



wilo

Produktschulung

Vorstellung der neuen Wilo-Para Baureihe

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Para – Part II Premium range

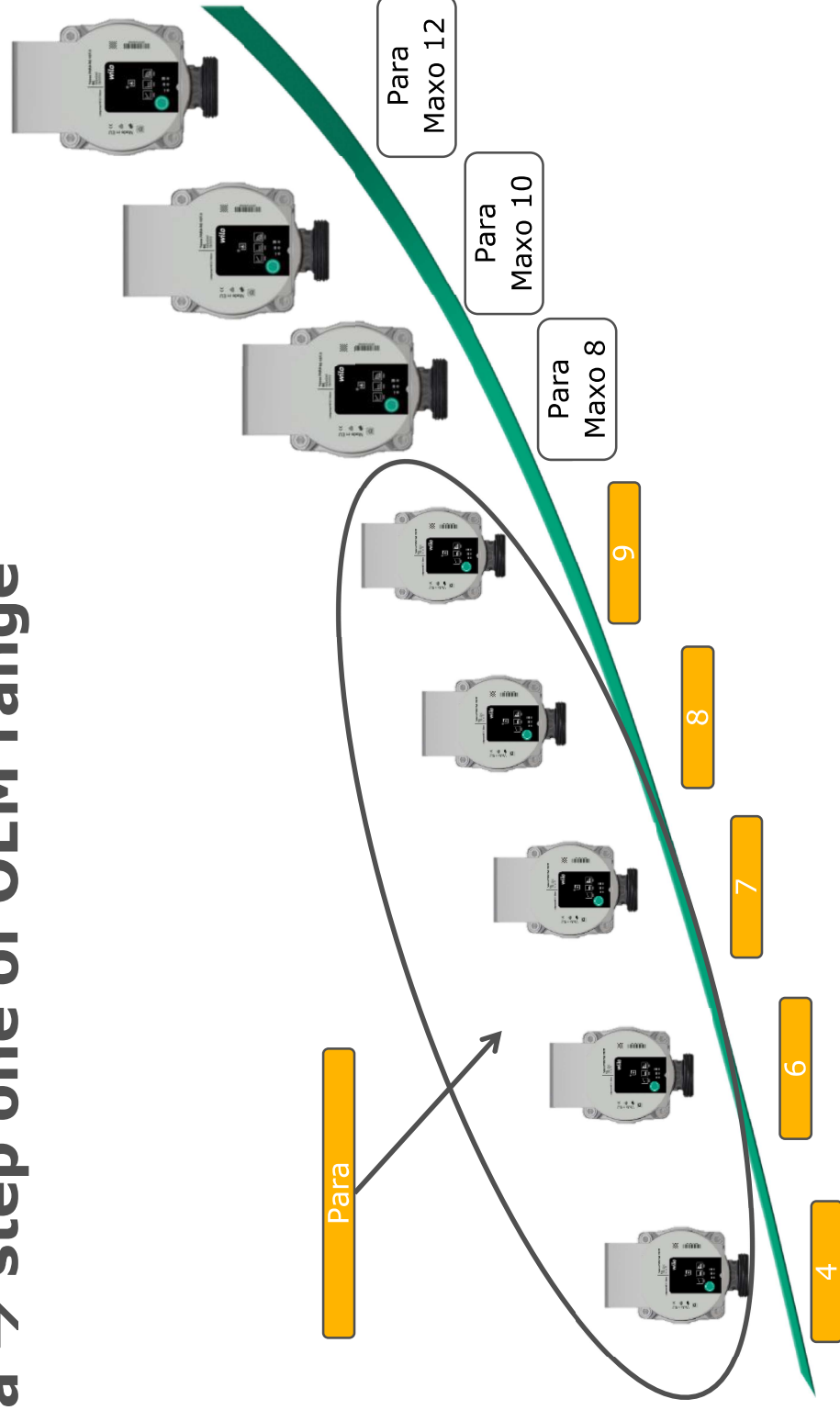
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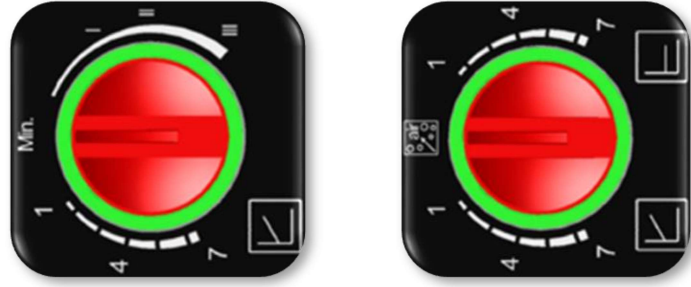
Wilo-Para OEM Roadmap

Sales Area Germany - OEM

Wilo-Para → step one of OEM range



RKA / RKC will become 1 product



No stepless setting, but 3 predefined curves

„PhaseOut Scenario“

PREMIUM VERSION					
	Yonos PARA RKA /6	→	Para 6 /SC*		
	Yonos PARA RKA /7	→	Para 7 /SC		
	Yonos PARA RKA /7.5	→	Para 8 /SC		
	Yonos PARA RKC /6	→	Para 6 /SC*		
	Yonos PARA RKC /7	→	Para 7 /SC		
	Yonos PARA RKC /7.5	→	Para 8 /SC		
	Yonos PARA PWM /6	→	Para 6 /IPWM*		
	Yonos PARA PWM /7	→	Para 7 /IPWM		
	Yonos PARA PWM /7.5	→	Para 8 /IPWM		
	Yonos PARA IPWM /6	→	Para 6 /IPWM*		
	Yonos PARA IPWM /7	→	Para 7 /IPWM		
	Yonos PARA IPWM /7.5	→	Para 8 /IPWM		

+ Para INT 6/7/8 iPWM/LIN



**„pin2pin replacement“
Austauschscenario Yonos / Para**

Variantenszenario

- Yonos PARA 6/7/7.5 (RKA/RKC/iPWM) → Para 6/7/8 (SC/iPWM/LIN)
- Die Regelungsarten „RKA/RKC“ („air venting“/„dp-const.“) werden durch eine Variante (= SC „Self Controlled“) ersetzt.
- „iPWM“ wird durch die Regelungsart „LIN“ erweitert.

„Full Premium Range“



Para STG



Para SC



Para iPWM

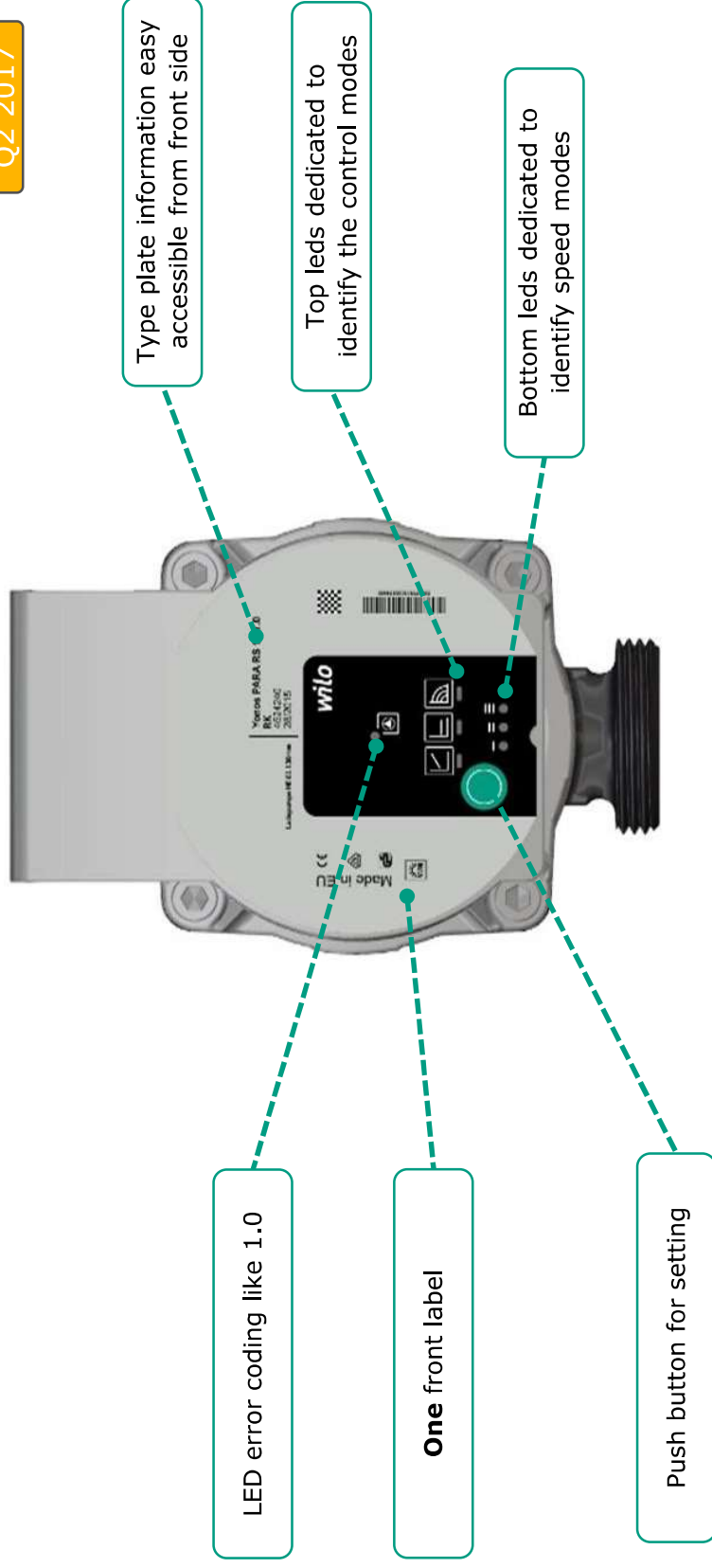


Para LIN

Optimised Human Machine Interface Self Control



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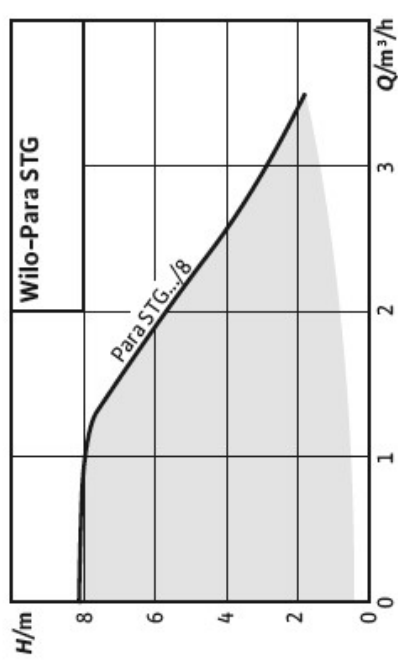
NEU „Para STG“ Die Vielfältige!



Wilo-Para STG.
The highly versatile one.



Technische Daten HVAC, Solar, Geothermie	
zul. Fluidtemperatur	-20°C...+110°C (140°C)
zul. Umgebungstemperatur	0°C...+70°C
Regelungsarten: SC („Self Controlled“); Grüner Knopf Technologie	Dp-c., Dp-v, n-const. Air-venting
Ext. Regelung	iPWM1&2
Baulänge Anschlüsse	130/180 mm
Energieeffizienzindex EEI	≤ 0.21



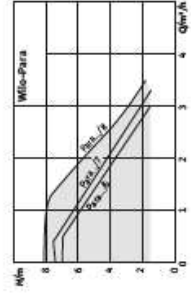
Produktportfolio



Wilo-Para
Heating and cooling

Wilo-Para range offers a wide range of products specifically designed for optimised integration in heating and cooling applications. Depending on customer needs, functions can be easily integrated into a variety of customised composite housings.

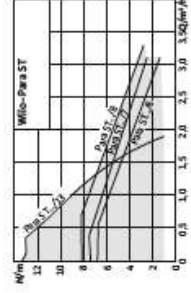
Technical data	
Fluid temperature	0 °C to +95 °C
Ambient temperature	0 °C to +70 °C
SC self-controlled, green push button (Manual setting and manual deaerating function)	Δp = 4, Δp = 4 constant speed
External control	0/10V2 signal, LIN bus
Hydraulic performance	4.6/7.8 m
Size	130/180 mm
Weight	DN 1.5 EN 25 DN 30
EEL	≤ 0.20



Wilo-Para ST
Solar thermal energy

For solar thermal applications, the Para ST range offers solutions which meet your specific requirements. Increased static pressure and higher temperatures are handled with ease in order to provide a maximum reliability.

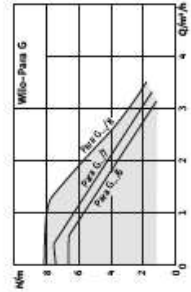
Technical data	
Fluid temperature	0 °C to +110 °C (+140 °C)
Ambient temperature	0 °C to +70 °C
SC self-controlled, green push button (Manual setting and manual deaerating function)	Δp = 4, Δp = 4 constant speed
External control	0/10V2 signal, LIN bus
Hydraulic performance	6.7/8.3 m
Size	130/180 mm
Weight	DN 1.5 EN 25 DN 30
EEL	≤ 0.20



Wilo-Para G
Geothermal energy

The Para G range offers circulation for geothermal (G) applications. The geothermal product range is equipped with a patented motor casing and corrosion resistant screws. With a minimum fluid temperature of -20 °C, these circulators are suitable for use in brine circuits.

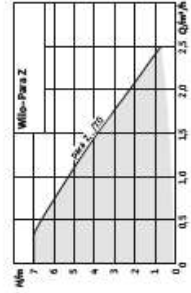
Technical data	
Fluid temperature	-20 °C to +95 °C
Ambient temperature	0 °C to +70 °C
SC self-controlled, green push button (Manual setting and manual deaerating function)	Δp = 4, Δp = 4 constant speed
External control	0/10V2 signal, LIN bus
Hydraulic performance	6.7/8 m
Size	130/180 mm
Weight	DN 1.5 EN 25 DN 30
EEL	≤ 0.20



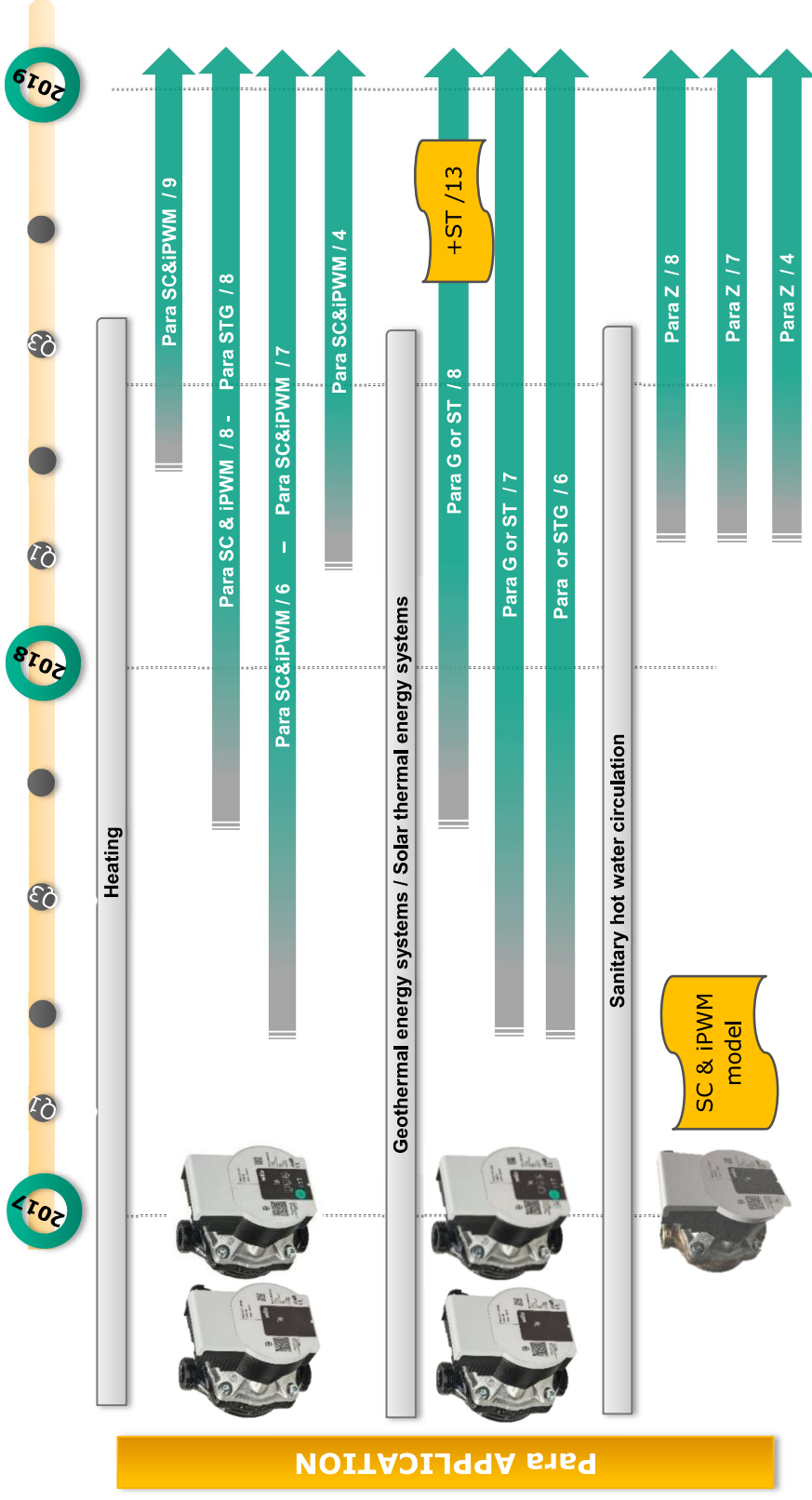
Wilo-Para Z
Domestic hot water circulation

The Para Z family is suitable for sanitary use. Different control modes (SC/DMM) and port-to-port dimensions are available to cover a variety of applications. Equipped with dedicated disinfection resistant brass pump housings, the Para Z range responds perfectly to the conditions of sanitary use.

Technical data	
Fluid temperature	0 °C to +95 °C
Ambient temperature	0 °C to +70 °C
SC self-controlled, green push button (Manual setting and manual deaerating function)	Δp = 4, Δp = 4 constant speed
External control	0/10V2 signal, LIN bus
Hydraulic performance	6.7/8 m
Size	130/180 mm
Weight	DN 1.5 EN 25



OEM HVAC Product roadmap 2016-2020



Wilo-Para range

o-Para range		Nominal width of connection	
Range		12	threading ¾"
Para	Premium	15	threading 1"
		20	threading 1"1/4
		25	threading 1"1/2
		30	threading 2"
		Para INT	

Pump housing length	
130	mm length
180	mm length

Max height at 0 flow	
4	4 meter
6	6 meter
7	7 meter
8	8 meter
9	9 meter
13	13 meter (ST)

Box orientation:
3, 6, 9 or 12 o'clock

Option	
I	Individual packaging

Pump housing heating	
Ku	Inline cast iron
RSL	Inline composite
HU 15/25	Composite inline with air venter
MSL	Hydraulic unit
NFSL	Composite OEM pump housing
BSL	Composite OEM pump housing
KSL	Composite anti clockwise
	Composite OEM pump housing

Application	
ST	Heating application
G	Solar application
Z	Geothermal application
STG	Sanitary application
	Hybrid version

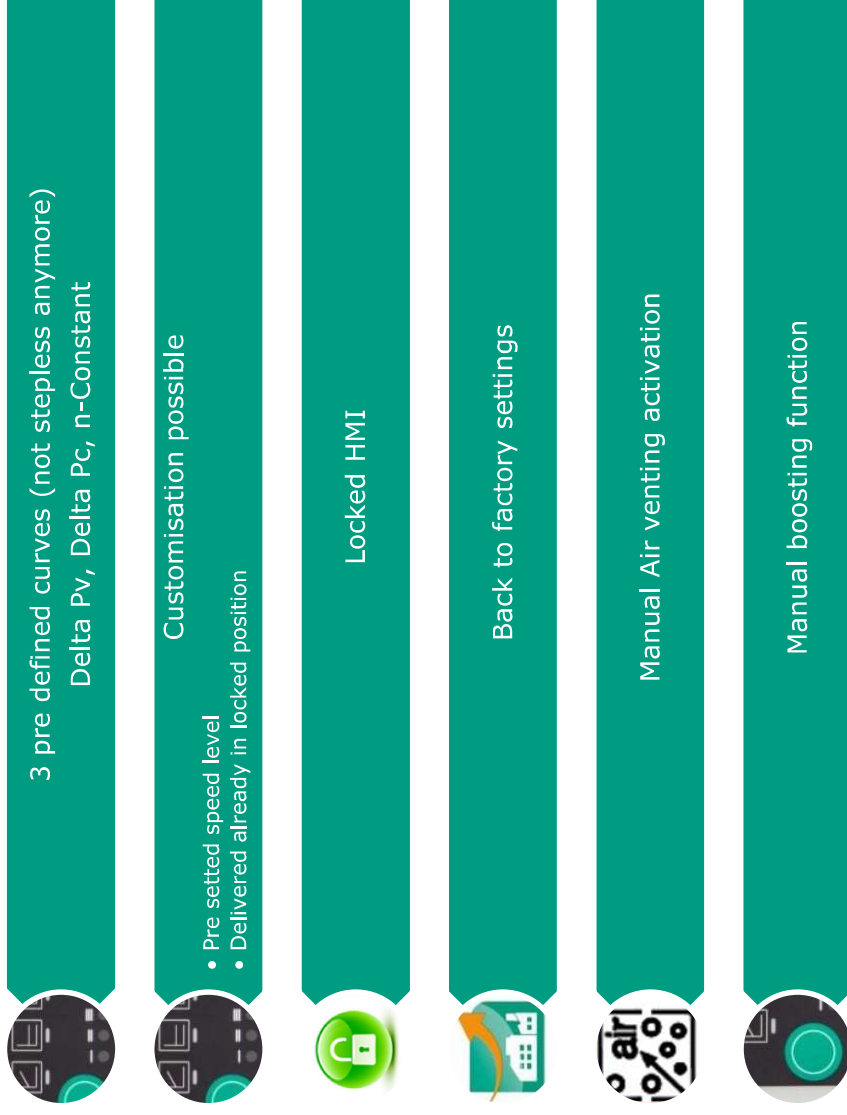
Power consumption	
43	P1(W)
50	W
75	W

Customer Control Interface	
iPWM1	External control by PWM1
iPWM2	External control by PWM2
LIN	External by LIN bus
SC	Self control for Delta-P var,, Delta-P const and Constant speed, Air venting

Human Machine Interface - HMI



HMI – what is new ?



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Elektrische Anschlüsse

Wilo-PARA

Elektrische Anschlüsse

Netzanschluss, Molex integriert



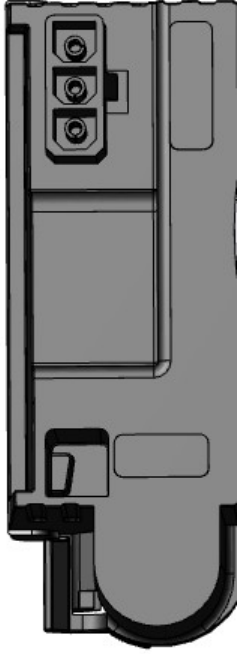
Self Controlled
SC



Signal



Standard Power-Kabel



3 Wege

Freies Kupferende
0,5/1/1,5/2 m

Ab Werk:
Keine Montage der Kabel durch
Wilo!
Individuelle Kabel auf Anfrage.

Molex
3-Wege

WS8

Superseal

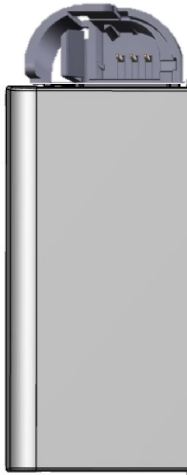


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Standard signal cable offering

No cable



No cable mounting by Wilo factory, individual cables on request

Automatic clipping function



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PWM input (from controller)

PWM common

PWM output (from the pump)



**Facon
PR 69**

Inside cover
dimensions



**Facon
PR 71**

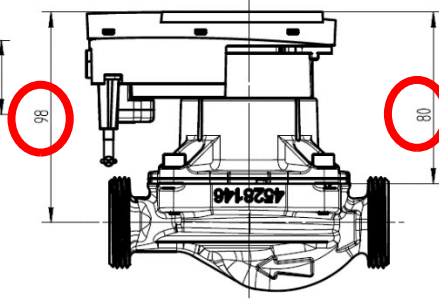
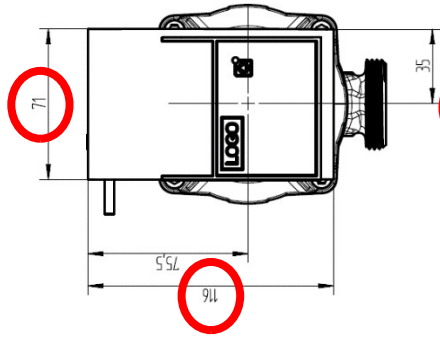
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Optimierte Abmessungen

Wilo-Para

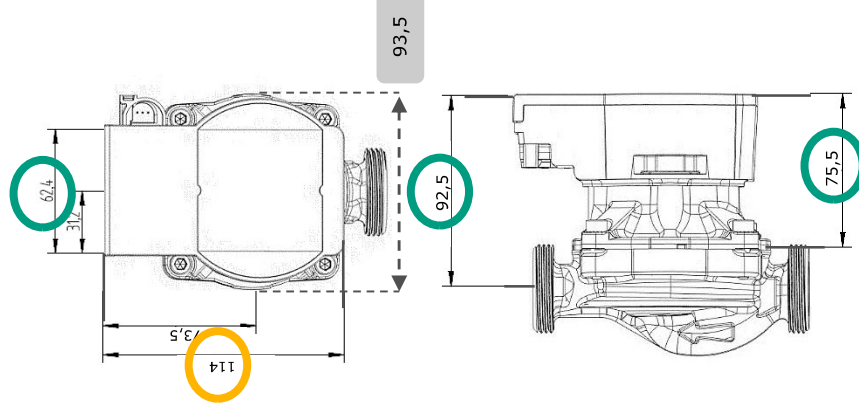
Integration - Motorgröße 6m/7m



Yonos PARA 1.0

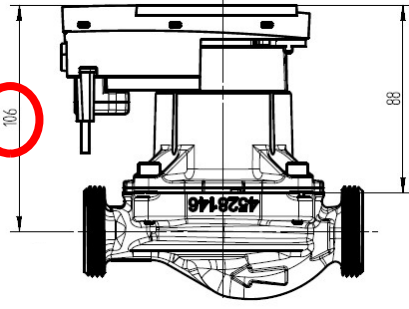
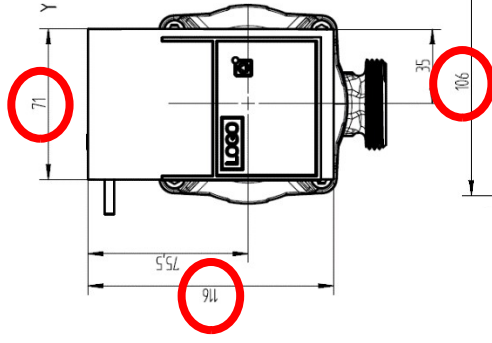


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Para

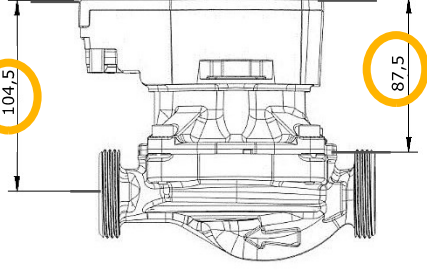
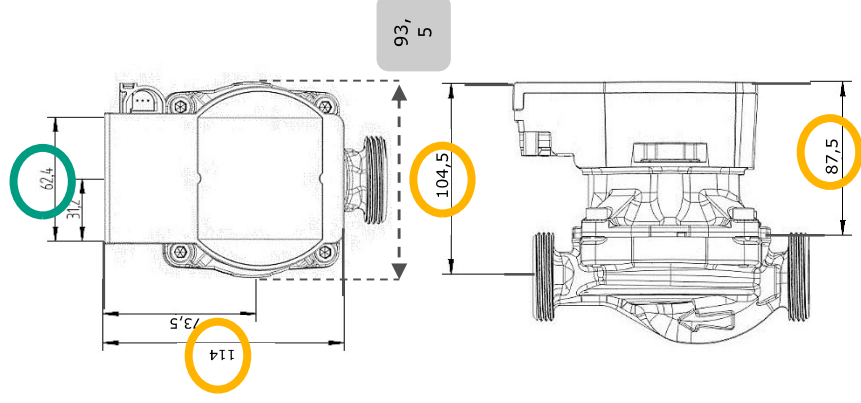
Integration - Motorgröße 7.5m → 8m



Yonos PARA 1.0



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Para

Composite pump housings diversity



HU 25



HU 15



RS Ku



RSL



BSL



MSL



NFSL



TWP



KSL

PARA Schlüsselspezifikationen



Feature	Bezeichnung
Energy Efficiency Index EEI	≤ 0.20 6m/7m & ≤ 0.21 8m
Schutzklasse	IPx4D
Temperatureinsatzbereich T_{Fluid} (Wasser)	0°C bis +95°C (Heizung); +110°C (Solar- und Geothermie STG)
Umgebungstemperatur T_u	0°C bis +70°C
Netzanschluss/Spannungsversorgung	$\sim 230V$ +10%/-15% @ 50/60Hz (IEC 60038)
Spannungsversorgung unter extremen Bedingungen	Pumpe während des Anlaufvorgangs, min. zul. Spannung: 170V wenn Pumpe im Betrieb; min. Spannung: 160V max. 253V
Standby-Verbrauch (PWM-Variante)	< 0.5W
On / OFF Spannungsversorgung	300.000 Zyklen bei 80.000 h Betriebsstunden (Lebensdauer) – 4 s Wartezeit
Einschaltströme (Inrush Current)	< 3A

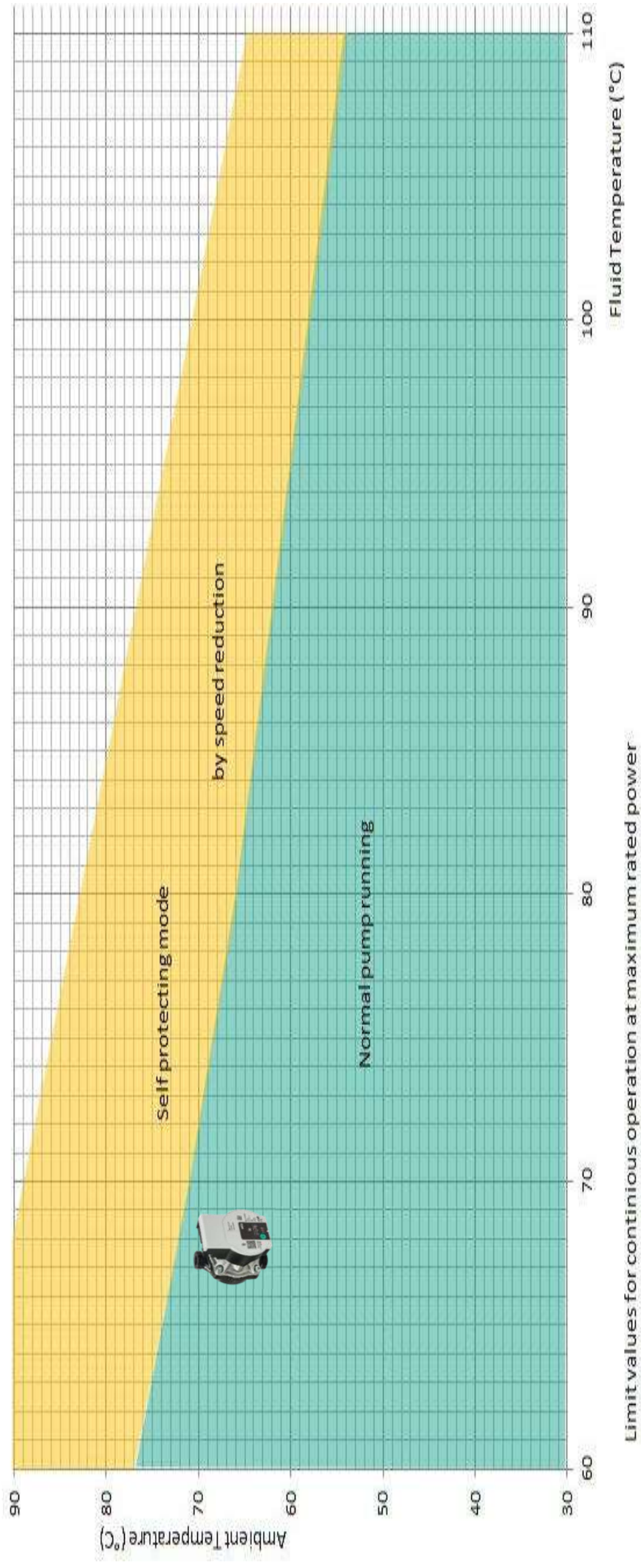
PARA Schlüsselspezifikationen



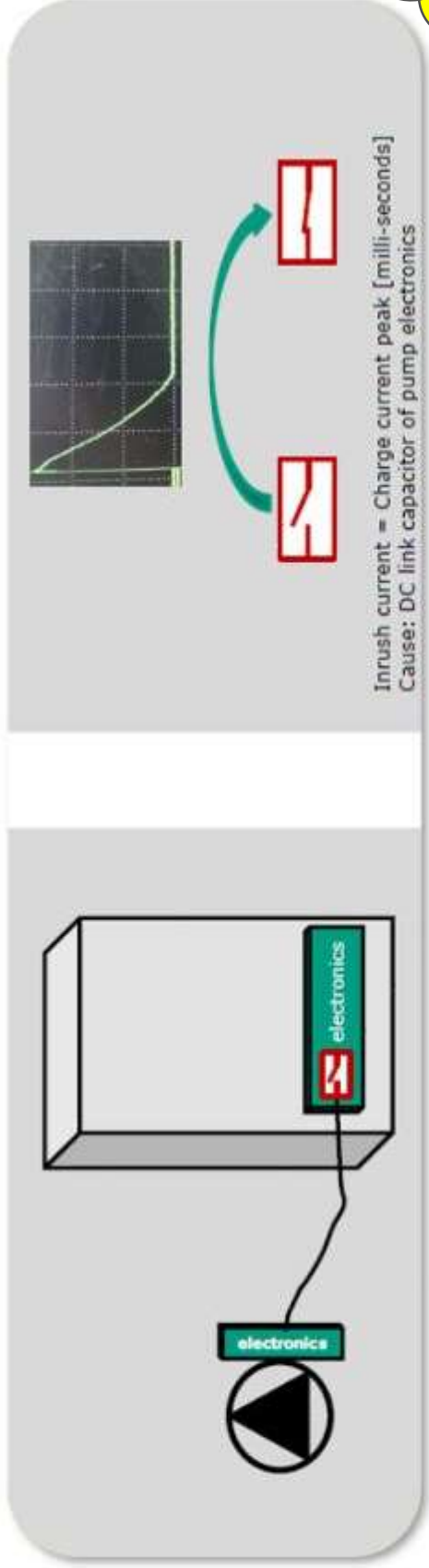
Feature	Bezeichnung
Zulässige Medien	▪ Heizungswasser gem. VDI 2035 ▪ Wasser/Glykol-Gemisch (max. 1:1)
Fluidtemperatur bei Geothermie	-20°C zulässig bei Wasser/Glykol-Gemisch
RoHS/Reach	Konform
Max. Energieverbrauch	▪ 43W – 6m Motor-Variante ▪ 50W – 7m Motor-Variante ▪ 75W – 8m Motor-Variante
Zulässige Positionen des Elektronikmoduls	3h, 6h, 9h oder 12h
Geräuschemission	Analog zur Yonos PARA 1.0
Anlaufdrehmoment	> 25 Ncm
LED User Interface	▪ Grün: Normaler Betrieb ▪ Rot blinkend: Abnormaler Betrieb



Self protecting mode



Einschaltströme



Umgebungstemperaturen	0°C	25°C	60°C
Stromspitzen I [A]	< 3A	< 3A	< 3A
Anlaufverhalten (aus „OFF“ Betrieb bis auf 80% Qmax)	< 4 ms	< 4ms	< 5ms

Gerhge „Inrush Currents“

Vergleichbar zur „Best in Class“ Yonos PARA



Thank you

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Vielen Dank für Ihre Aufmerksamkeit!

Pioneering for You