

**MR221 X SERIE**



**For Industrial, Crane's and Lockings**

- ➔ Heavy Duty Limit Switch
- ➔ Up to 8 channels
- ➔ Connected to wiring block
- ➔ 2x cable gland ½" NPT
- ➔ Protection class IP65
- ➔ Shaft with woodruff keys

**Product description**

Robust geared limit switch in stainless steel housing for simple and variable installation. 100% protection against accidental contact and, depending on the version, positive drive concept up to the cam. Available in different reduction ratios. The stainless steel housing can be used almost everywhere.

**Application**

This robust gear limit switch finds its place wherever an end position must be detected. Whether in cable drums of crane systems, lifting equipment or garage doors, it is a reliable and safe solution..


**Technical Data**

Usable Gear Ratio	1:1 – 2500:1	(more on request)
Program channels	2 - 8	(more on request)
Display scale	S 360 ( 0°...360°)	
Weight	ca. 4.260 Kg	
MTBF (IEC 60050)	ON/OFF 10 Mio cycles 200'000 hours	
Rotation speed	max. 1000 U/min	
Shaft load	radial 100N, axial 50N	
Protection	IP 65 EN 60 529 Nema4	
Shock resistance	1000m/s <sup>2</sup> , 3ms IEC 68-2-27	
Vibrations resistance	50 m/s <sup>2</sup> , 10....1000 Hz IEC 68-2-6	
Humidity	85% rh	
Temperature range	-40 °C +85 °C	

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**Microswitch types**

Picture	Description
	S840 V20 changeover contact for cable lug 6.3x0.9mm silver contact
	Switching capacity 10A 250V AC / 6A 24V DC

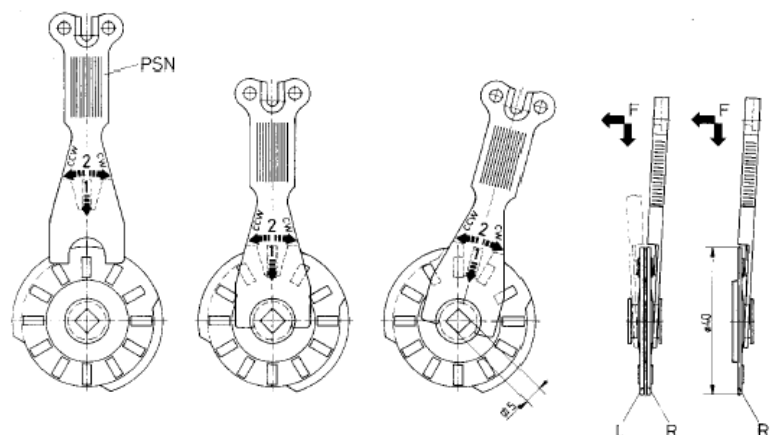
<b>Mechanical life time</b>	> 10 Mill.
Switching frequency	5 Hz
Contact chatter time	<4 ms
Actuating speed	>10 µm/s
Contact break	0,6 mm
Contact pressure	0,2 N

**Cam types and adjustment**

Order Code	Picture	Description
0		Single cam disc
		Adjustable with supplied PSN latches
		Available with 20 ° / 180 ° opening angle
		Material: Grilon T300
1		Double cam disc
		Adjustable with supplied PSN latches
		Available with 6 ° - 180 ° opening angle
		Material: Grilon T300

**Adjusting guideline of NK cams**

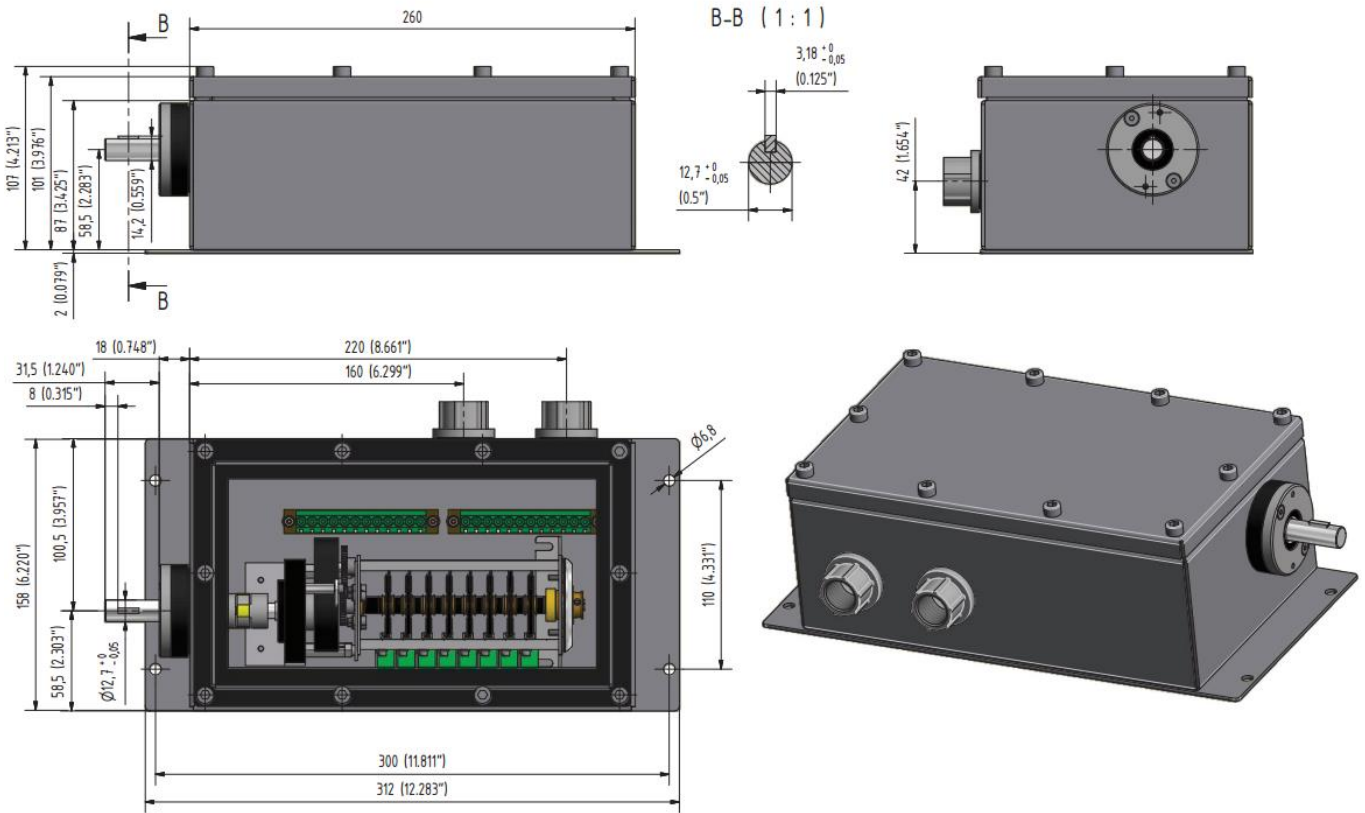
To adjust the NK pulley - insert the PSN key into the cam, press lightly and adjust the cam pulley by turning the key.



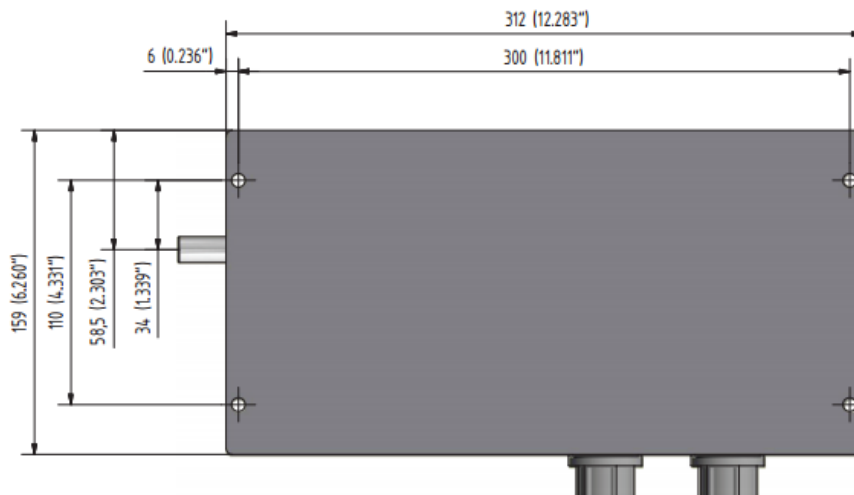
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Reference drawing in mm



Mounting hole in mm



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**Electrical wiring**

Standard wiring (inclusive)  
Screw terminal

24 x Typ MKDS 5/3-6,35 (max. 6 mm<sup>2</sup>)

Switch no.	Function	Terminal Block
1	COM	1
	NC	2
	NO	3
2	COM	4
	NC	5
	NO	6
3	COM	7
	NC	8
	NO	9
4	COM	10
	NC	11
	NO	12
5	COM	13
	NC	14
	NO	15
6	COM	16
	NC	17
	NO	18
7	COM	19
	NC	20
	NO	21
8	COM	22
	NC	23
	NO	24



**MR221 X SERIE**



Order Code

<b>MR 221 X</b>	<b>926</b>	<b>x.</b>	<b>x</b>	<b>x.</b>	<b>x</b>	<b>x</b>	<b>x</b>
926 MR221X							
<b>RATIO</b>							
0	12,5 : 1						
1	20 : 1						
2	25 : 1						
3	30 : 1						
4	40 : 1						
5	50 : 1						
6	75 : 1						
7	100 : 1						
8	200 : 1						
9	750 : 1						
<b>INTERFACE</b>							
0	None						
1	MR265 interface (possible by max. 6 switches)						
<b>NUMBER OF SWITCH</b>							
0	2 Switches						
1	3 Switches						
2	4 Switches						
3	5 Switches						
4	6 Switches						
5	7 Switches						
6	8 Switches						
<b>TYPE OF SWITCH</b>							
0	S840 V20 changeover contact for cable shoe 6.3x0.9mm silver contact						
<b>CAM</b>							
0	Single cam NK4101						
1	Double cam NK4201						
<b>CAM PROFILE</b>							
0	20° recess						
3	180° recess						



**Do you have any Questions ?**

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