

Príloha č. 1.: Špecifikácia predmetu zmluvy a zoznam čerpadiel

Servis a opravy čerpadiel zn. KSB

Časť A.: Diagnostika

Diagnostika pozostáva z jednotlivých servisných úkonov a jej účelom je zistenie poruchy zariadenia.

Diagnostika spočíva v kontrole a zistení aktuálneho stavu čerpadla, t. j. najmä no nie výlučne pozostáva z vykonania nasledovných činností:

- rozobratie čerpadla, odspojkovanie hriadeľa, kontrola otočných dielov,
- meranie čerpadla elektročasť,
- kontrola izolačného stavu statora cez kábel a na svorkovnici,
- kontrola olejového priestoru, kontrola motorového priestoru,
- kontrola hydraulickej časti,
- vyčistenie čerpadla,
- odskúšanie čerpadla,
- kontrola tesnosti, kontrola parametrov ošetrovanie konzervačnou látkou,
- vystavenie kontrolného protokolu (v prípade nálezu vystavenie zoznamu odporúčaní),
- výmena oleja, výmena upchávok,
- zloženie čerpadla, zosúosenie, meranie stavu čerpadla,
- vystavenie protokolov z meraní s hodnotiacou správou.

Časť B.: Opravy

Stručný popis požadovaných prác:

- demontáž čerpadiel a odpojenie od armatúr
- prehliadka a vyčistenie všetkých skupín
- dielenská oprava čerpadiel - obnovenie poškodených dielov a výmena ložísk, obežného kolesa, puzdier, upchávok, spojovacieho a tesniaceho materiálu, elementov spojky, sacieho koša;
- dielenská oprava pripojovacích armatúr - obnovenie dielov a výmena spojovacieho tesniaceho materiálu, puzdier, matíc, oprava tesniacich plôch;
- doprava čerpadiel do objektov zhotoviteľa a naspäť do objektov objednávateľa po vykonaní opravy;
- očistenie a obnovenie náteru;
- spätná montáž armatúr, čerpadiel s elektromotorom a nastavenie súososti;
- dodávka vymenených komponentov;
- doplnenie olejových náplní podľa druhu čerpadla a servopohonu;
- likvidácia starých olejov a mazív;
- vykonanie funkčnej skúšky
- odpojenie motorov od elektrickej inštalácie za súčinnosti objednávateľa;
- demontáž motorov;
- očistenie motorov;
- rozobratie motorov;
- výmena ložísk;
- dodávka vymenených komponentov;
- kontrola statora - kontrola vinutia, kontrola magnetického obvodu, vykonanie náteru vinutia elektroizolačným lakom, oprava vonkajšieho náteru a značenia
- kontrola rotora - kontrola magnetického obvodu, kontrola klietky rotora,
- výmena ložísk, vykonanie opravy náteru rotora;
- vykonanie diagnostického merania, najmä meranie izolačného odporu vinutia

- a meranie činného odporu vinutia;
- vykonanie zloženia rozobratého motora;
- dodanie protokolu o vykonaných prácach a o vykonaných meraniach,
- opätovná montáž a pripojenie motorov;
- vykonanie odbornej prehliadky a odbornej skúšky a uvedenie zariadení do prevádzky,
- vykonanie funkčnej skúšky

Zoznam čerpadiel:

čerpadlo	typ	kW
KSB	PNT 550 A-132.6	132
KSB	Ama-Porter 502 ND	1,1
KSB AMAREX	NF 65 004ULG-145	0,8
KSB AMAREX	NF65-220	1,8
KSB AMAREX	F/51-160	2,1
KSB AMAREX	N F65-220/014ULG-175	1,3
KSB OMEGA	V 100-250 B GB G M	55
KSB OMEGA	100-310 B GB G F	132
KSB OMEGA	300-560 B GB G F	400
KSB	ETN 200-150-400 GBKAA11GD505504B	55
KSB	ETN 200-150-200 GC A 10GD301504B	15
KSB	BRE 555/2a motor 14D3403/4	310
KSB	UPA 350-180/2a UMA 300d 250/22	165
KSB Hyamat	SVP 2_1004 B	1,5
KSB	UPA 100	3,2
KSB	UPA 150	do 3.2
KSB	UPA 150	nad 3.5
KSB	UPA 200	do 4.5
KSB	UPA 200	nad 4.5
KSB Guard		

Miesta plnenia predmetu zmluvy: Divízia čistenia odpadových vôd (DČOV), Divízia výroby vody (DVV), Divízia odvádzania odpadových vôd (DOOV).

Cenová ponuka:

Cena za poskytovanie servisných služieb podľa bodu A. prílohy č. 1 tejto zmluvy (diagnostika) kalové čerpadlá (Amarex): 120, do vrtu (UPA): 150, so spojkou ETN: 500, OMEGA: 850..EUR bez DPH

Cena za poskytovanie servisných služieb podľa bodu B. prílohy č. 1 tejto zmluvy (opravy) pozostáva z ceny práce, ceny náhradných dielov a materiálu, spotrebovaného na vykonanie servisu a nákladov na dopravu nasledovne:

Cena práce bude vypočítaná na základe hodinovej sadzby jedného pracovníka za poskytovanie servisných služieb na danom zariadení.....27.....EUR bez DPH

Cena náhradných dielov a materiálu sa spravuje cenníkom náhradných dielov, tvoriacim prílohu č. 2 tejto zmluvy, pričom poskytovateľ sa zaväzuje poskytnúť objednávateľovi dodatočnú zľavu vo výške5..... % z cien, uvedených v tomto cenníku

Dopravné náklady za 1 km.....1,15.....EUR bez DPH

V Bratislave....., dňa 29.6.2022.....

Y
prokurista



Spare Part List - BVS

2022

* pre čerpadlá UPA/BRE, SVP2 a PNT nie je dostupný štandardný balík ND. Rozsah dielov sa určí na základe obhliadky/skutkového stavu

Príloha č. 2

Ama Porter 502ND



Serial No.	Year	Description	Part No.	Designation	ID	Material	Quantity	Weight	Weight Unit	Price
ET8270	2022	AMA-PORTER502 ND	230.0	IMPELLER 120/AP 502-602	39017427	TO MANUFACTURER	1.0	0.8	kg	210,94 €
ET8270	2022	AMA-PORTER502 ND	410.0	Profil joint kit DNS0 NBR60 rep.410X3 (3 pieces) 3XTEIL 410	39080070	NBR 60	1.0	0.02	kg	22,21 €
ET8270	2022	AMA-PORTER502 ND	59-24	Rope d2" d2" S/10m INOX f. Amarex+Ama-Port	50418	1.4401/A276 TP 316	1.0	1.02	kg	230,68 €
ET8270	2022	AMA-PORTER502 ND	81-96	Plug for motor-cable f. Ama-Porter ND	39019927	TO MANUFACTURER	1.0	0.022	kg	15,23 €
ET8270	2022	AMA-PORTER502 ND	834.0	Electrical cable set without float switch f. Ama-Porter 58 54SNE+500ND+600ND + 412.07+914.01 KABEL 10M + 914.04	39018152	TO MANUFACTURER	1.0	1.7	kg	210,94 €
ET8270	2022	AMA-PORTER502 ND	894.0	Bracket DNS0 SA 79 / SD 5 INOX f. Insatllation set guide rail FUER STATIONAERE AUFSTELLUNG	19551768	1.4571	1.0	2.0	kg	290,60 €
ET8270	2022	AMA-PORTER502 ND	99-20	Maintenance-Kit f. Ama Porter 500 + 410 +914 +421 +321.1-.2 +932 +433 +969 +412.07/.10/.15 +433+421+321.01/02+412+932+410 +914.02/03	39017130	TO MANUFACTURER	1.0	0.2	kg	176,25 €

Amarex 51



Description	Part No.	ID	Quantity	Price
SET OF GASKETS AMAREX	99-9		39015448	1 113,80 €
REPAIR KIT F AMAR.50/51-160	99-20		39015788	1 102,81 €
KIT-MECH SEAL AMAREX MS-REP433.01	05-433		39015449	1 136,07 €
KIT-MECH SEAL AMAREX PS - 433.02	05-433		39015450	1 136,07 €
RESERVETEIL AMAREX 50-65-80-100	99-18		39015500	1 642,62 €
LAUFRAD AMAREX F, DURCHM. 155		230	39015413	1 840,57 €

Amarex 65



Description	Part No.	Designation	ID	Material	Quantity	Weight	Weight Unit	Price
AMAREX N F ULGF 65-220	162.0	KIT SUCTION COVER F65-170/220 rep.162+914.03+412.05	39080021	EN-GJL-250	1.0	4.0	kg	277,33 €
AMAREX N F ULGF 65-220	162.0	KIT SUCTION COVER DN65 ANSI AMAREX N rep.162+914.03+412.05	39080179	EN-GJL-250	1.0	4.6	kg	1 086,68 €
AMAREX N F ULGF 65-220	162.0	KIT SUCTION COVER DN65 DIN AMAREX N rep.162+914.03+412.05	39080183	EN-GJL-250	1.0	4.6	kg	460,23 €
AMAREX N F ULGF 65-220	182.0	SET PUMP FOOT AMAREX N DN 50 65 80 100 MATERIALS : 1.4021	39022260	1.4301	1.0	0.4	kg	83,21 €
AMAREX N F ULGF 65-220	230.0	KIT IMPELLER F d2" d2" 145/65-220 rep.230+914.04+	39080055	EN-GJL-250	1.0	2.4	kg	640,21 €
AMAREX N F ULGF 65-220	230.0	KIT IMPELLER G1 F d2" d2" 145 F65/220 AMAREX N rep.230+914.04+	39080138	NORIDUR 1.4593	1.0	2.4	kg	1 274,86 €
AMAREX N F ULGF 65-220	230.0	KIT IMPELLER G2 d2" d2" 145 F65/220 AMAREX N rep.230+914.04+550 TEIL 321.01/02+932.01	39080168	NORIHARD NH153	1.0	2.4	kg	1 008,31 €
AMAREX N F ULGF 65-220	321.0	KIT-DEEP GRV BALL BE AMAREX TEIL 321.01/02+932.01/02	39015451	TO MANUFACTURER	1.0	0.361	kg	246,35 €
AMAREX N F ULGF 65-220	330.0	KIT BEARING BRACKET ULG/1-2 KW rep.330+412.03+914.02+550	39080066	EN-GJL-250	1.0	4.8	kg	646,09 €
AMAREX N F ULGF 65-220	410.0	Profil joint kit DN65 NBR60 rep.410X3 (3 pieces) 3X TEIL 410	39080071	NBR 60	1.0	0.02	kg	29,13 €
AMAREX N F ULGF 65-220	433.01	KIT-MECH SEAL AMAREX MS-REP433.01 TEIL 433.01+932.03	39015449	TO MANUFACTURER	1.0	0.057	kg	136,07 €
AMAREX N F ULGF 65-220	433.02	KIT-MECH SEAL AMAREX PS - 433.02	39015450	TO MANUFACTURER	1.0	0.042	kg	136,07 €
AMAREX N F ULGF 65-220	476.0	SEAT RING HOLDER ULG 115MNPB30+C f. rep.476+412.02	39080074	115MNPB30+C	1.0	0.02	kg	116,25 €
AMAREX N F ULGF 65-220	59-17	SHACKLE 8/500 MATERIALS: 1.4401	1019282	1.4401	1.0	0.1	kg	30,83 €
AMAREX N F ULGF 65-220	69-16	Humidity sensor TEIL 81-56+81-39+914+930	39021300	CUZLN	1.0	0.04	kg	141,55 €
AMAREX N F ULGF 65-220	69-6	KIT TEMPERATURE SENS 140d2" d2" rep.69-6+	39080075	TO MANUFACTURER	1.0	0.004	kg	37,61 €
AMAREX N F ULGF 65-220	69-6	KIT TEMPERATURE SENS 160d2" d2" rep.69-6+	39080076	TO MANUFACTURER	1.0	0.3	kg	33,92 €
AMAREX N F ULGF 65-220	81-2	KIT-PLUG F.MOT.-KABEL TEIL 81-2+81-46	39016800	TO MANUFACTURER	1.0	0.014	kg	62,43 €
AMAREX N F ULGF 65-220	818.0	SPARE PARTS KIT ROTOR 004/014/024 4P-400V ULG rep.818+914.04+550	39080085	1.4021+QT800	1.0	3.8	kg	755,27 €
AMAREX N F ULGF 65-220	82-16	KIT SWITCH GEAR IF-1	39080239	TO MANUFACTURER	1.0	0.4	kg	
AMAREX N F ULGF 65-220	834.0	Cable gland 10m f. Amarex 50+51+65+80+100+Amamix rep.834+412.04 + 914.04 TEIL 834+914.01+412.04	39015445	TO MANUFACTURER	1.0	4.63	kg	403,48 €
AMAREX N F ULGF 65-220	834.0	Cable gland HO7RNF 7X1,5 15m rep.834+412.04+914.01	39021370	TO MANUFACTURER	1.0	5.5	kg	530,80 €
AMAREX N F ULGF 65-220	834.0	Cable gland HO7RNF 7X1,5 - 20M rep.834+412.04+914.04 =11300970	39021371	TO MANUFACTURER	1.0	7.3	kg	613,65 €
AMAREX N F ULGF 65-220	834.0	Cable gland HO7RNF 7X1,5 - 30M rep.834+412.04+914.04	39021373	TO MANUFACTURER	1.0	10.75	kg	570,22 €
AMAREX N F ULGF 65-220	834.0	Cable gland HO7RNF 7X1,5 - 40M rep.834+412.04+914.04	39021374	TO MANUFACTURER	1.0	13.75	kg	997,37 €
AMAREX N F ULGF 65-220	834.0	Cable gland HO7RNF 7X1,5 - 50M rep.834+412.04+914.04	39021375	TO MANUFACTURER	1.0	17.1	kg	813,48 €
AMAREX N F ULGF 65-220	834.0	Cable gland 10m+sonde rep.834+412.04 =39018009	39021376	TO MANUFACTURER	1.0	4.3	kg	750,18 €
AMAREX N F ULGF 65-220	834.0	Cable gland 15m+sonde rep.834+412.04 =39018010	39021377	TO MANUFACTURER	1.0	6.125	kg	865,90 €
AMAREX N F ULGF 65-220	834.0	Cable gland 20m+sonde rep.834+412.04 =39018011	39021378	TO MANUFACTURER	1.0	7.8	kg	1 090,49 €
AMAREX N F ULGF 65-220	834.0	Cable gland 30m+sonde rep.834+412.04	39021380	TO MANUFACTURER	1.0	11.9	kg	1 444,35 €
AMAREX N F ULGF 65-220	834.0	Cable gland 40m+sonde rep.834+412.04	39021381	TO MANUFACTURER	1.0	15.75	kg	1 760,35 €
AMAREX N F ULGF 65-220	834.0	Cable gland 50m+sonde rep.834+412.04	39021382	TO MANUFACTURER	1.0	19.6	kg	1 697,10 €
AMAREX N F ULGF 65-220	99-18	Spare parts kit Amarex-N series Consisting of: Mechanical seal 433 (2x) Bearingset 321 (2x) Gaskets NBR70 411,412 Screwset 914,903,904,932+550	39080091	TO MANUFACTURER	1.0	0.82	kg	484,23 €
AMAREX N F ULGF 65-220	99-20	HEXAGON SOCKET H A2-70 rep.914.01/02/03/04/06+904+903+932.01/02 03/04+550 TEIL 914.01/02/03/04/06+904+903+550 +932.01/02/03/04	39080089	A2-70	1.0	0.017	kg	167,27 €
AMAREX N F ULGF 65-220	99-9	SET OF GASKETS NBR70 rep.412.01/02/03/04/05+411	39080090	TO MANUFACTURER	1.0	0.02	kg	100,05 €



ID	Quantity	Part No.	Description	Price
1709550	1	102	VOLUTE CASING 200-150-200	4 828,80 €
1331153	1	920	HEXAGON NUT M12	5,36 €
1491114	1	161	CASING COVER 35-200.1	1 076,40 €
101982	1	183	SUPPORT FOOT A 110X 193	110,78 €
47078083	1	210	SHAFT 45X 513	1 259,52 €
1331156	1	920	HEXAGDN NUT M 24X1,5	24,32 €
1331199	1	930	SPRING WASHER 8 24	5,36 €
1331117	1	940	PARALLEL KEY A 8X 7X 65	18,30 €
1331119	1	940	PARALLEL KEY A 8X 7X 55	5,36 €
1331093	1	940	PARALLEL KEY A 10X 8X 55	5,36 €
1490380	1	230	IMPELLER 150-200	5 405,26 €
1018690	1	321	DEEP GRV BALL BEAR 6307-22 C3	23,68 €
1018690	1	321	DEEP GRV BALL BEAR 6307-22 C3	23,68 €
1455473	1	330	BEARING BRACKET W5 35	2 136,42 €
1018690	1	321	DEEP GRV BALL BEAR 6307-22 C3	23,68 €
1018690	1	321	DEEP GRV BALL BEAR 6307-22 C3	23,68 €
47077662	1	360	BEARING COVER 36/85X14	15,98 €
47077662	1	360	BEARING COVER 36/85X14	15,98 €
336283	1	411	V-RING V- 35 5	17,90 €
336283	1	411	V-RING V- 35 5	17,90 €
200922	1	550	WASHER 6-200 HV	5,36 €
1331689	1	554	LOCK WASHER 8 M 6	5,36 €
1331690	1	554	LOCK WASHER 8 M B	5,36 €
1331687	1	81-92	COVER PLATE WS35 LEFT	11,18 €
1331688	1	81-92	COVER PLATE WS35 RIGHT	11,18 €
1331066	1	901	HEXAGON HEAO SCREW M 12 X 20	5,36 €
1331170	1	901	HEXAGON HEAO SCREW M 8 X 50	5,36 €
1345164	1	901	HEXAGON HEAO SCREW 8 M 6 X 30 - 25	5,36 €
1331535	1	901	HEXAGON HEAD SCREW 8 M 6 X 25 - 20	5,36 €
1331691	1	901	HEXAGON HEAO SCREW 8 M 8 X 16 - 8	5,36 €
1331101	1	914	BUTTON HEAD SCREW M 8 X 12	5,36 €
180081	1	920	HEXAGON NUT M 24X1,5	5,36 €
200244	1	930	SPRING WASHER 8 24	5,36 €
200694	1	932	CIRCLIP 80 X 2,5	5,36 €
200694	1	932	CIRCLIP 80 X 2,5	5,36 €
1331107	1	940	PARALLEL KEY A 8X 7X 55	5,36 €
1331093	1	940	PARALLEL KEY A 10X 8X 55	5,36 €
47077662	1	360	BEARING COVER 36/85X14	15,98 €
47077662	1	360	BEARING COVER 36/85X14	15,98 €
1706547	1	400	GASKET 227/237X 1	29,10 €
135144	1	400	GASKET 28 / 33 X0,3	5,36 €
336283	1	411	V-RING V- 35 5	17,90 €
336283	1	411	V-RING V- 35 5	17,90 €
1044571	1	433	MECHANICAL SEAL-KSB NU 038 50-1	376,68 €
271629	1	502	CASING WEAR RING 200/215X15	228,58 €
270072	1	502	CASING WEAR RING 190/205X15	217,84 €
1038921	1	05-523	KIT-SHAFT SLEEVE A 28,4/ 38X 55	218,56 €
135144	1	400	GASKET 28 / 33 X0,3	5,36 €
1494790	1	81-92	COVER PLATE WS35 SET	20,48 €
200922	1	550	WASHER 6-200 HV	5,36 €
1331689	1	554	LOCK WASHER 8 M 6	5,36 €
1331690	1	554	LOCK WASHER 8 M B	5,36 €
1331687	1	81-92	COVER PLATE WS35 LEFT	11,18 €
1331688	1	81-92	COVERPLATE WS35 RIGHT	11,18 €
1331691	1	901	HEXAGON HEAD SCREW 8 M 8 X 16 - 8	5,36 €
1331535	1	901	HEXAGON HEAD SCREW 8 M 6 X 25 - 20	5,36 €
1345164	1	901	HEXAGON HEAD SCREW 8 M 6 X 30 - 25	5,36 €
326067	1	861	COUPL PART FLEX A 110X 32 H7	119,26 €
326492	1	861	SPACER SLEEVE ASS D 110-140X 42 H7	609,24 €
1331066	1	901	HEXAGON HEAD SCREW M 12 X 20	5,36 €
1331170	1	901	HEXAGON HEAD SCREW M 8 X 50	5,36 €
124406	1	902	STUD M 12 X 50	25,54 €
1032320	1	903	PLUG R 1/2	5,36 €
1032320	1	903	PLUG R 1/2	5,36 €
1331101	1	914	BUTTON HEAD SCREW M 8 X 12	5,36 €
1331153	1	920	HEXAGON NUT M12	5,36 €
1331156	1	920	HEXAGON NUT M 24X1,5	24,32 €
1331199	1	930	SPRING WASHER 8 24	5,36 €
200694	1	932	CIRCLIP 80 X 2,5	5,36 €
200694	1	932	CIRCLIP 80 X 2,5	5,36 €
1331119	1	940	PARALLEL KEY A 8X 7X 55	5,36 €
1331093	1	940	PARALLEL KEY A 10X 8X 55	5,36 €
1513436	1	05-433	KIT-MECH SEAL ETN-WS35-10	725,34 €
135140	1	400	GASKET 338 /348 X1	42,34 €
1066808	1	400	GASKET 271 /281 X1	35,66 €
1706547	1	400	GASKET 227/ 237X 1	29,10 €
135144	1	400	GASKET 28 / 33 X0,3	5,36 €
1044571	1	433	MECHANICAL SEAL-KSB NU 038 50-1	376,68 €
1038921	1	05-523	KIT-SHAFT SLEEVE A 28,4/ 38X 55	218,56 €
1513467	1	05-300	KIT-BEARING ETN-WS35-10+321	840,08 €
1018690	1	321	DEEP GRV BALL BEAR 6307-22 C3	23,68 €
135140	1	400	GASKET 338 /348 X1	42,34 €
1066808	1	400	GASKET 271 /281 X1	35,66 €
1706547	1	400	GASKET 227/ 237X 1	29,10 €
135144	1	400	GASKET 28 / 33 X0,3	5,36 €
336283	1	411	V-RING V- 35 5	17,90 €
1044571	1	433	MECHANICAL SEAL-KSB NU 038 50-1	376,68 €
1038921	1	05-523	KIT-SHAFT SLEEVE A 28,4/ 38X 55	218,56 €
200694	1	932	CIRCLIP 80 X 2,5	5,36 €

Etanorm 200-150-400



Part No.	Designation	ID	Material	Quantity	Weight	Weight Un	Price
102.0	Volute casing 200-150-400 JL1040 + 502.01 Standard JL + 902.01/920.01 = 8.8 4 Drillings/closed ACS-Authorised	1709442	EN-GJL-250/A48 CL 35B	1.0	118.7	kg	5 377,04 €
161.0	CASING COVER 55/60-400 JL1040 Mechanical seal standard + 502.02 Standard JL + 902.15/920.15 = 8.8 ACS-Authorised	1467281	EN-GJL-250/A48 CL 35B	1.0	28.5	kg	2 653,56 €
183.0	Support foot A 110X207 ZN884 S235JRG2 	101983	ST	1.0	2.1	kg	129,37 €
210.0	SHAFT 6SX 588 C45+N WSSS-Standard + 920.95+930.95+940.01/.02/.09	47078086	C45+N	1.0	9.2	kg	2 467,86 €
321.01	Deep groove ball bearing 6311-2 Z C3 DIN625 steel	1018688	ST	1.0	1.42	kg	75,96 €
321.02	Deep groove ball bearing 6311-2 Z C3 DIN625 steel	1018688	ST	1.0	1.42	kg	75,96 €
330.0	BEARING BRACKET WS 55 JL1040 complete - Shaft C45+N Grease standard	1455472	EN-GJL-250/A48 CL 35B	1.0	23.4	kg	3 214,29 €
360.01	Bearing cover 56/125X13 DC01-A for grease lubrication SU 55	47077666	DC01-A	1.0	0.6	kg	35,27 €
360.02	Bearing cover 56/125X13 DC01-A for grease lubrication SU 55	47077666	DC01-A	1.0	0.6	kg	35,27 €
400.1	Gasket 423/433X1 DPAF 	135141	DPAF DW001	1.0	0.008	kg	50,79 €
400.75	Gasket 38/43X0.3 DPAF 	135145	DPAF DW001	1.0	0.001	kg	5,08 €
411.01	SEALING RING A 21 X 26	1331129	A4/AISI 316	1.0	0.002	kg	5,08 €
411.02	SEALING RING A 21 X 26	1331129	A4/AISI 316	1.0	0.002	kg	5,08 €
411.03	SEALING RING A 21 X 26	1331129	A4/AISI 316	1.0	0.002	kg	5,08 €
411.04	SEALING RING A 21 X 26	1331129	A4/AISI 316	1.0	0.002	kg	5,08 €
411.77	V-Ring V-55 S ZN361 NBR60 	336287	NBR 60	1.0	0.005	kg	18,26 €
411.78	V-Ring V-55 S ZN361 NBR60 	336287	NBR 60	1.0	0.005	kg	18,26 €
433.0	Mechanical seal-KSB NU048SD-1 ZN1181 BQ1EGG-WA Code ..11	1044702	BQ1EGG-WA	1.0	0.27	kg	572,88 €
502.01	WEAR RING 210/230X20 JL Standard	270418	JL/LAMELLAR GRAPHITE CAST IRON	1.0	1.5	kg	279,21 €
502.02	WEAR RING 180/195X15 JL Standard	270068	JL/LAMELLAR GRAPHITE CAST IRON	1.0	0.49	kg	207,10 €
523.0	SHAFT SLEEVE A 38.4/ 48X 65 1.4571 WSSS-Standard + 400.75	1503335	(CRNIMO ST INT)	1.0	0.213	kg	437,07 €
81-92	COVER PLATE WSSS SET	1494791	ST+Z	1.0	0.128	kg	23,16 €
861.0	Coupling part A 160X42 H7 ZN3207A JL1040 + flexible elements	326186	EN-GJL-250	1.0	4.7	kg	315,68 €
861.0	Spacer sleeve assembly D 160-140X65 H7 ZN3207E JL1040	326618	EN-GJL-250	1.0	11.5	kg	1 206,66 €
901.04	HEXAGON HEAD SCREW M 12 X 20	1331066	ST	1.0	0.035	kg	5,08 €
901.3	HEXAGON HEAD SCREW M12 X 40	1350648	ST+A2A	2.0	0.045	kg	5,08 €
901.31	HEXAGON HEAD SCREW M 8 X 50	1331170	ST+A2A	2.0	0.022	kg	5,08 €
902.01	Stud M 16X45 DIN939 8.8 	121243	8.8	16.0	0.087	kg	5,08 €
903.01	screwed plug G 1/2 A DIN910 steel 	170069	ST	1.0	0.069	kg	5,08 €
903.02	screwed plug G 1/2 A DIN910 steel 	170069	ST	1.0	0.069	kg	5,08 €
903.03	screwed plug G 1/2 A DIN910 steel 	170069	ST	1.0	0.069	kg	5,08 €
903.04	screwed plug G 1/2 A DIN910 steel 	170069	ST	1.0	0.069	kg	5,08 €
914.02	BUTTDN HEAD SCREW M 10 X 16	1331056	ST+A2A	3.0	0.021	kg	5,08 €
920.01	HEXAGON NUT M16	1331154	8+A2A/ 8+B633 SC1 TP3	16.0	0.017	kg	5,08 €
920.15	HEXAGON NUT M12	1331153	8+A2A/ 8+B633 SC1 TP3	8.0	0.015	kg	5,37 €
920.95	HEXAGON NUT M 30X1,5	1331187	A4/AISI 316	1.0	0.215	kg	28,35 €
930.95	SPRING WASHER B 30	1331200	1.4310/AISI 301	1.0	0.029	kg	11,93 €
932.01	Circlip 120X4 DIN472 FST+PHR 	200702	SPRING STEEL+PHR	1.0	0.077	kg	5,08 €
932.02	Circlip 120X4 DIN472 FST+PHR 	200702	SPRING STEEL+PHR	1.0	0.077	kg	5,08 €
940.01	PARALLEL KEY A 10X 8X 60	1331118	1.4571+C/A276 TP 316 COND B	1.0	0.038	kg	10,79 €
940.02	PARALLEL KEY A 12X 8X 75	1331094	C45+C/A311 GR 1045 CLASS A	1.0	0.057	kg	5,98 €
940.09	PARALLEL KEY A 10X 8X 60	1331118	1.4571+C/A276 TP 316 COND B	1.0	0.038	kg	1 136,67 €
99-28.2	SPARE PARTS KIT Mechanical seal ETN-W555-11+321 consist of: 1 x 433 Mechanical seal BQ1EGG-WA + 1 x 523 Shaft sleeve + 400.75 2 x 400.10 Gasket 2 x 321.01/02 Grooved ball bearing GREASE 2 x 411.77/78 V-Ring 2 x 932.01/02 Circlip	1513510	TO MANUFACTURER	1.0	1.9	kg	1 420,77 €

Omega 100-310B



Description	Part No.	Designation	ID	Material	Quantity	Weight	Weight Unit	Price
Omega 100-310 B GB G F	102.0	VOLUTE CASING 100 - 310	19201912	EN-GJS-400-1S	1.0	182.0	kg	7 223,03 €
Omega 100-310 B GB G F	145.0	ADAPTER S 2S1X 65	80060413	S235JR	1.0	2.1	kg	80,31 €
Omega 100-310 B GB G F	211.0	A-PUMP SHAFT 000A DW40 H	19553514	1.4021+QT800/20CR13+QT800	1.0	5.9	kg	790,29 €
Omega 100-310 B GB G F	234.0	DOUBLE-ENTRY-IMP D2VAR./100-250/310	11304111	CC480K DW	1.0	25.1	kg	6 509,73 €
Omega 100-310 B GB G F	41-1.09	SEAL DISK 16X6,5X1	1228912	A2	3.0	0.006	kg	5,37 €
Omega 100-310 B GB G F	411.21	Joint ring A 8X11.5 DIN7603 DPAF	1015232	DPAF	2.0	0.01	kg	5,08 €
Omega 100-310 B GB G F	430.0	SHAFT SEAL DW40 4OM050 HGB	1617428	EN-GJL-250	1.0	18.5	kg	4 147,04 €
Omega 100-310 B GB G F	500.02	RING A 251	80015655	DC01-A	1.0	0.94	kg	142,39 €
Omega 100-310 B GB G F	502.0	CASING WEAR RING 180/ 195X 18	80059042	(CC493K)	2.0	0.75	kg	262,72 €
Omega 100-310 B GB G F	550.1	WASHER B 17-140 HV DIN125 ST A2A -	201796	ST+A2A	6.0	0.011	kg	5,08 €
Omega 100-310 B GB G F	550.19	Washer 6-200 ISO7089 A4 -	200038	A4	3.0	0.001	kg	5,08 €
Omega 100-310 B GB G F	561.01	GROOVED PIN 8 X 22	210723	ST	4.0	0.01	kg	5,08 €
Omega 100-310 B GB G F	680.0	GUARD A 251X 292	80017296	DC01-A	1.0	1.4	kg	301,89 €
Omega 100-310 B GB G F	719.01	FLEXIBLE TUBE 1/4IN X 360	1005417	ST+E-PLAT ZN-PTFE	2.0	0.1	kg	58,72 €
Omega 100-310 B GB G F	720.04	SPECIAL PIPE PAR G 1/2AXG 1/4A	1532550	ST+E-PLAT ZN	2.0	0.06	kg	10,78 €
Omega 100-310 B GB G F	731.02	DOPPELNIPPEL 280- 1/2 DOUBLE NIPPLE Material: GTW-40-05	240854	FE-A	1.0	0.057	kg	5,08 €
Omega 100-310 B GB G F	731.03	CROSS C1 - 1/2	240509	FE-A	1.0	0.12	kg	394,51 €
Omega 100-310 B GB G F	81-99.22	Electrical part 22X22X26 PA -	1230859	PA	8.0	0.001	kg	5,08 €
Omega 100-310 B GB G F	861.01	JAW C 160X 35 H7	1021170	EN-GJL-250	1.0	5.693	kg	394,51 €
Omega 100-310 B GB G F	861.02	Coupling part A 160X65 H7 ZN3207A JL1040 + flexible elements	326195	EN-GJL-250	1.0	3.9	kg	175,54 €
Omega 100-310 B GB G F	89-4.03	SHIM A	500290	ST	6.0	0.75	kg	30,41 €
Omega 100-310 B GB G F	901.21	hexagon head bolt M 16X20 ISO4017 A4-70 -	1051979	A4-70	1.0	0.064	kg	5,08 €
Omega 100-310 B GB G F	904.0	Grub screw M 10X12 ISO4029 45H -	171668	45 H	1.0	0.01	kg	5,08 €
Omega 100-310 B GB G F	904.0	Grub screw M 10X16 ISO4029 45H -	170905	45 H	1.0	0.02	kg	5,08 €
Omega 100-310 B GB G F	914.09	HEX SOCKET SCREW M 6 X 40	140149	A4-70	3.0	0.011	kg	16,95 €
Omega 100-310 B GB G F	914.21	Halb round head screw M 5X8 ISO7380 10.9+A2A	1230021	010.9+A2A	1.0	0.001	kg	5,08 €
Omega 100-310 B GB G F	920.1	Hexagon nut M 16 ISO4032 8+A2A	182492	8 +A2A	6.0	0.03	kg	5,08 €

Omega 300-560B



Description	Part No.	Designation	ID	Material	Quantity	Weight	Weight Unit	Price
Omega 300-560 B GB G F	102.0	VOLUTE CASING 300 - 560/D	19201903	EN-GJS-400-15	1.0	1229.0	kg	41 255,31
Omega 300-560 B GB G F	211.0	A-PUMP SHAFT 000A DW90 H	19553528	1.4021+QT800/20CR13+QT800	1.0	68.0	kg	7 613,85
Omega 300-560 B GB G F	234.0	DOUBLE-ENTRY-IMP D2VAR./300-560/700	11304133	CC480K DW	1.0	156.0	kg	23 314,33
Omega 300-560 B GB G F	411.21	Joint ring A 8X11.S DIN7603 DPAF	1015232	DPAF	2.0	0.01	kg	5,08
Omega 300-560 B GB G F	430.0	SHAFT SEAL DW90 4OM110 HGB	1617433	EN-GJL-250	1.0	100.2	kg	9 608,22
Omega 300-560 B GB G F	502.0	CASING WEAR RING 335/ 355X 35	80059049	(CC493K)	2.0	3.5	kg	637,34
Omega 300-560 B GB G F	561.01	GROOVED PIN 10 X 26	1050990	ST	4.0	0.015	kg	5,08
Omega 300-560 B GB G F	719.01	FLEXIBLE TUBE 1/4IN X 770	1005422	ST+E-PLAT ZN-PTFE	2.0	0.23	kg	72,66
Omega 300-560 B GB G F	720.04	SPECIAL PIPE PAR G 1/2AXG 1/4A	1532550	ST+E-PLAT ZN	2.0	0.06	kg	10,78
Omega 300-560 B GB G F	720.2	BARREL NIPPLE R 1/2 X 120	251430	1.4571	2.0	0.16	kg	16,51
Omega 300-560 B GB G F	731.02	DOPPELNIPPEL 280- 1/2 DOUBLE NIPPLE Material: GTW-40-05	240854	FE-A	1.0	0.057	kg	5,08
Omega 300-560 B GB G F	731.03	CROSS C1 - 1/2	240509	FE-A	1.0	0.12	kg	21,99
Omega 300-560 B GB G F	731.03	DOPPELNIPPEL 280- 1/2 DOUBLE NIPPLE Material: GTW-40-05	240854	FE-A	1.0	0.057	kg	5,08
Omega 300-560 B GB G F	743.01	BALL VALVE 835-1/2	1052621		1.0	0.0	kg	131,32
Omega 300-560 B GB G F	743.2	BALL VALVE 835-1/2	1052621		2.0	0.0	kg	131,32
Omega 300-560 B GB G F	81-99.22	Electrical part 22X22X26 PA -	1230859	PA	8.0	0.001	kg	5,08
Omega 300-560 B GB G F	914.21	Halb round head screw M 5X8 ISO7380 10.9+A2A	1230021	010.9+A2A	1.0	0.001	kg	5,08
Omega 300-560 B GB G F	99-11	BEARING 90 HF	19553508	EN-GJL-250	1.0	62.5	kg	8 571,77



ID	Part No.	Description	Price
19201911	102	VOLUTE CASING 100 - 250	6 762,26 €
1005338	901	HEXAGON HEAD BOLT M16 X 100	9,58 €
1005344	901	HEXAGON HEAD SCREW M16 X 80	9,58 €
1008573	903	SCREW PLUG R 1/2	11,18 €
80060413	145	ADAPTER 5 251X 65	80,40 €
19553713	04-211	A-PUMP SHAFT 000A DW40 V	2 139,16 €
80060230	211	PUMP SHAFT 40X590	2 261,30 €
372154	412	O-RING 32,00X 3,00-N-8	10,06 €
80060419	550	DISC 31 / 65X 4	65,42 €
141059	914	HEX SOCKET SCREW M 6 X 10	5,36 €
1005828	920	SLOTTED ROUND NUT A M 30X1,5	199,28 €
139334	930	SERRATED LOCK WASHER A 6,4	5,36 €
200636	932	CIRCLIP 35 X 1,5	5,36 €
80071226	940	PARALLEL KEY 12X 8X 76	14,02 €
80071220	940	PARALLEL KEY 10X 8X 85	5,36 €
1015621	950	DISC SPRING 8 63	74,36 €
11304111	234	DOUBLE-ENTRY-IMP D2VAR./100-250/310	5 891,56 €
1228912	41-1	SEAL DISK 16X6,5X1	5,36 €
336286	411	V-RING V- 50 5	29,36 €
370092	412	O-RING 43,70X 3,00-N-8	5,36 €
375558	412	O-RING 150,00X 5,00-N-8	24,18 €
1424397	433	MEC SEAL-BURGMANN KU0505-M7N4	1 284,42 €
80072480	457	NECK RING 58/ 70X 12	66,14 €
11304165	471	SEAL COVER 51/ 145X 40	271,84 €
1172660	525	SPACER SLEEVE 50/ 56X 46,5	316,24 €
210723	561	GROOVED PIN 8 X 22	5,36 €
1030893	901	HEXAGON HEAD SCREW M12 X 50	5,36 €
1008618	903	SCREW PLUG R 1/4	12,42 €
80015655	500	RING A 251	142,52 €
80059042	502	CASING WEAR RING 180/ 195X 18	262,80 €
200038	550	WASHER 6-200 HV	5,36 €
200043	550	WASHER 16-200 HV	5,36 €
1008176	560	SPIRAL PIN 14 X 50	5,36 €
210723	561	GROOVED PIN 8 X 22	5,36 €
80017299	680	GUARD A 251X 244	270,02 €
1005417	719	FLEXIBLE TUBE 1/4IN X 360	58,78 €
1005417	719	FLEXIBLE TUBE 1/4IN X 360	58,78 €
1532550	720	SPECIAL PIPE PAR G 1/2AXG 1/4A	10,80 €
240854	731	HEXAGON NIPPLE N8 - 1/2	5,36 €
240002	731	LONG SWEEP BEND G4 - 1/4	14,76 €
240398	731	T-PIECE B1- 1/2	11,18 €
1034968	861	JAW C 180X 60 H7	607,86 €
326219	861	COUPL PART FLEX A 180X 35 H7	245,88 €
500290	89-4	SHIM A	30,46 €
112598	901	HEXAGON HEAD SCREW M 12 X 70	5,36 €
110705	901	HEXAGON HEAD SCREW M16 X 35	11,18 €
110640	901	HEXAGON HEAD SCREW M16 X 60	5,36 €
111831	901	HEXAGON HEAD SCREW M16 X 50	5,36 €
111831	901	HEXAGON HEAD SCREW M16 X 50	5,36 €
1008178	901	HEXAGON HEAD SCREW M 12 X 40	5,36 €
80072085	901	HEXAGON HEAD BOLT G 1/4 X 47	38,24 €
110687	901	HEXAGON HEAD SCREW M16 X 40	11,18 €
111831	901	HEXAGON HEAD SCREW M16 X 50	5,36 €
171675	904	GRUB SCREW M12 X 16	5,36 €
140149	914	HEX SOCKET SCREW M 6 X 40	17,08 €
182492	920	HEXAGON NUT M16	5,36 €
182492	920	HEXAGON NUT M16	5,36 €
182492	920	HEXAGON NUT M16	5,36 €
11305913	160	COVER 30294	607,92 €
1018690	321	DEEP GRV BALL BEAR 6307-22 C3	23,68 €
1719681	350	BEARING HOUSING DW40	752,90 €
11305907	350	BEARING HOUSING DW 40/165	1 433,60 €
80059098	360	BEARING CO R 72/ 125X 16	294,58 €
1228912	41-1	SEAL DISK 16X6,5X1	5,36 €
1005708	412	O-RING 85,00X 5,30-N-8-D0850	16,40 €
375558	412	O-RING 50,00X 5,00-N-8	24,18 €
370092	412	O-RING 43,70X 3,00-N-8	5,36 €
291167	421	ROT SHAFT LIP SEAL A 35X 52X 7	30,32 €
291104	421	ROT SHAFT LIP SEAL A 50X 72X 8	41,44 €
80063133	524	SFT PROT SLEEVE 40/ 53X 197	898,16 €
80060455	525	SPACER SLEEVE 40/ 50X 73,9	412,98 €
80041047	545	BEARING BUSH C 35	1 901,48 €
1001220	550	SUPPORTING RING 5 35 X 45	5,36 €
1001218	550	SHIM RING 63X 80X2	5,36 €
200040	550	WASHER 10,5	5,36 €
210723	561	GROOVED PIN 8 X 22	5,36 €
1006075	901	HEXAGON HEAD SCREW M16 X 55	5,36 €
120480	902	STUD M 12 X 40	11,18 €
1033365	903	SCREW PLUG R 3/8	12,42 €
1033365	903	SCREW PLUG R 3/8	12,42 €
1003166	904	THREADED BOLT M10X 120-8	5,36 €
566425	916	PLUG A 6,4	5,36 €
1030308	920	HEXAGON NUT M12	5,36 €
1030291	920	HEXAGON NUT M10	5,36 €