Compliance and Testing:

Shock Load:	MIL-STD-810G, Method 516.6, Procedure I (40g, 11ms) MIL-STD-810G, Method 516.6, Procedure V (75g, 6ms)
Vibration:	MIL-STD-810G, Method 514.6C a 514.6, Procedure I, cat.4
Oper. temperature limits:	MIL-STD-810G, Method 501.5, Procedure II Operation (+85°C) MIL-STD-810G, Method 502.5, Procedure II Operation (-32°C)
Storage temperature limits:	MIL-STD-810G, Method 501.5, Procedure I Storage (+85°C) MIL-STD-810G, Method 502.5, Procedure II Storage (-46°C)
Humidity:	MIL-STD-810G, Method 507.5, Procedure II (+60°C, 95% RH, 10 cycles)
Altitude:	MIL-STD-810G, Method 507.5, Procedure II alt. 3000 a 10.000m a.s.l.)
Dust protection:	EN 60529, chapter 13.4; 13.5 (2kg/m3, grain <75um, neg. press. 20mbar)
Water immersion:	EN 60529, chapter 14.2.7 (depth 1 m approx. 100mbar, for 30 min)
High-pressure water:	ISO 20653 – IPx8 (14-16l/min, 80-100bar, dist. 100-150mm, +80°C)
Salt fog:	MIL-STD-810G, Method 509.5 (2x 24h salt fog, 2x 24h dry, 35°C, NaCl 5%)

Verified by Test Lab Testion Praha, report P-TESTION-282/25.

Ordering and Logistics:

Package content:	Lighting unit (mounting hardware not included)
Package size:	approx. 150x100x60 mm (bubble wrap bag size of carton depends on ordered volume
Total weight:	approx. 300 g

Disclaimer:
Subject to change without notice.
No liability is accepted for damage caused by improper use or use inconsistent with this data sheet.
This Technical Data Sheet is 1st edition; the manufacturer reserves the right to make changes and additions.

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A LIMIT SWITCH

A LIMIT **SWITCH**

DESIGNED TO MEET REQUIREMENTS FOR USE IN THE MOST DEMANDING CONDITIONS.

Variant KSU01000

Variant KSP02000

Product Features:

Compact and robust design. Certified and tested for use in extreme climatic conditions.

Function Description:

The limit switch is used for reliable switching on and off of an electrical circuit at a defined shaft travel. It provides sufficient sensitivity while maintaining robustness and durability, including margin for additional non-destructive operation of the control shaft.

Tested for water resistance, dust resistance, and resistance to shocks and vibrations.
The switch is designed for long-term operation at the declared current load.
Type tests performed with 250,000 cycles under continuous load of 1A @ 28VDC, including monitoring of contact degradation via transition resistance every 10th stroke.

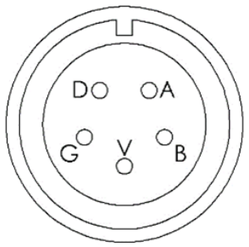
Product Variants:

The limit switch is manufactured and supplied with two optional connector types and orientations. Rear output in line with shaft movement or perpendicular to the shaft.

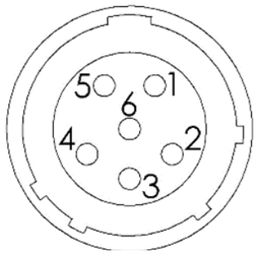
Designation	Description
KSPxxx	Variant with connector output in line with the shaft.
KSUxxx	Variant with connector output perpendicular to the shaft.
xx01000	Connectivity via VŠG18B5Š1-8
xx02000	Connectivity via D38999/20WA35PN

Connectivity:

Connection is provided optionally by connector D38999/20WA35PN (on switch body), connected via cable using mating connector D38999/26WA35SN with straight adapter M85049/88-09W03 or connector VŠG18B5Š1-8 paired with mating connector VŠ18KPN5G1U2.

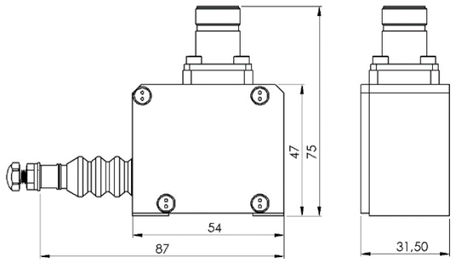


VŠG18B5Š1-8 Pinout
(connector front view)

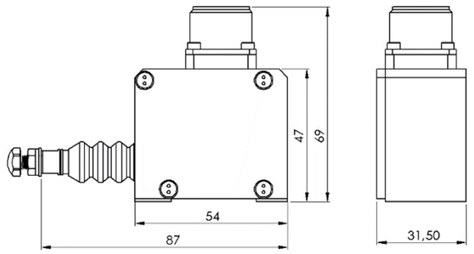


D38999/20WA35PN Pinout
(connector front view)

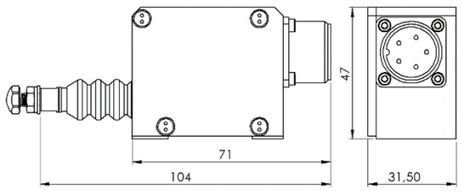
Overall product dimensions by variant



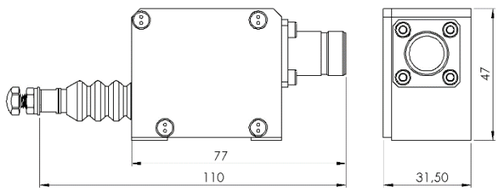
KSU01000/ KSU01000RS



KSU02000/ KSU02000RS



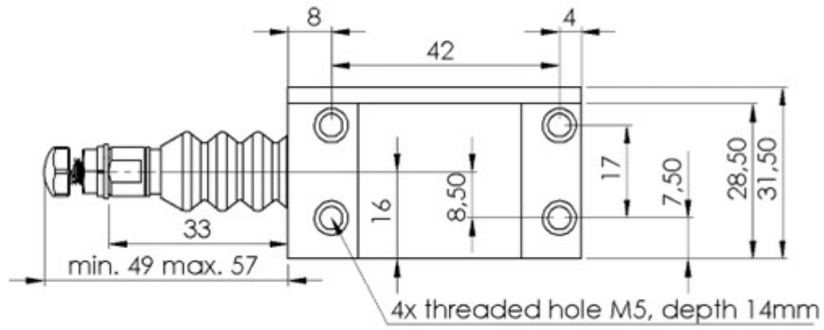
KSP01000/KSP01000RS



KSP02000/KSP02000RS

A LIMIT SWITCH

Installation and mounting dimensions – bottom view



TECHNICAL DATA:

Mechanical Parameters	
Shaft travel for switching:	min. 2mm, max. 3,5mm
Additional shaft travel after switching:	min. 7mm
Force to initiate shaft movement:	min. 38 N
Shaft force at switching:	49 - 78 N
Shaft force at end of travel:	max. 135 N
Electrical parameters	
Nominal voltage:	24V DC
Operating voltage:	6 – 32V DC
Operating current:	1A
Max. current:	0,2 - 8A (resistive load) 0,2 - 4A (inductive and capacitive load)
Mechanical dimensions (body)	
Length:	54 mm
Width (incl. cover):	31,5 mm
Height:	47 mm
Control shaft length:	49 – 57 (adjustable stop)
Weight:	205 g (± 5%)
Material and Finish	
Body material:	Aluminum alloy EN-AW 6082 T651
Body color:	Olive green RAL 6031
Surface treatment:	Anodized, black dyed
Surface treatment of visible surfaces:	Tikkurila Temadur 10 (gloss <12 at 60°)
Shaft materials:	
Shaft:	Stainless steel 1.4305
Dust protection:	Silicone 60 SHa UV stable
Stop bolt:	1.4571

Environmental Resistance and Conditions

Operating temperature:	-32 to +85°C
Storage temperature:	-46 to +85°C
Temperature change rate:	max. 60°C/10min
Humidity during storage:	
Unsealed connector:	< 50% RH
Sealed connector:	< 90% RH