



## Flexline-R Rapid-Clamping System, sturdy version

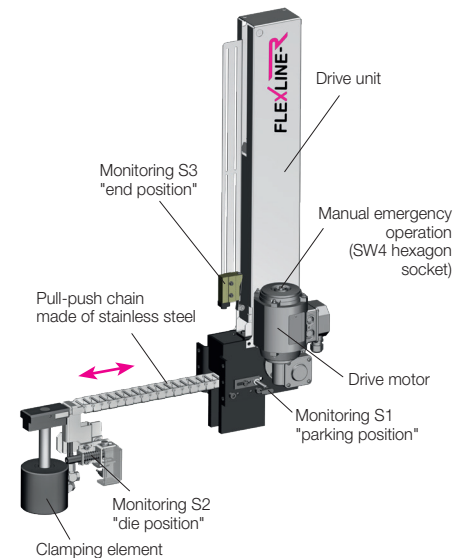
with pull-push chain made of stainless steel

Hollow-piston cylinder: 245 bar/100 kN or 400 bar/104 kN



### Advantages

- Extremely robust, welded pull-push chain made of stainless steel
- Chain case, bracket and sheet metal parts made of reinforced material and stainless steel
- Drive motor with manual emergency stop
- Chain case with slot for additional position monitoring (end of chain or intermediate position)
- Harting connector code class IP65 (no open junction box)
- Compact drive unit and lightweight
- Four different clamping elements and two adjustment tracks freely selectable
- Easy to service, easily exchangeable assemblies
- Highly flexible, low-maintenance hydraulic hoses with high burst pressure
- Drive motor selectable on left or right side



### Application

Rapid-clamping systems are used for the automatic clamping of dies of varying sizes on the press ram.

### Description

The electro-mechanical driven push chain moves the clamping element attached to the Flexline-R rapid-clamping system automatically from the parking position to the clamping position at the clamping edge and then back to the parking position.

The T-slot of the machine serves as the guide for the push chain and clamping element. The push chain also serves as the energy chain for accommodating the hydraulic and electric lines of the clamping element.

### Versions

Flexline-R rapid-clamping system can be supplied in the following variants:

- Clamping element: Hollow-piston cylinder, single or double acting
- T-slots: 28 or 36 mm or 1 1/16"
- Adjustment tracks (clamping element displacement path) 660 or 1100 mm
- Electrical drive motor
- Different Harting connectors for motor current and query signals selectable
- Option: monitoring S3 "end of chain", adjustable
- Option: design with UL-compliant components
- Option: socket housing for mounting on the machine
- Option: drive motor or monitoring S2 "die position" attached on the left or right side

### Technical data

|                                  |                                                               |
|----------------------------------|---------------------------------------------------------------|
| T-slot                           | 28 mm and 36 mm (DIN 650) and 1 1/16"                         |
| Adjustment speed                 | ~ 120 – 140 mm/s                                              |
| Drive motor option               | Technical characteristics see page 2                          |
| Motor connection                 | Harting connector with 500 mm cable length                    |
| Monitoring connection            | Harting connector with 500 mm cable length                    |
| Monitoring S1 "parking position" | Magnetic sensor 24 (10–30 V DC)                               |
| Monitoring S2 "die position"     | Inductive sensor 24 (10–30 V DC)                              |
| Option:                          |                                                               |
| Monitoring S3 "end position"     | Micro switch                                                  |
| Hydraulic port                   | 8-mm pipe socket with union nut M 16×1.5 (500 mm hose length) |
| Operating temperature            | Max. 70° C                                                    |
| Part no.                         | <b>8226</b> (basic version)                                   |

### Flexline-R with 24 VDC motor

**24 V**
**GREEN EDITION**


### 24 volt motor option

The drive motor for the Flexline-R rapid-clamping system can be selected in a low voltage version with 24 volts (Green Edition).

### Advantages

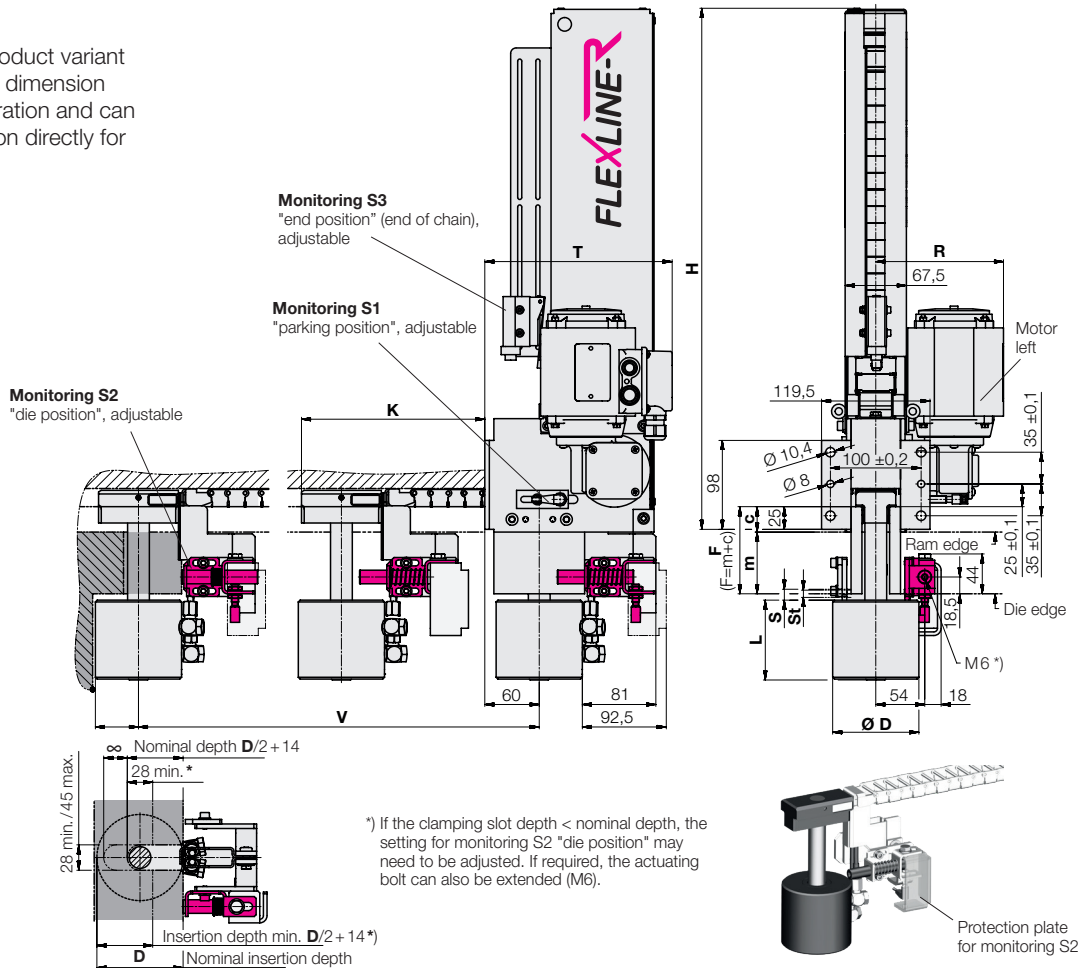
- 24 volts are available at every press worldwide
- Safe extra-low voltage instead of alternating current at the press ram
- Simple project planning and installation for press manufacturers
- ideally suited for new installations as well as retrofits

### Special versions of the rapid-clamping system

Please contact us if your clamping task is not covered by the options available with Flexline-R. In many cases, we will be able to fulfil your requirements with a customised version that deviates only slightly from the standard design.

## Selection scheme

You can configure the desired product variant yourself. You are provided with a dimension drawing for the selected configuration and can send us your chosen configuration directly for an offer to be prepared.



| Clamping element                                                                                                                                                                 | Dimensions D x L                                                   | Clamping force | Operating pressure | Total stroke S                 | Clamping stroke St | Oil volume clamping/unclamping |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|----------------|--------------------|--------------------------------|--------------------|--------------------------------|
| <input type="radio"/> Hollow-piston cylinder, double acting                                                                                                                      | Ø 95 x 88                                                          | 104 kN         | 400 bar            | 12 mm                          | 8 mm               | 2.6/2.6 cm³/mm                 |
| <input type="radio"/> Hollow-piston cylinder, single acting                                                                                                                      | Ø 90 x 105                                                         | 104 kN         | 400 bar            | 12 mm                          | 8 mm               | 2.6/ – cm³/mm                  |
| <input type="radio"/> Hollow-piston cylinder, double acting                                                                                                                      | Ø 105 x 88                                                         | 100 kN         | 245 bar            | 12 mm                          | 8 mm               | 4.1/4.1 cm³/mm                 |
| <input type="radio"/> Hollow-piston cylinder, single acting                                                                                                                      | Ø 100 x 112                                                        | 100 kN         | 245 bar            | 12 mm                          | 8 mm               | 4.1/ – cm³/mm                  |
| <b>Slot width a</b>                                                                                                                                                              | <b>Max. displacement path of clamping element V</b>                |                |                    |                                |                    |                                |
| <input type="radio"/> 28 mm (DIN 650)                                                                                                                                            | <input type="radio"/> 660 mm (H = 574 mm)                          |                |                    |                                |                    |                                |
| <input type="radio"/> 36 mm (DIN 650)                                                                                                                                            | <input type="radio"/> 1100 mm (H = 794 mm)                         |                |                    |                                |                    |                                |
| <input type="radio"/> 1 1/16" (27 mm)                                                                                                                                            |                                                                    |                |                    |                                |                    |                                |
| <b>Motor</b>                                                                                                                                                                     | <input type="radio"/> left <input type="radio"/> right             |                |                    | <b>R</b><br>Motor left / right |                    | <b>T</b><br>Motor left / right |
| <input type="radio"/> 380–400 V ±10 %, 50 Hz, 3~ AC [0.34–0.37 A, 45 W, ~120 mm/s] (UL-compliant) and 420–480 V ±10 %, 60 Hz, 3~ AC [0.3–0.37 A, 45 W, ~140 mm/s] (UL-compliant) |                                                                    |                | 141 mm             | 141 mm                         | 206.5 mm           | 223.5 mm                       |
| <b>Option</b>                                                                                                                                                                    |                                                                    |                |                    |                                |                    |                                |
| <input type="radio"/> A.C. motor 120 V, 60 Hz, 1~ AC [0.89 A, 45 W, ~120 mm/s] (UL-compliant)                                                                                    |                                                                    |                | 130 mm             | 130 mm                         | 199.5 mm           | 217 mm                         |
| <input type="radio"/> Direct current motor 24 V DC [5 A, 60 W] ( <i>Green Edition</i> )                                                                                          |                                                                    |                | 119 mm             | 119 mm                         | 188 mm             | 206 mm                         |
| <b>Position monitoring</b>                                                                                                                                                       |                                                                    |                |                    |                                |                    |                                |
| <input type="radio"/> Die position S2 - left                                                                                                                                     |                                                                    |                |                    |                                |                    |                                |
| <input type="radio"/> Die position S2 - right                                                                                                                                    |                                                                    |                |                    |                                |                    |                                |
| <input type="radio"/> End position S3 + spec. of dimension K                                                                                                                     |                                                                    |                |                    |                                |                    |                                |
| <b>Harting connector for motor and position monitoring</b>                                                                                                                       |                                                                    |                |                    |                                |                    |                                |
| <input type="radio"/> Harting HAN modular 3x5 ES                                                                                                                                 |                                                                    |                |                    |                                |                    |                                |
| <input type="radio"/> Harting HAN 3 HVE / HAN 10 E                                                                                                                               |                                                                    |                |                    |                                |                    |                                |
| <input type="radio"/> Harting HAN 6 ES / HAN 10 ES                                                                                                                               |                                                                    |                |                    |                                |                    |                                |
| <input type="radio"/> Counterparts included in the delivery (selectable option: yes/no)                                                                                          |                                                                    |                |                    |                                |                    |                                |
| <b>Option</b>                                                                                                                                                                    |                                                                    |                |                    |                                |                    |                                |
| <input type="radio"/> Harting HAN 6 ES / HAN 10 ES (for single-phase A.C. motor 120 V AC, 60 Hz)                                                                                 |                                                                    |                |                    |                                |                    |                                |
| <input type="radio"/> Harting HAN 10 ES for 24 VDC motor                                                                                                                         |                                                                    |                |                    |                                |                    |                                |
| <b>Clamping dimension</b> Specification of clamping dimension F (±St/2) in [mm]                                                                                                  |                                                                    |                |                    |                                |                    |                                |
| <b>F = mm</b>                                                                                                                                                                    | <b>F = c + m</b> (m = die clamping edge, c = web height of T-slot) |                |                    |                                |                    |                                |

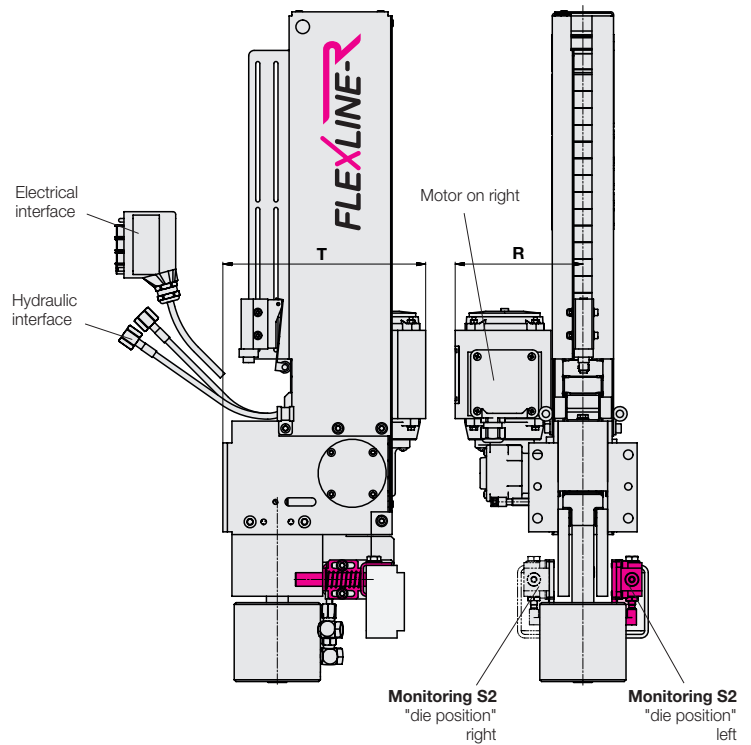
F min. 70 mm, max. 128 mm for hollow piston cylinder

## Electrical interface

Harting connector for motor + position monitoring  
Connector pinout and connector version see circuit diagram

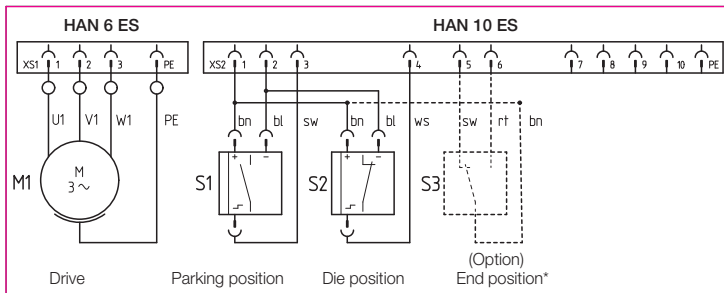
## Hydraulic interface

Port A for clamping  
Port B for unclamping  
Standard: M 16×1.5 union nut  
Pipe connection Ø 8 mm



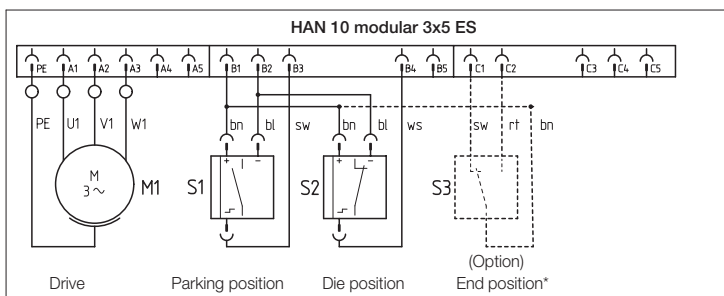
## Connector pinout of the Harting connector versions

Standard version

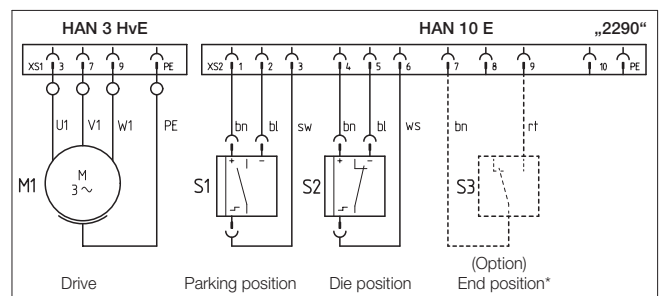


\* not actuated in \* position!

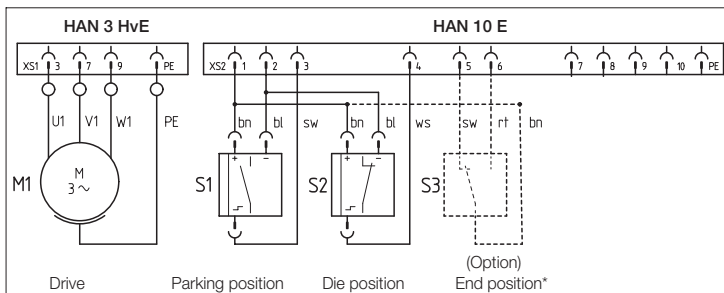
**Monitoring S2 "die position":**  
The signal from the normally closed (NC) contact must be inverted in the control system!



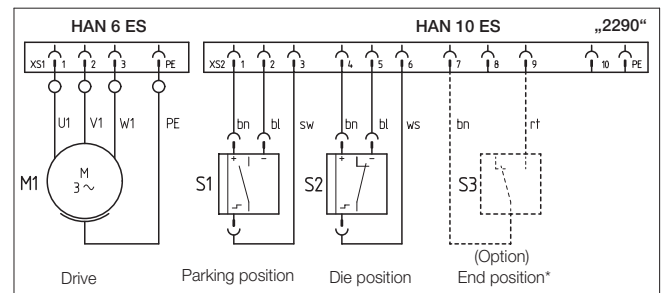
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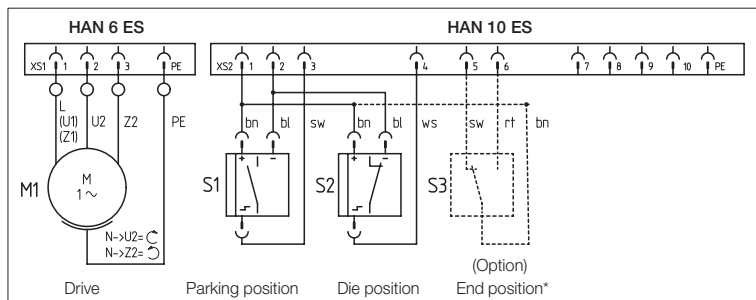


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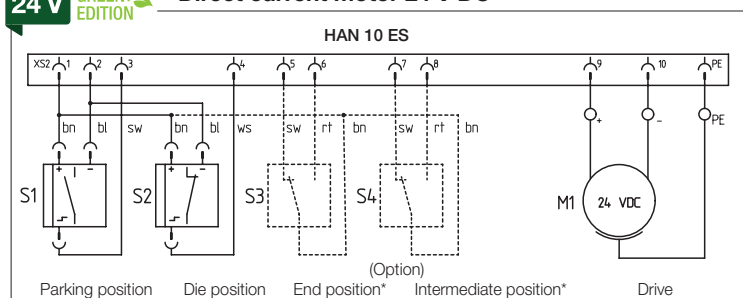
\* not actuated in \* position!

**Single-phase A.C. motor 120 V AC, 60 Hz**



\*) not actuated in \* position!

**24 V** **GREEN EDITION** **Direct current motor 24 V DC**



\*) not actuated in \* position!