



**ROEMHELD**  
HILMA ■ STARK

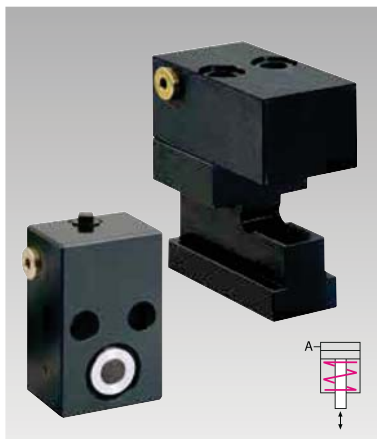
Issue 9-17 E

## WZ 3.2204

### Sliding Clamps classic

single acting, with spring return

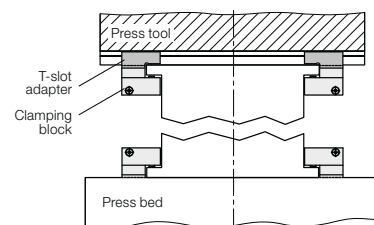
max. operating pressure 400 bar, clamping force from 19 to 78 kN



#### Advantages

- Optimum force transmission
- Clamping force from 19 kN up to 78 kN
- Easy mounting
- Suitable for large clamping edge tolerances
- No colliding edges when inserting the dies
- T-slot 18, 22, 28 and 36 mm are available
- Total stroke 8 and 12 mm
- Die standardisation with regard to the width and depth is not required
- Easy to retrofit

#### Installation option



#### Application

The "classic" sliding clamp is a very sturdy hydraulic clamping element, used with low space requirements for clamping and locking on machines and plants, on press bed and ram. The use is possible at ambient temperatures up to a maximum of 120 °C.

#### Description

Manual positioning of the sliding clamp in the T-slots of the press ram or bed. Clamping on the die clamping edge by the application of hydraulic pressure to the piston and unclamping by spring force.

The "classic" sliding clamp consists of a hydraulic clamping block which will be fixed with two screws to a T-slot adapter.

The clamping block can also be directly screwed without T-slot adapter and can be ordered separately.



#### Application examples



Sliding clamp with T-slot adapter in press bed and ram, roller bars and carrying consoles for tool insertion

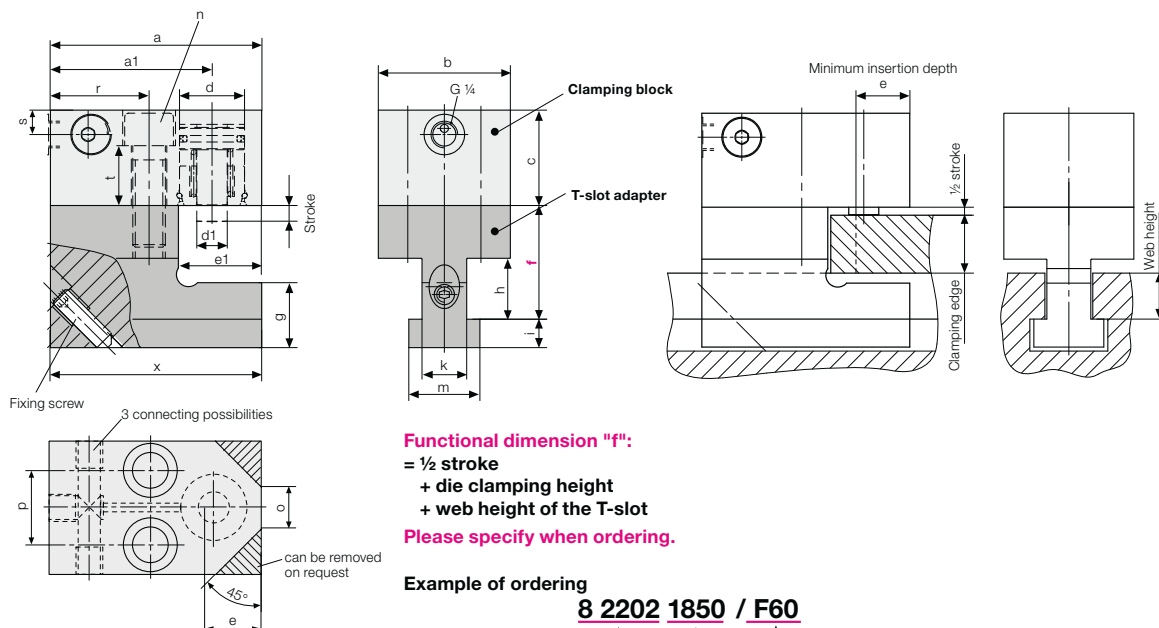


Clamping block separately mounted on bars, ball bars in the press bed, carrying consoles in front. Block cylinders and swing clamps for positioning

## Technical data Dimensions

### Sliding Clamp classic

Hydraulic sliding clamp complete, with T-slot adapter



**Functional dimension "f":**  
= 1/2 stroke  
+ die clamping height  
+ web height of the T-slot  
**Please specify when ordering.**

#### Example of ordering

**8 2202 1850 / F60**

**Sliding clamp**

Clamping force: 19.6 kN

**T-slot**

18 mm

**Functional dimension "f" [mm]**

**Please specify when ordering**

| T-slot as per DIN 650 [mm]                                       | 18               | 22               | 22               | 22               | 28               | 28               | 28               |
|------------------------------------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Clamping force at 400 bar [kN]                                   | 19.6             | 19.6             | 32               | 50               | 32               | 50               | 78               |
| Stroke [mm]                                                      | 8                | 8                | 8                | 8                | 8                | 8                | 12               |
| Oil volume [cm³]                                                 | 4                | 4                | 7                | 10               | 7                | 10               | 24               |
| Dimension "f" min. [mm]                                          | 42               | 50               | 50               | 50               | 55               | 55               | 60               |
| Dimension "f" max. [mm]                                          | 90               | 106              | 106              | 106              | 112              | 112              | 117              |
| a [mm]                                                           | 95               | 95               | 104              | 111              | 104              | 111              | 132              |
| a1 [mm]                                                          | 77               | 77               | 81               | 85               | 81               | 85               | 99               |
| b [mm]                                                           | 65               | 65               | 65               | 65               | 65               | 65               | 80               |
| c [mm]                                                           | 40               | 40               | 47               | 50               | 47               | 50               | 75               |
| d [mm]                                                           | 25               | 25               | 32               | 40               | 32               | 40               | 50               |
| d1 [mm]                                                          | 15               | 15               | 15               | 20               | 15               | 20               | 25               |
| e (min. insertion depth) [mm]                                    | 23               | 23               | 28               | 31               | 28               | 31               | 38               |
| e1 [mm]                                                          | 32               | 32               | 41               | 48               | 41               | 48               | 60               |
| g [mm]                                                           | 24               | 32               | 32               | 32               | 42               | 42               | 42               |
| h [mm]                                                           | 25               | 30               | 30               | 30               | 37               | 37               | 37               |
| i [mm]                                                           | 10               | 14               | 14               | 14               | 18               | 18               | 18               |
| k [mm]                                                           | 18               | 22               | 22               | 22               | 28               | 28               | 28               |
| m [mm]                                                           | 28               | 35               | 35               | 35               | 44               | 44               | 44               |
| n (screw DIN 912, 10.9)                                          | M16              | M16              | M16              | M16              | M16              | M16              | M20              |
| o [mm]                                                           | 18               | 18               | 20               | 20               | 20               | 20               | 28               |
| p [mm]                                                           | 36               | 36               | 36               | 36               | 36               | 36               | 43               |
| r [mm]                                                           | 50               | 50               | 50               | 50               | 50               | 50               | 57               |
| s [mm]                                                           | 12               | 12               | 12               | 12               | 12               | 12               | 17.5             |
| t [mm]                                                           | 24               | 24               | 29               | 32               | 29               | 32               | 53               |
| x [mm]                                                           | 95               | 104              | 104              | 104              | 104              | 104              | 132              |
| <b>Clamping block with T-slot adapter</b>                        |                  |                  |                  |                  |                  |                  |                  |
| Weight [kg]                                                      | 2.9              | 3.2              | 4.0              | 4.3              | 4.5              | 4.7              | 9.3              |
| Part no.                                                         | <b>822021850</b> | <b>822022250</b> | <b>822032250</b> | <b>822042250</b> | <b>822032850</b> | <b>822042850</b> | <b>822052850</b> |
| <b>Clamping block, separate</b> (supplied without fixing screws) |                  |                  |                  |                  |                  |                  |                  |
| Weight [kg]                                                      | 1.6              | 1.6              | 2.0              | 2.3              | 2.0              | 2.3              | 4.9              |
| Part no.                                                         | <b>822021301</b> | <b>822021301</b> | <b>822031301</b> | <b>822041301</b> | <b>822031301</b> | <b>822041301</b> | <b>822051301</b> |

Please consult us if aggressive spray is used.

Max. operating pressure 400 bar, max. operating temperature 120 °C.

Further sizes and special versions are available on request.

## Accessories

### Parking station

accommodates the sliding clamp during die change

| T-slot as per DIN 650 [mm] | 18      | 22 | 28 |
|----------------------------|---------|----|----|
| a                          | [mm] 25 | 33 | 43 |
| k                          | [mm] 30 | 37 | 46 |
| i                          | [mm] 10 | 14 | 18 |
| g                          | [mm] 24 | 32 | 42 |

**Parking station complete** (with bracket and spacer bar)

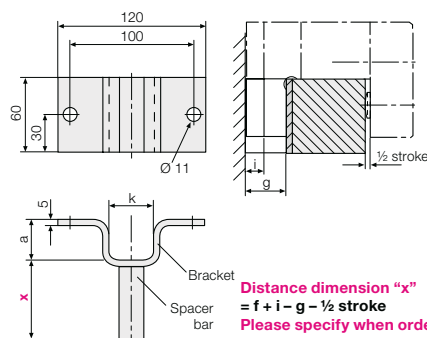
**Part no.** 827541850 827542250 827542850

**Bracket**

**Part no.** 2754180 2754220 2754280

**Spacer bar**

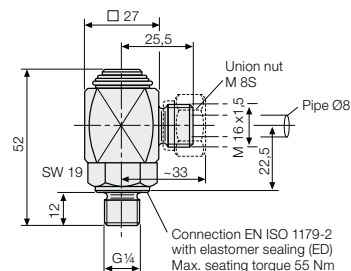
**Part no.** 2754500 2754500 2754500



### Angular rotary coupling (M 8S / G 1/4)

Part no. 9208176

For easier handling when changing dies.  
Max. operating pressure 400 bar

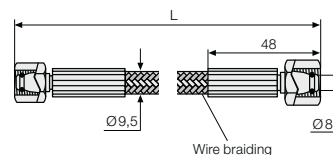


### High-pressure hoses ND4



#### Technical data

|                                   |       |      |
|-----------------------------------|-------|------|
| Burst pressure                    | [bar] | 2000 |
| Smallest bending radius           | [mm]  | 100  |
| Further information see DIN 20066 |       |      |



#### Notes on high pressure hoses

The freely selectable hose lengths should be generously dimensioned, in order to avoid kinking, abrasion marks, torsion, tensile and compressive stress and unacceptable bending radii. Protect against hot swarf.

#### Preferred lengths of the type

**4500XXXX33**

at both sides with hose connection

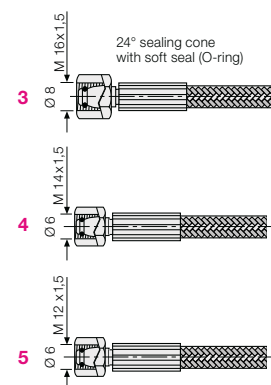
Union nut M 16 x 1.5 mm

| Length [mm] | Part no.  |
|-------------|-----------|
| 600         | 270010131 |
| 800         | 270010133 |
| 1200        | 270010137 |
| 1600        | 270010141 |

#### Code for part numbers for variable lengths and connections

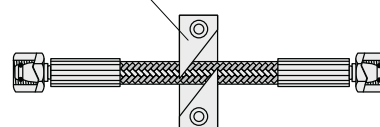
|                                 |     |      |   |   |
|---------------------------------|-----|------|---|---|
| 4                               | 500 | XXXX | X | X |
| Internal hose diameter (mm)     |     |      |   |   |
| Operating pressure max. 500 bar |     |      |   |   |
| Hose length L in mm             |     |      |   |   |
| Hose connection on the left     |     |      |   |   |
| Union nut                       |     |      |   |   |
| 3 = M 16 x 1.5                  |     |      |   |   |
| 4 = M 14 x 1.5                  |     |      |   |   |
| 5 = M 12 x 1.5                  |     |      |   |   |
| Hose connection on the right    |     |      |   |   |
| Union nut                       |     |      |   |   |
| 3 = M 16 x 1.5                  |     |      |   |   |
| 4 = M 14 x 1.5                  |     |      |   |   |
| 5 = M 12 x 1.5                  |     |      |   |   |

#### Hose connections on the left/right



#### Accessories

Hose holder made from Delrin  
Part no. 550650003



#### Hydraulic power units

see product group 7

#### Hydraulic accessories

see product group 11