

# Limit Switch for Cold Climate Pitch Systems

September, 2009

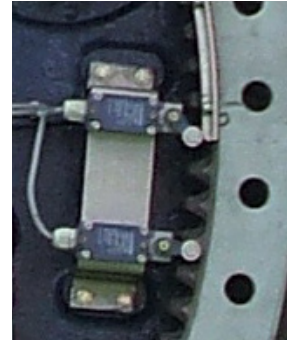
**Wind Cluster®**  
Creating Synergy

## Precise, reliable, and versatile

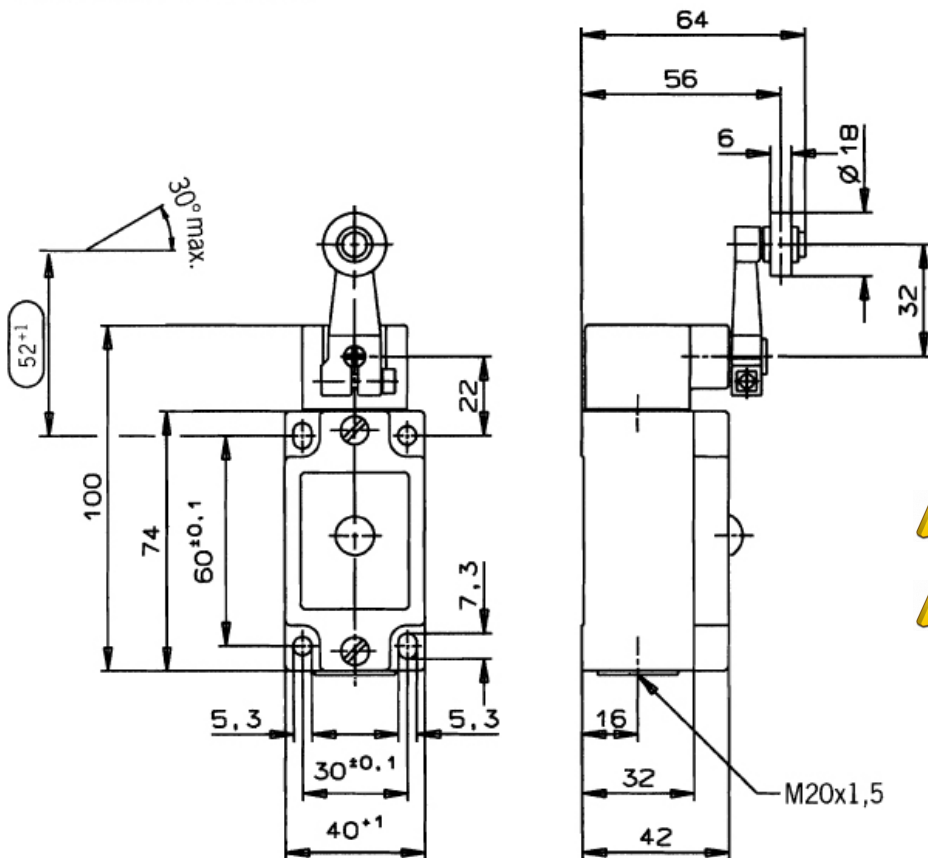
Wind Cluster limit switches for pitch systems are manufactured in accordance with the European standard EN 50041. Robust construction and the use of high quality, corrosion resistant materials, precision finishing and protection class IP 67 according to IEC 60529 guarantee trouble-free and reliable operation under the toughest conditions.

Wind Cluster limit switches can also be used as safety switches if equipped with a switching function, where the NC contact is opened by a rigid plunger, even if the switching function is damaged due to a faulty spring or contact welding.

Typically, the limit switches are mounted to indicate e.g. 91° and 100° angles, and perhaps mounted at the bottom.



## Dimension drawing

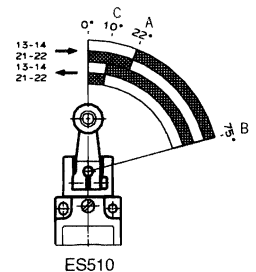


### Contacts

□ open  
▣ closed

### A Switching point

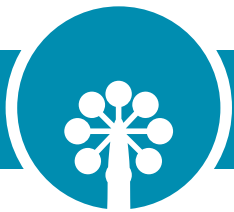
B End position  
C Reset point



**!** If damaged or worn, safety switches should be replaced as a unit.

### Notes on installation for limit switches with safety switching elements

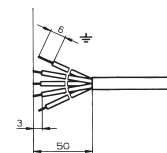
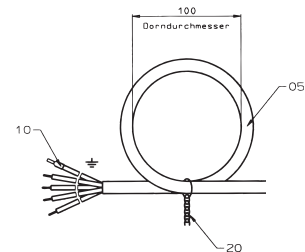
To obtain the direct opening travel, the switching cam gap shown in the dimension 52+1 must be complied with. Actuation elements such as cam approach guides must be firmly mounted in accordance with ES51 0 EN 1088, i.e. riveted, welded or otherwise secured against becoming loose.



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## Technical specifications Limit switch type 150117-WC

Parameters	Value	Unit
Housing material	Anodized die-cast allot	
Degree of protection acc. to IEC 60529	IP67	
Installation position	Optional	
Mechanical service life	30*106 switching cycles	
Ambient temperature	-40 to +80	°C
Weight	Approx 0.3	kg
Actuator	Roller lever arm	
Roller material	Steel	
Approx. speed max 1)	60	m/min
Approx. speed min	0.1	m/min
Repeat accuracy	+/- 0.25	°
Actuator force min	15	N
Switching element	1 NC + 1 NO	
Switching principle	Snap-action contact element	
Contact material	Silver alloy, gold flashed	
Contact closing time	< 4	ms
Contact bouncing time	< 3	ms
Rated impulse withstand voltage Uimp	2.5	kV
Rated insulation voltage	250	V
Utilization category acc. to IEC60947-5-1		
AC12	Ie 10A Ue 230V	
AC15	Ie 10A Ue 230V	
DC13	Ie 10A Ue 230V	
Switching current min at	10	mA
voltage	24	VDC
Conventional thermal current Ith	6	A
Short circuit protection IEC 60269-1	10/6	A gG
Type of connection	Cable 2000	mm
Conductor cross-section	PUR 5 x 0.5 cable	mm <sup>2</sup>



1) The approach speed specified applies to an approach angle of 30°

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