

## FOUP- and Autodoor FOSB-Opener

For safe and simple opening and locking of FOUPs (front Opening Unified Pods) and FOSBs (front Opening Shipping Boxes) for the wafer transport inside and outside of clean rooms, Hirata Robotics offers FOUP and Autodoor FOSB Opener KWF-12C. It is developed from clean room materials and for FOUPs and FOSBs with wafer sizes of 200 mm (8 inch) and 300 mm (12 inch).



Power supply	DC24V±5%
Required electric capacitance	4.8 A
Vacuum air pressure	-40 kPa (≤ 1.0 l/min, connection diameter ø 6)
Compressed air pressure	Not required
Exhaust	Not required

Application	200 mm and 300 mm FOUP/Autodoor FOSB (SEMI standard compliant)						
Name	FOUP Opener/Autodoor FOSB-Opener						
Model	KWF-12C						
External dimensions	1386H x 470W x 548D (Total height x Total width x Depth)						
Main body weight	54 kg						
Sound level	≤ 70 dB(A)						
Mechanism		Raising/ lowering	Dock sliding	Clamp	Latch open/ close	Door shunt	Mapping driver
	Drive	AC servo motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Motor output	50W	3.5W	4.2W	4.5W	3.5W	2W
	Speed reduction mechanism	Ball screw	Gear	Gear	Gear	Gear	Gear
	Movement stroke	387mm	70mm	26.5°	90°	40mm	33mm
Fan (Revolution detective)	DC24V/10W Air volume 3.3m <sup>3</sup> /min						
Detection function	FOUP detection	Detection of FOUP presence and load status			Transmission optical sensor		
	Wafer protrusion	Carrier wafer protrusion detection			Transmission optical sensor		
	Hand-pinch	Detection of obstructions during docking			Transmission optical sensor		
	Mapping (optional)	Detection of wafers in FOUP			Transmission optical sensor		
Operation cycle	Opening: 9 sec/Closing: 9 sec (excluding mapping time)						

