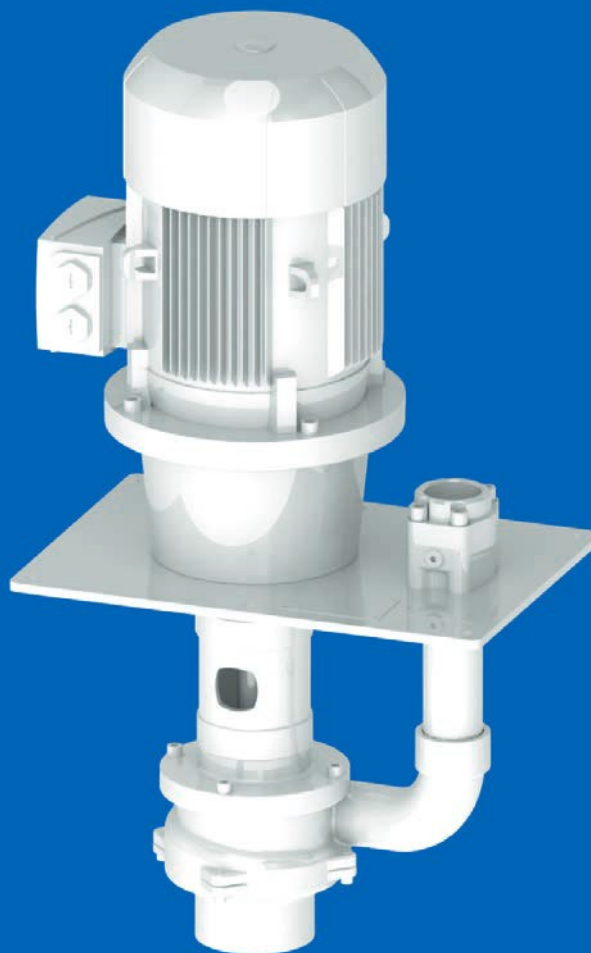


## Dirt coolant pumps

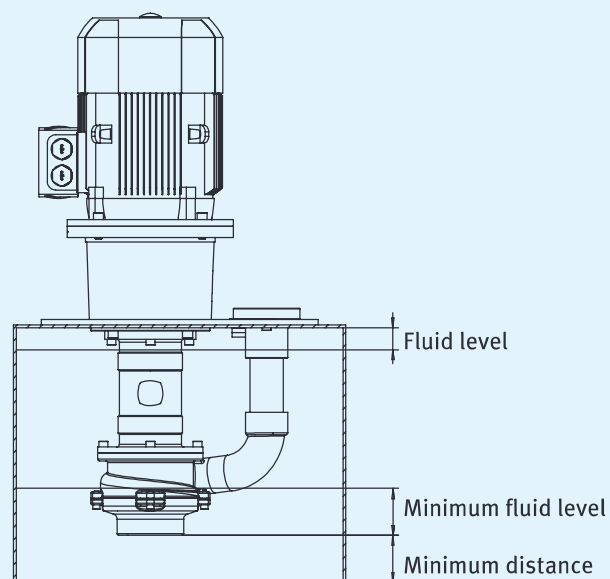
KNOLL dirt coolant pumps TF, TS and TSK are cooling lubricant pumps that convey very contaminated media. These pumps are able to transport the chip/cooling lubricant mixture to filters or separators.

### Properties

- No seal
- Flexible design with standard motor
- Energy efficient in conjunction with frequency converter
- Very high efficiency thanks to favorably shaped impeller for optimal flow behavior
- Impeller material POM/GJL-250/ST
- Wear-resistant component design
- With built-on inducer, to improve the intake behavior for media with high air load



### Dimensions



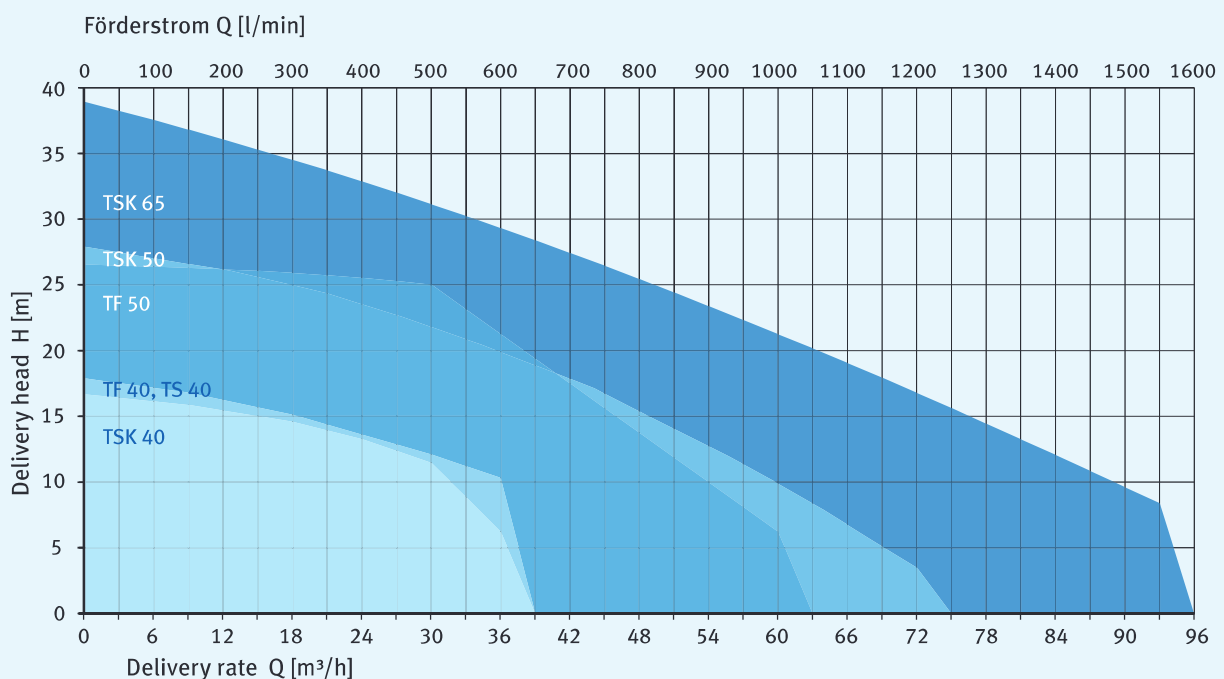
## Maximum performance data

Type	Air portion Vol.- %	Delivery rate [l/min]	Delivery head [m]	Particle size [mm]	Chip length [mm]	Chip freight [g/l]
TF 40	10	650	18	15	40	2
TF 50	10	1200	26	30	70	5
TS 40	50	550	18	12	20	2
TSK 40	30	600	17	20	40	5
TSK 50	30	1200	28	20	40	7
TSK 65	30	1500	38	20	40	10

## Fluid level

Type	Minimum distance [mm]	Minimum fluid level [mm]	Fluid level [mm]
TF 40	60	110	40
TF 50	75	150	40
TS 40	60	110	40
TSK 40	70	80	40
TSK 50	100	95	40
TSK 65	100	80	40

## Characteristic curve



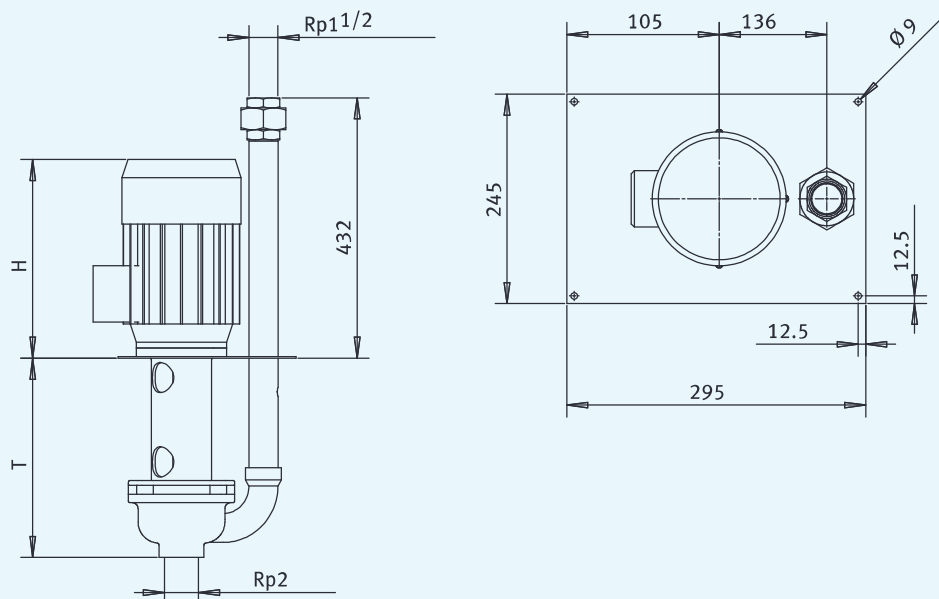
# Dirt coolant pump TF 40



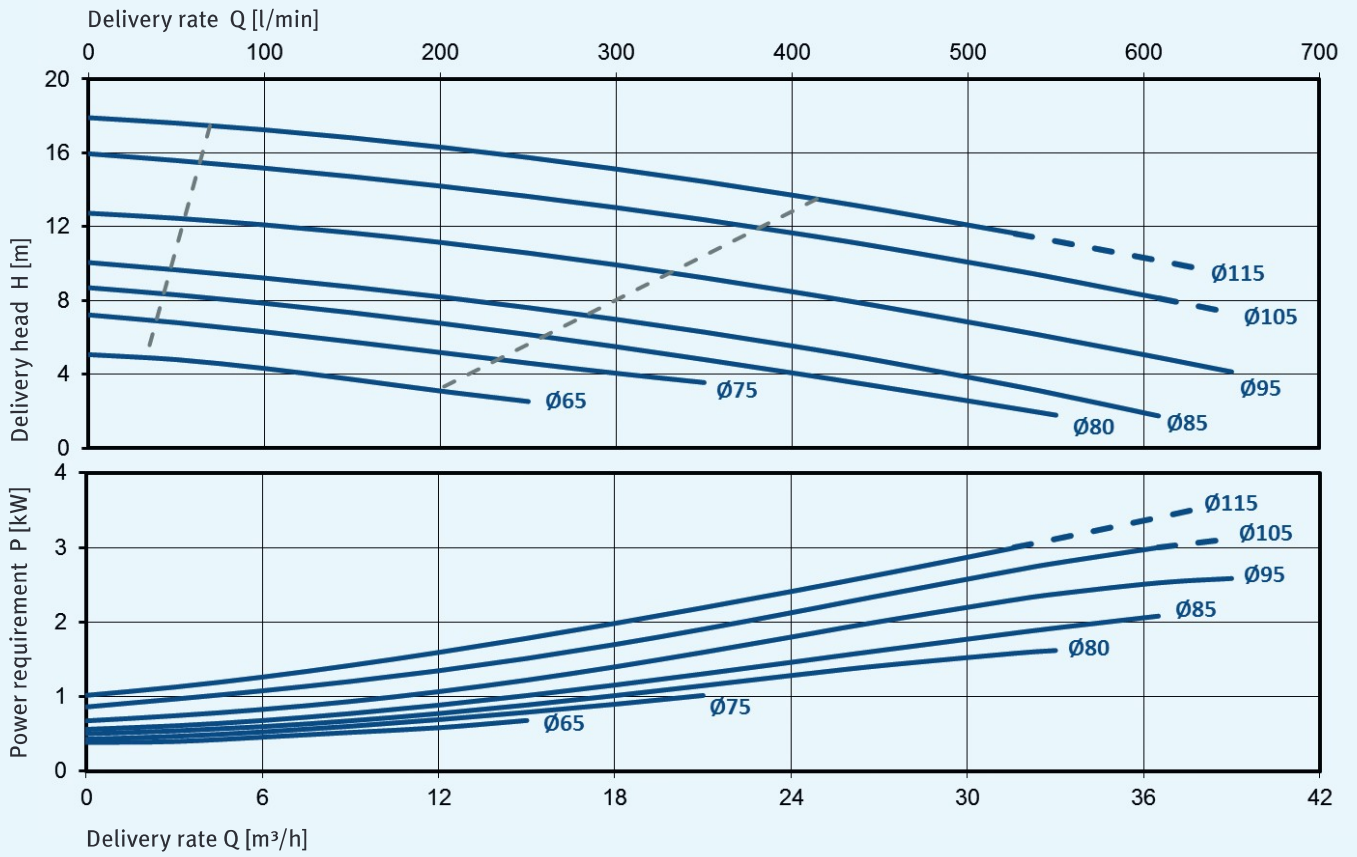
## Variants

Type	T [mm]	H [mm]	Weight [kg]	Frequency [Hz]	Motor power [kW]	Noise level [dB(A)]
TF 40-../07 330	330	250	26	50	0.75	60
TF 40-../11 330	330	250	27	50 / 60	1.10	60 / 63
TF 40-../15 330	330	285	30	50 / 60	1.50	62 / 65
TF 40-../22 330	330	285	33	50 / 60	2.20	62 / 65
TF 40-../30 330	330	325	37	50 / 60	3.00	66 / 69
TF 40-../07 578	578	250	33	50	0.75	60
TF 40-../11 578	578	250	34	50 / 60	1.10	60 / 63
TF 40-../15 578	578	285	37	50 / 60	1.50	62 / 65
TF 40-../22 578	578	285	40	50 / 60	2.20	62 / 65
TF 40-../15 826	826	285	44	50 / 60	1.50	62 / 65
TF 40-../22 826	826	285	47	50 / 60	2.20	62 / 65
TF 40-../30 826	826	325	51	50 / 60	3.00	66 / 65

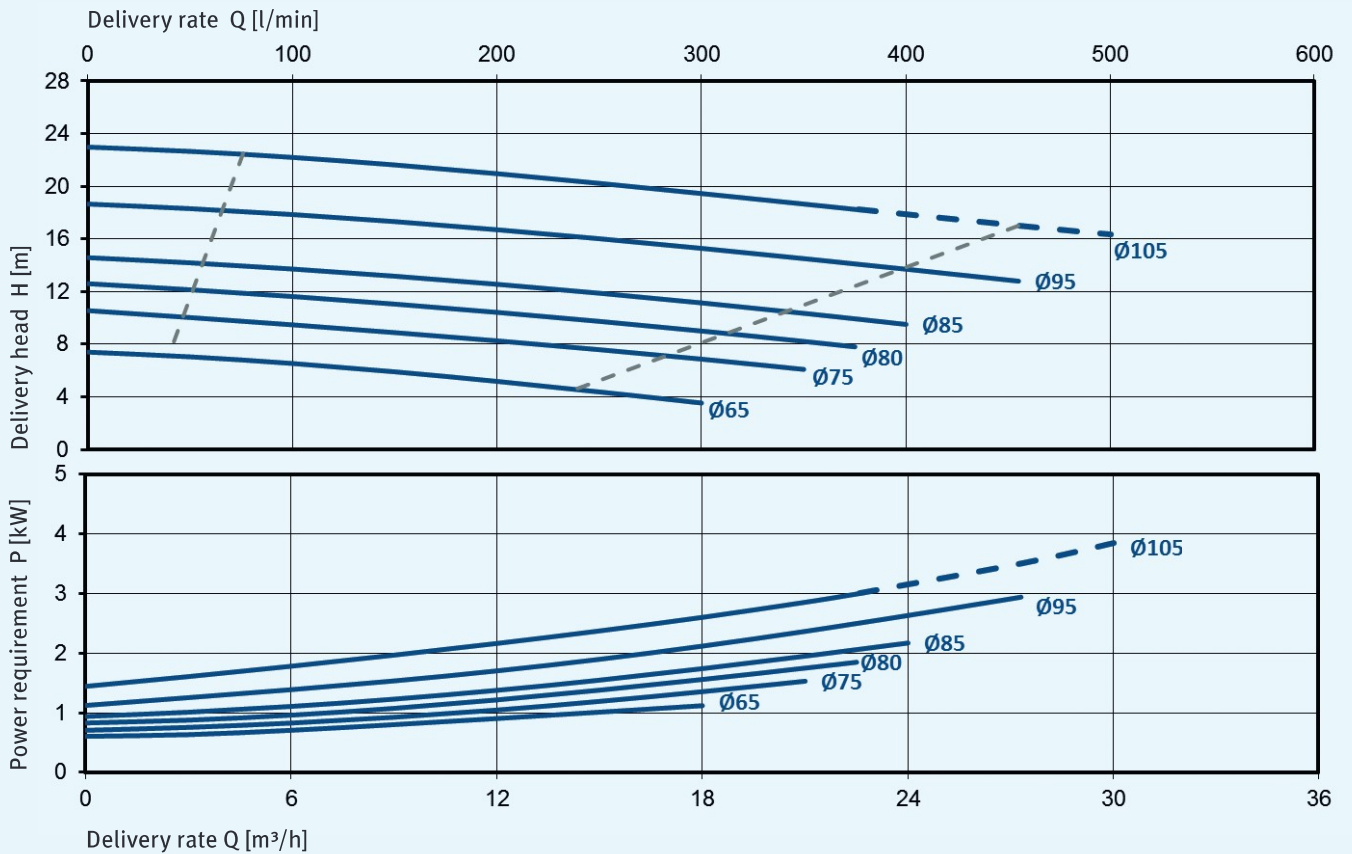
## Dimensions



## Characteristic curves for 2,900 min<sup>-1</sup>, 50 Hz, 1 mm<sup>2</sup>/s



## Characteristic curves for 3,500 min<sup>-1</sup>, 60 Hz, 1 mm<sup>2</sup>/s



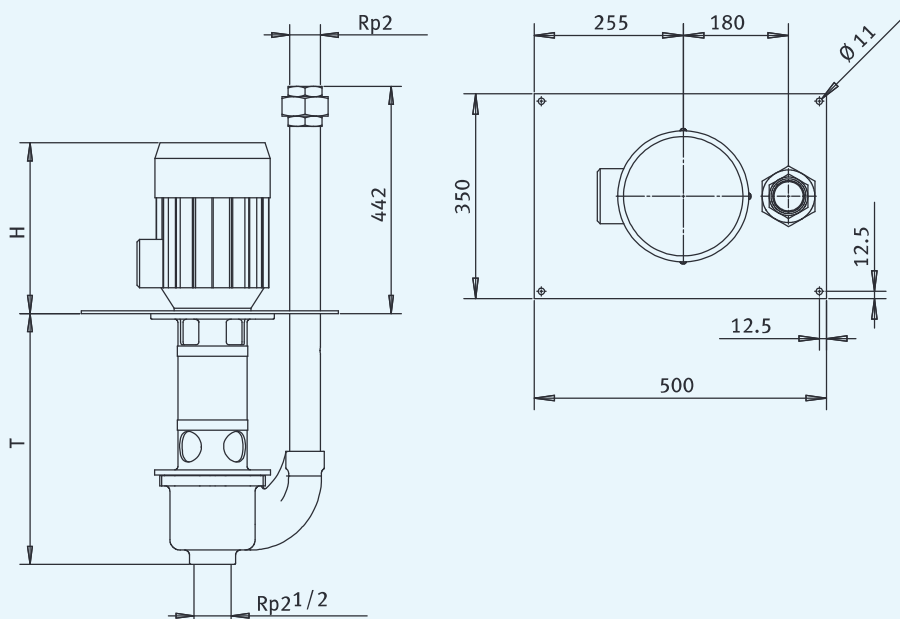
# Dirt coolant pump TF 50



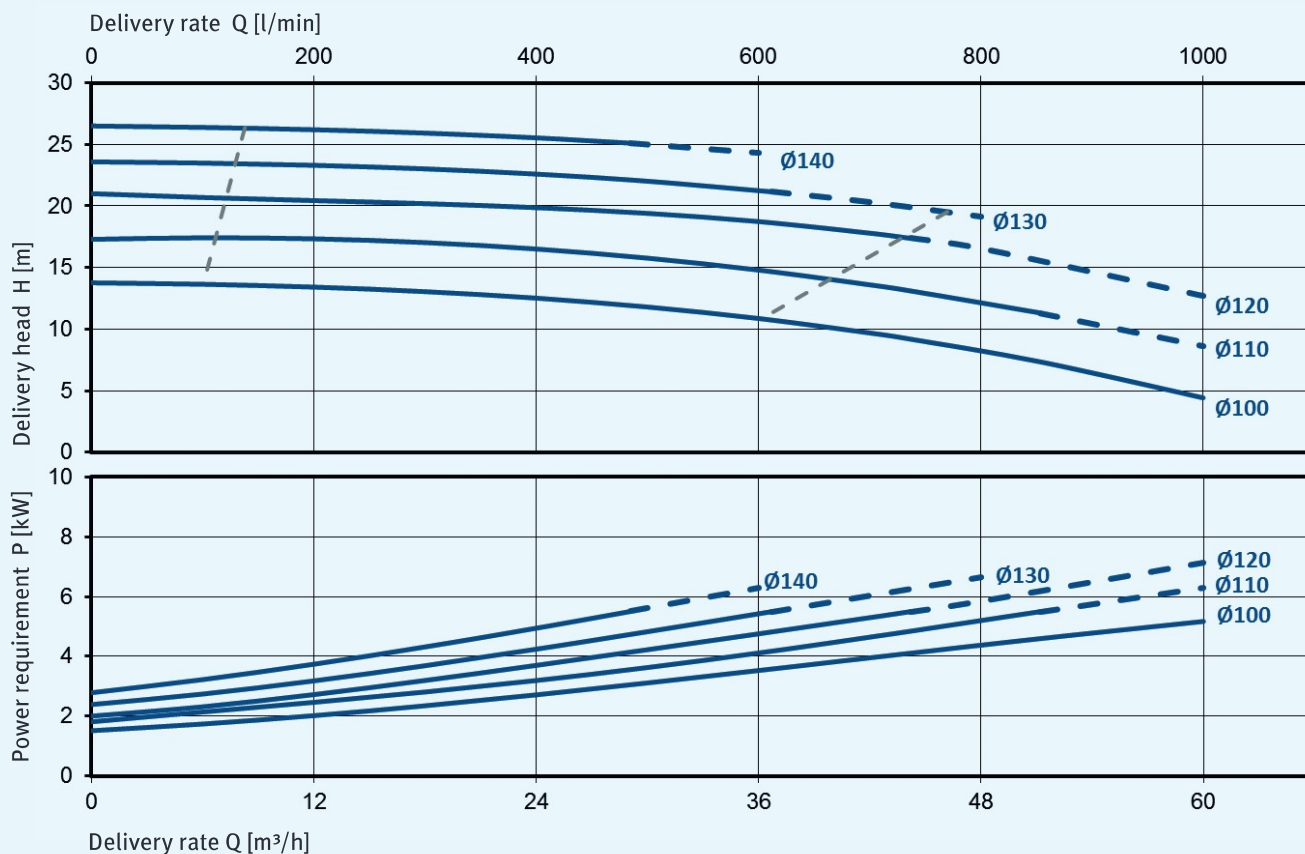
## Variants

Type	T [mm]	H [mm]	Weight [kg]	Frequency [Hz]	Motor power [kW]	Noise level [dB(A)]
TF 50-../40 488	488	328	68	50 / 60	4.0	68 / 71
TF 50-../55 488	488	328	75	50 / 60	5.5	68 / 71
TF 50-../40 848	848	328	78	50 / 60	4.0	68 / 71
TF 50-../55 848	848	328	85	50 / 60	5.5	68 / 71

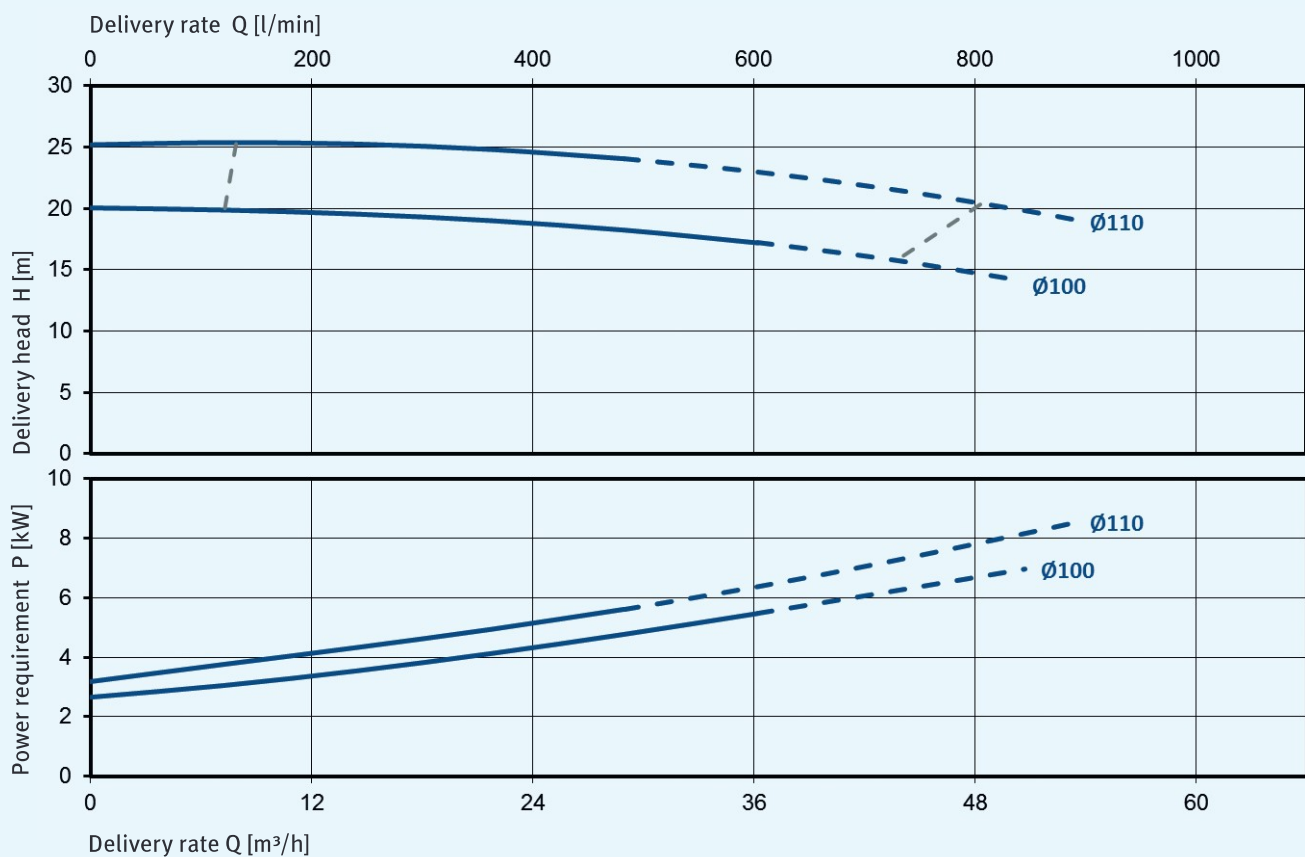
## Dimensions



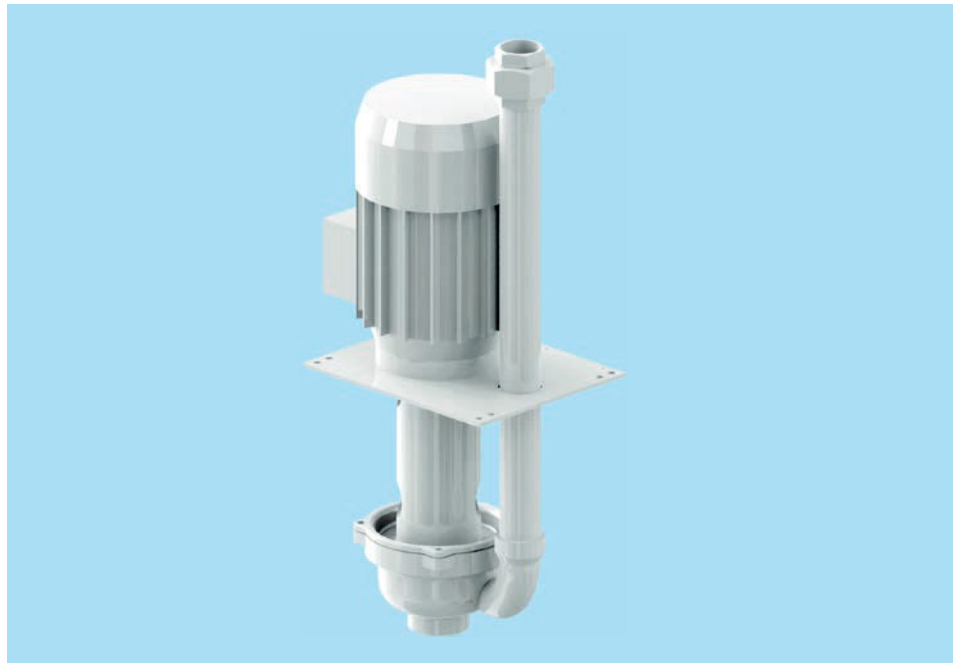
## Characteristic curves for 2,900 min<sup>-1</sup>, 50 Hz, 1 mm<sup>2</sup>/s



## Characteristic curves for 3,500 min<sup>-1</sup>, 60 Hz, 1 mm<sup>2</sup>/s



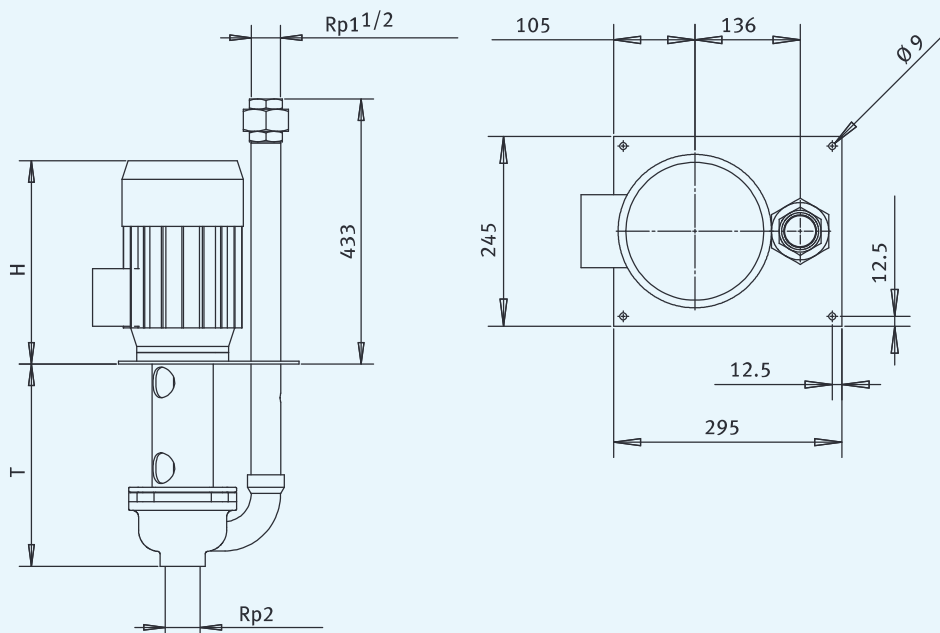
# Dirt coolant pump TS 40



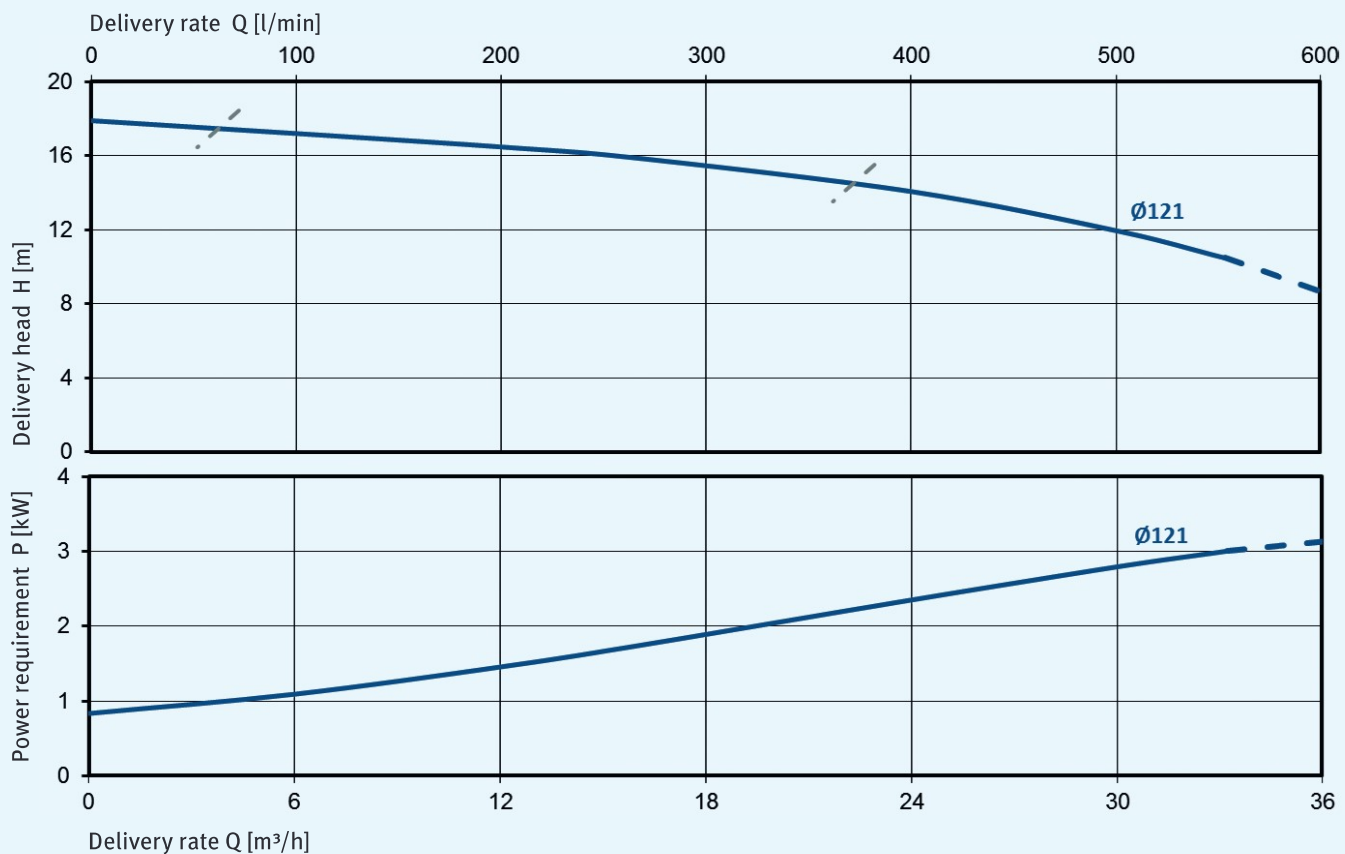
## Variants

Type	T [mm]	H [mm]	Weight [kg]	Frequency [Hz]	Motor power [kW]	Noise level [dB(A)]
TS 40-21/22 338	338	285	33	50 / 60	2.2	62 / 65
TS 40-21/30 338	338	325	37	50 / 60	3.0	66 / 69
TS 40-21/22 586	586	285	40	50 / 60	2.2	62 / 65
TS 40-21/30 586	586	325	44	50 / 60	3.0	66 / 69
TS 40-21/22 834	834	285	47	50 / 60	2.2	62 / 65
TS 40-21/30 834	834	325	51	50 / 60	3.0	66 / 69

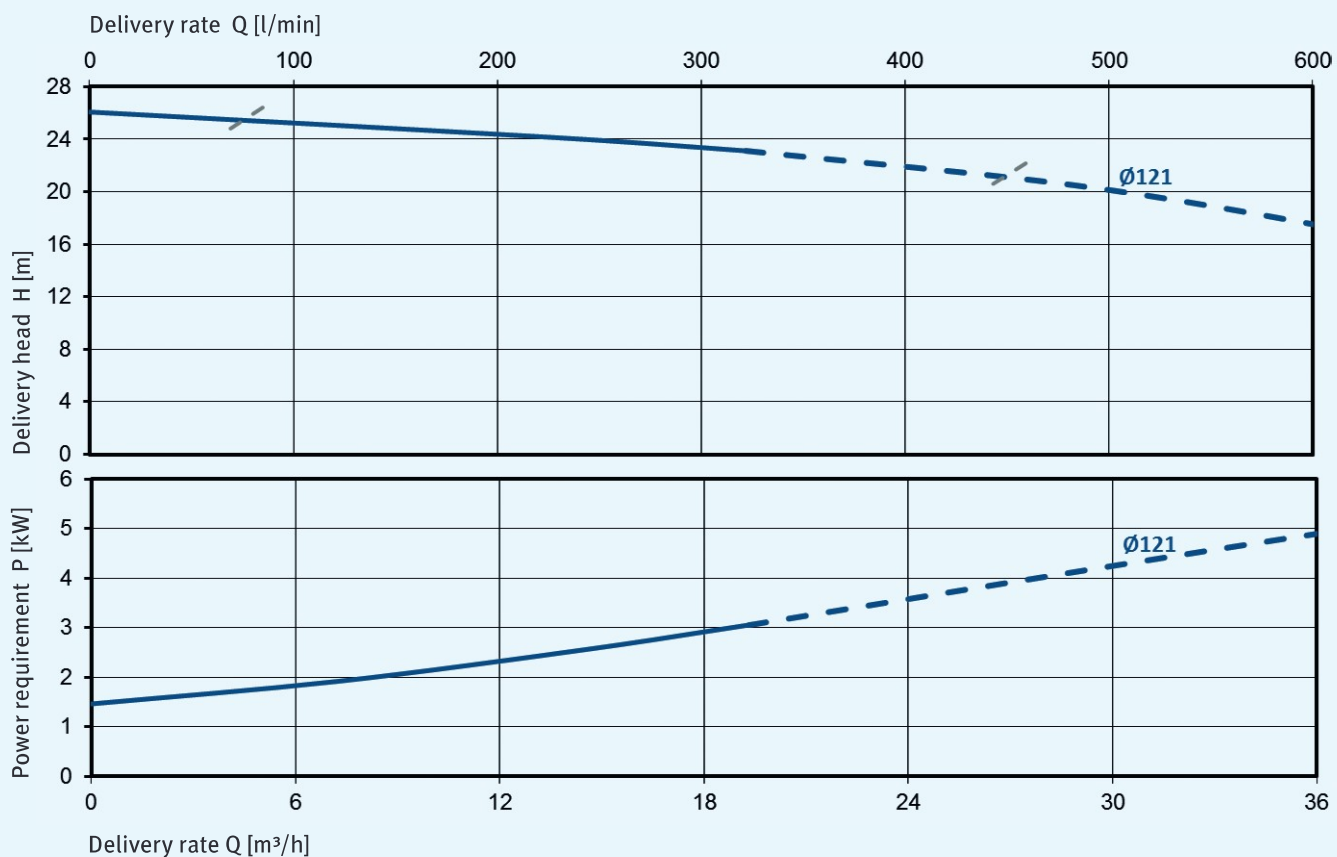
## Dimensions



## Characteristic curves for 2,900 min<sup>-1</sup>, 50 Hz, 1 mm<sup>2</sup>/s

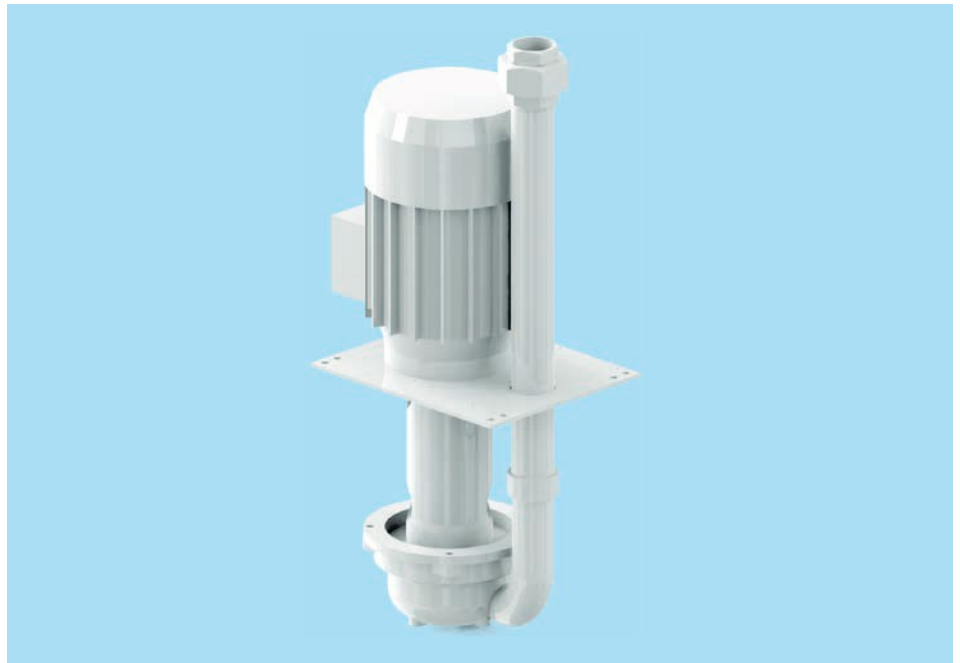


## Characteristic curves for 3,500 min<sup>-1</sup>, 60 Hz, 1 mm<sup>2</sup>/s





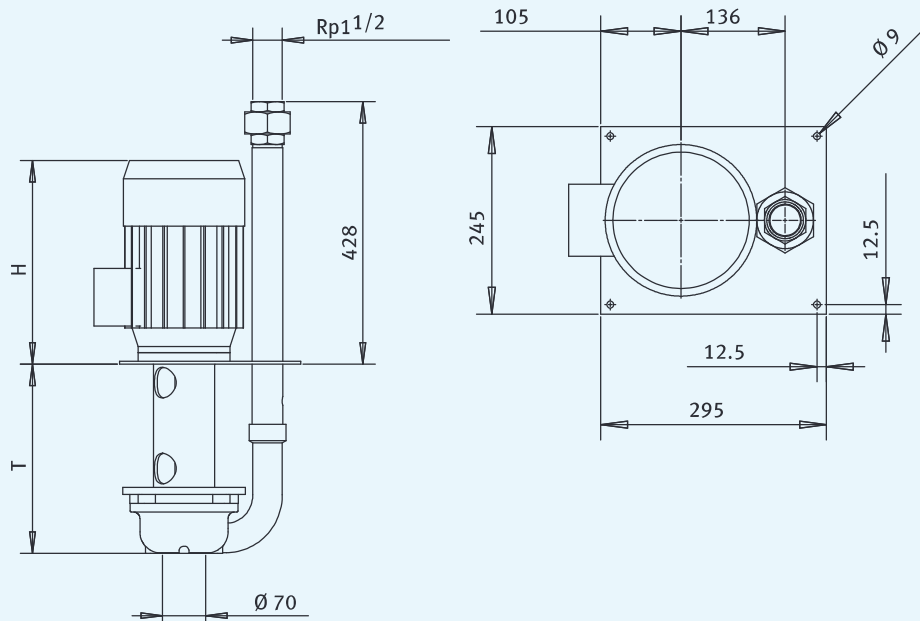
# Dirt coolant pump TSK 40



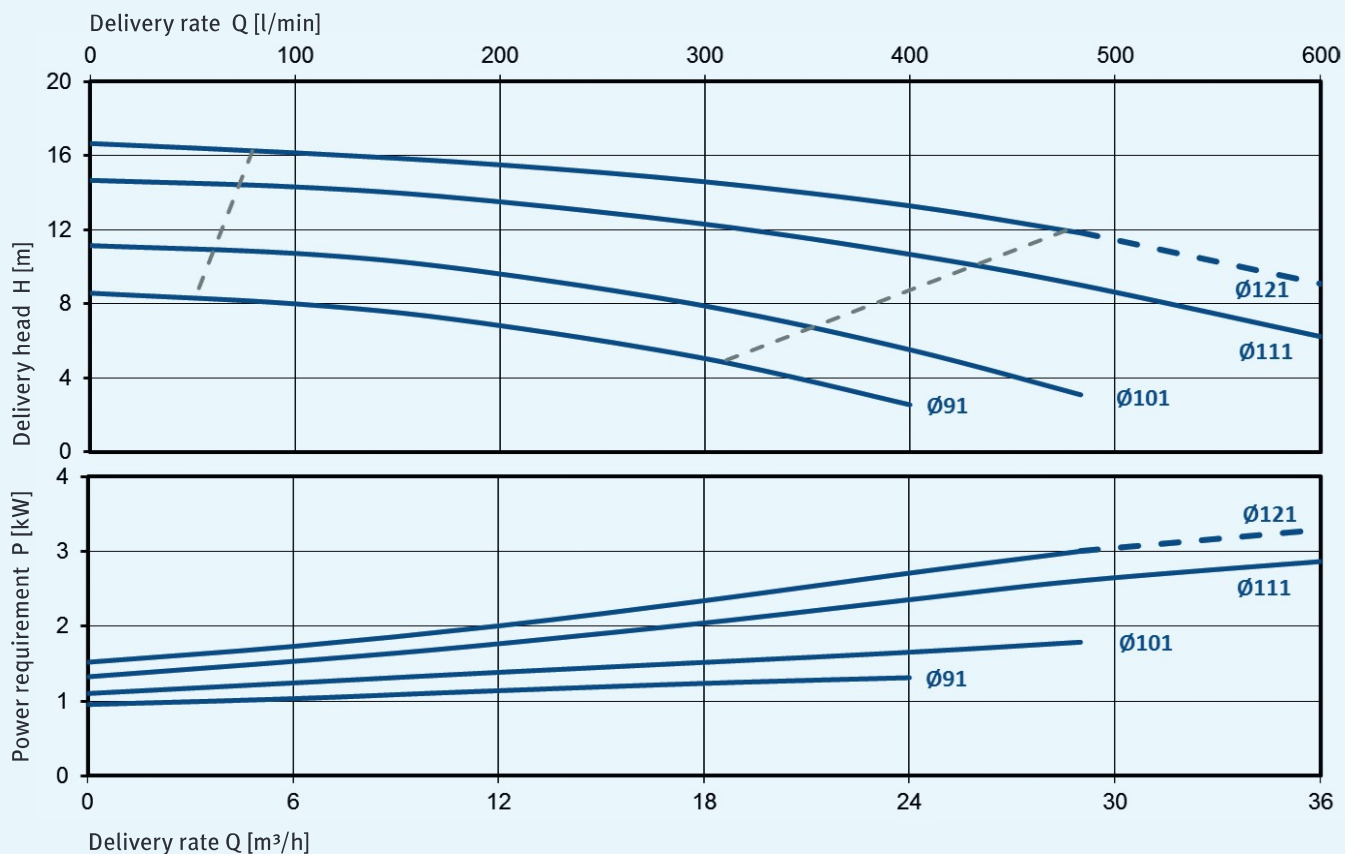
## Variants

Type	T [mm]	H [mm]	Weight [kg]	Frequency [Hz]	Motor power [kW]	Noise level [dB(A)]
TSK 40-../22 310	310	285	33	50 / 60	2.2	62 / 65
TSK 40-../30 310	310	325	37	50 / 60	3.0	66 / 69
TSK 40-../22 558	558	285	40	50 / 60	2.2	62 / 65
TSK 40-../30 558	558	325	44	50 / 60	3.0	66 / 69
TSK 40-../22 806	806	285	47	50 / 60	2.2	62 / 65
TSK 40-../30 806	806	325	51	50 / 60	3.0	66 / 69

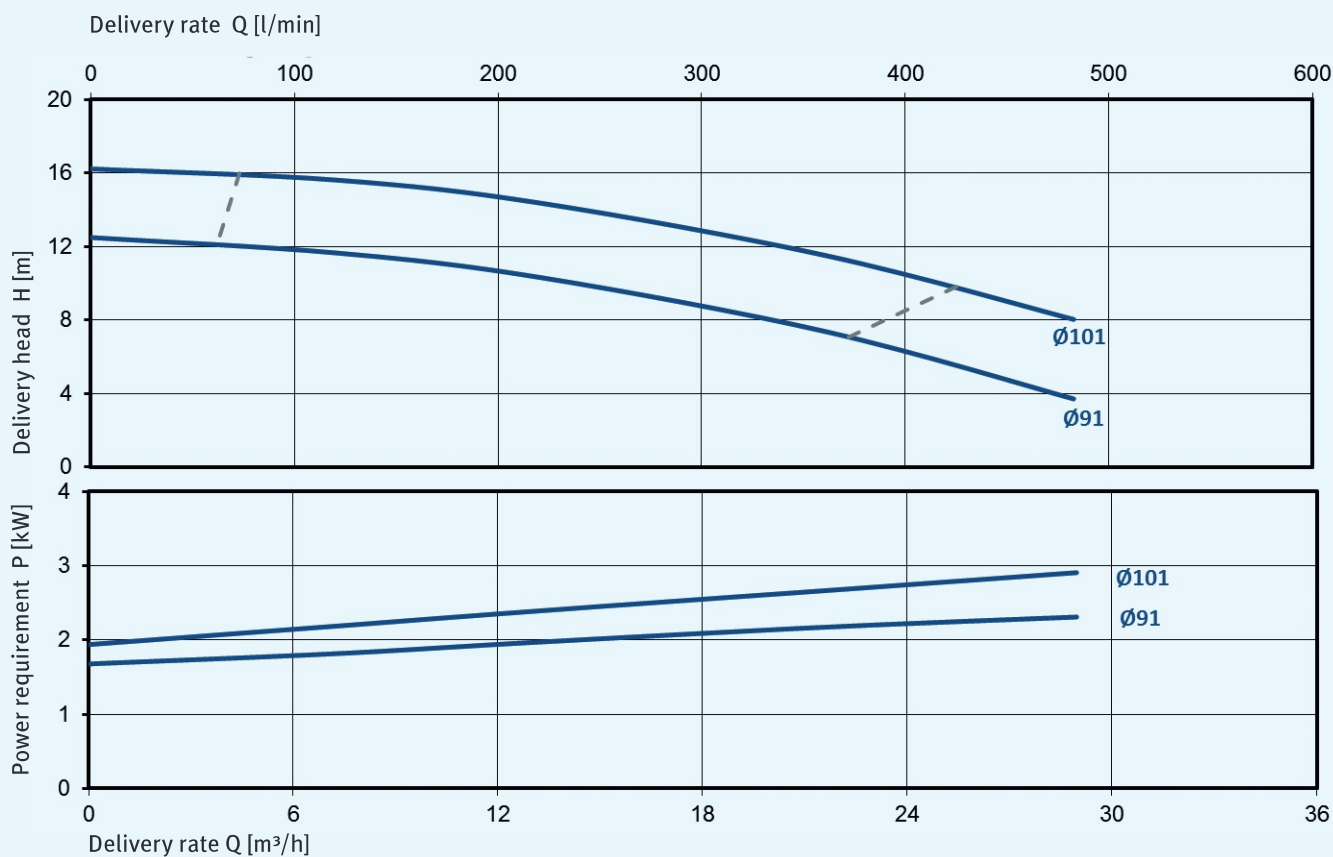
## Dimensions



## Characteristic curves for 2,900 min<sup>-1</sup>, 50 Hz, 1 mm<sup>2</sup>/s



## Characteristic curves for 3,500 min<sup>-1</sup>, 60 Hz, 1 mm<sup>2</sup>/s



# Dirt coolant pump TSK 50

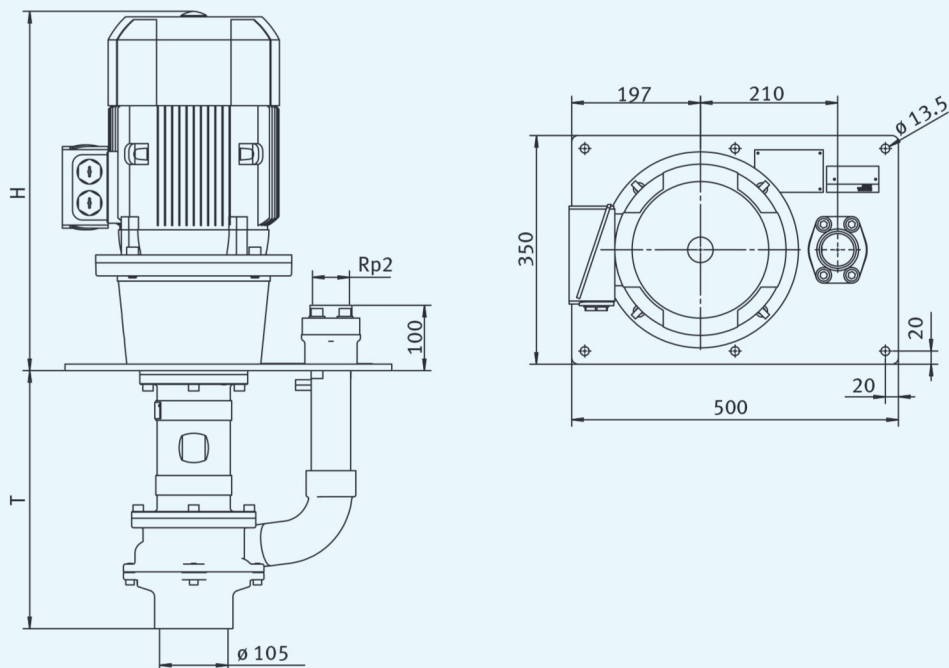


## Variants

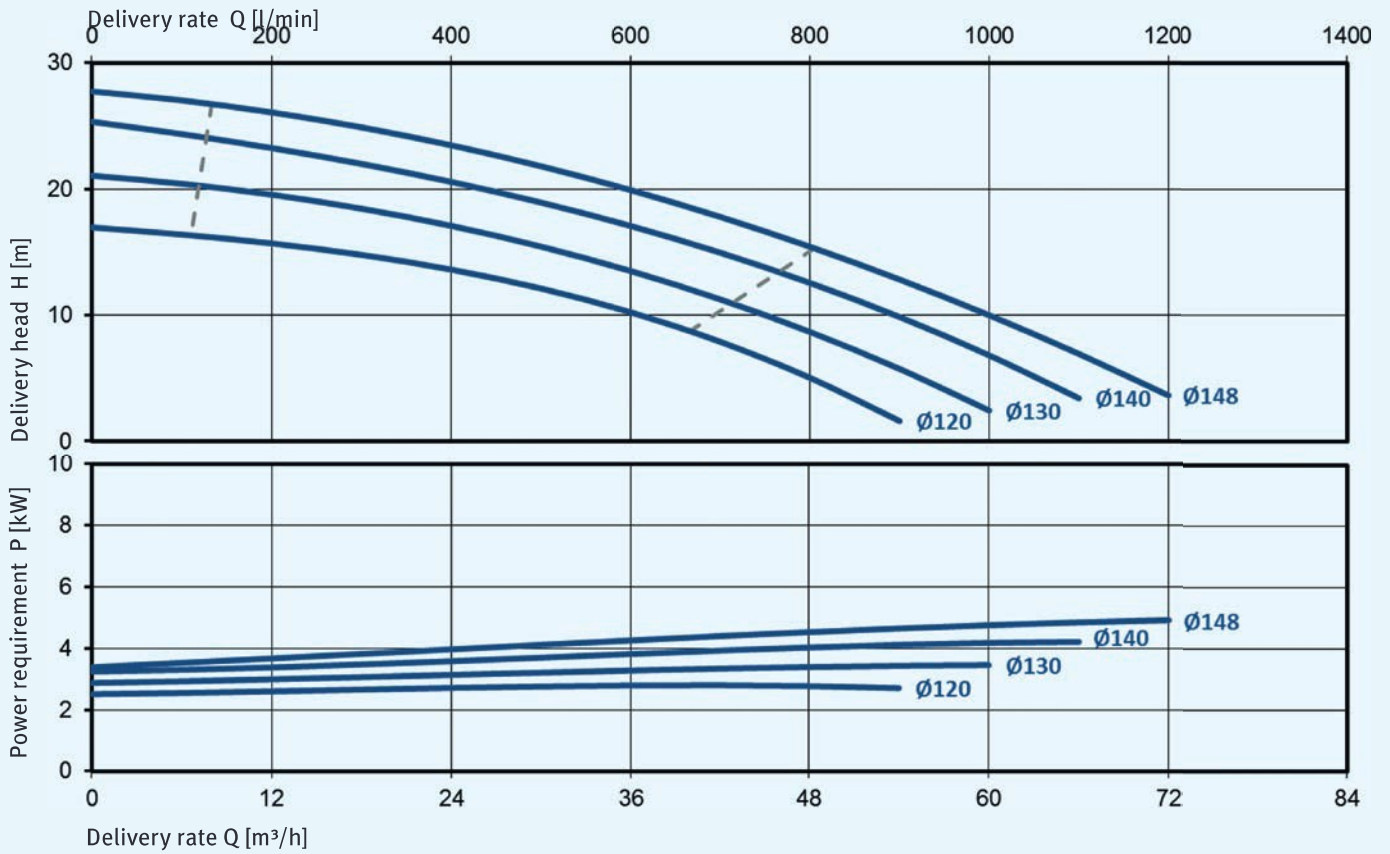
Type	T [mm]	H [mm]	Weight [kg]	Frequency [Hz]	Motor power (Nema Premium) [kW]	Noise level [dB(A)]
TSK 50-.. / 30 395	395	515	71	50	3.0	67
TSK 50-.. / 30 505	505	515	76	50	3.0	67
TSK 50-.. / 40 395	395	499	81	50 / 60	4.0	69
TSK 50-.. / 40 505	505	499	86	50 / 60	4.0	69
TSK 50-.. / 55 395	395	550	93	50 / 60	5.5	68
TSK 50-.. / 55 505	505	550	98	50 / 60	5.5	68

\* The following immersion depths are possible on request: 600 mm, 710 mm and 820 mm

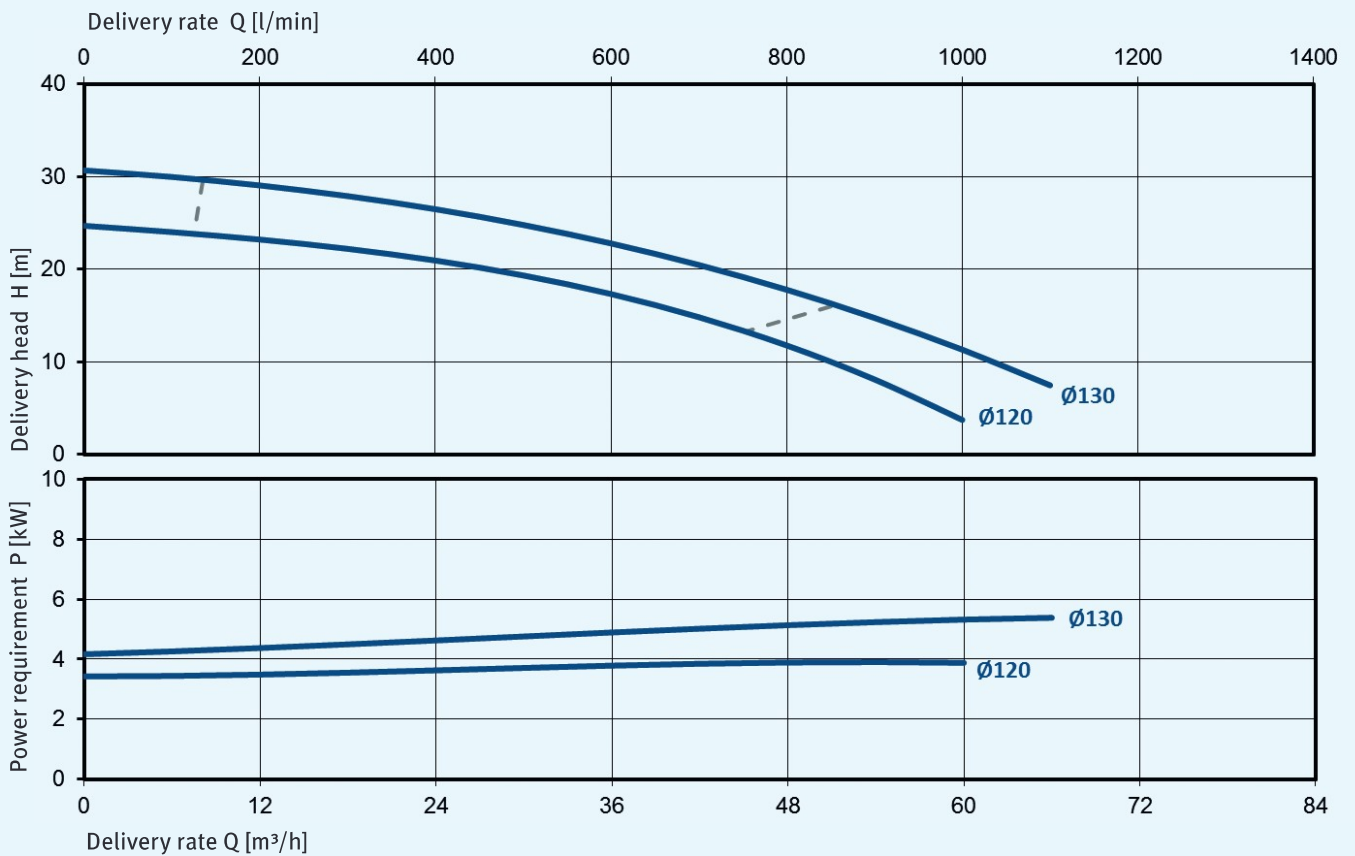
## Dimensions



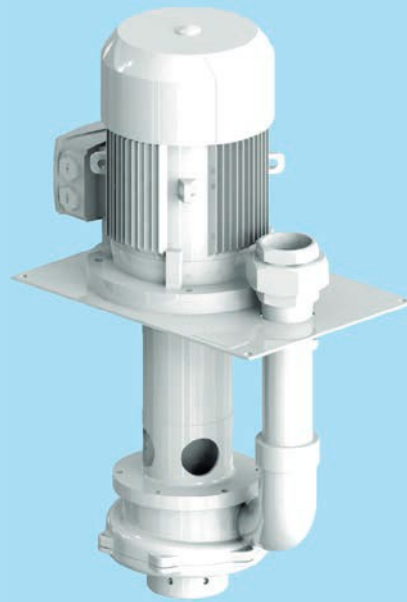
## Characteristic curves for 2,900 min<sup>-1</sup>, 50 Hz, 1 mm<sup>2</sup>/s



## Characteristic curves for 3,500 min<sup>-1</sup>, 60 Hz, 1 mm<sup>2</sup>/s



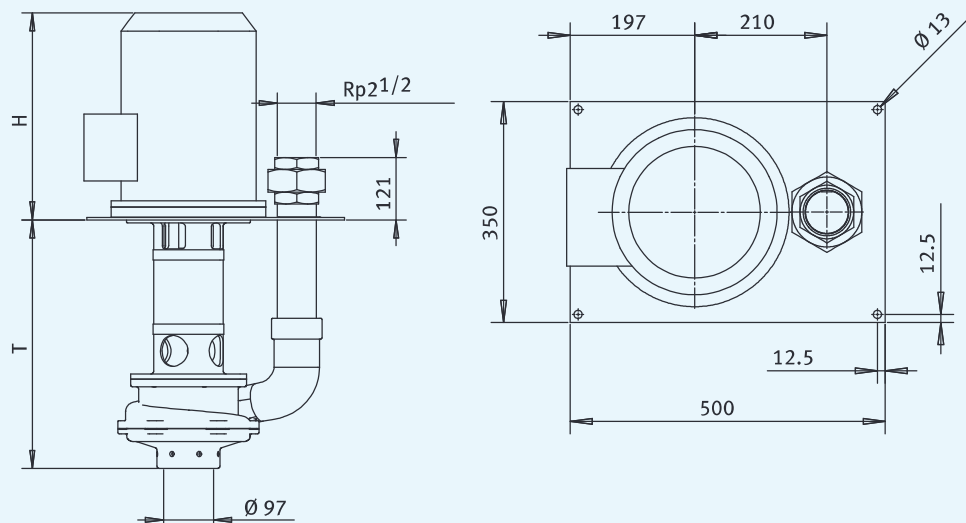
# Dirt coolant pump TSK 65



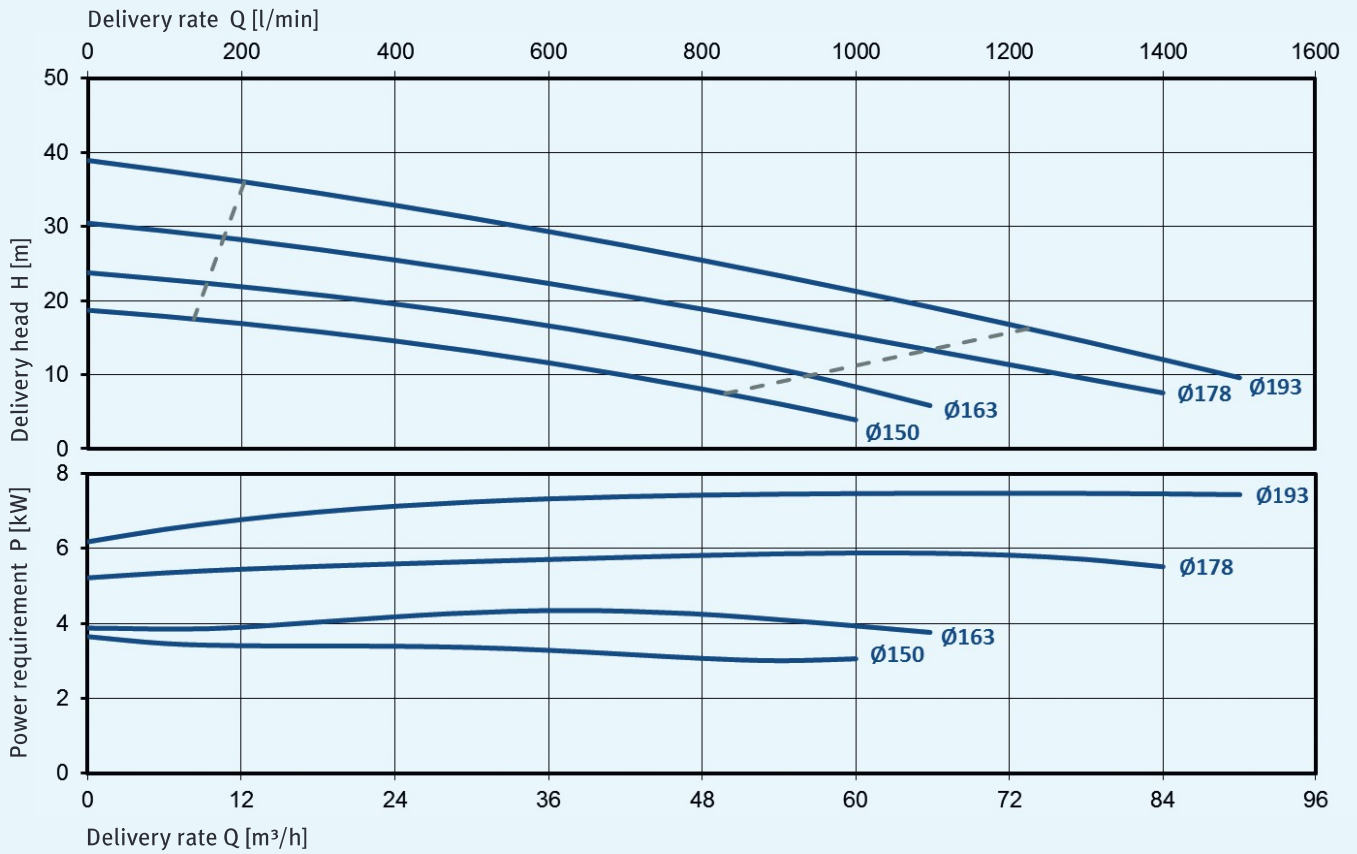
## Variants

Type	T [mm]	H [mm]	Weight [kg]	Frequency [Hz]	Motor power (Nema Premium) [kW]	Noise level [dB(A)]
TSK 65-../55 482	482	410	110	50	5.5	68
TSK 65-../75 482	482	450	120	50	7.5	68
TSK 65-../55 842	842	410	140	50	5.5	68
TSK 65-../75 842	842	450	150	50	7.5	68
TSK 65-../55 482	482	410	110	60	6.3 (5.5)	72
TSK 65-../75 482	482	450	120	60	8.6 (7.5)	72
TSK 65-../55 842	842	410	140	60	6.3 (5.5)	72
TSK 65-../75 842	842	450	150	60	8.6 (7.5)	72

## Dimensions



## Characteristic curves for 2,900 min<sup>-1</sup>, 50 Hz, 1 mm<sup>2</sup>/s



## Characteristic curves for 3,500 min<sup>-1</sup>, 60 Hz, 1 mm<sup>2</sup>/s

