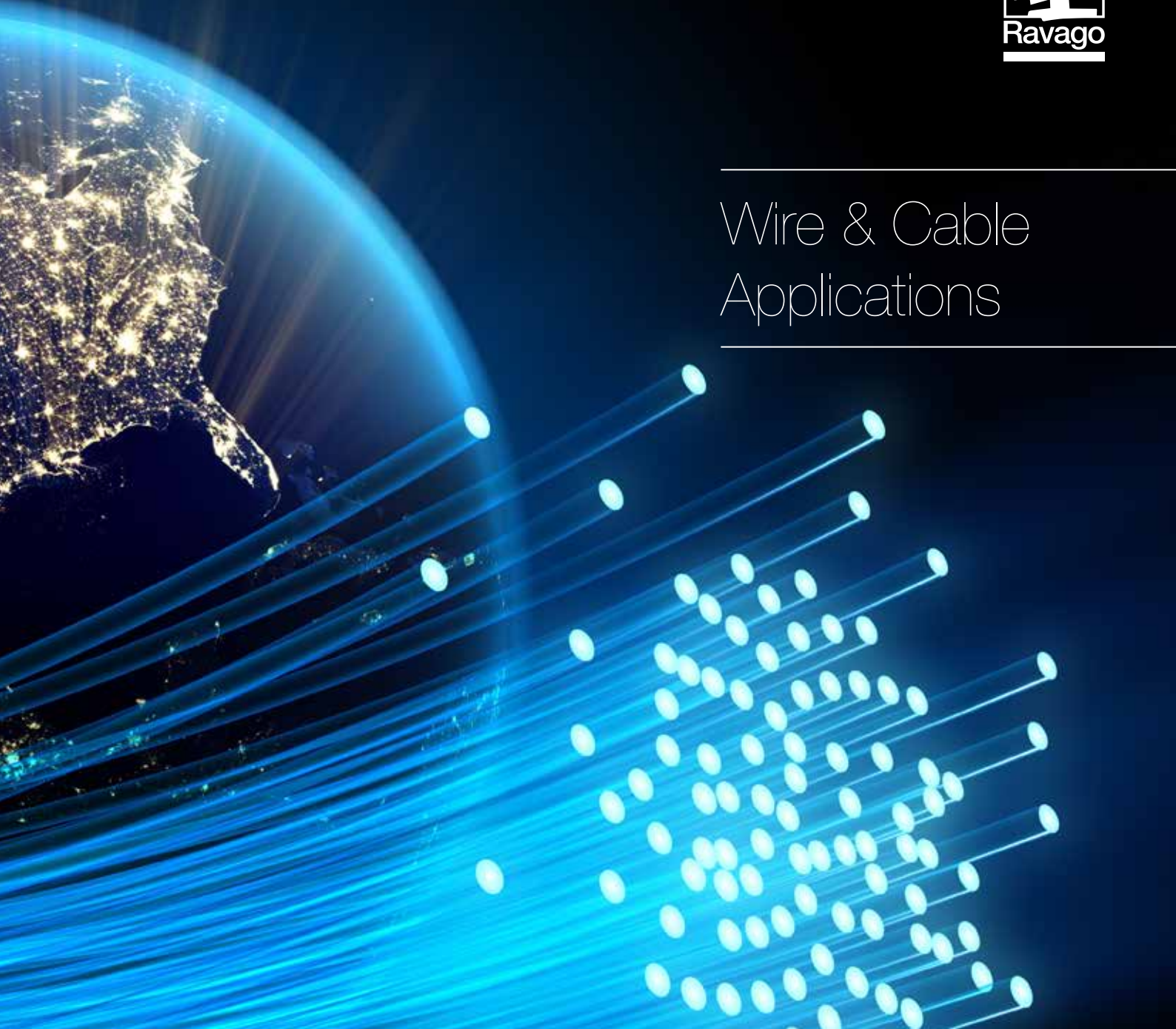




Wire & Cable Applications



Our services

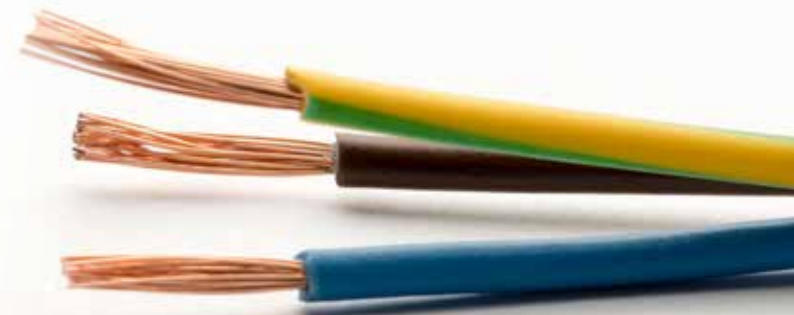
- Broad range of innovative solutions for various applications and specific demands
- Solutions package offering any type of polymer-based compounds combined with flame retardancy
- Full-service competence center and dedicated team with over 20 years of market experience



Ravago Wire & Cable: solutions for almost every need!

Ravago Wire & Cable provides a broad range of solutions for various applications and specific demands in the wire & cable market. We offer packages for any type of polymer-based wire and cable, combined with flame retardancy.

For over 20 years, Ravago Wire & Cable's dedicated team has worked with its customers to provide, select, develop and engineer innovative solutions in its full-service competence center.





Power cable

Insulation

RavaSafe®
ZH-LSF
2/21/25/251

Sheathing

RavaSafe®
ZH-LSF
2/25/30/32/321/33/4Z2/45/451

Telecommunication cable

DATA/LAN

Insulation

Solid PP, full range of RavaCabl®
PPc.

Sheathing

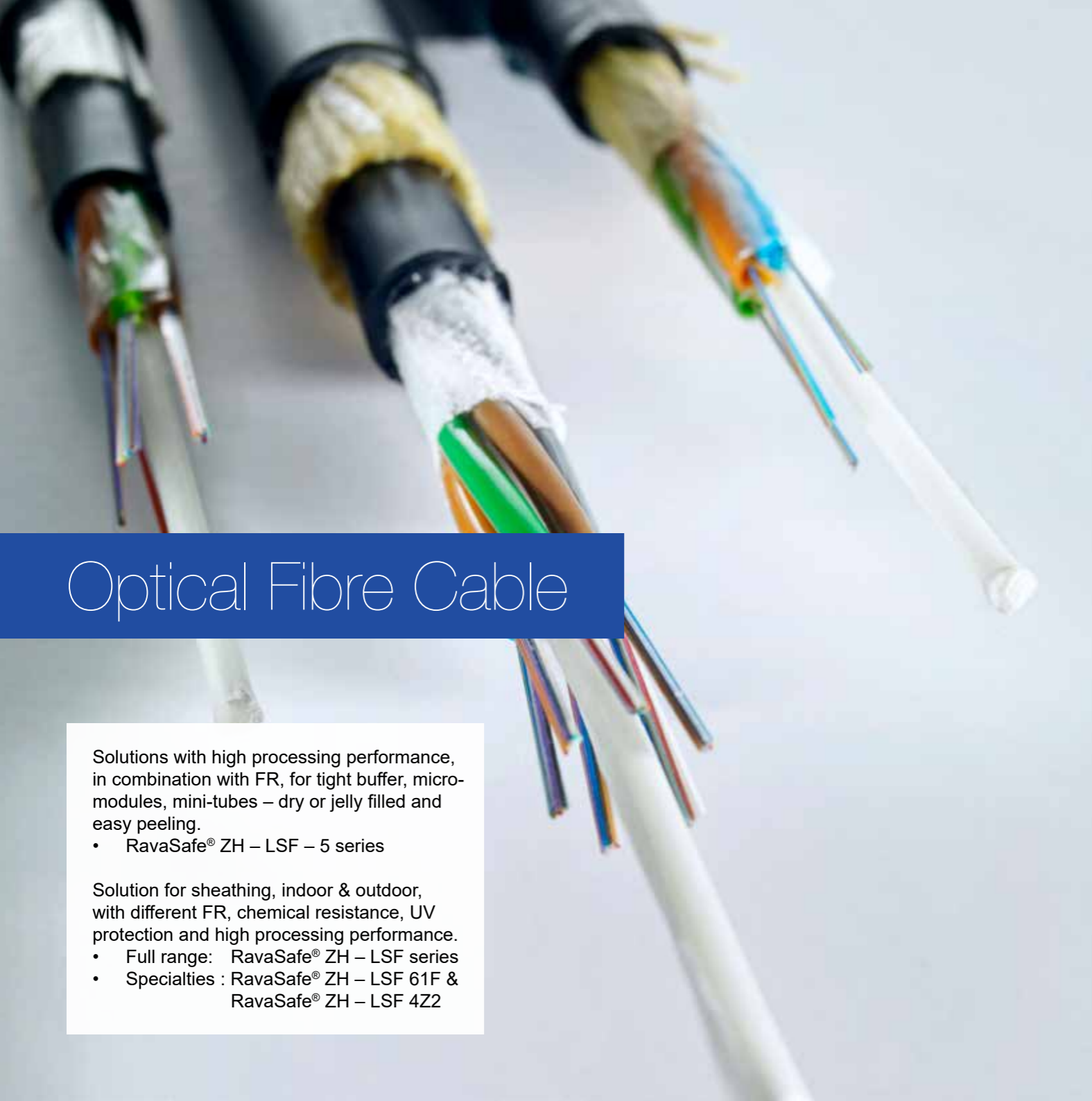
Full range of RavaSafe® ZH-LSF
solutions.

CO-AXIAL / RF CABLE

Sheathing

RavaSafe® ZH – LSF UV
and/or BK – 2, 3 & 4 series





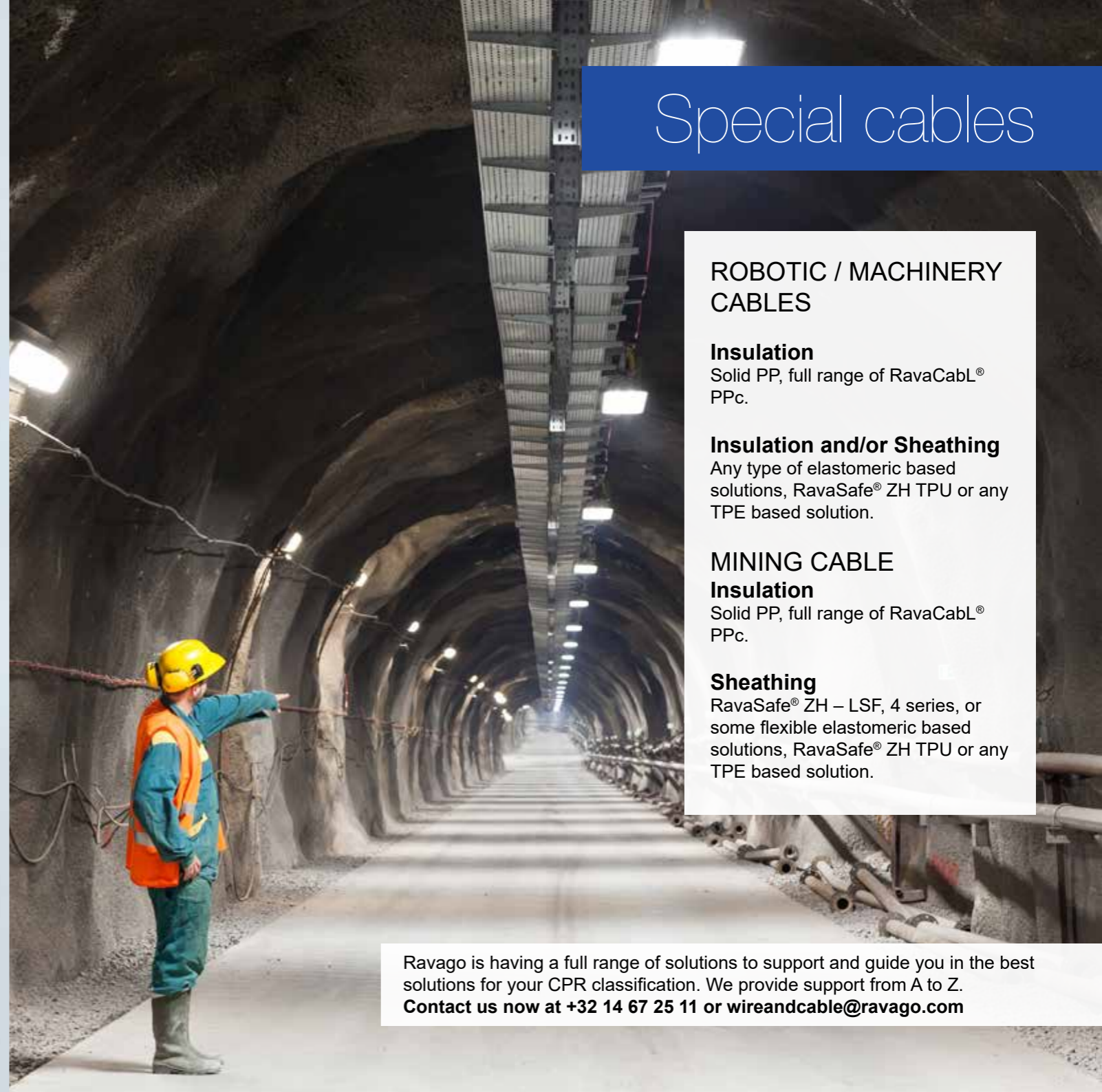
Optical Fibre Cable

Solutions with high processing performance, in combination with FR, for tight buffer, micro-modules, mini-tubes – dry or jelly filled and easy peeling.

- RavaSafe® ZH – LSF – 5 series

Solution for sheathing, indoor & outdoor, with different FR, chemical resistance, UV protection and high processing performance.

- Full range: RavaSafe® ZH – LSF series
- Specialties : RavaSafe® ZH – LSF 61F & RavaSafe® ZH – LSF 4Z2



Special cables

ROBOTIC / MACHINERY CABLES

Insulation

Solid PP, full range of RavaCabl® PPc.

Insulation and/or Sheathing

Any type of elastomeric based solutions, RavaSafe® ZH TPU or any TPE based solution.

MINING CABLE

Insulation

Solid PP, full range of RavaCabl® PPc.

Sheathing

RavaSafe® ZH – LSF, 4 series, or some flexible elastomeric based solutions, RavaSafe® ZH TPU or any TPE based solution.

Ravago is having a full range of solutions to support and guide you in the best solutions for your CPR classification. We provide support from A to Z.
Contact us now at +32 14 67 25 11 or wireandcable@ravago.com



Wire & Cable
Product portfolio



Elastomeric based compounds

TPE (ENFLEX TPV), FR-TPE, TPU (Ravathane®), ZH-TPU (RavaSafe®) range designed for cable extrusion and its specifications.

Halogen free solution

Application	RavaSafe® ZH TPU						
	LV, Industrial, Automation, Audio, Geophysics, Robotic, Battery, Sensor, Optical Fiber, Sheathing and or Insulation.						Electrical vehicles*
Grade	90A C301M	80A R112M	85A R112M	90A R112M	90A C400M	50D R112M	85A R112M EV
Physical Properties							
Density 23°C (g/cm³)	1,18	1,11	1,12	1,14	1,23	1,14	1,12
Hardness 15 sec	90 A	82 A	87 A	91 A	90 A	50 D	87 A
Mechanical Properties							
Tensile Strength (MPa)	30	31	39	40	26	35	35
Elongation at Break unaged (%)	500	630	640	550	550	490	680
Tear Strength 23°C N/mm	100	80	95	97	95	180	100
Flammability							
UL 94 FR rating (1,6mm)	V1	V2	V2	V2	V0	V2	V2
LOI (%)	23	23	23	23	23	23	23
Hydrolysis resistant	•	•	•	•	•	•	•
UV resistant	•	•	•	•	•	•	•
Very flexible at low temp	•	•	•	•	•	•	•

*charging cables

Ensoft® (TPE S)							Enflex® (TPE V)				
LV, Industrial, Automation, Audio, Geophysics, Robotic, Battery, Sensor, Optical Fiber, Sheathing and or Insulation > can be copper stabilized.											
SD53550AF0	SD53560AF0	SD53570AF0	SD53580AF0	SD53590AF0	SD53535DF0	SD53540DF0	VL54560AF0	VL54570AF0	VL54580AF0	VL54590AF0	VL54535DF0
Physical Properties											
1,06	1,04	1,03	1,02	1,01	1,01	1	1,09	1,08	1,08	1,04	1,03
50 A	60 A	70 A	80 A	90 A	35 D	40 D	60 A	70 A	80 A	90 A	35 D
Mechanical Properties											
3,87	5,48	6,71	9,02	11,3	12,9	15	3,89	2,77	3,82	6,25	7,37
730	750	730	730	690	660	660	340	320	340	480	470
20,3	26	32,4	39,6	50	55,8	59	13,7	13,4	18,6	31,3	35,9
Flammability											
V0	V0	V0	V0	V0	V0	V0	V0	V0	V0	V0	V0
26	25	25	25	25	25	25	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
•	•	•	•	•	•	•	•	•	•	•	•
-	-	-	-	-	-	-	-	-	-	-	-



Halogenated solution

		Ensoff® (TPE S)					
Application		LV, Industrial, Automation, Audio, Geophisic, Robotic, Battery, Sensor, Optical Fiber. Sheathing and or Insulation.					
Grade		SD-574-60A-F0	SL-584-60A-F0	SL-574-70A-F0	SL-584-75A-F0	SL-574-90A-F0	SL-574-40D-V0
Physical Properties							
Density 23°C (g/cm³)		1,21	1,32	1,22	1,32	1,23	1,22
Hardness 15 sec		60 A	60 A	70 A	75 A	90 A	40 D
Mechanical Properties							
Tensile Strength unaged (MPa)		8	5,5	9	5,3	12	11
Elongation at Break unaged (%)		785	550	750	600	650	565
Flammability							
UL 94 FR rating (1,6mm)		V0	V0	V0	V0	V0	V0
UV resistant		●	●	●	●	●	●

Non FR solution

		Enflex® (TPE V)									EZprene®
Application		LV, Industrial, Automation, Audio, Geophisic, Robotic, Battery, Sensor, Optical Fiber. Sheathing and or Insulation.									Insulation Non FR
Grade		VO-584-60A-F0	VO-564-65A-F0	VO-574-70A-F0	VM-564-75A-F0	VO-574-80A-F0 (ULlisted)	VM-564-85A-F0	VO-584-90A-V0	VO-584-40D-F0 (ULlisted)	VU-324-90A-TZ	
Physical Properties											
Density 23°C (g/cm³)		1,32	1,35	1,23	1,2	1,23	1,15	1,25	1,26	0,97	
Hardness 15 sec		60 A	65 A	70 A	75 A	80 A	85 A	90 A	40 D	90 A	
Mechanical Properties											
Tensile Strength unaged (MPa)		4,8	4,3	6	6,3	7	8,1	9,3	11,5	16	
Elongation at Break unaged (%)		535	412	600	550	550	473	550	550	700	
Flammability											
UL 94 FR rating (1,6mm)		V0	V0	V0	V0	V0	V0	V0	V0	V0	
UV resistant		●	●	●	●	●	●	●	●	-	

RavaCabL®

Wide range of non-flame retardant compounds designed and focus on specific applications and standards.

	PPc S-1	PPc S-2	PPc S-3	PPc S-4
Physical Properties	Typical Value	Typical Value	Typical Value	Typical Value
Shore hardness D	62	62	49	43
Tensile Strength MPa	30	28	27	31
Elongation at break %	600	680	620	610
Density (23°C)	0,90	0,90	0,89	0,88

RavaColor®

Color Master-batch having a full compatibility with our existing non FR or FR compounds. Various polymers based PE, EVA,TPU...



Grade	ZH-LSF 1*	ZH-LSF 2*	ZH-LSF 21	ZH-LSF 25	ZH-LSF 251	ZH-LSF 30*	ZH-LSF 32*
Application	Jacketing general application	Jacketing and insulation applications, high flame retardancy – CPR			Jacketing application, high flame retardancy and char formation – high CPR classification		
Physical Properties							
Density 23°C (g/cm³)	1,51	1,53	1,53	1,52	1,51	1,55	1,54
MFI (150°C/21,6kg - g/10min)	4	8,1	7,9	5,1	5,2	7	8,6
Hardness D 15 sec	41	49	49	44	43	48	44
Water absorption 24h 70°C, (mg/cm²)	1,3	1,4	0,76	0,31	0,24	1,3	1,2
Mechanical Properties							
Pressure Test 6h 90°C (%)	14	8	19	20	22	56	29
Tensile Str Unaged (MPa)	11,4	11,1	10,6	13	13,1	9,5	11,6
Elong at Break unaged (%)	184	184	176	180	165	185	160
Air ageing 7d 120°C							
Tensile Str Retention (%)	117	107	106	125	98	117	106
Elong at Break Retent (%)	91	82	84	97	80	91	88
Flammability							
LOI (%)	38	39	39	41	40	41	39
Temp. Index (°C)	> 310	> 310	-	-	-	> 310	> 330
Other features							
Char Formation	●	●	●●	●●	●●	●●	●●●
Water Resistant	●	●●	●●●	●●	●●●	●●	●
Cold Temperature Resistant	●	●●	●●	●●●	●●●	●●	●●
Stress Crack Resistance	●●	●●	●●	●	●	●●	●

*UV version exist please ask

ZH-LSF 321*	ZH-LSF 33*	ZH-LSF 35*	ZH-LSF 45	ZH-LSF 451	ZH-LSF 4Z2	ZH-LSF 5P	ZH-LSF 55P	ZH-LSF 61F
Jacketing application, high flame retardancy and char formation – high CPR classification			Jacketing application, Environmental Stress Crack Resistance, ESCR			Optical fiber cable - tight buffer, micro-modules, mini-tubes with easy peel		Optical fiber cables**
Physical Properties								
1,56	1,55	1,55	1,52	1,51	1,51	1,49	1,33	1,53
5	2,5	4	5,3	7,1	3	22	14	4,2
48	43	47	53	50	45	40	49	48
0,7	<i>in progress</i>	<i>in progress</i>	0,5	0,12	0,084	3,2	<i>in progress</i>	0,9
Mechanical Properties								
19	<i>in progress</i>	22	12,1	6,6	14	8	<i>in progress</i>	14
10	10,2	10,2	13,6	15	13,4	8,5	17	11,7
140	180	190	200	190	370	112	320	160
Air ageing 7d 100°C								
95	<i>in progress</i>	98	101	105	116	134	98	106
94	<i>in progress</i>	82	82	82	85	136	80	90
Flammability								
41	42	41	35	33	29	33	27	41
> 330	> 310	-	-	-	-	> 310	-	> 310
Other features								
●●●	●●●●	●●	●	●	●	●	●	●●
●●	●●	●●	●●	●●●	●●●	●	●	●●
●	●	●●●	●	●●	●●●	●	●	●●●
●	●	●●	●●●●	●●●	●●●●	●●	●	●●

** Jacketing for indoor and outdoor, UV and chemical resistance



All our compounds are available with UV additive and colored. RavaColor® UNIVERSAL range, suitable to color any polymer base. Contact us now at +32 14 67 25 11 or wireandcable@ravago.com

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