

# SGEG - SGEA - SGES - SGEK - EGE series

Flexible half-coupling in aluminium, cast iron and steel





# 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.mpfiltri.com/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**





# BELL-HOUSINGS & COUPLINGS SIZING

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

### DATA REQUIRED

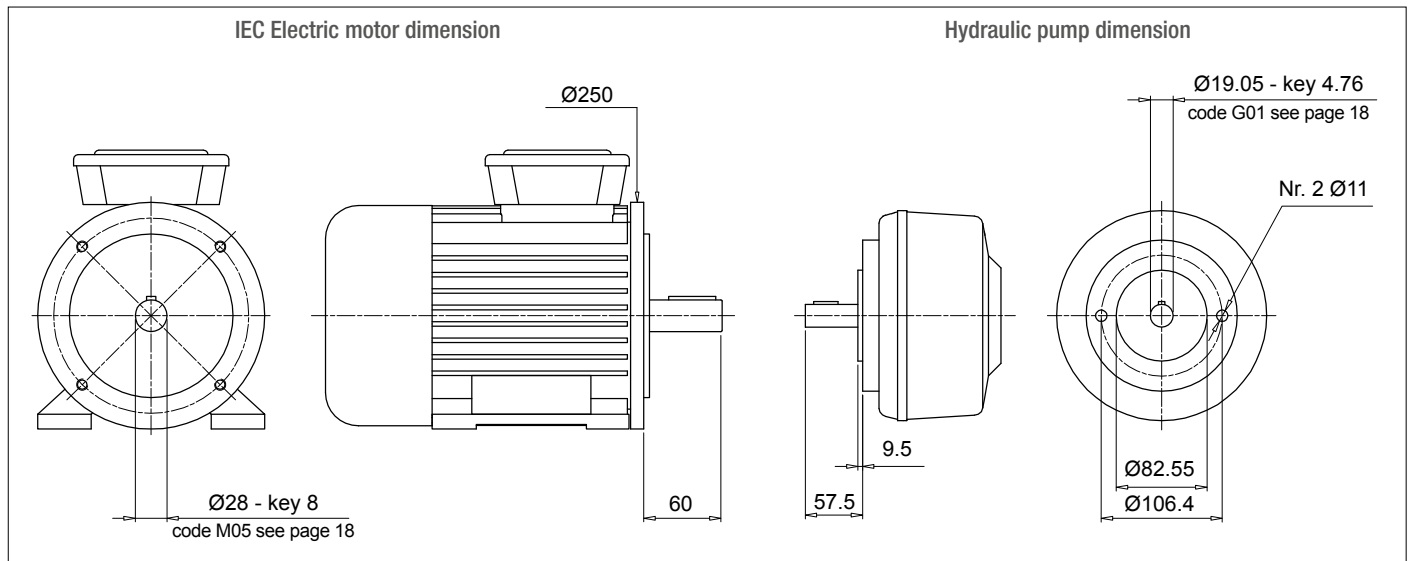
- Electric motor power/motor size
- Manufacturer and pump type

### 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

- $H = 60 + 18 + 57.5 = 135.5$  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**

### 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.

The half-couplings series SGE\*\*\* allow secure transmission between the electric motor and the driven side; they are able to absorb shocks and vibration, in addition to compensating radial misalignment, angular and axial.

The complete range of couplings are extrapolated from the on-line software, with a length equal than the shaft on which must be mounted and they are completed with grub screw for fixing located on the key.

The assembly of the couplings can be horizontal/vertical, withstanding vibration and load reversals.

Available for cylindrical shaft with metric and imperial dimensions as well for splined shafts as per specification DIN, ISO and SAE.

## Admissible misalignment radial, angular and axial

### Max admissible radial misalignment

Half-coupling	R [mm]
SGE * 01	0.5
SGE * 21	1.0
SGE * 31	1.0
SGE * 40	1.0
SGE * 51	1.5
SGE * 60	1.5
SGE * 80	2.0
SGE * 90	2.0

### Max admissible angular misalignment

Half-coupling	$\beta$ [°]
SGE * 01	1.5°
SGE * 21	
SGE * 31	
SGE * 40	
SGE * 51	
SGE * 60	
SGE * 80	
SGE * 90	

### Max admissible angular alignment

Half-coupling	A [mm]
SGE * 01	2.0
SGE * 21	2.5
SGE * 31	3.0
SGE * 40	3.5
SGE * 51	3.5
SGE * 60	3.5
SGE * 80	4.0
SGE * 90	5.0

Standard ATEX Directive 2014/34/EU and UK Regulation S.I. 2016 No. 1107 (as amended)



Half-couplings are available to use in hazardous area.

The couplings are certified according to Standard ATEX Directive 2014/34/EU and UK Regulation S.I. 2016 No. 1107 (as amended) - Category certified 2G - Area 1 and 2.

Other information available on our web site "www.mpfiltri.com".

MP Filtri couplings are developed with:



Drawings 3D available on website [www.mpfiltri.com](http://www.mpfiltri.com) at section TOOLS.

Examples verification of the coupling

Torque transmitted by electric motor:

**Mt:**  $9560 \times \text{kW} / \text{rpm} = \text{Nm}$

**Me >**  $Mt \times S = \text{Nm}$

Where:

**Mt:** Torque transmitted by electric motor

**Me:** Torque transmitted by coupling

**kW:** Power of electric motor

**Rpm:** Revolutions per minute of electric motor

**S:** Service factor

Table 1

<b>Small pumps, uniform load, low operating pressures</b> e.g. rotary action machine tools - 5/8 work cycles per hour	<b>1.3</b>
<b>Small pumps, uniform load, high working pressures</b> e.g. lifting equipment - 120-150 work cycles per hour	<b>1.5</b>
<b>Pumps, non-uniform load</b> e.g. lifting equipment - 280-300 work cycles per hour	<b>1.7</b>

**Example**

Electric motor, 4 pole - 4 kW  
hydraulic pump, uniform load, low operating pressure

**Mt:**  $9560 \times 4 / 1500 = 25.45 \text{ Nm}$

**Me >**  $25.49 \times 1.3 = 33 \text{ Nm}$

**Half-coupling SGEA21 meets the above requirement.**

Select the half-coupling of the calculated size from the motor half-couplings table.

**Note:** When selecting the coupling, remember that for pumps with splined shaft, only cast iron couplings of the SGEG series can be used.

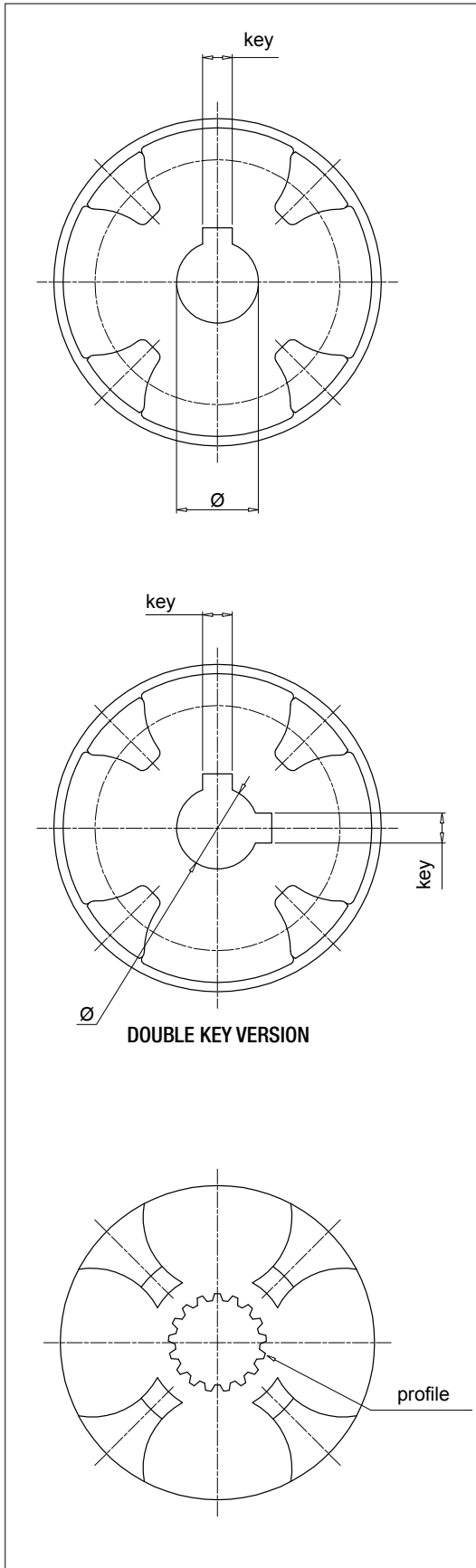
Determine the size of the coupling according to the type of installation and application envisaged, on the basis of the formulas and the following tables:

Table 2

Half-coupling type	External diameter [mm]	Nominal torque Me - Nm	Maximum transmissible torque Me - Nm		
<b>ROTAFIT</b>					
<b>SGEA01</b>	<b>SGEK01</b>	43	15	20	
<b>SGEA21</b>	<b>SGEK21</b>	68	160	190	
<b>SGEA31</b>	<b>SGEK31</b>	75	340	380	
<b>SGEA51</b>	<b>SGEK51</b>	109.5	550	620	<b>ALUMINIUM</b>
<b>SGEG01</b>		40	20	30	
<b>SGEG30</b>		80	400	450	
<b>SGEG40</b>	<b>SGEK40</b>	95	550	620	
<b>SGEG60</b>	<b>SGEK60</b>	120	760	850	
<b>SGEG80</b>	<b>SGEK80</b>	160	2200	2500	
<b>SGEG90</b>		200	5500	6100	<b>CAST IRON</b>
<b>SGES40</b>		95	550	620	
<b>SGES60</b>		120	760	850	
<b>SGES80</b>		180	2200	2500	<b>STEEL</b>

Nominal and maximum torque values are referred to couplings assembled with standard flexible spiders of the **EGE\*\*** series (see page 31).

Where higher torques are to be transmitted, use flexible spiders of the **EGE\*\*RR** series (see page 31).



Parallel shaft - Metric Dimensions

Ø [mm]	key [mm]	Code
12	4	<b>C00</b>
15	5	<b>C01</b>
16	4	<b>C02</b>
16	5	<b>C03</b>
17	5	<b>C04</b>
18	6	<b>C05</b>
20	5	<b>C06</b>
19	5	<b>C07</b>
30	10	<b>C08</b>
20	6	<b>C09</b>
16	5	<b>C10</b>
15	4	<b>C11</b>
22	6	<b>D00</b>
24	6	<b>D01</b>
25	8	<b>D02</b>
30	8	<b>D03</b>
32	10	<b>D04</b>
35	10	<b>D05</b>
40	12	<b>D06</b>
45	14	<b>D07</b>
50	14	<b>D08</b>
70	20	<b>D09</b>
22	8	<b>D10</b>
52	16	<b>D20</b>
8	3	<b>E00</b>
10	3	<b>E01</b>
22	5	<b>E02</b>
32	8	<b>E03</b>
35	8	<b>E04</b>
82	22	<b>E05</b>
25	7	<b>E06</b>
63	18	<b>E07</b>
9	3	<b>M00</b>
11	4	<b>M01</b>
14	5	<b>M02</b>
19	6	<b>M03</b>
24	8	<b>M04</b>
28	8	<b>M05</b>
38	10	<b>M06</b>
42	12	<b>M07</b>
48	14	<b>M08</b>
55	16	<b>M09</b>
60	18	<b>M10</b>
65	18	<b>M11</b>
75	20	<b>M12</b>
80	22	<b>M13</b>
90	25	<b>M14</b>
95	25	<b>M15</b>
100	28	<b>M16</b>
110	28	<b>M17</b>
85	22	<b>M18</b>

Parallel shaft - Imperial Dimensions

Ø		key		Code
[inch]	[mm]	[inch]	[mm]	
7/16"	11.11	1/8"	3.18	<b>G00</b>
3/4"	19.05	3/16"	4.76	<b>G01</b>
7/8"	22.22	3/16"	4.76	<b>G02</b>
7/8"	22.22	1/4"	6.35	<b>G03</b>
1"	25.4	3/16"	4.76	<b>G04</b>
1"	25.40	1/4"	6.35	<b>G05</b>
1 1/4"	31.75	1/4"	6.35	<b>G06</b>
1 1/4"	31.75	5/16"	7.94	<b>G07</b>
1 3/8"	34.94	5/16"	7.94	<b>G08</b>
1 1/2"	38.1	3/8"	9.52	<b>G09</b>
1 5/8"	41.27	3/8"	9.52	<b>H00</b>
1 3/4"	44.45	7/16"	11.11	<b>H01</b>
2"	50.8	1/2"	12.7	<b>H02</b>
2 11/32"	53.94	1/2"	12.7	<b>H03</b>
3/4"	19.02	1/8"	3.17	<b>H04</b>
1"	25.4	3/16"	4.76	<b>H05</b>
5/8"	15.87	3/16"	4.76	<b>H06</b>
17/32"	13.45	1/8"	3.18	<b>H07</b>
11/16"	17.46	3/16"	4.76	<b>H08</b>
1/2"	12.7	1/8"	3.18	<b>H09</b>
5/8"	15.87	5/32"	3.97	<b>L00</b>
7/8"	22.22	5/32"	4	<b>L01</b>
11/8"	28.58	1/4"	6.35	<b>L02</b>
3/4"	19.05	1/4"	6.35	<b>L03</b>
1 7/8"	47.63	1/2"	12.7	<b>L04</b>
3 3/8"	85.73	7/8"	22.23	<b>L05</b>
2 3/8"	60.33	5/8"	15.88	<b>L06</b>
2 3/8"	60.33	1/2"	12.7	<b>L07</b>
2 7/8"	73.03	3/4"	19.05	<b>L08</b>
3 5/8"	92.07	7/8"	22.22	<b>L09</b>
1 5/8"	41.6	15/32"	12	<b>L10</b>
1 1/8"	28.58	5/16"	7.94	<b>L15</b>

Parallel shaft - Double Key

Ø [mm]	key [mm]	Code
16.00	4.00	<b>C02***2H</b>
	5.00	
20.00	5.00	<b>C06***2M</b>
	6.00	
19.00	5.00	<b>C07***2L</b>
	6.00	
24.00	6.00	<b>D01***2N</b>
	8.00	
30.00	8.00	<b>D03***2P</b>
	10.00	
22.22	4.76	<b>G02***2E</b>
	6.35	
25.40	6.35	<b>G04***2F</b>
	4.76	
31.75	6.35	<b>G06***2G</b>
	7.94	

\*\*\* = coupling length



SAE Bore - ANS.B.92.1-1970

Profile	Nr. of Th	Code
17 th 8/16	17	<b>PD01</b>
14 th 12/24	14	<b>PD02</b>
16 th 12/24	16	<b>PD03</b>
17 th 12/24	17	<b>PD04</b>
9 th 16/32	9	<b>PD05</b>
11 th 16/32	11	<b>PD06</b>
12 th 16/32	12	<b>PD07</b>
13 th 16/32	13	<b>PD08</b>
15 th 16/32	15	<b>PD09</b>
21 th 16/32	21	<b>PD10</b>
23 th 16/32	23	<b>PD11</b>
27 th 16/32	27	<b>PD12</b>
40 th 16/32	40	<b>PD13</b>
20 th 24/48	20	<b>PD14</b>
21 th 24/48	21	<b>PD15</b>
23 th 24/48	23	<b>PD16</b>
25 th 24/48	25	<b>PD17</b>
26 th 24/48	26	<b>PD18</b>
27 th 12/48	27	<b>PD19</b>
28 th 24/48	28	<b>PD20</b>
29 th 24/48	29	<b>PD21</b>
32 th 24/48	32	<b>PD22</b>
21 th 32/64	21	<b>PD23</b>
30 th 32/64	30	<b>PD24</b>
33 th 32/64	33	<b>PD25</b>
23 th 40/80	23	<b>PD26</b>
36 th 48/96	36	<b>PD27</b>
41 th 48/96	41	<b>PD28</b>
47 th 48/96	47	<b>PD29</b>
13 th 8/16	13	<b>PD30</b>
15 th 8/16	15	<b>PD31</b>
14 th 16/32	14	<b>PD32</b>
40 th 16/32	40	<b>PD33</b>
33 th 16/32	33	<b>PD34</b>
9 th 20/40	9	<b>PD35</b>
10 th 16/32	10	<b>PD36</b>
25 th 20/40	25	<b>PD37</b>

Splined bore as per standard DIN5480

Profile	Nr. of Th	Code
W18 x 1.25 x 13	13	<b>PA01</b>
W20 x 1.25 x 14	14	<b>PA02</b>
W25 x 1.25 x 18	18	<b>PA03</b>
W28 x 1.25 x 21	21	<b>PA04</b>
W32 x 1.25 x 24	24	<b>PA05</b>
W38 x 1.25 x 29	29	<b>PA06</b>
W30 x 2 x 14	14	<b>PA07</b>
W32 x 2 x 14	14	<b>PA08</b>
W35 x 2 x 16	16	<b>PA09</b>
W37 x 2 x 17	17	<b>PA10</b>
W38 x 2 x 18	18	<b>PA11</b>
W40 x 2 x 18	18	<b>PA12</b>
W42 x 2 x 20	20	<b>PA13</b>
W45 x 2 x 21	21	<b>PA14</b>
W50 x 2 x 24	24	<b>PA15</b>
W55 x 2 x 26	26	<b>PA16</b>
W60 x 2 x 28	28	<b>PA17</b>
W70 x 2 x 34	34	<b>PA18</b>
W80 x 2 x 38	38	<b>PA19</b>
W60 x 3 x 18	18	<b>PA20</b>
W70 x 3 x 22	22	<b>PA21</b>
W75 x 3 x 24	24	<b>PA22</b>
W90 x 3 x 28	28	<b>PA23</b>
W105 x 3 x 34	34	<b>PA24</b>
W80 x 3 x 25	25	<b>PA25</b>
W50 x 1.25 x 38	38	<b>PA26</b>
W62 x 1.25 x 48	48	<b>PA27</b>
W40 x 1.5 x 25	25	<b>PA28</b>
W32 x 1.5 x 20	20	<b>PA29</b>
W40 x 1.25 x 30	30	<b>PA30</b>

Splined bore as per standard DIN5481

Profile	Nr. of Th	Code
8 x 10	28	<b>PC01</b>
10 x 12	30	<b>PC02</b>
12 x 14	31	<b>PC03</b>
15 x 17	32	<b>PC04</b>
17 x 20	33	<b>PC05</b>
21 x 24	34	<b>PC06</b>
26 x 30	35	<b>PC07</b>
30 x 34	36	<b>PC08</b>
60 x 65	41	<b>PC09</b>

Splined bore as per standard DIN5482

Profile	Nr. of Th	Code
A15 x 12	8	<b>PB01</b>
A17 x 14	9	<b>PB02</b>
A18 x 15	10	<b>PB03</b>
A20 x 17	12	<b>PB04</b>
A22 x 19	13	<b>PB05</b>
A25 x 22	14	<b>PB06</b>
A28 x 25	15	<b>PB07</b>
A30 x 27	16	<b>PB08</b>
A32 x 28	17	<b>PB09</b>
A35 x 31	18	<b>PB10</b>
A38 x 34	19	<b>PB11</b>
A40 x 36	20	<b>PB12</b>
A42 x 38	21	<b>PB13</b>
A45 x 41	22	<b>PB14</b>
A48 x 44	23	<b>PB15</b>
A50 x 45	24	<b>PB16</b>
A52 x 47	25	<b>PB17</b>
A55 x 50	26	<b>PB18</b>
A58 x 53	27	<b>PB19</b>
A60 x 55	28	<b>PB20</b>
A62 x 57	29	<b>PB21</b>
A65 x 60	30	<b>PB22</b>
A68 x 62	31	<b>PB23</b>
A70 x 64	32	<b>PB24</b>
A72 x 66	33	<b>PB25</b>
A75 x 69	34	<b>PB26</b>
A78 x 72	35	<b>PB27</b>
A80 x 74	36	<b>PB28</b>
A82 x 76	37	<b>PB29</b>
A85 x 79	38	<b>PB30</b>
A88 x 82	39	<b>PB31</b>
A90 x 84	40	<b>PB32</b>
A92 x 86	41	<b>PB33</b>
A95 x 89	42	<b>PB34</b>
A98 x 92	43	<b>PB35</b>
A100 x 94	44	<b>PB36</b>

## Technical data

### Couplings - Flexible half-coupling in aluminium, cast iron and steel

#### Half-couplings materials

SGEA: Pressure die cast aluminium

SGEG: Cast Iron en-GJL-250 (gg25)

SGES: Steel C40

SGEK: Pressure die cast aluminium

SGEK: Cast Iron en-GJL-250 (gg25)



#### Spider materials

EGE\*\* series: Oil-resistant NBR 85 Shore A - black colour

EGE\*\*RR series: in polyurethane Laripur - 92 Shore A - LPR202-95A - red colour

#### Compatibility with fluids

- 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

Spider oil-resistant rubber: from -20 °C to +90 °C

Spider polyurethane resin: from -30 °C to +120 °C

#### Note

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



## Range

IEC Electric Motors size	Aluminium		G25 UNI 5007 Cast Iron - C40 Carbon Steel			
	Shaft ISO 3019-2	Shaft ISO 3019-2	Shaft ANSI B92. 1A 1976	Shaft DIN 5480	Shaft DIN 5481	Shaft DIN 5482
IEC 80 Ø200 - Ø19x40	●	●	●	●	●	●
IEC 90 Ø200 - Ø24x50	●	●	●	●	●	●
IEC 100 Ø250 - Ø28x60	●	●	●	●	●	●
IEC 112 Ø250 - Ø28x60	●	●	●	●	●	●
IEC 132 Ø300 - Ø38x80	●	●	●	●	●	●
IEC 160 Ø350 - Ø42x110	●	●	●	●	●	●
IEC 180 Ø350 - Ø48x110	●	●	●	●	●	●
IEC 200 Ø400 - Ø55x110	●	●	●	●	●	●
IEC 225 Ø450 - Ø60x140		●	●	●	●	●
IEC 250 Ø550 - Ø65x140		●	●	●	●	●
IEC 280 Ø550 - Ø75x140		●	●	●	●	●
IEC 315 Ø660 - Ø80x170		●	●	●	●	●
IEC 355 Ø800 - Ø90x170		●	●	●	●	●

IEC Electric Motors size	European standard size						German standard size		
	0.5	1	2	3	3.5	4	ZB	ZF	ZG
IEC 63 Ø140 - Ø11x23	●	●	●				●		
IEC 71 Ø160 - Ø14x30	●	●	●				●		
IEC 80 Ø200 - Ø19x40	●	●	●	●			●	●	
IEC 90 Ø200 - Ø24x50	●	●	●	●			●	●	
IEC 110 Ø250 - Ø28x60		●	●	●	●		●	●	
IEC 112 Ø250 - Ø28x60		●	●	●	●		●	●	
IEC 132 Ø300 - Ø38x80		●	●	●	●	●		●	●
IEC 160 Ø350 - Ø42x110			●	●	●	●		●	●
IEC 180 Ø350 - Ø48x110			●	●	●	●		●	●
IEC 200 Ø400 - Ø55x110			●	●	●	●		●	●
IEC 225 Ø450 - Ø60x140				●	●	●			●


Couplings for standard IEC motors, protection class IP 54 / IP 55

A. C. motor 50 Hz			Motor output n=3000 RPM 2 poles		Coupling size	Motor output n=1500 RPM 4 poles		Coupling size	Motor output n=1000 RPM 6 poles		Coupling size	Motor output n=750 RPM 8 poles		Coupling size
Size	Shaft end Ø x L [mm]		Output P [kW]	Torque T [Nm]		Output P [kW]	Torque T [Nm]		Output P [kW]	Torque T [Nm]		Output P [kW]	Torque T [Nm]	
	2-pole	4, 6, 8 pole												
<b>56</b>	9 x 20		0.09	0.32		0.06	0.43		0.037	0.43				
			0.12	0.41		0.09	0.64		0.045	0.52				
<b>63</b>	11 x 23		0.18	0.62	01	0.12	0.88	01	0.06	0.7	01			01
			0.25	0.86		0.18	1.3		0.09	1.1				
<b>71</b>	14 x 30		0.37	1.3		0.25	1.8		0.18	2		0.09	1.4	
			0.55	1.9		0.37	2.5		0.25	2.8		0.12	1.8	
<b>80</b>	19 x 40		0.75	2.5		0.55	3.7		0.37	3.9		0.18	2.5	
			1.1	3.7		0.75	5.1		0.55	5.8		0.25	3.5	
<b>90S</b>	24 x 50		1.5	5	21	1.1	7.5	21	0.75	8	21	0.37	5.3	21
<b>90L</b>			2.2	7.4		1.5	10		1.1	12		0.55	7.9	
<b>100L</b>	28 x 60		3	9.8		2.2	15		1.5	15		0.75	11	
			3	20		1.5	15		1.1	16				
<b>112M</b>			4	13		4	27		2.2	22		1.5	21	
<b>132S</b>	38 x 80		5.5	18		5.5	36		3	30		2.2	30	
			7.5	25		7.5	49		4	40		3	40	
<b>132M</b>									5.5	55				
<b>160M</b>	42 x 110		11	36		11	72		7.5	75		4	54	
			15	49		15	98		11	109		5.5	74	
<b>160L</b>			18.5	60	40/51	15	98	40/51	11	109	40/51	7.5	100	40/51
<b>180M</b>	48 x 110		22	71		18.5	121							
<b>180L</b>			22	144		15	148		11	145				
<b>200L</b>	55 x 110		30	97		30	196		18.5	181		15	198	
			37	120		22	215		15	198				
<b>200S</b>	55 x 110	60 x 140			60	37	240	60			60	18.5	244	60
<b>225M</b>			45	145		45	292		30	293		22	290	
<b>250M</b>	60 x 140	65 x 140	55	177		55	356		37	361		30	392	
<b>280S</b>		75 x 140	75	241		75	484		45	438		37	483	
<b>280M</b>			90	289		90	581		55	535		45	587	
<b>315S</b>			110	353		110	707		75	727		55	712	
<b>315M</b>	65 x 140	80 x 170	132	423	80	132	849	80	90	873	80	75	971	80
			160	513		160	1030		110	1070		90	1170	
<b>315L</b>			200	641		200	1290		132	1280		110	1420	
			160	1550		132	1710							
<b>315</b>	85 x 170		250	802		250	1600		200	1930		160	2070	
			315	1010		315	2020		250	2410		200	2580	
<b>355</b>	75 x 140	95 x 170	355	1140		355	2280							
			400	1280		400	2570		315	3040		250	3220	
<b>400</b>	80 x 170	110 x 210	500	1600	90	500	3210	90	400	3850	90	315	4060	90
			560	1790		560	3580		450	4330		355	4570	
			630	2020		630	4030		500	4810		400	5150	
			710	2270		710	4540		560	5390		450	5790	
			800	2560		800	5120		630	6060		500	6420	


# SGEG-SGEA-SGES-SGEK

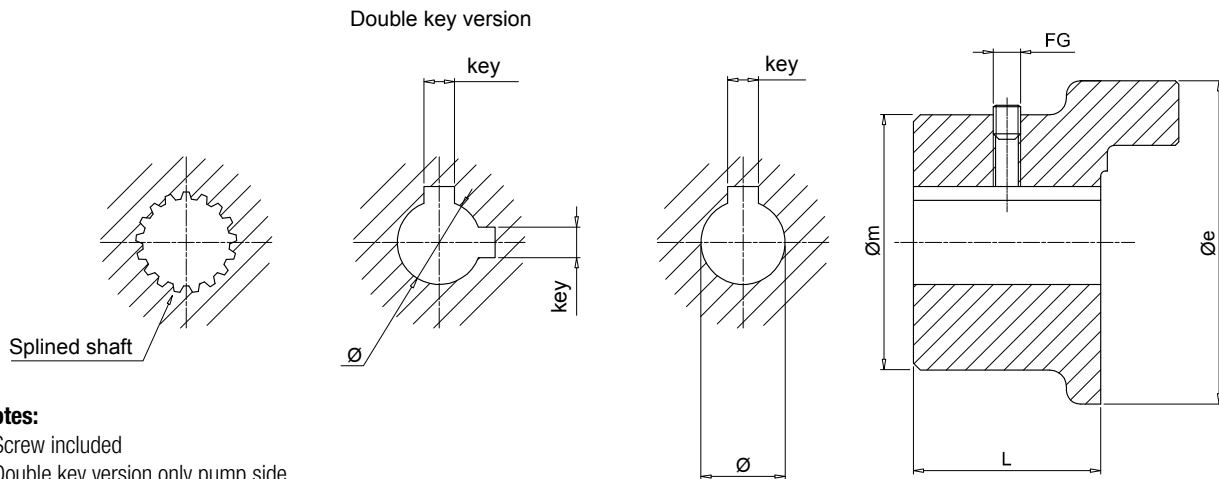
Designation & Ordering code

## PUMP HALF-COUPLING FOR PARALLEL SHAFT

<b>Pump half-coupling</b>	Configuration example: <b>SGE</b> <b>A</b> <b>21</b> <b>G02</b> <b>050</b> <b>2E</b>					
<b>SGE</b>						
<b>Series and material</b>						
<b>A</b>	Aluminium					
<b>G</b>	Cast Iron					
<b>S</b>	Steel					
<b>K</b>	Aluminium / Cast Iron - Reduced length 					
<b>Size</b>	<b>SGEG</b>	<b>SGEA</b>	<b>SGES</b>	<b>SGEK</b>		
	01	01	01	01		
	30	21	30	21		
	40	31	40	31		
	60	51	60	51		
	80		80	40		
	90		90	60		
				80		
<b>Pump shaft code</b>						
<b>G02</b>	See page 18					
<b>Length</b>						
<b>050</b>	See pages 26 ÷ 30					
<b>Double key way (available combinations only)</b>						
<b>2E</b>	See page 18 (parallel shaft - double key)					

## PUMP HALF-COUPLING FOR SPLINED SHAFT

<b>Pump half-coupling</b>	Configuration example: <b>SGE</b> <b>G</b> <b>40</b> <b>PD02</b> <b>050</b>				
<b>SGE</b>					
<b>Series and material</b>					
<b>G</b>	Cast Iron				
<b>S</b>	Steel				
<b>K</b>	Cast Iron - Reduced length 				
<b>Size</b>	<b>SGEG</b>	<b>SGES</b>	<b>SGEK</b>		
	01	01	01		
	30	30	21		
	40	40	31		
	60	60	51		
	80	80	40		
	90	90	60		
			80		
<b>Pump shaft code</b>					
<b>PD02</b>	See pages 19				
<b>Length</b>					
<b>050</b>	See pages 28 ÷ 30				



**Notes:**

- Screw included
- Double key version only pump side

### Motor half-coupling

IEC - Electric motors		Half-coupling code	Dimensions [mm]							Weight [kg]
Motor size	Shaft end [Ø x L]		Øe	Øm	L	Ø	key	FG		
63	11x23	<b>SGEG01M01021</b>	40	50	21	11	4	M6	0.32	
71	14x30	<b>SGEG01M02028</b>	40	50	28	14	5	M6	0.42	
80	19x40	<b>SGEG01M03040</b>	40	50	40	19	6	M6	0.61	
90	24x50	<b>SGEG01M04050</b>	40	50	50	24	8	M6	0.77	
100 - 112	28x60	<b>SGEG30M05060</b>	80	65	60	28	8	M8	2.35	
		<b>SGEG40M05060</b>	95	75	60	28	8	M8	2.65	
132	38x80	<b>SGEG30M06080</b>	80	65	80	38	10	M8	3.15	
		<b>SGEG40M06080</b>	95	75	80	38	10	M8	3.55	
160	42x110	<b>SGEG40M07110</b>	95	75	110	42	12	M8	4.70	
180	48x110	<b>SGEG40M08110</b>	95	95	110	48	14	M8	4.55	
200	55x110	<b>SGEG40M09110</b>	95	95	110	55	16	M8	4.35	
		<b>SGEG60M09110</b>	120	98	110	55	16	M8	9.00	
225	60x140	<b>SGEG60M10140</b>	120	118	140	60	18	M8	12.30	
		<b>SGEG60M11140</b>	120	118	140	65	18	M8	12.00	
250	65x140	<b>SGEG80M11140</b>	160	138	140	65	18	M8	18.30	
		<b>SGEG80M12140</b>	160	138	140	75	20	M10	17.70	
280	75x140	<b>SGEG90M12100</b>	200	160	100	75	20	M10	21.00	
		<b>SGEG80M13170</b>	160	138	170	80	22	M10	20.60	
315	80x170	<b>SGEG90M13100</b>	200	160	100	80	22	M10	20.00	
		<b>SGEG90M15100</b>	200	160	100	95	25	M10	19.00	
400	100x210	<b>SGEG90M16100</b>	200	160	100	100	28	M10	18.00	

### Pump half-couplings

Half-coupling code	Dimensions [mm]					Standard lengths [mm]
	Ø min	Ø max	Øe	L min	L max	
<b>SGEG01 *** **</b>	-	24	40	20	50	every 5 mm
<b>SGEG30 *** **</b>	-	42	80	30	80	
<b>SGEG40 *** **</b>	-	55	95	30	110	
<b>SGEG60 *** **</b>	-	75	120	40	140	
<b>SGEG80 *** **</b>	-	85	160	50	170	
<b>SGEG90 *** **</b>	-	100	200	40	100	

Complete the half-coupling code with the shaft's code and length

Example: **SGEG40PD02040**

**PD02** - see page 19

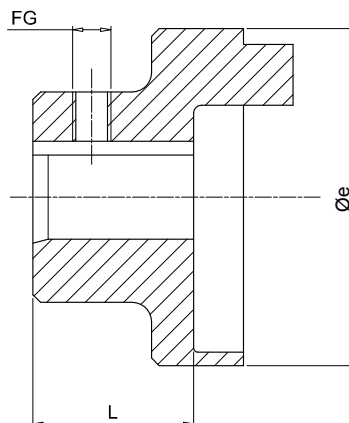
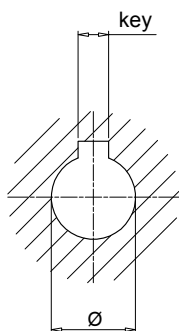
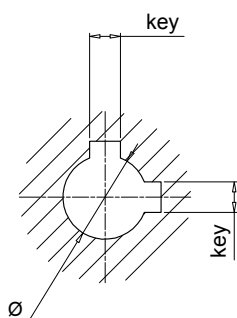
**040** - table "pump half-coupling - standard lengths"

All SGEG series half-couplings are supplied with a grub screw hole as standard, and with a grub screw **UNI 5929 DIN 916** fitted to the hub.

**Note:** For lengths other than those indicated in "Pump half-coupling" table, contact MP Filtri Technical and Sales Department.

## Dimensions

Double key version



**Notes:**

- Screw not included
- Double key version pump side only

### Motor half-coupling

IEC - Electric motors Motor size	Shaft end [Ø x L]	Half-coupling code	Øe	Dimensions [mm]				Weight [kg]
				L	Ø	key	FG	
63	11x23	<b>SGEA01M01019</b>	44.0	21	11	4	M5	0.07
71	14x30	<b>SGEA01M02028</b>	44.0	28	14	5	M5	0.08
80	19x40	<b>SGEA01M03040</b>	44.0	40	19	6	M5	0.12
		<b>SGEA21M03040</b>	70.0	40	19	6	M6	0.30
90	24x50	<b>SGEA01M04048</b>	44.0	48	24	8	M5	0.13
		<b>SGEA21M04048</b>	70.0	48	24	8	M6	0.28
100 - 112	28x60	<b>SGEA21M05060</b>	70.0	60	28	8	M6	0.33
		<b>SGEA31M05060</b>	85.0	60	28	8	M8	0.48
		<b>SGEA21M06080</b>	70.0	80	38	10	M6	0.44
132	38x80	<b>SGEA31M06077</b>	85.0	77	38	10	M8	0.78
		<b>SGEA51M06077</b>	109.5	77	38	10	M8	1.60
		<b>SGEA51M07109</b>	109.5	109	42	12	M8	1.60
160	42x110	<b>SGEA51M07109</b>	109.5	109	42	12	M8	1.60
180	48x110	<b>SGEA51M08109</b>	109.5	109	48	14	M8	1.60
200	55x110	<b>SGEA51M09109</b>	109.5	109	55	16	M8	1.90

### Pump half-couplings

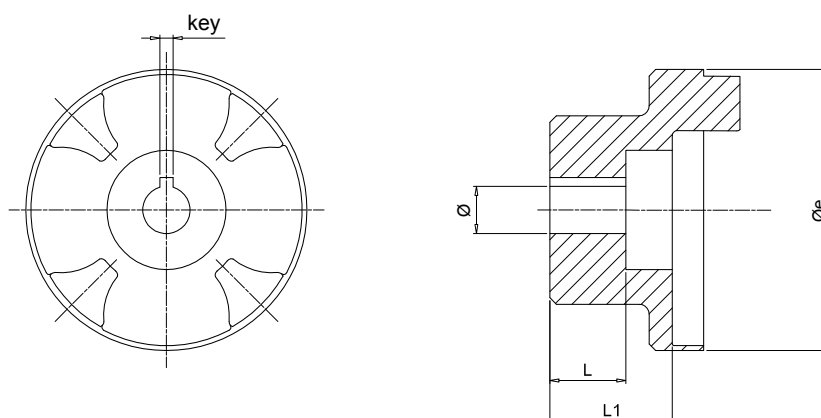
Half-coupling code	Dimensions [mm]					Standard lengths [mm]								FG		
	Ø min	Ø max	Øe	L min	L max	17	23	30	40	44	48	-	-		-	-
<b>SGEA01 *** **</b>	11	19	44.0	17	50	17	23	30	40	44	48	-	-	-	-	M5
<b>SGEA21 *** **</b>	15	24	70.0	23	50	35	40	42	44	48	50	-	-	-	-	M6
<b>SGEA21 *** **</b>	25	28	70.0	40	60	40	42	44	48	50	55	58	60	-	-	M6
<b>SGEA31 *** **</b>	18	32	85.0	40	60	42	45	48	50	52	55	58	60	-	-	M8
<b>SGEA31 *** **</b>	38	42	85.0	60	80	60	65	70	77	80	-	-	-	-	-	M8
<b>SGEA51 *** **</b>	18	40	109.5	40	70	42	45	48	50	52	55	58	60	65	70	M8
<b>SGEA51 *** **</b>	38	55	109.5	70	109	70	75	80	85	90	95	100	105	109	-	M8

Complete the half-coupling code with the shaft's code and length

Example: **SGEA51D02040**

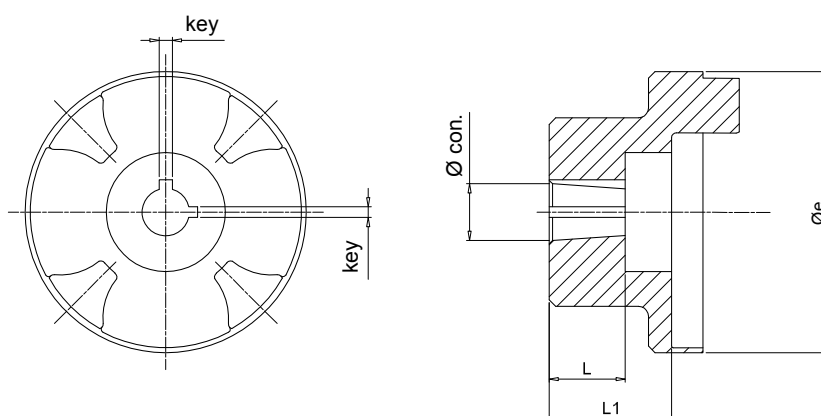
**D02** - see page 18

**040** - table "pump half-coupling - standard lengths"



### Half-coupling for gear pumps - parallel

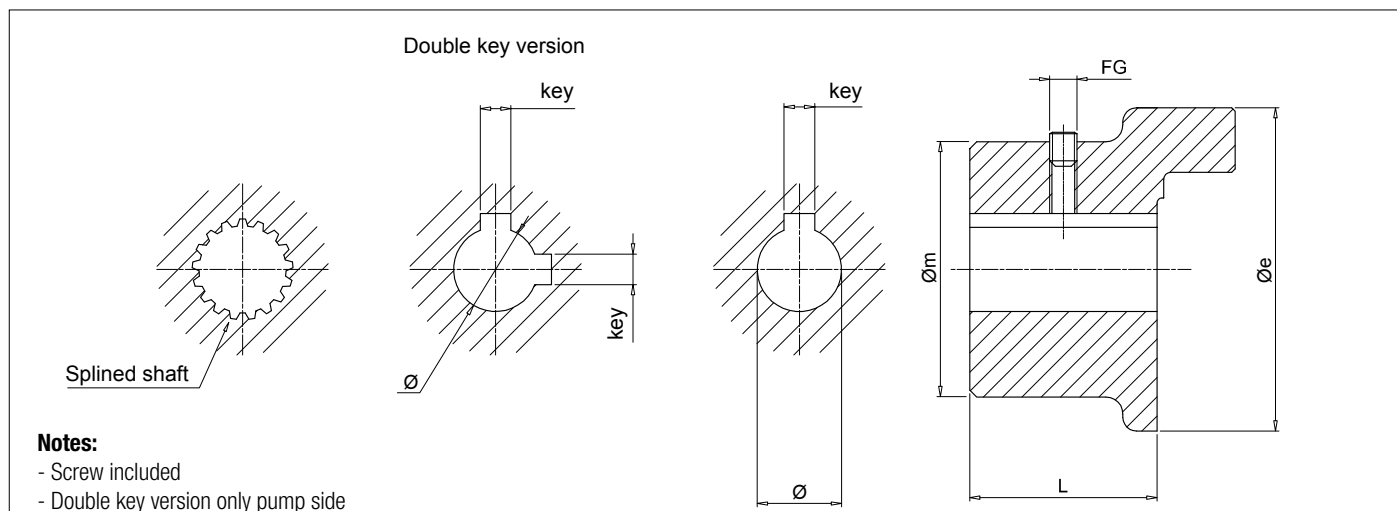
Half-coupling code	Dimensions [mm]					Weight [kg]
	Øe	L	L1	Ø	key	
<b>SGEA01FS05M</b>	44	10.0	17.0	6	2	0.07
<b>SGEA01FS05C</b>	44	10.0	17.0	7	2	0.08
<b>SGEA01FS1C0</b>	44	-	17.0	12	3	0.13
<b>SGEA21FS1C0</b>	70	14.5	21.5	12	3	0.48
<b>SGEA31FS1C0</b>	85	14.5	37.0	12	3	1.90



### Half-coupling for gear pumps - tapered

Half-coupling code	Dimensions [mm]					Weight [kg]	Conical
	Øe	L	L1	Ø	key		
<b>SGEA01FS100</b>	44.0	14.5	16.0	9.7	2.4	0.12	1:8
<b>SGEA01FS1M0</b>	44.0	16.0	16.0	13.9	3	0.30	1:8
<b>SGEA01FSZBR</b>	44.0	11.5	14.5	9.8	2	0.28	1:5
<b>SGEA21FS100</b>	70.0	14.5	21.5	9.7	2.4	0.33	1:8
<b>SGEA21FS1M0</b>	70.0	18.5	21.5	13.9	3	0.78	1:8
<b>SGEA21FS200</b>	70.0	21.5	21.5	17.2	3.2 - 4	1.60	1:8
<b>SGEA21FSZFR</b>	70.0	20.0	21.5	16.9	3	1.60	1:5
<b>SGEA21FS300</b>	70.0	27.0	41.0	21.6	4	1.60	1:8
<b>SGEA31FS100</b>	85.0	14.5	37.0	9.7	2.4	1.90	1:8
<b>SGEA31FS1M0</b>	85.0	17.5	36.0	13.9	3	0.33	1:8
<b>SGEA31FS200</b>	85.0	23.0	37.0	17.2	3.2 - 4	0.48	1:8
<b>SGEA31FS300</b>	85.0	27.0	37.0	21.6	4	0.78	1:8
<b>SGEA31FS350</b>	85.0	35.0	37.0	25.6	4.76 - 5	1.60	1:8
<b>SGEA31FSZFR</b>	85.0	17.0	37.0	16.9	3	1.60	1:5
<b>SGEA31FSZGR</b>	85.0	27.0	34.0	25.2	5	1.60	1:5
<b>SGEA51FS200</b>	109.5	23.5	32.0	17.2	3.2 - 4	1.90	1:8
<b>SGEA51FS300</b>	109.5	25.0	32.0	21.6	4	1.90	1:8
<b>SGEA51FS350</b>	109.5	32.0	32.0	25.6	4.76 - 5	1.60	1:8
<b>SGEA51FSZFR</b>	109.5	19.5	32.0	16.9	3	1.90	1:5
<b>SGEA51FSZGR</b>	109.5	25.0	32.0	24.6	5	1.90	1:5

## Dimensions



### Notes:

- Screw included
- Double key version only pump side

## Motor half-coupling

IEC - Electric motors		Half-coupling code	Dimensions [mm]							Weight [kg]
Motor size	Shaft end [Ø x L]		Øe	Øm	L	Ø	key	FG		
63	11x23	<b>SGES01M01021</b>	40	50	21	11	4	M6	0.32	
71	14x30	<b>SGES01M02028</b>	40	50	28	14	5	M6	0.42	
80	19x40	<b>SGES01M03040</b>	40	50	40	19	6	M6	0.61	
90	24x50	<b>SGES01M04050</b>	40	50	50	24	8	M6	0.77	
100 - 112	28x60	<b>SGES31M05060</b>	80	-	60	28	8	M8	2.35	
		<b>SGES40M05060</b>	95	-	60	28	8	M8	2.65	
132	38x80	<b>SGES31M06080</b>	80	-	80	38	10	M8	3.15	
		<b>SGES40M06080</b>	95	-	80	38	10	M8	3.55	
160	42x110	<b>SGES40M07110</b>	95	-	110	42	12	M8	4.70	
180	48x110	<b>SGES40M08110</b>	95	-	110	48	14	M8	4.55	
200	55x110	<b>SGES40M09110</b>	95	-	110	55	16	M8	4.35	
		<b>SGES60M09110</b>	120	-	110	55	16	M8	9.00	
225	60x140	<b>SGES60M10140</b>	120	-	140	60	18	M8	12.30	
250	65x140	<b>SGES60M11140</b>	120	-	140	65	18	M8	12.00	
		<b>SGES80M11140</b>	160	-	140	65	18	M8	18.30	
280	75x140	<b>SGES80M12140</b>	160	-	140	75	20	M10	17.70	
		<b>SGES90M12100</b>	200	-	100	75	20	M10	21.00	
315	80x170	<b>SGES80M13170</b>	160	-	170	80	22	M10	20.60	
		<b>SGES90M13100</b>	200	-	100	80	22	M10	20.00	
355	95x140	<b>SGES90M15100</b>	200	-	100	95	25	M10	19.00	
400	100x210	<b>SGES90M16100</b>	200	-	100	100	28	M10	18.00	

## Pump half-couplings

Half-coupling code	Dimensions [mm]					Standard lengths [mm]
	Ø min	Ø max	Øe	L min	L max	
<b>SGES01 *** **</b>	-	24	40	20	50	every 5 mm
<b>SGES30 *** **</b>	-	42	80	30	80	
<b>SGES40 *** **</b>	-	55	95	30	110	
<b>SGES60 *** **</b>	-	75	120	40	140	
<b>SGES80 *** **</b>	-	85	160	50	170	
<b>SGES90 *** **</b>	-	100	200	40	100	

Complete the half-coupling code with the shaft's code and length

Example: **SGES40PD02040**

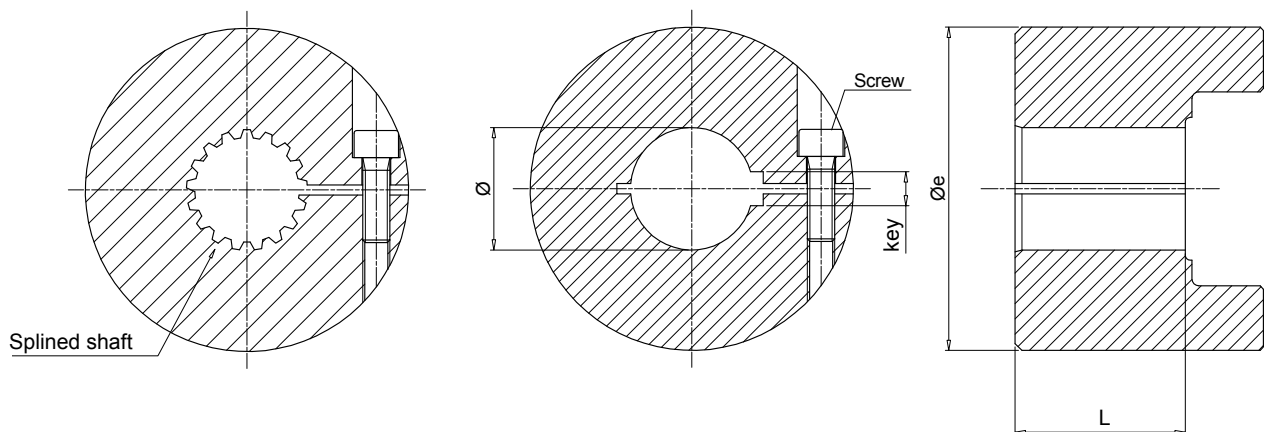
**PD02** - see page 19

**040** - table "pump half-coupling - standard lengths"

All SGES series half-couplings are supplied with a grub screw hole as standard, and with a grub screw **UNI 5929 DIN 916** fitted to the hub.

**Note:** For lengths other than those indicated in "Pump half-coupling" table, contact MP Filtri Technical and Sales Department.





### Motor half-coupling

IEC - Electric motors		Half-coupling code	Dimensions [mm]					Weight [kg]
Motor size	Shaft end [Ø x L]		Øe	L	Ø	key	Screw	
132	38x80	<b>SGES40M06050GO</b>	95	50	38	10	M8	4.00
160	42x110	<b>SGES40M07065GO</b>	95	65	42	12	M8	5.00
180	48x110	<b>SGES40M08065GO</b>	95	65	48	14	M8	5.00
200	55x110	<b>SGES60M09085GO</b>	120	85	55	16	M10	8.00
225	60x140	<b>SGES60M10085GO</b>	120	85	60	18	M10	8.00
250	65x140	<b>SGES60M11085GO</b>	120	85	65	18	M10	8.00
280	75x140	<b>SGES60M12085GO</b>	120	85	75	20	M10	8.00
315	80x170	<b>SGES80M13085GO</b>	160	85	80	22	M10	13.00

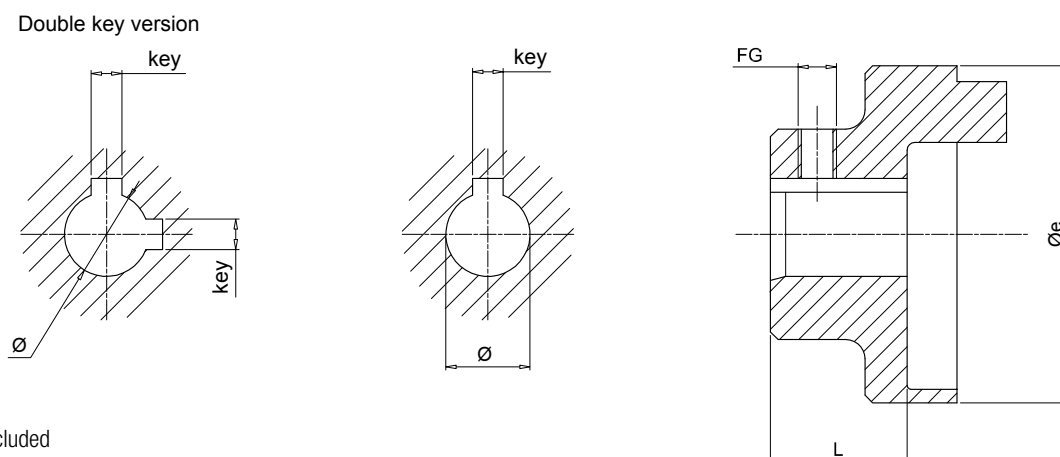
### Pump half-couplings

Half-coupling code	Dimensions [mm]			
	Ø min	Ø max	Øe	L
<b>SGES40 *** **</b>	-	55	95	35
<b>SGES60 *** **</b>	-	65	120	65
<b>SGES80 *** **</b>	-	75	160	85

Complete the half-coupling designation with the pump interface code and the length.

Example: **SGES40PD02035GO** (see page 19).

## Dimensions



### Notes:

- Screw not included
- Double key version pump side only

## Motor half-coupling

IEC - Electric motors		Half-coupling code	Dimensions [mm]					Weight [kg]
Motor size	Shaft end [Ø x L]		Øe	L	Ø	key	FG	
63	11x23	<b>SGEA01M01019</b>	44.0	21	11	4	M5	0.07
71	14x30	<b>SGEA01M02028</b>	44.0	28	14	5	M5	0.08
80	19x40	<b>SGEA01M03040</b>	44.0	40	19	6	M5	0.12
		<b>SGEA21M03040</b>	70.0	40	19	6	M6	0.30
90	24x50	<b>SGEA01M04048</b>	44.0	48	24	8	M5	0.13
		<b>SGEA21M04048</b>	70.0	48	24	8	M6	0.28
100 - 112	28x60	<b>SGEA21M05060</b>	70.0	60	28	8	M6	0.33
		<b>SGEA31M05060</b>	85.0	60	28	8	M8	0.48
132	38x80	<b>SGEA21M06080</b>	70.0	80	38	10	M6	0.44
		<b>SGEA31M06077</b>	85.0	77	38	10	M8	0.78
		<b>SGEA51M06077</b>	109.5	77	38	10	M8	1.60
160	42x110	<b>SGEA51M07109</b>	109.5	109	42	12	M8	1.60
180	48x110	<b>SGEA51M08109</b>	109.5	109	48	14	M8	1.60
200	55x110	<b>SGEA51M09109</b>	109.5	109	55	16	M8	1.90

## Pump half-couplings

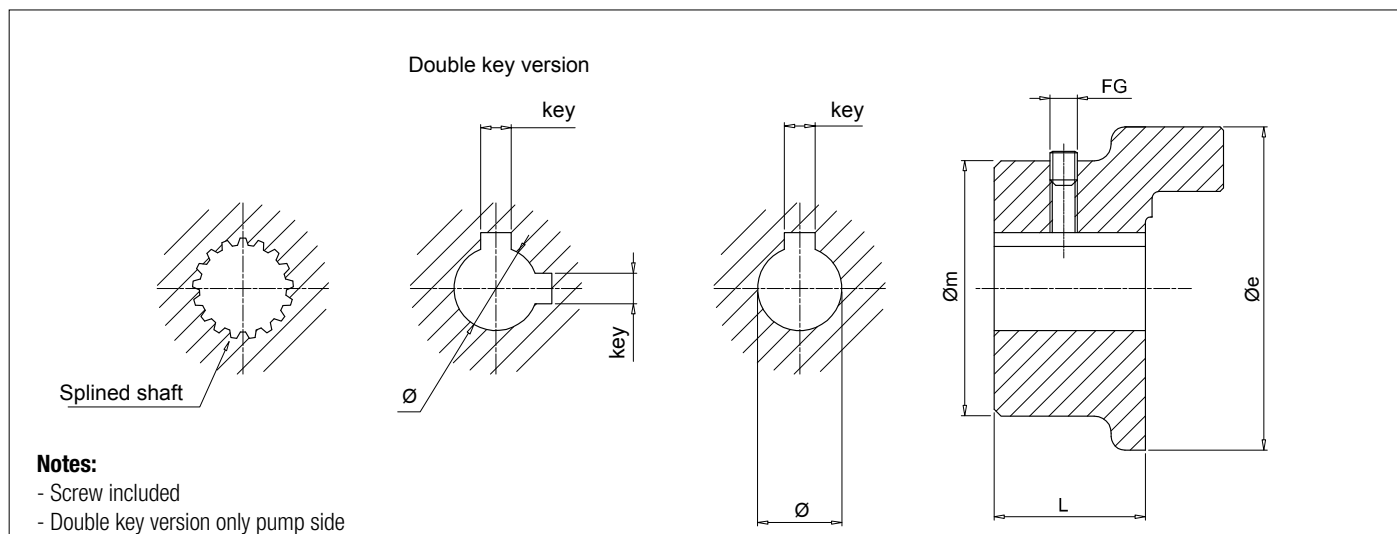
Half-coupling code	Dimensions [mm]				FG	Weight [kg]
	Ø min	Ø max	Øe	L		
<b>SGEK01 *** **</b>	11	19	44.0	25	M5	0.08
<b>SGEK21 *** **</b>	15	28	70.0	35	M6	0.10
<b>SGEK31 *** **</b>	18	42	85.0	45	M8	0.15
<b>SGEK51 *** **</b>	18	55	109.5	50	M8	0.35

Complete the half-coupling code with the shaft's code and length

Example: **SGEK51D02050**

**D02** - see page 18

**050** - table "pump half coupling - dimension L"


**Notes:**

- Screw included
- Double key version only pump side

**Motor half-coupling**

IEC - Electric motors		Half-coupling code	Dimensions [mm]							Weight [kg]
Motor size	Shaft end [Ø x L]		Øe	Øm	L	Ø	key	FG		
63	11x23	<b>SGEG01M01021</b>	40	50	21	11	4	M6	0.32	
71	14x30	<b>SGEG01M02028</b>	40	50	28	14	5	M6	0.42	
80	19x40	<b>SGEG01M03040</b>	40	50	40	19	6	M6	0.61	
90	24x50	<b>SGEG01M04050</b>	40	50	50	24	8	M6	0.77	
100 - 112	28x60	<b>SGEG30M05060</b>	80	65	60	28	8	M8	2.35	
		<b>SGEG40M05060</b>	95	75	60	28	8	M8	2.65	
132	38x80	<b>SGEG30M06080</b>	80	65	80	38	10	M8	3.15	
		<b>SGEG40M06080</b>	95	75	80	38	10	M8	3.55	
160	42x110	<b>SGEG40M07110</b>	95	75	110	42	12	M8	4.70	
180	48x110	<b>SGEG40M08110</b>	95	95	110	48	14	M8	4.55	
200	55x110	<b>SGEG40M09110</b>	95	95	110	55	16	M8	4.35	
		<b>SGEG60M09110</b>	120	98	110	55	16	M8	9.00	
225	60x140	<b>SGEG60M10140</b>	120	118	140	60	18	M8	12.30	
250	65x140	<b>SGEG60M11140</b>	120	118	140	65	18	M8	12.00	
		<b>SGEG80M11140</b>	160	138	140	65	18	M8	18.30	
280	75x140	<b>SGEG80M12140</b>	160	138	140	75	20	M10	17.70	
		<b>SGEG90M12100</b>	200	160	100	75	20	M10	21.00	
315	80x170	<b>SGEG80M13170</b>	160	138	170	80	22	M10	20.60	
		<b>SGEG90M13100</b>	200	160	100	80	22	M10	20.00	
355	95x140	<b>SGEG90M15100</b>	200	160	100	95	25	M10	19.00	
400	100x210	<b>SGEG90M16100</b>	200	160	100	100	28	M10	18.00	

**Pump half-couplings**

Half-coupling code	Dimensions [mm]				FG	Weight [kg]
	Ø min	Ø max	Øe	L		
<b>SGEK40 *** **</b>	-	55	95	50	M8	3
<b>SGEK60 *** **</b>	-	75	12	65	M8	6
<b>SGEK80 *** **</b>	-	85	160	85	M10	8

Complete the half-coupling code with the shaft's code and length

Example: **SGEK40PD02050**

**PD02** - see page 19

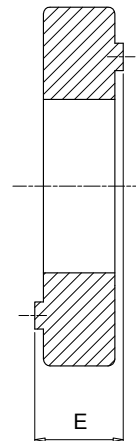
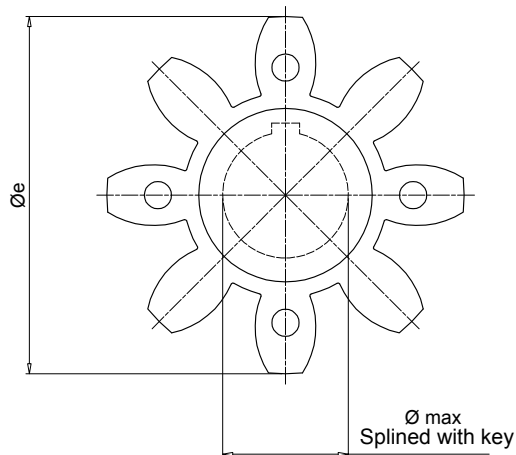
**050** - table "pump half coupling - dimension L"

All SGEK/SGEK series half-couplings are supplied with a grub screw hole as standard, and with a grub screw **UNI 5929 DIN 916** fitted to the hub.

**Note:** For lengths other than those indicated in "Pump half-coupling" table, contact MP Filtri Technical and Sales Department.

# EGE Spiders

## Dimensions

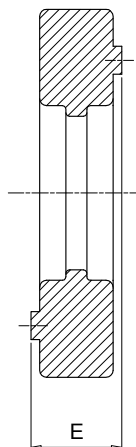
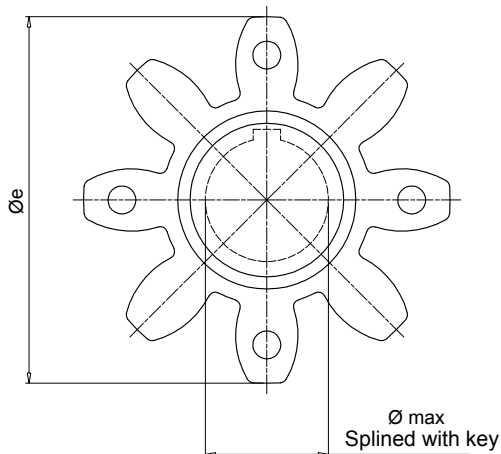


### Notes:

Made of black oil-resistant rubber, these components serve to interconnect the two halves (motor - pump) of a flexible coupling.

## EGE\*\* series

Code	Half-coupling code		Dimensions [mm]			Nominal torque Nm	Max torque Nm	Weight [kg]
			E	Øe	Ø max			
		<b>RCTAFIT</b>						
<b>EGE0</b>	SGEA01 - SGEG01	SGEK01	15	40	16	10	20	0.006
<b>EGE2</b>	SGEA21	SGEK21	18	65	25	95	190	0.02
<b>EGE3</b>	SGEA31 - SGEG30	SGEK31	22	80	35	190	380	0.04
<b>EGE5</b>	SGEA51	SGEK51	26	105	45	310	620	0.06
<b>EGE4</b>	SGEG40 - SGES40	SGEK40	24	95	40	310	620	0.09
<b>EGE6</b>	SGEG60 - SGES60	SGEK60	28	120	55	430	860	0.13
<b>EGE8</b>	SGEG80 - SGES80	SGEK80	38	160	75	1250	2500	0.36



### Notes:

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

## EGE\*\*RR series

Code	Half-coupling code		Dimensions [mm]			Nominal torque Nm	Max torque Nm	Weight [kg]
			E	Øe	Ø max			
		<b>RCTAFIT</b>						
<b>EGE0RR</b>	SGEA01 - SGEG01	SGEK01	15	40	16	15	30	0.006
<b>EGE2RR</b>	SGEA21	SGEK21	18	65	25	115	230	0.02
<b>EGE3RR</b>	SGEA31 - SGEG30	SGEK31	22	80	35	250	500	0.04
<b>EGE5RR</b>	SGEA51	SGEK51	26	105	45	400	800	0.06
<b>EGE4RR</b>	SGEG40 - SGES40	SGEK40	24	95	40	380	760	0.09
<b>EGE6RR</b>	SGEG60 - SGES60	SGEK60	28	120	55	550	1100	0.13
<b>EGE8RR</b>	SGEG80 - SGES80	SGEK80	38	160	75	1400	2900	0.36
<b>EGE9RP</b>	SGEG90	-	45	200	95	8900	9900	0.59

Version for extreme temperatures available on request.

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

**Metric cylindrical finish Keyway to DIN 6885 sheet 1**

Size	Materials	Diameter / Key [mm]																								
		8	9	10	11	12	13	14	15	15	16	16	17	18	19	19	20	20	22	22	22	24	24	25	25	
		3	3	3	4	4	5	5	5	4	4	5	5	5	6	5	6	5	6	6	8	5	6	8	8	7
01	Aluminium				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	Steel				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	Cast Iron				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
21	Aluminium							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Steel							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
31	Aluminium														•	•	•	•	•	•	•	•	•	•	•	•
	Steel														•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron														•	•	•	•	•	•	•	•	•	•	•	•
40	Aluminium																									
	Steel				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
51	Aluminium														•	•	•	•	•	•	•	•	•	•	•	•
	Steel														•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron														•	•	•	•	•	•	•	•	•	•	•	•
60	Aluminium																									
	Steel														•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron														•	•	•	•	•	•	•	•	•	•	•	•
80	Aluminium																									
	Steel														•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron														•	•	•	•	•	•	•	•	•	•	•	•
90	Aluminium																									
	Steel														•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron														•	•	•	•	•	•	•	•	•	•	•	•

Size	Materials	Diameter / Key [mm]																								
		28	30	30	32	32	35	35	38	40	42	45	48	50	52	55	60	63	65	70	75	80	82	90	95	100
		8	10	8	10	8	10	8	10	12	12	14	14	14	16	16	18	18	18	20	20	22	22	25	25	28
01	Aluminium																									
	Steel																									
	Cast Iron																									
21	Aluminium	•																								
	Steel	•																								
	Cast Iron																									
31	Aluminium	•	•	•	•	•	•	•	•																	
	Steel	•	•	•	•	•	•	•	•																	
	Cast Iron	•	•	•	•	•	•	•	•																	
40	Aluminium																									
	Steel	•	•	•	•	•	•	•	•	•	•	•	•													
	Cast Iron	•	•	•	•	•	•	•	•	•	•	•	•													
51	Aluminium	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•										
	Steel																									
	Cast Iron																									
60	Aluminium																									
	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
80	Aluminium																									
	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
90	Aluminium																									
	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

## Imperial cylindrical finish Keyway to DIN 6885 sheet 1

Size	Materials	Diameter / Key [mm]															
		11.11 3.18	12.7 3.18	13.45 3.18	15.87 4.76	15.87 3.97	17.46 4.76	19.02 3.17	19.05 4.76	19.05 6.35	22.22 4.76	22.22 6.35	22.22 4	25.4 6.35	25.4 4.76	26.94 4.76	28.58 6.35
01	Aluminium				•	•	•	•	•	•	•	•	•	•	•	•	•
	Steel				•	•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron				•	•	•	•	•	•	•	•	•	•	•	•	•
21	Aluminium							•	•	•	•	•	•	•	•	•	
	Steel							•	•	•	•	•	•	•	•	•	
	Cast Iron							•	•	•	•	•	•	•	•	•	
31	Aluminium							•	•	•	•	•	•	•	•	•	
	Steel							•	•	•	•	•	•	•	•	•	
	Cast Iron							•	•	•	•	•	•	•	•	•	
40	Aluminium																
	Steel				•	•	•	•	•	•	•	•	•	•	•	•	
	Cast Iron				•	•	•	•	•	•	•	•	•	•	•	•	
51	Aluminium							•	•	•	•	•	•	•	•	•	
	Steel							•	•	•	•	•	•	•	•	•	
	Cast Iron							•	•	•	•	•	•	•	•	•	
60	Aluminium																
	Steel							•	•	•	•	•	•	•	•	•	
	Cast Iron							•	•	•	•	•	•	•	•	•	
80	Aluminium																
	Steel							•	•	•	•	•	•	•	•	•	
	Cast Iron							•	•	•	•	•	•	•	•	•	
90	Aluminium																
	Steel												•	•	•	•	
	Cast Iron												•	•	•	•	

Size	Materials	Diameter / Key [mm]															
		28.58 7.94	31.75 6.35	31.75 7.94	34.94 7.94	38.1 9.52	41.27 9.52	41.6 12	44.45 11.11	47.63 12.7	50.8 12.7	53.94 12.7	60.33 15.88	60.33 12.7	73.03 19.05	85.73 22.23	92.07 22.22
01	Aluminium	•															
	Steel	•															
	Cast Iron	•															
21	Aluminium	•															
	Steel	•															
	Cast Iron	•															
31	Aluminium	•	•	•	•	•	•	•	•								
	Steel	•	•	•	•	•	•	•	•								
	Cast Iron	•	•	•	•	•	•	•	•								
40	Aluminium																
	Steel	•	•	•	•	•	•	•	•	•	•	•					
	Cast Iron	•	•	•	•	•	•	•	•	•	•	•					
51	Aluminium	•	•	•	•	•	•	•	•	•	•	•	•	•			
	Steel																
	Cast Iron																
60	Aluminium																
	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
80	Aluminium																
	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
90	Aluminium																
	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

## SAE involute spline (angle 30°) - ANS.B.92.1.1970

Size	Materials	Nr. of th - Diametral pitch															
		9 16/32	10 16/32	11 16/32	12 16/32	13 16/32	14 16/32	15 16/32	21 16/32	23 16/32	27 16/32	33 16/32	40 16/33	14 12/24	16 12/24	17 12/24	13 8/16
01	Steel	•	•	•	•	•	•	•						•			
	Cast Iron	•	•	•	•	•	•	•						•			
21	Steel	•	•	•	•	•	•	•						•			
	Cast Iron	•	•	•	•	•	•	•						•			
31	Steel	•	•	•	•	•	•	•	•	•	•			•	•	•	•
	Cast Iron	•	•	•	•	•	•	•	•	•	•			•	•	•	•
40	Steel			•	•	•	•	•	•	•	•	•		•	•	•	•
	Cast Iron			•	•	•	•	•	•	•	•	•		•	•	•	•
60	Steel					•	•	•	•	•	•	•		•	•	•	•
	Cast Iron					•	•	•	•	•	•	•		•	•	•	•
80	Steel								•	•	•	•	•		•	•	•
	Cast Iron								•	•	•	•	•		•	•	•
90	Steel								•	•	•	•	•		•	•	•
	Cast Iron								•	•	•	•	•		•	•	•

Size	Materials	Nr. of th - Diametral pitch														
		15 8/16	17 8/16	20 24/48	21 24/48	23 24/48	25 24/48	26 24/48	28 24/48	29 24/48	32 24/48	23 40/80	36 48/96	41 48/96	47 48/96	33 32/64
01	Steel			•	•	•			•	•		•	•	•	•	
	Cast Iron			•	•	•			•	•		•	•	•	•	
21	Steel			•	•	•	•	•	•	•		•	•	•	•	
	Cast Iron			•	•	•	•	•	•	•		•	•	•	•	
31	Steel	•		•	•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron	•		•	•	•	•	•	•	•	•	•	•	•	•	•
40	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
60	Steel	•	•	•	•	•	•	•	•	•	•			•	•	•
	Cast Iron	•	•	•	•	•	•	•	•	•	•			•	•	•
80	Steel	•	•								•					•
	Cast Iron	•	•								•					•
90	Steel	•	•								•					•
	Cast Iron	•	•								•					•

## Spline bores to DIN 5480

Size	Materials	Nr. of th - Size										
		13 18x1.25	14 20x1.25	14 30x2	14 32x2	16 35x2	17 37x2	18 25x1.25	18 38x2	18 40x2	20 42x2	18 60x3
01	Steel	•	•									
	Cast Iron	•	•									
21	Steel	•	•	•	•	•		•				
	Cast Iron	•	•	•	•	•		•				
31	Steel	•	•	•	•	•	•	•				
	Cast Iron	•	•	•	•	•	•	•				
40	Steel	•	•	•	•	•	•	•	•	•	•	
	Cast Iron	•	•	•	•	•	•	•	•	•	•	
60	Steel	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron	•	•	•	•	•	•	•	•	•	•	•
80	Steel				•	•	•		•	•	•	•
	Cast Iron				•	•	•		•	•	•	•
90	Steel								•	•	•	•
	Cast Iron								•	•	•	•

Size	Materials	Nr. of th - Size									
		21 28x1.25	21 45x2	22 70x3	24 32x1.25	24 50x2	26 55x2	28 60x2	29 38x1.25	34 70x2	38 80x2
01	Steel										
	Cast Iron										
21	Steel	•									
	Cast Iron	•									
31	Steel	•			•				•		
	Cast Iron	•			•				•		
40	Steel	•	•		•				•		
	Cast Iron	•	•		•				•		
60	Steel	•	•		•	•	•	•	•		
	Cast Iron	•	•		•	•	•	•	•		
80	Steel		•	•	•	•	•	•	•	•	•
	Cast Iron		•	•	•	•	•	•	•	•	•
90	Steel		•	•		•	•	•	•	•	•
	Cast Iron		•	•		•	•	•	•	•	•



## Spline bores to DIN 5481

Size	Materials	Nr. of th - Size									
		28 8x10	30 10x12	31 12x14	32 15x17	33 17x20	34 21x24	35 26x30	36 38x34	41 60x65	
01	Steel	•	•	•	•	•	•				
	Cast Iron	•	•	•	•	•	•				
21	Steel	•	•	•	•	•	•	•			
	Cast Iron	•	•	•	•	•	•	•			
31	Steel			•	•	•	•	•	•		
	Cast Iron			•	•	•	•	•	•		
40	Steel							•	•	•	
	Cast Iron							•	•	•	
60	Steel								•	•	•
	Cast Iron								•	•	•
80	Steel										•
	Cast Iron										•
90	Steel										•
	Cast Iron										•

## Spline bores to DIN 5482

Size	Materials	Nr. of th - Size															
		8 A15x12	9 A17x14	10 A18x15	12 A20x17	13 A22x19	14 A25x22	15 A28x25	16 A30x27	17 A32x28	18 A35x31	19 A38x34	20 A40x36	21 A42x38	22 A45x41	23 A48x44	24 A50x45
01	Steel	•	•	•	•	•	•										
	Cast Iron	•	•	•	•	•	•										
21	Steel	•	•	•	•	•	•	•	•	•	•						
	Cast Iron	•	•	•	•	•	•	•	•	•	•						
31	Steel							•	•	•	•	•					
	Cast Iron							•	•	•	•	•					
40	Steel																
	Cast Iron																
60	Steel																
	Cast Iron																
80	Steel																
	Cast Iron																
90	Steel																
	Cast Iron																

Size	Materials	Nr. of th - Size														
		25 A52x47	26 A55x50	27 A58x53	28 A60x55	29 A62x57	30 A65x60	31 A68x62	32 A70x64	33 A72x66	34 A75x69	35 A78x72	36 A80x74	37 A82x76	38 A85x79	39 A88x82
01	Steel															
	Cast Iron															
21	Steel															
	Cast Iron															
31	Steel															
	Cast Iron															
40	Steel	•	•													
	Cast Iron	•	•													
60	Steel	•	•	•	•	•	•	•								
	Cast Iron	•	•	•	•	•	•	•								
80	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
90	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Cast Iron	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•