

Submersible abrasion resistant drainage pumps type po-Söffel

The drainage pump po-Söffel is a submersible centrifugal pump for delivering clean or dirty water with solid admixtures up to a particle size of 10 mm, a pH-value from 4 up to 8 and a medium temperature during continuous operation of up to 40 °C, for a short time up to 60 °C.

Fields of application

- water supply at civil works sites and in mining
- watering and draining in communities, gardens and domestic sectors
- used in disastered areas and by fire brigades
- water supply at industries and agriculture
- fountains

Design

Single stage centrifugal pump with open impeller. For vertical, horizontal or inlined installation. The double casing made from aluminum alloy or stainless steel guarantees the best cooling of the motor by circulation of pumped fluid. The pump can be used for continuous working-, sipping suction and emerging operation. The dual mechanical seal made of silicon carbide guarantees a safety seal of the motor.

The impeller is made of stainless steel (1.4027) or polyurethane. The diffuser is wear resistant and guarantees a long life cycle. The anti-friction bearing are life time grease lubricated. They assure a vibration-free operation.

The motor is designed as tree phase AC or mono-phase AC.

Accessories (on request)

- integrated or external level control
- coupling fitting for two or more pumps to increase the head
- flat water suction fittings
- non- return valves
- flexible tubes
- connection parts:
 - Storz couplings
 - flange couplings
 - double and reducing nipples
 - pipes, blends and fittings



Material of construction

Drainage pumps po-Söffel

According to DIN

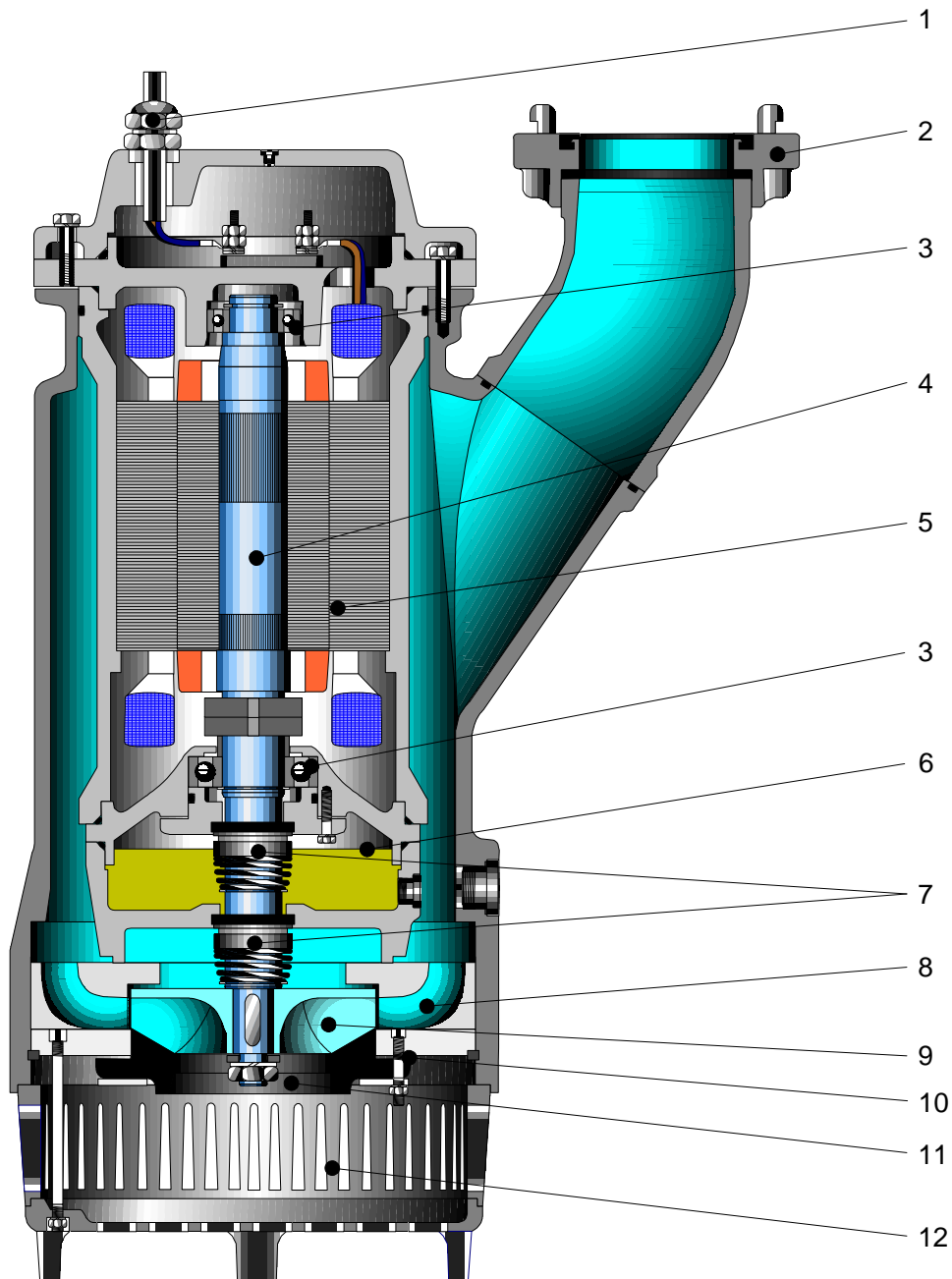
components	design		
	Söffel D	Söffel C / B	Söffel A / O
shaft	stainless steel / 1.4301	stainless steel / 1.4057	stainless steel / 1.4313
casing	stainless steel / 1.4301	aluminum alloy G-AISI10Mgwa / 3.2381	aluminum alloy G-AISI10Mgwa / 3.2381
impeller	stainless steel / 1.4301	Polyurethan or stainless steel 1.4027	stainless steel / 1.4027
diffuser		NORYL GFN2	stainless steel / 1.4027
suction casing	stainless steel / 1.4301	rubber NBR	rubber NBR
inlet strainer	stainless steel / 1.4301	stainless steel / 1.4301	aluminum alloy G-AISI10Mgwa / 3.2381
shaft seal	2 x mechanical seal SiC / ceramic	2 x mechanical seal SiC / SiC	2 x mechanical seal SiC / SiC
screws, nuts and bolts.	stainless steel A2 / 1.4301/1.4303	stainless steel A2 / 1.4301/1.4303	stainless steel A4 / 1.4401

According to AISI

components	design		
	Söffel D	Söffel C / B	Söffel A / O
shaft	stainless steel / AISI 304	stainless steel / AISI 431	stainless steel / AISI -
casing	stainless steel / AISI 304	aluminum alloy G-AISI10Mgwa / SAE 309	aluminum alloy G-AISI10Mgwa / SAE 309
impeller	stainless steel / AISI 304	Polyurethane or stainless steel AISI 420	stainless steel / AISI 420
diffuser		NORYL GFN2	stainless steel / AISI 420
suction casing	stainless steel / AISI 304	rubber NBR	rubber NBR
inlet strainer	stainless steel / AISI 304	stainless steel / AISI 304	aluminum alloy G-AISI10Mgwa / SAE 309
shaft seal	2 x mechanical seal SiC / ceramic	2 x mechanical seal SiC / SiC	2 x mechanical seal SiC / SiC
screws, nuts and bolts.	stainless steel A2 / AISI 304/305	stainless steel A2 / AISI 304/305	stainless steel A4 / AISI 316

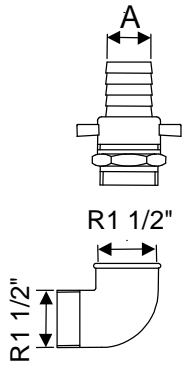
oddesse reserve the right to employ construction materials following German (DIN) standard

Construction



- | | | | |
|---|---------------------------------|----|-----------------------------|
| 1 | cable | 7 | 2 x mechanical seal SiC/SiC |
| 2 | outlet branch / hose connection | 8 | diffuser |
| 3 | anti-friction bearing | 9 | impeller |
| 4 | rotor | 10 | suction casing, adjustable |
| 5 | stator | 11 | shim |
| 6 | interstage casing | 12 | inlet strainer |

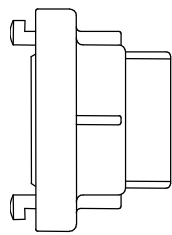
Subject to alterations



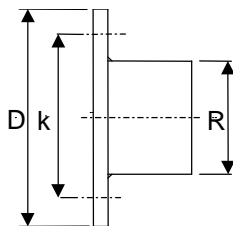
Hose connector for Söffel D

A = 1 1/2"

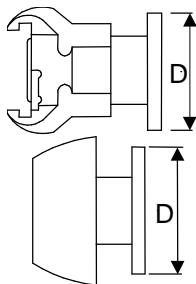
90° pipe bend



Hose coupling type Storz	Söffel D	Söffel C	Söffel B	Söffel A	Söffel 0
size D	S				
size C	M	S	M		
size B		M	S	M	
size A			M	S	M
size O				M	S

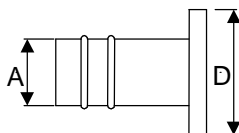


Flange	Söffel D	Söffel C	Söffel B	Söffel A	Söffel 0
DN 50 PN 10		S			
DN 65 PN 10		M	S		
DN 80 PN 10		M	M	M	
DN 100 PN 10			M	S	
DN 125 PN 10				M	M
DN 150 PN 10					S



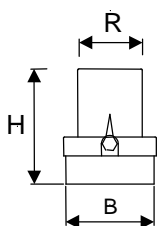
Perrot-coupling male- / female- part	Söffel D	Söffel C	Söffel B	Söffel A	Söffel 0
DN 50 PN 10		S			
DN 65 PN 10		M	S		
DN 80 PN 10		M	M	M	
DN 100 PN 10			M	S	
DN 125 PN 10				M	M
DN 150 PN 10					S

Legend: S = standard, M = possible
PN = nominal pressure [bar], DN = nominal diameter [mm]



Hose connection for Söffel O

A = 150 mm

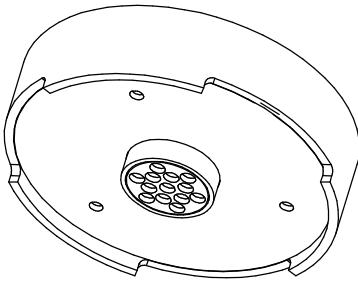


Non-return valve

spring-loaded, AG/IG 1 1/4" for Söffel D-H..
 AG/IG 1 1/2" for Söffel D.1 and Söffel D.2
 AG/IG 2" for Söffel C
 AG/IG 2 1/2" for Söffel B

Legend: AG = external thread / IG = internal thread

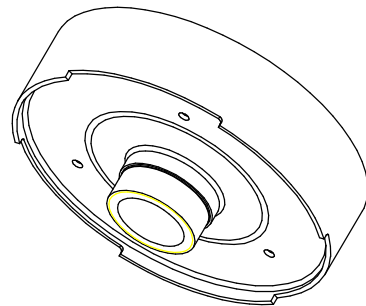
Subject to alterations



Flat water suction fitting for Söffel-Pumps, steel zinc-coated

minimal suction level 8 mm

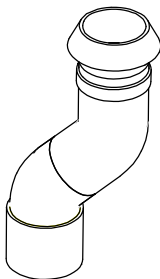
	order-N°:
Söffel C	SC500-1.5
Söffel B	SB500-4



Coupling fitting for two or more Söffel-pumps, steel zinc-coated

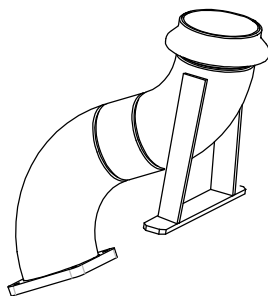
for tandem installation to blow-up the head

	connection	order-N°:
Söffel C	R 2" AG	SC520
Söffel B	R 2 ½" AG	SB520
Söffel A	R 4 ½" AG	SA520-7.5
Söffel O	R 6" AG	SO520
	hose connection	SO520-S



Pipe adapter for central connection of the riser pipe

	connection	order-N°:
Söffel C	V-Teil 50 mm	SCZ700
Söffel B	V-Teil 70 mm	SBZ700

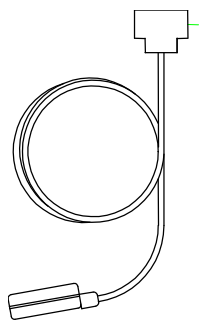


Pipe adapter for central connection of the riser pipe

	connection	order-N°:
Söffel A	V-Teil 100 mm	SAZ700
Söffel O	V-Teil 159 mm	SOZ700

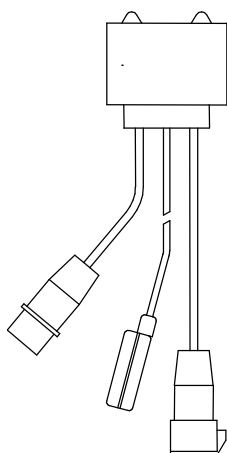
legend: AG = external thread

Subject to alterations



external float switches for Söffel-Pumps
for mono-phase AC

Söffel D
Söffel C



external float switches for Söffel-Pumps
for tree-phase AC

Söffel C
Söffel B
Söffel A
Söffel 0

Subject to alterations