High-performance, high-reliability and high-productivity electric injection molding machine

FANUC ROBOSHOT &-SiA series



Алматы (7273)495-231 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Благовещенск (4162)22-76-07 Брянск (4832)59-03-52 Владикавказ (8672)28-90-48 Владикавказ (8672)28-90-48 Владикарказ (8672)28-90-48 Волоград (844)278-03-48 Волоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-3-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Кострома (4942)77-07-48 Краснодар (861)203-40-90 Краснодарск (391)204-63-61 Курск (4712)77-13-04 Курсан (3522)50-90-47 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-1-16 Петрозаводск (8142)55-98-37 Псков (8112)59-10-37 Пермь (342)205-81-47 Казахстан +7(7172)727-132 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Серастополь (8692)22-31-93 Серастополь (8692)22-31-93 Саранск (8342)22-96-24 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35 Сыктывкар (8212)25-95-17 Тавбов (4752)50-40-97 Тверь (4822)63-31-35 Киргизия +996(312)96-26-47 Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Улан-Удэ (3012)59-97-51 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чербоксары (8352)28-53-07 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Яроспавть (4852)69-52-93

FANUC standard CNC and servo system installed Electric injection molding machine achieves high quality, FANUC ROBOSHOT CO-SIA series



High-Performance of Molding

FANUC standard CNC achieves superior molding repeatability Highly-rigid and low-friction mechanism achieve precision molding Additional servo axis control achieves extra value in molding

High-Sustainability

FANUC standard servo system achieves high-reliability and lower energy consumption High-precision AI protect function minimizes downtime ROBOSHOT-LINKi manages product and quality information

Ease of Use

Fully enclosed cover style achieves both safety and accessibility Conformity to safety standards supports molding plant globalization Robot system with superior interoperability



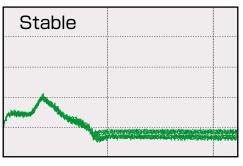
The outer view and operation differ in specifications.

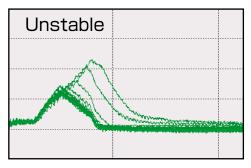
High-Performance of Molding

FANUC standard CNC achieves superior molding repeatability

Backflow monitor

• Detects backflow precisely at injection start, Displays injection repeatability in graph





Backflow monitor screen

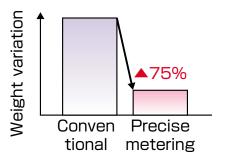
Precise metering

 Controls screw movement during metering optimally, Prevents string and silver streaking

Precise metering

Conventional

 Eliminates backflow of resin. Stabilizes injection volume and reduces weight variation of molded products





Precise connector Resin: PA66

Highly-rigid and low-friction mechanism achieves precision molding

Clamping unit

- Selectable two types of moving platen*
- Low-friction linear guided support*

[Single platen] Expands mold area



Magnetic clamping system Multi cavities Three plates mold etc.

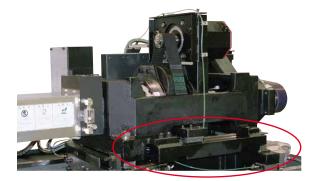
[Double platen] Pursuits high rigidity



Thin wall molding etc.

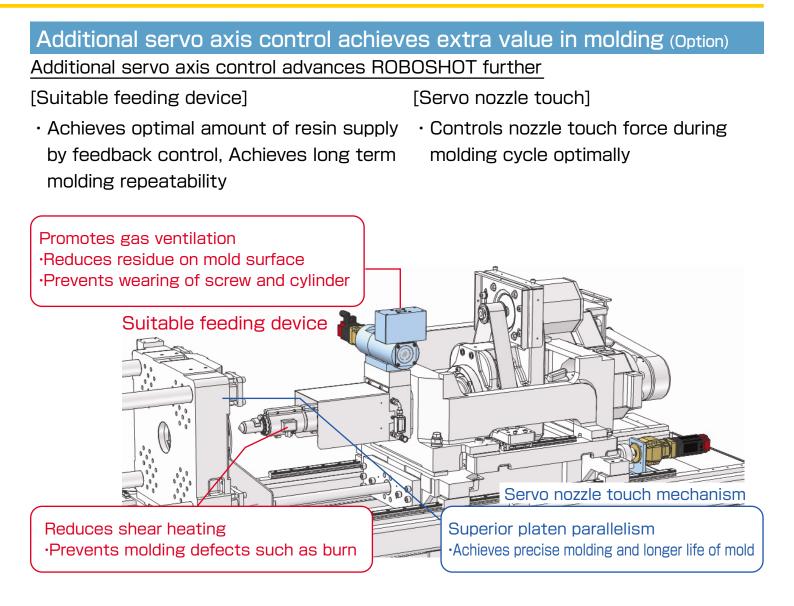
Injection unit

 Adopts low-friction linear guides, Achieves smooth injection and metering motion



Low-friction linear guides

Standard for α -S15*i*A/ α -S30*i*A/ α -S50*i*A/ α -S100*i*A/ α -S130*i*A *:Optional. Available options differ in region and model.

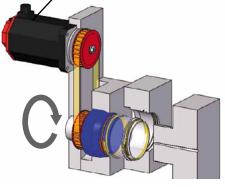


Additional servo axis control achieves versatile applications*

- \cdot High-speed and accuracy positioning by FANUC servo technology
- $\cdot \operatorname{No}$ additional control equipment required, Integrated into ROBOSHOT operation

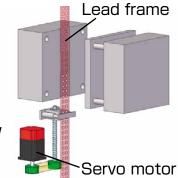
[Unscrewing molding]

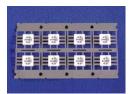
Servo motor



Container with screw Resin : PS

[Hoop molding]





LED parts Resin : LCP

*Only additional servo system is offered

High-Sustainability

FANUC standard servo system achieves high-reliability and lower energy consumption

- High-efficiency servo system reuses regenerated power during deceleration of motors, Excellent energy saving performance
- · Displays consumption power and regenerated power on operation screen
- Monitors power consumption including auxiliary equipments*



High-performance servo motors and amplifiers αi series

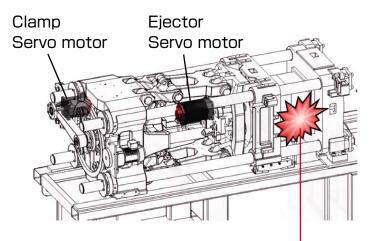
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*:Optional. Available options differ in region and model.

High-precision AI protect function minimizes downtime

Al mold protection

- Detects remaining molded products during mold closing or abnormal sliding core motion during mold opening with high-accuracy
- Interrupts motion immediately after abnormal status detected, Protects mold and ejector pin from damage



1.Realtime monitoring Monitors load of servo motors in every cycle

2.Problem detection

Detects load deviation precisely caused by remaining molded products etc.

Experimental example of AI mold protection by using paper cup





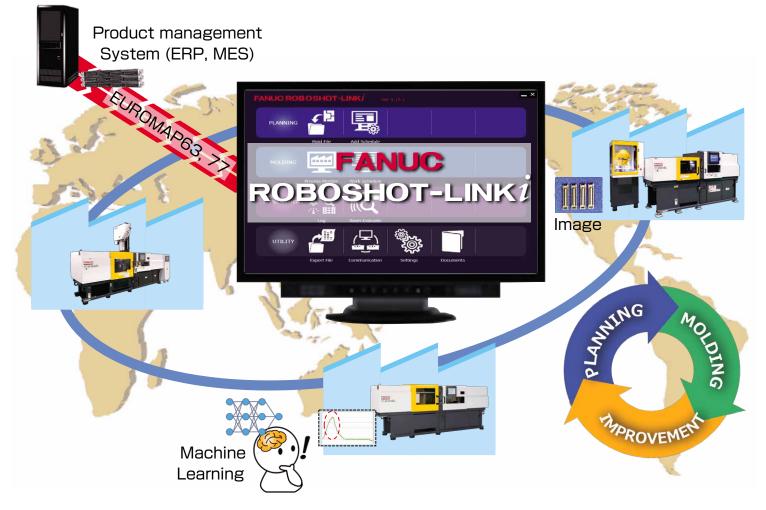
Al mold protection Al mold protection ON OFF

> 3.Protection Interrupts clamp and ejector motion immediately

ROBOSHOT-LINK*i*

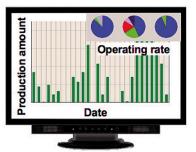
ROBOSHOT-LINK*i* manages product and quality information (Optional)

- Production and quality information management tool supports larger-scale and globalization of molding plant
- \cdot Realization of traceability by molding image
- \cdot Interfaces available for EUROMAP 63 and EUROMAP 77
- Realization of preventive maintenance on machine learning



Product information management

- Achieves lower cost and higher operation rate
- Monitors consumption power including auxiliary equipments



Visualization of production amount and operating time

Quality information management

- Achieves traceability and advanced quality
- Investigates cause of failure and molding repeatability



Visualization of cause of failure

Ease of Use

Fully enclosed cover style achieves both safety and accessibility

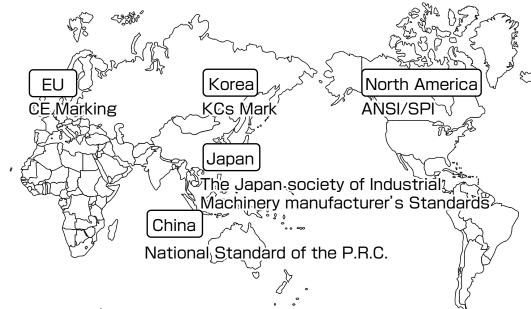
High-level safety

- Fully enclosed cover style prevents contact with moving part and high temperature part with high-level safety
- Superior accessibility
- Wide opened hopper maintenance area, Enhances accessibility
- ·Achieves compact machine dimensions





Conformity to safety standards supports molding plant globalization Regional safety standards and multiple languages support



Multiple languages support

Japanese / English / Chinese simplified / Chinese traditional / Korean / Thai / Vietnamese Indonesian / German / French / Italian / Spanish (Mexican) / Portuguese / Czech / Finnish Dutch / Hungarian / Polish / Danish / Turkish / Swedish

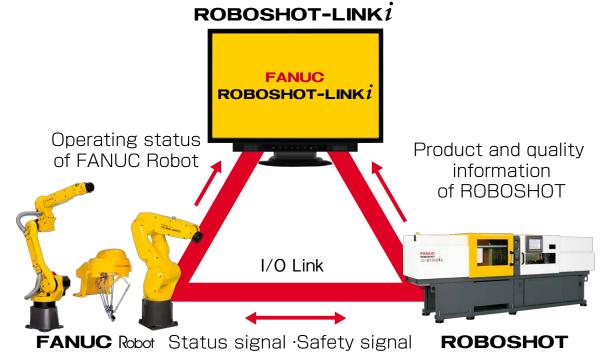
Safety requirements differ in region

Please confirm the latest safety requirements of the region where ROBOSHOT is installed.

Robot system with superior interoperability*

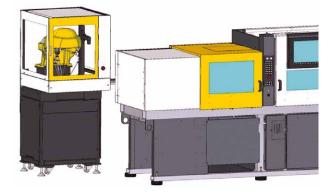
Superior interoperability

- $\cdot \text{Wire-saving}$ connection by high speed and reliable I/O Link
- ·Allows principle robot operation on ROBOSHOT screen
- \cdot " Visualization" of molding plant by ROBOSHOT-LINK i

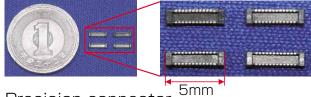


Robot systemization example

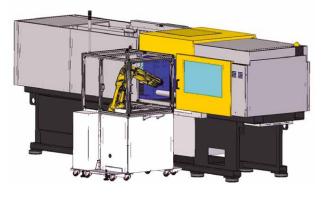
[Automatized check · sort]1.Precision and stable molding by ROBOSHOT



2.Automatic check and sort after parts detection by FANUC Robot



Precision connector ^{bmn} Resin : LCP [Automatized check · insert] 1.Precision insert of parts by FANUC Robot



2.Precision and stable molding by ROBOSHOT



Automotive interior part Resin : ABS

Application to a range of molding fields

Thin wall light guide panel

Decompression control at injection to packing (8 modes)

- Prevents sink marks and warpage, Achieves uniformed thickness distribution
- High pressure resistance cylinder and High pressure filling mode*
- Achieves thinner wall molding by injection with ultra high pressure

Precise lens

Moving platen support by linear guides*

Superior platen parallelism and straightness of clamp motion

Screw and cylinder for lens molding

 Optimized screw design and surface treatment achieves high-quality molding

Precise connector

Precise metering

Reduces weight variation and eliminates stringy, Achieves long term molding repeatability

Nozzle for Liquid Crystal Polymer*

 Optimized nozzle and temperature control for LCP achieves high-quality molding, Prevents resin carbonization

Automotive parts

Single platen

 Expanded mold installation area, Supports magnetic clamping system

Hot runner controller (Built-in)*

Integrated into ROBOSHOT operation, Achieves precise temperature control

Medical parts

Fully enclosed cover style

 \cdot Clean and quiet, Ideal for molding in clean room

Suitable feeding device*

Prevents burn and carbonization, Suitable for molding with transparent resin

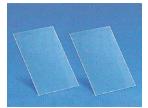
Two components molding

Second injection unit*

· FANUC CNC installed, operate from ROBOSHOT screen

Additional servo axis control*

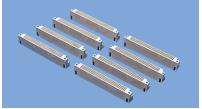
 Integrated into ROBOSHOT operation, Achieves high-speed and accuracy positioning of rotary table



Light guide panel for smartphone Resin : PC



Camera lens for smartphone Resin : COC



Precise fine-pitch connector Resin : LCP



Automotive connector Resin : PBT

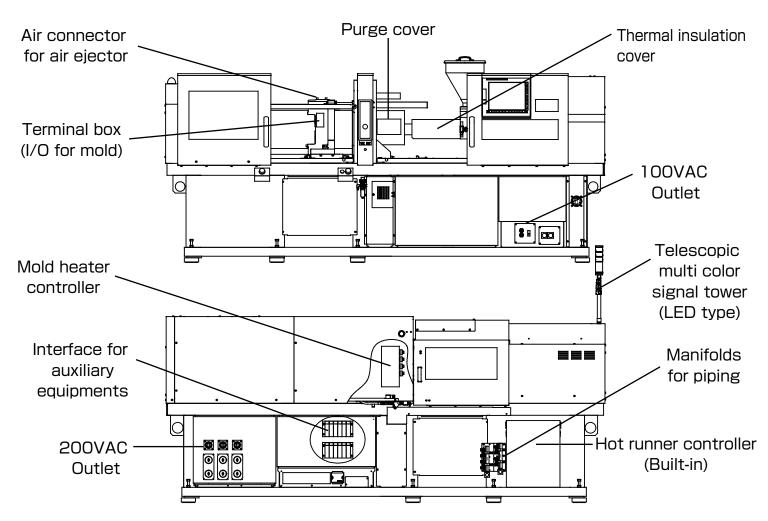


Syringe Resin : COP



Automotive interior part Resin : ABS+PP

Options



Optional, Available options differ in region and model. Refer to the "specification list" for details on the options.

Service & Support

Excellent Maintenance Services

FANUC service team delivers customer trust and confidence based on direction of service "Maximizing Uptime", "Global Service" and "Lifetime maintenance".



FANUC ACADEMY

FANUC ACADEMY operates training programs on FANUC ROBOSHOT which focus on practical operations and molding know how and maintenance.



Specifications

Clamping unit Ejec Maxin	Item Tonnage Taximum and minimum Double platen mold height Single platen Clamping stroke Tie bar spacing (H × V) Platen size (H × V) platen size (H × V) ijector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume Injection specification aximum injection pressure Maximum nijection speed Maximum nijection speed Injection specification aximum injection pressure Maximum injection speed Injection specification aximum injection pressure Maximum injection speed Injection specification aximum injection speed Injection specification Item Maximum injection pressure Maximum injection speed Item Tonnage faximum and minimum Double platen mold height Single platen Clamping stroke Tie bar spacing (H × V) Platen size (H × V) ijector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume Injection specification	mm cm ³ MPa MPa mm/s min ⁻¹ MPa MPa MPa MPa MPa MPa MPa MPa MPa mm/s min ⁻¹	250 230 190 800 450 1000 452 452 46 66 6 5 / 25 (2 22 26 22 29 50 55		Dtonf) 1150 30 3290 (420 onf) /60 8 20 22 9 24 29 nm/s 00 00 250 200 25 30 00 200 255 30 30 270 220 30 270 220 30 250 200 <td< th=""><th>525mm/s 330 300 250 250 260 270 250 250 260 250 450 525 330 330 300 250 250 260 270 525 330 300 330 300 250 250 260 270</th><th>10 3 5 5 5 5 5 5 5 5 5 5 22 20 22 20 22 20 22 20 22 20 24 29 24 29 24 29 24 20 22 20 24 20 280 240 290 280 240 290 280 240 290 280 240 290 280 240 290 280 240 280 240 280 240 280 280 280 280 280 280 280 28</th><th>50 58 76 30mm/s 290 250 210 190 150 150 190 160 30 340 450 00mm/s 275 240 210 190 160 190 190 200 275 240 210 190 190 160 500 500 </th><th>14 1 9 1 250 25 250 25 25</th><th>50 260 280 240 190 160 130 330 450 500mm/s </th></td<>	525mm/s 330 300 250 250 260 270 250 250 260 250 450 525 330 330 300 250 250 260 270 525 330 300 330 300 250 250 260 270	10 3 5 5 5 5 5 5 5 5 5 5 22 20 22 20 22 20 22 20 22 20 24 29 24 29 24 29 24 20 22 20 24 20 280 240 290 280 240 290 280 240 290 280 240 290 280 240 290 280 240 280 240 280 240 280 280 280 280 280 280 280 28	50 58 76 30mm/s 290 250 210 190 150 150 190 160 30 340 450 00mm/s 275 240 210 190 160 190 190 200 275 240 210 190 190 160 500 500	14 1 9 1 250 25 250 25 25	50 260 280 240 190 160 130 330 450 500mm/s
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Injection Maxim unit Maxim Maxim Maxim Maxim Maxim Maxim Ejec Clamping unit Ejec M Maxim M	aximum injection pressure (High pressure filling mode) Maximum injection pressure Maximum pack pressure Maximum screw rotation speed Injection specification Iaximum injection pressure filling mode) Maximum injection pressure Maximum pack pressure Maximum pack pressure Maximum screw rotation speed Item Tonnage Aaximum screw rotation speed Item Clamping stroke Tie bar spacing (H × V) Platen size (H × V) Platen size (H × V) Screw diameter Maximum injection volume	MPa MPa MPa mm/s min ⁻¹ MPa MPa MPa MPa mm/s min ⁻¹ Unit kN mm mm mm mm cm ³ 	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	330 30 250 250 26 250 26	00 00 270 220 00 250 200 25 00 00 250 200 00 00 270 220 00 250 200 00 50 00 270 220 00 250 200 00 00 270 220 00 250 200 00 270 220 00 250 200 	330 300 250 250 260 270 250 250 260 250 525 450 800mm/s 330 300 250 250 260 270 250 250 260 270 250 250 260 250 800 450 00 570/200 400 530×530	360 34(220 280 260 200 280 240 360 340 220 280 260 220 280 240 220 280 240 200 280 240	290 250 210 190 150 190 160 130 330 450 00mm/s 275 240 210 190 160 100 160 100 160 100 160 150	250 29 250 29 	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Injection Maxim unit Maxim Maxim Maxim Maxim Maxim Maxim Ejec Clamping unit Ejec M Maxim M	Maximum injection pressure Maximum pack pressure Maximum injection speed Injection specification aximum injection presure High pressure High pressure High pressure High pressure Maximum pack pressure Maximum pack pressure Maximum screw rotation speed Item Tonnage Aximum and minimum Double platen mold height Single platen Clamping stroke Tie bar spacing (H × V) Platen size (H × V) Platen size (H × V) Screw diameter Maximum injection volume	MPa MPa mm/s min ⁻¹ MPa MPa MPa mm/s min ⁻¹ Unit kN mm mm mm mm mm cm ³ 	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	250 250 26 250 250 26 250 250 26 45 800m 330 30 250 250 26 250 250 26 250 250 26 250 250 26 	60 270 220 80 250 200 25 300 25 90 90 90 90 270 220 90 250 200 90 250 200 90 50 1 90 90 90 90 90 90	250 250 260 270 250 250 260 250 525 450 800mm/s 330 300 250 250 260 270 250 250 260 270 250 250 260 250 800 450	220 280 260 200 280 240 360 340 220 280 260 200 280 240 200 280 240	210 190 150 190 160 130 330 450 00mm/s 210 190 1210 190 100 160 100 160 100 160 150	250 29 250 29 	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Injection unit Maxin Maxin Maxin Maxin Maxin Ejec Maxin	Maximum pack pressure Maximum injection speed Maximum screw rotation speed Injection specification laximum injection pressure Maximum injection pressure Maximum pack pressure Maximum pack pressure Maximum screw rotation speed Maximum screw rotation speed Item Tonnage faximum and minimum Double platen mold height Single platen Clamping stroke Tie bar spacing (H × V) Platen size (H × V) Platen size (H × V) Screw diameter Maximum injection volume	MPa mm/s min ⁻¹ MPa MPa MPa mm/s min ⁻¹ Unit kN mm mm mm mm mm cm ³ 	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	250 250 260 330 30 250 250 260 250 250 250 250 250 250 260 250 260 2	30 250 200 25 300 300 30 30 270 220 30 250 200 30 250 200 30 250 200 30 50 30 30 30 30 30 30 30 30 30 30	250 250 260 260 250 525 450 800mm/s 330 300 250 250 260 270 250 250 260 250 800 450 0.00 450 0.00 570/200 400 530×530	200 280 240 360 340 220 280 260 200 280 240 5	190 160 130 330 450 00mm/s 10 275 210 190 190 160 000 190 160 190 160 190 160 190 160	250 25 	50 260 280 240 190 160 130 330 450 500mm/s
Injection Maxin Maxin Maxin Maxin Maxin Maxin Maxin Injection M Unit Maxin Max	Maximum injection speed Maximum screw rotation speed Injection specification Jammu injection pressure (High pressure filling mode) Maximum injection pressure Maximum pack pressure Maximum pack pressure Maximum screw rotation speed Maximum screw rotation speed Item Tonnage Aaximum and minimum Double platen mold height Single platen Clamping stroke Tie bar spacing (H × V) Platen size (H × V) Platen size (H × V) Screw diameter Maximum injection volume	mm/s min ⁻¹ MPa MPa mm/s min ⁻¹ Unit kN mm mm mm mm mm cm ³ 	525 450 800mm/s 250 250 250 230 250 230 250 230 250 230 450 000 450 000 450 000 450 000 450 000 450 000 450 000 450 000 450 1000 450 450 1000 450 1000 450 1000 450 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 <td></td> <td>25 50 50 50 50 50 50 50 50 50 5</td> <td>525 450 800mm/s 330 300 250 250 260 270 250 250 260 250 800 450 ∞</td> <td> 360 340 220 280 260 200 280 240 5</td> <td>330 450 00mm/s 1 275 240 2 10 190 190 160 190 160 150</td> <td> 2! 2! </td> <td>330 450 500mm/s </td>		25 50 50 50 50 50 50 50 50 50 5	525 450 800mm/s 330 300 250 250 260 270 250 250 260 250 800 450 ∞	360 340 220 280 260 200 280 240 5	330 450 00mm/s 1 275 240 2 10 190 190 160 190 160 150	2! 	330 450 500mm/s
Clamping unit Unit Unit Unit Unit Unit Unit Unit U	Injection specification laximum injection pressure [High pressure [High pressure [High pressure] Maximum pack pressure Maximum screw rotation speed Maximum screw rotation speed Item Tonnage faximum and minimum Double platen mold height Single platen Clamping stroke Tie bar spacing (H × V) Platen size (H × V) Platen size (H × V) Screw diameter Maximum injection volume	 MPa MPa mm/s min ⁻¹ Unit kN mm mm mm point/kN/mm mm cm ³ 	800mm/s 250 250 230 250 230 190 800 450 	800n 330 30 250 250 250 25 250 250 250 250 250 26 80 	nm/s 10 10 270 220 10 250 200 10 50 50 50 50 50 50 50 50 50 	800mm/s 330 300 250 250 260 270 250 250 260 250 800 450	360 340 220 280 260 200 280 240 E	00mm/s 275 240 210 190 190 160 500 150	29 00 (15 500/2	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
Clamping unit Injection Unit Injection Maxin Max	aximum injection pressure (High pressure filling mode) Maximum injection pressure Maximum pack pressure Maximum injection speed Maximum screw rotation speed Item Tonnage faximum and minimum Double platen mold height Single platen Clamping stroke Tie bar spacing (H × V) Platen size (H × V) Platen size (H × V) ijector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume	MPa MPa MPa mm/s min ⁻¹ Unit kN mm mm mm point/kN/mm mm cm ³ 	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	330 30 250 250 260 250 250 26 800 45 350 20/150 20/220 350 20×410 30×410 50×610	00 00 270 220 00 250 200 00 00 00 00 00 00 00 00 00	330 300 250 250 260 270 250 250 260 250 800 450	360 340 220 280 260 200 280 240 E	275 240 210 190 190 160 500 150	29 00 (15 500/2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Clamping unit Injection Unit Injection Maxin Max	Maximum injection pressure Maximum pack pressure Maximum injection speed Maximum screw rotation speed Item Tonnage Maximum and minimum Double platen mold height Single platen Clamping stroke Tie bar spacing (H × V) Platen size (H × V) Platen size (H × V) Screw diameter Maximum injection volume	MPa MPa mm/s min ⁻¹ Unit kN mm mm mm point/kN/mm mm cm ³ 	250 250 230 250 230 190 800 450 1000 450 1000 450 52 52 52 52 25 250 25 250 25 250 25 250 25 250 25 250 25 250 25 25 25 25 26 26 29 50	250 250 250 26 250 250 26 250 250 26 45 (1000tnf) 50/150 20/220 350 50×410 50×410 50×610 .5tonf) / 10 8 32 36	50 270 220 50 250 200 5	250 250 260 270 250 250 260 250 800 450 0x~\$130iA 1300 (130tonf) 570/200 400 530×530	220 280 260 200 280 240	210 190 190 160 500 150	29 00 (15 500/2	50 260 280 260 210 190 50 260 280 240 190 160 500 450 0tonf) 00
Clamping unit Ejec Max Ejec M M M M M M M M M M M M M M M M M M M	Maximum injection speed Maximum screw rotation speed Item Tonnage Maximum and minimum Double platen mold height Single platen Clamping stroke Tie bar spacing (H × V) Platen size (H × V) Platen size (H × V) Screw diameter Maximum injection volume	mm/s min ⁻¹ Unit kN mm mm point/kN/mm mm cm ³ 	800 450 1000 45 52 	(100tonf) 50/150 20/220 350 50×610 .5tonf) / 10 8 32 36		800 450 0(~\$1300iA 1300 (130tonf) 570/200 400 530×530	Ę	500 150	 00 (15 500/2	00 100 100 100 100 100 100 100 100 100
Injection Inject	Maximum screw rotation speed Item Tonnage Maximum and minimum Double platen mold height Single platen Clamping stroke Tie bar spacing (H × V) Platen size (H × V) Platen size (H × V) jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume	min ⁻¹ Unit kN mm mm point/KN/mm mm cm ³ 	450 1000 45 52 46 6 6 5 / 25 (2 22 26 21 29 50 55	45 	50 1 00 5 / 2	450 @\$130/iA 1300 (130tonf) 570/200 400 530×530		150	 07\$15 00 (15 500/2	450 © <i>i</i> ∧ 0tonf) 00
Clamping unit Ejec Maxin Ejec M Maxin Maxi	Item Tonnage faximum and minimum Double platen mold height Single platen Clamping stroke Tie bar spacing (H × V) Platen size (H × V) Platen size (H × V) jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume	Unit kN mm mm mm point/kN/mm mm cm ³ 	1000 45 52 46 66 5 / 25 (2 22 26 20 29 50 58	(100tonf) 50/150 20/220 350 50×410 50×610 5tonf) / 10 8 32 36	00 5/2	<u> </u>			01-S15 00 (15 500/2	© <i>i</i> ∧ 0tonf) 00
Clamping unit Ejec M M Maxin Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M M Maxin M M Maxin M M M M M M M M M M M M M M M M M M M	Tonnage faximum and minimum Double platen mold height Single platen Clamping stroke Tie bar spacing (H × V) Platen size (H × V) jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume	kN mm mm mm point/kN/mm cm ³ 	1000 45 52 46 66 5 / 25 (2 22 26 28 29 50 58	(100tonf) 50/150 20/220 350 50×410 50×610 .5tonf) / 10 8 32 36	00 5/2	1300 (130tonf) 570/200 400 530×530			00 (15 500/2	0tonf) 00
Clamping unit Ejec M M Maxin Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M M Maxin M M Maxin M M M M M M M M M M M M M M M M M M M	faximum and minimum Double platen mold height Single platen Clamping stroke Tie bar spacing (H × V) Platen size (H × V) jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume	mm mm mm point/kN/mm cm ³	45 52 46 66 5 / 25 (2 22 26 20 29 50 50	50/150 20/220 350 50×410 50×610 .5tonf) / 10 8 32 36	00 5/2	 570/200 400 530×530		150	500/2	00
Clamping unit Ejec M M Maxin Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M Maxin M M Maxin M M M M Maxin M M M M M M M M M M M M M M M M M M M	mold height Single platen Clamping stroke Tie bar spacing (H × V) Platen size (H × V) jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume	mm mm point/kN/mm mm cm ³	52 46 5 / 25 (2 22 26 28 29 50 58	20/220 350 50×410 50×610 .5tonf) / 10 8 32 36		400 530×530				
Injection Unit Unit Unit Unit Unit Unit Unit Uni	Tie bar spacing (H × V) Platen size (H × V) jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume	mm point/kN/mm mm cm ³	66 5 / 25 (2 22 26 28 29 50 58	60×410 60×610 5tonf) / 10 8 32 36		530×530				75
Injection Maxin Maxin Unit Maxin Max	Platen size (H × V) jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume	mm point/kN/mm mm cm ³ 	66 5 / 25 (2 22 26 28 29 50 58	60×610 5tonf) / 10 8 32 36					440	
Injection Maxim Maxim Unit Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim	jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume	point/kN/mm mm cm ³ 	5 / 25 (2 22 26 28 29 50 58	5tonf) / 10 8 32 36					560×5 800×7	
Injection Maxim Maxim Unit Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim	Screw diameter Maximum injection volume	mm cm ³	22 26 28 29 50 58	8 32 36		25 (2.5tonf) / 100		5/35	(3.5to	
Injection unit Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim				8 103 147		28 32 36 40	22 26	28 32 36	40	32 36 40 44 48 52
Injection Maxim unit Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim			20	^ /	181 50		29 50	58 103 147	181	121 153 188 268 318 442
Injection Maxim unit Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim	Maximum injection pressure			0mm/s 0 220 190	160 260	200mm/s 240 220 190 160			I 1	200mm/s 280 280 260 220 190 160
Injection Maxim unit Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim Maxim	Maximum pack pressure	MPa	260 260 22			220 200 170 140				280 280 220 190 160 130
Injection N unit Maxin M	Maximum injection speed	mm/s		200		200				200
Injection M unit Maxin Maxin M M M M M M M	Maximum screw rotation speed	min ⁻¹		300		300	220 ma ma /		aite ()	300 330mm/s
Injection M unit Maxin Maxin M M M M M M M	Injection specification laximum injection pressure (High pressure filling mode)	MPa		0mm/s 0 270 220	340	330mm/s 320 270 220	330mm/ 340 340	s (Small capa 320 270 220		380 345 280
Injection M unit Maxim Maxim M M M M M M	Maximum injection pressure	MPa		0 220 190	160 260		260 260	240 220 190		280 280 260 220 190 160
unit Maxin Maxin Maxin Maxin Maxin Maxin Maxin Maxin Maxin Maxin Maxin	Maximum pack pressure	MPa	260 260 22		140 260	220 200 170 140	260 260	220 200 170	140	280 280 260 220 190 160
Maxin Mi Mi Mi Mi	Maximum injection speed Maximum screw rotation speed	mm/s min ⁻¹		330 450		<u>330</u> 450		<u>330</u> 450		<u> </u>
M M M M	Injection specification			0mm/s		450	500mm/	s (Small capa	city)	400
Ma Ma	laximum injection pressure (High pressure filling mode)	MPa	340 320 28	30			340 320	280		
Ma Ma Mi	Maximum injection pressure	MPa	260 260 24 260 260 22				260 260	240 220 170		
Ma Ma	Maximum pack pressure Maximum injection speed	MPa mm/s	260 260 22				260 260	220 200 170 500		
N	Maximum screw rotation speed	min ⁻¹	45	50				450		
N	Injection specification		1000mm/s (l					s (Ultra high sp		
N	Maximum injection pressure Maximum pack pressure	MPa MPa	400 380 35 380 350 30					350 210		
Ma	Maximum injection speed	mm/s	1000				1200			
	Maximum screw rotation speed	min ⁻¹	450				450			
	ltem	Unit	01-S22	20 <i>1</i> A		01-5250iA		01-8300 i A	L	01-5450 i a
	Tonnage	kN	2200 (22	Otonf)	250	00 (250tonf)	3	3000 (300ton	f)	4500 (450tonf)
Max	Aaximum and minimum Double platen mold height Single platen	mm	 6E0/2	550		650/300 		650/300		1000/350
Clamping	mold height Single platen	mm	650/2 550			600		600		900
unit	Tie bar spacing (H × V)	mm	650×6			710×635		810×710		920×920
	Platen size $(H \times V)$	mm	900×9		40.40	1030×960		1130×1030	(1300×1300
Ejec		point/kN/mm mm				10 (8.0tonf) / 200 32 36 40 44 4		80 (8.0tonf)		21 / 150 (15.0tonf) / 250 3 56 64 68 72 80 90 100
	jector point / Ejector force / Ejector stroke	cm ³								4 640 836 944 1059 1810 2290 2827
	jector point / Ejector force / Ejector stroke Screw diameter		200m	m/s ′	1200mm/s	330mm/s		240mm/s		180mm/s
	jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume Injection specification					380 345 280				
	jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume Injection specification laximum injection pressure (High pressure filling mode)	MPa	280 280 260 2	220 190 160 4	450 450 380 450 430 330	0 280 280 260 220 19 0 280 280 260 220 19	0 160 280 2	60 240 220 195	1/5 15	5 280 280 250 200 160 0 280 250 200 160 130
Injection N	jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume Injection specification aximum injection pressure filling mode) Maximum injection pressure	MPa	200 200 220 1		1200	330		240		180
	jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume Injection specification laximum injection pressure (High pressure filling mode)				450	400		400		200
Mavia	jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume Injection specification laximum injection pressure filling mode) Maximum njection pressure Maximum pack pressure Maximum injection speed Maximum screw rotation speed	MPa MPa mm/s min ⁻¹	300	m/c			. -	270mm/s		240mm/s (Small capacity)
	jector point / Ejector force / Ejector stroke Screw diameter Injection specification laximum injection pressure filling mode) Maximum injection pressure Maximum pack pressure Maximum injection speed Maximum screw rotation speed Injection specification	MPa MPa mm/s min ⁻¹	300 330m					80 270 240 225		
	jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume Injection specification laximum injection pressure (High pressure Maximum njection pressure Maximum pack pressure Maximum njection speed Maximum screw rotation speed Injection specification laximum injection pressure (High pressure filling mode)	MPa MPa mm/s min ⁻¹ MPa	300 330m 380 345 280				280 2			- 225 175 155 135
	jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume Injection specification laximum injection pressure filling mode] Maximum njection pressure Maximum pack pressure Maximum screw rotation speed Injection specification laximum injection pressure filling mode] Maximum injection pressure Maximum pack pressure	MPa MPa mm/s min ⁻¹ MPa MPa MPa	300 380 345 280 280 280 260 2 280 280 260 2	 220 190 160 220 190 160				60 240 220 195		- 195 150 130 120
	jector point / Ejector force / Ejector stroke Screw diameter Maximum injection volume Injection specification aximum injection pressure filling mode) Maximum injection pressure Maximum pack pressure Maximum injection speed Maximum screw rotation speed Injection specification aximum injection pressure filling mode) Maximum injection pressure	MPa MPa mm/s min ⁻¹ MPa MPa	300 330m 380 345 280 280 280 260 2	 220 190 160 220 190 160 D			280 2			

When high filling mode is used, a special cylinder is needed. Molding conditions may be restricted depending on the screw diameter. For details, see a separate list of specifications.

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