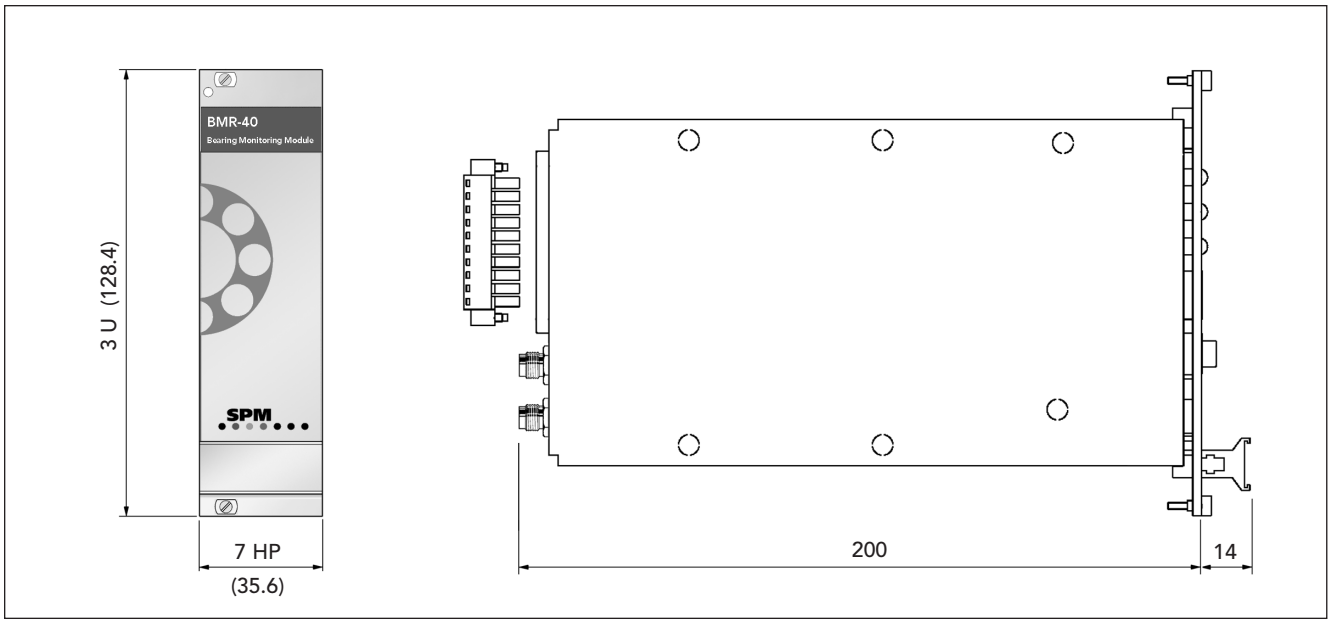
CMM System - Bearing Monitoring Rack Module BMR



Bearing Monitoring Rack Modules BMR are converters with two channels which output 4-20 mA proportional to the un-normalized maximum value of the shock pulses measured on a bearing. The measuring time is approximately 1 second per channel. The measuring range for both channels together can be jumper set to either 0 to 80 or 20 to 100 dBsv.

The 4-20 mA current can be supplied to an display module of type DMM/DMR, to a PLC or to a computer controlled monitoring system (e.g. SPM's CMS System).

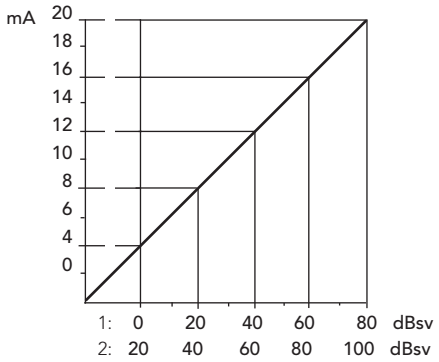
There are two versions:

BMR-40 for shock pulse transducer type 40000. The coaxial cable used between transducer and module is max. 4 m.

BMR-42 for shock pulse transducer type 42000. The coaxial cable used between transducer and module is max. 100 m.

The modules are mounted in standard 19" racks and supplied with 12 to 24 V DC. A transducer line fault is indicated by an output of ≤ 1 mA. This output can be changed to 4 mA by a jumper setting common for both channels.

Signal conversion



Technical data

Measuring method:	SPM dBm, unnormalized maximum value
Measuring channels:	2, multiplexing
Measuring range 1:	0 to 80 dBsv
	(5 dB /mA, 0.2 mA/dB)
Measuring range 2:	20 to 100 dBsv
	(4 mA ≤ 20 dBsv)
Measuring time:	approx. 1 second per channel
Transducer type:	SPM 40000 (BMR-40),
	SPM 42000 (BMR-42)
Transducer cable:	coaxial cable, SPM 90005-L, or SPM 90267-L (L = length in m)
Analog output:	4 to 20 mA, no galvanic separation
Fault indication:	≤ 1 mA out = interrupted or faulty transducer line
Loop resistance:	100 Ω. Higher resistance will reduce signal accuracy (max. 400 Ω at 12 V, 800 Ω at 24 V)
Power supply:	12 to 24V DC (±10%, tested according to EN 50082-2)
Supply current:	max. 0.1 A
Temperature range:	0° to 55° C
Vibration exposure:	max 5 mm/s RMS
Design:	anodised aluminium, not protected
Input connectors:	TNC, silver plated brass, 10-15 µ
Output connectors:	screw terminals for cable max. 1.5 mm^2, connector plug included
Mounting:	19" rack
Dimensions:	3 U x 7 HP x 214 mm, DIN 41494
Weight:	250 g

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