



Pic. 8: Loading directions

Method of lifting											
No. of strands	1	2	1	2	2	2	2	3 / 4*	3 / 4*	3 / 4*	
Inclination angle <math>\beta</math>	0°-7°	0°-7°	90°	90°	0-45°	>45-60°	Un-symm.	0-45°	>45-60°	Un-symm.	
Factor			1	2	1.4	1	1	2.1	1.5	1	
Loading directions (Pic. 8)	Z	Z	X (Y)	X (Y)	X (Y)	X (Y)	X (Y)	X (Y)	X (Y)	X (Y)	
Type	thread	For the max. total load weight >G< in metric tons, tightened and adjusted to force direction									
VWBG 6(7.5)	M33	15	30	6 (7.5)	12 (15)	8.4 (10.5)	6 (7.5)	6 (7.5)	12.6 (15.75)	9 (11.25)	6 (7.5)
VWBG 8(10)	M36 1 1/2"	15	30	8 (10)	16 (20)	11.2 (14)	8 (10)	8 (10)	17 (21.2)	11.8 (15)	8 (10)
VWBG 12(13)	M42 1 3/4" - 1 7/8"	17	34	12 (13)	24 (26)	16.8 (18.2)	12 (13)	12 (13)	25.2 (27.3)	18 (19.5)	12 (13)
VWBG 12(15)	M45	18	36	12 (15)	24 (30)	16.8 (21.2)	12 (15)	12 (15)	25.2 (31.5)	18 (22.4)	12 (15)
VWBG 13(16)	M48 2"	18	36	13 (16)	26 (32)	18.2 (22.4)	13 (16)	13 (16)	27.3 (33.6)	19.5 (24)	13 (16)
VWBG 14(20)	M52	25	50	14 (20)	28 (40)	19.6 (28)	14 (20)	14 (20)	29.4 (42)	21 (30)	14 (20)
VWBG 16(22)	M56 2 1/4" - 2 1/2"	28	56	16 (22)	32 (44)	22.4 (30.8)	16 (22)	16 (22)	33.6 (46.2)	24 (33)	16 (22)
VWBG 16(25)	M64 2 3/4" - 3"	28	56	16 (25)	32 (50)	22.4 (35)	16 (25)	16 (25)	33.6 (52.5)	24 (37.5)	16 (25)
VWBG 31.5(40)	M72 3"	50	100	31.5 (40)	63 (80)	45 (56)	31.5 (40)	31.5 (40)	67 (84)	47.5 (60)	31.5 (40)
VWBG 35(48)	M80 3 1/2"	50	100	35 (48)	70 (96)	49 (67.2)	35 (48)	35 (48)	73.5 (100.8)	52.5 (72)	35 (48)
VWBG 40(50)	M90 4" - 5"	50	100	40 (50)	80 (100)	56 (70)	40 (50)	40 (50)	84 (105)	60 (75)	40 (50)
At a lift with one strand and two parallel strands where the inclination angles are at the max. $\pm 7^\circ$ , the lifting method can be assumed as a vertical lift.					When lifting with two, three or four leg lifting means, inclination angles of less than $15^\circ$ shall be avoided, if possible (Risk of instability).						

Table 3: WLL overview



**HINT**

\*\*Values in brackets () from Table 3 are only permissible for manual alignment (cf. Pic. 8 - Part Y) during the lifting process!

\* Stated WLL for 3-4 strands is only valid when it is guaranteed that the load is distributed equal to more than 2 strands. Otherwise the 2 strand values must be taken (see DGUV 109-017).



**ATTENTION**

Please mind at the use especially that the method of lifting does not get changed.