

MANUAL HOISTS & WINCHES



EXPERIENCE THE DIFFERENCE

# 190 SERIES HAND CHAIN HOISTS

## A Quality Product

The 190 Series are world class products of high quality, low cost, light weight and high endurance in capacities from 500kg to 20000kg. The key capacities 500kg, 1000kg, 2000kg and 3000kg are Class M2 hoists for heavy-duty use giving twice the working life of Class M1 units commonly available in the market.

The Morris 190 design exceeds BS EN 13157\* and includes safety hooks. The hoists have a safety factor of 5:1 (M2). \*1500kg-Grade 100 loadchain is fitted

For optimised strength and wear resistance Morris fit as standard an anti-corrosive finish grade 80 loadchain. The 190 has proven minimal maintenance and long life lubrication.

Built in 164 series push or hand geared trolleys are offered for 500kg to 10000kg capacities. Hook suspension hoists are used with 164 series trolleys with 16000kg and 2000kg capacities providing a hung in arrangement.

Hook suspension is available for all capacities and all hook suspension hoists can be hung into push or hand geared Morris 164 travelling trolleys.

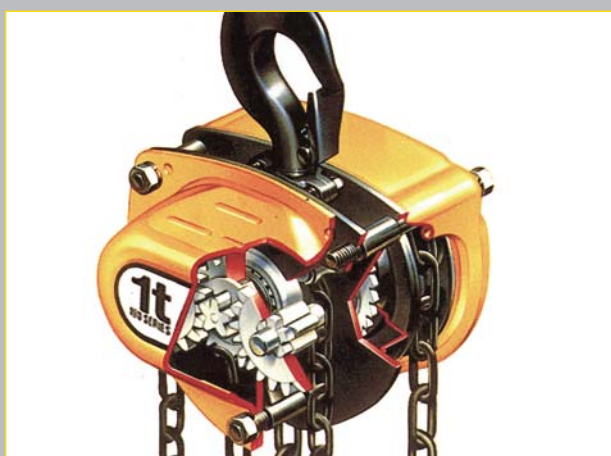
### Spark Resistant & Marine Specification Hand Chain Hoist

A specially designed 190 is suitable for use in hazardous environments where a spark resistant specification is required. The design can be supplied in both hook suspension and incorporated into spark resistant push or hand geared travelling trolleys. This range extends from 500kg to 20000kg.



#### Options:

- Load limiter - Protects the hoist against excessive overload
- Stainless Steel loadchain & handchain - Capacity reduction required
- Spark Resistant and marine specification



- Twin pawl mechanism as standard - additional safety
- Surface hardened gears - extended working life
- Use of needle roller bearings - high operating efficiency
- Self sustaining maintenance free friction brake
- Smooth passage of loadchain
- Smooth handchain operation

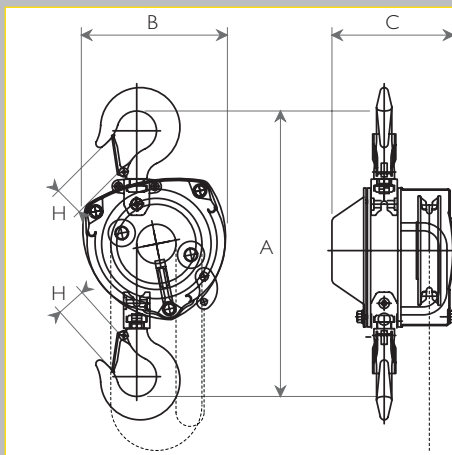
#### Spark Resistant Features Include:

- Bronze coated hooks
- Stainless steel ratchet pawl and handchain
- Aluminium bronze runners and chain guide rollers
- Zinc plated loadchain
- Brass protected drop stops and anti tip stop
- Synthetic rubber buffers

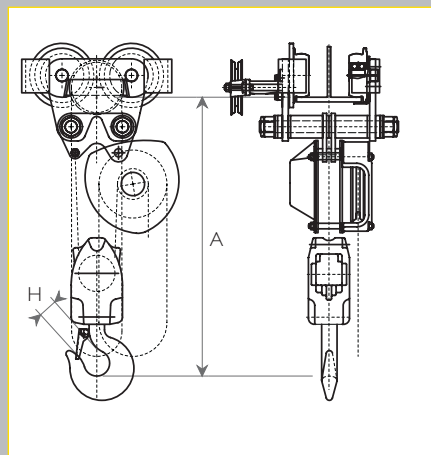
S4 Series Explosion Proof Wire Rope Hoists are also available.

## Technical Data & Dimensions

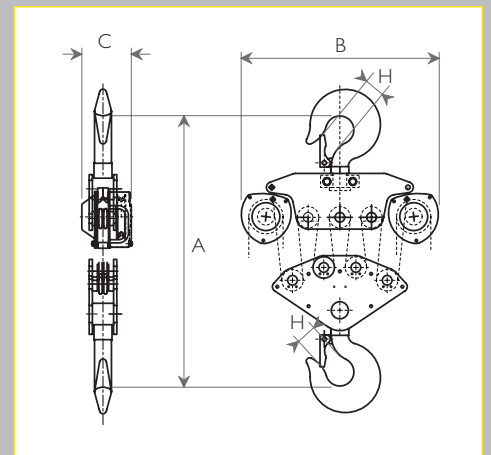
Capacity kg	500	1000	1500	2000	2000	2500	3000	5000	8000	10000	16000	20000
Number of falls of load chain	1	1	1	2	1	1	3	2	3	4	6	8
<b>Dimensions</b>												
<b>A</b> Hook suspension	295	360	360	450	450	450	530	720	810	840	1065	1120
Close-lift (ranges 1&2)	300	345	345	465	425	425	500	660	775	800	-	-
Close-lift (range 3)	340	385	385	505	470	470	565	725	775	800	-	-
Hung-in (164 trolley, ranges 1&2)	365	430	430	550	530	530	650	840	970	1000	1285	1340
Hung-in (164 trolley, range 3)	405	470	470	590	575	575	715	905	1060	1090	1285	1340
<b>B</b>	155	180	180	180	238	238	268	280	420	470	600	920
<b>C</b>	144	153	153	153	209	209	153	209	220	220	220	220
<b>H</b>	27	32	32	32	38	38	37	38	55	60	75	85
<b>Hung-in and close-lift units</b>												
Track width range 1	58-140	58-140	58-140	-	90-153	90-153	126-166	126-166	154-192	154-192	154-192	154-192
range 2	140-210	140-210	140-210	-	153-216	153-216	166-210	166-210	192-229	192-229	192-229	192-229
range 3	210-305	210-305	210-305	-	216-305	216-305	210-305	210-305	229-305	229-305	229-305	229-305
Minimum clear depth of track	127	127	127	-	152	152	203	203	203	203	203	203
Minimum radius of track curve	1.5	1.5	1.5	-	1.5	1.5	1.8	1.8	3.0	3.0	-	-
Weight: hook suspension unit chain for standard 3m hook-to-hook kg	10	13	13	14	29	29	27	55	67	99	178	220
Additional weight for extra of lift, per metre kg	1.4	1.8	1.8	3.6	3.5	3.5	3.6	5.7	8	10	14.5	20
Effort on hand chain to raise working load kg	23	26	39	26	33	41	31	41	46	40	40	46x2
Velocity ratio (movement of chain relative to load chain)	27:1	45:1	45:1	90:1	78:1	78:1	135:1	156:1	234:1	312:1	468:1	624:1
Safety factor	5:1	5:1	4:1	5:1	5:1	4:1	5:1	4:1	4:1	4:1	4:1	4:1



**Hook Suspension**



**Built In Trolley**



**20000kg Unit Incorporating  
2 Units - 8 Falls**

# 196 SERIES ULTRA LOW HEADROOM HAND CHAIN HOISTS

## Capacities From 1000kg to 25000kg

Manual chain hoists of special designs are needed when it is not possible to use standard hoists, i.e. lack of space available or special environmental conditions. Morris can offer the 196 Series Ultra Low Headroom Hand Chain Hoist configuration for these purposes.

### Optional Spark Resistant & Marine Specifications

Other options Morris offer are the Ultra Low Headroom manual hoist suitable for marine or hazardous environments. These hoists meet relevant internationally recognised standards and regulations.

- Fitted with overload protection as standard
- Machined trolley wheels with roller bearings
- Zinc plated high quality loadchain to EN818-7-T
- Zinc plated handchain to DIN 766

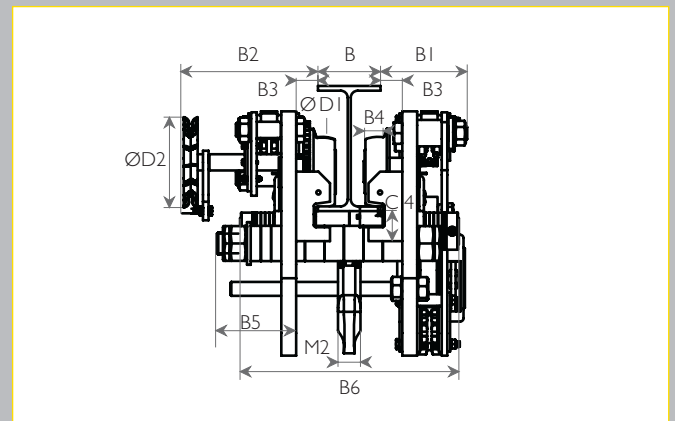
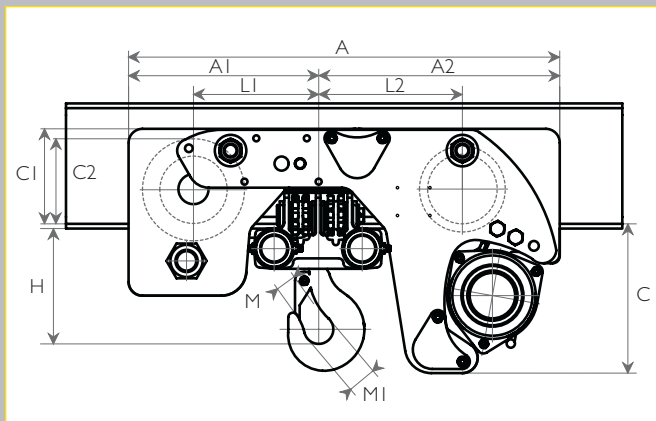
- Use in Zone I, 2I
- Upto temperature class T4
- Gas explosion group upto IIB
- Ultra low headroom

## Technical Data & Dimensions

Capacity kg	Number of Chain Falls	Chain mm	Flange Width From - To For Load Bar Size			At 30m Hand Chain Path		Hand Chain Pull For		Weight	
			Range 1 mm	Range 2 mm	Range 3 mm	Lifting Distance mm	Travel Distance m	Lifting daN	Travel daN	At 3m Track Height kg	Per m Add. Lift kg
1000		5x15	74-150	151-220	221-310	582	7.8	23	9	75	3.1
2000	2	6.3x19.1	82-156	157-210	211-306	435	9.8	36	13	145	3.8
3200	2	8x24	106-223	224-310	-	320	6.3	42	10	225	4.8
5000	2	8x24	119-215	216-312	-	160	6.5	35	12	370	7.6
6300	4	8x24	119-215	216-312	-	160	6.5	43	15	370	7.6
10000	4	16x45	155-310	-	-	35	4	19	28	1020	14.7
16000	2	16x45	185-310	-	-	18	4	19	28	1625	26.1
20000	4	16x45	185-310	-	-	18	4	19	28	1660	26.1
25000	4	16x45	300-310	-	-	18	4	19	28	1680	26.1

Capacity kg	Dimensions (mm)																									
	A	A1	A2	B1	B2	B3	B4	B5 Range			B6	B7	C	C1	C2	C4	D1	D2	H (1)	L1	L2	M	M1	M2		
1000	565	233	332	132	272	40	20	130	176	188	456	456	548	7	214	127	82	28	65	135	140	160	190	30	40	27
2000	670	265	405	157	335	43	23	136	185	223	486	486	582	10	293	167	107	28	85	135	163	170	235	36	48	35
3200	805	325	480	178	265	48	28	243	211	-	516	603	-	13	326	199	150	43	120	195	193	200	265	42	56	45
5000	930	410	520	187	268	47	33	188	189	-	472	568	-	15	323	204	185	43	150	195	239	270	310	45	63	53
6300	930	410	520	187	268	47	33	188	189	-	472	568	-	15	323	204	185	43	150	195	239	270	310	45	63	53

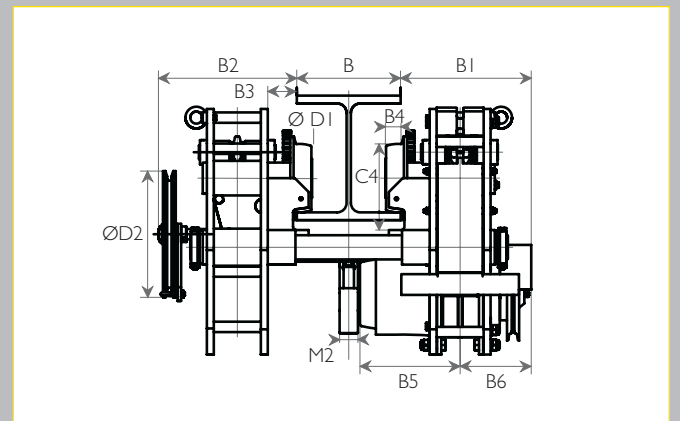
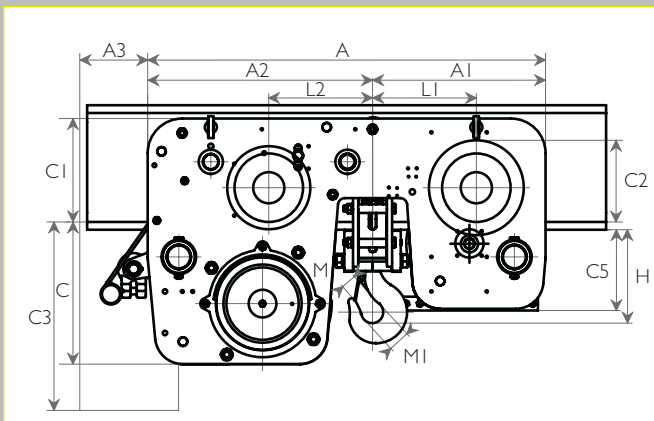
(1) Supplied with ball bearing load hook from 5000kg upwards.





## Technical Data & Dimensions

Capacity kg	Dimensions (mm)																							
	A	A1	A2	A3	B1	B2	B3	B4	B5	B6	C	C1	C2	C3	C4	C5	D1	D2	H	L1	L2	M	M1	M2
10000	1150	500	650	350	381	400	84	45	273	209	425	300	236	530	51	250	198	365	270	300	300	45	63	53
16000	1465	665	800	350	381	400	85	62	273	209	335	410	341	530	44	305	298	440	392	400	400	55	90	80
20000	1465	665	800	350	381	400	85	62	273	209	335	410	341	530	44	305	298	440	420	400	400	55	90	80
25000	1465	665	800	350	381	400	85	62	273	209	335	410	341	720	44	305	298	440	472	400	400	69	100	90



10,000 - 25000kg SWL