

MANUAL DECLUTCHABLE GEAR OVERRIDES

UT-ZM SERIES

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For 20 years, UniTorq has been the clear leader in the actuation industry. Our UT-ZM series of Manual Declutchable Gear Overrides follows that tradition of excellence, providing manual override capabilities whenever air supply or power to a pneumatic actuator is lost. Our gear overrides enable users to safely and easily position their valves - specifically enabling a 90° turn in either direction - whenever it becomes necessary to manually override a double acting or spring return actuator.

- > Corrosion Resistant The UT-ZM is ideal for harsh environments and is manufactured to provide high levels of corrosion resistance. Each unit is enclosed in a dust and weatherproof housing that conforms to IP67 standards. A powder epoxy coating is applied to the housings, and all gears are pre-lubricated with a high-quality, proprietary lubricant. The sturdy construction includes a stainless steel declutch lever and die cast handwheels.
- ➤ Wide Range of Sizes and Torque UniTorq's UT-ZM gear override is available in various models with torque outputs ranging from 1,770 to 61,955 in. lbs. Units are offered with ISO bolt patterns for a quick, custom and direct-mount fit between the actuator and the valve. Other bolt mounting patterns are available upon request.
- ➤ Easy to Use The UT-ZM is engineered to make operation easier. When an operator needs to engage or disengage the override, they simply pull the spring-loaded pin while rotating the declutch lever. When the bar reaches the proper position it automatically locks into place. There are no knobs to turn or keys to misplace. With its internal self-locking mechanism the UT-ZM is one of the safest and easiest to operate overrides on the market.
- Lockout Device UniTorq recommends a direct mount lockout solenoid device (Model # NV62L) designed to be used in conjunction with the actuator to relieve air pressure before engaging the override.
- **Padlock Option -** The addition of the Padlock Kit allows placement of a lock to prevent unintended operation.

Standard Self Locking Design

The pin on the UT-ZM is spring-loaded. The operator pulls the pin up and adjusts the declutch lever until it reaches the self-locking position.



Optional Padlock Kit

A padlock attached to the override provides an additional layer of protection against unintended start-up from the control room.





Designed for Safety

Block and Vent Air With The Isolation Safety Option

The Isolation Safety Option provides an innovative, intelligent solution to block and vent air from the actuator. This eliminates air resistance and makes operation of the override safer and easier. The built-in porting not only eliminates the need to install extra tubing, tees, valves and fittings, it releases air automatically. This provides an efficient, more reliable approach to isolating a valve during manual operation.

Auto Mode



In auto mode, the actuator drives the valve using air entering through the Pressurized Air port and the Actuator/ Solenoid port.

The UT-ZM equipped with the Isolation Safety Option has 3 ports:

P = Pressurized Air Port

 \mathbf{A} = Actuator/Solenoid Port

R = Released Air Port

Manual Mode



To switch to manual mode, the declutch bar is lifted and air is automatically released from the Actuator/Solenoid port and blocked from entering through the Pressurized Air Port. This simple and efficient release of air makes operation of the gear easier and safer.

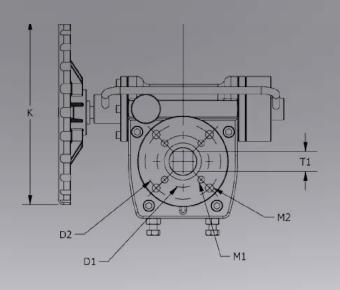
Isolation Safety Option

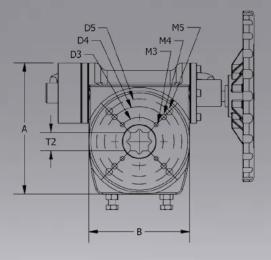


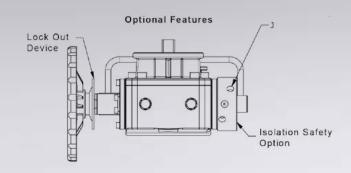
Standard Manual Override

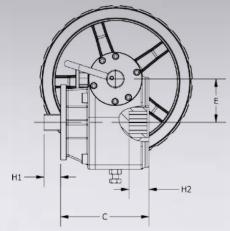


If the Isolation Safety Option is not required the standard manual override is available.









| Override | Input Torque in. lb | Output Torque in. lbs | A | В | С | D1 | D2 | D3, D4, D5 | E | L | M1 |
|----------|------------------------|-----------------------|------------|------------|-----------|-----|-----|---------------|-----------|------------|-----------|
| UTZM28 | 194 in. lbs | 1770 in. lbs | 4.724 in. | 3.973 in. | 4.094 in. | F05 | F07 | F05, F07 | 1.752 in. | 4.724 in. | 0.276 in. |
| UTZM49 | 371 in. lbs | 5310 in. lbs | 7.559 in. | 5.827.in. | 5.709 in. | F07 | F10 | F07, F10 | 2.795 in. | 6.890 in. | 0.354 in. |
| UTZM65 | 849 in. lbs | 10620 in. lbs | 7.559 in. | 5.827 in. | 5.079 in. | F07 | F10 | F07, F10, F12 | 2.795 in. | 7.126 in. | 0.354 in. |
| UTZM75 | 885 in. lbs | 17701 in. lbs | 10.236 in. | 7.717 in. | 7.539 in. | F14 | - | F14 | 4.232 in. | 10.709 in. | 0.669 in. |
| UTZM89 | 2035 in. lbs | 35402 in. lbs | 13.150 in. | 10.039 in. | 7.126 in. | F16 | - | F12, F16 | 4.843 in. | 10.827 in. | 0.866 in. |
| UTZM95 | 973 in. lbs | 61955 in. lbs | 15.315 in. | 11.693 in. | 9.803 in. | F16 | F25 | F16, F25 | 6.142 in. | 16.475 in. | 0.866 in. |

| Override | M2 | М3 | M4 | M5 | T1 | T2 | H1 | H2 | J | К | Actuators |
|----------|-----------|------------|-----------|------------|----------|-------|-----------|-----------|----------|------------|---------------|
| UTZM28 | 0.354 in. | M4 x 0.7 | M8 x 1.25 | - | 17 mm | 17 mm | 0.551 in. | 0.984 in. | 1/4" NPT | 7.874 in. | 75, 105 |
| UTZM49 | 0.433 in. | M8 x 1.25 | M10 x 1.5 | M12 x 1.75 | 22 mm | 27 mm | 0.748 in. | 1.18 in. | 1/4" NPT | 7.874 in. | 157, 257, 331 |
| UTZM65 | 0.433 in. | M8 x 1.25 | M10 x 1.5 | M12 x 1.75 | 27 mm | 27 mm | 0.748 in. | 1.18 in. | 1/4" NPT | 11.811 in. | 406, 633 |
| UTZM75 | - | M16 x 2.0 | - | - | 36 mm | 36 mm | 1.339 in. | 1.575 in. | 1/4" NPT | 15.748 in. | 1009, 1260 |
| UTZM89 | - | M12 x 1.75 | M20 x 2.5 | - | 46 mm | 46 mm | 1.77s in. | 6.929 in. | 1/4" NPT | 27.559 in. | 1831, 2928 |
| UTZM95 | 0.512 in. | M20 x 2.5 | M16 x 2 | | 46/55 mm | 46 mm | 1.772 in. | 1.890 in. | 1/2" NPT | 19.685 in. | |



UniTorq Actuators and Controls | 2150 Boggs Road, Ste. 410 | Duluth, Ga. 30096 Tel: 770-446-7074 | Fax: 770- 447-1825 | email: sales@unitorq.com