

Summing Units, Extension Boxes, and Cables

FEATURES

- Summing units— analog summing of up to eight (8) transducers (no trim pots that cause calibration shifts)
- Extension boxes— extend transducer cables without performance degradation
- System cables— custom manufactured for high performance over long distances and ranges of environmental conditions

APPLICATIONS

- Load cell summing
- Hazardous location installations
- Cable extension boxes
- Cables

DESCRIPTION

Model 308A and 306 Summing Units provide a multi-cell interface for load cell signal conditioning instrumentation. Versions available are capable of (analog) summing up to 8 individual transducer signals. A wide range of enclosure options are available for washdown, corrosive, and electrical hazard applications.

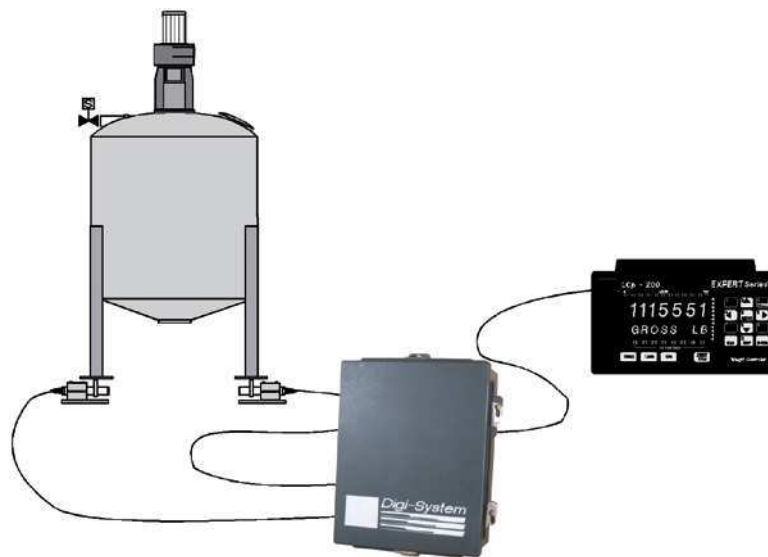
Operationally, these units perform the multiple tasks of distributing excitation current, summing transducer output signals, and protecting wiring and connections. A unique circuit design in the 308A unit minimizes the effects of system unbalance and electrical leakage. This added protection is beneficial when equipment is located in a harsh, corrosive atmosphere. Model 306 units are compatible with Plug-n-Weigh instrument calibration procedures for faster system start-up.



304 Extension Boxes are used whenever transducer cables are not long enough to reach the summing unit or system instrumentation. The internal terminal block or connection provides for either a four wire or six wire (remote sensing) hookup. A range of metallic enclosures are available for washdown, corrosive, and electrical hazard applications.

BLH Nobel offers a range of system cables for connection between the summing unit, junction box, and system instrumentation. These custom cables are designed for use over long distances without signal losses, temperature effects, undue EMI/RFI, or environmental deterioration.

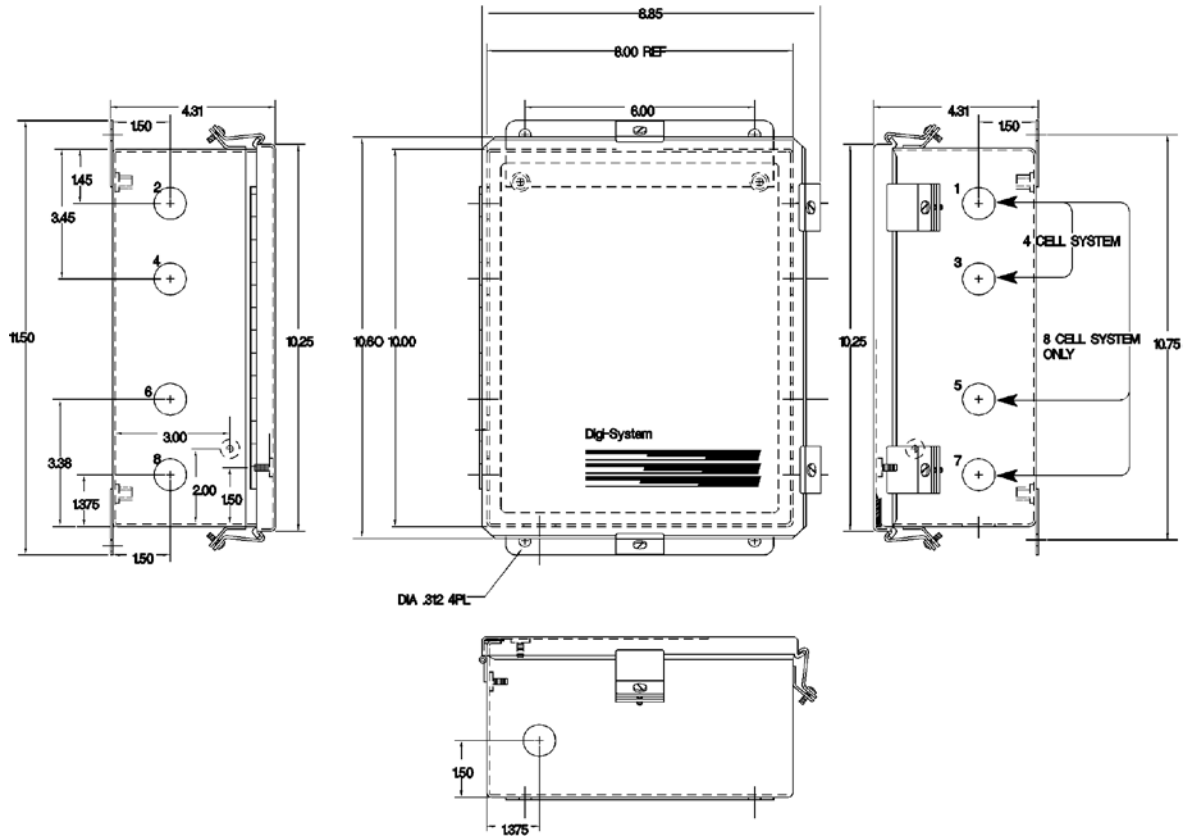
CONFIGURATION



Summing Units, Extension Boxes, and Cables

MODEL 308A SUMMING JUNCTION BOX in inches

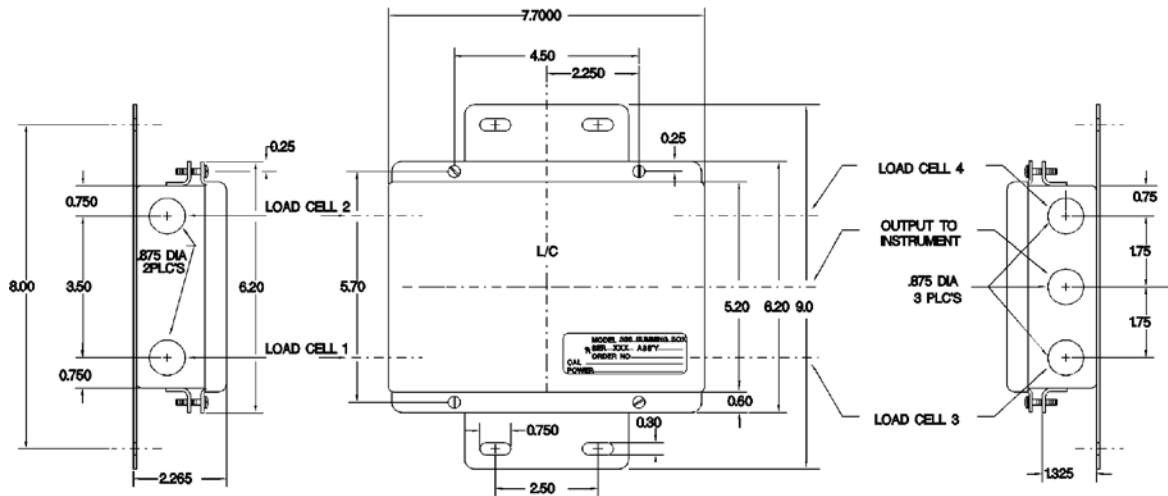
- 4 or 8 transducer capability
- Unbalance/leakage compensation
- Standard NEMA 4 enclosure
- Optional NEMA 4X or explosion-proof enclosures



Summing Units, Extension Boxes, and Cables

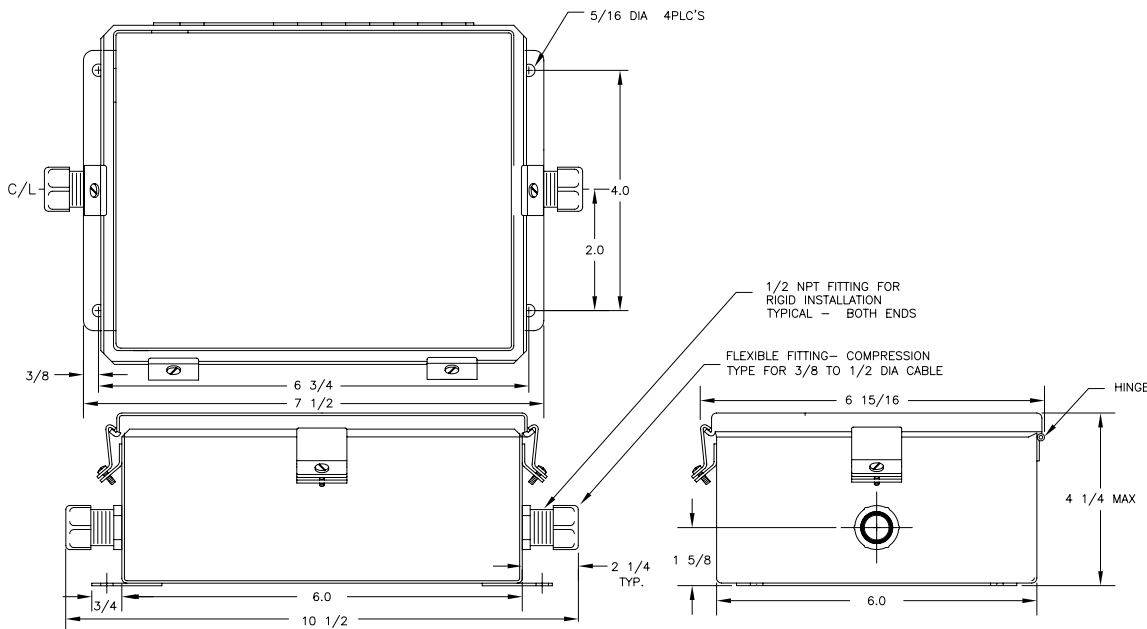
MODEL 306 SUMMING JUNCTION BOX in inches

- 4 transducer capability standard; multiple units can be connected together for 8 cell systems
- Standard NEMA 4X stainless steel enclosure



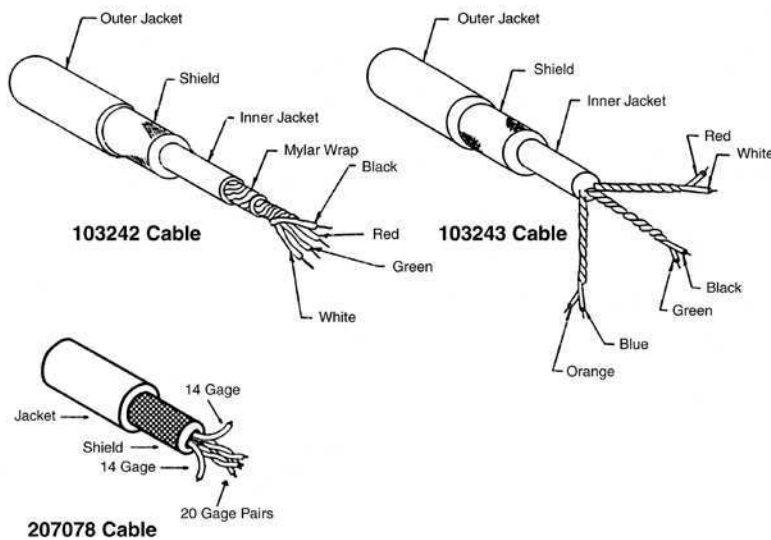
MODEL 304 EXTENSION BOX in millimeters (inches)

- Extend cable length to reach summing box
- Supports applications requiring remote sensing
- Explosion-proof enclosure option



Summing Units, Extension Boxes, and Cables

INSTRUMENTATION CABLES			
Special BLH Nobel instrumentation cables are recommended to insure that the full accuracy and dynamic performance of the transducers are maintained in the installed system. The special shielding and very high insulation resistance of BLH Nobel cables allows measurement of smaller signals and offer greater		accuracy at all signal levels. Cables are needed whenever required cable runs exceed the length of cable supplied with transducers and/or when outputs of several transducers must be summed into a single channel.	
Catalog Number	103242	103243	207078
Description	4-conductor shielded	6-conductor shielded	6-conductor shielded
Outside Diameter	0.365"	0.450"	0.370"
Conductors	2 twisted pairs #20 AWG	3 twisted pairs #20 AWG	2 twisted pairs #20 AWG 2 single #14 AWG
Insulation	Teflon	Teflon	polypropylene
Inner Jacket	waterproof polyethylene	waterproof TPR 5280 polyolefin	
Outer Jacket	0.072" black hypalon	0.040"/0.045" black hypalon	thermo-plastic TPR/TPE or neoprene
Leakage Test 50 VDC between conductor and shield	1,000,000 MΩ/ft	1,000,000 MΩ/ft	400,000 MΩ/ft
Max. Temperature Insulation	400°F	400°F	185°F
Max. Temperature Outer Jacket	195°F	195°F	221°F



Fitting Kits:

BLH Nobel provides cable and conduit kits for NEMA 4/4X Junction Boxes. Each kit includes nine fittings, one for each enclosure opening. The conduit kit accommodates conduit dimensions from 1/2 to 3/4 of an inch in diameter. The cable kit accommodates cables from 0.125 to 0.375-inch diameters.

Cable Kit Part Number 466615

Conduit Kit Part Number 466614

BLH Nobel is continually seeking to improve product quality and performance. Specifications may change accordingly.



Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Vishay Precision Group, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "VPG"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

The product specifications do not expand or otherwise modify VPG's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

VPG makes no warranty, representation or guarantee other than as set forth in the terms and conditions of purchase. **To the maximum extent permitted by applicable law, VPG disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.**

Information provided in datasheets and/or specifications may vary from actual results in different applications and performance may vary over time. Statements regarding the suitability of products for certain types of applications are based on VPG's knowledge of typical requirements that are often placed on VPG products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. You should ensure you have the current version of the relevant information by contacting VPG prior to performing installation or use of the product, such as on our website at vpgsensors.com.

No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of VPG.

The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling VPG products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify VPG for any damages arising or resulting from such use or sale. Please contact authorized VPG personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.

Copyright Vishay Precision Group, Inc., 2014. All rights reserved.