



### Micro Limit Switches Series 8064

- Explosion protection to
  - CENELEC
  - IEC
- Can be used in
  - Zones 1 and 2 (8064/1)
  - Zones 1, 2 and 21 (8064/2)
- Devices can be supplied as
  - Built-in micro limit switches with single core connections
  - Micro limit switches with flexible lead
- Version as limit switches with
  - Snap-action contact; contact separation:  $2 \times \geq 0,3 \text{ mm}$
  - Positive opening contact; contact separation:  $2 \times \geq 1,5 \text{ mm}$  to EN 60 947-5-1
- Width
  - Single limit switch 11 mm
  - Double limit switch 15,5 mm
- All current carrying parts are gold-plated

STAHL

Because of the large number of actuator and circuit options which can be supplied, the scope for using the micro limit switches is very wide.

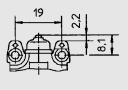
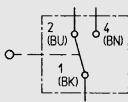
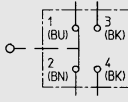
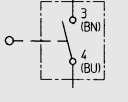
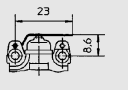
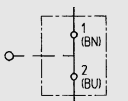
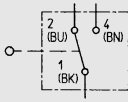
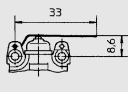
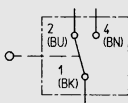
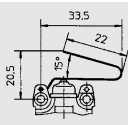
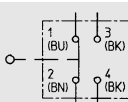
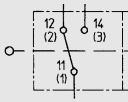
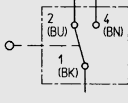
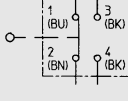
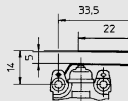
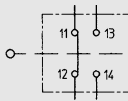
The devices can be supplied with silver contacts - or with gold-plated silver contacts for low currents and voltages.

The micro limit switches are designed for screw and clip-on mounting. Specially shaped fixing bushes enable several micro limit switches to be grouped together without expensive additional work.

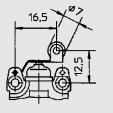
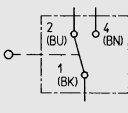
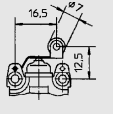
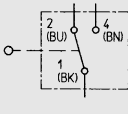
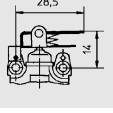
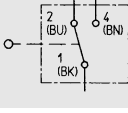
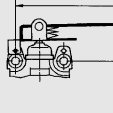
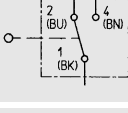
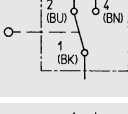
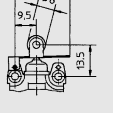
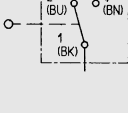
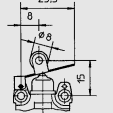
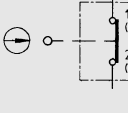
# Zones 1 & 2, 21



Selection table



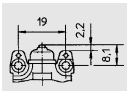
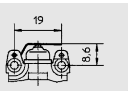
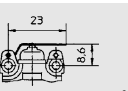
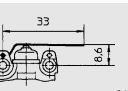
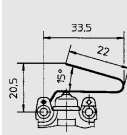
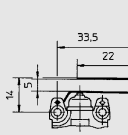
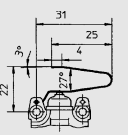
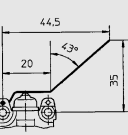
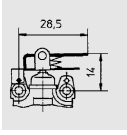
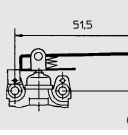
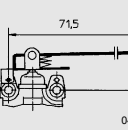
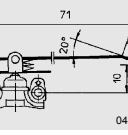
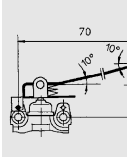
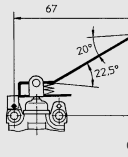
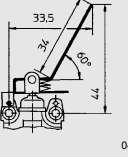
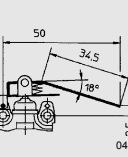
Version	Contacts	Connection	Cable length	Ordering code	Weight kg	
 04362E00	 07660E00	Silver	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	3 m	<b>8064/21-130-30-000</b>	0,210
	 07661E00	Silver	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	2 m	<b>8064/21-140-20-000</b>	0,160
	 07659E00	gold-plated	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	1 m	<b>8064/21-320-10-000</b>	0,100
 04364E00	 07658E00	Silver	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	5 m	<b>8064/21-110-50-102</b>	0,420
	 07660E00	Silver	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	3 m	<b>8064/21-130-30-102</b>	0,210
 04365E00	 07660E00	Silver	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	5 m	<b>8064/21-130-50-103</b>	0,420
 04366E00	 07661E00	Silver	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	6 m	<b>8064/21-140-60-121</b>	0,480
	 07672E00	Silver	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	1.5 m	<b>8064/21-133-15-121</b>	0,230
	 07660E00	Silver	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	3 m	<b>8064/21-130-30-121</b>	0,210
	 07661E00	Silver	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	2 m	<b>8064/21-140-20-121</b>	0,160
 04367E00	 07667E00	Silver	Single cores, H07G-K, 0,75 mm <sup>2</sup>	0.5 m	<b>8064/11-149-05-122</b>	0,070

### Selection table

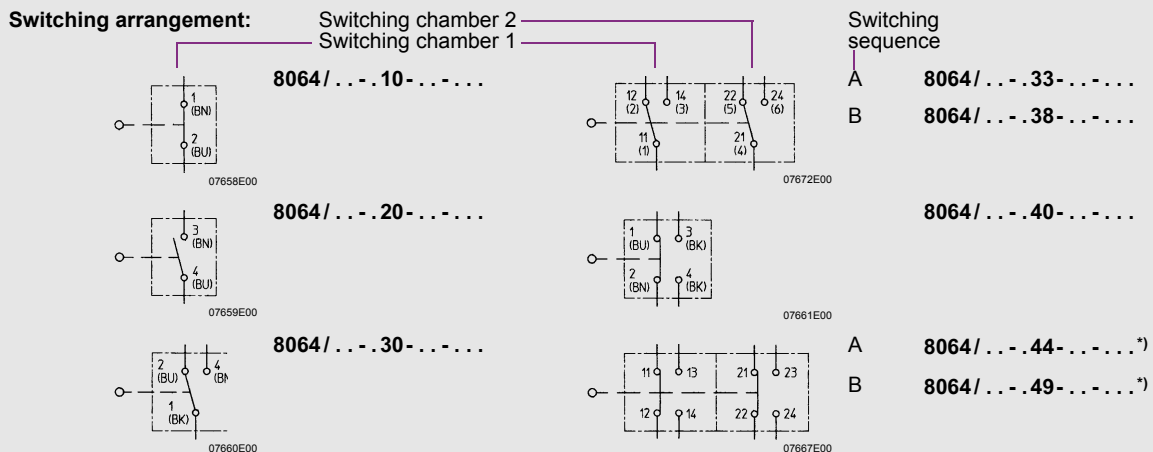
Version	Contacts	Connection	Cable length	Ordering code	Weight kg	
 04383E00	 07660E00	gold-plated	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	3 m	<b>8064/21-330-30-163</b>	0,210
 04383E00	 07660E00	Silver	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	1 m	<b>8064/21-130-10-164</b>	0,100
 04372E00	 07660E00	Silver	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	1 m	<b>8064/21-130-10-241</b>	0,100
 04374E00	 07660E00	Silver	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	1 m	<b>8064/21-130-10-243</b>	0,100
	 07660E00	Silver	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	3 m	<b>8064/21-130-30-243</b>	0,210
 04381E00	 07660E00	Silver	Flexible lead, H05VV-F 0,75 mm <sup>2</sup>	3 m	<b>8064/21-130-30-261</b>	0,210
 04360E00	 07662E00	Silver	Single cores, H07G-K, 0,75 mm <sup>2</sup>	0.5 m	<b>8064/15-150-05-261</b>	0,070

STAHL

Single- and double-micro limit switch with snap-action contact, contact distance  $2 \times \geq 0,3 \text{ mm}$

Version	Actuator	Reference	Actuator	Reference	Actuator	Reference	Actuator	Reference
 01228E00  01230E00		000		101		102		103
		121		122		123		124
		241		242		243		244
		245		246		247		248

<b>Contact distance:</b>	$2 \times \geq 0,3 \text{ mm}$ (snap-action contact)	<b>8064 / . 1- . . . . .</b>
<b>Connection:</b>	Single cores	<b>8064 / 1- . . . . .</b>
	Flexible cores	<b>8064 / 2- . . . . .</b>
<b>Contact material:</b>	Silver	<b>8064 / . . . 1- . . . . .</b>
	Silver, gold-plated galvanically	<b>8064 / . . . 3- . . . . .</b>





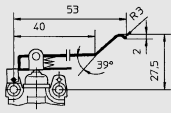
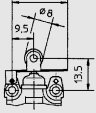
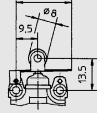
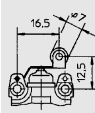
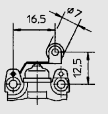
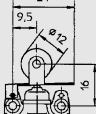

Switching sequence: A Switching chamber 1 and 2 switch nearly synchronous  
 B Switching chamber 1 switches reliably before switching chamber 2  
 \*) for same potential only with single cores only

<b>Cable length:</b>	0,5 m	<b>8064 / . . . . .-05- . . .</b>
	1,0 m	<b>8064 / . . . . .-10- . . .</b>
	3,0 m	<b>8064 / . . . . .-30- . . .</b>

**Note:** Micro limit switches, contact distance  $2 \times \geq 1,5 \text{ mm}$  on request

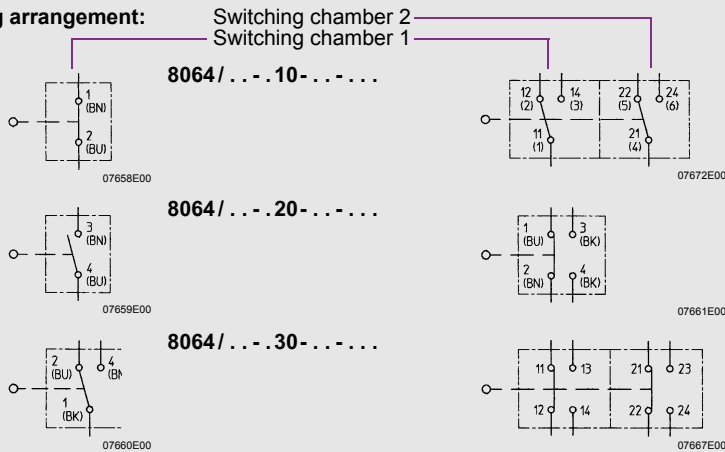


### Single- and double-micro limit switch with snap-action contact, contact distance $2 \times \geq 0,3 \text{ mm}$

Version	Actuator	Reference	Actuator	Reference	Actuator	Reference	Actuator	Reference
 01228E00 8064 with flexible lead  01230E00 8064 with single cores	 04380E00	249	 04381E00 Plastic roller	261	 04381E00 Metal roller	262	 04383E00 Plastic roller	163
	 04383E00 Metal roller	164	 04385E00 Plastic roller	266	 04386E00 Adjusting screw	173		

<b>Contact distance:</b>	2 x $\geq 0,3 \text{ mm}$ (snap-action contact)	<b>8064 / .1-.....</b>
<b>Connection:</b>	Single cores	<b>8064 / 1-.....</b>
	Flexible cores	<b>8064 / 2-.....</b>
<b>Contact material:</b>	Silver	<b>8064 / ...-1-.....</b>
	Silver, gold-plated galvanically	<b>8064 / ...-3-.....</b>

#### Switching arrangement:



#### Switching sequence

A	<b>8064 / ...-33-.....</b>
B	<b>8064 / ...-38-.....</b>
	<b>8064 / ...-40-.....</b>
A	<b>8064 / ...-44-.....*)</b>
B	<b>8064 / ...-49-.....*)</b>

#### Switching sequence:



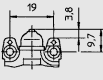
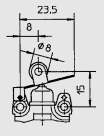
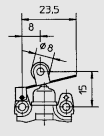
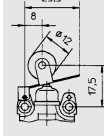
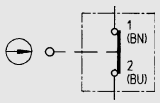
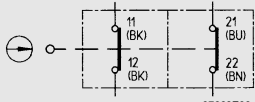
- A Switching chamber 1 and 2 switch nearly synchronous
- B Switching chamber 1 switches reliably before switching chamber 2

\*) for same potential only with single cores only

<b>Cable length:</b>	0,5 m	<b>8064 / .....-05-...</b>
	1,0 m	<b>8064 / .....-10-...</b>
	3,0 m	<b>8064 / .....-30-...</b>

**Note:** Micro limit switches, contact distance  $2 \times \geq 1,5 \text{ mm}$  on request

Micro limit switch with positive opening contact, contact distance  $2 \times \geq 1,5 \text{ mm}$

Version	Actuator	Reference	Actuator	Reference	Actuator	Reference	Actuator	Reference
 8064 with flexible lead 01228E00  8064 with single cores 01230E00	 04387E00	000	 Plastic roller 04360E00	261	 Metal roller 04360E00	262	 Plastic roller 04388E00	266
<b>Contact distance:</b>		2 x $\geq 1,5 \text{ mm}$ (positive opening contact)				8064 / .5- . . . . .		
<b>Connection:</b>		Single cores				8064 / 1 . . . . .		
		Flexible lead				8064 / 2 . . . . .		
<b>Contact material:</b>		Silver				8064 / . . -1 . . . . .		
		Silver, gold-plated galvanically				8064 / . . -3 . . . . .		
<b>Switching arrangement:</b>		 07662E00				8064 / . . - .50- . . . . .		
		 07668E00				8064 / . . - .55- . . . . .		
<b>Cable length:</b>		0,5 m				8064 / . . . . . -05- . . . . .		
		1,0 m				8064 / . . . . . -10- . . . . .		
		3,0 m				8064 / . . . . . -30- . . . . .		



### Technical Data

Contact distance	with snap-action contact	2 x ≥ 0,3 mm		
	with positive opening contact	2 x ≥ 1,5 mm		
Explosion protection				
Gas explosion protection				
Built-in micro limit switch with singles cores	⊕ II 2 G EEx de IIC or EEx d IIC			
Micro-limit switch with flexible lead	⊕ II 2 G EEx d IIC T6			
Dust explosion protection				
Micro-limit switch with flexible lead	⊕ II 2 D IP66 T 80 °C			
Certificates				
Gas explosion protection				
Built-in micro limit switch with singles cores	PTB 99 ATEX 1064 U <sup>1)</sup>			
	1) The miniature limit switch is to be installed in an enclosure meeting the requirements of a recognized type of protection to EN 50 014 Section 1.2. When installing the miniature limit switch in enclosures of type of protection Increased Safety „e“ to EN 50 019 the clearances and creepage distances must be maintained.			
Micro-limit switch with flexible lead	PTB 02 ATEX 1031 X <sup>2)</sup>			
	2) Micro limit switches with integral flexible lead must be installed with mechanical protection.			
Dust explosion protection				
Micro-limit switch with flexible lead	IBExU 04 ATEX 1125 X			
Degree of protection	IP 66 (acc. to IEC 60 529)			
Ambient temperature	- 20 °C ... + 40 °C			
Material				
Housing	Thermoplastic			
Plunger	Stainless steel			
Additional actuator	Stainless steel			
Contacts	Silver or gold-plated silver			
Weight		cable length	with single cores	with flexible lead
	Single limit switch	0,5 m	0,035 kg	0,060 kg
		1,0 m	0,065 kg	0,100 kg
		3,0 m	0,170 kg	0,210 kg
	Double limit switch	0,5 m	0,070 kg	0,080 kg
		1,0 m	0,120 kg	0,150 kg
		3,0 m	0,340 kg	0,415 kg
Connection				
Single cores	4GAF, 0,75 mm <sup>2</sup>			
Flexible lead	H05VV-F, 0,75 mm <sup>2</sup>			
Life				
mechanical	with snap-action contact	> 2 x 10 <sup>6</sup> operations		
	with positive opening contact	> 1 x 10 <sup>6</sup> operations		
elektrical	depend on load			
max. switching frequency	1000 switching cycles per hour			

**Technical Data**

Silver contacts  
(with protective gold-plating)

Rated voltage	AC	max. 400 V
	DC	max. 250 V
Rated current	AC	2 A / 400 V
	AC	7 A / 250 V
	DC	0,5 A / 250 V

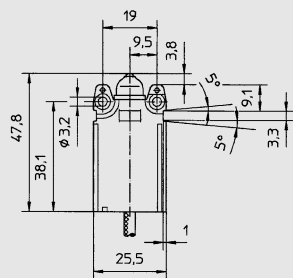
Braking capacity acc. to EN 60 947-5-1  
AC-15 2 A / 400 V  
DC-13 0,15 A / 250 V

voltage		ohmic load		inductive load cos φ = 0,6		voltage		ohmic load		inductive load L/R = 0,3 μs	
AC	400 V	3 A	2 A	DC	250 V	0,4 A	30 V	7 A	0,03 A		
	250 V	5 A	3 A								
	30 V	7 A	5 A								

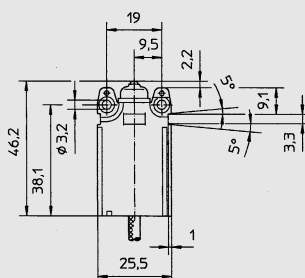
Gold-plated contacts

on request

**Dimension drawings** (all dimensions in mm) - subject to alterations



04347E00

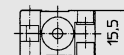


04349E00



04369E00

Single micro limit switch

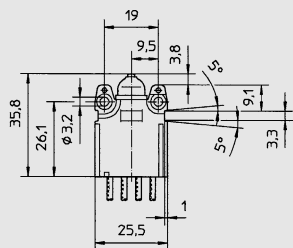


04370E00

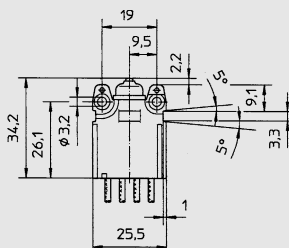
Double micro limit switch

**8064/25 - ... - ... - 000**  
Micro limit switch with flexible lead

**8064/21 - ... - ... - 000**  
Micro limit switch with flexible lead



04348E00



04350E00

**8064/15 - ... - ... - 000**  
Built-in micro limit switches with single cores

**8064/11 - ... - ... - 000**  
Built-in micro limit switch with single cores

**8064/.5** Micro limit switches  
with positive opening contacts,  
contact distance  $2 \times \geq 1,5$  mm

**8064/.1** Single micro limit switch  
with snap-action contact,  
contact distance  $2 \times \geq 0,3$  mm

For dimensions of drive heads,  
see selection tables



We reserve the right to make alterations to the technical data, weights, dimensions, designs and products available without notice. The illustrations cannot be considered binding.