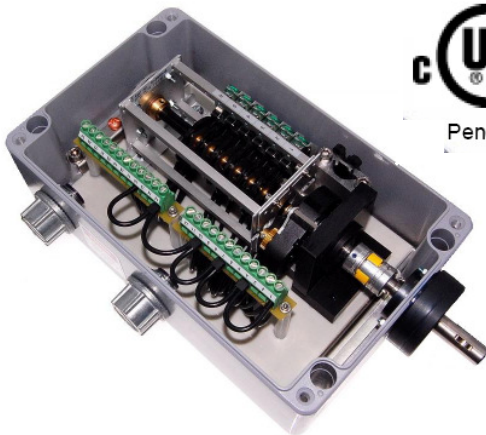
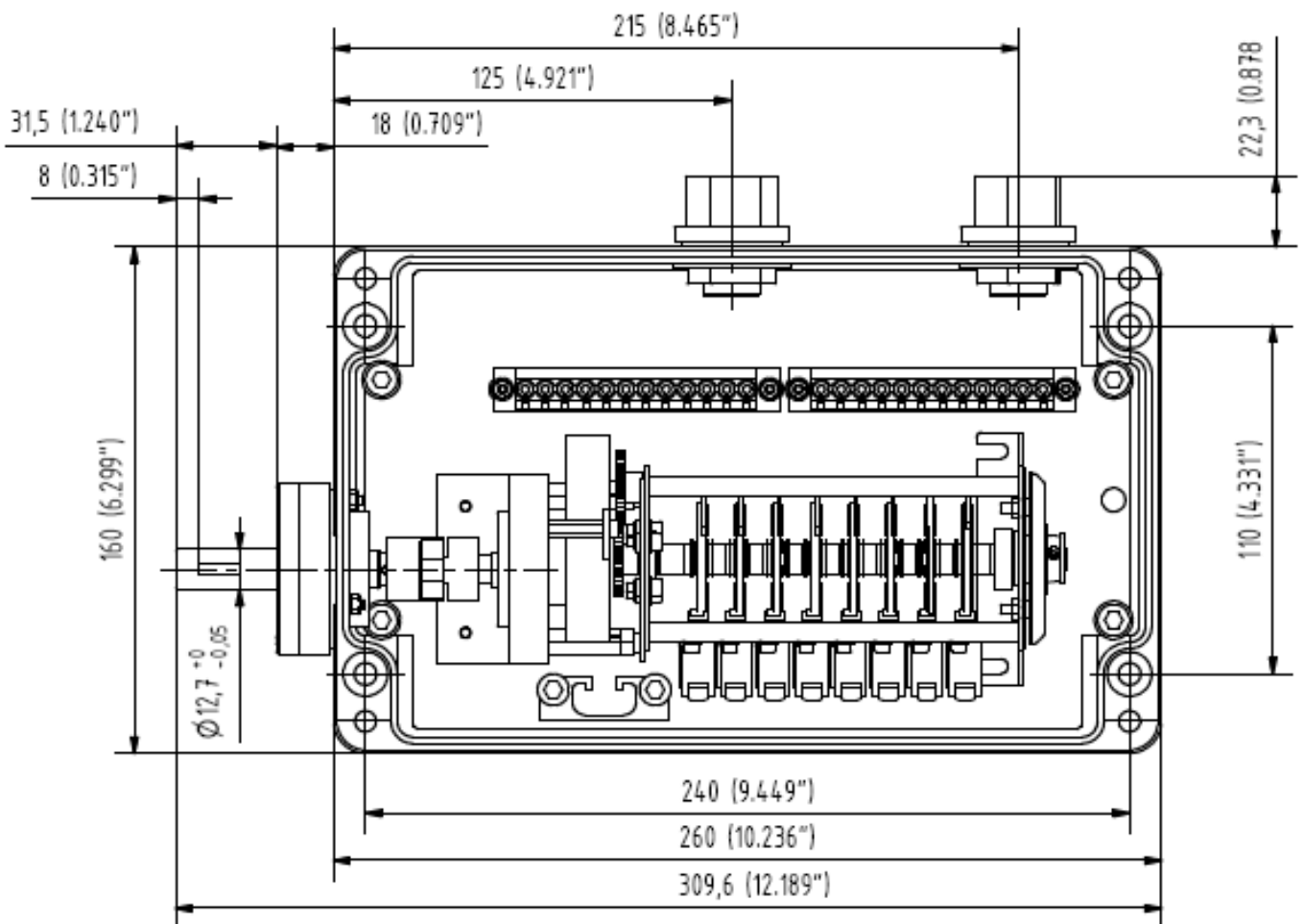


Serie MR 221



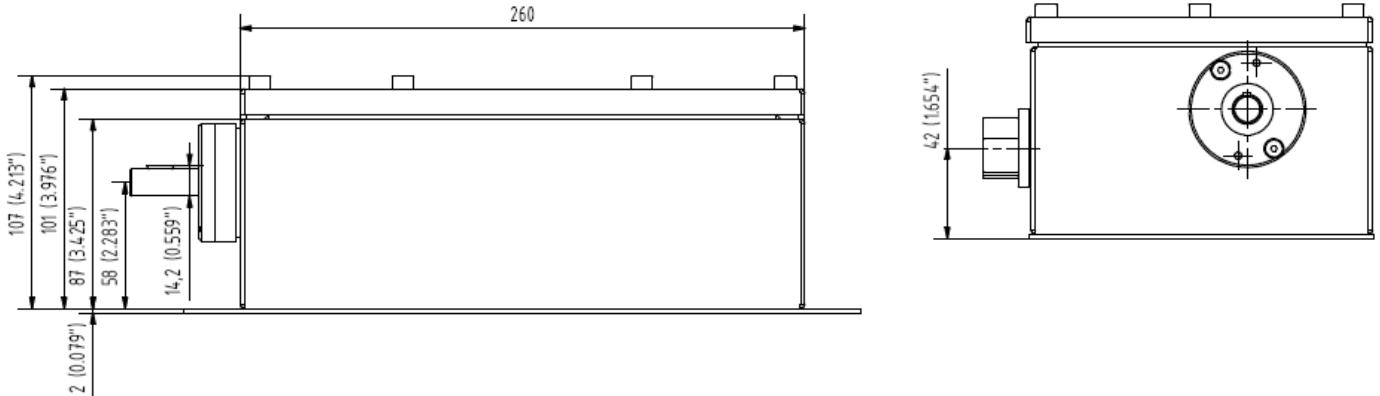
- Combines gear reducer, coupling and cam switches into one compact, heavy duty unit
- Single ended shaft model
- ½" Ø stainless steel shaft with #404 Woodruff Key slot
- Industrial grade, heavy duty sealed bearings
- NEMA 4 die cast aluminium or NEMA 4X stainless steel enclosure option
- Wide range of step-up or step-down gear options, from 1:1 to 2500:1
- 2, 4, 6 or 8 cam switch channels
- Easy to replace, heavy duty limit switches
- Two conduit wiring connections tapped for ½" NPT
- Industrial application:
Cranes, hoists, presses, packers, machine tools, handling devices and other similar operations where motion is expressed in shaft rotation

Outline drawing



Serie MR 221

Outline drawing



Specifications subjects to change without notice

Enclosure Ratings	NEMA 4 / IP 66 NEMA 4X / IP 66	Note: IP rating only applies when unit installed, connected and sealed properly. Die cast aluminium housing with powder coat finish Stainless steel housing
Switch Rating	Permanent Current Switching Current Mechanical Life	6A 10A 250V AC / 6A 24V DC 10 x 10 ⁶ Cycles
Cam Programming	1 – 2 (COM – NC) 1 – 3 (COM – NC) Repeatability	With Cam Valley Profile: 4° ... 180° (1 ... 50%) With Cam Peak Profile: 4° ... 356° (1 ... 99%) 1.8°
Mechanical Rating	Max. RPM Mechanical Life Max. Side Load Max Axial (Thrust) Load Bearing Life	3000 rpm 10 x 10 ⁶ Cycles (typical) 890 N (200 lbf) to 500 RPM, 445 N (100 lbf) to 1800 RPM 360 N (80 lbf) to 500 RPM, 185 N (40 lbf) to 1800 RPM 10 years (87'660 hours) continuous running with 350 N (78 lbf) side load at 1000 RPM
Wire Range	24-10 AWG	Via Phoenix MKDS 5/3-6.35 COMBICON modular wiring blocks with screw connection
Temperature	-40°C bis +85°C	Storage and operating temperature
List of Contents	1. 2. 3. 4. 5. 6. 7. 8.	One geared limit switch unit Supplied with #404 Woodruff Key mounted on each shaft end Protective safety shaft cover installed on each (can be used to cover an unused shaft end) One PSN cam programming tool (stored in internal holder) One Wire Jumper (installed across all COMMONS on terminal block) One copper grounding screw and split washer (installed inside unit) Two waterproof plugs (installed in threaded conduit holes) MR221 / MR222 Series Geared Limit Switch User Guide

Serie MR 221

Order key
Type

Inclination Sensor
MR221

MR 221 . X M 100

Shaft

MR221 = One-Ended

No. of Switches

2 = 2 Switches
 4 = 4 Switches
 6 = 6 Switches
 8 = 8 Switches

Single Stage-Step Down (Ux:1)

U1
 U1.5
 U2.0
 U2.5
 U3.0
 U3.5
 U4.0
 U4.5
 U5.0
 U5.5
 U6.0
 U6.5

Multistage-Step Down (Mx:1)

M12.5
 M20
 M25
 M30
 M37.5
 M40
 M50
 M52.5
 M75
 M100
 M200
 M300
 M420
 M600
 M750
 M1600
 M2250
 M2500

NEMA Enclosure

(Blank) = NEMA 4 (Standard)
 X = NEMA 4X

Important: The following gear reductions are UL-proofed: 20:1, 30:1, 40:1, 50:1, 75:1 and 100:1

Replacement Parts:

PSN CAM Programming Key
 Microswitch

Other gear ratios available upon request

This ordering example specifies a MR 221
 one-ended unit in NEMA 4 die cast aluminium case.
 Gear Ratio to be 100:1 and with X switch channels

Technische Änderungen vorbehalten / Subject to change without prior notice