

7MPa

Auto coupling system

Pal coupler

Pal coupler SOCKET MODEL(FEMALE)
model **WVP-2MSH**



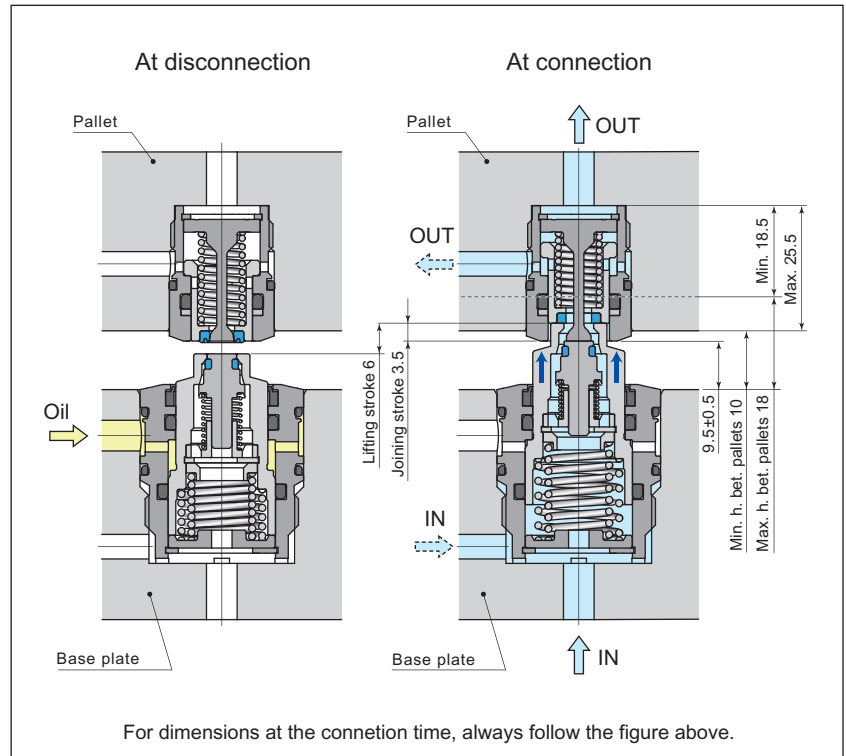
Pal coupler PLUG MODEL(MALE) LIFT UP TYPE
model **WVP-2MDL**

Pascal

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Pamphlet PA-258E REV.0 2009.08



Mounting tool (option)		model WVP-2M□J	
	Model (Mounting tool)	WVP-2MDJ	WVP-2MJ
	A	25	15
	B	2	1.5
	C	36	22
F	27	15	
Model (coupler)	WVP-2MDL	WVP-2MSH	

- Pallet change without reaction force can be done due to lifting up the plug side to the socket side at the time of pallet clamping.
- Bottom or side. Two ways are available in piping at customer's convenience.
- Specially designed seal at the edge prevents the spill of residual oil out of the circuit as well as the intrusion of coolant at the time of disconnection
- Both oil and air can be used due to the antirust treatment.
- No build-in filter in the structure

Max. working pressure	7 MPa
Proof pressure	10.5 MPa
Fluid used ※1	Normal operating oil, Air
Downward lifting force (See Note 5)	2 MPa
Upward lifting force (See Note 5)	0.5 MPa
Max. working lift-up force	7 MPa
Orifice area	12.6 mm ²
Allowable misalignment	±0.5 mm
Allowable gradient	Less than 0.3°
Reaction force ※2	113 N per 1MPa pressure Max. spring force 40 N at 0 MPa pressure
Operating temperature	0 ~ 70 °C
Mass	WVP-2MDL: 140 g / WVP-2MSH: 40 g

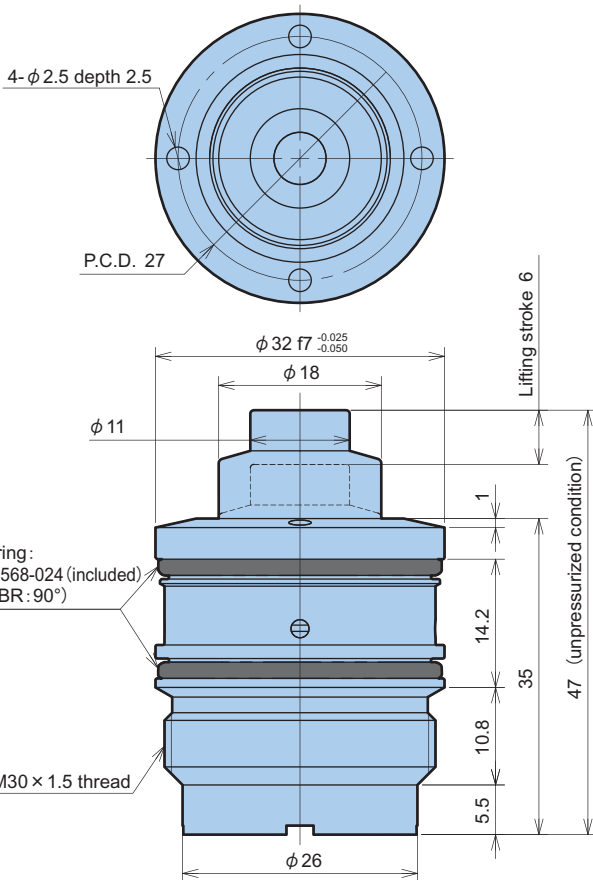
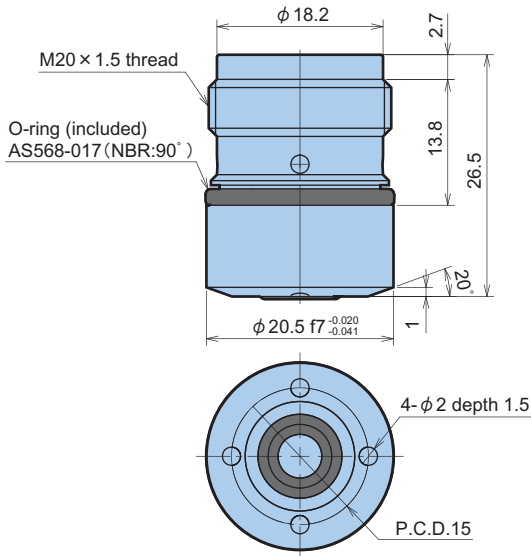
※1: Lift-up action should be used by hydraulic pressure.

※2: Reaction force(N) = Fluid pressure(MPa) × 113 + 40

Pal coupler

WVP-2MSH SOCKET MODEL

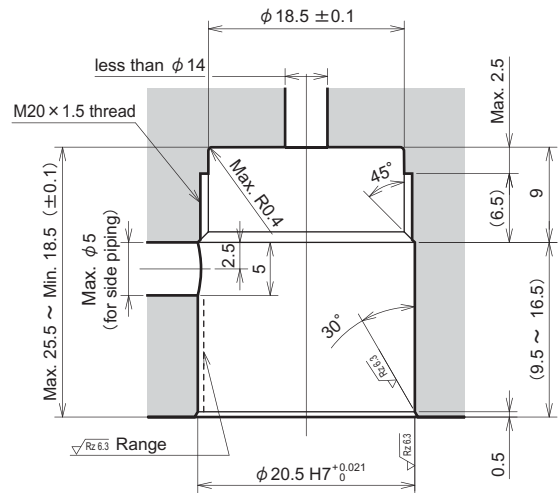
Recommended tightening torque: 25 N·m



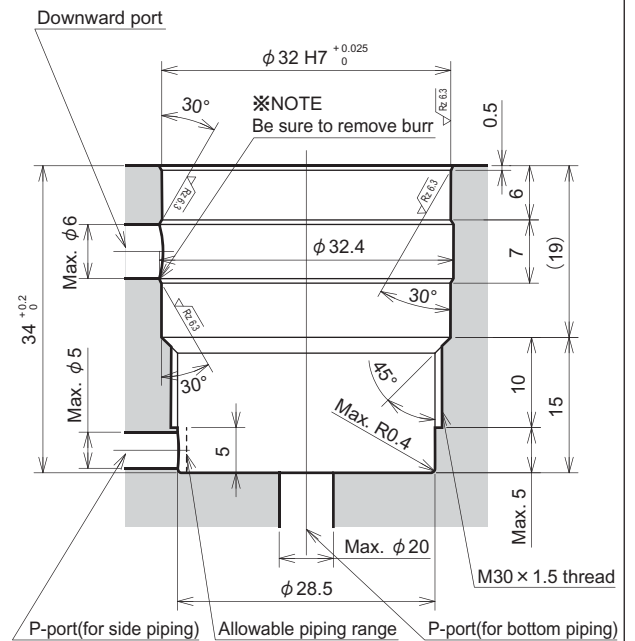
WVP-2MDL PLUG MODEL (LIFT UP TYPE)

Recommended tightening torque: 35 N·m

Mounting details
WVP-2MSH



Mounting details
WVP-2MDL



Note 1 : Do not connect/disconnect under pressure, or the fluid will be sprayed out.

2 : Pressurization with Max. working pressure 7MPa can be done to the P-port of model WVP-2MDL at disconnected condition, however the coupler lifts up.

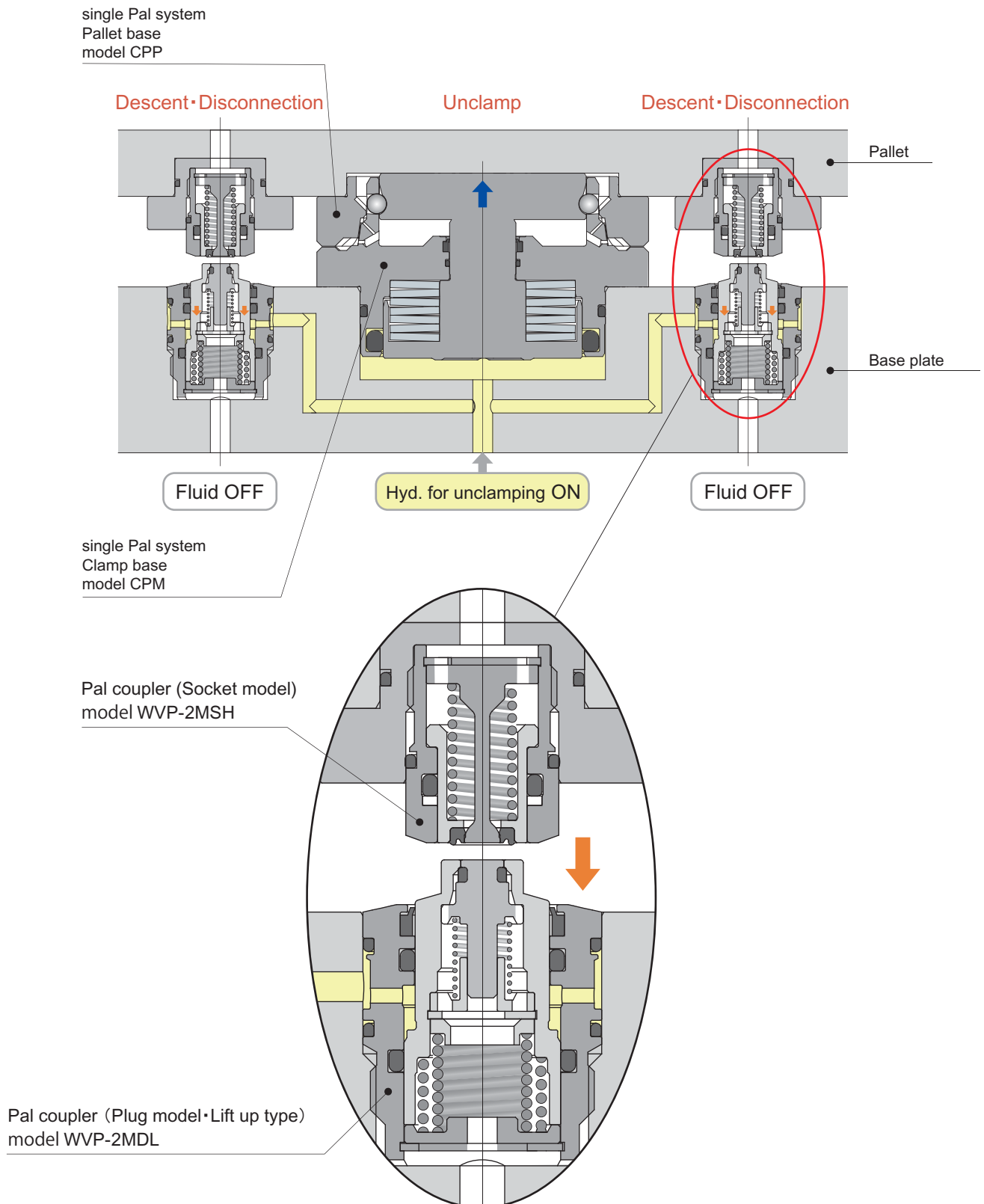
3 : Carry out sufficient air bleeding out of the circuit at the time of installation.

4 : Do not connect while chips or coolant are adhering to the edge of the coupler.

5 : The plug goes down by pressurizing the downward port in the range of 0.5MPa to 2MPa, and goes up by spring force.

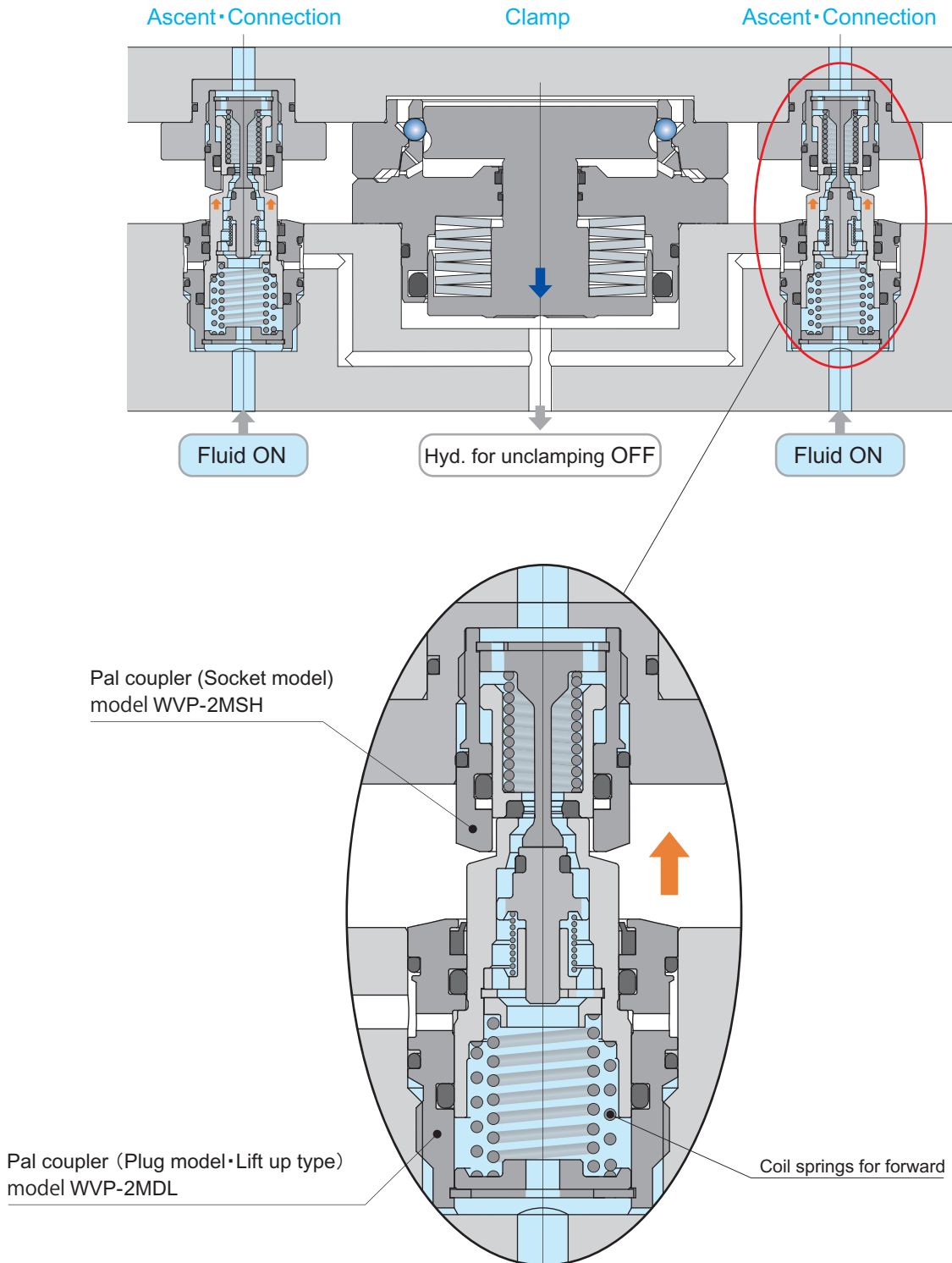
Coupling action (coordinated with Pal system)

① Loading the pallet



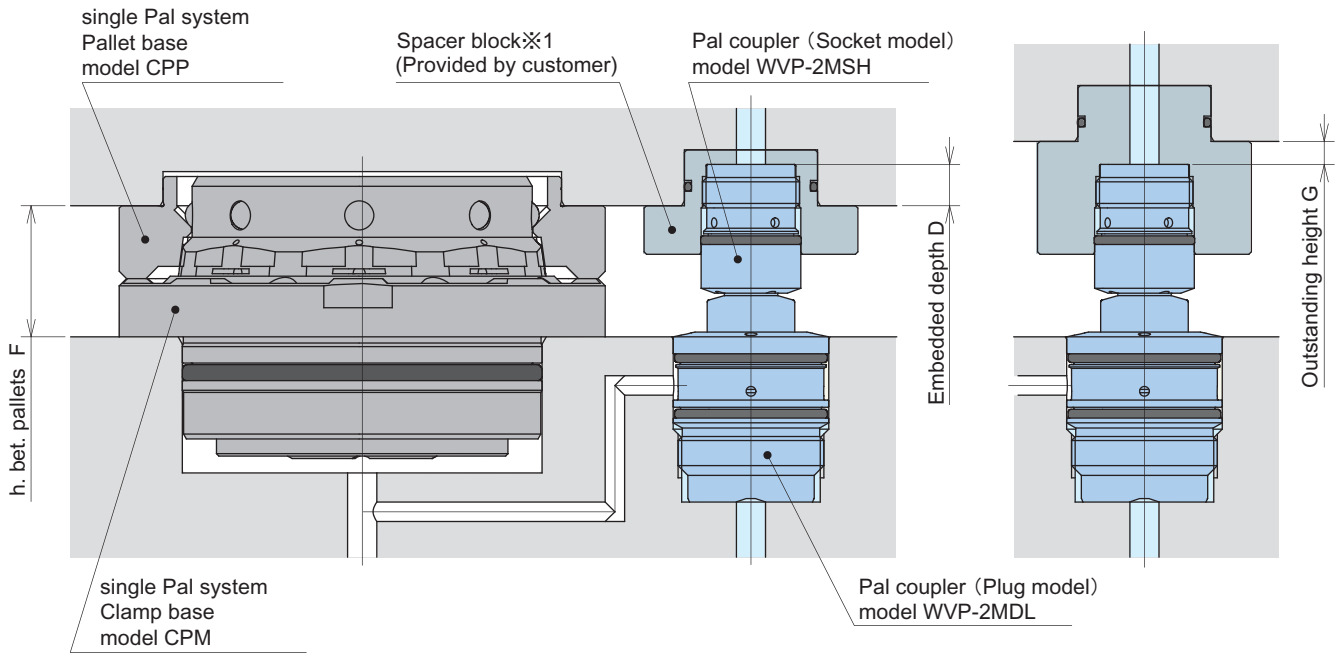
The plug of the Pal coupler goes down by hydraulic pressure for unclamping at the time of the pallet unclamping.

② Ascent of the coupler • Connection



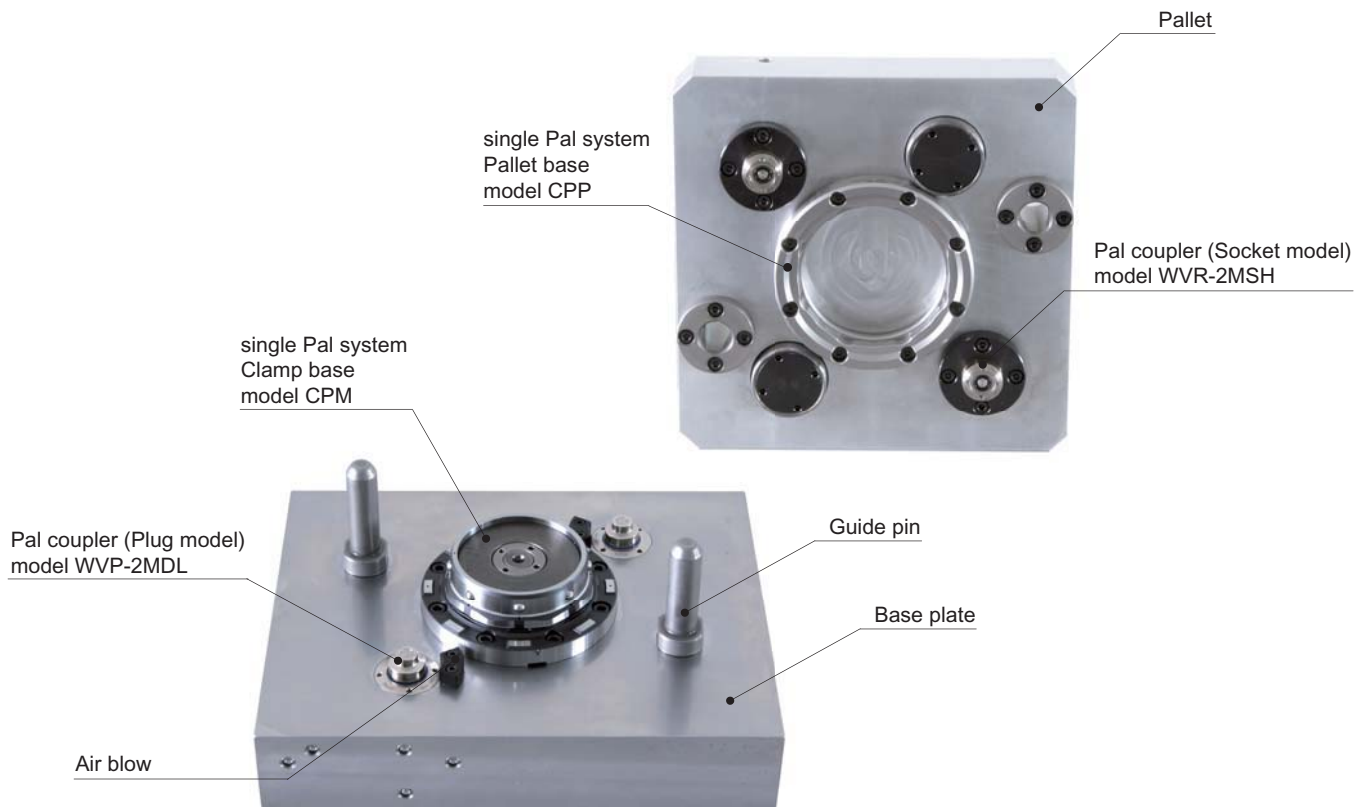
The plug of the Pal coupler goes up and joins by springs force at the time of the pallet clamping, while the hydraulic pressure for unclamping is not supplied.

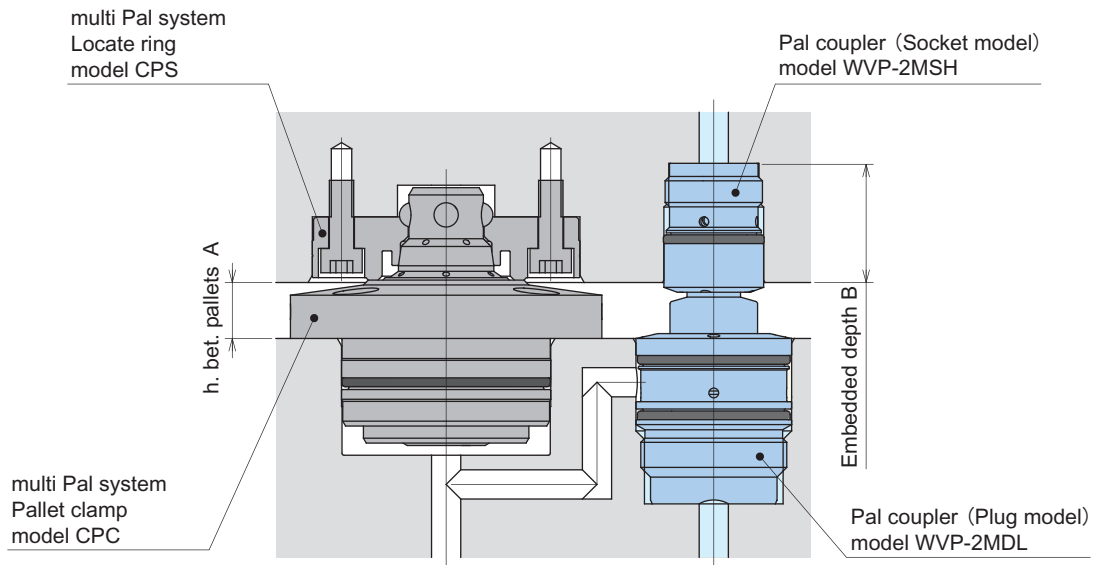
Installation for Pal coupler + single Pal system



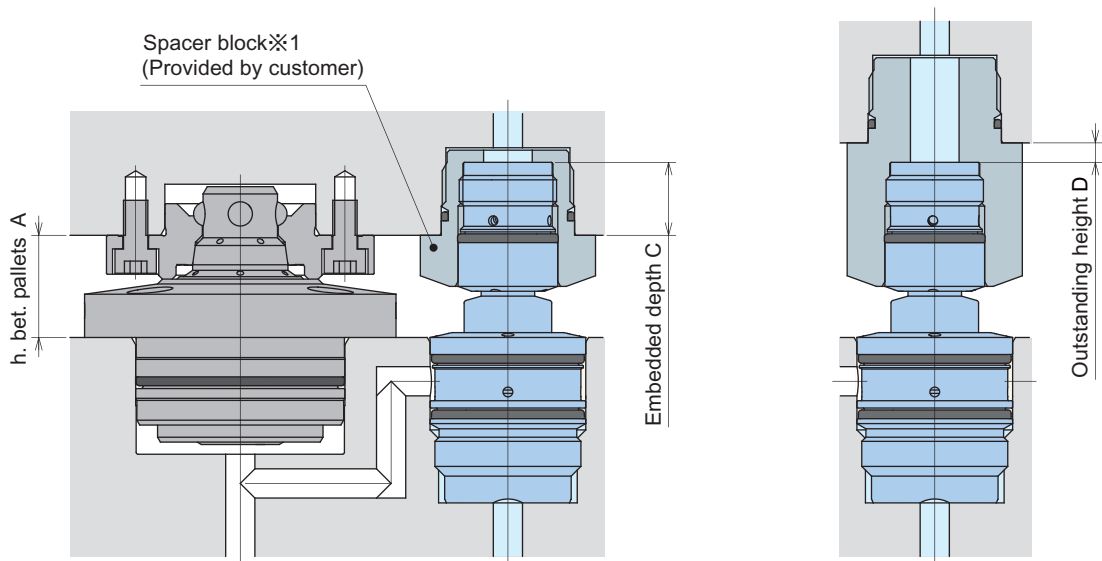
Model (Clamp base)	CPM-100	CPM-125	CPM-160	CPM-200
Model (Pallet base)	CPP-100	CPP-125	CPP-160	CPP-200
D	9	2	—	—
F	27	34	41	51
G	—	—	5	15

※1: Adjust the height between pallets with a spacer block (Provided by customer).





Model (Pallet clamp) Model (Locate ring)	CPC-□03F CPS-□03T/D	CPC-□06F CPS-□06T/D	CPC-□10F CPS-□10T/D	CPC-□16F CPS-□16T/D
A	11.5	12.5	14.5	17.5
B	24.5	23.5	21.5	18.5



Model (Pallet clamp) Model (Locate ring)	CPC-□03F CPS-□03F	CPC-□06F CPS-□06F	CPC-□10F CPS-□10F	CPC-□16F CPS-□16F
A	21	22.5	26.5	32.5
C	15	13.5	9.5	3.5

Model (Pallet clamp) Model (Locate ring)	CPC-□25F CPS-□25T/D	CPC-□25F CPS-□25F	CPC-□40F CPS-□40T/D	CPC-□40F CPS-□40F
A	21.5	40	27.5	51
C	14.5	—	8.5	—
D	—	4	—	15

※1: Adjust the height between pallets with a spacer block (Provided by customer).

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