ELECTRIC ACTUATORS WITH VALVES (GATE VALVES, OTHERS)

OFFER FOR APPLICATIONS IN POWER ENGINEERING, HEATING ENGINEERING, AIR CONDITIONING AND INSTALLATIONS OF VARIOUS FIELDS OF INDUSTRY

- Application for controlling and automatic control.

- Wide family of actuators and their equipment.

- Actuators of high forces / torques, guaranteeing permanent and reliable setting in the whole range of travel.

- Modern construction and rich equipment enabling co-operation with various valves.

- Application of intelligent controllers in actuators eliminated usage of electro-mechanic elements (microswitches) as position and overload switches and enabled to configure the actuator in programmable way.

- Valves presenting the wide set of flow rate coefficients and characteristics.

- High durability and operation reliability in result of applying the high-quality materials.

- Universal applications regarding the medium parameters.

- Regulation and checking of completed set: valve + actuator assembly on the factory stand guaranteeing its proper and reliable operation.

- Selecting of devices and completing of sets, according to the client's order, or on the basis of process parameters and requirements of the ordering party (vide the questionnaire).

- Upon the request of the ordering party assistance of CONTROLMATICA ZAP - PNEFAL Sp. z o. o. Company's service at the start-up of sets at site.

- Detailed information and technical data of actuators are to be found in catalogue data sheets on the internet website of our company.

- Detailed information and technical data of valves - in accordance with catalogue data sheets of producers.

I. ELECTRIC LINEAR ACTUATORS

No.	Actuator Type	Parameters / equipment / producer				
		a) force [kN] b) travel [mm] c) linear velocity [mm/min]	Position transmitter	Control signal type	Supply voltage	Producer of valves
1.	ESL-03-...	a) 2 3,2 4 6,3 b) 20, 25, 40 c) 16, 25, 40	100 Ω 2x100 Ω 0...5 mA 0...20 mA 4...20 mA	Three-term, with supply voltage	220V 50Hz	POLNA S.A. Valves: Z-DN15-100 20000-DN15-100 ZTM-DN20-100 ZTR-DN40-100 10000JG-DN20-100 10000DG-DN20-100 Z1A Z1B
2.	ESL-14-...					
3.	ESL-10-...		4...20 mA	0...5 mA 0...20 mA 4...20 mA 0...10 V		
4.	ESL-15-... ExdIIBT5 WUG	a) 2 3,2 4 b) 25, 40 c) 25, 40		Three-term, with supply voltage		POLNA S.A. Valves: Z-DN15-100 20000-DN15-100 ZTM-DN20-100 ZTR-DN40-100 10000JG-DN20-100 10000DG-DN20-100
5.	ESL-13-...	a) 8, 12, 16, 20 b) 25, 40, 63, 100 c) 16, 32, 50	100 Ω 0...5 mA 0...20 mA 4...20 mA 4...20 mA int.	Three-term, with supply voltage		POLNA S.A. Valves: Z-DN150-250 20000-DN150-250 ZTM-DN150-250 ZTR-DN100-150 10000JG-DN150-250 10000DG-150-300 Gate valves: PRC DN80...2000 CONTROLMATICA Injection valves: ZW For actuators ESL-17-and ESL-18- valves with connectors F-type (acc. to standard ISO5211)
6.	ESL-07-... ExedIIBT3	a) 4 16 25 40 b) 25 (40) 63 160 c) 25 32 (40) 100 160 250	0...5 mA 0...20 mA 4...20 mA 4...20 mA int.	Three-term, with supply voltage	220/380V 50Hz	
7.	ESL-08-...					
8.	ESL-09-...			Three-term, with supply 24 VDC voltage, 0...20 mA 4...20 mA 0...10 V intelligent controller		
9.	ESL-17-...		4...20 mA	Three-term, with supply 24 VDC voltage, 4...20 mA intelligent controller		
10.	ESL-18-...					
11.	ESL-16-...	a) 0,4; 0,6; 1,0 b) 6,3 20 25 c) 5 s/mm 3 s/mm	4...20 mA	Three-term, with supply 24 VDC voltage, 0...20 mA 4...20 mA 0...10 V 2...10 V intelligent controller	220V 50Hz 24V 50 Hz	POLNA S.A. ZH DN15...50 ZETKAMA 227-DN15...80 DANFOSS VR, VF DN 15...50 T.A.C.

II. ELECTRIC PART-TURN VALVE ACTUATORS

No.	Actuator Type	Parameters / equipment / producer				
		a) torque [Nm] b) rotation angle [°] c) angular velocity [°/min]	Position transmitter	Control signal type	Supply voltage	Producer of valves
1.	ESW-17-...	a) 160, 250 b) 30 c) 30	100 Ω 0...5 mA 0...20 mA 4...20 mA 4...20 mA int.	Three-term, with supply voltage, or 24 VDC	220V 50Hz	
2.	ESW-16-... ExedIIBT3	a) 630 1000 1500 2000 b) 90 120 150 c) 90 (180)	0...5 mA 0...20 mA 4...20 mA 4...20 mA int.	Three-term, with supply voltage	220/380V 50Hz	FAWENT S.A. flap valves, site connections, not realised at the factory
3.	ESW-19-...					
4.	ESW-20-...		4...20 mA	Three-term, with supply 24 VDC voltage, 0...5 mA 0...20 mA 4...20 mA 0...10 V, intelligent controller		
5.	ESW-25-...	a) 250 b) 90 c) 90	4..20 mA 4...20 mA int.	Three-term, with 24 VDC voltage, 4...20 mA intelligent controller	220/380V 50Hz	POLNA S.A. Gate valves: PRS DN40-200 Valves: BR 33 DN50...100 CHEMITEX Ball-type valves For actuators type ESL-25- and ESL26- valves with connectors F-type (acc. to standard ISO 5211)
6.	ESW-26-...	a) 500 b) 90 c) 90				

III. ELECTRIC ROTARY ACTUATORS

No.	Actuator Type	Parameters / equipment / producer				
		a) torque [Nm] b) rotation angle [°] c) angular velocity [rpm]	Position transmitter	Control signal type	Supply voltage	Producer of valves
1.	ESO-01-... ExedIIBT3	a) 120 160 200 400 b) 10 25 c) 10 25	0...5 mA 0...20 mA 4...20 mA 4...20 mA int.	Three-term, with supply voltage	220/380V 50Hz	INTERBEFA Gate valves HŁADKI Gate valves For actuators type ESL-03- valves with connectors F-type (acc. to standard ISO 5211)
2.	ESO-02-...			Three-term, with 24 VDC supply voltage, 0...5 mA 0...20 mA 4...20 mA 2...10 V		
3.	ESO-03-...	a) 50 b) 10, 25, 30 c) 10, 25	4...20 mA 4...20 mA int.	Three-term, with supply voltage		

ORDERING

The order should contain:

a) data concerning the drive: type, version, actuator equipment, etc.,

b) data concerning the valves - DN, PN, Kvs, required pressured drop, material, tightness, etc.,

c) information on the need of service personnel's assistance at starting up the set installed at site,

d) enclosed filled-in below questionnaire.

QUESTIONNAIRE OF TECHNICAL DATA			
Ordering Party: Order No.:			Elaborated by: Date:
	1.	Nominal diameter of pipeline [mm]	
	2.	No. of pieces	
	3.	**Service assistance required at site start-up**	Yes - No
DRIVE	**4.**	**Electric actuator type**	
	5.	Version: standard / explosionproof	
	6.	Rated force / Rated torque	
	7.	Supply voltage	
	8.	Control signal	
	9.	Linear / Angular positioning speed	
	10.	Special requirements	
VALVE	**11.**	**Valve type**	
	12.	Nominal valve diameter DN	
	13.	Nominal diameter of seat passage [mm]	
	14.	Flow characteristic	
	15.	Nominal pressure [mm]	
	16.	Connector type (flanged / welded)	
	17.	Body material	
	18.	Flow coefficient, calculated kvc	
	19.	Flow coefficient, catalogue kvs	
	20.	Plug type (standard, perforated, unloaded)	
	21.	Stuffing box type	
	22.	Tightness at the stuffing box (normal/high/total)	
	23.	Closing tightness (class acc. IEC 534-4)	
PARAMETERS OF MEDIUM	24.	**Medium**	
	25.	Operating temperature min./max. [OC]	
	26.	Operating pressure min./max. [MPa]	
	27.	Min. / Max. flow Q [kg/h, Nm^3/h, m^3/h, l/h]	
	28.	Pressure drop Δp at Qmin., Qmax. [MPa]	
	29.	Pressure drop Δp at closed valve [MPa]	
	30.	Density of medium ρ_n [kg/m^3]	
	31.	Viscosity	
	32.	Special requirements	