C E R T I F I C A T E

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: **Pneumatic scotch-yoke spring return and double acting heavy duty actuator series SRHG, DAHG**

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

Inspection & Certification Services TÜV NORD Italia S.r.l.

Registration No 20 20533 01
Test Report No PS-23789-23-M-07
File reference 23789-07

Validity
from 2023-12-03
until 2026-12-02

TÜV Nord Italia S.r.l (TÜV NORD Group)
Via Turati, 70 – 20023 Cerro Maggiore (MI) – Italy
www.tuev-nord.it

Cerro Maggiore, 2023-11-29
prodotto@tuev-nord.it

Please also pay attention to the information stated overleaf

ANNEX

To Certificate-Nr. 20 20533 01

Type	A
HFT	0
Safety functions	Spring return actuators: 1. Delivery of a full stroke (90° ± tolerance) driven by the spring, with power fluid exhausted from the cylinder through the control system Double acting actuators: 1. Delivery of a full stroke (90° ± tolerance) driven by the piston of cylinder, powered by the specified medium working pressure
Mode of operation	Low Demand Mode

Random failure rates				
Configuration	**Safety function**	**λ_{DU} [1/h]**	**λ_{DD} [1/h]**	**λ_{S} [1/h]**
Series SRHG - No PST	1	5,64E-08	0,00E+00	0,00E+00
Series SRHG - With PST	1	5,08E-09	5,14E-08	0,00E+00
Series DAHG - No PST	1	1,04E-07	0,00E+00	0,00E+00
Series DAHG - With PST	1	9,36E-09	9,47E-08	0,00E+00

Systematic capability	**3** (Route 1_S applied)			
Architectural constraints	**Route 1_H:**	Applied	**Route 2_H:**	Applied

	The product can be used in:
	• single channel configuration:
	  ○ up to SIL 2 without external diagnostic tests
	  ○ up to SIL 3 considering external diagnostic tests
	• double channel configuration: up to SIL 3			

Remarks:	• 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 SMA201705.			

Inspection & Certification Services TÜV TÜV NORD Italia S.r.l.