CHECK LIST

**Name of the facility \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Customer (design organization) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Initial data for electric drive selection**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **1. Valves parameters** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Valves type: |  Wedge gate valve | | | |  Sliding shutter | | | | | | | |  Valve | | | | | | | | | | | | |  Ball valve | | | | | | | | | |  Butterfly valve | | | | | | | | | | | |  Other  \_\_\_\_\_\_\_\_\_\_ | | |
| Valves designation: |  | | | | | | | | | | | | | | | | | | | | | | | | | Year of manufacture: | | | | | | | | | |  | | | | | | | | | | | | | | |
| Valves manufacturer: | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum permissible pressure, MPa: | |  | | | | | | | DN,mm: | | | | | |  | | | | | | | | | | | | | Operating pressure, MPa: | | | | | | | | | | | | | | | | | | |  | | | |
| Maximal pressure fall, MPa: | | | | | | | | | | | | | | | | | | |  | | | |
| Connection dimensions of flanges for electric drive installation: | | |  A | | | | | | |  B | | | | | | | |  C | | | | | | | | |  D | | | | | | | | | |  E | | | | | | | | | Other:  \_\_\_\_\_\_\_\_\_\_ | | | | |
| Availability of pre-gearbox  **(for ball valve):** | | |  No | | | | | | |  Yes | | | | | | | | Gear ratio including efficiency factor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximal torque on spindle, Мtravel/Мbreak-down./Мseparation, Nm: | | | | | | | | | Open | | | | | | | | | | | | | | | | | | | | | | | | Closed | | | | | | | | | | | | | | | | | |
| Мtravel: | | | | | | Мbreak-down: | | | | | | | | | | Мseparation: | | | | | | | | Мtravel: | | | | | | | | | Мbreak-down: | | | | | | | | Мseparation: |
| Maximal force on rod N,Ftravel/ Fbreak-down/ Fseparation **(for valve):** | | | | | | | | | Open | | | | | | | | | | | | | | | | | | | | | | | | Closed | | | | | | | | | | | | | | | | | |
| Ftravel: | | | | | Fbreak-down: | | | | | | | | | | Fseparation: | | | | | | | | | Ftravel: | | | | | | | Fbreak-down: | | | | | | | | | Fseparation: | |
| Turning number of loading nut  **(for shutters):** | | | | | | |  | | | | | | | | | | | | | | Valves spindle travel, mm  **(for shutters):** | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | |
| Operating range, degree. **(for shutters and ball valve):** | | | | | | |  45° | | | | | | | | | |  90° | | | | | | | | | | | | |  180° | | | | | | | | | | | | |  Other  \_\_\_\_\_\_\_\_\_° | | | | | | | |
| Maximal travel of spindle, mm  **(for valve):** | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Minimal closing time: | | | | | | | sec. | | | | | | | | | | | Maximal closing time: | | | | | | | | | | | | | | | | | | | | | | | | | | | | sec. | | | | |
| Electric drive position on valves: | | | | | | | | | | | | | | | | | | |  top | | | | | | | | | | | | |  bottom | | | | | | | | | | | | | |  side | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **2. Electric drive parameters** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operating voltage: | | | |  380V, 50 Hz | | | | | | | | | | | | | | | | | |  220 V, 50 Hz | | | | | | | | | | | | | | | |  220 V, 50 Hz  380 V, 50 Hz | | | | | | | | | | | | |
| Necessary torque (force) on electric drive output element, Nm (N): | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Method of drive fitting on valves: | | | | | |  horizontal | | | | | | | | | | | | | | | |  vertical | | | | | | | | | | | | | | | | | | |  other | | | | | | | | | |
| Rotation frequency of electric drives output shaft, rpm  **(for shutters)**: | | | | | |  | | | | | | | | | | | | | | | | Travel speed of output element, mm/s  **(for valve)**: | | | | | | | | | | | | | | | | | | |  | | | | | | | | | |
| Approximate number of starts per hour/day/month: | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operation mode: | | | |  open/close | | | | | | | | | | | | | | | | | | | | | | | | |  control | | | | | | | | | | | | | | | | | | | | | |
| Body protection type: | | | |  IP 54 | | | | | | | | | | | | | | | | | | | | | | | | |  IP 67 | | | | | | | | | | | | | | | | | | | | | |
| Explosion protection class: | | | |  2ExdIIBT3 | | | | | | | | | | | | | | | | | |  1ExdIIBT4 | | | | | | | | | | | | | | | |  other | | | | | | | | | | | | |
| Ambient environ. conditions: | | | | - 50 °C … + 40 °C | | | | | | | | | | | | | | | | | | - 50 °C … + 50 °C | | | | | | | | | | | | | | | |  -60 °C … +50°C | | | | | | | | | | | | |
| Electric control unit design type: | | | | | | | |  M | | | | | | | | | | | | | | |  S | | | | | | | | | | | | | | | |  V | | | | | | | | | | | |
| Control via fieldbus: | | | | | | | |  CAN | | | | | | | | | | | |  RS-485 | | | | | | | | | | |  not required | | | | | | | | | | | | | |  other | | | | | |
| Voltage of signal circuit switching: | | | | | | | | | | |  24 VDC | | | | | | | | | | | | | | | | | | | | | | |  220 VAC | | | | | | | | | | | | | | | | |
| Availability of current input 4-20 mA: | | | | | | | | | | |  yes | | | | | | | | | | | | | | | | | | | | | | |  no | | | | | | | | | | | | | | | | |
| Availability of current output 4-20 mA: | | | | | | | | | | |  yes | | | | | | | | | | | | | | | | | | | | | | |  no | | | | | | | | | | | | | | | | |
| Necessity of PID control of process parameter: | | | | | | | | | | |  yes | | | | | | | | | | | | | | | | | | | | | | |  no | | | | | | | | | | | | | | | | |
| Emergency situations recording: | | | | | | | | | | |  yes, last 32 situations | | | | | | | | | | | | | | | | | | | | | | |  Archive with time mark in history module for the last 500 situations | | | | | | | | | | | | | | | | |
| Power cable type: | | | | | | | | | | |  armored cable | | | | | | | | | | | | | | | | | | | | | | | cable laid in the pipe | | | | | | | | | | | | | | | | |
| Control cable type: | | | | | | | | | | | armored cable | | | | | | | | | | | | | | | | | | | | | | |  cable laid in the pipe | | | | | | | | | | | | | | | | |
| Necessity for the remote control via IR channel : | | | | | | | | | | |  yes | | | | | | | | | | | | | | | | | | | | | | |  no | | | | | | | | | | | | | | | | |
| Necessity (pcs.): | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Additional terms:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| **3. Necessity of electric drive placing in operation:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  yes | | | | | | | | | | | | |  no | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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# Organization name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# The check list is completed by (Full name, job position):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Contact phone/fax (E-mail): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_