

# ASK Cards



## Features

- |                |   |
|----------------|---|
| <b>System</b>  | <ul style="list-style-type: none"> <li>Analog signal isolation</li> <li>Digital signal isolation</li> </ul> |
| <b>Sources</b> | <ul style="list-style-type: none"> <li>Voltage signals</li> <li>Current signals</li> </ul>                  |

## Applications

- Industrial measurement and control technology
- Test bench measurement
- Isolation of signals up to 2000 V
- Signal conditioning
- Signal filtering

**Product information**

**ASK Cards**

**Functions and Benefits**

The modules provide isolated signal conversion and conditioning for automation and measurement applications. Each module has a 3-way isolation and offers flexible interference suppression with plug-in filters. These are designed as 4-pole Butterworth or Bessel filters. Other orders and characteristics are available on request.

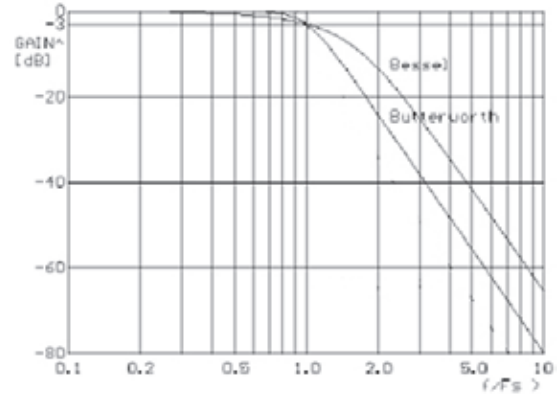
With isolating and filtering, the modules are best suited for interference suppression in measurement and control circuits, protection of SPCs and AD converters, galvanic isolation of line and signal circuits, as well as prevention of ground loops.

Low-noise with a residual ripple of < 2 mV<sub>pp</sub> and an accuracy of 0,1 % makes the modules also best usable for data acquisition applications.

Signal inputs and outputs are via BNC sockets resp. screw terminals on the front panel of the module and/or back panel of a 19" chassis/housing.

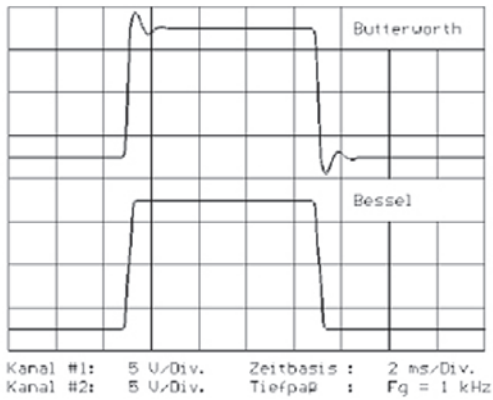
Customer-specific adaptations can be provided in many ways for e.g. measurement ranges and gains.

The frequency response of a filter increases with the steepness between passband and stop-band. Here Butterworth has advantages over Bessel:

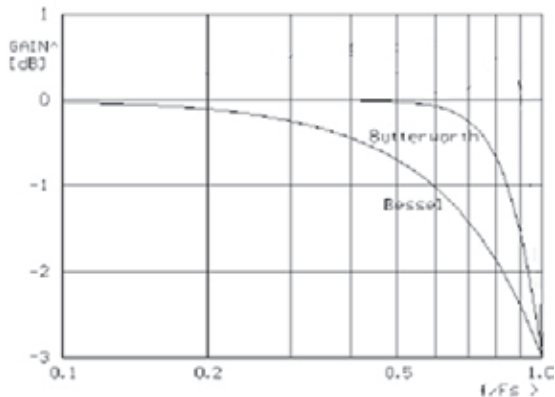


**Filter Characteristics**

Bessel is the better choice for square edge signals like rectangle pulses, as the signal is only marginally derogated:



4- pole Butterworth filters show ringing for square edge signals, which can reach up to 11 %. 4- pole Bessel filters reach only up to 0.8 %, but separate not so sharply from passband to stop-band:



**General Technical Data**

Dimensions	19" plug-in unit Europe card size Height 3 U Width 5 U, 8 U Depth 160 mm
Supply voltages	24 V DC or ± 15 V DC
Environmental temperature	0°C..50°C
Signals	Input: ± 10 V, ± 20 mA Output: ± 10 V 3-way isolation, Digitized isolation (ASK-DP) Low noise
Electric strength	2000 V DC (1 s) (except ASK-DP) 600 V <sub>eff</sub> (permanent)
Accuracy	< 0.1 % Further data see individual modules

## Module Overview

Card	Input			Output			Page
	Voltage	Current	RS 422	Plug-in Filter	± 10 V	TTL	
ASK-44A	●	○		●	●		4
ASK-44E	●	○		●	●		5
ASK-44D			●			●	6
ASK-DP 140, DP 200	●	○		●	●		7
ASK-8	●			●	●		8
ASK Card Housings							9
Plug-in Filter							10

- Standard
- Optional resp. Switchable

Mistakes reserved, technical specifications subject to change without notice.