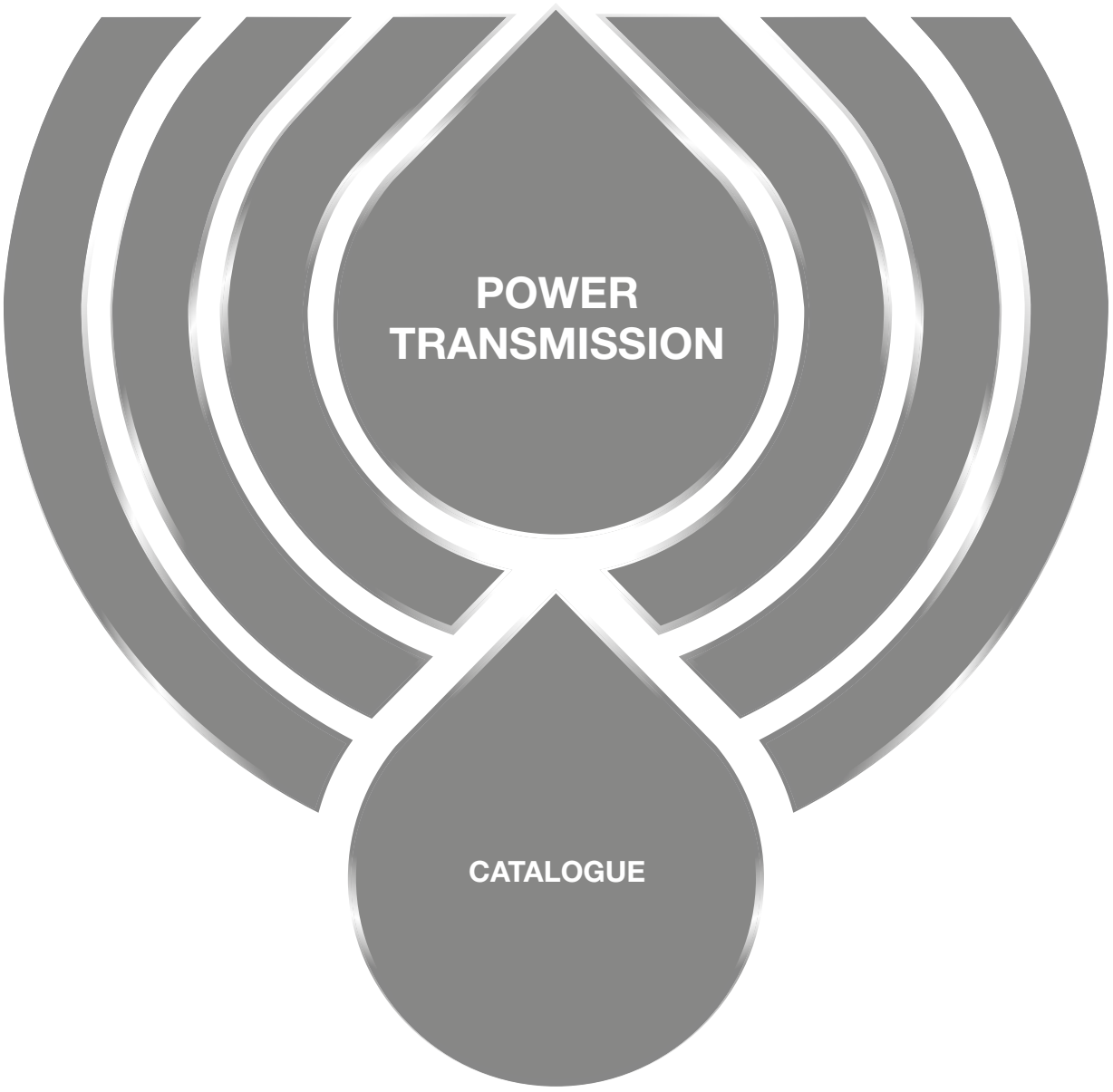
COUPLINGS



MPFILTRI®

PASSION TO PERFORM

A WORLDWIDE LEADER IN THE FIELD OF HYDRAULIC FILTRATION EQUIPMENT.

Our company started life in 1964, when Bruno Pasotto decided to attempt to cater for the requests of a market still to be fully explored, with the study, design, development, production and marketing of a vast range of filters for hydraulic equipment, capable of satisfying the needs of manufacturers in all sectors. The quality of our products, our extreme competitiveness compared with major international producers and our constant activities of research, design and development has made us a worldwide leader in the field of hydraulic circuit filtering.
Present for over 50 years in the market, we have played a truly decisive role in defining our sector, and by now we are a group capable of controlling our entire chain of production, monitoring all manufacturing processes to guarantee superior quality standards and to provide concrete solutions for the rapidly evolving needs of customers and the market.

POWER TRANSMISSION PRODUCTS

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Our work is based on a skillful interaction between advanced technology and fine workmanship, **customizing products according to specific market requests**, focusing strongly on innovation and quality, and following every step in the manufacturing of both standard and special products, fully respecting customer expectations.

Our customer-oriented philosophy, which enables us to satisfy all customer requests **rapidly** and **with personalized products**, makes us a **dynamic and flexible enterprise**.
The possibility of constantly controlling and monitoring the entire production process is essential to allow us to guarantee the quality of our products.

WORLDWIDE PRESENCE

Scan or click me!

Our foreign Branches enable us to offer a diversified range of products that allow us to successfully face the aggressive challenge of international competition, and also to maintain a stable presence at a local level.

The Group boasts **9 business branches**

TECHNOLOGY

Our constant **quest for excellence in quality and technological innovation** allows us to offer only the best solutions and services for applications in many fields, including general industry, test rigs, lubrication, heavy engineering, renewable energies, naval engineering, offshore engineering, aviation systems, emerging technologies and mobile plant (i.e. tractors, excavators, concrete pumps, platforms).

AND PRODUCTION

Our high level of technological expertise means **we can rely entirely on our own resources, without resorting to external providers.** This in turn enables us to satisfy a growing number of customer requests, also exploiting our constantly updated range of machines and equipment, featuring **fully-automated workstations** capable of **24-hour production**.

SUCTION FILTERS

Mounting:
- Tank immersed
- In-Line
- In tank with shut off valve
- In tank with flooded suction

RETURN FILTERS

Mounting:
- In-Line
- Tank top
- In single and duplex designs

RETURN / SUCTION FILTERS

Mounting:
- In-Line
- Tank top

SPIN-ON FILTERS

Mounting:
- In-Line
- Tank top

LOW & MEDIUM PRESSURE FILTERS

Mounting:
- In-Line
- Parallel manifold version
- In single and duplex designs

HIGH PRESSURE FILTERS

Mounting:
- In-Line
- Manifold
- In single and duplex designs

PRODUCT RANGE

MP Filtri can offer a vast and articulated range of products for the global market, suitable for all industrial sectors using hydraulic equipment.

This includes filters (suction, return, return/suction, spin-on, pressure, stainless steel pressure, ATEX filters) and structural components (motor/pump bell-housings, transmission couplings, damping rings, foot brackets, aluminium tanks, cleaning covers).

We can provide all the skills and solutions required by the modern hydraulics industry to monitor contamination levels and other fluid conditions.

Mobile filtration units and a full range of accessories allow us to supply everything necessary for a complete service in the hydraulic circuits.

STAINLESS STEEL HIGH PRESSURE FILTERS

Mounting:
- In-Line
- Manifold
- In single and duplex designs

FILTERS FOR POTENTIALLY EXPLOSIVE ATMOSPHERE

Mounting:
- In-Line

CONTAMINATION CONTROL SOLUTIONS

- Off-line, in-line particle analyser
- Off-line bottle sampling products
- Fully calibrated using relevant ISO standards
- A wide range of variants to support fluid types and communication protocols
- Mobile FIltration Units with flow rates from 15 l/min up to 200 l/min

POWER TRANSMISSION PRODUCTS

- Aluminium bell-housings for motors from 0.12 kW to 400 kW
- Couplings in Aluminium Cast Iron - Steel
- Damping rings
- Foot bracket
- Aluminium tanks
- Cleaning covers

TANK ACCESSORIES

- Oil filler and air breather plugs
- Optical and electrical level gauges
- Pressure gauge valve selectors
- Pipe fixing brackets
- Pressure gauges

Bell-housings & Couplings sizing

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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.

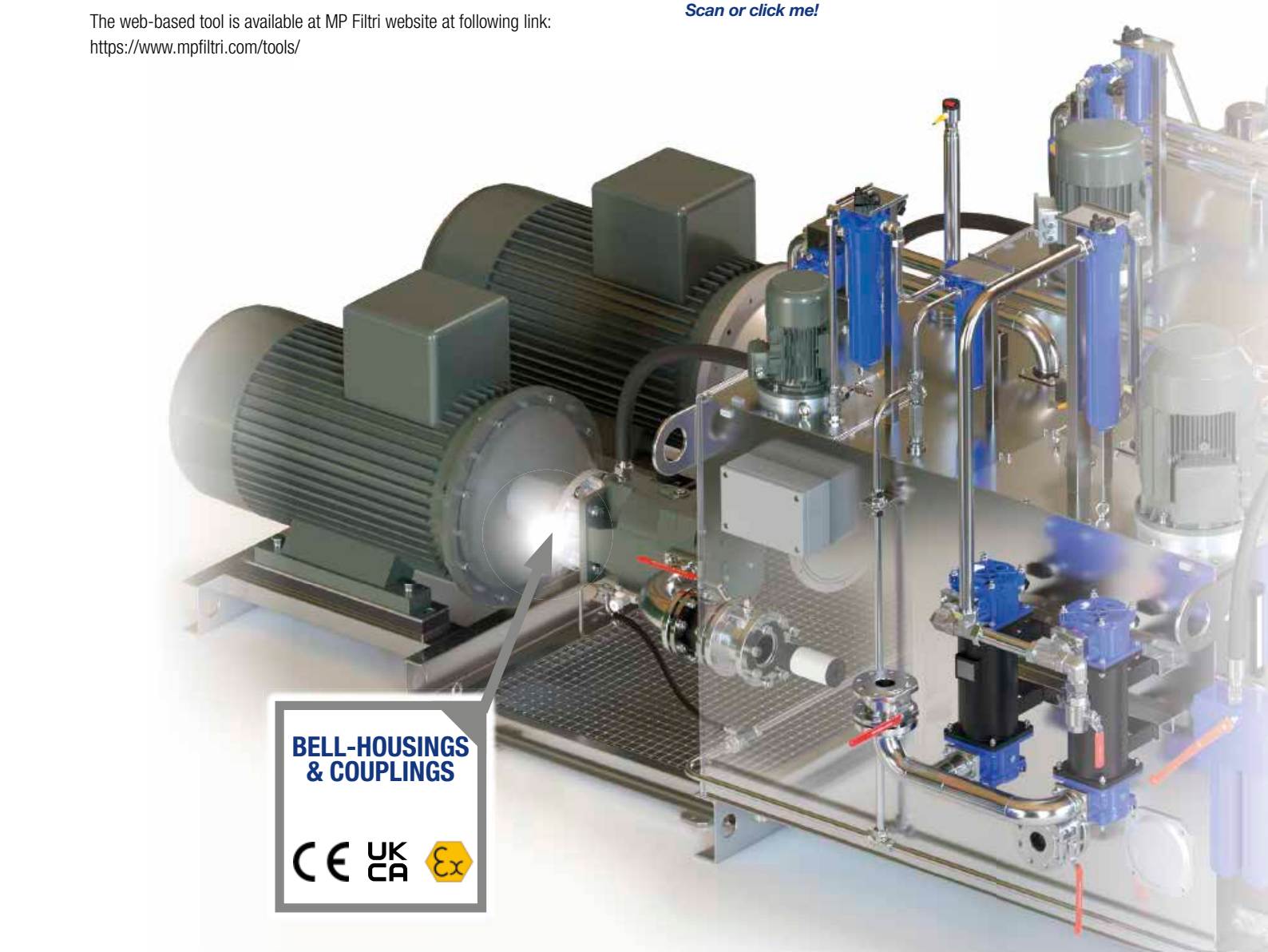
The program will automatically check your input design process prior to propose you the acceptable solutions and create an output in PDF report style format.

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

Scan or click me!



BELL-HOUSINGS & COUPLINGS SIZING

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

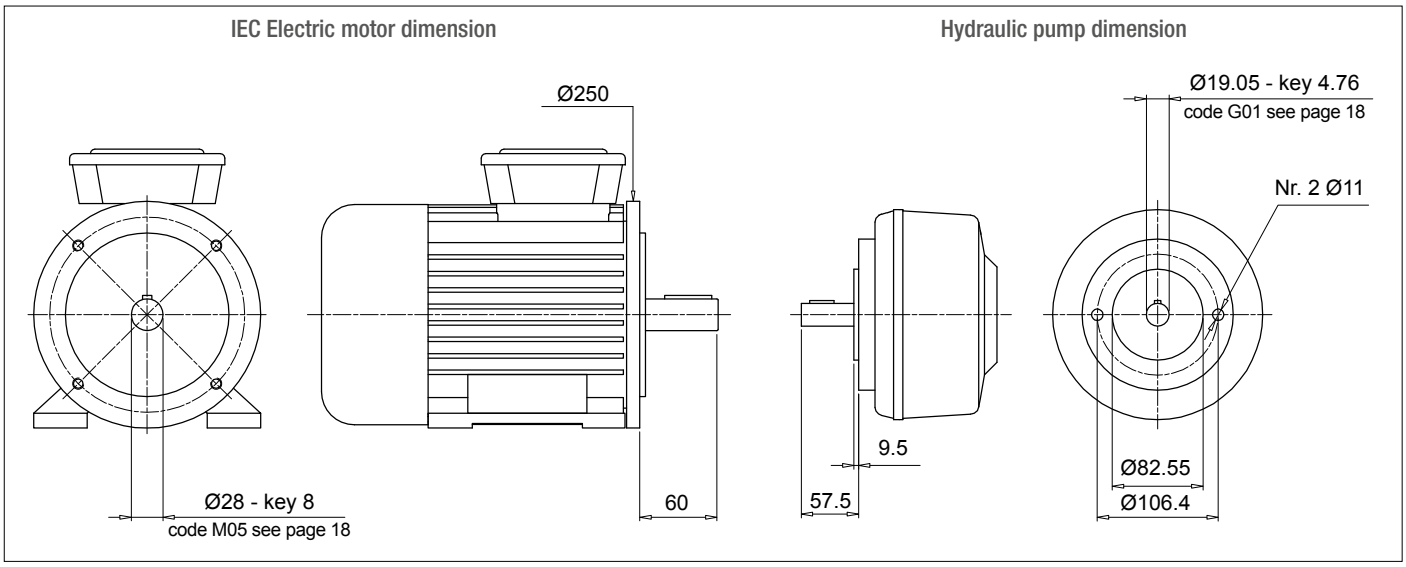
DATA REQUIRED

- 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 ≥ 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 ≥ 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 ≥ 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
LMC = 138 mm - 60 - 18 - 9.5 = 50.5 mm
LMS = 148 mm - 60 - 18 - 9.5 = 60.5 mm

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

Drive couplings provide the means by which power is transmitted from the electric motor to the hydraulic pump.

By virtue of their flexible structure, they are able to compensate angular and radial misalignments between motor and pump, and appreciably attenuate the noise generated through the drive line.

The couplings illustrated are available in aluminium and cast iron versions, with a variety of spider options, and will cover a range of applications using electric motors from size 63, rated 0.15 kW, up to size 400 rated 400 kW.

Grub screw on all half-couplings.
Cast iron half-coupling SGEG available with screw mounted.
Steel half-couplings SGES and SGDR available with screw.

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.mpfltri.com”.

The half-couplings SGE* series are in conformity to normative DIN 740/2.**
The max torque to transmit is always less than the max torque that the coupling can transmit.

Couplings

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SGEG - SGEA - SGES - SGEK - EGE	21
AKG	39
SGDR - EGR	47
COMPONENTS FOR e-PTO SYSTEMS	53

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	ß [°]
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

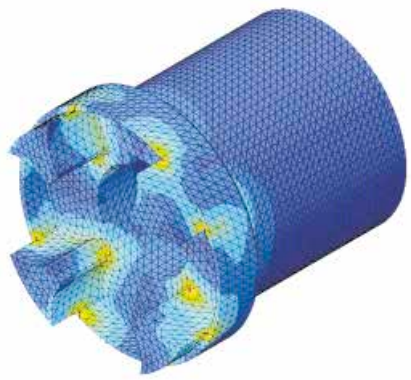
Standard ATEX Directive 2014/34/EU and UK Regulation S.I. 2016 No. 1107 (as amended)

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:

CAD 3D

FEM



Drawings 3D available on website www.mpfiltri.com at section TOOLS.

Examples verification of the coupling

Torque transmitted by electric motor:

Mt: 9560 x kW / rpm = Nm
Me > Mt x 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

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

Example
Electric motor, 4 pole - 4 kW
hydraulic pump, uniform load, low operating pressure
Mt: 9560 x 4 / 1500 = 25.45 Nm
Me > 25.49 x 1.3 = 33 Nm

Half-coupling SGEA21 meets the above requirement.

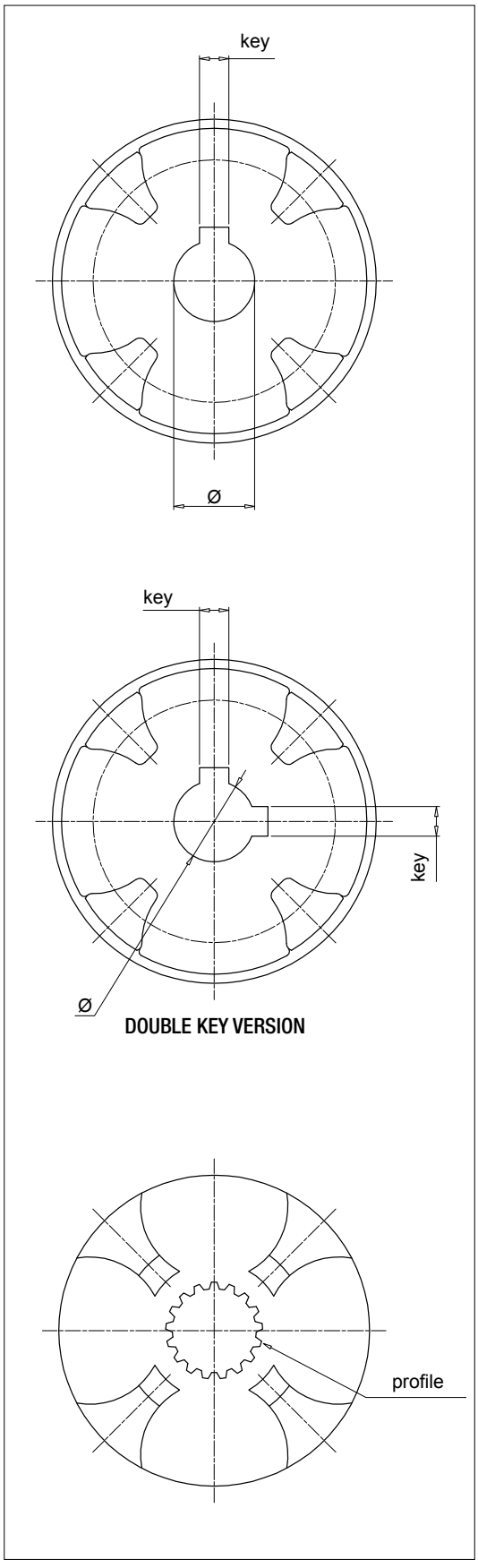
Select the half-coupling of the calculated size from the motor half-couplings table.
Note: When selecting the coupling, remember that for pumps with splined shaft, only cast iron couplings of the SGEG series can be used.

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	
	ROTAFIT				
SGEA01	**SGEK01**	44	10	20	
SGEA21	**SGEK21**	70	95	190	
SGEA31	**SGEK31**	85	190	380	
SGEA51	**SGEK51**	109.5	310	620	**ALUMINIUM**
SGEG01		40	10	20	
SGEG30		80	190	380	
SGEG40	**SGEK40**	95	310	620	
SGEG60	**SGEK60**	120	430	860	
SGEG80	**SGEK80**	160	1250	2500	
SGEG90		200	5500	6100	**CAST IRON**
SGES40		95	310	620	
SGES60		120	430	860	
SGES80		180	1250	2500	**STEEL**

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

Parallel shaft - Imperial Dimensions

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

Parallel shaft - Double Key

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

******* = coupling length

SAE Bore - ANS.B.92.1-1970

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

Splined bore as per standard DIN5480

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

Splined bore as per standard DIN5481

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

Splined bore as per standard DIN5482

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

SGEG - SGEA - SGES - SGEK - EGE series

Flexible half-coupling in aluminium, cast iron and steel

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)

ROTAFIT

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	Aluminiun	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] 2-pole	4, 6, 8 pole	Output P [kW]	Torque T [Nm]		Output P [kW]	Torque T [Nm]		Output P [kW]	Torque T [Nm]		Output P [kW]	Torque T [Nm]	
56	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				
63	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				
71	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	
80	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	
90S	24 x 50		1.5	5	21	1.1	7.5	21	0.75	8	21	0.37	5.3	21
90L			2.2	7.4		1.5	10		1.1	12		0.55	7.9	
100L	28 x 60		3	9.8		2.2	15		1.5	15		0.75	11	
						3	20					1.1	16	
112M			4	13		4	27		2.2	22		1.5	21	
132S	38 x 80		5.5	18	31	5.5	36	31	3	30	31	2.2	30	31
			7.5	25										
132M						7.5	49		4	40		3	40	
									5.5	55				
160M	42 x 110		11	36		11	72		7.5	75		4	54	
			15	49								5.5	74	
160L			18.5	60	40/51	15	98	40/51	11	109	40/51	7.5	100	40/51
180M	48 x 110		22	71		18.5	121							
180L						22	144		15	148		11	145	
200L	55 x 110		30	97		30	196		18.5	181		15	198	
			37	120					22	215				
200S	55 x 110	60 x 140			60	37	240	60			60	18.5	244	60
225M			45	145		45	292		30	293		22	290	
250M	60 x 140	65 x 140	55	177		55	356		37	361		30	392	
280S		75 x 140	75	241		75	484		45	438		37	483	
280M			90	289		90	581		55	535		45	587	
315S		80 x 170	110	353		110	707		75	727		55	712	
315M	65 x 140		132	423	80	132	849	80	90	873	80	75	971	80
			160	513		160	1030		110	1070		90	1170	
315L			200	641		200	1290		132	1280		110	1420	
									160	1550		132	1710	
315		85 x 170	250	802		250	1600		200	1930		160	2070	
			315	1010		315	2020		250	2410		200	2580	
355	75 x 140	95 x 170	355	1140		355	2280							
			400	1280		400	2570		315	3040		250	3220	
			500	1600		500	3210		400	3850		315	4060	
400	80 x 170	110 x 210	560	1790	90	560	3580	90	450	4330	90	355	4570	90
			630	2020		630	4030		500	4810		400	5150	
			710	2270		710	4540		560	5390		450	5790	
			800	2560		800	5120		630	6060		500	6420	

Designation & Ordering code

PUMP HALF-COUPLING FOR PARALLEL SHAFT

Configuration example: SGE | A | 21 | G02 | 050 | 2E

Pump half-coupling

SGE

Series and material

A	Aluminium
G	Cast Iron
S	Steel
K	Aluminium / Cast Iron - Reduced length

ROTAFIT

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

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)

PUMP HALF-COUPLING FOR SPLINED SHAFT

Configuration example: SGE | G | 40 | PD02 | 050

Pump half-coupling

SGE

Series and material

G	Cast Iron
S	Steel
K	Cast Iron - Reduced length

ROTAFIT

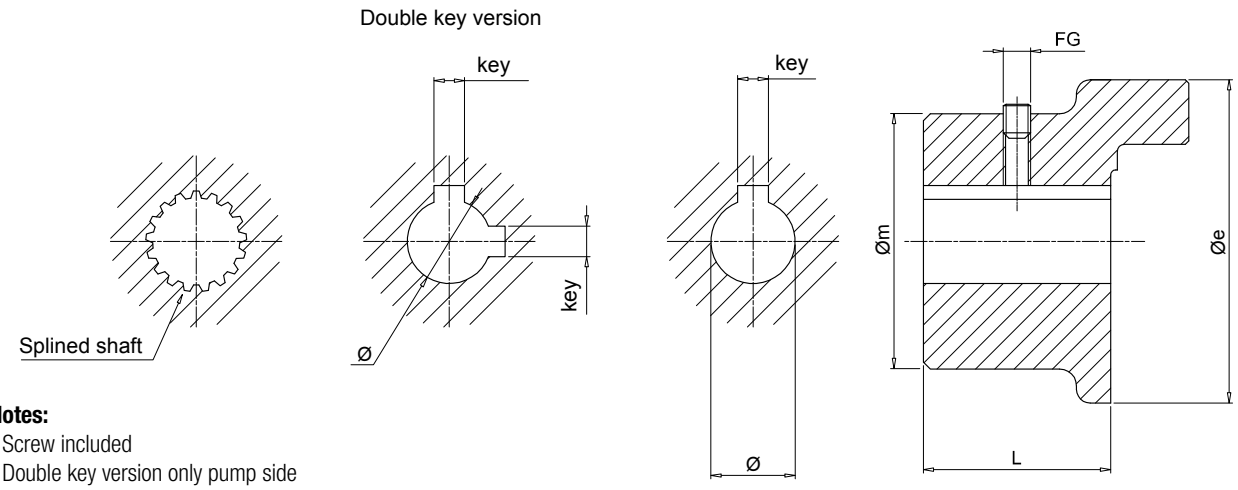
Size	SGEG	SGES	SGEK
	01	01	01
	30	30	21
	40	40	31
	60	60	51
	80	80	40
	90	90	60
			80

Pump shaft code

PD02 See pages 19

Length

050 See pages 28 ÷ 30



Notes:
- Screw included
- Double key version only pump side

Motor half-coupling

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

Pump half-couplings

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

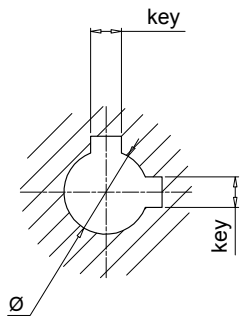
Complete the half-coupling code with the shaft's code and length
Example: **SGEG40PD02040**

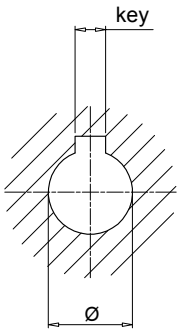
PD02 - see page 19
040 - table "pump half-coupling - standard lengths"

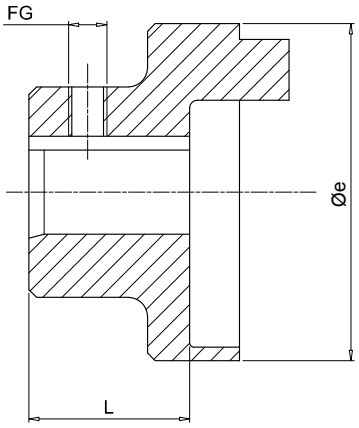
All SGEG series half-couplings are supplied with a grub screw hole as standard, and with a grub screw **UNI 5929 DIN 916** fitted to the hub.
Note: For lengths other than those indicated in "Pump half-coupling" table, contact MP Filtri Technical and Sales Department.

Dimensions

Double key version







Notes:
- Screw not included
- Double key version pump side only

Motor half-coupling

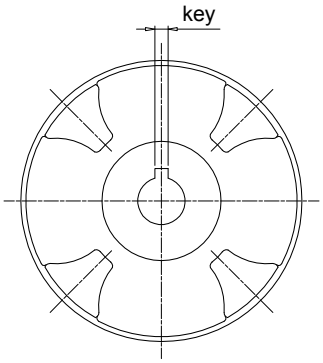
IEC - Electric motors		Half-coupling code	Dimensions [mm]					Weight [kg]
Motor size	Shaft end [Ø x L]		Øe	L	Ø	key	FG	
63	11x23	**SGEA01M01019**	44.0	21	11	4	M5	0.07
71	14x30	**SGEA01M02028**	44.0	28	14	5	M5	0.08
80	19x40	**SGEA01M03040**	44.0	40	19	6	M5	0.12
		SGEA21M03040	70.0	40	19	6	M6	0.30
90	24x50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

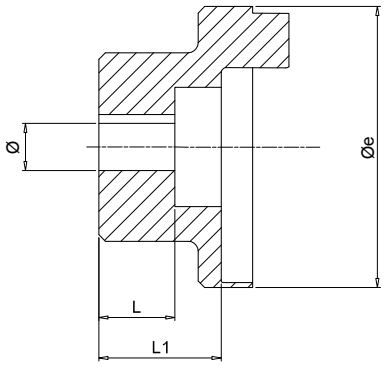
Pump half-couplings

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

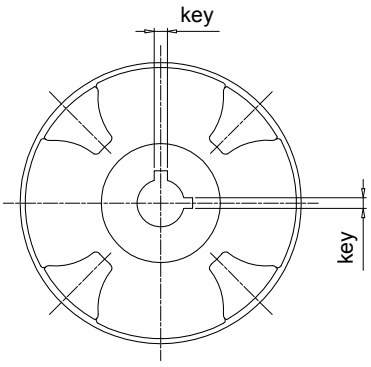
D02 - see page 18
040 - table "pump half-coupling - standard lengths"

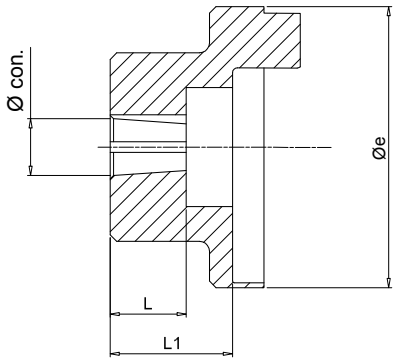




Half-coupling for gear pumps - parallel

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

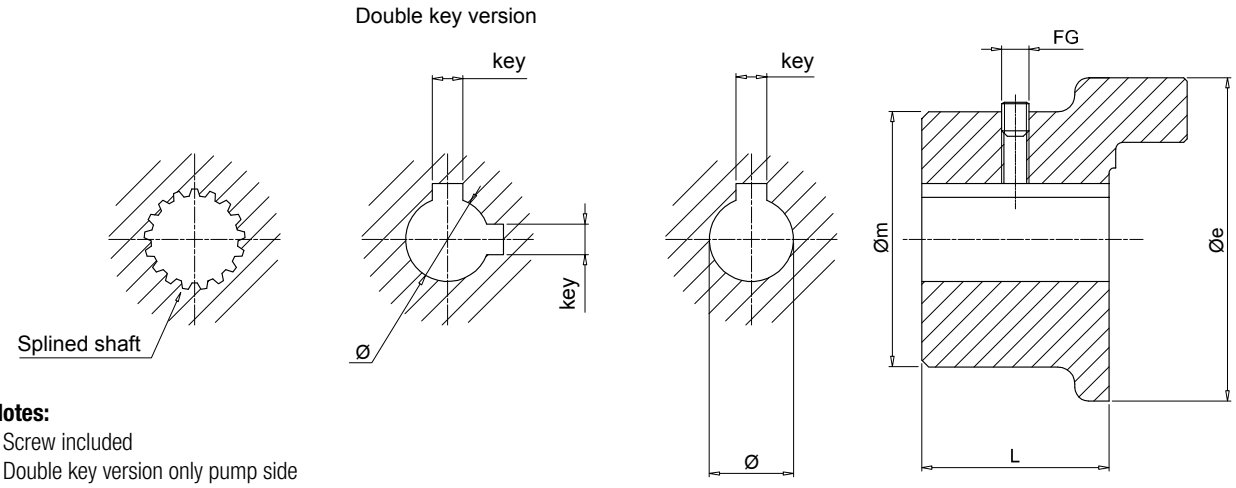




Half-coupling for gear pumps - tapered

Half-coupling code	Dimensions [mm]					Weight [kg]	Conical
	Øe	L	L1	Ø	key		
SGEA01FS100	44.0	14.5	16.0	9.7	2.4	0.12	1:8
SGEA01FS1M0	44.0	16.0	16.0	13.9	3	0.30	1:8
SGEA01FSZBR	44.0	11.5	14.5	9.8	2	0.28	1:5
SGEA21FS100	70.0	14.5	21.5	9.7	2.4	0.33	1:8
SGEA21FS1M0	70.0	18.5	21.5	13.9	3	0.78	1:8
SGEA21FS200	70.0	21.5	21.5	17.2	3.2 - 4	1.60	1:8
SGEA21FSZFR	70.0	20.0	21.5	16.9	3	1.60	1:5
SGEA21FS300	70.0	27.0	41.0	21.6	4	1.60	1:8
SGEA31FS100	85.0	14.5	37.0	9.7	2.4	1.90	1:8
SGEA31FS1M0	85.0	17.5	36.0	13.9	3	0.33	1:8
SGEA31FS200	85.0	23.0	37.0	17.2	3.2 - 4	0.48	1:8
SGEA31FS300	85.0	27.0	37.0	21.6	4	0.78	1:8
SGEA31FS350	85.0	35.0	37.0	25.6	4.76 - 5	1.60	1:8
SGEA31FSZFR	85.0	17.0	37.0	16.9	3	1.60	1:5
SGEA31FSZGR	85.0	27.0	34.0	25.2	5	1.60	1:5
SGEA51FS200	109.5	23.5	32.0	17.2	3.2 - 4	1.90	1:8
SGEA51FS300	109.5	25.0	32.0	21.6	4	1.90	1:8
SGEA51FS350	109.5	32.0	32.0	25.6	4.76 - 5	1.60	1:8
SGEA51FSZFR	109.5	19.5	32.0	16.9	3	1.90	1:5
SGEA51FSZGR	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 Motor size	Shaft end [Ø x L]	Half-coupling code	Dimensions [mm] Øe	Øm	L	Ø	key	FG	Weight [kg]
63	11x23	**SGES01M01021**	40	50	21	11	4	M6	0.32
71	14x30	**SGES01M02028**	40	50	28	14	5	M6	0.42
80	19x40	**SGES01M03040**	40	50	40	19	6	M6	0.61
90	24x50	**SGES01M04050**	40	50	50	24	8	M6	0.77
100 - 112	28x60	**SGES31M05060**	80	-	60	28	8	M8	2.35
		SGES40M05060	95	-	60	28	8	M8	2.65
132	38x80	**SGES31M06080**	80	-	80	38	10	M8	3.15
		SGES40M06080	95	-	80	38	10	M8	3.55
160	42x110	**SGES40M07110**	95	-	110	42	12	M8	4.70
180	48x110	**SGES40M08110**	95	-	110	48	14	M8	4.55
200	55x110	**SGES40M09110**	95	-	110	55	16	M8	4.35
		SGES60M09110	120	-	110	55	16	M8	9.00
225	60x140	**SGES60M10140**	120	-	140	60	18	M8	12.30
250	65x140	**SGES60M11140**	120	-	140	65	18	M8	12.00
		SGES80M11140	160	-	140	65	18	M8	18.30
280	75x140	**SGES80M12140**	160	-	140	75	20	M10	17.70
		SGES90M12100	200	-	100	75	20	M10	21.00
315	80x170	**SGES80M13170**	160	-	170	80	22	M10	20.60
		SGES90M13100	200	-	100	80	22	M10	20.00
355	95x140	**SGES90M15100**	200	-	100	95	25	M10	19.00
400	100x210	**SGES90M16100**	200	-	100	100	28	M10	18.00

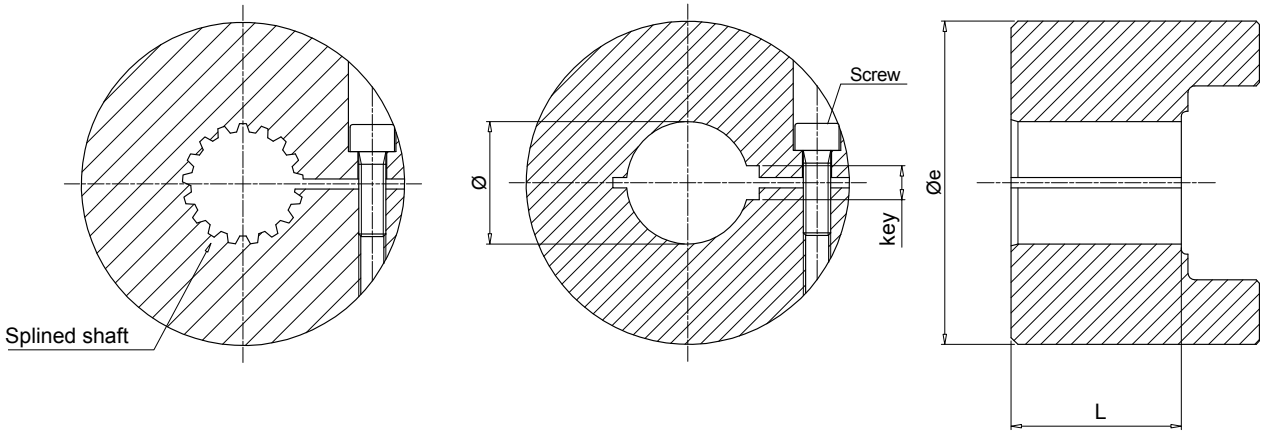
Pump half-couplings

Half-coupling code	Dimensions [mm] Ø min	Ø max	Øe	L min	L max	Standard lengths [mm]
SGES01 *** ***	-	24	40	20	50	every 5 mm
SGES30 *** ***	-	42	80	30	80	
SGES40 *** ***	-	55	95	30	110	
SGES60 *** ***	-	75	120	40	140	
SGES80 *** ***	-	85	160	50	170	
SGES90 *** ***	-	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	**SGES40M06050G0**	95	50	38	10	M8	4.00
160	42x110	**SGES40M07065G0**	95	65	42	12	M8	5.00
180	48x110	**SGES40M08065G0**	95	65	48	14	M8	5.00
200	55x110	**SGES60M09085G0**	120	85	55	16	M10	8.00
225	60x140	**SGES60M10085G0**	120	85	60	18	M10	8.00
250	65x140	**SGES60M11085G0**	120	85	65	18	M10	8.00
280	75x140	**SGES60M12085G0**	120	85	75	20	M10	8.00
315	80x170	**SGES80M13085G0**	160	85	80	22	M10	13.00

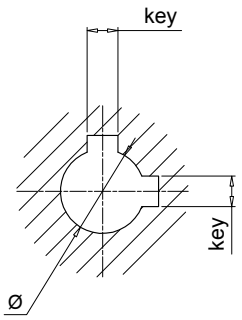
Pump half-couplings

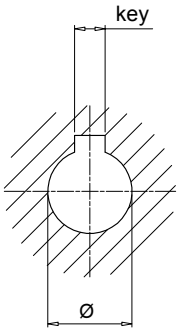
Half-coupling code	Dimensions [mm]			
	Ø min	Ø max	Øe	L
SGES40 * *****	-	55	95	35
SGES60 * *****	-	65	120	65
SGES80 * *****	-	75	160	85

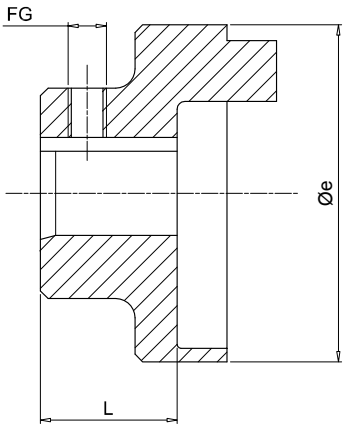
Complete the half-coupling designation with the pump interface code and the length.
Example: **SGES40PD02035G0** (see page 19).

Dimensions

Double key version







Notes:
- Screw not included
- Double key version pump side only

Motor half-coupling

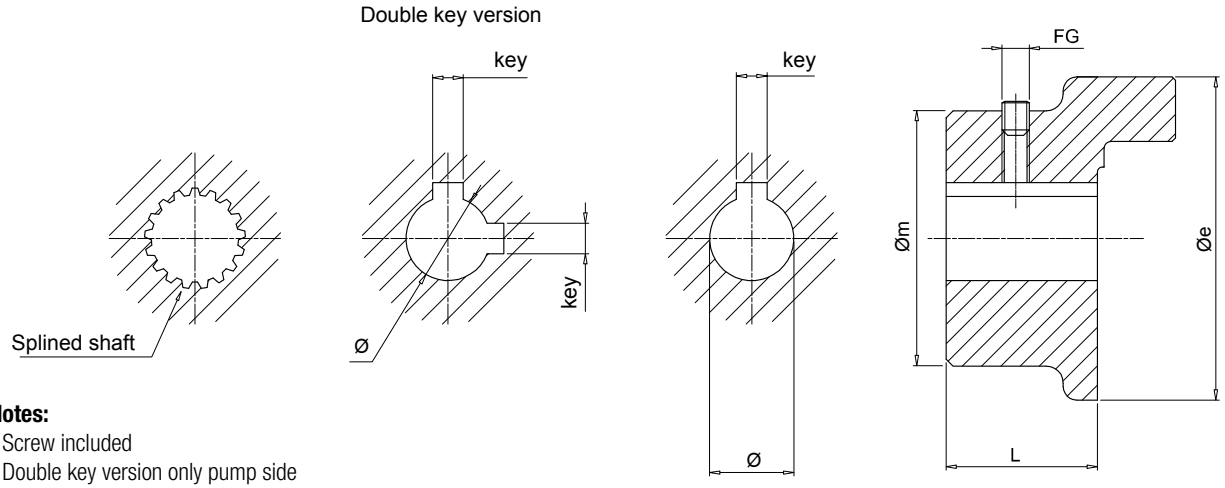
IEC - Electric motors		Half-coupling code	Dimensions [mm]					Weight [kg]
Motor size	Shaft end [Ø x L]		Øe	L	Ø	key	FG	
63	11x23	**SGEA01M01019**	44.0	21	11	4	M5	0.07
71	14x30	**SGEA01M02028**	44.0	28	14	5	M5	0.08
80	19x40	**SGEA01M03040**	44.0	40	19	6	M5	0.12
		SGEA21M03040	70.0	40	19	6	M6	0.30
90	24x50	**SGEA01M04048**	44.0	48	24	8	M5	0.13
		SGEA21M04048	70.0	48	24	8	M6	0.28
100 - 112	28x60	**SGEA21M05060**	70.0	60	28	8	M6	0.33
		SGEA31M05060	85.0	60	28	8	M8	0.48
132	38x80	**SGEA21M06080**	70.0	80	38	10	M6	0.44
		SGEA31M06077	85.0	77	38	10	M8	0.78
		SGEA51M06077	109.5	77	38	10	M8	1.60
160	42x110	**SGEA51M07109**	109.5	109	42	12	M8	1.60
180	48x110	**SGEA51M08109**	109.5	109	48	14	M8	1.60
200	55x110	**SGEA51M09109**	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		
SGEK01 *** ***	11	19	44.0	25	M5	0.08
SGEK21 *** ***	15	28	70.0	35	M6	0.10
SGEK31 *** ***	18	42	85.0	45	M8	0.15
SGEK51 *** ***	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	**SGEG01M01021**	40	50	21	11	4	M6	0.32
71	14x30	**SGEG01M02028**	40	50	28	14	5	M6	0.42
80	19x40	**SGEG01M03040**	40	50	40	19	6	M6	0.61
90	24x50	**SGEG01M04050**	40	50	50	24	8	M6	0.77
100 - 112	28x60	**SGEG30M05060**	80	65	60	28	8	M8	2.35
		SGEG40M05060	95	75	60	28	8	M8	2.65
132	38x80	**SGEG30M06080**	80	65	80	38	10	M8	3.15
		SGEG40M06080	95	75	80	38	10	M8	3.55
160	42x110	**SGEG40M07110**	95	75	110	42	12	M8	4.70
180	48x110	**SGEG40M08110**	95	95	110	48	14	M8	4.55
200	55x110	**SGEG40M09110**	95	95	110	55	16	M8	4.35
		SGEG60M09110	120	98	110	55	16	M8	9.00
225	60x140	**SGEG60M10140**	120	118	140	60	18	M8	12.30
250	65x140	**SGEG60M11140**	120	118	140	65	18	M8	12.00
		SGEG80M11140	160	138	140	65	18	M8	18.30
280	75x140	**SGEG80M12140**	160	138	140	75	20	M10	17.70
		SGEG90M12100	200	160	100	75	20	M10	21.00
315	80x170	**SGEG80M13170**	160	138	170	80	22	M10	20.60
		SGEG90M13100	200	160	100	80	22	M10	20.00
355	95x140	**SGEG90M15100**	200	160	100	95	25	M10	19.00
400	100x210	**SGEG90M16100**	200	160	100	100	28	M10	18.00

Pump half-couplings

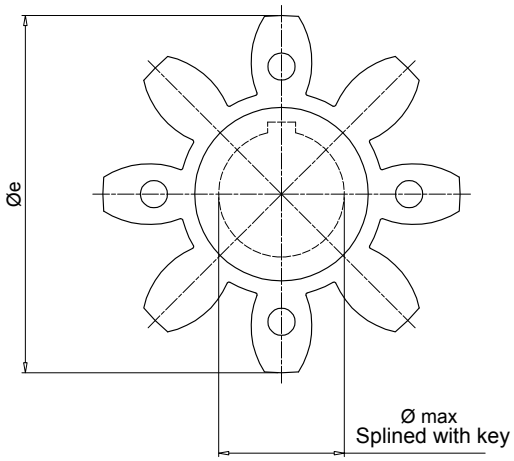
Half-coupling code	Dimensions [mm]				FG	Weight [kg]
	Ø min	Ø max	Øe	L		
SGEK40 * *****	-	55	95	50	M8	3
SGEK60 * *****	-	75	12	65	M8	6
SGEK80 * *****	-	85	160	85	M10	8

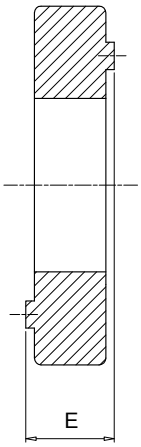
Complete the half-coupling code with the shaft's code and length
Example: **SGEK40PD02050**

PD02 - see page 19
050 - table "pump half coupling - dimension L"

All SGEG/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.

Dimensions

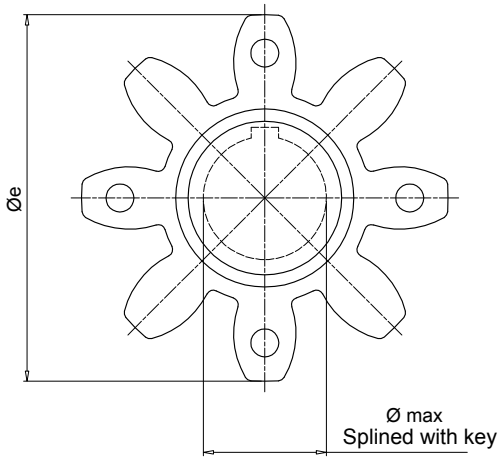


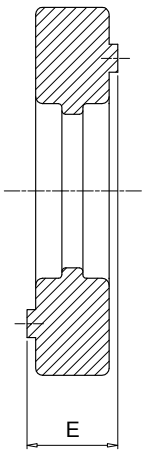


Notes:
Made of black oil-resistant rubber, these components serve to interconnect the two halves (motor - pump) of a flexible coupling.

EGE** series

Code	Half-coupling code		Dimensions [mm] E	Øe	Ø max	Nominal torque Nm	Max torque Nm	Weight [kg]
		ROTAFIT						
EGE0	SGEA01 - SGEG01	SGEK01	15	40	16	10	20	0.006
EGE2	SGEA21	SGEK21	18	65	25	95	190	0.02
EGE3	SGEA31 - SGEG30	SGEK31	22	80	35	190	380	0.04
EGE5	SGEA51	SGEK51	26	105	45	310	620	0.06
EGE4	SGEG40 - SGES40	SGEK40	24	95	40	310	620	0.09
EGE6	SGEG60 - SGES60	SGEK60	28	120	55	430	860	0.13
EGE8	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] E	Øe	Ø max	Nominal torque Nm	Max torque Nm	Weight [kg]
		ROTAFIT						
EGE0RR	SGEA01 - SGEG01	SGEK01	15	40	16	15	30	0.006
EGE2RR	SGEA21	SGEK21	18	65	25	115	230	0.02
EGE3RR	SGEA31 - SGEG30	SGEK31	22	80	35	250	500	0.04
EGE5RR	SGEA51	SGEK51	26	105	45	400	800	0.06
EGE4RR	SGEG40 - SGES40	SGEK40	24	95	40	380	760	0.09
EGE6RR	SGEG60 - SGES60	SGEK60	28	120	55	550	1100	0.13
EGE8RR	SGEG80 - SGES80	SGEK80	38	160	75	1400	2900	0.36
EGE9RP	SGEG90	-	45	200	95	5500	6100	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	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	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	40/80	48/96	48/96	48/96	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	14	14	14	16	17	18	18	18	20	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	30	31	32	33	34	35	36	41
		8x10	10x12	12x14	15x17	17x20	21x24	26x30	38x34	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	9	10	12	13	14	15	16	17	18	19	20	21	22	23	24
		A15x12	A17x14	A18x15	A20x17	A22x19	A25x22	A28x25	A30x27	A32x28	A35x31	A38x34	A40x36	A42x38	A45x41	A48x44	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	26	27	28	29	30	31	32	33	34	35	36	37	38	39
		A52x47	A55x50	A58x53	A60x55	A62x57	A65x60	A68x62	A70x64	A72x66	A75x69	A78x72	A80x74	A82x76	A85x79	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	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

AKG series

IEC electric motor range from size 63 up to size 225

Couplings - IEC electric motor range from size 63 up to size 225

Materials
- Hubs: Aluminium, cast iron, steel
- Spider materials: NBR rubber 87 Sh A
  Polyurethane 95 Sh A

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

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

Temperature
From -30 °C to +80 °C

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

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

On request, it's possible to certificate the AKG according to ATEX CAT. 2G - Areas 1 - 2

IEC Electric motors

Coupling size	European standard size						German standard size			IEC Motors size
	0.5	1	2	3	3.5	4	ZB	ZF	ZG	
AKG02	●	●	●				●			**IEC 63 Ø140 - Ø11x23**
AKG03	●	●	●				●			**IEC 71 Ø160 - Ø14x30**
AKG04	●	●	●	●			●	●		**IEC 80 Ø200 - Ø19x40**
AKG05	●	●	●	●			●	●		**IEC 90 Ø200 - Ø24x50**
AKG07		●	●	●			●	●		**IEC 110 Ø250 - Ø28x60**
AKG07		●	●	●			●	●		**IEC 112 Ø250 - Ø28x60**
AKG11		●	●	●	●	●		●	●	**IEC 132 Ø300 - Ø38x80**
AKG12			●	●	●	●	●	●	●	**IEC 160 Ø350 - Ø42x110**
AKG13			●	●	●	●	●	●	●	**IEC 180 Ø350 - Ø48x110**
AKG16			●	●	●	●	●	●	●	**IEC 200 Ø400 - Ø55x110**
AKG18			●	●	●	●	●	●	●	**IEC 225 Ø450 - Ø60x140**

KIT COUPLING FOR GEAR PUMPS

Configuration example: AKG02 | FS200 | Z | EX

Motors identification code

	Size		Size
02	63 B3-B5	**13**	180 B3-B5
03	71 B3-B5	**43**	63 B14
04	80 B3-B5	**44**	71 B14
05	90 B3-B5	**45**	80 B14
07	100/112 B3-B5	**46**	90 B14
11	132 B3-B5	**48**	100/112 B14
12	160 B3-B5		

Pump flange identification code

FS200 See pages 43 - 44 - 45

Pump identification code

Z Revision index

ATEX certification identification code

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

KIT COUPLING FOR PISTON PUMPS VANES AND SCREWS

Configuration example: AKG | M01 | Z0000 | EX

Motors identification code

	Size		Size
M01	80 B3-B5	**M07**	200 B3-B5
M02	90 B3-B5	**M08**	225 B3-B5
M03	100/112 B3-B5	**M09**	250 B3-B5
M04	132 B3-B5	**M10**	280 B3-B5
M05	160 B3-B5	**M11**	315 B3-B5
M06	180 B3-B5	**M12**	355 B3-B5

Electric motor identification code

M01 See software

Pump identification code

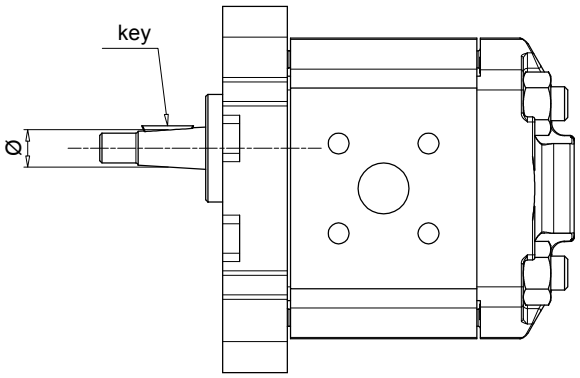
Z0000 See software

ATEX certification identification code

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

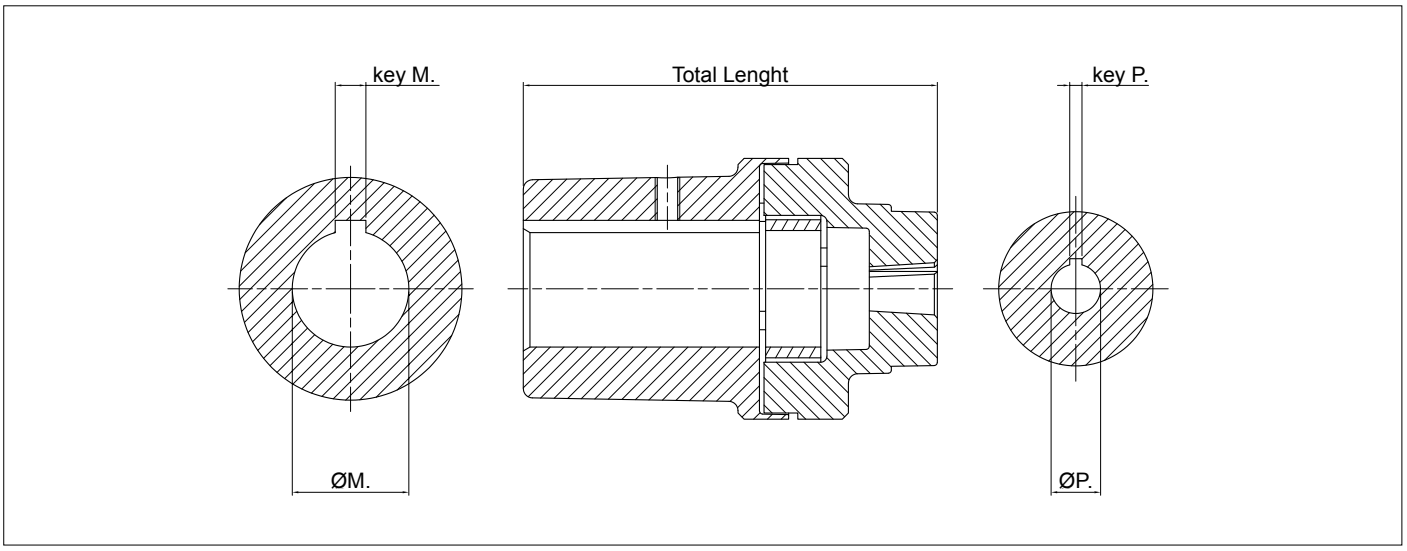
NOTE:
The complete code of the coupling kit can be selected following the selection of electric motor and hydraulic pump on the B&C selection software available on www.mpfiltri.com

Dimensions



Shaft identification

Pump group	d	Key	Shaft type	Pump half-coupling code
05	6.0	2.0	parallel	**FS05M**
	7.0	2.0	parallel	**FS05C**
1	9.7	2.4	tapered 1:8	**FS100**
	12.0	3.0	parallel	**FS1C0**
	13.9	3.0	tapered 1:8	**FS1M0**
2	17.2	3.2 - 4	tapered 1:8	**FS200**
3	22.2	4.0	tapered 1:8	**FS300**
	22.2	4.0	tapered 1:8	**FS300**
	22.2	4.0	tapered 1:8	**FS300**
	22.2	4.0	tapered 1:8	**FS300**
3.5	25.6	4.76 - 5.0	tapered 1:8	**FS350**
	25.6	4.76 - 5.0	tapered 1:8	**FS350**
4	33.3	6.35 - 7.0	tapered 1:8	**FS400**
	33.3	6.35 - 7.0	tapered 1:8	**FS400**
Bosch	9.8	2.0	tapered 1:5	**FSZBR**
	16.9	3.0	tapered 1:5	**FSZFR**
	25.2	5.0	tapered 1:5	**FSZGR**



IEC Motors B3/5 - standard gear pump

IEC - Electric motors		Pump identification code	Components								
Motor size	Shaft end [Ø x L]		Motor half-coupling code	Spider code	Codice Semigiunto pompa	Complete coupling kit code	ØM.	Key M.	ØP.	Key P.	Tot. L.
63	11x23	**FS05M**	SGEA01M01019	EGE 0	SGEA01FS05M	AKG02FS05MZEX	11	4	6	2	50
		FS05C			SGEA01FS05C	AKG02FS05CZEX			7	2	
		FS100			SGEA01FS100	AKG02FS100ZEX			9.7-1:8	2.4	
		FS1C0			SGEA01FS1C0	AKG02FS1C0ZEX			12	3	
		FS1M0			SGEA01FS1M0	AKG02FS1M0ZEX			13.9-1:8	3	
		FSZBR			SGEA01FSZBR	AKG02FSZBRZEX			9.8-1:5	2	
71	14x30	**FS05M**	SGEA01M02028	EGE 0	SGEA01FS05M	AKG03FS05MZEX	14	5	6	2	59
		FS05C			SGEA01FS05C	AKG03FS05CZEX			7	2	
		FS100			SGEA01FS100	AKG03FS100ZEX			9.7-1:8	2.4	
		FS1C0			SGEA01FS1C0	AKG03FS1C0ZEX			12	3	
		FS1M0			SGEA01FS1M0	AKG03FS1M0ZEX			13.9-1:8	3	
		FSZBR			SGEA01FSZBR	AKG03FSZBRZEX			9.8-1:5	2	
80	19x40	**FS05M**	SGEA01M03048	EGE 0	SGEA01FS05M	AKG04FS05MZEX	19	6	6	2	80
		FS05C			SGEA01FS05C	AKG04FS05CZEX			7	2	
		FS100			SGEA01FS100	AKG04FS100ZEX			9.7-1:8	2.4	
		FS1C0			SGEA01FS1C0	AKG04FS1C0ZEX			12	3	
		FS1M0			SGEA01FS1M0	AKG04FS1M0ZEX			13.9-1:8	3	
		FSZBR			SGEA01FSZBR	AKG04FSZBRZEX			9.8-1:5	2	
		FS200	SGEA21M03048	EGE 2	SGEA21FS200	AKG04FS200ZEX	19	6	17.2-1:8	3.5/4	94
		FSZFR			SGEA21FSZFR	AKG04FSZFRZEX			16.9	3	
90	24x50	**FS05M**	SGEA01M04048	EGE 0	SGEA01FS05M	AKG05FS05MZEX	24	8	6	2	80
		FS05C			SGEA01FS05C	AKG05FS05CZEX			7	2	
		FS100			SGEA01FS100	AKG05FS100ZEX			9.7-1:8	2.4	
		FS1C0			SGEA01FS1C0	AKG05FS1C0ZEX			12	3	
		FS1M0			SGEA01FS1M0	AKG05FS1M0ZEX			13.9-1:8	3	
		FSZBR			SGEA01FSZBR	AKG05FSZBRZEX			9.8-1:5	2	
		FS200	SGEA21M04048	EGE 2	SGEA21FS200	AKG05FS200ZEX	24	8	17.2-1:8	3.5/4	94
		FSZFR			SGEA21FSZFR	AKG05FSZFRZEX			16.9	3	
100 112	28x60	**FS100**	SGEA21M05055	EGE 2	SGEA21FS100	AKG07FS100ZEX	28	8	9.7-1:8	2.4	94
		FS1C0			SGEA21FS1C0	AKG07FS1C0ZEX			12	3	
		FS1M0			SGEA21FS1M0	AKG07FS1M0ZEX			13.9-1:8	3	
		FSZBR			SGEA21FSZBR	AKG07FSZBRZEX			25.2-1:5	5	
		FS200			SGEA21FS200	AKG07FS200ZEX			17.2-1:8	3.2/4	
		FSZFR			SGEA21FSZFR	AKG07FSZFRZEX			16.9-1:5	3	
		FS25T			SGEA21FS300	AKG07FS300ZEX			22.22-1:8	4	
		FS300			SGEA21FS300	AKG07FS300ZEX			22.22-1:8	4	
		FS3M0			SGEA21FS300	AKG07FS300ZEX			22.22-1:8	4	
		FS3T0			SGEA21FS300	AKG07FS300ZEX			22.22-1:8	4	

IEC Motors B3/5 - standard gear pump

IEC - Electric motors		Pump identification code	Components								
Motor size	Shaft end [Ø x L]		Motor half-coupling code	Spider code	Pump half-coupling code	Complete coupling kit code	ØM.	Key M.	ØP.	Key P.	Tot. L.
132	38x80	**FS100**	SGEA31M06077	EGE 3	SGEA31FS100	AKG11FS100ZEX	38	10	9.7-1:8	2.4	135
		FS1C0			SGEA31FS1C0	AKG11FS1C0ZEX			12	3	
		FS1M0			SGEA31FS1M0	AKG11FS1M0ZEX			13.9-1:8	3	
		FSZGR			SGEA31FSZGR	AKG11FSZGRZEX			25.2-1:5	5	
		FS200			SGEA31FS200	AKG11FS200ZEX			17.2-1:8	3.2/4	
		FSZFR			SGEA31FSZFR	AKG11FSZFRZEX			16.9-1:5	3	
		FS25T			SGEA31FS300	AKG11FS300ZEX			22.22-1:8	4	
		FS300			SGEA31FS300	AKG11FS300ZEX			22.22-1:8	4	
		FS3M0			SGEA31FS300	AKG11FS300ZEX			22.22-1:8	4	
		FS3T0			SGEA31FS300	AKG11FS300ZEX			22.22-1:8	4	
		FS35M			SGEA31FS350	AKG11FS350ZEX			25.6-1:5	4.76/5	
		FS350			SGEA31FS350	AKG11FS350ZEX			25.6-1:5	4.76/5	
160	42x110	**FSZGR**	SGEA51M07109	EGE 5	SGEA51FSZGR	AKG12FSZGRZEX	42	12	25.2-1:5	5	167
		FS200			SGEA51FS200	AKG12FS200ZEX			17.2-1:8	3.2/4	
		FSZFR			SGEA51FSZFR	AKG12FSZFRZEX			16.9-1:5	3	
		FS25T			SGEA51FS300	AKG12FS300ZEX			22.22-1:8	4	
		FS300			SGEA51FS300	AKG12FS300ZEX			22.22-1:8	4	
		FS3M0			SGEA51FS300	AKG12FS300ZEX			22.22-1:8	4	
		FS3T0			SGEA51FS300	AKG12FS300ZEX			22.22-1:8	4	
		FS35M			SGEA51FS350	AKG12FS350ZEX			25.6-1:5	4.76/5	
		FS350			SGEA51FS350	AKG12FS350ZEX			25.6-1:5	4.76/5	
180	48x110	**FSZGR**	SGEA51M08109	EGE 5	SGEA51FSZGR	AKG13FSZGRZEX	48	14	25.2-1:5	5	167
		FS200			SGEA51FS200	AKG13FS200ZEX			17.2-1:8	3.2/4	
		FSZFR			SGEA51FSZFR	AKG13FSZFRZEX			16.9-1:5	3	
		FS25T			SGEA51FS300	AKG13FS300ZEX			22.22-1:8	4	
		FS300			SGEA51FS300	AKG13FS300ZEX			22.22-1:8	4	
		FS3M0			SGEA51FS300	AKG13FS300ZEX			22.22-1:8	4	
		FS3T0			SGEA51FS300	AKG13FS300ZEX			22.22-1:8	4	
		FS35M			SGEA51FS350	AKG13FS350ZEX			25.6-1:5	4.76/5	
		FS350			SGEA51FS350	AKG13FS350ZEX			25.6-1:5	4.76/5	
200	55x110	**FS200**	SGEA51M09109	EGE 5	SGEA51FS200	AKG16FS200ZEX	55	16	17.2-1:8	3.2/4	167
		FS300			SGEA51FS300	AKG16FS300ZEX			22.22-1:8	4	
		FS3M0			SGEA51FS300	AKG16FS300ZEX			22.22-1:8	4	
		FS35M			SGEA51FS350	AKG16FS350ZEX			25.6-1:5	4.76/5	
		FS350			SGEA51FS350	AKG16FS350ZEX			25.6-1:5	4.76/5	
		FSZFR			SGEA51FSZFR	AKG16FSZFRZEX			16.9-1:5	3	
		FSZGR			SGEA51FSZGR	AKG16FSZGRZEX			25.2-1:5	5	
225	60x140	**FS300**	SGEG60M10110	EGE 6	SGEG60FS300	AKG18FS300ZEX	60	18	22.22-1:8	4	167
		FS3M0			SGEG60FS300	AKG18FS300ZEX			22.22-1:8	4	
		FS35M			SGEG60FS350	AKG18FS350ZEX			25.6-1:5	4.76/5	
		FS350			SGEG60FS350	AKG18FS350ZEX			25.6-1:5	4.76/5	
		FSZGR			SGEG60FSZGR	AKG18FSZGRZEX			25.2-1:5	5	
250	65x140	**FS300**	SGEG60M11140	EGE 6	SGEG60FS300	AKG20FS300ZEX	65	18	22.22-1:8	4	168
		FS3M0			SGEG60FS300	AKG20FS300ZEX			22.22-1:8	4	
		FS35M			SGEG60FS350	AKG20FS350ZEX			25.6-1:5	4.76/5	
		FS350			SGEG60FS350	AKG20FS350ZEX			25.6-1:5	4.76/5	
		FSZGR			SGEG60FSZGR	AKG20FSZGRZEX			25.2-1:5	5	
280	75x140	**FS300**	SGEG80M12140	EGE 8	SGEG80FS300	AKG22FS300ZEX	75	20	22.22-1:8	4	198
		FS3M0			SGEG80FS300	AKG22FS300ZEX			22.22-1:8	4	
		FS35M			SGEG80FS350	AKG22FS350ZEX			25.6-1:5	4.76/5	
		FS350			SGEG80FS350	AKG22FS350ZEX			25.6-1:5	4.76/5	
		FSZGR			SGEG80FSZGR	AKG22FSZGRZEX			25.2-1:5	5	
315	80x170	**FS300**	SGEG80M13170	EGE 8	SGEG80FS300	AKG26FS300ZEX	80	22	22.22-1:8	4	228
		FS3M0			SGEG80FS300	AKG26FS300ZEX			22.22-1:8	4	
		FS35M			SGEG80FS350	AKG26FS350ZEX			25.6-1:5	4.76/5	
		FS350			SGEG80FS350	AKG26FS350ZEX			25.6-1:5	4.76/5	
		FSZGR			SGEG80FSZGR	AKG26FSZGRZEX			25.2-1:5	5	

IEC Electric motors B14 mounting

IEC - Electric motors		Pump identification code	Components								
Motor size	Shaft end [Ø x L]		Motor half-coupling code	Spider code	Pump half-coupling code	Complete coupling kit code	ØM.	Key M.	ØP.	Key P.	Tot. L.
63	11x23	**FS05M**	SGEA01M01019	EGE0	SGEA00FS05M	AKG43FS05MZEX	11	4	6	2	50
		FS05C			SGEA01FS05C	AKG43FS05CZEX			7	2	
		FS100			SGEA01FS100	AKG43FS100ZEX			9.7-1:8	2.4	
		FS1C0			SGEA01FS1C0	AKG43FS1C0ZEX			12	3	
		FS1M0			SGEA01FS1M0	AKG43FS1M0ZEX			13.9-1:8	3	
		FSZBR			SGEA01FSZBR	AKG43FSZBRZEX			9.8-1:5	2	
71	14x30	**FS05M**	SGEA01M02028	EGE 0	SGEA01FS05M	AKG44FS05MZEX	14	5	6	2	59
		FS05C			SGEA01FS05C	AKG44FS05CZEX			7	2	
		FS100			SGEA01FS100	AKG44FS100ZEX			9.7-1:8	2.4	
		FS1C0			SGEA01FS1C0	AKG44FS1C0ZEX			12	3	
		FS1M0			SGEA01FS1M0	AKG44FS1M0ZEX			13.9-1:8	3	
		FSZBR			SGEA01FSZBR	AKG44FSZBRZEX			9.8-1:5	2	
80	19x40	**FS05M**	SGEA01M03048	EGE 0	SGEA01FS05M	AKG45FS05MZEX	19	6	6	2	79
		FS05C			SGEA01FS05C	AKG45FS05CZEX			7	2	
		FS100			SGEA01FS100	AKG45FS100ZEX			9.7-1:8	2.4	
		FS1C0			SGEA01FS1C0	AKG45FS1C0ZEX			12	3	
		FS1M0			SGEA01FS1M0	AKG45FS1M0ZEX			13.9-1:8	3	
		FSZBR			SGEA01FSZBR	AKG45FSZBRZEX			9.8-1:5	2	
		FS200	SGEA21M03048	EGE 2	SGEA21FS200	AKG45FS200ZEX	19	6	17.2-1:8	3.2/4	87
		FSZFR			SGEA21FSZFR	AKG45FSZFRZEX			16.9	3	
90	24x50	**FS05M**	SGEA01M04048	EGE 0	SGEA01FS05M	AKG46FS05MZEX	24	8	6	2	79
		FS05C			SGEA01FS05C	AKG46FS05CZEX			7	2	
		FS100			SGEA01FS100	AKG46FS100ZEX			9.7-1:8	2.4	
		FS1C0			SGEA01FS1C0	AKG46FS1C0ZEX			12	3	
		FS1M0			SGEA01FS1M0	AKG46FS1M0ZEX			13.9-1:8	3	
		FSZBR			SGEA01FSZBR	AKG46FSZBRZEX			9.8-1:5	2	
		FS200	SGEA21M04048	EGE 2	SGEA21FS200	AKG46FS200ZEX	24	8	17.2-1:8	3.5/4	87
		FSZFR			SGEA21FSZFR	AKG46FSZFRZEX			16.9	3	
100 112	28x60	**FS05M**	SGEA21M05055	EGE 2	SGEA21FS05M	AKG48FS05MZEX	28	8	6	2	94
		FS05C			SGEA21FS05C	AKG48FS05CZEX			7	2	
		FS100			SGEA21FS100	AKG48FS100ZEX			9.7-1:8	2.4	
		FS1C0			SGEA21FS1C0	AKG48FS1C0ZEX			12	3	
		FS1M0			SGEA21FS1M0	AKG48FS1M0ZEX			13.9-1:8	3	
		FSZBR			SGEA21FSZBR	AKG48FSZBRZEX			9.8-1:5	2	
		FS200			SGEA21FS200	AKG48FS200ZEX			17.2-1:8	3.5/4	
		FSZFR			SGEA21FSZFR	AKG48FSZFRZEX			16.9	3	

SGDR series

Curved-tooth steel gear coupling

Technical data

Couplings - Curved-tooth steel gear coupling

Gear couplings materials
Couplings: Steel C40
Sleeve: Polyamide PA66 Blue color

Temperature
Sleeve Polyamide PA66: from -20 °C to +90 °C

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

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

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

IEC Electric motors

IEC Electric Motors size	C40 Carbon Steel				
	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	●	●	●	●	●

BLANK HALF-COUPLING

Configuration example: SGDR | 28 | PB

Pump half-coupling
SGDR

Size
28
42
55

Without bore
PB

HALF-COUPLING FOR PARALLEL SHAFT

Configuration example: SGDR | 28 | G02 | 040 | 2E

Pump half-coupling
SGDR

Size
28
42
55

Bore size code
G02 See page 18

Length
040 See page 50

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

HALF-COUPLING FOR SPLINED SHAFT

Configuration example: SGDR | 28 | PD02 | 040

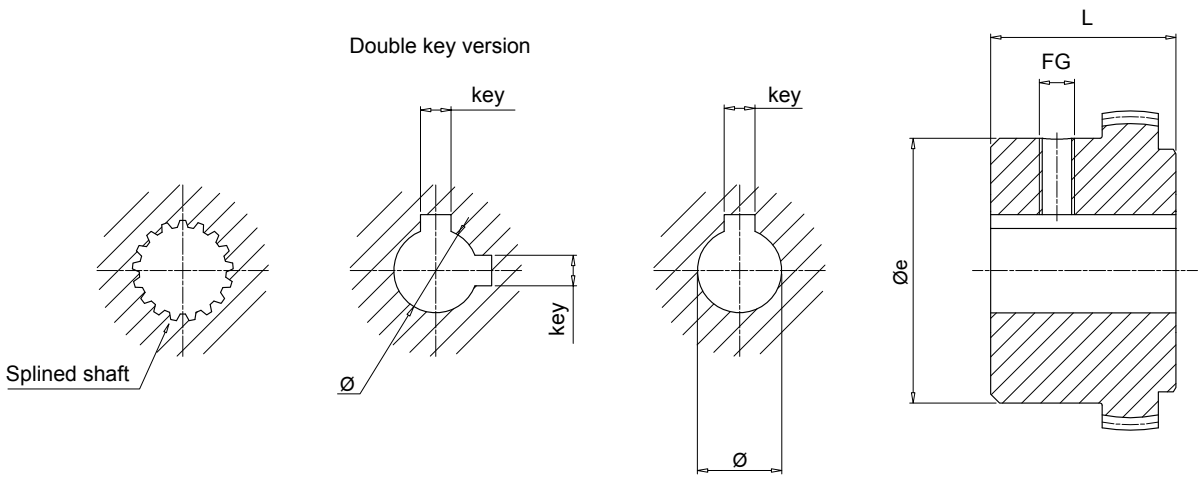
Pump half-coupling
SGDR

Size
28
42
55

Bore size code
PD02 See page 19

Length
040 See page 50

Dimensions



Notes:
- Screw included
- Double key version only pump side

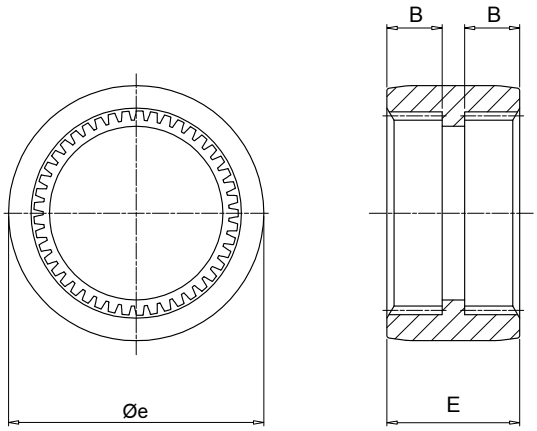
Motor half-coupling

IEC - Electric motors		Half-coupling code	Dimensions [mm]					Weight [kg]
Motor size	Shaft end [Ø x L]		Øe	L	Ø	key	Fg	
80	19x40	**SGDR28M03040**	45	40	19	6	M6	0.5
90	24x50	**SGDR28M04040**	45	40	24	8	M6	0.5
100-112	28x60	**SGDR28M05040**	45	40	28	8	M6	0.5
132	38x80	**SGDR42M06042**	60	42	38	10	M8	1.0
160	42x110	**SGDR42M07042**	60	42	42	12	M8	1.0
180	48x110	**SGDR55M08060**	84	60	48	14	M8	2.5
200	55x110	**SGDR55M09060**	84	60	55	16	M8	2.5

Pump half-couplings

Half-coupling code	Dimensions [mm]		Weight [kg]
	Øe	L	
SGDR28* **	45	40	0.5
SGDR42* **	60	42	1.0
SGDR55* **	84	60	2.5

Complete the half-coupling designation with the pump interface code and the length.
Example: **SGDR280PD02050** (see page 19).



Sleeve

Code	Half-coupling code	Dimensions [mm]			Nominal torque [Nm]	Maximum torque [Nm]	Weight [kg]
		Øe	E	B			
EGR066PA	SGDR28	66	38	16	30	90	0.050
EGR090PA	SGDR42	90	52	22	120	360	0.150
EGR125PA	SGDR55	125	65	27	200	600	0.371

COMPONENTS FOR e-PTO SYSTEMS

GO GREEN

FOCUS ON

e-PTO CONCEPT

Designed to power the onboard hydraulic systems of heavy vehicles, such as waste collection vehicles and cranes, the e-PTO uses the electric energy of a Banke e-PTO instead of traditional diesel. This innovation represents a significant step towards sustainability and energy efficiency in the industrial vehicle sector.

One of the main advantages of the e-PTO is its quiet operation and zero CO_2 emissions. This system allows for up to a 50% reduction in the energy consumed by onboard hydraulic systems.

The e-PTO system consists of:
- **Aluminum lantern**: customizable based on the pump mounted by the manufacturer
- **Steel half-coupling**: engine side with integrated shaft, ensuring robustness and reliability
- **Polyurethane elastic insert**: for a flexible and durable connection
- **Pump side half-coupling**: customizable based on the mounted pump
- **Hydraulic pump**: chosen by the manufacturer for equipment movement
- **Intelligent electronic control system**: manages the entire process to ensure efficiency and reliability.

Versatile Applications

The e-PTO is particularly suitable for vehicle outfitters who build:
- Loader cranes
- Refrigerated vehicles
- Cement mixers
- Urban distribution vehicles
- Dumper
- Aircraft Tug
- Sweeper machines.

Technical data

Couplings - Solutions for e-PTO

Half-couplings materials

SGES: Steel C40

Spider materials

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

Temperature

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

Note

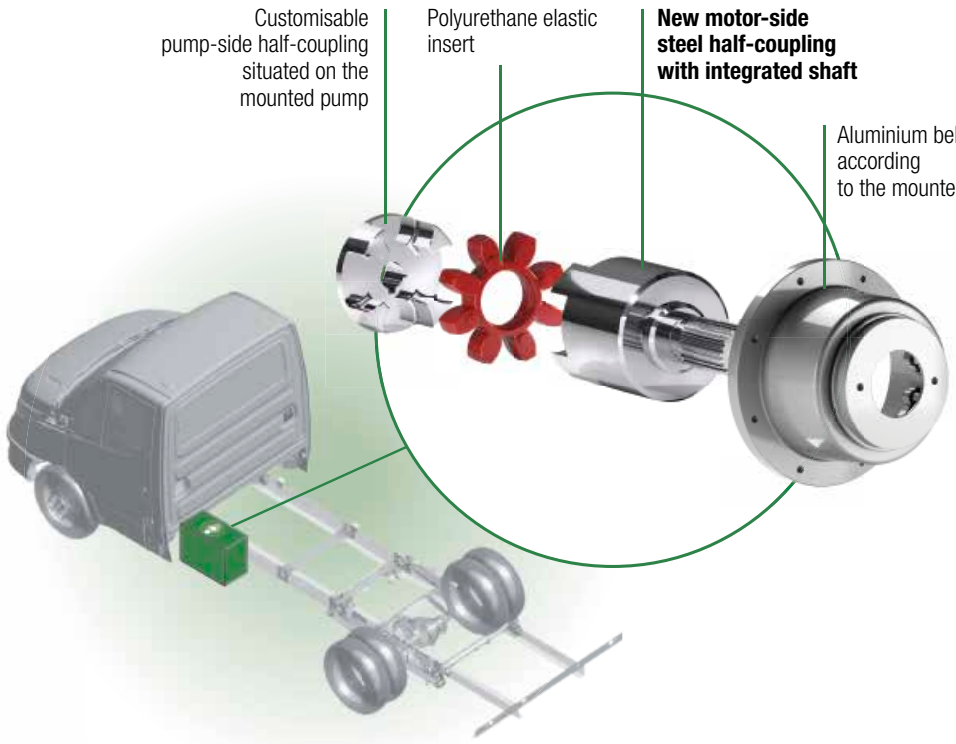
For temperatures outside this range, contact MP Filtri Technical and Sales Department

Ordering code

Motor half-coupling code: **SGES21ISO4156**

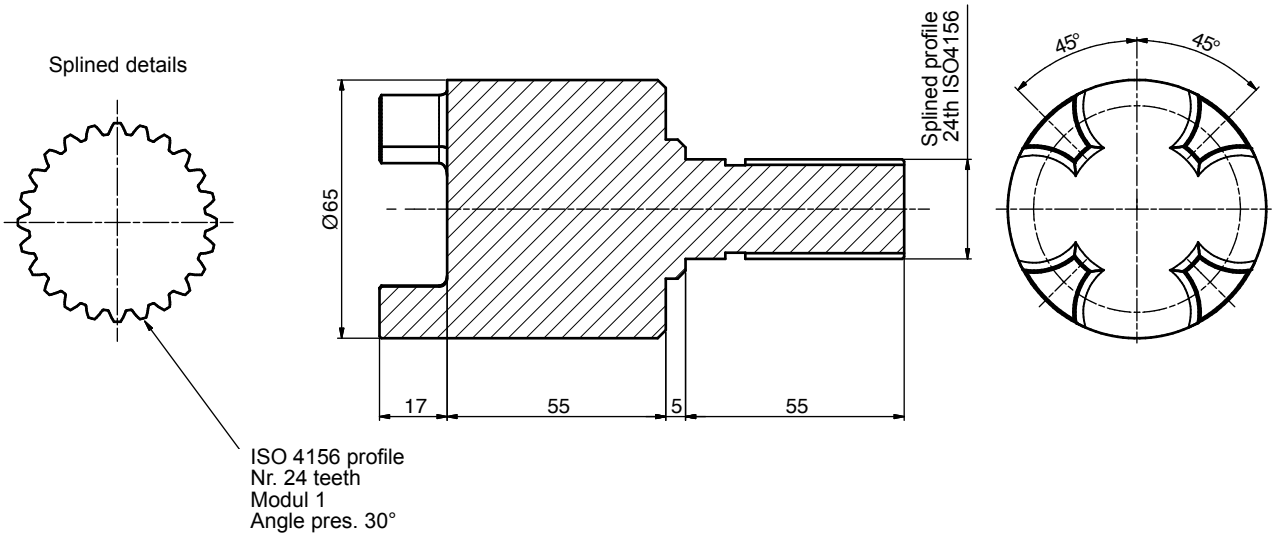
MP Filtri solution for e-PTO

The MP Filtri solution includes



e-PTO Brochure

Dimensions



Notes:
Please contact the Technical Department to discuss possible combinations between the electric motor installed on the machine and the pump mounted on the vehicle.

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