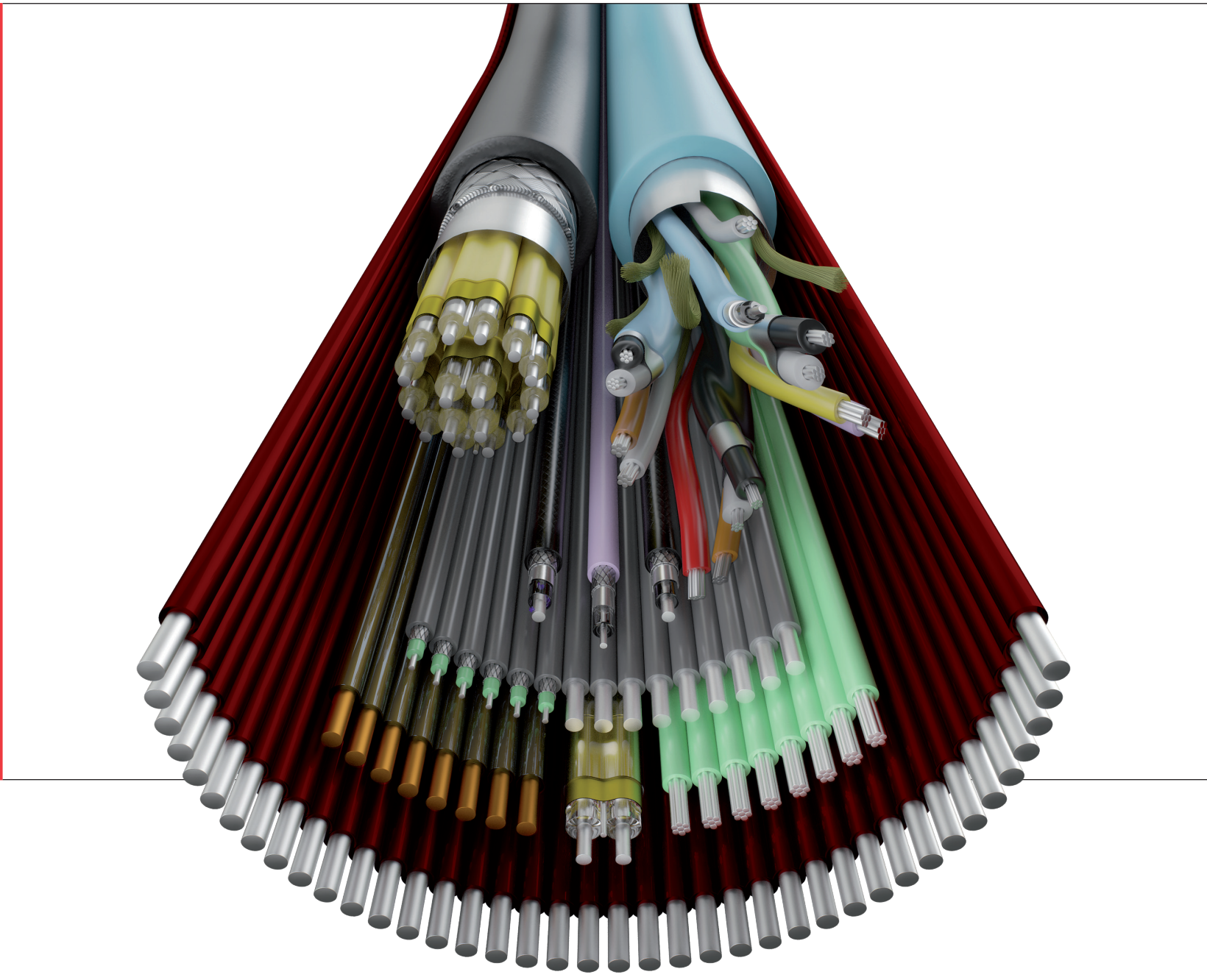
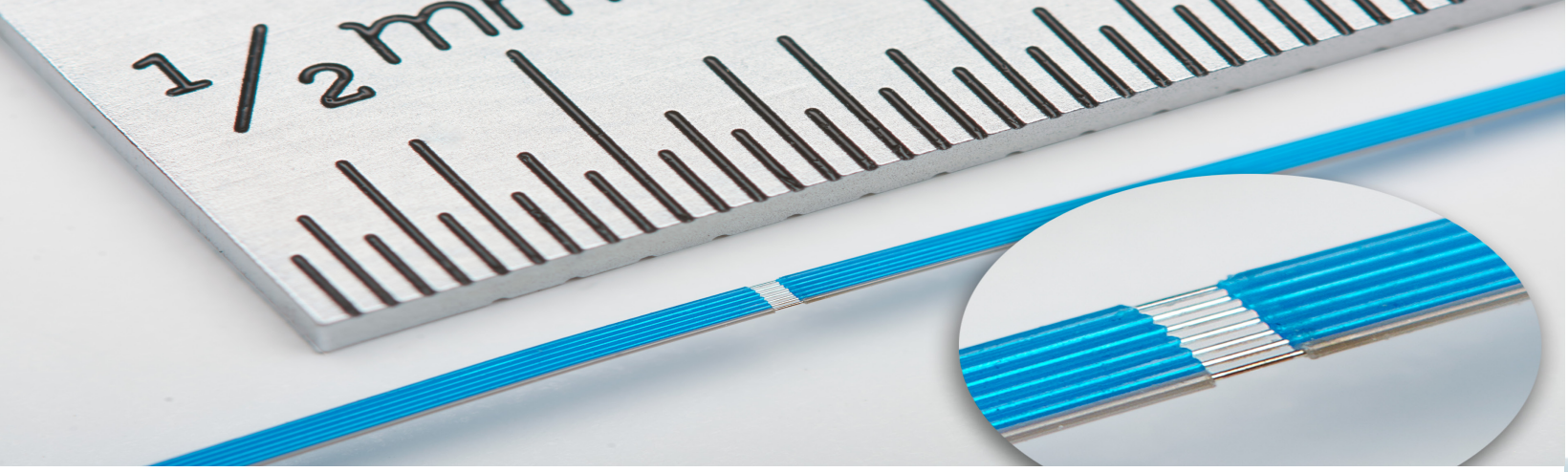
MOLEX
TEMP-FLEX SPECIALTY CABLE ›

SMALLER • FASTER • CUSTOMIZED
HIGH PERFORMANCE SOLUTIONS
AT YOUR FINGERTIPS



molex®



Molex Temp-Flex Speciality Wire and Cable Solutions – When Standard is not Enough

- **Temp-Flex specialty cables push the theoretical limits and physical properties of material**
- **Solutions range from micro-miniature products using wires finer than a human hair to industry leading high frequency and high speed cables – from 52 to 24 AWG (0.020 to 0.51mm)**
- **Molex has locations worldwide to provide everything from cut and strip services to intricate termination designs and higher level assemblies**

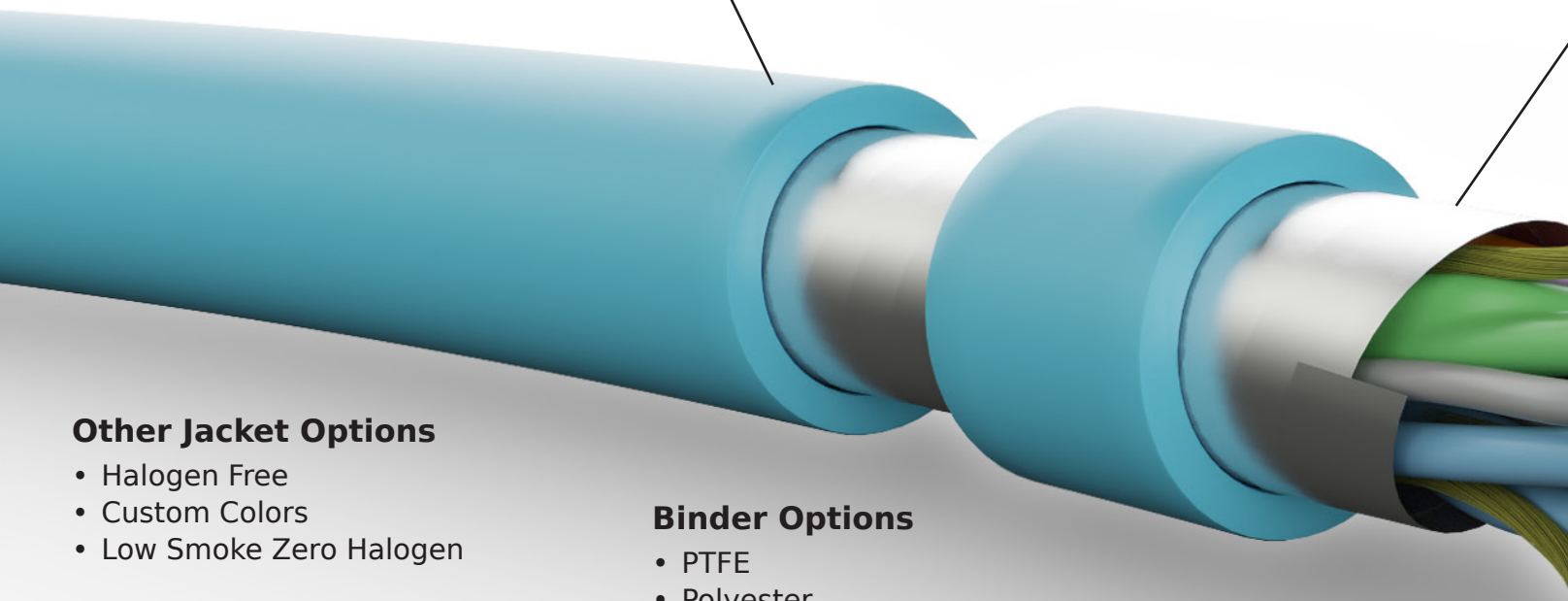
Key Characteristics

– Pin-hole free
– Biocompatible
– Fine wire handling
– Precious metals
– Harsh environments
– Broad low to high temperature range
– High flex
– Chemical and abrasion resistant
– Industry leading insertion loss
– Industry leading frequency and speeds
– Flex and size optimization
– No outgassing
– 180° to 360°cable rotation

Material and Construction Options

Extrusion Options (Jacketing / Dielectric)

- Fluoropolymer:
  - FEP
  - PFA
  - ETFE
  - PVDF
- Pebax
- Polyurethane
- PVC
- PEEK
- Nylon
- TPE



Other Jacket Options

- Halogen Free
- Custom Colors
- Low Smoke Zero Halogen

Binder Options

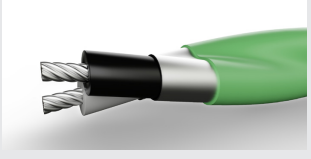
- PTFE
- Polyester
- Polyimide
- Aramid Fiber

Product Mix

Primary Wires

- Down to 52 AWG (0.020mm)
- OD tolerance control down to 5% wire OD
- Broad temperature range: -65° to 300° C

Twisted Pair

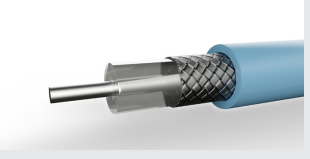


- 46 to 36 AWG (0.039 to 0.127mm)
- Shielded / unshielded
- Impedance controlled
- OD tolerance control down to 5% wire OD

High-Density Micro-Ribbon Cables

- Down to 50 AWG (0.025mm)
- Pitch down to 0.043mm (.002“)
- Option: Intermittently bonded, hybrid cable

Micro Coaxial Cables



- Down to 44 AWG (0.031mm)
- OD down to 0.24mm (.0093“)
- Option: Intermittently bonded, bundled

Shield Options

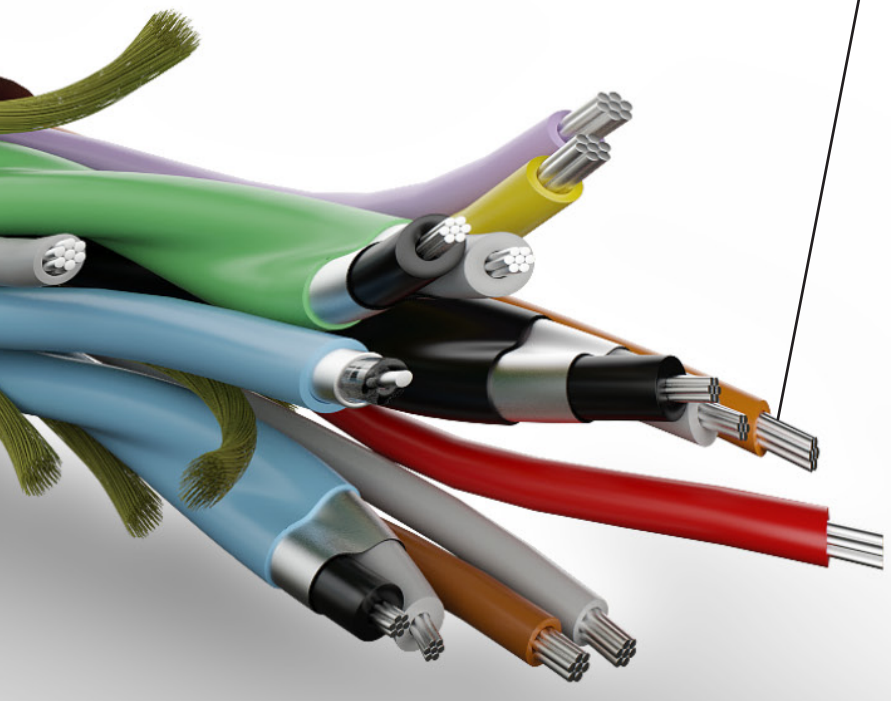
- Single or Dual Served
- Braid
- Aluminum Laminated Polyester

Shield Material Options

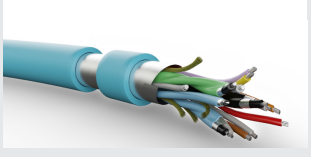
- Bare Copper
- Tin, Silver or Nickel Plated Copper or Copper Alloy
- Flat Wire

Conductor Material Options

- Bare Copper
- Tin, Silver or Nickel Plated Copper or Copper Alloy
- Copper Clad Steel
- Tin Plated Copper Clad Aluminum
- Stainless Steel
- Precious Metals (Silver, Gold, Platinum-Iridium etc.)

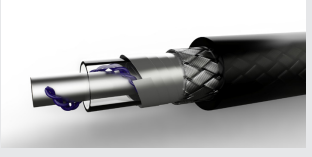


Multicore



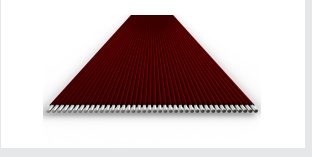
- Highly customizable

RF / Microwave Coax



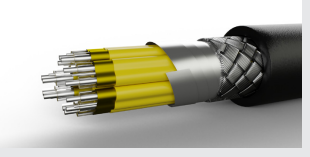
- Solid, foam and air core
- Impedance: 50 ±1 Ohm
- Shield OD down to 0.84mm (.033”)
- Up to 88% VoP
- Intermittently bonded

FEP Flat Ribbon



- Harsh environment
- Broad temperature range: -65° to 200°C
- Chemical resistant
- Commercial and MIL-Spec approved
- Variety of conductor sizes: 32 to 16 AWG (0.20 to 1.29mm)
- Pitch tolerance control down to ±0.05mm (.002“)

TwinMax Twinax



- 40+ Gbps
- Signal Conductor Size: 40 to 24 AWG (0.08 to 0.51mm)
- Controlled skew

Markets and Applications

Aerospace and Defense

- Radar
- Missiles
- Satellites
- Base Stations
- Military Vehicles
- Instrumentation
- Flight Recorder (Black Box)
- Power Management

Test and Measurement

- ATE–Device Under Test Cards (DUT)
- Memory Tester
- High Frequency Switching

Medical

Diagnostic

- Endoscope
- Heat Mapping
- Ultrasound

Therapeutic

- Pain Management
- Pacemaker
- Catheter ablation
- Defibrillator
- Probe
- Cochlear Implant

Monitoring

- Glucose
- Temperature
- General Patient

Data/ Computing Telecom/ Networking

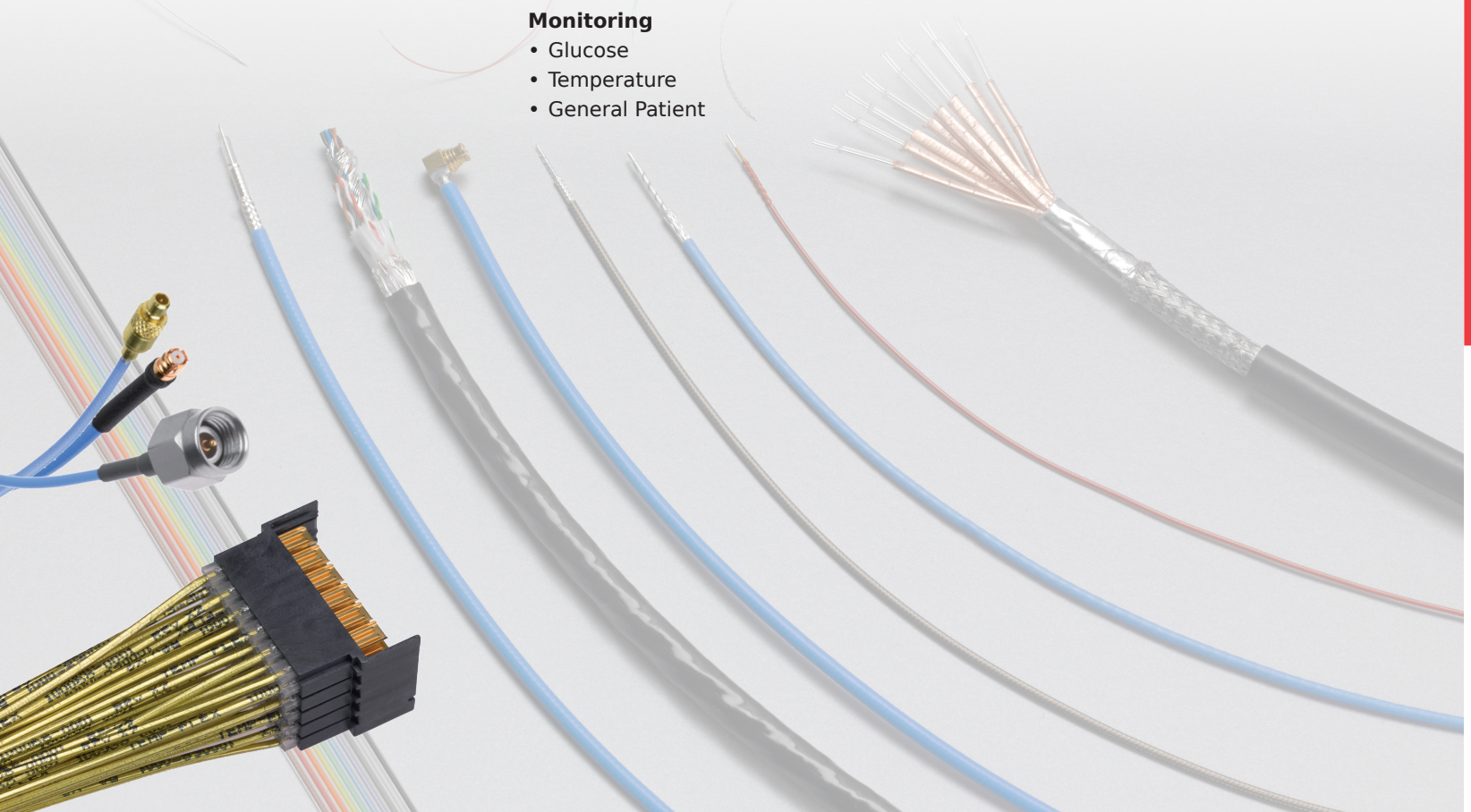
- Servers
- Hubs
- Storage Systems
- Routers
- Switches

Industrial

- Ultrasound Scope
- Heating Blankets
- Test Instrumen-tation
- Industrial Sewing Machines
- Robotics
- Inspection Equipment

Commercial

- Virtual Reality
- Augmented Reality
- In-Flight Entertainment



molex.com/tempflex/index.html

molex®

one company › a world of innovation

Order No. 987651-6321 Printed in USA/250/BD/2017.06