BSWS/TWS Sensor Wire Seals



Conax Technologies Sensor Wire Seals are designed to seal virtually any transducer, sensor or detector elements in a wide range of vacuum or pressure boundaries.

The most common use of these seals is for instrument leads on vibration transducers, proximity probes, pressure sensors, temperature sensors, flow meters, and strain gages. Virtually any sensor lead that passes through a pressure boundary can be sealed using one of our compression seal fitting styles.

Don't hesitate to contact our sales engineers directly with your specific needs.

Bearing Sensor Wire Seals (BSWS)

Catalog Numbering System

Conax Technologies BSWS assemblies were originally designed for use with embedded bearing temperature sensors to prevent oil migrating along the sensor leads. They seal on the individual insulated leads exiting an oil-filled bearing house. They may also be used to seal all types of insulated instrumentation lead wire. These sealing assemblies can be found in large motors, generators, turbines, pumps, compressors and journal bearing pedestals.

Construction consists of 303 SST standard bodies, followers with a Viton™ sealant. Standard assemblies seal 2-14 wires in

a variety of wire gauges. Please consult a Conax Technologies sales engineer for custom needs.

- Temperature Range: Ambient to +100 °F (+38 °C)
- Pressure Range: Vacuum to 50 PSIG (3.4 bar)

Accessories

The replaceable sealant permits repeated use of the same fitting. Elements can be easily assembled or replaced in the field. To replace the sealant or elements, simply loosen the cap, replace the necessary items, relubricate and retorque the cap.

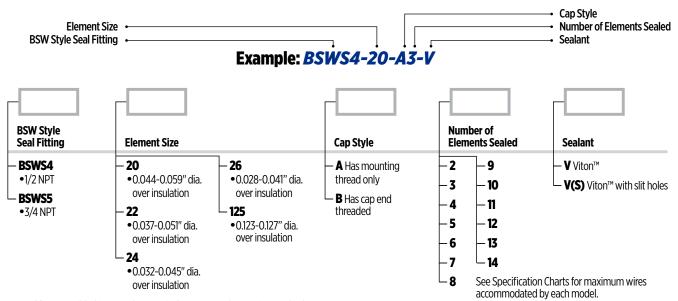
Fittings are supplied factory lubricated. If fittings are cleaned prior to assembly or when reused, the fittings should be relubricated to maintain the published torque and pressure ratings. See page 107 for information on our lubrication kit.

Sealants with hole slits [V(S)] may be specified to:

- · Ease installation of long lead wires
- · Allow installation of transduces without removing connectors
- Seal SS braid wire by removing braid in seal area

To order a Replacement Sealant, order RS – (BSWS [size]) – (Element) – (Number of Holes) – (Sealant).

Example: RS-BSWS4-20-2-V



Modifiers are added in parentheses to indicate optional mounting methods. See pages 9-11. See Specification Charts for the proper modifiers.

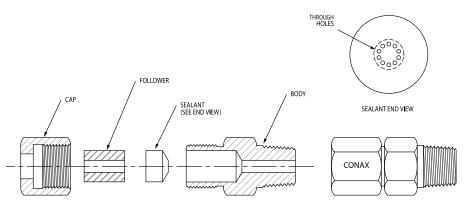
Specifications

DCINC Carlos	Number	Diameter Over Insulation		Thread	Length				Hex Size				Pressure Rating	
BSWS Series	of Wires			NPT	Leng	Length A		Length B		Cap	Body	Cap	Vito	on™
Catalog Number		IN	MM	IN	IN	IN		MM	IN	IN	MM	MM	PSIG	BAR
BSWS4-20	2-8	0.044-0.059	1.1-1.5	1/2	2.50	63.5	3.25	82.6	1.000	1.000	25.4	25.4	50	3
BSWS4-22	2-8	0.037-0.051	0.9-1.3	1/2	2.50	63.5	3.25	82.6	1.000	1.000	25.4	25.4	50	3
BSWS4-24	2-8	0.032-0.045	0.8-1.1	1/2	2.50	63.5	3.25	82.6	1.000	1.000	25.4	25.4	50	3
BSWS4-26	2-8	0.028-0.041	0.7-1.0	1/2	2.50	63.5	3.25	82.6	1.000	1.000	25.4	25.4	50	3
BSWS5-20	2-14	0.044-0.059	1.1-1.5	3/4	2.88	73.0	3.63	92.1	1.250	1.500	31.8	38.1	50	3
BSWS5-22	2-14	0.037-0.051	0.9-1.3	3/4	2.88	73.0	3.63	92.1	1.250	1.500	31.8	38.1	50	3
BSWS5-24	2-14	0.032-0.045	0.8-1.1	3/4	2.88	73.0	3.63	92.1	1.250	1.500	31.8	38.1	50	3
BSWS5-26	2-14	0.028-0.041	0.7-1.0	3/4	2.88	73.0	3.63	92.1	1.250	1.500	31.8	38.1	50	3
BSWS5-125	2-4	0.123-0.127	3.1-3.2	3/4	2.88	73.0	3.63	92.1	1.250	1.500	31.8	38.1	50	3

Note: The pressure and torque ratings provided in this catalog apply only when bores are drilled by Conax Technologies. Custom bore sizes and/or a blank body, follower and/or sealant may be provided. Consult factory.

BSWS assemblies may be purchased with SAE/MS thread mount, weld neck or flange style mounts. Consult factory for details.

All pressure and torque ratings were determined at 68 °F (20 °C) using stainless steel rod as the element. Pressure ratings may degrade at higher temperatures. Pressure rating guide values are provided for fittings with elements restrained by the compressed sealant. Higher pressure may be attained with additional element restraints. For proper assembly of these seal fittings, see the Assembly Instructions provided on pages 110-124.



Transducer Wire Seals (TWS)

This version of the Conax sensor wire seal is designed to seal transducer cables entering low-pressure oil-filled cavities in rotating equipment. Since these transducers are typically manufactured with a factory assembled sensor and connector, the seal fitting has split internals to seal the outside jacket of the transducer's cable.

The Transducer Wire Seal comes standard with a four hole split Viton^M sealant and with four split Teflon^M backing disks. The backing disks will have 1, 2, or 3 holes so one seal fitting can seal up to four vibration, proximity and pressure transducer sensor cables.

Example: TWS-125-B2-V

And unlike competitors' designs, the Conax design requires only one Teflon[™] backing disk and does not require the end user to punch out the holes.



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