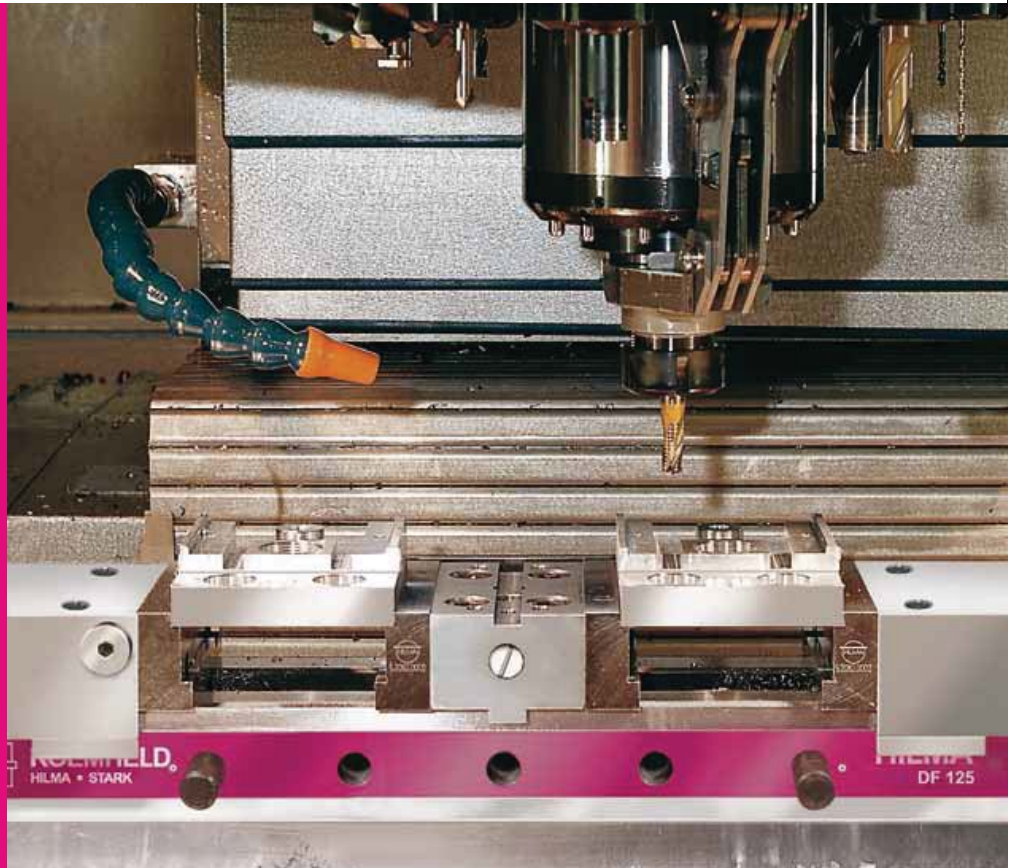




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Workholding Systems

## Double clamping system DF

05/2015

Products for productivity

3.3420



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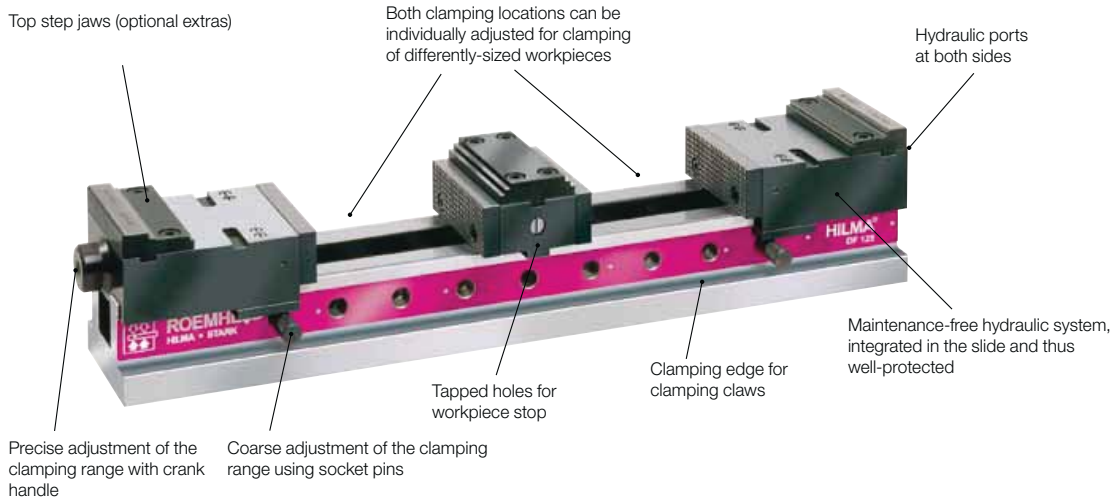
## Flexible double clamping system DF, mechanical-hydraulic and hydraulic



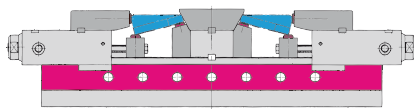
### Your benefits at a glance:

- ★ Double machining
- ★ Series arrangement
- ★ Individual control variants
- ★ Adaptation to the machine tool
- ★ Clamping jaws

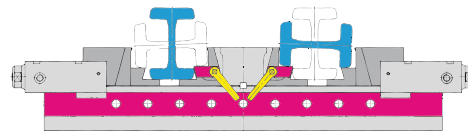
## Hydraulic design



## Application examples:



Double clamping system with hydraulically operated compensation jaws and special jaw inserts for clamping casing covers to suit the machining operation.



Double clamping system with QIS special jaws and attachments for clamping differently sized mast profiles. Set-up times are reduced to a minimum.

Flexible double clamping systems allow the efficient double machining of workpieces with the same or different dimensions. Both clamping locations work independently of each other.

Clamping of large workpieces that require several clamping locations can be realised economically and user-friendly with series arrangement.

Mechanical-hydraulic design for manual clamping / unclamping or hydraulic design with individual control variants and separate pressure transducer. (Individual control variants in combination with hydraulic power unit)

The machine-specific design (planned variants) guarantees the optimum utilization of the existing workspace.

The central jaw for large jaw openings can be displaced to the exterior (planned variant). Adaptation to the clamping task with a variety of standard and special jaws.



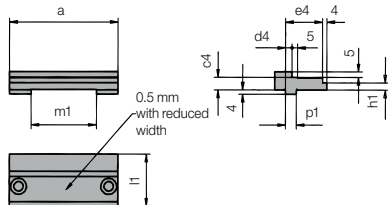




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## Accessories

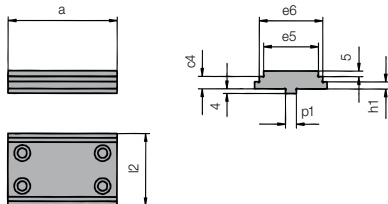
You will find further clamping jaws and jaw systems for the use with double clamping systems DF in group 1.



### Top step jaws for slide

to obtain very large jaw openings Including fixing screws.

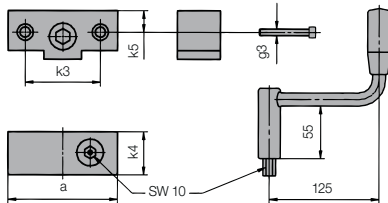
Part no.	Dimensions in mm							
	a	c4	d4	e4	h1	l1	m1	p1
<b>9.3284.1201</b>	100	11.5	6	34	6.5	48	60	10h6
<b>9.3284.1301</b>	125	14	6	40	9	58	65	12h6
<b>9.3284.1401</b>	160	17	8	43	12	64	88	18h6



### Top step jaws for fixed jaw

Use for double and simple clamping to obtain very large jaw openings Including fixing screws.

Part no.	Dimensions in mm						
	a	c4	e5	e6	h1	l2	p1
<b>9.3284.2201</b>	100	11.5	44	50	6.5	57	10h6
<b>9.3284.2301</b>	125	14	50	60	9	69	12h6
<b>9.3284.2401</b>	160	17	70	80	12	89	18h6



### Angle drive

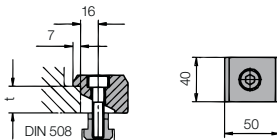
Including crank handle and fixing screws. Maintenance-free. May be used when normal operation is difficult or even impossible. Ideal for retrofitting.

Part no.	for type	Dimensions in mm					Weight [kg]
		a	g3	k3	k4	k5	
<b>9.3294.0505</b>	<b>DF100M</b>	100	M 6	82	39	19.5	1.6
<b>9.3294.0605</b>	<b>DF125M</b>	125	M10	96	43	23	2.3
<b>9.3294.0705</b>	<b>DF160M</b>	160	M10	126	46	29	3.4



### Set of key blocks DIN 6323 (2 off = 1 set)

Part no.	Table slot b3	For precise alignment of the double clamping system on the machine table the key blocks are inserted laterally.
<b>9.3917.4121</b>	14 mm	
<b>9.3917.4141</b>	18 mm	



### Set of clamping claws with screws

For safe clamping on the machine table.

Part number for 4 off = 1 set	Table slot [mm]	t [mm]	Screw
<b>9.3777.2011</b>	14	24	M12x45 DIN 912
<b>9.3777.3011</b>	14	27	M12x45 DIN 912
<b>9.3777.3021</b>	18	27	M16x50 DIN 912



### Hydraulic power unit for flexible double clamping system DF on request hydraulically operated

**1-circuit design** for simultaneous clamping and unclamping of one or several double clamping systems. With plug-in remote control.

**2-circuit design** for individual control of two separate circuits (pendulum machining). With two remote controls.

**Basic unit without directional control valves and remote control.**

The control of the double clamping system is made externally by valves with turning knob.



## Parameters

This page may be used as a pattern for copying



### Planned variant DF

Customers' requests concerning design, positioning and fixation are met using basic standard versions. Please determine parameters and advise us accordingly together with your enquiry or order.

Inquiry  Order  Quantity = \_\_\_\_\_

#### Parameter - size

9.3422.7003 DF 100 (Jaw width 100 mm)  9.3423.7003 DF 125 (Jaw width 125 mm)  9.3424.7003 DF 160 (Jaw width 160 mm)

#### Parameter - length of base

540 long (DF 100)  560 long (DF 125)  720 long (DF 125)  750 long (DF 160)

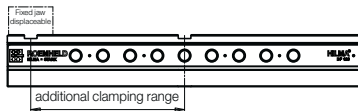
#### Parameter - slide 1+2 with upper slot (2 off)

mechanical-hydraulic without pressure gauge  mechanical-hydraulic Pressure gauge right-hand  mechanical-hydraulic Pressure gauge left-hand  hydraulically operated

Viewing direction: Lead screw direction towards the fixed jaw!

#### Parameter - jaw displaceable

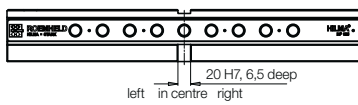
without outside slot



with outside slot for large clamping ranges (jaw openings see pages 4+5)

#### Parameter - crosswise keyway

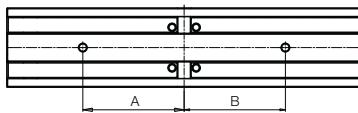
without crosswise keyway



in centre  $\pm 0.02$   
 left side \_\_\_\_\_ mm  $\pm 0.02$   
 right side \_\_\_\_\_ mm  $\pm 0.02$

#### Parameter - mounting holes

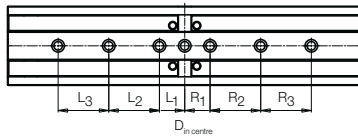
without mounting holes



12 H7  
 16 H7 A = \_\_\_\_\_ mm  $\pm 0.01$   
 18 G7 (for press fit bush 1.0179.0014)  
 26 G7 (for press fit bush 1.0179.0017) B = \_\_\_\_\_ mm  $\pm 0.01$

#### Parameter - mounting grid

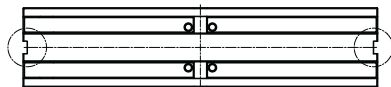
without mounting grid



KM 12  KM 16 (DIN 74) R1 = \_\_\_\_\_ mm  
 L1 = \_\_\_\_\_ mm R2 = \_\_\_\_\_ mm  
 L2 = \_\_\_\_\_ mm R3 = \_\_\_\_\_ mm  
 L3 = \_\_\_\_\_ mm D0 =  with  without

#### Parameter - longitudinal keyway

without longitudinal keyway



with longitudinal keyway 20 H7 6.5 mm deep

#### Parameter - angle drive (2 off)

without angle drive

(separate sales item)

9.3294.0505 (DF 100)  9.3294.0605 (DF 125)  9.3294.0705 (DF 160)

#### Parameter - top jaws

without top jaws

(separate sales item)

9.3284.1201 (2 pc.)  9.3284.1301 (2 pc.)  9.3284.1401 (2 pc.)  
 9.3284.2201 (DF 100)  9.3284.2301 (DF 125)  9.3284.2401 (DF 160)

Date

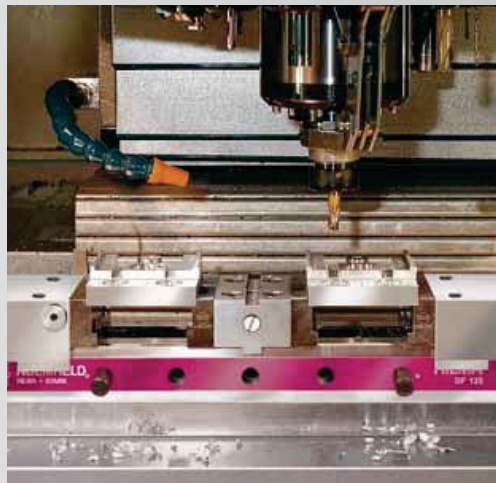
Stamp

Signature



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Large parts production of aircraft components Multiple clamping of thin-walled workpieces



Hydraulic clamping of guide rails

Economic double clamping of standard parts

Products | for | productivity