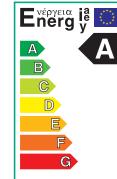


### Series description Wilo-Stratos PARA 15/1-5, 20/1-5, 25/1-5, 30/1-5



**EuP  
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#### Design

Glandless circulation pump with threaded connection.  
EC motor with automatic power adjustment.  
Standard delivery with cable for an easy electrical connection

#### Application

Hot-water heating systems of all kinds, closed cooling circuits, industrial circulation systems, circulation in solar thermal and geothermal systems.

#### Type key

Example:	<b>Wilo-Stratos PARA 25/1-5 T1</b>
<b>Stratos</b>	Electronically controlled high-efficiency pump
<b>PARA</b>	pump range adapted to requirements of the OEM market
<b>25/</b>	Nominal connection diameter
<b>1-5</b>	Nominal delivery head range [m]
<b>T1</b>	Type key for combinations of function and equipment
<b>12 h</b>	Position of electronic module, special version
<b>(not specified)</b>	Position of electronic module 6h, standard version

#### Options

- External control via 0–10V or PWM
- Control mode  $\Delta p$ -c (constant),  $\Delta p$ -v (variable)
- Control mode selection and differential pressure setpoint for  $\Delta p$ -c,  $\Delta p$ -v via operating button
- Special version without operating button
- All possible combinations of functions and equipment are available
- Version with cable according to customer specification
- Version with short overall length of 130 mm
- Delivery in collective packaging (196 pumps/packaging)
- Delivery with thermal insulation
- Cold insulation shell ClimaForm as accessories

#### Special features/product benefits

- Energy efficiency class A
- Maximum efficiency thanks to ECM technology
- Up to 80% electricity savings compared to uncontrolled circulation pumps
- High starting torque for reliable starting
- For all heating and cooling systems in the temperature range of  $-10^{\circ}\text{C}$  to  $+95^{\circ}\text{C}$
- Prevention of flow noise
- Safety and comfort during installation and operation
- Functions and space-saving design were specially adapted to the requirements of the OEM market. Optimum output even in narrow installation situations.
- Standard delivery with cable for an easy electrical connection
- Convenient setting of the pump via external control signals or the Red Button technology
- Cast iron pump housing with cataphoretic (KTL) coating for the prevention of corrosion from condensation formation

# Heating and cooling

## High-efficiency pumps

### Technical data Wilo-Stratos PARA 15/1-5, 20/1-5, 25/1-5, 30/1-5

	Wilo-Stratos PARA...					
	15/1-5-130	20/1-5-130	25/1-5-130	25/1-5	30/1-5-130	30/1-5
<b>Approved fluids (other fluids on request)</b>						
Heating water (in accordance with VDI 2035)	•	•	•	•	•	•
Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)	•	•	•	•	•	•
Potable water and water for food-processing companies in accordance with TrinkwV 2001 (drinking water ordinance)	–	–	–	–	–	–
<b>Power</b>						
Max. delivery head	5 m	5 m	5 m	5 m	5 m	5 m
Max. volume flow	3.2 m <sup>3</sup> /h	3.2 m <sup>3</sup> /h	3.2 m <sup>3</sup> /h	3.2 m <sup>3</sup> /h	3.2 m <sup>3</sup> /h	3.2 m <sup>3</sup> /h
Speed	1200 – 3900 rpm					
<b>Permitted field of application</b>						
Temperature range for applications in HVAC systems	at max. ambient temperature of 25°C = -10 to 95°C at max. ambient temperature of 40°C = -10 to 95°C at max. ambient temperature of 45°C = -10 to 95°C at max. ambient temperature of 50°C = -10 to 90°C at max. ambient temperature of 55°C = -10 to 80°C at max. ambient temperature of 60°C = -10 to 70°C at max. ambient temperature of 65°C = -10 to 60°C					
Temperature range for applications in secondary hot water circulation systems	–					
Maximum static pressure	6 bar	6 bar	6 bar	6 bar	6 bar	6 bar
Special version for operating pressure	–	–	–	–	–	–
<b>Pipe connections</b>						
Screwed connection	Rp ½	Rp ¾	Rp 1	Rp 1	Rp 1¼	Rp 1½
Thread	G 1	G 1¼	G 1½	G 1½	G 2	G 2
<b>Electrical connection</b>						
Mains connection 1~, standard version	230 V	230 V	230 V	230 V	230 V	230 V
Mains frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
<b>Motor/electronics</b>						
Electromagnetic compatibility	EN 61800-3					
Emitted interference	EN 61000-6-3					
Interference resistance	EN 61000-6-2					
Power electronics	Frequency converter					
Protection class	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
Insulation class	F	F	F	F	F	F
<b>Materials</b>						
Pump housing	Grey cast iron (EN-GJL-200)					
Impeller	Plastic (PPE), trade name: Noryl					
Pump shaft	Stainless steel (X46Cr13)					
Bearing	Carbon, metal impregnated					
<b>Minimum suction head at suction port [m] for preventing cavitation at water pumping temperature</b>						
Minimum suction head at 50°C	3.0 m	3.0 m	3.0 m	3.0 m	3.0 m	3.0 m
Minimum suction head at 95°C	10.0 m	10.0 m	10.0 m	10.0 m	10.0 m	10.0 m
Minimum suction head at 110°C	–	–	–	–	–	–

• = available, – = not available

# Heating and cooling

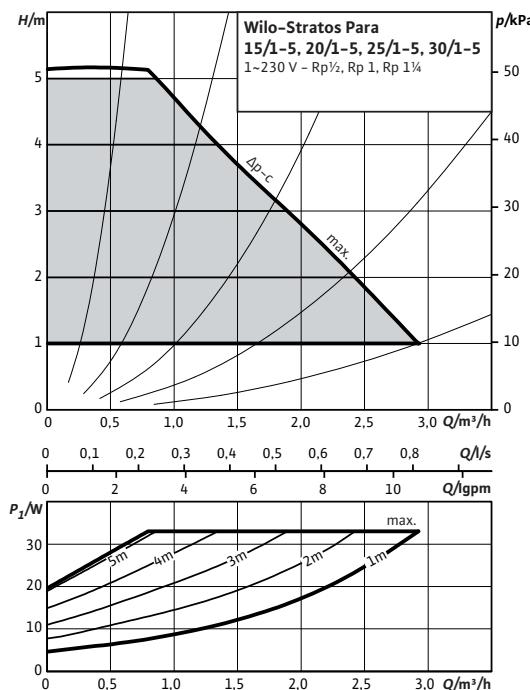
## High-efficiency pumps

**WILO**

### Pump curves Wilo-Stratos PARA 15/1-5, 20/1-5, 25/1-5, 30/1-5

Wilo-Stratos PARA 15/1-5, 20/1-5, 25/1-5, 30/1-5

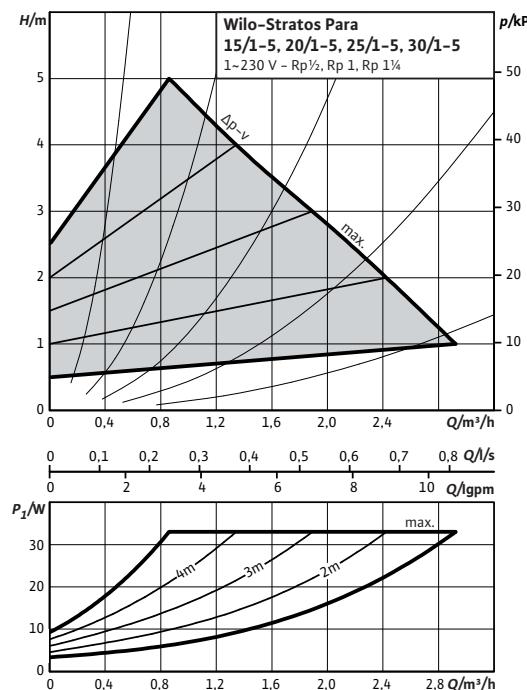
$\Delta p$ -c (constant)



Tolerances of each curve according to EN 1151-1:2006

Wilo-Stratos PARA 15/1-5, 20/1-5, 25/1-5, 30/1-5

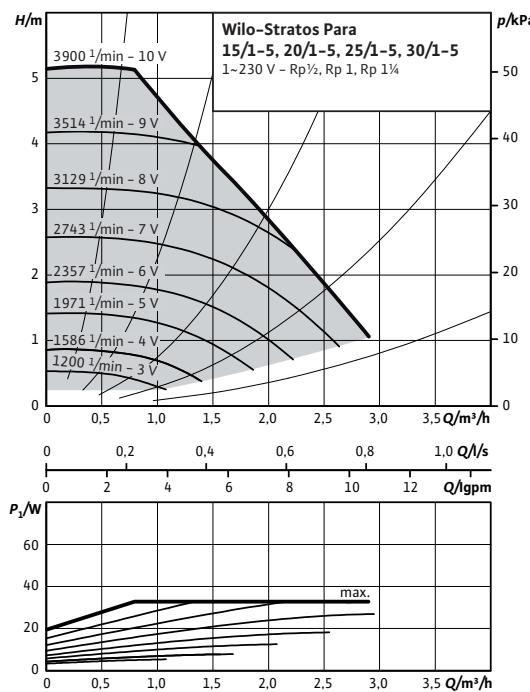
$\Delta p$ -v (variable)



Tolerances of each curve according to EN 1151-1:2006

Wilo-Stratos PARA 15/1-5, 20/1-5, 25/1-5, 30/1-5

Manual control mode



Tolerances of each curve according to EN 1151-1:2006

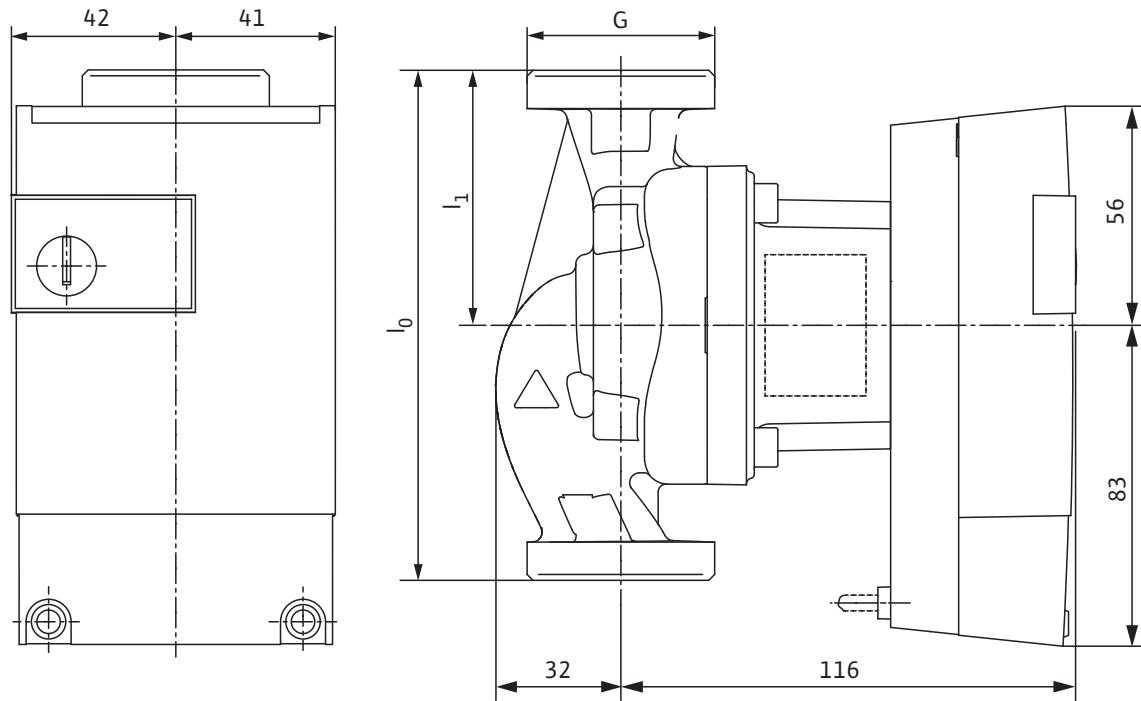
# Heating and cooling

## High-efficiency pumps

### Dimensions, motor data Wilo-Stratos PARA 15/1-5, 20/1-5, 25/1-5, 30/1-5

Motor data					
Wilo-Stratos PARA...	Nominal motor power	Speed	Power consumption 1~230 V	Current at 1~230V	Motor protection
	$P_2$	$n$	$P_1$	$I$	-
	W	rpm	W	A	-
15/1-5-130	30	1200 - 3900	5-33	0.06 - 0.29	integrated
20/1-5-130	30	1200 - 3900	5-33	0.06 - 0.29	integrated
25/1-5	30	1200 - 3900	5-33	0.06 - 0.29	integrated
25/1-5-130	30	1200 - 3900	5-33	0.06 - 0.29	integrated
30/1-5	30	1200 - 3900	5-33	0.06 - 0.29	integrated
30/1-5-130	30	1200 - 3900	5-33	0.06 - 0.29	integrated

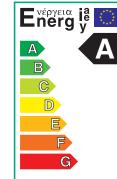
### Dimension drawing



### Dimensions, weights

Wilo-Stratos PARA...	Screwed connection	Thread	Overall length	Dimensions	Weight approx.
	-	G 1	$l_0$	$l_1$	M
	-			mm	kg
15/1-5-130	Rp 1/2	G 1	130	65	2.2
20/1-5-130	Rp 3/4	G 1 1/4	130	65	2.2
25/1-5	Rp 1	G 1 1/2	180	90	2.5
25/1-5-130	Rp 1	G 1 1/2	130	65	2.2
30/1-5	Rp 1 1/4	G 2	180	90	2.5
30/1-5-130	Rp 1 1/4	G 2	130	65	2.5

### Series description Wilo-Stratos PARA 15/1-7, 20/1-7, 25/1-7, 30/1-7



**EuP  
ready**



#### Design

Glandless circulation pump with threaded connection.  
EC motor with automatic power adjustment.  
Standard delivery with cable for an easy electrical connection

#### Application

Hot-water heating systems of all kinds, closed cooling circuits, industrial circulation systems, circulation in solar thermal and geothermal systems.

#### Type key

Example:	<b>Wilo-Stratos PARA 25/1-7 T1</b>
<b>Stratos</b>	Electronically controlled high-efficiency pump
<b>PARA</b>	pump range adapted to requirements of the OEM market
<b>25/</b>	Nominal connection diameter
<b>1-7</b>	Nominal delivery head range [m]
<b>T1</b>	Type key for combinations of function and equipment
<b>12 h</b>	Position of electronic module, special version
<b>(not specified)</b>	Position of electronic module 6h, standard version

#### Options

- External control via 0–10V or PWM
- Control mode  $\Delta p$ -c (constant),  $\Delta p$ -v (variable)
- Control mode selection and differential pressure setpoint for  $\Delta p$ -c,  $\Delta p$ -v via operating button
- Special version without operating button
- All possible combinations of functions and equipment are available
- Version with cable according to customer specification
- Version with short overall length of 130 mm
- Delivery in collective packaging (196 pumps/packaging)
- Delivery with thermal insulation
- Cold insulation shell ClimaForm as accessories

#### Special features/product benefits

- Energy efficiency class A
- Maximum efficiency thanks to ECM technology
- Up to 80% electricity savings compared to uncontrolled circulation pumps
- High starting torque for reliable starting
- For all heating and cooling systems in the temperature range of  $-10^{\circ}\text{C}$  to  $+95^{\circ}\text{C}$
- Prevention of flow noise
- Safety and comfort during installation and operation
- Functions and space-saving design were specially adapted to the requirements of the OEM market. Optimum output even in narrow installation situations.
- Standard delivery with cable for an easy electrical connection
- Convenient setting of the pump via external control signals or the Red Button technology
- Cast iron pump housing with cataphoretic (KTL) coating for the prevention of corrosion from condensation formation

# Heating and cooling

## High-efficiency pumps

### Technical data Wilo-Stratos PARA 15/1-7, 20/1-7, 25/1-7, 30/1-7

	Wilo-Stratos PARA...					
	15/1-7-130	20/1-7-130	25/1-7-130	25/1-7	30/1-7-130	30/1-7
<b>Approved fluids (other fluids on request)</b>						
Heating water (in accordance with VDI 2035)	•	•	•	•	•	•
Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)	•	•	•	•	•	•
Potable water and water for food-processing companies in accordance with TrinkwV 2001 (drinking water ordinance)	–	–	–	–	–	–
<b>Power</b>						
Max. delivery head	7 m	7 m	7 m	7 m	7 m	7 m
Max. volume flow	4.5 m <sup>3</sup> /h	4.5 m <sup>3</sup> /h	4.5 m <sup>3</sup> /h	4.5 m <sup>3</sup> /h	4.5 m <sup>3</sup> /h	4.5 m <sup>3</sup> /h
Speed	1200 – 4450 rpm					
<b>Permitted field of application</b>						
Temperature range for applications in HVAC systems	at max. ambient temperature of 25°C = -10 to 95°C at max. ambient temperature of 40°C = -10 to 95°C at max. ambient temperature of 45°C = -10 to 95°C at max. ambient temperature of 50°C = -10 to 90°C at max. ambient temperature of 55°C = -10 to 80°C at max. ambient temperature of 60°C = -10 to 70°C at max. ambient temperature of 65°C = -10 to 60°C					
Temperature range for applications in secondary hot water circulation systems	–					
Maximum static pressure	6 bar	6 bar	6 bar	6 bar	6 bar	6 bar
Special version for operating pressure	–	–	–	–	–	–
<b>Pipe connections</b>						
Screwed connection	Rp ½	Rp ¾	Rp 1	Rp 1	Rp 1¼	Rp 1½
Thread	G 1	G 1¼	G 1½	G 1½	G 2	G 2
<b>Electrical connection</b>						
Mains connection 1~, standard version	230 V	230 V	230 V	230 V	230 V	230 V
Mains frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
<b>Motor/electronics</b>						
Electromagnetic compatibility	EN 61800-3					
Emitted interference	EN 61000-6-3					
Interference resistance	EN 61000-6-2					
Power electronics	Frequency converter					
Protection class	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
Insulation class	F	F	F	F	F	F
<b>Materials</b>						
Pump housing	Grey cast iron (EN-GJL-200)					
Impeller	Plastic (PPE), trade name: Noryl					
Pump shaft	Stainless steel (X46Cr13)					
Bearing	Carbon, metal impregnated					
<b>Minimum suction head at suction port [m] for preventing cavitation at water pumping temperature</b>						
Minimum suction head at 50°C	3.0 m	3.0 m	3.0 m	3.0 m	3.0 m	3.0 m
Minimum suction head at 95°C	10.0 m	10.0 m	10.0 m	10.0 m	10.0 m	10.0 m
Minimum suction head at 110°C	–	–	–	–	–	–

• = available, – = not available

# Heating and cooling

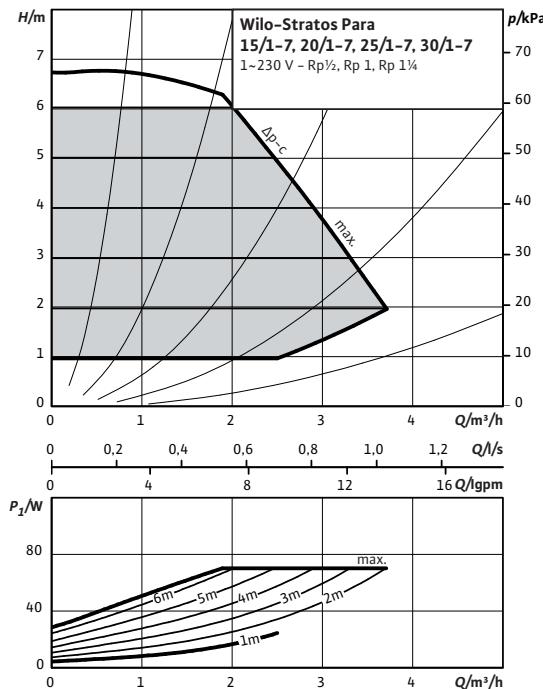
## High-efficiency pumps

**WILO**

### Pump curves Wilo-Stratos PARA 15/1-7, 20/1-7, 25/1-7, 30/1-7

Wilo-Stratos PARA 15/1-7, 20/1-7, 25/1-7, 30/1-7

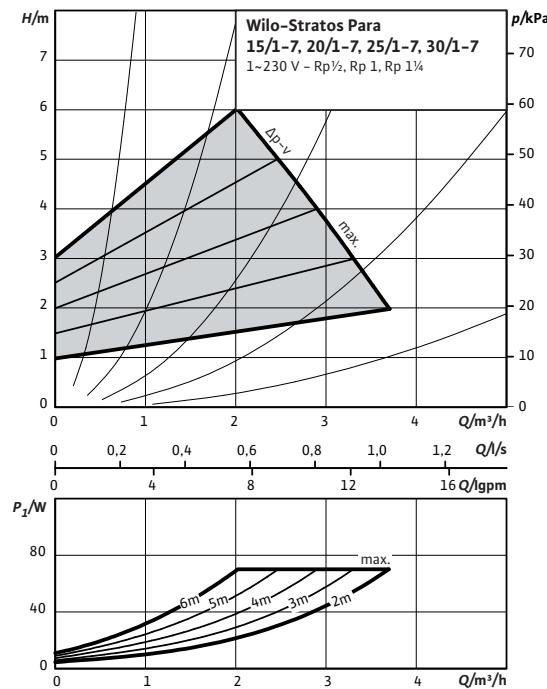
$\Delta p$ -c (constant)



Tolerances of each curve according to EN 1151-1:2006

Wilo-Stratos PARA 15/1-7, 20/1-7, 25/1-7, 30/1-7

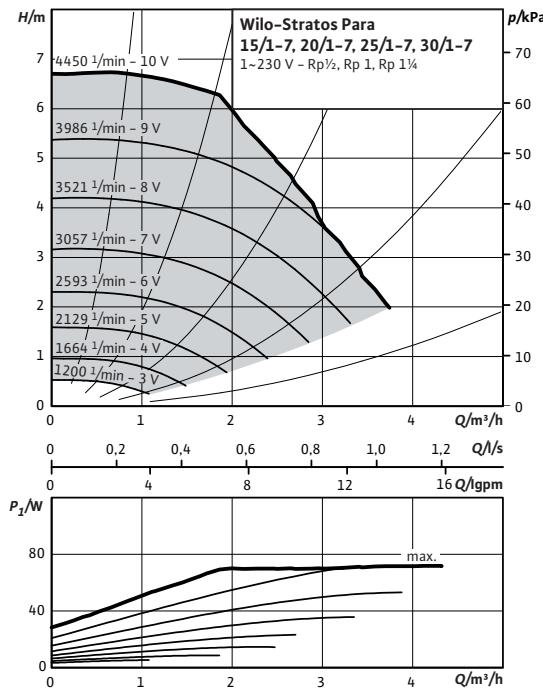
$\Delta p$ -v (variable)



Tolerances of each curve according to EN 1151-1:2006

Wilo-Stratos PARA 15/1-7, 20/1-7, 25/1-7, 30/1-7

Manual control mode



Tolerances of each curve according to EN 1151-1:2006

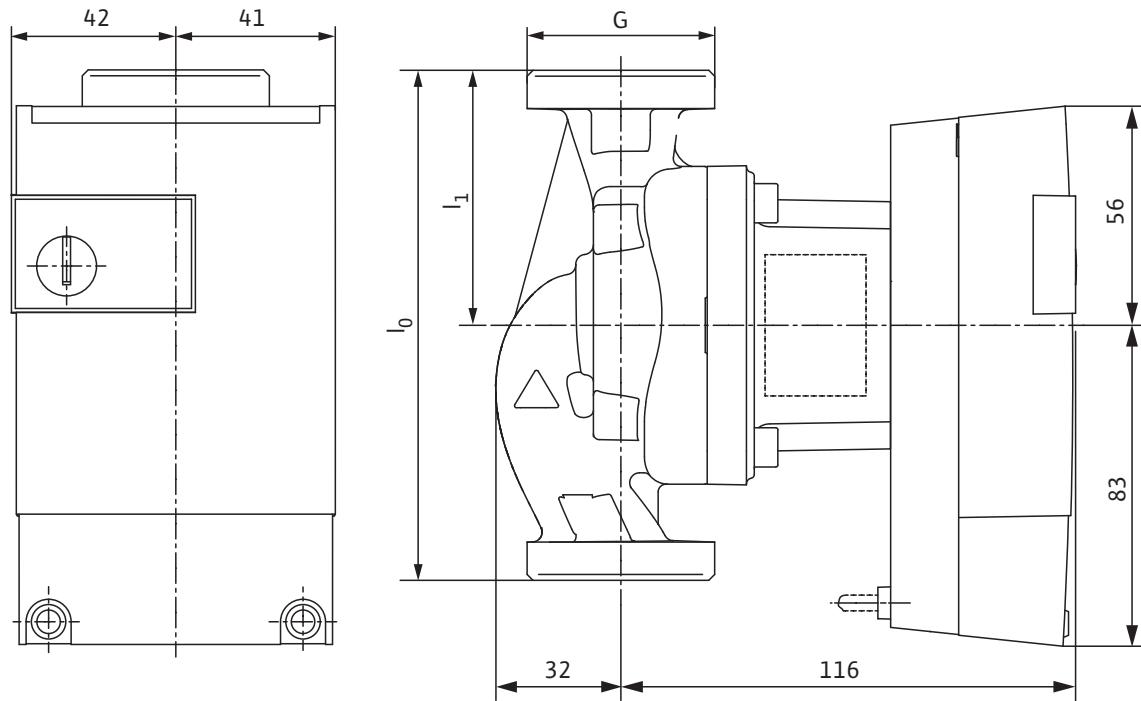
# Heating and cooling

## High-efficiency pumps

### Dimensions, motor data Wilo-Stratos PARA 15/1-7, 20/1-7, 25/1-7, 30/1-7

Motor data					
Wilo-Stratos PARA...	Nominal motor power	Speed	Power consumption 1~230 V	Current at 1~230V	Motor protection
	$P_2$	$n$	$P_1$	$I$	-
	W	rpm	W	A	-
15/1-7-130	50	1200 - 4450	5-70	0.06 - 0.58	integrated
20/1-7-130	50	1200 - 4450	5-70	0.06 - 0.58	integrated
25/1-7	50	1200 - 4450	5-70	0.06 - 0.58	integrated
25/1-7-130	50	1200 - 4450	5-70	0.06 - 0.58	integrated
30/1-7	50	1200 - 4450	5-70	0.06 - 0.58	integrated
30/1-7-130	50	1200 - 4450	5-70	0.06 - 0.58	integrated

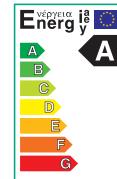
### Dimension drawing



### Dimensions, weights

Wilo-Stratos PARA...	Screwed connection	Thread	Overall length	Dimensions	Weight approx.
	-	-	$l_0$	$l_1$	$M$
	-	-		mm	kg
15/1-7-130	Rp 1/2	G 1	130	65	2.2
20/1-7-130	Rp 3/4	G 1 1/4	130	65	2.2
25/1-7	Rp 1	G 1 1/2	180	90	2.5
25/1-7-130	Rp 1	G 1 1/2	130	65	2.2
30/1-7	Rp 1 1/4	G 2	180	90	2.5
30/1-7-130	Rp 1 1/4	G 2	130	65	2.5

### Series description Wilo-Stratos PARA 25/1-8, 30/1-8



**EuP  
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#### Design

Glandless circulation pump with threaded connection.  
EC motor with automatic power adjustment.  
Standard delivery with cable for an easy electrical connection

#### Application

Hot-water heating systems of all kinds, closed cooling circuits, industrial circulation systems, circulation in solar thermal and geothermal systems.

#### Type key

Example:	<b>Wilo-Stratos PARA 25/1-8 T1</b>
<b>Stratos</b>	Electronically controlled high-efficiency pump
<b>PARA</b>	pump range adapted to requirements of the OEM market
<b>25/</b>	Nominal connection diameter
<b>1-8</b>	Nominal delivery head range [m]
<b>T1</b>	Type key for combinations of function and equipment
<b>12 h</b>	Position of electronic module, special version
<b>(not specified)</b>	Position of electronic module 6h, standard version

#### Special features/product benefits

- Energy efficiency class A
- Maximum efficiency thanks to ECM technology
- Up to 80% electricity savings compared to uncontrolled circulation pumps
- High starting torque for reliable starting
- For all heating and cooling systems in the temperature range of -10 °C to +110 °C
- Prevention of flow noise
- Safety and comfort during installation and operation
- Functions and space-saving design were specially adapted to the requirements of the OEM market. Optimum output even in narrow installation situations.
- Standard delivery with cable for an easy electrical connection
- Convenient setting of the pump via external control signals or the Red Button technology
- Cast iron pump housing with cataphoretic (KTL) coating for the prevention of corrosion from condensation formation

#### Options

- External control via 0–10V
- Control mode  $\Delta p$ -c (constant),  $\Delta p$ -v (variable)
- Control mode selection and differential pressure setpoint for  $\Delta p$ -c,  $\Delta p$ -v via operating button
- Further combinations of functions and equipment are available: T1-T5, T16, T17
- Version with cable according to customer specification
- Delivery in collective packaging (108 pumps/packaging)
- Delivery with thermal insulation
- Cold insulation shell ClimaForm as accessories

# Heating and cooling

## High-efficiency pumps

### Technical data Wilo-Stratos PARA 25/1-8, 30/1-8

	Wilo-Stratos PARA...	
	25/1-8	30/1-8
<b>Approved fluids (other fluids on request)</b>		
Heating water (in accordance with VDI 2035)	•	•
Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)	•	•
Potable water and water for food-processing companies in accordance with TrinkwV 2001 (drinking water ordinance)	–	–
<b>Power</b>		
Max. delivery head	8 m	8 m
Max. volume flow	8.0 m <sup>3</sup> /h	8.0 m <sup>3</sup> /h
Speed	1400 – 3900 rpm	1400 – 3900 rpm
<b>Permitted field of application</b>		
Temperature range for applications in HVAC systems	at max. ambient temperature of 25°C = -10 to 110°C at max. ambient temperature of 40°C = -10 to 90°C at max. ambient temperature of 45°C = -10 to 80°C at max. ambient temperature of 50°C = -10 to 70°C at max. ambient temperature of 55°C = -10 to 60°C at max. ambient temperature of 60°C = -10 to 50°C at max. ambient temperature of 65°C = -10 to 40°C	
Temperature range for applications in secondary hot water circulation systems	–	
Maximum static pressure	10 bar	10 bar
Special version for operating pressure	–	–
<b>Pipe connections</b>		
Screwed connection	Rp 1	Rp 1½
Thread	G 1½	G 2
<b>Electrical connection</b>		
Mains connection 1~, standard version	230 V	230 V
Mains frequency	50/60 Hz	50/60 Hz
<b>Motor/electronics</b>		
Electromagnetic compatibility	EN 61800-3	
Emitted interference	EN 61000-6-3	
Interference resistance	EN 61000-6-2	
Power electronics	Frequency converter	
Protection class	IP 44	IP 44
Insulation class	F	F
<b>Materials</b>		
Pump housing	Grey cast iron (EN-GJL-200)	
Impeller	Plastic (PPS – 40% GF)	
Pump shaft	Stainless steel (X46Cr13)	
Bearing	Carbon, metal impregnated	
<b>Minimum suction head at suction port [m] for preventing cavitation at water pumping temperature</b>		
Minimum suction head at 50°C	3.0 m	3.0 m
Minimum suction head at 95°C	10.0 m	10.0 m
Minimum suction head at 110°C	16.0 m	16.0 m

• = available, – = not available

# Heating and cooling

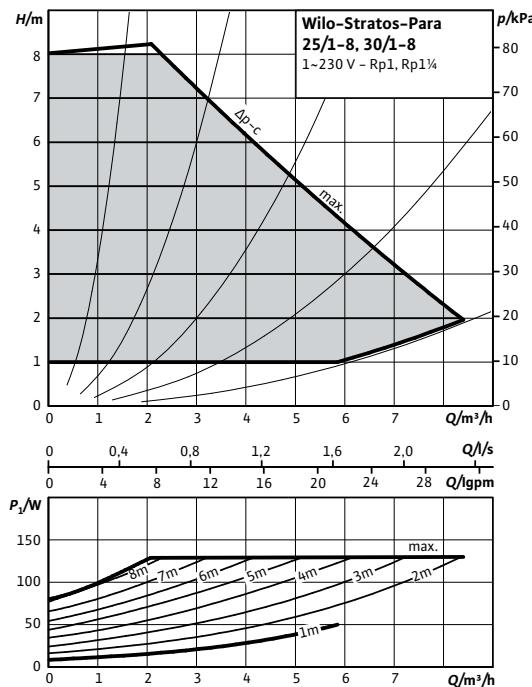
## High-efficiency pumps

**WILO**

### Pump curves Wilo-Stratos PARA 25/1-8, 30/1-8

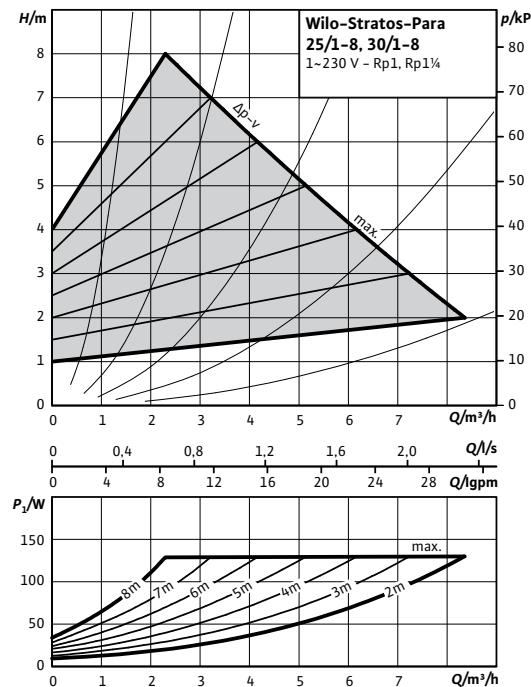
#### Wilo-Stratos PARA 25/1-8, 30/1-8

##### $\Delta p$ -c (constant)



#### Wilo-Stratos PARA 25/1-8, 30/1-8

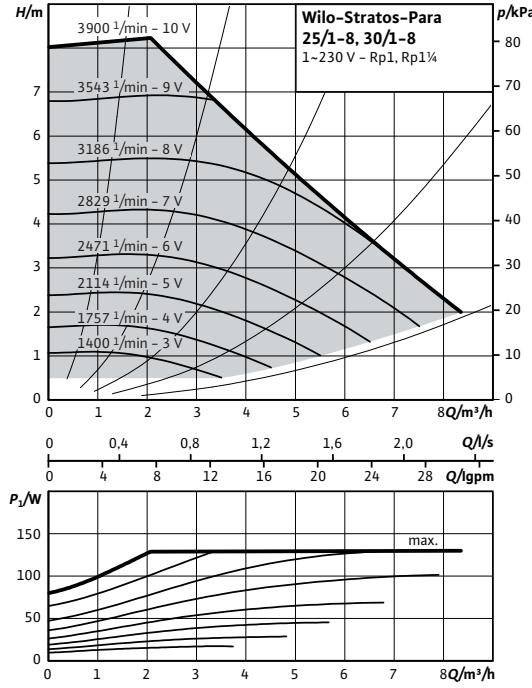
##### $\Delta p$ -v (variable)



Tolerances of each curve according to EN 1151-1:2006

#### Wilo-Stratos PARA 25/1-8, 30/1-8

##### Manual control mode



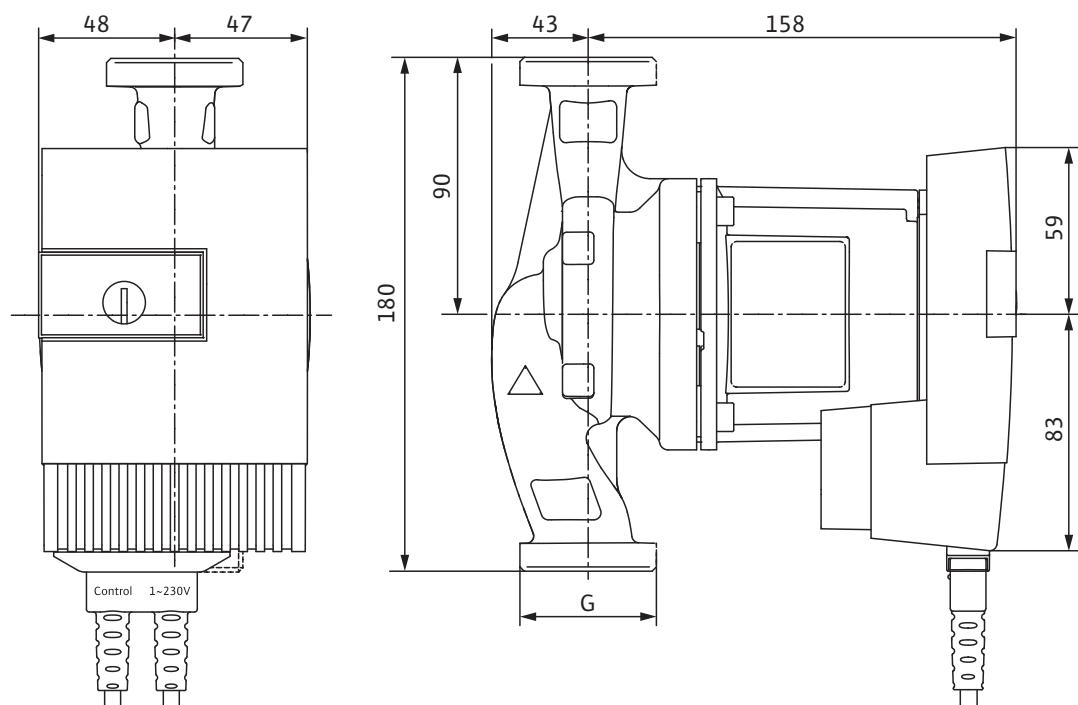
# Heating and cooling

## High-efficiency pumps

### Dimensions, motor data Wilo-Stratos PARA 25/1-8, 30/1-8

Motor data					
Wilo-Stratos PARA...	Nominal motor power	Speed	Power consumption 1~230 V	Current at 1~230V	Motor protection
	$P_2$ W	$n$ rpm	$P_1$ W	$I$ A	-
25/1-8	100	1400 - 3900	8-130	0.07 - 0.95	integrated
30/1-8	100	1400 - 3900	8-130	0.07 - 0.95	integrated

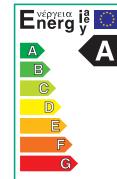
### Dimension drawing



### Dimensions, weights

Wilo-Stratos PARA...	Screwed connection	Thread	Weight approx.
	-	-	M
	-	-	kg
25/1-8	Rp 1	G 1½	4.7
30/1-8	Rp 1¼	G 2	4.7

### Series description Wilo-Stratos PARA 25/1-11, 30/1-11



**EuP  
ready**

#### Design

Glandless circulation pump with threaded connection.  
EC motor with automatic power adjustment.  
Standard delivery with cable for an easy electrical connection

#### Application

Hot-water heating systems of all kinds, closed cooling circuits, industrial circulation systems, circulation in solar thermal and geothermal systems.

#### Type key

Example:	<b>Wilo-Stratos PARA 25/1-11 T1</b>
<b>Stratos</b>	Electronically controlled high-efficiency pump
<b>PARA</b>	pump range adapted to requirements of the OEM market
<b>25/</b>	Nominal connection diameter
<b>1-11</b>	Nominal delivery head range [m]
<b>T1</b>	Type key for combinations of function and equipment
<b>12 h</b>	Position of electronic module, special version
<b>(not specified)</b>	Position of electronic module 6h, standard version

#### Options

- External control via 0–10V
- Control mode  $\Delta p$ -c (constant),  $\Delta p$ -v (variable)
- Control mode selection and differential pressure setpoint for  $\Delta p$ -c,  $\Delta p$ -v via operating button
- Further combinations of functions and equipment are available: T1–T5, T16, T17
- Version with cable according to customer specification
- Version with short overall length of 130 mm
- Delivery in collective packaging (108 pumps/packaging)
- Delivery with thermal insulation
- Cold insulation shell ClimaForm as accessories

#### Special features/product benefits

- Energy efficiency class A
- Maximum efficiency thanks to ECM technology
- Up to 80% electricity savings compared to uncontrolled circulation pumps
- High starting torque for reliable starting
- For all heating and cooling systems in the temperature range of  $-10^{\circ}\text{C}$  to  $+110^{\circ}\text{C}$
- Prevention of flow noise
- Safety and comfort during installation and operation
- Functions and space-saving design were specially adapted to the requirements of the OEM market. Optimum output even in narrow installation situations.
- Standard delivery with cable for an easy electrical connection
- Convenient setting of the pump via external control signals or the Red Button technology
- Cast iron pump housing with cataphoretic (KTL) coating for the prevention of corrosion from condensation formation

# Heating and cooling

## High-efficiency pumps

### Technical data Wilo-Stratos PARA 25/1-11, 30/1-11

	Wilo-Stratos PARA...		
	25/1-11-130	25/1-11	30/1-11
<b>Approved fluids (other fluids on request)</b>			
Heating water (in accordance with VDI 2035)	•	•	•
Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)	•	•	•
Potable water and water for food-processing companies in accordance with TrinkwV 2001 (drinking water ordinance)	–	–	–
<b>Power</b>			
Max. delivery head	11 m	11 m	11 m
Max. volume flow	4.5 m <sup>3</sup> /h	4.5 m <sup>3</sup> /h	4.5 m <sup>3</sup> /h
Speed	1400 – 4850 rpm	1400 – 4850 rpm	1400 – 4850 rpm
<b>Permitted field of application</b>			
Temperature range for applications in HVAC systems	at max. ambient temperature of 25°C = -10 to 110°C at max. ambient temperature of 40°C = -10 to 90°C at max. ambient temperature of 45°C = -10 to 80°C at max. ambient temperature of 50°C = -10 to 70°C at max. ambient temperature of 55°C = -10 to 60°C at max. ambient temperature of 60°C = -10 to 50°C at max. ambient temperature of 65°C = -10 to 40°C		
Temperature range for applications in secondary hot water circulation systems	–		
Maximum static pressure	10 bar	10 bar	10 bar
Special version for operating pressure	–	–	–
<b>Pipe connections</b>			
Screwed connection	Rp 1	Rp 1	Rp 1½
Thread	G 1½	G 1½	G 2
<b>Electrical connection</b>			
Mains connection 1~, standard version	230 V	230 V	230 V
Mains frequency	50/60 Hz	50/60 Hz	50/60 Hz
<b>Motor/electronics</b>			
Electromagnetic compatibility	EN 61800-3		
Emitted interference	EN 61000-6-3		
Interference resistance	EN 61000-6-2		
Power electronics	Frequency converter		
Protection class	IP 44	IP 44	IP 44
Insulation class	F	F	F
<b>Materials</b>			
Pump housing	Grey cast iron (EN-GJL-200)		
Impeller	Plastic (PPE), trade name: Noryl		
Pump shaft	Stainless steel (X46Cr13)		
Bearing	Carbon, metal impregnated		
<b>Minimum suction head at suction port [m] for preventing cavitation at water pumping temperature</b>			
Minimum suction head at 50°C	3.0 m	3.0 m	3.0 m
Minimum suction head at 95°C	10.0 m	10.0 m	10.0 m
Minimum suction head at 110°C	16.0 m	16.0 m	16.0 m

• = available, – = not available

# Heating and cooling

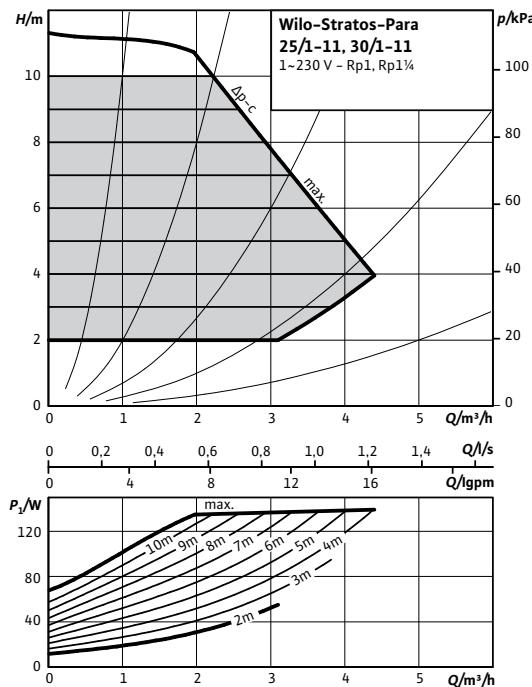
## High-efficiency pumps

**WILO**

### Pump curves Wilo-Stratos PARA 25/1-11, 30/1-11

#### Wilo-Stratos PARA 25/1-11, 30/1-11

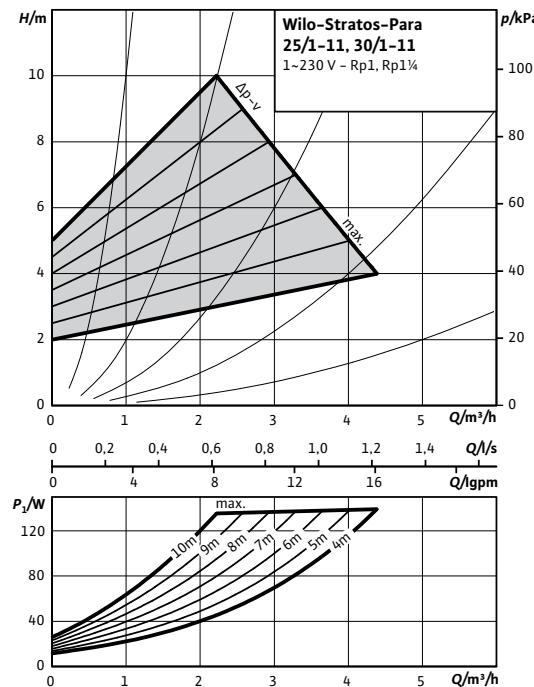
$\Delta p$ -c (constant)



Tolerances of each curve according to EN 1151-1:2006

#### Wilo-Stratos PARA 25/1-11, 30/1-11

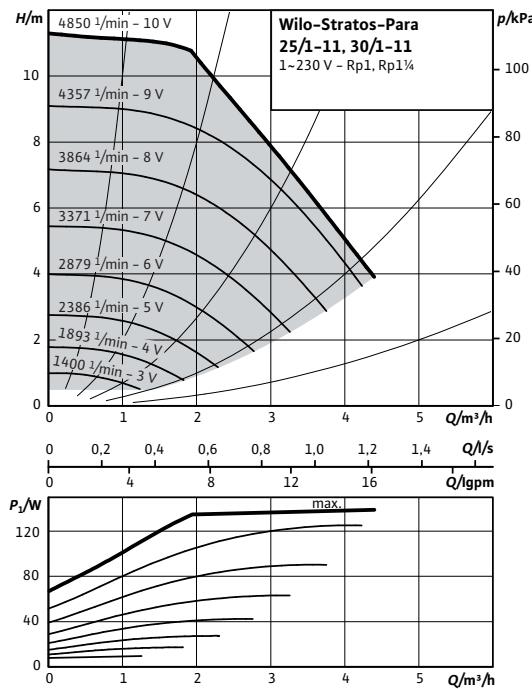
$\Delta p$ -v (variable)



Tolerances of each curve according to EN 1151-1:2006

#### Wilo-Stratos PARA 25/1-11, 30/1-11

Manual control mode



Tolerances of each curve according to EN 1151-1:2006

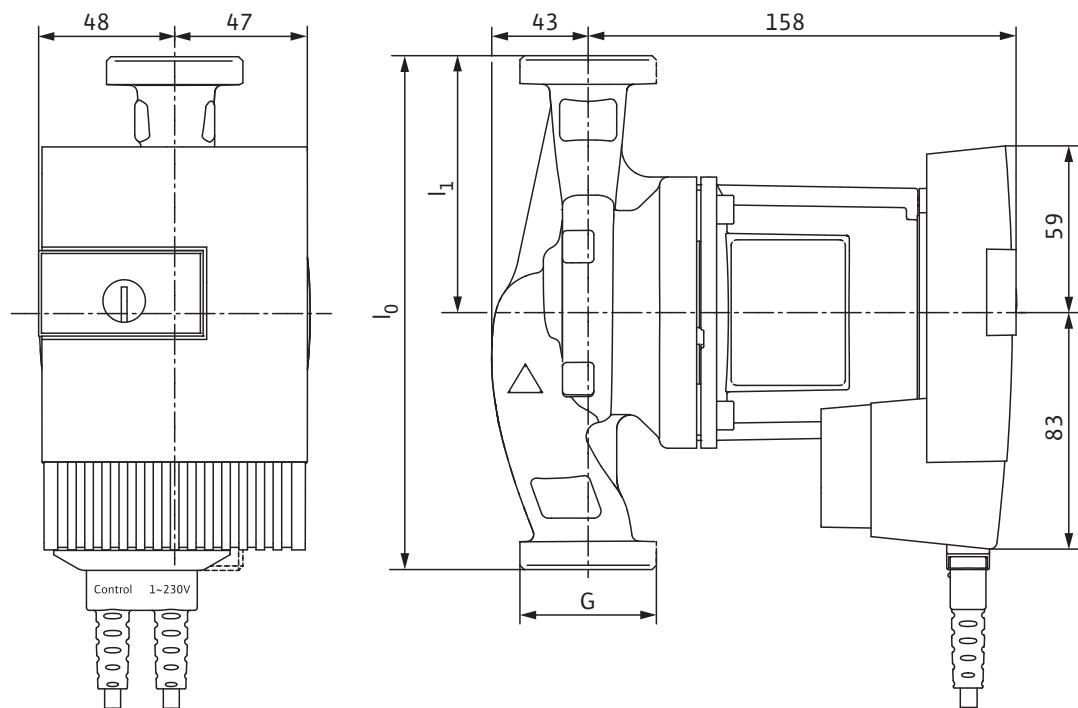
# Heating and cooling

## High-efficiency pumps

### Dimensions, motor data Wilo-Stratos PARA 25/1-11, 30/1-11

Motor data					
Wilo-Stratos PARA...	Nominal motor power	Speed	Power consumption 1~230 V	Current at 1~230V	Motor protection
	$P_2$	$n$	$P_1$	$I$	-
	W	rpm	W	A	-
25/1-11	105	1400 - 4850	8-140	0.07 - 1.05	integrated
25/1-11-130	105	1400 - 4850	8-140	0.07 - 1.05	integrated
30/1-11	105	1400 - 4850	8-140	0.07 - 1.05	integrated

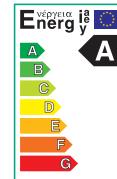
### Dimension drawing



### Dimensions, weights

Wilo-Stratos PARA...	Screwed connection	Thread	Overall length	Dimensions	Weight approx.
	-	-	$l_0$	$l_1$	M
	-	-		mm	kg
25/1-11	Rp 1	G 1½	180	90	4.3
25/1-11-130	Rp 1	G 1½	130	65	4.3
30/1-11	Rp 1¼	G 2	180	90	4.3

### Series description Wilo-Stratos PARA 25/1-12, 30/1-12



**EuP  
ready**

#### Design

Glandless circulation pump with threaded connection.  
EC motor with automatic power adjustment.  
Standard delivery with cable for an easy electrical connection

#### Application

Hot-water heating systems of all kinds, closed cooling circuits, industrial circulation systems, circulation in solar thermal and geothermal systems.

#### Type key

Example:	<b>Wilo-Stratos PARA 25/1-12 T1</b>
<b>Stratos</b>	Electronically controlled high-efficiency pump
<b>PARA</b>	pump range adapted to requirements of the OEM market
<b>25/</b>	Nominal connection diameter
<b>1-12</b>	Nominal delivery head range [m]
<b>T1</b>	Type key for combinations of function and equipment
<b>12 h</b>	Position of electronic module, special version
<b>(not specified)</b>	Position of electronic module 6h, standard version

#### Options

- External control via 0–10V
- Control mode  $\Delta p$ -c (constant),  $\Delta p$ -v (variable)
- Control mode selection and differential pressure setpoint for  $\Delta p$ -c,  $\Delta p$ -v via operating button
- Further combinations of functions and equipment are available: T1–T5, T16, T17
- Version with cable according to customer specification
- Delivery in collective packaging (72 pumps/packaging)
- Delivery with thermal insulation
- Cold insulation shell ClimaForm as accessories

#### Special features/product benefits

- Energy efficiency class A
- Maximum efficiency thanks to ECM technology
- Up to 80% electricity savings compared to uncontrolled circulation pumps
- High starting torque for reliable starting
- For all heating and cooling systems in the temperature range of  $-10^{\circ}\text{C}$  to  $+110^{\circ}\text{C}$
- Prevention of flow noise
- Safety and comfort during installation and operation
- Functions and space-saving design were specially adapted to the requirements of the OEM market. Optimum output even in narrow installation situations.
- Standard delivery with cable for an easy electrical connection
- Convenient setting of the pump via external control signals or the Red Button technology
- Cast iron pump housing with cataphoretic (KTL) coating for the prevention of corrosion from condensation formation

# Heating and cooling

## High-efficiency pumps

### Technical data Wilo-Stratos PARA 25/1-12, 30/1-12

	Wilo-Stratos PARA...	
	25/1-12	30/1-12
<b>Approved fluids (other fluids on request)</b>		
Heating water (in accordance with VDI 2035)	•	•
Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)	•	•
Potable water and water for food-processing companies in accordance with TrinkwV 2001 (drinking water ordinance)	–	–
<b>Power</b>		
Max. delivery head	12 m	12 m
Max. volume flow	10.0 m <sup>3</sup> /h	10.0 m <sup>3</sup> /h
Speed	1400 – 4800 rpm	1400 – 4800 rpm
<b>Permitted field of application</b>		
Temperature range for applications in HVAC systems	at max. ambient temperature of 25°C = -10 to 110°C at max. ambient temperature of 40°C = -10 to 90°C at max. ambient temperature of 45°C = -10 to 80°C at max. ambient temperature of 50°C = -10 to 65°C at max. ambient temperature of 55°C = -10 to 50°C at max. ambient temperature of 60°C = -10 to 35°C at max. ambient temperature of 65°C = -10 to 20°C	
Temperature range for applications in secondary hot water circulation systems	–	
Maximum static pressure	10 bar	10 bar
Special version for operating pressure	–	–
<b>Pipe connections</b>		
Screwed connection	Rp 1	Rp 1½
Thread	G 1½	G 2
<b>Electrical connection</b>		
Mains connection 1~, standard version	230 V	230 V
Mains frequency	50/60 Hz	50/60 Hz
<b>Motor/electronics</b>		
Electromagnetic compatibility	EN 61800-3	
Emitted interference	EN 61000-6-3	
Interference resistance	EN 61000-6-2	
Power electronics	Frequency converter	
Protection class	IP 44	IP 44
Insulation class	F	F
<b>Materials</b>		
Pump housing	Grey cast iron (EN-GJL-200)	
Impeller	Plastic (PPS – 40% GF)	
Pump shaft	Stainless steel (X46Cr13)	
Bearing	Carbon, metal impregnated	
<b>Minimum suction head at suction port [m] for preventing cavitation at water pumping temperature</b>		
Minimum suction head at 50°C	3.0 m	3.0 m
Minimum suction head at 95°C	10.0 m	10.0 m
Minimum suction head at 110°C	16.0 m	16.0 m

• = available, – = not available

# Heating and cooling

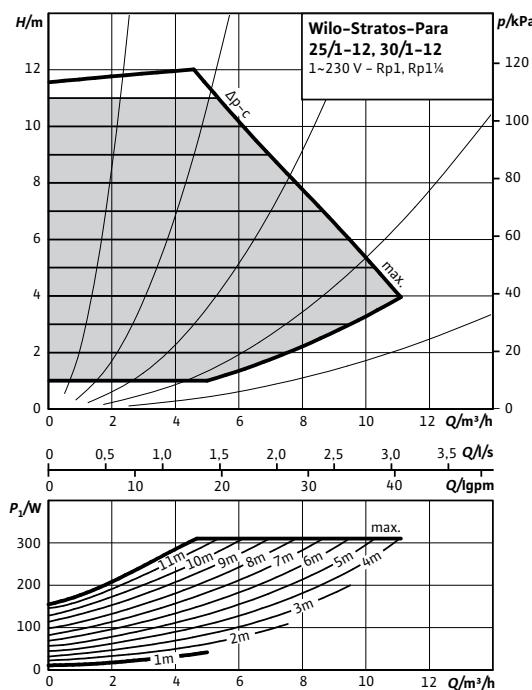
## High-efficiency pumps

**WILO**

### Pump curves Wilo-Stratos PARA 25/1-12, 30/1-12

#### Wilo-Stratos PARA 25/1-12, 30/1-12

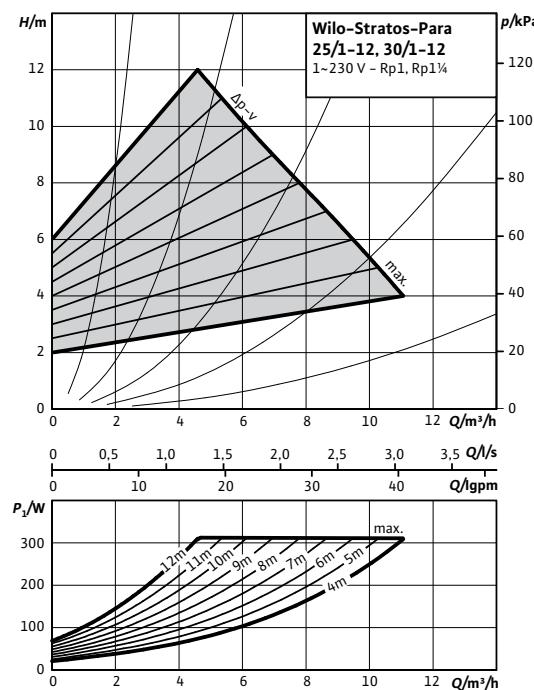
##### $\Delta p$ -c (constant)



Tolerances of each curve according to EN 1151-1:2006

#### Wilo-Stratos PARA 25/1-12, 30/1-12

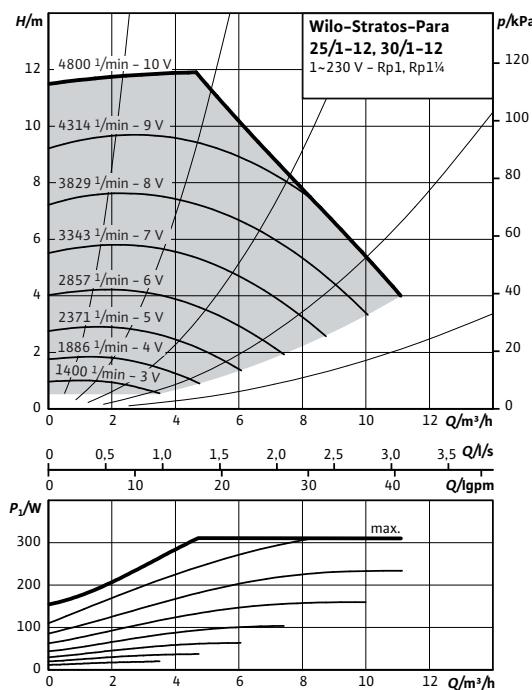
##### $\Delta p$ -v (variable)



Tolerances of each curve according to EN 1151-1:2006

#### Wilo-Stratos PARA 25/1-12, 30/1-12

##### Manual control mode



Tolerances of each curve according to EN 1151-1:2006

# Heating and cooling

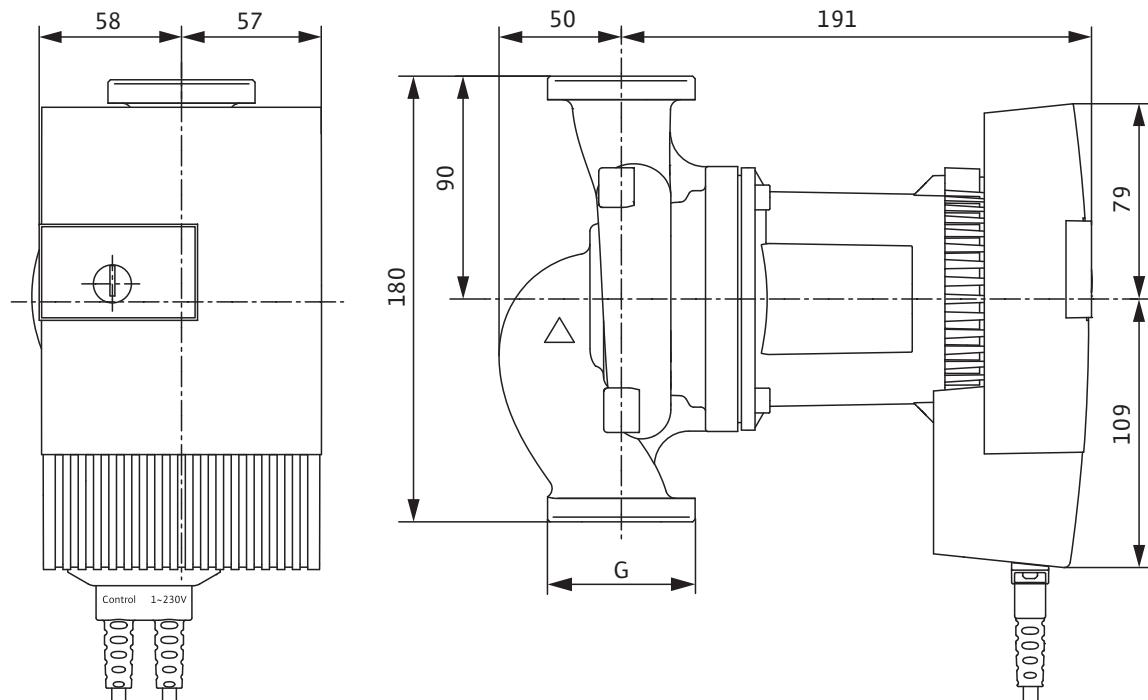
## High-efficiency pumps

### Dimensions, motor data Wilo-Stratos PARA 25/1-12, 30/1-12

#### Motor data

Wilo-Stratos PARA...	Nominal motor power	Speed	Power consumption 1~230 V	Current at 1~230V	Motor protection
$P_2$	$n$	$P_1$	$I$	-	-
25/1-12	200	1400 - 4800 rpm	16-310 W	0.16 - 1.37 A	integrated
30/1-12	200	1400 - 4800 rpm	16-310 W	0.16 - 1.37 A	integrated

#### Dimension drawing



#### Dimensions, weights

Wilo-Stratos PARA...	Screwed connection	Thread	Weight approx.
	-	-	M
	-	-	kg
25/1-12	Rp 1	G 1½	6.2
30/1-12	Rp 1¼	G 2	6.2