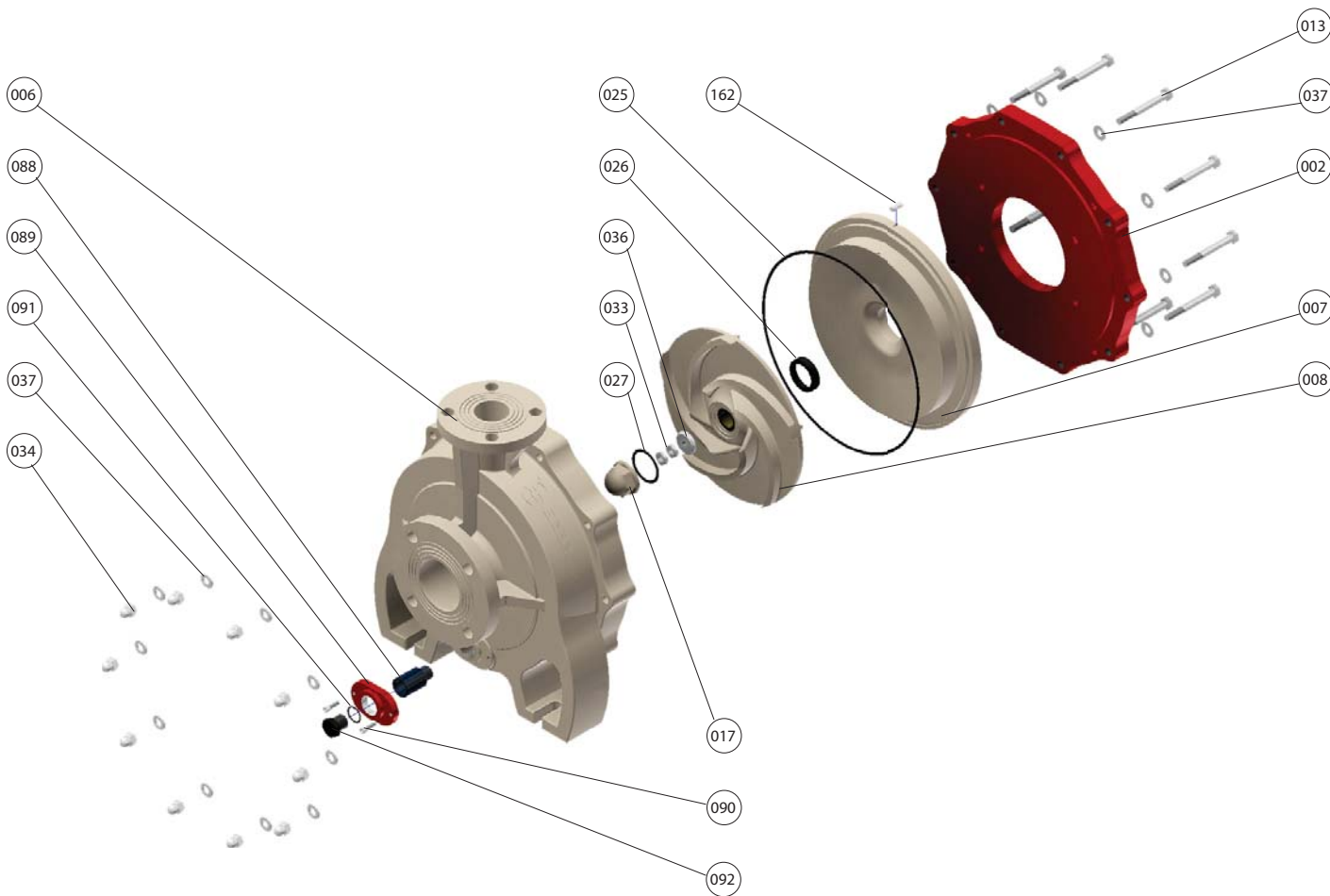


**8.1 PUMP CASING**



**NOMENCLATURE OF PUMP CASING PARTS**

POS.	DESCRIPTION	QUANTITY	MATERIAL
002	Rear armour	1	S275JR
006	Casing	1	FRP
007	Rear casing	1	FRP
008	Impeller	1	FRP
013	Screw, casing	8-14	SS 316
017	Nut, impeller	1	FRP
025	O-ring, casing	1	EPDM - FPM - FEP - FFKM
026	Gasket, impeller <sup>(1)</sup>	1	EPDM - FPM - PTFE
027	O-ring, nut	1	EPDM - FPM - FEP - FFKM
033	Locknut, impeller <sup>(2)</sup>	2	SS 304
034	Nut, casing	8-14	SS 316
036	Washer, impeller <sup>(2)</sup>	1	SS 304
037	Washer, casing	8-14	SS 304
088	Bushing for drainage *	1	Sales
089	Cover, drainage *	1	S275JR
090	Screw, drainage *	2	SS 304
091	O-ring, drainage *	1	EPDM - FPM - FEP - FFKM
092	Plug, drainage *	1	Sales
162	Cylindric pin	1	SS 304

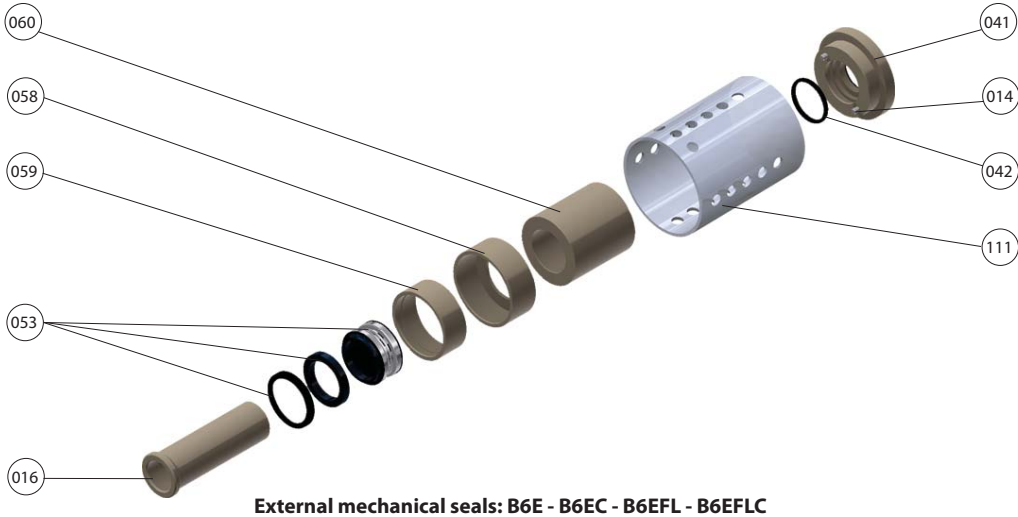
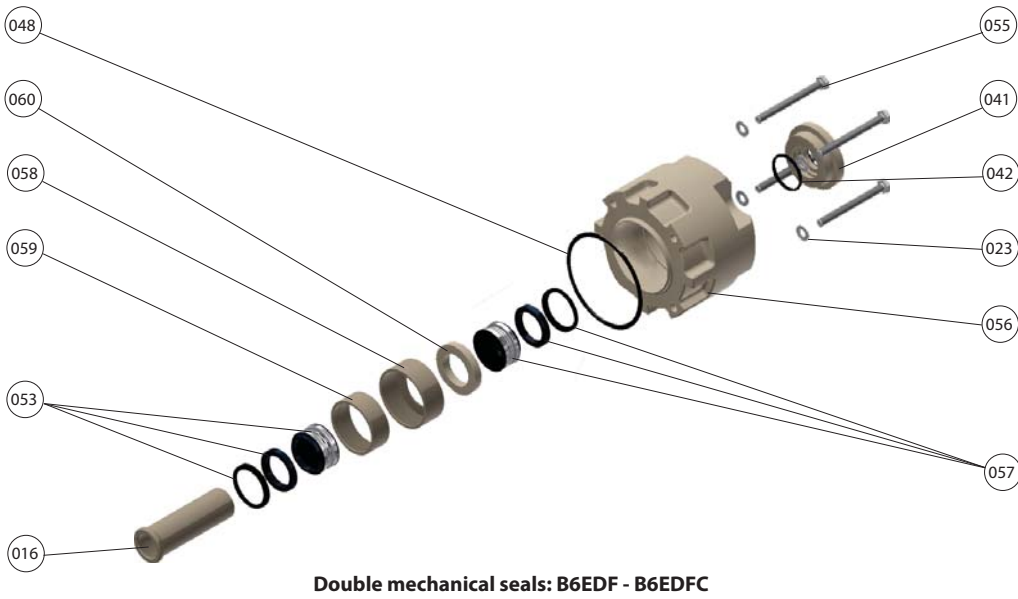
**NOTES:**

\* Optional parts

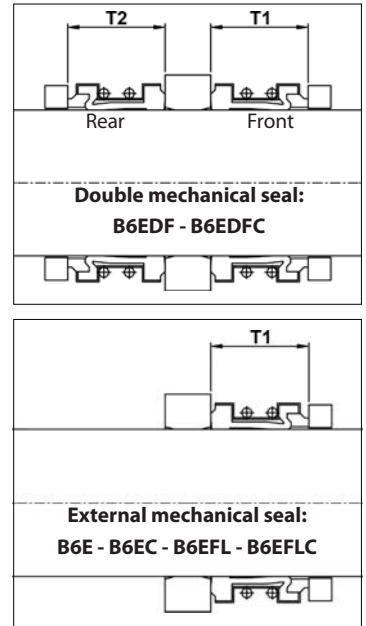
<sup>(1)</sup> O-ring in the Group I

<sup>(2)</sup> Only for the Group II and III

**8.2 B6EDF - B6EDFC - B6E - B6EC - B6EFL - B6EFLC SEALS**



Positioning of the mechanical seal



Seals diameter (mm)	T1 (mm)
35	26
55	30
75	40
Seals diameter (mm)	T2 (mm)
35	26
55	30
75	40

**NOMENCLATURE OF MECHANICAL SEAL PARTS**

POS.	DESCRIPTION	QUANTITY	MATERIAL
014	Cylindrical pin	2	SS 304
016	Shaft sleeve	1	FRP
023	Washer, seal chamber	4	SS 304
041	Spray guard	1	PP
042	O-ring, spray guard	1	EPDM - FPM - FFKM
048	O-ring, seal chamber	1	EPDM - FPM - FFKM
053	Mechanical seal	1	EPDM or FPM - SS316 - SiC/SiC
055	Screw, seal chamber	4	SS 304
056	Seal chamber	1	FRP
057	Mechanical seal	1	EPDM or FPM - SS316 - SiC/SiC
058	External reinforcement	1	PP
059	Internal reinforcement	1	PP
060	Spacer	1	PP
111	External protection	1	PC

**B6EDF - B6EDFC MECHANICAL SEAL TECHNICAL DATA**

Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -40 a 40	6,5	3450
	Da -40 a 60	5	
55	Da -40 a 60	4	1750
	Da -40 a 35	3	
75	Da -40 a 60	2	1750
	Da -40 a 35	3	

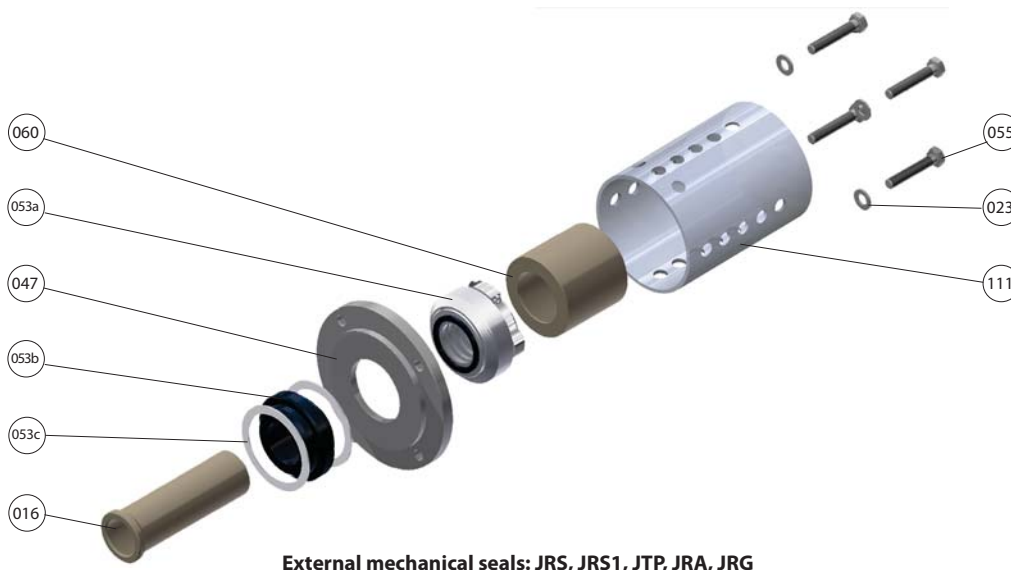
APPLICABLE API PLANS: 01 - 11 - 12 - 32 + 52 - 53 - 54

**B6E - B6EC - B6EFL - B6EFLC MECHANICAL SEAL TECHNICAL DATA**

Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -40 a 40	6,5	3450
	Da -40 a 60	5	
55	Da -40 a 60	4	1750
	Da -40 a 35	3	
75	Da -40 a 60	2	1750
	Da -40 a 35	3	

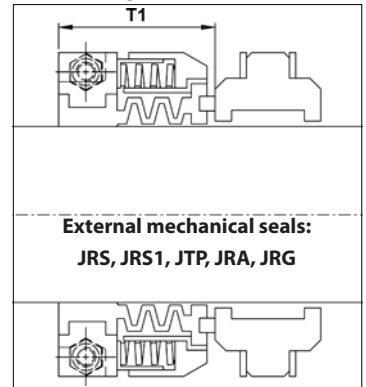
APPLICABLE API PLANS: 01 - 11 - 12 - 32

### 8.3 JRS - JRS1 - JTP - JRA - JRG SEALS



External mechanical seals: JRS, JRS1, JTP, JRA, JRG

Positioning of the mechanical seal



External mechanical seals:  
JRS, JRS1, JTP, JRA, JRG

Seals diameter (mm)	T1 (mm)
35	38
55	53
75	53

#### NOMENCLATURE OF MECHANICAL SEAL PARTS

POS.	DESCRIPTION	QUANTITY	MATERIAL
016	Shaft sleeve	1	FRP
023	Washer - seal chamber	4	SS 304
047	Retaining ring	1	SS 304
053a	Mechanical seal JRS (rotating ring)	1	SS 316 - PTFE C - SiC
	Mechanical seal JRS1 (rotating ring)	1	SS 316 - PTFE C - SiC
	Mechanical seal JTP (rotating ring)	1	SS 316 - PTFE C - PTFE C
	Mechanical seal JRA (rotating ring)	1	SS 316 - PTFE C - SiC
	Mechanical seal JRG (rotating ring)	1	SS 316 - PTFE C - Carbon-graphite
053b	Mechanical seal JRS (static ring)	1	SiC
	Mechanical seal JRS1 (static ring)	1	SiC
	Mechanical seal JTP (static ring)	1	Al <sub>2</sub> O <sub>3</sub>
	Mechanical seal JRA (static ring)	1	Al <sub>2</sub> O <sub>3</sub>
	Mechanical seal JRG (static ring)	1	Al <sub>2</sub> O <sub>3</sub>
053c	Gasket - static ring	2	PTFE
055	Screw - seal chamber	4	SS 304
060	Spacer	1	PP
111	Protection	1	PC

#### JRS MECHANICAL SEAL TECHNICAL DATA

Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -45 a 90	8	3450
55			
75		7	1750

APPLICABLE API PLANS: 01 - 11 - 12 - 32

#### JRS1 MECHANICAL SEAL TECHNICAL DATA

Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -30 a 90	7	3450
55		6	
75		5	1750

APPLICABLE API PLANS: 01 - 11 - 12 - 32

#### JTP MECHANICAL SEAL TECHNICAL DATA

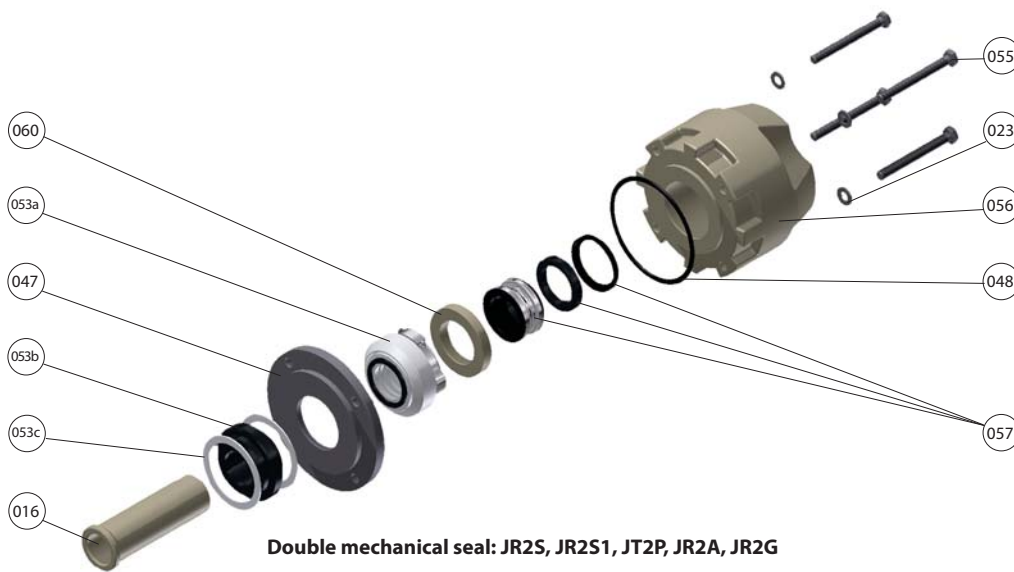
Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -45 a 95	8	3450
55			
75		7	1750

APPLICABLE API PLANS: 01 - 11 - 12 - 32

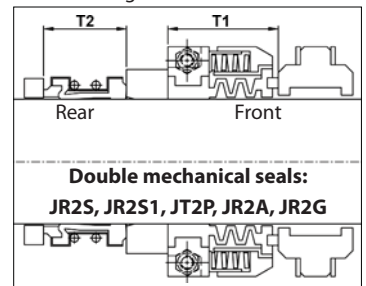
#### JRA - JRG MECHANICAL SEAL TECHNICAL DATA

Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -45 a 90	8	3450
55			
75		7	1750

APPLICABLE API PLANS: 01 - 11 - 12 - 32

**8.4 JR2S - JR2S1 - JT2P - JR2A - JR2G SEALS**


Positioning of the mechanical seal



Seals diameter (mm)	T1 (mm)
35	38
55	53
75	53

Seals diameter (mm)	T2 (mm)
35	26
55	30
75	40

**NOMENCLATURE OF MECHANICAL SEAL PARTS**

POS.	DESCRIPTION	QUANTITY	MATERIAL
016	Shaft sleeve	1	FRP
023	Washer - seal chamber	4	SS 304
047	Retaining ring	1	SS 304
048	O-ring - seal chamber	1	EPDM - FPM - FFKM
053a	Mechanical seal JR2S (rotating ring)	1	SS 316 - PTFE C - SiC
	Mechanical seal JR2S1 (rotating ring)	1	SS 316 - PTFE C - SiC
	Mechanical seal J2TP (rotating ring)	1	SS 316 - PTFE C - PTFE C
	Mechanical seal J2RA (rotating ring)	1	SS 316 - PTFE C - SiC
	Mechanical seal J2RG (rotating ring)	1	SS 316 - PTFE C - Carbon-graphite
053b	Mechanical seal J2RS (static ring)	1	SiC
	Mechanical seal J2RS1 (static ring)	1	SiC
	Mechanical seal J2TP (static ring)	1	Al <sub>2</sub> O <sub>3</sub>
	Mechanical seal J2RA (static ring)	1	Al <sub>2</sub> O <sub>3</sub>
	Mechanical seal J2RG (static ring)	1	Al <sub>2</sub> O <sub>3</sub>
053c	Gasket - static ring	2	PTFE
055	Screw - seal chamber	4	SS 304
056	Seal chamber	1	FRP
057	Mechanical seal	1	EPDM o FPM - SS 316 - SiC/SiC
060	Spacer	1	PP

**JR2S MECHANICAL SEAL TECHNICAL DATA**

Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -45 a 90	8	3450
55			
75		7	1750

APPLICABLE API PLANS: 01 - 11 - 12 - 32 + 52 - 53 - 54

**JR2S1 MECHANICAL SEAL TECHNICAL DATA**

Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -30 a 90	7	3450
55		6	
75		5	1750

APPLICABLE API PLANS: 01 - 11 - 12 - 32 + 52 - 53 - 54

**JT2P MECHANICAL SEAL TECHNICAL DATA**

Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -45 a 95	8	3450
55			
75		7	1750

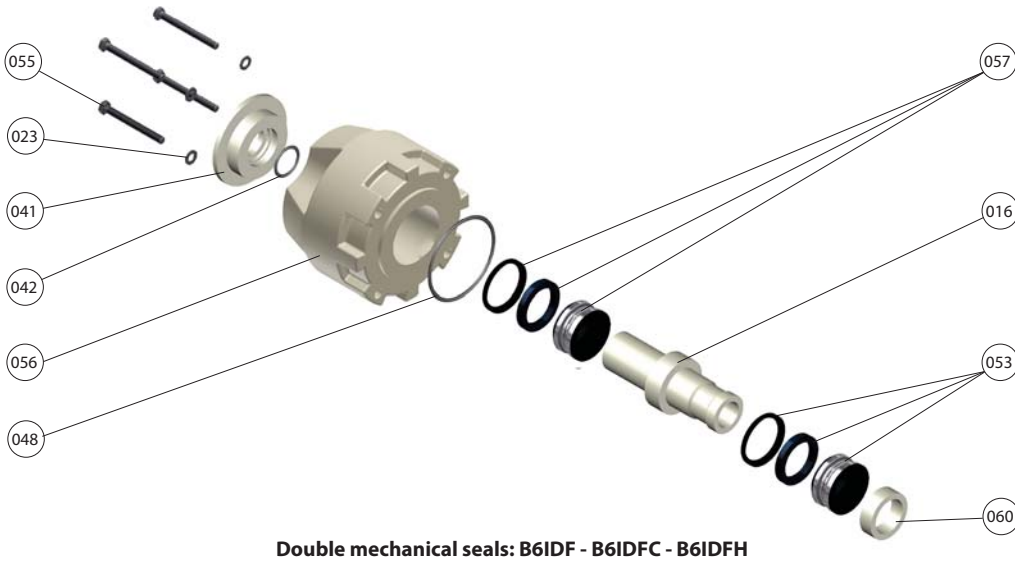
APPLICABLE API PLANS: 01 - 11 - 12 - 32 + 52 - 53 - 54

**JR2A - JR2G MECHANICAL SEALS TECHNICAL DATA**

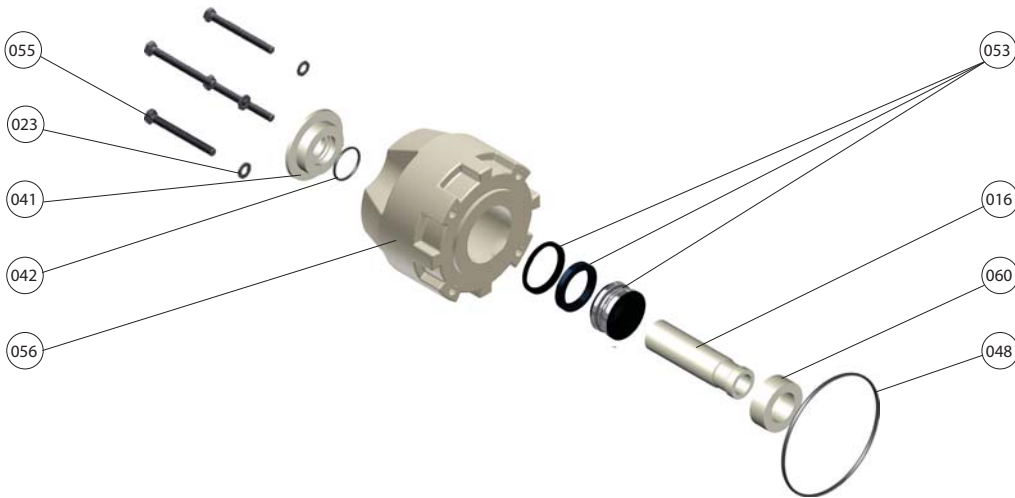
Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -45 a 90	8	3450
55			
75		7	1750

APPLICABLE API PLANS: 01 - 11 - 12 - 32 + 52 - 53 - 54

**8.5 B6IDF - B6IDFC - B6IDFH - B6I - B6IC - B6IFL - B6IH - B9IFLH - B6IFLC SEALS**

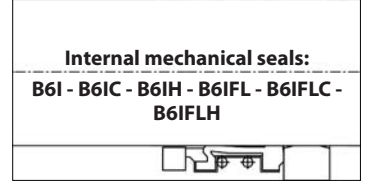
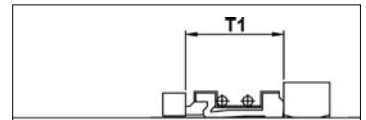
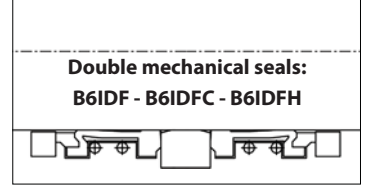
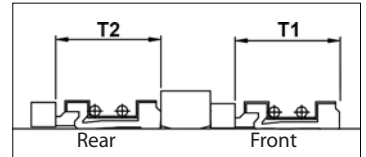


**Double mechanical seals: B6IDF - B6IDFC - B6IDFH**



**Internal mechanical seals: B6I - B6IC - B6IH - B6IFL - B6IFLC - B6IFLH**

Positioning of the mechanical seal



Seals diameter (mm)	T1 (mm)
35	26
55	30
75	40
Seals diameter (mm)	T2 (mm)
35	26
55	30
75	40

**NOMENCLATURE OF MECHANICAL SEAL PARTS**

POS.	DESCRIPTION	QUANTITY	MATERIAL
016	Shaft sleeve	1	FRP
023	Washer, seal chamber	4	SS 304
041	Spray guard	1	PP
042	O-ring, spray guard	1	EPDM - FPM - FFKM
048	O-ring, seal chamber	1	EPDM - FPM - FFKM
053	Mechanical seal	1	EPDM or FPM - SS 316 - SiC/SiC
055	Screw, seal chamber	4	SS 304
056	Seal chamber	1	FRP
057	Mechanical seal	1	EPDM or FPM - SS 316 - SiC/SiC
060	Spacer	1	PP

**MECHANICAL SEAL TECHNICAL DATA B6IDF - B6IDFC - B6IDFH**

Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -40 a 60	10	3450
55			
75		8,5	1750

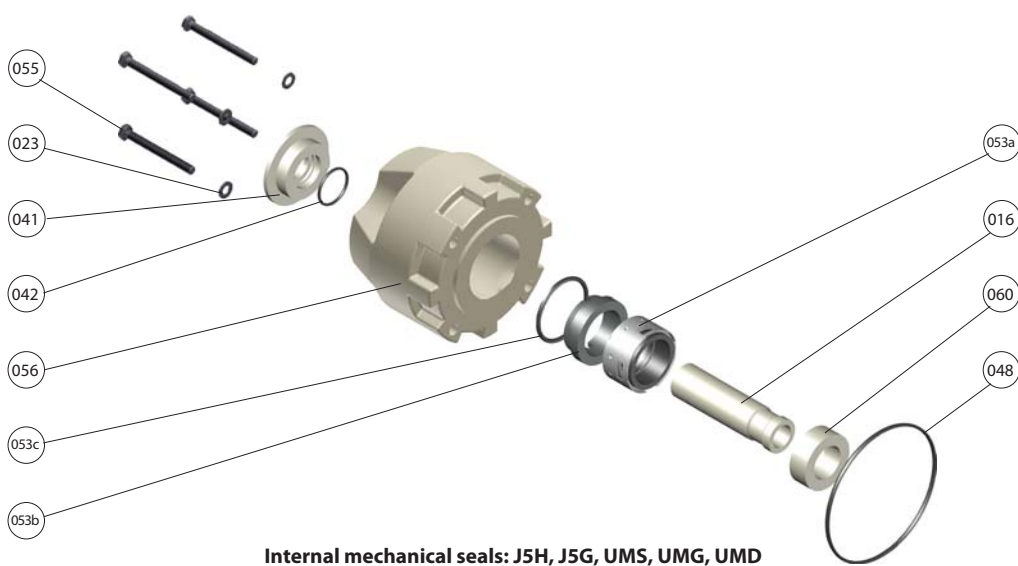
APPLICABLE API PLANS: 01 - 11 - 12 - 32 + 52 - 53 - 54

**MECHANICAL SEAL TECHNICAL DATA B6I - B6IC - B6IH - B6IFL - B6IFLC**

Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -40 a 60	10	3450
55			
75		8,5	1750

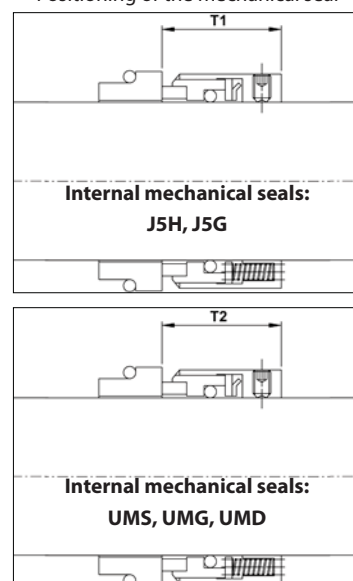
APPLICABLE API PLANS: 01 - 11 - 12 - 32

### 8.6 J5H - J5G - UMS - UMG - UMD SEALS



Internal mechanical seals: J5H, J5G, UMS, UMG, UMD

Positioning of the mechanical seal



Seal's diameter (mm)	T1 (mm)	T2 (mm)
35	30.5	32.5
55	34	34.5
75	45.5	45

#### NOMENCLATURE OF MECHANICAL SEAL PARTS

POS.	DESCRIPTION	QUANTITY	MATERIAL
016	Shaft sleeve	1	FRP
023	Washer, seal chamber	4	SS 304
041	Spray guard	1	PP
042	O-ring, spray guard	1	EPDM - FPM - FFKM
048	O-ring, seal chamber	1	EPDM - FPM - FFKM
053a	Mechanical seal J5H (rotating ring)	1	EPDM or FPM - SiC - Monel 400 - Hastelloy C276
	Mechanical seal J5G (rotating ring)	1	EPDM or FPM - Carbon-graphite - SS 316
	Mechanical seal UMS (rotating ring)	1	EPDM or FPM - SiC - Hastelloy C276
	Mechanical seal UMG (rotating ring)	1	EPDM or FPM - Carbon-graphite - Hastelloy C276
	Mechanical seal UMD (rotating ring)	1	SiC - Hastelloy C276 - Duplex
053b	Mechanical seal J5H (static ring)	1	SiC
	Mechanical seal J5G (static ring)	1	SiC
	Mechanical seal UMS (static ring)	1	SiC
	Mechanical seal UMG (static ring)	1	SiC
	Mechanical seal UMD (static ring)	1	SiC
053c	O-ring, mechanical seal	1	EPDM - FPM
055	Screw, seal chamber	4	SS 304
056	Seal chamber	1	FRP
060	Spacer	1	PP

#### J5H MECHANICAL SEAL TECHNICAL DATA

Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -40 a 90	12	3450
55	Da -40 a 80		
75		10	1750

APPLICABLE API PLANS: 01 - 11 - 12 - 32

#### J5G MECHANICAL SEAL TECHNICAL DATA

Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -40 a 100	12	3450
55	Da -40 a 90		
75		10	1750

APPLICABLE API PLANS: 01 - 11 - 12 - 32

#### UMS - UMD MECHANICAL SEAL TECHNICAL DATA

Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -40 a 90	12	3450
55	Da -40 a 80		
75		10	1750

APPLICABLE API PLANS: 01 - 11 - 12 - 32

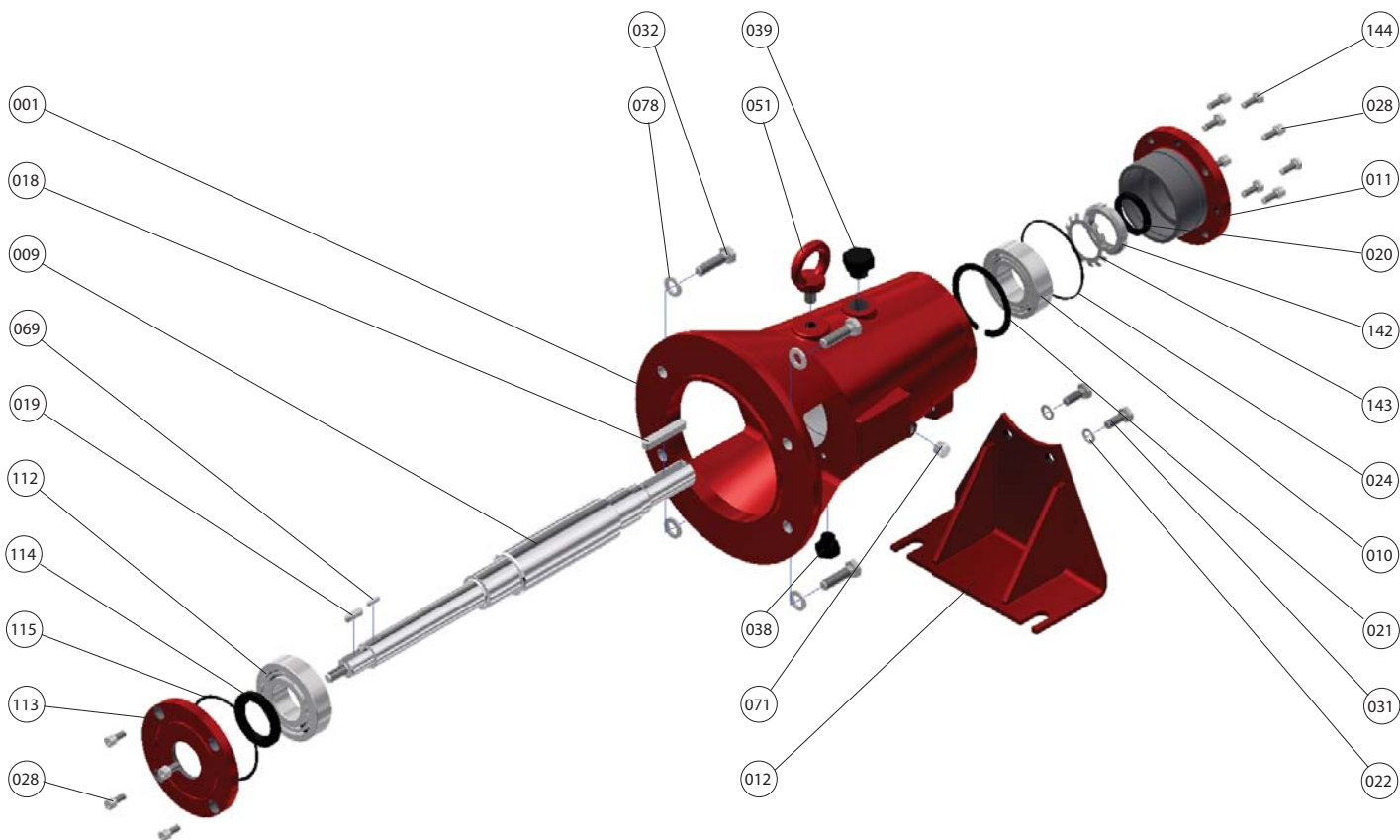
#### UMG MECHANICAL SEAL TECHNICAL DATA

Seal diameter (mm)	Temperature range (°C)	Max. pressure (Bar g)	Max. RPM
35	Da -40 a 100	12	3450
55	Da -40 a 90		
75		10	1750

APPLICABLE API PLANS: 01 - 11 - 12 - 32



### 8.7 BEARING HOUSING



#### NOMENCLATURE OF BEARING HOUSING PARTS

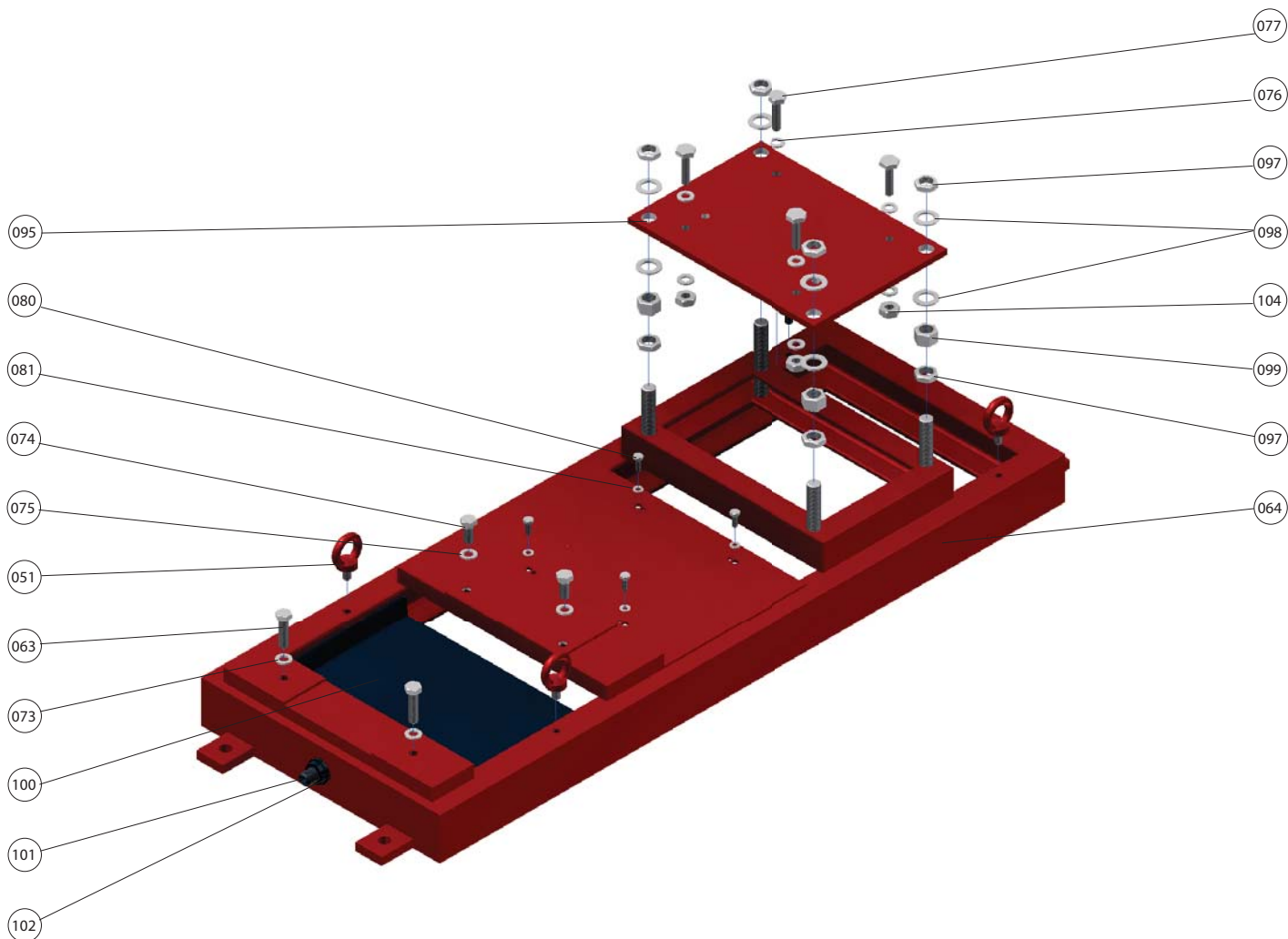
POS.	DESCRIPTION	QUANTITY	MATERIAL
001	Bearing housing	1	Cast iron
009	Shaft	1	42CrMo4 - Super Duplex <sup>(1)</sup>
010	Radial ball bearing	1	Sales
011	Cover, bearing housing	1	C45
012	Foot, bearing housing	1	S275JR
018	Key - shaft (motor side)	1	C45
019	Key - shaft (impeller side)	1	C45
020	Seal ring	1	NBR
021	Snap ring	1	Sales
022	Washer - foot	2	SS 304
024	O-ring - cover	1	NBR
028	Screw - cover	8-12	SS 304
031	Screw - foot	2	SS 304
032	Screw - bearing housing	4	SS 304
038	Oil drain plug	1	Sales
039	Oil fill plug	1	Sales
051	Eyebolt	1	Sales
069	Key - shaft sleeve	1	C45
071	Oil level plug	1	Sales
078	Washer - bearing housing	4	SS 304

POS.	DESCRIPTION	QUANTITY	MATERIAL
112	Radial ball bearing	1	Sales
113	Cover, bearing housing	1	C45
114	Seal ring	1	NBR
115	O-ring - cover	1	NBR
142	Slotted round nut	1	Sales
143	Lockwasher	1	Sales
144	Screw, shaft regulation	4	SS 304

NOTES:

(1) Special execution: Shaft in Super Duplex.

**8.8 BASE-PLATE**



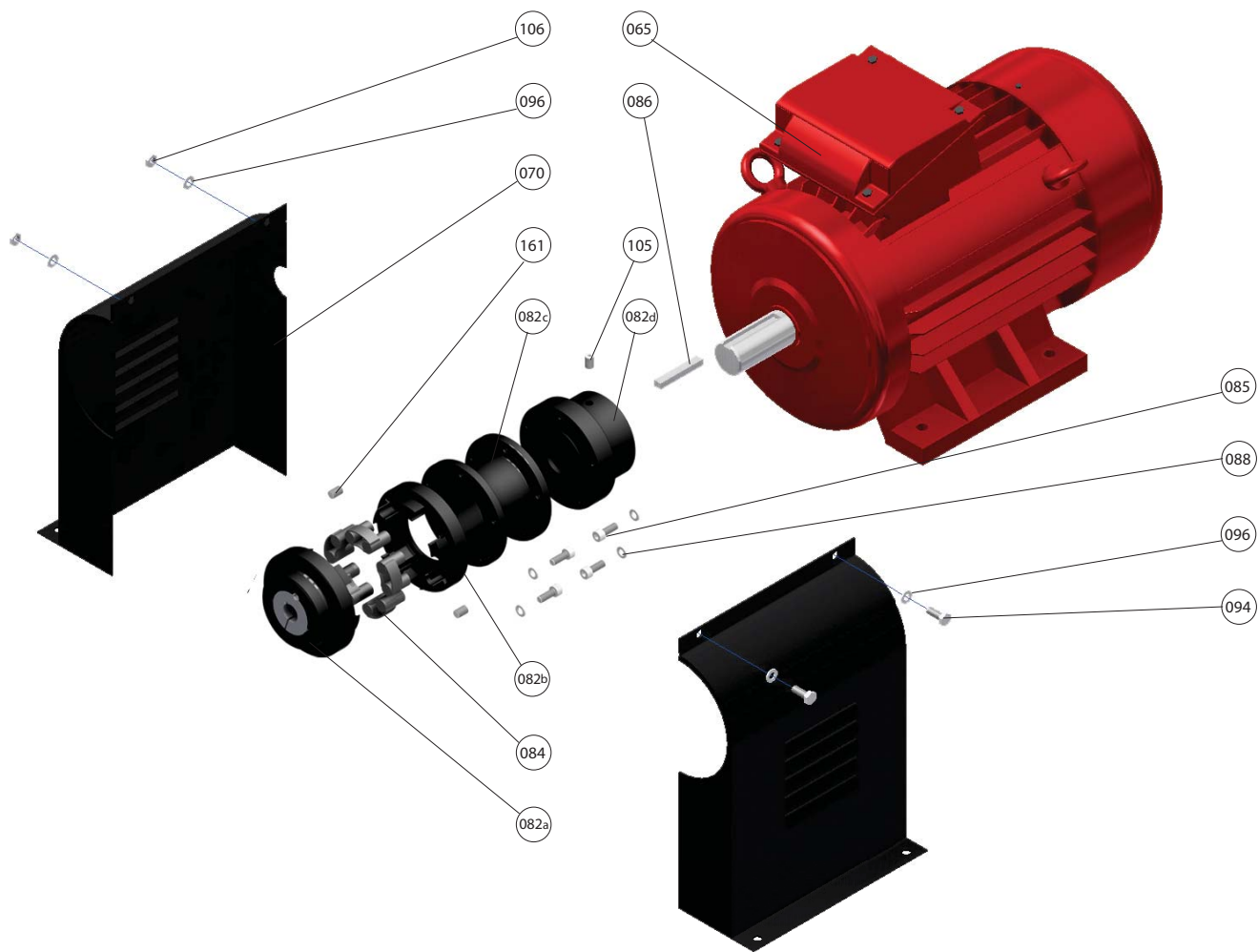
**NOMENCLATURE OF PUMP BASE PARTS**

POS.	DESCRIPTION	QUANTITY	MATERIAL
051	Eyebolt	4	Sales
063	Screw - armour	4	SS 304
064	Base	1	S275JR
073	Washer - armour	4	SS 304
074	Screw - foot	2	SS 304
075	Washer - foot	2	SS 304
076	Washer - motor	8	SS 304
077	Screw - motor	4	SS 304
080	Screw - coupling guard	4	SS 304
081	Washer - coupling guard	4	SS 304
095	Base plate - motor	1	S275JR
097	Nut - base plate	8	SS 304
098	Washer - base plate	8	SS 304
099	Nut - base plate	4	SS 304
100	Basin*, drainage	1	PVC
101	Nozzle*, drainage	1	PVC
102	Nut*, drainage	1	PVC
104	Nut - motor	4	SS 304

NOTES:  
\* Optional parts



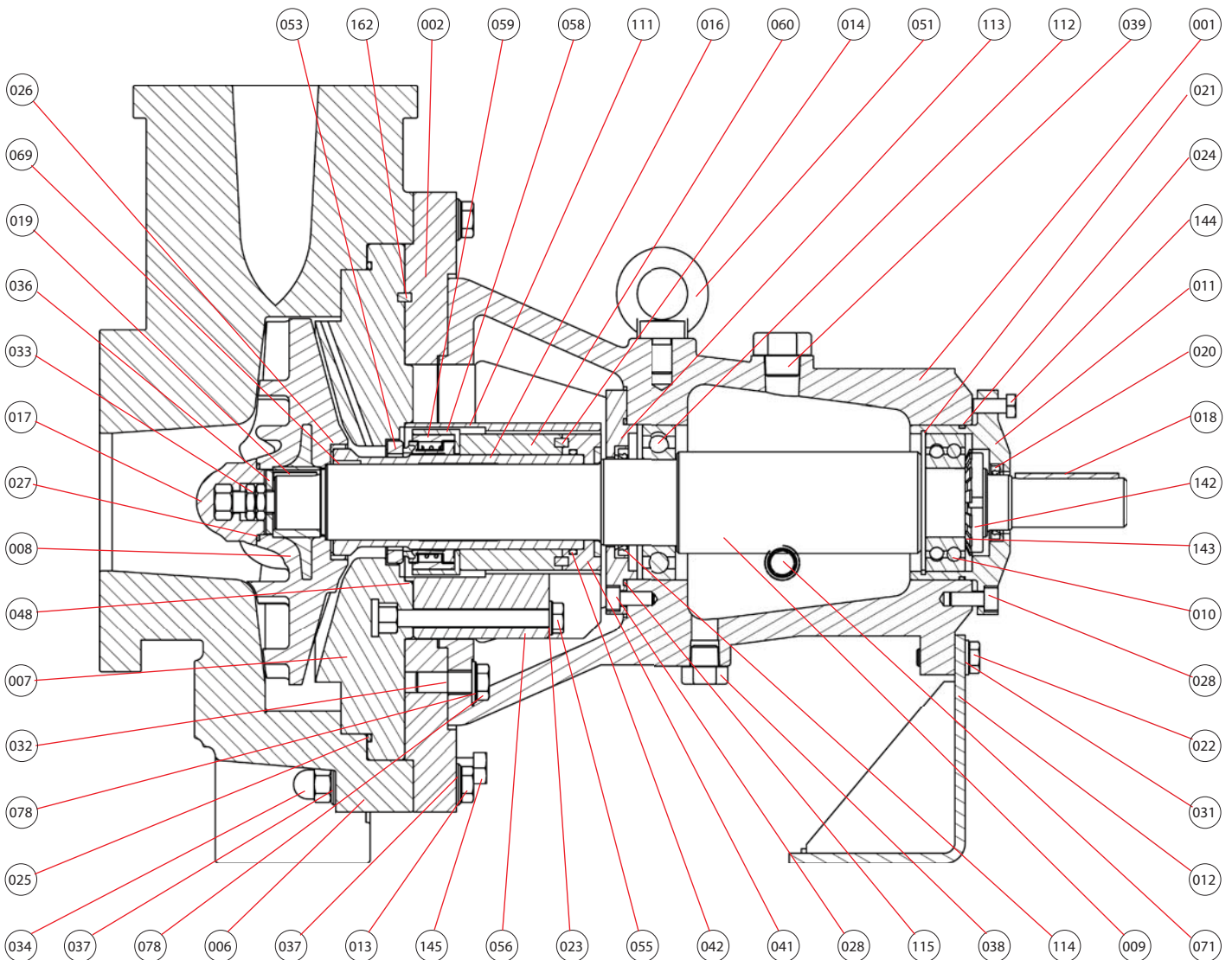
**8.9 COUPLING**



**NOMENCLATURE OF COUPLING PARTS**

POS.	DESCRIPTION	QUANTITY	MATERIAL
065	Motor	1	Sales
070	Coupling guard	1	S275JR
082	Coupling (a+b+c+d)	1	Cast iron
084	Rubber element - coupling	4-8	NBR 75Sh
085	Screw - coupling	8-16	UNI 5931 (class 8.8)
086	Key - motor	1	C45
088	Washer, coupling	8-16	UNI 5931 (class 8.8)
094	Screw - coupling guard	2	SS 304
096	Washer - coupling guard	4	SS 304
105	Grub screw - coupling	1	SS 304
106	Nut - coupling guard	2	SS 304
161	Grub screw - coupling	2	SS 304

### 8.10 SECTIONAL VIEW WITH B6E MECHANICAL SEAL



POS.	DESCRIPTION	POS.	DESCRIPTION
001	Bearing housing	022	Washer - foot
002	Rear armour	023	Washer - seal chamber
006	Casing	024	O-ring - cover
007	Rear casing	025	O-ring, casing
008	Impeller	026	<sup>(1)</sup> Gasket, impeller
009	Shaft	027	O-ring, impeller nut
010	Radial ball bearing	028	Screw - cover
011	Cover - bearing housing	031	Screw - foot
012	Foot - bearing housing	032	Screw - bearing housing
013	Screw - casing	033	Locknut, impeller
014	Cylindrical pin, spray guard	034	Nut, casing
016	Shaft sleeve	036	Washer, impeller
017	Impeller nut	037	Washer, casing
018	Key - shaft (motor side)	038	Oil drain plug
019	Key - shaft (impeller side)	039	Oil fill plug
020	Seal ring - bearing housing	041	Spray guard
021	Snap ring - bearing housing	042	O-ring, spray guard

POS.	DESCRIPTION	POS.	DESCRIPTION
048	O-ring, seal chamber	111	External protection
051	Eyebolt	112	Radial ball bearing
053	Mechanical seal	113	Cover - bearing housing
055	Screw, seal chamber	114	Seal ring - bearing housing
056	Seal chamber	115	O-ring - cover
058	External reinforcement	116	Snapring - bearing housing
059	Internal reinforcement	142	Slotted round nuts
060	Spacer	143	Lock washer
069	Key - shaft sleeve	144	Screw - shaft regulation
071	Oil level plug	145	Screw - shaft regulation
078	Washer - bearing housing	161	Cylindrical pin - rear casing

**NOTES:**

<sup>(1)</sup> O-ring in the Group I

<sup>(2)</sup> only for the Groups II and III

<sup>(3)</sup> in alternative to 111 position

<sup>(4)</sup> in alternative to 056 position