

Series description: Wilo-Stratos-D



Design

Glandless double circulation pump with flange connection, EC motor with automatic power adjustment

Application

Hot-water heating systems of all kinds, air-conditioning systems, closed cooling circuits, industrial circulation systems

Type key

Example: **Stratos-D 40/1-8**

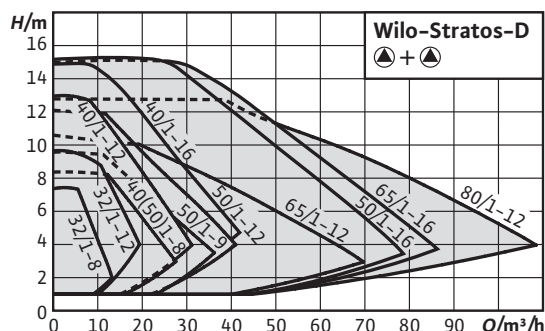
Stratos	High-efficiency pump (flange-end pump), electronically controlled
D	Double pump
40/	Nominal connection diameter
1-8	Nominal delivery head range [m]

Special features/product advantages

- Maximum efficiency thanks to ECM technology
- Front operation and access to terminal room, variable installation positions, display independent of position
- Simple installation due to PN 6/PN 10 combination flanges (with DN 32 to DN 65)
- Application possible in cooling/air-conditioning systems without ambient temperature limitation
- Pump housing with cataphoretic (KTL) coating to prevent corrosion due to condensation formation
- System expansion by means of retrofittable interface modules for communication: Modbus, BACnet, LON, CAN, PLR etc.
- Remote control via infrared interface (IR stick/IR monitor)
- Integratable dual pump management by means of retrofittable Stratos IF-modules for:
 - Main/standby operation with fault-dependent switchover
 - Efficiency-optimised peak-load operation

Technical data

- Permissible temperature range -10°C to $+110^{\circ}\text{C}$
- Mains connection 1~230 V, 50/60 Hz
- Protection class IP X4D
- Flange connection DN 32 to DN 80
- Max. operating pressure, standard version: 6/10 bar or 6 bar (special version: 10 bar or 16 bar)



Equipment/function

Operating modes

- Manual control mode (n=constant)
- Δp -c for constant differential pressure
- Δp -v for variable differential pressure
- Δp -T for temperature-controlled differential pressure (programmable via IR-Stick, IR-Monitor, Modbus, BACnet, LON or CAN)

Manual functions

- Operating mode setting
- Differential pressure setpoint setting
- Setting automatic setback operation
- Pump ON/OFF setting
- Speed setting (manual control mode)

Automatic functions

- Variable power adjustment depending on the operating mode
- Automatic setback operation
- Deblocking function
- Soft start
- Full motor protection with integrated trip electronics

External control functions

- "Overriding Off" control input (possible with Stratos IF-Modules)
- "Overriding Min" control input (possible with Stratos IF-Modules)
- "Analogue In 0 - 10 V" control input (remote speed adjustment) (possible with Stratos IF-Modules)
- "Analogue In 0 - 10 V" control input (remote setpoint adjustment) (possible with Stratos IF-Modules)

Signal and display functions

- Individual/collective fault signal (potential-free NC contact) (programmable with the IR-Stick/IR-Monitor)
- Collective fault signal (potential-free NC contact)
- Individual run signal (potential-free NO contact) (possible with Stratos IF-Modules)
- Fault signal light
- LC display for indication of pump data and fault codes

Data exchange

- Infrared interface for wireless data exchange with IR-Stick/IR-Monitor
- Modbus RTU serial digital interface for connection to building automation BA via RS485 BUS system (possible with Stratos IF-Modules)
- BACnet serial digital interface MS/TP slave for connection to building automation BA via RS485 BUS system (possible with Stratos IF-Modules)
- CAN serial digital interface for connection to building automation BA via IF-Modules BUS system (possible with Stratos IF-Modules)
- LON serial digital interface for connection to a LONWorks network (possible with Stratos IF-Modules)
- PLR serial digital interface for connection to BA via Wilo interface converter or company-specific coupling modules (possible with Stratos IF-Modules)

Dual pump management (double pump or 2 x single pump)

- Main/standby operation (automatic fault-actuated switchover/time-dependent pump cycling): various combinations with Stratos IF-Modules (accessories) possible
- Parallel operation (efficiency-optimised peak load activation and deactivation): various combinations with Stratos IF-Modules (accessories) possible

Equipment

- Flange versions:

Series description: Wilo-Stratos-D

- Standard version for DN 32 to DN 65 pumps: PN 6/10 combination flange (PN 16 flange according to EN 1092-2) for PN 6 and PN 16 counter flanges,
- Standard version for pumps DN 80: PN 6 flange (designed for PN 16 according to EN 1092-2) for PN 6 counter flange
- Special version for DN 32 to DN 80 pumps: PN 16 flange (according to EN 1092-2) for PN 16 counter flange,
- Double switchover valve in pump housing
- Plug-in position for optional extension with Wilo-IF-Modules

Materials

- Pump housing: Grey cast iron
- Shaft: stainless steel
- Bearing: Carbon, metal impregnated
- Impeller: Plastic

Scope of delivery

- Pump
- Incl. washers for flange screws (for nominal connection diameters DN 32 - DN 65)
- Including installation and operating instructions

Options

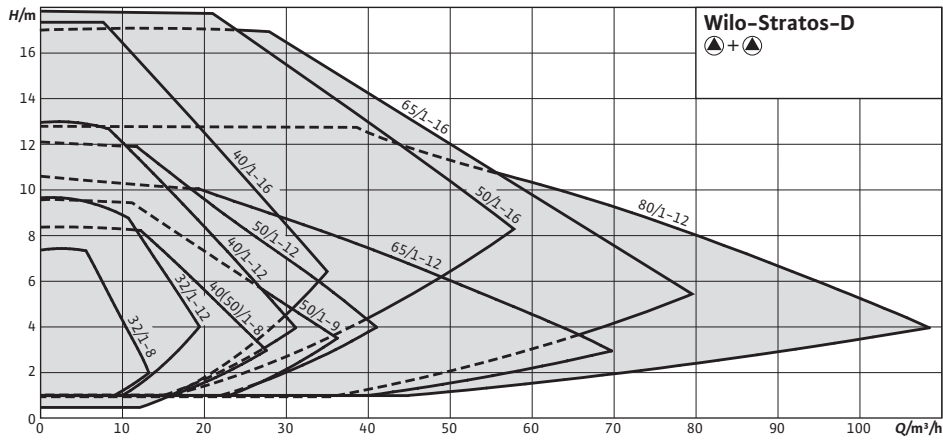
- Special versions for operating pressure PN 16

Accessories

- Blind flanges
- IR-Stick
- IR-Monitor
- Stratos IF-Modules: Modbus, BACnet, CAN, PLR, LON, DP, Ext. Off, Ext. Min., SBM, Ext. Off/SBM

Duty chart: Wilo-Stratos-D

Duty chart

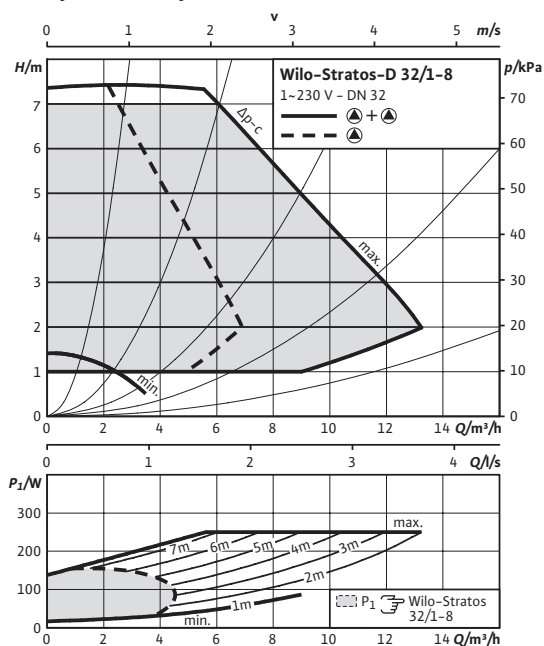


Product list: Wilo-Stratos-D

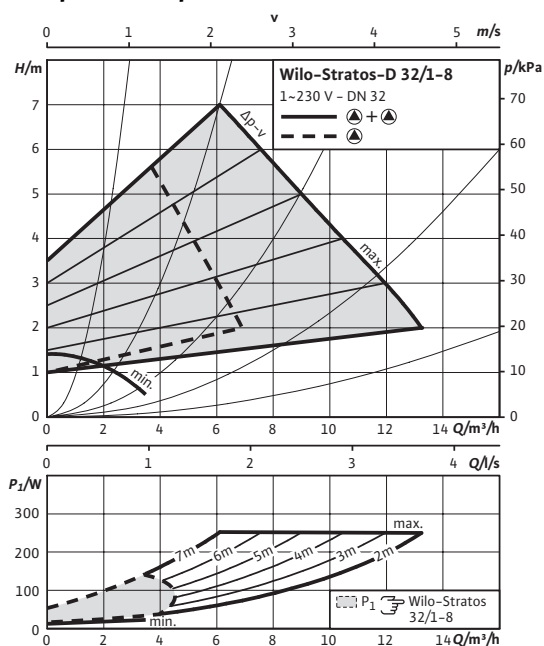
Type	Max. volume flow	Max. delivery head	Energy efficiency index (EEI)	Nominal flange diameter	Rated pressure	Overall length	Mains connection	Gross weight	Art no.
	$Q_{max}/m^3/h$	H_{max}/m			PN/bar	l_0/mm		m/kg	
Stratos-D 32/1-8	13	7	≤ 0,27	DN 32	6/10	220	1~230 V, 50/60 Hz	14,0	2090461
Stratos-D 32/1-12	21	10	≤ 0,27	DN 32	6/10	220	1~230 V, 50/60 Hz	19,0	2090462
Stratos-D 40/1-8	26	8	≤ 0,27	DN 40	6/10	220	1~230 V, 50/60 Hz	19,0	2090463
Stratos-D 40/1-12	31	13	≤ 0,27	DN 40	6/10	250	1~230 V, 50/60 Hz	28,0	2090464
Stratos-D 40/1-16	35	17	≤ 0,27	DN 40	6/10	250	1~230 V, 50/60 Hz	47,0	2131669
Stratos-D 50/1-8	26	8	≤ 0,27	DN 50	6/10	240	1~230 V, 50/60 Hz	21,0	2090465
Stratos-D 50/1-9	36	9	≤ 0,27	DN 50	6/10	280	1~230 V, 50/60 Hz	30,0	2090466
Stratos-D 50/1-12	41	12	≤ 0,27	DN 50	6/10	280	1~230 V, 50/60 Hz	30,0	2090467
Stratos-D 50/1-16	57	18	≤ 0,27	DN 50	6/10	340	1~230 V, 50/60 Hz	51,0	2131670
Stratos-D 65/1-12	69	11	≤ 0,27	DN 65	6/10	340	1~230 V, 50/60 Hz	53,5	2090468
Stratos-D 65/1-16	79	17	≤ 0,27	DN 65	6/10	340	1~230 V, 50/60 Hz	54,0	2131671
Stratos-D 80/1-12	109	13	≤ 0,27	DN 80	6	360	1~230 V, 50/60 Hz	64,5	2087527
Stratos-D 80/1-12	109	13	≤ 0,27	DN 80	10	360	1~230 V, 50/60 Hz	64,5	2087528

Data sheet: Wilo-Stratos-D 32/1-8

Pump curves Δp -c (constant)



Pump curves Δp -v (variable)



Approved fluids (other fluids on request)

- Heating water (in accordance with VDI 2035)
- Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)

Permitted field of application

Temperature range at max. ambient temperature +40 °C	-10...+110 °C
Maximum permissible operating pressure	P_{max} 6/10 bar

Pipe connections

Flange	Combination flange PN6/10 (PN 16 flange according to EN 1092-2)
Nominal flange diameter	DN 32
Overall length	l_o 220 mm

Motor/electronics

Energy efficiency index (EEI)	$\leq 0,27$
Electromagnetic compatibility	EN 61800-3
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Speed control	Frequency converter
Protection class	IP X4D
Insulation class	F
Mains connection	1~230 V, 50/60 Hz
Nominal motor power	P_2 100,00 W
Speed	n 1400 - 3700 rpm
Power consumption	P_1 9 - 130 W
Current consumption	I 0.13 - 1.20 A
Motor protection	integrated
Threaded cable connection	PG 1x7/1x9/1x13.5

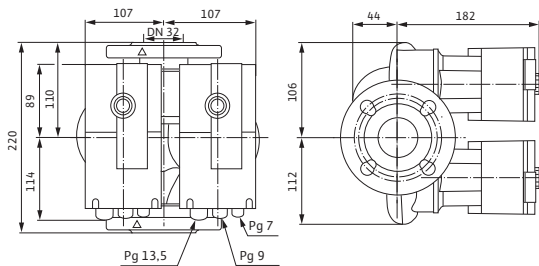
Materials

Pump housing	Grey cast iron (EN-GJL-250)
Impeller	Plastic (PPE - 30% GF)
Pump shaft	Stainless steel (X46Cr13)
Bearing	Carbon, metal impregnated

Minimum suction head at suction port for avoiding cavitation at water pumping temperature

Data sheet: Wilo-Stratos-D 32/1-8

Dimension drawing

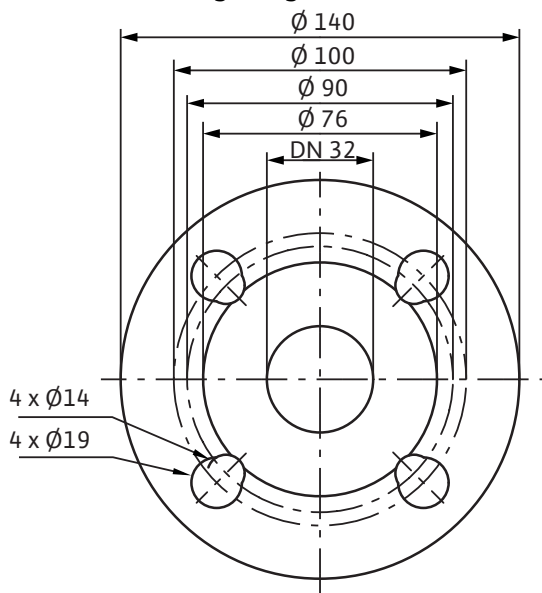


Minimum suction head at 50 / 95 / 110 °C 3 / 10 / 16 m

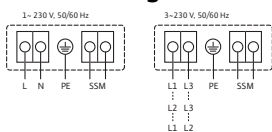
Information for order placements

Make	Wilo
Type	Stratos-D 32/1-8
Art no.	2090461
Weight approx.	<i>m</i> 12 kg

Dimension drawing, flange



Terminal diagram



Collective fault signal
(NC contact according to VDI 3814, load capacity 1 A, 250 V ~)

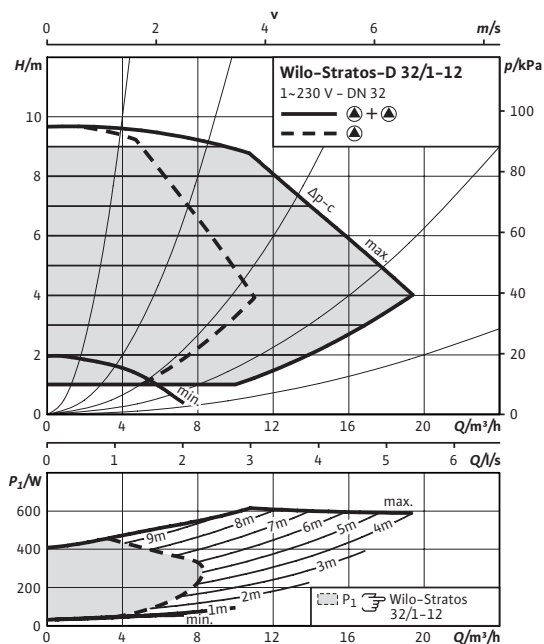
SSM:

For function, see Wilo catalogue, chapter "Pump management Wilo control, planning guide"

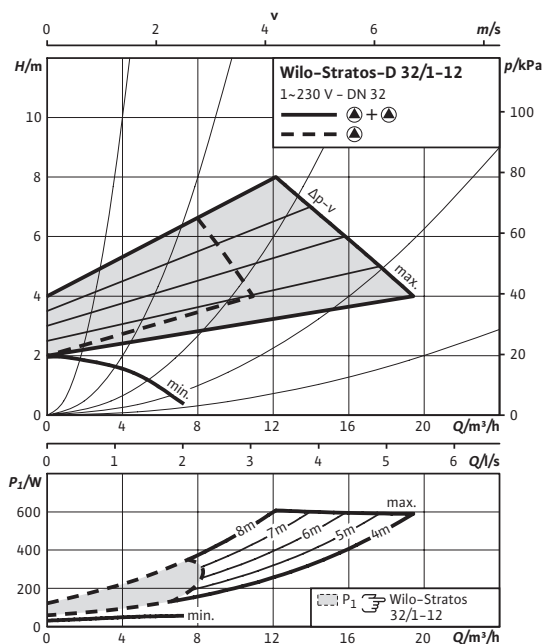


Data sheet: Wilo-Stratos-D 32/1-12

Pump curves Δp -c (constant)



Pump curves Δp -v (variable)



Approved fluids (other fluids on request)

- Heating water (in accordance with VDI 2035)
- Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)

Permitted field of application

Temperature range at max. ambient temperature +40 °C	-10...+110 °C
Maximum permissible operating pressure	P_{max} 6/10 bar

Pipe connections

Flange	Combination flange PN6/10 (PN 16 flange according to EN 1092-2)
Nominal flange diameter	DN 32
Overall length	l_o 220 mm

Motor/electronics

Energy efficiency index (EEI)	$\leq 0,27$
Electromagnetic compatibility	EN 61800-3
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Speed control	Frequency converter
Protection class	IP X4D
Insulation class	F
Mains connection	1~230 V, 50/60 Hz
Nominal motor power	P_2 200,00 W
Speed	n 1400 - 4800 rpm
Power consumption	P_1 12 - 310 W
Current consumption	I 0.22 - 1.37 A
Motor protection	integrated
Threaded cable connection	PG 1x7/1x9/1x13.5

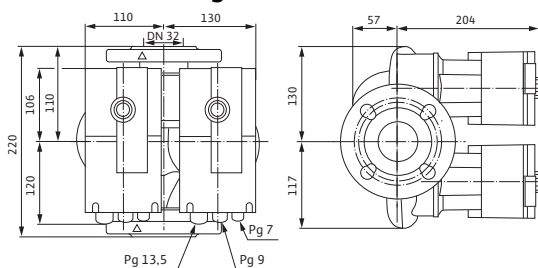
Materials

Pump housing	Grey cast iron (EN-GJL-250)
Impeller	Plastic (PPS - 40% GF)
Pump shaft	Stainless steel (X46Cr13)
Bearing	Carbon, metal impregnated

Minimum suction head at suction port for avoiding cavitation at water pumping temperature

Data sheet: Wilo-Stratos-D 32/1-12

Dimension drawing

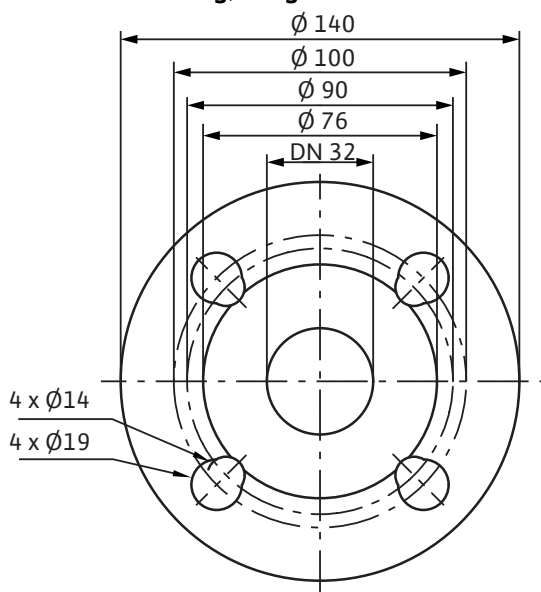


Minimum suction head at 50 / 95 / 110 °C 3 / 10 / 16 m

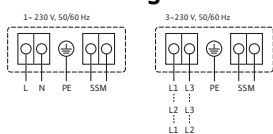
Information for order placements

Make	Wilo
Type	Stratos-D 32/1-12
Art no.	2090462
Weight approx.	<i>m</i> 16 kg

Dimension drawing, flange



Terminal diagram



Collective fault signal
(NC contact according to VDI 3814, load capacity 1 A,
250 V ~)

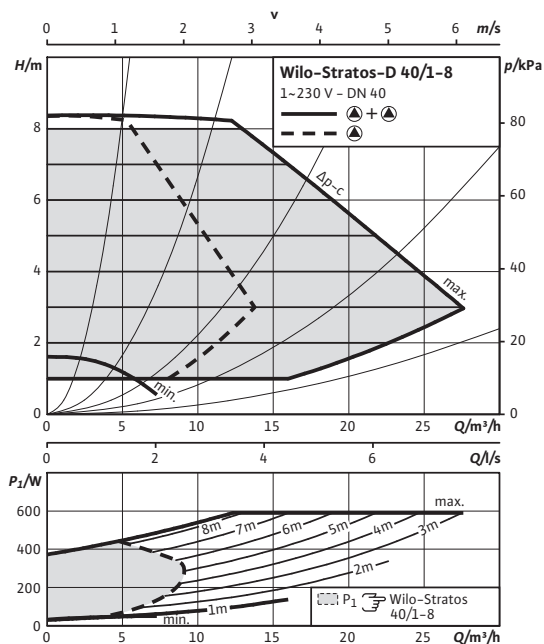
SSM:

For function, see Wilo catalogue, chapter "Pump
management Wilo control, planning guide"

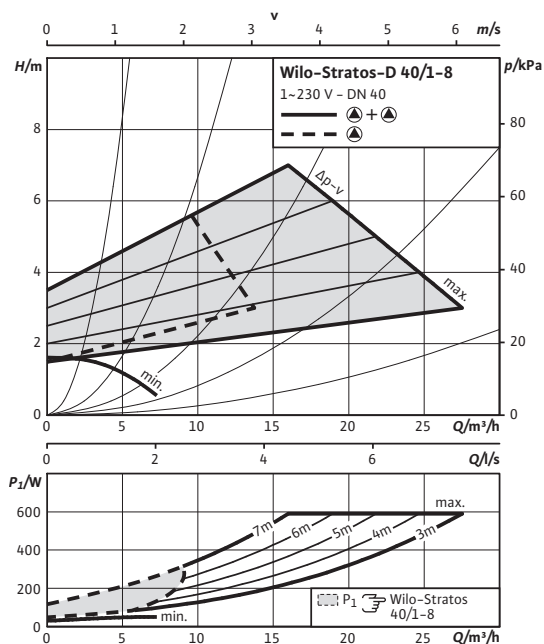


Data sheet: Wilo-Stratos-D 40/1-8

Pump curves $\Delta p-c$ (constant)



Pump curves $\Delta p-v$ (variable)



Approved fluids (other fluids on request)

- Heating water (in accordance with VDI 2035)
- Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)

Permitted field of application

Temperature range at max. ambient temperature +40 °C	-10...+110 °C
Maximum permissible operating pressure	P_{max} 6/10 bar

Pipe connections

Flange	Combination flange PN6/10 (PN 16 flange according to EN 1092-2)
Nominal flange diameter	DN 40
Overall length	l_o 220 mm

Motor/electronics

Energy efficiency index (EEI)	$\leq 0,27$
Electromagnetic compatibility	EN 61800-3
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Speed control	Frequency converter
Protection class	IP X4D
Insulation class	F
Mains connection	1~230 V, 50/60 Hz
Nominal motor power	P_2 200,00 W
Speed	n 1400 - 4800 rpm
Power consumption	P_1 12 - 310 W
Current consumption	I 0.22 - 1.37 A
Motor protection	integrated
Threaded cable connection	PG 1x7/1x9/1x13.5

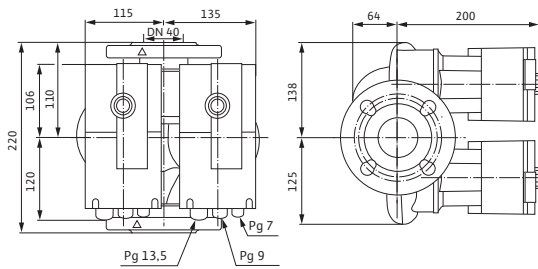
Materials

Pump housing	Grey cast iron (EN-GJL-250)
Impeller	Plastic (PPS - 40% GF)
Pump shaft	Stainless steel (X46Cr13)
Bearing	Carbon, metal impregnated

Minimum suction head at suction port for avoiding cavitation at water pumping temperature

Data sheet: Wilo-Stratos-D 40/1-8

Dimension drawing

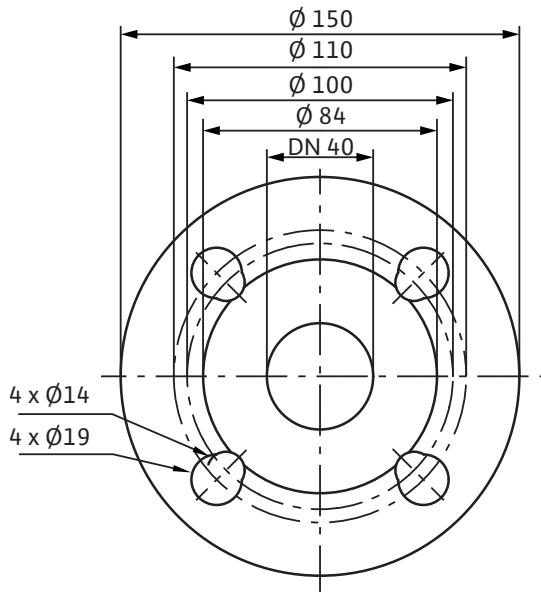


Minimum suction head at 50 / 95 / 110 °C 3 / 10 / 16 m

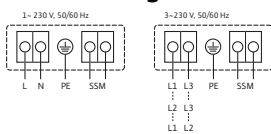
Information for order placements

Make	Wilo
Type	Stratos-D 40/1-8
Art no.	2090463
Weight approx.	<i>m</i> 17 kg

Dimension drawing, flange



Terminal diagram



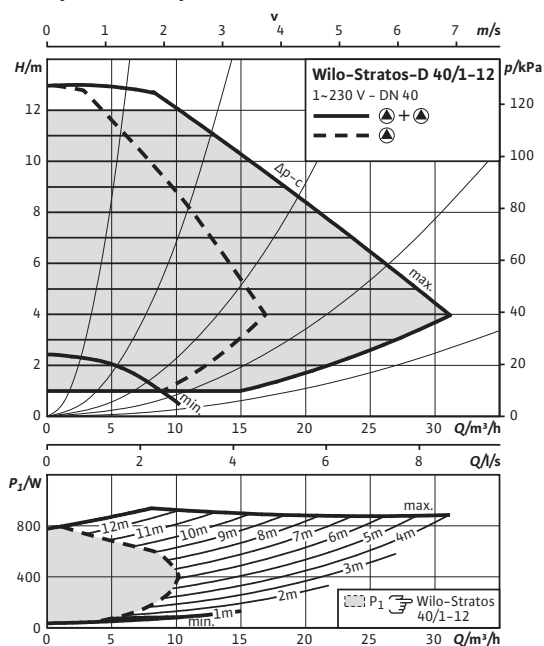
Collective fault signal
(NC contact according to VDI 3814, load capacity 1 A,
250 V ~)

SSM:
For function, see Wilo catalogue, chapter "Pump
management Wilo control, planning guide"

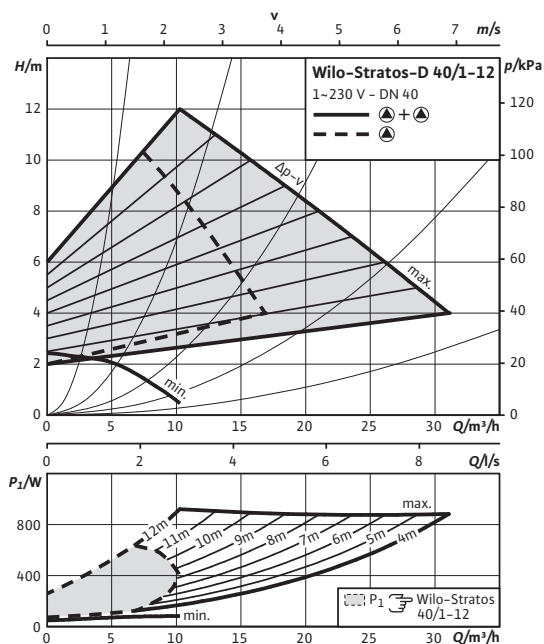


Data sheet: Wilo-Stratos-D 40/1-12

Pump curves $\Delta p-c$ (constant)



Pump curves $\Delta p-v$ (variable)



Approved fluids (other fluids on request)

- Heating water (in accordance with VDI 2035)
- Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)

Permitted field of application

Temperature range at max. ambient temperature +40 °C	-10...+110 °C
Maximum permissible operating pressure	P_{max} 6/10 bar

Pipe connections

Flange	Combination flange PN6/10 (PN 16 flange according to EN 1092-2)
Nominal flange diameter	DN 40
Overall length	l_o 250 mm

Motor/electronics

Energy efficiency index (EEI)	$\leq 0,27$
Electromagnetic compatibility	EN 61800-3
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Speed control	Frequency converter
Protection class	IP X4D
Insulation class	F
Mains connection	1~230 V, 50/60 Hz
Nominal motor power	P_2 350,00 W
Speed	n 1400 - 4600 rpm
Power consumption	P_1 25 - 470 W
Current consumption	I 0.20 - 2.05 A
Motor protection	integrated
Threaded cable connection	PG 1x7/1x9/1x13.5

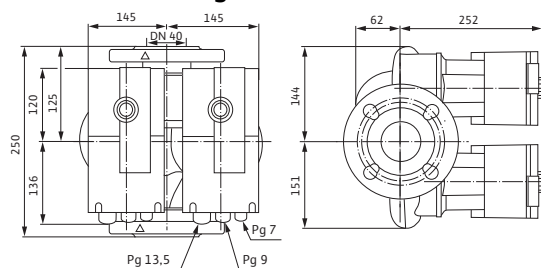
Materials

Pump housing	Grey cast iron (EN-GJL-250)
Impeller	Plastic (PPS - 40% GF)
Pump shaft	Stainless steel (X46Cr13)
Bearing	Carbon, metal impregnated

Minimum suction head at suction port for avoiding cavitation at water pumping temperature

Data sheet: Wilo-Stratos-D 40/1-12

Dimension drawing

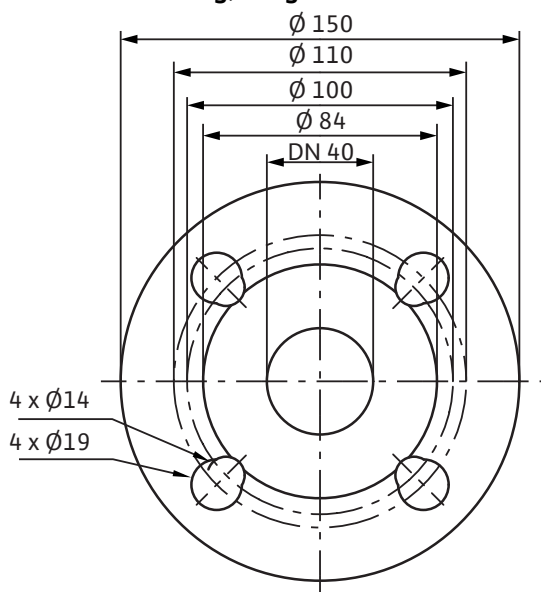


Minimum suction head at 50 / 95 / 110 °C 5 / 12 / 18 m

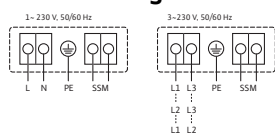
Information for order placements

Make	Wilo
Type	Stratos-D 40/1-12
Art no.	2090464
Weight approx.	<i>m</i> 25 kg

Dimension drawing, flange



Terminal diagram



Collective fault signal
(NC contact according to VDI 3814, load capacity 1 A,
250 V ~)

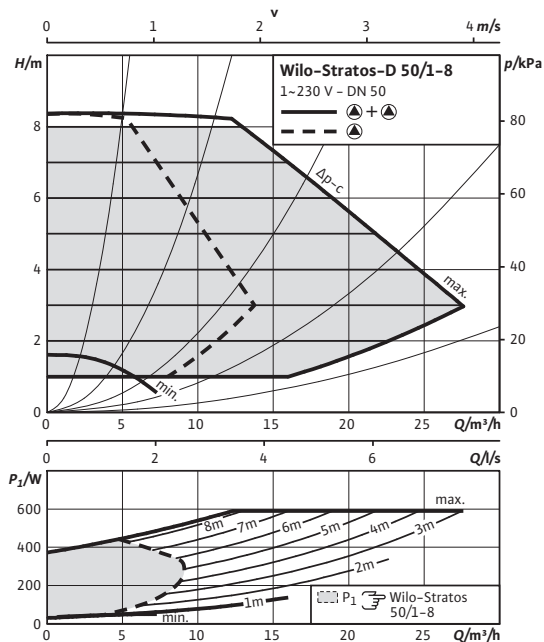
SSM:

For function, see Wilo catalogue, chapter "Pump
management Wilo control, planning guide"

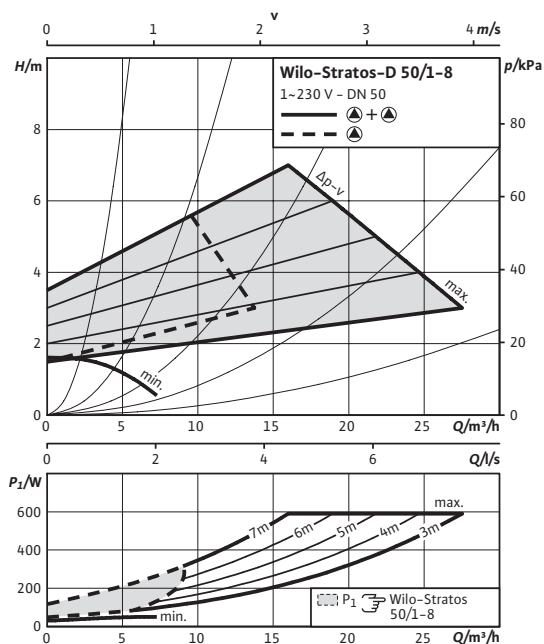


Data sheet: Wilo-Stratos-D 50/1-8

Pump curves $\Delta p-c$ (constant)



Pump curves $\Delta p-v$ (variable)



Approved fluids (other fluids on request)

- Heating water (in accordance with VDI 2035)
- Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)

Permitted field of application

Temperature range at max. ambient temperature +40 °C	-10...+110 °C
Maximum permissible operating pressure	P_{max} 6/10 bar

Pipe connections

Flange	Combination flange PN6/10 (PN 16 flange according to EN 1092-2)
Nominal flange diameter	DN 50
Overall length	l_o 240 mm

Motor/electronics

Energy efficiency index (EEI)	$\leq 0,27$
Electromagnetic compatibility	EN 61800-3
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Speed control	Frequency converter
Protection class	IP X4D
Insulation class	F
Mains connection	1~230 V, 50/60 Hz
Nominal motor power	P_2 200,00 W
Speed	n 1400 - 4800 rpm
Power consumption	P_1 12 - 310 W
Current consumption	I 0.22 - 1.37 A
Motor protection	integrated
Threaded cable connection	PG 1x7/1x9/1x13.5

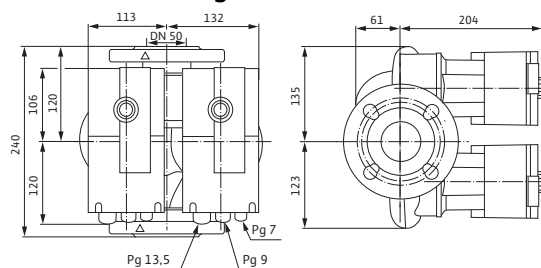
Materials

Pump housing	Grey cast iron (EN-GJL-250)
Impeller	Plastic (PPS - 40% GF)
Pump shaft	Stainless steel (X46Cr13)
Bearing	Carbon, metal impregnated

Minimum suction head at suction port for avoiding cavitation at water pumping temperature

Data sheet: Wilo-Stratos-D 50/1-8

Dimension drawing

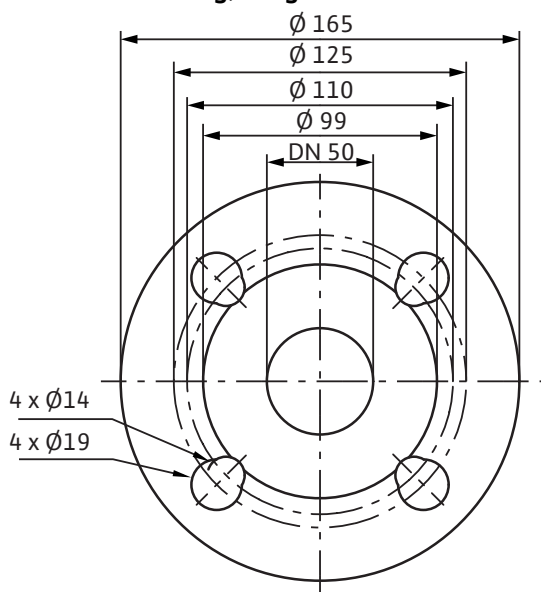


Minimum suction head at 50/95/110 °C 3/10/16 m

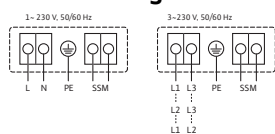
Information for order placements

Make	Wilo
Type	Stratos-D 50/1-8
Art no.	2090465
Weight approx.	<i>m</i> 19 kg

Dimension drawing, flange



Terminal diagram



Collective fault signal
(NC contact according to VDI 3814, load capacity 1 A,
250 V ~)

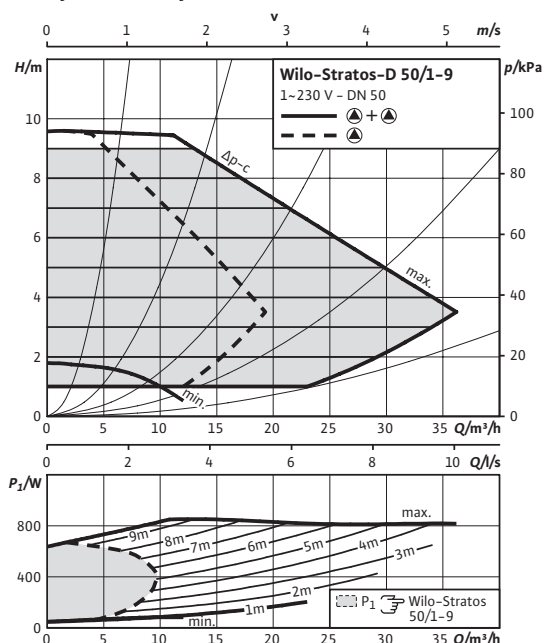
SSM:

For function, see Wilo catalogue, chapter "Pump
management Wilo control, planning guide"

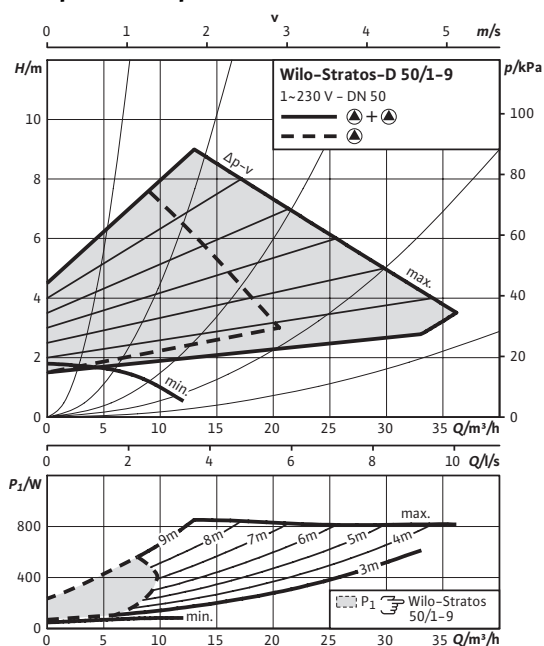


Data sheet: Wilo-Stratos-D 50/1-9

Pump curves $\Delta p-c$ (constant)



Pump curves $\Delta p-v$ (variable)



Approved fluids (other fluids on request)

- Heating water (in accordance with VDI 2035)
- Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)

Permitted field of application

Temperature range at max. ambient temperature +40 °C	-10...+110 °C
Maximum permissible operating pressure	P_{max} 6/10 bar

Pipe connections

Flange	Combination flange PN6/10 (PN 16 flange according to EN 1092-2)
Nominal flange diameter	DN 50
Overall length	l_o 280 mm

Motor/electronics

Energy efficiency index (EEI)	$\leq 0,27$
Electromagnetic compatibility	EN 61800-3
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Speed control	Frequency converter
Protection class	IP X4D
Insulation class	F
Mains connection	1~230 V, 50/60 Hz
Nominal motor power	P_2 350,00 W
Speed	n 1400 - 4100 rpm
Power consumption	P_1 25 - 430 W
Current consumption	I 0.20 - 1.88 A
Motor protection	integrated
Threaded cable connection	PG 1x7/1x9/1x13.5

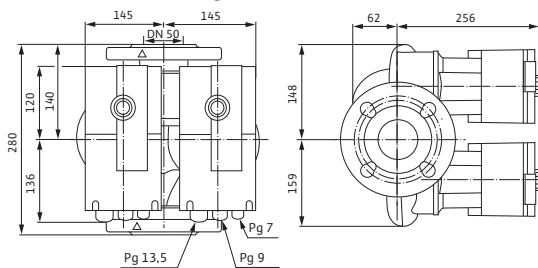
Materials

Pump housing	Grey cast iron (EN-GJL-250)
Impeller	Plastic (PPS - 40% GF)
Pump shaft	Stainless steel (X46Cr13)
Bearing	Carbon, metal impregnated

Minimum suction head at suction port for avoiding cavitation at water pumping temperature

Data sheet: Wilo-Stratos-D 50/1-9

Dimension drawing

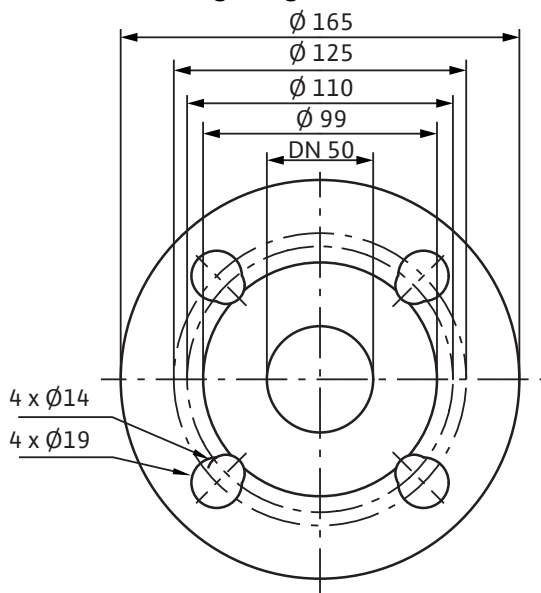


Minimum suction head at 50/95/110 °C 5/12/18 m

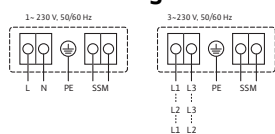
Information for order placements

Make	Wilo
Type	Stratos-D 50/1-9
Art no.	2090466
Weight approx.	<i>m</i> 27 kg

Dimension drawing, flange



Terminal diagram



Collective fault signal
(NC contact according to VDI 3814, load capacity 1 A,
250 V ~)

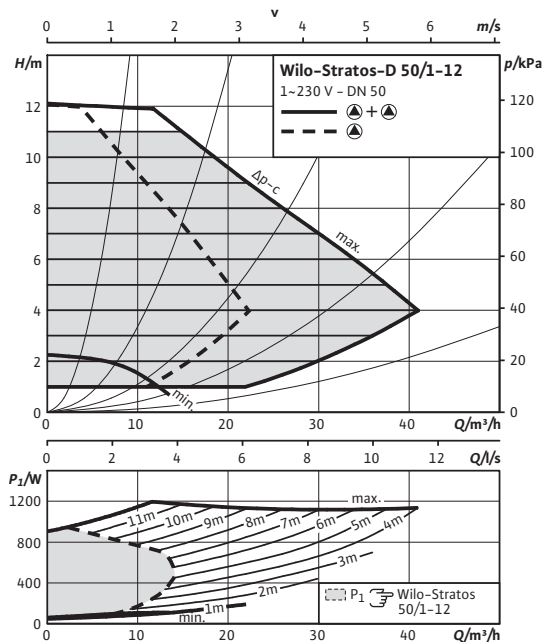
SSM:

For function, see Wilo catalogue, chapter "Pump management Wilo control, planning guide"

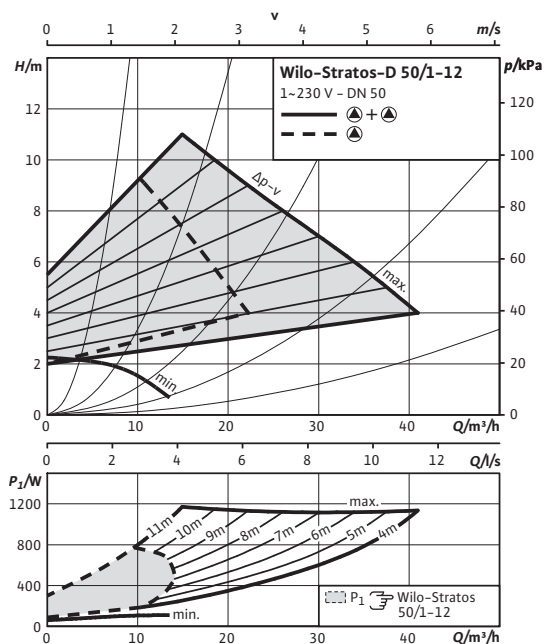


Data sheet: Wilo-Stratos-D 50/1-12

Pump curves $\Delta p-c$ (constant)



Pump curves $\Delta p-v$ (variable)



Approved fluids (other fluids on request)

- Heating water (in accordance with VDI 2035)
- Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)

Permitted field of application

Temperature range at max. ambient temperature +40 °C	-10...+110 °C
Maximum permissible operating pressure	P_{max} 6/10 bar

Pipe connections

Flange	Combination flange PN6/10 (PN 16 flange according to EN 1092-2)
Nominal flange diameter	DN 50
Overall length	l_o 280 mm

Motor/electronics

Energy efficiency index (EEI)	$\leq 0,27$
Electromagnetic compatibility	EN 61800-3
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Speed control	Frequency converter
Protection class	IP X4D
Insulation class	F
Mains connection	1~230 V, 50/60 Hz
Nominal motor power	P_2 500,00 W
Speed	n 1400 - 4600 rpm
Power consumption	P_1 25 - 590 W
Current consumption	I 0.20 - 2.60 A
Motor protection	integrated
Threaded cable connection	PG 1x7/1x9/1x13.5

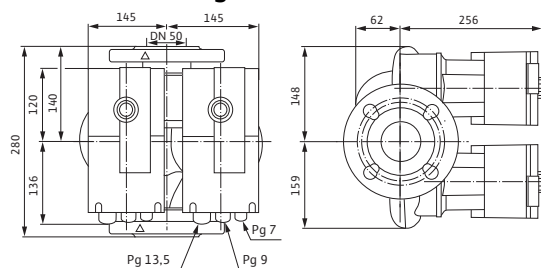
Materials

Pump housing	Grey cast iron (EN-GJL-250)
Impeller	Plastic (PPS - 40% GF)
Pump shaft	Stainless steel (X46Cr13)
Bearing	Carbon, metal impregnated

Minimum suction head at suction port for avoiding cavitation at water pumping temperature

Data sheet: Wilo-Stratos-D 50/1-12

Dimension drawing

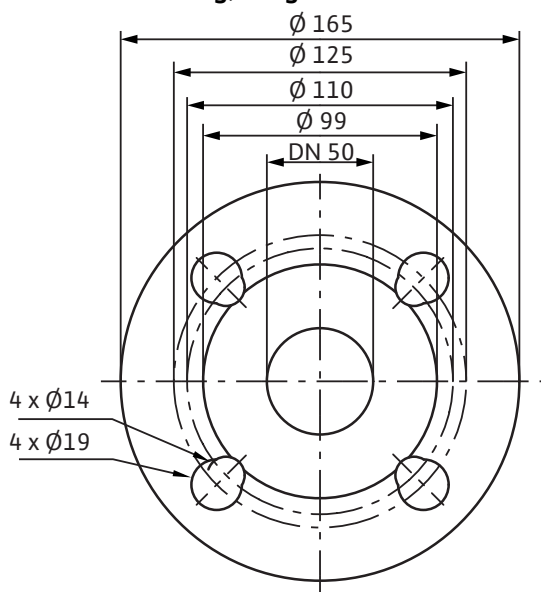


Minimum suction head at 50/95/110 °C 5/12/18 m

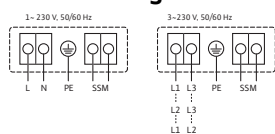
Information for order placements

Make	Wilo
Type	Stratos-D 50/1-12
Art no.	2090467
Weight approx.	<i>m</i> 27 kg

Dimension drawing, flange



Terminal diagram



Collective fault signal
(NC contact according to VDI 3814, load capacity 1 A,

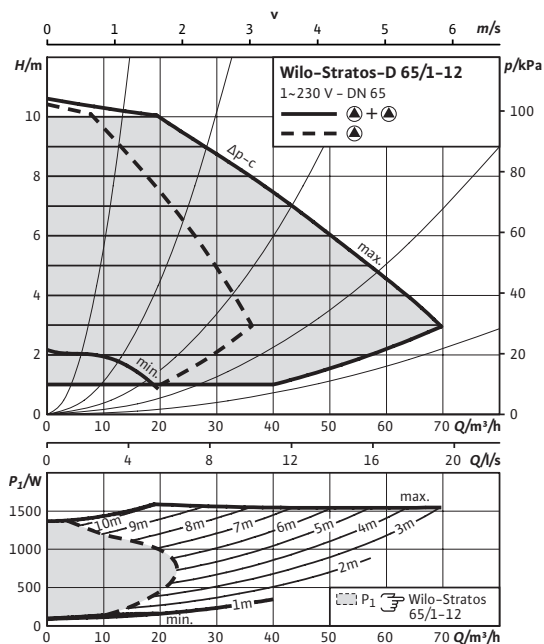
SSM: 250 V ~)

For function, see Wilo catalogue, chapter "Pump management Wilo control, planning guide"

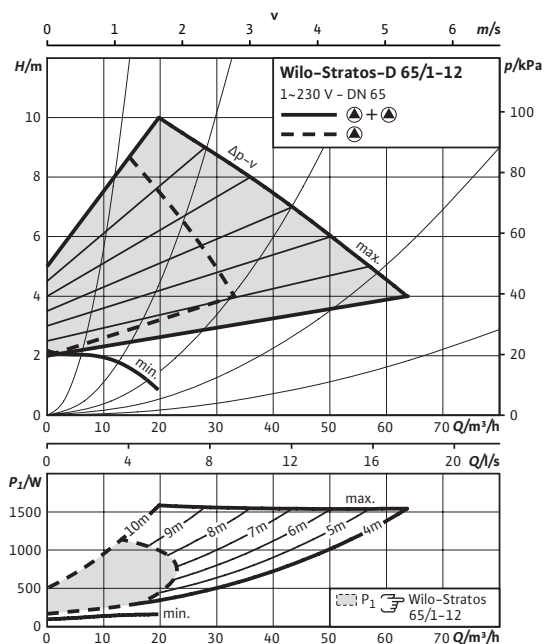


Data sheet: Wilo-Stratos-D 65/1-12

Pump curves $\Delta p-c$ (constant)



Pump curves $\Delta p-v$ (variable)



Approved fluids (other fluids on request)

Heating water (in accordance with VDI 2035)	•
Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)	•

Permitted field of application

Temperature range at max. ambient temperature +40 °C	-10...+110 °C
Maximum permissible operating pressure	P_{max} 6/10 bar

Pipe connections

Flange	Combination flange PN6/10 (PN 16 flange according to EN 1092-2)
Nominal flange diameter	DN 65
Overall length	l_o 340 mm

Motor/electronics

Energy efficiency index (EEI)	$\leq 0,27$
Electromagnetic compatibility	EN 61800-3
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Speed control	Frequency converter
Protection class	IP X4D
Insulation class	F
Mains connection	1~230 V, 50/60 Hz
Nominal motor power	P_2 650,00 W
Speed	n 950 - 3300 rpm
Power consumption	P_1 38 - 800 W
Current consumption	I 0.30 - 3.50 A
Motor protection	integrated
Threaded cable connection	PG 1x7/1x9/1x13.5

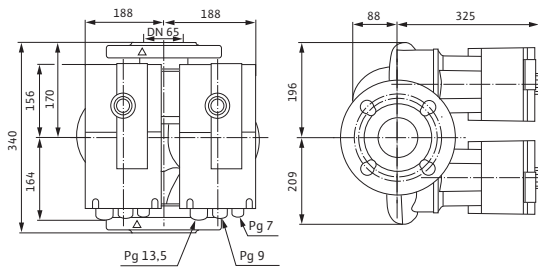
Materials

Pump housing	Grey cast iron (EN-GJL-250)
Impeller	Plastic (PP - 50% GF)
Pump shaft	Stainless steel (X46Cr13)
Bearing	Carbon, metal impregnated

Minimum suction head at suction port for avoiding cavitation at water pumping temperature

Data sheet: Wilo-Stratos-D 65/1-12

Dimension drawing

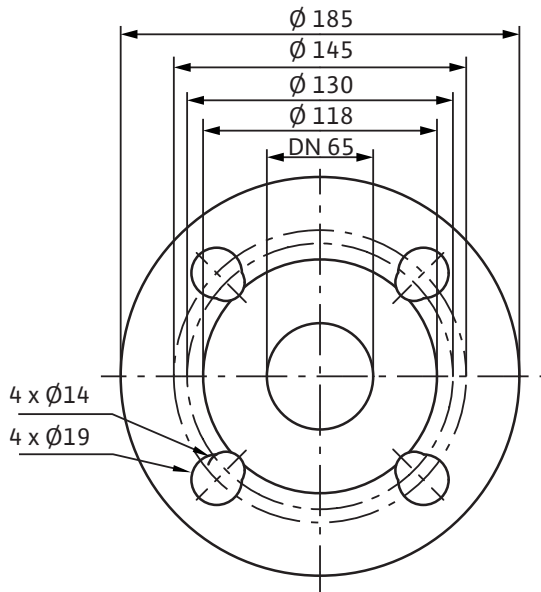


Minimum suction head at 50 / 95 / 110 °C 7 / 15 / 23 m

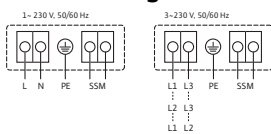
Information for order placements

Make	Wilo
Type	Stratos-D 65/1-12
Art no.	2090468
Weight approx.	<i>m</i> 52 kg

Dimension drawing, flange



Terminal diagram

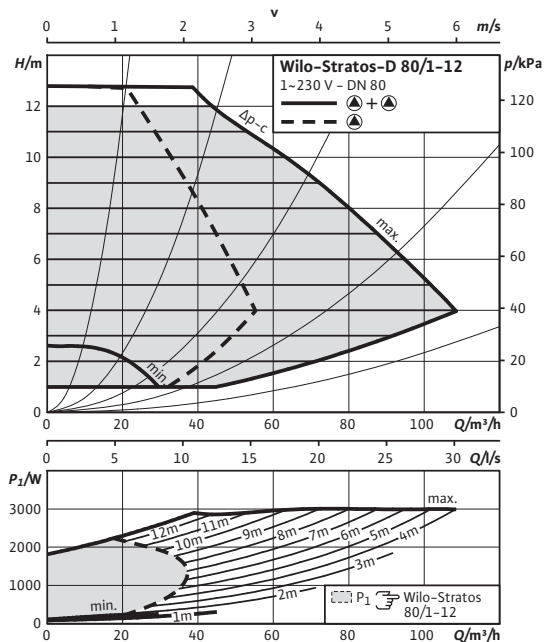


Collective fault signal
(NC contact according to VDI 3814, load capacity 1 A, 250 V ~)
SSM:
For function, see Wilo catalogue, chapter "Pump management Wilo control, planning guide"

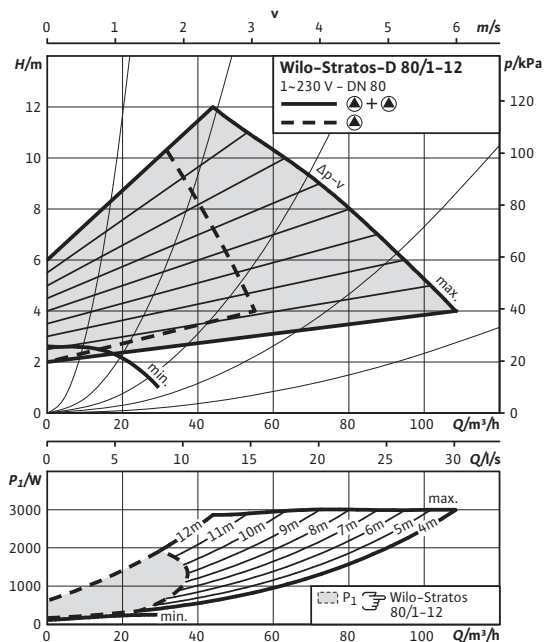


Data sheet: Wilo-Stratos-D 80/1-12

Pump curves Δp -c (constant)



Pump curves Δp -v (variable)



Approved fluids (other fluids on request)

- Heating water (in accordance with VDI 2035)
- Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)

Permitted field of application

Temperature range at max. ambient temperature +40 °C	-10...+110 °C
Maximum permissible operating pressure	P_{max} 6 bar

Pipe connections

Flange	Flange PN 6 (PN 16 design, according to EN 1092-2)
Nominal flange diameter	DN 80
Overall length	l_o 360 mm

Motor/electronics

Energy efficiency index (EEI)	$\leq 0,27$
Electromagnetic compatibility	EN 61800-3
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Speed control	Frequency converter
Protection class	IP X4D
Insulation class	F
Mains connection	1~230 V, 50/60 Hz
Nominal motor power	P_2 1300,00 W
Speed	n 900 - 3300 rpm
Power consumption	P_1 40 - 1550 W
Current consumption	I 0.32 - 6.80 A
Motor protection	integrated
Threaded cable connection	PG 1x7/1x9/1x13.5

Materials

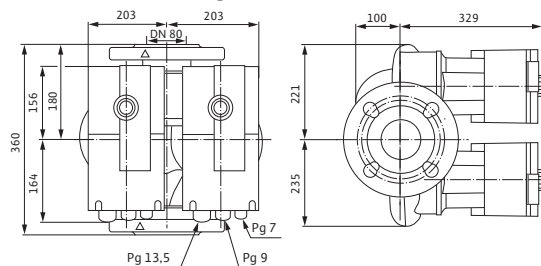
Pump housing	Grey cast iron (EN-GJL-250)
Impeller	Plastic (PP - 50% GF)
Pump shaft	Stainless steel (X46Cr13)
Bearing	Carbon, metal impregnated

Minimum suction head at suction port for avoiding cavitation at water pumping temperature

Minimum suction head at 50 / 95 / 110 °C	7 / 15 / 23 m
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Data sheet: Wilo-Stratos-D 80/1-12

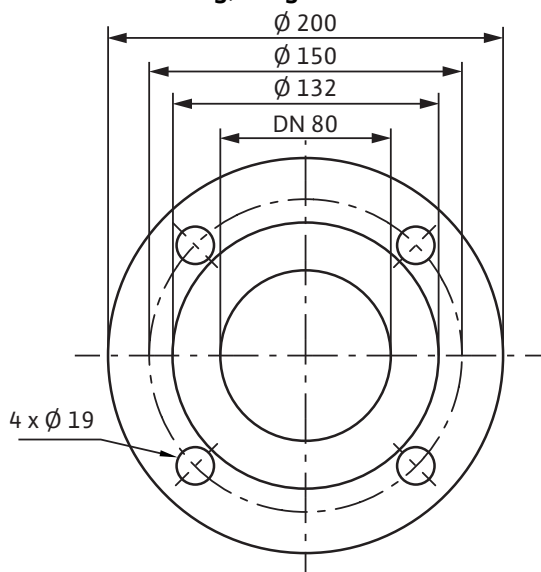
Dimension drawing



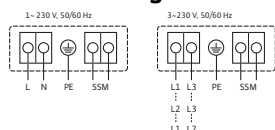
Information for order placements

Make	Wilo	
Type	Stratos-D 80/1-12	
Art no.	2087527	
Weight approx.	<i>m</i>	61 kg

Dimension drawing, flange



Terminal diagram



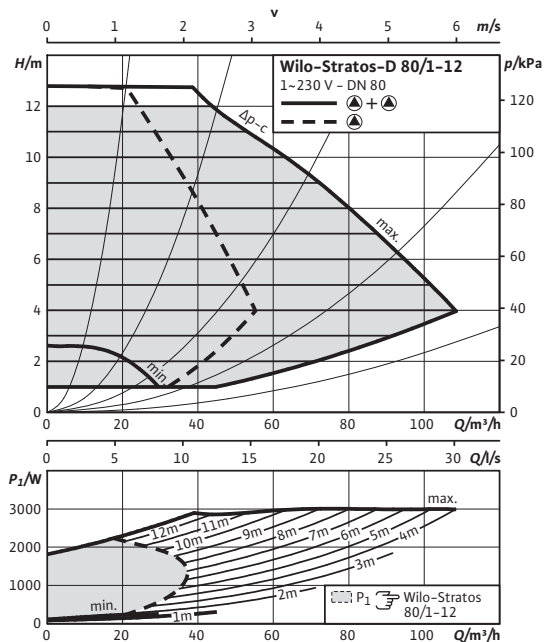
Collective fault signal
 (NC contact according to VDI 3814, load capacity 1 A,
 250 V ~)

SSM:
 For function, see Wilo catalogue, chapter "Pump
 management Wilo control, planning guide"

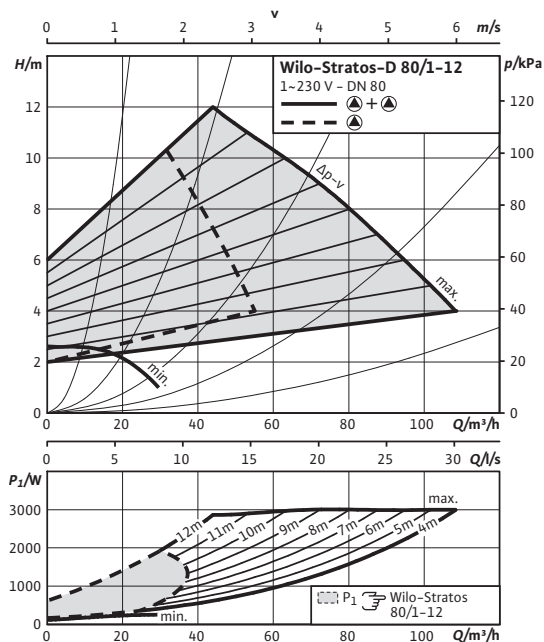


Data sheet: Wilo-Stratos-D 80/1-12

Pump curves $\Delta p-c$ (constant)



Pump curves $\Delta p-v$ (variable)



Approved fluids (other fluids on request)

- Heating water (in accordance with VDI 2035)
- Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)

Permitted field of application

Temperature range at max. ambient temperature +40 °C	-10...+110 °C
Maximum permissible operating pressure	P_{max} 10 bar

Pipe connections

Flange	Flange PN16 (according to EN 1092-2)
Nominal flange diameter	DN 80
Overall length	l_o 360 mm

Motor/electronics

Energy efficiency index (EEI)	≤ 0.27
Electromagnetic compatibility	EN 61800-3
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Speed control	Frequency converter
Protection class	IP X4D
Insulation class	F
Mains connection	1~230 V, 50/60 Hz
Nominal motor power	P_2 1300.00 W
Speed	n 900 - 3300 rpm
Power consumption	P_1 40 - 1550 W
Current consumption	I 0.32 - 6.80 A
Motor protection	integrated
Threaded cable connection	PG 1x7/1x9/1x13.5

Materials

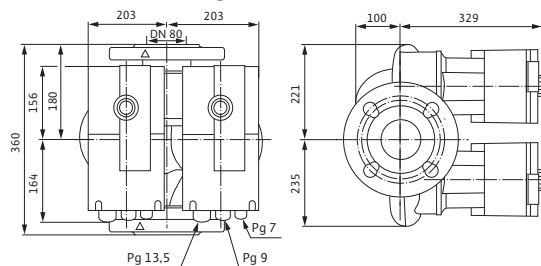
Pump housing	Grey cast iron (EN-GJL-250)
Impeller	Plastic (PP - 50% GF)
Pump shaft	Stainless steel (X46Cr13)
Bearing	Carbon, metal impregnated

Minimum suction head at suction port for avoiding cavitation at water pumping temperature

Minimum suction head at 50 / 95 / 110 °C	7 / 15 / 23 m
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Data sheet: Wilo-Stratos-D 80/1-12

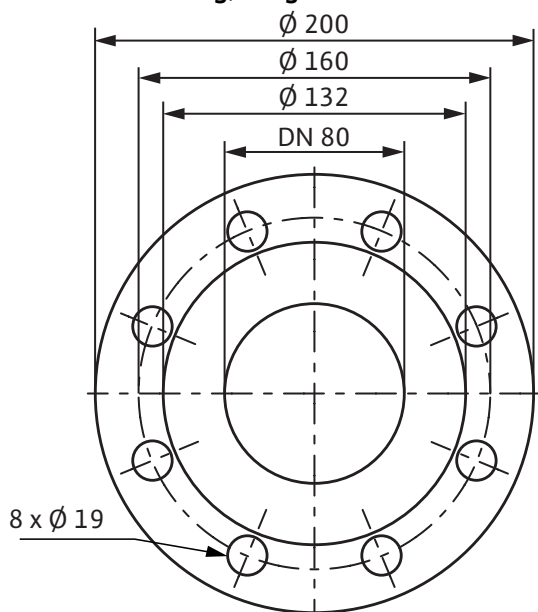
Dimension drawing



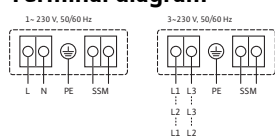
Information for order placements

Make	Wilo	
Type	Stratos-D 80/1-12	
Art no.	2087528	
Weight approx.	<i>m</i>	61 kg

Dimension drawing, flange



Terminal diagram



Collective fault signal
(NC contact according to VDI 3814, load capacity 1 A,
250 V ~)

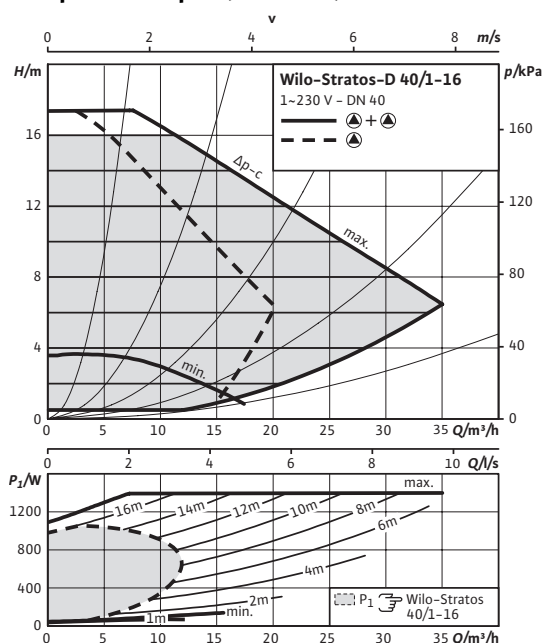
SSM:

For function, see Wilo catalogue, chapter "Pump
management Wilo control, planning guide"

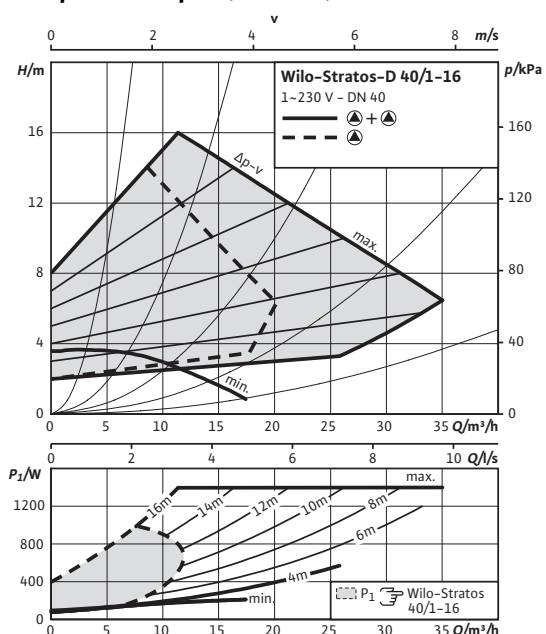


Data sheet: Wilo-Stratos-D 40/1-16

Pump curves $\Delta p-c$ (constant)



Pump curves $\Delta p-v$ (variable)



Approved fluids (other fluids on request)

- Heating water (in accordance with VDI 2035)
- Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)

Permitted field of application

Temperature range at max. ambient temperature +40 °C	-10...+110 °C
Maximum permissible operating pressure	P_{max} 6/10 bar

Pipe connections

Flange	Combination flange PN6/10 (PN 16 flange according to EN 1092-2)
Nominal flange diameter	DN 40
Overall length	l_o 250 mm

Motor/electronics

Energy efficiency index (EEI)	$\leq 0,27$
Electromagnetic compatibility	EN 61800-3
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Speed control	Frequency converter
Protection class	IP X4D
Insulation class	F
Mains connection	1~230 V, 50/60 Hz
Nominal motor power	P_2 600,00 W
Speed	n 950 - 3500 rpm
Power consumption	P_1 35 - 730 W
Current consumption	I 0.30 - 3.20 A
Motor protection	integrated
Threaded cable connection	PG 1x7/1x9/1x13.5

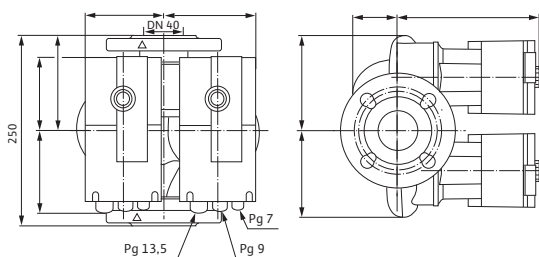
Materials

Pump housing	Grey cast iron (EN-GJL-250)
Impeller	Plastic (PPE - 30% GF)
Pump shaft	Stainless steel (X46Cr13)
Bearing	Carbon, metal impregnated

Minimum suction head at suction port for avoiding cavitation at water pumping temperature

Data sheet: Wilo-Stratos-D 40/1-16

Dimension drawing

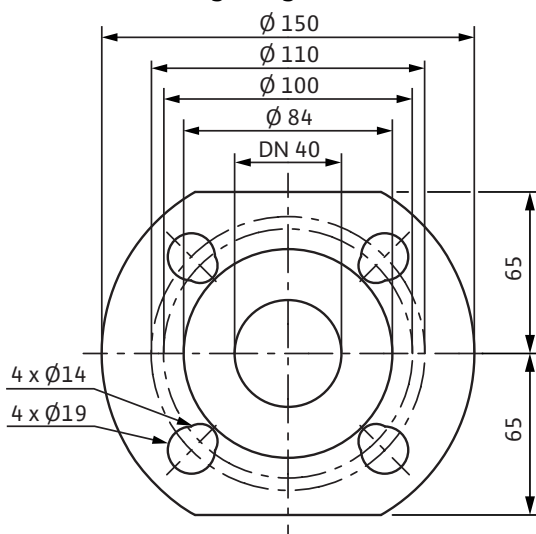


Minimum suction head at 50 / 95 / 110 °C 7 / 15 / 23 m

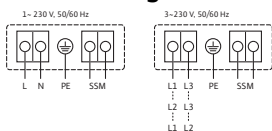
Information for order placements

Make	Wilo
Type	Stratos-D 40/1-16
Art no.	2131669
Weight approx.	<i>m</i> 44 kg

Dimension drawing, flange



Terminal diagram



Collective fault signal
(NC contact according to VDI 3814, load capacity 1 A, 250 V ~)

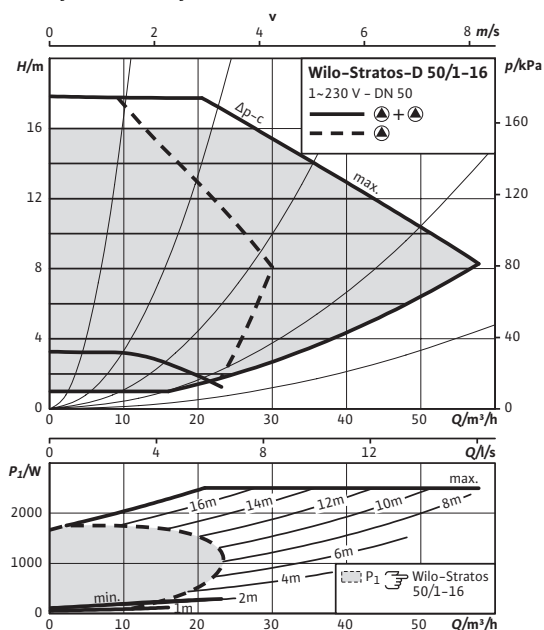
SSM:

For function, see Wilo catalogue, chapter "Pump management Wilo control, planning guide"

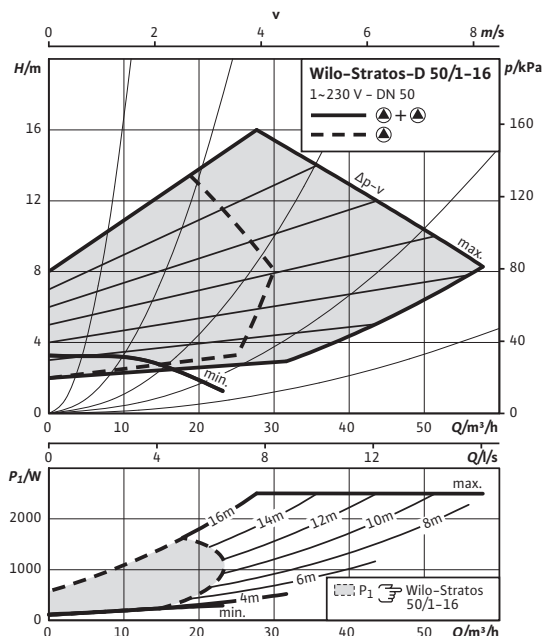


Data sheet: Wilo-Stratos-D 50/1-16

Pump curves $\Delta p-c$ (constant)



Pump curves $\Delta p-v$ (variable)



Approved fluids (other fluids on request)

- Heating water (in accordance with VDI 2035)
- Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)

Permitted field of application

Temperature range at max. ambient temperature +40 °C	-10...+110 °C
Maximum permissible operating pressure	P_{max} 6/10 bar

Pipe connections

Flange	Combination flange PN6/10 (PN 16 flange according to EN 1092-2)
Nominal flange diameter	DN 50
Overall length	l_o 340 mm

Motor/electronics

Energy efficiency index (EEI)	≤ 0,27
Electromagnetic compatibility	EN 61800-3
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Speed control	Frequency converter
Protection class	IP X4D
Insulation class	F
Mains connection	1~230 V, 50/60 Hz
Nominal motor power	P_2 1050,00 W
Speed	n 950 - 3400 rpm
Power consumption	P_1 40 - 1250 W
Current consumption	I 0.30 - 5.50 A
Motor protection	integrated
Threaded cable connection	PG 1x7/1x9/1x13.5

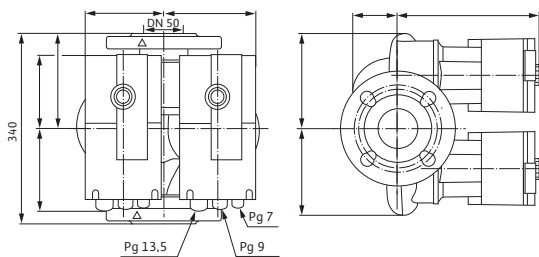
Materials

Pump housing	Grey cast iron (EN-GJL-250)
Impeller	Plastic (PPE - 30% GF)
Pump shaft	Stainless steel (X46Cr13)
Bearing	Carbon, metal impregnated

Minimum suction head at suction port for avoiding cavitation at water pumping temperature

Data sheet: Wilo-Stratos-D 50/1-16

Dimension drawing

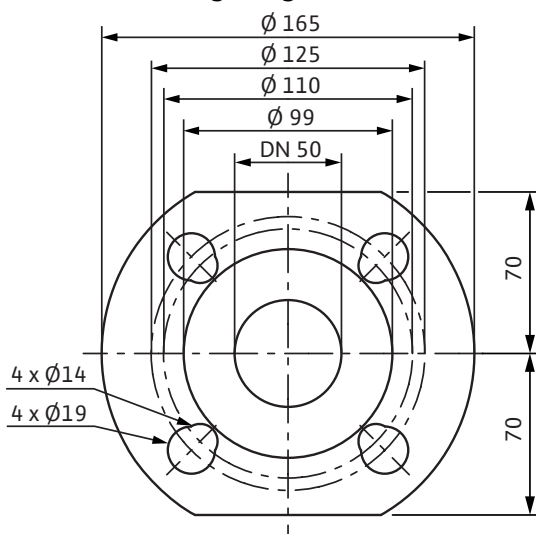


Minimum suction head at 50/95/110 °C 7/15/23 m

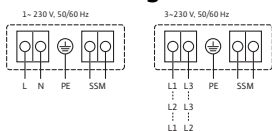
Information for order placements

Make	Wilo
Type	Stratos-D 50/1-16
Art no.	2131670
Weight approx.	<i>m</i> 48 kg

Dimension drawing, flange



Terminal diagram



Collective fault signal
(NC contact according to VDI 3814, load capacity 1 A,
250 V ~)

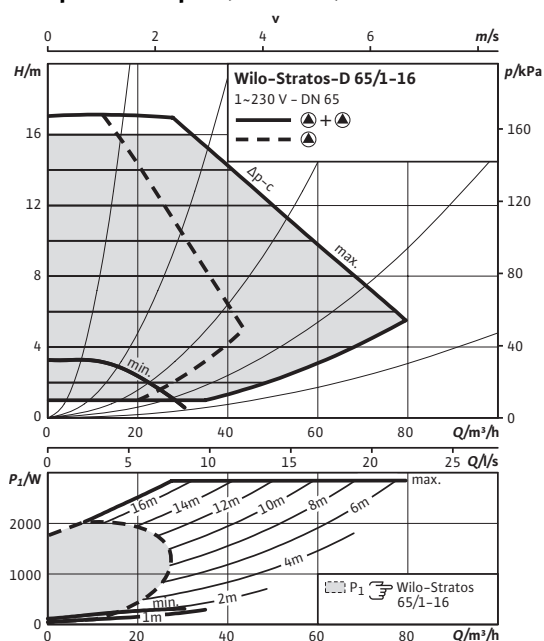
SSM:

For function, see Wilo catalogue, chapter "Pump
management Wilo control, planning guide"

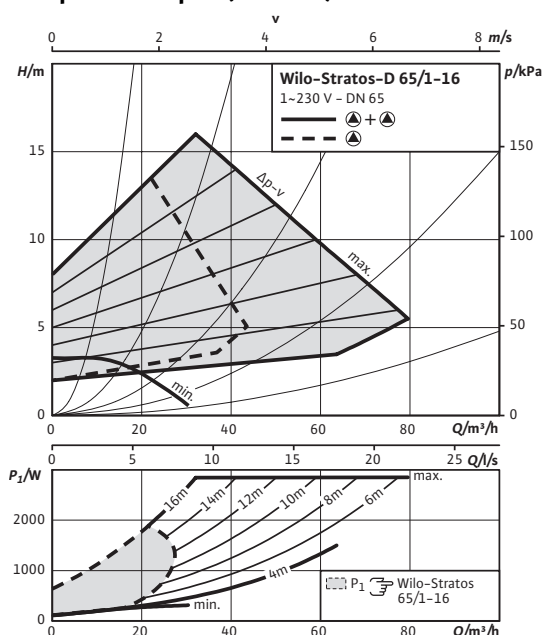


Data sheet: Wilo-Stratos-D 65/1-16

Pump curves $\Delta p-c$ (constant)



Pump curves $\Delta p-v$ (variable)



Approved fluids (other fluids on request)

Heating water (in accordance with VDI 2035)	•
Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)	•

Permitted field of application

Temperature range at max. ambient temperature +40 °C	-10...+110 °C
Maximum permissible operating pressure	P_{max} 6/10 bar

Pipe connections

Flange	Combination flange PN6/10 (PN 16 flange according to EN 1092-2)
Nominal flange diameter	DN 65
Overall length	l_o 340 mm

Motor/electronics

Energy efficiency index (EEI)	$\leq 0,27$
Electromagnetic compatibility	EN 61800-3
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Speed control	Frequency converter
Protection class	IP X4D
Insulation class	F
Mains connection	1~230 V, 50/60 Hz
Nominal motor power	P_2 1200,00 W
Speed	n 950 - 3400 rpm
Power consumption	P_1 40 - 1450 W
Current consumption	I 0.30 - 6.40 A
Motor protection	integrated
Threaded cable connection	PG 1x7/1x9/1x13.5

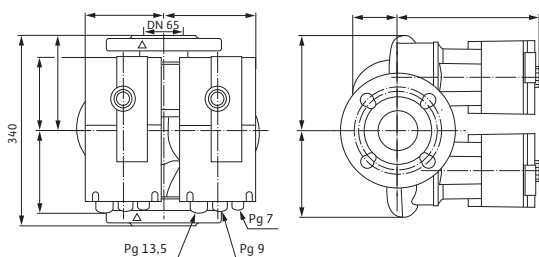
Materials

Pump housing	Grey cast iron (EN-GJL-250)
Impeller	Plastic (PPE - 30% GF)
Pump shaft	Stainless steel (X46Cr13)
Bearing	Carbon, metal impregnated

Minimum suction head at suction port for avoiding cavitation at water pumping temperature

Data sheet: Wilo-Stratos-D 65/1-16

Dimension drawing

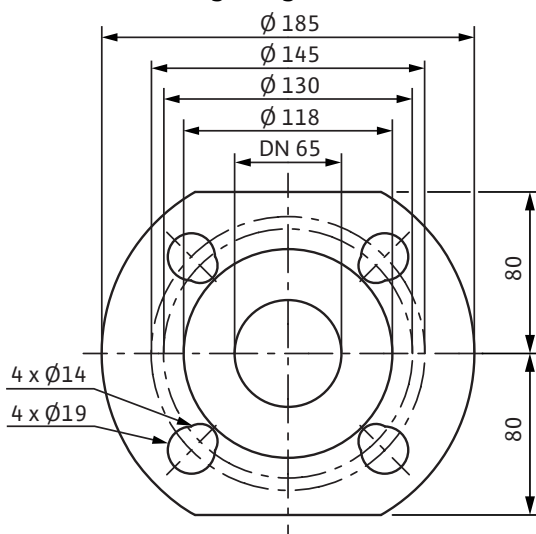


Minimum suction head at 50 / 95 / 110 °C 7 / 15 / 23 m

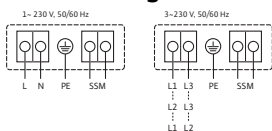
Information for order placements

Make	Wilo
Type	Stratos-D 65/1-16
Art no.	2131671
Weight approx.	<i>m</i> 51 kg

Dimension drawing, flange



Terminal diagram



Collective fault signal
(NC contact according to VDI 3814, load capacity 1 A,
250 V ~)

SSM:

For function, see Wilo catalogue, chapter "Pump
management Wilo control, planning guide"

