POWERTEX

GB Instruction for use

POWERTEX

Snatch Block with Shackle PSBS-S2

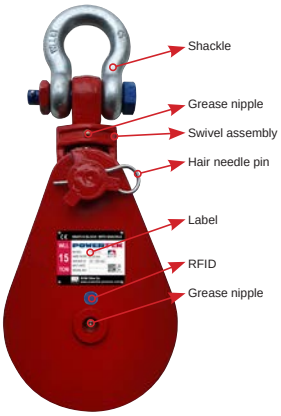
User Manual

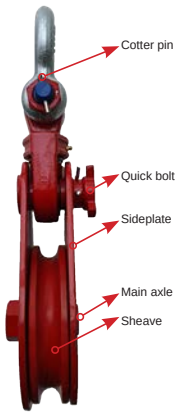
UMPSBSS220211214GB

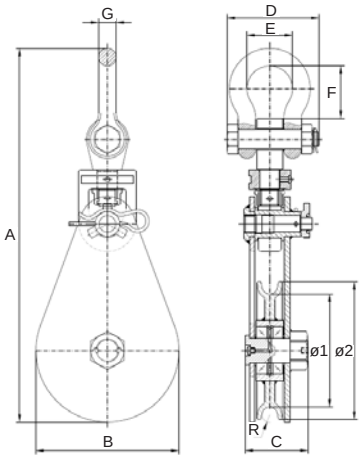
POWERTEX Snatch Block with Shackle PSBS-S2
Instruction for use (GB) (Original instructions)

Read through these user instructions carefully before using the Snatch block. Improper selection or operation may lead to hazardous situations!

Product description
The POWERTEX PSBS snatch block is a heavy duty snatch block that can be used for temporary or permanent lifting and pulling installations. The block can be used to redirect a wire rope or to increase the load that the wire rope winch arrangement would be able to handle in a straight loading without block. PSBS is not intended for use in environment where there is a potential risk of explosions or in aggressive atmospheres.







The POWERTEX snatch block with shackles is opened by removing the hair needle pin, rotating the quick pin bolt and then the side plate can swing away opening the snatch block so that the rope can be inserted.
Proof load testing: Each block has been tested 2xWLL at the factory prior delivering
Temperature range: -20°C up to +50°C
Safety factor: 4:1

Data

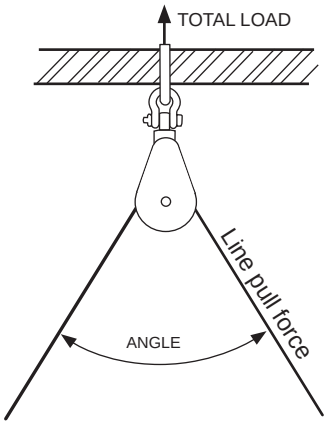
Model	WLL ton	Rope Ø mm	Sheave dia. mm	Sheave dia. inch	Bearing type	Weight (kg)
PSBS-S2/2T-75-10	2	7-10	75	3	BB	3,8
PSBS-S2/4T-115-13	4	10-13	115	4,5	BB	6,2
PSBS-S2/4T-150-19	4	16-19	150	6	BB	9,7
PSBS-S2/8T-200-22	8	19-22	200	8	RB	18,7
PSBS-S2/12T-250-26	12	23-26	250	10	RB	42,5
PSBS-S2/15T-200-24	15	22-24	200	8	RB	32,0
PSBS-S2/15T-300-26	15	23-26	300	12	RB	57,0
PSBS-S2/22T-350-32	22	28-32	350	14	RB	96

BB = Bronze bearing
RB = Roller bearing (conical)

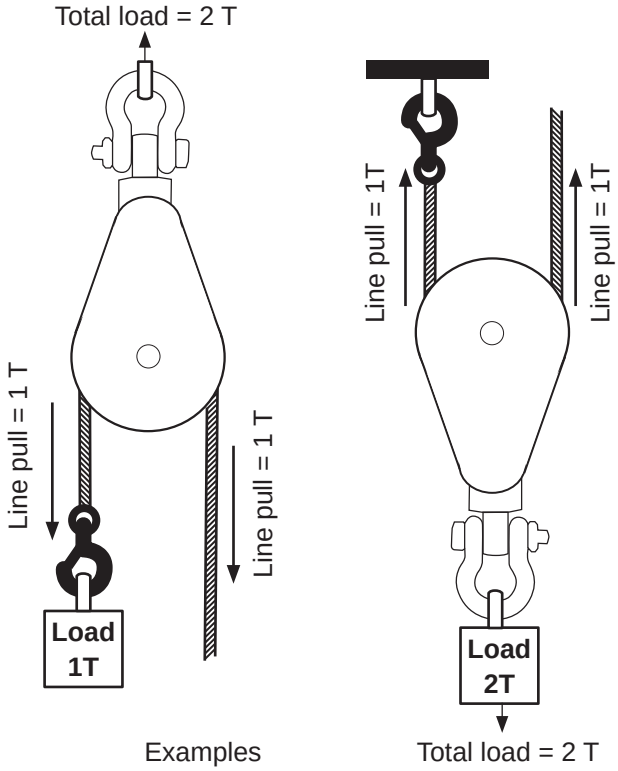
Dimensions

Model	A mm	B mm	C mm	D mm	E mm	F mm	G mm	R mm	ø1 mm	ø2 mm
PSBS-S2/2T-75-10	291	82	70	96	43	48,5	16	5,3-5,5	58	75
PSBS-S2/4T-115-13	363	120	70,5	115	58	72	22	6,8-7,15	90	115
PSBS-S2/4T-150-19	417	160	70,5	115	58	72	22	9,98-10,45	120	150
PSBS-S2/8T-200-22	527	210	94	133	68	83	25	11,55-12,1	165	200
PSBS-S2/12T-250-26	679	260	115	166	83	95	32	13,65-14,3	205	250
PSBS-S2/15T-200-24	665	210	102	193	99	124	38	12,60-13,2	160	200
PSBS-S2/15T-300-26	788	310	133	193	99	124	38	13,65-14,3	250	300
PSBS-S2/22T-350-32	950	365	140	228	126	157	45	16,8-17,6	295	350

Selection of snatch block
The WLL marked on the block is the maximum load that is allowed to be exerted on the block and it's connection. Be aware that the Total load on the block is a result of the rigging method and could be different from the weight being lifted or pulled by the hoisting or hauling system.
It is therefore necessary to determine the total load being imposed on each block in the system to properly determine the block capacity needed.
The following chart give the angle factor to be multiplied by the Line pull force to obtain the Total load on the block.
Total load = Line pull force x Angle factor



Angle	Angle factor
0°	2.00
10°	1.99
20°	1.97
30°	1.93
40°	1.87
45°	1.84
50°	1.81
60°	1.73
70°	1.64
80°	1.53
90°	1.41
100°	1.29
110°	1.15
120°	1.00
130°	0.84
135°	0.76
140°	0.68
150°	0.52
160°	0.35
170°	0.17
180°	0.00



Examples

Each snatch block is also marked with recommended wire rope size and the sheave outer diameter.
Note: The redirection motion of the wire rope over the sheave will bend the rope. Some ropes may be sensitive to bending and suspicious to fatigue. This needs to be taken into consideration, especially for continuously running operations. Always follow the rope manufacturers recommendations regarding min. sheave size.

Safety instructions
Operation and servicing must be left strictly to authorized, trained personnel.
Do not modify the product without written consent by the manufacturer.
Block having illegible product labels, missing parts or showing signs of damage or misfunction must be taken out of service immediately.
Do not use the block for lifting or transporting people.
Do not lift or transport loads over people and do not allow people to be in the danger zone.
Never exceed the load capacity of the product.
Use only with the block's recommended rope sizes.
Make sure the rope enters the block in the same plane as the sheave. The block is not designed for the rope entering the sheave from an angle.
Make sure the connection supporting the block provides adequate strength.
Never reach into moving parts.
Lifting should be made vertical to avoid the load to swing.
Never leave hanging load without supervision.
The product contains high strength parts and must not come into contact with free hydrogen, acids, alkalis, vapor or very aggressive cleaning products as they may become brittle and fracture.

Connection of the block
Remove the shackle in order to attach the block to the connection point.
The shackle is secured by a load bearing bolt, nut and a safety cotter pin.
Make sure to reassemble the shackle in the same way.

To insert the wire rope into the snatch block remove the safety hair needle pin and unscrew the quick bolt. The side plate can then be rotated around the main axle allowing the wire rope to be inserted onto the sheave. Make sure to reassemble the same way.

Storage
After each use check there are no damages to the block.
Clean the snatch block and store it in a dry, clean storage area.

Maintenance
Before every use check that the block is in good condition. Any block having illegible product labels, missing parts or showing signs of damage or misfunction must be taken out of service immediately.
Lubricate the main axle and the swivel every 14 day of intermittent use and more frequent if used in continuous use.

Thorough inspection

A thorough inspection should be conducted and registered at least every 12 month or more frequent if required by legislation or past experience, After cleaning the following should be checked:

Shackle:
There must be no signs of nicks, gauges, cracks, deformation, bending or stretching.
Wear must not exceed 10% of original dimensions.
The bolt and nut threads must be lock well into each other and the safety cotter pin shall be in good condition.

Swivel assembly:
There must be no signs of nicks, gauges, cracks, deformation, bending or stretching.
Wear must not exceed 10% of original dimensions.
When the snatch block is open the swivel assembly shall be locked in place and not be able to come loose unintentionally.

Quick bolt:
There must be no signs of cracks, deformation or bending.
The threads must be lock well into each other and the safety hair needle pin shall be in good condition. When the snatch block is open the quick bolt shall be locked in place and not be able to come loose unintentionally.

Sheave:
There must be no signs of nicks, gauges, cracks, deformation or bending.
Wear on the groove must not exceed 10% of original dimensions.
The sheave shall align between the side plates without misalignment or wobble.

Main axle/nut:
The main axle shall be positively locked in place and secured with safety screw blocking the thread. The nut must not be able to come loose unintentionally.

Bearings
Check there is no excessive play in the bearings.

Side plates
The side plates shall be straight and without deformations or cracks.

After successful inspection the block should be lubricated using High temperature bearing grease and the inspection results registered.

End of use/Disposal

Snatch blocks shall be sorted/scrapped as general steel scrap.

Your POWERTEX distributor will assist you with the disposal, if required.

Disclaimer
We reserve the right to modify product design, materials, specifications or instructions without prior notice and without obligation to others.

If the product is modified in any way, or if it is combined with a non-compatible product/component, we take no responsibility for the consequences in regard to the safety of the product.

EC Declaration of conformity
SCM Citra OY
Asessorinkatu 3-7
20780 Kaarina, Finland
www.powertex-products.com
hereby declares that the POWERTEX product as described above is in compliance with EC Machinery Directive 2006/42/EC.

UK Declaration of conformity
SCM Citra OY
Asessorinkatu 3-7
20780 Kaarina, Finland
www.powertex-products.com
hereby declares that the POWERTEX product as described above is in compliance with the Supply of Machinery (Safety) Regulations 2008.

CertMax+

The CertMax+ system is a unique leading edge certification management system which is ideal for managing a single asset or large equipment portfolio across multiple sites. Designed by the Lifting Solutions Group, to deliver optimum asset integrity, quality assurance and traceability, the system also improves safety and risk management levels.

Marking

The POWERTEX Snatch Block is equipped with a RFID (Radio-Frequency IDentification) tag, which is a small electronic device, that consist of a small chip and an antenna. It provides a unique identifier for the block.

The POWERTEX Snatch Blocks are **CE** marked in accordance with Machine Directive 2006/42/EC

User Manuals

You can always find the valid and updated User Manuals on the web.
The manual is updated continuously and valid only in the latest version.

NB! The English version is the Original instruction.

The manual is available as a download under the following link:
www.powertex-products.com/manuals

Product compliance and conformity

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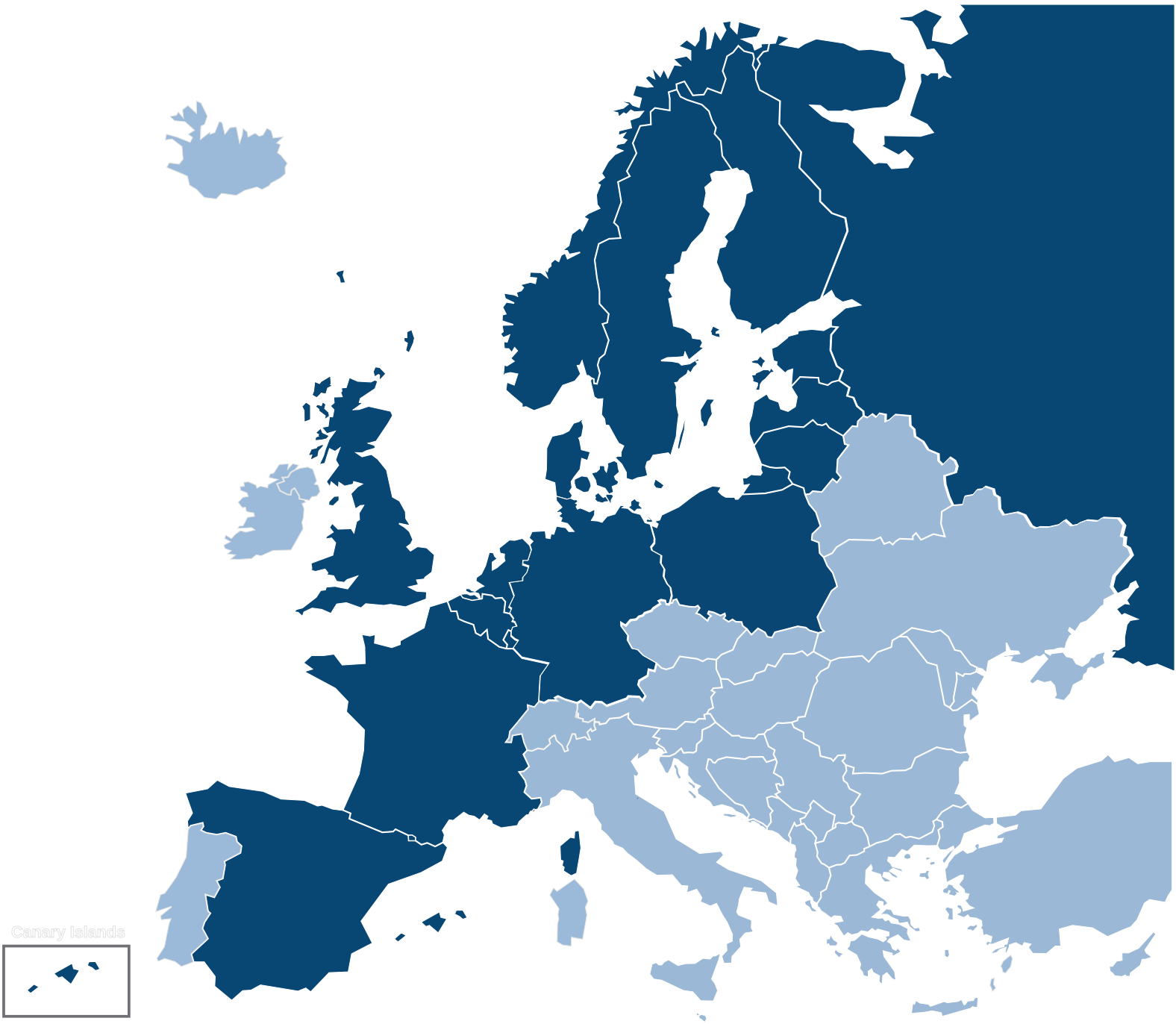

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