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POMPDIRECT

Centrifugal pumps with open impeller and flanged connections

SHO Series

MARKET SECTORS
CIVIL, INDUSTRIAL.

APPLICATIONS
- Industrial washing machines.
- Commercial dishwashers.
- Washing of metal parts, surface treatment.
- Food industry washing equipment and systems.
- Dyeing plants and textile industry.
- Plants for the circulation and transfer of moderately viscous liquids, with light chemical aggressiveness.

SPECIFICATIONS

PUMP and
APPLICATION RANGE

- The SHO series consists of single stage centrifugal pumps made of pressed AISI 316 stainless steel with **open and recessed impeller made of AISI CF8M stainless steel (casted AISI 316)**.
- **Delivery** up to 56 m^3/h 2 poles and up to 54 m^3/h 4 poles.
- **Head** up to 50 m, 2 poles and up to 12 m, 4 poles.
- **Temperature** of pumped liquid: -10°C to +120°C for standard version.
- Maximum working **pressure**: 12 bar (PN 12).
- Available sizes: DN25 to DN50.
- **SHOD** execution with **double mechanical seal**.
- **Suspended solids** handled up to:
  Ø **20-22 mm**. for models in DN25 and DN32 nominal sizes.
  Ø **30 mm**. for models in DN40 nominal sizes.
  Ø **40 mm**. for models in DN50 nominal sizes.

MOTOR

- Three-phase asynchronous, squirrel cage rotor, enclosed construction, external ventilation.
- Performances according to EN 60034-1.
- Lowara motors with condensation drain plugs.
- IP55 **Protection**.
- **Insulation** class F.
- Max. ambient **temperature** : 40°C. For different environmental conditions check the power.
- Overload protection to be provided by user.
- Standard voltage, three-phase version: 220-240/380-415 V, 50 Hz, for powers up to 3 kW; 380-415/660-690 V, 50 Hz, for powers above 3 kW;

CONSTRUCTION CHARACTERISTICS

- Stainless steel centrifugal pump with end suction and radial discharge ports.
- Pump body made of AISI 316L stainless steel.
- Open and recessed impeller in AISI CF8M stainless steel.
- Mechanical seal according to EN 12756 (ex DIN 24960).
- AISI 316L stainless steel fill & drain plugs.
- Flanges in compliance with EN 1092-1 (ex UNI 2236) and DIN 2532.

MOTOR-PUMP COUPLING

- **SHOE**: close-coupled by means of a bracket with impeller keyed directly to the motor shaft extension.
- **SHOS**: with a bracket, adaptor and rigid coupling keyed to the standard motor shaft extension.
- **SHOD**: execution with double mechanical seal. Bracket, adaptor and rigid coupling keyed to the standard motor shaft extension.

ACCESSORIES ON REQUEST

- AISI 316 stainless steel or galvanized iron counter-flanges.
- Intermediate flange with pressure gauge connection.
- Pump and motor shims.

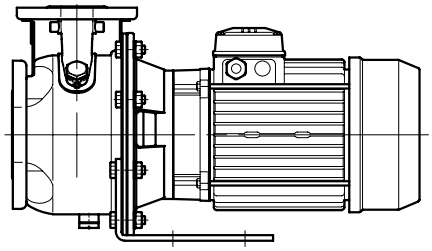
DIMENSIONS OF DISPLACED SOLIDS

TYPE	SIZE	ø SOLIDS (mm)
SHOE SHOS SHOD	25-32 / 200	20
	25-32 / 125 - 160	22
	40 / 125 - 160	30
	50 / 125 - 160	40

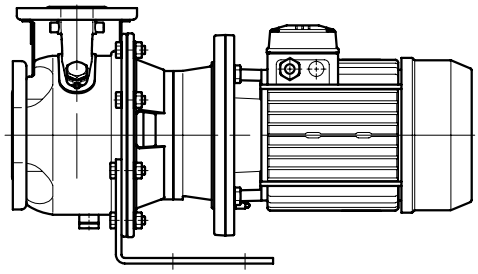
sho-pas-sol-en_a_ps

The SHO pumps are not drainage pumps, so can not be used for applications like waste water disposal or black waters. The SHO series can be used in washing systems or for clean water with small solid particles included.
The recessed position of the impeller allows the pumping of liquids with small solid particles reducing the risk of clogging the pump.
The dimensions of the solids are indicated in the table.

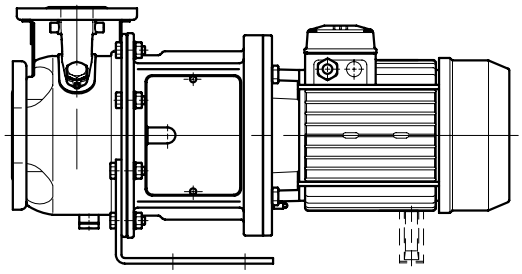
SHOE – SHOE4



SHOS – SHOS4



SHOD – SHOD4



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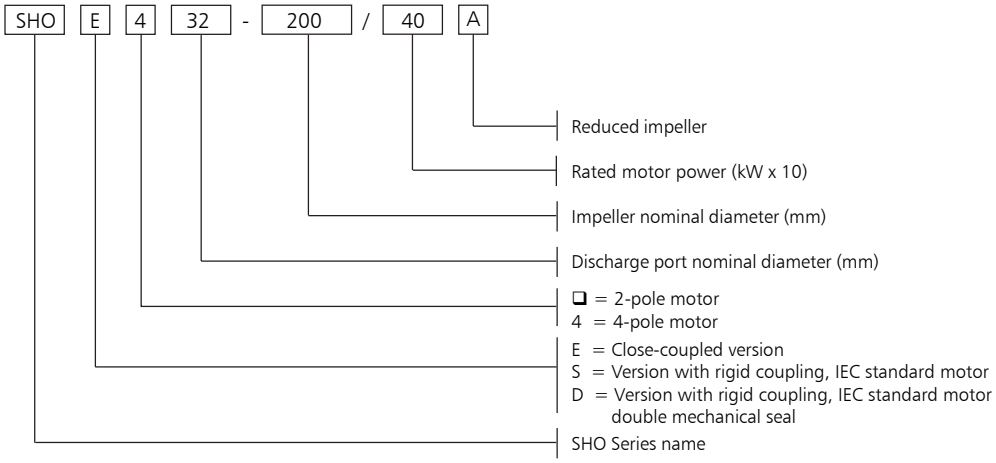
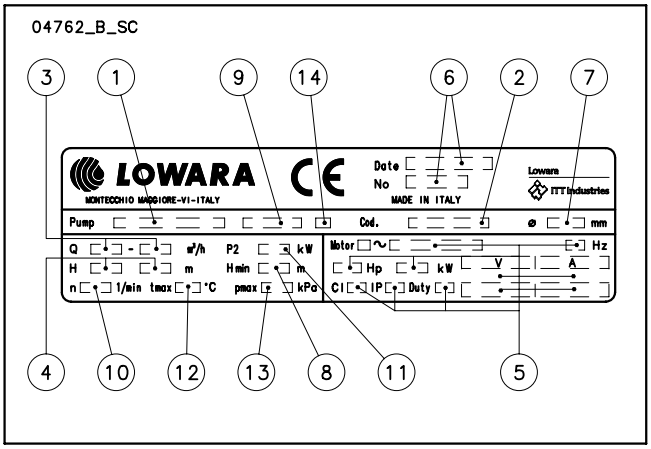
SHO SERIES
IDENTIFICATION CODE



RATING PLATE



LEGENDA

1 - Electric pump type
2 - Code
3 - Delivery range
4 - Head range
5 - Motor type
6 - Date of manufacture and serial number
7 - Impeller diameter
8 - Minimum head
9 - Mechanical seal material identification code
10 - Speed
11 - Rated output
12 - Maximum operating temperature
13 - Maximum operating pressure
14 - O-ring material identification code

LIST OF MODELS SHO SERIES 50 Hz

2 POLES

SIZE	kW	VERSIONS		
		SHOE	SHOS	SHOD
25-125/11	1,1	•	•	•
25-125/15	1,5	•	•	•
25-125/22	2,2	•	•	•
25-160/30	3	•	•	•
25-160/40	4	•	•	•
25-160/55	5,5	•	•	•
25-200/30	3	•	•	•
25-200/40	4	•	•	•
25-200/55	5,5	•	•	•
32-125/11	1,1	•	•	•
32-125/15	1,5	•	•	•
32-125/22	2,2	•	•	•
32-160/30	3	•	•	•
32-160/40	4	•	•	•
32-160/55	5,5	•	•	•
32-200/30	3	•	•	•
32-200/40	4	•	•	•
32-200/55	5,5	•	•	•
40-125/15	1,5	•	•	•
40-125/22	2,2	•	•	•
40-125/30	3	•	•	•
40-160/40	4	•	•	•
40-160/55	5,5	•	•	•
40-160/75	7,5	•	•	•
50-125/55	5,5	•	•	•
50-125/75	7,5	•	•	•
50-160/92	9,2	•	-	-
50-160/110A	11	-	•	•
50-160/110	11	•	•	•

• = Available

sho_2p50-en_a_tem

4 POLES

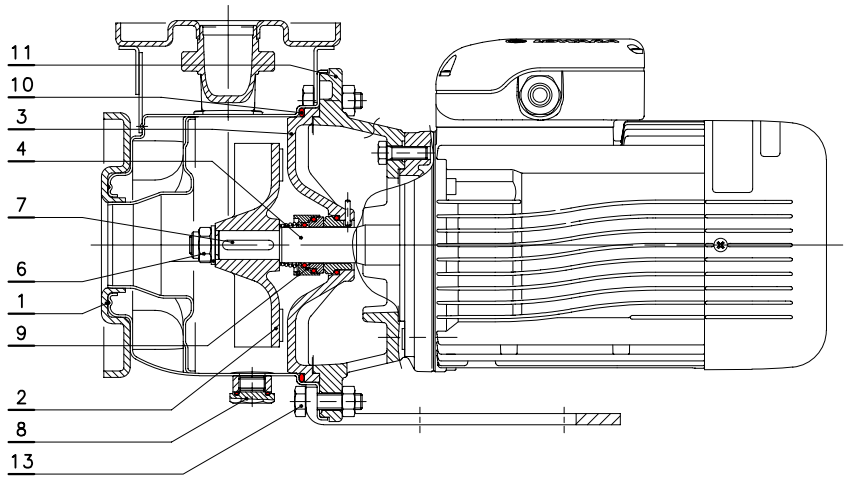
SIZE	kW	VERSIONS		
		SHOE4	SHOS4	SHOD4
25-125/03	0,37	•	•	•
25-160/03	0,37	•	•	•
25-160/05	0,55	•	•	•
25-160/07	0,75	•	•	•
25-200/07	0,75	•	•	•
32-125/03	0,37	•	•	•
32-160/03	0,37	•	•	•
32-160/05	0,55	•	•	•
32-160/07	0,75	•	•	•
32-200/07	0,75	•	•	•
40-125/03	0,37	•	•	•
40-160/05	0,55	•	•	•
40-160/07	0,75	•	•	•
40-160/11	1,1	•	•	•
50-125/07	0,75	•	•	•
50-125/11	1,1	•	•	•
50-160/11	1,1	•	•	•
50-160/15	1,5	•	•	•

• = Available

sho4_4p50_a_tem

SHOE - SHOE4 SERIES
LIST OF MODELS AND TABLE OF MATERIALS

05505_A_DS



VERSIONS	
2 POLES	4 POLES
SHOE 25-125/11	SHOE4 25-160/05
SHOE 25-125/15	SHOE4 25-160/07
SHOE 25-125/22	SHOE4 25-200/07
SHOE 25-160/30	SHOE4 32-160/05
SHOE 25-160/40	SHOE4 32-160/07
SHOE 25-160/55	SHOE4 32-200/07
SHOE 25-200/30	SHOE4 40-160/05
SHOE 25-200/40	SHOE4 40-160/07
SHOE 25-200/55	SHOE4 40-160/11
SHOE 32-125/11	SHOE4 50-125/07
SHOE 32-125/15	SHOE4 50-125/11
SHOE 32-125/22	SHOE4 50-160/11
SHOE 32-160/30	SHOE4 50-160/15
SHOE 32-160/40	
SHOE 32-160/55	
SHOE 32-200/30	
SHOE 32-200/40	
SHOE 32-200/55	
SHOE 40-125/15	
SHOE 40-125/22	
SHOE 40-125/30	
SHOE 40-160/40	
SHOE 40-160/55	
SHOE 40-160/75	
SHOE 50-125/55	
SHOE 50-125/75	
SHOE 50-160/92	
SHOE 50-160/110	

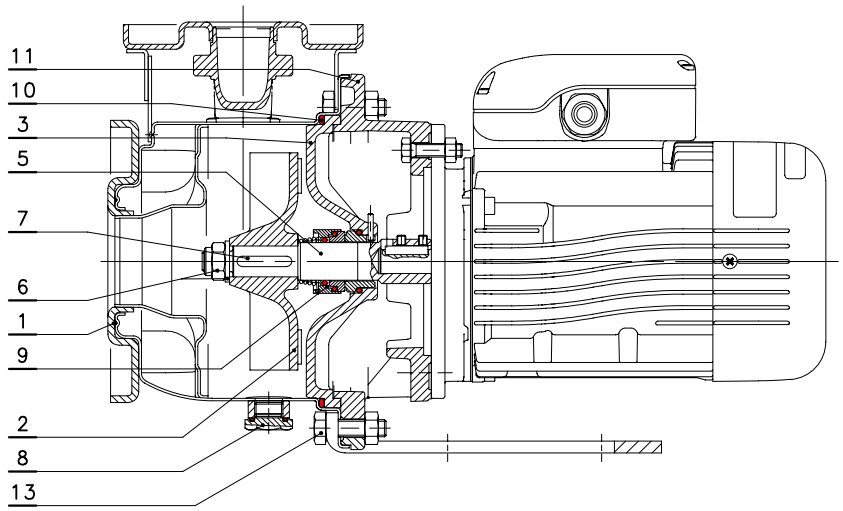
shoe-shoe4-p-en_a_mo

REF. N.	NAME	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Pump body	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
2	Impeller	Stainless steel	EN 10213-4-GX5CrNiMo19-11-2 (1.4408)	ASTM CF8M (cast AISI 316)
3	Seal housing	Stainless steel	EN 10213-4-GX5CrNiMo19-11-2 (1.4408)	ASTM CF8M (cast AISI 316)
4	Shaft extension	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
5	Rigid shaft coupling	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
6	Impeller locknut and washer	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
7	Tab	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
8	Fill/drain plugs	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
9	Mechanical seal	Silicon Carbide / Silicon Carbide / FPM (standard version)		
10	Elastomers	FPM (standard version)		
11	Adapter	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
13	Pump body fastening bold & screws	Galvanized steel		

shoe-en_a_tm

SHOE4 SERIES
LIST OF MODELS AND TABLE OF MATERIALS

05506_A_DS



VERSIONS 4 POLES
SHOE4 25-125/03
SHOE4 25-160/03
SHOE4 25-200/03
SHOE4 32-125/03
SHOE4 32-160/03
SHOE4 40-125/03

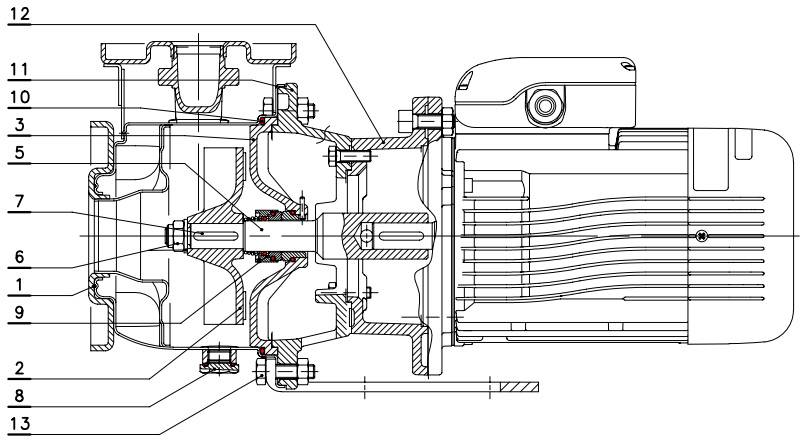
shoe4-p-en_a_mo

REF. N.	NAME	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Pump body	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
2	Impeller	Stainless steel	EN 10213-4-GX5CrNiMo19-11-2 (1.4408)	ASTM CF8M (cast AISI 316)
3	Seal housing	Stainless steel	EN 10213-4-GX5CrNiMo19-11-2 (1.4408)	ASTM CF8M (cast AISI 316)
4	Shaft extension	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
5	Rigid shaft coupling	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
6	Impeller locknut and washer	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
7	Tab	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
8	Fill/drain plugs	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
9	Mechanical seal	Silicon Carbide / Silicon Carbide / FPM (standard version)		
10	Elastomers	FPM (standard version)		
11	Adapter	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
13	Pump body fastening bold & screws	Galvanized steel		

shoe-en_a_tm

SHOS - SHOS4 SERIES
LIST OF MODELS AND TABLE OF MATERIALS

05555_A_DS



VERSIONS	
2 POLES	4 POLES
SHOS 25-125/11	SHOS4 25-125/03
SHOS 25-125/15	SHOS4 25-160/03
SHOS 25-125/22	SHOS4 25-160/05
SHOS 25-160/30	SHOS4 25-160/07
SHOS 25-160/40	SHOS4 25-200/07
SHOS 25-160/55	SHOS4 32-125/03
SHOS 25-200/30	SHOS4 32-160/03
SHOS 25-200/40	SHOS4 32-160/05
SHOS 25-200/55	SHOS4 32-160/07
SHOS 32-125/11	SHOS4 32-200/07
SHOS 32-125/15	SHOS4 40-125/03
SHOS 32-125/22	SHOS4 40-160/05
SHOS 32-160/30	SHOS4 40-160/07
SHOS 32-160/40	SHOS4 40-160/11
SHOS 32-160/55	SHOS4 50-125/07
SHOS 32-200/30	SHOS4 50-125/11
SHOS 32-200/40	SHOS4 50-160/11
SHOS 32-200/55	SHOS4 50-160/15
SHOS 40-125/15	
SHOS 40-125/22	
SHOS 40-125/30	
SHOS 40-160/40	
SHOS 40-160/55	
SHOS 40-160/75	
SHOS 50-125/55	
SHOS 50-125/75	

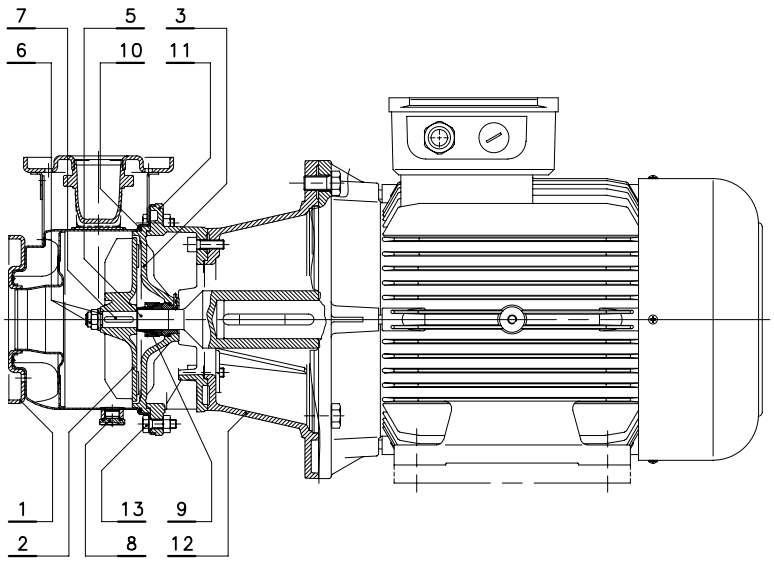
shos-shos4-p-en_a_mo

REF. N.	NAME	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Pump body	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
2	Impeller 25-32-40-50-65(160)	Stainless steel	EN 10213-4-GX5CrNiMo19-11-2 (1.4408)	ASTM CF8M (cast AISI 316)
3	Seal housing	Stainless steel	EN 10213-4-GX5CrNiMo19-11-2 (1.4408)	ASTM CF8M (cast AISI 316)
5	Rigid shaft coupling	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
6	Impeller locknut and washer	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
7	Tab	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
8	Fill/drain plugs	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
9	Mechanical seal	Silicon Carbide / Silicon Carbide / FPM (standard version)		
10	Elastomers	FPM (standard version)		
11	Adapter	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
12	Adapter-motor coupling	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
13	Pump body fastening bolts & screws	Galvanized steel		

shos-en_a_tm

SHOS SERIES
LIST OF MODELS AND TABLE OF MATERIALS

05556_A_DS



VERSIONS
2 POLES
SHOS 50-160/110A
SHOS 50-160/110

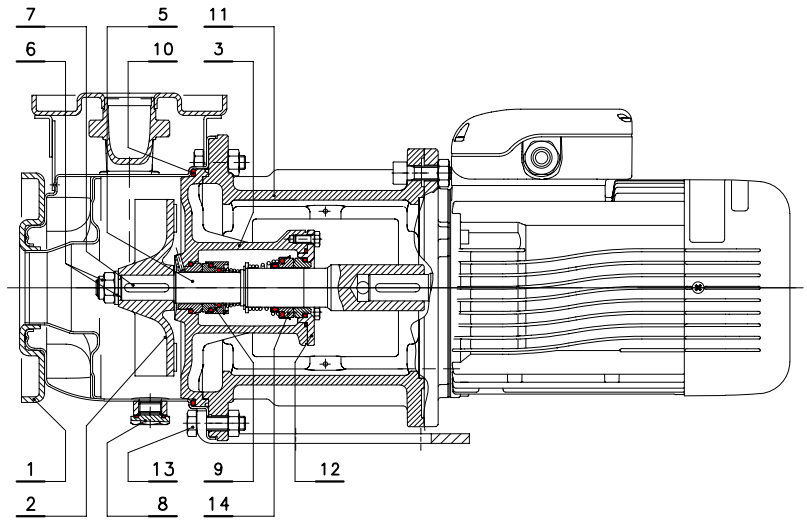
shos-s-en_a_mo

REF. N.	NAME	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Pump body	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
2	Impeller 25-32-40-50-65(160)	Stainless steel	EN 10213-4-GX5CrNiMo19-11-2 (1.4408)	ASTM CF8M (cast AISI 316)
3	Seal housing	Stainless steel	EN 10213-4-GX5CrNiMo19-11-2 (1.4408)	ASTM CF8M (cast AISI 316)
5	Rigid shaft coupling	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
6	Impeller locknut and washer	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
7	Tab	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
8	Fill/drain plugs	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
9	Mechanical seal	Silicon Carbide / Silicon Carbide / FPM (standard version)		
10	Elastomers	FPM (standard version)		
11	Adapter	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
12	Adapter-motor coupling	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
13	Pump body fastening bolts & screws	Galvanized steel		

shos-en_a_tm

SHOD - SHOD4 SERIES (DOUBLE MECHANICAL SEAL)
LIST OF MODELS AND TABLE OF MATERIALS

05575_A_DS



VERSIONS	
2 POLES	4 POLES
SHOD 25-125/11	SHOD4 25-125/03
SHOD 25-125/15	SHOD4 25-160/03
SHOD 25-125/22	SHOD4 25-160/05
SHOD 25-160/30	SHOD4 25-160/07
SHOD 25-160/40	SHOD4 25-200/07
SHOD 25-160/55	SHOD4 32-125/03
SHOD 25-200/30	SHOD4 32-160/03
SHOD 25-200/40	SHOD4 32-160/05
SHOD 25-200/55	SHOD4 32-160/07
SHOD 32-125/11	SHOD4 32-200/07
SHOD 32-125/15	SHOD4 40-125/03
SHOD 32-125/22	SHOD4 40-160/05
SHOD 32-160/30	SHOD4 40-160/07
SHOD 32-160/40	SHOD4 40-160/11
SHOD 32-160/55	SHOD4 50-125/07
SHOD 32-200/30	SHOD4 50-125/11
SHOD 32-200/40	SHOD4 50-160/11
SHOD 32-200/55	SHOD4 50-160/15
SHOD 40-125/15	
SHOD 40-125/22	
SHOD 40-125/30	
SHOD 40-160/40	
SHOD 40-160/55	
SHOD 40-160/75	
SHOD 50-125/55	
SHOD 50-125/75	

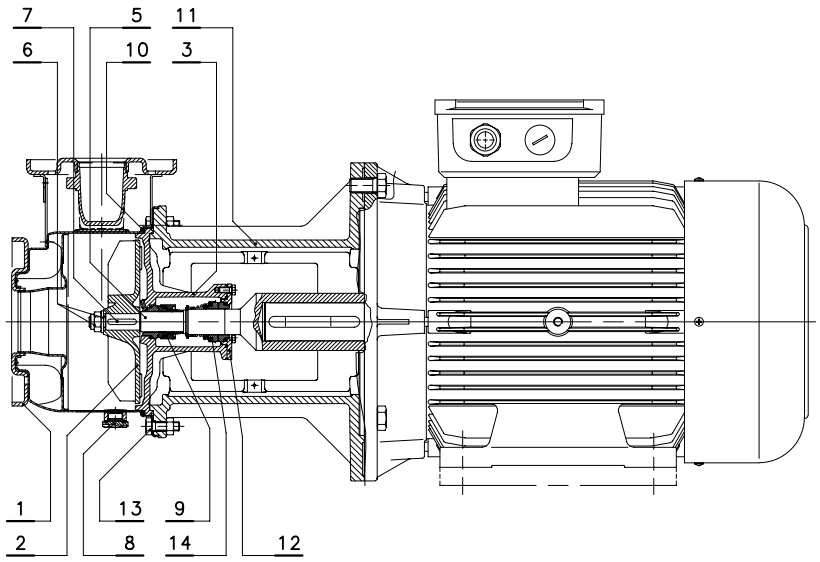
shod-shod4-p-en_a_mo

REF. N.	NAME	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Pump body	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
2	Impeller	Stainless steel	EN 10213-4-GX5CrNiMo19-11-2 (1.4408)	ASTM CF8M (cast AISI 316)
3	Seal housing	Stainless steel	EN 10213-4-GX5CrNiMo19-11-2 (1.4408)	ASTM CF8M (cast AISI 316)
5	Rigid shaft coupling	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
6	Impeller locknut and washer	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
7	Tab	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
8	Fill/drain plugs	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
9	(front) Mechanical seal	Silicon Carbide / Silicon Carbide / FPM (standard version)		
10	Elastomers	FPM (standard version)		
11	Adapter	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
12	Seal cover	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
13	Pump body fastening bolts & screws	Galvanized steel		
14	(back) Mechanical seal	Ceramic / Carbon / FPM (standard version)		

shod-en_a_tm

SHOD SERIES (DOUBLE MECHANICAL SEAL)
LIST OF MODELS AND TABLE OF MATERIALS

05576_A_DS



VERSIONS
2 POLES
SHOD 50-160/110A
SHOD 50-160/110

shod-s-en_a_mo

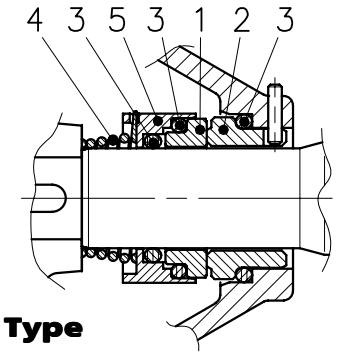
REF. N.	NAME	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Pump body	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
2	Impeller	Stainless steel	EN 10213-4-GX5CrNiMo19-11-2 (1.4408)	ASTM CF8M (cast AISI 316)
3	Seal housing	Stainless steel	EN 10213-4-GX5CrNiMo19-11-2 (1.4408)	ASTM CF8M (cast AISI 316)
5	Rigid shaft coupling	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
6	Impeller locknut and washer	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
7	Tab	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
8	Fill/drain plugs	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
9	(front) Mechanical seal	Silicon Carbide / Silicon Carbide / FPM (standard version)		
10	Elastomers	FPM (standard version)		
11	Adapter	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
12	Seal cover	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
13	Pump body fastening bolts & screws	Galvanized steel		
14	(back) Mechanical seal	Ceramic / Carbon / FPM (standard version)		

shod-en_a_tm

SHO MECHANICAL SEAL SERIES, ACCORDING TO EN 12756

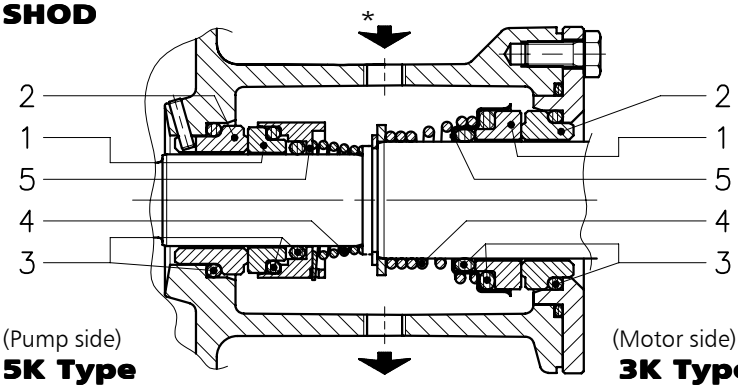
Mechanical seal with mounting dimensions according to EN12756 (ex DIN 24960) and ISO 3069.

SHOE-SHOS



5K Type

SHOD



5K Type **3K Type**

(*) Flushing of the seals has to be done with clean liquid and external flushing circuit. The liquid has to be compatible with the pumped liquid and with a pressure 0,5 bar higher than the pressure in the pump. (Rp 1/4 connections).

LIST OF MATERIALS

POSITION 1 - 2	POSITION 3	POSITION 4 - 5
B : Resin impregnated carbon	E : EPDM	G : AISI 316
Q_1 : Silicon carbide	V : FPM	
C : Special resin impregnated carbon	T : PTFE	
V : Ceramic		

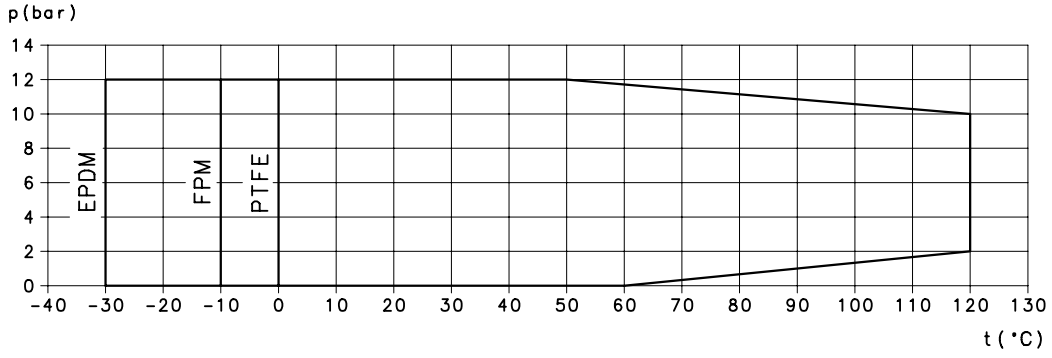
sho-shod_ten-mec-en_a_tm

SEAL TYPES

TYPE	POSITION 1 ROTATING ASSEMBLY	2 FIXED ASSEMBLY	3 ELASTOMERS	4 SPRINGS	5 OTHER COMPONENTS	TEMPERATURE (°C)
STANDARD MECHANICAL SEALS						
3K - V B V G G	V	B	V	G	G	-10 +120
5K - Q_1 Q_1 V G G	Q_1	Q_1	V	G	G	-10 +120
OTHER MECHANICAL SEAL TYPES						
3K - V B E G G	V	B	E	G	G	-30 +120
5K - Q_1 B V G G	Q_1	B	V	G	G	-10 +120
5K - Q_1 Q_1 E G G	Q_1	Q_1	E	G	G	-30 +120
5K - Q_1 B E G G	Q_1	B	E	G	G	-30 +120
5K - Q_1 C T G G	Q_1	C	T	G	G	0 +120
5K - Q_1 Q_1 T G G	Q_1	Q_1	T	G	G	0 +120

sho-shod_tipi-ten-mec-en_a_tc

COMPLETE PUMP PRESSURE / TEMPERATURE OPERATING LIMITS (WITH ANY OF THE SEALS LISTED ABOVE)



MOTORS

Enclosed short circuit squirrel cage motor (TEFC), with aluminium casing and external ventilation. Lowara motors are used as standard for powers up to 1,5 kW (included) in the 4-pole version and up to 11 kW (included) in the 2-pole version.
The motors are fan cooled according to EN 60034-6.
The terminal box is made of ABS technopolymer for motor sizes up to IM 100 and aluminium alloy for larger sizes.
The cable gland has standard passage dimensions accordin to EN 50262 (metric thread) for SM motors, and according to DIN 46255 (Pg thread) for LM motors.
The standard protection is IP 55, insulation class F.
Standard voltage:

- Three-phase version: 220-240/380-415 V 50 Hz for powers up to 3kW. 380-415/660-690 V 50 Hz for powers above 3 kW, overload protection to be provide by the user.

SHOE SERIES
THREE-PHASE 50 Hz, 2-POLE MOTORS

MOTOR TYPE			INPUT CURRENT In (A)				DATA FOR 400 V 50 Hz VOLTAGE					
kW	IEC SIZE*	CONSTRUCTION DESIGN	Δ 220-240 V	Y 380-415 V	Δ 380-415 V	Y 660-690 V	min^{-1}	Is / In	η %	cosφ	Tn Nm	Ts/Tn**
1,1	90R	B14	4,52	2,61	-	-	2875	6,78	78,9	0,77	3,65	3,49
1,5	90R	B14	5,98	3,45	-	-	2875	7,04	80,1	0,78	4,98	3,83
2,2	90R	B14	8,71	5,03	-	-	2860	7,32	81,1	0,78	7,34	4,12
3	90	B14	10,4	6,01	-	-	2860	6,38	84,3	0,85	10,0	2,77
4	112R	B14	-	-	8,09	4,67	2890	7,70	85,3	0,84	13,2	2,80
5,5	112	B14	-	-	10,1	5,83	2900	9,62	87,0	0,90	18,1	3,91
7,5	112	B14	-	-	13,7	7,91	2900	9,73	88,1	0,90	24,7	3,99
9,2	132	B14	-	-	16,8	9,7	2930	9,15	89,7	0,88	30,0	4,31
11	132	B14	-	-	20,0	11,5	2925	8,98	89,7	0,88	35,9	3,43

* R = Reduced size of motor casing as compared to shaft extension and flange.

shoe-mott-2p50_a_te

** Ts/Tn = ratio between starting torque and nominal torque.

SHOS - SHOD SERIES
THREE-PHASE 50 Hz, 2-POLE MOTORS

MOTOR TYPE			INPUT CURRENT In (A)				DATA FOR 400 V 50 Hz VOLTAGE					
kW	IEC SIZE*	CONSTRUCTION DESIGN	Δ 220-240 V	Y 380-415 V	Δ 380-415 V	Y 660-690 V	min^{-1}	Is / In	η %	cosφ	Tn Nm	Ts/Tn**
1,1	80	B5	4,52	2,61	-	-	2875	6,78	78,9	0,77	3,65	3,49
1,5	90R	B5	5,98	3,45	-	-	2875	7,04	80,1	0,78	4,98	3,83
2,2	90R	B5	8,71	5,03	-	-	2860	7,32	81,1	0,78	7,34	4,12
3	100R	B5	10,4	6,01	-	-	2860	6,38	84,3	0,85	10,0	2,77
4	112R	B5	-	-	8,09	4,67	2890	7,70	85,3	0,84	13,2	2,80
5,5	132R	B5	-	-	10,1	5,83	2900	9,62	87,0	0,90	18,1	3,91
7,5	132R	B5	-	-	13,7	7,91	2900	9,73	88,1	0,90	24,7	3,99
11	160	B35	-	-	20,1	11,6	2935	7,58	88,5	0,89	35,8	2,91

* R = Reduced size of motor casing as compared to shaft extension and flange.

shos-shod-mott-2p50-en_a_te

** Ts/Tn = ratio between starting torque and nominal torque.

SHOE4 SERIES
THREE-PHASE 50 Hz, 4-POLE MOTORS

MOTOR TYPE			INPUT CURRENT In (A)				DATA FOR 400 V 50 Hz VOLTAGE					
kW	IEC SIZE*	CONSTRUCTION DESIGN	Δ 220-240 V	Y 380-415 V	Δ 380-415 V	Y 660-690 V	min^{-1}	Is / In	η %	cosφ	Tn Nm	Ts/Tn**
0,37	71	B5	2,53	1,46	-	-	1370	3,39	61,4	0,60	2,57	3,40
0,55	90R	B14	3,03	1,75	-	-	1390	3,95	68,2	0,67	3,77	2,45
0,75	90R	B14	4,04	2,33	-	-	1395	4,06	70,1	0,66	5,13	2,73
1,1	90	B5	4,42	2,55	-	-	1415	4,48	78,2	0,80	7,42	2,14
1,5	90	B5	5,84	3,37	-	-	1415	5,10	81,0	0,79	10,1	2,43

* R = Reduced size of motor casing as compared to shaft extension and flange.

shoe4-mott-4p50-en_a_te

** Ts/Tn = ratio between starting torque and nominal torque.

SHOS4 - SHOD4 SERIES
THREE-PHASE 50 Hz, 4-POLE MOTORS

MOTOR TYPE			INPUT CURRENT In (A)		DATA FOR 400 V 50 Hz VOLTAGE					
kW	IEC SIZE	CONSTRUCTION DESIGN	Δ 220-240 V	Y 380-415 V	min^{-1}	Is / In	η %	cosφ	Tn Nm	Ts/Tn**
0,37	80	B5	2,53	1,46	1370	3,39	61,4	0,60	2,57	3,40
0,55	80	B5	3,03	1,75	1390	3,95	68,2	0,67	3,77	2,45
0,75	80	B5	4,04	2,33	1395	4,06	70,1	0,66	5,13	2,73
1,1	90	B5	4,42	2,55	1415	4,48	78,2	0,80	7,42	2,14
1,5	90	B5	5,84	3,37	1415	5,10	81,0	0,79	10,1	2,43

** Ts/Tn = ratio between starting torque and nominal torque.

shos4-shod4-mott-4p50-en_a_te

ITT

POMPDIRECT

MOTOR NOISE

The tables below show the mean sound pressure levels (Lp) measured at 1 meter's distance in a free field according to the A curve (ISO 1680 standard).
The noise values are measured with idling 50 Hz motor with a tolerance of 3 dB (A).

SHOE 50 Hz 2-POLE MOTOR NOISE

POWER	MOTOR TYPE SIZE	NOISE LpA
kW	IEC*	dB
1,1	90R	<70
1,5	90R	<70
2,2	90R	<70
3	90	<70
4	112R	<70
5,5	112	<70
7,5	112	<70
9,2	132	73
11	132	73

SHOS-SHOD 50 Hz 2-POLE MOTOR NOISE

POWER	MOTOR TYPE SIZE	NOISE LpA
kW	IEC*	dB
1,1	80	<70
1,5	90R	<70
2,2	90R	<70
3	100R	<70
4	112R	<70
5,5	132R	73
7,5	132R	73
11	160	75

SHOE4 50 Hz 4-POLE MOTOR NOISE

POWER	MOTOR TYPE SIZE	NOISE LpA
kW	IEC*	dB
0,37	71	<70
0,55	90R	<70
0,75	90R	<70
1,1	90	<70
1,5	90	<70

*R = Reduced size of motor casing as compared to shaft extension and flange.

SHOS4-SHOD4 50 Hz 4-POLE MOTOR NOISE

POWER	MOTOR TYPE SIZE	NOISE LpA
kW	IEC	dB
0,37	80	<70
0,55	80	<70
0,75	80	<70
1,1	90	<70
1,5	90	<70

sho_mott-en_a_tr