

EXPLOSION-PROOF NPT ADAPTER BUSHINGS

52240 SERIES FOR OIL & GAS APPLICATIONS

FEATURES

- Drop-in hermetic, explosion-proof seal
- Class I Division 1 Explosion-Proof
- Customize and integrate to your certification needs

APPLICATIONS

- Instrumentation
- Controls
- Sensors

OVERVIEW

Douglas Electrical Components manufactures UL1203 Class I Division 1 Explosion proof NPT feedthrough bushings for hazardous locations. The 52240 series offers customers a male-to-female NPT threaded nipple connection as a pre-wired epoxy feedthrough. This eliminates the need for pouring cement or epoxy in the field, ensures a factory-tested seal, and saves time in the field or factory. These feedthroughs are commonly designed into oil and gas applications including wellhead monitoring systems, gas analyzers, compressors, and other instrumentation and controls.

Select from various housing materials, wire gauge and types, and conductor counts to design a feedthrough for your needs. Our engineering team will also partner with you to customize a feedthrough for your OEM requirements. Integrate connectors, circuits, and customized mechanical interfaces to further reduce installation time and effort while meeting explosion-proof standards.

CERTIFICATION

• UL1203 Class I Division 1 Groups A, B, C, D Explosion-proof

QUALITY

- ISO9001/140001
- Rohs / reach compliant
- < $1x10^{-8}$ scc/s, standard

MATERIAL OPTIONS

- Stainless steel
- Aluminium
- Brass

SPECIFICATIONS

Housing material	Stainless-steel, Brass, or Aluminum	
Sealing material	7113/1481 Epoxy	
Wire Gauge	24 AWG to 3/0 AWG; see table for conductors per thread size	
Thread Sizes	1", $\frac{1}{2}$ ", $\frac{3}{4}$ " NPT; see table for group/hermetic rating.	
Feedthrough configurations	Female-to-male	
Leak check testing	< 1x10 ⁻⁸ scc/s, minimum. Contact factory for more options.	
Operating temperature	rature -40°F to 225°F (-40°C to 107°C)	

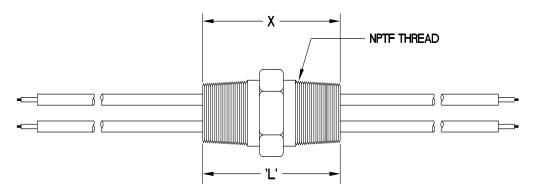
MAXIMUM WIRE COUNT PER FITTING

AWG	1/2" Fitting	3/4" Fitting	1" fitting
24	11	29	52
22	9	26	45
20	9	21	37
18	11	20	33
16	9	16	27
14	8	15	24
12	6	11	18
10	4	7	11
8	2	4	6
6	1	2	4
4	1	1	2
3	N/A	1	2
2	N/A	1	1
1	N/A	1	1
0	N/A	N/A	1
2/0	N/A	N/A	1
3/0	N/A	N/A	1

Thread Size	Group Rating	Seal Type Available	
1″	C & D	Non-Hermetic	
1/2″	A, B, C & D	Hermetic	
1/2"	A, B, C & D	Non-Hermetic	
3/4"	A, B, C & D	Hermetic	
3/4"	A, B, C & D	Non-Hermetic	

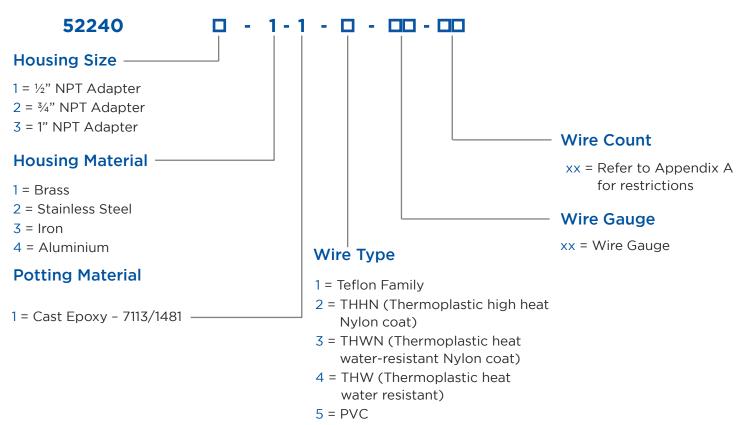
* Gauge and number of conductors at or below the maximum values listed may be used. Violations can be made provided minimum distance thru the epoxy between conductors is 0.020"

DIMENSIONAL DATA



NPT Adapter Size	Minimum Potted Length (X)	Minimum Wall Thickness (Y)	Minimum Length (L)
1/2"	1.00"	0.093"	1.13"
3/4"	1.00"	0.093"	1.13"
1"	1.13"	0.093"	2.25"

ORDERING INFORMATION



EXAMPLE 52240-1-1-1-18-04

- ½" NPT Adapter
- Stainless Steel
- PTFE Wire Insulation
- 18 AWG Wires

Next Steps

- Confirm Wire Colors and length on each side. Rohs/reach compliant
- Confirm Quantity.
- Send us an RFQ.

Contact Douglas Electrical Components to request a quote for your standard or custom explosion-proof feedthrough or bushing



To Order

You may place an order directly with our sales staff at 973.627.8230.

Technical Questions or Design Assistance

Please call our Product Engineering Department 973.627.8230.

Standard Terms and Conditions

Domestic shipments: All products are shipped F.O.B. Randolph, NJ. We offer a prompt payment discount of 1% 10 days, Net Cash 30 days to customers who have had their credit approved. Prices and specifications are subject to change without notice. Foreign shipments: All terms and conditions will be negotiated at time of order placement.

Note to Purchaser

While we believe all statements, representations, and recommendations are correct and reliable, we cannot guarantee accuracy or completeness. It is the user's responsibility to determine and confirm suitability for use. All sales of Douglas Electrical Components' products are subject to our Standard Terms and Conditions. A copy of our Standard Terms and Conditions may be obtained by calling our Sales Administration Office at 973.627.8230. Douglas Electrical will provide Special Certificates of Compliance, Test Reports, and certificates of origin but only if they are requested at the time of order.

Warranty

All products are warranted to be free of defects in materials and workmanship for a period of twelve months from date of shipment. Our liability, unless explicitly changed by us, is strictly limited to the repair or replacement (at our option) of defective parts. Any defective parts must be returned to us to receive credit or replacement. Returned product must be accompanied by an RMA number. RMA numbers may be obtained by calling our Sales Administration Office at 973.627.8230.

Errors

While we believe that all information in this catalog is accurate and correct, we do not take responsibility for typographical errors.

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