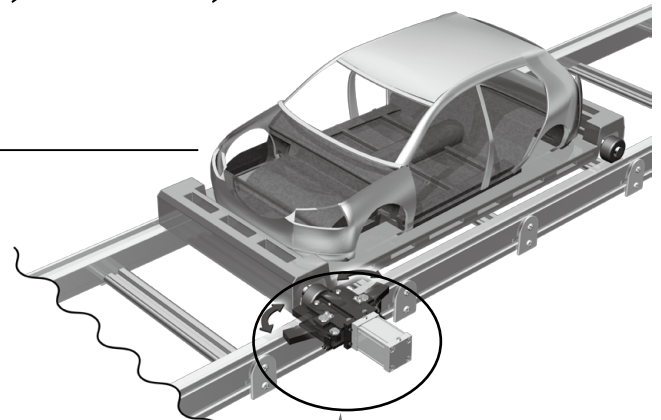


For post-stoppage positioning and locking of carriers, line pallets, carts, etc.

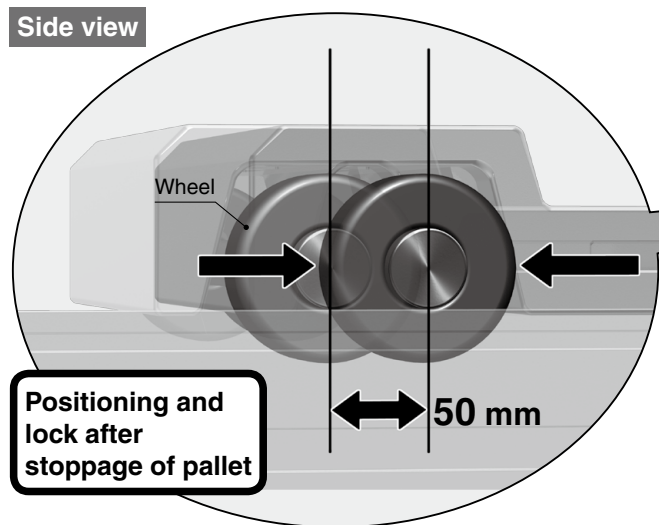
Pallet Lock Cylinder

■ Centering applied to correct positional deviation of up to ± 50 mm

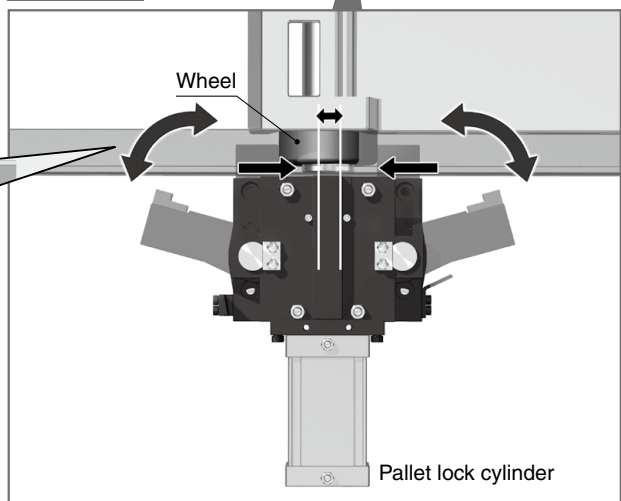
■ Through the toggle mechanism, max. clamping force of **4430 N**



Side view



Top view

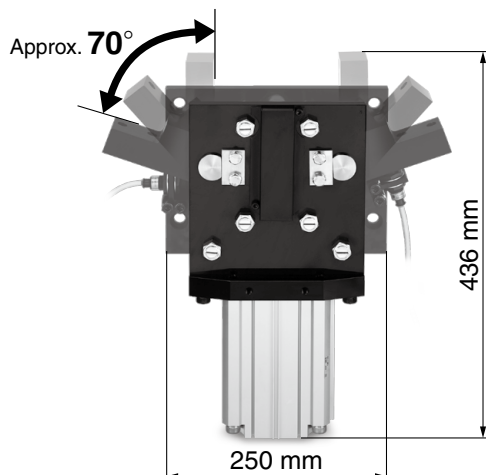


■ Arm opening angle: Approx. 70°

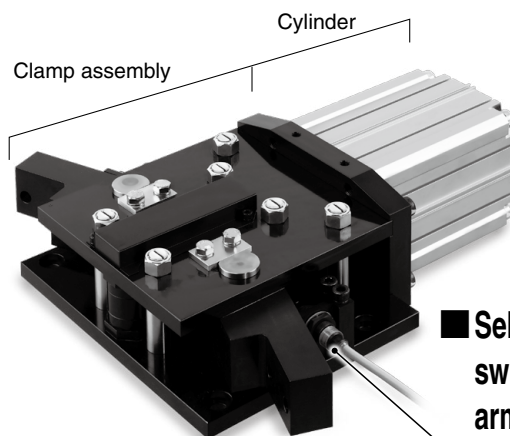
A wide arm opening angle prevents contact with the workpiece.

(Cylinder sliding is not necessary.)

* Values for W-R1 Series



■ Integration of the clamping unit and cylinder unit reduces design and assembly labor



■ Selectable proximity switch for checking arm operation (Option)

■ Selectable when the mass of the transferred object is either 1000 kg or 3000 kg, with consideration given to the impact during positioning

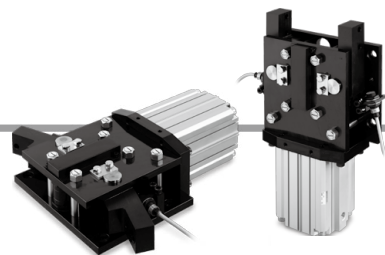
W-R1/W-R3 Series



Pallet Lock Cylinder

W-R1/W-R3 Series

How to Order



Type 1

W-R1-S2-B

Type 3

W-R3-S-B

● Proximity Switch

B	With mounting bracket (Without proximity switch)
SC	With proximity switch

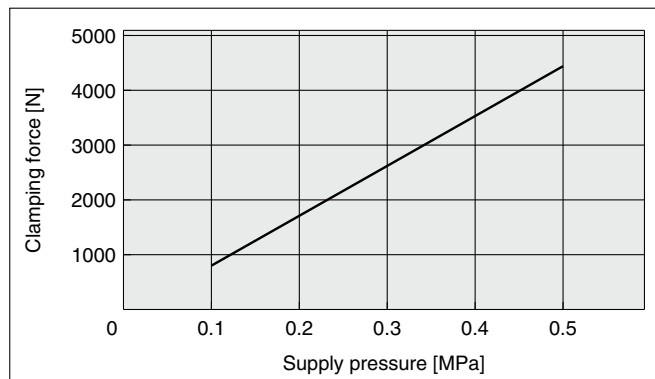
* For details, refer to the table below.

Specifications

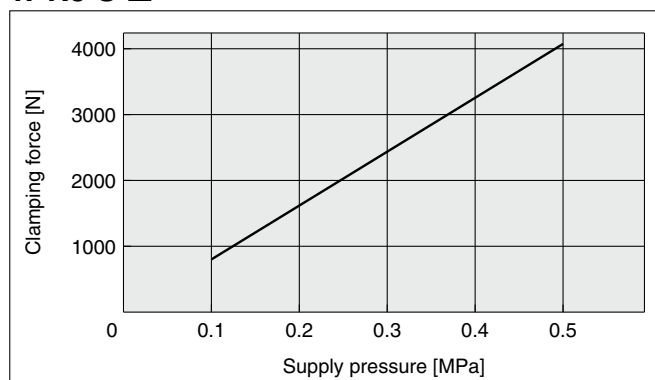
Type	Type 1	Type 3
Mass of transferred object	1000 kg or less	3000 kg or less
Possible amount of positional correction	±50 mm or less	
Clamping force	4430 N	4070 N
Operating time	1.0 s or more	0.8 s or more
Cylinder operation stroke	83.5 mm	140 mm
Bore size	100 mm	
Cylinder proof pressure	1 MPa	
Max. operating pressure	0.49 MPa Non-lube	
Ambient temperature	5 to 60°C	
Piston rod size	30 mm	
Weight	28 kg	35 kg

Clamping Force

W-R1-S2-□

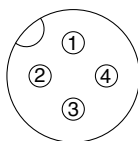


W-R3-S-□



Proximity Switch Specifications/Maker: OMRON Corporation

Model	E2E-X7D1-M1J-T10.3M
Voltage range	10 to 30 VDC {Allowable ripple: 10% or less (P-P)}
Temperature range	-25 to 70°C (with no freezing or condensation)
Humidity range	35 to 95%RH
Light	Lights up green when turned ON
Connector size	M12 x 1



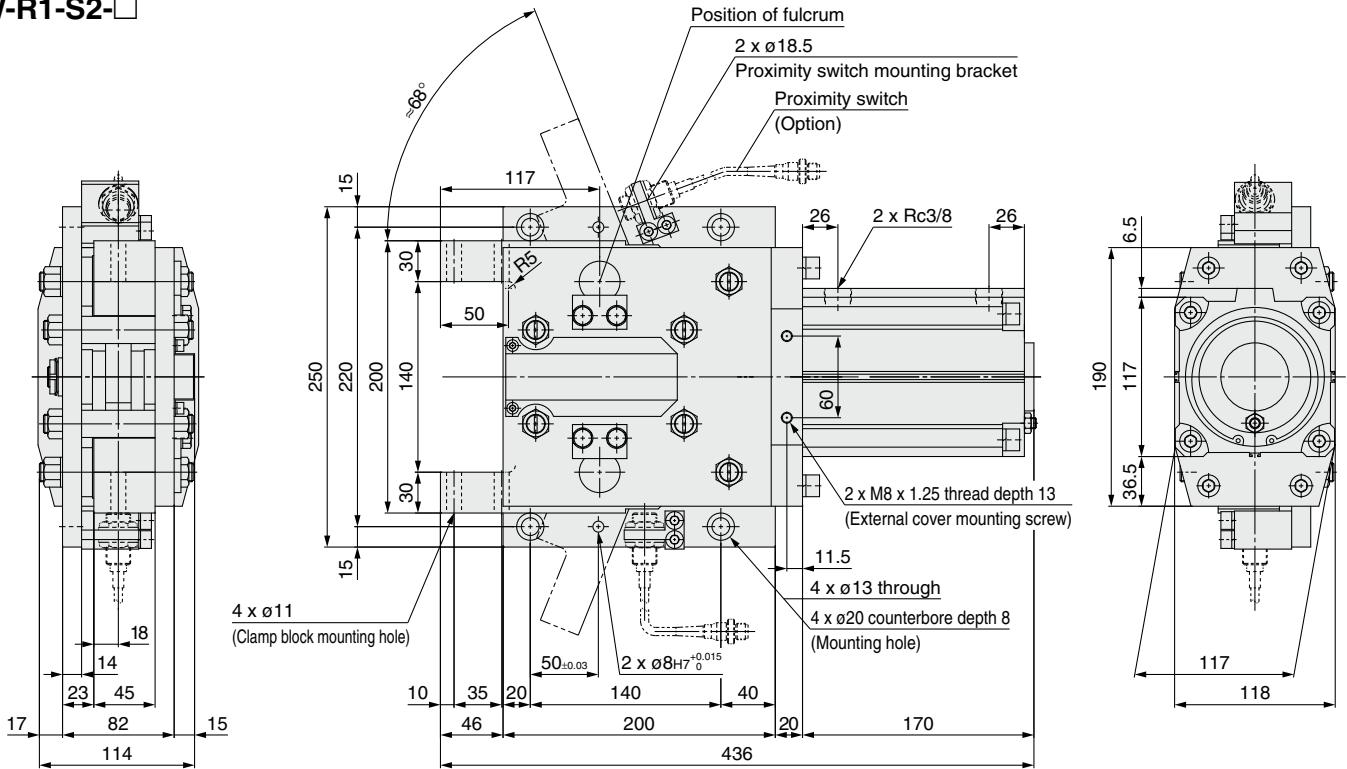
Connector pin arrangement

Type	Connector pins and arrangement			
	1	2	3	4
E2E-X7D1-M1J-T10.3M	—	—	OUT (⊕)	OUT (⊖)

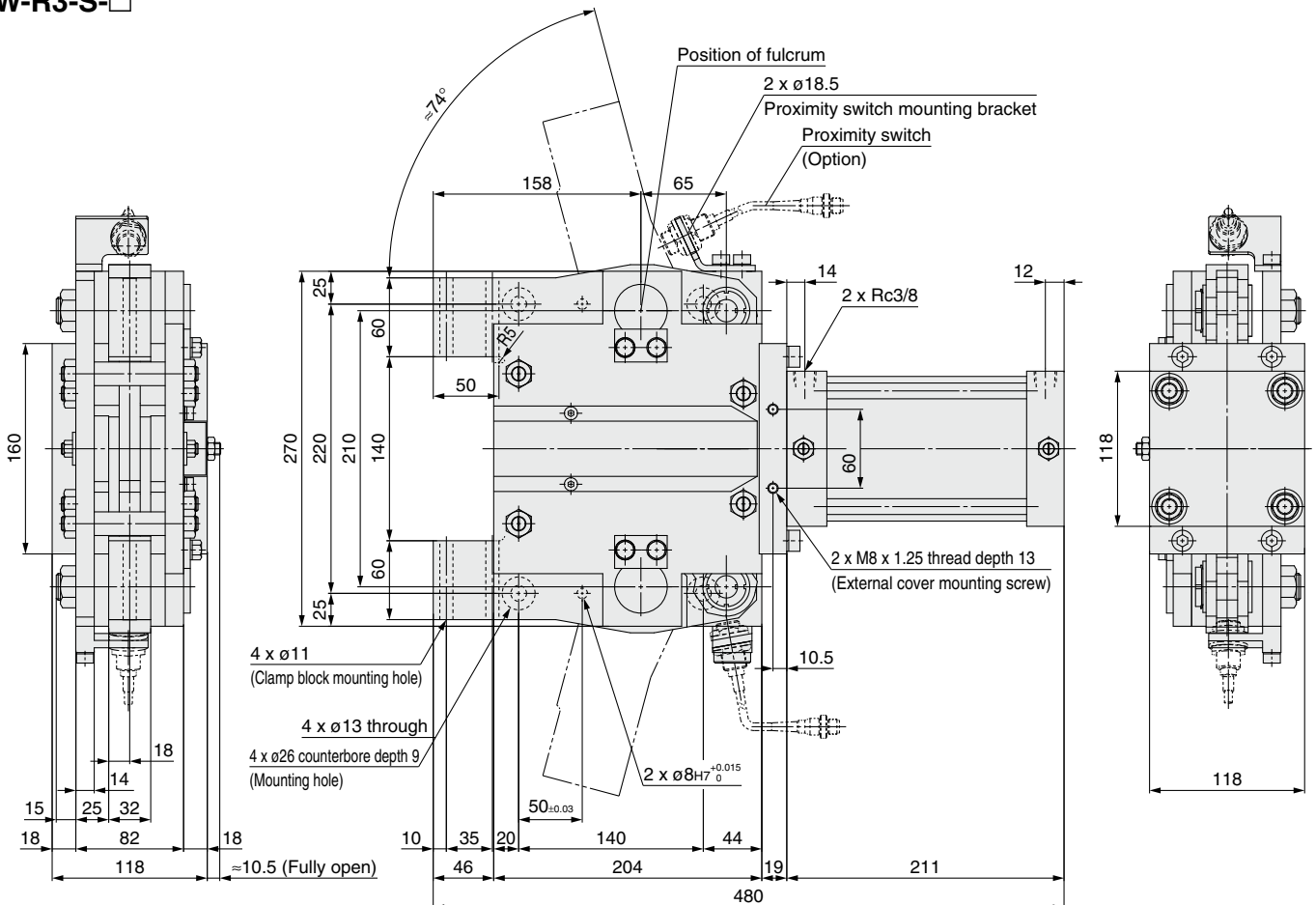
Pallet Lock Cylinder *W-R1/W-R3 Series*

Dimensions

W-R1-S2-□



W-R3-S-□





W-R1/W-R3 Series

Specific Product Precautions

Be sure to read this before handling the products. For safety instructions, refer to the "Handling Precautions for SMC Products" and the "Operation Manual" on the SMC website: <http://www.smcworld.com>

Handling Precautions

Warning

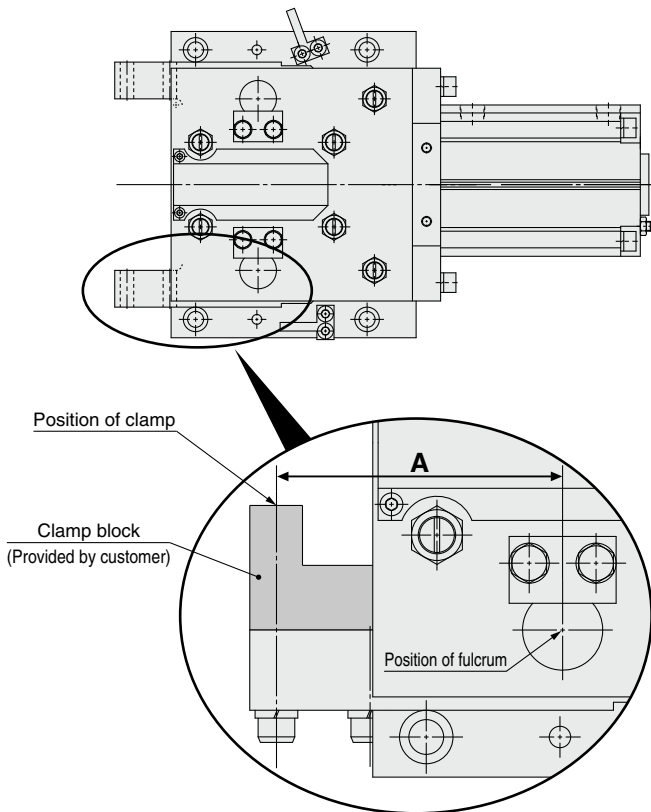
1. Affix a safety cover in places where there is a danger of personal injury.

A large gripping force is generated during clamping. If there is a possible pinching hazard, design the structure to avoid contact with the human body.

Caution

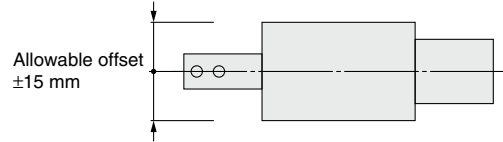
1. Avoid using material handling equipment in a way that applies torsion, inertial force, or impact.
2. Use the product under air pressure of up to 0.49 MPa.
3. Make sure that the clamp arm length is not longer than the lengths shown below.

	W-R1-S	W-R3-S
Arm length A	109.5 mm	150.5 mm



Caution

4. Make sure that the offset of the clamping position is within ± 15 mm as shown in the figure below.



Warning Safety Instructions Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and "Operation Manual" before use.