

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: **Coaxial actuated valve series VIP EVO**

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

Registration No 20 20256 03
Test Report No PS-20256-20-L-03
File reference 20256-03



TÜV NORD Italia S.r.l. (TÜV NORD Group)
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Validity
from 2020-06-19
until 2023-06-19

Cerro Maggiore, 2020-06-19
prodotto@tuev-nord.it

Please also pay attention to the information stated overleaf

ANNEX

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To Certificate-Nr. 20 20256 03

Type	A
HFT	0
Safety functions	<p><u>Spring return actuated valve:</u></p> <ol style="list-style-type: none"> 1. Delivery of a full stroke driven by the spring, with power fluid exhausted from the cylinder through the control system, to close / open the valve upon the demand of the actuation system 2. Close upon the demand of the actuation system, with inline tightness when in closed position <p><u>Double acting actuated valve:</u></p> <ol style="list-style-type: none"> 1. Delivery of a full stroke driven by the piston of cylinder, powered by the specified medium working pressure, to close / open the valve 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	λ_{DU} [1/h]	λ_{DD} [1/h]	λ_S [1/h]
Spring return coaxial actuated valve - No PST	1	2,85E-08	0,00E+00	0,00E+00
Spring return coaxial actuated valve - With PST	1	2,57E-09	2,59-E08	0,00E+00
Spring return coaxial actuated valve - No PST	2	4,14E-08	0,00E+00	0,00E+00
Spring return coaxial actuated valve - With PST	2	1,25E-08	2,59E-08	0,00E+00
Double acting coaxial actuated valve - No PST	1	1,36E-07	0,00E+00	0,00E+00
Double acting coaxial actuated valve - With PST	1	1,22E-08	1,24E-07	0,00E+00
Double acting coaxial actuated valve - No PST	2	1,49E-07	0,00E+00	0,00E+00
Double acting coaxial actuated valve - With PST	2	2,50E-08	1,24E-07	0,00E+00

Systematic capability	3 (Route 1 _s applied)			
Architectural constraints	Route 1_H:	Applied	Route 2_H:	Applied
	<p>The product can be used in:</p> <ul style="list-style-type: none"> • single channel configuration: <ul style="list-style-type: none"> ○ up to SIL 2 without external diagnostic tests ○ up to SIL 3 considering external diagnostic tests • double channel configuration: up to SIL 3 			
Remarks:	<ul style="list-style-type: none"> • 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 SM20202204. 			

