

# LDH, LDK, LHU

## HYDRAULIC SOLUTIONS

### LDH



### SCOPE OF DELIVERY

- › DEVICE INCL. SQUARE DRIVE AND COUNTER BEARING
- › TOOL BOX
- › TORQUE-SETTING-TABLE
- › OPERATING MANUAL



### LDK



### SCOPE OF DELIVERY

- › DEVICE
- › TOOL BOX
- › TORQUE-SETTING-TABLE
- › OPERATING MANUAL



### LHU



### SCOPE OF DELIVERY

- › DEVICE OIL-FILLED
- › CONTROL (M/A OR S)
- › OPERATING MANUAL



# THE HYDRAULIC TORQUE WRENCH

## LDH SERIES, 60 - 27000 Nm

Integrated relief valve in the hydraulic connection increases work safety



Reduced size and compact construction for extremely confined spaces



360° rotating hydraulic connection under load for flexible bolting work



Quick-change mechanism for rapid shifting of the reaction arm



Super-light high performance aluminium for rugged and ergonomic handling



Various inserts as accessories for flexible working



Counter bearing with push button allows quick replacement of various inserts



Optional: Hydraulic connection in 360° x 180° swiveling design



Optional: Inclined connection

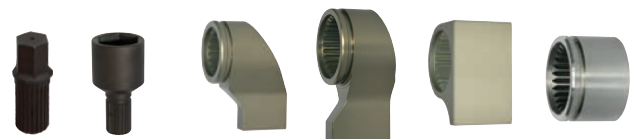
### Scope of delivery

- › Device
- › Square drive
- › Counter bearing
- › Tool box
- › Torque-setting-table
- › Operating instructions



### Optional accessories

- › Allen screw
- › Toothed impact sockets and special inserts on request
- › Different reaction arms (look p. 36)
- › Hydraulic connection in 360° x 180° swiveling design (see above)
- › Inclined connection (see above)





## Light, easy to handle and with high torque

The LDH is used where space is limited but high torque is required. In order to facilitate bolting operations for the user, the hydraulic torque wrench series has been designed with high-performance aluminium and subject to continuous improvements.

The size has therefore been constantly reduced while more and more features have been included to make the difficult work easier for the user.

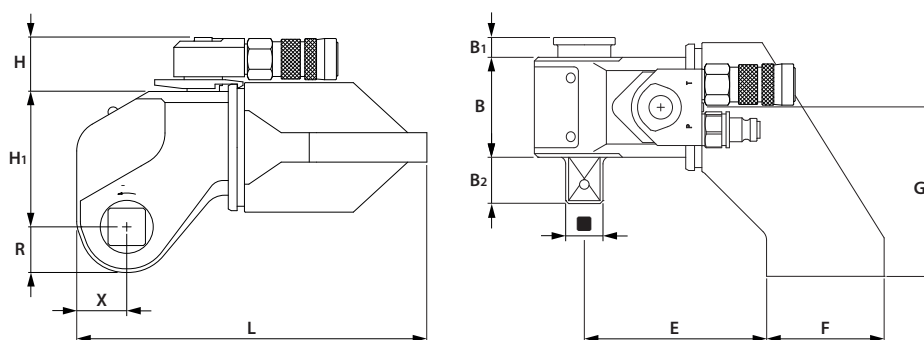
An integrated relief valve ensures working safety and the flow-optimised, generously dimensioned oil channels reduce heating up of the device during high continuous loads to a minimum.

## The perfect combination

Together with our hydraulic units, the hydraulic torque wrenches achieve a maximum in work performance. Both components together create an excellent synergy of user-friendliness and operating convenience.



## Technical Data



Series LDH – hydraulic

Type	N·m min/ max <sup>*1</sup>	lbf·ft min/ max <sup>*1</sup>	■	B mm	B <sub>1</sub> mm	B <sub>2</sub> mm	E mm <sup>*3</sup>	F mm <sup>*3</sup>	G mm	H mm	H <sub>1</sub> mm	L mm <sup>*3</sup>	R mm	X mm	kg <sup>*2</sup>
LDH-12V	60 - 1200	45 - 880	¾"	46	7	28	-/88	-/48	78	37	62	-/158	19	22	1.9
LDH-24V	120 - 2350	90 - 1730	¾"	53	6	28	59/109	60/58	95	37	72	146/194	24	27	2.0
LDH-48V	230 - 4800	170 - 3500	1"	68	14	32	70/125	89/80	115	37	92	193/239	31	34	3.9
LDH-75V	400 - 7560	290 - 5570	1½"	76	12	44	74/134	94/93	122	37	107	207/266	36	39	6.2
LDH-100V	500 - 10 000	370 - 7300	1½"	84	13	39	85/150	105/99	130	37	115	233/292	39	43	7.8
LDH-170V	800 - 16 000	590 - 11800	1½"	100	11	45	93/163	118/108	150	50	135	265/325	48	54	11.8
LDH-270V	1300 - 27 000	960 - 19900	2½"	119	18	76	121/206	145/133	200	50	164	329/402	59	63	24.0

<sup>\*1</sup> Maximum torque at 800 bar    <sup>\*2</sup> Without reaction arm  
The continuous sound pressure as per DIN 455635 is < 70 dB(A)

<sup>\*3</sup> Reaction arm type L(LM) / Reaction arm type S(LM)    Vibration is less than 2.5 m/s<sup>2</sup>  
All rights reserved. Subject to modifications without prior notice.



Allen screw - ISW

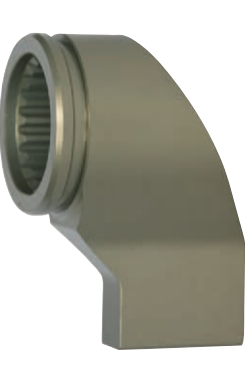
Type	ISW mm
LDH-12V	ISW 12V-14
	ISW 12V-17
	ISW 12V-19
LDH-24V	ISW 24V-14
	ISW 24V-17
	ISW 24V-19
	ISW 24V-22
	ISW 24V-24
LDH-48V	ISW 48V-17
	ISW 48V-19
	ISW 48V-22
	ISW 48V-24
	ISW 48V-27
	ISW 48V-30
	ISW 48V-32

Type	ISW mm
LDH-75V	ISW 75V-17
	ISW 75V-19
	ISW 75V-22
	ISW 75V-24
	ISW 75V-27
	ISW 75V-30
	ISW 75V-32
LDH-100V	ISW 100V-19
	ISW 100V-22
	ISW 100V-24
	ISW 100V-27
	ISW 100V-30
	ISW 100V-32
	ISW 100V-36

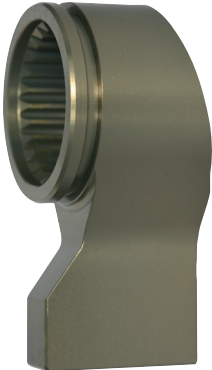
Type	ISW mm
LDH-170V	ISW 170V-27
	ISW 170V-30
	ISW 170V-32
	ISW 170V-36
	ISW 170V-41
	ISW 170V-46
LDH-270V	ISW 270V-36
	ISW 270V-41
	ISW 270V-46
	ISW 270V-50
	ISW 270V-55
	ISW 270V-60
	ISW 270V-65
	ISW 270V-70



Reaction arms



Reaction arm S (LM)  
Standard design



Reaction arm L (LM) (except LDH-12V)  
Compact design



Reaction arm K (LM)  
For embedded screws  
and raised allen screws



Reaction sleeve RH (St)

# THE HYDRAULIC UNIT

## LHU SERIES



OR



OR



### Manual control - M

The classic, semi-automatic control system enables the user to manually initiate every stroke of the hydraulic torque wrench. The return stroke is automatic.


### Automatic control - A




The bolting operation is started by pressing a button, then automatically implemented and ended in the automatic control mode.

### Modular control - Solution

The Solution control system is modularly expandable. All settings can be configured and bolting operations documented via the display.

## Technical data



Type	V / Hz	MP L/min., bar	HP L/min., bar	Tank L <sup>*1</sup>	LxBxH mm	 *2 – M	 *2 – A	 *2 – Solution
LHU-30	110/50	2.1/320	0.7/800	3.0	400x240x380	27.0	27.2	27.5
LHU-30	110/60	2.5/320	0.8/800	3.0	400x240x380	27.0	27.2	27.5
LHU-30	230/50	1.7/320	0.8/800	2.5	400x240x380	27.0	27.2	27.5
LHU-30	230/60	2.5/320	0.8/800	3.0	400x240x380	27.0	27.2	27.5
LHU-35	110/50	3.0/320	0.8/800	3.5	570x275x400	41.5	42.0	42.5
LHU-35	110/60	3.5/320	1.0/800	3.5	570x275x400	41.5	42.0	42.5
LHU-40	230/50	3.1/320	0.7/800	4.0	480x270x400	33.0	33.5	34.0
LHU-40	230/60	3.7/320	0.9/800	4.0	480x270x400	33.0	33.5	34.0
LHU-60	400/50, 60	4.7, 5.6/320	1.4, 1.7/800	6.2	480x270x400	36.5	37.2	37.5

\*1 Supplied filled with oil and ready for operation

\*2 Weight with control system, without oil

All rights reserved. Subject to modifications without prior notice.



## Modular control LHU Solution

The LHU Solution series is the high-end model in modern hydraulic unit technology. The operator controls the entire bolting process via remote control. In addition to the basic bolting methods (manual, automatic and torque-rotation angle), the control system can be retrofitted according to your requirements with additional modules of our bolting software.

 More information about documentation modules  
see pages 54/55

### The display and its functions:

Integrated work lighting

Visual and acoustic user guidance

3.5 „high-resolution LCD color display with impact-resistant macrolon screen

Back button

Start bolting



 Integrated holding magnets on the back for secure fixation on metallic surfaces

Inductive interface for data transmission

Adjustment wheel for easy selection of bolting options and torque values

Enter button

Pump OFF