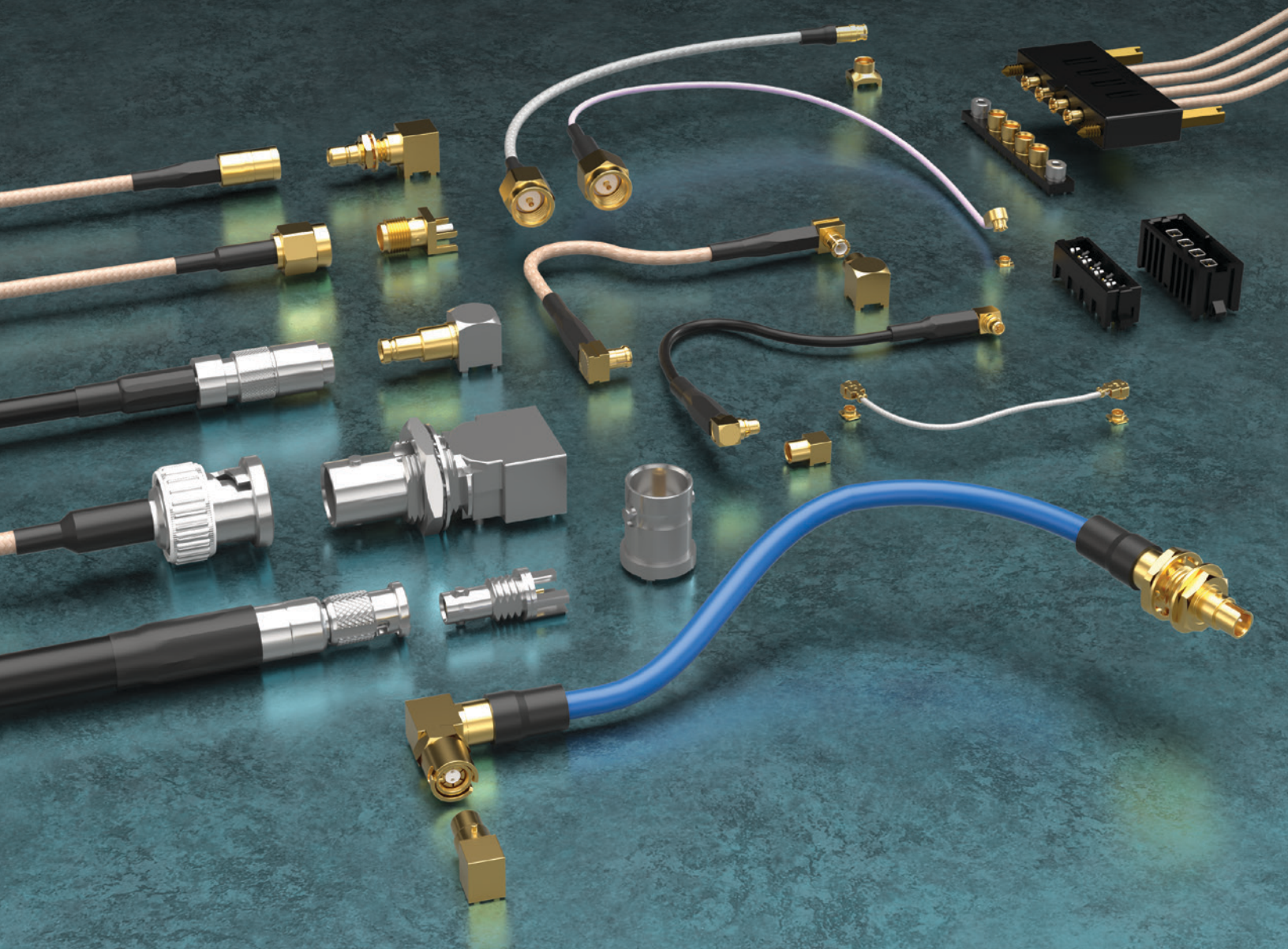


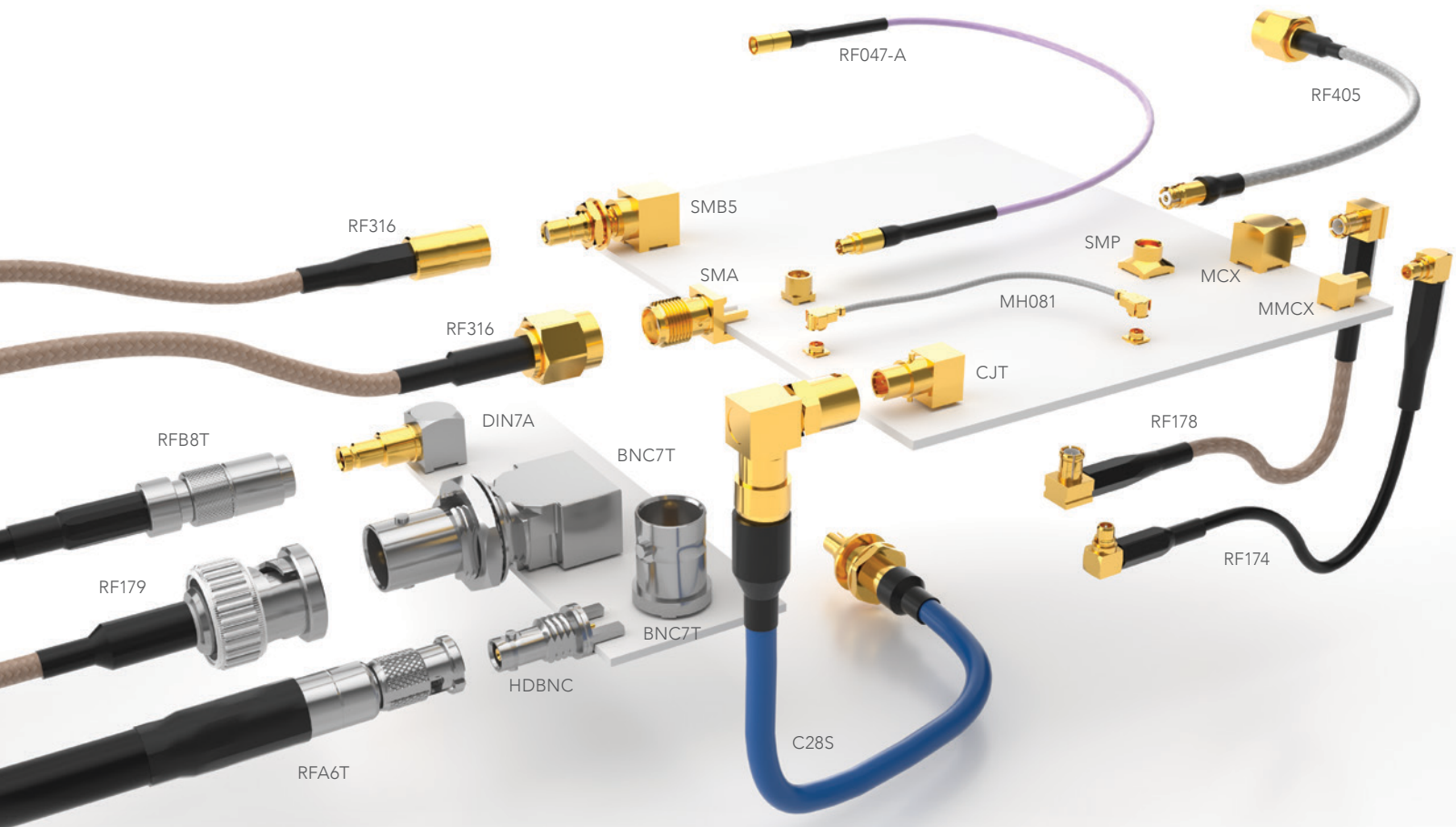


COMPLETE RF INTERCONNECT SOLUTIONS



COMPLETE RF INTERCONNECT SOLUTIONS

50 Ω & 75 Ω • PRECISION • 12G-SDI • NON-MAGNETIC • ORIGINAL SOLUTIONS



FULL LINE RF CABLE ASSEMBLIES & CONNECTORS

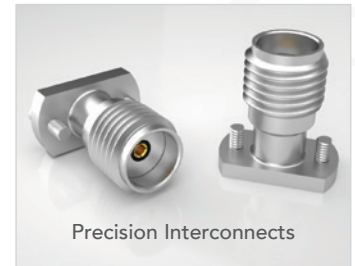
As a manufacturer of a broad line of electronic interconnects, Samtec offers full RF solution capabilities. In addition to high-frequency precision RF and high-performance test systems, Samtec's full line includes:

- Micro High-Frequency U.FL and W.FL
- 50 Ω and 75 Ω cable assemblies, cable connectors and board level interconnects
- Ganged and high isolation cable systems
- 100 Ω shielded twisted pair cable assemblies
- Micro-mini interconnects
- Non-magnetic RF solutions
- High-frequency, precision (18 GHz to 110 GHz)

Samtec is the service leader in the industry with the resources and willingness to provide technical support for launch optimization, simulation and test & measurement.

50 Ω RF CABLES & CONNECTORS

- High-frequency cables: semi-flexible, solid, foamed or air enhanced dielectric
- Variety of straight and right-angle jacks, plugs and bulkhead jacks
- Double-shielded RG 316 cable
- Micro high-frequency U.FL/W.FL assemblies
- Wide variety of industry standard cables with mix & match cable connectors
- Precision interconnects supporting frequencies from 18 to 110 GHz



75 Ω RF CABLES & CONNECTORS

- Wide variety of industry standard cables with mix & match cable connectors
- Low-Profile BNC with Pick & Place capability, optimized for high volume manufacturing
- RFB8T Series (with Belden 1855A cable)
- Wide variety of terminations: BNC, HD-BNC, DIN 1.0/2.3, SMB
- Straight and right-angle, die cast options
- 12G-SDI optimized 75 Ω interconnects



NON-MAGNETIC RF SOLUTIONS

- Truly non-magnetic RF solutions; 100% inspected for magnetic permeability
- Nearly all Samtec interconnects can be ordered as non-magnetic
- Supported by Samtec's quick-turn lead times and unmatched service
- Ideal for medical imaging, advanced driver assistance systems, hand held devices, etc.
- Visit samtec.com/non-magnetic or contact RFGroup@samtec.com



12G-SDI BROADCAST VIDEO SOLUTIONS

- Samtec has the largest variety of 12G-SDI optimized products
- Analysis and launch optimization: RFGroup@samtec.com
- 75 Ω BNC, HD-BNC and DIN 1.0/2.3
- Right-angle, vertical, edge mount, low-profile and standard or tall through-hole
- For additional details, please visit: samtec.com/12gsdi



ORIGINAL RF SOLUTIONS

SHIELDED TWISTED PAIR SYSTEM

- 100 Ω differential pair
- 28 AWG shielded twisted pair cable assembly
- High reliability BeCu contacts
- 1/4-turn bayonet lock

GANGED MICRO-MINI SYSTEMS

- 50 Ω & 75 Ω board stacking and cable assemblies
- High performance rugged contacts
- Variety of End 2 connectors (GRF1H-C, GRF7H-C Series)

ISORATE® SYSTEMS

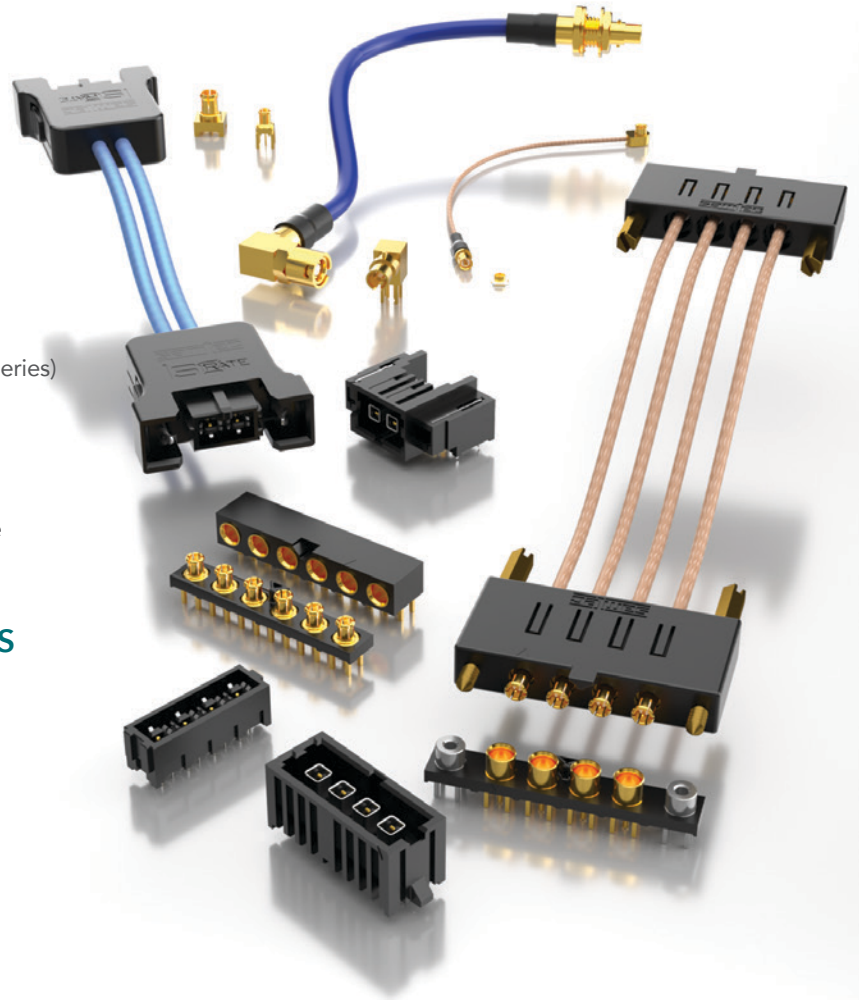
- 50 Ω board stacking and cable assemblies
- Isolated signal systems for 90 percent performance of traditional RF at 50 percent of the cost

MINI & MICRO-MINI INTERCONNECTS

- 75 Ω impedance (MMCX7, MCX7 Series)
- Higher extraction forces (MMCXV Series)
- Not intermateable with standard MMCX, MCX

HIGH-CYCLE U.FL CABLE PLUG

- 500 cycle U.FL compatible plug (HMHF1)
- .047" DIA flexible cable (RF047 Series)



CABLE SOLUTIONS

SERIES	C28S/CJT	GRF1-C/GRF7-C	GRF1H-C/GRF7H-C	RF047	IJ5C/IJ5H
Application	Shielded Twisted Pair	50 Ω & 75 Ω Micro-Mini Ganged	50 & 75 Ω Micro-Mini Hybrid Ganged	50 Ω .047 DIA flexible cable	50 Ω IsoRate®
URL	samtec.com?C28S samtec.com?CJT	samtec.com?GRF1-C samtec.com?GRF7-C	samtec.com?GRF1H-C samtec.com?GRF7H-C	samtec.com?RF047	samtec.com?IJ5C samtec.com?IJ5H

BOARD-TO-BOARD SOLUTIONS

SERIES	GRF1-P/GRF1-J	GRF7-P/GRF7-J	MMCX7	MCX7	MMCXV	IJ5/IP5
Application	50 Ω Micro-Mini Ganged	75 Ω Micro-Mini Ganged	75 Ω Mini and Micro-Mini Interconnects		High-Vibration Micro-Mini	50 Ω IsoRate®
URL	samtec.com?GRF1-P samtec.com?GRF1-J	samtec.com?GRF7-P samtec.com?GRF7-J	samtec.com?MMCX7-TH samtec.com?MMCX7-CA	samtec.com?MCX7-SM samtec.com?MCX7-TH samtec.com?MCX7-CA	samtec.com?MMCXV-TH samtec.com?MMCXV-EM samtec.com?MMCXV-CA	samtec.com?IP5 samtec.com?IJ5

CUSTOM RF APPLICATION SPECIFIC SOLUTIONS

EXTREME FLEXIBILITY • QUICK-TURN MODIFICATIONS • CUSTOM DESIGNS

Samtec's fully vertically integrated business model enables the flexibility to quickly and efficiently identify and/or develop innovative, application-specific interconnect solutions to meet a variety of demands in digital/analog systems. Contact RFGroup@samtec.com to discuss your application.

CUSTOMIZED CABLE ASSEMBLIES • EXTREME FLEXIBILITY

- Mix & Match solutions for any application
- Choose any cable connector
- Choose any standard cable



ANY
RF Connector

ANY
Microwave Cable

ANY
Application



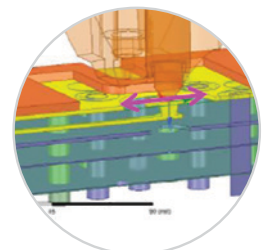
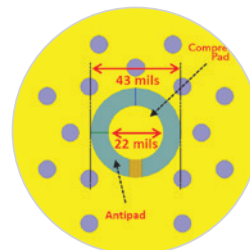
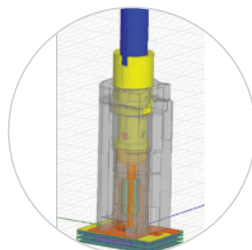
QUICK-TURN MODIFICATIONS & CUSTOMS • STANDARDS & NEW DESIGNS

- Termination types
- Custom tail lengths / designs
- Right-angle height adjustment
- Heat-shrink tubing
- High-frequency applications
- Pick & Place machine designs
- Alternate platings
- Custom labels
- Test & Measurement solutions



TECHNICAL SUPPORT • FULL SYSTEM DESIGN & DEVELOPMENT

- Launch design
- Prototyping
- Fabrication
- Simulations
- Launch optimization support
- Full system test & measurement



LOW-FREQUENCY CABLES

STANDARD OFF-THE-SHELF ASSEMBLIES

TYPE	50 Ω CABLES							75 Ω CABLES						100 Ω CABLES
	RG 178	CTB-2650F-01	RG 174	RG 316	RG 316 DS	RG 58	RG 179	BELDEN 1855A	BELDEN 1694A	BELDEN 4855R	BELDEN 4694R	RG 6	TPS-28100-RF	
ELECTRICAL														
Impedance	Ω	50 ± 2		50 ± 5	50 ± 2	50 ± 3		75 ± 3						100 ± 5
Insertion Loss (dB/m)	100 MHz	0.50	0.68	0.40	0.30	1.4 @ 2 GHz	0.20	0.30	0.12	0.07	0.12	0.06	0.07	-----
	1 GHz	1.70	2.37	1.40	1.25	1.6 @ 3 GHz	0.80	0.80	0.37	0.21	0.36	0.19	0.21	-----
	6 GHz	5.90	6.53	4.40	4.25	2.2 @ 5 GHz	5.40	3.60	0.97	0.59	0.91	0.51	0.59	-----
Propagation Delay	nS/m	4.83	4.17	5.06	4.83	-----	5.05	4.83	4.12	4.06		3.92	4.03	-----
Current Rating	Amps	3	3	5	5	-----	-----	3	5	-----	4.70	16	-----	-----
Capacitance	pF/m	96	85.6	101	96	95.8	102	64	55.7	53.14	53.40	52.20	53.14	38
CONSTRUCTION														
Center Conductor	Material	Silver Plated Copper Clad Steel	Silver Plated Copper	Bare Copper	Silver and Copper Plated Steel	Silver Plated Copper Clad Steel	Tinned Copper	Silver Plated Copper	Bare Copper		Silver Plated Copper		Bare Copper	Silver Plated Copper
	AWG	30	26	26	26	26	20	30	23	18	23	18	18	28
Dielectric	Material	PTFE	Foamed FEP	KLPE	PTFE	FEP	Solid Polyethylene	PTFE	FHDPE	FHDPE	PE (Foam)		FHDPE	FEP
Shield	Material	Silver Plated Copper		Tinned Copper	Silver Plated Copper		Tinned Copper	Silver Plated Copper	1. Al Foil-Polyester Tape-Al Foil 2. Tinned Copper	1. Bonded Al Foil 2. Al Wire	1. Al Foil-Polyester Tape-Al Foil 2. Tinned Copper		Silver Plated Copper	
Jacket	Material	FEP		PVC	FEP		PVC	FEP	PVC	PVC	PVC		PVC	PVC
	Temp Rating	-50 °C to +165 °C	-40 °C to +200 °C	-20 °C to +80 °C	-55 °C to +165 °C	-----	-50 °C to +90 °C	-50 °C to +165 °C	-30 °C to +75 °C	-30 °C to +75 °C	-30 °C to +75 °C	-20 °C to +75 °C	-30 °C to +75 °C	-20 °C to +105 °C
MECHANICAL														
Bend Radius	Min	10.2 mm	3.175 mm	25.4 mm	12.7 mm	12.8 mm	48.3 mm	10.2 mm	38.1 mm	69.85 mm	41 mm	70 mm	69.85 mm	19.05 mm
Connector Options		MMCX, MCX, SMA, SMB, BNC, TNC, N Type	IsoRate®	MMCX, MMCXV, MCX, SMA, SMB, BNC, TNC, N Type, Ganged	MMCX, MCX, SMA, BNC, TNC	SMA, TNC, N Type	MCX, MMCX7, SMB, BNC, DIN 1.0/2.3, Ganged	HD-BNC, DIN 1.0/2.3	BNC, HD-BNC, DIN 1.0/2.3	HD-BNC, DIN 1.0/2.3	BNC, HD-BNC, DIN 1.0/2.3		CJT	
PART NUMBER														
Series		RF178	IJ5C	RF174	RF316, IJ5C, IJ5H, GRF1-C, GRF1H-C	RS316	RF058	RF179, GRF7-C, GRF7H-C	RFB8T	RFB6T	RFC8T	RFC6T	RFA6T	C28S



samtec
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GERMANY • FRANCE • ITALY • NORDIC/BALTIC • BENELUX • ISRAEL • INDIA • AUSTRALIA / NEW ZEALAND
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