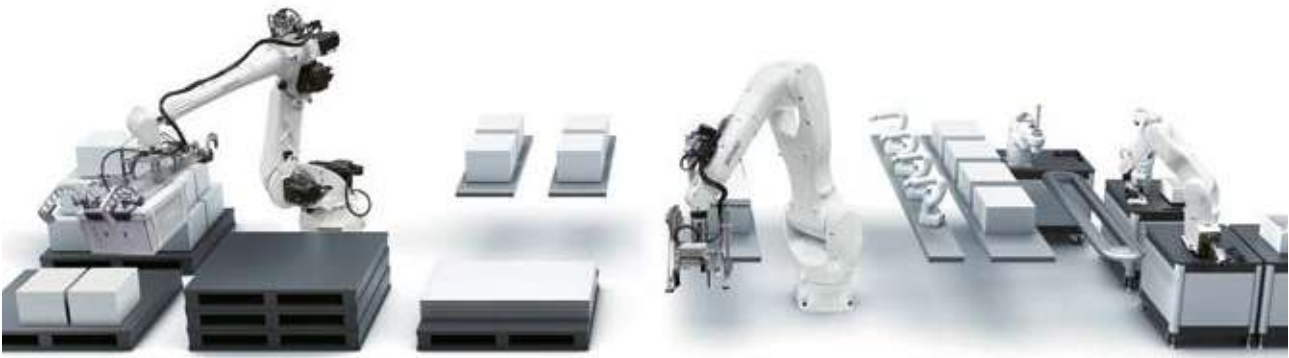


VLA/VMB Series

These high-payload, long-arm-reach models are ideally suited to transport and palletizing work.



VLA-4025 / 6022

Features

Resist with adverse environments

These robots have an IP67* protection rating, helping to facilitate automation in harsh environments where oil and mist can splash.

*Wrist: IP67-compliant, main unit: IP65-compliant



Ideal for transporting and palletizing heavy loads

The robots in the VLA series have the largest payload and arm length of any DENSO robot, making them ideal for automating heavy load transfer and palletizing operations. When combined with "Palletizing Builder," which is an option with WINCAPS Plus Offline Programming software suite, the palletizing process can be automated without coding.



Built-in field network

The field network is wired inside the robot, reducing the complexity of the external wiring. Compatible communication standards: PROFINET, PROFIBUS, DeviceNet



Options

Multibus cable

Field networks such as DeviceNet are wired inside the robot, reducing the complexity of external wiring.

Level-adjustable plate kit for fixing robot

Attachment for forklifts

Adjustable mechanical stopper kit for 1st axis (VL)

Protection cover for connector panel

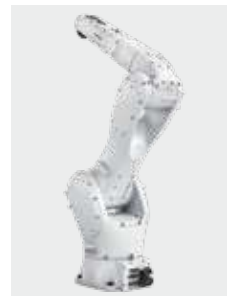
Non adjustable leveling plate for fixing robot

VMB-2515 / 2518

Features

Used in contaminate-critical environments

In addition to the standard specifications, the lineup includes robots that comply with dust and splash resistance (IP67) and cleanliness standards (ISO class 5). They can be used to automate processes in a variety of industries, from automotive parts manufacturing and electrical/electronic parts to food, pharmaceutical, and medical equipment manufacturing processes.



Full-cover structure

Internal EtherCAT wiring for flexible hand design



2nd arm User wiring option

A wide variety of devices and hands can be mounted on the robot flange with options for user wiring, piping, and solenoid valves. The 2nd arm user wiring allows up to two EtherCAT lines to be wired internally. The 3-axis wiring option prevents tangling and wear on the external wiring/piping.



3-axis wiring option

Options

External battery extension unit



A backup battery for the encoder can be installed externally to the robot. This allows easier battery replacement and improved maintenance.

Brake release unit



A switch that allows you to release the brake of each axis (the wiring of this switch is directly connected to the brake release signal of each axis).

Level-adjustable plate kit for fixing robot

Attachment for forklifts

Non adjustable leveling plate for fixing robot

Adjustable mechanical stopper kit for 1st axis

VLA Series

RC9 ▶ P.36

VLA-4025 / 6022

With a maximum payload of 60 kg and arm reach of 2,257 mm, these models can be used in processes such as palletizing, inspection, loading, transport, and packaging.



Maximum arm reach	2,503 / 2,257 mm
Maximum payload	40 / 60 kg

Specifications

Item		Specifications	
Model		VLA-4025	VLA-6022
Axes		6	
Position detection method		Absolute encoder	
Drive motor / brake		All-axis servo motor / all-axis with brakes	
Total arm length (No. 1 arm + No. 2 arm)		2,085.5 (860 + 1,225.5) mm	1,835.5 (860 + 975.5) mm
Arm offset	J1 (rotation)	400 mm	
	J3 (forearm)	210 mm	
Maximum motion area (Point P)		2,503 mm	2,257 mm
Motion range *1	1-axis	±180° *2	
	2-axis	-60° , +125°	
	3-axis	-165° , 0°	
	4-axis	±2,700° *4	
	5-axis	±123°	
	6-axis	±2,700° *4	
Maximum payload		40 kg	60 kg
Maximum joint speed	1-axis	170 deg/sec	
	2-axis	150 deg/sec	
	3-axis	165 deg/sec	
	4-axis	265 deg/sec	
	5-axis	250 deg/sec	249 deg/sec
	6-axis	340 deg/sec	339 deg/sec
Position repeatability		±0.06 mm	
Allowable wrist load moment	4-axis	167 Nm	221 Nm
	5-axis	167 Nm	221 Nm
	6-axis	98 Nm	118 Nm
User air pipe(s)		1 system (inner diameter: ø 12.5)	
User signal line(s)		14 (19-core connector)	
		15 (17-core connector) *3	
Air source	Maximum allowable pressure	2.0 MPa	
Protection grade		Main unit: IP65 / wrist: IP67	
Airborne noise (equivalent continuous A-weighted sound pressure level)		75 dB or less	
Weight		655 kg	645 kg

*1: For positive/negative direction, refer to the external dimensions and operating range diagram. *2: The operating angle is limited when the robot is installed at an angle.

*3: Can be used as ProfiBus/DeviceNet/ProfiNet using wiring. *4: 800(±400) at the factory default settings.

Legend

VLA -

Maximum payload:
40: 40 kg
60: 60 kg

Total arm length:
25: 2,503 mm
22: 2,257 mm