

# Pneumatic SHOWER TUBE OSCILLATORS

For Paper Machinery

**pmc** *polarteknik*



# SHOWER TUBE OSCILLATOR



Easy to install

Cannot be overloaded

Easy to adjust

Reliable and maintenance free operation

All external parts in contact with ambient made of stainless steel



## HYDROPNEUMATIC SHOWER TUBE OSCILLATOR FOR CORROSIVE ENVIRONMENTS



### OPERATION AND FEATURES

The SHO - 125 shower tube oscillator is a hydropneumatic actuator equipped with integrated control valves.

Only one compressed air supply line is needed to run the basic version. The unit starts to oscillate always when air supply is switched on.

Installation is fast and easy by flexible trunnion and piston rod mountings.

As optional features, SHO can be equipped with a sensor to get an alarm if stopped and to enable synchronization of oscillation speed to speed of wire.

Speed adjustment is either manual or remote controlled by standard pressure regulator or I/P -transducer.

The unit is oil stabilized to give smooth operation even at low speed.

When switched off the oscillator stops piston rod retracted inside to prevent impurities from sticking on it during shutdowns.

An exceptional feature of the SHO shower tube oscillators is fast return stroke mode which improves washing result.

Control cabinets to operate from one to five oscillators are also available

# SHOWER TUBE OSCILLATOR

## TECHNICAL DATA

### Speed Range:

0,2 - 5 mm/s ( fast return 15 mm/s )  
0,05 - 3,5 mm/s as option

### Stroke Length:

150 or 300 mm as standard, other  
stroke lengths available

### Operating Medium:

Filtered ( 20 micron ) and regulated  
compressed air. No lubrication needed.

### Temperature Range:

+ 5 °C . . . + 100 °C

### Pressure Range:

3 ... 10 bar

### Thrust Force:

6800 N / 6 bar

### Materials:

All parts in contact with ambient made  
of stainless steel AISI316 except piston  
rod scraper made of stainless steel  
AISI304.

Seals: Viton and PTFE

### Air Consumption:

1 - 25 Ndm<sup>3</sup> / min ( 6 bar )

75 Ndm<sup>3</sup> / min during fast return stroke

## ORDER INSTRUCTIONS

### Oscillator Type

SHO shower tube oscillator without ..... SHO-125-stroke-20180  
position feedback

SHO shower tube oscillator equipped ..... SHO-L-125-stroke-20002  
with linear sensor

### Sensors and Accessories

Magnetic sensor for SHO-125, IP 69..... 502970

Circuit board for linear sensor, IP 67 ..... RCL-41-0XXX, replace XXX with  
SHO-L-125 stroke length in millimeters

### Mountings

Trunnion mounting ..... 502968

Clevis mounting ..... 300335

Spherical bearing ..... 1120 HAST

Custom Made mountings available

### Spare Parts

Seal kit ..... SHO-125/32

Pimatic SHO shower oscillators are designed to  
reach maintenance free life time of 5 years in  
normal conditions.

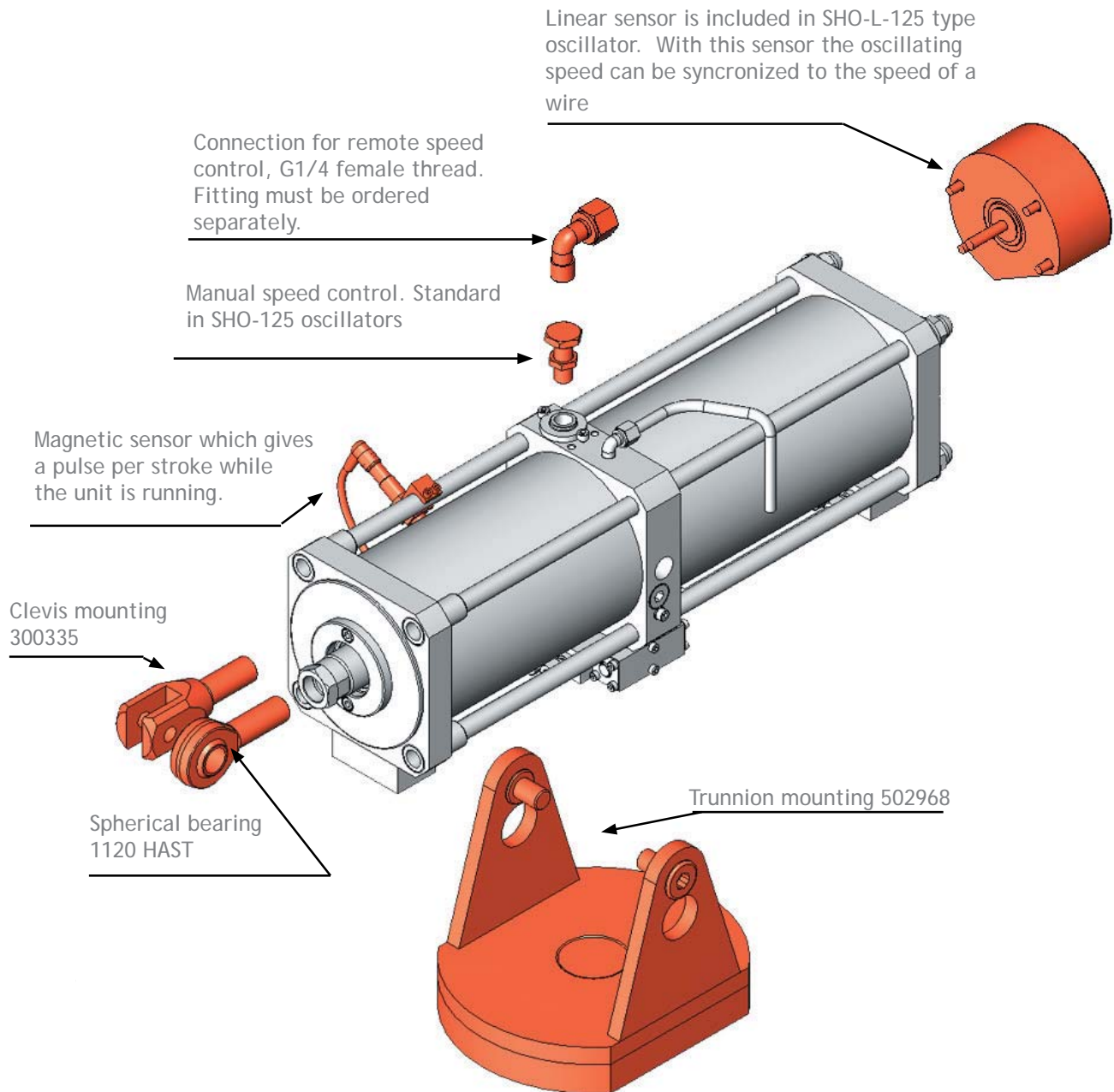
Yet, if any maintenance is needed, please contact  
our sales department for maintenance instructions.

# SHOWER TUBE OSCILLATOR

## OPTIONS

SHO hydropneumatic shower tube oscillators can be equipped with a variation of mountings and sensors to monitor the operation of the unit.

Even SHO-125-stroke-20180 models can be equipped with remote speed control. For SHO-L-125-stroke-20002 the circuit board for the linear sensor must be ordered separately.



Order Example:

Shower tube oscillator with linear sensor, a circuit board for the sensor, stroke length 150 mm, a trunnion mounting and a clevis mounting:

Oscillator SHO-L-125-150  
Trunnion mounting 502968  
Clevis mounting 300335  
Circuit board RCL-41-0150



# SHOWER TUBE OSCILLATOR

## CONTROL CABINETS FOR SHOWER TUBE OSCILLATORS

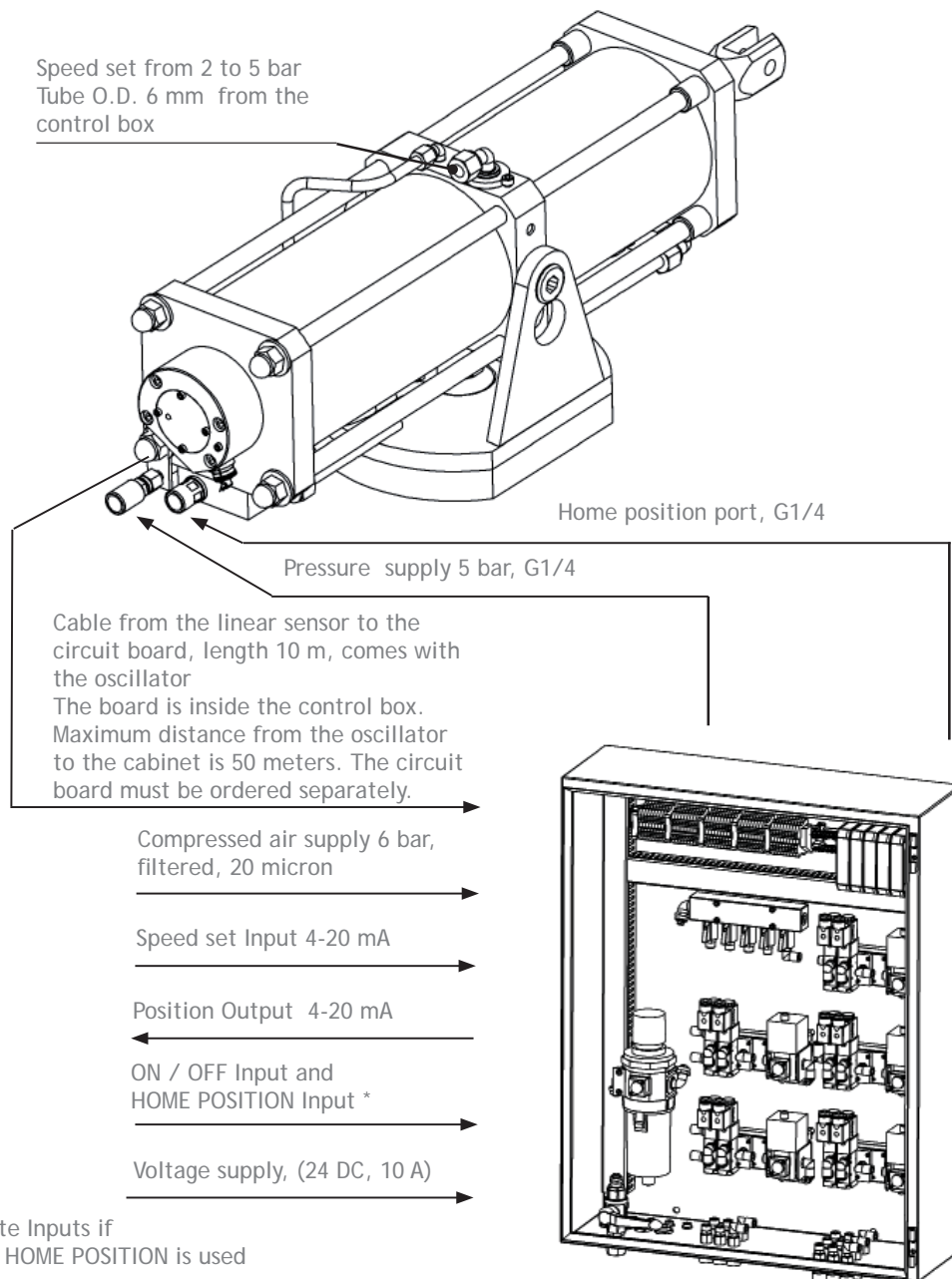
PMC Polarteknik supplies also control cabinets for shower oscillators.

The cabinets include all pneumatic components needed to run a shower oscillator, i.e. a shut off-valve, a filter and a pressure regulator for the main air supply line, the solenoid valves

and if required, an I/P transducer or a pressure regulator for remote speed control. By one cabinet one to five oscillators can be operated. Electric wires are connected to a terminal block.

For further details please contact our sales department.

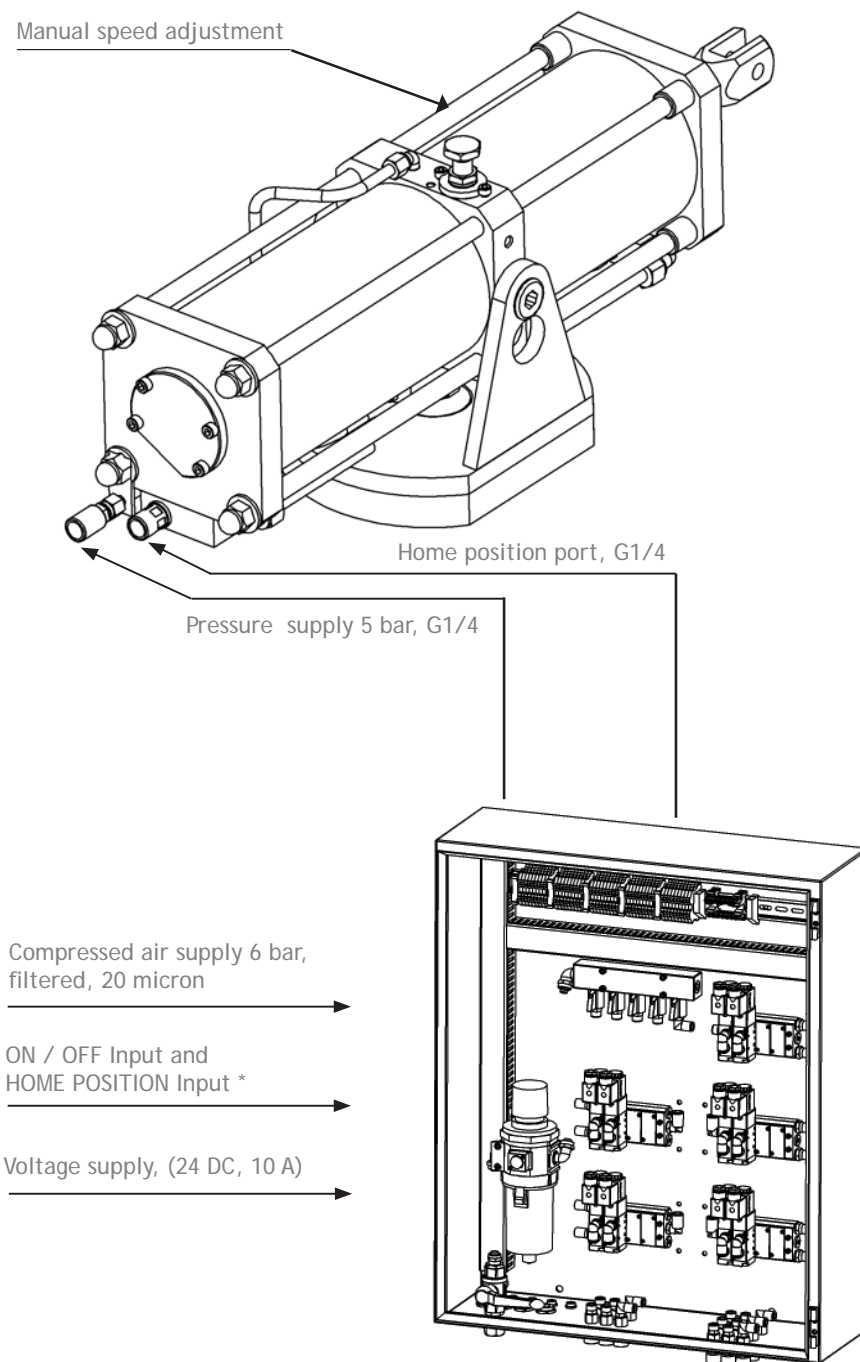
## WIRING INSTRUCTIONS FOR SHO-L





# SHOWER TUBE OSCILLATOR

## WIRING INSTRUCTIONS FOR SHO



\* Two separate Inputs if  
stopping at HOME POSITION is used



# Sales

## Huittinen

Klaavolantie 1, 32700 Huittinen  
puh +358 207 709 500, fax +358 207 709 505

## Jyväskylä

Seppäläntie 31, PL 85, 40351 Jyväskylä  
puh 020 770 9370, fax 020 770 9371

## Kuopio

Kellolahdentie 9, 70460 Kuopio  
puh 020 770 9200, fax 020 770 9201

## Lahti

Jussilankatu 5, 15680 Lahti  
puh. 020 770 9480, fax 020 770 9481

## Lempäälä

Tatekanpolku 2, 33880 Lempäälä  
puh 020 770 9280, fax 020 770 9281

## Nastola

Vaakatie 8, 15560 Nastola  
puh 020 770 9400, fax 020 770 9401

## Oulu

Krouvintie 3, 90400 Oulu  
puh 020 770 220, fax 020 770 9221

## Pori

Hevoshaankatu 7 B, 28600 Pori  
puh 020 770 9240, fax 020 770 9252

## Rauma

Kairakatu 6 D, PL 36, 26101 Rauma  
puh 020 770 9240, fax 020 770 9241

## Tampere

Vihiojantie 1, PL 32, 33901 Tampere  
puh 020 770 9300, fax 020 770 9301

## Turku

Orikedonkatu 21, 20380 Turku  
puh 020 770 9460, fax 020 770 9461

## Vantaa

Mestarintie 6, 01730 Vantaa  
puh 020 770 9700, fax 020 770 9701

## Viro

Polarteknik AS Tallinna  
puh +372 65 06 800, fax +372 65 06 818

PMC Polarteknik Oy Ab  
Mestarintie 6  
01730 Vantaa  
puh. 020 770 9700  
fax 020 770 9701  
[info@pmcpolarteknik.com](mailto:info@pmcpolarteknik.com)  
[www.pmcpolarteknik.com](http://www.pmcpolarteknik.com)