

DWPI Manual Code Revision 2018 - GMPI and EPI Codes					
New / Changed / Retired	Code	Date Range	Title	Scope Notes	Keyword/Search Terms
SECTION P					
Change Scope Note/Search Terms	P23-A06	(2015-)	Buckles	Includes buckles for safety belts. Safety belts are also coded under Q14-C01.	Seat belts
Change Scope Note	P26-A01A	(2015-)	Home or office chairs	Includes armchairs and garden chairs. Armchairs are also coded under P26-B01.	Workshop, high chair
Change Title	P26-B	(2015-)	Sofas, armchairs and beds		Divan
Change Title/Scope Note	P26-B01	(2015-)	Sofas and armchairs	Includes armrests, footrests, hidden storage, feet and legs. Armchairs are also coded under P26-A01A.	Couch, settee, armchair
Change Search Terms	P26-E	(2015-)	Furniture for children	This code can be used in conjunction with P25 or other P26 codes to highlight the piece of furniture, e.g. chair, bed, etc. Includes high chairs, cradles, cots, but also other nursery accessories such as baby carriers, playpens, safety harnesses, etc. Electrical details of baby equipment are coded under X27-X01.	Dressing table, changing table, rocking chair, carrycot, baby gate
Change Scope Note	P35-A03C	(2015-)	Protective clothing	Includes helmets, masks, and the like to provide protection for humans and animals from adverse environments. Fireproof clothing is also assigned P35-C05. Arrangements for facilitating or enabling breathing are covered by P35-A05E which is also assigned as necessary. Systems and equipment for treating hazardous chemicals or biological agents to make them safe or to contain them are covered by P35-A03G.	Environmental suit, hazmat suit, NBC suit
Change Search Terms	P42-T20	(2015-)	Casings, frameworks and housings	Includes constructional details of enclosures and equipment as a whole.	Brace, bracket, drying booth, mounting, spray booth
Change Scope Note	P53-C03	(2015-)	Compacting and/or sintering	Compacting only is also coded in M22-H03A, sintering only is also coded in M22-H03B, and compacting and sintering is also coded in M22-H03C. Selective laser sintering is coded under X25-A08C3.	
Change Title/Scope Note	P85-A50E	(2015-)	Maps, guide, town plans and public information panels	The title of this code has been changed (2018) to indicate that public information boards and panels are included in addition to maps in general, maps of an immediate area such as town plans, and guides to places of interest. Timetables, e.g. for public transport, are covered by P85-A50A. Electrical aspects of these information-presenting items are covered by W04-W09. Displays and signs for advertising and commercial purposes are covered by P85-E01 codes and by W05-E03 codes if electrical.	
SECTION Q					
New	Q32-A06	(2018-)	Capsules; Cartridges	Includes coffee capsules, and ink cartridges. Ink cartridges for printers are also coded under S06-G06A.	
New	Q68-B	(2018-)	Boards; Panels; Sheets	Layered products are covered under P73.	
New	Q68-X	(2018-)	Other engineering elements	This code covers engineering elements not covered by any other Q61 to Q68 codes.	
New	Q72-U40	(2018-)	Industrial		
New	Q75-A03	(2018-)	Defrosting and de-icing		
New	Q75-A99	(2018-)	Other refrigeration details		
SECTION S					
Change Scope Note	S01-G09	(1992-)	Other electrical property tests	Includes non-specific aging testing.	
New	S01-J05	(2018-)	Cables, terminals	Includes wires, cables, terminals, etc, for all instrumentation devices in S01, S02 and S03. See also V04- ???.	Switching box
Change Scope Note	S03-D05	(1992-)	Weather prediction systems, weather forecasting	Includes weather satellite and weather radar systems. Includes prediction of cyclones, thunderstorms, hurricanes, etc. See W06-A04H2 for weather radar, S02-B04 for satellite surveying of the earth. See also W05-B08 section for adverse weather alarms.	
SECTION T					
Change Scope Note	T06-D06	(1980-)	Machine tool control	Control of portable power driven screw or nut setting.	
SECTION U					
Change Scope Note/Search Terms	U21-A05	(1987-)	Code conversion	See W01-A02 also for application of code conversion to data transmission in general. Coding of audio and video signals is not included and is covered by W04-P01A codes (video signals), W04-V05G codes (speech signals) and W04-V10 codes (audio signals in general). Coding for error detection and correction in general is covered by U21-A06 codes.	Bit structure, character interval, format, mapping, recoding
New	U24-F08	(2018-)	Charging protection	This code covers protection for energy stores such as secondary cells and capacitors, and equipment using them, from damage arising from charging. The protection may be triggered by an undesired electrical condition or by a physical change, such as deformation of battery casing or temperature rise. Other U24-F codes are also assigned as appropriate, e.g. U24-F01 for protection involving disconnection from a charging source or U24-F07 for protection initiated by rise in temperature. Charging of batteries is also covered by X16-G codes and of capacitor energy stores by U24-L and X16-L02. Protection for high-power batteries and battery systems is covered by X13-C04X.	Fast charging, gas pressure, overcharging, rapid charging
Change Search Terms	U24-X	(1980-)	Low power supply details - Other		Portable power supply, power bank, wearable power supply
SECTION V					
New	V06-N21	(2018-)	Machines with vibrating armatures or coils	Control of ultrasonic motors are coded under V06-N36 only.	Vibration motor
Change Scope Note	V06-V04A	(2007-)	Audio/video equipment	Includes details of microphone (V06-V04A2) and/or speaker arrangements (V06-V04A4) for non-implanted hearing aids. Bone anchored or implanted hearing aids are only coded under V06-V04K and V06-V01P. Hearing aids are also coded under W04-Y. Also includes musical instruments, such as electronic trumpet, and cameras. Details of digital cameras are also included by W04-M01 codes.	
Change Scope Note	V06-V04X	(2007-)	Other transducer applications	Includes applications not covered elsewhere, e.g. igniters, vending machines, etc.	
SECTION W					
Change Search Terms	W01-A06A3	(2005-)	Network usage and operation monitoring	Includes measurement of network activity and quality of service, and detection of overload/blocking condition. See T01-N02B2 for computer network aspects of monitoring. Analogous arrangements in telephone switching are covered by W01-C02A1A. Prior to 2012 this code was assigned with W01-A06E to indicate resource allocation in data networks. From 2012 the topic of network resource allocation is covered by W01-A06E1L but W01-A06A3 will still be assigned also when measurement of network performance is a significant part of an invention. From 2010 resource allocation in radio communication has been covered by W02-C03G1 and cognitive radio systems are covered by W02-C03G5 with W01-A06A3, W01-A06E codes and wireless network codes assigned as appropriate.	Load measuring, network forensics, QoS
Change Search Terms	W01-A06F3	(2002-)	Application Layer Protocols		DNS/BIND, FTP, HTTP, Telnet, MIME, MQTT, Network File System, NNTP, SMTP, SNMP, POP, RTP, UDP, URI
Change Search Terms	W01-A06G1	(1992-)	Circuit switching	Covers centralised switching method, with one branch exchange (PBX), calls are centralised and switched and distributed switching method with hierarchical network, having a number of DSN's (Distributed Switching Nodes) controlled so that the entire system operates as one exchange. See also W01-A06E2 for centralised and decentralised network control. Includes stored program control and use of time division.	Clos network, fat tree, folded Clos network, fourth generation PBX
Change Search Terms	W01-A07H1	(1997-)	Wired interface	This code is intended for transmission of data through a wired medium, including serial and parallel interfaces. Prior to 2006 this code included optical fiber interfaces when used with W01-A07E. From 2006 interfaces of that type are covered by W01-A07H4.	C-type, Centronics®, Firewire®, IEEE1394, i-link®, parallel port, RS-232, RS-485, serial port, universal serial bus, USB
Change Search Terms	W02-B06C	(2005-)	Automatic directional control antenna system	Covers use of either mechanical movement or electronic beam steering (with W02-B06A or W02-B06B codes as necessary) to automatically adjust directional characteristics to optimize communication with a particular station, e.g. based on maximum signal strength or minimum BER (W02-G03I codes are also assigned to highlight this aspect, e.g. W02-G03J1A or W02-G03J5A). Prior to 2005, this topic was indicated by the assignment of W06-A02A1 ('Automatic direction finding') in addition to W02-B06 codes. From 2005, W06-A02A1 is no longer assigned unless separate direction finding aspects are emphasized. Directional diversity systems are also assigned W02-C03A4 codes and BDMA or SDMA systems are also assigned W02-K10 (from 2017). MIMO systems are covered by W02-C03A5 codes. Antenna set-up, i.e. installation, based on optimum reception is not included, being covered by W02-B08A5A. For use of antenna beam direction control in '5G' mobile networks search with W02-C03C1L.	Angle of arrival, direction of arrival, pilot signal, RSSI, signal scanning

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SECTION W (continued)					
Change Scope Note/Search Terms	W02-C03C1	(1992-)	Cellular	Application to telephone systems is indicated by assignment of W01-B05A1A for systems (with W02-C03C1A) or base stations (with W02-C03C1B), and by W01-C01D3 codes for subscriber telephones themselves (with W02-C03C1C). Analogous cellular aspects for inventions with emphasis on wireless data networks are also assigned W02-C03C1 codes with W01-A06C4 codes and other W01-A06 codes as appropriate. From 2012 W01-E codes have been introduced to cover aspects of wireless systems, normally operating on a cellular model, that may be equally applicable to data networks and mobile phone networks These codes cover topics such as roaming and registration, (previously indicated by assignment of W01-B05A1R and W01-B05A1N respectively in the case of mobile phone networks), and should be included in searches to provide more detail on specific cellular radio topics. Since 2002, non-TDMA access schemes, or systems not using that multiple access scheme alone, have been assigned W02-C03C1G, with other W02-C03C1 codes as appropriate. To discriminate these aspects, when the novelty lies in the multiple access technique used, W02-K codes are assigned as well. Thus for CDMA and W-CDMA W02-K05A7 is assigned (e.g. for UMTS), and for use of OFDM (e.g. as the access scheme for '4G' telephones), W02-K07C is used. Does not include 'call-point' cordless telephone systems, which are covered by W02-C03C3 codes. Satellite telephone systems are regarded as cellular types and thus W02-C03C1 codes are assigned in addition to W02-C03B1 codes.	CA, carrier aggregation, cell, frequency re-use, radiotelephone, zone
Change Scope Note	W04-M01C1A	(1992-)	Novel lens details	Covers novel aspects only of single lenses and lens groups such as zoom lenses. Search with W04-M01B5 for lens or lens array integral with image pick-up element which from 2018 is also specifically covered by W04-M01C1G. Since 2011 the use of variable lenses, including those with electrically-controlled variable parameters has been indicated by W04-M01C1E. If the variable lens is novel W04-M01C1A is also assigned. Note that 'lens systems', 'lens barrels' and 'lens tubes' without any novelty in lenses themselves are not included and are covered by W04-M01C1 with W04-M01G1B for constructional details such as lens mounting arrangements.	Abbe number, aberration, concave, convex, chromatic, coating, focal length, glass, material composition, plano-concave, plano-convex, plastics, power, refractive power, V number
New	W04-M01C1G	(2018-)	Lens or lens system integral with image sensor	This code covers lenses or lens systems that are integral with an image sensor. When novel lenses are involved W04-M01C1A is also assigned. Optical elements that are part of an integrated circuit image sensor are also assigned U13-A01F.	Micro lens, wafer level optics
Change Search Terms	W04-M01G1B	(1992-)	Internal constructional details		Card, circuit board, cooling, fan, layout, PCB, screening, shield
Change Scope Note	W05-D07D	(1992-)	For vehicles	This application code is assigned for remote measurement and/or control of any vehicle equipment or systems. Codes relating to the specific type of vehicle and on-board equipment or system should also be searched. See also X21, X22 and X23 for land vehicles and W06 for aircraft, space vehicles or marine craft. Search with W05-D02 codes for multiplex systems and with W05-D06F for data network aspects (e.g. CAN bus).	
New	W05-D07N	(2018-)	For agricultural systems and equipment ; farming	This code covers applications of remote measurement and control to agriculture and farming, including livestock aspects. X25-N codes are also assigned and should be included in searches for specific topics, e.g. X25-N01B for control or monitoring of irrigation and X25-N02A for animal feeding.	Automatic feeder, culture, fertilizing, harvesting, greenhouse, hen-house, milking, soil erosion
Change Title/Scope Note	W06-B02L	(2014-)	Aircraft launching/towing, landing and arresting	Includes catapult for launching military aircraft (Q25-P13) from aircraft carrier (Q24-P13) or launching/winch arrangements for gliders (see also Q25-P05). See Q25-R07 for mechanical details. Also includes arrangements for inflating and launching hot air balloons. Also includes electrical aspects of landing areas such as helipads that can't be covered elsewhere. See Q25-R02 for runways and helipads per se and W06-B02E for navigation-aiding markers and lights.	
SECTION X					
Change Scope Note	X11-C10	(1997-)	Monitoring, operation and control	Includes maintenance and repair of power plant.	
Change Scope Note	X12-G01A	(1980-)	For installing lines or cables	Maintenance and repair of cable installations is covered by X12-G01D which can be assigned along with X12-G01A codes as necessary. X12-G01A codes are also assigned as appropriate for removal of previously-installed cables.	Laying cables, cable puller
Change Scope Note	X12-G01A7D	(1992-)	Installing cables in ducts, ground	Ducts per se are in X12-G04A1. This code also covers removal of buried cables.	
Change Scope Note	X12-G04A2	(1992-)	Clamps	Includes cable ties, clips and hooks and their manufacture. Cable ties for low-power cables used in e.g. electronic equipment are covered by V04-T01A	
New	X14-C99	(2018-)	Other nuclear power plant details	Includes arrangements to provide heat for purposes other than conversion into power, e.g. for heating buildings.	
Change Scope Note	X16-X	(1980-)	Other general battery aspects	Includes battery manufacturing details. This code is used in conjunction with other X16 codes to identify the type of battery manufactured. Manufacture of active materials is coded under X16-E01G only.	
Change Search Terms	X21-A01D	(1997-)	Hybrid vehicle	Includes vehicles utilising electric traction motor and other power source, i.e. internal combustion engine. Can be used in conjunction with other X21-A01 codes such as X21-A01H for hybrid bus.	HEV, PHEV, plug-in hybrid vehicle
New	X21-R	(2018-)	Rider assist	Includes systems for assisting riding of electric vehicles such as electric motorcycles or electric mono-wheel personal transportation vehicles. Includes balance-aiding and self-balancing systems e.g. using gyroscopes or automatic steering correction to keep vehicle oriented/upright.	Gyroscope, balance, balancing
New	X21-X03	(2018-)	Anti-theft and Anti-hacking	Includes anti-theft arrangements with some kind of immobilisation of electric vehicle and systems for preventing hacking or overriding of electric vehicle systems. Includes devices for preventing door lock/motor start signal jamming, code grabbing, App hacking etc. See W05-B codes for theft alarms per se. See X21-K for electric vehicle communications/networking per se.	Steal, theft, override
Change Scope Note/Search Terms	X22-P04E	(2007-)	Hybrid-mechanical	Includes electrical details of hybrid-flywheel and hybrid-pneumatic or hybrid-hydraulic vehicles.	Petro-hydraulic, petro-air, compressed air
New	X22-R	(2018-)	Rider assist	Includes systems for assisting riding of vehicles such as motorcycles or mono-wheel vehicles. Includes balance-aiding and self-balancing systems e.g. using gyroscopes or automatic steering correction to keep motorcycle upright.	Gyroscope, balance, balancing
Change Title/Scope Note/Search Terms	X22-X03	(1992-)	Anti-theft and Anti-hacking	Includes anti-theft arrangements with some kind of immobilisation of vehicle (see X22-A08C for engine based immobilisers) and systems for preventing hacking or overriding of vehicle systems. Use with X22-D codes such as X22-D01A for arrangements for preventing jamming, code grabbing, App hacking etc. to illegally gain vehicle access. See W05-B codes for theft alarms per se. See X22-K codes for vehicle communications per se.	Steal, theft, override
New	X23-D05	(2018-)	Passenger carriages	Includes electrical aspects of passenger carriages. See Q21-C03A for mechanical details.	
Change Scope Note/Search Terms	X23-X	(2005-)	Other railway system details	Includes major electric railway track laying equipment and track maintenance equipment (coded in X23-A09A prior to 2005). See Q21-A01 for mechanical details of track maintenance/construction.	Track repair, track-laying
New	X25-A02F	(2018-)	Straightening/stretching; Edge/Metal Flanging	Covers electrical details only. Mechanical details are covered in P52 class. Also includes finishing details such as attaching head to a drawing-pin, and metal shaping using fluid pressure, shock waves, etc.	Chemical explosives, edge-curling, edge armoring
New	X25-A08B4	(2018-)	Food	See also X25-A08U7 and X25-P01X.	Chocolate
Change Scope Note/Search Terms	X25-N02A	(1987-)	Feeding and drinking	Also includes manufacture of animal feed (also coded under X25-P01X).	Automatic feeders, dispensers, compound feed
Change Scope Note/Search Terms	X25-P01X	(2002-)	General food processing	Includes meat slicing, food packing/canning (also see X25-F03A for food packing/tinning). Also includes food/packaging sterilization/disinfection e.g. using mechanical cleaning, chemicals, heat, radiation or electricity. See e.g. X27-D10 for general domestic scale sterilizing/disinfecting. Also includes details for milling and polishing rice or other seeds, manufacturing of animal feed, and 3D printed food. Details of 3D printing are also included under X25-A08M4 and X25-A08U7. Manufacturing of animal feed is also coded under X25-N02A.	Packing, canning, tinning, sterilising, UV, microwave, ultrasonic, plasma, flour/rice polishing/milling, oil pressing
Change Search Terms	X25-T04	(2006-)	Textile industry		Bleaching, binding
Change Title/Scope Note	X25-T04D	(2007-)	Textile printing; Textile dyeing	See also S06-G10 if using inkjet printing. See also F03-F codes for dyeing/printing.	
Change Scope Note	X26-C03C	(1992-)	Remote controlled switching	Includes all aspects of remotely controlling the light, including remotely adjusting the brightness (also coded in X26-C03A5) and remotely switching the light on/off (also coded in X26-C3E). See also W05-D codes. Also includes real-time monitoring of street lamps.	
Change Search Terms	X27-X	(1980-)	Other domestic electrical appliance	Includes ash tray, insecticide dispenser for house, wallpaper stripping iron, mail box, paper towel dispenser (also X25-F03), pill bottle warning alarm indicating lid removal (also W05-A02) etc. Can also be used for indicating general domestic appliance "white goods" application, including mechanical aspects of unspecified or general white goods.	Mosquito repeller, doorbell.