

DATA SHEET NUMBER: 0001 VALVES WITH ELECTRIC ACTUATORS									
Rev. no.	Completed by the CLIENT				Rev. no.	Completed by the SUPPLIER			
GENERAL VALVE INFORMATION					GENERAL INFORMATION				
1	NAME AND NUMBER OF VALVE SPECIFICATION		ball valve - HCA11, 12, 31		40	ACTUATOR MANUFACTURER			
2	SITE OF INSTALLATION		HPS		41	TYPE OF ACTUATOR			
3	TYPE OF VALVE		BALL VALVE		42	WIRING SCHEMATIC - MANUFACTURER'S INTERFACE DOCUMENTATION NO.:			
4	DN		1000		43	CONNECTION TO VALVE (FLANGE) PER ISO			
5	P&ID		J171-GOT-HPS-SO-600-SK-6003		44	MANUFACTURER'S CATALOGUE MARKING			
6	TAG. NUMBER				45	TECHNICAL SPECIFICATION - MANUFACTURER'S DOCUMENT NO.:			
VALVE OPERATING AND DESIGN PARAMETERS					ACTUATOR OPERATING AND DESIGN PARAMETERS				
7	AMBIENT CONDITIONS AT SITE OF OPERATION		-29°C / +59°C		46	MAX. MEDIA WORKING PRESSURE (bar)			
8	WORKING MEDIUM		natural gas		47	(MAX / MIN) MEDIA WORKING TEMPERATURE (°C)			
9	MEDIA COMPOSITION		mech. impurity content up to 5 mm max. 100 g/m³		48	DESIGN PRESSURE (bar)			
10	MAX. WORKING PRESSURE		8.4 MPa(g)		49	DESIGN TEMPERATURE (MAX. / MIN.) (°C)			
11	DIFFERENTIAL PRESSURE				50	NUMBER OF OPERATING CYCLES WITHOUT WORKING MEDIA			
12	MAX./MIN. WORKING MEDIA TEMPERATURE		0°C / 40°C		51	MAX. TORQUE			
13	ELEVATION				52	ACTUATOR TORQUE RATING			
14	DIRECTION OF FLOW OF WORKING MEDIA				53	LEVEL OF IP PROTECTION PER IEC 60529			
15	VALVE CLOSING/OPENING REQUIREMENTS		Max	Open ....90 s Close 90 s	54	MANUFACTURER'S DESIGN VALUES - VALVE CLOSING/OPENING		Max	Open s Close s
			Min.	Open s Close s	55			Min.	Open S Close s
Notes:					Notes:				
GENERAL ACTUATOR TECHNICAL DATA					TECHNICAL DATA SPECIFIED BY THE MANUFACTURER				
17	ELECTRIC CONTROL TYPE				56	PNEUMATIC CONTROL TYPE			
18	NAME AND NUMBER OF CONTROL SPECIFICATION		J171-GOT-LCG-PC-MTO-SK-6001		57	WORKING MEDIUM			
19	CONTROL WORKING MEDIUM		natural gas		58	SPECIFICATIONS OF WORK. MEDIUM AT CONNECTION POINT			
20	CONNECTION (INTERFACE) SPECIFICATIONS		WORKING MEDIUM		59	MANUFACTURER'S DESIGN FOR CONNECTION (INTERFACE)		WORKING MEDIUM	
			VALVE					VALVE	
			I&C (Feldbus, Profibus etc.)	no				I&C (Feldbus, Profibus etc.)	
21	VALVE POSITION SENSOR		CONTINUOUS POSITION CHECK		60	VALVE POSITION SENSOR - MANUFACTURER-RECOMMENDED LIMIT SENSORS		CONTINUOUS POSITION CHECK	
			LIMIT POSITION	yes				LIMIT POSITION	
			SAFE POSITION	FL - holds last position				SAFE POSITION	
22	MAX. AMBIENT TEMPERATURE (°C)		-29°C / +59°C		61	MAG. VALVES - MANUFACTURER SPECIFICATIONS			
23	MAX. RELATIVE HUMIDITY (%)				62	PILOT-MANUFACTURER SPECIFICATIONS			
24	ALTITUDE / ELEVATION				63	SHUT-OFF VALVES - MANUFACTURER SPECIFICATIONS			
25	ENVIRONMENT REQUIREMENTS / SPECIFICATIONS				64	PRIMARY ACTUATOR DIMENSIONS			
26	Ex ZONE		2		65	TRANSPORT WEIGHT OF ACTUATOR			
27	ESD, SAV,PILOT				66	TRANSPORT PACKAGING, PROTECTION FROM DAMAGE			
LOCAL CONTROL					LOCAL CONTROL DESIGNED BY MANUFACTURER				
28	CONTROL BUTTONS - LOCAL		OPEN	yes	67	CONTROL BUTTONS - LOCAL		OPEN	
			CLOSED	yes				CLOSED	
			STOP					STOP	
REMOTE CONTROL					REMOTE CONTROL DESIGNED BY MANUFACTURER				
29	REMOTE CONTROL		OPEN	yes	68	REMOTE CONTROL		OPEN	
			CLOSED	yes				CLOSED	
			STOP					STOP	
	LOCAL POSITION INDICATOR								
	REMOTE CONTROL VOLTAGE		24 VDC						
	REMOTE CONTROL POWER SUPPLY		EXTERNAL						
	POTENTIOMETER FOR REMOTE POSITION INDICATION								
	REMOTE MARKING SEQUENCE		VALVE POSITION						
			OPEN						
			DURING REGULATION						
			CLOSED						
	OTHER SWITCHING CONTACTS		1 2 3 X						
	POSITION OF CONTACTS WHEN VALVE IS CLOSED		1 2 3 X						

DATA SHEET NUMBER: 0001 VALVES WITH ELECTRIC ACTUATORS						
Rev. no.	Completed by the CLIENT			Rev. no.	Completed by the SUPPLIER	
		POSITION OF CONTACTS WHEN VALVE IS CONTROLLED (%)	1 2 3 X			
REQUIREMENTS FOR MATERIALS AND CORROSION PROTECTION				DESIGN OF MATERIALS AND CORROSION PROTECTION FROM MANUFACTURER		
	30	MOTOR PROTECTION	AUTOMATIC RESET			
	30	IMPULSE TUBES	stainless		69	IMPULSE TUBES
	31	PRESSURE VESSEL	stainless		70	PRESSURE VESSEL
		MAGNETIC VALVES	stainless			MAGNETIC VALVES
	32	CONTROL PANEL	stainless		71	CONTROL PANEL
	33	CORROSION PROTECTION	J171-GOT-LCG-PC-SPC-SK-6001		72	CORROSION PROTECTION
ACTUATOR CABLING SPECIFICATIONS						
		POWER WIRING:	INPUT 1	INPUT 2		
	34	(a) CONDUCTOR GAUGE	..... mm²	..... mm²		
		(b) NUMBER OF COILS				
		(c) CABLE GLAND DETAILS				
		CONTROL CABLES:	INPUT 3	INPUT 4		
		(a) CONDUCTOR GAUGE	..... mm²	..... mm²		
		(b) NUMBER OF COILS				
		(c) CABLE GLAND DETAILS				
	35	GAUGE OF PROTECTIVE CONDUCTOR				
	36	PROTECTIVE CONDUCTOR				
	37	TERMINAL				
CERTIFICATION				CERTIFICATION		
	34	DRGV- RESTRICTED PRESSURISED EQUIPMENT	yes		73	DRGV- RESTRICTED PRESSURISED EQUIPMENT
	35	ATEX	yes		74	ATEX
DOCUMENTATION AND TESTING				DOCUMENTATION AND TESTING		
	36	FAT	J171-GOT-LCG-PC-SPC-SK-6001		75	FAT SPECIFICATION AND IMPLEMENTATION PROCEDURE -DOC. NO.:
	37	CERTIFICATION REQUIREMENTS UNDER EN 10 204	3.2		76	CONFIRMATION OF MANUFACTURER'S CERTIFICATION TESTING UNDER EN 10 204
	38	DOCUMENTATION REQUIREMENTS FOR FINAL CONFIGURATION	J171-GOT-LCG-PC-SPC-SK-6001		77	DOCUMENTATION FOR FINAL CONFIGURATION
	39	REQUIREMENTS FOR PACKAGING AND TRANSPORT	J171-GOT-LCG-PC-SPC-SK-6001		78	MANUFACTURER'S DECLARATION - CLIENT'S SPECIFICATIONS ACCEPTED IN FULL
					79	YES NO (ALTERNATIVE DESIGN SPECIFICATIONS BELOW)

NOTES:

This data sheet is used as a reference for purchasing electrically controlled ball valves for HPS and KS01 installations. All actuators defined in the list of ball valves shall be specified in detail in Phase 7 of the project's implementation documentation.

This translation of the Data sheet from the Slovak into the English language is for an informative purpose only. The Procuring Entity provides no guarantee for quality of this translation and the binding wording of the Data sheet is in the Slovak language.

DATA SHEET NUMBER: 0002 VALVES WITH ELECTRIC ACTUATORS									
Rev. no.	Completed by the CLIENT				Rev. no.	Completed by the SUPPLIER			
GENERAL VALVE INFORMATION					GENERAL INFORMATION				
1	NAME AND NUMBER OF VALVE SPECIFICATION		ball valve - HCA30, HCA109		40	ACTUATOR MANUFACTURER			
2	SITE OF INSTALLATION		HPS		41	TYPE OF ACTUATOR			
3	TYPE OF VALVE		BALL VALVE		42	WIRING SCHEMATIC - MANUFACTURER'S INTERFACE DOCUMENTATION NO.:			
4	DN		1000		43	CONNECTION TO VALVE (FLANGE) PER ISO			
5	P&ID		J171-GOT-HPS-SO-600-SK-6003		44	MANUFACTURER'S CATALOGUE MARKING			
6	TAG. NUMBER				45	TECHNICAL SPECIFICATION - MANUFACTURER'S DOCUMENT NO.:			
VALVE OPERATING AND DESIGN PARAMETERS					ACTUATOR OPERATING AND DESIGN PARAMETERS				
7	AMBIENT CONDITIONS AT SITE OF OPERATION		-29°C / +59°C		46	MAX. MEDIA WORKING PRESSURE (bar)			
8	WORKING MEDIUM		natural gas		47	(MAX / MIN) MEDIA WORKING TEMPERATURE (°C)			
9	MEDIA COMPOSITION		mech. impurity content up to 5 mm max. 100 g/m³		48	DESIGN PRESSURE (bar)			
10	MAX. WORKING PRESSURE		7.25 MPa(g)		49	DESIGN TEMPERATURE (MAX. / MIN.) (°C)			
11	DIFFERENTIAL PRESSURE				50	NUMBER OF OPERATING CYCLES WITHOUT WORKING MEDIA			
12	MAX./MIN. WORKING MEDIA TEMPERATURE		0°C / 40°C		51	MAX. TORQUE			
13	ELEVATION				52	ACTUATOR TORQUE RATING			
14	DIRECTION OF FLOW OF WORKING MEDIA				53	LEVEL OF IP PROTECTION PER IEC 60529			
15	VALVE CLOSING/OPENING REQUIREMENTS		Max	Open ...90 s Close 90 s	54	MANUFACTURER'S DESIGN VALUES - VALVE CLOSING/OPENING		Max	Open s Close s
			Min.	Open s Close s	55			Min.	Open S Close s
Notes:					Notes:				
GENERAL ACTUATOR TECHNICAL DATA					TECHNICAL DATA SPECIFIED BY THE MANUFACTURER				
17	ELECTRIC CONTROL TYPE				56	ELECTRIC CONTROL TYPE			
18	NAME AND NUMBER OF CONTROL SPECIFICATION		J171-GOT-LCG-PC-MTO-SK-6001		57	WORKING MEDIUM			
19	CONTROL WORKING MEDIUM		natural gas		58	SPECIFICATIONS OF WORK. MEDIUM AT CONNECTION POINT			
20	CONNECTION (INTERFACE) SPECIFICATIONS		WORKING MEDIUM		59	MANUFACTURER'S DESIGN FOR CONNECTION (INTERFACE)		WORKING MEDIUM	
			VALVE					VALVE	
			I&C (Feldbus, Profibus etc.)	no				I&C (Feldbus, Profibus etc.)	
21	VALVE POSITION SENSOR		CONTINUOUS POSITION CHECK		60	VALVE POSITION SENSOR - MANUFACTURER-RECOMMENDED LIMIT SENSORS		CONTINUOUS POSITION CHECK	
			LIMIT POSITION	yes				LIMIT POSITION	
			SAFE POSITION	FL - holds last position				SAFE POSITION	
22	MAX. AMBIENT TEMPERATURE (°C)		-29°C / +59°C		61	MAG. VALVES - MANUFACTURER SPECIFICATIONS			
23	MAX. RELATIVE HUMIDITY (%)				62	PILOT-MANUFACTURER SPECIFICATIONS			
24	ALTITUDE / ELEVATION				63	SHUT-OFF VALVES - MANUFACTURER SPECIFICATIONS			
25	ENVIRONMENT REQUIREMENTS / SPECIFICATIONS				64	PRIMARY ACTUATOR DIMENSIONS			
26	Ex ZONE		2		65	TRANSPORT WEIGHT OF ACTUATOR			
27	ESD, SAV, PILOT				66	TRANSPORT PACKAGING, PROTECTION FROM DAMAGE			
LOCAL CONTROL					LOCAL CONTROL DESIGNED BY MANUFACTURER				
28	CONTROL BUTTONS - LOCAL		OPEN	yes	67	CONTROL BUTTONS - LOCAL		OPEN	
			CLOSED	yes				CLOSED	
			STOP					STOP	
REMOTE CONTROL					REMOTE CONTROL DESIGNED BY MANUFACTURER				
29	REMOTE CONTROL		OPEN	yes	68	REMOTE CONTROL		OPEN	
			CLOSED	yes				CLOSED	
			STOP					STOP	
	LOCAL POSITION INDICATOR								
	REMOTE CONTROL VOLTAGE		24 VDC						
	REMOTE CONTROL POWER SUPPLY		EXTERNAL						
	POTENTIOMETER FOR REMOTE POSITION INDICATION								
	REMOTE MARKING SEQUENCE		VALVE POSITION						
			OPEN						
			DURING REGULATION						
			CLOSED						
	OTHER SWITCHING CONTACTS		1 2 3 X						
	POSITION OF CONTACTS WHEN VALVE IS CLOSED		1 2 3 X						

DATA SHEET NUMBER: 0002 VALVES WITH ELECTRIC ACTUATORS						
Rev. no.	Completed by the CLIENT			Rev. no.	Completed by the SUPPLIER	
		POSITION OF CONTACTS WHEN VALVE IS CONTROLLED (%)	1 2 3 X			
REQUIREMENTS FOR MATERIALS AND CORROSION PROTECTION				DESIGN OF MATERIALS AND CORROSION PROTECTION FROM MANUFACTURER		
	30	MOTOR PROTECTION	AUTOMATIC RESET			
	30	IMPULSE TUBES	stainless		69	IMPULSE TUBES
	31	PRESSURE VESSEL	stainless		70	PRESSURE VESSEL
		MAGNETIC VALVES	stainless			MAGNETIC VALVES
	32	CONTROL PANEL	stainless		71	CONTROL PANEL
	33	CORROSION PROTECTION	J171-GOT-LCG-PC-SPC-SK-6001		72	CORROSION PROTECTION
ACTUATOR CABLING SPECIFICATIONS						
		POWER WIRING:	INPUT 1	INPUT 2		
	34	(a) CONDUCTOR GAUGE	..... mm²	..... mm²		
		(b) NUMBER OF COILS				
		(c) CABLE GLAND DETAILS				
		CONTROL CABLES:	INPUT 3	INPUT 4		
		(a) CONDUCTOR GAUGE	..... mm²	..... mm²		
		(b) NUMBER OF COILS				
		(c) CABLE GLAND DETAILS				
	35	GAUGE OF PROTECTIVE CONDUCTOR				
	36	PROTECTIVE CONDUCTOR				
	37	TERMINAL				
CERTIFICATION				CERTIFICATION		
	34	DRGV- RESTRICTED PRESSURISED EQUIPMENT	yes		73	DRGV- RESTRICTED PRESSURISED EQUIPMENT
	35	ATEX	yes		74	ATEX
DOCUMENTATION AND TESTING				DOCUMENTATION AND TESTING		
	36	FAT	J171-GOT-LCG-PC-SPC-SK-6001		75	FAT SPECIFICATION AND IMPLEMENTATION PROCEDURE -DOC. NO.:
	37	CERTIFICATION REQUIREMENTS UNDER EN 10 204	3.2		76	CONFIRMATION OF MANUFACTURER'S CERTIFICATION TESTING UNDER EN 10 204
	38	DOCUMENTATION REQUIREMENTS FOR FINAL CONFIGURATION	J171-GOT-LCG-PC-SPC-SK-6001		77	DOCUMENTATION FOR FINAL CONFIGURATION
	39	REQUIREMENTS FOR PACKAGING AND TRANSPORT	J171-GOT-LCG-PC-SPC-SK-6001		78	MANUFACTURER'S DECLARATION - CLIENT'S SPECIFICATIONS ACCEPTED IN FULL
					79	YES NO (ALTERNATIVE DESIGN SPECIFICATIONS BELOW)

NOTES:

This data sheet is used as a reference for purchasing electrically controlled ball valves for HPS and KS01 installations. All actuators defined in the list of ball valves shall be specified in detail in Phase 7 of the project's implementation documentation.

This translation of the Data sheet from the Slovak into the English language is for an informative purpose only. The Procuring Entity provides no guarantee for quality of this translation and the binding wording of the Data sheet is in the Slovak language.

DATA SHEET NUMBER: 0003 VALVES WITH ELECTRIC ACTUATORS									
Rev. no.	Completed by the CLIENT				Rev. no.	Completed by the SUPPLIER			
GENERAL VALVE INFORMATION					GENERAL INFORMATION				
1	NAME AND NUMBER OF VALVE SPECIFICATION		ball valve - GA01		40	ACTUATOR MANUFACTURER			
2	SITE OF INSTALLATION		HPS		41	TYPE OF ACTUATOR			
3	TYPE OF VALVE		BALL VALVE		42	WIRING SCHEMATIC - MANUFACTURER'S INTERFACE DOCUMENTATION NO.:			
4	DN		1000		43	CONNECTION TO VALVE (FLANGE) PER ISO			
5	P&ID		J171-GOT-HPS-SO-600-SK-6003		44	MANUFACTURER'S CATALOGUE MARKING			
6	TAG. NUMBER				45	TECHNICAL SPECIFICATION - MANUFACTURER'S DOCUMENT NO.:			
VALVE OPERATING AND DESIGN PARAMETERS					ACTUATOR OPERATING AND DESIGN PARAMETERS				
7	AMBIENT CONDITIONS AT SITE OF OPERATION		-29°C / +59°C		46	MAX. MEDIA WORKING PRESSURE (bar)			
8	WORKING MEDIUM		natural gas		47	(MAX / MIN) MEDIA WORKING TEMPERATURE (°C)			
9	MEDIA COMPOSITION		mech. impurity content up to 5 mm max. 100 g/m³		48	DESIGN PRESSURE (bar)			
10	MAX. WORKING PRESSURE		7.25 MPa(g)		49	DESIGN TEMPERATURE (MAX. / MIN.) (°C)			
11	DIFFERENTIAL PRESSURE				50	NUMBER OF OPERATING CYCLES WITHOUT WORKING MEDIA			
12	MAX./MIN. WORKING MEDIA TEMPERATURE		0°C / 40°C		51	MAX. TORQUE			
13	ELEVATION				52	ACTUATOR TORQUE RATING			
14	DIRECTION OF FLOW OF WORKING MEDIA				53	LEVEL OF IP PROTECTION PER IEC 60529			
15	VALVE CLOSING/OPENING REQUIREMENTS		Max	Open 90 s Close 90 s	54	MANUFACTURER'S DESIGN VALUES - VALVE CLOSING/OPENING		Max	Open s Close s
			Min.	Open S Close s	55			Min.	Open S Close s
Notes:					Notes:				
GENERAL ACTUATOR TECHNICAL DATA					TECHNICAL DATA SPECIFIED BY THE MANUFACTURER				
17	ELECTRIC CONTROL TYPE				56	ELECTRIC CONTROL TYPE			
18	NAME AND NUMBER OF CONTROL SPECIFICATION		J171-GOT-LCG-PC-MTO-SK-6001		57	WORKING MEDIUM			
19	CONTROL WORKING MEDIUM		natural gas		58	SPECIFICATIONS OF WORK. MEDIUM AT CONNECTION POINT			
20	CONNECTION (INTERFACE) SPECIFICATIONS		WORKING MEDIUM		59	MANUFACTURER'S DESIGN FOR CONNECTION (INTERFACE)		WORKING MEDIUM	
			VALVE					VALVE	
			I&C (Feldbus, Profibus etc.)	no				I&C (Feldbus, Profibus etc.)	
21	VALVE POSITION SENSOR		CONTINUOUS POSITION CHECK		60	VALVE POSITION SENSOR - MANUFACTURER-RECOMMENDED LIMIT SENSORS		CONTINUOUS POSITION CHECK	
			LIMIT POSITION	yes				LIMIT POSITION	
			SAFE POSITION					SAFE POSITION	
22	MAX. AMBIENT TEMPERATURE (°C)		-29°C / +59°C		61	MAG. VALVES - MANUFACTURER SPECIFICATIONS			
23	MAX. RELATIVE HUMIDITY (%)				62	PILOT-MANUFACTURER SPECIFICATIONS			
24	ALTITUDE / ELEVATION				63	SHUT-OFF VALVES - MANUFACTURER SPECIFICATIONS			
25	ENVIRONMENT REQUIREMENTS / SPECIFICATIONS				64	PRIMARY ACTUATOR DIMENSIONS			
26	Ex ZONE		2		65	TRANSPORT WEIGHT OF ACTUATOR			
27	ESD, SAV, PILOT				66	TRANSPORT PACKAGING, PROTECTION FROM DAMAGE			
LOCAL CONTROL					LOCAL CONTROL DESIGNED BY MANUFACTURER				
28	CONTROL BUTTONS - LOCAL		OPEN	yes	67	CONTROL BUTTONS - LOCAL		OPEN	
			CLOSED	yes				CLOSED	
			STOP					STOP	
REMOTE CONTROL					REMOTE CONTROL DESIGNED BY MANUFACTURER				
29	REMOTE CONTROL		OPEN		68	REMOTE CONTROL		OPEN	
			CLOSED					CLOSED	
			STOP					STOP	
	LOCAL POSITION INDICATOR								
	REMOTE CONTROL VOLTAGE								
	REMOTE CONTROL POWER SUPPLY								
	POTENTIOMETER FOR REMOTE POSITION INDICATION								
	REMOTE MARKING SEQUENCE		VALVE POSITION						
			OPEN						
			DURING REGULATION						
			CLOSED						
	OTHER SWITCHING CONTACTS		1 2 3 X						
	OTHER SWITCHING		1 2 3 X						

DATA SHEET NUMBER: 0003 VALVES WITH ELECTRIC ACTUATORS						
Rev. no.	Completed by the CLIENT			Rev. no.	Completed by the SUPPLIER	
		POSITION OF CONTACTS WHEN VALVE IS CONTROLLED (%)	1 2 3 X			
REQUIREMENTS FOR MATERIALS AND CORROSION PROTECTION				DESIGN OF MATERIALS AND CORROSION PROTECTION FROM MANUFACTURER		
	30	MOTOR PROTECTION	AUTOMATIC RESET			
	30	IMPULSE TUBES	stainless		69	IMPULSE TUBES
	31	PRESSURE VESSEL	stainless		70	PRESSURE VESSEL
		MAGNETIC VALVES	stainless			MAGNETIC VALVES
	32	CONTROL PANEL	stainless		71	CONTROL PANEL
	33	CORROSION PROTECTION	J171-GOT-LCG-PC-SPC-SK-6001		72	CORROSION PROTECTION
ACTUATOR CABLING SPECIFICATIONS						
		POWER WIRING:	INPUT 1	INPUT 2		
	34	(a) CONDUCTOR GAUGE	..... mm ²	..... mm ²		
		(b) NUMBER OF COILS				
		(c) CABLE GLAND DETAILS				
		CONTROL CABLES:	INPUT 3	INPUT 4		
		(a) CONDUCTOR GAUGE	..... mm ²	..... mm ²		
		(b) NUMBER OF COILS				
		(c) CABLE GLAND DETAILS				
	35	GAUGE OF PROTECTIVE CONDUCTOR				
	36	PROTECTIVE CONDUCTOR				
	37	TERMINAL				
CERTIFICATION				CERTIFICATION		
	34	DRGV- RESTRICTED PRESSURISED EQUIPMENT	yes		73	DRGV- RESTRICTED PRESSURISED EQUIPMENT
	35	ATEX	yes		74	ATEX
DOCUMENTATION AND TESTING				DOCUMENTATION AND TESTING		
	36	FAT	J171-GOT-LCG-PC-SPC-SK-6001		75	FAT SPECIFICATION AND IMPLEMENTATION PROCEDURE -DOC. NO.:
	37	CERTIFICATION REQUIREMENTS UNDER EN 10 204	3.2		76	CONFIRMATION OF MANUFACTURER'S CERTIFICATION TESTING UNDER EN 10 204
	38	DOCUMENTATION REQUIREMENTS FOR FINAL CONFIGURATION	J171-GOT-LCG-PC-SPC-SK-6001		77	DOCUMENTATION FOR FINAL CONFIGURATION
	39	REQUIREMENTS FOR PACKAGING AND TRANSPORT	J171-GOT-LCG-PC-SPC-SK-6001		78	MANUFACTURER'S DECLARATION - CLIENT'S SPECIFICATIONS ACCEPTED IN FULL
					79	YES NO (ALTERNATIVE DESIGN SPECIFICATIONS BELOW)

NOTES:

This data sheet is used as a reference for purchasing electrically controlled ball valves for HPS and KS01 installations. All actuators defined in the list of ball valves shall be specified in detail in Phase 7 of the project's implementation documentation.

This translation of the Data sheet from the Slovak into the English language is for an informative purpose only. The Procuring Entity provides no guarantee for quality of this translation and the binding wording of the Data sheet is in the Slovak language.

DATA SHEET NUMBER: 0004 VALVES WITH ELECTRIC ACTUATORS									
Rev. no.	Completed by the CLIENT				Rev. no.	Completed by the SUPPLIER			
GENERAL VALVE INFORMATION					GENERAL INFORMATION				
1	NAME AND NUMBER OF VALVE SPECIFICATION		ball valve - GA20		40	ACTUATOR MANUFACTURER			
2	SITE OF INSTALLATION		HPS		41	TYPE OF ACTUATOR			
3	TYPE OF VALVE		BALL VALVE		42	WIRING SCHEMATIC - MANUFACTURER'S INTERFACE DOCUMENTATION NO.:			
4	DN		1000		43	CONNECTION TO VALVE (FLANGE) PER ISO			
5	P&ID		J171-GOT-HPS-SO-600-SK-6003		44	MANUFACTURER'S CATALOGUE MARKING			
6	TAG. NUMBER				45	TECHNICAL SPECIFICATION - MANUFACTURER'S DOCUMENT NO.:			
VALVE OPERATING AND DESIGN PARAMETERS					ACTUATOR OPERATING AND DESIGN PARAMETERS				
7	AMBIENT CONDITIONS AT SITE OF OPERATION		-29°C / +59°C		46	MAX. MEDIA WORKING PRESSURE (bar)			
8	WORKING MEDIUM		natural gas		47	(MAX / MIN) MEDIA WORKING TEMPERATURE (°C)			
9	MEDIA COMPOSITION		mech. impurity content up to 5 mm max. 100 g/m³		48	DESIGN PRESSURE (bar)			
10	MAX. WORKING PRESSURE		8.4 MPa(g)		49	DESIGN TEMPERATURE (MAX. / MIN.) (°C)			
11	DIFFERENTIAL PRESSURE				50	NUMBER OF OPERATING CYCLES WITHOUT WORKING MEDIA			
12	MAX./MIN. WORKING MEDIA TEMPERATURE		0°C / 40°C		51	MAX. TORQUE			
13	ELEVATION				52	ACTUATOR TORQUE RATING			
14	DIRECTION OF FLOW OF WORKING MEDIA				53	LEVEL OF IP PROTECTION PER IEC 60529			
15	VALVE CLOSING/OPENING REQUIREMENTS		Max	Open 90 s Close 90 s	54	MANUFACTURER'S DESIGN VALUES - VALVE CLOSING/OPENING		Max	Open s Close s
			Min.	Open s Close s	55			Min.	Open S Close s
Notes:					Notes:				
GENERAL ACTUATOR TECHNICAL DATA					TECHNICAL DATA SPECIFIED BY THE MANUFACTURER				
17	ELECTRIC CONTROL TYPE				56	ELECTRIC CONTROL TYPE			
18	NAME AND NUMBER OF CONTROL SPECIFICATION		J171-GOT-LCG-PC-MTO-SK-6001		57	WORKING MEDIUM			
19	CONTROL WORKING MEDIUM		natural gas		58	SPECIFICATIONS OF WORK. MEDIUM AT CONNECTION POINT			
20	CONNECTION (INTERFACE) SPECIFICATIONS		WORKING MEDIUM		59	MANUFACTURER'S DESIGN FOR CONNECTION (INTERFACE)		WORKING MEDIUM	
			VALVE					VALVE	
			I&C (Feldbus, Profibus etc.)	no				I&C (Feldbus, Profibus etc.)	
21	VALVE POSITION SENSOR		CONTINUOUS POSITION CHECK		60	VALVE POSITION SENSOR - MANUFACTURER-RECOMMENDED LIMIT SENSORS		CONTINUOUS POSITION CHECK	
			LIMIT POSITION	yes				LIMIT POSITION	
			SAFE POSITION					SAFE POSITION	
22	MAX. AMBIENT TEMPERATURE (°C)		-29°C / +59°C		61	MAG. VALVES - MANUFACTURER SPECIFICATIONS			
23	MAX. RELATIVE HUMIDITY (%)				62	PILOT-MANUFACTURER SPECIFICATIONS			
24	ALTITUDE / ELEVATION				63	SHUT-OFF VALVES - MANUFACTURER SPECIFICATIONS			
25	ENVIRONMENT REQUIREMENTS / SPECIFICATIONS				64	PRIMARY ACTUATOR DIMENSIONS			
26	Ex ZONE		2		65	TRANSPORT WEIGHT OF ACTUATOR			
27	ESD, SAV, PILOT				66	TRANSPORT PACKAGING, PROTECTION FROM DAMAGE			
LOCAL CONTROL					LOCAL CONTROL DESIGNED BY MANUFACTURER				
28	CONTROL BUTTONS - LOCAL		OPEN	yes	67	CONTROL BUTTONS - LOCAL		OPEN	
			CLOSED	yes				CLOSED	
			STOP					STOP	
REMOTE CONTROL					REMOTE CONTROL DESIGNED BY MANUFACTURER				
29	REMOTE CONTROL		OPEN		68	REMOTE CONTROL		OPEN	
			CLOSED					CLOSED	
			STOP					STOP	
	LOCAL POSITION INDICATOR								
	REMOTE CONTROL VOLTAGE								
	REMOTE CONTROL POWER SUPPLY								
	POTENTIOMETER FOR REMOTE POSITION INDICATION								
	REMOTE MARKING SEQUENCE		VALVE POSITION						
			OPEN						
			DURING REGULATION						
			CLOSED						
	OTHER SWITCHING CONTACTS		OTHER	1 2 3 X					
	POSITION OF CONTACTS WHEN VALVE IS CLOSED		POSITION OF CONTACTS WHEN VALVE IS CLOSED	1 2 3 X					

DATA SHEET NUMBER: 0004 VALVES WITH ELECTRIC ACTUATORS						
Rev. no.	Completed by the CLIENT			Rev. no.	Completed by the SUPPLIER	
		POSITION OF CONTACTS WHEN VALVE IS CONTROLLED (%)	1 2 3 X			
REQUIREMENTS FOR MATERIALS AND CORROSION PROTECTION				DESIGN OF MATERIALS AND CORROSION PROTECTION FROM MANUFACTURER		
	30	MOTOR PROTECTION	AUTOMATIC RESET			
	30	IMPULSE TUBES	stainless		69	IMPULSE TUBES
	31	PRESSURE VESSEL	stainless		70	PRESSURE VESSEL
		MAGNETIC VALVES	stainless			MAGNETIC VALVES
	32	CONTROL PANEL	stainless		71	CONTROL PANEL
	33	CORROSION PROTECTION	J171-GOT-LCG-PC-SPC-SK-6001		72	CORROSION PROTECTION
ACTUATOR CABLING SPECIFICATIONS						
		POWER WIRING:	INPUT 1	INPUT 2		
	34	(a) CONDUCTOR GAUGE	..... mm²	..... mm²		
		(b) NUMBER OF COILS				
		(c) CABLE GLAND DETAILS				
		CONTROL CABLES:	INPUT 3	INPUT 4		
		(a) CONDUCTOR GAUGE	..... mm²	..... mm²		
		(b) NUMBER OF COILS				
		(c) CABLE GLAND DETAILS				
	35	GAUGE OF PROTECTIVE CONDUCTOR				
	36	PROTECTIVE CONDUCTOR				
	37	TERMINAL				
CERTIFICATION				CERTIFICATION		
	34	DRGV- RESTRICTED PRESSURISED EQUIPMENT	yes		73	DRGV- RESTRICTED PRESSURISED EQUIPMENT
	35	ATEX	yes		74	ATEX
DOCUMENTATION AND TESTING				DOCUMENTATION AND TESTING		
	36	FAT	J171-GOT-LCG-PC-SPC-SK-6001		75	FAT SPECIFICATION AND IMPLEMENTATION PROCEDURE -DOC. NO.:
	37	CERTIFICATION REQUIREMENTS UNDER EN 10 204	3.2		76	CONFIRMATION OF MANUFACTURER'S CERTIFICATION TESTING UNDER EN 10 204
	38	DOCUMENTATION REQUIREMENTS FOR FINAL CONFIGURATION	J171-GOT-LCG-PC-SPC-SK-6001		77	DOCUMENTATION FOR FINAL CONFIGURATION
	39	REQUIREMENTS FOR PACKAGING AND TRANSPORT	J171-GOT-LCG-PC-SPC-SK-6001		78	MANUFACTURER'S DECLARATION - CLIENT'S SPECIFICATIONS ACCEPTED IN FULL
					79	YES NO (ALTERNATIVE DESIGN SPECIFICATIONS BELOW)

NOTES:

This data sheet is used as a reference for purchasing electrically controlled ball valves for HPS and KS01 installations. All actuators defined in the list of ball valves shall be specified in detail in Phase 7 of the project's implementation documentation.

This translation of the Data sheet from the Slovak into the English language is for an informative purpose only. The Procuring Entity provides no guarantee for quality of this translation and the binding wording of the Data sheet is in the Slovak language.

DATA SHEET NUMBER: 0005 VALVES WITH ELECTRIC ACTUATORS									
Rev. no.	Completed by the CLIENT				Rev. no.	Completed by the SUPPLIER			
GENERAL VALVE INFORMATION					GENERAL INFORMATION				
1	NAME AND NUMBER OF VALVE SPECIFICATION		ball valve - HA01		40	ACTUATOR MANUFACTURER			
2	SITE OF INSTALLATION		KS01		41	TYPE OF ACTUATOR			
3	TYPE OF VALVE		BALL VALVE		42	WIRING SCHEMATIC - MANUFACTURER'S INTERFACE DOCUMENTATION NO.:			
4	DN		1000		43	CONNECTION TO VALVE (FLANGE) PER ISO			
5	P&ID		J171-GOT-KSN-SO-570-SK-6003		44	MANUFACTURER'S CATALOGUE MARKING			
6	TAG. NUMBER				45	TECHNICAL SPECIFICATION - MANUFACTURER'S DOCUMENT NO.:			
VALVE OPERATING AND DESIGN PARAMETERS					ACTUATOR OPERATING AND DESIGN PARAMETERS				
7	AMBIENT CONDITIONS AT SITE OF OPERATION		-29°C / +59°C		46	MAX. MEDIA WORKING PRESSURE (bar)			
8	WORKING MEDIUM		natural gas		47	(MAX / MIN) MEDIA WORKING TEMPERATURE (°C)			
9	MEDIA COMPOSITION		mech. impurity content up to 5 mm max. 100 g/m³		48	DESIGN PRESSURE (bar)			
10	MAX. WORKING PRESSURE		7.25 MPa(g)		49	DESIGN TEMPERATURE (MAX. / MIN.) (°C)			
11	DIFFERENTIAL PRESSURE				50	NUMBER OF OPERATING CYCLES WITHOUT WORKING MEDIA			
12	MAX./MIN. WORKING MEDIA TEMPERATURE		0°C / 40°C		51	MAX. TORQUE			
13	ELEVATION				52	ACTUATOR TORQUE RATING			
14	DIRECTION OF FLOW OF WORKING MEDIA				53	LEVEL OF IP PROTECTION PER IEC 60529			
15	VALVE CLOSING/OPENING REQUIREMENTS		Max	Open 90 s Close 90 s	54	MANUFACTURER'S DESIGN VALUES - VALVE CLOSING/OPENING		Max	Open s Close s
			Min.	Open s Close s	55			Min.	Open S Close s
Notes:					Notes:				
GENERAL ACTUATOR TECHNICAL DATA					TECHNICAL DATA SPECIFIED BY THE MANUFACTURER				
17	ELECTRIC CONTROL TYPE				56	ELECTRIC CONTROL TYPE			
18	NAME AND NUMBER OF CONTROL SPECIFICATION		J171-GOT-LCG-PC-MTO-SK-6001		57	WORKING MEDIUM			
19	CONTROL WORKING MEDIUM		natural gas		58	SPECIFICATIONS OF WORK. MEDIUM AT CONNECTION POINT			
20	CONNECTION (INTERFACE) SPECIFICATIONS		WORKING MEDIUM		59	MANUFACTURER'S DESIGN FOR CONNECTION (INTERFACE)		WORKING MEDIUM	
			VALVE	insulating flange (cathodic protection)				VALVE	
			I&C (Feldbus, Profibus etc.)	no				I&C (Feldbus, Profibus etc.)	
21	VALVE POSITION SENSOR		CONTINUOUS POSITION CHECK		60	VALVE POSITION SENSOR - MANUFACTURER-RECOMMENDED LIMIT SENSORS		CONTINUOUS POSITION CHECK	
			LIMIT POSITION					LIMIT POSITION	
			SAFE POSITION					SAFE POSITION	
22	MAX. AMBIENT TEMPERATURE (°C)		-29°C / +59°C		61	MAG. VALVES - MANUFACTURER SPECIFICATIONS			
23	MAX. RELATIVE HUMIDITY (%)				62	PILOT-MANUFACTURER SPECIFICATIONS			
24	ALTITUDE / ELEVATION				63	SHUT-OFF VALVES - MANUFACTURER SPECIFICATIONS			
25	ENVIRONMENT REQUIREMENTS / SPECIFICATIONS				64	PRIMARY ACTUATOR DIMENSIONS			
26	Ex ZONE		2		65	TRANSPORT WEIGHT OF ACTUATOR			
27	ESD, SAV, PILOT				66	TRANSPORT PACKAGING, PROTECTION FROM DAMAGE			
LOCAL CONTROL					LOCAL CONTROL DESIGNED BY MANUFACTURER				
28	CONTROL BUTTONS - LOCAL		OPEN	yes	67	CONTROL BUTTONS - LOCAL		OPEN	
			CLOSED	yes				CLOSED	
			STOP					STOP	
REMOTE CONTROL					REMOTE CONTROL DESIGNED BY MANUFACTURER				
29	REMOTE CONTROL		OPEN		68	REMOTE CONTROL		OPEN	
			CLOSED					CLOSED	
			STOP					STOP	
	LOCAL POSITION INDICATOR								
	REMOTE CONTROL VOLTAGE								
	REMOTE CONTROL POWER SUPPLY								
	POTENTIOMETER FOR REMOTE POSITION INDICATION								
	REMOTE MARKING SEQUENCE		VALVE POSITION						
			OPEN						
			DURING REGULATION						
			CLOSED						
	OTHER SWITCHING CONTACTS		1 2 3 X						
	POSITION OF CONTACTS WHEN VALVE IS CLOSED		1 2 3 X						

DATA SHEET NUMBER: 0005 VALVES WITH ELECTRIC ACTUATORS						
Rev. no.	Completed by the CLIENT			Rev. no.	Completed by the SUPPLIER	
		POSITION OF CONTACTS WHEN VALVE IS CONTROLLED (%)	1 2 3 X			
REQUIREMENTS FOR MATERIALS AND CORROSION PROTECTION				DESIGN OF MATERIALS AND CORROSION PROTECTION FROM MANUFACTURER		
	30	MOTOR PROTECTION	AUTOMATIC RESET			
	30	IMPULSE TUBES	stainless		69	IMPULSE TUBES
	31	PRESSURE VESSEL	stainless		70	PRESSURE VESSEL
		MAGNETIC VALVES	stainless			MAGNETIC VALVES
	32	CONTROL PANEL	stainless		71	CONTROL PANEL
	33	CORROSION PROTECTION	J171-GOT-LCG-PC-SPC-SK-6001		72	CORROSION PROTECTION
ACTUATOR CABLING SPECIFICATIONS						
		POWER WIRING:	INPUT 1	INPUT 2		
	34	(a) CONDUCTOR GAUGE	..... mm²	..... mm²		
		(b) NUMBER OF COILS				
		(c) CABLE GLAND DETAILS				
		CONTROL CABLES:	INPUT 3	INPUT 4		
		(a) CONDUCTOR GAUGE	..... mm²	..... mm²		
		(b) NUMBER OF COILS				
		(c) CABLE GLAND DETAILS				
	35	GAUGE OF PROTECTIVE CONDUCTOR				
	36	PROTECTIVE CONDUCTOR				
	37	TERMINAL				
CERTIFICATION				CERTIFICATION		
	34	DRGV- RESTRICTED PRESSURISED EQUIPMENT	yes		73	DRGV- RESTRICTED PRESSURISED EQUIPMENT
	35	ATEX	yes		74	ATEX
DOCUMENTATION AND TESTING				DOCUMENTATION AND TESTING		
	36	FAT	J171-GOT-LCG-PC-SPC-SK-6001		75	FAT SPECIFICATION AND IMPLEMENTATION PROCEDURE -DOC. NO.:
	37	CERTIFICATION REQUIREMENTS UNDER EN 10 204	3.2		76	CONFIRMATION OF MANUFACTURER'S CERTIFICATION TESTING UNDER EN 10 204
	38	DOCUMENTATION REQUIREMENTS FOR FINAL CONFIGURATION	J171-GOT-LCG-PC-SPC-SK-6001		77	DOCUMENTATION FOR FINAL CONFIGURATION
	39	REQUIREMENTS FOR PACKAGING AND TRANSPORT	J171-GOT-LCG-PC-SPC-SK-6001		78	MANUFACTURER'S DECLARATION - CLIENT'S SPECIFICATIONS ACCEPTED IN FULL
					79	YES NO (ALTERNATIVE DESIGN SPECIFICATIONS BELOW)

NOTES:

This data sheet is used as a reference for purchasing electrically controlled ball valves for HPS and KS01 installations. All actuators defined in the list of ball valves shall be specified in detail in Phase 7 of the project's implementation documentation.

This translation of the Data sheet from the Slovak into the English language is for an informative purpose only. The Procuring Entity provides no guarantee for quality of this translation and the binding wording of the Data sheet is in the Slovak language.