

KRW3 : VOLUTE CASING PUMPS
ACCORDING TO DIN 24255
AND SUPPLEMENTARY SIZES

Applications

Single-stage volute casing pumps of the KRW3 series are preferably used in the field of water supply. Standardized connecting dimensions allow for trouble-free installation even in existing systems. Our volute casing pumps suitable for use on various applications, such as:

- Water supply in Buildings
- Water Pressure Boosting
- Water Treatment
- Water Circulating
- Air Conditioning
- Industrial use
- Agriculture
- Irrigation
- Drainage
- Fire Protection

Construction

Dimensions and rated capacities of single-stage end suction pumps of the KRW3 series comply with DIN standard 24255. A favourable characteristic of our volute casing pump is easy maintenance. Motor, sealing systems and impeller can be replaced while pump casing remains installed in the piping system. Our modular design principle combined & optimised hydraulic allows for various design arrangements in accordance with different use conditions.

Designation

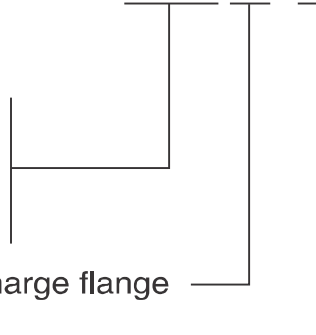
Single-stage volute casing pump acc.to DIN 24255

Standard water pump

Nominal diam.of discharge flange

Impeller diameter

KRW3 50 / 20



Operating data

Size	DN 32-DN300
Flow rate	max. 1800 m ³ /hr*
Total head	max. 160 m
Speed	max. 3600 rpm
Max. Operating temperature	max. 105°C
Max. Working pressure	max. 16 bar**

* For higher capacity, consult factory

** Hydrostatic testing pressure is 1.5 times of maximum working pressure

*** Available 3600 rpm



Bearings

Usually, lifetime-lubricated, maintenance-free ball bearings are used. Oil lubrication is an available option for special use conditions.

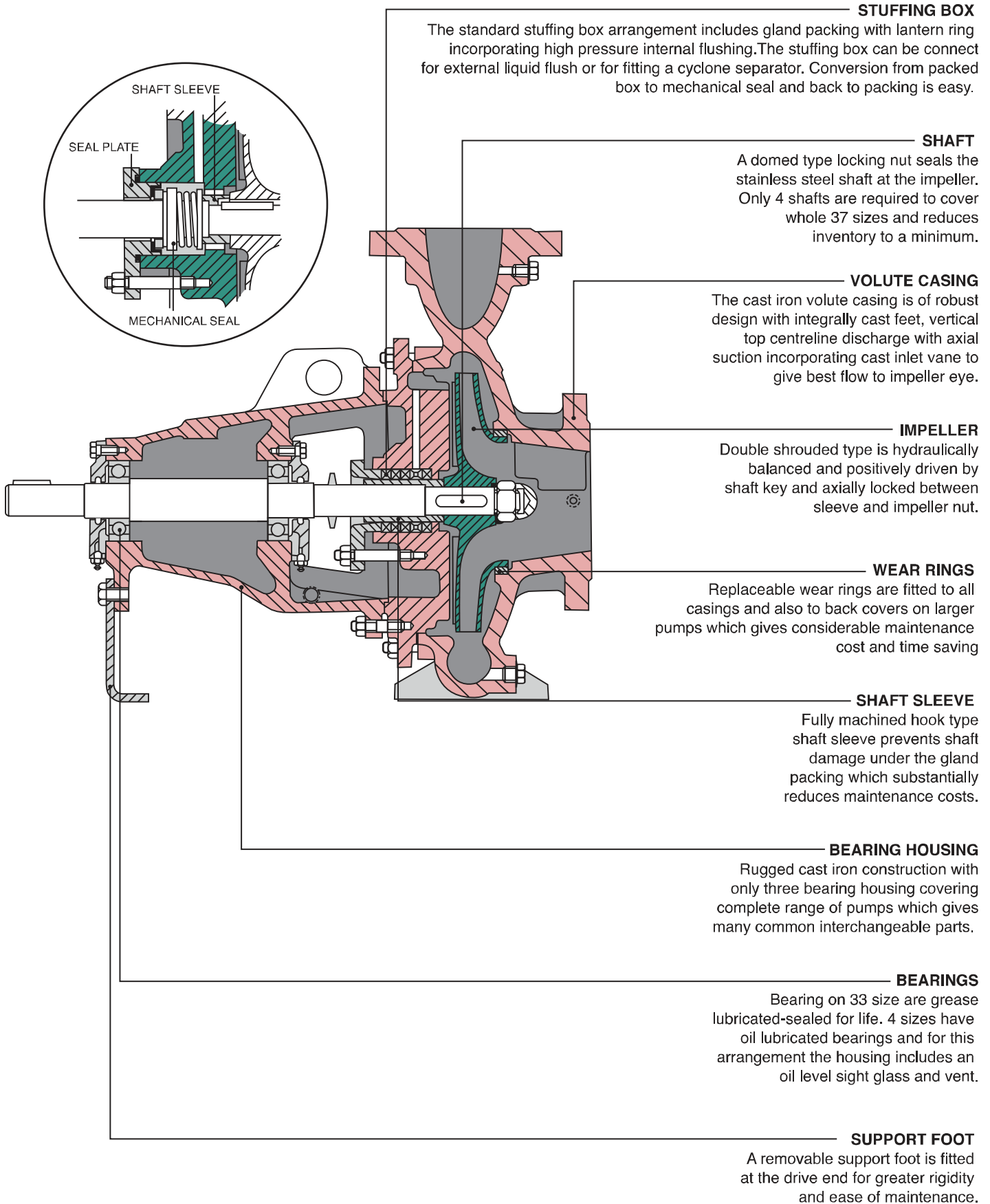
MATERIAL OF CONSTRUCTION

	Bronze Fitted	Cast Iron	All Iron	Stainless Steel 304/316
Casing	Cast Iron	Cast Iron	Cast Iron	Stainless Steel
Impeller	Bronze	Cast Iron	Cast Iron	Stainless Steel
Wear Ring	Cast Iron	Cast Iron	Cast Iron	Stainless Steel
Shaft	Stainless steel	Stainless steel	Stainless steel	Stainless Steel
Shaft Nut	Stainless steel	Stainless steel	Cast Iron	Stainless Steel
Shaft Sleeve	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Lantern Ring	Cast Iron	Cast Iron	Cast Iron	Stainless Steel
Gland	Cast Iron	Cast Iron	Cast Iron	Stainless Steel

MATERIAL SPECIFICATION

Material	Nearest Equivalent Standard			
	Australian	British	American	DIN
Cast Iron	AS 1830/T200	BS 1452: GR220	ASTM A48 CLASS 30	DIN 1691 GG20
Bronze	AS 1565/836B	BS 1400: LG2	ASTM B145 CDA836	DIN 1705
Stainless Steel	AS 1444 GR 420	BS 970: 420/S37	AISI420	DIN 17440

CONSTRUCTION



STUFFING BOX

The standard stuffing box arrangement includes gland packing with lantern ring incorporating high pressure internal flushing. The stuffing box can be connect for external liquid flush or for fitting a cyclone separator. Conversion from packed box to mechanical seal and back to packing is easy.

SHAFT

A domed type locking nut seals the stainless steel shaft at the impeller. Only 4 shafts are required to cover whole 37 sizes and reduces inventory to a minimum.

VOLUTE CASING

The cast iron volute casing is of robust design with integrally cast feet, vertical top centreline discharge with axial suction incorporating cast inlet vane to give best flow to impeller eye.

IMPELLER

Double shrouded type is hydraulically balanced and positively driven by shaft key and axially locked between sleeve and impeller nut.

WEAR RINGS

Replaceable wear rings are fitted to all casings and also to back covers on larger pumps which gives considerable maintenance cost and time saving

SHAFT SLEEVE

Fully machined hook type shaft sleeve prevents shaft damage under the gland packing which substantially reduces maintenance costs.

BEARING HOUSING

Rugged cast iron construction with only three bearing housing covering complete range of pumps which gives many common interchangeable parts.

BEARINGS

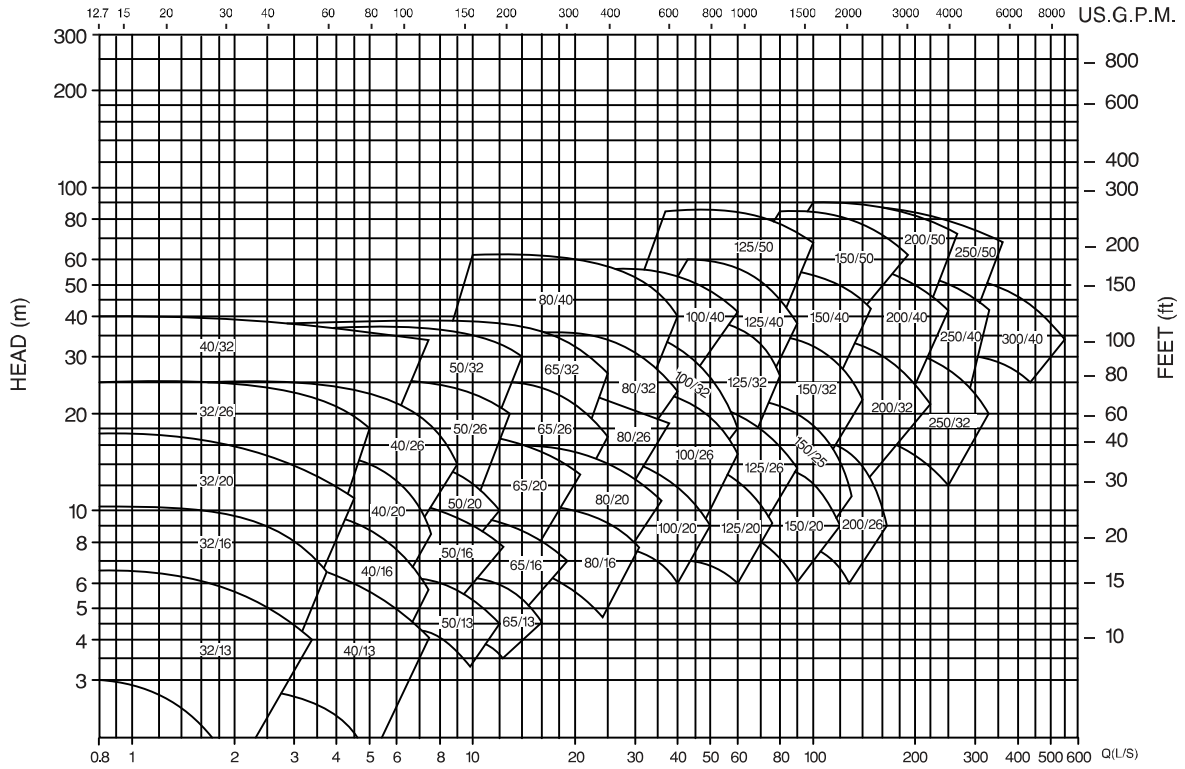
Bearing on 33 size are grease lubricated-sealed for life. 4 sizes have oil lubricated bearings and for this arrangement the housing includes an oil level sight glass and vent.

SUPPORT FOOT

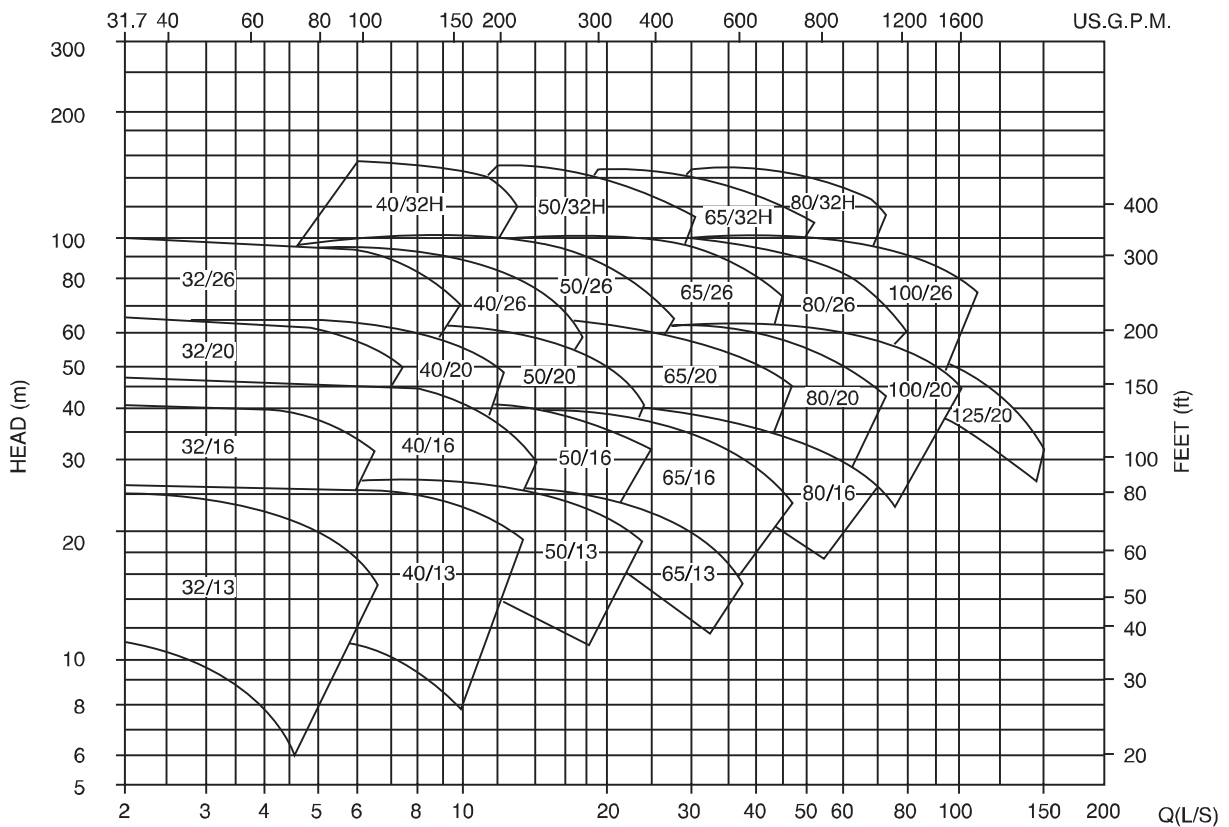
A removable support foot is fitted at the drive end for greater rigidity and ease of maintenance.

PERFORMANCE CHART 50Hz

1450 rpm



2900 rpm

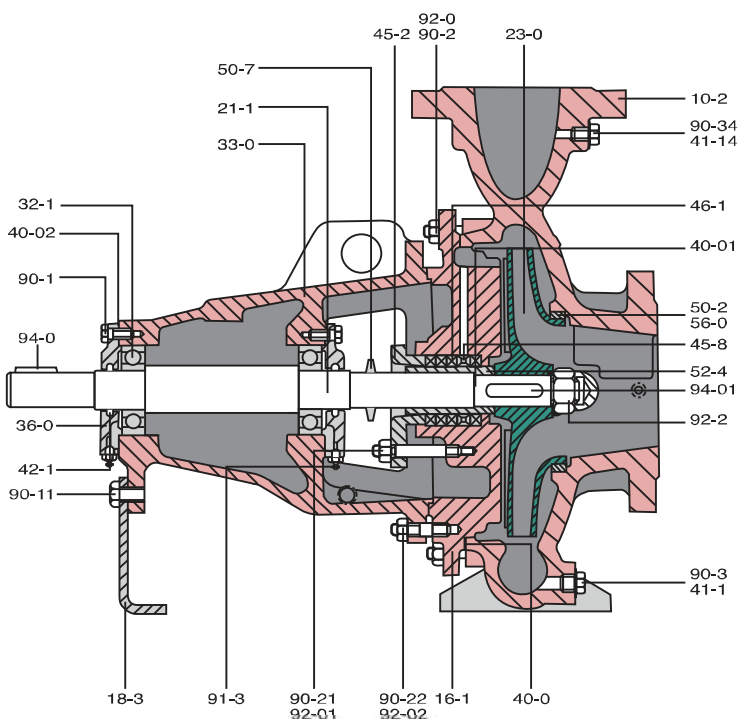


The non-overloading power required when handing fresh water SG 1.0 for pumps : Some model(s) are overestimated with the power up to 13%-40% service factor.

MODEL NO.	1450RPM	2900RPM
32/13	0.37 KW	2.2 KW
32/16	0.55 KW	4.0 KW
32/20	1.1 KW	7.5 KW
32/26	2.2 KW	18.5 KW
40/13	0.55 KW	4.0 KW
40/16	1.1 KW	5.5 KW
40/20	1.5 KW	11 KW
40/26	3.0 KW	22 KW
40/32	5.5 KW	-
40/32 (H)	-	37 KW
50/13	1.1 KW	7.5 KW
50/16	1.5 KW	11 KW
50/20	2.2 KW	18.5 KW
50/26	4.0 KW	37 KW
50/32	11 KW	-
50/32 (H)	-	75 KW
65/13	1.5 KW	11 KW
65/16	2.2 KW	18.5 KW
65/20	4.0 KW	30 KW
65/26	7.5 KW	55 KW
65/32	15 KW	-
65/32 (H)	-	90 KW

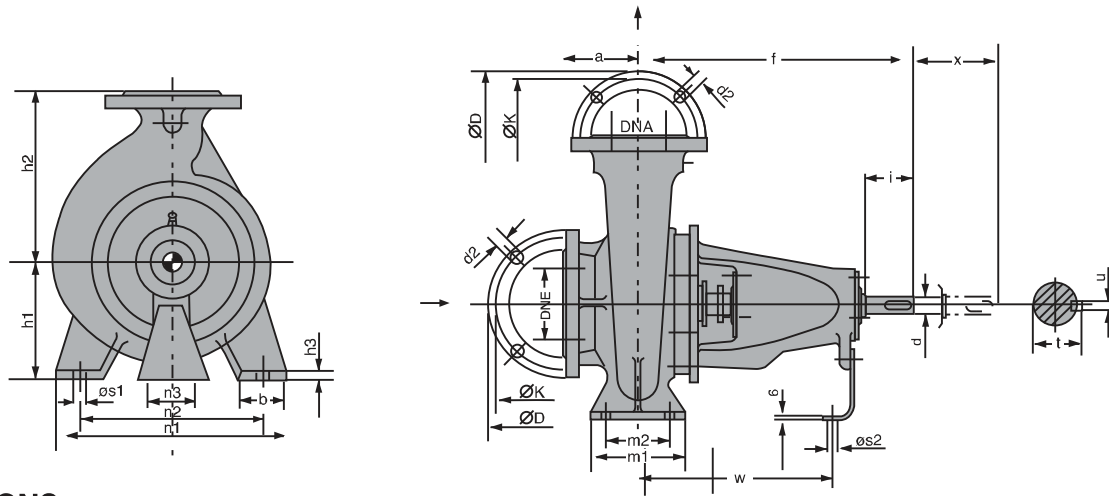
MODEL NO.	1450RPM	2900RPM
80/16	4.0 KW	30 KW
80/20	7.5 KW	45 KW
80/26	11 KW	75 KW
80/32	18.5 KW	-
80/32 (H)	-	125 KW
80/40	30 KW	-
100/20	7.5 KW	55 KW
100/26	15 KW	-
100/26 (H)	-	110 KW
100/32	18.5 KW	-
100/40	37 KW	-
125/20	11 KW	75 KW
125/26	22 KW	-
125/32	30 KW	-
125/40	55 KW	-
125/50	110 KW	-
150/20	18.5 KW	-
150/26	30 KW	-
150/32	55 KW	-
150/40	90 KW	-
150/50	160 KW	-
200/26	30 KW	-
200/32	60 KW	-
200/40	150 KW	-
200/50	250 KW	-
250/32	90 KW	-
250/40	160 KW	-
250/50	300 KW	-
300/40	250 KW	-

PART LIST



PART NO.	DESCRIPTION	QTY.
10-2	Pump Casing	1
50-2	Case Wear Ring	1
56-0	Dowel	2
40-0	Casing Gasket	1
90-3	Drain Plug	1
41-1	Gasket Ring	1
91-3	Grease Nipple	2
23-0	Impeller	1
90-2	Stud-Casing	8/12
92-0	Nut-Casing	8/12
18-3	Support Foot	1
90-34	Gauge Plug	1
41-14	Gasket Ring	1
90-11	Hex. Screw	1
16-1	Casing Back Cover	1
45-8	Lantern Ring	1
45-2	Gland	1
46-1	Gland Packing	4
52-4	Shaft Sleeve	1
40-01	Sleeve Gasket	1
90-22	Stud-Back Cover	8/6
92-02	Nut-Back Cover	8/6
90-21	Stud-Gland	2
92-01	Nut-Gland Stud	2
33-0	Bearing Housing	1
36-0	Bearing Cover	2
40-02	Gasket	2
42-1	Oil Seal	2
32-1	Bearing	2
21-1	Shaft	1
94-0	Coupling Key	1
94-01	Impeller Key	1
92-2	Impeller Nut	1
50-7	Thrower	1
90-1	Hex. Screw	6

OUTLINE & DIMENSIONS



DIMENSIONS

Pump size	Shaft unit	DNE	DNA	a	f	h1	h2	b	m1	m2	n1	n2	n3	h3	Øs1	Øs2	w	d	l	t	u	WT kg
32/13	25	Ø50	Ø32	80	360	112	140	50	100	70	190	140	100	14	14	14	267	24	50	27	8	27.5
32/16	25	Ø50	Ø32	80	360	132	160	50	100	70	240	190	100	14	14	14	267	24	50	27	8	35
32/20	25	Ø50	Ø32	80	360	160	180	50	100	70	240	190	110	14	14	14	267	24	50	27	8	41
32/26	25	Ø50	Ø32	100	360	180	225	65	125	95	320	250	110	14	14	14	267	24	50	27	8	59
40/13	25	Ø65	Ø40	80	360	112	140	50	100	70	210	160	100	14	14	14	267	24	50	27	8	30
40/16	25	Ø65	Ø40	80	360	132	160	50	100	70	240	190	100	14	14	14	267	24	50	27	8	36
40/20	25	Ø65	Ø40	100	360	160	180	50	100	70	265	212	110	14	14	14	267	24	50	27	8	44
40/26	25	Ø65	Ø40	100	360	180	225	65	125	95	320	250	110	14	14	14	267	24	50	27	8	61
40/32	35	Ø65	Ø40	125	470	200	225	65	125	95	345	280	110	14	14	14	342	32	80	35	10	45.8
40/32H	35	Ø65	Ø40	125	470	200	225	65	125	95	345	280	110	14	14	14	342	32	80	35	10	45.8
50/13	25	Ø65	Ø50	100	360	132	160	50	100	70	240	190	100	14	14	14	267	24	50	27	8	34
50/16	25	Ø65	Ø50	100	360	160	180	50	100	70	265	212	110	14	14	14	267	24	50	27	8	38
50/20	25	Ø65	Ø50	100	360	160	200	50	100	70	265	212	110	14	14	14	267	24	50	27	8	46
50/26	25	Ø65	Ø50	100	360	180	225	65	125	95	320	250	110	14	14	14	267	24	50	27	8	63
50/32	35	Ø65	Ø50	125	470	225	280	65	125	95	345	280	110	16	14	14	342	32	80	35	10	101
50/32H	35	Ø65	Ø50	125	470	225	280	65	125	95	345	280	110	16	14	14	342	32	80	35	10	101
65/13	25	Ø80	Ø65	100	360	160	180	65	125	95	280	212	110	14	14	14	267	24	50	27	8	39
65/16	25	Ø80	Ø65	100	360	160	200	65	125	95	280	212	110	14	14	14	267	24	50	27	8	43
65/20	25	Ø80	Ø65	100	360	180	225	65	125	95	320	250	110	14	14	14	267	24	50	27	8	70
65/26	35	Ø80	Ø65	100	470	200	250	80	160	120	360	280	110	16	17.5	14	342	32	80	35	10	91
65/32	35	Ø80	Ø65	125	470	225	280	80	160	120	400	315	110	16	17.5	14	342	32	80	35	10	110
65/32H	35	Ø80	Ø65	125	470	225	280	80	160	120	400	315	110	16	17.5	14	342	32	80	35	10	110
80/16	25	Ø100	Ø80	125	360	180	225	65	125	95	320	250	110	14	14	14	267	24	50	27	8	54
80/20	35	Ø100	Ø80	125	470	180	250	65	125	95	345	280	110	14	14	14	342	32	80	35	10	70
80/26	35	Ø100	Ø80	125	470	200	280	80	160	120	400	315	110	16	17.5	14	342	32	80	35	10	91
80/32	35	Ø100	Ø80	125	470	250	315	80	160	120	400	315	110	16	17.5	14	342	32	80	35	10	120
80/32H	35	Ø100	Ø80	125	470	250	315	80	160	120	400	315	110	16	17.5	14	342	32	80	35	10	120
100/40	45	Ø100	Ø80	125	530	280	355	85	160	120	440	340	110	16	17.5	14	368	42	110	45	12	161
100/20	35	Ø125	Ø100	125	470	200	280	80	160	120	360	280	110	16	17.5	14	342	32	80	35	10	85
100/26	35	Ø125	Ø100	140	470	225	280	80	160	120	400	315	110	16	17.5	14	342	32	80	35	10	106
100/26H	35	Ø125	Ø100	140	470	225	280	80	160	120	400	315	110	16	17.5	14	342	32	80	35	10	106
100/32	35	Ø125	Ø100	140	470	250	315	80	160	120	400	315	110	16	17.5	14	342	32	80	35	10	134
100/40	45	Ø125	Ø100	140	530	280	355	100	200	150	500	400	110	18	23	14	370	42	110	45	12	174
125/20	35	Ø150	Ø125	140	470	250	315	80	160	120	400	315	110	16	17.5	14	342	32	80	35	10	106
125/26	35	Ø150	Ø125	140	470	250	355	80	160	120	400	315	110	16	17.5	14	342	32	80	35	10	115
125/32	45	Ø150	Ø125	140	530	280	355	100	200	150	500	400	110	18	23	14	370	42	110	45	12	163
125/40	45	Ø150	Ø125	140	530	315	400	100	200	150	500	400	110	18	23	14	370	42	110	45	12	181
125/50	60	Ø150	Ø125	180	680	375	500	100	200	150	550	450	140	24	24	14	500	55	110	59	16	220
150/20	35	Ø200	Ø150	160	495	280	400	100	200	150	550	450	110	20	23	14	367	32	80	35	10	156
150/26	45	Ø200	Ø150	160	530	250	355	100	200	150	450	350	110	18	23	14	370	42	110	45	12	148
150/32	45	Ø200	Ø150	160	530	280	400	100	200	150	550	450	110	18	23	14	370	42	110	45	12	170
150/40	45	Ø200	Ø150	160	530	315	450	100	200	150	550	450	110	18	23	14	370	42	110	45	12	209
150/50	60	Ø200	Ø150	180	670	375	500	100	200	150	550	450	140	24	24	15	500	55	110	59	16	430
200/26	45	Ø250	Ø200	180	546	280	400	100	200	150	550	450	110	25	26	15	389	42	110	45	12	210
200/32	55	Ø250	Ø200	200	670	355	450	100	200	150	550	450	110	20	24	15	500	48	110	52	14	323
200/40	55	Ø250	Ø200	200	670	355	500	100	200	150	550	450	110	20	24	15	500	48	110	52	14	370
200/50	60	Ø250	Ø200	240	783	425	545	160	300	240	720	600	140	30	27	23	534	70	140	75	20	530
250/32	55	Ø300	Ø250	200	783	425	545	160	300	240	720	600	140	30	27	23	534	70	140	75	20	370
250/40	60	Ø300	Ø250	240	783	425	545	160	300	240	720	600	140	30	27	23	534	70	140	75	20	457
250/50	75	Ø300	Ø250	240	783	425	545	160	300	240	720	600	140	30	27	23	534	70	140	75	20	646
300/40	75	Ø350	Ø300	280	783	500	600	150	300	200	800	660	140	40	27	23	550	70	140	74.5	20	720

Flange mating dimensions to ISO 2084 PN16												
DN _w /DN _e	32	40	50	65	80	100	125	150	200	250	300	350
ØD	140	150	165	185	200	220	250	285	340	405	460	520
ØK	100	110	125	145	160	180	210	240	295	355	410	470
d _x number	18x4	18x4	18x4	18x4	18x8	18x8	18x8	22x8	22x12	26x12	26x12	26x16