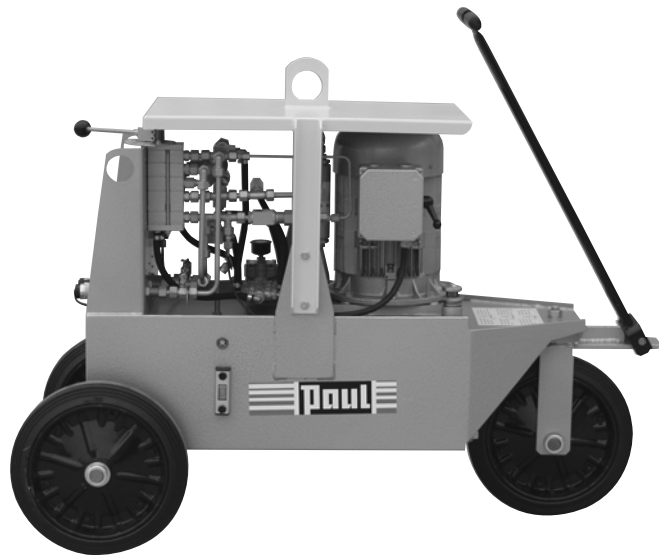


# Hydraulic Pump Unit Type 77-220.00



Maschinenfabrik GmbH & Co. KG



The hydraulic pump unit type 77-220.00 is suitable for the operation of all TENSA M stressing jacks (see brochure B 143.29/1).

It can also be used in conjunction with:

- Two-hose stressing jacks (brochure B 141.20/1)
- TENSA SM 240 kN stressing jack and TENSA 220 kN overstressing jack (brochure B 143.26/1)
- 300 kN twin stressing jacks (brochure B 141.23/1)
- Stressing jacks with hydraulic stressing grip if an additional control block is fitted.

Control is effected manually by means of a 5/4-way directional control valve.

## Functions

### Stressing

Pulling the prestressing wire/strand. The stressing pressure is infinitely variable between 0-650 bar.

### Zero position

The stressing pressure is maintained. The pump returns the oil under no pressure to the tank.

### Wedge-seating/lock-off

Seating of the anchor wedges within their tapered holes. The wedge seating pressure can be infinitely varied between 0-450 bar.

### Retraction

The retracting pressure is adjustable between 0-200 bar.

### Fine pressure release

An additional valve provides for releasing the stressing pressure, e.g. to detension an overstressed wire/strand.

## Technical Data

Drive	Three-phase motor, 1500 rpm for output and supply voltage, see Ordering Data "Motor group"
Pump	High-pressure radial-piston pump
Working pressure	max. 650 bar
Control	Manual with 5/4-way directional control valve, Functions: SP - 0 - V - R - fine pressure release * Pressure gauge connections M 16 x 2
Oil filling	See sheet B 541.01/2, total oil capacity approx. 90 l, useful oil capacity approx. 50 l
Dimensions (approx.)	1400 mm x 700 mm x 1080 mm (L x W x H) Wheel dia. 400 mm Weight 220 kg (without oil filling)
Manometer	600 bar, class 1.0

\* stressing (SP) - zero position (0) - wedge seating (V) - retraction (R)

## Ordering Data

			Order No.
Basic unit	(see circuit diagram 77-211 Bl. 22)		77-220.00
High-pressure pump	Delivery flow	5.8 / 11.6 l/min (manual change-over)	78-089.00
		3.7 / 7.4 l/min (manual change-over)	78-090.00
		7.4 l/min	78-090.10
Motor group (tropicalized)	400 V 50 Hz 7.5 kW	(motor 400 / 690 V, 50 Hz)	77-168.00
	346 V 50 Hz 7.5 kW	(motor 346 V, 50 Hz, delta)	77-168.01
	208 V 60 Hz 7.5 kW	(motor 208 V, 60 Hz, delta)	77-168.02
	460 V ± 10% 60 Hz 9.0 kW *	(motor 230 / 400 V +/- 10%, 50 Hz, 7.5 kW and 230 / 460 V +/- 10%, 60 Hz, 9.0 kW, 100% duty cycle)	77-168.03
	400 V 50 Hz 9.2 kW	(motor 400 / 660 V, 50 Hz for 5.8/11.6 l/min)	77-184.00
	* This motor can be connected on the terminal board for the voltages indicated! It is then also necessary to replace the protective motor switch insert!		
	for 230 V 50 Hz	(24-37 A)	24-267.08
	for 230 V 60 Hz	(24-37 A)	24-267.09
	for 400 V 50 Hz	(17.3-25 A)	24-266.23
	for 460 V 60 Hz	(17.3-25 A)	24-266.19
Spare parts kit	"medium" for basic unit and high-pressure pump		77-220.02
	"ample" for basic unit and high-pressure pump		77-220.03
	for Motor group	400 V 50 Hz	77-168.07
	for Motor group	400 V 50 Hz 9.2 kW	77-168.08
	for Motor group	460 V 60 Hz	77-168.09
Set of hydraulic couplings	PN 500 bar, ND 8 (1 x stressing socket SVM 3/8", 1 x wedge-seating socket T 3/8", 1 x retraction socket T 1/2")		77-134.39
	PN 700 bar, ND 8 (1 x stressing plug P 3010-3 3/8", 1 x wedge-seating socket P 3050-3 3/8", 1 x retraction socket P 3050-3 3/8")		77-134.40
Connection cable	0.7 m long, with 32 Amp Cekon power plug and coupling		77-168.05
	10.0 m long, with 32 Amp Cekon power plug (without coupling)		77-168.06
Test pressure gauge	600 bar, 160 dia., with storage case and measuring hose for M 16 x 2 x 1 m		77-179.00
Pneumatic tyres	(instead of Ø 400 solid rubber tyres)		77-138.12
Hydraulic hoses	PN 700, ND 10	5 m	13-070.21
		10 m	13-070.28
		Different lengths on inquiry.	