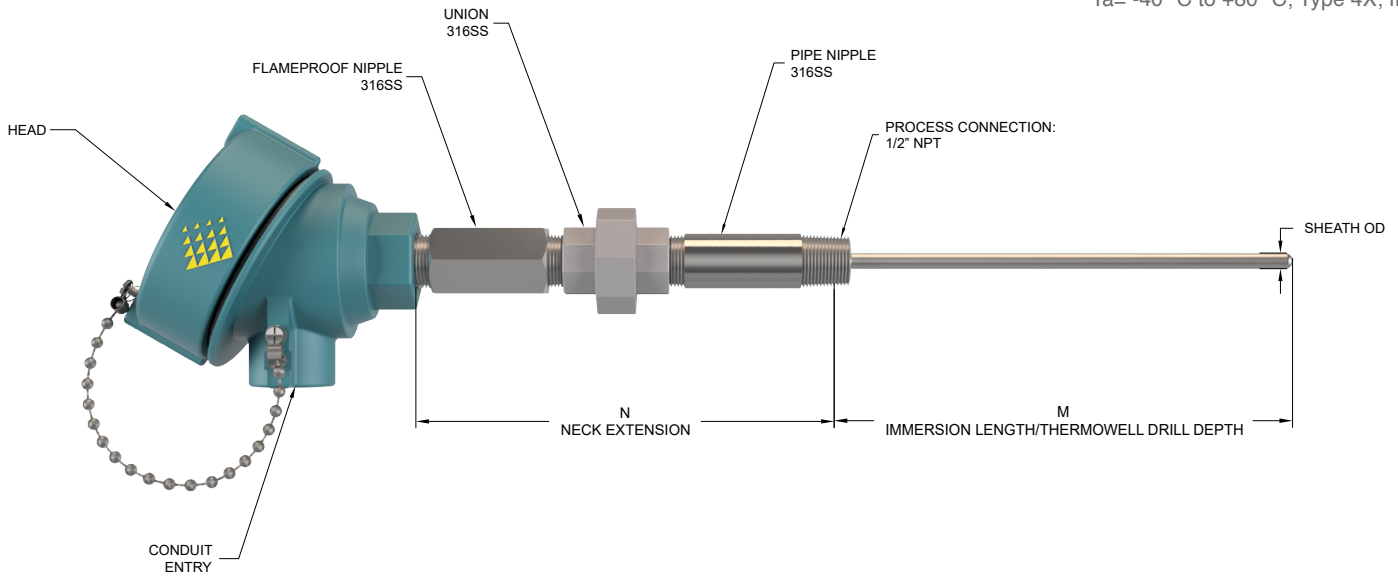


# Model 310HZ

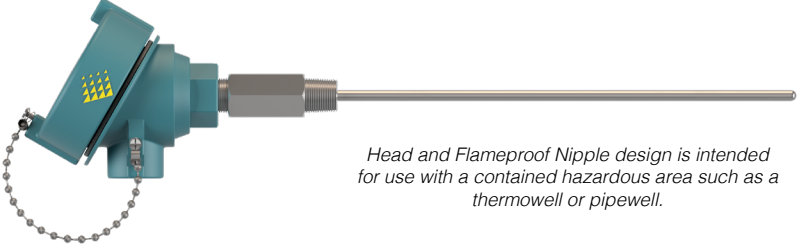
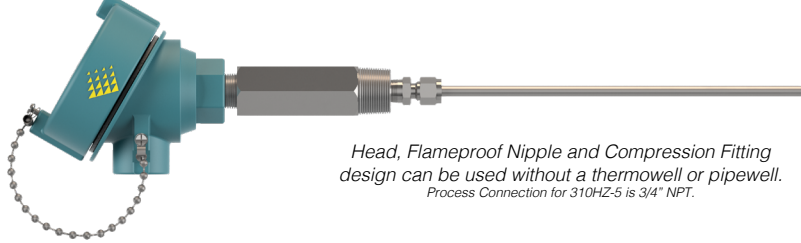
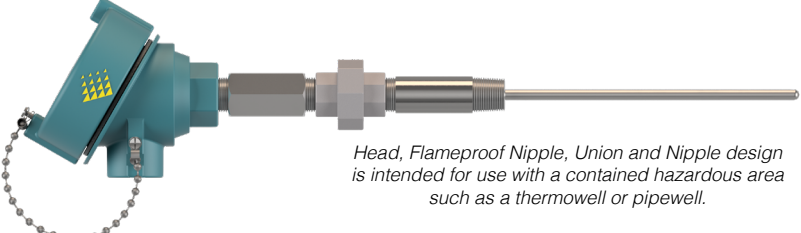
## Flameproof Industrial Sensor Assembly



Product Certification Rating:  
 IECEx: Ex db IIC T6...T4 Gb; IP66  
 ATEX: II 2G Ex db IIC T6...T4 Gb  
 Tamb = -40 °C to +80 °C  
 CSA/UL: Cl. 1, Div 1, Groups A,B,C,D T6...T4  
 Cl. 1, Zone 1, AEx db IIC T6...T4 Gb  
 Ex db IIC T6...T4 Gb  
 Ta= -40 °C to +80 °C; Type 4X; IP66



Daily Thermetrics' 310HZ Series Flameproof Industrial Sensor Assembly is designed for direct termination into a head via a nipple and union combination. This sensor is best suited for use with a thermowell (see [Daily Thermetrics' Thermowell Catalog](#)). Many aspects of this sensor assembly are customizable, including element type, sheath metallurgy, length, connection type, spring-loading and head. If your desired configuration is not obtainable using this product configuration, please contact [Sales](#), as more options are available.

B	Extension Type
<p>1/2</p> <p>Head and Flameproof Nipple</p>	 <p><i>Head and Flameproof Nipple design is intended for use with a contained hazardous area such as a thermowell or pipewell.</i></p>
<p>5/6</p> <p>Head and Flameproof Nipple with Compression Fitting</p>	 <p><i>Head, Flameproof Nipple and Compression Fitting design can be used without a thermowell or pipewell. Process Connection for 310HZ-5 is 3/4" NPT.</i></p>
<p>1 1/2</p> <p>Head, Flameproof Nipple, Union, Pipe Nipple</p>	 <p><i>Head, Flameproof Nipple, Union and Nipple design is intended for use with a contained hazardous area such as a thermowell or pipewell.</i></p>

Other configurations are available. Contact [Sales](#) for inquiries.

# Model 310HZ How to Order

EXAMPLE:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
310HZ	I	11	1	1	N6	M9	K	1	N	2	2	5	316	1

• INDICATES COMMON SELECTION

A	Model
310HZ	Flameproof Sensor with Direct Mount Head

B	Unit of Measure
I	Imperial (inch)
M	Metric (mm)

C	Extension Type
1	Flameproof Nipple
2	Spring-Loaded Flameproof Nipple
5	Flameproof Nipple and Compression Fitting
6	Flameproof Nipple, Compression Fitting, Union, and Nipple
11	Flameproof Nipple, Union, and Nipple
12	Spring-Loaded Flameproof Nipple, Union, and Nipple

Extension Types 1, 2, 11, 12 require the use of [thermowell](#) or [pipewell](#)

D	Head Style
1	Aluminum Epoxy Coated 3/4" FNPT Conduit Entry
2	Aluminum Epoxy Coated M20x1.5(F) Conduit Entry
3	Aluminum Epoxy Coated 2x 3/4" FNPT Conduit Entry with 1 Entry Plugged
4	Aluminum Epoxy Coated 2x M20x1.5(F) Conduit Entry with 1 Entry Plugged
5	316SS 3/4" FNPT Conduit Entry
6	Aluminum Epoxy Coated 1/2" FNPT Conduit Entry

Other options are available. Contact [Sales](#) for inquires.

E	Terminal Block / Transmitter
1	Ceramic Terminal Block
2	HART Transmitter 4-20 mA

Please submit [configuration sheet for transmitters](#) with Purchase Order.

F	N Dimension (Neck Extension Length)
N2.5	2.5" (standard for Head & Nipple assemblies)
N65	65mm (standard for Head & Nipple assemblies)
N6	6" (standard for Head, Nipple, & Union assemblies and Head, Nipple, Union, & Nipple assemblies)
N150	150mm (standard for Head, Nipple, & Union assemblies and Head, Nipple, Union, & Nipple assemblies)
N10	10" (standard for Head, Nipple, & Union assemblies requiring lagging)
NXX	Custom Length Eg. Specify N12 - 12", N300 - 300mm

G	M Dimension (Immersion Length/Thermowell Drill Depth)
MXX	Custom Length Eg. Specify M12 - 12", M300 - 300mm

H	Calibration
K	Type K - Thermocouple
J	Type J - Thermocouple
E	Type E - Thermocouple
T	Type T - Thermocouple
S	Type S - Thermocouple
R	Type R - Thermocouple
B	Type B - Thermocouple
N	Type N - Thermocouple
H	RTD (-328 °F to 1221 °F)

I	Sensor Type
1	Single Thermocouple
2	Duplex Thermocouple
3	Triplex Thermocouple
A	2-Wire RTD, Single Element
B	3-Wire RTD, Single Element
C	4-Wire RTD, Single Element
D	2-Wire RTD, Duplex Element (4 wires total)
E	3-Wire RTD, Duplex Element (6 wires total)
F	4-Wire RTD, Duplex Element (8 wires total)

J	Upgrade to Daily Premium™ Line
Y	Yes* ( <a href="#">Daily Premium Line™ Data Sheet</a> )
N	No

\*Not available for RTDs

K	Measuring Junction Type
1	Grounded*
2	Ungrounded
N	Not Applicable - RTD

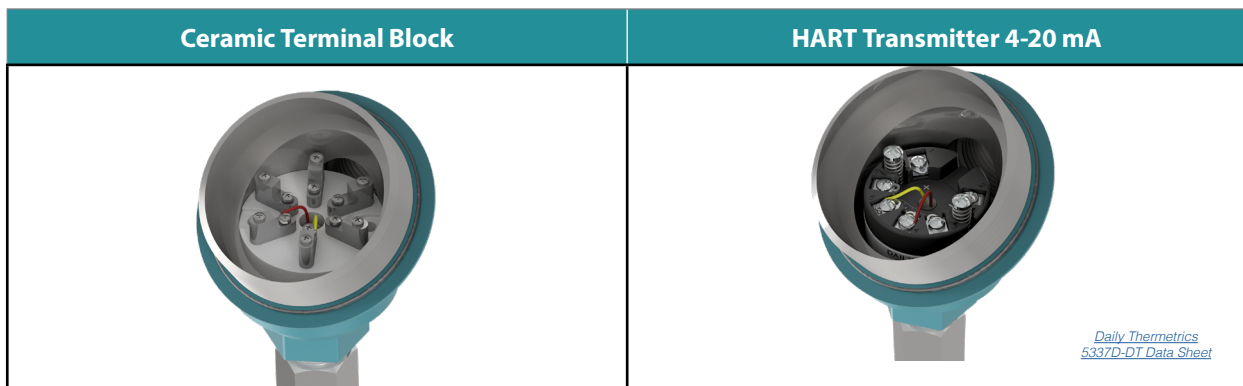
\* Grounded junctions are not capable of withstanding 500 V rms between the measurement circuit and ground. This must be taken into account during installation.

L	Limits of Error
1	Standard Limits Thermocouple (Class 2)
2	Special Limits Thermocouple (Class 1) <sup>3</sup>
A	100 OHM Platinum, Alpha=0.00385 (Class A) RTD
B	100 OHM Platinum, Alpha=0.00385 (Class B) RTD

M	Sensor Sheath Diameter
1	6mm
2	1/4" (0.250")
3	5/16" (0.313")
4	8mm
5	3/8" (0.375")

N	Sensor Sheath Material
304	304 SS
316	316 SS <sup>4</sup>
310	310 SS
321	321 SS
347	347 SS
446	446 SS
I600	Inconel® 600
I800	Incoloy® 800
HASTX	Hastelloy® X

O	Calibration Options
1	Report not Required
2	212 °F (100 °C) with Certificate
3	212 °F (100 °C) with Report
4	3-Point Calibration <sup>5</sup> with Report
5	5-Point Calibration <sup>5</sup> with Report



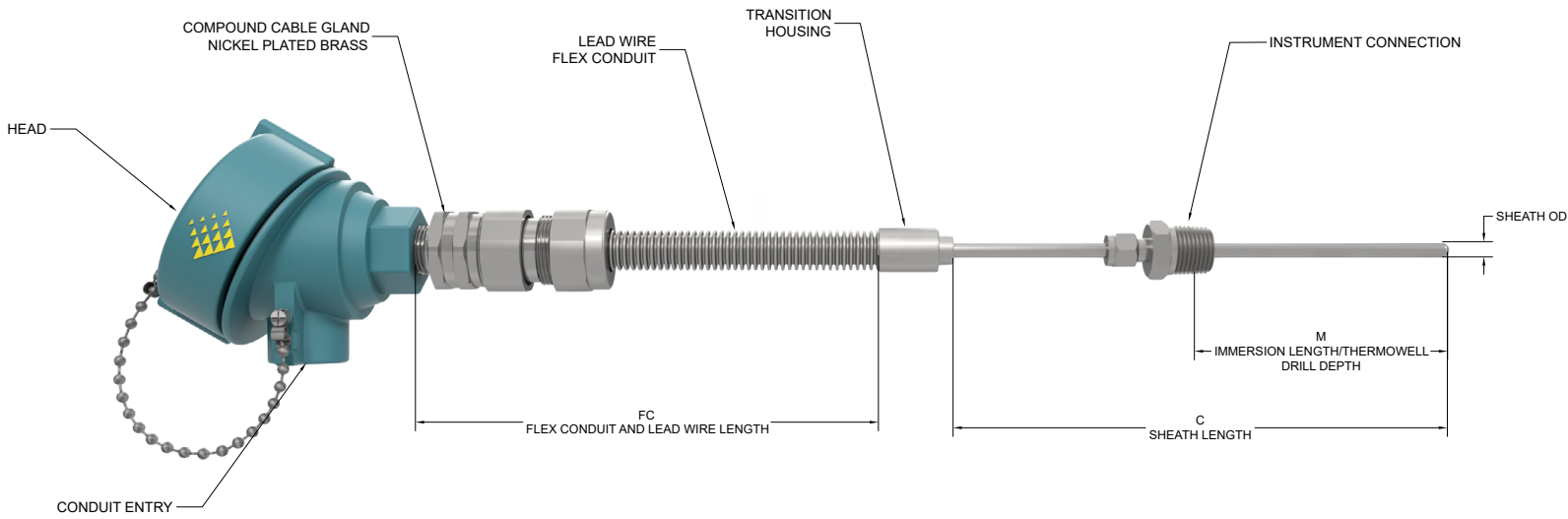
1. A unique and simplified item number will be generated and issued for every customized thermocouple for ease of reordering.
2. The majority of options are customizable. Please contact Sales if your requirements are not listed in this catalog.
3. Includes Daily Premium™ Line.
4. 316 SS is standard for RTDs.
5. Specify calibration temperature points with order.

# Model 360HZ



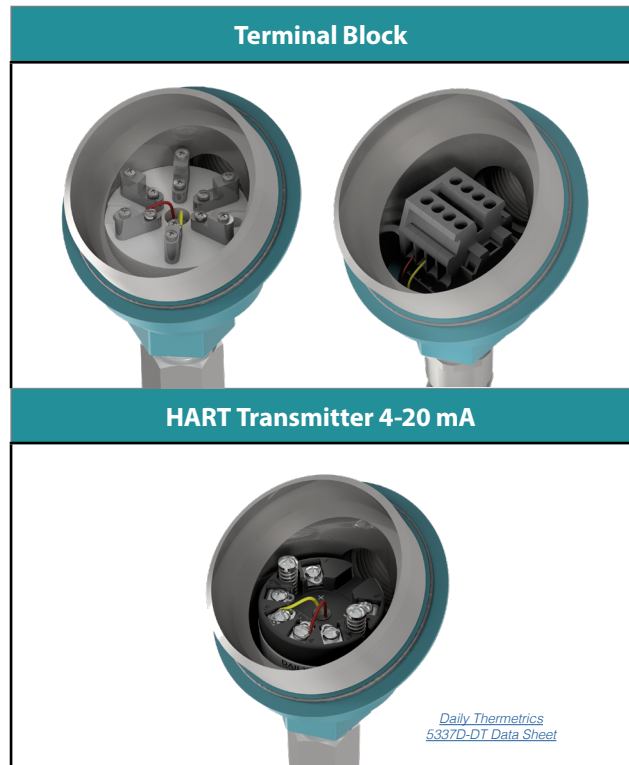
Product Certification Rating:  
 IECEx: Ex db eb IIC T6...T4 Gb; IP66  
 ATEX: II 2G Ex db eb IIC T6...T4 Gb  
 Tamb = -40 °C to +80 °C  
 CSA/UL: Cl. 1, Div 2, Groups A,B,C,D T6...T4  
 Cl. 1, Zone 1, AEx db eb IIC T6...T4 Gb  
 Ex db eb IIC T6...T4 Gb  
 Ta= -40 °C to +80 °C; Type 4X; IP66

## Remote Flameproof Industrial Sensor Assembly



Daily Thermetrics' 360HZ Series Remote Flameproof Industrial Sensor Assembly is designed for remote termination into a head via extension wire and conduit. Various styles and connection methods are available, and many aspects of this sensor assembly are customizable, including element type, sheath metallurgy, length, connection type, and head. Please contact [sales](#) if your desired configuration is not attainable.

J	Instrument Connection Type
1 / 2 / 3	
Compression Fitting (Standard, Swagelok® or Parker manufacturer)	
4 / 5	
Spring-Loaded Fitting with Retainer	
6 / 7	
Spring-Loaded Compression Fitting with Retainer	
U / V	
Spring-Loaded Fitting with Self-Retaining Spring	
X / Y	
Spring-Loaded Compression Fitting with Self-Retaining Spring	



Other configurations are available. Contact [Sales](#) for inquiries.

# Model 360HZ How to Order

EXAMPLE:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
360HZ	1	M	1	1	4	FC500	1	2	2	N	MO	C300	K	1	N	2	2	2	316	1

• INDICATES COMMON SELECTION

A	Model
360HZ	Flameproof Sensor with Direct Mount Head •

B	Hazardous Area Certification
1	ATEX/IECEX •
2	CSA/UL (Canada/USA) •

C	Unit of Measure
I	Imperial (inch) •
M	Metric (mm) •

D	Head Style
1	Aluminum Epoxy Coated 3/4" FNPT Conduit Entry •
2	Aluminum Epoxy Coated M20x1.5(F) Conduit Entry
3	Aluminum Epoxy Coated 2x 3/4" FNPT Conduit Entry with 1 Entry Plugged
4	Aluminum Epoxy Coated 2x M20x1.5(F) Conduit Entry with 1 Entry Plugged
5	316SS 3/4" FNPT Conduit Entry
6	Aluminum Epoxy Coated 1/2" FNPT Conduit Entry

Other options are available. Contact sales for inquires.

E	Terminal Block / Transmitter
1	Industrial Terminal Block - ATEX/IECEX Mini Din Rail Terminal Block - Canada/USA •
2	HART Transmitter 4-20 mA ATEX/IECEX/Canada/USA •

Please submit configuration sheet for transmitters with Purchase Order.

F	Type of Lead Wire
1	Solid - 24 AWG
2	Solid - 20 AWG
3	Solid - 18 AWG
4	Stranded - 24 AWG (standard for duplex thermocouples) •
5	Stranded - 22 AWG (standard for RTDs) •
6	Stranded - 20 AWG (standard for single thermocouples) •

G	FC Dimension (Lead Wire Length)
FCXX	Custom Length Eg. Specify FC36 - 36", FC1000 - 1000mm •

H	Instrument Connection Type
1	Compression Fitting •
2	Compression Fitting (Swagelok®) •
3	Compression Fitting (Parker)
4	Spring-Loaded Fitting with SS Spring and Retainer
5	Spring-Loaded Fitting with Inconel® Spring and Retainer
6	Spring-Loaded Compression Fitting with SS Spring and Retainer
7	Spring-Loaded Compression Fitting with Inconel® Spring and Retainer
U	Spring-Loaded Fitting with Self-Retaining SS Spring
V	Spring-Loaded Fitting with Self-Retaining Inconel® Spring
X	Spring-Loaded Compression Fitting with Self-Retaining SS Spring
Y	Spring-Loaded Compression Fitting with Self-Retaining Inconel® Spring
N	None •

I	Instrument Connection Material
1	304 SS
2	316 SS •
3	Brass
N	None •

J	Instrument Connection Size
1	3/8" NPT
2	1/2" NPT •
3	3/4" NPT
N	None •

K	Vent Hole for Instrument Connection - Ø1/8"
Y	Yes
N	None •

L	M Dimension (Immersion Length/Thermowell Drill Depth)
MO	No Instrument Connection (set length in field) •
MXX	Custom Length Eg. Specify M12 - 12", M300 - 300mm

M	C Dimension (Sheath Length)
CS	Standard ("M" + 3" or "M + 76mm) •
CXX	Custom Length Eg. Specify C12 - 12", C300 - 300mm

N	Calibration
K	Type K - Thermocouple •
J	Type J - Thermocouple •
E	Type E - Thermocouple •
T	Type T - Thermocouple
S	Type S - Thermocouple
R	Type R - Thermocouple
B	Type B - Thermocouple
N	Type N - Thermocouple
H	RTD (-328 °F to 1221 °F) •

O	Sensor Type
1	Single Thermocouple •
2	Duplex Thermocouple •
3	Triplex Thermocouple
A	2-Wire RTD, Single Element
B	3-Wire RTD, Single Element •
C	4-Wire RTD, Single Element
D	2-Wire RTD, Duplex Element (4 wires total)
E	3-Wire RTD, Duplex Element (6 wires total) •
F	4-Wire RTD, Duplex Element (8 wires total)

P	Upgrade to Daily Premium™ Line
Y	Yes* (Daily Premium™ Line Data Sheet) •
N	No •

Q	Measuring Junction Type
1	Grounded* •
2	Ungrounded •
N	Not Applicable - RTD •

\* Grounded junctions are not capable of withstanding 500 V rms between the measurement circuit and ground. This must be taken into account during installation.

R	Limits of Error
1	Standard Limits Thermocouple (Class 2) •
2	Special Limits Thermocouple (Class 1) <sup>3</sup> •
A	100 OHM Platinum, Alpha=0.00385 (Class A) RTD
B	100 OHM Platinum, Alpha=0.00385 (Class B) RTD •

S	Sensor Sheath Diameter
1	6mm •
2	1/4" (0.250") •
3	5/16" (0.313")
4	8mm
5	3/8" (0.375")

T	Sensor Sheath Material
304	304 SS
316	316 SS <sup>4</sup> •
310	310 SS
321	321 SS
347	347 SS
446	446 SS
1600	Inconel® 600 •
1800	Incoloy® 800
HASTX	Hastelloy® X

U	Calibration Options
1	Report not Required •
2	212 °F (100 °C) with Certificate •
3	212 °F (100 °C) with Report
4	3-Point Calibration <sup>5</sup> with Report
5	5-Point Calibration <sup>5</sup> with Report

Contact sales for specifications.

1. A unique and simplified item number will be generated and issued for every customized thermocouple for ease of reordering.
2. The majority of options are customizable. Please contact sales if your requirements are not listed in this catalog.
3. Includes Daily Premium™ Line.
4. 316 SS is standard for RTDs.
5. Specify calibration temperature points with order.