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DATA SHEET

SFD

Forward Acting Rupture Disc

ELIMINATE DOWNTIME CONCERNS WITH ADVANCED CPL™ TECHNOLOGY

The SFD (Sublimated Forward Acting Rupture Disc) is a versatile rupture disc solution suitable for use with a wide range of process conditions. Manufactured using Contour Precision Lasering, this forward acting rupture disc eliminates common industry concerns associated with mechanically scored discs such as premature failure, corrosion on the score-line and pin-holing. Unexpected problems can cause costly downtime, REMBE®'s CPL™ Technology maximises the lifetime of the installed disc and ensures high-quality, accurate burst control even in the harshest of environments.

Made in Germany

Also available with integrated signalling

Your advantages

- Manufactured with unique **Contour Precision Lasering (CPL™) – Reduces downtime** caused by premature failure, corrosion or pin-holing.
- **Low profile design** – Excellent for relief valve isolation.
- Suitable for gas, liquid, two-phase flow and highly viscous media.
- Compatible with a wide range of process conditions.

Process medium	Suitability
Gas/Steam	✓✓
Liquid with gas cushion	✓✓
Liquid	✓✓
Two phase flow	✓✓
Hygienic applications	✓

✓✓ Recommended
✓ Suitable

You can find detailed information and contact details for enquiries relating to SFD at www.rembe.de.
Give us a call on: T +49 2961 7405-0 or contact us via email: info@rembe.de.

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Certification

Works Certificate	PED	ASME	KOSHA (South Korea)	CML (China)	TR CU (Russia)
	CE 0045				

Technical restrictions must be observed dependent on the certification.

Technical Data

Product Parameters

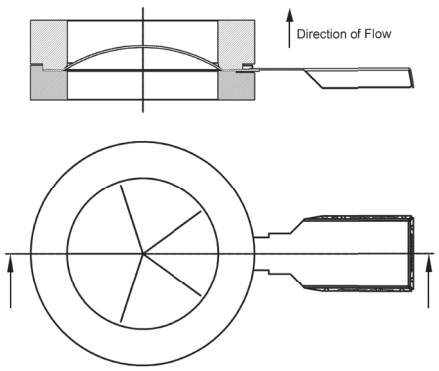
Feature	Characteristics	Variations
Holder compatibility	✓	IG-HL, IG-HP
Signalling available	✓	NIMU, BT-S, FOS, SB-(S), SBK
Safety valve isolation	✓	–
Pulsating/Cycling	✓	–
Vacuum resistance	✓	–
Back pressure resistance	✓	–
K_{RG} (ASME)	0.42	–
K_{RL} (ASME)	0.79	–
Torque independent burst pressure	–	–
Tolerance [%]	± 10 (±5; -0/+10; +0/-10 upon request)	–
Manufacturing design range [%]	0	–
Operating ratio [%]	80	–
Non-fragmenting design	✓	–
Temperature range PED [°C]	-80 bis 600*	–
Leakrate [mbar ls^{-1}]	10^{-4} bis 10^{-5}	–

Note: Vacuum resistance is size and pressure dependent and may require additional vacuum support.
All parameters to be confirmed by REMBE® dependent on customers application.

Temperature Range PED

Material	min. Temperature [°C]	max. Temperature [°C]
Inconel	-196	600*
Hastelloy	-196	400
Monel	-10	425
Nickel	-10	600
Stainless steel	-80	320
Titanium	-10	300
Tantalum	-10	250
PTFE/PFA	-79	230
FEP	-10	200

*Temperature limits for PED certification may vary.



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Burst Pressure Range (PED)

DN	NPS [in]	Vent area [cm²]	Vent area [in²]	Burst pressure min. [bar g]	Burst pressure max. [bar g]	Burst pressure min. [psi g]	Burst pressure max. [psi g]
20	**0.75**	2.7	0.42	16	431	232	6250
25	**1**	4.5	0.7	10	431	145	6250
32	**1.25**	8.5	1.3	6.5	431	94.3	6250
40	**1.5**	10	1.55	6.4	431	92.8	6250
50	**2**	22	3.4	3.2	431	46.4	6250
65	**2.5**	35	5.43	3.2	431	46.4	6250
80	**3**	50	7.75	3.2	431	46.4	6250
100	**4**	80	12	2	431	29	6250
125	**5**	120	19	2	431	29	6250
150	**6**	160	24.8	2	431	29	6250
200	**8**	280	43	2	431	29	6250
250	**10**	440	68	2	431	29	6250
300	**12**	650	100	2	431	29	6250
350	**14**	860	130	2	259	29	3760
400	**16**	1100	170	2	259	29	3760
450	**18**	1520	235.6	2	103	29	1490
500	**20**	1800	279	2	103	29	1490
550	**22**	2150	333.3	2	103	29	1490
600	**24**	2626	407	2	103	29	1490

Burst Pressure Range (ASME)

DN	NPS [in]	Vent area [cm²]	Vent area [in²]	Burst pressure min. [bar g]	Burst pressure max. [bar g]	Burst pressure min. [psi g]	Burst pressure max. [psi g]
20	**0.75**	3.1	0.48	16	431	232	6250
25	**1**	5.25	0.81	10	431	145	6250
32	**1.25**	9.5	1.47	6.5	431	94.3	6250
40	**1.5**	11.3	1.75	6.4	431	92.8	6250
50	**2**	21	3.26	3.2	431	46.4	6250
65	**2.5**	30.5	4.73	3.2	431	46.4	6250
80	**3**	47.6	7.38	3.2	431	46.4	6250
100	**4**	82	12.71	2	431	29	6250
125	**5**	129	20	2	431	29	6250
150	**6**	186.5	28.91	2	431	29	6250
200	**8**	322.5	49.99	2	431	29	6250
250	**10**	508	78.74	2	431	29	6250
300	**12**	729	113	2	431	29	6250
350	**14**	889	137.8	2	259	29	3760
400	**16**	1178	182.6	2	259	29	3760
450	**18**	1507	233.6	2	103	29	1490
500	**20**	1877	290.9	2	103	29	1490
550	**22**	2287	354.5	2	103	29	1490
600	**24**	2697	418	2	103	29	1490

Consulting. Engineering. Products. Service.

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