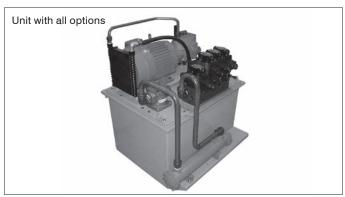
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NT Series SSS MARK-II





Features

Extensive variations

A wide range of control functions and other options such as fluid level switches, temperature switches and water coolers, is available in an easy-to-install modular format.

The energy-saving performance of the V series pump can be further enhanced by adding the optional feathering pump control.

Low oil temperature rise

All models are equipped with an oil cooler as standard. Maintaining the fluid at a low temperature gives it a long service life.

Space saving

The compact design has reduced the footprint to 70 to 74% of the conventional models.

The design of the mounting holes has allowance in all directions and the tank top plate can be mounted in the 180° opposite direction.

Low noise

All models are equipped with vibration-absorbing rubber pads as standard.

Control valves installable

Options enabling installation of a control valves are available (-ABT***).

Nomenclature

							ABT		
1	2	3	4	5	6	7	8	9	10

1 Model No.

NT: SSS MARK-II

2 Tank capacity

06: 60 L 10: 100 L 16: 160 L

3 Pump type

M: Motor pump (V pump)

4 Pump capacity

15: 14.8 cm³/rev 23: 23.0 cm³/rev 38: 37.7 cm³/rev

5 Unit type

N: Tank top plate type

6 Motor capacity

15: 1.5 kW, 4-pole

22:2.2 kW, 4-pole

37: 3.7 kW, 4-pole

55: 5.5 kW, 4-pole

75: 7.5 kW, 4-pole

7 Design No.

The design number was changed to 20 due to the motor high efficiency restrictions that took effect in April 2015.

8 Manifold block

No designation: Without manifold block ABT: With manifold block

9 Number of series

No designation: None

(not installed)

2: 2-series 4: 4-series

T-301103

10 Solenoid valve size

No designation: None

(not installed)

02: 02 size

3: 03 size

Refer to Page A-8 for details of V series piston pumps incorporated into these units.

Series table

	Pump capacity	1	5 (14.8 cm ³ /rev	/)	23 (23.0	cm³/rev)	38 (37.7	cm ³ /rev)
	Motor capacity	1.5 kW	2.2 kW	3.7 kW	3.7 kW	5.5 kW	5.5 kW	7.5 kW
	60 L	✓	✓	✓				
Tank capacity	100 L		✓	✓	✓	✓		
	160 L				✓	✓	✓	✓

Specifications

	Pump discharge rate L/min at 50/60 Hz (1.0 MPa)	Tank capacity L	Motor capacity Output kW (Number of poles: 4)	Mass kg	Rated pressure MPa {kgf/cm²}	Maximum operating pressure MPa {kgf/cm²}		
NT06M15N15-20			1.5	110				
NT06M15N22-20		60	2.2	118				
NT06M15N37-20	20/25		3.7	130		21.0 {210}		
NT10M15N22-20			2.2	128				
NT10M15N37-20		100	3.7	140	14.0			
NT10M23N37-20		100	3.7	150	14.0 {140}			
NT10M23N55-20	33/40		5.5	170	(140)			
NT16M23N37-20	33/40		3.7	175				
NT16M23N55-20		160	5.5	195				
NT16M38N55-20	55/66	160	5.5	200				
NT16M38N75-20	33/00		7.5	210				

Note: Rated pressure:

Pressure at which the maximum load does not exceed 175% of the rated capacity of the motor with the pump discharge rate set

Maintain the average shaft input of the motor at no greater than 100%.

Maximum operating pressure:

Pressure at which the motor can be started with the pump discharge rate set to minimum

Maintain the maximum load at no greater than 160% (15 seconds) and average shaft input at no greater than 100%.

With the standard specifications, the pressure is set to 3.5 MPa and the flow rate is set to the maximum discharge rate at shipment. Motors for AC 200 V at 50/60 Hz and for AC 220 V at 60 Hz are used as standard.

Consult DAIKIN for different voltages [380 V (50 Hz), 400 V (50/60 Hz), 415 V (50 Hz), 440 V (60 Hz), 460 V (60 Hz)]

• The models with the following model codes that incorporate a manifold are available as a product series. Since a manifold block is preinstalled, solenoid valves and modular stack valves can be mounted easily. The manifold blocks are fitted with blocking blocks (BS-**). Remove them when mounting solenoid valves and modular stack valves.

Standard model code	Option code	Number of series	Solenoid valve size	Option code		Solenoid valve size	- 1	Number of series	Solenoid valve size	Option code	Number of series	Solenoid valve size
NT06M15N15-20	-ABT202	2	02	-ABT402	4	02	_					
NT06M15N22-20	-ABT202	2	02	-ABT402	4	02	_			_		
NT06M15N37-20	-ABT202	2	02	-ABT402	4	02	_			_		
NT10M15N22-20	-ABT202	2	02	-ABT402	4	02	_			_		
NT10M15N37-20	-ABT202	2	02	-ABT402	4	02		_		_		
NT10M23N37-20	-ABT202	2	02	-ABT402	4	02	-ABT203	2	03	-ABT403	4	03
NT10M23N55-20	-ABT202	2	02	-ABT402	4	02	-ABT203	2	03	-ABT403	4	03
NT16M23N37-20	-ABT202	2	02	-ABT402	4	02	-ABT203	2	03	-ABT403	4	03
NT16M23N55-20	-ABT202	2	02	-ABT402	4	02	-ABT203 2 03		-ABT403	4	03	
NT16M38N55-20	-ABT202	2	02	-ABT402	4	02	-ABT203 2 03		-ABT403	4	03	
NT16M38N75-20	-ABT202	2	02	-ABT402	4	02	-ABT203	2	03	-ABT403	4	03

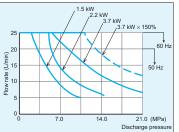
Paint color

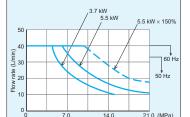
JMPA code Y59-60H (Munsell code 10BG6/4) Blue-green colors Motors, pumps, and purchased parts are in the standard colors of the manufacturers.

Tank: Baking finish

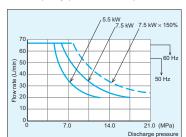
Quick-reference charts for motor selection

Motor capacity (M15-1.5/2.2/3.7 kW)





Motor capacity (M23-3.7/5.5 kW)



Motor capacity (M38-5.5/7.5 kW)

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Handling

Hydraulic fluid, ambient environment

O Use a petroleum-based hydraulic fluid equivalent to ISO VG32 to 46.

For pressures higher than 7 MPa use wear-resistant hydraulic fluid.

Use of hydraulic fluids other than the petroleum-based type (e.g. hydrous/synthetic) is prohibited.

- Operate the unit in an environment where both the following conditions are satisfied: viscosity range from 15 to 400 mm²/s and oil temperature from 0 to 60°C.
- O Be sure to maintain the water content in the hydraulic fluid at 0.1% maximum by volume.
- O Contamination of the hydraulic fluid causes device trouble and reduces the service life, so pay due attention to controlling contamination and ensure that it goes no higher than NAS contamination class 9. (NAS contamination class 10 is permitted for operating pressures of 7 MPa or lower.)
- O Use the unit indoors under the following conditions.

Ambient temperature: 0 to 35°C, Ambient humidity: 20 to 90%RH (with no condensation)

If using the unit where there is a lot of dust or oil mist, clean it periodically by applying compressed air or by other means since the oil cooler is prone to clogging in such environments.

At start

• Fill the pump case with hydraulic fluid through the filler port before starting trial operation, after replacing the pump, or after stopping the unit for 6 months or longer. Use the same hydraulic fluid as for the hydraulic circuit.

	NT××M15	NT××M23	NT××M38
Pump case capacity cm³	500	500	900

• After checking that all hydraulic circuits and electrical circuits are ready for operation, set the hydraulic circuit at the load side in the no-load status or connect an unloading circuit before starting the pump.

When the pump is driven for the first time, turn the power switch to the motor on and off a few times to let the air out of the piping and then run it continuously at full speed. A roaring noise may be observed until the air has been completely removed but this is not abnormal.

O Check that the pressure rises at the pressure gauge.

Electric wiring

O Connect the power cable such that the phases at the pump motor and power supply sides are as shown below.

Motor side
$$\begin{bmatrix} U - R \\ V - S \\ W - T \end{bmatrix}$$
 Power supply side

Check that the pressure rises at the pressure gauge.

If the motor rotates in the reverse direction, switch the connection between two phases among the three to correct the direction of rotation.

- O Be sure to connect the ground terminal.
- O Install a no-fuse breaker and an earth leakage breaker on the main power supply.

The electrical ratings are as shown in the table to the right.

O These are premium efficiency products and therefore they tend to have a higher current value than products with the previous design. Pay attention to the design of the power distribution when replacing products of the previous design.

<Motor rating table (rated current)>

Permissible voltage fluctuation: ±10%

Motor capacity Output kW		Rated current (A)		Starting current (A)					
(Number of poles: 4P)	AC 200 V (50 Hz)	AC 200 V (60 Hz)	AC 220 V (60 Hz)	AC 200 V (50 Hz)	AC 200 V (60 Hz)	AC 220 V (60 Hz)			
1.5	6.8	6.4	6.0	46.6	41.0	45.1			
2.2	10.6	9.4	9.2	96.0	81.0	89.1			
3.7	15.6	14.6	13.8	134.0	118.0	130.0			
5.5	23.4	21.4	20.6	200.0	166.0	183.0			
7.5	30.8	28.6	27.4	264.0	218.0	240.0			

Transportation

- O When transporting or hoisting the unit, use the hoisting hooks (\$\phi25\$ holes at 4 locations) or a fork lift truck.
- When using a fork lift truck, take due care to ensure that it will not topple over because an appropriate fork span cannot be secured.

Installation

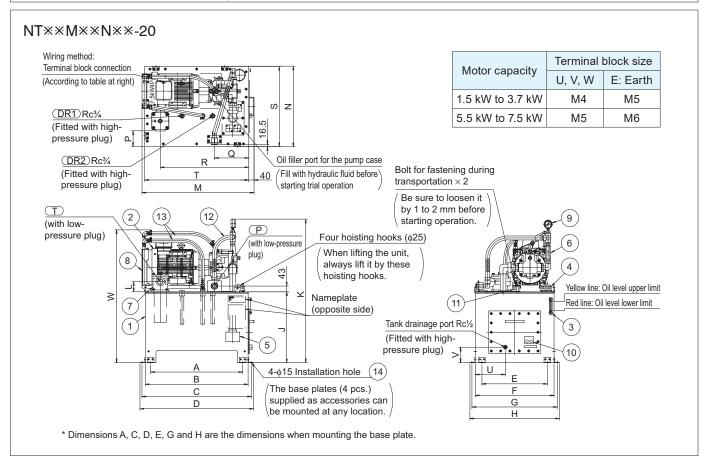
- The unit is a stationary type. Fix it on a level location that is free of vibration.
- O Mount the foundation plates (4 pcs.) provided as accessories at appropriate positions according to the installation conditions. (8 mounting positions provided)

Before using the product, please check the guide pages at the front of this catalog.

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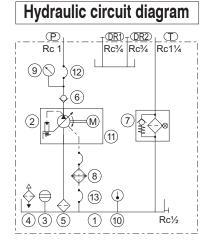
https://www.daikinpmc.com/en/

External dimension diagram



Model	Motor	Wiring port	Α	В	С	D	Е	F	G	Н	J	K	L	М	N	Р	Q	R	S	Т	U	V	W
NT06M15N15-20	1.5kW-4P		500	580	630	660	340	440	490	520	411	852	53	647	454	70	217	505	450	590	135	116	841
NT06M15N22-20	2.2kW-4P	4P	500	580	630	660	340	440	490	520	411	862	53	647	454	70	217	505	450	590	135	116	821
NT06M15N37-20	3.7kW-4P	407	500	580	630	660	340	440	490	520	411	874	53	662	454	70	217	505	450	590	135	116	821
NT10M15N22-20	2.2kW-4P	φ27	650	730	780	810	390	490	540	570	461	912	53	782	504	70	262	636	500	740	175	116	871
NT10M15N37-20	3.7kW-4P		650	730	780	810	390	490	540	570	461	924	53	782	504	70	262	636	500	740	175	116	871
NT10M23N37-20	3.7KVV-4P		650	730	780	810	390	490	540	570	461	986	53	782	504	70	262	636	500	740	175	116	887
NT10M23N55-20	5.5kW-4P	ф35	650	730	780	810	390	490	540	570	461	1006	53	782	504	70	262	636	500	740	175	116	925
NT16M23N37-20	3.7kW-4P	ф27	690	770	820	850	490	590	640	670	531	1056	76	822	604	116	257	663	600	780	225	116	957
NT16M23N55-20	5 5WW 1D		690	770	820	850	490	590	640	670	531	1076	76	822	604	116	257	663	600	780	225	116	995
NT16M38N55-20	5.5kW-4P	ф35	690	770	820	850	490	590	640	670	531	1076	76	840	604	116	257	663	600	780	225	116	995
NT16M38N75-20	7.5kW-4P		690	770	820	850	490	590	640	670	531	1076	76	840	604	116	257	663	600	780	225	116	995

	D (D	D (T	
Model	Port P	Port T	
NT06M15N15-20			
NT06M15N22-20	Rc½	Rc¾	
NT06M15N37-20			
NT10M15N22-20	Rc½		
NT10M15N37-20	KC/2	Rc¾	
NT10M23N37-20	Rc¾	NC/4	
NT10M23N55-20	NC/4		
NT16M23N37-20	Rc¾		
NT16M23N55-20	NG/4	Rc1-1/4	
NT16M38N55-20	Rc1	TC 1-74	
NT16M38N75-20	1101		

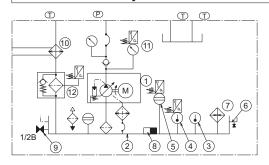


Devices used

	Part No.	Name	Part No.	Name
	1	Oil tank	8	Oil cooler
	2	Motor pump	9	Pressure gauge
ĺ	3	Oil level gauge	10	Thermo label
	4	Oil filler port with air breather	11	Vibration-absorbing rubber
	5	Suction strainer	12	High-pressure hose
ĺ	6	Inline check valve	13	Low-pressure hose
ĺ	7	Return filter	14	Foundation plate

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Power unit options



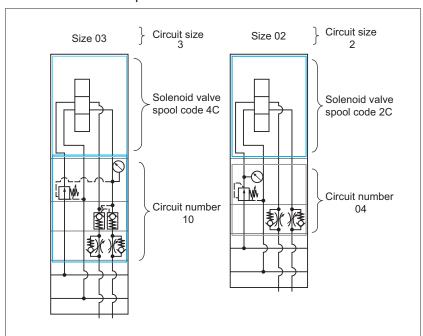
- * When selecting an option, enter a circle or the required quantity in the option selection table and submit it when placing the order.
- * The codes in the circuit diagram correspond to those in the table below.

Overview of options

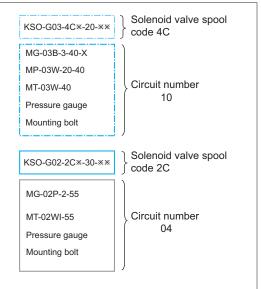
Code		Item	Description								
1) (1)		Pressure	● Sharp cutoff characteristics are achieved. ● The pressure and flow rate can be adjusted as necessary. Pressure → Pressure								
1) (2)	l method	Pressure feedback method combination control	● The operation mode can be switched between high-pressure low-quantity and low-pressure high-quantity with a single pump by pressure feedback method.								
1 (3)	Pump control method	Solenoid operated method combination control	● The control shown to the right can be performed by switching the solenoid valve incorporated in the pump. SOL OFF SOL ON Pressure								
1 (4)	А	Feathering pump control	Sets the high-pressure cutoff characteristics of the pump to feathering status (extremely low pressure). Pressure								
2	Tar	nk	Manufacture water fill test can be performed as an option.								
3			Consult DAIKIN if it is necessary to comply with the Fire Service Act since the parts to be used will differ.								
4		ermometer mperature switch	Enables visual monitoring of the fluid temperature. (0 to 100°C, ϕ 40) For fluid temperature upper limit alarm: Outputs an alarm when 65°C is exceeded. For heater control: Stops the heater when 20°C is exceeded.								
(5)	Flu	id level switch	For fluid level lower limit detection: Detects insufficient level of fluid. For fluid level upper limit detection: Detects excessive level of fluid to prevent overflow.								
6	Oil	pan	Accumulates fluid so that it will not spill over the floor. Environmentally friendly option.								
7	Ele	ctric heater	 Used in an environment where the unit may be started at a low temperature (0°C or lower) such as in cold regions. The heater is equipped with a dry operation prevention sensor. Warm-up operation of the unit increases the temperature by approximately 5°C/hr, and it is advisable to stop the heater when the temperature reaches a certain level using the heater control temperature switch. (Heater capacity: 1 kW) 								
8		gnet contaminant paretor	Used to remove fine metal chips and contaminant contained in hydraulic fluid when hydraulic fluid contamination level needs to be controlled. (To be mounted/removed through the cleaning port) Installing 1 pc for 60 to 100 L tank and 2 pcs for 160 L								
9	Tar	nk drain valve	Used to facilitate oil replacement by arranging a ball valve (JIS 1/2B) at the drain port of the fluid tank. The port is plugged as standard.								
10	Wa	ter cooler	Used to cool fluid when the fluid in the tank reaches a high temperature. To determine whether a cooler is necessary or not, see the quick-reference chart provided in the SSS MARK-II brochure. For details of cooling capacities, see the information on LT coolers. Fluid temperature can be controlled using the optional temperature control water valve.								
11)	Pre	essure switch	 Used for detecting a main pressure drop. Standard setting at shipment: Open at 2.0 MPa or lower. There are two types of switches, mechanical and electronic. 								
12		turn filter ctric alarm switch	Used for the filter clogging alarm. Provided with C type contact.								
13	Uni	it orientation	• Only the tank top plate can be mounted in the 180° reversed orientation (even after the delivery of the unit).								
14	Ter	minal box	 A terminal box that can be mounted on the unit, with a size of 300 mm × 200 mm × 105 mm (W × H × D). No terminal block is supplied with the terminal box. One DIN rail is attached. 								
15	Ele	ctric wiring	 Wiring from electrical control devices to the terminal box. Up to 30 pins supported. A rail type terminal block with TDT touch-down structure is used. A 2-row type terminal block is used when more than 15 pins are required. VCT cables are used with M3 round crimp-style terminals. Note that the wiring for the motor and electric heater needs to be directly connected to their terminal boxes. No wiring port is provided for wiring by the user. Note that the terminal numbers are predetermined. 								
16	Spe	ecified color	 Recoating with epoxy-based paint. The pressure gauge and hoses are masked, and also the cables, if there are any. Standard color: JMPA code Y59-60H (Munsell code 10BG6/4) When using specified colors, specify the JMPA code. 								

List of control circuits/solenoid valves

Control circuit expressions



Component parts



Select the solenoid valve spool code and circuit code by referring to the solenoid valve table and the control circuit selection manual.

Solenoid valve table

Category	Solenoid valve spool code	Graphic symbol	Model	Category	Solenoid valve spool code	Graphic symbol	Model
All ports blocked at center position (closed center)	2C×	P I A T I B b	KSO-G02-2C*-30-EN KSO-G03-2C*-20-EN	Ports A/B/T open (port P blocked) at center position Ports A/B throttled at center position	44C*	P A T B B B B B B B B B B B B B B B B B B	KSO-G02-44C*-30-EN KSO-G03-44C*-20-EN
Spring offset $(P \rightarrow A, B \rightarrow T)$	2B*	P B A	KSO-G02-2B*-30-EN KSO-G03-2B*-20-EN	Ports P/T open at center position (tandem center)	66C*	A A D A B B B B B B B B B B B B B B B B	KSO-G02-66C*-30-EN KSO-G03-66C*-20-EN
No-spring type (with detent)	2D*	P A A T A B B B B B B B B B B B B B B B B	KSO-G02-2D*-30-EN KSO-G03-2D*-20-EN	Spring offset $(P \rightarrow B, A \rightarrow T)$	2A*	a P A A B B	KSO-G02-2A*-30-EN KSO-G03-2A*-20-EN
Ports A/B/T open (port P blocked)	4C*	a A P A A T B B	KSO-G02-4C*-30-EN KSO-G03-4C*-20-EN				

• General solenoid valve model code



- 1 Solenoid valve size 02: size 02, 03: size 03
- 2 Voltage code A: AC 100 V, B: AC 200 V, P: DC 24 V
- 3 Design No.

at center position

4 CE specifications, with surge killer

Note that AC 200 V specifications do not comply with CE specifications.

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Option selection table

Item				Des	cription					
		Property for all	ool:	Colonoid anatd			With fe	eathering		
Pump control	Pressure compensator control	Pressure feedb method combin control		Solenoid operated method combination control	Pressure o	compensator	Pressure to method control	feedback ombination	Solenoid operated method combination control	
	A	В		С		D	CONTROL	F		
Pressure	Г 1	High-pres	sure sid	e [] MPa	Г] Hig			n-pressure sid	e [] MPa	
at 50/60 Hz	MPa	Low-pres	sure side	e [] MPa	ŢL.	MPa	Low	v-pressure side [] MPa		
Standard	г 1	High-pres	sure sid	e [7.0] MPa	r a Hi			High-pressure side [7.0] MPa		
Setting	3.5 MPa	Low-pres	sure side	e [3.5] MPa	3.5	MPa	Low	ow-pressure side [3.5] MPa		
Flow rate	[/]	High-qua	ntity side	e [/] L/min		/ 1	High	igh-quantity side [/] L/min		
at 50/60 Hz	L/min	Low-quar	ntity side	[/] L/min	_	, L/min	Low	-quantity side [/] L/min		
		High-quantity side	e: Same a	s for pressure compensato	r		High-quant	ity side: Same a	s for pressure compensator	
Standard		LOW-		3 L/min at 60 Hz			Low-	*M15* 3	L/min at 60 Hz	
Setting			123*	6 L/min at 60 Hz			quantity	*M23* 6	L/min at 60 Hz	
		side *M	l38× 1	0 L/min at 60 Hz			side	*M38* 10	L/min at 60 Hz	
Motor power supply	N: Standard AC 200/22	20 V			380 V (50 I	Hz), 400 V (50/	60 Hz), 415	V (50 Hz), 440	V (60 Hz), 460 V (60 Hz)	
Tank specifications	N: Standard (3.2 mm v	vall thickness, to	p plate c	onstruction)		mous water fi				
Thermometer	N: Not featured	T			A: Feature	ed (0 to 100°C	, φ40)			
Temperature		A: Open at 65°0				E: A + C				
switch		B: Closed at 65		, ,		F: A + D				
(Up to 3 including	N: Not featured	<u> </u>		er (for heater control)		G: B + C				
fluid level switches)				gher (for heater control)	_	H: B + D				
				C for A/C, 3 to 6°C for E	B/D					
Fluid level		<u> </u>		r lower (for alarm)		E: A + C				
switch (Up to 3 including	N: Not featured			or lower (for alarm)	F: A + D					
temperature				r higher (for alarm)		G: B + C				
switches)			per limit	or higher (for alarm)		H: B + D				
Oil pan	N: Not featured	A: Featured				1_				
Electric heater	N: Not featured	A: For AC 200		B: For AC 220 \	-	C: For AC 4			For AC 440 V	
1 kW Magnet contaminant separator	N: Not featured			unit for a 60/100 L tan			guiating va	ive		
Tank drain valve	N: Not featured	A: Featured (1/2	2B globe	valve)						
Water cooler	N: Not featured	60 L tank	A:	LT0403A-10 B: I	_T0504A-10					
Water Cooler	IN. NOI leatured	100/160 L tank	C:	LT0504A-10 D:	_T0707A-10					
Water cooler piping	N: Not featured	A: Featured	cooler a	nstalled with control val and between the water between the water cool e needs to be directly o	cooler and r er and returr	eturn filter. W n filter is cove	hen not ins	stalled with cor option but the	ntrol valves, the	
Temperature			60 L tar	nk: OWR-5004G				Manufacturer	: Saginomiya	
actuated water regulating	N: Not featured	A: Featured	100/160	L tank: OWR-5006G				Seisakusho, I	• .	
valve		A. F t		l D					. 5	
Return filter clog detection	N: Not featured	A: Featured (O		,						
switch Unit		B: Featured (CI	-	en clogged)						
orientation	N: Standard	A: Reverse ass			• Mechar	nical switch				
Pressure switch	N: Not featured	A: Open at 2 M				cturer: ACT E	lectric Indu	ustry Co., Ltd.	CE16	
		B: Closed at 2 I	MPa or lo	ower		cturer: WIKA	PSD-4 (PN	NP)		
Terminal box	N: Not featured	A terminal box that can be mounted on the unit, with a size of 300 mm × 200 mm × 105 mm (W × H × D). A: Featured No terminal block is supplied with the terminal box. One DIN rail row is attached. When selecting the wiring option, select "N: Not featured" for this option.								
Electric wiring	N: Not featured	A: Featured	No wiring port is provided for wiring by the user because the port is a part of the work to be carried out by the user.							
Specified color	N: Standard	(Only recoating possible: with epoxy-based paint) Only the pressure gauge, hoses, and parts A: Special color purchased are masked. JMPA code [] or Munsell code [] Baking finish is applied to the standard tank. Paint color: JMPA code Y59-60H (Munsell code 10BG6)						•		
	Baking finish is applied to the standard tank. Paint color: JMPA code Y59-60H (Munsell code 10BG6/4)									

Other requests will be handled as design-to-order cases.

Control circuit selection table

* Series order	6th series	5th series	4th series	3rd series	2nd series	1st series	
Size	02 -	02 03	02 03	02 03	02 03	02 03	
Solenoid valve spool code	Select one from the solenoid valve table.						
Circuit code	Select one from the circuit codes given in the table below.						
Solenoid valve voltage	No AC 100/100/110 V, 50/60/60 Hz AC 200/200/220 V, 50/60/60 Hz DC 24 V				killer (CE com Note that only	e: With ground terminal and surge killer (CE compliant models) Note that only the models with voltage codes A and P are CE compliant.	

Name	Meter-in throttle	Meter-out throttle	Meter-out position holding	Meter-in port P pressure reducing	Meter-out port P pressure reducing	Meter-in port B pressure reducing	Meter-out port B pressure reducing	Meter- in back pressure	Meter-out position holding port B pressure reducing	Meter-out position holding port P pressure reducing	Meter-in PC flow control
Circuit	01	02	03	04	05	06	07	08	09	10	11
Standard control circuit	***			No. No.							
Notes on circuit operation	only to positive load Not applicable to negative load or inertial load. Not applicable to very low speed (no slower than 1 m/min) Leakage at	both positive and negative load • Care required about boost pressure with	Used when the position needs to be held. Care required about boost pressure with negative load.	Used to lower the pressure in the series. Not applicable to negative load.	Used to lower the pressure in the series.	Used to achieve variable thrust, such as for clamping pressure. Not applicable to negative load. To be meterout control with negative load.	Used to achieve variable thrust with negative load while adjusting roll-separating force, etc. Not applicable when the position needs to be held.	Used when boost occurs in the meter-out circuit with negative load. Not applicable when the position needs to be held.	Used when the position needs to be held in circuit 07.	Used when the position needs to be held in circuit 05.	Used when precise speed control is required in circuit 01.

	position.	illel tial load.							<u> </u>	
Name			Meter- out port B pressure reducing PC flow control		B pressure reducing position	Meter-out 2-speed	Meter-out 2-speed position hold	Meter-in 2-pressure 2-speed	Meter-out 2-pressure 2-speed	Blocking
Circuit	12	13	14	15	16	17	18	19	20	00
Standard control circuit										
Notes on circuit operation	Used when precise speed control is required in circuit 02. Brake valves, etc. to be considered with inertial load. Care required about boost pressure with negative load.	speed control is required in circuit 06.	Used when precise speed control is required in circuit 07.	Used when the position needs to be held in circuit 13.	the position needs to	Used when high-/low-speed control is required. Care required about boost pressure with negative inertial load.	Used when the position needs to be held in circuit 17.	positive load. • Used when high-/	Used when high-/ low-pressure control is required. High-/low-speed control possible	When the circuit is not used