

Símbolo / Symbol 1

Símbolo / Symbol 2

Propósito:

El incremento y disminución sensibles de la presión de aire en el sistema de frenado de servicio de circuito doble del vehículo remolcador. El accionamiento automático del sistema de frenado del motor y de la luz de parada, por medio de los conmutadores eléctricos incorporados, o el accionamiento del retarder (en la variante 461 310 5 .. 0).

Requisitos para la instalación:

La válvula de freno con pedal debe instalarse en el suelo de la cabina, de tal forma que pueda accionarse el pedal del freno cómodamente con un movimiento del tobillo. El paso del pie desde el pedal del acelerador hasta el pedal del freno debe ser posible sin necesidad de levantar el pie. La válvula se sujeta con una placa de soporte y tornillos M8.

La válvula de freno accionada mediante émbolo debe instalarse en el vehículo en una posición adaptada al mismo. La válvula se sujeta por medio de la brida suministrada y tres tornillos M10.

Purpose:

Sensitive increase and decrease of the air pressure in the towing vehicle's dual circuit service braking system. Automatic actuation of the engine braking system and the stop light by means of built-in electrical switches, or actuation of the retarder (Variant 461 310 5.. 0).

Installation Requirement:

The brake valve with pedal should be installed on the floor of the cab such that comfortable operation of the pedal is ensured using the ankle. Passage from the

accelerator pedal to the brake pedal should be possible without lifting the foot. The valve is fixed with carrier plate and screws M8.

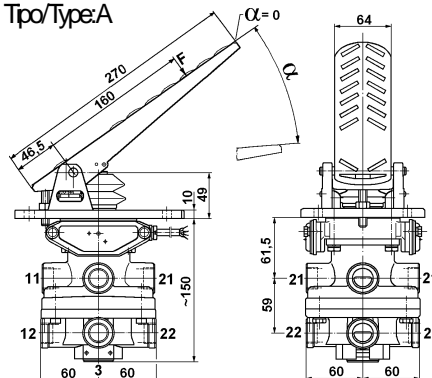
The brake valve operated by plunger should be installed on an adapted position in the vehicle. The valve is fixed with the provided flange and three screws M10.

Datos técnicos / Technical Data:

Presión de funcionamiento Operating pressure	max. 8 bar
Medio Permissible medium	aire / air
Rango de temperatura Operating temperature range	-40°C a/to +80°C
Diámetro nominal Nominal diameter	Ø 12 mm
Voltaje Operating voltage	max. 24 V
Corriente Current	max. 1 A
Predominancia (Colocación fijada) Predominance (fixed setting)	max. 0,25 bar

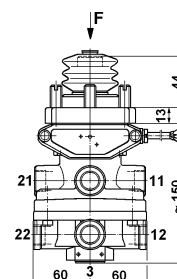
Instalación / Installation:

Tpo/Type:A



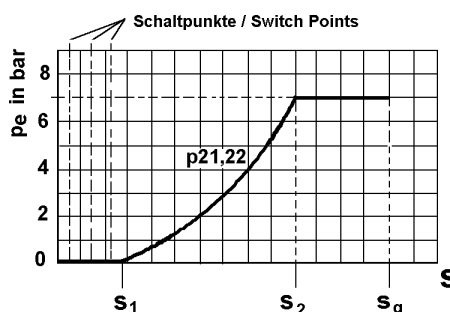
Bocas / Ports = M 22x1,5

Tpo/Type:B

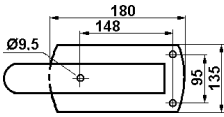
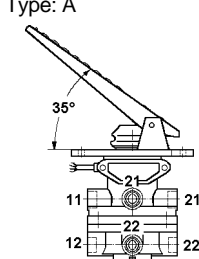
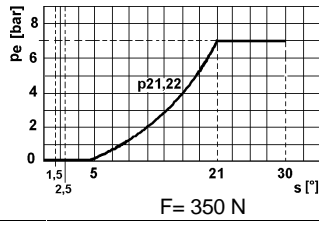
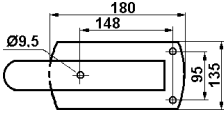
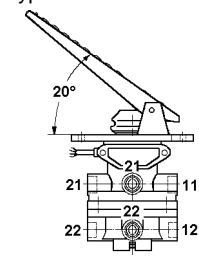
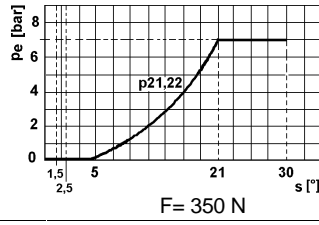
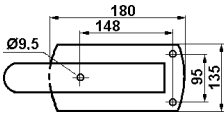
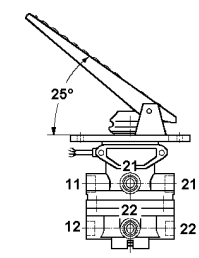
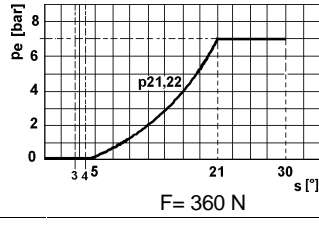
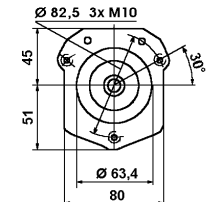
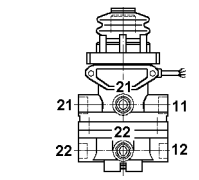
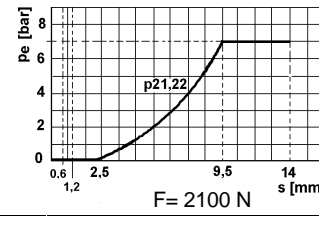
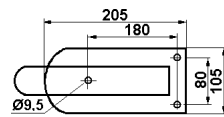
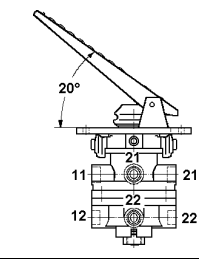
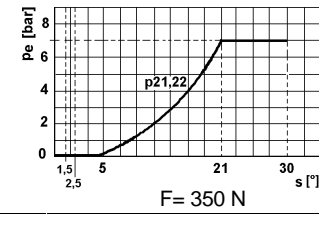
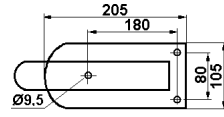
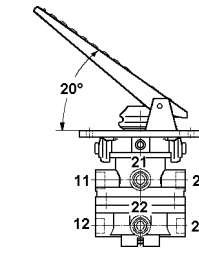
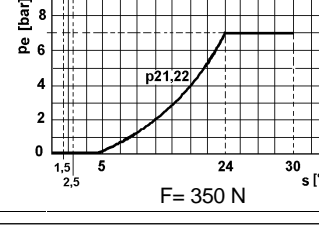


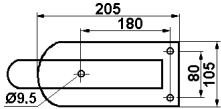
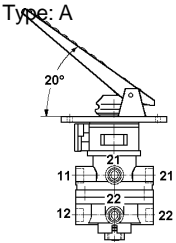
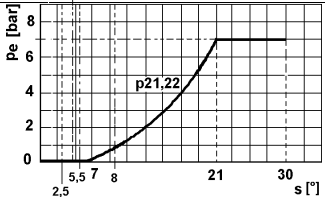
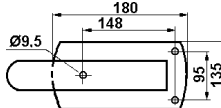
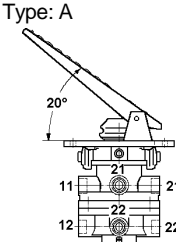
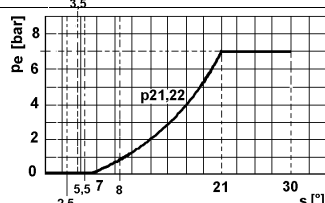
La fuerza F_{max} en el recorrido total necesario s_g se indica en la tabla siguiente.
Force F_{max} at necessary total way s_g is shown in the following table.

Característica / Characteristic:



- s = recorrido del pedal en ° o recorrido del émbolo en mm / way of pedal in ° or way of plunger in mm
- s_1 = recorrido muerto / idle way
- s_2 = recorrido a p_{max} / way at p_{max} .
- s_g = recorrido total necesario / necessary total way
- p_e = presión de salida $p_{21,22}$ / output pressure $p_{21,22}$

Referencia / Part Number Componentes y posición de las bocas Components and position of ports A= Válv. básica/ Basic valve B= Accionamiento / Operating assy S= Interruptor/ Switch			Característica / Characteristic	Observaciones Comments
461 310 201 0 A= 461 307 479 0 B= 461 314 790 2 S= 461 310 534 2	Símbolo 1 	Type: A 	Δp = fijado / fixed 0,25 bar 	
461 310 204 0 A= 461 307 479 0 B= 461 314 791 2 C= 461 310 534 2	Símbolo 1 	Type: A 	Δp = fijado / fixed 0,25 bar 	
461 310 237 0 A= 461 307 479 0 B= - S= 461 310 534 2	Símbolo 1 	Type: A 	Δp = fijado / fixed 0,25 bar 	
461 310 245 0 A= 461 307 479 0 B= 461 901 797 2 S= 461 310 534 2	Símbolo 1 	Type: B 	Δp = fijado / fixed 0,25 bar 	
461 310 350 0 A= - B= 461 314 792 2 S= 461 310 534 2	Símbolo 1 	Type: A 	Δp = fijado / fixed 0,25 bar 	Boca 3 / Port 3 = M22x1,5
461 310 362 0 A= - B= 461 314 792 2 S= 461 310 534 2	Símbolo 1 	Type: A 	Δp = fijado / fixed 0,25 bar 	Bocas 21,22 abiertas y roscadas Port 21,22 two each plugged

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461 310 550 0 A= - B= 461 310 796 2 S= 461 904 535 2	Símbolo 2 	Type: A 	$\Delta p = \text{fijado / fixed } 0,25 \text{ bar}$ $\Delta p = 3,5$  <p>F= 430 N</p>	Para retardador for retarder Boca 3 / Port 3 = M22x1,5
461 310 562 0 A= - B= 461 904 792 2 S= 461 904 538 2	Símbolo 2 	Type: A 	$\Delta p = \text{fijado / fixed } 0,25 \text{ bar}$ $\Delta p = 3,5$  <p>F= 430 N</p>	Para retardador for retarder