INDUSTRIAL APPLICATIONS

Gas Recovery Unit and Other O&G Drilling Applications

BACKGROUND
Explosion-proof limit switches are used in many places along
or around oil and gas operations. These hazardous-area
switches are used for monitoring and shutoff switches on BOP
stacks (blow-out preventers), pressure controllers, gas
recovery units, and other accessories found on down-hole
drilling and/or platform sites.

BOPs are used to control blow-out, and are installed on top of
the well. Valves that open and shut with explosive natural gas
and other gas product vapors are controlled, monitored or
harvested as a by-product or oil drilling. Many recovery units
are installed near or around highly corrosive brine, marine or
chemical environments limiting their durability.

SOLUTION
MICRO SWITCH™ BX2 hazardous-area switches provide the
corrosion resistance desired by designers of gas control,
monitoring, and/or recovery equipment. Some portable
monitoring units are made from stainless steel to insure they
will be a durable investment and used for many years by gas
and petrochemical companies. The BX2 stainless steel
housing is designed for use in highly corrosive environments
where salt, harsh environment, or other chemical agents may
cause excessive corrosion. The stainless steel housing can
provide corrosion resistance up to four times longer than
standard housing switches. Fewer product replacements over
time may reduce total installed cost by 50% through lower
labor and material costs. MICRO SWITCH™ BX2 Series
switches are easy to install, mount, and wire in the multiple
locations required in these oil and gas units.

MICRO SWITCH™ BX2
The MICRO SWITCH™ BX2 Series delivers corrosion
resistance and can provide both cost and time savings to the
end user. The stainless steel housing helps protect the switch
mechanism from corrosion often present in chemical
processing plants, off-shore/near shore sites, and other
hazardous areas. To comply with explosion-proof switching
requirements, the flame path within the switch housing is
designed to contain and cool escaping hot gases/fumes which
could cause an explosion outside of the switch. (See Table 1.)
### Table 1. MICRO SWITCH BX2 Series

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<tr>
<th>BX2 Series</th>
<th>Features</th>
<th>Benefits</th>
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|            | - New 316L stainless steel body  
- Optional conduit selection allows for 20mm metric conduit or imperial conduit ½ in NPT  
- Tracking interchangeability with existing MICRO SWITCH™ Hazardous Area Switches (LSX & BX) for drop in replacement  
- Variety of heads and non-sparking actuators  
- Power-duty load switching through 10A continuous carry electrical rating  
- Choice of silver or gold contacts (provide enhanced electrical performance) when switching low energy loads  
- To comply with explosion-proof requirements, the BX/BX2 has flame paths within the housing, which cool exploding gases below the ignition temperature before they reach explosive gases surrounding the housing  
- Certified for global use: UL, CSA, ATEX, IEC Ex approvals  
- Both internal and external grounding screw to comply with international standards  
- Weather sealed ratings: NEMA 1, 3, 4, 6, 7, 9, 13 and IP67 to ensure that product can survive outdoors | - Improved durability due to better resistance in corrosive marine, brine, or chemical environments through full stainless steel body  
- Global Conduit Connectivity options  
- Global Explosion Proof Compliance and Approvals  
- Ease/compatibility of installation  
- Heavy duty continuous carry switching load  
- Low energy contact options  
- Variety of application actuation options |


**WARNING**

**IF USED IN APPLICATIONS CONCERNING HUMAN SAFETY**

- Use only NC direct opening (“positive opening”/“positive break”) contacts, identified by the symbol.
- Do NOT use flexible/adjustable actuators. Only use actuators designed for safety applications.
- Do NOT defeat, tamper, remove, or bypass this switch.
- Hazardous voltage, disconnect power before servicing.
- Strictly adhere to all installation and maintenance instructions.
- Consult with local safety agencies and their requirements when designing a machine-control link, interface and all control elements that affect safety.

FAILURE TO COMPLY WITH THESE INSTRUCTIONS COULD RESULT IN DEATH OR SERIOUS INJURY.

**WARNING**

**MISUSE OF DOCUMENTATION**

- The information presented in this application note is for reference only. Do not use this document as a product安装 guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

FAILURE TO COMPLY WITH THESE INSTRUCTIONS COULD RESULT IN DEATH OR SERIOUS INJURY.

**SALES AND SERVICE**

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

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Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

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