



The Nemag Rope Pear Socket

The rope pear socket is an end connection especially designed by Nemag for steel wire rope. Using the Nemag rope pear socket an unbreakable connection can be made, and the rope can be coupled to other ropes and chains in the best possible way; and even more so in combination with the Nemag quick release link.

The Nemag rope pear socket is cast from high-grade austenitic manganese steel and generally lasts longer than the steel wire rope itself. Austenitic manganese steel combines a great toughness and a high resistance to wear.

Temperatures


Rope pear sockets can be fitted to the rope using a metallic casting mass or a 2-component casting mass. Applying metallic casting on a too high temperature can cause structural decomposition from austenitic to martensite. Martensite is a lot less flexible and as a result more brittle and not as resistant to the shocks rope pear sockets are exposed to. Decomposition from austenitic to martensite happens when rope pear sockets are heated to temperatures above approx. 300 degrees Celsius and to a greater extent at even higher temperatures. That is why it is not permitted to apply casting alloys with a melting point above 245 degrees Celsius and a casting temperature above 320 to 350 degrees Celsius. This has to be taken into account.

Make sure the temperature never rises above 350 degrees Celsius and check this using thermochrome or temperature indicators of a well-known and approved make or brand. The shape and socketing technology of the rope pear socket reduce the bending of the wire rope to a minimum. The rope pear socket is often used in combination with the quick release link, but also widely applied in other coupling combinations.

User manual

Erroneous use can result in austenitic being decomposed into martensite. The specific manual has to be consulted when casting the wire rope into the rope pear socket (the user manual can also be downloaded on www.nemag.com) and in addition to that the instructions of the manufacturers of steel wire ropes and/or casting products also have to be complied with. For further information you can also refer to the last page of this brochure.

Advantages of the Nemag Rope Pear Socket:

- *The Nemag rope pear socket has been designed to, in combination with the Nemag quick release link, smoothly pass over cable sheaves designed for that purpose.*
 - *The life span of the Nemag rope pear socket generally surpasses that of the steel wire rope.*
 - *The rope pear socket can be fitted by casting with a 2-component casting mass without the need for outside assistance, and ensures an unbreakable connection.*
 - *Our range of rope pear sockets is suited to any type of steel wire rope.*
 - *There are rope pear sockets available for both standard steel wire ropes and special compacted steel wire ropes (the S-series rope pear sockets).*
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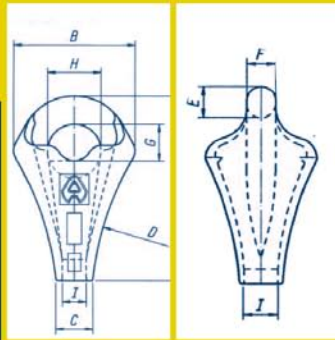
The Rope Pear Socket for compacted steel wire rope (the S-series)

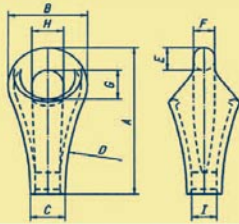
The new, additional series of rope pear sockets of the "S-type" was designed for special steel wire ropes. Examples of this are the 8-strand steel wire ropes (for example CASAR Turboplast or similar makes). In comparison with standard steel wire ropes in 6x36WS version, these special wire ropes combine a smaller diameter with a greater breaking load. The Nemaq series of rope pear sockets designed especially for this type of steel wire rope has been developed in such a way that the breaking load of the rope pear socket is geared to these steel wire ropes. The safety factor of the rope pear socket is therefore in line with that of this type of steel wire rope. This means that the new rope pear socket offers additional safety in comparison to the existing range of rope pear sockets. The geometry of this new range of rope pear sockets has also been adjusted to create an even more favourable picture with regard to wire deflection behind the rope pear socket. This decreases steel wire rope fatigue and benefits the life span of the steel wire rope.



The most important advantages

- *especially designed for compacted steel wire rope*
- *increased safety*
- *less steel wire rope fatigue as a result of a better deflection angle of the steel wire rope upon passing over the cable sheave.*
- *longer life span of the steel wire rope at the casting place*
- *optimal, new design of the rope pear socket for improved sheave passage*



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Technical specifications of Nemag Rope Pear Sockets

Pear size	Wire rope diam.	Work.load	Break.load	Size in mm									Weight
				A	B	C	D	E	F	G	H	I	
1	10-11	1500	10000	81	48	22	195	12	11,5	20	24	12	0,4
2	12-13	2000	14000	94	56	25	195	15,5	13,5	22	25	14	0,5
3	14-15	2500	17500	108	64	28	220	17,5	15,5	24	29	16	0,6
4	16-17	3000	22500	122	70	31	220	19,5	17,5	26	31	18	0,9
5	18-19	4500	27500	135	84	33	245	21	19	30	42	20	1,3
6	20-21	5000	35000	152	84	36	310	23	21	33	38	23	1,7
7	22-24	7000	42500	166	100	40	310	26	23	37	48	26	2,3
8	25-27	8000	52500	186	100	43	350	28	25	39	44	29	3,2
9	28-30	11000	70000	202	120	45	350	31	27	40	58	32	4,1
10	31-33	13000	85000	222	120	52	445	32	28,5	45	56	35	5,2
11	34-36	15000	95000	239	142	55	445	36	31,5	50	70	40	6,4
12	37-39	17000	110000	264	142	60	495	39	34,5	51	64	41	7,9
13	40-42	21000	125000	285	166	63	555	43	36,5	59	80	44	9,5
14	43-45	26000	155000	312	166	68	595	47	40	62	72	48	11,2
15	46-48	30000	180000	337	170	75	595	51	44	66	68	53	13
17	52-56	42500	240000	400	220	84	880	60	54	75	90	59	23

Dimension tables are subject to change.