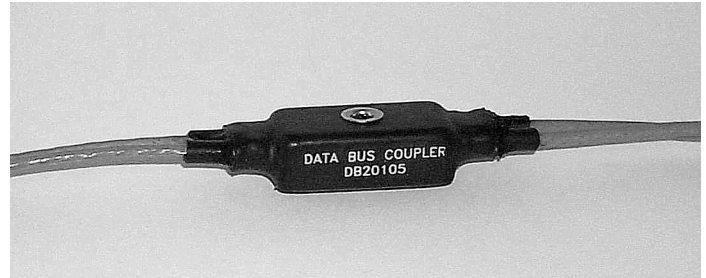


# IN-LINE THROUGH-HOLE MOUNTED COUPLERS

North Hills provides In-line Through-Hole mount data bus couplers with up to four transformer-coupled stub output ports (units with more than four stubs are available on special order). These units are available with and without internal terminations and are for use in applications where the environment requires a stable, fixed mounting solution. These units can be supplied with a variety of different connectors and cables (MIL-C-17/176-00002 is standard) or without connectors for splicing or integrating into harnesses. The standard stocked units are manufactured with 12 inch long (30cm or 300mm) MIL-C-17/176-00002 cable. Couplers can also be ordered with custom cable lengths and a variety of connectors for direct installation on any system. Using in-line couplers in your data network reduces the number of connectors which significantly improves the calculated reliability (MTBF).

All resistors are 1 Watt per MIL-R-39007, Failure Grade S and mounted away from the transformer to minimize heating effects. The transformers are manufactured to MIL-T-21038. These couplers are Flight Qualified and have successfully completed a 1000 hour life test at +125°C and 100% duty cycle. Copies of test reports are available upon request. Space Qualified couplers are also available. Please refer to the appropriate data sheet for more information.

All products are 100% tested and certified. For maximum system reliability multiple couplers can be daisy chained at the factory into an integrated harness with no splices. Specification Control Drawings are available to help you document the part selected for your application.



North Hills Model # DB20105 In-Line Through Hole Mounted Coupler.

## Features:

- Through-Hole mount
- Complete harnesses, any cable length or type
- Single or Multi-stub

## Benefits:

- Flight qualified
- High reliability
- Fast turn around for custom units
- Low cost

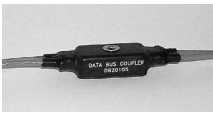
## Electrical Specifications:

All parameters are in accordance with MIL-STD-1553B and Notice 2.

Drop	20% Maximum @ 250 kHz
Overshoot and Ringing	± 1.0V Peak
Common Mode Rejection	-55.0 dB (Min) @ 1 MHz
Fault Protection	59Ω ± 1%, 1 Watt per MIL-R-39007
Turns Ratio	1:1.41
Stub Voltage	1.0V <sub>pp</sub> to 14.0V <sub>pp</sub> transformer-coupled
Operating Temperature	-55°C to +125°C
Storage Temperature	-55°C to +150°C

Higher temperature units available.

*Specifications subject to change without notice.*



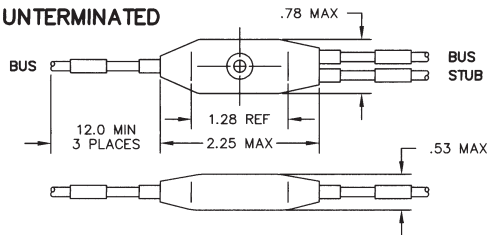
# IN-LINE THROUGH-HOLE MOUNTED COUPLERS

These couplers are Flight Qualified and Space Qualified units to SSQ 21676 and are available on special order.

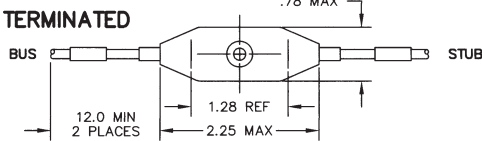
## Ordering Information:

### Single Stub

#### DB10105 – UNTERMINATED

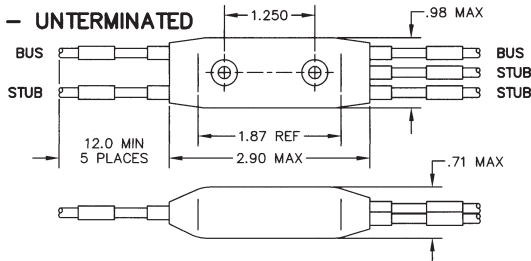


#### DB12105 – TERMINATED

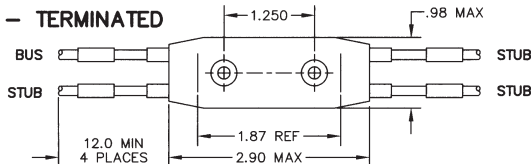


### Three Stubs

#### DB30105 – UNTERMINATED

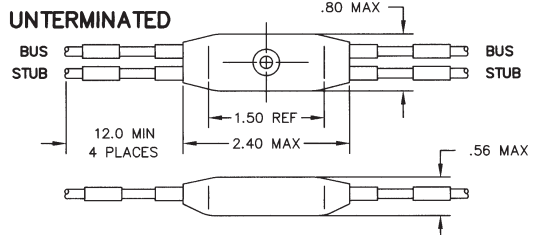


#### DB32105 – TERMINATED

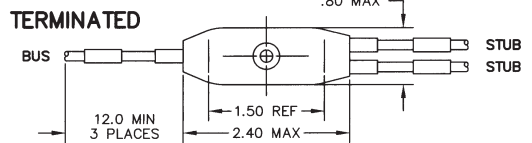


### Two Stubs

#### DB20105 – UNTERMINATED

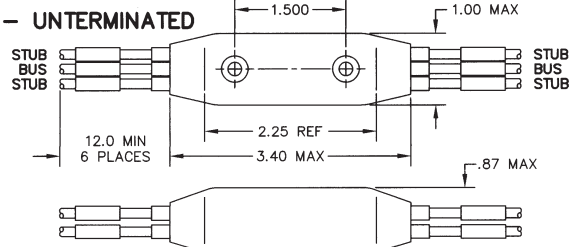


#### DB22105 – TERMINATED

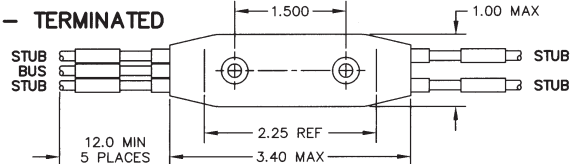


### Four Stubs

#### DB40105 – UNTERMINATED



#### DB42105 – TERMINATED



All mounting holes can accommodate a #8 screw; Weight without cable - 1 stub = 18 gm., 2 stub = 28 gm., 3 stub = 40 gm., 4 stub = 55 gm. All stubs are marked with a black marker. Patent Pending.

## Accessories:

For external bus termination use	P/N DB03005
Extend cables with MIL-STD-1553 twinax cable	P/N 590M-17/176-00002
Splice with splice kit	P/N 571-18-8002
Test couplers and harnesses with Bus Network/Harness Tester	P/N DBT100A
Specifications subject to change without notice.	
<a href="#">Click here for a full list of accessories</a>	



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