

# LME series

Engine power range from 3 to 13.5 HP





# Bell-housings & Couplings sizing

p.

<b>AUTOMATIC</b>	<b>11</b>
<b>MANUALLY</b>	<b>12</b>

## SOFTWARE FOR AUTOMATIC CALCULATION

The web-based software program will allow you to select the most suitable MP Filtri's Filters, in accordance with your process design requirements.

The program will automatically check your input design process prior to propose you the acceptable solutions and create an output in PDF report style format.

The MP Filtri Selection Tool software program is easy to use with a flexible fast design method and provides improved layout formats with full descriptions.

The web-based tool is available at MP Filtri website at following link:  
<https://www.mpfiltricom/tools/>

The related, complete user guide is available as Manual and downloadable from the "Download" section of MP Filtri website, as well as scanning the following QR code



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# BELL-HOUSINGS & COUPLINGS SIZING

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

### DATA REQUIRED

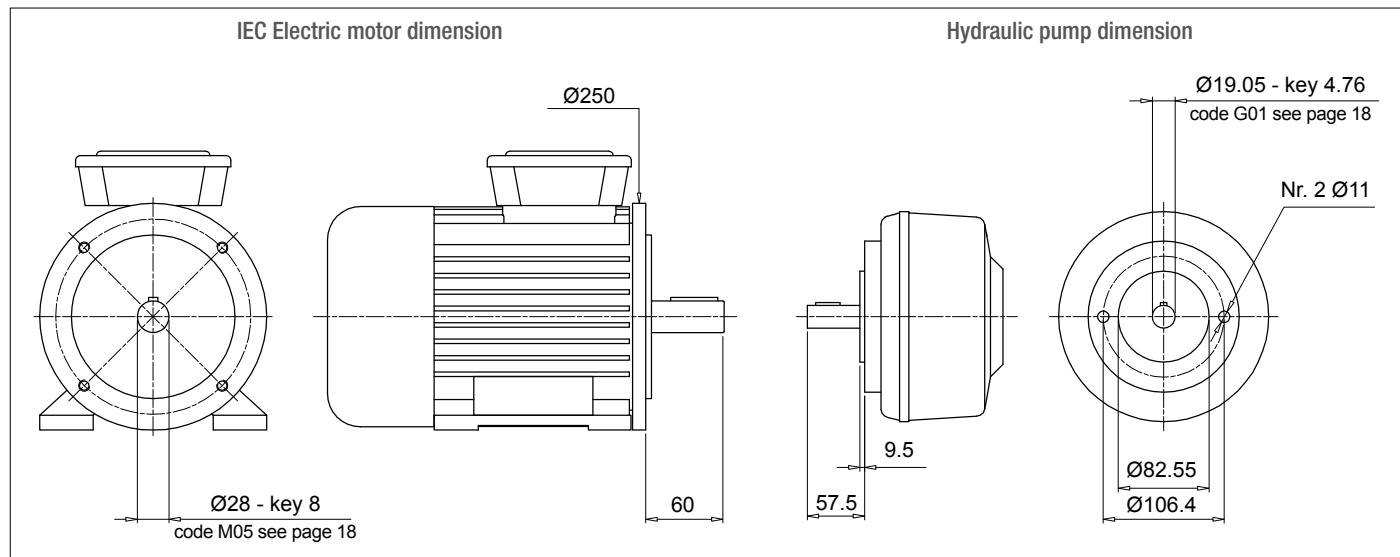
- Electric motor power/motor size
- Manufacturer and pump type

### 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

- $H = 60 + 18 + 57.5 = 135.5 \text{ mm}$  (18 = Sp spider - see page 31)
- Choose type of bell-housing (LMC - LMS):  
For monobloc bell-housing LMC/LDC series see pages 75 ÷ 81  
For Low noise bell-housing LMS/LDS series see pages 81 ÷ 89  
For Multi-components 2-3 bell housing series see pages 91 ÷ 111

#### Note:

The length of bell-housing must be  $\geq$  than the length calculated (135.5 mm)

#### Case A

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

Pages 75 ÷ 81 for IEC Electric motor size 100-112 - LMC250

LMC 250 bell-housing with height  $\geq 135.5$  - LMC250AFSQ

The bell-housing code must be completed with pump drilling code (see pages 60-61).  
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 83 ÷ 89 for IEC Electric motor size 100-112 - LMS250

LMS 250 bell-housing with height  $\geq 135.5$  - LMS250AFSA

The bell-housing code must be completed with pump drilling code (see pages 60-61).  
For the specific case:

Spigot hole 82.55 - PCD 106.4 - Nr.2 holes M10 : Drilling code 060

Definitive bell-housing code **LMS250AFSA060**

# BELL-HOUSINGS & COUPLINGS SIZING

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

### Coupling selection

#### **Motor half-coupling** (see page 26)

For IEC Electric motor size 100/112, the half-coupling is **SGEA21M05060**

#### **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

$$\text{LMC} = 138 \text{ mm} - 60 - 18 - 9.5 = 50.5 \text{ mm}$$

$$\text{LMS} = 148 \text{ mm} - 60 - 18 - 9.5 = 60.5 \text{ mm}$$

LMC - Choose the half-coupling's length at page 26  $\leq$  50.5 mm.

LMS - Choose the half-coupling's length at page 26  $\leq$  60.5 mm.

LMC - Available length for SGEA21 = 50 mm

LMS - Available length for SGEA21 = 60 mm

Half coupling for LMC: **SGEA21G01050**

Half coupling for LMS: **SGEA21G01050**

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

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.

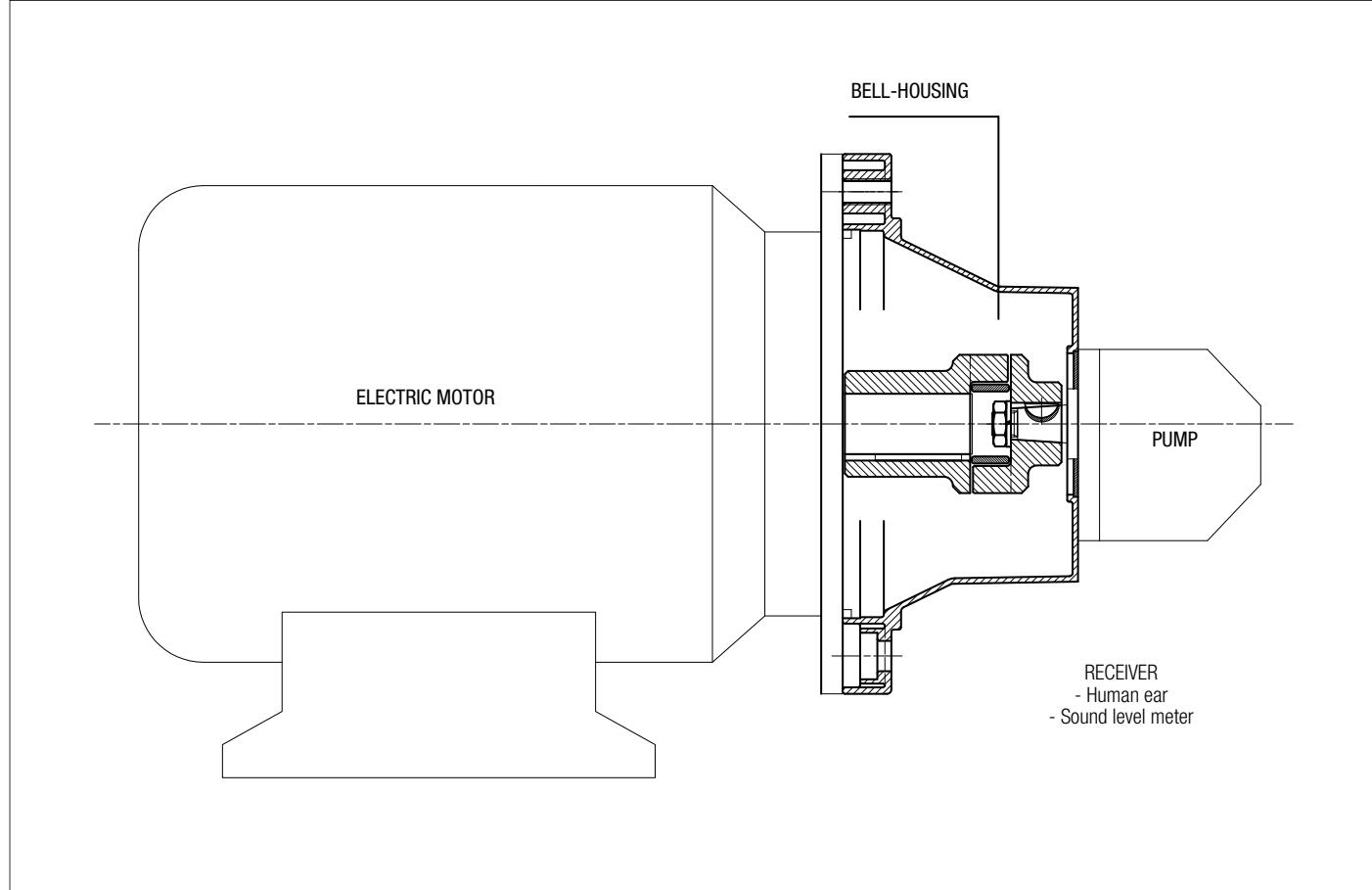
### ② SOUND

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.

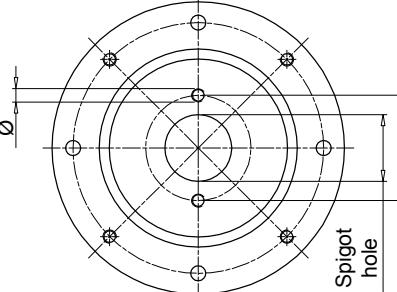
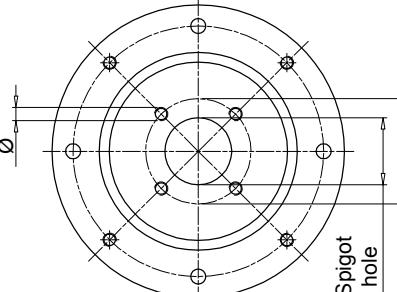
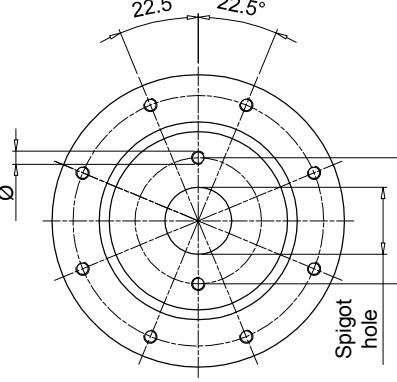
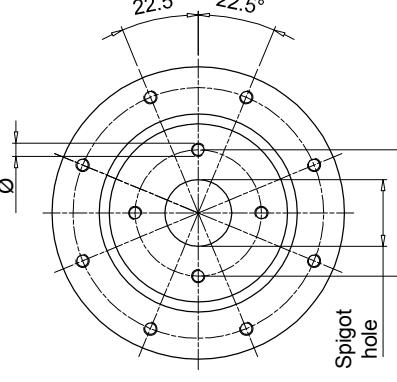
## FINAL CONSIDERATION

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					
					PCD
Bell-housing with nr. 2 holes at pump interface, aligned with through holes at motor interface.					Spigot hole
					PCD
Bell-housing with nr. 4 holes at pump interface, aligned with thread holes at motor interface.					Spigot hole
Valid configuration for bell-housing from Ø450 to Ø660					
					PCD
Bell-housing with nr. 2 holes at pump interface + 22.5° compared to through holes at motor interface.					Spigot hole
					PCD
Bell-housing with nr. 4 holes at pump interface + 22.5° compared to thread holes at motor interface.					Spigot hole

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

"-": configuration out of ISO &amp; SAE Standard

Spigot hole [mm]	PCD	Ø	Nr. holes	Code	Type
<b>95</b>	115.00	M8	4	<b>137</b>	-
	127.00	M10	4	<b>131</b>	-
<b>98.4</b>	125.00	Ø11	4	<b>128</b>	-
<b>100</b>	125.00	M10	2	<b>023</b>	ISO3019-2-100-B4
	125.00	M10	4	<b>025</b>	ISO3019-2-100-B2
	125.00	Ø11	4	<b>031</b>	-
	125.00	M5	4	<b>032</b>	-
	190.00	Ø15	4	<b>038</b>	-
	125.00	Ø13	4	<b>041</b>	-
	125.00	M12	2	<b>071</b>	-
	140.00	M12	2	<b>072</b>	-
	146.00	M12	2	<b>075</b>	-
	126.00	M10	2	<b>106</b>	-
	120.00	M8	4	<b>122</b>	-
	160.00	M10	4	<b>141</b>	-
	150.00	M10	4	<b>150</b>	-
<b>101.6</b>	161.50	M12	4	<b>029</b>	-
	146.00	M12	2	<b>070</b>	SAE B 101-2
	127.00	M12	4	<b>125</b>	-
	146.00	M10	2	<b>159</b>	-
	127.00	M10	4	<b>224</b>	-
<b>105</b>	146.00	M12	2	<b>076</b>	-
<b>110</b>	175.00	M10	4	<b>110</b>	-
	130.00	M8	4	<b>154</b>	-
	200.00	M10	4	<b>202</b>	-
<b>112</b>	135.00	M10	4	<b>219</b>	-
	145.00	M12	4	<b>273</b>	-
	140.00	M12	2	<b>074</b>	-
<b>115</b>	140.00	M10	2	<b>138</b>	-
	130.00	M10	4	<b>264</b>	-
<b>116</b>	180.00	M12	4	<b>198</b>	-
<b>120</b>	160.00	M14	2	<b>084</b>	-
<b>125</b>	210.00	M16	2	<b>094</b>	-
	145.00	M10	4	<b>155</b>	-
	150.00	Ø13	4	<b>267</b>	-
	160.00	M12	4	<b>026</b>	ISO3019-2-125-B4
	160.00	Ø13	4	<b>033</b>	-
	160.00	M12	2	<b>079</b>	-
	180.00	M16	2	<b>082</b>	ISO3019-2-125-B2
	155.00	M10	4	<b>102</b>	-
	160.00	Ø17	4	<b>113</b>	-
	200.00	M12	4	<b>114</b>	-
<b>127</b>	181.20	M16	2	<b>136</b>	-
	200.00	M16	4	<b>200</b>	-
	180.00	Ø20	4	<b>215</b>	-
	170.00	Ø18	4	<b>237</b>	-
<b>130</b>	161.50	M12	4	<b>021</b>	-
	181.20	M16	2	<b>080</b>	SAE C 127-2
	161.50	M14	4	<b>140</b>	-
<b>130</b>	165.00	Ø11	4	<b>054</b>	-
	150.00	M12	4	<b>068</b>	-
	181.20	M16	2	<b>085</b>	-
	165.00	M12	4	<b>124</b>	-
	165.00	M14	4	<b>135</b>	-

"-": configuration out of ISO &amp; SAE Standard

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

"-": configuration out of ISO &amp; SAE Standard

## Technical data

### Bell-housing - Engine power range from 3 to 13.5 HP

#### Materials

- Bell-housing: Pressure die casting Aluminium
- Gasket: Special paper - Guarnital

#### Versions:

- Single-drilled bell-housing for pump group 1 or 2, with pump centering ring included (see pages 116 - 117).
- Bell-housing with Multi -Drilling machined for group 1 and 2 pump, with pump centering ring to be ordered separately (see page 118).

#### Temperature

From -30 °C to +80 °C

#### Note

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

Our bell-housings are available for flanges standard according to the SAE standard.

#### Compatibility with fluids

Bell-housing components compatible for use with:

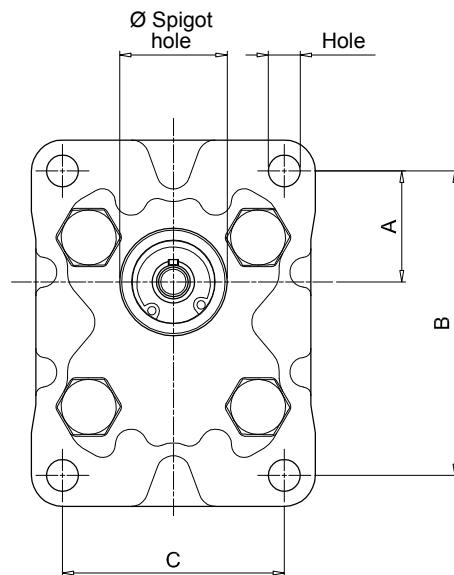
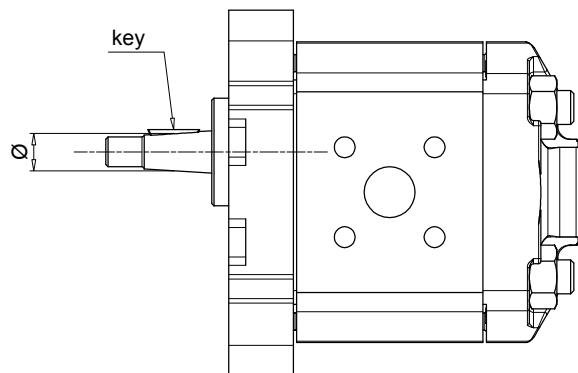
- Mineral oils types HH-HL-HM-HR-HV, to ISO 6743/4 standard
- Water based emulsions types HFAE-HFAS, to ISO 6743/4 standard
- Water glycol type HFC, to ISO 6743/4 standard: ask for anodized version

#### 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.

In order to ensure maximum reliability of the application, endothermic motor combinations include the exclusive use of elastic Spider made of Polyurethane 95 Shore A (see page 120).

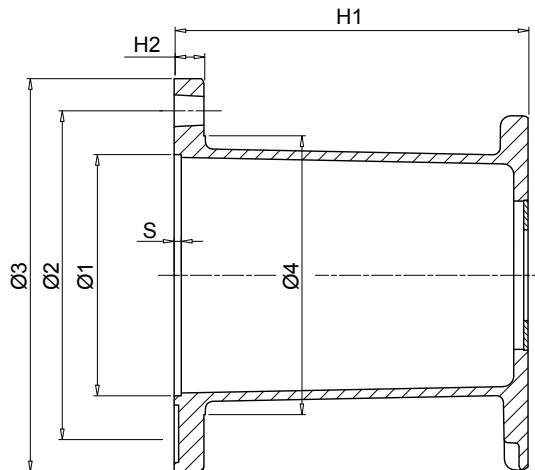
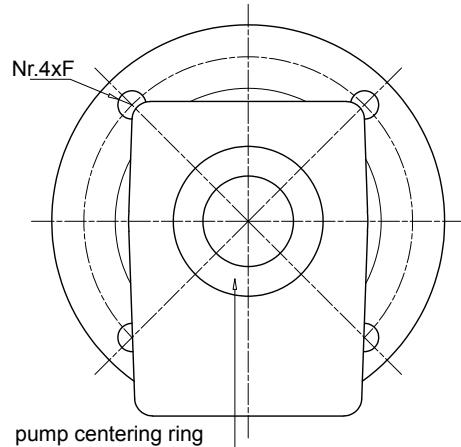
## Designation of pump flange and shaft



Pump group	Ø Spigot hole	A	Dimensions B	C	Hole	Pump flange code	Ø	Key	Shaft type	Pump half-coupling code
<b>05</b>	22.0	25.5	66.0	-	M6	<b>FS05M</b>	6.0	2.0	parallel	<b>FS05M</b>
	22.0	25.5	66.0	-	M6	<b>FS05C</b>	7.0	2.0	parallel	<b>FS05C</b>
<b>1</b>	25.4	26.2	72.0	52.0	M6	<b>FS100</b>	9.7	2.4	tapered 1:8	<b>FS100</b>
	30.0	24.5	73.0	56.0	M6	<b>FS1M0</b>	12.0	3.0	parallel	<b>FS1C0</b>
	30.0	24.5	73.0	56.0	M6	<b>FS1M0</b>	13.9	3.0	tapered 1:8	<b>FS1M0</b>
<b>2</b>	36.5	32.5	96.0	71.5	M8	<b>FS200</b>	17.2	3.2 - 4	tapered 1:8	<b>FS200</b>

## Dimensions

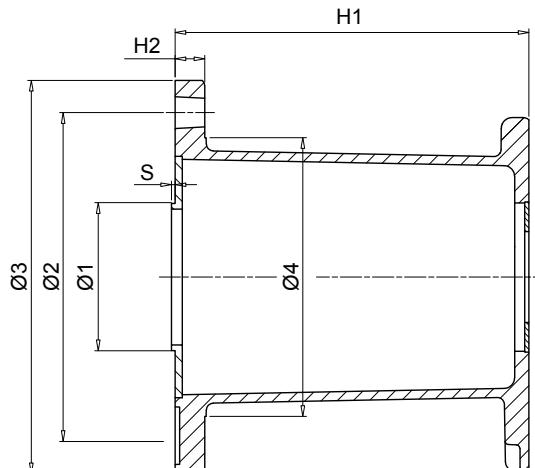
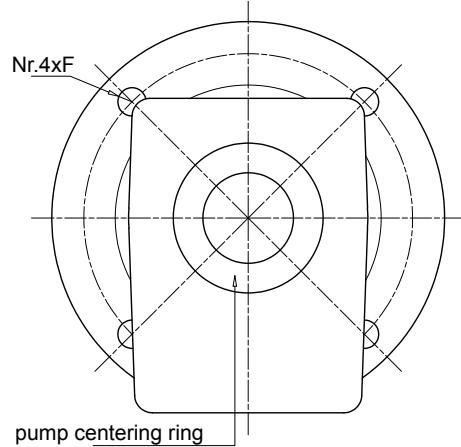
Combinations for Endothermic engine 3 - 5.5 Hp



Female centering  $\varnothing$  67.5 - Gear pumps

		Dimensions [mm]								
		$\varnothing 1$	$\varnothing 2$	$\varnothing 3$	$\varnothing 4$	H1	H2	S	F	Weight [kg]
		67.5	92	110	78	99	8	3	8	0.5

Power Kw	Hp	Shaft end	Pump code	Bell-Housing code	SG code motor side	Spider code	SG code pump side	Spigot hole
2.2-4	3-5.5	Ø 18 - Key 5 ISO 3019-2-E	FS100 FS1M0	LME110T099FS100 LME110T099FS1M0	SGEA01C05056P10 SGEA01C05056P10	EGEORR EGEORR	SGEA01FS100P10 SGEA01FS1M0P10	ANCA002 ANCA003
		Ø 19.05 - Key 4.76 SAE straight shaft	FS100 FS1M0	LME110T099FS100 LME110T099FS1M0	SGEA01G01056P10 SGEA01G01056P10	EGEORR EGEORR	SGEA01FS100P10 SGEA01FS1M0P10	ANCA002 ANCA003



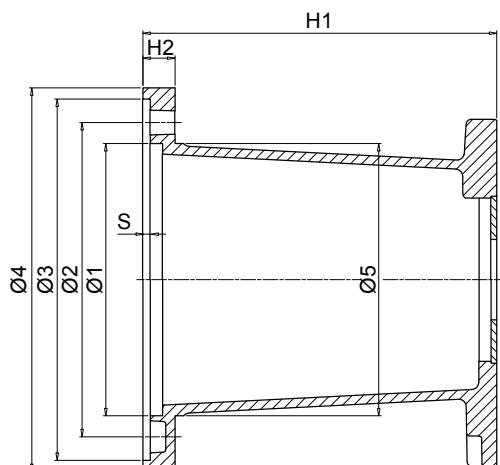
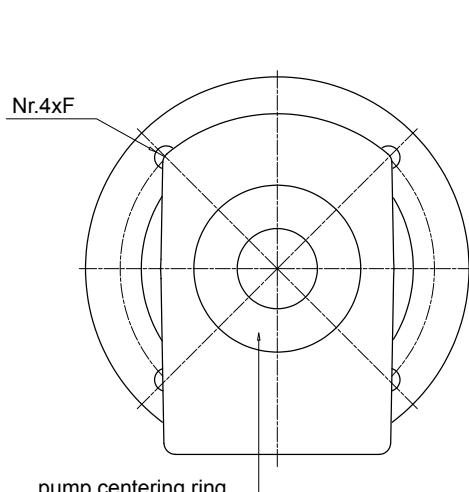
Male centering ring  $\varnothing$  41.2 - Gear pumps

		Dimensions [mm]								
		$\varnothing 1$	$\varnothing 2$	$\varnothing 3$	$\varnothing 4$	H1	H2	S	F	Weight [kg]
		41.2	92	110	78	99	8	3	8	0.5

Power Kw	Hp	Shaft end	Pump code	Bell-Housing code	SG code motor side	Spider code	SG code pump side	Spigot hole
2.2-4	3-5.5	Ø 18 - Key 5 ISO 3019-2-E	FS100 FS1M0	LME110T099FS100MM LME110T099FS1M0MM	SGEA01C05056P10 SGEA01C05056P10	EGEORR EGEORR	SGEA01FS100P10 SGEA01FS1M0P10	ANCA002 ANCA003
		Ø 19.05 - Key 4.76 SAE straight shaft	FS100 FS1M0	LME110T099FS100MM LME110T099FS1M0MM	SGEA01G01056P10 SGEA01G01056P10	EGEORR EGEORR	SGEA01FS100P10 SGEA01FS1M0P10	ANCA002 ANCA003

NOTE: Pump side centering rings are included in the bellhousing

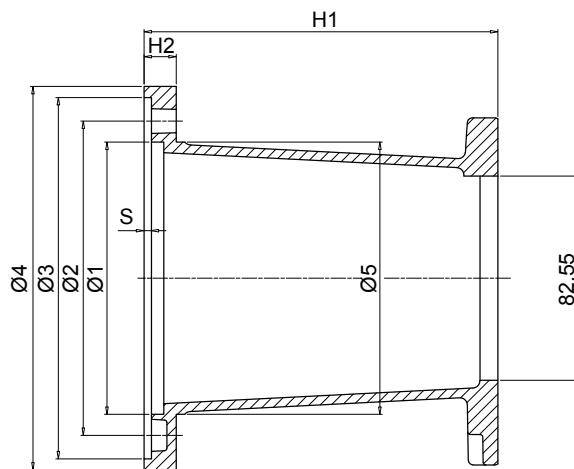
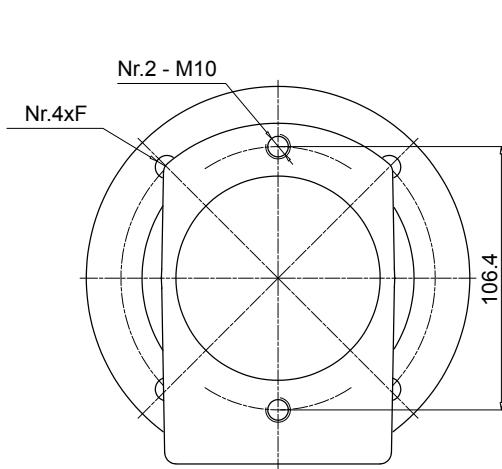
## Combinations for Endothermic engine 7 - 18 Hp



## Gear pumps

Dimensions [mm]								Weight [kg]	
$\varnothing 1$	$\varnothing 2$	$\varnothing 3$	$\varnothing 4$	$\varnothing 5$	H1	H2	S	F	
110	127	146	155	110	143	13	3	10	1.0

Power Kw	Power Hp	Shaft end	Pump code	Bell-Housing code	SG code motor side	Spider code	SG code pump side	Spigot hole
5-13.5	7-18	$\varnothing 25$ - Key 7 ISO 3019-2-E	FS100	LME155T140FS100	SGEA21E06076P10	EGE2RR	SGEA21FS100P10	ANCC002
			FS1C0	LME155T140FS1M0	SGEA21E06076P10	EGE2RR	SGEA21FS1C0P10	ANCC003
			FS1M0	LME155T140FS1M0	SGEA21E06076P10	EGE2RR	SGEA21FS1M0P10	ANCC003
			FS200	LME155T140FS200	SGEA21E06076P10	EGE2RR	SGEA21FS200P10	ANCC004
		$\varnothing 25.4$ - Key 6.35 SAE straight shaft	FS100	LME155T140FS100	SGEA21G040762FP10	EGE2RR	SGEA21FS100P10	ANCC002
			FS1C0	LME155T140FS1M0	SGEA21G040762FP10	EGE2RR	SGEA21FS1C0P10	ANCC003
			FS1M0	LME155T140FS1M0	SGEA21G040762FP10	EGE2RR	SGEA21FS1M0P10	ANCC003
			FS200	LME155T140FS200	SGEA21G040762FP10	EGE2RR	SGEA21FS200P10	ANCC004



## Pump SAE A 2 BOLT

Dimensions [mm]								Weight [kg]	
$\varnothing 1$	$\varnothing 2$	$\varnothing 3$	$\varnothing 4$	$\varnothing 5$	H1	H2	S	F	
110	127	146	155	110	143	13	3	10	1.0

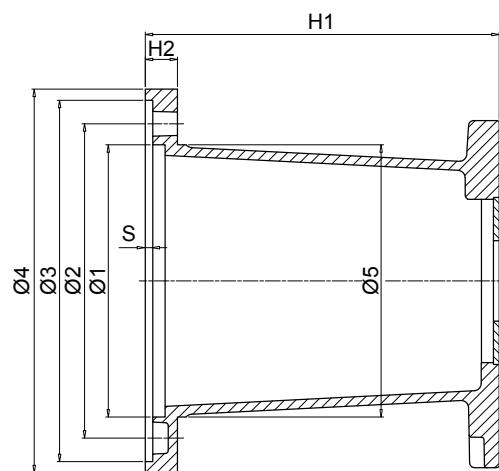
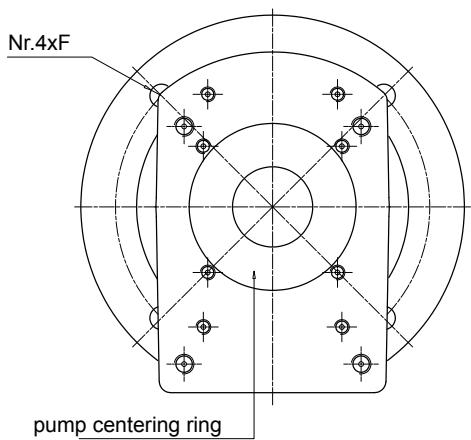
Power Kw	Power Hp	Shaft end	Pump code	Bell-Housing code	SG code motor side	Spider code	SG code pump side	Spigot hole
5-13.5	7-18	$\varnothing 25$ - Key 7 ISO 3019-2-E	SAE A 2 BOLT	LME155T140S060	SGEA21E06076P10	EGE2RR	SGEA21G01030P10	-
		$\varnothing 25.4$ - Key 6.35 SAE straight shaft	SAE A 2 BOLT	LME155T140S060	SGEA21G040762FP10	EGE2RR	SGEA21G01030P10	-

NOTE: Pump side centering rings are included in the bellhousing

## Dimensions

Combinations for Endothermic engine 7 - 18 Hp

## BELL-HOUSING MULTI-DRILLING FOR GROUP 1 AND 2



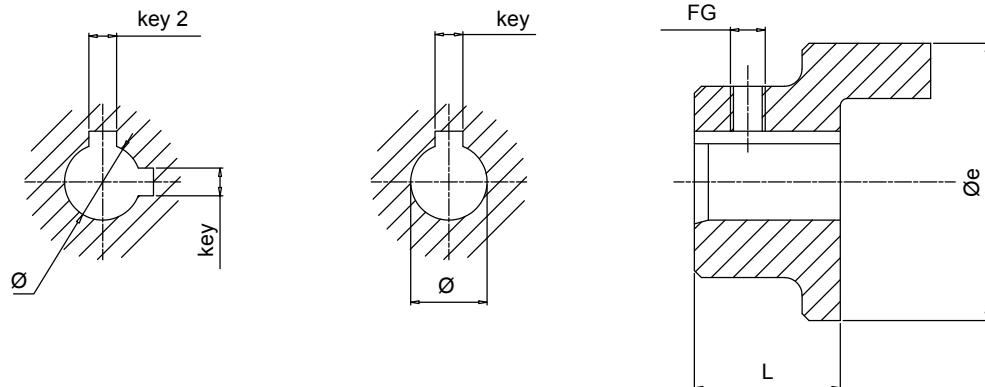
## Gear pumps

Dimensions [mm]									Weight [kg]
Ø1	Ø2	Ø3	Ø4	Ø5	H1	H2	S	F	
110	127	146	155	110	143	13	3	10	1.0

Power Kw	Power Hp	Shaft end	Pump code	Bell-Housing code	SG code motor side	Spider code	SG code pump side	Spigot hole
5-13.5	7-18	Ø 25 - Key 7 ISO 3019-2-E	FS100 +	LME155T140FS100M3	SGEA21E06076P10	EGE2RR	SGEA21FS100P10	ANCC002
			FS1C0 +	LME155T140FS100M3	SGEA21E06076P10	EGE2RR	SGEA21FS1C0P10	ANCC003
			FS1M0 +	LME155T140FS100M3	SGEA21E06076P10	EGE2RR	SGEA21FS1M0P10	ANCC003
			FS200	LME155T140FS100M3	SGEA21E06076P10	EGE2RR	SGEA21FS200P10	ANCC004
	7-18	Ø 25.4 - Key 6.35 SAE straight shaft	FS100 +	LME155T140FS100M3	SGEA21G040762FP10	EGE2RR	SGEA21FS100P10	ANCC002
			FS1C0 +	LME155T140FS100M3	SGEA21G040762FP10	EGE2RR	SGEA21FS1C0P10	ANCC003
			FS1M0 +	LME155T140FS100M3	SGEA21G040762FP10	EGE2RR	SGEA21FS1M0P10	ANCC003
			FS200	LME155T140FS100M3	SGEA21G040762FP10	EGE2RR	SGEA21FS200P10	ANCC004

NOTE: Pump side centering rings are not included in the bellhousing

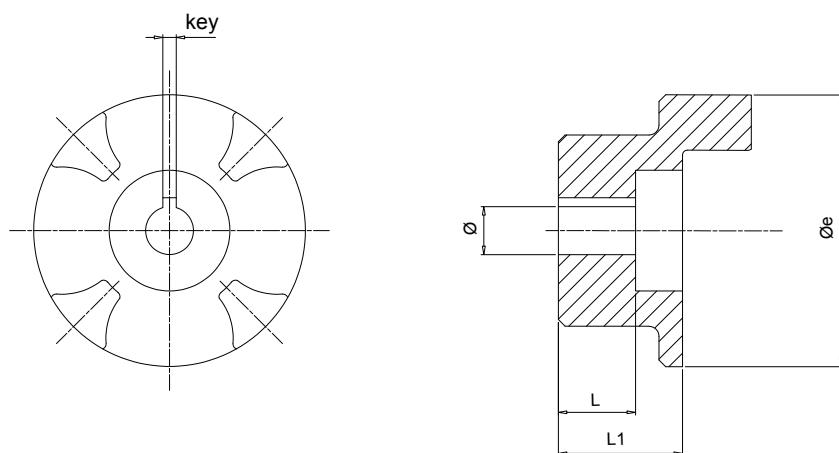
## Motor half-coupling



Half-coupling code	$\text{Ø}_e$	L	Dimensions [mm]	Key	Key 2	FG	Weight [kg]
<b>SGEA01C05056P10</b>	40	56	18.00	5.00	6.00	M5	0.13
<b>SGEA01G01056P10</b>	40	56	19.05	4.76	-	M5	0.13
<b>SGEA21E06076P10</b>	65	76	25.00	7.00	-	M6	0.35
<b>SGEA21G040762FP10</b>	65	76	25.40	4.76	6.35	M6	0.35

NOTE: Double key version pump side only

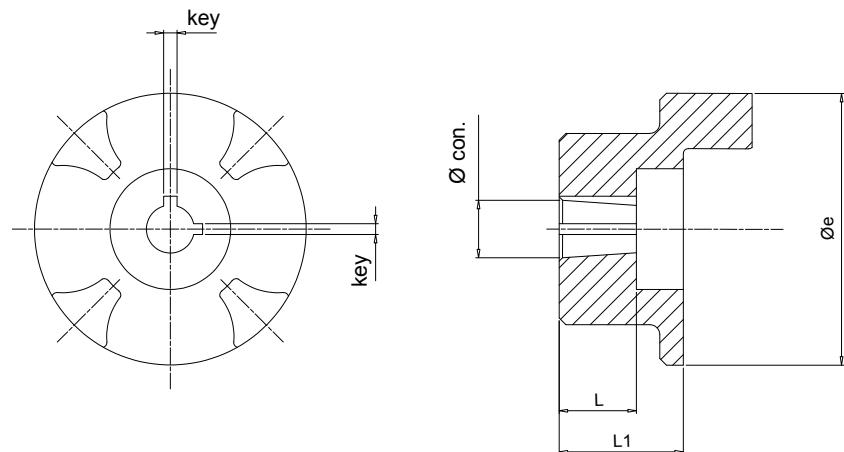
## Half-coupling for gear pumps



Half-coupling code	$\text{Ø}_e$	L	L1	$\text{Ø}$	Key	Weight [kg]
<b>SGEA01FS05CP10</b>	40	10.0	17.0	7	2	0.08
<b>SGEA01FS1COP10</b>	40	-	17.0	12	3	0.13
<b>SGEA21FS1COP10</b>	65	14.5	21.5	12	3	0.48

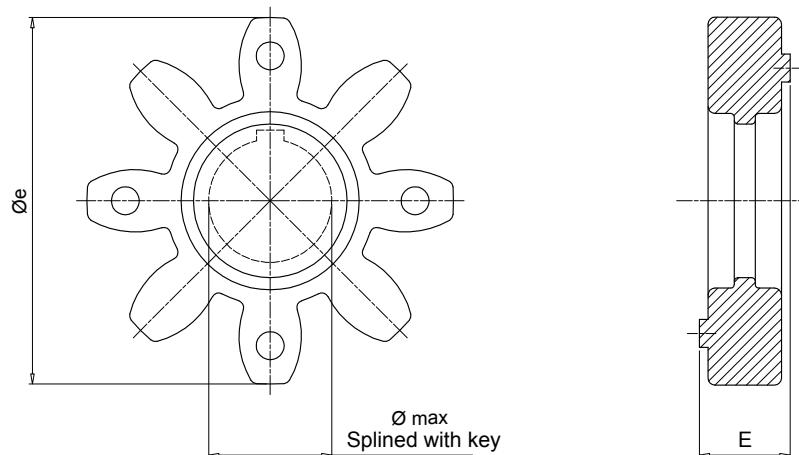
## Dimensions

### Half-coupling for gear pumps



Half-coupling code	Øe	L	Dimensions [mm]			Weight [kg]	Tapered
			L1	Ø	Key		
<b>SGEA01FS100P10</b>	40	14.5	16.0	9.7	2.4	0.12	1:8
<b>SGEA01FS1M0P10</b>	40	16.0	16.0	13.9	3.0	0.30	1:8
<b>SGEA21FS100P10</b>	65	14.5	21.5	9.7	2.4	0.33	1:8
<b>SGEA21FS1M0P10</b>	65	18.5	21.5	13.9	3.0	0.78	1:8
<b>SGEA21FS200P10</b>	65	21.5	21.5	17.2	3.2 - 4	1.60	1:8

### Spider EGE\*\*RR series



#### Notes:

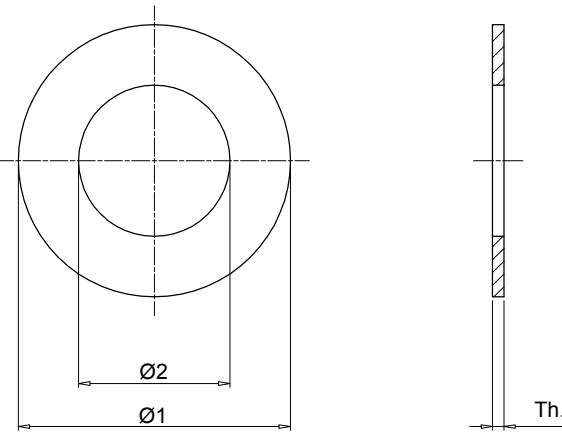
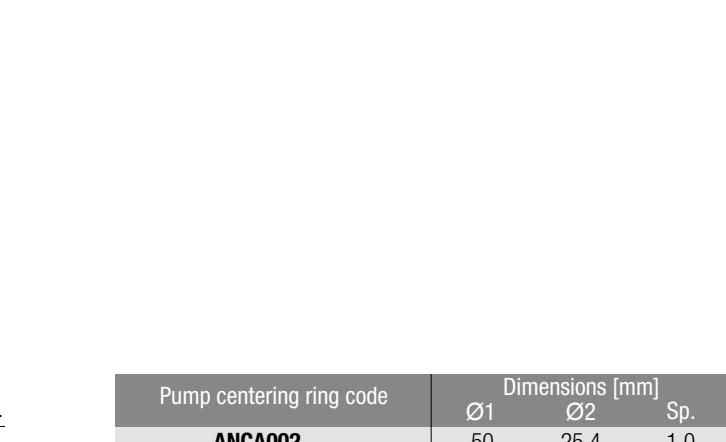
Made in polyurethane Laripur LPR202-95A, red colour, are suitable for applications where high levels of torque are transmitted.

Code	Half-coupling code	E	Dimensions [mm]		Nominal torque Nm	Max torque Nm	Weight [kg]
			Øe	Ø max			
<b>EGE0RR</b>	SGEA01	15	40	16	15	30	0.006
<b>EGE2RR</b>	SGEA21	18	65	25	115	230	0.02

Version for extreme temperatures available on request.

For further information, contact MP Filtri Technical and Sales Department.

## Pump centering ring

		<table border="1"> <thead> <tr> <th>Pump centering ring code</th><th colspan="3">Dimensions [mm]</th></tr> <tr> <th></th><th>Ø1</th><th>Ø2</th><th>Sp.</th></tr> </thead> <tbody> <tr> <td><b>ANCA002</b></td><td>50</td><td>25.4</td><td>1.0</td></tr> <tr> <td><b>ANCA003</b></td><td>50</td><td>30.0</td><td>1.0</td></tr> <tr> <td><b>ANCC002</b></td><td>67.5</td><td>25.4</td><td>2.0</td></tr> <tr> <td><b>ANCC003</b></td><td>67.5</td><td>30.0</td><td>2.0</td></tr> <tr> <td><b>ANCC004</b></td><td>67.5</td><td>36.5</td><td>2.0</td></tr> </tbody> </table>	Pump centering ring code	Dimensions [mm]				Ø1	Ø2	Sp.	<b>ANCA002</b>	50	25.4	1.0	<b>ANCA003</b>	50	30.0	1.0	<b>ANCC002</b>	67.5	25.4	2.0	<b>ANCC003</b>	67.5	30.0	2.0	<b>ANCC004</b>	67.5	36.5	2.0
Pump centering ring code	Dimensions [mm]																													
	Ø1	Ø2	Sp.																											
<b>ANCA002</b>	50	25.4	1.0																											
<b>ANCA003</b>	50	30.0	1.0																											
<b>ANCC002</b>	67.5	25.4	2.0																											
<b>ANCC003</b>	67.5	30.0	2.0																											
<b>ANCC004</b>	67.5	36.5	2.0																											

## Designation &amp; Ordering code

COMPLETE KIT (BELL-HOUSING & COUPLINGS)				
<b>Endothermic engine identification code</b>	Configuration example:			
<b>110</b>	3 - 5.5 Hp	<b>AKA155</b>	<b>G04</b>	<b>FS200</b>
<b>155</b>	5.5 - 13.5 Hp	<b>P10</b>		
<b>Shaft end codes</b>				
<b>C05</b>	Ø18-Ch.5			
<b>G01</b>	Ø19.05-Ch.4.76			
<b>E06</b>	Ø25-Ch.7			
<b>G04</b>	Ø25.4-Ch.4.76/6.35			
<b>Pump interface codes</b>				
<b>FS100</b>	Gr. 1			
<b>FS1M0</b>	Gr. 1M			
<b>FS200</b>	Gr. 2			
<b>SAE A</b>	2 BOLT			