



Centrifugal Pump



 **MAC-TECH ENGINEERING SDN. BHD.**

MAC-TECH ENGINEERING SDN. BHD.(156877-M)

NO.21 & 23, Jalan 3/118C, Desa Tun Razak Industrial Park
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The technical data are subject to change without prior notice.

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 **MAC-TECH ENGINEERING SDN. BHD.**

End Suction SERIES

Horizontal Single-stage End-suction Centrifugal Pump

ISO SERIES

Horizontal Single-stage End-suction Centrifugal Pump

EHS SERIES

Horizontal Single-stage Split Case Pump

ESL SERIES

Vertical Double-suction Split Case Pump

EGM SERIES

Vertical In-line Pump

ABOUT MAC-TECH ENGINEERING

Founded on 17th October 1986, Mac-Tech Engineering has established itself as a trusted leader with over 35 years of expertise in delivering high-quality domestic and industrial water pump solutions. We specialize in providing a wide range of systems for air conditioning, fire protection, and cold and hot water applications, ensuring reliable and efficient performance for every project.

We pride ourselves on our commitment to quality and customer satisfaction, As such, we have a dedicated team focused on ensuring optimal pump performance, offering comprehensive backup services and technical assistance. At Mac-Tech Engineering, we provide expert guidance throughout all project phases, ensuring that our clients receive tailored solutions for their needs.

In addition, our subsidiary, Mac-Tech Maintenance, is devoted to the maintenance and servicing of all pumps sold, ensuring the longevity and efficiency of every system. With a reputation for excellence and a customer-first approach, Mac-Tech Engineering remains the go-to partner for reliable and innovative pump system solutions.



MAC-TECH ENGINEERING SDN. BHD. (156877-M)

MAC-TECH MAINTENANCE SDN. BHD. (623852-W)

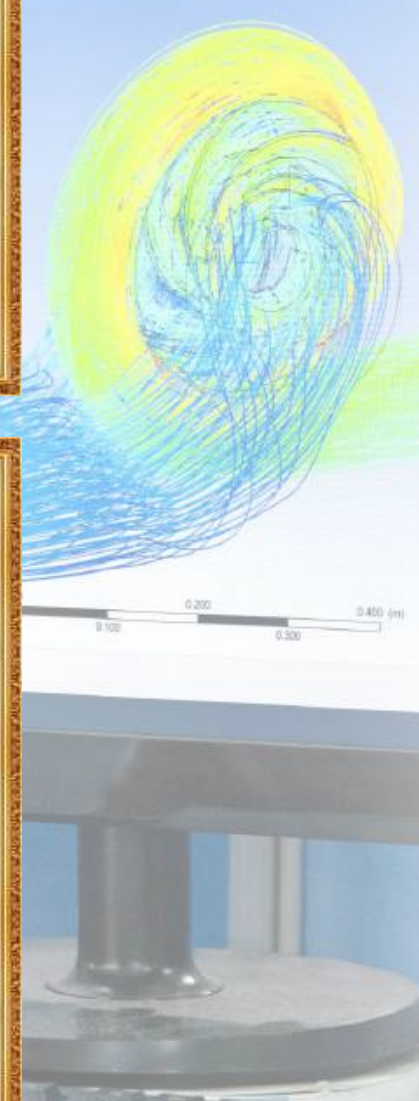
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Company Information

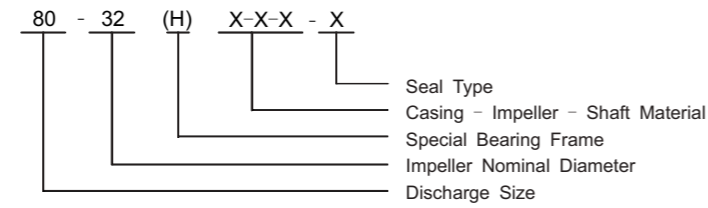


Description & Features

Ebs-ray end suction centrifugal pumps are designed complying to BS EN733 / DIN24255 standard. This series of pumps have great advantages in interchangeable parts, high quality and low cost, wide applications in plants, mines, city water supplies, fire-fighting systems, air-condition systems and irrigation.



Model Instruction



Material Code

C: Cast Iron
 Q: Ductile Iron
 B: Bronze
 S: ASTM 420
 45: ASTM 1045
 S304: ASTM 304
 S316: ASTM 316

- Bearing Frame Code
 H: Bearing frame for double-row bearing with oil lubrication
 Default: Standard
- Seal Type
 M: Mechanical Seal
 P: Gland Packing

Design & Structure

Design	Performance and dimensions referring to the European standard BS EN733 / DIN24255
Structure	Horizontal, Axial End-Suction, Single-Stage, Single-Suction, Volute Casing, Back pull-out
DN (mm)	32-300
Flange	DIN2501 PN16 (ANSI, JIS, AS...)

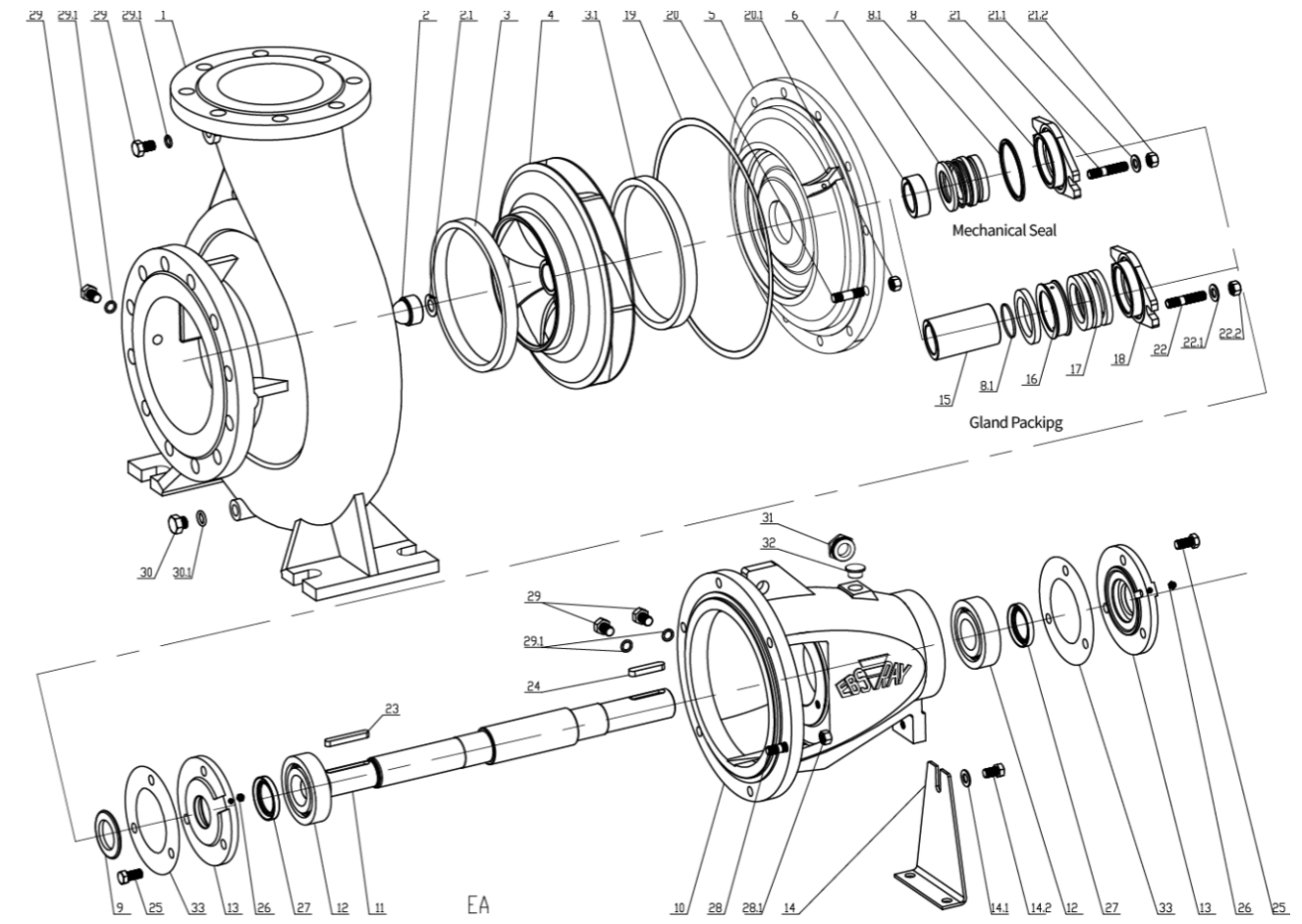
Material

Part	Standard Material	Options on request
Casing	Cast Iron	Ductile Iron / ASTM304(CF8) / ASTM316(CF8M)
Impeller	Bronze	Cast Iron / ASTM304(CF8) / ASTM316(CF8M)
Shaft	ASTM420	ASTM304 / ASTM316 / ASTM1045
Shaft Seal	Gland Packing	Mechanical Seal

Operating Data

Flow Rate(Q)	4~1584 m ³ /h
Head(H)	2~150m
Speed	1450 or 2900rpm (50Hz) / 1750 or 3500rpm (60Hz)
Max Temperature	85°C(standard) ; 120°C(on request)
Working Pressure	1.0MPa standard; 1.6MPa on request
Conveying Medium	Clean water or liquids similar to clean water in physical property

END SUCTION PUMP – Explode View & List of Parts

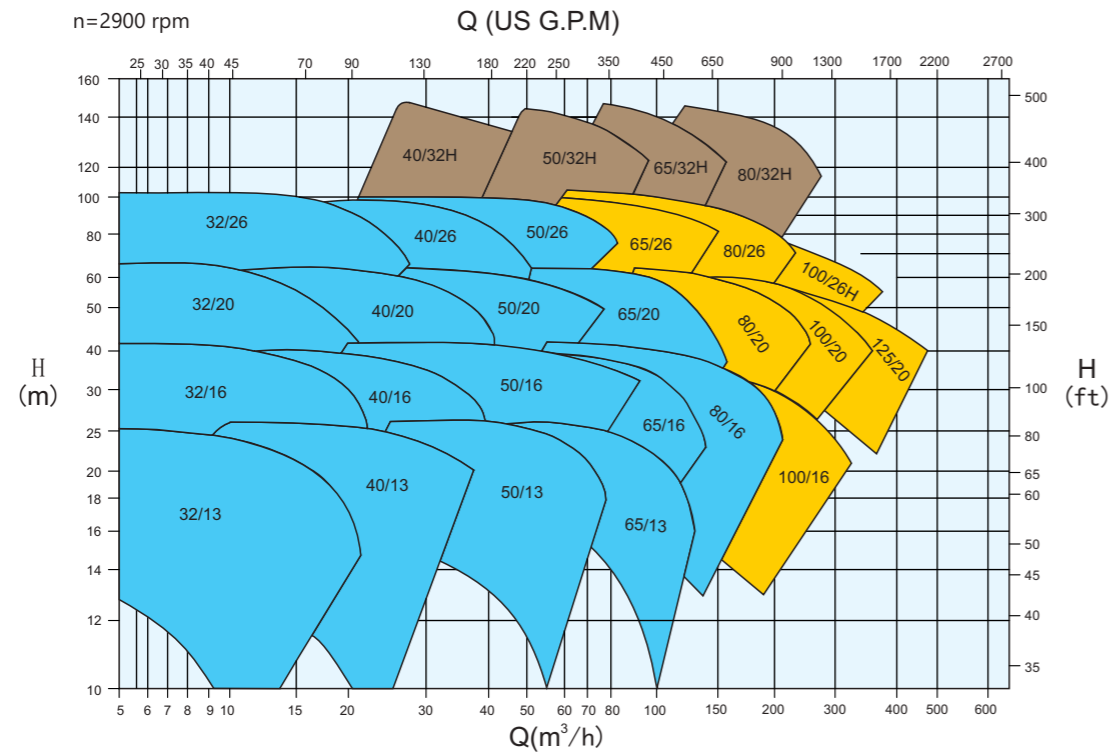


Code	Part Name
1	Casing
2	Impeller Nut
2.1	spring lock washer
3	Front-Wearing
3.1	Back-Wearing
4	Impeller
5	Casing Cover
6	Shaft Spacer
7	Mech.Seal
8	Seal Cover
8.1	O-ring
9	Rubber Slinger
10	Bearing Housing
11	Shaft
12	Bearing
13	Bearing Cover

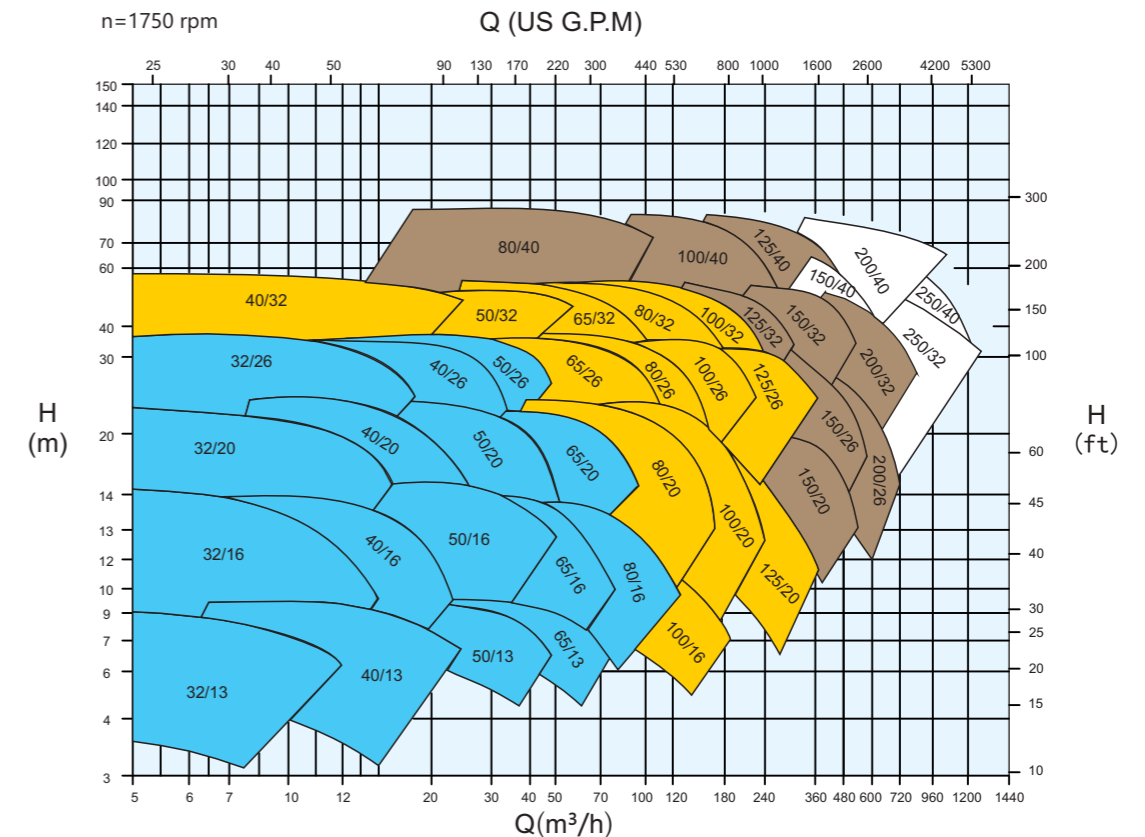
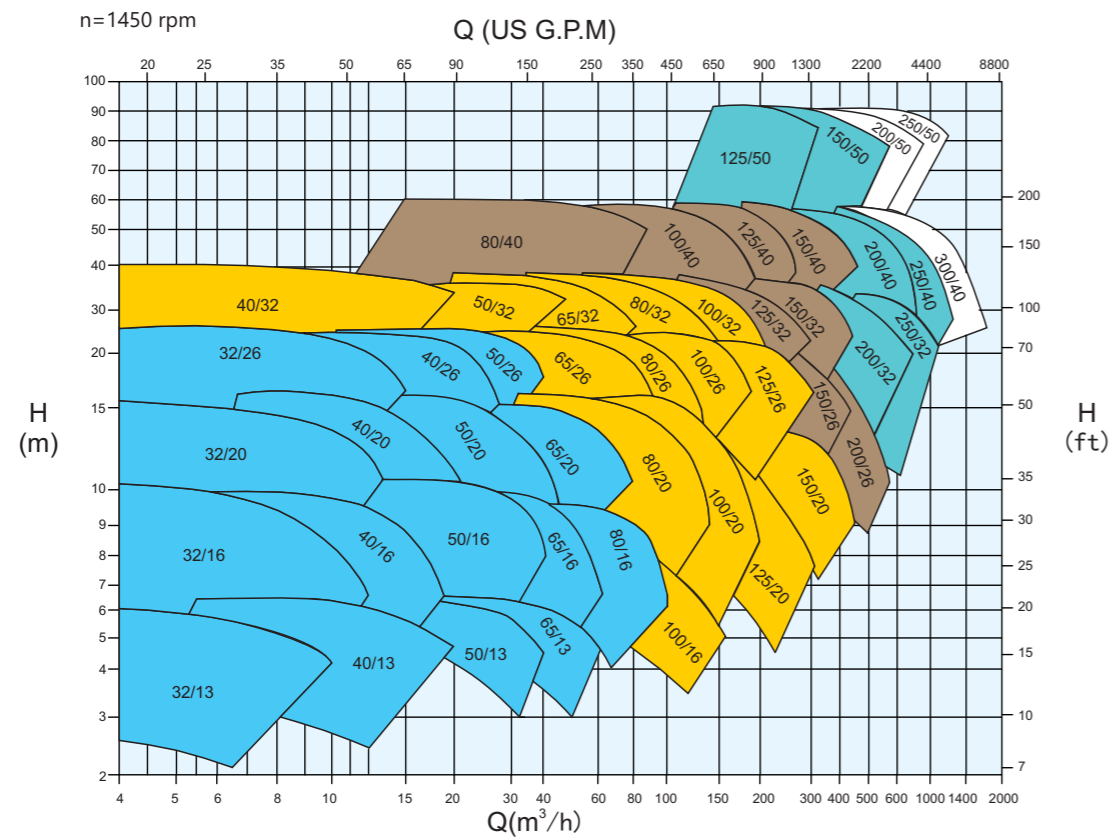
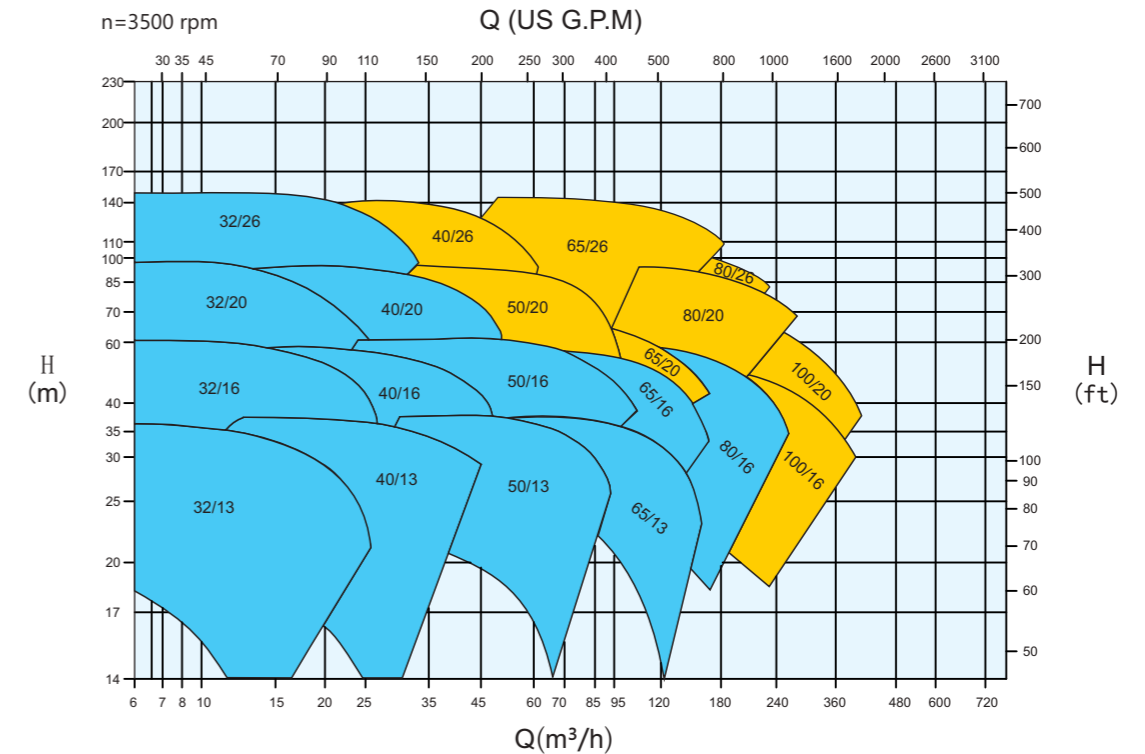
Code	Part Name
14	Support Foot
14.1	Flat Washer
14.2	Elastic Washer
14.3	Screw Bolt
15	Packing Sleeve
16	Packing Seal Cage
17	Throat Bushing
17	Gland Packing
18	Gland Cover
19	Casing Gasket
20	Stud Bolt
20.1	Screw Nut
21	Stud Bolt
21.1	Flat Washer
21.2	Screw Nut
22	Stud Bolt
22.1	Flat Washer

Code	Part Name
22.2	Screw Nut
23	Key
24	Key
25	Screw Bolt
26	Oil Cup M6
27	Felting
27	Oil Seal
28	Stud Bolt
28.1	Screw Nut
29	Plug
29.1	plug gasket
30	Plug
30.1	plug gasket
31	Oil Scale
32	Oil Cover
33	Throat Bushing Gasket

End Suction Pump-50Hz Performance

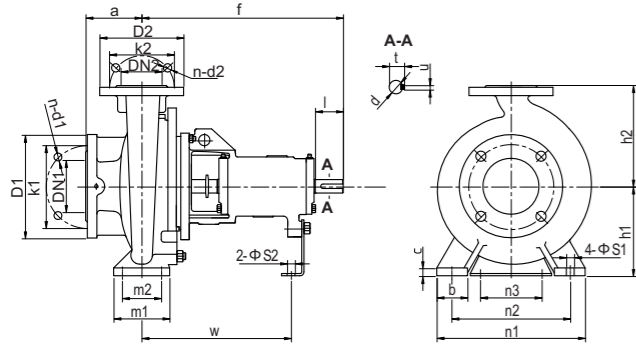


End Suction Pump-60Hz Performance



Performance to ISO9906 Grade 2 for clean cold water only

Performance to ISO9906 Grade 2 for clean cold water only



Flange Dimensions (ISO7005.2 DIN2501 PN16)

DN1/DN2	32	40	50	65	80	100	125
D1/D2	140	150	165	185	200	220	250
K1/K2	100	110	125	145	160	180	210
n-d1/ n-d2	4-Φ18	4-Φ18	4-Φ18	4-Φ18	8-Φ18	8-Φ18	8-Φ18

DN1/DN2	150	200	250	300	350	400
D1/D2	285	340	405	460	520	580
K1/K2	240	295	355	410	470	525
n-d1/ n-d2	8-Φ22	12-Φ22	12-Φ26	12-Φ26	16-Φ26	16-Φ30

Model	Sealing Inner Dia.	Outlet DN2	Inlet DN1	a	f	h1	h2	b	c	n3	m1	m2	n1	n2	s1	s2	w	d	l	t	u	Weight (kg)
32-13						112	140															29
32-16						132	160															35
32-20	25	32	50	80	360	160	180	50	14	100	100	70	240	190	14	14	267	24	50	27	8	47
32-26						180	225	65		110	125	95	320	250								58
40-13						112	140															31
40-16						132	160	50		100	100	70	240	190								34
40-20	25	40			360	160	180						265	212			267	24	50	27	8	45
40-26						180	225			110	125	95	320	250								61
40-32(H)	35		65	125	470	200	250	65	14				345	280			342	32	80	35	10	94
50-13						132	160						240	190								35
50-16						160	180	50					265	212								39
50-20	25	50			360	160	200				100	70	265	212	14		267	24	50	27	8	49
50-26						180	225						320	250								68
50-32(H)	35		65	125	470	225	280	65	18		125	95	345	280			342	32	80	35	10	113
65-13						160	180						240	190								41
65-16						160	200	65	14				280	212								47
65-20	25	65	80	100	360	180	225				125	95	320	250			267	24	50	27	8	55
65-26						200	250	80	15				360	280								87
65-32(H)	35		65	125	470	225	280	80	18		160	120	400	315	18		342	32	80	35	10	110
80-16	25					360	180	225	65	14			320	250								53
80-20						180	250		15				345	280								76
80-26	35	80	100	125	470	200	280	80	16				400	315	14		342	32	80	35	10	99
80-32(H)						250	315	80	16				400	315								118
80-40	45					530	280	355	83	18			440	340			370	42	110	45	12	160
100-16	35					200	250	80	15		160	120	360	280	18							87
100-20						280							360	280								84
100-26(H)	35	100	125	140	470	225	280	80	16	110			400	315			342	32	80	35	10	102
100-32						250	315						400	315								118
100-40	45					530	280	355	100	20	200	150	500	400	23		370	42	110	45	12	176
125-20	35					470	250	315	80	16			400	315	18							112
125-26						250	355						400	315								117
125-32	45	125	150	160	530	280	355		18				500	400			370	42	110	45	12	155
125-40						315	400						550	450								178
125-50	55					670	355	450	25				550	450			500	48	110	51	14	300
150-20	35					500	280	400					400	315	23		368	32	80	35	10	132
150-26						250	355	100	18		200	150	450	350								163
150-32	45	150	200	160	530	280	400		18				550	450			370	42		45	12	170
150-40						315	450						550	450								207
150-50	55					670	375	500	22				550	450			500	48	110	51	14	330
200-26	45					555	315	450					550	450			392	42		45	12	219
200-32						315	480		20		220	170	600	480	28		505	48		51	14	286
200-40	55	200	250	180	670	315	480	120	20	140	250	170	600	480								328
200-50	65	200	250	200	720	425	560	100	22	140	200	150	660	560	23	19	515	60	140	64	18	450
250-32						491	355	520					525									366
250-40	55	250	300	220	682	400	560		26	110	250	200	660	510	28	14	516	48	110	51	14	396
250-50	65	250	300	250	720	450		120	32	140	240	190	750	650	23	19	515	60	140	64	18	550
300-40	65	300	350	300	720	425	670	120	30	140	250	190	760	660	30	19	515	60	140	64	18	550

