



PED
2014/68/UE



**COMPACT
EXTRA POWER**

TITAN

TPH

TPS

TPSP

TPF

TPK

TPC

TPCT

TPB

TPR

TPA

TPG

TPSR

TPSRS

TPNS

STOP
CYLINDER






HOT
FORMING

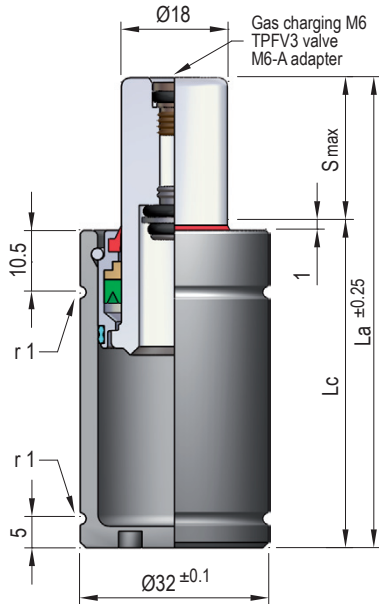
TPHT

TPSL



Extra force and extremely compact gas springs

Code	ØBody mm	Strokes mm	 Fa daN		 ACTIVE SAFETY		
TITAN 32	32	12 - 80	500	✓	✓		✓
TITAN 38	38	16 - 80	750	✓	✓		✓
TITAN 50	50	13 - 80	1200	✓	✓		✓
TITAN 63	63	13 - 80	2100	✓	✓		✓
TITAN 75	75	12 - 80	3000	✓	✓		✓



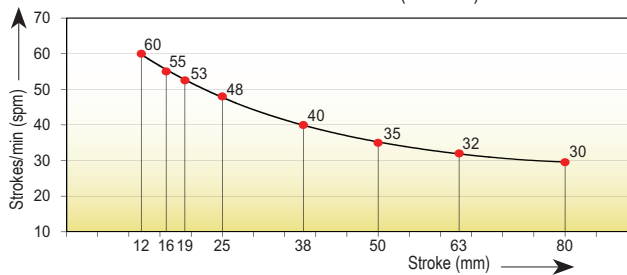
Pressure medium	Gas Nitrógeno (N ₂)
Max. charging pressure	190 Bar
Min. charging pressure	25 Bar
Rod seal area	2,54 cm ²
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	1,2 m/s
Maintenance kit	Kit T32



VDI SAFETY

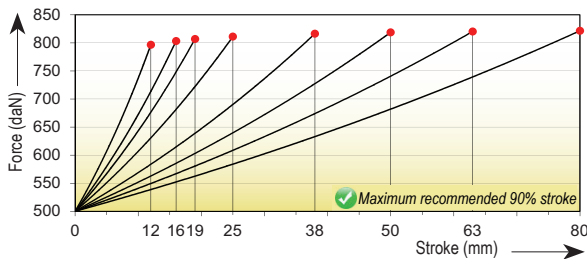


Maximum strokes / minute (at 20°C)

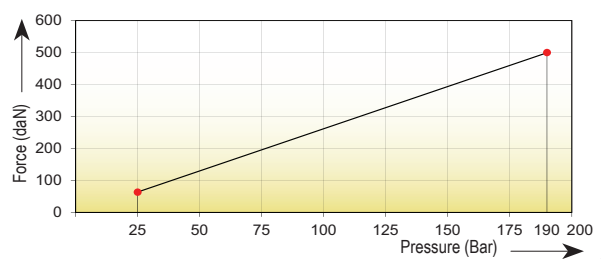


Code	Smax mm	La mm	Lc mm	Fa daN	90% F daN	100% Fc daN	P Bar	V l	Kg
TITAN 32x12	12	49	37	500 ±5% (20°C)	755	800	190 (20°C)	0,008	0,19
TITAN 32x16	16	58	42		760	805		0,011	0,21
TITAN 32x19	19	65	46		760	810		0,013	0,22
TITAN 32x25	25	76	51		765	815		0,017	0,24
TITAN 32x38	38	102	64		770	820		0,025	0,27
TITAN 32x50	50	127	77		770	820		0,033	0,30
TITAN 32x63	63	152	89		775	825		0,041	0,34
TITAN 32x80	80	186	106		775	825		0,052	0,41

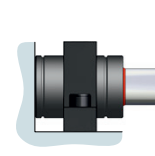
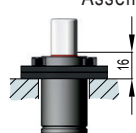
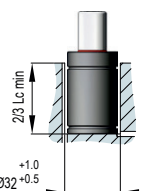
Force/stroke ratio



Initial force/charging pressure ratio



Assembly possibilities



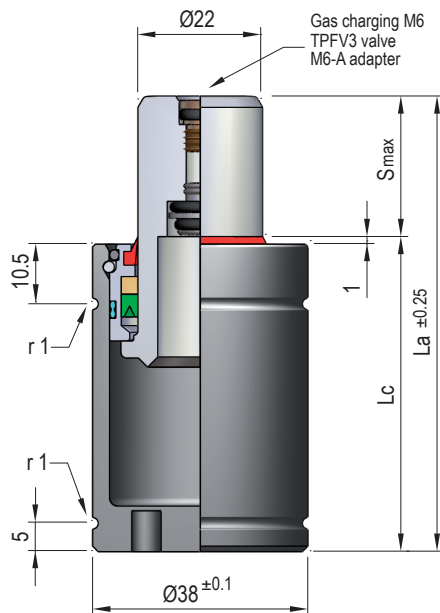
FS 32 · FS 32/1 · FSC 32

FS 32 · FS 32/1 · FSC 32

FI 32 · FI 32/1

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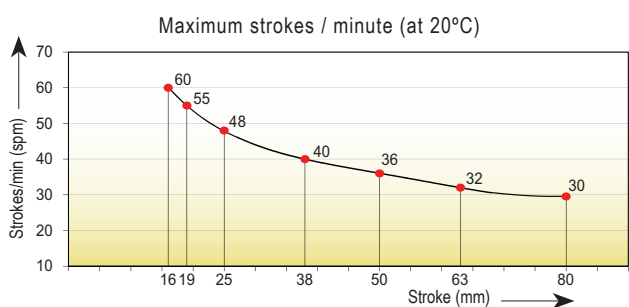
**COMPACT
EXTRA POWER**



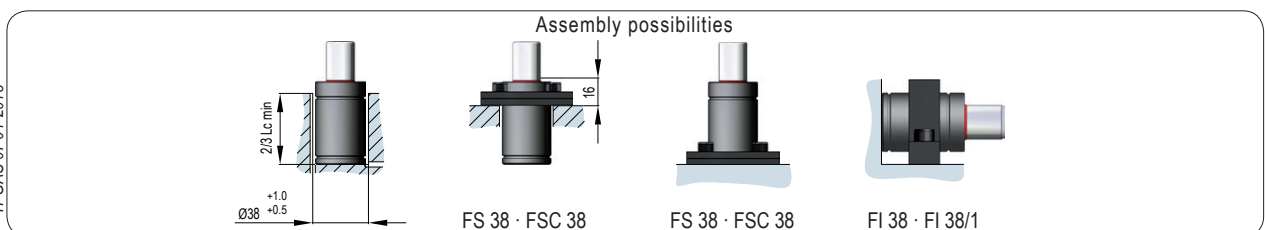
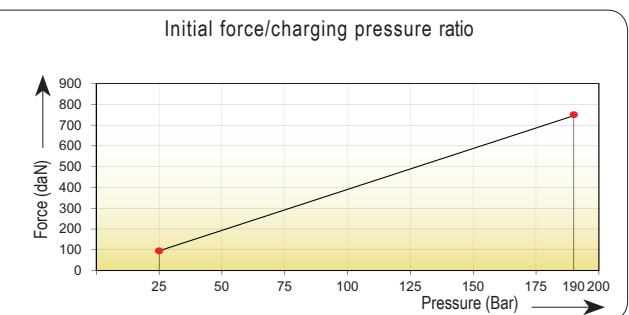
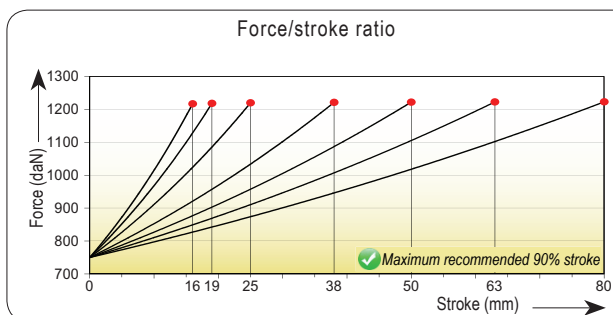
i Pressure medium	Gas Nitrógeno (N ₂)
Max. charging pressure	190 Bar
Min. charging pressure	35 Bar
Rod seal area	3,80 cm ²
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	1,2 m/s
Maintenance kit	Kit T38



VDI SAFETY



Code	Smax mm	La mm	Lc mm		Fa daN		F daN		Fc daN		P Bar	V l		Kg
TITAN 38x16	16	58	42	750 ±5% (20°C)	1145		1145		1215		190 (20°C)	0,016		0,27
TITAN 38x19	19	65	46				1145		1215			0,019		0,30
TITAN 38x25	25	78	53				1145		1220			0,025		0,32
TITAN 38x38	38	102	64				1145		1220			0,037		0,35
TITAN 38x50	50	127	77				1150		1220			0,049		0,39
TITAN 38x63	63	152	89				1150		1220			0,062		0,42
TITAN 38x80	80	186	106				1150		1220			0,079		0,51



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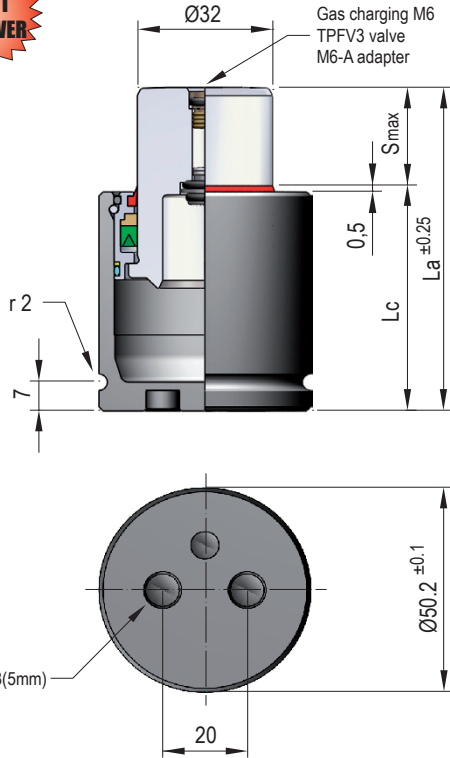
STOP
CYLINDER

HOT
FORMING

TPHT

TPSL





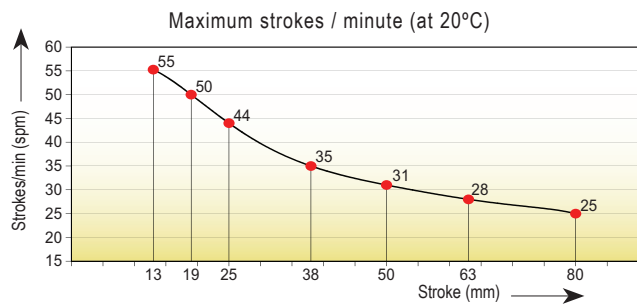
Pressure medium	Gas Nitrógeno (N ₂)
Max. charging pressure	150 Bar
Min. charging pressure	50 Bar
Rod seal area	8,04 cm ²
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	0,8 m/s
Maintenance kit	Kit T50



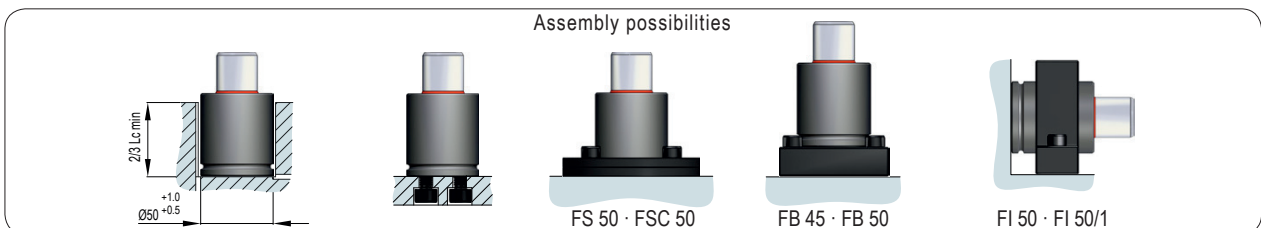
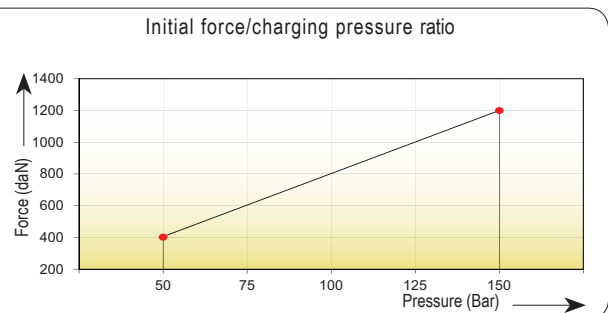
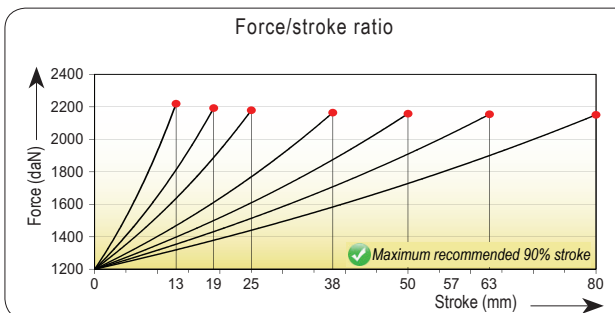
VDI SAFETY



RE-32+43



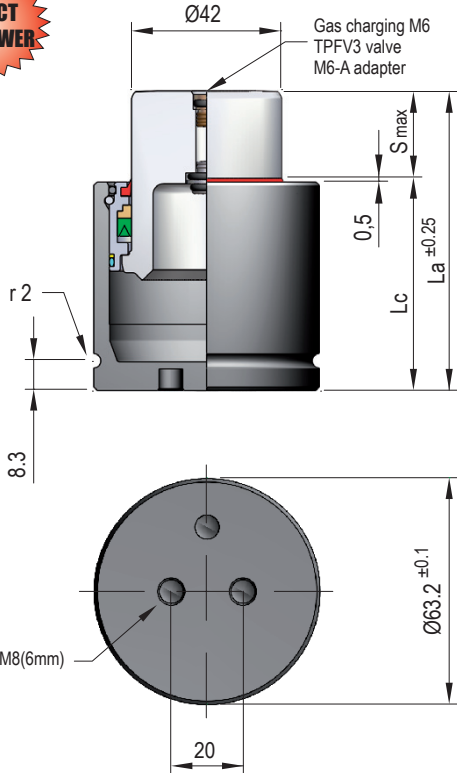
Code	S _{max} mm	L _a mm	L _c mm	Fa daN	90% F daN	100% Fc daN	P Bar	V l	Kg
TITAN 50x13	13	55	42	1200 ±5% (20°C)	2045	2215	150 (20°C)	0,023	0,49
TITAN 50x19	19	67	48		2020	2190		0,034	0,52
TITAN 50x25	25	79	54		2010	2175		0,045	0,59
TITAN 50x38	38	105	67		2000	2160		0,069	0,68
TITAN 50x50	50	129	79		1995	2155		0,091	0,79
TITAN 50x63	63	155	92		1995	2150		0,114	0,95
TITAN 50x80	80	189	109		1990	2150		0,146	1,10



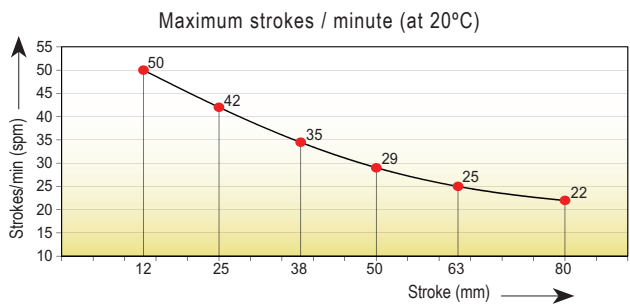
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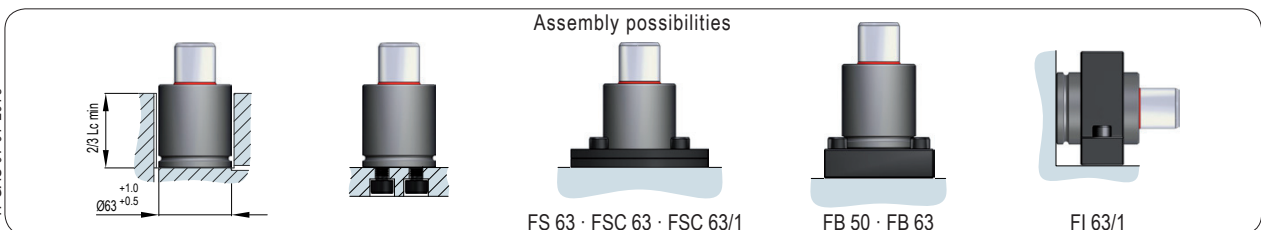
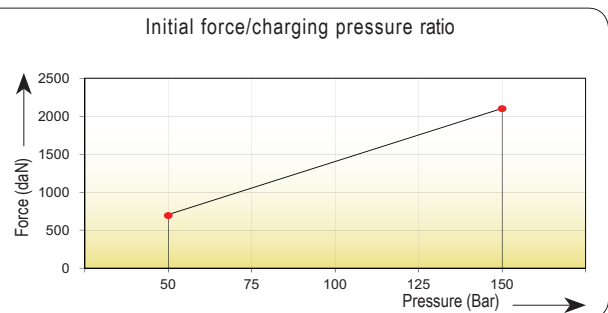
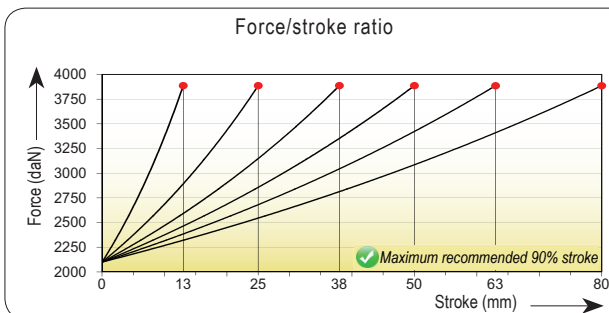
**COMPACT
EXTRA POWER**



Pressure medium	Gas Nitrógeno (N ₂)
Max. charging pressure	150 Bar
Min. charging pressure	50 Bar
Rod seal area	13,85 cm ²
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	0,8 m/s
Maintenance kit	Kit T63



Code	Smax mm	La mm	Lc mm	Fa daN	F daN	Fc daN	P Bar	V l	Kg
TITAN 63x13	13	60	47	2100 ±5% (20°C)	3545	3845	150 (20°C)	0,039	0,87
TITAN 63x25	25	84	59		3545	3845		0,075	0,92
TITAN 63x38	38	110	72		3545	3845		0,115	1,30
TITAN 63x50	50	134	84		3545	3845		0,151	1,55
TITAN 63x63	63	160	97		3545	3845		0,190	1,70
TITAN 63x80	80	194	114		3545	3845		0,241	1,85



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TITAN

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TPSR5

TPNS

STOP

CYLINDER

HOT

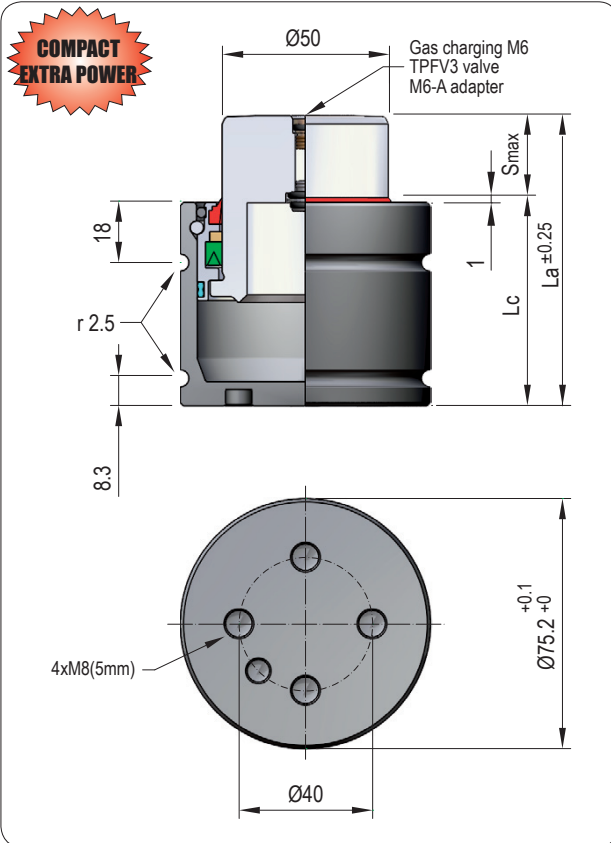
FORMING

TPHT

TPSL



i
MICRO
TITAN



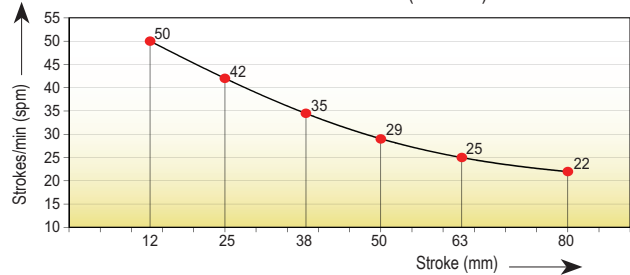
i Pressure medium	Gas Nitrógeno (N ₂)
Max. charging pressure	150 Bar
Min. charging pressure	50 Bar
Rod seal area	19,63 cm ²
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	0,8 m/s
Maintenance kit	Kit T75



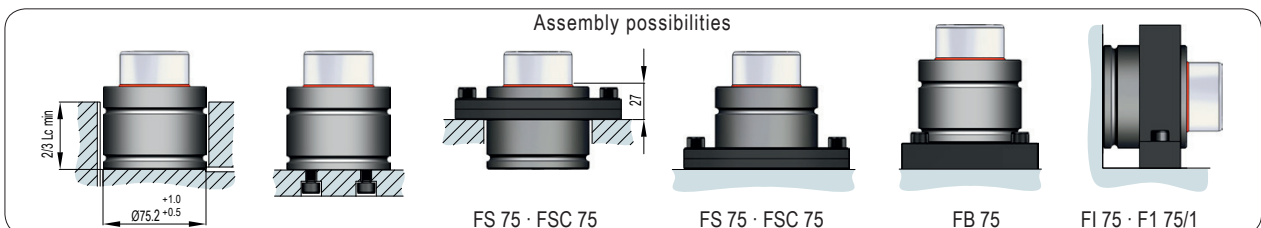
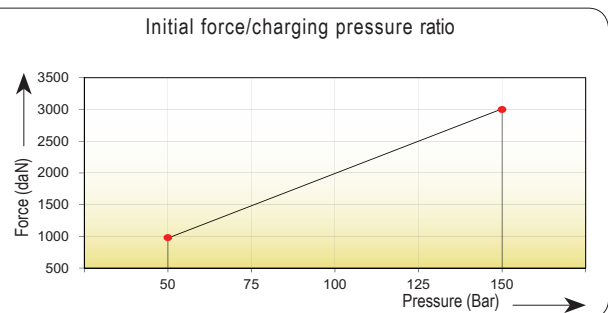
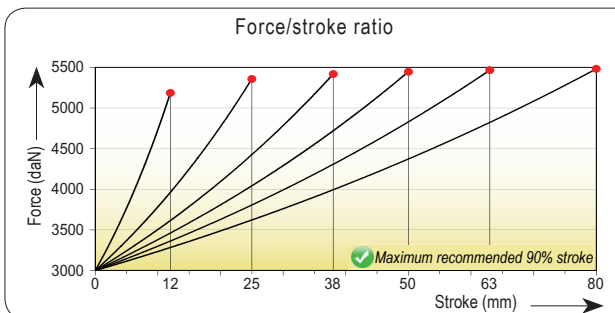
VDI SAFETY



Maximum strokes / minute (at 20°C)



Code	Smax mm	La mm	Lc mm		Fa daN		F daN		Fc daN		P Bar	V l		Kg
TITAN 75x12	12	61	49		3000 ±5% (20°C)		4810		5160		150 (20°C)	0,056		1,25
TITAN 75x25	25	87	62				4940		5330			0,112		1,39
TITAN 75x38	38	113	75				4990		5390			0,167		1,62
TITAN 75x50	50	137	87				5010		5420			0,219		1,72
TITAN 75x63	63	163	100				5025		5435			0,274		1,99
TITAN 75x80	80	197	117				5035		5455			0,347		2,18



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