WH SS-L5 QP (Quad Pawl) Lever Hoist

The SS-L5 QP meets and exceeds the requirements of international standards:
British Standard BS EN13157:2004+ AI:2009
American Standard ASME B30.21-2014
Australian Standard AS 1418.2-1997
South African Standard SANS 1594:2007
NORSOK R-002:2017

The William Hackett SS-L5 QP is the first lever hoist to incorporate four pawl mechanical engagement functionality. The unique and patented pawl design enhances the capabilities of the hoist allowing all four pawls to engage with the ratchet gear in an offset configuration allowing finer adjustment and tensioning capability while maintaining pawl / ratchet gear engagement. The pawl springs are totally enclosed in the brake chamber and the patented pawl design allows, however unlikely, for both pawl springs to fail and for the quad pawls to maintain full functioning engagement with the ratchet gear making the hoist safer.

William Hackett verifies that the SS-L5 QP can be safely used over a 21-day single immersion and a 31-day multi immersion period which offers operators considerable financial advantages.

The design features, manufacture, verification testing and guidance for use, maintenance and storage of the SS-L5 QP has also been developed in line with:

BP Document DEV-AAD-SS-SD-BP-0545
'Specification and compliance requirements for lever hoists used subsea on BP projects'

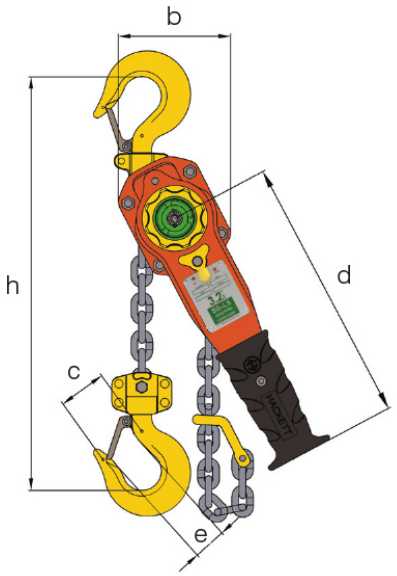
The design and specification of the William Hackett SS-L5 QP lever hoist includes

- **WORKING LOAD LIMIT RANGE:** 800kg to 15 tonnes.
- **LIGHT LOAD CAPABILITY:** the SS-L5 QP is tested and certified at 2% of the lever hoist rated capacity.
- **DABS (DUAL ANTI-LOCK BRAKE SYSTEM):** allows the load chain to be adjusted in freewheel mode without locking the brake.
- **CONSTRUCTION AND DESIGN:** minimises the ingress of contaminates to the internal brake mechanism surfaces.
- **STAINLESS STEEL PAWL SPRINGS:** specially designed to work with the SS-L5 patented quad pawls. The stainless steel springs are captivated in the brake chamber protecting them against damage.
- **STAINLESS STEEL FIXINGS:** all internal springs, circ clips securing thepawls onto the pawl stands, nyloc nuts and socket head cap screws are stainless steel.
- **SINTERED/FUSED FRICTION MATERIAL:** the brake material of the SS-L5 QP is fused directly onto the ratchet gear. This reduces the number of mating faces where there is a potential for ingress of contaminates that could affect the brake performance. Grooves cut into the brake material allow water to be displaced from the friction surface.
- **LOAD CHAIN:**
  - Highly effective anti-corrosion protection for Grade 8 load chain
  - No hydrogen embrittlement occurs in the application of corrosion protection
  - Free from harmful metals such as Cr-VI
  - Cathodic protection by sacrificial corrosion of zinc
  - Integrated lubricant with coefficient of friction µtot 0,12 - 0,18
  - Dry film thickness 8 - 10 microns
  - Corrosion resistance 720h - 1,000h according to DIN EN ISO 9227
  - Fully compliant with EN818-7

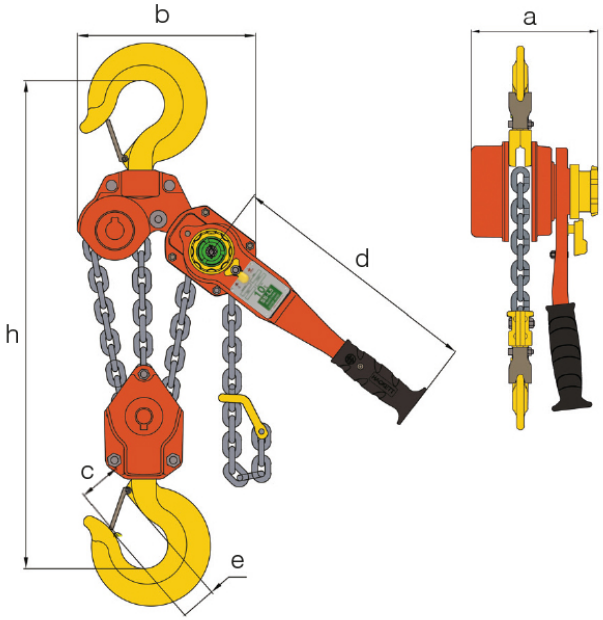
- **MARINE PAINT:**
  - AkzoNobel Interpon D1010 Premium is a high durability powder coating with maximum film itegrity and resistance to colour change ensuring a long term corrosion protection
  - Corrosion Resistance 1,000h according to DIN EN ISO 9227. No corrosion creep more than 2mm from scribe mark
  - Multi-layer coating system
  - For premium coating performance a pre-treatment zinc phosphate primer is applied prior to the application of the Interpon D1010 top coat
  - AkzoNobel Interpon D1010 top coat dry film thickness 60 - 100 microns
- **CORROSION PROTECTION:** the complete brake mechanism of the SS-L5 QP is corrosion protected including the pinion shaft, disc hub, change gear, ratchet gear, pawls, pawl stands and load sheave. In addition the load chain guide, stay bolts and chain stripper are also corrosion protected.
- **HIGH PERFORMANCE WATERPROOF GREASE:** used throughout the SS-L5 QP lever hoist enhancing the corrosion protection.
- **ADJUSTABLE TRAVELLING END STOP:** the uniquely designed travelling end stop of the SS-L5 QP lever hoist allows the operator to position the end stop at any point of the slack section of the Grade 8 load chain. When the lever hoist is in a final rigged position the travelling end stop can be positioned adjacent to the body of the SS-L5 QP. This has the function of preventing the payout of the chain for whatever reason when the next time the lever hoist is operated.
- **TEMPERATURE RANGE:** -40°C to +120°C.
- **OPTIONAL EQUIPMENT:** the SS-L5 QP lever hoist can be fitted with an overload limiter and also hook adaptors to allow any Grade 8 fixing to be fitted to the SS-L5 QP to suit varying applications.
- **PROOF TESTED:** every SS-L5 QP lever hoist is proof tested to 1.5 times the Working Load Limit.
- **SAFETY FACTOR:** 4 : 1.
- **MANUFACTURED:** in the United Kingdom.

Specifications

Single Fall



Multi Fall



Part Code	WLL tonnes	No. of Falls	Load Chain mm	Standard Lift m	a mm	b mm	c mm	d mm	e mm	h mm	Nett Weight kg	Extra Weight per m kg
035.SS.080	0.80	1	5.6x15.7	1.5	146	119	42.0	245	27.0	280	5.90	0.70
035.SS.160	1.60	1	7.1x19.9	1.5	164	126	54.5	265	36.0	335	7.40	1.12
035.SS.320	3.20	1	10 x 28	1.5	196	159	60.5	415	42.0	395	13.70	2.23
035.SS.630	6.30	2	10 x 28	1.5	196	218	85.5	415	52.5	540	26.40	4.46
035.SS.1000	10.00	3	10 x 28	1.5	196	298	86.0	415	59.0	680	40.10	6.69
035.SS.1500	15.00	6	10 x 28	1.5	196	420	-	415	80.0	1000	70.20	13.38