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Advisory Opinion No. GS 6.1/25-018-2

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Translation of the original German document GS 6.1/25-018-2

Object: Evaluation of the performance characteristics in case of fire of fischer Sliding Elements FASM-2, FASM-2 HDG, FASM-2 A4 and FASH-2 in accordance with EAD 280016-00-0602 - abbreviated version

Client: **fischerwerke GmbH & Co. KG**
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This document covers 10 pages, including 0 appendices.

Contents

1 Objectives and procedure

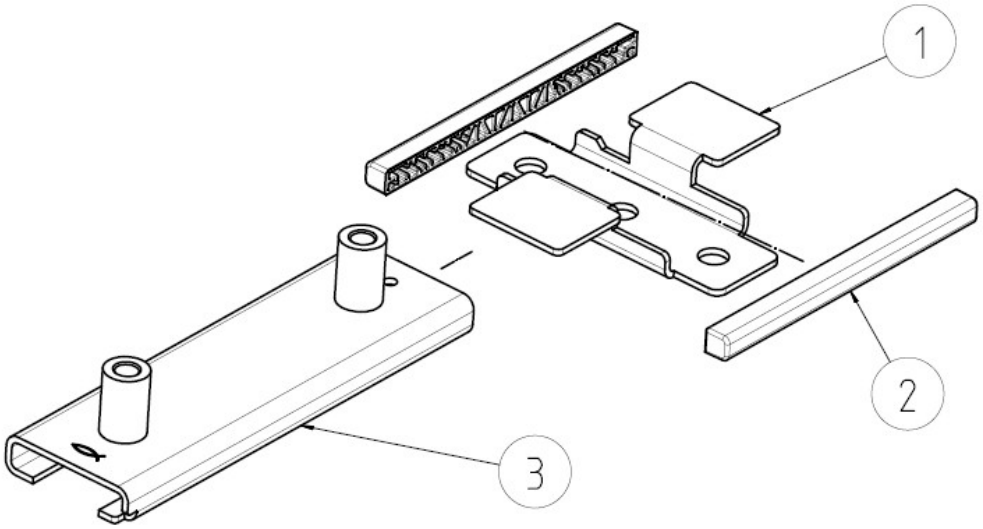
MFPA Leipzig GmbH was commissioned by fischerwerke GmbH & Co. KG to carry out an evaluation of performance characteristics in case of fire in accordance with EAD 280016-00-0602 [N1] for medium-duty fischer Sliding Elements FASM-2, FASM-2 HDG and FASM-2 A4 as well as heavy-duty fischer Sliding Elements FASH-2. With respect to the thermal loading, the standard temperature time curve (STTC) according to [N2] is considered. The evaluation is carried out on the basis of test results.
The present document includes a summary of the evaluation concept for fire design and the associated characteristic load-bearing capacities. For a detailed derivation of the performance properties, please refer to [G1].

2 Description of the construction

Medium-duty fischer Sliding Elements FASM-2, FASM-2 HDG and FASM-2 A4 as well as heavy-duty fischer Sliding Elements FASH-2 are used to fasten pipe clamps in areas where longitudinal movement of the pipelines (caused, for example, by thermal elongation) must be possible. Medium-duty Sliding Elements FASM-2, FASM-2 HDG and FASM-2 A4 consist of a bracket, two sliding rails and a carriage, while heavy-duty Sliding Elements FASH-2 are equipped with two rolling elements in addition to the bracket and carriage (see Figures 1 to 4). In both cases, the carriage is equipped with two weld-on nuts M10/M12 or M12/M16, respectively, which allow the connection to threaded elements (e.g. threaded rods) of sizes M10 and M12 or M12 and M16. The weld-on nuts are connected to the carriage by weld seams.
The FASM-2, FASM-2 HDG and FASM-2 A4 Sliding Elements are geometrically identical and differ only in terms of the materials used

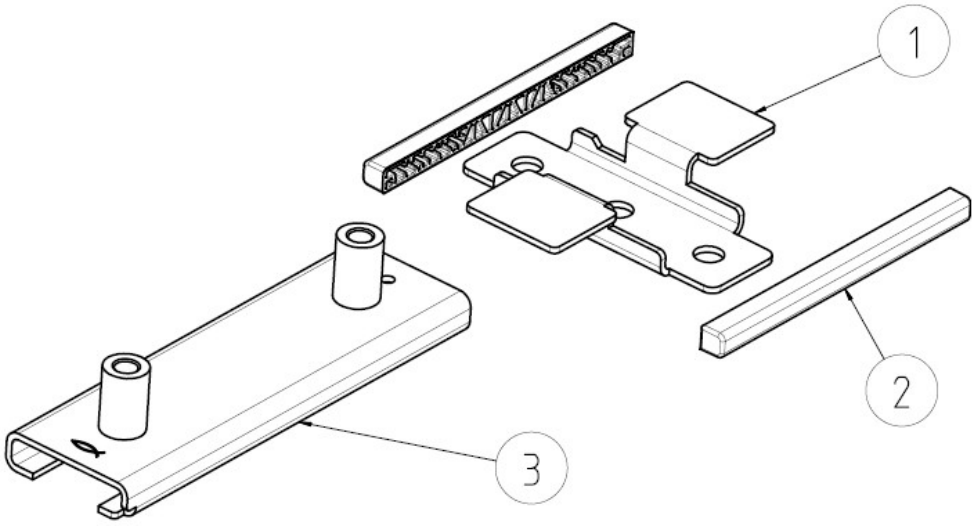
- FASM-2: carbon steel, galvanised
- FASM-2 HDG: carbon steel, hot-dip galvanised
- FASM-2 A4: stainless steel A4.

The FASH-2 Sliding Elements are made of galvanised carbon steel.



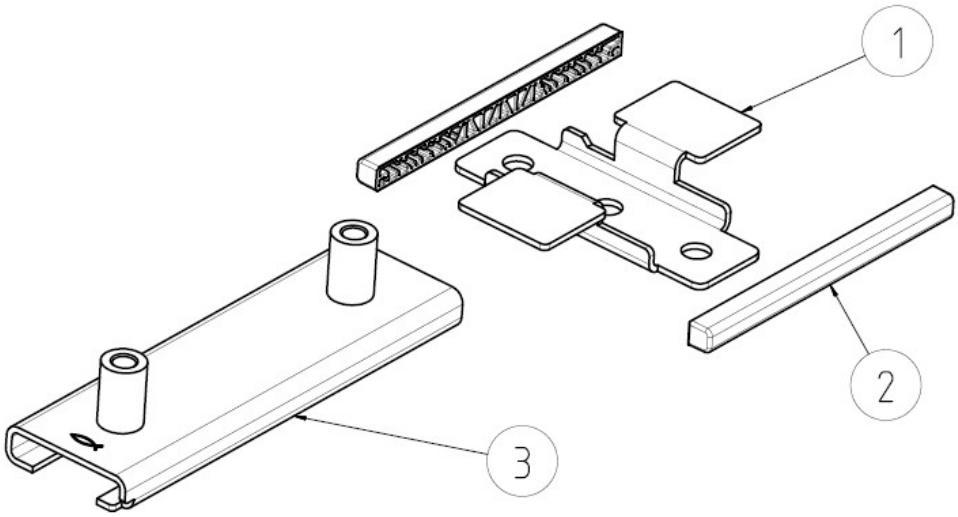
Article-No.	Article	Pos.	Designation
567952	FASM-2 M10/12	1	Bracket FASM
		2	Sliding rail
		3	Carriage FASM-2 M10/12

Figure 1: Medium-duty fischer Sliding Elements FASM-2: Geometry



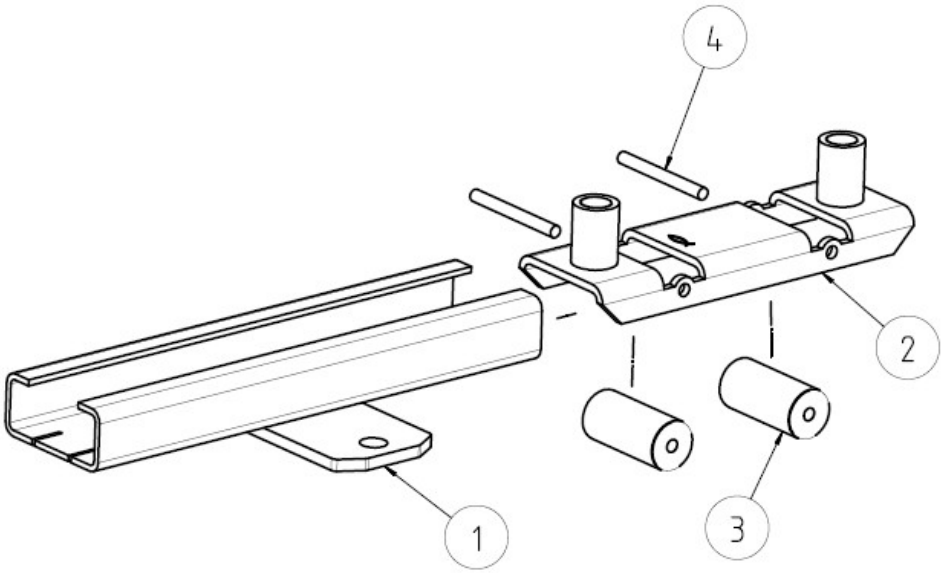
Article-No.	Article	Pos.	Designation
573331	FASM-2 M10/12 hdg	1	Bracket FASM
		2	Sliding rail
		3	Carriage FASM-2 M10/12

Figure 2: Medium-duty fischer Sliding Elements FASM-2 HDG: Geometry



Article-No.	Article	Pos.	Designation
573333	FASM-2 M10/12 A4	1	Bracket FASM
		2	Sliding rail
		3	Carriage FASM-2 M10/12

Figure 3: Medium-duty fischer Sliding Elements FASM-2 A4: Geometry



Article-No.	Article	Pos.	Designation
567954	FASH-2 M12/16	1	Bracket FASH
		2	Carriage FASH-2 M12/16
		3	Rolling element FASH
		4	Pin 6m6x60 -A1 1.4305

Figure 4: Heavy-duty fischer Sliding Elements FASH-2: Geometry

3 References

3.1 Utilized guidelines, rules and standards

The analyses are based on the following guidelines, rules and standards:

[N1] EAD 280016-00-0602: Products for installation systems for supporting technical building equipment; 06/2020

[N2] DIN EN 1363-1:2020-05: Fire resistance tests - Part 1: General Requirements; German version EN 1363-1:2020

3.2 Assessment and test reports

[G1] Gutachterliche Stellungnahme Nr. GS 6.1/25-018-1: Bewertung der Leistungseigenschaften im Brandfall von fischer Gleitelementen FASM-2, FASM-2 HDG, FASM-2 A4 sowie FASH-2 in Anlehnung an EAD 280016-00-0602. – MFPA Leipzig GmbH; 07.08.2025

4 Evaluation of the performance characteristics

4.1 Evaluation concept

The determination of the performance characteristics in case of fire for medium-duty fischer Sliding Elements FASM-2, FASM-2 HDG and FASM-2 A4 as well as heavy-duty fischer Sliding Elements FASH-2 is carried out using the procedure anchored in EAD 280016-00-0602 [N1], Annex F on the basis of experimental tests for a fire exposure of up to 120 minutes.
The corresponding results are applicable to all positions of the carriage with respect to the bracket. The attachment of the Sliding Elements to the substrate is not part of the present advisory opinion.

4.2 Load bearing capacity in case of fire

The characteristic tensile load-bearing capacities $F_{Rk,t}$ in case of fire summarized below are valid for Sliding Elements

- FASM-2 with threaded rods $\geq$ M10 of strength class $\geq$ 4.8,
- FASM-2 HDG with threaded rods $\geq$ M10, hot-dip galvanized of strength class $\geq$ 4.8,
- FASM-2 A4 with threaded rods $\geq$ M10, A4 of strength class $\geq$ 70,
- FASH-2 with threaded rods $\geq$ M12 of strength class $\geq$ 4.8,

installed according to the manufacturer's specifications.

		fire duration $[min]$			
		30	60	90	120
FASM-2	$F_{Rk,t}$ $[N]$	1691	853	573	433
FASM-2 HDG		897	740	688	662
FASM-2 A4		6130	2510	1304	701
FASH-2		2108	1213	915	766

Table 1: fischer Sliding Elements FASM-2, FASM-2 HDG, FASM-2 A4 and FASH-2: $F_{Rk,t}$ $[N]$

5 Signatures

The results of the tests refer exclusively to the items tested. This document does not replace a certificate of conformity or suitability according to national and European building codes.

Leipzig, 15.09.2025

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