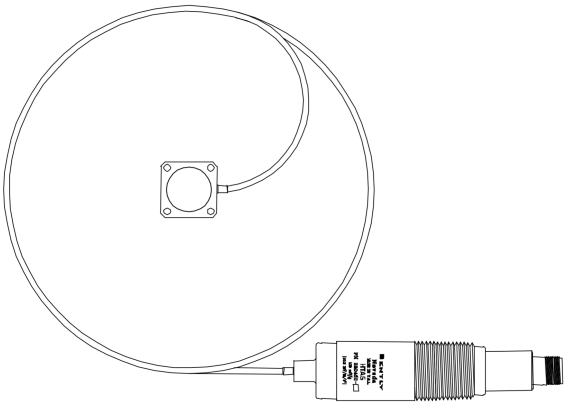
330450 High Temperature Acceleration System

Datasheet

Cordant™

169885 Rev. H



Description

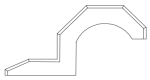
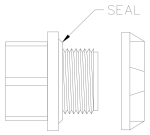
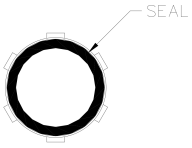
The 330450 High Temperature Acceleration System (HTAS) segregates the sensing element from the signal conditioning electronics, with the two permanently connected via a hardline cable. Due to the segregated design, the signal conditioning electronics can be installed in a cooler location. This achieves overall transducer system performance comparable to other acceleration transducers, but permits use at significantly higher temperatures.

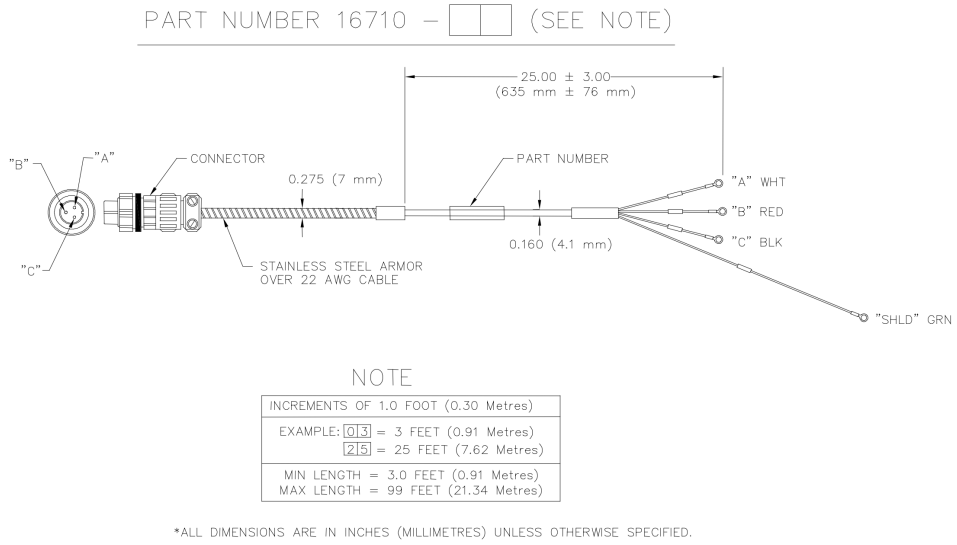
Earlier versions of the standard 330400 Accelerometer located the electronics in the same case as the sensing element. This limited the sensor to a maximum operating temperature of +300°C (+572°F). The serial number of current versions that measure up to +400°C (+752°F) are preceded by the letter "G".

By eliminating connections between the sensing head and its associated signal conditioning electronics, a significant source of potential transducer failures (connector problems) is eliminated.

Baker Hughes

Table 1: Interconnection Cables and Accessories

APPLICATION	PART NUMBER	DESCRIPTION
†Note: AA - Specifies the length (in feet) of cable required		
Standard Interconnect Cable	6925-AA†	3-conductor shielded 22 AWG (0.5 mm2) cable with 3-socket plug at one end, terminal lugs at the other end. Minimum length of 2.0 ft (0.6 m), maximum length of 99 ft (30 m). See Figure 4
Standard Armored Interconnect Cable	16710-AA†	3-conductor shielded 22 AWG (0.5 mm2) armored cable with 3-socket plug at one end, terminal lugs at the other end. Minimum length of 3.0 ft (0.9 m), maximum length of 99 ft (30 m). See Figure 5
Interconnect Cable with Boot	130539-AA†	3-conductor shielded 18 AWG (1.0 mm2) cable with 3-socket plug and fluorosilicone elastomer boot at one end, terminal lugs at the other end. Minimum length of 2.0 ft (0.6 m), maximum length of 99 ft (30 m). A manual is available to assist with installation of this cable (part number 133080-01). See Figure 6
Spare Mating Connector	00531080	Mating connector for 330450 HTAS.
Electronics Housing Strap	03818073	1 inch rigid conduit strap for securing the electronics housing. 
Electronics Mounting Hub	03818071	1 inch weather tight hub used to mount the electronics housing in a weatherproof enclosure. 
Seal Ring	03818072	1 inch sealing lock ring used to mount the electronics housing. Two rings are required to mount the electronics. 



NOTE

INCREMENTS OF 1.0 FOOT (0.30 Metres)
EXAMPLE: 03 = 3 FEET (0.91 Metres) 25 = 25 FEET (7.62 Metres)
MIN LENGTH = 3.0 FEET (0.91 Metres) MAX LENGTH = 99 FEET (21.34 Metres)

*ALL DIMENSIONS ARE IN INCHES (MILLIMETRES) UNLESS OTHERWISE SPECIFIED.

Standard Lengths	
Feet	**Metres (approx.)**
6	1.8
8	2.4
10	3.0
12	3.6
15	4.5
17	5.0
20	6.0
25	7.6
30	9.0
33	10.0
50	15.2
99	30.0

Non-standard/custom lengths can also be ordered at additional cost.

Figure 5: Standard Armored Interconnect Cable