



# City of Spokane Request for Quotes

QUOTE #: \_\_\_\_\_

DESCRIPTION: \_\_\_\_\_

DEPARTMENT: \_\_\_\_\_

DUE DATE: \_\_\_\_\_, no later than \_\_\_\_\_

The purpose of this Request for Quote is to invite quotes to supply The City of Spokane \_\_\_\_\_ Department with \_\_\_\_\_.

ITEM #	EST QTY	DESCRIPTION	UNIT PRICE	TOTAL
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
Subtotal				
Sales Tax – 8.8%				
Freight/Shipping Charge				
GRAND TOTAL				

**Sales Tax:** The City of Spokane is not a tax exempt entity and is therefore obligated to pay sales tax under Washington State law. Therefore, all quotes shall be tabulated with the applicable sales tax rate whether that tax will be charged through the supplier or paid by the City as use tax.

**Delivery:** We (I) will deliver complete the above items within \_\_\_\_\_ days from receipt of order.

**Attachments:** The following attachments are made a part of this Request for Quote:



# City of Spokane Request for Quotes

Any questions concerning this Request For Quote should be directed to:

\_\_\_\_\_, \_\_\_\_\_ Department at \_\_\_\_\_.

**Deliver to:** \_\_\_\_\_

**Payment:** Supplier will accept credit card ( ☐ YES ) ( ☐ NO ). If YES, state any additional charge or discount for credit card payments:

**Payment Terms:** Unless agreeing to payment by credit card with no additional fee, payment shall be made via direct deposit/ACH (except as provided by state law) after receipt of the goods/services ordered. A completed ACH application is required before a City order will be issued. If the City objects to all or any portion of an invoice, it shall notify the supplier and reserve the right to pay only that portion of the invoice not in dispute. In that event, all parties shall immediately make every effort to settle the disputed amount.

SIGNATURE BELOW ACKNOWLEDGES AGREEMENT TO FURNISH THE ABOVE ITEMS AT THE PRICES STATED, SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF THIS QUOTE.

## BIDDER INFORMATION

Company Name: \_\_\_\_\_

By: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Please indicate person to be contacted by the City concerning items(s) quoted:

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

## BUSINESS REGISTRATION REQUIREMENT

Section 8.01.070 of the Spokane Municipal Code states that no person may engage in business with the City without first having obtained a valid annual business registration. The Bidder shall be responsible for contacting the State of Washington Business License Services at <http://bls.dor.wa.gov> or 1-800-451-7985 to obtain a business registration. If the Bidder does not believe it is required to obtain a business registration, it may contact the City's Taxes and Licenses Division at (509) 625-6070 to request an exemption status determination.

**CITY OF SPOKANE BUSINESS REGISTRATION NUMBER:** \_\_\_\_\_

## ADDITIONAL ITEMS

The City of Spokane reserves the right to purchase additional items at the quoted price. Supplier agrees to sell at the same price, terms and conditions.

( ☐ YES ) ( ☐ NO ) If yes, prices are good until further notice



# City of Spokane

## Request for Quotes

### ORIGINAL PRODUCT/EQUIPMENT MANUFACTURER

State name(s) and address(es) of Original Equipment Manufacturer (OEM) and distributors (if applicable) to be used in the production and delivery of your product.

NAME	ADDRESS	ZIP

### MINORITY BUSINESS ENTERPRISE

Supplier ( ☐ IS ) ( ☐ IS NOT ) a Minority Business Enterprise. A Minority Business Enterprise is defined as a “business, privately or publicly owned, at least 51% of which is owned by minority group members.” For purpose of this definition, minority group members are Blacks, Hispanics, Asian Americans, American Indian or Alaskan Natives, or Women.

### SMALL BUSINESS

Supplier ( ☐ IS ) ( ☐ IS NOT ) a small business concern. (A small business concern for the purpose of government procurement is a concern, including its affiliates, which is independently owned and operated, is not dominant in the field of operations in which it is bidding on government contracts, and can further qualify under the criteria concerning number of employees, average annual receipts, or other criteria as prescribed by the Small Business Administration).

## INSTRUCTIONS AND SPECIFICATIONS

### GENERAL INSTRUCTIONS

1. The items to be furnished by the Bidder on this Quote must be of the latest possible design and production.
2. Time is of the essence in the performance of this contract.
3. Successful bidder will designate a representative who will be available during regular City business hours to serve as a primary contact for the City in the implementation of this supply agreement and if any issues arise regarding the product.
4. The City of Spokane reserves the right to accept or reject any variance from the published specifications and to award the Quote in a manner that is most advantageous to the continued efficient operation of the City.
5. The City reserves the right to accept or reject any part of or all Quotes and to accept the Quote deemed to be in the best interest of the City.
6. The City of Spokane reserves the option of awarding this purchase by item grouping or by any manner most advantageous for the City.
7. Bidder should be aware that Quotes may be rejected if all questions are not completely and correctly answered.
8. Signature on this Quote by the Bidder will confirm receipt and understanding of all instructions, terms, and conditions.



# City of Spokane

## Request for Quotes

### SPECIAL INSTRUCTIONS

The City of Spokane \_\_\_\_\_ Department invite quotes for the supply of \_\_\_\_\_

1. If the product differs from the provisions contained herein, these differences must be explained in detail.
2. Suppliers found to have “overstated” the true ability of their product shall reimburse the City for all costs incurred with remanufacturing or replacement of units until all criteria has been satisfied. These costs shall also include legal, rentals, travel, etc.
3. The omission of any standard feature described herein shall not void the bidder’s responsibility to furnish a complete unit with all standard equipment of the manufacturer’s latest model and design. Equipment to be furnished shall be new and unused unless a demo unit is specified.
4. Successful bidder shall furnish standard warranty as well as any other warranty required in the Quote specifications.
5. The Supplier must be able to service any items purchased by the City of Spokane. The Supplier, therefore, must:
  - Be an authorized factory dealer for the area including the City of Spokane; or
  - Submit a 100% Performance Bond for the life of the equipment; or
  - Provide satisfactory proof by the manufacturer that service will be guaranteed.
6. Federal and State laws governing this product and its final certification must be satisfied.
7. It shall be the Supplier’s responsibility to conform to all Federal Standards for certification.
8. Delivery time shall be a consideration of awarding this contract. Therefore the City requests a completed delivery date as soon as possible after receipt of the purchase order.
9. Any technical specifications and general provisions listed are the minimum acceptable requirements and failure to comply may be used as a basis for rejection of the Quote.
10. In accordance with SMC 7.06.172(A), the Bidder certifies that the products bid and to be supplied (to include product packaging) do not contain polychlorinated biphenyls (PCB’s). Moreover and consistent with SMC 7.06.172(B), the City of Spokane, at its sole discretion, may require (at no cost to the City) the apparent successful bidder to provide testing data (prior to contract execution or issue of purchase order) from an accredited laboratory or testing facility documenting the proposed products and or product packaging polychlorinated biphenyl levels.

	Yes	No	Don't Know
As far as you know has this type product been tested for PCBs by a WA State accredited lab using EPA Method 1668c (or equivalent as updated)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If so were PCBs found at a measureable level?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
As far as you know has this actual product been tested for PCBs by a WA State accredited lab using EPA Method 1668 (or equivalent as updated)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If so attach the results or note from whom the results can be obtained.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have reason to believe the product contains measureable levels of PCBs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have reason to believe the product packaging contains measureable levels of PCBs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I ACKNOWLEDGE RECEIPT OF AND COMPLIANCE WITH THE ABOVE GENERAL AND SPECIAL INSTRUCTIONS

Initials: \_\_\_\_\_



# City of Spokane

## Request for Quotes

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### QUOTE SUBMISSION AND EVALUATION

#### A. PREPARATION OF QUOTES

All Quotes shall be typed or printed in ink, prepared on the document furnished by the Purchaser and signed by an authorized person of Bidder's firm. If errors are made, they may be crossed out. Corrections shall be printed in ink or typewritten adjacent and initialed in ink by the person signing the Quote. IF THE QUOTES CONTAIN ANY OMISSION, ERASURES, ALTERATIONS, ADDITIONS, OR ITEMS NOT CALLED FOR IN THE PROPOSAL, OR CONTAIN IRREGULARITIES OF ANY KIND, IT MAY CONSTITUTE SUFFICIENT CAUSE FOR REJECTION.

#### B. ENVELOPE PREPARATION OF QUOTES SUBMITTED BY HAND OR MAIL

Place one copy of the Quote in a sealed envelope. On the front of the envelope, place the following information:

"QUOTE – IMPORTANT"

"DESCRIPTION: \_\_\_\_\_"

"DUE: \_\_\_\_\_, \_\_\_\_\_ AT \_\_\_\_\_"

"YOUR COMPANY NAME"

If you do not put the above information on your envelope, it could be opened early or late and damage your chance to respond.

Mail or deliver envelope to: \_\_\_\_\_

#### 4. EMAILING QUOTES

Email one copy to City of Spokane \_\_\_\_\_ at \_\_\_\_\_. It is the responsibility of the Bidder to be sure the email is received. If you do not receive an email confirmation sent directly by \_\_\_\_\_, it is recommended that you call the contact name listed in Quote to confirm receipt. A delivery confirmation receipt generated from your original email is not a guaranteed confirmation of receipt.

The Purchaser is not responsible for Quotes delivered late. It is the responsibility of the Bidder to be sure the Quotes are sent sufficiently ahead of time to be received no later than \_\_\_\_\_ on the due date.

#### 5. INTERPRETATION

If the Bidder discovers any errors, discrepancies or omissions in the Quote specifications, or has any questions about the specifications, the Bidder must notify the contact person listed above in writing. Any corrections issued by the Purchaser will be incorporated into the contract or purchase order.

#### 6. WITHDRAWAL OF QUOTES

Bidders may make written request to the contact person listed above for withdrawal of a sealed Quote prior to the scheduled Quote due date and time. Unless otherwise specified, no Quotes may be withdrawn for a minimum of sixty (60) calendar days after the due date.



# City of Spokane

## Request for Quotes

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### **7. EVALUATION OF QUOTES**

Evaluation of Quotes shall be based upon the following criteria, where applicable:

- The price, including sales tax and the effect of discounts. Price may be determined by life cycle costing or total cost quoting, when advantageous to the Purchaser.
- The quality of the items quoted, their conformity to specifications and the purpose for which they are required.
- The Bidder's ability to provide prompt and efficient service and/or delivery.
- The character, integrity, reputation, judgment, experience and efficiency of the Bidder.
- The quality of performance of previous contracts or services.
- The previous and existing compliance by the Bidder with the laws relating to the contract or services.
- Uniformity or interchangeability.
- The energy efficiency of the product throughout its life.
- Any other information having a bearing on the decision to award the contract.

### **8. QUOTING ERRORS**

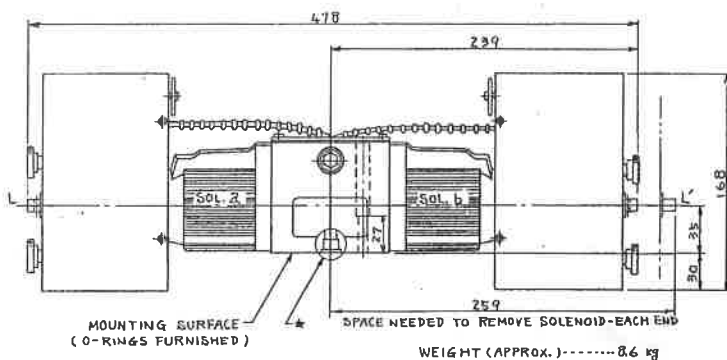
When, after the opening and tabulation of Quotes, a Bidder claims error, and requests to be relieved of award, he will be required to promptly present certified work sheets. The Purchaser will review the work sheets and if the Purchaser is convinced, by clear and convincing evidence, that an honest, mathematically excusable error or critical omission of costs has been made, the Bidder may be relieved of his Quote.

### **9. REJECTION OF QUOTES**

The Purchaser reserves the right to reject any or all Quotes; to waive minor deviations from the specifications, to waive any informality in Quotes received, whenever it is in the Purchaser's best interest, and to accept or reject all or part of this Quote at prices shown.

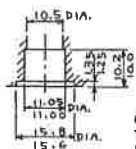
### **10. AWARD OF CONTRACT**

Award of contract or purchase, when made, will be to the Bidder whose Quote is the most favorable to the Purchaser, taking into consideration price and the other evaluation factors. INTERLOCAL AND STATE CONTRACTS WHERE APPLICABLE WILL BE CONSIDERED AS A QUOTE. Unsuccessful Bidders will not automatically be notified of Quote results.



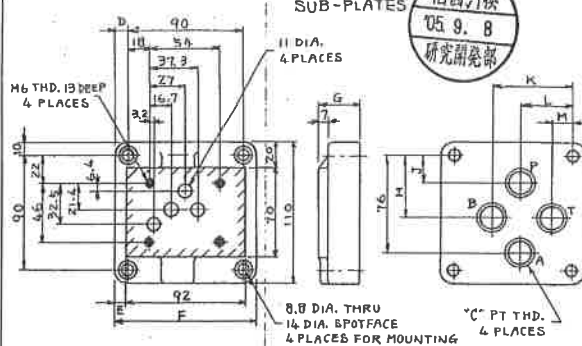
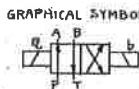
★ EACH PORT (P, A, B & T) IS  
MACHINED FOR FLOW RESTRICTOR.  
( NOT SUPPLIED ) ( SEE FIGURE RIGHT )

★★ ALTHOUGH THE TANK PORT IS SHOWN ON THE LEFT IN OUR SUB-PLATE, EITHER MAY BE USED.



FLOW  
RESTRICTOR

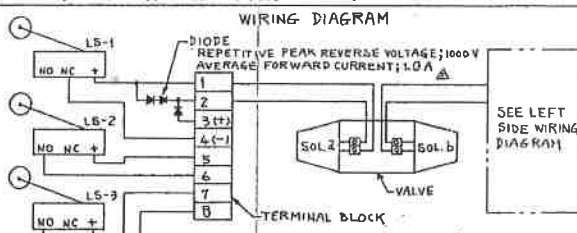
OUTER DIA. OF FLOW  
RESTRICTOR FLANGE  
MAX. 11.5 mm



SUB-PLATE MODEL NUMBER	°C °F	DIMENSIONS mm											WEIGHT (APPROX.) kg	RECOMMENDED FLOW CAPACITY l/min
		D	E	F	G	H	J	K	L	M				
D56M-03-40	3/8	10	9	110	32	48	21	62	40	16			3	30
D56M-03X-40	1/2													50
D56M-03Y-40	3/4	15	14	120	50	47	16	80	45	10			4.7	100

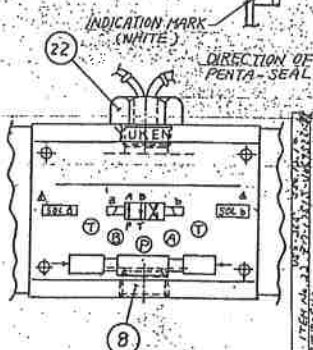
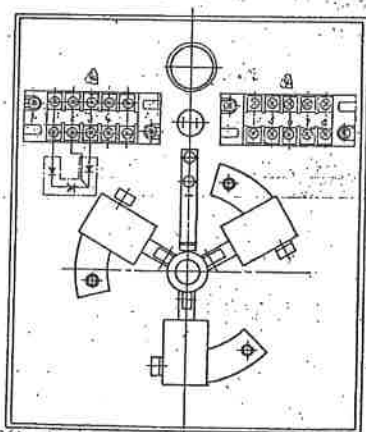
SUB-PLATES ARE AVAILABLE. SPECIFY SUB-PLATE MODEL FROM THE TABLE ABOVE.

WHEN SUB-PLATES ARE NOT USED, THE MOUNTING SURFACE AS SHOWN BY SHADED AREA SHOULD HAVE A GOOD MACHINED FINISH.



Δ	V05-098	3/8	H.Y
SYM	REVISIONS	DATE	SIGN

[illegible]



A-A VIEW

B - B VIEW

REV. DATE	DATE	DRAWN	YUKEN KOGYO CO., LTD.
	78-03-28	M. J.	
REV. APPROVED	CHECKED	FORM NO.	DSG-03-2D2-D** - 4035
T. J.	N. J.	NAME	
三角法	THIRD ANGLE PROJECTION	SOLENOID OPERATED DIRECTIONAL VALVES	
FILE NO.	78-03-28	SUB-PLATE MOUNTING	
735-1751S	735-1751S	735-1751S	

735-1751S

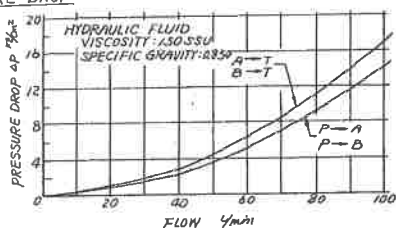
$\nabla A_3 | 1 \ 0 \ 2 \ 7 \ 9 - 0 - 5 \ 1/6$



# RATING

MAXIMUM FLOW WITHOUT MALFUNCTION ..... 100  $\frac{1}{2}$ in  
 MAXIMUM OPERATING PRESSURE ..... 250  $\frac{1}{2}$ kg/cm<sup>2</sup>  
 MAXIMUM TANK LINE BACK PRESSURE ..... 100  $\frac{1}{2}$ kg/cm<sup>2</sup>

## PRESSURE DROP



1. FOR ANY OTHER VISCOSITY, MULTIPLY BY THE FACTORS IN THE TABLE BELOW.

VISCOSITY SSU	75	100	200	250	300	350	400
FACTOR	0.82	0.90	1.08	1.14	1.19	1.24	1.28

2. FOR ANY OTHER SPECIFIC GRAVITY (G'), THE PRESSURE DROP ( $\Delta P'$ ) MAY BE OBTAINED FROM THE FORMULA BELOW.  
 $\Delta P' = \Delta P (G' / 0.850)$

## SOLENOID RATINGS

ELECTRIC SOURCE	COIL TYPE	VOLTAGE (V)		CURRENT AND POWER AT RATED VOLTAGE	
		SOURCE RATING	SERVICEABLE RANGE	HOLDING (A)	POWER (W)
DC	D 100	100	85 ~ 110	0.38	38
	D 110	110	93.5 ~ 121	0.34	
	D 200	200	170 ~ 220	0.19	
	D 220	220	187 ~ 242	0.17	

## MODEL NUMBER DESIGNATION

DSG-03-2 D 2-P100-4035

DESIGN NUMBER\*

COIL TYPE (REFER TO SOLENOID RATINGS)

SPOOL TYPE

SPOOL-SPRING ARRANGEMENT  
 D...NO-SPRING DETENTED

NUMBER OF VALVE POSITIONS  
 2...TWO POSITIONS

VALVE SIZE

SOLENOID OPERATED DIRECTIONAL VALVE, SUB-PLATE MOUNTING

\* DESIGN NUMBERS SUBJECT TO CHANGE, BUT INSTALLATION DIMENSIONS REMAIN AS SHOWN FOR DESIGN NUMBERS 4035 THROUGH 4935.

## MOUNTING

1. THESE VALVES NOT ENERGIZED CONTINUOUSLY MUST BE INSTALLED SO THAT THE SPOOL AXIS L-L' WILL BE HORIZONTAL.
2. CONNECTION OF VALVE TANK PORT TO LINE WHERE SURGE PRESSURE IS LIKELY TO OCCUR IS TO BE AVOIDED.

## HYDRAULIC FLUIDS

PETROLEUM BASE OIL WITH VISCOSITY RANGING BETWEEN 160 AND 270 SSU AT 100°F, AND TEMPERATURES BETWEEN 65 AND 140°F ARE RECOMMENDED. IF THE OTHER SPECIAL FLUIDS TO BE USED, CONSULT FACTORY FOR INFORMATION.

## FILTRATION

10 MICRONS OR LESS IS RECOMMENDED.

## MOUNTING BOLTS

FOUR SOCKET HEAD CAP SCREWS, M6x35 LG ARE INCLUDED.



Δ1	V05-098	DC48V	11A.	8%	H-Y
Δ	78-04-10	ACA	DC	11A	8%

DWG. NO. 235-1751S VA3 10230-8-3

SYN	REVISIONS	DATE	SIGN
ΔX1	V99-125	9/20	R.S
ΔX1	V100-061	5/2	R.S
ΔX7	V05-058	8/8	H.Y

TABLE 1

ITEM	PART NUMBERS	NAME OF PARTS	REQ.	REMARKS	ITEM	PART NUMBERS	NAME OF PARTS	REQ.	REMARKS
1	<del>275-1751S-VK111489-1</del> <del>1751S-V40433</del>	BODY	1		12	1751S-V48177	DETENT	2	
2	<del>235-1751S-VK413796-0</del> <del>1751S-V32471</del>	SPOOL	1		13	1751S-V48179	RETAINER	2	
3	1751S-V48166	PUSH PIN GUIDE	2		14	1751S-V44665	SCREW	4	
4	1751S-V48167	SPRING	2		15	235-1751S-VK310308-2	NAME PLATE	1	
5	1751S-V48170	CUP WASHER	2		16	1751S-V48523	PENTA-SEAL	2	
6	1751S-V48190	CUSHION	2		17	672-V45821	SNAP RING	2	
7	1751S-V48176	GASKET	1		18	ARP568-014	O-RING	5	
8	1751S-V47071	PLUG	1		19	SO-NA-P18	O-RING	2	JISB2401-1A-P18
9	1751S-V32987	RECEPTACLE	2		20	TT-SP-M3x0.5x6	TAPPING SCREW	1	
10	1751S-V40302	BACK UP RING	2		21	SEE TABLE 2	SOLENOID ASSY	2	
11	1751S-V48172	PUSH PIN	2		22	<del>217-1751S-VK47522-1</del>	COMBI-NUT	1	(P.18 KHR)

TABLE 2

MODEL NUMBERS	SOLENOID ASSY
DSG-03-2D2-D100-4035	SD4-100-4052
DSG-03-2D2-D110-4035	SD4-110-4052
DSG-03-2D2-D200-4035	SD4-200-4052
DSG-03-2D2-D220-4035	SD4-220-4052



235-1751S V A3 10229-0-6

ELECTROMAGNETIC VALVE

TYPE --- DSG-03-2D2

# INSTRUCTION MANUAL

Sub-contractor

Yuken Kogyo Co., Ltd.



H566413 1/5



FULL ELECTRIC



### GENERAL

This electromagnetic valve has been developed through the most modern hydraulic techniques keeping pace with the recent tendency of using super-hydraulic operation system in hydraulic power stations. It is a horizontal type electromagnetic valve featuring trouble-free operation and easy maintenance.

### TYPE

This electromagnetic valve is a multiple electromagnetic valve equipped with 2 solenoids which are demagnetized by means of the microswitch and, at the same time, are mechanically locked when the hydraulic changeover valve is switched after excitation.

### FEATURES

- 1) The left and right solenoids are each equipped with 3 microswitches; one is used for self-switching of circuit, and others used for indication of operation.
- 2) Switching position at the time of demagnetization of solenoids is held by a claw and a plate spring which is in contact with the solenoid core shaft inside the hydraulic changeover valve.

	Date	Name
Drawn	—, —	
Traced	— —	

FUJI ELECTRIC

H 566413 <sup>2</sup>/<sub>5</sub>

- 3) The electromagnetic valve is supported by a sub-plate, eliminating the need for disconnecting the piping when the valve requires disassembly for inspection.
- 4) Manual operation is also possible by pressing the solenoid core shaft with hand.

#### SPECIFICATIONS

Rating: Continuous

Voltage: DC125V $\pm$ 20%

Power: 37 W

Magnetic attraction: 3.5 kg/7mm, 85%V at 20°C

Insulation class: Class H

Rated flow: 30 l/min

Maximum operating pressure:

210 kg/cm<sup>2</sup>

Contact system: Microswitch (X10GW2-KB), 3 for each solenoid

Rating of microswitch:

DC125 V, 5A

Sub-plate fixing screw:

PT 1/2

	Date	Name
Drawn	—	—
Traced	—	—

FUJI ELECTRIC

CO., LTD.

H 566413 <sup>3/5</sup>

## CONSTRUCTION AND OPERATION

As is seen from Fig. 1, the right solenoid (SoL b) is being excited where the spool (2) and the solenoid core (10) are pressed against the left side so that the compressed oil from the hydraulic tank passes through the P port to the B port while the oil in the A port is drained out through the T port. When the left solenoid (SoL a) is excited, the solenoid core (10) is attracted to the right where the spool (2) is switched, thus the compressed oil from the hydraulic tank passes through the P port to the A port while the oil in the B port is drained out through the T port. At this time, the microswitch (13) is activated by the action of the stopper (12) and, hence, the solenoid is demagnetized and locked by the claw (5) and the plate spring (11). During a test or power failure, the solenoid can be manually operated by pressing the rod (14) with hand.

	Date	Name
Drawn	— —	
Traced	— —	

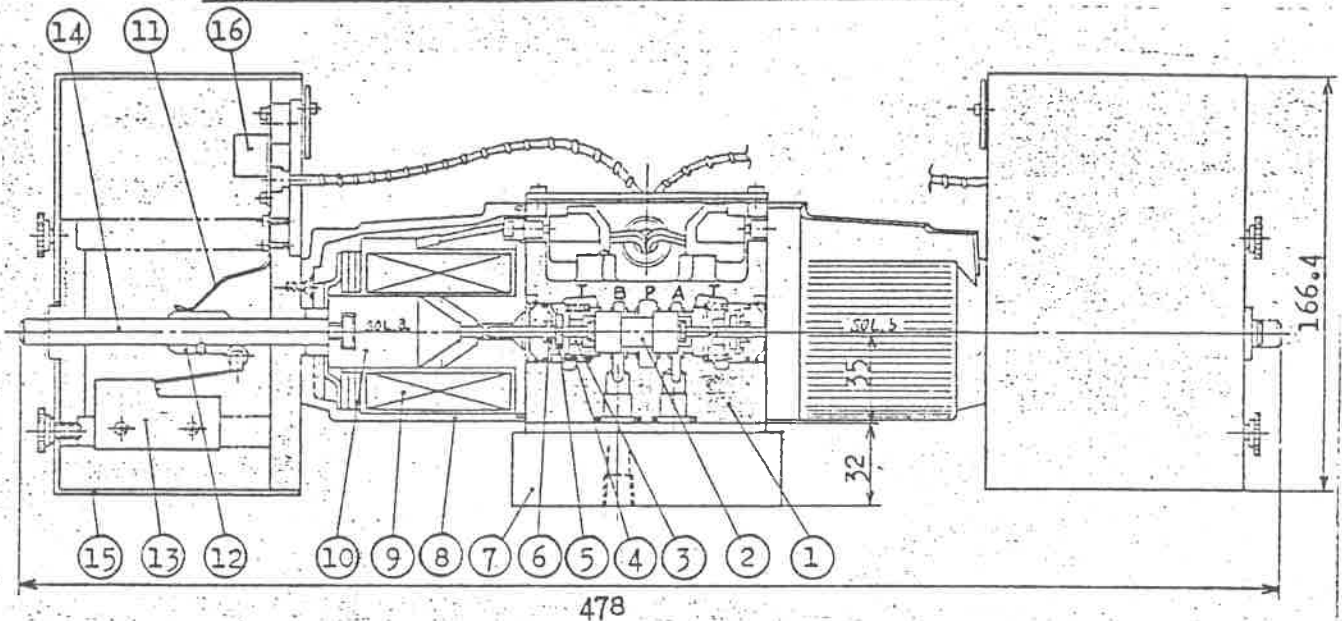
FUJI ELECTRIC

CO. LTD.

H 566413

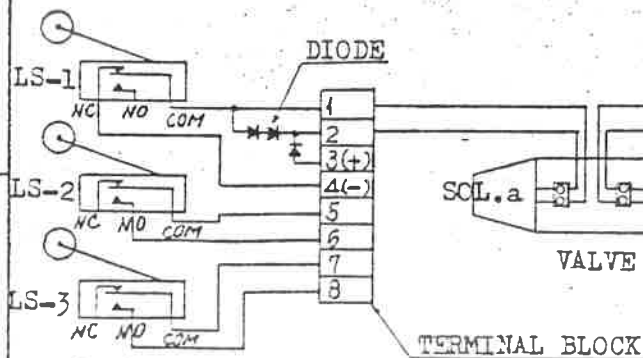
4/5

Fig. 1 CONSTRUCTION OF ELECTROMAGNETIC VALVE

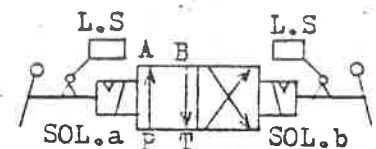


PART NO.	NAME	PART NO.	NAME
1	BODY	9	SOLENOID COIL
2	SPOOL	10	SOLENOID CORE
3	CUSHION	11	PLATE SPRING
4	SPRING	12	STOPPER
5	CLAW	13	MICRO SWITCH
6	PENTASEAL	14	ROD
7	SUB-PLATE (DSGM-O3X-40)	15	COVER
8	SOLENOID CASE	16	TERMINAL BLOCK

WIRING DIAGRAM



GRAPHICAL SYMBOL



SEE LEFT SIDE WIRING DIAGRAM

DIODE RATING

REPETITIVE PEAK REVERSE VOLTAGE; 1000V  
AVERAGE FORWARD CURRENT; 1.2A

Date	Name
Drawn	—
Traced	—
Alteration	—

FUJI ELECTRIC  
CO., LTD.

H 566413 5/5