

short description of the test		All tests are done in the Intercable testing facilities in Brunico Italy.			
Pull out test: crimping solution for customer Miasin and his customer DTC		part n°:	part name:	dwg n°:	remark:
tester		time required	several	several	several
Lukas Untergasser / Alex Niederkofler		5h			

requirements / specifications	target of the test	result
Pull ot test conform with DIN EN 61238-1: Compression and mechanical connectors for powers cables	finding a crimping solution: To pass the test according to the standard DIN EN 61238-1, the conductor must not slip in the crimp/press connection at 100% of the tensile force and a holding time of 60 seconds	The required pulling force to the norm DIN EN 61238-1 could be maintained for one minute without slipping and, in addition, a much higher maximum force was achieved. All attempts were completed positively. The crimping solution is thus released.

Sez. mm <sup>2</sup>	Cable type	Lug	Die	Tool	required value[Nm]	detected value [Nm]	result		remark
							pos.	neg.	
25	Üntel M2XCH flex kl 5 3x25mm2	ICR25-12	MI25-CK	AP60-2	1.500	3.403	X		Lug was crimped two times
						4.136	X		Lug was crimped two times
						4.184	X		Lug was crimped two times
35	Waskönig & Walter YMvK Dca SS 4x35mm2	ICR35-8	MI35-CK	AP60-2	2.100	3.653	X		Lug was crimped two times
						3.378	X		Lug was crimped two times
						3.796	X		Lug was crimped two times
50	Üntel M2XCH 0,6-1kV 3x50mm2	ICR50-12	MI50-CK	AP60-2	3.000	5.739	X		Lug was crimped two times
						3.994	X		Lug was crimped two times
						3.814	X		Lug was crimped two times
70	Üntel M2XCH flex kl 5 1x70mm2	ICR70-10	MI70-CK	AP60-2	4.200	10.812	X		Lug was crimped two times
						9.753	X		Lug was crimped two times
						10.615	X		Lug was crimped two times
95	Waskönig & Walter YMvK Dca SS 4x95mm2	ICR95-10	MI95-CK	AP60-2	5.700	9.121	X		Lug was crimped two times
						7.430	X		Lug was crimped two times
						9.057	X		Lug was crimped two times



cable with unpressed lugs and I-crimp dies



AP60-2: Battery operated hydraulic crimping tool 60kN up to 300mm<sup>2</sup>



pull compression machine up to 50kN

DIN EN 61238-1: Tensile force for mechanical test: No slipping shall occur during the last minute of the test.

Conductor material: **Copper: 60 x nominal cross sectional area (mm<sup>2</sup>)** / Used compression tool AP60-2: Battery operated hydraulic crimping tool 60kN for dies series 60-2/4 up to 300mm<sup>2</sup>



cables that were tested



**Waskönig+Walter**

