

# SGEA - SGEG - SGES - EGE series

Aluminium - Cast Iron - Steel couplings



# BELL-HOUSING & COUPLING SIZING

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

### DATA REQUIRED

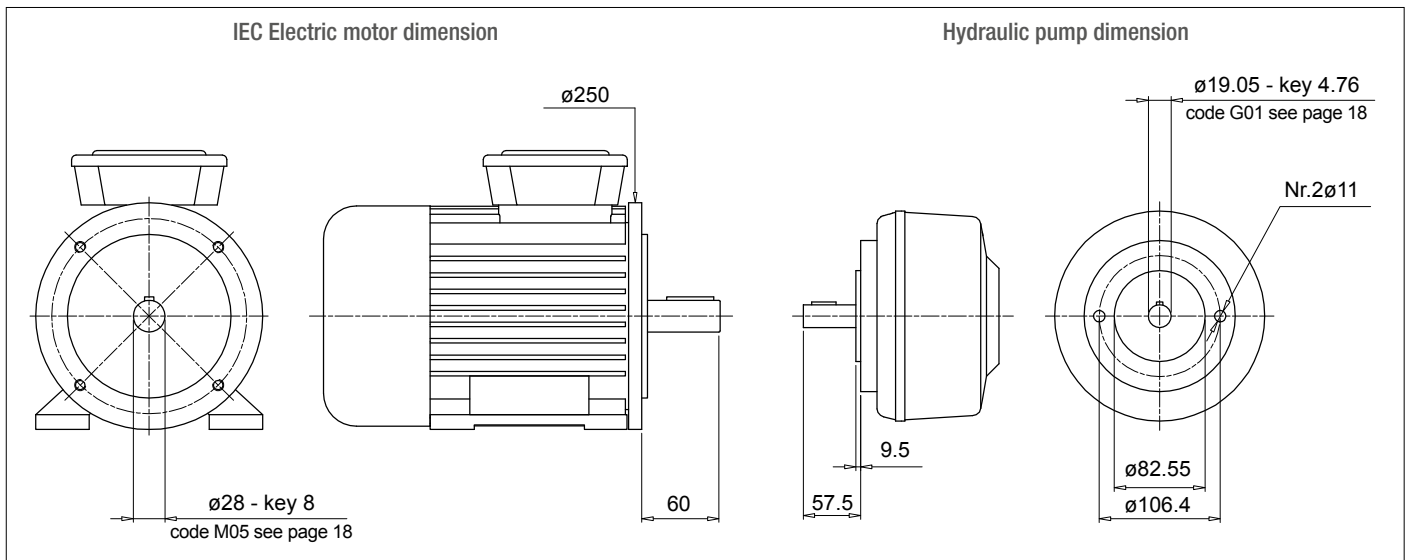
- Electric motor power/motor size
- Manufacturer and pump type

### 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 63 ÷ 69  
For Low noise bell-housing LMS/LDS series see pages 71 ÷ 77  
For Multi-components 2-3 bell housing series see pages 79 ÷ 99

#### 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 63 ÷ 69 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 drilling pump code (see pages 48-49).

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 71 ÷ 77 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 drilling pump code (see pages 48-49).

For the specific case:

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

Definitive bell-housing code **LMS250AFSA060**

# BELL-HOUSING & COUPLING SIZING

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

### 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

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

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

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 - Availabe length for SGEA21 = 50 mm

LMS - Availabe 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](http://www.mpfiltri.com)

Vane / Piston / Screw pumps

AKA  
AKMM03Z0066

Pump  
Manufacturer: ATOS  
Pump type: PFE  
Pump model: PFE31 Shaft 1

HYDRAULIC PUMP - Technical Data  
L1: 57.5  
d1: 19.05  
Ch: 4.76  
s: 9.5  
PD: 82.55  
Int: 106  
Nr: 2  
F: M10

Electric Motor  
N. Poles: 2P  
Type: 83-85  
Size: 100-112  
Kw: 3-4  
Hp: 4-5,44

ELECTRIC MOTOR - Technical Data  
L: 60  
d1: 28  
Flg.: 250  
Ch: 8

Coupling material  
 Aluminium  Cast iron  Allow alternative material

Result  
Coupling: M03 - 20066  
Drilling Pump: S060  
Pump Shaft: G01  
Motor Shaft: M05

Result  
Monobloc Bellhousing:   
Modular Bellhousing:   
Silenced Bellhousing:

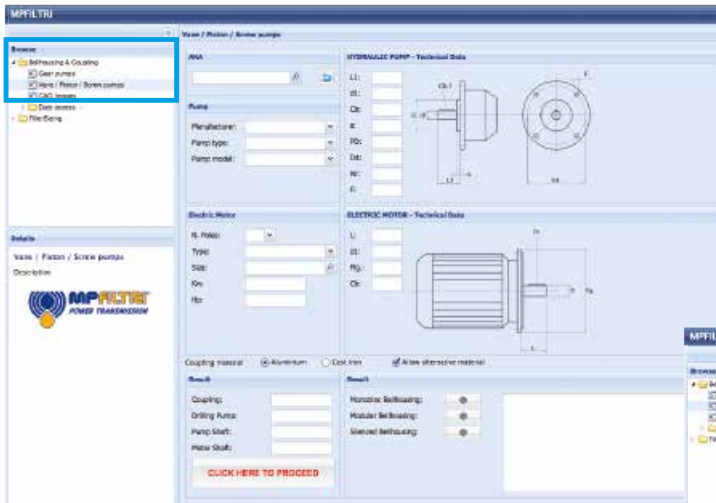
Monobloc Bellhousing:  
Pump half-coupling with grub screw  
For other solution please contact technical department

Modular Bellhousing: OK  
Silenced Bellhousing: OK

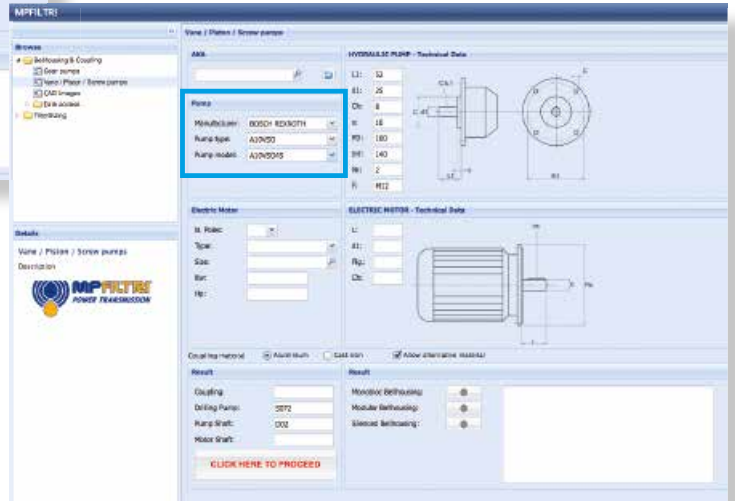
[CLICK HERE TO PROCEED](#)

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

## Step 1 Select "BELL-HOUSING & COUPLING"



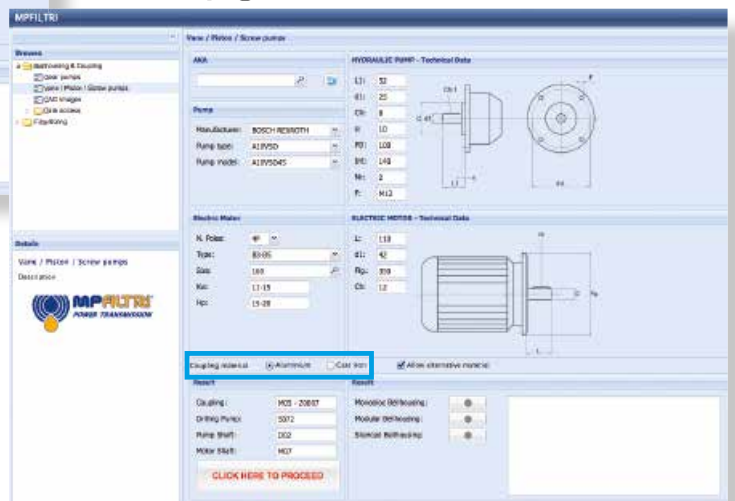
## Step 2 Choose Manufacturer: select "Pump type" and "Pump model"



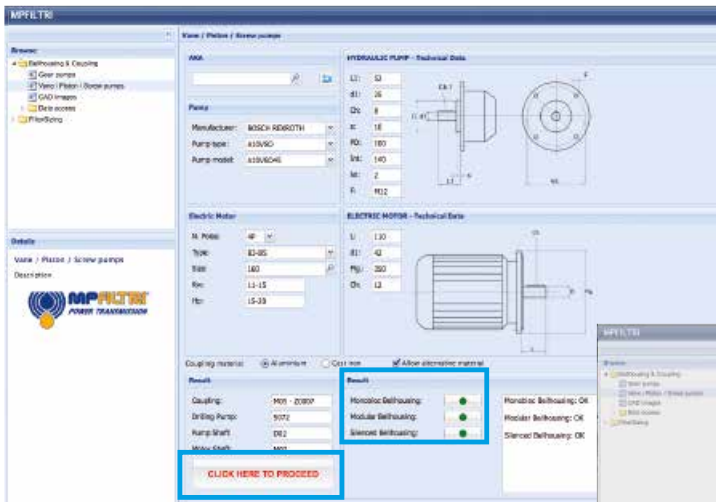
## Step 3 Choose nr° of poles of "Electric motors": select "Electric motors type" and "Electric motors size"



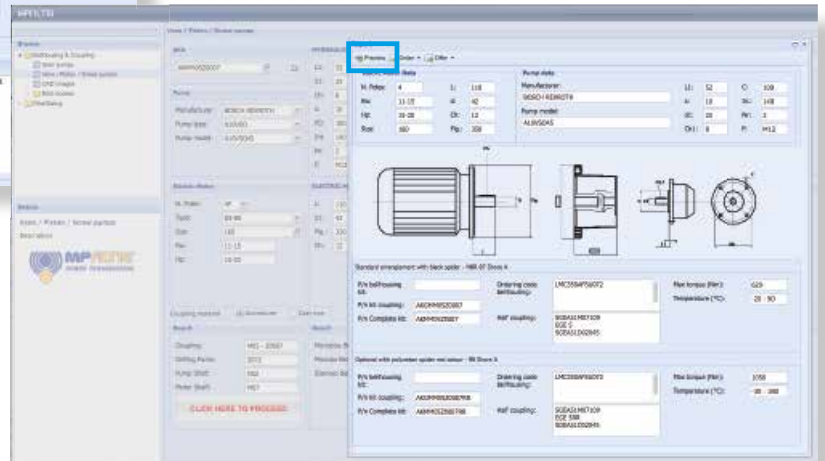
## Step 4 Choose Coupling material



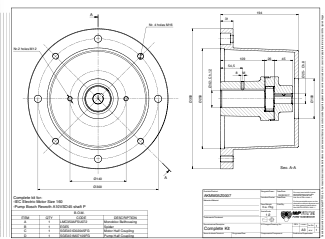
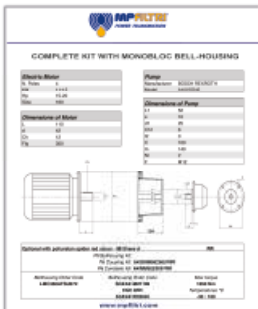
**Step 5** Push **"CLICK HERE TO PROCEED"**, then choose best solution for your application.



**Step 6** Push **"PREVIEW"** to download the reports.



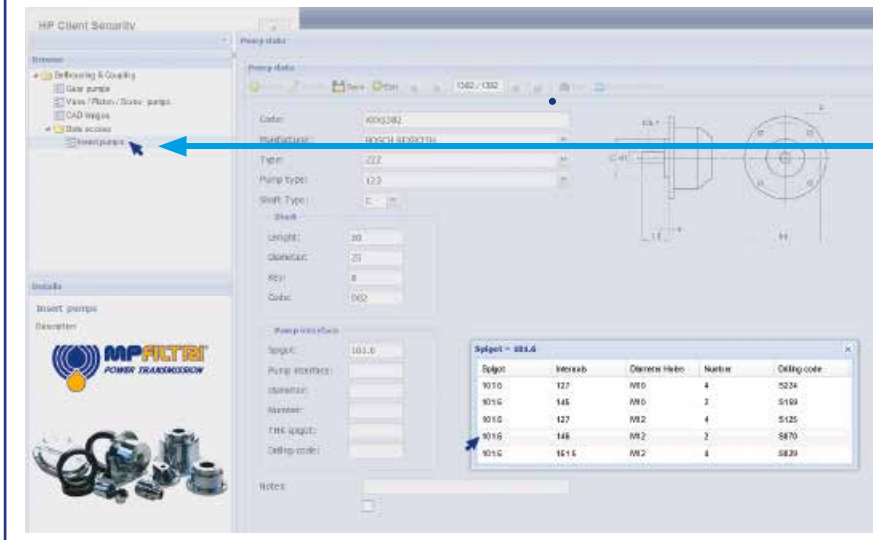
**Step 7**  Download PDF Datasheet and "DXF Drawing" of your selection



You can't find the pump on the system?

**NEW FEATURE!!**

Insert pump's dimension on the section **"INSERT PUMP"** and follow the instructions to achieve the couplings components code



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

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.

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

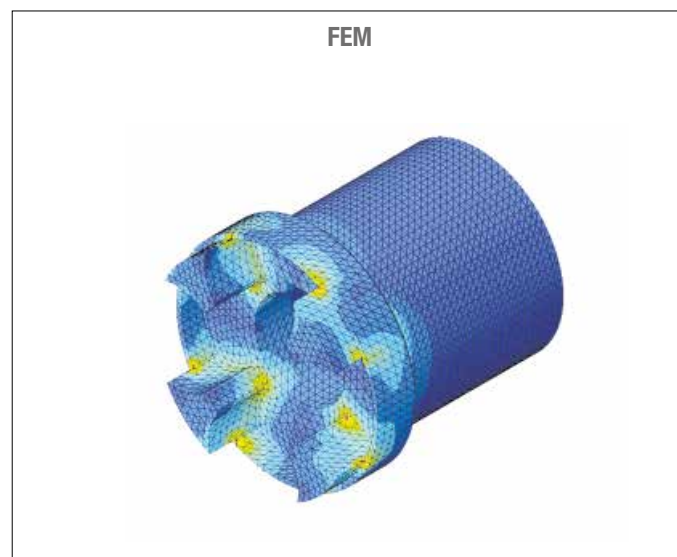
## Standard ATEX 2014/34/EU

Half-couplings are available to use in hazardous area.

The couplings are certified according to Standard ATEX 2014/34/EU - 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:**  $9560 \times kW / rpm = Nm$

**Me >**  $Mt \times S = Nm$

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:**  $9560 \times 4 / 1500 = 25.45 Nm$

**Me >**  $25.49 \times 1.3 = 33 Nm$

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

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

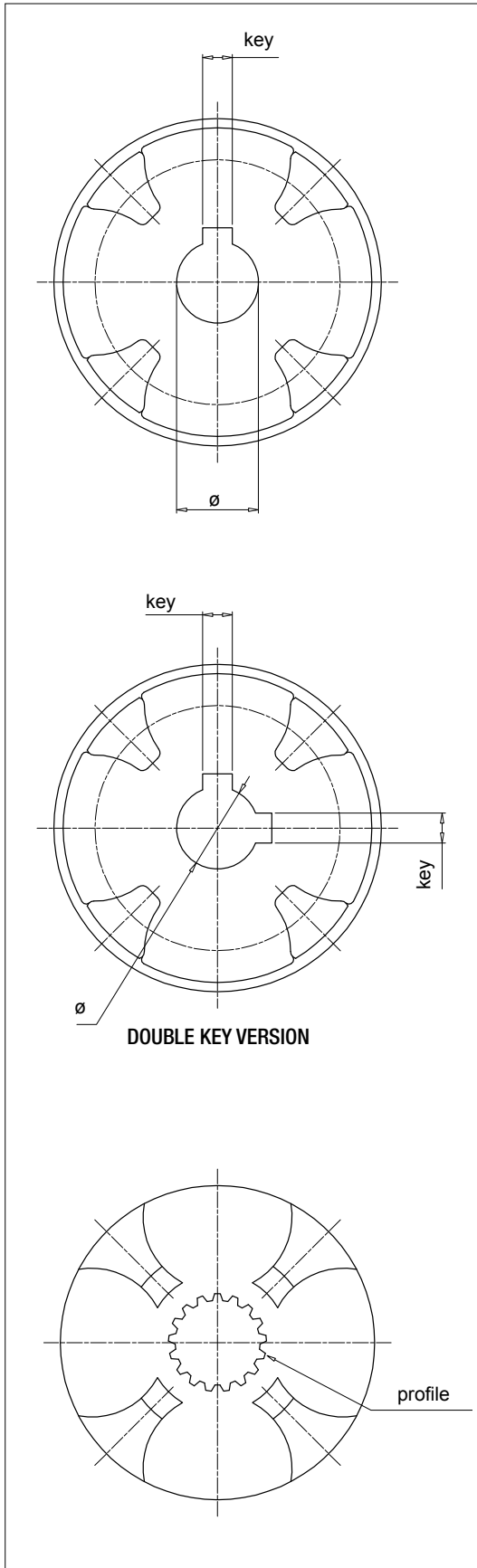
**Note:** When selecting the coupling, remember that for pumps with splined shaft, only cast iron couplings of the SGEG series can be used.

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>SGEA01</b>	43	15	20	
<b>SGEA21</b>	68	160	190	
<b>SGEA31</b>	75	340	380	
<b>SGEA51</b>	109.5	550	620	<b>ALUMINIUM</b>
<b>SGEG01</b>	40	20	30	
<b>SGEG30</b>	80	400	450	
<b>SGEG40</b>	95	550	620	
<b>SGEG60</b>	120	760	850	
<b>SGEG80</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	1/4"	6.35	<b>G04</b>
1"	25.40	3/16"	4.76	<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>
1 1/8"	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 18	18	<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>



# SGEA - SGEG - SGES - EGE series

Aluminium - Cast Iron - Steel couplings



## Technical data

**Half-couplings materials**

SGEA: Pressure die cast aluminium  
SGEG: Cast Iron en-GJL-250 (gg25)  
SGES: Steel C40

**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-LL-HM-HR-HV-HC, 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**

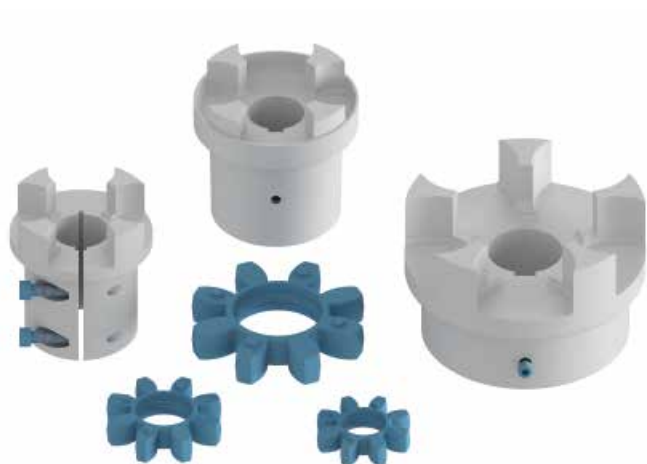
Any applications not covered by the normal indications contained in this catalogue must be evaluated and approved by MP Filtri Technical and Sales Department.

**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 $\varnothing$ 200 - $\varnothing$ 19x40	●	●	●	●	●	●
IEC 90 $\varnothing$ 200 - $\varnothing$ 24x50	●	●	●	●	●	●
IEC 100 $\varnothing$ 250 - $\varnothing$ 28x60	●	●	●	●	●	●
IEC 112 $\varnothing$ 250 - $\varnothing$ 28x60	●	●	●	●	●	●
IEC 132 $\varnothing$ 300 - $\varnothing$ 38x80	●	●	●	●	●	●
IEC 160 $\varnothing$ 350 - $\varnothing$ 42x110	●	●	●	●	●	●
IEC 180 $\varnothing$ 350 - $\varnothing$ 48x110	●	●	●	●	●	●
IEC 200 $\varnothing$ 400 - $\varnothing$ 55x110	●	●	●	●	●	●
IEC 225 $\varnothing$ 450 - $\varnothing$ 60x140		●	●	●	●	●
IEC 250 $\varnothing$ 550 - $\varnothing$ 65x140		●	●	●	●	●
IEC 280 $\varnothing$ 550 - $\varnothing$ 75x140		●	●	●	●	●
IEC 315 $\varnothing$ 660 - $\varnothing$ 80x170		●	●	●	●	●
IEC 355 $\varnothing$ 800 - $\varnothing$ 90x170		●	●	●	●	●

IEC Electric Motors size	European standard size						German standard size		
	0.5	1	2	3	3.5	4	ZB	ZF	ZG
IEC 63 $\varnothing$ 140 - $\varnothing$ 11x23	●	●	●				●		
IEC 71 $\varnothing$ 160 - $\varnothing$ 14x30	●	●	●				●		
IEC 80 $\varnothing$ 200 - $\varnothing$ 19x40	●	●	●	●			●	●	
IEC 90 $\varnothing$ 200 - $\varnothing$ 24x50	●	●	●	●			●	●	
IEC 110 $\varnothing$ 250 - $\varnothing$ 28x60		●	●	●	●		●	●	
IEC 112 $\varnothing$ 250 - $\varnothing$ 28x60		●	●	●	●		●	●	
IEC 132 $\varnothing$ 300 - $\varnothing$ 38x80		●	●	●	●	●		●	●
IEC 160 $\varnothing$ 350 - $\varnothing$ 42x110			●	●	●	●		●	●
IEC 180 $\varnothing$ 350 - $\varnothing$ 48x110			●	●	●	●		●	●
IEC 200 $\varnothing$ 400 - $\varnothing$ 55x110			●	●	●	●		●	●
IEC 225 $\varnothing$ 450 - $\varnothing$ 60x140				●	●	●			●

# SGEA-SGEG-SGES

Designation & Ordering code

## PUMP HALF-COUPLING FOR PARALLEL SHAFT

**Pump half-coupling** Configuration example: **SGE** **A** **21** **G02** **050** **2E** **FG**  
**SGE**

**Series and material**

**A** Aluminium  
**G** Cast Iron  
**S** Steel

Size	SGEA	SGEG	SGES
	01	01	01
	21	30	30
	31	40	40
	51	60	60
		80	80
		90	90

**Pump shaft code**  
**G02** See page 18

**Length**  
**050** See pages 26 ÷ 30

**Double key way (available combinations only)**  
**2E** See page 18 (parallel shaft - double key)

**Group screw (necessary for SGEA series only)**  
**FG**

## PUMP HALF-COUPLING FOR SPLINED SHAFT

**Pump half-coupling** Configuration example: **SGE** **G** **40** **PD02** **050**  
**SGE**

**Series and material**

**G** Cast Iron  
**S** Steel

Size	SGEG	SGES
	01	01
	30	30
	40	40
	60	60
	80	80
	90	90

**Pump shaft code**  
**PD02** See pages 19

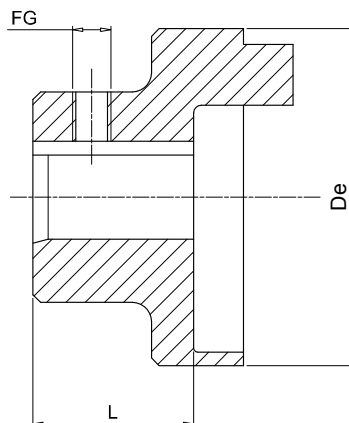
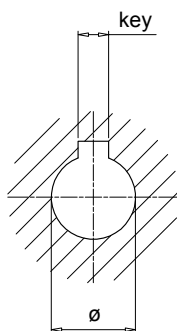
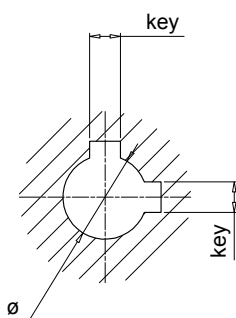
**Length**  
**050** See pages 28 ÷ 30



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 dxl [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	31	5.5	36	31	3	30	31	2.2	30	31
			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		7.5	75		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	60	30	196	60	18.5	181	60	15	198	60
			37	120		22	215		18.5	244				
<b>200S</b>	55 x 110	60 x 140				37	240					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>	65 x 140		110	353	80	110	707	80	75	727	80	55	712	80
<b>315M</b>			132	423		132	849		90	873		75	971	
<b>315L</b>	80 x 170		160	513		160	1030		110	1070		90	1170	
			200	641		200	1290		132	1280		110	1420	
<b>315</b>	85 x 170								160	1550		132	1710	
			250	802		250	1600		200	1930		160	2070	
<b>355</b>	75 x 140		315	1010		315	2020		250	2410		200	2580	
			355	1140		355	2280							
<b>400</b>	80 x 170		400	1280	90	400	2570	90	315	3040	90	250	3220	90
			500	1600		500	3210		400	3850		315	4060	
<b>400</b>	110 x 210		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	

## Dimensions

Double key version



**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 [d x l]		De	L	ø	key	FG		
63	11x23	<b>SGEA01M01021FG</b>	44.0	21	11	4	M5	0.07	
71	14x30	<b>SGEA01M02028FG</b>	44.0	28	14	5	M5	0.08	
80	19x40	<b>SGEA01M03040FG</b>	44.0	40	19	6	M5	0.12	
		<b>SGEA21M03040FG</b>	70.0	40	19	6	M6	0.30	
90	24x50	<b>SGEA01M04048FG</b>	44.0	48	24	8	M5	0.13	
		<b>SGEA21M04048FG</b>	70.0	48	24	8	M6	0.28	
100 - 112	28x60	<b>SGEA21M05060FG</b>	70.0	60	28	8	M6	0.33	
		<b>SGEA31M05060FG</b>	85.0	60	28	8	M8	0.48	
132	38x80	<b>SGEA21M06080FG</b>	70.0	80	38	10	M6	0.44	
		<b>SGEA31M06077FG</b>	85.0	77	38	10	M8	0.78	
		<b>SGEA51M06077FG</b>	109.5	77	38	10	M8	1.60	
160	42x110	<b>SGEA51M07109FG</b>	109.5	109	42	12	M8	1.60	
180	48x110	<b>SGEA51M08109FG</b>	109.5	109	48	14	M8	1.60	
200	55x110	<b>SGEA51M09109FG</b>	109.5	109	55	16	M8	1.90	

### Pump half-couplings

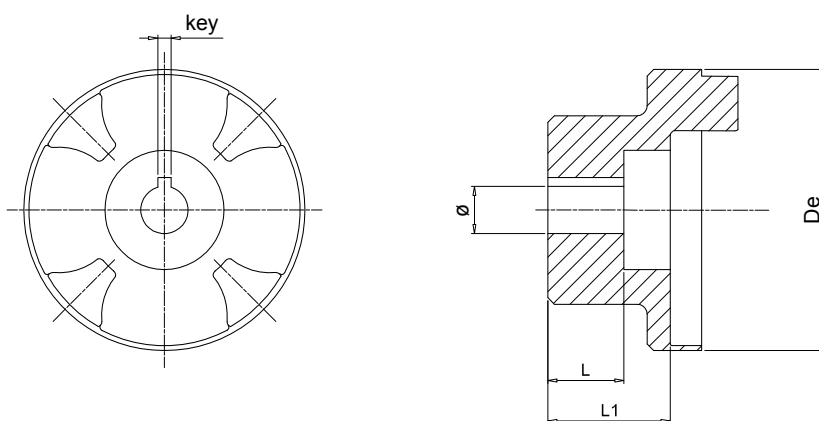
Half-coupling code	Dimensions [mm]					Standard lengths [mm]								FG		
	ø min	ø max	De	L min	L max	17	23	30	40	44	48	-	-		-	-
<b>SGEA01 *** **</b>	11	19	44.0	17	50	-	-	-	-	-	-	-	-	-	-	M5
<b>SGEA21 *** **</b>	15	24	70.0	23	50	35	40	42	44	48	50	-	-	-	-	M6
<b>SGEA21 *** **</b>	25	28	70.0	40	60	40	42	44	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: **SGEA51D02040FG**

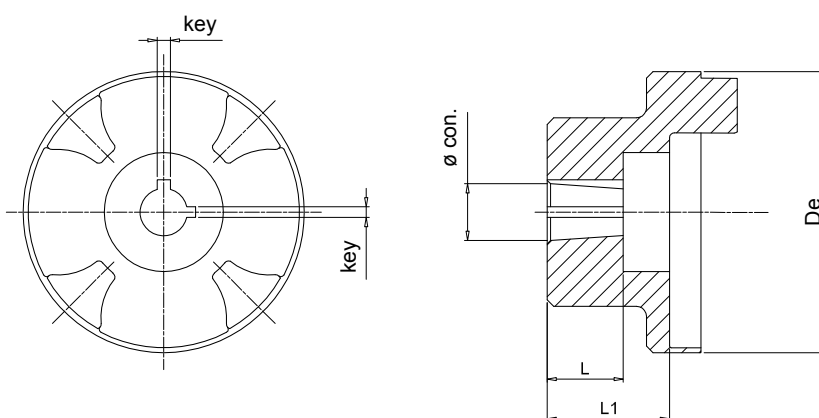
**D02** - see page 18

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



### Half-coupling for gear pumps - parallel

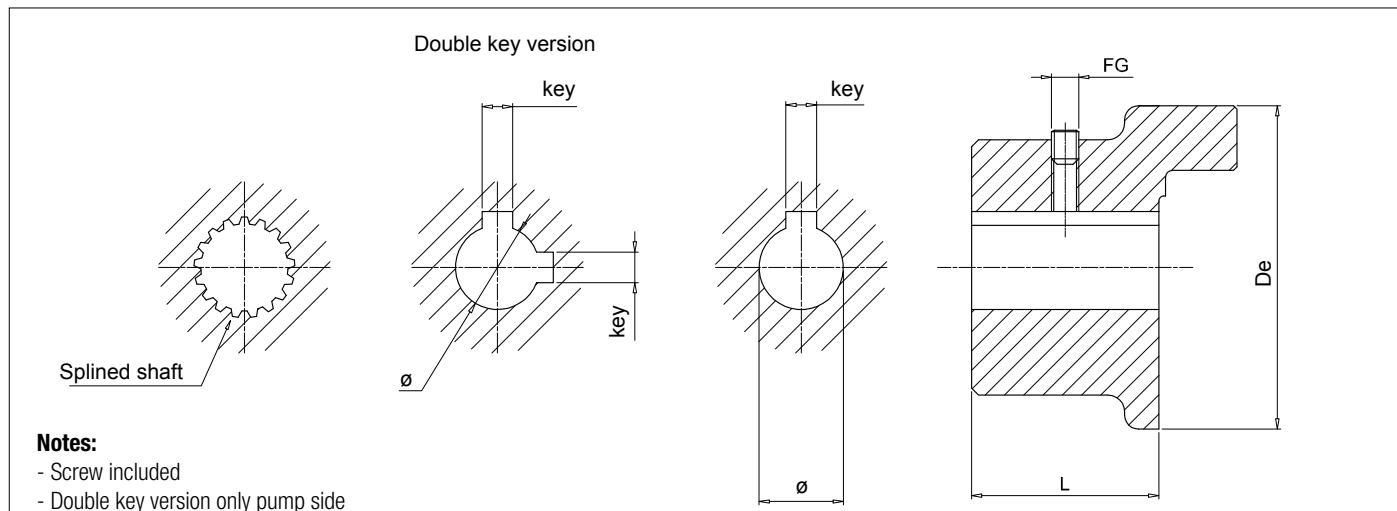
Half-coupling code	Dimensions [mm]					Weight [kg]
	De	L	L1	ø	key	
<b>SGEA01FS05M</b>	44	10.0	17.0	6	2	0.07
<b>SGEA01FS05C</b>	44	10.0	17.0	7	2	0.08
<b>SGEA01FS1C0</b>	44	-	17.0	12	3	0.13
<b>SGEA21FS1C0</b>	70	14.5	21.5	12	3	0.48
<b>SGEA31FS1C0</b>	85	14.5	37.0	12	3	1.90



### Half-coupling for gear pumps - tapered

Half-coupling code	Dimensions [mm]					Weight [kg]	Conical
	De	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 [d x l]		De	L	ø	key		FG
63	11x23	<b>SGEG01M01021</b>	44	21	11	4	M6	0.32
71	14x30	<b>SGEG01M02028</b>	44	28	14	5	M6	0.42
80	19x40	<b>SGEG01M03040</b>	44	40	19	6	M6	0.61
90	24x50	<b>SGEG01M04050</b>	44	50	24	8	M6	0.77
100 - 112	28x60	<b>SGEG31M05060</b>	80	60	28	8	M6	2.35
		<b>SGEG40M05060</b>	95	60	28	8	M8	2.65
132	38x80	<b>SGEG31M06080</b>	80	80	38	10	M6	3.15
		<b>SGEG40M06080</b>	95	80	38	10	M8	3.55
160	42x110	<b>SGEG40M07110</b>	95	110	42	12	M8	4.70
180	48x110	<b>SGEG40M08110</b>	95	110	48	14	M8	4.55
200	55x110	<b>SGEG40M09110</b>	95	110	55	16	M8	4.35
		<b>SGEG60M09110</b>	120	110	55	16	M8	9.00
225	60x140	<b>SGEG60M10140</b>	120	140	60	18	M8	12.30
250	65x140	<b>SGEG60M11140</b>	120	140	65	18	M8	12.00
		<b>SGEG80M11140</b>	160	140	65	18	M8	18.30
280	75x140	<b>SGEG80M12140</b>	160	140	75	20	M10	17.70
		<b>SGEG90M12100</b>	200	100	75	20	M10	21.00
315	80x170	<b>SGEG80M13170</b>	160	170	80	22	M10	20.60
		<b>SGEG90M13100</b>	200	100	80	22	M10	20.00
355	95x140	<b>SGEG90M15100</b>	200	100	95	25	M10	19.00
400	100x210	<b>SGEG90M16100</b>	200	100	100	28	M10	18.00

### Pump half-couplings

Half-coupling code	Dimensions [mm]					Standard lengths [mm]
	ø min	ø max	De	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

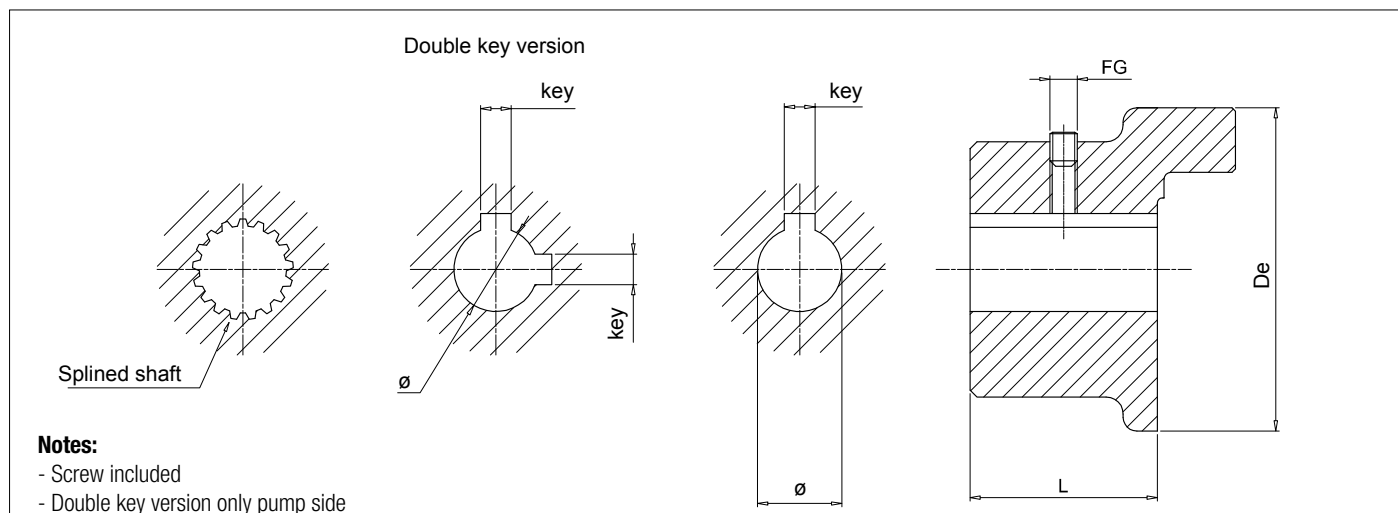
Example: **SGEG40PD02040**

**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.



### Motor half-coupling

IEC - Electric motors		Half-coupling code	Dimensions [mm]					Weight [kg]
Motor size	Shaft end [d x l]		De	L	ø	key	FG	
63	11x23	<b>SGES01M01021</b>	44	21	11	4	M6	0.32
71	14x30	<b>SGES01M02028</b>	44	28	14	5	M6	0.42
80	19x40	<b>SGES01M03040</b>	44	40	19	6	M6	0.61
90	24x50	<b>SGES01M04050</b>	44	50	24	8	M6	0.77
100 - 112	28x60	<b>SGES31M05060</b>	80	60	28	8	M6	2.35
		<b>SGES40M05060</b>	95	60	28	8	M8	2.65
132	38x80	<b>SGES31M06080</b>	80	80	38	10	M6	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	De	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**

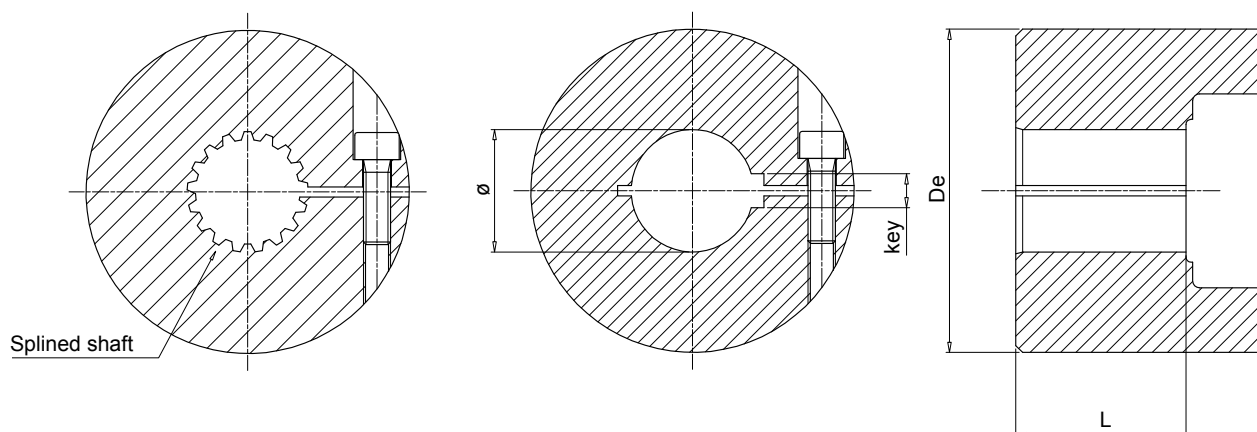
**PD02** - see page 19

**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.

## Dimensions



### Motor half-coupling

IEC - Electric motors		Half-coupling code	Dimensions [mm]					Screw	Weight [kg]
Motor size	Shaft end [d x l]		De	L	$\emptyset$	key			
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	

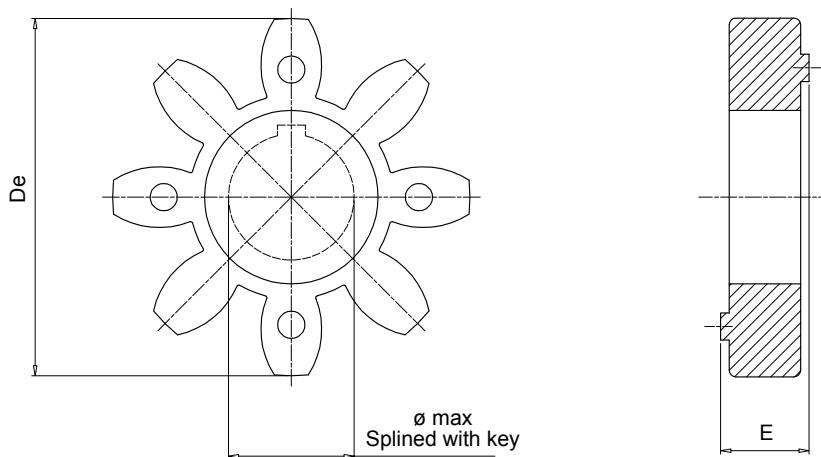
### Pump half-couplings

Half-coupling code	Dimensions [mm]			
	$\emptyset$ min	$\emptyset$ max	De	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).



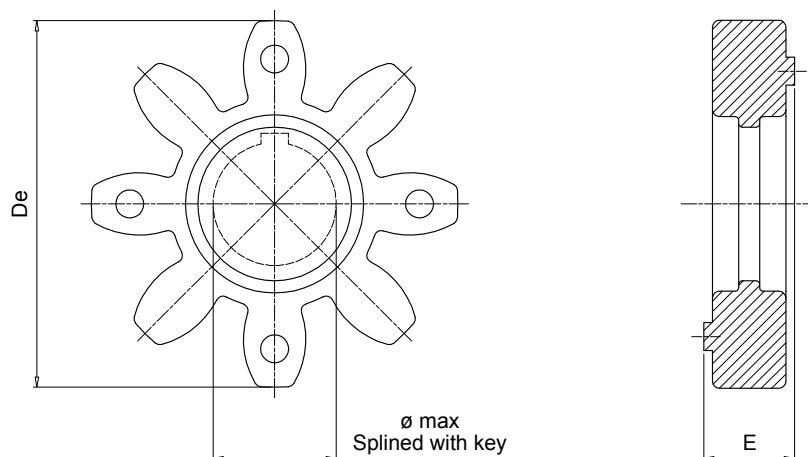


**Notes:**

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	De	ø max			
<b>EGE0</b>	SGEA01 - SGEG01	15	40	16	10	20	0.006
<b>EGE2</b>	SGEA21	18	65	25	95	190	0.02
<b>EGE3</b>	SGEA31 - SGEG31	22	80	35	190	380	0.04
<b>EGE5</b>	SGEA51	26	105	45	310	620	0.06
<b>EGE4</b>	SGEG40 - SGES40	24	95	40	310	620	0.09
<b>EGE6</b>	SGEG60 - SGES60	28	120	55	430	860	0.13
<b>EGE8</b>	SGEG80 - SGES80	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	De	ø max			
<b>EGE0RR</b>	SGEA01/SGEG01	15	40	16	15	30	0.006
<b>EGE2RR</b>	SGEA21	18	65	25	115	230	0.02
<b>EGE3RR</b>	SGEA31/SGEG31	22	80	35	250	500	0.04
<b>EGE5RR</b>	SGEA51	26	105	45	400	800	0.06
<b>EGE4RR</b>	SGEG40/SGES40	24	95	40	380	760	0.09
<b>EGE6RR</b>	SGEG60/SGES60	28	120	55	550	1100	0.13
<b>EGE8RR</b>	SGEG80/SGES80	38	160	75	1400	2900	0.36
<b>EGE9RP</b>	SGEG90	42	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 bore H7 Keyway to DIN 6885 sheet 1 (JS9)

Size	Materials	Diameter / Key [mm]																								
		8	9	10	11	12	13	14	15	15	16	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 bore H7 Keyway to DIN 6885 sheet 1 (JS9)**

Size	Materials	Diameter / Key [mm]															
		11.11	12.7	13.45	15.87	15.87	17.46	19.02	19.05	19.05	22.22	22.22	22.22	25.4	25.4	26.94	28.58
		3.18	3.18	3.18	4.76	3.97	4.76	3.17	4.76	6.35	4.76	6.35	4	6.35	4.76	4.76	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	31.75	31.75	34.94	38.1	41.27	41.6	44.45	47.63	50.8	53.94	60.33	60.33	73.03	85.73	92.07
		7.94	6.35	7.94	7.94	9.52	9.52	12	11.11	12.7	12.7	12.7	15.88	12.7	19.05	22.23	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	10	11	12	13	14	15	21	23	27	33	40	14	16	17	13
		16/32	16/32	16/32	16/32	16/32	16/32	16/32	16/32	16/32	16/32	16/32	16/33	12/24	12/24	12/24	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	17	20	21	23	25	26	28	29	32	23	36	41	47	33
		8/16	8/16	24/48	24/48	24/48	24/48	24/48	24/48	24/48	24/48	24/48	40/80	48/96	48/96	48/96
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	14	14	14	16	17	18	18	18	18	18
		18x1.25	20x1.25	30x2	32x2	35x2	37x2	25x1.25	38x2	40x2	42x2	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	21	22	24	24	26	28	29	34	38
		28x1.25	45x2	70x3	32x1.25	50x2	55x2	60x2	38x1.25	70x2	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	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•