

# Guide cylinders, Series GPC-BV

- Ø 10-63 mm
- double-acting
- ball bearing
- Cushioning elastic
- with magnetic piston



Working pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	6.3 bar
Weight	See table below



## Technical data

Piston Ø	10 mm	12 mm	16 mm	20 mm	25 mm	32 mm	40 mm
Stroke 10	R402000314	0822060100	0822061100	0822062100	0822063100	-	-
20	R402000316	0822060101	0822061101	0822062101	0822063101	-	-
25	R402000317	0822060107	0822061107	0822062107	0822063107	0822064100	0822065100
30	R402000318	0822060102	0822061102	0822062102	0822063102	-	-
40	R402000320	0822060103	0822061103	0822062103	0822063103	-	-
50	R402000322	0822060104	0822061104	0822062104	0822063104	0822064101	0822065101
75	R402000327	0822060105	0822061105	0822062105	0822063105	0822064102	0822065102
100	R402000332	0822060106	0822061106	0822062106	0822063106	0822064103	0822065103
125	-	0822060124	0822061124	0822062124	0822063124	0822064104	0822065104
150	-	0822060129	0822061129	0822062129	0822063129	-	-
160	-	-	-	-	0822063131	0822064105	0822065105
200	-	-	-	-	0822063139	0822064106	0822065106

Piston Ø	50 mm	63 mm
Stroke 10	-	-
20	-	-
25	0822066100	0822067100
30	-	-

Piston Ø	50 mm	63 mm
40	-	-
50	0822066101	0822067101
75	0822066102	0822067102
100	0822066103	0822067103
125	0822066104	0822067104
150	-	-
160	0822066105	0822067105
200	0822066106	0822067106

## Technical data

Piston Ø	10 mm	12 mm	16 mm	20 mm
Port	M5	M5	M5	M5
Working pressure min./max.	2 ... 8 bar	2 ... 8 bar	2 ... 10 bar	2 ... 10 bar
Retracting piston force	42 N	53 N	95 N	148 N
Extracting piston force	49 N	71 N	127 N	198 N
Speed max.	0,5 m/s	0,5 m/s	0,5 m/s	0,5 m/s
Impact energy	0,04 J	0,1 J	0,11 J	0,15 J

Piston Ø	25 mm	32 mm	40 mm	50 mm
Port	G 1/8	G 1/8	G 1/8	G 1/4
Working pressure min./max.	1,5 ... 10 bar	1,3 ... 10 bar	1 ... 10 bar	1 ... 10 bar
Retracting piston force	260 N	435 N	720 N	1110 N
Extracting piston force	309 N	507 N	792 N	1237 N
Speed max.	0,8 m/s	0,6 m/s	0,6 m/s	0,6 m/s
Impact energy	0,35 J	0,4 J	0,52 J	0,64 J

Piston Ø	63 mm
Port	G 1/4
Working pressure min./max.	1 ... 10 bar
Retracting piston force	1837 N
Extracting piston force	1964 N
Speed max.	0,6 m/s
Impact energy	0,75 J

## Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Note: Only the Ø10 variants fits to sensor series ST4. The sensor series ST6 and SN3 can be used for all other Ø variants.

## Technical information

Material	
Housing	Aluminum, anodized
Seal	Polyurethane
Front plate	Steel, galvanized
Guide rod	Steel, hardened
Bearing	Steel, hardened
Piston rod	Stainless steel



## Dimensions

Piston Ø	A RTxLB	A1	B ØdxLA	B1 ØdxDxLA	C RTxLB	D Ø
10 mm	M4x6	–	4H7x4	4H7x5x4	M4x6	3.2
12 mm	M5x8	–	4H7x4	4H7x5x4	M5x8	4.2
16 mm	M5x8	135°	4H7x4	4H7x5x4	M5x8	4.2
20 mm	M6x10	135°	4H7x4	4H7x5x4	M6x10	5.2

Piston Ø	D1 S=10-30	D1 S=40-100	D1 S>100	D2	D4	DD	DX
10 mm	13.5	13.5	13.5	7	–	17.4	6
12 mm	0	18.4	33.4	14.5	40	20	8
16 mm	0	20.8	35.8	15.8	47	28.5	10
20 mm	0	20.8	35.8	16.5	54	30.5	10

Piston Ø	E RTxLB	E1	E2	F Ø 1)	G Ø 2)	H Ø 2)	K	L1
10 mm	M4x8	50	21	M4	–	–	M5	20 ±0,04
12 mm	M5x8	58	30.5	M4	4.5	4H9	M5	23 ±0,04
16 mm	M5x8	68	33	M4	5.5	4H9	M5	28 ±0,04
20 mm	M5x10	80	36	M5	5.5	4H9	M5	30 ±0,04

Piston Ø	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11
10 mm	10.5	3	–	20	15	–	–	–	–	–
12 mm	15	4	22	50	22	–	–	–	–	–
16 mm	16.5	4	25	61	25	43	6.15	12	1.5	1.5
20 mm	18	3.5	24	70	29	50	6.15	12	1.5	1.5

Piston Ø	L12	L13	L14 S=10	L14 S=20	L14 S>20	L15 S=40	L15 S>40
10 mm	–	15	–	20	20	55	55
12 mm	–	14.5	–	18	22	–	58.5
16 mm	5.5	14	18	25	25	–	64
20 mm	5.5	15	16	24	24	–	63

Piston Ø	L17	L18	L19	L20 S=10	L20 S>10	L21 S=10	L21 S>10
10 mm	15	–	8	20	20	13 1)	13
12 mm	4	22	8	20	20	18	18
16 mm	4	25	8	18	25	20.5	20.5
20 mm	4.5	24	8	20	30	18	23

Piston Ø	L22 S≤40	L22 S>40	L24 S=10	L24 S>10	L25	L26	L27
10 mm	48	48	25	25	20	–	20
12 mm	–	48	25.5	25.5	20	–	40
16 mm	–	58	26.5	26.5	25	20	40
20 mm	–	68	23	27	30	25	50

Piston Ø	L28	L29	L30	L31	LJ1	LJ2	LM1	LM2	LM3
10 mm	10	20	–	–	15.5	15	5	13.5	48

Piston Ø	L28	L29	L30	L31	LJ1	LJ2	LM1	LM2	LM3
12 mm	20	20	–	–	24.8	17.5	8	12.7	55
16 mm	20	25	20 ±0,04	22	27	21	8	13.5	65
20 mm	25	30	25 ±0,04	25	26.5	25	10	15.5	77

Piston Ø	LM4	PL	T	TT	ZA	ZJ S=10-30	ZJ S=40-100
10 mm	19	8	5.5	–	36	63	63
12 mm	27	8.5	5	–	34.4	47.1	65.5
16 mm	30	8.8	6.5	N6	36	49.5	70.3
20 mm	33	10	5.5	N6	36	51.5	72.3

S = stroke

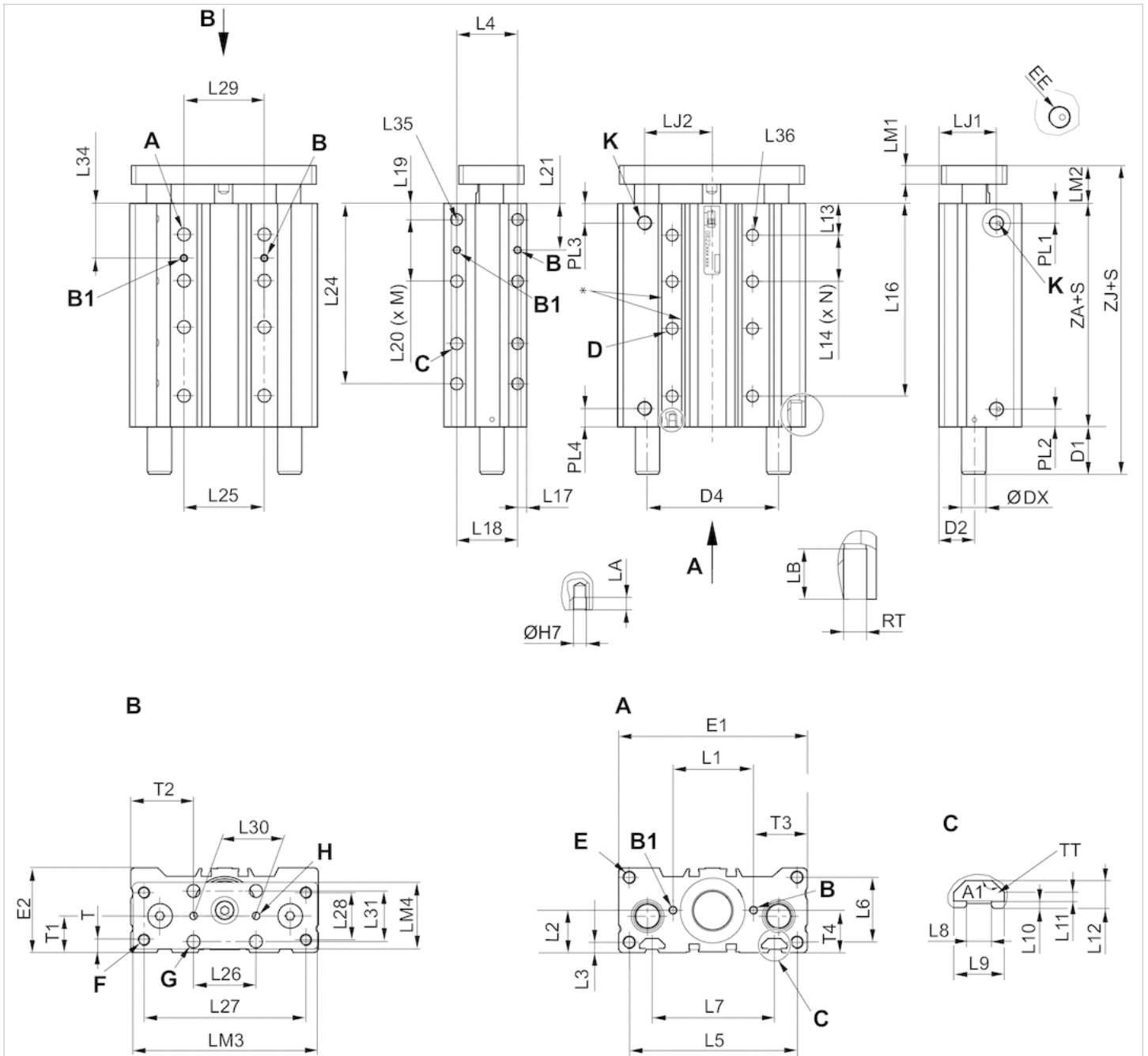
To determine the cylinder length (ZA) for intermediate strokes (i.e. stroke 10 with dia. 40), the next available standard stroke size must be used

- 1) Through hole with thread
- 2) through-hole

Two holes C-C 10 mm.

# Dimensions

## Dimensions, Ø 25 ... 100



\* Suitable for screws according to ISO 4762

S = stroke

Note: Only the Ø10 variants fits to sensor series ST4. The sensor series ST6 and SN3 can be used for all other Ø variants.

## Dimensions

Piston Ø	A RTxLB	A1	B ØdxLA	B1 ØdxD	C RTxLB	D Ø 1)	D2	D4	DX	E RTxLB	E1	E2
25 mm	M6x10	135°	4x4	4x5	M6x10	5.5	18	59	12	M6x12	95	43
32 mm	M8x14	135°	4x4	4x5	M8x14	7.4	23	75.6	16	M6x12	114	48.5
40 mm	M8x14	135°	4x4	4x5	M8x14	7.4	23	86	16	M8x16	124	54.5
50 mm	M10x20	135°	5x5	5x6	M10x20	9.3	27.5	104	20	M8x16	148	64
63 mm	M10x20	135°	5x5	5x6	M10x20	9.3	35	124	20	M10x20	162	78.5

Piston Ø	F Ø 1)	G Ø 2)	H Ø 2)	K EE	L1	L2	L3	L4	L5	L6	L7	L8	L9
25 mm	M6	6.5	4H8	G 1/8	35 ±0,1	20.5	4.5	25 ±0,1	85	34	52	6.15	12
32 mm	M8	6.5	4H8	G 1/8	44 ±0,1	24	5	33 ±0,1	105	26	70	8.2	16.7
40 mm	M8	8.5	4H8	G 1/8	53 ±0,15	27	6	40 ±0,15	110	42	80	8.2	16.7
50 mm	M8	8.5	4H8	G 1/4	66 ±0,15	32	8	48 ±0,15	133	34.5	93	8.2	16.7
63 mm	M10	10.5	5H8	G 1/4	84 ±0,15	39	8	60 ±0,15	147	62	112	10.2	20.3

Piston Ø	L10	L11	L12	L13	L15	L17	L18	L19	L22	L25	L26	L27	L28	L29	L30	L31	LJ1
25 mm	1.5	1.5	5.5	16.5	25	5.5	25	8	32	32	30	81	23	32 ±0,1	30 ±0,2	24	29.6
32 mm	2.2	2.8	9	20.5	33	6.5	33	10	42	42	32	97	30	42 ±0,1	32 ±0,2	25	40
40 mm	2.2	2.8	9	20	40	6	40	10	53	53	42	107	30	53 ±0,15	42 ±0,2	32.5	37.8
50 mm	2.2	2.8	9	23	48	7.5	48	12	63	63	53	134	40	63 ±0,15	53 ±0,2	40	54.5
63 mm	6	6	16	24	60	11	60	12	80	80	63	140	48	80 ±0,15	63 ±0,2	48	57

Piston Ø	LJ2	LM1	LM2	LM3	LM4	PL1	PL2	PL3	PL4	T	T1	T2	T3
25 mm	32	10	15.5	93	33	11	11	11	11	6.5	18 ±0,4	32,5 ±0,4	30 ±0,05
32 mm	40.5	12	18.5	112	43	13.5	13.5	13.5	13.5	8	23 ±0,4	41 ±0,4	35 ±0,05
40 mm	44	12	19.5	122	43	12	12	12	12	8	23 ±0,4	41 ±0,4	35,5 ±0,1
50 mm	50.5	15	23.5	146	52	13	13	13	13	7.5	27,5 ±0,4	47,5 ±0,4	41 ±0,1
63 mm	59	15	24	160	67	13.7	13.7	13.7	13.7	11	35 ±0,4	49,5 ±0,5	39 ±0,1

Piston Ø	T4	TT	ZA
25 mm	20,5 ±0,05	N6	42 3)
32 mm	24 ±0,05	N8	46.5
40 mm	27 ±0,1	N8	44
50 mm	32 ±0,1	N8	46
63 mm	39 ±0,1	N10	51

S = stroke

To determine the cylinder length (ZA) for intermediate strokes (i.e. stroke 10 with dia. 40), the next available standard stroke size must be used

- 1) Through hole with thread
- 2) through-hole
- 3) For stroke 10/150, ZA = 52, for stroke 25, ZA = 47

Two holes C-C 10 mm.



## Dimensions

Piston Ø	S=10 D1	S=20 D1	S=25 D1	S=30 D1	S=40 D1	S=50 D1
25 mm	19	19	19	19	29	29
32 mm	-	-	20	20	20	20
40 mm	-	-	21.5	21.5	21.5	21.5
50 mm	-	-	20	20	20	20
63 mm	-	-	14	14	14	14

Piston Ø	S=75 D1	S=100 D1	S=125 D1	S=150 D1	S=160 D1	S=200 D1
25 mm	29	29	47	47	47	47
32 mm	35	35	51	51	51	51
40 mm	37	37	53	53	53	53
50 mm	46	46	64	64	64	64
63 mm	40	40	58	58	58	58

Piston Ø	S=10 L14	S=20 L14	S=25 L14	S=30 L14	S=40 L14	S=50 L14
25 mm	25	25	25	25	25	25
32 mm	30	30	30	33	33	33
40 mm	30	30	30	40	40	40
50 mm	25	25	25	48	48	48
63 mm	28	28	28	28	28	28

Piston Ø	S=75 L14	S=100 L14	S=125 L14	S=160 L14	S=200 L14
25 mm	25	25	25	25	25
32 mm	33	33	33	33	33
40 mm	40	40	40	40	40
50 mm	48	48	48	48	48
63 mm	60	60	60	60	60

S = stroke

## Dimensions

Piston Ø	S=10 N	S=20 N	S=25 N	S=30 N	S=40 N	S=50 N	S=75 N
25 mm	1	1	1	1	1	2	3
32 mm	-	-	1	1	1	1	2
40 mm	-	-	1	1	1	1	2
50 mm	-	-	1	1	1	1	1
63 mm	-	-	1	1	1	1	1

Piston Ø	S=100 N	S=125 N	S=160 N	S=200 N	S=40 L16	S=50 L16
25 mm	3	3	3	3	65.5	-
32 mm	3	3	3	3	-	76
40 mm	2	3	3	3	-	-
50 mm	2	2	3	3	-	-
63 mm	1	2	2	3	-	-

Piston Ø	S=100 L16	S=125 L16	S=160 L16	S=200 L16
25 mm	12.5	150.5	185.5	225.5
32 mm	-	151	186	226
40 mm	-	-	184	224
50 mm	-	148	-	223
63 mm	127	-	187	-

## Dimensions

Piston Ø	S=10 M	S=20 M	S=25 M	S=30 M	S=40 M	S=50 M	S=75 M
25 mm	1	1	1	1	1	1	2
32 mm	-	-	1	1	1	1	2
40 mm	-	-	1	1	1	1	1
50 mm	-	-	1	1	1	1	1
63 mm	-	-	1	1	1	1	1

Piston Ø	S=100 M	S=125 M	S=160 M	S=200 M	S=40 L24	S=50 L24
25 mm	3	3	3	3	60	70
32 mm	2	3	3	3	-	-
40 mm	2	2	3	3	-	-
50 mm	1	2	2	3	-	-
63 mm	1	1	2	2	-	-

Piston Ø	S=75 L24	S=100 L24	S=125 L24	S=160 L24	S=200 L24
25 mm	95	-	145	180	220
32 mm	-	122.5	-	182.5	222.5
40 mm	91	-	-	-	216
50 mm	-	116	-	176	-
63 mm	-	-	140	-	217

S = stroke

## Dimensions

Piston Ø	S=20 L20	S=25 L20	S=30 L20	S=40 L20	S=50 L20	S=75 L20
25 mm	22	32	32	32	32	32
32 mm	35	35	42	42	42	42
40 mm	30	30	53	53	53	53
50 mm	30	30	30	30	30	63
63 mm	30	30	30	30	30	30

Piston Ø	S=100 L20	S=125 L20	S=160 L20	S=200 L20	S=20 L21	S=25 L21
25 mm	32	32	32	32	19	24
32 mm	42	42	42	42	27.5	27.5
40 mm	53	53	53	53	25	25
50 mm	63	63	63	63	27	27
63 mm	30	30	30	30	27	27

Piston Ø	S=30 L21	S=40 L21	S=50 L21	S=75 L21	S=100 L21	S=125 L21
25 mm	24	24	24	24	24	24
32 mm	31	31	31	31	31	31
40 mm	36.5	36.5	36.5	36.5	36.5	36.5
50 mm	27	27	27	43.5	43.5	43.5
63 mm	27	27	27	52	52	52

Piston Ø	S=160 L21	S=200 L21
25 mm	24	24
32 mm	31	31
40 mm	36.5	36.5
50 mm	43.5	43.5
63 mm	52	52

S = stroke

## Dimensions

Piston Ø	S=10 L34	S=20 L34	S=25 L34	S=30 L34	S=40 L34	S=50 L34
25 mm	26	29	29	29	29	29
32 mm	35.5	35.5	35.5	37	37	37
40 mm	35	35	35	40	40	40
50 mm	35.5	35.5	35.5	47	47	47
63 mm	38	38	38	38	38	38

Piston Ø	S=75 L34	S=100 L34	S=125 L34	S=160 L34	S=200 L34	S=10 L35
25 mm	29	29	29	29	29	4
32 mm	37	37	37	37	37	4
40 mm	40	40	40	40	40	4
50 mm	47	47	47	47	47	4
63 mm	54	54	54	54	54	4

Piston Ø	S=20 L35	S=25 L35	S=30 L35	S=40 L35	S=50 L35	S=75 L35
25 mm	4	4	4	6	6	8
32 mm	4	4	4	4	4	6
40 mm	4	4	4	4	4	6
50 mm	4	4	4	4	4	4
63 mm	4	4	4	4	4	4

Piston Ø	S=100 L35	S=125 L35	S=160 L35	S=200 L35
25 mm	8	10	10	10
32 mm	8	8	10	10
40 mm	6	6	8	10
50 mm	6	6	8	8
63 mm	4	6	6	8

S = stroke

## Dimensions

Piston Ø	S=10 L36	S=20 L36	S=25 L36	S=30 L36	S=40 L36	S=50 L36
25 mm	4	4	4	4	6	6
32 mm	4	4	4	4	4	6
40 mm	4	4	4	4	4	4
50 mm	4	4	4	4	4	4
63 mm	4	4	4	4	4	4

Piston Ø	S=75 L36	S=100 L36	S=125 L36	S=160 L36	S=200 L36	S=10 ZJ
25 mm	8	10	10	10	10	76.5
32 mm	6	8	10	10	10	-
40 mm	6	6	8	10	10	-
50 mm	4	6	8	8	10	-
63 mm	4	6	6	8	10	-

Piston Ø	S=20 ZJ	S=25 ZJ	S=30 ZJ	S=40 ZJ	S=50 ZJ	S=75 ZJ
25 mm	76.5	76.5	76.5	86.5	86.5	86.5
32 mm	-	85	-	-	85	100
40 mm	-	85	-	-	85	100.5
50 mm	-	89.5	-	-	89.5	115.5
63 mm	-	89.5	-	-	89.5	115.5

Piston Ø	S=100 ZJ	S=125 ZJ	S=160 ZJ	S=200 ZJ
25 mm	86.5	104.5	104.5	104.5
32 mm	100	116	116	116
40 mm	100.5	116.5	116.5	116.5
50 mm	115.5	133.5	133.5	133.5
63 mm	115.5	133.5	133.5	133.5

## Weight [kg]

Piston Ø	S	Weight kg
10 mm	10 mm	0,19 kg
10 mm	20 mm	0,22 kg
10 mm	25 mm	0,23 kg
10 mm	30 mm	0,24 kg
10 mm	40 mm	0,27 kg
10 mm	50 mm	0,29 kg
10 mm	75 mm	0,36 kg
10 mm	100 mm	0,42 kg
12 mm	10 mm	0,28 kg
12 mm	20 mm	0,32 kg
12 mm	25 mm	0,35 kg
12 mm	30 mm	0,35 kg
12 mm	40 mm	0,37 kg
12 mm	50 mm	0,43 kg

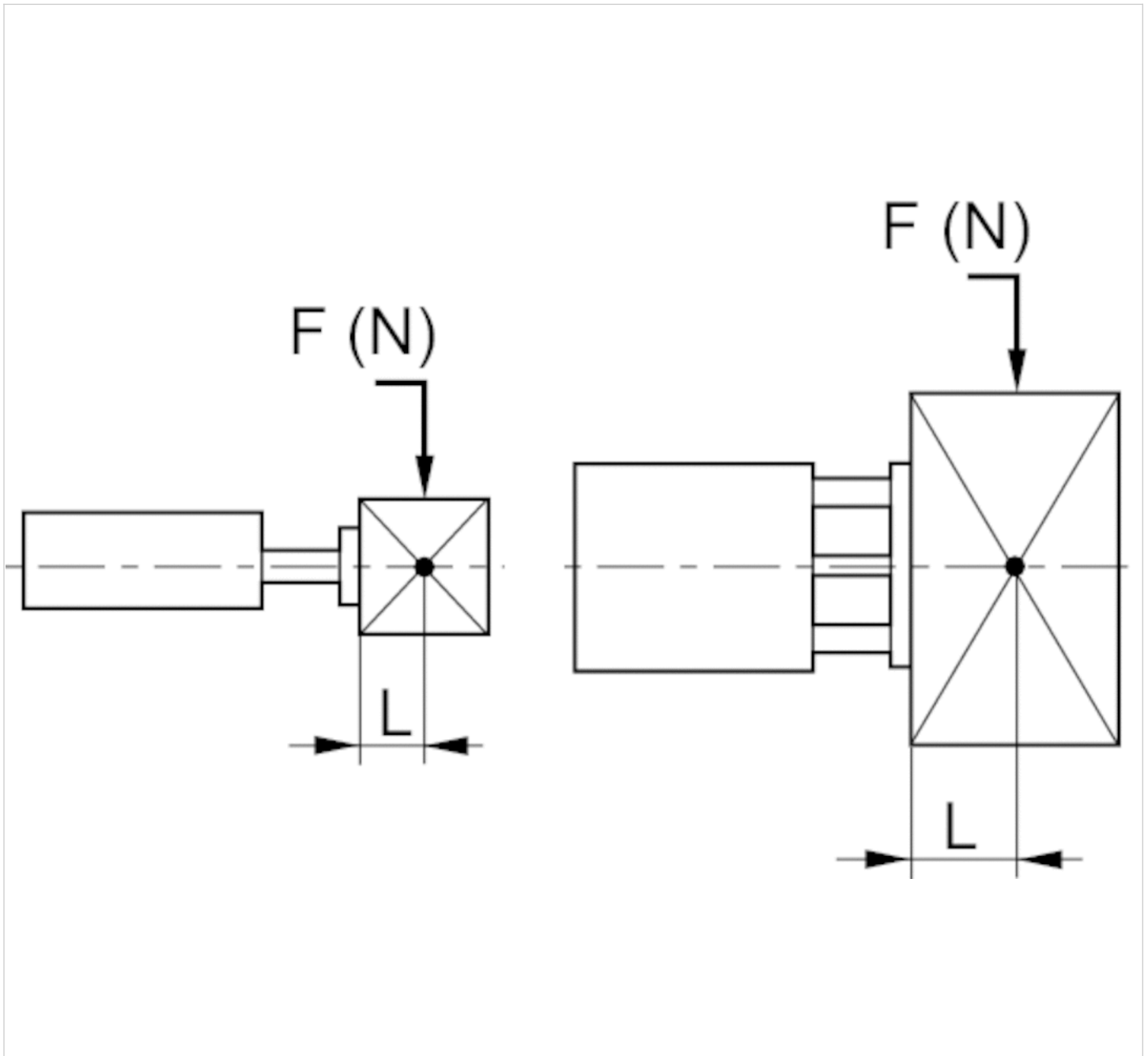
Piston Ø	S	Weight kg
12 mm	75 mm	0,48 kg
12 mm	100 mm	0,7 kg
12 mm	125 mm	0,82 kg
12 mm	150 mm	0,94 kg
16 mm	10 mm	0,36 kg
16 mm	20 mm	0,41 kg
16 mm	25 mm	0,44 kg
16 mm	30 mm	0,47 kg
16 mm	40 mm	0,56 kg
16 mm	50 mm	0,61 kg
16 mm	75 mm	0,74 kg
16 mm	100 mm	0,88 kg
16 mm	125 mm	1,03 kg
16 mm	150 mm	1,16 kg
20 mm	10 mm	0,48 kg
20 mm	20 mm	0,54 kg
20 mm	25 mm	0,58 kg
20 mm	30 mm	0,61 kg
20 mm	40 mm	0,72 kg
20 mm	50 mm	0,79 kg
20 mm	75 mm	0,95 kg
20 mm	100 mm	1,12 kg
20 mm	125 mm	1,35 kg
20 mm	150 mm	1,47 kg
25 mm	10 mm	0,9 kg
25 mm	20 mm	0,93 kg
25 mm	25 mm	-
25 mm	30 mm	1,03 kg
25 mm	40 mm	1,13 kg
25 mm	50 mm	1,22 kg
25 mm	75 mm	1,45 kg
25 mm	100 mm	1,69 kg
25 mm	125 mm	1,95 kg
25 mm	150 mm	-
25 mm	160 mm	2,28 kg
25 mm	200 mm	2,67 kg
32 mm	25 mm	1,44 kg
32 mm	50 mm	1,77 kg
32 mm	75 mm	2,1 kg
32 mm	100 mm	2,41 kg
32 mm	125 mm	2,77 kg
32 mm	160 mm	3,22 kg
32 mm	200 mm	3,74 kg
40 mm	25 mm	1,72 kg
40 mm	50 mm	2,1 kg
40 mm	75 mm	2,5 kg
40 mm	100 mm	2,9 kg
40 mm	125 mm	3,3 kg
40 mm	160 mm	3,76 kg

Piston Ø	S	Weight kg
40 mm	200 mm	4,4 kg
50 mm	25 mm	2,7 kg
50 mm	50 mm	3,2 kg
50 mm	75 mm	3,9 kg
50 mm	100 mm	4,4 kg
50 mm	125 mm	5 kg
50 mm	160 mm	5,8 kg
50 mm	200 mm	6,6 kg
63 mm	25 mm	3,55 kg
63 mm	50 mm	4,2 kg
63 mm	75 mm	4,96 kg
63 mm	100 mm	5,56 kg
63 mm	125 mm	6,27 kg
63 mm	160 mm	7,1 kg
63 mm	200 mm	8 kg

S = stroke

## Dimensions

Permissible static side load  $F$  [N] at distance  $L$



## Dimensions

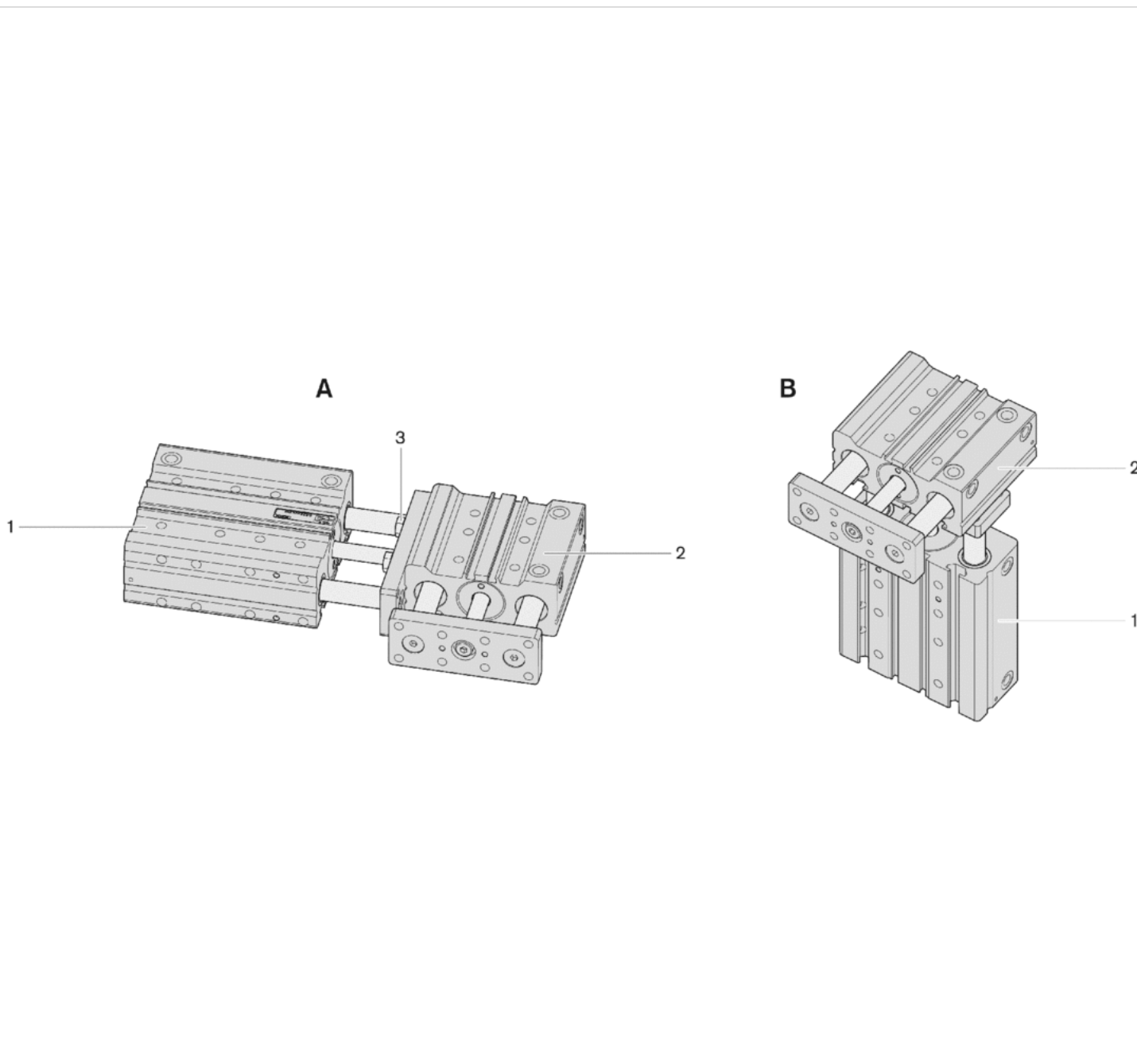
Piston Ø	L	S=10	S=20	S=25	S=30	S=40	S=50	S=75	S=100	S=125	S=150	S=160	S=200
10 mm	25	10	9	8	8	7	6	5	5	-	-	-	-
12 mm	25	19	17	16	15	23	22	20	19	19	17	-	-
16 mm	50	27	24	23	22	58	56	51	48	44	40	-	-
20 mm	50	27	24	23	22	58	56	51	48	44	40	-	-
25 mm	50	81.4	75	-	69.5	82.3	77.4	67.3	59.5	73.2	-	64.5	56.8
32 mm	50	-	-	89.9	-	-	76.1	93.2	83	94.9	-	84	74.3
40 mm	50	-	-	89.2	-	-	75.6	92.7	82.7	94.5	-	83.7	74.1
50 mm	50	-	-	110	-	-	94	135	121	136	-	121	108

Piston Ø	L	S=10	S=20	S=25	S=30	S=40	S=50	S=75	S=100	S=125	S=150	S=160	S=200
63 mm	50	-	-	110	-	-	93.5	134	120	135	-	121	107

S = stroke

## Dimensions

### GPC combinations



- 1) Cylinder 1
- 2) Cylinder 2
- 3) Screw



### Minimum strokes for cylinder 1 when using 2 assembled guide cylinders

Piston Ø	S
32 mm	25
40 mm	25
50 mm	30
63 mm	30

S = stroke

### Minimum strokes for cylinder 2 when using 2 assembled guide cylinders

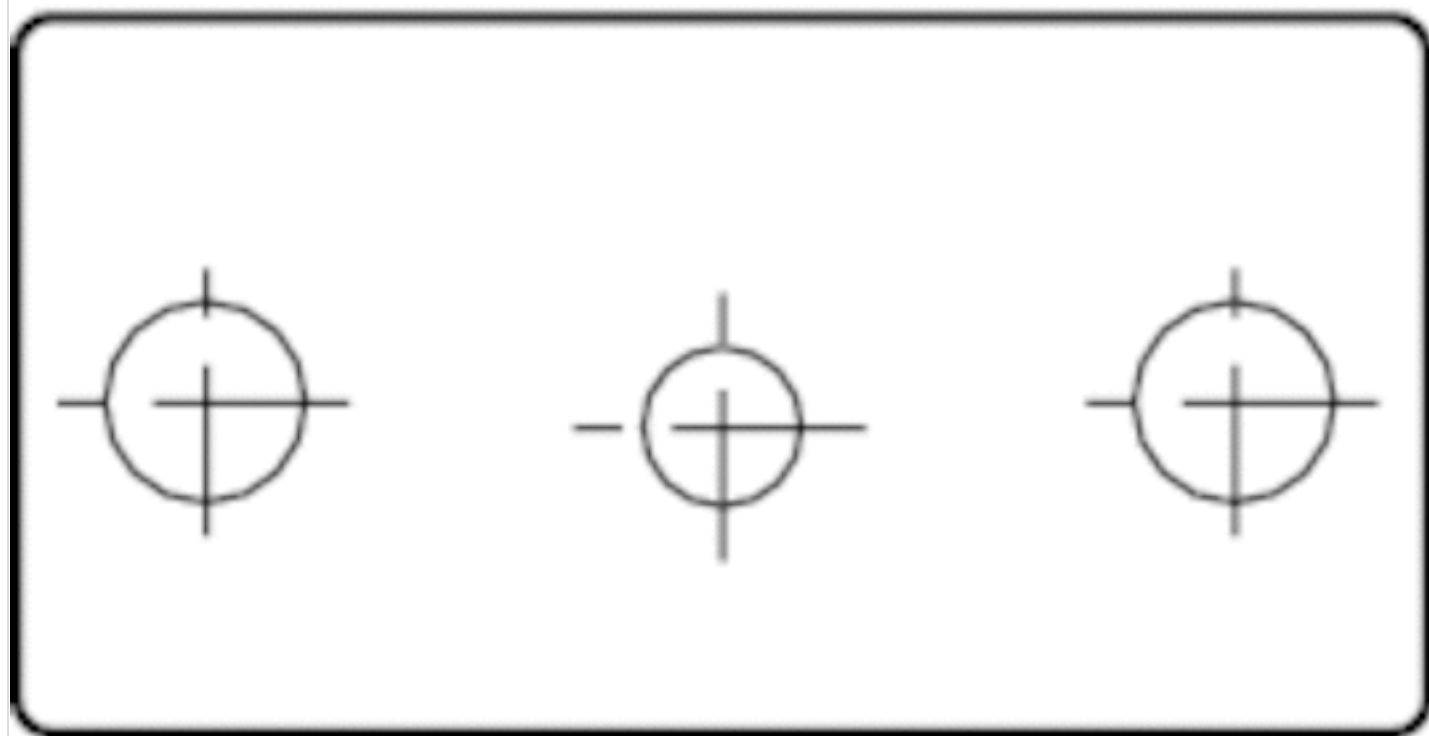
Piston Ø	Ø 2	A	B	3
10 mm	12	–	–	M4x12
12 mm	16	–	–	M5x15
16 mm	20	–	–	M5x18
20 mm	25	–	–	M6x20
25 mm	32	25	15	M6x20
32 mm	40	30	30	M8x25
40 mm	50	30	30	M8x30
50 mm	63	55	30	M10x30

A = min.stroke: assembly A↔B = min.stroke: assembly B↔3 = screw

## Dimensions

Permissible static moment  $M$  [Nm]

$M$



## Dimensions

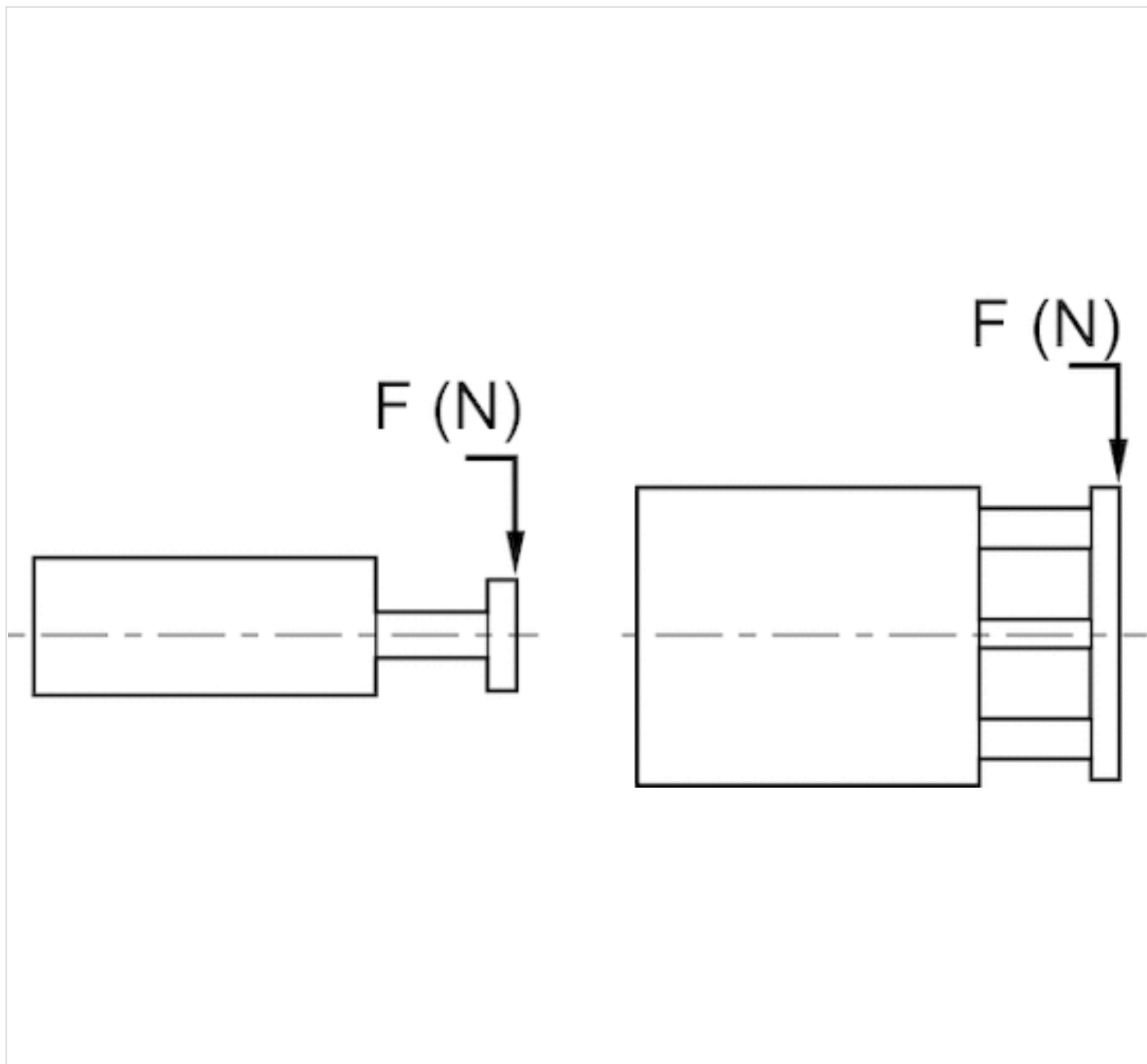
Piston $\varnothing$	S=10	S=20	S=25	S=30	S=40	S=50	S=75	S=100	S=125	S=160	S=200
10 mm	0.35	0.31	0.29	0.27	0.25	0.23	0.17	0.14	–	–	–
12 mm	0.38	0.34	0.32	0.3	0.46	0.44	0.4	0.38	0.36	0.34	–
16 mm	0.63	0.56	0.54	0.52	1.36	1.32	1.2	1.13	1.03	0.94	–
20 mm	0.73	0.65	0.62	0.59	1.57	1.51	1.38	1.3	1.19	1.08	–
25 mm	4.19	3.65	3.23	3.23	3.56	3.26	2.68	2.28	2.67	2.29	1.97
32 mm	–	–	5.33	–	–	4.15	4.67	4.02	4.4	3.8	3.28
40 mm	–	–	5.99	–	–	4.68	5.27	4.54	4.99	4.3	3.72
50 mm	–	–	8.83	–	–	6.96	9.07	7.91	8.55	7.45	6.5

Piston Ø	S=10	S=20	S=25	S=30	S=40	S=50	S=75	S=100	S=125	S=160	S=200
63 mm	-	-	10.4	-	-	8.23	10.8	9.38	10.2	8.85	7.72

S = stroke

## Dimensions

### Permissible static side force F [N]



## Dimensions

Piston Ø	S=10	S=20	S=25	S=30	S=40	S=50	S=75	S=100	S=125	S=150	S=160	S=200
25 mm	142	124	-	109	121	110	91	77	90	-	77	66
32 mm	-	-	141	-	-	110	123	106	116	-	100	86
40 mm	-	-	139	-	-	109	123	106	116	-	100	86

Piston Ø	S=10	S=20	S=25	S=30	S=40	S=50	S=75	S=100	S=125	S=150	S=160	S=200
50 mm	-	-	170	-	-	134	175	152	164	-	143	125
63 mm	-	-	168	-	-	133	173	151	164	-	143	125

## Dimensions

### Permissible static moment M [Nm]

The diagrams illustrate the application of a static load  $F$  at a distance  $L$  from the mounting point, resulting in a permissible static moment  $M$ . The left diagram shows a single rod configuration, and the right diagram shows a multi-rod configuration. The formula for the permissible static moment is given as:

$$M = F \times L$$

## Dimensions

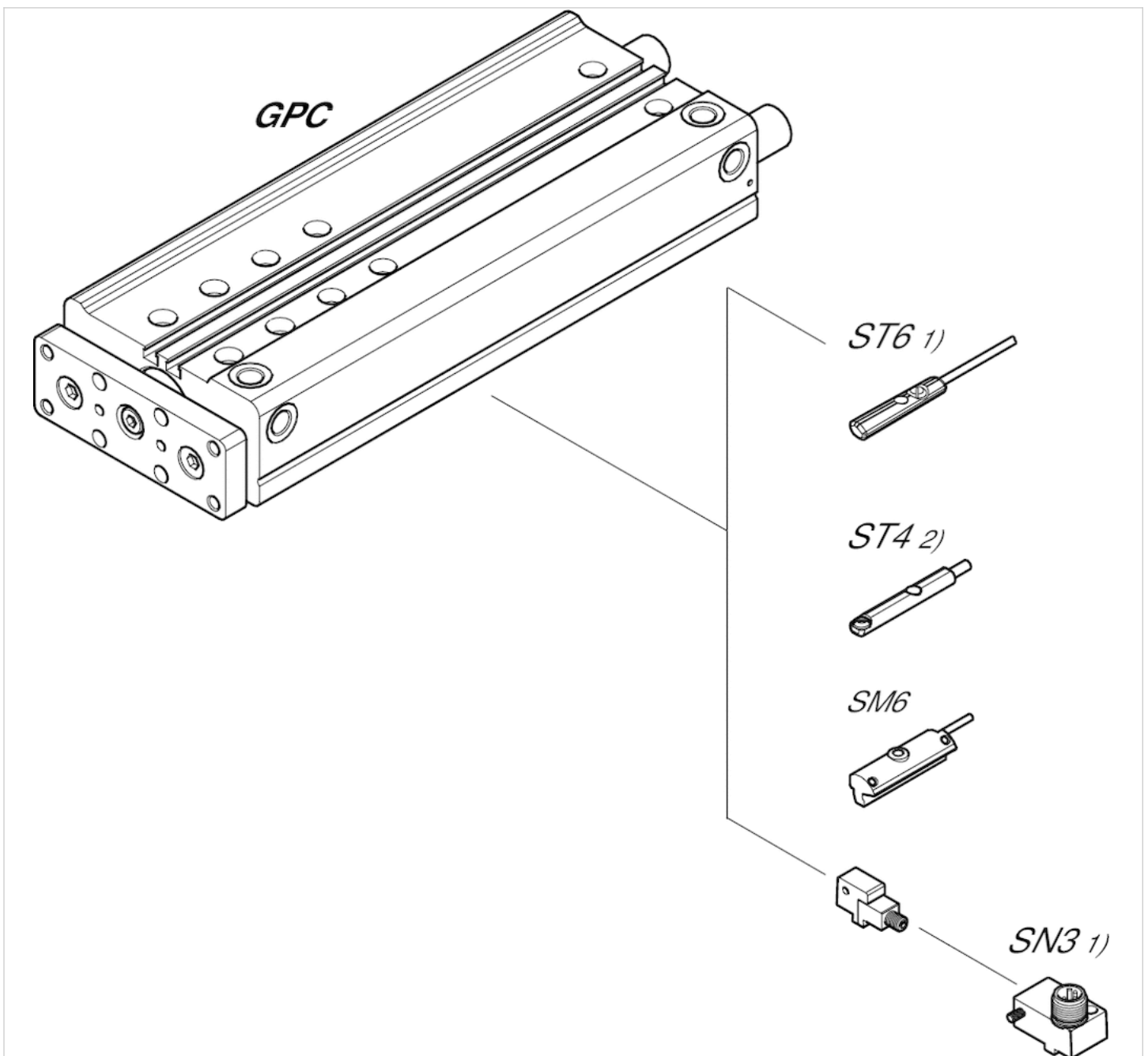
Piston Ø	S=5-30	S>30	S=35-50	S=55-100	S>100
10 mm	0.8	0.8	-	-	-
12 mm	1.5	2	-	-	-
16 mm	2	5	-	-	-
20 mm	2	5	-	-	-

Piston Ø	S=5-30	S>30	S=35-50	S=55-100	S>100
25 mm	7.5	-	10.6	10.8	16.5
32 mm	9.9	-	10.6	16.2	22
40 mm	9.9	9.9	9.9	16.2	22
50 mm	12.8	12.8	12.8	24.6	32.9
63 mm	12.8	12.8	12.8	24.6	32.9

S = stroke

## Accessories overview

### Overview drawing



1) ≤ Ø12 mm (GPC-BV, GPC-E, GPC-TL)

2) Only for Ø10 mm (GPC-BV) and all Ø (GPC-ST)

**NOTE:**

This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The

illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

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