O2PA Series

(DIN 24255)

Back Pull-out End Suction Centrifugal Pump

EASYFLOW BACK PULL-OUT FEATURE

This design feature allows the complete rotating element to be removed for servicing without disconnecting pipework. If a spacer coupling is fitted then motor does not have to be moved. On re-assembly of pump coupling re-alignment problems are completely eliminated.

APPLICATIONS

Air Conditioning
Heating and Ventilating
Refrigeration
Fire Protection
Plumbing
Food and Drink Manufacture
Circulating
Water Pressure Boosting
Transfer
Water Treatment and supply
Irrigation
Drainage
Factory Pumping
Process Industry
Petroleum Products
Greneral Industry

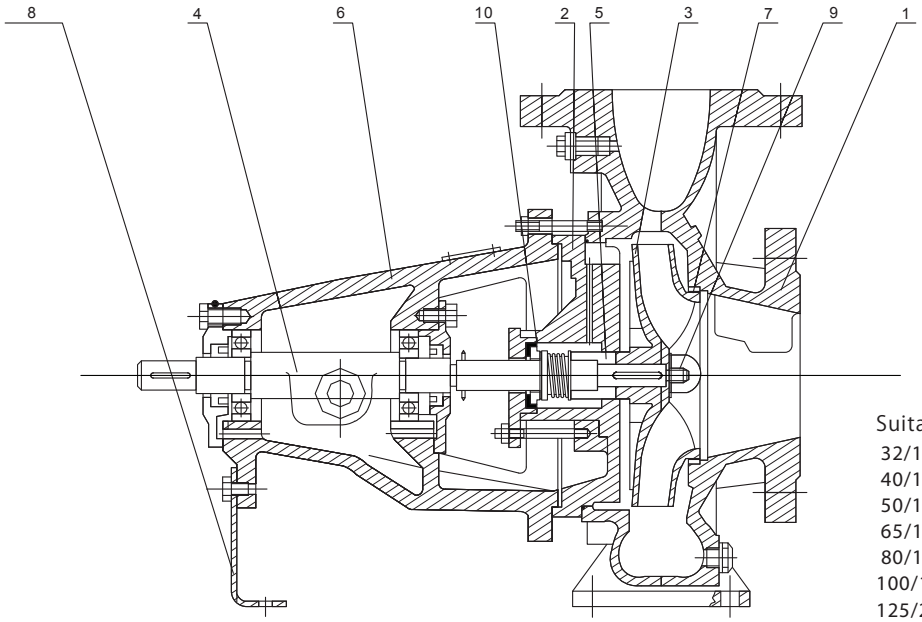
MATERIALS OF CONSTRUCTION

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

MATERIALS SPECIFICATION

Material	Nearest Equivalent Standard			
	Australian	British	American	DIN
Cast Iron	AS 1830/T200	BS 1452: GR 220	ASTM A48 Class 30	DIN 1691 GG 20
Bronze	AS 1565/836B	BS 1400: LG 2	ASTM B145 CDA836	DIN 1705
Stainless Steel	AS 1444 GR 420	BS 970: 420/S37	AISI 420	DIN 17440

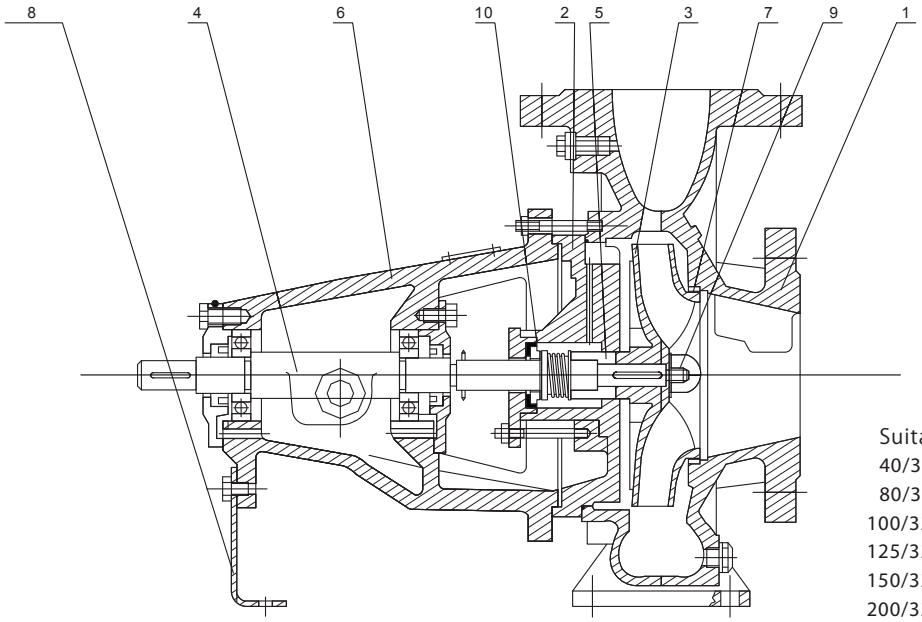
GENERAL ARRANGEMENT DRAWING (Mechanical Seal)



1.Pump Casing
2.Casing Cover
3.Impeller
4.Shaft
5.Shaft Sleeve
6.Bearing Bracket
7.Wear ring
8.Support Feet
9.Impeller Nut
10.Mechanical Seal

Suitable for」口

32/13	32/16	32/20	32/26
40/13	40/16	40/20	40/26
50/13	50/16	50/20	50/26
65/13	65/16	65/20	65/26
80/16	80/20	80/26	
100/16	100/20	100/26	
125/20	125/26		



1.Pump Casing
2.Casing Cover
3.Impeller
4.Shaft
5.Shaft Sleeve
6.Bearing Bracket
7.Wear ring
8.Support Feet
9.Impeller Nut
10.Mechanical Seal

Suitable for」口

40/32	50/32	65/32
80/32	80/40	
100/32	100/40	
125/32	125/40	
150/32	150/40	
200/32	200/40	
250/32	250/40	

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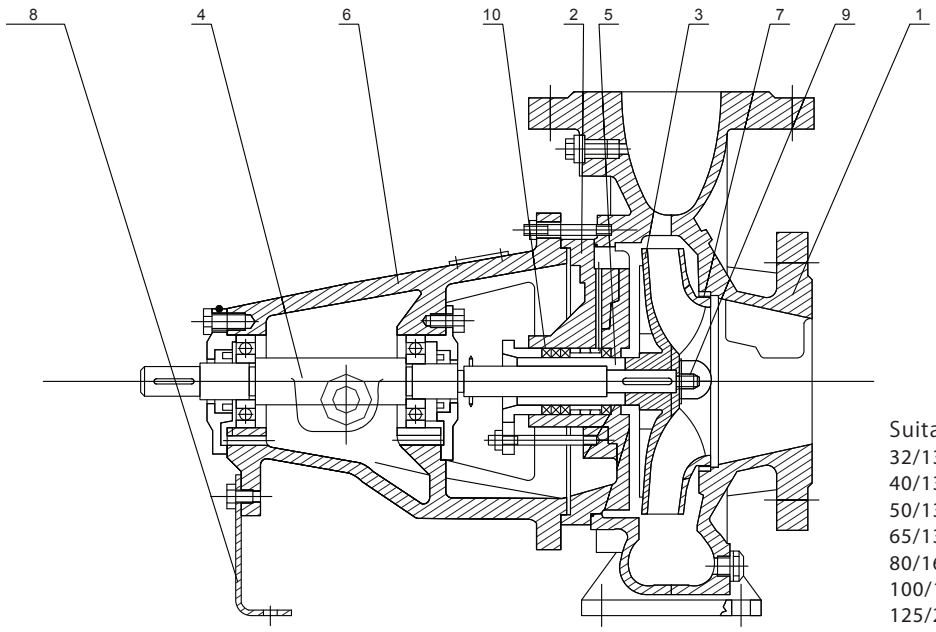
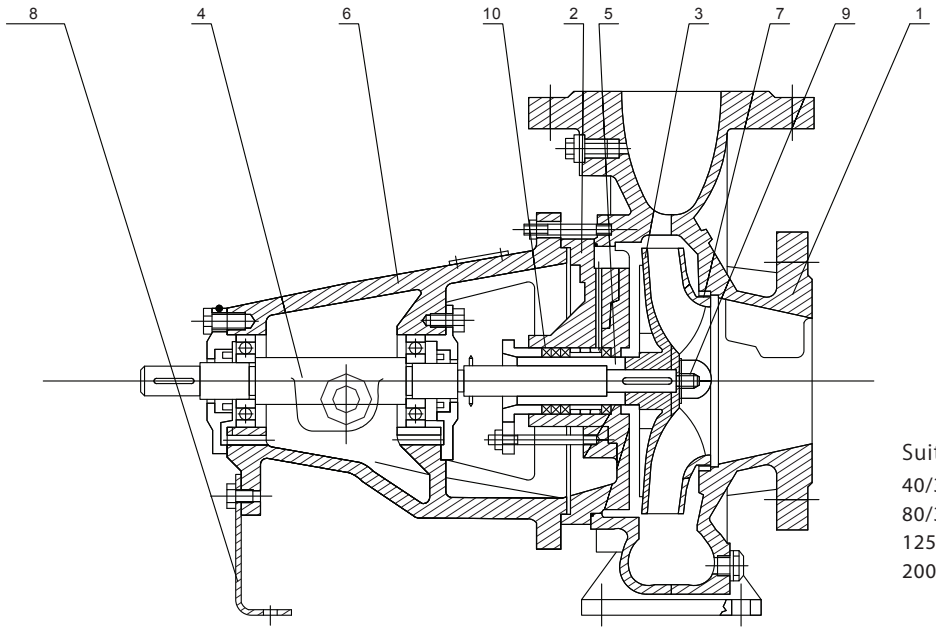
GENERAL ARRANGEMENT DRAWING (Packing)



1.Pump Casing
2.Casing Cover
3.Impeller
4.Shaft
5.Shaft Sleeve
6.Bearing Bracket
7.Wear Ring
8.Support Feet
9.Impeller Nut
10.Soft Packing

Suitable for」⊐

32/13	32/16	32/20	32/26
40/13	40/16	40/20	40/26
50/13	50/16	50/20	50/26
65/13	65/16	65/20	65/26
80/16	80/20	80/26	
100/16	100/20	100/26	
125/20	125/26		



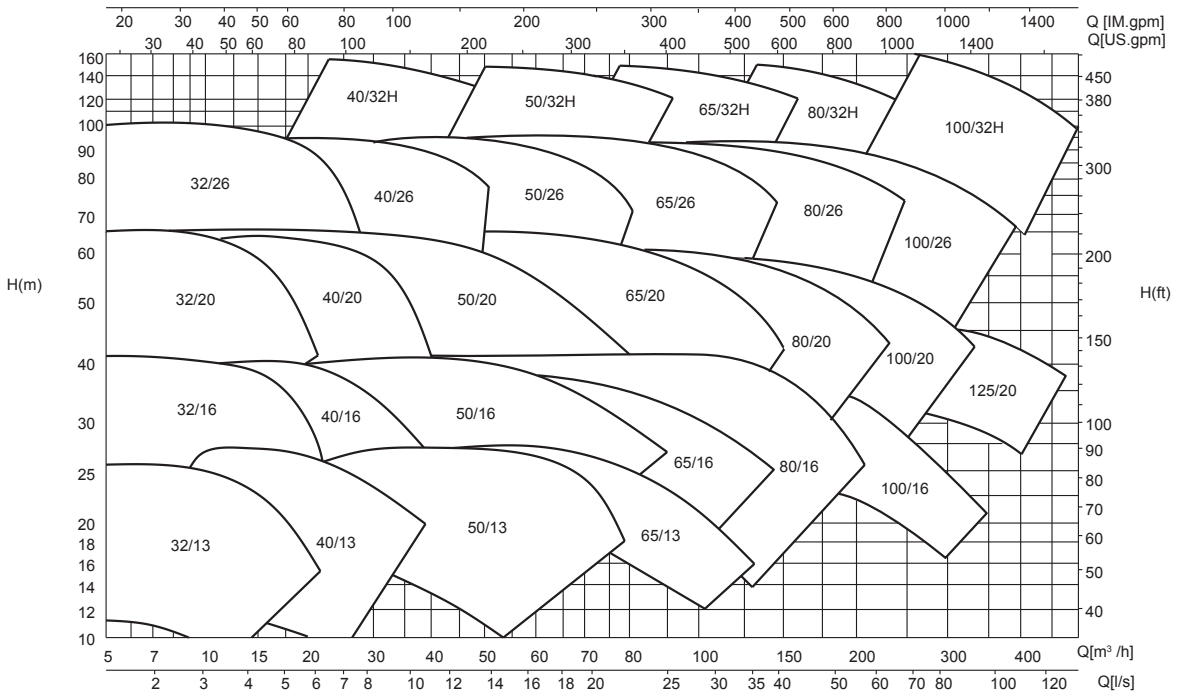
1.Pump Casing
2.Casing Cover
3.Impeller
4.Shaft
5.Shaft Sleeve
6.Bearing Bracket
7.Wear Ring
8.Support Feet
9.Impeller Nut
10.Soft Packing

Suitable for」⊐

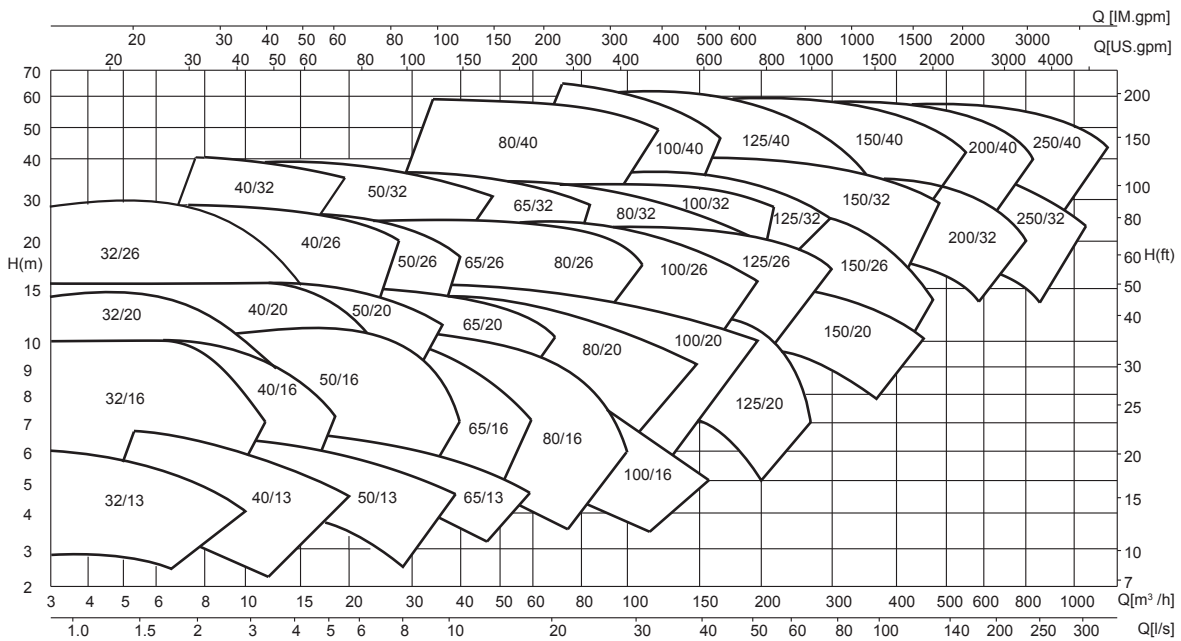
40/32	50/32	65/32	
80/32	80/40	100/32	100/40
125/32	125/40	150/32	150/40
200/32	200/40	250/32	250/40

SELECTION RANGE CHART

n=2900rpm



n=1450rpm



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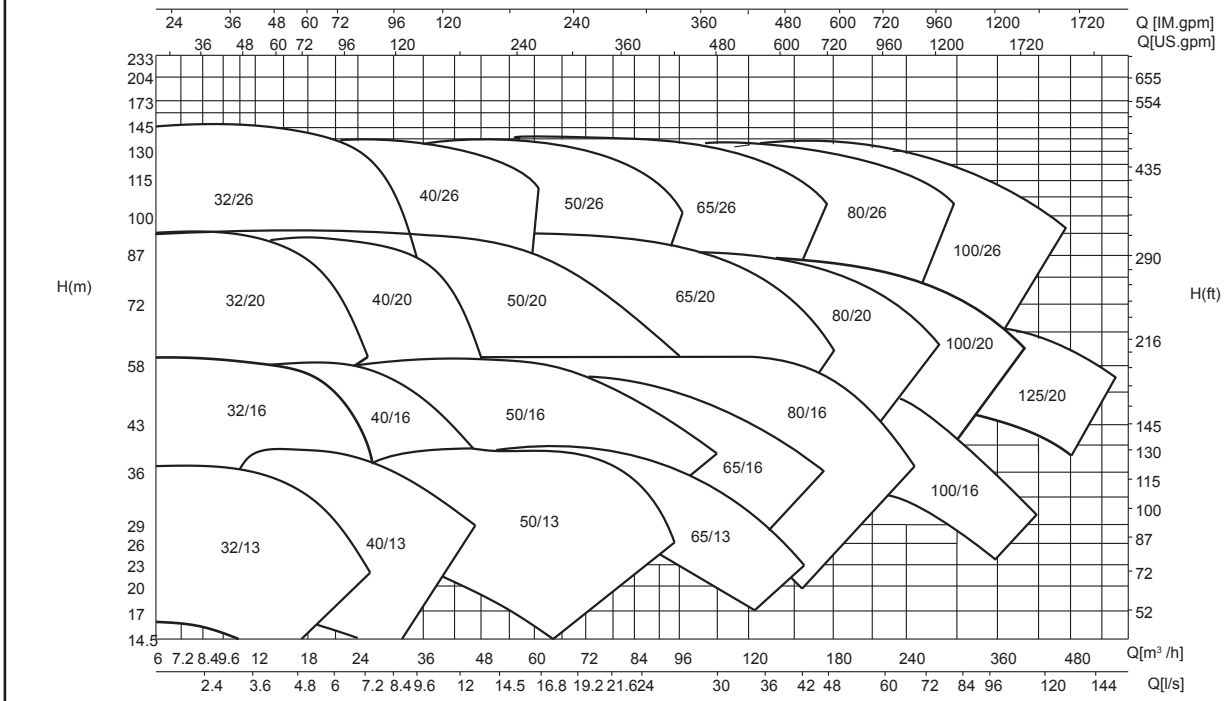
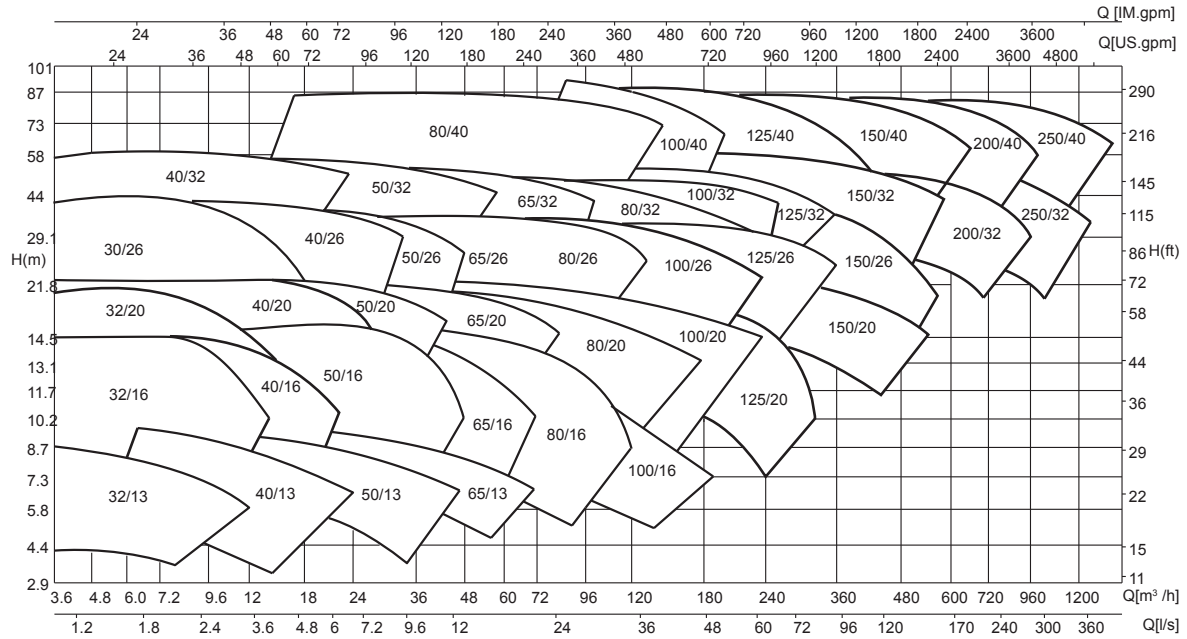
SELECTION RANGE CHART

n=3500rpm

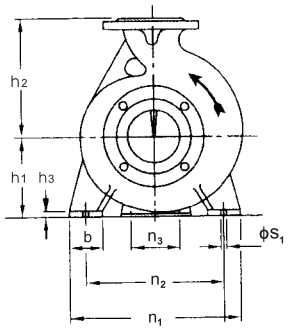


n=1750rpm

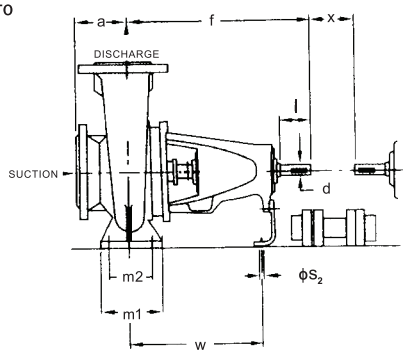


DIMENSIONS

FLANGES DRILLED TO ISO 2084 - 16BAR

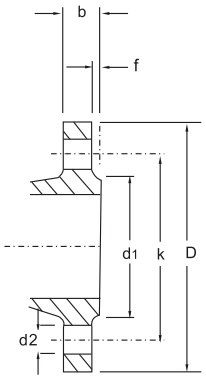


END ELEVATION



SIDE ELEVATION

Model	Shaft Diameter	Suction	Discharge	Pump Dimensions							Foot Dimensions								Shaft End		Coupling Key	Net Weight
				a	f	h1	h2	b	m1	m2	n_1	n_2	n_3	h3	ϕs_1	ϕs_2	w	x	d	l		(Kg)
O2PA 32/13				80		112	140	50	100	70	190	140	100									28
O2PA 32/16	25	50	32	80	360	132	160	50	100	70	240	190	100	14	14	14	267	140	24	50	8X7	36
O2PA 32/20				80		160	180	50	100	70	240	190	110									43
O2PA 32/26				100		180	225	65	125	95	320	250	110									63
O2PA 40/13	25			80	360	112	140	50	100	70	210	160	100				267		24	50	8X7	31
O2PA 40/16	25			80	360	132	160	50	100	70	240	190	100				267		24	50	8X7	37
O2PA 40/20	25			100	360	160	180	50	100	70	265	212	110				267		24	50	8X7	46
O2PA 40/26	25	65	40	100	360	180	225	65	125	95	320	250	110	14	14	14	267	140	24	50	8X7	63
O2PA 40/32	35			125	470	200	250	65	125	95	350	280	110				342		32	80	10X8	96
O2PA 40/32H	45H			125	519	200	250	65	125	95	350	280	110				362		42	110	12X8	104
O2PA 50/13	25			100	360	132	160	50	100	70	240	190		14			267		24	50	8X7	34
O2PA 50/16	25			100	360	160	180	50	100	70	265	212		14			267		24	50	8X7	38
O2PA 50/20	25	65	50	100	360	160	200	50	100	70	265	212	110	14	14	14	267	140	24	50	8X7	48
O2PA 50/26	25			100	360	180	225	65	125	95	320	250		14			267		24	50	8X7	65
O2PA 50/32	35			125	470	225	280	65	125	95	350	280		16			342		32	80	10X8	101
O2PA 50/32H	45H			125	523.5	225	280	65	125	95	350	280		16			364		42	110	12X8	110
O2PA 65/13	25			100	360	160	180	65	125	95	280	212		14	14		267		24	50	8X7	40
O2PA 65/16	25			100	360	160	200	65	125	95	280	212		14	14		267		24	50	8X7	44
O2PA 65/20	25	80	65	100	360	180	225	65	125	95	320	250	110	14	14	14	267	140	24	50	8X7	54
O2PA 65/26	35			100	470	200	250	80	160	120	360	280		16	18		342		32	80	10X8	83
O2PA 65/32	35			125	470	225	280	80	160	120	400	315		16	18		342		32	80	10X8	110
O2PA 65/32H	45H			125	520	225	280	80	160	120	400	315		16	18		363		42	110	12X8	118
O2PA 80/16	25				360	180	225	65	125	95	320	250		14	14		267		24	50	8X7	55
O2PA 80/20	35				470	180	250	65	125	95	345	280		14	14		342		32	80	10X8	72
O2PA 80/26	35	100	80	125	470	200	280	80	160	120	400	315	110	16	18	14	342	140	32	80	10X8	92
O2PA 80/32	35				470	250	315	80	160	120	400	315		16	18		342		32	80	10X8	120
O2PA 80/32H	45H				521	250	315	80	160	120	440	355		16	18		363		42	110	12X8	128
O2PA 80/40	45				530	280	355	80	160	120	440	355		18	18		370		42	110	12X8	162
O2PA 100/16	35			125	470	200	250	80	160	120	360	280		16	18		342		32	80	10X8	81
O2PA 100/20	35			125	470	200	280	80	160	120	360	280		16	18		342		32	80	10X8	87
O2PA 100/26	35			140	470	225	280	80	160	120	400	315		16	18		342		32	80	10X8	110
O2PA 100/26H	45H	125	100	140	520	225	280	80	160	120	400	315	110	16	18	14	363	140	42	110	12X8	117
O2PA 100/32	35			140	470	250	315	80	160	120	400	315		16	18		342		32	80	10X8	134
O2PA 100/32H	45H			140	520	250	315	80	160	120	400	315		16	18		363		42	110	12X8	143
O2PA 100/40	45			140	530	280	355	100	200	150	500	400		18	23		370		42	110	12X8	177
O2PA 125/20	35				470	250	315	80	160	120	400	315		16	18		342		32	80	10X8	111
O2PA 125/26	35	150	125	140	470	250	355	80	160	120	400	315	110	16	18	14	342	140	32	80	10X8	115
O2PA 125/32	45				530	280	355	100	200	150	500	400		18	23		370		42	110	12X8	163
O2PA 125/40	45				530	315	400	100	200	150	500	400		18	23		370		42	110	12X8	190
O2PA 150/20	35				495	280	400				550	450		20			367		32	80	10X8	140
O2PA 150/26	45	200	150	160	530	250	355	100	200	150	450	350	110	18	23	14	370	140	42	110	12X8	164
O2PA 150/32	45				530	280	400				550	450		18			370		42	110	12X8	175
O2PA 150/40	45				530	315	450				550	450		18			370		42	110	12X8	210
O2PA 200/32		250	200	225	725	315	435	100	200	150	550	450	140				500		48		14X10	251
O2PA 200/40	55	250	200	225	670	315	450	100	200	150	550	450	140	30	23	14	500	140	48	110	14X10	295
O2PA 250/32		300	250	250	693	400	500	100	270	180	500	400	180				513		48		14X10	311
O2PA 250/40		300	250	250	797	450	505	125	270	210	600	500	180				611		60		18X12	390



Flange Dimensions and drilling according to ISO 2084 - 16 BAR (BS 4504 - 1969 TABLE 16/11).*Holes - Equally spaced straddling pump centreline.

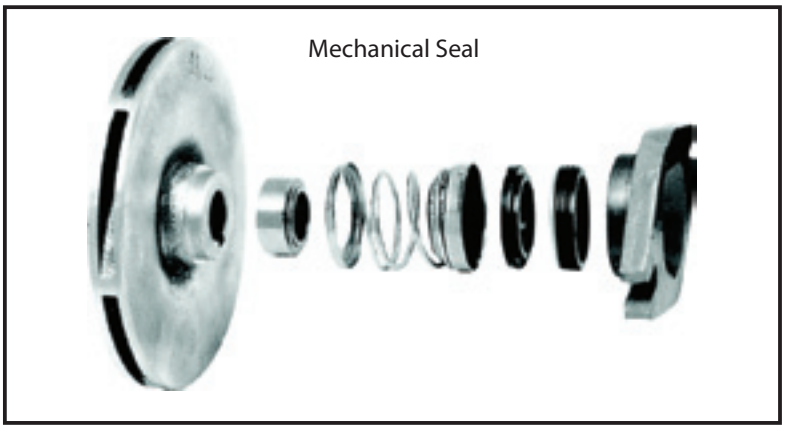
Flange Data

Dimensions in mm

BRACH SIZE	FLANGE		RAISED FACE		DRILLING*			BOLTING
	D	b	d_1	f	No.	d_2	k	
32	140	18	78	2	4	18	100	M16
40	150	18	88	3	4	18	110	M16
50	165	20	102	3	4	18	125	M16
65	185	20	122	3	4	18	145	M16
80	200	22	138	3	8	18	160	M16
100	220	24	158	3	8	18	180	M16
125	250	26	188	3	8	18	210	M16
150	285	26	212	3	8	22	240	M20
200	340	30	268	3	12	22	295	M20

Range from 32mm to 250mm discharge

Easyflow range fully complies to both performance and dimensional standards for the International Standard DIN 24255



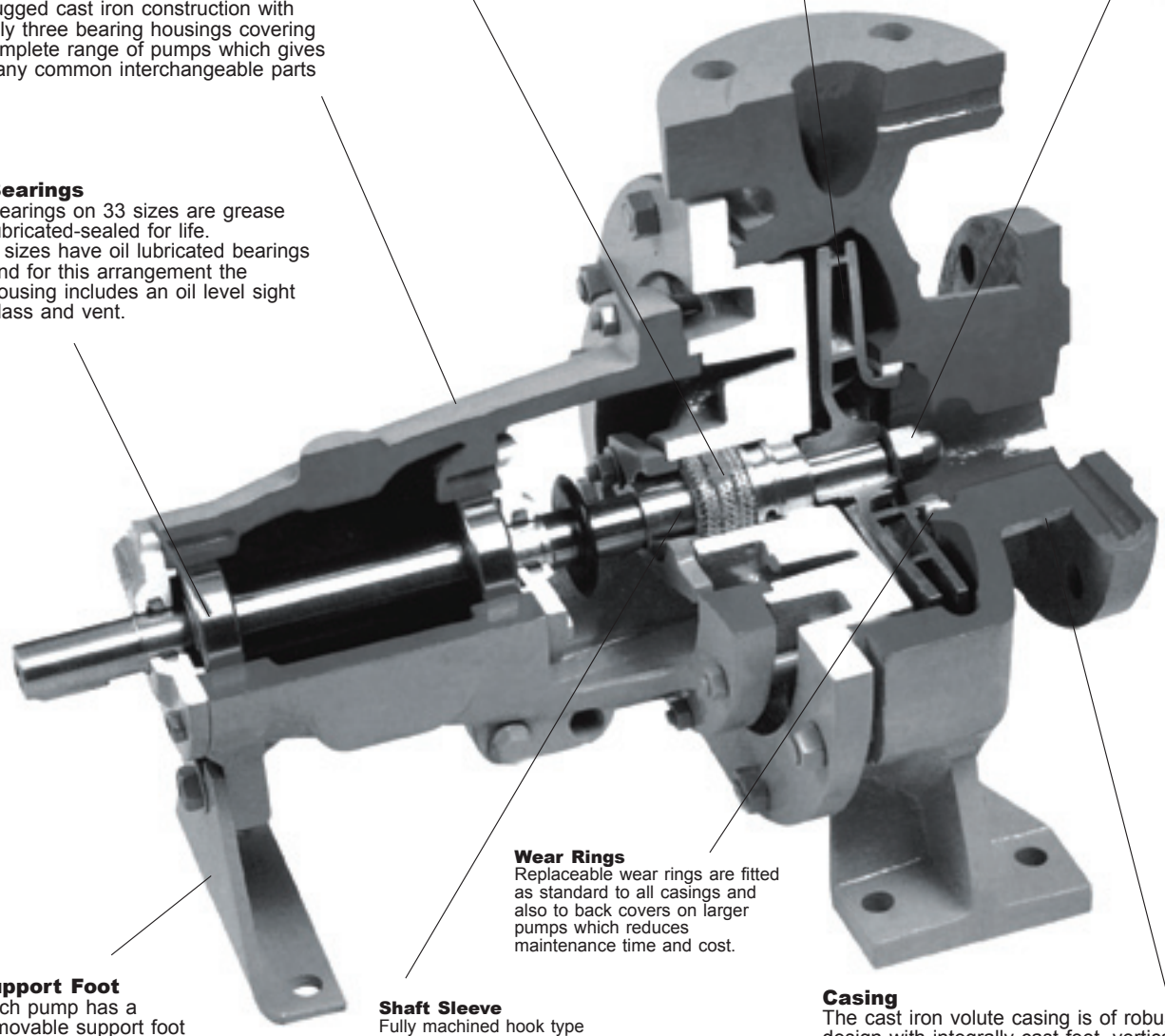
Stuffing Box
Standard stuffing box includes gland packing with a lantern ring incorporating high pressure internal flushing.External flush can be fitted and pump can be supplied with a mechanical seal.Conversion from packed box to mechanicalseal and back to packing is easy. All pumps that can operate at 2 pole speed have a close tolerance stuffing box bush fitted.

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

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

Bearing Housing
Rugged cast iron construction with only three bearing housings covering complete range of pumps which gives many common interchangeable parts

Bearings
Bearings on 33 sizes 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.



Wear Rings
Replaceable wear rings are fitted as standard to all casings and also to back covers on larger pumps which reduces maintenance time and cost.

Support Foot
Each pump has a removable support foot fitted at drive end for greater rigidity.

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

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.