

KWG120 SERIE



For Industrial, Crane's and Lockings

- ➔ Heavy Duty Limit Switch
- ➔ Up to 5 Channels
- ➔ Different micro switches
- ➔ 1x PG16 Cable output
- ➔ Protection class IP64
- ➔ Protection against contact

Product description

Heavy duty geared limit switch in an aluminium housing easy and variable to mount. 100% guard and interlocking drive concept up to the cam. Available in different ratios. The cover is provided with a sealing ring and fixable with 4 screws.

Application

This heavy duty geared limit switch could be used to control every end switch application in cranes, mining, automotives and wind power

Technical specifications

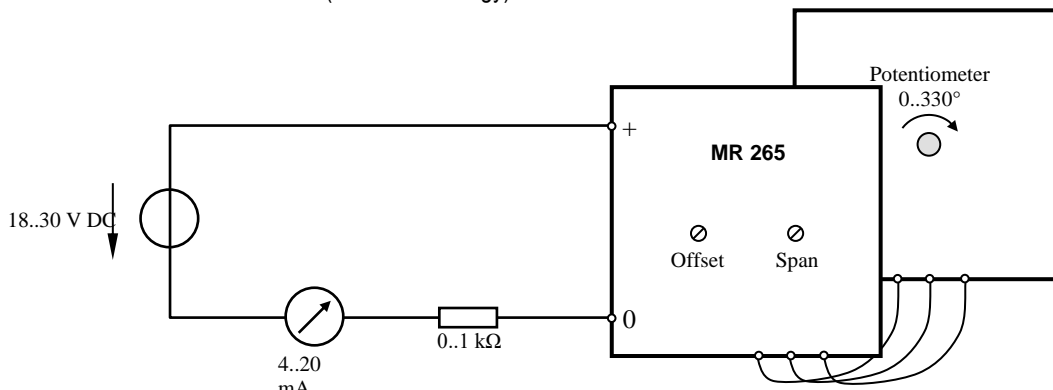
Usable Gear Ratio	1:1 – 2500:1	(more on request)
Program channels	2 - 5	(more on request)
Switching frequency	5 Hz	
Contact chatter time	<4 ms	
Actuating speed	>10 µm/s	
Contact break	0,6 mm	
Contact pressure	0,2 N	
Temperature range	-40 °C +85 °C	
Hysteresis	depend of ratio	
Repeatability	depend of ratio	
Weight	ca. 1,5 Kg	
MTBF (IEC 60050)	ON/OFF 10 Mio cycle 200'000l hours	
Rotation speed	max. 1500 U/min	
Shaft load	radial 80N, axial 40N	
Protection	IP 64 EN 60 529	
Shock resistance	2500m/s ² , 6ms IEC 68-2-27	
Vibrations resistance	200 m/s ² , 10....2000 Hz IEC 68-2-6	
Humidity	40% rh	

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Interface MR265

Adjustable current interface 4...20 mA (2-wire technology)



Connection type
Supply voltage:
Current consumption:
Max. Output power:
Max. Load:
Output current:
Linearity:
Temperature coefficient:
Temperature range:

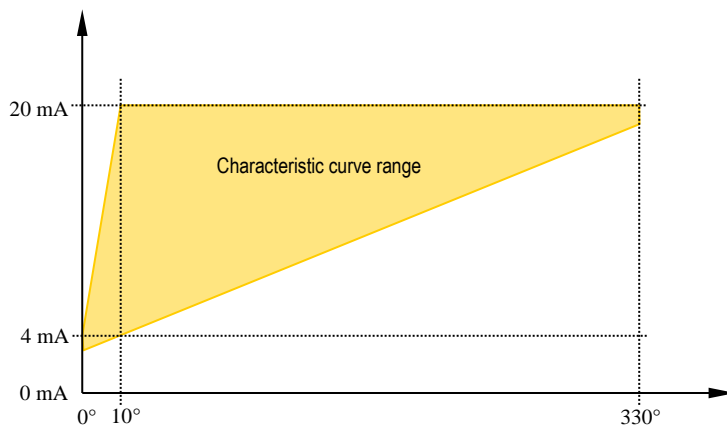
2-conductor technology
18...30 V DC (specifications apply at 24V)
4...20 mA
400 mW
1 kΩ
4...20 mA
± 0.5
100 ppm/K
0...70°C

Setting options

The shaft of the potentiometer can be rotated a maximum of 330°. The output characteristic of 4..20 mA can be set as follows.

Min. offset: 0°
Max. Offset: 10
Min. slope: 48.5 μA/°
Max. Slope: 1.6 mA/°

These values result in the characteristic curve range shown, in which the straight line of the characteristic can be freely inserted.



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Microswitch Type

Order code	Picture	Description
0		KS25B4 changeover contact for cable shoe 2.8x0.55mm silver contact switching current 4A 250 VAC / 1A 60VDC
		Maximum number of switches: Without MR265 = 5 / With MR265= 3
1		KS26B4 changeover contact for cable shoe 2.8x0.55mm gold contact switching current 4A 250 VAC / 1A 60VDC
		Maximum number of switches: Without MR265 = 5 / With MR265= 3
2		S840 V20 changeover contact for cable shoe 6.3x0.9mm silver contact switching current 10A 250V AC / 6A 24V DC
		Maximum number of switches: Without MR265 = 3 / With MR265= 2
4		S845 controlled opening switch gold contact switching current 10A 250V AC / 6A 24V DC
		Maximum number of switches: Without MR265 = 3 / With MR265= 2

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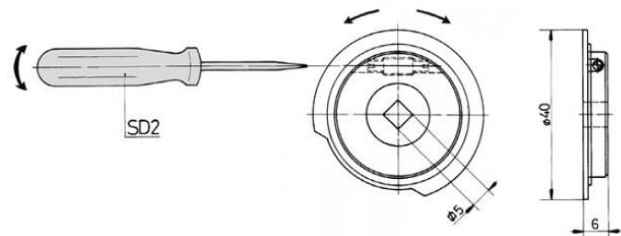
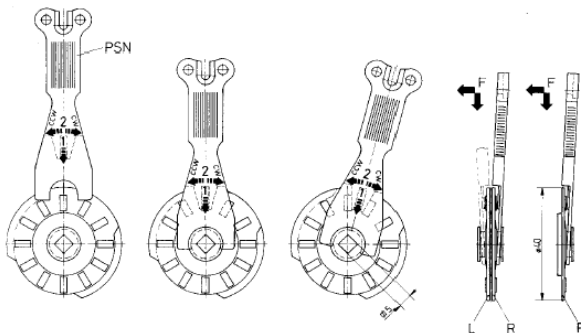
Cam types and adjustment

Type	Order code	Picture	Description
NK Cams	0		single cam
			adjustable with included PSN Key
			available with 20° / 60° / 90° / 180° opening angle
	1		double cam
			adjustable with included PSN Key
			free programmable from 6° - 180°
NV Cams	2		single cam
			adjustable with included screwdriver
			available with 20° / 60° / 90° / 180° / opening angle
	3		double cam
			adjustable with included screwdriver
			free programmable from 6° - 180°

Adjusting guideline of NV / 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.

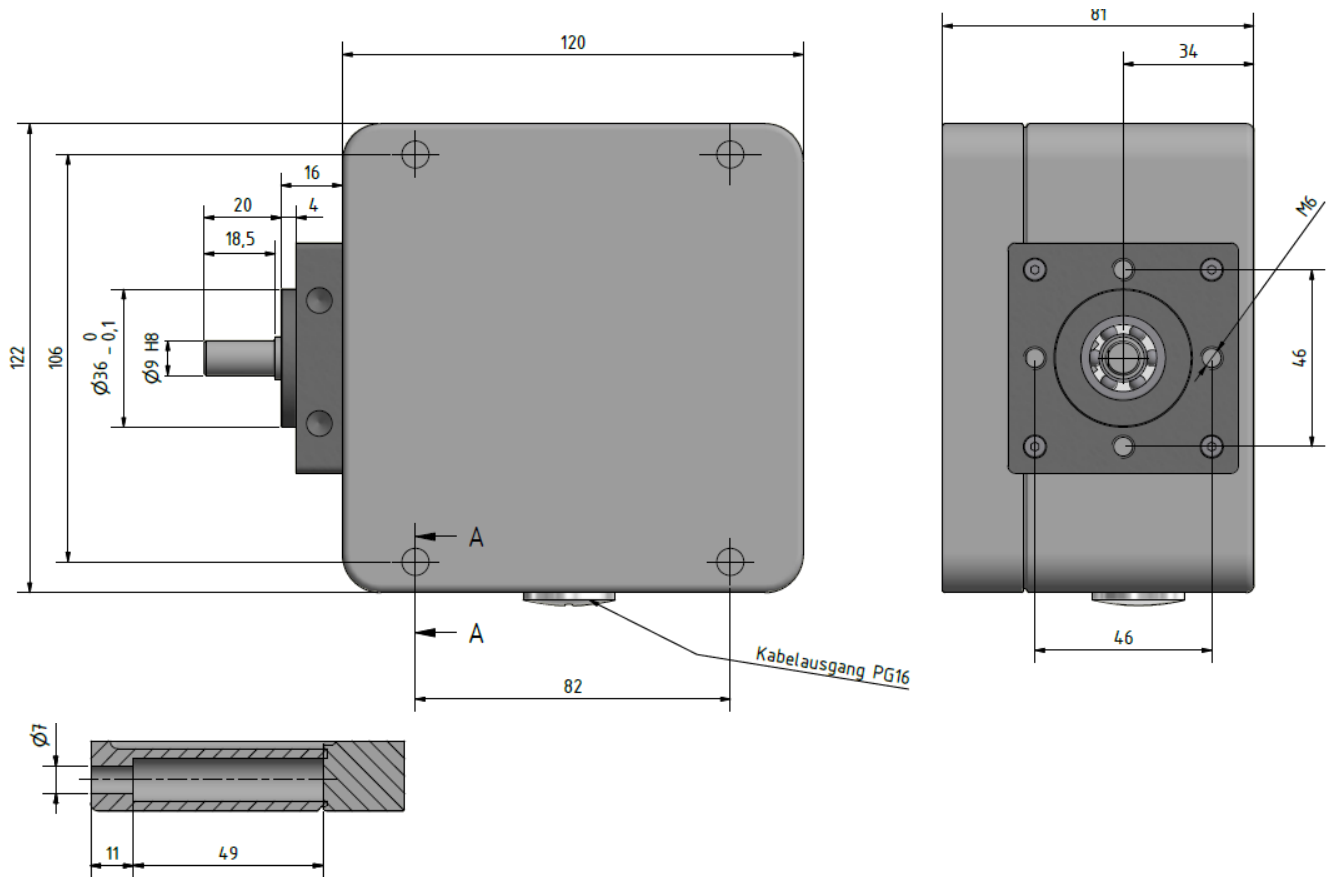
To adjust the NV washer - use the supplied SD screwdriver to turn the screw located radially on the side of the cam until the cam is in the desired position.



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Reference drawing in mm



Connection terminal + connection cable

The gear limit switch is supplied with a connection terminal and suitable connection cables and jumpers for the COMs. For pre-wired versions please contact our sales department.

Up to 3 switches = 6 pole terminal

supplied: connecting cables and jumpers

Pin	1	2	3	4	5	6
Signal	Signal switch 1	Signal switch 2	Signal switch 3	COM switch 1-3	MR265 GND	MR265 4-20mA

From 4 switches = 8 pole terminal

supplied: connecting cables and jumpers

Pin	1	2	3	4	5	6	7	8
Signal	Signal switch 1	Signal switch 2	Signal switch 3	Signal switch 4	Signal switch 5	COM switch 1-5	MR265 GND	MR265 4-20mA

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Order code

		918	x.	x	x.	x	x	x
918	KWG120							
		RATIO						
0	1 : 1							
1	2 : 1							
2	4 : 1							
3	12,5 : 1							
4	25 : 1							
5	40 : 1							
6	100 : 1							
7	200 : 1							
8	750 : 1							
9	2500 : 1							
		INTERFACE						
0	None							
1	MR 265 interface 4-20mA							
		NUMBER OF SWITCH						
0	2 switches							
1	3 switches							
2	4 switches							
3	5 switches							
		TYPE OF SWITCH						
0	KS25B4 changeover contact for cable shoe 2.8x0.55mm silver contact	2)						
1	KS26B4 changeover contact for cable shoe 2.8x0.55mm gold contact	2)						
2	S840 V20 changeover contact for cable shoe 6.3x0.9mm silver contact	1) 3)						
4	S845 controlled opening switch gold contact	1) 3)						
		CAM						
0	Single cam NK4101							
1	Double cam NK4201							
2	Single cam NV4101							
3*	Double cam NV4201	5)						
		CAM PROFILE						
0	20° recess	4)						
3	180° recess	4)						

- 1) Maximum 2 switches with MR265
- 2) Maximum 4 switches with MR265
- 3) Maximum 3 switches without MR265
- 4) Other angles on request (20° / 40° / 60° / 90°)
- 5) Double Cam Disk Series NV4201 on Request



Do you have any Questions ? Phone: +41 (0)44 843 40 20 or Mail: sales@micronor.ch