

Centrifugal Pump



End Suction SERIES

Horizontal Single-stage End-
suction Centrifugal Pump

ISO SERIES

Horizontal Single-stage End-
suction Centrifugal Pump

EGM SERIES

Vertical Inline Pump

EHS SERIES

Horizontal Single-stage
Split Case Pump

ESL SERIES

Vertical Double-suction
Split Case Pump

ABOUT MAC-TECH ENGINEERING

NEW VISION
AT THE BIG VALUE

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)

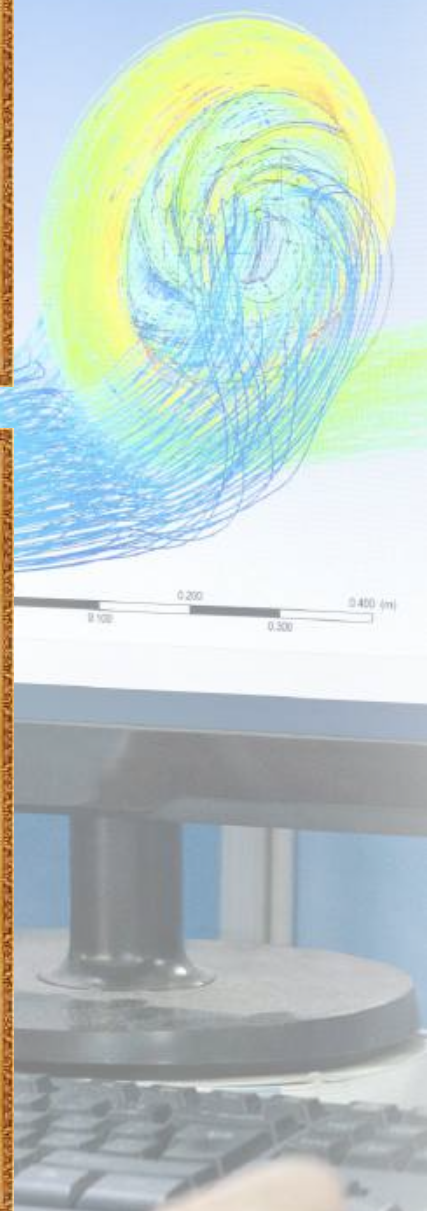
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PENTAIR
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Company Information

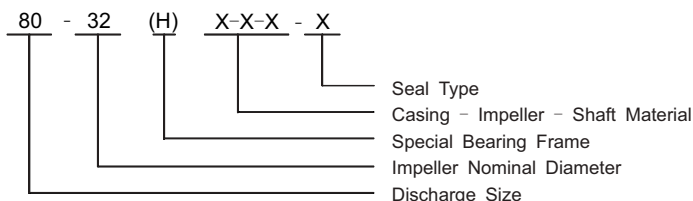




Description & Features

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...)

Applications

- Fire Protection and Fire Fighting
- Swimming Pool
- Water supply
- HVAC and Cooling Tower
- Booster and Pressurization Set
- Irrigation and agriculture

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

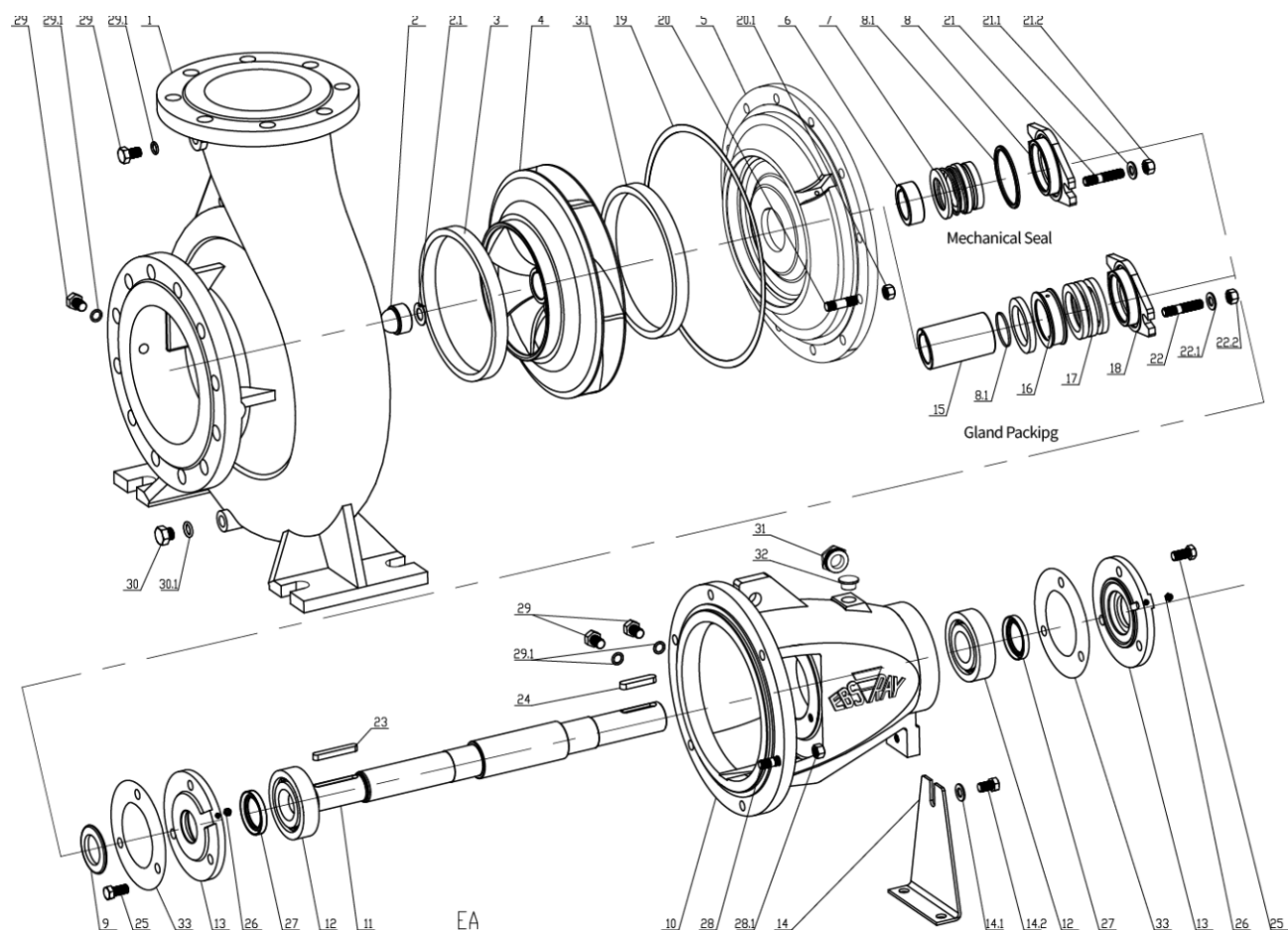
Operating Data

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

series

END SUCTION PUMP – Explode View & List of Parts

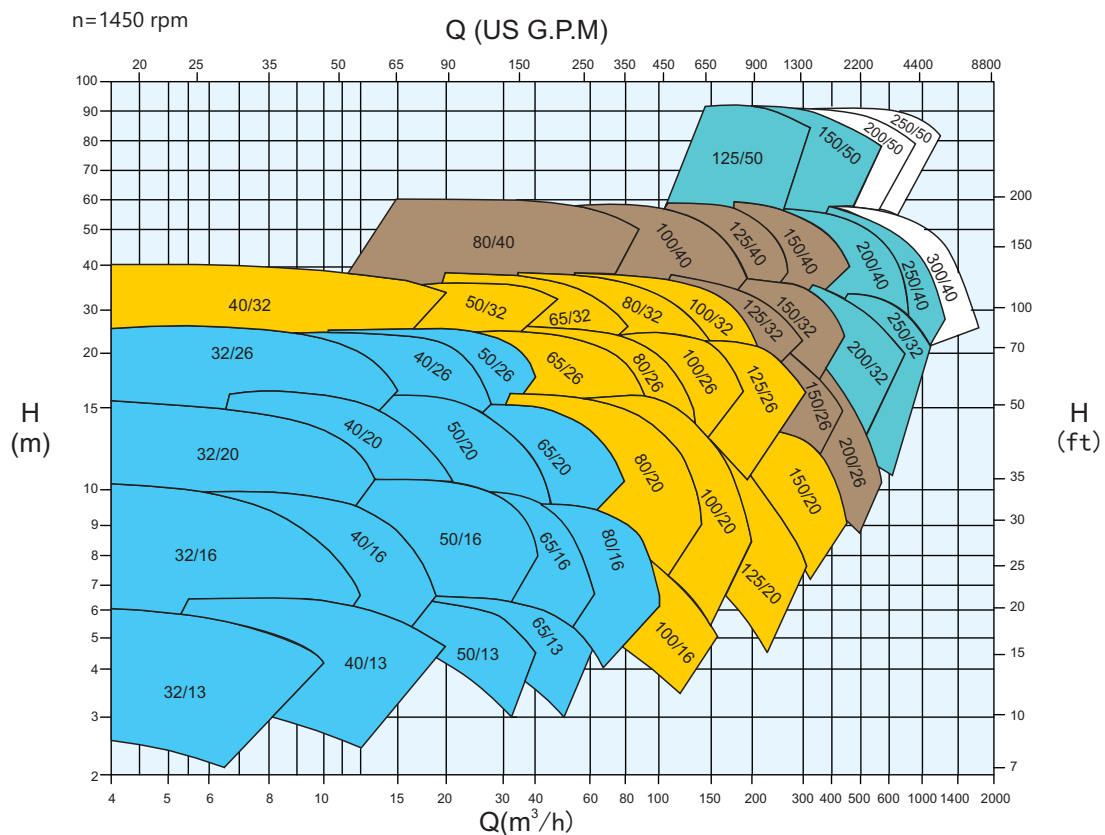
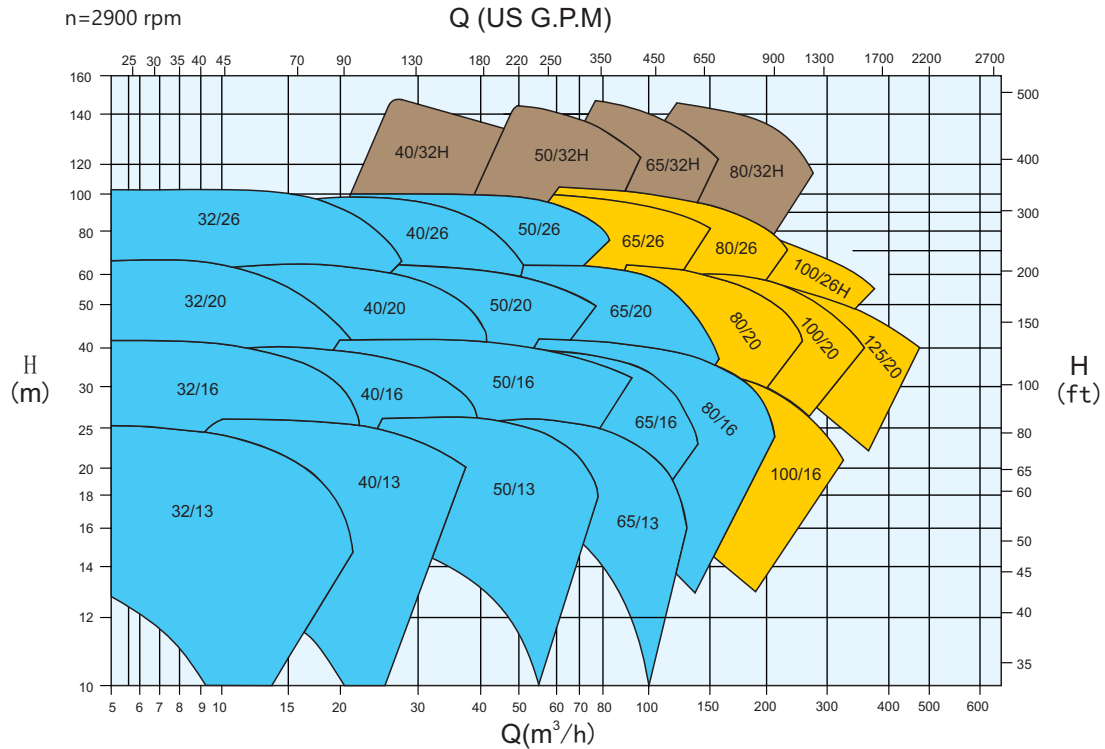


Code	Part Name
1	Casing
2	Impeller Nut
2.1	spring lock washer
3	Front-Wearing
3.1	Back-Wearing
4	Impeller
5	Casing Cover
6	Shaft Spacer
7	Mech.Seal
8	Seal Cover
8.1	O-ring
9	Rubber Slinger
10	Bearing Housing
11	Shaft
12	Bearing
13	Bearing Cover

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
16	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

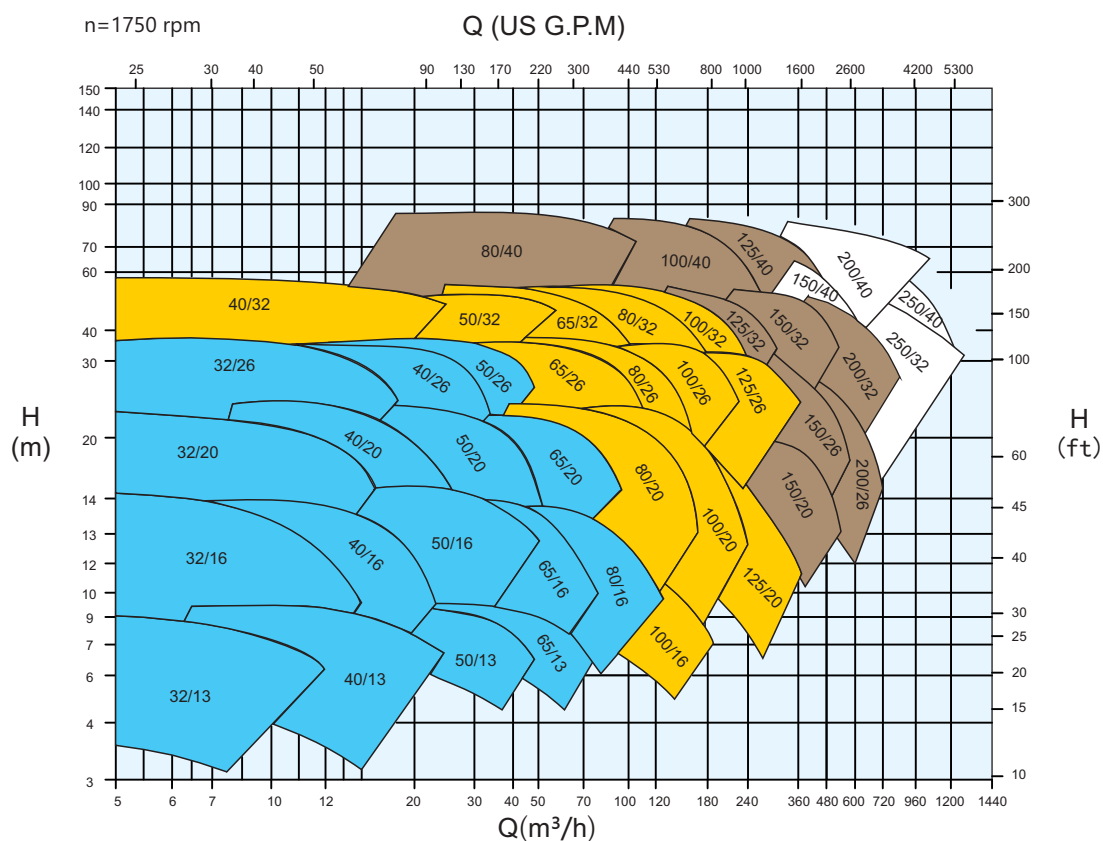
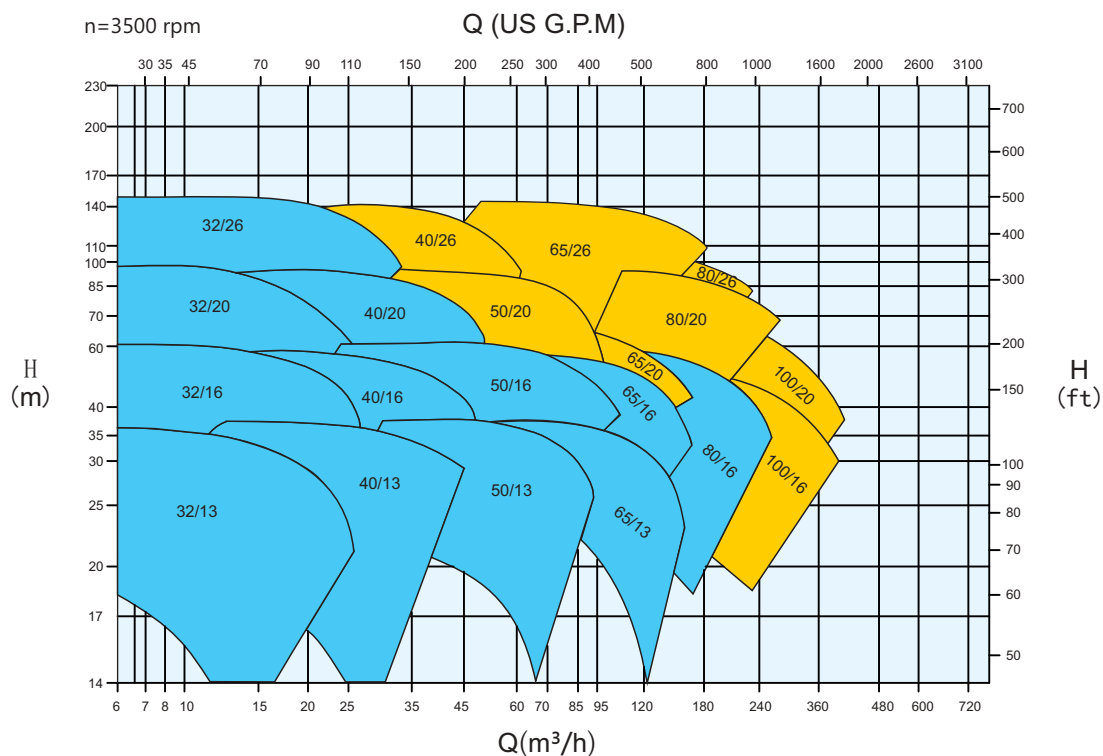


Performance to ISO9906 Grade 2 for clean cold water only

END SUCTION PUMP

series

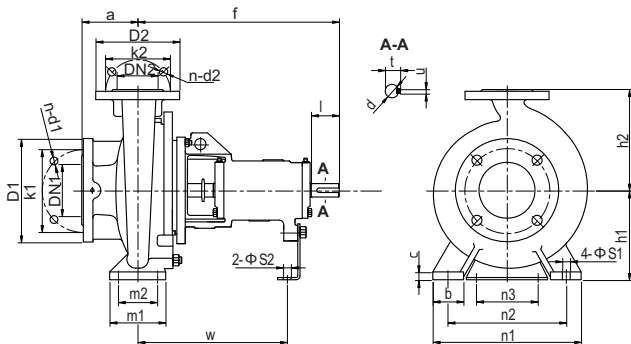
End Suction Pump-60Hz Performance



Performance to ISO9906 Grade 2 for clean cold water only

END SUCTION PUMP

series



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	Bearing 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	25	32	50	80	360	112	140	50	14	100	100	70	190	140	14	14	267	24	50	27	8	29		
32-16						132	160						35											
32-20						160	180			47														
32-26						180	225	65		110	125	95	320	250								58		
40-13	25	40	65	80	360	112	140	50	14	100	100	70	210	160	14	14	267	24	50	27	8	31		
40-16						132	160						34											
40-20						160	180			45														
40-26						180	225	61																
40-32(H)	35	50	65	100	360	125	470	200	250	14	100	100	70	345	280	14	14	342	32	80	35	10	94	
50-13	132					160	35																	
50-16	25					100	360	160	180		50	100	100	70	240								190	39
50-20								160	200		49													
50-26								180	225	68														
50-32(H)	35					125	470	225	280	65	18	125	95	320	250	345	280	113						
65-13	25	65	80	100	360	160	180	65	14	110	125	95	280	212	18	14	267	24	50	27	8	41		
65-16						160	200						47											
65-20						180	225						55											
65-26						200	250	87																
65-32(H)	35	80	100	125	360	225	280	80	15	110	160	120	360	280	18	14	342	32	80	35	10	110		
80-16	225					280	18	400	315				118											
80-20	180					225	14	320	250				53											
80-26	180					250	15	345	280				76											
80-32(H)	35					470	200	280	80	16	400	315	95	342	32	80	35	10	95					
80-40	45					250	315	80	16	400	315	118												
100-16	35	100	125	140	360	280	355	83	18	110	160	120	440	340	18	14	370	42	110	45	12	160		
100-20	200					280	80	15	360				280	87										
100-26(H)	225					280	80	16	400				315	102										
100-32	250					315	118																	
100-40	45	125	150	160	360	280	355	100	20	110	200	150	500	400	23	14	370	42	110	45	12	176		
125-20	250					315	80	16	400				315	112										
125-26	250					355	117																	
125-32	280					355	18	500	400				155											
125-40	315					400	25	550	450	178														
125-50	35					500	280	400	18	550	450	300												
150-20	45	150	200	180	360	280	355	100	18	110	200	150	400	315	23	14	369	32	80	35	10	132		
150-26						250	355	163																
150-32						280	400	170																
150-40						315	450	207																
150-50	55	670	375	500	22	550	450	330																
200-26	45	200	250	180	360	555	315	450	20	110	220	170	600	480	28	14	392	42	110	45	12	219		
200-32	670					315	480	120	250				190	660								560	286	
200-40	335					480	328																	
200-50	720					425	560	100	22				250	190								660	560	328
250-32	55	250	300	220	360	691	355	520	150	26	110	250	200	660	510	28	14	525	46	110	51	14	366	
250-40						682	400	560	120	30	250	190	760	660	30	19	515	60	140	64	18	550		
250-50	65	250	300	250	720	450	670	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		





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The technical data are subject to change without prior notice.