

DENSO

DENSO

www.densorobotics-europe.com

Headquarters:

DENSO Robotics Europe | DENSO EUROPE B.V.

Waldecker Str. 9, 64546 Moerfelden-Walldorf, Germany

t: +49 (0) 6105 27 35 150 f: +49 (0) 6105 27 35 180

@: info@densorobotics-europe.com (commercial information)

@: support@densorobotics-europe.com (technical support)



www.facebook.com/DENSORoboticsEurope



www.twitter.com/DENSORoboticsEU



www.youtube.com/DENSORoboticsEurope

Watch our latest videos



The QR-Code's inventor



HS Series

The DENSO HS Series of robots is ideal for circumstances where size constraints are a key consideration.

	PAYLOAD (KG)	ARM REACH (MM)
HS-4535*G	5	350
HS-4545*G	5	450
HS-4555*G	5	550

- EXCEPTIONAL PRECISION: from ± 0.015 mm
- FAST: cycle time: 0.35 s
- OPTIONAL SPECIFICATIONS: Dust & splash proof (IP65/54) and Cleanroom class ISO 3 and UL specifications (for the USA and Canada)

HS SERIES

	PAYLOAD	ARM REACH
HS-4535*G	5 kg	350 mm
HS-4545*G	5 kg	450 mm
HS-4555*G	5 kg	550 mm

Model	A	B	C
HS-4535*G	350	125	143
HS-4545*G	450	225	136
HS-4555*G	550	325	191

HS-4535*G



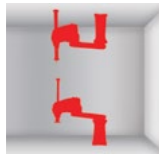
HS-4545*G



HS-4555*G

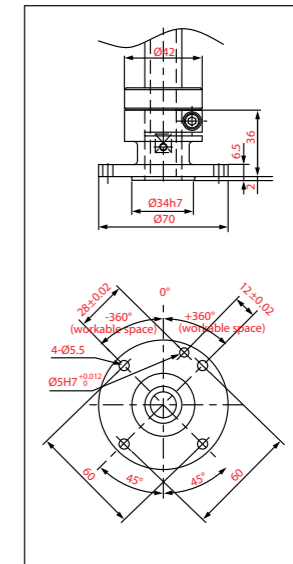
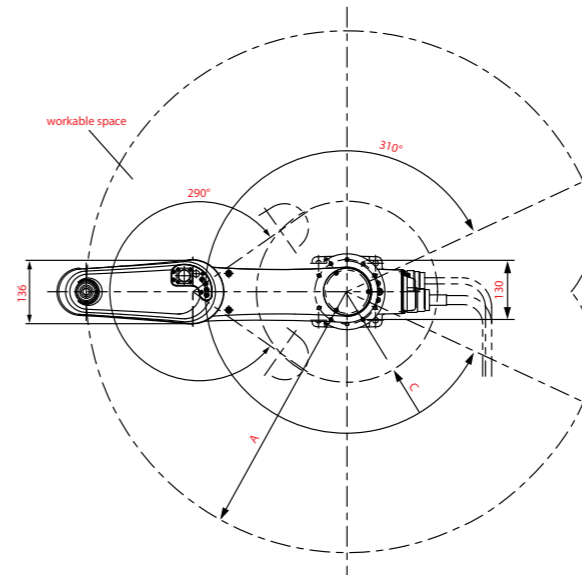
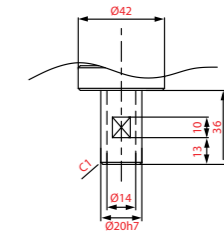
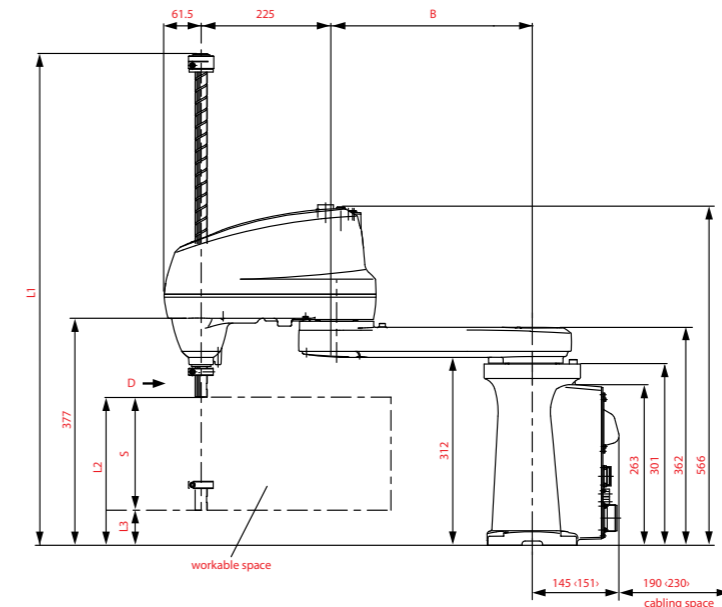


Mounting Options

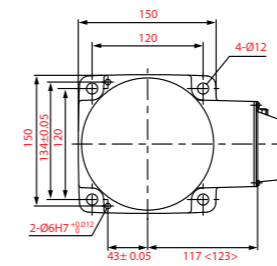


		Unit	HS-4535*G	HS-4545*G	HS-4555*G
Number of axis			4	4	4
Maximum arm reach (Point P: wrist center)		mm	350	450	550
Payload		kg	5	5	5
Maximum composite speed	At the center of the hand mounting flange	mm/s	7200	6300	7100
	Z		2000	2000	2000
	T	deg/s	2400	2400	2400
Cycle time		s	0.35 (with 2 kg weight)	0.35 (with 2 kg weight)	0.35 (with 2 kg weight)
Position repeatability (1)	J1+J2	mm	±0.015	±0.02	±0.02
	Z	mm	±0.01	±0.01	±0.01
	T	deg	±0.05	±0.05	±0.05
Environment resistance	Protection class		IP40, IP65		
	Cleanroom class (2)		Class ISO 3		
UL specification (2)			✓	✓	✓
Motion range	J1	deg	±155	±155 (Ceiling ±152)	±155
	J2		±145	±145 (Ceiling ±141)	±145
	Z	mm	150, 200, 320 (3)	150, 200, 320 (3)	150, 200, 320 (3)
	T	deg	±360	±360	±360
Maximum allowable inertia		kgm ²	0.1 (with 5 kg)	0.1 (with 5 kg)	0.1 (with 5 kg)
Signal lines & air piping	Signal lines		19 (for proximity sensor signals, etc.)		
	Air piping		4 systems (φ4x2, φ6x2)		
Brakes			Brakes for Z axis (3rd axis) and T axis (4th axis)		
Mounting configuration			Floor	Floor, Ceiling	Floor, Ceiling
Arm weight		kg	25	25	25

1. Position repeatability is the value at constant ambient temperature. 2. Only for floor-mounted. 3. Z-axis stroke 150 mm is available only for HS. For details, please contact our sales.



Unit: mm



S (mm)	Type	L1	L2	L3
* = 2:200	Standard	697	246	46
	Dust- & splash-proof	790	206	6
	Cleanroom	798		
* = 3:320	Standard	817	246	-74*1
	Dust- & splash-proof	910	206	-114*1
	Cleanroom	918		

*1 If the Z-axis stroke is 320 mm, the Z axis in the lowermost position may reach below the base mounting face.

Legend

HS □ - 4 5 □ □ □ - □

- Small 4-axis type
- Robot type: None: Floor S: Ceiling
- Axes: 4: 4-axis
- Maximum payload: 5: 5 kg
- Total arm length: 35: 350 mm 45: 450 mm 55: 550 mm
- Vertical stroke: 2: 200 mm 3: 320 mm
- Options: None: Standard type W: Dust & splash proof type (IP65) P: Cleanroom type (class 10) UL: UL specifications