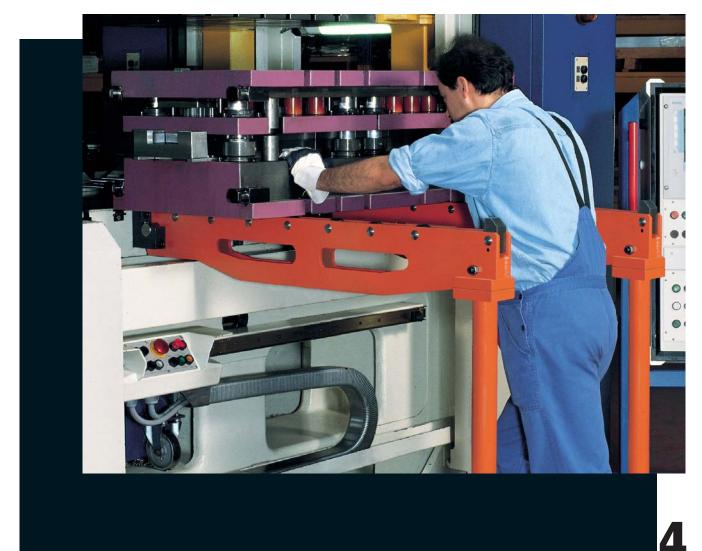


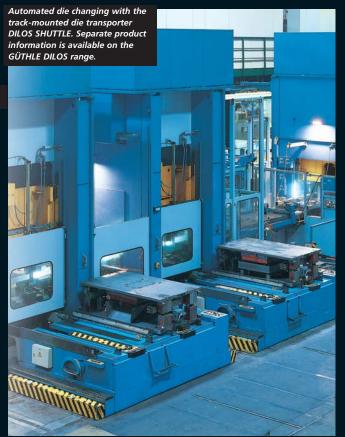
PRODUCT CATALOGUE WITH APPLICATION INFORMATION

→ EVERYTHING FOR QUICK DIE CHANGE AND DIE CLAMPING













→THE PRODUCT RANGE

General information

The complete die clamping and changing technology This catalogue contains all the products that are required for the purpose of equipping a press to ensure quick, safe and reliable die changing operations – up to 10 t die weight.

Many new features

Substantial revisions and extensive additions have been made to the previous range of products designed for changing and clamping dies. These products have now been brought together under the **trade name ROLLBLOC**. The great variety of this product range is aimed at enabling you to find individual solutions whilst obtaining everything you need from under one roof.

All ROLLBLOC products in this catalogue feature a new, logically structured **order code** which you should use wherever possible.

Standard and options

We assume that you will find exactly what you require in our extensive ROLLBLOC product range. In addition, whenever necessary, we can manufacture our products modified to specifically suit your particular requirements.

Not only for experts

With detailed application information, the new ROLLBLOC ordering catalogue is designed to be easy to understand and use without the need for expert knowledge. The aim is to provide concise information to assist you in your specific project planning requirements.

Consulting

In the case of complex tasks, you can give us a dimensioned drawing or CAD data of the tool installation space in question. Güthle will be glad to work out a concept for you according to your specifications.

Installations Service

If you wish, Güthle can carry out the installation for you. In this case, get in touch with us at: Telephone: +49 7163 990921 e-mail: info@guthle.com

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Project planning and ordering information

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→ EASY HANDLING AND PRECISION POSITIONING OF DIES WEIGHING TONS

ROLLBLOC Die Lifters

The conventional procedure for changing press and punch dies becomes awkward, often tedious, protracted and potentially dangerous when handling dies weighing more than 500 kg. Long downtimes soon send costs spiralling, resulting in substantial cost estimation problems for small and medium-sized production lots.

A die change operation completed quickly is reflected in increased productivity.

Fast handling – protective die changing

Press tables can be equipped with **ROLLBLOC die lifters, ball version** to rationalize the die changing procedure. This poses no problems as the **T-slots** in virtually all press tables make them suitably prepared for this purpose. The ball strips are simply fitted in position and secured with an Allen key.

The load carrying balls that can move in all directions in the ball version die lifters, slightly protrude above the table. They carry the mounted die plate as if it were suspended. Load distribution over several balls and their mounting arrangement allows for smooth movement that makes it possible to quickly move the die with little effort in any direction.

Exact manual **positioning** of the die therefore poses absolutely no problems.

The **manufacturing precision** of the load bearing elements is of decisive significance for comparable product assessment. Güthle know-how provides the foundation for **trouble-free** function and lowest possible wear under high loads.

New: The rectangular ROLL-BLOC lifting strips are suitable both for T-slots conforming with DIN 650 (optional ASA B.51) as well a for rectangular slots. Each of these die lifters is equipped with a newly designed, easy-to-use fixing lock.

The new generation of ROLLBLOC die lifters with integrated fixing lock. Universal lifter profile section for T-slots and rectangular slots

Order information from Page 13



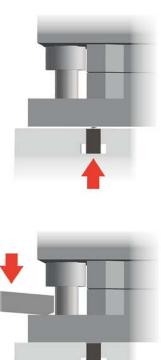
with spring pressure . . .

In this version of the ROLLBLOC ball version die lifters the load carrying balls are mounted individually on springs. The ball units can be loaded with the weight of the die up to the specified load bearing capacity before these springs slowly begin to 'give'. This feature is used for fixing and clamping the die.

The clamping elements 'overcome' the **spring force** and clamp the die onto the press table. When the die clamping system is released, the springloaded balls raise the die back into its initial position where it can be handled with ease.

The spring force-actuated **ROLL-BLOC ball version die lifters** are manufactured for the standard slot size of 18/22/28/36 mm. For presses used flexibly with different die formats, it is advisable to have these ball version die lifters available in various lengths.

After positioning the die, the ball version die lifters in the cross-over zone can be removed again thus clearing T-slots for the purpose of accepting clamping elements.



with hydraulic pressure ...

At 40 bar operating pressure, the hydraulically operated ROLLBLOC ball version die lifters feature double the load bearing capacity (compared to the spring-loaded version). In addition to their high load bearing capacity, they offer further specific features.

The balls of the hydraulic ball version die lifters are each supported by a **piston**. Automatic pressure equalization between the cylinders ensures uniform load distribution. The hydraulic pressure is reduced in order to lower the die into the clamping position on the surface of the press table.

The depressurised hydraulic ball version die lifters can be easily removed from the T-slots under the die, allowing them to be used on other presses.

To facilitate subsequent die change, the **ROLLBLOC ball ver**sion die lifters can be reinserted and connected to the hydraulic system. The **hydraulic pressure** is optionally produced by the hydraulic system of the press, by the ROLLBLOC hydraulic unit or by the ROLLBLOC hydraulic pump.





Spring force-actuated ROLLBLOC ball version die lifters can be used piece-by-piece

ROLLBLOC ball version die lifters with hydraulic connection. Easy operation of fixing lock with Allen key

→ VARIANTS DESIGNED TO ENHANCE THE SYSTEM ADVANTAGES

ROLLBLOC Roller Version Die Lifters

In this version, the dies are carried by support rollers. With their linear support format, they offer a maximum load bearing capacity increased by 100 % compared to the ball version.

For highest loads and exact linear traverse paths

ROLLBLOC roller version die lifters are available in **springloaded** or **hydraulic version**. The standard direction of movement is along the die lifters, roller version. However, **special versions** with transverse or diagonal direction of movement can be manufactured on customer request. Thanks to the **linear guidance** of the dies, **ROLLBLOC roller version die lifters** are preferably used on presses with stationary clamping facilities.

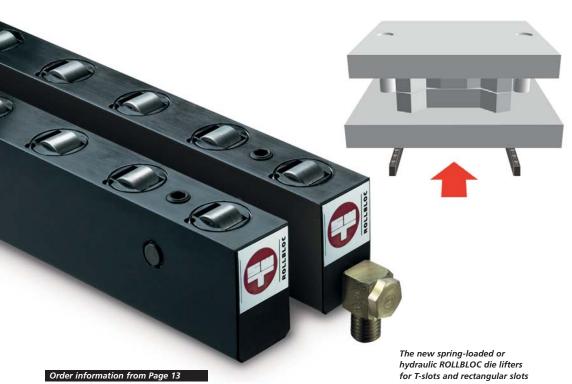
They can be used for many other applications as the special roller mounting system enables their effective use in **high temperature applications** (200 °C) and overhead installation for special applications. Hydraulic ROLLBLOC roller version die lifters require an operating pressure of 80 bar.

ROLLBLOC Table Inserts

These inserts are designed as individual spring-loaded ball or roller units. **ROLLBLOC table inserts** are frequently used in **transfer zones** or on press tables with insufficient T-slots. A simple hole is all that is needed to accept these units. The ROLLBLOC table inserts are available with or without collar. **Order information from Page 22**

rder mormation nom rage 22







TRANSFER STATION FOR CRANE OR MULTI-PURPOSE STACKER

ROLLBLOC Die Loading Arms

ROLLBLOC die loading arms extend the press table to create space for quick, safe and reliable die transfer. The clear access to the underside of the die is ideal for the use of conventional fork-lift trucks.

For safe and reliable machine setup with fork-lift truck or crane

The ball bearing-mounted load carrying rollers of the ROLL-BLOC die loading arms ensure smooth linear movement. Only slight displacement force need to be applied even for the heaviest dies. Swivel-mounted die loading arms are designed for fixed installation on press tables. Depending on the length of the extension arm, the clear span between the die loading arms and the press surroundings can be selected from various combinations of swivel movement and swivel direction. As an alternative to the fixed swivel die loading arms, ROLL-BLOC overhung version die loading arms and ROLLBLOC bridge version die loading arms can be used for the purposes of effectively changing dies. In addition to this comprehensive range of products, special versions/adaptations are available for extraordinary mounting situations.

Order information from Page 27

ROLLBLOC die loading arms are generally not required when changing dies with the die transporter ROLLBLOC BUGGY (Page 12).

ROLLBLOC overhung version die loading arms CK With attachment in hooks enabling quick mounting at the press table

> ROLLBLOC swivel die loading arms CS Fixed with swivel bearing at the press table. Locking with index pin



The cantilever rollers are hardened. They therefore provide the optimum preconditions for smooth, linear and therefore safe transfer of all types of dies ROLLBLOC bridge version die loading arms CT Mounted on both sides, with attachment in hooks and adjustable support leg

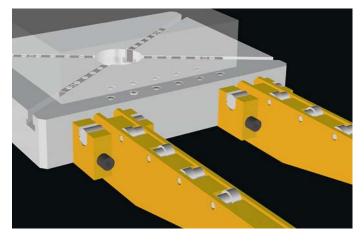
with transport rollers

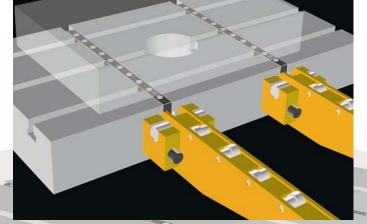
→ ROLLBLOC INTERCHANGEABLE COMPONENTS ARE SUITABLE FOR ANY TABLE LAYOUT

Diagonal arranged T-slots are characteristic of smaller C-presses. Spring-mounted ROLLBLOC die lifters are particularly suitable for such applications. ROLLBLOC ball inserts cover the relatively large cross-over range.

On large **C-presses** with transverse T-slots, the die change procedure can also take place at the front under confined space conditions.

In this table layout, the existing T-slots remain completely free for the clamping devices. Rectangular slots are additionally milled in the table for the ROLLBLOC die lifters.



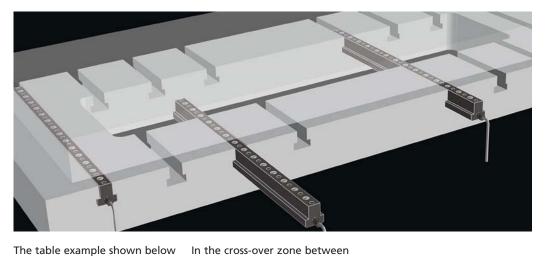


The standard table layout of a **double-sided eccentric press** normally has available sufficient T-slots to accommodate the required die lifters and clamping equipment separately.

Stationary mounted, **hydraulically-operated ROLLBLOC die lifters** ensure particularly convenient and time-saving die change procedures.



To effectively change the die in the case of large clearance openings in the press table, the 'old' T-version of **hydraulic ROLLBLOC die lifters** is inserted in the slots and then removed again prior to initial operation. When the die lifters are used as bridge strips, the load bearing capacity should not be fully utilized (prior consultation required for individual cases).



The table example shown below illustrates the flexible application options of the springloaded **ROLLBLOC ball version die lifters** and **ROLLBLOC die loading arms**.

These ROLLBLOC die loading arms are ideal for ensuring correct mounting of the die in front of the press table. The illustration shows a **ROLLBLOC bridge version die loading arms** mounted in table hooks and a vertically adjustable support leg.

ROLLBLOC table hook for accepting ROLLBLOC die loading arms the ROLLBLOC die loading arms and the working position, the ROLLBLOC ball version die lifters are inserted only for the purpose of transferring the die and are then removed again.

Order information from Page 27

ROLLBLOC bridge version die loading arms CT. With support rollers for reliable acceptance and transfer of dies. Vertically adjustable support leg

> After removing this ROLLBLOC ball version die lifters, the T-slot is clear again for accepting clamping elements

→ ROLLBLOC HYDRAULIC CLAMPS

→ QUICK-ACTION CLAMPING TECHNOLOGY FOR ...

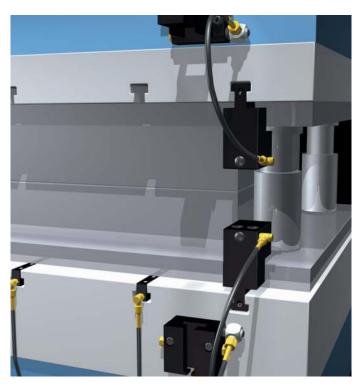


When using ROLLBLOC hollow piston clamps, the complete area of the press table can be used for the die plate

The ROLLBLOC sliding clamp can be mounted in any position in the T-slot. The table surface remains clear for use at the sides

Suitable for positioning in T-slots If different sizes of dies are Adaptive ROLLE

predominantly used, hydraulic quick-action clamps mounted in the T-slot is the ideal solution for press tables and rams. Adaptive ROLLBLOC hydraulic quick-action clamps offer not only practical convenience for frequent die change procedures but also tangible economic benefits with regard to setup times and die protection.



Also suitable for combinations

The different types of **ROLLBLOC hydraulic quick-action clamps** can be used in combined arrangements. (Example: ROLLBLOC ledge clamps on the press table, ROLLBLOC Wedge Clamps on the ram)

The defined clamping force is activated simultaneously in each clamping circuit configuration, thus avoiding stress points on the dies. **Check valve and/ or a multi-circuit supply system** reliably prevent the occurrence of pressure drops in the die clamping systems.

ROLLBLOC hydraulic hollow piston clamp with park station for efficient die changing operations



ROLLBLOC hydraulic sliding clamp





PRESS TABLE AND RAM

Integrated die clamps

The use of fixed-position hydraulic quick-action clamps is ideal on a press that mainly uses dies with **plates of the same format**.

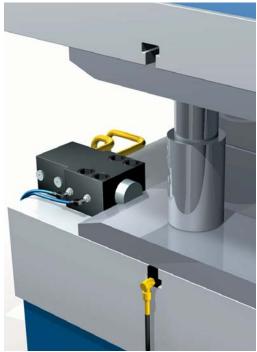
These clamps are **screw-mount**ed on the machine table or on the ram.



ROLLBLOC hydraulic ledge clamps in various lengths



The clamping pressure in ROLLBLOC ledge clamps is produced by a series of hydraulic clamping pistons. Three versions with 3, 5 and 8 pistons are available as standard

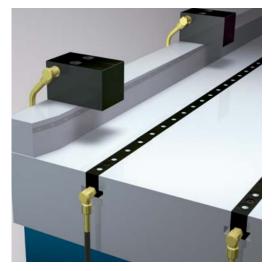


ROLLBLOC wedge clamp Double-acting, clears the ram or upper section of the die when released

ROLLBLOC block clamps are mounted separately or in series on guide blocks

ROLLBLOC hydraulic block clamp



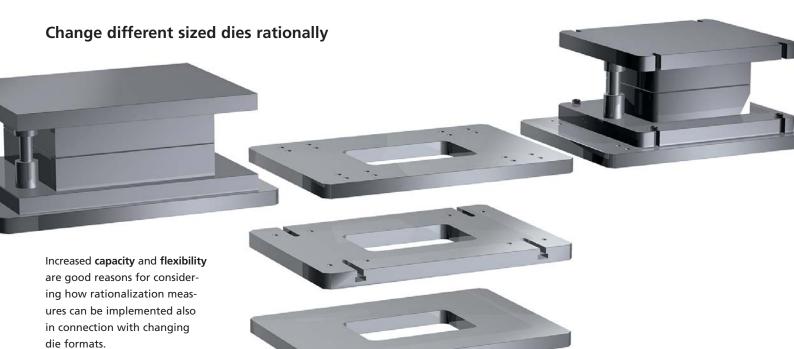




ROLLBLOC hydraulic wedge clamp

Order information from Page 45

→ ROLLBLOC INTERCHANGEABLE SUBPLATE TECHNOLOGY



The lack of uniformly dimensioned die base plates can be compensated by the use of **ROLLBLOC subplates.**

In step with continuous production, the dies are prepared on the subplate **outside the press** to reduce press downtimes even further.

ROLLBLOC components and interchangeable subplates We can manufacture the subplate in compliance with your dimensional specifications. We recommend the use of hardened strips and mounting surfaces.

The **ROLLBLOC die lifters** and **ROLLBLOC clamping elements** correspond to the catalogue specifications.

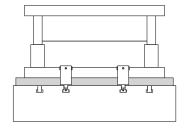


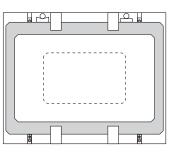


ALREADY BEFORE THE CHANGE

Complete flexibility while pressing and punching

Quick die change with ROLL-BLOC interchangeable subplate technology opens up new options of profitably producing even small batch sizes as well as **express orders** for customers in a hurry.





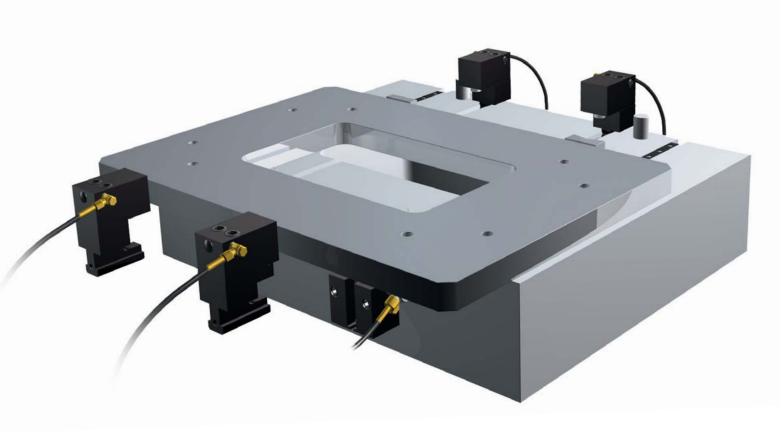
Consultation

If you would like to find out more about ROLLBLOC subplate technology or obtain information on the design and structure of the subplates, we would be pleased to provide technical advice by telephone or at your premises.

We can draw up an individual concept for your specific requirements together with a firm offer.



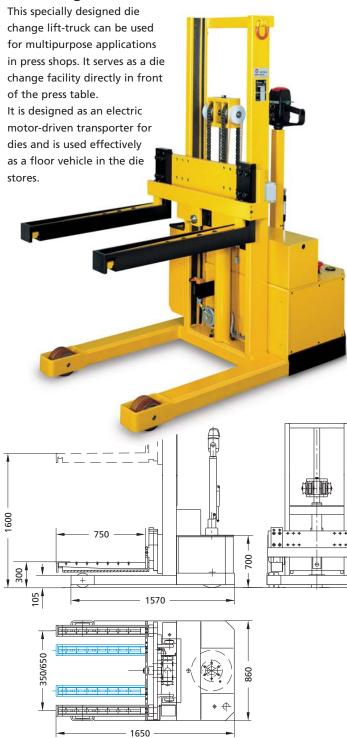
The press table is equipped with ROLLBLOC die lifters when using Rollbloc interchangeable subplate technology



→ROLLBLOC BUGGY 20

→ THE FLEXIBLE ALTERNATIVE

Die change lift-truck with electric drive



By lowering in a coupling, the front of the carrying forks is docked with the press bed for the purpose of transferring dies in loading and unloading operations.

The integrated rollway is activated automatically for the purpose of safe and reliable transfer of the dies.



For detailed order information and prices please ask for the separate ROLLBLOC BUGGY 20 brochure.

→ ROLLBLOC DIE LIFTERS



PRELIMINARY INFORMATION ON PROJECT PLANNING

AND ORDERING ROLLBLOC BALL AND ROLLBLOC ROLLER DIE LIFTERS

The slots in the press table define the shape and size of the required ROLLBLOC die lifters.

Load carrying elements: Ball or Roller?

ROLLBLOC ball version offer the advantage of being able to easily move dies in any direction. In conjunction with different die formats, this advantage ensures particularly short setup times.

ROLLBLOC roller version offer double the load bearing capacity. They enable exact linear transfer of the die. This linear technology requires accurate die positioning during transfer to the die table or to the die loading arms.

To further reduce rolling friction, we recommend hardened strips on the underside of the die.

Unlike the ball version, the ROLLBLOC die lifter with rollers can also be used in the die base plate (overhead installation).

When calculating the desired number of die lifters a smaller die can be more crucial than a bigger one, because there is a smaller number of balls/rollers supporting the die!

Lifting function: Spring Pressure or Hydraulic pressure?

ROLLBLOC die lifters with spring pressure are manufactured in relatively short lengths. They can be inserted in the table slots and locked in position one after the other or in a distributed layout. A particular advantage of this configuration is that individual sections can be removed from the cross-over zone thus clearing space for the required clamping elements.

With ROLLBLOC die lifters for hydraulic operation, the die is lowered onto the press table by way of pressure relief. The die is clamped when the ROLLBLOC die lifters, that can be moved and removed under the die, are depressurised.

Lifting height: 1.5 mm above table level

Achieving the required load bearing capacity

The length of the die base plate (in rolling direction) defines the **number** of **load carrying** ball or roller elements. Multiplied by the carrying force of the lifting elements (kN), the result represents the **die-specific load bearing capacity** for the minimum layout of 2 table slots. Further table slots are simply equipped with die lifters in order to increase the load bearing capacity. Die lifters length/size In the case of ROLLBLOC die lifters with spring pressure, it is advisable to separately equip the cross-over zone (A*) and the maximum die plate support in rolling direction. The die lifter lengths are to be sized accordingly.

In the case of ROLLBLOC die lifters for **hydraulic operation**, the cross-over zone and the die area are added to the total length of the required ROLL-BLOC die lifters. The available lengths are listed in the **order tables** (from Page 14 onwards).

Mounting arrangement

If the entire load bearing capacity of a ROLLBLOC die lifters is not required in full, versions with half the number of load carrying elements can be ordered.

Special versions available on request.

Rolling direction of ROLLBLOC roller version

In the standard version, the rolling direction is **longitudinal with** the die lifters. The following options are available without extra charge:

- Transverse rolling direction
- Any rolling direction (on request)
- * Bottom of Page 14

Necessary ordering data:

The effective slot depths

Experience has shown that the large tolerance of this dimension renders it **absolutely necessary** to individually measure the slot depth. The slot depth must be specified to an accuracy of 1/10 mm when ordering (see order code Page 14/fold-in flap).

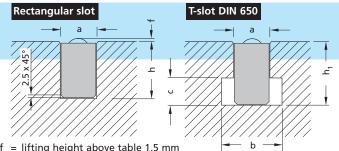
Size deviations from the smallest size of the standard to the largest slot depth can be supplied at extra cost.

Temperature resistance

The standard version of ROLL-BLOC die lifters is designed for maximum temperatures of 80°C. The version for high temperature applications withstands maximum temperatures of up to 200°C.

Hydraulic connection

When ordering ROLLBLOC die lifters for hydraulic operation, specification of the thread connections G 1/8" or SAE_44-20 **must be added** to the **order code**.



Standard slots in press table and ram

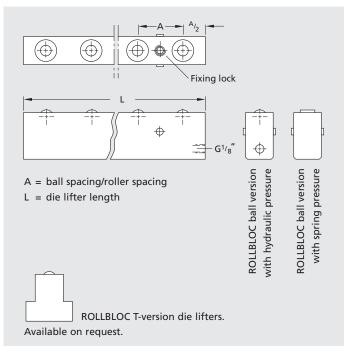
f = lifting height above table 1.5 mm

Slot size a ^{+0,2}	h ^{+0,2}	h1 ^{+0,2*}	ball version Order code	roller version Order code
18 mm	30 mm	30 mm	D18K	D18W
22 mm	38 mm	38 mm	D22K	D22W
28 mm	44 mm	48 mm	D28K	D28W
36 mm	53 mm	61 mm	D36K	D36W

*Standard slot depth (minimum size in accordance with DIN 650) Due to the possible tolerance, the slot depth must be measured exactly for ordering purposes.

See the ordering designation guide overleaf

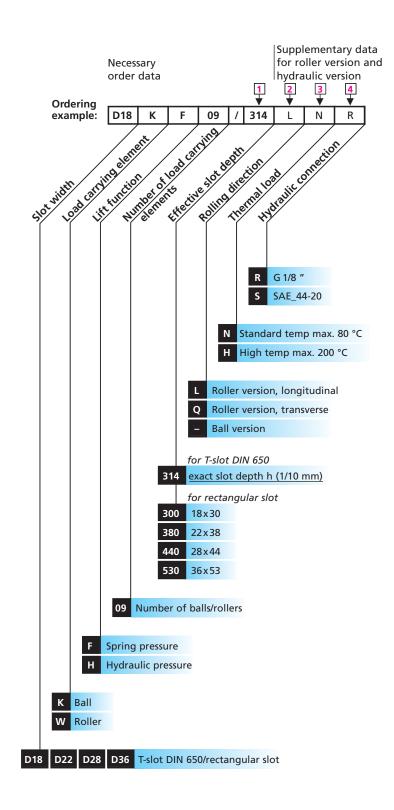
Dimensions of ROLLBLOC die lifters



The guide to simple and exact

→ ORDER DESIGNATION

FOR ROLLBLOC DIE LIFTERS



→ T-SLOT 18, DIN 650 Order code D18...

-> RECTANGULAR SLOT 18x30 Order code D18...

ROLLBLOC Ball Version Die Lifters Order code ...K...

with spring pressure Order code ...F...

Load carrying element: Ball 0.25 kN Ball spacing 35 mm, die lift f = 1.5 mm

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ROLLBLOC Roller Version Die Lifters Order code ... W...

with spring pressure Order code ...F...

Load carrying element: Roller 0.5 kN Roller spacing 35 mm, die lift f = 1.5 mm

-	—	-
	5	

Allocation planning (examples) (1)

Die size 🝳	Load bearing capacity/mean limit load (kN) (3			
Length in roll-	Carrying points	Allocation of		
ing direction	per rollway	2 slots	3 slots	4 slots
315 mm	9	4.5	6.75	9
400 mm	11	5.5	8.25	11
500 mm	14	7	10.5	14
630 mm	18	9	13.5	18
800 mm	22	11	16.5	22
1000 mm	28	14	21	28

Type list (4)

Lifter length	Number of balls	Load bearing capacity/Lifter		
105 mm	3	0.75 kN	D18KF03 / 300 - N	
140 mm	4	1.00 kN	D18KF04 / N	
175 mm	5	1.25 kN	D18KF05 / N	
210 mm	6	1.50 kN	D18KF06 / N	
280 mm	8	2.00 kN	D18KF08 / N	
350 mm	10	2.50 kN	D18KF10 / N	

Use the detailed information

on the fold-in flap order designation for exact order data.

Explanatory order information

1 Preliminary remarks on allocation planning

The slot size is generally defined. The relatively heaviest die serves as the basis for allocation planning. The load bearing capacity of the load carrying elements is dependent on their shape (ball, rollers) and the type of pressure system (spring, hydraulic).

2 Die dimensions

There are a corresponding number of load carrying points per runway (underside of die base plate) for a defined die length (in rolling direction).

(3) Load bearing capacity

The table *Load bearing capacity* indicates how many table slots are to be equipped with ROLLBLOC die lifters in order to achieve the necessary load bearing capacity based on a defined die length. Any interruptions in the runway at the die base plate must be taken into consideration.

The die with the small/short base plate can turn out to be the relatively heaviest die.

Die size (2	Load bearing capacity/mean limit load (kN) ③			
Length in roll-	Carrying points	Allocation of		
ing direction	per rollway	2 slots	3 slots	4 slots
315 mm	9	9	13.5	18
400 mm	11	11	16.5	22
500 mm	14	14	21	28
630 mm	18	18	27	36
800 mm	22	22	33	44
1000 mm	28	28	42	56

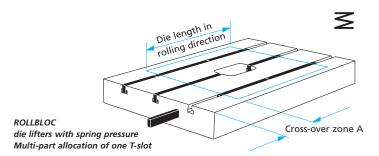
Lifter length	Number of rollers	Load bearing capacity/Lifter	Order code	
105 mm	1 3	1.5 kN	D18WF03 / 300 L N	
140 mm	n 4	2.0 kN	D18WF04 / L N	
175 mm	ו 5	2.5 kN	D18WF05 / L N	
210 mm	n 6	3.0 kN	D18WF06 / L N	
280 mm	n 8	4.0 kN	D18WF08 / L N	
350 mm	n 10	5.0 kN	D18WF10/ L N	

Use the detailed information

on the fold-in flap order designation for exact order data.

4 Type list

The standard versions are detailed in the *Type list*. The lengths are based on typical press table formats. ROLLBLOC die lifters can be supplied with any number of load carrying elements on request. **The order code is to be completed according to the specific version**. For this purpose, please use the detailed information provided on the fold-in flap **Order designation**.





ROLLBLOC Ball Version Die Lifters Order code ...K...

with hydraulic pressure Order code ...H...

Load carrying element: Ball 0.5 kN, op pressure 40 bar (4 MPa) Ball spacing 35 mm, die lift f = 1.5 mm



Die size 2

Length in roll-

ing direction

315 mm

400 mm

ROLLBLOC Roller Version Die Lifters Order code ... W...

with hydraulic pressure Order code ...H...

Carrying points

9

11

per rollway

Load carrying element: Roller 1.0 kN, op pressure 80 bar (8 MPa) Roller spacing 35 mm, die lift f = 1.5 mm

Allocation of

18

22

2 slots

Load bearing capacity (kN)

3 slots

27

33

3

4 slots

36

44

Allocation planning (examples) (1)

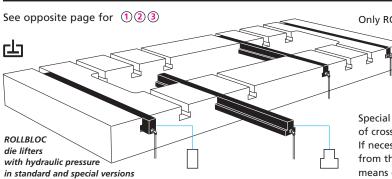
Die size (2) Load bearing capacity (kN) ③					
Length in roll-	Carrying points	Allocation of				
ing direction	per rollway	2 slots 3 slots 4 slots				
315 mm	9	9	13.5	18		
400 mm	11	11	16.5	22		
500 mm	14	14	21	28		
630 mm	18	18	27	36		
800 mm	22	22	33	44		
1000 mm	28	28	42	56		

Type list 🌗

Lifter length	Number of balls	Load bearing capacity/Lifter	Order code
245 mm	7	0.35 kN	D18KH07 / 300 – N R
315 mm	9	4.5 kN	D18KH09 / – N R
385 mm	11	5.5 kN	D18KH11 / – N R
490 mm	14	7 kN	D18KH14 / – N R
560 mm	16	8 kN	D18KH16 / – N R
630 mm	18	9 kN	D18KH18 / – N R
700 mm	20	10 kN	D18KH20 / – N R
770 mm	22	11 kN	D18KH22 / – N R
875 mm	25	12.5 kN	D18KH25 / – N R
980 mm	28	14 kN	D18KH28 / – N R
1085 mm	31	15.5 kN	D18KH31 / – N R
1225 mm	35	17.5 kN	D18KH35 / – N R
1400 mm	40	20 kN	D18KH40 / – N R
	-		

Use the detailed information 1 234 on the fold-in flap *order designation* for exact order data.

Explanatory order information



500 mm 14 28 42 56 630 mm 18 36 54 72 800 mm 22 44 66 88 1000 mm 28 56 84 112 Lifter Number Load bearing Order length of rollers capacity/Lifter code 245 mm 7 7 kN D18WH07 / 300 L N R

315 mm	9	9 kN	D18WH09/ L N R
385 mm	11	11 kN	D18WH11/ L N R
490 mm	14	14 kN	D18WH14/ L N R
560 mm	16	16 kN	D18WH16/ L N R
630 mm	18	18 kN	D18WH18/ L N R
700 mm	20	20 kN	D18WH20/ L N R
770 mm	22	22 kN	D18WH22/ L N R
875 mm	25	25 kN	D18WH25/ L N R
980 mm	28	28 kN	D18WH28/ L N R
1085 mm	31	31 kN	D18WH31/ L N R
1225 mm	35	35 kN	D18WH35/ L N R
1400 mm	40	40 kN	D18WH40/ L N R

Use the detailed information

on the fold-in flap order designation for exact order data.

Only ROLLBLOC roller version die lifters are suitable for overhead installation.

Special ROLLBLOC T-version die lifters should be used for the purpose of crossing over table recesses (bridge function).

If necessary, for production purposes, these die lifters can be removed from the table slot. They are disconnected from the hydraulic system by means of a quick-release coupling (Page 25).

→T-SLOT 22, DIN 650 Order code D22...

RECTANGULAR SLOT 22x38 Order code D22...

ROLLBLOC Ball Version Die Lifters Order code ...K...

with spring pressure Order code ...F...

Load carrying element: Ball 0.4 kN Ball spacing 40 mm, die lift f = 1.5 mm

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\leq	

ROLLBLOC Roller Version Die Lifters Order code ... W...

with spring pressure Order code ...F...

Load carrying element: Roller **0.8** kN Roller spacing 40 mm, die lift f = 1.5 mm

31

-	—	-
	5	

100

Allocation planning (examples) (1)

Die size (2		Load bearing ca	apacity/mean lim	it load (kN) (3)
Length in roll-	Carrying points	Allocation of		
ing direction	per rollway	2 slots	3 slots	4 slots
400 mm	10	8	12	16
500 mm	12	10	15	20
630 mm	15	12	18	24
800 mm	20	16	24	32
1000 mm	25	20	30	40
1250 mm	31	25	37.5	50

Type list </u>

Lifter length	Number of balls	Load bearing capacity/Lifter		_
120 mm	3	1.2 kN	D22KF03 / 380 - N	
160 mm	4	1.6 kN	D22KF04 / – N	
200 mm	5	2.0 kN	D22KF05 / – N	
240 mm	6	2.4 kN	D22KF06 / – N	
320 mm	8	3.2 kN	D22KF08 / N	
400 mm	10	4.0 kN	D22KF10 / – N	

Use the detailed information on the fold-in flap	1 2 3
order designation for exact order data (Page 14).	

Explanatory order information

1 Preliminary remarks on allocation planning

The slot size is generally defined. The relatively heaviest die serves as the basis for allocation planning. The load bearing capacity of the load carrying elements is dependent on their shape (ball, rollers) and the type of pressure system (spring, hydraulic).

2 Die dimensions

There are a corresponding number of load carrying points per runway (underside of die base plate) for a defined die length (in rolling direction).

3 Load bearing capacity

The table *Load bearing capacity* indicates how many table slots are to be equipped with ROLLBLOC die lifters in order to achieve the necessary load bearing capacity based on a defined die length. Any interruptions in the runway at the die base plate must be taken into consideration.

The die with the small/short base plate can turn out to be the relatively heaviest die.

Die size 🝳		Load bearing c	apacity/mean lim	it load (kN) (3)
Length in roll-	Carrying points	Allocation of		
ing direction	per rollway	2 slots	3 slots	4 slots
400 mm	10	16	24	32
500 mm	12	19	29	38
630 mm	15	24	36	48
800 mm	20	32	48	64
1000 mm	25	40	60	80

Lifter length	Number of rollers	Load bearing capacity/Lifter		
120 mm	3	2.4 kN	D22WF03 / 380 L N	
160 mm	4	3.2 kN	D22WF04 / L N	
200 mm	5	4.0 kN	D22WF05 / L N	
240 mm	6	4.8 kN	D22WF06 / L N	
320 mm	8	6.4 kN	D22WF08 / L N	
400 mm	10	8.0 kN	D22WF10 / L N	

50

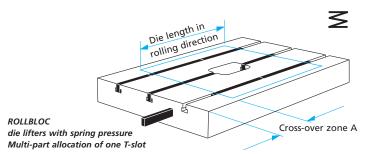
75

Use the detailed information on the fold-in flap 123 order designation for exact order data (Page 14).

4 Type list

1250 mm

The standard versions are detailed in the *Type list*. The lengths are based on typical press table formats. ROLLBLOC die lifters can be supplied with any number of load carrying elements on request. **The order code is to be completed according to the specific version**. For this purpose, please use the detailed information provided on the fold-in flap **Order designation** (Page 14).





ROLLBLOC Ball Version Die Lifters Order code ...K...

with hydraulic pressure Order code ...H...

Load carrying element: Ball 0.8 kN, op pressure 40 bar (4 MPa) Ball spacing 40 mm, die lift f = 1.5 mm

ROLLBLOC Roller Version Die Lifters Order code ... W...

with hydraulic pressure Order code ...H...

31

Number

1250 mm

Lifter

Load carrying element: Roller 1.6 kN, op pressure 80 bar (8 MPa) Roller spacing 40 mm, die lift f = 1.5 mm

Allocation planning (examples) 1

Die size (2		Load bearing ca	apacity (kN) (3)
Length in roll-	Carrying points	Allocation of		
ing direction	per rollway	2 slots	3 slots	4 slots
400 mm	10	16	24	32
500 mm	12	19	29	38
630 mm	15	24	36	48
800 mm	20	32	48	64
1000 mm	25	40	60	80
1250 mm	31	50	75	100

Type list </u>

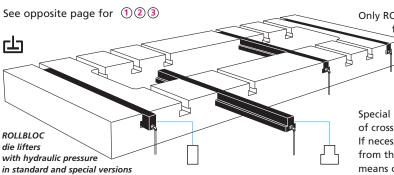
Lifter length	Number of balls	Load bearing capacity/Lifter	Order code
320 mm	8	6.4 kN	D22KH08 / 380 - N R
400 mm	10	8.0 kN	D22KH10/ N R
480 mm	12	9.6 kN	D22KH12 / – N R
560 mm	14	11.2 kN	D22KH14 / – N R
640 mm	16	12.8 kN	D22KH16/ – N R
720 mm	18	14.4 kN	D22KH18/ – N R
800 mm	20	16.0 kN	D22KH20 / – N R
880 mm	22	17.6 kN	D22KH22 / – N R
1000 mm	25	20.0 kN	D22KH25 / – N R
1120 mm	28	22.4 kN	D22KH28 / – N R
1240 mm	31	24.8 kN	D22KH31 / – N R
1400 mm	35	28.0 kN	D22KH35 / – N R
1600 mm	40	32.0 kN	D22KH40 / – N R

Use the detailed information on the fold-in flap 1 2 3 4 order designation for exact order data (Page 14).

length of rollers capacity/Lifter code 8 12.8 kN D22WH08 / 380 L N R 320 mm 16.0 kN D22WH10/. L N R 400 mm 10 N R 12 19.2 kN D22WH12 / L 480 mm NR 560 mm 14 22.4 kN D22WH14/ L 16 25.6 kN D22WH16 / LNR 640 mm 720 mm 18 28.8 kN D22WH18 / L N R 800 mm 20 32.0 kN D22WH20 / . . . LNR 880 mm 22 35.2 kN D22WH22 / . . . L N R 1000 mm D22WH25 / . . . 40.0 kN LNR 25 1120 mm 28 44.8 kN D22WH28/. LNR 1240 mm 31 49.6 kN D22WH31 / L NR 35 D22WH35 / 1400 mm 56.0 kN L N R 1600 mm 40 64.0 kN D22WH40 / Ν £. R 234

Use the detailed information on the fold-in flap order designation for exact order data (Page 14).

Bestellvorklärung



Only ROLLBLOC roller version die lifters are suitable for overhead installation.

Special ROLLBLOC T-version die lifters should be used for the purpose of crossing over table recesses (bridge function).

If necessary, for production purposes, these die lifters can be removed from the table slot. They are disconnected from the hydraulic system by means of a quick-release coupling (Page 25).

Die size 2		Load bearing ca	pacity (kN) (3)
Length in roll-	Carrying points	Allocation of		
ing direction	per rollway	2 slots	3 slots	4 slots
400 mm	10	32	48	64
500 mm	12	38	58	76
630 mm	15	48	72	96
800 mm	20	64	96	128
1000 mm	25	80	120	160

100

Load bearing Order

150

→ T-SLOT 28, DIN 650 Order code D28...

RECTANGULAR SLOT 28x44 Order code D28...

with spring pressure Order code ...F...

Load carrying element: Ball 0.63 kN Ball spacing 45 mm, die lift f = 1.5 mm

5	w
2	Lo

Die size (2)

ing direction

Length in roll-

400 mm

500 mm

630 mm

800 mm

1000 mm

1250 mm

1600 mm

135 mm

180 mm

225 mm

270 mm

360 mm

450 mm

Lifter

length

Allocation of

20

27.5

35

42.5

55

67.5

87.5

Load bearing Order

capacity/Lifter code

3.8 kN

5.0 kN

6.3 kN

7.5 kN

1.0 kN

12.5 kN

Use the detailed information on the fold-in flap

order designation for exact order data (Page 14).

2 slots

Load bearing capacity/mean limit load (kN) (3)

40

55

70

85

110

135

175

D28WF03 / 480 L

D28WF04 /

D28WF05 /

D28WF06 /

D28WF08 /

D28WF10 /

4 slots

ith spring pressure Order code ...F...

oad carrying element: Roller 1.25 kN Roller spacing 45 mm, die lift f = 1.5 mm

Carrying points

8

11

14

17

22

27

35

Number

of rollers

3

4

5

6

8

10

per rollway

-	-	-
	5	

6 slots 60

82

105

127

165

202

262

Ν

LN

LN

LN

L N

L Ν

Allocation planning (examples) (1)

Die size (2		Load bearing capacity/mean limit load (kN) (3)				
Length in roll-	Carrying points	Allocation of				
ing direction	per rollway	2 slots	4 slots	6 slots		
400 mm	8	10	20	30		
500 mm	11	14	28	42		
630 mm	14	18	36	54		
800 mm	17	22	44	66		
1000 mm	22	28	56	84		
1250 mm	27	35	70	105		
1600 mm	35	45	90	135		

Type list ④

Lifter	Number	Load bearing	Order	
length	of balls	capacity/Lifter	code	
135 mm	3	1.9 kN	D28KF03 / 480 - N	
180 mm	4	2.5 kN	D28KF04 / N	
225 mm	5	3.2 kN	D28KF05 / N	
270 mm	6	3.8 kN	D28KF06 / N	
360 mm	8	5.0 kN	D28KF08 / N	
450 mm	10	6.3 kN	D28KF10 / N	

Use the detailed information on the fold-in flap order designation for exact order data (Page 14).

Explanatory order information

(1) Preliminary remarks on allocation planning

The slot size is generally defined. The relatively heaviest die serves as the basis for allocation planning. The load bearing capacity of the load carrying elements is dependent on their shape (ball, rollers) and the type of pressure system (spring, hydraulic).

2 Die dimensions

There are a corresponding number of load carrying points per runway (underside of die base plate) for a defined die length (in rolling direction).

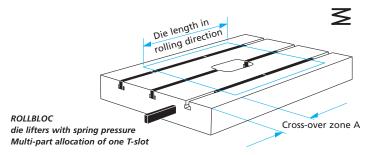
③ Load bearing capacity

The table Load bearing capacity indicates how many table slots are to be equipped with ROLLBLOC die lifters in order to achieve the necessary load bearing capacity based on a defined die length. Any interruptions in the runway at the die base plate must be taken into consideration.

The die with the small/short base plate can turn out to be the relatively heaviest die.

(4) Type list

The standard versions are detailed in the Type list. The lengths are based on typical press table formats. ROLLBLOC die lifters can be supplied with any number of load carrying elements on request. The order code is to be completed according to the specific version. For this purpose, please use the detailed information provided on the fold-in flap Order designation (Page 14).





ROLLBLOC Ball Version Die Lifters Order code ...K...

with hydraulic pressure Order code ...H...

Load carrying element: Ball 1.25 kN, op pressure 40 bar (4 MPa) Ball spacing 45 mm, die lift f = 1.5 mm

ROLLBLOC Roller Version Die Lifters Order code ... W...

with hydraulic pressure Order code ...H...

Load carrying element: Roller 2.5 kN, op pressure 80 bar (8 MPa) Roller spacing 45 mm, die lift f = 1.5 mm

Allocation planning (examples) (1)

Die size (2		Load bearing ca	apacity (kN) (3)	Die size (2		Load bearing o	apacity (kN) 🤇	3)
Length in roll-	Carrying points	Allocation of			Length in roll-	Carrying points	Allocation of		
ing direction	per rollway	2 slots	4 slots	6 slots	ing direction	per rollway	2 slots	4 slots	6 slots
400 mm	8	20	40	60	400 mm	8	40	80	120
500 mm	11	27.5	55	82	500 mm	11	55	110	165
630 mm	14	35	70	105	630 mm	14	70	140	210
800 mm	17	42.5	85	127	800 mm	17	85	170	255
1000 mm	22	55	110	165	1000 mm	22	110	220	330
1250 mm	27	67.5	135	202	1250 mm	27	135	270	405
1600 mm	35	87.5	175	262	1600 mm	35	175	350	525

Type list 🕘

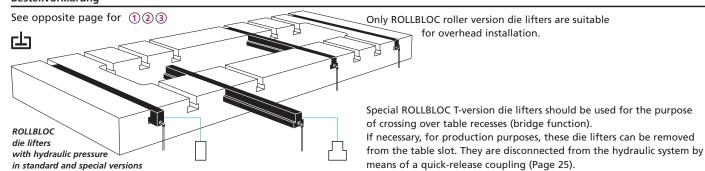
Lifter length	Number of balls	Load bearing capacity/Lifter	Order code
315 mm	7	8.75 kN	D28KH07 / 480 – N R
405 mm	9	11.25 kN	D28KH09 / – N R
495 mm	11	13.75 kN	D28KH11/ – N R
630 mm	14	17.5 kN	D28KH14 / – N R
720 mm	16	20 kN	D28KH16/ – N R
810 mm	18	22.5 kN	D28KH18 / – N R
900 mm	20	25 kN	D28KH20 / – N R
990 mm	22	27.5 kN	D28KH22 / – N R
1125 mm	25	31.25 kN	D28KH25 / – N R
1260 mm	28	35 kN	D28KH28 / – N R
1395 mm	31	38.75 kN	D28KH31 / – N R
1575 mm	35	43.75 kN	D28KH35 / – N R
1800 mm	40	50 kN	D28KH40 / – N R

Lifter length	Number of rollers	Load bearing capacity/Lifter	Order code		
315 mm	7	17.5 kN	D28WH07 / 480 L N R		
405 mm	9	22.5 kN	D28WH09/ L N R		
495 mm	11	27.5 kN	D28WH11/ L N R		
630 mm	14	35 kN	D28WH14/ L N R		
720 mm	16	40 kN	D28WH16/ L N R		
810 mm	18	45 kN	D28WH18/ L N R		
900 mm	20	50 kN	D28WH20/ L N R		
990 mm	22	55 kN	D28WH22 / L N R		
1125 mm	25	62.5 kN	D28WH25 / L N R		
1260 mm	28	70 kN	D28WH28/ L N R		
1395 mm	31	77.5 kN	D28WH31/ L N R		
1575 mm	35	87.5 kN	D28WH35/ L N R		
1800 mm	40	100 kN	D28WH40/ L N R		
Use the detailed information on the fold-in flap 1234					

order designation for exact order data (Page 14).

Use the detailed information on the fold-in flap 1 2 3 4 order designation for exact order data (Page 14).

Bestellvorklärung



→ T-SLOT 36, DIN 650 Order code D36...

RECTANGULAR SLOT 36x53 Order code D36...

ROLLBLOC Ball Version Die Lifters Order code ...K.

with spring pressure Order code ...F... Load carrying element: Ball 1 kN Ball spacing 50 mm, die lift f = 1.5 mm

	-	t	+
		`	4
		_	-
		<	<
		-	-

ROLLBLOC Roller Version Die Lifters Order code ... W...

Allocation of

40

48

64

80

100

128

160

2 slots

Load bearing capacity (kN)

4 slots

80

96

128

160

200

256

320

with spring pressure Order code ...F...

Load carrying element: Roller 2 kN Roller spacing 50 mm, die lift f = 1.5 mm

Carrying points

10

12

16

20

25

32

40

per rollway

-	-	-
	5	

3

6 slots

120

144

192

240

300

384

480

Allocation planning (examples) (1)

Die size (2	Load bearing capacity/mean limit load (kN) (3)					
Length in roll-	Carrying points	Allocation of				
ing direction	per rollway	2 slots	4 slots	6 slots		
500 mm	10	20	40	60		
630 mm	12	24	48	72		
800 mm	16	32	64	96		
1000 mm	20	40	80	120		
1250 mm	25	50	100	150		
1600 mm	32	64	128	192		
2000 mm	40	80	160	240		

Type list ④

Lifter length	Number of balls	Load bearing capacity/Lifter		
150 mm	3	3 kN	D36KF03 / 610 - N	
200 mm	4	4 kN	D36KF04 / N	
250 mm	5	5 kN	D36KF05 / – N	
300 mm	6	6 kN	D36KF06 / N	
400 mm	8	8 kN	D36KF08 / N	
500 mm	10	10 kN	D36KF10 / N	

Use the detailed information on the fold-in flap order designation for exact order data (Page 14).

Explanatory order information

1 Preliminary remarks on allocation planning

The slot size is generally defined. The relatively heaviest die serves as the basis for allocation planning. The load bearing capacity of the load carrying elements is dependent on their shape (ball, rollers) and the type of pressure system (spring, hydraulic).

2 Die dimensions

There are a corresponding number of load carrying points per runway (underside of die base plate) for a defined die length (in rolling direction).

(3) Load bearing capacity

The table Load bearing capacity indicates how many table slots are to be equipped with ROLLBLOC die lifters in order to achieve the necessary load bearing capacity based on a defined die length. Any interruptions in the runway at the die base plate must be taken into consideration.

The die with the small/short base plate can turn out to be the relatively heaviest die.

(4) Type list

Die size

Length in roll-

ing direction

500 mm

630 mm

800 mm

1000 mm

1250 mm

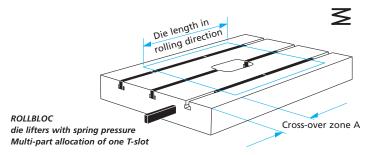
1600 mm

2000 mm

Lifter

(2)

The standard versions are detailed in the Type list. The lengths are based on typical press table formats. ROLLBLOC die lifters can be supplied with any number of load carrying elements on request. The order code is to be completed according to the specific version. For this purpose, please use the detailed information provided on the fold-in flap Order designation (Page 14).



Load bearing Number Order

length	ot rollers	capacity/Lifter	code	
150 mm	3	6 kN	D36WF03 / 610 L N	
200 mm	4	8 kN	D36WF04 / L N	
250 mm	5	10 kN	D36WF05 / L N	
300 mm	6	12 kN	D36WF06 / L N	
400 mm	8	16 kN	D36WF08 / L N	
500 mm	10	20 kN	D36WF10 / L N	

1 2 3 Use the detailed information on the fold-in flap order designation for exact order data (Page 14).



ROLLBLOC Ball Version Die Lifters Order code ...K...

with hydraulic pressure Order code ...H...

Load carrying element: Ball 2 kN, op pressure 40 bar (4 MPa) Ball spacing 50 mm, die lift f = 1.5 mm



ROLLBLOC Roller Version Die Lifters Order code ... W...

with hydraulic pressure Order code ...H...

Load carrying element: Roller **4** kN, op pressure 80 bar (8 MPa) Roller spacing 50 mm, die lift f = 1.5 mm



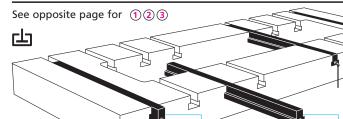
Die size 2		Load bearing o	apacity (kN)	3	Die size (2		Load bearing o	apacity (kN)	3
Length in roll-	Carrying points	Allocation of			Length in roll-	Carrying points	Allocation of		
ing direction	per rollway	2 slots	4 slots	6 slots	ing direction	per rollway	2 slots	4 slots	6 slo
500 mm	10	40	80	120	500 mm	10	80	160	
630 mm	12	48	96	144	630 mm	12	96	192	
800 mm	16	64	128	192	800 mm	16	128	256	
1000 mm	20	80	160	240	1000 mm	20	160	320	
1250 mm	25	100	200	300	1250 mm	25	200	400	
1600 mm	32	128	256	384	1600 mm	32	256	512	
2000 mm	40	160	320	480	2000 mm	40	320	640	

Type list (4)

Lifter length	Number of balls	Load bearing capacity/Lifter	Order code
400 mm	8	16 kN	D36KH08 / 610 - N R
500 mm	10	20 kN	D36KH10 / – N R
600 mm	12	24 kN	D36KH12 / – N R
700 mm	14	28 kN	D36KH14 / – N R
800 mm	16	32 kN	D36KH16 / – N R
900 mm	18	36 kN	D36KH18 / – N R
1000 mm	20	40 kN	D36KH20 / – N R
1100 mm	22	44 kN	D36KH22 / – N R
1250 mm	25	50 kN	D36KH25 / – N R
1400 mm	28	56 kN	D36KH28 / – N R
1550 mm	31	62 kN	D36KH31 / – N R
1750 mm	35	70 kN	D36KH35 / – N R
2000 mm	40	80 kN	D36KH40 / – N R

Lifter length	Number of rollers	Load bearing capacity/Lifter	Order code
400 mm	8	32 kN	D36WH08 / 610 L N R
500 mm	10	40 kN	D36WH10 / L N R
600 mm	12	48 kN	D36WH12 / L N R
700 mm	14	56 kN	D36WH14/ L N R
800 mm	16	64 kN	D36WH16 / L N R
900 mm	18	72 kN	D36WH18/ L N R
1000 mm	20	80 kN	D36WH20/ L N R
1100 mm	22	88 kN	D36WH22 / L N R
1250 mm	25	100 kN	D36WH25/ L N R
1400 mm	28	112 kN	D36WH28/ L N R
1550 mm	31	124 kN	D36WH31/ L N R
1750 mm	35	140 kN	D36WH35/ L N R
2000 mm	40	160 kN	D36WH40 / L N R
	-	mation on the	

Use the detailed information on the fold-in flap $\begin{bmatrix} 1 \\ 2 \end{bmatrix} \begin{bmatrix} 2 \\ 3 \end{bmatrix} \begin{bmatrix} 1 \\ 4 \end{bmatrix}$ order designation for exact order data (Page 14).



Only ROLLBLOC roller version die lifters are suitable

for overhead installation.

order designation for exact order data (Page 14).

Special ROLLBLOC T-version die lifters should be used for the purpose of crossing over table recesses (bridge function).

If necessary, for production purposes, these die lifters can be removed from the table slot. They are disconnected from the hydraulic system by means of a quick-release coupling (Page 25).

Explanatory order information

ROLLBLOC

die lifters

with hydraulic pressure

in standard and special versions

다기

→ ROLLBLOC TABLE INSERTS

ROLLBLOC Hardened Strips

Hardened To be glued into the die base plates

to reduce rolling friction on the die side

Supplied in pairs. Length: as requested (max. 2500 mm)

ROLLBLOC Ball Inserts Order code ...K...

with spring pressure Order code ...F...

Type/

T 18

T22

T28

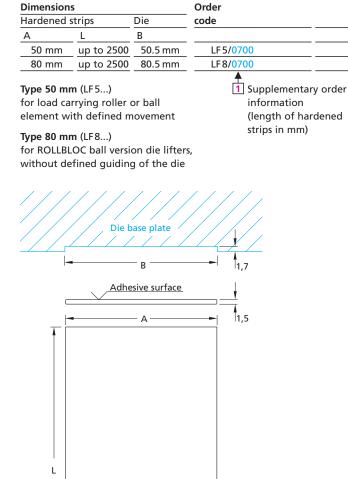
T36

size

Load carrying element: Ball Die lift f = 1.5 mm



Ball insert without flange



Layout according to the ROLLBLOC die lifters in the press bed.

Caution: The hardened strips must have full contact with the base plate. Use suitable two-component adhesive. Follow manufacturer's instructions.

N = normal temperature max. 80° C H = high temperature max. 200° C Ball insert with flange Load bearing Order Type/ size capacity code T 18 0.25 kN T 18KFB N T22 0.40 kN T22KFB N T28 0.63 kN T28KFB N T36KFB N T36 1.00 kN

Load bearing

0.25 kN

0.40 kN

0.63 kN

1.00 kN

capacity

Order

code

T18KFG N

T22KFG N

T28KFG N

T36KFG N

Supplementary order information

for possible high temperatures

1

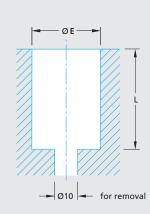
Supplementary order information for possible high temperatures N = normal temperature max. 80° CH = high temperature max. 200° C

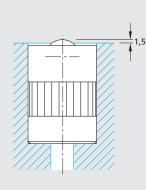


(MATCHING DIE LIFTERS CONFORMING TO DIN 650)

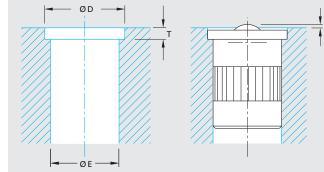


Holes for ROLLBLOC table inserts





1,5



With this design existing holes for drawing pins can be used.

ROLLBLOC Roller Inserts Order code ...W...

with spring pressure	Order codeF
Load carrying elemen	t: Roller
Die lift f = 1.5 mm	



Roller insert without flange

Type/ size	Load bearing capacity	Order code	
T18	0.50 kN	T18WFG N	
T22	0.80 kN	T22WFG N	
T28	1.25 kN	T28WFG N	
T36	2.00 kN	T36WFG N	
		1	
	Supplen	nentary order in [.]	formation
	for poss	ible high tempe	ratures
		mal temperature h temperature m	

Roller insert with flange

Type size	e/	Load bearing capacity	Order code	
Т	18	0.50 kN	T 18WFB N	
Т	22	0.80 kN	T22WFB N	
T	28	1.25 kN	T28WFB N	
Т	36	2.00 kN	T36WFB N	
			1	
		Supplen	nentary order in	formation
		for poss	ible high tempe	ratures

N = normal temperature max. 80° C

H = high temperature max. 200° C

Dimensions for table holes

Inserts						
Type/size	without fl	ange	with flang	je		
	Ø E ^{H9}	L ^{+0,2}	Ø E ^{H9}	Ø D ^{+0,2}	T ^{+0,1}	
T 18	20	30	20	25	3,5	
T22	24	38	24	30	4	
T28	30	44	30	35	5	
T 36	40	53	40	50	6	

→HYDRAULIC PUMP AND PRESSURE INTENSIFIER

ROLLBLOC Pump for Manual Operation

Operating lever with double function: Pressure build-up/pressure

relief with tank and pressure limiting valve Connection G 1/8"

Standard version hydraulic pump

Load carrying element	Max. die weight	Operating pressure	Order code	
Ball version	100 kN	40 bar	HP 1/40	
die lifters	200 kN	40 bar	HP 2/40	
Roller version	200 kN	80 bar	HP 1/80	
die lifters				

ROLLBLOC Pressure Intensifier

Pneumatic/hydraulic pressure build-up

Air pressure required: 5 bar, Connection G 1/4", Control valve as required, Hydraulic connection G 1/8", Maintenance-free continuous operation

Standard version pressure intensifier

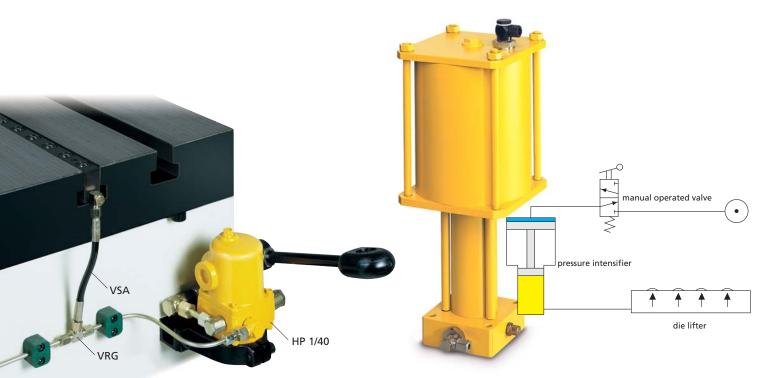
Load carrying element	Max. die weight	Operating pressure	Order code
Ball version die lifter	200 kN	40 bar	HD 1/40
Roller version die lifter	200 kN	80 bar	HD 1/80

Control valves for pressure intensifier

3-way valve	Order	
Туре	code	
Manually operated valve/mechanical	HM 3/01	
Solenoid valve, 24 V*	MV 4/01	

*with key-operated switch

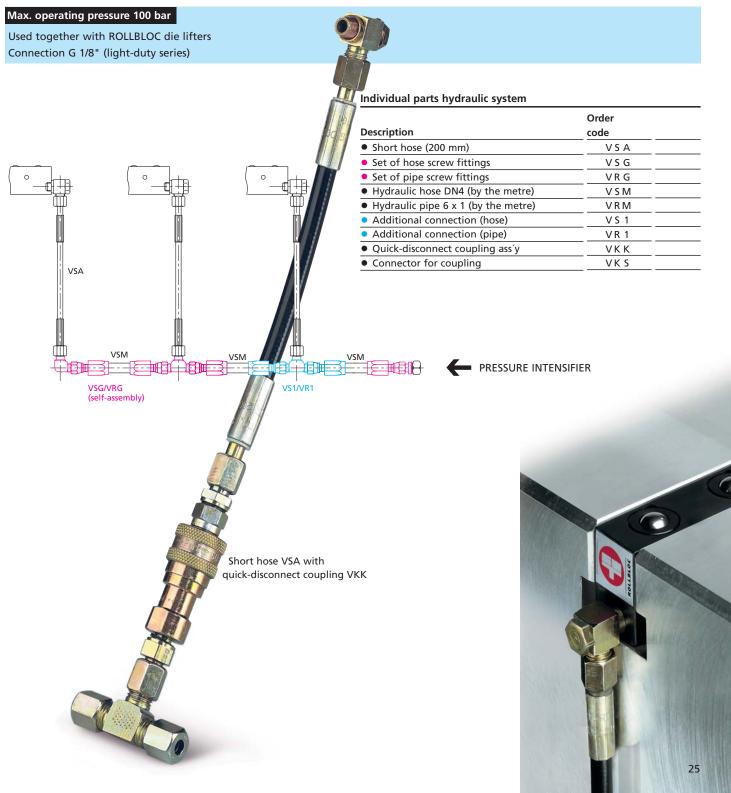
Continuous operation requiring no maintenance.





→ACCESSORIES FOR HYDRAULIC DIE LIFTERS

Hoses and Screw Fittings for Hydraulic Die Lifters



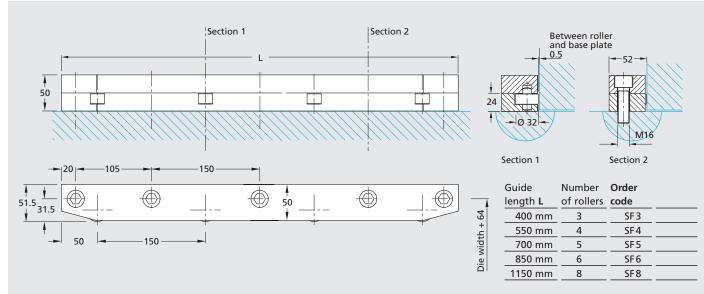
→LATERAL GUIDES FOR THE PRESS BED

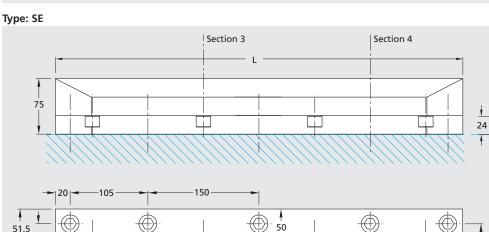
ROLLBLOC Lateral Guides with Guide Rollers SF/SE

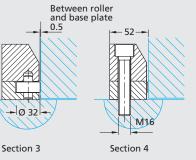
Universal Order code SF or SE

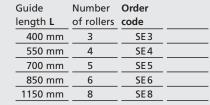
To guide dies. For use on one or both sides. Type SE with slanted entrance on both ends and from above

Type: SF









Die width + 64

31.5

50



→ ROLLBLOC DIE LOADING ARMS

PRELIMINARY INFORMATION FOR PROJECT PLANNING AND ORDERING

ROLLBLOC die loading arms are the ideal complement to the ROLLBLOC die lifters for transporting dies with a crane or conventional stacker truck.

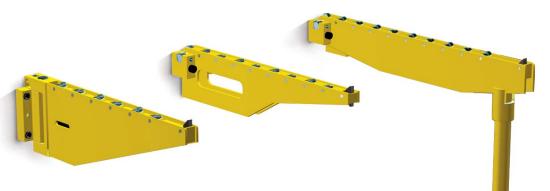
Permanently mounted to the press table - or attachable as required

Different die loading arms designs enable effective adaptation to the die weight and format while taking into consideration the space available.

ROLLBLOC die loading arms are always used only in pairs. Statics do not permit the load bearing capacity to be increased by using further loading arms. If the die loading arms are mounted to the front of the press bed plate, ensure that the installation height is sufficient. Adequate overall height must be ensured when attaching the loading arms to the front of the press table plate.

Swivel die loading arms are flange-mounted. When not required they are simply swivelled to the side. The different versions ensure the space available in front of the press table can be used most effectively.

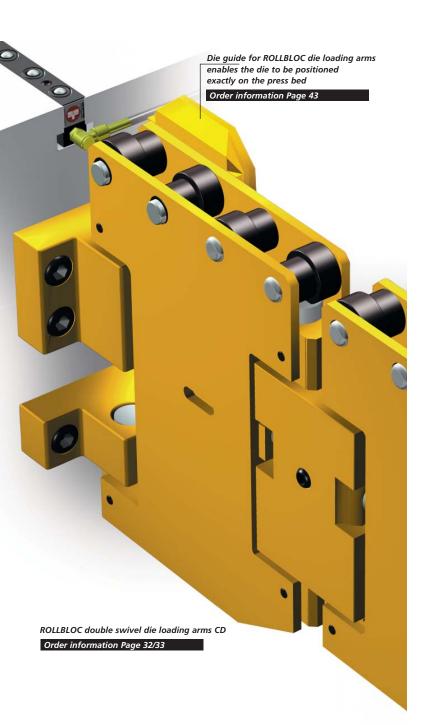
Overhung and bridge version die loading arms are only attached in fixed mounting hooks directly when required. This mounting technology facilitates the use of die loading arms on several presses.



Overview of all types

Load	Die loading a	Die loading arms length							
bearing	500 mm	800 mm	1000 mm	1250 mm	1600 mm	2000 mm			
capacity	Order code								
5 kN	CK00/0500	CK00/0800	CK00/1000						
10 kN	CS01/0500	CS01/0800	CS01/1000						
	CA01/0500	CA01/0800	CA01/1000						
	CD01/0500	CD01/0800	CD01/1000						
	CK01/0500	CK01/0800	CK01/1000						
20 kN	CS02/0500	CS02/0800	CS02/1000						
	CA02/0500	CA02/0800	CA02/1000						
	CD02/0500	CD02/0800	CD02/1000						
	CK02/0500	CK02/0800	CK02/1000		_				
			CT02/1000	CT 02/1250	CT02/1600				
30 kN	CK03/0500	CK03/0800	CK03/1000						
40 kN		CS04/0800	CS04/1000	CS 04/1250					
		CA04/0800	CA04/1000	CA04/1250	_				
		CD04/0800	CD04/1000	CD04/1250					
			CT04/1000	CT 04/1250	CT04/1600				
60 kN		CS06/0800	CS06/1000	CS 06/1250					
		CA06/0800	CA06/1000	CA06/1250					
		CD06/0800	CD06/1000	CD06/1250					
				CT 06/1250	CT06/1600	CT06/2000			
100 kN				CT 10/1250	CT10/1600	CT10/2000			

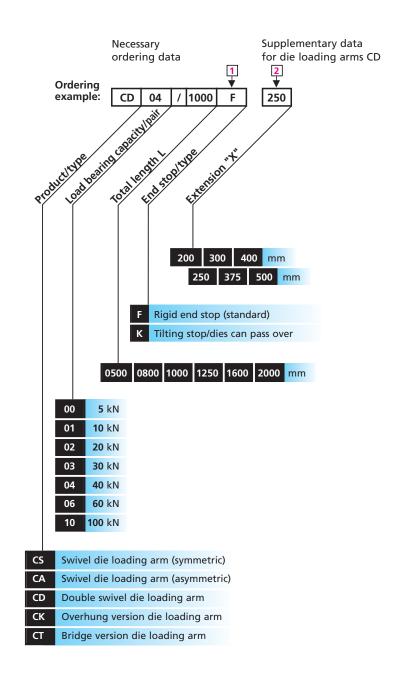
Further information →



The guide to simple and exact

→ ORDER DESIGNATION

FOR ROLLBLOC DIE LOADING ARMS



→ ROLLBLOC DIE LOADING ARMS

ROLLBLOC Die Loading Arms CS 01/02

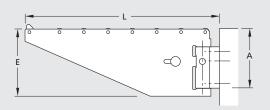
Swivel version, symmetric

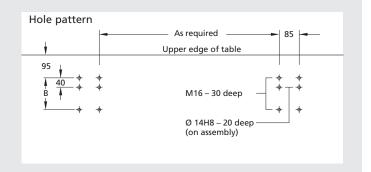
Fixed to the press table With locking mechanism

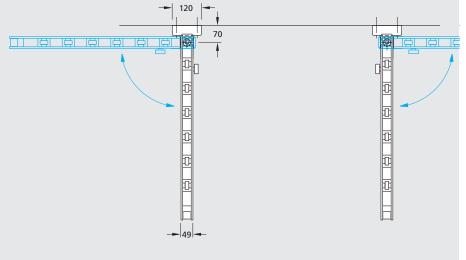
Type list

Loading arm dimensions E	Hole pattern B
01/0500 F 230	80
01/0800 F 230	80
01/1000 F 280	130
02/0500 F 230	80
02/0800 F 280	130
02/1000 F 330	
	E 230 01/0500 F 230 01/0800 F 230 01/1000 F 280 02/0500 F 230 02/0800 F 280

See fold-in flap on left for supplementary order designation









→ FOR FIXED MOUNTING TO THE PRESS TABLE

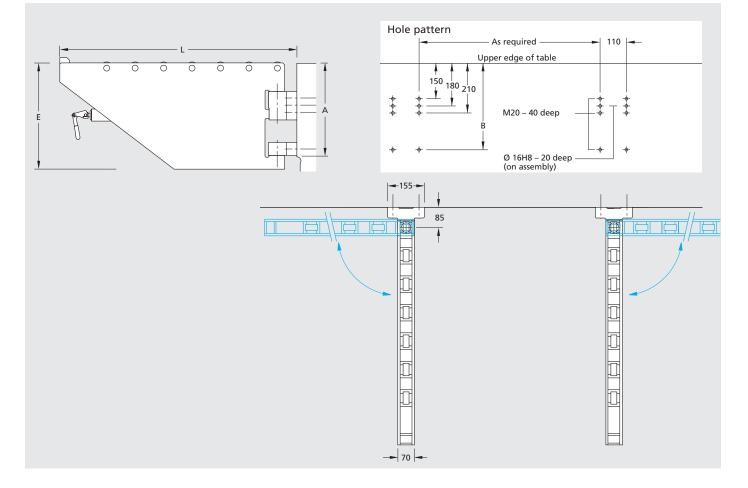
ROLLBLOC Die Loading Arms CS 04/06

Swivel version, symmetric

Fixed to the press table With locking mechanism

Type list

Load bear- ing capacity	Length L	Attachment height A	Order code	Loading arm E	dimensions	Hole pattern B	
40 kN	800 mm	345 mm	CS 04/0800 F	400		315	
40 kN	1000 mm	395 mm	CS04/1000 F	450		365	
40 kN	1250 mm	445 mm	CS04/1250 F	500		415	
60 kN	800 mm	445 mm	CS 06/0800 F	500		415	
60 kN	1000 mm	525 mm	CS06/1000 F	580		495	
60 kN	1250 mm	625 mm	CS06/1250 F	680		595	
ee fold-in fla	p on left for supp	lementary order	designation 1				



ROLLBLOC DIE LOADING ARMS WITH SPACE-SAVING

ASYMMETRIC SWIVEL ACTION

ROLLBLOC Die Loading Arms CA 01/02

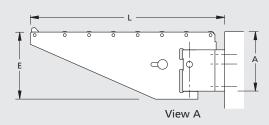
Swivel version, asymmetric

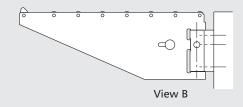
Fixed to the press table With locking mechanism

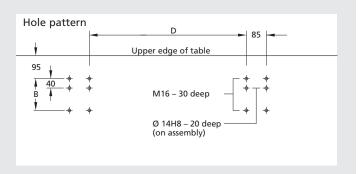
Type list

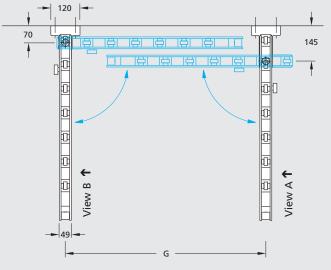
Load bear- Attachment		Order	Loading a	Loading arm dimensions		n		
ng capacity Leng	ngth L	height A	code	E	G min.	D min.	В	
10 kN	500 mm	195 mm	CA01/0500 F	230	500	415	80	
10 kN	800 mm	195 mm	CA01/0800 F	230	800	715	80	
10 kN 1	1000 mm	245 mm	CA01/1000 F	280	1000	915	130	
20 kN	500 mm	195 mm	CA 02/0500 F	230	500	415	80	
20 kN	800 mm	245 mm	CA 02/0800 F	280	800	715	130	
20 kN 1	1000 mm	295 mm	CA02/1000 F	330	1000	915	180	

.











→ FOR FIXED MOUNTING TO THE PRESS TABLE

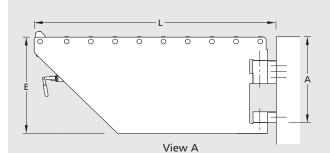
ROLLBLOC Die Loading Arms CA 04/06

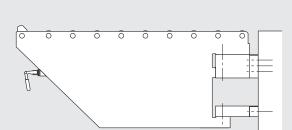
Swivel version, asymmetric

Fixed to the press table With locking mechanism

Type list

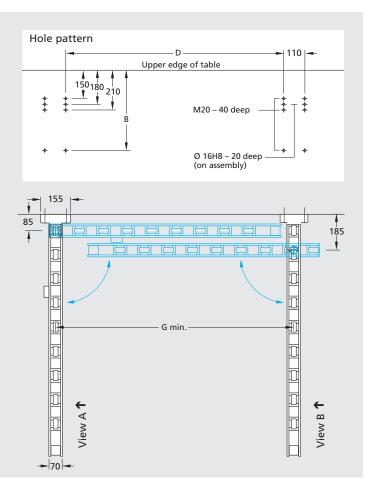
Load bear-		Attachment	Order		Loading ar	m dimens
ing capacity	Length L	height A	code		E	G mir
40 kN	800 mm	345 mm	CA 04/0800	F	400	78
40 kN	1000 mm	395 mm	CA04/1000	F	450	98
40 kN	1250 mm	445 mm	CA04/1250	F	500	123
60 kN	800 mm	445 mm	CA06/0800	F	500	7
60 kN	1000 mm	525 mm	CA06/1000	F	580	9
60 kN	1250 mm	625 mm	CA06/1250	F	680	12
See fold-in fla	p on Page 28 for	supplementary o	rder designation	1		





View B

Loading arm dimensions		Hole patter	n		
E	G min.		D min.	В	
400	780		670	315	
450	980		870	365	
500	1230		1120	415	
500	780		670	415	
580	980		870	495	
680	1230		1120	595	



→ SPACE-SAVING ROLLBLOC DIE LOADING ARMS ...

ROLLBLOC Die Loading Arms CD 01/02

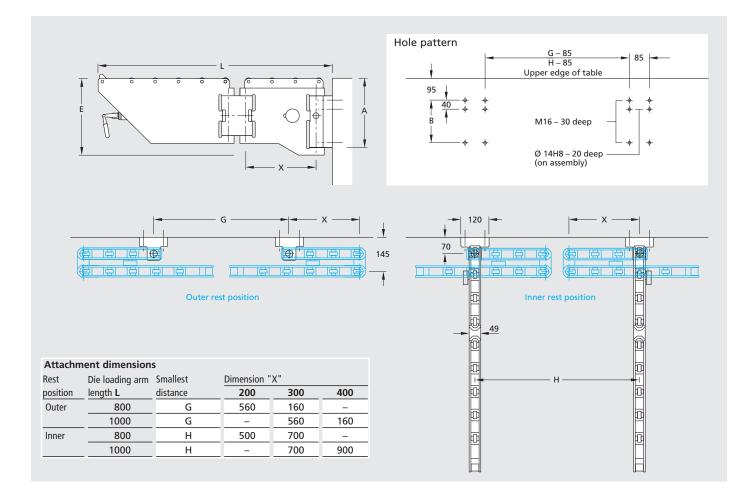
Double swivel version

Different size options possible, with locking mechanism Fixed to the press table

Type list

L hei	ight A	Order code		limensions arm on machine	e side	Hole pattern B	Load. arm height E
0 mm	195 mm	CD 01/0800 F 300	200	300	-	80	230
0 mm	245 mm	CD01/1000 F 300		300	400	130	280
0 mm	245 mm	CD 02/0800 F 300	200	300		130	280
0 mm	295 mm	CD02/1000 F 300		300	400	180	330
(0 mm 0 mm	0 mm 195 mm 0 mm 245 mm 0 mm 245 mm	0 mm 195 mm CD 01/0800 F 300 0 mm 245 mm CD 01/1000 F 300 0 mm 245 mm CD 02/0800 F 300	0 mm 195 mm CD 01/0800 F 300 200 0 mm 245 mm CD 01/1000 F 300 - 0 mm 245 mm CD 02/0800 F 300 200	0 mm 195 mm CD 01/0800 F 300 200 300 0 mm 245 mm CD 01/1000 F 300 - 300 0 mm 245 mm CD 02/0800 F 300 200 300	0 mm 195 mm CD 01/0800 F 300 200 300 - 0 mm 245 mm CD 01/1000 F 300 - 300 400 0 mm 245 mm CD 02/0800 F 300 200 300 -	0 mm 195 mm CD 01/0800 F 300 200 300 - 80 0 mm 245 mm CD 01/1000 F 300 - 300 400 130 0 mm 245 mm CD 02/0800 F 300 200 300 - 130

See fold-in flap on Page 28 for supplementary order designation 12





SECOND SWIVEL

BEARING AND SELECTABLE EXTENSION ARM LENGTH

ENSURE EFFECTIVE ADAPTATION TO INDIVIDUAL SITUATIONS

ROLLBLOC Die Loading Arms CD 04/06

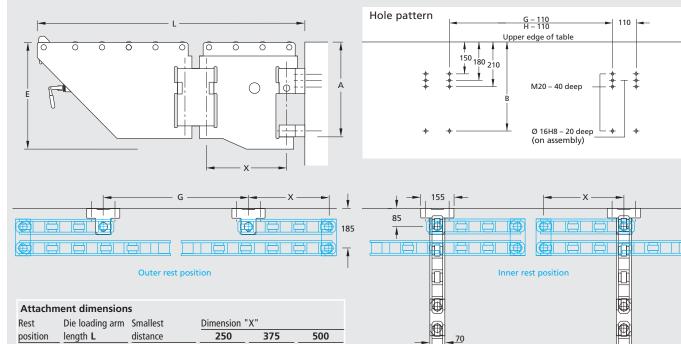
Double swivel version

Different size options possible, with locking mechanism Fixed to the press table

Type list

Load bear- ing capacity	Length L	Attachment height A	Order code	Available X-dimensions for extension arm on machine side		Hole pattern B	Load. arm height E	
40 kN	800 mm	345 mm	CD 04/0800 F 250	250	_	_	315	400
40 kN	1000 mm	395 mm	CD 04/1000 F 250	250	375	-	365	450
40 kN	1250 mm	445 mm	CD 04/1250 F 375		375	500	415	500
60 kN	800 mm	445 mm	CD 06/0800 F 250	250			415	500
60 kN	1000 mm	525 mm	CD 06/1000 F 250	250	375	-	495	580
60 kN	1250 mm	625 mm	CD 06/1250 F 375		375	500	595	680

See fold-in flap on Page 28 for supplementary order designation



н

position	length L	distance	250	375	500
Outer	800	G	280	-	-
	1000	G	680	180	-
	1250	G	-	680	180
Inner	800	Н	620		_
	1000	Н	620	870	-
	1250	Н	-	870	1120



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→ UNIVERSAL ROLLBLOC DIE LOADING ARMS **ATTACHED IN MOUNTING HOOKS**

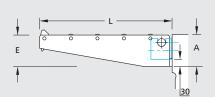
ROLLBLOC Die Loading Arms CK 00/01

Overhung version

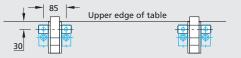
Please order mounting hooks for accepting the die loading arms separately. Page 38 For mounting to the press table, see attachment support height

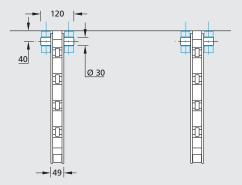
Typliste

.oad bear- ng capacity	Length L	Attachment height A	Order code	Loading arm height E		
5 kN	500 mm	120 mm	CK 00/0500 F	120		
5 kN	800 mm	120 mm	CK 00/0800 F	120		
5 kN	1000 mm	150 mm	CK 00/1000 F	150	 	
10 kN	500 mm	150 mm	CK 01/0500 F	150		
10 kN	800 mm	175 mm	CK 01/0800 F	175		
10 kN	1000 mm	250 mm	CK 01/1000 F	250		
ee fold-in fla	p on Page 28 for	supplementary of	rder designation			



Detailed measuring information for mounting with die loading arm hooks from Page 38







ROLLBLOC Die Loading Arms CK 02/03

Overhung version

Please order mounting hooks for accepting the die loading arms separately. Page 38 For mounting at press table, see attachment support height

Type list

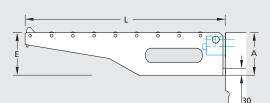
Load bear- ing capacity	Length L	Attachment height A	Order code				
20 kN	500 mm	175 mm	CK 02/0500 F				
20 kN	800 mm	250 mm	CK 02/0800 F				
20 kN	1000 mm	300 mm	CK 02/1000 F				
30 kN	500 mm	250 mm	CK 03/0500 F				
30 kN	800 mm	375 mm	CK 03/0800 F				
30 kN	1000 mm	450 mm	CK 03/1000 F				
See fold-in flap on Page 28 for supplementary order designation							

Die loading arm height

85

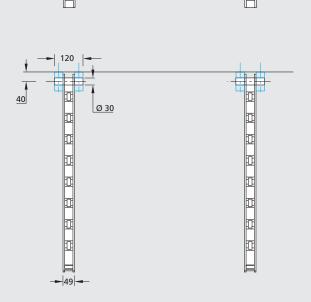
30

E	 	 	
175			
250		 	
300	 		
250			
375			
450	 	 	



Detailed measuring information for mouting with die loading arm hooks from Page 38

Upper edge of table



→ BRIDGE VERSION DIE LOADING ARMS

FOR USE WITH DIE LOADING ARM HOOKS

LARGE WORKING RADIUS - LOW ATTACHMENT HEIGHT

Die loading arm height

49

Е

150

ROLLBLOC Die Loading Arms CT 02/04

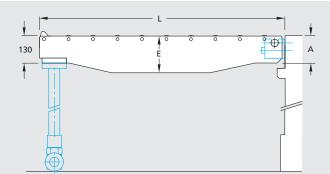
Bridge version

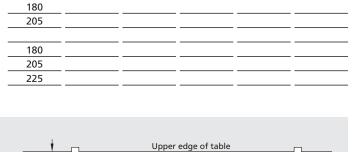
Please order mounting hooks and support legs separately. Page 38 and 40

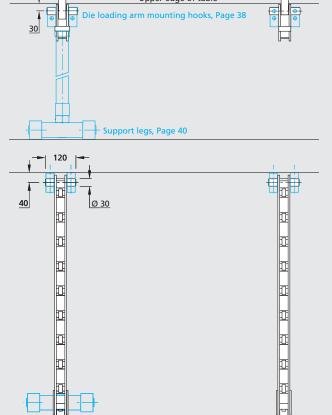
Type list

Load bear- ing capacity	Length L	Attachment height A	Order code	
20 kN	1000 mm	110 mm	CT02/1000	F
20 kN	1250 mm	110 mm	CT02/1250	F
20 kN	1600 mm	110 mm	CT02/1600	F
40 kN	1000 mm	110 mm	CT 04/1000	F
40 kN	1250 mm	110 mm	CT04/1250	F
40 kN	1600 mm	110 mm	CT04/1600	F

See fold-in flap on Page 28 for supplementary order designation









ROLLBLOC Die Loading Arms CT 06/10

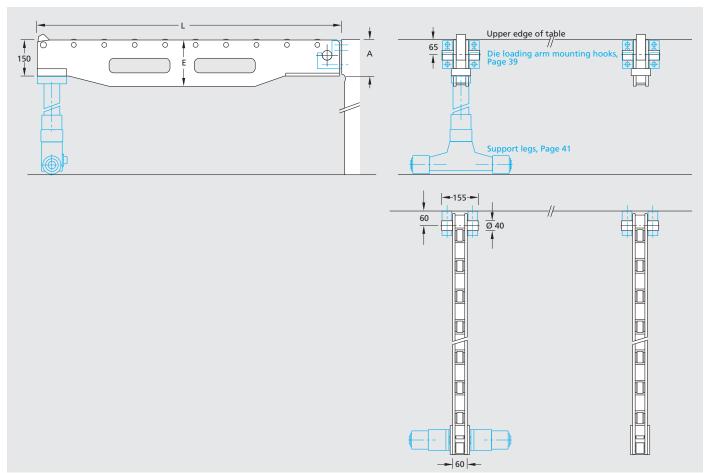
Bridge version

Please order mounting hooks and support legs separately. Page 39 and 41

Type list

Load bear-	Length	Attachment	Order		Die loading a	rm height
ing capacity	L	height A	code		 E	
60 kN	1250 mm	150 mm	CT06/1250	F	190	
60 kN	1600 mm	150 mm	CT06/1600	F	225	
60 kN	2000 mm	150 mm	CT06/2000	F	250	
100 kN	1250 mm	150 mm	CT 10/1250	F	 250	
100 kN	1600 mm	150 mm	CT 10/1600	F	 280	
100 kN	2000 mm	150 mm	CT 10/2000	F	 320	

See fold-in flap on Page 28 for supplementary order designation



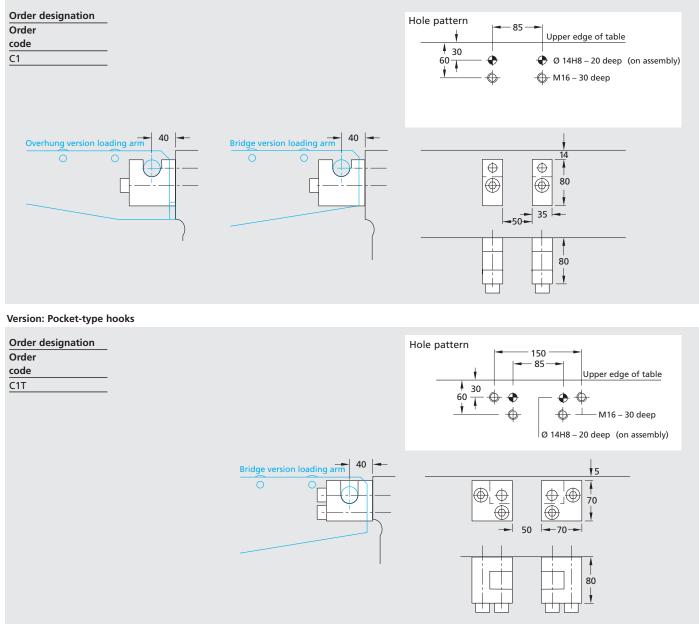
→ DIE LOADING ARM MOUNTING HOOKS

Mounting Hooks for ROLLBLOC Die Loading Arms CK 00/01/02/03 and CT 02/04

2 types

Delivery including screws and dowel pins Used in sets (for 2 loading arms)

Version: Standard





→ COMPACT DESIGN

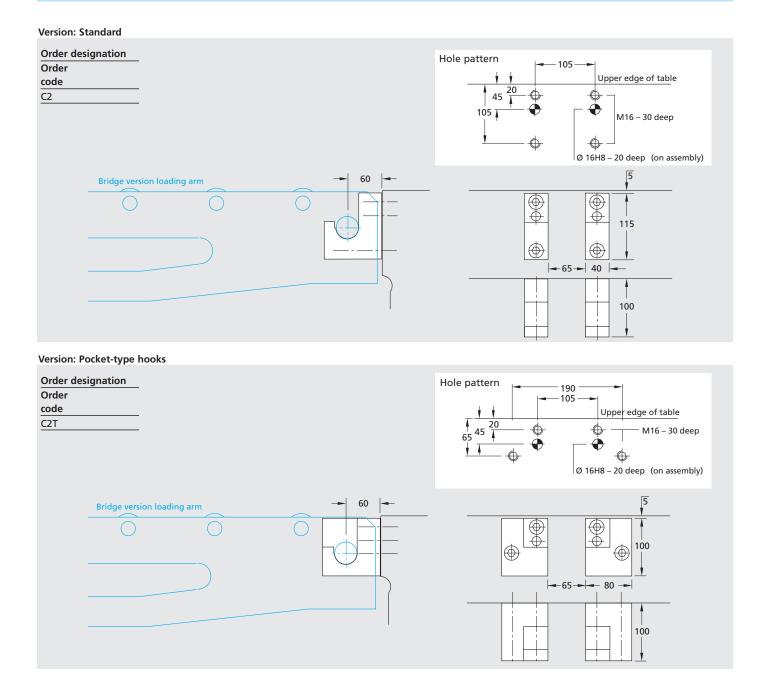
FOR FAST MOUNTING OF OVERHUNG AND BRIDGE VERSION

DIE LOADING ARMS TO THE PRESS TABLE

Mounting Hooks for ROLLBLOC Die Loading Arms CT 06/10

2 types

Delivery including screws and dowel pins Used in sets (for 2 loading arms)

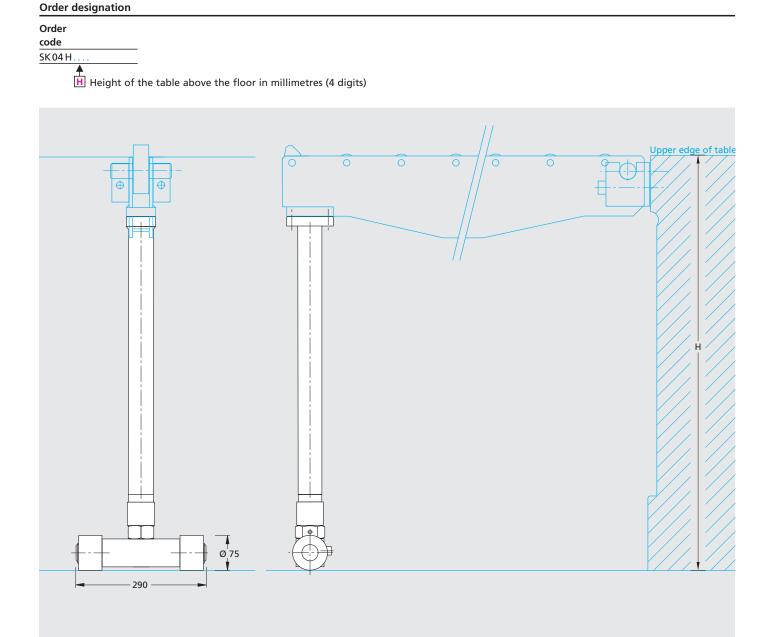


→ ADJUSTABLE SUPPORT LEGS WITH ROLLERS

ROLLBLOC Support Legs SK for Bridge Version Die Loading Arms CT 02/04

Adjustable by means of adjusting spindle by ±15 mm

min. height of the table 300 mm, smaler height of the table is optional





ROLLBLOC Support Legs SK for Bridge Version Die Loading Arms CT 06/10

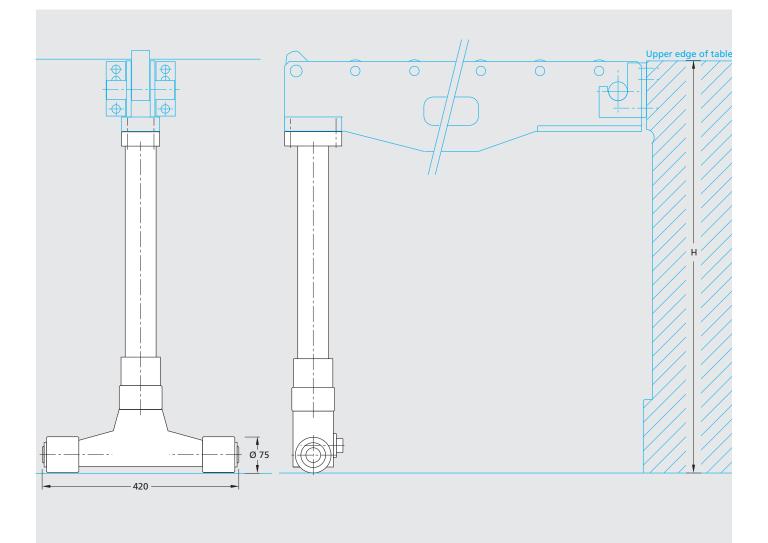
Adjustable by means of adjusting spindle by ±15 mm

min. height of the table 400 mm, smaler height of the table is optional

Order

code SK 10 H

Height of the table above the floor in millimetres (4 digits)



VERSATILE TRANSPORT ELEMENTS

FOR DIE TRANSFER, PLACEMENT STATIONS, STORAGE RACKS

ROLLBLOC Tranfer Roller TL

For universal applications, Additional length by means of adaptor

Load carrying element: Roller. The specified load bearing capacity is based on the load resting on at least 2 rollers per rail. Used in pairs. Continuous support on load-bearing substructure necessary.

Type: TL03

Load bearing capacity: 30 kN Roller spacing: 100 mm

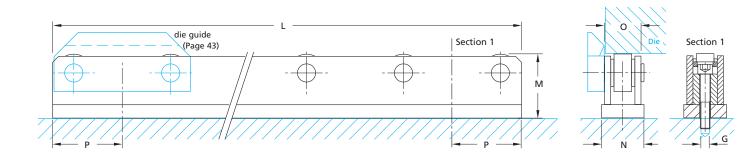
Strip	Order	1	
length L	code	V	
440 mm	TL03/	0440 <mark>F</mark>	
540 mm	TL03/	0540 <mark>F</mark>	
640 mm	TL03/	0640 <mark>F</mark>	
840 mm	TL03/	0840 <mark>F</mark>	
1040 mm	TL03/	1040 <mark>F</mark>	
Adaptor			
160 mm	TLZ 03	}	

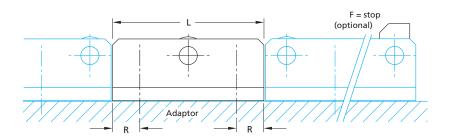
Type: TL10 Load bearing

Load bearing capacity: 100 kN Roller spacing: 160 mm	Strip length L	Order <u>1</u> code V
	710 mm	TL10/0710 F
	870 mm	TL10/0870 F
	1030 mm	TL10/1030 F
	1350 mm	TL10/1350 F
	1670 mm	TL10/1670 F
	Adaptor	
	250 mm	TLZ 10

Type: TL06

Load bearing capacity: 60 kN Strip Order **1** Sublementary order designation 1 Roller spacing: 125 mm length L code F = with stop 560 mm TL06/0560 F TL06/0685 F 685 mm TL06/0810 **Project planning dimensions** Hole/mounting dimensions 810 mm 1060 mm TL06/1060 Ν Р G Туре Μ 0 R 1310 mm TL06/1310 TL 03 61,5 60 49 70 30 M12 Adaptor TL 06 81,5 70 60 92,5 32,5 M16 TLZ 06 190 mm TL 10 106,5 70 60 115 45 M16







→IDEAL FOR REGULARLY SIZED DIE BASE PLATES

ROLLBLOC Die Guide for Transfer Rollers and Die Loading Arms

Universal Centering and guide aid for die transfer and storage for regular sized base plates.

If ordered with transfer rollers and die loading arms, it can be delivered ready-mounted. Unmounted delivery in pairs.

	◄ ──── B ───►	Application: Die	guiding		Dimensio	ns			
		Transfer rollers	Loading arms	Туре	А	В	С	D	E
		×	×	W1	100	130	55	15	52
c /	$\left[\begin{array}{c} \bullet \\ \bullet \end{array} \right]$		×	W2	125	175	80	20	52
	$\left[\begin{array}{c} \varphi \\ \varphi \end{array} \right]$	×	×	W3	125	175	80	20	63
			×	W4	125	175	80	20	73
→ D - E →	- A	×	×	W5	160	220	100	25	65

Selecting type of die guide for transfer rollers and die loading arms

For positioni	ng and mounting	on	Die guide type
Transfer roller	up to 30 kN	TL03	W1
	up to 60 kN	TL06	W3
	up to 100 kN	TL10	W5
Symmetric swiv	el die loading arm	CS 01/02	
		CS 04/06	W4
Asymmetric swi	vel die loading arm	CA 01/02	W1
		CA 04/06	W4
Double swivel d	ie loading arm	CD 01/02	W1
		CD 04/06	W4
Overhung version	on die loading arm	CK 00/01/02/03	W1
Bridge version of	lie loading arm	CT 02	W1
		CT 04	W2
		CT 06	W3
		CT 10	W5

Order

code (s	elf assembly)	
W1		
W2		
W3		
W4		
W5		

Order	(3 pairs
code	mounted)

coue	mounteu)	
W1M3		
W2M3		
W3M3		
W4M3		
W5M3		
	2 pairs mounted	k
	(500 mm projec	tion)
W1M2		

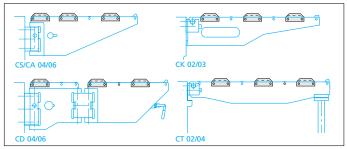
Order information

If several die loading arms are ordered, please state (order code) which die loading arms should be fitted with a die guide.

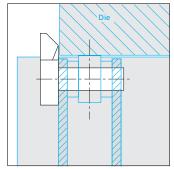
Assembly position

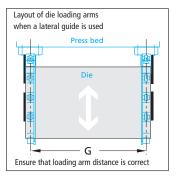
For transfer rollers: as stated or shown in a drawing.

For die loading arms: according to drawings or as stated by you or shown in your drawing. If necessary, you will be assigned appropriate CAD data. Die loading arms with a projection of 500 mm will be fitted with 2 pairs of die guides.



Guide function with loading arms





→ SAFE AND QUICK HANDLING

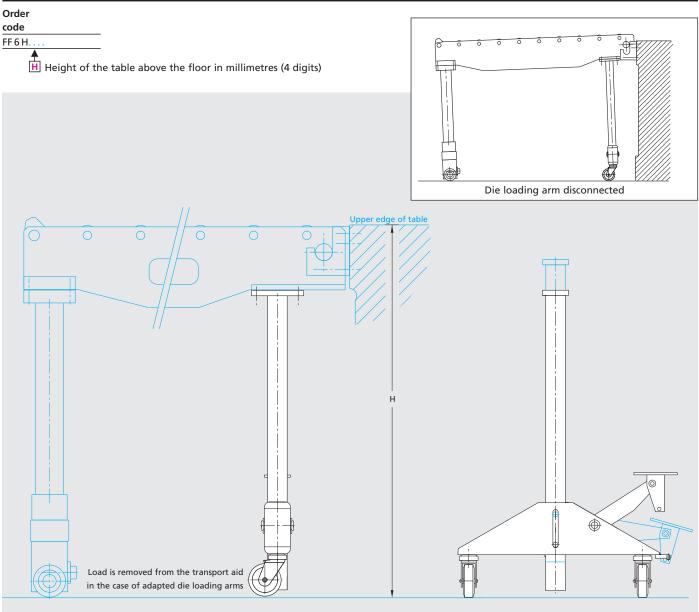
FOR LARGE DIE LOADING ARM

ROLLBLOC Mobile Support FF for Die Loading Arms CT 06/10

Universal

To suspend the die loading arm Lift with pedal operation

Order designation





→ROLLBLOC RO HYDRAULIC QUICK-ACTION CLAMPS

PRELIMINARY INFORMATION ON PROJECT PLANNING AND ORDERING

Hydraulic clamps can be used to reduce down time when setting up wherever dies need to be changed frequently. With a defined clamping pressure, die clamping is extremely precise as all clamping elements are effective simultaneously. Integral features of such a die clamping system include complete die protection in conjunction with effortless operation. The minimum handling requirements saves considerable time.

Five clamping systems

The ROLLBLOC product range includes five different hydraulic clamping systems for the purpose of clamping dies (press table and ram):

ROLLBLOC sliding clamp ROLLBLOC hollow piston clamp ROLLBLOC ledge clamp ROLLBLOC wedge clamp ROLLBLOC block clamp

Combination of the different clamping systems such as ROLLBLOC ledge clamps and ROLLBLOC sliding clamps pose no problems. The decisive factor for selecting

The decisive factor for selecting the most suitable clamping system is the planned utilization of the respective press.

Adaptive clamps ROLLBLOC sliding clamps and ROLLBLOC hollow piston clamps are particularly suitable for clamping dies with differently sized die base plates. These clamps are held in the T-slots of the press bed and ram.

Park stations

The clamps have their own place in these park stations during die changing and during temporary non-use. They need not therefore be disconnected from the system. If required, they can be disconnected from the hydraulic system by means of quick-disconnect couplings.

... with hydraulic distributor plates

Particularly in the case of adaptive clamps it is helpful if the hydraulic connection is combined with the park stations. The hydraulic distributor plates are available with and without check valve (page 56).

Clamping standardized die formats

A die change can be carried out particularly fast when die base plates of the same size are used. A method that has established itself in many companies as a rationalization feature for quick die change.

Integrated clamping elements

ROLLBLOC clamping bars, ROLLBLOC block clamps and ROLLBLOC wedge camps are permanently installed on the press bed/ram. Thus, they require no manual operation.

The **ROLLBLOC wedge clamps** offer a special function: The ram/upper section of the die is clear when the clamps is released.

In some cases this is the fundamental requirement for automated die change operations.

Clamping force and clamping force protection

A multi-circuit hydraulic supply system for the clamps and/or the use of pilot-controlled check valves effectively safeguard the hydraulic die clamping system.

Supplementary components

Hydraulic components, valve kits, hydraulic distributor plates and hose connections are described from page 54 onwards.

Overview of ROLLBLOC clamps

	Adaptive clamps for T-	slots		Integrated clamps for T	-slots	
Clamping	Sliding	Hollow Piston	T-slot	Wedge	Ledge	Block
force*	Clamps	Clamps	sizes	Clamps	Clamps	Clamps
20 kN	×		18			×
25 kN			-	×		
32 kN	×		22			X
50 kN	×		22/28	×		×
63 kN		×	22/28		×	
80 kN	×		28			×
100 kN		×	28/36	×	×	
160 kN		×	36	×	×	

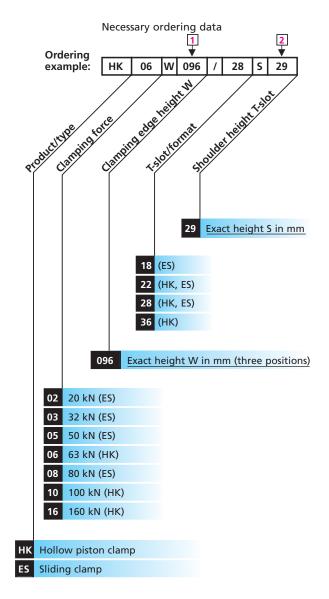
*All information on the clamping forces of the clamps is based on the usual operating pressure of 400 bar



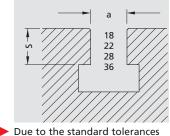
The guide to simple and exact

→ ORDER DESIGNATION

FOR ROLLBLOC HOLLOW PISTON CLAMPS AND ROLLBLOC SLIDING CLAMPS



T-slot DIN 650



with regard to the shoulder height (S) in press tables and rams, this dimension must be measured for the specific order.

→ SPACE-SAVING CLAMPING

FOR DIES WITH CLAMPING SLOTS

ROLLBLOC Hollow Piston Clamps HK

Hydraulic operation max. pressure 400 bar

Hydraulic single-acting, with spring return. Connection G 1/4" Required valve set: Type E

Type list

Туре	Clamping force	For T-slot Standard	Option	Order code			
HK 06	63 kN	22		HK 06 W/22 S			
			28	HK06W/285			
HK 10	100 kN	28		HK10W/285			
			36	HK 10 W / 36 S			
HK 16	160 kN	36		HK 16 W / 36 S			
See below and fold-in flap on left for supplementary							

See below and fold-in flap on left for supplementary order designation

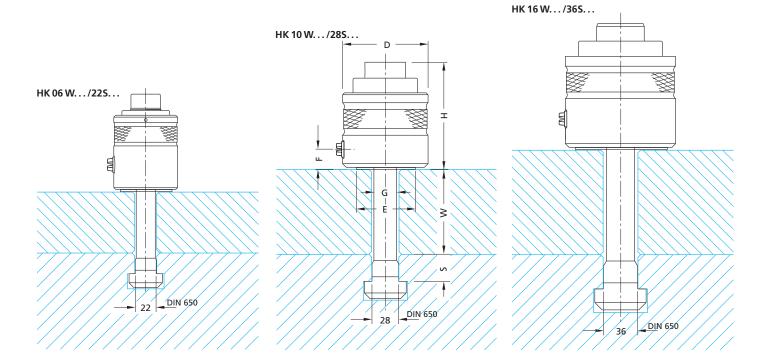
1 (W) Height of die clamping edge as 3-position mm specification, e.g. 086 for 86 mm (2) (S) Shoulder height of T-slot. In view of the standard tolerances in this area, the T-slot in the press table and ram must be measured for ordering hollow piston clamps.

Project planning dimensions

Cylinder size, ı	nm				Recommended
ØD	ØE	F	G	Н	clamping stroke*
67	55	26	M 20	92	5 mm
			M 24		
90	78	19	M 24	100	5 mm
			M 30		
116	90	30	M 30	120	5 mm

Order code not including mounting screw Example: HK 06

*Total stroke 8 mm





ERGONOMIC

ROLLBLOC Park Station PH for Hollow Pistion Clamps HK

1

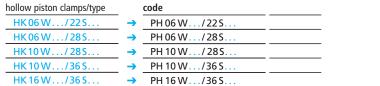
2

1 version for press bed and ram

The park station can be supplemented by a ROLLBLOC hydraulic distributor plate

For

The ROLLBLOC park stations must be ordered matching the selected and 'measured' ROLLBLOC hollow piston clamps. Use the dimensions [1][2] from your hollow piston clamps order.



1

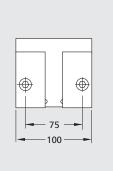
2

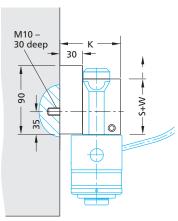
Order

Selection list - park stations PH (also for combination with hydraulic distributor plates - see page 56)

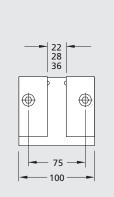
Supplementary order designation corresponding to hollow piston clamps (explanation on Page 46 and on fold-in flap order designation)

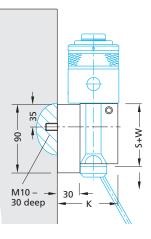
Park station mounted to the ram





Park station mounted to the press bed





D	i	m	ıe	er	15	i	o	n	S

Slot size	Dimension "K"
22	70
28	80
36	90

→ HYDRAULIC CLAMPING HIGH FLEXIBILITY TOGETHER WITH QUICK HANDLING

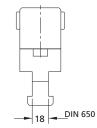
ROLLBLOC Sliding Clamps ES

Hydraulic operation max. pressure 400 bar

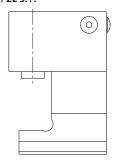
Hydraulic single-acting, with spring return. Connection G 1/4" Required valve set: Type E

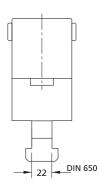
ES 02 W.../18 S...



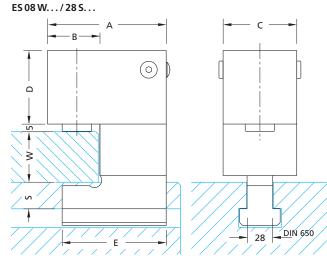


ES 03 W.../22 S... ES 05 W.../22 S...





ES 05 W.../28 S...



Type list

Туре	Clamping force	For T-slot DIN 650	Order code				
ES 02	20 kN	18	ES02 W/18 S				
ES 03	32 kN	22	ES 03 W / 22 S				
ES 05	50 kN	22	ES 05 W / 22 S				
ES 05	50 kN	28	ES 05 W/28 S				
ES 08	80 kN	28	ES 08 W / 28 S				
See opposite and fold-in flap on Page 46 for							

See opposite and fold-in flap on Page 46 for supplementary order designation

Project planning dimensions

Туре	А	В	с	D	E	Recommended clamping stroke*
ES 02	79	29	45	45	72	5
ES 03	105	45	65	50	95	5
ES 05	106	46	65	65	95	5
ES 08	129	57	80	80	108	5

(W) Height of die clamping edge as 3-position mm specification, e.g. 086 for 86 mm (5) Shoulder height of T-slot. In view of the standard tolerances in this area, the T-slot in the press table and ram must be measured for ordering Sliding Clamps.

*Total stroke 8 mm

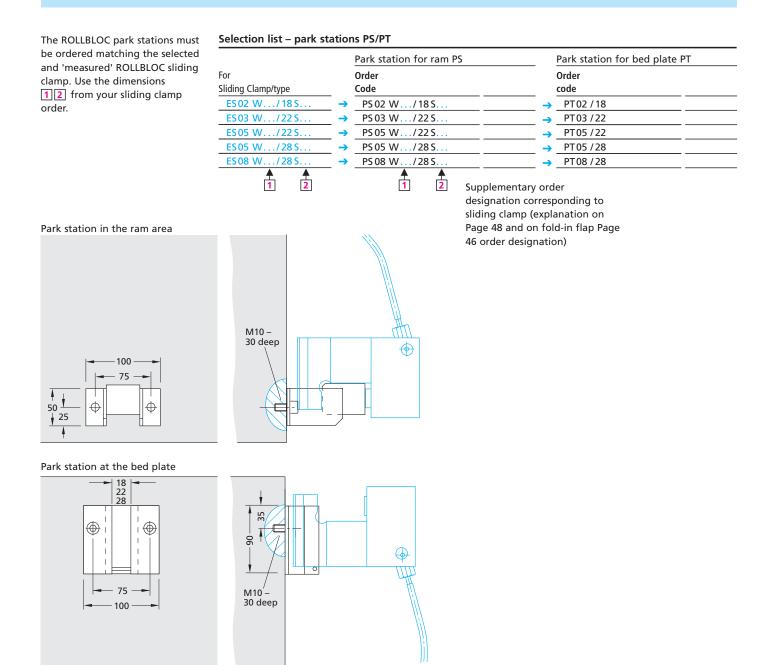


UNIVERSAL VARK STATION

ROLLBLOC Park Stations PS/PT for Sliding Clamps ES

2 versions for press bed and ram

The park station can be supplemented by ROLLBLOC hydraulic distributor plates



CLAMPING TECHNOLOGY FOR A SEMI-AUTOMATED SETUP

ROLLBLOC Wedge Clamps KS

Hydraulic operation Pressure max. 350 bar (400 bar*). The maximum permitted operating force per tensioner must not be exceeded.

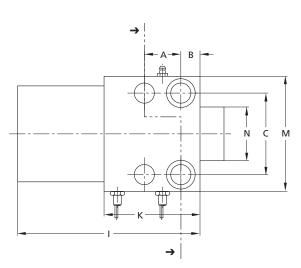
Other versions have position detection (2 proximity switches)

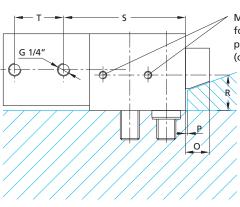
Hydraulic, double-action. Connection G 1/4". Recommended valve set: D or T

Type lis	t					
Туре	Clamping force	Operating force, max.	Position with	sensing without	Order code	
KS02	25 kN	36 kN	В		KS02 B	
				L	KS02 L	
KS05	50 kN	72 kN	B		KS05 B	
				L	KS05 L	
KS10	100 kN	145 kN	B		KS10 B	
				L	KS10 L	
KS16	160 kN	230 kN	B		KS16 B	
				L	KS16 L	

Hole pattern

Туре	А	В	C ^{±0,02}	Ø d ^{H8}	E	F	G
KS02	24	14	48	18	M12	7	30
KS05	30	16	65	26	M16	9	40
KS10	38	20	85	30	M 20	11	45
KS16	50	25	106	35	M 24	11	50





M8x1 on both sides for lubrication/ position detection (optional)

ciently stable tappings (at least St 50)

* When attachment screws of 10.9 quality are used, the maximum permitted operating pressure is 400 bar.

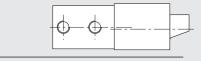
Prerequisite is a mounting surface with suffi-



ROLLBLOC Wedge Clamps KS

Project planning dimensions

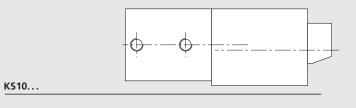
н	Ι	К	М	ØN	0	Р	R	S	т	U	V	W
48	122	58	70	30	20	3	21,5	78	33	15	12	11
65	157	78	95	40	25	3	28,5	103	43	18	6	11
80	190	100	120	56	25	3	37	127	51	25	16	11
105	222	120	150	70	30	3	49	148	57	30	8	11

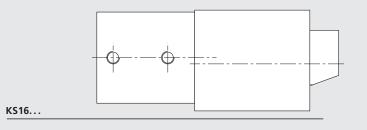


KS02...

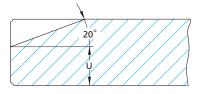
KS05...







Die connection dimensions



→ DISTRIBUTED CLAMPING FORCE

ROLLBLOC Ledge Clamps SL

Hydraulic operation max. pressure 400 bar. Connection thread G 1/4"

For press table and position-controlled ram

Required valve set: E

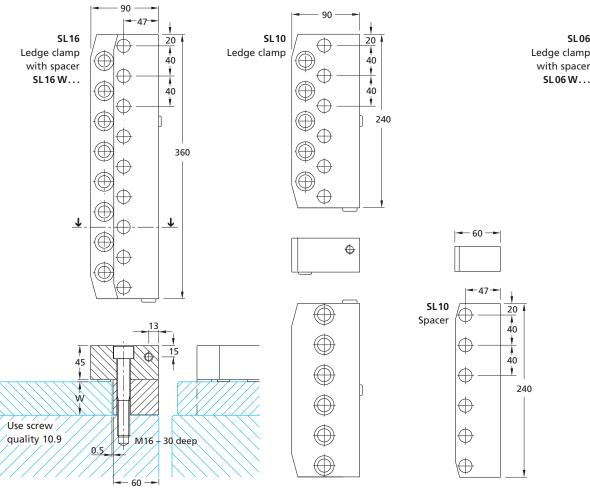
Recommended clamping stroke 5 mm Total stroke 8 mm

Recommended gap size between die plate and spacer 0.5 mm

Clamping	Order code		
force	Ledge clamp		
63 kN	SL06		
100 kN	SL 10		
160 kN	SL16		
	force 63 kN 100 kN	force Ledge clamp 63 kN SL06 100 kN SL10	force Ledge clamp 63 kN SL06 100 kN SL10



edge height of die base plate in mm



SL06 edge clamp with spacer SL06 W....



20 4 40

40

ŧ

160



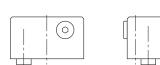




ROLLBLOC Block Clamps BS

Hydraulic operation max. pressure 400 bar.

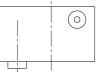
Hydraulic single-acting, with spring return. Connection G 1/4" Required valve set: Type E



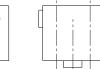
Type list				
Type	Clamping force	Order code		
Туре				
BS 02	20 kN	BS 02		
BS 03	32 kN	BS 03		
BS 05	50 kN	BS 05		
BS 08	80 kN	BS 08		

BS 03

BS 05



 (\circ)

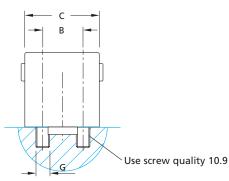


Project planning dimensions

								Recommended
Туре	Α	В	С	D	E	F	G	clamping stroke*
BS 02	79	27	45	45	10	50	M10	5
BS 03	105	36	65	50	13	60	M16	5
BS 05	106	36	65	65	13	60	M16	5
BS 08	129	43	80	80	16	73	M20	5

*Total stroke 8 mm

BS 08 А (\circ) Δ Е



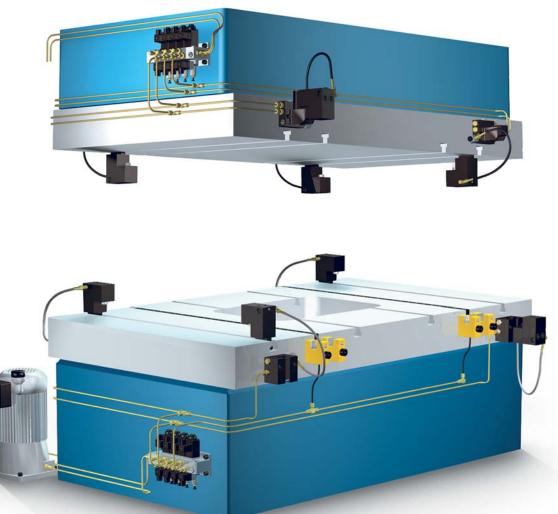
BS 02

→ COMPONENTS FOR CLAMPING HYDRAULICS

Producing and controlling the clamping pressure Special sets of hydraulic valves are used for controlling the ROLLBLOC hydraulic clamps.

The ROLLBLOC hydraulic unit produces the necessary clamping pressure (in an independent operating system).

Supplementary measures for safeguarding reliable operation can be implemented by using a multi-circuit supply for the hydraulic clamps, e. g. crosswise. This can be supplemented by pilot controlled check valves in the hydraulic distributor plates.



This configuration example shows:

Press bed with hydraulic ROLLBLOC die lifter, ball type, and mounting hooks for ROLLBLOC die loading arms.

ROLLBLOC sliding clamp in the press bed area and ram. Each has a 2-circuit hydraulic supply through ROLLBLOC hydraulic distributor plates with mounted ROLLBLOC park stations.

The ROLLBLOC hydraulic distributor plates in the ram area are fitted with check valves. The ROLLBLOC valve kits are on mounting plates. Here, they are also on the press bed.

The ROLLBLOC hydraulic unit is shown here as a separate element. The electrical connections to control the valves are not shown.



PRELIMINARY INFORMATION FOR PROJECT PLANNING AND ORDERING

ROLLBLOC hydraulic distributor plate

Hydraulic distributor plates serve primarily to branch the hydraulic system to the adaptive clamps. They also provide a solid base for the pipes of the hydraulic clamping system.

The hydraulic distributor plates can also be supplied with pilot controlled check valves to secure the clamping force.

The hydraulic distributor plates are also designed to be used as replaceable base plates for the park stations.

Park stations

In order that the adaptive clamps have a defined place during die changing, it is recommended that appropriate park stations are included. This avoids the risks of collisions and, if necessary, the clamps can also remain in the park stations during production. The park stations are designed so that they can be mounted directly on a hydraulic distributor plate or they can replace its base plate.

When ordering, please note:

Park stations should always be ordered together with the relevant clamps. Park stations and distributor plates should be ordered separately (even if they are later to be combined).

Hose connections

for adaptive hydraulic clamps Four standard hose lengths are available. The measurement of the length is usually based on the smallest die. The inclusion of a swivel connection is advantageous for handling the clamps. In an additional type the hoses can also be ordered with an integrated quick-action coupling.

ROLLBLOC hydraulic unit

The ROLLBLOC hydraulic unit is mounted on an equipment frame with a generously dimensioned oil collection tray. It accommodates the actual **hydraulic unit**, normally together with **valve sets** and the **control cabinet** (optional).

The hydraulic unit is sufficiently dimensioned such as to be able to supply 20 hollow piston clamps (each with 160 kN clamping force at 400 bar) for example.

The valve sets are mounted on the hydraulic unit.

Arranged on a separate valve mounting plate, for mounting in the ram area, the valve sets can be placed in the vicinity of the clamps. This arrangement effectively reduces the number of moving hose connections particularly in multi-circuit applications in the ram area.

ROLLBLOC control valves

Directional seated valves (24 V DC) of renowned manufacturers are used for the ROLLBLOC valve sets. The valves are mounted on a function block with hydraulic test connections.

Valves with a 'clamping' function are equipped with a pressure switch for function monitoring. Valve set: E...

Double-acting valve sets for 'clamping' and 'releasing' are required for ROLLBLOC wedge clamps. These valve sets are also used for the park stations of ROLLBLOC hollow piston clamps and ROLLBLOC sliding clamps which are equipped with pilotcontrolled check valve. Valve set: D...

The following valve sets are available for the pressure supply of the ROLLBLOC die lifters:

Valve set: K... For ROLLBLOC ball version die lifters (40 bar working pressure)

Valve set: W... For ROLLBLOC roller version die lifters (80 bar working pressure)

Ordering and delivery

The hydraulic unit, hydraulic valves and the optional mounting plate are assigned separate order numbers to facilitate straight-forward ordering.

The equipment is supplied completely assembled and, depending on the ordered expansion stage, wired on terminal strips or additionally equipped with a corresponding control system. The prices for the valve sets include the costs for functional components, wiring and control.

→ PRACTICAL AND CLEAR

ROLLBLOC Hydraulic Distributor Plate HV01/HR01

Universal For press bed and ram

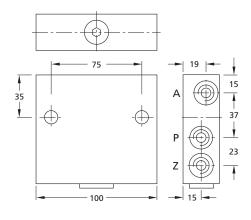
Quick installation due to simple pipework

Also serves as base to mount park stations (see pages 47 and 49)

Type: With check valve

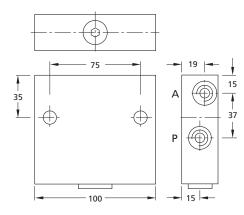
Order code HR 01

Required valve set D



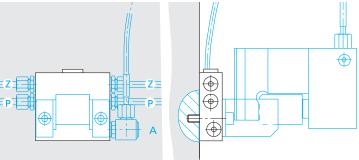
Type: Without check valve

Order code HV 01 Required valve set E



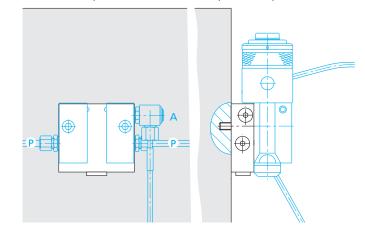
These hydraulic distributor plates are particularly suited to control the ROLLBLOC Clamps. If adaptive clamps are used, any necessary park stations can be mounted directly on the appropriate distributor plate.

Application example: Hydraulic distributor plate with check valve, mounted to the ram. With mounted park station PS for sliding clamp ES



Application example:

Hydraulic distributor plate mounted to the press bed with mounted park station PS for hollow piston clamp HK





→ HYDRAULIC HOSES FOR ADAPTIVE HYDRAULIC CLAMPS

ROLLBLOC Hydraulic Hoses

Completely assembled Pressure range up to 400 bar

With angle connection G 1/4", with swivel joint on one side SV Additional type with quick-action coupling ST

Type:	S٧

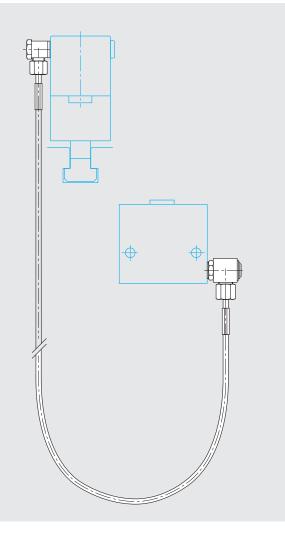
Standard type

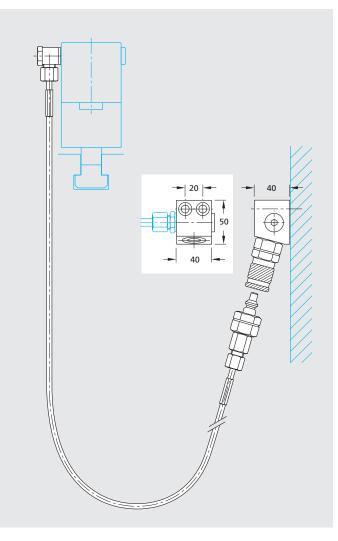
Hose length between angle connections	Order code
500 mm	SV 0500
630 mm	SV 0630
800 mm	SV 0800
1000 mm	SV 1000

Type:	ST
-------	----

Incl. connection block (AB01) and quick-action coupling

Hose length ncl. coupling	Order code
615 mm	ST 0500
745 mm	ST 0630
915 mm	ST 0800
1115 mm	ST 1000







VALVE TECHNOLOGY

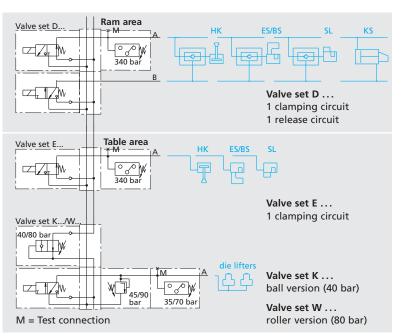
FOR ROLLBLOC CLAMPING JACKS AND ROLLBLOC DIE LIFTERS

ROLLBLOC Valve Sets

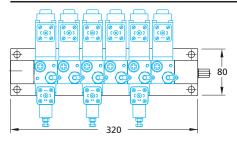
Seat valves 24 V DC, LED connector

Connection G 1/4". For die clamps and for die lifters Delivery completely assembled on hydraulic unit or mounting plate

Application examples/explanation valve sets



Mounting plate for ram area



Mounting plate PS6 Exemplary illustration, equipped with 3 valve sets DSP. Other dimensions are also available on request A mounting plate is used for valve sets that are mounted separately in the ram area.

Type list

	Valve sets	1						
		Wired						
Туре	Mounted	(terminal strip)	Controlled 2	code 🖌				
Ε	S			ES A				
		V		EV				
			Ε	EE				
D	S			DS				
		V		DV				
			Ε	DE				
К	S			KSA				
		V		KVA				
			Ε	KEA				
W	S			WSA				
		V		WVA				
			Ε	WEA				

¹Delivery form adapted to hydraulic unit order.

² In conjunction with hydraulic unit only Version ... E (Page 59) Important supplement!
 Please specify where the valve set is to be mounted.
 A = Hydraulic unit
 P = Mounting plate

 (for valves of ram clamps only)

All valve sets are supplied completely assembled

Valve sets for clamps in the table area are normally arranged on the hydraulic unit. If valve sets (...VP and ...EP) are arranged on a mounting plate, they are wired to a terminal box (in the vicinity of the mounting plate).





HYDRAULIC UNIT

WITH OPTIONAL CONTROL

Technical data Type B...

Tank volume 5.0 litre

Hydraulic oil HLPD 46

Voltage 400 V, 50 Hz

340 x 610 x 630 mm

Temperature monitor

Pressure limiting valve

Aluminium housing

Speed 1370 rpm

Dimensions

 $(W \times D \times H)$

Equipment

Level monitor

Pressure switch

Effective volume 3.0 litre

Control voltage 24 V DC

Power consumption 1.0 kW

Delivery rate 1.8 litres/min

ROLLBLOC Hydraulic Unit

Operating pressure 400 bar

With intermittent operation Version depends on delivery rate and effective volume

Technical data Type A...

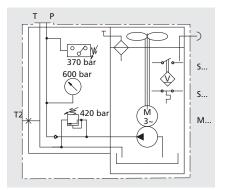
Delivery rate 1.5 litres/min Tank volume 4.0 litre Hydraulic oil HLPD 46 Effective volume 2.0 litre Power consumption 0.75 kW Voltage 400 V, 50 Hz Speed 1360 rpm Control voltage 24 V DC

Dimensions

340 x 610 x 630 mm $(W \times D \times H)$

Equipment

Temperature monitor Level monitor Pressure limiting valve Pressure switch Aluminium housing



Frame With oil collection tray Mounting facility for terminal box Control with control panel

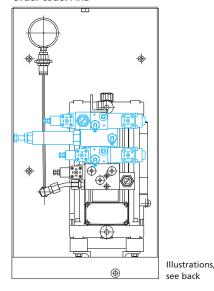
Type list

Hydraulic unit		Electric equipment			
Vith rame	Without frame	Without elec- trical system	Wiring to terminal strip	Hydraulic unit control	Order code
AR		S			ARS
			V		ARV
				E	ARE
	AN	S			ANS
			V		ANV
				E	ANE
BR		S			BRS
			V		BRV
				E	BRE
	BN	S			BNS
			V		BNV
				E	BNE

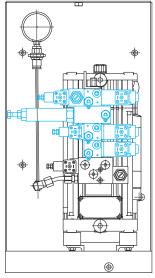
Further units optional

ROLLBLOC hydraulic unit A

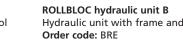
Hydraulic unit with frame and control Order code: ARE



ROLLBLOC hydraulic unit B Hydraulic unit with frame and control Order code: BRE



Order example →



Requirements/example:

Initial situation

8 sliding clamps, Type ES are used on a press in the ram area.

4 ledge clamps, Type SL are used on the press table.

2 ROLLBLOC hydraulic, roller version die lifters are installed in the press bed for the purpose of handling the dies.

For safety reasons, the sliding clamps on the ram should be supplied via 2 separate, double-acting circuits. Installation work is simplified by the use of distributor plates. This application example requires the following order.

Order example: BRE-1EEA-1WEA-2DEP

Prod	uct application	Order description		
1. Hy	ydraulic unit			
-	1 hydraulic unit consisting of central hydraulic	1x hydraulic unit BRE		
	unit with frame and control (unit type B)			
2. Ta	ble area			
2.1	1 valve set for ledge clamps type SL,	1x valve set EEA		
	electrically controlled*,			
	(mounting on hydraulic unit, standard)			
2.2	1 valve set for roller version die lifters,	1x valve set WEA		
	electrically controlled*,			
	(mounting on hydraulic unit, standard)			
3. Ra	am area			
	2 valve sets for sliding clamps type ES in	2x valve sets DEP		
	2-circuit arrangement 'crosswise' and park station			
	with pilot-controlled check valve,			
	Control*, to be mounted on plate in the ram area			
*On	ly together with hydraulic unit F			



→ HIGH-QUALITY COMPONENTS

FOR RELIABLE FUNCTIONALITY



ROLLBLOC Hydraulic Unit (Rear Side) with pump and control valves with frame structure

ROLLBLOC Hydraulic Unit with operating panel and controls

VK 09/1 GB • 2356 Errors and omission excepted, subject to technical modifications All measures in mm Concept and implementation: www.wast.de



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