

Level switch

NS 10/NS 25 ..-AM

Oil tanks in lubrication and oil supply systems are often under overpressure compared to the ambient atmosphere. All oil moistened parts of devices mounted externally on the tanks or housings for monitoring the liquid level must therefore be pressure-resistant.

The NS 10 and NS 25 series are designed for 10 or 25 bar operating pressures. The separate display float can easily be viewed inside the upstream guide tube and the magnetic field ensures the touchless connection with the interior main float. The variable electric switching contacts and/or the continuous position encoder are located on the scale plate, which also holds the sight glass. On the NS 10 it is standard connected to the tank via pipe sockets and fittings, on the NS 25 via DIN flange.

Level switch NS for external installation

Visual and electric liquid level monitoring

Operating pressure up to 25 bar

Lengths up to 5000 mm

Adjustable level contacts

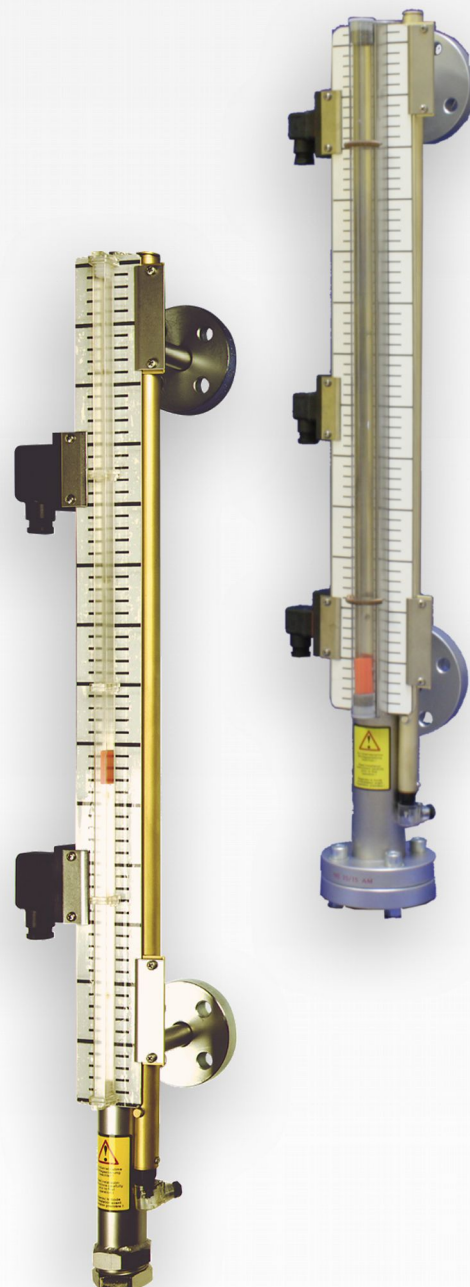
Optional 4-20 mA analogue output

Display with scale

Compact design

Particularly buoyant floats

Special versions available upon request



Technical Data NS 10 ..-AM
Basic Unit

Max. operating pressure	10 bar
Max. operating temperature	100 °C
spec. min. fluid weight	0.75 kg/dm ³

Material

Float SK166	NBR
Riser	1.4571
Flange	Galvanised steel
Sight glass	PC
Sealing cap	1.4571

Version	0-AM	15-AM	25-AM
Connection	Tube	Flange	Flange
DIN 2656 flange		DN15	DN25
ØD	20	95	115
Øk		65	85
Ød		14	14
b		16	18
ØA		45	68
h		12	14
Weight at L1=500 mm	approx. 7.5 kg	approx. 8.0 kg	approx. 8.75 kg
Weight L1+100 mm	approx. 0.2 kg	approx. 0.2 kg	approx. 0.2 kg

Other versions available upon request

Options

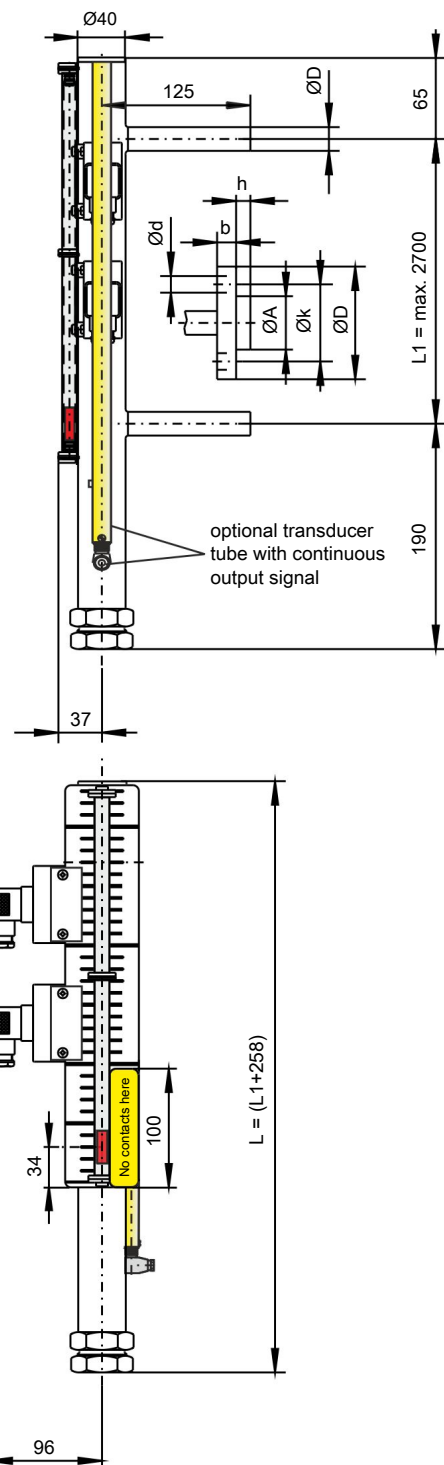
Transducer tube	-K continuous level
Measurement principle	Reed contact
Resolution	5 or 10 mm
Operating voltage (U _B)	10 - 30 VDC
Output	4 - 20 mA (nominal voltage 24 VDC)
Load Ω max.	(U _B - 7.5 V) / 0.02 A

Accessories

Item no.:	Description:
22 51 000	Flange seal 45/22x2 mm (DN15)
22 52 000	Flange seal 68/27x2 mm (DN25)
22 71 999	Mounting bolts 8 x M12x65

Pressure Equipment Directive information:

The level switches are designed, manufactured and tested to Pressure Equipment Directive 2014/68/EU according to AD-2000 code.
The actual category of the level switch achieved is printed on the type plate.
Depending on the category, comprehensive quality assurance is performed according to module H or H1.



Model key NS 10

Model key

Type designation		NS 10/-XX-XX-SK166/-XX		Length L1 = mm
Version				Float
0-AM	with pipe socket			Optional Transducer tube
15-AM	DN 15 flange			-K5 continuous resolution 5 mm
25-AM	DN 25 flange			-K10 continuous resolution 10 mm

Ordering example

You require: Level switch for external installation, max. operating pressure 10 bar, with DN15 flange connection, adapter spacing L1 = 1500 mm, with 2 changeover contacts

Order NS 10/15-AM-SK166 / 1500
2 x item no. 28 89 999 contact MKS 1/W

Technical Data NS 25 ..-AM
Basic Unit

Operating pressure	max. 25 bar	
Operating temperature	max. 120 °C	
spec. min. fluid weight	SK661 0.85 kg/dm ³	SK662 0.70 kg/dm ³

Material

Float	1.4571	
Riser	1.4571	
Flange	Galvanised steel	
Sight glass	PC	

Version	15-AM	25-AM
Connection	Flange	Flange
DIN 2656 flange	DN15	DN25
ØD	95	115
Øk	65	85
Ød	14	14
b	16	18
ØA	45	68
h	12	14
S for float SK661	205	205
S for float SK662	390	390
Weight at L1=500 mm	approx. 9.5 kg	approx. 10.5 kg
Weight L1+100 mm	approx. 0.4 kg	approx. 0.4 kg

Other versions available upon request

Options

Transducer tube	-K continuous level
Measurement principle	Reed contact
Resolution	5 or 10 mm
Operating voltage (U _B)	10 - 30 VDC
Output	4 - 20 mA (nominal voltage 24 VDC)
Load Ω max.	(U _B - 7.5 V) / 0.02 A

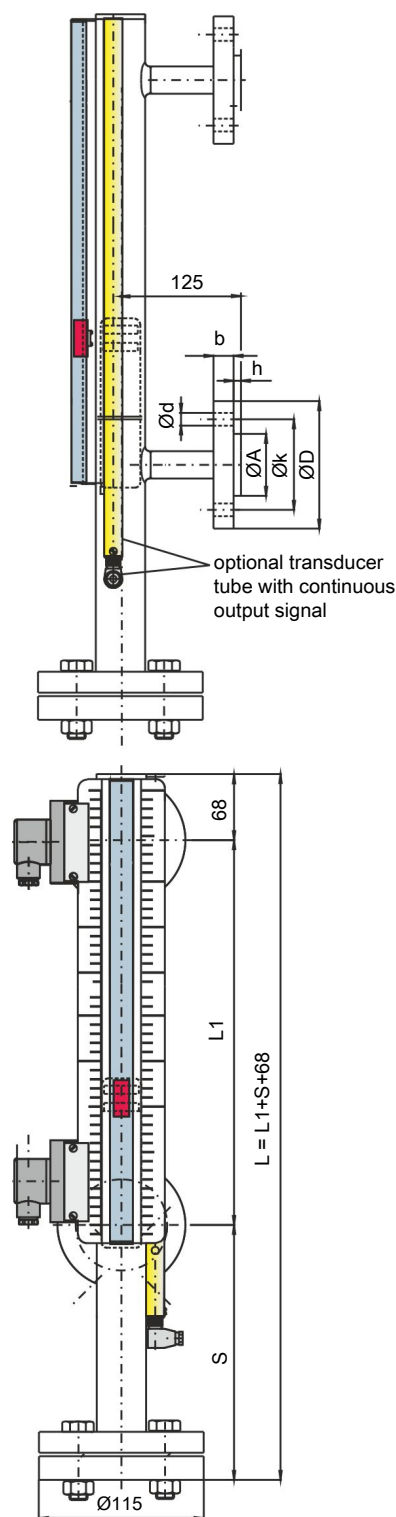
Accessories

Item no.:	Description:
22 51 000	Flange seal 45/22x2 mm (DN15)
22 52 000	Flange seal 68/27x2 mm (DN25)
22 71 999	Mounting bolts 8 x M12x65

Pressure Equipment Directive information:

The level switches are designed, manufactured and tested to Pressure Equipment Directive 2014/68/EU according to AD-2000 code.

The actual category of the level switch achieved is printed on the type plate. Depending on the category, comprehensive quality assurance is performed according to module H or H1.



Model key NS 25

Model key

		NS 25/-XX-XX-XX/-XX					Length L1 = mm	
Type designation								
Version		Float type						
15-AM	DN 15 flange						-SK661	spec. min. fluid weight 0.85 kg/dm³
25-AM	DN 25 flange						-SK662	spec. min. fluid weight 0.70 kg/dm³
Option		Transducer tube - continuous level measurement						
K5	continuous resolution 5 mm							
K10	continuous resolution 10 mm							

Ordering example

You require: Level switch for external installation, max. operating pressure 25 bar, with DN25 flange connection, spec. weight fluid 0.89 kg/dm³, adapter spacing L1 = 1500 mm, continuous level output, 10 mm resolution and with 2 changeover contacts

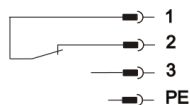
Order NS 25/25-AM-K10-SK661 / 1500
2 x item no. 28 89 999 contact MKS - 1/W

Contacts for NS ..-AM

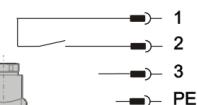
Pin assignment (Contact position empty tank)

Type	MKS-1/K (-60)
Function	NC contact/NO contact
Max. voltage	230 V AC/DC
Max. switching current	1 A
Max. contact load	50 VA
Connector	M3 (DIN EN 175301-803)
	3-pin + PE
IP class	IP 65
Item no.	28 88 999

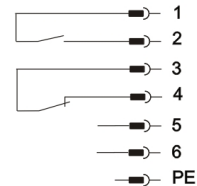
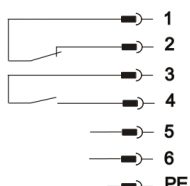
Mounted left



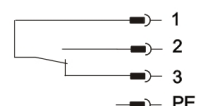
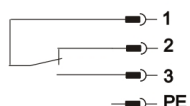
Mounted right



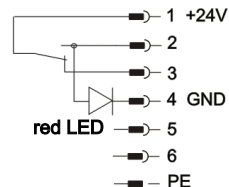
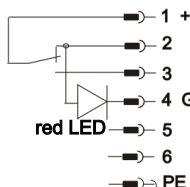
Type	MKS-2/K
Function	2 x NC contact/NO contact
Max. voltage	230 V AC/DC
Max. switching current	1 A
Max. contact load	50 VA
Connector	S6 (DIN EN 175291-804)
	6-pin + PE
IP class	IP 65
Item no.	28 91 999



Type	MKS-1/W (-60)
Function	Change-over contact
Max. voltage	230 V AC/DC
Max. switching current	1 A
Max. contact load	50 VA
Connector	M3 (DIN EN 175301-803)
	3-pin + PE
IP class	IP 65
Item no.	28 89 999



Type	MKS-1/W-L 24 V (-60)
Function	Change-over contact with LED
Max. voltage	24 V DC
Max. switching current	1 A
Max. contact load	25 VA
Connector	S6 (DIN EN 175291-804)
	6-pin + PE
IP class	IP 65
Item no.	28 90 999

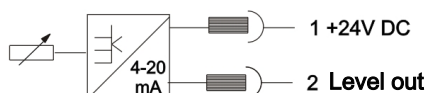


Other contacts available upon request

For applications in high shock and vibration environments we recommend using the MKS-1/K and MKS-2K contacts.

Versions ending in -60 are for switch type NS 3/20 AM and have a pipe clamp for mounting to the level switch tube.

Pin assignment for AM-K with S3 connector



When installing a transducer tube with continuous output signal the contact can only be installed on the left side.

MKS 1/K, MKS 1/W

MKS 2/K

MKS 1/W-L24V

