

**APPLICATION CHECKLIST**

For the selection of electric actuators designed for the pipeline valves automation

<b>Customer:</b> tel./fax: e-mail:		<b>Name of Project:</b>	
<b>DEFINITION AND TECHNICAL REQUIREMENTS FOR THE PIPELINE VALVES</b>			
1.	<b>Valve type</b> • Valve type.....		
2.	<b>Working function of the valve</b> • Isolation of flow <input type="checkbox"/> • Regulation of flow <input type="checkbox"/> • With the rising stem <input type="checkbox"/>		
3.	DN, mm .....	4.	PN, bar.....
5.	Tripping torque.....[Nm]	6.	Tripping force.....[N]
7.	<b>Required stroke.</b> • .....[rpm] • .....[mm]		8. Actuation time.....
9.	<b>Ambient temperature</b> • From -25°C to +55°C <input type="checkbox"/> • From -40°C to +40°C <input type="checkbox"/> • From -25°C to +55°C <input type="checkbox"/> • From -40°C to +40°C <input type="checkbox"/> (for marine solutions) • From -50°C to +40°C <input type="checkbox"/> (extreme low)		10. <b>Size of valve attachment according to OST 26-07-76373</b> • M <input type="checkbox"/> / A <input type="checkbox"/> / B <input type="checkbox"/> / B <input type="checkbox"/> / Г <input type="checkbox"/> / Д <input type="checkbox"/> • According to ISO 5210 F..... • Tube clamp connector..... • Flanged tube clamp connector..... • Other.....(please, attach the drawing)
<b>DEFINITION AND TECHNICAL REQUIRMENTS FOR THE ELECTRIC ACTUATOR</b>			
11.	<b>Electric actuator type</b> • Part-turn <input type="checkbox"/> • Multi-turn <input type="checkbox"/> • Linear <input type="checkbox"/>		
12.	<b>Actuator control</b> • Standard <input type="checkbox"/> • Positioner-equipped <input type="checkbox"/> • MATIC <input type="checkbox"/>		13. <b>Type of protection</b> • General purpose <input type="checkbox"/> • Explosion-proof <input type="checkbox"/> • For Nuclear Power Plants <input type="checkbox"/>
14.	<b>Type of duty ON – OFF</b> • S2 – 10 min short-time duty <input type="checkbox"/> • S2 - 25% intermittent duty from 6 to 90 cph <input type="checkbox"/>		
15.	<b>Type of duty for automated control</b> • S4-25% intermittent duty from 90 to 1200 cph <input type="checkbox"/>		

16.	<b>Type of atmosphere</b> <ul style="list-style-type: none"> <li>• II industrial <input type="checkbox"/></li> <li>• III seaside <input type="checkbox"/></li> <li>• IV seaside-industrial <input type="checkbox"/></li> </ul>	17.	<b>Voltage</b> <ul style="list-style-type: none"> <li>• 220 V AC <input type="checkbox"/></li> <li>• 3x380 V AC <input type="checkbox"/></li> <li>• 24 V AC <input type="checkbox"/></li> <li>• 24 V DC <input type="checkbox"/></li> <li>• Other.....V AC, .....Hz</li> </ul>
18.	<b>Electric connection</b> <ul style="list-style-type: none"> <li>• Crimp connection <input type="checkbox"/></li> <li>• Plug/socket connector <input type="checkbox"/></li> </ul>		
19.	<b>Mechanical position indicator</b> <input type="checkbox"/>	20.	<b>Hand wheel</b> <input type="checkbox"/>
21.	<b>Local control</b> <input type="checkbox"/>	22.	<b>Space heater</b> <input type="checkbox"/>
23.	<b>Limit switches</b> <input type="checkbox"/>	24.	<b>Travel limit switches</b> <input type="checkbox"/>
25.	<b>Torque switches</b> <input type="checkbox"/>	26.	<b>Mechanical connection:</b> <ul style="list-style-type: none"> <li>• Part-turn: <ul style="list-style-type: none"> <li>- According to ISO 5211 F.....<input type="checkbox"/></li> </ul> </li> <li>• Multi-turn: <ul style="list-style-type: none"> <li>- According to OCT 26-07-763 <input type="checkbox"/></li> <li>- According to ISO 5210 F.....<input type="checkbox"/></li> </ul> </li> <li>• Linear: <ul style="list-style-type: none"> <li>- flanged according to DIN 3358 <input type="checkbox"/></li> <li>- tube clamp connector <input type="checkbox"/></li> <li>- flanged tube clamp connector <input type="checkbox"/></li> <li>- special 4-tube clamp connector <input type="checkbox"/></li> </ul> </li> <li>• Other.....(please, attach the drawing)</li> </ul>
27.	<b>Explosion protection</b> <ul style="list-style-type: none"> <li>• Ex de II B T6 <input type="checkbox"/></li> <li>• Ex de II B T5 <input type="checkbox"/></li> <li>• Ex de II C T5 <input type="checkbox"/></li> <li>• Ex de II C T4 <input type="checkbox"/></li> <li>• Ex de II B T4 <input type="checkbox"/></li> </ul>		
28.	<b>Enclosure protection</b> <ul style="list-style-type: none"> <li>• IP 55 <input type="checkbox"/></li> <li>• IP 65 <input type="checkbox"/></li> <li>• IP 67 <input type="checkbox"/></li> <li>• IP 68 <input type="checkbox"/></li> </ul>		
29.	<b>Required settings</b> <ul style="list-style-type: none"> <li>Torque <input type="checkbox"/>.....</li> <li>Force <input type="checkbox"/>.....</li> <li>Turns/stroke <input type="checkbox"/>.....</li> </ul>		
<b>ACTUATOR CONTROLS WITH POSITIONER</b>			
30.	<b>Positioner</b> <ul style="list-style-type: none"> <li>• Potentiometer feedback signal <input type="checkbox"/></li> <li>• mA feedback signal <input type="checkbox"/></li> </ul>	31.	<b>Amperage sensor 4-20 mA (simple)</b> <ul style="list-style-type: none"> <li>• Amperage sensor without source <input type="checkbox"/></li> <li>• Amperage sensor with source <input type="checkbox"/></li> </ul>
32.	<b>Capacity sensor 4-20 mA</b> <ul style="list-style-type: none"> <li>• Capacity sensor CPT 4-20mA without source <input type="checkbox"/></li> <li>• Capacity sensor CPT 4-20mA with the source <input type="checkbox"/></li> <li>• Capacity sensor CPT 4-20mA with remote source <input type="checkbox"/></li> </ul>		
33.	<b>Mechanical position indicator</b> <input type="checkbox"/>	34.	<b>Space heater</b> <input type="checkbox"/>

35.	<b>Torque blocking</b> <ul style="list-style-type: none"> <li>• During the start <input type="checkbox"/></li> <li>• In limit positions <input type="checkbox"/></li> </ul>		
<b>ACTUATOR CONTROLS MATIC</b>			
36.	<b>Control signal input type:</b> <ul style="list-style-type: none"> <li>• Voltage 24 V DC <input type="checkbox"/></li> <li>• Unified signal 0/4-20mA <input type="checkbox"/></li> <li>• Impulse <input type="checkbox"/></li> </ul>	37.	1 relay READY <input type="checkbox"/>
38.	<b>2 freely programmable relays</b> RE1, RE 2 <input type="checkbox"/>	39.	Safety function ESD <input type="checkbox"/>
40.	Timing mode / regime of operation <input type="checkbox"/>	41.	Output for failure messages <input type="checkbox"/>
42.	Built-in reversing contacts for 3-phase motor <input type="checkbox"/>	43.	Space heater operated by control unit <input type="checkbox"/>
44.	Thermoswitches automatic reset <input type="checkbox"/>	45.	LED local position indicator <input type="checkbox"/>
46.	Additional relays R3, R4, R5 <input type="checkbox"/>	47.	Switch-off adjusting torque from 50% to 100% <input type="checkbox"/>
48.	<b>Torque blocking</b> <ul style="list-style-type: none"> <li>• in limit positions <input type="checkbox"/></li> <li>• during the start <input type="checkbox"/></li> </ul>	49.	Local control through LCD display <input type="checkbox"/>
50.	Control and correction of phases sequence <input type="checkbox"/>	51.	Version with control board PROFIBUS <input type="checkbox"/>
<b>EQUIPMENT AND MAIN PARAMETERS FOR ACTUATORS AIMED FOR NUCLEAR POWER PLANTS</b>			
52.	<b>Aimed for installation in</b> <ul style="list-style-type: none"> <li>• Outside the nuclear building <input type="checkbox"/></li> <li>• Inside the nuclear building <input type="checkbox"/></li> </ul>	53.	<b>For automation of valves with quality category</b> <ul style="list-style-type: none"> <li>• QA1 <input type="checkbox"/></li> <li>• QA2, QA3 <input type="checkbox"/></li> <li>• QNC <input type="checkbox"/></li> </ul>
<b>GEAR REDUCER (GEARBOX)</b>			
54.	Gearbox name.....	55.	Gain coefficient.....
56.	Time of valve adjustment.....	57.	Type of flange for electric actuator.....
58.	Type of flange for pipeline valve.....		
59.	Notes		