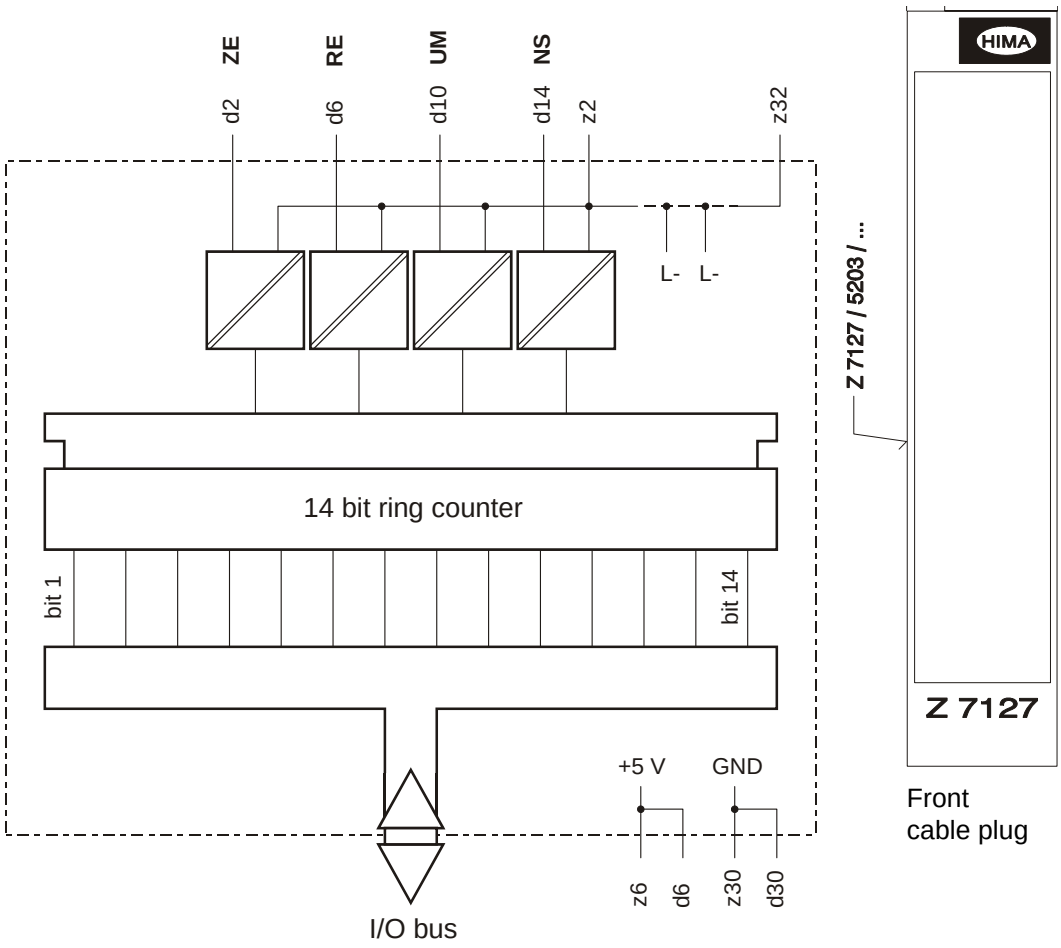
F 5203

F 5203: 14 bit ring counter



Block diagram

ZE	counting input
RE	counting direction input
UM	change-over discriminator / counter
NS	zero setting input

Figure 1: 14 bit ring counter

The module records fast counting pulses. It can be used as a counter or discriminator.

Inputs	1-signal, 4 mA, 24 VDC
Counting frequency	max. 5 kHz
Counting range	0...16383
Space requirement	4 SU
Operating data	5 VDC / 300 mA

The ring counter is controlled via the inputs ZE, RE, UM, NS. The value of the ring counter can be read over the defined digital input.

With 1-signal at the zero setting input (NS) the 14 bit ring counter is set on zero and the value 32,768 is transferred to the digital output. 0-signal transfers 0 to the digital output.

Counting mode
UM = 1-signal
ZE = counting pulses
The counting direction depends on a binary signal at the input RE:
0-signal = forward,
1-signal = backward.

Discriminator mode
UM = 0-signal
ZE = counting pulses
The counting direction depends on the signal sequence of the inputs RE and ZE.

If the signal on ZE changes before RE the counting direction is forward.
If the signal on ZE changes after RE the counting direction is backward.

Function	Connection	Colour
ZE	d2	WH
RE	d6	BN
UM	d10	GN
NS	d14	YE
none	d18	GY
none	d22	PK
none	d26	BU
none	d30	RD
L-	z2 (L-)	BK

Lead marking of the cable plug Z 7127 / 5203 / C..

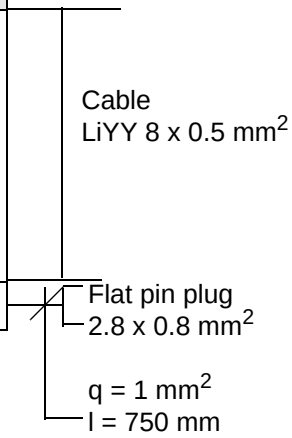


Figure 2: Lead marking of the cable plug Z 7127 / 5203 / C..