



## 3.2 Component data

### Main electric hydraulic power packs

Number of power packs:	3
Hydraulic pump type:	HA4VSO 250 DP / 30 R-PPB 25N00-SO585
Pump speed:	1785 rpm
Oil delivery (each power pack):	415 l/min
Hydraulic pressure (differential):	270 bar
Electric motor type:	M2CA 315 LA4
Protection:	IP55
Electric motor rating:	215 kW
Rated normal current:	339 A
Starting current (direct on-line):	2462 A
Power supply:	440V / 60Hz / 3Ph
Heater element supply:	220V / 60Hz / 1Ph

### Jockey pump

Number of power packs:	1
Hydraulic pump type:	PG-KRAL NE 42
Hydraulic pressure (differential):	4.5 bar
Electric motor type:	M2AA 90 L2
Protection:	IP55
Power supply:	440V / 60Hz / 3Ph
Pump speed:	3420 rpm
Oil delivery (each power pack):	97.5 l/min
Electric motor rating:	2.5 kW
Rated normal current:	4.7 A
Starting current (direct on-line):	29.6 A

### Hydraulic oil cooler

Number of coolers:	1
Type:	DPK219/2000
Heat transfer rate:	163 kW
Cooling water inlet temperature:	36 °C
Minimum required cooling water flow:	35 m³/h
Pressure drop at minimum required flow:	13.2 mwc ( $\Delta p$ measuring, $p_1 - p_2$ )
Maximum cooling water flow:	35 m³/h
Pressure drop at maximum flow:	13.2 mwc ( $\Delta p$ measuring, $p_1 - p_2$ )
Maximum cooling water inlet pressure:	40 mwc

For cooling water pressure drop curve ( $\Delta p$  measuring,  $p_1 - p_2$ ), refer to the dimensional drawing of the cooling water accessories supplied by Framo.

## Hydraulic oil transfer unit

Number of transfer units:	1
Transfer pump type:	PG-KRAL CKCR 15U
Hydraulic pressure (differential):	14 bar
Electric motor type:	M2VA 80 C2
Protection:	IP55
Power supply:	440V / 60Hz / 3Ph
Pump speed:	3420 rpm
Oil delivery (each power pack):	36 l/min
Electric motor rating:	1.3 kW
Rated normal current:	2.5 A
Starting current (direct on-line):	15.3 A

## Cargo pumps:

Type SD150-5 DTHH90-B325-S

Number of pumps:	12
Material against cargo:	EN1.4432
Capacity - Head:	300 m <sup>3</sup> /h - 110 mlc
Cargo specific gravity - Viscosity:	0.8 kg/dm <sup>3</sup> - 1.0 cSt
Hydraulic motor type:	A2FM 90/61
Motor speed:	2659 rpm
Oil consumption:	247 l/min
Hydraulic pressure:	248 bar

Type SD100-5 DTHH23-B220-S

Number of pumps:	2
Material against cargo:	EN1.4432
Capacity - Head:	100 m <sup>3</sup> /h - 110 mlc
Cargo specific gravity - Viscosity:	0.8 kg/dm <sup>3</sup> - 1.0 cSt
Hydraulic motor type:	A2FM 23/61
Motor speed:	3880 rpm
Oil consumption:	93 l/min
Hydraulic pressure:	244 bar

## Portable pump:

Type TK80 DUHH16-A168-S

Number of pumps:	1
Material against cargo:	EN1.4432
Capacity - Head:	70 m <sup>3</sup> /h - 70 mlc
Cargo specific gravity - Viscosity:	1.0 kg/dm <sup>3</sup> - 1.0 cSt
Hydraulic motor type:	A2FM 16/61
Motor speed:	4164 rpm
Oil consumption:	72 l/min
Hydraulic pressure:	210 bar

## **Ballast pumps:**

Type SB200-T3 MHH90-A372-S/G

Number of pumps:	2
Material (water side):	EN1.4432 / NS16570
Capacity - Head:	350 m <sup>3</sup> /h - 25 mlc
Specific gravity - Viscosity:	1.025 kg/dm <sup>3</sup> - 1.0 cSt
Hydraulic motor type:	A4FM 90
Motor speed:	1231 rpm
Oil consumption:	115 l/min
Hydraulic pressure:	192 bar

## **Tank cleaning pump:**

Type MA200/150 MHH63-A300-F/G

Number of pumps:	1
Material (water side):	NS16520 / NS16570
Capacity - Head:	100 m <sup>3</sup> /h - 110 mlc
Specific gravity - Viscosity:	1.025 kg/dm <sup>3</sup> - 1.0 cSt
Hydraulic motor type:	A2FM 63/61
Motor speed:	2796 rpm
Oil consumption:	183 l/min
Hydraulic pressure:	210 bar

## **Bow thruster motor:**

Type A4V750

Number of motors:	1
Shaft power:	400 kW
Shaft speed:	1550 rpm
Motor speed:	1550 rpm
Oil consumption:	1224 l/min
Hydraulic pressure:	225 bar

**Note!** *Technical data for other equipment, refer Framo Specification and other actual specifications.*