

Symbol	Typ	Titel
F	Sektion	SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING
F16	Klasse	ENGINEERING ELEMENTS OR UNITS; GENERAL MEASURES FOR PRODUCING AND MAINTAINING EFFECTIVE FUNCTIONING OF MACHINES OR INSTALLATIONS ; THERMAL INSULATION IN GENERAL
F16C	Unterklasse	SHAFTS; FLEXIBLE SHAFTS; ELEMENTS OF CRANKSHAFT MECHANISMS; ROTARY BODIES OTHER THAN GEARING ELEMENTS; BEARINGS [5]
F16C 1/00	Hauptgruppe	Flexible shafts (flexible shafts in dental machines for boring or cutting A61C 1/18); Mechanical means for transmitting movement in a flexible sheathing
F16C 1/02	1-Punkt Untergruppe	. for conveying rotary movements
F16C 1/04	2-Punkt Untergruppe	. . Articulated shafts
F16C 1/06	2-Punkt Untergruppe	. . with guiding-sheathing, tube, or box (F16C 1/04 takes precedence; guiding-sheathings F16C 1/26)
F16C 1/08	2-Punkt Untergruppe	. . End connections
F16C 1/10	1-Punkt Untergruppe	. Means for transmitting linear movement in a flexible sheathing, e.g. "Bowden mechanisms" (guiding-sheathings F16C 1/26)
F16C 1/12	2-Punkt Untergruppe	. . Arrangements for transmitting movement to or from the flexible member
F16C 1/14	3-Punkt Untergruppe	. . . Construction of the end-piece of the flexible member; Attachment thereof to the flexible member
F16C 1/16	3-Punkt Untergruppe	. . . in which the end-piece is guided rectilinearly
F16C 1/18	3-Punkt Untergruppe	. . . in which the end portion of the flexible member is laid along a curved surface of a pivoted member
F16C 1/20	2-Punkt Untergruppe	. . Construction of flexible members moved to and fro in the sheathing
F16C 1/22	2-Punkt Untergruppe	. . Adjusting; Compensating length
F16C 1/24	1-Punkt Untergruppe	. Lubrication; Lubricating equipment
F16C 1/26	1-Punkt Untergruppe	. Construction of guiding-sheathings or guiding-tubes
F16C 1/28	2-Punkt Untergruppe	. . with built-in bearings
F16C 3/00	Hauptgruppe	Shafts (flexible shafts F16C 1/00; marine propeller shafts, paddle wheel shafts B63H 23/34); Axles ; Cranks; Eccentrics
F16C 3/02	1-Punkt Untergruppe	. Shafts; Axles
F16C 3/03	2-Punkt Untergruppe	. . telescopic (axially displaceable couplings F16D 3/06)
F16C 3/035	3-Punkt Untergruppe	. . . with built-in bearings
F16C 3/04	1-Punkt Untergruppe	. Crankshafts, eccentric-shafts; Cranks, eccentrics
F16C 3/06	2-Punkt Untergruppe	. . Crankshafts
F16C 3/08	3-Punkt Untergruppe	. . . made in one piece (features relating to lubrication F16C 3/14, to cooling F16C 3/16)
F16C 3/10	3-Punkt Untergruppe	. . . assembled of several parts, e.g. by welding
F16C 3/12	4-Punkt Untergruppe	 releasably connected
F16C 3/14	3-Punkt Untergruppe	. . . Features relating to lubrication

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F16C 3/16	3-Punkt Untergruppe	. . . Features relating to cooling
F16C 3/18	2-Punkt Untergruppe	. . Eccentric-shafts
F16C 3/20	2-Punkt Untergruppe	. . Shape of crankshafts or eccentric-shafts having regard to balancing
F16C 3/22	2-Punkt Untergruppe	. . Cranks; Eccentrics (constructional features of crank-pins F16C 11/02)
F16C 3/24	3-Punkt Untergruppe	. . . with return cranks, i.e. a second crank carried by the crank-pin
F16C 3/26	3-Punkt Untergruppe	. . . Elastic crank-webs; Resiliently-mounted crank-pins (elastic connecting-rods F16C 7/04)
F16C 3/28	3-Punkt Untergruppe	. . . Adjustable cranks or eccentrics (adjustable crank mechanisms F16H 21/20)
F16C 3/30	3-Punkt Untergruppe	. . . with arrangements for overcoming dead-centres
F16C 5/00	Hauptgruppe	Crossheads; Constructions of connecting-rod heads or piston-rod connections rigid with crossheads (piston-rods, i.e. rods rigidly connected to the piston, F16J 7/00)
F16C 7/00	Hauptgruppe	Connecting-rods or like links pivoted at both ends (coupling-rods for locomotive driving-wheels B61C; inhibiting shift in gearing during unfavourable conditions F16H 61/16); Construction of connecting-rod heads (heads rigid with crossheads F16C 5/00)
F16C 7/02	1-Punkt Untergruppe	. Constructions of connecting-rods with constant length
F16C 7/04	1-Punkt Untergruppe	. with elastic intermediate part or fluid cushion
F16C 7/06	1-Punkt Untergruppe	. Adjustable connecting-rods
F16C 7/08	1-Punkt Untergruppe	. made from sheet metal
F16C 9/00	Hauptgruppe	Bearings for crankshafts or connecting-rods; Attachment of connecting-rods (lubrication of connecting-rods in connection with crankshafts F16C 3/14; connections to crossheads F16C 5/00, to pistons F16J 1/14)
F16C 9/02	1-Punkt Untergruppe	. Crankshaft bearings
F16C 9/03	2-Punkt Untergruppe	. . Arrangements for adjusting play
F16C 9/04	1-Punkt Untergruppe	. Connecting-rod bearings; Attachment thereof
F16C 9/06	2-Punkt Untergruppe	. . Arrangements for adjusting play in bearings, operating either automatically or not (bearings adjustable for play in general F16C 25/00)
F16C 11/00	Hauptgruppe	Pivots; Pivotal connections (arrangements of steering linkage connections B62D 7/16)
F16C 11/02	1-Punkt Untergruppe	. Trunnions; Crank-pins (fastening crank-pins to webs, crank-pins integral with cranks F16C 3/06, F16C 3/22)
F16C 11/04	1-Punkt Untergruppe	. Pivotal connections (hinges for doors, windows or wings E05D; rubber springs with stiff outer sleeve and inner sleeve or pin F16F 1/38)
F16C 11/06	2-Punkt Untergruppe	. . Ball-joints; Other joints having more than one degree of angular freedom, i.e. universal joints (for transmitting rotary motion F16D 3/00; supports for apparatus with ball-joint heads F16M 11/14)
F16C 11/08	3-Punkt Untergruppe	. . . with resilient bearings
F16C 11/10	2-Punkt Untergruppe	. . Arrangements for locking
F16C 11/12	2-Punkt Untergruppe	. . incorporating flexible connections, e.g. leaf springs
F16C 13/00	Hauptgruppe	Rolls, drums, discs, or the like (guide rollers in feeding webs B65H 27/00; calender rolls, bearings therefor D21G 1/02; pulleys F16H 55/00; rotary drums or rollers for heat-exchange or heat-transfer apparatus F28F 5/02; special adaptations, <u>see</u> the relevant classes); Bearings or mountings therefor
F16C 13/02	1-Punkt Untergruppe	. Bearings

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F16C 13/04	2-Punkt Untergruppe	. . Bearings with only partial enclosure of the member to be borne; Bearings with local support at two or more points
F16C 13/06	2-Punkt Untergruppe	. . self-adjusting
F16C 15/00	Hauptgruppe	Construction of rotary bodies to resist centrifugal force (flywheels, correction weights F16F 15/30 , F16F 15/32) <u>Bearings for rotary parts (F16C 9/00, F16C 13/02 take precedence; allowing for linear movement also F16C 31/00)</u>
F16C 17/00	Hauptgruppe	Sliding-contact bearings (F16C 32/06 takes precedence; adjustable bearings F16C 23/00, F16C 25/00) [2]
F16C 17/02	1-Punkt Untergruppe	. for radial load only
F16C 17/03	2-Punkt Untergruppe	. . with tiltably-supported segments, e.g. Michell bearings
F16C 17/04	1-Punkt Untergruppe	. for axial load only
F16C 17/06	2-Punkt Untergruppe	. . with tiltably-supported segments, e.g. Michell bearings
F16C 17/08	2-Punkt Untergruppe	. . for supporting the end face of a shaft or other member, e.g. footstep bearings
F16C 17/10	1-Punkt Untergruppe	. for both radial and axial load
F16C 17/12	1-Punkt Untergruppe	. characterised by features not related to the direction of the load
F16C 17/14	2-Punkt Untergruppe	. . specially adapted for operating in water
F16C 17/18	2-Punkt Untergruppe	. . with floating brasses or bushes, rotatable at a reduced speed
F16C 17/20	2-Punkt Untergruppe	. . with emergency supports or bearings
F16C 17/22	2-Punkt Untergruppe	. . with arrangements compensating for thermal expansion
F16C 17/24	2-Punkt Untergruppe	. . with devices affected by abnormal or undesired conditions, e.g. for preventing overheating, for safety
F16C 17/26	1-Punkt Untergruppe	. Systems consisting of a plurality of sliding-contact bearings
F16C 19/00	Hauptgruppe	Bearings with rolling contact (adjustable bearings F16C 23/00, F16C 25/00)
F16C 19/02	1-Punkt Untergruppe	. with bearing balls essentially of the same size in one or more circular rows
F16C 19/04	2-Punkt Untergruppe	. . for radial load mainly
F16C 19/06	3-Punkt Untergruppe	. . . with a single row of balls
F16C 19/08	3-Punkt Untergruppe	. . . with two or more rows of balls
F16C 19/10	2-Punkt Untergruppe	. . for axial load mainly
F16C 19/12	3-Punkt Untergruppe	. . . for supporting the end face of a shaft or other member, e.g. footstep bearings
F16C 19/14	2-Punkt Untergruppe	. . for both radial and axial load
F16C 19/16	3-Punkt Untergruppe	. . . with a single row of balls
F16C 19/18	3-Punkt Untergruppe	. . . with two or more rows of balls
F16C 19/20	2-Punkt Untergruppe	. . with loose spacing bodies, e.g. balls, between the bearing balls
F16C 19/22	1-Punkt Untergruppe	. with bearing rollers essentially of the same size in one or more circular rows, e.g. needle bearings
F16C 19/24	2-Punkt Untergruppe	. . for radial load mainly

Symbol	Typ	Titel
F16C 19/26	3-Punkt Untergruppe	. . . with a single row of rollers
F16C 19/28	3-Punkt Untergruppe	. . . with two or more rows of rollers
F16C 19/30	2-Punkt Untergruppe	. . for axial load mainly
F16C 19/32	3-Punkt Untergruppe	. . . for supporting the end face of a shaft or other member, e.g. footstep bearings
F16C 19/34	2-Punkt Untergruppe	. . for both radial and axial load
F16C 19/36	3-Punkt Untergruppe	. . . with a single row of rollers
F16C 19/38	3-Punkt Untergruppe	. . . with two or more rows of rollers
F16C 19/40	2-Punkt Untergruppe	. . with loose spacing bodies between the rollers
F16C 19/44	2-Punkt Untergruppe	. . Needle bearings
F16C 19/46	3-Punkt Untergruppe	. . . with one row of needles
F16C 19/48	3-Punkt Untergruppe	. . . with two or more rows of needles
F16C 19/49	1-Punkt Untergruppe	. Bearings with both balls and rollers
F16C 19/50	1-Punkt Untergruppe	. Other types of ball or roller bearings
F16C 19/52	1-Punkt Untergruppe	. with devices affected by abnormal or undesired conditions
F16C 19/54	1-Punkt Untergruppe	. Systems consisting of a plurality of bearings with rolling friction (spindle bearings F16C 35/08)
F16C 19/55	2-Punkt Untergruppe	. . with intermediate floating rings rotating at reduced speed
F16C 19/56	2-Punkt Untergruppe	. . in which the rolling bodies of one bearing differ in diameter from those of another
F16C 21/00	Hauptgruppe	Combinations of sliding-contact bearings with ball or roller bearings (F16C 17/24, F16C 19/52 take precedence) [2]
F16C 23/00	Hauptgruppe	Bearings adjustable for aligning or positioning (F16C 27/00 takes precedence)
F16C 23/02	1-Punkt Untergruppe	. Sliding-contact bearings
F16C 23/04	2-Punkt Untergruppe	. . self-adjusting
F16C 23/06	1-Punkt Untergruppe	. Ball or roller bearings
F16C 23/08	2-Punkt Untergruppe	. . self-adjusting
F16C 23/10	1-Punkt Untergruppe	. Bearings, parts of which are eccentrically adjustable with respect to each other
F16C 25/00	Hauptgruppe	Bearings adjustable for wear or play (F16C 27/00 takes precedence)
F16C 25/02	1-Punkt Untergruppe	. Sliding-contact bearings
F16C 25/04	2-Punkt Untergruppe	. . self-adjusting
F16C 25/06	1-Punkt Untergruppe	. Ball or roller bearings
F16C 25/08	2-Punkt Untergruppe	. . self-adjusting
F16C 27/00	Hauptgruppe	Elastic or yielding bearings or bearing supports (shock-damping bearings for watches or clocks G04B 31/02)
F16C 27/02	1-Punkt Untergruppe	. Sliding-contact bearings
F16C 27/04	1-Punkt Untergruppe	. Ball or roller bearings, e.g. with resilient rolling bodies

Symbol	Typ	Titel
F16C 27/06	1-Punkt Untergruppe	. by means of parts of rubber or like materials (F16C 27/08 takes precedence; with sliding surfaces of rubber or synthetic rubber F16C 33/22; construction of units comprising rigid inner and outer members with rubber or the like between them F16F 1/38)
F16C 27/08	1-Punkt Untergruppe	. primarily for axial load, e.g. for vertically-arranged shafts
F16C 29/00	Hauptgruppe	<u>Other bearings</u> Bearings for parts moving only linearly (F16C 32/06 takes precedence; incorporated in flexible shafts F16C 1/28) [2]
F16C 29/02	1-Punkt Untergruppe	. Sliding-contact bearings
F16C 29/04	1-Punkt Untergruppe	. Ball or roller bearings
F16C 29/06	2-Punkt Untergruppe	. . in which the rolling bodies circulate partly without carrying load
F16C 29/08	1-Punkt Untergruppe	. Arrangements for covering or protecting the ways
F16C 29/10	1-Punkt Untergruppe	. Arrangements for locking the bearings (preventing relative movement between machine parts in general F16B, e.g. F16B 1/00)
F16C 29/12	1-Punkt Untergruppe	. Arrangements for adjusting play
F16C 31/00	Hauptgruppe	Bearings for parts which both rotate and move linearly
F16C 31/02	1-Punkt Untergruppe	. Sliding-contact bearings
F16C 31/04	1-Punkt Untergruppe	. Ball or roller bearings
F16C 31/06	2-Punkt Untergruppe	. . in which the rolling bodies circulate partly without carrying load
F16C 32/00	Hauptgruppe	Bearings not otherwise provided for
F16C 32/02	1-Punkt Untergruppe	. Knife-edge bearings
F16C 32/04	1-Punkt Untergruppe	. using magnetic or electric supporting means [2]
F16C 32/06	1-Punkt Untergruppe	. with moving member supported by a fluid cushion formed, at least to a large extent, otherwise than by movement of the shaft, e.g. hydrostatic air-cushion bearings [2]
F16C 33/00	Hauptgruppe	<u>Details or accessories of bearings</u> Parts of bearings; Special methods for making bearings or parts thereof (metal-working or like operations, <u>see</u> the relevant classes)
F16C 33/02	1-Punkt Untergruppe	. Parts of sliding-contact bearings
F16C 33/04	2-Punkt Untergruppe	. . Brasses; Bushes; Linings
F16C 33/06	3-Punkt Untergruppe	. . . Sliding surface mainly made of metal (F16C 33/24-F16C 33/28 take precedence)
F16C 33/08	4-Punkt Untergruppe	 Attachment of brasses, bushes, or linings to the bearing housing
F16C 33/10	4-Punkt Untergruppe	 Construction relative to lubrication
F16C 33/12	4-Punkt Untergruppe	 Structural composition; Use of special materials or surface treatments, e.g. for rust-proofing (the materials or treatments themselves, <u>see</u> the relevant places, e.g. C22C)
F16C 33/14	4-Punkt Untergruppe	 Special methods of manufacture; Running-in
F16C 33/16	3-Punkt Untergruppe	. . . Sliding surface consisting mainly of graphite
F16C 33/18	3-Punkt Untergruppe	. . . Sliding surface consisting mainly of wood or fibrous material
F16C 33/20	3-Punkt Untergruppe	. . . Sliding surface consisting mainly of plastics (F16C 33/22-F16C 33/28 take precedence)

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F16C 33/22	3-Punkt Untergruppe	. . . Sliding surface consisting mainly of rubber or synthetic rubber (F16C 33/24-F16C 33/28 take precedence; of interest apart from the surface itself F16C 27/06)
F16C 33/24	3-Punkt Untergruppe	. . . with different areas of the sliding surface consisting of different materials
F16C 33/26	3-Punkt Untergruppe	. . . made from wire coils; made from a number of discs, rings, rods, or other members
F16C 33/28	3-Punkt Untergruppe	. . . with embedded reinforcements shaped as frames or meshed materials
F16C 33/30	1-Punkt Untergruppe	. Parts of ball or roller bearings
F16C 33/32	2-Punkt Untergruppe	. . Balls
F16C 33/34	2-Punkt Untergruppe	. . Rollers; Needles
F16C 33/36	3-Punkt Untergruppe	. . . with bearing-surfaces other than cylindrical, e.g. tapered; with grooves in the bearing surfaces
F16C 33/37	2-Punkt Untergruppe	. . Loose spacing bodies
F16C 33/372	3-Punkt Untergruppe	. . . rigid
F16C 33/374	3-Punkt Untergruppe	. . . resilient
F16C 33/38	2-Punkt Untergruppe	. . Ball cages
F16C 33/40	3-Punkt Untergruppe	. . . for multiple rows of balls
F16C 33/41	3-Punkt Untergruppe	. . . comb-shaped
F16C 33/42	3-Punkt Untergruppe	. . . made from wire or sheet-metal strips (F16C 33/40, F16C 33/41 take precedence)
F16C 33/44	3-Punkt Untergruppe	. . . Selection of substances (F16C 33/40, F16C 33/41 take precedence)
F16C 33/46	2-Punkt Untergruppe	. . Cages for rollers or needles
F16C 33/48	3-Punkt Untergruppe	. . . for multiple rows of rollers or needles
F16C 33/49	3-Punkt Untergruppe	. . . comb-shaped
F16C 33/50	3-Punkt Untergruppe	. . . formed of interconnected members, e.g. chains
F16C 33/51	3-Punkt Untergruppe	. . . formed of unconnected members
F16C 33/52	3-Punkt Untergruppe	. . . with no part entering between, or touching, the bearing surfaces of the rollers (F16C 33/50 takes precedence)
F16C 33/54	3-Punkt Untergruppe	. . . made from wire, strips, or sheet metal (F16C 33/48, F16C 33/49 take precedence)
F16C 33/56	3-Punkt Untergruppe	. . . Selection of substances (F16C 33/48, F16C 33/49 take precedence)
F16C 33/58	2-Punkt Untergruppe	. . Raceways; Race rings
F16C 33/60	3-Punkt Untergruppe	. . . divided
F16C 33/61	4-Punkt Untergruppe	 formed by wires
F16C 33/62	3-Punkt Untergruppe	. . . Selection of substances
F16C 33/64	3-Punkt Untergruppe	. . . Special methods of manufacture
F16C 33/66	2-Punkt Untergruppe	. . Special parts or details in view of lubrication
F16C 33/72	1-Punkt Untergruppe	. Sealings (sealings in general F16J)

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F16C 33/74	2-Punkt Untergruppe	. . of sliding-contact bearings
F16C 33/76	2-Punkt Untergruppe	. . of ball or roller bearings
F16C 33/78	3-Punkt Untergruppe	. . . with a diaphragm, disc, or ring, with or without resilient members
F16C 33/80	3-Punkt Untergruppe	. . . Labyrinth sealings
F16C 33/82	3-Punkt Untergruppe	. . . Arrangements for electrostatic or magnetic action against dust or other particles
F16C 35/00	Hauptgruppe	Rigid support of bearing units; Housings, e.g. caps, covers (F16C 23/00 takes precedence; elastic or yielding supports F16C 27/00)
F16C 35/02	1-Punkt Untergruppe	. in the case of sliding-contact bearings
F16C 35/04	1-Punkt Untergruppe	. in the case of ball or roller bearings
F16C 35/06	2-Punkt Untergruppe	. . Mounting of ball or roller bearings; Fixing them onto shaft or in housing (hand-tools for inserting or withdrawing sleeves or ball races B25B 27/06)
F16C 35/063	3-Punkt Untergruppe	. . . Fixing them on the shaft (with interposition of an element F16C 35/07) [3]
F16C 35/067	3-Punkt Untergruppe	. . . Fixing them in a housing (with interposition of an element F16C 35/07) [3]
F16C 35/07	3-Punkt Untergruppe	. . . Fixing them on the shaft or housing with interposition of an element [3]
F16C 35/073	4-Punkt Untergruppe	 between shaft and inner race ring [3]
F16C 35/077	4-Punkt Untergruppe	 between housing and outer race ring [3]
F16C 35/078	3-Punkt Untergruppe	. . . using pressure fluid as mounting aid [3]
F16C 35/08	1-Punkt Untergruppe	. for spindles
F16C 35/10	2-Punkt Untergruppe	. . with sliding-contact bearings
F16C 35/12	2-Punkt Untergruppe	. . with ball or roller bearings
F16C 37/00	Hauptgruppe	Cooling of bearings
F16C 39/00	Hauptgruppe	Relieving load on bearings
F16C 39/02	1-Punkt Untergruppe	. using mechanical means
F16C 39/04	1-Punkt Untergruppe	. using hydraulic or pneumatic means
F16C 39/06	1-Punkt Untergruppe	. using magnetic means
F16C 41/00	Hauptgruppe	Other accessories
F16C 41/02	1-Punkt Untergruppe	. Arrangements for equalising the load on a plurality of bearings or their elements
F16C 41/04	1-Punkt Untergruppe	. Preventing damage to bearings during storage or transport thereof or when otherwise out of use
F16C 43/00	Hauptgruppe	Assembling bearings
F16C 43/02	1-Punkt Untergruppe	. Assembling sliding-contact bearings
F16C 43/04	1-Punkt Untergruppe	. Assembling rolling contact bearings
F16C 43/06	2-Punkt Untergruppe	. . Placing rolling bodies in cages or bearings
F16C 43/08	3-Punkt Untergruppe	. . . by deforming the cages or the races