



**PC**

Pneumatic  
Torque Multiplier

## Applications

- **Continuous rotation**, tightening, or loosening for all heavy duty fastening connections.
- **Perfect for bolted applications** in hazardous, explosive environments.
- **alkitronic® PC-F** quick, compact torque multiplier for torques of 55 to 2,555 ft.lbs (75 to 3,460 Nm).
- **alkitronic® PC-S** comfortable torque multiplier with rotating handle for torques of 225 to 7,225 ft.lbs (305 to 9,795 Nm).
- **alkitronic® PC-F2** high-performance 2-gear machine for torques of 90 to 35,855 ft.lbs (120 to 48,610 Nm).

## Advantages

- **Permanently higher joint quality** (compared to impact and hydraulic wrenches) by continuous rotation of the square drive.
- **alkitronic® PC-S** - the 360 degree rotating handle ensures comfortable operation. Barely any reaction forces are transferred to the user.
- **alkitronic® PC-F2** with fast gear for turning in and simple, quick switching to power gear (is used for applying the final torque).

## alkitronic® specials

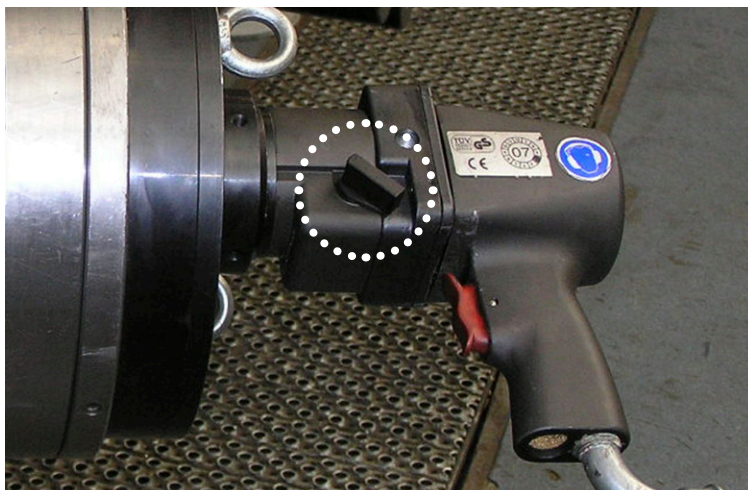
- **Simple 1-finger operation** for right/left rotation, option to enable the reaction to be locked in one position.
- **Robust cast aluminum housing** with proven pneumatic drive.
- **Proven high-performance gears**, produced in a chip-free, high-precision process produce high loads with low wear.
- **alkitronic® PC-F2** with uniquely high torque - 35,855 ft.lbs. (48,610 Nm).
- **Optional silencer levels** to reduce the noise from the motor exhaust on request.

## Specifications



On request, you will receive our pneumatic multipliers with **ATEX-Certification: II 2 G D c IIB T6**

Prerequisites for best work with the indicated torques are an operating pressure of 29-101 psi (2-7 bar) at a volumeflow of approx. 21.2-31.8 cfm (10-15 l/sec). The torque accuracy depends on the stability of the supply system.



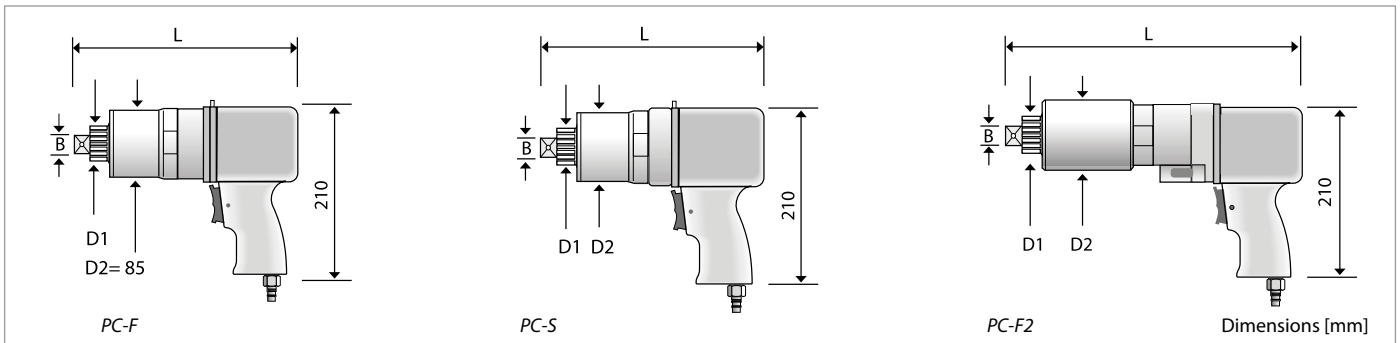
**alkitronic® PC-F2**, 2-gear pneumatic torque multiplier. Mechanically switchable from fast gear to power gear.

**alkitronic® PC-S** torque multipliers in use (figures on the right). Screw connections at a bolt circle and a diesel unit for large construction machines





## Technical Data



### Models PC-F

Type		PC-F 15	PC-F 25	PC-F 35	PC-F 45	PC-F 75	PC-F 95	PC-F 135	PC-F 175	PC-F 255	PC-F 315
Torque range (approx.)*	Nm	75-225	95-280	135-390	165-485	305-895	365-1080	495-1450	645-1900	910-2670	1180-3460
	ft.lbs	55-165	70-205	100-290	120-360	225-660	270-795	365-1070	475-1400	670-1970	870-2555
Square drive	B	1/2" / 3/4"	1/2" / 3/4"	3/4"	3/4"	3/4"	3/4"	1"	1"	1"	1"
Diameter (approx.)	D <sub>1</sub>	mm	41	41	41	41	41	54	54	54	54
Length (approx.)	L	mm	255	255	255	255	277	277	300	300	330
Weight without DMA (approx.)	kg	6	6	6	6	7	7	8	8	8.5	8.5
Idle speed	rpm	60	38	34	27	19	13	9	7	6	4

### Models PC-S

Type		PC-S 85	PC-S 105	PC-S 125	PC-S 175	PC-S 225	PC-S 280	PC-S 380	PC-S 580	PC-S 780	PC-S 980
Torque range (approx.)*	Nm	305-895	365-1080	495-1450	645-1900	910-2670	1180-3460	1490-4380	2080-6115	2610-7675	3330-9795
	ft.lbs	225-660	270-795	365-1070	475-1400	670-1970	870-2555	1100-3230	1535-4510	1925-5665	2460-7225
Square drive	B	3/4"	3/4"	3/4"	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Diameter (approx.)	D <sub>1</sub>	mm	41	41	41	54	54	54	72	72	91
Diameter (approx.)	D <sub>2</sub>	mm	85	85	85	85	85	85	98	109	173
Length (approx.)	L	mm	275	275	275	300	300	300	320	350	370
Weight without DMA (approx.)	kg	7	7	7	7	8.5	8.5	10.5	13	15	25
Idle speed	rpm	19	13	9	7	5	4	3	2	1.5	1

### Models PC-F2

Type		PC-F2/100	PC-F2/150	PC-F2/300	PC-F2/400	PC-F2/600	PC-F2/800	PC-F2/1000	PC-F2/3400	PC-F2/4800
Torque range 2nd gear (approx.)*	Nm	120-355	170-505	385-1130	540-1585	840-2470	1010-2965	1175-3455	3310-9720	4725-13890
	ft.lbs	90-260	125-375	285-835	400-1170	620-1820	745-2185	865-2550	2440-7170	3485-10245
Torque range 1st gear (approx.)*	Nm	380-1125	550-1615	1225-3595	1720-5055	2675-7865	3210-9435	3745-11010	11575-34025	16540-48610
	ft.lbs	280-830	405-1190	900-2650	1270-3730	1975-5800	2370-6960	2765-8120	8540-25100	12200-35855
Square drive	B	3/4"	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2 1/2"	2 1/2"
Diameter (approx.)	D <sub>1</sub>	mm	41	54	54	72	72	72	91	
Diameter (approx.)	D <sub>2</sub>	mm	85	85	85	98	109	133	173	
Length (approx.)	L	mm	330	330	360	380	410	410	430	
Weight without DMA (approx.)	kg	7	7.5	9	11	12	16	24	58	58
Idle speed 2nd gear	rpm	36	21	15	9	6	5	4		
Idle speed 1st gear	rpm	12	7	5	3	2	1.5	1	further details upon request	

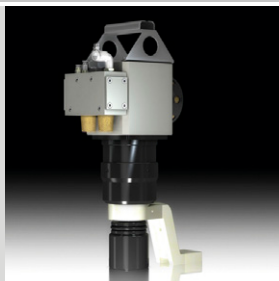
\*) When loosening a bolted connection, up to 20% higher torque may be required (loosening torque). We will gladly advise you with details.

### Product information

#### alkitronic® PV-F models

Pneumatic torque multipliers with remote control for multiple bolted connections and serial assembly in semi-automatic operation. Torques up to 2,555 ft.lbs (3,460 Nm).

We will gladly provide you with comprehensive information on this.



The torque control of the pneumatic alkitronic® torque multiplier takes place via the air supply or pressure regulator of the Maintenance Unit.

#### Accessories

Maintenance Unit, complete with filter, regulator, oiler and 5 m/16.4 ft hose, incl. couplings.



## YOUR PLUS FOR MORE PERFORMANCE

### Increased quality

Premium production  
Highest quality materials  
Long product life cycles  
Experience in bolting technology since 1984  
Made in Germany – international patents

### Increased precision

Precise, customer-specific torques  
High repeatability  
Reliability in permanent operation  
Documentation of tightening results  
Automatic shut-off

### Increased productivity

Quicker tightening without reworking  
No environmentally caused failures (IP54, ATEX)  
High work safety  
Easy to use: clear, simple instructions  
Low maintenance and cost efficient

### Better service

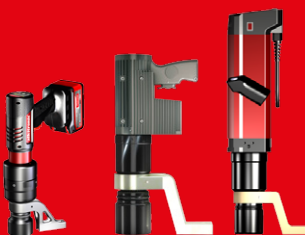
Technical advice on site  
Training offers  
Manufacturer's calibration and certification  
Lifecycle support  
Spare part and repair service

alki TECHNIK GmbH

Development, Production and Distribution of Bolting Systems

Unterlettenweg 4 – 85051 Ingolstadt/Germany – fon +49 841 97499-0 – fax +49 841 97499-90  
info@alkitronic.com – www.alkitronic.com

### EXTRACT FROM OUR PRODUCT RANGE



**alkitronic XE-SERIES**

THE ELECTRICS



**alkitronic XP-SERIES**

THE PNEUMATICS



**alkitronic XH-SERIES**

THE HYDRAULICS



**alkitronic XM-SERIES**

THE MANUALS