

Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

12/08/2021

## Pump

The pump housing has both a priming and a drain hole closed by plugs. The impeller is a closed impeller with double-curved blades with smooth surfaces. The impeller is statically balanced according to ISO 1940-1 class G6.3 and hydraulically balanced to compensate for axial thrust.

Wear rings used in pump housing and for impeller are made of bronze/brass.

Motor stool and pump cover are made of cast iron (EN-GJL-250). Coupling guards are fitted to the motor stool. The pump cover is provided with a manual air vent screw for venting of the pump housing and the shaft seal chamber.

The pump is fitted with an unbalanced rubber bellows seal with torque transmission across the spring and around the bellows. Due to the bellows, the seal does not wear the shaft, and the axial movement is not prevented by deposits on the shaft.

Primary seal:

- Rotating seal ring material: silicon carbide (SiC)
- Stationary seat material: silicon carbide (SiC)

This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

Secondary seal material: EPDM (ethylene-propylene rubber)

EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.

The pump housing has feet.

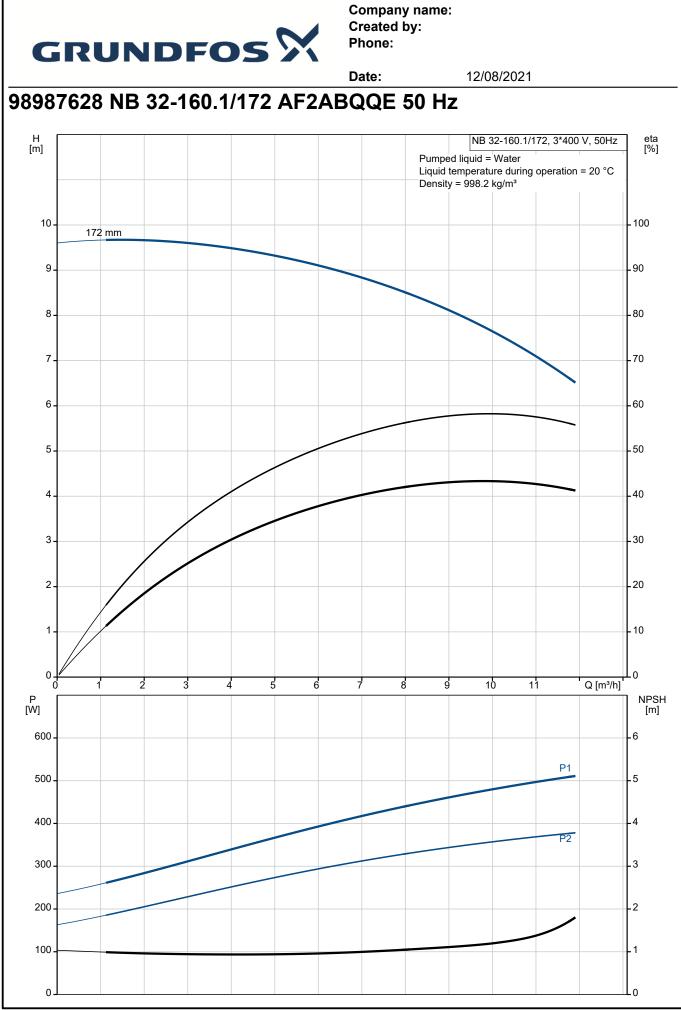
## Motor

	GRUNDFO	) C	Compan Created Phone:		
	GRONDF		Date:	12/08/2021	
ty.	Description				
	tolerances comply with IEC 6003 The motor efficiency is classified The motor does not incorporate r	4. as IE2 in acco notor protection	rdance with IEC 60 n and must be conr	nensions to IEC and DIN standards. Elec 034-30. nected to a motor-protective circuit break e set according to the rated current of th	er which
	Further product details				
	Technical data				
	Controls:				
	Frequency converter:	NONE			
	Pressure sensor:	Ν			
	Liquid:	10/04			
	Pumped liquid:	Water			
	Liquid temperature range:	-25 120 °C 20 °C			
	Selected liquid temperature:				
	Density:	998.2 kg/m³			
	Technical:				
	Pump speed on which pump data	a are based:	1400 rpm		
	Rated flow:	9.85 m³/h	·		
	Rated head:	7.551 m			
	Actual impeller diameter:	172 mm			
	Nominal impeller diameter:	160.1			
	Shaft seal arrangement:	Single			
	Code for shaft seal:	BQQE			
	Curve tolerance:	ISO9906:201	2 3B2		
	Bearing design:	Standard			
	Materials:				
	Pump housing:	Cast iron			
		EN-GJL-250			
		ASTM class 3	5		
	Wear ring:	Brass			
	Impeller:	Cast iron			
		EN-GJL-200			
		ASTM class 3	60		
	Shaft:	Stainless stee	el		
		EN 1.4301			
		AISI 304			
	Internal pump house coating:	CED			
	Installation:				
	Maximum ambient temperature:	40 °C			
	Maximum operating pressure:	16 bar			
	Pipe connection standard:	EN 1092-2			
	Size of inlet connection:	DN 50			
	Size of outlet connection:	DN 32			
	Pressure rating for connection:	PN 16			
	Bearing lubrication:	Grease			



Company name: Created by: Phone:

Support block: N   Electrical data: M   Motor type: 71B   IE Efficiency class: IE2   Rated power sex: 50 Hz   Rated power sex: 120 - 37 KW   Mains frequency: 50 Hz   Rated voltage: 3 x 220-2400/380-415Y V   Rated voltage: 3 x 220-2400/380-415Y V   Rated voltage: 3 x 220-2400/380-415Y V   Rated speed: 1.390-1410 rpm   Efficiency: IE2 72.8% - IE2 73.1%   Motor efficiency at full load: 72.8-73.1%   Motor efficiency at 1/2 load: 73.8 %   Number of poles: 4   Enclosure class (IEC 24.5): 55 Dust/Jetting   Insulation class (IEC 45.5): F   Motor No: 99957665   Others: Minimum efficiency index, MEI ≥:   Minimum efficiency index, MEI ≥: 0.70   Net weight: 31 kg   Gross weight: 42 kg   Shipping voltme: 0.134 m²   Country of origin: HU   Custom tariff no.: 84137051	Description	Date:	12/08/2021
Electrical data:Motor type:71BIE Efficiency class:IE2Rated power - P2:0.37 kWMains frequency:50 HzRated voltage:3 x 220-240D/380-415Y VRated current:1,80-1,83/1,04-1,06 AStarting current:390-430 %Cos phi - power factor:0.78-0.69Rated speed:1390-1410 rpmEfficiency:IE2 72,8% - IE2 73,1%Motor efficiency at full load:72.8-73,1 %Motor efficiency at 1/2 load:73.8 %Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No:99957665Others:0.70Minimum efficiency index, MEI ≥:0.70Net weight:31 kgGross weight:42 kgShipping volume:0.134 m³Country of origin:HU	-	N	
Motor type:71BIE Efficiency class:IE2Rated power - P2:0.37 kWMains frequency:50 HzRated voltage:3 x 220-240D/380-415Y VRated current:1,80-1,83/1,04-1,06 AStarting current:390-430 %Cos phi - power factor:0.78-0.69Rated speed:1390-1410 rpmEfficiency:IE2 72,8% - IE2 73,1%Motor efficiency at full load:72.8-73.1 %Motor efficiency at full load:75.6 %Motor efficiency at 1/2 load:73.8 %Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No:99957665Others:0.70Minimum efficiency index, MEI ≥:0.70Net weight:31 kgGross weight:42 kgShipping volume:0.134 m³Country of origin:HU	Support block.	N	
Motor type:71BIE Efficiency class:IE2Rated power - P2:0.37 kWMains frequency:50 HzRated voltage:3 x 220-240D/380-415Y VRated current:1,80-1,83/1,04-1,06 AStarting current:390-430 %Cos phi - power factor:0.78-0.69Rated speed:1390-1410 rpmEfficiency:IE2 72,8% - IE2 73,1%Motor efficiency at full load:72.8-73.1 %Motor efficiency at 1/2 load:75.6 %Motor efficiency at 1/2 load:73.8 %Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No:99957665Others:0.70Minimum efficiency index, MEI ≥:0.70Net weight:31 kgGross weight:42 kgShipping volume:0.134 m³Country of origin:HU	Electrical data:		
IE Efficiency class:IE2Rated power - P2:0.37 kWMains frequency:50 HzRated voltage:3 x 220-240D/380-415Y VRated current:1,80-1,83/1,04-1,06 AStarting current:390-430 %Cos phi - power factor:0.78-0.69Rated speed:1390-1410 rpmEfficiency:IE2 72,8% - IE2 73,1%Motor efficiency at full load:72.8-73.1 %Motor efficiency at 3/4 load:75.6 %Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No:99957665Others:0.70Met weight:31 kgGross weight:42 kgShipping volume:0.134 m³Country of origin:HU		71B	
Rated power - P2: $0.37 \text{ kW}$ Mains frequency: $50 \text{ Hz}$ Rated voltage: $3 \times 220-240D/380-415Y \text{ V}$ Rated current: $1,80-1,83/1,04-1,06 \text{ A}$ Starting current: $390-430 \ \%$ Cos phi - power factor: $0.78-0.69$ Rated speed: $1390-1410 \text{ rpm}$ Efficiency:IE2 72,8% - IE2 73,1%Motor efficiency at full load: $72.8-73.1 \ \%$ Motor efficiency at $3/4 \text{ load}$ : $75.6 \ \%$ Motor efficiency at $1/2 \text{ load}$ : $73.8 \ \%$ Number of poles: $4$ Enclosure class (IEC 34-5): $55 \text{ Dust/Jetting}$ Insulation class (IEC 85):FMotor No: $99957665$ Others: $0.70$ Minimum efficiency index, MEI $\geq$ : $0.70$ Net weight: $31 \text{ kg}$ Gross weight: $42 \text{ kg}$ Shipping volume: $0.134 \text{ m}^3$ Country of origin:HU			
Mains frequency:50 HzRated voltage: $3 \times 220-240D/380-415Y V$ Rated current: $1,80-1,83/1,04-1,06 A$ Starting current: $390-430 \%$ Cos phi - power factor: $0.78-0.69$ Rated speed: $1390-1410 rpm$ Efficiency:IE2 72,8% - IE2 73,1%Motor efficiency at full load: $72.8-73.1 \%$ Motor efficiency at $3/4$ load: $75.6 \%$ Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No: $99957665$ Others: $31 kg$ Gross weight: $42 kg$ Shipping volume: $0.134 m^3$ Country of origin:HU			
Rated voltage: $3 \times 220-240D/380-415Y V$ Rated current: $1,80-1,83/1,04-1,06 A$ Starting current: $390-430 \%$ Cos phi - power factor: $0.78-0.69$ Rated speed: $1390-1410 \text{ rpm}$ Efficiency:IE2 72,8% - IE2 73,1%Motor efficiency at full load: $72.8-73.1 \%$ Motor efficiency at $3/4 \log 2$ : $75.6 \%$ Motor efficiency at $1/2 \log 2$ : $73.8 \%$ Number of poles: $4$ Enclosure class (IEC 34-5): $55 \text{ Dust/Jetting}$ Insulation class (IEC 85):FMotor No: $99957665$ Others: $0.70$ Minimum efficiency index, MEI $\geq$ : $0.70$ Net weight: $31 \text{ kg}$ Gross weight: $42 \text{ kg}$ Shipping volume: $0.134 \text{ m}^3$ Country of origin: $HU$			
Rated current:1,80-1,83/1,04-1,06 AStarting current:390-430 %Cos phi - power factor:0.78-0.69Rated speed:1390-1410 rpmEfficiency:IE2 72,8% - IE2 73,1%Motor efficiency at full load:72.8-73.1 %Motor efficiency at 3/4 load:75.6 %Motor efficiency at 1/2 load:73.8 %Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No:99957665Others:0.70Net weight:31 kgGross weight:42 kgShipping volume:0.134 m³Country of origin:HU			
Starting current: $390-430 \ \%$ Cos phi - power factor: $0.78-0.69$ Rated speed: $1390-1410 \ \text{rpm}$ Efficiency:IE2 72,8% - IE2 73,1%Motor efficiency at full load: $72.8-73.1 \ \%$ Motor efficiency at 3/4 load: $75.6 \ \%$ Motor efficiency at 1/2 load: $73.8 \ \%$ Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No: $99957665$ Others:Minimum efficiency index, MEI $\geq$ :Minimum efficiency index, MEI $\geq$ : $0.70$ Net weight: $31 \ \text{kg}$ Gross weight: $42 \ \text{kg}$ Shipping volume: $0.134 \ \text{m}^3$ Country of origin:HU			
Cos phi - power factor: $0.78-0.69$ Rated speed: $1390-1410 \text{ rpm}$ Efficiency:IE2 72,8% - IE2 73,1%Motor efficiency at full load: $72.8-73.1 \%$ Motor efficiency at 3/4 load: $75.6 \%$ Motor efficiency at 1/2 load: $73.8 \%$ Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No:99957665Others:0.70Minimum efficiency index, MEI $\geq$ : $0.70$ Net weight: $31 \text{ kg}$ Gross weight: $42 \text{ kg}$ Shipping volume: $0.134 \text{ m}^3$ Country of origin:HU			
Rated speed:1390-1410 rpmEfficiency:IE2 72,8% - IE2 73,1%Motor efficiency at full load:72.8-73.1 %Motor efficiency at 3/4 load:75.6 %Motor efficiency at 1/2 load:73.8 %Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No:99957665Others:0.70Minimum efficiency index, MEI $\geq$ :0.70Net weight:31 kgGross weight:42 kgShipping volume:0.134 m³Country of origin:HU			
Efficiency:IE2 72,8% - IE2 73,1%Motor efficiency at full load:72.8-73.1 %Motor efficiency at 3/4 load:75.6 %Motor efficiency at 1/2 load:73.8 %Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No:99957665Others:0.70Net weight:31 kgGross weight:42 kgShipping volume:0.134 m³Country of origin:HU			
Motor efficiency at full load:72.8-73.1 %Motor efficiency at 3/4 load:75.6 %Motor efficiency at 1/2 load:73.8 %Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No:99957665Others:Minimum efficiency index, MEI $\geq$ :0.70Net weight:31 kgGross weight:42 kgShipping volume:0.134 m³Country of origin:HU			
Motor efficiency at 3/4 load:75.6 %Motor efficiency at 1/2 load:73.8 %Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No:99957665Others:0.70Minimum efficiency index, MEI $\geq$ :0.70Net weight:31 kgGross weight:42 kgShipping volume:0.134 m³Country of origin:HU			
Motor efficiency at 1/2 load:73.8 %Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No:99957665Others: $0.70$ Net weight:31 kgGross weight:42 kgShipping volume: $0.134 \text{ m}^3$ Country of origin:HU			
Number of poles:4Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No:99957665Others: $0.70$ Minimum efficiency index, MEI $\geq$ : $0.70$ Net weight:31 kgGross weight:42 kgShipping volume: $0.134 \text{ m}^3$ Country of origin:HU			
Enclosure class (IEC 34-5):55 Dust/JettingInsulation class (IEC 85):FMotor No:99957665Others: $0.70$ Minimum efficiency index, MEI $\geq$ : $0.70$ Net weight:31 kgGross weight:42 kgShipping volume: $0.134 \text{ m}^3$ Country of origin:HU			
Insulation class (IEC 85):FMotor No:99957665Others:Minimum efficiency index, MEI $\geq$ :0.70Net weight:31 kgGross weight:42 kgShipping volume:0.134 m³Country of origin:HU			
Motor No:99957665Others:Minimum efficiency index, MEI $\geq$ :0.70Net weight:31 kgGross weight:42 kgShipping volume:0.134 m³Country of origin:HU			
Others:   Minimum efficiency index, MEI ≥: 0.70   Net weight: 31 kg   Gross weight: 42 kg   Shipping volume: 0.134 m³   Country of origin: HU			
Minimum efficiency index, MEI ≥:0.70Net weight:31 kgGross weight:42 kgShipping volume:0.134 m³Country of origin:HU		00001000	
Net weight:31 kgGross weight:42 kgShipping volume:0.134 m³Country of origin:HU	Others:		
Net weight:31 kgGross weight:42 kgShipping volume:0.134 m³Country of origin:HU		x, MEI ≥: 0.70	
Shipping volume:0.134 m³Country of origin:HU		31 kg	
Country of origin: HU	Gross weight:	42 kg	
	Shipping volume:	0.134 m <sup>3</sup>	
Custom tariff no.: 84137051	Country of origin:	HU	
	Custom tariff no.:	84137051	





## Company name: Created by: Phone:

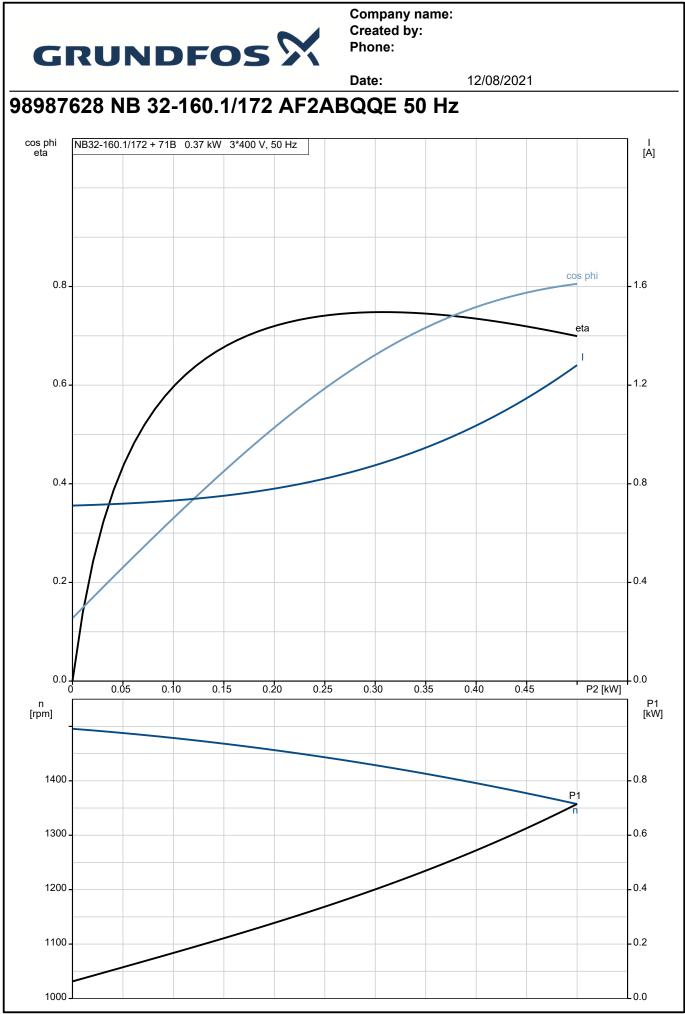
		Date:	12/08/2021	
Description	Value	H [m]	NB 32-160.1/172, 3*400 V, 50Hz	et [%
General information:			Pumped liquid = Water Liquid temperature during operation = 20 °C	
Product name:	NB 32-160.1/172 AF2ABQQE	10 <b>-</b> 172 m	Density = 998.2 kg/m <sup>3</sup>	- 100
Product No:	98987628	9		90
EAN number:	5712604745601	-		
Price:	GBP 1140	8 -		- 80
Technical:		7		70
Pump speed on which pump data are based:	1400 rpm	6 -		60
Rated flow:	9.85 m³/h	-		
Rated head:	7.551 m	5 -		- 50
Actual impeller diameter:	172 mm	4		40
Nominal impeller diameter:	160.1	-		
Shaft seal arrangement:	Single	3-		- 30
Shaft diameter:	24 mm	2		20
Code for shaft seal:	BQQE			-~
Curve tolerance:	ISO9906:2012 3B2	1-		10
Pump version:	A	• • •		L
Bearing design:	Standard	0	2 4 6 8 10 Q [m³/h]	-
Materials:		P [W]		NPS [m
Pump housing:	Cast iron			+ ""
Pump housing:	EN-GJL-250	500 -	P1	-5
Pump housing:	ASTM class 35			
Wear ring:	Brass	400 -	P2	-4
Impeller:	Cast iron	300 -	12	_ 3
Impeller:	EN-GJL-200	200 -		2
Impeller:	ASTM class 30	200-		T <sup>2</sup>
Shaft:	Stainless steel	100		-1
Shaft:	EN 1.4301	0		Lo
Shaft:	AISI 304	<b>.</b>		-
Internal pump house coating:	CED		100 III	<i>_</i>
Material code:	А			$\rightarrow$
Code for rubber:	E	11		S
Installation:				20
Maximum ambient temperature:	40 °C			J.
Maximum operating pressure:	16 bar	- "AA"		
Pipe connection standard:	EN 1092-2	100		
Size of inlet connection:	DN 50	-	<i>i</i>	000
Size of outlet connection:	DN 32			
Pressure rating for connection:	PN 16	4 × • 19	╉ <mark>╞╤╤╤┧╴</mark> ┥╴╴┍┲ <sup>╋</sup> ╎╇ <sub>┝</sub> _╹┘ <sup>╸</sup>	$\Box$
Bearing lubrication:	Grease			1
Pump housing with feet:	Yes		╨└ <del>╞┈╷</del> ┶╩┿	
Support block:	Ν			
Connect code:	F2			
Liquid:				
Pumped liquid:	Water		HIGH VOLTAGE RECTION OF ROTATION	
Liquid temperature range:	-25 120 °C	· 🔊 🛄		
Selected liquid temperature:	20 °C			
Density:	998.2 kg/m³			
Electrical data:				
Motor type:	71B			
E Efficiency class:	IE2	.   ≻	<u>Pa</u> -	
Rated power - P2:	0.37 kW			
Mains frequency:	50 Hz	- (6) <u>-</u> ,		
Rated voltage:	3 x 220-240D/380-415Y V	Er f		
Rated current:	1,80-1,83/1,04-1,06 A			
Starting current:	390-430 %			
Cos phi - power factor:	0.78-0.69			

Printed from Grundfos Product Centre [2021.19.003]



Company name: Created by: Phone:

		Date:	12/08/2021	
Description	Value			
Rated speed:	1390-1410 rpm			
Efficiency:	IE2 72,8% - IE2 73,1%			
Motor efficiency at full load:	72.8-73.1 %			
Motor efficiency at 3/4 load:	75.6 %			
Motor efficiency at 1/2 load:	73.8 %			
Number of poles:	4			
Enclosure class (IEC 34-5):	55 Dust/Jetting			
Insulation class (IEC 85):	F			
Motor protec:	NONE			
Motor No:	99957665			
Mount. design. acc. IEC 34-7:	IM V1/B5			
Controls:				
Frequency converter:	NONE			
Pressure sensor:	Ν			
Others:				
Minimum efficiency index, MEI ≥:	0.70			
Net weight:	31 kg			
Gross weight:	42 kg			
Shipping volume:	0.134 m³			
Country of origin:	HU			
Custom tariff no.:	84137051			



Printed from Grundfos Product Centre [2021.19.003]

