

PRODUCT CARD



VDM07 - VDM09 MONOBLOCK VALVES



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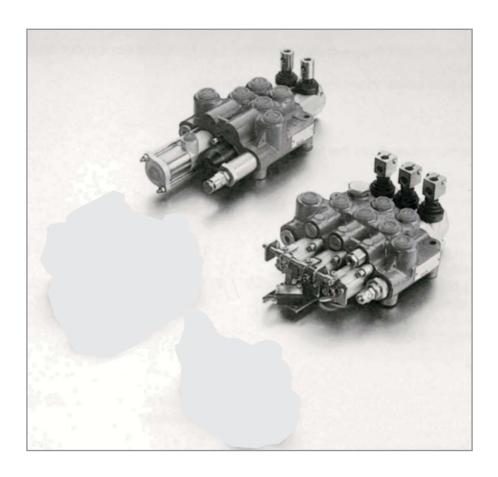
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The data in this catalogue refers to the standard product.

The policy of Salami S.p.A. consists of a continuous improvement of its products. It reserves the right to change the specifications of the different products whenever necessary and without giving prior information. If any doubts, please get in touch with our sales departement.

FEATURES



| TYPE | Internal o | diameter | Nomi | nal flow | Inlet p | Number | |
|-------|------------|----------|-------|----------|---------|--------|-----------|
| IIFE | mm. | ín. | I/min | U.S. gpm | bar | psi | of spools |
| VDM07 | 11 | .43 | 50 | 14 | 280 | 4000 | 1÷6 |
| VDM09 | 13 | .51 | 75 | 21 | 280 | 4000 | 1+6 |

VDM07 - VDM09

FEATURES

GENERAL

Among all hydraulic directional control valves used in the field of mobile equipment applications, the spool valve is the most popular.

The monoblock valve type offers an excellent quality price ratio.

FEATURES

Salami directional control valves have the following features:

- Monoblock construction up to 6 spools
- Parallel circuits between the sections
- Several valves types with different spool types
- Possibility of power beyond configuration
- Spool construction in steel, hardened and chromium-plated to obtain a higher surface hardness and a better corrosion resistance
- Minimum tolerance between the spool and the body to obtain a minimum internal leakage
- Interchangeability of all the spools
- Optional auxiliary valves for VDM07 and VDM09
- Several spool controls and spool positionings.

VALVES AND DEVICES TYPES

In order to meet the most stringent demands and to satisfy the wider range of possible applications, the following auxiliary valves are offered along with several control devices:

Valves

Direct main pressure relief valve: Controls the system pressure in the circuit when one or more spools are activated and the implements achieve the end stroke.

Check valve: Avoids the return of the fluid to the pump.

Overload valve on B port VA: Set at a higher value in comparison with the main relief valve, protects the B port from load induced pressures when the spool is in neutral position.

Anti-cavitation check valve on B port VR: Avoids cavitation in the system, created by the inertia, when the spool is in neutral position.

Cross-over pressure relief valve VX: Flanged in the lower part of the valve, it limits the pressure on both A and B ports also at different values.

Secondary pressure relief valve VS: Limits the pressure of the working sections where it is fitted at lower value than the main pressure relief valve, it protects both A and B ports.

Flow limiting valve LC: Reduces the flow only in the working sections where it is fitted. The pressure compensated flow is the by-pass one.

Double-single acting conversion valve CV: This manual selector changes the working section from double to single acting (A port).

FEATURES

Flow restrictor ST-SP: Directy fitted on the ports orifice.

Devices

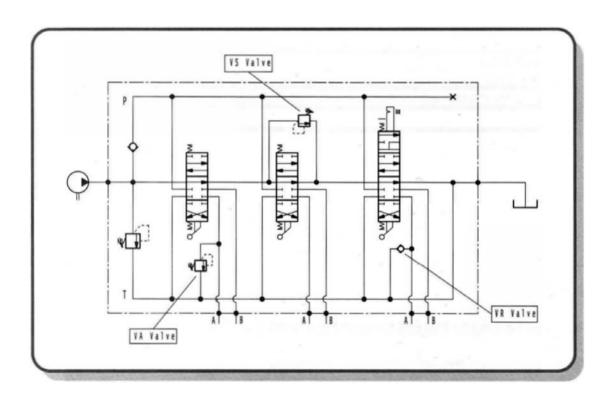
Manual safety device: Avoids accidental operation of the spool.

Control device for microswitches: For the operation of D.C. motor driven pumps at one or more rotation speeds.

Emergency manual device: Allows manual actings when the spool is usually electrically activated.

Anti-tilt device: Returns the spool automatically to the neutral position when the pressure reaches a pre-set value to avoid cranes from becoming unstable.

Hydraulic kick-out: Returns the spool automatically to the neutral position when the preset pressure of port A or B is exceeded. Also combined with float spool



WORKING CONDITIONS

| | neral oil according to DIN 51524 |
|--|------------------------------------|
| VISCOSITY | |
| Viscosity range | 10 460 mm²/sec. |
| | 0.015 0.713 sq.in./sec. |
| Optimal viscosity | 12 75 mm²/sec. |
| | 0.019 0.116 sq.in./sec. |
| TEMPERATURE | The Indicate Brack Brack Co. Carry |
| Fluid range temperature | - 20 + 85° C |
| | - 4 + 185° F |
| Suggested range | +30 + 60° C |
| | +86 + 140° F |
| MAXIMUM CONTAMINATION LEVEL | NAS 1638: class 9 |
| | ISO 4406: 19/16 |
| MAXIMUM PRESSURE ON TANK (T) PORT | 20 bar |
| | 300 psi |
| ROOM TEMPERATURE | - 30 + 60° C |
| | - 22 + 140° F |
| WORKING LIMITS | See diagrams |
| PRESSURE DROPS | See diagrams |
| For operation with fire resistant fluid, pleas | e contact our sales departemen |
| . s. sps. s.ion with the reduction hald, produ | o som sais da cara dopartorno |

OPERATING PRINCIPLE

Salami directional control valves belong to the 6/3 (or 6/4) type; they can control 6 paths in 3 (or 4) spool positions simultaneously.

They are open circuit types: when the spool is in neutral position, the fluid flows directly to the tank with minimum internal pressure drops (approximatively 1 bar / 14,5 psi for each spool at nominal flow). When the spool is moved from this position, the central path is gradually throttled and the connection between pump and implement, through the corresponding port, is made.

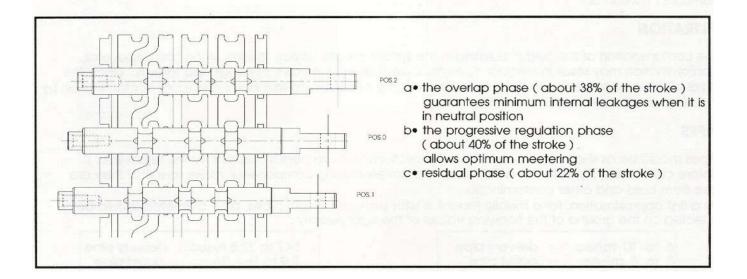
When a pressure exceeds the value of the pressure existing in port A or B, the fluid flows through the check valve to the implement.

VDM07 - VDM09

DIRECTIONAL CONTROL VALVE MONOBLOCK TYPE

FEATURES

There are 3 characteristic phases in the spool stroke:



CIRCUIT TYPES

Parallel circuit: The spools, when activated simultaneously, will use full system pressure while dividing the available flow by the number of sections up to the maximum rating.

HYDRAULIC FLUIDS

Usually a mineral-base oil with a good viscosity index should be used, preferably with good lubricating properties and corrosion, oxydation and foaming resistant.

Sometimes the fluids supplied by the manufacturers do not satisfy purity requirements (see WORKING CONDITIONS). It is therefore necessary to filter the fluid carefully before filling. Your supplier can give you the information about the NAS class of its fluids. To maintain the proper purity class, the use of filters of high dirt capacity with clogging indicator is recommended.

Under humidity conditions it is necessary to use igroscopic salts.

For operation with fire resistant and ecological fluids, please contact our technical department.

VDM07 - VDM09

FEATURES

INSTALLATION

When proceeding to mount the unit on the structure and to connect adaptors to work ports, it is necessary to comply with the values of tightening torques as indicated in the maintenance book. The attachment of linkages to spools should not affect their operation. The mounting position can be vertical or horizontal.

FILTRATION

The contamination of the fluid circulating in the system greatly affects the life of the unit. Above all, contamination may result in irregular operation, wear of seals in valve housings and failures. Once the initial cleanliness of the system has been attained, it is necessary to limit any increase of contamination by installing an efficient filtration system.

PIPES

Pipes should be as short as possible, without restrictions or sharp bends (especially the return lines). Before connecting pipes to the adaptors of the corresponding components, make sure that they are free from burrs and other contamination.

As a first approximation, for a mobile machine with standard length pipes, pipe diameters should be selected on the ground of the floowing values of the fluid velocity:

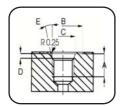
6 to 10 m/sec : delivery pipe 3 to 5 m/sec. : outlet pipe 19.7 to 32.8 ft/sec : delivery pipe 9.9 to 16.4 ft/sec : outlet pipe

The lowest velocity in the pipes is required when the temperature range is wide and / or for continuous running.

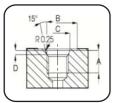
Alternatively, the highest velocity is required when the temperature range is more limited and / or for intermittent operations.

PORTS

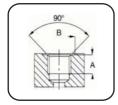
Following are standard ports. For other port types, please contact our sales department.



| Dimensions SAE UN-UNF (ISO 725) | | | | | | | | | | 10 | | | | | | | |
|---------------------------------|-----|--------------------------------------|------|------|------------------------------------|------|------|-----------------------|------|-----------------------|------|----------------------|------|----------------------|------|------|------|
| mm | in. | 7/16-20 UNF 9/16-18 UNF SAE4 SAE6 | | | 3/4-16 UNF 7/8-14 UN SAE8 SAE10 | | | 1°1/16-12 UN SAE12 | | 1°5/16-12 UN SAE16 | | 1"5/8-12 UN SAE20 | | 1"7/8-12 UN SAE24 | | | |
| А | \ | 12 | 0,47 | 13 | 0,51 | 15 | 0,59 | 17 | 0,67 | 20 | 0,79 | 20 | 0,79 | 20 | 0,79 | 20 | 0,79 |
| В | 1 | 21 | 0,83 | 25 | 0,98 | 30 | 1,18 | 34 | 1,34 | 41 | 1,61 | 49 | 1,92 | 58 | 2,28 | 65 | 2,56 |
| C | : | 12,4 | 0,49 | 15,6 | 0,61 | 20,6 | 0,81 | 23,9 | 0,94 | 29,2 | 1,15 | 35,5 | 1,40 | 43,5 | 1,71 | 49,5 | 1,95 |
| D |) | 2,4 | 0,09 | 2,5 | 0,10 | 2,5 | 0,10 | 2,5 | 0,10 | 3,3 | 0,13 | 3,3 | 0,13 | 3,3 | 0,13 | 3,3 | 0,13 |
| E 12° | | | | | 15° | | | | | | | | | | | | |



| | | | | | | | | ME | TRIC (| ISO 61 | 49) | | | | | | |
|------------|-----|---------|------|------|---------|------|------|-------|--------|--------|------|-------|------|-----|------|------|------|
| Dimensions | | M18X1,5 | | | M22X1,5 | | | M27X2 | | | | M33X2 | | | | | |
| mm | in. | ISO | 262 | ISO | 6149 | ISO | 262 | ISO | 6149 | ISO | 262 | ISO | 6149 | ISO | 262 | ISO | 6149 |
| Α | | 14 | 0,55 | 14,5 | 0,57 | 16 | 0,63 | 16 | 0,63 | 18 | 0,71 | 19 | 1,75 | 20 | 0,79 | 19 | 0,75 |
| В | 3 | 27,5 | 1,08 | 29 | 1,14 | 31,5 | 1,24 | 34 | 1,34 | 37,7 | 1,48 | 40 | 1,57 | 45 | 1,77 | 46 | 1,81 |
| C | : | | | 19,8 | 0,78 | | | 23,8 | 0,94 | | | 29,4 | 1,16 | 1 | | 35,4 | 1,39 |
| D |) | | | 2,4 | 0,09 | | | 2,4 | 0,09 | | | 3,1 | 0,12 | | | 3,1 | 0,12 |



| Dimer | nsions | BSP (ISO 228) | | | | | | | | | | | | | | | |
|-------|--------|---------------|------|----|------|----|------|----|------|----|------|----|------|-----|------|-----|------|
| mm | in. | G | 1/8 | G | 1/4 | G | 3/8 | G | 1/2 | G | 3/4 | G | 1 | G I | 1/4 | G I | 1/2 |
| F | A | 10 | 0,39 | 14 | 0,55 | 14 | 0,55 | 16 | 0,63 | 18 | 0,71 | 20 | 0,79 | 22 | 0,87 | 24 | 0.94 |
| B (n | nin) | 15 | 0,59 | 19 | 0,75 | 23 | 0,91 | 27 | 1,06 | 33 | 1,30 | 40 | 1,57 | 50 | 1,97 | 56 | 2,20 |

QUICK REFERENCE

| | VDM07 | VDM09 |
|--|-----------------------------|-----------------------------|
| NUMBER OF SPOOLS | 1+6 | 1+6 |
| Internal diameter | 11 mm. | 13 mm. |
| internal diameter | ,43 in. | ,51 in. |
| NOMINAL FLOW | 50 I/min. 14 g p m US | 75 l/min. 21 g p m US |
| PRESSURE | | |
| Working pressure on P port | 280 bar | 280 bar |
| Λ | 4000 psi | 4000 psi |
| Working pressure on A-B ports | 315 bar | 315 bar |
| Internal leakage A/B → T, 200 bar | 4560 psi 22 | 4560 psi 35 |
| at 2860 psi, 16 cSt | cm ³ /min. | cm ³ /min. |
| Main pressure relief valve (max. setting) | 315 bar 4560 psi | 315 bar 4560 psi |
| Prearrangement for auxiliary valves on B port (optional) | 4300 psi | • |
| AUXILIARY VALVES | | |
| Overload valve on B port VA | | • |
| Anticavitation check valve on B port VR | 0.0 | • |
| Cross-over pressure relief valve VX | | |
| Secondary pressure relief valve VS | • | • |
| Flow limiting valve LC | 5. | • |
| Double-single acting conversion valve CV | • | • |
| Flow restrictor ST-SP | • | • |
| SPOOL CONTROLS | | |
| Manual | • | • |
| Cable | • | • |
| Hydraulic proportional | • | • |
| Pneumatic ON-OFF | | |
| Pneumatic proportional | • | • |
| Electric ON-OFF | • | |
| Electro-pneumatic ON-OFF | • | |
| Power beyond | • | • |
| Micro-switch | • | • |

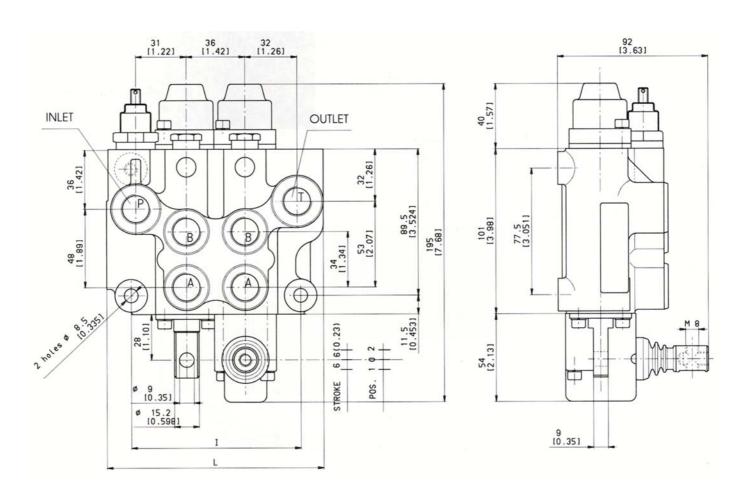
Note: Nominal flow meaning: flow causing 1 bar pressure drop each section, with spools in neutral position

VDM07

DIMENSIONS FROM 1 TO 6 SECTIONS MONOBLOCK

Nominal flow: 50 I/min. Pressure on P port: 280 bar Pressure on A/B port: 315 bar Nominal flow: 14 gpm US Pressure on P port: 4000 psi Pressure on A/B port: 4560 psi

| Ports | Р | ī | A-B |
|------------------|------------|------------|------------|
| BSP ISO 228 | 3/8 | 3/8 | 3/8 |
| METRICA ISO 6149 | M18X1.5 | M18X1.5 | M18X1.5 |
| SAE ISO 725 | 3/4-16 UNF | 3/4-16 UNF | 3/4-16 UNF |

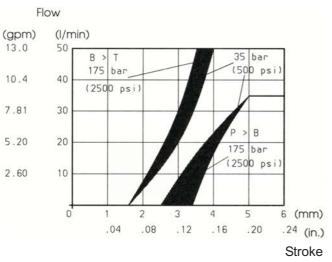


| Sp | ool | 1 | 2 | 3 | 4 | 5 | 6 |
|-----|-----|------|-------|-------|-------|-------|-------|
| 1 | mm. | 68 | 104 | 140 | 176 | 212 | 248 |
| 1 | in. | 2.67 | 4.09 | 5.51 | 6.92 | 8.34 | 9.76 |
| 1 | mm. | 96.5 | 132.5 | 168.5 | 204.5 | 240.5 | 276.5 |
| L | in. | 3.79 | 5.21 | 6.63 | 8.05 | 9.46 | 10.89 |
| М | kg | 2.8 | 4.5 | 6.3 | 8 | 9.7 | 11.4 |
| IVI | lb | 6.16 | 9.9 | 13.86 | 17.6 | 21.34 | 25.08 |

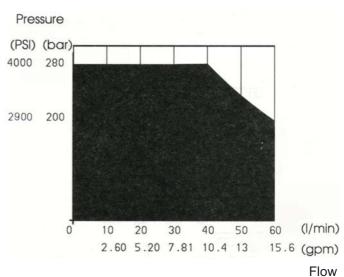
PERFORMANCE DATA

Performance curves carried out with oil viscosity at 16cSt Internal leakages A/B \rightarrow T **22** cm³/min. (0.92 cu. in./min.) at 200 bar (2900 psi)

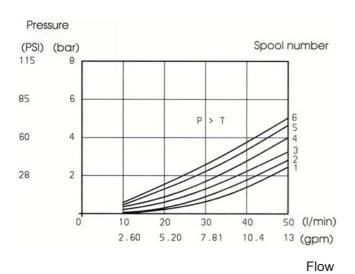
Meetering



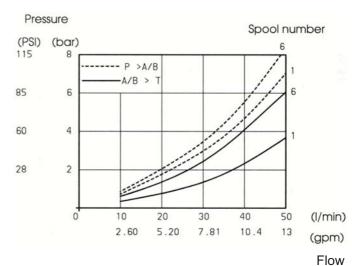
Working limits



Pressure drop



Pressure drop



VDM09

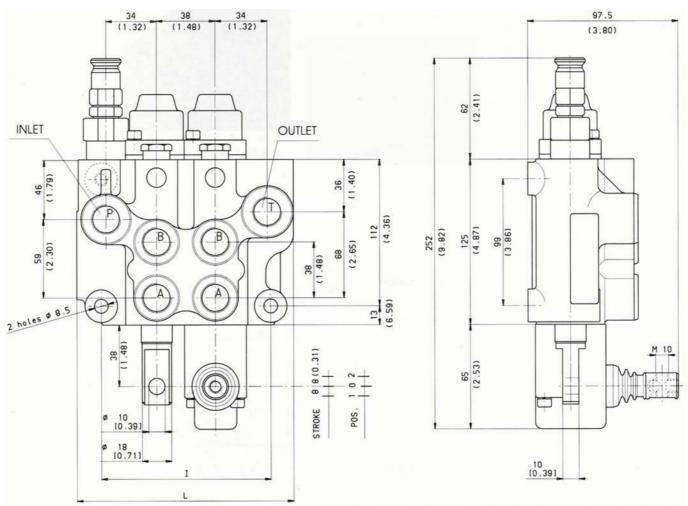
DIMENSIONS FROM 1 TO 6 SECTIONS MONOBLOCK

Nominal flow: 75 l/min. Pressure on P port: 280 bar Pressure on A/B port: 315 bar

Nominal flow: 21 gpm US Pressure on P port: 4000 psi Pressure on A/B port: 4560 psi

| Ports | P | Ī | A - B |
|-------------------|--------------|--------------|--------------|
| BSP ISO 228 | 1/2 | 1/2 | 1/2 |
| *METRICA ISO 6149 | M 22X1.5 | M 22X1.5 | M 22X1.5 |
| SAE ISO 725 | 7/8 - 16 UNF | 7/8 - 16 UNF | 7/8 - 16 UNF |

^{*} Available on request

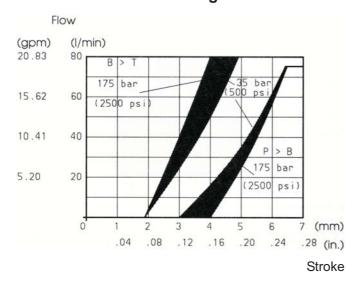


| Sp | ool | 1 | 2 | 3 | 4 | 5 | 6 |
|-----|-----|------|------|-------|-------|-------|-------|
| 21 | mm. | 76 | 114 | 152 | 190 | 228 | 266 |
| 1 | in. | 2.90 | 4.48 | 5.98 | 7.48 | 8.98 | 10.47 |
| - 0 | mm. | 105 | 143 | 181 | 219 | 257 | 295 |
| L | in. | 4.13 | 5.62 | 7.12 | 8.62 | 10.12 | 11.61 |
| | kg | 4.2 | 6.5 | 8.9 | 11.3 | 13.7 | 16.1 |
| М | lb | 9.24 | 14.3 | 19.58 | 24.86 | 30.14 | 35.42 |

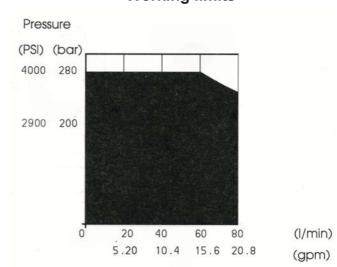
PERFORMANCE DATA

Performance curves carried out with oil viscosity at 16cSt Internal leakages A/B \rightarrow T 35 cm 3 /min. (0.92 cu. in./min.) at 200 bar (2900 psi)

Meetering



Working limits

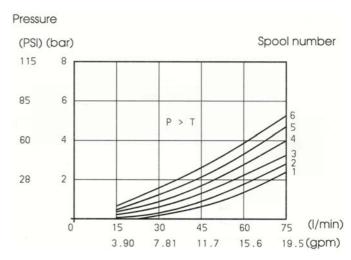


Flow

Pressure drop

Pressure Spool number (PSI) (bar) 115 8 -P > A/B A/B > T85 6 4 60 2 28 (I/min) 15 75 45 60 3.90 7.81 11.7 15.6 19.5 (gpm) Flow

Pressure drop

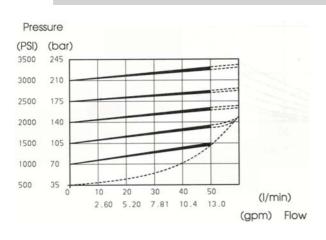


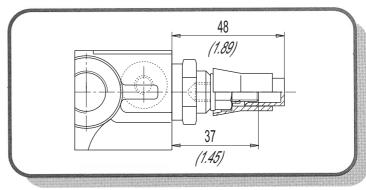
Flow

INLET TYPES

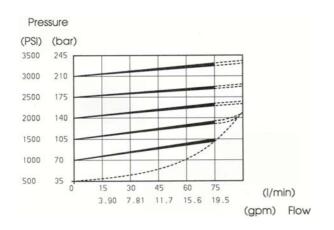
| Code | Hydraulic symbol | Description | VDM07 | VDM09 |
|------|------------------|------------------------------------|-------|-------|
| 01 | | Top inlet port | • | • |
| 02 | | Side inlet port (top port plugged) | | |
| 03 | , ¥ | Top and side inlet port | | |
| 41 | | Down inlet port | | |

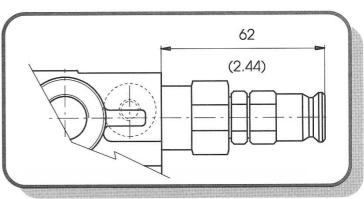
MAIN PRESSURE RELIEF VALVE - VDM07





MAIN PRESSURE RELIEF VALVE - VDM09





SPOOL TYPES

| Code | Hydraulic symbol | Description | VDM07 | VDM09 |
|------|------------------|--|-------|-------|
| 01 | | Double acting spool | • | • |
| 02 | | Double acting motor spool | • | • |
| 03 | | Double acting motor spool (B port blocked) | • | • |
| 04 | MI I I I I M | Double acting motor spool (A port blocked) | • | • |
| 05 | M I I I I | Single acting spool A working port | • | • |
| 06 | | Single acting spool B working port | • | • |
| 11 | | Double acting spool with third float position (spool in) | • | • |
| 12 | | Double acting spool with third float position (spool out) | • | • |
| 17 | MILITIT | Double acting spool with regenerative position (spool out)** | • | |
| 18 | MI TIII I | Double acting spool with regenerative position (spool out)** | • | |
| 52 | | Over center double acting spool A working port | • | |
| 53 | | Over center double acting spool B working port | • | |
| 54 | | Over center double acting spool A and B working port | • | |

^{**} Need a modification on the cast iron body

SPOOL CHOICE ACCORDING TO THE INLET FLOW

| Code | Description |
|------|---------------------|
| Α | Nominal flow |
| С | 2/3 of nominal flow |

AUXILIARY VALVES

| Code | Hydraulic symbol | Description | | VDM07 | VDM09 |
|------|------------------|---------------------------------------|---------|---------------|---------------|
| VA | B | Overload valve on B port | | | L=62 2.44" |
| VR | B T | Anticavitation check valve on B port | B | L=5 0,20" | L=5 |
| VX | P(T) A T(P) B | Cross over pressure relief valve | P A 0.5 | • | |
| VS | A/B N | Secondary pressure relief valve | | | L=62 2.44" |
| LC | N A/B N | Flow limiting valve | | • | • |
| CV | B T | Double-single acting conversion valve | | L=25 0,98" | L=31 |
| ST | T A/B | Flow restrictor | | • | • |
| SP | P A/B | Flow restrictor | | • | • |

Note: the port valves for monoblock are optional and need a modification to the cast-iron body

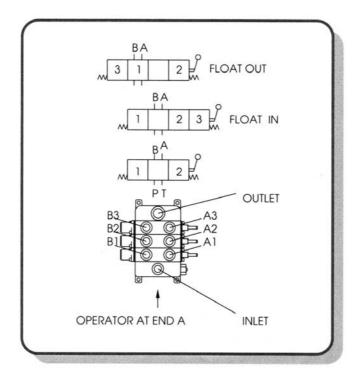
SPOOL CONTROLS

| Code | Hydraulic symbol | Description | | VDM07 | VDM09 |
|------|------------------|---|-------------|-------|-------|
| | | | | • | • |
| SL | 102 | Without lever | | L=28 | L=38 |
| | | | 11 | 1,10" | 1,50" |
| | w | | 噩 | • | • |
| NL | 1 0 2 | With protected lever | | L=54 | L=65 |
| | | | <u> </u> | 2,13" | 2,56" |
| | MA | With protected | | • | • |
| MP | 1 0 2 | With protected clamp lever | | L=54 | L=65 |
| | | | <u></u> | 2,13" | 2,56" |
| L1 | M11012 M | Cross lever for 2 spools with fulcrum on | | • | |
| | 11012 | up-stream spool | | L=96 | L=106 |
| L2 | M | Cross lever for 2 spools with fulcrum on | | 3,78" | 4,17" |
| | | down-stream spool | L | | |
| | M 1 0 2 W 0 | With protected lever and device for spool return in | A B | • | |
| MO | 1 0 2 24 | NEUTRAL position by an external acting | | L=83 | |
| | | external acting | | 3,26" | |
| | M 1 0 2 M | Cable control (with | [] | • | • |
| TC | [1]0]2 | mounting kit on directional control valve) | | L=80 | L=90 |
| | | | 6 1/4 6 1/4 | 3,15" | 3,54" |
| | M 1 0 2 M | Hydraulic proportional | | • | • |
| IP | | min: 57 psi (4 bar) max 357 psi (25 bar) | | L=54 | L=68 |
| | | Pneumatic proportional | | 2,13" | 2,68" |
| PP | 1 0 2 W | min: 35 psi (2,5 bar) | | • | • |
| | | max 85 psi (6 bar) Pneumatic | XII | L=54 | L=68 |
| РО | W 1 0 2 W | ON-OFF | | 2,13" | 2,68" |
| | | min: 50 psi (3,5 bar) | | | |

SPOOL CONTROLS

| Code | Hydraulic symbol | Description | VDM07 VDM09 |
|------|------------------|---|--------------------------|
| El | M 1 0 2 M | Electric 3 positions ON-OFF 12V c.c. (induced current = 3,8A absorbed power = 46W) | • |
| E2 | | Electric 3 positions ON-OFF 24V c.c. (induced current = 1,9A absorbed power = 46W) | L=140 5,51" |
| Ρl | M 1 0 2 M | Electric pneumatic ON-OFF 12V c.c. (max 9 bar/130 psi) (induced current = 1,5A absorbed power = 18W) | |
| P2 | | Electric pneumatic ON-OFF 24V c.c. (max 9 bar/130 psi) (induced current = 0,75A absorbed power = 18W) | L=85 L=98 3,35" 3,86" |

SPOOL CONTROL LOCATION SCHEMATIC VIEW



Positioning levers on B port is not standard but is possible using special spools.

The electric, pneumatic and electro-pneumatic actings are usually on the B port side.

SPOOL POSITIONINGS

| Code | Hydraulic symbol | Description | | VDM07 | VDM09 |
|------|------------------|--|------|---------------|---------------|
| C0 | 102 | With friction on each position | | L=45 | |
| C2 | W 1 0 2 W | Spring centered to NEUTRAL | | L=40 1,57" | L=43 |
| С3 | 0 M 1 0 2 M | Spring centered to NEUTRAL with double control (screw tap) | 20 7 | L=70 2,76" | L=73 2,87" |
| C5 | W 0 2 W 0 | Two positions (NEUTRAL/spool-IN) with spring return in neutral | | • | • |
| C6 | W 1 0 W | Two positions (NEUTRAL/spool-OUT) with spring return in neutral | | L=40 1,57" | L=43 1,69" |
| C7 | M 1 2 M 0 | Two positions-spool IN/spool OUT with spring return in spool OUT | | L=54 2,13" | L=68 2,68" |
| C8 | W 1 2 W 0 | Two positions-spool IN/spool OUT with spring return in spool IN | 4-11 | L=40 | L=43 |
| CE | M 1 0 2 M | Pre-arrangement for electrical device | | L=70 2,76" | L=75 2,95" |
| СМ | 102 M | Microswitch to start an electric motor (Max current = 10A at 250 Vca) | | L=70 2,76" | L=75 2,95" |
| PE | | Prearrangement for electrical/potentiometer device | | • | • |
| PM | | Microswitch to start an electric motor and potentiometer device (Max current = 10A at 250 Vca) | | • | • |

SPOOL POSITIONINGS

| Code | Hydraulic symbol | Description | VDM07 | VDM09 |
|------|------------------|---|----------------|----------------|
| R2 | M 1 0 2 M 0 | Detent on spool IN-OUT position with spring return in NEUTRAL | L=66 2,60" | L=72 2,83" |
| R4 | 1 0 2 W | Detent on spool OUT position with spring return in NEUTRAL | L=66 2,60'' | L=72 2,83" |
| R5 | 102 | Detent on spool IN position with spring return in NEUTRAL | L=66 2,60'' | L=72 2,83'' |
| R6 | 02 | Detent on spool IN, 2 positions with spring return in NEUTRAL | • | • |
| R7 | 02 | Detent on spool OUT, 2 positions with spring return in NEUTRAL | L=66 2,60'' | L=72 2,83'' |
| R9 | 102 | Detent on spool IN-NEUTRAL-OUT, 3 positions without spring | L=66 2,60'' | |
| F1 | 1 0 2 3 M | Detent on float spool IN, with spring return in NEUTRAL | L=66 2,60'' | L=72 2,83'' |
| F2 | 1023 | Detent on spool FLOAT-IN-OUT, position with spring return in NEUTRAL | L=66 2,60'' | L=72 2,83'' |
| | I W | Detent on spool FLOAT-OUT, position | • | • |
| F3 | 1023 | with spring return in NEUTRAL | L=66 2,60'' | L=72 2,83'' |
| F4 | 1023 | Detent on spool FLOAT-IN, position with spring return in NEUTRAL | L=66 2,60" | L=72 2,83'' |

SPOOL POSITIONINGS

| Code | Hydraulic symbol | Description | | VDM07 | VDM09 |
|----------|------------------|--|-----|----------------|----------------|
| F5 | 3 1 0 2 W | Detent on spool float OUT position with spring return in neutral | | L=66 2,60'' | L=72 2,83" |
| | | | | 2,00 | 2,03 |
| DI | 11012 110 | Cable remote control | | L=66 | L=72 |
| | HITCHEN | cap side | | 2,60′′ | 2,83'' |
| | | Cable remote control | | • | • |
| D2 | 102 | and detent on spool | | L=66 | L=72 |
| | | IN-OUT position | ** | 2,60′′ | 2,83'' |
| 100 8000 | | Cable remote control | | • | • |
| D3 | 102 | and detent on spool IN-NEUTRAL-OUT position | | L=66 | L=72 |
| | | IN-INCOTRAL-OUT POSITION | | 2,60′′ | 2,83′′ |
| D4 | 1 | Cable remote control and detent on spool | | • | • |
| D4 | 102 | OUT position | | L=66 | L=72 |
| | | Par satewin and to the | | 2,60′′ | 2,83'' |
| D5 | - Jalomo | Cable remote control and detent on spool | | 1 44 | 1 70 |
| D0 | 102 | IN position | | L=66 2,60'' | L=72 2,83'' |
| | | 5 1 1 1 11 617 | | 2,00 | 2,00 |
| G2 | 1 0 2 | Detent on spool IN-OUT position with hydraulic kick-out | | | |
| | = W | Detent on spool OUT | 1 | | |
| G4 | 1 0 2 | position with hydraulic kick-out | , u | L=65 | L=69 |
| | | Detent on spool IN | | | |
| G5 | 1 0 2 | position with hydraulic kick-out | | | |

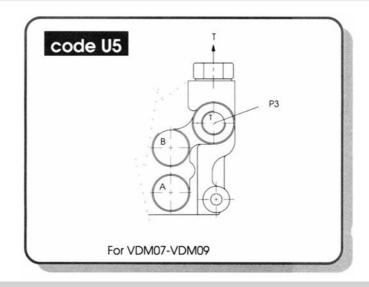
DETENT IN/OUT EFFORT

| | Detent IN | Detent OUT |
|-----------------------|---------------|--|
| 1st and 2nd positions | 250N/56,2 lbf | 33,72 lb _f (min) 150N (min) |
| 3rd position | 350N/78,7 lbf | 33,72 lb _f (min) 150N (min) |

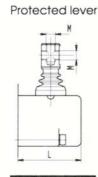
OUTLET TYPES

| Code | Hydraulic symbol | Description | VDM07 | VDM09 |
|------|------------------|--|-------|-------|
| Ul | Ĭ, N | Top outlet port | • | • |
| U2 | Į _P N | Top and side outlet port | • | • |
| U3 | Ĭ _P N | Side outlet port (top port plugged) | • | • |
| U4 | Ĭ _P N | Top outlet port (side port plugged) | • | • |
| U5 | P3 T | Power beyond configuration (P3) U5 configuration is achieveable by U2-U3-U4 with the power beyond kit. | • | • |
| U7 | P N T | Closed center circuit configuration (P3 port plugged) Obtained with U5 + plug | • | • |

POWER BEYOND (P3)

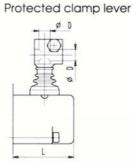


CLAMP LEVERS CODE NL - MP - SS



code NL

Protected lever NL



code MP

Available for VDM07 and VDM09



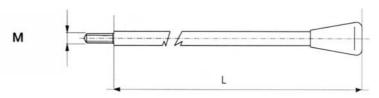
code SS

Available for VDM07 and VDM09. This code is not included in the codification: if requested, please add to the order

STANDARD SHAFTS FOR PROTECTED LEVERS CODE NL

| | VDM07 | VDM09 |
|---|-------------|-------------|
| М | M8 | M10 |
| L | 180 mm-7,1" | 240 mm-9,5" |

code LA

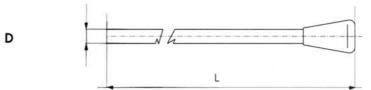


This code is not included in the codification: if requested, please add to the order

STANDARD SHAFTS FOR LEVERS CODE MP - SS

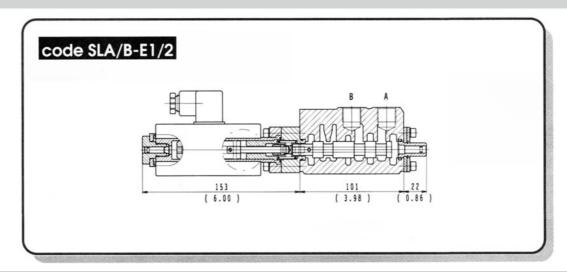
| | VDM07 | VDM09 |
|---|-------------|-------------|
| D | 8 mm-0,31" | 10 mm-0,39" |
| L | 180 mm-7,1" | 240 mm-9,5" |

code LB

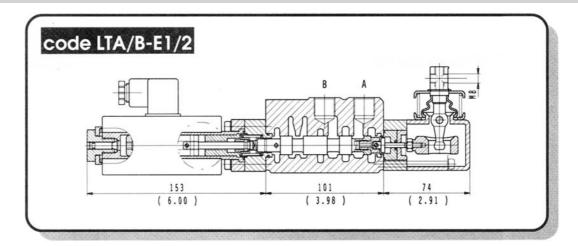


This code is not included in the codification: if requested, please add to the order

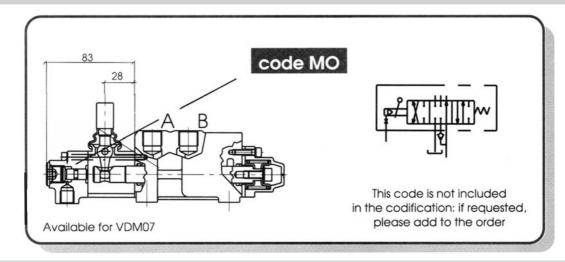
ON-OFF ELECTRIC CONTROL



ON-OFF ELECTRIC AND EMERGENCY MANUAL CONTROL

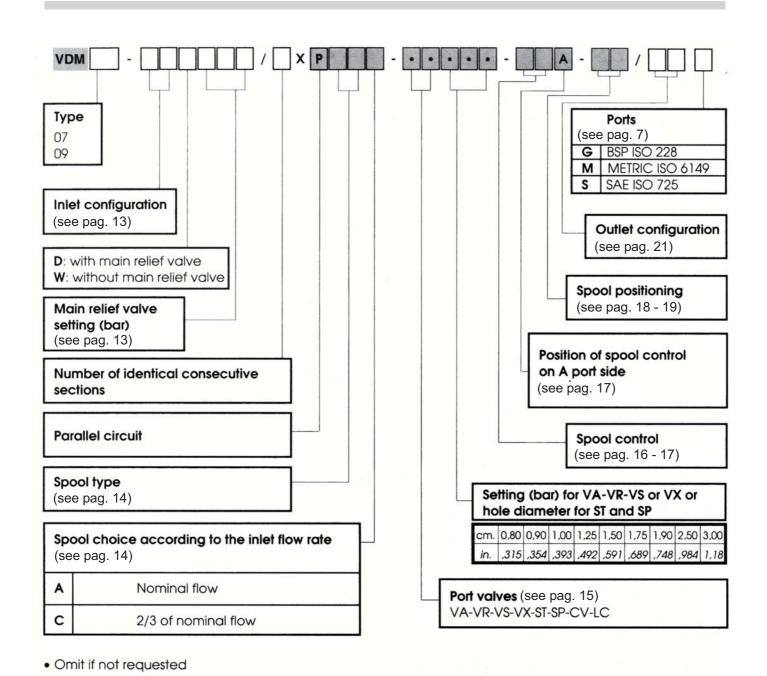


DEVICE FOR SPOOL POSITIONING IN NEUTRAL BY AN EXTERNAL ACTING



How to order/ VDM07-VDM09

DIRECTIONAL CONTROL VALVE SECTIONAL TYPE



WARRANTY

- We warrant products sold by us to be free from defects in material and workmanship.
- Our sole obligation to buyer under this warranty is the repair or replacement, at our option, of any products or parts thereof which, under normal use and proper maintenance, have proven defective in material or workmanship, this warranty does not cover ordinary wear and tear, abuse, misuse, averloading, alteration.
- No claims under this warranty will be valid unless buyer notifies SALAMI in writing within a reasonable time of the buyer's discovery of such defects, but in no event later than twelve (12) mounths from date of shipment to buyer.
- Our obligation under this warranty shall not include any transportation charges or cost of installation, replacement, field repair, or other charges related to returning products to us; or any liability for directs, indirects or consequential damage or delay. If requested by us, products or parts for which a warranty claim is made are to be returned transportation prepaid to our factory. The risk of loss of any products or parts thereof returned to SALAMI will be on buyer.
- No employee or representative is authorized to change any warranty in any way or grant any other warranty unless such change is made in writing and signed by an officer of SALAMI.



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