



Kirk Sandall Industrial Estate, Doncaster, South Yorkshire, DN3 1QR

+44 (0)1302 310 113
 enquiries@prosolveproducts.com
 www.prosolveproducts.com

ProSolve is trademark of S.T.L Trading Company Limited
 Reg in England No: 5230722
 VAT Reg No: 381 3533 58

TECHNICAL DATA SHEET

ProSolve Lifting Slings

DESCRIPTION

The Lifting Slings itemised below comply with the Machinery Directive 2006/42/EC:

BS EN 1492-1:2000+A1:2008 (Webslings)

BS EN 1492-2:2000+A1:2008 (Roundslings)

Product Code	Name	Sling Type	Strap Length (m)	Strap Width (mm)	Safe Working Limit (SWL) kg
BDV1641CP	ProSolve 2m x 30mm SWL 1000Kg Duplex Flat Sling	Duplex Flat	2	30	1000
BDV1642CP	ProSolve 3m x 30mm SWL 1000Kg Duplex Flat Sling	Duplex Flat	3	30	1000
BDV1643CP	ProSolve 4m x 30mm SWL 1000Kg Duplex Flat Sling	Duplex Flat	4	30	1000
BDV1644CP	ProSolve 6m x 30mm SWL 1000Kg Duplex Flat Sling	Duplex Flat	6	30	1000
BDV1645CP	ProSolve 2m x 60mm SWL 2000Kg Duplex Flat Sling	Duplex Flat	2	60	2000
BDV1646CP	ProSolve 3m x 60mm SWL 2000Kg Duplex Flat Sling	Duplex Flat	3	60	2000
BDV1647CP	ProSolve 4m x 60mm SWL 2000Kg Duplex Flat Sling	Duplex Flat	4	60	2000
BDV1648CP	ProSolve 6m x 60mm SWL 2000Kg Duplex Flat Sling	Duplex Flat	6	60	2000

BDV1649CP	ProSolve 2m x 90mm SWL 3000Kg Duplex Flat Sling	Duplex Flat	2	90	3000
BDV1650CP	ProSolve 3m x 90mm SWL 3000Kg Duplex Flat Sling	Duplex Flat	3	90	3000
BDV1651CP	ProSolve 4m x 90mm SWL 3000Kg Duplex Flat Sling	Duplex Flat	4	90	3000
BDV1652CP	ProSolve 6m x 90mm SWL 3000Kg Duplex Flat Sling	Duplex Flat	6	90	3000
BDV1653CP	ProSolve 2m x 120mm SWL 4000Kg Duplex Flat Sling	Duplex Flat	2	120	4000
BDV1654CP	ProSolve 3m x 120mm SWL 4000Kg Duplex Flat Sling	Duplex Flat	3	120	4000
BDV1655CP	ProSolve 4m x 120mm SWL 4000Kg Duplex Flat Sling	Duplex Flat	4	120	4000
BDV1656CP	ProSolve 6m x 120mm SWL 4000Kg Duplex Flat Sling	Duplex Flat	6	120	4000
BDV1657CP	ProSolve 2m x 150mm SWL 5000Kg Duplex Flat Sling	Duplex Flat	2	150	5000
BDV1658CP	ProSolve 3m x 150mm SWL 5000Kg Duplex Flat Sling	Duplex Flat	3	150	5000
BDV1659CP	ProSolve 4m x 150mm SWL 5000Kg Duplex Flat Sling	Duplex Flat	4	150	5000
BDV1660CP	ProSolve 6m x 150mm SWL 5000Kg Duplex Flat Sling	Duplex Flat	6	150	5000
BDV1661CP	ProSolve 0.5m x 45mm SWL 1000Kg Endless Round Sling	Endless Round	0.5	45	1000
BDV1662CP	ProSolve 1m x 45mm SWL 1000Kg Endless Round Sling	Endless Round	1	45	1000
BDV1663CP	ProSolve 1.5m x 45mm SWL 1000Kg Endless Round Sling	Endless Round	1.5	45	1000
BDV1664CP	ProSolve 2m x 45mm SWL 1000Kg Endless Round Sling	Endless Round	2	45	1000
BDV1665CP	ProSolve 2.5m x 45mm SWL 1000Kg Endless Round Sling	Endless Round	2.5	45	1000
BDV1666CP	ProSolve 3m x 45mm SWL 1000Kg Endless Round Sling	Endless Round	3	45	1000
BDV1667CP	ProSolve 0.5m x 50mm SWL 2000Kg Endless Round Sling	Endless Round	0.5	50	2000
BDV1668CP	ProSolve 1m x 50mm SWL 2000Kg Endless Round Sling	Endless Round	1	50	2000
BDV1669CP	ProSolve 1.5m x 50mm SWL 2000Kg Endless Round Sling	Endless Round	1.5	50	2000
BDV1670CP	ProSolve 2m x 50mm SWL 2000Kg Endless Round Sling	Endless Round	2	50	2000
BDV1671CP	ProSolve 2.5m x 50mm SWL 2000Kg Endless Round Sling	Endless Round	2.5	50	2000
BDV1672CP	ProSolve 3m x 50mm SWL 2000Kg Endless Round Sling	Endless Round	3	50	2000
BDV1673CP	ProSolve 0.5m x 60mm SWL 3000Kg Endless Round Sling	Endless Round	0.5	60	3000

BDV1674CP	ProSolve 1m x 60mm SWL 3000Kg Endless Round Sling	Endless Round	1	60	3000
BDV1675CP	ProSolve 1.5m x 60mm SWL 3000Kg Endless Round Sling	Endless Round	1.5	60	3000
BDV1676CP	ProSolve 2m x 60mm SWL 3000Kg Endless Round Sling	Endless Round	2	60	3000
BDV1677CP	ProSolve 2.5m x 60mm SWL 3000Kg Endless Round Sling	Endless Round	2.5	60	3000
BDV1678CP	ProSolve 3m x 60mm SWL 3000Kg Endless Round Sling	Endless Round	3	60	3000
BDV1679CP	ProSolve 0.5m x 70mm SWL 4000Kg Endless Round Sling	Endless Round	0.5	70	4000
BDV1680CP	ProSolve 1m x 70mm SWL 4000Kg Endless Round Sling	Endless Round	1	70	4000
BDV1681CP	ProSolve 1.5m x 70mm SWL 4000Kg Endless Round Sling	Endless Round	1.5	70	4000
BDV1682CP	ProSolve 2m x 70mm SWL 4000Kg Endless Round Sling	Endless Round	2	70	4000
BDV1683CP	ProSolve 2.5m x 70mm SWL 4000Kg Endless Round Sling	Endless Round	2.5	70	4000
BDV1684CP	ProSolve 3m x 70mm SWL 4000Kg Endless Round Sling	Endless Round	3	70	4000
BDV1685CP	ProSolve 0.5m x 80mm SWL 5000Kg Endless Round Sling	Endless Round	0.5	80	5000
BDV1686CP	ProSolve 1m x 80mm SWL 5000Kg Endless Round Sling	Endless Round	1	80	5000
BDV1687CP	ProSolve 1.5m x 80mm SWL 5000Kg Endless Round Sling	Endless Round	1.5	80	5000
BDV1688CP	ProSolve 2m x 80mm SWL 5000Kg Endless Round Sling	Endless Round	2	80	5000
BDV1689CP	ProSolve 2.5m x 80mm SWL 5000Kg Endless Round Sling	Endless Round	2.5	80	5000
BDV1690CP	ProSolve 3m x 80mm SWL 5000Kg Endless Round Sling	Endless Round	3	80	5000
BDV1692CP	ProSolve 3m x 60mm SWL 1000Kg Simplex Flat Sling	Simplex Flat	3	60	1000
BDV1695CP	ProSolve 3m x 120mm SWL 2000Kg Simplex Flat Sling	Simplex Flat	3	120	2000
BDV1696CP	ProSolve 4m x 120mm SWL 2000Kg Simplex Flat Sling	Simplex Flat	4	120	2000
BDV1697CP	ProSolve 2m x 180mm SWL 3000Kg Simplex Flat Sling	Simplex Flat	2	180	3000
BDV1698CP	ProSolve 3m x 180mm SWL 3000Kg Simplex Flat Sling	Simplex Flat	3	180	3000
BDV1699CP	ProSolve 4m x 180mm SWL 3000Kg Simplex Flat Sling	Simplex Flat	4	180	3000
BDV1720CP	ProSolve 0.75m x 80mm SWL 5000Kg Endless Round Sling	Endless Round	0.75	80	5000

Rated capacities for safe use of web slings and round slings						
		Straight Pull	Chock Hitch	Parallel	90°	Two leg sling max 90°
Working Load Limit (WLL) = Sling rating x Mode factor (all loads are in tonnes)	Duplex/Simple x					
	Web Slings					
Factor of safety for all Web slings & Round slings is 7:1	Round Slings and Endless Web Slings					
	Round Slings and Endless Web Slings					
Colour coding only applicable within the EU for Industrial Use and does not apply To ships equipment!	Mode factor (x)	1	0.8	2.0	1.4	1.4
	1 Tonne	1000kg	800kg	2000kg	1400kg	1400kg
	2 Tonne	2000kg	1600kg	4000kg	2800kg	2800kg
	3 Tonne	3000kg	2400kg	6000kg	4200kg	4200kg
	4 Tonne	4000kg	3200kg	8000kg	5600kg	5600kg
	5 Tonne	5000kg	4000kg	10000kg	7000kg	7000kg

Effect of Angle on Loading Capacities

When slings are used at an angle (i.e., two slings, or one sling in a basket hitch, attached to only one crane hook), sling capacity is reduced. How much it is reduced depends on the degree of the angle. You can determine the suitability of a sling if you know the angle between the sling leg and the horizontal using the table below to multiply the slings rating by the factor for the appropriate angle.

A sling capable of lifting 1000Kg in a 90° vertical basket hitch can only lift 866Kg at a 60° angle, 707Kg at a 45° angle and 500Kg at a 30 angle.

Angle Degrees	Factor	Angle Degrees	Factor	Angle Degrees	Factor
90	1.00	65	.906	40	.643
85	.996	60	.866	35	.574
80	.985	55	.619	30	.500
75	.966	50	.766	25	.423
70	.940	45	.707	20	.342

Safe Working Practice for Web Slings

Failure to read, understand and follow the use and inspection instructions may result in severe personal injury or death. It is your own personal duty to always wear appropriate P.P.E. (Personal Protective Equipment)

Always inspect new slings to make sure they are as ordered and have not been damaged in transit.

INSPECTION

Remove Web slings from service if any of the following are visible:

- A rated capacity tag is missing or illegible.
- Exposure of red core warning yarn (for those slings that can contain warning yarn).
- Broken or worn threads in the stitching.
- Knots in any part of the sling.
- Any evidence of heat or chemical damage, including melting or charring.
- Any other visible damage which causes doubt as to the serviceability of the sling.

OPERATING PRACTICE

- Always protect web slings from being cut or damaged by corners, edges or protrusions.
- Slings shall not be loaded in excess of the rated capacity. Consideration must be given to the effect of angles.
- Select slings having suitable characteristics for the type of load, hitch and environment.
- Slings must not be shortened by twisting, knotting other unapproved methods.
- Slings must not be lengthened by knotting, choking or basketing slings together, or by any other unapproved method.
- Suitable fittings must interconnect slings.
- Slings shall be hitched in a manner providing control of the load.
- Web slings shall always be protected from being cut or damaged by corners, edges, protrusions or abrasive surfaces by using wear pads where necessary.

- Keep all parts or the human body from between the sling and the load, and from between the sling and the lifting hook.
- Stand clear of the suspended load.
- Do not ride on the sling or load suspended on the sling.
- Avoid shock loading as this causes stress damage.
- Slings must not be pulled from under a load resting on them, use blocking to facilitate sling removal.
- Avoid twisting and kinking slings during operation.
- Slings used with a hook should be centred in the base of the hook to prevent point loading on the hook.
- Prior to lifting, make sure that all lifting gear will not snag or bump other objects causing the possibility of damage to equipment, load or personnel.
- If using a basket hitch, select the proper slings to balance the load and prevent slippage causing the load to fall from the sling.
- If using a choker hitch, the slings must be long enough to choke onto the eye or body of the sling, not onto other fittings.
- Slings should be stored away safely where they will not be subject to mechanical damage, moisture, extreme heat or ultraviolet light.
- Do not expose slings to chemicals that are not compatible with the materials used in all of the sling.
- Do not use nylon and polyester slings in heat in excess of 200°F.
- Exposure to sunlight or ultraviolet light will degrade the strength of synthetic web.
- Slings should not be used at angles of less than 30 degrees from the horizontal.
- Slings should not be dragged on the floor or over rough surfaces.
- When lifting points are below the centre of gravity, loads tend to be unstable. The correct use of rigging must
- restrict load rotation and avoid tipping and loss of load control.
- For lifts of non-symmetrical loads using multiple leg slings, an analysis should be performed by a qualified person to prevent overloading of any leg.

Refer to other regulations, codes and standards for additional information and safe operating practices.

See oSHA CFR 1910.184 Regulations, ANSI/ASME B30.9, and the Web Sling and Tie Down Association Standards.

IMPORTANT NOTICE

All statements, technical information and recommendations are based on tests we believe to be reliable as at the date of hereof, but the accuracy or completeness thereof is not guaranteed. Please ensure before using the product that it is suitable for your intended use. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, other than for fraudulent misrepresentation, ProSolve

expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

BEFORE USE, CONSULT THE SAFETY DATA SHEET OF THE PRODUCT.