

# Lifting, Guiding and Handling



- Blocks
- Sheaves
- Subsea lifting and handling

- Hooks
- Swivels
- Guiding Anchor

# Safety and Quality

Further to Imenco's long term experience with lifting equipment, Møllerodden was acquired early 2004, expanding the scope of products and experience.

## SCOPE OF PRODUCTS

- Over and under water
- Standard and special design
- Engineering and calculation

**MØLLERODDEN**



### BLOCKS

The Møllerodden blocks have more than 40 years history. Safety and quality has been prioritized, and the blocks have the highest ranking in the industry. Size range up to 1,000 ton.



### SWIVELS

Swivels for crane, towing and subsea operation.



### HOOKS

Crane and subsea hooks. Up to 1,000 ton.



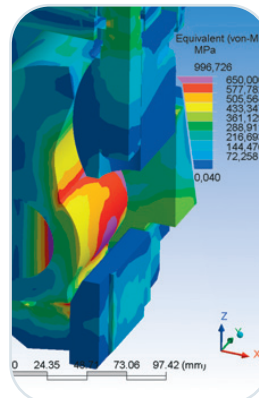
### SCHEAVES

Standard and special sheaves for rope, wire and chain. Size range up to 80"



### GUIDE WIRE ANCHOR

Any equipment relating to subsea guide wire operating.



### ENGINEERING

Design of special lifting and handling equipment including deck handling/skidding/seafastening arrangements, deployment and subsea guiding equipment. Strength analysis and verification of cranes and lifting equipment using Straad structural analysis/ and Ansys FEM analysis software.

NS-EN ISO 9001:2000

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**imenco**  
smart solutions

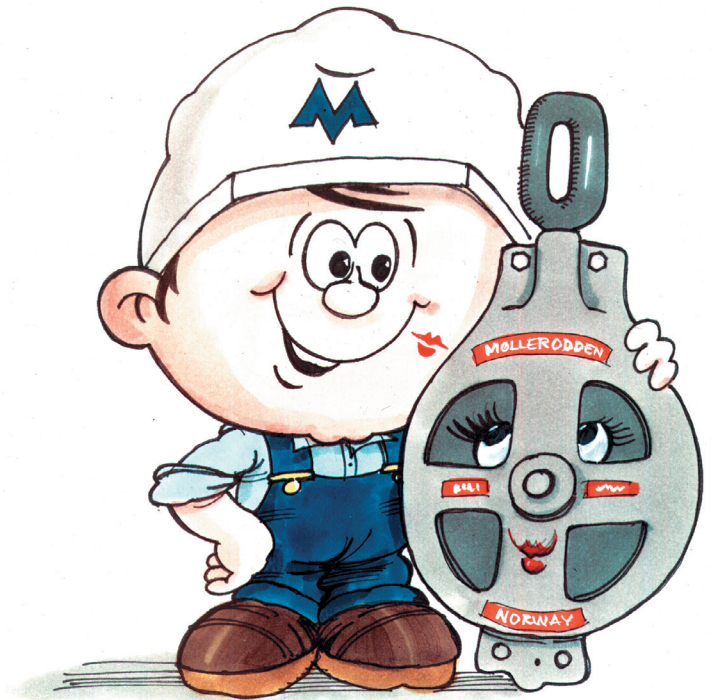
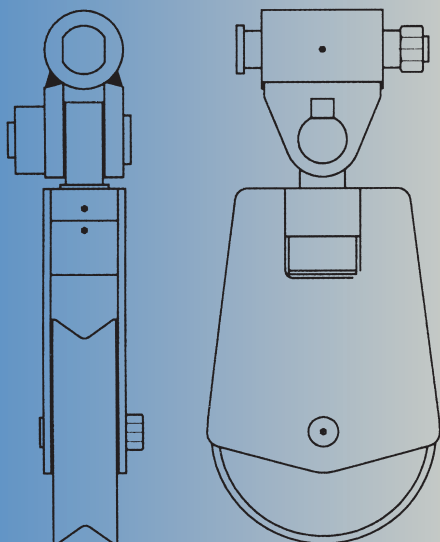


# imenco calls upon your attention!

*Møllerodden was founded in 1953 and has been a manufacturer of lifting equipment for ships and fishing vessels since 1960. Imenco acquired the company January 2004.*

## **Product range:**

- *Single and multiple Sheave Blocks*
- *Wires Seaves*
- *Snatch Blocks*
- *Cargo Blocks*
- *Special Blocks*
- *Ball beared Swivels*
- *Trawl / Purse Blocks*
- *Trawl / Purse Sheaves*
- *Guide Blocks and Sheave Housing*
- *Sound Cable Blocks*
- *Anchor Chain Weels*
- *Towing Hooks*
- *Towing Blocks*
- *Anchor Release Hooks*
- *Cable Blocks / "Banana Sheaves"*
- *Guide Blocks - Risers and Seismic Systems*
- *Blocks and Guide Collar - Seismic Cables*
- *Fairleads - Risers and Anchor Chains*



**M**øllerodden is a modern manufacturing company with many in-house developed products and other services.

Today, Møllerodden is Norway's leading manufacturer of such equipment, the well known "Møllerblock".

The high quality of engineering and manufacturing expertise for cargo handling equipment has lead the company into the more specialised field of equipment.

The modern fishing fleet of today requires high quality products. Møllerodden high skilled personell, combined with the experience and knowledge gained through the manufacturing of listed products, have resulted in high quality products as required by owners and crew. Møllerodden realise that in today's industrial environment, response to clients needs is of the outmost importance, and to satisfy these needs, technical and sales personnel are available at very short notice to give a positive response.

## **imenco**

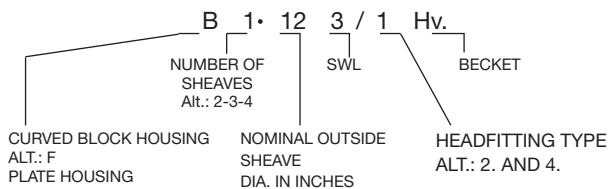
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We wish to give the following information regarding blocks as a guide, without prejudice.

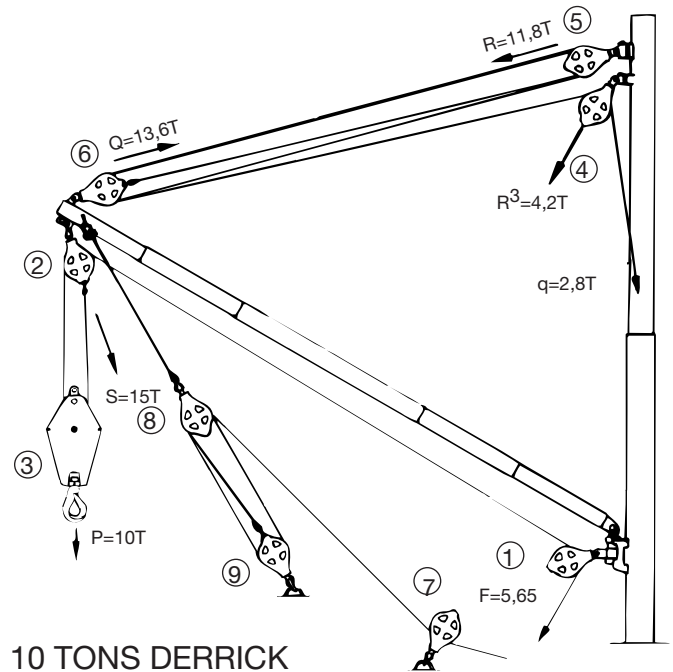
**SWL**

For definition of SWL see page 2

Blocks are generally tested and marked acc. to the Norwegian Maritime Directorate' rules and regulations, July 17. 1978.



See drawing of 10 T derrick rig as an example only. Cargo runner Ø24mm. Span rope Ø18, Slewing Guy Wire Ø14.



10 TONS DERRICK

**Item 1. Heel Block**

Fitted with stud eye to suit a spring loaded self adjusting heeblock assembly, which will keep the block in correct position until derrick angle is altered, thereby avoiding the block to fall down and turn over when cargowire is unloaded.

Code: F1-166/2.

**Item 2. Top Block**

Fitted with a stud eye to suit the bolt and gap of a shackle.

Code: F1-166/2 Hv.

**Item 3. Lower Cargo Block**

Fitted with Swivel Hook. The block has to be heavy enough to pull out the wire with empty hook and preferably of an anti toppling type.

Code: F1-166/5L.

**Item 4. Singl. Span Block**

On mast, fitted with jaw.

Code: B1-123/4.

**Item 5. Double Span Block**

On mast, fitted with fixed jaw to prevent twisting of Span Wire.

Code: F2-1212/4F.

**Item 6. Derrick Head Span Block**

Double sheaved fitted with becket and fixed jaw to prevent twisting of span rope.

Code: F2-1216/4F, Hv.

Slewing Guy Blocks are normally fitted with swivel stud eyes to take shackle pins.

**Item 7. Slewing Guy Lead Block**

Code: B1-92/2.

**Item 8. Upper Slewing Guy Block Double sheaved.**

Code: F2-98/2.

**Item 9. Lower Slewing Guy Block**

Single sheaved with becket.

Code: B1-92/2 Hv.

**Shackles**

Shackles are to be of non agein steel and be furnished with nut and cotter pin.

They are to be tested and a test certificate are to be issued.

It shall also be correctly fitted both in the block head fitting and in fittings onboard.

See catalogue page 4.

**All Møllerblocks are certified and marked acc. to the Norwegian Maritime Directorates's rules of 1978.**

## Extract from the Norwegian Maritime Directorate's rules:

§13. Loose gear.

13.1 Test loads:

Before it is first taken into use, and after it has been altered or repaired, every item of loose shall be tested with the following test loads:

Chain, ring, hook, schackle, swivel, multiple sheave block.

Up to	and	including	25 tonnes	2 x SWL
«	«	«	30	« 55 tonnes
«	«	«	35	« 65
«	«	«	40	« 70
«	«	«	45	« 75
«	«	«	50	« 85
«	«	«	55	« 90
«	«	«	60	« 95
«	«	«	65	« 100
«	«	«	70	« 110
«	«	«	75	« 115
«	«	«	80	« 120
«	«	«	85	« 125
«	«	«	90	« 130
«	«	«	95	« 135
«	«	«	100	« 145
«	«	«	110	« 155
«	«	«	120	« 165
«	«	«	130	« 175
«	«	«	140	« 190
«	«	«	150	« 200
«	«	«	160	« 215
«	«	«	170	« 230
«	«	«	180	« 240
«	«	«	180	« 1.33 x SWL
Single sheave block <sup>2)</sup>				4 x SWL
Single sheave block with becket <sup>2)</sup>				6 x SWL
Wire rope <sup>3)</sup>				Breaking load
Yoke or similar <sup>4)</sup>				2.0 x SWL

- 1) For multiple sheave blocks, the permitted working load (SWL) is equal to the resultant load in the head fitting. See also § 12.2
- 2) For single sheave block with or without becket, the test load may be reduced in accordance with the above table when the resultant load in the head fitting exceeds 25 tonnes.
- 3) Every length and dimensions shall be tested. If there is no possibility of testing a complete piece, threads or parts may be tested till breakage and the strength be calculated.
- 4) Yokes and similar with a permitted working load (SWL) of more than 20 tonnes, may be tested together with the cargo handling gear.

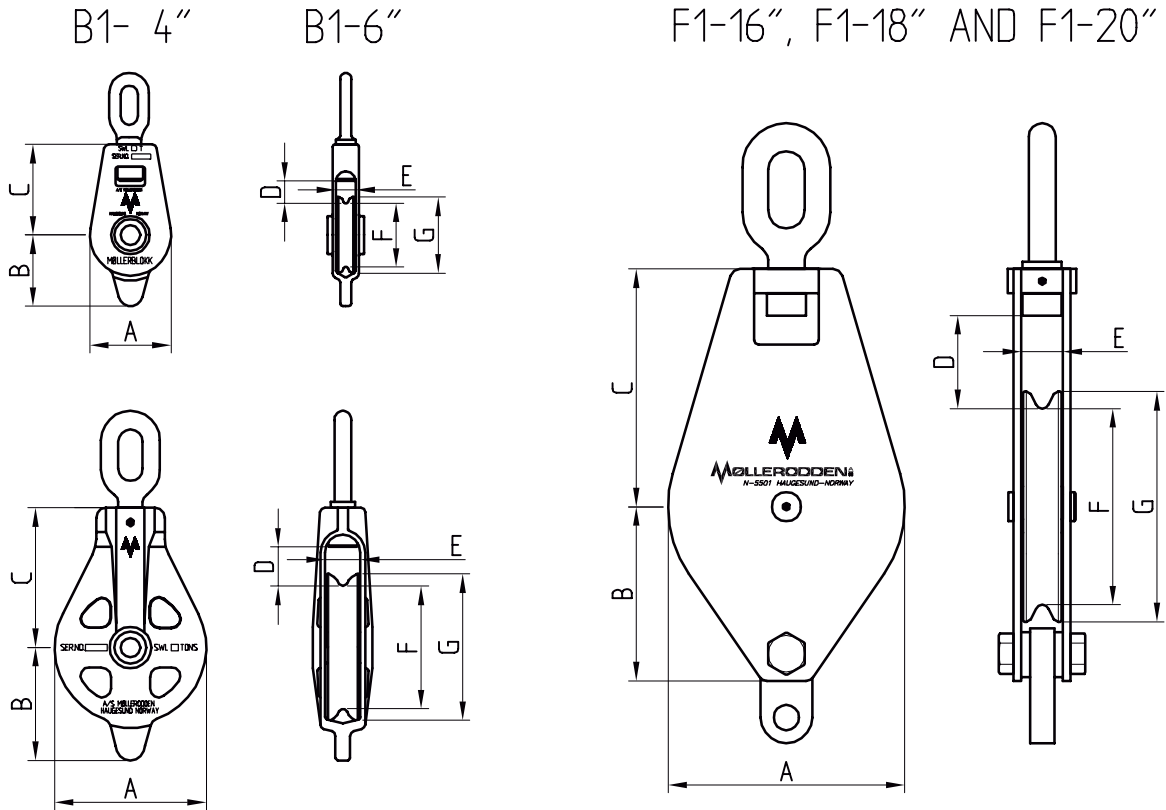
15.5 Blocks

15.5.1 Safe working load (SWL) for a single sheave block is equal to the wire pull (i.e. half the force on the suspension link) when the block is used as a single loading block. For a single sheave block with becket, SWL is also equal to the wire pull which, in this case, is on third of the force on the suspension link. In both cases, the block shall be marked with SWL = the wire pull.

15.5.2. For a multiple sheave block, SWL is equal to the force on the the suspension link, and equal to the SWL with which the block shall be marked.

15.6 Chain, rings, hooks, shackles, swivels, etc. shall be marked with the maximum permitted safe working load, and an identification number in the Certificate.

# SINGLE SHEAVED BLOCKS



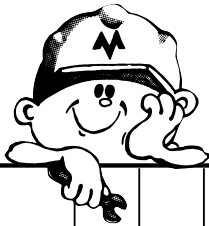
B1- 9", B1-12", B1-14" AND B1-16"

BLOCK CODE	SWL Ton	MAX LOAD ON HEAD- FITTING	WIRE DIA. mm	A	B	C	D	E	F	G	WEIGHT Kg
B1 - 4"	1	2	12	110	100	140	55	28	80	100	3,5
B1 - 6"	2	4	10	166	145	185	43	41	130	155	10
B1 - 9"	3	6	14	240	180	235	60	40	195	230	18
B1 - 12"	5	10	18	310	230	285	80	71	250	300	32
B1 - 14"	6	12	20	365	255	300	75	71	290	355	39
B1 - 16"	6	12	24	410	280	340	90	71	340	400	43

BLOCK CODE	SWL Ton	MAX LOAD ON HEAD- FITTING	WIRE DIA. mm	A	B	C	D	E	F	G	WEIGHT Kg
F1 - 16"	10	20	26	410	320	450	175	85	335	400	105
F1 - 18"	10	20	28	480	355	485	190	85	400	470	145
F1 - 20"	16	32	32	525	380	510	155	80	445	515	190

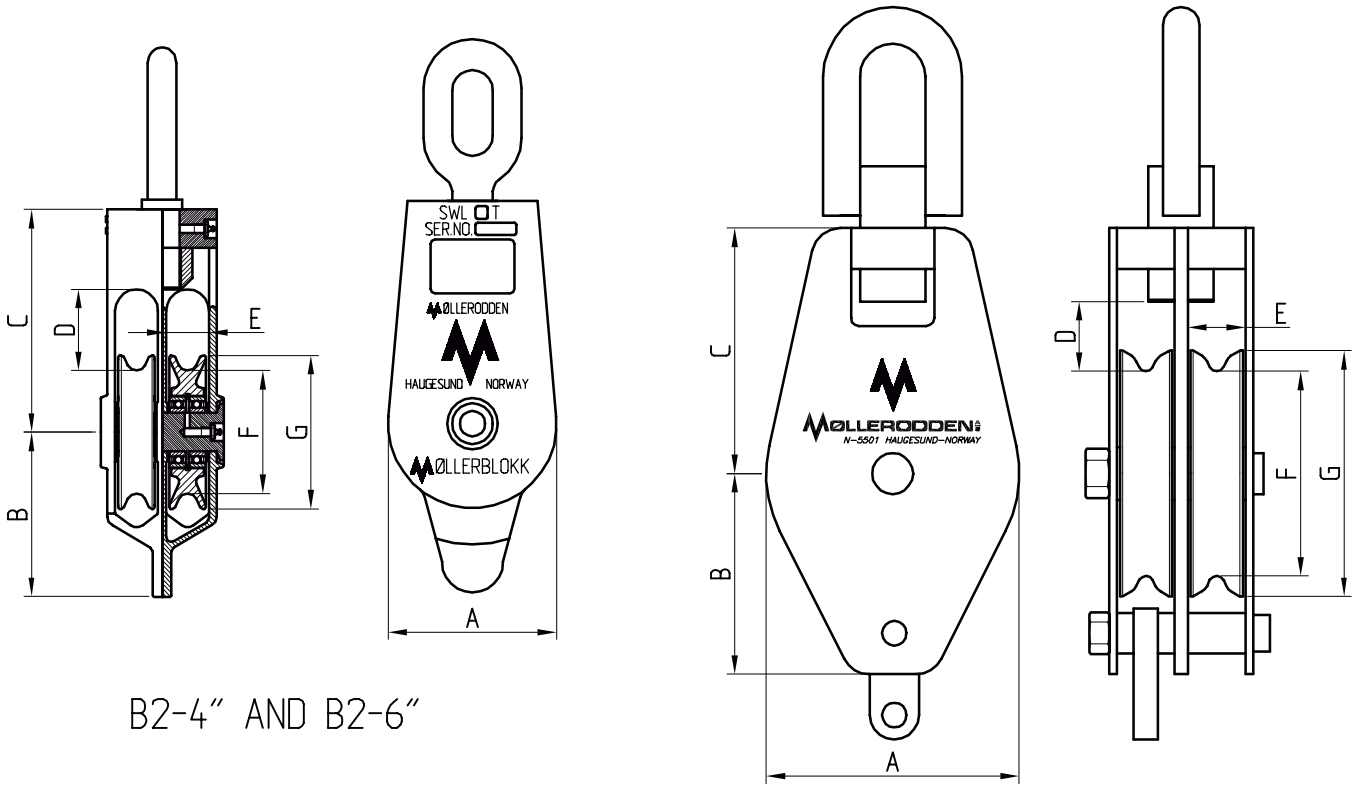
\* Becket are supplied **only** when specified.

# HEADFITTINGS



BLOCK CODE	SWL	Proof load	Load on Headfittings	Wirediameter	Weight	1 - Oval eye				2 - Stud eye				4 - Jaw					
						a	b <sub>1</sub>	b <sub>2</sub>	e	d	e	r	t	b <sub>1</sub>	b <sub>2</sub>	c	d	h	r
B1 - 41	1	4	2	12	3,5	58	26	16	23	25	30	24	22	26	10	45	23	70	25
B1 - 41 hv	1	6	3	12	3,5	58	26	16	23	30	42	30	30	26	10	45	23	70	25
B1 - 61 hv	1	6	3	10	10	80	35	26	40	33	46	33	30	35	16	55	31	105	35
B1 - 62	2	8	4	10	10	80	35	26	40	33	46	33	30	35	16	55	31	105	35
B1 - 62 hv	2	12	6	10	10	90	44	34	48	42	58	40	40	45	20	60	40	110	38
B1 - 92	2	8	4	14	18	80	35	26	40	33	46	33	30	35	16	55	31	105	35
B1 - 92 hv	2	12	6	14	18	90	44	34	48	42	58	40	40	45	20	60	40	110	38
B1 - 93	3	12	6	14	18	90	44	34	48	42	58	40	40	45	20	60	40	110	38
B1 - 122 hv	2	12	6	18	32	90	44	34	37	42	58	40	40	45	20	60	40	130	38
B1 - 123	3	12	6	18	32	90	44	34	37	42	58	40	40	45	20	60	40	130	38
B1 - 124	4	16	8	18	32	105	50	38	55	48	65	50	45	49	25	75	46	147	55
B1 - 123,4 hv	3,4	20	10	18	32	105	50	38	55	52	70	50	50	58	25	75	50	147	55
B1 - 125	5	20	10	18	32	105	50	38	55	52	70	50	50	58	25	75	50	147	55
B1 - 143	3	12	6	20	39	90	44	34	40	42	58	40	40	45	20	60	40	130	38
B1 - 144	4	16	8	20	39	105	50	38	55	48	65	50	45	49	25	75	46	147	55
B1 - 143,4 hv	3,4	20	10	20	39	105	50	38	55	52	70	50	50	58	25	75	50	147	55
B1 - 145	5	20	10	18	39	105	50	38	55	52	70	50	50	58	25	75	50	147	55
B1 - 144 hv	4	24	12	20	39	105	50	38	55	56	75	50	55	64	25	75	54	147	55
B1 - 146	6	24	12	20	39	105	50	38	55	56	75	50	55	64	25	75	54	147	55
B1 - 163	3	12	6	24	43	90	44	34	40	42	58	40	40	45	20	60	40	130	38
B1 - 164	4	16	8	24	43	105	50	38	55	48	65	50	45	49	25	75	46	147	55
B1 - 163,4 hv	3,4	20	10	20	43	105	50	38	55	52	70	50	50	58	25	75	50	147	55
B1 - 165	5	20	10	18	43	105	50	38	55	52	70	50	50	58	25	75	50	147	55
B1 - 164 hv	4	24	12	24	43	135	50	40	75	56	75	50	55	64	25	75	54	145	55
B1 - 166	6	24	12	24	43	135	50	40	75	56	75	50	55	64	25	75	54	147	55
F1 - 168	8	32	16	26	105	150	80	45	75	65	80	60	60	70	32	90	62	165	70
F1 - 166 hv	6	36	18	26	105	160	80	55	75	74	90	65	65	74	32	90	70	165	70
F1 - 1610	10	40	20	26	105	160	80	55	75	74	90	65	65	74	32	90	70	165	70
F1 - 188	8	32	16	28	145	150	80	45	90	65	80	60	60	70	32	90	62	165	70
F1 - 186 hv	6	36	18	28	145	160	80	55	90	74	90	65	65	74	32	90	70	165	70
F1 - 1810	10	40	20	28	145	160	80	55	90	74	90	65	65	74	32	90	70	165	70
F1 - 2010	10	40	20	32	175	160	80	55	90	74	90	65	65	74	32	90	70	180	70
F1 - 206 hv	6	36	18	32	180	160	80	55	75	74	90	65	65	74	32	90	70	180	70
F1 - 2012	12	48	24	32	180	190	80	55	90	78	100	75	70	80	32	100	74	190	75
F1 - 2015	15	55	30	32	190	200	90	60	90	86	110	80	80	90	40	105	82	195	85
F1 - 2010 hv	10	55	30	32	190	200	90	60	90	86	110	80	80	90	40	105	82	195	85

## DOUBLE SHEAVED BLOCKS



B2-4" AND B2-6"

F2-9" TO F2-20"

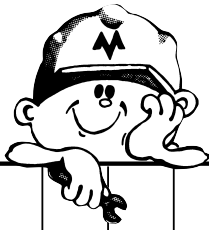
BLOCK CODE	SWL Ton	MAX LOAD ON HEAD-FITTING	WIRE DIA. mm	A	B	C	D	E	F	G	WEIGHT Kg
B2 - 4"	4	4	12	110	110	145	54	28	80	100	7,5
B2 - 6"	8	8	10	166	115	185	47	41	130	155	20

BLOCK CODE	SWL Ton	MAX LOAD ON HEAD-FITTING	WIRE DIA. mm	A	B	C	D	E	F	G	WEIGHT Kg
F2 - 9"	12	12	14	240	180	235	65	46	190	230	40
F2 - 12"	20	20	18	310	245	300	80	71	250	300	78
F2 - 14"	20	20	20	365	280	330	90	71	290	355	95
F2 - 16"	20	20	24	410	300	350	85	71	340	400	125
F2 - 16"	40	40	26	420	320	450	152	85	335	400	160
F2 - 18"	40	40	28	480	355	485	155	85	400	470	155
F2 - 20"	50	50	32	525	380	510	135	80	445	515	230

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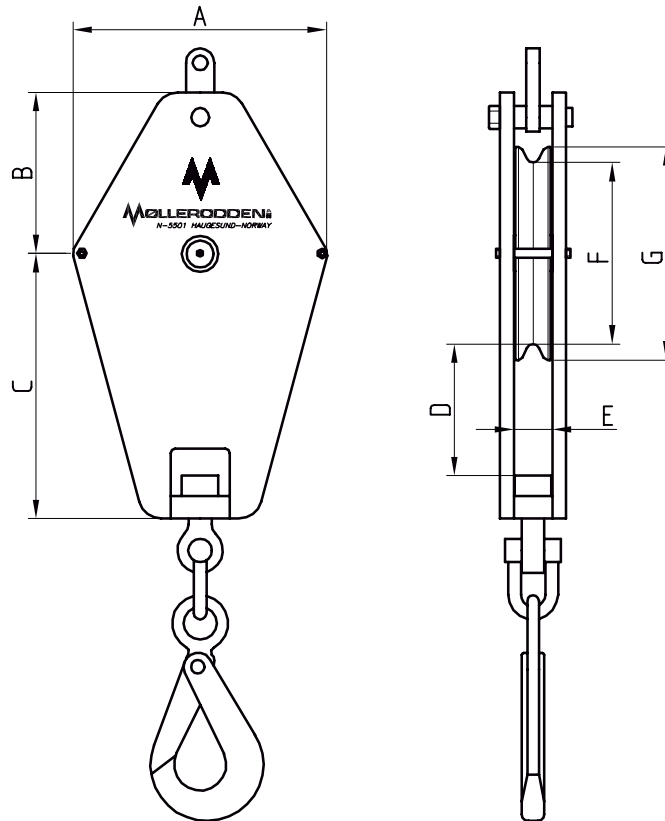
# HEADFITTINGS



BLOCK CODE	SWL	Proof load	Load on Headfittings	Wire diameter	Weight	1 - Oval eye				2 - Stud eye				4 - Jaw					
						a	b <sub>1</sub>	b <sub>2</sub>	e	d	e	r	t	b <sub>1</sub>	b <sub>2</sub>	c	d	h	r
B2 - 44	4	8	4	12	7,5	80	35	26	40	33	46	33	30	35	16	55	31	125	35
B2 - 64	4	8	4	10	20	90	44	34	40	33	46	33	30	35	16	55	31	125	35
B2 - 66	6	12	6	10	21	90	44	34	40	42	58	40	40	45	20	60	40	130	38
B2 - 68	8	16	8	10	22	105	50	38	55	48	65	50	45	49	25	75	46	145	55
F2 - 94	4	8	4	14	40	90	44	34	40	33	46	33	30	35	16	55	31	125	35
F2 - 96	6	12	6	14	40	90	44	34	40	42	58	40	40	45	20	60	40	130	38
F2 - 98	8	16	8	14	40	105	50	38	55	48	65	50	45	49	25	75	46	145	55
F2 - 910	10	20	10	14	40	105	50	38	55	52	70	50	50	58	25	75	50	145	55
F2 - 912	12	24	12	14	40	105	50	38	55	56	75	50	55	64	25	75	54	145	55
F2 - 1210	10	20	10	18	75	105	50	38	55	52	70	50	50	58	25	75	50	150	55
F2 - 1212	12	24	12	18	76	105	50	38	55	56	75	50	55	64	25	75	54	150	55
F2 - 1216	16	32	16	18	77	150	80	45	75	65	95	60	60	70	32	90	62	165	70
F2 - 1220	20	40	20	18	78	160	80	55	75	74	105	65	65	74	32	90	70	165	70
F2 - 1412	12	24	12	20	90	135	60	40	70	56	75	50	55	64	25	75	54	150	55
F2 - 1416	16	32	16	20	92	150	80	45	75	65	95	60	60	70	32	90	62	165	70
F2 - 1420	20	40	20	20	95	160	80	55	75	74	105	65	65	74	32	90	70	165	70
F2 - 1612	12	24	12	24	120	105	50	38	55	56	75	50	55	64	25	75	54	150	55
F2 - 1616	16	32	16	24	122	150	80	45	75	65	95	60	60	70	32	90	62	165	70
F2 - 1620	20	40	20	24	125	160	80	55	75	74	105	65	65	74	32	90	70	165	70
F2 - 1625	25	50	25	26	150	160	80	55	90	78	100	75	70	80	32	100	74	190	75
F2 - 1632	32	60	32	26	155	200	90	60	90	86	110	80	80	90	40	105	82	195	85
F2 - 1640	40	70	40	26	160	220	90	60	90	96	120	95	90	100	40	110	93	200	95
F2 - 1825	25	50	25	28	150	160	80	55	90	78	100	75	70	80	32	100	74	190	75
F2 - 1832	32	60	32	28	155	200	90	60	90	86	110	80	80	90	40	105	82	195	85
F2 - 1840	40	70	40	28	160	220	90	60	90	96	120	95	90	100	40	110	93	200	95
F2 - 2025	25	50	25	32	200	160	80	55	90	78	100	75	70	80	32	100	74	190	75
F2 - 2032	32	60	32	32	215	200	90	60	90	86	110	80	80	90	40	105	82	195	85
F2 - 2040	40	70	40	32	220	220	90	60	90	96	120	95	90	100	40	110	93	200	95
F2 - 2050	50	85	50	32	250	265	110	80	105	105	130	100	100	110	50	120	104	210	100

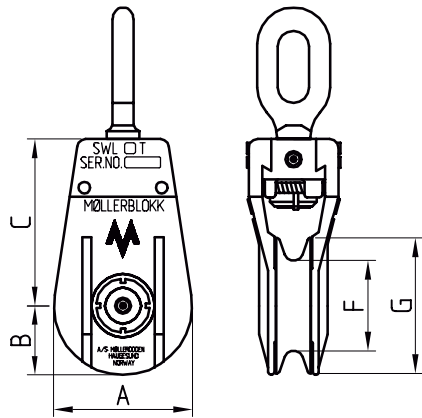
NOTES:

## LOWER CARGO BLOCK WITH HOOK

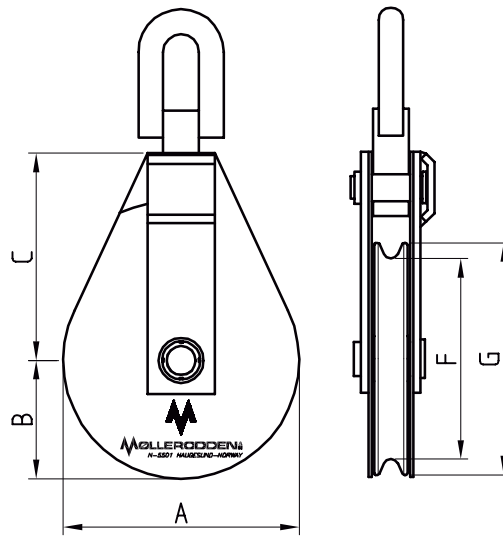


BLOCK CODE	SWL	Proof load	Load on headfitting	Wire diameter	Weight	BLOCK DIMENSIONS							HOOK DIMENSIONS				HOOK TYPE
						A	B	C	D	E	F	G	a	b	c	d	
F1 - 92/2L hv	2	12	6	14	45	320	180	350	180	46	190	230	254	50	68	50	
F1 - 93/2L	3	12	6	14	45	320	180	350	180	46	190	230	254	50	68	50	
F1 - 123/2L	3	12	6	18	95	390	245	375	175	71	250	300	254	50	68	50	
F1 - 123/2L hv	3,4	20	10	18	95	390	245	375	175	71	250	300	254	50	68	50	
F1 - 125/2L	5	20	10	18	95	390	245	375	175	71	250	300	320	62	84	70	
F1 - 143/2L hv	3,4	20	10	20	135	445	280	480	255	71	290	355	320	62	84	70	
F1 - 145/2L	5	20	10	20	135	445	280	480	255	71	290	355	320	62	84	70	
F1 - 164/2L hv	4	24	12	24	150	490	300	500	255	71	340	400	320	62	84	70	
F1 - 166/2L	6	24	12	24	150	490	300	500	255	71	340	400	320	62	84	70	
F1 - 166/2L hv	6,7	40	20	26	195	490	320	550	275	85	335	400	400	81	120	90	
F1 - 1610/2L	10	40	20	26	195	490	320	550	275	85	335	400	400	81	120	90	
F1 - 186/2L hv	6,7	40	20	28	195	560	385	585	290	85	400	470	400	81	120	90	
F1 - 1810/2L	10	40	20	28	230	560	355	585	290	85	400	470	400	81	120	90	
F1 - 2010/2L	10	40	20	32	270	600	380	600	245	80	445	515	400	81	120	90	

# SNATCHBLOCK



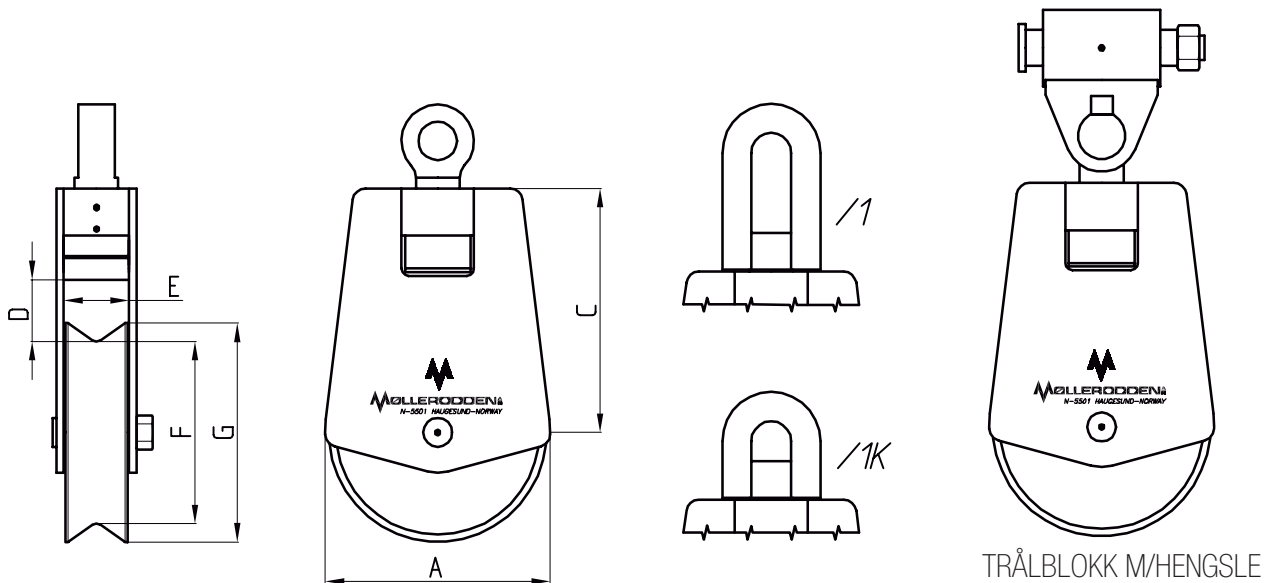
K-42 TO K-96  
FIG. 1



K-123 TO K-2015  
FIG. 2

BLOCK CODE	SWL	Proof load	Load on headfitting	Wire diameter	Weight	BLOCK DIMENSIONS						1 - Oval eye				2 - Stud eye			
						A	B	C	øF	øG	Fig.	a	b <sub>1</sub>	b <sub>2</sub>	e	d	e	r	t
K - 42	2	8	4	12	6	105	53	140	80	100	1	80	35	26	40	33	46	33	30
K - 42/5	2	8	4	12	6	105	53	140	80	100	1	Swivel hook							
K - 42 S	2	8	4	12	6	105	53	140	80	100	1	Shackle				25	40	33	30
K - 62	2	8	4	20	12	155	77	185	100	150	1	80	35	26	40	33	46	33	30
K - 63	3	12	6	20	12	155	77	185	100	150	1	90	44	34	37	42	58	40	40
K - 64	4	16	8	20	12	155	77	185	100	150	1	90	44	34	37	48	65	50	45
K - 64/5	4	16	8	20	15	155	77	185	100	150	1	Swivel hook							
K - 64/S	4	16	8	20	15	155	77	185	100	150	1	Shackle				32	45	35	40
TK - 64	4	16	8	20	16	155	77	185	100	150	1	90	44	34	37	48	65	50	45
K - 92	2	8	4	22	24	235	118	235	180	230	1	90	44	34	37	33	46	33	30
K - 93	3	12	6	22	24	235	118	235	180	230	1	90	45	30	37	42	58	40	40
K - 95	5	20	10	22	24	235	118	235	180	230	1	105	50	38	55	52	70	50	50
<b>K - 96</b>	<b>6</b>	<b>24</b>	<b>12</b>	<b>22</b>	<b>24</b>	<b>235</b>	<b>118</b>	<b>235</b>	<b>180</b>	<b>230</b>	<b>1</b>	<b>105</b>	<b>50</b>	<b>38</b>	<b>55</b>	<b>52</b>	<b>70</b>	<b>50</b>	<b>50</b>
K - 123	3	12	6	18	38	320	160	290	250	300	2	90	45	34	43	42	58	40	40
K - 125	5	20	10	18	38	320	160	290	250	300	2	105	50	38	27	52	72	50	50
K - 145	5	20	10	20	47	380	190	320	290	355	2	105	50	38	27	52	72	50	50
K - 165	5	20	10	24	55	420	210	350	340	400	2	105	50	30	27	52	72	50	50
K - 168	8	32	16	30	100	420	210	410	335	400	2	150	80	45	110	65	80	60	60
K - 1610	10	40	20	26	100	420	210	410	335	400	2	170	80	55	110	74	90	65	65
K - 2015	15	55	30	32	150	560	265	510	445	515	2	200	90	60	110	58	100	70	80

# TRAWLBLOCK



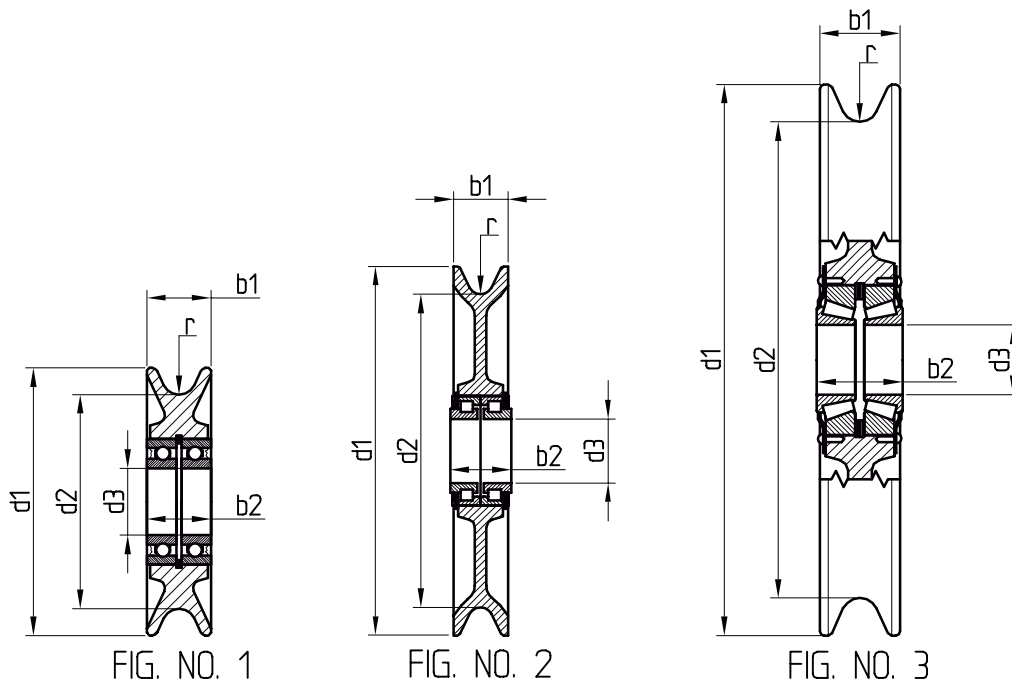
BLOCK CODE	TEST LOAD	SWL Ton	MAX LOAD ON HEAD-FITTING	A	C	D	E	F	G	WEIGHT Kg
T155-4	16	4	8	155	158	50	80	100	150	16
T170-4	16	4	8	175	250	100	100	125	170	18
T255-4	16	4	8	270	335	170	124	190	255	50
T300-5	20	5	10	320	355	165	140	220	300	80
TR300-5	20	5	10	320	355	140	140	220	300	80
T300-10	40	10	20	320	355	130	140	220	300	90
TR300-10	40	10	20	320	355	110	140	220	300	90
T400-6	24	6	12	430	500	270	180	300	400	180
TR400-6	24	6	12	430	500	180	180	300	400	180
T400-12,5	50	12,5	25	430	500	200	180	300	400	180
TR400-12,5	50	12,5	25	430	500	180	180	300	400	180
TR400-30	95	30	60	430	550	180	180	300	400	200
T500-12,5	50	12,5	25	520	550	220	180	400	500	260
TR500-12,5	50	12,5	25	520	550	180	180	400	500	270
T500-30	95	30	60	520	600	180	180	400	500	270
TR500-30	95	30	60	520	600	170	180	400	500	290
TR600-30	95	30	60	620	650	170	180	500	600	340
TR600-30	95	30	60	620	690	240	240	460	600	450
TR600-50	145	50	100	620	780	180	180	500	600	550
TR600-50	145	50	100	620	830	240	240	460	600	750
TR700-30	95	30	60	720	740	240	240	560	700	550
TR700-50	145	50	100	720	880	270	240	560	700	800
TR800-30	95	30	60	820	790	240	240	660	800	660
TR800-50	145	50	100	820	930	270	240	660	800	950
TR800-60	165	60	120	820	930	240	240	660	800	1000
TR1000-50	145	50	100	1020	1130	270	240	860	1000	1200
TR1000-60	165	60	120	1020	1030	240	240	860	1000	1250
TR1200-100	266	100	200	1200	1180	240	240	1060	1200	2300



# HEADFITTINGS

BLOCK CODE	Short oval eye				1 - Oval eye				2 - Stud eye			
	a	b <sub>1</sub>	b <sub>2</sub>	e	a	b <sub>1</sub>	b <sub>2</sub>	e	d	e	r	t
T-155-4	44	44	35	60	90	44	34	40	48	65	50	45
T-170-4	44	44	35	60	90	44	34	40	48	65	50	45
T-255-4	44	44	35	60	90	44	34	40	42	58	40	40
T300-5	60	60	40	70	105	50	38	55	48	65	50	45
TR-300-5	60	60	40	50	135	60	40	50	48	70	50	45
T-300-10	80	80	75	55	170	80	55	75	74	105	65	65
TR-300-10	80	80	55	75	170	80	55	75	74	105	65	65
T-400-6	60	60	40	70	135	60	40	70	56	75	50	55
TR-400-6	60	60	40	80	134	60	40	80	56	75	50	55
T-400-12,5	100	80	55	90	190	80	55	90	78	100	75	70
TR-400-12,5	100	80	55	90	190	80	55	90	78	90	75	70
TR-400-30	110	110	80	105	265	110	80	105	106	130	100	100
T-500-12,5	100	80	55	90	160	80	55	90	78	100	75	70
TR-500-12,5	90	80	55	85	190	80	55	85	78	110	75	70
T-500-30	110	110	80	105	265	110	80	105	106	130	100	100
TR-500-30	110	110	80	105	265	110	80	105	106	130	100	100
TR-600-30	110	110	80	105	265	110	80	105	106	130	100	100
TR-600-50	135	135	90	150	325	135	90	150	131	175	130	130
TR-700-30	110	110	80	105	265	110	80	105	106	130	100	100
TR700-50	135	135	90	150	325	135	90	150	131	175	130	130
TR-800-30	110	110	80	105	265	110	80	105	106	130	100	100
TR-800-50	135	135	90	150	325	135	90	150	131	175	130	130
TR-800-60									162	200	160	150
TR-1000-50	135	135	90	150	325	135	90	150	131	175	130	130
TR-1000-60									162	200	160	150

# STANDARD WIRESHEAVES FOR MØLLERBLOKK

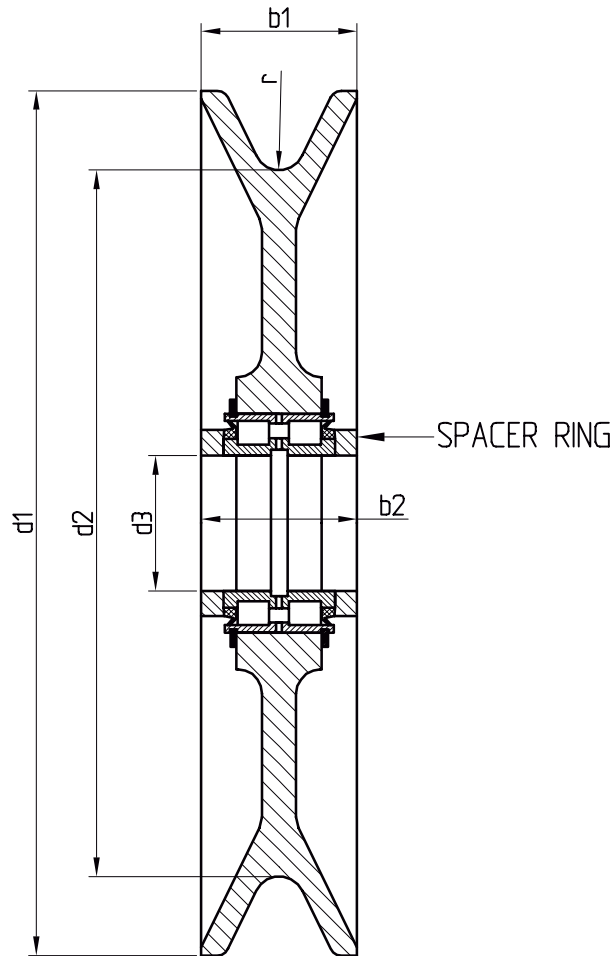


Dy"	Drawing no.	Fig no.	SWL Ton	Wire dia. mm	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	b <sub>1</sub>	b <sub>2</sub>	r	Weight Kg
4"	04100-03	1	2	12	100	80	25	24	26	6,3	1,2
4"	04150-03	2	6	12	100	80	25	24	30	6,3	1,2
6"	06100-03	1	4	10	155	130	40	33	39	5,3	2,5
6"	06150-03	2	20	20	150	100	40	40	38	10,5	2,2
9"	09101-03	2	10	14	230	195	40	34	38	7,5	5
9"	09150-03	2	17	22	230	180	55	40	46	11,5	5
9"	24300-03	3	10	14	230	190	30	41	46	7,5	5,5
9"	24712-03	3	24	24	230	175	40	64	70,5	12,7	8,5
12"	12101-03	3	24	18	300	250	40	64	70,5	9,5	10,5
14"	14101-03	3	24	20	355	290	40	64	70,5	10,5	15,5
16"	16101-03	3	24	24	400	340	40	64	70,5	12,7	18
16"	24600-03	3	35	26	400	335	50	75	84,5	14	24,5
18"	24800-03	3	35	28	470	400	50	78	84,5	15	36
20"	20100-03	3	46	32	515	445	65	75	80	17	41

-Wiresheaves in other dimensions, see page 15.

Materialcertificate DIN 50049 2.3 upon request.

## MULTIPURPOSE WIRESHEAVES



Dy	Drawing no.	SWL Ton	Wire dia. mm	$d_1$	$d_2$	$d_3$	$b_1$	$b_2$	$r$	Weight Kg
* 9"	SK 1500	11	14	230	195	40	34	38	7,5	5
9"	SK 1501	18	24	230	175	55	64	68	12,7	8,5
12"	SK 1502	18	18	300	250	55	64	68	9,5	10,5
14"	SK 1503	18	20	355	290	55	64	68	10,5	15,5
16"	SK 1504	18	24	400	340	55	64	68	12,7	18
16"	SK 1505	35	26	400	335	85	66	70	14	24,5
18"	SK 1506	35	28	470	400	85	66	70	15	36
20"	SK 1507	51	32	515	445	90	75	80	17	41

\* SK 1500 are supplied without spacer rings.

- Wiresheaves in other dimensions, see page '15.

Materialcertificate DIN 50049 2.3 upon request.

# TRAWL WIRE SHEAVES

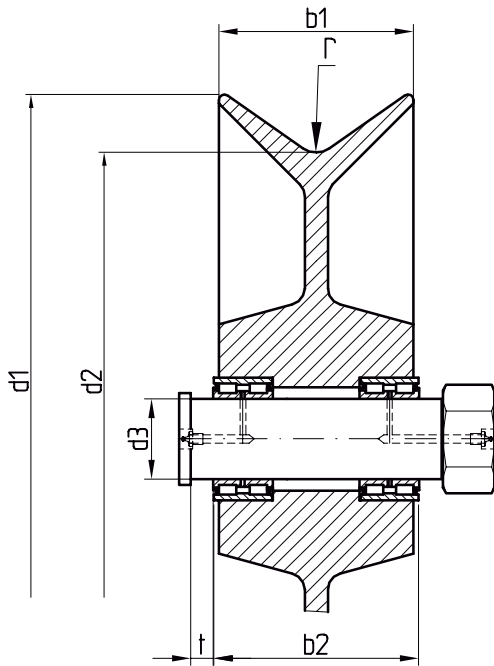


Figure 1  
Cylindric roller bearings

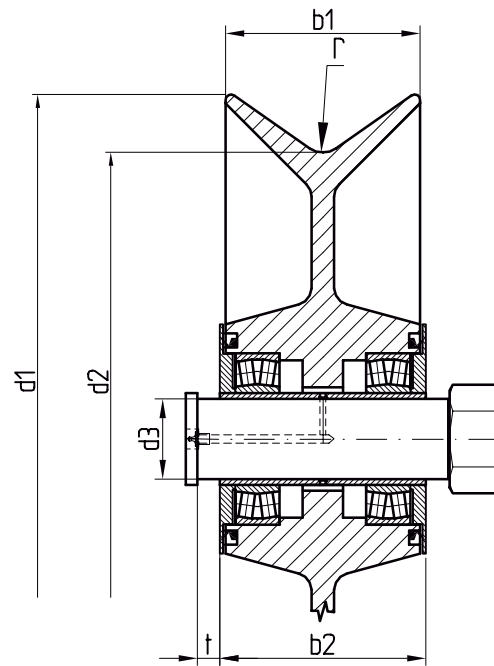
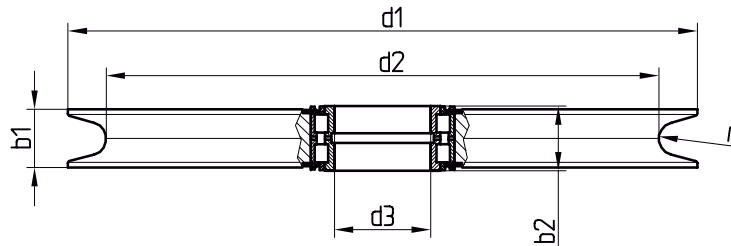


Figure 2  
Spherical roller bearings

Drawing no.	Fig. no.	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	b <sub>1</sub>	b <sub>2</sub>	r	t	Load on bearing Ton	Groove hardness Brinell	Weight Kg
06155-03	1	150	100	40	76	80	10	6	10	170-200	6
SK 3225	1	170	125	40	95	100	10	7	10	170-200	10
A4-0960	1	255	190	38	120	125	30	12	8	550	30
SK 1246-03	1	300	220	50	130	140	20	16	20	550	40
A4-0794	1	300	180	50	170	180	20	16	20	550	50
A4-0456	1	300	220	60	170	180	20	16	20	550	50
SK 459-03	1	400	300	60	170	180	20	20	25	550	90
A4-2134	1	400	300	70	170	180	20	20	60	550	90
A4-1364	2	500	400	70	170	180	20	20	60	550	125
A3-0316	2	500	360	70	230	240	20	20	60	550	140
A4-1344	2	600	500	70	170	180	20	20	60	550	170
A3-0293	2	600	460	70	230	240	20	20	60	550	180
A3-0313	2	600	460	90	230	240	20	35	100	550	180
A3-0376	2	650	510	70	230	240	20	20	60	550	200
A3-0378	2	700	560	70	230	240	20	20	60	550	250
A3-0310	2	700	560	90	230	240	20	35	100	550	250
A3-0281	2	700	560	90	270	280	20	35	100	550	270
A3-0325	2	800	660	70	230	240	20	20	60	550	420
A3-0353	2	800	660	90	230	240	20	20	100	550	420
A3-1322	2	800	660	110	230	240	20	35	120	550	358
A3-0422	2	800	680	110	170	180	20	35	120	550	400
A3-0646	2	1000	860	90	230	240	20	35	100	550	650
A4-3032	2	1200	1060	130	230	240	20	45	200	550	803



# WIRESHEAVES

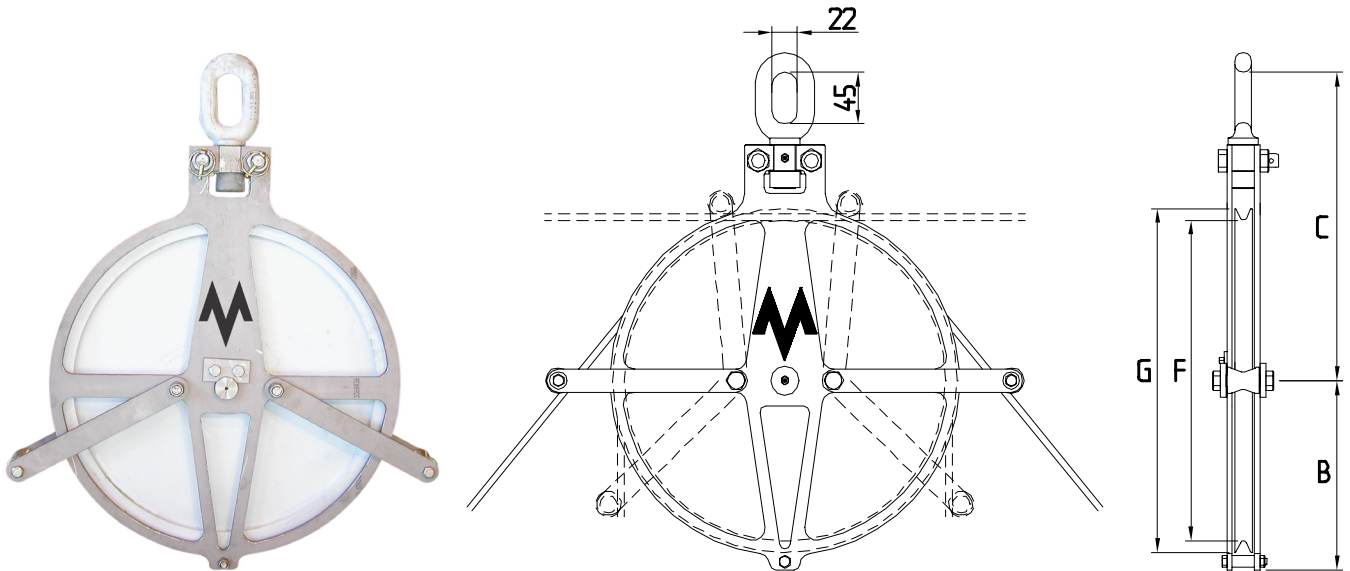


Drawing No.	Load on Bearing TON	Wire Dia. mm	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	b <sub>1</sub>	b <sub>2</sub>	Weight Kg
SK-2595	-	32	150	125	35	30	35	2
SK-3225	-	13	170	125	40	95	98	10
A3-0185	4	10	185	160	45	31	34,5	3
A3-0195	15	13	330	280	50	36	40	10
A4-3403	18	15	335	280	55	42	46	10
A4-1475	27	18	405	345	70	50	54	20
A4-2114	-	19	420	360	-	50	-	18
SK-2560A	27	60	440	300	70	100	54	38
A3-0090	-	18	465	400	-	49	-	25
A3-0108	-	32	550	486	-	80	-	40
SK-2679	36	25	550	470	85	52	60	40
A4-0786	52	22	570	500	90	59	67	70
SK-2679	-	24	575	500	85	52	60	70
SK-2584	55	20	600	535	100	70	67	80
A3-0091	-	24	600	535	-	49	-	38
SK-2562	55	33	650	576	100	60	67	70
A4-0410	68	30	700	600	110	72	80	90
A4-1753	50	34	750	670	100	70	80	80
SK-2694 A	55	38	780	658	100	114	114	115
A3-0189	110	40	780	680	100	130	140	160
A3-0132	53	28	785	720	90	54	67	90
SK-2586	98	44	900	800	130	77	90	150
SK-3099-1	180	67	938	670	150	135	165	270
SK-3099-2	240	67	938	670	180	110	165	270
SK-2951-36	52	36	972	864	80	80	90	290
SK-2853-56	214	56	1000	860	180	100	136	260
SK-2561	176	52	1070	940	170	100	122	270
SK-3353-01	96	30	1136	1040	130	92	95	215
SK-2178	140	57	1140	1000	200	140	150	250
SK-3098-1	180	67	1143	983	150	135	165	390
SK-3098-2	240	67	1143	983	200	135	165	270
SK-3352-01-30	98	30	1170	1040	160	92	109	390
SK-2541	176	60	1280	1140	170	100	122	440
A2-0110	214	56	1352	1202	180	135	136	1025
SK-2432	-	35	1525	1475	300	95	218	614
A3-0112	38	40	2080	1958	110	100	145	900
A3-0114	38	40	2080	1958	200	100	220	900
SK-2806	700	127	2100	1820	450	220	260	1950
SK-2910	-	38	2150	2030	-	105	108	1030

-MATERIAL : Sjk 500 NS 11350.

-MATERIALCERTIFICATE TO BE SPECIFIED

## SOUND CABLE BLOCK



BLOCK CODE	SWL	TEST LOAD	CABLE DIA	BLOCK DIMENSION			
	TON	TON	mm	B	C	F	G
SB 410-D6	5	10	6	245	485	410	450
SB 410-D8	5	10	8	245	485	410	450
SB 440-D6	5	10	6	260	500	440	480
SB 440-D8	5	10	8	260	500	440	480
SB 410-D11	5	10	11	245	485	410	450
SB 440-D11	5	10	11	260	500	440	480
SB 410-D12	5	10	12	245	485	410	450
SB 440-D12	5	10	12	260	500	440	480
SB 560-D10	5	10	10	330	538	560	600
SB 560-D11	5	10	11	330	538	560	600
SB 560-D12	5	10	12	330	538	560	600

REFERENCE LIST

JULY 2003

M/TR	ABEL EGEDE	M/TR	H. ØSTERVOLD	F/TR	PERSFJORD
M/TR	ACONA	M/TR	HABORG	F/TR	POLAR HARVEST
M/TR	ALASKA OCEAN	M/TR	HÅKON	F/TR	POLARBORG I
M/TR	ALTAIRE	M/TR	HARALDUR	F/TR	POLARBORG II
M/TR	AMERICAN CHAMPION	F/V	HARALDUR	F/TR	PRESTFJORD
M/TR	AMERICAN DYNASTY		KRISTJANSSON	F/TR	QIPOQQAQ
M/TR	AMERICAN EMPRESS	M/S	HARMATTAN	M/TR	QUANTUS
F/TR	AMERICAN MONARCH	M/TR	HAVSTRAND	M/TR	RESEARCH
M/TR	ANDENESFISK I	M/TR	HEATHER SEA	F/TR	ROSUND
M/TR	ANDENESFISK II	M/TR	HERØYHAV	F/TR	ROYAL KING
M/TR	ANGO	M/TR	HERØYTRÅL	F/TR	ROYAL PRINCESS
M/S	ANTARCTIC	M/TR	HUGINN	F/TR	SAGA SEA
M/TR	ANTARES	M/TR	HVILTENNI	M/S	SEGLA
F/TR	AORERE	M/TR	HVITANES	M/TR	SENIOR
M/TR	AQVIQ	M/TR	HØGIFOSSUR	F/TR	SERENE
M/TR	ARCTIC VIKING	M/TR	INGUNN	F/TR	SERMILIK
M/TR	SWAN	M/TR	JAN MAYEN	F/TR	SEVRYBA
M/TR	ARTIC PRAWNS	M/TR	JOHAN HJORT	F/TR	SHANNON
M/TR	ATLANTEAN	F/TR	KAPTAIN AZARKIN	F/TR	SHEANNE
M/TR	ATLANTEAN II	M/TR	KEILA	F/TR	SHETLAND
F/TR	ATLANTIC	M/TR	KERAK		CHALLENGER
M/TR	ATLANTIC CHALLENGE	M/TR	KINGS BAY	F/TR	SJØVIK
M/TR	ATLANTIC CHAMPION	M/TR	KINGUK	F/TR	SKALABERG
M/TR	ATLANTIC DAWN	M/TR	KINGS CROSS	F/TR	SKALAFJALL
M/TR	ATLANTIC STAR	M/TR	KJELSVIK	F/TR	SKAREGG
M/TR	AVANGARD	M/TR	KJØLLEFJORD	F/TR	SKJONGNES
F/V	BEI DOU	F/TR	KLARA BIRTING	F/TR	SKUMUR
M/TR	BESSI	M/TR	KONGSFJORD	M/TR	SMARAGD
M/TR	BJØRGVIN	M/TR	KROSSBREKKA	F/TR	SNODDID
M/TR	BJØRNØY	M/TR	KROSSFJORD	F/TR	SNÆFELL
M/TR	BLIKI	M/TR	LANGVIN	F/TR	SOLIDARNOST
M/TR	BRENDELEN	M/S	LISA BEATE	M/TR	SOLVÅR VIKING
M/TR	BRENNHOLM	M/TR	LEIRANGER	F/TR	SOTRUDNICHESTVO
M/TR	BROEGG	F/TR	LONGVA III	F/TR	SOZIDANIE
F/V	BUCANERO	F/TR	M RAKEL	F/TR	ST. LOMAN
M/TR	BÅTSFJORD	M/TR	MANON	F/TR	STAMSUND
M/TR	CAP NORD	M/TR	MAYALA	M/TR	STANOVLENIE
M/TR	CHALLENGER	F/TR	MERSEY VENTURE	M/S	STEINTOR
M/TR	CHARISMA	F/TR	MERSEY VIKING	F/TR	STIMUL
M/TR	CHRISTINA S	F/TR	MONARC	M/TR	STØTTFJORD
M/TR	CLAYMORE SEA	F/TR	MØGSTERFJORD	M/TR	SUNDABERG
F/V	CORSARIO	F/TR	NANOQ TRAWL	M/TR	SUVERENITET
M/TR	DAGNY KRISTIN	M/TR	NEW FOUNDLAND	M/TR	SYLTEFJORD
F/V	DON JULIO		OTTER	M/TR	TAMPEN
F/V	EINAR ERLEND	M/S	NIELS PAULI	M/TR	TANGANES
M/TR	ELDBORGTRÅL	M/TR	NORAFJELL	M/TR	TASERMIUT
M/TR	ENGEY	M/TR	NORDFJORDTRÅL	M/TR	TONY ANDRE
M/TR	ENNIBERG	M/TR	NORDKYNFISK	M/TR	TOPAS
M/TR	ENTERPRISE	F/TR	NORDSJØTRÅL	M/TR	TRESS PIONEER
M/TR	EROS	F/TR	NORFISK	M/TR	TRONDUR I GØTU
M/TR	FAIRWAY II	F/TR	NORTHERN EAGLE	M/TR	TØNSNES
M/TR	FAME	F/TR	NORTHERN HAWK	M/TR	UKSNØY
M/TR	FAROE PRAWNS	F/TR	NORTHERN OTTER	M/TR	VADSØJENTA
M/TR	FATHER McKEE	F/TR	NORØRN	M/TR	VARAK
M/TR	FREYA	F/TR	NYBORG	F/V	VENTISQUERO
M/TR	GANTHI	F/TR	OCEAN PRAWN	M/TR	VERONICA
F/TR	GIJON	F/TR	OCEAN PRINCESS	M/TR	VESTURVON
M/TR	GINNETON	F/TR	OCEAN ROVER	F/TR	VIGO
M/TR	GISUND	M/TR	ODD LUNDBERG	M/TR	VOLSTAD
M/TR	GJØGUR	F/TR	PACIFIC EXPLORER	M/TR	VOLSTAD SENIOR
M/S	G.O. SARS	F/TR	PACIFIC GLACIER	M/TR	WILHELM EGEDE
M/TR	GUDBJØRG	F/TR	PACIFIC NAVIGATOR	M/TR	YMIR
M/TR	GUDRUN GISLADOTTIR	M/TR	PACIFIC PRIDE	M/TR	ZEPHYR
S/TR	GULLVER	F/TR	PACIFIC SCOUT		

