



PRODUCT INFORMATION



SPEEDETEX® ROTARY SPEED SWITCHES FOR HAZARDOUS AND NONHAZARDOUS LOCATIONS

APPLICATION:

- **BULK MATERIAL HANDLING** systems to monitor speeds of conveyors and other rotating machinery.

Belt conveyors	Bucket elevators
Screw conveyors	Rotary feeder shafts
Rotary airlocks	Rotating drums

- **MILLS, MINES & ORE OPERATIONS** used for handling/processing/storage.

Coal mines	Grain feeders
Chemical equipment	Plastics industry
Foundries	Paper mills
Power plants	Lumber mills
Saw mills	Special machinery

- **PROCESS INDUSTRIES** to protect elevators, feeders, and conveyors from speed-related damage resulting from broken belts, overloads, or belt slippages. Switches monitor material flow by sequencing operation of multiple conveyors feeding a common bin or conveyor.

- **HAZARDOUS & NONHAZARDOUS** locations such as mining and industrial areas where rugged enclosures are needed for protection from falling ores or other heavy objects, dripping water, hosedowns, or explosive environments.

SPEEDETEX® SPEED RESPONSIVE SWITCHES PREVENT DOWNTIME AND WASTE THROUGH THE ELIMINATION OF JAMS AND SPILLS.

OVERSPEED OR UNDERSPEED SWITCHES

These rugged switches electronically detect overspeed or underspeed with settings chosen by the user. The setpoint is selected directly thru pushbuttons and an LCD display, without having to drive the unit. When the shaft speed on a piece equipment exceeds or falls below the setpoint speed, the switch will activate an alarm system or control action. The standard output has a 1/16 turn response thru a 10 amp, SPDT relay. A built in tachometer provides the

ability to check its operation. The unit goes into "alarm" mode on power failure.

ESS - is completely self-contained in NEMA 4 housing.

XES - is enclosed in a UL Classified case which is suitable for hazardous locations.

ZERO SPEED SWITCHES

These speed switches electronically detect stopping. The output logic can be selected "on" or "off" in the alarm mode as set by the user. If set "on" after an 8 second prestart delay, power will be supplied until the shaft speed exceeds 1.1 RPM. Then power will be off until the speed drops below 1.0 RPM. In the "off" setting, power will not be supplied until 1.1 RPM is exceeded and goes off below 1.0 RPM. Speed detection is made within 1/16 turn of the shaft thru a 10 amp SPDT relay. The unit goes into "alarm" mode on power failure.

ZSS - is completely self-contained in NEMA 4 housing.

XZS - is enclosed in a UL Classified case which is suitable for hazardous locations.

MECHANICAL SPEED SWITCHES

These activate at an RPM specified by the user. Each unit is designed with a spring and weight combination to detect either-underspeed or overspeed. Output is a hard contact closure - SPNO, SPNC, or SPDT as specified by the user.

MSS - is completely self-contained in NEMA 4 housing.

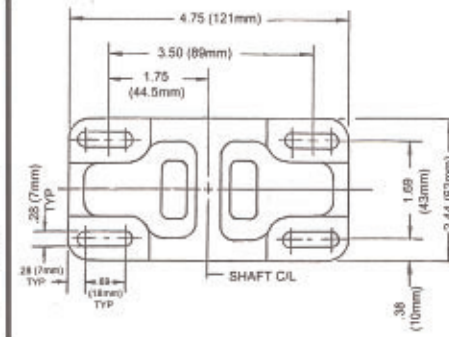
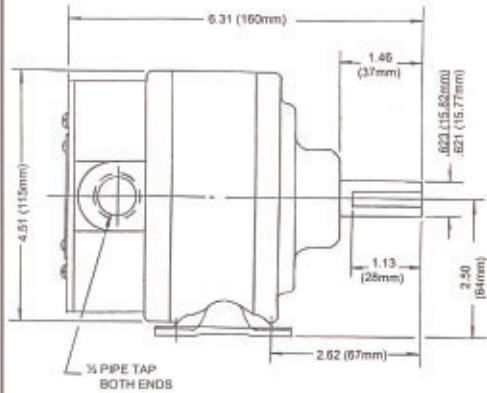
XMS - is enclosed in a UL Classified case which is suitable for hazardous locations.

OPTIONS FOR OVERSPEED, UNDERSPEED OR ZERO SPEED SWITCHES

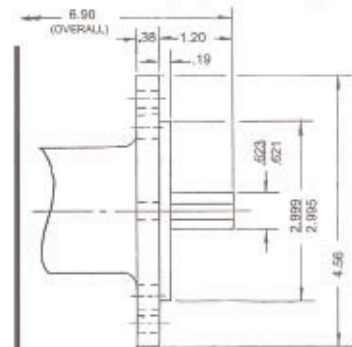
- 1/60 turn response
- Supply voltage
- Speed Range
- Finishes
- Shaft machining
- C Face Flange Mount

SWITCHES FOR NONHAZARDOUS LOCATIONS - NEMA 4 ENCLOSURES

Standard Foot Mount



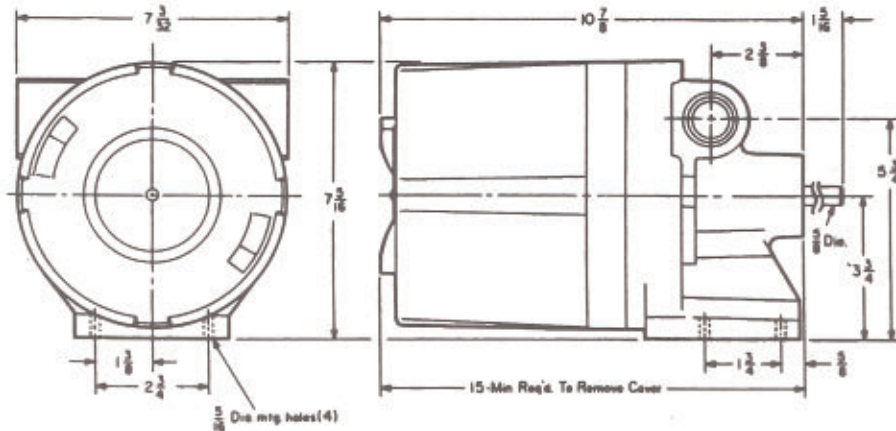
C-Face Flange Optional Mounting



.399 DIA. 4 holes on 4.0 B.C. plus
 .28 DIA. 4 holes on 3.75 B.C.

MODEL			COMMON SPECIFICATIONS
ESS	ZSS	MSS	
Electronically detects OVERSPEED or UNDERSPEED with adjustable set point	Electronically detects stopping or ZERO SPEED	Mechanically detects either OVERSPEED or UNDERSPEED from one factory manufactured set point	- Input power 115 or 230 VAC \pm 10% 50/60 Hz - Operating temperature range -22°F to 150°F - Direction of Rotation - Either - Bearing life - 10,000 Hr @ 5000 RPM

SWITCHES FOR HAZARDOUS LOCATIONS - UL CLASSIFIED ENCLOSURES



MODEL			COMMON SPECIFICATIONS
XES	XZS	XMS	
Electronically detects OVERSPEED or UNDERSPEED with adjustable set point	Electronically detects stopping or ZERO SPEED	Mechanically detects either OVERSPEED or UNDER-SPEED from one factory manufactured set point	- Input power 115 or 230 VAC \pm 10% 50/60 Hz - Operating temperature range -22°F to 150°F - Direction of Rotation - Either - Bearings - sealed lifetime lubricated - Copper free aluminum enclosure - Stainless steel shaft
ENCLOSURES UL CLASSIFIED FOR: Class II, Groups C, D, E, F, G Class III NEMA 3, 4, 7CD, 9FG, 12,			



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