

05

WIRE ROPE LIFTING SLINGS



Suitable for lifting heavier weights with round shapes





Wire rope lifting slings have to be used only for weights which allows safe fastening according to weight shape and firmness at work environment temperature

- Wire rope lifting sling is made from wire rope. We manufacture two types of wire rope slings. Wire rope slings on both ends ended with eyes [with or without end fittings]. Mechanical spliced [aluminium sleeve], hand spliced [tucked] or fastened with clips. Other type is endless wire rope sling.



ČSN 02 4322

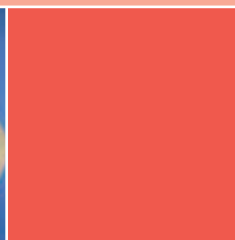
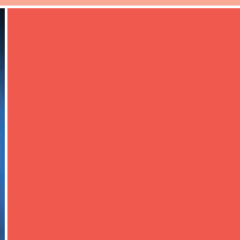


ČSN 02 4324

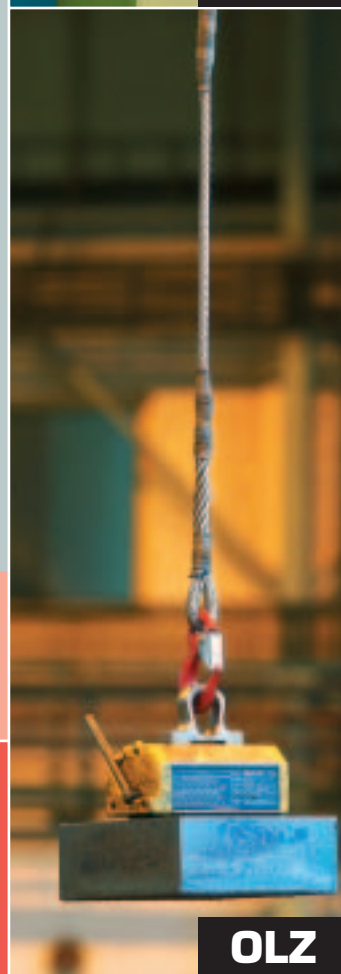
- Wire rope slings are made from nonlubricated wire ropes with nonlubricated nonmetallic or metallic core, without surface finishment or galvanized. Wire rope slings are preferentially made from wire ropes according to ČSN 02 4322 and ČSN 02 4324 with counter-clockwise right winding, made from wires with nominal tenacity 1570 MPa and 1770 MPa
- Multiple-leg wire rope slings consist of two, three or four single-leg wire rope slings which are on its upper end connected to master link. Eyes with thimbles are recommended if end fittings are present
- Wire rope lifting slings have to be used only for weight which allows safe fastening according to its shape and firmness at work environment temperature. Wire rope slings are suitable for lifting heavier weights with round shape. Should not be bend over edges with radius smaller than 2.5 times wire rope diameter. In any case bend diameter must be larger than wire rope diameter. Wire rope eyes must be stressed only to tension. It's recommended to lift weight at least with two-leg wire rope sling to avoid wire rope untwisting. Load shall be equally distributed among sling legs. Center of gravity shall be under lifting axis before fastening sling to weight.
- Use of wire rope slings in choke is not recommended because of swing possibility while choke loop tightening and increased stress to wire rope deformation - nevertheless it is allowed. Working Load Limit is reduced to 80% if used with thimbles or if used for one-shot lifting.

• **Protective means:**

- Considerably prolong working life of textile slings
- Polyurethane sleeves and corners as protection against sharp edges



OLL



OLZ

OLL...

WIRE ROPE LIFTING SLINGS MECHANICAL SPLICED WITH SWAGGED ALUMINIUM SLEEVES

Standard device for general lifting applications

use: suitable for lifting round shape weights and packs of material [pipes...]

Wire rope lifting slings are manufactured according to **CSN 02 4481**. Minimal allowed rope length between swagged sleeves is 10 times nominal rope diameter. Wire rope slings with swagged aluminum sleeves must not be used in environments with temperature exceeding **60°C**.

standard production:

- rope diameter from 6.3 mm to 40 mm
- nominal length from 1 m to 20 m graded by 0.5 m

- without thimbles

wire rope:

- raw [black]
- galvanized



111 [eye - hook with latch]	115 [hook - hook with latches]	121 [eye - eye]	
211 [eye - 2 hook with latch]	221 [eye - 2 eye]	261 [eye - endless loop]	
311 [eye - 3 hook with latch]	321 [eye - 3 eye]		
411 [eye - 4 hook with latch]	421 [eye - 4 eye]	461 [eye - 2 endless loops]	

also available with thimbles and hooks without latch

Our reference: **OLL[C/P]999888777**

explanation:

- OLL** – wire rope lifting sling, mechanically spliced, without thimbles
[C/P] – **C** – raw wire rope
– **P** – galvanized wire rope
999 – rope diameter [99,9 mm]
888 – sling construction [see previous page]
777 – nominal length L_1 [dm = 0,1 m]

Ordering example:

OLLP100411020 1 pc

Above means:

we order 1 pc of wire rope lifting sling, mechanically spliced, without thimbles, galvanized, rope diameter 10 mm, construction 411 [eye - 4 hook], nominal length 2 m

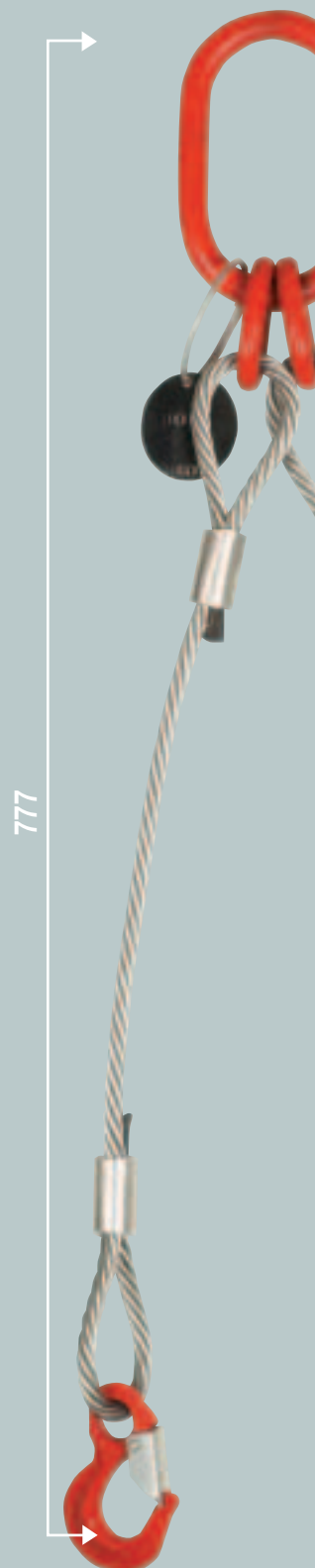
Technical data: **OLL**

data for wire with nominal strength 1570 MPa	Maximal load capacities - straight lift							
	one-leg	two-leg		three-leg		four-leg		
								
angle β	0°	7° - 45°	46° - 60°	7° - 45°	46° - 60°	7° - 45°	46° - 60°	
Rope diameter [mm]	Load capacity [t]							
6,30	0,30	0,40	0,30	0,60	0,40	0,75	0,50	
8,00	0,50	0,70	0,50	1,00	0,70	1,20	0,80	
9,00	0,60	0,80	0,60	1,20	0,90	1,50	1,00	
10,00	0,80	1,10	0,80	1,70	1,20	2,00	1,40	
11,20	1,00	1,40	1,00	2,10	1,50	2,50	1,80	
12,50	1,30	1,80	1,30	2,70	1,90	3,20	2,30	
14,00	1,60	2,20	1,60	3,30	2,40	4,00	2,80	
16,00	2,10	2,90	2,10	4,40	3,10	5,20	3,70	
18,00	2,70	3,80	2,70	5,60	4,00	6,70	4,80	
20,00	3,40	4,70	3,40	7,10	5,10	8,50	6,10	
22,40	4,30	6,00	4,30	9,00	6,40	10,70	7,70	
25,00	5,40	7,50	5,40	11,30	8,10	13,50	9,70	
28,00	6,80	9,50	6,80	14,30	10,20	17,00	12,20	
30,00	7,50	10,50	7,50	15,70	11,20	18,70	13,40	
31,50	8,50	11,90	8,50	17,80	12,70	21,20	15,20	
35,50	11,20	15,70	11,20	23,50	16,80	28,00	19,50	
40,00	14,10	19,70	14,10	29,60	21,10	35,20	25,30	

Load capacities are reduced to 80% when lifting in choke. Load capacities for multiple leg slings are correct only when load is equally distributed among sling legs.



You can considerably increase working life of wire rope lifting slings by using protective means. Our product range include highly resistant polyurethane sleeves and corners for protection against sharp edges [see protective means chapter].



OLZ...

WIRE ROPE LIFTING SLINGS HAND SPLICED

Standard device for general lifting applications

use: suitable for lifting round shape weights and packs of material [pipes...]

Wire rope lifting slings are manufactured according to **CSN 02 4481**. Minimal allowed rope length between inner ends of splices is 10 times nominal rope diameter. Hand spliced [tucked] wire rope slings must not be used in environments with temperature **exceeding 200°C**.

standard production:

- rope diameter from 6.3 mm to 40 mm
- nominal length from 1 m to 20 m
- graded by 0.5 m

- without thimbles

wire rope:

- raw [black]
- galvanized



111
[eye - hook with latch]



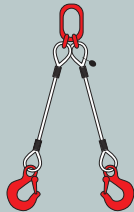
115
[hook - hook with latch]



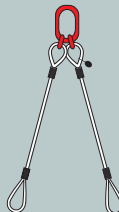
121
[eye - eye]



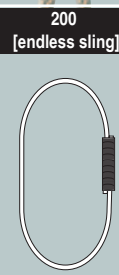
211
[eye - 2 hook with latch]



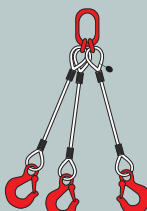
221
[eye - 2 eye]



261
[eye - endless loop]



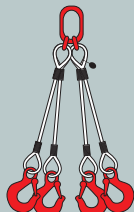
311
[eye - 3 hook with latch]



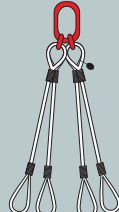
321
[eye - 3 eye]



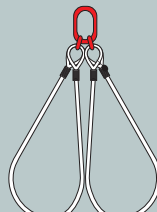
411
[eye - 4 hook with latch]



421
[eye - 4 eye]



461
[eye - 2 endless loop]



also available with thimbles and hooks without latches

Our reference: **OLZ[C/P]999888777**

Explanation:

- OLZ** – wire rope lifting sling, hand splined [tucked], without thimbles
[C/P] – **C** – raw wire rope
– **P** – galvanized wire rope
999 – rope diameter [99,9 mm]
888 – sling construction [see previous page]
777 – nominal length L_1 [dm = 0,1 m]

Ordering example:

OLZP100411020 1 pc

Above means:

we order 1 pc of wire rope lifting sling, hand splined [tucked], without thimbles, galvanized, rope diameter 10 mm, construction 411 [eye - 4 hook], nominal length 2 m

Technical data: **OLZ**

data for wire with nominal strength 1570 MPa	Maximal load capacities - straight lift						
	one-leg 	two-leg 		three-leg 		four-leg 	
angle β	0°	7° - 45°	46° - 60°	7° - 45°	46° - 60°	7° - 45°	46° - 60°
Rope diameter [mm]	Load capacity [t]						
3,15	0,08	0,11	0,08	0,17	0,12	0,20	0,14
4,00	0,13	0,18	0,13	0,27	0,19	0,32	0,23
5,00	0,20	0,28	0,20	0,40	0,30	0,50	0,35
6,30	0,30	0,40	0,30	0,60	0,40	0,75	0,50
8,00	0,50	0,70	0,50	1,00	0,70	1,20	0,80
9,00	0,60	0,80	0,60	1,20	0,90	1,50	1,00
10,00	0,80	1,10	0,80	1,70	1,20	2,00	1,40
11,20	1,00	1,40	1,00	2,10	1,50	2,50	1,80
12,50	1,30	1,80	1,30	2,70	1,90	3,20	2,30
14,00	1,60	2,20	1,60	3,30	2,40	4,00	2,80
16,00	2,10	2,90	2,10	4,40	3,10	5,20	3,70
18,00	2,70	3,80	2,70	5,60	4,00	6,70	4,80
20,00	3,40	4,70	3,40	7,10	5,10	8,50	6,10
22,40	4,30	6,00	4,30	9,00	6,40	10,70	7,70
25,00	5,40	7,50	5,40	11,30	8,10	13,50	9,70
28,00	6,80	9,50	6,80	14,30	10,20	17,00	12,20
30,00	7,50	10,50	7,50	15,70	11,20	18,70	13,40
31,50	8,50	11,90	8,50	17,80	12,70	21,20	15,20
35,50	11,20	15,70	11,20	23,50	16,80	28,00	19,50
40,00	14,10	19,70	14,10	29,60	21,10	35,20	25,30
45,00	17,50	24,50	17,50	36,70	26,20	43,70	31,40
50,00	21,90	30,60	21,90	46,00	32,80	54,70	39,40
56,00	27,30	38,20	27,30	57,30	40,90	68,20	49,00
63,00	34,30	48,00	34,30	72,00	51,40	85,70	61,70

Load capacities are reduced to 80% when lifting in choke. Load capacities for multiple leg slings are correct only when load is equally distributed among sling legs.



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