

Prot.act



# | Prot.**act**

#### Safety brakes delivered by Ortlinghaus

Ortlinghaus has been the first with a specific safety brake solution for the field of servo presses.

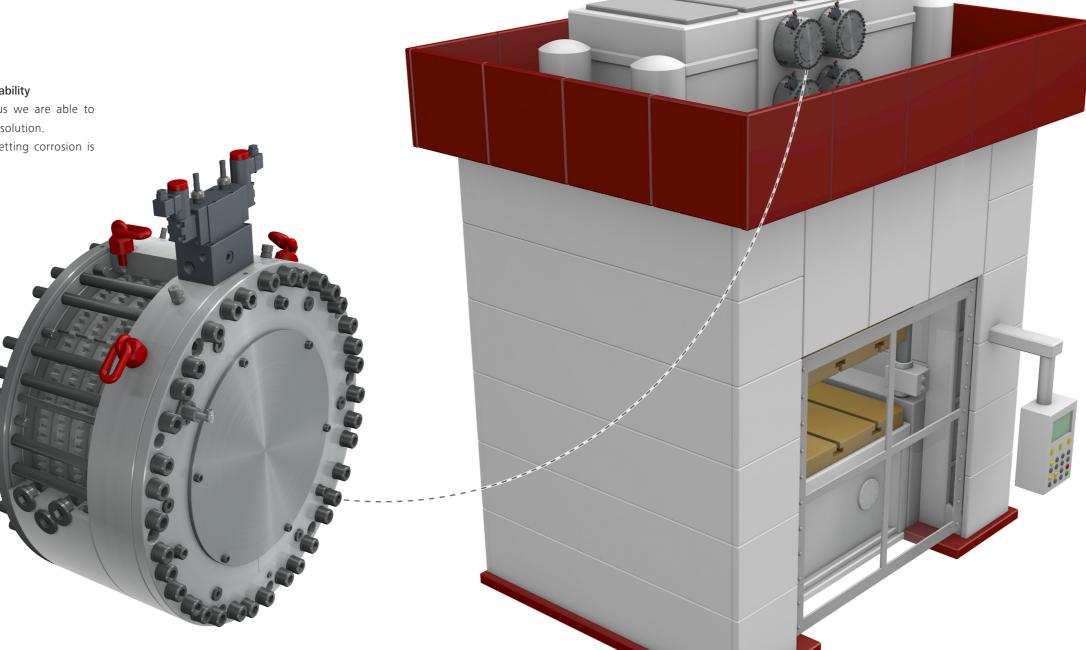
After more than 10 years of experience, we have launched the new Prot. act generation series 172 which fulfills highest safety and customer requirements for this application.

#### Essential equipment for highest press availability

Due to the sizing expertise of Ortlinghaus we are able to provide the best economical and technical solution.

With the superior friction block design fretting corrosion is

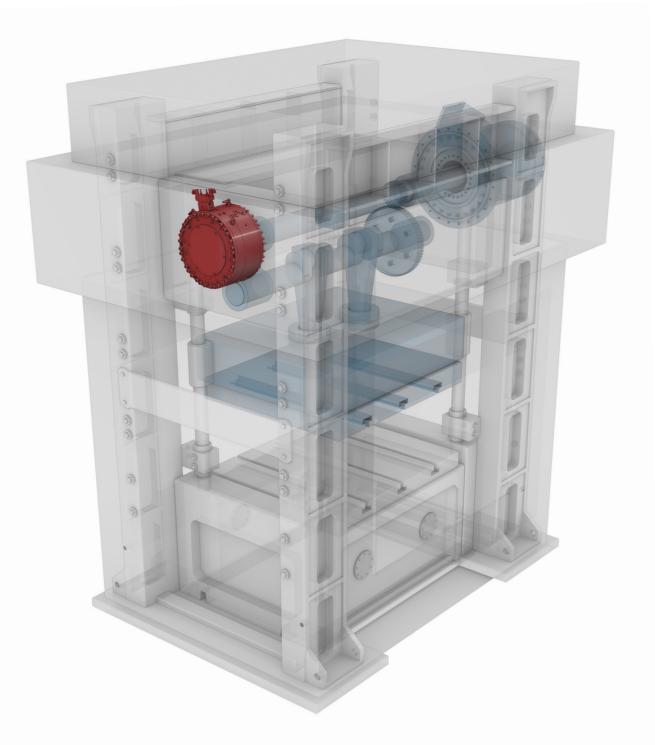
completely avoided.

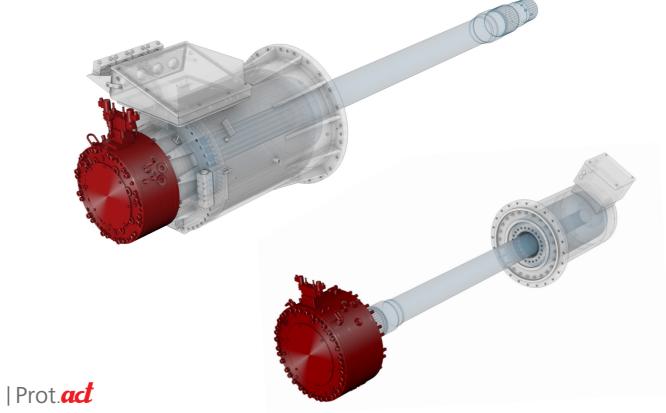


# Brake safely before break-down

#### Brake 'n hold

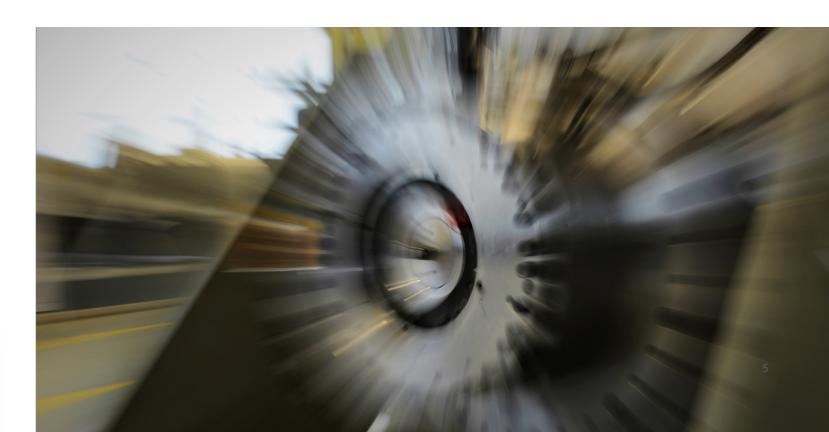
The Prot.act brake is specifically designed for servomotordriven presses and is used as ram holding and as emergency brake.

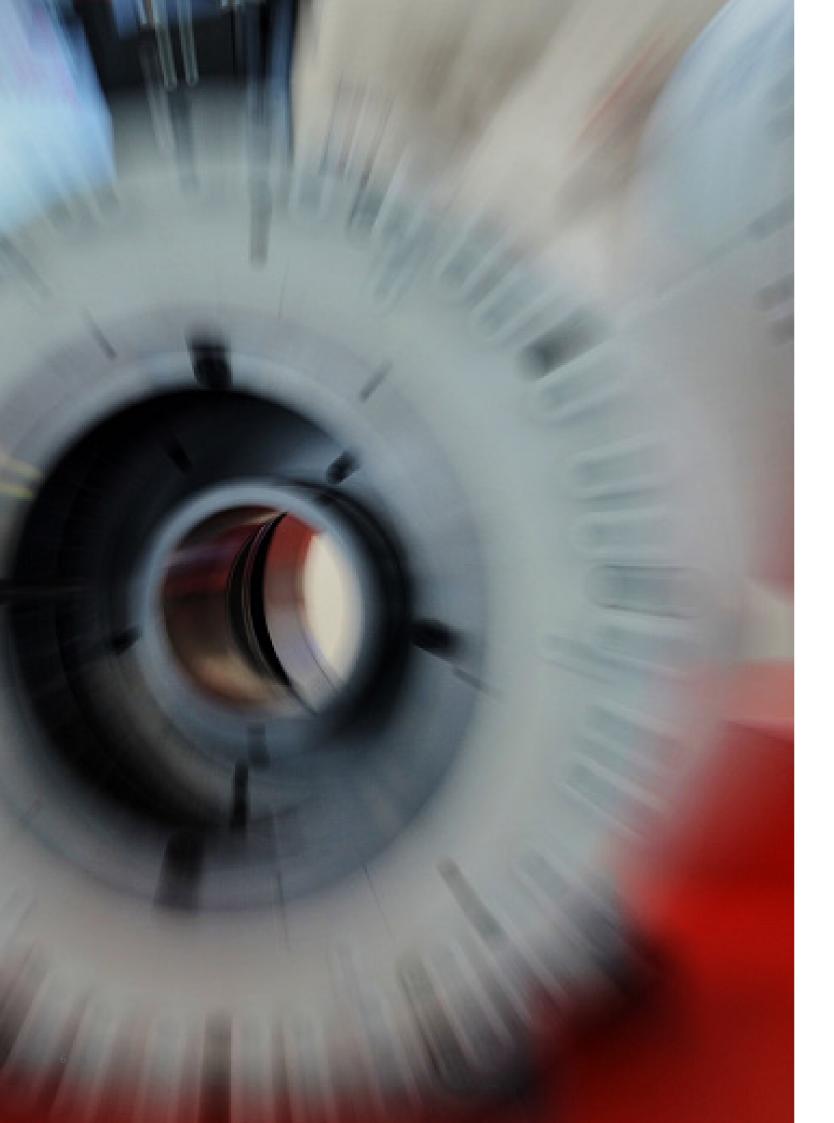




#### The solution for your specific press design

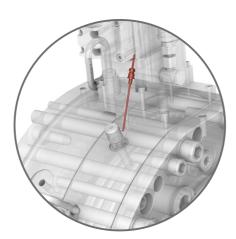
The new Prot.act series 172 can be installed in different arrangements. The brake is mounted either directly to the motor or at a free shaft end.





#### Monitored safety

The Prot.act can be equipped with a sensor package to provide real time information on the brake condition to the press control.

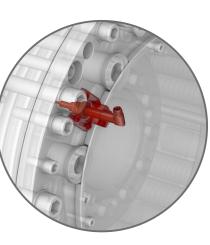


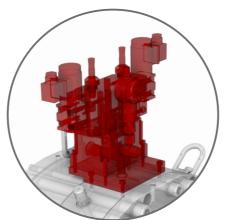
#### Temperature sensor

Due to the possibility of measuring the temperature of the friction surface, a break down can be avoided.



Wear measurement allows a predictive maintenance.



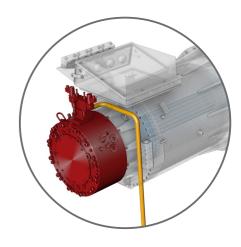


### Press safety valve

Permanent pressure monitoring ensures functionality.



This brake is spring applied and hydraulically released. It is actuated and stops the press ram in emergency cases in shortest time e.g. in the event of a power failure.



#### | Double sealing

To increase the safety level, the brake has a redundant and drained double sealing system. Leakage oil can be detected

# | Modular brake design

The Prot.act has a standardized and modular brake design in three sizes.

Each brake size is available in different torque configurations.

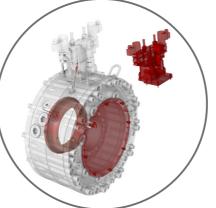
#### | Mounting and centering aid

The brake includes a mounting and centering aid which ensures an easy handling during the assembling onto the press.



## Dry running friction block brake

Due to the brake design, lubrication is not necessary and idling losses are avoided. Play-free connection of rotating parts avoids the risk of fretting corrosion.



#### Optional features

- Sensor kit for temperature and wear monitoring
- Cover and a labyrinth sealing for protection against external pollution
- Press safety valve for actuation

### | Durability and safety

The Prot.**act** provides a long service life due to innovative design, durability and functional reliability.



### | Simple integration

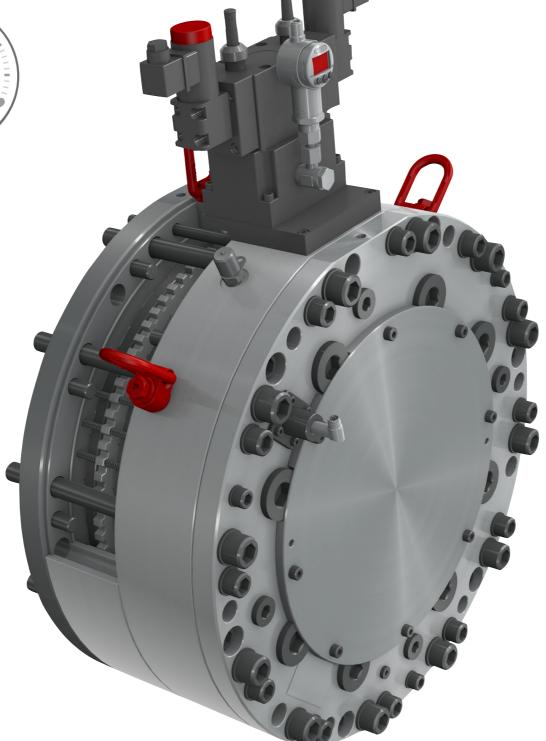
With its mounting and centering aid a fast integration into the press is provided.



### | High press availability

The brake can be supplied with an optional cover and labyrinth sealing for additional protection against external pollution like oily or dusty air.







### Ready for industry 4.0

A sensor kit including temperature and wear sensors allows predictive maintenance planning and reduces break-down time of the press.



#### | Verified quality

Proven process steps from individual dimensioning to final inspection of every single brake on our end of line test bench ensures first class quality.

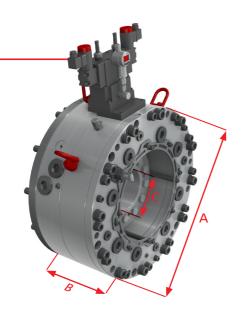


#### | World wide service

Our global network, consisting of more than 25 branch offices, sales partners, and service points, ensures quick assistance in every situation.

10 11

# Prot.**act** data





	Prot. <i>act</i> Performance Data											
	Size 69			Size 82			Size 87			Size 92		
Execution	0172-100- 2-disk	0172-200- 3-disk	0172-300- 4-disk	0172-100- 2-disk	0172-200- 3-disk	0172-300- 4-disk	0172-100- 2-disk	0172-200- 3-disk	0172-300- 4-disk	0172-100- 2-disk	0172-200- 3-disk	0172-300- 4-disk
Stat. torque [Nm] 1) + 2)	3.700	5.300	6.700	12.000	17.100	21.600	24.000	34.000	43.000	66.000	96.000	125.000
Dyn. torque [Nm] 1) + 2)	5.200	7.400	9.300	16.700	23.700	29.900	34.000	48.000	60.000	77.000	112.000	145.000
Min. required pressure [bar]	95	95	95	95	95	95	95	95	95	95	95	95
Max. release pressure [bar]	120	120	120	120	120	120	120	120	120	120	120	120

	Prot. <i>act</i> Dimensions											
	Size 69			Size 82			Size 87			Size 92		
A - Outer-Ø [mm]	345	345	345	453	453	453	548	548	548	762	762	762
B - Length [mm]	238	267	296	249	282	315	271	310	349	314	364	414
C - Shaft connection <sup>3)</sup>	Shrink disk for shafts Ø: 70 H7 - 80 H7, toothing or hub bore with keyways			Shrink disk for shafts Ø: 95 H7 - 110 H7			Shrink disk for shafts Ø: 120 H7 - 135 H7, toothing			Shrink disk for shafts Ø: 120 H7 - 180 H7, toothing		
Weight [kg]	~90	~105	~120	~209	~229	~254	~310	~350	~391	~628	~793	~863

12

Minimum values in delivery condition
 Brake torque in worn conditions is provided in the specific calculation of the press
 Shrink disc design for shafts Ø in 5mm increments available

# Ortlinghaus





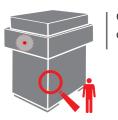
Original spare parts



Product overhaul at Ortlinghaus



Service & repair worldwide



Condition check

14 15



Ortlinghaus-Werke GmbH Kenkhauser Str. 125 42929 Wermelskirchen Germany

Phone: +49 (0)2196 85-0 Fax: +49 (0)2196 855-444

info@ortlinghaus.com www.ortlinghaus.com