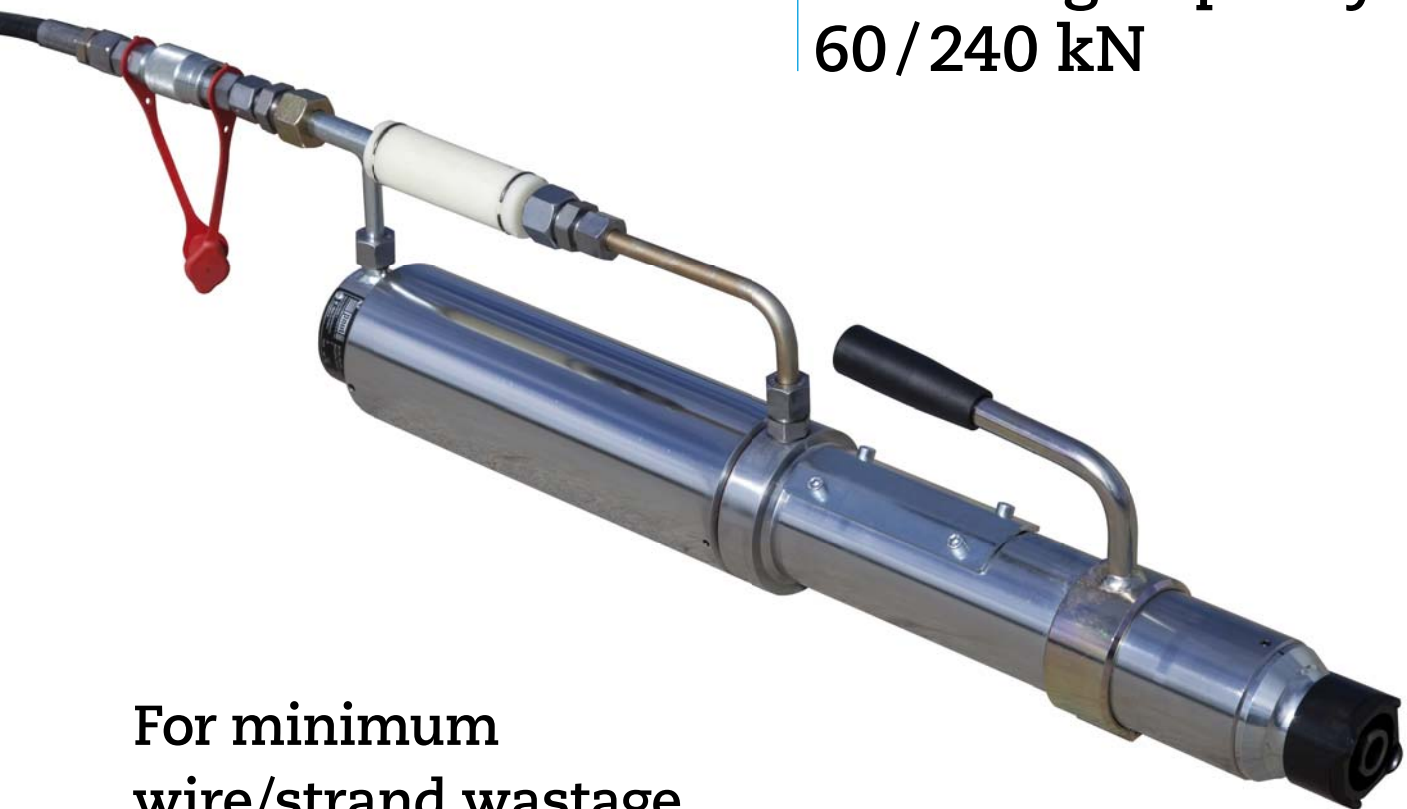


P R E S T R E S S E D
C O N C R E T E
T E C H N O L O G Y



Mini Stressing Jacks

Stressing Capacity
60 / 240 kN



For minimum
wire/strand wastage

Universal application



Fig. 1 240 kN mini stressing jack, 100 mm stroke with electrical manual control 72-546.01

These 60/200 kN mini stressing jacks are designed to suit every prestressing requirement – from the smallest precast concrete unit to the largest beam. Thanks to their low weight they are particularly suitable for use at frequently changing work places, such as construction sites, for stressing multi-strand tendons and anchors, erection and stressing of silos etc.

They are less suited where short prestressing beds are provided (shorter than approx. 10–15 m): In these cases preference should be given to stressing jacks equipped with hydraulic wedge-seating piston to keep wedge drawing to a minimum.

This jack model requires a shorter projecting prestressing steel length for attachment than our 60/160 kN mini stressing jacks (ref. 72-026.00 and 74-033.00, brochure B 141.21/1) and is fitted with more robust clamping jaws. The 60 kN jack also has a larger center hole. The 60/200 kN mini jacks described herein are, however, somewhat longer.

Suitable for all PAUL pump units

The 60/240 kN mini stressing jacks can be operated from both hand pumps and electric pumps. Generally they are used in conjunction with an electric mini pump unit (B 141.21/1), but they are suitable for connection to every PAUL pump.



Fig. 2 240 kN mini stressing jack, 100 mm stroke with stressing head, manual control 72-546.01 and mini pump unit 77-209.15

Easy to handle

The mini stressing jacks are easy to operate: The stressing stroke is actuated hydraulically and the retract operation of the stressing piston, the clamping jaws and wedge-seating piston are actuated via a spring.

The clamping jaws are inserted from the front after removing the stressing head and unscrewing the threaded part. The 60 kN mini stressing jack is fitted with type 34P and 34M clamping jaws and the 240 kN jack with type 38/8.5 (before type 42P) clamping jaws (see brochure 83-601 Bl. 1).



Fig. 3

Technical Data

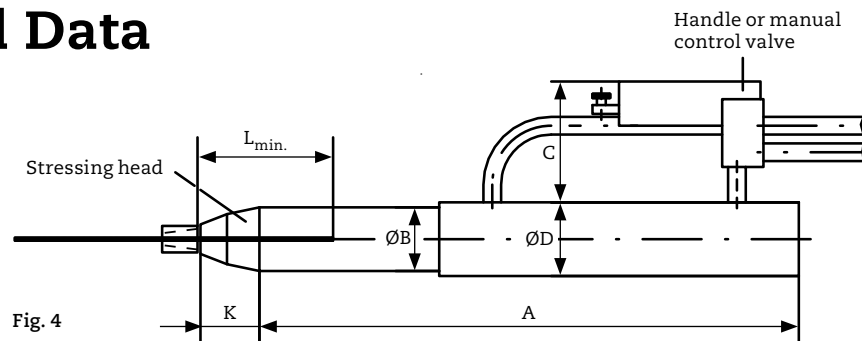


Fig. 4

Stressing jack kN	Stressing piston area cm ²	Stressing force without friction at 420/510* bar kN	Theoretical stressing speed in cm/s at pump delivery l/min.			Stroke mm	Weight without head kg	Dimensions mm				
			3.0	5.8	8.4			A	B	C	D	Center hole
60	16.7	70.1	3.0	5.8	8.3	30	9.5	520	60	115	70	14
60	16.7	70.1	3.0	5.8	8.3	100	11.5	650	60	115	70	14
200	47.13	198	1.06	2.05	2.9	100	19	660	76	115	98	17
240	47.13	240.4*	1.06	2.05	2.9	100	19	660	76	115	98	16.5
240	47.13	240.4*	1.06	2.05	2.9	200	23	1015	76	115	98	16.5

Ordering Data

Stressing jack			Spare parts kit
60 kN	Stroke 30 mm	72-027.01	72-027.02
60 kN	Stroke 100 mm	72-027.00	72-027.02
200 kN	Stroke 100 mm	74-036.00	74-036.08
240 kN	Stroke 100 mm	74-036.20	74-036.08
240 kN	Stroke 200 mm	74-036.10	74-036.08

Clamping jaws		
60 kN	Type 34P or Type 34M	see 83-601 Bl. 1
200 kN	Type 42P	see 83-601 Bl. 1
240 kN	Type 38/8.5	see 83-601 Bl. 1

Handle

Depending on the type of pump used, the mini jack is either equipped with a handle or a manual control valve. See Accessories for Different Connection Possibilities.

Stressing heads

Stressing jack kN	Anchor grip	Short	Long	Bore Ø mm	Connection dia of head adapter mm *)	Weight kg	K mm	L _{min.} mm	Order No.	Order No. Spare parts kit
60	A20.5	x		9	–	0.85	51	160	72-027.19	72-027.27
60	A24	x		9	–	0.85	51	160	72-027.20	72-027.27
60	A30-A50	x		14	50	1.10	51	160	72-027.21	72-027.28
60	A20.5-A38		x	9	33	1.60	162	260	72-027.22	72-027.29
60	A30-A38		x	14	33	1.60	162	260	72-027.23	72-027.30
60	A30-A50		x	14	50	2.10	163	260	72-027.24	72-027.30

Stressing heads for type 42P (type 74-036.00)

200	A30-A50	x		14	50	1.60	55	165	74-328.00	74-329.00
200	A30-A50	x		17	50	1.60	55	165	74-318.00	74-319.00
200	A20.5-A38		x	9	33	2.20	168	280	74-343.00	74-355.00
200	A20.5-A38		x	14	33	2.20	168	280	74-324.00	74-325.00
200	A30-A50		x	14	50	2.65	167	280	74-326.00	74-325.00
200	A30-A50		x	17	50	2.65	167	280	74-347.00	74-327.00

Stressing heads for type 38/8.5 (types 74-036.20, 74-036.10)

240	A30-A50	x		14	50	1.60	55	165	74-318.16	74-329.00
240	A30-A50	x		17	50	1.60	55	165	74-318.17	74-319.00
240	A30-A50		x	14	50	2.65	167	280	74-318.18	74-325.00
240	A30-A50		x	17	50	2.65	167	280	74-318.19	74-327.00

Notes: 60 kN stressing jacks are generally fitted with a short support head.
*) Additional head adapter as per brochure 10-790 Bl. 5 required.

Accessories for different connection possibilities

1) To hand pumps as per brochure B 592.01/1:

	Order No.
Handle	72-027.08
Hose, 2.5 m long	13-070.14
Hose, 10 m long	13-070.26

2) To mini pumps for hydraulic control, e.g. Types 77-122.00, 77-148.00 as per brochure B 131.11/1:

Hydraulic manual control valve incl. 2.5 m hoses, Order No.: 13-096.00

3) To mini pumps NG15 and NG30 for electric control, e.g. type 77-209.15 as per brochure B 131.11/1 and B 131.23/1:

a) Push-button switch for electric control in separate box

	Order No.
Handle	72-027.08
Hose	13-070.14
Electric manual control, 4-pole, cable length 2.5 m	72-547.00

b) Push-button switch for electric control located in handle. Electric manual control (4-pole, incl. 2.5 m hydr. hose)
Order No.: 72-546.01

4) Connection possibilities to large pumps, e.g. type 77-024.00, 77-043.00 etc. or electrically controlled mini pump 77-081.00 (see brochure B 103.03/6).

Wedge-release adapter for 60 kN stressing jack
This adapter is used in place of the stressing head for releasing wedges from their barrels.

Anchor grip	Weight kg	K mm	L _{min.} mm	Order No.
A20.5 and A30	0.6	15	110	72-027.12
A24 and A38	0.6	15	110	72-027.13

alternatively wedge releasing device as per B 140.20/1

Cutter head for 200 kN stressing jack
Mounted in place of the stressing head for cutting off single strands within the stressing recess

Weight kg	K mm	L _{min.} mm	Order No.
3.5	100	250	70-058.08
Cutting wedges (set)		0.5"	81-030.42
		0.6"	81-030.44
		0.7"	81-030.43
Spacer ring		0.6"	W 102.53