



Certificate no. TAI-FS-C-21-0049

WE HEREBY CERTIFY THAT

Product description 2-WAYS FLOATING BALL VALVE

Models

SERIES 16R, 16MC, 16ML, 40R, 40MC, 40ML, 16RE, 16RL, 40RE, 150MC, 300MC, 150RC, 300RC, 40ME, 16TE, 16TL, 40TE, 40TL, 16TM, 16TC, 40TM, 40TC, 150TM, 150TC, 300TM, 600R, 600T, 16VK, 16VL, 40VK, 40VL, 63TL, 100TL, 900T, 900R, 1500T, 1500R, 2500T, 2500R, 16ST.A, 150ST.A, 40ST.A, 300ST.A, 16WT, 150WT, 40WT, 300WT, D300F, D300R, D800F, D800R, D1500F, D1500R, D2500F, D2500R

Manufacturer

**DAFRAM S.p.A.
Via San Raffaele 1
I-20121 Milano (MI)**

IS IN COMPLIANCE WITH THE REQUIREMENTS OF THE STANDARDS

IEC 61508 Parts 1–7:2010

AS RESULT OF THE ASSESSMENT ACCORDING TO THE PROVISION SET OUT IN THE ABOVE-MENTIONED STANDARDS

Summary Report no. TAI-FS-R-21-0103

Expiry date 27.04.2024

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TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.
28.04.2021, Monte Roberto (AN)

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Cap. Soc. i.v. EUR 10.000,00; R.I. Ancona – C.F. – P. IVA 02217380423
Cod. Id. CEE IT02217380423 REA AN n. 170070
A socio unico, soggetta a controllo e coordinamento di:
TÜV AUSTRIA HOLDING AG, Deutschstrasse 10, 1230, Vienna, Austria
www.tuvaustriaitalia.com www.tuv.at

Annex to certificate no. TAI-FS-C-21-0049

| | |
|--------------------------|--|
| 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 |

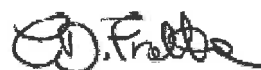
| Random failure rates | | | | |
|----------------------------|-----------------|----------------------|----------------------|-------------------|
| Configuration | Safety function | λ_{DU} [1/h] | λ_{DD} [1/h] | λ_S [1/h] |
| 2-ways floating - No PST | 1 | 2,93E-08 | 0,00E+00 | 0,00E+00 |
| 2-ways floating - With PST | 1 | 2,64E-09 | 2,66E-08 | 0,00E+00 |
| 2-ways floating - No PST | 2 | 4,15E-08 | 0,00E+00 | 0,00E+00 |
| 2-ways floating - With PST | 2 | 1,48E-08 | 2,66E-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: <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:**
- 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 MAE11009.

END OF CERTIFICATE

TÜV AUSTRIA ITALIA - Blu Solutions s.r.l.
28.04.2021, Monte Roberto (AN)



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