PED 2014/68/UE



ISO

VDI

ISO POWER

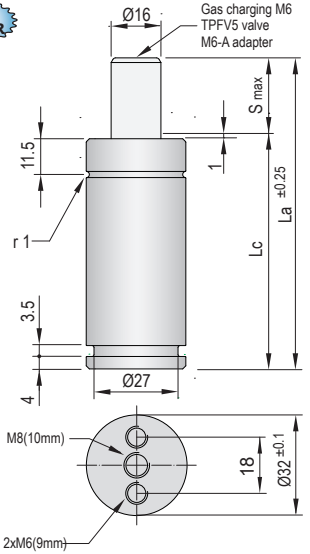
Verstärkte ISO-Gasdruckfedern

Code	ØBody mm	Strokes mm	Fa daN		VDI SAFETY			ISO STANDARD
TPSP 300.1	32	10 - 125	300	√	√		√	
TPSP 500.1	38	10 - 125	470	√	√	√	√	
TPSP 750	45	13 - 200	740	√	√	√	√	
TPSP 1000.1	50	13 - 300	920	√	√	√	√	√
TPSP 1500	63	13 - 200	1500	√	√	√	√	
TPSP 2400	75	25 - 300	2400	√	√	√	√	√
TPSP 4200	95	25 - 300	4200	√	√	√	√	√
TPSP 6600	120	25 - 300	6600	√	√	√	√	√
TPSP 9500	150	25 - 300	9500	√	√	√	√	√
TPSP 20000	195	25 - 200	20000	√	√	√		

VDI SAFETY

PED 2014/68/UE

ISO POWER



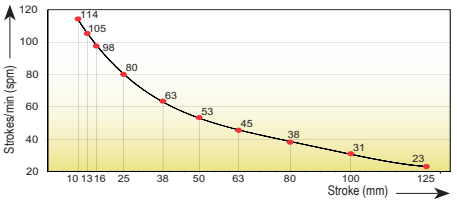
Pressure medium	Nitrogen (N_2)
Max. charging pressure	150 Bar
Min. charging pressure	25 Bar
Rod seal area	2,01 cm^2
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	1,6 m/s
Maintenance kit	Kit SP300.2





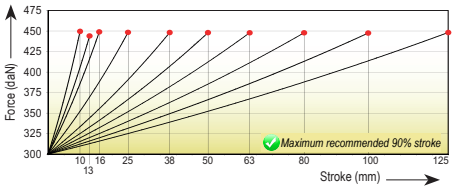


Maximum strokes / minute (at 20°C)

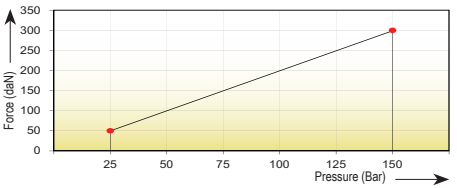


Code	Smax mm	La mm	Lc mm	Fa daN	90% F daN	100% Fc daN	P Bar	V l	Kg
TPSP 300x10.1	10	70	60		430	450		0,006	0,31
TPSP 300x13.1	13	75,4	62,7		425	445		0,008	0,33
TPSP 300x16.1	16	82	66		430	450		0,010	0,34
TPSP 300x25.1	25	100	75		430	450		0,015	0,38
TPSP 300x38.1	38	126	88	300 ±5%	430	450	150	0,023	0,43
TPSP 300x50.1	50	150	100	(20°C)	430	450	(20°C)	0,030	0,48
TPSP 300x63.1	63	176	113		430	450		0,038	0,53
TPSP 300x80.1	80	210	130		430	450		0,049	0,61
TPSP 300x100.1	100	250	150		430	450		0,061	0,77
TPSP 300x125.1	125	300	175		430	450		0,076	0,89

Force/stroke ratio

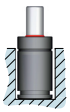


Initial force/charging pressure ratio

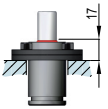


Einbaumöglichkeiten

Hinweise beachten
Seite 287

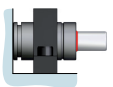

DROP-IN


SCREWS



FS 32
FS 32/1·FSC 32


FP 32·FPR 32


FI 32·FI 32/1

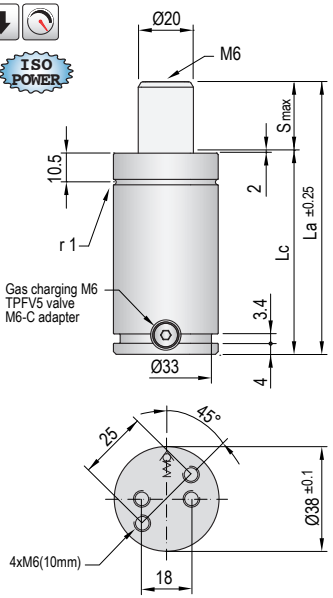
Pieper Normteile GmbH +++ www.pieper-normteile.de +++
Tel.: +49 (0) 7644.929588 +++ info@pieper-normteile.de

TPSP 500.1

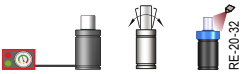
VDI SAFETY

PED 2014/68/UE

ISO POWER

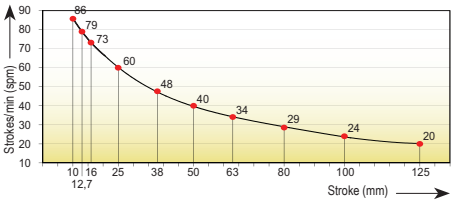


Pressure medium	Nitrogen (N_2)
Max. charging pressure	150 Bar
Min. charging pressure	35 Bar
Rod seal area	3,14 cm^2
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	1,6 m/s
Maintenance kit	Kit SP500.1



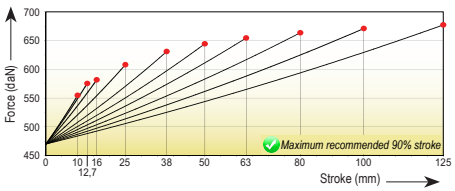


Maximum strokes / minute (at 20°C)

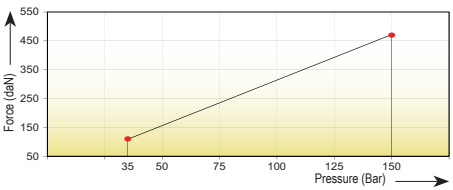


Code	Smax mm	La mm	Lc mm	Fa daN	90% F daN	100% Fc daN	P Bar	V l	Kg
TPSP 500x10.1	10	70	60		545	555		0,021	0,43
TPSP 500x13.1	12,7	75,4	62,7		565	575		0,022	0,44
TPSP 500x16.1	16	82	66		570	585		0,026	0,46
TPSP 500x25.1	25	100	75		590	610		0,035	0,51
TPSP 500x38.1	38	126	88	470 ±5%	610	635	150	0,047	0,59
TPSP 500x50.1	50	150	100	(20°C)	625	645	(20°C)	0,058	0,66
TPSP 500x63.1	63	177	114		630	655		0,070	0,73
TPSP 500x80.1	80	210	130		640	665		0,086	0,83
TPSP 500x100.1	100	250	150		645	675		0,105	0,96
TPSP 500x125.1	125	300	175		650	680		0,128	1,05

Force/stroke ratio



Initial force/charging pressure ratio

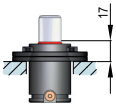


Einbaumöglichkeiten

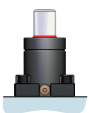
Hinweise beachten
Seite 287

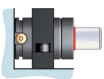

DROP-IN


SCREWS



FS 38·FSC 38

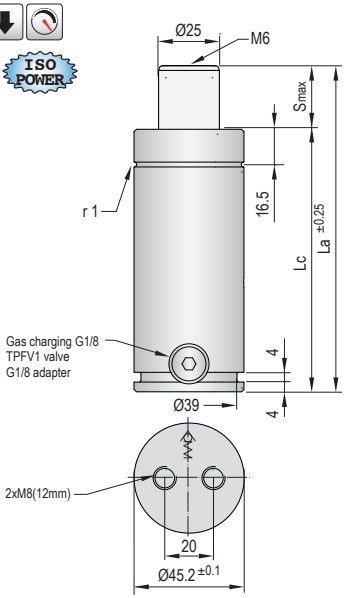

FP 38·FPR 38


FI 38·FI 38/1

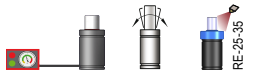
VDI SAFETY

PED 2014/68/UE

ISO POWER

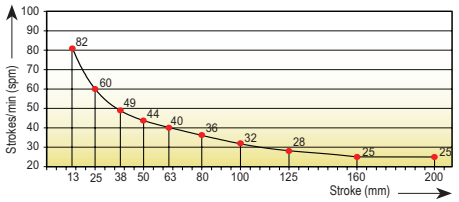


Pressure medium	Nitrogen (N_2)
Max. charging pressure	150 Bar
Min. charging pressure	35 Bar
Rod seal area	4,91 cm^2
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	1,6 m/s
Maintenance kit	Kit SP750



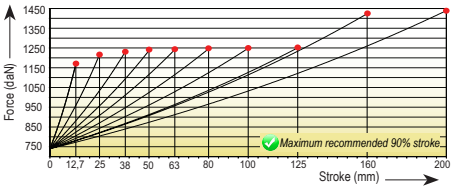


Maximum strokes / minute (at 20°C)

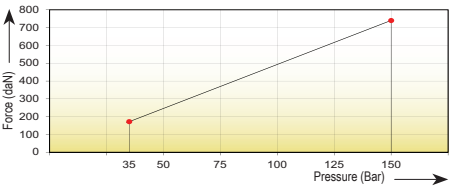


Code	Smax mm	La mm	Lc mm	Fa daN	90% F daN	100% Fc daN	P Bar	V l	Kg
TPSP 750x13	12,7	110,4	97,7		1105	1170		0,017	0,90
TPSP 750x25	25	135	110		1145	1220		0,031	0,98
TPSP 750x38	38	161	123		1155	1235		0,047	1,02
TPSP 750x50	50	185	135		1160	1240		0,061	1,15
TPSP 750x63	63	212	149	740 ±5%	1165	1245	150	0,077	1,24
TPSP 750x80	80	245	165	(20°C)	1170	1250	(20°C)	0,097	1,35
TPSP 750x100	100	285	185		1170	1250		0,121	1,60
TPSP 750x125	125	335	210		1170	1255		0,150	1,70
TPSP 750x160	160	405	245		1305	1425		0,163	2,20
TPSP 750x200	200	485	285		1315	1440		0,202	2,35

Force/stroke ratio

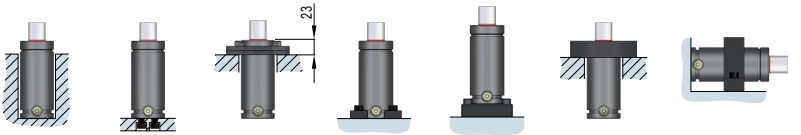


Initial force/charging pressure ratio



Einbaumöglichkeiten

Hinweise beachten
Seite 287



DROP-IN | SCREWS | FS 45·FSC 45 | FP 45·FPR 45 | FB 45 | FRS 45 | FI 45·FI 45/1

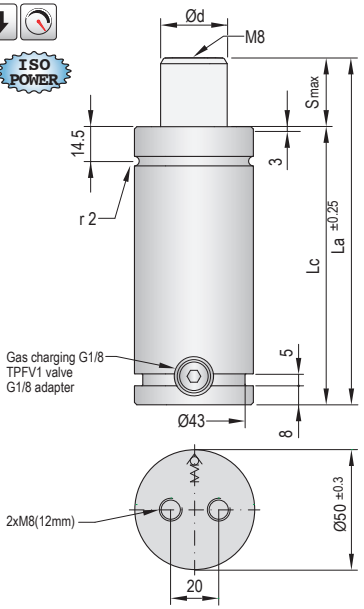
Pieper Normteile GmbH +++ www.pieper-normteile.de +++
Tel.: +49 (0) 7644.929588 +++ info@pieper-normteile.de

TPSP 1000.1

VDI SAFETY

PED 2014/68/UE

ISO POWER



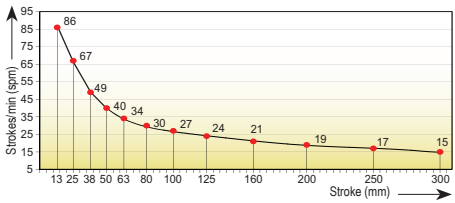
Pressure medium	Nitrogen (N_2)
Max. charging pressure	150 Bar
Min. charging pressure	35 Bar
Rod seal area	Ø28 - 6,16 cm² Ø30 - 7,07 cm²
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	1,2 m/s
Maintenance kit	Ø28 - Kit SP1000.1/28 Ø30 - Kit SP1000.1/30

VDI 3003 ISO TI901



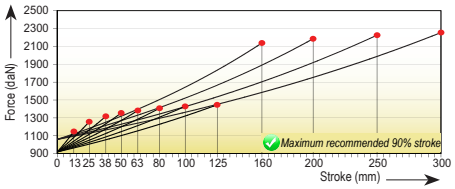


Maximum strokes / minute (at 20°C)

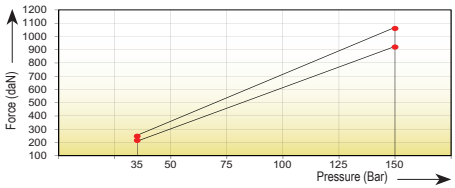


Code	Smax mm	La mm	Lc mm	Ød mm	Fa daN	90% F daN	100% Fc daN	P Bar	V l	Kg
TPSP 1000x13.1	13	120,4	107,7	28		1120	1145		0,040	1,25
TPSP 1000x25.1	25	145	120	28		1220	1260		0,057	1,40
TPSP 1000x38.1	38	171	133	28		1270	1325		0,077	1,45
TPSP 1000x50.1	50	195	145	28	920 ±5%	1300	1360		0,096	1,57
TPSP 1000x63.1	63	222	159	28	(20°C)	1320	1390		0,116	1,75
TPSP 1000x80.1	80	255	175	28		1340	1415	150	0,142	1,87
TPSP 1000x100.1	100	295	195	28		1360	1435	(20°C)	0,173	1,90
TPSP 1000x125.1	125	345	220	28		1375	1450		0,211	2,25
TPSP 1000x160.1	160	415	255	30		1940	2140		0,224	2,35
TPSP 1000x200.1	200	495	295	30	1060 ±5%	1975	2185		0,275	2,50
TPSP 1000x250.1	250	595	345	30	(20°C)	2005	2225		0,337	3,25
TPSP 1000x300.1	300	695	395	30		2025	2255		0,400	3,95

Force/stroke ratio

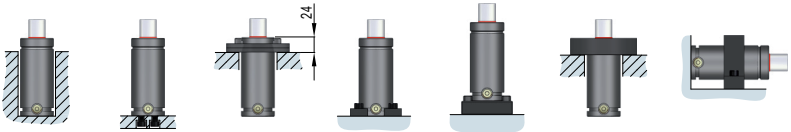


Initial force/charging pressure ratio



Einbaumöglichkeiten

Hinweise beachten Seite 287

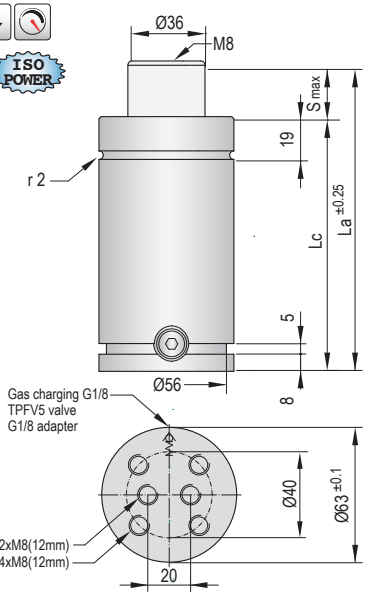


DROP-IN | SCREWS | FS 50·FSC 50 | FP 50·FPR 50 | FB 45·FB 50 | FRS 50 | FI 50·FI 50/1

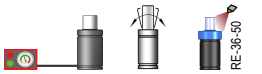
VDI SAFETY

PED 2014/68/UE

ISO POWER

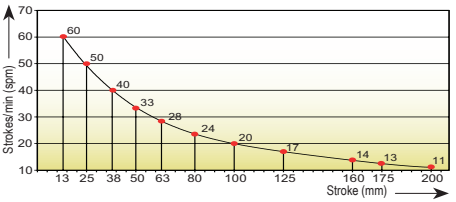


Pressure medium	Nitrogen (N_2)
Max. charging pressure	150 Bar
Min. charging pressure	35 Bar
Rod seal area	10,18 cm²
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	1,6 m/s
Maintenance kit	Kit SP1500



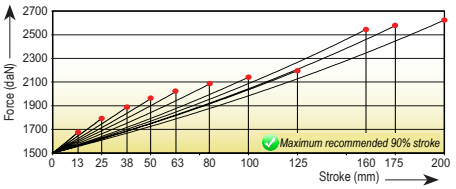


Maximum strokes / minute (at 20°C)

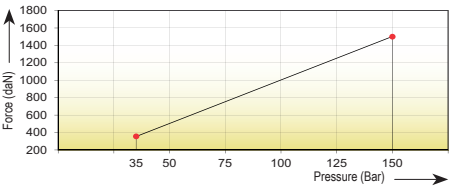


Code	Smax mm	La mm	Lc mm	Fa daN	90% F daN	100% Fc daN	P Bar	V l	Kg
TPSP 1500x13	13	121	108	1500 ±5% (20°C)	1660	1680	148 (20°C)	0,126	1,96
TPSP 1500x25	25	145	120		1765	1800		0,156	2,20
TPSP 1500x38	38	171	133		1850	1895		0,188	2,36
TPSP 1500x50	50	195	145		1910	1965		0,217	2,44
TPSP 1500x63	63	221	158		1960	2030		0,249	2,55
TPSP 1500x80	80	255	175		2015	2090		0,291	2,61
TPSP 1500x100	100	295	195		2060	2150		0,340	3,25
TPSP 1500x125	125	345	220		2110	2205		0,401	4,06
TPSP 1500x160	160	415	255		2390	2555		0,397	5,23
TPSP 1500x175	175	445	270		2415	2590		0,426	5,46
TPSP 1500x200	200	495	295		2450	2635		0,475	5,80

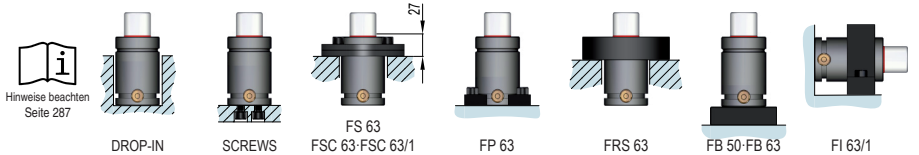
Force/stroke ratio



Initial force/charging pressure ratio



Einbaumöglichkeiten



DROP-IN | SCREWS | FS 63 FSC 63·FSC 63/1 | FP 63 | FRS 63 | FB 50·FB 63 | FI 63/1

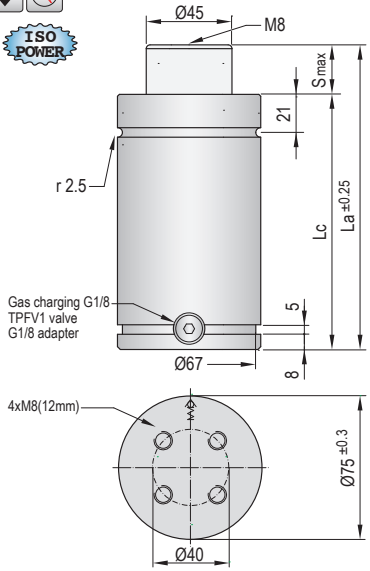
Pieper Normteile GmbH +++ www.pieper-normteile.de +++
Tel.: +49 (0) 7644.929588 +++ info@pieper-normteile.de

TPSP 2400

VDI SAFETY

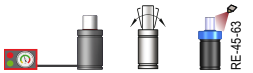
PED 2014/68/UE

ISO POWER



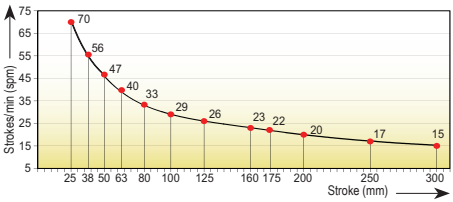
Pressure medium	Nitrogen (N_2)
Max. charging pressure	150 Bar
Min. charging pressure	35 Bar
Rod seal area	15,90 cm^2
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	1,6 m/s
Maintenance kit	Kit SP2400

VDI 3003 ISO 11901



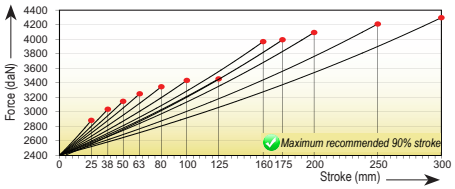


Maximum strokes / minute (at 20°C)

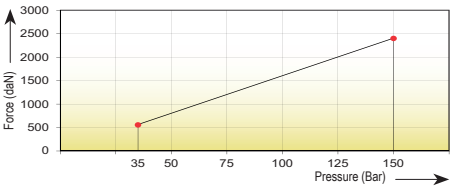


Code	Smax mm	La mm	Lc mm	Fa daN	90% F daN	100% Fc daN	P Bar	V l	Kg
TPSP 2400x25	25	160	135		2810	2865		0,238	3,50
TPSP 2400x38	38	186	148		2940	3015		0,289	3,70
TPSP 2400x50	50	210	160		3030	3125		0,336	3,85
TPSP 2400x63	63	237	174		3120	3230		0,384	4,10
TPSP 2400x80	80	270	190		3200	3325		0,451	4,65
TPSP 2400x100	100	310	210	2400 ±5%	3270	3410	150	0,529	5,00
TPSP 2400x125	125	360	235	(20°C)	3290	3430	(20°C)	0,652	5,56
TPSP 2400x160	160	430	270		3700	3940		0,645	6,24
TPSP 2400x175	175	460	285		3740	3995		0,691	6,51
TPSP 2400x200	200	510	310		3800	4070		0,769	7,36
TPSP 2400x250	250	610	360		3890	4185		0,925	8,12
TPSP 2400x300	300	710	410		3960	4270		1,081	9,05

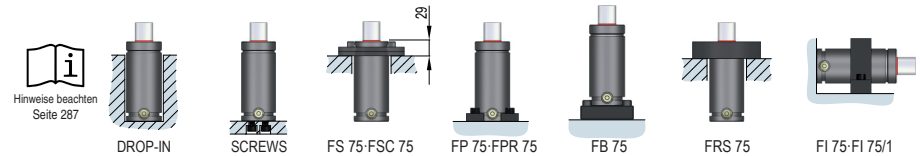
Force/stroke ratio



Initial force/charging pressure ratio



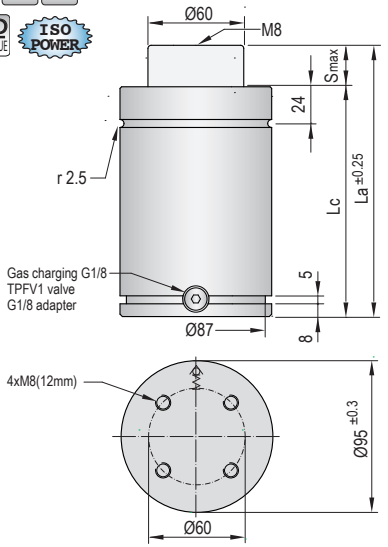
Einbaumöglichkeiten



VDI SAFETY

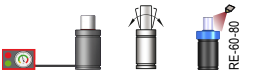
PED 2014/68/UE

ISO POWER



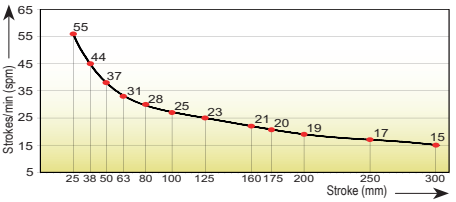
Pressure medium	Nitrogen (N_2)
Max. charging pressure	150 Bar
Min. charging pressure	35 Bar
Rod seal area	28,27 cm^2
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	1,6 m/s
Maintenance kit	Kit SP4200

VDI 3003 ISO TI1901



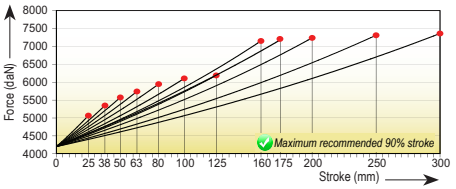


Maximum strokes / minute (at 20°C)

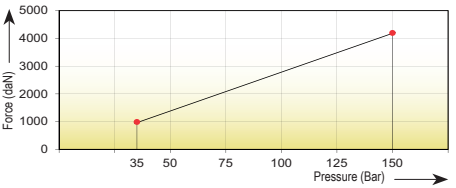


Code	Smax mm	La mm	Lc mm	Fa daN	90% F daN	100% Fc daN	P Bar	V l	Kg
TPSP 4200x25	25	170	145		5010	5115		0,413	6,25
TPSP 4200x38	38	196	158		5260	5400		0,500	6,75
TPSP 4200x50	50	220	170		5450	5630		0,574	7,05
TPSP 4200x63	63	247	184		5590	5795		0,664	7,54
TPSP 4200x80	80	280	200		5765	6005		0,770	8,04
TPSP 4200x100	100	320	220	4200 ±5%	5900	6165	150	0,906	9,05
TPSP 4200x125	125	370	245	(20°C)	5970	6250	(20°C)	1,099	9,87
TPSP 4200x160	160	440	280		6750	7225		1,096	10,75
TPSP 4200x175	175	470	295		6775	7260		1,190	10,89
TPSP 4200x200	200	520	320		6815	7310		1,347	11,84
TPSP 4200x250	250	620	370		6875	7380		1,661	13,21
TPSP 4200x300	300	720	420		6910	7435		1,975	16,43

Force/stroke ratio

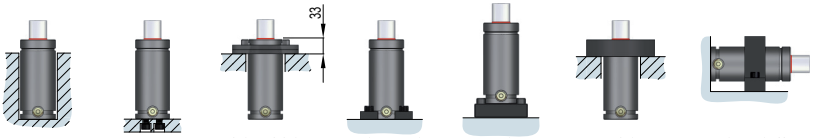


Initial force/charging pressure ratio



Einbaumöglichkeiten

Hinweise beachten Seite 287



DROP-IN | SCREWS | FS 95·FSC 95 | FP 95·FPR 95 | FB 95 | FRS 95 | FI 95·FI 95/1

Pieper Normteile GmbH +++ www.pieper-normteile.de +++
Tel.: +49 (0) 7644.929588 +++ info@pieper-normteile.de

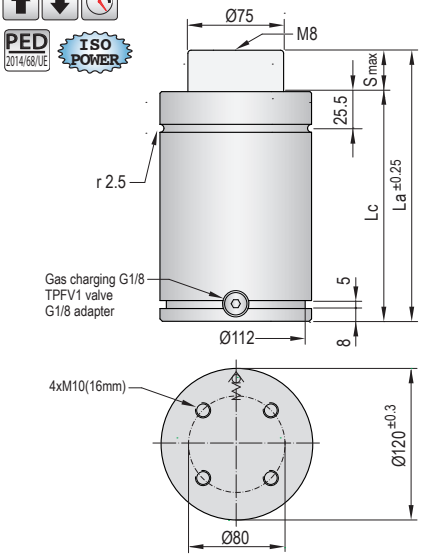
Ø120mm
6600daN

TPSP 6600

VDI SAFETY

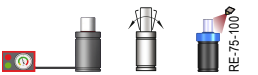
PED 2014/68/UE

ISO POWER



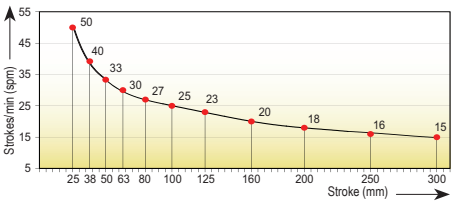
Pressure medium	Nitrogen (N_2)
Max. charging pressure	150 Bar
Min. charging pressure	35 Bar
Rod seal area	44,18 cm^2
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	1,6 m/s
Maintenance kit	Kit SP6600

VDI 3003 ISO TI901



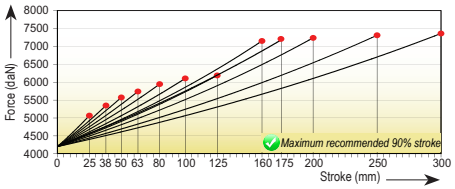


Maximum strokes / minute (at 20°C)

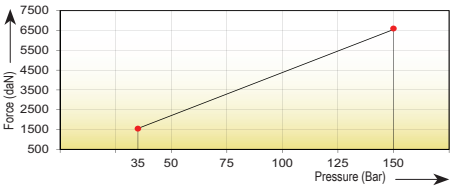


Code	Smax mm	La mm	Lc mm	Fa daN	90% F daN	100% Fc daN	P Bar	V l	Kg
TPSP 6600x25	25	190	165	6600 ±5% (20°C)	7620	7755	147 (20°C)	0,730	12,47
TPSP 6600x38	38	216	178		7980	8170		0,863	13,75
TPSP 6600x50	50	240	190		8245	8485		0,986	14,09
TPSP 6600x63	63	267	204		8480	8760		1,119	15,34
TPSP 6600x80	80	300	220		8730	9060		1,293	16,15
TPSP 6600x100	100	340	240		8965	9340		1,497	17,08
TPSP 6600x125	125	390	265		9185	9610		1,753	18,95
TPSP 6600x160	160	460	300		10495	11240		1,706	20,58
TPSP 6600x200	200	540	340		10165	10818		2,257	22,46
TPSP 6600x250	250	640	390		10270	10950		2,769	25,13
TPSP 6600x300	300	740	440		10345	11045		3,280	27,87

Force/stroke ratio

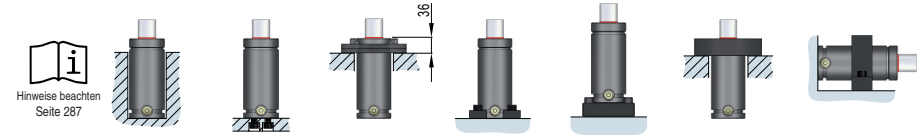


Initial force/charging pressure ratio



Einbaumöglichkeiten

Hinweise beachten Seite 287

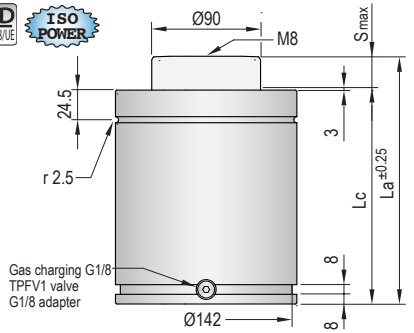


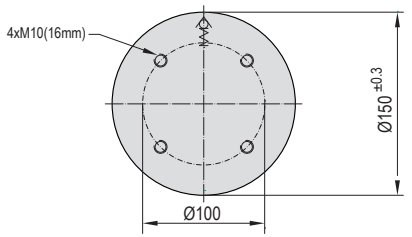
DROP-IN | SCREWS | FS 120·FSC 120 | FP 120·FPR 120 | FB 120 | FRS 120 | FI 120·FI 120/1

VDI SAFETY

PED 2014/68/UE

ISO POWER





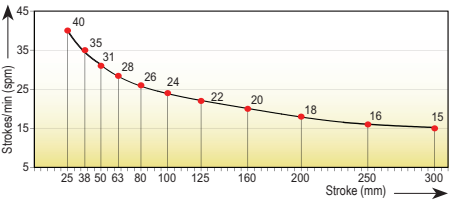
Pressure medium	Nitrogen (N_2)
Max. charging pressure	150 Bar
Min. charging pressure	35 Bar
Rod seal area	63,62 cm^2
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	1,6 m/s
Maintenance kit	Kit SP9500

VDI 3003 ISO TI901



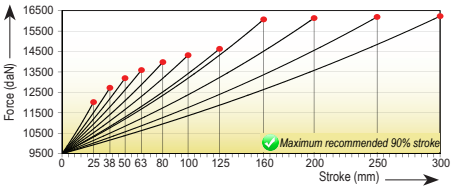


Maximum strokes / minute (at 20°C)

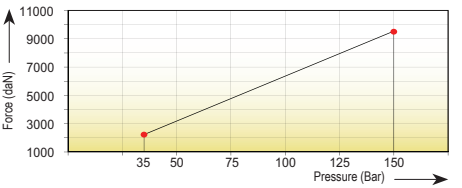


Code	Smax mm	La mm	Lc mm	Fa daN	90% F daN	100% Fc daN	P Bar	V l	Kg
TPSP 9500x25	25	205	180	9500 ±5% (20°C)	11765	12075	150 (20°C)	0,758	20,61
TPSP 9500x38	38	231	193		12360	12780		0,954	21,72
TPSP 9500x50	50	255	205		12760	13255		1,135	22,62
TPSP 9500x63	63	282	219		13090	13650		1,332	23,93
TPSP 9500x80	80	315	235		13410	14040		1,588	25,84
TPSP 9500x100	100	355	255		13690	14385		1,890	27,55
TPSP 9500x125	125	405	280		13945	14695		2,268	29,15
TPSP 9500x160	160	475	315		15100	16145		2,490	32,78
TPSP 9500x200	200	555	355		15150	16210		3,093	34,00
TPSP 9500x250	250	655	405		15195	16265		3,848	40,62
TPSP 9500x300	300	755	455		15225	16300		4,603	43,33

Force/stroke ratio



Initial force/charging pressure ratio

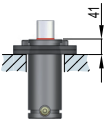


Einbaumöglichkeiten

Hinweise beachten Seite 287


DROP-IN

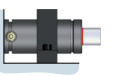

SCREWS



FS 150·FSC 150


FP 150


FB 150


FI 150·FI 150/1

Pieper Normteile GmbH +++ www.pieper-normteile.de +++
Tel.: +49 (0) 7644.929588 +++ info@pieper-normteile.de

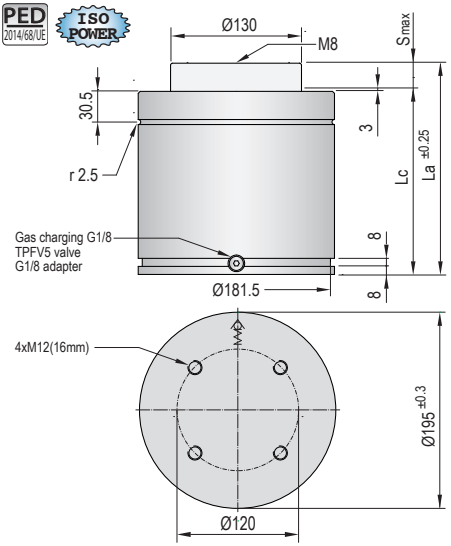
Ø195mm
20000daN

TPSP 20000

VDI SAFETY

PED 2014/68/UE

ISO POWER

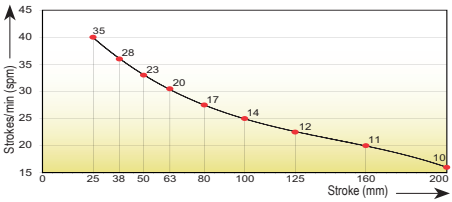


Pressure medium	Nitrogen (N_2)
Max. charging pressure	150 Bar
Min. charging pressure	35 Bar
Rod seal area	132,73 cm^2
Operating temperature	0°C - 80°C
Force increase by temperature	0,33 %/°C
Max. stem speed	1 m/s
Maintenance kit	Kit SP20000



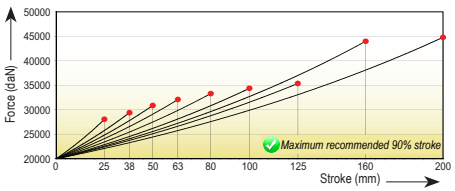


Maximum strokes / minute (at 20°C)

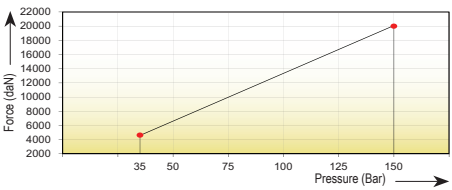


Code	Smax mm	La mm	Lc mm	Fa daN	F 90% daN	Fc 100% daN	P Bar	V l	Kg
TPSP 20000x25	25	210	185	20000 ±5% (20°C)	26865	27950	150 (20°C)	1,154	31,8
TPSP 20000x38	38	236	198		27990	29310		1,573	32,3
TPSP 20000x50	50	260	210		29165	30755		1,882	34,25
TPSP 20000x63	63	286	223		30140	31965		2,217	35,37
TPSP 20000x80	80	320	240		31105	33175		2,655	38,09
TPSP 20000x100	100	360	260		31945	34245		3,171	39,15
TPSP 20000x125	125	410	285		32710	35230		3,816	42,75
TPSP 20000x160	160	480	320		39105	43795		3,894	45,91
TPSP 20000x200	200	560	360		39670	44585		4,797	51,33

Force/stroke ratio

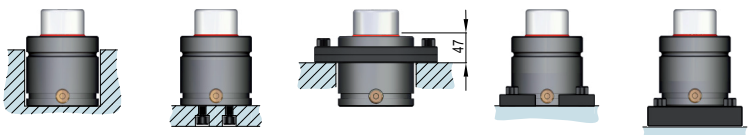


Initial force/charging pressure ratio



Einbaumöglichkeiten

Hinweise beachten
Seite 287



DROP-IN | SCREWS | FSC 195 | FP 195 | FB 195