





## **PORTABLE HIGH PRESSURE POWERPACK**

MAX. WORKING PRESSURE 3650 BAR / 52,200 PSI MAX. FLOW UP TO 50 LITERS / MINUTE FULLY MADE OF STAINLESS STEEL



**AVAILABLE IN ATEX VERSION** 



## **DESCRIPTION**

Resato's portable powerpack type DPS/WPS is a self-contained air-driven unit of proven design. Not only can it be used to pressurize valves, fittings, hoses, piping, vessels and wellhead equipment, but it is also suitable for supply of hydraulic power to operating cylinders, presses, rams, jacks, bolt tensioners and actuators.

Water, oil or an emulsion of both can be used as the high pressure medium. The DPS/WPS-unit can also be used for chemical injection, because the unit has been made suitable for a wide range of (chemical) fluids. Please contact Resato for more information.

The portable powerpack is available in two types:

- Type DPS operates from an integrated reservoir.
- Type WPS has an external supply connection;
   it operates from a direct tap water supply or from an external reservoir.

Both types are standard available in 10 pressure ranges in either a single-acting or double-acting pump configuration.

As an option, the units can be fitted with a chart recorder. The resultant chart may be used as a test certificate.

#### **OPERATION**

Output pressure control is achieved by regulating the air supply pressure with the air regulator provided with the system. A start / stop valve is a standard feature. When the desired pressure is reached the Resato air-driven pump will automatically stop; thus, no energy is required to maintain the pressure. If a pressure drop occurs, the powerpack will automatically compensate the pressure. The output pressure is indicated by a panel-mounted test gauge and registered by the optional recorder. The pressure can be released by operating the panel-mounted bleed valve.

## **TECHNICAL SPECIFICATIONS**

#### PLIMP

The unique design of the Resato high pressure air-driven pump makes the pump operate very silently. High volume displacement, reliability and easy maintenance are other advantages of the modern pump design. The high-pressure seals can be replaced without taking the complete pump apart.

#### **MATERIALS**

All wetted parts, such as pump head, valves, tubing, fittings and gauges are made of stainless steel, as is the reservoir, frame and optional pressure recorder. The seals are made of Teflon (valve), Viton (Check valves) and U-PE for the high-pressure plunger seals. Other seal materials and special seals are available.

#### **TEST GAUGE**

Class 1.0% F.S., housing  $\phi$  100 mm (4 inch), fully stainless steel, filled with glycerin and fitted with laminated safety glass.

For WPS/DPS types 400 and 520 test gauge is of solid front type, housing ø 160 mm (6 inch). For ranges, see type table.

#### **AIR PRESSURE GAUGE**

Range 0-10 bar / 0-140 psi, class 1.6% F.S., housing  $\emptyset$  63 mm (2.5 inch) fully stainless steel, filled with glycerin and fitted with laminated safety glass.

#### RECORDER (OPTION)

Mechanical, clockwork-driven. Class 2.0% F.S. Fully stainless steel, chart diameter  $\emptyset$  163 mm (6.5 inch). Range in accordance with test gauge installed. For chart revolutions, see type table.

#### PC DATA ACQUISITION AND RECORDING SYSTEM (OPTION)

Documentation of test results is very important. For that purpose Resato offers a PC data acquisition and recording system (type CR). This system generates a test certificate with a graph immediately after completion of a test.



## **OTHER OPTIONS**

The units are optionally available with high-pressure isolate valve (between test gauge and pump).

#### Ordering code: I

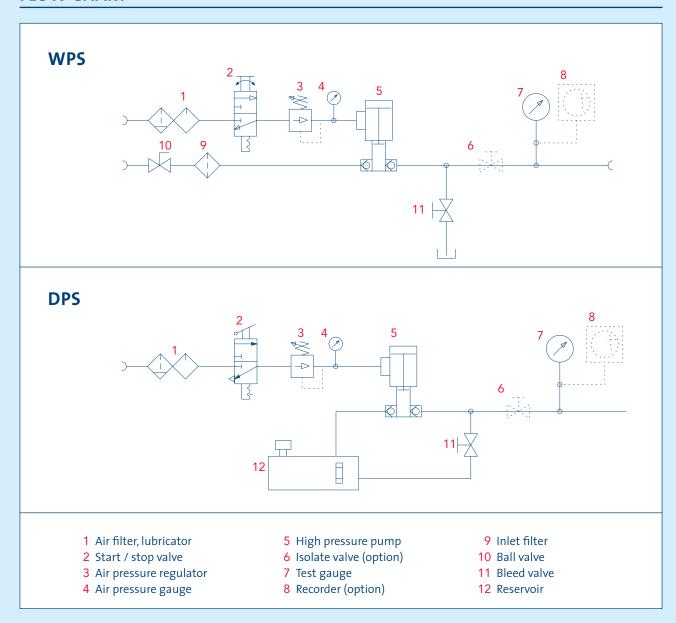
Furthermore, in case a reservoir is used, a float cock for connecting a powerpack to a tap water supply is available as an option.

Ordering code: F

## **CERTIFICATES**

The Resato portable powerpack is supplied with a test certificate for the complete unit, a calibration report for the test gauge and optional recorder, and an operating and maintenance manual.

## **FLOW CHART**





## **TYPE TABLE**

WPS/DPS	Туре		outlet ssure	Flow (L/min)		Recorder (Option)	Gauge	range	HP outlet connection	Other options	
		bar	psi	1	2	rev/hr	bar psi				
WPS/DPS	10	70	1025	26.3	50.0	$0 = \frac{1}{4} hr$	0 - 100	0 - 1000	А, В, С	I = Isolate valve	
WPS/DPS	20	140	2100	13.2	25.0	1 = 1 hr	0 - 160	0 - 2500	A, B, C		
WPS/DPS	30	200	2850	9.5	18.0	4 = 4 hrs	0 - 250	0 - 3000	А, В, С	F= Float cock in	
WPS/DPS	40	285	4100	6.4	12.2	8 = 8 hrs	0 - 400	0 - 5000	A, B, C	reservoir (DPS only)	
WPS/DPS	65	450	6400	4.2	8.0	24 = 24 hrs	0 - 600	0 - 8000	A, E		
WPS/DPS	115	800	11,400	2.4	4.5		0 - 1000	0 - 15,000	D, E	EX= ATEX version	
WPS/DPS	180	1245	17,800	1.5	2.9		0 - 1600	0 - 20,000	D, E		
WPS/DPS	255	1790	25,600	1.1	2.1		0 - 2000	0 - 30,000	D, E		
WPS/DPS	400 *	2800	40,000	0.7	1.3		0 - 3000	0 - 45,000	D		
WPS/DPS	520*	3655	52,200	0.5	0.9		0 - 4000	0 - 55,000	D		
DPS = with reservoir  WPS = with	The type of the unit indicates the pump ratio and thus the output pressure			acting	2 = double acting pump	Recorder with choice of chart revolutions	B = bar D= double	P = psi scale	A = 1/2" NPT Female B = 1/2" BSP Female C = 1/2" BSP Male hose connection D = M20x1,5 (female) for		
direct water feed					*not available for WPS/DPS 400 and 520			10 mm or 3/8" tubing E = 1/4" BSP Male hose connection			
ORDERING EXAMPLE											
DPS	-	115	-	1	-	R24	1	B /	D /	I / EX	

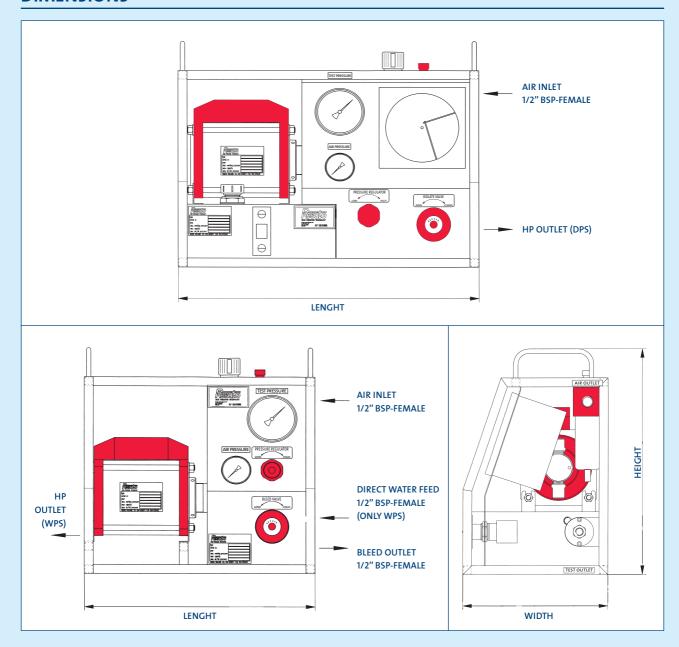
## **ATEX**

As an option, Resato air driven pumps can be delivered in a version that comply with ATEX 94/9/EC. The user of the unit is responsible for classifying the area of use, while

identifying the equipment category is the responsibility of the manufacturer. The Resato units are ATEX approved for Group II, category 2 zones G & D.



## **DIMENSIONS**



Powerpack Type	length (mm)				width (mm)				height (mm)	reservoir (DPS) (Liter)		weight (kg)			
	-1	-2	-R	-2-R	-1	-2	-R	-2-R		-1	-2	-1	-2	-R	-2-R
DPS-10	670	-	780	-	380	-	380	-	505	18	-	35	-	39	-
DPS-20 thru 520	515	670	670	780	325	380	325	380	505	11	18	33	38	37	42
WPS-10 thru 520	515	670	670	780	325	380	325	380	505	-	-	29	34	33	38



# EXAMPLES OF RESATO HIGH-PRESSURE COMPONENTS UP TO 14,000 BAR

Air-driven pumps and gas boosters
Hydraulically-driven pumps and gas boosters
Fittings
General-purpose valves
Check valves
Swivels
Hoses
Tubing
Pressure transducers
Rupture-disc safety devices
Quick connectors

## EXAMPLES OF RESATO HIGH-PRESSURE EQUIPMENT AND SYSTEMS

Portable pressure-test systems
Test equipment for hoses (safety) valves, fittings etc.
Computer-controlled high-pressure test equipment
Autofrettage systems
Autoclaves
Custom-made test equipment
Water-jet cutting systems
High-pressure food preservation systems
PC data aquisition and recording systems



## **COMPANY PROFILE RESATO**

Founded in 1985, Resato International B.V. is wholly specialized in the design and manufacture of high-pressure components and systems for pressures of up to 14,000 bar (200,000 psi). At our modern manufacturing plant in Roden, The Netherlands, we have our own engineering and R&D departments as well as sophisticated production facilities. These enable us to furnish precisely the right component or system a client may need.

## **RESATO INTERNATIONAL BV**



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Please note that general data and specifications given in this brochure are subject to change without notice.

Feel free to contact our sales department if you need more definite information.