C E R T I F I C A T E

This certifies, that the company

Gefran S.p.A.
Via Sebina, 74
25050 Provaglio d'Iseo (BS)
Italy

Is authorized to provide the product mentioned below

Description of product:	**Melt pressure sensor series IMPACT ILI-x-x-x-xxxx-x-x-x-P-xxxxxxxxxxx**
In accordance with:	**IEC/EN 62061:2005 + A1:2013 + A2:2015 + EN 62061 / EC:2010** **IEC 61508:2010 Parts 1, 2, 3, 4, 5, 6, 7** **IEC 61511-1:2016 + A1:2017, IEC 61511-2, 3:2016 (as far as applicable)** **EN ISO 13849-1:2015** **EN ISO 13849-2:2012**

Registration No 21 22064 04
Test Report No PS-22064-21-L-04
File reference 22064-04

Validity
from 2021-12-22
until 2024-12-22

TÜV NORD Italia S.r.l. (TÜV NORD Group)
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Cerro Maggiore, 2021-12-22
prodotto@tuev-nord.it

Please also pay attention to the information stated overleaf

ANNEX

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Safety functions	1. Analog output (current or voltage) 2. Relay output (de-energise to trip)
Mode of operation	High Demand Mode

Results		
Parameter	**Value**	**Measuring Unit**
Architecture	1oo1 (1oo2 for relay output block)	--
HFT	0 (1 for relay output block)	--
Category	2 (3 for relay output block)	
β, β_D factors	0,02	--
λ_{DD}		
Analog output	4,61E-07	1/h
Relay output	4,44E-07	1/h
λ_{DU}		
Analog output	6,73E-08	1/h
Relay output	3,72E-08	1/h
DC_{avg}		
Analog output	90	%
Relay output	90	%
SFF		
Analog output	94,1	%
Relay output	96,7	%
$MTTF_D$		
Analog output	216	years
Relay output	237	years
PFH / PFH_D		
Analog output	6,73E-08	1/h
Relay output	3,72E-08	1/h
Systematic Capability	2	--
SILCL (IEC/EN 62061) SIL (IEC/EN 61508)	2	--
PL (EN ISO 13849)	d	--

The product can be declared as compliant to:	**IEC/EN 62061 SILCL 2, IEC/EN 61508 SIL 2, EN ISO 13849-1, EN ISO 13849-2, PL d**

Remarks:	• These results must be considered in combination with SIL/PL and λ_D values of other devices of a safety-related system in order to determine suitability for a specific SIL/PL • The results are “worst case” results, considering all the mechanical versions • The results for analog output are conservative “worst case” results for voltage or current output