



Data sheet

Hydraulic data

Minimum efficiency index (MEI)	≥0.7
Maximum operating pressure PN	16 bar
Min. fluid temperature <i>T</i> _{min}	-20 °C
Max. fluid temperature $T_{\rm max}$	140 °C
Min. ambient temperature T_{\min}	0 °C
Max. ambient temperature $T_{\rm max}$	50 °C

Materials

Pump housing	Grey cast iron
Impeller	Grey cast iron
Shaft	Stainless steel
Shaft seal	AQ1EGG
Lantern	5.1301/EN-GJL-250 KTL-coated

Approved liquids (other liquids upon request)

Heating water (as per VDI 2035)	yes
Heat carrier oil	Special version at additional charge
Cooling and cold water circulation systems	yes
Water-glycol mixtures (at 20 – 40 vol. % glycol and fluid temperature \leq 40 °C)	yes

Installation dimensions

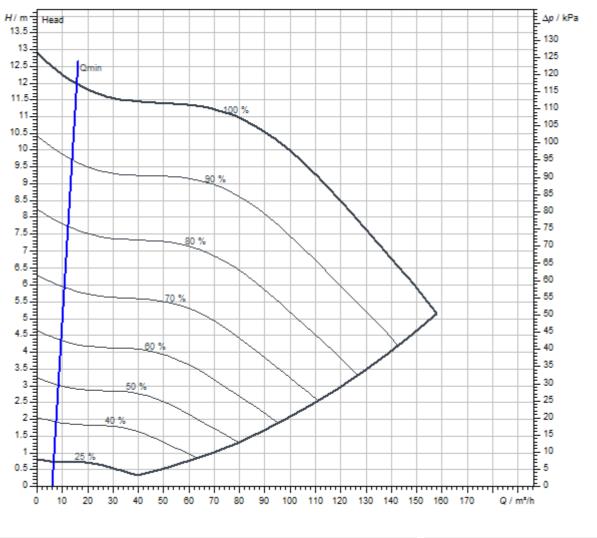
Port-to-port length <i>L0</i>	500 mm
Pipe connection on the suction side <i>DNs</i>	DN 100
Pipe connection on the discharge side DNd	DN 100

Drive

Mains connection	3~400 V, 50/60 Hz
Number of poles	4
Motor efficiency class	IE5
Power consumption $P_{1 \text{ max}}$	4100 W
Rated power P ₂	4 kW
Max current I _{max}	6.1 A
Emitted interference	EN 61800-3
Interference resistance	EN 61800-3
Insulation class	F
Protection class motor	IP55
Motor protection	PTC integrated



Pump curves

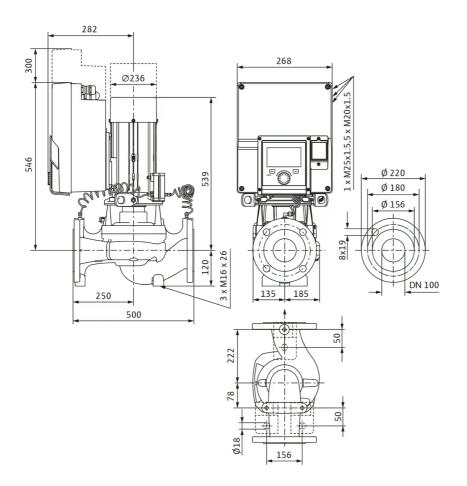


Fluid media	Water 100 %
Fluid temperature <i>T</i>	20.00 °C
speed at duty point <i>n hydr. @ OP</i>	1,579 1/min



Dimensions and dimensions drawings

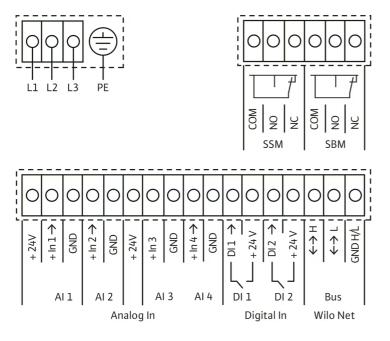
Stratos GIGA2.0-I 100/1-11/4,0-R1





Wiring diagram

Wilo-Stratos GIGA2.0



Bezeichnung



Tender text

High-efficiency in-line pump with EC motor of energy efficiency class IE5 in accordance with IEC 60034-30-2, hydraulics with minimum efficiency index MEI \ge 0.7 and electronic power adjustment with a glanded pump design. The pump is configured as a single-stage low-pressure centrifugal pump with flange connection and mechanical seal. The **Stratos GIGA2.0-I** has been predominantly designed for pumping heating water (acc. to VDI 2035), chilled water and water-glycol mixtures without abrasive substances in heating, airconditioning and cooling systems.

Design ...-R1:

- > Single-stage low-pressure centrifugal pump with one-piece shaft in monobloc design
- > Spiral housing in in-line design (suction and discharge ports with the same flanges in a line)
- > PN 16 flange in accordance with EN 1092-2
- > Pressure measuring connections (R 1/8) for retrofitting of a differential pressure sensor (version ...-R1 without differential pressure sensor)
- > Pump housing and motor flange with cataphoretic coating as standard
- > Mechanical seal for pumping water up to Tmax. = +140 °C. A glycol admixture of 20 % to +40 % by volume is permitted up to $T \le +40$ °C. An alternative mechanical seal must be provided in water-glycol mixtures with glycol proportions > 40 % up to max. 50 % by volume and a fluid temperature of > +40 °C up to max. +120 °C or fluids other than water. When using water-glycol mixtures, the use of an S1 variant with a corresponding mechanical seal is generally recommended.
- > Connection voltages:
 - > 3~440 V ±10% 50/60 Hz; 3~400 V ±10% 50/60 Hz; 3~380 V -5% +10% 50/60 Hz
- > Version M-: 1~220 V 240 V (±10%), 50/60 Hz
- > Compliance with electromagnetic compatibility without additional measures
 - > Interference emission for residential environment according to EN 61800-3:2018
 - > Interference immunity for industrial environments according to EN 61800-3:2018

Control modes:

- > Constant speed (n-const.)
- > Constant temperature (T-const.)
- > Constant differential temperature (dT-const.)
- > User-defined **PID** control
- > Only possible with differential pressure sensor:
- > Permanent, automatic power adjustment to system requirements without setpoint specification Wilo Dynamic Adapt plus (factory setting).
- > Needs-based volume flow optimisation of the feeder pump through connectivity and communication between multiple secondary pumps (Multi-Flow Adaptation).
- > Constant volume flow (Q-const.)
- > Variable differential pressure (dp-v) with the option to set the nominal duty point Q and H
- > Constant differential pressure (dp-c)
- > Differential pressure control (dp-c) to a remote point in the pipe network (index circuit evaluator)

Functions:

- > Selection of the field of application in the setting assistant
- > Operating modes of twin-head pump: Main/standby operation
- > Switchover between heating and cooling mode (automatic, external or manual)
- > Ability to save and restore configured pump settings (3 restoration points)
- > Fault and warning messages shown in plain text with advice on resolving the issue
- > Integrated full motor protection
- > Only possible with differential pressure sensor:
 - > Heat quantity measurement
 - > Cooling quantity measurement
 - > Adjustable volume flow limiter using the Q-Limit function (Q_{min.} and Q_{max.})
 - > Pump automatically deactivates when no flow is detected (No-Flow Stop)
 - > Efficiency-optimised **parallel operation** for dp-c and dp-v

Display in the "Home screen" of the graphic display:

- > Control mode currently set
- > Current setpoint
- Current volume flow (only if a differential pressure sensor is connected)
- Current fluid temperature (only if temperature sensor is connected)
- > Current power consumption
- > Cumulative electric consumption

wilo

Version:

- > 4 configurable analogue inputs: 0-10 V, 2-10 V, 0-20 mA, 4-20 mA and commercially available PT1000 (only on two analogue inputs); +24 V DC power supply
- > 2 configurable digital inputs (Ext. OFF, Ext. Min, Ext. Max, heating/cooling, manual override (uncoupled from building automation), operation lock (key lock and remote operation configuration protection))
- > 2 configurable signal relays for run signals and fault messages
- Slot for Wilo-CIF modules with interfaces for building automation (BA) (optional accessories: CIF modules Modbus RTU, BACnet MS/TP, LON, PLR, CAN)
- > Wilo Net as a Wilo system bus for communication between Wilo products, e.g. Multi-Flow Adaptation; dual-pump operation
- > Automatic emergency operation with definable pump speed for exceptional circumstances, e.g. bus communication or sensor value malfunction
- > Rotatable, graphic colour display (4.3 inches) with one button manual operation level
- > Bluetooth interface via Wilo-Smart Connect module BT
- > Use the Wilo-Assistant app to read and set operating data and –among other things– set up a commissioning protocol through the Bluetooth interface
- > Integrated dual-pump management (twin-head pumps are prewired) when using 2 single pumps as two-pump unit (connection via Wilo Net)
- > Cable break detection when using an analogue signal (in connection with 2 – 10 V or 4 – 20 mA)
- > Time stamp for error/warnings and historical operating data
- > Continuous operating data memory
- > Standard condensate drainage holes in the motor housing (closed upon delivery)
- > Air vent valve on the lantern

Operating Data

Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature $T_{\rm max}$	140 °C
Min. ambient temperature T_{min}	0 °C
Max. ambient temperature $T_{\rm max}$	50 °C
Maximum operating pressure PN	16 bar
Minimum efficiency index (MEI)	≥0.7

Scope of delivery:

- > Pump
- > Wilo-Smart Connect module BT
- > Threaded cable glands with sealing inserts
- Installation and operating instructions and declaration of conformity

Accessories must be ordered separately:

3 mounting brackets with fixation material for installation on a base

- > Blind flanges for twin-head pump housing
- > Installation aid for mechanical seal (incl. mounting bolts)
- > For connection to building automation:
 - > CIF module PLR
 - > CIF module LON
 - > CIF module BACnet MS/TP
 - > CIF module Modbus RTU
 - > CIF module CANopen
 - > CIF module Ethernet Multi-protocol (Modbus TCP, BACnet/IP)
 - > Connection M12 RJ45 CIF Ethernet
- > Differential pressure sensor DPS 2 ... 10 V
- > Differential pressure sensor DPS 4 ... 20 mA
- > Temperature sensor PT1000 AA
- > Sensor sleeves for the installation of temperature sensors in the pipe



Drive

Mains connection	3~400 V, 50/60 Hz
Motor efficiency class	IE5
Power consumption $P_{1 \max}$	4100 W
Rated power P ₂	4 kW
Max current I _{max}	6.1 A
Max. speed n _{max}	1580 1/min
Emitted interference	EN 61800-3
Interference resistance	EN 61800-3
Insulation class	F
Protection class motor	IP55
Motor protection	PTC integrated

Materials

Pump housing	Grey cast iron
Impeller	Grey cast iron
Shaft	Stainless steel
Shaft seal	AQ1EGG
Lantern	5.1301/EN-GJL-250 KTL-coated

Installation dimensions

Pipe connection on the suction side DNs	DN 100
Pipe connection on the discharge side DNd	DN 100
Port-to-port length <i>L0</i>	500 mm

Ordering information

Brand	Wilo
Product description	Stratos GIGA2.0-I 100/1-11/4,0-R1
Net weight, approx. <i>m</i>	105 kg
Article number	2204898 🔀



Installation type

Continuous, infinitely variable control, differential pressure-sensitive CCe-HVAC system

CCe-HVAC system	
CCe-HVAC system 1 x 2.2	2536676
CCe-HVAC system 2 x 2.2	2536677
CCe-HVAC system 3 x 2.2	2536678
CCe-HVAC system 4 x 2.2	2536679
CCe-HVAC system 5 x 2.2	2536680
CCe-HVAC system 6 x 2.2	2536681
Antenna GSM/GPRS	
D-network dual-band antenna with 3 m cable	2533862
D-network tri-band antenna 10 m cable	2533863
D-network tri-band antenna 15 m cable	2533864
Outdoor temperature sensor Pt 100	
Outdoor temperature sensor Pt 100	2533772
DDG impulse selector	
DDG impulse selector	2533770
BMS base module	
BMS base module BMS base module	2533800
	2533800
BMS base module	2533800 2537051
BMS base module CC communication module BACnet	
BMS base module CC communication module BACnet CC-communication module BACnet IP (slave)	2537051
BMS base module CC communication module BACnet CC-communication module BACnet IP (slave) CC-communication module BACnet MS/TP (slave)	2537051
BMS base module CC communication module BACnet CC-communication module BACnet IP (slave) CC-communication module BACnet MS/TP (slave) Communication module LON	2537051 2537050
BMS base module CC communication module BACnet CC-communication module BACnet IP (slave) CC-communication module BACnet MS/TP (slave) Communication module LON Communication module LON	2537051 2537050
BMS base module CC communication module BACnet CC-communication module BACnet IP (slave) CC-communication module BACnet MS/TP (slave) Communication module LON Communication module LON Communication module ModBus	2537051 2537050 2533868
BMS base module CC communication module BACnet CC-communication module BACnet IP (slave) CC-communication module BACnet MS/TP (slave) Communication module LON Communication module LON Communication module ModBus Communication module ModBus	2537051 2537050 2533868
BMS base module CC communication module BACnet CC-communication module BACnet IP (slave) CC-communication module BACnet MS/TP (slave) Communication module LON Communication module LON Communication module ModBus Communication module ModBus Communication module ModBus Communication module ModBus	2537051 2537050 2533868 2533869
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Communication module GSM 2533861 GSM module Pump signalling module Signalling module pump 1-2 2533812 Signalling module pump 3-6 2533836 Signal converter retrofit kit Signal converter 0-10 V / 0-20 mA 2534992 Connection cable control modules/signalling modules Control modules connecting cable 2533790 Signalling modules connecting cable 2533890 DDG transducer DDG transducer 501771990 DDG power supply unit DDG power supply unit 501865293 Extension kit differential pressure sensor for Y-piece application Extension for DDG-kit 2166098

Continuous, infinitely variable control, temperature-dependent CCe-HVAC system

CCe-HVAC system	
CCe-HVAC system 1 x 2.2	2536676
CCe-HVAC system 2 x 2.2	2536677
CCe-HVAC system 3 x 2.2	2536678
CCe-HVAC system 4 x 2.2	2536679
CCe-HVAC system 5 x 2.2	2536680
CCe-HVAC system 6 x 2.2	2536681

Antenna GSM/GPRS 2533862 D-network dual-band antenna with 3 m cable 2533862 D-network tri-band antenna 10 m cable 2533863 D-network tri-band antenna 15 m cable 2533864

Outdoor temperature sensor Pt 100

Outdoor temperature sensor Pt 100 2533772

BMS base module

Stratos GIGA2.0-I 100/1-11/4,0-R1



BMS base module	2533800
CC communication module BACnet	
CC-communication module BACnet IP (slave)	2537051
CC-communication module BACnet MS/TP (slave)	2537050
Communication module LON	
Communication module LON	2533868
Communication module ModBus	
Communication module Modbus RTU	2533869
Communication module Profibus	
Communication module Profibus DP	2533866
Communication module CC	
CC communication module	2533850
Communication module GSM	
GSM module	2533861
Pump signalling module	
Signalling module pump 1-2	2533812
Signalling module pump 3-6	2533836
Signal converter retrofit kit	
Signal converter 0-10 V / 0-20 mA	2534992
Temperature module	
Temperature module for systems with 1-3 pumps	2534991
Temperature module for systems with 4-6 pumps	2533771
Connection cable control modules/signalling modules	
Control modules connecting cable	2533790
Signalling modules connecting cable	2533890

Continuous, infinitely variable control, differential pressure-sensitive SCe-HVAC system

SCe-HVAC system	
SCe-HVAC system 1x10A-WM	2545254
SCe-HVAC system 2x10A-WM	2545255
SCe-HVAC system 3x10A-WM	2545256



Detwork dual-band antenna %in cable2000000Detwork bi-band antenna %in cable2000000000000000000000000000000000000	SCe-HVAC system 4x10A-WM	2545257
Derevord of Hand antenna 10 m cable 253864 Derevords of Hand antenna 15 m cable 253864 Outdoor temperature sensor Pt 100 253772 DDG impulse selector 253770 DDG impulse selector 253770 Communication module LON (SC) 253770 Communication module BACnet 253770 SC communication module BACnet 253770 Communication module BACnet Ms/TP (slave) 253770 Communication module BACnet Ms/TP (slave) 253770 SC communication module BACnet Ms/TP (slave) 253720 Signalling module BACnet Ms/TP (slave) 253720 Communication module BACnet Ms/TP (slave) 253720 Signalling module BACnet Ms/TP (slave) 253720 Communication module GSM (SC) 253720 Communication module GSM (SC) 253720 Signalling module pump 3-6 253720 Strikt Signal board 253720 DDG transducer 217640 DDG transducer 217640 DDG transducer 2177940 DDG power supply unit 2177940 DDG power supply unit 2	Antenna GSM/GPRS	
D-network triband antenna 15 m cable 233364 Outdoor temperature sensor Pt 100 233770 DDG impulse selector 233770 DDG impulse selector 233770 Communication module LON (SC) 233770 Communication module BACnet 233770 SC communication module BACnet 233720 Communication module BACnet 233770 SC communication module BACnet 233700 Communication module BACnet 233720 SC communication module BACnet 233720 Sc manufication module BACnet 233720 Sc communication module BACnet MS/TP (slave) 233720 Sc manufication module GSM (SC) 254276 Pump signalling module 254276 Signalling module pump 1-2 253372 Signalling module pump 3-6 23372 Sc HVAC signal board 21946 DDG transducer 21946 DDG power supply unit 219467 DDG power supply unit 219467	D-network dual-band antenna with 3 m cable	2533862
Outdoor temperature sensor Pt 100 233772 Obtidoor temperature sensor Pt 100 233772 DDG Impulse selector 233772 DDG impulse selector 233772 Communication module LON (SC) 23372 Communication module BACnet 23372 SC communication module BACnet 23372 Communication module BACnet (SC) 23372 Communication module GSM (SC) 23372 Communication module GSM (SC) 23372 Signalling module pump 1-2 25378 Signalling module pump 3-6 253872 COMMUNICATION PUMPINE 253872 DDG transducer 219642 DDG transducer 219729 DDG transducer 219729 DDG power supply unit 2195292 Extension kit differential pressure sensor for Y-piece application 2197292	D-network tri-band antenna 10 m cable	2533863
Outdoor temperature sensor Pt 100253372DDG impulse selector253370DDG impulse selector253370Communication module LON (SC)258283SC communication module BACnet2538243SC communication module BACnet2538243SC communication module BACnet MS/TP (slave)2538243Communication module GSM (SC)2538243Communication module GSM (SC)2538243Sc munication module GSM (SC)2538243Se ranguling module gump 1-22538263Signalling module gump 3-62538263SC -HVAC signal board219846DDG transducer219846DDG transducer21977980DDG sower supply unit21977980Extension kit differential pressure sensor for Y-piece application2198283	D-network tri-band antenna 15 m cable	2533864
DDG impulse selector 233770 DDG impulse selector 233770 Communication module LON (SC) Communication module BACnet MS/TP (slave) 238242 SC communication module BACnet MS/TP (slave) 238242 Communication module GSM (SC) Communication module GSM (SC) Communication module GSM (SC) Sc munication module GSM	Outdoor temperature sensor Pt 100	
DDG impulse selector 253370 Communication module LON (SC) 258248 Communication module BACnet 258248 SC communication module BACnet MS/TP (slave) 258248 Communication module GSM (SC) 258248 Communication module GSM (SC) 258248 Pump signalling module GSM (SC) 258248 Signalling module pump 1-2 258248 Signalling module pump 3-6 258248 SC-HVAC signal board 258248 DDG transducer 259268 DDG for ansducer 259268 DDG over supply unit 259276 Extension kit differential pressure sensor for Y-piece application 259370	Outdoor temperature sensor Pt 100	2533772
Communication module LON (SC) 258048 Communication module BACnet 258242 SC communication module BACnet MS/TP (slave) 258242 Communication module GSM (SC) 258248 Communication module GSM (SC) 258216 Signalling module GSM (SC) 258218 Signalling module pump 1-2 258288 Signalling module pump 1-2 258388 SC-HVAC signal board 258288 SC-HVAC signal board 21966 DDG transducer 201771900 DDG power supply unit 0196298 Extension kit differential pressure sensor for Y-piece application 01971900	DDG impulse selector	
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SC communication module BACnet MS/TP (slave) 253242 Sc-communication module GSM (SC) Communication module GSM (SC) Communication module GSM (SC) Communication module GSM (SC) 242216 Pump signalling module pump 1-2 Signalling module pump 3-6 SC-HVAC signal board SC-HVAC signal	Communication module LON (SC)	
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Communication module GSM (SC) 2542216 Pump signalling module 2542216 Pump signalling module pump 1-2 2533212 Signalling module pump 3-6 253336 SC-HVAC signal board 253366 SC-HVAC signal board 219646 DDG transducer 501771900 DDG power supply unit 50185293 Extension kit differential pressure sensor for Y-piece application 50185293	SC communication module BACnet	
Communication module GSM (SC) 254226 Pump signalling module 253312 Signalling module pump 1-2 253312 signalling module pump 3-6 253386 SC-HVAC signal board 211966 DDG transducer 50177190 DDG power supply unit 50185223 Extension kit differential pressure sensor for Y-piece application 50185223	SC-communication module BACnet MS/TP (slave)	2538242
Pump signalling module 253812 Signalling module pump 1-2 253836 Signalling module pump 3-6 253836 SC-HVAC signal board 211966 DDG transducer 20171190 DDG transducer 501771900 DDG power supply unit 50185293 Extension kit differential pressure sensor for Y-piece application 501865293	Communication module GSM (SC)	
Signalling module pump 1-22533812Signalling module pump 3-62533836SC-HVAC signal board2119646DDG transducer2119646DDG transducer501771990DDG power supply unit50185233Extension kit differential pressure sensor for Y-piece application501865233	Communication module GSM (SC)	2542216
Signalling module pump 3-6 2533836 SC-HVAC signal board 2119646 DDG transducer 501771990 DDG power supply unit 50185293 Extension kit differential pressure sensor for Y-piece application 50185293	Pump signalling module	
SC-HVAC signal board 2119646 CDG transducer DDG transducer DDG power supply unit DDG power supply unit Extension kit differential pressure sensor for Y-piece application	Signalling module pump 1-2	2533812
SC-HVAC signal board 2119646 DDG transducer 501771990 DDG power supply unit 501865293 Extension kit differential pressure sensor for Y-piece application 501865293	Signalling module pump 3-6	2533836
SC-HVAC signal board 2119646 DDG transducer 501771990 DDG power supply unit 501865293 Extension kit differential pressure sensor for Y-piece application 501865293	SC-HVAC signal board	
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DDG power supply unit 501865293 Extension kit differential pressure sensor for Y-piece application	DDG transducer	501771990
Extension kit differential pressure sensor for Y-piece application	DDG power supply unit	
	DDG power supply unit	501865293
Extension for DDG-kit 2166098	Extension kit differential pressure sensor for Y-piece application	
	Extension for DDG-kit	2166098

Continuous, infinitely variable control, temperature-dependent SCe-HVAC system

SCe-HVAC system	
SCe-HVAC system 1x10A-WM	2545254
SCe-HVAC system 2x10A-WM	2545255

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SCe-HVAC system 3x10A-WM	2545256
SCe-HVAC system 4x10A-WM	2545257
Antenna GSM/GPRS	
D-network dual-band antenna with 3 m cable	2533862
D-network tri-band antenna 10 m cable	2533863
D-network tri-band antenna 15 m cable	2533864
Outdoor temperature sensor Pt 100	
Outdoor temperature sensor Pt 100	2533772
Communication module LON (SC)	
Communication module LON (SC)	2538243
SC communication module BACnet	
SC-communication module BACnet MS/TP (slave)	2538242
Communication module GSM (SC)	
Communication module GSM (SC)	2542216
Pump signalling module	
Signalling module pump 1-2	2533812
Signalling module pump 3-6	2533836
SC-HVAC signal board	
SC-HVAC signal board	2119646