



Series 97

Tools and harnessing machines

The complete application tooling equipment for insulation displacement technology (IDT) connector systems. Depending on your needs, choose from manual, semi and fully automated solutions for low, middle or high volume production.





















- Flexible cable processing

- Quality assurance







- Knuckle-joint press for termination of Micromodul™ connectors

 Semiautomatic harnessing machine for termination of Micromodul™ connectors

 Semiautomatic harnessing machine for termination of Micromodul™ connectors

 Semiautomatic harnessing machine for termination of Micromodul™ connectors

 Fully automatic harnessing machine for termination of Micromodul™ connectors, for flexible harness configurations

 Fully automatic harnessing machine for termination of RAST connectors, for flexible harness configurations

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 Fully automatic harnessing machine for termination of flexible harness configurations

 Fully automatic
 - Highly efficient connector loading Highly efficient cable loading Flexible cable processing
 - Quality assurance

Connectors		302299	* 12	302299, MICA, MICAL, MICALD	RAST 2.5 Power	RD also 354), RAST 2.5 plus™ (35200) plus™ (35700) 52, 363)
State of delivery of connectors	in bulk	on reel	in bulk	on reel, in bar stock carrier	in chain	in chain
Processable conductor	ribbon cable	ribbon cable	ribbon cable	ribbon cable	discrete conductor	discrete conductor
Stroke capacity, discrete conductor per hour	ca 450	ca 1.200	ca 600	ca 1.200	ca 10.500 contacts	ca 17.000 contacts
Harnessing of bus cables	X		8	- Processing modules for mass ter-	- 2 different RAST systems loadable in parallel	- 2 different RAST systems loadable in parallel
Cable color detection 7 + 1 (CA)				mination - Testing units for quality control	- Decollating of connectors and cutting of RAST keyings	- Decollating of connectors and cutting of RAST keyings
Verification of insertion pattern and line end position				- Type U, type Z, hybrid	- 12 cable barrels mountable in parallel - 4 different cables loadable in parallel (different	- 24 cable barrels mountable in parallel - 8 different cables loadable in parallel (different
Storage of insertion patterns					types, sections, colors) - 1-to-n (U-type) and 1-to-1 (Z-type) harnesses - Crossed cables, bridged contacts and varying pit-	types, sections, colors) - 1-to-n (U-type) and 1-to-1 (Z-type) harnesses - Crossed cables, bridged contacts and varying pit-
High-voltage test (HV)					ches in one harness - Variable cable lengths in one harness (min. 200 mm,	ches in one harness - Multiple cable lengths in one harness (min. 200 mm,
Cutting and vacuum extraction device for connector chain inter- links (RK)					max. 2500 mm) - Mechanical testing units including RAST keying and cable end position tests - Electrical testing units, including continuity, high-	max. 2500 mm) - Mechanical testing units including RAST keying and cable position tests - Electrical testing units, including continuity, high-
Key cutting (KC)					voltage/short-circuit tests	voltage/short-circuit tests
Key test (KT)					- Distruction of reject parts - Cable bending unit for RAST 2.5 Power plus™ and	- Distruction of reject parts - Cable bending unit for RAST 2.5 Power plus™ and
Automatic feeding of connectors		х			RAST 5 - Produced harnesses hanging straight or in loop for	RAST 5 - Produced harnesses hanging straight or in loop for
Additional specifications			- counter		manual unloading - Especially short changeover times	manual unloading - Especially short changeover times - Main process units duplicated for maximum performance and output









www.lumberg.com · info@lumberg.com

Harnessing in insulation displacement technology



Lumberg #

Tools and harnessin

The complete application tooling equipment for insulation displacement technology (IDT) connector systems. Depending on your needs, for keying (also choose from manual, semi and fully for 357...) automated solutions for low, middle or high volume production.













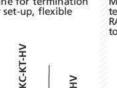




extendible





































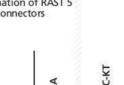












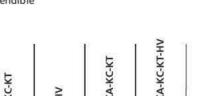
362..., 363...

in chain

discrete

conductor

ca 1.200









press for term
nation of RAS
7.5 Power™ co
nectors

Micromodul™ on- connectors

HZ-M30 modu-

lar manual tongs

... M30 MICA

in bulk

ribbon cable

ca 240

MICAL MICALI

in bulk

ribbon cable

ca 450

- press die for | - press die for MICA, MICAL, MICA, MICAL,

MICALD

MICALD

nation of Micro- chine for termi- chine for term modul™ connec- nation of Micro- nation of Micromodul™ connectors modul™ connectors

MICA (MICA VP3 HA30...-R) . MICAL MICALD

in bulk

ribbon cable

ca 600

Manual tongs for Knuckle-joint Electropneumatic Semiautomati

A and C



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The		
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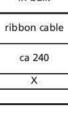


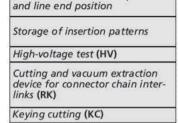
30e-R	HZ-M30
95 95	TOTAL TRANS

c	Modular manua
1-	tongs for termi-
ni-	nation of Micro-
ro-	modul™ connec-
ec-	tors

i-	nation of Micro
0-	modul™ connec
c-	tors

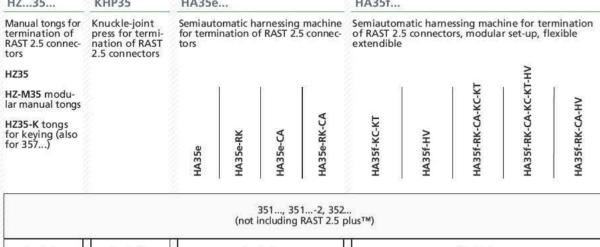
30	2299	
in	bulk	

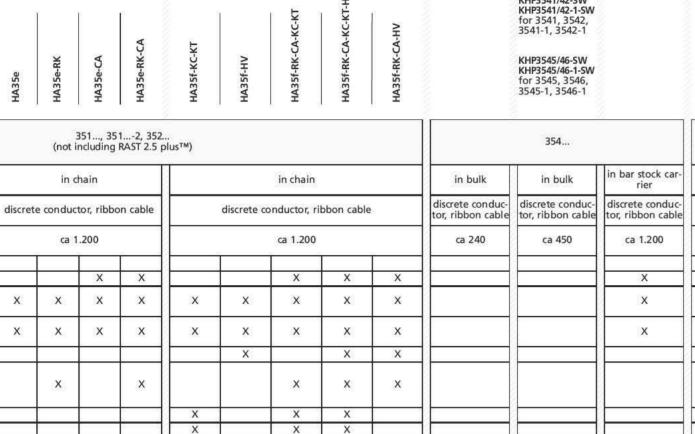




Connectors		
Connectors		T .
State of delivery of connectors	in chain	in chain
Processable conductor	discrete conduc- tor, ribbon cable	discrete conduc- tor, ribbon cable
Stroke capacity, discrete conductor per hour	ca 240	ca 450
Bus cables on request		
Cable color detection 7 + 1 (CA)		
Verification of insertion pattern and line end position		
Storage of insertion patterns		
High-voltage test (HV)		
Cutting and vacuum extraction device for connector chain inter- links (RK)		
Keying cutting (KC)		
Keying test (KT)		
Automatic feeding of connectors		









푼	40	
HA35f-RK-CA-KC-KT-HV	>	
¥-	HA35f-RK-CA-HV	
3	ğ	
*	*	
356	354	
₹	¥	



KHP3545/46-SW KHP3545/46-1-SW for 3545, 3546,

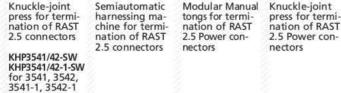
3545-1, 3546-1

354...

in bulk

ca 450

	KHP354SW	HA
	Knuckle-joint	Sem
	press for termi-	harr
6	nation of RAST	chin
	2.5 connectors	nati



n bar stock car-

rier

ca 1.200





in chain

discrete

conductor

ca 240



in chain

discrete

conductor

ca 450



in chain

discrete

conductor

ca 1.200

357... (not including RAST 2.5 Power plus™)

double-s.

X

	ī i	I.	, ≩	100
		ż	4357f-CA-KC-KT-	
ż		-CA-KC-KT	¥	
1357f-KC-KT	\357f-HV	্ব	\$	
57f	157£	1357f	574	1
9	9	1 2	1 2	

in chain

discrete conductor

ca 1.200

double-s. double-s.

Semiautomatic Semiautomatic harnessing machine for termination





in chain, to be

decollated

discrete

ca 450

conductor

(RAST 2.5 plusTM)

in chain

discrete

conductor

ca 1.200

double-sided

Knuckle-ioint





(RAST 2.5 Power plusTM)

in chain

discrete

conductor

ca 1.200

double-sided

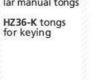
in chain, to be

decollated

discrete

conductor

ca 450



in chain

discrete

conductor

ca 240



in chain

discrete

conductor

ca 450



in chain

discrete conductor

X X

X X

X X

X

| x | x

	\$	\$
	A36f	A36f
I	Ŧ	1





rier

discrete

conductor

ca 1.200

in bar stock car- in bar stock car-

rier (separate)

discrete

conductor

ca 450



3690

in chain

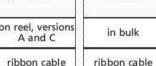
discrete conduc-

ca 450



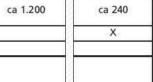


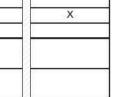
3		
	302299	
ons	in bulk	



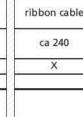
















utomatic	feeding or	f connectors









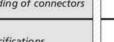




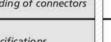




















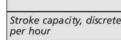


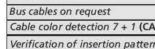












Keying test (KT)	
Automatic feeding of connectors	

