



Fig.1 Counting Module overall view.

Supply voltage

Input voltage U_{IN}	12 .. 24 V DC
Input voltage U_{IN} MIN/MAX	9 .. 32 V DC
Max. duration of input voltage interruption without functional impairment	10 ms
Inverse polarity protection	available
Power consumption P_{IN}	4 W (330 mA at 12V DC)

Digital inputs

Type	Optical coupler
Isolating voltage	707 V DC
Input voltage (absolute), maximum	50 V
Input voltage (low), maximum	6 V
Input voltage (high), minimum	9 V
Input current (at 24 V DC)	10 mA

Ethernet interface

Transfer rate	10 / 100 MBit/s
Cable length, maximum	100 m
Coding (for industrial Ethernet)	D
Connector type (APC/PC)	M12/IEC 631076-2-101
Pairing	1/2, 3/4

Environmental conditions

Operating temperature (ambient temperature housing)	-25 .. +70 °C
Storage temperature (the device is switched off)	-40 .. +85 °C
Degree of protection (DIN IEC 60529)	IP54
Relative humidity (non-condensing)	0 .. 75%
Relative humidity (non-condensing), maximum on 30 consecutive days in the year	90%

Certifications and approvals

Automotive application (type approval)	(e1) Directive 72/245/EEC and Directive 2006/28/EC
Fire protection level	3 (according to DIN 5510/ISO 3795)
Flammability class	UL94 (V0)/ISO 3795
Electromagnetic compatibility (EMC)	EN 55022 IEC61000-6-2, e1, EN 50121-3-2
Reliability prediction	DIN EN 61078 DIN IEC 61709 SN 29500
Climatic and mechanical dynamic strength and functionality (according to railway requirements)	EN 50155, IEC 61373, IEC 60068, VDE 0115-2000

Dimensions

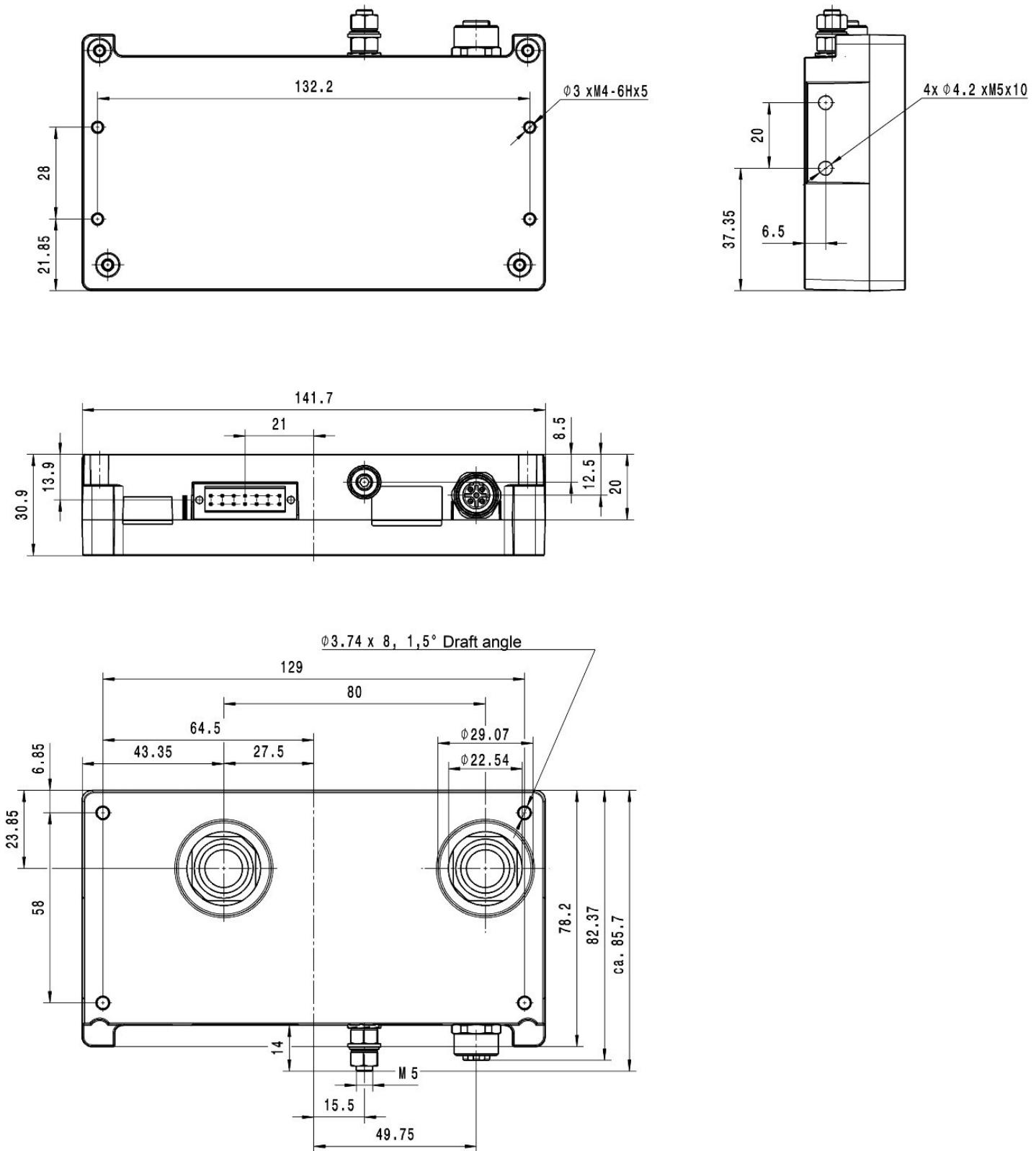


Fig.2 APC-R counter dimensions.