

Frame arrester for new fuels Energy Support

(MODEL:6020)



Hydrogen gas (group IIC) compatible type

- Hydrogen gas is classified as Explosion Group II C* and is highly flammable. Even a small amount of ignition source can cause an explosion, requiring appropriate safety measures.
*The highest group in the classification of explosive gases.
- Applicable to gases other than explosion group **IIC**, such as **IIA**, **II B3**, **II B**, etc.
- Threaded connection type is IIA-compliant

Prevents flame deviation from external ignition sources in both directions

- Prevents serious secondary disasters by extinguishing the spread of flames in the event of a fire inside or outside the plant.
- Targeted entrance/exit structure prevents flames from escaping in both directions.
- Can be installed and used either horizontally or vertically

Uses a crimpribbon type flame-extinguishing element

- The crimpribbon (corrugated structural component) consists of thin metal corrugated plates and flat plates of the same material alternately overlapped to form a gap, with specifications determined by the explosion group (gas used).
- Material is SUS316L only



Compliant with international standard ISO 16852

- Our crimpribbon frame arresters are tested with the test gas specified in ISO 16852.
- Performance verification testing is in accordance with ISO 16852:2016

New lineup of Rc1 and Rc1/2 threaded connection type

- Conducted "flame-extinguishing performance test" at in-house testing facility.
- Corresponds to Explosion Group IIA

New

■ Our crimpribbon flame arresters are tested with the test gases specified in ISO 16852 Flame arresters-Performance requirements, test methods and limits for use (see Table 1.).

■ Performance verification testing is performed in accordance with ISO 16852:2016

Table 1. Gas types and concentrations for deflagration and detonation tests

Explosion group	Gas type	Gas purity by volume %	Gas in air by volume %
II A1	Methane	≥ 98	8.4±0.2
II A	Propane	≥ 95	4.2±0.2
II B1	Ethylene	≥ 98	5.2±0.2
II B2			5.7±0.2
II B3			6.6±0.3
II B	Hydrogen	≥ 99	45.0±0.5
II C			28.5±2.0

■ Type designation

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Combustion type	Body type	Body Material	Connection standard	Body size	Connection bore	Crimribbon
DT detonation	C casting model	2 S45C	010 JIS10K-FF	01 15A	01 15A	Selected according to specifications
DF defragmentation		3 SCS13	011 JIS10K-RF	02 20A	02 20A	
		4 SCS14	150 JPI-150Lb	03 25A	03 25A	
		6 SCS16	300 JPI-300Lb	04 40A	04 40A	
				05 50A	05 50A	
				08 80A	08 80A	
			10 100A	10 100A		
			15 150A	15 150A		

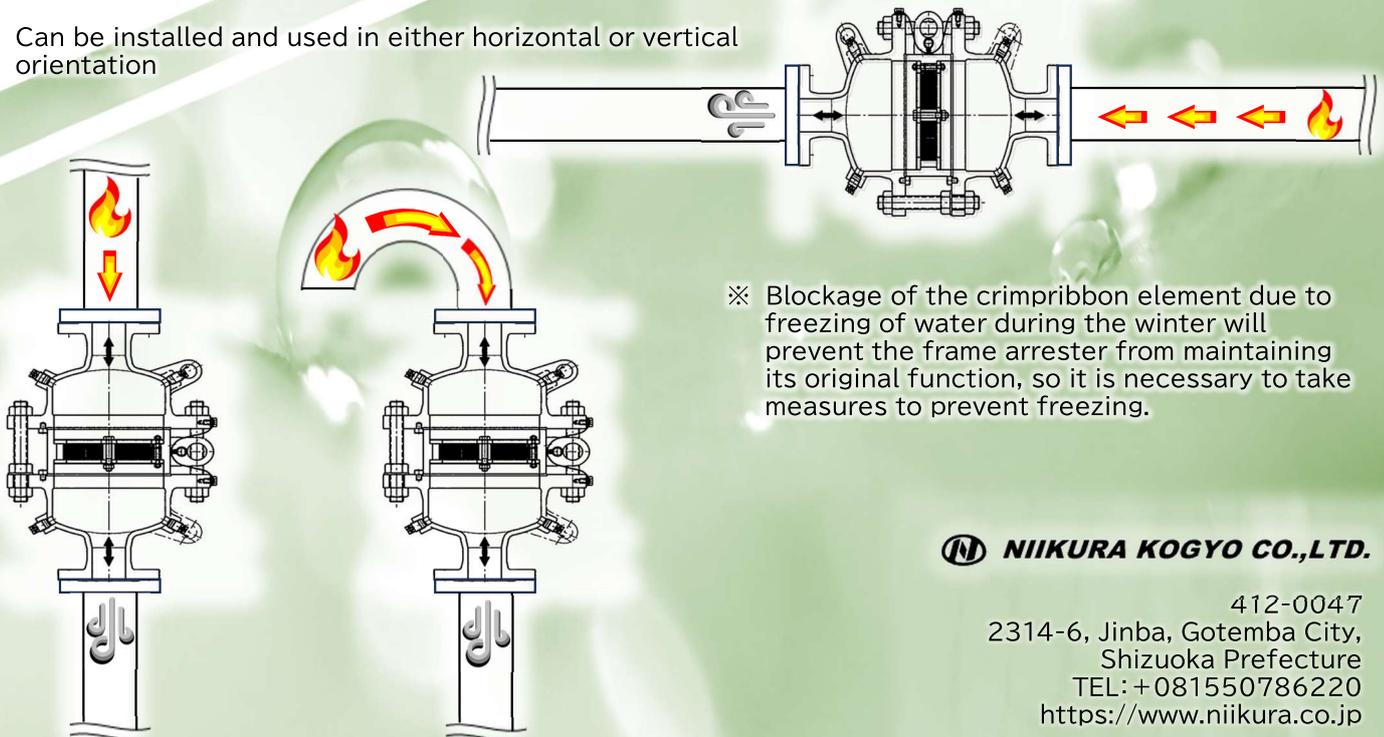
Combustion type	Body type	Body Material	Connection standard	Body shape	Body size	Connection	Crimribbon
DT detonation	P machining	B C3604B	T Taper female screw	1 screw-in	0 Equivalent to 10A	00 Rc(G)3/8	Selected according to specifications
DF defragmentation	L lost wax	3 SUS304	S Parallel Female Thread	2 bolt securing	1 Equivalent to 15A	11 Rc(G)1/2	
		4 SUS316			2 Equivalent to 20A	22 Rc(G)3/4	
		6 SUS316L			3 Equivalent to 25A	33 Rc(G)1	
					4 Equivalent to 40A	44 Rc(G)1-1/2	
					5 Equivalent to 50A	55 Rc(G)2	



■ Installation example

Targeted entrance/exit structure prevents flames from escaping in both directions

Can be installed and used in either horizontal or vertical orientation



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