AP | LP | LW | YP Series



FEATURES

- >Oil-less
- >Long life
- >Low power consumption
- > Worldwide service network
- >Low noise/vibration
- > Protection class IP54 (AP/LP/LW-Series)
- > CE approved (230V models with housing and cord with plug)
- >Integrated intake filter (AP/LP/LW-Series)

TYPICAL APPLICATIONS

- > Sewage aeration
- > Aquarium aeration
- > Gas/particle analysis
- > Air mattress
- > Compression therapy
- > Battery aeration
- > Grey water treatment
- > Process water recycling



ΑP

LΡ

LW ΥP

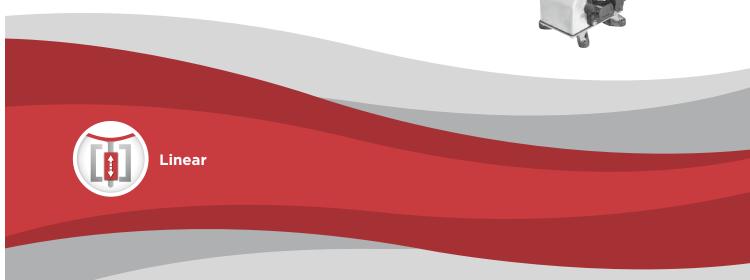












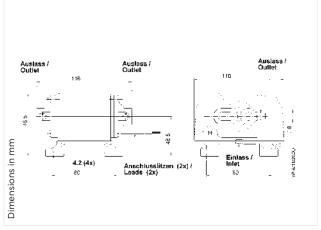
Linear Diaphragm Pumps

PRODUCT OVERVIEW

Model		Pressure	Vacuum	without housing	with housing	Flow	at rated	d press	sure	150	200	250	(l/mi	n)		Page
	YP-6DU YP-15DU YP-20DU	•		•									6 I/mir 15 I/mir 10 I/mir	a @ 100) mbar	3
The same of the sa	YP-6A YP-15A YP-20A	•			•	L							6 I/mir 15 I/mir 20 I/mir	a @ 100) mbar	4
	YP-6V YP-15V YP-20V	•	•		•							15 (1	3) l/mir	n @ 100) (-100) mba) (-100) mba) (-100) mba	r
No.	YP-30DU YP-40DU YP-50DU	•		•								4	32 l/mir 13 l/mir 50 l/mir	n @ 120	mbar	6
	YP-30VC YP-40VC YP-50VC YP-60VC	•	•		•							43 (3 58 (5 66 (6	9) I/mir 2) I/mir 1) I/mir	1 @ 120 1 @ 120 1 @ 120	(-120) mba (-120) mba (-120) mba (-120) mba	r r r
	YP-70VC AP-30 AP-40 AP-60N AP-60/80 AP-80H AP-100	•			•							4	10 I/mir 16 I/mir 17 I/mir 17 I/mir 10 I/mir 12 I/mir	1 @ 120 1 @ 120 1 @ 200 1 @ 200 1 @ 200	mbar O mbar O mbar O mbar	7
	AP-120 LP-150HN	•			•							1:	25 I/mir 50 I/mi	n @ 200	0 mbar 0 mbar	8,9
	LP-200HN	•			•										0 mbar	10

Linear Diaphragm Pumps YP-6DU, YP-15DU, YP-20DU





PNEUMATIC DATA			
Description	YP-6DU	YP-15DU	YP-20DU
Part number	52500007	52500016	52500023
Flow at rated pressure	6 l/min	15 l/min	20 l/min
Rated pressure	100 mbar	100 mbar	100 mbar
Operating range	20 to 150 mbar	20 to 200 mbar	20 to 200 mbar

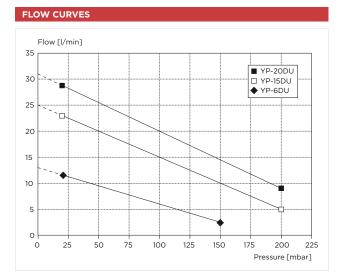
ELECTRICAL DATA			
Motor type	Linear drive	Linear drive	Linear drive
Voltage	230 V 50/60 Hz	230 V 50/60 Hz	230 V 50/60 Hz
Power consumption at rated pressure	7 W	13 W	18 W

GENERAL DATA			
Ambient temperature	-10 to 40 °C	-10 to 40 °C	-10 to 40 °C
Weight	1.1 kg	1.2 kg	1.2 kg
Outlet diameter	2 x 8 mm	2 x 8 mm	2 x 8 mm
Average sound level	36 dB (A)	38 dB (A)	40 dB (A)

SERVICE PARTS			
Chamber block set ¹⁾	700017	700017	700017

All listed values are measured at standard atmospheric conditions and at 50 Hz.

1) Only available for trained service personnel.



Note: Operation outside specified operating range is not recommended.

SUPPLIED AS STANDARD

2 x Leads (30 cm) for power supply

1 x Lead (10 cm) for earth/ground

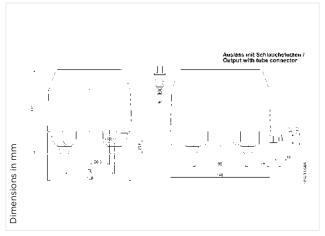
SERVICE PARTS

Chamber block set¹⁾ consists of:

- 2 x Pump head with valves
- 2 x Diaphragm
- 2 x Diaphragm ring
- 2 x Diaphragm nut
- 2 x Diaphragm washer

Linear Diaphragm Pumps YP-6A, YP-15A, YP-20A





PNEUMATIC DATA			
Description	YP-6A	YP-15A	YP-20A
Part number	52500006	52500015	52500020
Flow at rated pressure	6 l/min	15 l/min	20 I/min
Rated pressure	100 mbar	100 mbar	100 mbar
Operating range	20 to 150 mbar	20 to 200 mbar	20 to 200 mbar

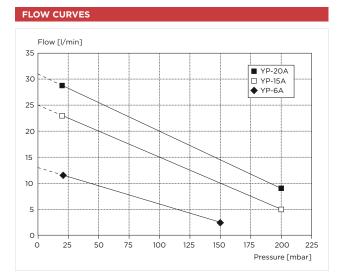
ELECTRICAL DATA			
Motor type	Linear drive	Linear drive	Linear drive
Voltage	230 V 50/60 Hz	230 V 50/60 Hz	230 V 50/60 Hz
Power consumption at rated pressure	7 W	13 W	18 W

GENERAL DATA			
Ambient temperature	-10 to 40 °C	-10 to 40 °C	-10 to 40 °C
Weight	2.1 kg	2.4 kg	2.4 kg
Outlet diameter	5 or 11 mm	5 or 11 mm	5 or 11 mm
Average sound level	31 dB (A)	33 dB (A)	35 dB (A)

SERVICE PARTS			
Chamber block set ¹⁾	700017	700017	700017

All listed values are measured at standard atmospheric conditions and at 50 Hz.

1) Only available for trained service personnel.



Note: Operation outside specified operating range is not recommended.

SUPPLIED AS STANDARD

Cable/Euro-plug 1 x Tube connector I.D. 5 - 11 mm

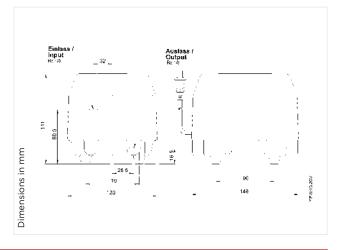
SERVICE PARTS

Chamber block set 1) consists of:

- 2 x Pump head with valves
- 2 x Diaphragm
- 2 x Diaphragm ring
- 2 x Diaphragm nut
- 2 x Diaphragm washer

Linear Diaphragm Pumps YP-6V, YP-15V, YP-20V

Flow at rated pressure 6 to 20 I/min Oil-less



PNEUMATIC DATA			
Description	YP-6V	YP-15V	YP-20V
Part number	52500009	52500014	52500021
Flow at rated pressure	6 l/min	15 l/min	20 l/min
Rated pressure	±100 mbar	±100 mbar	±100 mbar
Operating range	-150 to 150 mbar	-200 to 200 mbar	-200 to 200 mbar

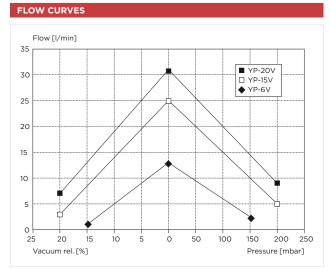
ELECTRICAL DATA			
Motor type	Linear drive	Linear drive	Linear drive
Voltage	230 V 50/60 Hz	230 V 50/60 Hz	230 V 50/60 Hz
Power consumption at rated pressure	7 W	13 W	18 W

GENERAL DATA			
Ambient temperature	-10 to 40 °C	-10 to 40 °C	-10 to 40 °C
Weight	2.1 kg	2.4 kg	2.4 kg
Inlet/Outlet diameter	Rc 1/8	Rc 1/8	Rc 1/8
Average sound level	32 dB (A)	34 dB (A)	34 dB (A)

SERVICE PARTS			
Chamber block set ¹⁾	700017	700017	700017

All listed values are measured at standard atmospheric conditions and at 50 Hz.

1) Only available for trained service personnel.



Note: Operation outside specified operating range is not recommended. \\

SUPPLIED AS STANDARD

5250... Stock programme

Cable/Euro-plug

SERVICE PARTS

Chamber block set¹⁾ consists of:

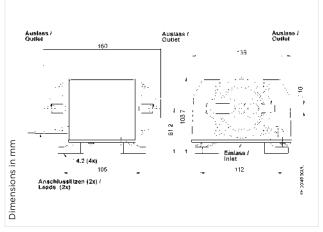
- 2 x Pump head with valves
- 2 x Diaphragm
- 2 x Diaphragm ring 2 x Diaphragm nut
- 2 x Diaphragm washer

ACCESSORIES

Tube connector I.D. 8 mm (part number 61206)

Linear Diaphragm Pumps YP-30DU, YP-40DU, YP-50DU





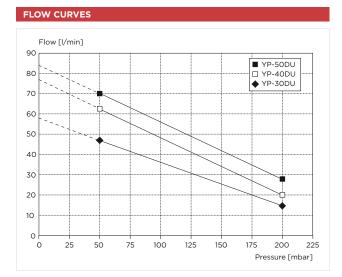
PNEUMATIC DATA			
Description	YP-30DU	YP-40DU	YP-50DU
Part number	52500036	52500043	52500052
Flow at rated pressure	32 l/min	43 l/min	50 l/min
Rated pressure	120 mbar	120 mbar	120 mbar
Operating range	50 to 200 mbar	50 to 200 mbar	50 to 200 mbar

ELECTRICAL DATA			
Motor type	Linear drive	Linear drive	Linear drive
Voltage	230 V 50/60 Hz	230 V 50/60 Hz	230 V 50/60 Hz
Power consumption at rated pressure	32 W	42 W	45 W

GENERAL DATA			
Ambient temperature	-10 to 40 °C	-10 to 40 °C	-10 to 40 °C
Weight	2.3 kg	2.5 kg	2.8 kg
Outlet diameter	2 x 10 mm	2 x 10 mm	2 x 10 mm
Average sound level	48 dB (A)	49 dB (A)	50 dB (A)

SERVICE PARTS				
Chamber block set 1)	700020	700020	700020	

All listed values are measured at standard atmospheric conditions and at 50 Hz. 1) Only available for trained service personnel.



Note: Operation outside specified operating range is not recommended.

SUPPLIED AS STANDARD

2 x Leads (30 cm) for power supply

1 x Lead (10 cm) for earth/ground

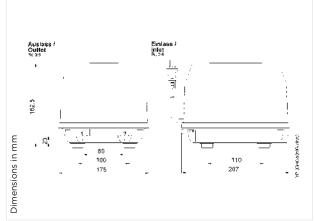
SERVICE PARTS

Chamber block set¹⁾ consists of:

- 2 x Pump head with valves
- 2 x Diaphragm
- 2 x Diaphragm ring
- 2 x Diaphragm nut
- 2 x Diaphragm washer

Linear Diaphragm Pumps **YP-30VC, YP-40VC, YP-50VC, YP-60VC, YP-70VC**





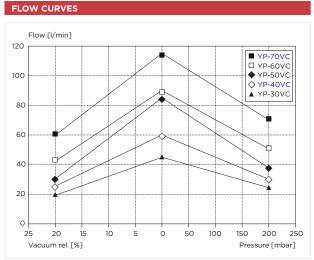
PNEUMATIC DATA					
Description	YP-30VC	YP-40VC	YP-50VC	YP-60VC	YP-70VC
Part number	52500401	52500402	52500054	52500067	52500073
Flow at rated pressure	33 I/min	43 l/min	58 I/min	66 I/min	73 l/min
Rated pressure	±120 mbar	±120 mbar	±120 mbar	±120 mbar	±180 mbar
Operating range	-200 to 200 mbar				

ELECTRICAL DATA					
Motor type	Linear drive				
Voltage	230 V 50/60 Hz				
Power consumption at rated pressure	37 W	40 W	46 W	59 W	85 W

GENERAL DATA					
Ambient temperature	-10 to 40 °C				
Weight	4.8 kg	5.1 kg	5.5 kg	5.9 kg	6.2 kg
Inlet/Outlet diameter	Rc 3/8				
Average sound level	37 dB (A)	39 dB (A)	41 dB (A)	46 dB (A)	48 dB (A)

SERVICE PARTS					
Chamber block set ¹⁾	700020	700020	700020	700038	700038

All listed values are measured at standard atmospheric conditions and at 50 Hz.



Note: Operation outside specified operating range is not recommended.

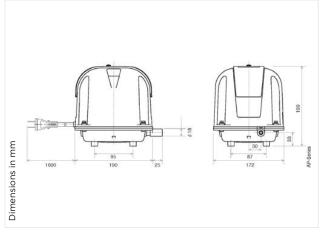


Tube connector I.D. 14 mm (part number 31644)

¹⁾ Only available for trained service personnel.

Linear Diaphragm Pumps AP-30, AP-40





PNEUMATIC DATA		
Description	AP-30	AP-40
Part number	52500452	52500453
Flow at rated pressure	40 l/min	46 I/min
Rated pressure	120 mbar	120 mbar
Operating range	100 to 230 mbar	100 to 230 mbar

ELECTRICAL DATA				
Motor type	Linear drive	Linear drive		
Nominal Voltage	230 V 50/60 Hz	230 V 50/60 Hz		
Consumption at rated pressure	0.28 A / 25 W	0.37 A / 29 W		
Efficiency at rated pressure	0.63 W/I	0.63 W/I		

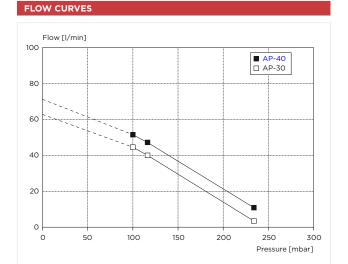
GENERAL DATA				
Ambient temperature	-10 to 40 °C	-10 to 40 °C		
Weight	4.6 kg	4.6 kg		
Outlet diameter	18 mm	18 mm		
Average sound level	32 dB (A)	34 dB (A)		

SERVICE PARTS			
Chamber block set ¹⁾	700580	700580	
Air filter and gasket kit	700582	700582	
Air filter kit	700583	700583	

Please refer to the operation and service manual for additional information.

All listed values are measured at standard atmospheric conditions and at 50 Hz.

1) Only available for trained service personnel.



Note: Operation outside specified operating range is not recommended.

SERVICE PARTS

Chamber block set 1) consists of:

- 2 x Pump head with valves
- 2 x Diaphragm
- 2 x Diaphragm ring
- 2 x Diaphragm gasket
- 2 x Nut
- 2 x Washer

Air filter and gasket kit consists of:

- 1 x Air cleaner element
- 1 x Air cleaner gasket
- 1 x Cover plate gasket
- 1 x Noise absorbing net
- 1 x Tank gasket

Air filter kit consists of:

- 5 x Air cleaner element
- 5 x Air cleaner gasket

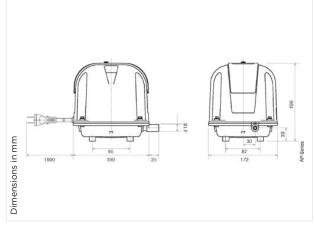
SUPPLIED AS STANDARD

Cable/Euro-plug Air connector (part number 700073) consists of:

- 1 x Outlet hose, angled, 170/50 mm
- 2 x Hose clamp

Linear Diaphragm Pumps AP-60N, AP-60/80, AP-80H, AP-100, AP-120





PNEUMATIC DATA					
Description	AP-60N	AP-60/80	AP-80H	AP-100	AP-120
Part number ¹⁾	52500478	52500485	52500480	52500472	52500473
Flow at rated pressure	47 l/min	60 I/min	82 l/min	108 I/min	125 l/min
Rated pressure	200 mbar				
Operating range	100 to 300 mbar	100 to 300 mbar	100 to 300 mbar	140 to 300 mbar	160 to 300 mbar

ELECTRICAL DATA					
Motor type	Linear drive				
Nominal Voltage	230 V 50/60 Hz				
Consumption at rated pressure	0.26 A / 31 W	0.34 A / 41 W	0.8 A / 73 W	1.06 A / 99 W	1.45 A / 128 W
Efficiency at rated pressure	0.66 W/I	0.68 W/I	0.89 W/I	0.92 W/I	1.02 W/I

GENERAL DATA					
Ambient temperature	-10 to 40 °C				
Weight	5.8 kg	5.8 kg	6.1 kg	6.1 kg	6.1 kg
Outlet diameter	18 mm				
Average sound level	34 dB (A)	34 dB (A)	35 dB (A)	37 dB (A)	38 dB (A)

SERVICE PARTS					
Chamber block set 2)	700581	700581	700585	700585	700585
Air filter and gasket kit	700582	700582	700582	700582	700582
Air filter kit	700583	700583	700583	700583	700583
Protective switch ²⁾	700586	700586	700586	700586	700586

¹⁾ Standard version with cable and Schuko plug; if signal cable for connection of e.g. light/buzzer is needed please contact us Please refer to the operation and service manual for additional information.

All listed values are measured at standard atmospheric conditions and at 50 Hz. 2) Only available for trained service personnel.

FLOW CURVES Flow [l/min] 200 ■ AP-120 □ AP-100 ♦ AP-80H ♦ AP-60/80 ▲ AP-60N 160 140 100 80 60 40 20

Note: Operation outside specified operating range is not recommended.

SERVICE PARTS

Chamber block set 2) consists of:

- 2 x Pump head with valves
- 2 x Diaphragm
- 2 x Diaphragm ring
- 2 x Diaphragm gasket
- 2 x Nut
- 2 x Washer

Air filter and gasket kit consists of:

- 1 x Air cleaner element
- 1 x Air cleaner gasket
- 1 x Cover plate gasket
- 1 x Noise absorbing net
- 1 x Tank gasket

Air filter kit consists of:

- 5 x Air cleaner element
- 5 x Air cleaner gasket

Protective switch²⁾ consists of:

- 1 x Microswitch
- 2 x Nut
- 2 x Washer
- 1 x Cover plate gasket

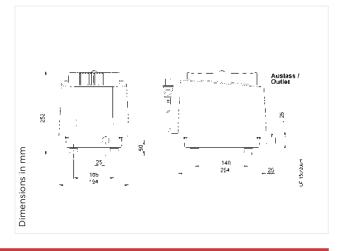
SUPPLIED AS STANDARD

Cable/Euro-plug Air connector (part number 700073) consists of:

- 1 x Outlet hose, angled, 170/50 mm
- 2 x Hose clamp

Linear Diaphragm Pumps LP-150HN, LP-200HN

Flow at rated pressure 150 to 200 I/min



1.0.150101	1 B 0001111
LP-ISUHN	LP-200HN
52500151	52500202
150 l/min	200 l/min
200 mbar	200 mbar
100 to 300 mbar	100 to 300 mbar
	150 l/min 200 mbar

ELECTRICAL DATA		
Motor type	Linear drive	Linear drive
Nominal Voltage	230 V 50/60 Hz	230 V 50/60 Hz
Consumption at rated pressure	0.85 A/130 W	1.15 A/200 W

GENERAL DATA		
Ambient temperature	-10 to 40 °C	-10 to 40 °C
Weight	8.6 kg	8.6 kg
Outlet diameter	18 mm	18 mm
Average sound level	43 dB (A)	44 dB (A)

SERVICE PARTS		
Chamber block set ¹⁾	700549	700549
Air filter and gasket kit	700550	700550
Air filter kit	700551	700551
Protective switch ¹⁾	700552	700552

Please refer to the operation and service manual for additional information.

All listed values are measured at standard atmospheric conditions and at 50 Hz.

1) Only available for trained service personnel.

FLOW CURVES Flow [l/min] 400 ■ LP-200HN □ LP-150HN 250 150 100 50 100 150 200 300 Pressure [mbar]

Note: Operation outside specified operating range is not recommended.

SERVICE PARTS

Chamber block set 1) consists of:

- 2 x Pump head with valves
- 2 x Diaphragm
- 2 x Diaphragm ring
- 2 x Diaphragm nut
- 2 x Diaphragm washer
- 2 x Diaphragm gasket

Air filter and gasket kit consists of:

- 1 x Air cleaner element
- 1 x Air cleaner gasket
- 1 x Cover plate gasket
- 1 x Noise absorbing net
- 1 x Tank gasket
- 2 x L-Hose
- 2 x L-Clamp

Air filter kit consists of:

- 5 x Air cleaner element
- 5 x Air cleaner gasket

- Protective switch¹⁾ consists of:
- 1 x Microswitch complete with cover plate
- 1 x Cover plate gasket

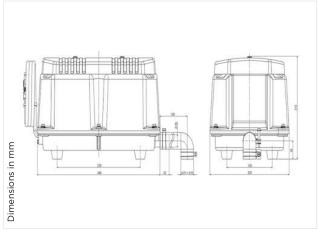
SUPPLIED AS STANDARD

Cable/Euro-plug Air connector (part number 700073) consists of:

- 1 x Outlet hose, angled, 170/50 mm
- 2 x Hose clamp

Linear Diaphragm Pumps LW-240





PNEUMATIC DATA	
Description	LW-240
Part number	52500410
Flow at rated pressure	245 l/min
Rated pressure	200 mbar
Operating range	100 to 300 mbar

ELECTRICAL DATA	
Motor type	Linear drive
Nominal Voltage	230 V 50/60 Hz
Consumption at rated pressure	1.8 A/250 W

GENERAL DATA	
Ambient temperature	-10 to 40 °C
Weight	14.1 kg
Outlet diameter	26 mm
Average sound level	48 dB (A)

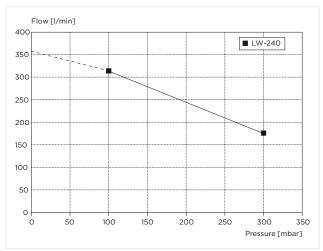
SERVICE PARTS	
Chamber block set ¹⁾	700500
Air filter and gasket kit	700502
Air filter kit	700510
Protective switch ¹⁾	700512

Please refer to the operation and service manual for additional information.

All listed values are measured at standard atmospheric conditions and at 50 Hz.

1) Only available for trained service personnel.

FLOW CURVES



Note: Operation outside specified operating range is not recommended.

SERVICE PARTS

Chamber block set¹⁾ consists of:

- 4 x Pump head with valves
- 4 x Diaphragm
- 4 x Diaphragm ring
- 4 x Diaphragm nut
- 4 x Diaphragm washer

Air filter and gasket kit consists of:

- 1 x Air cleaner element
- 1 x Air cleaner gasket
- 1 x Noise absorbing net
- 1 x Tank gasket
- 1 x Cover gasket
- 4 x L-Hose
- 4 x L-Clamp

Air filter kit consists of:

- 5 x Air cleaner element
- 5 x Air cleaner gasket

Protective switch¹⁾ consists of:

1 x Microswitch complete with cover plate

Please note: one pump is equipped with 2 protective switches

SUPPLIED AS STANDARD

Cable/Euro-plug Air connector (part number 700513) consists of:

- 1 x Outlet hose, angled, 170/50 mm
- 2 x Hose clamp

Accessory:

Air connector, straight type (part number 700514) consists of:

- 1 x Outlet hose, straight, 150 mm
- 2 x Hose clamp



PUMP AND COMPRESSOR SOLUTIONS FOR OEMS WORLDWIDE

The information presented in this material is based on technical data and test results of nominal units. It is believed to be accurate and reliable and is offered as an aid to help in the selection of Thomas products. It is the responsibility of the user to determine the suitability of the product for the intended use and the user assumes all risk and liability in connection therewith. Thomas does not warrant, guarantee or assume any obligation or liability in connection with this information.

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