CONTRINEX

40 YEARS 1972-2012

Winter 2012 / 2013

NEWS

MiniMini

The smallest inductive sensor on the market

– MINIMINI – THE SMALLEST INDUCTIVE SENSOR ON THE MARKET (3 X 12 MM)
– PAINTSHOP SOLUTIONS
  • C44 CUBIC INDUCTIVE SENSORS, WITH ROTATABLE SENSING FACE
  • WELD-IMMUNE, FULL-METAL INDUCTIVE SENSORS
  • INDUCTIVE SENSORS – UP TO 180°C (356°F)
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– RFID INNOVATIONS
– CONVERSATION WITH CEO ANNETTE HEIMLICHER

Swiss Quality

MiniMini

SMALLEST INDUCTIVE SENSOR IN THE WORLD

maximum sensor performance in minimum space

MINIMINI: THE SMALLEST INDUCTIVE SENSOR ON THE MARKET

Measuring just 12 mm in length and 3 mm in diameter, the MiniMini is the smallest inductive sensor in the world today.

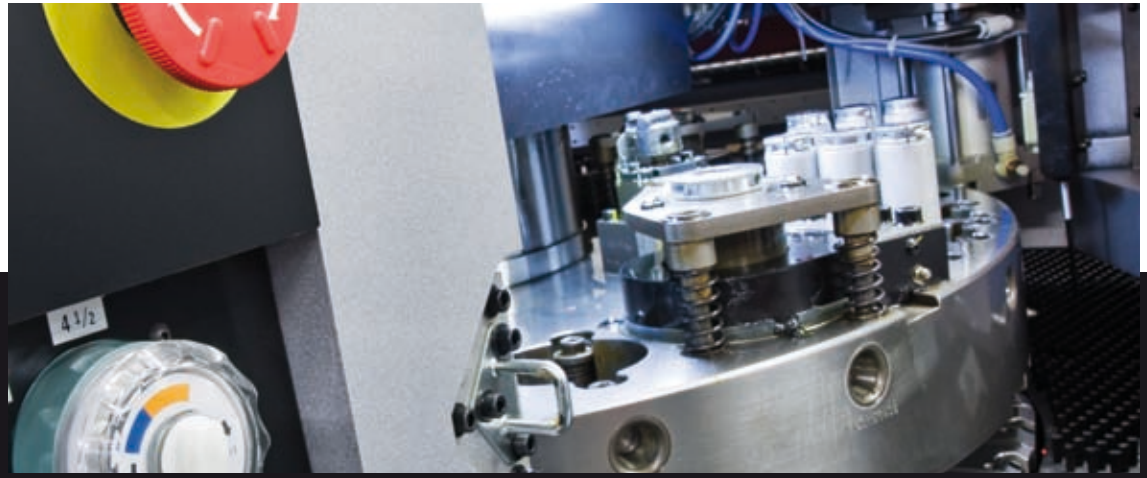
This subminiature construction, which even includes IO-Link, has been made possible by using the latest mixed-signal ASIC technology. This technology reduces component count by combining analog signal processing with digital computing power on a single chip. Another advantage is that it eliminates the need to use separate analog components.

The MiniMini impresses with its high switching frequency of 8 kHz and excellent temperature stability. Alongside the standard version with a plastic cap Contrinex also offers a pressure-resistant version with a ceramic sensing face. With a plastic cap the switching distance is 1 mm; with a ceramic cover it is 0.8 mm.

Sensor calibration takes place after the production process by means of the integrated ASIC. Due to the extraordinary accuracy, there are only slight measurable production variations in operating distance or other key values across any single series.

Key benefits

- Subminiature construction 3 x 12 mm
- Reduced component count
- Increased reliability
- Excellent temperature stability in range -25°C to +70°C (-13°F to +158°F)
- Pressure-resistant version up to 200 bar (2902 psi), IP 68 + IP 69K protection

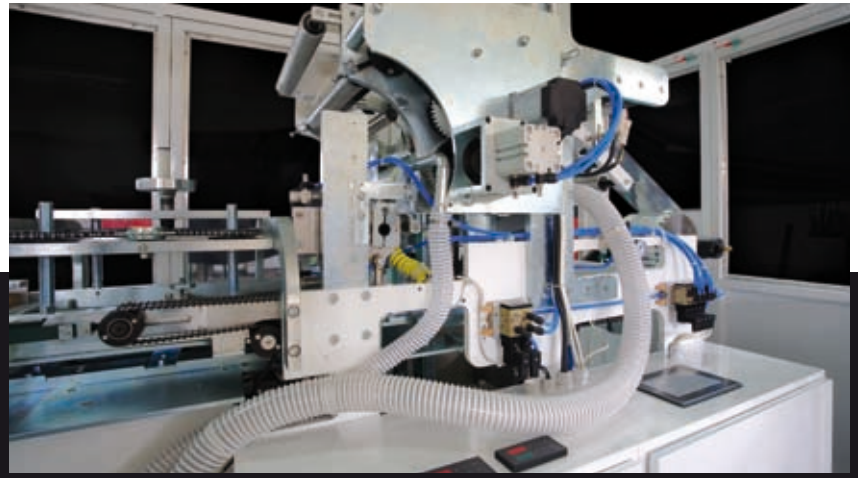


TYPICAL APPLICATIONS

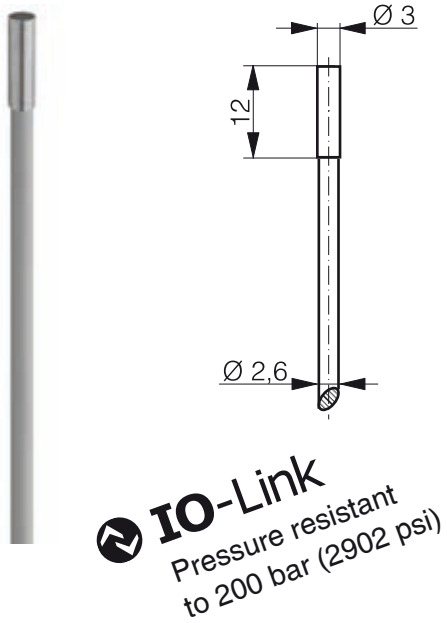
The MiniMini's mixed-signal ASIC technology makes it particularly suitable for all applications where signals are recorded in analog form, but must be digitized for transmission. Typical application areas are mainly found wherever very limited available space demands ever more compact construction with increasing integration density and sensor performance.

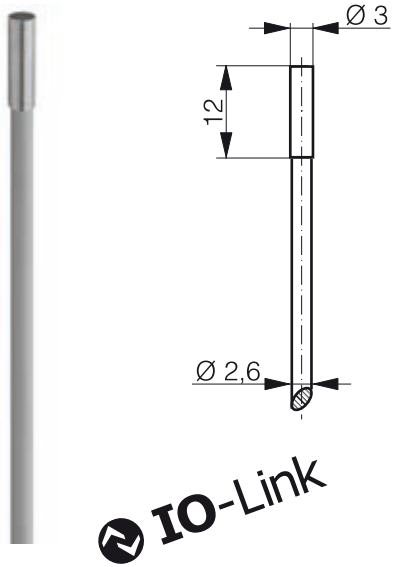
- Robotics
- Pharmaceutical sector
- Automated handling
- Production of electronic components

Smaller and shorter than ever – MiniMini makes the impossible possible



HOUSING SIZE	Ø 3		
OPERATING DISTANCE MM	0.8	1	



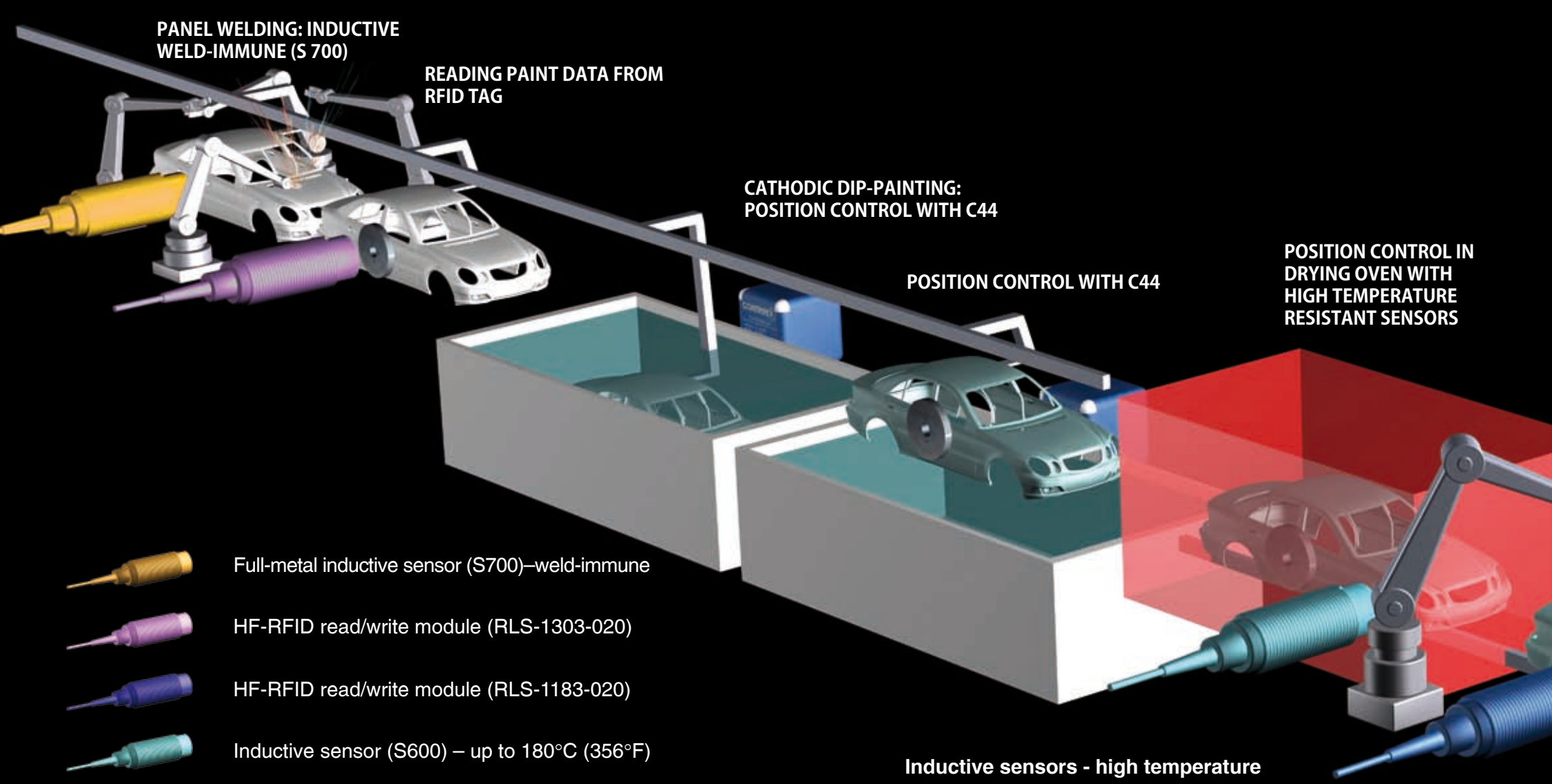


TECHNICAL DATA

Housing material	Stainless steel V2A	Stainless steel V2A	
Degree of protection	IP 68 + IP 69K	IP 67	
Connection type	PUR cable	PUR cable	
Max. switching frequency	8000 Hz	8000 Hz	
Supply voltage range	10 … 30 VDC	10 … 30 VDC	
Ambient temperature range	-25 ... +70°C (-13 ... +158°F)	-25 ... +70°C (-13 ... +158°F)	
Mounting	Embeddable	Embeddable	
Output current	≤ 100 mA	≤ 100 mA	

PART REFERENCES

PNP N.O.	**DW-AD-623-03E-961**	**DW-AD-623-03-960**	



Full-metal inductive sensor (S700)–weld-immune

HF-RFID read/write module (RLS-1303-020)

HF-RFID read/write module (RLS-1183-020)

Inductive sensor (S600) – up to 180°C (356°F)

HF-RFID tag (RTP-0502-022) – up to 250°C (482°F)

Cubic inductive sensor C44 – rotatable active face

Inductive sensors - high temperature

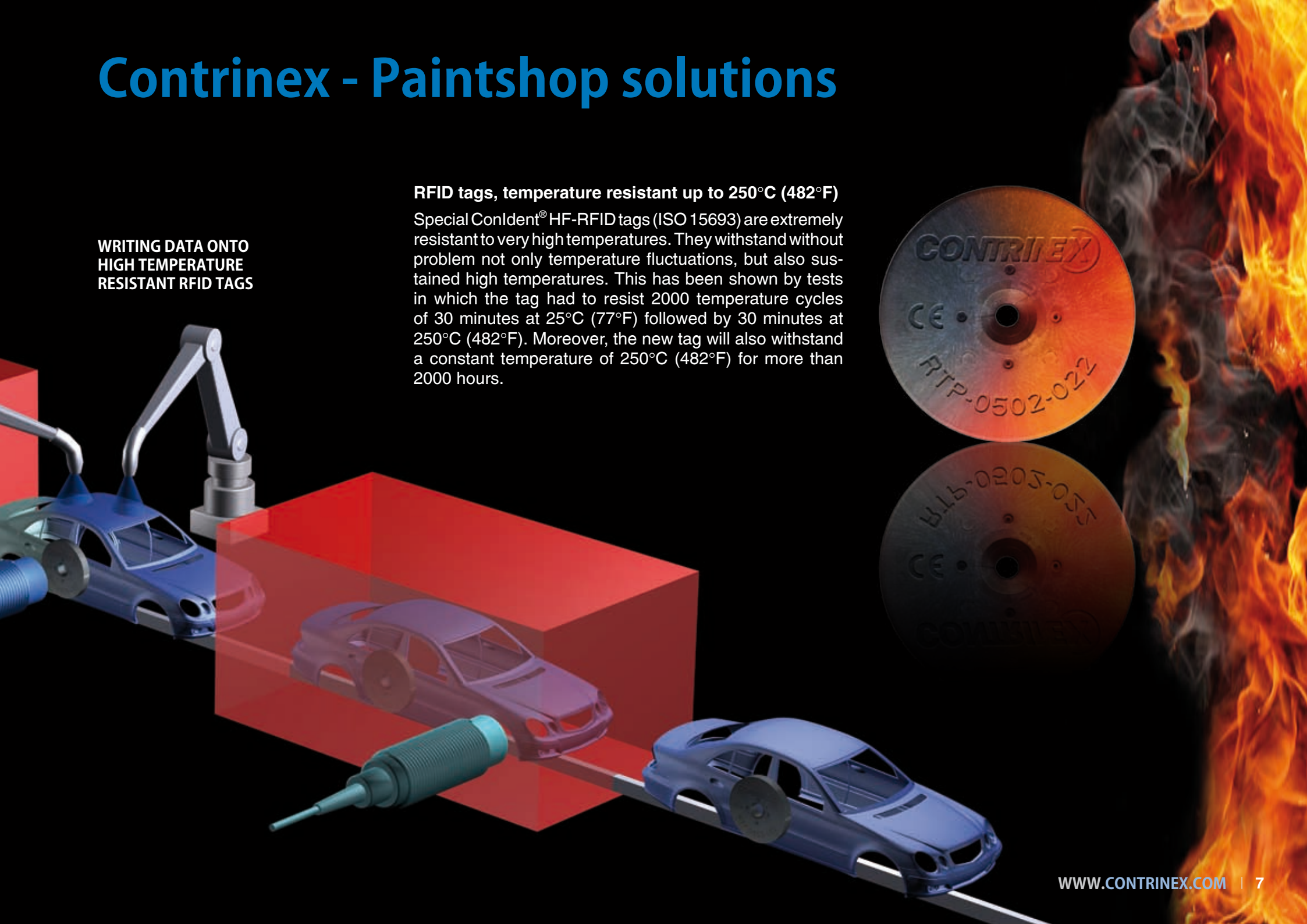
New high temperature resistant inductive sensors have been built on the platform of Classics inductive technology (series 600), extending Contrinex's renowned range of high temperature sensors. In addition to an elevated temperature range and high temperature stability, these sensors are characterized above all by an extended sensing range, a tight seal against liquids and humidity, high durability and long term reliability.

Contrinex - Paintshop solutions

WRITING DATA ONTO HIGH TEMPERATURE RESISTANT RFID TAGS

RFID tags, temperature resistant up to 250°C (482°F)

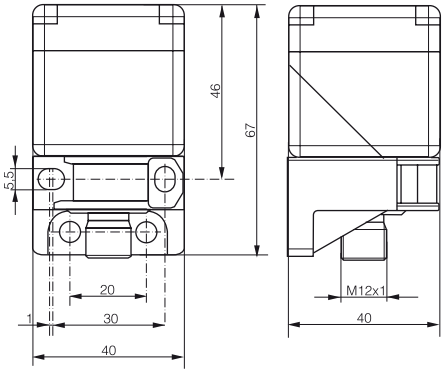
Special ConIdent® HF-RFID tags (ISO 15693) are extremely resistant to very high temperatures. They withstand without problem not only temperature fluctuations, but also sustained high temperatures. This has been shown by tests in which the tag had to resist 2000 temperature cycles of 30 minutes at 25°C (77°F) followed by 30 minutes at 250°C (482°F). Moreover, the new tag will also withstand a constant temperature of 250°C (482°F) for more than 2000 hours.

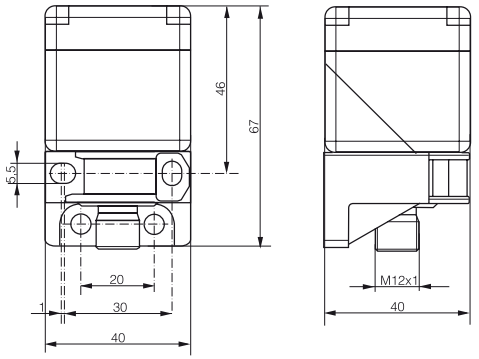


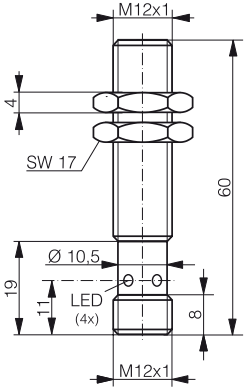
C44 CUBIC INDUCTIVE SENSORS

FULL-METAL WELD-IMMUNE

HOUSING SIZE	⧄ 40 X 40		M12
OPERATING DISTANCE MM	15 / 20*	30 / 40**	6





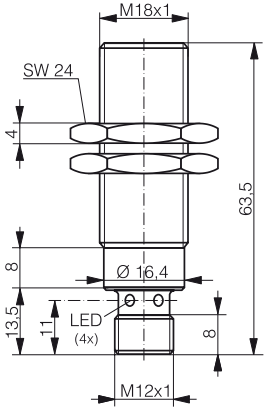


TECHNICAL DATA			
Housing material	PA GF (glass fiber reinforced polyamide)	PA GF (glass fiber reinforced polyamide)	Stainless steel V2A
Degree of protection	IP 69K	IP 69K	IP 68 + IP 69K
Connection type	Connector S12	Connector S12	Connector S12
Max. switching frequency	100 Hz	100 Hz	15 Hz
Supply voltage range	10 ... 30 VDC	10 ... 30 VDC	10 ... 30 VDC
Ambient temperature range	-25 ... +85°C (-13 ... +185°F)	-25 ... +85°C (-13 ... +185°F)	-25 ... +70°C (-13 ... +158°F)
Mounting	Embeddable	Non-embeddable	Embeddable
Output current	≤ 200 mA	≤ 200 mA	≤ 200 mA

PART REFERENCES			
PNP N.O. (+ N.C. -C44)	**DW-AS-60A-C44 / DW-AS-62A-C44***	**DW-AS-61A-C44 / DW-AS-63A-C44****	**DW-AS-703-M12-673**
NPN N.O. (+ N.C. -C44)	**DW-AS-60B-C44 / DW-AS-62B-C44***	**DW-AS-61B-C44 / DW-AS-63B-C44****	

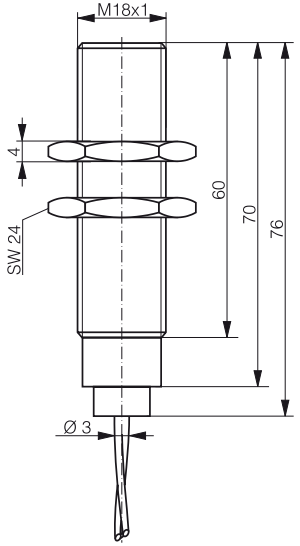
M18

10



M18

5

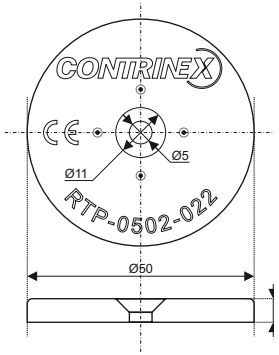


HIGH TEMPERATURE INDUCTIVE

HIGH TEMPERATURE RFID

HOUSING SIZE

Ø 50



Stainless steel V2A
IP 68 + IP 69K
Connector S12
15 Hz
10 ... 30 VDC
-25 ... +70°C (-13 ... +158°F)
Embeddable
≤ 200 mA

Stainless steel V2A
IP 67
Teflon cable 2 m
400 Hz
10 ... 30 VDC
0 ... +180°C (+32 ... +356°F)
Embeddable
≤ 150 mA

TECHNICAL DATA

Housing material	LCP
Degree of protection	IP 68 + IP 69K
Integrated circuit	SL2 ICS53 I·Code SLI-S
Operating frequency	13.56 MHz
Max. transmission speed	53 kbit/s
RF interface and anti-collision according to	ISO/IEC 15693
Ambient temperature range T_A	-25 ... +250°C (-13 ... +482°F)
Storage temperature range	-40 ... +250°C (-40 ... +482°F)

DW-AS-703-M18-673

DW-HD-603-M18-310
DW-HD-601-M18-310

PART REFERENCES

HF-RFID transponder	**RTP-0502-022**

RFID

MINIATURE READ/ WRITE MODULE

with USB connection.

HF-RFID tag embeddable in metal.

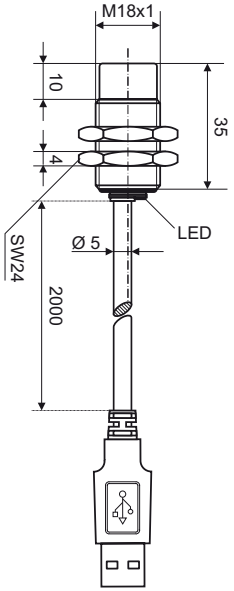
MINIATURE READ/WRITE MODULES WITH USB CONNECTION

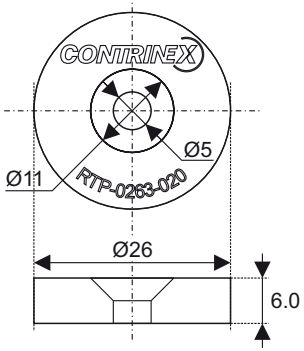
The new HF-RFID miniature read/write module with USB (ISO 15693) fits into a threaded M18 housing measuring only 35 mm in length. It forms part of a set of four read/write modules that can be directly connected to a USB port and powered by it. In addition to the miniature module, there is a 50 mm long M18 module and two M30 modules measuring 35 mm and 50 mm in length. Its size and the fact that it can be connected directly to a PC make this module very attractive for many applications, either in office or industrial engineering, where space constraints play an important role.

HF-RFID TAGS EMBEDDABLE IN METAL

New ConIdent® HF-RFID tags (ISO 15693) are embeddable in metal. Thanks to a small technical adaptation, they are able to overcome the usual difficulties of high frequency RFID tags in metal environments. They can be flush-mounted in metal and are resistant not only to fluctuating temperatures but also continuously high temperatures of up to 180°C (356°F). Product traceability is therefore possible even under very difficult environmental conditions. These tags also have IP 68 + IP 69K protection.

HOUSING SIZE	M18	HOUSING SIZE	Ø 26
READ/WRITE DISTANCE MM	25		





TECHNICAL DATA	
Housing material	Stainless steel
Sensing face material	PBTP
Supply voltage range U_B	5 VDC (USB powered)
Max. current consumption	200 mA
Carrier frequency	13.56 MHz
Compatible integrated circuit	ISO 15693
Data transmission rate	115 200 baud
Data transmission rate RWM - tag	max. 24 kbps
Interface	USB
Connector	USB A (connector)

PART REFERENCES	
Read/write module HF USB	**RLS-1181-220-120**

TECHNICAL DATA	
Housing material	PPS
Degree of protection	IP 68 + IP 69K
Integrated circuit	SL2 ICS53 I·Code SLI-S
Operating frequency	13.56 MHz
Max. transmission speed	53 kbit/s
RF interface and anti-collision according to	ISO/IEC 15693
Ambient temperature range T_A	-25 ... +180°C (-13 ... +356°F)
Storage temperature range	-40 ... +180°C (-40 ... +356°F)

PART REFERENCES	
HF-RFID transponder	**RTP-0263-020**

INTERVIEW WITH THE CEO, ANNETTE HEIMLICHER

On 1st September 2012 Peter Heimlicher, founder and President of the Contrinex Group, handed over management of the business to daughter and Board member, Annette Heimlicher.

Contrinex celebrates its 40th anniversary this year. Peter Heimlicher established the company in 1972 as a one-man business - today there are about 500 employees. What goals have you set yourself for the 50th anniversary?

A. Heimlicher: On our 50th anniversary Contrinex will be a key player in the sensor industry. At the same time, we will remain true to our existing values: we will also still be a strongly technology-based company, constantly enriching the market with innovations. We will have a solid international sales structure and be flexible in adapting products to the needs of our customers.

You yourself guided the entry of Contrinex into the Indian and Brazilian markets. This was recognized with the Osec Export Award for 2010. What distinguished the two projects and how far can you apply the experience gained there in your new field of work?

A. Heimlicher: The Osec Export Award is presented by the Swiss export promotion association. We received it because of our systematic and structured expansion into Brazil. To lead an expansion is comparable with establishing a small business: you have to know all the areas of a company and move them forward successfully. This also gave me great insight into the manufacturing and supply chain areas. I can put this knowledge and experience to good use in my new role as CEO, because here too it is important to keep the balance between all areas of the business.

On 1st August a new production facility opened in Budapest. What other countries are to be entered next, or developed with additional branches (production sites/sales offices)?

Please explain the thrust of your international expansion.

A. Heimlicher: Our expansion strategy focuses on Southeast Asia, Brazil and India. These countries offer great potential in the long term, in our view. Accordingly, it is important for us to establish an optimum position. At the same time, of course, we must also continue to serve the traditional industrial markets in the best possible way – here too we continue to see great growth opportunities. Whether in Europe or the United States, we are still a long way from reaching our limits.

On taking office, you announced the aim of increasing revenue by 2015 from its current 58 million Euro to 83 million Euro. Apart from international expansion, what other measures will be taken to reach this goal?

A. Heimlicher: This sales target will be achieved by scaling up our existing sales channels. Here we still see significant possibilities for expansion. We will strengthen and improve our services to customers and carry our product benefits more actively to the market. This will help us continue to grow on the existing base. At the same time we will, of course, constantly expand our product offering with innovations, and so continue to offer customers excellent solutions for their complex applications. For example, at the end of this year, we are launching an extremely small inductive sensor on the market - a further example of our innovative strength.

The stated revenue goals obviously set you apart from your companions in the market as far as growth forecasts are concerned. Is optimism therefore your success strategy, or do you think that current reticence is excessive?

A. Heimlicher: Our companions in the market are mostly considerably larger than Contrinex. So we are the "Challenger" and will naturally have more potential for growth. In addition, we are well known for developing new market niches for ourselves - our full-metal sensors are an example of this. Here there are always opportunities for above average growth, without getting into destructive competition.

Full interview (in German) published in the magazine **openautomation** 6/12.

CONTRINEX

Market position: Contrinex is a world leader in miniature sensor technology, sensors with long operating distances and devices for high temperatures and pressures. The range comprises some 8000 product varieties.

Headquarters:	Givisiez, near Fribourg (Switzerland)
Employees:	Over 500 world-wide
Subsidiaries:	
Europe:	Switzerland, France, Italy, Germany, Great Britain, Portugal, Belgium/Netherlands
America:	USA, Mexico, Brazil
Asia:	China, India, Japan, Singapore
Production sites:	Switzerland, Hungary, China, Brazil
Sales network:	In 60 countries

Contrinex Headquarters, Switzerland

EUROPE

Austria
Belgium*
Croatia
Czech Republic
Denmark
Estonia
Finland
France*
Germany*
Great Britain*
Greece
Hungary
Ireland
Italy*
Luxembourg
Netherlands
Norway
Poland
Portugal*
Romania
Russian Federation
Slovakia
Slovenia
Spain
Sweden
Switzerland*
Turkey

AFRICA

Morocco
South Africa

THE AMERICAS

Argentina
Brazil*
Canada
Chile
Colombia
Mexico*
United States*
Venezuela

ASIA

China*
India*
Indonesia
Japan*
Korea
Malaysia
Pakistan
Philippines
Singapore*
Taiwan
Thailand
Vietnam

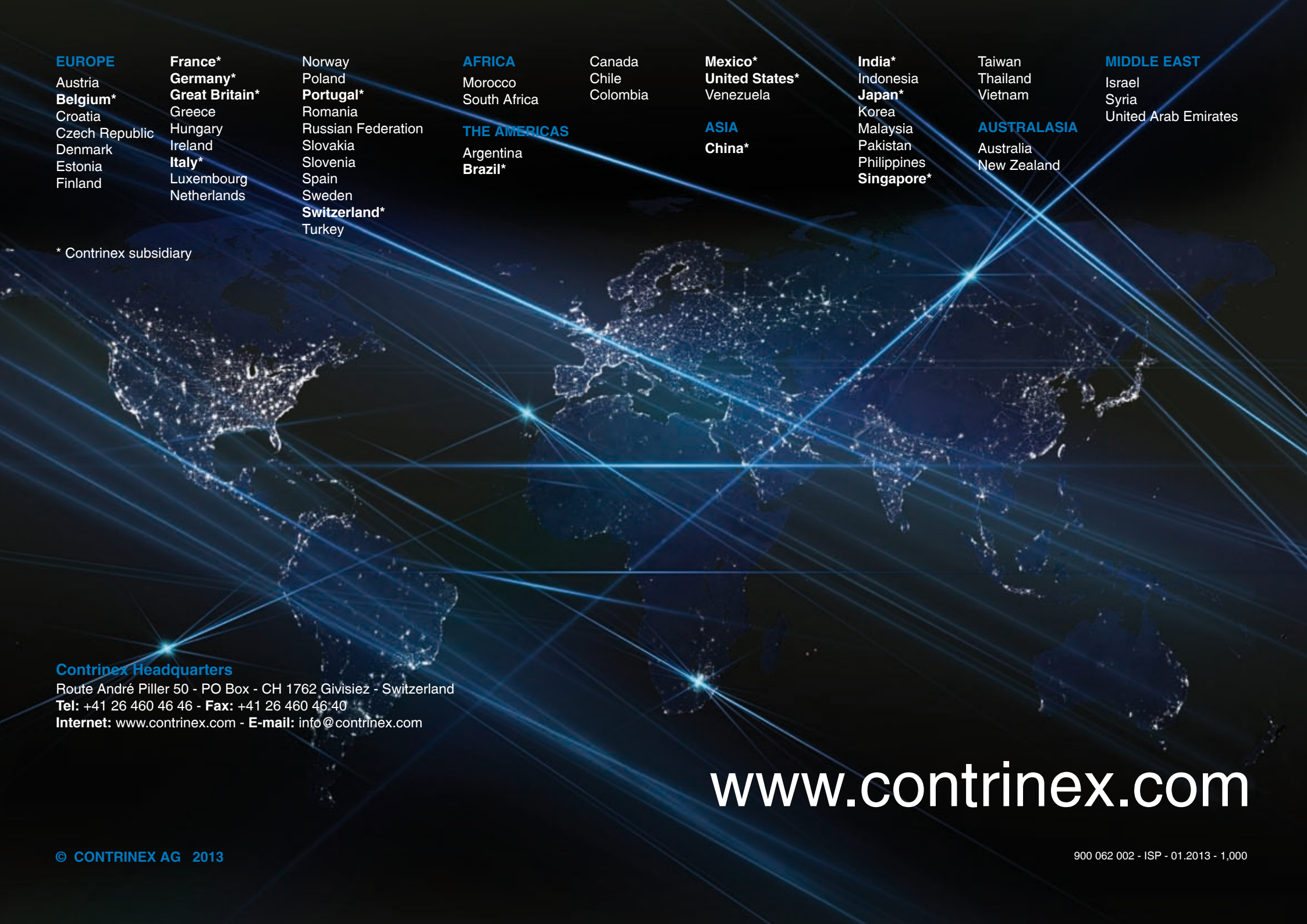
AUSTRALASIA

Australia
New Zealand

MIDDLE EAST

Israel
Syria
United Arab Emirates

* Contrinex subsidiary



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