

**Direct Debit Authorization Normalized Number  
Algorithm to calculate – Module 97-10 (ISO 70064)**

THE REFERENCE OF THE DIRECT DEBIT AUTHORIZATION GIVEN BY THE CREDITOR, SPECIFICALLY OF THE DDS, AND WHICH TOGETHER WITH THE CREDITORS IDENTIFICATION (ID CREDITOR) CONSTITUTES THE IDENTIFICATION KEY OF THE AUTHORIZATION, IS CALCULATED AS BELOW. ADDITIONALLY WE PUT AN EXAMPLE IN AN EXCEL WORKSHET.

POLINOMIAL METHOD

To each digit of the number is given a weight obtained by the formula:

$$W_i = 10^{(i-1)} \pmod{97}$$

Being  $W_i$  the digit weight in order  $i$  and having  $i = 1$  for the 1st position starting from the right, including the check digits. Each digit is multiplied by the respective weight and the product is added. The remaining portion of the total ratio from 97 must be deducted to 98 and the result is the check digits.

EXEMPLE

The check digits of **NUM-AUT** (the two last digits) are calculated in agreement with the Module 97-10 (norm ISO 70064), applicable to **ID\_CRED+NUM-AUT (17 positions)**

Creditor Identification Number (ID\_CRED): 100.000

Internal Reference - Client number, contract... – (NUM-AUT): 210.000.010

<b>i</b>	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
<b>W<sub>i</sub></b>	62	45	53	15	50	5	49	34	81	76	27	90	9	30	3	10	1	
<b>a<sub>i</sub></b>	1	0	0	0	0	0	2	1	0	0	0	0	0	1	0	X	X	
<b>P</b>	62+	0+	0+	0+	0+	0+	98+	34+	0+	0+	0+	0+	0+	30+	0	=		224

$224 = 30 \pmod{97} \Rightarrow$  Check Digits (XX) =  $98-30 = 68$

**Result NUM-AUT = 210 000 010 68 (always 11 digits)**

**WEIGHTS TO USE**

POSITION	WEIGHT	POSITION	WEIGHT
1	1	16	45
2	10	17	62
3	3	18	38
4	30	19	89
5	9	20	17
6	90	21	73
7	27	22	51
8	76	23	25
9	81	24	56
10	34	25	75
11	49	26	71
12	5	27	31
13	50	28	19
14	15	29	93
15	53	30	57

Note:

The position 1 is the 1st digit of the number starting from the right and thus successively.