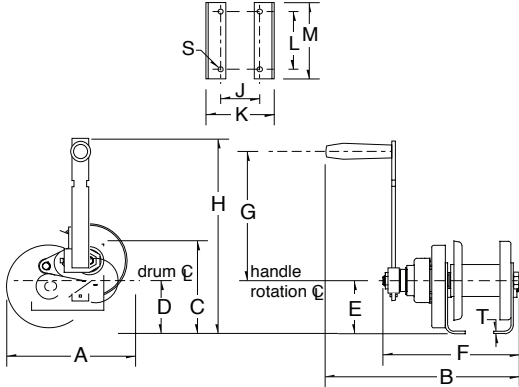
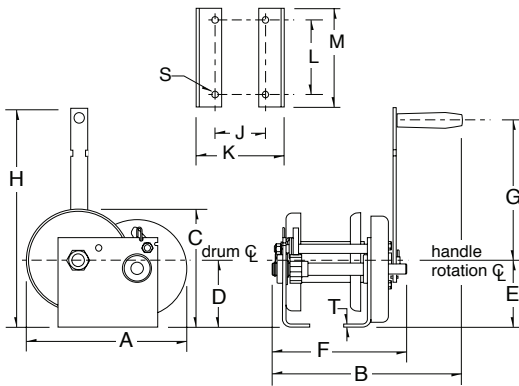


SPUR GEAR

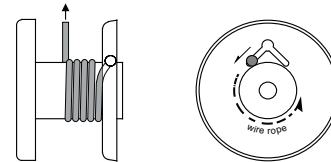
Model M4312PB, M4412PB AND M4312PBSS



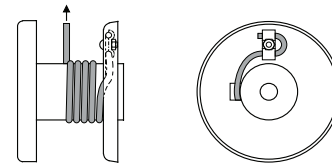
Models M4312 and M4412



Wire Rope Installation - Models M4312, M4312PB, M4312PBSS. M4412 AND M4412PB



Quick Disconnect Anchor



Flange Clip Anchor

IMPORTANT:

It is the owner or operator's responsibility to determine the suitability of the equipment to its intended use. Study all applicable codes, manuals and regulations. Be sure to read the Owner's Manual supplied with the equipment before operating it.

Spur Gear Hand Winches - Dimensions

Model	Drum Dia.		Flange Dia.		Drum Width		A		B		C		D		E		F	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
M4312	2.5	63.5	5.5	139.7	3	76.2	10	254	12.7	322.6	7.15	181.6	4	101.6	4	101.6	8	203.2
M4312PB	2.5	63.5	5.5	139.7	3	76.2	10	254	14.5	368.3	7.15	181.6	4	101.6	4	101.6	10.78	273.8
M4312PBSS	2.5	63.5	5.5	139.7	3	76.2	10	254	14.5	368.3	7.15	181.6	4	101.6	4	101.6	10.78	273.8
M4412	2.5	63.5	5.5	139.7	6	152.4	10	254	15.7	398.8	7.15	181.6	4	101.6	4	101.6	11	279.4
M4412PB	2.5	63.5	5.5	139.7	6	152.4	10	254	17.5	444.5	7.15	181.6	4	101.6	4	101.6	13.78	350.0

Model	G ¹		H ¹		J		K		L		M		S (hole dia.)		T	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
M4312	8.75	222.25	13.35	339.09	3.34	84.84	5.31	134.87	5	127	6	152.4	.40	10.16	.18	4.57
M4312PB	10.59	268.99	15.19	385.83	3.34	84.84	5.31	134.87	5	127	6	152.4	.40	10.16	.18	4.57
M4312PBSS	10.59	268.99	15.19	385.83	3.34	84.84	5.31	134.87	5	127	6	152.4	.40	10.16	.18	4.57
M4412	8.75	222.25	13.35	339.09	6.34	161.04	8.31	211.07	5	127	6	152.4	.40	10.16	.18	4.57
M4412PB	10.59	268.99	15.19	385.83	6.34	161.04	8.31	211.07	5	127	6	152.4	.40	10.16	.18	4.57

¹ Models M4312PB, M4312PBSS and M4412PB handles are adjustable. Dimension shown is for maximum handle length. Dimensions are for reference only and subject to change without notice.

These products are not for lifting people or things over people.
FLCL-0916

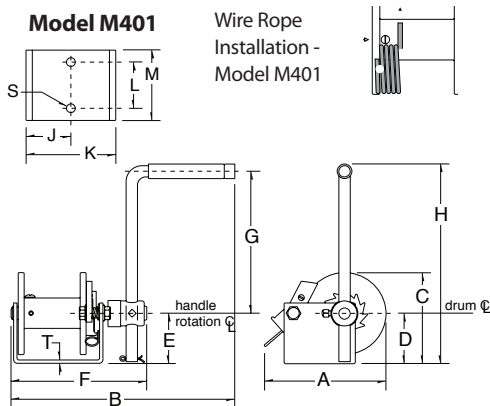
SASKATOON - 3235 Millar Avenue, Saskatoon SK S7K 5Y3
 FAX: (306) 249-4374 **Ph: (306) 242-7073** Toll Free: 1-800-242-7073
 email: sales@northernstrands.com

REGINA - 125 Henderson Drive, Regina SK S4N 5W4
 FAX: (306) 352-9112 **Ph: (306) 352-7073** Toll Free: 1-800-242-7073
 email: sales@northernstrands.com

SPUR GEAR

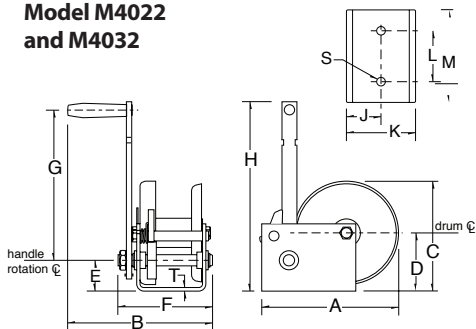
Model M401

Wire Rope Installation - Model M401



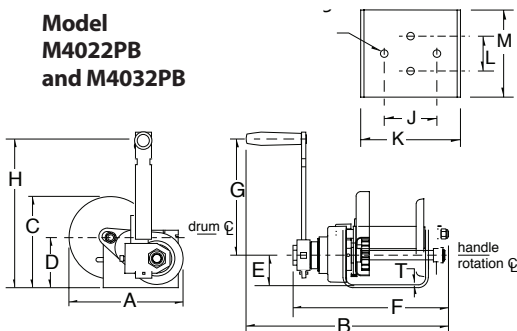
Model M4022 and M4022 PB Base

Model M4022 and M4032

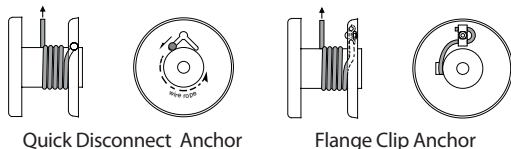


Model M4032 and M4032 PB Base

Model M4022PB and M4032PB



Wire Rope Installation - M4022, M4032, Model M4022PB and M4032PB

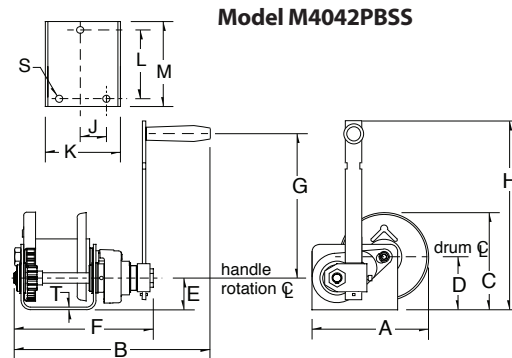


Quick Disconnect Anchor

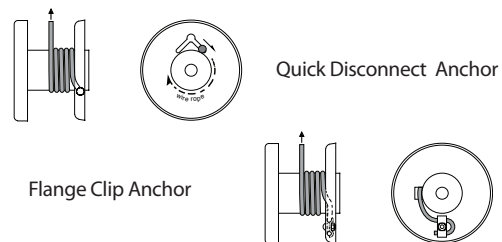
Flange Clip Anchor

Warning: These products are not for lifting people or things over people.
FLCL-0916

Model M4042PBSS



Wire Rope Installation - Model M4042PBSS



Flange Clip Anchor

Quick Disconnect Anchor

Spur Gear Hand Winches - Dimensions (in)

	M401	M4022	M4022PB	M4032	M4032PB	M4042PBSS
Drum Diameter	1.50	1.50	1.50	1.50	1.50	2.50
Flange Diameter	4.06	4.56	4.56	4.56	4.56	5.50
Drum Width	2.75	2.00	2.00	4.00	4.00	3.00
A	6.56	7.27	7.27	7.27	7.27	8.21
B	10.56	9.00	12.12	11.00	14.12	13.77
C	4.56	6.12	6.12	6.12	6.12	6.90
D	2.50	3.31	3.31	3.31	3.31	3.75
E	2.50	2.00	2.00	2.00	2.00	2.25
F	5.81	5.25	8.12	7.25	10.12	9.76
G ¹	8.50	11.03	10.59	11.03	10.59	10.59
H ¹	11.28	13.56	13.12	13.56	13.12	13.50
J	2.19	1.84	1.84	3.00	3.00	1.44
K	4.38	3.68	3.68	53.68	5.68	5.26
L	2.50	2.82	2.82	2.00	2.00	5.00
M	3.50	5.00	5.00	5.00	5.00	6.00
S (hole dia.)	.40	.43	.43	.43	.43	.41
T	.18	.18	.18	.18	.18	.18

Dimensions are for reference only and subject to change without notice.
¹ Models M401, M4022PB, M4032PB and M4042PBSS handles are adjustable.
 Dimension shown is for maximum handle length.

IMPORTANT:

It is the owner or operator's responsibility to determine the suitability of the equipment to its intended use. Study all applicable codes, manuals and regulations. Be sure to read the Owner's Manual supplied with the equipment before operating it.

THERN SPUR GEAR

Spur Gear Hand Winches (Up to 2000 lb Capacity)

- Machine Cut Spur Gears for accurate and long lasting service.
- Automatic Brake Models provide positive load control for lifting and lowering operations. Brake models have a PB or B suffix.
- Corrosion Resistant trivalent zinc plated finish protects against corrosion in harsh environments.
- Quick Disconnect Anchor¹ for quickly attaching or removing wire rope equipped with a swaged ball fitting.
- Bronze and Radial Ball Bearings provide smooth and efficient operation.
- Large Diameter Drums minimize wear to extend wire rope life.
- Gear Covers protect gears and help prevent injuries.
- Stainless Steel Models Available for harsh environments, see models with SS suffix. Stainless steel models are electro-polished for added corrosion resistance.
- Two-year Limited Warranty

Model M4022PB



Model M4312PBSS
Shown with wire rope



Wire rope assemblies sold separately

Worm Gear Hand Winches

Model	Description	LOAD RATING						Wire Rope Dia. ¹		DRUM CAPACITY ²						Single Gear Ratio	Double Gear Ratio	Force ³ to lift 1000 lb		Approx. Ship Weight	
		1st Layer		Mid Drum		Full Drum				1st Layer		Mid Drum		Full Drum							
		(lb)	(kg)	(lb)	(kg)	(lb)	(kg)	(in)	(mm)	(ft)	(m)	(ft)	(m)	(ft)	(m)						
M401	500 lb – marine duty (for pulling only)	500	226	400	181	300	136	1/8	3.2	7	2	60	18	130	39	–	–	–	–	8	3
								3/16	4.8	4	1	27	8	60	18						
M4022	1000 lb – marine duty (for pulling only)	1000	453	700	317	500	226	1/8	3.2	4	1	52	15	130	39	2.85:1	–	40	18.1	12	5
								3/16	4.8	3	0.9	26	7	57	17						
M4022PB	1000 lb – marine duty with brake (for lifting)	1000	453	700	317	500	226	1/8	3.2	4	1	52	15	130	39	2.85:1	–	41	18.6	17	7
								3/16	4.8	3	0.9	26	7	57	17						
M4032	1000 lb – marine duty (for pulling only)	1000	453	700	317	500	226	1/8	3.2	11	3	110	33	250	76	2.85:1	–	40	18.1	14	6
								3/16	4.8	7	2	51	15	110	33						
M4032PB	1000 lb – marine duty with brake (for lifting)	1000	453	700	317	500	226	1/8	3.2	11	3	110	33	250	76	2.85:1	–	41	18.6	18	8
								3/16	4.8	7	2	51	15	110	33						
M4042PBSS	1000 lb – stainless steel with brake (for lifting)	1000	453	800	362	600	272	1/8	3.2	12	3	110	33	240	73	3.83:1	–	46	20.9	24	10
								3/16	4.8	8	2	48	14	110	33			(sgl gear)			
								1/4	6.4	5	1	27	8	59	17						
M4312	2000 lb – marine duty (for pulling only)	2000	907	1600	725	1200	544	3/16	4.8	8	2	48	14	110	33	3.83:1	14.7:1	20	9.1	23	10
								1/4	6.4	5	1	27	8	59	17			(dbl gear)			
								5/16	7.9	4	1	17	5	39	11						
M4312PB	2000 lb – marine duty with brake (for lifting)	2000	907	1600	725	1200	544	3/16	4.8	8	2	48	14	110	33	–	14.7:1	17	7.7	28	12
								1/4	6.4	5	1	27	8	59	17			(dbl gear)			
								5/16	7.9	4	1	17	5	39	11						
M4312PBSS	2000 lb – stainless steel with brake (for lifting)	2000	907	1600	725	1200	544	3/16	4.8	8	2	48	14	110	33	–	14.7:1	17	7.7	28	12
								1/4	6.4	5	1	27	8	59	17			(dbl gear)			
								5/16	7.9	4	1	17	5	39	11						
M4412	2000 lb – marine duty (for pulling only)	2000	907	1600	725	1200	544	3/16	4.8	18	5	97	29	210	64	3.83:1	14.7:1	20	9.1	25	11
								1/4	6.4	14	4	52	15	120	36			(dbl gear)			
								5/16	7.9	11	3	35	10	77	23						
M4412PB	2000 lb – marine duty with brake (for lifting)	2000	907	1600	725	1200	544	3/16	4.8	18	5	97	29	210	64	–	14.7:1	17	7.7	30	13
								1/4	6.4	14	4	52	15	120	36			(dbl gear)			
								5/16	7.9	11	3	35	10	77	23						

Please contact Thern or nearest Thern Distributor for firm fixed price and delivery.

¹ For Models M4022, M4022PB, M4032, M4032PB, ball end is available for 1/8-inch and 3/16-inch only. For Models 4042PBSS, M4312, M4312PB, M4312PBSS, M4412, M4412PB, ball end is available for 3/16-inch and 1/4-inch only.

² Actual drum capacities may be 25-30% less due to nonuniform winding. Wire rope tension will also affect drum capacity.

³ Approximate handle force required to lift 1000 lbs with an empty drum and maximum handle length.

These products are not for lifting people or things over people.

FLCL-0916

SASKATOON - 3235 Millar Avenue, Saskatoon SK S7K 5Y3
 FAX: (306) 249-4374 **Ph: (306) 242-7073** Toll Free: 1-800-242-7073
 email: sales@northernstrands.com

REGINA - 125 Henderson Drive, Regina SK S4N 5W4
 FAX: (306) 352-9112 **Ph: (306) 352-7073** Toll Free: 1-800-242-7073
 email: sales@northernstrands.com