MULTI-COMPONENTS

IEC electric motor range from size 132 up to size 355

BELL-HOUSING & COUPLING SIZING

A GUIDE TO SELECT THE CORRECT BELL-HOUSING AND DRIVE COUPLING

DATA REQUIRED

- Electric motor power/motor size
- Manufacturer and pump type

TO VERIFY:

1 - Pump and motor shaft dimensions (see electric motor data sheet)
2 - Shaft and flange pump (see pump data sheet)

Example:
- Electric motor 2.2 kW - size 100-112
- Atos pump code PFE31 - Shaft 1

Bell-Housing's length calculation

- H = 60 + 18 + 57.5 = 135.5 mm (18 = Sp spider - see page 31)

- Choose type of bell-housing (LMC - LMS):
  For monobloc bell-housing LMC/LDC series see pages 71 ÷ 77
  For Low noise bell-housing LMS/LDS series see pages 79 ÷ 85
  For Multi-components 2-3 bell housing series see pages 87 ÷ 107

Note:
The length of bell-housing must be ≥ than the length calculated (135.5 mm)

Case A
Solution with monobloc bell-housing series **LMC/LDC**

Pages 71 ÷ 77 for IEC Electric motor size 100-112 - LMC250

LMC 250 bell-housing with height ≥ 135.5 - LMC250AFSQ

The bell-housing code must be completed with pump drilling code (see pages 56-57).
For the specific case:
Spigot hole 82.55 - PCD 106.4 - Nr.2 holes M10 : Drilling code 060

Definitive bell-housing code **LMC250AFSQ060**

Case B
Solution with low noise bell-housing series **LMS/LDS**

Pages 79 ÷ 85 for IEC Electric motor size 100-112 - LMS250

LMS 250 bell-housing with height ≥ 135.5 - LMS250AFSA

The bell-housing code must be completed with pump drilling code (see pages 56-57).
For the specific case:
Spigot hole 82.55 - PCD 106.4 - Nr.2 holes M10 : Drilling code 060

Definitive bell-housing code **LMS250AFSA060**

Coupling selection

Motor half-coupling (see page 26)
For IEC Electric motor size 100/112, the half-coupling is **SGEA21M05060FG**

Spider (see page 31)
For SGEA21, EGE2 - EGE2RR
(choose spider material on the base of the application, oil, temperature and cycle machine, etc.)

Pump half-coupling
Choose the drilling code - see pages 18-19 for shaft 19.05 - key 4.76 - code: **G01**

Pump half-coupling length = BH length - THK Spider - THK Spigot
LMC = 138 mm - 60 - 18 - 9.5 = 50.5 mm
LMS = 148 mm - 60 - 18 - 9.5 = 60.5 mm

LMC - Choose the half-coupling's length at page 26 ≤ 50.5 mm.
LMS - Choose the half-coupling's length at page 26 ≤ 60.5 mm.
LMC - Available length for SGEA21 = 50 mm
LMS - Available length for SGEA21 = 60 mm
Half coupling for LMC: **SGEA21G01050FG**
Half coupling for LMS: **SGEA21G01050FG**

SOFTWARE FOR AUTOMATIC CALCULATION

available on the web site www.mpfiltri.com

Note: for multi pumps we recommend to use a specific support on the base of the pump's dimensions and weight.

Step (1) Select “POWER TRANSMISSION SOFTWARE” after login

Step (2) Choose Manufacturer: select “Pump type” and “Pump code”

Step (3) Choose N Poles of “Electric motors”: select “Motor frame” and “Size”

Step 4 Choose the insert and eventual Bell-Housings option and accessories for assembly: click on “CALCULATE”

Step 5 Select the option requested and download the report.

Step 6 Download PDF

You can’t find the pump on the system?

NEW FEATURE!!

Insert pump’s dimension on the section “SELECTION WITH PUMP DATA ENTRY” and follow the instructions to achieve the couplings components code

Noise is a particularly pervasive problem so much so that there have been statutory regulations in place now for some years, designed to limit harmful occupational exposure.
Many of the machines used in industry today are equipped with oil-hydraulic systems, which happen to be a major source of noise.

1 THEORY AND DEFINITION OF NOISE

From a health and hygiene standpoint, noise can be defined as an unpleasant and undesirable sound, or an unpleasant and annoying or intolerable auditory sensation (noise being any sound phenomena that may be accompanied by sensations of disturbance and pain). By definition, acoustic phenomena are oscillatory in character, propagated in a flexible medium and causing pressure variations at the points, and the areas adjacent to those points, through which they pass.

2 SOUND

Technically considered, certain elements must be present simultaneously for acoustic phenomena to occur:

- Sound source
- Transmission medium
- Receive

The electric motor and the pump, together with the drive coupling, are the SOURCE OF THE NOISE. The Bell-housing is the noise transmission MEDIUM. Depending on whether the monobloc bell-housing is a rigid or low noise type, there will be variations in the flexible properties of the transmission medium. The acoustic phenomena are dissimilar in the two cases, given the differences in pressure variation and particle displacement.

MOTOR AND PUMP UNIT

Low noise bell-housing will help to attenuate the transmission of vibrations and the emission of noise generated by the system.
Self-evidently, however, the mere adoption of a low noise bell-housing will achieve little unless the motor and pump are correctly installed on the machine or on the tank of the hydraulic power unit.

Should be followed in order to achieve best possible results and correct installation:

1 MOTOR AND PUMP UNIT MOUNTED HORIZONTALLY ON OIL TANK LID

- The suction pipe attached to the pump must be rigid and fitted using a resilient bulkhead flange of the FTA series, which helps to cushion the vibrations propagated between the pipe and the tank lid.
  If pipes need to be bent, the radius of curvature must be at least 3 times the pipe diameter.
  Do not use elbow fittings, as these will significantly increase pressure losses.

- The pressure pipeline of the pump must be flexible and long enough to include bends with the minimum radius of curvature recommended by the manufacturer for the specified operating pressure.

- The return pipeline running from the service to the filter must be flexible.
  Where oil is returned directly to the tank of the hydraulic power unit through a rigid pipe, it is advisable to use a resilient bulkhead flange of the FTR series, which helps to cushion the vibrations propagated between the pipe and the tank lid.

- Anti-vibration devices (resilient mounts or damping rods) must be located under the feet of the electric motor or the PDM foot brackets, depending on the mounting position of the motor.

- The lids of hydraulic oil tanks must be sturdy enough to support the load they carry.

2 MOTOR AND PUMP UNIT MOUNTED HORIZONTALLY ON MACHINE

- As a matter of good practice, the oil tank and motor-pump unit should be mounted on a single supporting frame of strength sufficient to support the load.

- If the hydraulic system is fitted with a side-mounted filter, the suction pipeline to the pump must be flexible and long enough to include bends with the minimum radius of curvature recommended by the manufacturer.

- If the suction filter is not side mounted, the pipeline should be rigid and installed in conjunction with a compensating coupling.

- The pressure pipeline of the pump must be flexible, and long enough to include bends with the minimum radius of curvature recommended by the manufacturer for the specified operating pressure.

- The return pipeline running from the service to the filter must be flexible.
  Where oil is returned directly to the tank of the hydraulic power unit through a rigid pipe, it is advisable to use a resilient bulkhead flange of the FTR series, which helps to cushion the vibrations propagated between the pipe and the tank lid.

- Anti-vibration devices (resilient mounts or damping rods) must be located under the feet of the electric motor or the PDM foot brackets, depending on the mounting position of the motor.

FINAL CONSIDERATION

For best results, in any event, the motor-and-pump unit should be incorporated into the hydraulic system in such a way that no one component is rigidly associated with another, resulting in the propagation of vibration, and consequently noise.

RECOMMENDED TIGHTENING TORQUES FOR MOTOR/PUMP FIXING ON THE BELL-HOUSING

M6	10 N·m	M16	205 N·m
M8	15 N·m	M18	280 N·m
M10	50 N·m	M20	400 N·m
M12	84 N·m	M22	530 N·m
M14	135 N·m	M24	690 N·m

Note: The above guidelines are indicative only and subordinate to the solutions adopted ultimately by design engineers.

Valid configuration for bell-housing up to Ø400

Bell-housing with nr. 2 holes at pump interface, aligned with through holes at motor interface.

Bell-housing with nr. 4 holes at pump interface, aligned with thread holes at motor interface.

Valid configuration for bell-housing from Ø450 to Ø660

Bell-housing with nr. 2 holes at pump interface + 22.5° compared to through holes at motor interface.

Bell-housing with nr. 4 holes at pump interface + 22.5° compared to thread holes at motor interface.

Spigot hole [mm]	PCD	Ø	Nr. holes	Code	Type
40	72.00	M8	2	**191**	-
45.2	88.90	M8	4	**096**	-
	71.80	M8	4	**120**	-
50	80.00	M8	2	**052**	ISO3019-2-50-B2
	93.00	M10	2	**053**	-
	60.00	M5	4	**280**	-
	63.00	Ø7	4	**057**	-
	93.00	M8	2	**287**	-
50.8	82.50	M8	2	**050**	SAE A-A 50-2
56	76.00	M6	4	**234**	-
57.15	106.40	Ø11	2	**212**	-
60	74.00	M10	4	**098**	-
	98.50	M6	4	**147**	-
	75.00	M6	4	**227**	-
62.7	157.20	M12	4	**231**	-
63	100.00	M8	2	**042**	ISO3019-2-63-B2
	125.00	M6	4	**043**	-
	85.00	M8	4	**044**	-
	80.00	M8	2	**051**	-
	80.00	Ø8.5	4	**058**	-
	100.00	M10	2	**062**	-
	85.00	M8	4	**168**	ISO3019-2-63-B4
	90.00	M8	4	**271**	-
65	90.00	M8	4	**073**	-
70	84.00	Ø7	4	**289**	-
71.8	88.90	M10	4	**047**	-
75	102.00	M10	4	**139**	-
80	100.00	M8	4	**024**	ISO3019-2-80-B4
	103.20	M8	2	**045**	ISO3019-2-80-B2
	100.00	Ø11	4	**059**	-
	100.00	M10	2	**061**	-
	110.00	M10	2	**063**	-
	140.00	M10	2	**064**	-
	115.00	M10	2	**065**	-
	100.00	M10	4	**067**	-
	106.40	M10	2	**083**	-
	130.00	M8	4	**087**	-
	100.00	Ø8.5	4	**093**	-
	113.00	M12	4	**104**	-
	95.00	M8	4	**169**	-
	103.00	M8	4	**242**	-
	110.00	M10	4	**272**	-
82.55	106.40	M10	2	**060**	SAE A 82-2
	105.00	M10	4	**097**	-
	106.40	M8	2	**254**	-
	146.00	M12	2	**260**	-
	110.00	M10	2	**284**	-
85	106.40	M10	2	**066**	-
90	112.00	M8	2	**134**	-
	105.00	M8	4	**156**	-
	118.00	Ø9	2	**163**	-
	112.00	Ø9	2	**164**	-
92	140.00	M8	4	**088**	-
	145.00	M10	4	**089**	-

"-": configuration out of ISO & SAE Standard

Spigot hole [mm]	PCD	Ø	Nr. holes	Code	Type
95	115.00	M8	4	**137**	-
	127.00	M10	4	**131**	-
98.4	125.00	Ø11	4	**128**	-
100	125.00	M10	2	**023**	ISO3019-2-100-B4
	125.00	M10	4	**025**	ISO3019-2-100-B2
	125.00	Ø11	4	**031**	-
	125.00	M5	4	**032**	-
	190.00	Ø15	4	**038**	-
	125.00	Ø13	4	**041**	-
	125.00	M12	2	**071**	-
	140.00	M12	2	**072**	-
	146.00	M12	2	**075**	-
	126.00	M10	2	**106**	-
	120.00	M8	4	**122**	-
	160.00	M10	4	**141**	-
	150.00	M10	4	**150**	-
101.6	161.50	M12	4	**029**	-
	146.00	M12	2	**070**	SAE B 101-2
	127.00	M12	4	**125**	-
	146.00	M10	2	**159**	-
	127.00	M10	4	**224**	-
105	146.00	M12	2	**076**	-
110	175.00	M10	4	**110**	-
	130.00	M8	4	**154**	-
	200.00	M10	4	**202**	-
	135.00	M10	4	**219**	-
	145.00	M12	4	**273**	-
112	140.00	M12	2	**074**	-
	140.00	M10	2	**138**	-
	130.00	M10	4	**264**	-
115	180.00	M12	4	**198**	-
116	160.00	M14	2	**084**	-
120	210.00	M16	2	**094**	-
	145.00	M10	4	**155**	-
	150.00	Ø13	4	**267**	-
125	160.00	M12	4	**026**	ISO3019-2-125-B4
	160.00	Ø13	4	**033**	-
	160.00	M12	2	**079**	-
	180.00	M16	2	**082**	ISO3019-2-125-B2
	155.00	M10	4	**102**	-
	160.00	Ø17	4	**113**	-
	200.00	M12	4	**114**	-
	181.20	M16	2	**136**	-
	200.00	M16	4	**200**	-
	180.00	ø20	4	**215**	-
	170.00	ø18	4	**237**	-
127	161.50	M12	4	**021**	-
	181.20	M16	2	**080**	SAE C 127-2
	161.50	M14	4	**140**	-
130	165.00	Ø11	4	**054**	-
	150.00	M12	4	**068**	-
	181.20	M16	2	**085**	-
	165.00	M12	4	**124**	-
	165.00	M14	4	**135**	-

"-": configuration out of ISO & SAE Standard

Spigot hole [mm]	PCD	Ø	Nr. holes	Code	Type
130	165.00	M10	4	**253**	-
135	160.00	M10	4	**151**	-
	175.40	M12	4	**220**	-
140	180.00	M14	4	**077**	ISO3019-2-140-B4
	180.00	M12	2	**081**	-
	165.00	M10	4	**157**	-
	200.00	M16	4	**176**	ISO3019-2-140-B2
	165.00	Ø11	4	**223**	-
	180.00	M16	2	**232**	-
150	185.00	M16	4	**069**	-
152.4	228.60	M16	4	**022**	-
	228.60	M18	2	**090**	-
	228.60	M18	4	**108**	-
	217.50	Ø17	4	**118**	-
	228.60	M20	2	**166**	SAE D 152-2
	228.60	M20	4	**192**	SAE D 152 -4
	190.50	M8	4	**207**	-
160	200.00	M16	4	**027**	ISO3019 - 2 -160 B4
	200.00	Ø17	4	**035**	-
	200.00	M16	2	**091**	-
	224.00	M20	2	**092**	ISO3019 - 2 -160 B2
	200.00	M12	2	**107**	-
	230.00	M22	4	**111**	-
	185.00	M12	4	**152**	-
	224.00	M16	4	**184**	-
	230.00	Ø22	4	**228**	-
162	188.00	M12	4	**263**	-
165.1	317.35	M20	4	**143**	SAE E 165 - 4
	317.35	M24	2	**145**	SAE E 165 - 2
	229.00	M20	4	**201**	-
	317.35	M18	4	**204**	-
175	200.00	M12	4	**153**	-
	230.00	M18	2	**185**	-
177.8	350.00	M24	4	**146**	SAE F 177 - 4
	216.00	M12	4	**222**	-
	350.00	M24	2	**203**	SAE F 177 - 2
180	216.00	Ø13	4	**055**	-
	216.00	M16	4	**078**	-
	224.00	M16	4	**112**	ISO3019 - 2 -180 B4
	216.00	M12	4	**132**	-
	215.00	M22	4	**148**	-
	230.00	M22	4	**226**	-
200	250.00	M20	4	**028**	ISO3019 - 2 -200 B4
	250.00	Ø22	4	**095**	-
	280.00	M24	2	**117**	-
	230.50	M12	4	**214**	-
203.2	254.00	M14	4	**210**	-
205	240.00	M16	4	**133**	-
224	280.00	M20	4	**144**	ISO3019 - 2 -224 B4
	280.00	Ø22	4	**205**	-
250	310.00	M24	4	**238**	-
	315.00	M20	4	**282**	ISO3019 - 2 -250 B4
275	355.00	M16	4	**233**	-
	355.00	Ø18	4	**281**	-

"-": configuration out of ISO & SAE Standard

MULTI-COMPONENTS

IEC electric motor range from size 132 up to size 355

Technical data

Modular Bell-Housing Components - IEC electric motor range from size 132 up to size 355

Materials
- Base module: Pressure die-cast aluminium alloy
- Pump flange: Aluminium alloy
- Intermediate adapter: Aluminium alloy.
- Screw kit: Steel
- Gaskets: Special paper (Guarnital)

Compatibility with fluids
Modular bell-housing components compatible for use with:
- Mineral oils types HH-HL-HM-HR-HV, to ISO 6743/4 standard
- Water based emulsions types HFAE-HFAS, to ISO 6743/4 standard
- Water glycol type HFC, to ISO 6743/4 standard: ask for anodized version

Special Applications
Any applications not covered by the normal indications contained in this catalogue must be evaluated and approved by MP Filtri Technical and Sales Department

Temperature
From -30 °C to +80 °C

Note
For temperatures outside this range, contact MP Filtri Technical and Sales Department

BMC

Bell-Housing size	Flange ISO 3019-2 50 B2-B4	63 B2-B4	80 B2-B4	100 B2-B4	125 B2-B4	160 B2-B4	200 B2-B4	IEC Motors size
BMC200	●	●	●	●				**IEC 80 Ø200 - Ø19x40**
BMC200	●	●	●	●				**IEC 90 Ø200 - Ø24x50**
BMC250	●	●	●	●	●			**IEC 100 Ø250 - Ø28x60**
BMC250	●	●	●	●	●			**IEC 112 Ø250 - Ø28x60**
BMC300			●	●	●	●		**IEC 132 Ø300 - Ø38x80**
BMC350			●	●	●	●		**IEC 160 Ø350 - Ø42x110**
BMC350			●	●	●	●	●	**IEC 180 Ø350 - Ø48x110**
BMC400			●	●	●	●	●	**IEC 200 Ø400 - Ø55x110**
BMC450			●	●	●	●	●	**IEC 225 Ø450 - Ø60x140**

Bell-Housing size	Flange SAE J 744 50-2 (A-A)	82-2 (A)	101-2 (B)	127-2 (C)	152-2 (D)	165-2 (E)	101-4 (B)	127-4 (D)	152-4 (D)	165-4 (E)	IEC Motors size
BMC200	●	●									**IEC 80 Ø200 - Ø19x40**
BMC200	●	●									**IEC 90 Ø200 - Ø24x50**
BMC250	●	●	●				●				**IEC 100 Ø250 - Ø28x60**
BMC250	●	●	●	●			●				**IEC 112 Ø250 - Ø28x60**
BMC300		●	●	●			●	●			**IEC 132 Ø300 - Ø38x80**
BMC350		●	●	●			●	●			**IEC 160 Ø350 - Ø42x110**
BMC350		●	●	●	●		●	●	●		**IEC 180 Ø350 - Ø48x110**
BMC400		●	●	●	●	●	●	●	●	●	**IEC 200 Ø400 - Ø55x110**
BMC450			●	●	●	●		●	●	●	**IEC 225 Ø450 - Ø60x140**

BMT

Bell-Housing size	Flange ISO 3019-2 50 B2-B4	63 B2-B4	80 B2-B4	100 B2-B4	125 B2-B4	160 B2-B4	200 B2-B4	IEC Motors size
BMT300			●	●	●	●		**IEC 132 Ø300 - Ø38x80**
BMT350			●	●	●	●		**IEC 160 Ø350 - Ø42x110**
BMT350			●	●	●	●	●	**IEC 180 Ø350 - Ø48x110**
BMT400			●	●	●	●	●	**IEC 200 Ø400 - Ø55x110**
BMT450			●	●	●	●	●	**IEC 225 Ø450 - Ø60x140**
BMT550					●	●	●	**IEC 250 Ø550 - Ø65x140**
BMT550					●	●	●	**IEC 280 Ø550 - Ø75x140**
BMT660					●	●	●	**IEC 315 Ø660 - Ø80x170**
BAD800					●	●	●	**IEC 355 Ø800 - Ø95x210**

Bell-Housing size	Flange SAE J 744 50-2 (A-A)	82-2 (A)	101-2 (B)	127-2 (C)	152-2 (D)	165-2 (E)	101-4 (B)	127-4 (D)	152-4 (D)	165-4 (E)	IEC Motors size
BMT300		●	●	●			●	●			**IEC 132 Ø300 - Ø38x80**
BMT350		●	●	●			●	●			**IEC 160 Ø350 - Ø42x110**
BMT350		●	●	●	●		●	●	●		**IEC 180 Ø350 - Ø48x110**
BMT400		●	●	●	●	●	●	●	●	●	**IEC 200 Ø400 - Ø55x110**
BMT450			●	●	●	●		●	●	●	**IEC 225 Ø450 - Ø60x140**
BMT550				●	●	●		●	●	●	**IEC 250 Ø550 - Ø65x140**
BMT550				●	●	●		●	●	●	**IEC 280 Ø550 - Ø75x140**
BMT660				●	●	●		●	●	●	**IEC 315 Ø660 - Ø80x170**
BAD800				●	●	●		●	●	●	**IEC 355 Ø800 - Ø95x210**

Designation & Ordering code

BMC

1 Motor base series and size

BMC200A1001	BMC300A1551	BMC400A2016
BMC200A1251	BMC300A1555	BMC450A2507
BMC250A1141	BMC300A1705	
BMC250A1361	BMC350A1945	
	BMC350A1946	

BMT300A0805	BMT550A21567
BMT350A1105	BMT660A25067
BMT400A1106	BAD800A2707
BMT450A1406	

Options

DI	Drain hole + inspection hole
AN	Black anodized finish
SA	Clearance holes at motor interface
Pxx	Customer specification

Configuration example: BMC200A1001 | DI

2 Intermediate adapter series and size

AD60465
AD50385
AD60466
AD50386
AD50467
AD60467

Options

AN	Black anodized finish
Pxx	Customer specification

Configuration example: AD60465 | AN

3 Pump flange series and size

FR1023	FP5026	FP6032	FP7052
FR1025	FP5032	FP6045	FP7066
FR1033	FP5035	FP6058	FP7069
FR1035	FP5045	FP6070	FP7086
FR1040	FP5056	FP6082	FP70111
FR1079	FP5063	FP6086	
	FP5091	FP60101	
		FP60110	

Pump interface codes

070	See page 56

Options

FR	Holes rotated through 45° in relation to standard position
DP	Double set of hole
AN	Black anodized finish
Pxx	Customer specification

Configuration example: FP5026 | 070 | AN

Options

Mounting kit code series and size

KVG1	See page 107
KVG5	
KVG6	
KVG7	

1

IEC - Electric motors		Motor base	Dimensions [mm]								On request		Weight
Motor size	Shaft end [Ø x L]	code	Ø1	Ø2	Ø3	Ø5	H1	H2	F	P	H3	Ø6	[kg]
80	19x40	**BMC200A1001**	130	165	200	135	100	18	M10	11	60	3/4"	0.75
90	24x50	**BMC200A1251**	130	165	200	135	125	18	M10	11	75	3/4"	0.95
100-112	28x60	**BMC250A1141**	180	215	250	186	114	19	M12	14	80	3/4"	1.60
		BMC250A1361	180	215	250	186	138	19	M12	14	100	3/4"	1.60
132	38x80	**BMC300A1551**	230	265	300	235	155	23	M12	14	95	3/4"	3.30

4 Bolt Version

2 Bolt Version

3

Pump flange code	H1	Mounting kit	Available pump interface 2 Bolt	4 Bolt	Weight [kg]
FR1023***	23	KVG1 See page 107	D042 - S061 - S063 -S083 - S023 - S070 -S071 - S082 - S075	S024 - S025 - S125 - S154	0.25
FR1025***	25		S080 - S082	S021 - S026 - S068 -S069	0.30
FR1033***	33		S023 - S070 - S071 - S072 -S074 S080 -S082	S021 - S026 - S027	0.80
FR1035***	35		S060 - S063 -S065	-	0.90
FR1040***	40		-	S098 - S227	1.10
FR1079***	79		-	S031	1.30

Pump flange code to be complete with available pump interface
Example: **FR1023S024**

IEC - Electric motors		Motor base	Dimensions [mm]								On request		Weight
Motor size	Shaft end [Ø x L]	code	Ø1	Ø2	Ø3	Ø5	H1	H2	F	P	H3	Ø6	[kg]
132	38x80	**BMC300A1555**	230	265	300	235	155	23	M12	14	95	3/4"	3.3
		BMC300A1705	230	265	300	235	170	23	M12	14	110	3/4"	3.6
160	42x110	**BMC350A1785**	250	300	350	254	178	31	M16	18	100	1"	4.4
180	48x110	**BMC350A1945**	250	300	350	254	194	31	M16	18	115	1"	4.9

Pump flange code	H1	Mounting kit	Available pump interface 2 Bolt	Available pump interface 4 Bolt	Weight [kg]
FP5026***	26	KVG5 See page 107	S023 - D042 - S063 - S070 - S072 S075	S024 - S024 -S033 - S125 - S154	1.0
FP5032***	32		-	S024 - S031 - S096 - S125	1.1
FP5035***	35		S023 - D042 - S063 - S070 - S072 - S075 - S060 - S072 - S074 - S075 - S106	S021 - S024 - S025 - S026 - S031 - S059 - S068 - S083 - S097 - S125 - S141	0.9
FP5045***	45		S060 - S070 - S071 - S072 - S074 - S075 - S106	S021 - S024 - S025 - S026 - S068 - S125 -S141	0.9
FP5056***	56		S072	S021 - S026	1.6
FP5063***	63		S070 - S079 - S138	S021 - S025 - S068 -S141	1.7
FP5091***	91		-	S025 - S031 - S033 - S113 - S267	2.2

Pump flange code to be complete with available pump interface
Example: **FP5026S023**

1

IEC - Electric motors Motor size	Shaft end [Ø x L]	Motor base code	Dimensions [mm] Ø1	Ø2	Ø3	Ø5	H1	H2	F	P	On request H3	Ø6	Weight [kg]
160	42x110	**BMC350A1786**	250	300	350	254	178	31	M16	18	100	1"	4.4
180	48x110	**BMC350A1946**	250	300	350	254	194	31	M16	18	115	1"	1.9
200	55x110	**BMC400A2016**	300	350	400	305	201	31	M16	18	125	1 1/2"	6.9

4 Bolt Version

2 Bolt Version

3

Pump flange code	H1	Mounting kit	Available pump interface 2 Bolt	4 Bolt	Weight [kg]
FP6032***	32	KVG6 See page 107	S081 - S082	S021 - S035	1.8
FP6045***	45		S070 - S075 - S080 - S081 - S082	S021 -S025 - S026 -S027 - S069 - S077 -S125 - S198 - S207 - S215 - S253	2.1
FP6058***	58		S079 - S080 - S081 - S082	S025 - S026 -S027 - S038 - S077 - S078 - S207 - S215 - S237	2.4
FP6070***	70		S080	-	3.0
FP6082***	82		S080 - S081	S038 - S141 - 198 - 215	3.3
FP6086***	86		S090 - S092 - S166 - S091	S021 - S026 - S027 - S077 - S078 - S114 - S132 - 198 - S200	3.4
FP6101***	101		-	S027 - S035 - S113 -S132 - S148 - S176 - S228	4.2
FP6110***	110		S080	S111	5.5

Pump flange code to be complete with available pump interface
Example: **FP6032S021**

1

IEC - Electric motors Motor size	Shaft end [Ø x L]	Motor base code	Dimensions [mm] Ø1	Ø2	Ø3	Ø5	H1	H2	F	P	On request H3	Ø6	Weight [kg]
225	60x140	**BMC450A2506**	350	400	450	350	250	31	M16	-	175	1 1/2"	6.9

3

Pump flange code	H1	Mounting kit	Available pump interface 2 Bolt	4 Bolt	Weight [kg]
FP6032***	32	KVG6 See page 107	S081 - S082	S021 - S035	1.8
FP6045***	45		S070 - S075 - S080 - S081 - S082	S021 -S025 - S026 -S027 - S069 - S077 -S125 - S198 - S207 - S215 - S253	2.1
FP6058***	58		S079 - S080 - S081 - S082	S025 - S026 -S027 - S038 - S077 - S078 - S207 - S215 - S237	2.4
FP6070***	70		S080	-	3.0
FP6082***	82		S080 - S081	S038 - S141 - 198 - 215	3.3
FP6086***	86		S090 - S092 - S166 - S091	S021 - S026 - S027 - S077 - S078 - S114 - S132 - 198 - S200	3.4
FP6101***	101		-	S027 - S035 - S113 -S132 - S148 - S176 - S228	4.2
FP6110***	110		S080	S111	5.5

Pump flange code to be complete with available pump interface
Example: **FP6032S021**

1

IEC - Electric motors Motor size	Shaft end [Ø x L]	Motor base code	Dimensions [mm] Ø1	Ø2	Ø3	Ø5	H1	H2	F	P	On request H3	Ø6	Weight [kg]
225	60x140	**BMC450A2507**	350	400	450	350	250	31	M16	-	175	1 1/2"	6.9

3

Pump flange code	H1	Mounting kit	Available pump interface 2 Bolt	4 Bolt	Weight [kg]
FP7052***	52	KVG7 See page 107	-	S028 - S108 - S112 - S133 - S192	4.4
FP7066***	66		S090 - S092 - S166	-	4.8
FP7069***	69		-	S108 - S143 - S148 - S192 - S201 - S204 - S281 -S282	4.9
FP7086***	86		S091 - S092 - S117 - S166	S022 - S027 - S028 - S108 - S112 - S184 - S192 - S201 - S228 - S300	5.2
FP7111***	111		S091 - S092 - S117 - S145	S028 - S108 - S112 - S133 - S184	6.3

Pump flange code to be complete with available pump interface
Example: **FP7052S028**

Motor base code	Weight [kg]
BMT300A0805	1.95

Pump flange code	H1	Ø1	Ø2	P	Mounting kit	Available pump interface 2 Bolt	Available pump interface 4 Bolt	Weight [kg]
FP5026***	26	190	170	15	KVG5 See page 107	S023 - D042 - S063 - S070 - S072 S075	S024 - S024 -S033 - S125 - S154	1
FP5032***	32					-	S024 - S031 - S096 - S125	1.1
FP5035***	35					S023 - D042 - S063 - S070 - S072 - S075 - S060 - S072 - S074 - S075 - S106	S021 - S024 - S025 - S026 - S031 - S059 - S068 - S083 - S097 - S125 - S141	0.9
FP5045***	45					S060 - S070 - S071 - S072 - S074 - S075 - S106	S021 - S024 - S025 - S026 - S068 - S125 -S141	0.9
FP5056***	56					S072	S021 - S026	1.6
FP5063***	63					S070 - S079 - S138	S021 - S025 - S068 -S141	1.7
FP5091***	91					-	S025 - S031 - S033 - S113 - S267	2.2
FP6032***	32	240	218	17	KVG6 See page 107	S081 - S082	S021 - S035	1.8
FP6045***	45					S070 - S075 - S080 - S081 - S082	S021 -S025 - S026 -S027 - S069 - S077 -S125 - S198 - S207 - S215 - S253	2.1
FP6058***	58					S079 - S080 - S081 - S082	S025 - S026 -S027 - S038 - S077 - S078 - S207 - S215 - S237	2.4
FP6070***	70					S080	-	3.0
FP6082***	82					S080 - S081	S038 - S141 - 198 - 215	3.3
FP6086***	86					S090 - S092 - S166 - S091	S021 - S026 - S027 - S077 - S078 - S114 - S132 - 198 - S200	3.4
FP6101***	101					-	S027 - S035 - S113 -S132 - S148 - S176 - S228	4.2
FP6110***	110					S080	S111	5.5
FP7052***	52	288	258	22	KVG7 See page 107	-	S028 - S108 - S112 - S133 - S192	4.4
FP7066***	66					S090 - S092 - S166	-	4.8
FP7069***	69					-	S108 - S143 - S148 - S192 - S201 - S204 - S281 -S282	4.9
FP7086***	86					S091 - S092 - S117 - S166	S022 - S027 - S028 - S108 - S112 - S184 - S192 - S201 - S228 - S300	5.2
FP7111***	111					S091 - S092 - S117 - S145	S028 - S108 - S112 - S133 - S184	6.3

Pump flange code to be complete with available pump interface

Example: **FP6032S021**

2

Flange interface

Motor base interface

Code	Weight [kg]
AD50385	1.00

Code	Weight [kg]
AD50386	1.25

Code	Weight [kg]
AD50467	1.90

Motor base code	Weight [kg]
BMT350A1105	3.10

Pump flange code	H1	Ø1	Ø2	P	Mounting kit	Available pump interface 2 Bolt	Available pump interface 4 Bolt	Weight [kg]
FP5026***	26	190	170	15	KVG5 See page 107	S023 - D042 - S063 - S070 - S072 S075	S024 - S024 -S033 - S125 - S154	1
FP5032***	32					-	S024 - S031 - S096 - S125	1.1
FP5035***	35					S023 - D042 - S063 - S070 - S072 - S075 - S060 - S072 - S074 - S075 - S106	S021 - S024 - S025 - S026 - S031 - S059 - S068 - S083 - S097 - S125 - S141	0.9
FP5045***	45					S060 - S070 - S071 - S072 - S074 - S075 - S106	S021 - S024 - S025 - S026 - S068 - S125 -S141	0.9
FP5056***	56					S072	S021 - S026	1.6
FP5063***	63					S070 - S079 - S138	S021 - S025 - S068 -S141	1.7
FP5091***	91					-	S025 - S031 - S033 - S113 - S267	2.2
FP6032***	32	240	218	17	KVG6 See page 107	S081 - S082	S021 - S035	1.8
FP6045***	45					S070 - S075 - S080 - S081 - S082	S021 -S025 - S026 -S027 - S069 - S077 -S125 - S198 - S207 - S215 - S253	2.1
FP6058***	58					S079 - S080 - S081 - S082	S025 - S026 -S027 - S038 - S077 - S078 - S207 - S215 - S237	2.4
FP6070***	70					S080	-	3.0
FP6082***	82					S080 - S081	S038 - S141 - 198 - 215	3.3
FP6086***	86					S090 - S092 - S166 - S091	S021 - S026 - S027 - S077 - S078 - S114 - S132 - 198 - S200	3.4
FP6101***	101					-	S027 - S035 - S113 -S132 - S148 - S176 - S228	4.2
FP6110***	110					S080	S111	5.5
FP7052***	52	288	258	22	KVG7 See page 107	-	S028 - S108 - S112 - S133 - S192	4.4
FP7066***	66					S090 - S092 - S166	-	4.8
FP7069***	69					-	S108 - S143 - S148 - S192 - S201 - S204 - S281 -S282	4.9
FP7086***	86					S091 - S092 - S117 - S166	S022 - S027 - S028 - S108 - S112 - S184 - S192 - S201 - S228 - S300	5.2
FP7111***	111					S091 - S092 - S117 - S145	S028 - S108 - S112 - S133 - S184	6.3

Pump flange code to be complete with available pump interface
Example: **FP6032S021**

2

Flange interface

Motor base interface

Code	Weight [kg]
AD50385	1.00

Code	Weight [kg]
AD50386	1.25

Code	Weight [kg]
AD50467	1.90

Motor base code	Weight [kg]
BMT400A1106	4.90

Pump flange code	H1	Ø1	Ø2	P	Mounting kit	Available pump interface 2 Bolt	Available pump interface 4 Bolt	Weight [kg]
FP5026***	26	190	170	15	KVG5 See page 107	S023 - D042 - S063 - S070 - S072 S075	S024 - S024 -S033 - S125 - S154	1
FP5032***	32					-	S024 - S031 - S096 - S125	1.1
FP5035***	35					S023 - D042 - S063 - S070 - S072 - S075 - S060 - S072 - S074 - S075 - S106	S021 - S024 - S025 - S026 - S031 - S059 - S068 - S083 - S097 - S125 - S141	0.9
FP5045***	45					S060 - S070 - S071 - S072 - S074 - S075 - S106	S021 - S024 - S025 - S026 - S068 - S125 -S141	0.9
FP5056***	56					S072	S021 - S026	1.6
FP5063***	63					S070 - S079 - S138	S021 - S025 - S068 -S141	1.7
FP5091***	91					-	S025 - S031 - S033 - S113 - S267	2.2
FP6032***	32	240	218	17	KVG6 See page 107	S081 - S082	S021 - S035	1.8
FP6045***	45					S070 - S075 - S080 - S081 - S082	S021 -S025 - S026 -S027 - S069 - S077 -S125 - S198 - S207 - S215 - S253	2.1
FP6058***	58					S079 - S080 - S081 - S082	S025 - S026 -S027 - S038 - S077 - S078 - S207 - S215 - S237	2.4
FP6070***	70					S080	-	3.0
FP6082***	82					S080 - S081	S038 - S141 - 198 - 215	3.3
FP6086***	86					S090 - S092 - S166 - S091	S021 - S026 - S027 - S077 - S078 - S114 - S132 - 198 - S200	3.4
FP6101***	101					-	S027 - S035 - S113 -S132 - S148 - S176 - S228	4.2
FP6110***	110					S080	S111	5.5
FP7052***	52	288	258	22	KVG7 See page 107	-	S028 - S108 - S112 - S133 - S192	4.4
FP7066***	66					S090 - S092 - S166	-	4.8
FP7069***	69					-	S108 - S143 - S148 - S192 - S201 - S204 - S281 -S282	4.9
FP7086***	86					S091 - S092 - S117 - S166	S022 - S027 - S028 - S108 - S112 - S184 - S192 - S201 - S228 - S300	5.2
FP7111***	111					S091 - S092 - S117 - S145	S028 - S108 - S112 - S133 - S184	6.3

Pump flange code to be complete with available pump interface

Example: **FP6032S021**

2

Flange interface

Motor base interface

Code	Weight [kg]
AD60465	1.30

Code	Weight [kg]
AD60466	1.60

Code	Weight [kg]
AD60467	2.50

Motor base code	Weight [kg]
BMT450A1406	5.00

Pump flange code	H1	Ø1	Ø2	P	Mounting kit	Available pump interface 2 Bolt	Available pump interface 4 Bolt	Weight [kg]
FP5026***	26	190	170	15	KVG5 See page 107	S023 - D042 - S063 - S070 - S072 S075	S024 - S024 -S033 - S125 - S154	1.0
FP5032***	32					-	S024 - S031 - S096 - S125	1.1
FP5035***	35					S023 - D042 - S063 - S070 - S072 - S075 - S060 - S072 - S074 - S075 - S106	S021 - S024 - S025 - S026 - S031 - S059 - S068 - S083 - S097 - S125 - S141	0.9
FP5045***	45					S060 - S070 - S071 - S072 - S074 - S075 - S106	S021 - S024 - S025 - S026 - S068 - S125 -S141	0.9
FP5056***	56					S072	S021 - S026	1.6
FP5063***	63					S070 - S079 - S138	S021 - S025 - S068 -S141	1.7
FP5091***	91					-	S025 - S031 - S033 - S113 - S267	2.2
FP6032***	32	240	218	17	KVG6 See page 107	S081 - S082	S021 - S035	1.8
FP6045***	45					S070 - S075 - S080 - S081 - S082	S021 -S025 - S026 -S027 - S069 - S077 -S125 - S198 - S207 - S215 - S253	2.1
FP6058***	58					S079 - S080 - S081 - S082	S025 - S026 -S027 - S038 - S077 - S078 - S207 - S215 - S237	2.4
FP6070***	70					S080	-	3.0
FP6082***	82					S080 - S081	S038 - S141 - 198 - 215	3.3
FP6086***	86					S090 - S092 - S166 - S091	S021 - S026 - S027 - S077 - S078 - S114 - S132 - 198 - S200	3.4
FP6101***	101					-	S027 - S035 - S113 -S132 - S148 - S176 - S228	4.2
FP6110***	110					S080	S111	5.5
FP7052***	52	288	258	22	KVG7 See page 107	-	S028 - S108 - S112 - S133 - S192	4.4
FP7066***	66					S090 - S092 - S166	-	4.8
FP7069***	69					-	S108 - S143 - S148 - S192 - S201 - S204 - S281 -S282	4.9
FP7086***	86					S091 - S092 - S117 - S166	S022 - S027 - S028 - S108 - S112 - S184 - S192 - S201 - S228 - S300	5.2
FP7111***	111					S091 - S092 - S117 - S145	S028 - S108 - S112 - S133 - S184	6.3

Pump flange code to be complete with available pump interface
Example: **FP6032S021**

2

Flange interface

Motor base interface

Code	Weight [kg]
AD60465	1.30

Code	Weight [kg]
AD60466	1.60

Code	Weight [kg]
AD60467	2.50

1

Motor base code	Weight [kg]
BMT550A21567	8.80

3

Pump flange code	H1	Ø1	Ø2	P	Mounting kit	Available pump interface 2 Bolt	Available pump interface 4 Bolt	Weight [kg]
FP6032***	32	240	218	17	KVG6 See page 107	S081 - S082	S021 - S035	1.8
FP6045***	45					S070 - S075 - S080 - S081 - S082	S021 -S025 - S026 -S027 - S069 - S077 -S125 - S198 - S207 - S215 - S253	2.1
FP6058***	58					S079 - S080 - S081 - S082	S025 - S026 -S027 - S038 - S077 - S078 - S207 - S215 - S237	2.4
FP6070***	70					S080	-	3.0
FP6082***	82					S080 - S081	S038 - S141 - 198 - 215	3.3
FP6086***	86					S090 - S092 - S166 - S091	S021 - S026 - S027 - S077 - S078 - S114 - S132 - 198 - S200	3.4
FP6101***	101					-	S027 - S035 - S113 -S132 - S148 - S176 - S228	4.2
FP6110***	110					S080	S111	5.5
FP7052***	52	288	258	22	KVG7 See page 107	-	S028 - S108 - S112 - S133 - S192	4.4
FP7066***	66					S090 - S092 - S166	-	4.8
FP7069***	69					-	S108 - S143 - S148 - S192 - S201 - S204 - S281 -S282	4.9
FP7086***	86					S091 - S092 - S117 - S166	S022 - S027 - S028 - S108 - S112 - S184 - S192 - S201 - S228 - S300	5.2
FP7111***	111					S091 - S092 - S117 - S145	S028 - S108 - S112 - S133 - S184	6.3

Pump flange code to be complete with available pump interface
Example: **FP6032S021**

1

Motor base code	Weight [kg]
BMT660A25067	12.00

Flange

4 Bolt Version

2 Bolt Version

3

Pump flange code	H1	Ø1	Ø2	P	Mounting kit	Available pump interface 2 Bolt	4 Bolt	Weight [kg]
FP6032***	32	240	218	17	KVG6 See page 107	S081 - S082	S021 - S035	1.8
FP6045***	45					S070 - S075 - S080 - S081 - S082	S021 -S025 - S026 -S027 - S069 - S077 -S125 - S198 - S207 - S215 - S253	2.1
FP6058***	58					S079 - S080 - S081 - S082	S025 - S026 -S027 - S038 - S077 - S078 - S207 - S215 - S237	2.4
FP6070***	70					S080	-	3.0
FP6082***	82					S080 - S081	S038 - S141 - 198 - 215	3.3
FP6086***	86					S090 - S092 - S166 - S091	S021 - S026 - S027 - S077 - S078 - S114 - S132 - 198 - S200	3.4
FP6101***	101					-	S027 - S035 - S113 -S132 - S148 - S176 - S228	4.2
FP6110***	110					S080	S111	5.5
FP7052***	52	288	258	22	KVG7 See page 107	-	S028 - S108 - S112 - S133 - S192	4.4
FP7066***	66					S090 - S092 - S166	-	4.8
FP7069***	69					-	S108 - S143 - S148 - S192 - S201 - S204 - S281 -S282	4.9
FP7086***	86					S091 - S092 - S117 - S166	S022 - S027 - S028 - S108 - S112 - S184 - S192 - S201 - S228 - S300	5.2
FP7111***	111					S091 - S092 - S117 - S145	S028 - S108 - S112 - S133 - S184	6.3

Pump flange code to be complete with available pump interface
Example: **FP6032S021**

1

Motor base code	Weight [kg]
BAD800A2707	31.00

Flange

4 Bolt Version

2 Bolt Version

3

Pump flange code	H1	Ø1	Ø2	P	Mounting kit	Available pump interface 2 Bolt	Available pump interface 4 Bolt	Weight [kg]
FP7052***	52	288	258	22	KVG7 See page 107	-	S028 - S108 - S112 - S133 - S192	4.4
FP7066***	66					S090 - S092 - S166	-	4.8
FP7069***	69					-	S108 - S143 - S148 - S192 - S201 - S204 - S281 -S282	4.9
FP7086***	86					S091 - S092 - S117 - S166 -	S022 - S027 - S028 - S108 - S112 - S184 - S192 - S201 - S228 - S300	5.2
FP7111***	111					S091 - S092 - S117 - S145	S028 - S108 - S112 - S133 - S184	6.3

Pump flange code to be complete with available pump interface
Example: **FP7052S028**

KVG1

Components				
Item	Description	Q.ty	Material	Torque
1	Gasket for auxiliary flange FR1	1	Paper	-
2	Screw T.C.E.I. M8x20 UNI-5931 8.8	4	Steel	15 Nm

KVG5

Components				
Item	Description	Q.ty	Material	Torque
1	Gasket for auxiliary flange FP5 / AD5	1	Paper	-
2	Screw T.C.E.I. M14x35 UNI-5931 8.8	4	Steel	90 Nm
3	Washer Schnorr 14	4	Steel	-

KVG6

Components				
Item	Description	Q.ty	Material	Torque
1	Gasket for auxiliary flange FP6 / AD6	1	Paper	-
2	Screw T.C.E.I. M16x35 UNI-5931 8.8	4	Steel	130 Nm
3	Washer Schnorr 16	4	Steel	-

KVG7

Components				
Item	Description	Q.ty	Material	Torque
1	Gasket for auxiliary flange FP7 / AD7	1	Paper	-
2	Screw T.C.E.I. M20x50 UNI-5931 8.8	4	Steel	200 Nm
3	Washer Schnorr 20	4	Steel	-