

Order information

Gearhead type

TP+ 004 – TP+ 4000
SP+ 060 – SP+ 240

Type code

S = Standard
A = Optimized mass moment of inertia ^{b)}
E = Version in ATEX ^{b)}
F = Food-grade lubrication ^{b)}
G = Grease ^{b)}
L = Low friction (SP+ 100 - 240 HIGH SPEED)
W = Corrosion resistant ^{b)}

Gearhead variations

M = Motor attachment gearhead
S = Separate version

Gearhead model

F = Standard
A = HIGH TORQUE (only TP+)
C = HIGH SPEED (only SP+)

Number of stages

1 = 1-stage
2 = 2-stage
3 = 3-stage

^{a)} Order shrink discs separately, see section accessories, shrink discs on page 416

^{b)} Reduced specification available on request

Gearhead type

TK+ 004 – TK+ 110
TPK+ 010 – TPK+ 500
SK+ 060 – SK+ 180
SPK+ 075 – SPK+ 240
HG+ 060 – HG+ 180
SC+ 060 – SC+ 180
SPC+ 060 – SPC+ 180
TPC+ 004 – TPC+ 110

Type code

S = Standard
B = Modular output combination (SK+, SPK+, TK+, TPK+, HG+) ^{c)}
E = Version in ATEX ^{b)} ^{d)}
F = Food-grade lubrication ^{b)}
W = Corrosion resistant ^{b)}

Gearhead variations

M = Motor attachment gearhead

Gearhead model

F = Standard
A = HIGH TORQUE (only TPK+)

Number of stages

1 = 1-stage
2 = 2-stage
3 = 3-stage
4 = 4-stage

^{a)} Order shrink discs separately, see section accessories, shrink discs on page 416

^{b)} Reduced specification available on request

^{c)} See modular system matrix, page 430

^{d)} SK+/TK+/HG+ only

Gearhead type

LP+ 050 – LP+ 155
LPB+ 070 – LPB+ 120

Type code

S = Standard
F = Food lubrication

Gearhead variations

M = Motor attachment gearhead

Gearhead model

F = Standard

Number of stages

1 = 1-stage
2 = 2-stage

Gearhead type

LK 050 – LK 155
LPK 050 – LPK 155
LPBK 070 – LPBK 120
CP 040 – CP 115

Gearhead variations

M = Motor attachment gearhead

Gearhead model

O = Standard
L = Food-grade grease

Number of stages

1 = 1-stage
2 = 2-stage
3 = 3-stage (LPK+)

Ratios

See technical data sheets.

Gearhead type

VDT = TP flange
VDH = hollow shaft
VDS = shaft

Gearhead version

e = value
(only for VDH and VDS, size 040, 050 and 063)

Distance between axes

040, 050, 063, 080, 100

Gearhead variations

M = Motor attachment gearhead

Gearhead model

F = Standard
L = Food-grade lubrication
W = Corrosion resistant

Number of stages

1 = 1-stage

** See section accessories, shrink discs on page 416

Ratios
See technical data sheets.

Output shape
0 = Csmooth shaft/flange
1 = shaft with key
2 = involute to DIN 5480
3 = system output
4 = other
5 = Shaft mounted (SP⁺)^{a)}

Clamping hub bore hole diameter
(see technical data sheets and clamping hub diameter table)

Backlash
1 = Standard
0 = Reduced
(see technical data sheets)

Installation on motor side
S = Push-on sleeve
K = Coupling

X = Special model

Ratios
See technical data sheets.

Output shape
0 = smooth shaft/flange (no hollow shaft)
1 = shaft with key
2 = involute to DIN 5480
3 = system output
4 = other
5 = Hollow shaft interface / Flanged hollow shaft (TK⁺)^{a)}
Shaft mounted (SPK⁺/SPC⁺)^{a)}
6 = 2 hollow shaft interfaces (HG⁺)^{a)}
(see technical data sheets)

Clamping hub bore hole diameter
(see technical data sheets and clamping hub diameter table)

Backlash
1 = Standard
0 = Reduced
(see technical data sheets)

Installation on motor side
S = Push-on sleeve
K = Coupling

X = Special model

Ratios
See technical data sheets.

Output shape
0 = Smooth shaft/flange
1 = Shaft with key

Clamping hub bore hole diameter
(see technical data sheets and clamping hub diameter table)

Backlash
1 = Standard
(see technical data sheets)

Installation on motor side
S = Push-on sleeve
K = Coupling

Output shape
0 = Smooth shaft (for LP⁺ only)
1 = Shaft with key
LPBK⁺
1 = Centering on output side

Clamping hub bore hole diameter
1 = Standard
(see technical data sheets)

Backlash
1 = Standard

X = Special model

Ratios
4 (not for value sizes 050 and 063)
7
10
16
28
40

Output shape
0 = smooth shaft/flange
1 = shaft with key
2 = involute to DIN 5480 (VDS⁺)
4 = other (see technical data sheets)
8 = Dual-shaft output, smooth (VDS⁺, VDSe)
9 = Dual-shaft output with key (VDS⁺, VDSe)

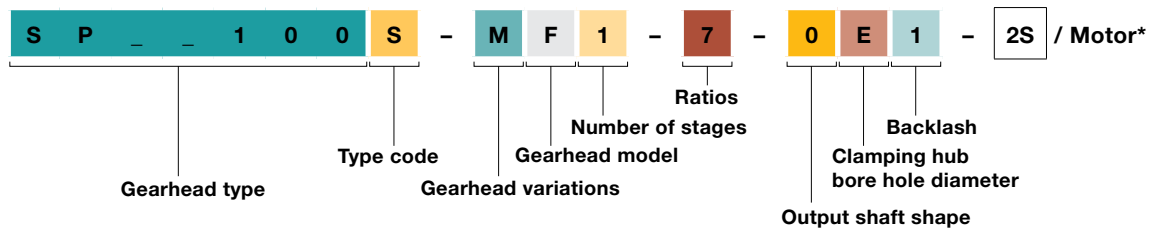
Clamping hub bore hole diameter
2 = 14 mm (040)
3 = 19 mm (040, 050)
4 = 28 mm (063)
5 = 35 mm (080)
7 = 48 mm (100)

Backlash
1 = Standard
0 = Reduced

VDH – number of shrink discs**
0 = no shrink disc
1 = one shrink disc
2 = two shrink discs

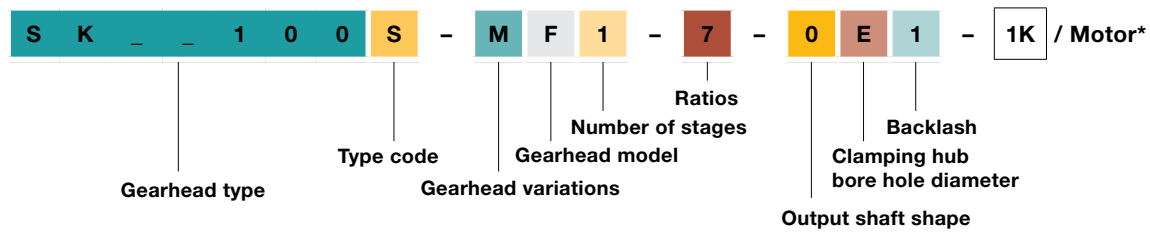
X = Special model

TP+/SP+



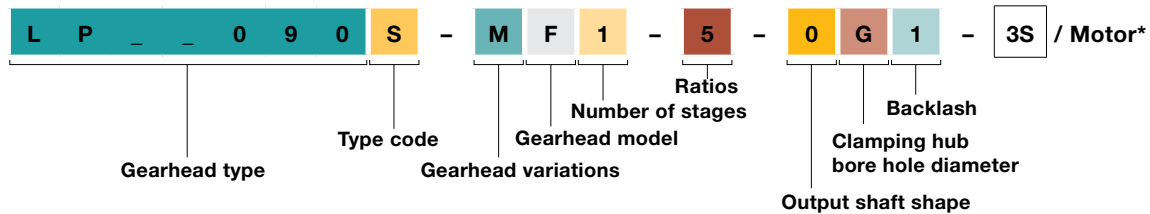
* Full motor designation only required for determining gearhead attached components!

TK+/TPK+/SK+/SPK+/HG+/SC+/SPC+/TPC+

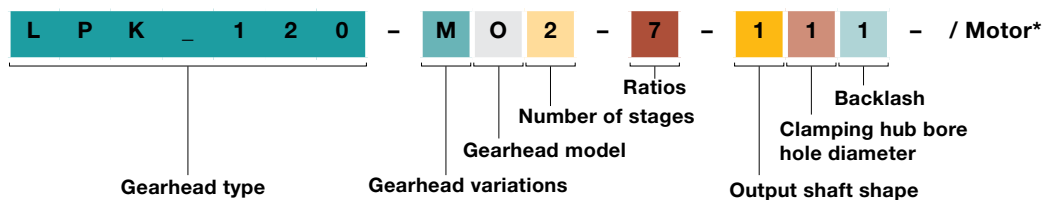


* Full motor designation only required for determining gearhead attached components!

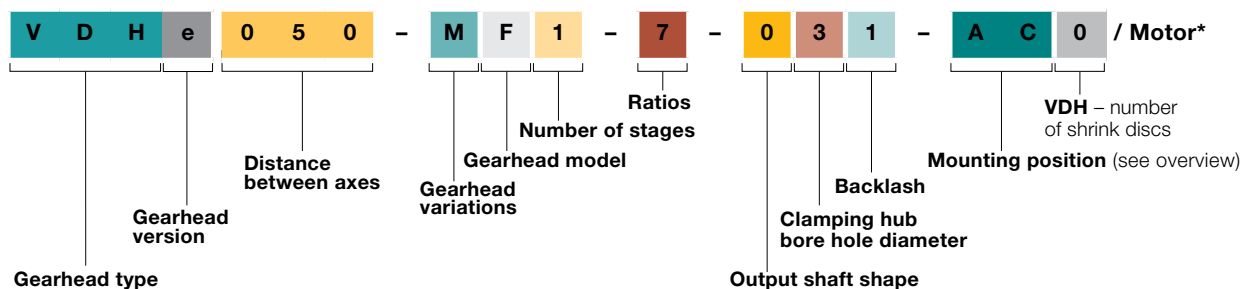
LP+/LPB+ Generation 3



LK+/LPK+/LPBK+/CP



V-Drive

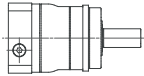


Mounting positions and clamping hub diameters

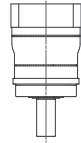
Coaxial gearheads

TP+ 2000/4000: Please contact WITTENSTEIN alpha

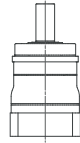
B5 – horizontal



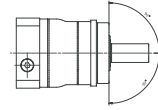
V1 – vertical
Output shaft
downwards



V3 – vertical
Output shaft
upwards



S – can be tilted
 $\pm 90^\circ$ from a horizontal
position



Clamping hub diameter

(the technical data sheet contains all diameters available for TP+, SP+, TK+, TPK+, SK+, SPK+, SC+, SPC+, TPC+, HG+ and LP+ models)

Code letter	mm	Code letter	mm
B	11	I	32
C	14	K	38
D	16	L	42
E	19	M	48
G	24	N	55
H	28	O	60

Intermediate diameters possible in combination with a bushing with a minimum thickness of 1 mm.

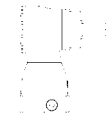
Right-angle gearheads

For information purposes only – not required when placing orders!

Permitted standard mounting positions for right-angle gearheads (see illustrations)

If the mounting position is different, contact WITTENSTEIN alpha

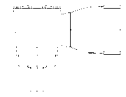
B5/V3
Output shaft, horizontal
Motor shaft upwards



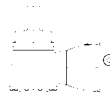
B5/V1
Output shaft, horizontal
Motor shaft downwards



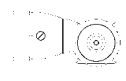
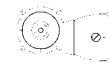
V1/B5
Output shaft, vertical
Motor shaft, horizontal



V3/B5
Output shaft, vertical, upwards
Motor shaft, horizontal



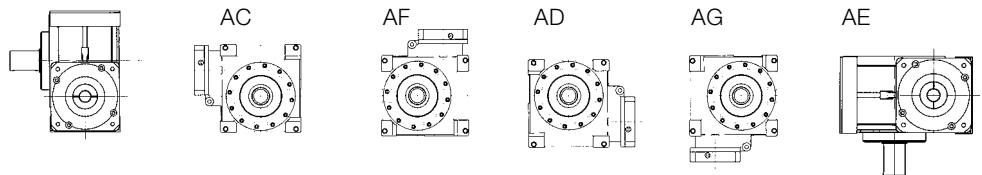
B5/B5
Output shaft, horizontal
Motor shaft, horizontal



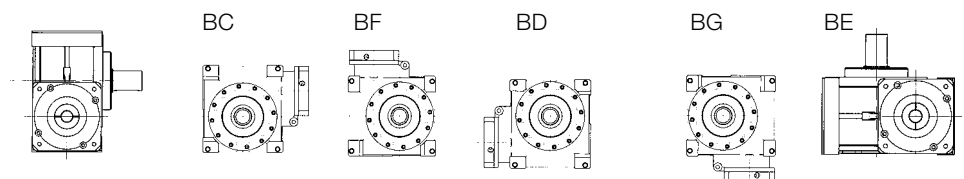
Worm gearheads

Mounting position (only relevant for oil volume)

Output side A:
View of motor interface
Only valid for VDS+, VDSe and VDT+



Output side B:
View of motor interface
Only valid for VDS+, VDSe und VDT+



For VDH+, VDHe and VDS+/VDSe with Dual-shaft output, A and B must be replaced with 0 (zero).

Order information

Rack and assembly jig

Rack type ZST = Rack ZMT = Assembly jig	Module 200 = 2.00 300 = 3.00 400 = 4.00 500 = 5.00 600 = 6.00	Version PA5 = Premium Class HE6 = Performance Class VB6 = Value Class PD5 = Assembly jig	Length 100 = Assembly jig (module 2–3) 156 = Assembly jig (module 4–6) 480 = Smart Class (module 2–4) 167/333 = Premium Class (module 2) 250 = Premium Class (module 3) 500 = Premium Class (module 2–6) 1000 = Value Class (module 2–6)
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Premium Class⁺ and Value Class pinion

Designation RMT = Pinion mounted ex works RMX = Pinion mounted offset 180° (for VC pinions only)	Module 200 = 2.00 300 = 3.00 400 = 4.00 500 = 5.00 600 = 6.00	Version PC5 = Premium Class VC6 = Value Class	Number of teeth (see technical data sheet)
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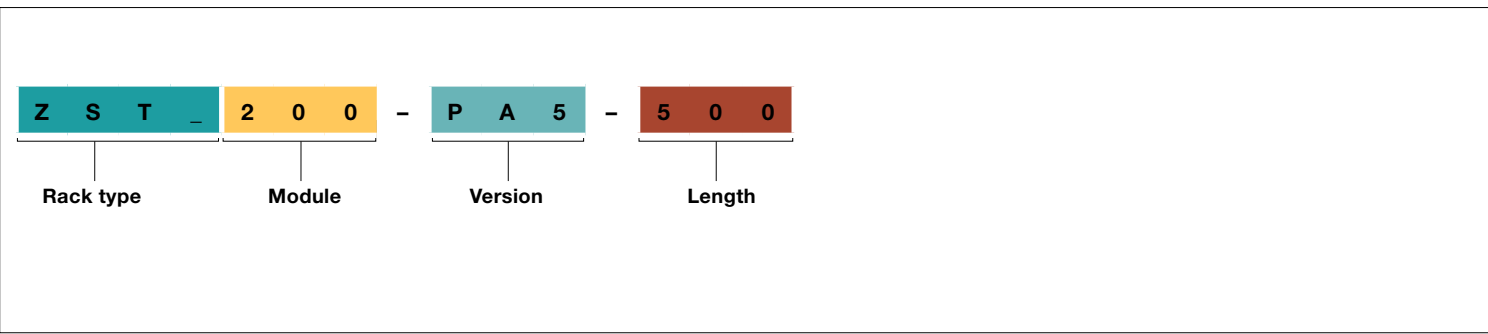
Premium Class RTP and Standard Class RSP pinions

Designation RSP = Standard Class RSP pinion for SP Involute output as per DIN 5480 RTP = Premium Class RTP pinion for TP output RTPA = Premium Class RTP pinion for TP High Torque output	Gearhead size For SP output: 060, 075, 100, 140, 180, 210, 240 For TP output: 004, 010, 025, 050, 110, 300, 500 (see technical data sheets)	Module A02 = 2.00 A03 = 3.00 A04 = 4.00 A05 = 5.00 A06 = 6.00	Tolerance class 5e24 = Premium Class RTP/RTPA 6e25 = Standard Class RSP	Number of teeth (see technical data sheet)
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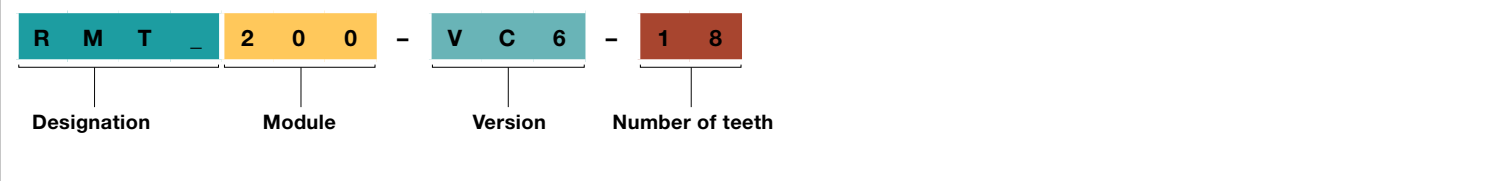
Torque limiter, bellows coupling and elastomer coupling

Model Torque limiter TL1 / TL 2 / TL3 Metal bellows coupling BCT / BCH / BC2 / BC3 / EC2 Elastomer coupling ELC / EL6	Series (see technical data sheets)	Length option A = First length B = Second length Elastomer ring option A = 98 Sh A B = 64 Sh D C = 80 Sh A	Torque limiter (TL) function W = Single position (360°) D = Multi-position (60°) G = Load holding F = Full disengagement Metal bellows coupling function (BC, EC) A = Standard B = incl. self-opening clamp system (EC2) Elastomer coupling function (EL) A = Standard	Internal diameter D₁ (drive side) TL1: D ₁ = D ₂ BCT: D ₁ = Output side
Bore version D₁ 0 = Smooth 1 = Key shape A DIN 6885 2 = Involute DIN 5480 (on request) 3 = Key shape A ANSI B17.1	Internal diameter D₂ (output side) TL1: D ₁ = D ₂ BCT: D ₂ = TP* flange hole circle	Bore version D₂ 0 = Smooth 1 = Key shape A DIN 6885 2 = Involute DIN 5480 (on request) 3 = Key shape A ANSI B17.1 A = Hole circle BCT HIGH TORQUE	Torque limiter (TL) adjustment range A = First series B = Second series C = Third series D = Fourth series (for TL1 only)	Disengagement torque Torque limiter T _{Dis} [Nm] (see technical data sheets for torque limiter)

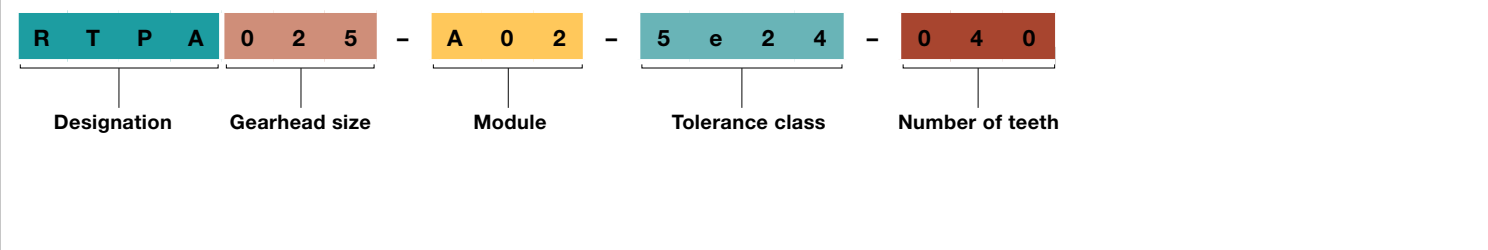
Order codes



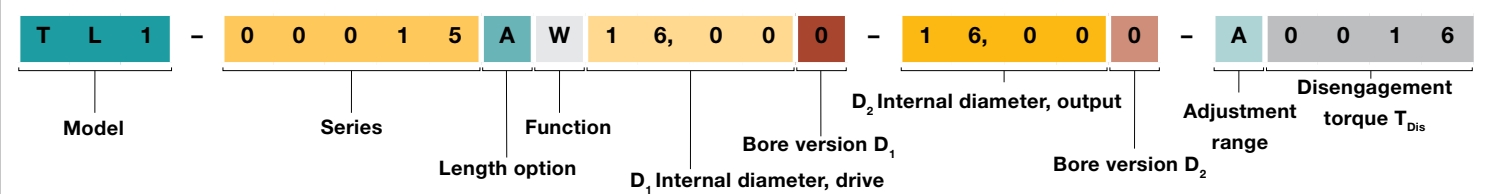
Premium Class⁺ and Value Class pinion



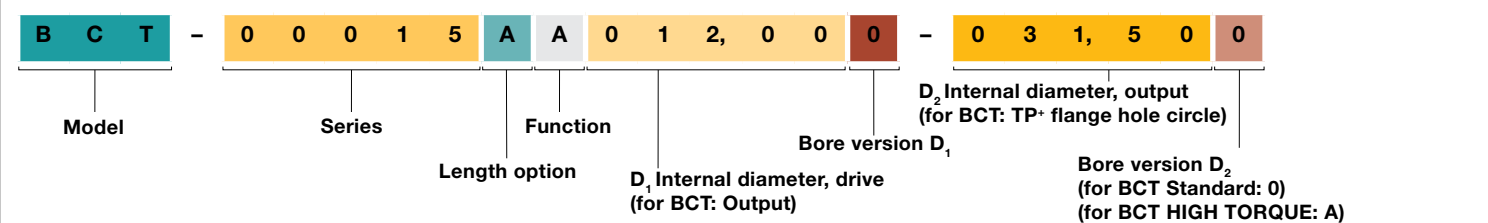
Premium Class RTP and Standard Class RSP pinions



Torque limiter



Bellows coupling



Elastomer coupling

