

# CERTIFICATE

This certifies, that the company

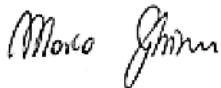
**Omal S.p.A.**  
**Via Ponte Nuovo, 11**  
**25050 Rodengo Saiano (BS)**  
**Italy**

Is authorized to provide the product mentioned below

Description of product: **High pressure floating ball valve series Kratos**

In accordance with: **EN 61508:2010 Parts 1, 2, 3, 4, 5, 6, 7**

Registration No 20 20256 01  
Test Report No PS-20256-20-L-01  
File reference 20256-01

A handwritten signature in blue ink, appearing to read "Marco Janni".

TÜV NORD Italia S.r.l. (TÜV NORD Group)  
Via Turati, 70 - 20023 Cerro Maggiore (MI)



Validity  
from 2020-03-31  
until 2023-03-30

Cerro Maggiore, 2020-03-31  
prodotto@tuev-nord.it

*Please also pay attention to the information stated overleaf*

# ANNEX

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To Certificate-Nr. 20 20256 01

Type	A
HFT	0
Safety functions	1. Close / Open upon the demand of the actuation system 2. Close upon the demand of the actuation system, with inline tightness when in closed position
Mode of operation	Low Demand Mode

Random failure rates				
Configuration	Safety function	$\lambda_{DU}$ [1/h]	$\lambda_{DD}$ [1/h]	$\lambda_S$ [1/h]
Series Kratos - No PST	1	6,89E-08	0,00E+00	0,00E+00
Series Kratos - With PST	1	6,20E-09	6,27E-08	0,00E+00
Series Kratos - No PST	2	8,65E-08	0,00E+00	0,00E+00
Series Kratos - With PST	2	2,38E-08	6,27E-08	0,00E+00

Systematic capability	3 (Route 1 <sub>s</sub> applied)			
Architectural constraints	Route 1 <sub>H</sub> :	Applied	Route 2 <sub>H</sub> :	Applied
	The product can be used in: <ul style="list-style-type: none"> <li>• single channel configuration:               <ul style="list-style-type: none"> <li>○ up to SIL 2 without external diagnostic tests</li> <li>○ up to SIL 3 considering external diagnostic tests</li> </ul> </li> <li>• double channel configuration: up to SIL 3</li> </ul>			
Remarks:	<ul style="list-style-type: none"> <li>• For further details, including environmental conditions, limitations of use, lifetime, failure rates traceability, mean repair times, common cause factors and systematic capability constraints, make reference to Safety Manual SM201900.</li> </ul>			

