

TWIN POWERED S6T BRAKE VALVE

- **Single circuit S6T brake valve**
- **Double crossed circuit S6T brake valve**



010.010 – MAIN FEATURES

010.010 – DESCRIPTION

010.010 – MAIN APPLICATIONS

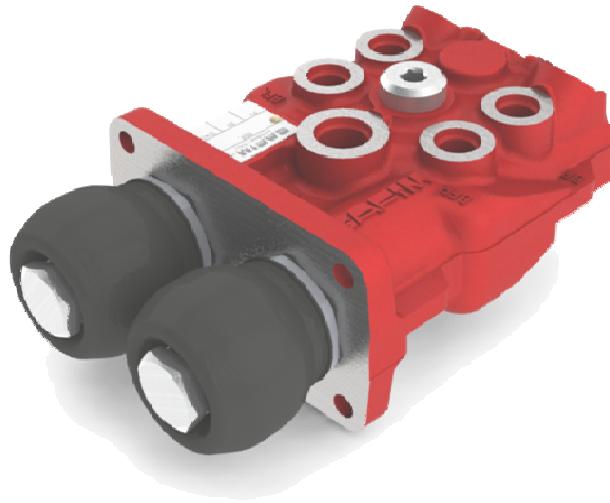
010.020 – INSTALLATION LAYOUT

020.010 – SINGLE CIRCUIT S6T POWERED BRAKE VALVE

020.020 – DOUBLE CIRCUITS S6T POWERED BRAKE VALVE

030.010 – MAIN WORKING CONDITIONS

040.010 – ORDERING DETAILS



MAIN FEATURES

- Compact design
- Steering assist brake valve (by using a single pedal only the corresponding rear wheel will brake)
- Only one valve control 4 wheels brakes
- Two independent feeding accumulator
- Two independent cross split circuits available (in case of breakage of one hose, one rear and front brake on the opposite side are operated)
- Two independent front and rear circuits available (in case of breakage of one hose, one axle is operated)
- Large oil displacement available
- A wide pressure setting range is available
- Trailer brake valve pilot port available
- Fully free mounting position on the vehicle
- Maintenance free

DESCRIPTION

The main feature of the brake valve is the capacity to maintain essentially equalized pressure on all brakes even if a little misalignments on brake pedals.

The S6T powered brake valve needs a lower pedal force than a standard master cylinder and it can supply an unlimited oil quantity to operate the brakes wheel cylinders.

This valve is being supplied to the customers already set according to the technical data required.

The brake circuit bleeding is generally not requested (recommended only to improve the reaction time).

All the connections are on the same side make it immediately adaptable on whatever type of cab and vehicle.

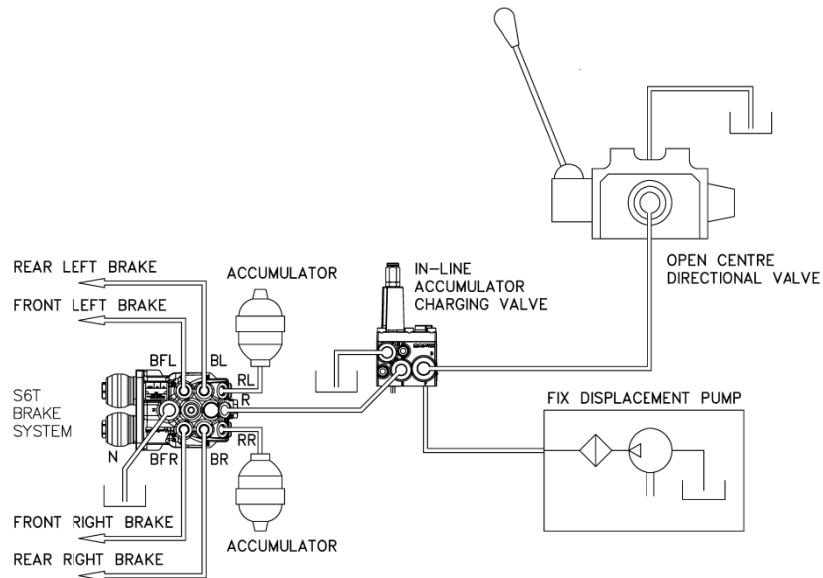
All these features make this valve particularly suitable for medium and large vehicles.

MAIN APPLICATION

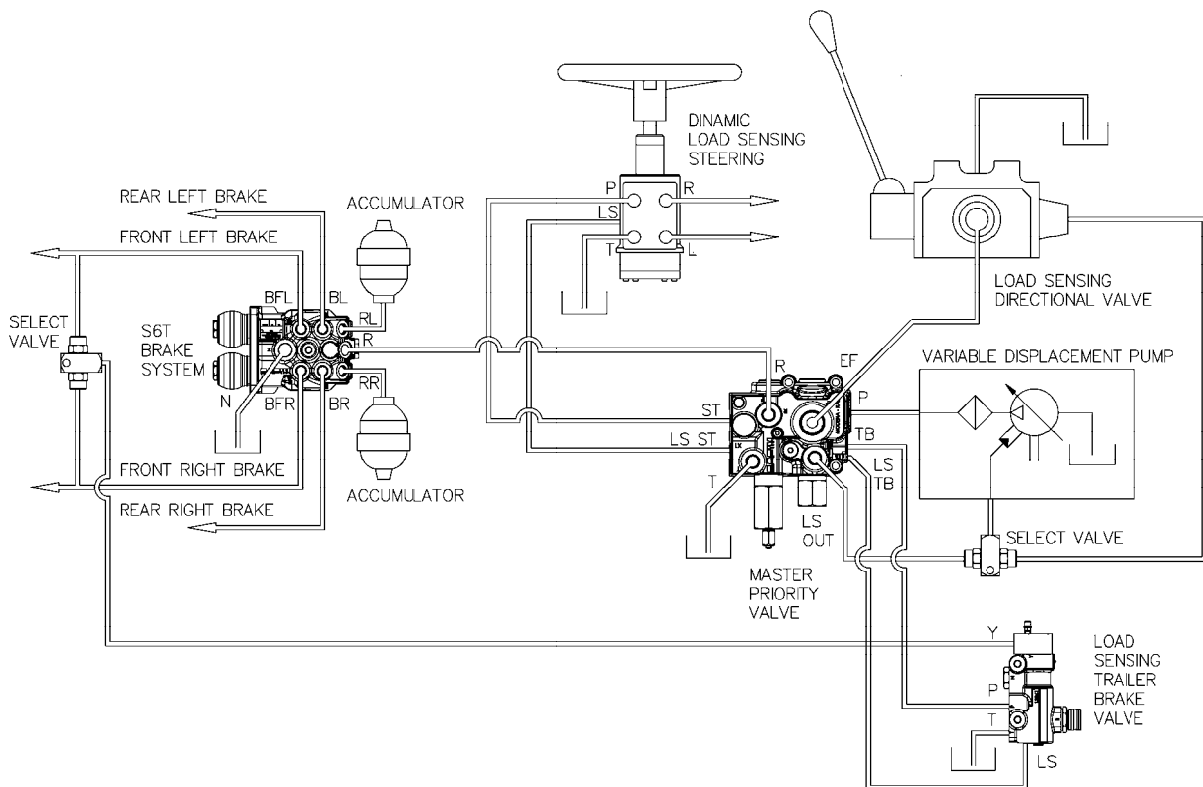
- MEDIUM AND LARGE TRACTORS
- BACKHOE LOADERS
- COMBINE HARVESTERS

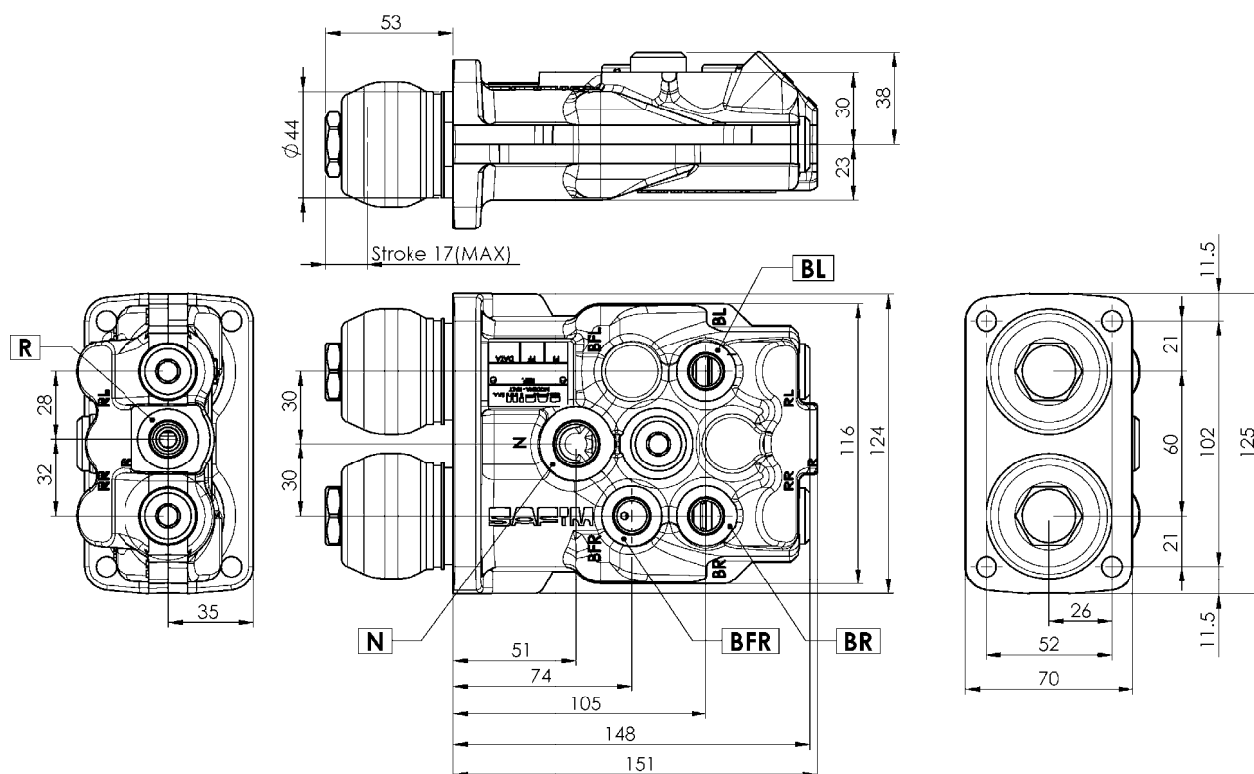
INSTALLATION LAYOUT

PRESSURE FEEDING BY ACCUMULATOR CHARGING VALVE



PRESSURE FEEDING BY MASTER PRIORITY VALVE®



133537 Single circuit S6T powered brake valve

CONNECTION

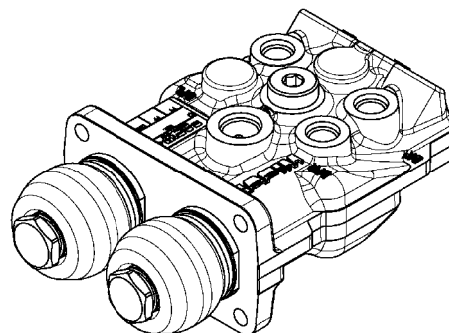
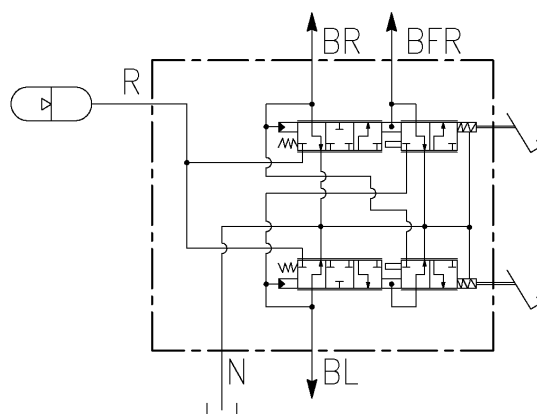
R	Accumulator
BL	Rear left brake
BR	Rear right brake
BFL	Front brake or trailer brake valve
N	Tank

GENERAL TECHNICAL FEATURES

Max feeding pressure (R port)	225 Bar
Brake pressure (BL, BR, BFL ports)	20 Bar – 120 Bar
Max tank line pressure (N port)	0.5 Bar (*)
Push-rod misalignment	±2 mm
Oil type	Mineral oil
Filtering level	NAS 1638 CLASS 9
Working temperature	-30°C / + 90°C
Oil viscosity	From 1.9° cSt to 5.4° cSt to 50°C

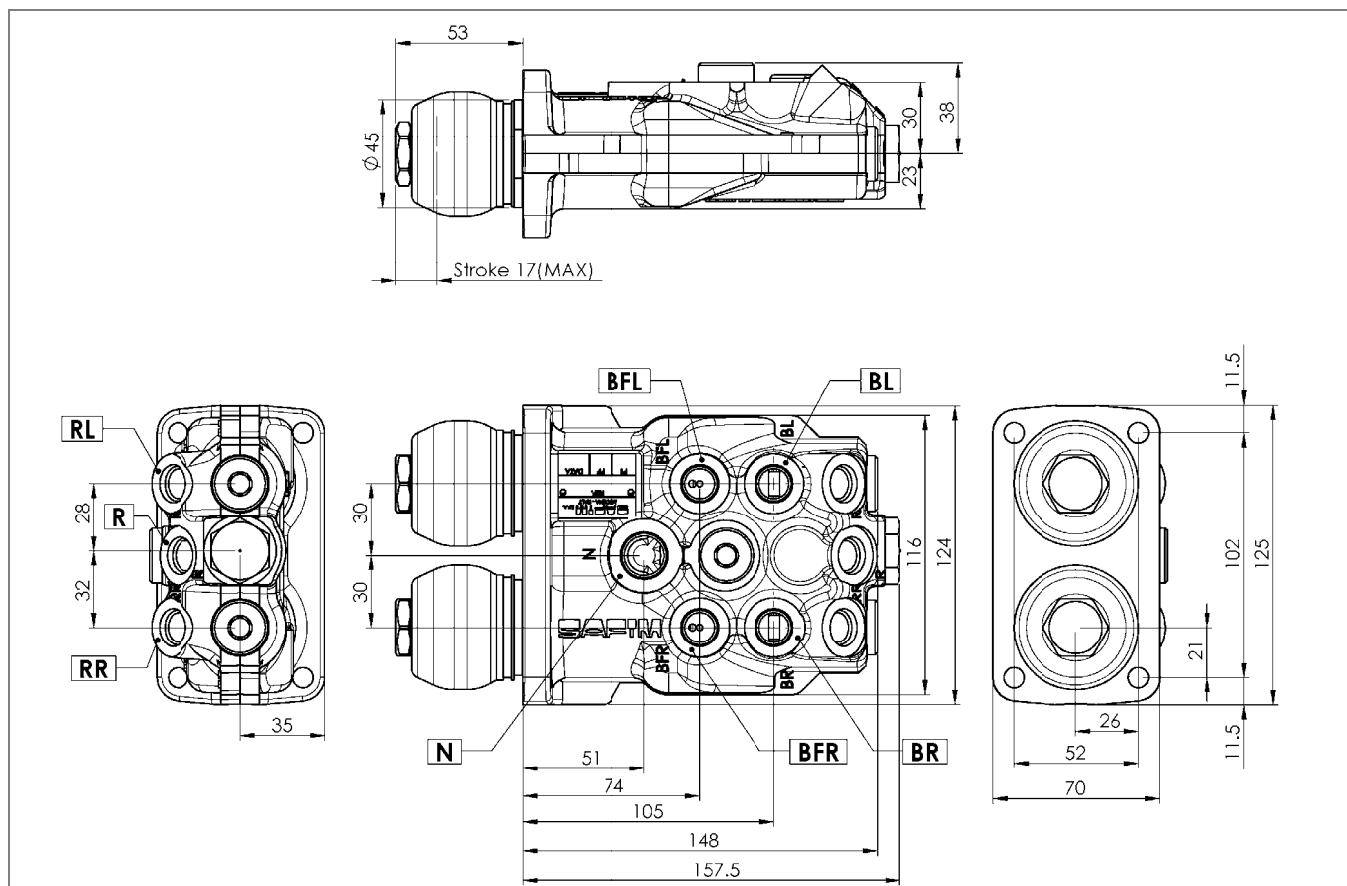
ORDER PART NUMBER

See page 040.010 for ordering details

HYDRAULIC SCHEMATIC


(*): An independent line to tank must be provided.

133535 Double circuit S6T powered brake valve



CONNECTION

R	Feeding pressure
RL	Left circuit accumulator
RR	Right circuit accumulator
BL	Rear left brake
BR	Rear right brake
BFL	Front left brake
BFR	Front right brake
N	Tank

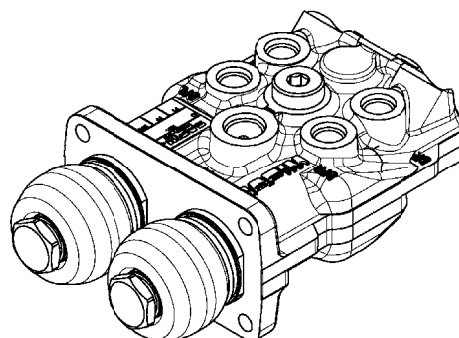
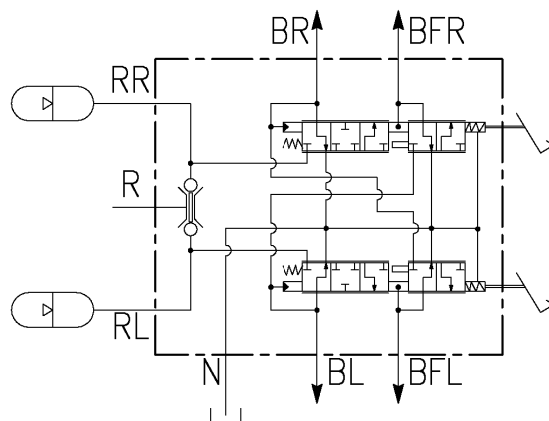
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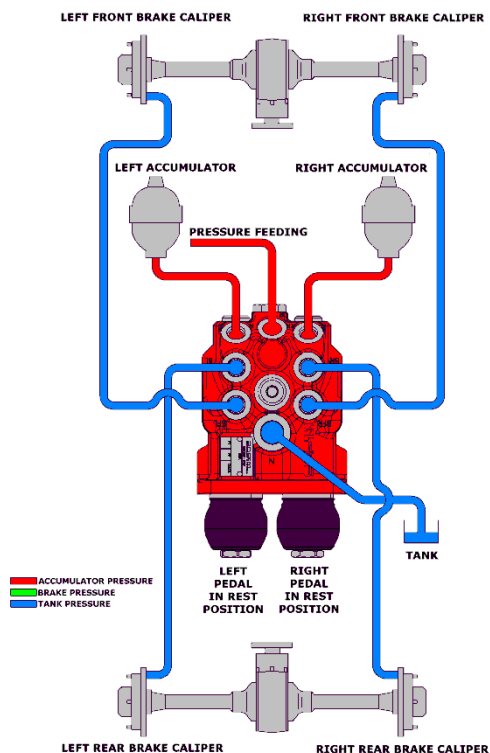
HYDRAULIC SCHEMATIC



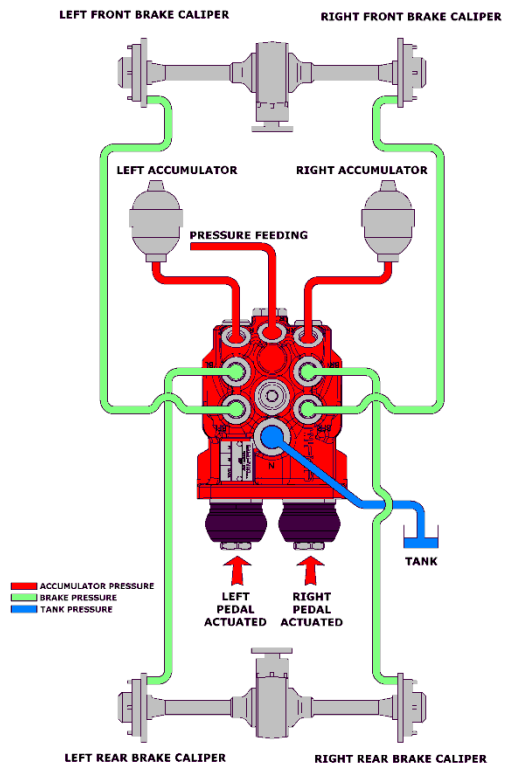
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INSTALLATION LAYOUT

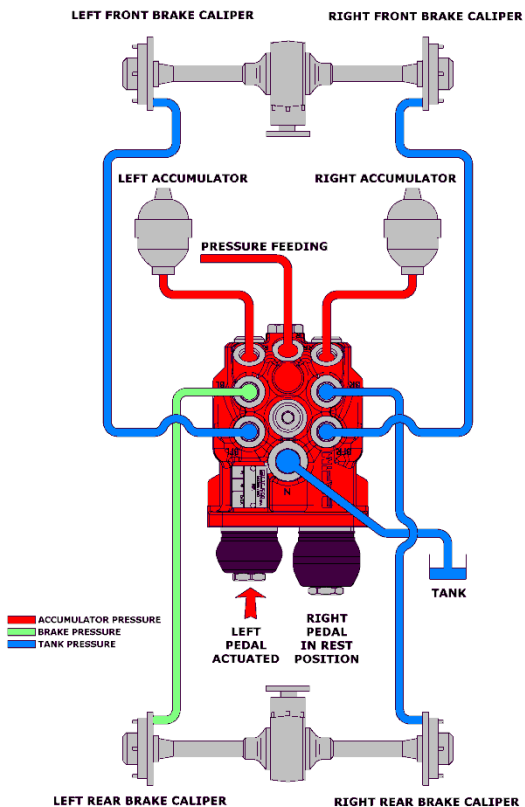
BRAKE NOT ACTUATED



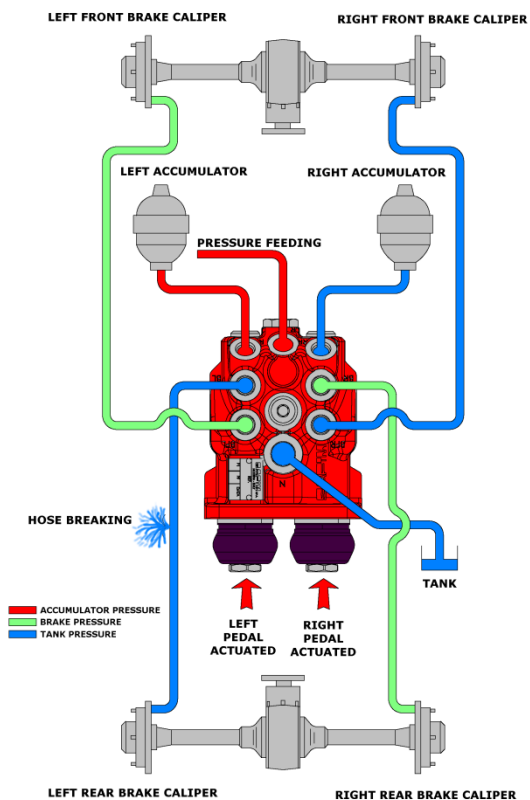
LEFT AND RIGHT BRAKE ACTUATED



LEFT BRAKE ACTUATED



LEFT AND RIGHT BRAKE ACTUATED (EMERGENCY)



ORDERING DETAILS

13	3537	/	0	I	A	020	B	B
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Painting

_: No final painting

B: Ral 9005 black final painting**Push-rod type** (see table below)**B:** Roller actuated push-rod**C:** tie rod actuated push-rod**Brake pressure**

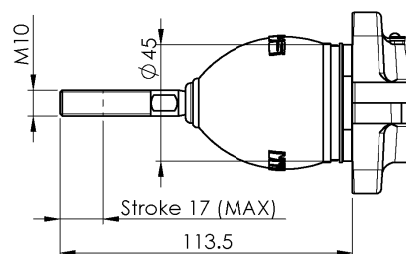
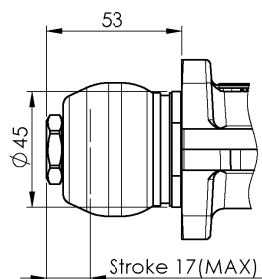
From 020 Bar to 120 Bar (step of 5 Bar)

Stroke – pressure curve

This parameter is defined by Safim technical office

Threads types (see table below)**I:** Metric threads according ISO 6149-1 standard**S:** UNF threads according ISO 11926-1 standard (Ex SAE J 475)**Spool diameter** (see table below)**2:** Spool diameter = 12 mm**4:** Spool diameter = 14 mm**6:** Spool diameter = 16 mm**3537:** Single circuit S6T powered brake valve**3535:** Double circuits S6T powered brake valve**13:** S6T powered brake valve product class

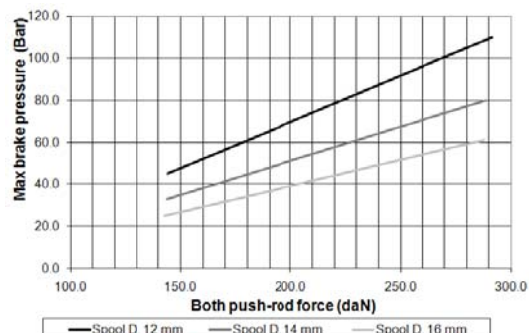
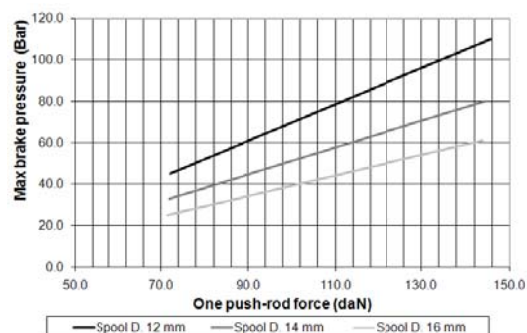
PUSH-ROD TYPE

B: Roller actuated push-rod**C:** Tie rod actuated push-rod

THREADS TYPE

Identification letter	R, RL, RR, BL, BR,BFL, BFR ports	T port
I: Metric threads ISO 6149-1	M14x1.5 ISO 6149-1	M18x1.5 ISO 6149-1
S: UNF threads ISO 11926-1	9/16-18 UNF ISO 11926-1	¾-16 UNF ISO 11926-1

SPOOL DIAMETER

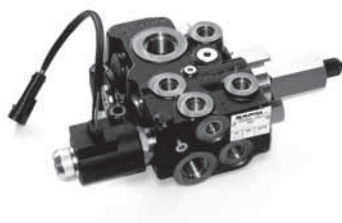


**MASTER CYLINDERS**

Master cylinders with or without hydraulic booster, single or double circuit, single bore or step-bore piston.

**SAFIM S6 BRAKE VALVES**

Full power brake valve available in different configuration.

**MASTER PRIORITY VALVE®**

Master Priority Valve® feeds, with a single pump, steering, brakes and working equipment.

**WHEEL CYLINDERS**

Standard, spring actuated and multi-function brake cylinders.

**FARM TRACTORS HYDRAULIC BRAKING**

Hydraulic trailer brake valves for European and Italian homologation, quick-release couplings, service and parking brake cylinders for trailer.

**ACCESSORIES**

Accessories to complete the hydraulic brakes system.

SAFIM S.p.A.

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