

ATEX

Offshore And Subsea Products

Or Blok

Australia
Lifting & Hoisting Equipment

OFFSHORE AND SUBSEA PRODUCTS



Technical basis

In Directive 94/9/EC, equipment for areas with an explosion hazard is assigned to groups, categories and temperature classes. This is necessary as the requirements for equipment need not be the same for every application and for every hazard classification.

group I Equipment group I (mines, firedamp and combustible dusts)

Category M1	Category M2
Very high level of protection: Equipment must feature integrated explosion protection measures	High level of protection: Protection measures must ensure the required level of safety during normal operation also under arduous conditions and in particular heavy handling and under changing ambient conditions
The equipment must continue to operate in an explosive atmosphere even in the event of rare faults	It must be possible to switch off the equipment if an explosive atmosphere occurs

group II

Equipment group II (explosive atmospheres caused by mixtures of gas/air or dust/air, vapours or mists)

Category	Zone		Equipment safety	Explosive atmosphere
	G[Gas]	D[Dust]		
1	0	20	Equipment which ensures a very high level of safety. In the event of rare equipment faults.	Intended for use in areas in which explosive atmospheres caused by mixtures of air and gases, vapours or mists or by air/dust mixtures are present continuously, for long periods or frequently.
2	1	21	Equipment which ensures a high level of safety. If equipment faults are to be expected.	Intended for use in areas in which explosive atmospheres caused by mixtures of air and gases, vapours or mists or by air/dust mixtures are likely to occur occasionally.
3	2	22	Equipment which ensures a normal level of safety. For normal operation	Intended for use in areas in which explosive atmospheres caused by gases, vapours or mists or whirled up dust are unlikely to occur or, if they do occur, are likely to do so only infrequently and for a short period.

Temperature classes

The ignition temperature is the lowest temperature of a heated surface at which the gas/air or vapour/air mixture ignites. In other words, it represents the lowest temperature value at which a hot surface is capable of igniting the corresponding explosive atmosphere. Thus the highest surface temperature of any equipment must always be less than the ignition temperature of the gas/air or vapour/air mixture.

Temperature classes

Temperature classes	Permissible max. surface temperature of the equipment	Ignition temperature range of the mixtures
T1	450° C	>450° C
T2	300° C	>300° C ≤ 450° C
T3	200° C	>300° C ≤ 300° C
T4	135° C	>135° C ≤ 200° C
T5	100° C	>100° C ≤ 135° C
T6	85° C	> 85° C ≤ 100° C

Explosion groups

Equipment of group II, for appropriate use in explosive gas atmospheres may also be classified by the type of explosive area.

Explosion groups

Explosion group of the explosive atmosphere	Equipment with marking of the explosion group which may be used in these atmospheres	Maximum experimental safe gap
IIA	IIA, IIB, IIC	>0.9 mm
IIB	IIA, IIB	≤ 0.9 – ≥ 0.5 mm
IIC	IIC	<0.5 mm

(IEC60079-12)

(MIC)

This classification is based on the Maximum Experimental Safe Gap (MESG) and the Minimum Ignition Current (MIC) of the gas mixture (see IEC 60079-12) or the explosion groups can also be used for classification of the equipment based on their inflammability.

Marking key

Example	Ex	II	2	GD	c	IIC	T4	IIIC	T135°C
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Explosion proof identification	II	2	GD	c	IIC	T4	IIIC	T135°C
Equipment group	II=Surface industries							
Classify	1=Extremely high security 2=Extremely high Safety 3=Conventional safety							
Ex atmosphere	G=Gas D=Dust							
Protection type	p=Pressurized shell d=Fire proof shell e=Safe nA=No-spark i=Security of this certificate c=Design safety b=Ignition source monitoring k=Liquid immersion							
Gas Explosion Group								
Temperature grade								
Groups of dust	IIIA=Flammable fly floc IIIB=Non-conductive dust IIIC=Conductive dust							
Temperature grade								

IIA=Atmospheric environment containing propane or gas or steam of equal risk

IIB=Atmospheric environment containing ethylene or gas or steam of equal risk

IIC=Atmospheric environment containing acetylene, hydrogen or gas or steam of equal risk

T1=max.450°C
T2=max.300°C
T3=max.200°C
T4=max.135°C
T5=max.100°C
T6=max.85°C



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CCS

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SLST



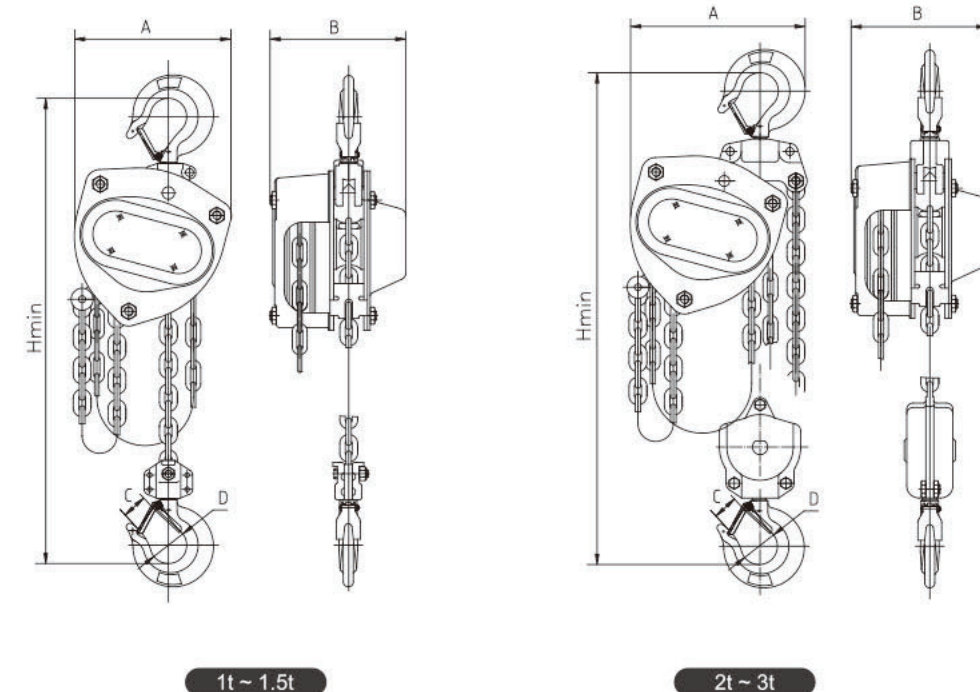
SLST

Stainless Steel Chain Hoist

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1. The main components are made of all stainless steel, which has strong anti-fouling, anti-corrosion and anti-wear properties.
2. The surface of the product is smooth and compact, not easy to be dusty and has good self-cleaning properties.
3. The hoist is easy to maintain, as it gets scratches or rust in daily use.
4. It is widely used in food, chemical, biological, marine and other places with corrosive factors and high cleanliness requirements.

Note: It is the responsibility of the user to tell in which corrosive environment the product is used.



Model		SL-1	SL-1.5	SL-2	SL-3
Capacity	t	1	1.5	2	3
Lifting height	m	2.5	2.5	2.5	3
Test load	KN	12.5	18.8	25	37.5
Pull on lever to lift full load	N	304	265	335	343
No. of load chain falls		1	1	1	1
Diameter of load chain	mm	7x21	9x27	7x21	9x27
Dimensions mm	A	172	196	192	230
	B	151	173	151	173
	C	26	29.5	34	39
	D	40	45	50	55
	Hmin	376	442	425	565
Net weight	kg	13	16.5	19.5	31.5
Extra wt. per m	mm	1.97	2.61	3.1	4.37