«APPROVED»

Chief Metrologist

of "Shurtan GCC", LLC

_____ H. Makhmudov

"____" _____ 2021 y.

UNG
Shurtan GKM

"O'zbekneftgaz" AJ
"Shurtan gaz kimyo majmuasi" MCHJ
MTRB xizmati
RO'YXATGA OLINDI
074/007-1093-1(eng)
2021 yil "30" 12

TECHNICAL ASSIGNMENT

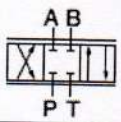
for purchasing of the Servo solenoid valves

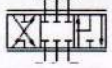
for the needs of "Shurtan Gas Chemical Complex", LLC.

1. ОБЩИЕ СВЕДЕНИЯ

1.1 Наименование				
Servo solenoid valves (Directional control valve)				
№	Name of goods	Brief description	Unit	Quantity
1	Servo solenoid valve for the pallet production unit	Servo solenoid valves with overlap and on-board electronics	pcs.	1
2	Servo solenoid valve for the pallet production unit	Servo solenoid valves with overlap and on-board electronics	pcs.	1

1.2 Basis and purpose of purchasing of the equipment.
Basis: Approved annual application for 2020.
Purpose: For stable operation of existing solenoid valves with servo drive.
1.3 Novelty Information (Equipment production/manufacture year).
The delivered products shall be previously unused, manufactured not earlier than 2019.
1.4 HC code and other international codes when applicable.
The manufacturer of the goods shall provide the HC code or other international codes.
2. SCOPE OF USE.
Existing solenoid valves with a servo drive on cylindrical structures are used in technological processes with applications of control of operating parameters, for example, control of the movement of the mandrel, cylinder and oil pressure or partially opening or closing at a given signal. Valves with translational movement of the rod.
3. OPERATING CONDITIONS
3.1 General operating conditions
Place of use: Indoor with the forced ventilation;
Ambient temperature range: from + 5 to + 55 ° C;
Relative humidity of ambient air: from 5% to 80%;
The valve parts are subject to normal wear and tear, so they must be inspected periodically and replaced if necessary. The frequency of maintenance inspections depends on the severity of the operating conditions.
4. TECHNICAL REQUIREMENTS
4.1 Basic Technical Requirements

Position № 1. Servo solenoid valves with overlap and on-board electronics - 1 piece	
Power supply	24 V
Nominal size	10
Ambient temperature	from -40°C to+ 85°C
Control spool symbols:	= E, E1 
nominal fluid flow rate at 10 bar pressure difference	50 or 85 L/min (13.21 or 22.45 GPM)
flow characteristics	Progressive
Overlap compensation signal	±0,5V
interface for trigger electronics	±10V
item number:	0 811 404 701
seals	NBR
suitable for mineral oils	(HL, HLP), DIN 51524
electrical connection	DIN 43563-AM6

Position № 2. Servo solenoid valves with overlap and on-board electronics - 1 piece	
power supply	24B
nominal size	25
ambient temperature	От -40°C до+ 85°C
control spool symbols:	= E (Z), E1 (Z) AC1B 
nominal fluid flow rate at 10 bar pressure difference	350 L/min (92.5 GPM)
flow characteristics	Progressive
Overlap compensation signal	±0.5V
interface for trigger electronics	±10V
item number:	0 811 404 455
seals	NBR
suitable for mineral oils	(HL, HLP), DIN 51524
electrical connection	DIN 43563-AM6

4.2 Reliability Requirements.

Average service life of the spare parts per year used with the use of aggressive media, the average service life of which depends on the property of the aggressive media, operating conditions and materials used. The supplied equipment shall be designed for continuous operation - 24 hours a day, 7 days a week under specified conditions during the specified service life.

4.4 Design requirements, installation and technical requirements.

When replacing parts, only parts manufactured and supplied by the company shall be used, part numbers and names of spare parts shall be specified in accordance with the technical documentation of the manufacturer attached to this TA.

4.5 Material Requirements.

Refer to the technical specifications in paragraph 4.1.

4.6 Requirements for stability and parameters under the influence of environmental factors.

When exposed to environmental factors, it is necessary to avoid harmful effects such as high temperature and aggressive environment, as well as to provide protection against mechanical damage during storage, transportation and packaging.

4.7 Marking Requirements.

The equipment shall be marked in Russian and must have clear designations. The manufacturer, lot number and date of manufacture are also must be indicated. Marking shall be maintained for the entire service life of the supplied equipment.

4.8 Requirements for dimensions and packaging.

The goods are delivered in tare / packaging. Tare and packaging shall be of a commercial type, ensure the safety of product against mechanical damage during loading and unloading operations, during transportation, as well as during long-term storage, (in accordance with the manufacturer's requirement). Provide with protection against mechanical damage during transportation and packaging.

5. REQUIREMENTS AS PER DELIVERY AND ACCEPTANCE RULES

5.1 Delivery and Acceptance Procedure

The goods shall be accepted after incoming control and drawing up an act in accordance with the contract.

The Customer accepts the goods according to the quantity, quality and completeness of the batch, and external signs of preservation of the goods (presence of mechanical damages, visible deformation of individual units and parts of the goods and other similar obvious signs of damage) in accordance with transport and accompanying documents, quality certificates of the manufacturer.

Hereby, the parties agree that the visual inspection of the goods performed by the representative of the Customer shall be absolute and final for the parties to determine compliance by quantity, completeness and external signs of preservation of the goods during its transportation.
The products shall have certificates of conformity and certification test reports confirming the declared characteristics, accompanied documentation for installation, adjustment and operation.
All accompanying documentation shall be in Russian or English and shall be handed over to the Customer together with the products supplied.
The supplied equipment shall be designed for continuous operation - 24 hours a day, 7 days a week under specified conditions during the specified service life.
The equipment shall be marked in Russian and English and must have clear designations. The manufacturer, lot number and date of manufacture are also must be indicated.
Marking shall be maintained for the entire service life of the supplied equipment.
The options proposed by the participant for technical parameters and characteristics of equipment and materials not specified in the TA are agreed additionally.
Upon acceptance of the goods from the carrier, the Customer (consignee) shall check the conformity of the goods with the information specified in the contract, specifications or additional agreements to it, as well as in transport, accompanying documents, quality certificates of the manufacturer.
If upon acceptance of the goods after their receipt from the carrier there is a non-conformity of the goods by quality/quantity, the Customer (consignee) shall suspend the acceptance of the goods, take measures to ensure the safety of the goods and prevent mixing with other homogeneous goods and notify the Seller in writing form within 5 (five) working days from the moment of detection of defects.
The Seller shall send to the Customer (consignee) not later than 10 (ten) working days from the moment of receipt of the notification the response about participation of his representative in further acceptance of the goods. The Seller's representative shall appear to participate in the acceptance of the goods within a reasonable period not exceeding 20 (twenty) calendar days from the date of receipt of the notice.
5.2 Requirements for handing over to the customer of technical and other documents during equipment delivery.
The Supplier shall provide with the following documents confirming compliance of the products with the established requirements:
Certificates (declarations) of compliance with GOST and safety requirements;
Specification of main components of equipment with indication of manufacturers, as well as enclosure certificates of conformity for them;
Documentation for installation, adjustment and operation in Russian and English;
All supplied equipment is subject to incoming inspection with the participant's representative when receiving the equipment at the warehouse.
The goods shall be accompanied by the following documentation:
- The certificate of conformity of the goods;
- invoice (invoice) of the Seller with description of the goods, indication of the quantity, price of the unit of goods and total amount;
- consignment note issued in the name of the consignee, the name of the Customer, the number and dates of signing the existing contract;
- Certificate of the country of origin indicating the invoice number and date;
- packing list;
- Certificate of quality of goods issued by the manufacturer;
- product safety passport.
5.3 Equipment Insurance Requirements
The goods must be insured.

6. TRANSPORTATION REQUIREMENTS
After manufacturing the spare parts, pack in a box and provide with protection against mechanical damage.
The goods must be shipped in the export standard package (closed, sealed package, serviceable) of the manufacturer, ensuring its complete safety from all kinds of damage during long-term storage and

transportation of products, taking into account several transshipments in transit. Other variants and dimensions of packages shall be subject to additional approval with the Customer, provided that they are acceptable.

The equipment shall be delivered at the Supplier's expense by means of shipment of products by road and/or air transport to the consignee's address, other methods of shipment may be performed only with written approval of the Customer.

In case of erroneous shipment of equipment not to the address, the Supplier shall, at its own expense, forward the products to the destination specified in the contract.

Consignee: Owner - "Shurtan GCC" LLC. The Republic of Uzbekistan, Kashkadarya region, Guzar district, Shurtan settlement, 180300, www.sgcc.uz , sgcc@sgcc.uz

7. STORAGE REQUIREMENTS

When storing spare parts, it is necessary to avoid harmful effects, such as high temperature and aggressive environment and provide protection against mechanical damage.

8. REQUIREMENTS FOR THE SCOPE AND/OR PERIOD OF GUARANTEES

Warranty period for supplied materials and equipment is in accordance with the manufacturer's passport, but not less than 12 months. The warranty period shall begin from the moment of equipment commissioning.

The Supplier shall, at its own expense and at the time agreed with the Customer, eliminate any defects in the supplied equipment and materials identified during the warranty period.

In case of equipment failure, the participant is obliged to send his representative to participate in drawing up an act that fixing defects, agreeing on the procedure and terms for their elimination not later than 5 days from the date of receipt of the customer's written notice. The warranty period in this case is extended accordingly for the period of elimination of defects.

9. SERVICEABILITY REQUIREMENTS

Not required.

10. MAINTENANCE REQUIREMENTS

10.1 Maintenance Requirements

The supplied spare parts shall be designed for continuous operation, 24 hours a day under specified conditions during the specified service life.

10.2 Service Requirements

Not required.

11. ENVIRONMENTAL AND SANITARY REQUIREMENTS

The goods shall not cause any damage to the environment.

12. ENERGY EFFICIENCY REQUIREMENTS

The quality of the product shall ensure that it can be used for its intended purpose without negative consequences.

13. SAFETY REQUIREMENTS

The goods shall be safe during their operation, storage and disposal.

14. QUALITY AND CLASSIFICATION REQUIREMENTS

The quality and completeness of the delivered products shall comply with the terms of the contract, the requirements of the ND. The quality of the products is certified by a certificate (passport) of quality, as well as other documents provided by the current legislation confirming the quality of the products. In case of deviation of indexes, the goods are returned to and at the Supplier's expense. Product replacement shall be performed within 14 calendar days. If the participant offers the goods for delivery according to other regulatory and technical documentation (analogue, equivalent), it is necessary to attach certified documents to the participant's request for prices: a certificate/declaration of conformity, the passport of the goods, as well as any other certified documents at the discretion of the participant in the procurement procedure confirming compliance with the technical characteristics of the intended goods for delivery with the requirements of the Customer.

15. REQUIREMENTS FOR QUANTITY, COMPLETING, LOCATION AND TERM (PERIODICITY) OF DELIVERY

Technical data and required quantity of goods (name and technical data of spare parts based on manufacturer's technical documentation) are specified in item 4.1 of this Technical assignment.
The equipment shall be delivered at the Supplier's expense by means of shipment of products by road and/or air transport to the consignee's address, other methods of shipment can be performed only with written approval of the Customer.
The delivery time of the goods is 2 months (60 calendar days).
In case of erroneous shipment of equipment not to the address, the Supplier shall, at its own expense, forward the products to the destination specified in the contract.
Consignee: Owner - "Shurtan GCC", LLC. The Republic of Uzbekistan, Kashkadarya region, Guzar district, Shurtan settlement, 180300, www.sgcc.uz, sgcc@sgcc.uz

16. LIST OF ACCEPTED ABBREVIATIONS

№	Abbreviations	
1	ND	Normative Documentation
2	TA	Technical assignment

* Note: The developer is responsible for the correctness of the filling and the blank item.

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