

WINNER[®] FLEXIBLE TYRE COUPLING

FLEXIBLE TYRE COUPLING หรือ FLEXIBLE RUBBER COUPLING ถูกออกแบบด้วยยางยืดหยุ่นสูง ช่วยดูดซับแรงสั่นสะเทือนและแรงกระแทกได้อย่างมีประสิทธิภาพรองรับการเชื่อมต่อศูนย์กลางทั้งเชิงมุมขนานและแนวแกนได้มากกว่าคัปปลิงทั่วไป ทำงานเงียบ ลดการสึกหรอของอุปกรณ์ต้นกำลังและอุปกรณ์ปลายทาง สามารถถอดเปลี่ยนยางได้โดยไม่ต้องขยับมอเตอร์ เพิ่มความสะดวกในการบำรุงรักษา และช่วยปกป้องระบบเมื่อเกิดโอเวอร์โหลด ด้วยคุณสมบัติที่ยางขาดก่อนชิ้นส่วนโลหะเสียหาย

จะมีชิ้นส่วนหลัก 3 ชิ้นส่วนดังนี้

1. ยาง (Flex rubber)

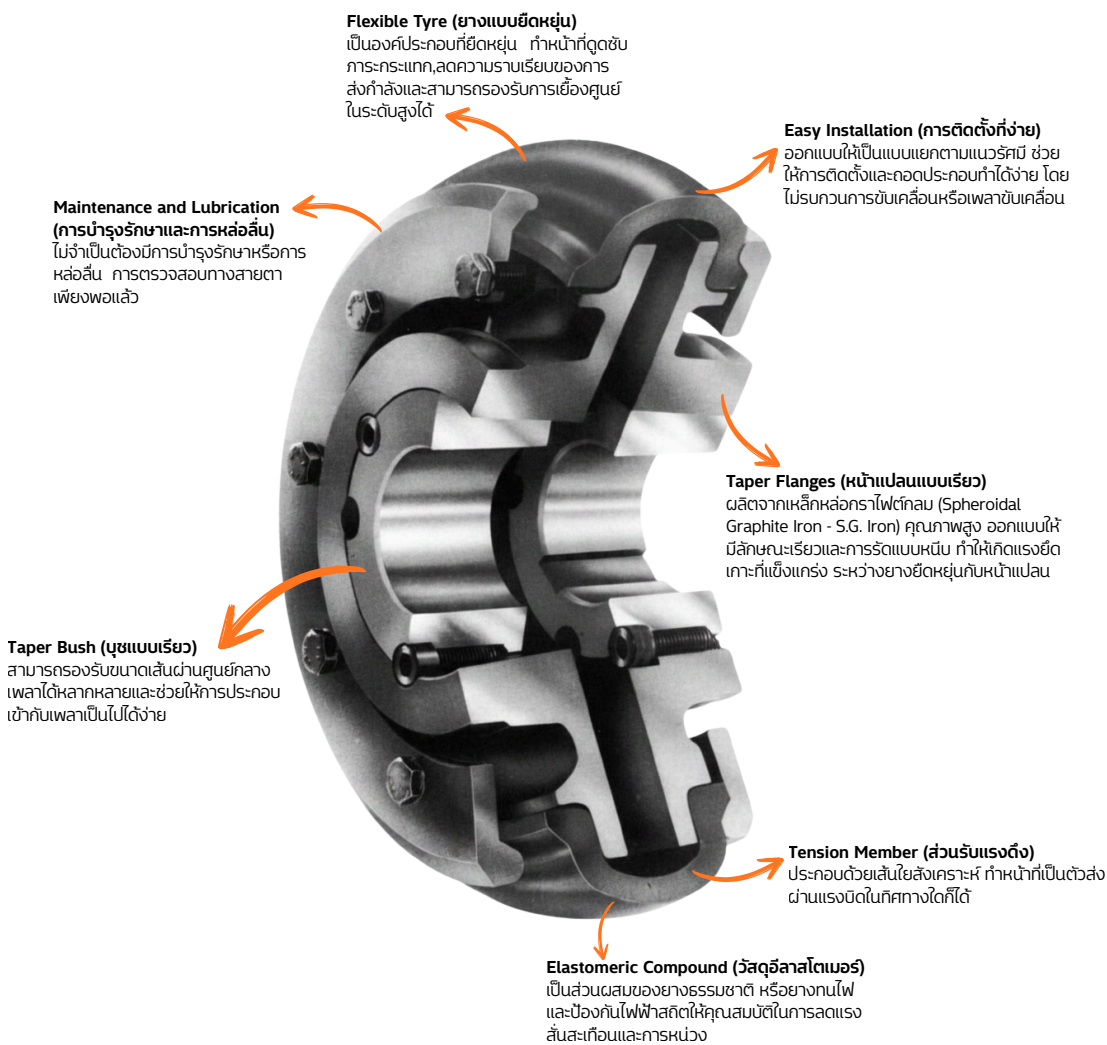
2. หน้าแปลน 2 ด้าน (flange) ซึ่งหน้าแปลนจะมีให้เลือก 3 แบบดังนี้

2.1) หน้าแปลนแบบรูนาคูญ (B flange)

2.2) หน้าแปลนแบบใส่เทเปอร์บุชด้านหน้า flange (F Flange)

2.3) หน้าแปลนแบบใส่เทเปอร์บุชด้าน hub (H flange)

3. Spacer ช่วยเพิ่มระยะห่างระหว่างอุปกรณ์ต้นกำลังและอุปกรณ์ปลายทาง มีความยาวมาตรฐาน 110 mm. 140 mm. และ 180 mm.



หน้าแปลนแบบใส่เทเปอร์บุช+Spacer

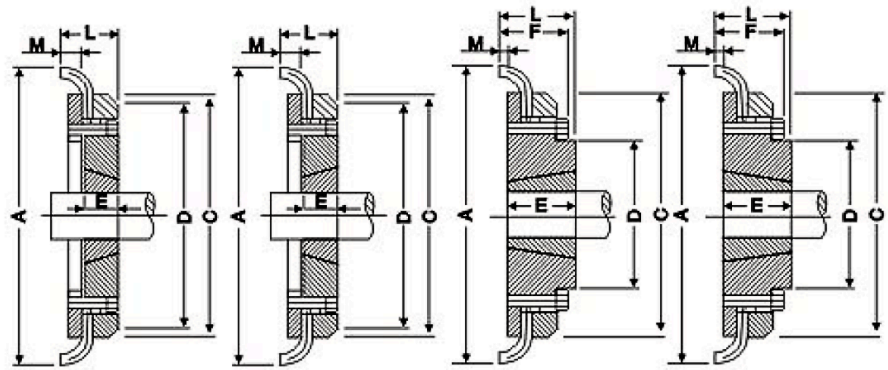


หน้าแปลนแบบใส่เทเปอร์บุช



หน้าแปลนแบบรูนาคูญ B flange

WINNER[®] TYRE COUPLING



**F - FLANGE
SIZE F40 TO F60**

H - FLANGE

**F - FLANGE
SIZE F70 TO F250**

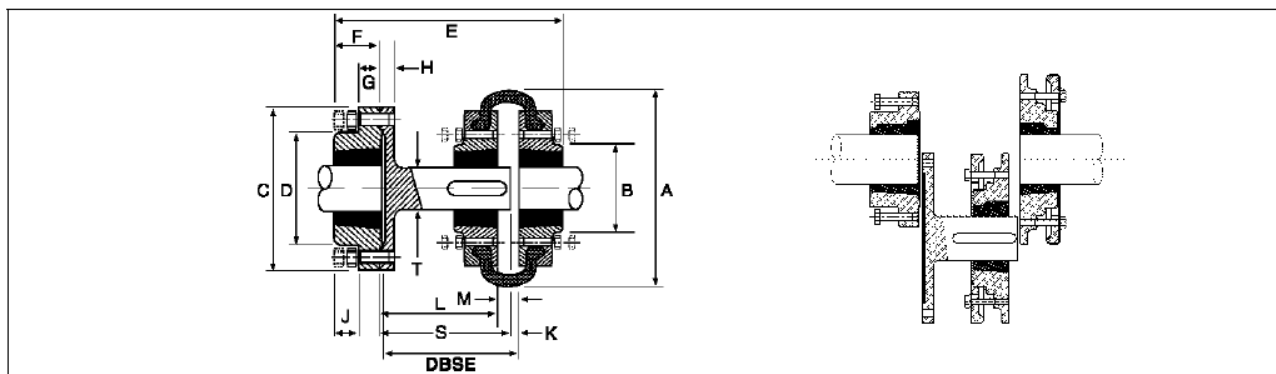
H - FLANGE

| Size | Type | Bush No. | Max.Bore | Type F&H | | Type H | | Seve over Key | A | C | D | F | M |
|------|------|----------|----------|----------|-----|--------|-----|---------------|-----|-----|-----|-----|------|
| | | | mm. | L | E | L | E | | | | | | |
| F40 | B | --- | 32 | --- | --- | 33 | 22 | M5 | 104 | 82 | --- | --- | 11 |
| F40 | F | 1008 | 25 | 33 | 22 | --- | --- | --- | 104 | 82 | --- | --- | 11 |
| F40 | H | 1008 | 25 | 33 | 22 | --- | --- | --- | 104 | 82 | --- | --- | 11 |
| F50 | B | --- | 38 | --- | --- | 43 | 32 | M5 | 133 | 100 | 79 | --- | 12.5 |
| F50 | F | 1210 | 32 | 38 | 25 | --- | --- | --- | 133 | 100 | 79 | --- | 12.5 |
| F50 | H | 1210 | 32 | 38 | 25 | --- | --- | --- | 133 | 100 | 79 | --- | 12.5 |
| F60 | B | --- | 45 | --- | --- | 55 | 33 | M6 | 165 | 125 | 70 | --- | 16.5 |
| F60 | F | 1610 | 42 | 42 | 25 | --- | --- | --- | 165 | 125 | 103 | --- | 16.5 |
| F60 | H | 1610 | 42 | 42 | 25 | --- | --- | --- | 165 | 125 | 103 | --- | 16.5 |
| F70 | B | --- | 50 | --- | --- | 47 | 35 | M8 | 187 | 142 | 80 | 50 | 11.5 |
| F70 | F | 2012 | 50 | 44 | 32 | --- | --- | --- | 187 | 142 | 80 | 50 | 11.5 |
| F70 | H | 1610 | 42 | 42 | 25 | --- | --- | --- | 187 | 142 | 80 | 50 | 11.5 |
| F80 | B | --- | 60 | --- | --- | 55 | 42 | M8 | 211 | 165 | 98 | 54 | 12.5 |
| F80 | F | 2517 | 60 | 58 | 45 | --- | --- | --- | 211 | 165 | 98 | 54 | 12.5 |
| F80 | H | 2012 | 50 | 45 | 32 | --- | --- | --- | 211 | 165 | 98 | 54 | 12.5 |
| F90 | H | --- | 70 | --- | --- | 63.5 | 49 | M10 | 235 | 188 | 108 | 60 | 13.5 |
| F90 | F | 2517 | 60 | 58.5 | 45 | --- | --- | --- | 235 | 188 | 108 | 60 | 13.5 |
| F90 | H | 2517 | 60 | 58.5 | 45 | --- | --- | --- | 235 | 188 | 108 | 60 | 13.5 |
| F100 | H | --- | 80 | --- | --- | 70.5 | 56 | M10 | 254 | 216 | 120 | 62 | 13.5 |
| F100 | F | 3020 | 75 | 64.5 | 51 | --- | --- | --- | 254 | 216 | 125 | 62 | 13.5 |
| F100 | H | 2517 | 60 | 58.5 | 45 | --- | --- | --- | 254 | 216 | 113 | 62 | 13.5 |
| F110 | B | --- | 90 | --- | --- | 75.5 | 63 | M12 | 279 | 233 | 128 | 62 | 12.5 |
| F110 | F | 3020 | 75 | 63.5 | 51 | --- | --- | --- | 279 | 233 | 134 | 62 | 12.5 |
| F110 | H | 3020 | 75 | 63.5 | 51 | --- | --- | --- | 279 | 233 | 134 | 62 | 12.5 |
| F120 | B | --- | 100 | --- | --- | 84.5 | 70 | M12 | 314 | 264 | 140 | 67 | 14.5 |
| F120 | F | 3525 | 100 | 79.5 | 65 | --- | --- | --- | 314 | 264 | 144 | 67 | 14.5 |
| F120 | H | 3020 | 75 | 85.5 | 61 | --- | --- | --- | 314 | 264 | 144 | 67 | 14.5 |
| F140 | B | --- | 130 | --- | --- | 110.5 | 94 | M16 | 359 | 311 | 178 | 73 | 16 |
| F140 | F | 3525 | 100 | 81.5 | 65 | --- | --- | --- | 359 | 311 | 178 | 73 | 16 |
| F140 | H | 3525 | 100 | 81.5 | 65 | --- | --- | --- | 359 | 311 | 178 | 73 | 16 |
| F160 | B | --- | 140 | --- | --- | 117 | 102 | M20 | 402 | 345 | 187 | 78 | 15 |
| F160 | F | 4030 | 115 | 92 | 77 | --- | --- | --- | 402 | 345 | 197 | 78 | 15 |
| F160 | H | 4030 | 115 | 92 | 77 | --- | --- | --- | 402 | 345 | 197 | 78 | 15 |
| F180 | B | --- | 150 | --- | --- | 137 | 114 | M16 | 470 | 394 | 205 | 94 | 23 |
| F180 | F | 4535 | 125 | 112 | 89 | --- | --- | --- | 470 | 394 | 205 | 94 | 23 |
| F180 | H | 4535 | 125 | 112 | 89 | --- | --- | --- | 470 | 394 | 205 | 94 | 23 |
| F200 | B | --- | 150 | --- | --- | 138 | 114 | M20 | 508 | 429 | 205 | 103 | 24 |
| F200 | F | 4535 | 125 | 113 | 89 | --- | --- | --- | 508 | 429 | 205 | 103 | 24 |
| F200 | H | 4535 | 125 | 113 | 89 | --- | --- | --- | 508 | 429 | 205 | 103 | 24 |
| F220 | B | --- | 160 | □ | □ | 154.5 | 127 | M20 | 562 | 474 | 223 | 118 | 27.5 |
| F220 | F | 5040 | 125 | 129.5 | 102 | □ | □ | --- | 562 | 474 | 223 | 118 | 27.5 |
| F220 | H | 5040 | 125 | 129.5 | 102 | □ | □ | --- | 562 | 474 | 223 | 118 | 27.5 |
| F250 | H | --- | 190 | c | | 161.5 | 132 | M20 | 628 | 522 | 254 | 125 | 29.5 |

WINNER[®] Spacer Coupling

DISTANCE BETWEEN SHAFT ENDS

| Size | Distance between Shaft Ends (MM) | | | | | | | | | | | | | | | | | | | |
|------|----------------------------------|-----|------|-----|-----|-----|------|-----|-----|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|
| | SM12 | | SM16 | | | | SM25 | | | | | | SM30 | | | | SM35 | | | |
| | 80(100) | | 100 | | 140 | | 100 | | 140 | | 180 | | 140 | | 180 | | 140 | | 180 | |
| | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max |
| F40 | 80 | 100 | 100 | 113 | 140 | 150 | | | | | | | | | | | | | | |
| F50 | | | 100 | 116 | 140 | 156 | | | | | | | | | | | | | | |
| F60 | | | 100 | 124 | 140 | 164 | | | | | | | | | | | | | | |
| F70 | | | | | | | 100 | 114 | 140 | 154 | 180 | 194 | | | | | | | | |
| F80 | | | | | | | 100 | 117 | 140 | 157 | 180 | 197 | | | | | | | | |
| F90 | | | | | | | | | 140 | 158 | 180 | 198 | | | | | | | | |
| F100 | | | | | | | | | | | | | 140 | 158 | 180 | 198 | | | | |
| F110 | | | | | | | | | | | | | 140 | 156 | 180 | 196 | | | | |
| F120 | | | | | | | | | | | | | | | | | 140 | 160 | 180 | 200 |
| F140 | | | | | | | | | | | | | | | | | 140 | 163 | 180 | 203 |



SPACER COUPLING DIMENSIONS

| Spacer | Nom DBSE | Martin-Flex | Spacer Bush Size | Max. Bore | | Martin-Flex Bush Size | Max. Bore | | A | B | C | D | E | F | G | H | J | K | L | M | S | T |
|--------|----------|-------------|------------------|-----------|-------|-----------------------|-----------|-------|-----|-----|-----|-----|-----|----|----|----|----|----|-----|----|-----|----|
| | | | | mm | Inch | | mm | Inch | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| SM12 | 80 | F40 | 1210 | 32 | 1.250 | 1008 | 25 | 1 | 104 | 82 | 118 | 83 | 134 | 25 | 14 | 15 | 14 | 6 | 65 | 22 | 77 | 25 |
| SM12 | 100 | F40 | 1210 | 32 | 1.250 | 1008 | 25 | 1 | 104 | 82 | 118 | 83 | 140 | 25 | 14 | 15 | 14 | 22 | 77 | 22 | 77 | 25 |
| SM16 | 100 | F40 | 1615 | 42 | 1.625 | 1008 | 25 | 1 | 104 | 82 | 127 | 80 | 157 | 38 | 18 | 15 | 14 | 9 | 88 | 22 | 94 | 32 |
| SM16 | 140 | F40 | 1615 | 42 | 1.625 | 1008 | 25 | 1 | 104 | 82 | 127 | 80 | 187 | 38 | 18 | 15 | 14 | 9 | 128 | 22 | 134 | 32 |
| SM16 | 100 | F50 | 1615 | 42 | 1.625 | 1210 | 32 | 1.250 | 133 | 79 | 127 | 80 | 160 | 38 | 18 | 15 | 14 | 9 | 85 | 25 | 94 | 32 |
| SM16 | 140 | F50 | 1615 | 42 | 1.625 | 1210 | 32 | 1.250 | 133 | 79 | 127 | 80 | 200 | 38 | 18 | 15 | 14 | 9 | 125 | 25 | 134 | 32 |
| SM16 | 100 | F60 | 1615 | 42 | 1.625 | 1610 | 42 | 1.625 | 165 | 103 | 127 | 80 | 161 | 38 | 18 | 15 | 14 | 9 | 78 | 33 | 94 | 32 |
| SM16 | 140 | F60 | 1615 | 42 | 1.625 | 1610 | 42 | 1.625 | 165 | 103 | 127 | 80 | 201 | 38 | 18 | 15 | 14 | 9 | 118 | 33 | 134 | 32 |
| SM25 | 100 | F70 | 2517 | 60 | 2.50 | 2012 | 50 | 2 | 187 | 80 | 178 | 123 | 180 | 45 | 22 | 16 | 14 | 9 | 80 | 23 | 94 | 48 |
| SM25 | 140 | F70 | 2517 | 60 | 2.50 | 2012 | 50 | 2 | 187 | 80 | 178 | 123 | 220 | 45 | 22 | 16 | 14 | 9 | 120 | 23 | 174 | 48 |
| SM25 | 180 | F70 | 2517 | 60 | 2.50 | 2012 | 50 | 2 | 187 | 80 | 178 | 123 | 260 | 45 | 22 | 16 | 14 | 9 | 160 | 23 | 174 | 48 |
| SM25 | 100 | F80 | 2517 | 60 | 2.50 | 2517 | 60 | 2.50 | 211 | 95 | 178 | 123 | 193 | 45 | 22 | 16 | 14 | 9 | 78 | 25 | 94 | 48 |
| SM25 | 140 | F80 | 2517 | 60 | 2.50 | 2517 | 60 | 2.50 | 211 | 95 | 178 | 123 | 233 | 45 | 22 | 16 | 14 | 9 | 118 | 25 | 134 | 48 |
| SM25 | 180 | F80 | 2517 | 60 | 2.50 | 2517 | 60 | 2.50 | 211 | 95 | 178 | 123 | 273 | 45 | 22 | 16 | 14 | 9 | 158 | 25 | 174 | 48 |
| SM25 | 140 | F90 | 2517 | 60 | 2.50 | 2517 | 60 | 2.50 | 235 | 108 | 178 | 123 | 233 | 45 | 22 | 16 | 14 | 9 | 116 | 27 | 134 | 48 |
| SM25 | 180 | F90 | 2517 | 60 | 2.50 | 2517 | 60 | 2.50 | 235 | 108 | 178 | 123 | 273 | 45 | 22 | 16 | 14 | 9 | 156 | 27 | 174 | 48 |
| SM30 | 140 | F100 | 3020 | 75 | 3 | 3020 | 75 | 3 | 254 | 120 | 216 | 146 | 245 | 51 | 29 | 20 | 17 | 9 | 116 | 27 | 134 | 60 |
| SM30 | 180 | F100 | 3020 | 75 | 3 | 3020 | 75 | 3 | 254 | 120 | 216 | 146 | 285 | 51 | 29 | 20 | 17 | 9 | 156 | 27 | 174 | 60 |
| SM30 | 140 | F110 | 3020 | 75 | 3 | 3020 | 75 | 3 | 279 | 134 | 216 | 146 | 245 | 51 | 29 | 20 | 17 | 9 | 118 | 25 | 134 | 60 |
| SM30 | 180 | F110 | 3020 | 75 | 3 | 3020 | 75 | 3 | 279 | 134 | 216 | 146 | 285 | 51 | 29 | 20 | 17 | 9 | 158 | 25 | 174 | 60 |
| SM35 | 140 | F120 | 3525 | 100 | 4 | 3525 | 100 | 4 | 314 | 140 | 248 | 178 | 272 | 63 | 34 | 20 | 17 | 9 | 114 | 29 | 134 | 80 |
| SM35 | 180 | F120 | 3525 | 100 | 4 | 3525 | 100 | 4 | 314 | 140 | 248 | 178 | 312 | 63 | 34 | 20 | 17 | 9 | 154 | 29 | 174 | 80 |
| SM35 | 140 | F140 | 3525 | 100 | 4 | 3525 | 100 | 4 | 359 | 178 | 248 | 178 | 271 | 63 | 34 | 20 | 17 | 9 | 111 | 27 | 134 | 80 |
| SM35 | 180 | F140 | 3525 | 100 | 4 | 3525 | 100 | 4 | 359 | 178 | 248 | 178 | 312 | 63 | 34 | 20 | 17 | 9 | 151 | 27 | 174 | 80 |

PHYSICAL CHARACTERISTICS - FLEXIBLE TYRES

| Characteristics | Coupling Size | | | | | | | | | | | | | | |
|----------------------------------|---------------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| | F40 | F50 | F60 | F70 | F80 | F90 | F100 | F110 | F120 | F140 | F160 | F180 | F200 | F220 | F250 |
| Maximum speed rev/min | 4500 | 4500 | 4000 | 3600 | 3100 | 3000 | 2600 | 2300 | 2050 | 1800 | 1600 | 1500 | 1300 | 1100 | 1000 |
| Nominal Torque Nm THN | 24 | 66 | 127 | 250 | 375 | 500 | 675 | 875 | 1330 | 2325 | 3770 | 6270 | 9325 | 11600 | 14675 |
| Maximum Torque Nm TH MAX | 64 | 160 | 318 | 487 | 759 | 196 | 1517 | 2137 | 3547 | 5642 | 9339 | 16455 | 23508 | 33125 | 42740 |
| Torsional Stiffness Nm/• | 5 | 13 | 26 | 41 | 63 | 91 | 126 | 178 | 296 | 470 | 778 | 1959 | 1959 | 2760 | 3562 |
| Max, parallel misalignment mm | 1.1 | 1.3 | 1.6 | 1.9 | 2.1 | 2.4 | 2.6 | 2.9 | 3.2 | 3.7 | 4.2 | 5.3 | 5.3 | 5.8 | 6.6 |
| Maximum end float mm | 1.3 | 1.7 | 2.0 | 2.3 | 2.6 | 3.0 | 3.3 | 3.7 | 4.0 | 4.6 | 5.3 | 6.6 | 6.6 | 7.3 | 8.2 |
| Approximate mass, kg | 0.1 | 0.3 | 0.5 | 0.7 | 1.0 | 1.1 | 1.1 | 1.4 | 2.3 | 2.6 | 3.4 | 8.0 | 8.0 | 10 | 15 |
| Alternating Torque Nm @ 10Hz THW | 11 | 26 | 53 | 81 | 127 | 183 | 252 | 356 | 591 | 940 | 1556 | 3918 | 3918 | 5521 | 7124 |
| Resonance Factor V | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| Damping Coefficient | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |

Maximum torque figures should be regarded as short duration overload ratings for use in such circumstances as direct-on-line starting
All flexible tyres have an angular misalignment capacity up to 4°

เราจัดจำหน่ายยาง (Tyre) สำหรับ Flexible Coupling เป็นอะไหล่แยกครบทุกขนาด ผลิตจากวัสดุคุณภาพสูง รองรับแรงสั่นสะเทือนและการเยื้องศูนย์ได้ดี พร้อมสต็อกสำหรับงานซ่อมบำรุงและงานเปลี่ยนทดแทนทันที

