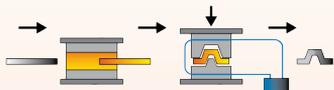
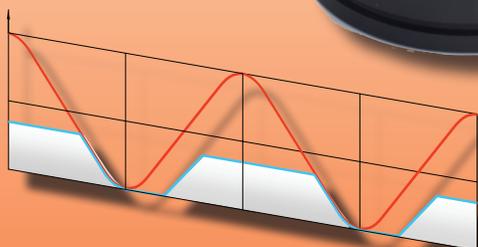




HOT STAMPING



COLD STAMPING



STOP CYLINDER

STOP CYLINDER

TPSR

TPSRS

TPNS

TPHT



Monobloc stop-cylinders

Code	Strokes mm	Fa daN					
TPCM 1500	50 - 125	1500	✓	✓	✓	✓	✓
TPCM 2400	50 - 125	2400	✓	✓	✓	✓	✓
TPCM 3000	50 - 125	3000	✓	✓	✓	✓	✓
TPCM 4500	50 - 125	4500	✓	✓	✓	✓	✓
TPCM 7500	50 - 125	7500	✓	✓	✓	✓	✓



i

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.

MICRO

TITAN

The new format holds all elements in a single monoblock. 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.

TPH

TPS

The working cylinder is activated by the movement of the press, displacing the hydraulic volume freely through the active cylinder 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.

TPSP

TPF

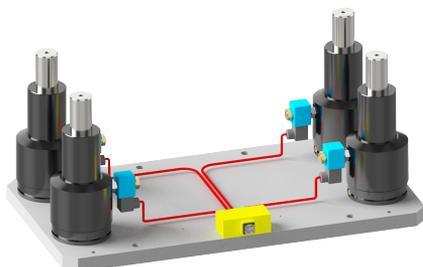
TPK

The pressure accumulator is regulated in accordance to Pressure Equipment Directive, as it is charged with nitrogen gas at a maximum pressure of 150 Bar.

TPC

TPR

Example of an application in autonomous working



TPB

TPHC

TPA

TPG

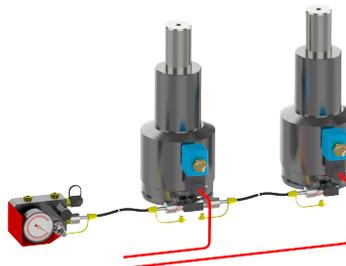
TPCT

TPSL

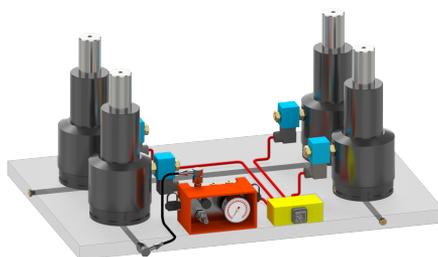
STOP
CYLINDER



Example of an application connected to a control panel



Example of Eco Manifold working application



Advanced Features

- ✓ Fulfills European Pressure Equipment Directive 
- ✓ VDI safety features 
- ✓ Monoblock size format
- ✓ Stoppable at any stage of the working stroke
- ✓ High Frequency
- ✓ No cooling system required
- ✓ Commanded by electrical signal
- ✓ Slow return speed (≈ 10 m/min)
- ✓ Application: Self-contained, hoses and eco-manifold
- ✓ Long service-life without maintenance
- ✓ Very easy mounting on the tool
- ✓ Total synchronization in stem expansion
- ✓ It can work in every position and angle
- ✓ Supply voltage: 24V DC, 110V AC, 220V AC

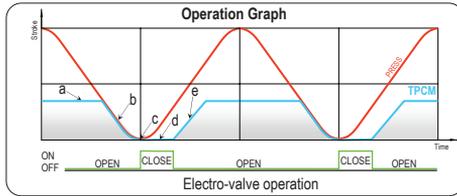


Figure a

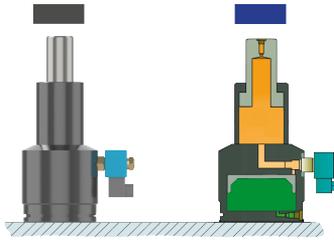
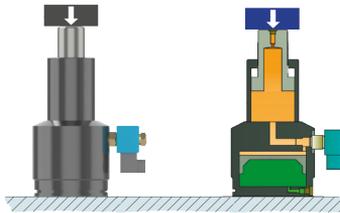


Figure b



STOP (1% to 90% Smax)

Figure c

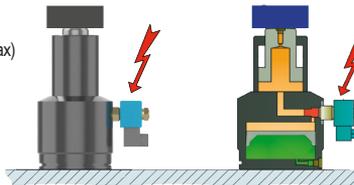


Figure d

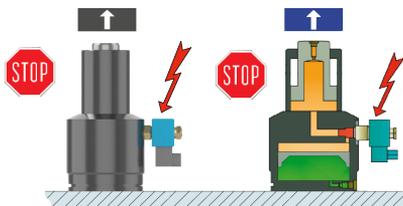
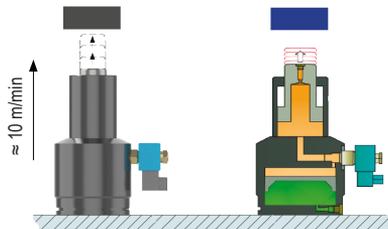


Figure e



STOP CYLINDER

STOP CYLINDER

TPSR

TPSRS

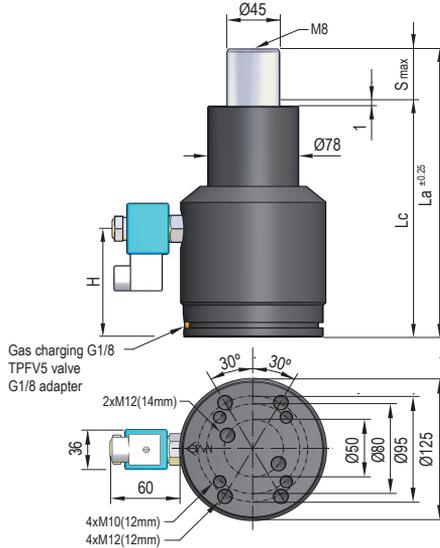
TPNS

TPHT



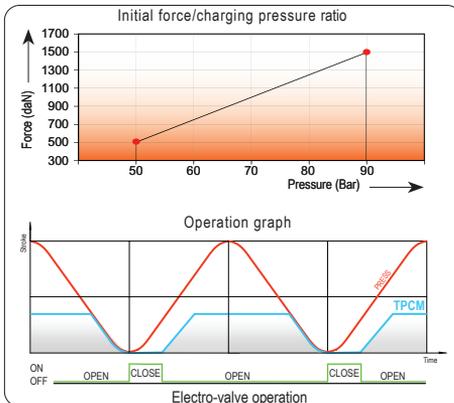


VDI SAFETY



Code	Smax mm	La mm	Lc mm	H mm	Fa daN	90% F daN	100% Fc daN	P Bar
TPCM 1500x50	50	245	195	83,5		1905	1980	
TPCM 1500x75	75	307	232	95,5	1500 ±5%	2000	2080	90
TPCM 1500x100	100	365	265	103,5	(20°C)	2110	2230	(20°C)
TPCM 1500x125	125	425	300	113,5		2175	2310	

(Other strokes under order)



	Gas Nitrógeno (N ₂) / Oil
Max. charging pressure	90 Bar
Min. charging pressure	50 Bar
Rod seal area	15,90 cm ²
Operating temperature	0°C - 60°C
Force increase by temperature	0,33 %/°C
Max. stem speed	0,4 m/s
Max. recommended strokes/min	10 - 30* spm
Hydraulic valve	24 VDC / 21w

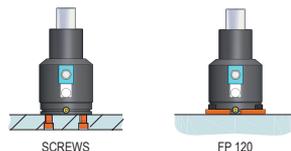


Required information

Working stroke	(mm)
Press speed	(m/min)
Maximum production rate	(spm)
Working pressure	(bar)

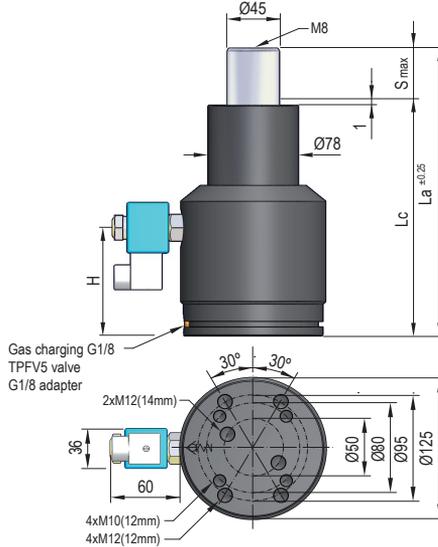
* Maximum rate will depend on working parameters

Assembly possibilities



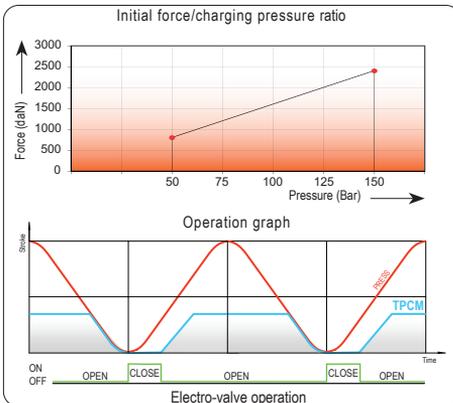


VDI SAFETY



Code	S_{max} mm	L_a mm	L_c mm	H mm	Fa daN	90% F daN	100% Fc daN	P Bar
TPCM 2400x50	50	245	195	83,5		3180	3300	
TPCM 2400x75	75	307	232	95,5	2400 $\pm 5\%$	3320	3470	150
TPCM 2400x100	100	365	265	103,5	(20°C)	3520	3715	(20°C)
TPCM 2400x125	125	425	300	113,5		3630	3850	

(Other strokes under order)

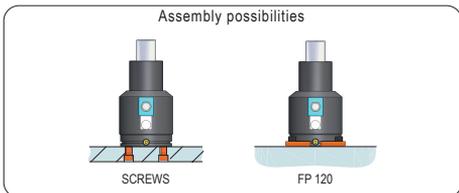


Pressure medium	Gas Nitrógeno (N ₂) / Oil
Max. charging pressure	150 Bar
Min. charging pressure	50 Bar
Rod seal area	15,90 cm ²
Operating temperature	0°C - 60°C
Force increase by temperature	0,33 %/°C
Max. stem speed	0,4 m/s
Max. recommended strokes/min	8 - 20* spm
Hydraulic valve	24 VDC / 21w



Required information	
Working stroke	(mm)
Press speed	(m/min)
Maximum production rate	(spm)
Working pressure	(bar)

* Maximum rate will depend on working parameters



STOP CYLINDER

STOP CYLINDER

TPSR

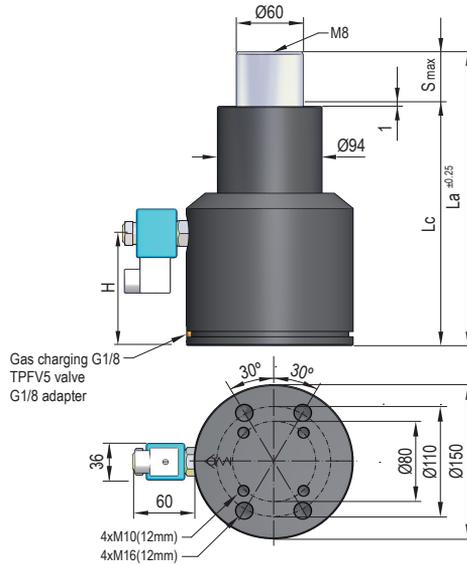
TPSRS

TPNS

TPHT

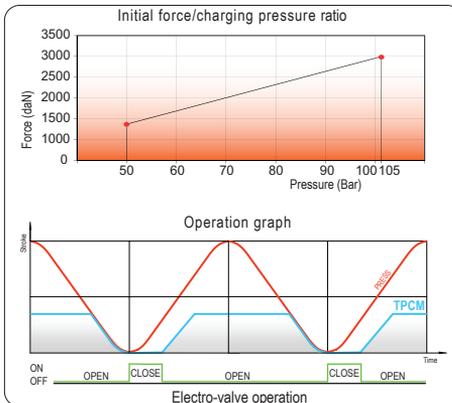


VDI SAFETY



Code	Smax mm	La mm	Lc mm	H mm	Fa daN	90% F daN	100% Fc daN	P Bar
TPCM 3000x50	50	258	208	88,5		4065	4240	
TPCM 3000x75	75	320	245	100,5	3000 ±5% (20°C)	4330	4560	105
TPCM 3000x100	100	382	282	112,5		4515	4795	(20°C)
TPCM 3000x125	125	444	319	124,5		4655	4965	

(Other strokes under order)



Pressure medium Gas Nitrógeno (N₂) / Oil

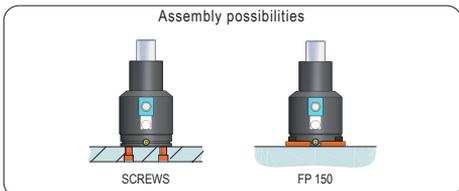
Max. charging pressure	105 Bar
Min. charging pressure	50 Bar
Rod seal area	28,27 cm ²
Operating temperature	0°C - 60°C
Force increase by temperature	0,33 %/°C
Max. stem speed	0,5 m/s
Max. recommended strokes/min	10 - 25* spm
Hydraulic valve	24 VDC / 21w



Required information

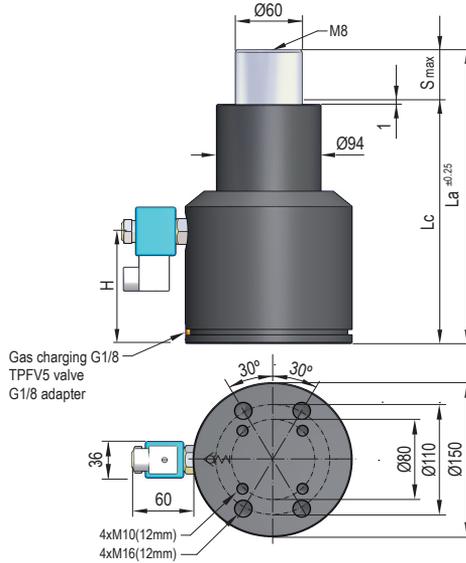
Working stroke	(mm)
Press speed	(m/min)
Maximum production rate	(spm)
Working pressure	(bar)

* Maximum rate will depend on working parameters



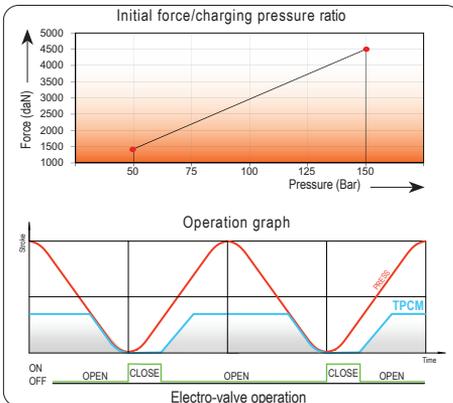


VDI SAFETY



Code	S_{max} mm	L_a mm	L_c mm	H mm	Fa daN	90% F daN	100% Fc daN	P Bar
TPCM 4500x50	50	258	208	88,5		5810	6060	
TPCM 4500x75	75	320	245	100,5	4500 \pm 5% (20°C)	6185	6518	150
TPCM 4500x100	100	382	282	112,5		6450	6845	(20°C)
TPCM 4500x125	125	444	319	124,5		6650	7095	

(Other strokes under order)



Pressure medium	Gas Nitrógeno (N ₂) / Oil
Max. charging pressure	150 Bar
Min. charging pressure	50 Bar
Rod seal area	28,27 cm ²
Operating temperature	0°C - 60°C
Force increase by temperature	0,33 %/°C
Max. stem speed	0,5 m/s
Max. recommended strokes/min	8 - 20* spm
Hydraulic valve	24 VDC / 21w

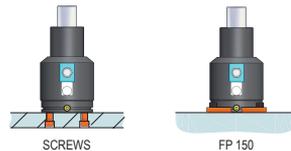


Required information

Working stroke	(mm)
Press speed	(m/min)
Maximum production rate	(spm)
Working pressure	(bar)

* Maximum rate will depend on working parameters

Assembly possibilities



STOP CYLINDER

STOP CYLINDER

TPSR

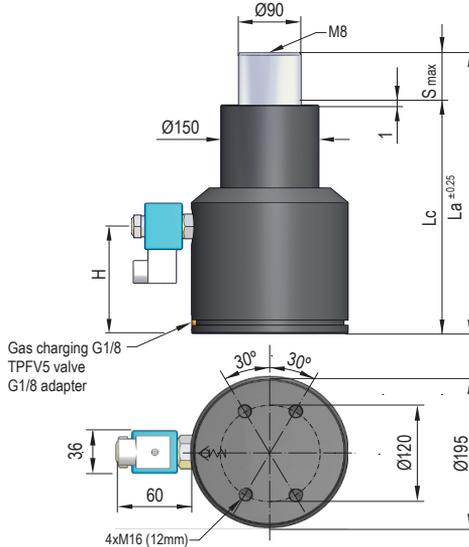
TPSRs

TPNS

TPHT

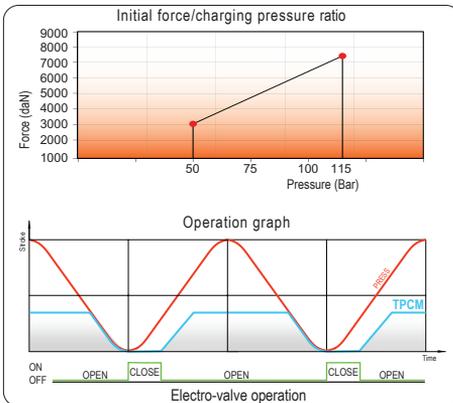


VDI SAFETY



Code	Smax mm	La mm	Lc mm	H mm	Fa daN	90% F daN	100% Fc daN	P Bar
TPCM 7500x50	50	294	244	99		9625	9975	
TPCM 7500x75	75	359	284	114	7500 ±5%	10160	10620	115
TPCM 7500x100	100	424	324	129	(20°C)	10535	11075	(20°C)
TPCM 7500x125	125	489	364	144		10810	11415	

(Other strokes under order)



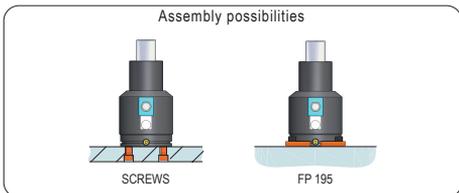
i Pressure medium **Gas Nitrógeno (N₂) / Oil**

Max. charging pressure	115 Bar
Min. charging pressure	50 Bar
Rod seal area	63,62 cm ²
Operating temperature	0°C - 60°C
Force increase by temperature	0,33 %/°C
Max. stem speed	0,5 m/s
Max. recommended strokes/min	4 - 12* spm
Hydraulic valve	24 VDC / 21w

Required information

Working stroke	(mm)
Press speed	(m/min)
Maximum production rate	(spm)
Working pressure	(bar)

* Maximum rate will depend on working parameters





Type 1 Standard Version

Cylinders applied in working environments with low pollution risk

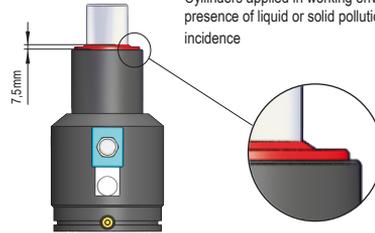


How to order

TPCM 1500	x 50	- E24	- C	- 1
Model	Stroke	Hydraulic valve	C- Linked system NC - Self contained	Standard Version

Type 2 Shield-Scraper Version

Cylinders applied in working environments with presence of liquid or solid pollution at medium incidence

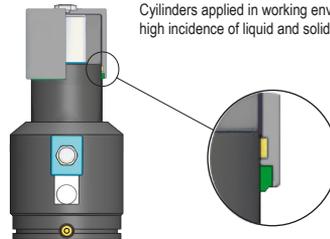


How to order

TPCM 1500	x 50	- E24	- C	- 2
Model	Stroke	Hydraulic valve	C- Linked system NC - Self contained	Shield-Scraper Version

Type 3 Sealing Cap Version

Cylinders applied in working environments with high incidence of liquid and solid pollution

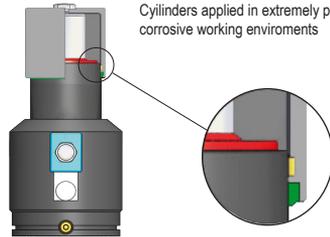


How to order

TPCM 1500	x 50	- E24	- C	- 3
Model	Stroke	Hydraulic valve	C- Linked system NC - Self contained	Sealing Cap Version

Type 4 Shield-Scraper + Sealing Cap Version

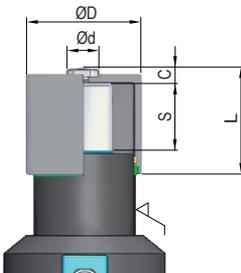
Cylinders applied in extremely polluted or corrosive working environments



How to order

TPCM 1500	x 50	- E24	- C	- 4
Model	Stroke	Hydraulic valve	C- Linked system NC - Self contained	Shield-Scraper Sealing Cap Version

Protection Cap details



Stop-cylinder model	ØD mm	Ød mm	L mm	C mm
TPCM 1500 / TPCM 2400	91	35	28,5 + S	11
TPCM 3000 / TPCM 4500	108	35	30,5 + S	13

STOP CYLINDER

STOP CYLINDER

TPSR

TPSR5

TPNS

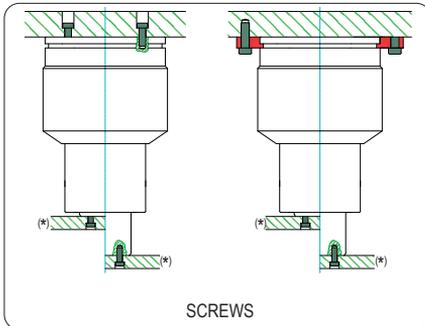
TPHT



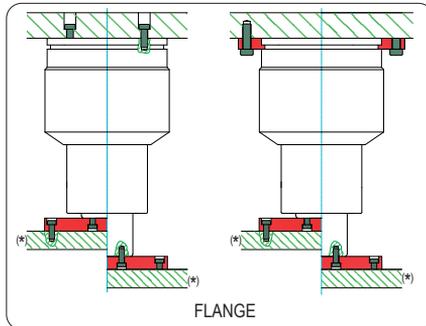


i

Stem Fixed Option



SCREWS



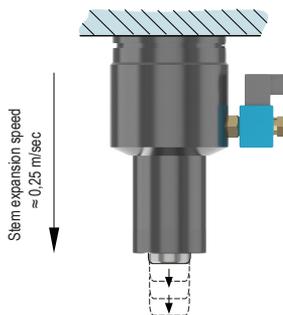
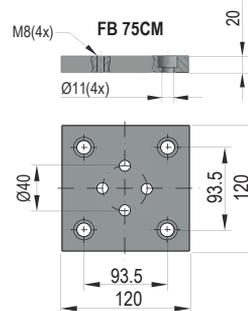
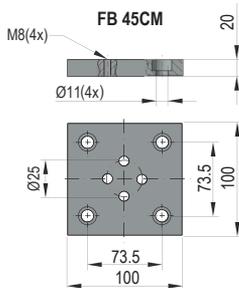
FLANGE

(*) Blank Holder

Model	Stem Fixed Holes	Fixed with Flange	Max. Stem Weight Support
TPCM 1500	2 X M8 Ø 20	FB 45CM	225 Kg
TPCM 2400			360 Kg
TPCM 3000	4 X M8 Ø 40	FB 75CM	450 Kg
TPCM 4500			600 Kg

STOP
CYLINDER

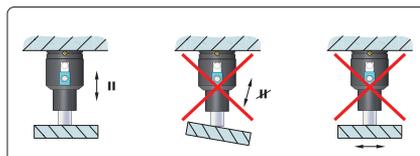
Flanges



How to order

TPCM 1500 x 50BH

Model Stroke





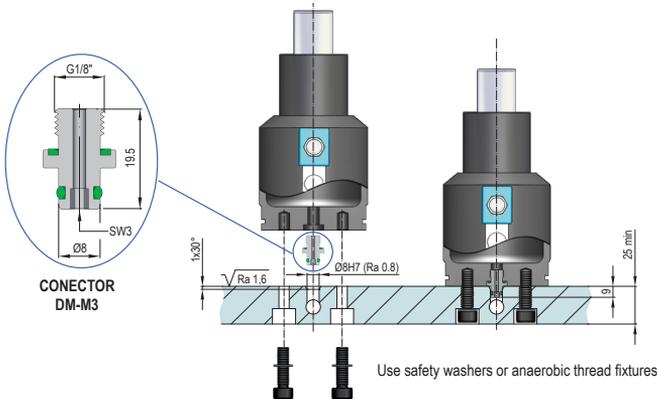
Eco Manifold version



How to order

TPCM 1500	DM	x 50
Model	Eco Manifold Version	Stroke

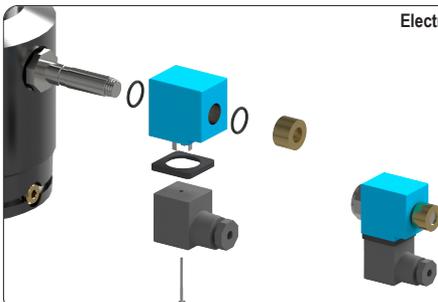
Eco Manifold DM-M3



CONECTOR DM-M3

Use safety washers or anaerobic thread fixtures

Electrovalve detail



Optional Hydraulic valves - Technical information

Valve Code	E 24	E 110	E 220
Supply voltage	24 VDC	110 VAC	220 VAC
Power consumption	21w	21w	21w
Protection Class	IP65	IP65	IP65
Fatigue cycle life	2x10 ⁶	2x10 ⁶	2x10 ⁶

STOP CYLINDER

STOP CYLINDER

TPSR

TPSRS

TPNS

TPHT

