



PRODUCT OVERVIEW
MEASURING AND
CONTROL TECHNOLOGY

Our Company

We are a southern Germany family company, based in Kernen-Rommelshausen. Our company was founded in 1922 and now has around 200 qualified employees. Jacob is not just a leading producer of cable glands, but also offers individual system solutions for specific requirements with its measurement and control technology division. Our strengths lie in the quick and efficient implementation of our customers' various requirements and wishes for individual products as well as larger series of products.



A source of pride

Our headquarter in Germany and the "Made in Germany" quality seal are a source of great pride. Making this statement requires the highest level of quality from us and our products as well as our employees.

The high-quality measurement and control technology and our entire team's outstanding service make us internationally competitive. This combination makes us an innovative, growing company with a clear vision for the future.

Customised service

Producing high-quality products and making sure that the customers receive the products on time are things that we expect of ourselves as a matter of course. Just like our customers having a specific internal contact partner. This is how we guarantee quick and efficient reactions and offer our customers optimal consultation at the same time. We consider this to be important:

Our customers should
always feel that
they come first

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because they do!

To us, that is part of giving the
best service possible!



Product Overview

We manufacture standard and individual solutions from our following product groups:

Float Switches



Level Sensors



Optical Sensors



Suction Lances



Conductive Level Electrodes

Amplifiers

Magnetic Switches



Temperature Sensors

Pressure Sensors

Float Switches

Float Switches Type LS 3 straight and angled

Material	PVC, PP, PA, PVDF, NBR, Stainless steel, brass
Process connection	M12, G1/8" to G1", NPT, Flange (round and oval), PG7, PG9, others on request
Electr. connection	PVC- and Silicone-cable, M8- and M12-connector, Alu- and ABS-enclosure
Contacts	max. 4 NO or NC, max. 3 change over
Overall length	to 3.000 mm
Temperature range	-40°C to +150°C
Pressure	max. 15bar
Protection grade	to IP68
Options	integrated RTD or temperature switch on request



Float Switches Type LS 2 straight and angled

Material	PVC, PP, PTFE, Stainless steel, brass
Process connection	G1/2" to G2", Flange (round and oval), others on request
Electr. connection	PVC- and Silicone-cable, M8- and M12-connector, Alu- and ABS-enclosure
Contacts	max. 4 NO or NC, max. 3 change over
Overall length	to 6.000 mm
Temperature range	-40°C to +150°C
Pressure	max. 20bar
Protection grade	to IP65
Options	integrated RTD or temperature switch on request



Float Switches

Incapsulated Float Switches with protective pipe	
Material	PVC, PP, brass
Process connection	G3/8" to G1"
Electr. connection	PVC- and Silicone-cable, DIN 43650 plug, M8- and M12-connector
Contacts	max. 2 NO or NC, max. 1 change over
Overall length	to 2.000 mm
Temperature range	-40°C to +90°C
Pressure	max. 3bar
Protection grade	to IP65



Bypass Float Switches	
Material	Aluminium, Stainless steel
Process connection	G3/8", others on request
Electr. connection	Aluminium-enclosure
Contacts	max. 4 NO or NC, max. 3 change over
Overall length	to 3.000 mm
Temperature range	-40°C to +150°C
Pressure	max. 10bar
Protection grade	to IP65



Float Switches

Level Switches

fully enclosed

Material	Polypropylen (PP)
Electr. connection	2 to 30 m cable
Contacts	1 change over
Contact current	10 A (250 VAC), 4 A (30 VDC)
Temperature range	0°C to +60°C
Protection grade	to IP68 (40 m)



Plastic Float Switches

for horizontal installation

Material	PP, PA, PVDF
Process connection	M 16x2 and Adapter G1/2"
Electr. connection	PVC- and Silicone-cable
Contacts	1 NO, NC or change over
Temperature range	to +70°C
Pressure	max. 3bar
Protection grade	to IP65



Level Sensors / Optical Sensors

Level Sensors for continuous measuring	
Material	PVC, PP, PTFE, Stainless steel, brass
Process connection	G3/8" to G2", Flange (round and oval), others on request
Electr. connection	PVC- and Silicone-cable, M8- and M12-connector, Alu- and ABS-enclosure
Resolution	Grid: 5 or 10 mm
Overall length	to 3.000 mm
Temperature range	-40°C to +90°C
Pressure	max. 20bar
Protection grade	to IP65
Options	integrated RTD, temperature switch or transducer on request



Optical Sensors	
Material	Polysulfone, Stainless steel
Process connection	M12, G3/8", G1/2", NPT
Electr. connection	PVC-cable, M12-connector
Function	NO in Air, NC in Air
Output	PNP, NPN open collector
Temperature range	to +125°C
Pressure	to 60bar
Protection grade	to IP67



Suction Lances

Suction Lances combination of float switch and suction tube	
Material	PVC, PP-float
Process connection	G1 1/2" to G2", cone, others on request
Electr. connection	PVC- and Silicone-cable, ABS-enclosure
Contacts	to 3 NO, NC or 2 change over
Overall length	to 3.000 mm
Temperature range	0°C to +60°C
Pressure	0bar
Protection grade	to IP64
Options	Non return valve, sieve



Custom-Made Float Switches	
	Such as:
	- Float switches with three adjustable contacts
	- Combination of float switch, RTD and transducers in one device
	- Float switches for liquids loaded with magnetic suspended particles
	<u>Please contact us:</u> for more float switches in various dimensions, materials, with individual connections and functions.



Conductive Level Electrodes

Vibrating Fork Switches

Material	AISI 316 L
Process connection	G1/2", G3/4", G1"
Electr. connection	M12-connector; DIN 43650 plug
Variants	19 to 253 VAC, 10 to 35 VDC, AS-i-Bus
Temperature range	-40°C to +100°C
Pressure	-1 to +40bar
Protection grade	IP65 / IP67



Level Electrodes

for vertical and horizontal mounting

Material	Probes: Stainless steel, Body: PVC, PP, PVDF, PTFE, Stainless steel, brass
Insulation	without, PTFE, Polyolefin
Probe-Ø	1,5 mm; 4 and 6 mm, others on request
Electr. connection	PVC- and Silicone-cable M8- and M12-connector, others on request
Contacts	1 to 4 levels
Overall length	to 3.000 mm
Temperature range	to +55°C
Pressure	to 5bar
Protection grade	bis IP65
Options	Custom-made Electrodes on request



Indicators and Controls

Amplifiers

for conductive level electrodes

Input	up to 6 conductive level probes
Output	up to 2 relay-outputs (change over) up to 1 min-max-controls
Display	LED for all outputs
Supply voltage	24 - 240 VAC/ VDC, 230 VAC
Protection grade	IP20 and IP65



Transducers

for our continuous level sensor and temperature sensors

Input	0 - 5 kOhm, Pt 100
Output	(0) or 4 - 20 mA, 0 - 10 V
Supply voltage	24 VDC
Options	available as single unit in an enclosure or integrated in our sensors

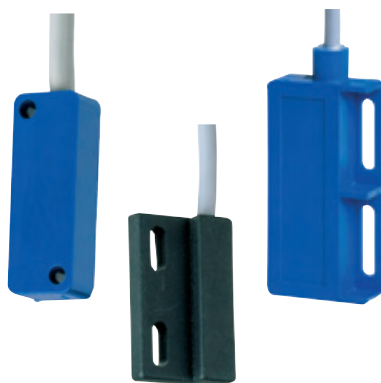


Magnetic Switches

Magnetic Switches	
Material	PA, Stainless steel, brass, nickel plated brass
Case	Ø 6, 8 and 12 mm Threads M8, M10, M12, PG7
Electr. connection	PVC- and Silicone-cable M8- and M12-connector
Contacts	max. 1 NO or NC, change over
Overall length	30 to 100 mm, on request: above 100 mm
Temperature range	-40°C to +150°C
Protection grade	to IP65
Options	bistable



Magnetic Switches	
Material	PA, Aluminium
Case	35x13 mm to 80x35 mm
Electr. connection	PVC- and Silicone-cable M8- and M12-connector
Contacts	max. 2 NO or NC, change over
Temperature range	-40°C to +150°C
Protection grade	to IP65
Options	bistable



Magnetic Switches

Permanent Magnets	
Case	available in all cases as for magnetic switches
Characteristic	axial or radial, aligned to reed-contacts
Options	Permanent magnets also available without case



Please contact us:

for more magnetic switches in various dimensions, materials, with individual connections and functions

Temperature sensors

Temperature Sensors

Sensor	Pt 100
Material Sensor	Stainless steel
Process connection	G3/8" to G2"
Electr. connection	Cable gland, Alu- and ABS-enclosure
Overall length	to 600 mm
Temperature range	-40°C to +150°C
Pressure	max. 20bar
Protection grade	to IP67
Options	integrated transducer available



Temperature Switches

Switching temperature	50 - 150°C in 5°C-steps
Contacts	NO or NC
Material sensor	PP, PVDF, PTFE, Stainless steel, brass
Process connection	G3/8" to G2", others on request
Electr. Connection	Cable gland, Alu- and ABS-enclosure
Overall length	to 3.000 mm
Temperature range	-40°C to +150° C
Pressure	max. 20bar
Protection grade	to IP67



Pressure Sensors

Pressure Sensors with integrated transducer	
Material	Stainless steel
Process connection	G1/4", G1/2", NPT
Electr. connection	PVC-cable, M12-connector, DIN 43650 plug
Range	17 ranges from -1 to 100 bar gauge
Output	4 - 20 mA, 0-10 V, 1 - 5 V
Supply voltage	10 to 30 VDC
Temperature range	-20°C to +125°C
Accuracy	0,5% FS
Protection grade	IP65 / IP67



Notes

Further information about our representatives abroad is available at

www.jacob-gmbh.de



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