

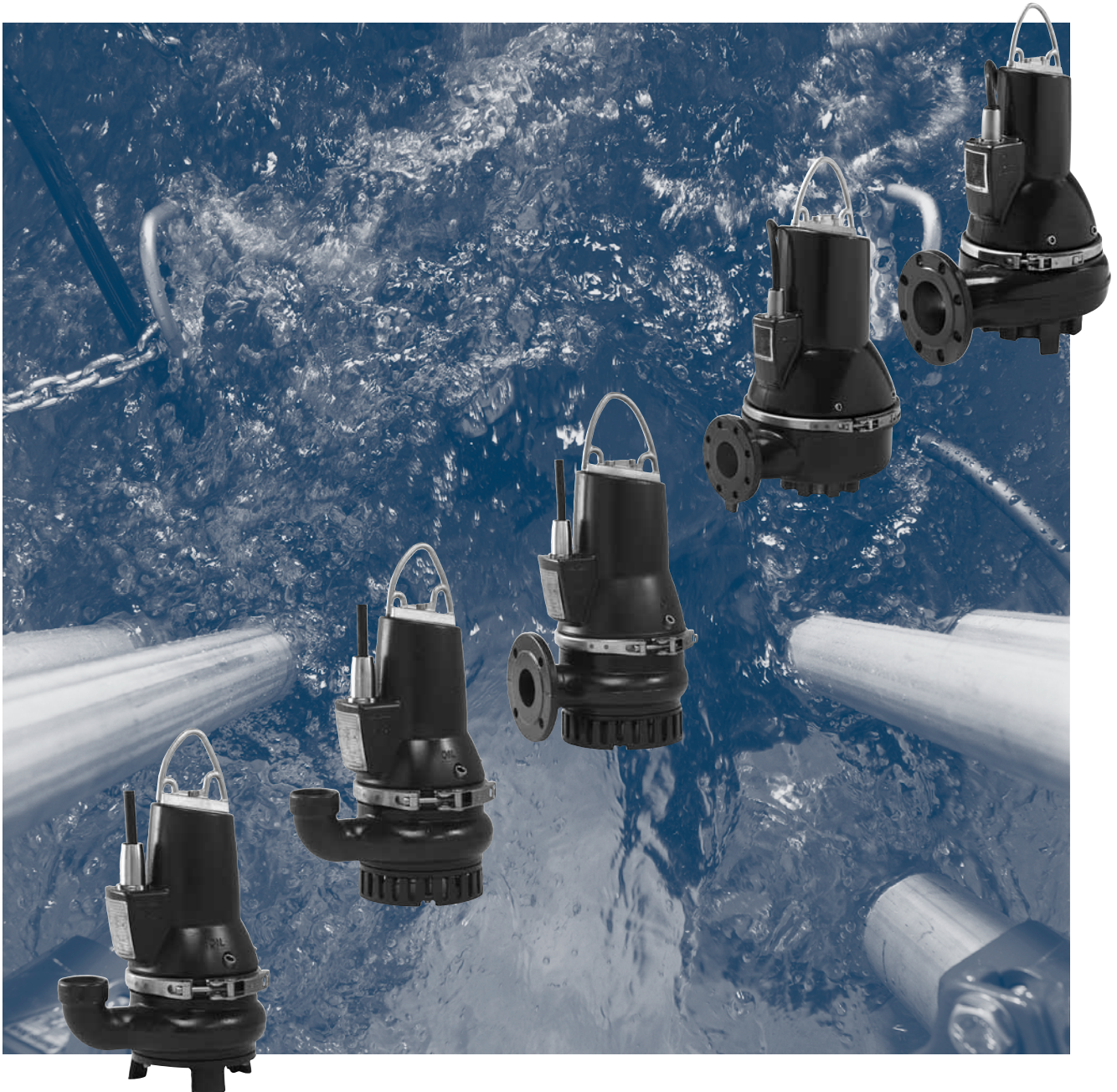
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SL1, SLV, DP, EF pumps

0.6 to 11 kW
50 Hz



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Introduction

This data booklet deals with Grundfos sewage pumps, types SL1, SLV, DP and EF.



Fig. 1 DP, EF and SL pumps

The pumps are free-flow (SuperVortex) and single-channel impeller pumps specifically designed for pumping sewage and wastewater in a wide range of municipal, private and industrial applications.

The pumps are made of resistant materials, such as cast iron and stainless steel. These materials ensure a proper operation.

The pumps are fitted with motors from 0.6 kW up to 11.0 kW. The motors are either 2- or 4-pole motors, depending on the motor size.

The free passage in the pumps is 10 to 100 mm.

The pumps are available for:

- submerged installation on auto-coupling system
- submerged installation, free-standing.

Applications

Typical applications are transfer of liquids, such as:

- municipal wastewater
- wastewater with high content of fibres (SuperVortex impeller)
- drainage and groundwater
- domestic wastewater
- industrial wastewater
- process and cooling water.

The pumps are ideal for the pumping of the above liquids from for instance:

- municipal network pumping stations
- inlet pumping stations in wastewater treatment plants
- primary clarification in wastewater treatment plants
- secondary clarification in wastewater treatment plants
- stormwater pumping stations
- public buildings
- blocks of flats
- factories/industry.

Overall construction features

- Watertight cable entry of corrosion-resistant polyamide
- Power cable incorporating wires for thermal sensors in the motor windings
- No extra cable required for sensors in pumps with sensors
- Monitoring of operating conditions for pumps with sensors
- Moisture detector for continuous monitoring of motor enclosure and automatic cut-out in case of leakage
- Heavy-duty bearings greased for life
- Built for frequency-converter operation
- Smooth pump surface prevents dirt and impurities from sticking to the pump
- Self-cleaning channel impeller with long vanes, thus reducing risk of jamming or clogging, or SuperVortex impeller with high pumping efficiency and less downtime
- Explosion-proof motors for potentially explosive environments
- Motor in insulation class F (155 °C), enclosure class IP68 with thermal sensor in each phase
- Service-friendly design:
 - clamp connection between motor and pump
 - cartridge shaft seal
 - cable connection to motor via plug.

SL1 and SLV pumps except

SL1.50.65.09/11/15 and SLV.65.65.09/11/15

- Motor built of EFF1 components, offering lower motor temperature and longer life.

Type key

SL1-SLV

Code Example	SL	1	.80	.80	.40	.A	.Ex	.4	.5	.OD
Pump type: SL Sewage and wastewater pump										
Impeller type: 1 Single-channel impeller V SuperVortex (free-flow) impeller										
Pump passage: Maximum solids size [mm]										
Pump discharge: Nominal diameter of discharge port [mm]										
Power: Motor output power P2/100 [W]										
Sensor version: [-] Standard A With sensor version or CU 100										
Pump version: [-] Non-explosion-proof pump (standard) Ex Explosion-proof pump										
Number of poles: 2 2-pole 4 4-pole										
Number of phases 1 Single-phase motor [-] Three-phase motor										
Frequency: 50 50 Hz										
Voltage and starting method: 02 230V, DOL 0D 380-415V, DOL 1D 380-415V, Y/D 0B 400-415 V, DOL 0C 230-240 V, DOL										

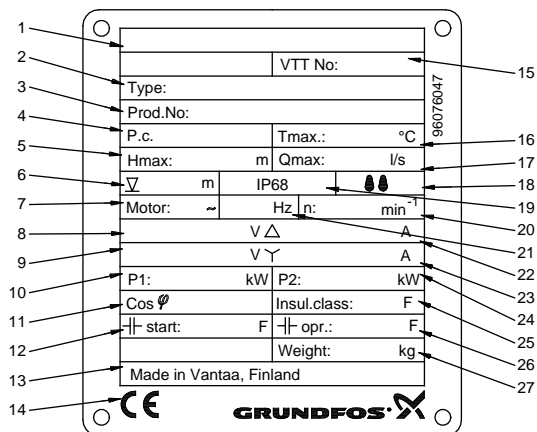
Note: The pump types are not available in all variants.

DP and EF

Code Example	DP	1	10	.65	.11	.A	.Ex	.2	.5	.O2
Pump type: DP Grundfos drainage pump EF Grundfos effluent pump										
Material (Standard, cast iron)										
Impeller type: 1 Single-channel impeller V SuperVortex (free-flow) impeller										
Pump passage: 10 Maximum solids size [mm]										
Pump discharge: 65 Nominal diameter of discharge port [mm]										
Power: 11 Motor output power P2/100 [W]										
Sensor version: [-] Standard A Equipped with a CU 100 control box										
Pump version: [-] Non-explosion-proof pump (standard) Ex Explosion-proof pump										
Number of poles: 2 2-pole 4 4-pole										
Frequency: 5 50 Hz										
Voltage and starting method: 02 230V, DOL (50 Hz) 1B 400-415V, DOL (50 Hz) 1C 230-240V, DOL (50 Hz)										
[] Standard pump material										

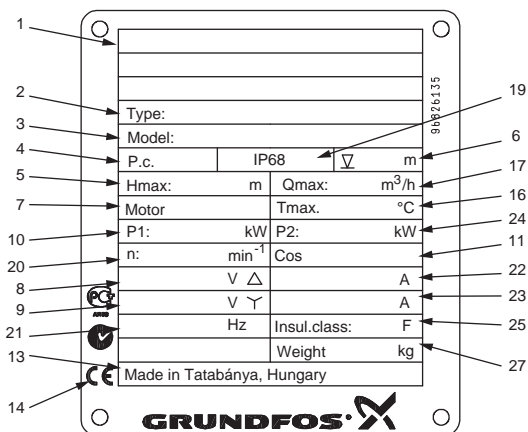
Nameplate

Pump nameplate



TM02 5375 3 102

Fig. 2 DP, EF, SL1.50.65.09/11/15 and SLV.65.65.09/11/15



TM04 3279 4 108

Fig. 3 SL1 and SLV pumps except SL1.50.65.09/11/15 and SLV.65.65.09/11/15

- 1 Ex mark
- 2 Type designation
- 3 Product/Model number
- 4 Production code
- 5 Maximum head
- 6 Maximum installation depth
- 7 Number of phases
- 8 Rated voltage, D
- 9 Rated voltage, Y
- 10 Rated input power
- 11 Power factor
- 12 Starting capacitor
- 13 Country of production
- 14 CE mark
- 15 EN approval
- 16 Maximum liquid temperature
- 17 Maximum flow rate
- 18 Explosion protection
- 19 Enclosure class to IEC
- 20 Rated speed
- 21 Frequency
- 22 Rated current, D
- 23 Rated current, Y
- 24 Shaft power
- 25 Insulation class
- 26 Operating capacitor
- 27 Weight without cable

Ordering a pump

When ordering a pump, you need to take the following five aspects into consideration:

1. pump type
2. custom-built variation (option)
3. accessories
4. controller
5. explosion-proof version.

Pump

Use the following table to identify which type of pump that best meets your needs. The table is for guidance only.

Application	DP	EF	SL1	SLV
Storm water			x	x
Groundwater	x	x	x	x
Drainage and surface water	x	x	x	x
Drainage and surface water with smaller impurities	x	x	x	x
Abrasive surface water	x	x	x	x
Wastewater with long fibres, e.g. from laundries		x	x	x
Wastewater without discharge from toilets (Grey water)		x		
Wastewater from commercial buildings without discharge from toilets.		x		
Domestic wastewater with discharge from toilets			x	x
Municipal sewage			x	x
Sewage from commercial buildings			x	x
Industrial process water with fibres/solids				x
Industrial process water with solids		x	x	x
Industrial process water without solids and fibres	x		x	

When you have selected the pump type, you can identify the specific pump that best meets your needs in section Product range on page 8 and Type key on page 4. The list below is a detailed description of the product you get if you order the following pump:

Pump	Product no
SLV.65.65.22.2.51D	96871966

- Pump as specified in the type key
- 10 m cable
- Paint: NSC 8005-R80B (dark grey), gloss code 35, thickness 100 µ
- Three thermal switches, one in each phase or
- Three thermal sensors (PTC)
- One moisture switch in the motor. (SL1 and SLV pumps, except SL1.50.65.09/11/15 and SLV.65.65.09/11/15)
- Tested according to DIN 9906, Annex A.

See section Performance curves Technical data for selection of a standard pump.

Note: Product-specific data for the pump can also be found in WebCAPS using the product number 96871966.

Custom-built variants

The pumps can be customised to meet individual requirements. Many pump features and options are available for customisation, such as explosion-proof versions, various cable lengths or special materials.

Variants can be seen in the table in section List of variants on page 24. For requirements or designs outside the mentioned table, contact Grundfos.

Accessories

Depending on the installation type, accessories may be required. See section Accessories on page 206 for selection of the correct accessories.

Note: Ordered accessories are not fitted from factory.

Controller

The following controllers are available:

- CU 100
- LC/LCD 107 with level pickups
- LC/LCD 108 with float switches
- LC/LCD 110 with level electrodes.

Explosion-proof version

The entire range is available in explosion-proof versions.

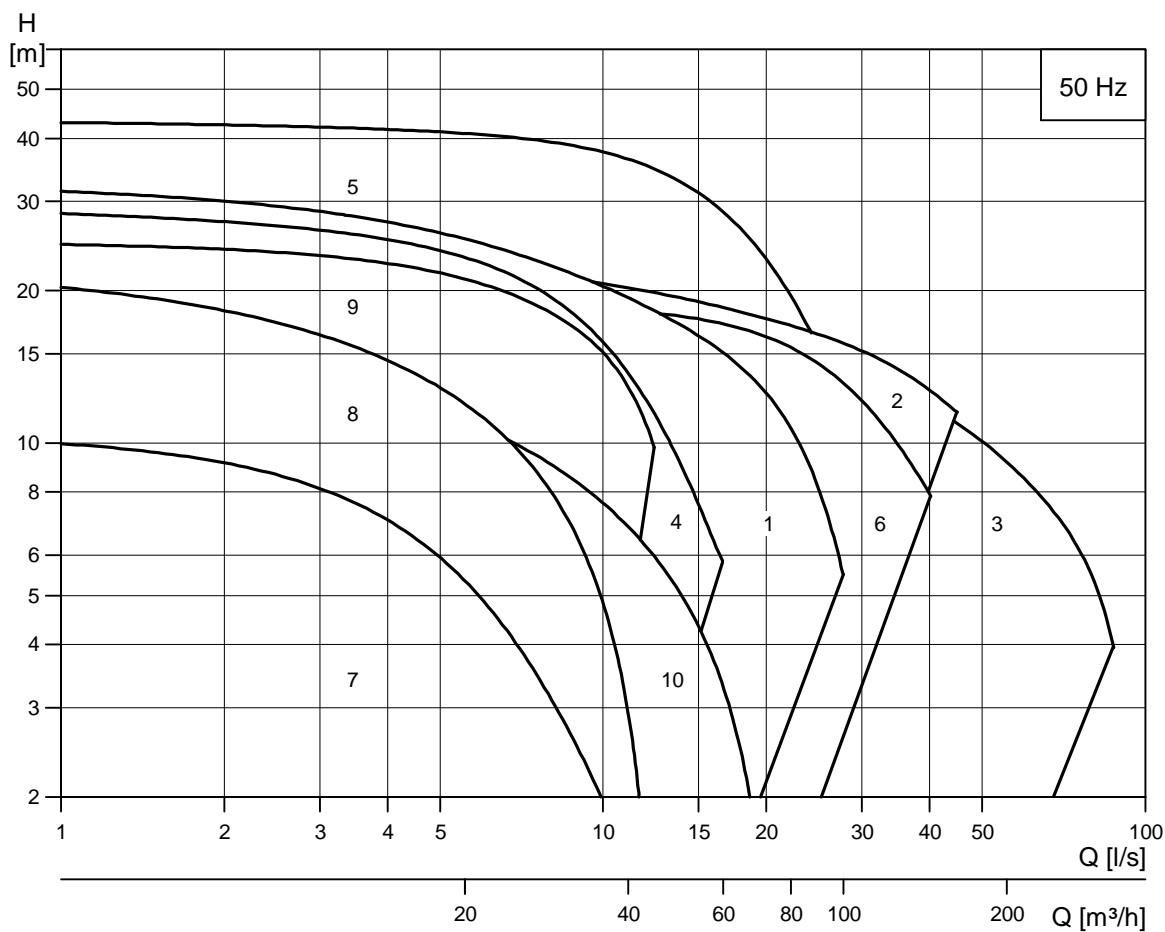
DP, EF, SL1.50.65.09, SL1.50.65.11, SL1.50.65.15, SLV.65.65.09, SLV.65.65.11 and SLV.65.65.15

Pumps are provided with a II 2 G Ex c d IIB T4 explosion protection classification according to EN60079-0:2006 and EN60079-1:2007.

The pumps are also available for Australia with an Ex nC T3 classification according to IEC 60079-15:1987.

All other SL1 and SLV pumps are provided with a II 2 G Ex c d IIB T4, T3 classification and for the sensor version a II 2G c d mb IIB T4, T3 classification according to EN 60079-1: 2007, EN 13463-5: 2003 and EN 60079-18: 2004.

Performance range, SL, DP and EF pumps



TM04 2624 2808

Pump type	Curve No
SL1.50.65.09	10
SL1.50.65.11	
SL1.50.65.15	
SL1.50.65.22	
SL1.50.65.30	1
SL1.50.65.40	
SL1.50.80.22	
SL1.50.80.30	
SL1.50.80.40	2
SL1.80	
SL1.100	
	3

Pump type	Curve No
SLV.65.65.09	7
SLV.65.65.11	
SLV.65.65.15	
SLV.65.65.22	
SLV.65.65.30	4
SLV.65.65.40	
SLV.65.80.22	
SLV.65.80.30	
SLV.65.80.40	5
SLV.80	
SLV.100	
EF30	6
	8
DP10	9

Standard pumps

DP10 Standard

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
DP10.50.09.2.1.502	96104200	1x230 V D	10	THERMAL SWITCH
DP10.50.09.A.2.1.502	96104202	1x230 V D	10	THERMAL SWITCH
DP10.50.09.2.50B	96104204	3x400-415 V Y	10	THERMAL SWITCH
DP10.50.09.A.2.50B	96104206	3x400-415 V Y	10	THERMAL SWITCH
DP10.50.15.2.50B	96104208	3x400-415 V Y	10	THERMAL SWITCH
DP10.50.15.A.2.50B	96104210	3x400-415 V Y	10	THERMAL SWITCH
DP10.65.26.2.50B	96106542	3x400-415 V Y	10	THERMAL SWITCH
DP10.65.26.A.2.50B	96106544	3x400-415 V Y	10	THERMAL SWITCH

DP10 Standard Australia

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
DP10.50.09.2.50B	96104204	3x400-415 V Y	10	THERMAL SWITCH
DP10.50.09.A.2.50B	96104206	3x400-415 V Y	10	THERMAL SWITCH
DP10.50.15.2.50B	96104208	3x400-415 V Y	10	THERMAL SWITCH
DP10.50.15.A.2.50B	96104210	3x400-415 V Y	10	THERMAL SWITCH
DP10.65.26.2.50B	96106542	3x400-415 V Y	10	THERMAL SWITCH
DP10.65.26.A.2.50B	96106544	3x400-415 V Y	10	THERMAL SWITCH

EF30 Standard

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
EF30.50.06.2.1.502	96106546	1x230 V D	10	THERMAL SWITCH
EF30.50.06.A.2.1.502	96106548	1x230 V D	10	THERMAL SWITCH
EF30.50.06.2.50B	96106550	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.06.A.2.50B	96106552	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.09.2.1.502	96115111	1x230 V D	10	THERMAL SWITCH
EF30.50.09.A.2.1.502	96115113	1x230 V D	10	THERMAL SWITCH
EF30.50.09.2.50B	96115115	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.09.A.2.50B	96115117	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.11.2.1.502	96106554	1x230 V D	10	THERMAL SWITCH
EF30.50.11.A.2.1.502	96106556	1x230 V D	10	THERMAL SWITCH
EF30.50.11.2.50B	96106558	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.11.A.2.50B	96106560	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.15.2.50B	96104196	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.15.A.2.50B	96104198	3x400-415 V Y	10	THERMAL SWITCH

EF30 Standard Australia

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
EF30.50.06.2.50B	96106550	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.06.A.2.50B	96106552	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.09.2.50B	96115115	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.09.A.2.50B	96115117	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.11.2.50B	96106558	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.11.A.2.50B	96106560	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.15.2.50B	96104196	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.15.A.2.50B	96104198	3x400-415 V Y	10	THERMAL SWITCH

SL1 Standard

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SL1.50.65.09.2.1.502	96106562	1x230 V D	10	THERMAL SWITCH
SL1.50.65.09.2.50C	96106567	3x230-240 V D	10	THERMAL SWITCH
SL1.50.65.09.2.50B	96106566	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.09.A.2.1.502	96106564	1x230 V D	10	THERMAL SWITCH
SL1.50.65.09.A.2.50C	96106571	3x230-240 V D	10	THERMAL SWITCH
SL1.50.65.09.A.2.50B	96106570	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.11.2.1.502	96104125	1x230 V D	10	THERMAL SWITCH
SL1.50.65.11.2.50C	96104130	3x230-240 V D	10	THERMAL SWITCH
SL1.50.65.11.2.50B	96104129	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.11.A.2.1.502	96104127	1x230 V D	10	THERMAL SWITCH
SL1.50.65.11.A.2.50C	96104134	3x230-240 V D	10	THERMAL SWITCH
SL1.50.65.11.A.2.50B	96104133	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.15.2.50C	96104119	3x230-240 V D	10	THERMAL SWITCH
SL1.50.65.15.2.50B	96104118	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.15.A.2.50C	96104123	3x230-240 V D	10	THERMAL SWITCH
SL1.50.65.15.A.2.50B	96104122	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.22.2.50D	96836307	3x380-415V Y	10	THERMAL SWITCH
SL1.50.65.30.2.50D	96836311	3x380-415V Y	10	THERMAL SWITCH
SL1.50.65.40.2.51D	96872032	3x380-415V D	10	THERMAL SWITCH
SL1.50.80.22.2.50D	96836286	3x380-415V Y	10	THERMAL SWITCH
SL1.50.80.30.2.50D	96836289	3x380-415V Y	10	THERMAL SWITCH
SL1.50.80.40.2.51D	96872071	3x380-415V D	10	THERMAL SWITCH
SL1.80.80.15.4.50D	96872130	3x380-415V Y	10	THERMAL SWITCH
SL1.80.80.22.4.50D	96836605	3x380-415V Y	10	THERMAL SWITCH
SL1.80.80.30.4.50D	96872177	3x380-415V Y	10	THERMAL SWITCH
SL1.80.80.40.4.51D	96872217	3x380-415V D	10	THERMAL SWITCH
SL1.80.80.55.4.51D	96873771	3x380-415V D	10	THERMAL SWITCH
SL1.80.80.75.4.51D	96873359	3x380-415V D	10	THERMAL SWITCH
SL1.80.100.15.4.50D	96836267	3x380-415V Y	10	THERMAL SWITCH
SL1.80.100.22.4.50D	96836271	3x380-415V Y	10	THERMAL SWITCH
SL1.80.100.30.4.50D	96836283	3x380-415V Y	10	THERMAL SWITCH
SL1.80.100.40.4.51D	96873358	3x380-415V D	10	THERMAL SWITCH
SL1.80.100.55.4.51D	96873360	3x380-415V D	10	THERMAL SWITCH
SL1.80.100.75.4.51D	96873361	3x380-415V D	10	THERMAL SWITCH
SL1.100.100.40.4.51D	96873364	3x380-415V D	10	THERMAL SWITCH
SL1.100.100.55.4.51D	96873365	3x380-415V D	10	THERMAL SWITCH
SL1.100.100.75.4.51D	96873366	3x380-415V D	10	THERMAL SWITCH
SL1.100.150.40.4.51D	96873367	3x380-415V D	10	THERMAL SWITCH
SL1.100.150.55.4.51D	96873368	3x380-415V D	10	THERMAL SWITCH
SL1.100.150.75.4.51D	96873369	3x380-415V D	10	THERMAL SWITCH

SL1 Standard Australia

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SL1.50.65.09.2.50B	96106566	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.09.A.2.50B	96106570	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.11.2.50B	96104129	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.11.A.2.50B	96104133	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.15.2.50B	96104118	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.15.A.2.50B	96104122	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.22.2.50B	96891639	3x400-415V Y	15	THERMAL SWITCH
SL1.50.65.30.2.50B	96891640	3x400-415V Y	15	THERMAL SWITCH
SL1.50.65.40.2.50B	96891641	3x400-415V D	15	PTC
SL1.50.80.22.2.50B	96891652	3x400-415V Y	15	THERMAL SWITCH
SL1.50.80.30.2.50B	96891653	3x400-415V Y	15	THERMAL SWITCH
SL1.50.80.40.2.50B	96895854	3x380-415V D	10	THERMAL SWITCH
SL1.80.80.15.4.50B	96872146	3x400-415V Y	15	THERMAL SWITCH
SL1.80.80.22.4.50B	96891654	3x400-415V Y	15	THERMAL SWITCH
SL1.80.80.30.4.50B	96891655	3x400-415V Y	15	THERMAL SWITCH
SL1.80.80.40.4.50B	96891656	3x400-415V D	15	PTC
SL1.80.80.55.4.50B	96891657	3x400-415V D	15	PTC
SL1.80.80.75.4.50B	96891658	3x400-415V D	15	PTC
SL1.80.100.15.4.50B	96873354	3x400-415V Y	15	THERMAL SWITCH
SL1.80.100.22.4.50B	96891659	3x400-415V Y	15	THERMAL SWITCH
SL1.80.100.30.4.50B	96891660	3x400-415V Y	15	THERMAL SWITCH
SL1.80.100.40.4.50B	96836611	3x400-415V D	15	PTC
SL1.80.100.55.4.50B	96836612	3x400-415V D	15	PTC
SL1.80.100.75.4.50B	96891662	3x400-415V D	15	PTC
SL1.100.100.40.4.50B	96891661	3x400-415V D	15	PTC
SL1.100.100.55.4.50B	96891663	3x400-415V D	15	PTC
SL1.100.100.75.4.50B	96891664	3x400-415V D	15	PTC
SL1.100.150.40.4.50B	96891665	3x400-415V D	15	PTC
SL1.100.150.55.4.50B	96891666	3x400-415V D	15	PTC
SL1.100.150.75.4.50B	96891667	3x400-415V D	15	PTC

SLV Standard

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SLV65.65.09.2.1.502	96115119	1x230 V D	10	THERMAL SWITCH
SLV65.65.09.2.50B	96115123	3x400-415 V Y	10	THERMAL SWITCH
SLV65.65.09.A.2.1.502	96115121	1x230 V D	10	THERMAL SWITCH
SLV65.65.09.A.2.50B	96115125	3x400-415 V Y	10	THERMAL SWITCH
SLV65.65.11.2.1.502	96106573	1x230 V D	10	THERMAL SWITCH
SLV65.65.11.2.50B	96106577	3x400-415 V Y	10	THERMAL SWITCH
SLV65.65.11.A.2.1.502	96106575	1x230 V D	10	THERMAL SWITCH
SLV65.65.11.A.2.50B	96106579	3x400-415 V Y	10	THERMAL SWITCH
SLV65.65.15.2.50B	96104192	3x400-415 V Y	10	THERMAL SWITCH
SLV65.65.15.A.2.50B	96104194	3x400-415 V Y	10	THERMAL SWITCH
SLV.65.65.22.2.50D	96836323	3x380-415V Y	10	THERMAL SWITCH
SLV.65.65.30.2.50D	96871968	3x380-415V Y	10	THERMAL SWITCH
SLV.65.65.40.2.51D	96871971	3x380-415V D	10	THERMAL SWITCH
SLV.65.80.22.2.50D	96836287	3x380-415V Y	10	THERMAL SWITCH
SLV.65.80.30.2.50D	96836303	3x380-415V Y	10	THERMAL SWITCH
SLV.65.80.40.2.51D	96842221	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.11.4.50D	96836266	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.13.4.50D	96857830	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.15.4.50D	96836269	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.22.4.50D	96835691	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.22.4.51D	96871980	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.40.4.51D	96871995	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.40.2.51D	96871992	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.60.2.51D	96873784	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.75.2.51D	96871998	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.92.2.51D	96872003	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.110.2.51D	96872004	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.11.4.50D	96872005	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.13.4.50D	96890480	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.15.4.50D	96872008	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.22.4.50D	96872244	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.22.4.51D	96872243	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.40.4.51D	96872022	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.40.2.51D	96872010	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.60.2.51D	96893379	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.75.2.51D	96872011	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.92.2.51D	96872023	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.110.2.51D	96890789	3x380-415V D	10	THERMAL SWITCH
SLV.100.100.30.4.50D	96836305	3x380-415V Y	10	THERMAL SWITCH
SLV.100.100.40.4.51D	96872026	3x380-415V D	10	THERMAL SWITCH
SLV.100.100.55.4.51D	96872028	3x380-415V D	10	THERMAL SWITCH
SLV.100.100.75.4.51D	96872029	3x380-415V D	10	THERMAL SWITCH

SLV Standard Australia

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SLV65.65.09.2.50B	96115123	3x400-415 V Y	10	THERMAL SWITCH
SLV65.65.09.A.2.50B	96115125	3x400-415 V Y	10	THERMAL SWITCH
SLV65.65.11.2.50B	96106577	3x400-415 V Y	10	THERMAL SWITCH
SLV65.65.11.A.2.50B	96106579	3x400-415 V Y	10	THERMAL SWITCH
SLV65.65.15.2.50B	96104192	3x400-415 V Y	10	THERMAL SWITCH
SLV65.65.15.A.2.50B	96104194	3x400-415 V Y	10	THERMAL SWITCH
SLV.65.65.22.2.50B	96891379	3x400-415V Y	15	THERMAL SWITCH
SLV.65.65.30.2.50B	96891380	3x400-415V Y	15	THERMAL SWITCH
SLV.65.65.40.2.50B	96891402	3x400-415V D	15	PTC
SLV.65.80.22.2.50B	96891403	3x400-415V Y	15	THERMAL SWITCH
SLV.65.80.30.2.50B	96891404	3x400-415V Y	15	THERMAL SWITCH
SLV.65.80.40.2.50B	96891406	3x400-415V D	15	PTC
SLV.80.80.11.4.50B	96871977	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.13.4.50B	96871978	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.15.4.50B	96871979	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.22.4.50B	96891407	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.40.4.50B	96891410	3x400-415V D	15	PTC
SLV.80.80.40.2.50B	96891408	3x400-415V D	15	PTC
SLV.80.80.60.2.50B	96891411	3x400-415V D	15	PTC
SLV.80.80.75.2.50B	96891412	3x400-415V D	15	PTC
SLV.80.80.92.2.50B	96891413	3x400-415V D	15	PTC
SLV.80.80.110.2.50B	96891414	3x400-415V D	15	PTC
SLV.80.100.11.4.50B	96872007	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.13.4.50B	96891415	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.15.4.50B	96872009	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.22.4.50B	96891416	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.40.2.50B	96891420	3x400-415V D	15	PTC
SLV.80.100.40.2.50B	96891418	3x400-415V D	15	PTC
SLV.80.100.60.2.50B	96893973	3x400-415V D	15	PTC
SLV.80.100.75.2.50B	96891419	3x400-415V D	15	PTC
SLV.80.100.92.2.50B	96891421	3x400-415V D	15	PTC
SLV.80.100.110.2.50B	96891432	3x400-415V D	15	PTC
SLV.100.100.30.4.50B	96891433	3x400-415V Y	15	THERMAL SWITCH
SLV.100.100.40.4.50B	96891434	3x400-415V D	15	PTC
SLV.100.100.55.4.50B	96891435	3x400-415V D	15	PTC
SLV.100.100.75.4.50B	96891436	3x400-415V D	15	PTC

Pumps equipped with sensors

SL1 Sensor

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SL1.50.65.22.A.2.50D	96871937	3x380-415V Y	10	THERMAL SWITCH
SL1.50.65.30.A.2.50D	96871940	3x380-415V Y	10	THERMAL SWITCH
SL1.50.65.40.A.2.51D	96872034	3x380-415V D	10	THERMAL SWITCH
SL1.50.80.22.A.2.50D	96871952	3x380-415V Y	10	THERMAL SWITCH
SL1.50.80.30.A.2.50D	96871953	3x380-415V Y	10	THERMAL SWITCH
SL1.50.80.40.A.2.51D	96872102	3x380-415V D	10	THERMAL SWITCH
SL1.80.80.15.A.4.50D	96872143	3x380-415V Y	10	THERMAL SWITCH
SL1.80.80.22.A.4.50D	96837225	3x380-415V Y	10	THERMAL SWITCH
SL1.80.80.30.A.4.50D	96872179	3x380-415V Y	10	THERMAL SWITCH
SL1.80.80.40.A.4.51D	96872218	3x380-415V D	10	THERMAL SWITCH
SL1.80.80.55.A.4.51D	96872255	3x380-415V D	10	THERMAL SWITCH
SL1.80.80.75.A.4.51D	96873372	3x380-415V D	10	THERMAL SWITCH
SL1.80.100.15.A.4.50D	96871954	3x380-415V Y	10	THERMAL SWITCH
SL1.80.100.22.A.4.50D	96871955	3x380-415V Y	10	THERMAL SWITCH
SL1.80.100.30.A.4.50D	96871956	3x380-415V Y	10	THERMAL SWITCH
SL1.80.100.40.A.4.51D	96873375	3x380-415V D	10	THERMAL SWITCH
SL1.80.100.55.A.4.51D	96873376	3x380-415V D	10	THERMAL SWITCH
SL1.80.100.75.A.4.51D	96873377	3x380-415V D	10	THERMAL SWITCH
SL1.100.100.40.A.4.51D	96873380	3x380-415V D	10	THERMAL SWITCH
SL1.100.100.55.A.4.51D	96873381	3x380-415V D	10	THERMAL SWITCH
SL1.100.100.75.A.4.51D	96873382	3x380-415V D	10	THERMAL SWITCH
SL1.100.150.40.A.4.51D	96873383	3x380-415V D	10	THERMAL SWITCH
SL1.100.150.55.A.4.51D	96873384	3x380-415V D	10	THERMAL SWITCH
SL1.100.150.75.A.4.51D	96873385	3x380-415V D	10	THERMAL SWITCH

SL1 Sensor Australia

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SL1.50.65.22.A.2.50B	96891722	3x400-415V Y	15	THERMAL SWITCH
SL1.50.65.30.A.2.50B	96891723	3x400-415V Y	15	THERMAL SWITCH
SL1.50.65.40.A.2.50B	96891724	3x400-415V D	15	PTC
SL1.50.80.22.A.2.50B	96891725	3x400-415V Y	15	THERMAL SWITCH
SL1.50.80.30.A.2.50B	96891726	3x400-415V Y	15	THERMAL SWITCH
SL1.50.80.40.A.2.50B	96891727	3x400-415V D	15	PTC
SL1.80.80.15.A.4.50B	96872148	3x400-415V Y	15	THERMAL SWITCH
SL1.80.80.22.A.4.50B	96891695	3x400-415V Y	15	THERMAL SWITCH
SL1.80.80.30.A.4.50B	96891696	3x400-415V Y	15	THERMAL SWITCH
SL1.80.80.40.A.4.50B	96891697	3x400-415V D	15	PTC
SL1.80.80.55.A.4.50B	96891698	3x400-415V D	15	PTC
SL1.80.80.75.A.4.50B	96891699	3x400-415V D	15	PTC
SL1.80.100.15.A.4.50B	96873371	3x400-415V Y	15	THERMAL SWITCH
SL1.80.100.22.A.4.50B	96891690	3x400-415V Y	15	THERMAL SWITCH
SL1.80.100.30.A.4.50B	96891689	3x400-415V Y	15	THERMAL SWITCH
SL1.80.100.40.A.4.50B	96871958	3x400-415V D	15	PTC
SL1.80.100.55.A.4.50B	96871959	3x400-415V D	15	PTC
SL1.80.100.75.A.4.50B	96891686	3x400-415V D	15	PTC
SL1.100.100.40.A.4.50B	96891685	3x400-415V D	15	PTC
SL1.100.100.55.A.4.50B	96891684	3x400-415V D	15	PTC
SL1.100.100.75.A.4.50B	96891683	3x400-415V D	15	PTC
SL1.100.150.40.A.4.50B	96891670	3x400-415V D	15	PTC
SL1.100.150.55.A.4.50B	96891669	3x400-415V D	15	PTC
SL1.100.150.75.A.4.50B	96891668	3x400-415V D	15	PTC

SLV Sensor

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SLV.65.65.22.A.2.50D	96871926	3x380-415V Y	10	THERMAL SWITCH
SLV.65.65.30.A.2.50D	96872135	3x380-415V Y	10	THERMAL SWITCH
SLV.65.65.40.A.2.51D	96872137	3x380-415V D	10	THERMAL SWITCH
SLV.65.80.22.A.2.50D	96871930	3x380-415V Y	10	THERMAL SWITCH
SLV.65.80.30.A.2.50D	96871931	3x380-415V Y	10	THERMAL SWITCH
SLV.65.80.40.A.2.51D	96872152	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.11.A.4.50D	96837216	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.13.A.4.50D	96871962	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.15.A.4.50D	96871963	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.22.A.4.50D	96835682	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.22.A.4.51D	96872156	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.40.A.4.51D	96872159	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.40.A.2.51D	96872157	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.60.A.2.51D	96872160	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.75.A.2.51D	96872161	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.92.A.2.51D	96872162	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.110.A.2.51D	96872163	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.11.A.4.50D	96872165	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.13.A.4.50D	96890782	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.15.A.4.50D	96872168	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.22.A.4.50D	96872248	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.22.A.4.51D	96872249	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.40.A.4.51D	96872184	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.40.A.2.51D	96872171	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.75.A.2.51D	96872183	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.92.A.2.51D	96872185	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.110.A.2.51D	96890790	3x380-415V D	10	THERMAL SWITCH
SLV.100.100.30.A.4.50D	96871965	3x380-415V Y	10	THERMAL SWITCH
SLV.100.100.40.A.4.51D	96872187	3x380-415V D	10	THERMAL SWITCH
SLV.100.100.55.A.4.51D	96872188	3x380-415V D	10	THERMAL SWITCH
SLV.100.100.75.A.4.51D	96872189	3x380-415V D	10	THERMAL SWITCH

SLV Sensor Australia

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SLV.65.65.22.A.2.50B	96891440	3x400-415V Y	15	THERMAL SWITCH
SLV.65.65.30.A.2.50B	96891441	3x400-415V Y	15	THERMAL SWITCH
SLV.65.65.40.A.2.50B	96891443	3x400-415V D	15	PTC
SLV.65.80.22.A.2.50B	96891444	3x400-415V Y	15	THERMAL SWITCH
SLV.65.80.30.A.2.50B	96891445	3x400-415V Y	15	THERMAL SWITCH
SLV.65.80.40.A.2.50B	96891446	3x400-415V D	15	PTC
SLV.80.80.11.A.4.50B	96872153	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.13.A.4.50B	96872154	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.15.A.4.50B	96872155	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.22.A.4.50B	96891448	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.40.A.4.50B	96891451	3x400-415V D	15	PTC
SLV.80.80.40.A.2.50B	96891449	3x400-415V D	15	PTC
SLV.80.80.60.A.2.50B	96891452	3x400-415V D	15	PTC
SLV.80.80.75.A.2.50B	96891453	3x400-415V D	15	PTC
SLV.80.80.92.A.2.50B	96891454	3x400-415V D	15	PTC
SLV.80.80.110.A.2.50B	96891455	3x400-415V D	15	PTC
SLV.80.100.11.A.4.50B	96872166	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.13.A.4.50B	96891457	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.15.A.4.50B	96872170	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.22.A.4.50B	96891458	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.40.A.4.50B	96891461	3x400-415V D	15	PTC
SLV.80.100.40.A.2.50B	96891459	3x400-415V D	15	PTC
SLV.80.100.60.A.2.50B	96893974	3x400-415V D	15	PTC
SLV.80.100.75.A.2.50B	96891460	3x400-415V D	15	PTC
SLV.80.100.92.A.2.50B	96891462	3x400-415V D	15	PTC
SLV.80.100.110.A.2.50B	96891464	3x400-415V D	15	PTC
SLV.100.100.30.A.4.50B	96891465	3x400-415V Y	15	THERMAL SWITCH
SLV.100.100.40.A.4.50B	96891466	3x400-415V D	15	PTC
SLV.100.100.55.A.4.50B	96891467	3x400-415V D	15	PTC
SLV.100.100.75.A.4.50B	96891468	3x400-415V D	15	PTC

Explosion proof pumps

DP10 Ex

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
DP10.50.09.Ex.2.1.502	96104201	1x230 V D	10	THERMAL SWITCH
DP10.50.09.Ex.2.50B	96104205	3x400-415 V Y	10	THERMAL SWITCH
DP10.50.15.Ex.2.50B	96104209	3x400-415 V Y	10	THERMAL SWITCH
DP10.65.26.Ex.2.50B	96106543	3x400-415 V Y	10	THERMAL SWITCH

DP10 Ex Australia

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
DP10.50.09.Ex.2.1.502	96104203	1x230 V D	10	THERMAL SWITCH
DP10.50.09.Ex.2.50B	96104207	3x400-415 V Y	10	THERMAL SWITCH
DP10.50.15.Ex.2.50B	96104211	3x400-415 V Y	10	THERMAL SWITCH
DP10.65.Ex.26.2.50B	96106545	3x400-415 V Y	10	THERMAL SWITCH

EF30 Ex

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
EF30.50.06.Ex.2.1.502	96106547	1x230 V D	10	THERMAL SWITCH
EF30.50.06.Ex.2.50B	96106551	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.09.Ex.2.1.502	96115112	1x230 V D	10	THERMAL SWITCH
EF30.50.09.Ex.2.50B	96115116	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.11.Ex.2.1.502	96106555	1x230 V D	10	THERMAL SWITCH
EF30.50.11.Ex.2.50B	96106559	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.15.Ex.2.50B	96104197	3x400-415 V Y	10	THERMAL SWITCH

EF30 Ex Australia

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
EF30.50.Ex.06.2.1.502	96106549	1x230 V D	10	THERMAL SWITCH
EF30.50.Ex.06.2.50B	96106553	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.Ex.09.2.1.502	96115114	1x230 V D	10	THERMAL SWITCH
EF30.50.Ex.09.2.50B	96115118	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.Ex.11.2.1.502	96106557	1x230 V D	10	THERMAL SWITCH
EF30.50.Ex.11.2.50B	96106561	3x400-415 V Y	10	THERMAL SWITCH
EF30.50.Ex.15.2.50B	96104199	3x400-415 V Y	10	THERMAL SWITCH

SL1 Ex.

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SL1.50.65.09.Ex.2.1.502	96106563	1x230 V D	10	THERMAL SWITCH
SL1.50.65.09.Ex.2.50C	96106569	3x230-240 V D	10	THERMAL SWITCH
SL1.50.65.09.Ex.2.50B	96106568	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.11.Ex.2.1.502	96104126	1x230 V D	10	THERMAL SWITCH
SL1.50.65.11.Ex.2.50C	96104132	3x230-240 V D	10	THERMAL SWITCH
SL1.50.65.11.Ex.2.50B	96104131	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.15.Ex.2.50C	96104121	3x230-240 V D	10	THERMAL SWITCH
SL1.50.65.15.Ex.2.50B	96104120	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.22.Ex.2.50D	96871960	3x380-415V Y	10	THERMAL SWITCH
SL1.50.65.30.Ex.2.50D	96857882	3x380-415V Y	10	THERMAL SWITCH
SL1.50.65.40.Ex.2.51D	96872035	3x380-415V D	10	THERMAL SWITCH
SL1.50.80.22.Ex.2.50D	96872038	3x380-415V Y	10	THERMAL SWITCH
SL1.50.80.30.Ex.2.50D	96872064	3x380-415V Y	10	THERMAL SWITCH
SL1.50.80.40.Ex.2.51D	96872103	3x380-415V D	10	THERMAL SWITCH
SL1.80.80.15.Ex.4.50D	96872144	3x380-415V Y	10	THERMAL SWITCH
SL1.80.80.22.Ex.4.50D	96837227	3x380-415V Y	10	THERMAL SWITCH
SL1.80.80.30.Ex.4.50D	96872180	3x380-415V Y	10	THERMAL SWITCH
SL1.80.80.40.Ex.4.51D	96872219	3x380-415V D	10	THERMAL SWITCH
SL1.80.80.55.Ex.4.51D	96872252	3x380-415V D	10	THERMAL SWITCH
SL1.80.80.75.Ex.4.51D	96873388	3x380-415V D	10	THERMAL SWITCH
SL1.80.100.15.Ex.4.50D	96873389	3x380-415V Y	10	THERMAL SWITCH
SL1.80.100.22.Ex.4.50D	96857919	3x380-415V Y	10	THERMAL SWITCH
SL1.80.100.30.Ex.4.50D	96837214	3x380-415V Y	10	THERMAL SWITCH
SL1.80.100.40.Ex.4.51D	96873414	3x380-415V D	10	THERMAL SWITCH
SL1.80.100.55.Ex.4.51D	96873416	3x380-415V D	10	THERMAL SWITCH
SL1.80.100.75.Ex.4.51D	96873417	3x380-415V D	10	THERMAL SWITCH
SL1.100.100.40.Ex.4.51D	96873420	3x380-415V D	10	THERMAL SWITCH
SL1.100.100.55.Ex.4.51D	96873422	3x380-415V D	10	THERMAL SWITCH
SL1.100.100.75.Ex.4.51D	96873423	3x380-415V D	10	THERMAL SWITCH
SL1.100.150.40.Ex.4.51D	96873424	3x380-415V D	10	THERMAL SWITCH
SL1.100.150.55.Ex.4.51D	96873425	3x380-415V D	10	THERMAL SWITCH
SL1.100.150.75.Ex.4.51D	96873426	3x380-415V D	10	THERMAL SWITCH

SL1 Ex. Australia

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SL1.50.65.09.Ex.2.1.502	96106565	1x230 V D	10	THERMAL SWITCH
SL1.50.65.09.Ex.2.50B	96106572	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.11.Ex.2.1.502	96104128	1x230 V D	10	THERMAL SWITCH
SL1.50.65.11.Ex.2.50B	96104135	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.15.Ex.2.50B	96104124	3x400-415 V Y	10	THERMAL SWITCH
SL1.50.65.22.Ex.2.50B	96891716	3x400-415V Y	15	THERMAL SWITCH
SL1.50.65.30.Ex.2.50B	96891717	3x400-415V Y	15	THERMAL SWITCH
SL1.50.65.40.Ex.2.50B	96891718	3x400-415V D	15	PTC
SL1.50.80.22.Ex.2.50B	96891719	3x400-415V Y	15	THERMAL SWITCH
SL1.50.80.30.Ex.2.50B	96891720	3x400-415V Y	15	THERMAL SWITCH
SL1.50.80.40.Ex.2.50B	96891721	3x400-415V D	15	PTC
SL1.80.80.15.Ex.4.50B	96872149	3x400-415V Y	15	THERMAL SWITCH
SL1.80.80.22.Ex.4.50B	96891704	3x400-415V Y	15	THERMAL SWITCH
SL1.80.80.30.Ex.4.50B	96891703	3x400-415V Y	15	THERMAL SWITCH
SL1.80.80.40.Ex.4.50B	96891702	3x400-415V D	15	PTC
SL1.80.80.55.Ex.4.50B	96891701	3x400-415V D	15	PTC
SL1.80.80.75.Ex.4.50B	96891700	3x400-415V D	15	PTC
SL1.80.100.15.Ex.4.50B	96873390	3x400-415V Y	15	THERMAL SWITCH
SL1.80.100.22.Ex.4.50B	96891692	3x400-415V Y	15	THERMAL SWITCH
SL1.80.100.30.Ex.4.50B	96891691	3x400-415V Y	15	THERMAL SWITCH
SL1.80.100.40.Ex.4.50B	96873413	3x400-415V D	15	PTC
SL1.80.100.55.Ex.4.50B	96873415	3x400-415V D	15	PTC
SL1.80.100.75.Ex.4.50B	96891687	3x400-415V D	15	PTC
SL1.100.100.40.Ex.4.50B	96891682	3x400-415V D	15	PTC
SL1.100.100.55.Ex.4.50B	96891681	3x400-415V D	15	PTC
SL1.100.100.75.Ex.4.50B	96891680	3x400-415V D	15	PTC
SL1.100.150.40.Ex.4.50B	96891673	3x400-415V D	15	PTC
SL1.100.150.55.Ex.4.50B	96891672	3x400-415V D	15	PTC
SL1.100.150.75.Ex.4.50B	96891671	3x400-415V D	15	PTC

SLV Ex.

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SLV65.65.09.Ex.2.1.502	96115120	1x230 V D	10	THERMAL SWITCH
SLV65.65.09.Ex.2.50B	96115124	3x400-415 V Y	10	THERMAL SWITCH
SLV65.65.11.Ex.2.1.502	96106574	1x230 V D	10	THERMAL SWITCH
SLV65.65.11.Ex.2.50B	96106578	3x400-415 V Y	10	THERMAL SWITCH
SLV.65.65.15.Ex.2.50B	96104193	3x400-415 V Y	10	THERMAL SWITCH
SLV.65.65.22.Ex.2.50D	96872031	3x380-415V Y	10	THERMAL SWITCH
SLV.65.65.30.Ex.2.50D	96872045	3x380-415V Y	10	THERMAL SWITCH
SLV.65.65.40.Ex.2.51D	96872050	3x380-415V D	10	THERMAL SWITCH
SLV.65.80.22.Ex.2.50D	96872051	3x380-415V Y	10	THERMAL SWITCH
SLV.65.80.30.Ex.2.50D	96872056	3x380-415V Y	10	THERMAL SWITCH
SLV.65.80.40.Ex.2.51D	96872059	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.11.Ex.4.50D	96857918	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.13.Ex.4.50D	96872072	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.15.Ex.4.50D	96872074	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.22.Ex.4.50D	96835683	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.22.Ex.4.51D	96872077	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.40.Ex.4.51D	96872080	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.40.Ex.2.51D	96872079	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.60.Ex.2.51D	96872081	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.75.Ex.2.51D	96872082	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.92.Ex.2.51D	96872084	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.110.Ex.2.51D	96872085	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.11.Ex.4.50D	96872087	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.13.Ex.4.50D	96890783	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.15.Ex.4.50D	96872089	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.22.Ex.4.50D	96872247	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.22.Ex.4.51D	96872246	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.40.Ex.4.51D	96872093	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.40.Ex.2.51D	96872091	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.60.Ex.2.51D	96893448	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.75.Ex.2.51D	96872092	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.92.Ex.2.51D	96872094	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.110.Ex.2.51D	96890791	3x380-415V D	10	THERMAL SWITCH
SLV.100.100.30.Ex.4.50D	96872095	3x380-415V Y	10	THERMAL SWITCH
SLV.100.100.40.Ex.4.51D	96872097	3x380-415V D	10	THERMAL SWITCH
SLV.100.100.55.Ex.4.51D	96872098	3x380-415V D	10	THERMAL SWITCH
SLV.100.100.75.Ex.4.51D	96872099	3x380-415V D	10	THERMAL SWITCH

SLV Ex. Australia

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SLV65.65.Ex.09.2.1.502	96115122	1x230 V D	10	THERMAL SWITCH
SLV65.65.Ex.09.2.50B	96115126	3x400-415 V Y	10	THERMAL SWITCH
SLV65.65.Ex.11.2.1.502	96106576	1x230 V D	10	THERMAL SWITCH
SLV65.65.Ex.11.2.50B	96106580	3x400-415 V Y	10	THERMAL SWITCH
SLV65.65.Ex.15.2.50B	96104195	3x400-415 V Y	10	THERMAL SWITCH
SLV.65.65.22.Ex.2.50B	96891469	3x400-415V Y	15	THERMAL SWITCH
SLV.65.65.30.Ex.2.50B	96891470	3x400-415V Y	15	THERMAL SWITCH
SLV.65.65.40.Ex.2.50B	96891471	3x400-415V D	15	PTC
SLV.65.80.22.Ex.2.50B	96891472	3x400-415V Y	15	THERMAL SWITCH
SLV.65.80.30.Ex.2.50B	96891473	3x400-415V Y	15	THERMAL SWITCH
SLV.65.80.40.Ex.2.50B	96891474	3x400-415V D	15	PTC
SLV.80.80.11.Ex.4.50B	96872061	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.13.Ex.4.50B	96872073	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.15.Ex.4.50B	96872075	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.22.Ex.4.50B	96891475	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.40.Ex.4.50B	96891479	3x400-415V D	15	PTC
SLV.80.80.40.Ex.2.50B	96891478	3x400-415V D	15	PTC
SLV.80.80.60.Ex.2.50B	96891480	3x400-415V D	15	PTC
SLV.80.80.75.Ex.2.50B	96891481	3x400-415V D	15	PTC
SLV.80.80.92.Ex.2.50B	96891492	3x400-415V D	15	PTC
SLV.80.80.110.Ex.2.50B	96891493	3x400-415V D	15	PTC
SLV.80.100.11.Ex.4.50B	96872088	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.13.Ex.4.50	96891494	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.15.Ex.4.50B	96872090	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.22.Ex.4.50B	96891495	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.40.Ex.4.50B	96891498	3x400-415V D	15	PTC
SLV.80.100.40.Ex.2.50B	96891496	3x400-415V D	15	PTC
SLV.80.100.60.Ex.2.50B	96893975	3x400-415V D	15	PTC
SLV.80.100.75.Ex.2.50B	96891497	3x400-415V D	15	PTC
SLV.80.100.92.Ex.2.50B	96891499	3x400-415V D	15	PTC
SLV.80.100.110.Ex.2.50B	96891500	3x400-415V D	15	PTC
SLV.100.100.30.Ex.4.50B	96891501	3x400-415V Y	15	THERMAL SWITCH
SLV.100.100.40.Ex.4.50B	96891502	3x400-415V D	15	PTC
SLV.100.100.55.Ex.4.50B	96891503	3x400-415V D	15	PTC
SLV.100.100.75.Ex.4.50B	96891504	3x400-415V D	15	PTC

Explosion-proof pumps with sensors

SL1 Ex. Sensor

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SL1.50.65.22.A.Ex.2.50D	96871985	3x380-415V Y	10	THERMAL SWITCH
SL1.50.65.30.A.Ex.2.50D	96872014	3x380-415V Y	10	THERMAL SWITCH
SL1.50.65.40.A.Ex.2.51D	96872036	3x380-415V D	10	THERMAL SWITCH
SL1.50.80.22.A.Ex.2.50D	96872039	3x380-415V Y	10	THERMAL SWITCH
SL1.50.80.30.A.Ex.2.50D	96872065	3x380-415V Y	10	THERMAL SWITCH
SL1.50.80.40.A.Ex.2.51D	96872105	3x380-415V D	10	THERMAL SWITCH
SL1.80.80.15.A.Ex.4.50D	96872145	3x380-415V Y	10	THERMAL SWITCH
SL1.80.80.22.A.Ex.4.50D	96872223	3x380-415V Y	10	THERMAL SWITCH
SL1.80.80.30.A.Ex.4.50D	96872212	3x380-415V Y	10	THERMAL SWITCH
SL1.80.80.40.A.Ex.4.51D	96872220	3x380-415V D	10	THERMAL SWITCH
SL1.80.80.55.A.Ex.4.51D	96872253	3x380-415V D	10	THERMAL SWITCH
SL1.80.80.75.A.Ex.4.51D	96873427	3x380-415V D	10	THERMAL SWITCH
SL1.80.100.15.A.Ex.4.50D	96873428	3x380-415V Y	10	THERMAL SWITCH
SL1.80.100.22.A.Ex.4.50D	96873430	3x380-415V Y	10	THERMAL SWITCH
SL1.80.100.30.A.Ex.4.50D	96873432	3x380-415V Y	10	THERMAL SWITCH
SL1.80.100.40.A.Ex.4.51D	96873435	3x380-415V D	10	THERMAL SWITCH
SL1.80.100.55.A.Ex.4.51D	96873438	3x380-415V D	10	THERMAL SWITCH
SL1.80.100.75.A.Ex.4.51D	96873439	3x380-415V D	10	THERMAL SWITCH
SL1.100.100.40.A.Ex.4.51D	96873441	3x380-415V D	10	THERMAL SWITCH
SL1.100.100.55.A.Ex.4.51D	96873452	3x380-415V D	10	THERMAL SWITCH
SL1.100.100.75.A.Ex.4.51D	96873453	3x380-415V D	10	THERMAL SWITCH
SL1.100.150.40.A.Ex.4.51D	96873454	3x380-415V D	10	THERMAL SWITCH
SL1.100.150.55.A.Ex.4.51D	96873455	3x380-415V D	10	THERMAL SWITCH
SL1.100.150.75.A.Ex.4.51D	96873456	3x380-415V D	10	THERMAL SWITCH

SL1 Ex. Sensor Australia

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SL1.50.65.22.A.Ex.2.50B	96891710	3x400-415V Y	15	THERMAL SWITCH
SL1.50.65.30.A.Ex.2.50B	96891711	3x400-415V Y	15	THERMAL SWITCH
SL1.50.65.40.A.Ex.2.50B	96891712	3x400-415V D	15	PTC
SL1.50.80.22.A.Ex.2.50B	96891713	3x400-415V Y	15	THERMAL SWITCH
SL1.50.80.30.A.Ex.2.50B	96891714	3x400-415V Y	15	THERMAL SWITCH
SL1.50.80.40.A.Ex.2.50B	96891715	3x400-415V D	15	PTC
SL1.80.80.15.A.Ex.4.50B	96872150	3x400-415V Y	15	THERMAL SWITCH
SL1.80.80.22.A.Ex.4.50B	96891705	3x400-415V Y	15	THERMAL SWITCH
SL1.80.80.30.A.Ex.4.50B	96891706	3x400-415V Y	15	THERMAL SWITCH
SL1.80.80.40.A.Ex.4.50B	96891707	3x400-415V D	15	PTC
SL1.80.80.55.A.Ex.4.50B	96891708	3x400-415V D	15	PTC
SL1.80.80.75.A.Ex.4.50B	96891709	3x400-415V D	15	PTC
SL1.80.100.15.A.Ex.4.50B	96873429	3x400-415V Y	15	THERMAL SWITCH
SL1.80.100.22.A.Ex.4.50B	96891694	3x400-415V Y	15	THERMAL SWITCH
SL1.80.100.30.A.Ex.4.50B	96891693	3x400-415V Y	15	THERMAL SWITCH
SL1.80.100.40.A.Ex.4.50B	96873434	3x400-415V D	15	PTC
SL1.80.100.55.A.Ex.4.50B	96873437	3x400-415V D	15	PTC
SL1.80.100.75.A.Ex.4.50B	96891688	3x400-415V D	15	PTC
SL1.100.100.40.A.Ex.4.50B	96891679	3x400-415V D	15	PTC
SL1.100.100.55.A.Ex.4.50B	96891678	3x400-415V D	15	PTC
SL1.100.100.75.A.Ex.4.50B	96891677	3x400-415V D	15	PTC
SL1.100.150.40.A.Ex.4.50B	96891676	3x400-415V D	15	PTC
SL1.100.150.55.A.Ex.4.50B	96891675	3x400-415V D	15	PTC
SL1.100.150.75.A.Ex.4.50B	96891674	3x400-415V D	15	PTC

SLV Ex. Sensor

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SLV.65.65.22.A.Ex.2.50D	96872190	3x380-415V Y	10	THERMAL SWITCH
SLV.65.65.30.A.Ex.2.50D	96872192	3x380-415V Y	10	THERMAL SWITCH
SLV.65.65.40.A.Ex.2.51D	96872194	3x380-415V D	10	THERMAL SWITCH
SLV.65.80.22.A.Ex.2.50D	96872195	3x380-415V Y	10	THERMAL SWITCH
SLV.65.80.30.A.Ex.2.50D	96872199	3x380-415V Y	10	THERMAL SWITCH
SLV.65.80.40.A.Ex.2.51D	96872202	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.11.A.Ex.4.50D	96837199	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.13.A.Ex.4.50D	96872204	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.15.A.Ex.4.50D	96872206	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.22.A.Ex.4.50D	96826096	3x380-415V Y	10	THERMAL SWITCH
SLV.80.80.40.A.Ex.4.51D	96872211	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.40.A.Ex.2.51D	96872209	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.60.A.Ex.2.51D	96872222	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.75.A.Ex.2.51D	96872223	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.92.A.Ex.2.51D	96872224	3x380-415V D	10	THERMAL SWITCH
SLV.80.80.110.A.Ex.2.51D	96872225	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.11.A.Ex.4.50D	96872226	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.15.A.Ex.4.50D	96872228	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.22.A.Ex.4.50D	96872250	3x380-415V Y	10	THERMAL SWITCH
SLV.80.100.22.A.Ex.4.51D	96872251	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.40.A.Ex.4.51D	96872232	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.40.A.Ex.2.51D	96872230	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.75.A.Ex.2.51D	96872231	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.92.A.Ex.2.51D	96872235	3x380-415V D	10	THERMAL SWITCH
SLV.80.100.110.A.Ex.2.51D	96890792	3x380-415V D	10	THERMAL SWITCH
SLV.100.100.30.A.Ex.4.50D	96872237	3x380-415V Y	10	THERMAL SWITCH
SLV.100.100.40.A.Ex.4.51D	96872240	3x380-415V D	10	THERMAL SWITCH
SLV.100.100.55.A.Ex.4.51D	96872241	3x380-415V D	10	THERMAL SWITCH
SLV.100.100.75.A.Ex.4.51D	96872242	3x380-415V D	10	THERMAL SWITCH

SLV Ex. Sensor Australia

Pump type	Product number	Voltage [V]	Cable length [m]	Thermal protection
SLV.65.65.22.A.Ex.2.50B	96891505	3x400-415V Y	15	THERMAL SWITCH
SLV.65.65.30.A.Ex.2.50B	96891506	3x400-415V Y	15	THERMAL SWITCH
SLV.65.65.40.A.Ex.2.50B	96891507	3x400-415V D	15	PTC
SLV.65.80.22.A.Ex.2.50B	96891508	3x400-415V Y	15	THERMAL SWITCH
SLV.65.80.30.A.Ex.2.50B	96891509	3x400-415V Y	15	THERMAL SWITCH
SLV.65.80.40.A.Ex.2.50B	96891511	3x400-415V D	15	PTC
SLV.80.80.11.A.Ex.4.50B	96872203	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.13.A..Ex.4.50B	96872205	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.15.A.Ex.4.50B	96872207	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.22.A.Ex.4.50B	96891512	3x400-415V Y	15	THERMAL SWITCH
SLV.80.80.40.A.Ex.4.50B	96891514	3x400-415V D	15	PTC
SLV.80.80.40.A.Ex.2.50B	96891513	3x400-415V D	15	PTC
SLV.80.80.60.A.Ex.2.50B	96891515	3x400-415V D	15	PTC
SLV.80.80.75.A.Ex.2.50B	96891516	3x400-415V D	15	PTC
SLV.80.80.92.A.Ex.2.50B	96891517	3x400-415V D	15	PTC
SLV.80.80.110.A.Ex.2.50B	96891519	3x400-415V D	15	PTC
SLV.80.100.11.A.Ex.4.50B	96872227	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.13.A.Ex.4.50B	96891520	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.15.A.Ex.4.50B	96872229	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.22.A.Ex.4.50B	96891521	3x400-415V Y	15	THERMAL SWITCH
SLV.80.100.40.A.Ex.4.50B	96891524	3x400-415V D	15	PTC
SLV.80.100.40.A.Ex.2.50B	96891522	3x400-415V D	15	PTC
SLV.80.100.75.A.Ex.2.50B	96891523	3x400-415V D	15	PTC
SLV.80.100.92.A.Ex.2.50B	96891598	3x400-415V D	15	PTC
SLV.80.100.110.Ex.A.2.50B	96891599	3x400-415V D	15	PTC
SLV.100.100.30.A.Ex.4.50B	96891600	3x400-415V Y	15	THERMAL SWITCH
SLV.100.100.40.A.Ex.4.50B	96891601	3x400-415V D	15	PTC
SLV.100.100.55.A.Ex.4.50B	96891642	3x400-415V D	15	PTC
SLV.100.100.75.A.Ex.4.50B	96891643	3x400-415V D	15	PTC

List of variants

Motor		
Various cable lengths		15 m
		25 m
		50 m
		10 m
EMC power cables	Screened power cables for variable-speed drives	15 m
		25 m
		50 m
Special motor		Insulation class H
		Special voltage
Special oil	Non-toxic Shell Ondina 917	
Tests		
Test at specified duty on standard impeller curve		
Trimmed impeller for specified duty test		
Additional test of entire QH curve (including report)	5-10 flows from pump performance curve	
Different test standard	Efficiency guaranteed by Grundfos	ISO 9906 grade 1 tolerances
		ISO 9906 grade 2 tolerances
Vibration test (including report)	According to Grundfos factory quality standard	
NPSHr test	Not yet available	
String test	Contact Grundfos	
Witness test	Contact Grundfos	
Miscellaneous		
Special packaging	Contact Grundfos	
Special nameplate	Contact Grundfos	
Other variants	Contact Grundfos	

Drawings, DP10

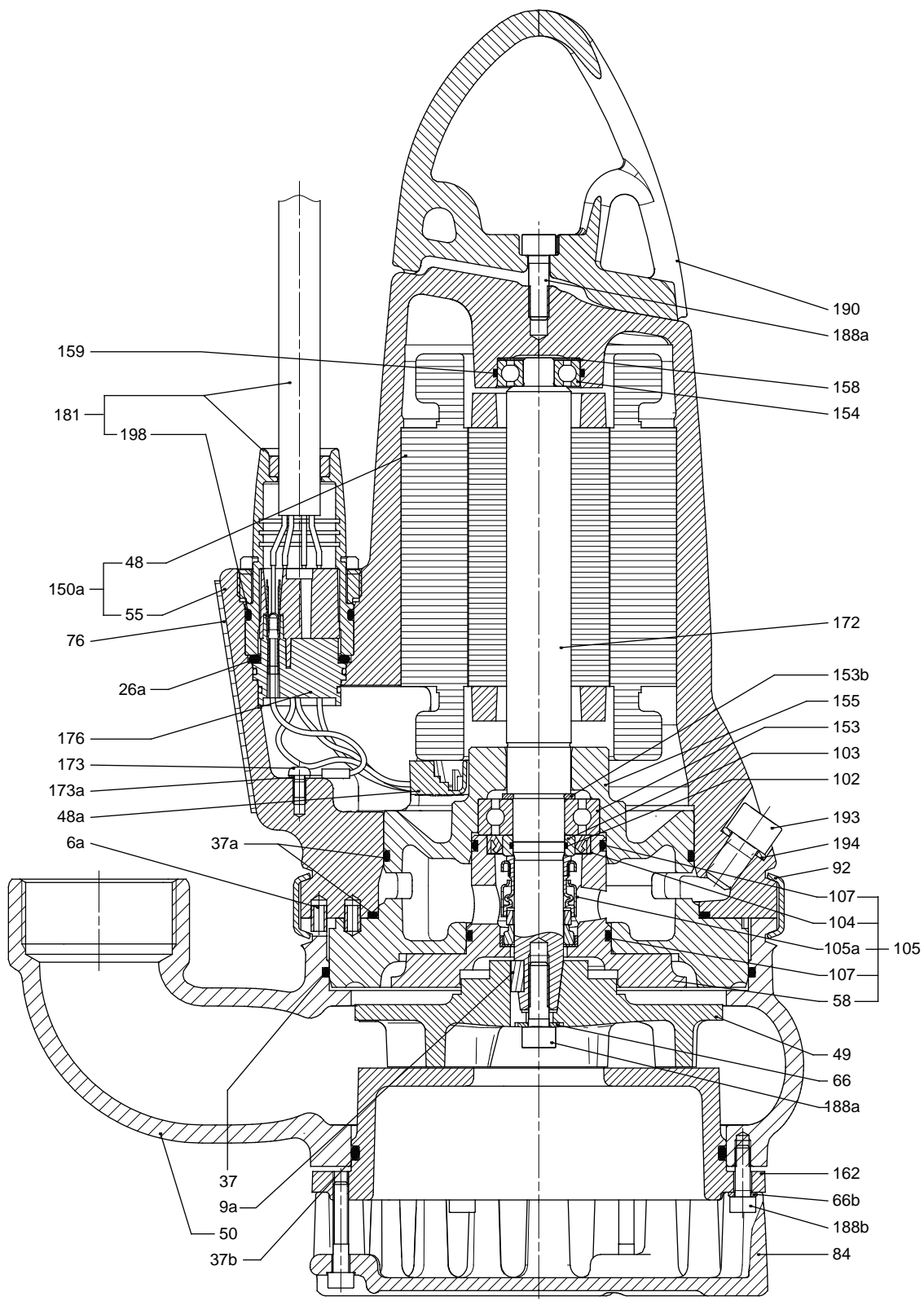


Fig. 4 Sectional drawing, DP10.50.09/15

TM02 7230 0904

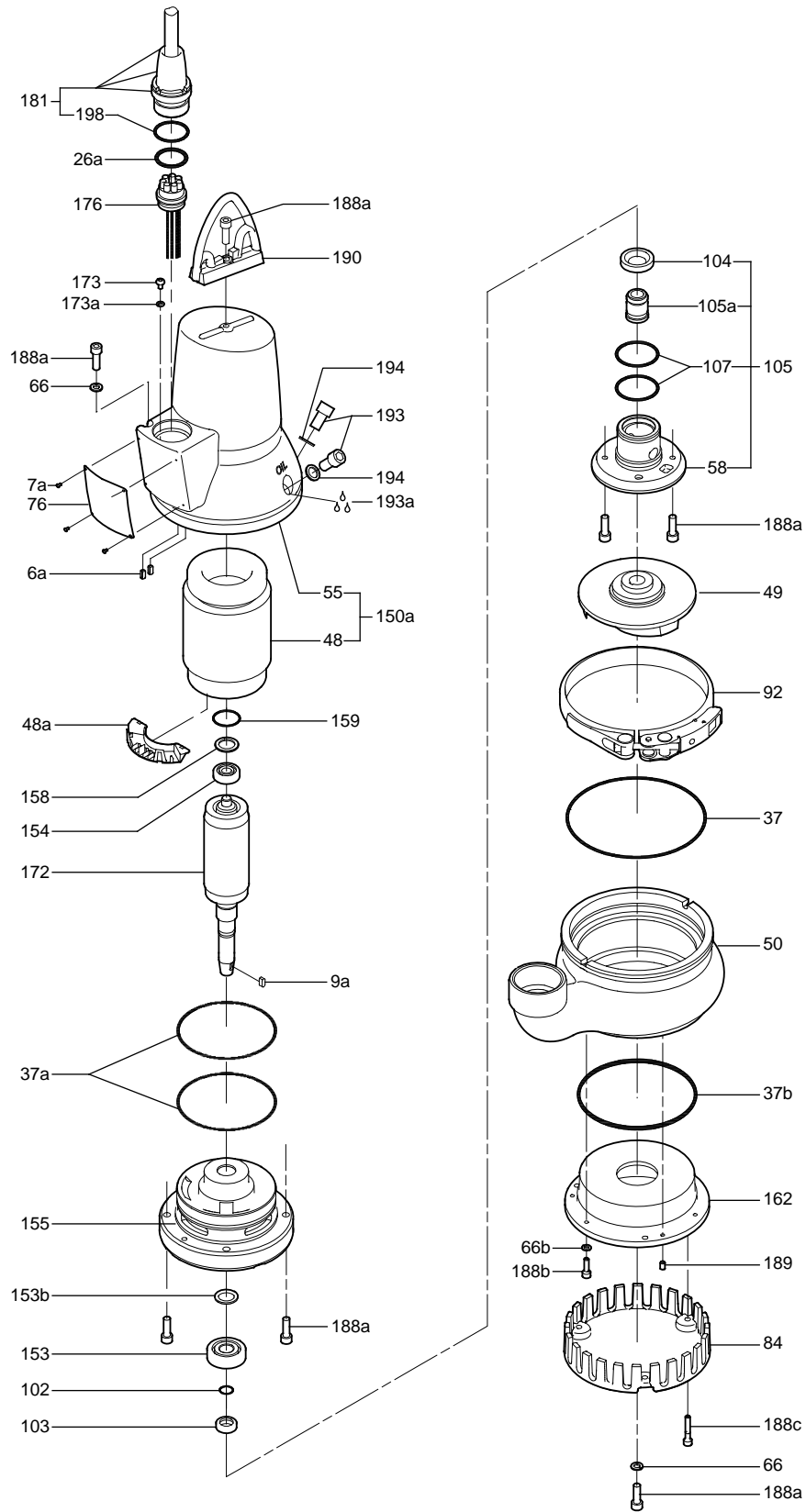


Fig. 5 Exploded drawing, DP10.50.09/15

TM02 7229 0904

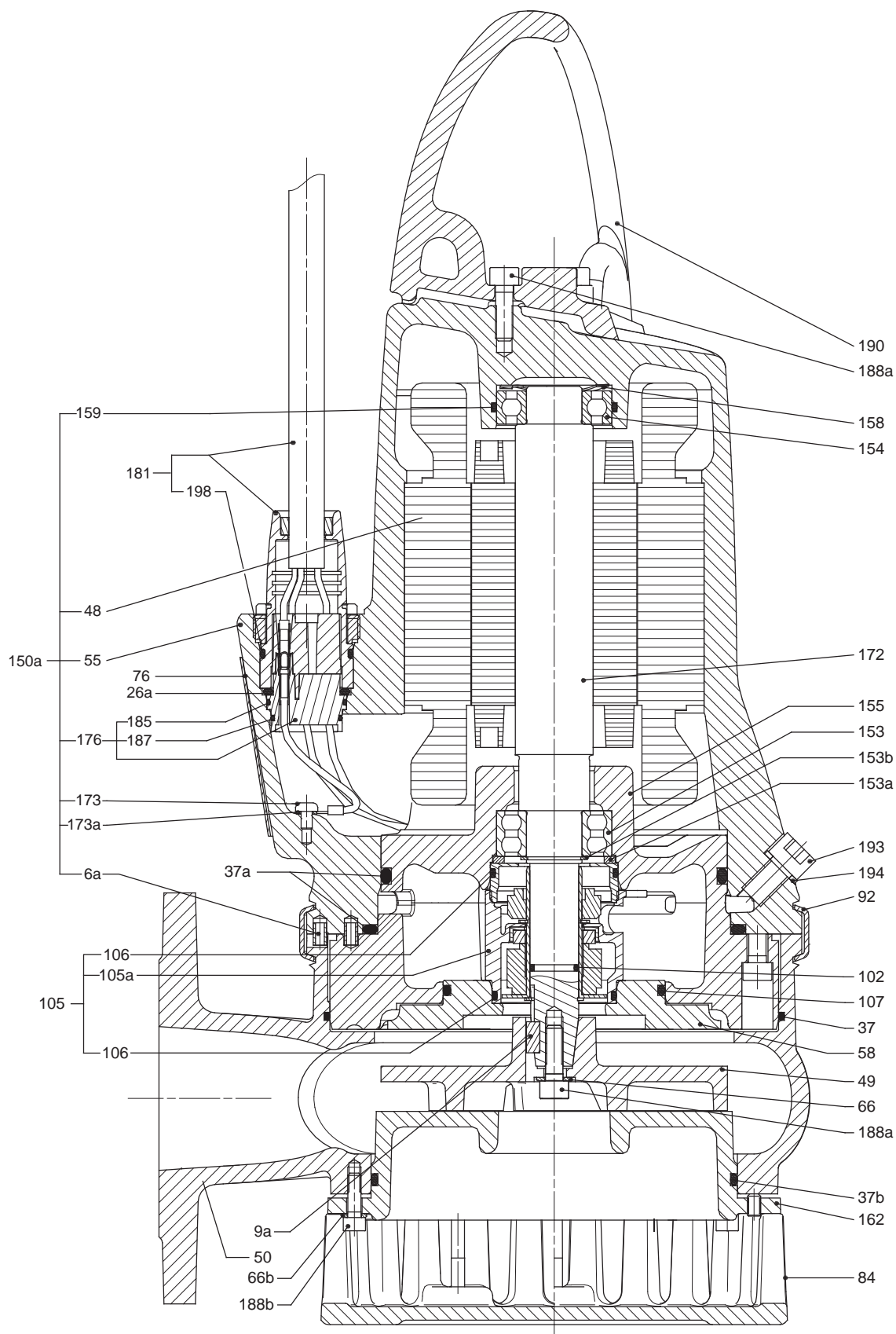


Fig. 6 Sectional drawing, DP10.65.26

TM02 7233 0904

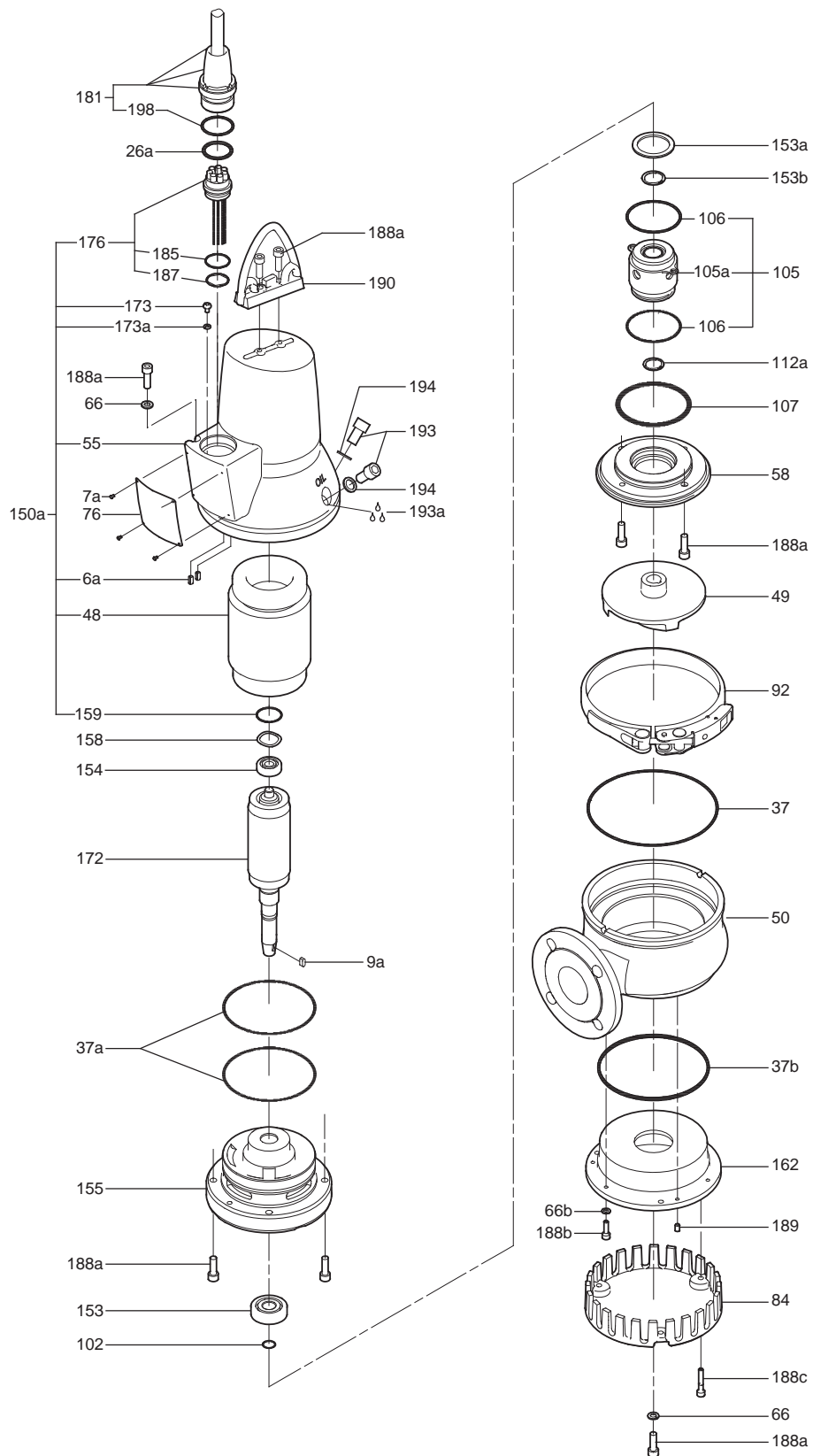


Fig. 7 Exploded view, DP10.65.26

TM02 7232 0904

Drawings, EF

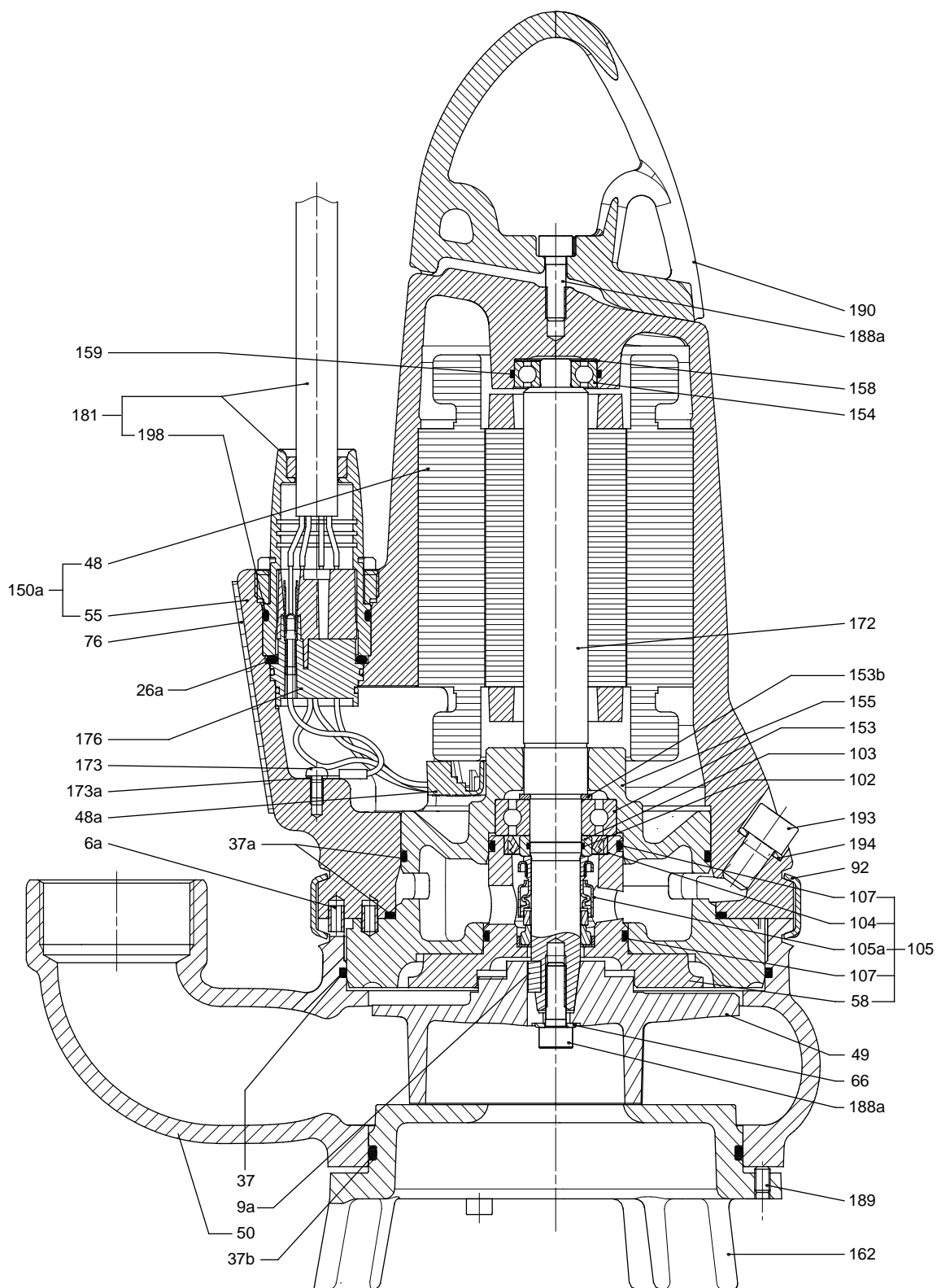
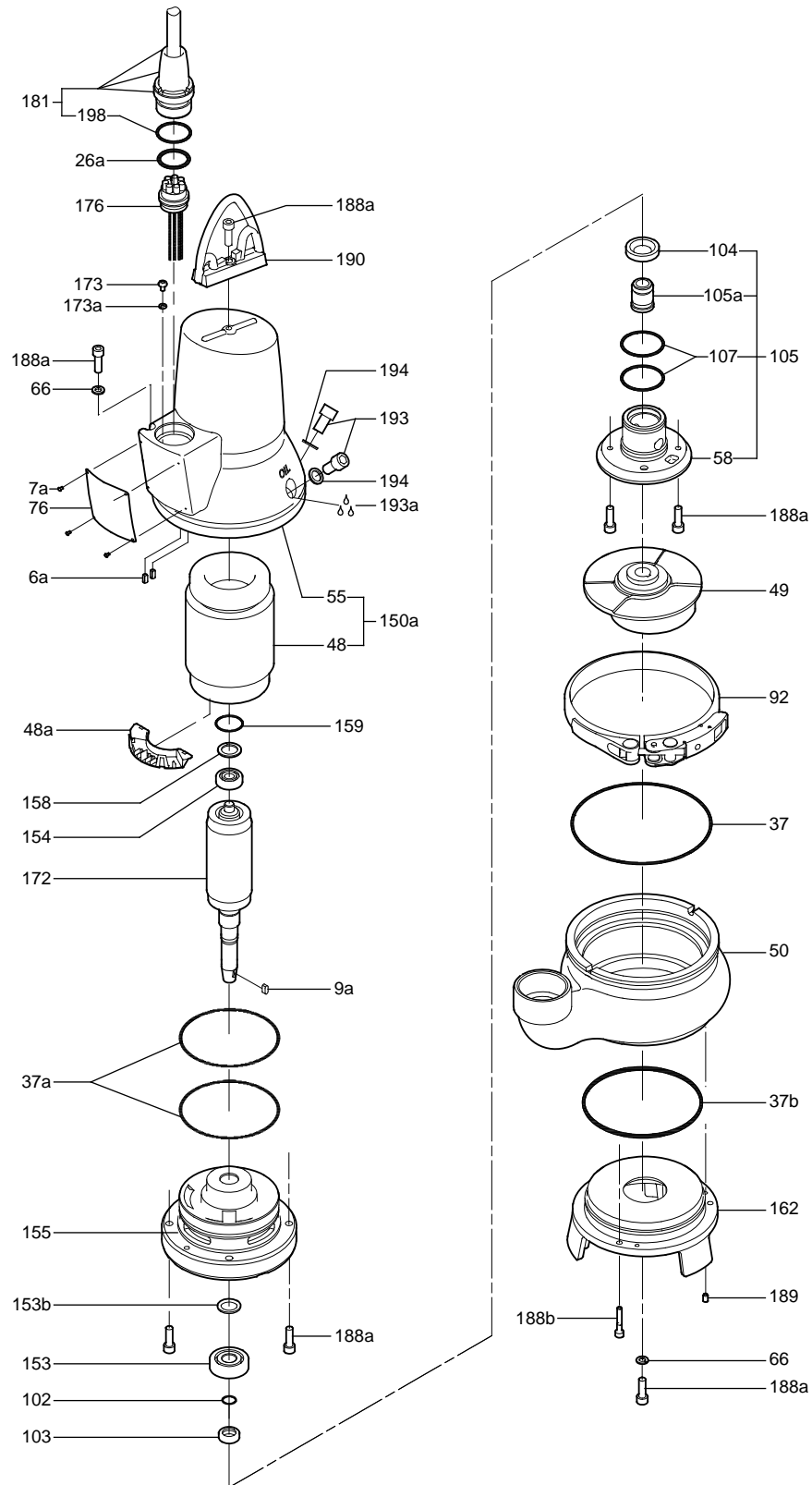


Fig. 8 Sectional drawing, EF

TM02 7359 0904



TM02 7362 0904

Fig. 9 Exploded drawing, EF

SL1

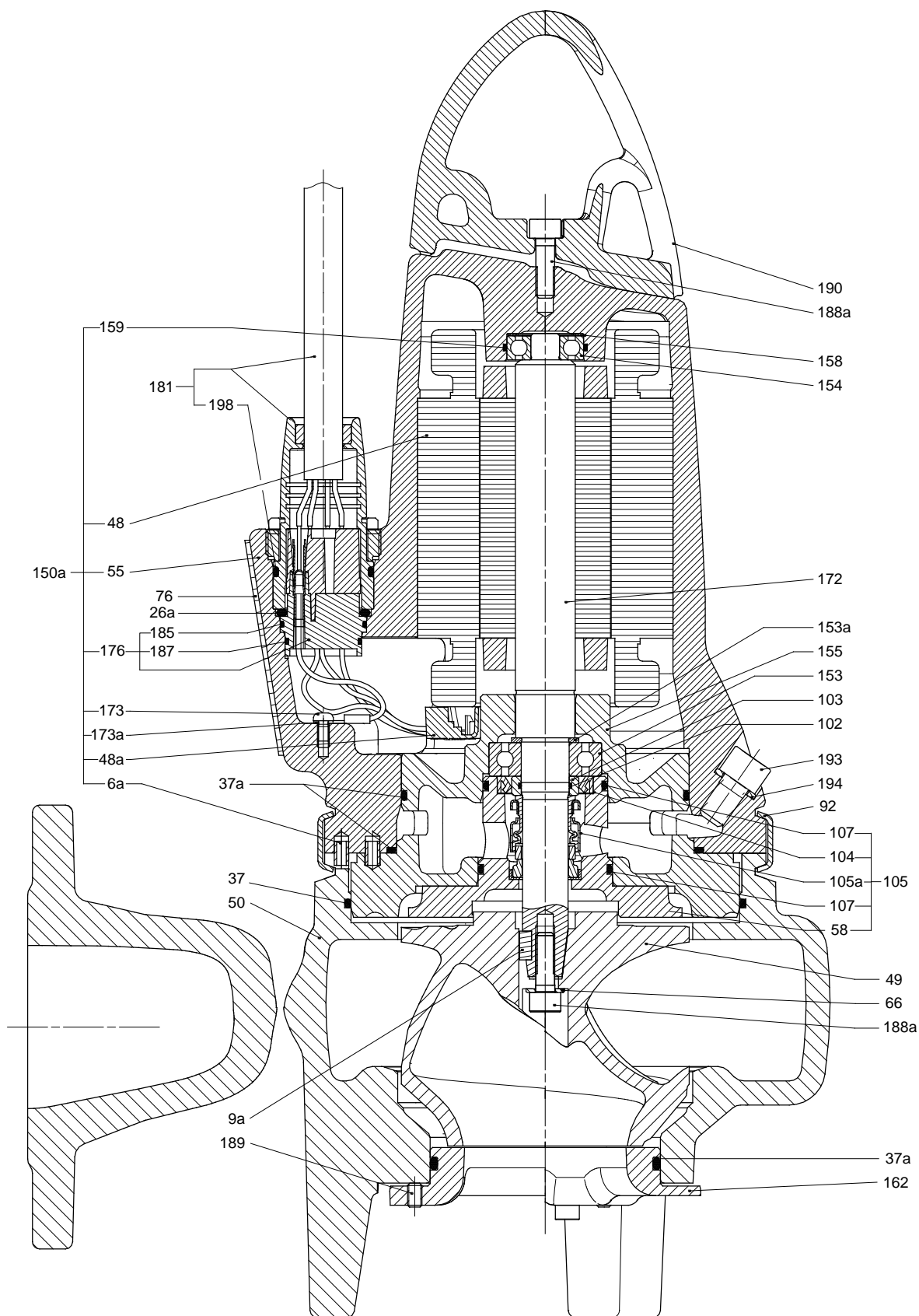


Fig. 10 Sectional drawing, SL1.50.65.09/11/15

TM02 7360 0904

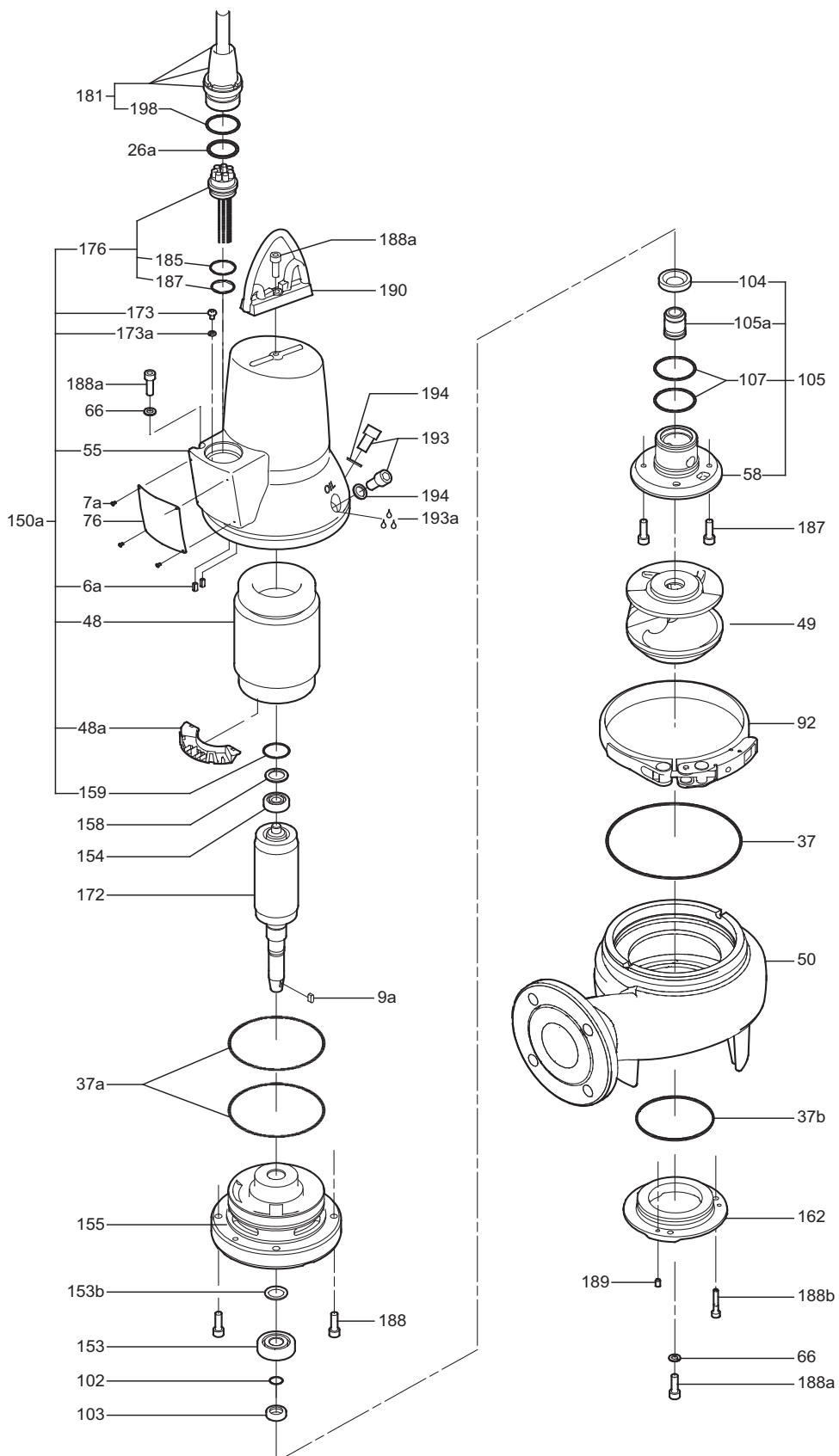
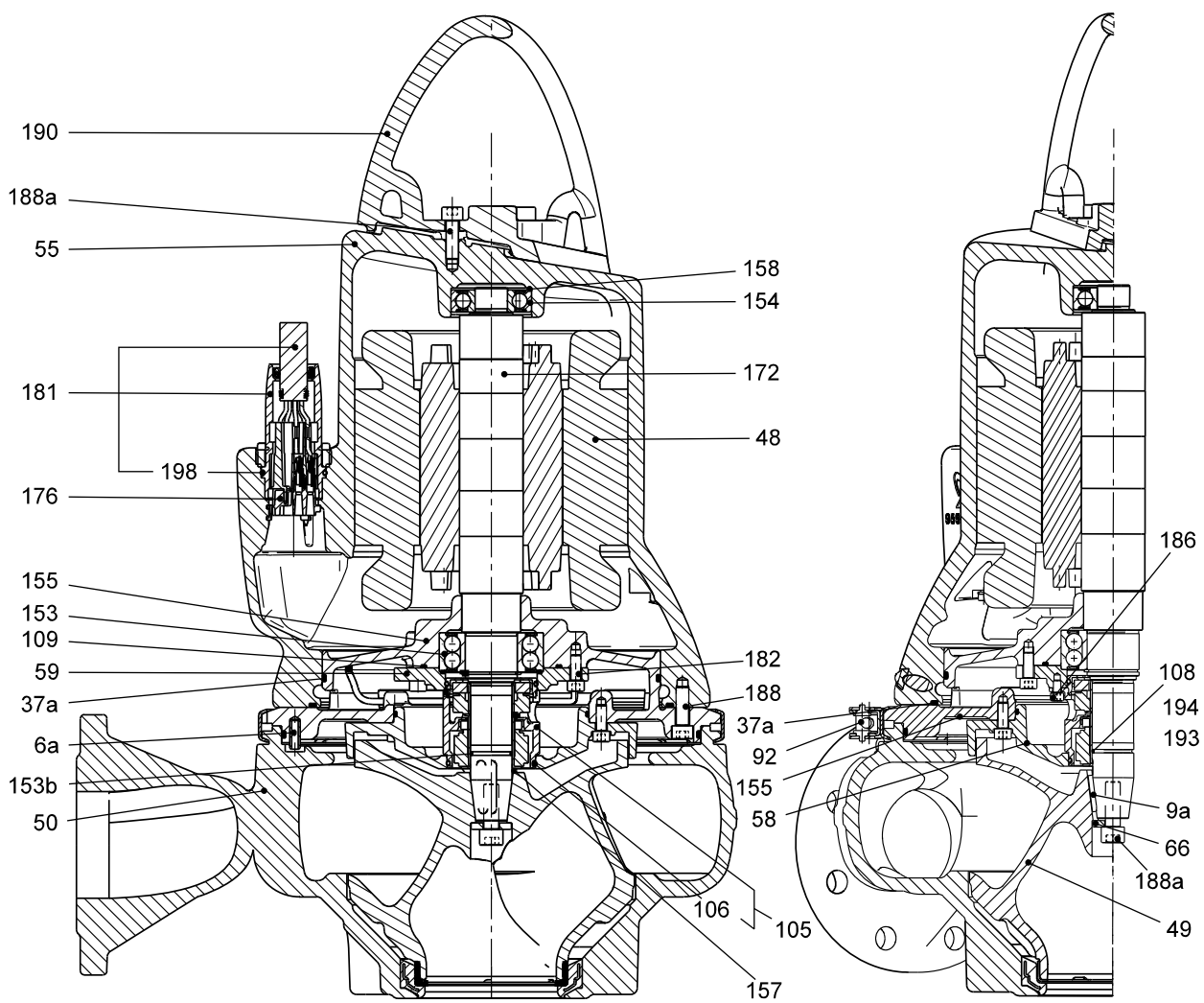


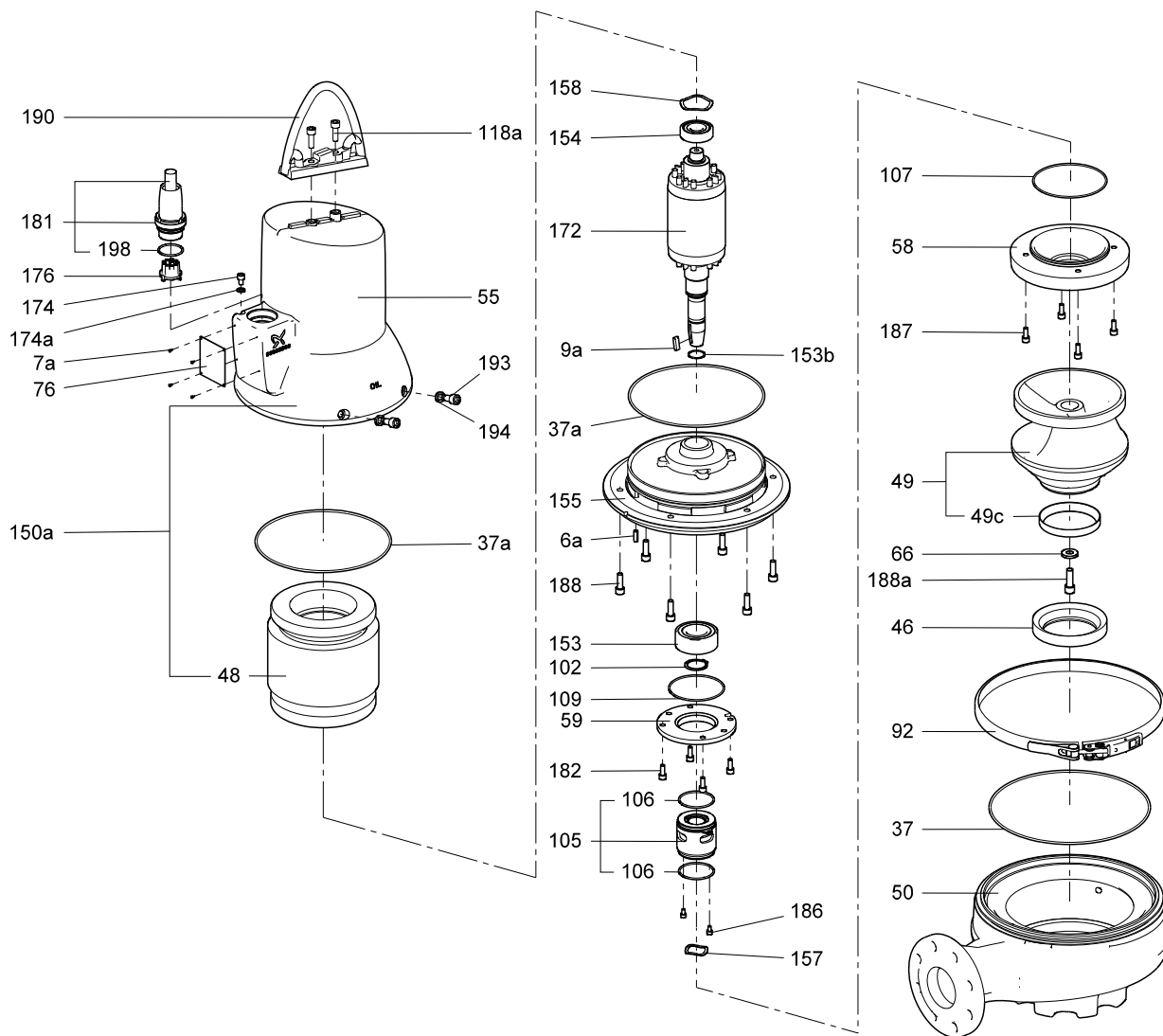
Fig. 11 Exploded view, SL1.50.65.09/11/15

TM02 7363 0904



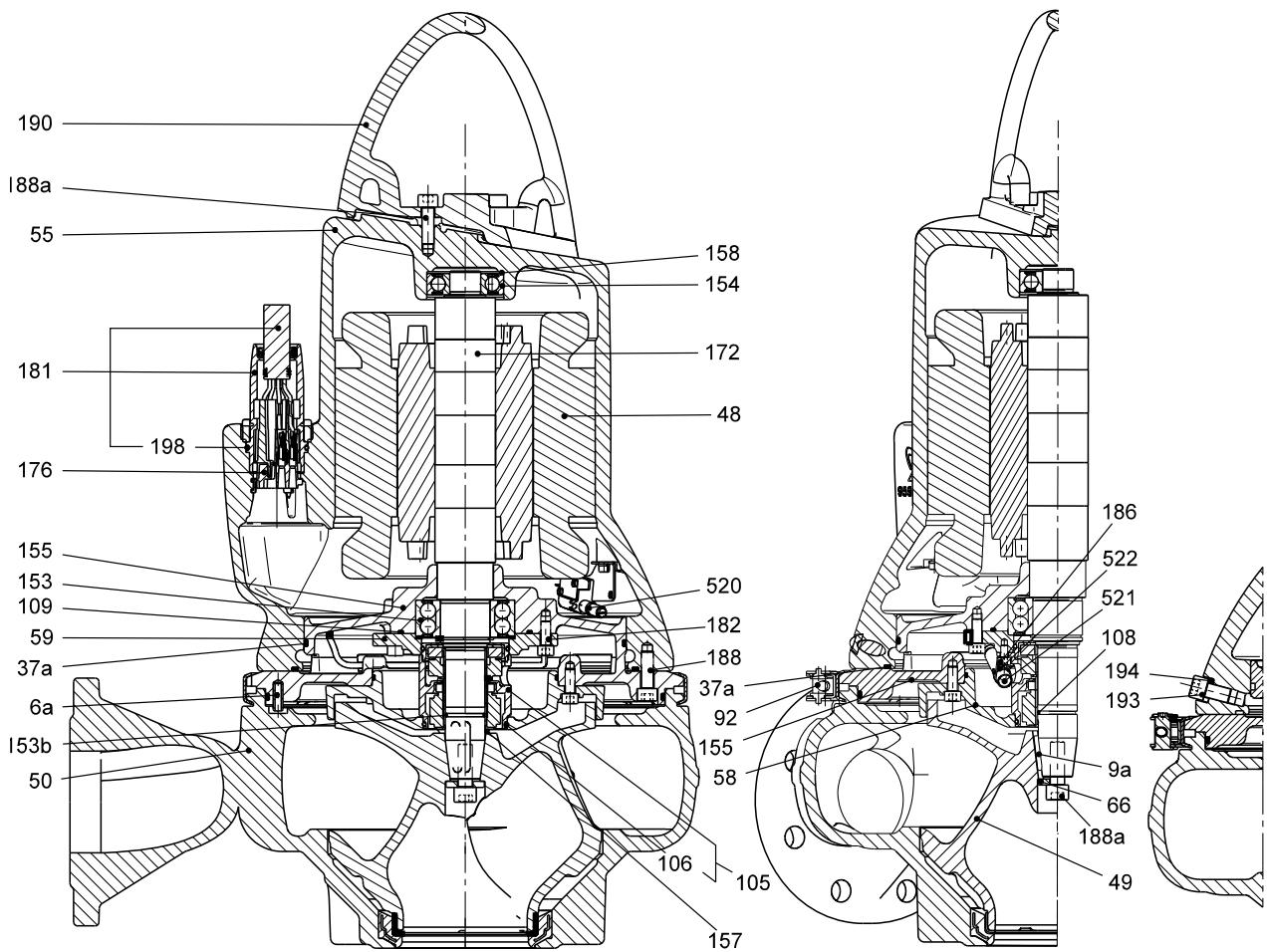
TM04 2787 2908

Fig. 12 Sectional drawing, SL1.50.65.22/30/40, SL1.50.80.xx, SL1.80.80.xx, SL1.80.100.xx, SL1.100.100.xx without sensor



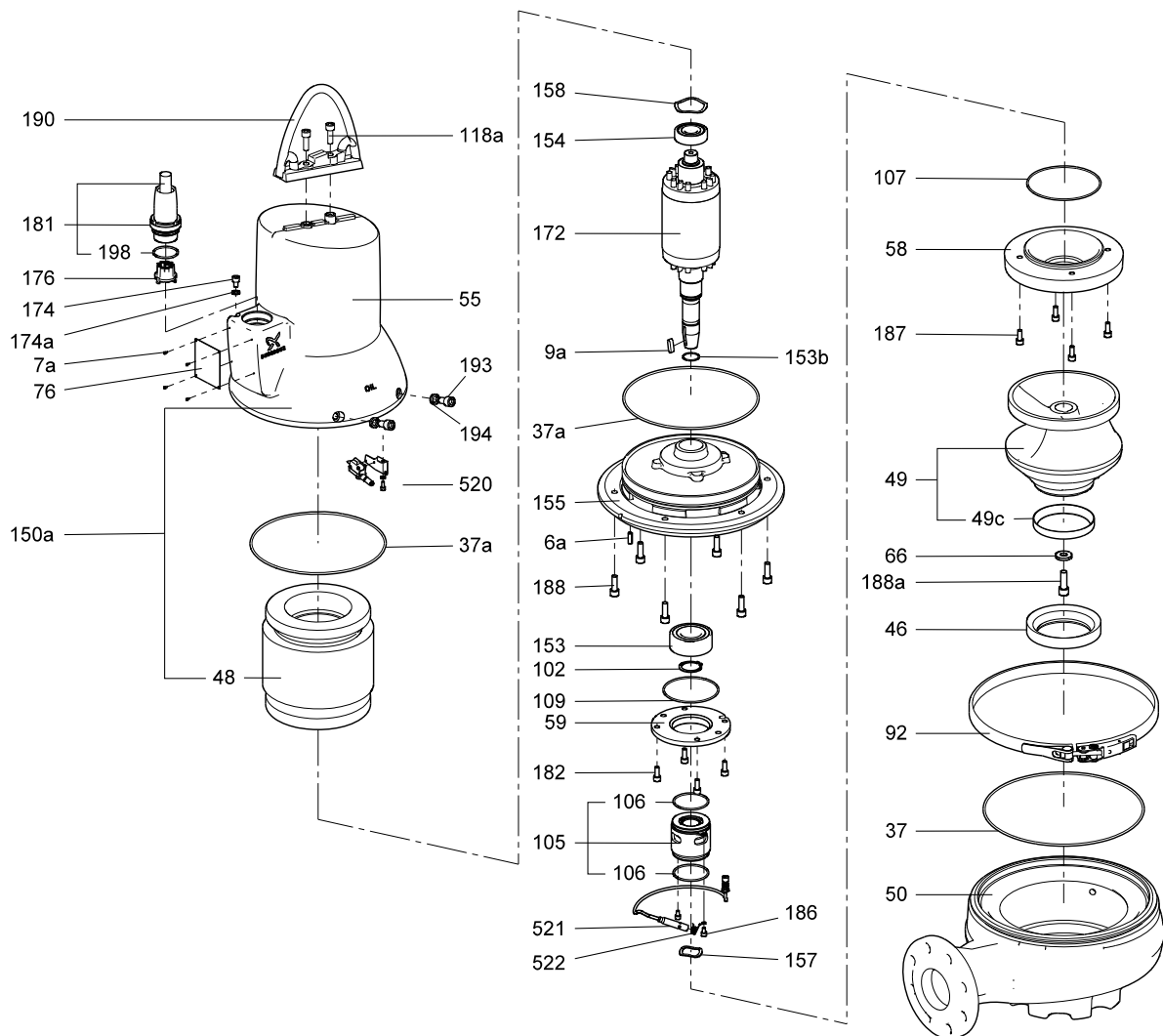
TM04 2777 2908

Fig. 13 Exploded view, SL1.50.65.22/30/40, SL1.50.80.xx, SL1.80.80.xx, SL1.80.100.xx, SL1.100.100.xx without sensor



TM04 2788 2908

Fig. 14 Sectional drawing, SL1.50.65.22/30/40, SL1.50.80.xx, SL1.80.80.xx, SL1.80.100.xx, SL1.100.100.xx with sensor



TM02 7363 0904

Fig. 15 Exploded view, SL1.50.65.22/30/40, SL1.50.80.xx, SL1.80.80.xx, SL1.80.100.xx, SL1.100.100.xx with sensor

SLV

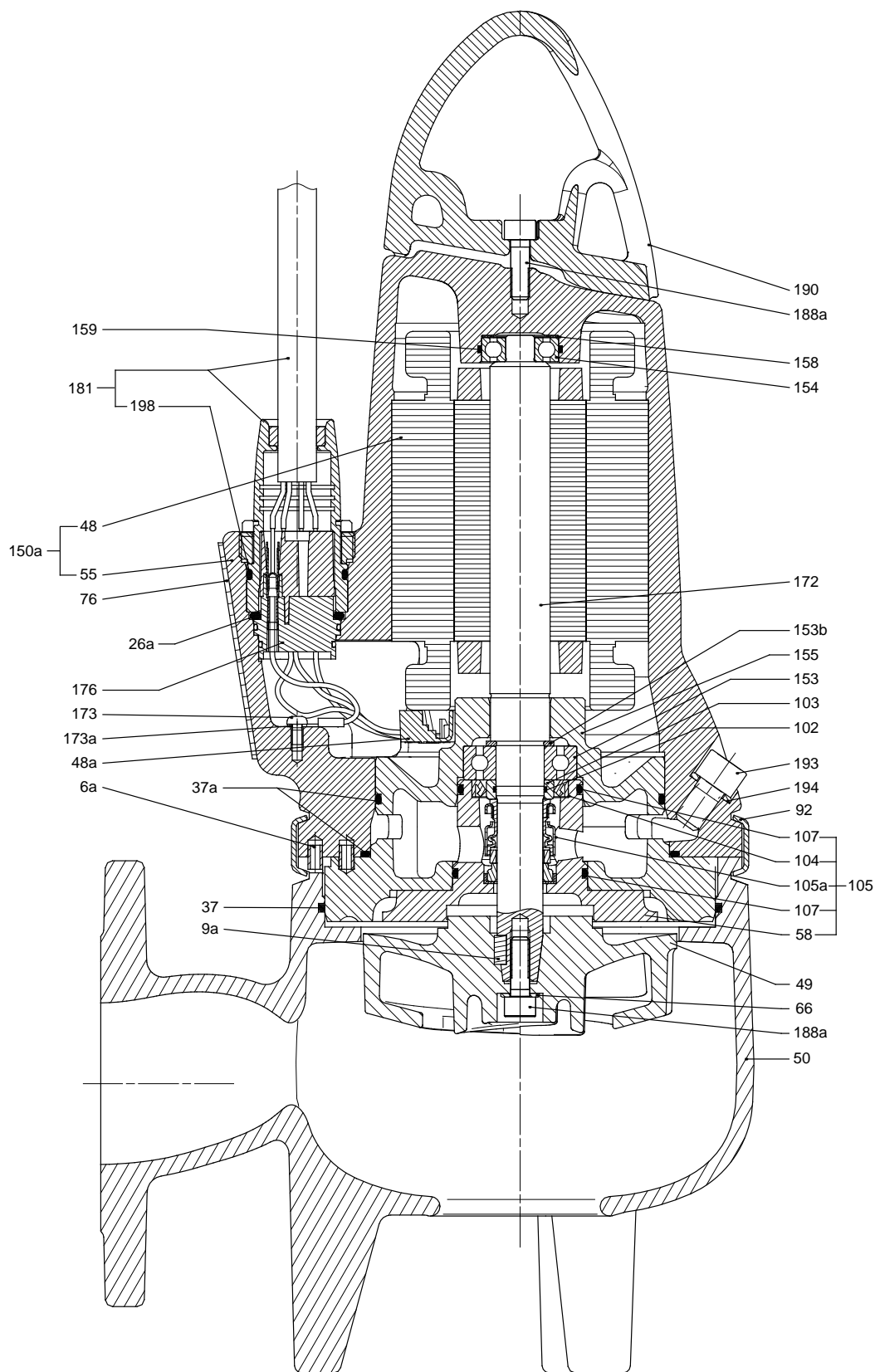


Fig. 16 Sectional drawing, SLV.65.65.09/11/15

TM02 7361 0904

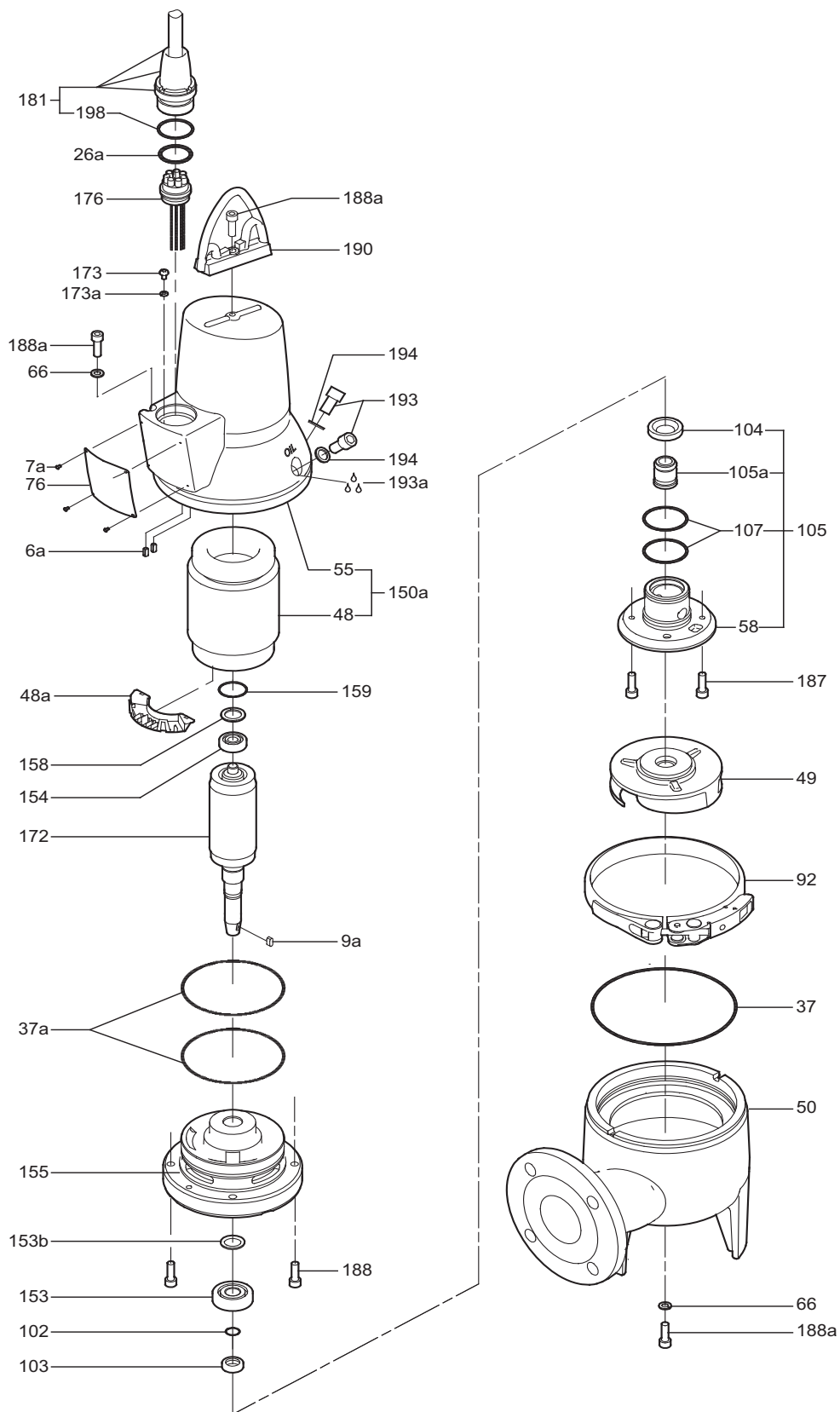
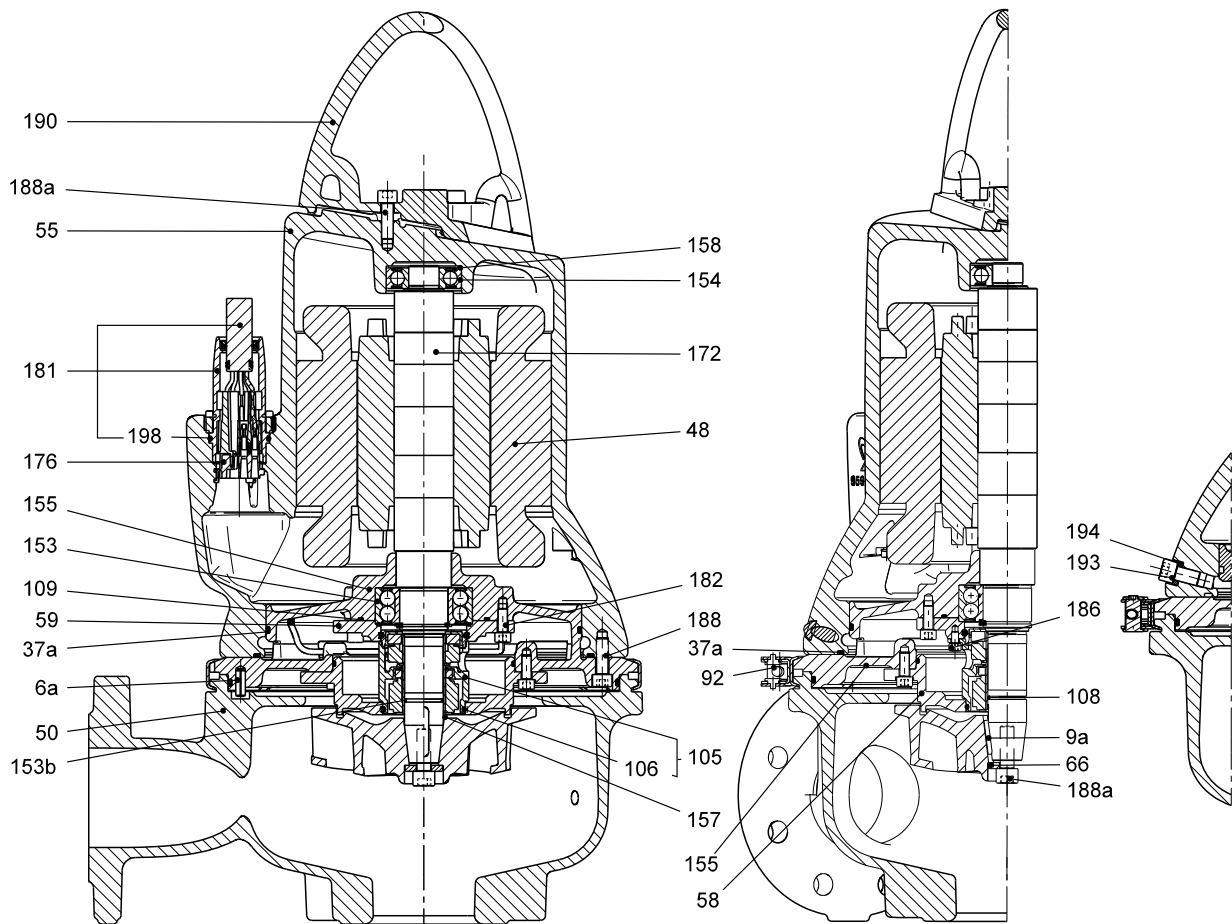


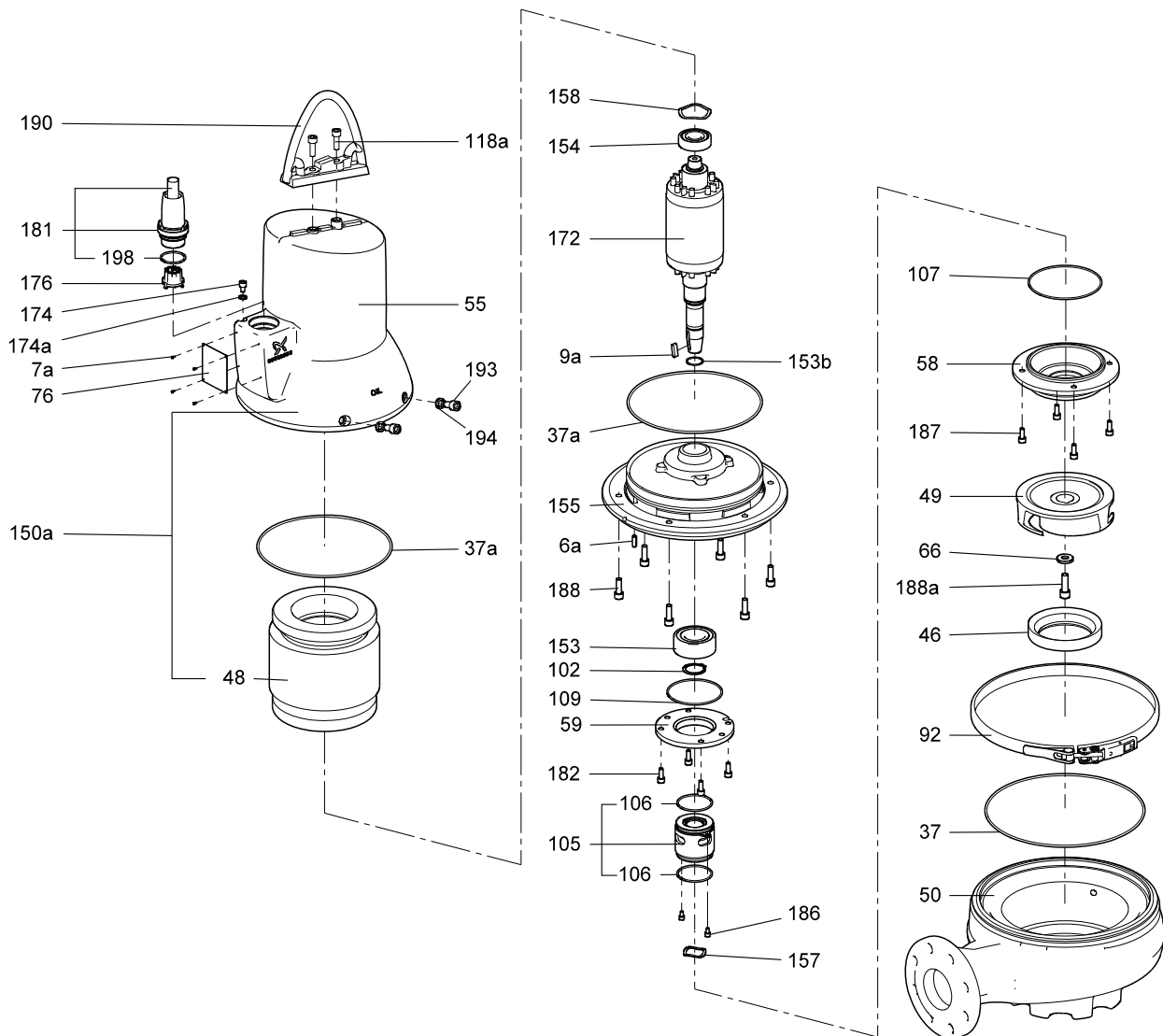
Fig. 17 Exploded view, SLV.65.65.09/11/15

TM02 7364 0904



TM04 2785 2908

Fig. 18 Exploded view, SLV.65.65.22/30/40, SLV.65.80.xx, SLV.80.80.xx, SLV.80.100.xx, SLV.100.100.xx without sensor



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Fig. 19 Sectional drawing, SLV.65.65.22/30/40, SLV.65.80.xx, SLV.80.80.xx, SLV.80.100.xx, SLV.100.100.xx without sensor

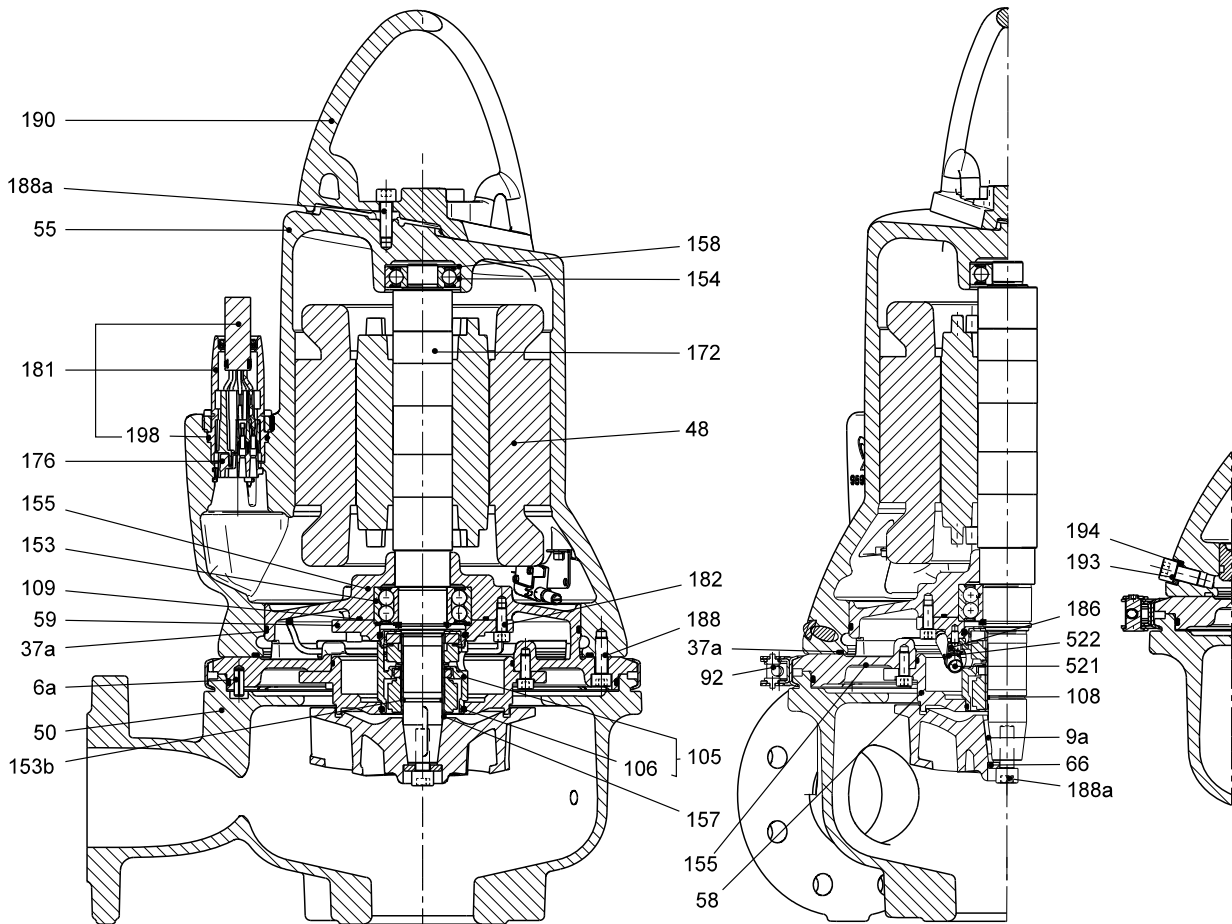
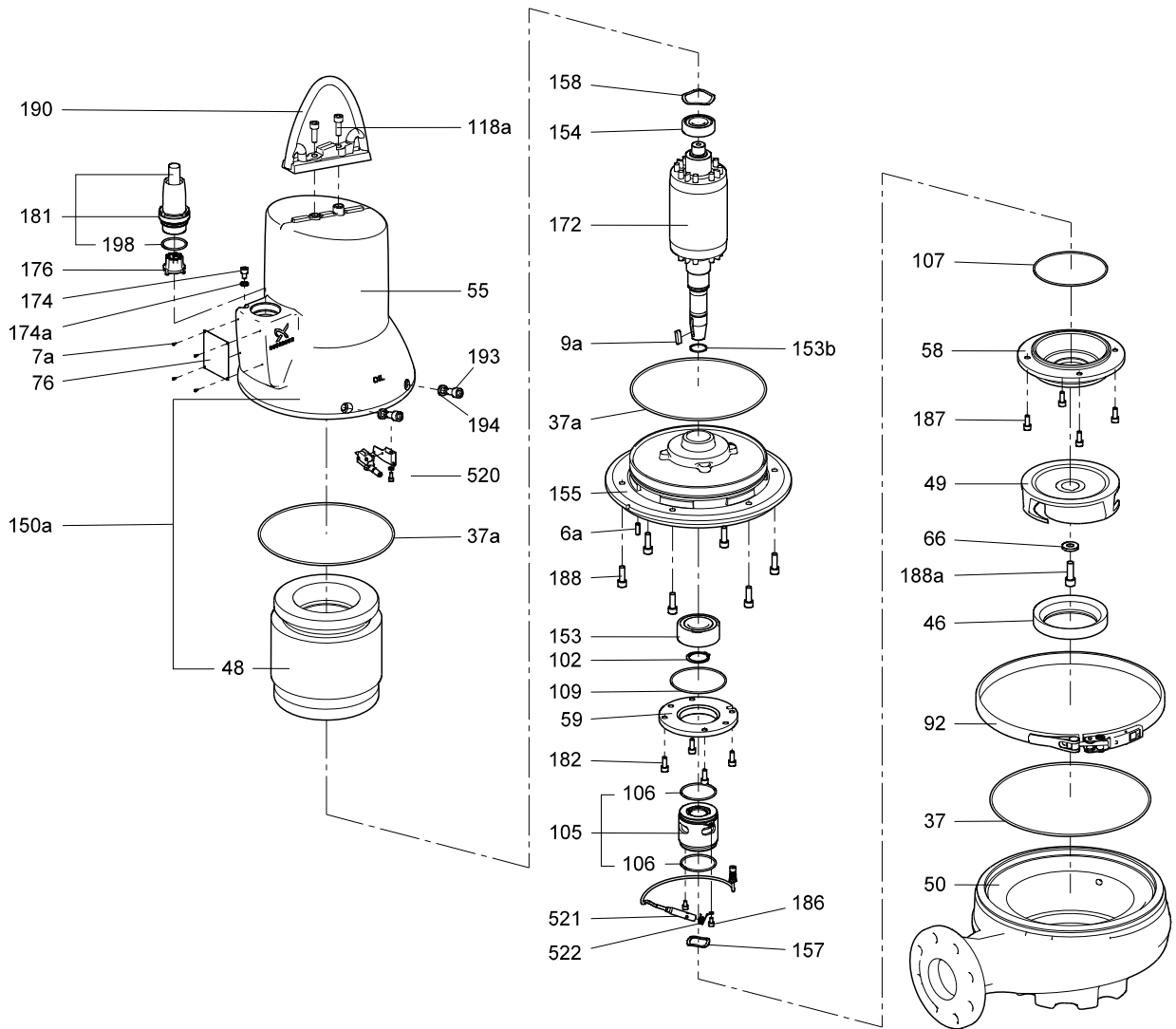


Fig. 20 Sectional drawing, SLV.65.65.22/30/40, SLV.65.80.xx, SLV.80.80.xx, SLV.80.100.xx, SLV.100.100.xx with sensor

TM04 2786 2908



TM04 2780 2908

Fig. 21 Exploded view, SLV.65.65.22/30/40, SLV.65.80.xx, SLV.80.80.xx, SLV.80.100.xx, SLV.100.100.xx with sensor

Components and material specification

DP pumps

Pos.	Description	Material	DIN W. -Nr. / EN standard	AISI / ASTM
6a	Pin	Stainless steel		
9a	Key	Stainless steel		
26a	O-ring	NBR		
37	O-ring	NBR		
37a	O-rings	NBR		
37b	O-rings	NBR		
48	Stator			
48a	Cover			
49	Impeller	Cast iron	EN-GJS-500-7	
50	Pump housing	Cast iron	EN-GJL-250	
55	Stator housing	Cast iron	EN-JL-1030	
58	Shaft seal carrier	Cast iron	EN-JL-1030	
66	Locking ring	Stainless steel		
76	Nameplate	Stainless steel	1.4301	304
84	Strainer	Cast iron		
92	Clamp	Stainless steel	1.4301	304
102	O-ring	NBR		
103	Bush	Stainless steel	1.4057	431
104	Seal ring	NBR		
105	Shaft seal			
105a	Shaft seal			
107	O-rings	NBR		
150a	Stator in housing complete			
153	Bearing	6204		
153a	Washer			
153b	Washer			
154	Bearing	6303		
155	Oil chamber	Cast iron		
157	Washer			
158	Corrugated spring	Steel		
159	O-ring	NBR		
162	Wear plate	Cast iron		
172	Rotor Shaft		1.0533 1.4301	304
173	Screw	Steel		
173a	Washer	Steel		
176	Inner plug part	PET		
181	Outer plug part	CR rubber, cable H07RN-F	1.4308	CF-8
188a	Screw	Stainless steel		
188b	Locking screw			
188c	Locking screw			
189	Adjusting screw			
190	Lifting bracket	Stainless steel	1.4308	CF-8
193	Oil screw	Stainless steel		
193a	Oil	Shell Ondina 917		
194	Gasket	Nylon		
198	O-ring	NBR		
	Paint	Two-component epoxy		

EF pumps

Pos.	Description	Material	DIN W. -Nr. / EN standard	AISI / ASTM
6a	Pin	Stainless steel		
9a	Key	Stainless steel		
26a	O-ring	NBR		
37	O-ring	NBR		
37a	O-rings	NBR		
48	Stator			
48a	Cover			
49	Impeller	Cast iron	EN-GJS-500-7	
50	Pump housing	Cast iron	EN-GJL-250	
55	Stator housing	Cast iron	EN-JL-1030	
58	Shaft seal carrier	Cast iron	EN-JL-1030	
66	Locking ring	Stainless steel		
76	Nameplate	Stainless steel	1.4301	304
92	Clamp	Stainless steel	1.4301	304
102	O-ring	NBR		
103	Bush	Stainless steel	1.4057	431
104	Seal ring	NBR		
105	Shaft seal			
105a	Shaft seal			
107	O-rings	NBR		
150a	Stator in housing complete			
153	Bearing	6204		
153b	Washer			
154	Bearing	6303		
155	Oil chamber	Cast iron		
158	Corrugated spring	Steel		
159	O-ring	NBR		
162	Wear plate	Cast iron		
172	Rotor Shaft		1.0533 1.4301	304
173	Screw	Steel		
173a	Washer	Steel		
176	Inner plug part	PET		
181	Outer plug part	CR rubber, cable H07RN-F	1.4308	CF-8
188a	Screw	Stainless steel		
188b	Locking screw			
189	Adjusting screw			
190	Lifting bracket	Stainless steel	1.4308	CF-8
193	Oil screw	Stainless steel		
193a	Oil	Shell Ondina 917		
194	Gasket	Nylon		
198	O-ring	NBR		

SL1.50.65.09/11/15

Pos.	Description	Material	DIN W. -Nr. / EN standard	AISI / ASTM
6a		Stainless steel		
9a	Key	Stainless steel		
26a	O-ring	NBR		
37	O-ring	NBR		
37a	O-rings	NBR		
37b	O-rings	NBR		
48	Stator			
48a	Cover			
49	Impeller	Cast iron	EN-GJS-500-7	
50	Pump housing	Cast iron	EN-GJL-250	
55	Stator housing	Cast iron	EN-JL-1030	
58	Shaft seal carrier	Cast iron	EN-JL-1030	
66	Locking ring	Stainless steel		
76	Nameplate	Stainless steel	1.4301	304
92	Clamp	Stainless steel	1.4301	304
102	O-ring	NBR		
103	Bush	Stainless steel	1.4057	431
104	Seal ring	NBR		
105	Shaft seal			
105a	Shaft seal			
107	O-rings	NBR		
150a	Stator in housing complete			
153	Bearing	6204		
153a	Washer			
154	Bearing	6303		
155	Oil chamber	Cast iron		
158	Corrugated spring	Steel		
159	O-ring	NBR		
162	Wear plate	Cast iron		
172	Rotor Shaft		1.0533 1.4301	304
173	Screw	Steel		
173a	Washer	Steel		
176	Inner plug part	PET		
181	Outer plug part	CR rubber, cable H07RN-F	1.4308	
188a	Screw	Stainless steel		CF-8
188b	Locking screw			
189	Adjusting screw			
190	Lifting bracket	Stainless steel	1.4308	
193	Oil screw	Stainless steel		CF-8
193a	Oil	Shell Ondina 917		
194	Gasket	Nylon		
198	O-ring	NBR		

SLV.65.65.09/11/15

Pos.	Description	Material	DIN W. -Nr. / EN standard	AISI / ASTM
9a	Key	Stainless steel		
26a	O-ring	NBR		
37	O-ring	NBR		
37a	O-rings	NBR		
48	Stator			
48a	Cover			
49	Impeller	Cast iron	EN-GJS-500-7	
50	Pump housing	Cast iron	EN-GJL-250	
55	Stator housing	Cast iron	EN-JL-1030	
58	Shaft seal carrier	Cast iron	EN-JL-1030	
66	Locking ring	Stainless steel		
76	Nameplate	Stainless steel	1.4301	304
92	Clamp	Stainless steel	1.4301	304
102	O-ring	NBR		
103	Bush	Stainless steel	1.4057	431
104	Seal ring	NBR		
105	Shaft seal			
105a	Shaft seal			
107	O-rings	NBR		
150a	Stator in housing complete			
153	Bearing	6204		
153b	Washer			
154	Bearing	6303		
155	Oil chamber	Cast iron		
158	Corrugated spring	Steel		
159	O-ring	NBR		
172	Rotor Shaft		1.0533 1.4301	304
173	Screw	Steel		
173a	Washer	Steel		
176	Inner plug part	PET		
181	Outer plug part	CR rubber, cable H07RN-F	1.4308	CF-8
188a	Screw	Stainless steel		
190	Lifting bracket	Stainless steel	1.4308	CF-8
193	Oil screw	Stainless steel		
193a	Oil	Shell Ondina 917		
194	Gasket	Nylon		
198	O-ring	NBR		

SL1-SLV except SL1.50.65.09/11/15 and SLV.65.65.09/11/15

Pos.	Component	Material	DIN W. -Nr. / EN standard	AISI / ASTM
6a	Tubular pin D8 x 22 A2	Stainless steel	1.4301	304
7a	Blank rivet 2.4 x 6 A2	Stainless steel	1.4301	304
37	O-Ring	NBR rubber		
37a	O-Ring	NBR rubber		
48	Stator package			
55	Stator housing	Cast iron GG20	EN-JL 1030	
58	Cover for oil chamber	Cast iron GG20	EN-JL 1030	
59	Bearing cover	Cast iron GG25	EN-JL 1040	
76	Nameplate	Stainless steel	1.4401	316
92	Clamp	Stainless steel	1.4401	316
102	Circlip			
105	Shaft seal cpl. (rotating part of MG1/25-G60 Q1Q1PGG stationary part of MG1/25-G60 Q1Q1PGG; rotating part of BT-AR/25 BXPFF stationary part of BT-AR/25 BXPFF)	Stainless steel, SiC/SiC Carbon/ceramic		
106	O-ring for shaft seal	NBR rubber		
107	O-ring (cover for oil chamber/cover for oil chamber)	NBR rubber		
109	O-ring for bearing cover D-end	NBR rubber		
150a	Stator house complete with stator			
153	Bearing, D-end	Stainless steel		
153b	O-ring	NBR rubber		
154	Bearing, N-end	Stainless steel		
155	Oil chamber	Cast iron GG25	EN-JL1040	
157	Corrugated spring (bearing D-end)	Stainless steel		
158	Corrugated spring (bearing N-end)	Stainless steel		
172	Shaft with rotor	Regular iron/stainless steel	1.0570 1.4401	316
174	Earth screw, external	Stainless steel		
174a	Washer for external earth screw	Stainless steel		
176	Connector set (internal part)			
181	Cable with outer plug part	7G2.5 + 3x1		
182	Screw	Stainless steel	1.4436	316
186	Screw	Stainless steel	1.4436	316
188	Screw	Stainless steel	1.4436	316
190	Lifting handle	Stainless steel	1.4308	
193	Plug	Stainless steel	1.4436	316
194	Gasket			
198	O-ring	NBR rubber		
520	Moisture switch (only sensor versions)			
521	WIO sensor (only sensor versions)			
522	Bracket for WIO sensor (only sensor versions)	Stainless steel		

Features

Ball bearings

The bearings are greased for life.

Main bearings: Double-row angular contact ball bearing.

Support bearings: Single-row deep-groove ball bearing.

Shaft seal

The shaft seal consists of two mechanical seals and separates the motor from the pumped liquid.

The shaft seal is a cartridge seal for easy service. The combination of the primary and secondary seals in a cartridge results in shorter assembly length compared to traditional shaft seals. Furthermore, this design minimises the risk of incorrect fitting.

The primary seal is SiC/SiC and the secondary is carbon/ceramic.

Motor

The motor is a watertight, totally encapsulated motor.

Insulation class: F (155 °C).

Temperature rise class: F (105 °C).

Enclosure class IP68.

For motor protection and sensors, see section Sensors below.

Power cables

Standard cable

Cable type [mm ²]	Outer cable diameter [mm]	Bending radius	
		Fixed	Free
Lyniflex 4 G 1.5 mm ² + 3 x 1 mm ²	15.5 +/-0.5	60	90
Lyniflex 4 G 2.5 mm ² + 3 x 1 mm ²	17.0 +/-0.5	66	99
Lyniflex 7 G 2.5 mm ² + 3 x 1 mm ²	18.5 +/-0.5	74	111

EMC cable

Cable type [mm ²]	Outer cable diameter [mm]	Bending radius	
		Fixed	Free
3G3GC3G-F3x1AiC+4 G 2.5 mm ²	17.5 +/-0.5	85	170

The cables are 10 m long as standard. Other cable lengths are available on request. See section List of variants on page 24.

The number and dimension of cables depend on the motor size.

Cable entry

The stainless steel plug is fastened with a union nut. The nut and O-rings provide sealing against ingress of the liquid.

The plug is filled with a special material that is cast into the plug around the leads of the cable to prevent ingress of water into the motor through the cable in case of cable breakage or in case water enters the loose cable end on account of adverse handling in connection with installation or service.

Sensors

As standard the pump is equipped with three thermal switches, one in each phase.

Customised sensor options

- PT1000 sensors in motor phases for stator temperature measurements.
- WIO (water-in-oil) sensor
The WIO sensor measures the water content in the oil and converts the value into an analog current signal. The two sensor conductors are for power supply as well as for carrying the signal to the measuring device or controller. The sensor measures the water content from 0 to 20 %. It also sends a signal if the water content is outside the normal range (warning), or if there is air in the oil chamber (alarm). The sensor is fitted in a stainless steel tube for mechanical protection.
The WIO sensor is connected to a Grundfos IO 111 module.
- One moisture switch.

IO 111 sensor module

The module collects the following signals from sensors in the pump:

- Stator temperature
- Stator insulation resistance
- Water in oil chamber
- Moisture in motor.

Note: All pump versions with sensor come with an IO 111 sensor module. It is therefore not necessary to order an IO 111 separately.

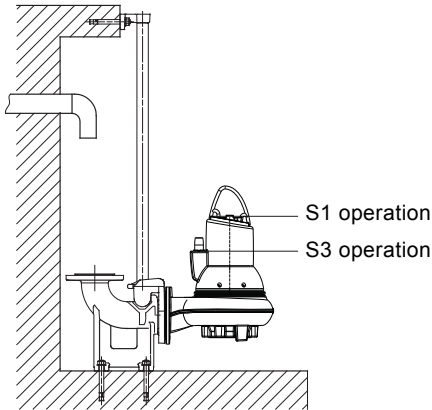
Testing

All pumps are tested before leaving the factory. The factory test report is based on ISO 9906, Annex A. Test reports can be ordered directly with the pump or separately based on the pump serial number.

Other tests or third-party inspection certificates are available on request. See section List of variants on page 24.

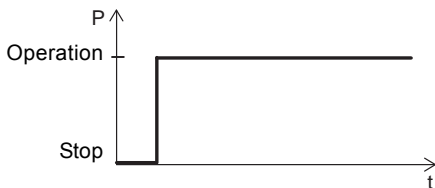
Operating conditions

Pumps without cooling jacket are only for submerged installation.



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- Continuous operation S1 when the pump is fully submerged to the top of the motor.

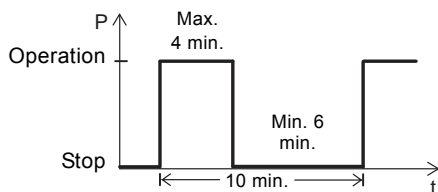


TM02 7776 4003

Fig. 22 Continuous operation

- Intermittent operation S3 with max. 20 starts per hour when pump is submerged to the bottom of the cable plug. The pump must run for max. 4 minutes and stop for min. 6 minutes. See fig. 23.

Note: Explosion-proof pumps must always be fully submerged.



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Fig. 23 Intermittent operation

Pumped liquids

pH value: 4-10.

Liquid temperature: 0 °C to + 40 °C.

When pumping liquids with a density and/or a kinematic viscosity higher than that of water, use motors with correspondingly higher outputs.

For short periods (max. 3 minutes), temperatures up to 60 °C are permissible (non-Ex versions only).

Sound pressure

The sound pressure level of the pump is lower than the limiting values stated in the EC Council directive 98/37/EC relating to machinery (Machinery Directive).

Motor range

Shaft power [kW]	No of poles
0.9	2
1.1	2/4
1.3	2/4
1.5	2/4
2.2	2/4
3.0	2/4
4.0	2/4
6.0	2
7.5	2/4
9.2	2
11	2

Pump controllers

The pumps must be connected to a control box with a motor protection relay with an IEC trip class 10 or 15.

Note: Pumps for hazardous locations must be connected to a control box with a motor protection relay with an IEC trip class 10.

The pumps can be controlled by the following LC and LCD pump controllers:

- LC 107, LCD 107 with level pickups
- LC 108, LCD 108 with float switches
- LC 110, LCD 110 with level electrodes.

LC controllers are for single-pump installations; LCD controllers are for two-pump installations.

In the following description, “level switch” means level pickup, float switch or level electrode, depending on the pump controller selected.

The LC controller is fitted with two or three level switches: One for start and one for stop of pump. The third - optional - level switch, is for high-level alarm.

The LCD controller is fitted with three or four level switches: Two for start of the pumps and one for common stop. The fourth - optional - level switch, is for high-level alarm.

For further settings, see the installation and operating instructions for the pump controller selected.

Frequency converter operation

In principle, all three-phase motors can be connected to a frequency converter.

However, frequency converter operation will often expose the motor insulation system to a heavier load and cause the motor to be more noisy than usual due to eddy currents caused by voltage peaks.


In addition, large motors driven via a frequency converter will be loaded by bearing currents.


For more information, please see the Installation and operation manual 96771279 at www.grundfos.com

Explosion-proof pumps

In relation to Ex-approvals, the explosion-proof pumps, types DP, EF, SL1 and SLV, are divided into two groups with two different Ex approvals. The groups and approvals are explained below.

Explanation to Ex approval

The explosion-protection classification of the pump is CE 0344  II 2 G Ex c d IIB T4.

Directive/standard	Code	Description
ATEX	CE 0344	= CE marking of conformity according to the ATEX directive 94/9/EC, Annex X. 0344 is the number of the notified body which has certified the quality system for ATEX.
		= Marking of explosion protection
	II	= Equipment group according to the ATEX directive, Annex II, point 2.2, defining the requirements applicable to the equipment in this group
	2	= Equipment category according to the ATEX directive, Annex II, point 2.2, defining the requirements applicable to the equipment in this category
	G	= Explosive atmospheres caused by gases, vapours or mists
Harmonized European standard EN 60079-0	Ex	= The equipment conforms to harmonized European standard
	c	= Constructional safety according to EN 13463-5: 2003
	d	= Flame-proof enclosure according to EN 60079-1:2007
	II	= Suitable for use in explosive atmospheres (not mines)
	B	= Classification of gases, see EN 60079-0:2006, Annex A. Gas group B includes gas group A.
	T4	= Maximum surface temperature is 135 °C
	X	= The letter X in the certificate number indicates that the equipment is subject to special conditions for safe use. The conditions are mentioned in the certificate and the installation and operating instructions.

Australia

Ex nC II T3.

Ex variants for Australia are approved as Ex nC II T3 according to IEC 79-15 (corresponding to AS 2380.9).

Standard	Code	Description
IEC 79-15: 1987	Ex	= Area classification according to AS 2430.1
	n	= Non-sparking according to AS 2380.9: 1991, section 3 (IEC 79-15: 1987)
	C	= The environment is adequately protected against sparking components
	II	= Suitable for use in explosive atmospheres (not mines)
	T3	= Maximum surface temperature is 200 °C
	X	The letter X in the certificate number indicates that the equipment is subject to special conditions for safe use. The conditions are mentioned in the certificate and the installation and operating instructions.

Group A

The pumps in the table below have been tested by VDE, and the explosion-proof version approved by KEMA according to the ATEX directive.

Pump types, group A			
DP10.50.09	EF.30.50.06	SL1.50.65.09	SLV.65.65.09
DP10.50.15	EF.30.50.09	SL1.50.65.11	SLV.65.65.11
DP10.65.26	EF.30.50.11	SL1.50.65.15	SLV.65.65.15
	EF.30.50.15		

Approval standards

The standard variants are approved by LGA (notified body under the construction products directive) according to EN 12050-1/2.

Group B

The SL1 and SLV pumps in the table below have been tested by KEMA, and the explosion-proof versions hold an EC type examination certificate issued by KEMA according to the ATEX directive.





Pump types, group B			
SL1.50.65.22	SL1.80.80.40	SL1.100.150.55	SLV.80.80.92
SL1.50.65.22	SL1.80.80.55	SL1.100.150.75	SLV.80.80.110
SL1.50.65.30	SL1.80.80.75	SLV.65.65.22	SLV.80.100.11
SL1.50.65.30	SL1.80.100.15	SLV.65.65.30	SLV.80.100.13
SL1.50.65.40	SL1.80.100.22	SLV.65.65.40	SLV.80.100.15
SL1.50.80.22	SL1.80.100.22	SLV.65.80.22	SLV.80.100.22
SL1.50.80.22	SL1.80.100.30	SLV.65.80.30	SLV.80.100.40
SL1.50.80.30	SL1.80.100.30	SLV.65.80.40	SLV.80.100.60
SL1.50.80.30	SL1.80.100.40	SLV.80.80.11	SLV.80.100.75
SL1.50.80.40	SL1.80.100.55	SLV.80.80.13	SLV.80.100.92
SL1.80.80.15	SL1.80.100.75	SLV.80.80.15	SLV.80.100.110
SL1.80.80.22	SL1.100.100.40	SLV.80.80.22	SLV.100.100.30
SL1.80.80.22	SL1.100.100.55	SLV.80.80.40	SLV.100.100.40
SL1.80.80.30	SL1.100.100.75	SLV.80.80.60	SLV.100.100.55
SL1.80.80.30	SL1.100.150.40	SLV.80.80.75	SLV.100.100.75

Approval standards


The pumps are approved by LGA (notified body under the construction products directive) according to EN 12050-1/2.

Explanation to Ex approval

The SL1 and SLV pumps have the following explosion protection classification:

Direct-drive pump, without sensor:	CE 0344  II 2 G Ex c d IIB T4
Direct-drive pump, with sensor:	CE 0344  II 2 G Ex c d mb IIB T4
Pump driven by frequency converter, without sensor:	CE 0344  II 2 G Ex c d IIB T3
Pump driven by frequency converter, with sensor:	CE 0344  II 2 G Ex c d mb IIB T3

Europe

Directive/standard	Code	Description
ATEX	CE 0344	= CE marking of conformity according to the ATEX directive 94/9/EC, Annex X. 0344 is the number of the notified body which has certified the quality system for ATEX.
		= Marking of explosion protection
	II	= Equipment group according to the ATEX directive, Annex II, point 2.2, defining the requirements applicable to the equipment in this group.
	2	= Equipment category according to the ATEX directive, Annex II, point 2.2, defining the requirements applicable to the equipment in this category.
	G	= Explosive atmosphere caused by gases or vapours
Harmonized European standards	Ex	= The equipment conforms to harmonized European standard
	c	= Constructional safety according to EN 13463-5: 2003
	d	= Flame-proof enclosure according to EN 60079-1: 2007
	mb	= Encapsulation according to EN 60079-18:2004
	II	= Suitable for use in explosive atmospheres (not mines)
	B	= Classification of gases, see EN 60079-0: 2006, Annex A. Gas group B includes gas group A.
	T4/T3	= Maximum surface temperature is 135 °C/200 °C according to EN 60079-0: 2006
	IP68	= Enclosure class according to IEC 60529
	X	The letter X in the certificate number indicates that the equipment is subject to special conditions for safe use. The conditions are mentioned in the certificate and the installation and operating instructions.

Australia

Explosion proof variants for Australia are approved as Ex d IIB T4/T3 & Ex d mb II B T4/T3 Gb.

Standard	Code	Description
IEC 60079-0 and IEC 60079-1	Ex	= The equipment conforms to harmonized European standard.
	d	= Flame-proof enclosure according to IEC 60079-1: 2007
	mb	= Encapsulation according to IEC 60079-18
	II	= Suitable for use in explosive atmospheres (not mines).
	B	= Classification of gases, see IEC 60079-0: 2004, Annex A. Gas group B includes gas group A.
	T4/T3	= Maximum surface temperature is 135 °C/200 °C according to IEC 60079-0: 2004.
	IP68	= Enclosure class according to IEC 60529.
	X	The letter X in the certificate number indicates that the equipment is subject to special conditions for safe use. The conditions are mentioned in the certificate and the installation and operating instructions.
	Gb	Equipment protection level

Wiring diagrams

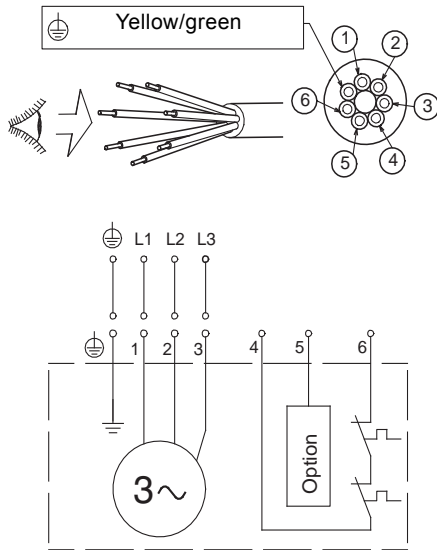


Fig. 24 Wiring diagram, 7-wire cable

TM028396

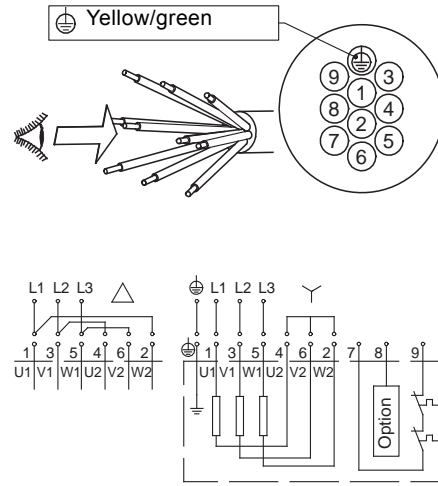
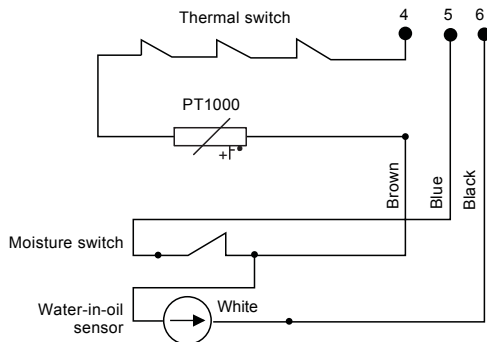


Fig. 26 Wiring diagram, 10-wire cable

TM02 8397 5103

Pumps with thermal switch and PT1000



Pumps with thermistor (PTC)

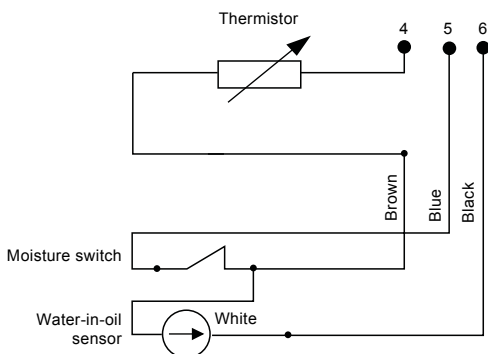
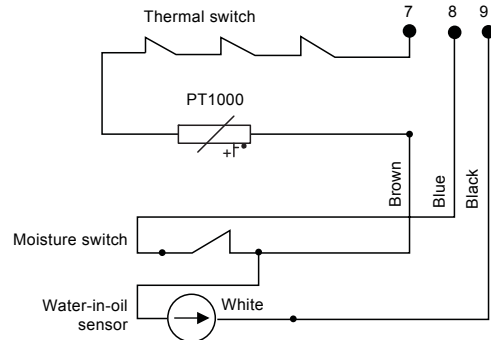


Fig. 25 Wiring diagram, 7-wire cable, sensor and moisture switch

TM02 8396 5103

Pumps with thermal switch and PT1000



Pumps with thermistor (PTC)

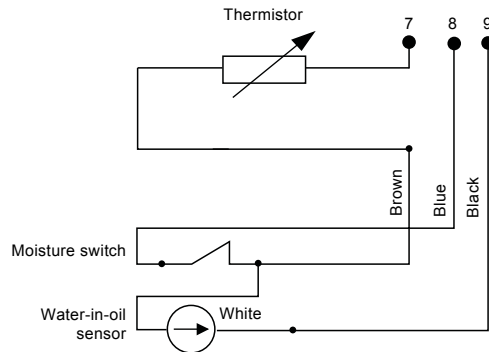


Fig. 27 Wiring diagram, 10-wire cable, sensor and moisture switch

Curve charts and technical data

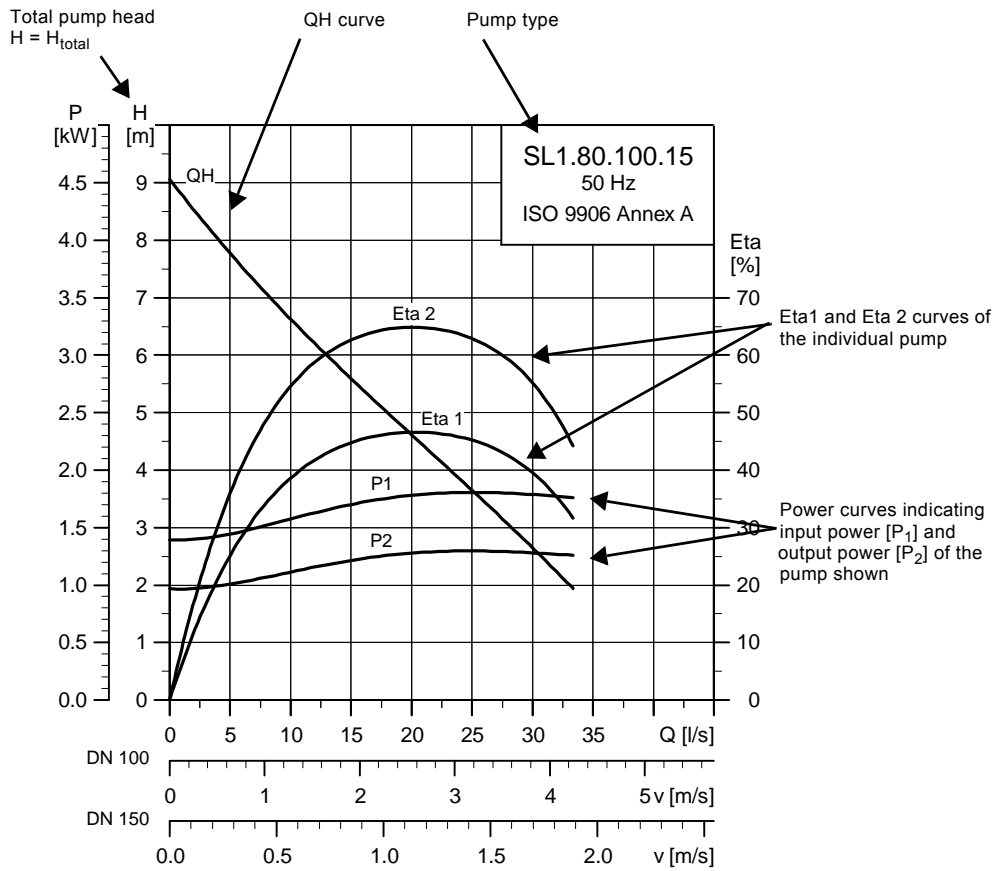
The following many pages are divided into sections:

Pages 55 and 56 A give brief explanation of how to read the curve charts, the curve conditions, etc.

Performance curves and technical data:

Page	Pump curves	Page	Pump curves	Page	Pump curves	Page	Pump curves
58	Performance curves DP10.50.09.1	96	Performance curves SL1.50.80.30	134	Performance curves SL1.100.150.75	172	Performance curves SLV.80.80.75
60	Performance curves DP10.50.09.3	98	Performance curves SL1.50.80.40	136	Performance curves SLV.65.65.09.1	174	Performance curves SLV.80.80.92
62	Performance curves DP10.50.15.3	100	Performance curves SL1.80.80.15	138	Performance curves SLV.65.65.09.3	176	Performance curves SLV.80.80.110
64	DP10.65	102	Performance curves SL1.80.80.22	140	Performance curves SLV.65.65.11.1	178	Performance curves SLV.80.100.11
66	Performance curves EF30.50.06.1	104	Performance curves SL1.80.80.30	142	Performance curves SLV.65.65.11.3	180	Performance curves SLV.80.100.13
68	Performance curves EF30.50.06.3	106	Performance curves SL1.80.80.40	144	Performance curves SLV.65.65.15.3	182	Performance curves SLV.80.100.15
70	Performance curves EF30.50.09.1	108	Performance curves SL1.80.80.55	146	Performance curves SLV.65.65.22	184	Performance curves SLV.80.100.22
72	Performance curves EF30.50.09.3	110	Performance curves SL1.80.80.75	148	Performance curves SLV.65.65.30	186	Performance curves SLV.80.100.40 - 4 pole
74	Performance curves EF30.50.11.1	112	Performance curves SL1.80.100.15	150	Performance curves SLV.65.65.40	188	Performance curves SLV.80.100.40 - 2 pole
76	Performance curves EF30.50.11.3	114	Performance curves SL1.80.100.22	152	SLV.65.80	190	Performance curves SLV.80.100.60
78	Performance curves EF30.50.15.3	116	Performance curves SL1.80.100.30	154	Performance curves SLV.65.80.30	192	Performance curves SLV.80.100.75
80	Performance curves SL1.50.65.09.1	118	Performance curves SL1.80.100.40	156	Performance curves SLV.65.80.40	194	Performance curves SLV.80.100.92
82	Performance curves SL1.50.65.09.3	120	Performance curves SL1.80.100.55	158	Performance curves SLV.80.80.11	196	Performance curves SLV.80.100.110
84	Performance curves SL1.50.65.11.1	122	Performance curves SL1.80.100.75	160	Performance curves SLV.80.80.13	198	Performance curves SLV.100.100.30
86	Performance curves SL1.50.65.15.3	124	SL1.100.100	162	Performance curves SLV.80.80.15	200	Performance curves SLV.100.100.40
88	Performance curves SL1.50.65.22	126	Performance curves SL1.100.100.55	164	Performance curves SLV.80.80.22	202	Performance curves SLV.100.100.55
90	Performance curves SL1.50.65.30	128	Performance curves SL1.100.100.75	166	Performance curves SLV.80.80.40 - 4 Pole	204	Performance curves SLV.100.100.75
92	Performance curves SL1.50.65.40	130	Performance curves SL1.100.150.40	168	Performance curves SLV.80.80.40 - 2 Pole		
94	Performance curves SL1.50.80.22	132	Performance curves SL1.100.150.55	170	Performance curves SLV.80.80.60		

How to read the curve charts



TM04 3460 4608

Curve conditions

The guidelines below apply to the curves shown in the performance charts on page 58 to page 198.

- Tolerances according to: ISO 9906, Annex A.
- The curves show pump performance with different impeller diameters at the nominal speed.
- The **bold** part of the curves show the **recommended** operating range.
- The curves apply to the pumping of airless water at a temperature of +20 °C and a kinematic viscosity of 1 mm²/s (1 cSt).
- **ETA**: The lines show values of the hydraulic efficiency of the pump for the different impeller diameters.
- **NPSH**: The curves show average values measured under the same conditions as the performance curves.
When dimensioning the pump, add a safety margin of at least 0.5 m.
- In case of other densities than 1000 kg/m³, the discharge pressure is proportional to the density.
- When pumping liquids with a density higher than 1000 kg/m³, motors with correspondingly higher outputs must be used.

Calculation of total head

The total pump head consists of the height difference between the measuring points + the differential head + the dynamic head.

$$H_{\text{total}} = H_{\text{geo}} + H_{\text{stat}} + H_{\text{dyn}}$$

H_{geo} : Height difference between measuring points.

H_{stat} : Differential head between suction and the discharge side of the pump.

H_{dyn} : Calculated values based on the velocity of the pumped liquid on the suction and the discharge side of the pump.

Performance tests

The requested duty point for every pump is tested according to ISO 9906, Annex A, and without certification.

In case of pumps ordered on the basis of impeller diameter only (no requested duty point), the pump will be tested at a duty point which is 2/3 of the maximum flow of the published performance curve which is related to the ordered impeller diameter (according to ISO 9906, Annex A).

If the customer requires either more points on the curve to be checked or certain minimum performances or certificates, individual measurements must be made, and a certificate can be ordered.

Certificates

Certificates have to be confirmed for every order and are available on request as follows:

- Certificate of compliance with the order (EN 10204-2.1)
- Pump test sheet.

Witness test

It is possible for the customer to witness the testing procedure according to ISO 9906.

The witness test is not a certificate and will not result in a written statement from Grundfos. The witness itself is the only guarantee that everything is carried out as prescribed in the testing procedure.

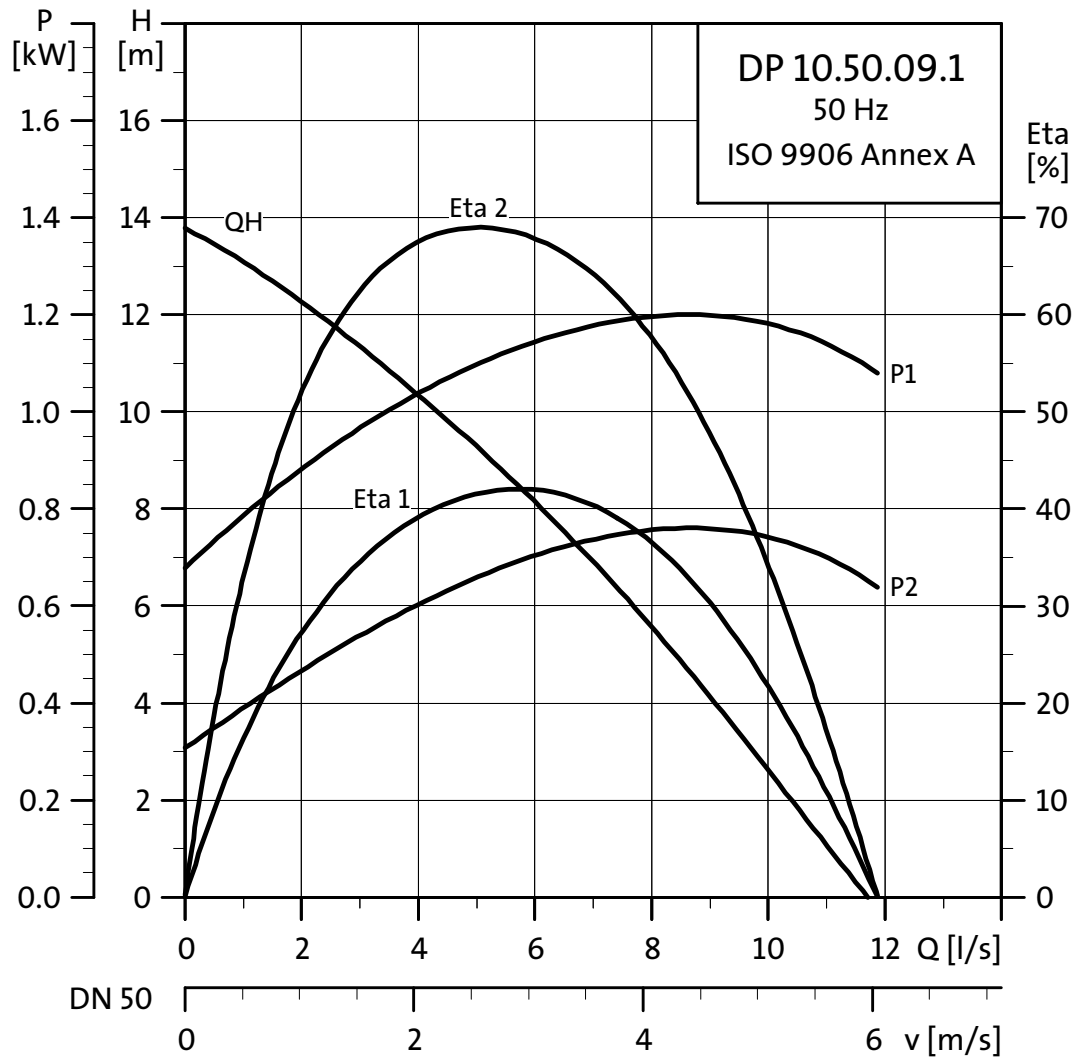
If the customer wants to witness the test of pump performance, this request must be stated on the order.

Performance curves Technical data

SL1, SLV, DP, EF pumps

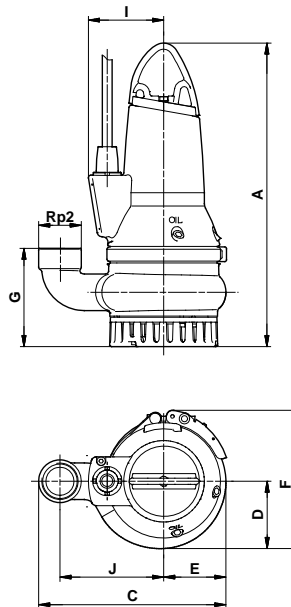
DP10.50

Performance curves DP10.50.09.1



TM02 7463 3603

Dimensional sketches DP10.50.09.1



TM02 7231 2803

Product dimensions

A [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]	Weight [kg]
497	307	110	102	227	161	-	123	170	39

With 10 m cable

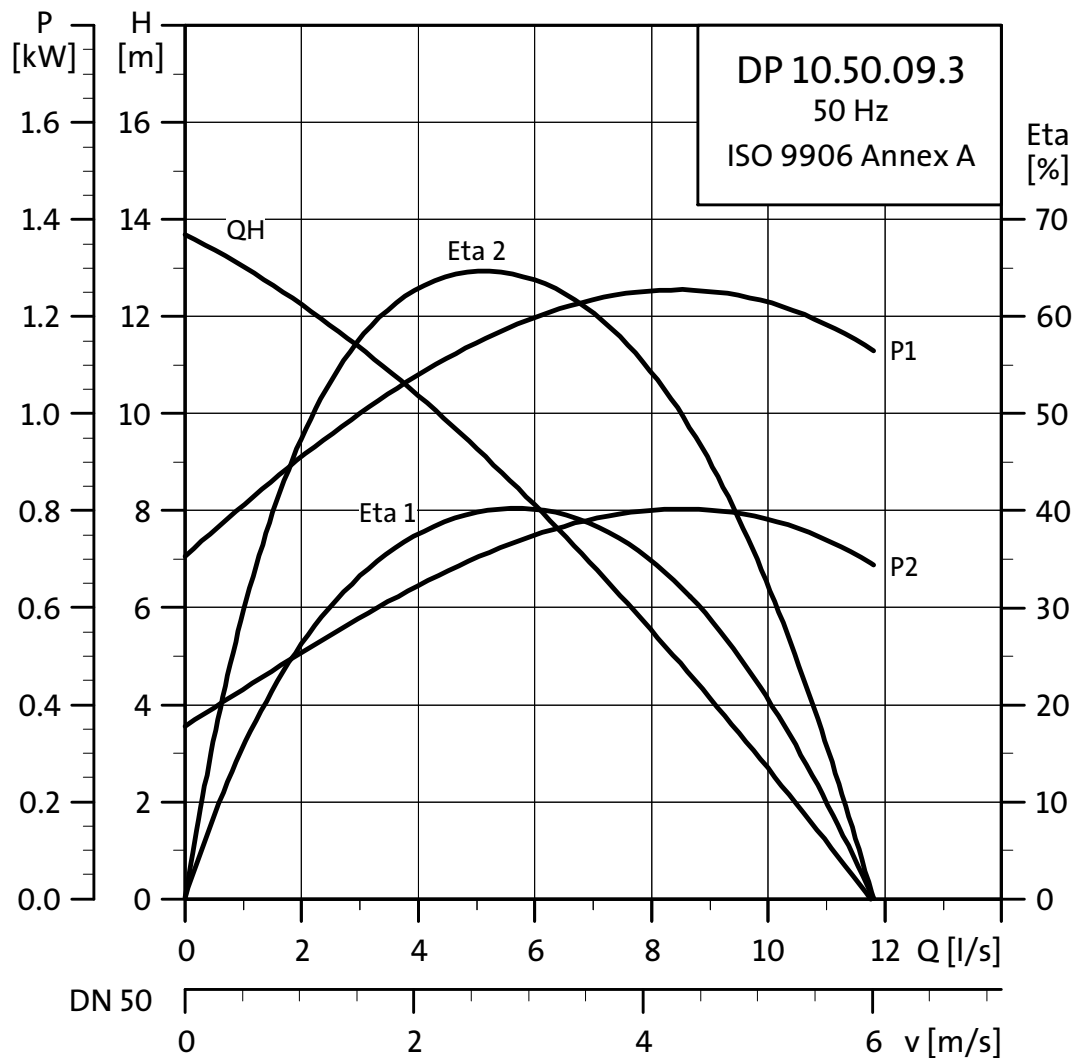
Electrical data

Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	Run capacitor [μF]	I _N		η _{motor} [%]			Cos φ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							I _N [A]	I _{start} [A]	1/2	3/4	1/1	1/2	3/4	1/1		
1 x 230	1.3	0.9	2	2870	DOL	30	6.1	38	0.55	0.63	0.67	0.86	0.92	0.96	0.0033	7

Pump data

Impeller type	Max. solids size [mm]	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Semi-open	10	30	10	IP 68	F	40	4 - 10	Ex d IIB T4/ Ex n IIB T4

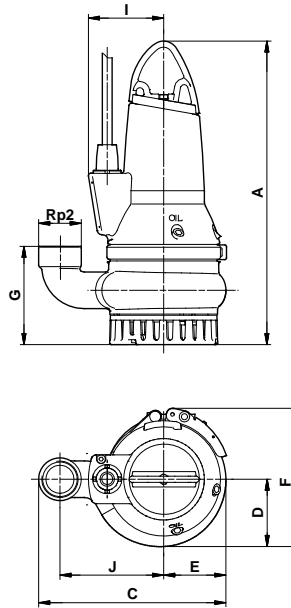
Performance curves DP10.50.09.3



TM02 7462 3603

Technical data

Dimensional sketches DP10.50.09.3



TM02 7231 2803

Product dimensions

A [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]	Weight [kg]
497	307	110	102	227	161	-	123	170	39

With 10 m cable

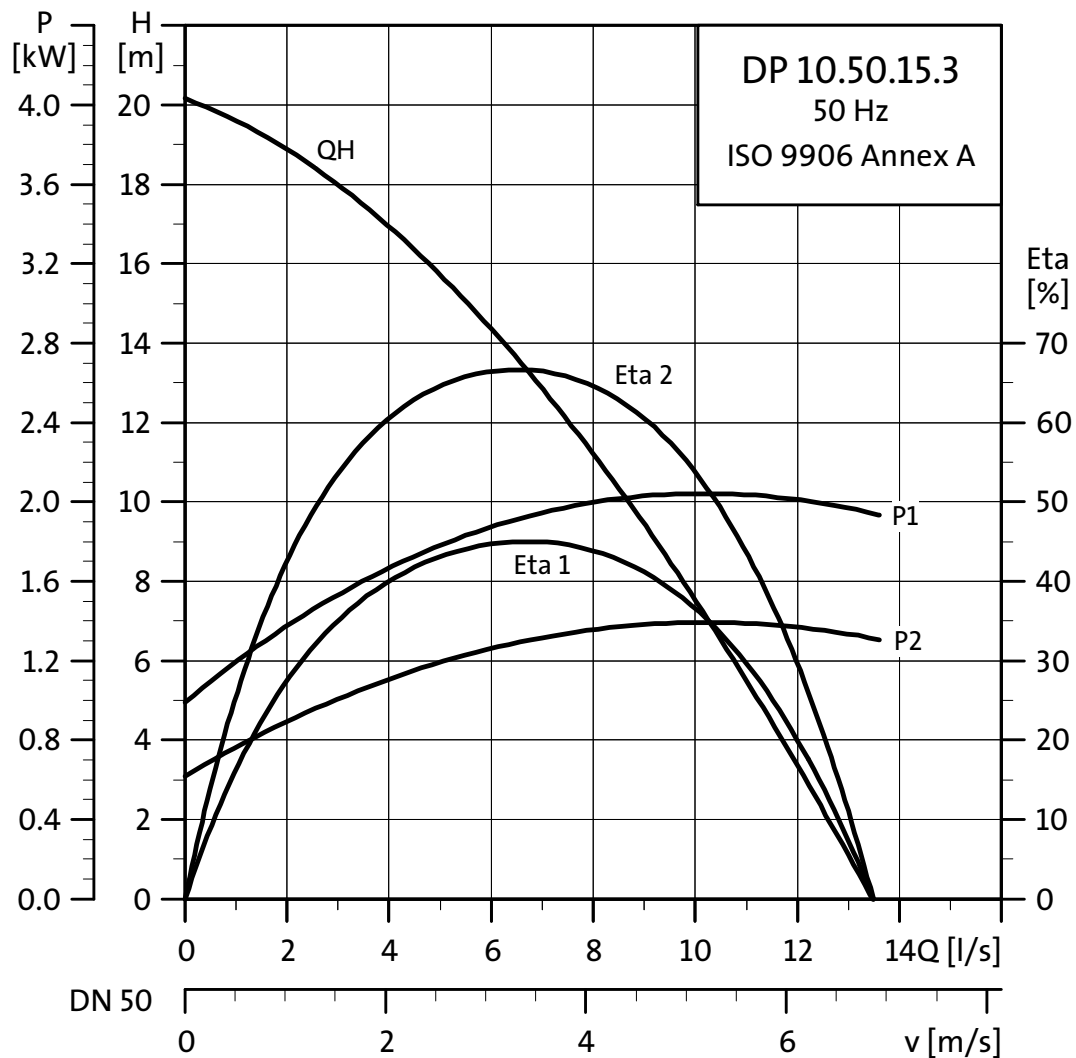
Electrical data

Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		I_{start}			η_{motor} [%]				Cos φ	Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
						[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1				
3 x 400-415	1.38	0.9	2	2870	DOL	2.8	21	58	61	65	0.58	0.68	0.76	0.0033	12		

Pump data

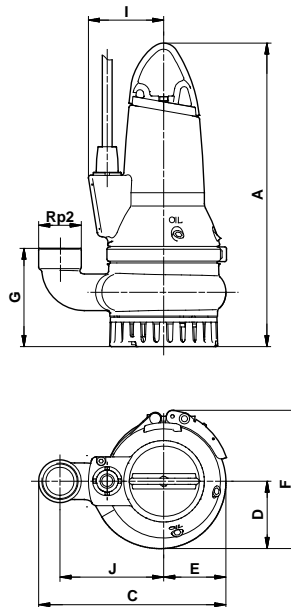
Impeller type	Max. solids size [mm]	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Semi-open	10	30	10	IP 68	F	40	4 - 10	Ex d IIB T4/ Ex n IIB T4

Performance curves DP10.50.15.3



TM02 7461 3603

Dimensional sketches DP10.50.15.3



TM02 7231 2803

Product dimensions

A [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]	Weight [kg]
497	307	110	102	227	161	-	123	170	39

With 10 m cable

Electrical data

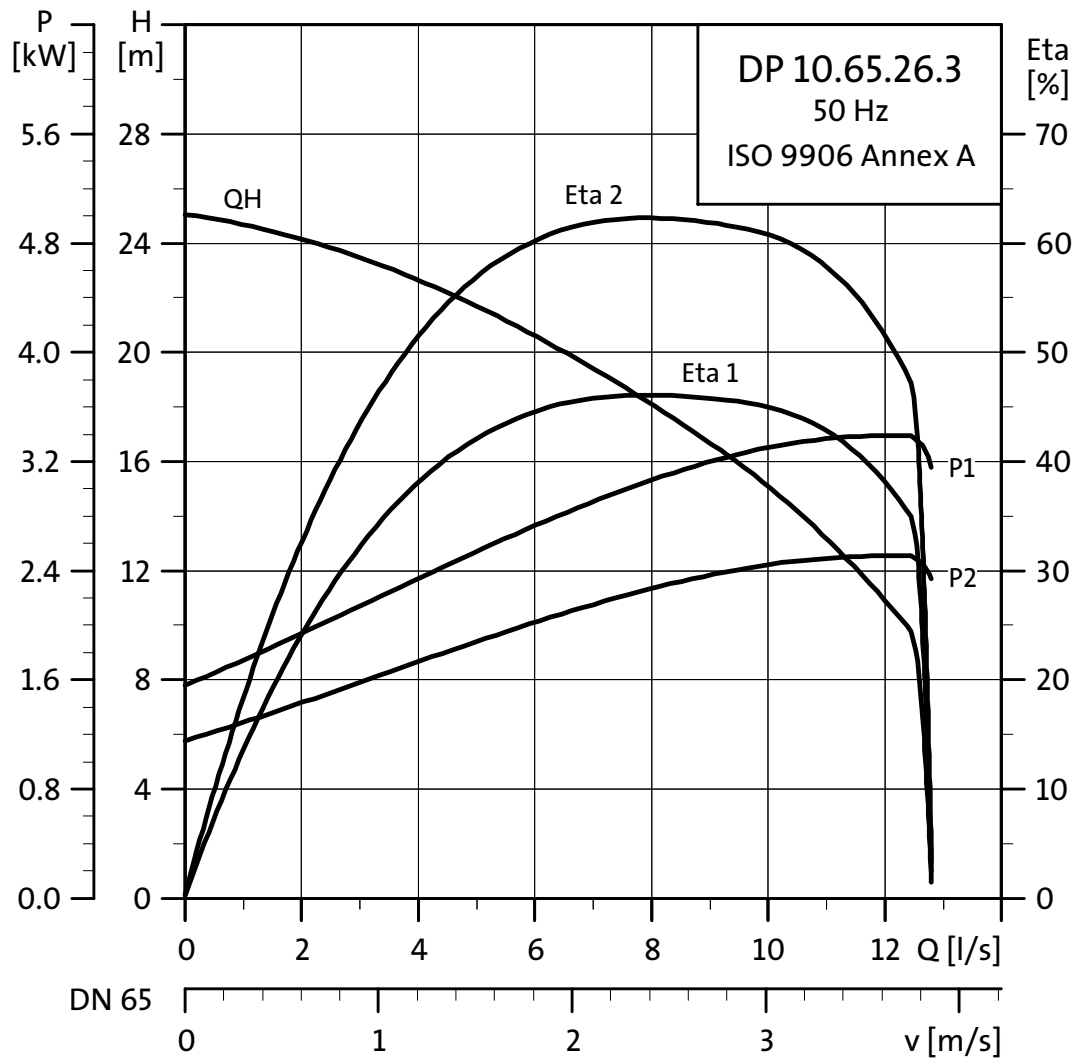
Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		I_{start}			η_{motor} [%]			$\cos \varphi$		Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
						[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1				
3 x 400-415	2.2	1.5	2	2720	DOL	3.8	21	63	68	67	0.71	0.81	0.88	0.0036	12		

Pump data

Impeller type	Max. solids size [mm]	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Semi-open	10	30	10	IP 68	F	40	4 - 10	Ex d IIB T4/ Ex n IIB T4

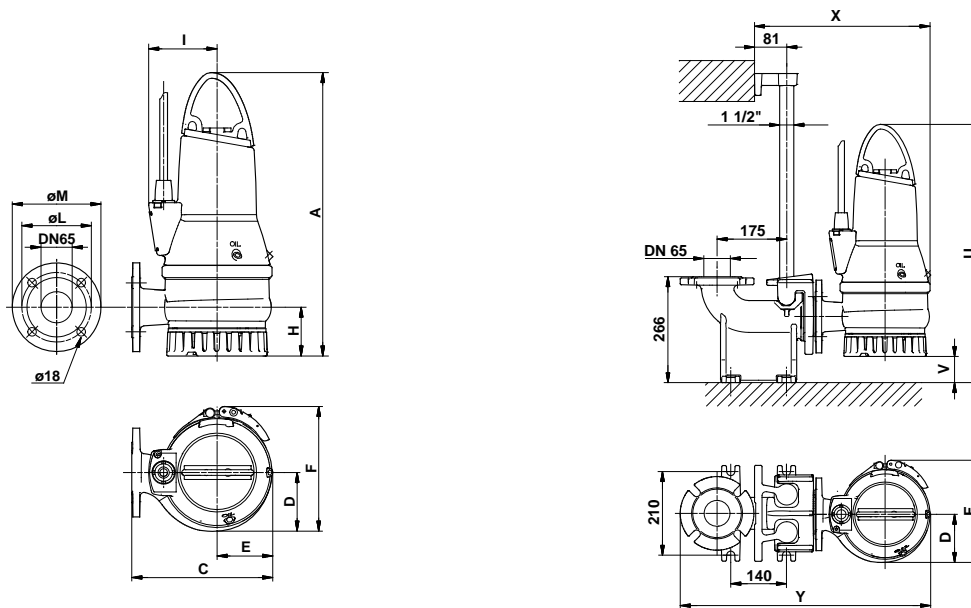
DP10.65

Performance curves DP10.65.26.3



TM02 7464 3603

Dimensional sketches DP10.65.26.3



TM02 7234 3303/TM02 7346 3303

Product dimensions

A [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]	U [mm]	V [mm]	X [mm]	Y [mm]	Weight [kg]
497	307	110	102	227	161	-	143	170	655	64	443	630	39

With 10 m cable

Electrical data

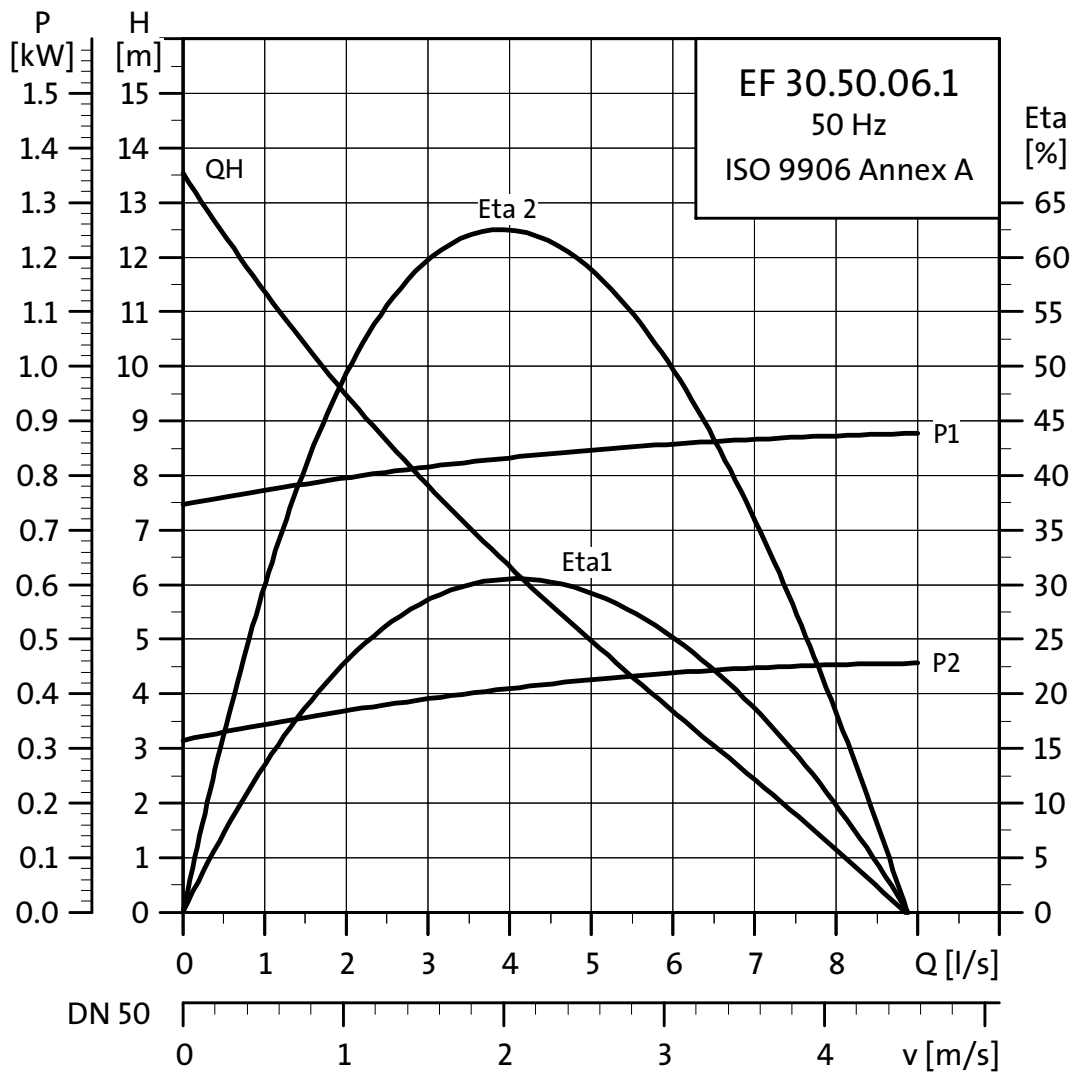
Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		I_{start}			η_{motor} [%]				Cos φ	Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
						[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1				
3 x 400-415	3.5	2.6	2	2870	DOL	5.8	33	74	75	74	0.68	0.81	0.87	0.007	24		

Pump data

Impeller type	Max. solids size [mm]	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Semi-open	10	30	10	IP 68	F	40	4 - 10	Ex d IIB T4/ Ex n IIB T4

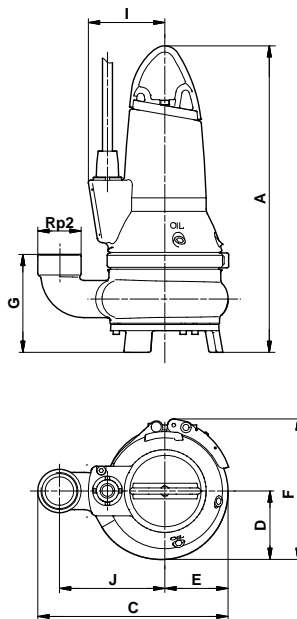
EF30.50

Performance curves EF30.50.06.1



TM02 7469 3603

Dimensional sketches EF30.50.06.1



TM02 7348 3303

Product dimensions

A	C	D	E	F	G	J	Weight [kg]
494	307	110	102	227	159	170	39

With 10 m cable

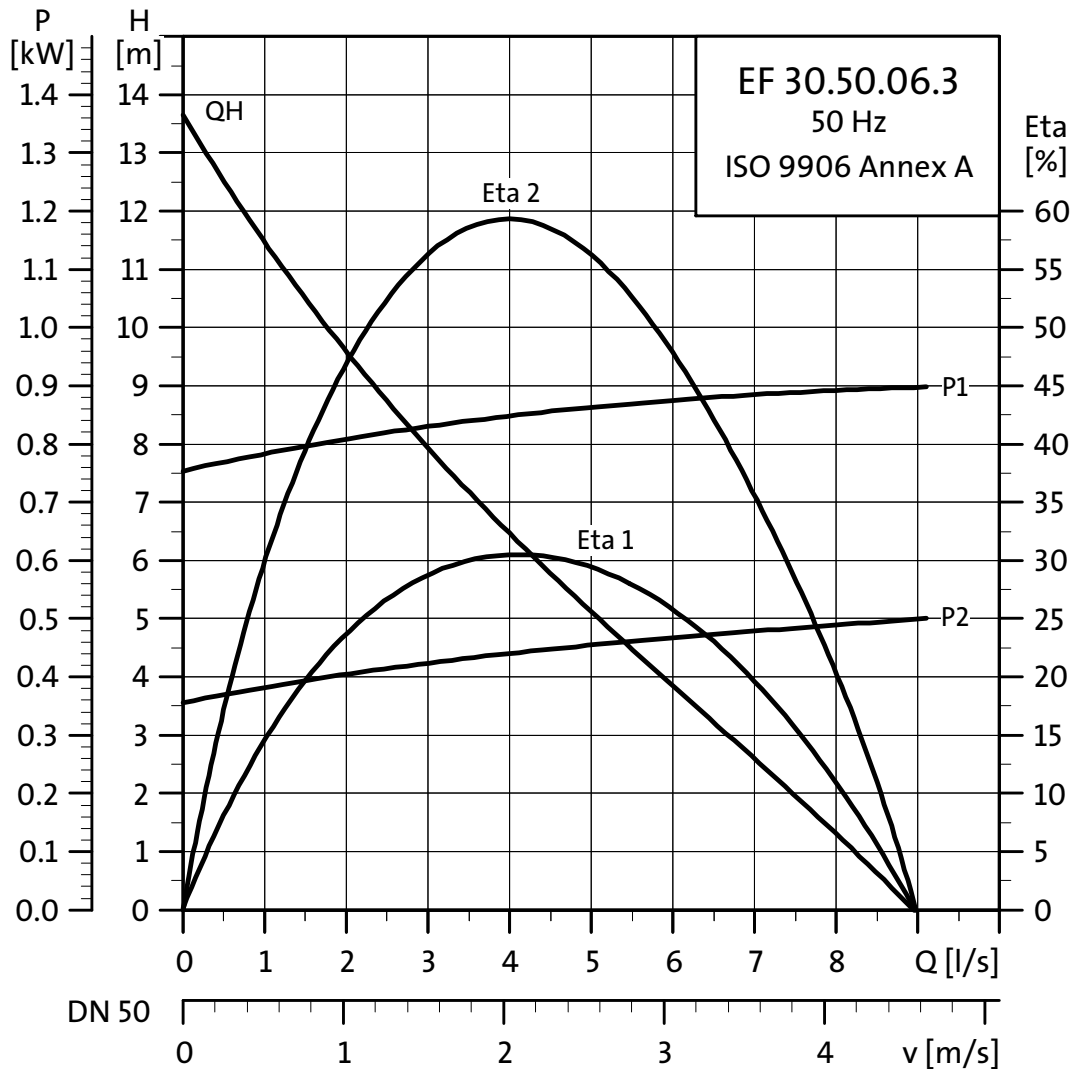
Electrical data

Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	Run capacitor [μ F]	I_N					I_{start}			η_{motor} [%]	Cos ϕ				Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		1/2	3/4	1/1			
1 x 230	0.98	0.6	2	2920	DOL	30	4.8	21	42	55	61	0.81	0.81	0.86	0.0035	7					

Pump data

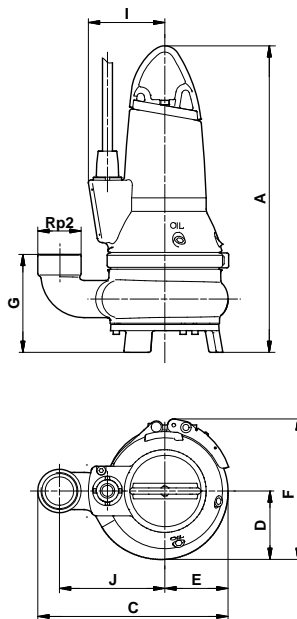
Impeller type	Max. solids size [mm]	Max . number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Semi-open	30	30	10	IP 68	F	40	4-10	Ex d IIB T4 Ex n IIB T4

Performance curves EF30.50.06.3



TMD2 7468 3603

Dimensional sketches EF30.50.06.3



TM02 7348 3303

Product dimensions

A	C	D	E	F	G	J	Weight [kg]
494	307	110	102	227	159	170	39

With 10 m cable

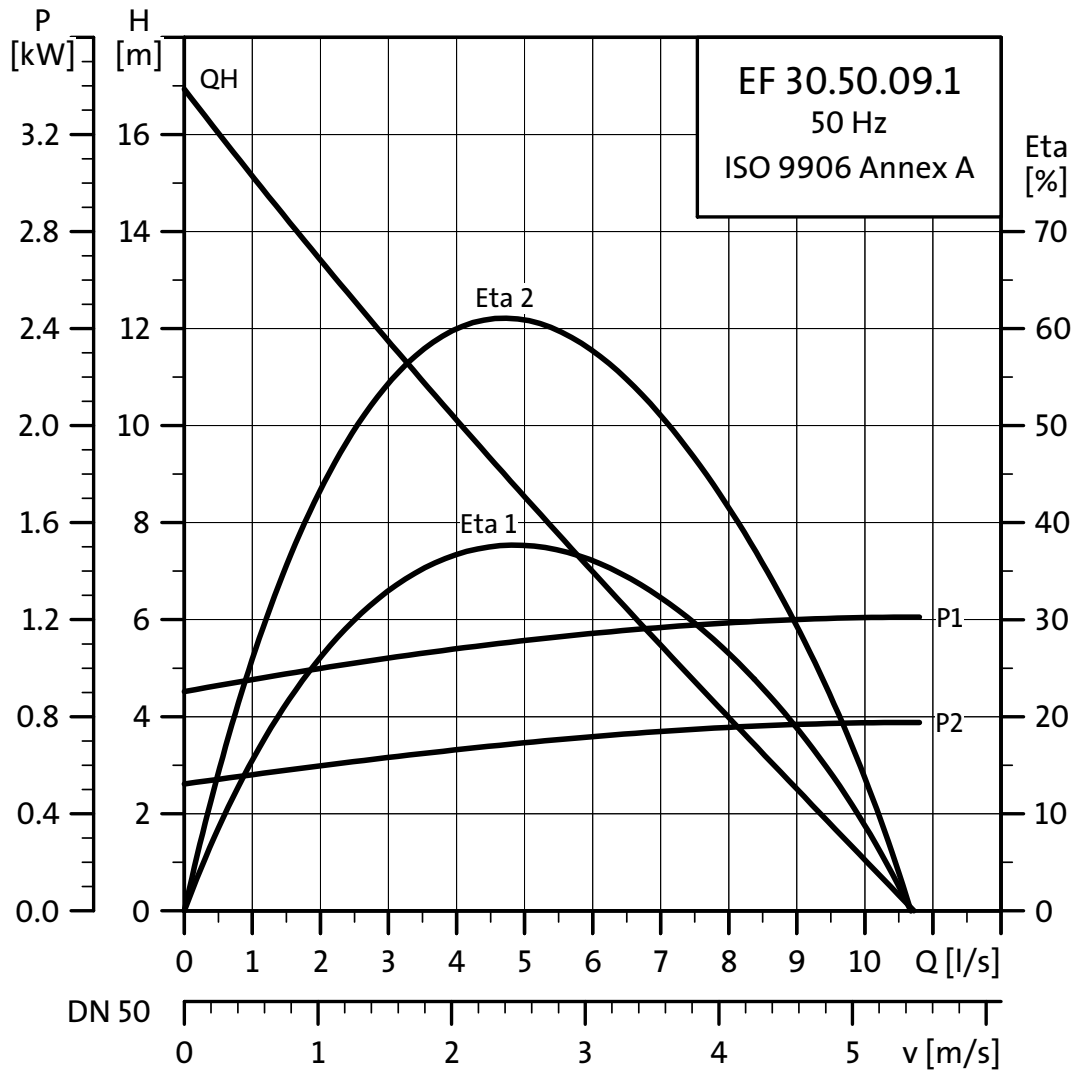
Electrical data

Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			I_{start}			η_{motor} [%]			Cos ϕ		Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
						[A]	[A]		1/2	3/4	1/1	1/2	3/4	1/1				
3 x 400-415	1.0	0.6	2	2890	DOL	2.3	21		43	53	59	0.5	0.58	0.65	0.0035	12		

Pump data

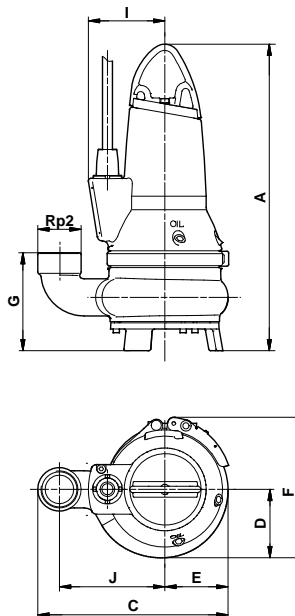
Impeller type	Max. solids size [mm]	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Semi-open	30	30	10	IP 68	F	40	4-10	Ex d IIB T4 Ex n IIB T4

Performance curves EF30.50.09.1



TM02 7481 3603

Dimensional sketches EF30.50.09.1



TM02 7348 3303

Product dimensions

A	C	D	E	F	G	J	Weight [kg]
494	307	110	102	227	159	170	39

With 10 m cable

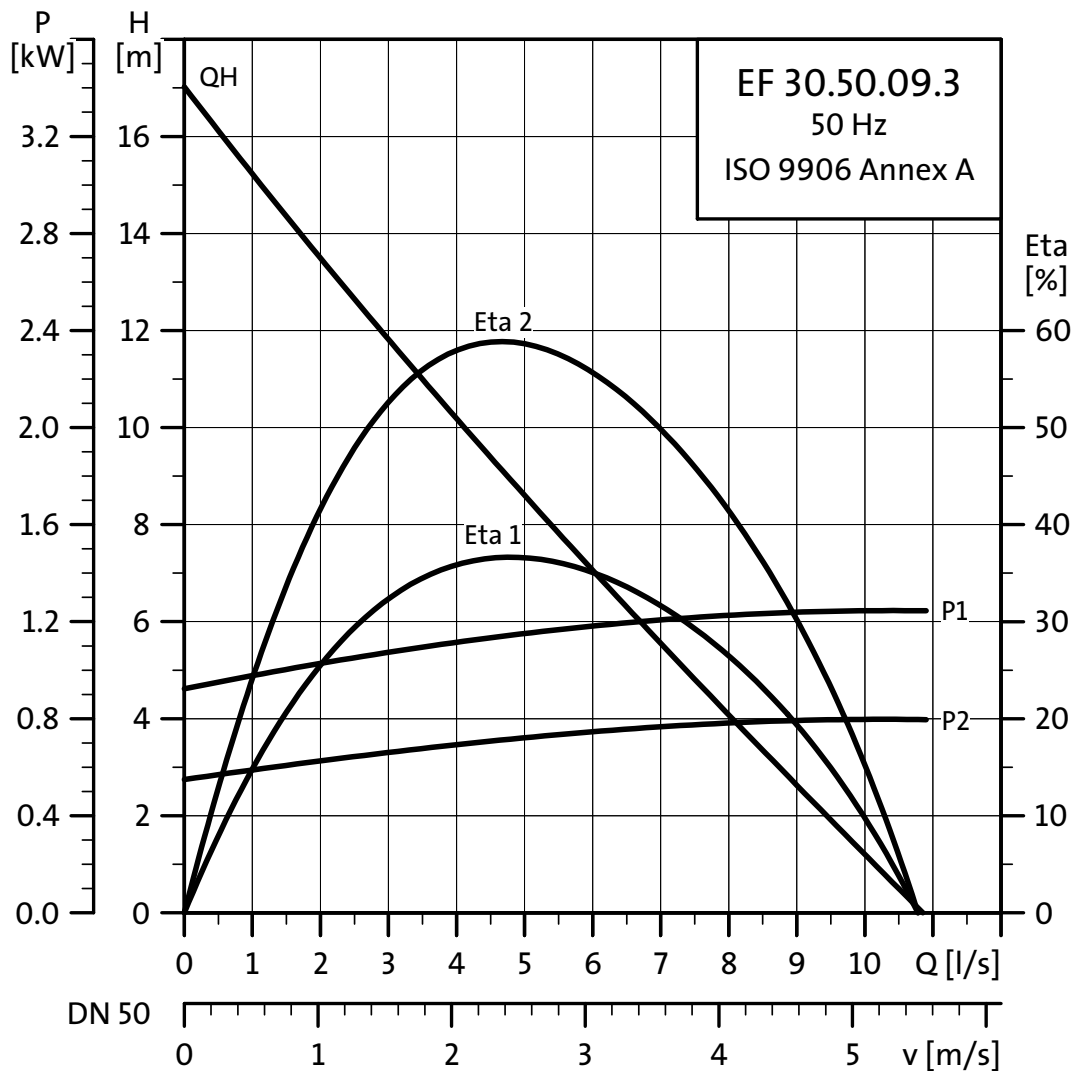
Electrical data

Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	Run capacitor [μF]	I_N			I_{start}			η_{motor} [%]			$\cos \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1	1/2	3/4	1/1		
1 x 230	0.98	0.6	2	2920	DOL	30	4.8	21	42	55	61	0.81	0.81	0.86	0.0035	7				

Pump data

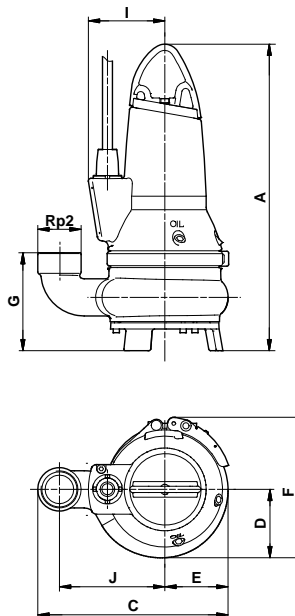
Impeller type	Max. solids size [mm]	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Semi-open	30	30	10	IP 68	F	40	4-10	Ex d IIB T4 Ex n IIB T4

Performance curves EF30.50.09.3



TMD2 7480 3603

Dimensional sketches EF30.50.09.3



/TMD2 7348 3303

Product dimensions

A	C	D	E	F	G	J	Weight [kg]
494	307	110	102	227	159	170	39

With 10 m cable

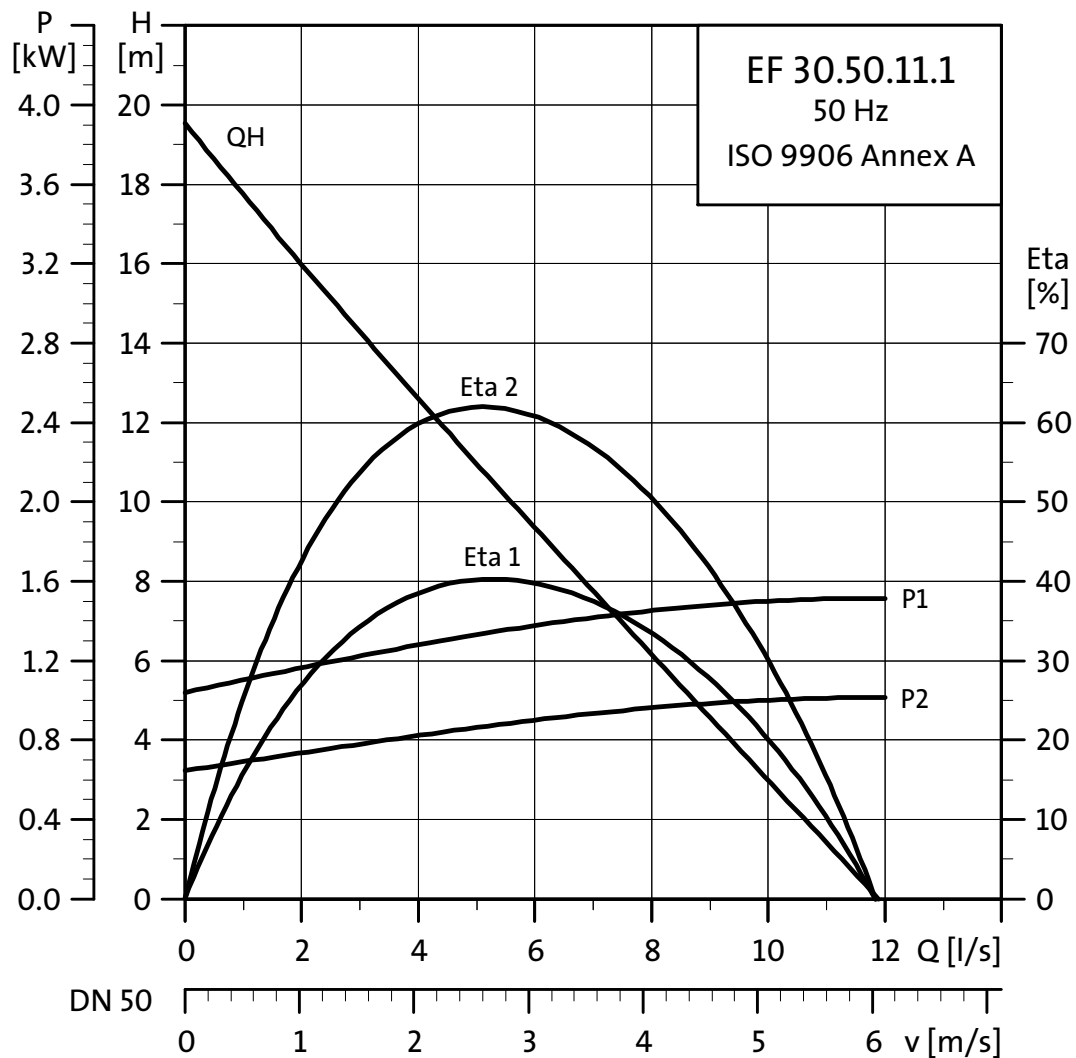
Electrical data

Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			I_{start}			η_{motor} [%]			$\cos \varphi$		Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
						[A]	[A]		1/2	3/4	1/1	1/2	3/4	1/1				
3 x 400-415	1.4	0.9	2	2870	DOL	2.8	21		58	61	65	0.58	0.68	0.76	0.0037	12		

Pump data

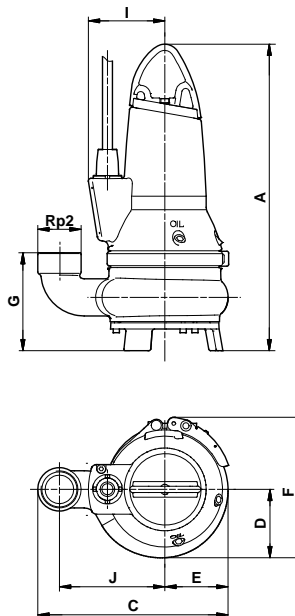
Impeller type	Max. solids size [mm]	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Semi-open	30	30	10	IP 68	F	40	4-10	Ex d IIB T4 Ex n IIB T4

Performance curves EF30.50.11.1



TMO2 7467 3603

Dimensional sketches EF30.50.11.1



TM02 7348 3303

Product dimensions

A	C	D	E	F	G	J	Weight [kg]
494	307	110	102	227	159	170	39

With 10 m cable

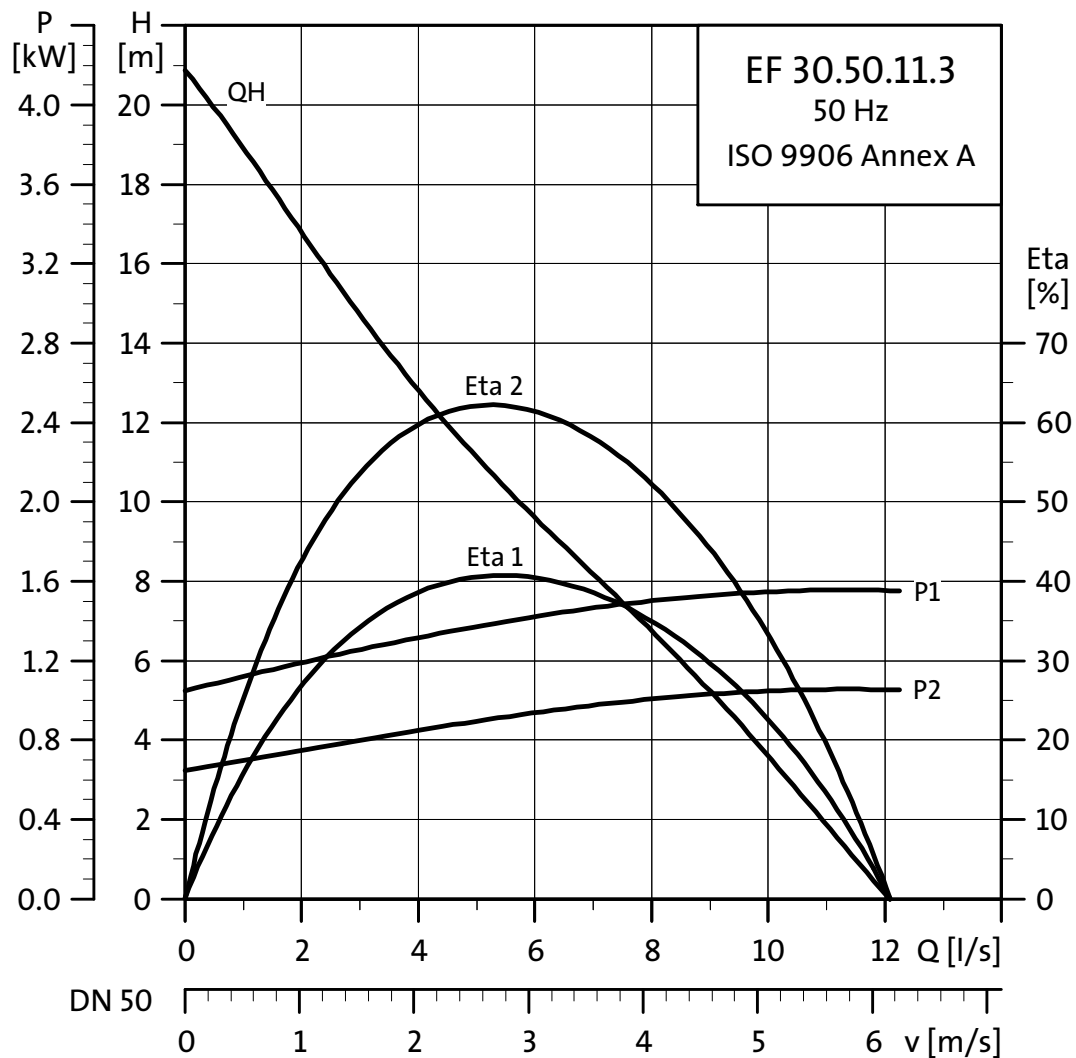
Electrical data

Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	Run capacitor [μF]	I_N			I_{start}			η_{motor} [%]			$\cos \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1	1/2	3/4	1/1		
1 x 230	1.6	1.1	2	2830	DOL	30	7.4	38	60	66	67	0.89	0.96	0.97	0.0037	7				

Pump data

Impeller type	Max. solids size [mm]	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Semi-open	30	30	10	IP 68	F	40	4-10	Ex d IIB T4 Ex n IIB T4

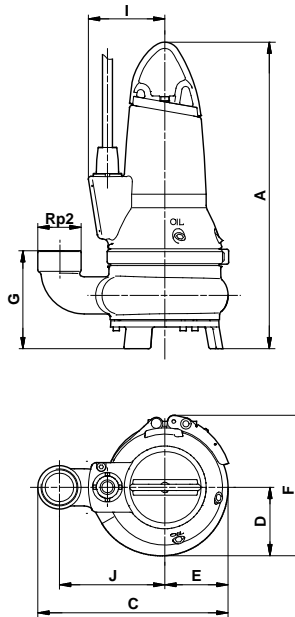
Performance curves EF30.50.11.3



TM02 7466 3603

Technical data

Dimensional sketches EF30.50.11.3



TM02 7348 3303

Product dimensions

A	C	D	E	F	G	J	Weight [kg]
494	307	110	102	227	159	170	39

With 10 m cable

Electrical data

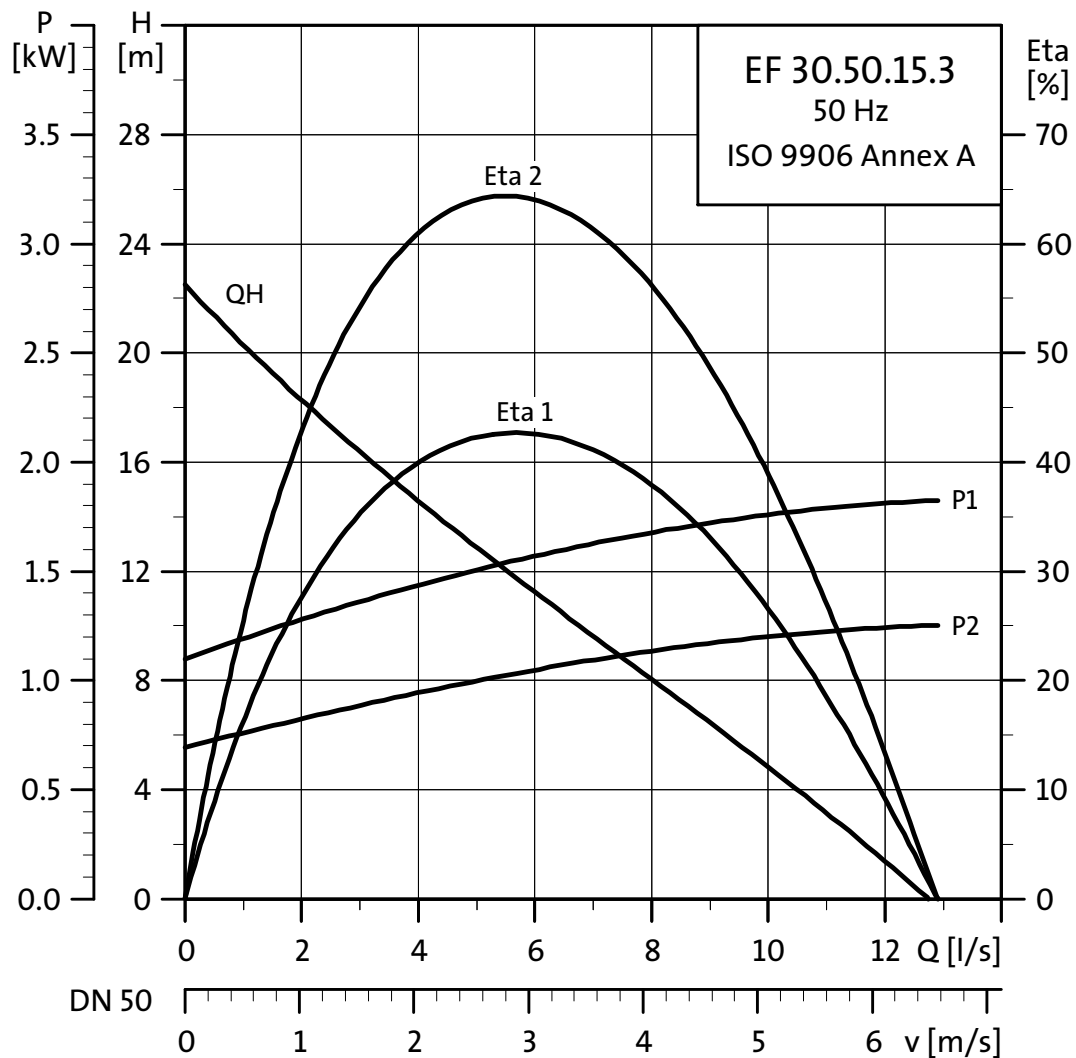
Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			I_{start}			η_{motor} [%]			Cos ϕ		Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
						[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1				
3 x 400-415	1.6	1.1	2	2830	DOL	3.1	21	57	64	67	0.63	0.74	0.81	0.0037	12			

Pump data

Impeller type	Max. solids size [mm]	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Semi-open	30	30	10	IP 68	F	40	4-10	Ex d IIB T4 Ex n IIB T4

Performance curves

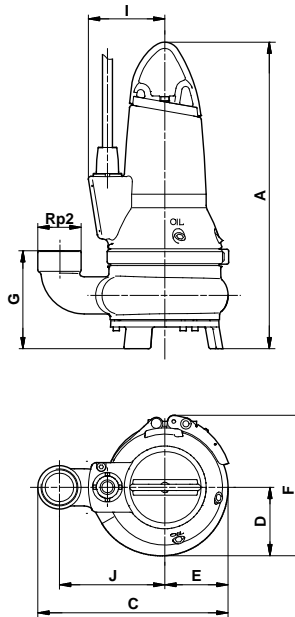
Performance curves EF30.50.15.3



TM02 7465 3603

Technical data

Dimensional sketches EF30.50.15.3



TM02 7348 3303

Product dimensions

A	C	D	E	F	G	J	Weight [kg]
494	307	110	102	227	159	170	39

With 10 m cable

Electrical data

Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			I_{start}			η_{motor} [%]			Cos ϕ			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
						[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1	1/2	3/4	1/1		
3 x 400-415	2.2	1.5	2	2720	DOL	3.8	21	63	68	67	0.71	0.81	0.88	0.0039	12				

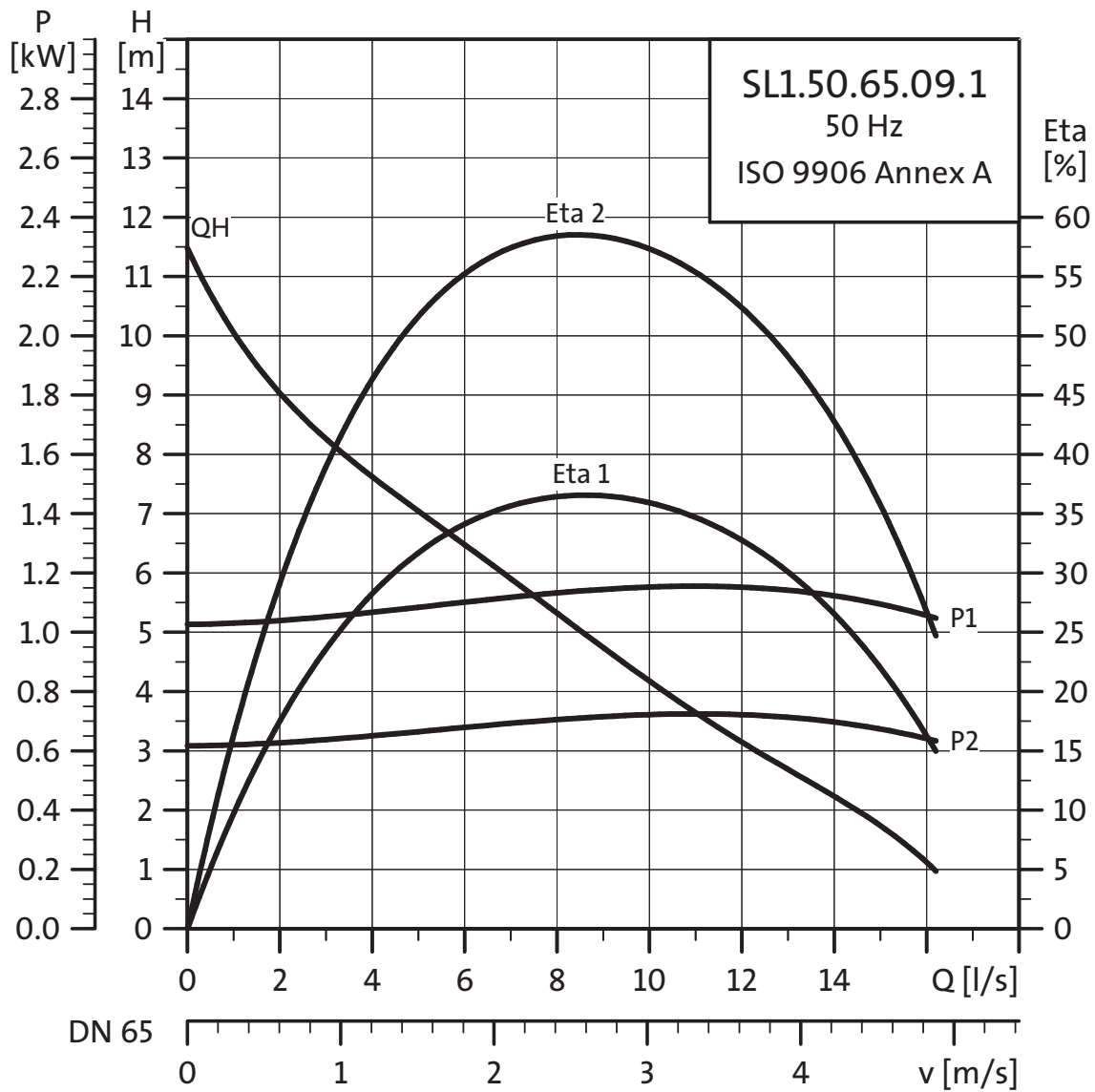
Pump data

Impeller type	Max. solids size [mm]	Max . number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Semi-open	30	30	10	IP 68	F	40	4-10	Ex d IIB T4 Ex n IIB T4

Performance curves

SL1.50.65

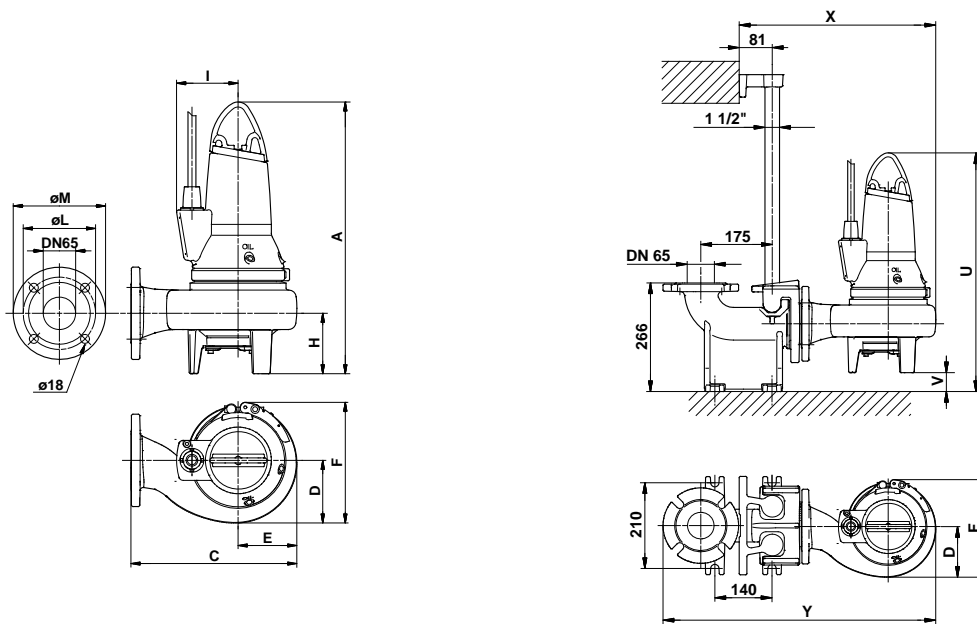
Performance curves SL1.50.65.09.1



TM02 7574 3603

Technical data

Dimensional sketches SL1.50.65.09.1



TM02 7349 3403/TM02 7420 3403

Product dimensions

A	C	D	E	F	H	I	U	V	X	Y	øL	øM	Weight [kg]
544	333	126	118	242	121	123	589	45	485	671	143	185	48

With 10 m cable

Electrical data

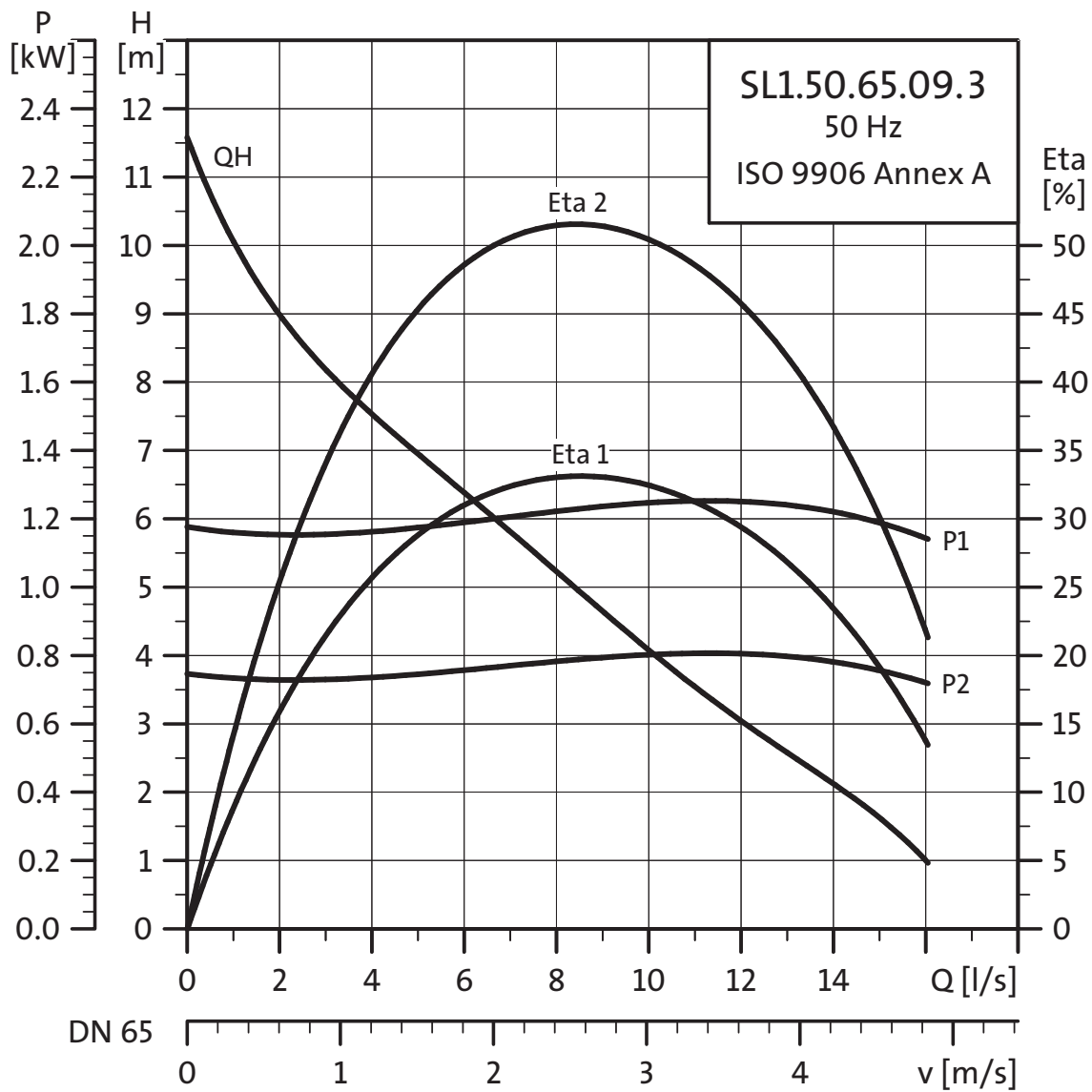
Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	Run capacitor [µF]	I_N		I_{start}			η_{motor} [%]			$\cos \varphi$		Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1				
1 x 230	1.3	0.9	2	2920	DOL	30	6.1	38	55	63	67	0.86	0.92	0.96	0.004	7		

Pump data

Impeller type	Max. solids size [mm]	Max . number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Channel	65	30	10	IP68	F	40	4-10	Ex d IIB T4 / Ex n IIB T4

Performance curves

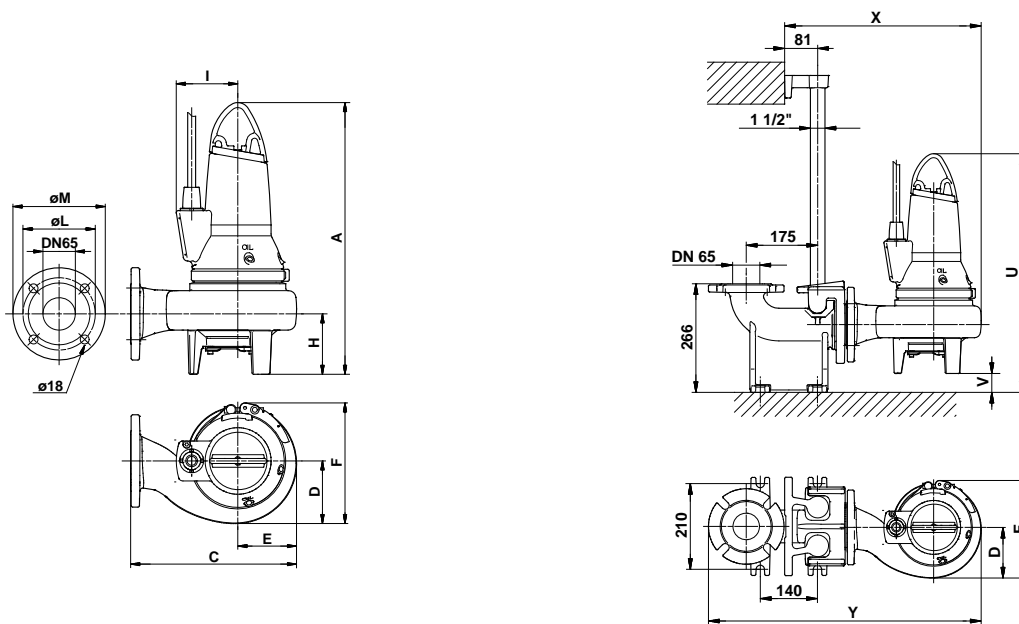
Performance curves SL1.50.65.09.3



TMD2 7484 3603

Technical data

Dimensional sketches SL1.50.65.09.3



TM02 7349 3403/TM02 7420 3403

Product dimensions

A	C	D	E	F	H	I	U	V	X	Y	øL	øM	Weight [kg]
544	333	126	118	242	121	123	589	45	485	671	143	185	48

With 10 m cable

Electrical data

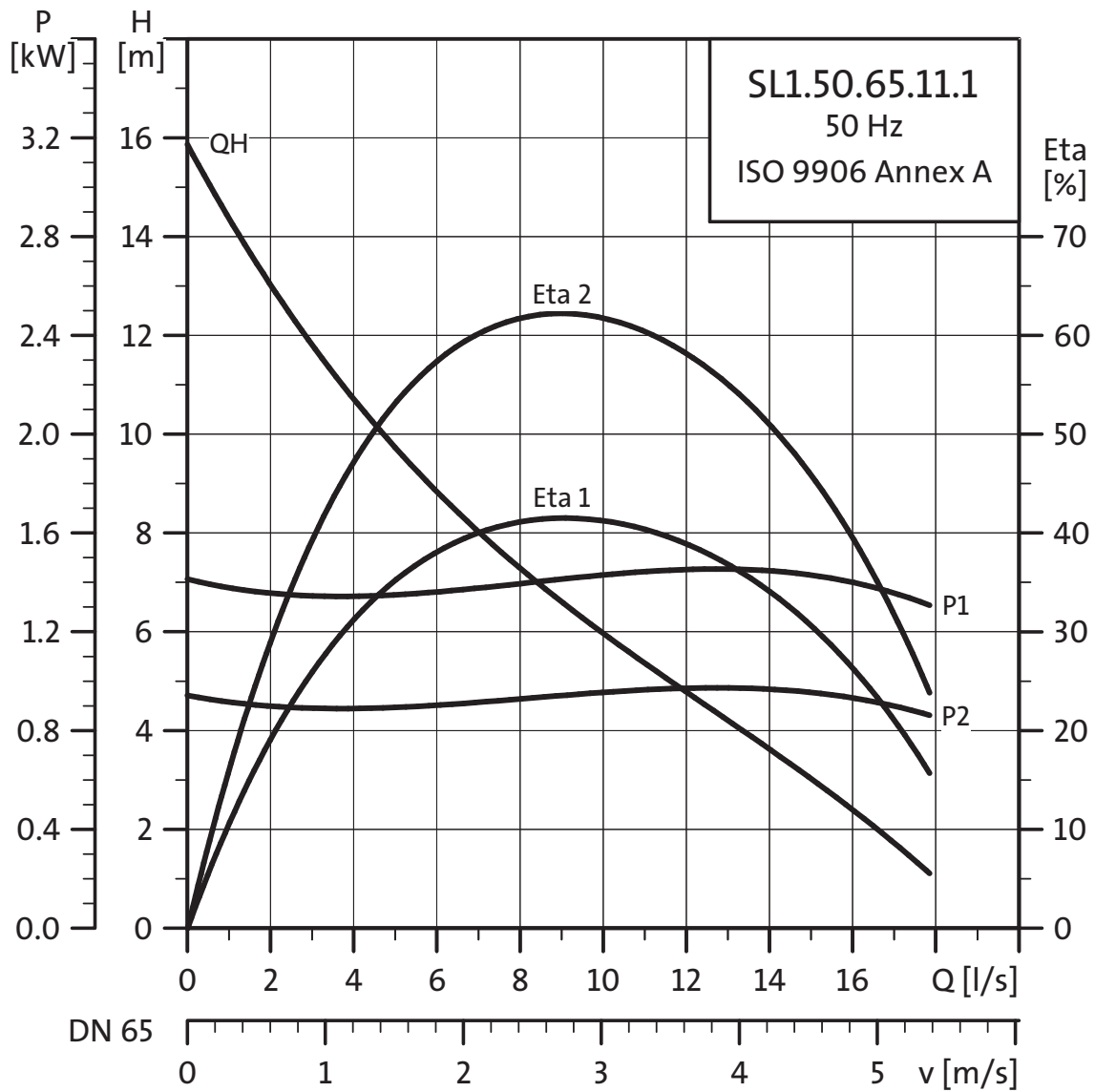
Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		I_{start}			η_{motor} [%]				Cos ϕ	Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
						[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1				
3 x 230-240	1.4	0.9	2	2920	DOL	4.9	36	58	61	65	0.50	0.58	0.65	0.004	12		
3 x 400-415	1.4	0.9	2	2920	DOL	2.8	21	58	61	65	0.58	0.68	0.76	0.004	12		

Pump data

Impeller type	Max. solids size [mm]	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Channel	65	30	10	IP68	F	40	4-10	Ex d IIB T4 / Ex n IIB T4

Performance curves

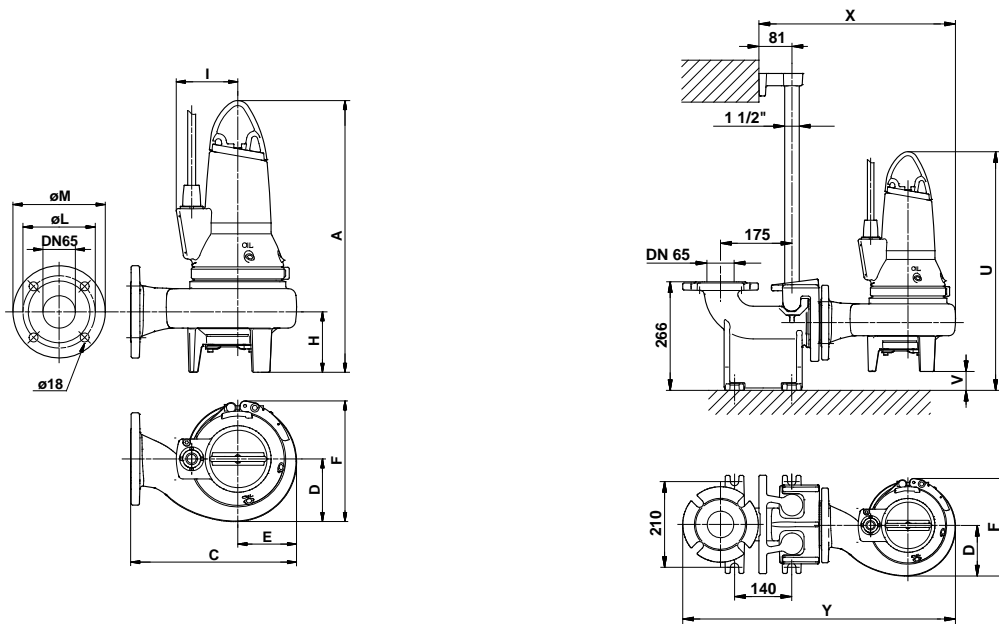
Performance curves SL1.50.65.11.1



TM02 7774 3603

Technical data

Dimensional sketches SL1.50.65.11.1



TM02 7349 3403/TM02 7420 3403

Product dimensions

A	C	D	E	F	H	I	U	V	X	Y	øL	øM	Weight [kg]
544	333	126	118	242	121	123	589	45	485	671	143	185	48

With 10 m cable

Electrical data

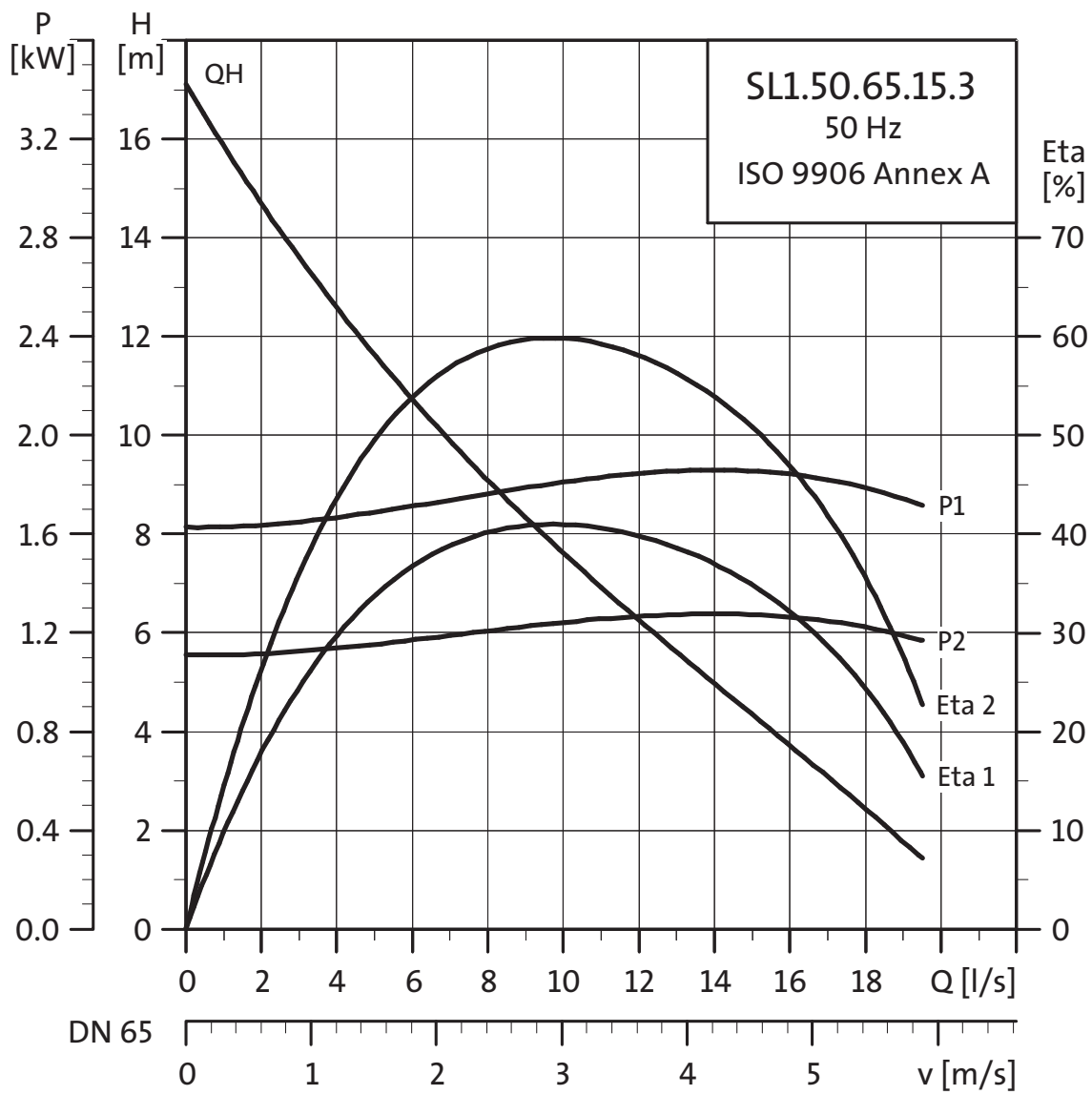
Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	Run capacitor [µF]	I_N		I_{start}				η_{motor} [%]		$\cos \varphi$		Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1				
1 x 230	1.3	0.9	2	2920	DOL	30	6.1	38	55	63	67	0.86	0.92	0.96	0.004	7		

Pump data

Impeller type	Max. solids size [mm]	Max . number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Channel	65	30	10	IP68	F	40	4-10	Ex d IIB T4 / Ex n IIB T4

Performance curves

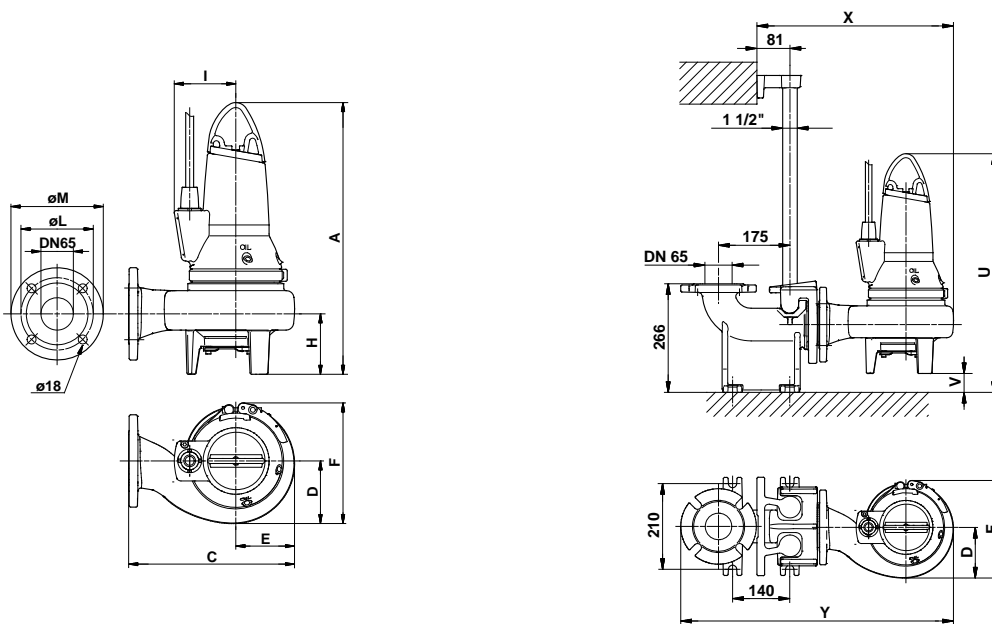
Performance curves SL1.50.65.15.3



TM02 7473 3603

Technical data

Dimensional sketches SL1.50.65.15.3



TM02 7349 3403/TM02 7420 3403

Product dimensions

A	C	D	E	F	H	I	U	V	X	Y	øL	øM	Weight [kg]
544	333	126	118	242	121	123	589	45	485	671	143	185	48

With 10 m cable

Electrical data

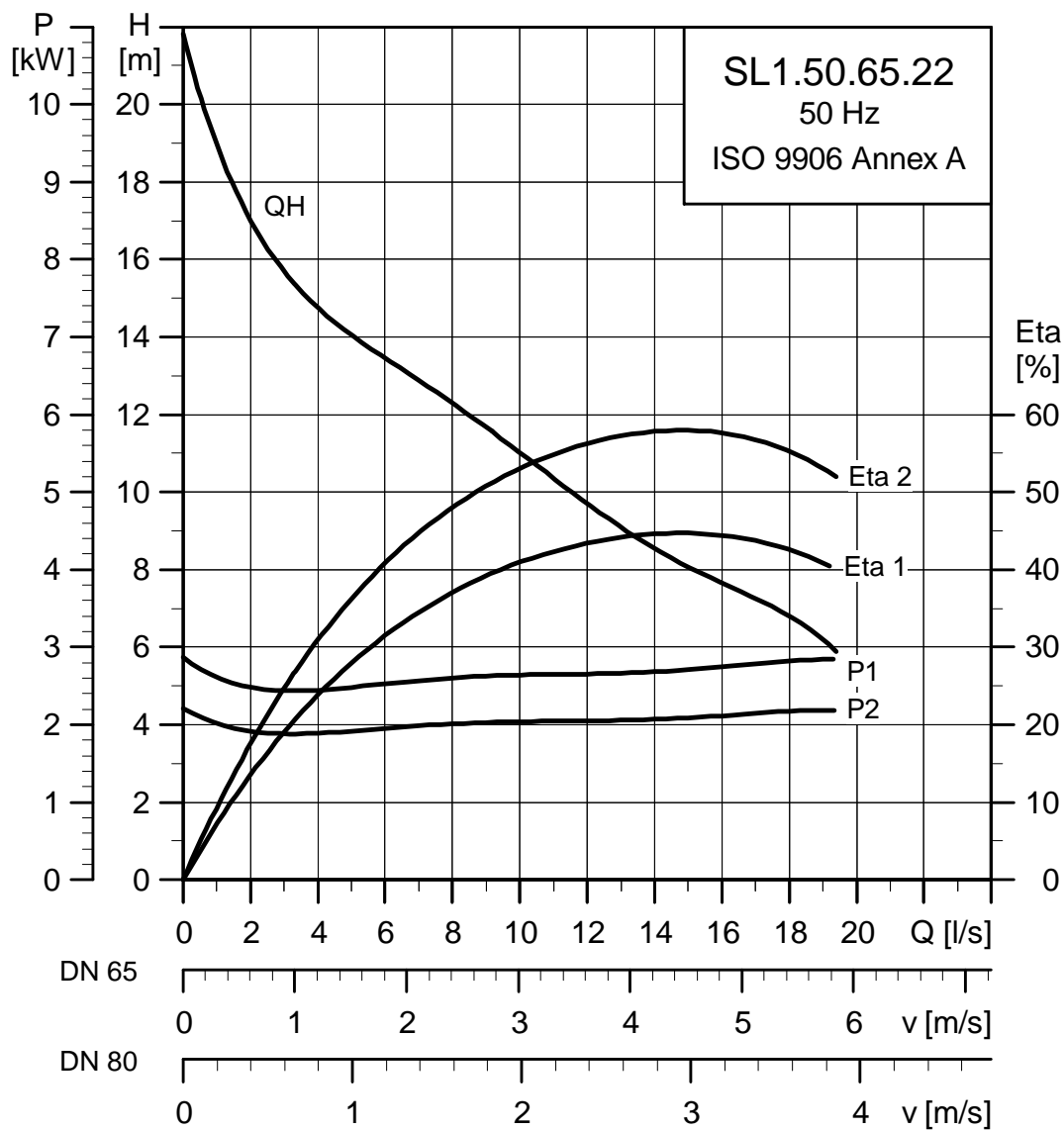
Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		η_{motor} [%]			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
						I_N [A]	I_{start} [A]	1/2	3/4	1/1	1/2	3/4	1/1		
3 x 230-240	2.2	1.5	2	2720	DOL	6.6	36	67	68	63	0.88	0.81	0.71	0.004	12
3 x 400-415	2.2	1.5	2	2720	DOL	3.8	21	67	68	63	0.88	0.81	0.71	0.004	12

Pump data

Impeller type	Max. solids size [mm]	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Channel	65	30	10	IP68	F	40	4-10	Ex d IIB T4 / Ex n IIB T4

Performance curves

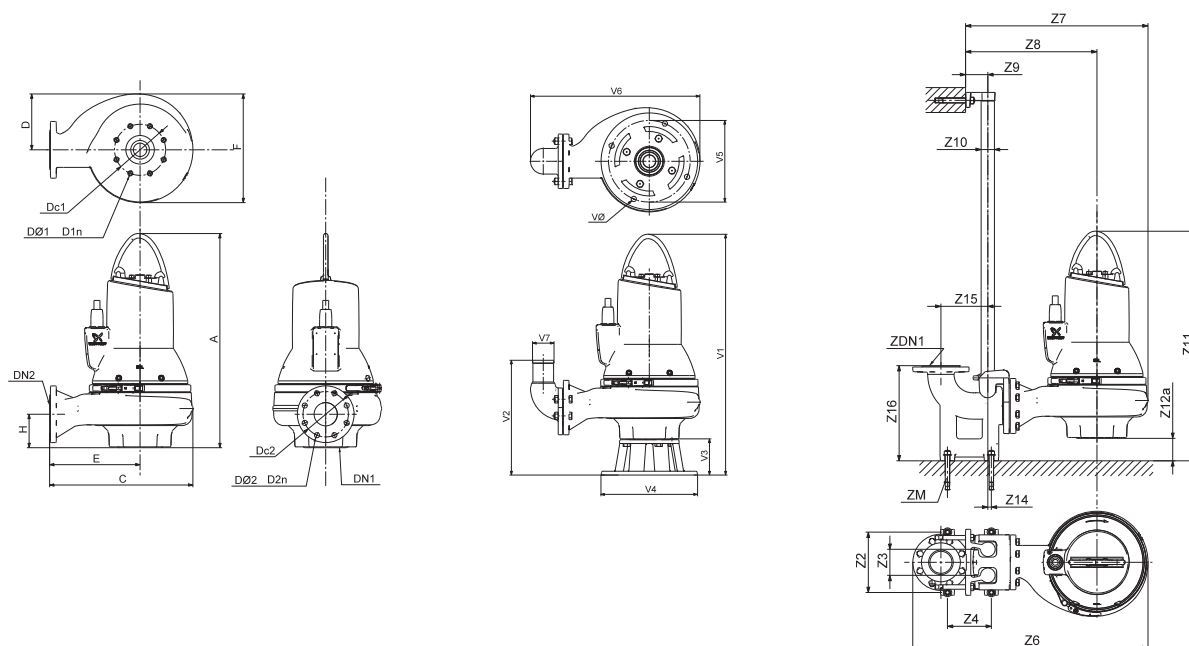
Performance curves SL1.50.65.22



TM04 2793 3008

Technical data

Dimensional sketches SL1.50.65.22



TM04 2794 3008/TM04 2795 3008/TM04 3473 4608

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
641	366	171	216	321	93	65	145	4 x 18	65	145	4 x 18	86			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
210	95	140	700	513	363	81	1½"	740	99	1	175	266	145	65	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
771	339	130	325	270	491	65	18								

Electrical data

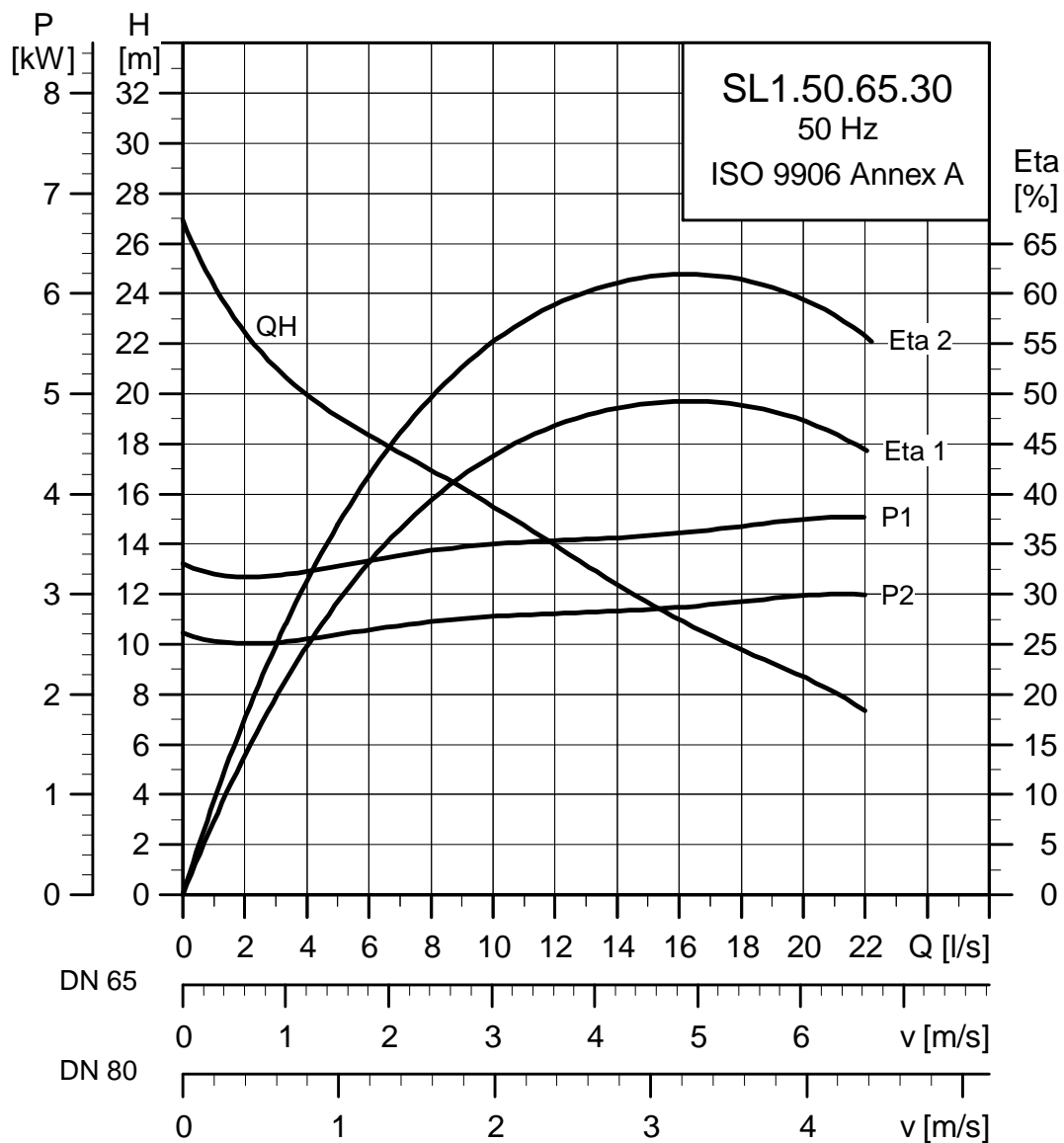
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		$\eta_{\text{motor}} [\%]$				$\text{Cos } \varphi$		Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SL1.50.65.22.2.50E	3x220-240V D	2.8	2.2	2	2990	DOL	8.5	74	70.3	75.2	76.7	0.79	0.86	0.89	0.0102	25
SL1.50.65.22.2.51D	3x380-415V D	2.8	2.2	2	2990	SD	4.9	43	70.3	75.2	76.7	0.79	0.86	0.89	0.0102	25
SL1.50.65.22.2.50D	3x380-415V Y	2.8	2.2	2	2990	DOL	4.9	43	70.3	75.2	76.7	0.79	0.86	0.89	0.0102	25
SL1.50.65.22.2.50B	3x400-415V Y	2.8	2.2	2	2990	DOL	4.9	43	70.3	75.2	76.7	0.79	0.86	0.89	0.0102	25

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	50	10	20	20	68	F	40	4-10

Performance curves

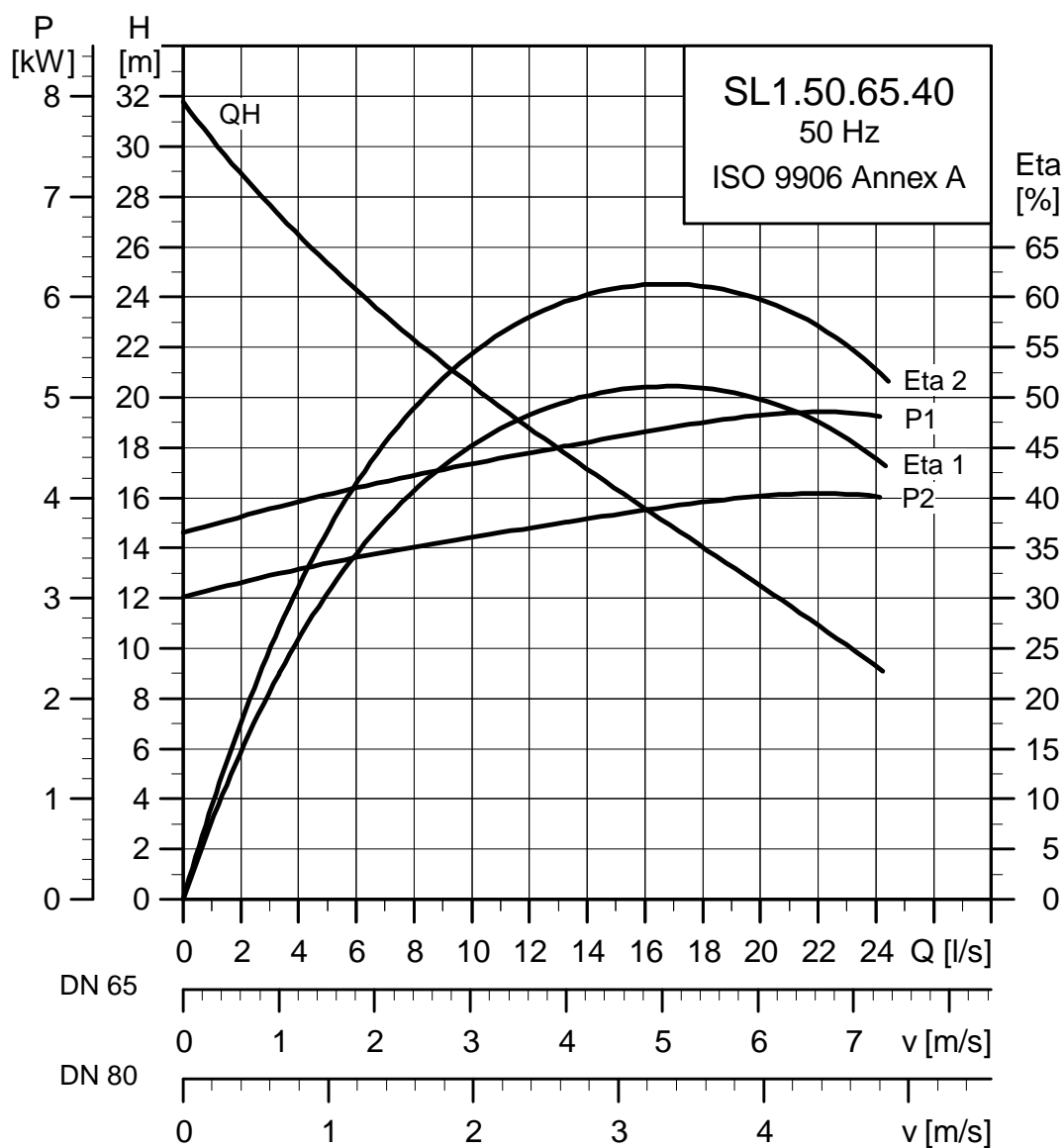
Performance curves SL1.50.65.30



TM04 2793 3008

Performance curves

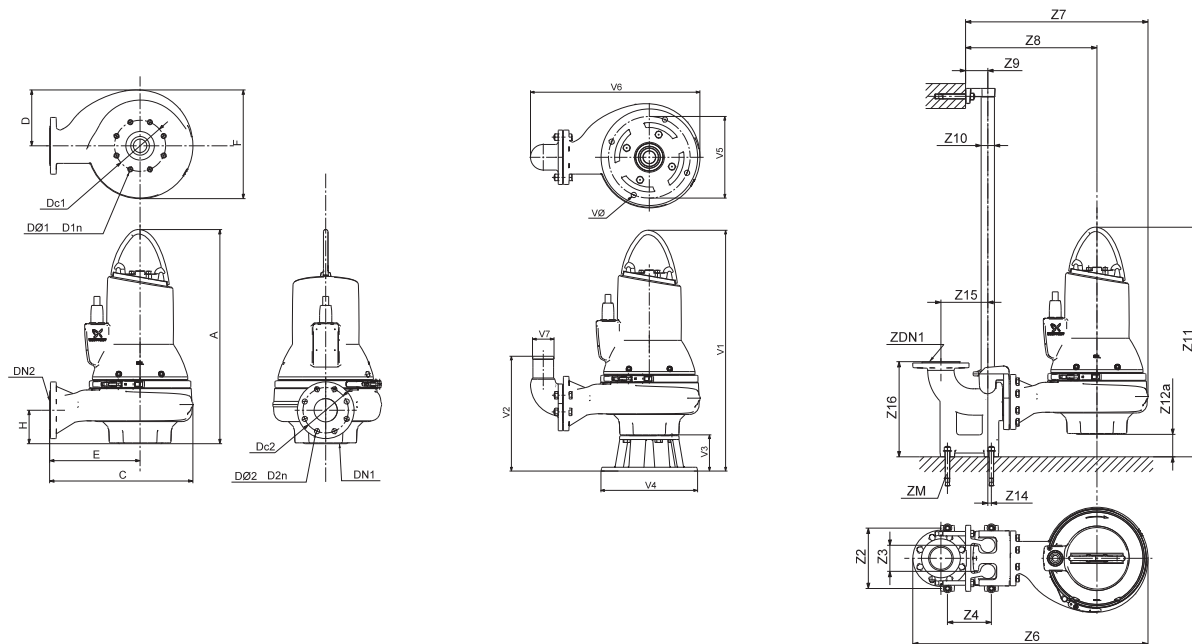
Performance curves SL1.50.65.40



TM04 3475 4608

Technical data

Dimension sketches SL1.50.65.40



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

Pump type	A	C	D	E	F	H	DN1	Dc1	DØ1	D1n	DN2	Dc2	DØ2	D2n	Weight [kg]
SL1.50.65.40	677	407	200	227	379	93	65	145	4 x 18		65	145	4 x 18		115

Pump type	Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
SL1.50.65.40	210	95	140	741	554	375	81	1½"	774	97	1	175	266	145	65	4 x M16

Pump type	V1	V2	V3	V4	V5	V6	V7	VØ
SL1.50.65.40	807	341	130	325	270	519	65	18

Electrical data

Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		$\eta_{\text{motor}} [\%]$			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SL1.50.65.40.2.51E	3x220-240V D	4.8	4.0	2	2930	SD	14.7	161	75.8	80.9	82.7	0.71	0.82	0.87	0.0194	56
SL1.50.65.40.2.51D	3x380-415V D	4.8	4.0	2	2930	SD	8.5	93	75.8	80.9	82.7	0.71	0.82	0.87	0.0194	56
SL1.50.65.40.2.50B	3x400-415V D	4.8	4.0	2	2925	DOL	8.5	93	75.8	80.9	82.7	0.71	0.82	0.87	0.0194	56

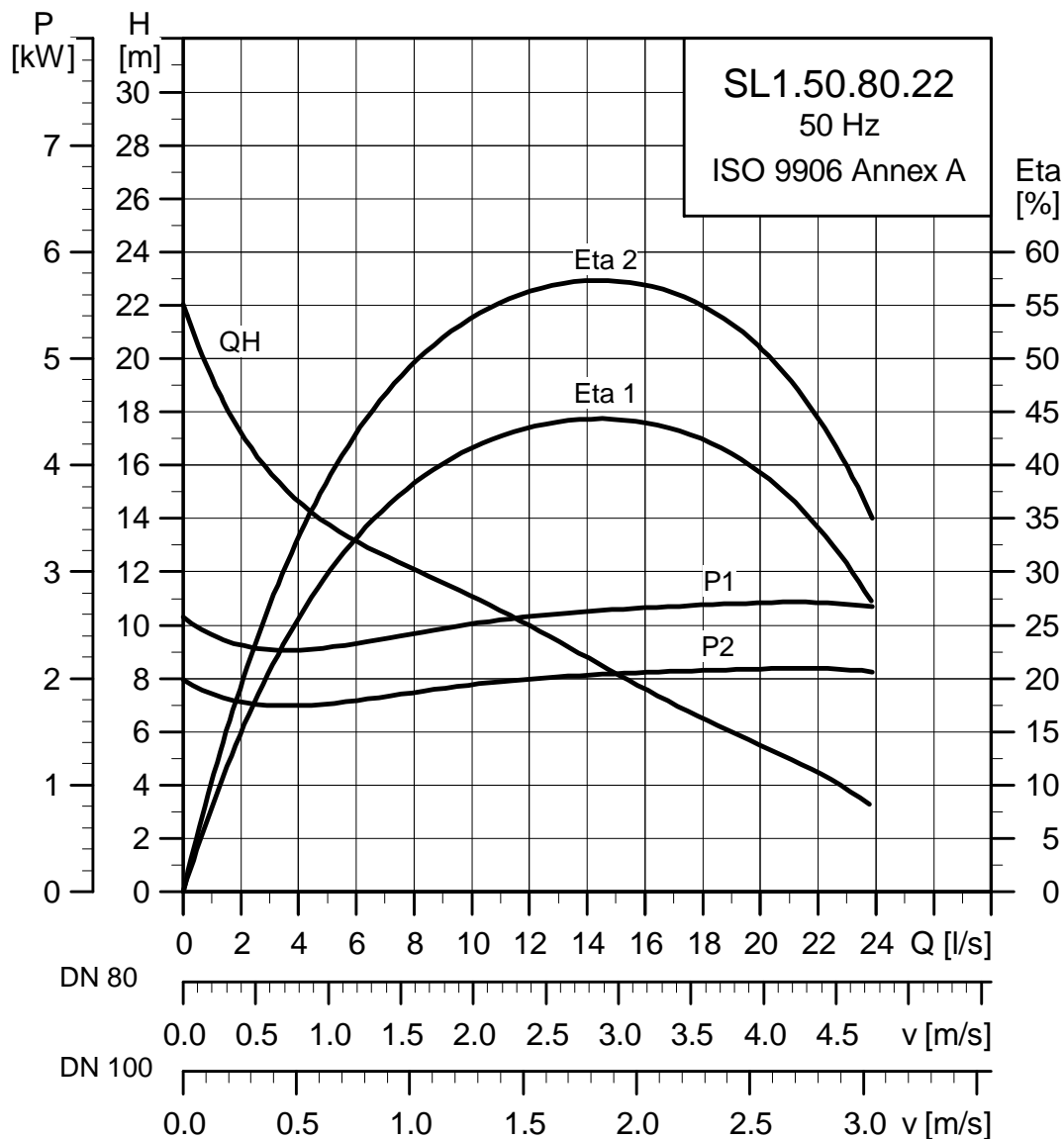
Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	50	10	20	20	68	F	40	4-10

Performance curves

SL1.50.80

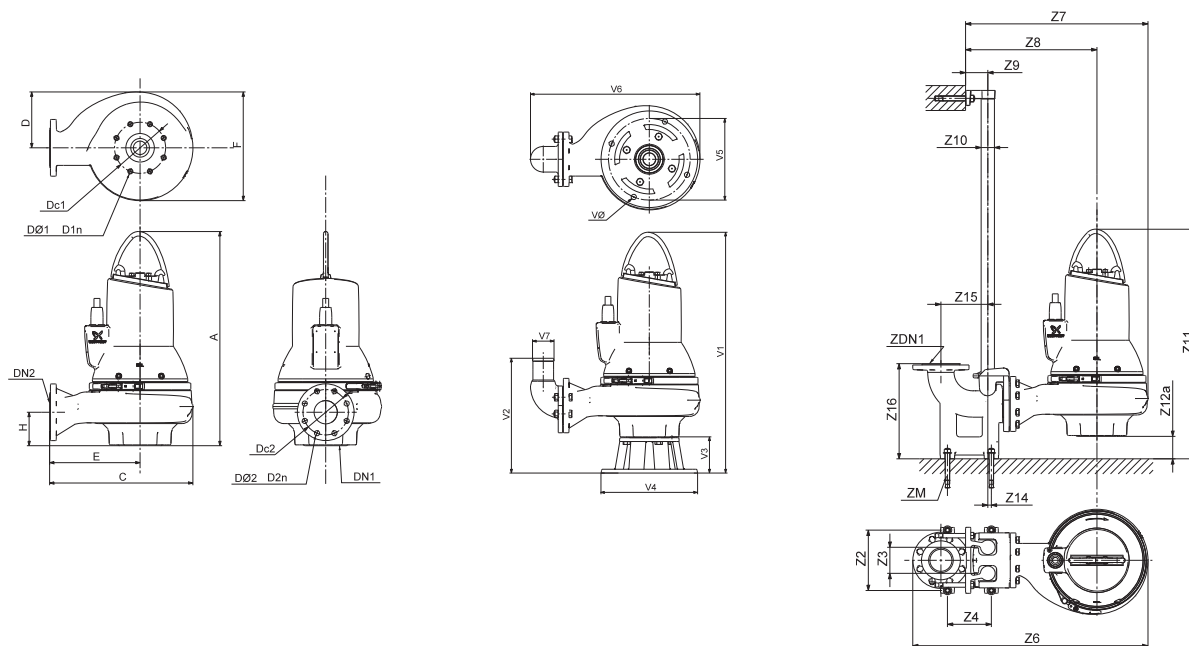
Performance curves SL1.50.80.22



TM04 3476 4608

Technical data

Dimension sketches SL1.50.80.22



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
641	366	171	216	321	100	65	145	4 x 18	80	160	8x18	87			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	719	526	376	81	1½"	774	133	13	171	345	145	65	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
771	339	130	325	270	496	80	18								

Electrical data

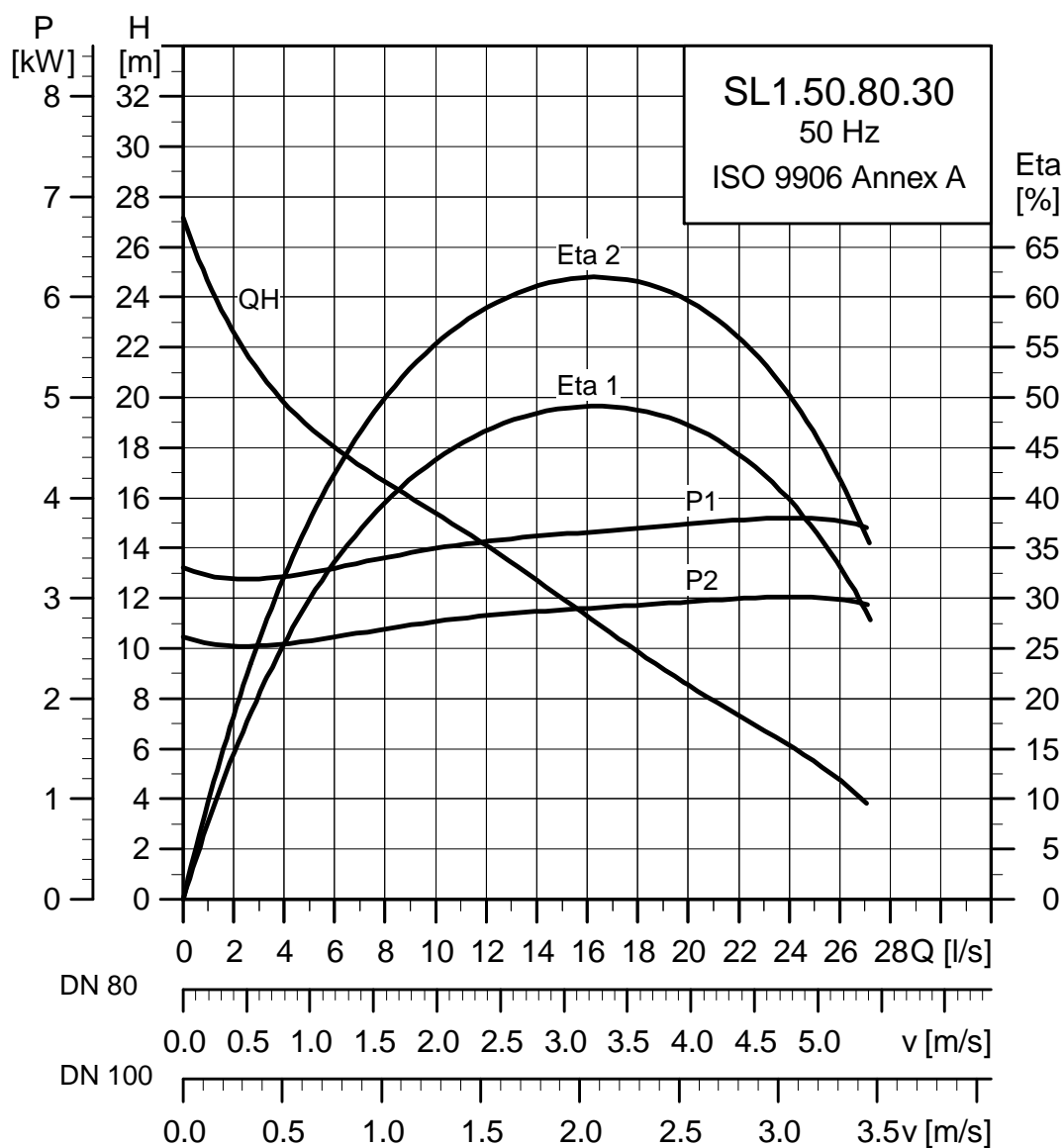
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I _N		η _{motor} [%]			Cos φ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SL1.50.80.22.2.50E	3x220-240V D	2.8	2.2	2	2990	DOL	8.5	74	70.3	75.2	76.7	0.79	0.86	0.89	0.0102	25
SL1.50.80.22.2.51D	3x380-415V D	2.8	2.2	2	2990	SD	4.9	43	70.3	75.2	76.7	0.79	0.86	0.89	0.0102	25
SL1.50.80.22.2.50D	3x380-415V Y	2.8	2.2	2	2990	DOL	4.9	43	70.3	75.2	76.7	0.79	0.86	0.89	0.0102	25
SL1.50.80.22.2.50B	3x400-415V Y	2.8	2.2	2	2990	DOL	4.9	43	70.3	75.2	76.7	0.79	0.86	0.89	0.0102	25

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	50	10	20	20	68	F	40	4-10

Performance curves

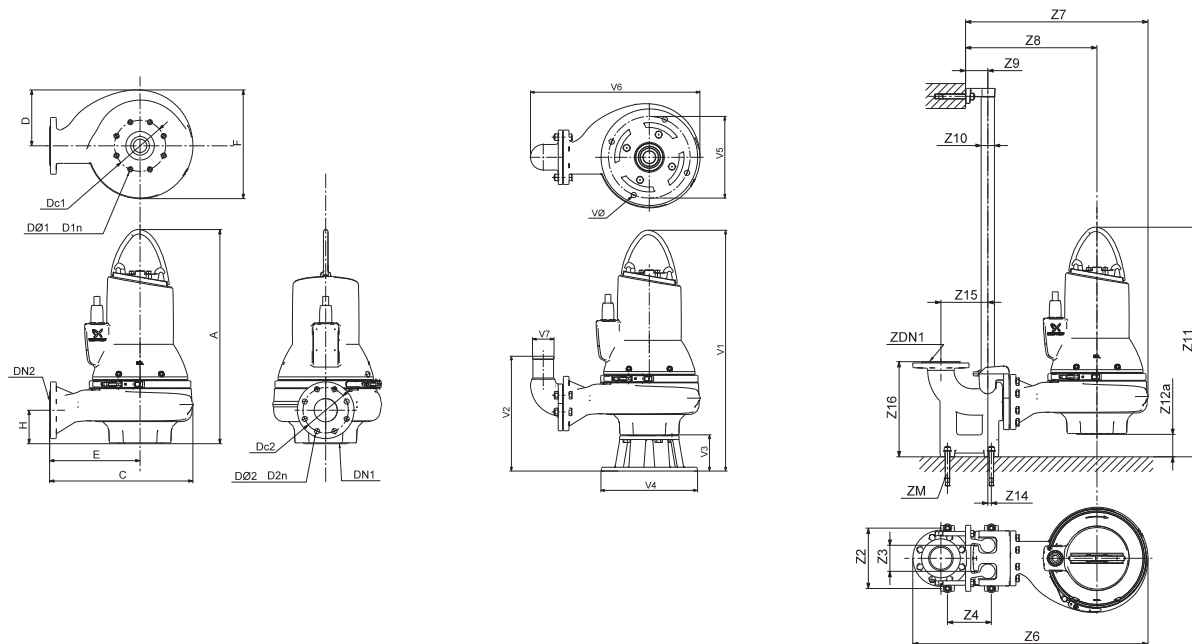
Performance curves SL1.50.80.30



TM04 3516 4608

Technical data

Dimension sketches SL1.50.80.30



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
641	366	171	216	321	100	65	145	4 x 18	80	160	8x18	90			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	719	526	376	81	1½"	774	133	13	171	345	145	65	4 x M16
220	95	160	760	567	387	81	1½"	808	132	13	171	345	145	65	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
771	339	130	325	270	496	80	18								

Electrical data

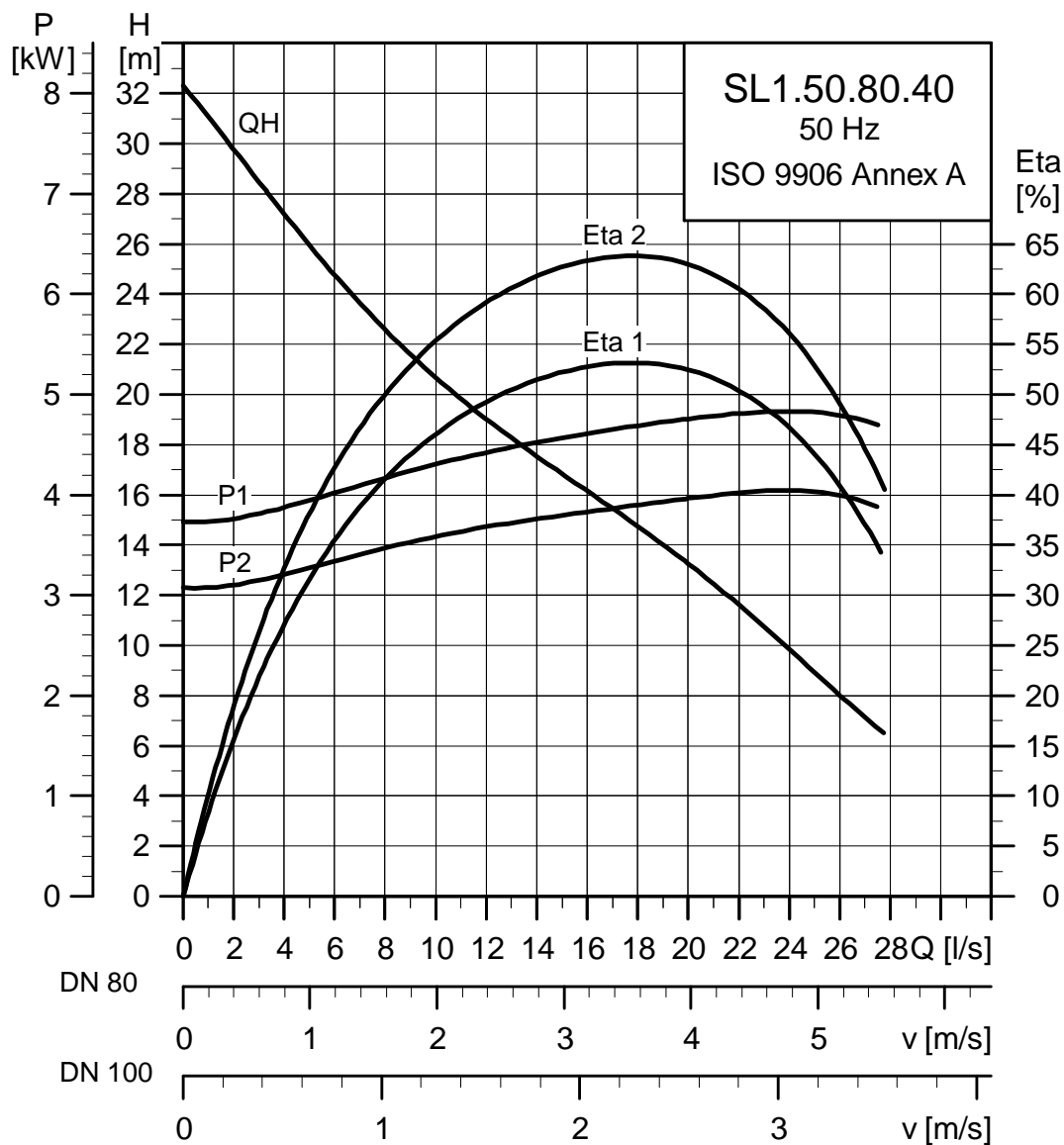
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I _N	I _{start}	η _{motor} [%]						Cos φ	Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1			
SL1.50.80.30.2.50E	3x220-240V D	3.8	3.0	2	2910	DOL	11.8	104	73.8	78.3	79.6	0.67	0.78	0.84	0.0123	42	
SL1.50.80.30.2.51D	3x380-415V D	3.8	3.0	2	2910	SD	6.8	59.8	73.8	78.3	79.6	0.67	0.78	0.84	0.0123	42	
SL1.50.80.30.2.50D	3x380-415V Y	3.8	3.0	2	2910	DOL	6.8	59.8	73.8	78.3	79.6	0.67	0.78	0.84	0.0123	42	
SL1.50.80.30.2.50B	3x400-415V Y	3.8	3.0	2	2910	DOL	6.8	59.8	73.8	78.3	79.6	0.67	0.78	0.84	0.0123	42	

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	50	10	20	20	68	F	40	4-10

Performance curves

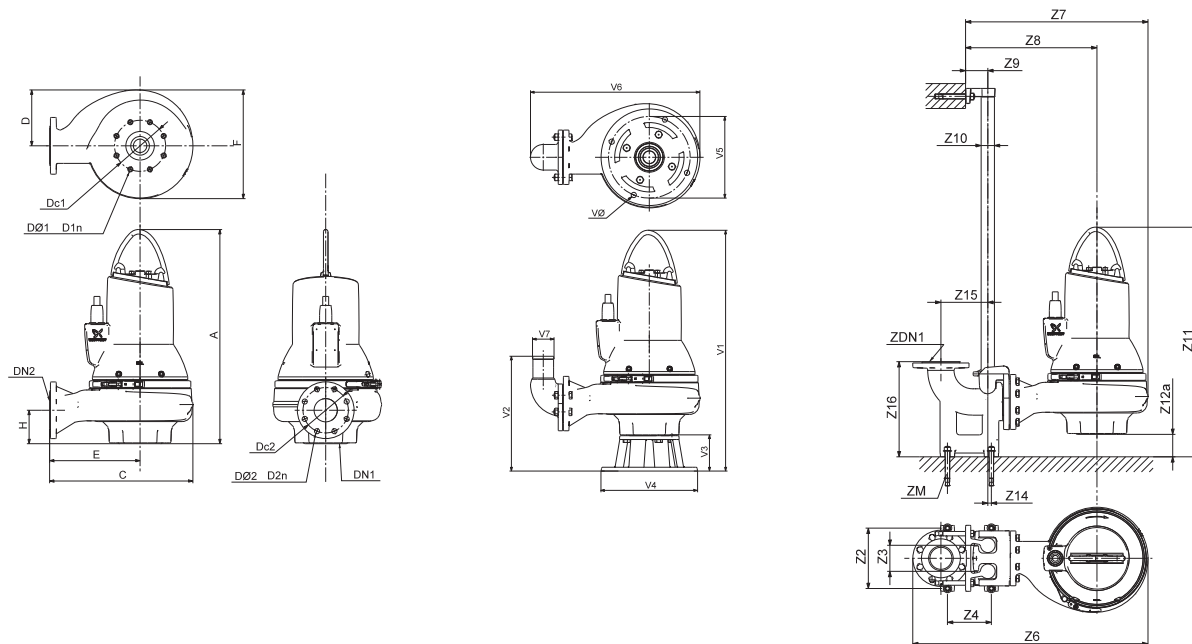
Performance curves SL1.50.80.40



TM04 3517 4608

Technical data

Dimension sketches SL1.50.80.40



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
677	407	200	227	379	100	65	145	4 x 18	80	160	8x18	94			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	760	567	387	81	1½"	808	132	13	171	345	145	65	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
807	341	130	325	270	525	80	18								

Electrical data

Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I _N		η _{motor} [%]			Cos φ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SL1.50.80.40.2.51E	3x220-240V D	4.8	4.0	2	2930	SD	14.7	161	75.8	80.9	82.7	0.71	0.82	0.87	0.0194	56
SL1.50.80.40.2.51D	3x380-415V D	4.8	4.0	2	2930	SD	8.5	93	75.8	80.9	82.7	0.71	0.82	0.87	0.0194	56

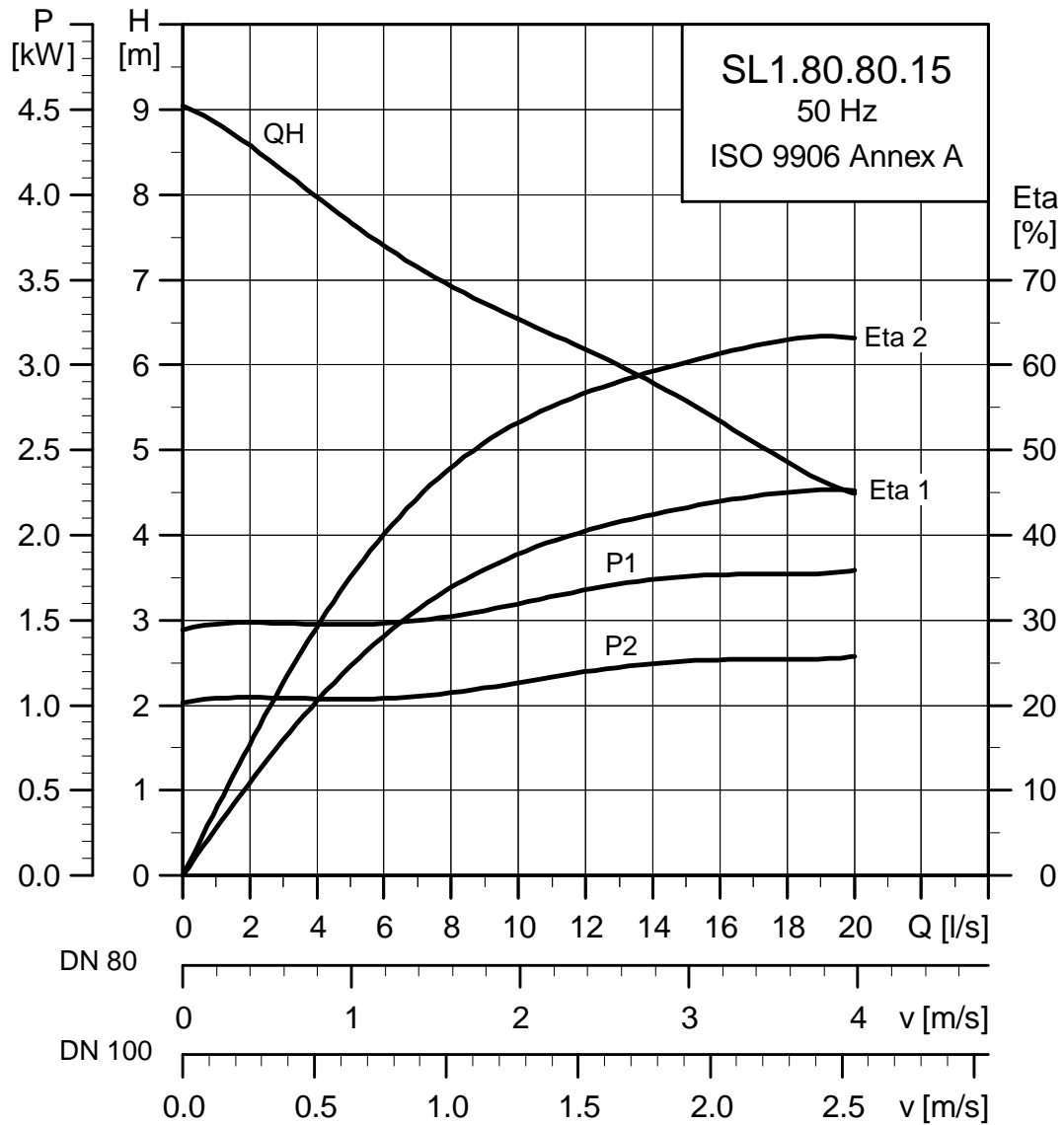
Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	50	10	20	20	68	F	40	4-10

Performance curves

SL1.80.80

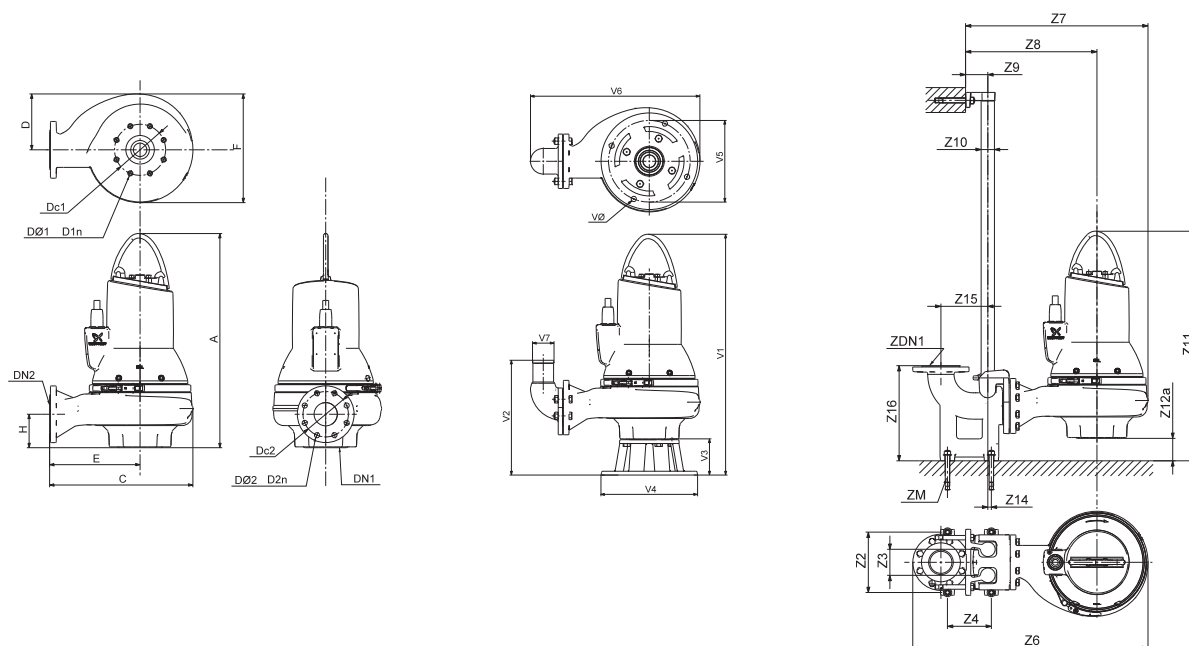
Performance curves SL1.80.80.15



TMD4 3518 4608

Technical data

Dimension sketches SL1.80.80.15



A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
682	435	171	272	347	100	100	180	8x18	80	160	8x18	95			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	788	595	432	81	1½"	790	108	13	171	345	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
812	364	130	355	300	567	80	19								

Electrical data

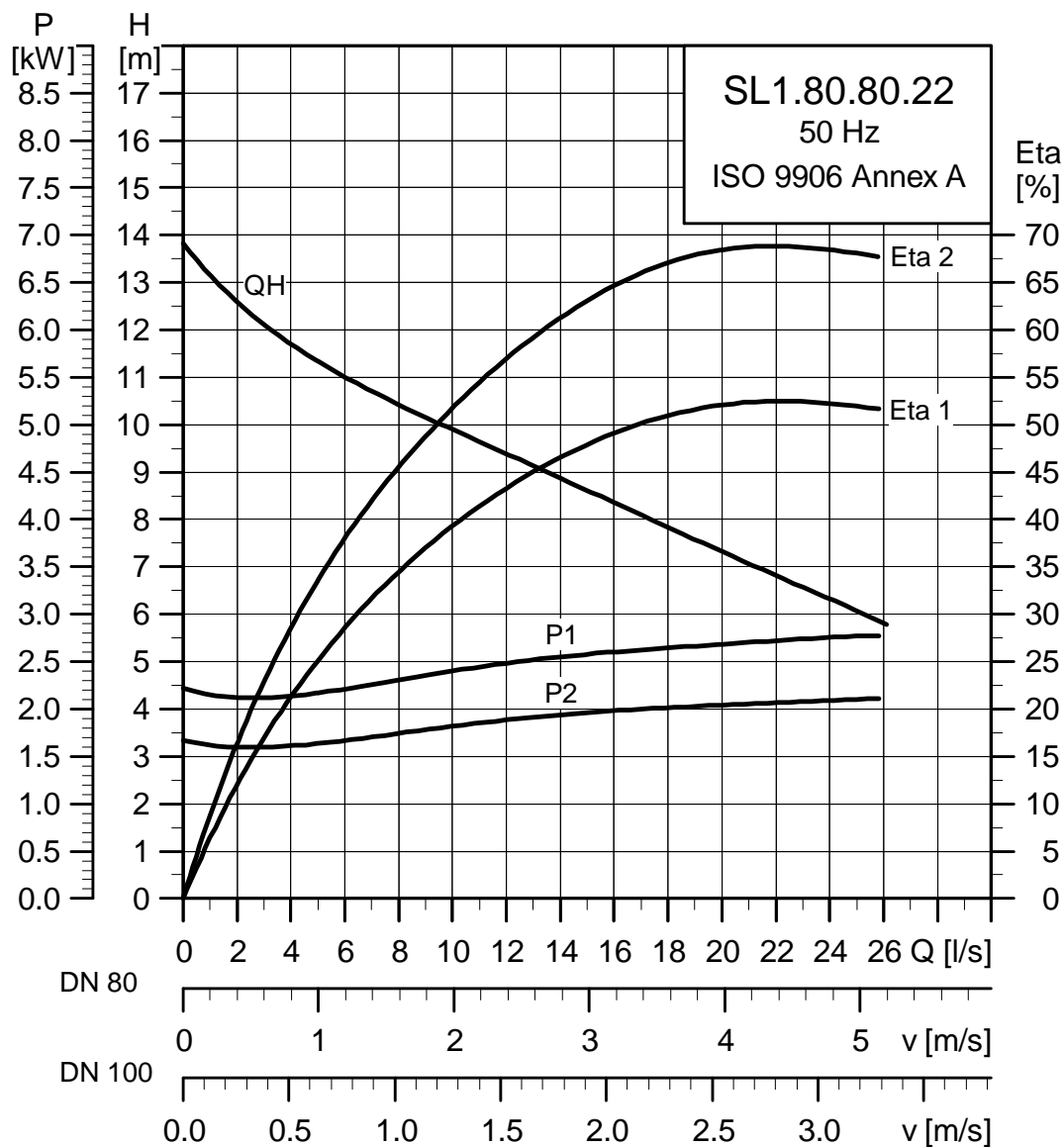
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		η_{motor} [%]			Cos φ			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SL1.80.80.15.4.50E	3x220-240V D	2.1	1.5	4	1450	DOL	6.8	45	70.6	75.4	77.1	0.57	0.68	0.76	0.0492	34
SL1.80.80.15.4.50D	3x380-415V Y	2.1	1.5	4	1450	DOL	3.9	26	70.6	75.4	77.1	0.57	0.68	0.76	0.0492	34
SL1.80.80.15.4.50B	3x400-415V Y	2.1	1.5	4	1450	DOL	3.9	26	70.6	75.4	77.1	0.57	0.68	0.76	0.0492	34

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	80	10	20	20	68	F	40	4-10

Performance curves

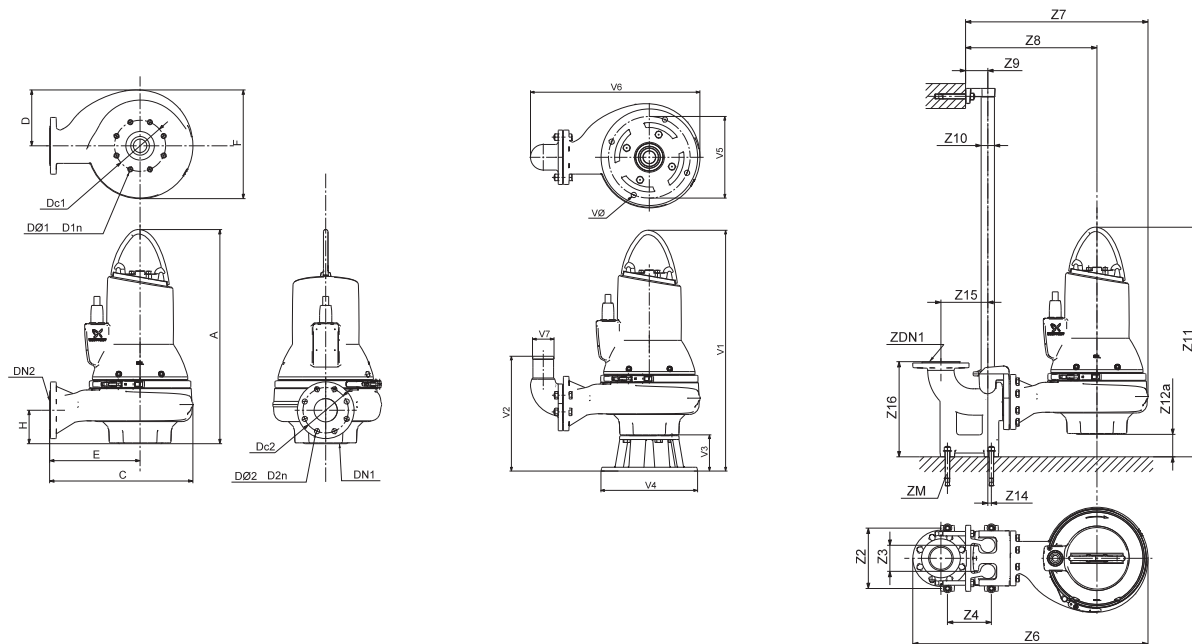
Performance curves SL1.80.80.22



TM04 3519 4608

Technical data

Dimension sketches SL1.80.80.22



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
682	435	171	272	347	100	100	180	8x18	80	160	8x18	107			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	788	595	432	81	1½"	790	108	13	171	345	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
812	364	130	355	300	567	80	19								

Electrical data

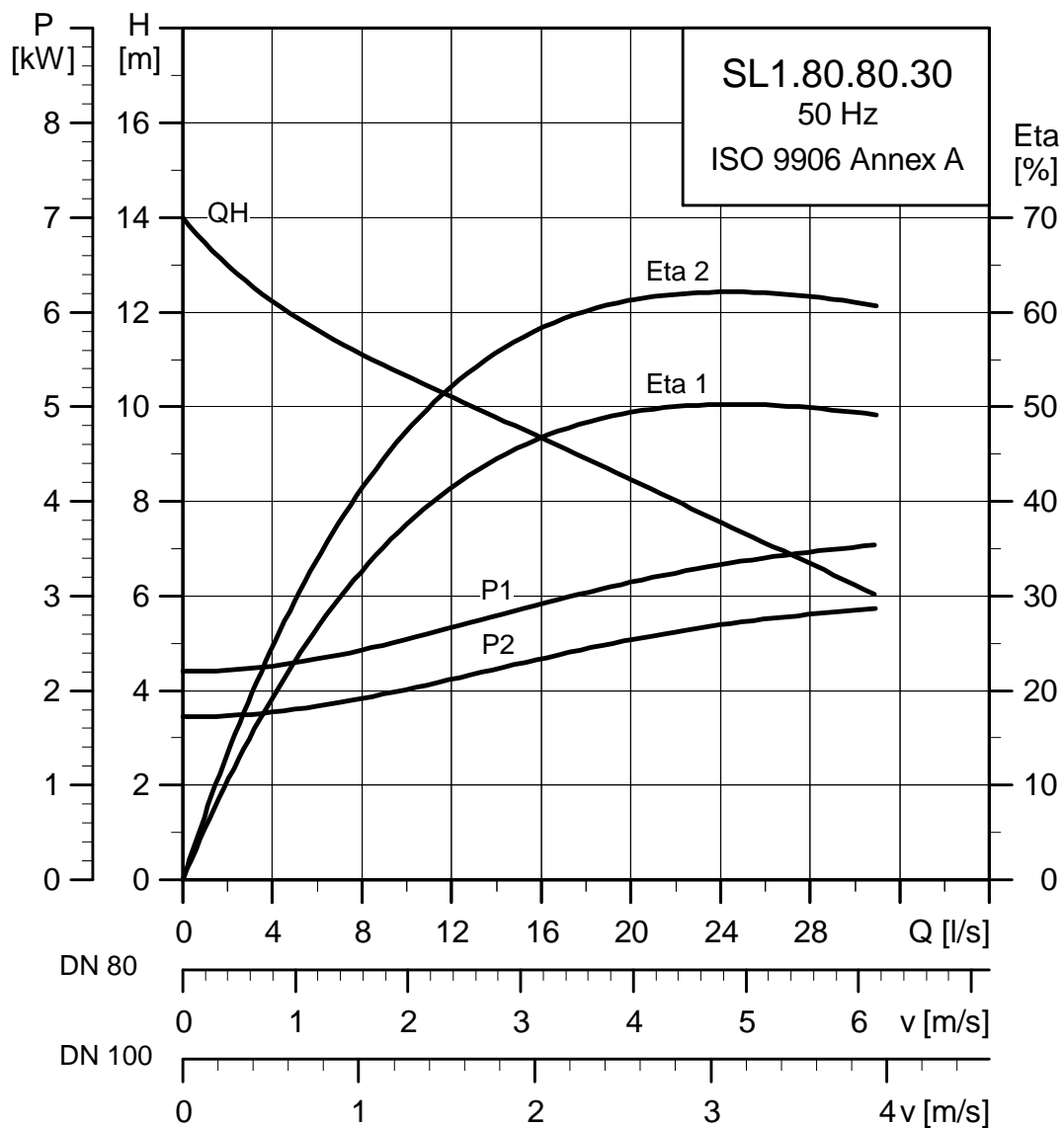
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	η_{motor} [%]					$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							I_N [A]	I_{start} [A]	1/2	3/4	1/1	1/2	3/4	1/1		
SL1.80.80.22.4.50E	3x220-240V D	2.9	2.2	4	1460	DOL	9.1	66	78.4	81.7	82.7	0.58	0.70	0.77	0.0570	50
SL1.80.80.22.4.51D	3x380-415V D	2.9	2.2	4	1460	SD	5.3	38.3	78.4	81.7	82.7	0.58	0.70	0.77	0.0570	50
SL1.80.80.22.4.50D	3x380-415V Y	2.9	2.2	4	1460	DOL	5.3	38.3	78.4	81.7	82.7	0.58	0.70	0.77	0.0570	50
SL1.80.80.22.4.50B	3x400-415V Y	2.9	2.2	4	1460	DOL	5.3	38.3	78.4	81.7	82.7	0.58	0.70	0.77	0.0570	50

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	80	10	20	20	68	F	40	4-10

Performance curves

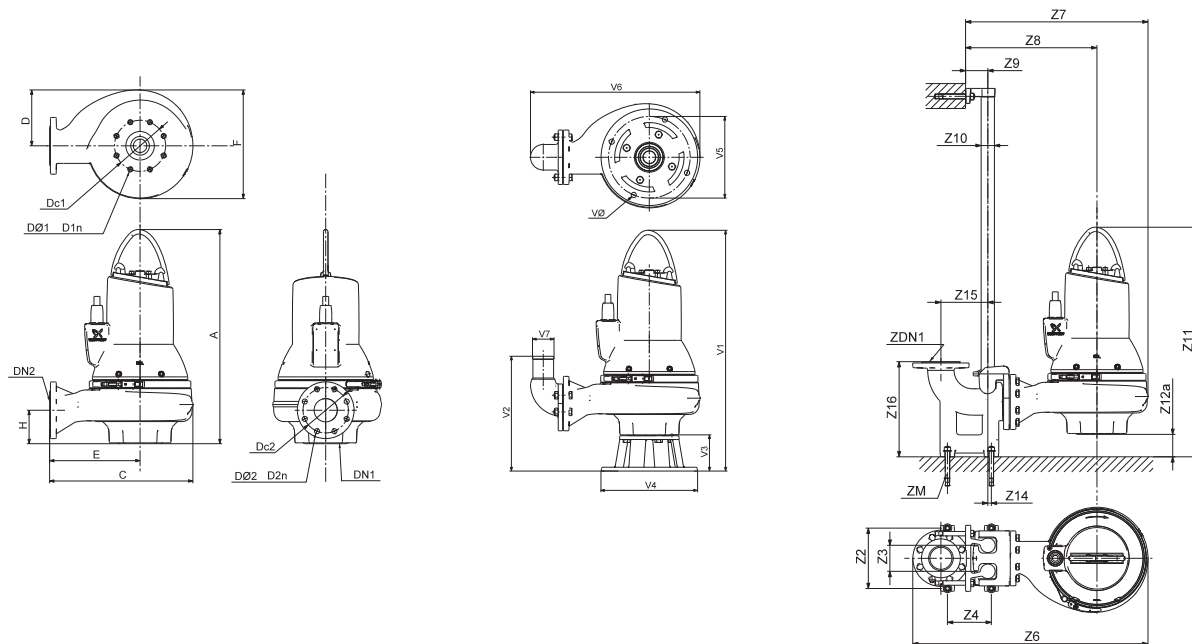
Performance curves SL1.80.80.30



TMO4 3520 4608

Technical data

Dimension sketches SL1.80.80.30



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
711	505	200	319	397	118	100	180	8x18	80	160	8x18	137			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	858	666	480	81	1½"	793	82	13	171	345	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
841	390	130	355	300	623	80	19								

Electrical data

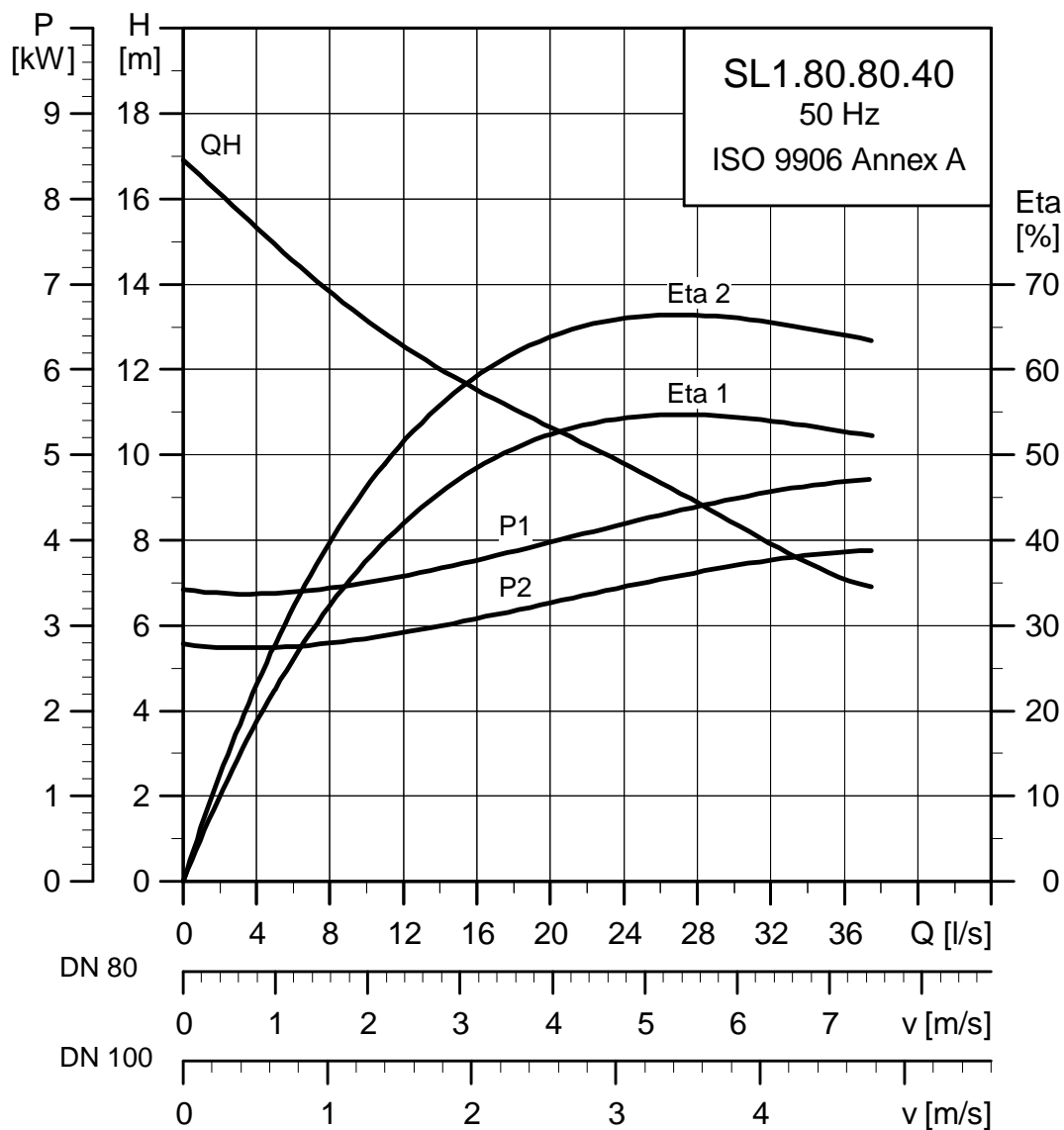
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		$\eta_{\text{motor}} [\%]$				$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1			
SL1.80.80.30.4.50E	3x220-240V D	3.7	3.0	4	1450	DOL	12.5	87	75.4	79.7	80.7	0.58	0.72	0.78	0.0966	64	
SL1.80.80.30.4.51D	3x380-415V D	3.7	3.0	4	1450	SD	7.2	50	75.4	79.7	80.7	0.58	0.72	0.78	0.0966	64	
SL1.80.80.30.4.50D	3x380-415V Y	3.7	3.0	4	1450	DOL	7.2	50	75.4	79.7	80.7	0.58	0.72	0.78	0.0966	64	
SL1.80.80.30.4.50B	3x400-415V Y	3.7	3.0	4	1450	DOL	7.2	50	75.4	79.7	80.7	0.58	0.72	0.78	0.0966	64	

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	80	10	20	20	68	F	40	4-10

Performance curves

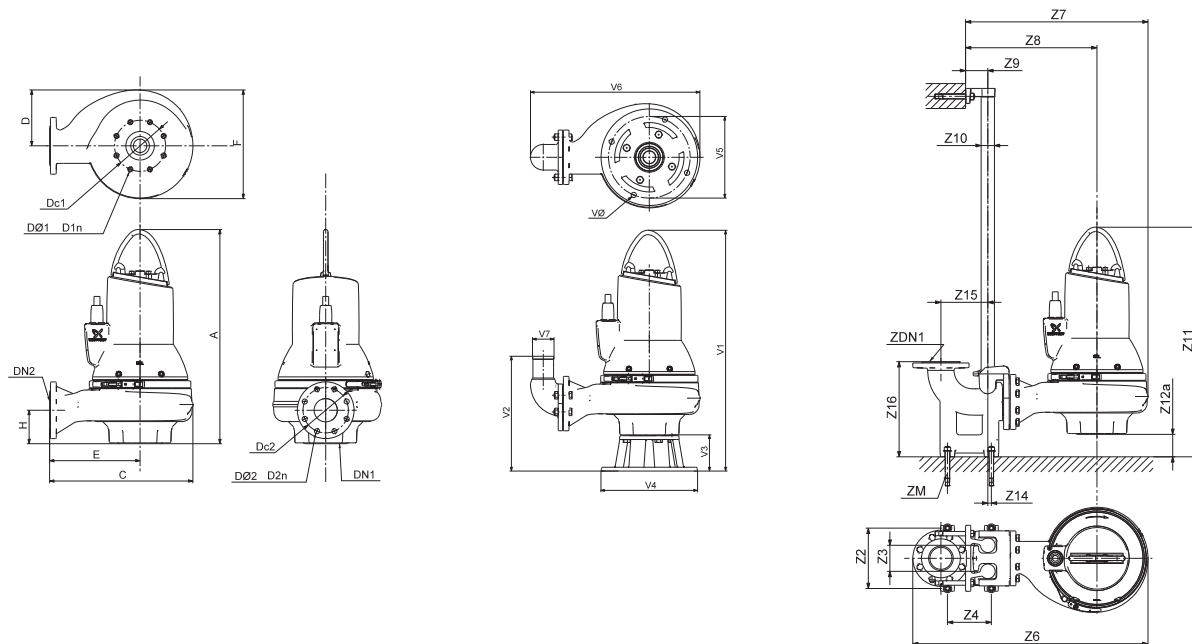
Performance curves SL1.80.80.40



TM04 3521 4608

Technical data

Dimension sketches SL1.80.80.40



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
748	505	200	319	397	118	100	180	8x18	80	160	8x18	142			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	858	666	480	81	1½"	830	82	13	171	345	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
878	390	130	355	300	623	80	19								

Electrical data

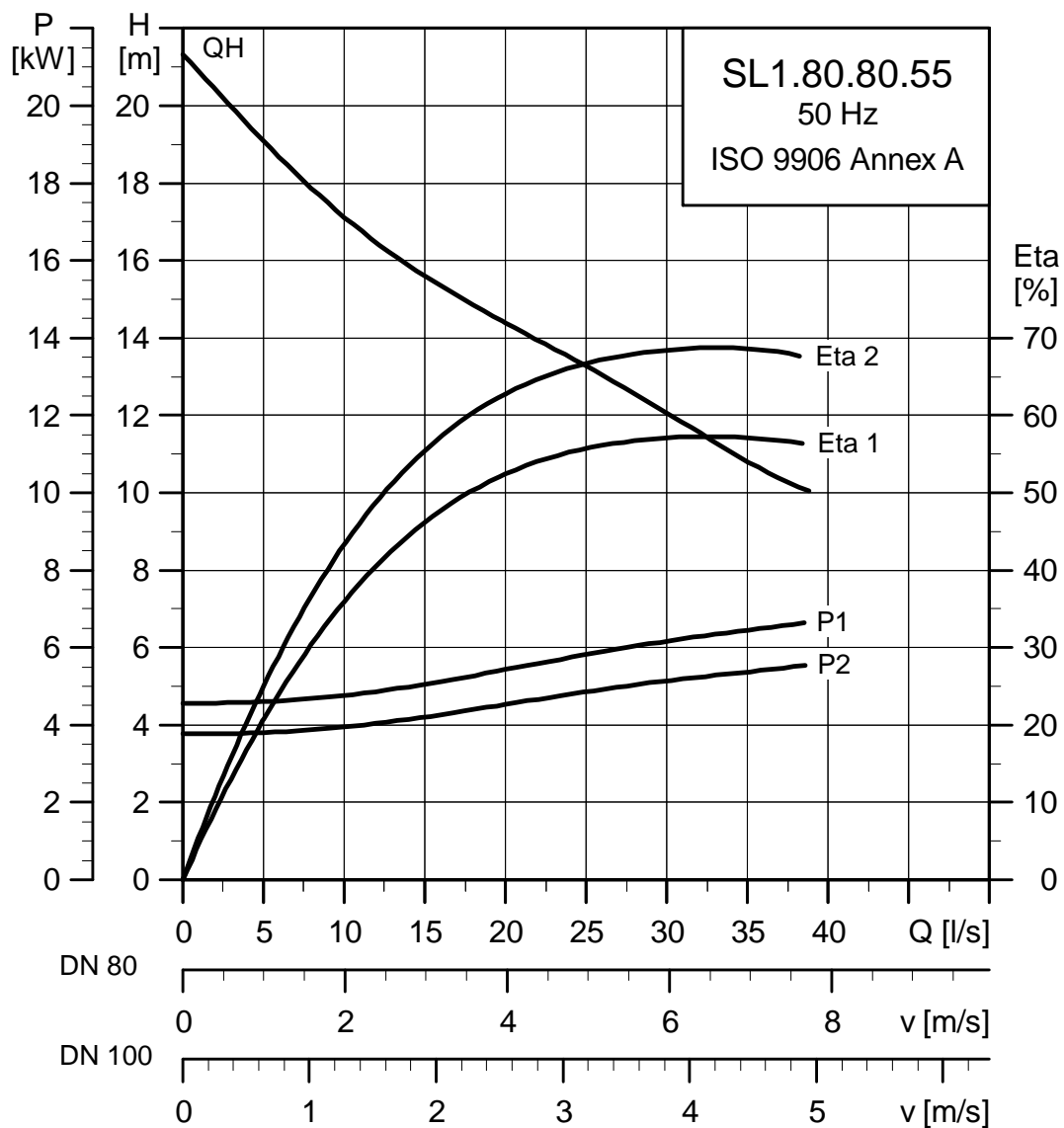
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		$\eta_{\text{motor}} [\%]$			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SL1.80.80.40.4.51E	3x220-240V D	4.8	4.0	4	1460	SD	16.9	88	78.6	82.3	83.6	0.53	0.66	0.75	0.1141	90
SL1.80.80.40.4.51D	3x380-415V D	4.8	4.0	4	1460	SD	9.7	51	78.6	82.3	83.6	0.53	0.66	0.75	0.1141	90
SL1.80.80.40.4.50B	3x400-415V D	4.8	4.0	4	1460	DOL	9.7	51	78.6	82.3	83.6	0.53	0.66	0.75	0.1141	90

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	80	10	20	20	68	F	40	4-10

Performance curves

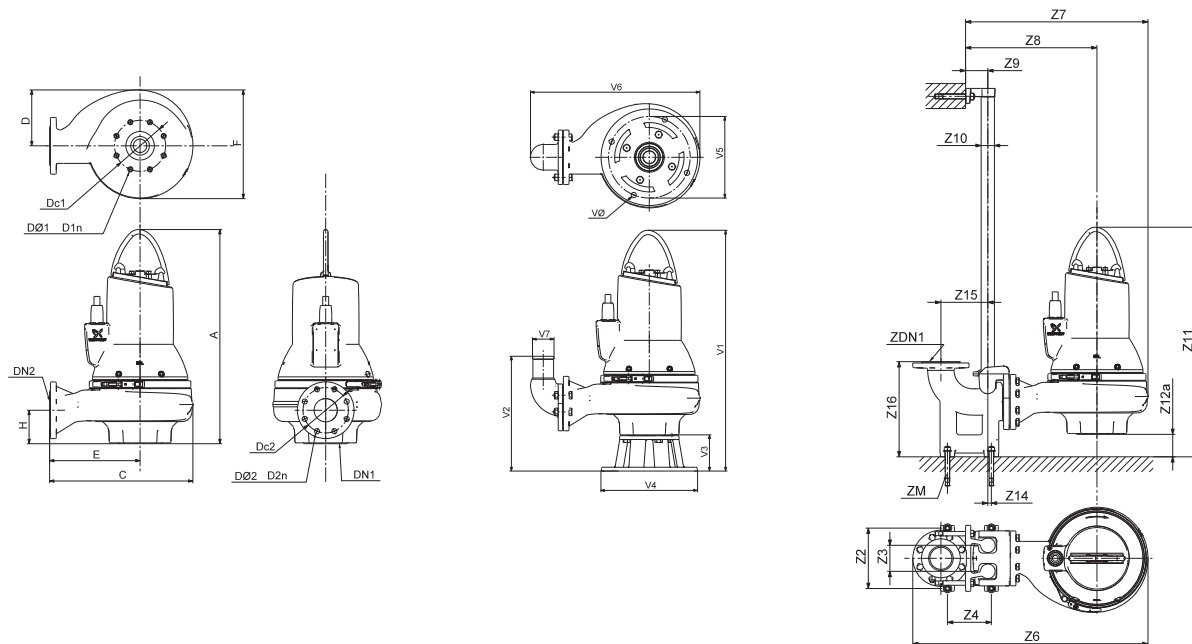
Performance curves SL1.80.80.55



7TMO4 3522 4608

Technical data

Dimension sketches SL1.80.80.55



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
755	505	200	319	397	118	100	180	8x18	80	160	8x18	149			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	858	666	480	81	1½"	837	82	13	171	345	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
885	390	130	355	300	623	80	19								

Electrical data

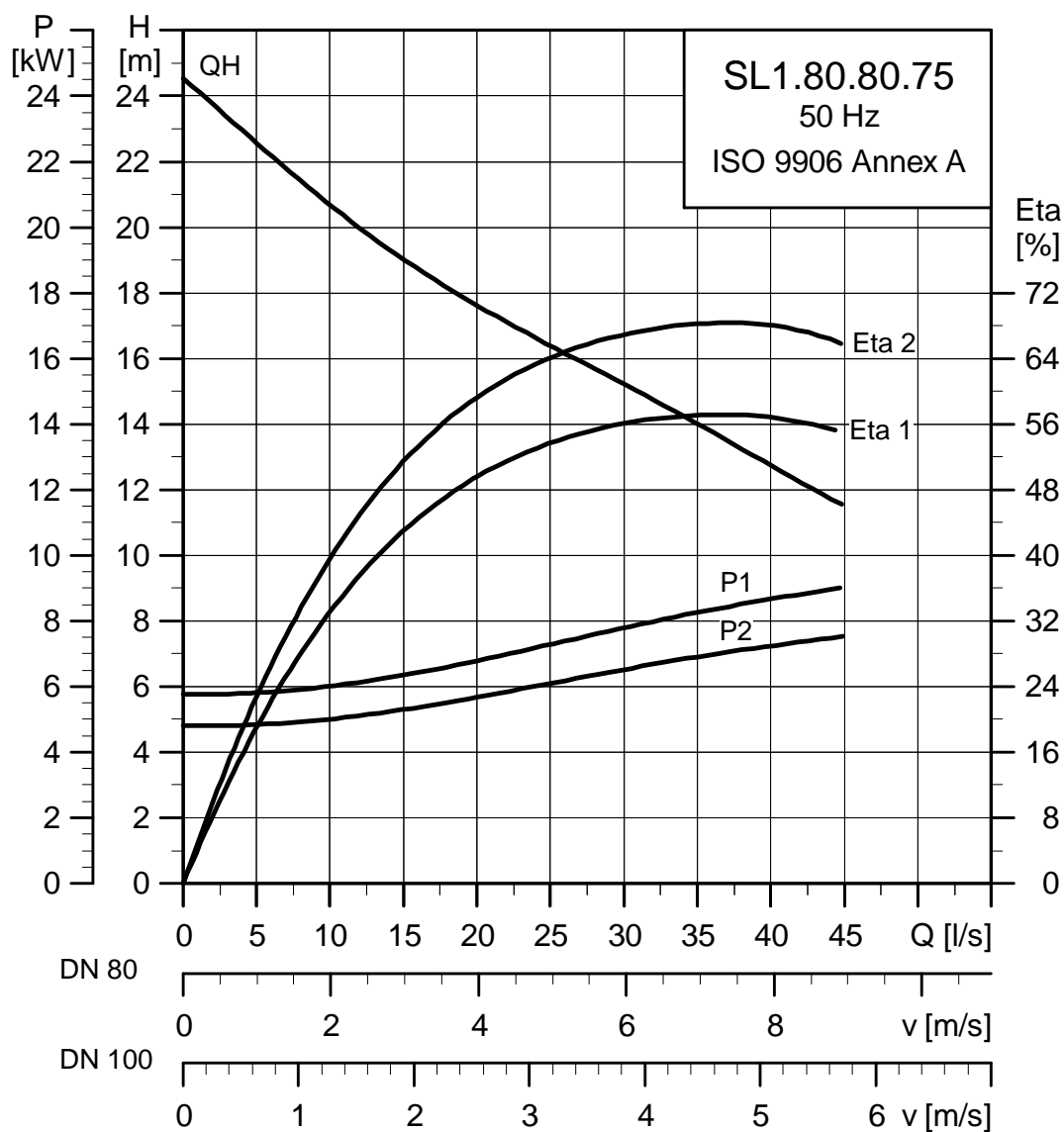
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I _N [A]	I _{start} [A]	η _{motor} [%]						Cos φ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
									1/2	3/4	1/1	1/2	3/4	1/1	1/2	3/4	1/1		
SL1.80.80.55.4.51E	3x220-240V D	6.4	5.5	4	1460	SD	20.4	140	82.0	84.8	85.6	0.67	0.77	0.82	0.1295	110			
SL1.80.80.55.4.51D	3x380-415V D	6.4	5.5	4	1460	SD	11.8	81	82.0	84.8	85.6	0.67	0.77	0.82	0.1295	110			
SL1.80.80.55.4.50B	3x400-415V D	6.4	5.5	4	1460	DOL	11.8	81	82.0	84.8	85.6	0.67	0.77	0.82	0.1295	110			

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	80	10	20	20	68	F	40	4-10

Performance curves

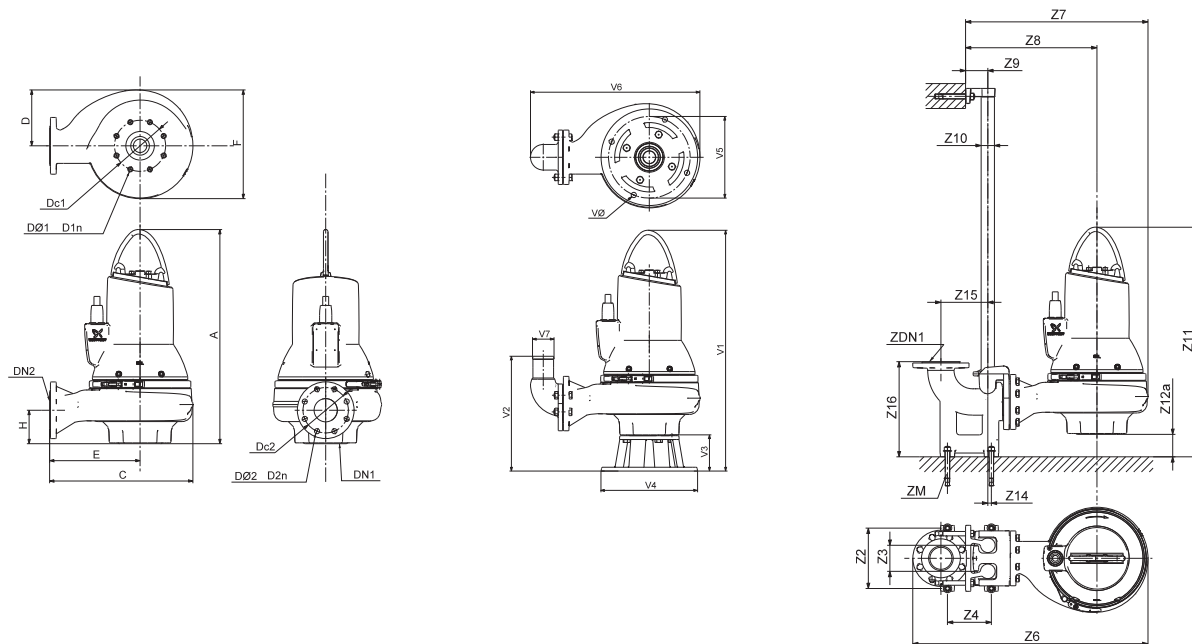
Performance curves SL1.80.80.75



TMO4 3523 4608

Technical data

Dimension sketches SL1.80.80.75



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
818	530	217	328	423	118	100	180	8x18	80	160	8x18	193			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	883	690	489	81	1½"	900	82	13	171	345	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
948	390	130	355	300	648	80	19								

Electrical data

Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			I_{start}			η_{motor} [%]			$\cos \varphi$		Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1	1/2	3/4		
SL1.80.80.75.4.51E	3x220-240V D	8.6	7.5	4	1460	SD	26.3	189	85.7	87.2	87.0	0.72	0.81	0.86	0.1618	141			
SL1.80.80.75.4.51D	3x380-415V D	8.6	7.5	4	1460	SD	15.2	109	85.7	87.2	87.0	0.72	0.81	0.86	0.1618	141			
SL1.80.80.75.4.50B	3x400-415V D	8.6	7.5	4	1460	DOL	15.2	109	85.7	87.2	87.0	0.72	0.81	0.86	0.1618	141			

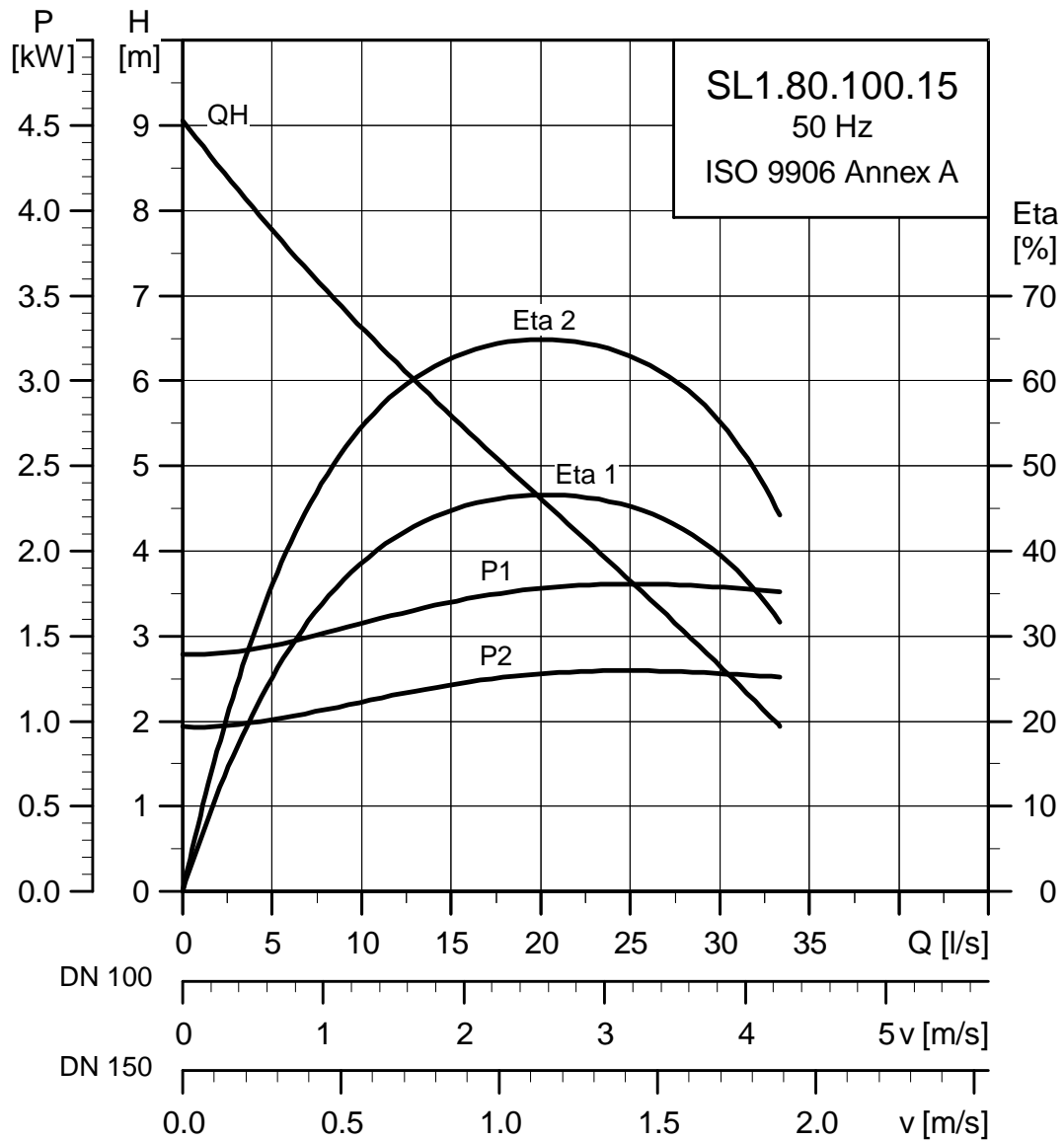
Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	80	10	20	20	68	F	40	4-10

Performance curves

SL1.80.100

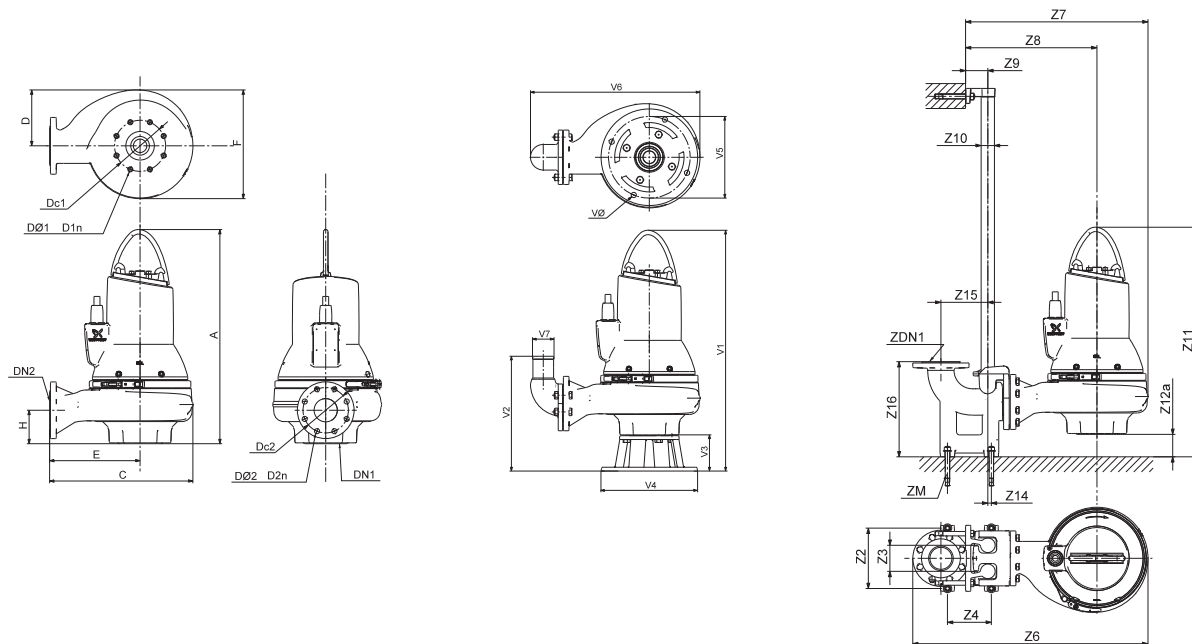
Performance curves SL1.80.100.15



TMD4 3460 4608

Technical data

Dimension sketches SL1.80.100.15



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
682	435	171	272	347	112	100	180	8x18	100	180	8x18	96			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	878	652	489	110	2"	830	148	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
812	369	130	355	300	591	100	19								

Electrical data

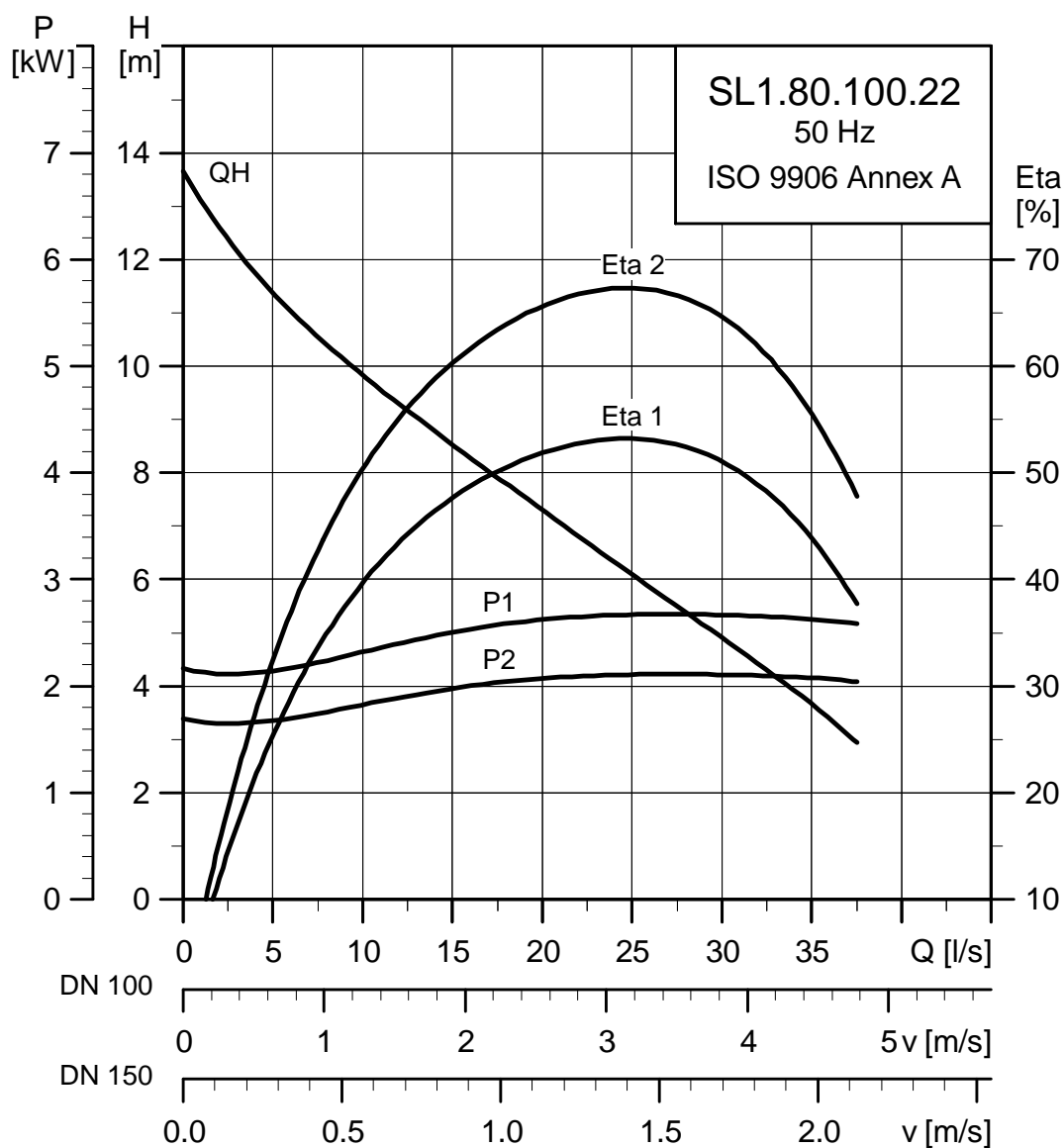
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			I_{start}			$\eta_{motor} [\%]$			$\cos \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1	1/2	3/4	1/1		
SL1.80.100.15.4.50E	3x220-240V D	2.1	1.5	4	1450	DOL	6.8	45	70.6	75.4	77.1	0.57	0.68	0.76	0.0492	34				
SL1.80.100.15.4.50D	3x380-415V Y	2.1	1.5	4	1450	DOL	3.9	26	70.6	75.4	77.1	0.57	0.68	0.76	0.0492	34				
SL1.80.100.15.4.50B	3x400-415V Y	2.1	1.5	4	1450	DOL	3.9	26	70.6	75.4	77.1	0.57	0.68	0.76	0.0492	34				

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	80	10	20	20	68	F	40	4-10

Performance curves

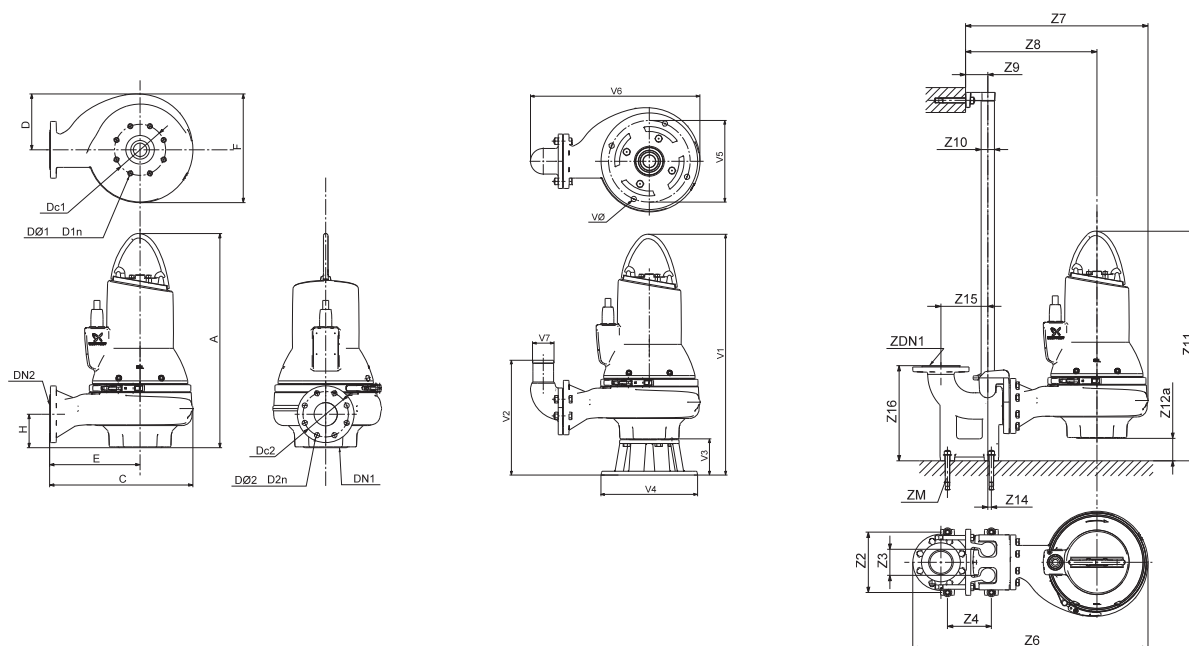
Performance curves SL1.80.100.22



TM04 3461 4608

Technical data

Dimension sketches SL1.80.100.22



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
682	435	171	272	347	112	100	180	8x18	100	180	8x18	108			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	878	652	489	110	2"	830	148	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
812	369	130	355	300	591	100	19								

Electrical data

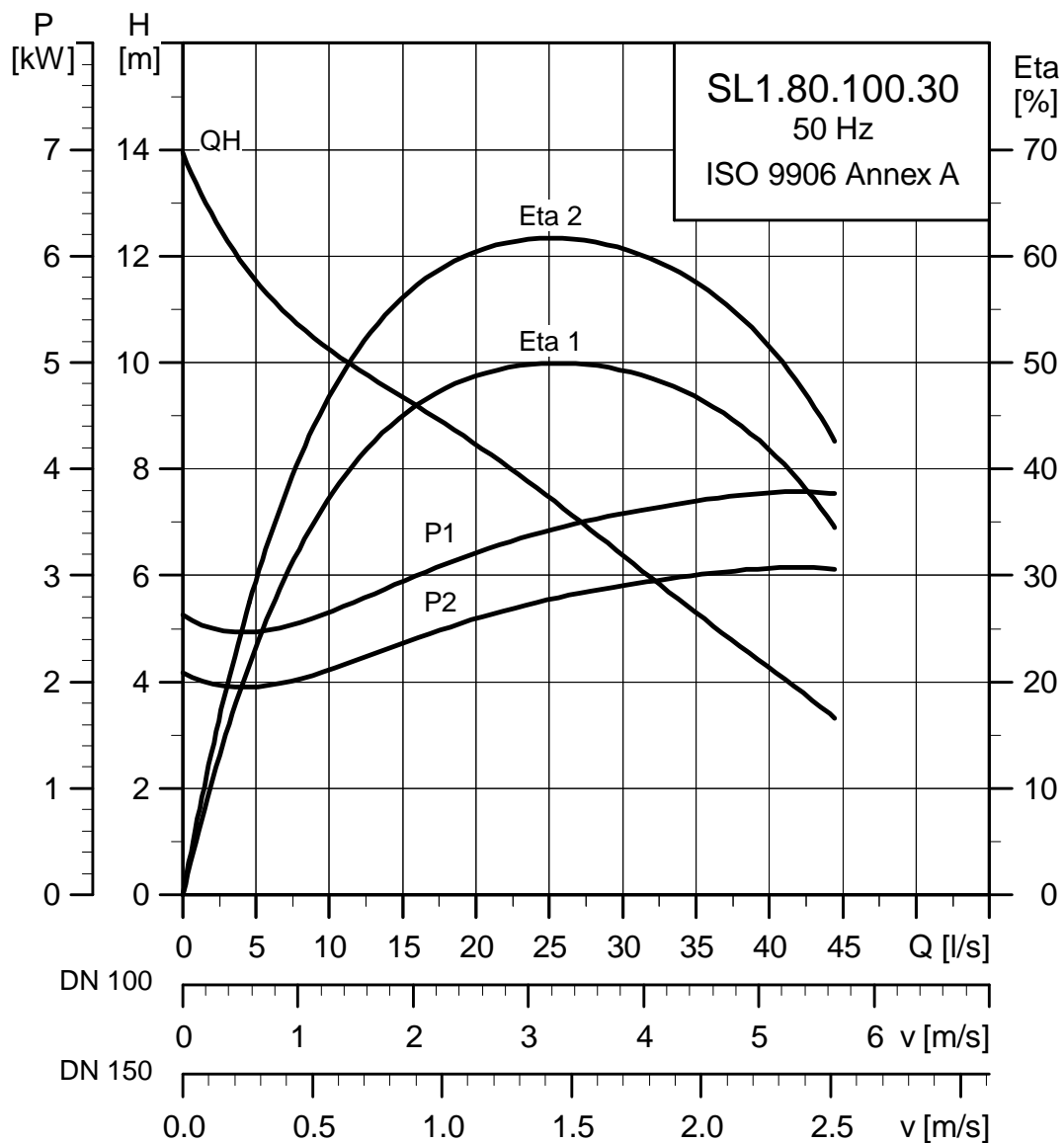
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	$\eta_{\text{motor}} [\%]$						$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							I_N [A]	I_{start} [A]	1/2	3/4	1/1	1/2	3/4	1/1			
SL1.80.100.22.4.50E	3x220-240V D	2.9	2.2	4	1460	DOL	9.1	66	78.4	81.7	82.7	0.58	0.70	0.77	0.0570	50	
SL1.80.100.22.4.51D	3x380-415V D	2.9	2.2	4	1460	SD	5.3	38.3	78.4	81.7	82.7	0.58	0.70	0.77	0.0570	50	
SL1.80.100.22.4.50D	3x380-415V Y	2.9	2.2	4	1460	DOL	5.3	38.3	78.4	81.7	82.7	0.58	0.70	0.77	0.0570	50	
SL1.80.100.22.4.50B	3x400-415V Y	2.9	2.2	4	1460	DOL	5.3	38.3	78.4	81.7	82.7	0.58	0.70	0.77	0.0570	50	

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	80	10	20	20	68	F	40	4-10

Performance curves

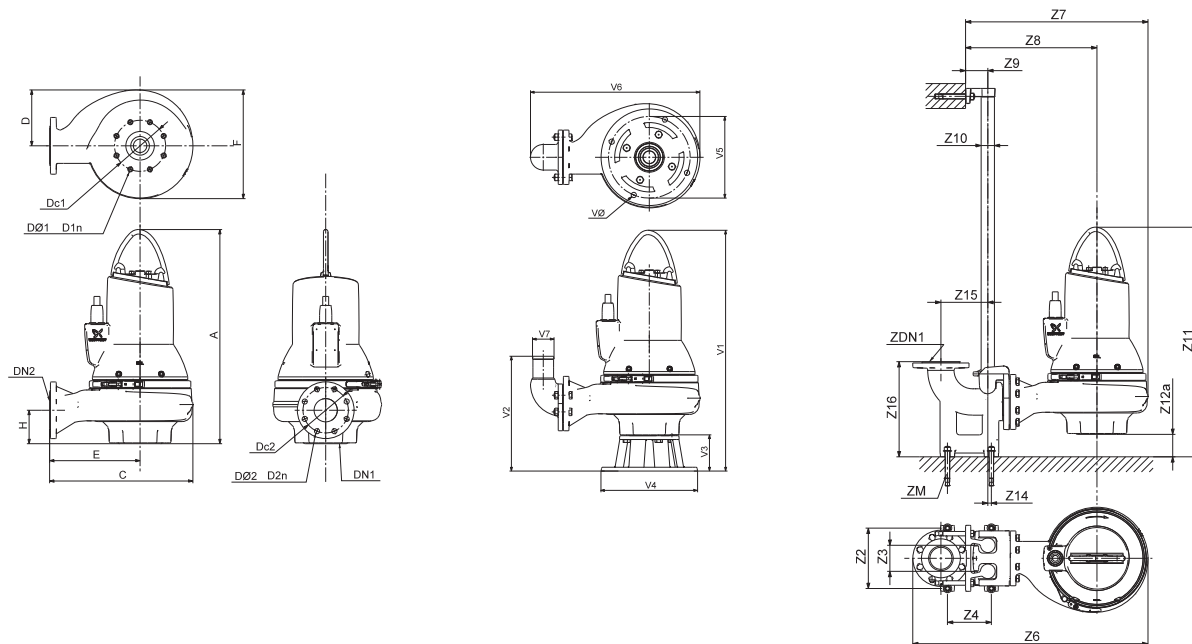
Performance curves SL1.80.100.30



TMD4 3462 4608

Technical data

Dimension sketches SL1.80.100.30



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
726	505	200	319	397	118	100	180	8x18	100	180	8x18	139			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	948	722	536	110	2"	830	122	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
856	395	130	355	300	647	100	19								

Electrical data

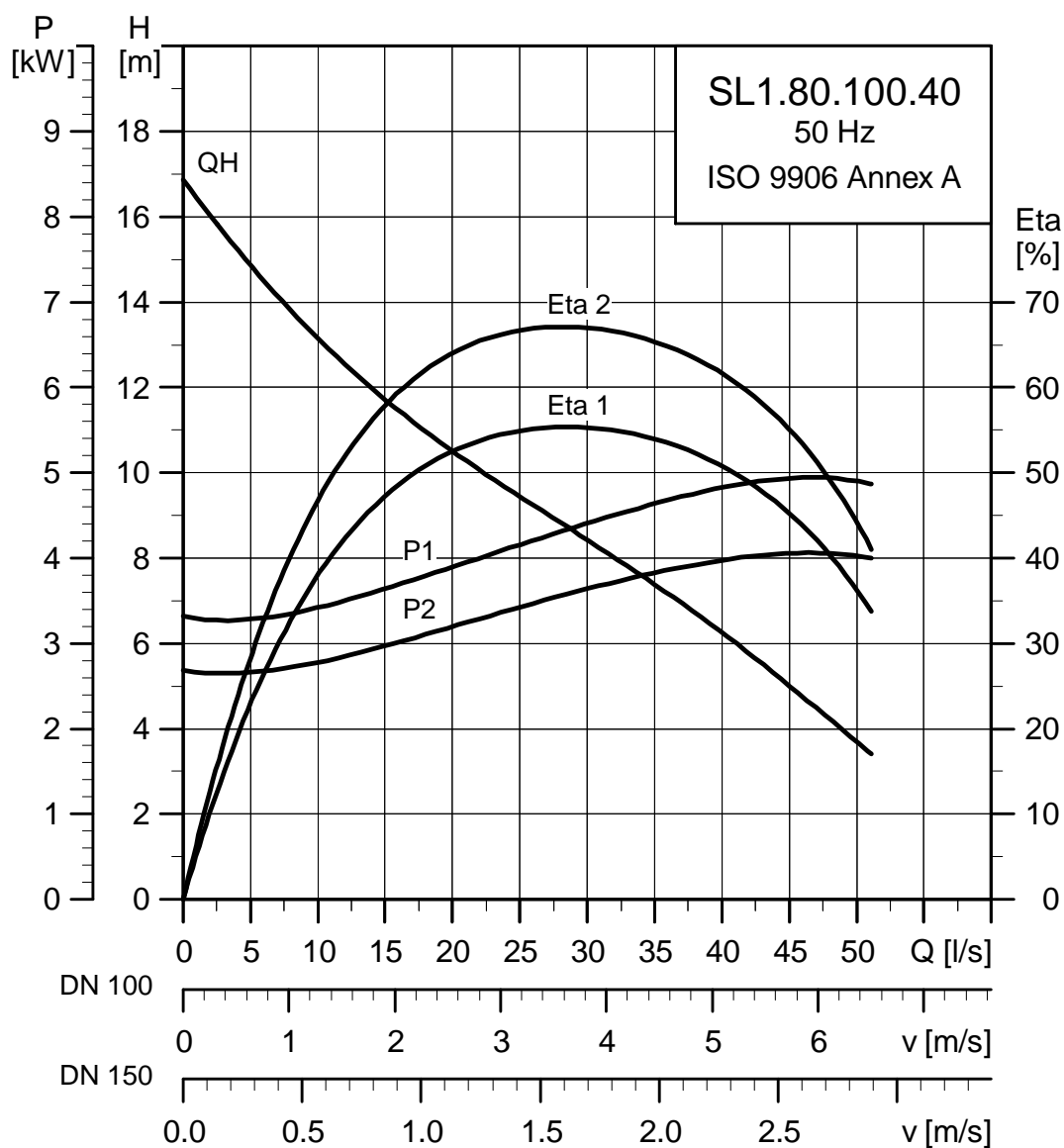
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			I_{start}			η_{motor} [%]			$\cos \phi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]		1/2	3/4	1/1	1/2	3/4	1/1	1/2	3/4	1/1		
SL1.80.100.30.4.50E	3x220-240V D	3.7	3.0	4	1450	DOL	12.5	87	75.4	79.7	80.7	0.58	0.72	0.78	0.0966	64				
SL1.80.100.30.4.51D	3x380-415V D	3.7	3.0	4	1450	SD	7.2	50	75.4	79.7	80.7	0.58	0.72	0.78	0.0966	64				
SL1.80.100.30.4.50D	3x380-415V Y	3.7	3.0	4	1450	DOL	7.2	50	75.4	79.7	80.7	0.58	0.72	0.78	0.0966	64				
SL1.80.100.30.4.50B	3x400-415V Y	3.7	3.0	4	1450	DOL	7.2	50	75.4	79.7	80.7	0.58	0.72	0.78	0.0966	64				

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	80	10	20	20	68	F	40	4-10

Performance curves

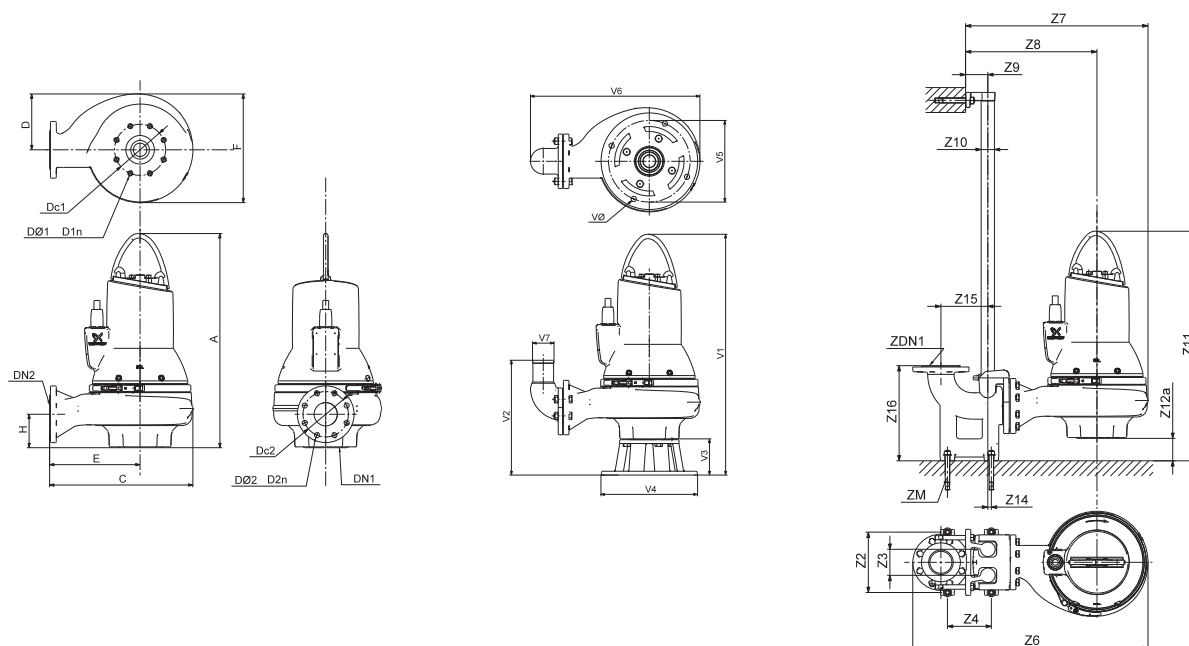
Performance curves SL1.80.100.40



TM04 3457 4608

Technical data

Dimension sketches SL1.80.100.40



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
748	505	200	319	397	118	100	180	8x18	100	180	8x18	139			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	948	722	536	110	2"	870	122	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
878	395	130	355	300	647	100	19								

Electrical data

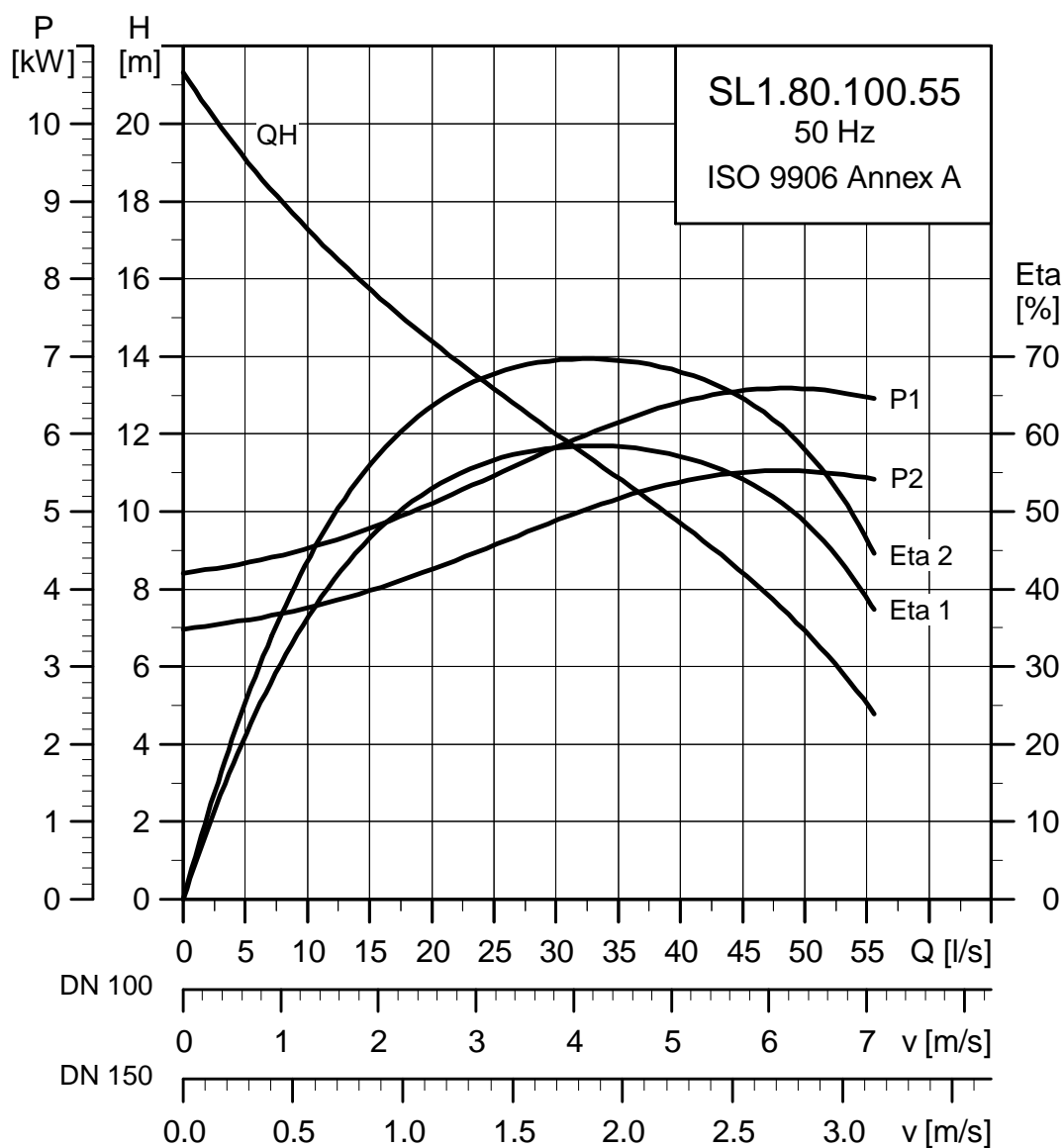
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			I_{start}			η_{motor} [%]			$\cos \phi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1					
SL1.80.100.40.4.51E	3x220-240V D	4.8	4.0	4	1460	SD	16.9	88	78.6	82.3	83.6	0.53	0.66	0.75	0.1141	90				
SL1.80.100.40.4.51D	3x380-415V D	4.8	4.0	4	1460	SD	9.7	51	78.6	82.3	83.6	0.53	0.66	0.75	0.1141	90				
SL1.80.100.40.4.50B	3x400-415V D	4.8	4.0	4	1460	DOL	9.7	51	78.6	82.3	83.6	0.53	0.66	0.75	0.1141	90				

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	80	10	20	20	68	F	40	4-10

Performance curves

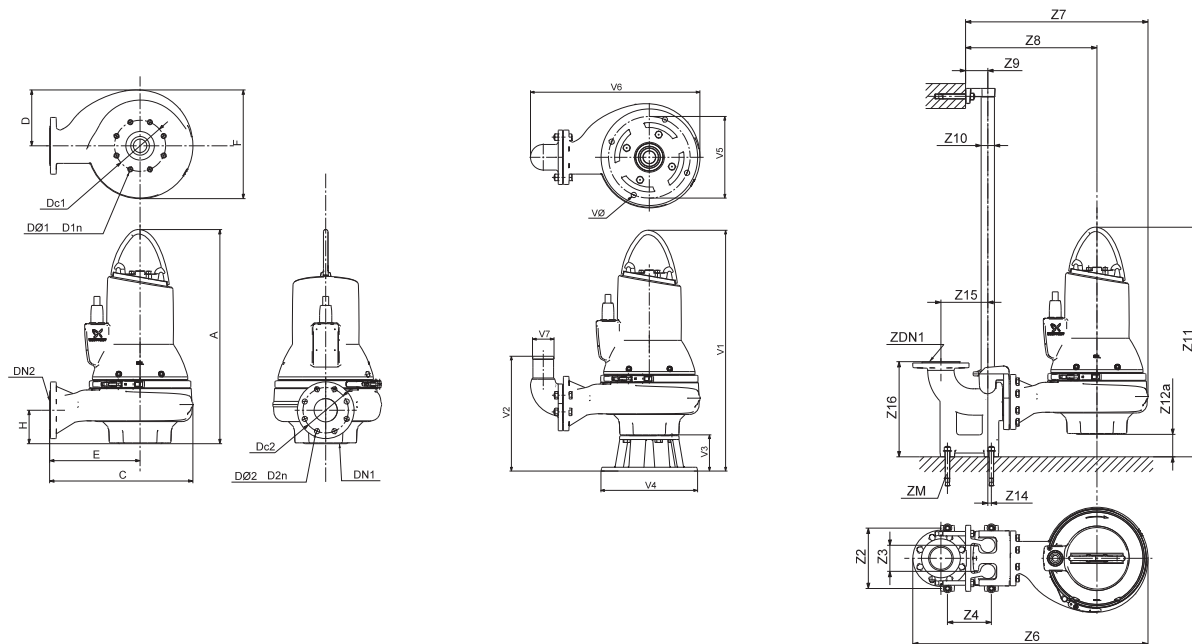
Performance curves SL1.80.100.55



TM04 3458 4608

Technical data

Dimension sketches SL1.80.100.55



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
755	505	200	319	397	118	100	180	8x18	100	180	8x18	150			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	948	722	536	110	2"	870	122	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
8858	395	130	355	300	647	100	19								

Electrical data

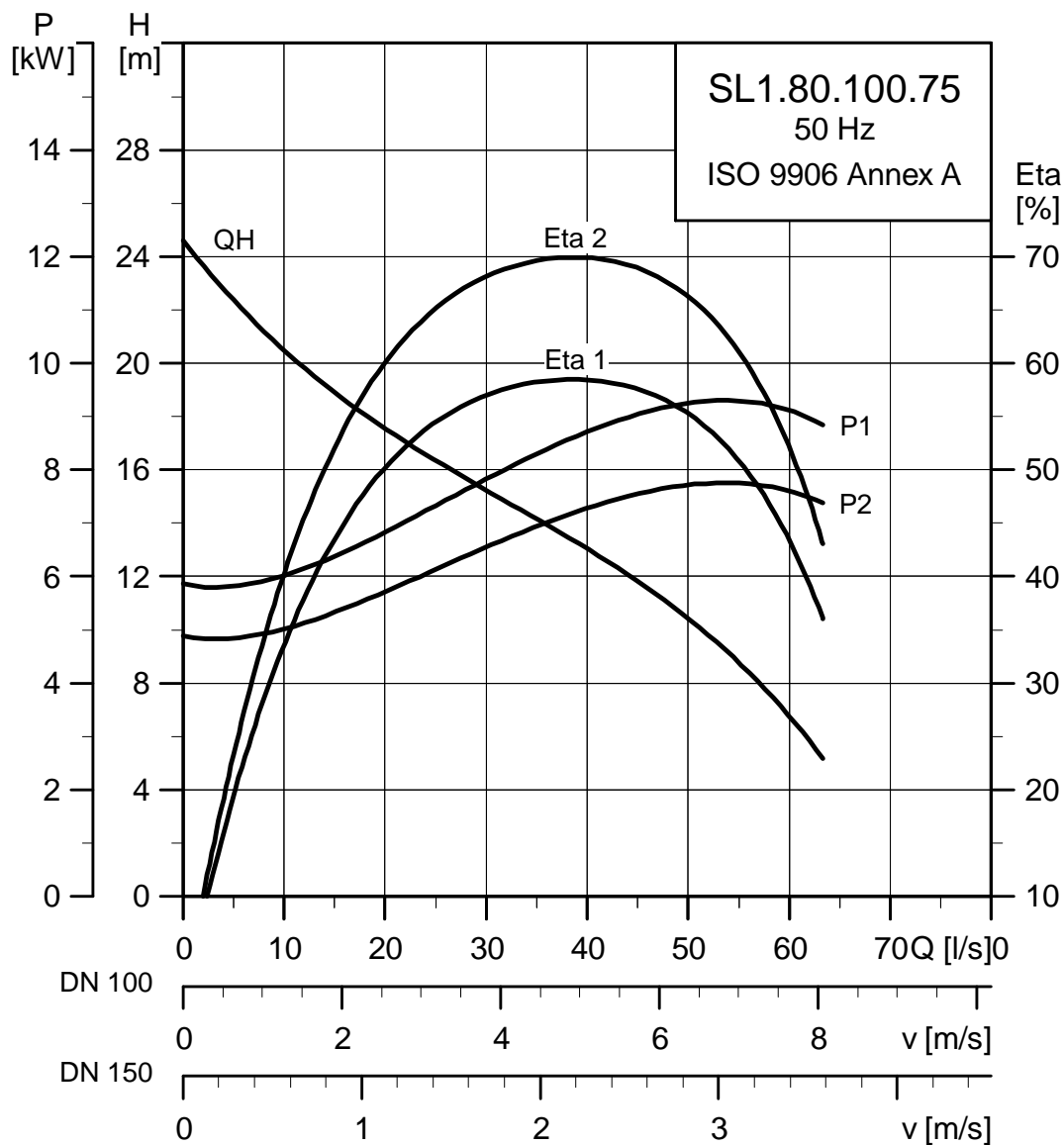
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	η_{motor} [%]			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]		
							I_N [A]	I_{start} [A]	1/2	3/4	1/1	1/2			3/4	1/1
SL1.80.100.55.4.51E	3x220-240V D	6.4	5.5	4	1460	SD	20.4	140	82.0	84.8	85.6	0.67	0.77	0.82	0.1295	110
SL1.80.100.55.4.51D	3x380-415V D	6.4	5.5	4	1460	SD	11.8	81	82.0	84.8	85.6	0.67	0.77	0.82	0.1295	110
SL1.80.100.55.4.50B	3x400-415V D	6.4	5.5	4	1460	DOL	11.8	81	82.0	84.8	85.6	0.67	0.77	0.82	0.1295	110

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	80	10	20	20	68	F	40	4-10

Performance curves

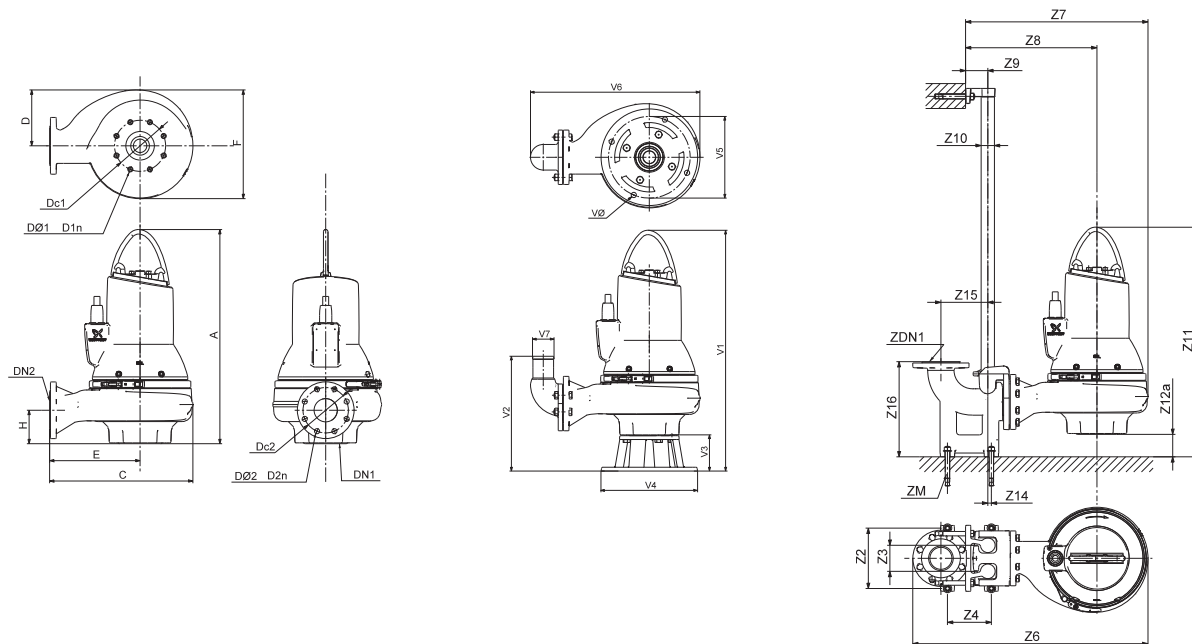
Performance curves SL1.80.100.75



TMD4 3458 4608

Technical data

Dimension sketches SL1.80.100.75



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
818	530	217	328	423	118	100	180	8x18	100	180	8x18	194			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	972	747	545	110	2"	940	122	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
948	395	130	355	300	672	100	19								

Electrical data

Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	η_{motor} [%]			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]		
							I_N [A]	I_{start} [A]	1/2	3/4	1/1	1/2			3/4	1/1
SL1.80.100.75.4.51E	3x220-240V D	8.6	7.5	4	1460	SD	26.3	189	85.7	87.2	87.0	0.72	0.81	0.86	0.1618	141
SL1.80.100.75.4.51D	3x380-415V D	8.6	7.5	4	1460	SD	15.2	109	85.7	87.2	87.0	0.72	0.81	0.86	0.1618	141
SL1.80.100.75.4.50B	3x400-415V D	8.6	7.5	4	1460	DOL	15.2	109	85.7	87.2	87.0	0.72	0.81	0.86	0.1618	141

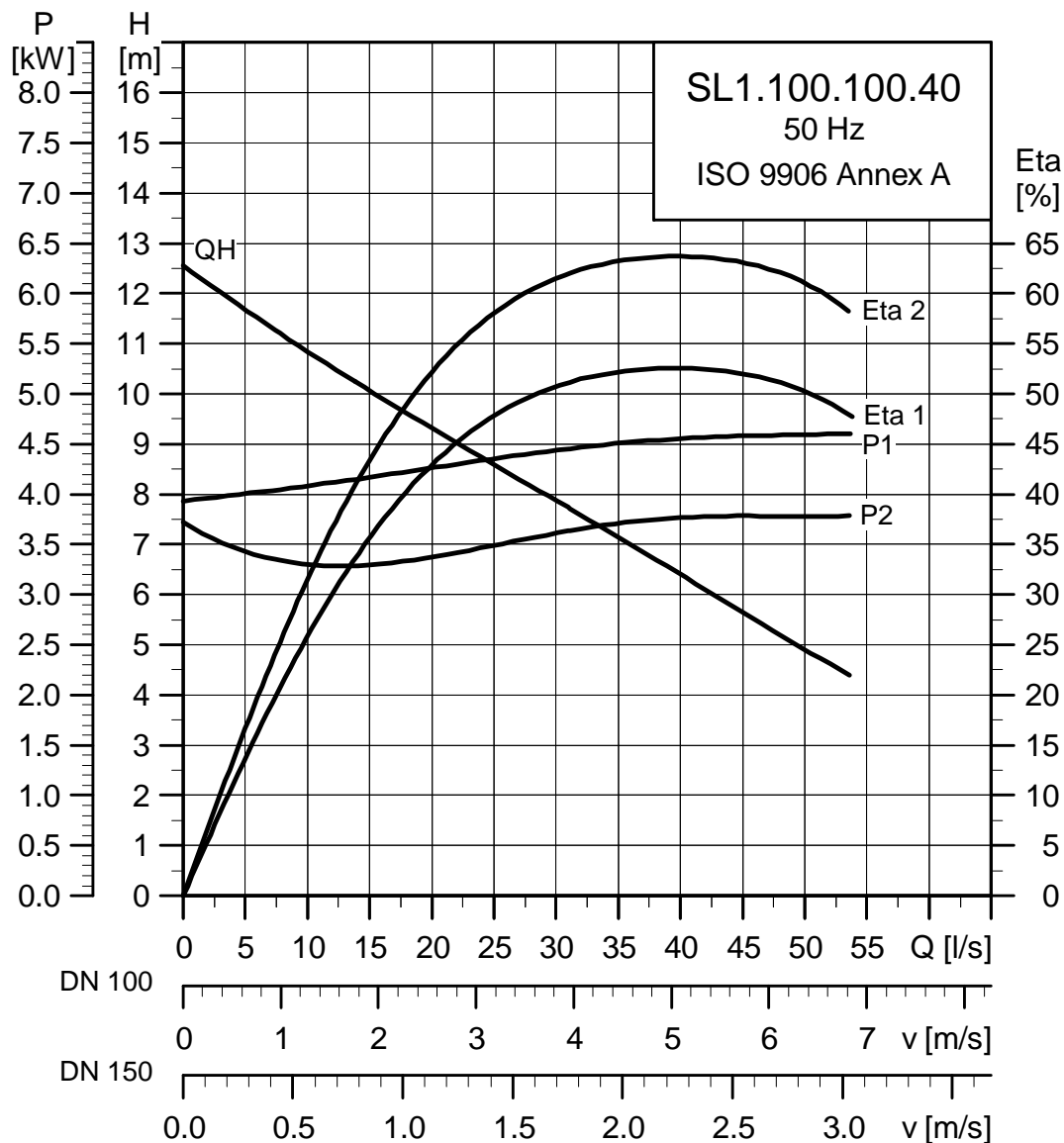
Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	80	10	20	20	68	F	40	4-10

Performance curves

SL1.100.100

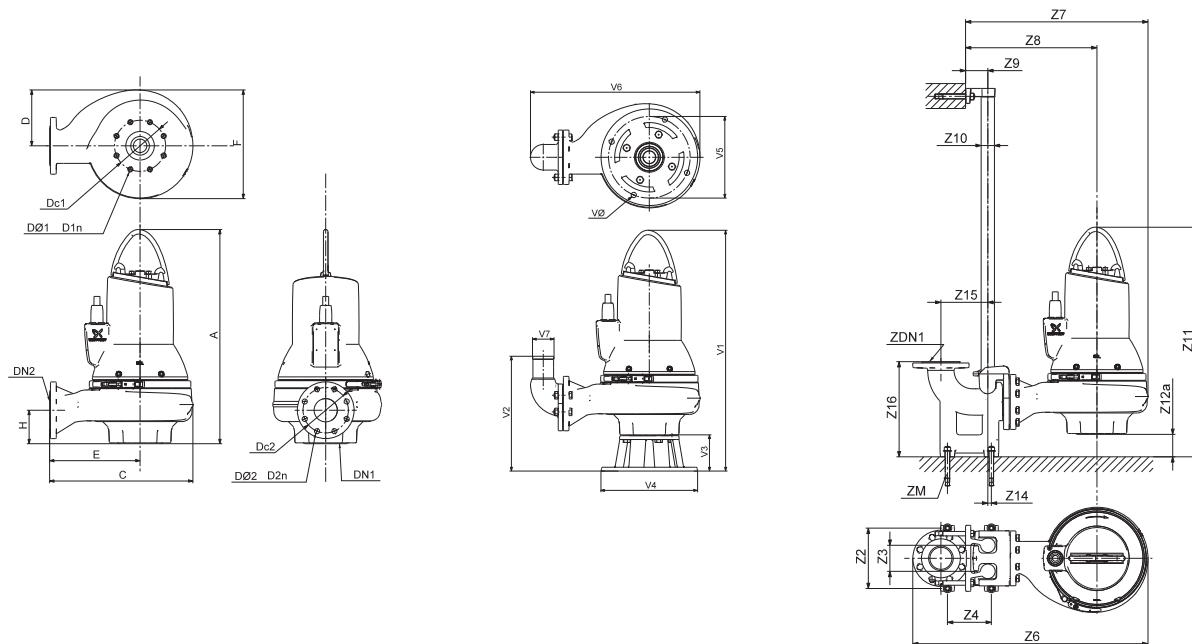
Performance curves SL1.100.100.40



TM04 3524 4608

Technical data

Dimension sketches SL1.100.100.40



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
755	541	200	320	438	115	150	240	8x22	100	180	8x18	155			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	983	758	537	110	2"	879	125	0	220	413	240	150	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
941	445	186	450	400	711	100	22								

Electrical data

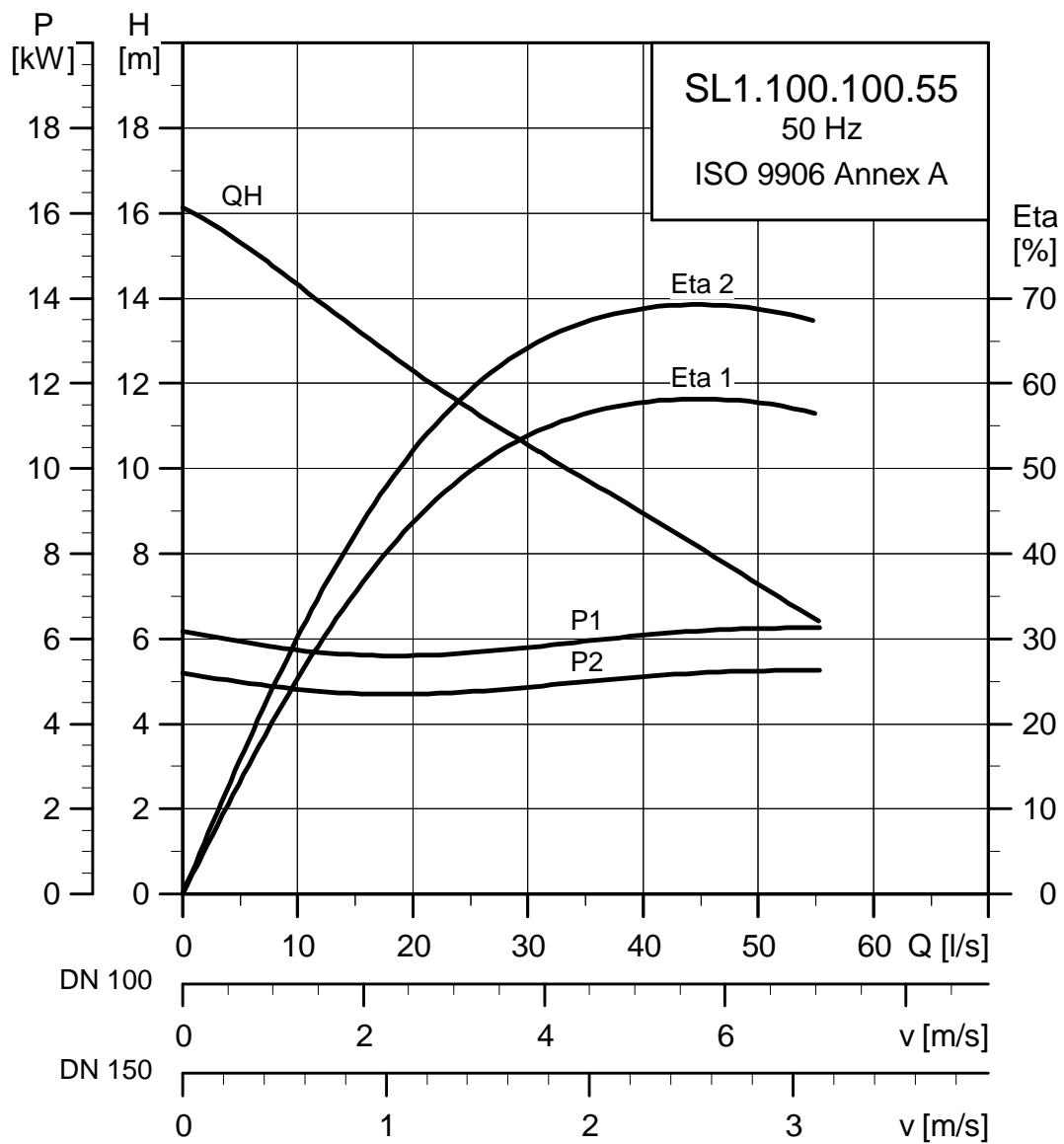
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I _N		η _{motor} [%]			Cos φ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SL1.100.100.40.4.51E	3x220-240V D	4.8	4.0	4	1460	SD	16.9	88	78.6	82.3	83.6	0.53	0.66	0.75	0.1222	90
SL1.100.100.40.4.51D	3x380-415V D	4.8	4.0	4	1460	SD	9.7	51	78.6	82.3	83.6	0.53	0.66	0.75	0.1222	90
SL1.100.100.40.4.50B	3x400-415V D	4.8	4.0	4	1460	DOL	9.7	51	78.6	82.3	83.6	0.53	0.66	0.75	0.1222	90

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	100	10	20	20	68	F	40	4-10

Performance curves

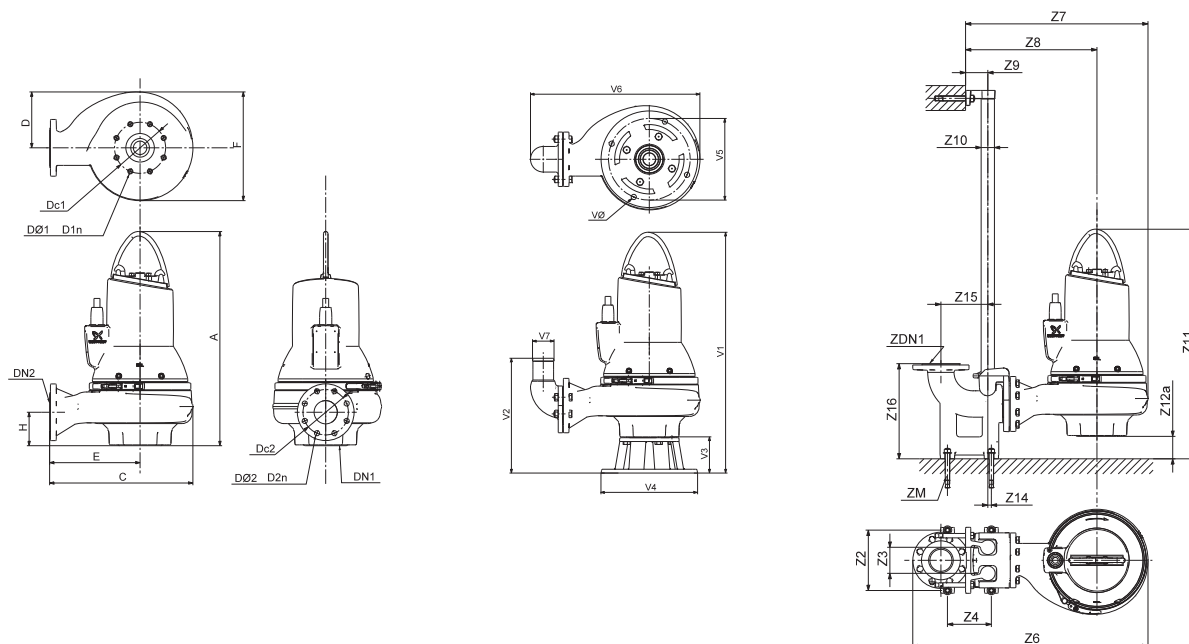
Performance curves SL1.100.100.55



TM04 3525 4608

Technical data

Dimension sketches SL1.100.100.55



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
762	541	200	320	438	115	150	240	8x22	100	180	8x18	161			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	983	758	537	110	2"	886.	125	0	220	413	240	150	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
948	445	186	450	400	711	100	22								

Electrical data

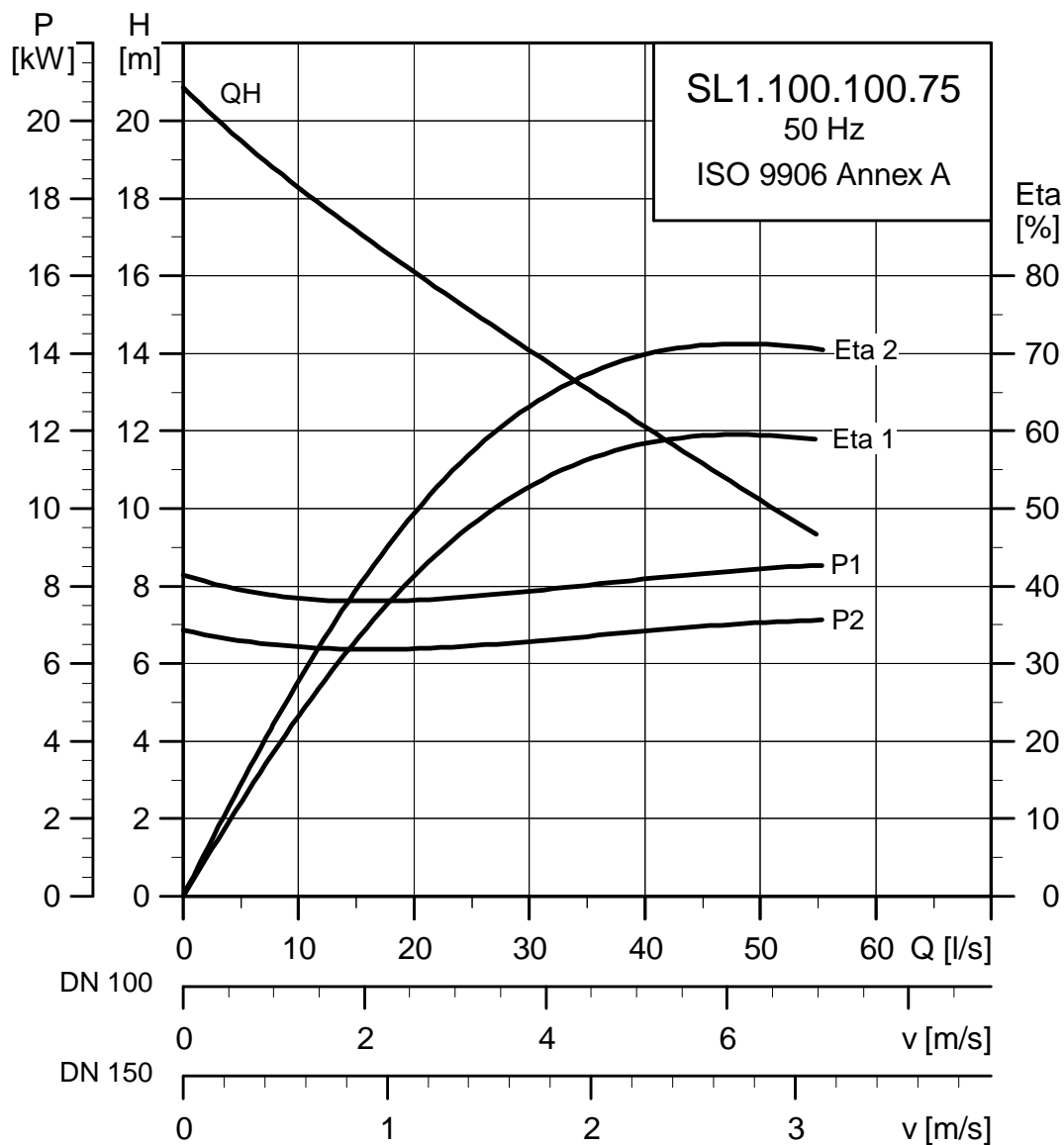
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			η_{motor} [%]			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SL1.100.100.55.4.51E	3x220-240V D	6.4	5.5	4	1460	SD	20.4	140	82.0	84.8	85.6	0.67	0.77	0.82	0.1393	110	
SL1.100.100.55.4.51D	3x380-415V D	6.4	5.5	4	1460	SD	11.8	81	82.0	84.8	85.6	0.67	0.77	0.82	0.1393	110	
SL1.100.100.55.4.50B	3x400-415V D	6.4	5.5	4	1460	DOL	11.8	81	82.0	84.8	85.6	0.67	0.77	0.82	0.1393	110	

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	100	10	20	20	68	F	40	4-10

Performance curves

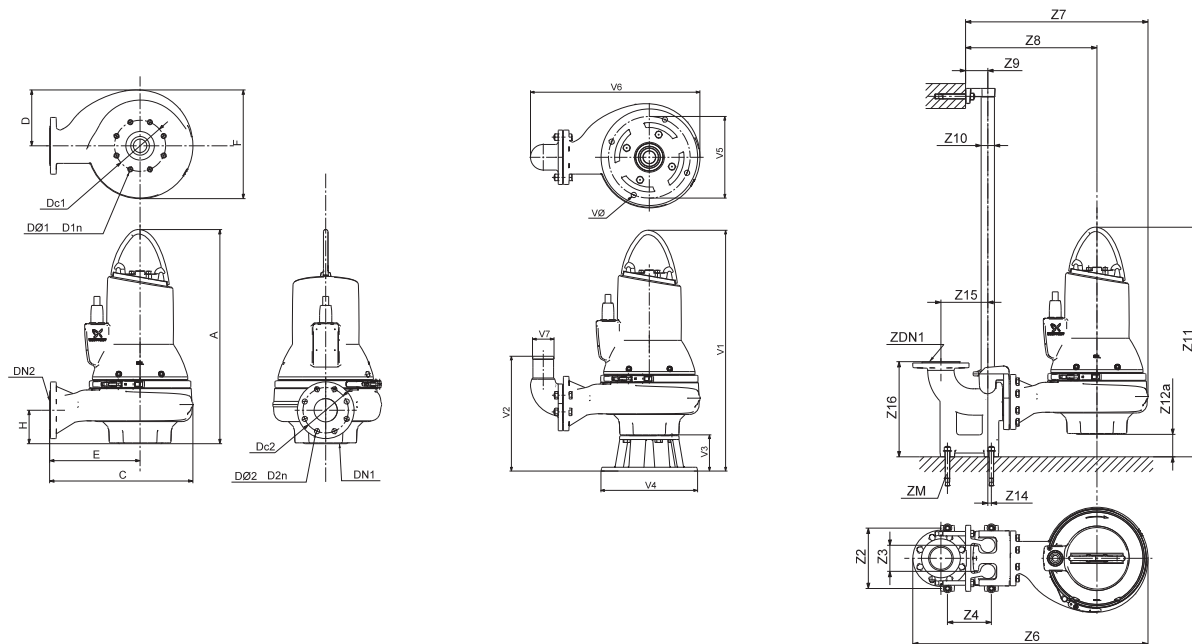
Performance curves SL1.100.100.75



TM04 3526 4608

Technical data

Dimension sketches SL1.100.100.75



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
827	541	217	312	462	115	150	240	8x22	100	180	8x18	202			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	983	758	529	110	2"	951	125	0	220	413	240	150	4 x M16
V1			V2		V3		V4		V5		V6		V7		VØ
1013			445		186		450		400		706		100		22

Electrical data

Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		η_{motor} [%]			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SL1.100.100.75.4.51E	3x220-240V D	8.6	7.5	4	1460	SD	26.3	189	85.7	87.2	87.0	0.72	0.81	0.86	0.1860	141
SL1.100.100.75.4.51D	3x380-415V D	8.6	7.5	4	1460	SD	15.2	109	85.7	87.2	87.0	0.72	0.81	0.86	0.1860	141
SL1.100.100.75.4.50B	3x400-415V D	8.6	7.5	4	1460	DOL	15.2	109	85.7	87.2	87.0	0.72	0.81	0.86	0.1860	141

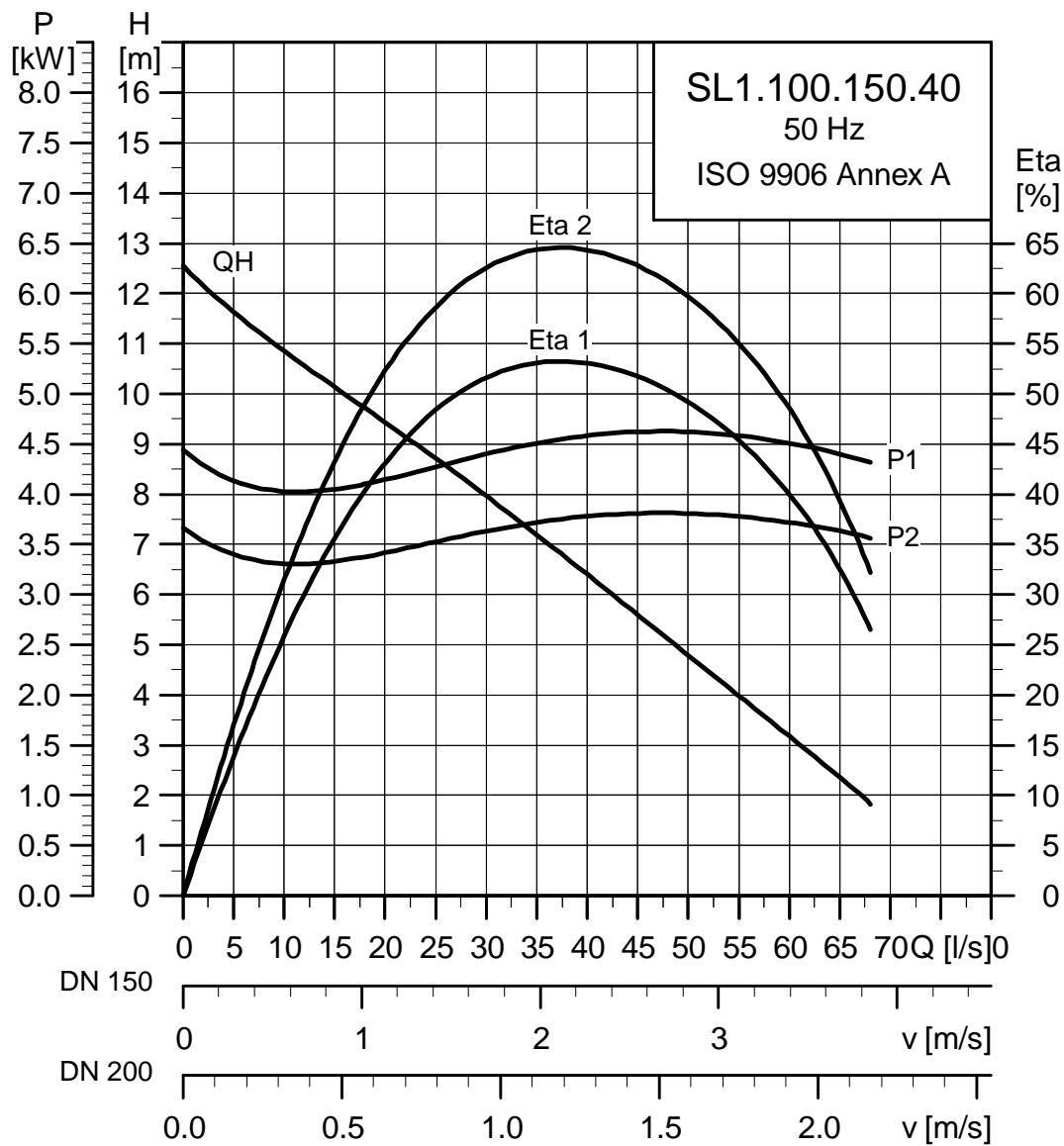
Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	100	10	20	20	68	F	40	4-10

Performance curves

SL1.100.150

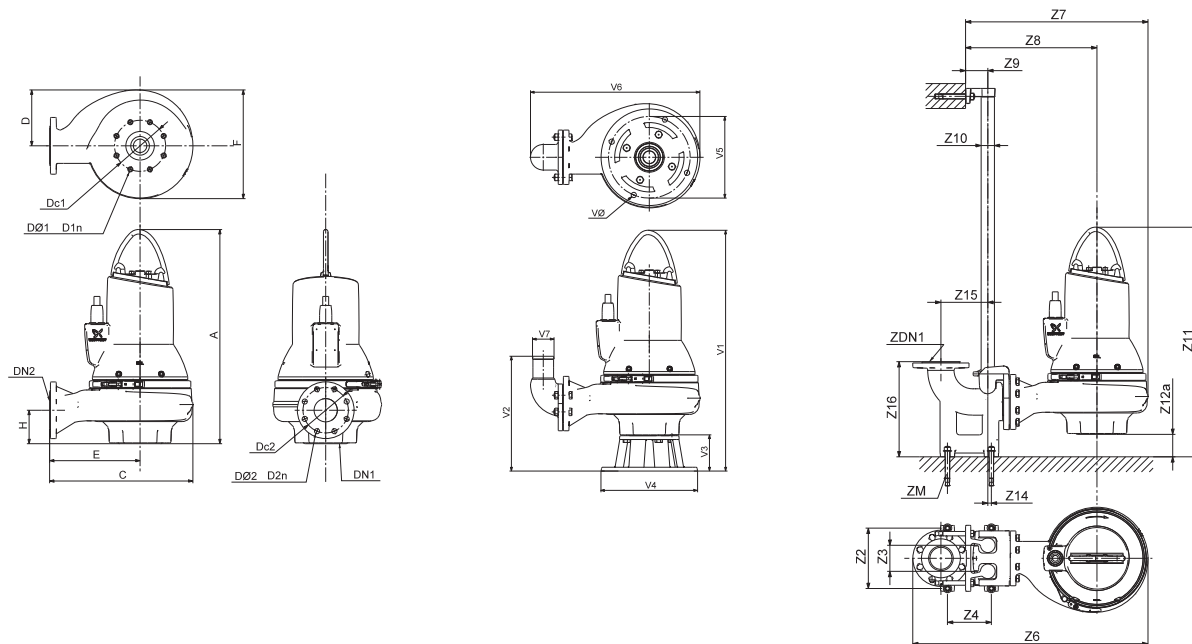
Performance curves SL1.100.150.40



TM04 3527 4608

Technical data

Dimension sketches SL1.100.150.40



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

Pump type	A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]
SL1.100.150.40	755	541	200	320	440	143	150	240	8x22	150	240	8x22	157

Pump type	Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
SL1.100.150.40	300	110	340	1093	780	559	110	2"	919	164	0	280	450	240	150	4 x M16

Pump type	V1	V2	V3	V4	V5	V6	V7	VØ
SL1.100.150.40	941	555	186	450	400	807	150	22

Electrical data

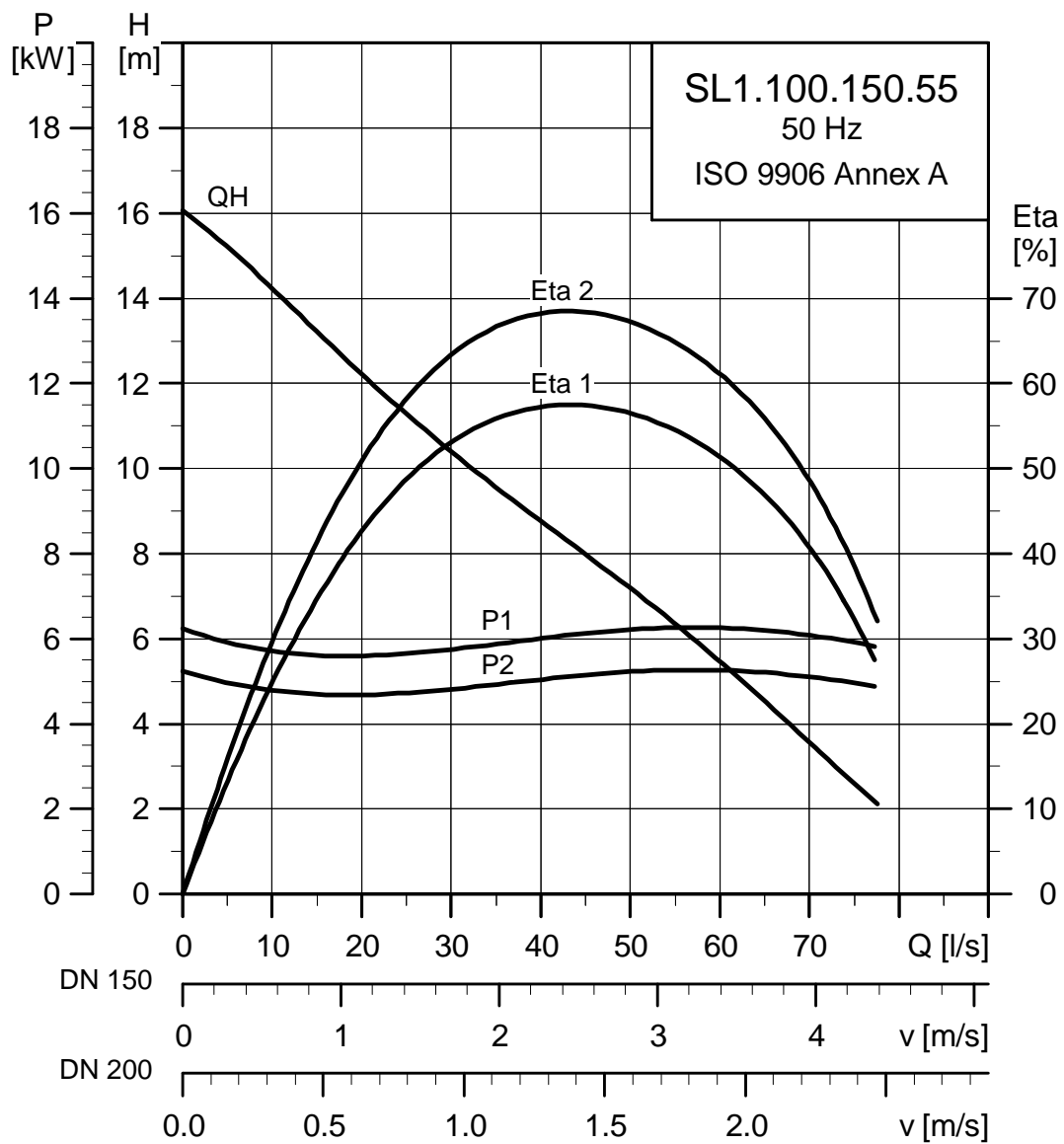
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N [A]	I_{start} [A]	η_{motor} [%]			$\cos \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
									1/2	3/4	1/1	1/2	3/4	1/1		
SL1.100.150.40.4.51E	3x220-240V D	4.8	4.0	4	1460	SD	16.9	88	78.6	82.3	83.6	0.53	0.66	0.75	0.1222	90
SL1.100.150.40.4.51D	3x380-415V D	4.8	4.0	4	1460	SD	9.7	51	78.6	82.3	83.6	0.53	0.66	0.75	0.1222	90
SL1.100.150.40.4.50B	3x400-415V D	4.8	4.0	4	1460	DOL	9.7	51	78.6	82.3	83.6	0.53	0.66	0.75	0.1222	90

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	100	10	20	20	68	F	40	4-10

Performance curves

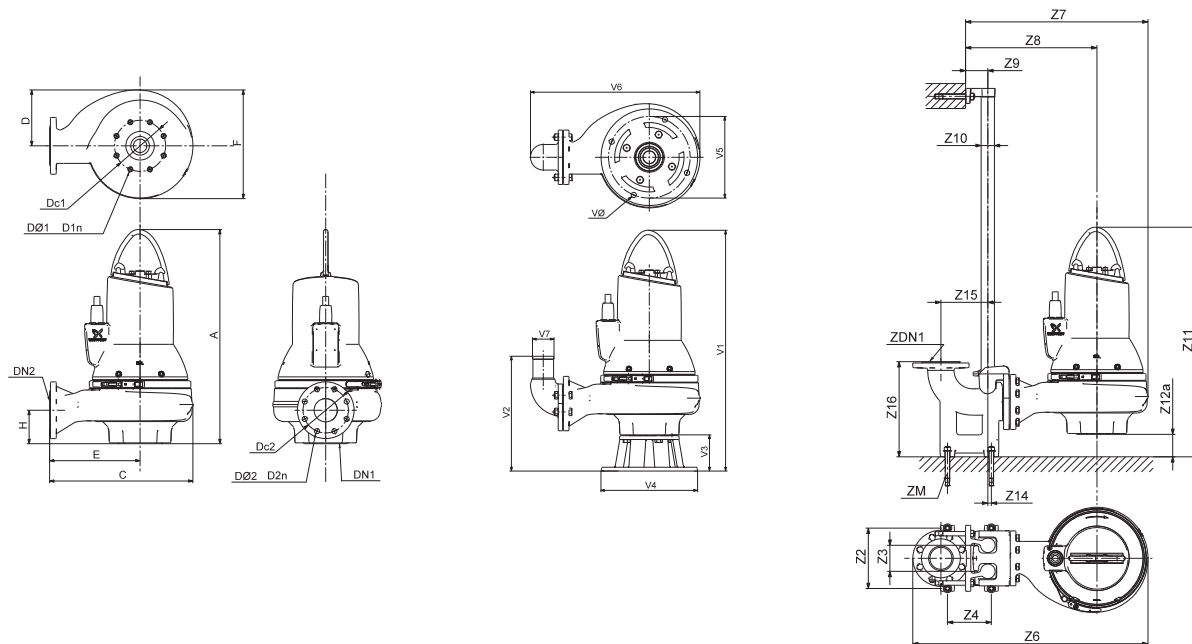
Performance curves SL1.100.150.55



TM04 3528 4608

Technical data

Dimension sketches SL1.100.150.55



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
762	541	200	320	440	143	150	240	8x22	150	240	8x22	163			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
300	110	340	1093	780	559	110	2"	926	164	0	280	450	240	150	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
948	555	186	450	400	807	150	22								

Electrical data

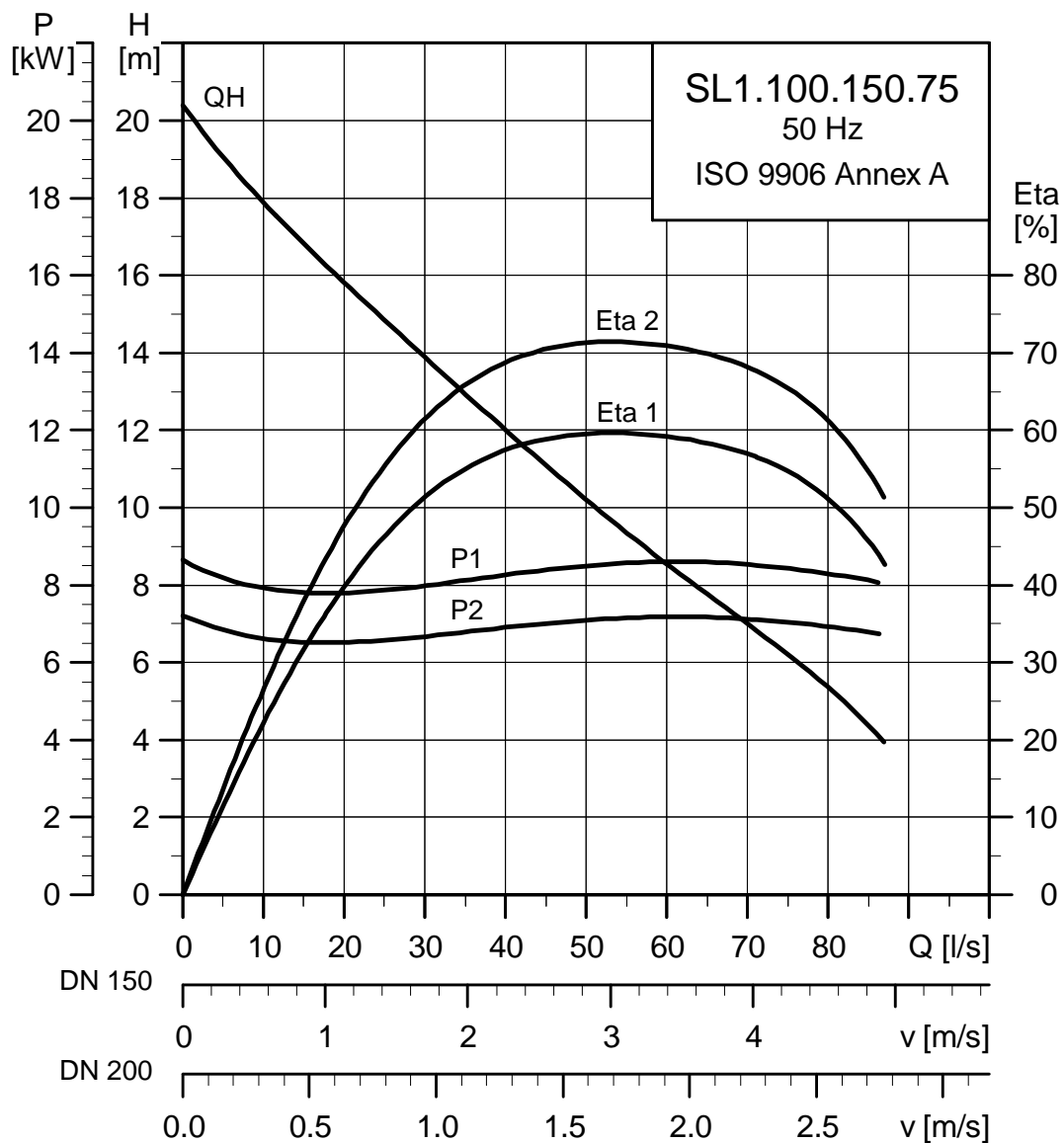
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N [A]	I_{start} [A]	η_{motor} [%]			$\cos \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
									1/2	3/4	1/1	1/2	3/4	1/1		
SL1.100.150.55.4.51E	3x220-240V D	6.4	5.5	4	1460	SD	20.4	140	82.0	84.8	85.6	0.67	0.77	0.82	0.1393	110
SL1.100.150.55.4.51D	3x380-415V D	6.4	5.5	4	1460	SD	11.8	81	82.0	84.8	85.6	0.67	0.77	0.82	0.1393	110
SL1.100.150.55.4.50B	3x400-415V D	6.4	5.5	4	1460	DOL	11.8	81	82.0	84.8	85.6	0.67	0.77	0.82	0.1393	110

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	100	10	20	20	68	F	40	4-10

Performance curves

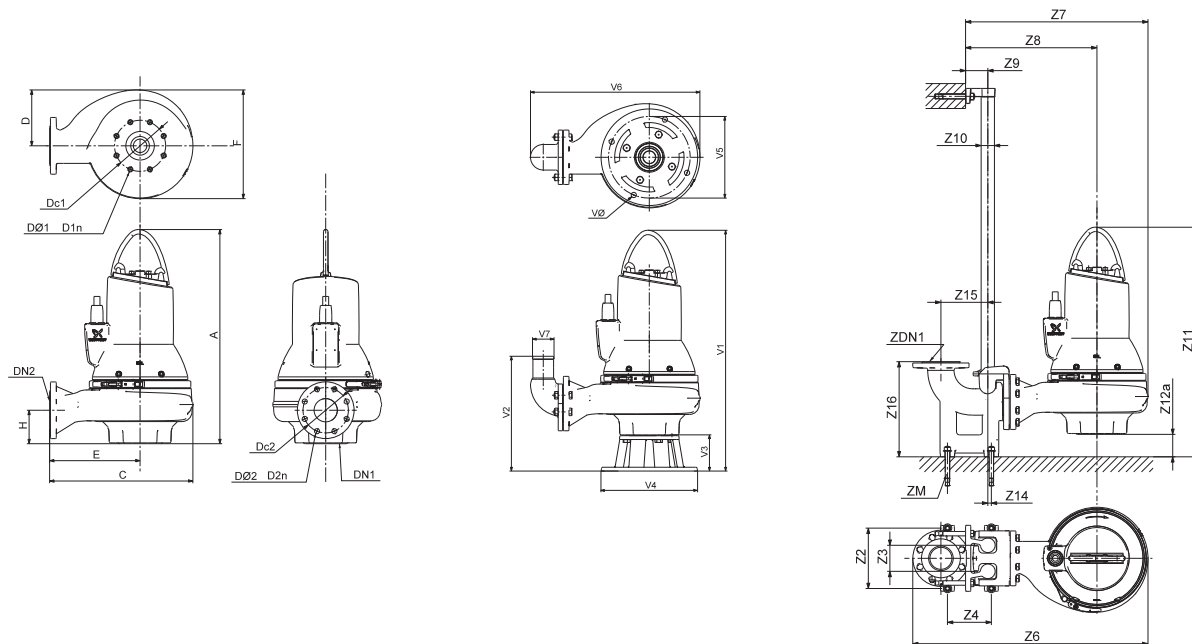
Performance curves SL1.100.150.75



TM04 3529 4608

Technical data

Dimension sketches SL1.100.150.75



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
827	541	217	306	472	143	150	240	8x22	150	240	8x22	204			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
300	110	340	1093	780	545	110	2"	991	164	0	280	450	240	150	4 x M16
V1			V2		V3		V4		V5		V6		V7		VØ
1013			555		186		450		400		803		150		22

Electrical data

Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			η_{motor} [%]			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]		1/2	3/4	1/1	1/2	3/4	1/1		
SL1.100.150.75.4.51E	3x220-240V D	8.6	7.5	4	1460	SD	26.3	189	85.7	87.2	87.0	0.72	0.81	0.86	0.1860	141	
SL1.100.150.75.4.51D	3x380-415V D	8.6	7.5	4	1460	SD	15.2	109	85.7	87.2	87.0	0.72	0.81	0.86	0.1860	141	
SL1.100.150.75.4.50B	3x400-415V D	8.6	7.5	4	1460	DOL	15.2	109	85.7	87.2	87.0	0.72	0.81	0.86	0.1860	141	

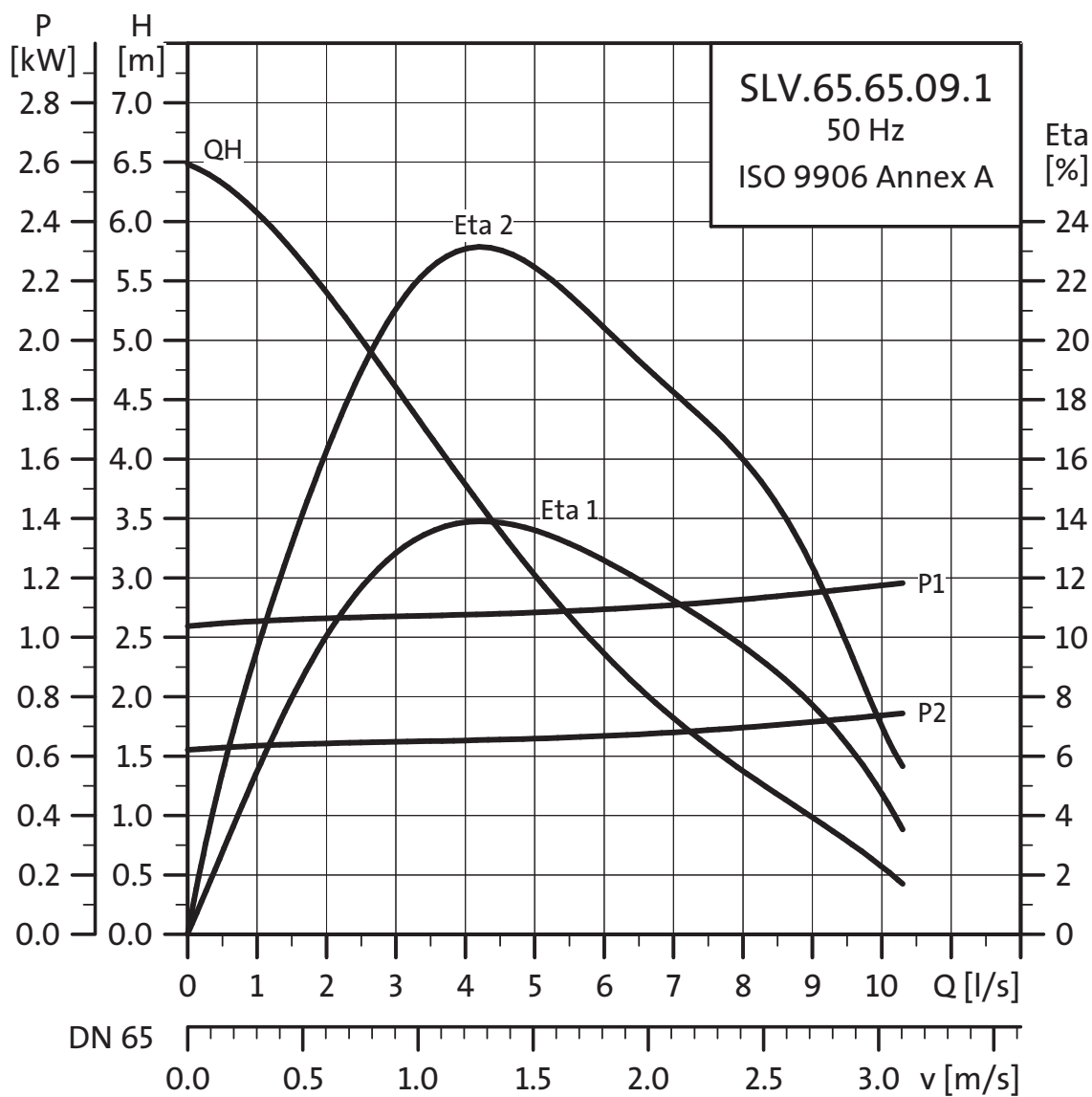
Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Channel	100	10	20	20	68	F	40	4-10

Performance curves

SLV.65.65

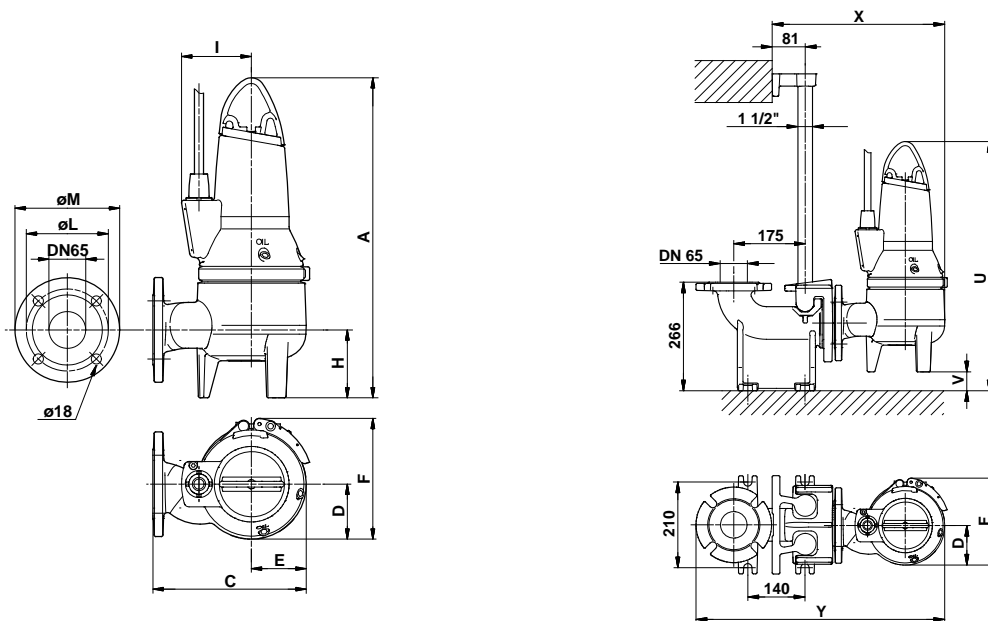
Performance curves SLV.65.65.09.1



TM02 7483 3-403

Technical data

Dimensional sketches SLV.65.65.09.1



TM02 7483 3603/TM02 7350 3403

Product dimensions

A	C	D	E	F	H	I	U	V	X	Y	øL	øM	Weight [kg]
544	333	126	118	242	121	123	589	45	485	671	143	185	48

With 10 m cable

Electrical data

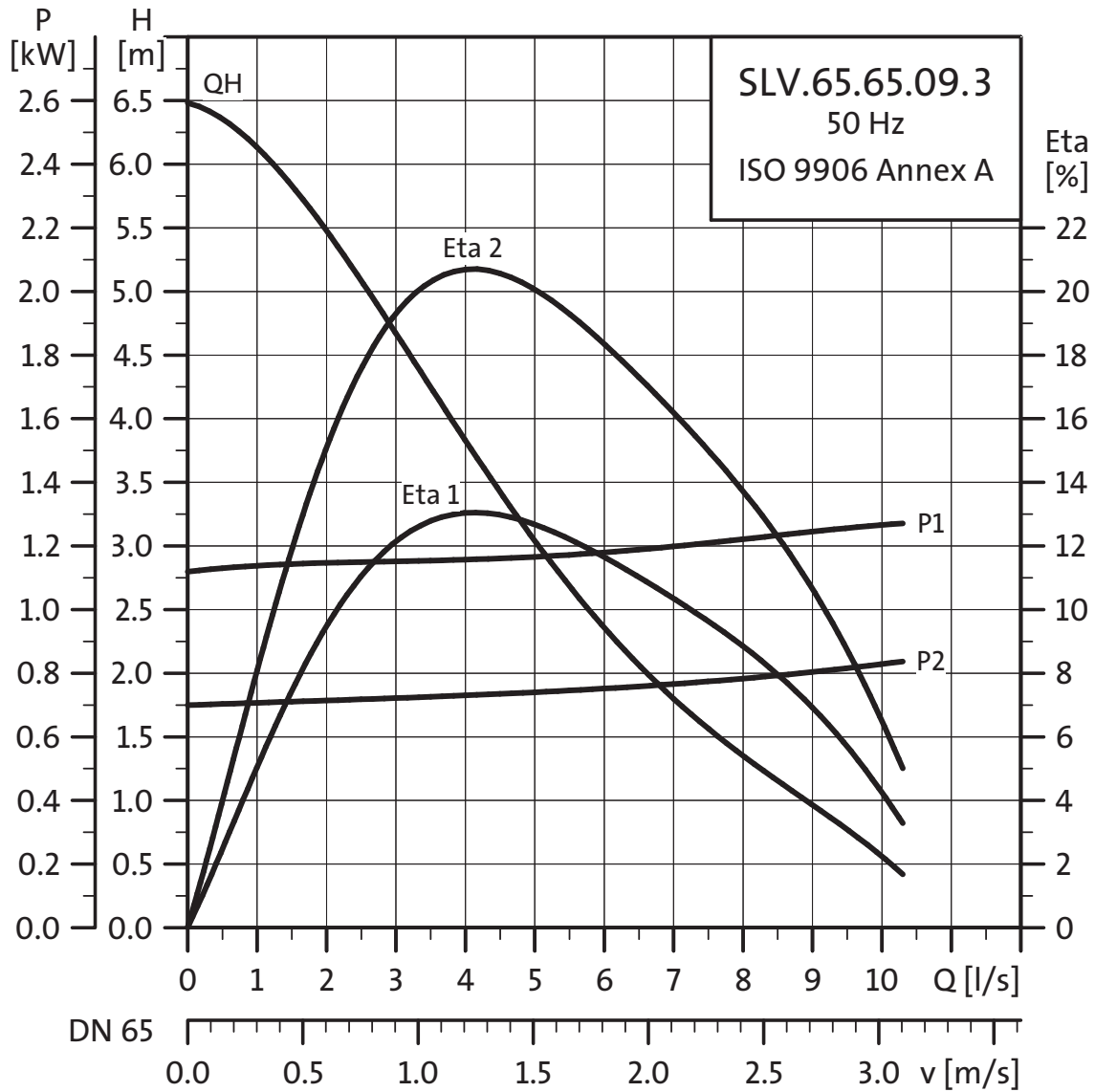
Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	Run capacitor [µF]	I_N		I_{start}			η_{motor} [%]			$\cos \varphi$		Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1				
1 x 230	1.3	0.9	2	2920	DOL	30	6.1	38	55	63	67	0.86	0.92	0.96	0.004	7		

Pump data

Impeller type	Max. solids size [mm]	Max . number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Channel	65	30	10	IP68	F	40	4-10	Ex d IIB T4 / Ex n IIB T4

Performance curves

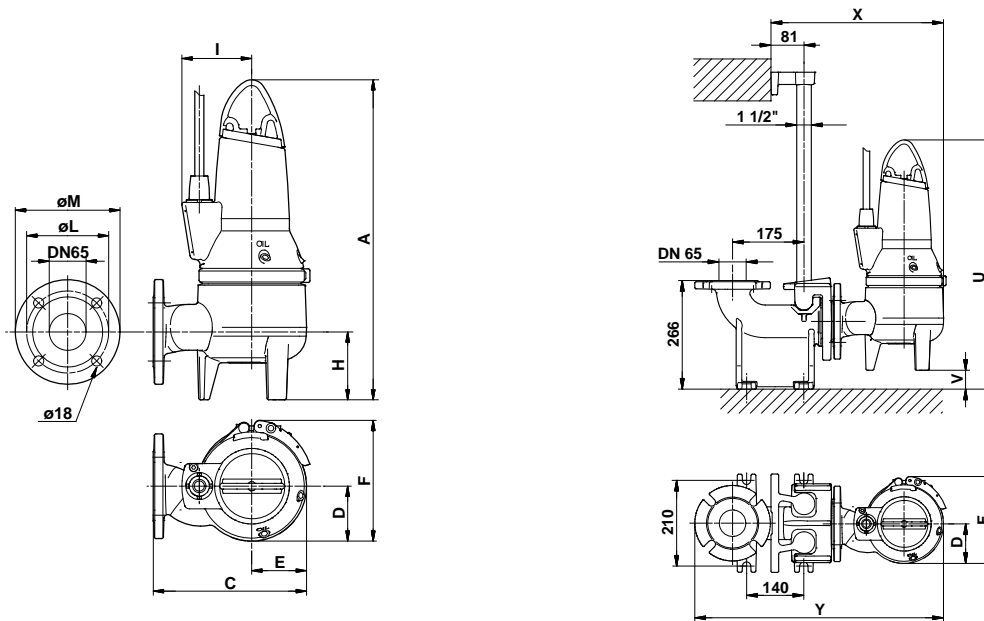
Performance curves SLV.65.65.09.3



TM027482-3403

Technical data

Dimensional sketches SLV.65.65.09.3



TM02 7482 3603/TM02 7350 3403

Product dimensions

A	C	D	E	F	H	I	U	V	X	Y	øL	øM	Weight [kg]
544	333	126	118	242	121	123	589	45	485	671	143	185	48

With 10 m cable

Electrical data

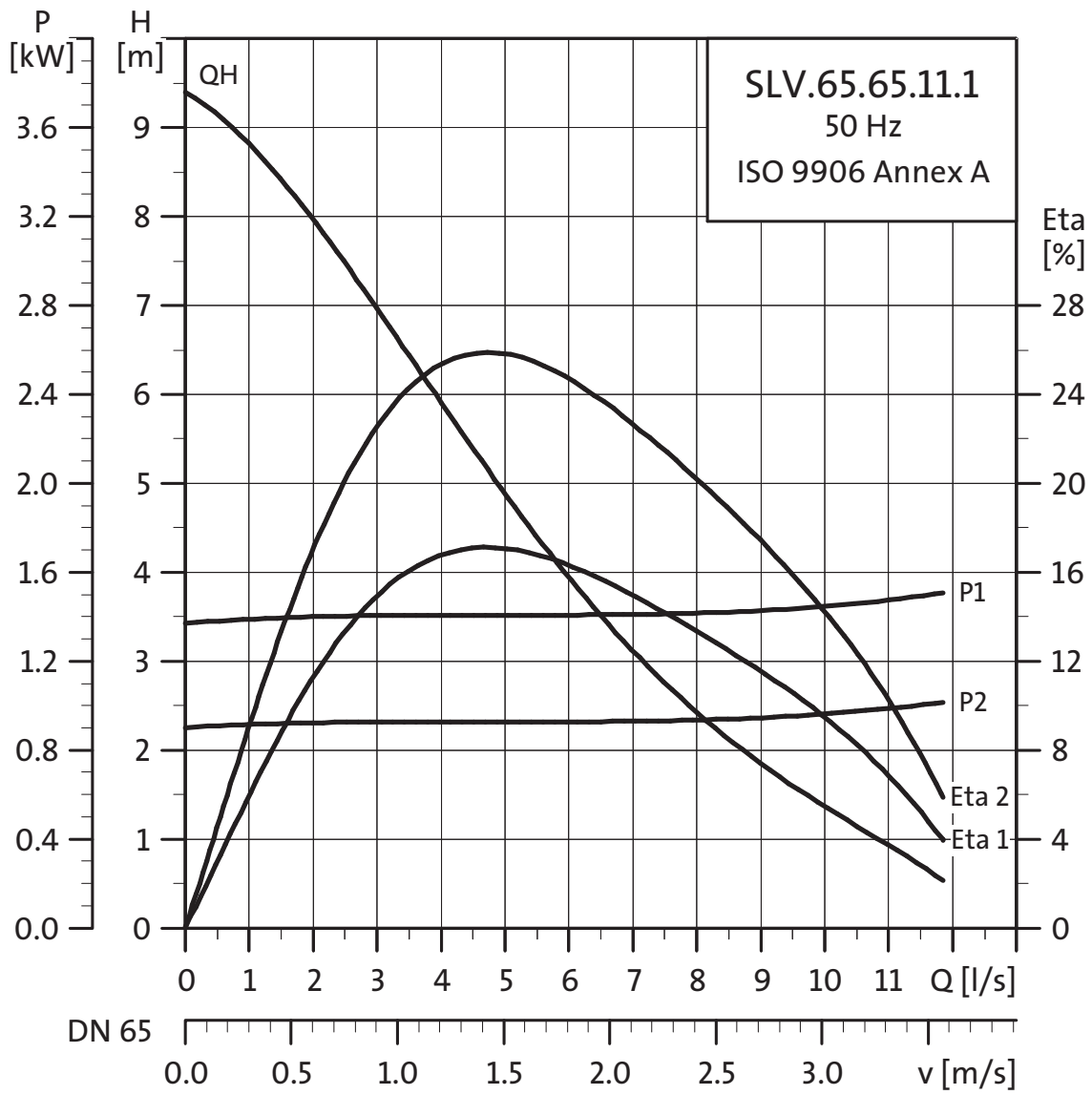
Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		I_{start}			η_{motor} [%]				Cos φ	Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
						[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1				
3 x 230-240	1.4	0.9	2	2920	DOL	4.9	36	58	61	65	0.50	0.58	0.65	0.004	12		
3 x 400-415	1.4	0.9	2	2920	DOL	2.8	21	58	61	65	0.58	0.68	0.76	0.004	12		

Pump data

Impeller type	Max. solids size [mm]	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Channel	65	30	10	IP68	F	40	4-10	Ex d IIB T4 / Ex n IIB T4

Performance curves

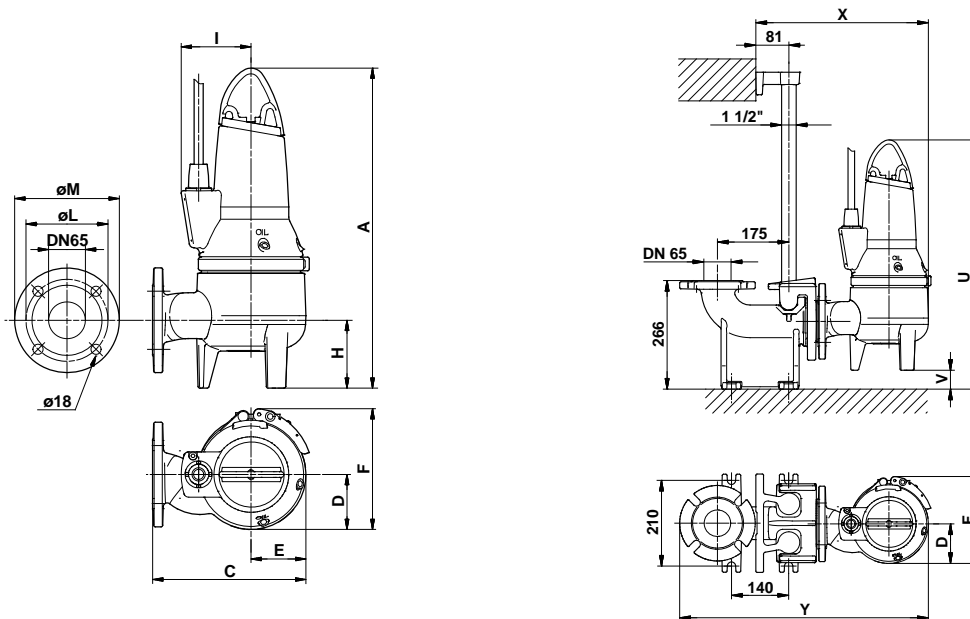
Performance curves SLV.65.65.11.1



TM02 7472 3403

Technical data

Dimensional sketches SLV.65.65.11.1



TM02 7472 3603/TM02 7350 3403

Product dimensions

A	C	D	E	F	H	I	U	V	X	Y	øL	øM	Weight [kg]
544	333	126	118	242	121	123	589	45	485	671	143	185	48

With 10 m cable

Electrical data

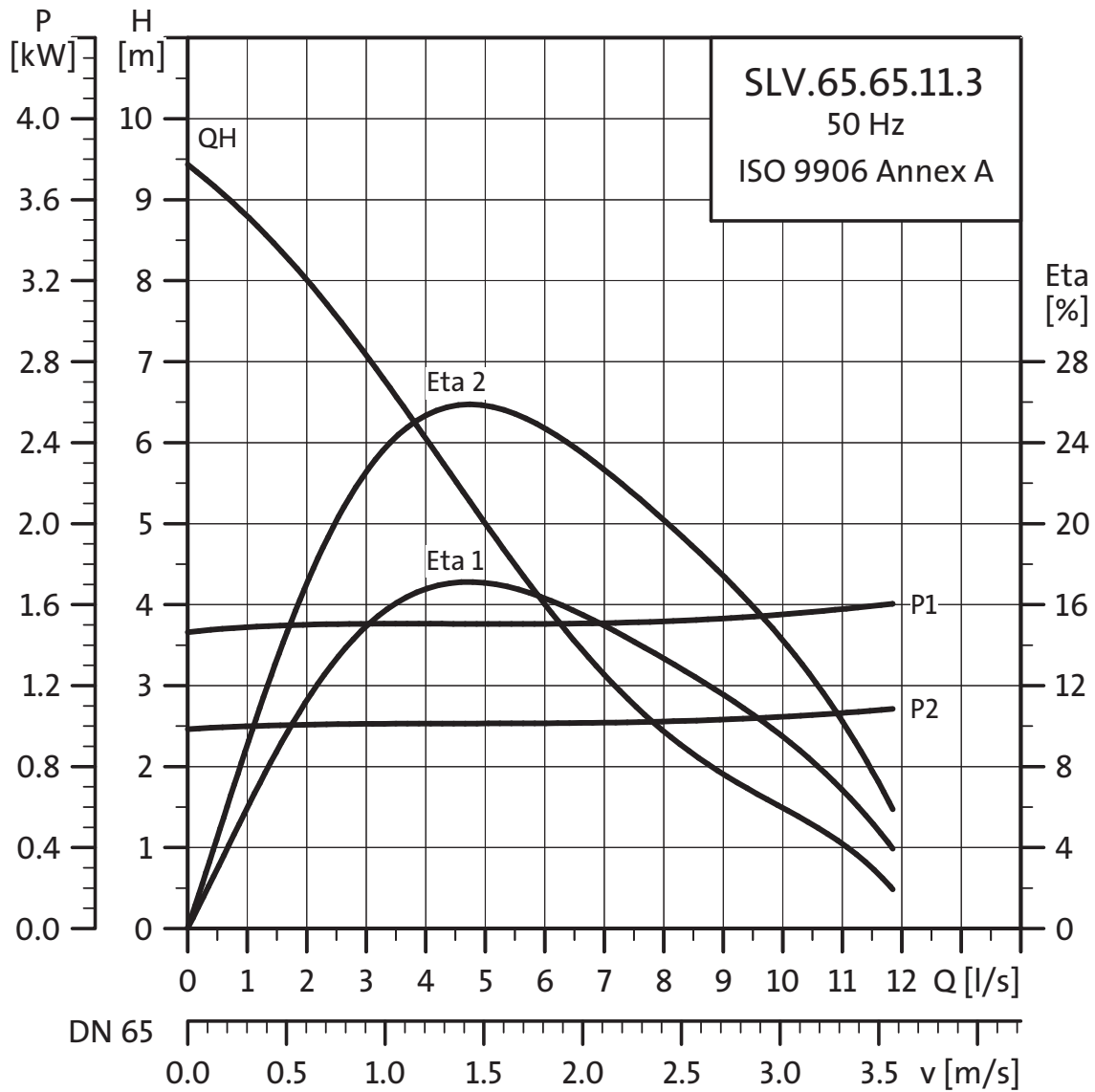
Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	Run capacitor [µF]	I_N		I_{start}			η_{motor} [%]			$\cos \varphi$		Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1				
1 x 230	1.3	0.9	2	2920	DOL	30	6.1	38	55	63	67	0.86	0.92	0.96	0.004	7		

Pump data

Impeller type	Max. solids size [mm]	Max . number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Channel	65	30	10	IP68	F	40	4-10	Ex d IIB T4 / Ex n IIB T4

Performance curves

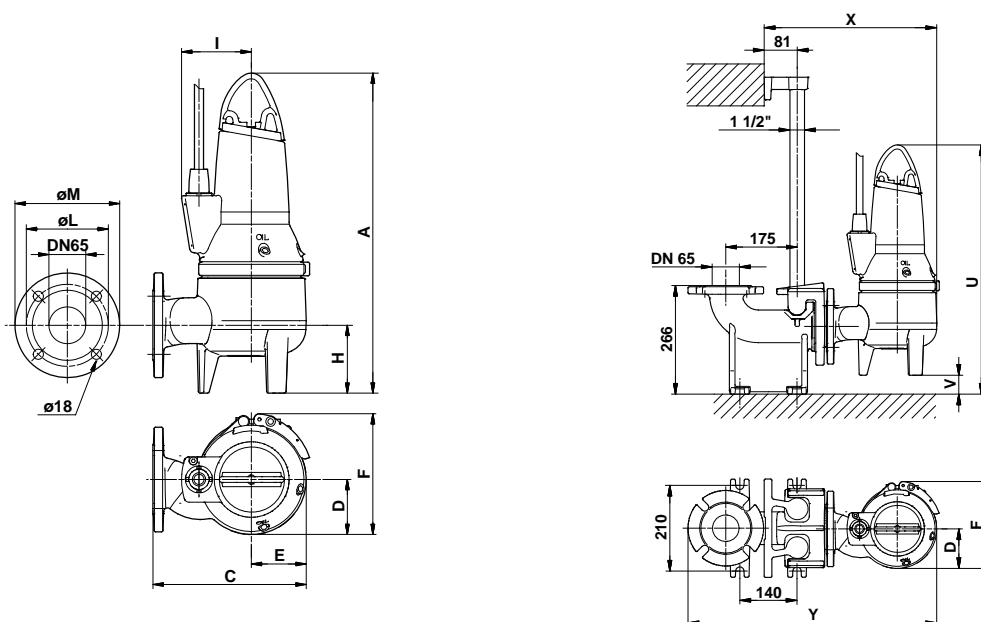
Performance curves SLV.65.65.11.3



TM02 7471 3403

Technical data

Dimensional sketches SLV.65.65.11.3



TM02 7471 3603/TM02 7350 3403

Product dimensions

A	C	D	E	F	H	I	U	V	X	Y	øL	øM	Weight [kg]
544	333	126	118	242	121	123	589	45	485	671	143	185	48

With 10 m cable

Electrical data

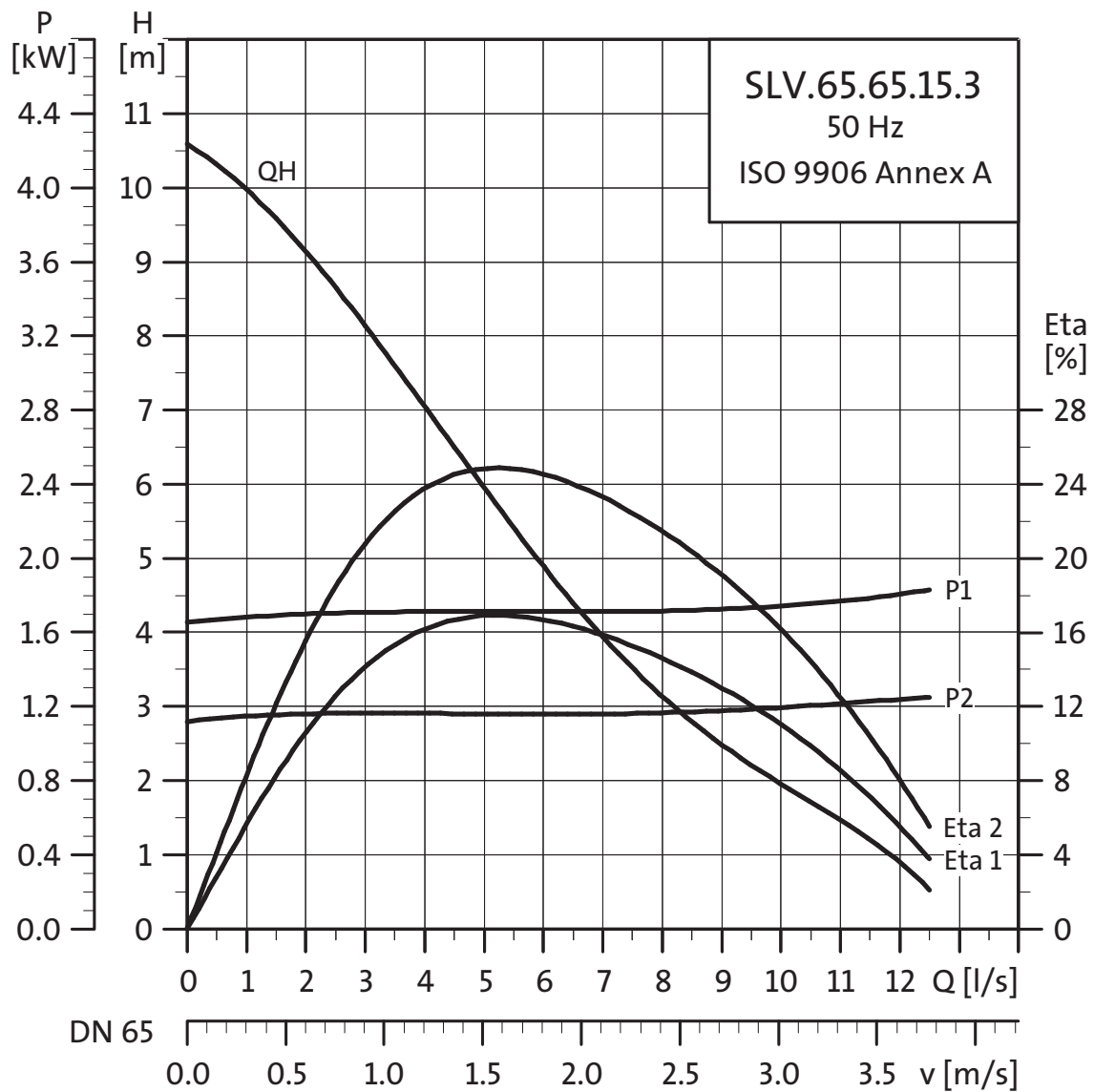
Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		I_{start}			η_{motor} [%]				Cos φ	Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
						[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1				
3 x 230-240	1.4	0.9	2	2920	DOL	4.9	36	58	61	65	0.50	0.58	0.65	0.004	12		
3 x 400-415	1.4	0.9	2	2920	DOL	2.8	21	58	61	65	0.58	0.68	0.76	0.004	12		

Pump data

Impeller type	Max. solids size [mm]	Max . number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Channel	65	30	10	IP68	F	40	4-10	Ex d IIB T4 / Ex n IIB T4

Performance curves

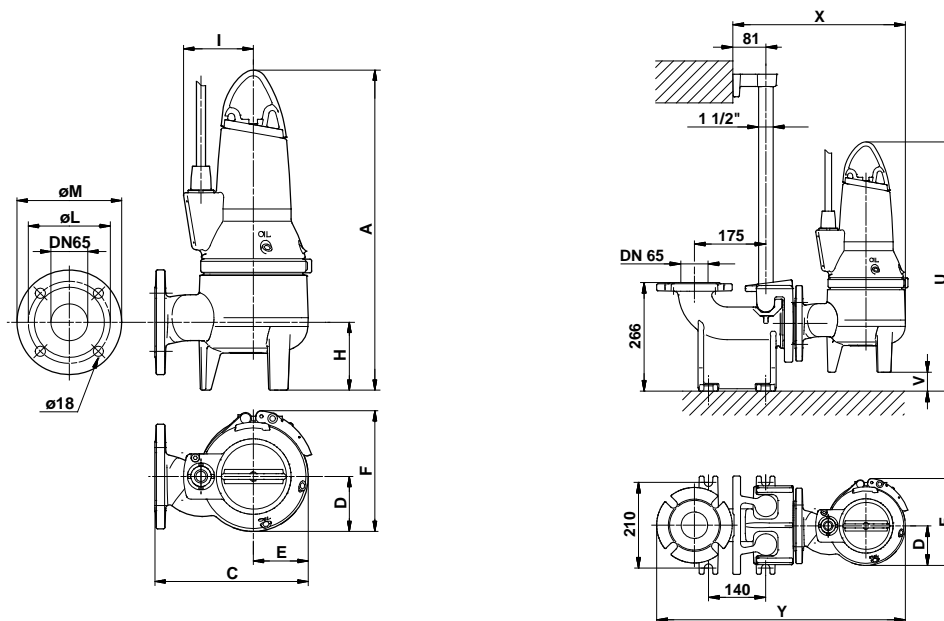
Performance curves SLV.65.65.15.3



TM02 7470 3403

Technical data

Dimensional sketches SLV.65.65.15.3



TM02 7470 3603/TM02 7350 3403

Product dimensions

A	C	D	E	F	H	I	U	V	X	Y	øL	øM	Weight [kg]
544	333	126	118	242	121	123	589	45	485	671	143	185	48

With 10 m cable

Electrical data

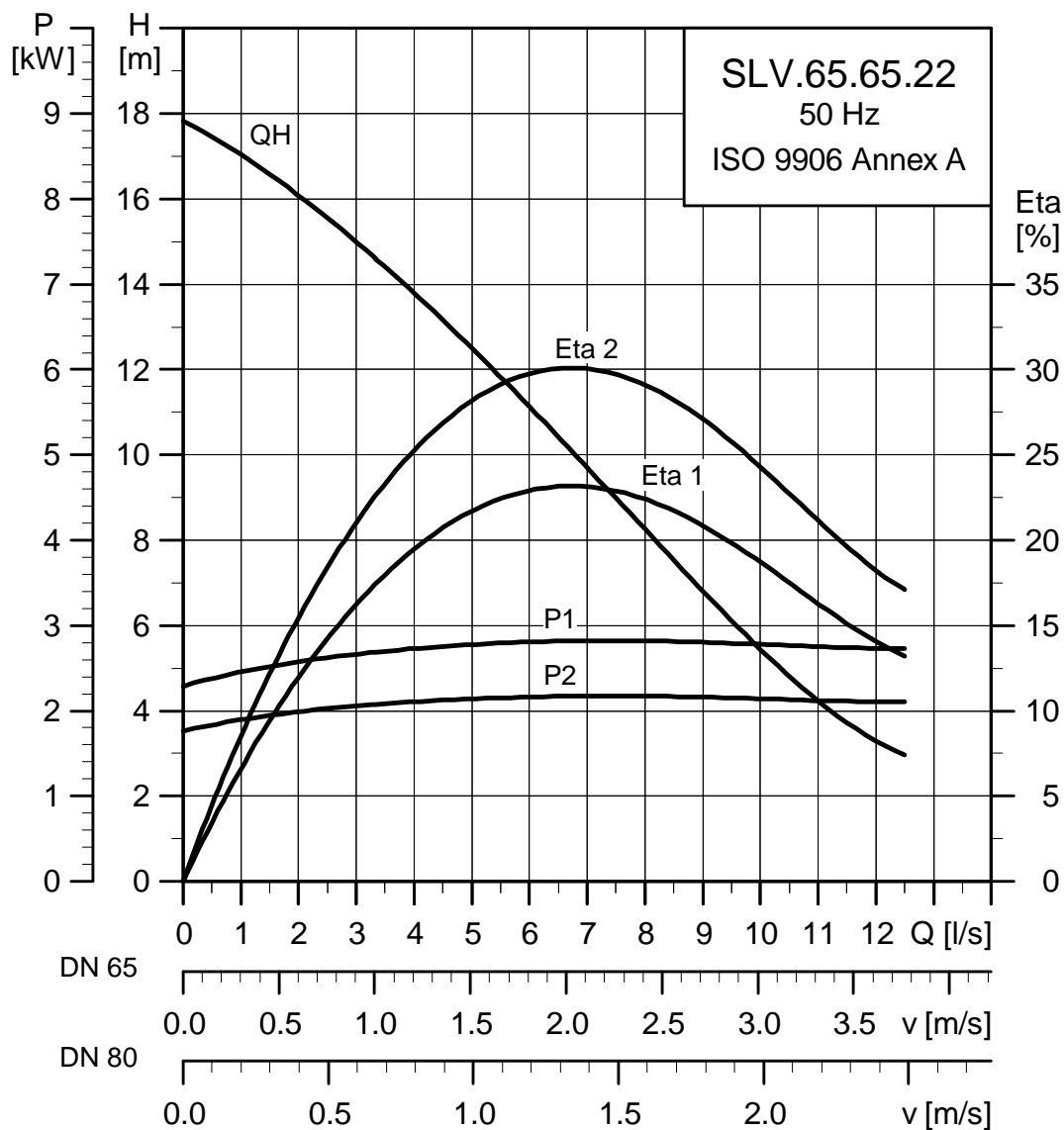
Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		I_{start}			η_{motor} [%]			$\cos \varphi$		Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
						[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1				
3 x 230-240	1.4	0.9	2	2920	DOL	4.9	36	58	61	65	0.50	0.58	0.65	0.004	12		
3 x 400-415	1.4	0.9	2	2920	DOL	2.8	21	58	61	65	0.58	0.68	0.76	0.004	12		

Pump data

Impeller type	Max. solids size [mm]	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH	Ex-class
Channel	65	30	10	IP68	F	40	4-10	Ex d IIB T4 / Ex n IIB T4

Performance curves

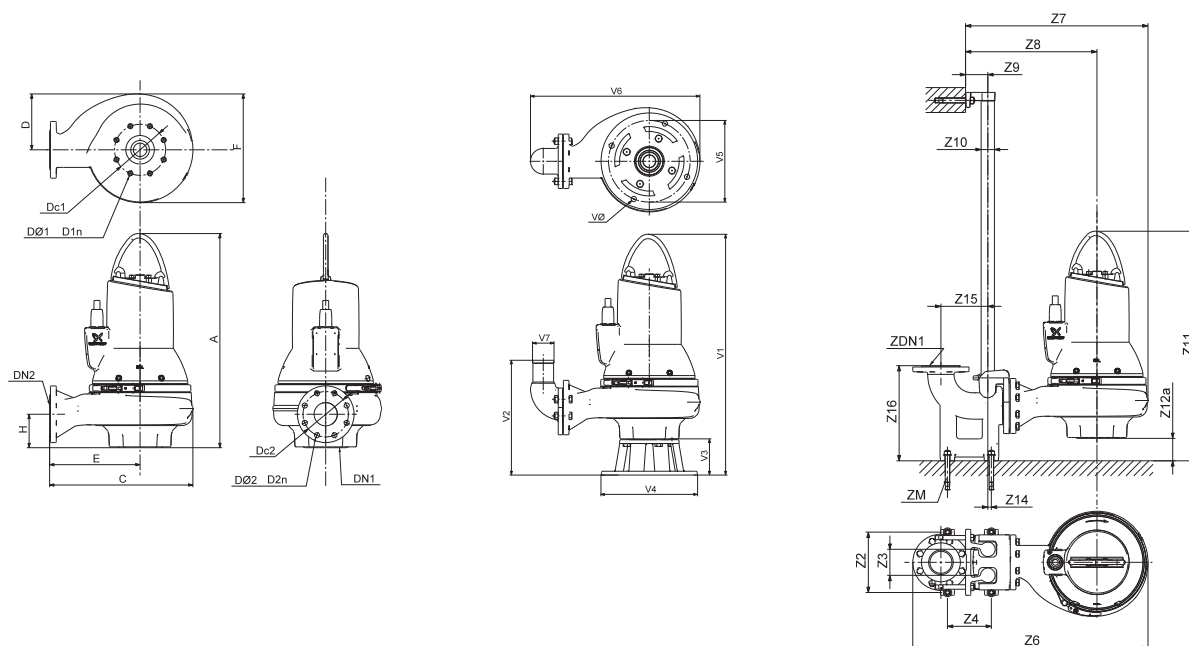
Performance curves SLV.65.65.22



TM04 3530 4608

Technical data

Dimension sketches SLV.65.65.22



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
684	396	171	246	321	102	80	160	8x18	65	145	4 x 18	88			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
210	95	140	730	543	394	81	1½"	747	63	1	175	266	160	80	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
812	372	128	330	280	524	65	18								

Electrical data

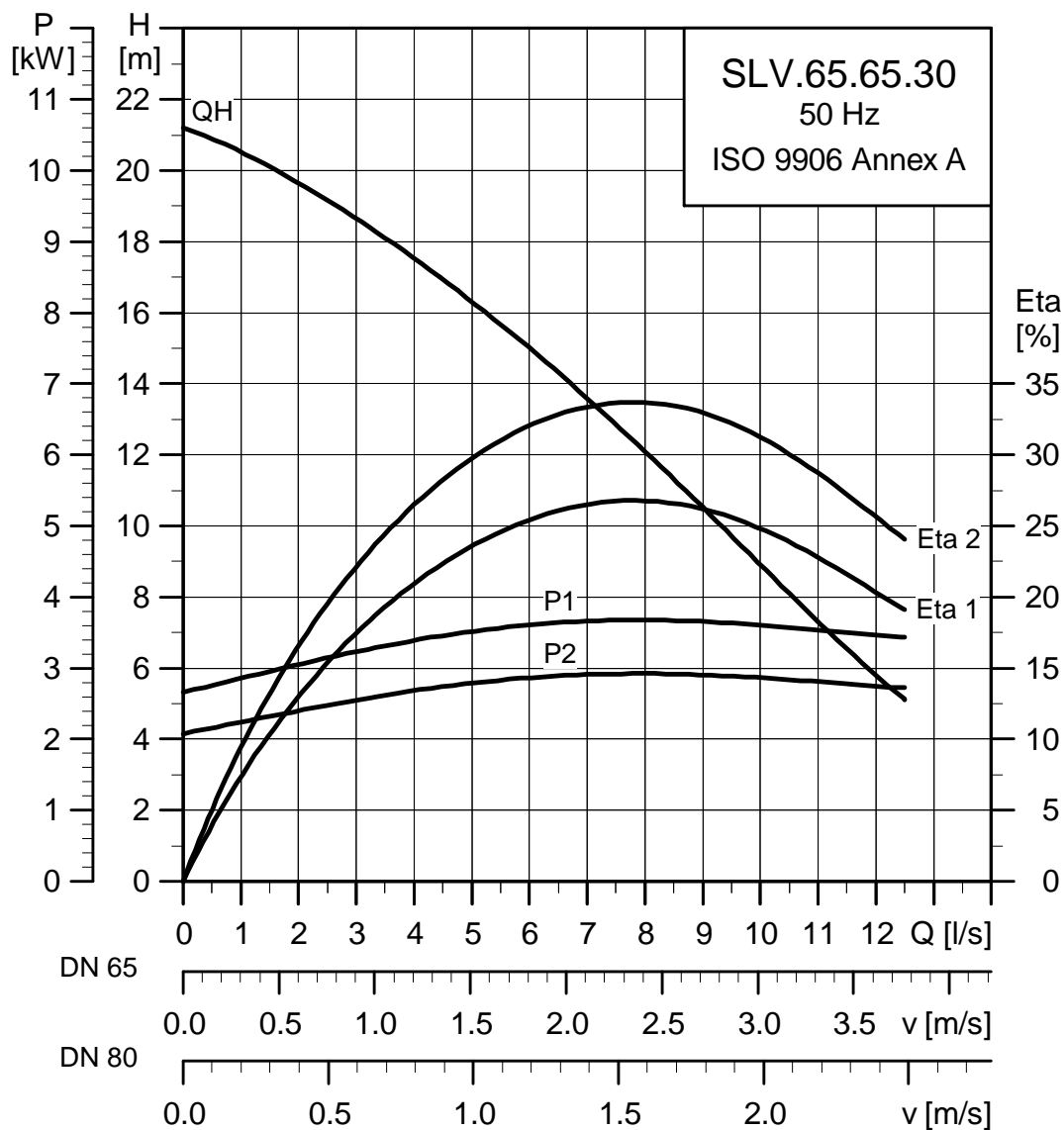
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			$\eta_{\text{motor}} [\%]$			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.65.65.22.2.50E	3x220-240V D	2.8	2.2	2	2990	DOL	8.5	74	70.3	75.2	76.7	0.79	0.86	0.89	0.0088	25	
SLV.65.65.22.2.51D	3x380-415V D	2.8	2.2	2	2990	SD	4.9	43	70.3	75.2	76.7	0.79	0.86	0.89	0.0088	25	
SLV.65.65.22.2.50D	3x380-415V Y	2.8	2.2	2	2990	DOL	4.9	43	70.3	75.2	76.7	0.79	0.86	0.89	0.0088	25	
SLV.65.65.22.2.50B	3x400-415V Y	2.8	2.2	2	2990	DOL	4.9	43	70.3	75.2	76.7	0.79	0.86	0.89	0.0088	25	

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	65	10	20	20	68	F	40	4-10

Performance curves

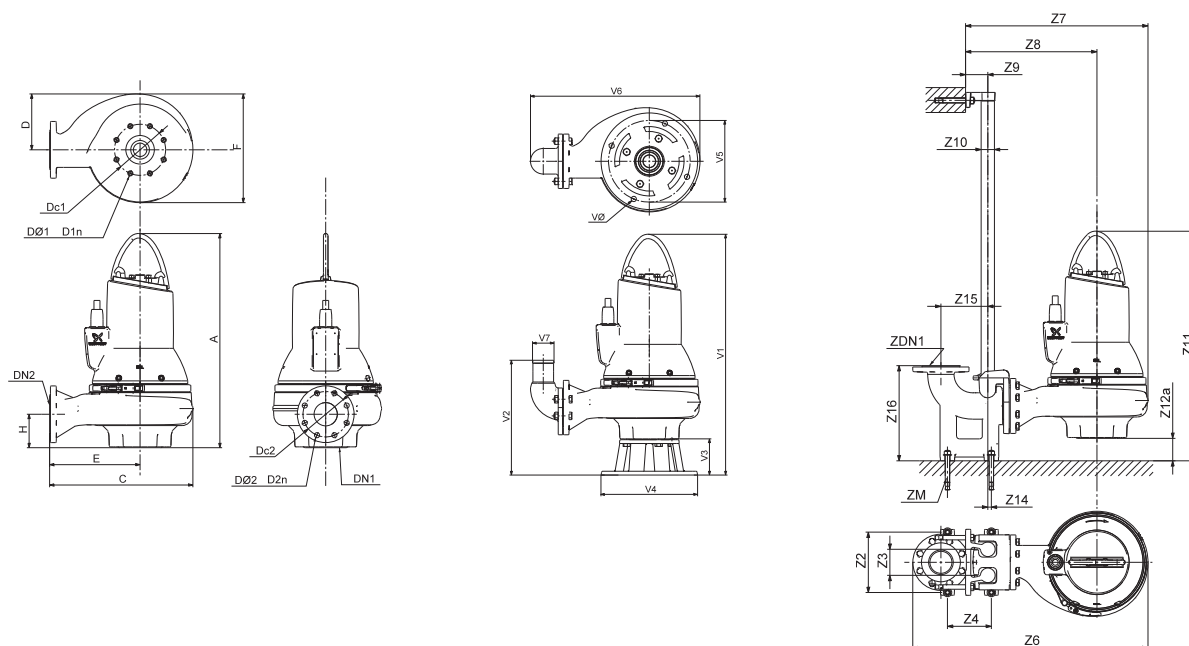
Performance curves SLV.65.65.30



TM04 3531 4608

Technical data

Dimension sketches SLV.65.65.30



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
684	396	171	246	321	102	80	160	8x18	65	145	4 x 18	91			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
210	95	140	730	543	394	81	1½"	747	63	1	175	266	160	80	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
812	372	128	330	280	524	65	18								

Electrical data

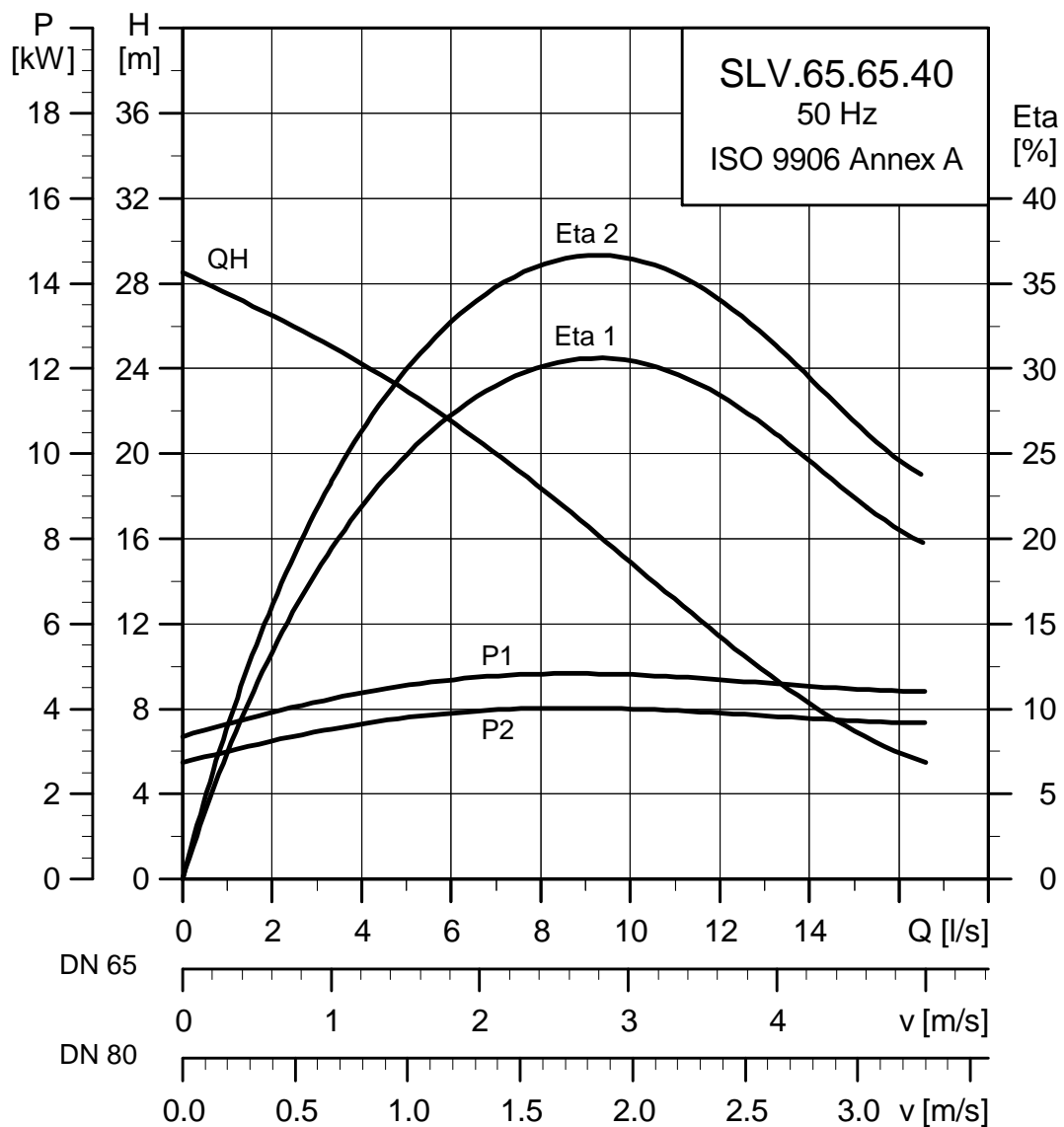
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I _N		η _{motor} [%]			Cos φ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							I _N [A]	I _{start} [A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.65.65.30.2.50E	3x220-240V D	3.8	3.0	2	2910	DOL	11.8	104	73.8	78.3	79.6	0.67	0.78	0.84	0.0098	42
SLV.65.65.30.2.51D	3x380-415V D	3.8	3.0	2	2910	SD	6.8	59.8	73.8	78.3	79.6	0.67	0.78	0.84	0.0098	42
SLV.65.65.30.2.50D	3x380-415V Y	3.8	3.0	2	2910	DOL	6.8	59.8	73.8	78.3	79.6	0.67	0.78	0.84	0.0098	42
SLV.65.65.30.2.50B	3x400-415V Y	3.8	3.0	2	2910	DOL	6.8	59.8	73.8	78.3	79.6	0.67	0.78	0.84	0.0098	42

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	65	10	20	20	68	F	40	4-10

Performance curves

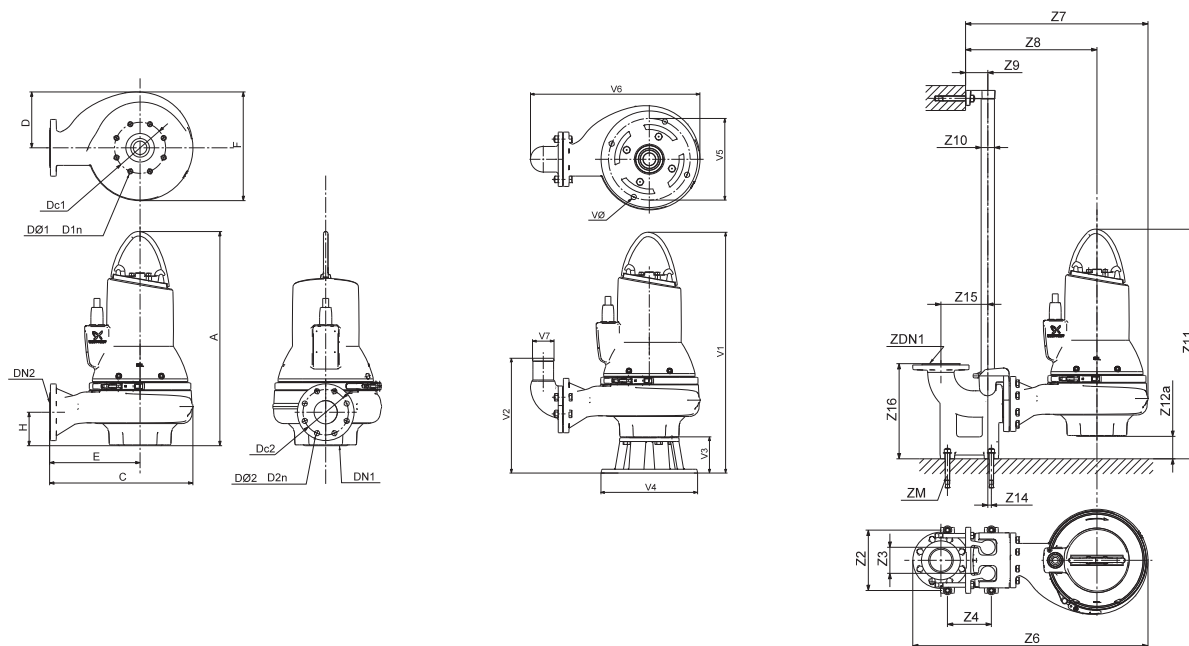
Performance curves SLV.65.65.40



TM04 3532 4608

Technical data

Dimension sketches SLV.65.65.40



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
718	456	200	276	380	106	80	160	8x18	65	145	4 x 18	117			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
210	95	140	790	604	424	81	1½"	778	60	1	175	266	160	80	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
846	376	128	330	280	568	65	18								

Electrical data

Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			$\eta_{\text{motor}} [\%]$			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.65.65.40.2.51E	3x220-240V D	4.8	4.0	2	2930	SD	14.7	161	75.8	80.9	82.7	0.71	0.82	0.87	0.0126	56	
SLV.65.65.40.2.51D	3x380-415V D	4.8	4.0	2	2930	SD	8.5	93	75.8	80.9	82.7	0.71	0.82	0.87	0.0126	56	
SLV.65.65.40.2.50B	3x400-415V D	4.8	4.0	2	2925	DOL	8.5	93	75.8	80.9	82.7	0.71	0.82	0.87	0.0126	56	

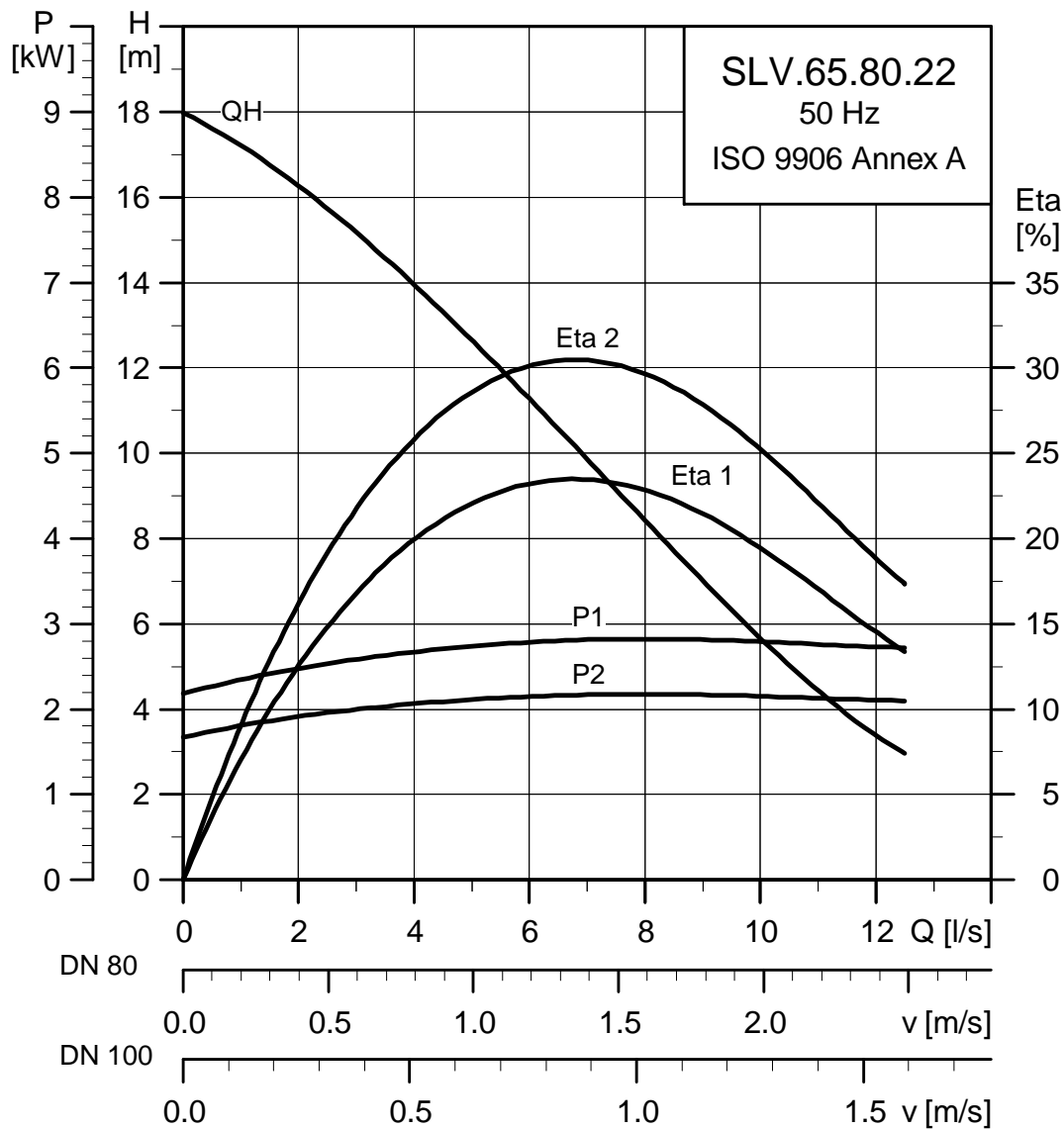
Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	65	10	20	20	68	F	40	4-10

Performance curves

SLV.65.80

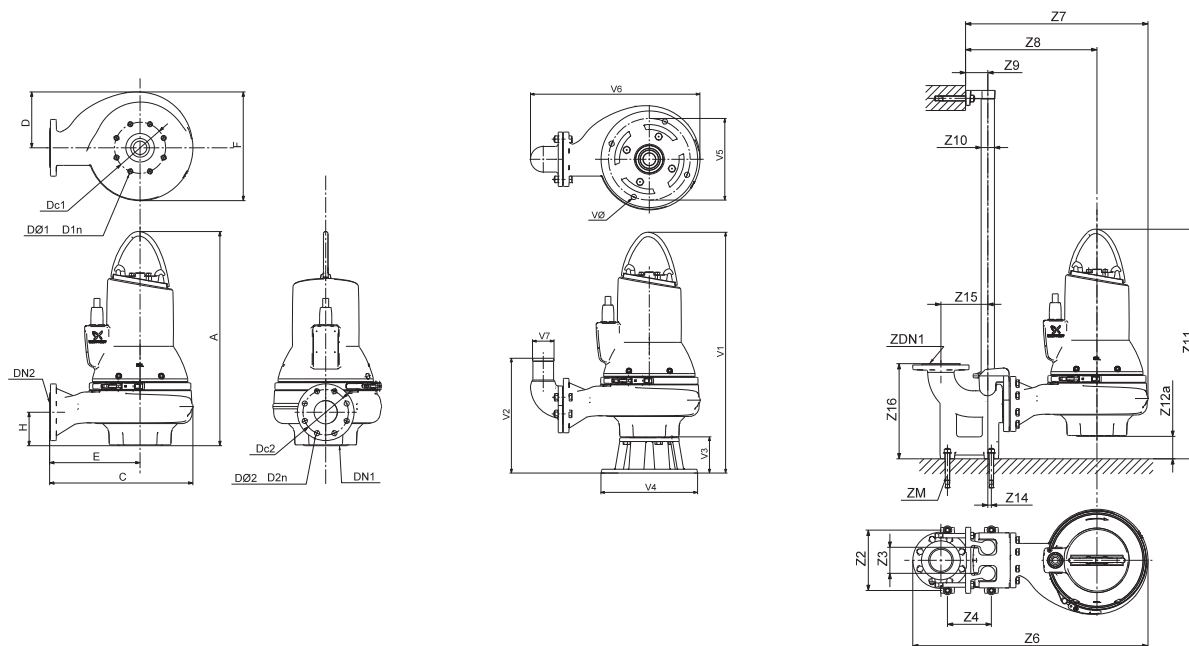
Performance curves SLV.65.80.22



TM04 3533 4608

Technical data

Dimension sketches SLV.65.80.22



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
685	397	171	247	321	103	80	160	8x18	80	160	8x18	89			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	750	557	408	81	1½"	782	97	13	171	345	160	80	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
813	373	128	330	280	530	80	18								

Electrical data

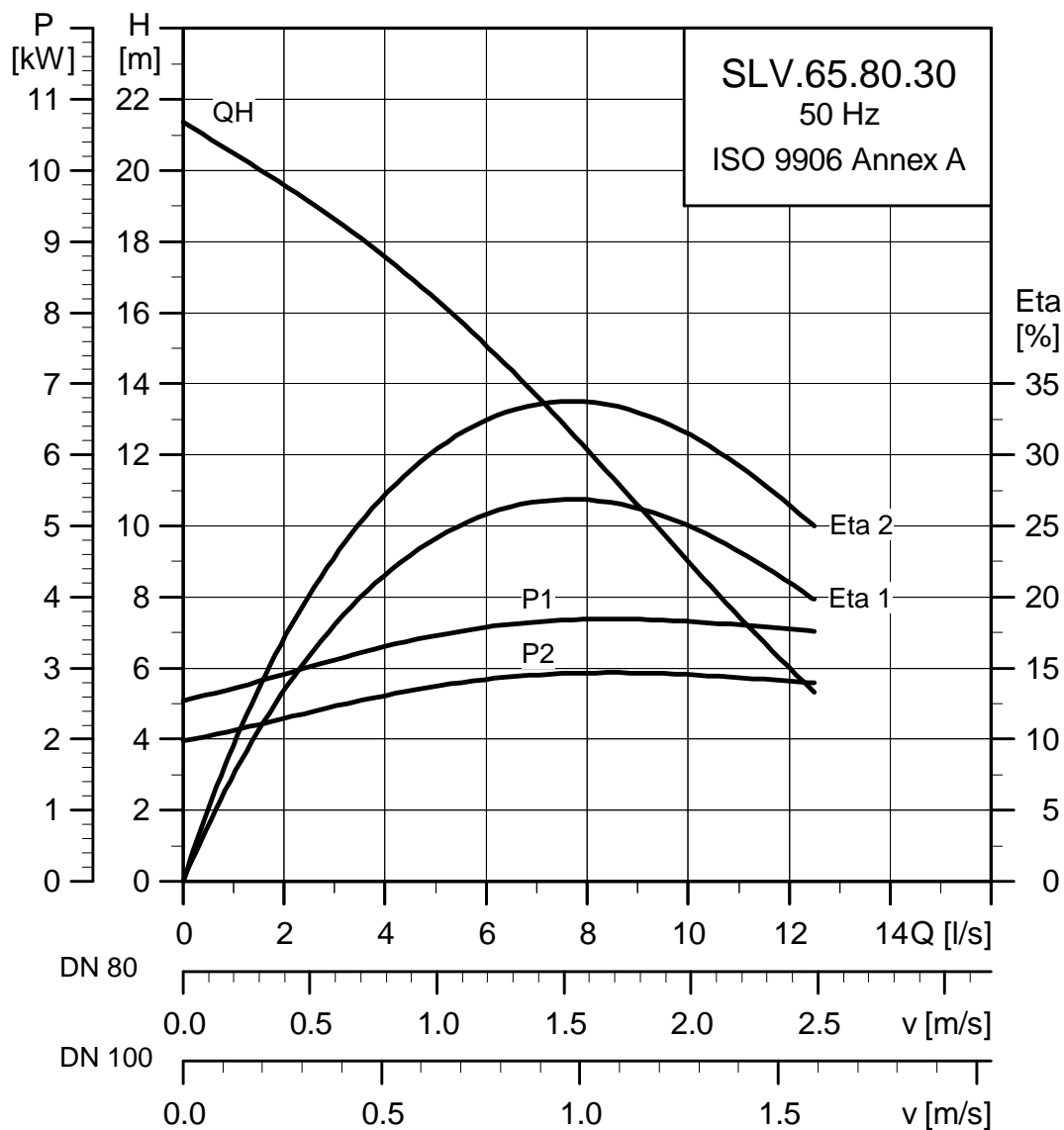
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I _N		η _{motor} [%]			Cos φ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.65.80.22.2.50E	3x220-240V D	2.8	2.2	2	2990	DOL	8.5	74	70.3	75.2	76.7	0.79	0.86	0.89	0.0088	25
SLV.65.80.22.2.51D	3x380-415V D	2.8	2.2	2	2990	SD	4.9	43	70.3	75.2	76.7	0.79	0.86	0.89	0.0088	25
SLV.65.80.22.2.50D	3x380-415V Y	2.8	2.2	2	2990	DOL	4.9	43	70.3	75.2	76.7	0.79	0.86	0.89	0.0088	25
SLV.65.80.22.2.50B	3x400-415V Y	2.8	2.2	2	2990	DOL	4.9	43	70.3	75.2	76.7	0.79	0.86	0.89	0.0088	25

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	65	10	20	20	68	F	40	4-10

Performance curves

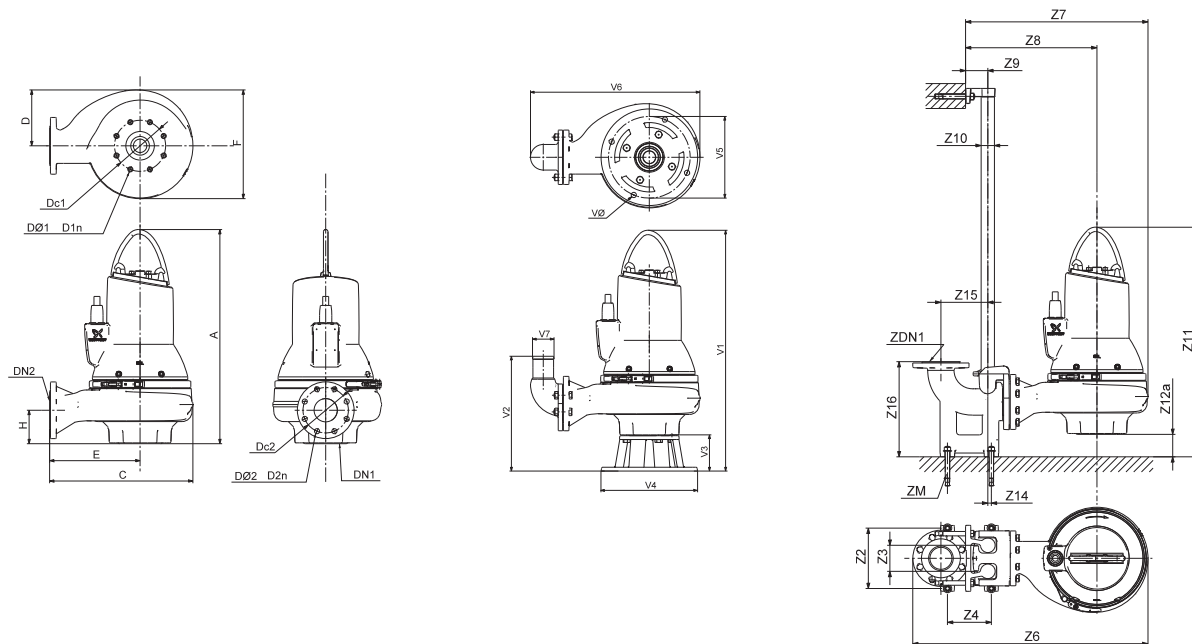
Performance curves SLV.65.80.30



TM04 3534 4608

Technical data

Dimension sketches SLV.65.80.30



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
685	397	171	247	321	103	80	160	8x18	80	160	8x18	92			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	750	557	408	81	1½"	782	97	13	171	345	160	80	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
813	373	128	330	280	530	80	18								

Electrical data

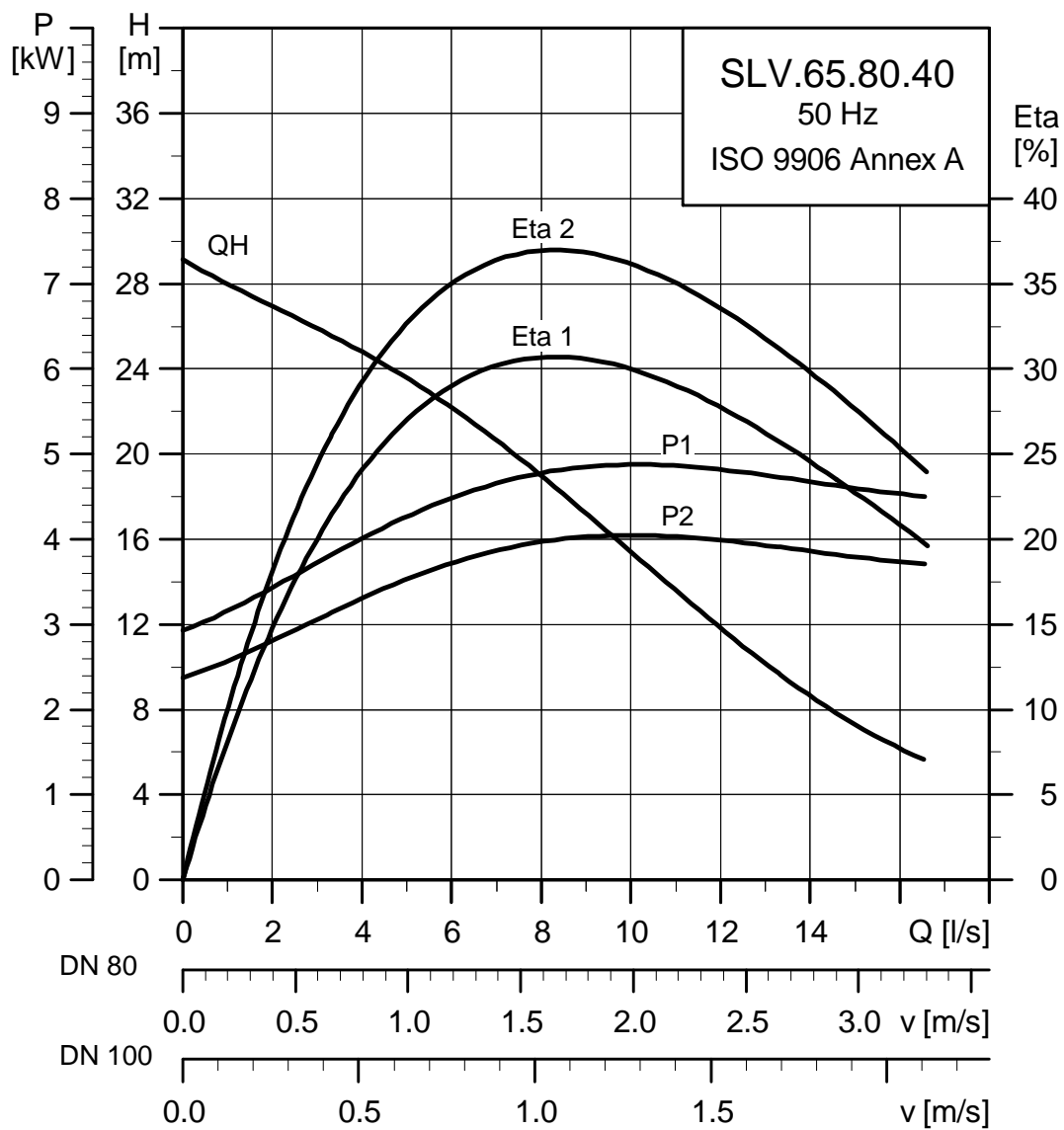
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I _N		η _{motor} [%]				Cos φ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1			
SLV.65.80.30.2.50E	3x220-240V D	3.8	3.0	2	2910	DOL	11.8	104	73.8	78.3	79.6	0.67	0.78	0.84	0.0098	42	
SLV.65.80.30.2.51D	3x380-415V D	3.8	3.0	2	2910	SD	6.8	59.8	73.8	78.3	79.6	0.67	0.78	0.84	0.0098	42	
SLV.65.80.30.2.50D	3x380-415V Y	3.8	3.0	2	2910	DOL	6.8	59.8	73.8	78.3	79.6	0.67	0.78	0.84	0.0098	42	
SLV.65.80.30.2.50B	3x400-415V Y	3.8	3.0	2	2910	DOL	6.8	59.8	73.8	78.3	79.6	0.67	0.78	0.84	0.0098	42	

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	65	10	20	20	68	F	40	4-10

Performance curves

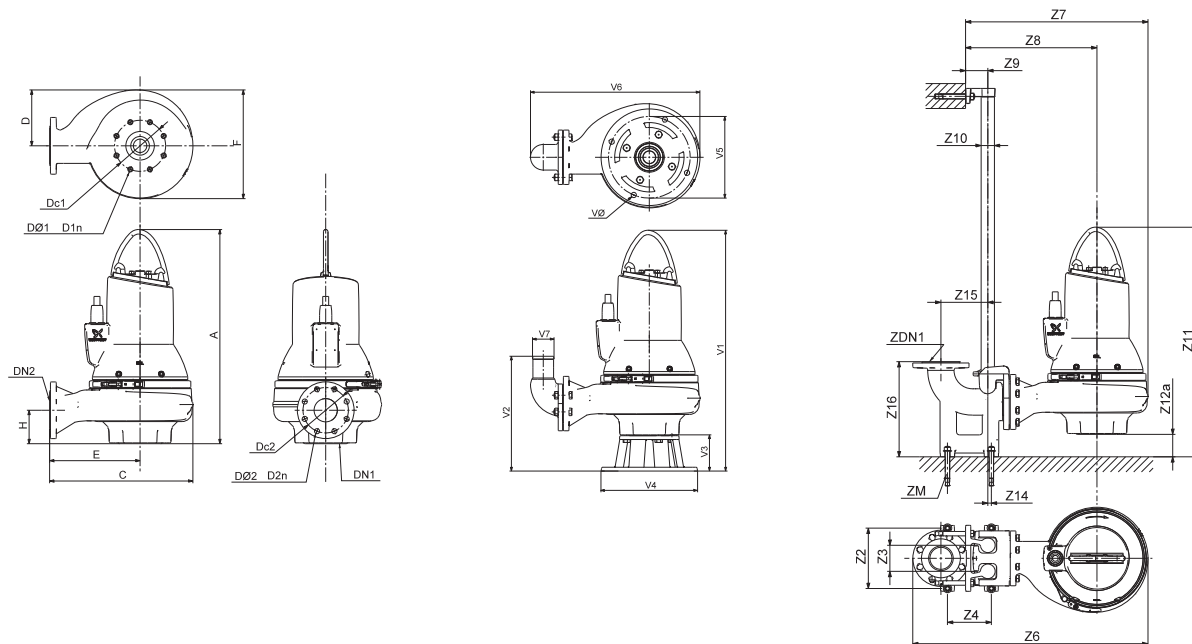
Performance curves SLV.65.80.40



TM04 3535 4608

Technical data

Dimension sketches SLV.65.80.40



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
718	455	200	276	379	106	80	160	8x18	80	160	8x18	117			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	808	616	437	81	1½"	812	94	13	171	345	160	80	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
846	376	128	330	280	573	80	18								

Electrical data

Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I _N		η _{motor} [%]			Cos φ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.65.80.40.2.51E	3x220-240V D	4.8	4.0	2	2930	SD	14.7	161	75.8	80.9	82.7	0.71	0.82	0.87	0.0126	56
SLV.65.80.40.2.51D	3x380-415V D	4.8	4.0	2	2930	SD	8.5	93	75.8	80.9	82.7	0.71	0.82	0.87	0.0126	56
SLV.65.80.40.2.50B	3x400-415V D	4.8	4.0	2	2925	DOL	8.5	93	75.8	80.9	82.7	0.71	0.82	0.87	0.0126	56

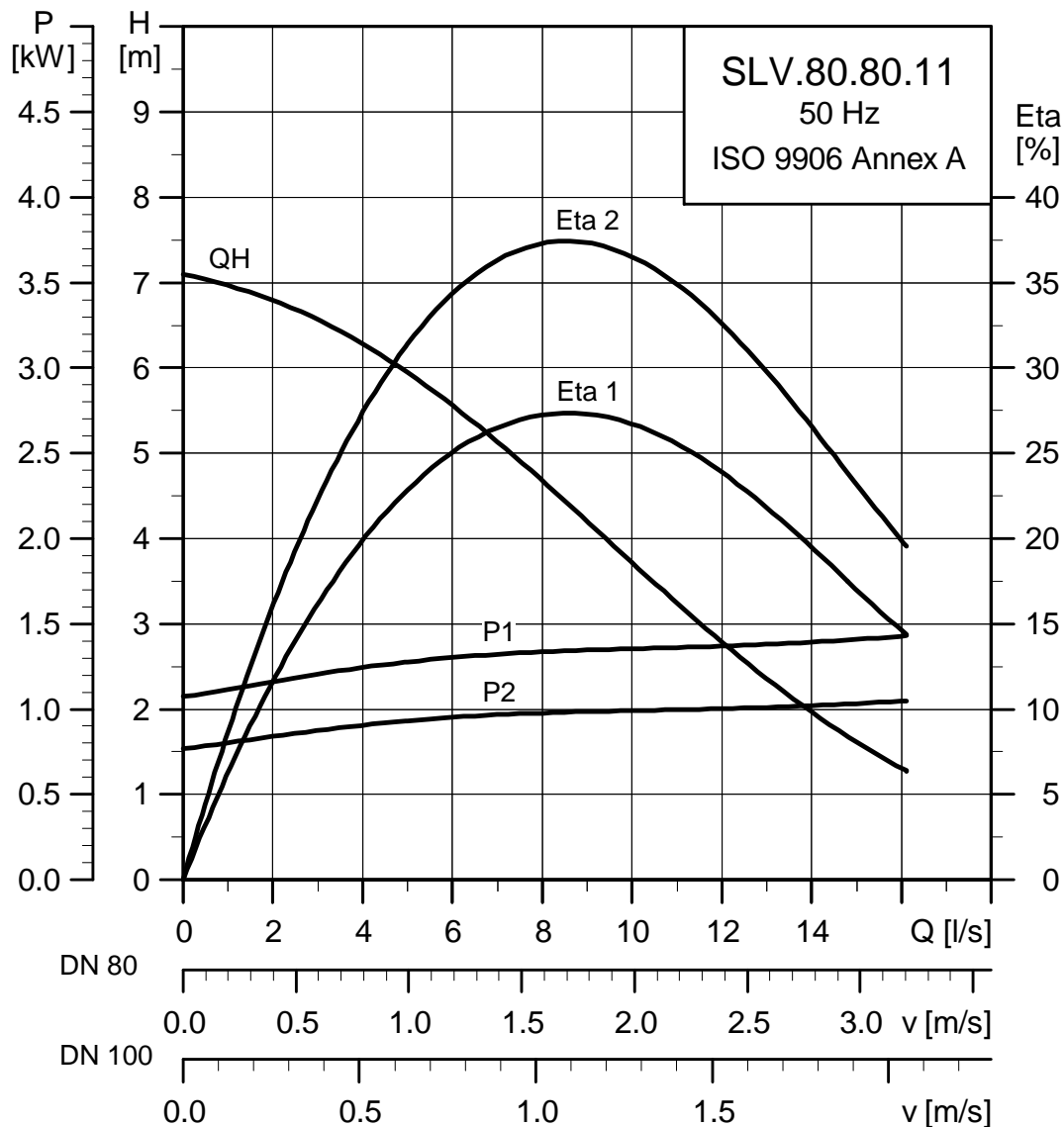
Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	65	10	20	20	68	F	40	4-10

Performance curves

SLV.80.80

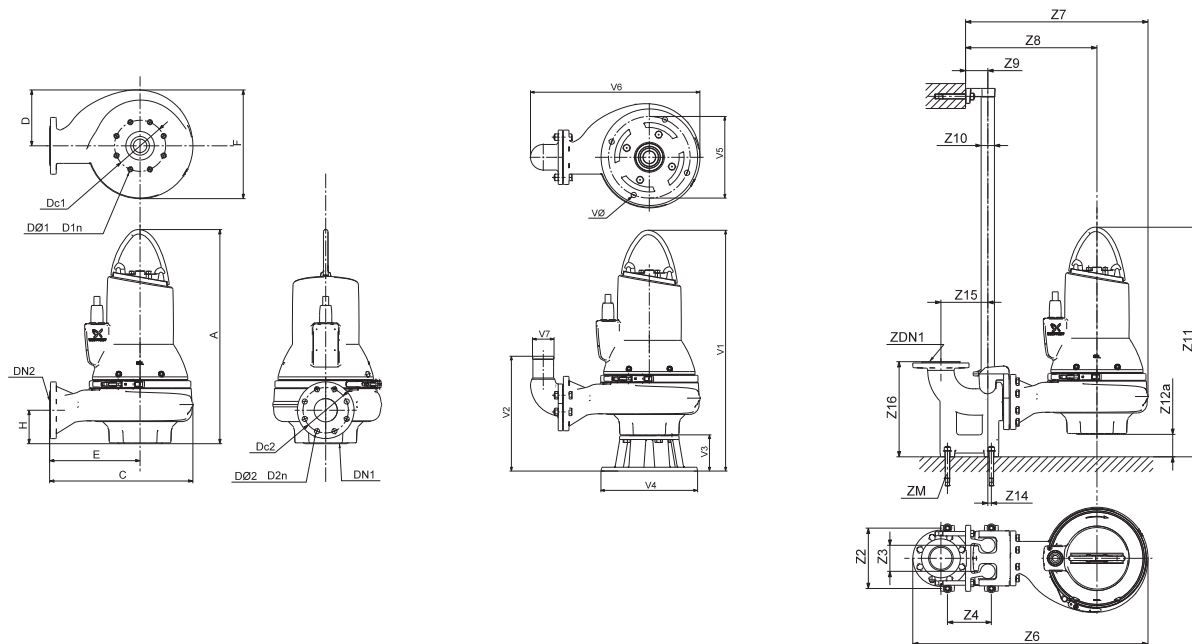
Performance curves SLV.80.80.11



TM04 3536 4608

Technical data

Dimension sketches SLV.80.80.11



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
711	409	171	241	339	109	80	160	8x18	80	160	8x18	94			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	762	569	402	81	1½"	802	91	13	171	345	160	80	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
839	379	128	330	280	527	80	18								

Electrical data

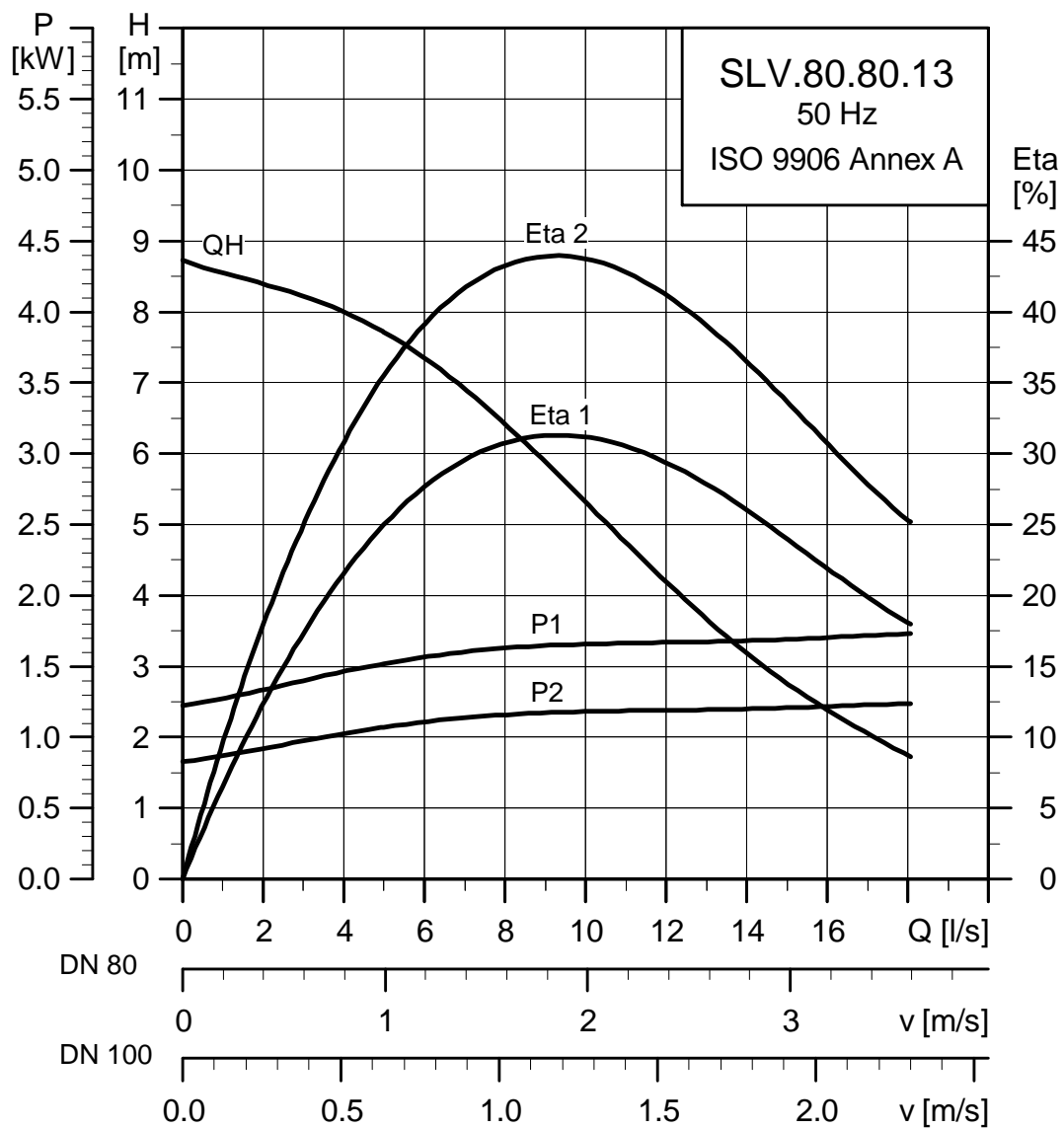
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I _N		η _{motor} [%]			Cos φ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.80.11.4.50E	3x220-240V D	1.5	1.1	4	1450	DOL	5.1	34	67.2	72.7	75.2	0.58	0.68	0.75	0.0142	26
SLV.80.80.11.4.50D	3x380-415V Y	1.5	1.1	4	1450	DOL	3.0	20	67.2	72.7	75.2	0.58	0.68	0.75	0.0142	26
SLV.80.80.11.4.50B	3x400-415V Y	1.5	1.1	4	1450	DOL	3.0	20	67.2	72.7	75.2	0.58	0.68	0.75	0.0142	26

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

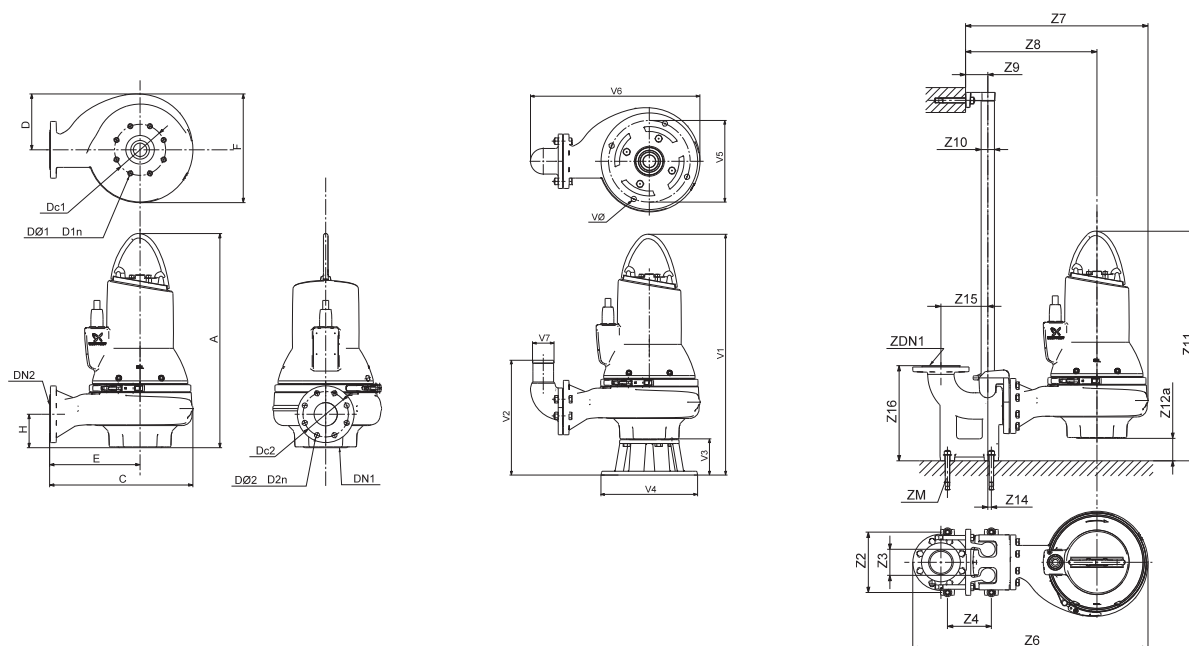
Performance curves SLV.80.80.13



/TM04 3537 4608

Technical data

Dimension sketches SLV.80.80.13



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
711	409	171	241	339	109	80	160	8x18	80	160	8x18	94			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	762	569	402	81	1½"	802	91	13	171	345	160	80	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
839	379	128	330	280	527	80	18								

Electrical data

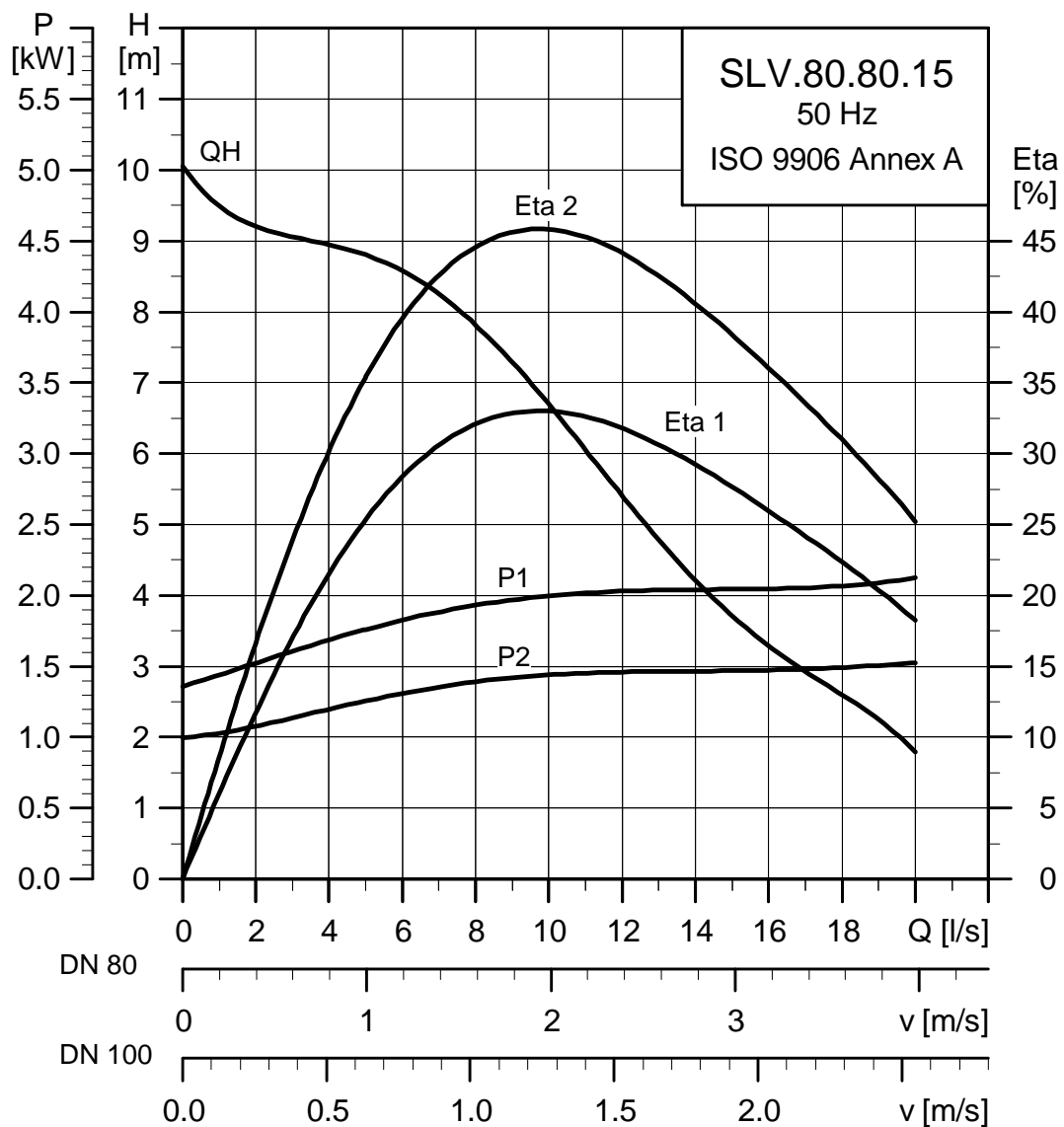
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I _N		η _{motor} [%]			Cos φ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.80.13.4.50E	3x220-240V D	1.8	1.3	4	1460	DOL	6.2	26	68.2	74.2	76.4	0.53	0.65	0.73	0.0165	34
SLV.80.80.13.4.50D	3x380-415V Y	1.8	1.3	4	1460	DOL	3.6	26	68.2	74.2	76.4	0.53	0.65	0.73	0.0165	34
SLV.80.80.13.4.50B	3x400-415V Y	1.8	1.3	4	1460	DOL	3.6	22	68.2	74.2	76.4	0.53	0.65	0.73	0.0165	34

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

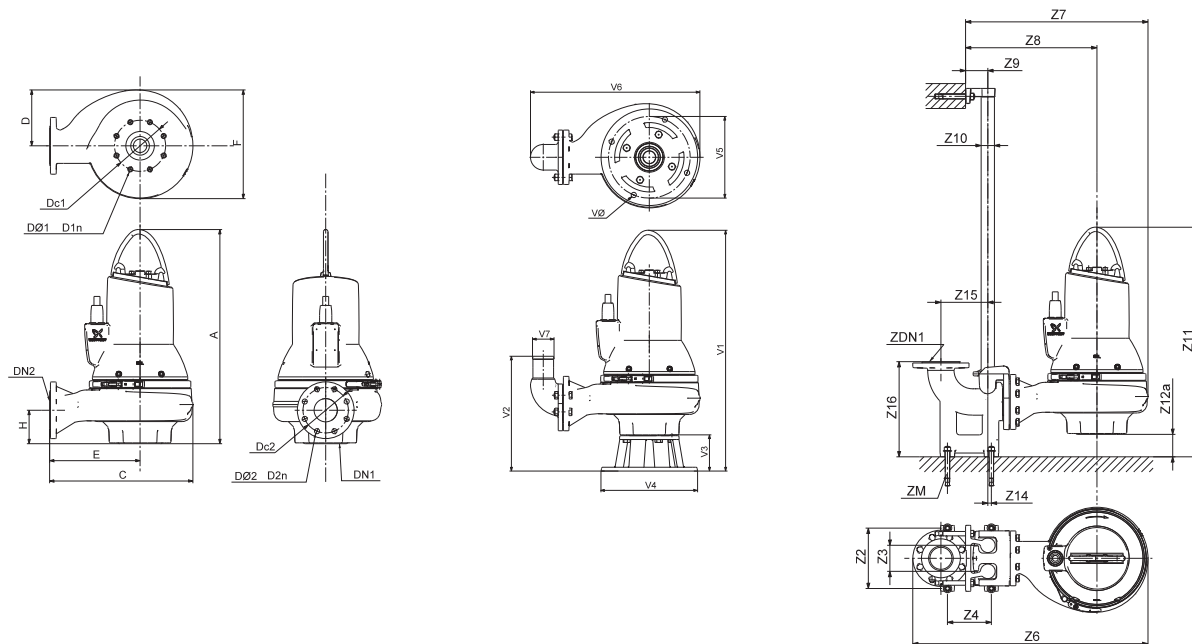
Performance curves SLV.80.80.15



TM04 3538 4608

Technical data

Dimension sketches SLV.80.80.15



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
711	409	171	241	339	109	80	160	8x18	80	160	8x18	94			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	762	569	402	81	1½"	802	91	13	171	345	160	80	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
839	379	128	330	280	527	80	18								

Electrical data

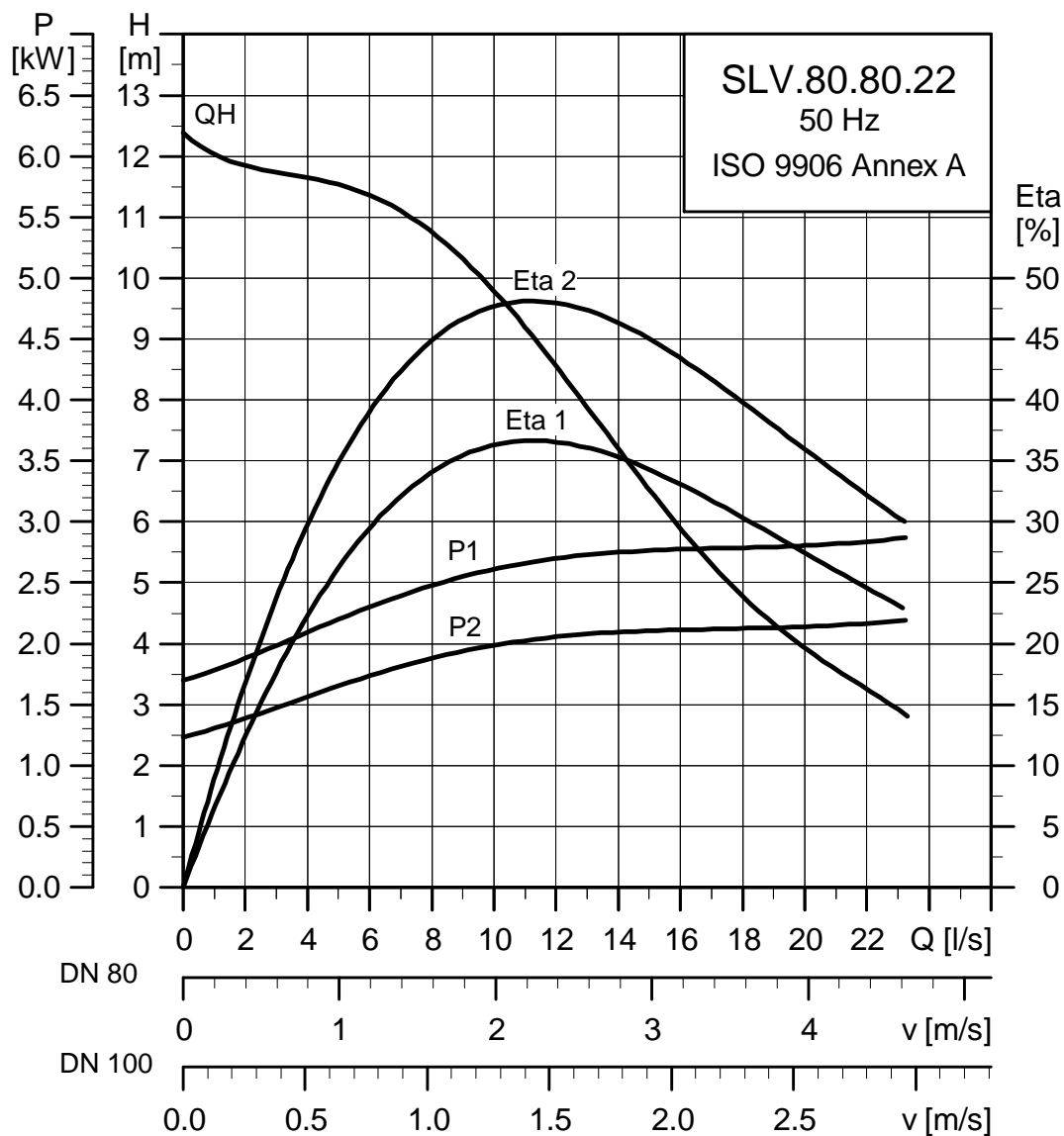
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		$\eta_{\text{motor}} [\%]$			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.80.15.4.50E	3x220-240V D	2.1	1.5	4	1450	DOL	6.8	45	70.6	75.4	77.1	0.57	0.68	0.76	0.0185	34
SLV.80.80.15.4.50D	3x380-415V Y	2.1	1.5	4	1450	DOL	3.9	26	70.6	75.4	77.1	0.57	0.68	0.76	0.0185	34
SLV.80.80.15.4.50B	3x400-415V Y	2.1	1.5	4	1450	DOL	3.9	26	70.6	75.4	77.1	0.57	0.68	0.76	0.0185	34

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

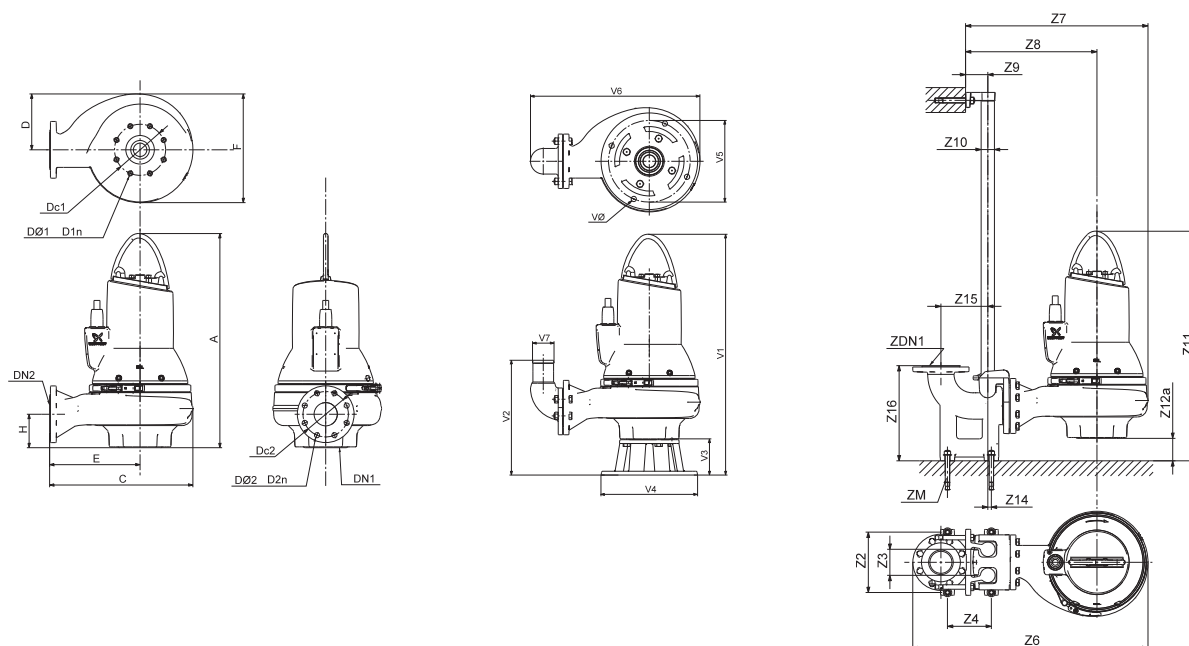
Performance curves SLV.80.80.22



TM04 3539 4608

Technical data

Dimension sketches SLV.80.80.22



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
711	409	171	241	339	109	80	160	8x18	80	160	8x18	106			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	762	569	402	81	1½"	802	91	13	171	345	160	80	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
839	379	128	330	280	527	80	18								

Electrical data

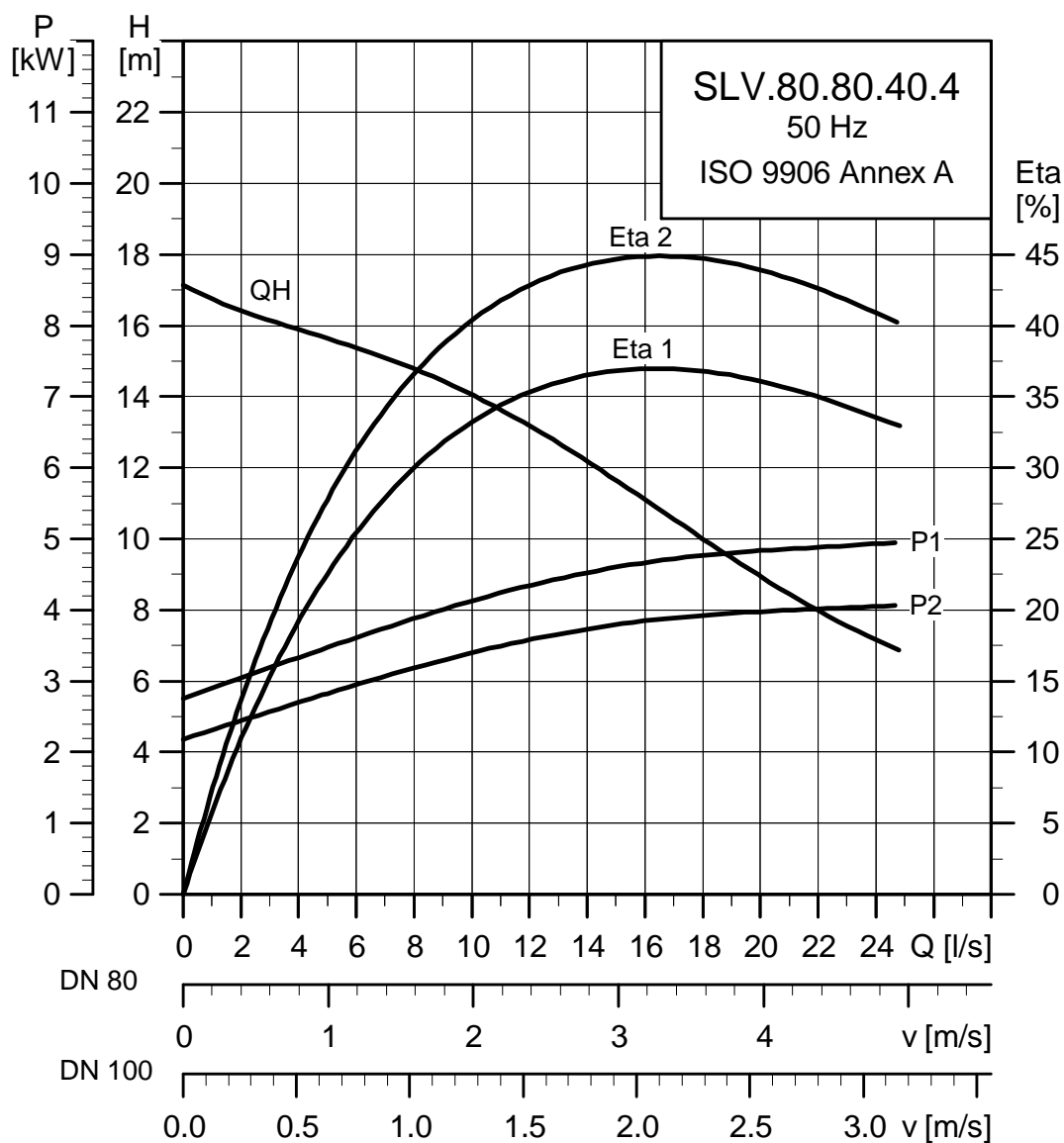
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	η_{motor} [%]					Cos ϕ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							I _N [A]	I _{start} [A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.80.22.4.50E	3x220-240V D	2.9	2.2	4	1460	DOL	9.1	66	78.4	81.7	82.7	0.58	0.70	0.77	0.0240	50
SLV.80.80.22.4.51D	3x380-415V D	2.9	2.2	4	1460	SD	5.3	38.3	78.4	81.7	82.7	0.58	0.70	0.77	0.0240	50
SLV.80.80.22.4.50D	3x380-415V Y	2.9	2.2	4	1460	DOL	5.3	38.3	78.4	81.7	82.7	0.58	0.70	0.77	0.0240	50
SLV.80.80.22.4.50B	3x400-415V Y	2.9	2.2	4	1460	DOL	5.3	38.3	78.4	81.7	82.7	0.58	0.70	0.77	0.0240	50

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

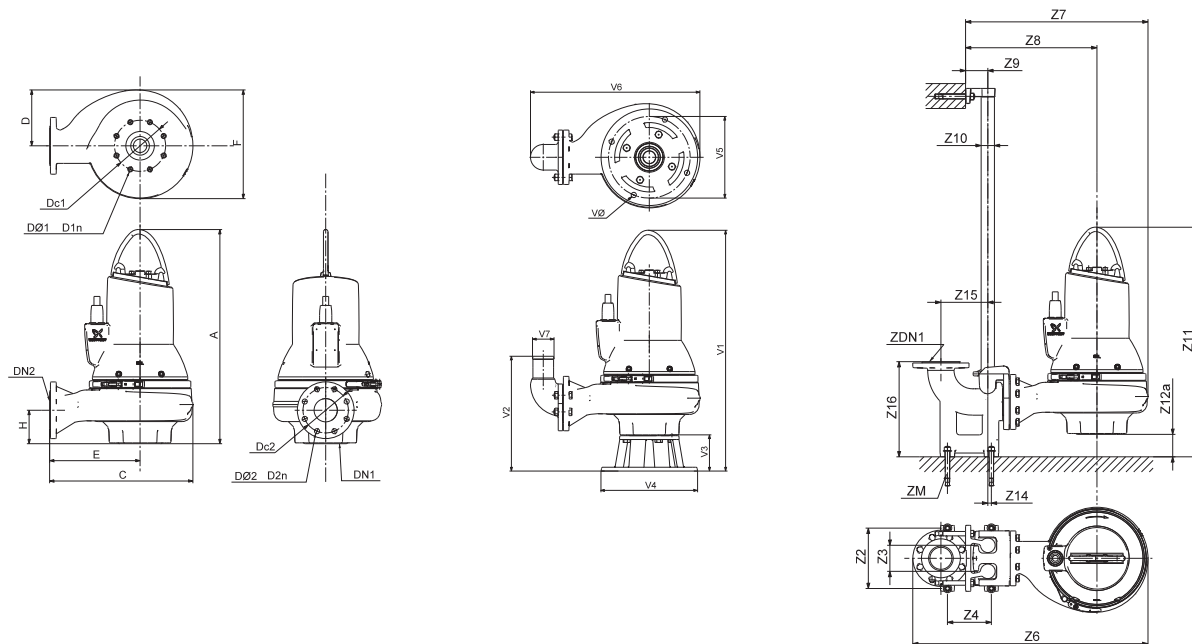
Performance curves SLV.80.80.40 - 4 Pole



TM04 3540 4608

Technical data

Dimension sketches SLV.80.80.40 - 4 Pole



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
744	456	200	276	380	104	80	160	8x18	80	160	8x18	121			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	809	617	437	81	1½"	840	96	13	171	345	160	80	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
872	374	128	330	280	574	80	18								

Electrical data

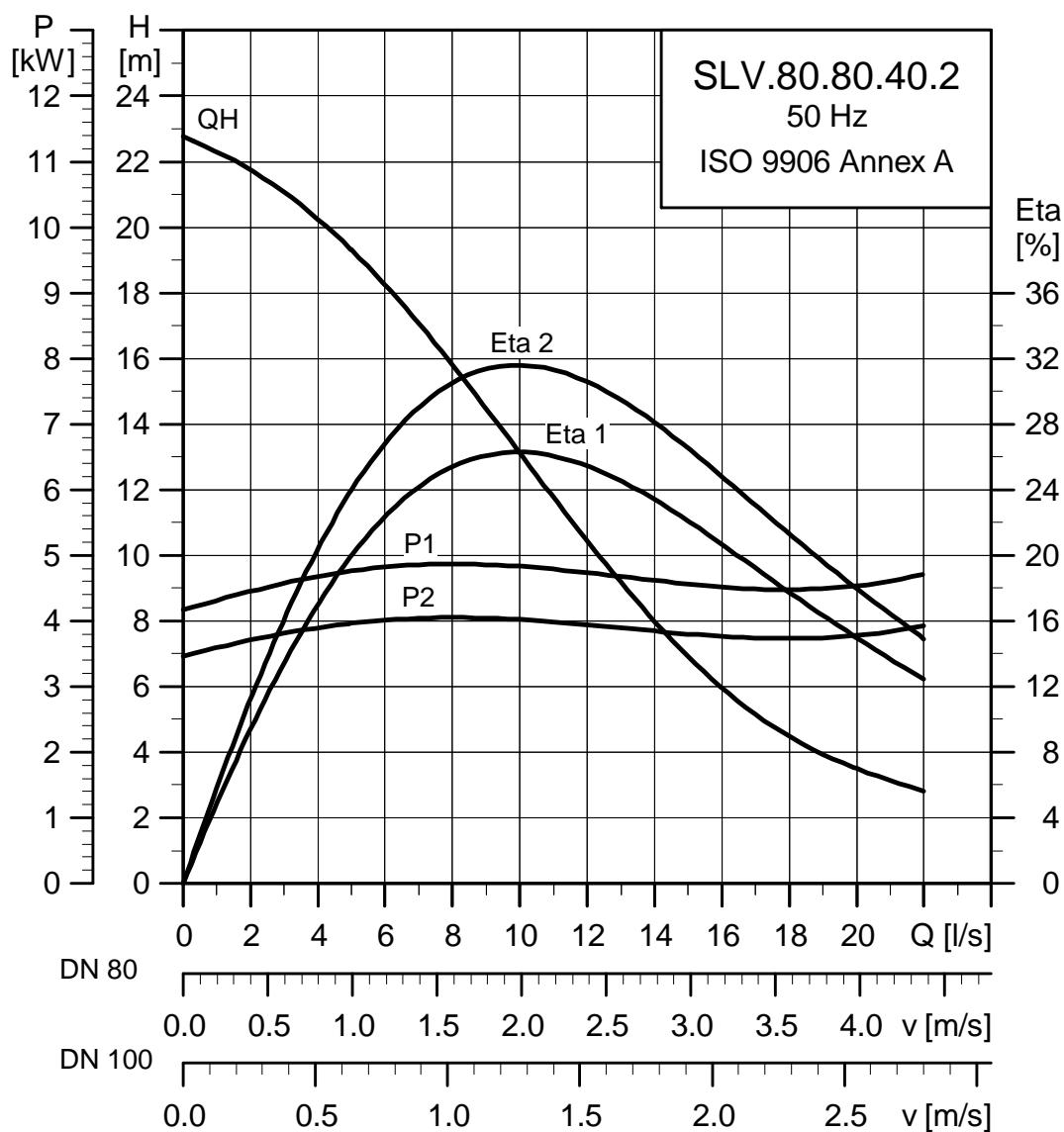
Pump type	Voltage [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		$\eta_{\text{motor}} [\%]$			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.80.40.4.51E	3x220-240V D	4.8	4.0	4	1460	SD	16.9	88	78.6	82.3	83.6	0.53	0.66	0.75	0.0479	90
SLV.80.80.40.4.51D	3x380-415V D	4.8	4.0	4	1460	SD	9.7	51	78.6	82.3	83.6	0.53	0.66	0.75	0.0479	90
SLV.80.80.40.4.50B	3x400-415V D	4.8	4.0	4	1460	DOL	9.7	51	78.6	82.3	83.6	0.53	0.66	0.75	0.0479	90

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

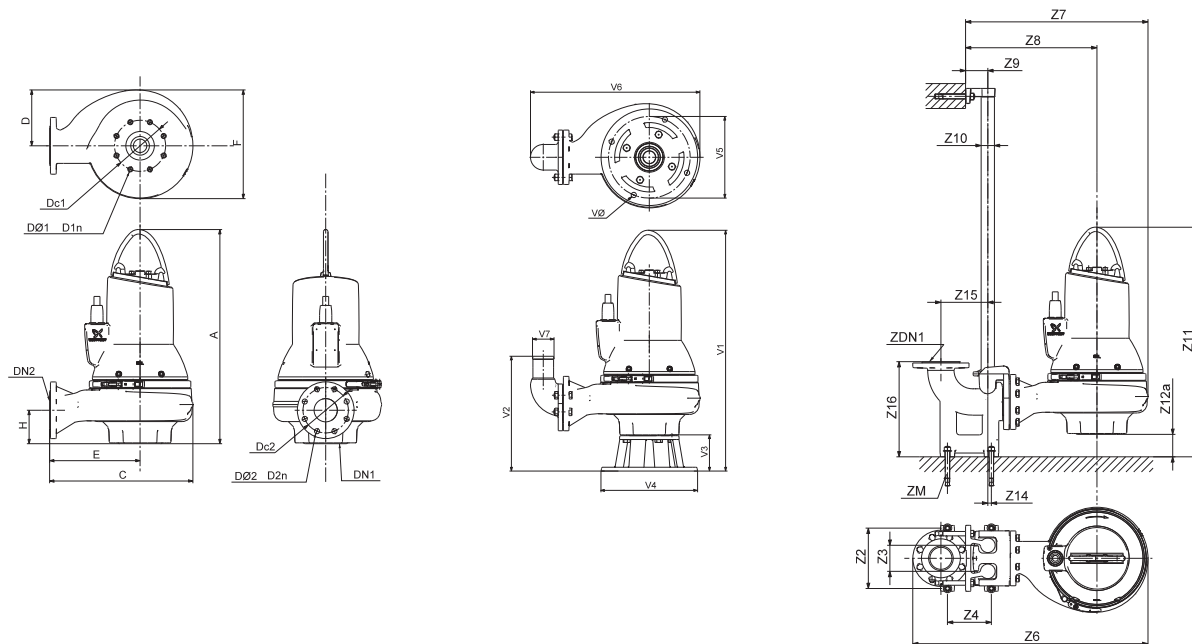
Performance curves SLV.80.80.40 - 2 Pole



TM04 3541 4608

Technical data

Dimension sketches SLV.80.80.40 - 2 Pole



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
748	460	200	267	393	109	80	160	8x18	80	160	8x18	134			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	813	620	428	81	1½"	839	91	13	171	345	160	80	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
876	379	128	330	280	578	80	18								

Electrical data

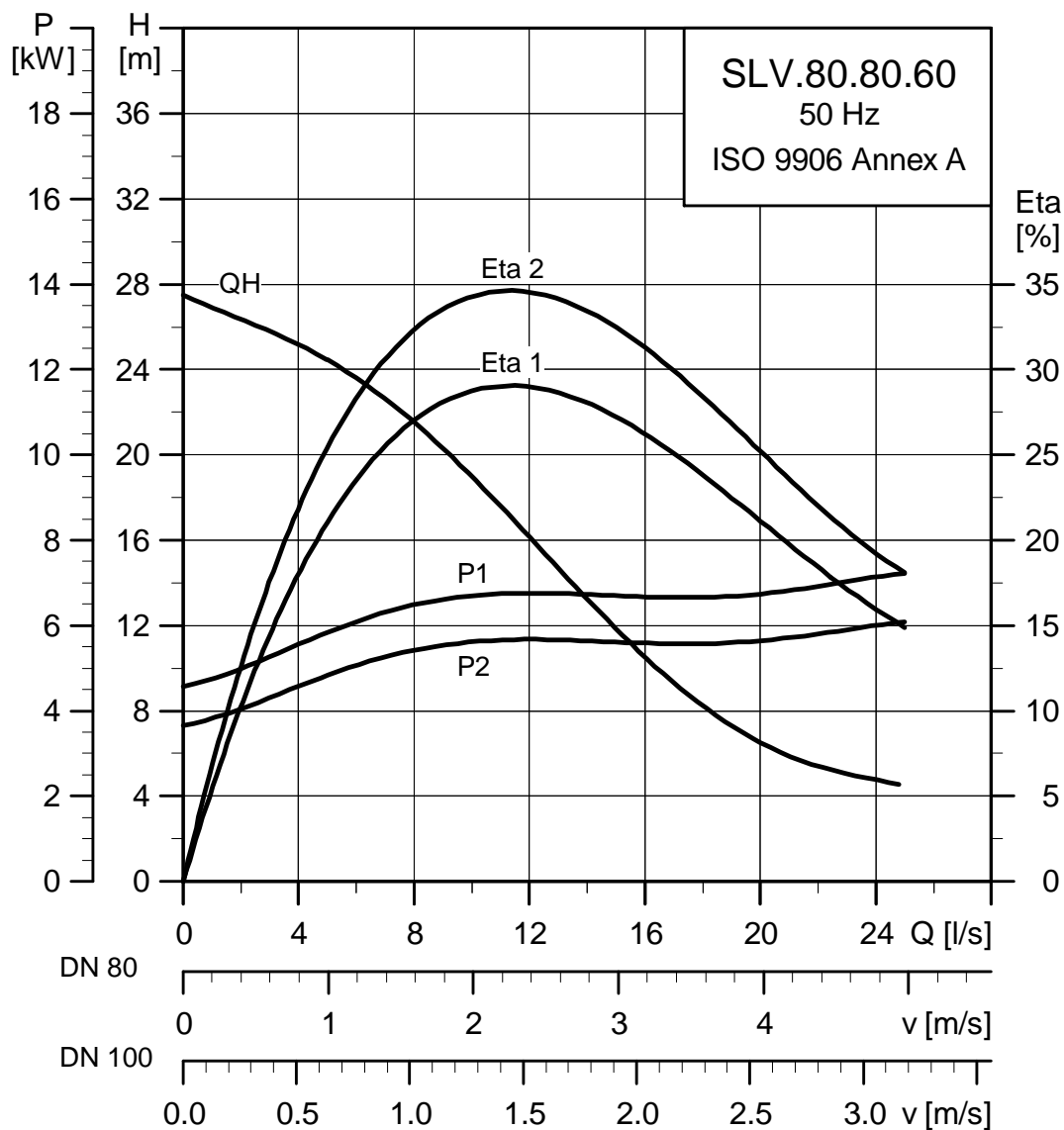
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	η_{motor} [%]			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]		
							I _N [A]	I _{start} [A]	1/2	3/4	1/1	1/2			3/4	1/1
SLV.80.80.40.2.51E	3x220-240V D	4.8	4.0	2	2930	SD	14.7	161	75.8	80.9	82.7	0.71	0.82	0.87	0.0127	56
SLV.80.80.40.2.51D	3x380-415V D	4.8	4.0	2	2930	SD	8.5	93	75.8	80.9	82.7	0.71	0.82	0.87	0.0127	56
SLV.80.80.40.2.50B	3x400-415V D	4.8	4.0	2	2925	DOL	8.5	93	75.8	80.9	82.7	0.71	0.82	0.87	0.0127	56

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

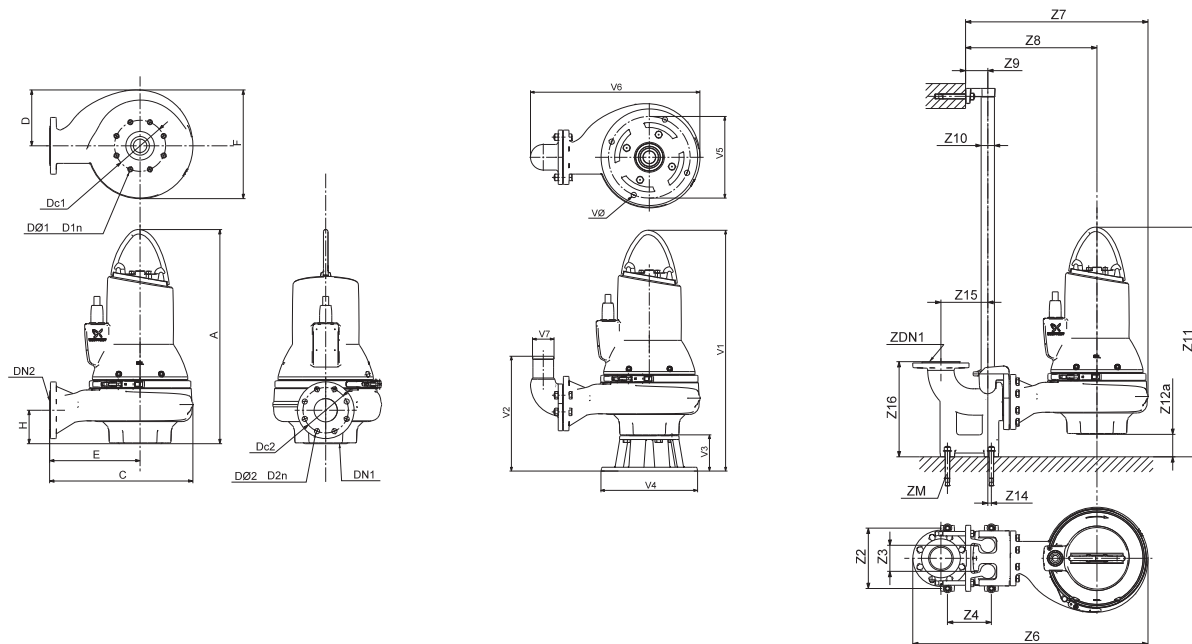
Performance curves SLV.80.80.60



TM04 3542 4608

Technical data

Dimension sketches SLV.80.80.60



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
751	456	200	276	380	104	80	160	8x18	80	160	8x18	140			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	809	617	437	81	1½"	847	96	13	171	345	160	80	4XM16
V1	V2	V3	V4	V5	V6	V7	VØ								
879	374	128	330	280	574	80	18								

Electrical data

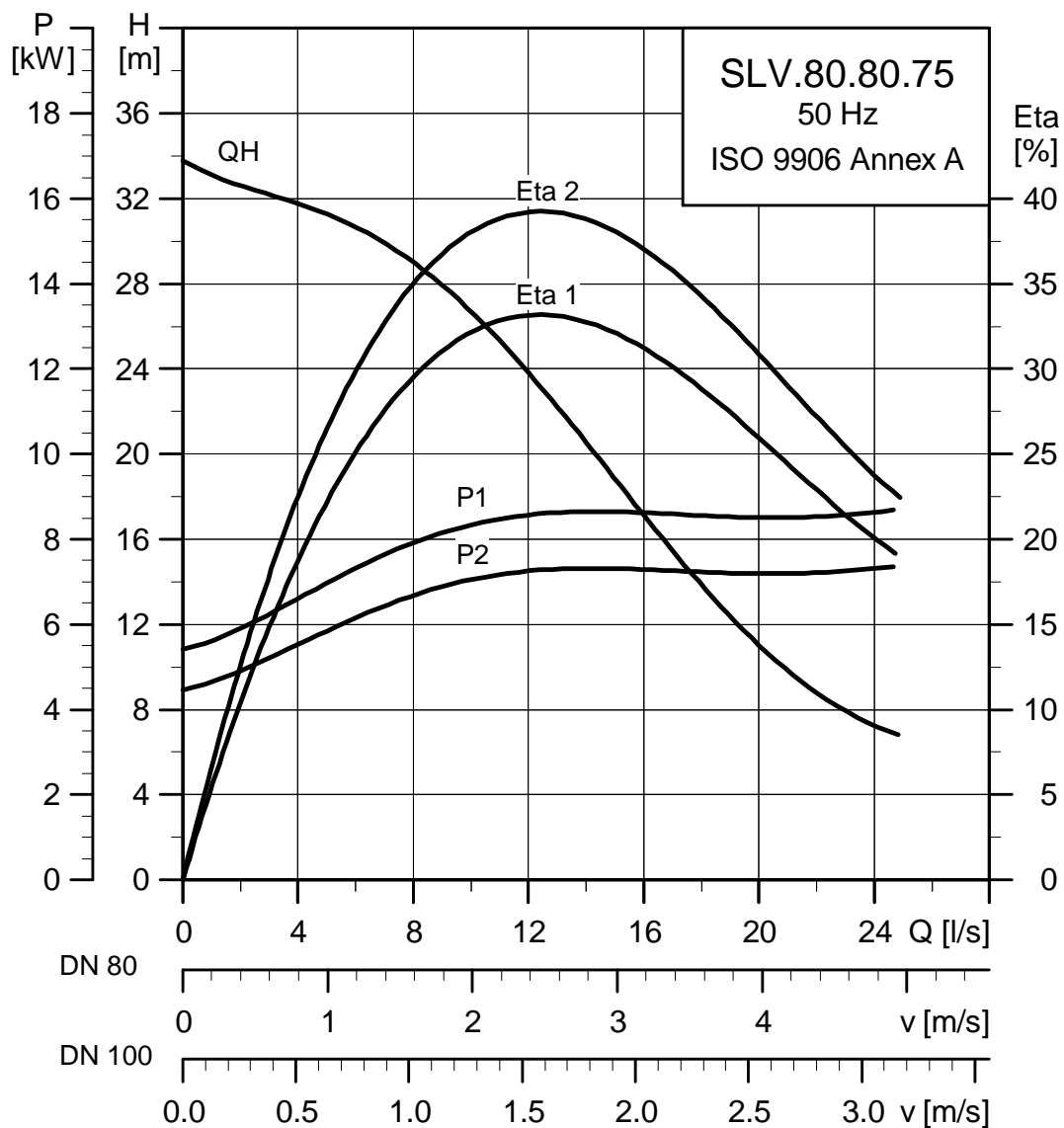
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			I_{start}			η_{motor} [%]			$\cos \phi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]		1/2	3/4	1/1	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.80.60.2.51E	3x220-240V D	6.9	6.0	2	2940	SD	21.7	211	81.9	85.2	86.4	0.68	0.78	0.84	0.0190	83				
SLV.80.80.60.2.51D	3x380-415V D	6.9	6.0	2	2940	SD	12.5	122	81.9	85.2	86.4	0.68	0.78	0.84	0.0190	83				
SLV.80.80.60.2.50B	3x400-415V D	6.9	6.0	2	2940	DOL	12.5	122	81.9	85.2	86.4	0.68	0.78	0.84	0.0190	83				

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

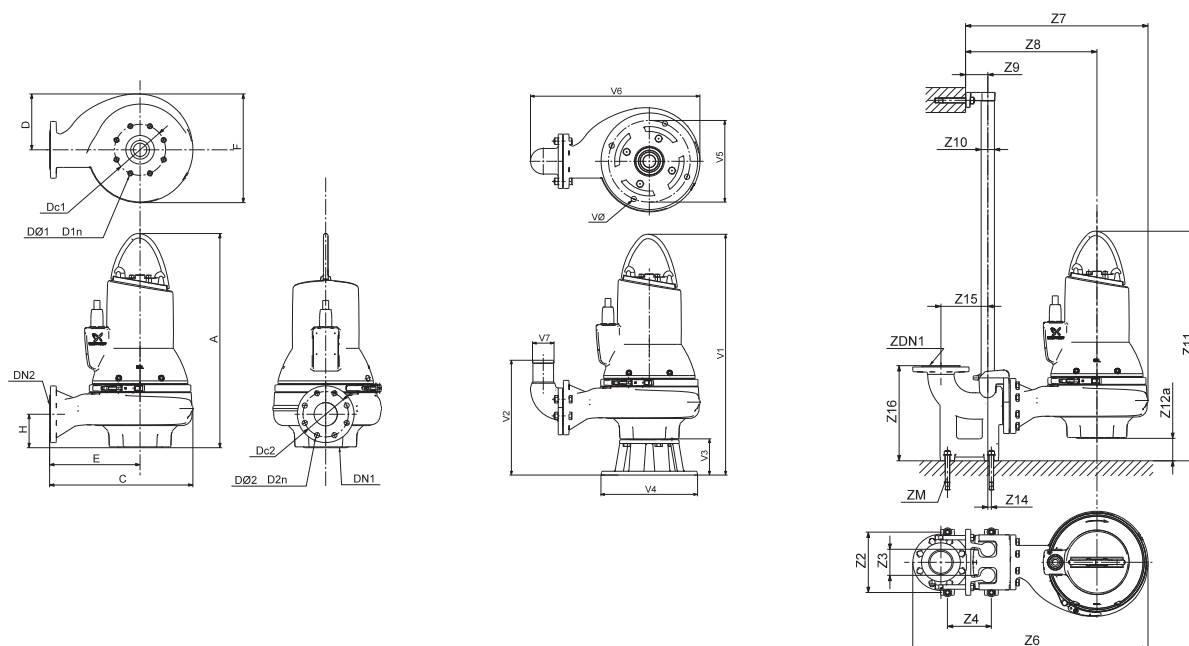
Performance curves SLV.80.80.75



TM04 3543 4608

Technical data

Dimension sketches SLV.80.80.75



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

Pump type	A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]
SLV.80.80.75	751	456	200	276	380	104	80	160	8x18	80	160	8x18	141

Pump type	Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
SLV.80.80.75	220	95	160	809	617	437	81	1½"	847	96	13	171	345	160	80	4 x M16

Pump type	V1	V2	V3	V4	V5	V6	V7	VØ
SLV.80.80.75	879	374	128	330	280	574	80	18

Electrical data

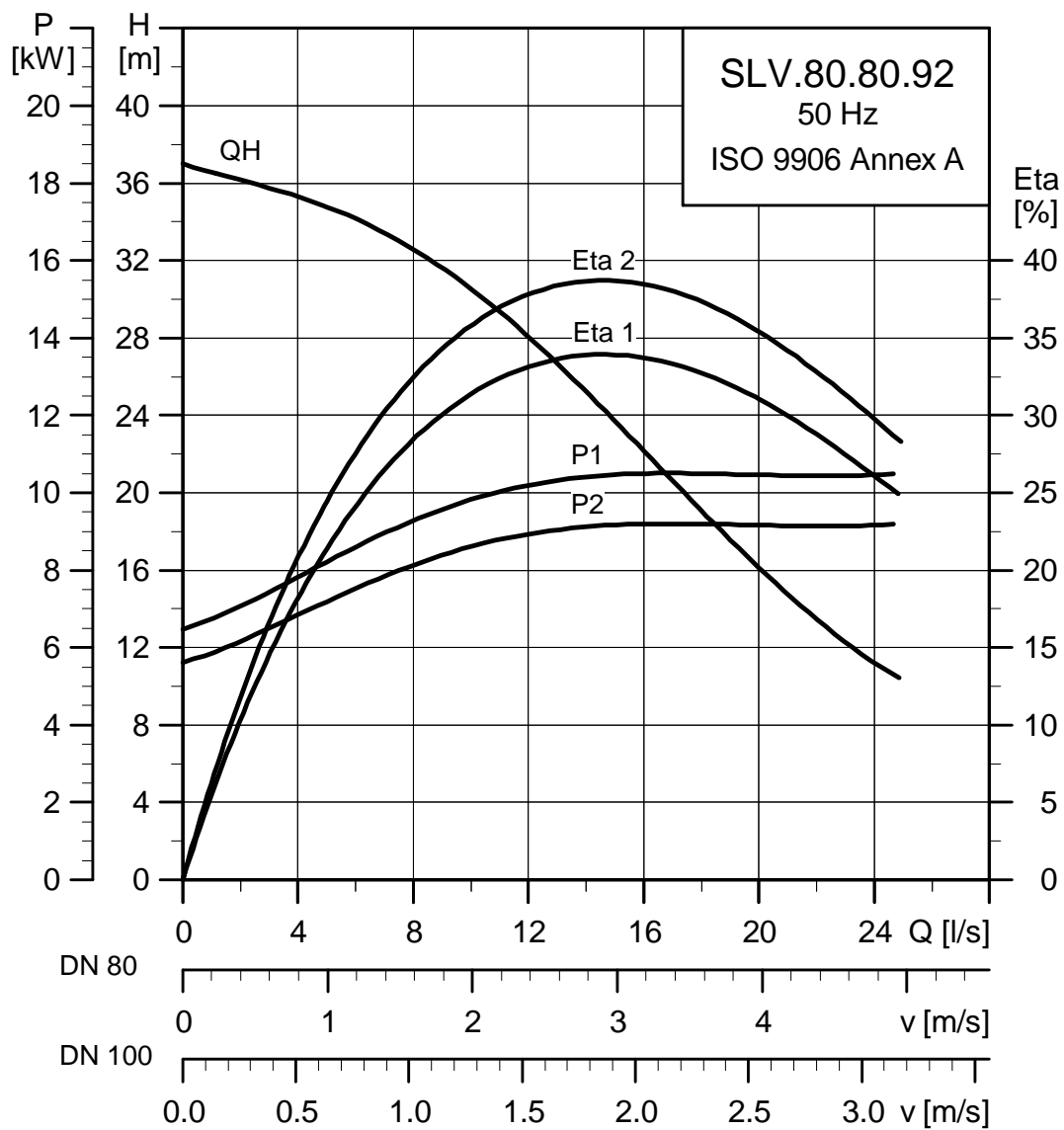
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		$\eta_{\text{motor}} [\%]$			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.80.75.2.51E	3x220-240V D	8.7	7.5	2	2920	SD	26.2	211	84.1	86.2	86.3	0.74	0.83	0.87	0.0215	83
SLV.80.80.75.2.51D	3x380-415V D	8.7	7.5	2	2920	SD	15.1	122	84.1	86.2	86.3	0.74	0.83	0.87	0.0215	83
SLV.80.80.75.2.50B	3x400-415V D	8.7	7.5	2	2920	DOL	15.1	122	84.1	86.2	86.3	0.74	0.83	0.87	0.0215	83

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

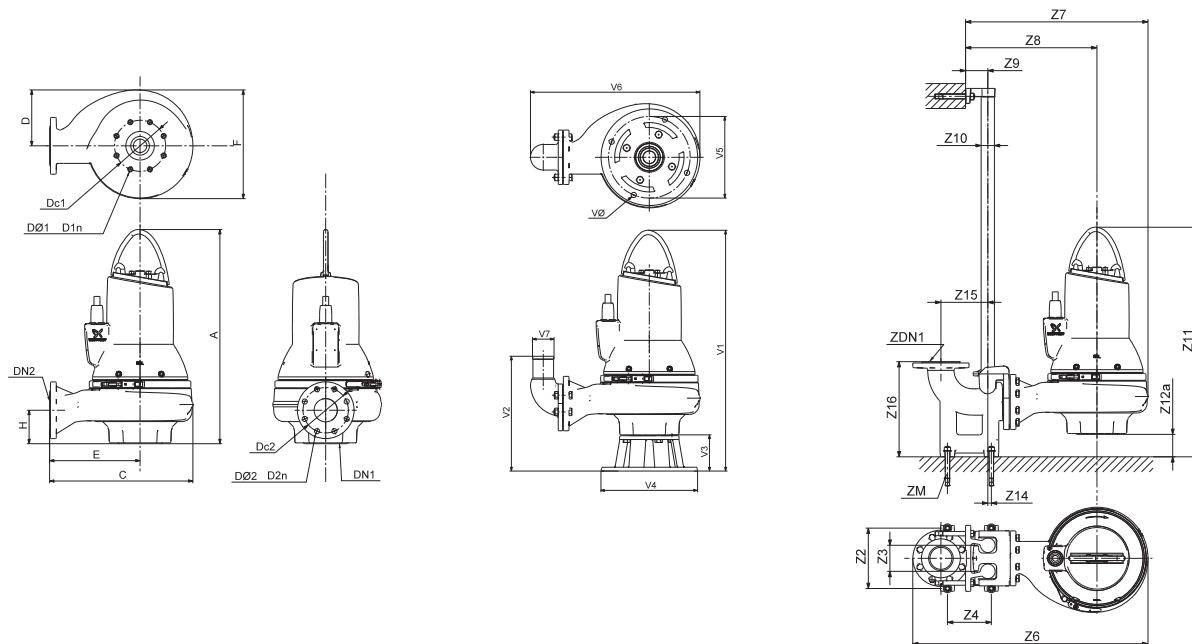
Performance curves SLV.80.80.92



TM04 3544 4608

Technical data

Dimension sketches SLV.80.80.92



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
782	489	217	293	413	123	80	160	8x18	80	160	8x18	183			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	842	650	454	81	1½"	858	77	13	171	345	160	80	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
910	393	128	330	280	607	80	18								

Electrical data

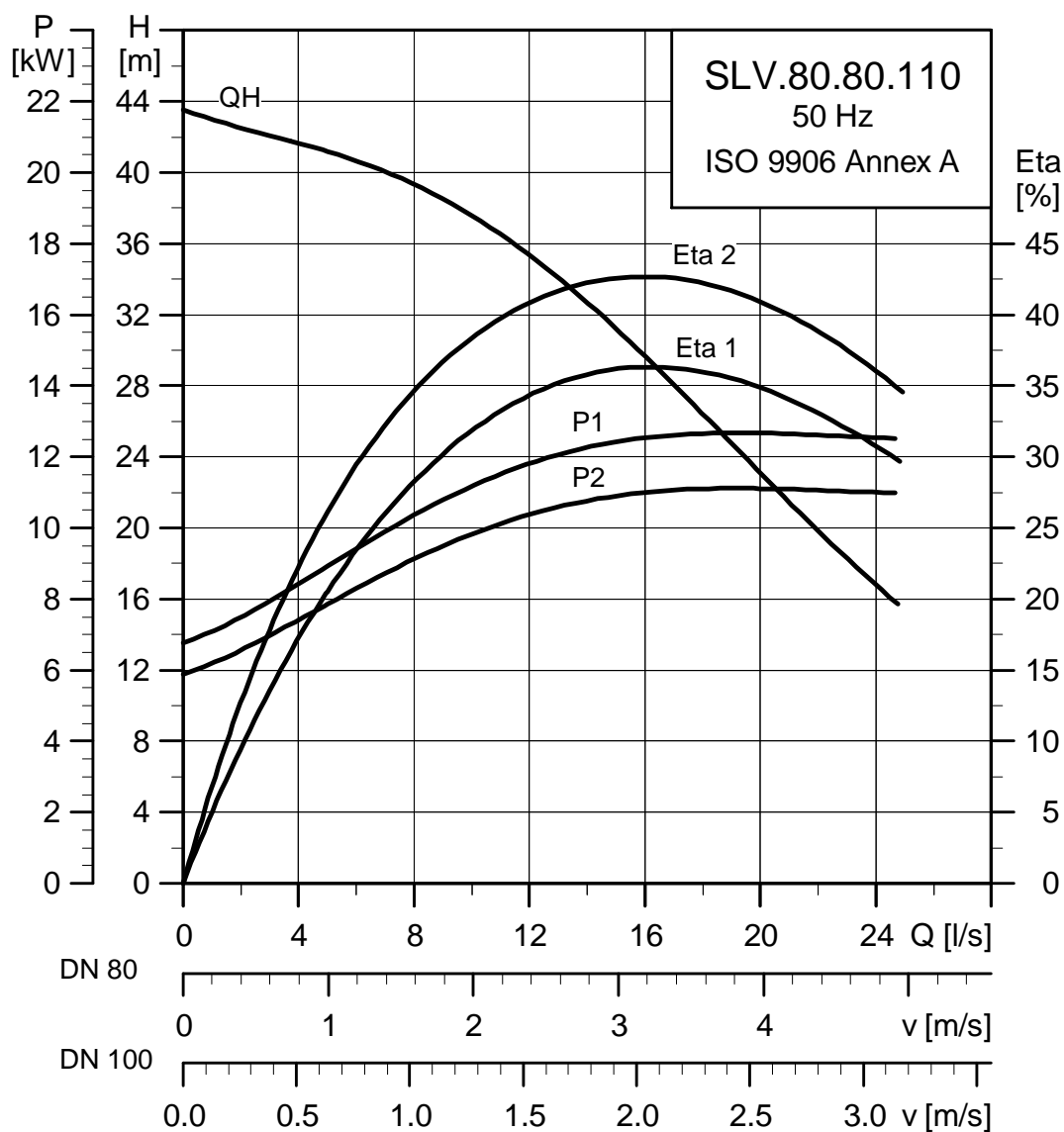
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I _N		η _{motor} [%]			Cos φ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.80.92.2.51E	3x220-240V D	10.5	9.2	2	2960	SD	31.2	288	85.5	87.6	88.1	0.76	0.84	0.88	0.0334	103
SLV.80.80.92.2.51D	3x380-415V D	10.5	9.2	2	2960	SD	18.0	166	85.5	87.6	88.1	0.76	0.84	0.88	0.0334	103
SLV.80.80.92.2.50B	3x400-415V D	10.5	9.2	2	2960	DOL	18.0	166	85.5	87.6	88.1	0.76	0.84	0.88	0.0334	103

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

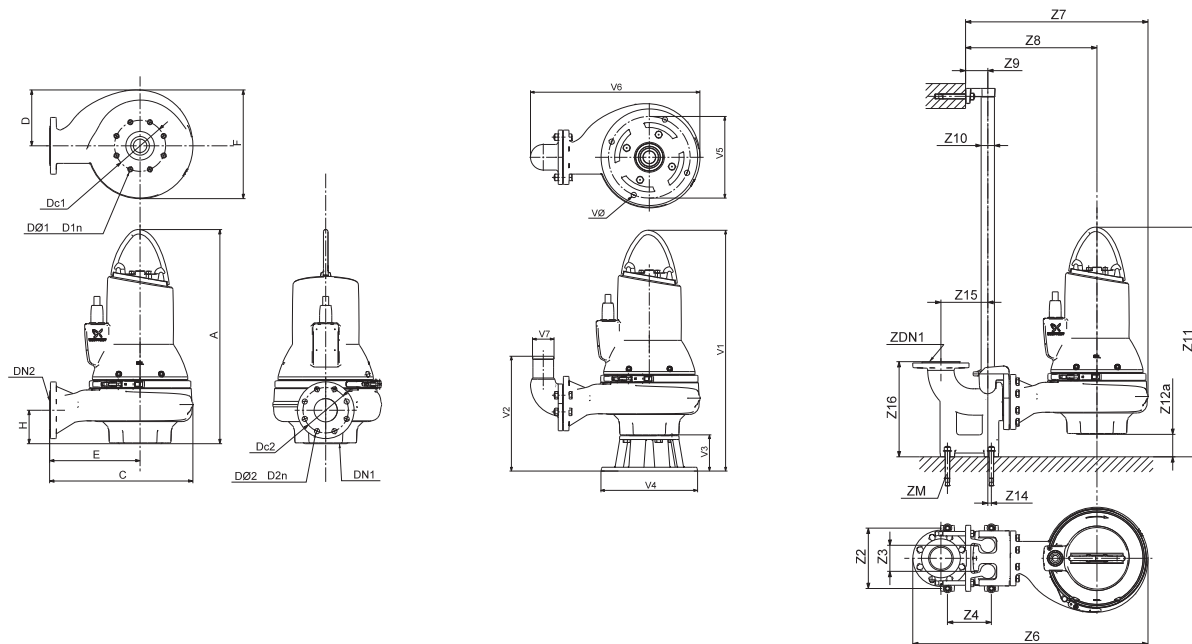
Performance curves SLV.80.80.110



TMD4 3545 4608

Technical data

Dimension sketches SLV.80.80.110



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
782	489	217	293	413	123	80	160	8x18	80	160	8x18	183			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
220	95	160	842	650	454	81	1½"	858	77	13	171	345	160	80	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
910	393	128	330	280	607	80	18								

Electrical data

Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I _N		η _{motor} [%]			Cos φ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.80.110.2.51E	3x220-240V D	12.5	11.0	2	2950	SD	37.1	288	86.6	88.0	87.8	0.79	0.86	0.89	0.0368	103
SLV.80.80.110.2.51D	3x380-415V D	12.5	11.0	2	2950	SD	21.4	166	86.6	88.0	87.8	0.79	0.86	0.89	0.0368	103
SLV.80.80.110.2.50B	3x400-415V D	12.5	11.0	2	2950	DOL	21.4	166	86.6	88.0	87.8	0.79	0.86	0.89	0.0368	103

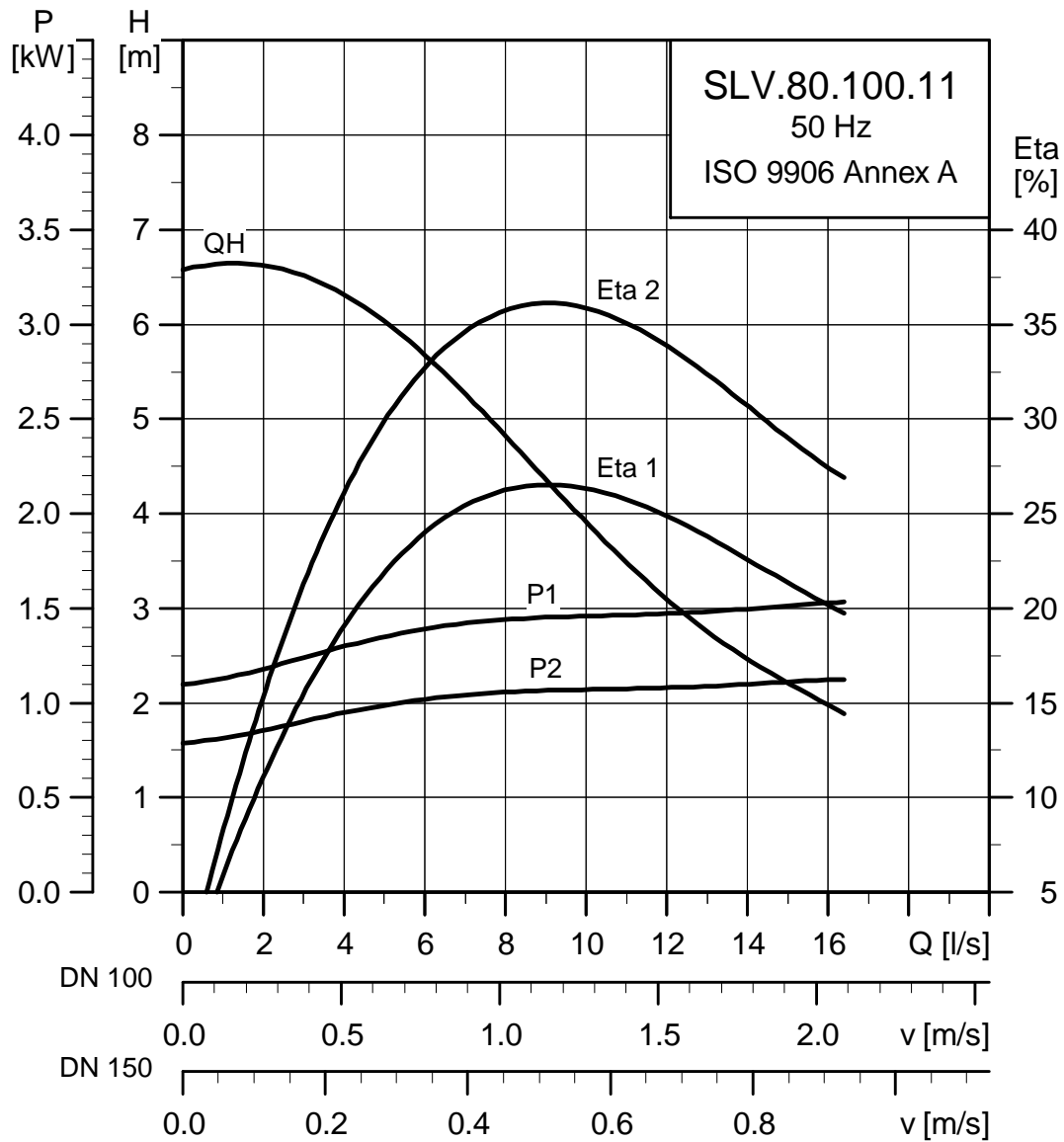
Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

SLV.80.100

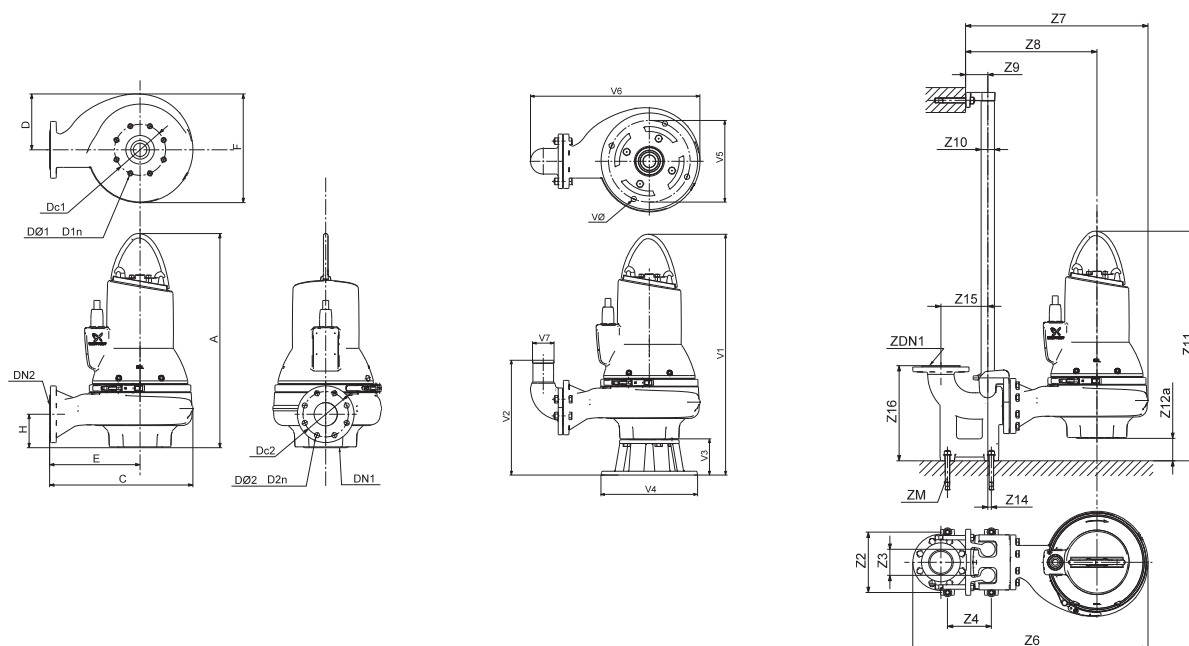
Performance curves SLV.80.100.11



TM04 3550 4608

Technical data

Dimension sketches SLV.80.100.11



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
711	407	171	241	336.5	109	80	160	8x18	100	180	8x18	95			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	850	624	458	110	2"	842	131	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
839	354	128	330	280	548.7	100	18								

Electrical data

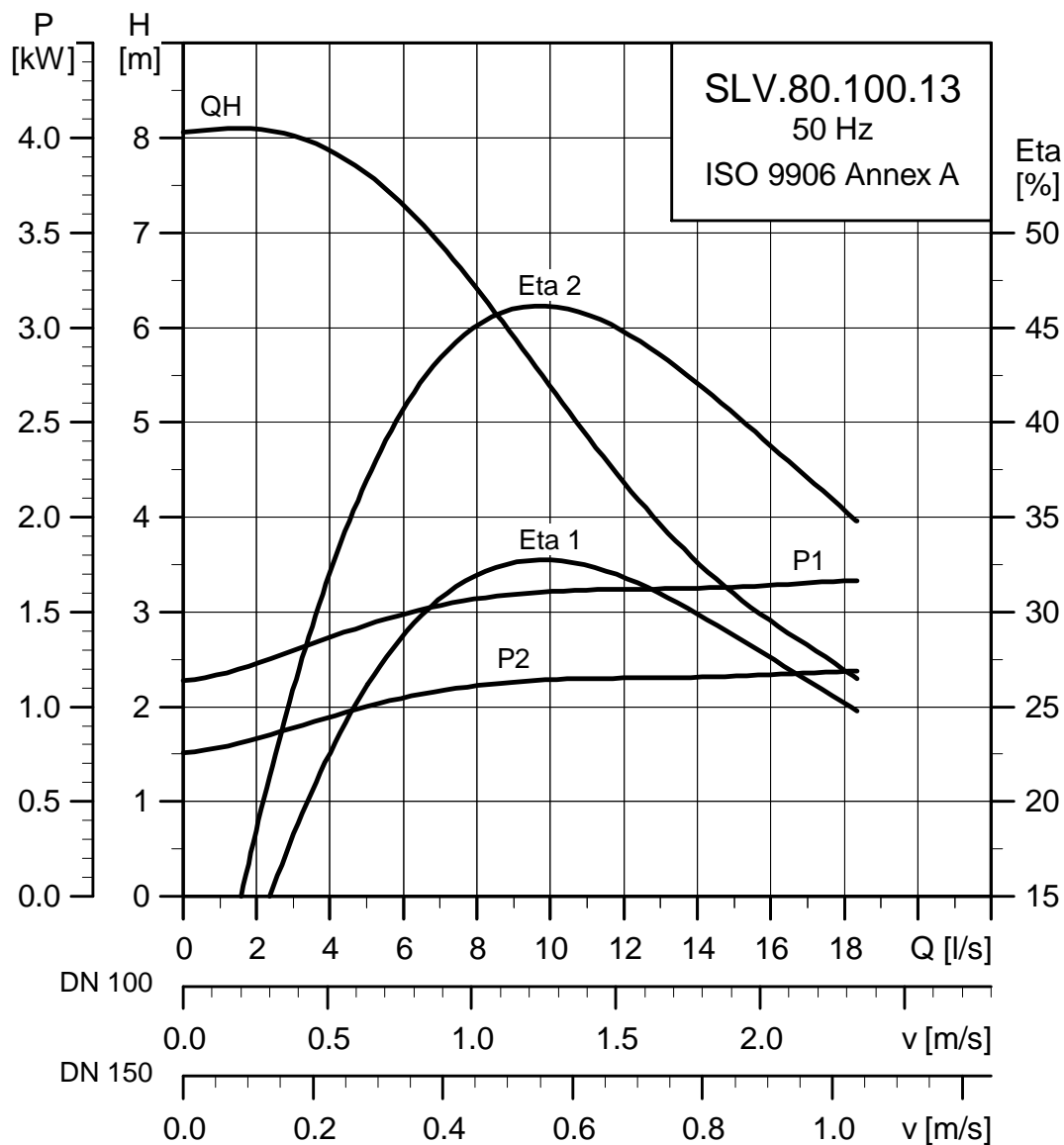
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			I_{start}			η_{motor} [%]			$\cos \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.100.11.4.50E	3x220-240V D	1.5	1.1	4	1450	DOL	5.1	34	67.2	72.7	75.2	0.58	0.68	0.75	0.0142	26				
SLV.80.100.11.4.50D	3x380-415V Y	1.5	1.1	4	1450	DOL	3.0	20	67.2	72.7	75.2	0.58	0.68	0.75	0.0142	26				
SLV.80.100.11.4.50B	3x400-415V Y	1.5	1.1	4	1450	DOL	3.0	20	67.2	72.7	75.2	0.58	0.68	0.75	0.0142	26				

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

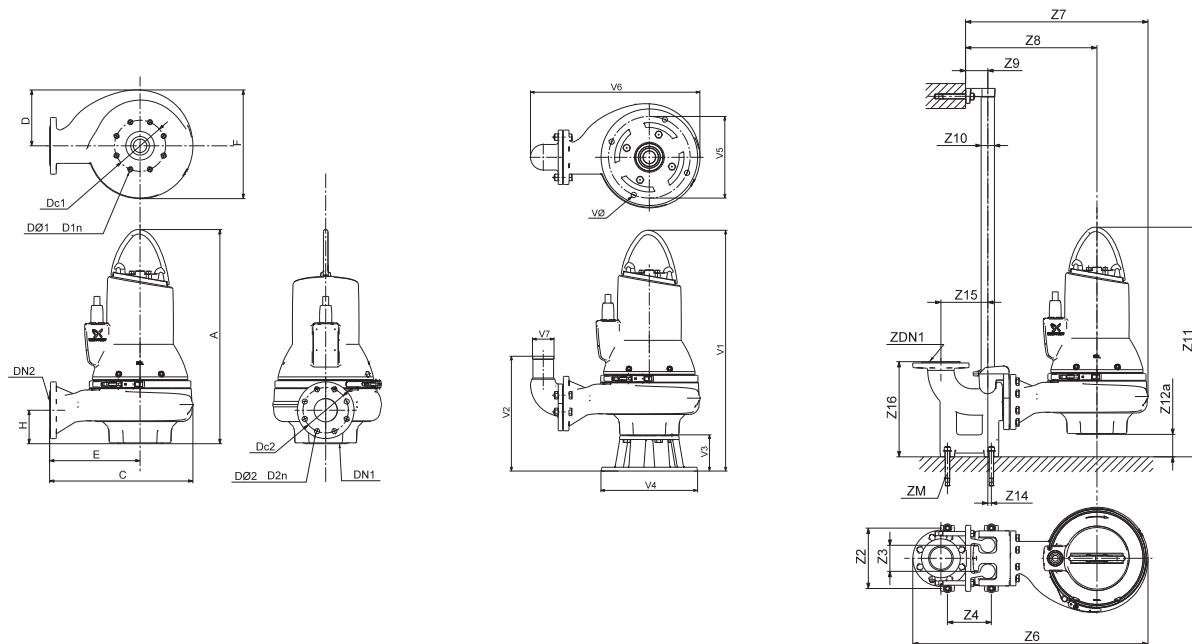
Performance curves SLV.80.100.13



TM04 3551 4608

Technical data

Dimension sketches SLV.80.100.13



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
711	407	171	241	336.5	109	80	160	8x18	100	180	8x18	95			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	850	624	458	110	2"	842	131	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
812	369	130	355	300	591	100	18								

Electrical data

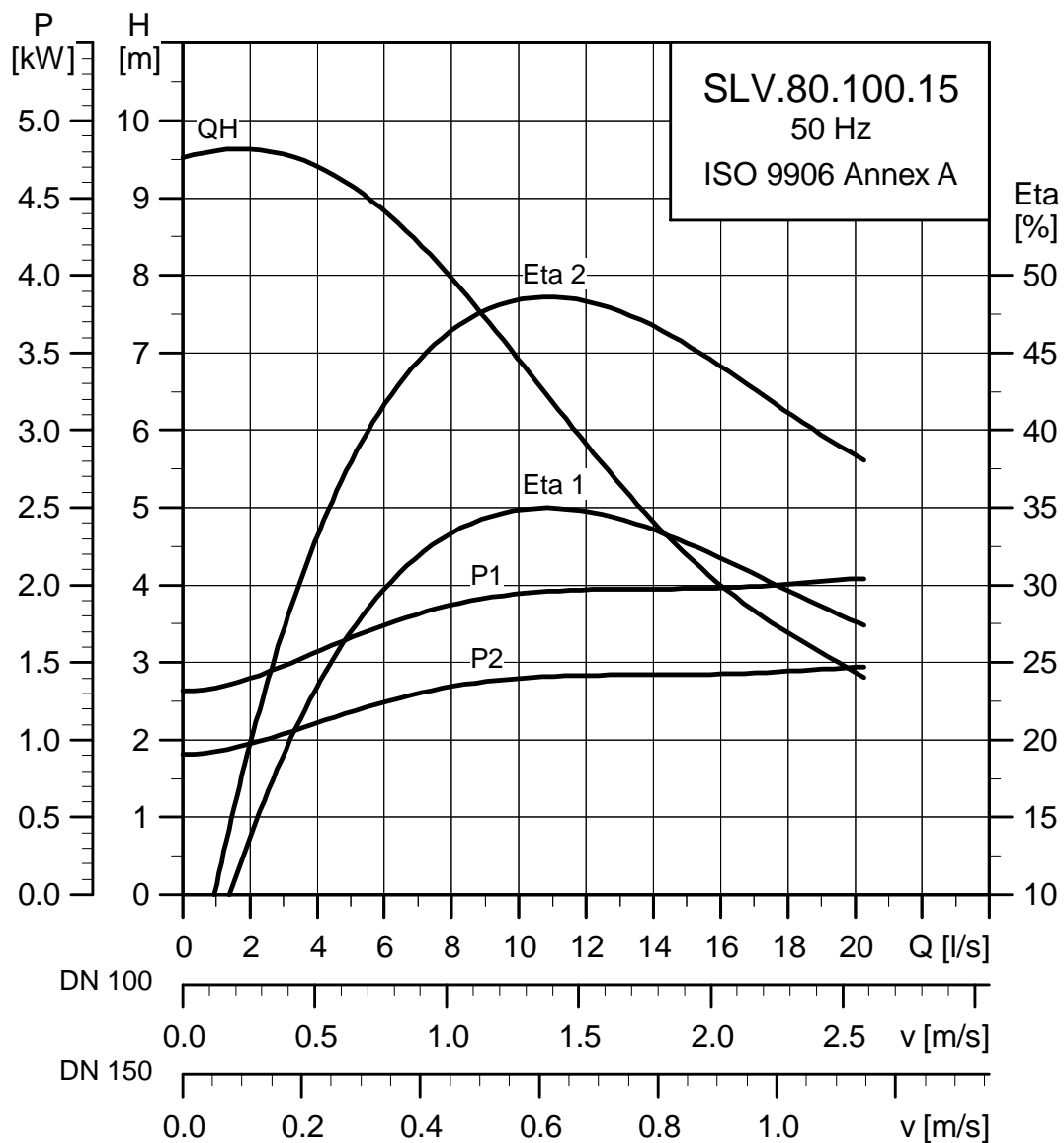
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		$\eta_{\text{motor}} [\%]$			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.100.13.4.50E	3x220-240V D	1.8	1.3	4	1460	DOL	6.2	26	68.2	74.2	76.4	0.53	0.65	0.73	0.0165	34
SLV.80.100.13.4.50D	3x380-415V Y	1.8	1.3	4	1460	DOL	3.6	26	68.2	74.2	76.4	0.53	0.65	0.73	0.0165	34

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

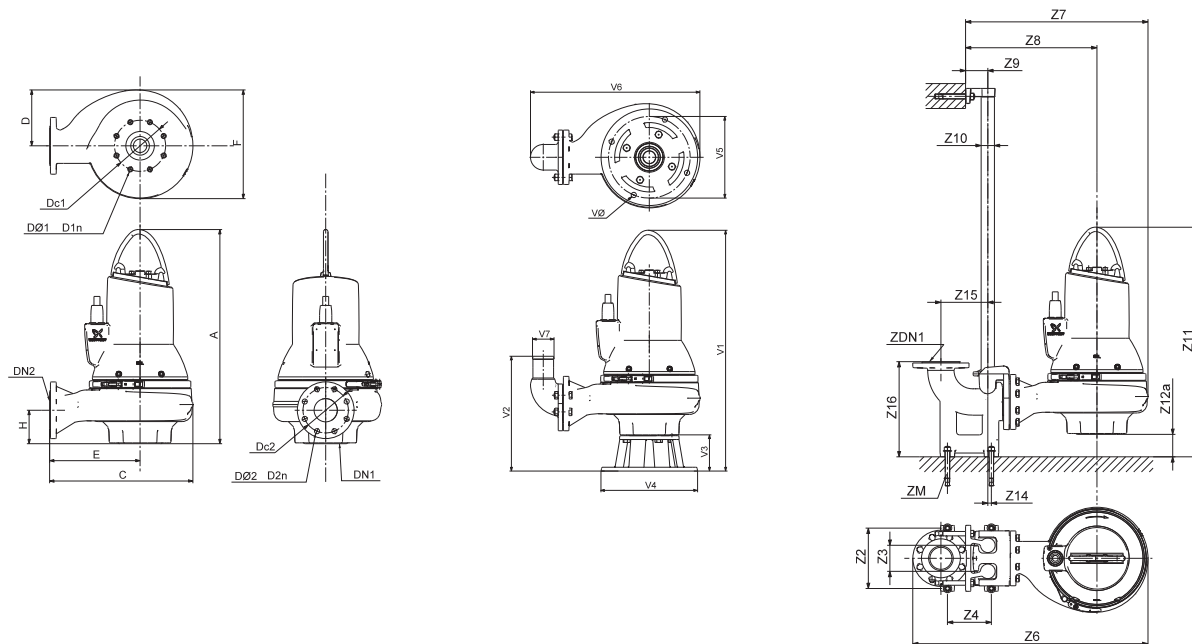
Performance curves SLV.80.100.15



TM04 3552 4608

Technical data

Dimension sketches SLV.80.100.15



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
711	407	171	241	336.5	109	80	160	8x18	100	180	8x18	95			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	850	624	458	110	2"	842	131	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
812	369	130	355	300	591	100	18								

Electrical data

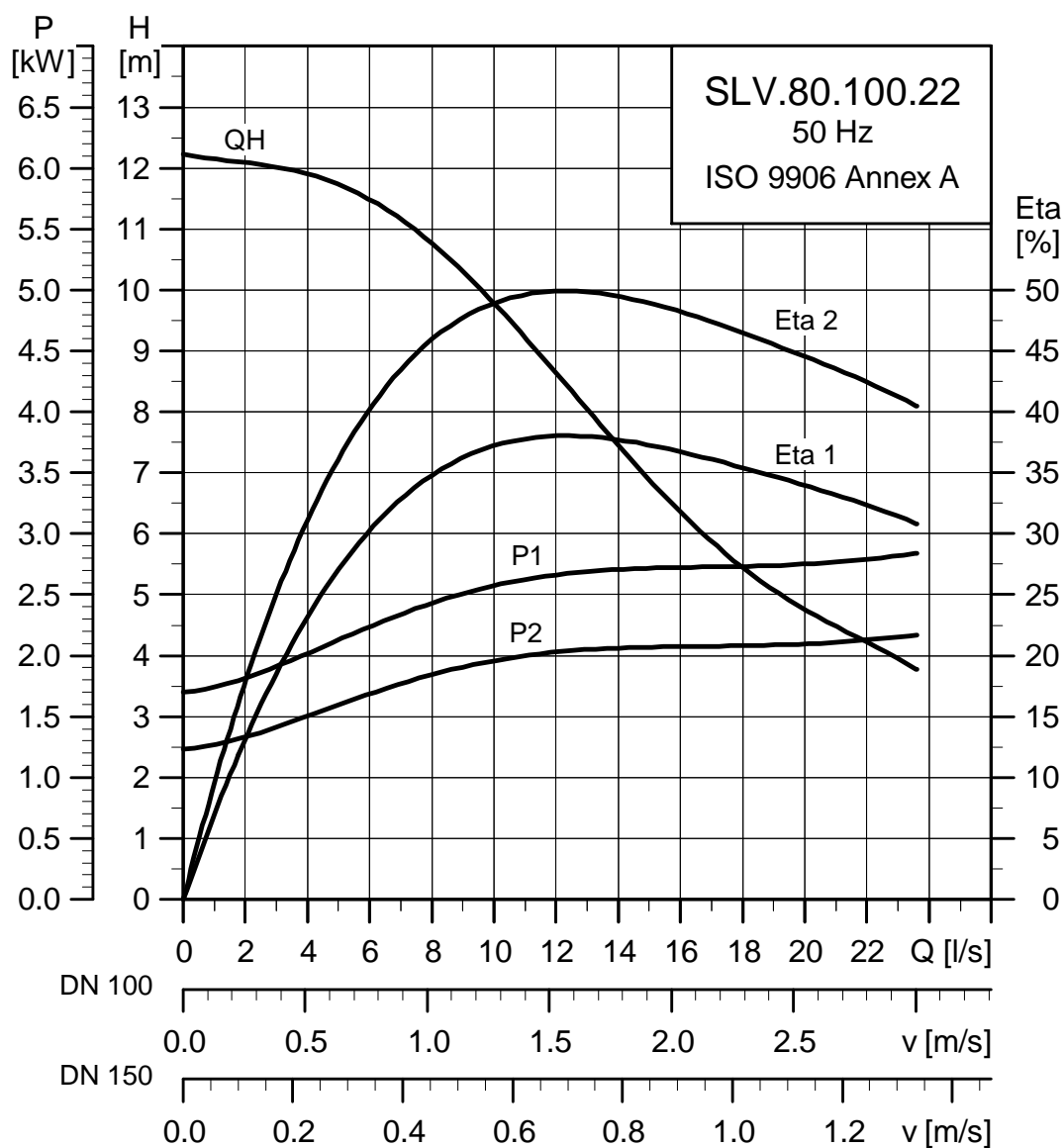
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			I_{start}			η_{motor} [%]			$\cos \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1					
SLV.80.100.15.4.50E	3x220-240V D	2.1	1.5	4	1450	DOL	6.8	45	70.6	75.4	77.1	0.57	0.68	0.76	0.0185	34				
SLV.80.100.15.4.50D	3x380-415V Y	2.1	1.5	4	1450	DOL	3.9	26	70.6	75.4	77.1	0.57	0.68	0.76	0.0185	34				
SLV.80.100.15.4.50B	3x400-415V Y	2.1	1.5	4	1450	DOL	3.9	26	70.6	75.4	77.1	0.57	0.68	0.76	0.0185	34				

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

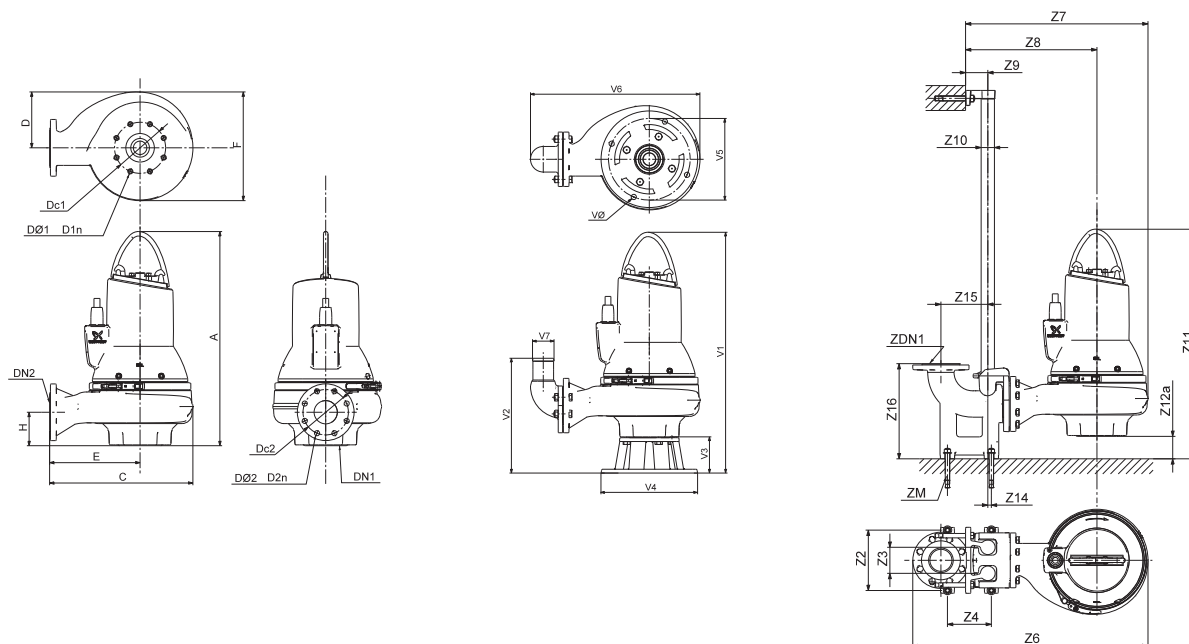
Performance curves SLV.80.100.22



TM04 3553 4608

Technical data

Dimension sketches SLV.80.100.22



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
711	407	171	241	336.5	109	80	160	8x18	100	180	8x18	107			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	850	624	458	110	2"	842	131	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
812	369	130	355	300	591	100	18								

Electrical data

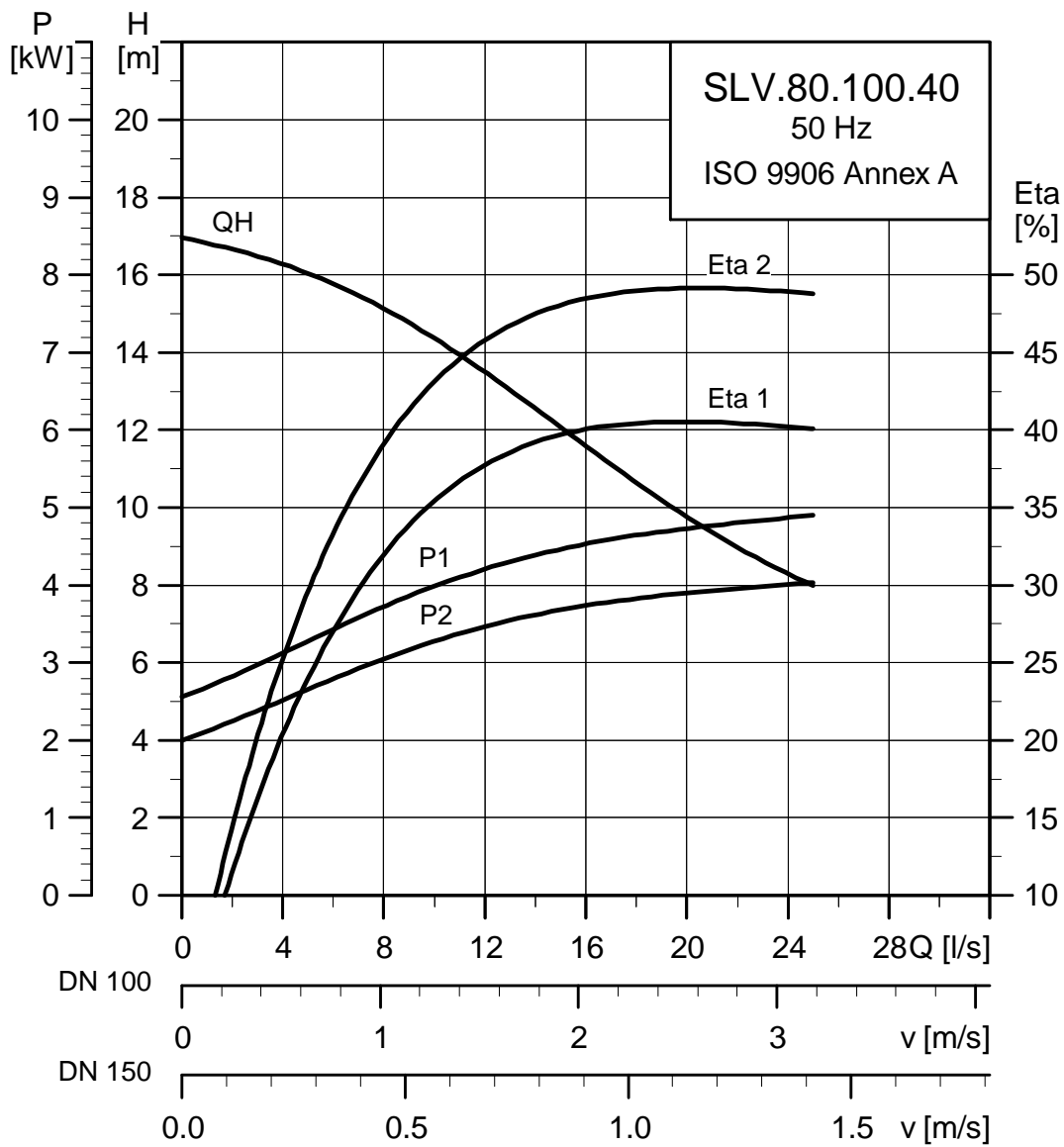
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I _N		I _{start}		η _{motor} [%]			Cos φ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1				
SLV.80.100.22.4.50E	3x220-240V D	2.9	2.2	4	1460	DOL	9.1	66	78.4	81.7	82.7	0.58	0.70	0.77	0.0240	50		
SLV.80.100.22.4.51D	3x380-415V D	2.9	2.2	4	1460	SD	5.3	38.3	78.4	81.7	82.7	0.58	0.70	0.77	0.0240	50		
SLV.80.100.22.4.50D	3x380-415V Y	2.9	2.2	4	1460	DOL	5.3	38.3	78.4	81.7	82.7	0.58	0.70	0.77	0.0240	50		
SLV.80.100.22.4.50B	3x400-415V Y	2.9	2.2	4	1460	DOL	5.3	38.3	78.4	81.7	82.7	0.58	0.70	0.77	0.0240	50		

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

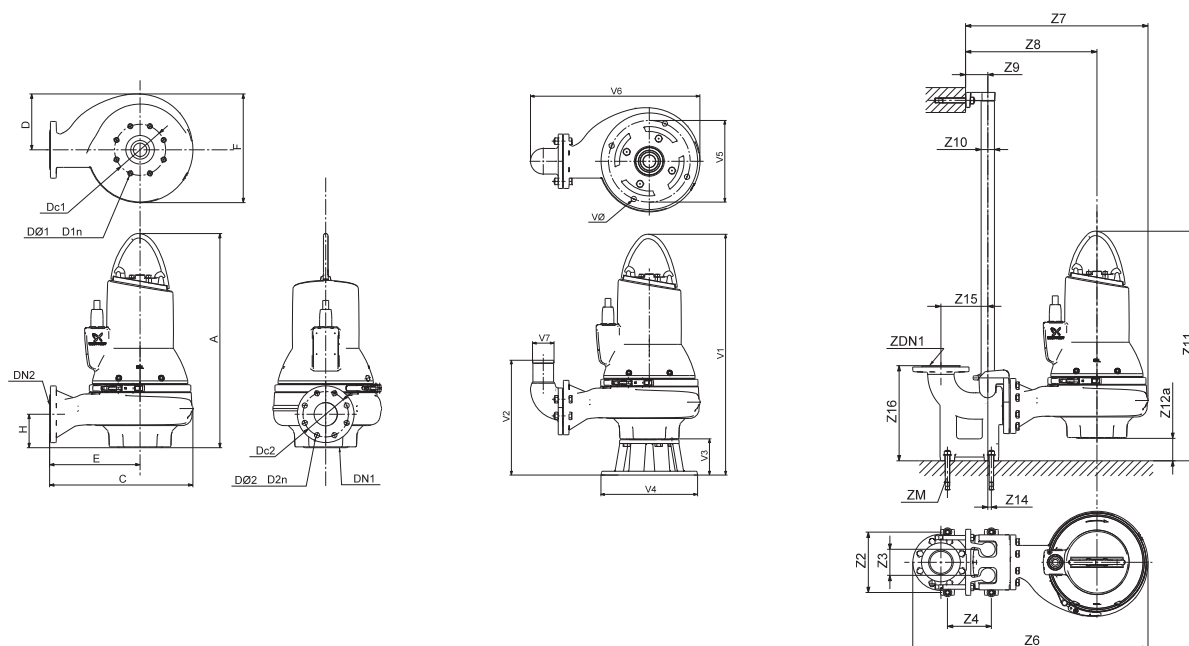
Performance curves SLV.80.100.40 - 4 pole



TMD4 3554 4608

Technical data

Dimension sketches SLV.80.100.40 - 4 pole



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
744	466	200	286	380	108	80	160	8x18	100	180	8x18	135			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	909	683	503	110	2"	876	132	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
878	395	130	355	300	647	100	18								

Electrical data

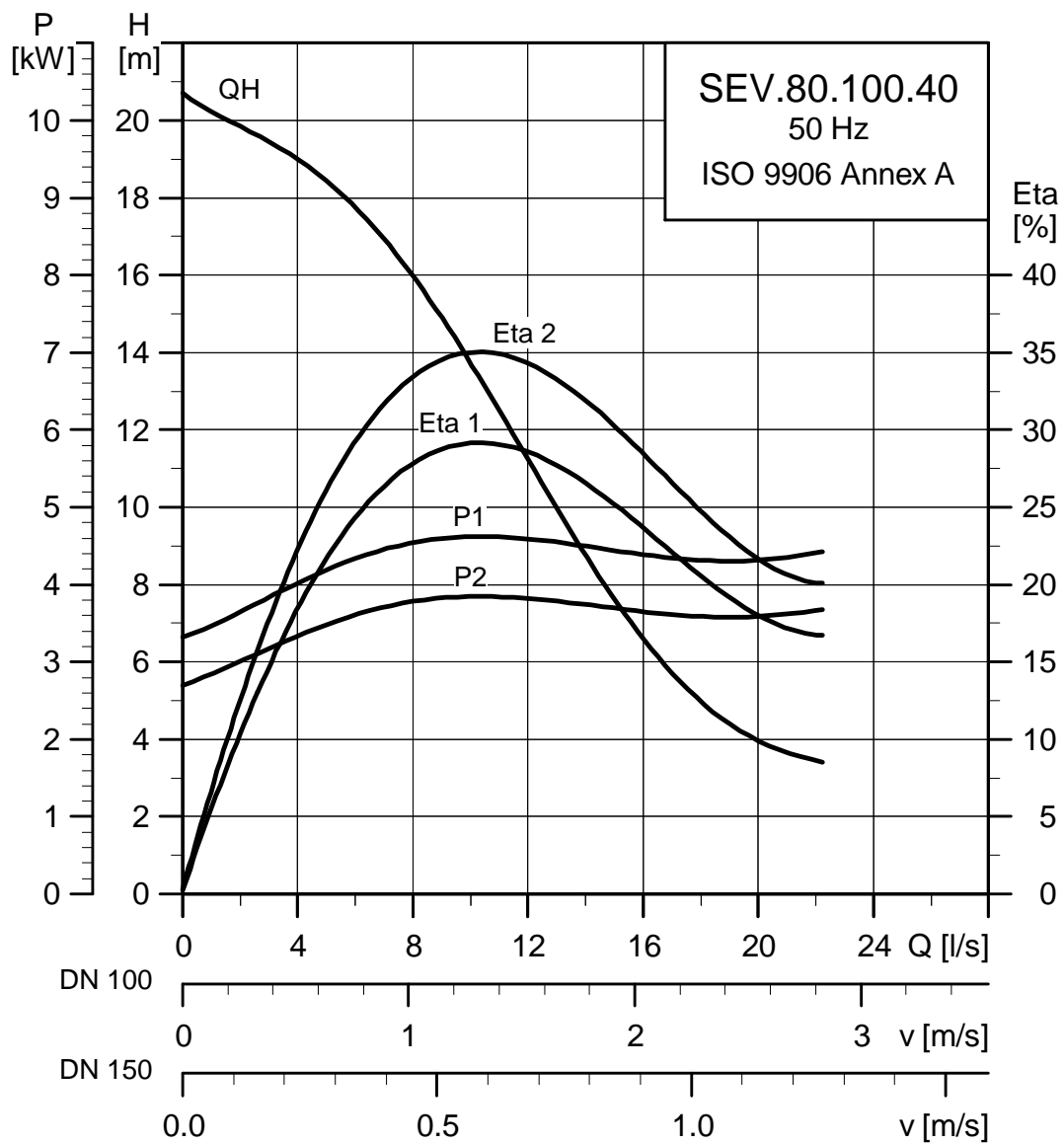
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N		I_{start}			η_{motor} [%]			$\cos \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.100.40.4.51E	3x220-240V D	4.8	4.0	4	1460	SD	16.9	88	78.6	82.3	83.6	0.53	0.66	0.75	0.0479	90			
SLV.80.100.40.4.51D	3x380-415V D	4.8	4.0	4	1460	SD	9.7	51	78.6	82.3	83.6	0.53	0.66	0.75	0.0479	90			
SLV.80.100.40.4.50B	3x400-415V D	4.8	4.0	4	1460	DOL	9.7	51	78.6	82.3	83.6	0.53	0.66	0.75	0.0479	90			

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

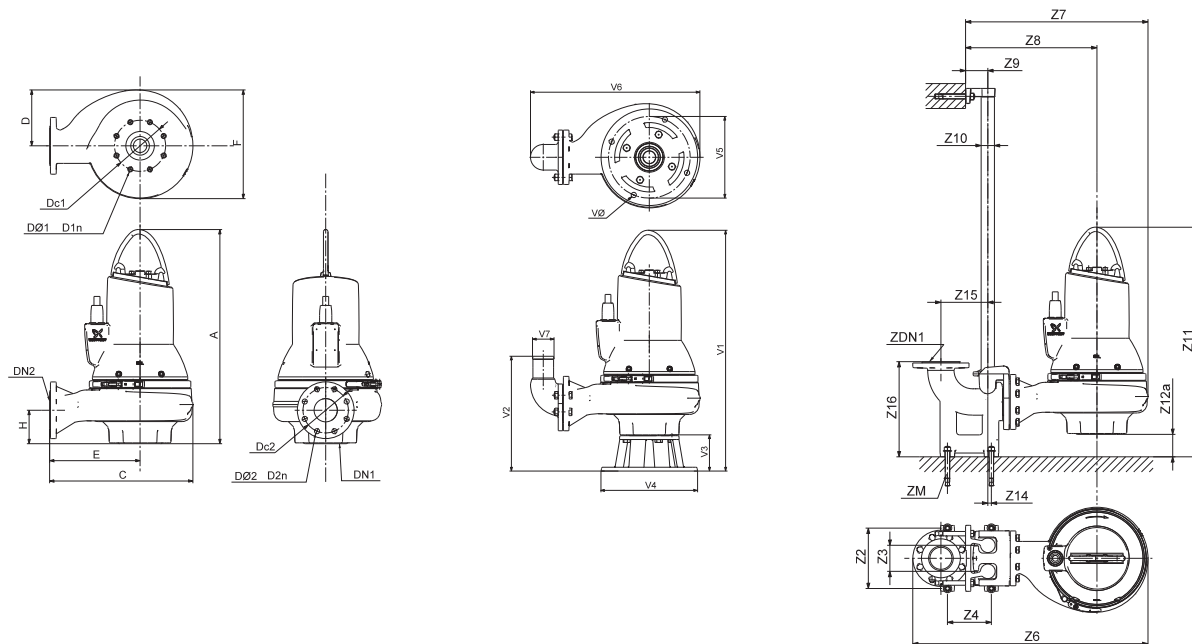
Performance curves SLV.80.100.40 - 2 pole



TM04 3555 4608

Technical data

Dimension sketches SLV.80.100.40 - 2 pole



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
748	458	200	267	391	109	80	160	8x18	100	180	8x18	122			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	901	675	484	110	2"	857	109	0	220	413	80	160	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
876	354	128	330	280	600	100	18								

Electrical data

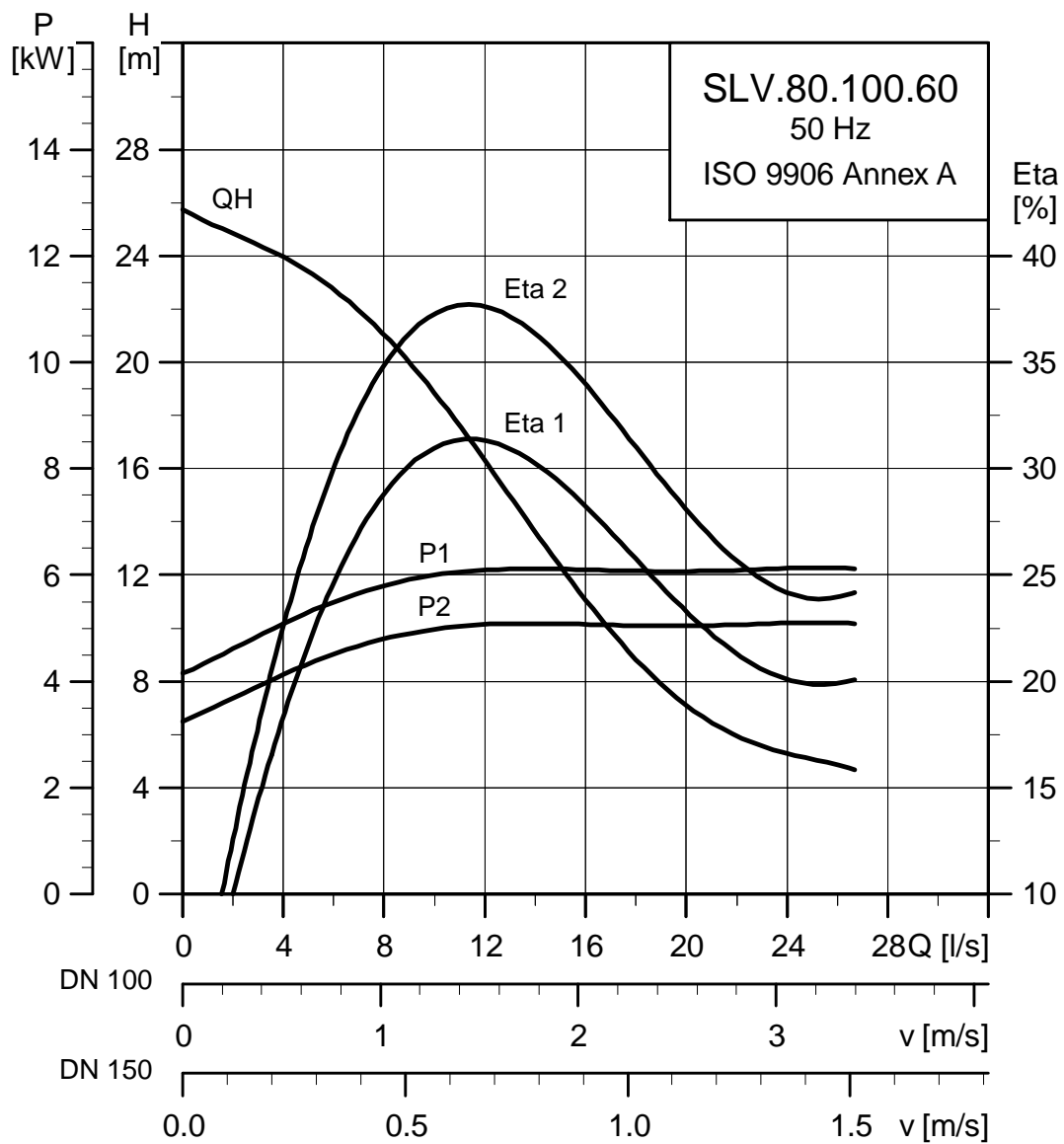
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	η_{motor} [%]					$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							I_N [A]	I_{start} [A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.100.40.2.51E	3x220-240V D	4.8	4.0	2	2930	SD	14.7	161	75.8	80.9	82.7	0.71	0.82	0.87	0.0127	56
SLV.80.100.40.2.51D	3x380-415V D	4.8	4.0	2	2930	SD	8.5	93	75.8	80.9	82.7	0.71	0.82	0.87	0.0127	56
SLV.80.100.40.2.50B	3x400-415V D	4.8	4.0	2	2925	DOL	8.5	93	75.8	80.9	82.7	0.71	0.82	0.87	0.0127	56

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

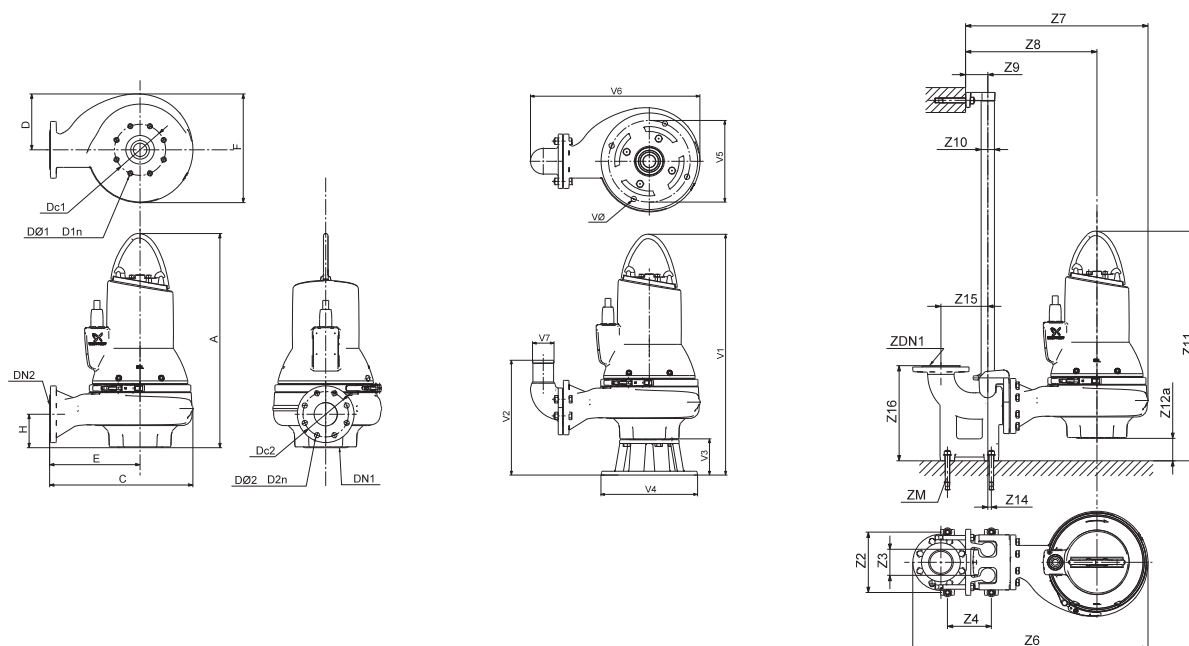
Performance curves SLV.80.100.60



TM04 35556 4608

Technical data

Dimension sketches SLV.80.100.60



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

Pump type	A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]
SLV.80.100.60	751	466	200	286	380	108	80	160	8x18	100	180	8x18	141

Pump type	Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
SLV.80.100.60	260	110	270	909	683	503	110	2"	883	132	0	220	413	80	160	4 x M16

Pump type	V1	V2	V3	V4	V5	V6	V7	VØ
SLV.80.100.60	879	353	128	330	280	598	100	18

Electrical data

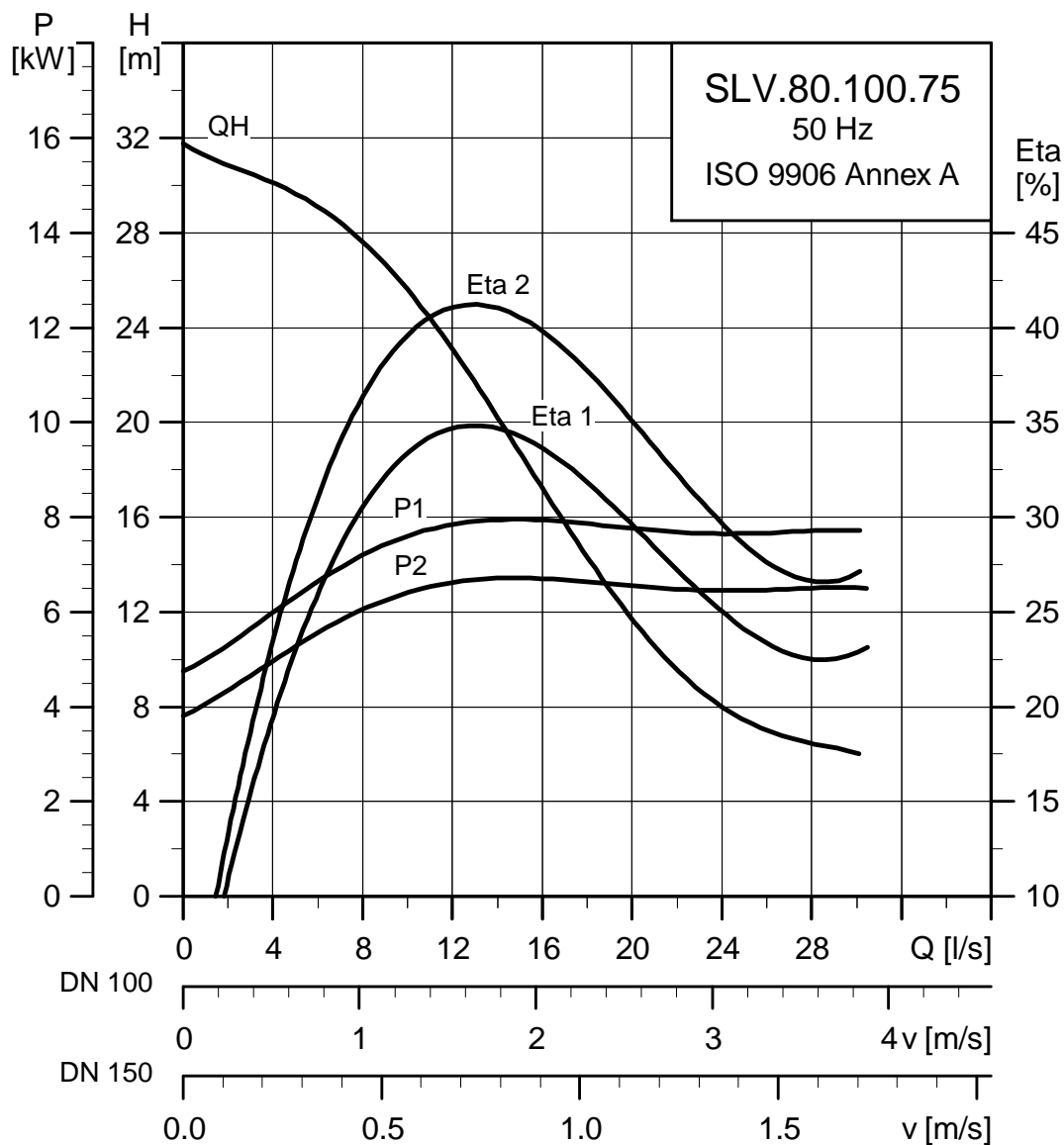
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	η_{motor} [%]					$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							I_N [A]	I_{start} [A]	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.100.60.2.51E	3x220-240V D	6.9	6.0	2	2940	SD	21.7	211	81.9	85.2	86.4	0.68	0.78	0.84	0.0190	83
SLV.80.100.60.2.51D	3x380-415V D	6.9	6.0	2	2940	SD	12.5	122	81.9	85.2	86.4	0.68	0.78	0.84	0.0190	83
SLV.80.100.60.2.50B	3x400-415V D	6.9	6.0	2	2940	DOL	12.5	122	81.9	85.2	86.4	0.68	0.78	0.84	0.0190	83

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

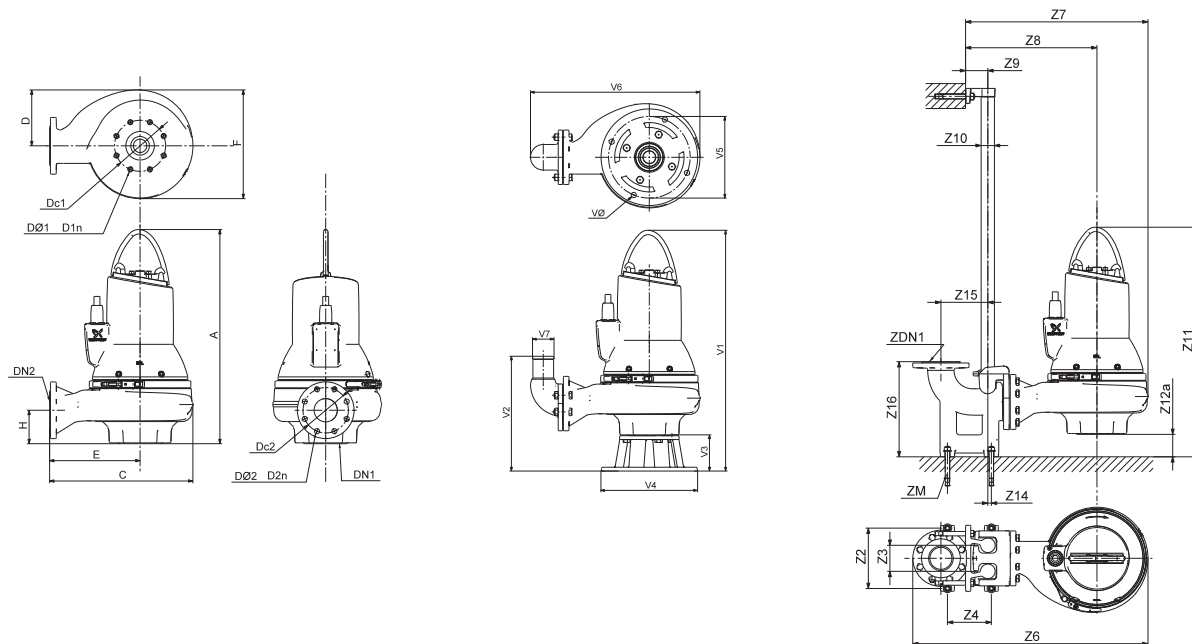
Performance curves SLV.80.100.75



TM04 3557 4608

Technical data

Dimension sketches SLV.80.100.75



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
782	499	217	303	413	123	80	160	8x18	100	180	8x18	141			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	942	716	520	110	2"	899	117	0	220	413	80	160	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
879	353	128	330	280	598	100	18								

Electrical data

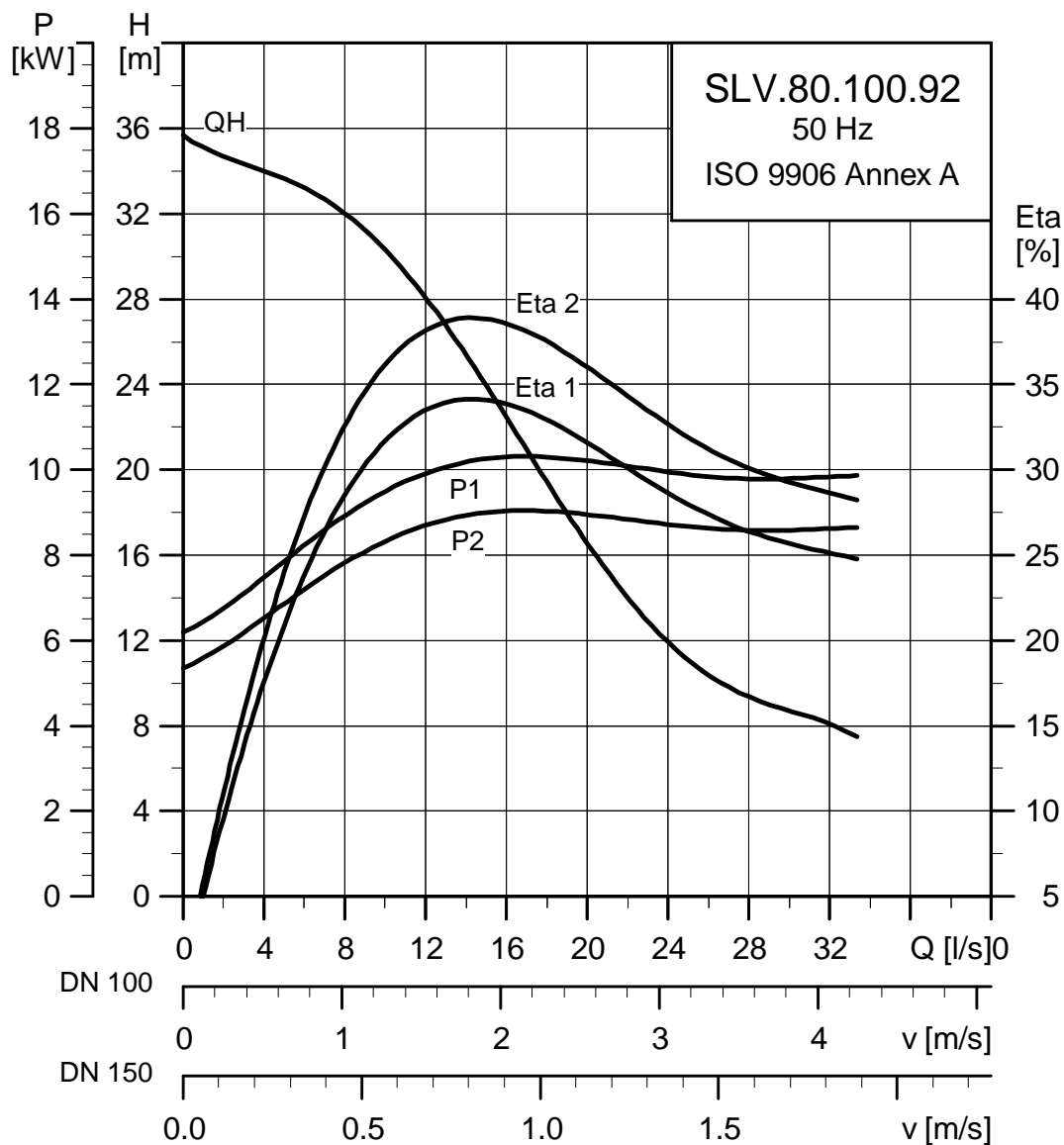
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			I_{start}			$\eta_{motor} [\%]$			$\cos \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.100.75.2.51E	3x220-240V D	8.7	7.5	2	2920	SD	26.2	211	84.1	86.2	86.3	0.74	0.83	0.87	0.0215	83				
SLV.80.100.75.2.51D	3x380-415V D	8.7	7.5	2	2920	SD	15.1	122	84.1	86.2	86.3	0.74	0.83	0.87	0.0215	83				
SLV.80.100.75.2.50B	3x400-415V D	8.7	7.5	2	2920	DOL	15.1	122	84.1	86.2	86.3	0.74	0.83	0.87	0.0215	83				

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

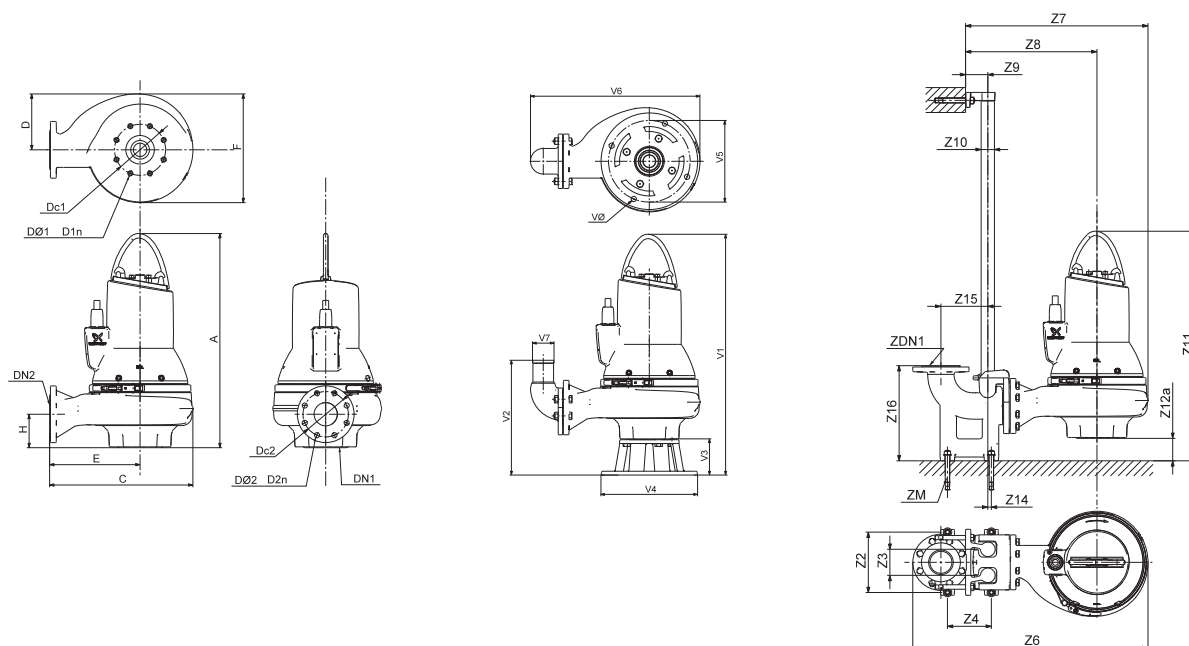
Performance curves SLV.80.100.92



TM04 3558 4608

Technical data

Dimension sketches SLV.80.100.92



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
782	499	217	303	413	123	80	160	8x18	100	180	8x18	184			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	942	716	520	110	2"	899	117	0	220	413	80	160	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
910	368	128	330	280	641	100	18								

Electrical data

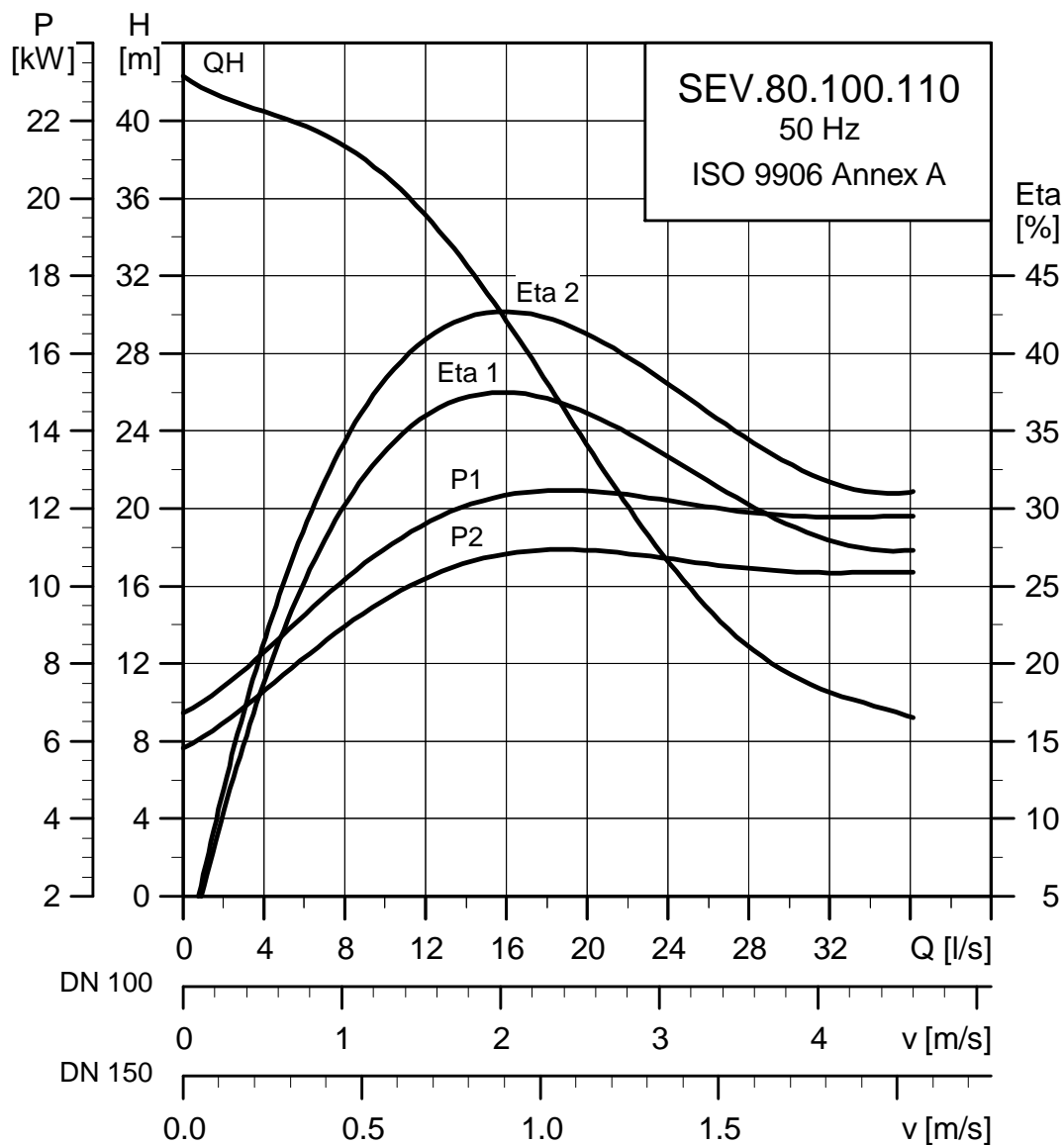
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	η_{motor} [%]			Cos ϕ			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]		
							I _N [A]	I _{start} [A]	1/2	3/4	1/1	1/2			3/4	1/1
SLV.80.100.92.2.51E	3x220-240V D	10.5	9.2	2	2960	SD	31.2	288	85.5	87.6	88.1	0.76	0.84	0.88	0.0334	103
SLV.80.100.92.2.51D	3x380-415V D	10.5	9.2	2	2960	SD	18.0	166	85.5	87.6	88.1	0.76	0.84	0.88	0.0334	103
SLV.80.100.92.2.50B	3x400-415V D	10.5	9.2	2	2960	DOL	18.0	166	85.5	87.6	88.1	0.76	0.84	0.88	0.0334	103

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

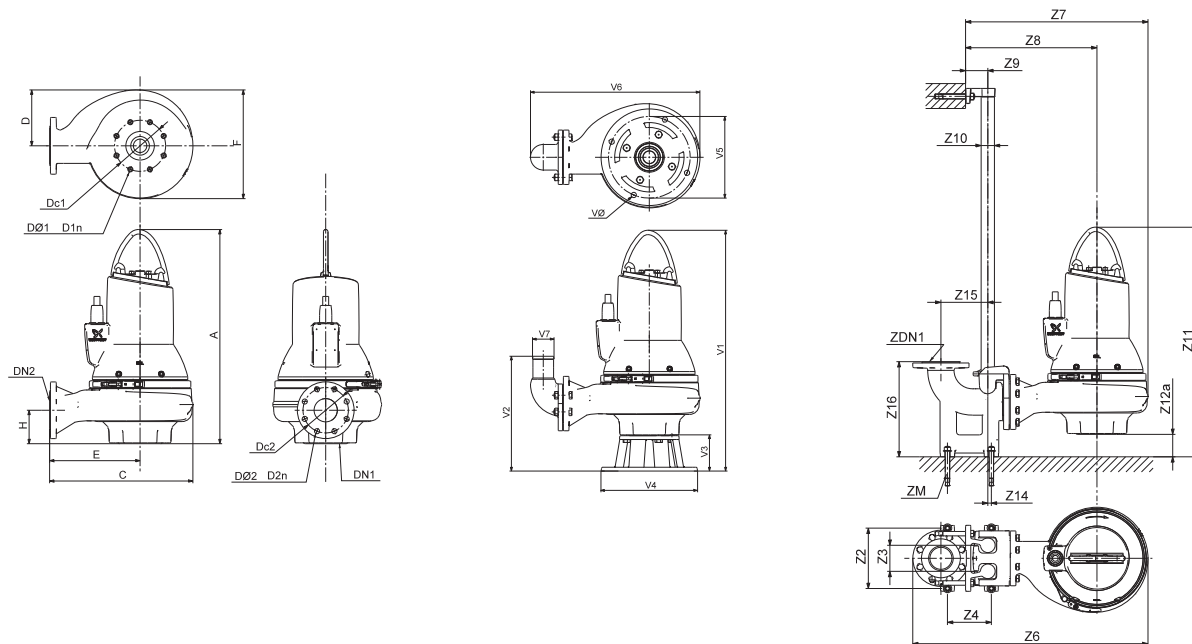
Performance curves SLV.80.100.110



TM04 35559 4608

Technical data

Dimension sketches SLV.80.100.110



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
782	499	217	303	413	123	80	160	8x18	100	180	8x18	184			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	942	716	520	110	2"	899	117	0	220	413	80	160	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
910	368	128	330	280	641	100	18								

Electrical data

Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			I_{start}			$\eta_{motor} [\%]$			$\cos \phi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.80.100.110.2.51E	3x220-240V D	12.5	11.0	2	2950	SD	37.1	288	86.6	88.0	87.8	0.79	0.86	0.89	0.0368	103				
SLV.80.100.110.2.51D	3x380-415V D	12.5	11.0	2	2950	SD	21.4	166	86.6	88.0	87.8	0.79	0.86	0.89	0.0368	103				
SLV.80.100.110.2.50B	3x400-415V D	12.5	11.0	2	2950	DOL	21.4	166	86.6	88.0	87.8	0.79	0.86	0.89	0.0368	103				

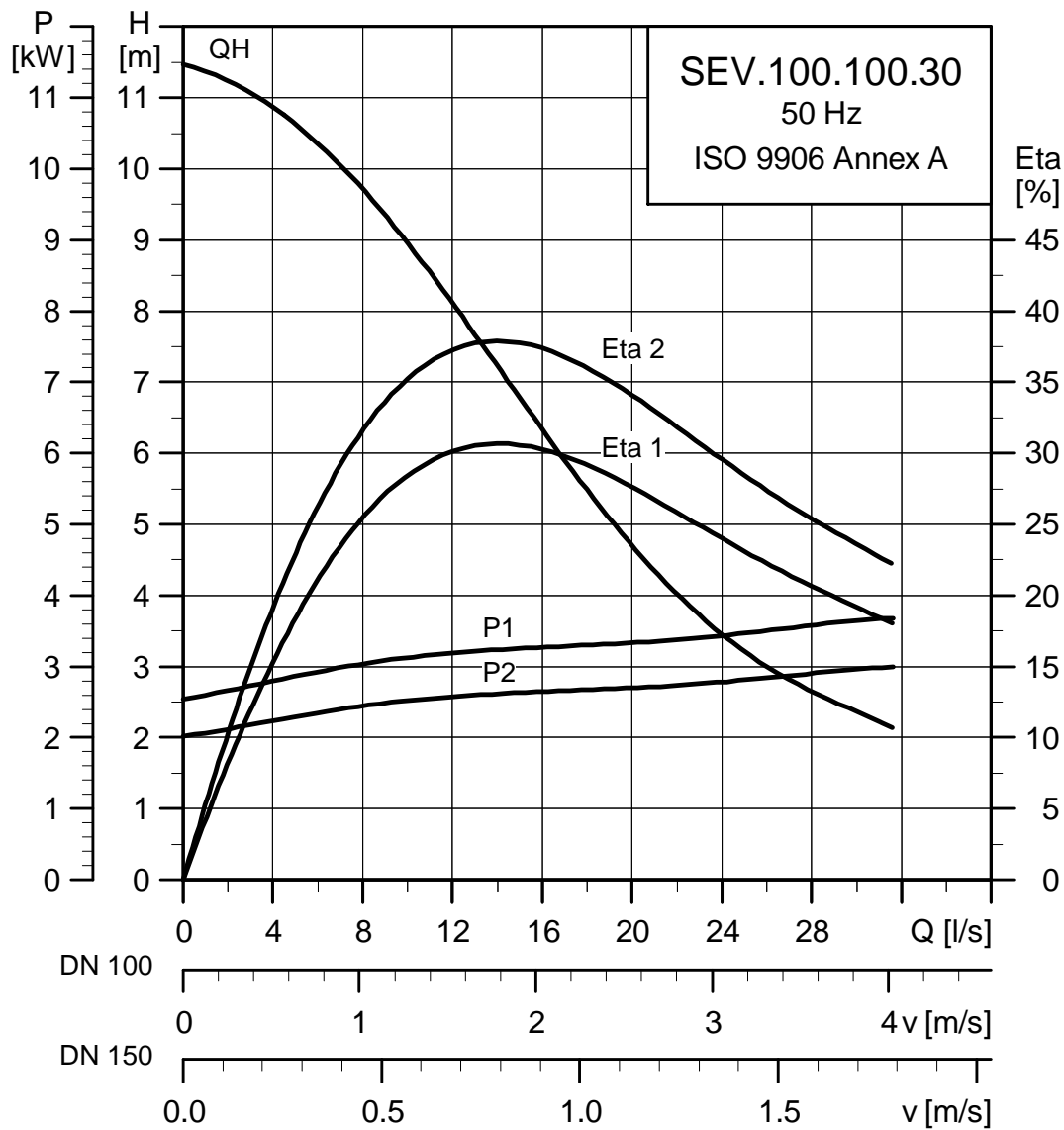
Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	80	10	20	20	68	F	40	4-10

Performance curves

SLV.100.100

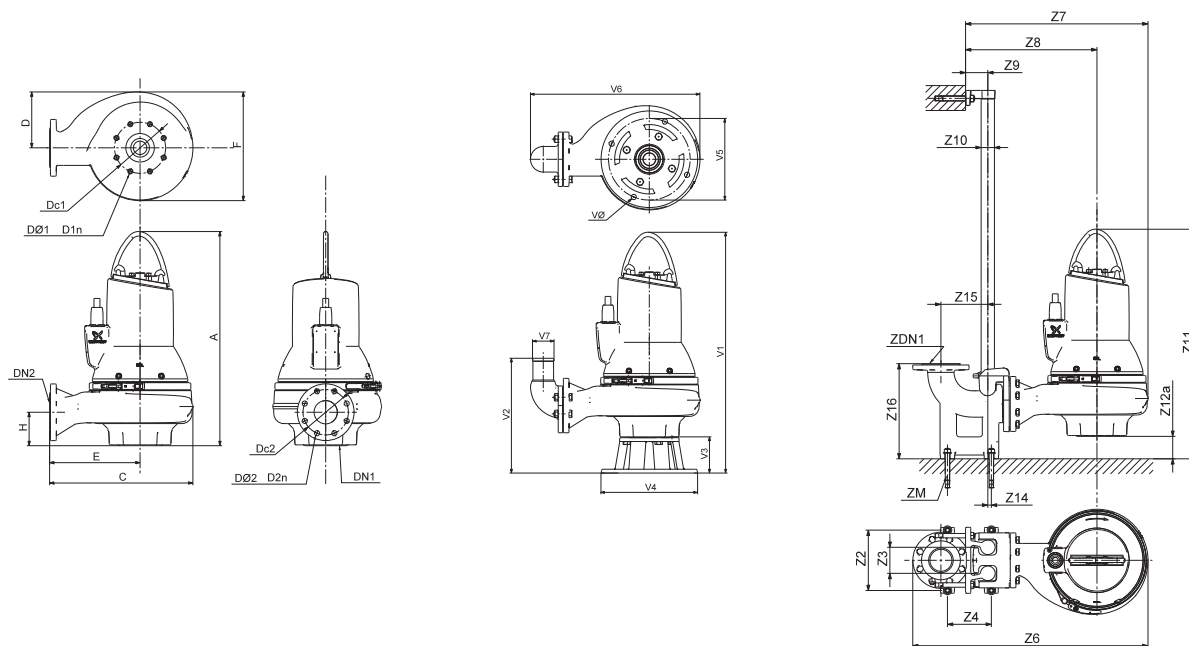
Performance curves SLV.100.100.30



TM04 3546 4608

Technical data

Dimension sketches SLV.100.100.30



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
737	457	200	277	380	134	100	180	8x18	100	180	8x18	125			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	900	674	494	110	2"	844	106	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
867	411	130	355	300	599	100	19								

Electrical data

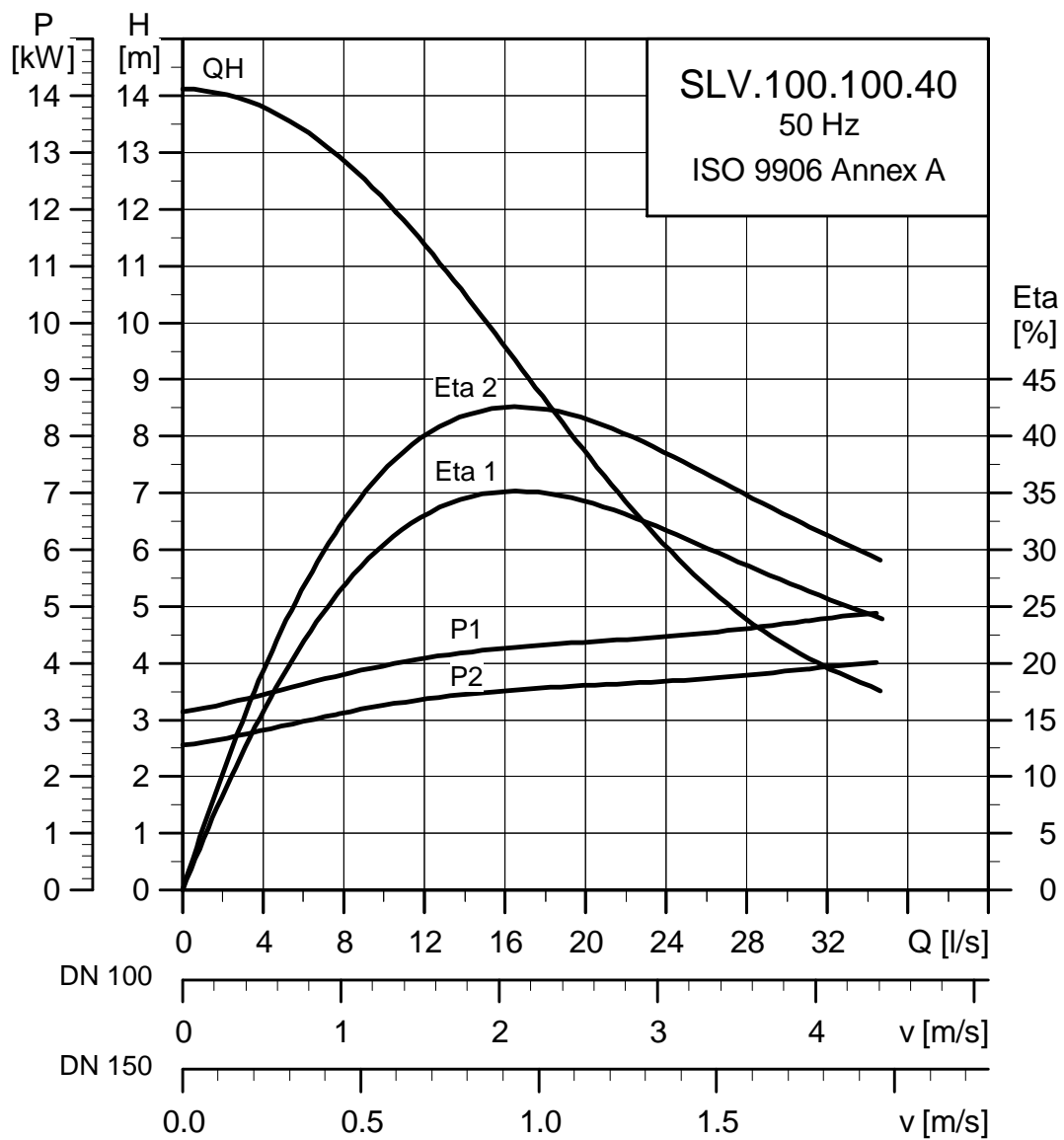
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	η_{motor} [%]			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]		
							I_N [A]	I_{start} [A]	1/2	3/4	1/1	1/2			3/4	1/1
SLV.100.100.30.4.50E	3x220-240V D	3.7	3.0	4	1450	DOL	12.5	87	75.4	79.7	80.7	0.58	0.72	0.78	0.0450	64
SLV.100.100.30.4.51D	3x380-415V D	3.7	3.0	4	1450	SD	7.2	50	75.4	79.7	80.7	0.58	0.72	0.78	0.0450	64
SLV.100.100.30.4.50D	3x380-415V Y	3.7	3.0	4	1450	DOL	7.2	50	75.4	79.7	80.7	0.58	0.72	0.78	0.0450	64
SLV.100.100.30.4.50B	3x400-415V Y	3.7	3.0	4	1450	DOL	7.2	50	75.4	79.7	80.7	0.58	0.72	0.78	0.0450	64

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	100	10	20	20	68	F	40	4-10

Performance curves

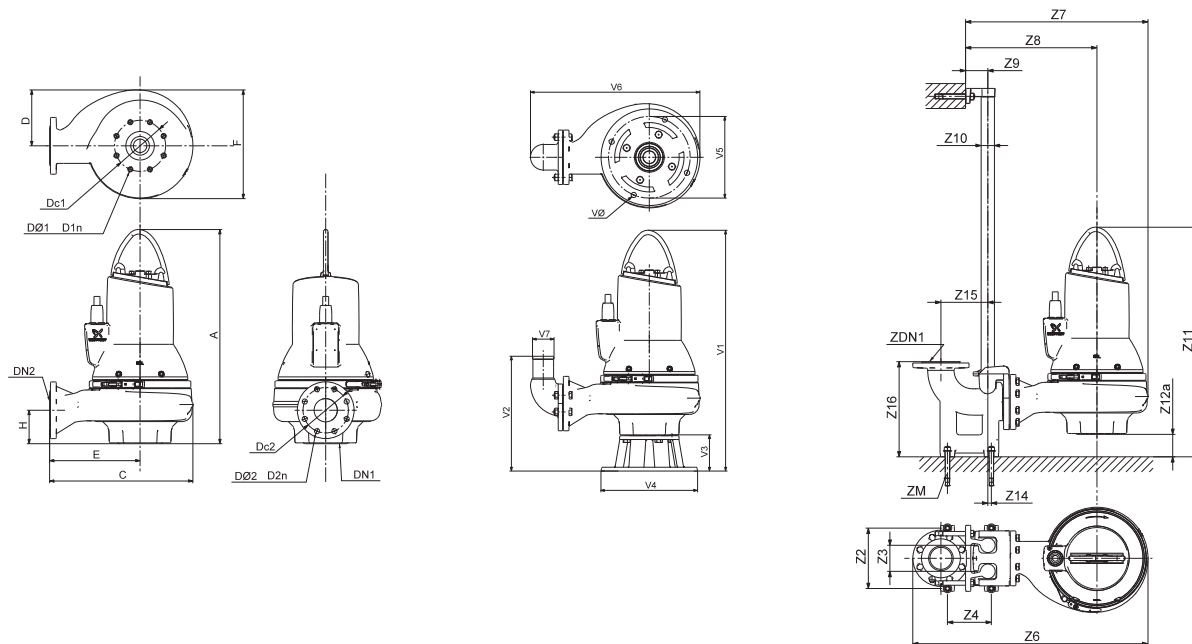
Performance curves SLV.100.100.40



TM04 3547 4608

Technical data

Dimension sketches SLV.100.100.40



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
759	457	200	277	380	134	100	180	8x18	100	180	8x18	130			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	900	674	494	110	2"	866	106	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
889	411	130	355	300	599	100	19								

Electrical data

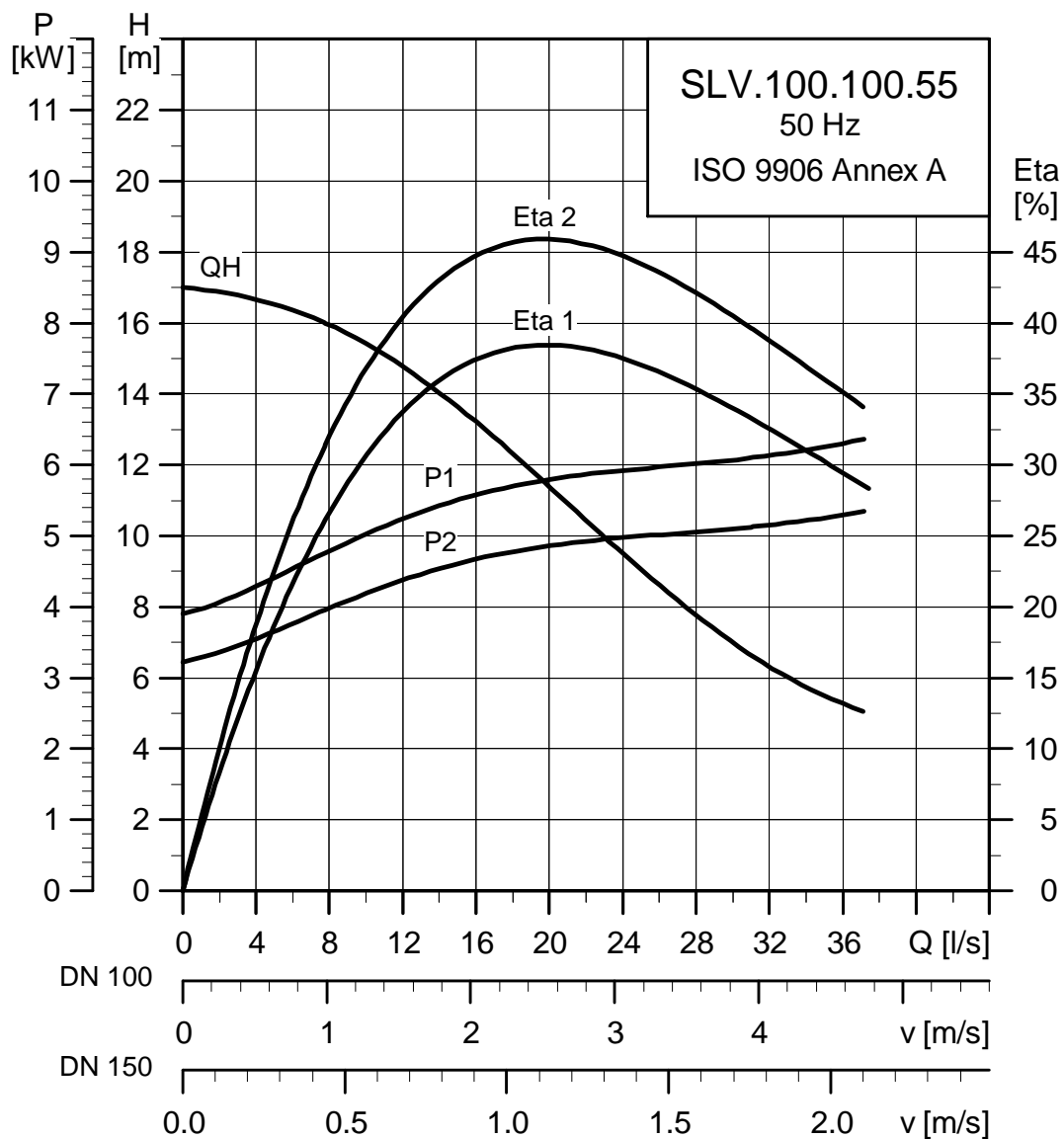
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	I_N			I_{start}			η_{motor} [%]			$\cos \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]
							[A]	[A]	[A]	1/2	3/4	1/1	1/2	3/4	1/1	1/2	3/4	1/1		
SLV.100.100.40.4.51E	3x220-240V D	4.8	4.0	4	1460	SD	16.9	88	78.6	82.3	83.6	0.53	0.66	0.75	0.0501	90				
SLV.100.100.40.4.51D	3x380-415V D	4.8	4.0	4	1460	SD	9.7	51	78.6	82.3	83.6	0.53	0.66	0.75	0.0501	90				
SLV.100.100.40.4.50B	3x400-415V D	4.8	4.0	4	1460	DOL	9.7	51	78.6	82.3	83.6	0.53	0.66	0.75	0.0501	90				

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	100	10	20	20	68	F	40	4-10

Performance curves

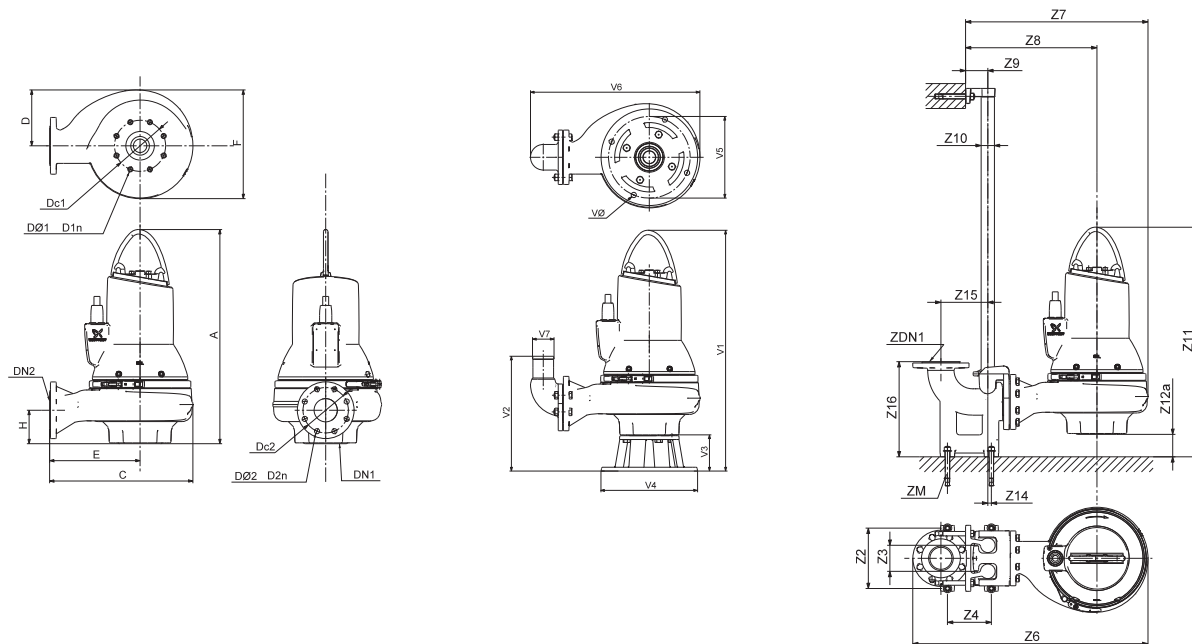
Performance curves SLV.100.100.55



TM04 3548 4608

Technical data

Dimension sketches SLV.100.100.55



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
766	457	200	277	380	134	100	180	8x18	100	180	8x18	136			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	900	674	494	110	2"	873	106	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
896	411	130	355	300	599	100	19								

Electrical data

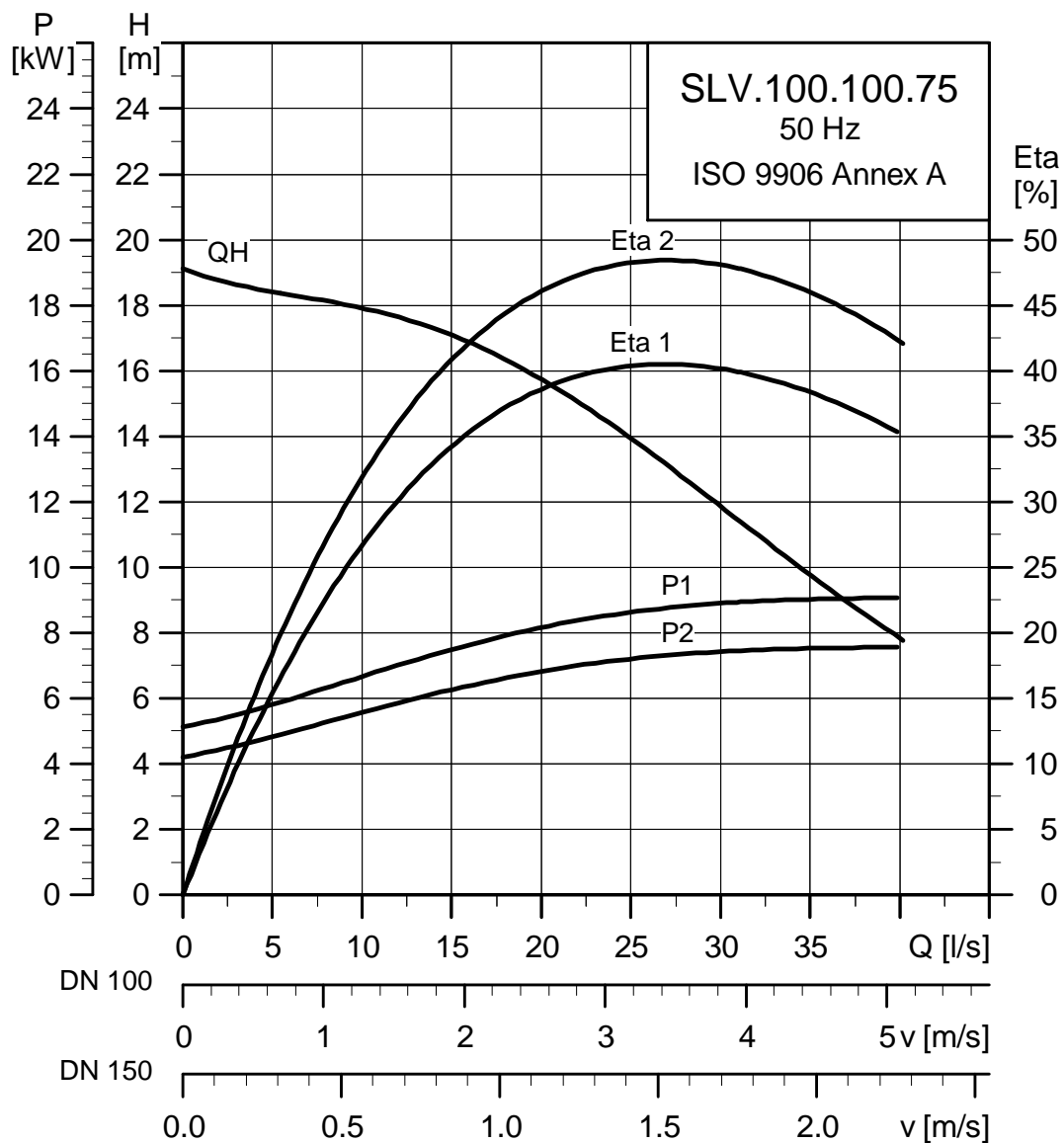
Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	$\eta_{\text{motor}} [\%]$						$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M _{max} [Nm]
							I _N [A]	I _{start} [A]	1/2	3/4	1/1	1/2	3/4	1/1			
SLV.100.100.55.4.51E	3x220-240V D	6.4	5.5	4	1460	SD	20.4	140	82.0	84.8	85.6	0.67	0.77	0.82	0.0552	110	
SLV.100.100.55.4.51D	3x380-415V D	6.4	5.5	4	1460	SD	11.8	81	82.0	84.8	85.6	0.67	0.77	0.82	0.0552	110	
SLV.100.100.55.4.50B	3x400-415V D	6.4	5.5	4	1460	DOL	11.8	81	82.0	84.8	85.6	0.67	0.77	0.82	0.0552	110	

Pump data

Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	100	10	20	20	68	F	40	4-10

Performance curves

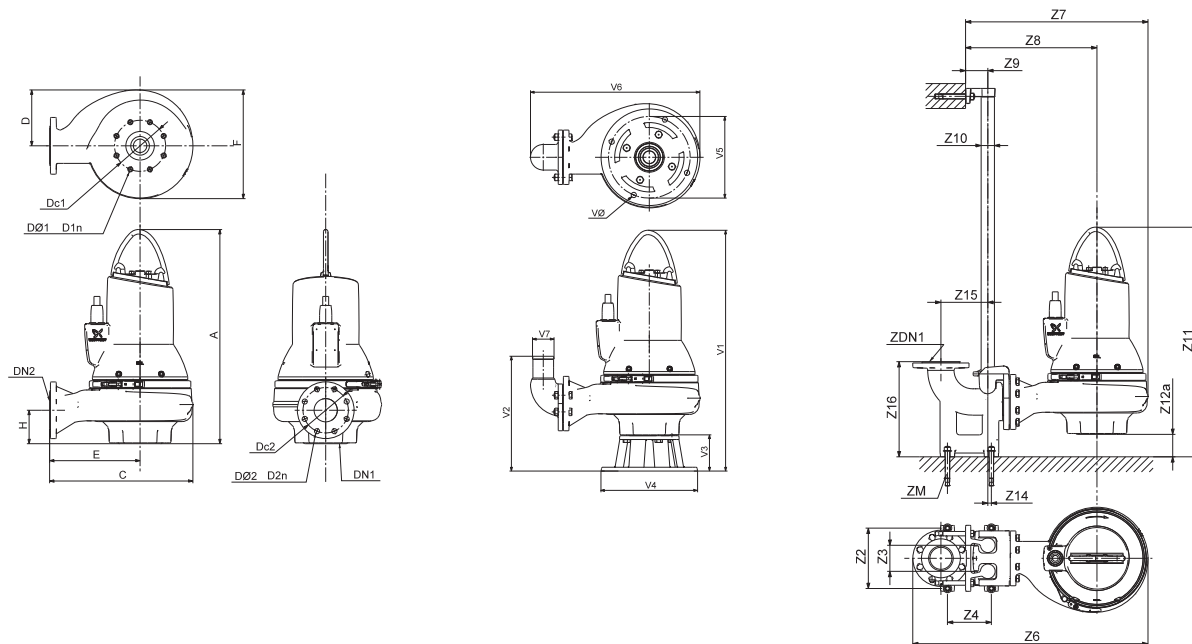
Performance curves SLV.100.100.75



TMD4 3549 4608

Technical data

Dimension sketches SLV.100.100.75



TM04 2793 3008/TM04 2794 3008/TM04 2795 3008

A	C	D	E	F	H	DN1	Dc1	DØ1 D1n	DN2	Dc2	DØ2 D2n	Weight [kg]			
842	490	217	294	413	145	100	180	8x18	100	180	8x18	179			
Z2	Z3	Z4	Z6	Z7	Z8	Z9	Z10	Z11	Z12a	Z14	Z15	Z16	Dc1	DN1	ZM
260	110	270	933	707	511	110	2"	938	95	0	220	413	180	100	4 x M16
V1	V2	V3	V4	V5	V6	V7	VØ								
972	422	130	355	300	632	100	19								

Electrical data





Pump type	Volt [V]	P1 [kW]	P2 [kW]	No of poles	RPM	Starting method	η_{motor} [%]			$\text{Cos } \varphi$			Moment of inertia [kgm ²]	Breakdown torque M_{max} [Nm]		
							I_N [A]	I_{start} [A]	1/2	3/4	1/1	1/2			3/4	1/1
SLV.100.100.75.4.51E	3x220-240V D	8.6	7.5	4	1460	SD	26.3	189	85.7	87.2	87.0	0.72	0.81	0.86	0.0692	141
SLV.100.100.75.4.51D	3x380-415V D	8.6	7.5	4	1460	SD	15.2	109	85.7	87.2	87.0	0.72	0.81	0.86	0.0692	141
SLV.100.100.75.4.50B	3x400-415V D	8.6	7.5	4	1460	DOL	15.2	109	85.7	87.2	87.0	0.72	0.81	0.86	0.0692	141

Pump data






Impeller type	Max. solids size [mm]	Pump housing pressure PN	Max. number of starts per hour	Max. installation depth [m]	Enclosure class	Insulation class	Max. liquid temperature [°C]	pH
Vortex	100	10	20	20	68	F	40	4-10












Accessories

Installation systems











Pictures	Description	Size	Weight	PN	Product number
	Auto-coupling system complete - upper guide rail holder, nuts, bolts, gaskets, guide claw and base	DN 65			96090992
		DN 80			96090993
		DN 80/DN 65			96102238
		DN 100			96090994
		DN 100/DN 80			96102240
		DN 150			96090995
		DN 150/DN 100			96102241
Intermediate guide rail bracket	For guide rails longer than 6 m				96046827
	Hook-up 2"				96004445
Guide rails	Standard pipes. Not delivered by Grundfos.				
 	Ring stand with flanged 90° elbow and hose connection. With bolts, nuts, gaskets and anchor bolts. Cast iron, epoxy-coated.	DN 65/DN 65/2½"			96102253
		DN 65/DN 80/3"			96102378
		DN 80/DN 65/2½"			96102439
		DN 80/DN 80/3"			96102254
		DN 100/DN 80/3"			96102313
		DN 100/DN 100/4"			96102255
		DN 150/DN 100/4" galvanized steel			96102314
		DN 150/DN 150/6" galvanized steel			96102256
		DN 65/DN 65/R 2½			96102379
		DN 65/DN 80/R 3			96102380
		DN 80/DN 65/R 2½			96102440
		DN 80/DN 80/R 3			96102381
		DN 100/DN 80/R 3			96102382
		DN 100/DN 100/R 4			96102383
		DN 150/DN 100/R 4 galvanized steel			96102384
DN 150/DN 150/R 6 galvanized steel			96102385		

Other accessories

Pictures	Description	Size	Weight	PN	Product number
	4 m galvanized lifting chain with lifting link and safety hook. With certificates.		800 kg		96735550
	6 m galvanized lifting chain with lifting link and safety hook. With certificates.				96735553
	8 m galvanized lifting chain with lifting link and safety hook. With certificates.				96735554
	10 m galvanized lifting chain with lifting link and safety hook. With certificates.				96735556
	12 m galvanized lifting chain with lifting link and safety hook. With certificates.				96735557
	4 m stainless steel lifting chain with lifting link and safety hook. With certificates.				96735559
	6 m stainless steel lifting chain with lifting link and safety hook. With certificates.				96735564
	8 m stainless steel lifting chain with lifting link and safety hook. With certificates.				96735566
	10 m stainless steel lifting chain with lifting link and safety hook. With certificates.				96735567
	12 m stainless steel lifting chain with lifting link and safety hook. With certificates.				96735569
	AMD.07.18.1410 mixer, 3 x 400 V, 50 Hz				96113490
	Bracket for wall mounting	2" thread			96115291
	Bracket for floor mounting	2" thread			96115292
	Bracket for suspended mounting	2" thread			96115293
	3 m tube for suspended mounting	2" thread			96115294
	90° elbow Galvanized steel	R2"			96001980
		R/Rp 2½			96001981
		R/Rp 3			96006563
		R/Rp 4			96006564
	Coupling half, Storz coupling Aluminium	Rp 2 for 2" hose			96001982
		Rp 2½ for 2" hose			96001983
		Rp 2½ - 3" hose			96002086
		Rp 3 - 3" hose			96001984
		Rp 4 - 4" hose			96005252
		Rp 6 - 6" hose			96005253
	10 m rubber hose incl. Storz couplings	2"			96001987
		3"			96001989
		4"			96005255
		6"			96005256
	20 m rubber hose incl. Storz couplings	3"			96005259
		4"			96005260
		6"			96005261

Pictures	Description	Size	Weight	PN	Product number
	90° elbow	R/Rp 2			96001990
		R/Rp 2½			96001991
		Rp/Rp 3			96001992
		Rp/Rp 4			96006565
	Flanged 90° elbow	R/Rp 2			96001990
		R/Rp 2½			96001991
	Hexagon nipple	R/Rp 2			96001993
		R/Rp 2½			96001994
	Threaded flange	DN 50, Rp 2			96001993
		DN 65, Rp 2½			96001994
	Bolts, nuts and gaskets	4 of each M16 x 65 mm, DN 50			96004452
		4 of each M16 x 65 mm, DN 65			96001998
	Non-return valve Cast iron ball-type valve	Rp/Rp 2			96002002
	Isolating valve Brass	R/Rp 2			96002005
		R/Rp 2½			96002006
	Isolating valve Cast iron	Rp/Rp 2			96489976
	Non-return valve Cast iron ball-type valve	DN 50			96489974
		DN 65			96002008
	Isolating valve Cast iron	DN 50			96489975
		DN 65			96002010
	LC 107 controller, pneumatic version with bell-shaped level pickups and tube for 1 pump, 1 x 230 V, direct-on-line-starting. With built-in operating capacitors.	3.7 - 12.0 A 30µ			96125595
		1 - 2.9 A			96002467
		1.6 - 5.0 A			96002468
		3.7 - 12.0 A			96002469
		12.0 - 23.0 A			96002470

Pictures	Description	Size	Weight	PN	Product number	
	LCD 107 controller, pneumatic version with bell-shaped level pickups and tube for 2 pumps, 1 x 230 V, direct-on-line-starting. With built-in operating capacitors.	3.7 - 12.0 A 30μ			96125596	
		1 - 2.9 A			96002474	
		1.6 - 5.0 A			96002475	
		3.7 - 12.0 A			96002476	
	LCD 107 controller, pneumatic version with bell-shaped level pickups and tube for 2 pumps, 3 x 400 V, direct-on-line-starting	12.0 - 23.0 A			96002477	
		LC 108 controller for level switches for 1 pump, 1 x 230 V, direct-on-line-starting. With built-in operating capacitors.	3.7 - 12.0 A 30μ			96125597
		1 - 2.9 A			*96433975	
		1.6 - 5.0 A			*96433979	
	LC 108 controller for level switches for 1 pump, 3 x 230 V, direct-on-line-starting	3.7 - 12.0 A			*96433983	
		12.0 - 23.0 A			*96433987	
		1 - 2.9 A			*96433991	
		1.6 - 5.0 A			*96433995	
	LC 108 controller for level switches for 1 pump, 3 x 400 V, direct-on-line-starting	3.7 - 12.0 A			*96433999	
		12.0 - 23.0 A			*96434003	
		LCD 108 controller for level switches for 1 pump, 1 x 230 V, direct-on-line-starting. With built-in operating capacitors.	3.7 - 12.0 A 30μ			96125598
		1 - 2.9 A			*96434023	
	LCD 108 controller for level switches for 2 pumps, 3 x 400 V, direct-on-line-starting	1.6 - 5.0 A			*96434027	
		3.7 - 12.0 A			*96434031	
		12.0 - 23.0 A			*96434035	
		1 - 2.9 A			*96434039	
	LCD 108 controller for level switches for 2 pumps, 3 x 400 V, direct-on-line-starting	1.6 - 5.0 A			*96434043	
		3.7 - 12.0 A			*96434047	
		12.0 - 23.0 A			*96434051	
		* Supplied with English installation and operating instructions. Other languages are available on request.				
	LC 110 controller for electrodes for 1 pump, 1 x 230 V, direct-on-line-starting. With built-in operating capacitors.	3.7 - 12.0 A 30μ			96125599	
		1 - 2.9 A			96484085	
		1.6 - 5.0 A			96484086	
		3.7 - 12.0 A			96484087	
	LC 110 controller for electrodes for 1 pump, 3 x 400 V, direct-on-line-starting	12.0 - 23.0 A			96484088	
		LCD 110 controller for electrodes for 2 pumps, 1 x 230 V, direct-on-line-starting. With built-in operating capacitors.	3.7 - 12.0 A 30μ			96125600
		1 - 2.9 A			96484093	
		1.6 - 5.0 A			96484094	
	LCD 110 controller for electrodes for 2 pumps, 3 x 400 V, direct-on-line-starting	3.7 - 12.0 A			96484095	
		12.0 - 23.0 A			96484096	

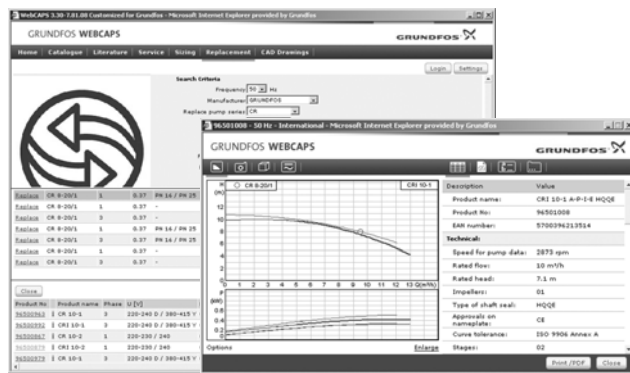
Pictures	Description	Size	Weight	PN	Product number
	CU 100 control box for one pump A models include a float switch for automatic operation.	CU100.230.1.9.30			96076194
		CU100.230.1.9.30.A			96076195
		CU100.230.3.5.A			96076198
		CU100.230.3.12.A			96076199
		CU100.400.3.2,9.A			96076200
		CU100.400.3.5.A			96076201
	For LC 108 and LCD 108 controllers	Float switch with 10 m cable			96003332
		Float switch with 20 m cable			96003695
	For LC 108 and LCD 108 controllers connected to LC-Ex4	Float switch for use in potentially explosive environments, with 10 m cable			96003421
		Float switch for use in potentially explosive environments, with 20 m cable			96003536
	Bracket for float switch				96003338
	Standard float switches with 10 m cable, counter weight and bracket	1 pump without alarm (2 switches)			62500013
		1 pump with alarm (3 switches)			62500014
		2 pumps without alarm (3 switches)			62500014
		2 pumps with alarm (4 switches)			62500015
	Float switches for use in potentially explosive environments, with 10 m cable, counter weight and bracket	1 pump without alarm (3 switches)			62500016
		1 pump with alarm (4 switches)			62500017
		2 pumps without alarm (4 switches)			62500017
	LC-Ex4 intrinsically safe barrier for use in potentially explosive environments, for float switch applications. The LC-Ex4 can be installed at ambient temperatures ranging from -25 °C to +50 °C. Safety class: II (1) G [EEx ia] II °C.				96440300
	Electrodes for LC 110 and LCD 110	1 electrode with 10 m cable			96076289
		3 electrodes with 10 m cable			96076189
		4 electrodes with 10 m cable			91713437
	Bracket for electrodes	To be mounted on a 38 mm pipe			91713196
	Signal lamp, 1 x 230 V	Outdoor mounting			62500020
	Acoustic signal (horn), 1 x 230 V	Outdoor mounting			62500021
		Indoor mounting			62500022



Sizing

This section is based on different fields of application and installation examples, and gives easy step-by-step instructions in how to

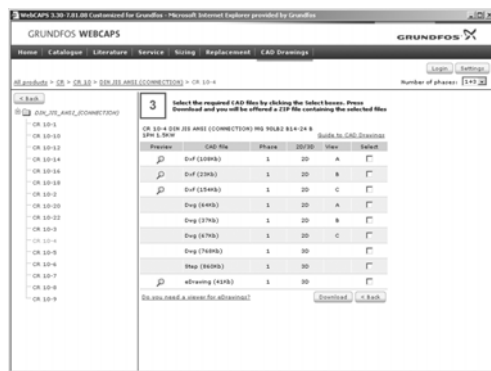
- select the most suitable and efficient pump for your installation
- carry out advanced calculations based on energy consumption, payback periods, load profiles, life cycle costs, etc.
- analyse your selected pump via the built-in life cycle cost tool
- determine the flow velocity in wastewater applications, etc.



Replacement

In this section you find a guide to selecting and comparing replacement data of an installed pump in order to replace the pump with a more efficient Grundfos pump. The section contains replacement data of a wide range of pumps produced by other manufacturers than Grundfos.

Based on an easy step-by-step guide, you can compare Grundfos pumps with the one you have installed on your site. When you have specified the installed pump, the guide will suggest a number of Grundfos pumps which can improve both comfort and efficiency.



CAD drawings

In this section it is possible to download 2-dimensional (2D) and 3-dimensional (3D) CAD drawings of most Grundfos pumps.

These formats are available in WebCAPS:

- 2-dimensional drawings:
- .dxf, wireframe drawings
 - .dwg, wireframe drawings.
- 3-dimensional drawings:
- .dwg, wireframe drawings (without surfaces)
 - .stp, solid drawings (with surfaces)
 - .eprt, E-drawings.

WinCAPS



Fig. 1 WinCAPS CD-ROM

WinCAPS is a **Windows-based Computer Aided Product Selection** program containing detailed information on more than 185,000 Grundfos products in more than 20 languages.

The program contains the same features and functions as WebCAPS, but is an ideal solution if no Internet connection is available.

WinCAPS is available on CD-ROM and updated once a year.

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Subject to alterations.