

# Pascal clamp model TXA

Pascal clamp

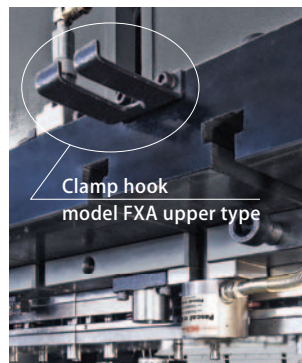




### Model designation

TXA **063**

Clamping force  
Refer to the below specifications for the details.



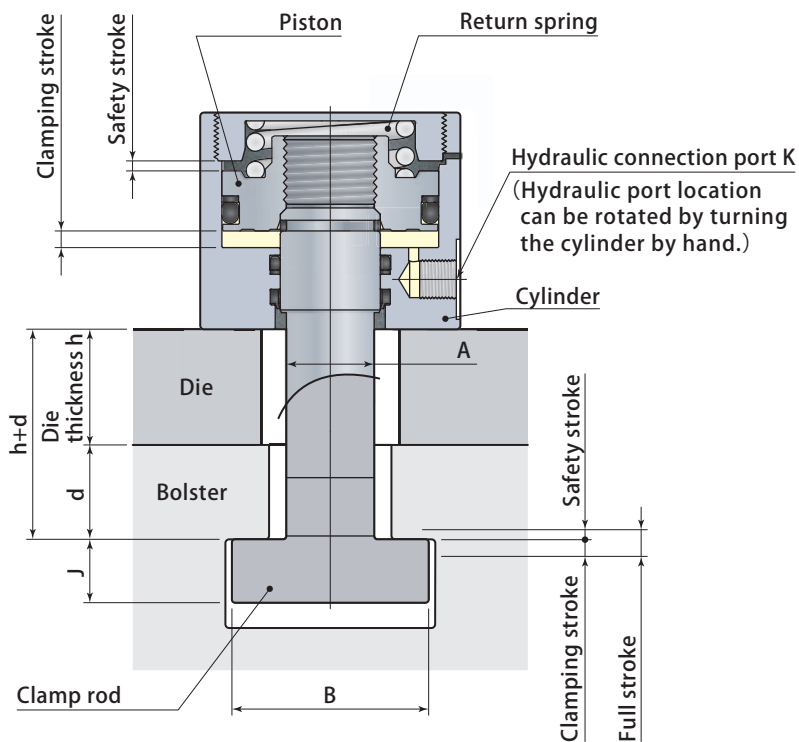
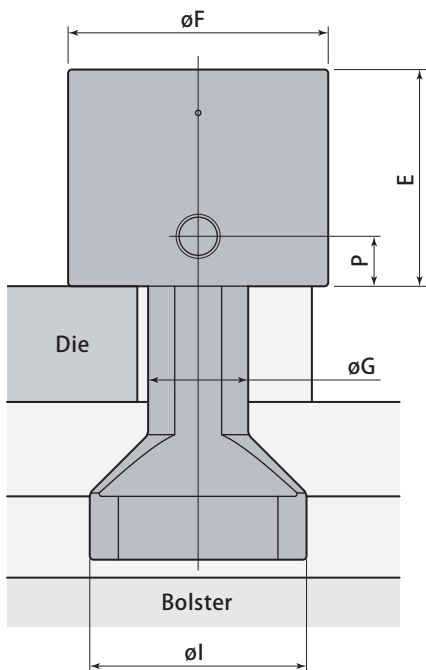
Clamp hook  
model FXseries  
(Accessory)

For temporary hanging.  
Refer to **page → 41**  
for the details.

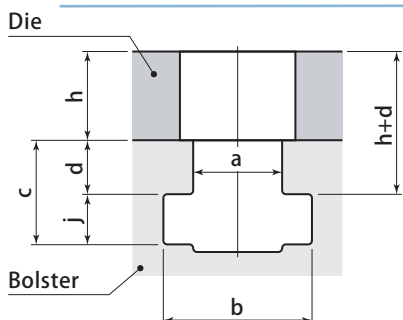
### Specifications

Model	TXA010	TXA020	TXA040	TXA063	TXA100	TXA160	TXA250	
Clamping force (at 24.5 MPa)	kN	9.8	19.6	39.2	61.7	98	156	245
Proof pressure	MPa	36.7						
Full stroke	mm	5			8			
Clamping stroke	mm	3			5			
Safety stroke	mm	2			3			
Cylinder capacity (at full stroke)	cm <sup>3</sup>	2.0	6.5	13	21	32	54	84
Operating temperature	°C	0 ~ 70 (Standard)						
Approximate weight	kg	0.7	1	2	3	5	8	18

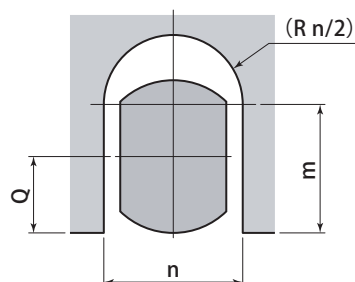
- Working hydraulic pressure : 24.5MPa
- Weight varies according to the die thickness and dimension of clamp rod.
- Clamping stroke and safety stroke are the standard, however they are subject to change depending on dimensions of die and T-slot. Contact Pascal for the details.



T-slot dimension and die thickness



U-cut dimension



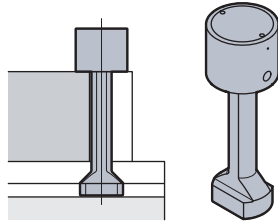
mm

Model	TXA010	TXA020	TXA040	TXA063	TXA100	TXA160	TXA250
E	37	52	59	65	71	78	100
øF	38	49	62	78	98	127	157
øG	13	16	25	30	40	50	60
øl	30	38	60	60	80	90	100
Hydraulic connection port K	Rc1/8	Rc1/4					
P	9	12	13.5	15	16	16	18
Min. a	6	10	12	15	18	23	27
Max. h+d	70	80	90	100	110	120	120
Tolerance of dimension d				± 0.2			
Min. j	6	9	11	15	18	21	24
Tolerance of dimension h				± 0.3			
m	13.5	17	23.5	29	38	47	56
Min.Q	7	9	11	14	18	22	26
Max.n	20	30	35	40	50	60	70

- Specify T-slot dimensions a, b, d, j and die thickness h. For brand new machine, machine d and h dimensions with the tolerance shown in the above table. For existing machine, specify tolerance of 0.1mm unit on d and h dimensions.
- Dimensions A, B, J are determined based on T-slot dimension.
- In case U-cut width n is smaller than T-slot dimension a, contact Pascal.
- In case dimension is over Max. h+d, refer to the **page →32** Long clamp rod type.

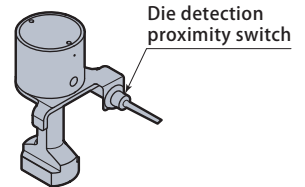
**H** Long clamp rod type TXA□-H

It is applied in case the die thickness is over the standard.  
page → 32



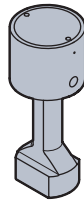
**E** With die detection proximity switch TXA□E

It prevents clamp misplace.  
page → 33



**V** Heat proof type TXA□-V

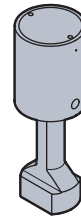
It is applied under condition that the die and its surroundings are in high temperature.



Operating temperature : 5 ~ 120°C

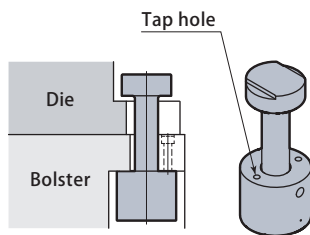
**X** Long stroke type TXA□-X

It is applied in case the variations of dimension h of die thickness are wide.  
page → 34



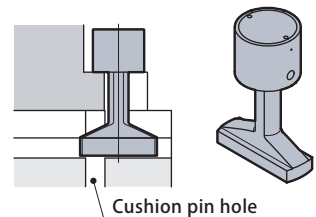
**K** Cylinder fixed type TXA□K

It is applied in case the cylinder is mounted in bolster.  
page → 35



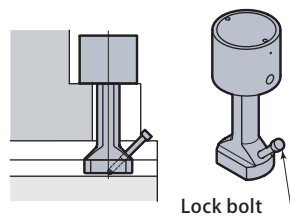
**W** Wide rod type TXA□W

It is applied at the point which intersects with T-slot or the point with cushion pin hole.  
page → 37



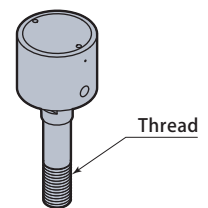
**L** Lock type TXA□-L

It can fix the clamp installed on the position out of reach, such as the rear side.  
page → 38



**S** Clamp rod thread type TXA□-S

It is applied without T-slot.  
page → 39

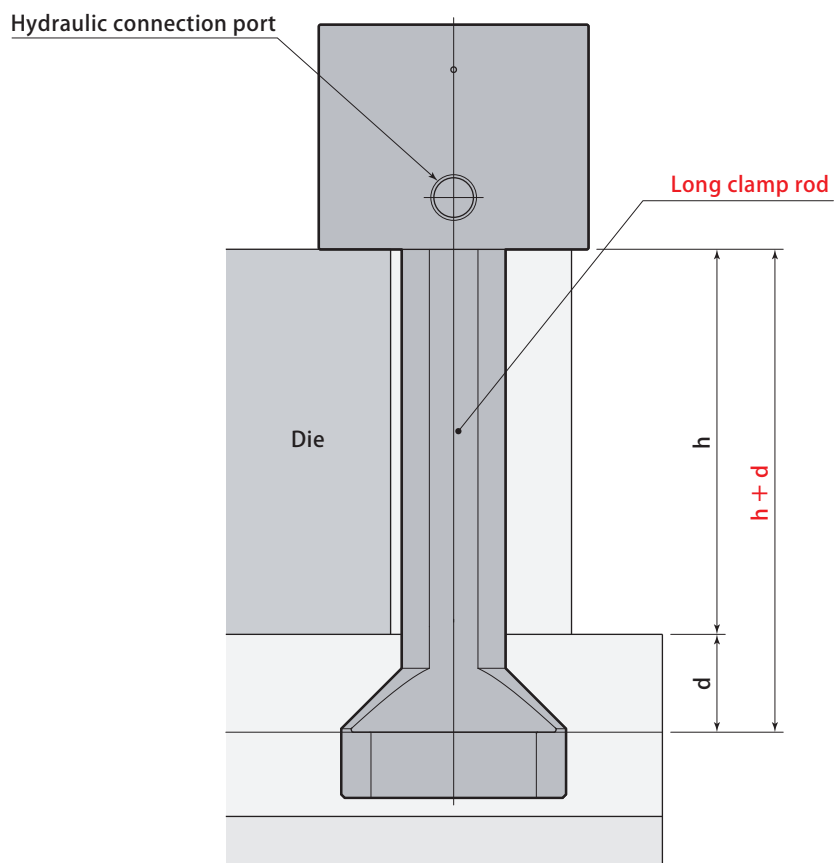


**H** Long clamp rod type It is applied in case the die thickness is over the standard.

Model designation

TXA **063** - **H**

- Clamping force  
 TXA010 TXA020 TXA040 TXA063  
 TXA100 TXA160 TXA250



mm

Model	TXA010-H	TXA020-H	TXA040-H	TXA063-H	TXA100-H	TXA160-H	TXA250-H
$h + d$	$h+d > 70$	$h+d > 80$	$h+d > 90$	$h+d > 100$	$h+d > 110$	$h+d > 120$	$h+d > 120$

**E** With die detection proximity switch

It prevents clamp misplace.

Model designation

TXA **063** **E** **0** **L**

- 1 Clamping force •
  - 2 Proximity switch •
  - 3 Mounting position of die detection proximity switch
- 1 Clamping force  
TXA040 TXA063 TXA100
- 3 Mounting position of die detection proximity switch  
**L** : Left side **R** : Right side

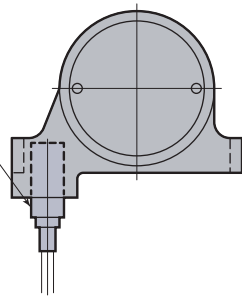
**2** Proximity switch

Symbol of proximity switch model	0	1	2	3
Specifications	DC24V 2-Wire	DC24V 3-Wire(NPN)	AC100V 2-Wire	DC24V 3-Wire(PNP)
Model	E2E-X7D1-N	E2E-X5E1	E2E-X5Y1	E2E-X5F1
Manufacturer name	OMRON			
Insulation vinyl cable length	5m			

Mounting position of die detection proximity switch

**L** : Left side

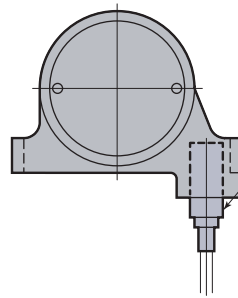
Die detection proximity switch



Mounting position of die detection proximity switch

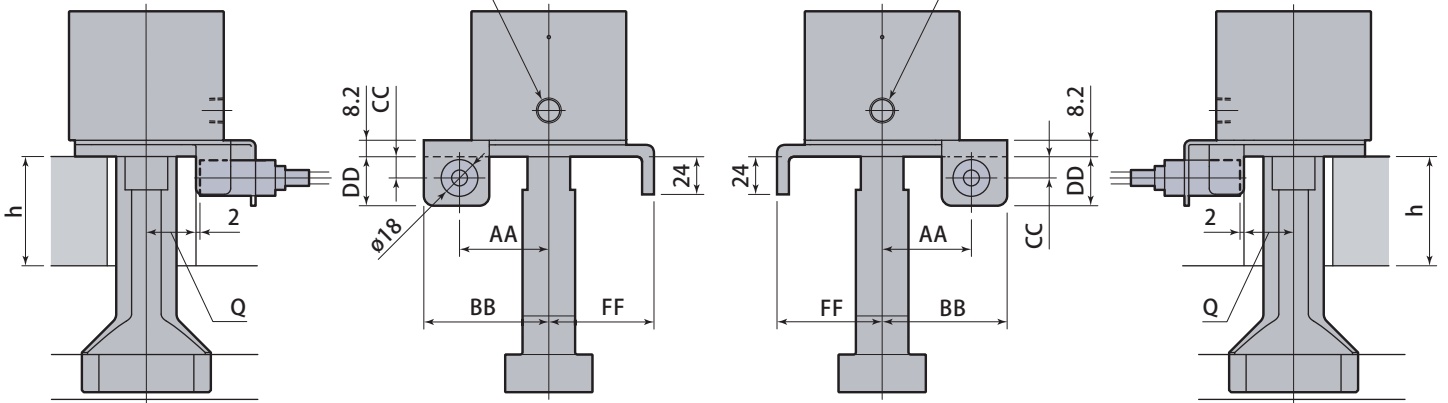
**R** : Right side

Die detection proximity switch



Hydraulic connection port  
(Port position is unchangeable.)

Hydraulic connection port  
(Port position is unchangeable.)



Model	TXA040E	TXA063E	TXA100E
AA	45	45	51.5
BB	63	63	75
FF	53	53	60
DD	24.7	24.7	31.7
CC	10.7	10.7	16.7
Q	22	25	30
Min. h	30	30	40

mm

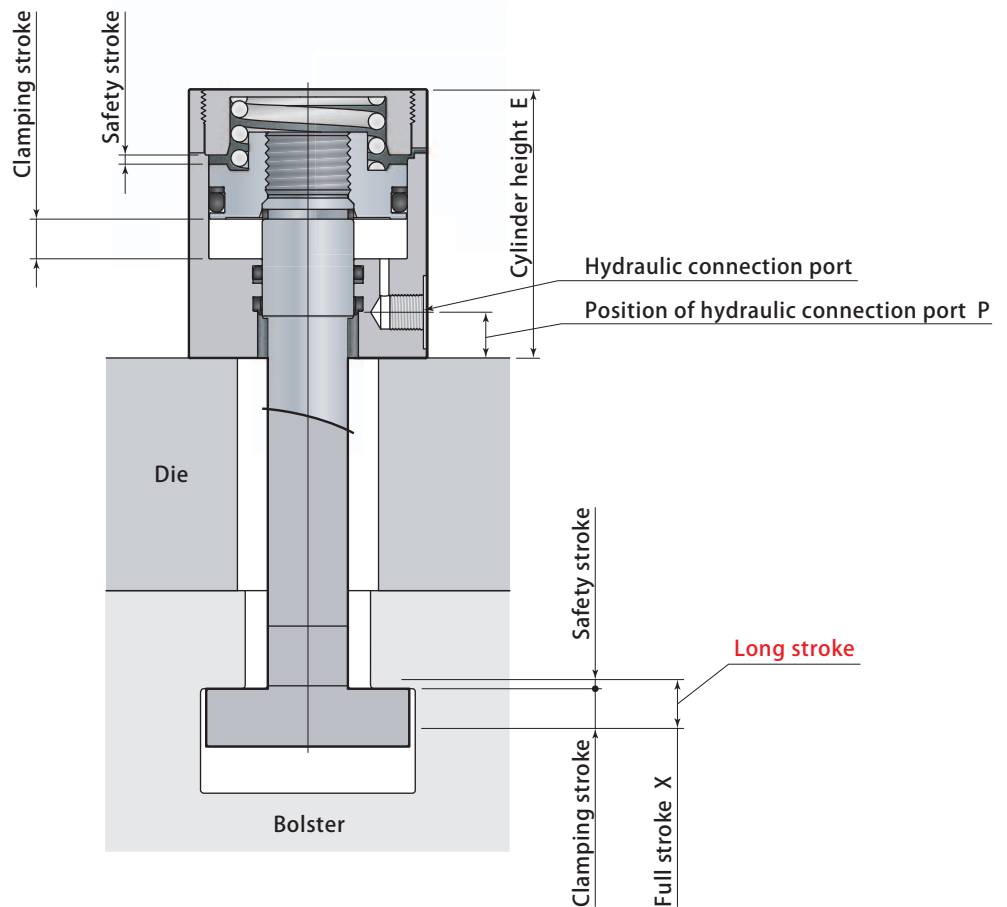
**X** Long stroke type It is applied in case the variations of dimension h of die thickness are wide.

Model designation

TXA 063 - X 10

- 1 Clamping force
- 2 Full stroke (mm)

- 1 Clamping force  
TXA020 TXA040  
TXA063 TXA100 TXA160



2 Full stroke (mm) 10 ~ 20 mm

● TXA020-X mm

Full stroke X	—	12	16	20
Cylinder height E	—	65	73	81
Position of hydraulic connection port P	—	12	12	20

● TXA063-X mm

Full stroke X	10	12	16	20
Cylinder height E	73	77	88	103
Position of hydraulic connection port P	15	17	15	27

● TXA040-X mm

Full stroke X	10	12	16	20
Cylinder height E	63	67	80	94
Position of hydraulic connection port P	15.5	15.5	13.5	13.5

● TXA100-X mm

Full stroke X	10	12	16	20
Cylinder height E	79	83	94	107
Position of hydraulic connection port P	16	16	16	16

- Pascal selects optional length of the stroke. Contact Pascal for the details.
- Confirm the length of clamping stroke and safety stroke with the approval drawing.

● TXA160-X mm

Full stroke X	10	12	16	20
Cylinder height E	80	86	101	109
Position of hydraulic connection port P	16	20	24	28



**K** Cylinder fixed type It is applied in case the cylinder is mounted in bolster.

Model designation

TXA 063 K - 080

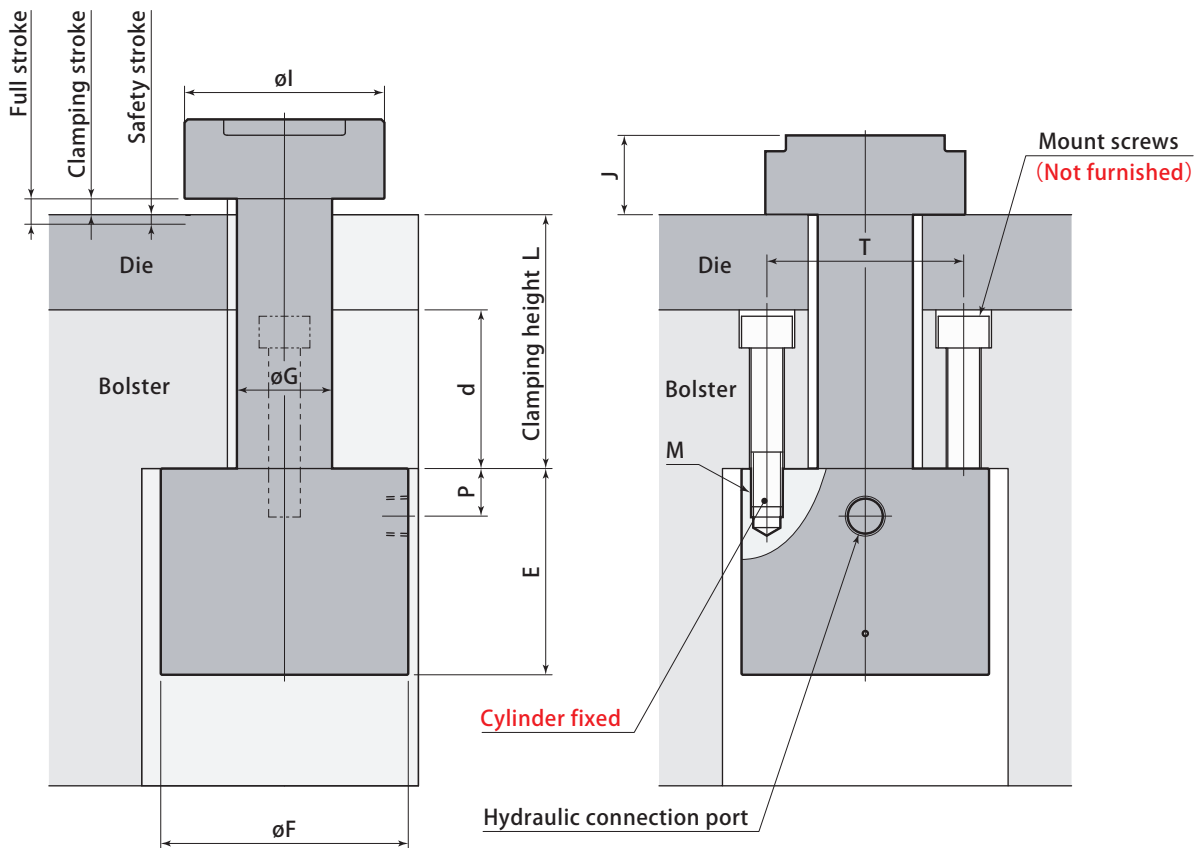
1 Clamping force ●.....

2 Clamping height (mm) ●.....

\* Indicated in 3 digits

1 Clamping force  
TXA020 TXA040 TXA063 TXA100

2 Clamping height L (mm)  
Refer to the below table "Range of clamping height L/ tolerance".



mm

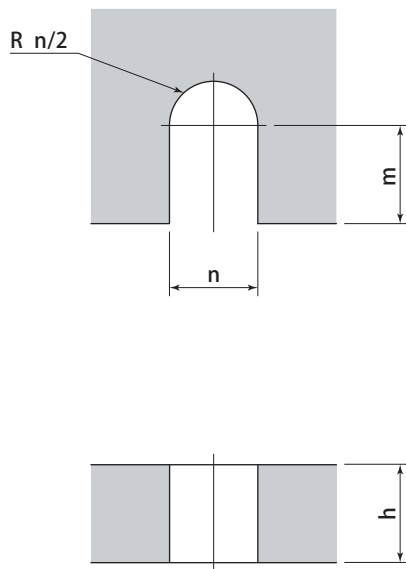
Model	TXA020K	TXA040K	TXA063K	TXA100K
ø l	40	50	63	75
J	18	25	25	32
ø G	16	24	30	34
P	12	13.5	15	16
E	52	59	65	71
ø F	49	62	78	98
T	36	46	62	82
M	M6 depth 10	M6 depth 12	M10 depth 15	M10 depth 15
2 Range of clamping height L	50 ~ 100	65 ~ 220	80 ~ 220	85 ~ 230
2 Tolerance of clamping height L dimension	± 0.5	± 0.5	± 0.5	± 0.5

- Specify clamping height L dimension.
- In case the lift stroke of Die-lifter is large, the clamping stroke extension is necessary, so contact Pascal.

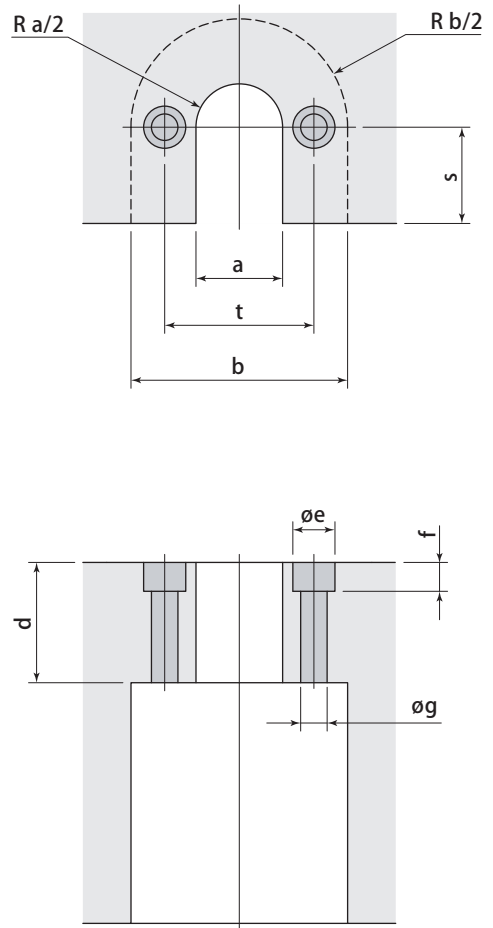


Mounting details

U-cut dimension



Dimensional drawing to clamp on bolster



mm

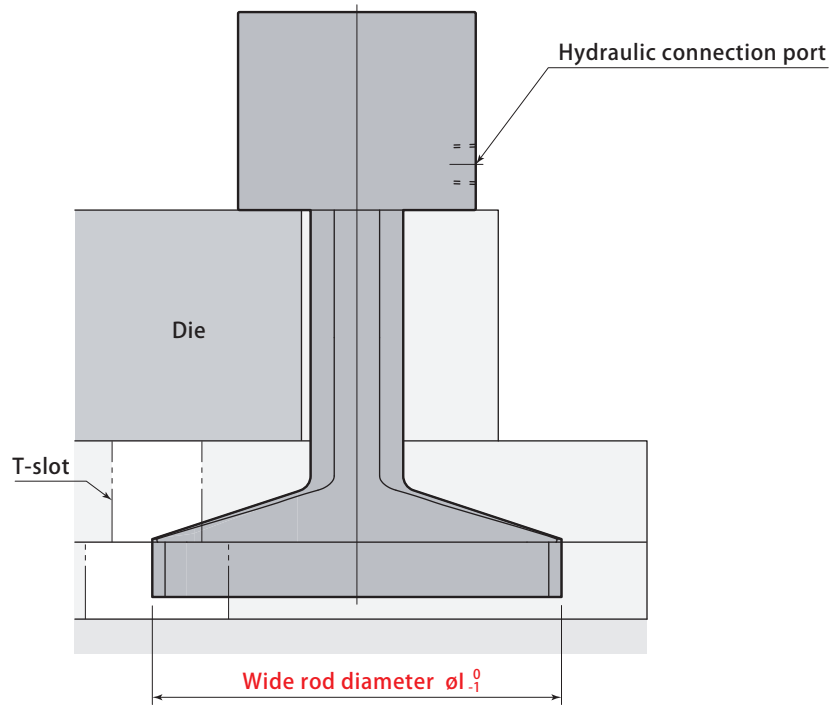
Model	TXA020K	TXA040K	TXA063K	TXA100K
a	20	28	36	38 ~ 42
t	36	46	62	82
b	52	70	90	110
Min. d	30	40	50	50
Min. h	20	25	30	30
ø e	11	11	17.5	17.5
f	8	8	13	13
ø g	6.8	6.8	11	11
n	20	28 ~ 30	34 ~ 36	38 ~ 42
Min. m	20	20	40	35
Min. s	25	32	40	50

**W** Wide rod type It is applied at the point which intersects with T-slot or the point with cushion pin hole.

Model designation

TXA 063 W

Clamping force TXA010 TXA020 TXA040  
TXA063 TXA100 TXA160



Model	TXA010W	TXA020W	TXA040W	TXA063W	TXA100W	TXA160W
Wide rod diameter øl	45	58	90	98	120	135

● In case the clamp is placed at the T-slot that has a hole for the cushion pin, specify the dimension of the clamp rod referring to the table shown below.

Model designation

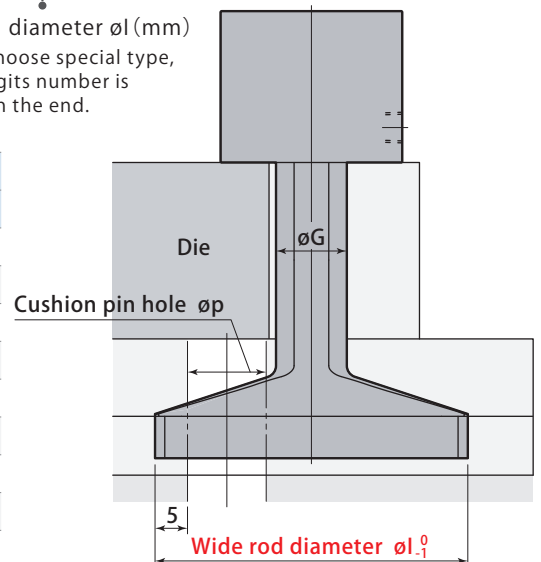
TXA 063 W - 095

Clamping force TXA040  
TXA063  
TXA100

Wide rod diameter øl (mm)  
\*When choose special type,  
the 3 digits number is  
added in the end.

Max. producible rod diameter øl

Model	TXA040W-□	TXA063W-□	TXA100W-□
Clamp rod diameter øG	25	30	40
Cushion pin hole diameter øp	30	95	110
	35	105	120
	40	115	130
	45	125	140
	50	135	150
	55	145	160
	60	155	170
	65	165	180
70	175	180	



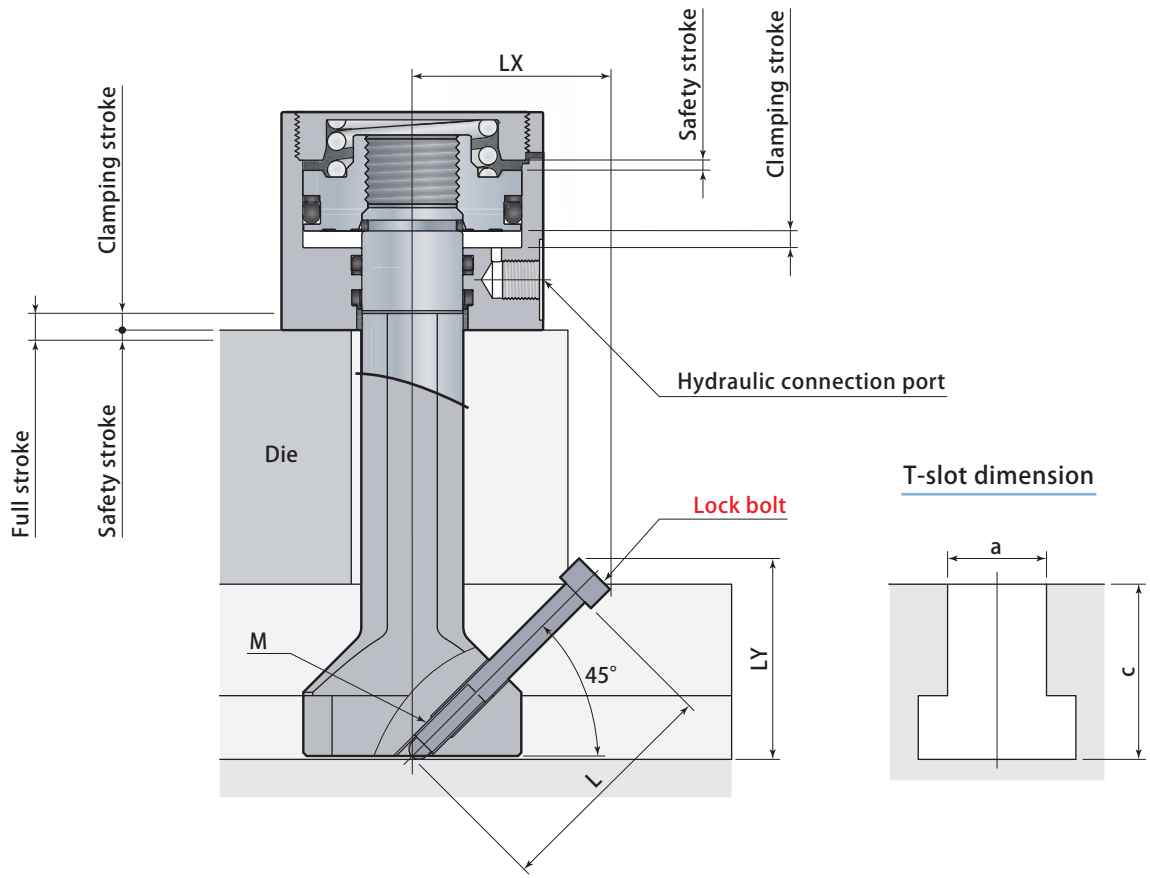
Relational expression  $øl = (øp + øG \div 2 + 5) \times 2$

**L** Lock type It can fix the clamp installed on the position out of reach, such as the rear side.

Model designation

TXA 063 - L

Clamping force TXA020 TXA040 TXA063  
TXA100 TXA160



mm

Model	TXA020-L	TXA040-L	TXA063-L	TXA100-L	TXA160-L
Min. a	11.5	14.5	15	18	23

● Lock bolt size differs according to c dimension of T-slot.

mm

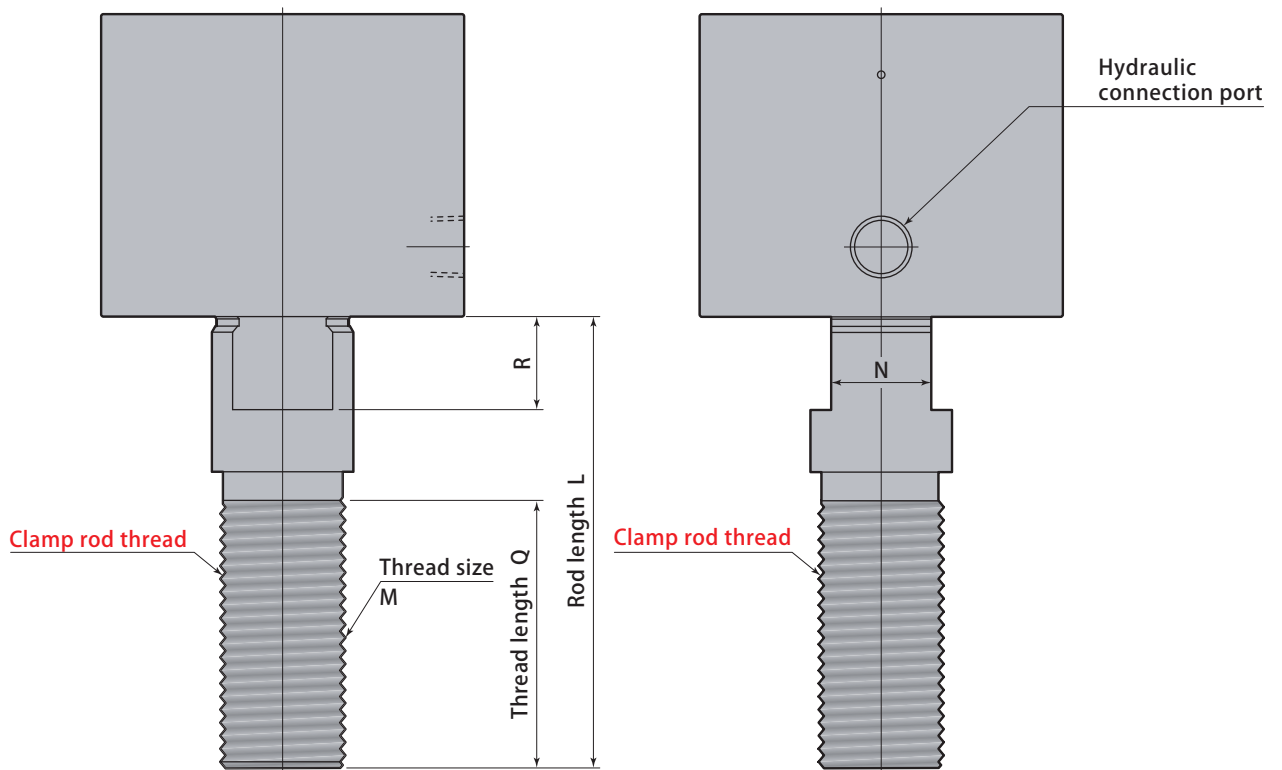
Model	TXA020-L			TXA040-L	TXA063-L	TXA100-L	TXA160-L
Range of c dimension of T-slot	M×L	LX	LY	M×L	LX	LY	
17.7 < c ≤ 21.2	M6×29	27.9	28.9	M8×29	30.6	31.6	
21.2 < c ≤ 24.7	M6×34	31.4	32.4	M8×34	34.2	35.2	
24.7 < c ≤ 28.2	M6×39	34.9	35.9	M8×39	37.7	38.7	
28.2 < c ≤ 31.8	M6×44	38.5	39.5	M8×44	41.2	42.2	
31.8 < c ≤ 35.3	M6×49	42.0	43.0	M8×49	44.8	45.8	
35.3 < c ≤ 38.8	M6×54	45.5	46.5	M8×54	48.3	49.3	
38.8 < c ≤ 42.3	M6×59	49.1	50.1	M8×59	51.9	52.9	
42.3 < c ≤ 45.9	M6×64	52.6	53.6	M8×64	55.4	56.4	
45.9 < c ≤ 49.4	M6×69	56.2	57.2	M8×69	58.9	59.9	
49.4 < c ≤ 52.9	M6×74	59.7	60.7	M8×74	62.5	63.5	
52.9 < c ≤ 56.5	M6×79	63.2	64.2	M8×79	66.0	67.0	
56.5 < c ≤ 60.1	M6×84	66.8	67.8	M8×84	69.5	70.5	

**S** Clamp rod thread type It is applied without T-slot.

Model designation

TXA 063 - S

- Clamping force  
TXA010 TXA020 TXA040  
TXA063 TXA100 TXA160



● The drawing indicated : position of unclamped

Model		TXA010-S	TXA020-S	TXA040-S	TXA063-S	TXA100-S	TXA160-S
Thread size	M	M12 × 1.75	M16 × 2	M22 × 2.5	M27 × 3	M36 × 4	M45 × 4.5
Width across flats	N	10	11.5	18.5	21.5	29.5	35.5

● Specify the thread length Q and rod length L.

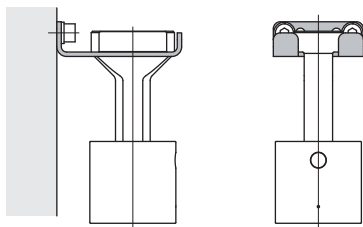
● R dimension to be changeable depending on Q and L dimensions.

Model	TXA010-S	TXA020-S	TXA040-S	TXA063-S	TXA100-S	TXA160-S
Width across flats height R Inside the brackets range of L-Q	10 (10 < L-Q ≤ 20)					-
	20 (20 < L-Q)					-
	-					15 (15 < L-Q ≤ 25)
	-					25 (25 < L-Q)



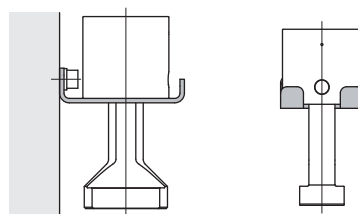
For TXA temporary hanging

**FX A** Upper clamp hook page → 42



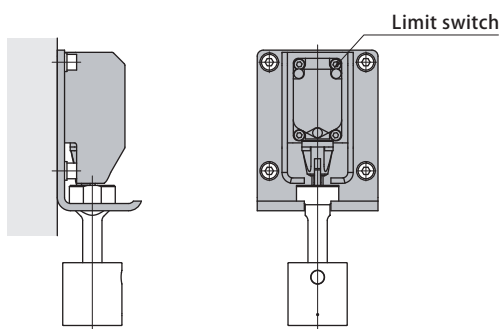
\* Not applicable for model TXA □ W.

**FX A** Lower clamp hook page → 42



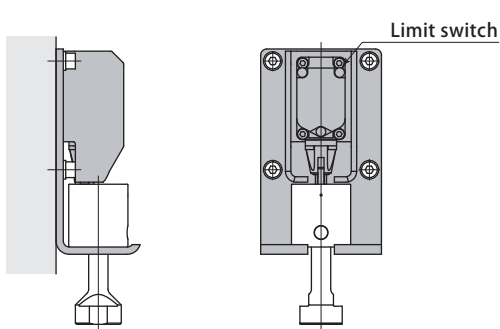
\* Not applicable for model TXA □ E.

**FX B** Upper clamp hook with LS page → 43



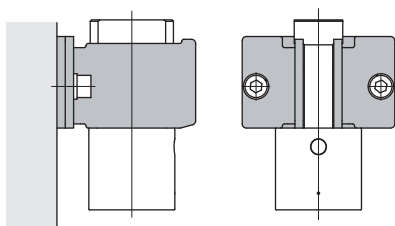
\* Not applicable for model TXA □ W.

**FX C** Lower clamp hook with LS page → 44



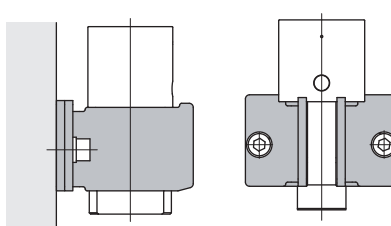
\* Not applicable for model TXA □ E, TXA-X □ and TXA □ W.

**FX D** Upper clamp hook with dummy plate page → 45



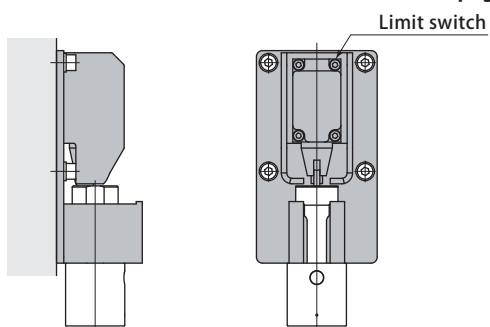
\* Not applicable for model TXA □ W.

**FX D** Lower clamp hook with dummy plate page → 45



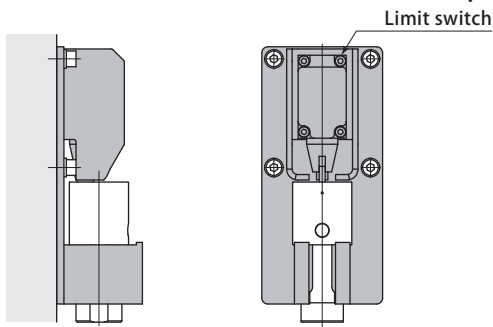
\* Not applicable for model TXA □ W.

**FX E** Upper clamp hook with LS and dummy plate page → 46



\* Not applicable for model TXA □ W.

**FX F** Lower clamp hook with LS and dummy plate page → 47



\* Not applicable for model TXA □ E, TXA-X □ and TXA □ W.

\* Contact Pascal for the details.

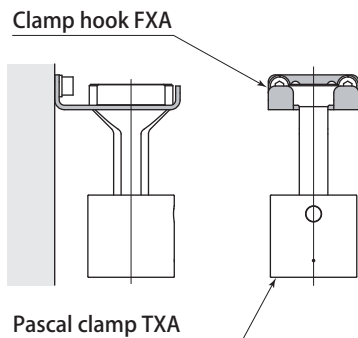
Model designation

FX A 01 - 18

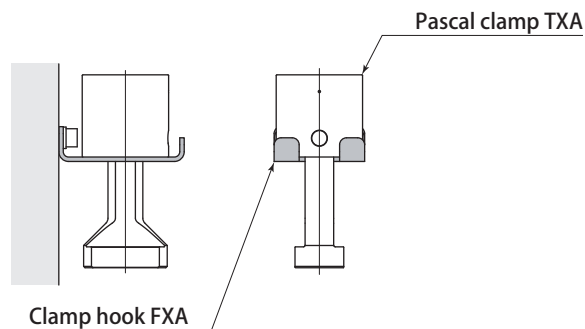
- 1 Hook size
- 2 W dimension (mm)

- 1 Hook size  
FXA01 FXA02 FXA03
- 2 W dimension (mm)  
Refer to the below table

Installation example of the upper type of clamp

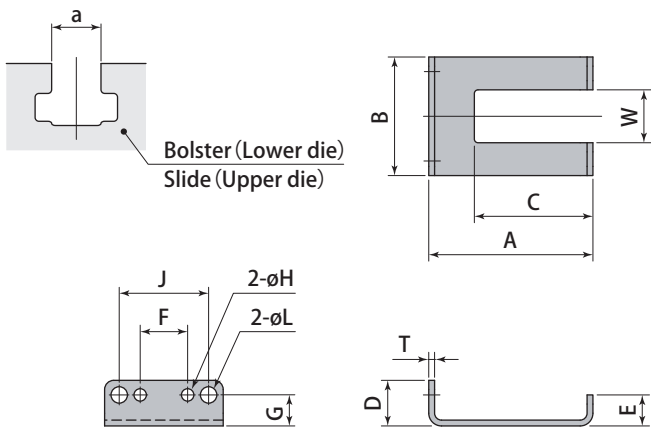


Installation example of the lower type of clamp



- The shape of the upper and lower type of hook is the same.
- Do not operate the machine with clamp hung on the clamp hook.

T-slot dimension



- The mount screw is not furnished. If necessary, order the mount screw type sold separately.

øH Mount screw

Hook type	Reference specification	Mount screw type (option)
FXA01	2-M5 length 12	FXA-A05
FXA02	2-M6 length 14	FXA-A06

øL Mount screw

Hook type	Reference specification	Mount screw type (option)
FXA01	2-M6 length 14	FXA-A06
FXA02	2-M8 length 16	FXA-A08
FXA03	2-M8 length 16	FXA-A08

Clamp model	TXA010				TXA020 / TXA040					TXA063 / TXA100				TXA160							
	T-slot a	mm	Less than 14	15~18	19~22	23~28	Less than 14	15~18	19~22	23~28	29~34	Less than 22	23~28	29~34	35~40	Less than 28	29~34	35~40	41~46		
Clamp hook type		FXA 01-14	FXA 01-18	FXA 01-22	FXA 01-28	FXA 02-14	FXA 02-18	FXA 02-22	FXA 02-28	FXA 02-34	FXA 03-22	FXA 03-28	FXA 03-34	FXA 03-40	FXA 04-28	FXA 04-34	FXA 04-40	FXA 04-46			
W	mm	14	18	22	28	14	18	22	28	34	22	28	34	40	28	34	40	46			
A	mm		65					90					120					155			
B	mm		50					65					75					100			
C	mm		50					65					90					110			
D	mm		25					25					25					60			
E	mm		12					17					17					24			
G	mm		17					17					17					45			
T	mm		2.3					3.2					3.2					4.5			
F	mm		17					26					—					—			
øH	mm		5.5					6.8					—					—			
J	mm		35					49					49					80			
øL	mm		6.8					9					9					11			
Weight	kg		0.1					0.2					0.3					0.7			



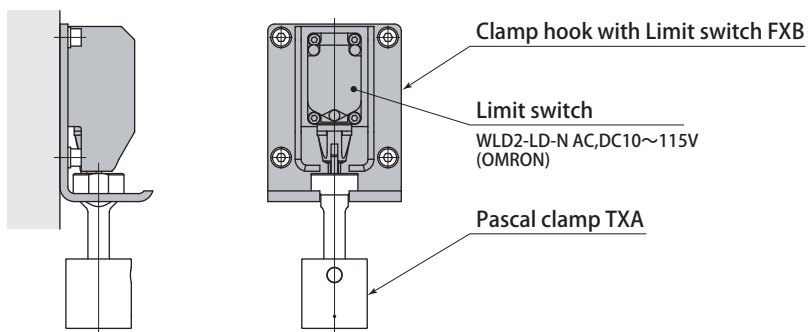
Model designation

FX **B** **01** - **18** - **11**

- 1 Hook size  
FXB01 FXB02 FXB03  
FXB04 FXB05
- 2 W dimension (mm)  
Refer to the below table
- 3 J dimension (mm)

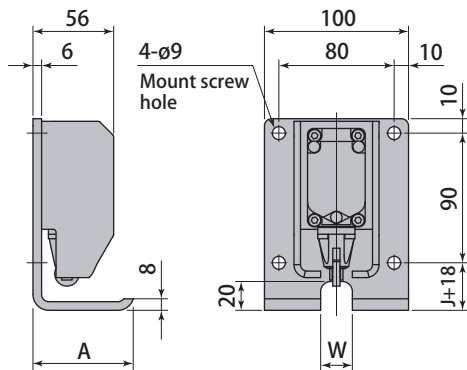
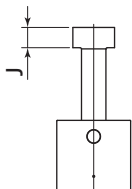
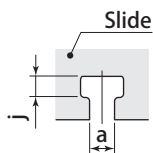
Installation example

Do not operate the machine with clamp hung on the clamp hook.



T-slot dimension

T-leg dimension



The mount screw is not furnished. If necessary, order the mount screw type sold separately.

**Mount screw**

Hook type	Reference specification	Mount screw type (option)
FXB01	4-M8 length 16	FXB-A08
FXB02		
FXB03		
FXB04		
FXB05		

Clamp model	TXA010					TXA020				
T-slot a mm	Less than 14	15~18	19~22	23~28		Less than 14	15~18	19~22	23~28	29~34
Clamp hook type	FXB01-14	FXB01-18	FXB01-22	FXB01-28		FXB02-14	FXB02-18	FXB02-22	FXB02-28	FXB02-34
W mm	14	18	22	28		14	18	22	28	34
A mm	55					70				
Weight (Approx) kg (Reference J dimension) mm	1.6 (J=11)					1.6 (J=15)				

Clamp model	TXA040					TXA063				TXA100			
T-slot a mm	Less than 14	15~18	19~22	23~28	29~34	Less than 22	23~28	29~34	35~40	Less than 22	23~28	29~34	35~40
Clamp hook type	FXB03-14	FXB03-18	FXB03-22	FXB03-28	FXB03-34	FXB04-22	FXB04-28	FXB04-34	FXB04-40	FXB05-22	FXB05-28	FXB05-34	FXB05-40
W mm	14	18	22	28	34	22	28	34	40	22	28	34	40
A mm	90					95				110			
Weight (Approx) kg (Reference J dimension) mm	1.7 (J=17)					1.7 (J=19)				1.8 (J=19)			

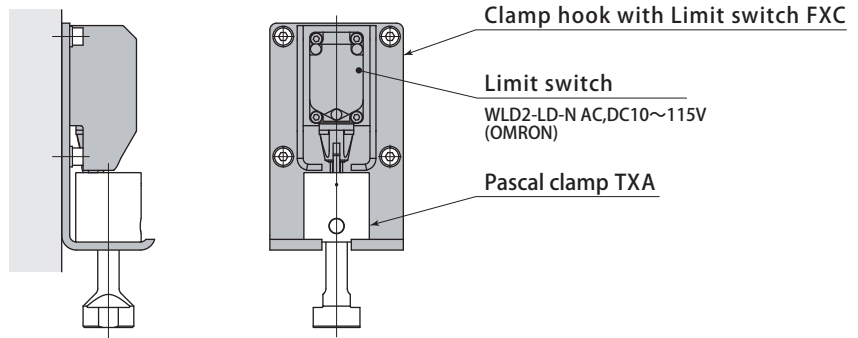
Model designation

**FX C 01 - 18**

- 1 Hook size
- 2 W dimension (mm)

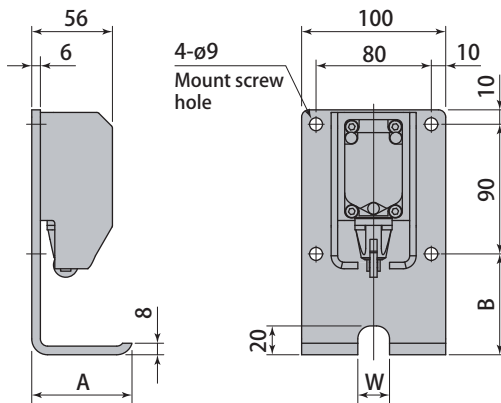
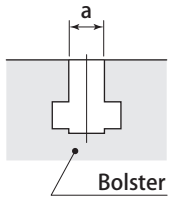
- 1 Hook size  
FXC01 FXC02 FXC03  
FXC04 FXC05
- 2 W dimension (mm)  
Refer to the below table

Installation example



● Do not operate the machine with clamp hung on the clamp hook.

T-slot dimension



● The mount screw is not furnished. If necessary, order the mount screw type sold separately.

Mount screw

Hook type	Reference specification	Mount screw type (option)
FXC01	4-M8 length 16	FXC-A08
FXC02		
FXC03		
FXC04		
FXC05		

Clamp model	TXA010					TXA020					
	T-slot a	mm	Less than 14	15~18	19~22	23~28	Less than 14	15~18	19~22	23~28	29~34
Clamp hook type		FXC01-14	FXC01-18	FXC01-22	FXC01-28	FXC02-14	FXC02-18	FXC02-22	FXC02-28	FXC02-34	
W	mm	14	18	22	28	14	18	22	28	34	
A	mm	55					70				
G	mm	55					70				
Weight	kg	1.7					1.8				

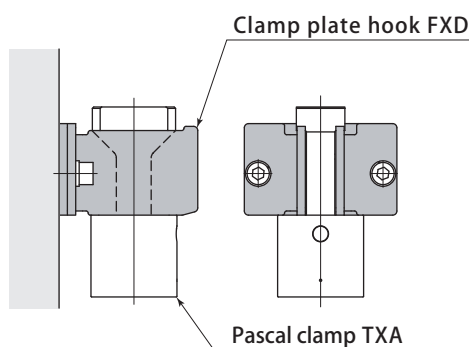
Clamp model	TXA040					TXA063				TXA100				
	T-slot a	mm	Less than 14	15~18	19~22	23~28	29~34	Less than 22	23~28	29~34	35~40	Less than 22	23~28	29~34
Clamp hook type		FXC03-14	FXC03-18	FXC03-22	FXC03-28	FXC03-34	FXC04-22	FXC04-28	FXC04-34	FXC04-40	FXC05-22	FXC05-28	FXC05-34	FXC05-40
W	mm	14	18	22	28	34	22	28	34	40	22	28	34	40
A	mm	90					110				130			
G	mm	77					83				89			
Weight	kg	1.9					2.0				2.1			

Model designation

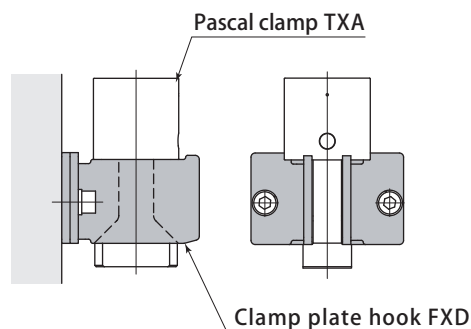
FX **D** **01** - **18** - **38**

- 1 Hook size  
FXD01 FXD02 FXD03
- 2 W dimension (mm)  
Refer to the below table
- 3 d+h dimension (mm)

Installation example of the upper type of clamp

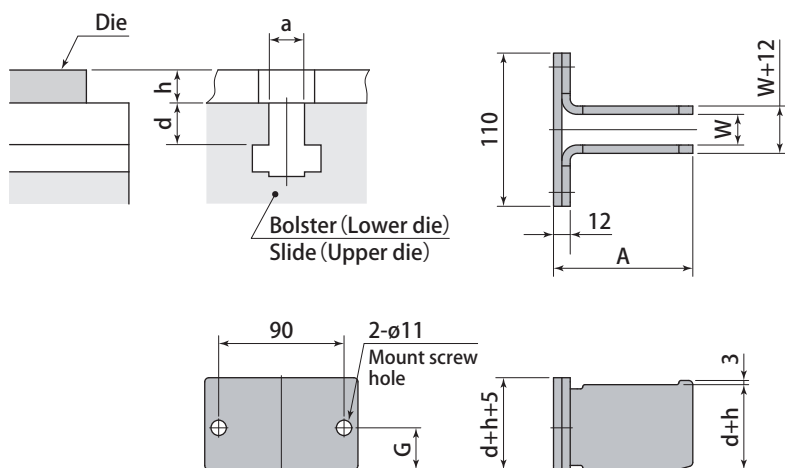


Installation example of the lower type of clamp



- The shape of the upper and lower type of hook is the same.
- The clamp plate which fixes the unused clamp outside machine is attached.

T-slot dimension



- The mount screw is not furnished. If necessary, order the mount screw type sold separately.

Mount screw

Hook type	Reference specification	Mount screw type (option)
FXD01	2-M10 length 30	FXD-A10
FXD02		
FXD03		

Clamp model	TXA010				TXA020 / TXA040					TXA063 / TXA100				
	T-slot a	mm	Less than 14	15~18	19~22	23~28	Less than 14	15~18	19~22	23~28	29~34	Less than 22	23~28	29~34
Clamp hook type		FXD01 -14	FXD01 -18	FXD01 -22	FXD01 -28	FXD02 -14	FXD02 -18	FXD02 -22	FXD02 -28	FXD02 -34	FXD03 -22	FXD03 -28	FXD03 -34	FXD03 -40
W	mm	14	18	22	28	14	18	22	28	34	22	28	34	40
A	mm	60				100					125			
G	mm	22				30					30			
Wight (Approx) (Reference d+h dimension)	kg mm	0.6 (d+h=38)				1.1 (d+h=61)					1.6 (d+h=83)			

Model designation

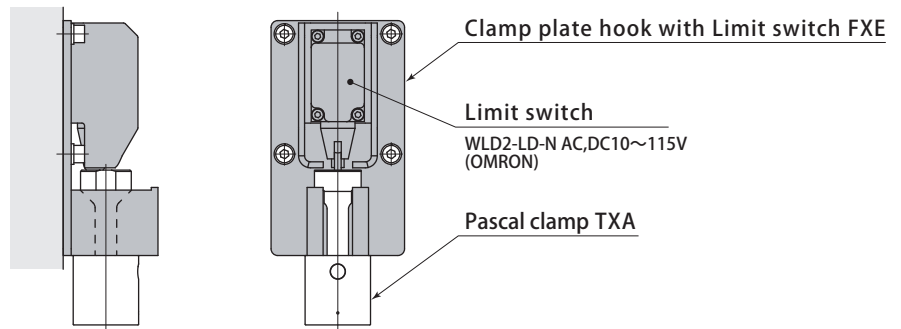
**FX E 01 - 18 - 38 - 11**

- 1 Hook size
- 2 W dimension (mm)
- 3 d+h dimension (mm)
- 4 J dimension (mm)

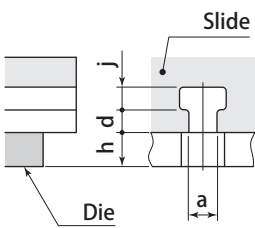
- 1 Hook size  
FXE01 FXE02 FXE03  
FXE04 FXE05
- 2 W dimension (mm)  
Refer to the below table.
- 3 d+h dimension (mm)  
Refer to T-slot dimension.
- 4 J dimension (mm)

Installation example

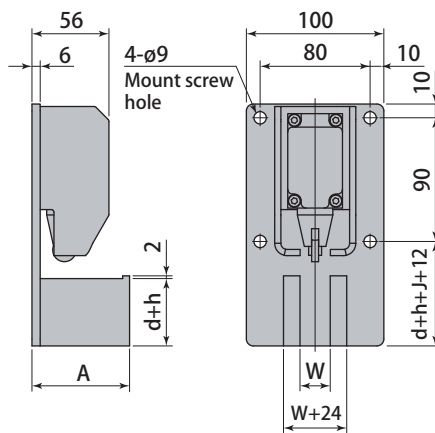
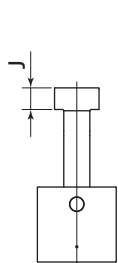
● The clamp plate which fixes the unused clamp outside machine is attached.



T-slot dimension



T-leg dimension



● The mount screw is not furnished. If necessary, order the mount screw type sold separately.

Mount screw

Hook type	Reference specification	Mount screw type (option)
FXE01	4-M8 length 16	FXE-A08
FXE02		
FXE03		
FXE04		
FXE05		

Clamp model		TXA010					TXA020						
		T-slot a	mm	Less than 14	15~18	19~22	23~28	Less than 14	15~18	19~22	23~28	29~34	
Clamp hook type		FXE01-14	FXE01-18	FXE01-22	FXE01-28	FXE02-14	FXE02-18	FXE02-22	FXE02-28	FXE02-34			
W	mm	14	18	22	28	14	18	22	28	34			
A	mm	56					71						
Wight (Approx)	kg	1.9					2.2						
(Reference d,h,J dimension)	mm	(d+h=38, J=11)					(d+h=49, J=15)						

Clamp model		TXA040					TXA063				TXA100			
		T-slot a	mm	Less than 14	15~18	19~22	23~28	29~34	Less than 22	23~28	29~34	35~40	Less than 22	23~28
Clamp hook type		FXE03-14	FXE03-18	FXE03-22	FXE03-28	FXE03-34	FXE04-22	FXE04-28	FXE04-34	FXE04-40	FXE05-22	FXE05-28	FXE05-34	FXE05-40
W	mm	14	18	22	28	34	22	28	34	40	22	28	34	40
A	mm	91					106				131			
Wight (Approx)	kg	2.7					3.2				3.8			
(Reference d,h,J dimension)	mm	(d+h=61, J=17)					(d+h=73, J=19)				(d+h=83, J=19)			

Model designation

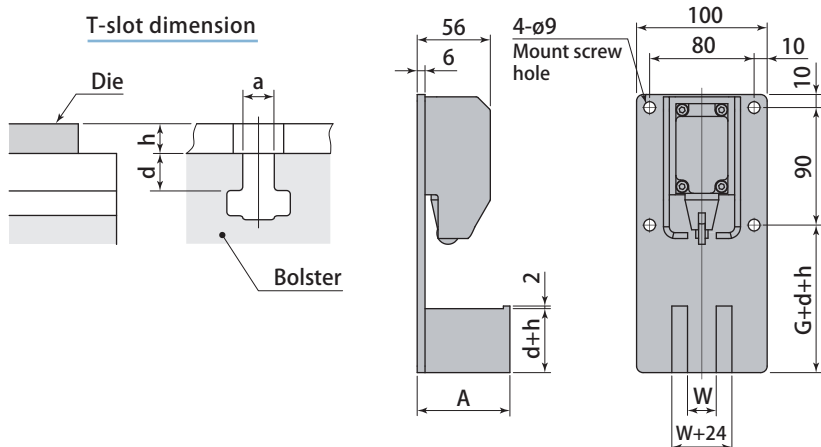
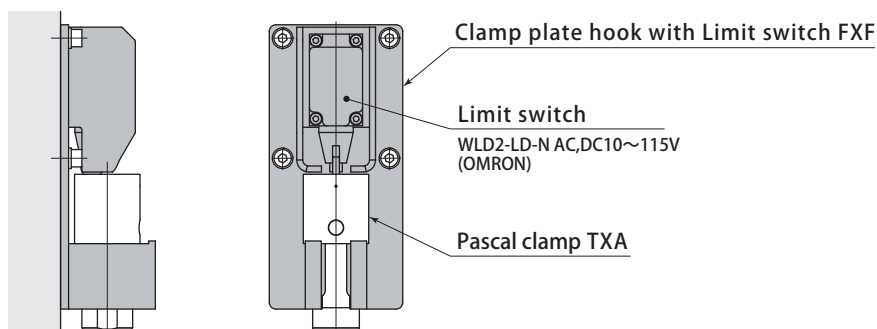
FX **F** **01** - **18** - **38**

- 1 Hook size
- 2 W dimension (mm)
- 3 d+h dimension (mm)

- 1 Hook size  
FXF01 FXF02 FXF03  
FXF04 FXF05
- 2 W dimension (mm)  
Refer to the below table.
- 3 d+h dimension (mm)

Installation example

The clamp plate which fixes the unused clamp outside machine is attached.



The mount screw is not furnished. If necessary, order the mount screw type sold separately.

Mount screw

Hook type	Reference specification	Mount screw type (option)
FXF01	4-M8 length 16	FXF-A08
FXF02		
FXF03		
FXF04		
FXF05		

Clamp model		TXA010				TXA020				
		Less than 14	15~18	19~22	23~28	Less than 14	15~18	19~22	23~28	29~34
T-slot a	mm									
Clamp hook type		FXF01-14	FXF01-18	FXF01-22	FXF01-28	FXF02-14	FXF02-18	FXF02-22	FXF02-28	FXF02-34
W	mm	14	18	22	28	14	18	22	28	34
A	mm	56				71				
G	mm	49				64				
Wight (Approx) (Reference d+h dimension)	kg mm	2.1 (d+h=38)				2.4 (d+h=49)				

Clamp model		TXA040					TXA063				TXA100			
		Less than 14	15~18	19~22	23~28	29~34	Less than 22	23~28	29~34	35~40	Less than 22	23~28	29~34	35~40
T-slot a	mm													
Clamp hook type		FXF03-14	FXF03-18	FXF03-22	FXF03-28	FXF03-34	FXF04-22	FXF04-28	FXF04-34	FXF04-40	FXF05-22	FXF05-28	FXF05-34	FXF05-40
W	mm	14	18	22	28	34	22	28	34	40	22	28	34	40
A	mm	91					106				131			
G	mm	71					77				83			
Wight (Approx) (Reference d+h dimension)	kg mm	2.9 (d+h=61)					3.4 (d+h=73)				4.0 (d+h=83)			

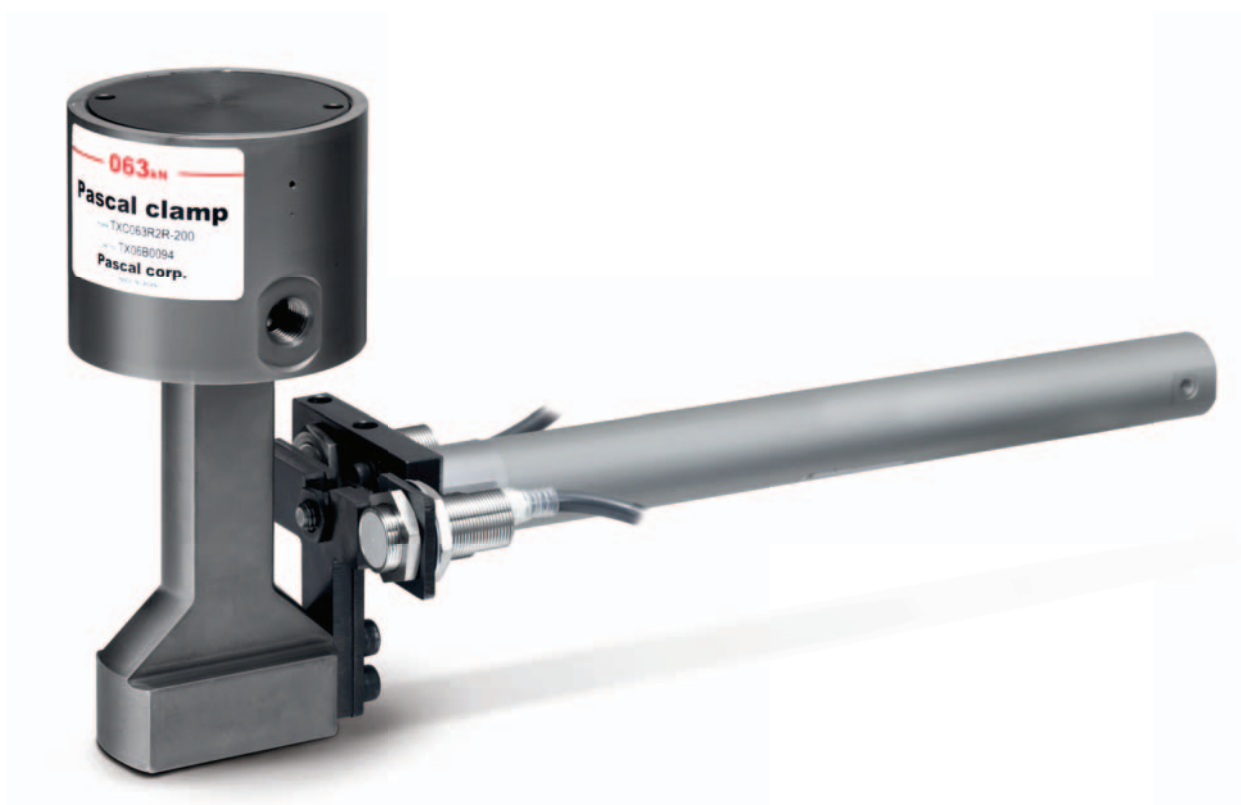






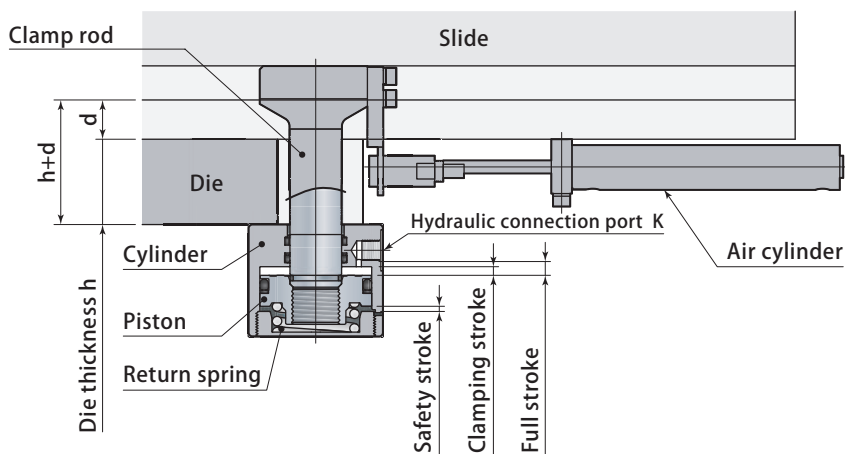
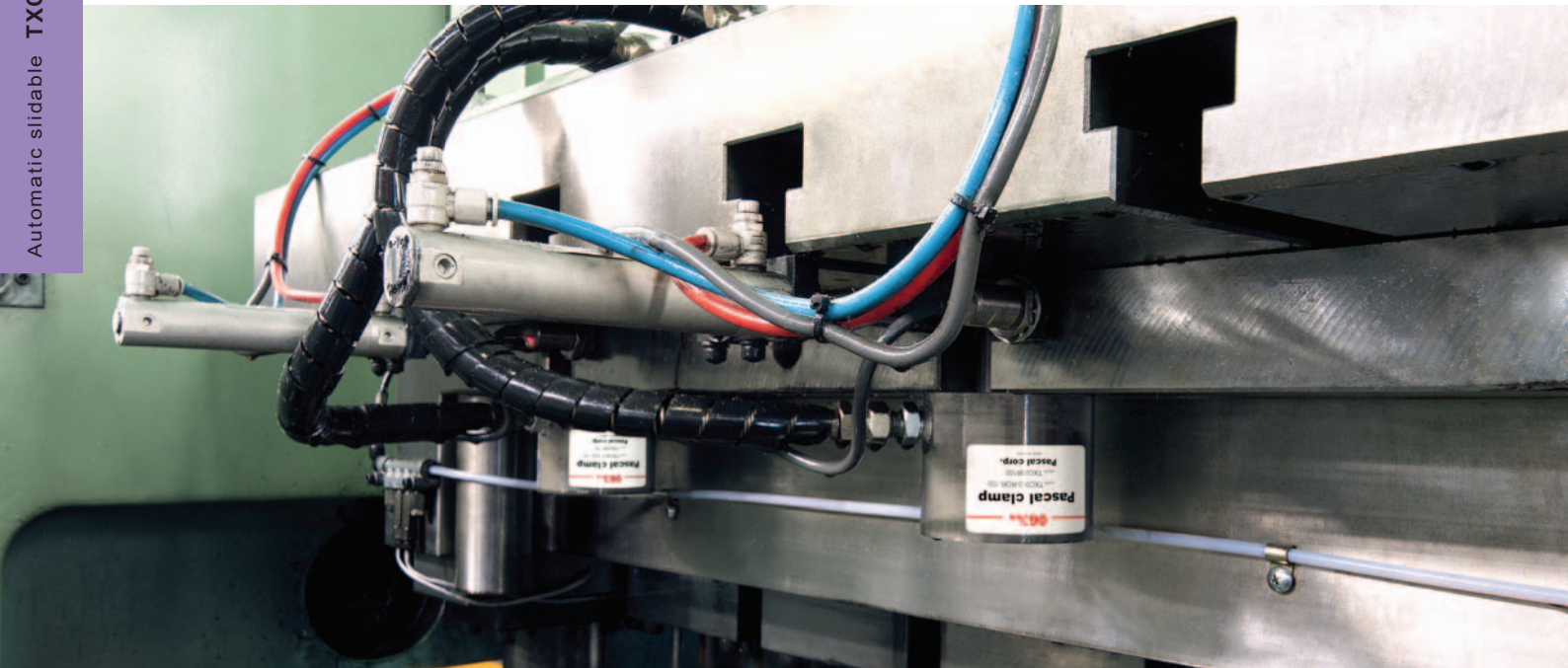
# Pascal clamp model TXC

Pascal clamp automatic slidable type



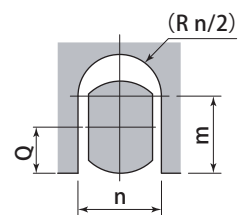
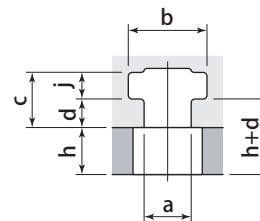
Automatic slidable clamp with air cylinder. It enables to shorten the die exchange time.

Automatic slidable TXC



T-slot dimension and die thickness

U-cut dimension



**Specifications**

Model		TXC020	TXC040	TXC063	TXC100
Clamping force (at 24.5 MPa)	kN	19.6	39.2	61.7	98
Proof pressure	MPa	36.7			
Full stroke	mm	8			
Clamping stroke	mm	5			
Safety stroke	mm	3			
Cylinder capacity (at full stroke)	cm <sup>3</sup>	6.5	13	21	32
Operating temperature	°C	0 ~ 70 (Standard)			
Approximate weight	kg	2	3	4	6
Range of dimension a	mm	18 ~ 28	22 ~ 32		28 ~ 36
Min. h	mm	30			40
Max. h+d	mm	80	90	100	110
Tolerance of dimension d	mm	± 0.2			
Tolerance of dimension j	mm	0 ~ +1			
Tolerance of dimension h	mm	± 0.3			
Min. m	mm	15	40	45	57
Range of dimension n	mm	22 ~ 30	22 ~ 35	22 ~ 40	28 ~ 50

- Working hydraulic pressure : 24.5MPa ● Weight varies according to the clamp rod dimension and sliding stroke.
- Specify T-slot dimensions a, b, d, j and die thickness h. For brand new machine, machine d, j and h dimension with the tolerance shown in the above table. For existing machine, specify tolerance of 0.1mm unit on d, j and h dimensions.
- In case dimension is over Max. h+d, refer to **page →56** Long clamp rod type. ● Stop the press during the clamp wait.

Model designation

**TXC 040 R 0 L - 075**

- 1 Clamping force
- 2 Proximity switch
- 3 Mounting position of die detection proximity switch
- 4 Sliding stroke (mm)  
\* Indicated in 3 digits

- 1 Clamping force  
TXC020 : 19.6kN  
TXC040 : 39.2kN  
TXC063 : 61.7kN  
TXC100 : 98kN

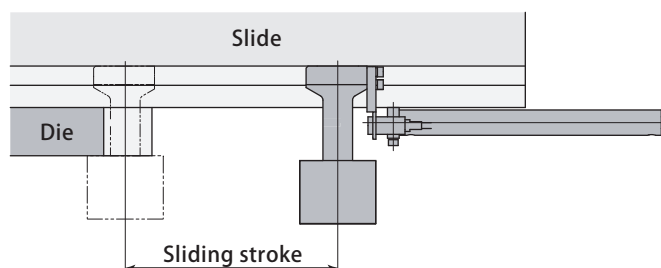
**2 Proximity switch**

Symbol of proximity switch model	0	1	2	3
Specifications	DC24V 2-Wire	DC24V 3-Wire(NPN)	AC100V 2-Wire	DC24V 3-Wire(PNP)
Model	E2E-X7D1-N	E2E-X5E1	E2E-X5Y1	E2E-X5F1
Manufacturer name	OMRON			
Insulation vinyl cable length	5m			

**3 Mounting position of die detection proximity switch**



**4 Sliding stroke**

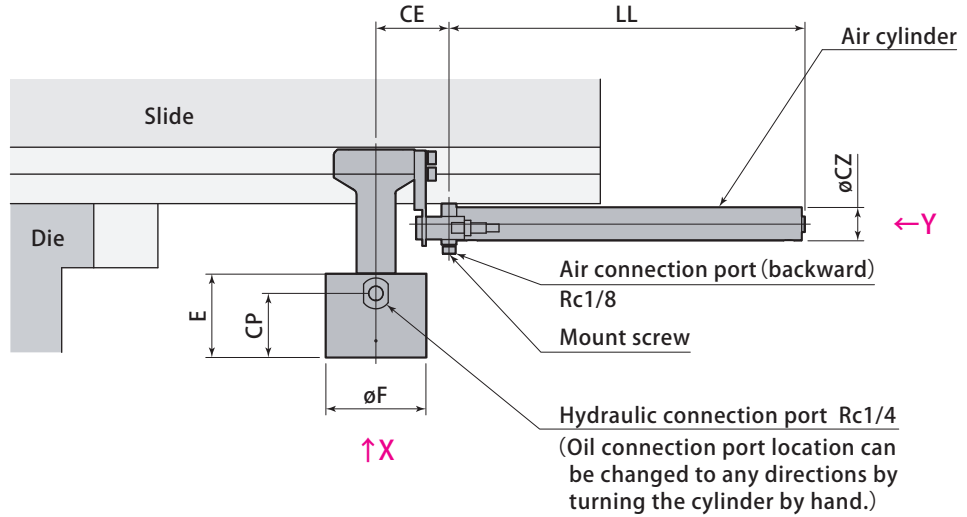


Model	TXC020R	TXC040R	TXC063R	TXC100R
Sliding stroke *	mm 50, 75, 100, 125, 150, 200	75, 100, 125, 150, 200	100, 125, 150, 200	100, 150, 200
Air cylinder driven pressure	MPa 0.39 ~ 0.54			
Slide velocity	mm/s 30 ~ 1000 (to be adjusted by a flow control valve)			
Air cylinder model	CG1BN20-□			CG1BN32-□
Air cylinder manufacturer	SMC			

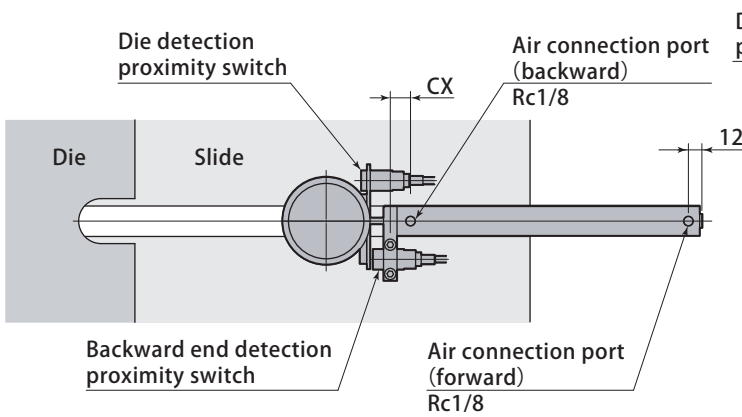
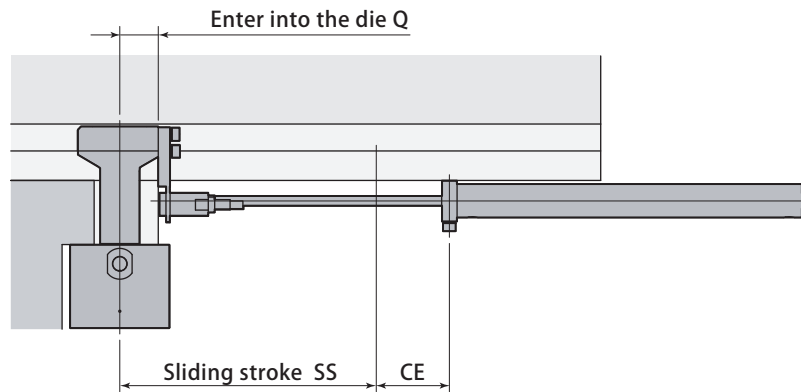
● Refer to **page →54** for the details of sliding stroke.

\* Contact Pascal for the sliding stroke which is not mentioned above.

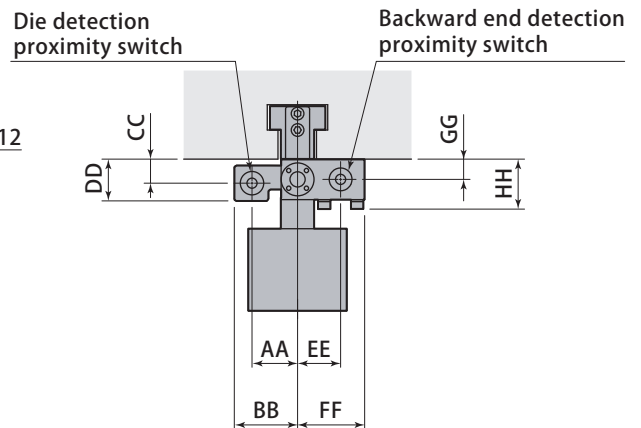
**Unclamp**



**Clamp**



**VIEW : X**



**VIEW : Y**

● These drawings indicate : mounting position of proximity switch **L**

Dimensions

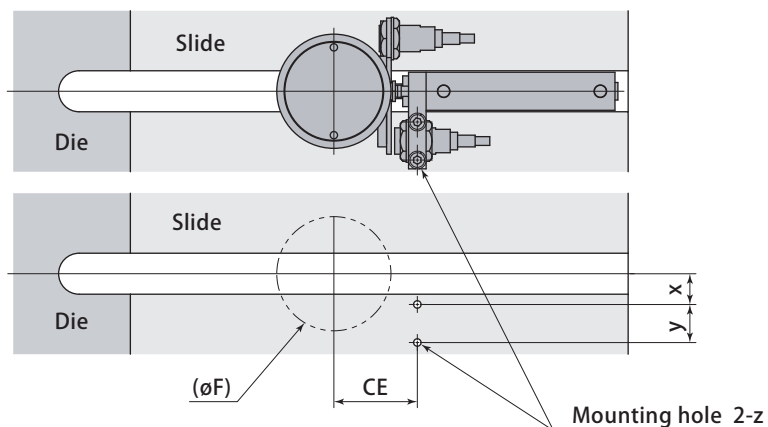
Model	mm			
	TXC020R	TXC040R	TXC063R	TXC100R
øCZ	26	26	26	38
øF	49	62	78	98
CP	40	45.5	50	55
E	52	59	65	71
CE	42	54	57	64
CX	18	18	18	20
Q	15	27	30	37
HH	39.5	39.5	39.5	54
GG	16	16	16	22
CC	19	19	19	20
EE	34	34	34	39.5
AA	36	36	36	43
FF	53	53	53	54
BB	50.5	50.5	50.5	57.5
DD	33	33	33	34
Mount screw	4-M6 length 40	4-M6 length 40	4-M6 length 40	4-M8 length 55

Sliding stroke  50  75  100  125  150  200 mm

Sliding stroke SS	mm			
	TXC020R	TXC040R	TXC063R	TXC100R
	<b>Overall length LL</b>			
50	127	—	—	—
75	152	152	—	—
100	177	177	177	181
125	202	202	202	206
150	227	227	227	231
200	277	277	277	281

Mounting details

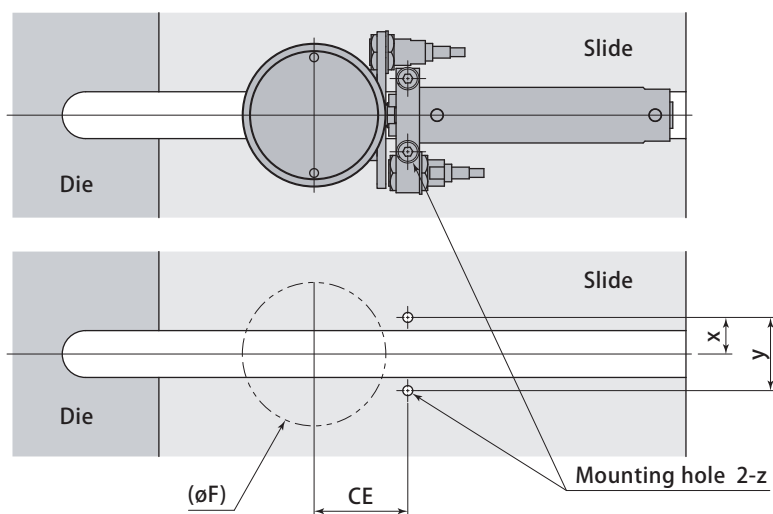
TXC020R TXC040R TXC063R



● This drawing indicates : mounting position of proximity switch L

TXC100R

The mounting hole position is the same between TXC100RL and TXC100RR.



mm

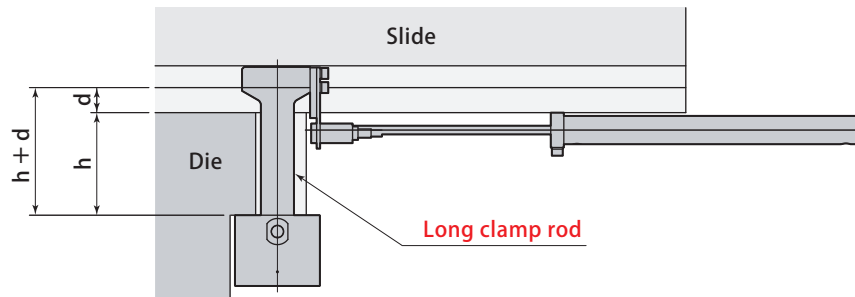
Model	TXC020R	TXC040R	TXC063R	TXC100R
øF	49	62	78	98
CE	42	54	57	64
x	21	21	21	25
y	26	26	26	50
z	M6 depth 12	M6 depth 12	M6 depth 12	M8 depth 16

**H** Long clamp rod type It is applied in case the die thickness is over the standard.

Model designation

TXC **040** R **0** **L** - **075** - **H**

- 1 Clamping force
  - 2 Proximity switch
  - 3 Mounting position of die detection proximity switch
  - 4 Sliding stroke (mm) \* Indicated in 3 digits
- 1 2 3 4 Refer to page →52



Model	TXC020R	TXC040R	TXC063R	TXC100R
h+d	h+d > 80	h+d > 90	h+d > 100	h+d > 110

mm

**V** Heat proof type It is applied under condition that the die and its surroundings are in high temperature.

Model designation

TXC **040** R **0** **L** - **075** - **V**

- 1 Clamping force
  - 2 Proximity switch
  - 3 Mounting position of die detection proximity switch
  - 4 Sliding stroke (mm) \* Indicated in 3 digits
- 1 2 3 4 Refer to page →52

● The operating ambient temperature of heat proof type is 5-120°C.

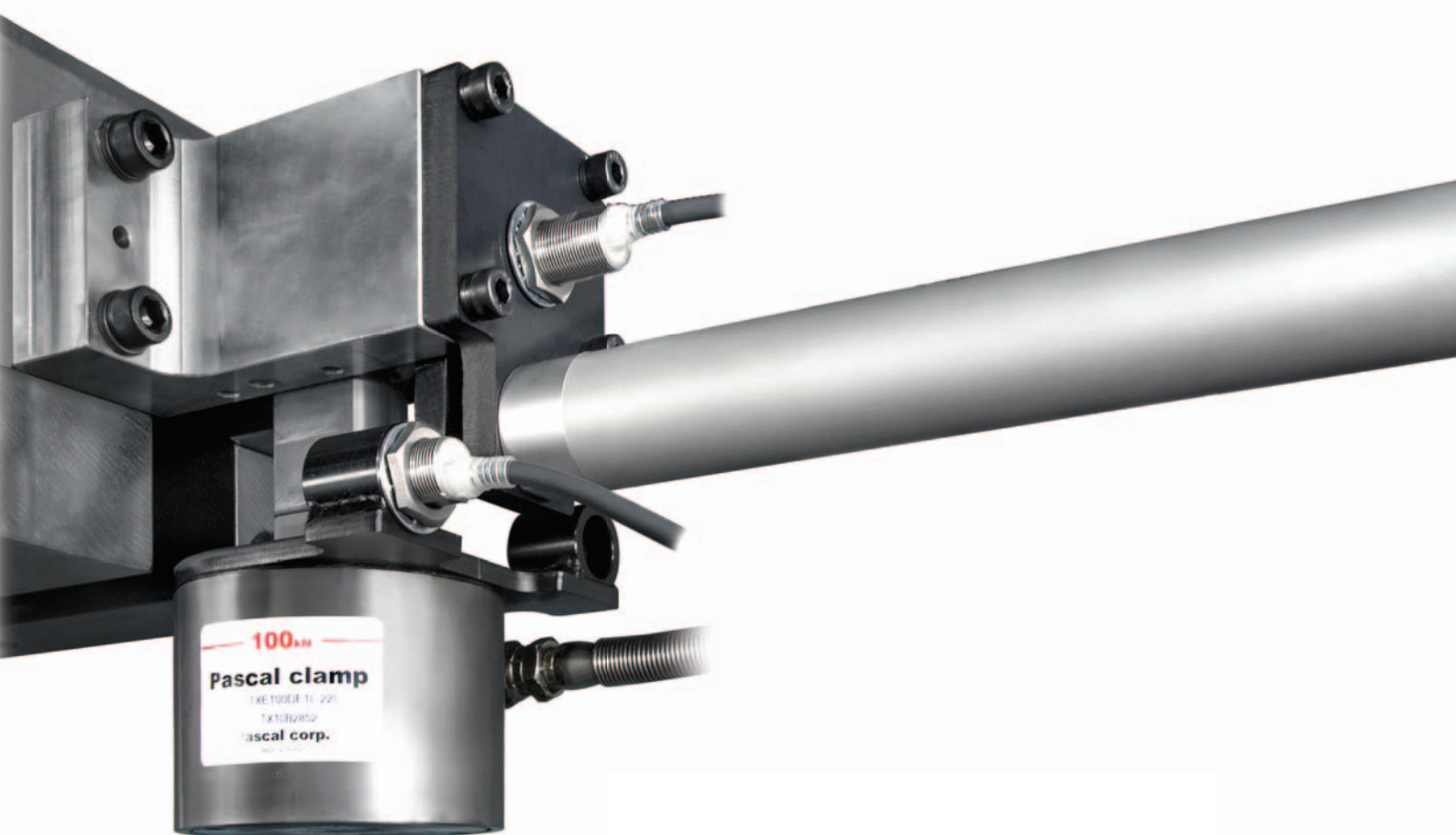




# Pascal clamp model **TXE**

Pascal clamp automatic solidable type model **TXE**

which utilizes the entire lower surface.



Automatic slidable clamp which utilizes **the entire** lower surface.

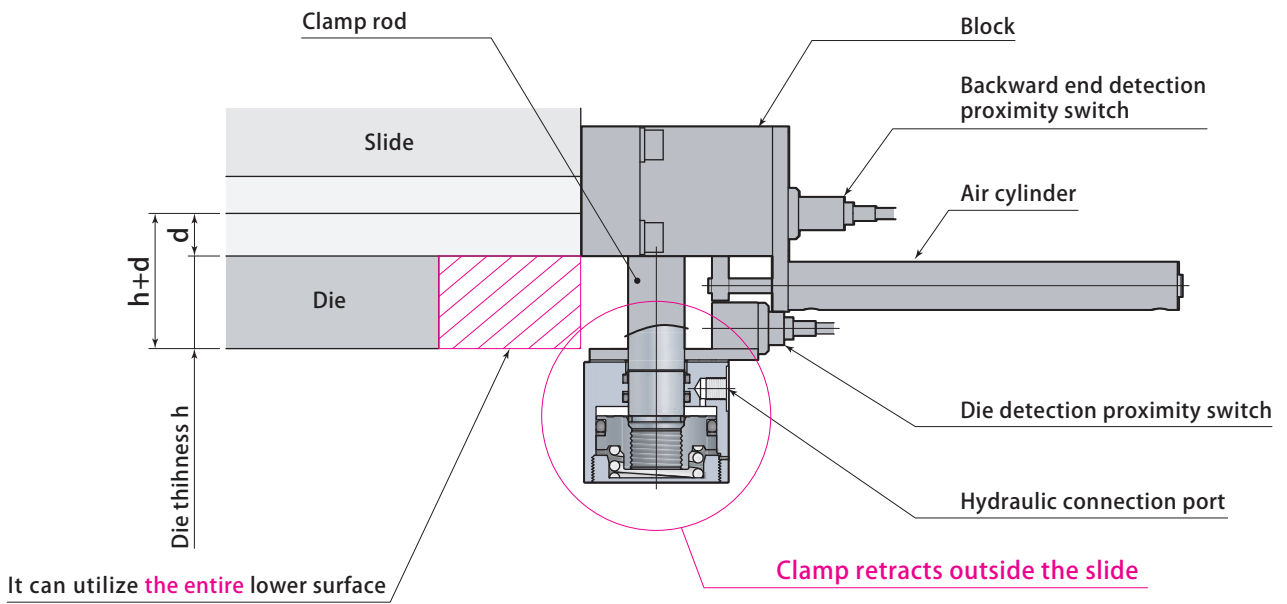


### Specifications

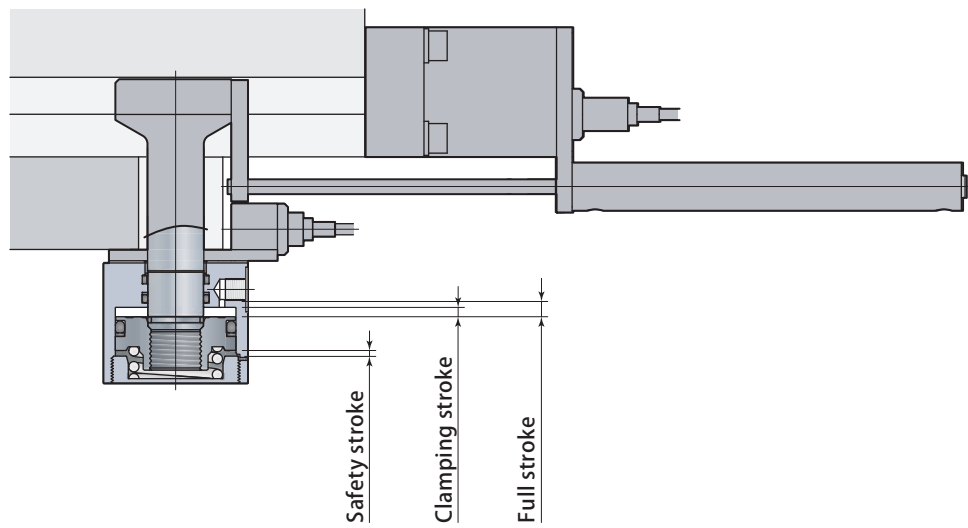
Model		TXE020	TXE040	TXE063	TXE100
Clamping force (at 24.5 MPa)	kN	19.6	39.2	61.7	98
Proof pressure	MPa	36.7			
Full stroke	mm	8			
Clamping stroke	mm	5			
Safety stroke	mm	3			
Cylinder capacity (at full stroke)	cm <sup>3</sup>	6.5	13	21	32
Operating temperature	°C	0 ~ 70 (Standard)			
Approximate weight	kg	4	5	6	9
Range of dimension a	mm	18 ~ 28	22 ~ 32		28 ~ 36
Min. h	mm	30			40
Max. h+d	mm	80	90	100	110
Tolerance of dimension d	mm	± 0.2			
Tolerance of dimension j	mm	0 ~ +1			
Tolerance of dimension h	mm	± 0.3			
Min. m	mm	15	40	45	57
Range of dimension n	mm	22 ~ 30	22 ~ 35	22 ~ 40	28 ~ 50

- Working hydraulic pressure : 24.5MPa
- Weight varies according to clamp rod dimension and existence or non-existence of sliding stroke and clamp plate.
- Specify T-slot dimensions a, b, d, j and die thickness h. For brand new machine, machine d, j and h dimensions with the tolerance shown in the above table. For existing machine, specify tolerance of 0.1mm unit on d, j and h dimensions.
- In case dimension is over Max. h+d, refer to **page** → 72 Long clamp rod type.
- Stop the press during the clamp wait.

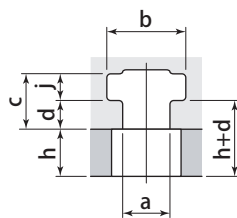
Home clamp



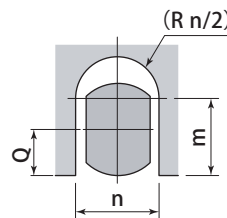
Clamp



T-slot dimension and die thickness



U-cut dimension



Model designation

TXE 063 C 0 L - 090

- 1 Clamping force
- 2 Clamp plate  
Mounting bracket
- 3 Proximity switch
- 4 Mounting position  
of die detection proximity switch
- 5 Sliding stroke (mm) \* Indicated in 3 digits

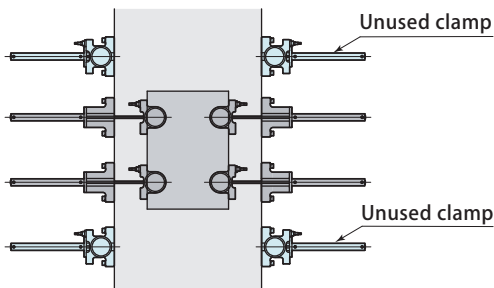
- 1 Clamping force  
TXE020 : 19.6kN  
TXE040 : 39.2kN  
TXE063 : 61.7kN  
TXE100 : 98kN

2 Clamp plate, Mounting bracket

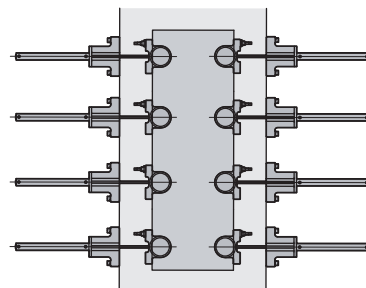
Symbol of clamp plate and mounting bracket model	B	C	D	E
Clamp plate	No attached	Attached	No attached	Attached
Mounting bracket	No attached	No attached	Attached	Attached

The clamp plate is necessary, in case each die varies to number of used clamps.

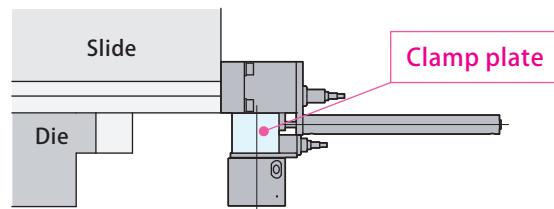
Clamping the small sized die



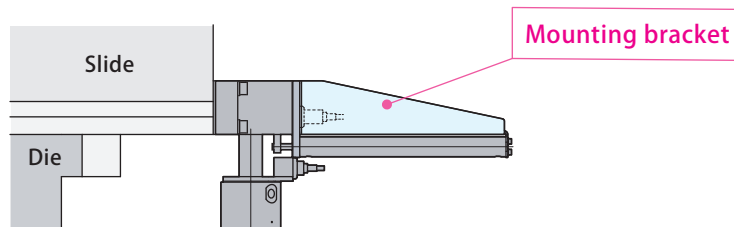
Clamping the large sized die



- If the unused clamps are forced to wait and the press is operated, the connecting part will be damaged by vibration. Therefore, specify the clamp plate and let them wait in status of clamping.



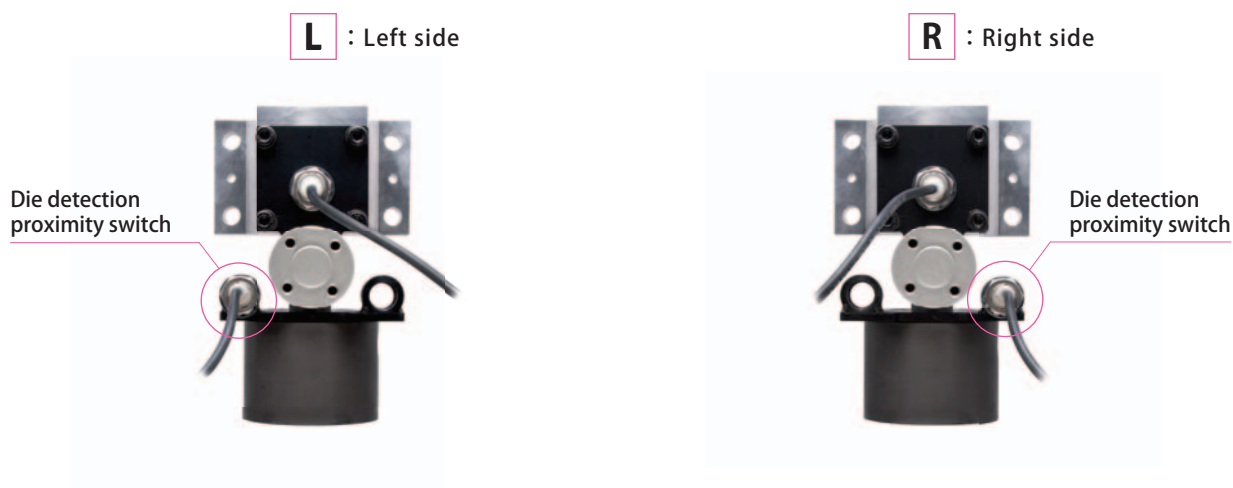
In case the sliding stroke is over 200mm, mounting bracket is necessary.



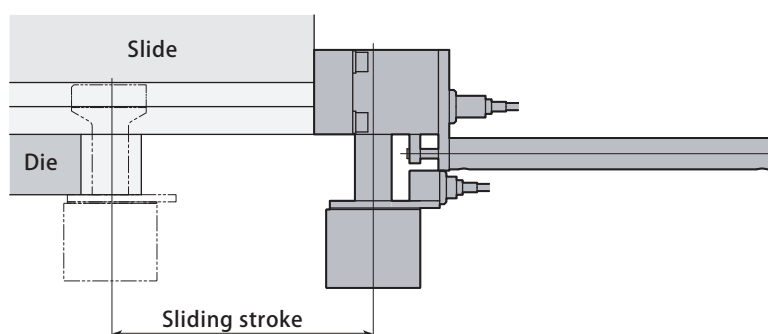
**3** Proximity switch

Symbol of proximity switch model	0	1	2	3
Specifications	DC24V 2-Wire	DC24V 3-Wire(NPN)	AC100V 2-Wire	DC24V 3-Wire(PNP)
Model	E2E-X7D1-N	E2E-X5E1	E2E-X5Y1	E2E-X5F1
Manufacturer name	OMRON			
Insulation vinyl cable length	5m			

**4** Mounting position of die detection proximity switch



**5** Sliding stroke

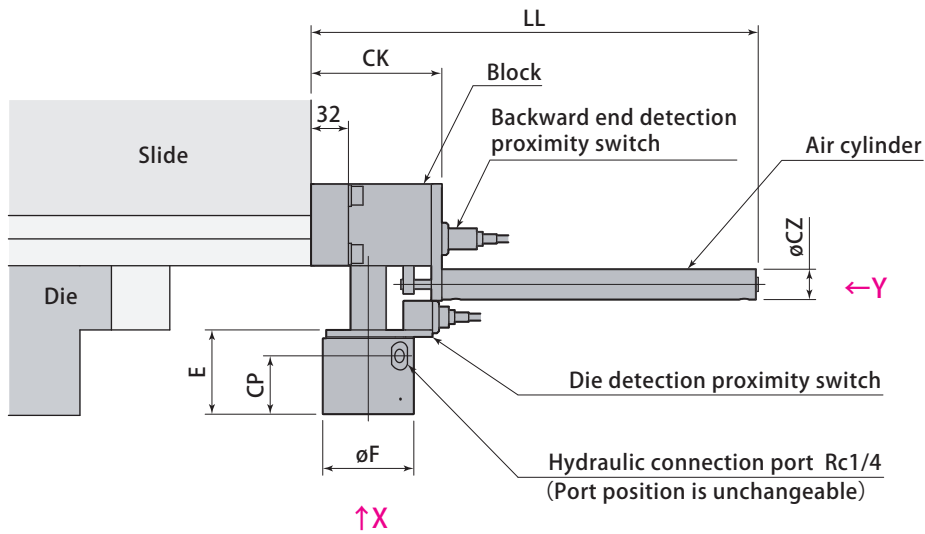


Model	TXE020	TXE040	TXE063	TXE100
Sliding stroke *	mm 50, 75, 100, 125, 150, 200, 250, 300	75, 100, 125, 150, 200, 250, 300	100, 125, 150, 200, 250, 300	100, 125, 150, 200, 250, 300
Air cylinder driven pressure	MPa	0.39 ~ 0.54		
Slide velocity	mm/s	30 ~ 100 (to be adjusted by a flow control valve)		
Air cylinder model		CG1BN20-□		CG1BN32-□
Air cylinder manufacturer		SMC		

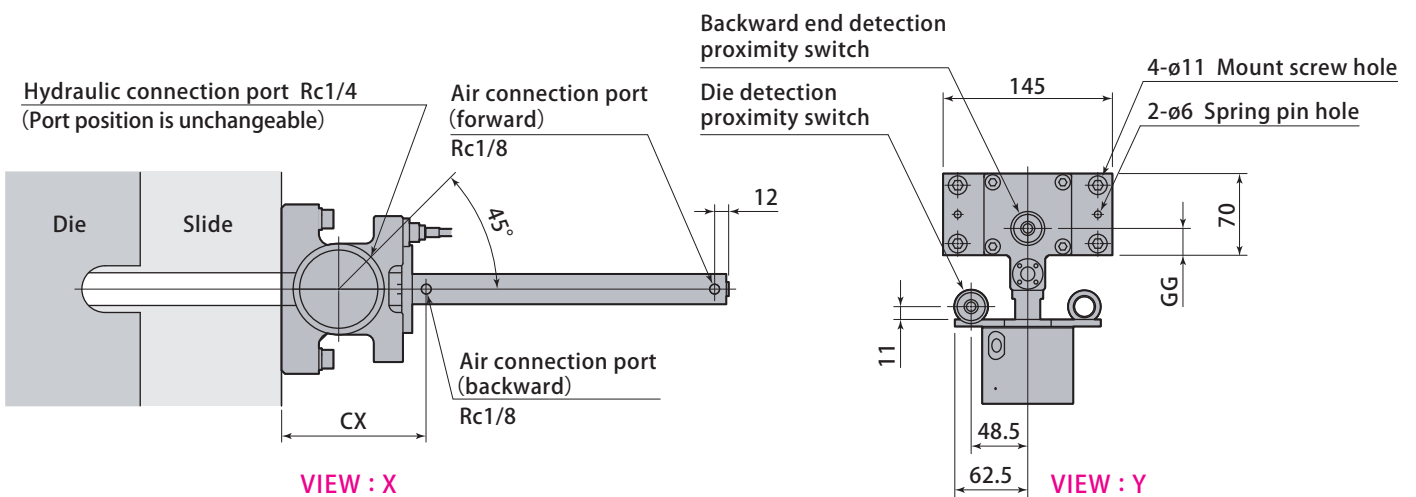
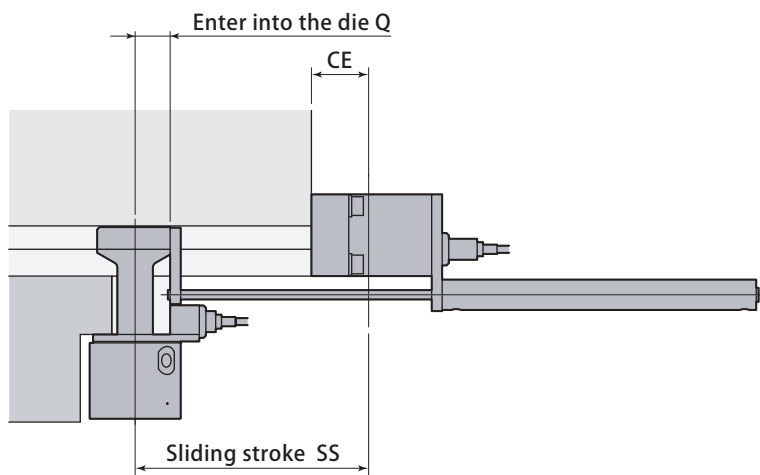
● Refer to **pages →64 ~ 70** for the details of sliding stroke.

\* Contact Pascal for the sliding stroke which is not mentioned above.

Home clamp



Clamp



● These drawings indicate : mounting position of proximity switch **L**



**B** Clamp plate : no attached  
Mounting bracket : no attached

Model designation

TXE **040** **B** **0** **L** - **075**

- 1 Clamping force
- 3 Proximity switch
- 4 Mounting position of die detection proximity switch
- 5 Sliding stroke (mm) \*Indicated in 3 digits

1 3 4 Refer to pages → 61 ~ 62

5 Sliding stroke 50 75 100 125 150 200 mm

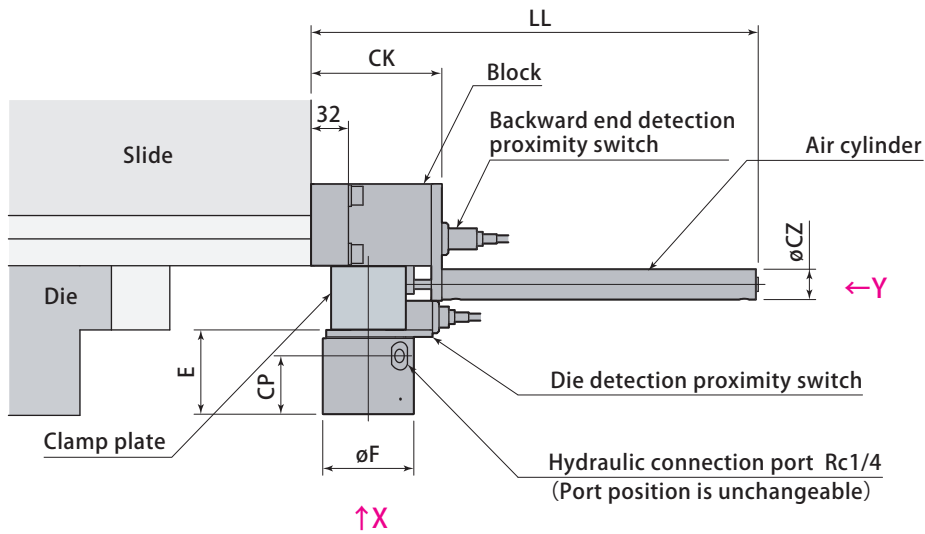
Sliding stroke SS	TXE020B	TXE040B	TXE063B	TXE100B
	Overall length LL			
50	203.5	—	—	—
75	228.5	247	—	—
100	253.5	272	283	304
125	278.5	297	308	329
150	303.5	322	333	354
200	353.5	372	383	404

External dimension

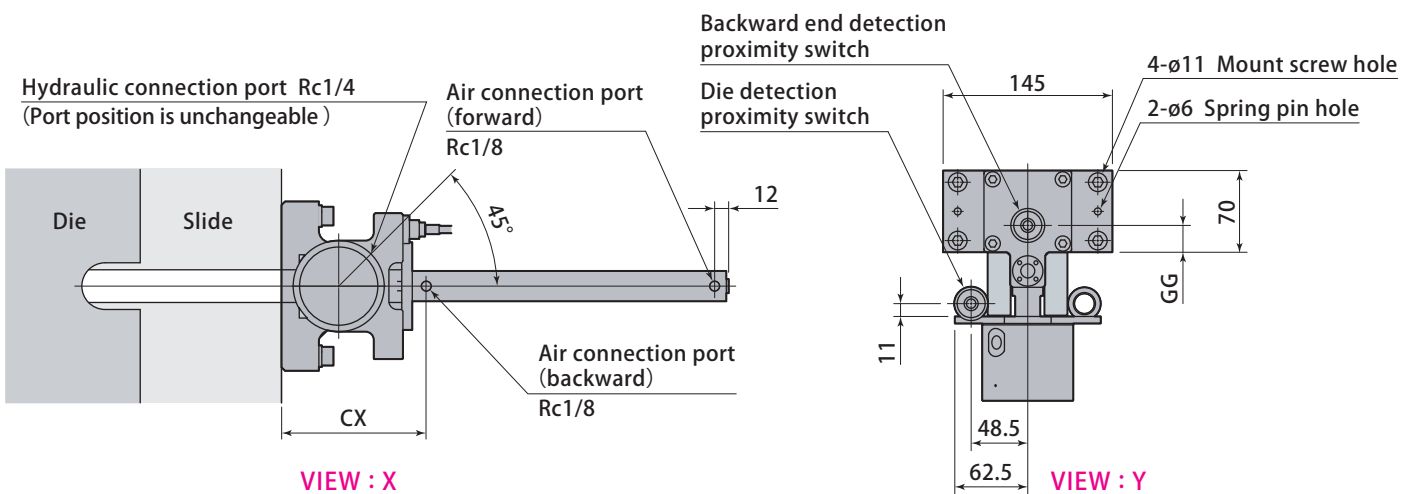
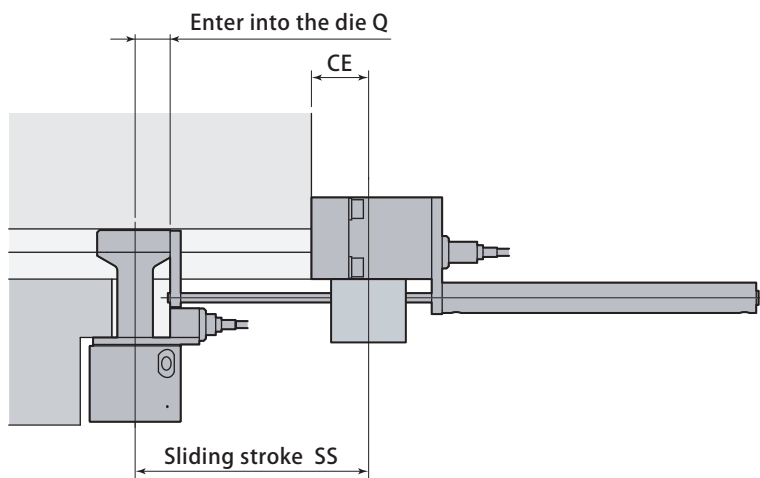
Model	TXE020B	TXE040B	TXE063B	TXE100B
∅CZ	26	26	26	38
∅F	49	62	78	98
CP	40	45.5	50	55
E	67	71	75.5	81.5
CK	82.5	101	112	131
CX	94.5	113	124	143
CE	34.5	41	49	59
Q	15	27	30	37
GG	23	23	23	29
Mount screw	4-M10 length 50			
Spring washer	4-M10			
Spring pin	2-∅6 length 45			



Home clamp



Clamp



● These drawings indicate : mounting position of proximity switch **L**

**C** Clamp plate : attached  
Mounting bracket : no attached

Model designation

TXE **040** **C** **0** **L** - **075**

- 1 Clamping force
- 3 Proximity switch
- 4 Mounting position of die detection proximity switch
- 5 Sliding stroke (mm) \* Indicated in 3 digits

1 3 4 Refer to pages → 61 ~ 62

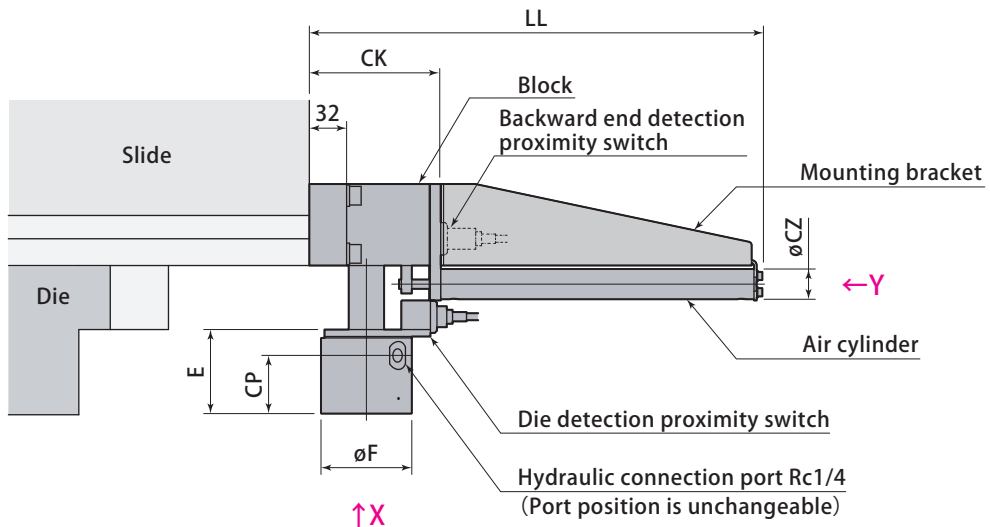
5 Sliding stroke 50 75 100 125 150 200 mm

Sliding stroke SS	TXE020C	TXE040C	TXE063C	TXE100C
	Overall length LL			
50	203.5	—	—	—
75	228.5	247	—	—
100	253.5	272	283	304
125	278.5	297	308	329
150	303.5	322	333	354
200	353.5	372	383	404

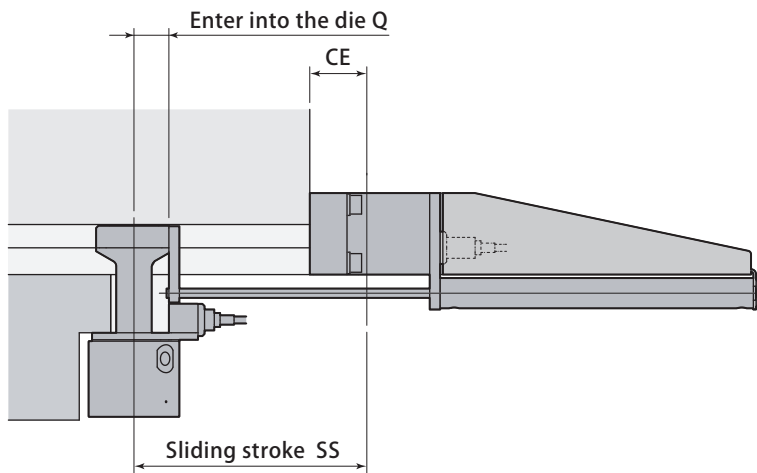
External dimension

Model	TXE020C	TXE040C	TXE063C	TXE100C
øCZ	26	26	26	38
øF	49	62	78	98
CP	40	45.5	50	55
E	67	71	75.5	81.5
CK	82.5	101	112	131
CX	94.5	113	124	143
CE	34.5	41	49	59
Q	15	27	30	37
GG	23	23	23	29
Mount screw	4-M10 length 50			
Spring washer	4-M10			
Spring pin	2-ø6 length 45			

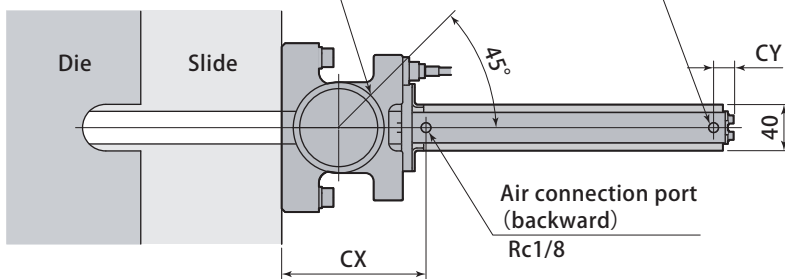
Home clamp



Clamp



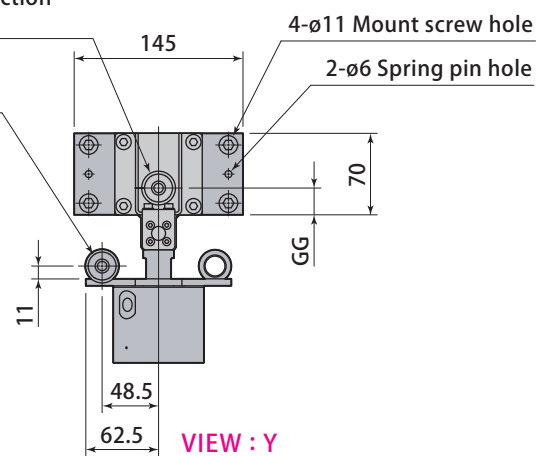
Hydraulic connection port Rc1/4  
(Port position is unchangeable)



VIEW : X

Backward end detection proximity switch

Die detection proximity switch



VIEW : Y

● These drawings indicate : mounting position of proximity switch **L**

**D** Clamp plate : no attached  
Mounting bracket : attached

Model designation

TXE **063** **D** **0** **L** - **250**

- 1 Clamping force
- 3 Proximity switch
- 4 Mounting position of die detection proximity switch
- 5 Sliding stroke (mm) \* Indicated in 3 digits

1 3 4 Refer to pages → 61 ~ 62

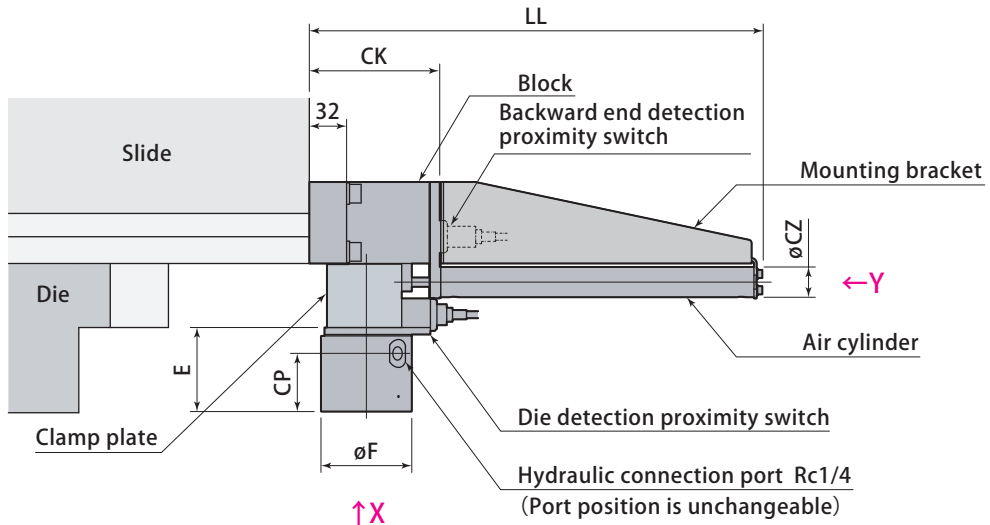
**5** Sliding stroke 250 300 mm

Sliding stroke SS	TXE020D	TXE040D	TXE063D	TXE100D
	Overall length LL			
250	417	435	446	461
300	467	485	496	511

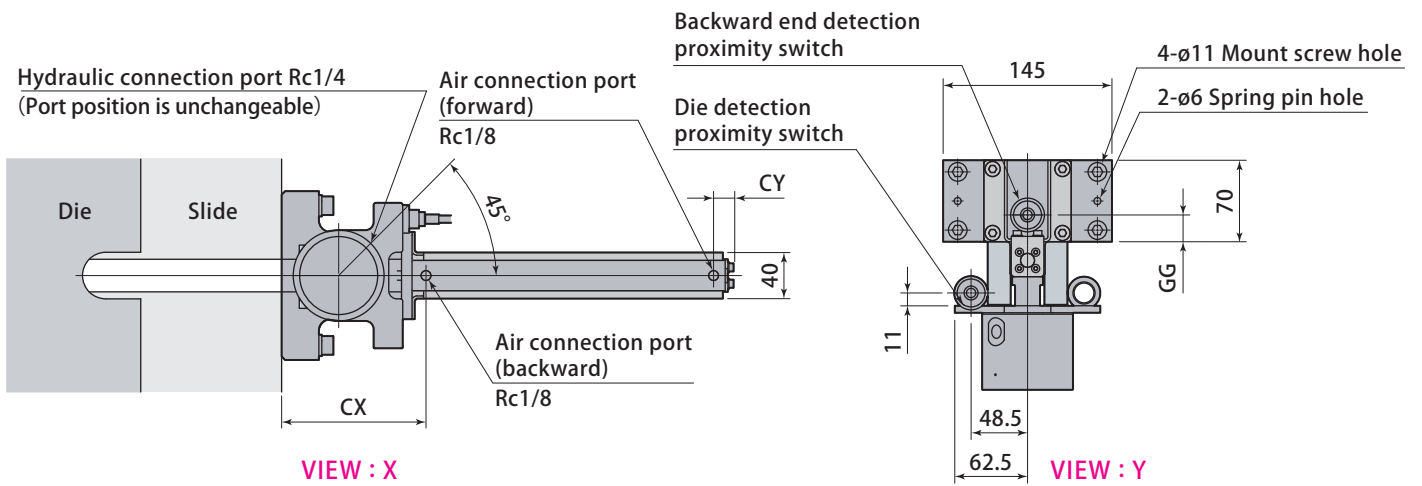
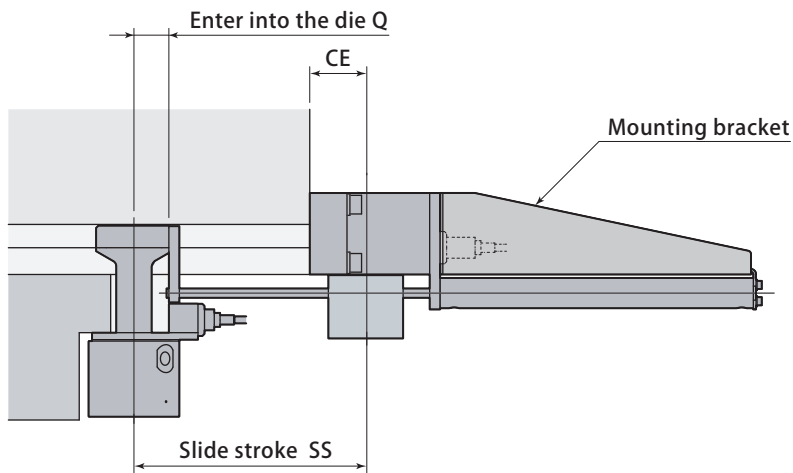
External dimension

Model	TXE020D	TXE040D	TXE063D	TXE100D
∅CZ	26	26	26	38
∅F	49	62	78	98
CP	40	45.5	50	55
E	67	71	75.5	81.5
CK	82.5	101	112	131
CX	94.5	113	124	143
CE	34.5	41	49	59
Q	15	27	30	37
GG	23	23	23	29
CY	19.2	19.2	19.2	18.6
Mount screw	4-M10 length 50			
Spring washer	4-M10			
Spring pin	2-∅6 length 45			

Home clamp



Clamp



● These drawings indicate : mounting position of proximity switch **L**

**E** Clamp plate : attached  
Mounting bracket : attached

Model designation

TXE **063** **E** **0** **L** - **250**

- 1 Clamping force
- 3 Proximity switch
- 4 Mounting position of die detection proximity switch
- 5 Sliding stroke (mm) \* Indicated in 3 digits

1 3 4 Refer to pages → 61 ~ 62

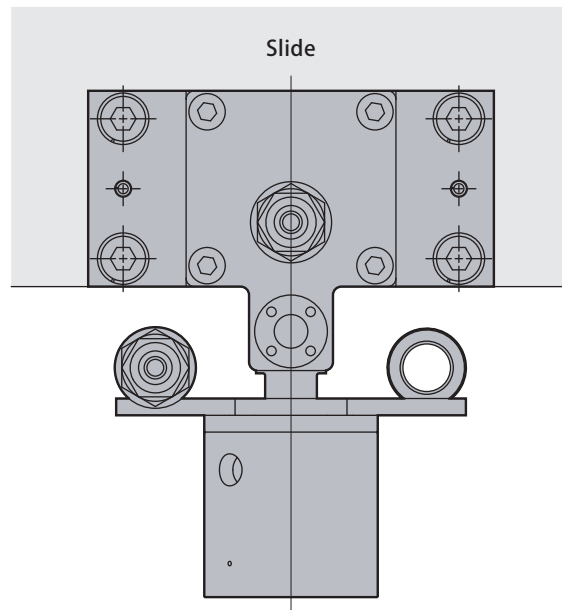
5 Sliding stroke 250 300 mm

Sliding stroke SS	TXE020E	TXE040E	TXE063E	TXE100E
	Overall length LL			
250	417	435	446	461
300	467	485	496	511

External dimension

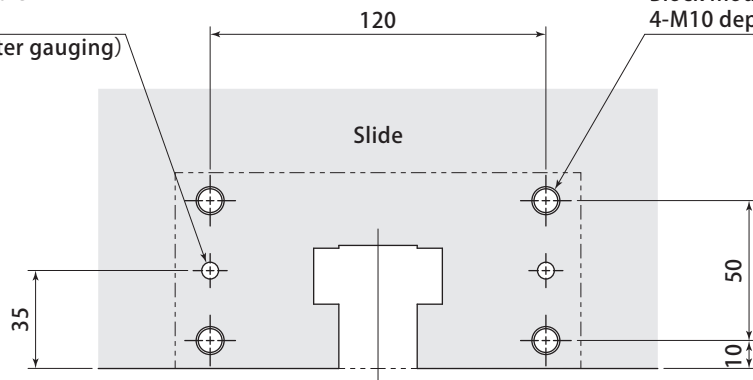
Model	TXE020E	TXE040E	TXE063E	TXE100E
øCZ	26	26	26	38
øF	49	62	78	98
CP	40	45.5	50	55
E	67	71	75.5	81.5
CK	82.5	101	112	131
CX	94.5	113	124	143
CE	34.5	41	49	59
Q	15	27	30	37
GG	23	23	23	29
CY	19.2	19.2	19.2	18.6
Mount screw	4-M10 length 50			
Spring washer	4-M10			
Spring pin	2-ø6 length 45			

Mounting details



Block mounting hole  
2-6 depth12  
(Co-machining after gauging)

Block mounting hole  
4-M10 depth20



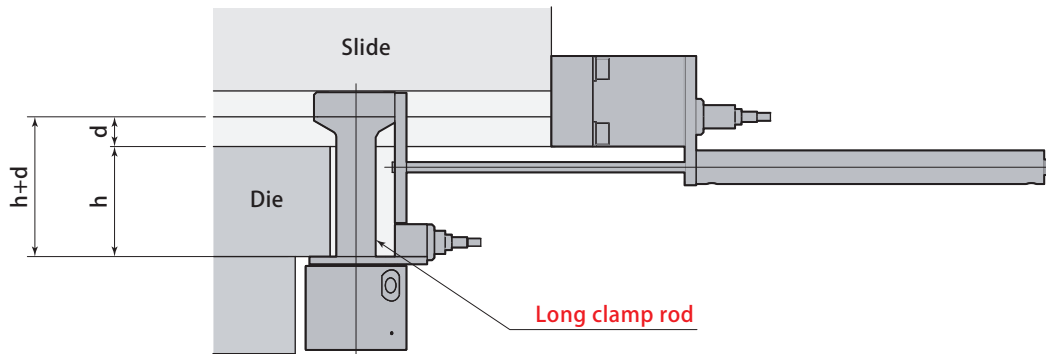
**H Long clamp rod type** It is applied in case the die thickness is over the standard.

Model designation

TXE **040** **C** **0** **L** - **075** - **H**

- 1 Clamping force
- 2 Clamp plate  
Mounting bracket
- 3 Proximity switch
- 4 Mounting position  
of die detection proximity switch
- 5 Sliding stroke (mm)

1 2 3 4 5 Refer to pages → 61 ~ 62



Model	TXE020	TXE040	TXE063	TXE100
$h+d$	$h+d > 80$	$h+d > 90$	$h+d > 100$	$h+d > 110$

mm

**V Heat proof type** It is applied under condition that the die and its surroundings are in high temperature.

Model designation

TXE **040** **C** **0** **L** - **075** - **V**

- 1 Clamping force
- 2 Clamp plate  
Mounting bracket
- 3 Proximity switch
- 4 Mounting position  
of die detection proximity switch
- 5 Sliding stroke (mm)

1 2 3 4 5 Refer to pages → 61 ~ 62

● The operating ambient temperature of heat proof type is 5-120°C.