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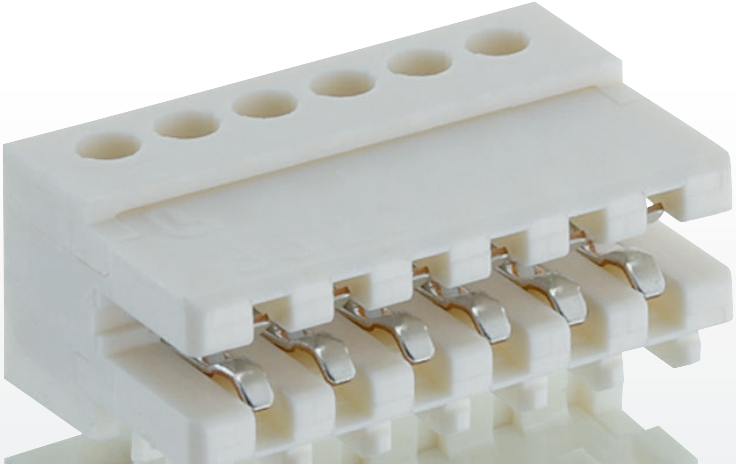

System Overview

RAST 2.5

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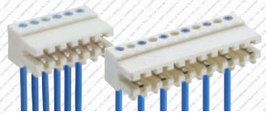
Series 35

RAST 2.5 connectors

pitch 2.5 mm (0.098")
pitch 5.0 mm (0.197")

Direct and indirect mating, for cable-to-board and cable-to-cable-connections, insulation displacement technology. Keying according to RAST 2.5 standard avoids mismating.

For signal and load currents up to 6 A, RAST 2.5. Power connectors up to 10 A.



3520 · 3521 · 3522 · 3523

RAST 2.5 connectors for direct and indirect mating, insulation displacement technology

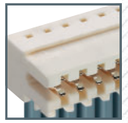
3521, 3523 for exterior locking
3520, 3522 with interior locking (locking and keying by means of guide frame or pin header)

mating with printed circuit board 1.5 ± 0.14 mm (by means of guide frame 350...) or pin headers 354..., 355..., 8354...

352...-1 · 352...-2

RAST 2.5 connectors for direct and indirect mating, insulation displacement technology

details on the left (352...)
352...-1 for flat cables, daisy chain
352...-2 for flat cables or discrete wires

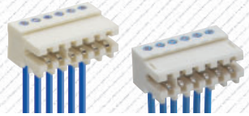


mating with printed circuit board 1.5 ± 0.14 mm (by means of guide frame 350...) or pin headers 354..., 355..., 8354...

352100 · 352300

RAST 2.5 plus™ connectors for direct and indirect mating, insulation displacement technology, with double-sided keying

mating with printed circuit board 1.5 ± 0.14 mm (by means of guide frame 350...) or pin headers 354..., 355..., 8354...



3510 · 3511 · 3517... · 3518

RAST 2.5 connectors for direct mating, insulation displacement technology, with or without keying rib and closed sides

3510, 3511 without locking
3517, 3518 with locking toes
3517-4, 3518-4 with enhanced locking toes

mating with printed circuit board 1.5 ± 0.14 mm

3517-5

RAST 2.5 connectors for direct mating on **1.0 mm printed circuit boards**, insulation displacement technology, with enhanced locking toes, with or without keying rib and closed sides

mating with printed circuit board 1.0 ± 0.14 mm

351700 · 351800

RAST 2.5 plus™ connectors for direct mating, insulation displacement technology, with double-sided keying, with or without keying rib and closed sides

351700, **351800** with locking toes

mating with printed circuit board 1.5 ± 0.14 mm

3512 · 3513 · 3515 · 3516

RAST 2.5 connectors for direct mating, insulation displacement technology

with or without keying rib and closed sides
3512, 3513 with lateral locking hooks

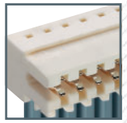
with keying rib
3515, 3516 with internal locking hooks

mating with printed circuit board 1.5 ± 0.14 mm

351...-1 · 351...-2

RAST 2.5 connectors for direct mating, insulation displacement technology, with or without keying rib and closed sides

Details siehe links (351...)
351...-1 for flat cables, daisy chain
351...-2 for flat cables or discrete wires



mating with printed circuit board 1.5 ± 0.14 mm

Contact pitch	2.5 mm (always the first mentioned type) or 5.0 mm (always the second mentioned type)						
Pole number	**3521...** 2–20 **3520...** 4–20 (**3520-1** 4–10) **3523...** 2–10 **3522...** 3–10 (**3522-1** 3–5)		**352100** 2–11 **352300** 2–6	**3510..., 3512..., 3517...,** 2–20 (**35...-1** 2–10, **35...-4** 2–9) **3515...** 3–18 (**3515-1** 3–10) **3511..., 3513..., 3518...,** 2–10 (**35...-1** 2–5) **3516** 2–10 (**3516-1** 3–6, **3516-2** 3–10) **3517-5** 3–9 **351700** 2–11 **351800** 2–6			
Insulating body	**352...** PBT, V0 according to UL 94 **352... M12** PA[1], V2 according to UL 94		PA[1], V0 according to UL 94	**351..., 352...50** PBT, V0 according to UL 94 **351... M12, 352...50 M12** PA[1], V2 according to UL 94			
Contact spring	CuSn, tin-plated			**351...** CuSn, tin-plated **351...V03** CuSn, tin-plated (Sn/Ag) (pitch 2.5 mm, 2-9 poles and pitch 5.0 mm, 2-5 poles) **351...V102** CuSn, pre-nickel and gold-plated			
Connectable wire section[2]	0.14–0.38 mm²		0.35–0.38 mm²	0.14–0.38 mm²	0.22–0.38 mm²	0.35–0.38 mm²	0.14–0.38 mm²
Rated current	4 A at T_{amb} 60 °C (**3517-5** 70 °C) 2 A at T_{amb} 100 °C						
Rated voltage	32 V AC (pitch 2.5 mm), 250 V AC (pitch 5.0 mm), **35...00** 80/250 V AC, **355...95** 250/500 V AC						

[1] glow-wire resistant (GWT 750 °C), see specification at www.lumberg.com
[2] range of values of conductors approved by laboratory tests; covering various geometries of insulation displacement terminations

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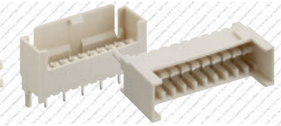
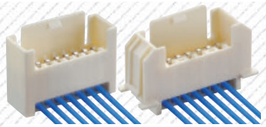
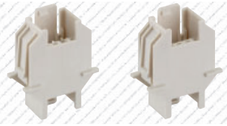
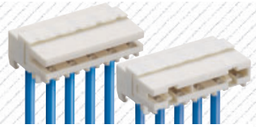
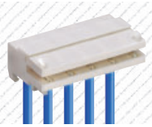
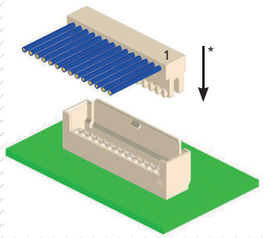
								
355...	**355099 · 355299**	**355095-355395**	**3541 · 3542 · 3545 · 3546**	**83545 · 83546**	**357...**	**357099**	**357000 · 357600**	**3501 · 3500**
RAST 2.5 pin headers	RAST 2.5 plus™ pin headers, with double-sided keying	RAST 2.5 plus™ pin headers, in surface mount technology (SMT), with double-sided keying	RAST 2.5 pin headers, insulation displacement technology, with locking latches	RAST 2.5 double chassis pin headers	RAST 2.5 Power connectors for direct and indirect mating, insulation displacement technology	RAST 2.5 Power connector for direct and indirect mating, insulation displacement technology, with double-sided keying	RAST 2.5 Power plus™ connector for direct and indirect mating, insulation displacement technology, with double-sided keying	RAST 2.5 guide frame and handle latch
upright **3551, 3553** interior locking **3550, 3552** locking latch **355096** without locking latch angular **3555, 3557** interior locking **3554, 3556** locking latch	upright **355099, 355299** with locking latch	upright **355095, 355295** with locking latch and positioning spigot **355195, 355395** for interior locking, with positioning spigot	**3541, 3542** without chassis latches **3545, 3546** with latches for chassis mounting	**83545, 83546** straight, with locking latches	**3570** for direct and indirect mating, locking and keying by means of guide frame or pin header **3575** for direct mating, with or without locking hooks for locking on printed circuit board, with or without keying rib and closed sides	locking and keying by means of guide frame or pin header	**357000** for direct and indirect mating, locking and keying by means of guide frame or pin header **357600** for direct mating, with or without locking hooks for locking on printed circuit board, with or without keying rib and closed sides	**3501** for interior locking for connectors 3520..., 3522... **3500** with locking latch for use with connectors 3521..., 3523..., 3570...
mating with connectors 352..., 3570	mating with connectors 3521..., 3523..., 3570...	mating **355095, 355295** with 3521..., 3523..., 3570... **355195, 355395** with 3520..., 3522...	mating with connectors 3521..., 3523..., 3570...	mating with connectors 3521..., 3523..., 3570...	mating **3570** with printed circuit board 1.5 ± 0.14 mm (by means of guide frame 350...) or pin headers 354..., 355..., 83546 **3575** with printed circuit board 1.5 ± 0.14 mm	mating with printed circuit board 1.5 ± 0.14 mm (by means of guide frame 350...) or pin headers 354..., 355..., 83546	mating **357000** with printed circuit board 1.5 ± 0.14 mm (by means of guide frame 350...) or pin headers 3542..., 3546... or pin headers 3552..., 3556, 83546 **357600** with printed circuit board 1.5 ± 0.14 mm	
2.5 mm (always the first mentioned type) or 5.0 mm (second type)					5.0 mm			2.5/5.0 mm
3551, 3555 3–20 **3550, 3554** 2–20 **3552, 3553, 3556, 3557** 2–10	**355099** 3–11 **355299** 2–7	**355095-355195** 3–7 **355295-355395** 3–4	**3541..., 3545...** 2–20 **3542..., 3546...** 2–10	**83545** 3–4 **83546** 2	2–10	2–7	2–8	3–20
PA GF[1], V0 according to UL 94					**357..., 357099** PBT GF, V0 according to UL 94 **357...M09** PA[1], V2 according to UL 94		PA, V0 according to UL 94	PBT GF, V0 nach UL 94
355... CuZn, pre-nickel and tin-plated **355...V04** CuZn, pre-nickel and silver-plated (only pitch 5.0 mm)		CuZn, pre-nickel and tin-plated	CuSn, tin-plated	CuZn, pre-nickel and tin-plated	**357...** Cu alloy, silver-plated **357...V03** Cu alloy, tin-plated (Sn/Ag)		**357000** CuSn, tin-plated **357600, 357000 V168** CuSn, silver-plated	
			354... 0.22–0.38 mm^2 **354...-1** 0.34–0.5 mm^2		0.35–0.82 mm^2		0.5–0.75 mm^2	
355... 4/2 A at T_{amb} 60/100 °C **355... V04** 10/6 A at T_{amb} 70 °C (pitch 5.0 mm, 2-5-poles/6-10 poles)		4 A at T_{amb} 60 °C, 2 A at T_{amb} 100 °C	4 A at T_{amb} 60 °C, 2 A at T_{amb} 110 °C, 6 A at T_{amb} 85 °C (only pitch 5.0 mm)	4 A at T_{amb} 60 °C 2 A at T_{amb} 120 °C	6 A at T_{amb} 70 °C **3570...** 10 A at T_{amb} 70 °C (with indirect mating, 2-5 poles) **357...V03** 6 A at T_{amb} 70 °C (max. 4 poles energized)		6 A at T_{amb} 70 °C **357...V168** 6 A at T_{amb} 70 °C, 10 A at T_{amb} 70 °C (with indirect mating, 2-4 poles)	
				83545 160/40 VAC (poll. deg. 2/3) **83546** 400/250 VAC (poll. deg. 2/3)	400 V AC			

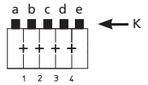
KEYING of RAST 2.5 connectors according to RAST 2.5 standard

Indirect connectors

350... · 352... · 354... · 355... · 3570...

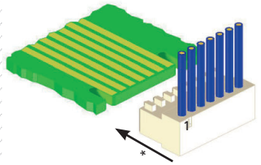


Indirect connectors are keyed by means of keying noses (K). The matching keying windows of the pin header are open (same with guide frame in case of direct mating).

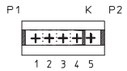


Direct connectors

351... · 3575



Direct connectors are keyed by keying ribs (K) and closed sides (positioning, P). The printed circuit board has matching reliefs.

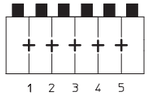


All drawings in view of mating direction (*), from female to male connector.

A selection of proposed keyings can be found on the Internet at **www.lumberg.com**

Examples:

3521 05 K00

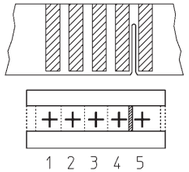


keying: –

Examples:

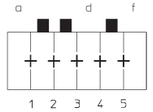
Direct RAST 2.5 connectors with keying rib, RAST 2.5 Power connectors as well as double-sided keyings are geared to the RAST 2.5 standard without being described by the directive.

3510 05 K01



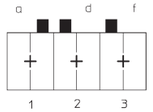
keying: **4/5**

3521 05 K32



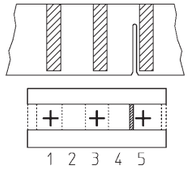
keying: **adf**

3523 03 K32



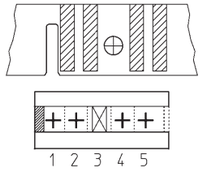
keying: **adf**

3511 03 K01



keying: **4/5**

3515 04 K04



positioning: **P1**, lock: **3**

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EFFICIENT HARNESSING

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