

Application area

- For die change in forming presses
- Available versions:
 - with balls or rollers as lifting inserts
 - hydraulically or mechanically driven
- Used in pairs (or more by using hydraulic versions) in T-slots according to DIN 650 or in rectangular slots in the machine bed.

Die lifters with balls (HLK/MLK):

- The die can be moved and positioned in any direction.
- Usable for normal cast materials or steels.
- The die plates should have a minimum pressure resistance of approx. 750 N/mm² (ideal conditions: hardened and grinded surface or ledges)

Die lifters with rollers (HLR/MLR):

- The die can be moved and positioned linearly along the T-slot lay out.

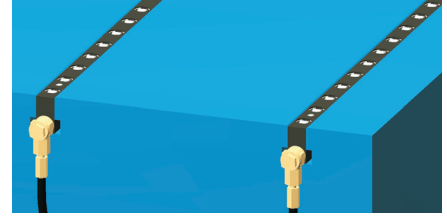


Fig.: Hydraulic die lifter type HLK (with roller inserts)
No hydraulic connection required for mechanical version.

Mode of operation

- The balls and rollers are lifted over the table (bed) surface. This is achieved by application of hydraulic pressure (hydraulic) or by disk springs (mechanical).
- The die can be moved and positioned with low force.
- In the hydraulic versions the balls/rollers are pushed back onto the table / bed surface by the weight of the die after depressurising.
- In the mechanical versions the balls/rollers are pushed back to the table / bed surface by the clamping force of the die.

Description

The balls or rollers are lifted hydraulically (40 bar respectively 80 bar) or mechanically (by disk springs). During the die change the hydraulic pressure has to be maintained. Pressure sensing by pressure switch on the hydraulic power pack is required.

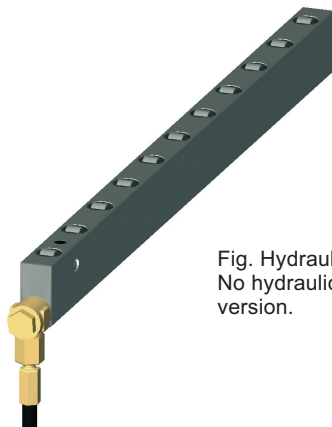


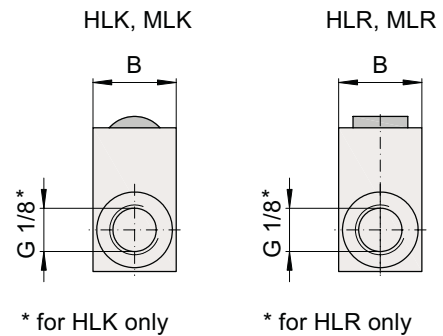
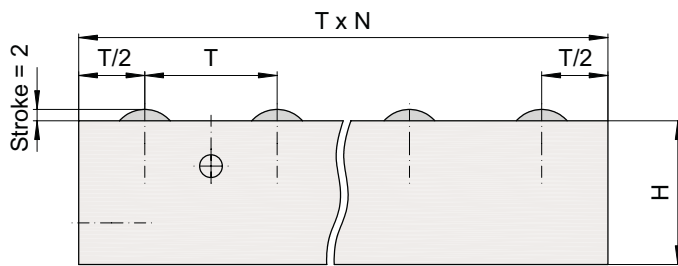
Fig. Hydraulic die lifters type HLR (with ball inserts)
No hydraulic connection required for mechanical version.

Advantages

- Central operation
- Secured against displacement by expansion dowels
- Lifting function is achieved by separate lifting inserts (single inserts can be taken out from above)
- Suitable for retrofits
- Die lifters with rollers offer a high lifting force and a large contact surface.

Accessories

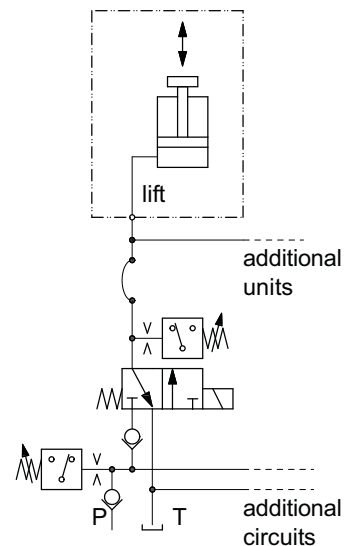
- Fittings
- Hydraulic hoses / Hydraulic accessories
- Hydraulic power packs



Mechanical die lifter						
T-Slot DIN 650	B	H	T	Lifting force per insert [dN]		N (Number of lifting inserts)
				Ball	Roller	
18	18	30	35	25	50	Series A
22	22	38	40	40	80	
28	28	48	45	63	125	
36	36	61	50	100	200	

Hydraulic die lifter						
T-Slot DIN 650	B	H	T	Lifting force per insert [dN]		N (Number of lifting inserts)
				Ball	Roller	
18	18	30	35	50	100	Series B
22	22	38	40	80	160	Series C
28	28	48	45	125	250	Series B
36	36	61	50	200	400	Series C

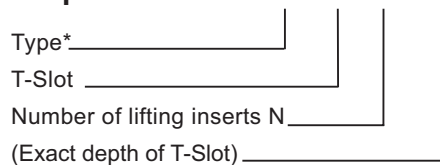
For HLK and HLR:



N (Number of lifting inserts)																				
Series A	3	4	5	6	--	8	--	10	--	--	--	--	--	--	--					
Series B	--	--	--	--	7	--	9	--	11	12	14	16	18	20	22	25	28	31	35	40
Series C	--	--	--	--	--	8	--	10	--	--	--	--	--	--	--	--	--	--	--	--

Example order

HRL - 22 - 14 - 39,1



*Type	
MLK	with ball inserts, mechanical
MLR	with roller inserts, mechanical
HLK	with ball inserts, hydraulic
HLR	with roller inserts, hydraulic