



Magnetic level gauge

NA7-50, NA7-52, NA7-80, NA7-110 and NA7-150

Application and function

The magnetic level gauge is an indirect liquid level indicator. The liquid level to be observed in the tank is transferred analogously in a ratio of 1:1 by a float to the magnetic indicator bar.

This product complies with EU Directive 2014/68/EU. The applicable regulations are AD2000 and the ASME Boiler and Pressure Vessel Code.

Technical basic equipment

- Parts in contact with media made of stainless steel
- Indicator bar
- Drain and vent plugs
- Process connections (customer-specific)

Optional versions

- Version with drain and vent valve
- Magnetic switch type M510-1-60
- Additional transmitter type MRK 110
- Luminous band indicator LB16 for optical transmission of the filling level
- ATEX version (2014/34/EU) II 3G Ex -h II C T2 Gc
- With bypass and measuring probe V86
- Other float types

Attention! Not all options can be combined with each other.



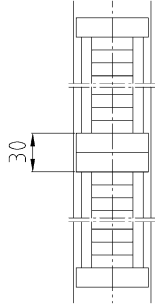
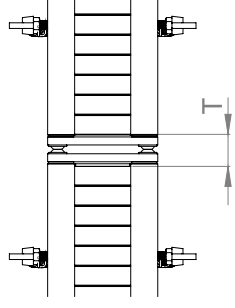
NA7-50

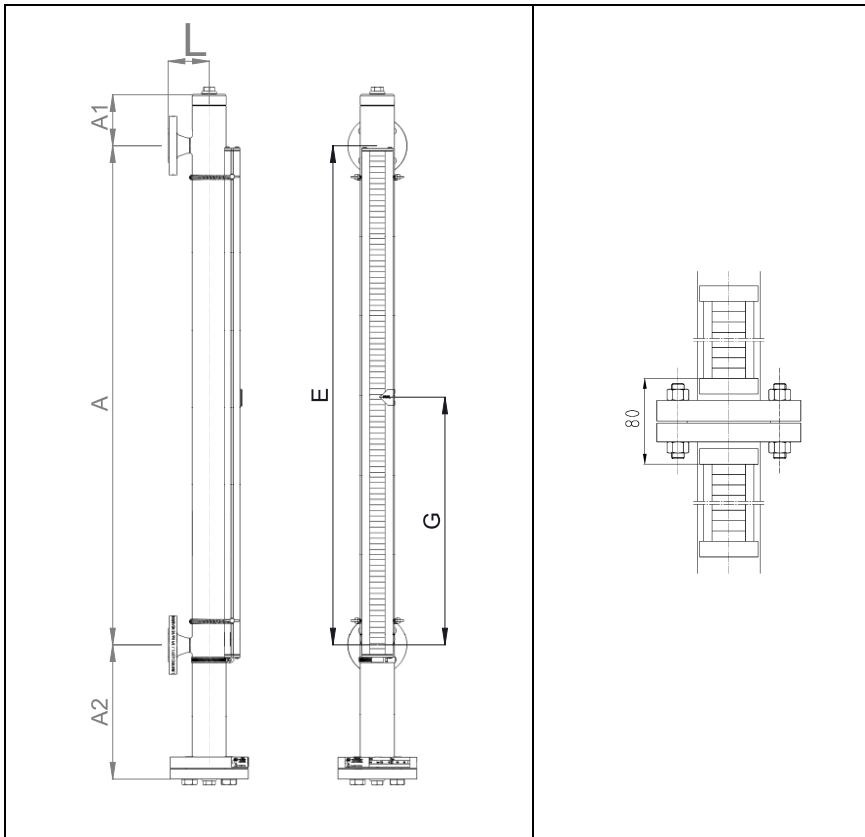
Technical data

Application limits NA7	Permissible pressure [PS]	Permissible temperature [TS]
NA7-50	20bar 290psig	214°C 417°F
NA7-52	50bar 725psig	265°C 509°F
NA7-80	80bar 1160psig	296°C 564°F
NA7-110	110bar 1595psig	318°C 604°F
NA7-150	150bar 2175psig	342°C 647°F

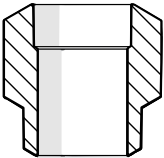
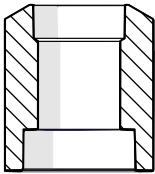
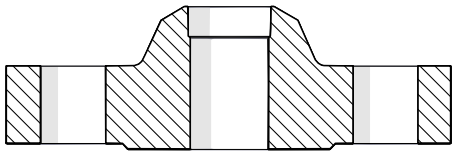
Dimensions and sizes

The indicator strip can be positioned anywhere outside the area of the connection pipes. If the display area is greater than the maximum length of a single indicator strip, it is possible to arrange two or more indicator strips one above the other. Device lengths > 6 m are designed in a split housing version with intermediate flanges. From a length of 2600 mm, a retaining plate is fitted in the centre to support the indicator.

NA7-50 and NA7-52 with vent plug at the top and drain plug at the bottom	Display range > 2,6 m (with indication bar AL2-G) <i>T=30mm</i>	Display range >2m (with indication bar ALG-R) <i>T=16 mm</i>
		
	Sight length > 6 m (version with intermediate flange) <i>T=80 mm</i>	



Available process connections

Process connections		
Welding end	Socket welding	Flange
		

Basic configuration

The magnetic flap indicators are equipped with an application specific indicator bar and drain and vent plugs.



Indicator bar (Ex.:AL2-G)



vent plug

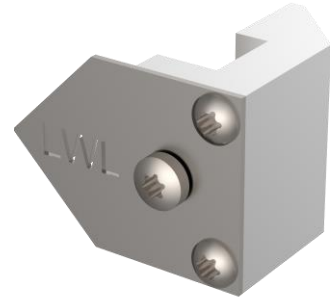
Type	Data sheet number
Indicator bar	D-06-D-50334-EN

Floater				
Indicator type	Pressure	Density (kg/dm ³)	Article number	Dimension A ₂
NA7-50 / NA7-52	< PN25	0,85-1	15-12501	272
	< PN40	0,78-0,85	15-12973	287
	< PN63	0,78-0,815	15-12974	392
NA7-80	PS 80 bar	0,72-0,78	40-11869	347
NA7-110	PS 110 bar	0,63-0,72	40-11879	507
NA7-150	PS 150 bar	0,62-0,68	40-11886	607

Accessories and optional versions

Description	Labeling	Article no.
Water level mark (for AL2-G / AL3-G)	HHWL	40-04502
	HWL	40-04501
	NWL	40-04500
	LWL	40-04499
	LLWL	40-04498

The fastening element with item number 25-14980 is required for fastening the water level mark.



Description	Labeling	Article no.
Water level mark	NW-LWL-NB	25-13645
	HHWL	25-13717
	HWL	25-13716
	NWL	25-13698
	LWL	25-13718
	LLWL	25-13719

Two M4 flat-head screws are required for fixing each water level marker.
Item number: 15-19296



Water level mark NWL

Examples of the optional versions

With customised drain valve	Additional transmitter	ATEX-Version	With one or more magnetic switches	Additional measuring bar
<p><i>E.g.: AV250</i></p>	<p><i>E.g.: MRK 110</i></p>		<p><i>E.g.: M510-1-60</i></p>	

Type	Data sheet number	Article number
AV250 Cutting ring screw connection DS12	D-09-D-54181-EN	15-16613
Magnetic switch Type M510-1-60	D-06-D-50380-EN	15-03037

With bypass and probe V86



E.g.: NA7-130

The liquid level to be measured by the V86 probe is continuously measured in the bypass by high-frequency microwave pulses guided through a tube.

A version with bypass is possible for measuring ranges <6m.

The probe is additionally approved as a high and low water limiter.

It has an automatic runtime adjustment and can thus compensate for temperature fluctuations.

The probe is suitable for use in hazardous areas and has various marine approvals.

Approvals according to ATEX, IEC, GL, LRS and ABS are possible.

Transmitter MRK 110

D-06-D-52503-EN

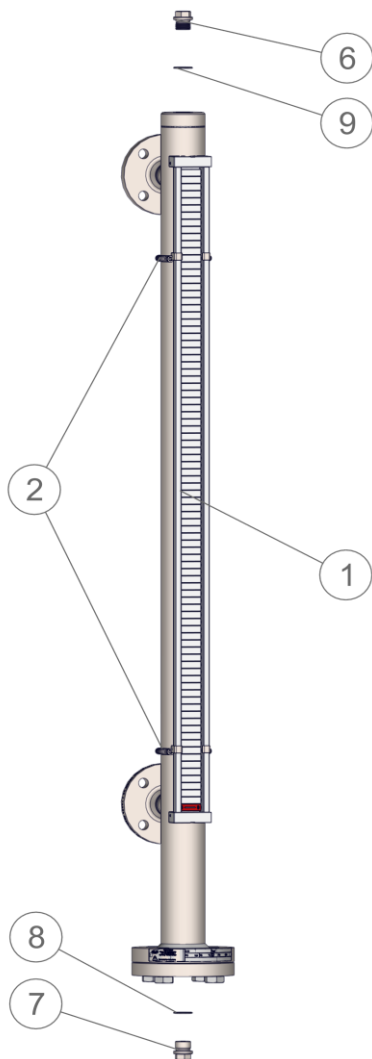
see datasheet

Measuring accuracy	± 2mm
Operating voltage	9,6 . . . 35 VDC
Output signal	4 . . . 20mA / HART
Protection class	IP66
Process temperature	-196 . . . +400°C
Ambient temperature	-40 . . . +80°C

Optional floats				
Indicator type	Pressure	Density (kg/dm^3)	Article number	Dimension A2
NA7-50 / NA7-52	< PN25	1,1	15-16178	217
		0,78-0,85	15-14790	272
		0,683-0,78	15-13319	302
		0,585-0,683	15-14829	372
	< PN40	0,85-1	15-15048	257
	< PN63	1,3	15-17496	227
NA7-80	PS 80bar	0,85-1	40-11870	287
		0,78-0,85	40-11871	347
		0,68-0,78	40-11873	407
		0,63-0,72	40-11872	507
		0,60-0,68	40-11874	607
NA7-110	PS 110bar	0,85-1	40-11875	347
		0,78-0,85	40-11876	407
		0,72-0,78	40-11877	407
		0,68-0,78	40-11878	507
		0,60-0,68	40-11880	607
NA7-150	PS 150bar	0,85-1	40-11881	347
		0,78-0,85	40-11882	407
		0,72-0,78	40-11883	407
		0,68-0,78	40-11884	507
		0,63-0,72	40-11885	507

Spare parts

Pos.	Designation	Size	Article no.	Quantity
1	Indicator bar AL2-G	0-1000mm Measuring range	10-10502	1
2	Fastening elements	-	15-00250	2
3	Manual test magnet	-	40-00768	1
4	Magnetic switch M510-1-60-G	-	15-03037	-
6	Venting screw	G 1/2"	40-10492	1
7	Drain screw			1
8	Sealing ring	21 x 26 x 1,5mm	40-00128	1
9				1



Pos. 3



Floaters see table



Direct download



Product page on the Internet

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