1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Component intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 16ATEX9350U** Issue: **4**

4 Component: **Liquid Fuel Delivery Nozzle (3N1 & 3N1S)**

5 Applicant: **Husky Corporation**

6 Address: 2325 Husky Way
Pacific
Missouri 63069
United States of America

7 This component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

8 CSA Group Netherlands B.V. notified body number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of a component intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 13012:2021

10 The sign 'U' is placed after the certificate number to indicate that the product assessed is a component and may be subject to further assessment when incorporated into equipment. Any limitations of use are listed in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified component. If applicable, further requirements of this Directive apply to the manufacture and supply of this component.

12 The marking of the component shall include the following:

II 1G
EN 13012 Type 1

Signed: M Halliwell

Title: Director of Operations

13 **DESCRIPTION OF COMPONENT**

Type 3N1

The 3N1 is a nozzle platform that serves the purpose of 3 different types of nozzles, it is equipped with a 1″ BSP inlet, and has a max flow rate of 113 litres per minute (30 US Gallons per minute). The 3N1 nozzle platform can be assembled as a 1A (retail fuelling nozzle equipped with either an unleaded or light duty diesel spout), 1GS (farm nozzle equipped with either an unleaded, light duty diesel, or high-flow, heavy duty diesel spout, and has an option for a hanging hook attached to the front of the nozzle around the spout base and handguard), or a 1HS (retail fuelling nozzle equipped with a high-flow, heavy duty diesel spout). When the lever is pulled to the open position, the poppet raises against the flow of fuel, allowing the fuel to travel through the body to the spout, and into the fuel neck. There is a hole at the end of the spout that is connected by a tube and vent to a sealed chamber. When the fuel level reaches this hole on the spout, a vacuum is created by a Venturi and check valve system, and that vacuum is delivered to the sealed vacuum chamber. This vacuum causes the vacuum diaphragm assembly to be lifted, allowing the nozzle plunger to drop, and the lever to be disengaged, thus closing the poppet, and shutting off the flow. In addition to the automatic shut-off feature, the nozzle is equipped with an attitude device, which utilizes a stainless steel ball that rolls back and blocks the flow of air through the Venturi and check valve area when the spout is raised near or above the horizontal position, and thus creating the same vacuum generation required to shut the nozzle off. The nozzle may be equipped with a number of different handguard options, as well as different lever and poppet options based on customer preference. All materials that will or are likely to come into contact with fuels as defined by EN 13012:2021 are resistant to attack by the fuel. The nozzle is explosion protected in accordance with category 1 of EN ISO 80079-36:2016 and fulfils the requirements for temperature class T3 and group IIA according to EN ISO 80079-36:2016. All conducting parts are arranged such that potentially dangerous differences cannot exist between them. There are no composite materials used in the construction of the nozzle. The materials used in construction of the nozzle meet the requirements for category 1. This nozzle does not have an auto-deactivating feature otherwise known as a "No Pressure, No Flow" feature.

Type 3N1S

The 3N1S uses the concept and most of the same components as the standard 3N1. The main difference between the two is that the 3N1S has an auto-deactivating feature. This feature requires that a pressure be applied to the poppet before allowing the lever to be engaged. If no pressure is applied, when the lever is pulled, the "No Pressure, No Flow" feature won't allow the lever to engage, so the poppet won't open. The "No Pressure, No Flow" feature sits in the same location as the sealed vacuum chamber on the standard 3N1 and that portion of the nozzle works in the same manner. This nozzle does have an auto-deactivating feature otherwise known as a "No Pressure, No Flow" feature.

Variation 1 - This variation introduced the following changes:

i. Re-evaluate assembly B.o.Ms with respect to construction components/assemblies errata for drawings 3N1_ATEX & 3N1S_ATEX.

Variation 2 - This variation introduced the following changes:

i. Introduction of Part No 013835 – Poppet Stem Bushing, and replacement of Part No 000020 – Packing Seal, with Part No 012080 – Short Packing Seal.

SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

Sira 16ATEX9350U
Issue 4

Variation 3 - This variation introduced the following changes:

i. Standards upgraded to the latest versions.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Reports and Certificate History

Issue	Date	Report number	Comment
0	09 August 2017	R70097300A	The release of the prime certificate.
1	17 July 2018	R70173410A	The introduction of Variation 1.
2	31 October 2019	0419	Transfer of certificate Sira 16ATEX9350U from Sira Certification Service to CSA Group Netherlands B.V..
3	20 December 2023	R80180941A	The introduction of Variation 2.
4	10 June 2024	R80205645A	The introduction of Variation 3.

15 SCHEDULE OF LIMITATIONS

None

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 CONDITIONS OF MANUFACTURE

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of CSA Group Netherlands B.V. certificates.

17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

17.3 Each component manufactured will be subject to the routine testing as described in clause 7, B.9, B.11, B.12 and B.13 of EN 13012:2021.

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Certificate Annexe

Certificate Number: **Sira 16ATEX9350U**

Component: **Liquid Fuel Delivery Nozzle (3N1 & 3N1S)**

Applicant: **Husky Corporation**

Issue 0

Drawing	Sheets	Rev.	Date (Sira Stamp)	Title
3N1_ATEX	1 to 2	0	25 Jul 17	3N1 ATEX CERT DWG
3N1S_ATEX	1 to 2	0	25 Jul 17	3N1S ATEX CERT DWG

Issue 1

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
3N1_ATEX	1 to 2	1	04 Apr 18	3N1_ATEX CERT DWG
3N1S_ATEX	1 to 2	1	04 Apr 18	3N1S_ATEX CERT DWG

Issue 2 – No new drawings were introduced.

Issue 3

Drawing	Sheets	Rev.	Date (Stamp)	Title
3N1_ATEX	1 to 2	3	10 Dec 23	3N1 ATEX CERT DRAWING
3N1S_ATEX	1 to 2	3	10 Dec 23	3N1S ATEX CERT DRAWING
005085	1 to 3	20	14 Dec 23	BODY, 3N1, CASTING, BSP
012080	1 of 1	1	14 Dec 23	SEAL, PACKING, SHORT
013835	1 of 1	2	14 Dec 23	BUSHING, PACKING

Issue 4

Drawing	Sheets	Rev.	Date (Stamp)	Title
3N1_ATEX	1 to 2	3	28 May 24	3N1 ATEX CERT DWG
3N1S_ATEX	1 to 2	3	28 May 24	3N1S ATEX CERT DWG