871TM 2-wire Intrinsically Safe Inductive Proximity Sensor



Hazardous Location

Why Upgrade or Migrate?

Rockwell Automation announces that as of 4/20/2023*, the 871TM-DR* Intrinsically Safe inductive proximity sensors will be discontinued and no longer available for sale.

The 871C-DH* intrinsically safe NAMUR proximity sensor family offers enhanced performance and meets all hazardous location inductive proximity sensing needs of the 871TM intrinsically safe sensors, and more. This family also can provide:

- All the same barrel sizes with the addition of M8 barrel sizes
- Equal sensing ranges and shielding options
- All the same Factory Mutual hazardous location ratings, plus the addition of Zone 2 certification



Rockwell Automation understands that your hazardous location inductive proximity sensors are critical assets in your automation system. We support that by providing you with the latest technology to maximize your investment.

NAMUR intrinsically safe technologies can improve existing hazardous location sensing applications and eliminate the risk of combustion in the most extreme environments. By migrating from your legacy 871TM-DR* sensors to the 871C-DH* NAMUR intrinsically safe inductive proximity sensors product family, you can achieve your hazardous location inductive proximity sensing needs better than ever before while shifting to a modern intrinsically safe sensing method that will be the industry standard for many years.

We will help you to meet this demand to innovate by proactively planning and managing your transition every step of the way to help you get the highest possible return on your automation investment.



ACTIVE: Most current offering within a product category.

ACTIVE MATURE: Product is fully supported, but a newer product or family exists. Gain value by migrating.

END OF LIFE: Discontinued date announced – actively execute migrations and last time buys. Product generally orderable until the discontinued date

DISCONTINUED: New product no longer manufactured or procured. Repair/exchange services may be available.

1- Outages on specific items may occur prior to the discontinued date. 2 - Limited stock may be available in run-out mode, regionally.



Table 1. 871TM Intrinsically Safe and 871C NAMUR FM hazardous location ratings

Bulletin	Class I Div 1	Class I Div 2	Class II Div 1	Class II Div 2	Class III	Zone 0	Zone 1	Zone 2
871TM	✓	✓	✓	✓	✓	✓	✓	
871C	✓	✓	✓	✓	✓	✓	✓	✓

871C NAMUR can effectively be used in nearly all applications of 871TM Intrinsically Safe, however, it is not a drop-in replacement. To achieve hazardous location level safety, 871TM Intrinsically safe uses 937ZH-DPBN-1 or 937ZH-DPDP-2 Intrinsically Safe Zener Barriers or can be used in Division 2 locations without a barrier. 871C NAMUR conforms to the NAMUR specification (DIN 19 234) when used with Cat. No. 937TH-DISAR-DC2, 937TS-DISAR-KD2, 937TS-DISAR-KF2, or 937TH-DISAT-DC Intrinsically Safe Output Switch Amplifiers – meeting all the ratings specified in Table 1.

Most of the electrical connection options match between 871TM and 871C, but there are some unique to just 871TM. 871TM Intrinsically safe units with M12 micro plug connector ("-D4") or 2M PVC cable connector ("-A2") have a direct electrical connection replacement in 871C NAMUR. For specialized ToughLink™ cable versions, 871TM can be replaced by 871C NAMUR with an M12 micro connection paired with a ToughLink cordset.

For example: 871TM-DR10NE30-H2 has an electrical connection consisting of a 2M 18 AWG ToughLink cable and can be replaced by the 871C-DH10M30-D4 paired with an 889D-F4HJ-2 2M 18 AWG ToughLink cordset – achieving the same connection and cable type. The recommended replacement for an 871TM unit fitted with a specialized ToughLink cable is the appropriate 871C NAMUR sensor with the M12 micro plug paired with a ToughLink cordset.

889D-F4HJ-2 is the catalog number for an 18 AWG 2M DC micro ToughLink Cordset.

889D-F4HL-2 is the catalog number for a 22 AWG 2M DC micro ToughLink Cordset.

Table 2. Impacted products are as follows:

Catalog Number	Description	Discontinued Date	Recommended Replacement	Replacement Category
871TM-DR10NE30-A2	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH10M30-A2	Engineered Replacement
871TM-DR10NE30-D4	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH10M30-D4	Engineered Replacement
871TM-DR10NE30-H2*	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH10M30-D4	Engineered Replacement
871TM-DR15NE30-A2	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH15M30-A2	Engineered Replacement
871TM-DR15NE30-D4	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH15M30-D4	Engineered Replacement
871TM-DR15NE30-H2*	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH15M30-D4	Engineered Replacement
871TM-DR2NE12-A2	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH2M12-A2	Engineered Replacement
871TM-DR2NE12-C2*	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH2M12-D4	Engineered Replacement
871TM-DR2NE12-D4	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH2M12-D4	Engineered Replacement
871TM-DR4NE12-A2	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH4M12-A2	Engineered Replacement
871TM-DR4NE12-C2*	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH4M12-D4	Engineered Replacement
871TM-DR4NE12-D4	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH4M12-D4	Engineered Replacement
871TM-DR5NE18-A2	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH5M18-A2	Engineered Replacement
871TM-DR5NE18-D4	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH5M18-D4	Engineered Replacement
871TM-DR5NE18-H2*	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH5M18-D4	Engineered Replacement
871TM-DR8NE18-A2	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH8M18-A2	Engineered Replacement
871TM-DR8NE18-D4	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH8M18-D4	Engineered Replacement
871TM-DR8NE18-H2*	Intrinsically safe Inductive Proximity Sensor	4/20/2023	871C-DH8M18-D4	Engineered Replacement

^{*} ToughLink cable 871TM Intrinsically Safe models

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