

Cylinders with stem controlled movement can stop at the desired working position, with the possibility of deciding when stem withdrawal is to take place by means of an electric

signal, in accordance with the application that is being executed.

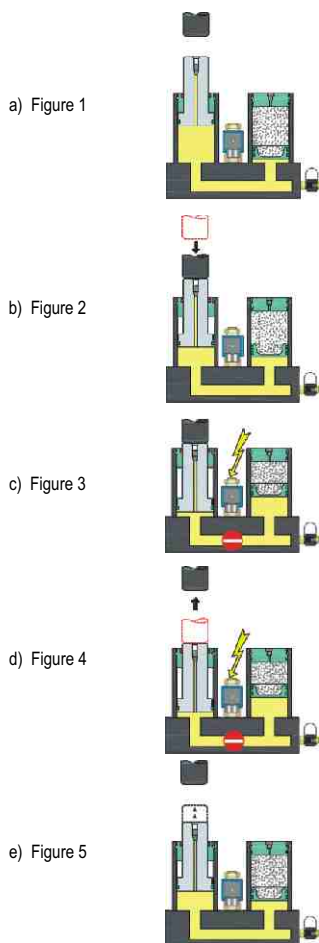
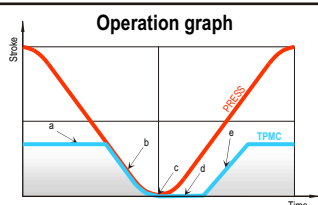
The complete set has the following elements:

- working cylinder
- pressure accumulator
- adaptor plate
- Hydraulic valve

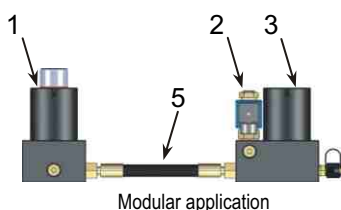
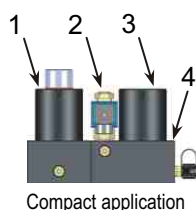
The adaptor plate lodges all the elements, communicating them one with another. The working cylinder, which is full of oil, is connected through the adaptor plate to the pressure accumulator. This is subjected in one of its parts to nitrogen gas pressure, thus providing pressure for the whole system. The accumulator has the capacity to absorb the whole of the volume of oil displaced by the working cylinder.

The working cylinder is activated by the movement of the press, displacing the hydraulic volume freely through the adaptor plate up to the pressure accumulator. Once the working stroke has been attained, the hydraulic valve, which is controlled by means of an electric signal, stops the return of hydraulic fluid from the accumulator to the working cylinder, with which the stem movement stops. When the hydraulic valve opens once again, the hydraulic volume returns to the working cylinder, thus bringing about the return of the stem to its stand-by position.

The pressure accumulator is regulated in accordance to pressure device norms, as it is charged with nitrogen gas at a pressure of 150 Bar.

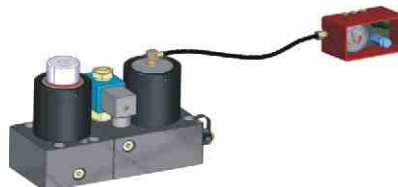


Components description



1. Working cylinder
2. Hydraulic valve
3. Pressure accumulation cylinder
4. Adaptation plate
5. Hydraulic hoses

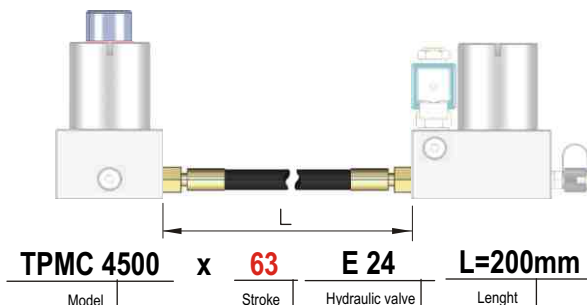
Example of an application of a compact version connected to a panel control



Example of an application of a modular version connected to a panel control

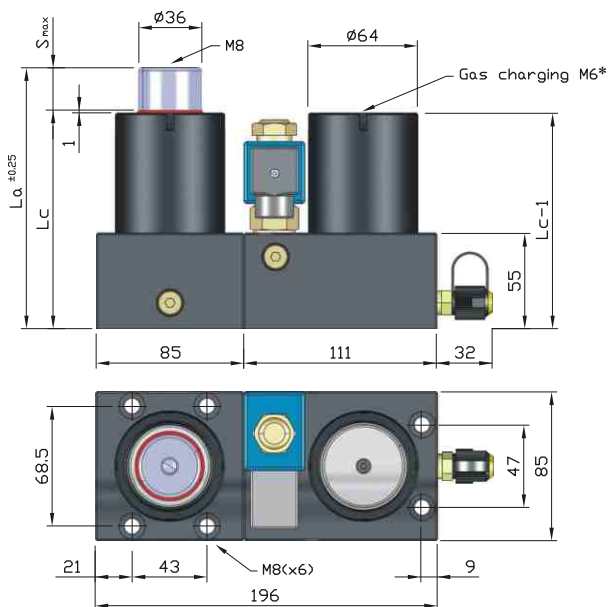


How to order an modular application



Model: TPMC 1500, TPMC 3000, TPMC 4500, TPMC 6500
Stroke: 12, 25, 38, 50, 63, 80, 100, 125 (other strokes under order)
Hydraulic valve : E 24, E 110, E 220
Length: distance between modules (min. 175mm)

TPMC 1500



* The TPMC 1500 model is also available equipped with RMF-D. When placing an order, please indicate the reference: TPMC 1500x ... C

Pressure medium	Nitrogen Gas (N₂)
Max. charging pressure	150 Bar
Min. charging pressure	50 Bar
Min. charging pressure	150 Bar
Rod seal area	10,18 cm²
Max. working temperature	60°C
Force increase by temperature	0,33% / 1°C
Max. stem speed	10 m/min

Model	S max mm	La mm	Lc mm	Fa daN	Fc daN
TPMC 1500x12	12	124	112	1500 (±5%)	1715
TPMC 1500x25	25	150	125		1875
TPMC 1500x38	38	176	138		2000
TPMC 1500x50	50	200	150		2100
TPMC 1500x63	63	226	163		2190
TPMC 1500x80	80	260	180		2285
TPMC 1500x100	100	300	200		2375
TPMC 1500x125	125	350	225		2465

Hydraulic valve	Supply voltage	Power consumption
E 24	24V DC	17w
E 110	110V AC	17w
E 220	220V AC	17w

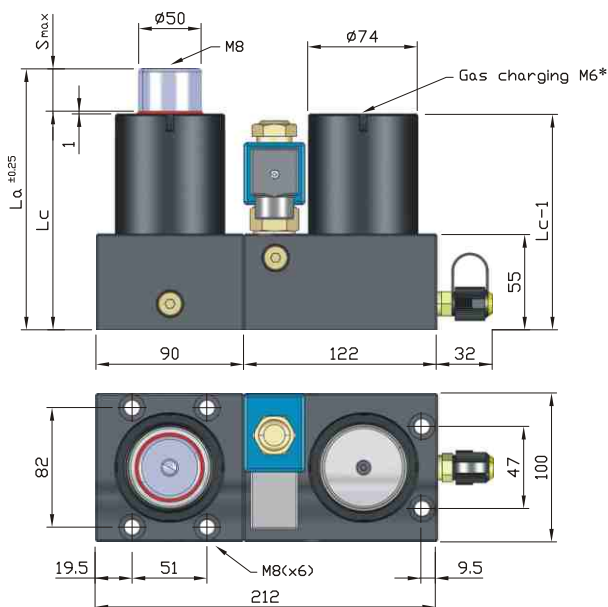
Required data:

Working stroke(mm)

Press speed(m/min)

Maximum press rate(strokes/min)

TPMC 3000



* The TPMC 3000 model is also available equipped with RMF-D. When placing an order, please indicate the reference: TPMC 3000x ... C

Pressure medium	Nitrogen Gas (N₂)
Max. charging pressure	150 Bar
Min. charging pressure	50 Bar
Min. charging pressure	150 Bar
Rod seal area	19,63 cm²
Max. working temperature	60°C
Force increase by temperature	0,33% / 1°C
Max. stem speed	10 m/min

Model	S max mm	La mm	Lc mm	Fa daN	Fc daN
TPMC 3000x12	12	129	117	3000 (±5%)	3360
TPMC 3000x25	25	155	130		3740
TPMC 3000x38	38	181	143		4065
TPMC 3000x50	50	205	155		4320
TPMC 3000x63	63	231	168		4560
TPMC 3000x80	80	265	185		4835
TPMC 3000x100	100	305	205		5100
TPMC 3000x125	125	355	230		5380

Hydraulic valve	Supply voltage	Power consumption
E 24	24V DC	17w
E 110	110V AC	17w
E 220	220V AC	17w

Required data:

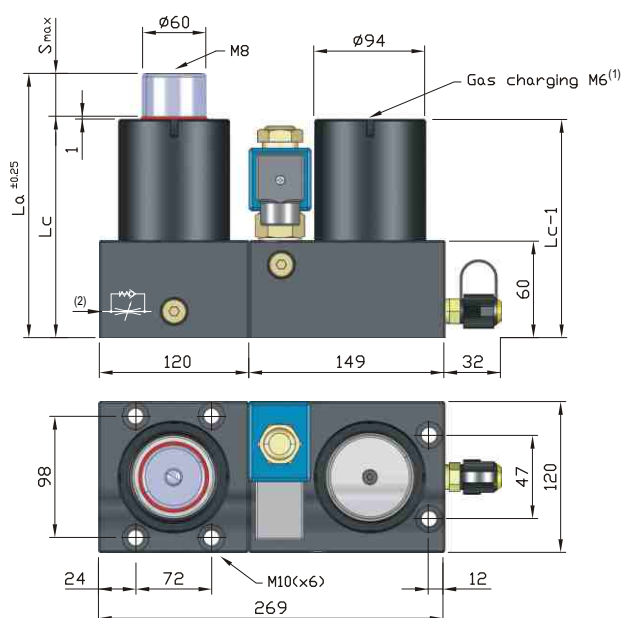
Working stroke(mm)

Press speed(m/min)

Maximum press rate(strokes/min)

TPMC 4500

PED
97/23/CE



1. The TPMC 4500 model is also available equipped with RMF-D. When placing an order, please indicate the reference: TPMC 4500x... C
2. Flow regulator for controlling stem expansion speed.

Pressure medium	Nitrogen Gas (N₂)
Max. charging pressure	150 Bar
Min. charging pressure	50 Bar
Min. charging pressure	150 Bar
Rod seal area	28,27 cm²
Max. working temperature	60°C
Force increase by temperature	0,33% / 1°C
Max. stem speed	10 m/min

Model	S max mm	La mm	Lc mm	Fa daN	Fc daN
TPMC 4500x12	12	140	128	4500 (±5%)	4710
TPMC 4500x25	25	166	141		5130
TPMC 4500x38	38	192	154		5490
TPMC 4500x50	50	216	166		5775
TPMC 4500x63	63	242	179		6040
TPMC 4500x80	80	276	196		6340
TPMC 4500x100	100	316	216		6635
TPMC 4500x125	125	366	241		6935

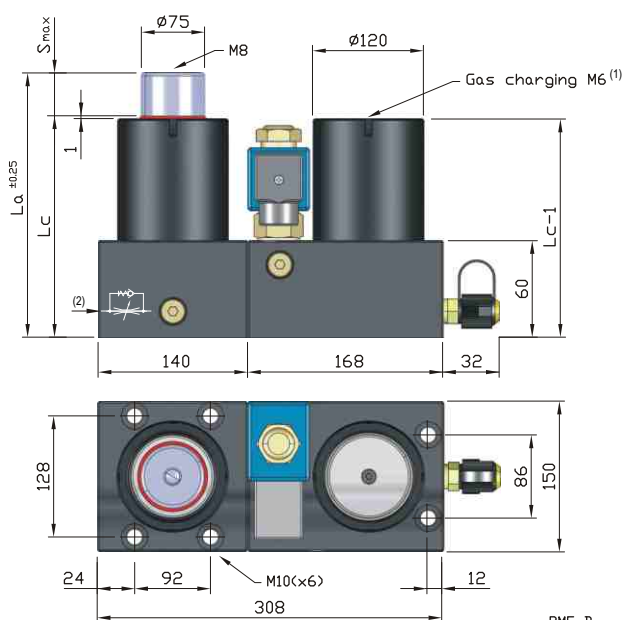
Hydraulic valve	Supply voltage	Power consumption
E 24	24V DC	17w
E 110	110V AC	17w
E 220	220V AC	17w

Required data:

Working stroke(mm)
 Press speed(m/min)
 Required gas spring expansion speed(m/min)
 Maximum press rate(strokes/min)

TPMC 6500

PED
97/23/CE



1. The TPMC 6500 model is also available equipped with RMF-D. When placing an order, please indicate the reference: TPMC 6500x... C
2. Flow regulator for controlling stem expansion speed.

Pressure medium	Nitrogen Gas (N₂)
Max. charging pressure	150 Bar
Min. charging pressure	50 Bar
Min. charging pressure	150 Bar
Rod seal area	44,18 cm²
Max. working temperature	60°C
Force increase by temperature	0,33% / 1°C
Max. stem speed	10 m/min

Model	S max mm	La mm	Lc mm	Fa daN	Fc daN
TPMC 6500x12	12	152	140	6500 (±5%)	7280
TPMC 6500x25	25	178	153		7885
TPMC 6500x38	38	204	166		8405
TPMC 6500x50	50	228	178		8825
TPMC 6500x63	63	254	191		9220
TPMC 6500x80	80	288	208		9640
TPMC 6500x100	100	328	228		10120
TPMC 6500x125	125	378	253		10585

Hydraulic valve	Supply voltage	Power consumption
E 24	24V DC	17w
E 110	110V AC	17w
E 220	220V AC	17w

Required data:

Working stroke(mm)
 Press speed(m/min)
 Required gas spring expansion speed(m/min)
 Maximum press rate(strokes/min)