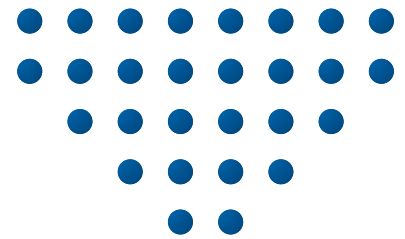
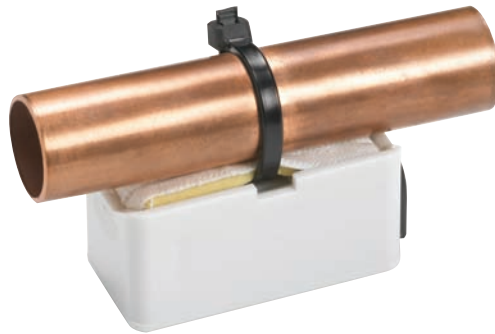


Alarm

NVP

HVAC CONTROLS AND POWER

Moisture and Leakage Alarm

NVP is an electronic unit capable of detecting moisture and water leakage, and is designed to protect installations and materials against condensation and bursting water pipes.

NVP is a safe and reliable alarm system, developed for use in both large and small installations where there is a need for early warning of condensation or pipe bursts.

NVP has proved a success in many homes and offices. It is used in the building trade to monitor attics and roof voids in order to keep roof leak damage to a minimum. It is also fitted in HVAC installations to monitor condensation in cooled ceilings as well as pipe bursts.

NVP was designed to provide customers with an advantageous combination of high quality, reliability and low life cycle costs.

NVP FUNCTIONS

Early Warning

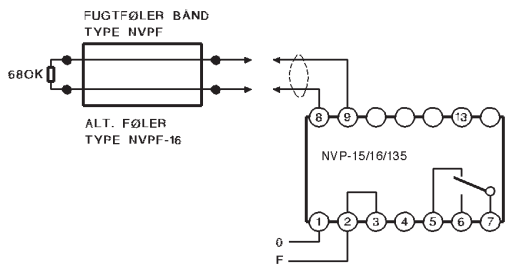
Thanks to the specially developed sensor tape, just a few drops of water are sufficient to activate the alarm. Incipient risks are thus discovered before damage is caused to installations and materials. The built-in relay can be connected to an audible or visual alarm, or connected to a BMS system.

With cooled ceilings, the built-in relay can be connected direct to the controller so that the temperature can be increased to prevent condensation before problems arise.

Multi-purpose Sensor

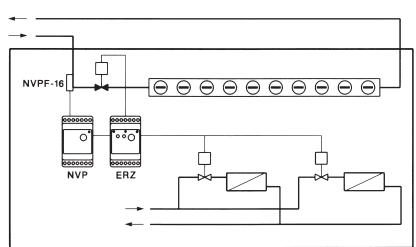
There are no special requirements for sensor tape attachment. In attics, the tape can be nailed to beams. The sensor tape is 20 mm wide and is ordered by metre length as required for the installation concerned. When used as a leakage alarm in rooms containing pipe installations, the sensor tape should be attached to the floor under the pipe runs. To monitor pipes for condensation, sensor tape can be attached to the pipes themselves using NVPFL adhesive.

Alternatively, NVPF-16, a clip-on sensor with a short piece of sensor tape attached to its base, can be used. NVPF-16 is ideal for monitoring specific points on piping. For example, in connection with cooled ceilings.

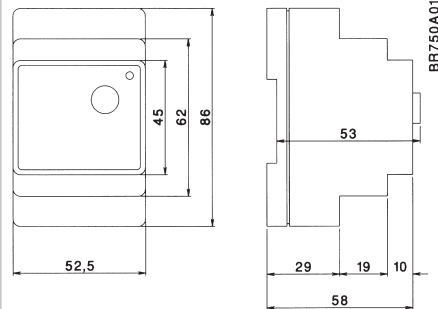


Wiring

BR750A05



Application example



Dimensions

NVP FUNCTIONS

Avoid Unnecessary Alarms

NVP sensitivity is adjustable in order to prevent alarms being given earlier than necessary. This is done by adjusting the sensor conductivity that initiates an alarm.

Built-in Acoustic Alarm

If both a system alarm and an acoustic alarm are required, NVPF-16 is supplied with a built-in acoustic alarm which is activated at the same time as the built-in relay activates the system alarm.

A Single Alarm for Many Measuring Points

If a number of locations are to be monitored, the sensor tape can be sectioned and connected in series using standard electric cable with the accompanying resistor connected at the end. The interconnected sections of sensor tape can then be connected to a single NVP alarm, thus saving on installation costs.

Low Life Cycle Costs

The NVP series alarms are extremely robust and require no regular maintenance. As long as the sensor tape is correctly positioned and is not covered, which would otherwise prevent contact with fluid, it will continue to operate without problems for many years. Where critical installations are concerned, the NVP alarm can be tested by sprinkling a few drops of water onto the sensor tape when servicing the installation.

Sensor Fault Monitoring

If the sensor tape short-circuits or is disconnected, the NVP alarm is activated.

SUPPLY VOLTAGE	AMBIENT TEMPERATURE	POWER CONSUMPTION
24 or 230V AC ±10% 50/60 Hz	-20/+50°C	3 VA
ENCLOSURE RATING	DIMENSIONS (W/D/H)	WEIGHT
IP20	52.5 x 58 x 86 mm	530 g

CE MARKING

The NVP meets the requirements contained in the following standards:

EMC DIRECTIVE	LOW VOLTAGE DIRECTIVE
EN 61000-6-2 EN 50081-1	EN 60730-1

INSTALLATION

Controller Installation

The NVP series was designed to be mounted on a DIN rail inside an enclosure with a suitable enclosure rating. An optional ETNK wall mounted housing can also be provided.

Cable Connection

NVP can be connected to the sensor tape by a length of standard electric cable (0.75 mm²). The control signal cable from an external controller may be up to 50 m in length. The sensor tape/control signal cable must be kept separate from mains-carrying cables as voltages may be produced that can interfere with alarm function.

The control signal cable need not be screened, but the use of screened cable increases the immunity of the NVP to electrical interferences, which is particularly important in industrial installations. The screen must be connected with a bracket to a grounded metal backplate or directly to the installation ground wire.

PRODUCT PROGRAM

TYPE	PRODUCT
NVP-15	Moisture alarm 230V AC, 10A relay
NVP-35	Moisture alarm 24V AC, 10A relay
NVP-16	Moisture alarm 230V AC, 10A relay with acoustic alarm signal

ACCESSORIES

NVPF	Sensor tape, by the metre
NVPF-16	Clamp-on pipe sensor
NVPFL	Sensor tape adhesive
ETNK	Enclosure for wall mounting IP54