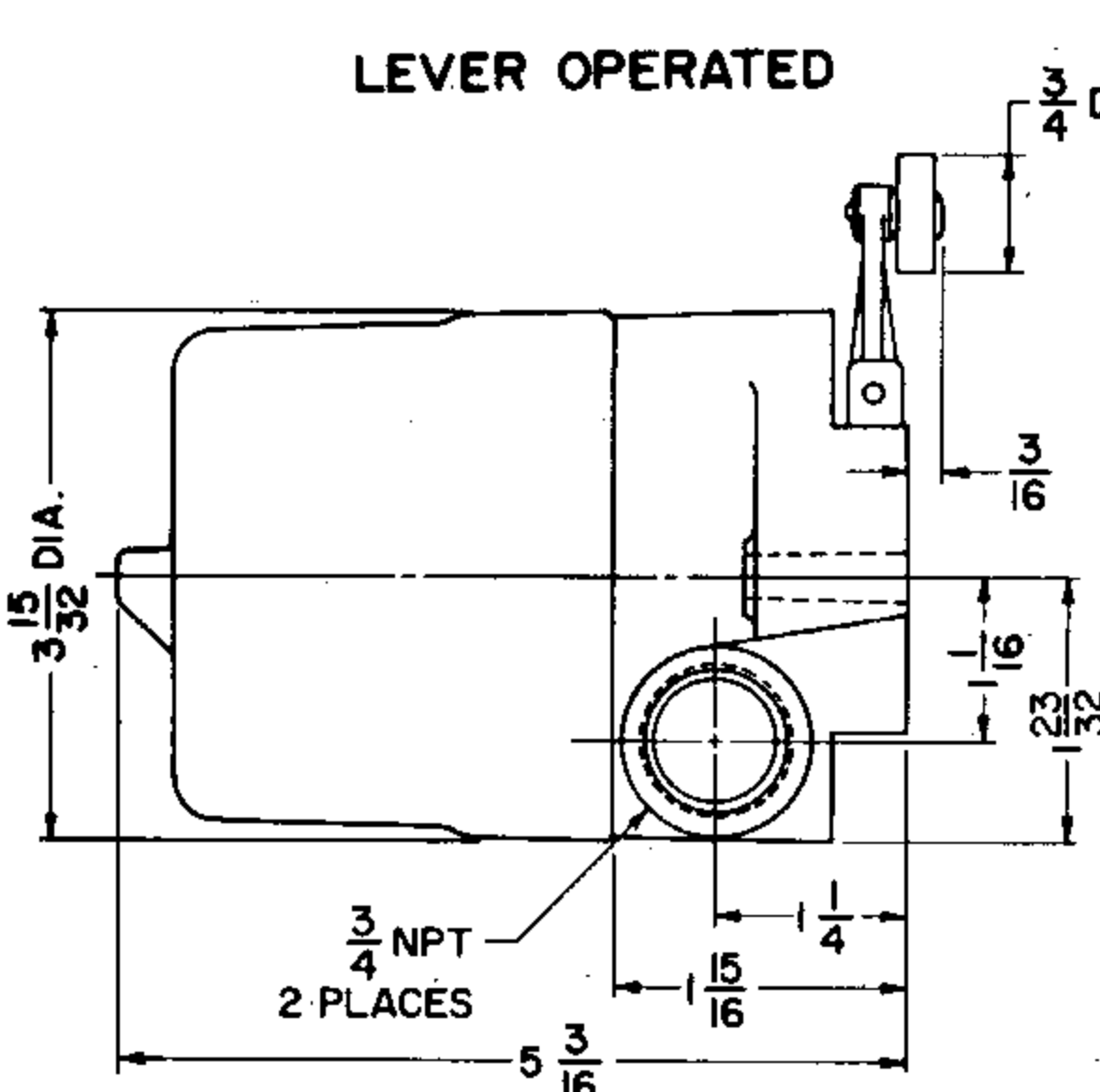
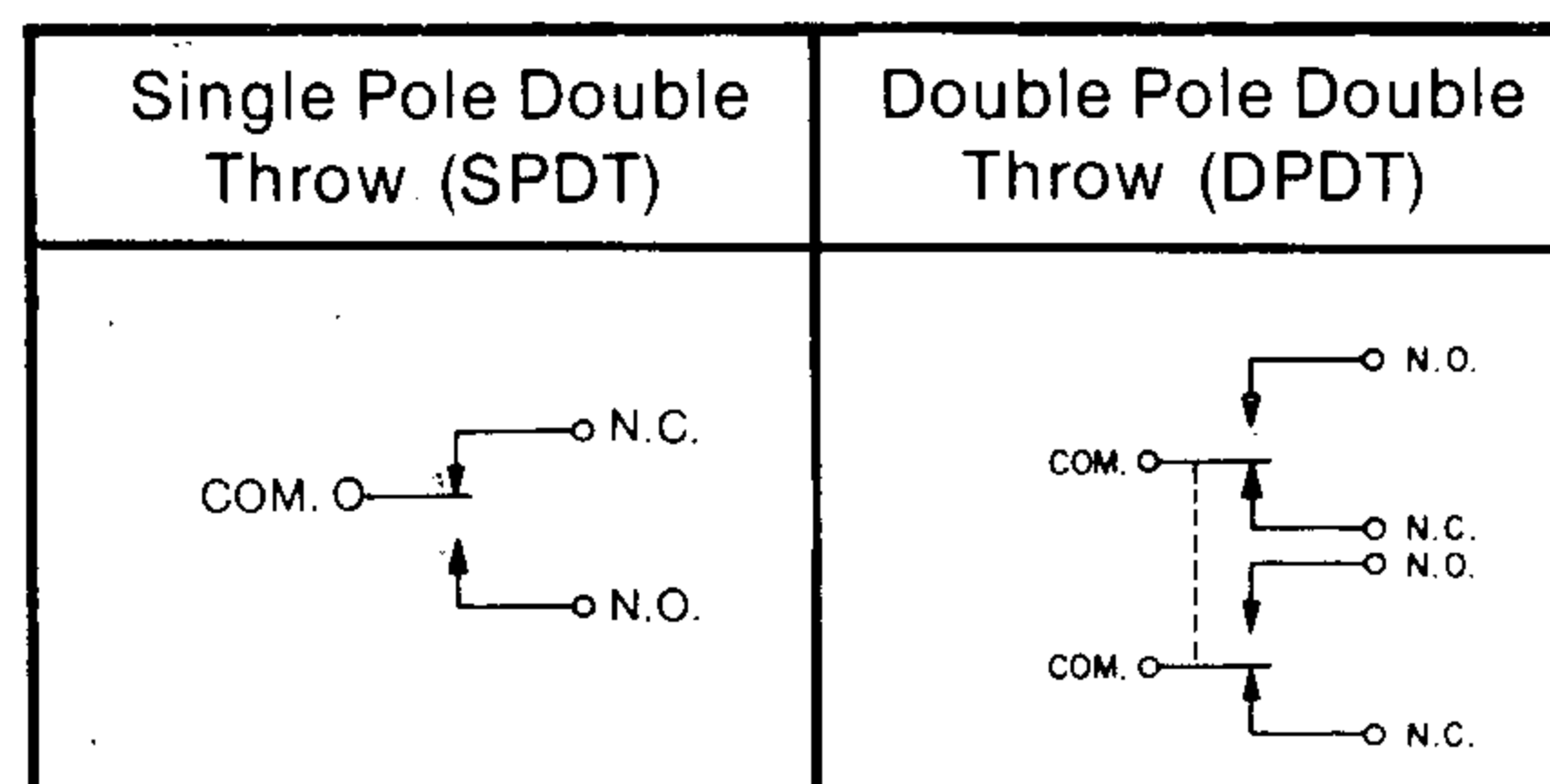
## Electrical Ratings

| SP/DT  |     |     | DP/DT |     |     |
|--------|-----|-----|-------|-----|-----|
| Amps   | VAC | VDC | Amps  | VAC | VDC |
| 15     | 125 |     | 10    | 125 |     |
| 15     | 250 |     | 10    | 250 |     |
| 15     | 480 |     | *0.30 |     | 125 |
| * 0.50 |     | 125 | *0.15 |     | 250 |
| * 0.25 |     | 250 |       |     |     |

Switch Elements in above table are UL & CSA listed

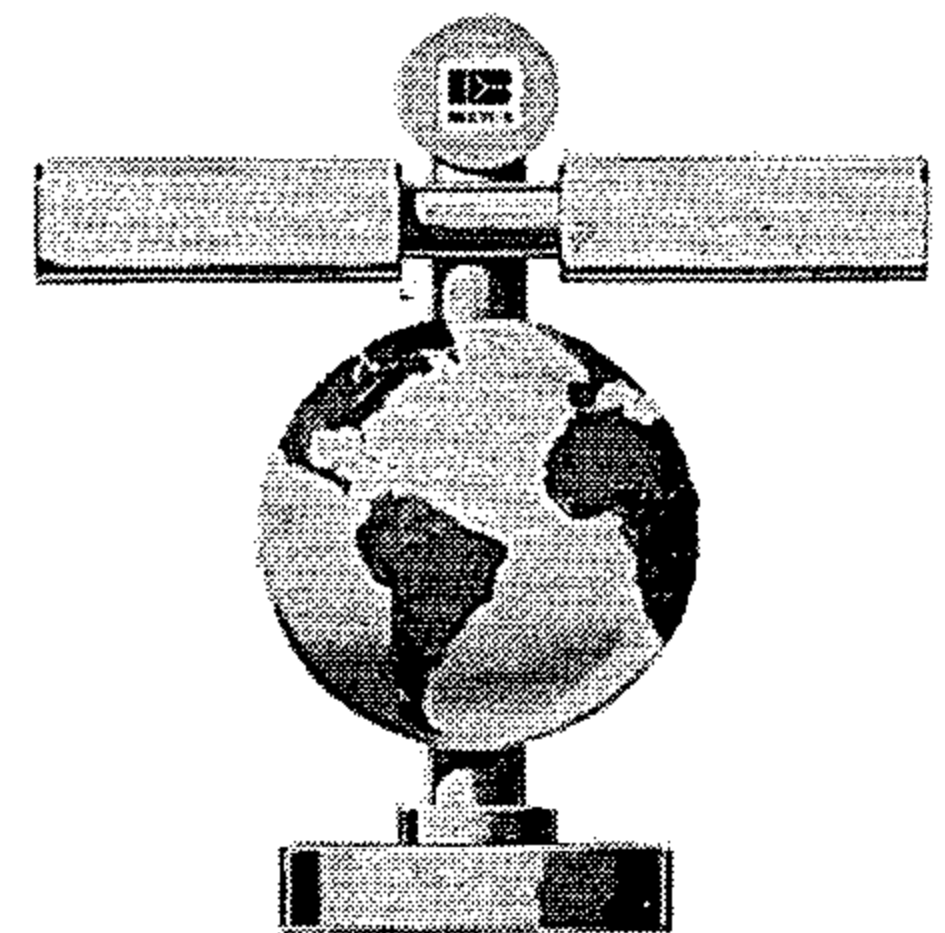
\* Other amperage ratings for DC voltage are available. Consult factory.

## Electrical Data



| DESCRIP. | PRE TRAVEL | DIFFERENTIAL TRAVEL |
|----------|------------|---------------------|
| SPDT     | 10° MIN.   | 3° MIN.             |
| DPDT     | 25° MIN.   | 16° MIN.            |

**HOME OFFICE:**  
**BETTIS CORPORATION**  
 7031 Grand Boulevard  
 P. O. Box 14689,  
 Houston, Texas 77021  
 Telephone: (713) 748-1143  
 Telex: 762713



**BETTIS ACTUATORS & CONTROLS LTD.**  
 20/36 Empress Road  
 Southampton SO2 OJU  
 Hampshire, England  
 Telephone: Southampton 32414  
 Telex: 47493