## Face Drivers FSP/FSPB

# Clamping tools for machining between centers

The entire surface of the work piece can be tooled and finished by clamping with a maximum of torque transmission.

NEIDLEIN face drivers of type FSP/FSPB with drive disks are mechanical clamping systems which are suited for soft/green as well as hard tooling. In application, they feature maximum flexibility and high robustness.

These face drivers are power-operated by the thrust of the tailstock. Work pieces are clamped centrically using a movable center pin. This way different centerings can be adjusted, thus ensuring a constant datumpoint at the face end of the work piece. Type FSP with flange retainer for screw connection



Type FSPB with flange retainer for jaw clamping



## **NEIDLEIN face drivers FSP/FSPB ensure:**

- a maximum of torque transmission, thus achieving high metal removing rates
- datum-point at the face end of work piece, stable datum-point in case of different centerings
- compensating drive disk
- high flexibility in the application, wide range of clamping diameters
- fixed center pin in clamped condition
  fixed clamping point

- maximum deviation of true run-out accuracy 0.01-0.02 mm
- adjustable spring force (depending on weight of work piece)
- low setup costs due to fast change of drive disks and center pins
- cost efficient exchange of parts that are in contact with work piece (changeable carbide inserts)

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# Type FSP with flange retainer

## **Clamping principle**

The center pin located on the side of the tailstock pushes the work piece against the movable center pin of the face driver. The center pin will draw back until the surface of the work piece bears against the drive disk.

In this state the clamping bolt is clamped over the the power flow, in order to ensure a fixed datumpoint throughout the entire tooling process.

The drive disk is "floatingly" suspended, thus balancing out possible planarity defects of the contact surface of the work piece. The entire surface of the work piece can now be tooled in one single clamping. See brochure 1.1 page 6 and 7 for data of achievable removal of material and the tailstock thrust requested.

You will find various sizes of face drivers with appropriate standard drive disks and center pins on the following pages.

In case you need special dimensions, we will be glad to design clamping devices suitable for your work pieces.



cat. no.	type	D	D1	d3	d5	d6	1	2	fixing screws	
									type	pcs
63201	FSP 3	70	9 - 59	160	26	133.4	67	104	M12	3
63203	FSP 4	90	31 - 125	160	35	133.4	70	110	M12	3
63205	FSP 55	182	84 - 290	220	45	171.4	76	170	M16	3

• Face drivers for turning and milling upon request.

• All face drivers are provided without drive disk and without center pin. (changeable parts see page 6-8)

• Mounting elements for face drivers see brochure 2.0

### **Removal of drive disks**

In order to easily and quickly change the drive disks, the removal lever shown at right may be used.

The removal lever is placed laterally and easily inserted. Thus the drive disk can be loosened through a tilting movement.



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cat. no.	type	D	D1	d3	d5	1	12
63202	FSPB 3	70	9 - 59	130	26	73	98
63204	FSPB 4	90	31 - 125	130	35	76	104

• Face drivers for turning and milling upon request.

• All face drivers are provided without drive disk and without center pin. (changeable parts see page 6-8)



cat. no.	type	D1	D2	11
63220	FSP / FSPB 3	44.5	80	262
63221	FSP / FSPB 4	58.5	96	272
63222	FSP 55	130.5	190	310