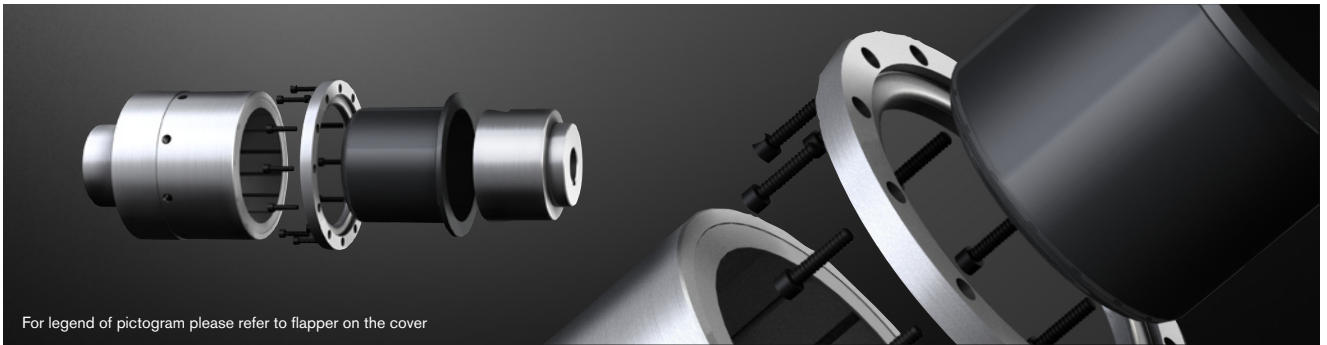


MINEX®-S Magnetic couplings

Containment shroud – material PEEK



For legend of pictogram please refer to flapper on the cover



| Technical data – Internal rotor and containment shroud | | | | | | | | | | | | | | | |
|--------------------------------------------------------|-------------------------|------------------------------------------|------|-----------------|-----------------|----------------|----------------|--------------------|-----------------|-----------------|-----------------|-----------------|----------------|-------------------------------------|-----|
| Size | TK max. [Nm] with 20 °C | Dimensions [mm] | | | | | | | | | | | | | |
| | | Internal rotor | | | | | | Containment shroud | | | | | | | |
| | | Finish bore ¹⁾ d _i | | D _{J1} | L _{J1} | G _I | S _I | | D _{S1} | D _{S2} | D _{S3} | D _{S4} | Z _S | L _S = L _{total} | |
| min. | max. | min. | max. | | | | | | | | | | | | |
| SA 75/10 | 10 | | | | 39,5 | | | 8,5 | 54,5 | | | | | | |
| SB 75/10 | 24 | 12 | 32 | 45 | 58 | M6 | | 34,5 | | 99,9 | 115 | 135 | 9 | 8 | 108 |
| SC 75/10 | 40 | | | | 80 | | | 5,5 | 10,0 | | | | | | |
| SA 110/16 | 30 | | | | 45 | | | | 46,0 | | | | | | 115 |
| SB 110/16 | 70 | 14 | 55 | 80 | 65 | M8 | 4 | 26,0 | | 140 | 151 | 168 | 9 | 12 | |
| SC 110/16 | 100 | | | | 85 | | | | 6,0 | | | | | | |
| SB 135/20 | 110 | | | | 65 | | | | 48,0 | | | | | | 144 |
| SC 135/20 | 155 | 20 | 70 | 90 | 85 | M10 | 4 | 28,0 | | 157 | 167 | 180 | 5,5 | 12 | |
| SD 135/20 | 210 | | | | 110 | | | | 4,0 | | | | | | |
| SC 165/24 | 220 | | | | 85 | | | | 32,0 | | | | | | |
| SD 165/24 | 300 | 24 | 80 | 110 | 110 | M12 | 4 | 8,0 | | 196 | 210 | 225 | 6,6 | 12 | 156 |
| SE 165/24 | 390 | | | | 130 | | | -5 | -5,0 | | | | | | 165 |

| Technical data – External rotor, flange hub and general | | | | | | | | | | | | | | |
|---------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|----------------|-----------------------------------------------|-----------------|-----------------|-----------------|-----------------|----------------|---------|----------------------------------|-------|
| Size | Dimensions [mm] | | | | | | | | | | | | | |
| | External rotor | | | | | Flange hub | | | | | | General | | |
| | D _{A1} | D _{A2} | D _{A3} | L _{A1} | G _A | Max. finish bore ¹⁾ d _f | D _{F1} | D _{F2} | L _{F1} | L _{F2} | G _F | ΔS | Total length* (incl. flange hub) | |
| | | | | | | | | | | | | | min. | max. |
| SA 75/10 | | | | 41,3 | | | | | | | | | 148,5 | 172,5 |
| SB 75/10 | 90 | 100 | 110 | 61,3 | M6 | 42 | 60 | 114 | 64,5 | 35,5 | M8 | 12,2 | 148,5 | 172,5 |
| SC 75/10 | | | | 83,8 | | | | | | | | 14,2 | 168 | 172,5 |
| SA 110/16 | | | | 41,3 | | | | | | | | | 165,5 | 193,5 |
| SB 110/16 | 130 | 138 | 150 | 61,3 | M6 | 55 | 85 | 153 | 87,5 | 45,5 | M10 | 18,7 | 172,5 | 193,5 |
| SC 110/16 | | | | 81,3 | | | | | | | | | 191,5 | 193,5 |
| SB 135/20 | | | | 70,3 | | | | | | | | 18,2 | 216 | 225,5 |
| SC 135/20 | 158 | 167 | 176 | 90,3 | M6 | 70 | 100 | 176 | 89 | 67 | M12 | | 216 | 225,5 |
| SD 135/20 | | | | 110,3 | | | | | | | | 20,7 | 224 | 224 |
| SC 165/24 | | | | 90,3 | | | | | | | | 18,5 | 231 | 234,8 |
| SD 165/24 | 186 | 195 | 204 | 110,3 | M6 | 75 | 110 | 204 | 94 | 70 | M16 | | 231 | 233,3 |
| SE 165/24 | | | | 130,3 | | | | | | | | 21 | 254,3 | 254,3 |

¹⁾ Bore H7 with keyway to DIN 6885, sheet 1 [JS9]

| Technical data | | | | | | | | | |
|----------------|-------------------------|-------------------|---------|--------------------|--------------|-----------------------------------------|------------------------|----------------------------------------|---------|
| Size | TK max. [Nm] with 20 °C | Internal rotor | | Containment shroud | | | | External rotor (+ optional flange hub) | |
| | | Standard material | | Standard material | | Max. pressure | Max. temperature | Standard material | |
| | | Hub | Magnets | Hub | Cont. shroud | P _N /P _{max.} [bar] | t _{max.} [°C] | Hub | Magnets |
| SA 75/10 | 10 | 1.4571 | Sm2Co17 | Aluminium | PEEK | s. table | s. table | S355J2G3 | NdFeB |
| SB 75/10 | 24 | 1.4571 | Sm2Co17 | Aluminium | PEEK | s. table | s. table | S355J2G3 | NdFeB |
| SC 75/10 | 40 | 1.4571 | Sm2Co17 | Aluminium | PEEK | s. table | s. table | S355J2G3 | NdFeB |
| SA 110/16 | 30 | 1.4571 | Sm2Co17 | Aluminium | PEEK | s. table | s. table | S355J2G3 | NdFeB |
| SB 110/16 | 70 | 1.4571 | Sm2Co17 | Aluminium | PEEK | s. table | s. table | S355J2G3 | NdFeB |
| SC 110/16 | 100 | 1.4571 | Sm2Co17 | Aluminium | PEEK | s. table | s. table | S355J2G3 | NdFeB |
| SB 135/20 | 110 | 1.4571 | Sm2Co17 | Aluminium | PEEK | s. table | s. table | S355J2G3 | NdFeB |
| SC 135/20 | 155 | 1.4571 | Sm2Co17 | Aluminium | PEEK | s. table | s. table | S355J2G3 | NdFeB |
| SD 135/20 | 210 | 1.4571 | Sm2Co17 | Aluminium | PEEK | s. table | s. table | S355J2G3 | NdFeB |
| SC 165/24 | 220 | 1.4571 | Sm2Co17 | Aluminium | PEEK | s. table | s. table | S355J2G3 | NdFeB |
| SD 165/24 | 300 | 1.4571 | Sm2Co17 | Aluminium | PEEK | s. table | s. table | S355J2G3 | NdFeB |
| SE 165/24 | 390 | 1.4571 | Sm2Co17 | Aluminium | PEEK | s. table | s. table | S355J2G3 | NdFeB |

| | | | | | |
|-------------------|-----------------|----------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------|-------------------------|
| Ordering example: | MINEX® SB 75/10 | NdFeB | d _i Ø20mm | d _a Ø24mm | PEEK |
| | Coupling size | NdFeB – t _{max.} = 150 °C Sm2Co17 – t _{max.} = 300 °C | Finish bore (H7), feather keyway acc. to DIN 6885 sheet 1 (JS9) | | Containment shroud type |

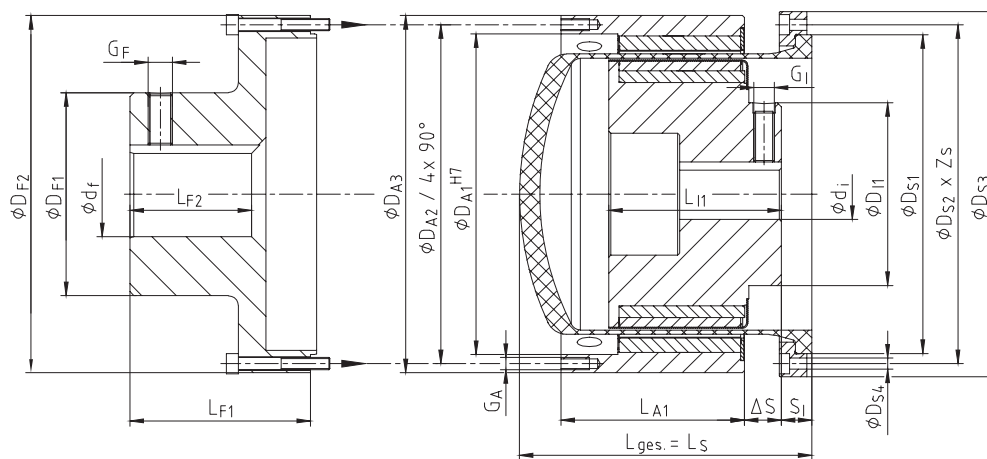
Examples of application

MINEX® couplings with containment shroud made of PEEK are an economic, energy-efficient alternative to the types made of metal. They do not generate any eddy current losses and as a result do not generate any heat so that usually expensive cooling measures can be done without. Moreover, they are characterized by low susceptibility to fracture, low weight and easy handling. They are ideally suitable for applications with low demands on temperature and pressure resistance.

Typical applications: vacuum pumps, fan drives, compressors, agitators, PU foaming lines.

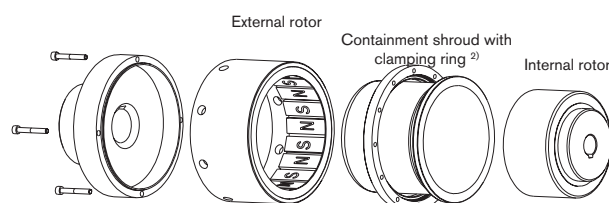
Depending on pressure and temperature resistance

| Temperature [°C] | Perm. nominal/testing pressure | |
|------------------|--------------------------------|------------------------|
| | P _N [bar] | P _{MAX} [bar] |
| 40 | 14 | 21 |
| 70 | 13 | 19,5 |
| 100 | 12 | 18 |
| 130 | 10 | 15 |



$$S_A = S_1 + \Delta S$$

Optional flange hub with bore da



²⁾ Containment shroud size 75 also available as a single-part design!