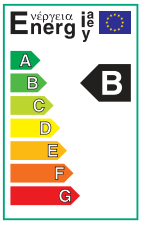
Series description Wilo-Star-RS



Design
Glandless circulation pump with threaded connection. Pre-selectable speed stages for power adjustment

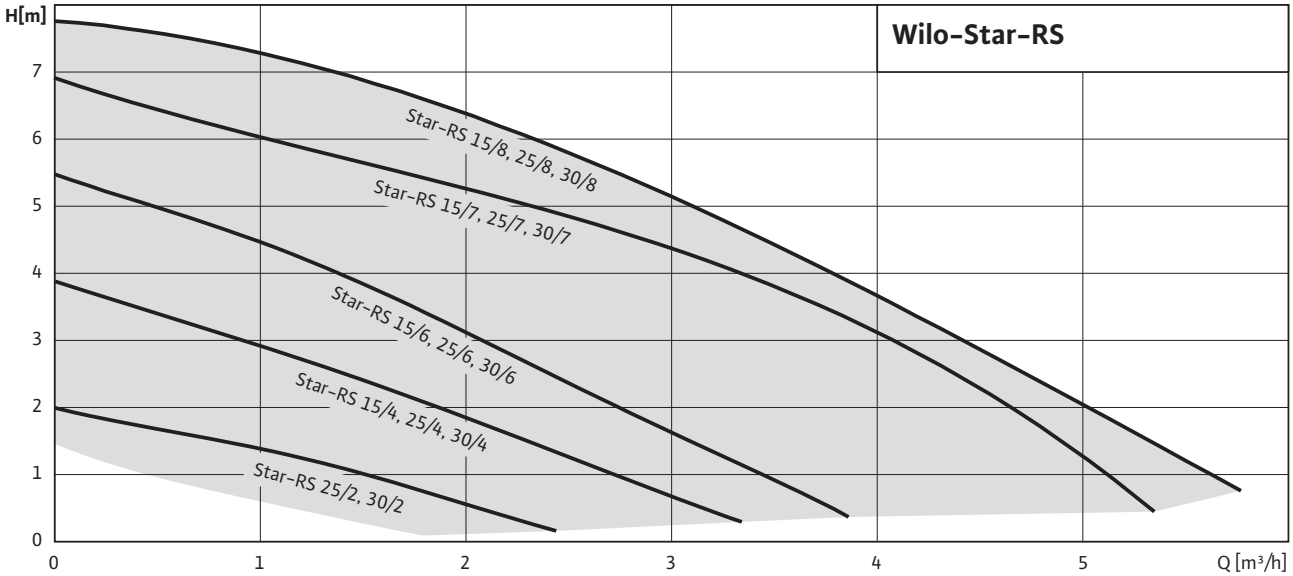
Application
Hot-water heating systems of all kinds, industrial circulation systems, cold water systems and air-conditioning systems

Type key

Example:	**Wilo Star-RS 25/4**
Star-RS	Standard pump (screw-end pump)
25/	Nominal connection diameter R
4	Nominal delivery head [m] at Q = 0 m^3/h

Options
- Version ...RG with housing made of red brass
- Version ... -130 with short overall length of 130 mm
- RSL version with connection for rapid ventilation.

Special features/product benefits
- Suitable for any installation position with horizontal shaft; terminal box in 3-6-9-12 o'clock position
- Three pre-selectable speed stages for load adjustment
- Easy and safe installation due to practical wrench attachment point on pump body
- Simplified electrical installation due to terminal box with removable threaded cable connection that can be used on both sides; quick connection with spring clips



Series description Wilo-Star-RS

Equipment/function

Operating modes
- Speed-stage switching

Manual functions
- Setting of speed stages (3 speed stages)

Equipment
- Wrench attachment point on pump body
- Cable lead-in possible on both sides
- Quick connection with spring clips
- Blocking current-proof motor

Scope of delivery
- Pump
- Seals
- Installation and operating instructions

Accessories
- Screwed connections
- Thermal insulation shells

Heating, air-conditioning, cooling

Standard pumps (single pumps)

Technical data Wilo-Star-RS

	Wilo-Star-RS ...											
	15/4	**15/6**	**25/2**	**25/4**	**25/6**	**25/7**	**25/8**	**30/2**	**30/4**	**30/6**	**30/7**	**30/8**
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)	•	•	•	•	•	•	•	•	•	•	•	•
Potable water and water for food-processing companies in accordance with TrinkwV 2001 (drinking water ordinance)	–	–	–	–	–	–	–	–	–	–	–	–
Output												
Delivery head max. [m]	4	6	2	4	6	7	8	2	4	6	7	8
Max. volume flow [m^3/h]	3.5	4	2.5	3.5	4	5	5.5	2.5	3.5	4	5	5.5
Permitted field of application												
Temperature range for applications in heating/ventilation/air-conditioning systems at max. ambient temperature of +25 °C [°C]	–											
Temperature range for applications in heating, ventilation & air-conditioning systems at max. ambient temperature of +40 °C	-10 up to +110						-10 up to +95	-10 up to +110				-10 up to +95
Temperature range for applications in secondary hot water circulation systems at max. ambient temperature of +40 °C [°C]	–	–	–	–	–	–	–	–	–	–	–	–
Maximum permissible total hardness in secondary hot water circulation systems [°d]	–	–	–	–	–	–	–	–	–	–	–	–
Standard version for operating pressure, p_{max}	10	10	10	10	10	10	10	10	10	10	10	10
Special version for operating pressure, p_{max}	–	–	–	–	–	–	–	–	–	–	–	–
Pipe connections												
Screwed connection Rp	½	½	1	1	1	1	1	1¼	1¼	1¼	1¼	1¼
Nominal flange diameter DN	15	15	25	25	25	25	25	30	30	30	32	32
Flange for counter flange PN 6, standard version	–	–	–	–	–	–	–	–	–	–	–	–
Flange for counter flange PN 16, special version	–	–	–	–	–	–	–	–	–	–	–	–
Combination flange PN 6/10 for counter flanges PN 6 and PN 16, standard version	–	–	–	–	–	–	–	–	–	–	–	–
Support-bracket mounting (with horizontal shaft only), standard version	–	–	–	–	–	–	–	–	–	–	–	–
Support-bracket mounting (with horizontal shaft only), special version	–	–	–	–	–	–	–	–	–	–	–	–
Electrical connection												
Mains connection 1 ~ [V], standard version	230	230	230	230	230	230	230	230	230	230	230	230
Mains connection 3 ~ [V], standard version	–	–	–	–	–	–	–	–	–	–	–	–
Mains connection 3 ~ [V], with optional switching plug	–	–	–	–	–	–	–	–	–	–	–	–
Mains frequency	50	50	50	50	50	50	50	50	50	50	50	50

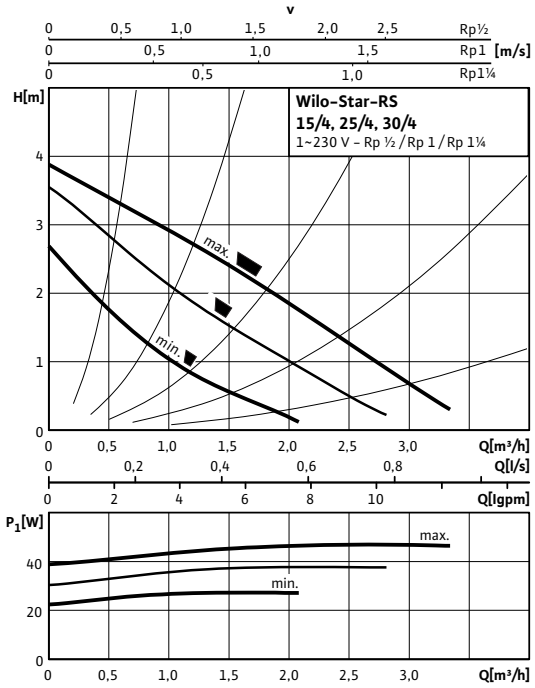
Technical data Wilo-Star-RS

	Wilo-Star-RS ...											
	15/4	**15/6**	**25/2**	**25/4**	**25/6**	**25/7**	**25/8**	**30/2**	**30/4**	**30/6**	**30/7**	**30/8**
Motor/electronics												
Electromagnetic compatibility	EN 61800-3											
Emitted interference	EN 61000-6-3											
Interference resistance	EN 61000-6-2											
Power electronics	–	–	–	–	–	–	–	–	–	–	–	–
Protection class	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
Insulation class	F	F	F	F	F	F	F	F	F	F	F	F
Materials												
Pump housing	Grey cast iron (EN-GJL-200)					Grey cast iron		Grey cast iron (EN-GJL-200)			Grey cast iron	
Impeller	Plastic (PP – 40% GF)					Fibreglass-reinforced PP		Plastic (PP – 40% GF)			Fibreglass-reinforced PP	
Pump shaft	Stainless steel (X40Cr13)											
Bearing	Carbon, metal impregnated											
Minimum suction head at suction port [m] for preventing cavitation at water pumping temperature												
Minimum suction head at 50°C	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Minimum suction head at 95°C	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum suction head at 110°C	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum suction head at 130°C	–	–	–	–	–	–	–	–	–	–	–	–

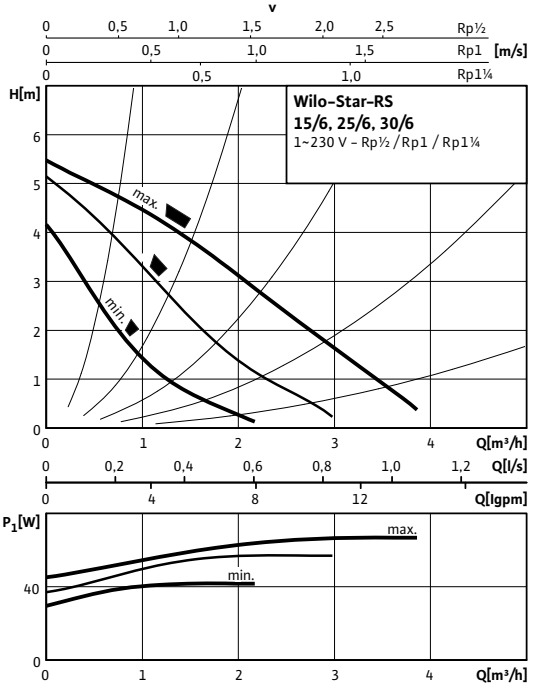
• = available, – = not available

Pump curves Wilo-Star-RS

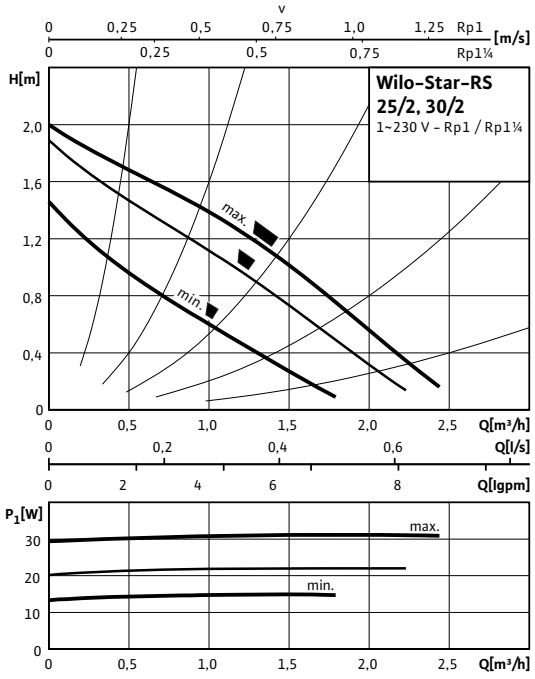
Wilo-Star-RS 15/4, 25/4, 30/4



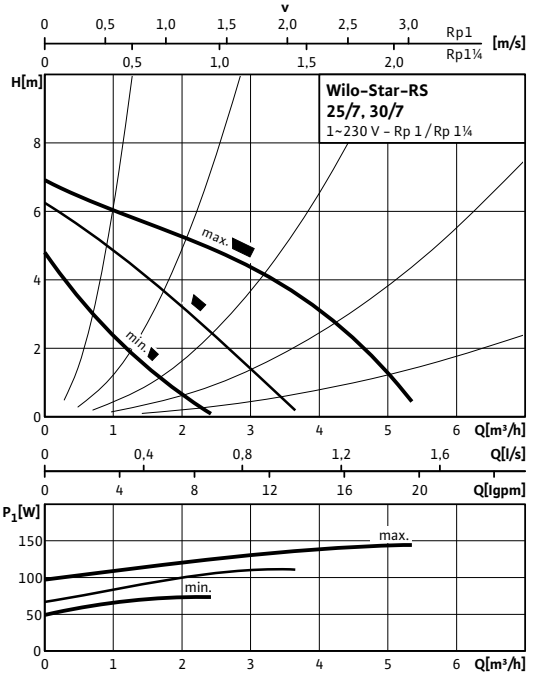
Wilo-Star-RS 15/6, 25/6, 30/6



Wilo-Star-RS 25/2, 30/2

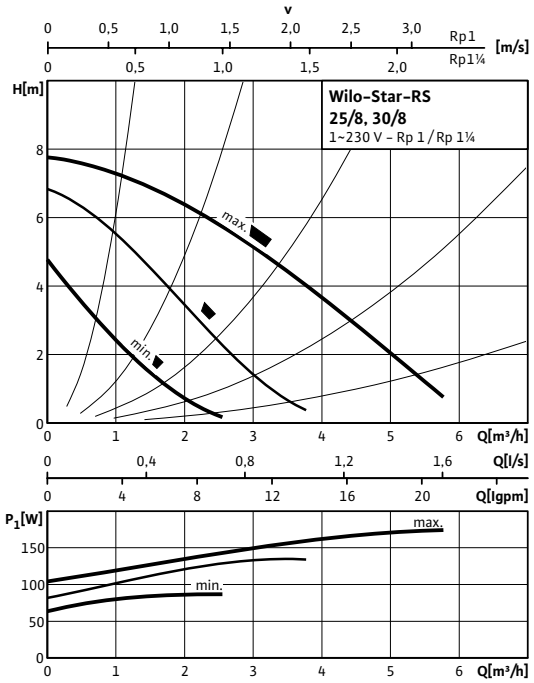


Wilo-Star-RS 25/7 - 30/7



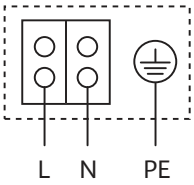
Pump curves Wilo–Star–RS

Wilo–Star–RS 25/8 – 30/8



Terminal diagram, motor data Wilo-Star-RS

Terminal diagram A



Blocking current-proof motor
Single-phase motor (EM) 2-pole - 1~230 V, 50 Hz
With built-in capacitor

Motor data

Wilo-Star-RS ...	Nominal motor power	Speed	Power consumption	Max. current	Motor protection	Capacitor	Threaded cable connection
	P_2	n	P_1	I	–	C	PG
	[W]	[rpm]	[W]	[A]	–	[µF/VDB]	[PG]
15/4	15.5	max. 2720	48	0.21	not required (blocking current-proof)	1.7/400	1x11
	9.5	2630	38	0.17			
	5.5	min. 2350	28	0.13			
15/6	38	max. 2750	84	0.36	not required (blocking current-proof)	2.6/400	1x11
	21	2650	61	0.28			
	11	min. 2350	43	0.2			
25/2	7	max. 2600	45	0.2	not required (blocking current-proof)	1.6/400	1x11
	4	2500	30	0.13			
	1.5	min. 2200	18	0.08			
25/4	15.5	max. 2720	48	0.21	not required (blocking current-proof)	1.7/400	1x11
	9.5	2630	38	0.17			
	5.5	min. 2350	28	0.13			
25/4-130	15.5	max. 2720	48	0.21	not required (blocking current-proof)	1.7/400	1x11
	9.5	2630	38	0.17			
	5.5	min. 2350	28	0.13			
25/4-RG	15.5	max. 2720	48	0.21	not required (blocking current-proof)	1.7/400	1x11
	9.5	2630	38	0.17			
	5.5	min. 2350	28	0.13			
RSL 25/4-3H	15,5	max. 2720	48	0,21	not required (blocking current-proof)	1,7/400	1x11
	9,5	2630	38	0,17			
	5,5	min. 2350	28	0,13			
RSL 25/6	26	max. 2750	63	0,28	not required (blocking current-proof)	2,0/400	1x11
	17.5	2630	54	0.23			
	10.5	min. 2350	41	0.18			
25/6	38	max. 2750	84	0.36	not required (blocking current-proof)	2.6/400	1x11
	21	2650	61	0.28			
	11	min. 2350	43	0.2			

Terminal diagram, motor data Wilo-Star-RS

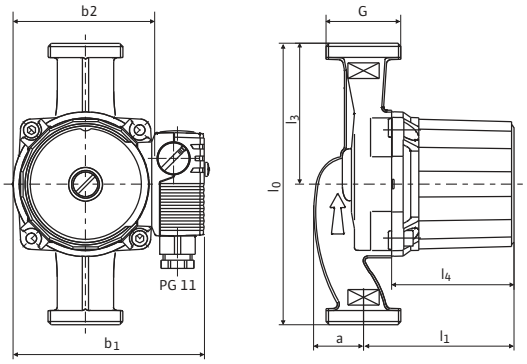
Motor data

Wilo-Star-RS ...	Nominal motor power	Speed	Power consumption	Max. current	Motor protection	Capacitor	Threaded cable connection
	P_2	n	P_1	I	–	C	PG
	[W]	[rpm]	[W]	[A]	–	[µF/VDB]	[PG]
25/6-130	38	max. 2750	84	0.36	not required (blocking current-proof)	2.6/400	1x11
	21	2650	61	0.28			
	11	min. 2350	43	0.2			
25/6-RG	38	max. 2750	84	0.36	not required (blocking current-proof)	2.6/400	1x11
	21	2650	61	0.28			
	11	min. 2350	43	0.2			
25/7	57	max. 2800	132	0.58	not required (blocking current-proof)	3.5/400	1x11
	29.5	2650	92	0.42			
	13.5	min. 2300	62	0.3			
25/8	64	max. 2760	151	0.76	not required (blocking current-proof)	3.5/400	1x11
	35	2404	113	0.6			
	19	min. 2122	81	0.4			
30/2	7	max. 2600	45	0.2	not required (blocking current-proof)	1.6/400	1x11
	4	2500	30	0.13			
	1.5	min. 2200	18	0.08			
30/4	15.5	max. 2720	48	0.21	not required (blocking current-proof)	1.7/400	1x11
	9.5	2630	38	0.17			
	5.5	min. 2350	28	0.13			
30/6	38	max. 2750	84	0.36	not required (blocking current-proof)	2.6/400	1x11
	21	2650	61	0.28			
	11	min. 2350	43	0.2			
30/7	57	max. 2800	132	0.58	not required (blocking current-proof)	3.5/400	1x11
	29.5	2650	95	0.42			
	13.5	min. 2300	68	0.3			
30/8	64	max. 2760	151	0.76	not required (blocking current-proof)	3.5/400	1x11
	35	2404	113	0.6			
	19	min. 2122	81	0.4			

Observe name plate data!

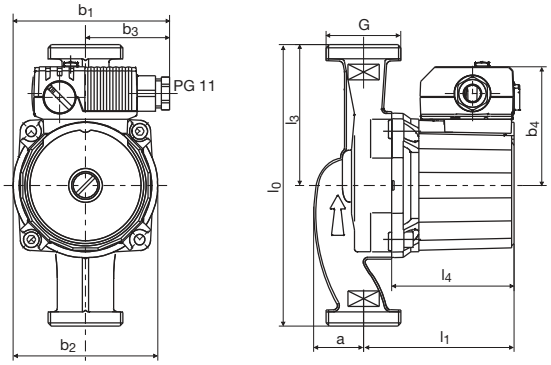
Dimensions, weights Wilo-Star-RS

Dimension drawing A



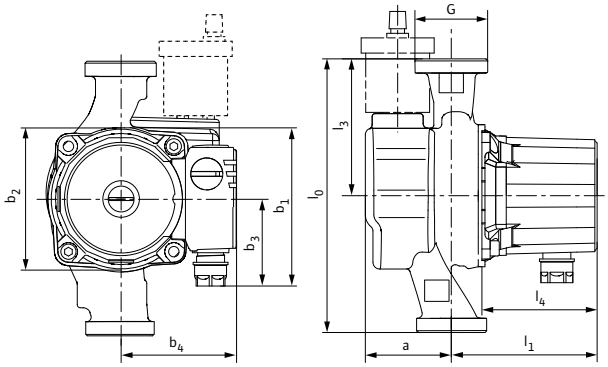
Motor horizontal
Terminal box positions for 3, 6, 9 and 12 o'clock possible
On delivery, terminal box position is at 3 o'clock

Dimension drawing B



Motor horizontal
Terminal box positions for 3, 6, 9 and 12 o'clock possible

Dimension drawing C



Dimensions, weights

Wilo-Star-RS ...	Pipe connection	Thread	Dimensions									Weight approx.	Dimension drawing
	Rp	G	l_0	l_1	l_3	l_4	A	b_1	b_2	b_3	b_4	M	–
	–		[mm]									[kg]	–
15/4	½	1	130	96	65	78	34	104	93.5	58	73	2.4	A
15/6	½	1	130	96	65	78	33	104	93.5	58	76	2.5	A
25/2	1	1½	180	96	90	78	34	104	93.5	58	73	2.2	B
25/4	1	1½	180	96	90	78	34	104	93.5	58	73	2.2	B
25/4-130	1	1½	130	96	65	78	34	104	93.5	58	73	2.2	A
25/4-RG	1	1½	180	96	90	78	34	104	93.5	58	73	2.6	B
RSL 25/4-3H	1	1½	180	96	90	78	56	104	93.5	57.2	76	3.1	C
RSL 25/6	1	1½	180	96	90	78	33	104	93.5	58	76	2.4	B
25/6-130	1	1½	130	96	65	78	33	104	93.5	58	76	2.4	A

Dimensions, weights Wilo-Star-RS

Dimensions, weights

Wilo-Star-RS ...	Pipe connection	Thread	Dimensions									Weight approx.	Dimension drawing
	Rp	G	l_0	l_1	l_3	l_4	A	b_1	b_2	b_3	b_4	M	–
	–		[mm]									[kg]	–
25/6-RG	1	1½	180	96	90	78	33	104	93.5	58	76	2.6	B
25/6	1	1½	180	100	90	78	62	101	93.5	54	79	3.4	B
25/7	1	1½	180	109	90	91	32	101	93.5	54	79	2.7	B
25/8	1	1½	180	119	90	88	34	113	93.5	54	76	3.3	B
30/2	1¼	2	180	96	90	78	34	104	93.5	58	73	2.2	B
30/4	1¼	2	180	96	90	78	34	104	93.5	58	73	2.4	B
30/6	1¼	2	180	96	90	78	33	104	93.5	58	76	2.7	B
30/7	1¼	2	180	109	90	91	32	101	93.5	54	79	3.0	B
30/8	1¼	2	180	119	90	88	34	113	93.5	54	76	3.5	B