

Barksdale®

CONTROL PRODUCTS

CRANE Barksdale, Inc./Barksdale GmbH
A Subsidiary of Crane Co.

**High pressure, custom
fit made transmitter**

**Series 422
Flanged
Transducer
Case Study**



Product: Series 422 Flanged Mounted Pressure Transmitter

Description: General purpose , industrial grade transducer for use in general industrial applications. Constructed of 304 stainless steel with NEMA 3 enclosures constructed of 304 stainless steel. .25% accuracy with pressure ranges from 0-10,000 psi and available with either 0-30 millivolt or 0-100 millivolt radiometric output. High pressure snubbers are standard of units at 2,000 psi and above.

Problem:

An original equipment manufacturer (OEM) has been manufacturing their Gas Volume Correctors with an outsourced, custom-made adapter for the Barksdale Series 422 Pressure Transducer. The Gas Volume Corrector series is an intelligent, compact, rugged, and reliable industrial microprocessor-controlled computer designed for measurement applications that features Barksdale's Series 422 pressure transducers to execute multiple processes without host intervention. In order to successfully install the Series 422 Transducer in the corrector, the OEM was required to produce a custom fitted adapter to mount on the side of the enclosed space. Furthermore, the OEM's engineers were required to mount the adapter, then install the Series 422. The adapter was designed to have bolts on each side and a custom fitting to insert the Series 422 Transducer. The production of the adapter was outsourced to another supplier which led to extended lead times due to production and freight. The problems surrounding the adapter posed a challenge for the Barksdale team to assist in the development of a solution to cut costs, lessen lead times, and provide consistent high-tier performance.



Solution:

Barksdale collaborated with the OEM to provide a custom solution that provided a transducer with an integrated flanged fitting, with 300 series stainless steel & NEMA 3 enclosures constructed of 304 stainless steel. The custom Series 422 incorporated Barksdale technology to achieve .25% accuracy and pressure ranges from 0-10,000 psi, with either 0-30 millivolt or 0-100 millivolt radiometric outputs. Barksdale's 422 Flanged Mounted Transducer offered a durable and accurate solution to the OEM's adapter problem that led to a reduction in time spent outsourcing the part and provided a faster replacement potential.

Result:

The OEM challenged the Barksdale team with providing a more accessible and reliable transmitter solution that fit the design of the OEM's gas volume corrector. The custom fitting provided by Barksdale allowed the same performance, without the need for an adapter provided by a third party supplier. Barksdale engineers worked tirelessly with the OEM to redesign the Series 422 Pressure Transducer to include a flanged mounted fitting, to alleviate the need for off site production. This design alleviated the need for the Series 422 adapter and allowed the OEM to reduce production times and replacement times for their gas monitoring applications. The OEM was able to create a partnership with Barksdale to produce the Series 422 Flanged Mounted Transducer and create a new product number in addition to the Barksdale 420 Series Pressure Transducer family.

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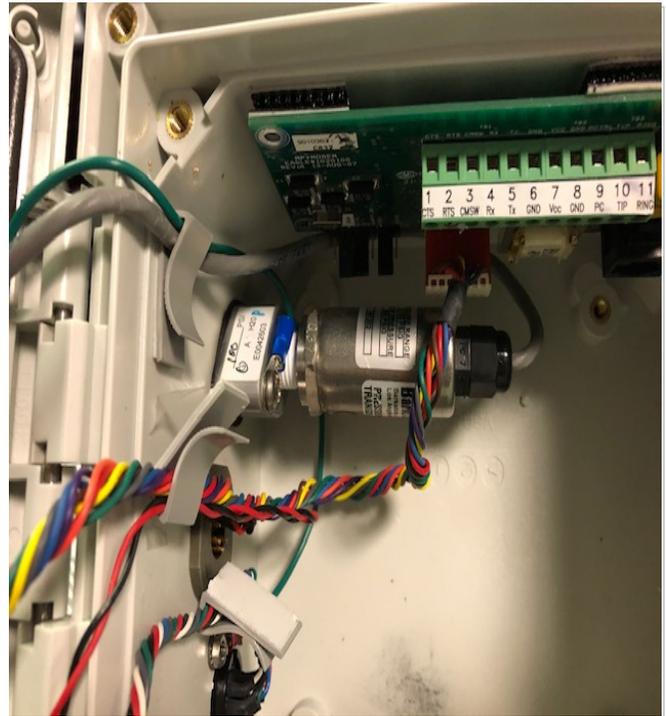
Figure 1.

Barksdale's Series 422 Pressure Transducer available for general purpose with 0-10,000 psi and available in 30mV or 100mV output. The 422 Series is featured in the OEM's MPplus Volume Corrector (Upper Right)



Figure 2.

Shows a custom made Barksdale 422 Flanged Mounted Pressure Transducer that was designed with a custom adapter to alleviate the issue of relying on separate supplier for production of an adapter for Barksdale products.



Barksdale, founded in 1949, is a leading manufacturer of highly engineered control products. As a subsidiary of Crane Co., Barksdale has a leading brand position in instrumentation, with focus on General Industrial, Oil & Gas and Transportation end markets. With proprietary technologies, Barksdale's valves, regulators, pressure switches, electronics, and speed instrumentation products have carved a niche for themselves in demanding applications.

Barksdale is a leading provider of valves and regulators for BOP's and also provides hazardous area BiT transmitters that can be used to meet API RP 53 BOP testing requirements in the field. Barksdale maintains inventory for popular models to reduce lead time to maximum of 4 weeks.

Have any questions? Contact us today.

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