

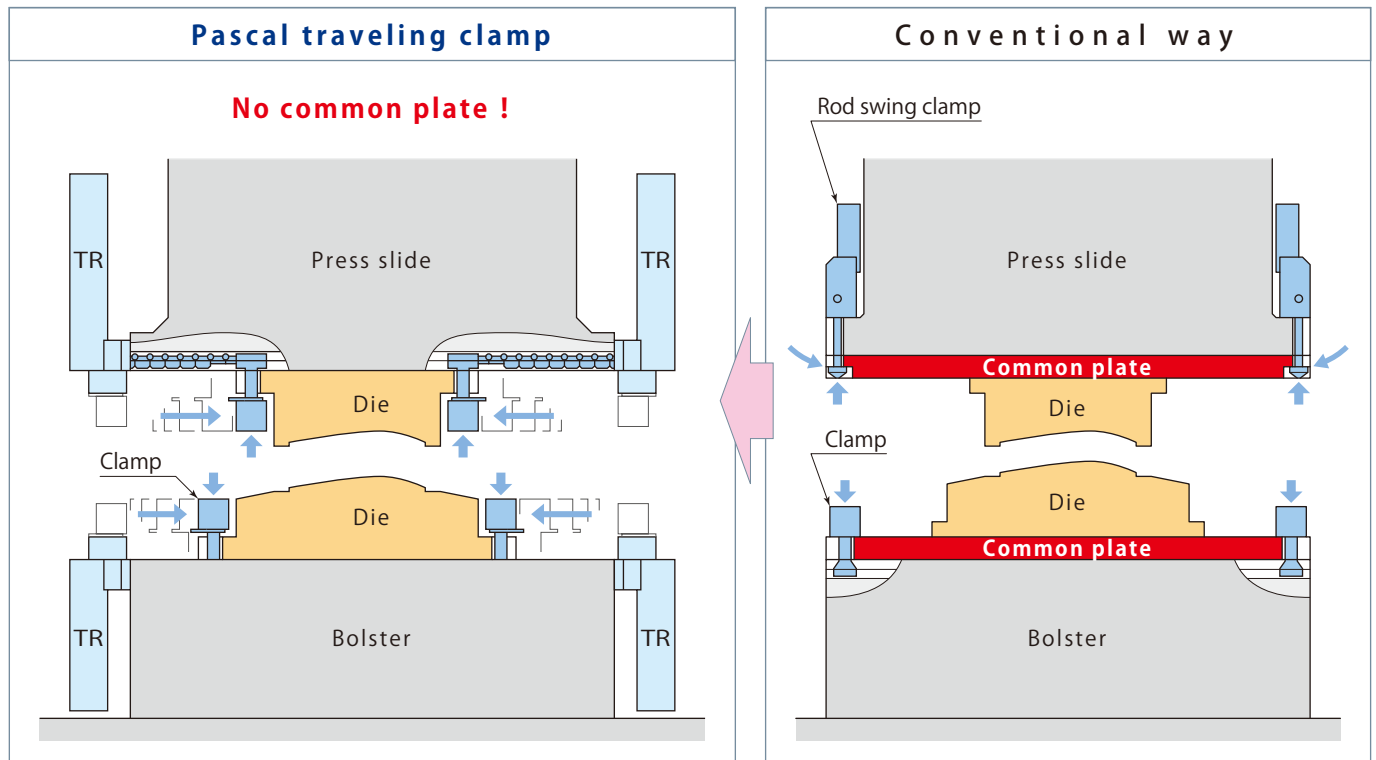
# Pascal traveling clamp

model TR Series

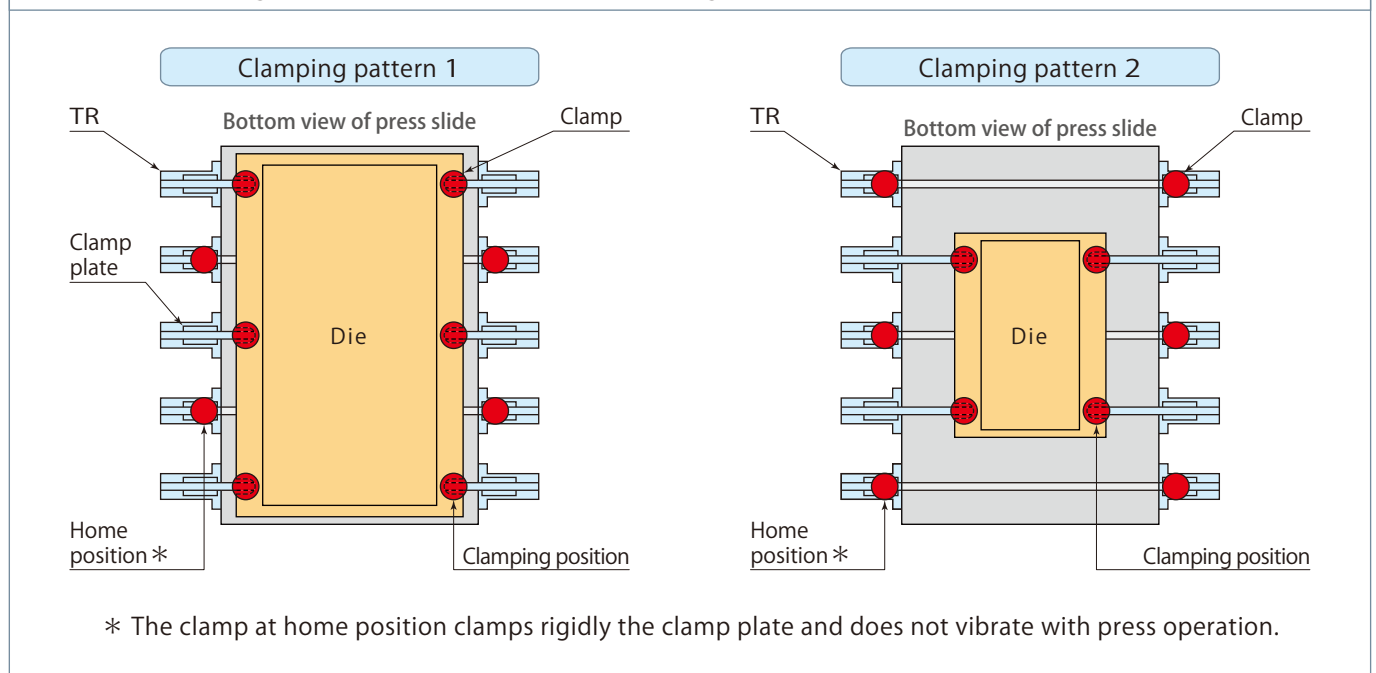


**Pascal**  
[www.pascaleng.co.jp](http://www.pascaleng.co.jp)

PASCAL TRAVELING CLAMP TR series is the most advanced die clamping system, where the hydraulic clamp automatically travels to the die to clamp it through the T-slots. The introduction of TR series offers major cost savings by eliminating the common plates. The die can be firmly mounted at the central part of the press and yields high, precise and stable metal stamping compared with the conventional swing clamps at the edge of the press slide. With over 30,000 units in use worldwide, the TR series is proven in the metal stamping industry and especially in the automobile industry. Also, it can be easily retrofitted on the existing press machines.



The die clamping pattern can be selected according to the variable die size and the U-cut position.



TR series has a simple and durable mechanism and withstands shock and vibration under the severe operating conditions of a press.

**improved point of new TR**

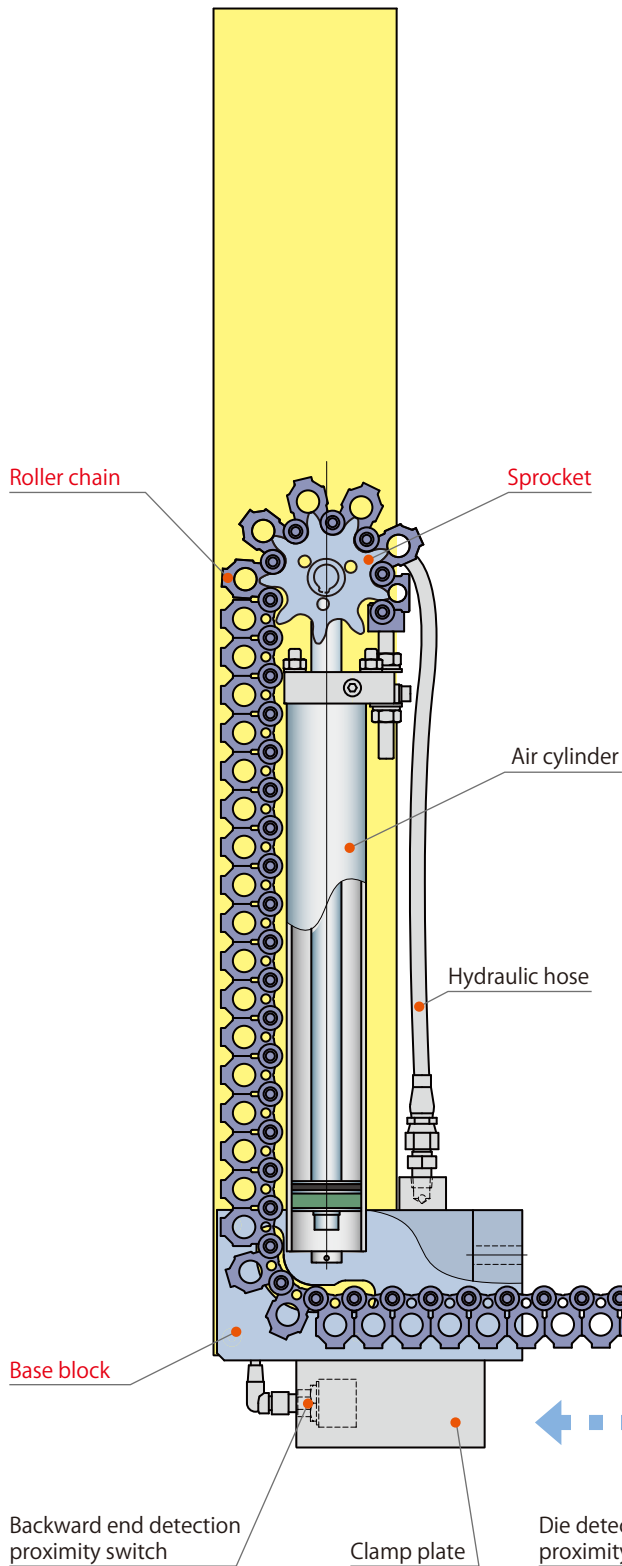
For details refer to the brochure (No.PA-289E).

● **Traveling speed**

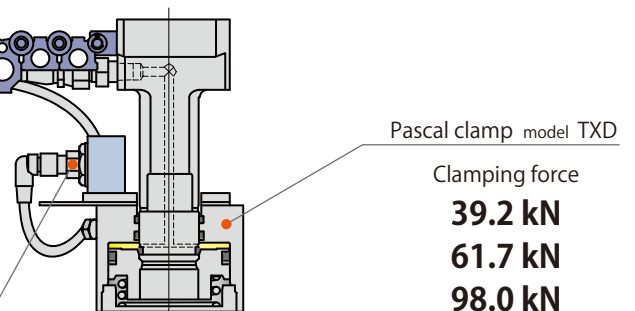
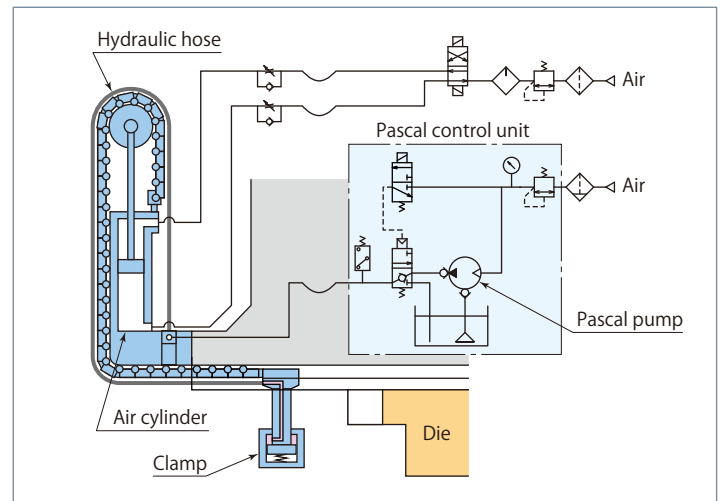
Newly designed sprocket as well as roller chain enable the clamps (TXD) to travel faster than former model TRA. In case of traveling stroke 600mm, time spent from bwd-end to the die-detection has been reduced down to 2 seconds from 3 seconds. Traveling speed has been hiked up from 0.2m/sec. to 0.3m/sec.

● **Light-weight base block**

By changing the material of the base block as well as roller chain design, total weight of the traveling clamp has been cut down, for example, TRAEX06-0600 weight is reduced to 20kgs from 30kgs.



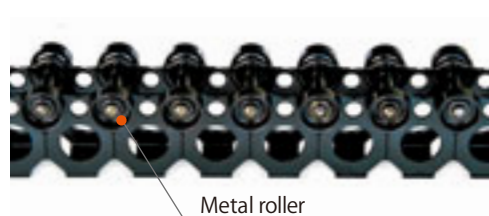
System diagram



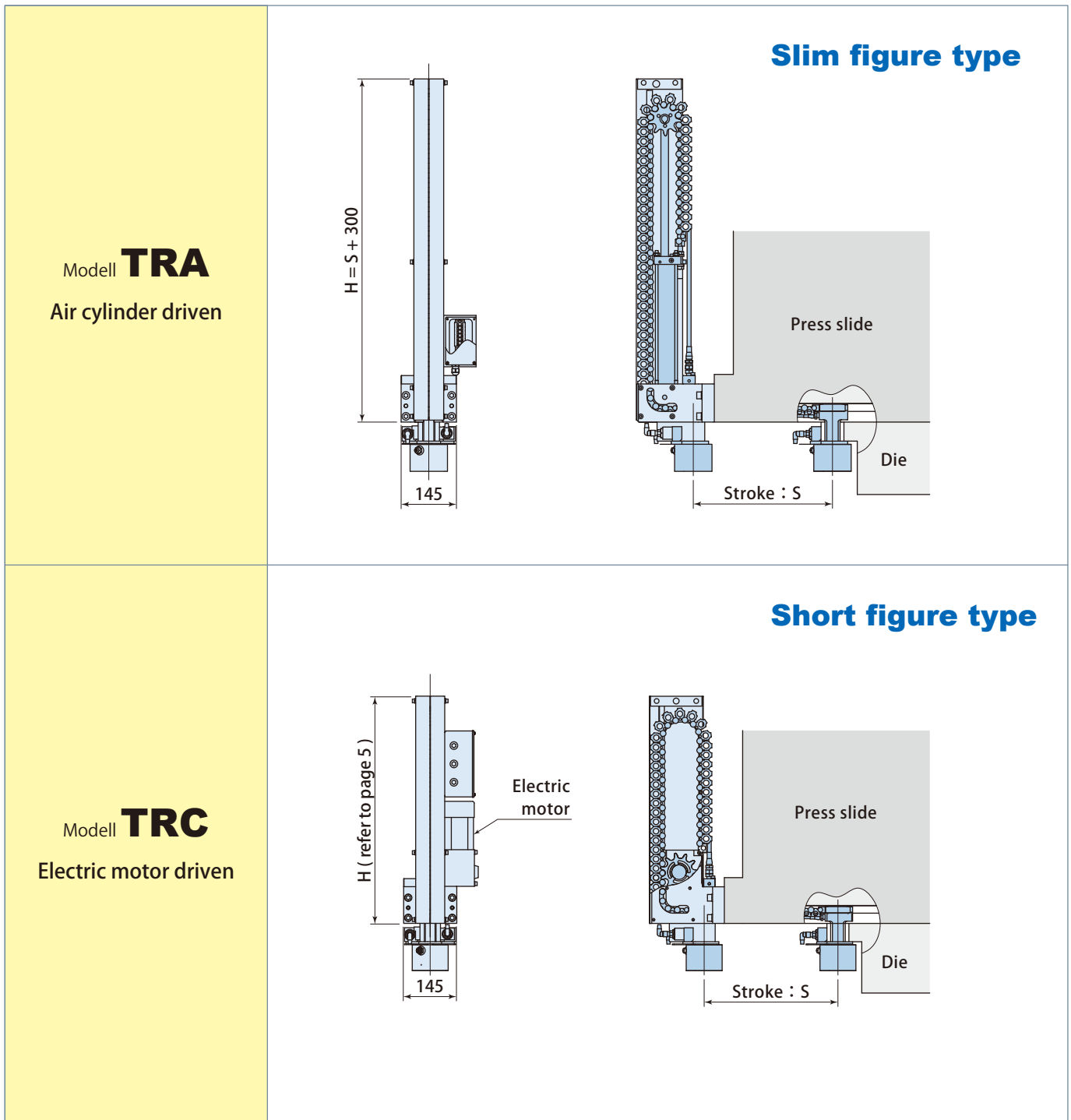
**Light-weight aluminium alloy base block**



**Light-weight but durable design of roller chain**



Two kinds of clamp sliding methods are provided as follows ; -



**Class definition** TR A E X06 - 0800 L

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↑
↑
↑

①
②
③
④

- ① Model A, C (See above)
- ② Clamp model X04 : model TXD040 (Clamping force 39.2 kN)  
X06 : model TXD063 (Clamping force 61.7 kN)  
X10 : model TXD100 (Clamping force 98.0 kN)
- ③ Traveling stroke TRA : 0400~1300 mm TRC : 0400~0900 mm
- ④ Terminal box , proximity switch location  
(Rotary actuator and electric motor housing included with model TRC)  
L : As shown in the above diagram R : Inverted placement of L

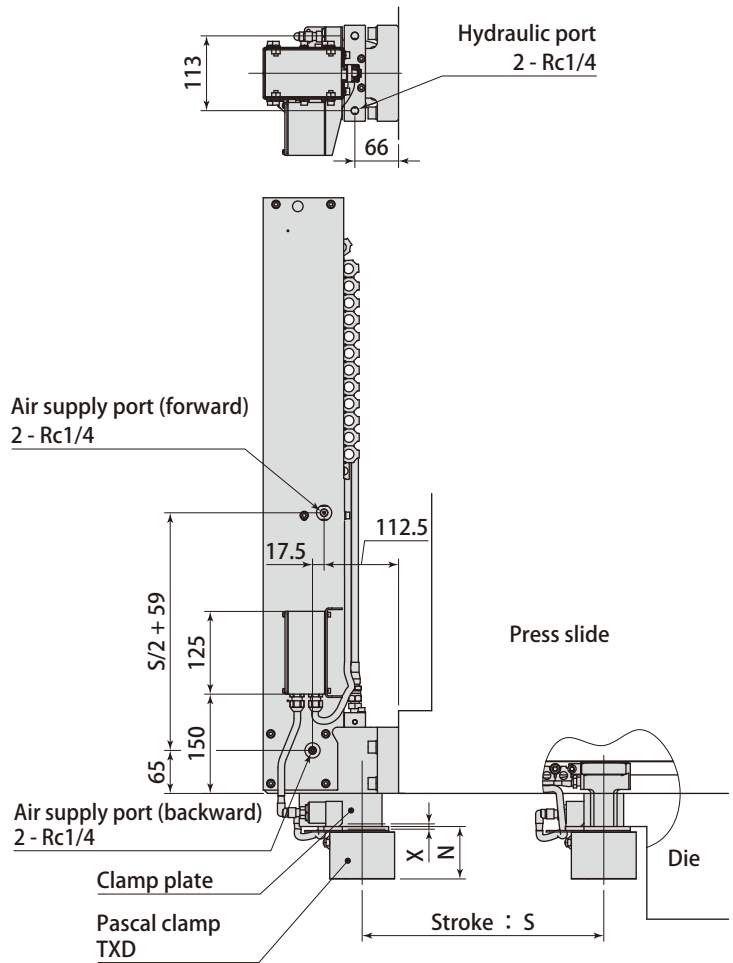
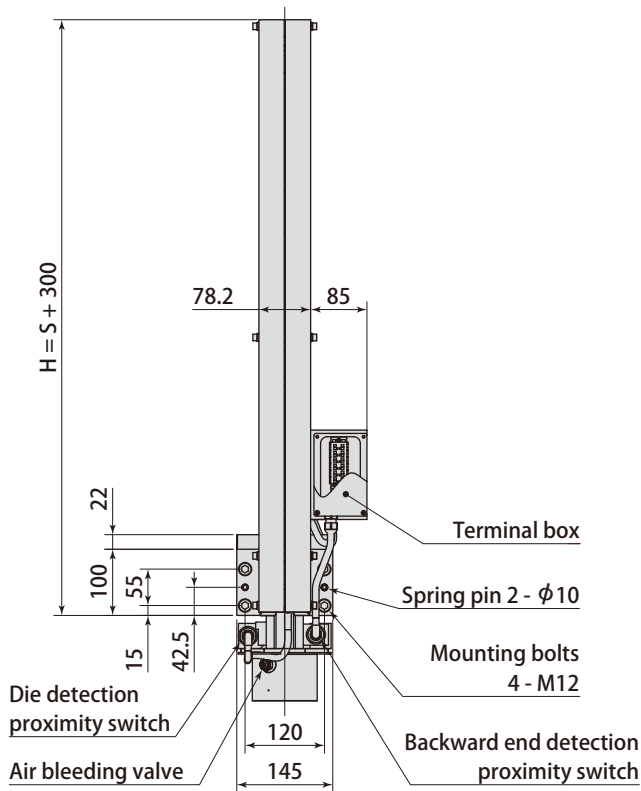
## Specifications

Model		TRAEX04	TRAEX06	TRAEX10
Clamping force *1		39.2 kN {8800 lbs}	61.7 kN {13800 lbs}	98.0 kN {22000 lbs}
Clamping stroke : X	mm	8 (full stroke)		
Traveling stroke : S	mm	400 ~ 1300 (every 100 mm)		
Traveling speed	m/sec.	0.14 ~ 0.30 (adjustable by speed controller)		
Mass *2	kg	19	21	23
Dimensions	F	62	78	98
	N	67	73	79
	P	24	16	6

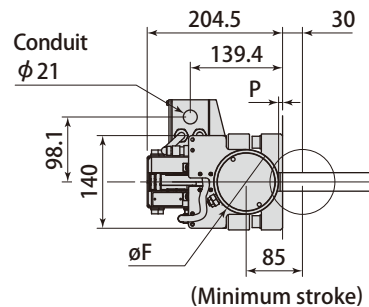
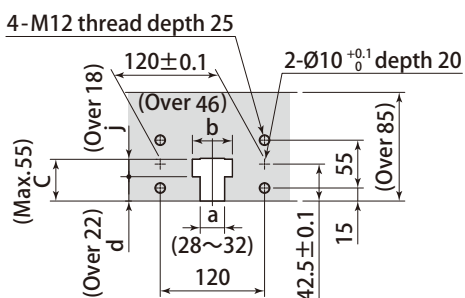
\*1 Hydraulic pressure 24.5 MPa {3555 psi}

\*2 Above mass values are for the case of stroke 800 mm. The mass increase or decreases about 0.8 kg per every 100 mm.

## Dimensions



### Mounting hole dimensions on press slide



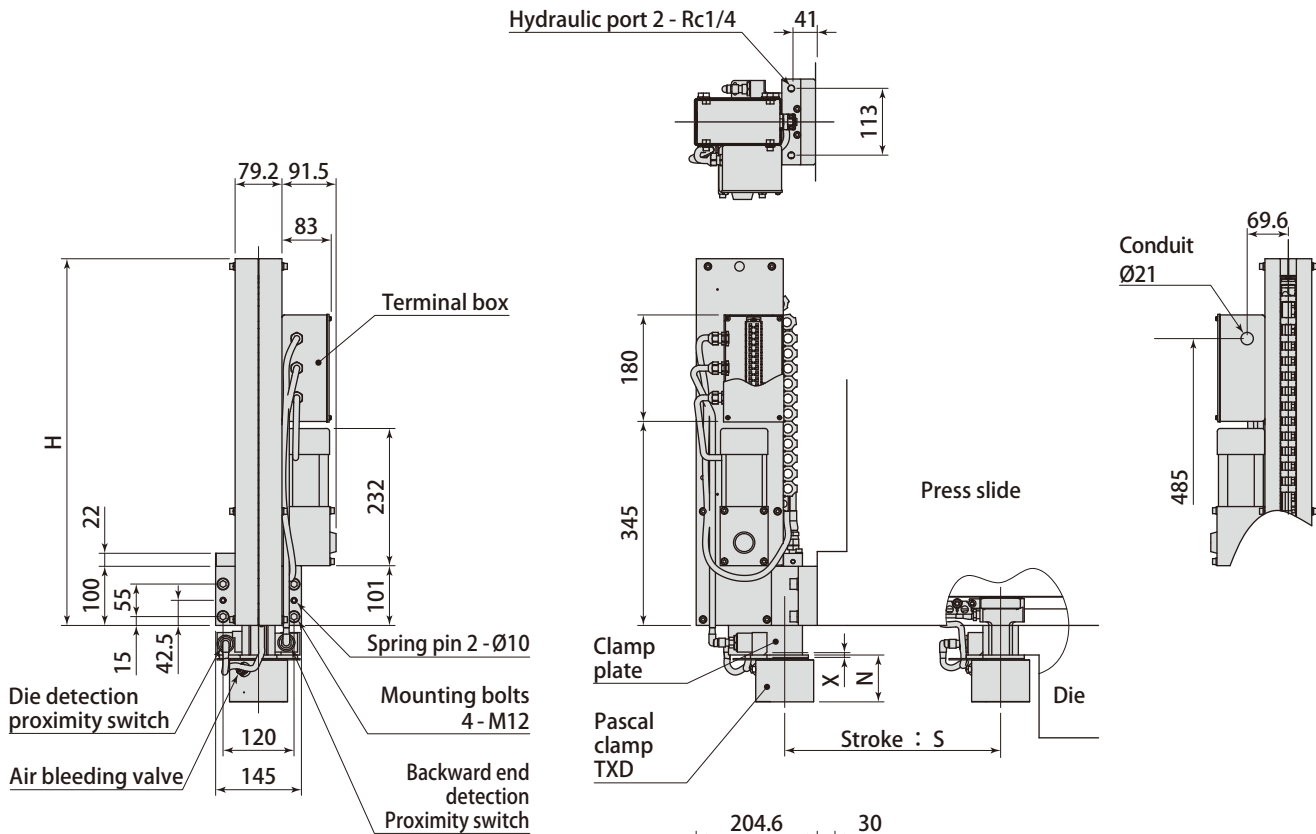
## Specifications

Model		TRCEX04	TRCEX06	TRCEX10
Clamping force *1	kN	39.2 kN {8800 lbs}	61.7 kN {13800 lbs}	98.0 kN {22000 lbs}
Clamping stroke : X	mm	8 (full stroke)		
Traveling stroke : S	mm	400 ~ 900 (every 25 mm)		
Traveling speed	m/sec.	0.18 (50 Hz) , 0.21 (60 Hz)		
Mass *2	kg	23	25	27
Dimensions	F	62	78	98
	N	67	73	79
	P	24	16	6

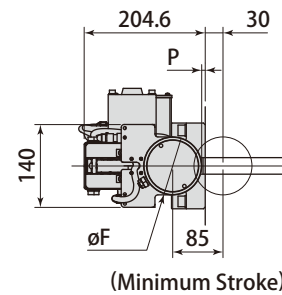
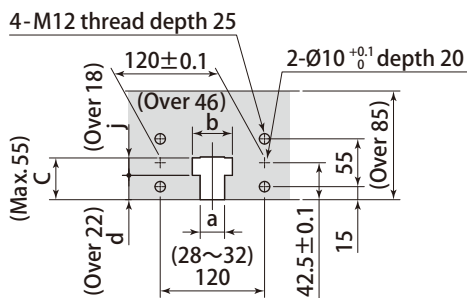
\*1 Hydraulic pressure 24.5 MPa {3555 psi}

\*2 Above mass values are for the case of stroke 800 mm. The mass increase or decreases about 0.6 kg per every 100 mm.

## Dimensions



### Mounting hole dimensions on press slide



Stroke : S	H	Stroke : S	H
400	520	625 ~ 700	670
425 ~ 500	570	725 ~ 800	720
525 ~ 600	620	825 ~ 900	770

mm



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