В	Sektion	SECTION B — PERFORMING OPERATIONS; TRANSPORTING
B63	Klasse	SHIPS OR OTHER WATERBORNE VESSELS; RELATED EQUIPMENT
В63Н	Unterklasse	MARINE PROPULSION OR STEERING (peculiar to submarines, other than nuclear propulsion, B63G; peculiar to torpedoes F42B 19/00)
B63H 1/00	Hauptgruppe	Propulsive elements directly acting on water (jet propulsion B63H 11/00; attachment of propellers on shafts B63H 23/34)
B63H 1/02	1-Punkt Untergruppe	. of rotary type (endless-track type B63H 1/34)
B63H 1/04	2-Punkt Untergruppe	with rotation axis substantially at right angles to propulsive direction, e.g. paddle wheels
B63H 1/06	3-Punkt Untergruppe	with adjustable vanes or blades
B63H 1/08	4-Punkt Untergruppe	with cyclic adjustment
B63H 1/10	5-Punkt Untergruppe	with blades extending axially from a disc-shaped rotary body
B63H 1/12	2-Punkt Untergruppe	with rotation axis substantially in propulsive direction
B63H 1/14	3-Punkt Untergruppe	Propellers (pitch changing B63H 3/00)
B63H 1/15	4-Punkt Untergruppe	having vibration damping means (anti-vibration mounting of propulsion plant B63H 21/30; means for damping vibration in general F16F) [4]
B63H 1/16	4-Punkt Untergruppe	having a shrouding ring attached to blades
B63H 1/18	4-Punkt Untergruppe	with means for diminishing cavitation, e.g. supercavitation
B63H 1/20	4-Punkt Untergruppe	Hubs; Blade connections
B63H 1/22	5-Punkt Untergruppe	the blades being foldable
B63H 1/24	6-Punkt Untergruppe	automatically foldable or unfoldable
B63H 1/26	4-Punkt Untergruppe	Blades
B63H 1/28	4-Punkt Untergruppe	Other means for improving propeller efficiency (water-guiding elements formed by shape of hull B63H 5/00)
B63H 1/30	1-Punkt Untergruppe	. of non-rotary type
B63H 1/32	2-Punkt Untergruppe	Flaps, pistons, or the like, reciprocating in propulsive direction
B63H 1/34	2-Punkt Untergruppe	of endless-track type
B63H 1/36	2-Punkt Untergruppe	Swinging flaps, e.g. fishtail type [4]
B63H 1/37	2-Punkt Untergruppe	Moving-wave propellers, i.e. wherein the propelling means comprise a flexible undulating structure [4]
B63H 1/38	1-Punkt Untergruppe	. characterised solely by flotation properties, e.g. drums
B63H 3/00	Hauptgruppe	Propeller-blade pitch changing
B63H 3/02	1-Punkt Untergruppe	. actuated by control element coaxial with propeller shaft, e.g. the control element being rotary
B63H 3/04	2-Punkt Untergruppe	the control element being reciprocatable
B63H 3/06	1-Punkt Untergruppe	. characterised by use of non-mechanical actuating means, e.g. electrical
B63H 3/08	2-Punkt Untergruppe	fluid

Symbol	Тур	Titel
B63H 3/10	1-Punkt Untergruppe	. characterised by having pitch control conjoint with propulsion-plant control
B63H 3/12	1-Punkt Untergruppe	. the pitch being adjustable only when propeller is stationary
B63H 5/00	Hauptgruppe	Arrangements on vessels of propulsion elements directly acting on water
B63H 5/02	1-Punkt Untergruppe	. of paddle wheels, e.g. of stern wheels
B63H 5/03	2-Punkt Untergruppe	movably mounted with respect to the hull, e.g. having means to reposition paddle wheel assembly, or to retract paddle or to change paddle attitude [4]
B63H 5/04	2-Punkt Untergruppe	with stationary water-guiding elements
B63H 5/07	1-Punkt Untergruppe	. of propellers (forming part of outboard propulsion units B63H 20/00) [6]
B63H 5/08	2-Punkt Untergruppe	of more than one propeller
B63H 5/10	3-Punkt Untergruppe	of coaxial type, e.g. of counter-rotative type
B63H 5/125	2-Punkt Untergruppe	movably mounted with respect to hull, e.g. adjustable in direction (movably mounted for steering purposes only B63H 25/42) [6]
B63H 5/14	2-Punkt Untergruppe	characterised by being mounted in non-rotating ducts or rings, e.g. adjustable for steering purposes (shrouding ring attached to blades B63H 1/16; jet propulsion B63H 11/00)
B63H 5/15	3-Punkt Untergruppe	Nozzles, e.g. Kort-type [4]
B63H 5/16	2-Punkt Untergruppe	characterised by being mounted in recesses; with stationary water-guiding elements; Means to prevent fouling of the propeller, e.g. guards, cages or screens (anti-fouling paints C09D 5/16)
B63H 5/18	2-Punkt Untergruppe	of emergency propellers, e.g. arranged at the side of the vessel
B63H 5/20	3-Punkt Untergruppe	movable from a working position to a non-working position [4]
B63H 7/00	Hauptgruppe	Arrangements of propulsive devices directly acting on air (jet propulsion B63H 11/00)
B63H 7/02	1-Punkt Untergruppe	. using propellers (air-screws of aircraft type B64C)
В63Н 9/00	Hauptgruppe	Propulsive devices directly acted on by wind; Arrangements thereof (air-driven propellers driving underwater propulsive elements B63H $13/00$)
B63H 9/02	1-Punkt Untergruppe	. using Magnus effect
B63H 9/04	1-Punkt Untergruppe	. using sails or like wind-catching surfaces (sailing sledges or ice boats B62B 15/00)
B63H 9/06	2-Punkt Untergruppe	Construction or types of sails; Arrangements thereof on vessels
B63H 9/08	2-Punkt Untergruppe	Connections of sails to masts, spars, or the like
B63H 9/10	3-Punkt Untergruppe	Spars; Running rigging, e.g. reefing equipment (staying of masts B63B 15/02)
B63H 11/00	Hauptgruppe	Effecting propulsion by jets, i.e. reaction principle (steering by jet action B63H 25/46; power plant per se, see the relevant classes)
B63H 11/01	1-Punkt Untergruppe	. having means to prevent foreign material from clogging fluid passageway [4]
B63H 11/02	1-Punkt Untergruppe	. the propulsive medium being ambient water
B63H 11/04	2-Punkt Untergruppe	by means of pumps
B63H 11/06	3-Punkt Untergruppe	of reciprocating type
B63H 11/08	3-Punkt Untergruppe	of rotary type
B63H 11/09	3-Punkt Untergruppe	by means of pressure pulses applied to a column of liquid, e.g. by ignition of an air/gas or vapour mixture [4]

Symbol	Тур	Titel
B63H 11/10	2-Punkt Untergruppe	having means for deflecting jet or influencing cross-section thereof
B63H 11/103	3-Punkt Untergruppe	having means to increase efficiency of propulsive fluid, e.g. discharge pipe provided with means to improve the fluid flow [4]
B63H 11/107	3-Punkt Untergruppe	Direction control of propulsive fluid [4]
B63H 11/11	4-Punkt Untergruppe	with bucket or clamshell-type reversing means [4]
B63H 11/113	4-Punkt Untergruppe	Pivoted outlet [4]
B63H 11/117	4-Punkt Untergruppe	Pivoted vane [4]
B63H 11/12	1-Punkt Untergruppe	. the propulsive medium being steam or other gas
B63H 11/14	2-Punkt Untergruppe	the gas being produced by combustion
B63H 11/16	2-Punkt Untergruppe	the gas being produced by other chemical processes
B63H 13/00	Hauptgruppe	Effecting propulsion by wind motors driving water-engaging propulsive elements
B63H 15/00	Hauptgruppe	Effecting propulsion by use of vessel-mounted driving mechanisms co-operating with anchored chains or the like
B63H 16/00	Hauptgruppe	Effecting propulsion by muscle power (swimming frameworks with swimmer-operated driving mechanisms A63B 35/00; land-based training equipment for rowing or sculling A63B 69/06)
B63H 16/02	1-Punkt Untergruppe	. Movable thwarts; Foot-rests
B63H 16/04	1-Punkt Untergruppe	. Oars; Sculls; Paddles; Poles
B63H 16/06	1-Punkt Untergruppe	. Rowlocks; Mountings therefor
B63H 16/067	2-Punkt Untergruppe	Rowlocks mounted on a structure extending beyond the gunwale of the vessel [4]
B63H 16/073	2-Punkt Untergruppe	having oar shaft restraining means [4]
B63H 16/08	1-Punkt Untergruppe	. Other apparatus for converting muscle power into propulsive effort (general features of propulsion elements, $\underline{\text{see}} \text{ the relevant groups)}$
B63H 16/10	2-Punkt Untergruppe	for bow-facing rowing
B63H 16/16	2-Punkt Untergruppe	using reciprocating pull cable, i.e. a strand-like member movable alternately backward and forward [4]
B63H 16/18	2-Punkt Untergruppe	using sliding handle or pedal, i.e. the motive force being transmitted to a propelling means by means of a lever operated by the hand or foot of the occupant [4]
B63H 16/20	2-Punkt Untergruppe	using rotary cranking arm [4]
B63H 19/00	Hauptgruppe	Effecting propulsion of vessels, not otherwise provided for
B63H 19/02	1-Punkt Untergruppe	. by using energy derived from movement of ambient water, e.g. from rolling or pitching of vessels
B63H 19/04	2-Punkt Untergruppe	propelled by water current
B63H 19/06	1-Punkt Untergruppe	. by discharging gas into ambient water (with jet action B63H 11/12; for reducing surface friction B63B 1/38)
B63H 19/08	1-Punkt Untergruppe	. by direct engagement with water-bed or ground
B63H 20/00	Hauptgruppe	Outboard propulsion units, i.e. propulsion units having a substantially vertical power leg mounted outboard of a hull and terminating in a propulsion element, e.g. "outboard motors", Z-drives (
		power plants <u>per se</u> , <u>see</u> the relevant classes); Arrangements thereof on vessels [6]
B63H 20/02	1-Punkt Untergruppe	. Mounting of propulsion units (B63H 20/08 takes precedence) [6]
B63H 20/04	2-Punkt Untergruppe	in a well [6]

Symbol	Тур	Titel
B63H 20/06	2-Punkt Untergruppe	on an intermediate support [6]
В63Н 20/08	1-Punkt Untergruppe	. Means enabling movement of the position of the propulsion element, e.g. for trim, tilt, or steering (transmissions allowing movement of the propulsion element B63H 20/14); Control of trim or tilt (initiating means for steering B63H 25/02) [6]
B63H 20/10	2-Punkt Untergruppe	Means enabling trim or tilt, or lifting of the propulsion element when an obstruction is hit; Control of trim or tilt [6]
B63H 20/12	2-Punkt Untergruppe	Means enabling steering [6]
B63H 20/14	1-Punkt Untergruppe	. Transmission between propulsion power unit and propulsion element [6]
B63H 20/16	2-Punkt Untergruppe	allowing movement of the propulsion element in a horizontal plane only, e.g. for steering [6]
B63H 20/18	2-Punkt Untergruppe	allowing movement of the propulsion element about a longitudinal axis, e.g. the through transom shaft (B63H 20/22 takes precedence) [6]
B63H 20/20	2-Punkt Untergruppe	with provision for reverse drive [6]
B63H 20/22	2-Punkt Untergruppe	allowing movement of the propulsion element about at least a horizontal axis without disconnection of the drive, e.g. using universal joints [6]
B63H 20/24	1-Punkt Untergruppe	. Exhaust gas outlets [6]
B63H 20/26	2-Punkt Untergruppe	passing through the propeller or its hub [6]
B63H 20/28	1-Punkt Untergruppe	. Cooling-water intakes [6]
B63H 20/30	2-Punkt Untergruppe	for flushing [6]
B63H 20/32	1-Punkt Untergruppe	. Housings [6]
B63H 20/34	2-Punkt Untergruppe	comprising stabilising fins [6]
B63H 20/36	1-Punkt Untergruppe	. Transporting or testing stands; Protection of power legs [6]
B63H 21/00	Hauptgruppe	Use of propulsion power plant or units on vessels (use of outboard propulsion units B63H 20/00; hull reinforcements for carrying propulsion power plant or units B63B 3/70; propulsion power
		plant or units <u>per se</u> , <u>see</u> the relevant classes) [6]
B63H 21/02	1-Punkt Untergruppe	. the vessels being steam-driven (B63H 21/18 takes precedence)
B63H 21/04	2-Punkt Untergruppe	relating to positive-displacement steam engines
B63H 21/06	2-Punkt Untergruppe	relating to steam turbines
B63H 21/08	2-Punkt Untergruppe	relating to steam boilers
B63H 21/10	2-Punkt Untergruppe	relating to condensers or engine-cooling fluid heat-exchangers
B63H 21/12	1-Punkt Untergruppe	. the vessels being motor-driven (B63H 21/175, B63H 21/18 take precedence) [4]
B63H 21/14	2-Punkt Untergruppe	relating to internal-combustion engines
B63H 21/16	2-Punkt Untergruppe	relating to gas turbines
B63H 21/165	2-Punkt Untergruppe	by hydraulic fluid motor, i.e. wherein a liquid under pressure is utilised to rotate the propelling means [4]
B63H 21/17	2-Punkt Untergruppe	by electric motor (electrically-propelled vehicles B60L) [4]
B63H 21/175	1-Punkt Untergruppe	. the vessel being powered by land vehicle supported by vessel [4]

Symbol	Тур	Titel
B63H 21/18	1-Punkt Untergruppe	. the vessels being powered by nuclear energy
B63H 21/20	1-Punkt Untergruppe	. the vessels being powered by combinations of different types of propulsion units
B63H 21/21	1-Punkt Untergruppe	. Control means for engine or transmission, specially adapted for use on marine vessels [4]
B63H 21/22	1-Punkt Untergruppe	. the propulsion power units being controlled from exterior of engine room, e.g. from navigation bridge;
		Arrangements of order telegraphs (order telegraphs <u>per se</u> G08B 9/00)
B63H 21/30	1-Punkt Untergruppe	. Mounting of propulsion plant or unit, e.g. for anti-vibration purposes (hull reinforcements therefor B63B 3/70; vibration-dampers, suppression of vibration in systems F16F; engine beds F16M)
B63H 21/32	1-Punkt Untergruppe	. Arrangements of propulsion power-unit exhaust uptakes; Funnels peculiar to vessels (engine exhausts in general F01N; flue devices for furnaces in general F23J)
B63H 21/34	2-Punkt Untergruppe	having exhaust-gas deflecting means
B63H 21/36	1-Punkt Untergruppe	. Covers or casing arranged to protect plant or unit from marine environment (hull construction B63B 3/00) [4]
B63H 21/38	1-Punkt Untergruppe	. Apparatus or methods specially adapted for use on marine vessels, for handling power plant or unit liquids, e.g. lubricants, coolants, fuels or the like (lubricating or cooling engines in general F01-F04) [4]
B63H 23/00	Hauptgruppe	Transmitting power from propulsion power plant to propulsive elements (changing pitch of propellers B63H 3/00; adaptation of transmission to allow adjustment in direction of propellers B63H 5/125; transmission between wind motors and propulsive elements B63H 13/00, in outboard propulsion units B63H 20/14; adaptation of transmission to allow adjustment of location of propellers B63H 20/08; for vehicles in general B60K; driving auxiliary machinery B63J;
		transmission elements <u>per se</u> F16)
B63H 23/02	1-Punkt Untergruppe	. with mechanical gearing
B63H 23/04	2-Punkt Untergruppe	the main transmitting element, e.g. shaft, being substantially vertical
B63H 23/06	2-Punkt Untergruppe	for transmitting drive from a single propulsion power unit
B63H 23/08	3-Punkt Untergruppe	with provision for reversing drive
B63H 23/10	2-Punkt Untergruppe	for transmitting drive from more than one propulsion power unit (for synchronisation of propulsive elements B63H 23/28)
B63H 23/12	3-Punkt Untergruppe	allowing combined use of the propulsion power units
B63H 23/14	4-Punkt Untergruppe	with unidirectional drive or where reversal is immaterial
B63H 23/16	4-Punkt Untergruppe	characterised by provision of reverse drive
B63H 23/18	3-Punkt Untergruppe	for alternative use of the propulsion power units
B63H 23/20	4-Punkt Untergruppe	with separate forward and astern propulsion power units, e.g. turbines
B63H 23/22	1-Punkt Untergruppe	. with non-mechanical gearing
B63H 23/24	2-Punkt Untergruppe	electric
B63H 23/26	2-Punkt Untergruppe	fluid
B63H 23/28	1-Punkt Untergruppe	. with synchronisation of propulsive elements
B63H 23/30	1-Punkt Untergruppe	. characterised by use of clutches
B63H 23/32	1-Punkt Untergruppe	. Other parts

Symbol	Тур	Titel
B63H 23/34	2-Punkt Untergruppe	Propeller shafts; Paddle-wheel shafts; Attachment of propellers on shafts (shafts in general F16C; attachment of a member on a shaft in general F16D 1/06)
B63H 23/35	3-Punkt Untergruppe	Shaft braking or locking, i.e. means to slow or stop the rotation of the propeller shaft or to prevent the shaft from initial rotation [4]
B63H 23/36	2-Punkt Untergruppe	Shaft tubes (propeller-shaft tunnels B63B 11/06; shaft-tube seals F16J)
В63Н 25/00	Hauptgruppe	Steering; Slowing-down otherwise than by use of propulsive elements (using adjustably-mounted propeller ducts or rings for steering B63H 5/14; using movably-installed outboard propulsion units B63H 20/00); Dynamic anchoring, i.e. positioning vessels by means of main or auxiliary propulsive elements (anchoring, other than dynamic, B63B 21/00; equipment to decrease pitch, roll, or like unwanted vessel movements by auxiliary jets or propellers B63B 39/08)
B63H 25/02	1-Punkt Untergruppe	. Initiating means for steering
B63H 25/04	2-Punkt Untergruppe	automatic, e.g. reacting to compass
B63H 25/06	1-Punkt Untergruppe	. Steering by rudders (by rudders carrying propellers B63H 25/42)
B63H 25/08	2-Punkt Untergruppe	Steering gear
B63H 25/10	3-Punkt Untergruppe	with mechanical transmission
B63H 25/12	3-Punkt Untergruppe	with fluid transmission
B63H 25/14	3-Punkt Untergruppe	power assisted; power driven, i.e. using steering engine
B63H 25/16	4-Punkt Untergruppe	with alternative muscle or power- operated steering
B63H 25/18	4-Punkt Untergruppe	Transmitting of movement of initiating means to steering engine
B63H 25/20	5-Punkt Untergruppe	by mechanical means
B63H 25/22	5-Punkt Untergruppe	by fluid means
B63H 25/24	5-Punkt Untergruppe	by electrical means
B63H 25/26	4-Punkt Untergruppe	Steering engines
B63H 25/28	5-Punkt Untergruppe	of fluid type
B63H 25/30	6-Punkt Untergruppe	hydraulic
B63H 25/32	6-Punkt Untergruppe	steam
B63H 25/34	4-Punkt Untergruppe	Transmitting of movement of engine to rudder, e.g. using quadrants, brakes
B63H 25/36	2-Punkt Untergruppe	Rudder-position indicators
B63H 25/38	2-Punkt Untergruppe	Rudders (stern posts B63B 3/40)
B63H 25/40	3-Punkt Untergruppe	using Magnus effect
B63H 25/42	1-Punkt Untergruppe	. Steering or dynamic anchoring by propulsive elements (by jets B63H 25/46); Steering or dynamic anchoring by propellers used therefor only; Steering or dynamic anchoring by rudders carrying propellers [2]
B63H 25/44	1-Punkt Untergruppe	. Steering or slowing-down by extensible flaps or the like
B63H 25/46	1-Punkt Untergruppe	. Steering or dynamic anchoring by jets [2]
B63H 25/48	1-Punkt Untergruppe	. Steering or slowing-down by deflection of propeller slip-stream otherwise than by rudder
B63H 25/50	1-Punkt Untergruppe	. Slowing-down means not otherwise provided for

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B63H 20/30

Symbol Typ Titel

B63H 25/52 1-Punkt Untergruppe . Parts for steering not otherwise provided for