

The following decoding list of suffixes is meant to help you to decode the different usage of most frequently-used suffixes made by bearings producers. Please note that in the following chart the symbol „•“ indicates that the corresponding suffix code is not explicitly given by the producer. Suffixes marked with a dash „–“ are not being produced.

|                                                 | Brand/Suffixes                          | FAG                      | Koyo              | NKE                      | NSK          | NTN      | SKF                      | SNR       | TWB      |
|-------------------------------------------------|-----------------------------------------|--------------------------|-------------------|--------------------------|--------------|----------|--------------------------|-----------|----------|
| <b>In general</b>                               | 1 / 2 one/two dustshields               | Z / 2Z                   | Z / ZZ            | Z / 2Z                   | Z / ZZ       | Z / ZZ   | Z / 2Z                   | Z / ZZ    | Z / ZZ   |
|                                                 | 1 / 2 one/two rubber seals              | RSR / 2RSR<br>HRS / 2HRS | RS / 2RS          | RSR / 2RSR<br>RS2 / 2RS2 | DU / DDU     | LU / LLU | RS1 / 2RS1<br>RSH / 2RSH | E / EE    | RS / 2RS |
|                                                 | Clearance lager than normal             | C3                       | C3                | C3                       | C3           | C3       | C3                       | J30       | C3       |
| <b>Cylindrical roller bearings</b>              | Cage of glass-fibre                     | TVP2                     | FG                | TVP, TVP3                | T, T7        | T2       | P, PH                    | G15       | T        |
|                                                 | Steel cage                              | –, (JP1)                 | FS                | •                        | W            | J        | J                        | G13, G28  | –        |
|                                                 | Brass cage                              | M1, M1A                  | FY, FW<br>LPR, LY | M, M6, MA                | M            | L1       | MA, M, ML                | M         | M        |
|                                                 | Maximum capacity design                 | E, EX                    | R                 | E                        | E            | E        | EC                       | E         | E        |
| <b>Spherical roller bearings</b>                | Cage of glass-fibre                     | TVPB                     | FG                | –                        | H            | –        | –                        | –         | –        |
|                                                 | Steel cage                              | •                        | FC, FP            | CE, •                    | C, CD, EA, J | J        | C(J), CC                 | A         | C        |
|                                                 | Brass cage                              | MA, M, MB                | FY, Q, R          | MB                       | CAM, M, MB   | L1       | CA, CAC                  | M, MB     | CA, MB   |
|                                                 | Lubrication groove and holes            | S, •                     | W33               | W33                      | E4, W33      | D1       | W33                      | B33       | W33      |
|                                                 | Maximum capacity design                 | E, E1                    | E                 | E                        | E, •         | E        | E                        | E         | E        |
|                                                 | For vibratory stressing                 | T41A, T41D               | ROVS502           | SQ34                     | U15VS, VB    | UAVS1    | VA405<br>VA406           | F800      | –        |
| <b>Self-aligning ball bearings</b>              | Cage of glass-fibre                     | (TV), TVH                | –                 | TV                       | TNG          | TNH      | TN, TN9                  | G14, G15  | –        |
|                                                 | Steel cage                              | –, (•)                   | FC                | •                        | J, •         | •        | J, •                     | •         | –        |
|                                                 | Brass cage                              | M                        | FY                | –                        | M            | M        | M                        | M         | M        |
| <b>Tapered roller bearings</b>                  | Modified internal construction          | A                        | A                 | –                        | HR...        | –        | A                        | A, C, V   | –        |
|                                                 | Increased contact angle                 | B                        | C                 | B                        | C, D         | C        | B                        | B         | –        |
|                                                 | ISO dimensions                          | X                        | X                 | X                        | X            | X, U     | X                        | X         | X        |
| <b>Deep groove ball bearings</b>                | Cage of glass-fibre                     | TVH                      | MN, MG<br>FN, FG  | TV                       | TNG          | T2       | TN9                      | G14, G15  | –        |
|                                                 | Cage of reinforced polyamide            | TB                       | FT                | TB                       | –            | –        | –                        | –         | –        |
|                                                 | Steel cage                              | •                        | •                 | •                        | •            | J        | •                        | •         | •        |
|                                                 | Brass cage                              | M, MA                    | FY, P             | M, MA                    | M            | L1       | M, MA                    | MA, M, MB | M        |
|                                                 | Maximum capacity design                 | B, C                     | R                 | –                        | –            | –        | E                        | A         | –        |
| <b>Angular contact ball bearings Single row</b> | Contact angle 30°                       | •                        | •                 | A                        | –            | •        | A                        | –         | –        |
|                                                 | Contact angle 40°                       | B                        | B                 | B                        | B            | B        | B                        | B         | B        |
|                                                 | Cage of glass-fibre                     | TVP                      | –                 | TVP                      | T85          | T2       | P                        | G14, G15  | T        |
|                                                 | Steel cage                              | JP                       | •                 | J                        | W            | J        | J, F                     | –         | •        |
|                                                 | Brass cage                              | MP                       | FY                | MP                       | M, •         | L1       | M                        | M, MB, MA | M        |
|                                                 | Universal design in X and O arrangement | UA                       | G                 | CB                       | G            | G        | CB                       | G         | –        |
|                                                 | O / X arranges, zero clearance          | UO                       | –                 | –                        | –            | –        | –                        | –         | –        |
|                                                 | O / X lightly preloaded                 | UL                       | GL                | GA                       | GL           | GL       | GA                       | –         | –        |
| <b>Angular contact ball bearings Double row</b> | Contact angle 25°                       | B                        | –                 | –                        | B            | •        | –                        | A         | –        |
|                                                 | Contact angle 32°                       | –                        | •                 | B                        | •            | –        | A                        | B         | –        |
|                                                 | Contact angle 35°                       | •                        | –                 | •                        | –            | –        | –                        | –         | –        |
|                                                 | Contact angle 45° + split inner ring    | DA                       | DAC               | D                        | –            | –        | D                        | –         | –        |
|                                                 | Steel cage                              | •                        | •                 | •                        | J, •         | •        | J1, •                    | •         | –        |
|                                                 | Cage of glass-fibre                     | TVH                      | MN, FG            | TV                       | TNG          | –        | TN9                      | G14, G15  | –        |
|                                                 | Brass cage                              | M, MA                    | FY                | M                        | M            | –        | M, MA                    | M         | –        |

No guarantee and no liability for the correctness of the information provided in this cross-reference table. In case of doubt please contact the manufacturer.

## TECHNICAL DATA SHEET: V-BELTS

SWR-Europe - V-belts for every application

Innovative manufacturing methods with over a 50 years' experience in producing V-belts are the guarantors of consistently high quality.

All products are electrically conductive in accordance with DIN ISO 1813. The SWR V-belts are fully suitable for tropical regions. They are conditionally resistant to oil and heat up to 120°C.

Flawless, reliable and durable products are the result of the most stringent quality controls and the latest production technologies.

| Section | Length ranges     |                       | Cross section<br>width x height | Angle | ~kg/m | Max. belt<br>speed<br>m/s | Bending<br>frequency | Min<br>pulley<br>diameter | Temperature<br>range | Standards  |
|---------|-------------------|-----------------------|---------------------------------|-------|-------|---------------------------|----------------------|---------------------------|----------------------|------------|
|         | inch              | mm                    |                                 |       |       |                           |                      |                           |                      |            |
|         | inch Li           | mm Li                 |                                 |       |       |                           |                      |                           |                      |            |
| Z /M    | 23 – 140          | 584 – 3556            | 10 x 6                          | 38°   | 0.057 | 30                        | 60                   | 45                        | -40 – 80°C           | DIN 2215   |
| A       | 14 – 300          | 355 – 7620            | 13 x 8                          | 38°   | 0.108 | 30                        | 60                   | 71                        | -40 – 80°C           | ISO 4184   |
| B       | 18 – 600          | 457 – 15240           | 17 x 11                         | 38°   | 0.179 | 30                        | 60                   | 112                       | -40 – 80°C           |            |
| C       | 36 – 600          | 914 – 15240           | 22 x 14                         | 38°   | 0.320 | 30                        | 60                   | 180                       | -40 – 80°C           |            |
| D       | 80 – 600          | 2032 – 15240          | 32 x 20                         | 38°   | 0.672 | 30                        | 60                   | 315                       | -40 – 80°C           |            |
| E       | 80 – 600          | 2032 – 15240          | 40 x 25                         | 38°   | 1.041 | 30                        | 60                   | 450                       | -40 – 80°C           |            |
|         |                   | mm Ld                 |                                 |       |       |                           |                      |                           |                      |            |
| SPZ     |                   | 637 – 3556            | 9,7 x 8                         | 36°   | 0.086 | 40                        | 100                  | 63                        | -40 – 80°C           | DIN 7753/1 |
| SPA     |                   | 890 – 7620            | 12,7 x 10                       | 36°   | 0.128 | 40                        | 100                  | 90                        | -40 – 80°C           | ISO 4184   |
| SPB     |                   | 890 – 15240           | 16,3 x 13                       | 36°   | 0.210 | 40                        | 100                  | 140                       | -40 – 80°C           |            |
| SPC     |                   | 1524 – 15240          | 22 x 18                         | 36°   | 0.390 | 40                        | 100                  | 224                       | -40 – 80°C           |            |
|         | inch La           | mm La                 |                                 |       |       |                           |                      |                           |                      |            |
| 3V      | 25 – 140          | 635 – 3556            | 9,5 x 8                         | 38°   | 0.075 | 40                        | 100                  | 63                        | -40 – 80°C           | RMA/MPTA   |
| 5V      | 50 – 600          | 1270 – 15240          | 15,9 x 13                       | 38°   | 0.207 | 40                        | 100                  | 140                       | -40 – 80°C           |            |
| 8V      | 80 – 600          | 2032 – 15240          | 25,4 x 23                       | 38°   | 0.552 | 40                        | 100                  | 315                       | -40 – 80°C           |            |
|         |                   | mm Ld                 |                                 |       |       |                           |                      |                           |                      |            |
| XPZ     |                   | 560 – 3550            | 9,7 x 8                         | 36°   | 0.075 | 50                        | 120                  | 50                        | -40 – 80°C           | DIN 7753/1 |
| XPA     |                   | 560 – 4500            | 12,7 x 10                       | 36°   | 0.112 | 50                        | 120                  | 63                        | -40 – 80°C           | ISO 4184   |
| XPB     |                   | 580 – 7620<br>*9000   | 16,3 x 13                       | 36°   | 0.184 | 50                        | 120                  | 100                       | -40 – 80°C           |            |
| XPC     |                   | 650 – 7620<br>*12500  | 22 x 18                         | 36°   | 0.343 | 50                        | 120                  | 160                       | -40 – 80°C           |            |
|         | inch Li           | mm Li                 |                                 |       |       |                           |                      |                           |                      |            |
| ZX      | 22 – 100          | 559 – 2540            | 10 x 6                          | 38°   | 0.055 | 50                        | 120                  | 40                        | -40 – 80°C           | DIN 2215   |
| AX      | 22 – 70<br>*400   | 355 – 7620<br>*10160  | 13 x 8                          | 38°   | 0.070 | 50                        | 120                  | 63                        | -40 – 80°C           | ISO 4184   |
| BX      | 23 – 300<br>*400  | 584 – 7620<br>*10160  | 17 x 11                         | 38°   | 0.152 | 50                        | 120                  | 90                        | -40 – 80°C           |            |
| CX      | 24 – 300<br>*600  | 610 – 7620<br>*15240  | 22 x 14                         | 38°   | 0.272 | 50                        | 120                  | 140                       | -40 – 80°C           |            |
| DX      | 80 – 300          | 2032 – 7620<br>*15240 | 32 x 20                         | 38°   | 0.571 | 50                        | 120                  | 280                       | -40 – 80°C           |            |
|         | inch La           | mm La                 |                                 |       |       |                           |                      |                           |                      |            |
| 3VX     | 22 – 140          | 560 – 3550            | 9,5 x 8                         | 38°   | 0.066 | 50                        | 120                  | 56                        | -40 – 80°C           | RMA/MPTA   |
| 5VX     | 35 – 300<br>*354  | 890 – 7620<br>*9000   | 15,9 x 13                       | 38°   | 0.182 | 50                        | 120                  | 112                       | -40 – 80°C           |            |
| 8VX     | 100 – 300<br>*600 | 2540 – 7620<br>*15240 | 25 x 23                         | 38°   | 0.486 | 50                        | 120                  | 280                       | -40 – 80°C           |            |

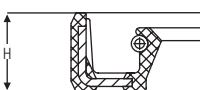
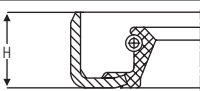
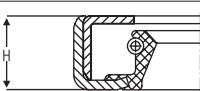
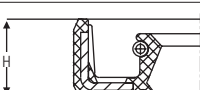
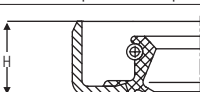
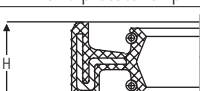
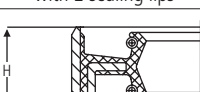
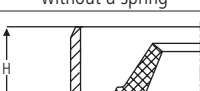
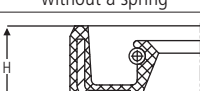
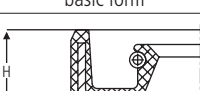
\* on request

This technical data sheet serves only as a technical guide and offers no guarantee of completeness or absolute accuracy.

## COMPARISON TABLE: SHAFT SEAL RINGS

The standard shaft seal rings are made of acrylonitrile-butadiene rubber (NBR). They can withstand temperatures from -40°C up to +100°C (up to 120°C for a brief period of time).

As for the SKF shaft seal rings made of fluoro rubber, R/RG is replaced by V.

| Sketch                                                                                                       | Sealing material    | Operating temperature | STORM | Dichtomatik | SKF       | Simrit | Stefa | Action-Seal | Goetze   | Kaco | Eriks    |
|--------------------------------------------------------------------------------------------------------------|---------------------|-----------------------|-------|-------------|-----------|--------|-------|-------------|----------|------|----------|
| <br>basic form              | Standard (NBR)      | -40°C up to +100°C    | BA    | WA          | HMS5 RG   | A      | CB    | SC          | WDR827 N | DG   | R        |
| <br>basic form              | Standard (NBR)      | -40°C up to +100°C    | B1    | WB          | CRS1 R    | B      | BB    | SB          | WDR822 N | DF   | M        |
| <br>basic form              | Standard (NBR)      | -40°C up to +100°C    | B2    | WC          | CRSH1 R   | C      | DG    | SA          | WDR824 N | DFK  | GV       |
| <br>with a protective lip   | Standard (NBR)      | -40°C up to +100°C    | BASL  | WAS         | HMSA10 RG | ASL    | CC    | TC          | WDR827 S | DGS  | RST      |
| <br>with a protective lip | Standard (NBR)      | -40°C up to +100°C    | B1SL  | WBS         | CRSA1 R   | BSL    | BC    | TB          | WDR822 S | DFS  | MST      |
| <br>with a protective lip | Standard (NBR)      | -40°C up to +100°C    | B2SL  | WCS         | CRSHA1 R  | CSL    | DC    | TA          | WDR824 S | DFSK | GVSTO    |
| <br>with 2 sealing lips   | Standard (NBR)      | -40°C up to +100°C    | BADUO | WAD         |           | ADUO   | CK    | CK          | WDR827 D | DGD  | R-DUO    |
| <br>with 2 sealing lips   | Standard (NBR)      | -40°C up to +100°C    | B1DUO | WBD         |           | BDUO   | BK    | BK          | WDR822 D | DFD  | M-DUO    |
| <br>without a spring      | Standard (NBR)      | -40°C up to +100°C    | BAOF  | WAO         |           | AOF    | CD    |             |          | DE   | RZV      |
| <br>without a spring      | Standard (NBR)      | -40°C up to +100°C    | B1OF  | WBO         |           | BOF    | BD    |             |          | DC   | MZV      |
| <br>basic form            | Fluoro rubber (FKM) | -30°C up to +200°C    | VIT   | VIA         | HMS5 V    | BAUM   |       |             |          |      | Viton GR |
| <br>with a protective lip | Fluoro rubber (FKM) | -30°C up to +200°C    | VITSL | VIAS        | HMSA10 V  | BAUMSL |       |             |          |      |          |