

ROBOT ARM WITH INPUT ELEMENTS

ABSTRACT

The invention relates to a robot arm with a number N of arm elements A_n , which can be connected to a robot body via a number N of actuator-drivable joint connections GV_n , where $n = 1, 2, \dots, N$; wherein the proximal end of the distal arm element A_N of the robot arm is connected to the arm element A_{N-1} via the joint connection GV_N ; the proximal end of the proximal arm element can be connected to the robot body via the joint connection GV_1 ; the joint connection GV_N allows a rotation of the arm element A_N about a rotational axis D_N , the arm element A_N of the robot arm extends along an axis $L1$, and the axis $L1$ and the rotational axis D_N form an angle of 50 to 130° ; the distal end of the arm element A_N can be connected to an effector E via an actuator-drivable joint connection GV_{N+1} , the joint connection GV_{N+1} allows a rotation of the effector E about a rotational axis D_{N+1} ; the rotational axes D_N and D_{N+1} form an angle $W1$ ranging from 50° to 130° , the rotational axis D_{N+1} and the axis $L1$ form an angle $W2$ ranging from 50° to 130° , the arm element A_N has a grip-like extension $F1$ which is rigidly connected to the arm element and which extends concentrically to the rotational axis D_{N+1} , a free end FE of the extension $F1$ can be rotated relative to the rest of the extension $F1$ about the rotational axis D_{N+1} or can be arranged so as to be rotatable about the rotational axis D_{N+1} ; and the free end FE has input elements EE for manually entering data. The proposed robot arm allows an improved ergonomic operation during a learning programming process of a robot comprising such a robot arm.