

Electric Drives  
and Controls

Hydraulics

Linear Motion and  
Assembly Technologies

Pneumatics

Service

**Rexroth**  
Bosch Group

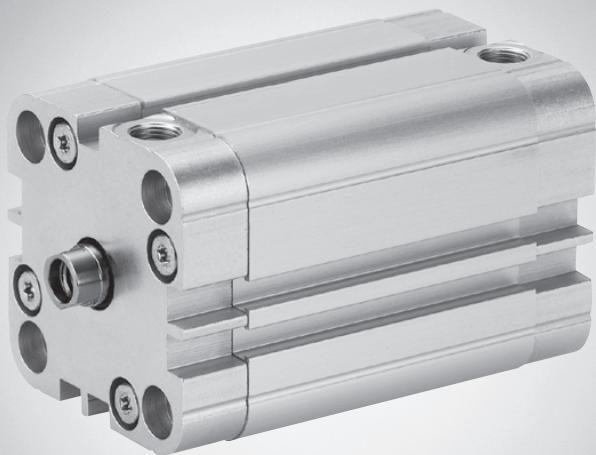


Piston rod cylinders → Short-stroke and compact cylinders

## Series KPZ

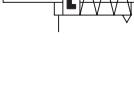
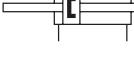
Brochure

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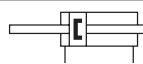
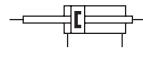
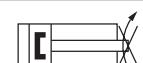
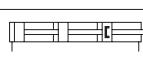
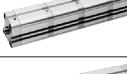
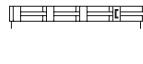
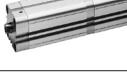
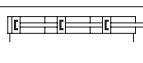
Piston rod cylinders → Short-stroke and compact cylinders

## ● Series KPZ

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Piston rod cylinders → Short-stroke and compact cylinders

## ● Series KPZ

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Piston rod cylinders → Short-stroke and compact cylinders

## ● Series KPZ

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Piston rod cylinders → Short-stroke and compact cylinders

## ● Series KPZ



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**98**

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## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: internal thread



#### Standards

Compressed air connection

#### NFE 49004

internal thread

Working pressure min./max.

1.5 bar / 10 bar

Ambient temperature min./max.

-20 °C / +80 °C

Medium temperature min./max.

-20 °C / +80 °C

Medium

Compressed air

Max. particle size

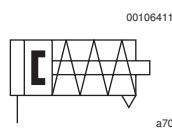
5 µm

Oil content of compressed air

0 mg/m³ - 5 mg/m³

Pressure for determining piston forces

6 bar



#### Materials:

Cylinder tube

Aluminum, anodized

Piston rod

Stainless steel

Front cover

Aluminum

End cover

Aluminum

Seal

Polyurethane

Scraper

Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	12	13	25	35	43
Extending piston force	[N]	94	151	234	387	622
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke [kg]	0.07	0.098	0.143	0.223	0.333
	+10 mm stroke [kg]	0.014	0.02	0.02	0.03	0.04
Stroke max.	[mm]	25	25	25	25	25

Piston Ø	[mm]	50	63	80	100
Retracting piston force	[N]	82	82	105	215
Extending piston force	[N]	953	1565	2551	3930
Impact energy	[J]	0.64	0.75	0.75	1
Weight	0 mm stroke [kg]	0.446	0.757	1.318	2.276
	+10 mm stroke [kg]	0.05	0.08	0.11	0.14
Stroke max.	[mm]	25	25	25	25

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: internal thread

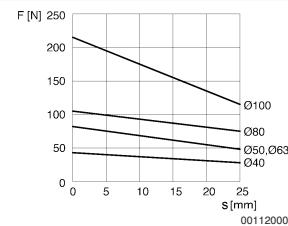
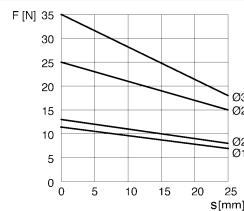
	Piston Ø Piston rod thread Ports	16 M4 M5	20 M6 M5	25 M6 M5	32 M8 G 1/8	40 M8 G 1/8
	Stroke 5	0822490000	0822491000	0822492000	0822493000	0822494000
	10	0822490001	0822491001	0822492001	0822493001	0822494001
	15	0822490002	0822491002	0822492002	0822493002	0822494002
	20	0822490003	0822491003	0822492003	0822493003	0822494003
	25	0822490004	0822491004	0822492004	0822493004	0822494004
	Piston Ø Piston rod thread Ports	50 M10 G 1/8	63 M10 G 1/8	80 M12 G 1/8	100 M16 G 1/8	
	Stroke 5	0822495000	0822496000	0822497000	0822498000	
	10	0822495001	0822496001	0822497001	0822498001	
	15	0822495002	0822496002	0822497002	0822498002	
	20	0822495003	0822496003	0822497003	0822498003	
	25	0822495004	0822496004	0822497004	0822498004	

#### Configurable product



This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

#### Retracting piston force



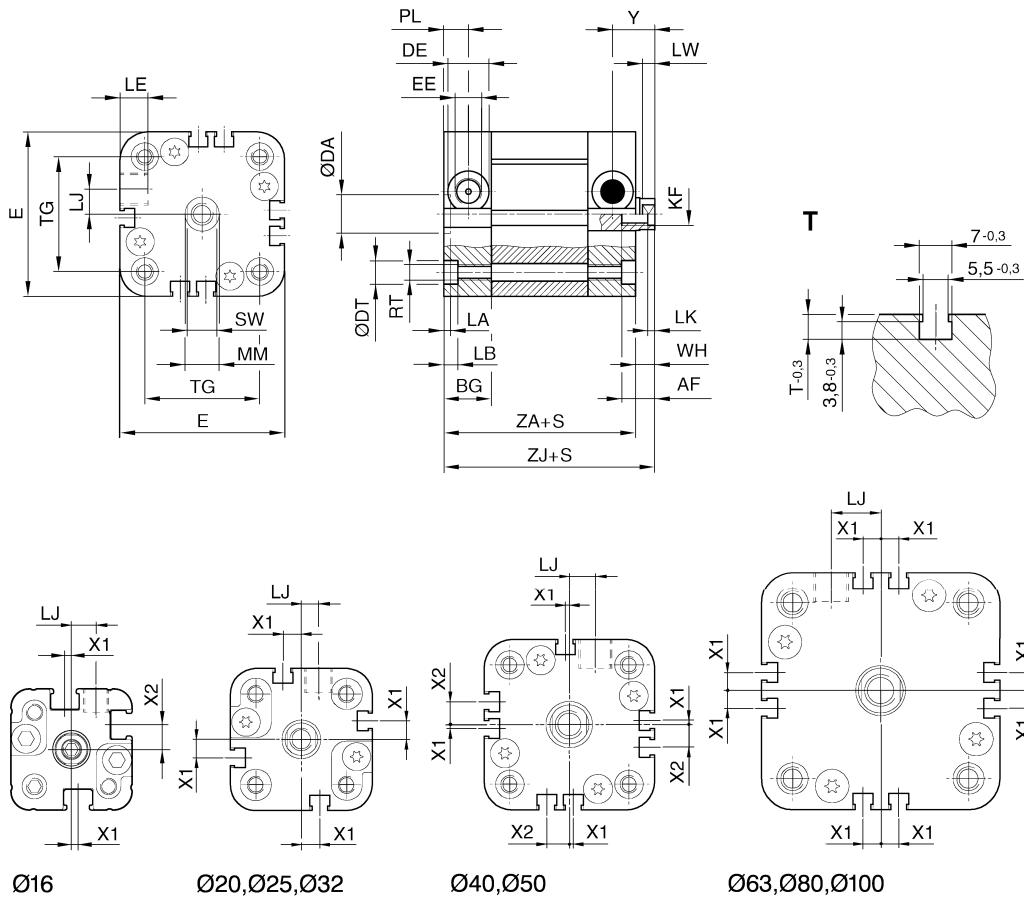
F = spring return force, s = return stroke

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: internal thread

#### Dimensions



S = stroke

T = View for sensor groove

00132968

Piston Ø	AF	BG	DA H11	DE	DT H13	E	EE	KF 6H	LA	LB	LE	LJ	LK +0,5
16	10	12.5	10	8	6	29.5	M5	M4	2.5	4	5	6.1	1.6
20	10	12.5	12	8	8	36	M5	M6	2.5	4.4	5	4.5	2.5
25	10	13	12	8	8	40	M5	M6	2.5	4.4	5	5.4	2.5
32	12	14.5	14	15	11	50	G 1/8	M8	2.5	5.4	8	5.1	2.5
40	12	14.5	14	15	10	60	G 1/8	M8	2.5	5.4	8	9.6	2.5
50	16	14.5	18	15	11	68	G 1/8	M10	2.5	1.7	8	8.5	3.5
63	16	14.5	18	15	11	84	G 1/8	M10	2.5	1.7	8	17.8	3.5
80	20	16.5	23	15	15	103	G 1/8	M12	3	0.5	8	22.9	3.5
100	24	19.5	28	15	15	124	G 1/8	M16	3	3.5	8	27.4	4.5

Piston Ø	LW	MM f8	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1
16	3.7	8	7.5	M4	7	5.3	18 ±0,4	4.5	1.6	6	12	38
20	4	10	7.5	M5	8	5.3	22 ±0,4	5	3.4	—	13.5	38
25	4	10	7.5	M5	8	5.3	26 ±0,4	5.5	3.4	—	13.5	39.5
32	4.5	12	7.5	M6	10	5.3	32 ±0,5	7	6.5	—	14.5	44
40	4.5	12	7.5	M6	10	5.4	42 ±0,5	7	1.4	8	14.5	45
50	6	16	7.5	M8	13	5.5	50 ±0,6	7.5	3.4	7	15.5	45.5
63	6	16	7.5	M8	13	5.7	62 ±0,7	8	6.15	—	15.5	50

**Piston rod cylinders → Short-stroke and compact cylinders**

**Compact cylinder, Series KPZ**

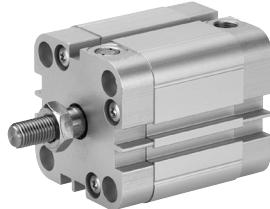
- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: internal thread

Piston Ø	LW	MM f8	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1
80	7	20	8.3	M10	16	6.1	82 ±0,7	9.5	7.7	-	18	55.5
100	8	25	9.7	M10	21	6.1	103 ±0,7	10.5	7.7	-	20	66.5
Piston Ø	ZJ											
16	42,5 0/+1,2											
20	43 0/+1,4											
25	45 0/+1,4											
32	51 0/+1,6											
40	52 0/+1,6											
50	53 0/+1,6											
63	58 ±1											
80	65 ±1											
100	77 0/+2											

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: external thread



#### Standards

Compressed air connection

#### NFE 49004

internal thread

Working pressure min./max.

1.5 bar / 10 bar

Ambient temperature min./max.

-20 °C / +80 °C

Medium temperature min./max.

-20 °C / +80 °C

Medium

Compressed air

Max. particle size

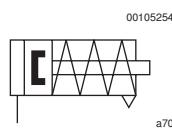
5 µm

Oil content of compressed air

0 mg/m³ - 5 mg/m³

Pressure for determining piston forces

6 bar



#### Materials:

Cylinder tube

Aluminum, anodized

Piston rod

Stainless steel

Front cover

Aluminum

End cover

Aluminum

Seal

Polyurethane

Nut for piston rod

Steel, hardened

Scraper

Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
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Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	12	13	25	35	43
Extending piston force	[N]	94	151	234	387	622
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke [kg]	0.083	0.112	0.157	0.237	0.347
	+10 mm stroke [kg]	0.014	0.02	0.02	0.03	0.04
Stroke max.	[mm]	25	25	25	25	25

Piston Ø	[mm]	50	63	80	100
Retracting piston force	[N]	82	82	105	215
Extending piston force	[N]	953	1565	2551	3930
Impact energy	[J]	0.64	0.75	0.75	1
Weight	0 mm stroke [kg]	0.468	0.779	1.368	2.375
	+10 mm stroke [kg]	0.05	0.08	0.11	0.14
Stroke max.	[mm]	25	25	25	25

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: external thread

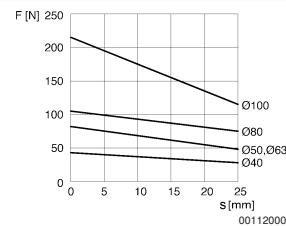
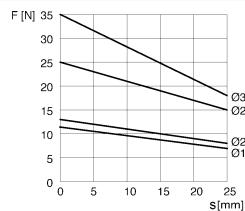
	Piston Ø Piston rod thread Ports	16 M8 M5	20 M10x1,25 M5	25 M10x1,25 M5	32 M10x1,25 G 1/8	40 M10x1,25 G 1/8
	Stroke 5	0822490200	0822491200	0822492200	0822493200	0822494200
	10	0822490201	0822491201	0822492201	0822493201	0822494201
	15	0822490202	0822491202	0822492202	0822493202	0822494202
	20	0822490203	0822491203	0822492203	0822493203	0822494203
	25	0822490204	0822491204	0822492204	0822493204	0822494204
	Piston Ø Piston rod thread Ports	50 M12x1,25 G 1/8	63 M12x1,25 G 1/8	80 M16x1,5 G 1/8	100 M20x1,5 G 1/8	
	Stroke 5	0822495200	0822496200	0822497200	0822498200	
	10	0822495201	0822496201	0822497201	0822498201	
	15	0822495202	0822496202	0822497202	0822498202	
	20	0822495203	0822496203	0822497203	0822498203	
	25	0822495204	0822496204	0822497204	0822498204	

#### Configurable product



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#### Retracting piston force



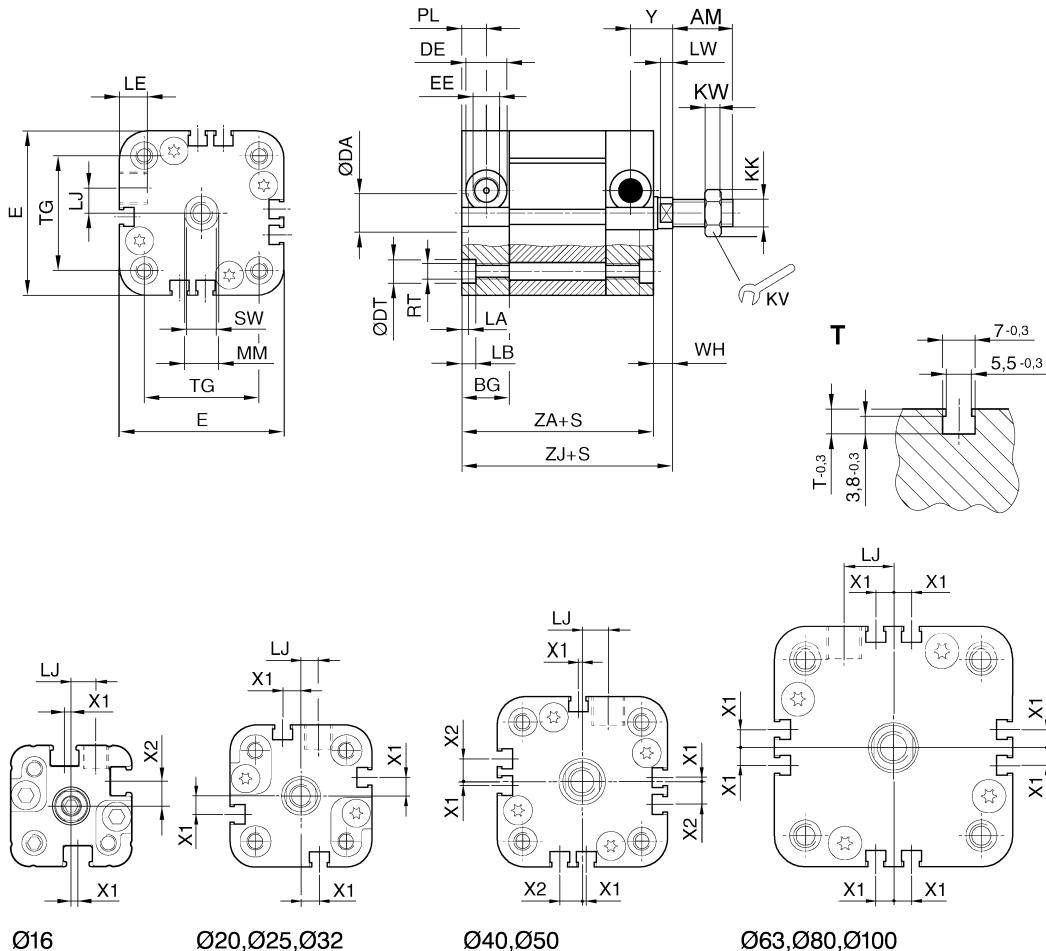
F = spring return force, s = return stroke

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: external thread

#### Dimensions



S = stroke

T = View for sensor groove

00132969

Piston Ø	AM	BG	DA H11	DE	DT H13	E	EE	KK	KV	KW	LA	LB	LE
16	20	12.5	10	8	6	29.5	M5	M8	13	4	2.5	4	5
20	22	12.5	12	8	8	36	M5	M10x1,25	17	6	2.5	4.4	5
25	22	13	12	8	8	40	M5	M10x1,25	17	6	2.5	4.4	5
32	22	14.5	14	15	11	50	G 1/8	M10x1,25	17	6	2.5	5.4	8
40	22	14.5	14	15	10	60	G 1/8	M10x1,25	17	6	2.5	5.4	8
50	24	14.5	18	15	11	68	G 1/8	M12x1,25	19	7	2.5	1.7	8
63	24	14.5	18	15	11	84	G 1/8	M12x1,25	19	7	2.5	1.7	8
80	32	16.5	23	15	15	103	G 1/8	M16x1,5	24	8	3	0.5	8
100	40	19.5	28	15	15	124	G 1/8	M20x1,5	30	10	3	3.5	8

Piston Ø	LJ	LW	MM f8	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1
16	6.1	3.7	8	7.5	M4	7	5.3	18 ±0,4	4.5	1.6	6	12	38
20	4.5	4	10	7.5	M5	8	5.3	22 ±0,4	5	3.4	-	13.5	38
25	5.4	4	10	7.5	M5	8	5.3	26 ±0,4	5.5	3.4	-	13.5	39.5
32	5.1	4.5	12	7.5	M6	10	5.3	32 ±0,5	7	6.5	-	14.5	44
40	9.6	4.5	12	7.5	M6	10	5.4	42 ±0,5	7	1.4	8	14.5	45

**Piston rod cylinders → Short-stroke and compact cylinders**

**Compact cylinder, Series KPZ**

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: external thread

Piston Ø	LJ	LW	MM f8	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1
50	8.5	6	16	7.5	M8	13	5.5	50 ±0,6	7.5	3.4	7	15.5	45.5
63	17.8	6	16	7.5	M8	13	5.7	62 ±0,7	8	6.15	-	15.5	50
80	22.9	7	20	8.3	M10	16	6.1	82 ±0,7	9.5	7.7	-	18	55.5
100	27.4	8	25	9.7	M10	21	6.1	103 ±0,7	10.5	7.7	-	20	66.5

Piston Ø	ZJ												
16	42,5 0/+1,2												
20	43 0/+1,4												
25	45 0/+1,4												
32	51 0/+1,6												
40	52 0/+1,6												
50	53 0/+1,6												
63	58 ±1												
80	65 ±1												
100	77 0/+2												

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, extended without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: internal thread



Standards	NFE 49004
Compressed air connection	internal thread
Working pressure min./max.	1.5 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6 bar
Materials:	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Scraper	Polyurethane

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#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	67	124	191	329	559
Extending piston force	[N]	12	13	25	35	43
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke [kg]	0.07	0.098	0.143	0.223	0.333
	+10 mm stroke [kg]	0.014	0.02	0.02	0.03	0.04
Stroke max.	[mm]	25	25	25	25	25

Piston Ø	[mm]	50	63	80	100
Retracting piston force	[N]	848	1450	2387	3671
Extending piston force	[N]	82	82	105	215
Impact energy	[J]	0.64	0.75	0.75	1
Weight	0 mm stroke [kg]	0.446	0.757	1.318	2.276
	+10 mm stroke [kg]	0.05	0.08	0.11	0.14
Stroke max.	[mm]	25	25	25	25

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, extended without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: internal thread

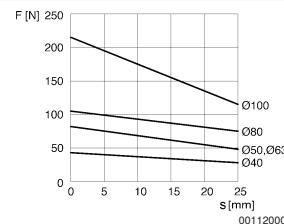
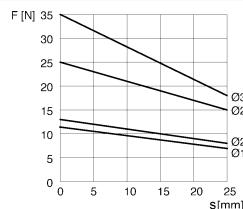
	Piston Ø Piston rod thread Ports	16 M4 M5	20 M6 M5	25 M6 M5	32 M8 G 1/8	40 M8 G 1/8
	Stroke 5	0822490100	0822491100	0822492100	0822493100	0822494100
	10	0822490101	0822491101	0822492101	0822493101	0822494101
	15	0822490102	0822491102	0822492102	0822493102	0822494102
	20	0822490103	0822491103	0822492103	0822493103	0822494103
	25	0822490104	0822491104	0822492104	0822493104	0822494104
	Piston Ø Piston rod thread Ports	50 M10 G 1/8	63 M10 G 1/8	80 M12 G 1/8	100 M16 G 1/8	
	Stroke 5	0822495100	0822496100	0822497100	0822498100	
	10	0822495101	0822496101	0822497101	0822498101	
	15	0822495102	0822496102	0822497102	0822498102	
	20	0822495103	0822496103	0822497103	0822498103	
	25	0822495104	0822496104	0822497104	0822498104	

#### Configurable product



This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

#### Extending piston force



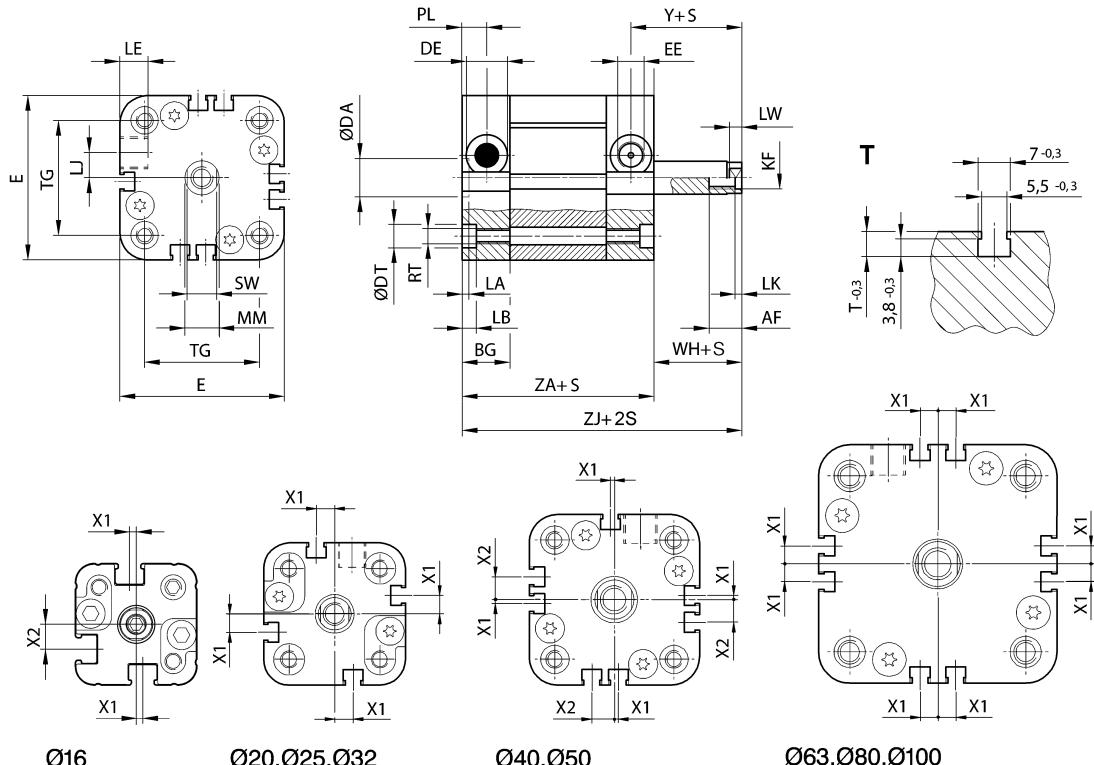
F = spring return force, s = stroke

## Piston rod cylinders → Short-stroke and compact cylinders

## Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, extended without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: internal thread

## Dimensions



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S = stroke

T = View for sensor groove

Piston Ø	AF	BG	DA H11	DE	DT H13	E	EE	KF 6H	LA	LB	LE	LJ	LK +0,5
16	10	12.5	10	8	6	29.5	M5	M4	2.5	4	5	6.1	1.6
20	10	12.5	12	8	8	36	M5	M6	2.5	4.4	5	4.5	2.5
25	10	13	12	8	8	40	M5	M6	2.5	4.4	5	5.4	2.5
32	12	14.5	14	15	11	50	G 1/8	M8	2.5	5.4	8	5.1	2.5
40	12	14.5	14	15	10	60	G 1/8	M8	2.5	5.4	8	9.6	2.5
50	16	14.5	18	15	11	68	G 1/8	M10	2.5	1.7	8	8.5	3.5
63	16	14.5	18	15	11	84	G 1/8	M10	2.5	1.7	8	17.8	3.5
80	20	16.5	23	15	15	103	G 1/8	M12	3	0.5	8	22.9	3.5
100	24	19.5	28	15	15	124	G 1/8	M16	3	3.5	8	27.4	4.5

Piston Ø	LW	MM f8	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1
16	3.7	8	7.5	M4	7	5.3	18 ±0,4	4.5	1.6	6	12	38
20	4	10	7.5	M5	8	5.3	22 ±0,4	5	3.4	—	13.5	38
25	4	10	7.5	M5	8	5.3	26 ±0,4	5.5	3.4	—	13.5	39.5
32	4.5	12	7.5	M6	10	5.3	32 ±0,5	7	6.5	—	14.5	44
40	4.5	12	7.5	M6	10	5.4	42 ±0,5	7	1.4	8	14.5	45
50	6	16	7.5	M8	13	5.5	50 ±0,6	7.5	3.4	7	15.5	45.5
63	6	16	7.5	M8	13	5.7	62 ±0,7	8	6.15	—	15.5	50
80	7	20	8.3	M10	16	6.1	82 ±0,7	9.5	7.7	—	18	55.5
100	8	25	9.7	M10	21	6.1	103 ±0,7	10.5	7.7	—	20	66.5

Piston Ø	ZJ											
16	42,5 0/+1,2											

**Piston rod cylinders → Short-stroke and compact cylinders****Compact cylinder, Series KPZ**

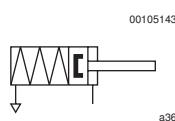
- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, extended without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: internal thread

Piston Ø	ZJ														
20	43 0/+1,4														
25	45 0/+1,4														
32	51 0/+1,6														
40	52 0/+1,6														
50	53 0/+1,6														
63	58 ±1														
80	65 ±1														
100	77 0/+2														

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, extended without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: external thread



Standards	NFE 49004
Compressed air connection	internal thread
Working pressure min./max.	1.5 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6 bar
Materials:	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Nut for piston rod	Steel, hardened
Scraper	Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

Piston Ø		[mm]	16	20	25	32	40
Retracting piston force		[N]	67	124	191	329	559
Extending piston force		[N]	12	13	25	35	43
Impact energy		[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke	[kg]	0.083	0.112	0.157	0.237	0.347
	+10 mm stroke	[kg]	0.014	0.02	0.02	0.03	0.04
Stroke max.		[mm]	25	25	25	25	25

Piston Ø		[mm]	50	63	80	100
Retracting piston force		[N]	848	1450	2387	3671
Extending piston force		[N]	82	82	105	215
Impact energy		[J]	0.64	0.75	0.75	1
Weight	0 mm stroke	[kg]	0.468	0.779	1.368	2.375
	+10 mm stroke	[kg]	0.05	0.08	0.11	0.14
Stroke max.		[mm]	25	25	25	25

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, extended without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: external thread

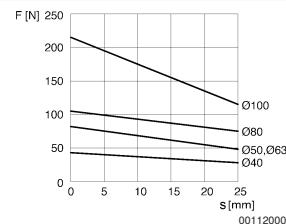
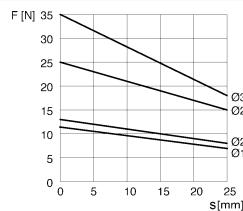
	Piston Ø Piston rod thread Ports	16 M8 M5	20 M10x1,25 M5	25 M10x1,25 M5	32 M10x1,25 G 1/8	40 M10x1,25 G 1/8
	Stroke 5	0822490300	0822491300	0822492300	0822493300	0822494300
	10	0822490301	0822491301	0822492301	0822493301	0822494301
	15	0822490302	0822491302	0822492302	0822493302	0822494302
	20	0822490303	0822491303	0822492303	0822493303	0822494303
	25	0822490304	0822491304	0822492304	0822493304	0822494304
	Piston Ø Piston rod thread Ports	50 M12x1,25 G 1/8	63 M12x1,25 G 1/8	80 M16x1,5 G 1/8	100 M20x1,5 G 1/8	
	Stroke 5	0822495300	0822496300	0822497300	0822498300	
	10	0822495301	0822496301	0822497301	0822498301	
	15	0822495302	0822496302	0822497302	0822498302	
	20	0822495303	0822496303	0822497303	0822498303	
	25	0822495304	0822496304	0822497304	0822498304	

#### Configurable product



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#### Extending piston force



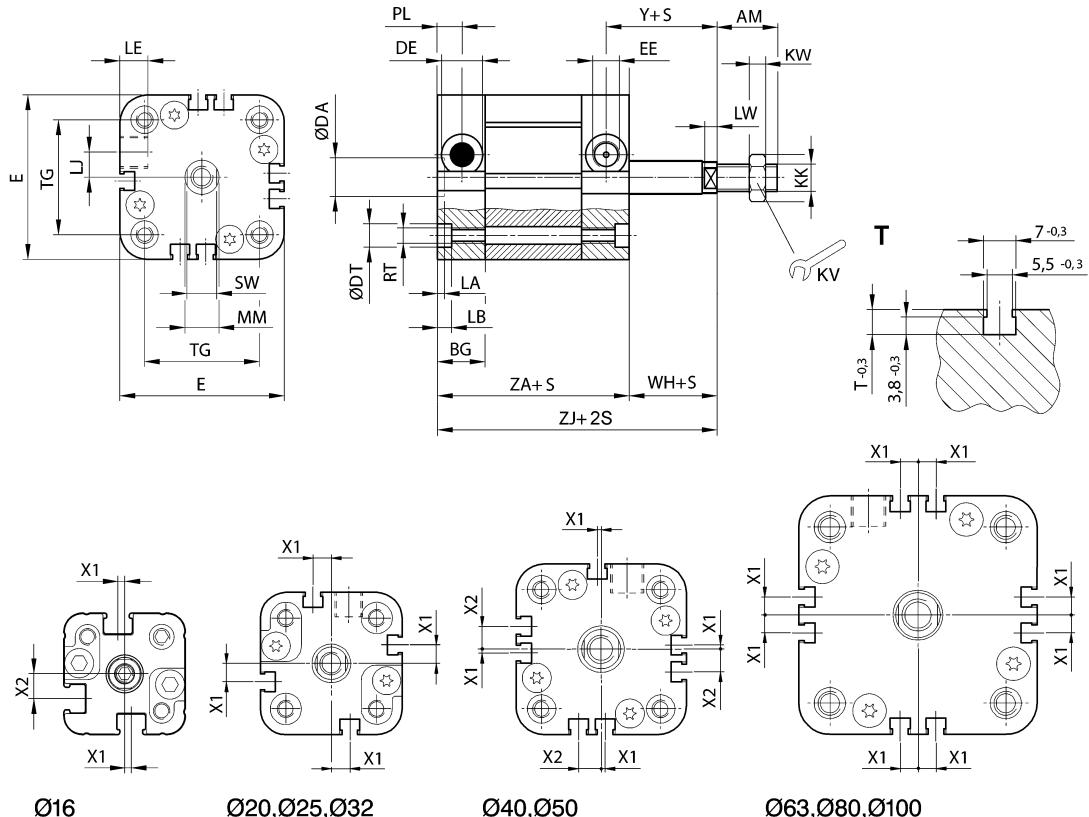
F = spring return force, s = stroke

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, extended without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: external thread

#### Dimensions



S = stroke

T = View for sensor groove

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Piston Ø	AM	BG	DA H11	DE	DT H13	E	EE	KK	KV	KW	LA	LB	LE
16	20	12.5	10	8	6	29.5	M5	M8	13	4	2.5	4	5
20	22	12.5	12	8	8	36	M5	M10x1,25	17	6	2.5	4.4	5
25	22	13	12	8	8	40	M5	M10x1,25	17	6	2.5	4.4	5
32	22	14.5	14	15	11	50	G 1/8	M10x1,25	17	6	2.5	5.4	8
40	22	14.5	14	15	10	60	G 1/8	M10x1,25	17	6	2.5	5.4	8
50	24	14.5	18	15	11	68	G 1/8	M12x1,25	19	7	2.5	1.7	8
63	24	14.5	18	15	11	84	G 1/8	M12x1,25	19	7	2.5	1.7	8
80	32	16.5	23	15	15	103	G 1/8	M16x1,5	24	8	3	0.5	8
100	40	19.5	28	15	15	124	G 1/8	M20x1,5	30	10	3	3.5	8

Piston Ø	LJ	LW	MM f8	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1
16	6.1	3.7	8	7.5	M4	7	5.3	18 ± 0,4	4.5	1.6	6	12	38
20	4.5	4	10	7.5	M5	8	5.3	22 ± 0,4	5	3.4	—	13.5	38
25	5.4	4	10	7.5	M5	8	5.3	26 ± 0,4	5.5	3.4	—	13.5	39.5
32	5.1	4.5	12	7.5	M6	10	5.3	32 ± 0,5	7	6.5	—	14.5	44
40	9.6	4.5	12	7.5	M6	10	5.4	42 ± 0,5	7	1.4	8	14.5	45
50	8.5	6	16	7.5	M8	13	5.5	50 ± 0,6	7.5	3.4	7	15.5	45.5
63	17.8	6	16	7.5	M8	13	5.7	62 ± 0,7	8	6.15	—	15.5	50
80	22.9	7	20	8.3	M10	16	6.1	82 ± 0,7	9.5	7.7	—	18	55.5
100	27.4	8	25	9.7	M10	21	6.1	103 ± 0,7	10.5	7.7	—	20	66.5

**Piston rod cylinders → Short-stroke and compact cylinders****Compact cylinder, Series KPZ**

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, extended without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: external thread

Piston Ø	ZJ														
16	42,5 0/+1,2														
20	43 0/+1,4														
25	45 0/+1,4														
32	51 0/+1,6														
40	52 0/+1,6														
50	53 0/+1,6														
63	58 ±1														
80	65 ±1														
100	77 0/+2														

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: through, internal thread



#### Standards

Compressed air connection

#### NFE 49004

internal thread

Working pressure min./max.

1.5 bar / 10 bar

Ambient temperature min./max.

-20 °C / +80 °C

Medium temperature min./max.

-20 °C / +80 °C

Medium

Compressed air

Max. particle size

5 µm

Oil content of compressed air

0 mg/m³ - 5 mg/m³

Pressure for determining piston forces

6 bar

#### Materials:

Cylinder tube

Aluminum, anodized

Piston rod

Stainless steel

Front cover

Aluminum

End cover

Aluminum

Seal

Polyurethane

Scraper

Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	12	13	25	35	43
Extending piston force	[N]	67	124	191	329	559
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke [kg]	0.079	0.108	0.154	0.238	0.348
	+10 mm stroke [kg]	0.018	0.03	0.03	0.04	0.05
Stroke max.	[mm]	25	25	25	25	25

Piston Ø	[mm]	50	63	80	100
Retracting piston force	[N]	82	82	105	215
Extending piston force	[N]	848	1450	2387	3671
Impact energy	[J]	0.64	0.75	0.75	1
Weight	0 mm stroke [kg]	0.474	0.785	1.367	2.349
	+10 mm stroke [kg]	0.07	0.1	0.13	0.18
Stroke max.	[mm]	25	25	25	25

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: through, internal thread

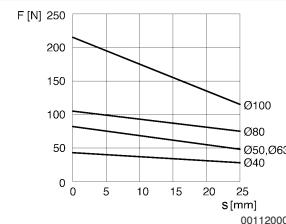
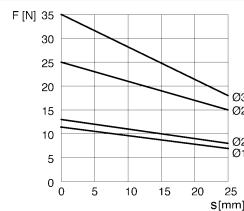
	Piston Ø Piston rod thread Ports	16 M4 M5	20 M6 M5	25 M6 M5	32 M8 G 1/8	40 M8 G 1/8
	Stroke 5	0822490500	0822491500	0822492500	0822493500	0822494500
	10	0822490501	0822491501	0822492501	0822493501	0822494501
	15	0822490502	0822491502	0822492502	0822493502	0822494502
	20	0822490503	0822491503	0822492503	0822493503	0822494503
	25	0822490504	0822491504	0822492504	0822493504	0822494504
	Piston Ø Piston rod thread Ports	50 M10 G 1/8	63 M10 G 1/8	80 M12 G 1/8	100 M16 G 1/8	
	Stroke 5	0822495500	0822496500	0822497500	0822498500	
	10	0822495501	0822496501	0822497501	0822498501	
	15	0822495502	0822496502	0822497502	0822498502	
	20	0822495503	0822496503	0822497503	0822498503	
	25	0822495504	0822496504	0822497504	0822498504	

#### Configurable product



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#### Retracting piston force



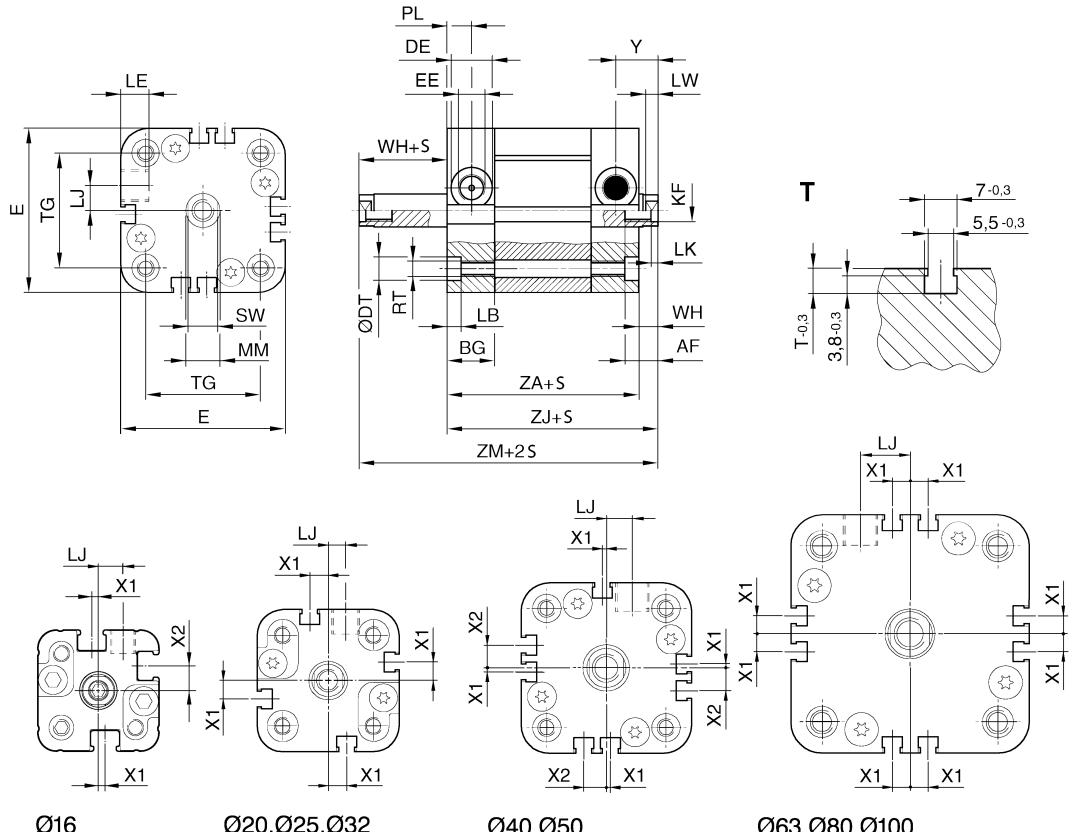
F = spring return force, s = return stroke

## Piston rod cylinders → Short-stroke and compact cylinders

## Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: through, internal thread

## Dimensions



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S = stroke

T = View for sensor groove

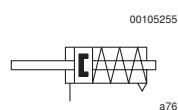
Piston Ø	AF	BG	DE	DT H13	E	EE	KF 6H	LB	LE	LJ	LK +0,5	LW	MM f8
16	10	12.5	8	6	29.5	M5	M4	4	5	6.1	1.6	3.7	8
20	10	12.5	8	8	36	M5	M6	4.4	5	4.5	2.5	4	10
25	10	13	8	8	40	M5	M6	4.4	5	5.4	2.5	4	10
32	12	14.5	15	11	50	G 1/8	M8	5.4	8	5.1	2.5	4.5	12
40	12	14.5	15	10	60	G 1/8	M8	5.4	8	9.6	2.5	4.5	12
50	16	14.5	15	11	68	G 1/8	M10	1.7	8	8.5	3.5	6	16
63	16	14.5	15	11	84	G 1/8	M10	1.7	8	17.8	3.5	6	16
80	20	16.5	15	15	103	G 1/8	M12	0.5	8	22.9	3.5	7	20
100	24	19.5	15	15	124	G 1/8	M16	3.5	8	27.4	4.5	8	25

Piston Ø	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1	ZJ	ZM
16	7.5	M4	7	5.3	18 ±0,4	4.5	1.6	6	12	38	42,5 0/+1,2	48
20	7.5	M5	8	5.3	22 ±0,4	5	3.4	-	13.5	38	43 0/+1,4	49.5
25	7.5	M5	8	5.3	26 ±0,4	5.5	3.4	-	13.5	39.5	45 0/+1,4	51.5
32	7.5	M6	10	5.3	32 ±0,5	7	6.5	-	14.5	44	51 0/+1,6	59.5
40	7.5	M6	10	5.4	42 ±0,5	7	1.4	8	14.5	45	52 0/+1,6	60.5
50	7.5	M8	13	5.5	50 ±0,6	7.5	3.4	7	15.5	45.5	53 0/+1,6	62.5
63	7.5	M8	13	5.7	62 ±0,7	8	6.15	-	15.5	50	58 ±1	68
80	8.3	M10	16	6.1	82 ±0,7	9.5	7.7	-	18	55.5	65 ±1	77
100	9.7	M10	21	6.1	103 ±0,7	10.5	7.7	-	20	66.5	77 0/+2	89.5

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: through, external thread



Standards  
Compressed air connection

NFE 49004  
internal thread

Working pressure min./max.  
Ambient temperature min./max.  
Medium temperature min./max.  
Medium  
Max. particle size  
Oil content of compressed air  
Pressure for determining piston forces

1.5 bar / 10 bar  
-20 °C / +80 °C  
-20 °C / +80 °C  
Compressed air  
5 µm  
0 mg/m³ - 5 mg/m³  
6 bar

Materials:  
Cylinder tube  
Piston rod  
Front cover  
End cover  
Seal  
Nut for piston rod  
Scraper

Aluminum, anodized  
Stainless steel  
Aluminum  
Aluminum  
Polyurethane  
Steel, hardened  
Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	12	13	25	35	43
Extending piston force	[N]	67	124	191	329	559
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke [kg]	0.104	0.135	0.181	0.265	0.375
	+10 mm stroke [kg]	0.018	0.03	0.03	0.04	0.05
Stroke max.	[mm]	25	25	25	25	25

Piston Ø	[mm]	50	63	80	100
Retracting piston force	[N]	82	82	105	215
Extending piston force	[N]	848	1450	2387	3671
Impact energy	[J]	0.64	0.75	0.75	1
Weight	0 mm stroke [kg]	0.517	0.828	1.565	2.547
	+10 mm stroke [kg]	0.07	0.1	0.13	0.18
Stroke max.	[mm]	25	25	25	25

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston

► cushioning: elastic ► piston rod: through, external thread

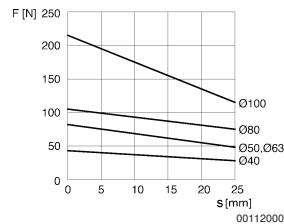
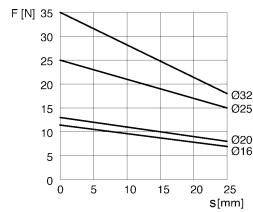
	Piston Ø Piston rod thread Ports	16 M8 M5	20 M10x1,25 M5	25 M10x1,25 M5	32 M10x1,25 G 1/8	40 M10x1,25 G 1/8
	Stroke 5	0822490700	0822491700	0822492700	0822493700	0822494700
	10	0822490701	0822491701	0822492701	0822493701	0822494701
	15	0822490702	0822491702	0822492702	0822493702	0822494702
	20	0822490703	0822491703	0822492703	0822493703	0822494703
	25	0822490704	0822491704	0822492704	0822493704	0822494704
	Piston Ø Piston rod thread Ports	50 M12x1,25 G 1/8	63 M12x1,25 G 1/8	80 M16x1,5 G 1/8	100 M20x1,5 G 1/8	
	Stroke 5	0822495700	0822496700	0822497700	0822498700	
	10	0822495701	0822496701	0822497701	0822498701	
	15	0822495702	0822496702	0822497702	0822498702	
	20	0822495703	0822496703	0822497703	0822498703	
	25	0822495704	0822496704	0822497704	0822498704	

#### Configurable product



This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

#### Retracting piston force



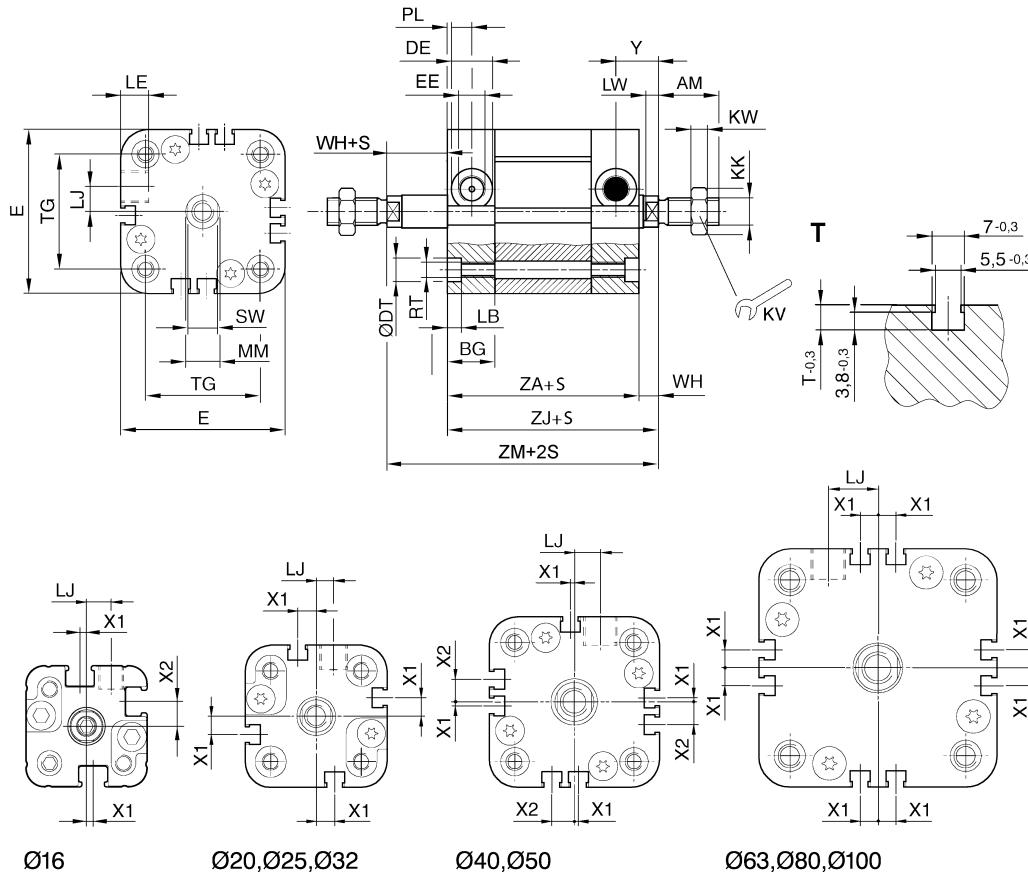
F = spring return force, s = return stroke

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: through, external thread

#### Dimensions



S = stroke

T = View for sensor groove

00132963

Piston Ø	AM	BG	DE	DT H13	E	EE	KK	KV	KW	LB	LE	LJ	LW
16	20	12.5	8	6	29.5	M5	M8	13	4	4	5	6.1	3.7
20	22	12.5	8	8	36	M5	M10x1,25	17	6	4.4	5	4.5	4
25	22	13	8	8	40	M5	M10x1,25	17	6	4.4	5	5.4	4
32	22	14.5	15	11	50	G 1/8	M10x1,25	17	6	5.4	8	5.1	4.5
40	22	14.5	15	10	60	G 1/8	M10x1,25	17	6	5.4	8	9.6	4.5
50	24	14.5	15	11	68	G 1/8	M12x1,25	19	7	1.7	8	8.5	6
63	24	14.5	15	11	84	G 1/8	M12x1,25	19	7	1.7	8	17.8	6
80	32	16.5	15	15	103	G 1/8	M16x1,5	24	8	0.5	8	22.9	7
100	40	19.5	15	15	124	G 1/8	M20x1,5	30	10	3.5	8	27.4	8

Piston Ø	MM f8	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1	ZJ
16	8	7.5	M4	7	5.3	18 ±0,4	4.5	1.6	6	12	38	42,5 0/+1,2
20	10	7.5	M5	8	5.3	22 ±0,4	5	3.4	—	13.5	38	43 0/+1,4
25	10	7.5	M5	8	5.3	26 ±0,4	5.5	3.4	—	13.5	39.5	45 0/+1,4
32	12	7.5	M6	10	5.3	32 ±0,5	7	6.5	—	14.5	44	51 0/+1,6
40	12	7.5	M6	10	5.4	42 ±0,5	7	1.4	8	14.5	45	52 0/+1,6
50	16	7.5	M8	13	5.5	50 ±0,6	7.5	3.4	7	15.5	45.5	53 0/+1,6
63	16	7.5	M8	13	5.7	62 ±0,7	8	6.15	—	15.5	50	58 ±1
80	20	8.3	M10	16	6.1	82 ±0,7	9.5	7.7	—	18	55.5	65 ±1

**Piston rod cylinders → Short-stroke and compact cylinders****Compact cylinder, Series KPZ**

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston

► cushioning: elastic ► piston rod: through, external thread

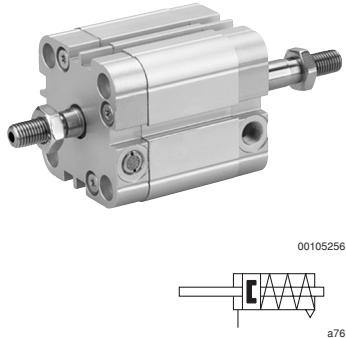
Piston Ø	MM f8	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1	ZJ
100	25	9.7	M10	21	6.1	103 ±0,7	10.5	7.7	-	20	66.5	77 0/+2

Piston Ø	ZM											
16	48											
20	49.5											
25	51.5											
32	59.5											
40	60.5											
50	62.5											
63	68											
80	77											
100	89.5											

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: hollow, through, external thread



Standards	NFE 49004
Compressed air connection	internal thread
Working pressure min./max.	1.5 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6 bar
Materials:	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Nut for piston rod	Steel, hardened
Scraper	Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

Piston Ø	[mm]	20	25	32	40	50
Retracting piston force	[N]	13	25	35	43	82
Extending piston force	[N]	124	191	329	559	848
Impact energy	[J]	0.15	0.2	0.4	0.52	0.64
Weight	0 mm stroke +10 mm stroke	[kg] [kg]	0.135 0.03	0.181 0.03	0.265 0.04	0.375 0.05
Stroke max.	[mm]	25	25	25	25	25

Piston Ø	[mm]	63	80	100		
Retracting piston force	[N]	82	105	215		
Extending piston force	[N]	1450	2387	3671		
Impact energy	[J]	0.75	0.75	1		
Weight	0 mm stroke +10 mm stroke	[kg] [kg]	0.828 0.1	1.565 0.13	2.547 0.18	
Stroke max.	[mm]	25	25	25		

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston

► cushioning: elastic ► piston rod: hollow, through, external thread

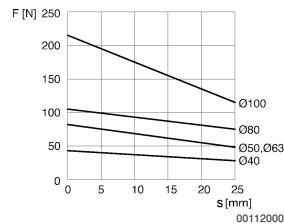
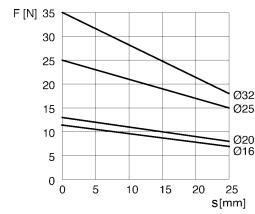
	Piston Ø Piston rod thread Ports	20 M10x1,25 M5	25 M10x1,25 M5	32 M10x1,25 G 1/8	40 M10x1,25 G 1/8	50 M12x1,25 G 1/8
	Stroke 5	0822491600	0822492600	0822493600	0822494600	0822495600
	10	0822491601	0822492601	0822493601	0822494601	0822495601
	15	0822491602	0822492602	0822493602	0822494602	0822495602
	20	0822491603	0822492603	0822493603	0822494603	0822495603
	25	0822491604	0822492604	0822493604	0822494604	0822495604
	Piston Ø Piston rod thread Ports	63 M12x1,25 G 1/8	80 M16x1,5 G 1/8	100 M20x1,5 G 1/8		
	Stroke 5	0822496600	0822497600	0822498600		
	10	0822496601	0822497601	0822498601		
	15	0822496602	0822497602	0822498602		
	20	0822496603	0822497603	0822498603		
	25	0822496604	0822497604	0822498604		

#### Configurable product



This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

#### Retracting piston force



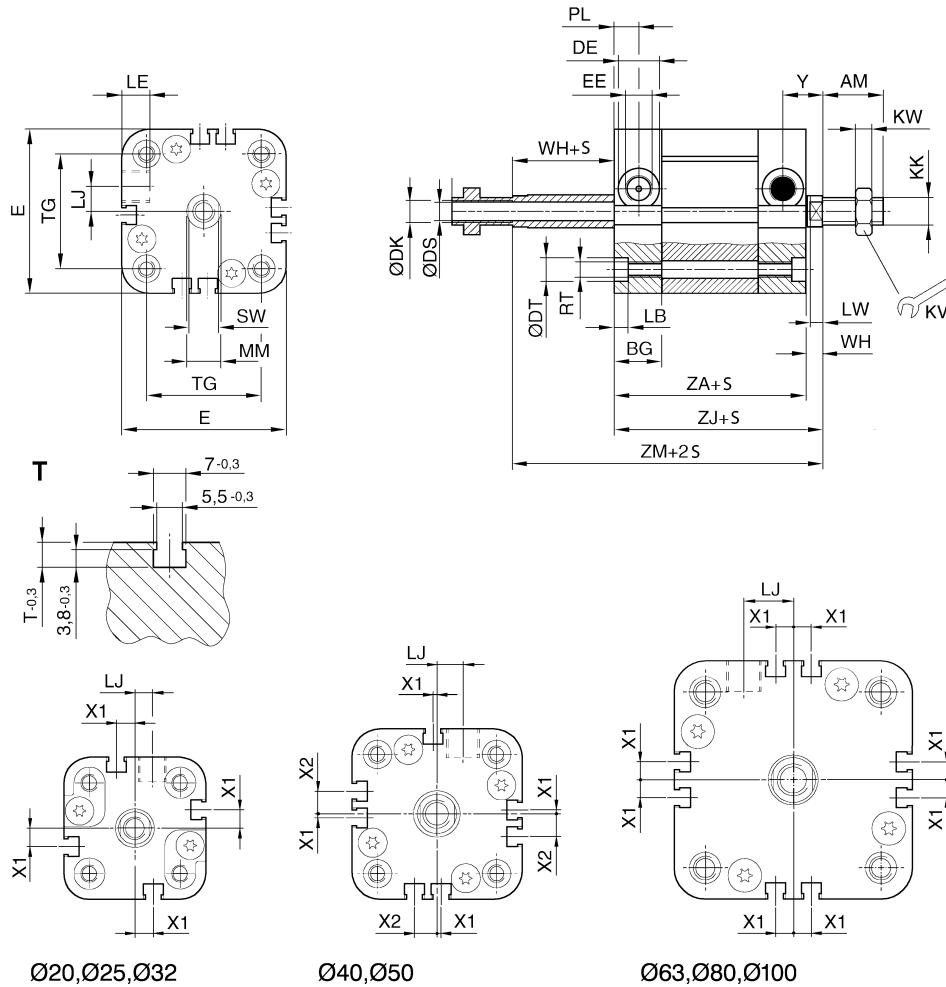
F = spring return force, s = return stroke

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

- Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
- cushioning: elastic ► piston rod: hollow, through, external thread

#### Dimensions



00132979

S = stroke

T = View for sensor groove

Piston Ø	AM	BG	DE	DK	DS	DT H13	E	EE	KK	KV	KW	LB	LE
20	22	12.5	8	-	3.8	8	36	M5	M10x1,25	17	6	4.4	5
25	22	13	8	-	3.8	8	40	M5	M10x1,25	17	6	4.4	5
32	22	14.5	15	-	4.5	11	50	G 1/8	M10x1,25	17	6	5.4	8
40	22	14.5	15	-	4.5	10	60	G 1/8	M10x1,25	17	6	5.4	8
50	24	14.5	15	-	6	11	68	G 1/8	M12x1,25	19	7	1.7	8
63	24	14.5	15	-	6	11	84	G 1/8	M12x1,25	19	7	1.7	8
80	32	16.5	15	G 1/8	8	15	103	G 1/8	M16x1,5	24	8	0.5	8
100	40	19.5	15	G 1/4	11.5	15	124	G 1/8	M20x1,5	30	10	3.5	8

Piston Ø	LJ	LW	MM f8	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1
20	4.5	4	10	7.5	M5	8	5.3	22 ±0,4	5	3.4	-	13.5	38
25	5.4	4	10	7.5	M5	8	5.3	26 ±0,4	5.5	3.4	-	13.5	39.5
32	5.1	4.5	12	7.5	M6	10	5.3	32 ±0,5	7	6.5	-	14.5	44
40	9.6	4.5	12	7.5	M6	10	5.3	42 ±0,5	7	1.4	8	14.5	45
50	8.5	6	16	7.5	M8	13	5.4	50 ±0,6	7.5	3.4	7	15.5	45.5

**Piston rod cylinders → Short-stroke and compact cylinders****Compact cylinder, Series KPZ**

► Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston

► cushioning: elastic ► piston rod: hollow, through, external thread

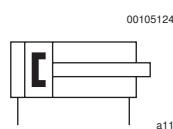
Piston Ø	LJ	LW	MM f8	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1
63	17.8	6	16	7.5	M8	13	5.5	62 ±0,7	8	6.15	-	15.5	50
80	22.9	7	20	8.3	M10	16	5.7	82 ±0,7	9.5	7.7	-	18	55.5
100	27.4	8	25	9.7	M10	21	6.1	103 ±0,7	10.5	7.7	-	20	66.5

Piston Ø	ZJ	ZM											
20	43 0/+1,4	49.5											
25	45 0/+1,4	51.5											
32	51 0/+1,6	59.5											
40	52 0/+1,6	60.5											
50	53 0/+1,6	62.5											
63	58 ±1	68											
80	65 ±1	77											
100	77 0/+2	89.5											

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: internal thread ► ATEX optional



Standards	NFE 49004
Compressed air connection	internal thread
Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6 bar

Materials:	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Scraper	Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- ATEX-certified cylinders can be generated in the Internet configurator.
- ATEX ID II 2G2D c T4 T135 °C -20 °C ≤ Ta ≤ 60 °C
- For ATEX-certified cylinders, the temperature range specified in the header does not apply. See the ATEX ID.

Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	79	121	216	364	602
Extending piston force	[N]	106	164	259	422	665
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke	[kg]	0.07	0.098	0.143	0.223
	+10 mm stroke	[kg]	0.014	0.02	0.02	0.03
Stroke max.	[mm]	200	200	200	300	300

Piston Ø	[mm]	50	63	80	100
Retracting piston force	[N]	930	1532	2492	3886
Extending piston force	[N]	1035	1647	2656	4145
Impact energy	[J]	0.64	0.75	0.75	1
Weight	0 mm stroke	[kg]	0.446	0.757	1.318
	+10 mm stroke	[kg]	0.05	0.08	0.11
Stroke max.	[mm]	300	300	400	400

## Piston rod cylinders → Short-stroke and compact cylinders

## Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: internal thread ► ATEX optional

	Piston Ø Piston rod thread Ports	16 M4 M5	20 M6 M5	25 M6 M5	32 M8 G 1/8	40 M8 G 1/8
	Stroke 5	<b>0822390000</b>	<b>0822391000</b>	<b>0822392000</b>	<b>0822393000</b>	<b>0822394000</b>
	10	<b>0822390001</b>	<b>0822391001</b>	<b>0822392001</b>	<b>0822393001</b>	<b>0822394001</b>
	15	<b>0822390002</b>	<b>0822391002</b>	<b>0822392002</b>	<b>0822393002</b>	<b>0822394002</b>
	20	<b>0822390003</b>	<b>0822391003</b>	<b>0822392003</b>	<b>0822393003</b>	<b>0822394003</b>
	25	<b>0822390004</b>	<b>0822391004</b>	<b>0822392004</b>	<b>0822393004</b>	<b>0822394004</b>
	30	<b>0822390005</b>	<b>0822391005</b>	<b>0822392005</b>	<b>0822393005</b>	<b>0822394005</b>
	40	<b>0822390006</b>	<b>0822391006</b>	<b>0822392006</b>	<b>0822393006</b>	<b>0822394006</b>
	50	<b>0822390007</b>	<b>0822391007</b>	<b>0822392007</b>	<b>0822393007</b>	<b>0822394007</b>
	60	<b>0822390008</b>	<b>0822391008</b>	<b>0822392008</b>	<b>0822393008</b>	<b>0822394008</b>
	80	-	-	-	<b>0822393009</b>	<b>0822394009</b>
	100	-	-	-	<b>0822393010</b>	<b>0822394010</b>
	Piston Ø Piston rod thread Ports	50 M10 G 1/8	63 M10 G 1/8	80 M12 G 1/8	100 M16 G 1/8	
	Stroke 5	<b>0822395000</b>	0822396000	0822397000	0822398000	
	10	<b>0822395001</b>	<b>0822396001</b>	0822397001	0822398001	
	15	<b>0822395002</b>	0822396002	<b>0822397002</b>	0822398002	
	20	<b>0822395003</b>	<b>0822396003</b>	0822397003	0822398003	
	25	<b>0822395004</b>	<b>0822396004</b>	<b>0822397004</b>	0822398004	
	30	<b>0822395005</b>	<b>0822396005</b>	0822397005	0822398005	
	40	<b>0822395006</b>	<b>0822396006</b>	<b>0822397006</b>	0822398006	
	50	<b>0822395007</b>	<b>0822396007</b>	0822397007	0822398007	
	60	<b>0822395008</b>	<b>0822396008</b>	0822397008	0822398008	
	80	<b>0822395009</b>	<b>0822396009</b>	<b>0822397009</b>	0822398009	
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## Configurable product

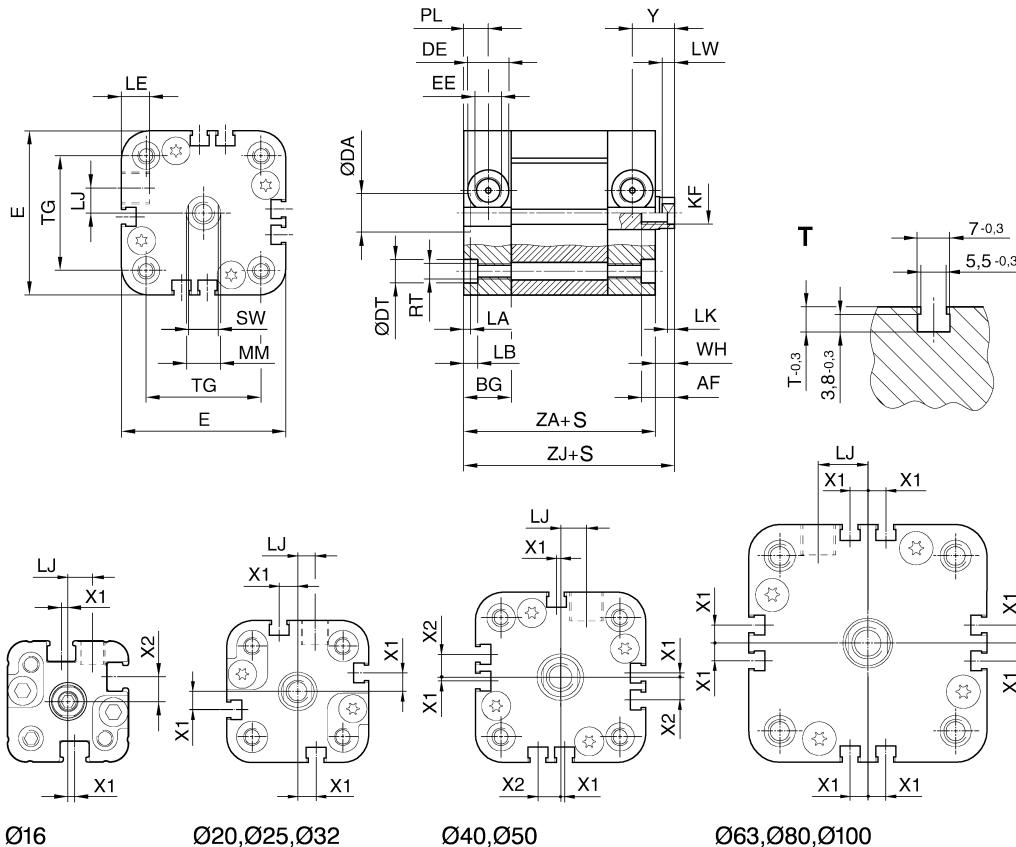
	This product is configurable. Please use our Internet configurator at <a href="http://www.boschrexroth.com/pneumatics">www.boschrexroth.com/pneumatics</a> or contact the nearest Bosch Rexroth sales office.
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## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: internal thread ► ATEX optional

#### Dimensions



S = stroke  
T = View for sensor groove

00132958

Piston Ø	AF	BG	DA H11	DE	DT H13	E	EE	KF 6H	LA	LB	LE	LJ	LK+0,5
16	10	12.5	10	8	6	29.5	M5	M4	2.5	4	5	6.1	1.6
20	10	12.5	12	8	8	36	M5	M6	2.5	4.4	5	4.5	2.5
25	10	13	12	8	8	40	M5	M6	2.5	4.4	5	5.4	2.5
32	12	14.5	14	15	11	50	G 1/8	M8	2.5	5.4	8	5.1	2.5
40	12	14.5	14	15	10	60	G 1/8	M8	2.5	5.4	8	9.6	2.5
50	16	14.5	18	15	11	68	G 1/8	M10	2.5	1.7	8	8.5	3.5
63	16	14.5	18	15	11	84	G 1/8	M10	2.5	1.7	8	17.8	3.5
80	20	16.5	23	15	15	103	G 1/8	M12	3	0.5	8	22.9	3.5
100	24	19.5	28	15	15	124	G 1/8	M16	3	3.5	8	27.4	4.5

Piston Ø	LW	MM 18	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1
16	3.7	8	7.5	M4	7	5.3	18 ±0,4	4.5	1.6	6	12	38
20	4	10	7.5	M5	8	5.3	22 ±0,4	5	3.4	—	13.5	38
25	4	10	7.5	M5	8	5.3	26 ±0,4	5.5	3.4	—	13.5	39.5
32	4.5	12	7.5	M6	10	5.3	32 ±0,5	7	6.5	—	14.5	44
40	4.5	12	7.5	M6	10	5.4	42 ±0,5	7	1.4	8	14.5	45
50	6	16	7.5	M8	13	5.5	50 ±0,6	7.5	3.4	7	15.5	45.5
63	6	16	7.5	M8	13	5.7	62 ±0,7	8	6.15	—	15.5	50
80	7	20	8.3	M10	16	6.1	82 ±0,7	9.5	7.7	—	18	55.5
100	8	25	9.7	M10	21	6.1	103 ±0,7	10.5	7.7	—	20	66.5

**Piston rod cylinders → Short-stroke and compact cylinders****Compact cylinder, Series KPZ**

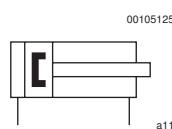
► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: internal thread ► ATEX optional

Piston Ø	ZJ													
16	42,5 0/+1,2													
20	43 0/+1,4													
25	45 0/+1,4													
32	51 0/+1,6													
40	52 0/+1,6													
50	53 0/+1,6													
63	58 ±1													
80	65 ±1													
100	77 0/+2													

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: external thread ► ATEX optional



Standards  
Compressed air connection

NFE 49004  
internal thread

Working pressure min./max.  
Ambient temperature min./max.  
Medium temperature min./max.  
Medium  
Max. particle size  
Oil content of compressed air  
Pressure for determining piston forces

1 bar / 10 bar  
-20 °C / +80 °C  
-20 °C / +80 °C  
Compressed air  
5 µm  
0 mg/m³ - 5 mg/m³  
6 bar

Materials:  
Cylinder tube  
Piston rod  
Front cover  
End cover  
Seal  
Nut for piston rod  
Scraper

Aluminum, anodized  
Stainless steel  
Aluminum  
Aluminum  
Polyurethane  
Steel, hardened  
Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- ATEX-certified cylinders can be generated in the Internet configurator.
- ATEX ID II 2G2D c T4 T135°C -20°C ≤Ta ≤60°C
- For ATEX-certified cylinders, the temperature range specified in the header does not apply. See the ATEX ID.

Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	79	121	216	364	602
Extending piston force	[N]	106	164	259	422	665
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke	[kg]	0.083	0.112	0.157	0.237
	+10 mm stroke	[kg]	0.014	0.02	0.02	0.03
Stroke max.	[mm]	200	200	200	300	300

Piston Ø	[mm]	50	63	80	100
Retracting piston force	[N]	930	1532	2492	3886
Extending piston force	[N]	1035	1647	2656	4145
Impact energy	[J]	0.64	0.75	0.75	1
Weight	0 mm stroke	[kg]	0.468	0.779	1.368
	+10 mm stroke	[kg]	0.05	0.08	0.11
Stroke max.	[mm]	300	300	400	400

## Piston rod cylinders → Short-stroke and compact cylinders

## Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: external thread ► ATEX optional

	Piston Ø Piston rod thread Ports	16 M8 M5	20 M10x1,25 M5	25 M10x1,25 M5	32 M10x1,25 G 1/8	40 M10x1,25 G 1/8
	Stroke 5	0822390200	0822391200	0822392200	0822393200	0822394200
	10	<b>0822390201</b>	0822391201	<b>0822392201</b>	<b>0822393201</b>	0822394201
	15	<b>0822390202</b>	0822391202	0822392202	<b>0822393202</b>	0822394202
	20	<b>0822390203</b>	<b>0822391203</b>	<b>0822392203</b>	<b>0822393203</b>	<b>0822394203</b>
	25	<b>0822390204</b>	<b>0822391204</b>	<b>0822392204</b>	<b>0822393204</b>	<b>0822394204</b>
	30	<b>0822390205</b>	<b>0822391205</b>	0822392205	<b>0822393205</b>	<b>0822394205</b>
	40	0822390206	0822391206	<b>0822392206</b>	<b>0822393206</b>	<b>0822394206</b>
	50	<b>0822390207</b>	<b>0822391207</b>	<b>0822392207</b>	<b>0822393207</b>	<b>0822394207</b>
	60	0822390208	0822391208	0822392208	<b>0822393208</b>	<b>0822394208</b>
	80	-	-	-	<b>0822393209</b>	<b>0822394209</b>
	100	-	-	-	<b>0822393210</b>	<b>0822394210</b>
	Piston Ø Piston rod thread Ports	50 M12x1,25 G 1/8	63 M12x1,25 G 1/8	80 M16x1,5 G 1/8	100 M20x1,5 G 1/8	
	Stroke 5	0822395200	0822396200	0822397200	0822398200	
	10	<b>0822395201</b>	0822396201	0822397201	0822398201	
	15	<b>0822395202</b>	<b>0822396202</b>	0822397202	0822398202	
	20	<b>0822395203</b>	0822396203	0822397203	0822398203	
	25	<b>0822395204</b>	0822396204	0822397204	0822398204	
	30	<b>0822395205</b>	<b>0822396205</b>	<b>0822397205</b>	0822398205	
	40	<b>0822395206</b>	0822396206	0822397206	0822398206	
	50	<b>0822395207</b>	<b>0822396207</b>	<b>0822397207</b>	0822398207	
	60	<b>0822395208</b>	<b>0822396208</b>	0822397208	0822398208	
	80	<b>0822395209</b>	<b>0822396209</b>	<b>0822397209</b>	0822398209	
	100	<b>0822395210</b>	<b>0822396210</b>	<b>0822397210</b>	0822398210	

## Configurable product

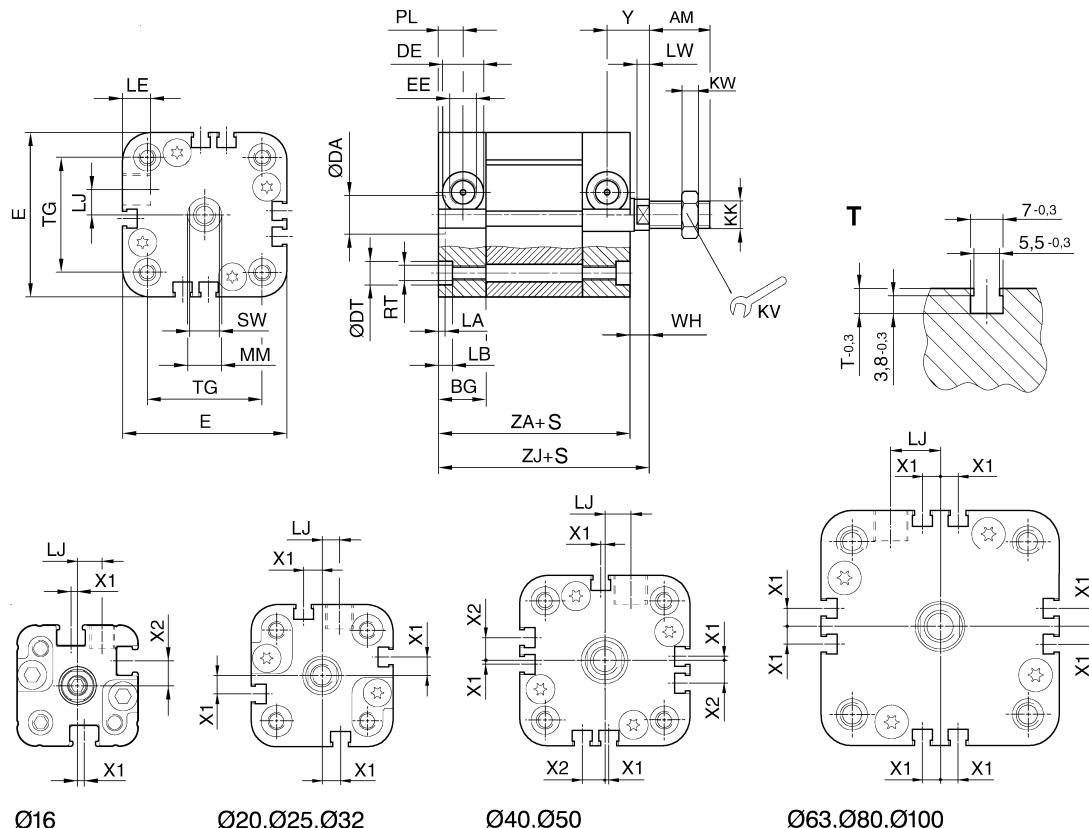
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## Piston rod cylinders → Short-stroke and compact cylinders

## Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: external thread ► ATEX optional

## Dimensions



S = stroke  
T = View for sensor groove

00132959

Piston Ø	AM	BG	DA H11	DE	DT H13	E	EE	KK	KV	KW	LA	LB	LE
16	20	12.5	10	8	6	29.5	M5	M8	13	4	2.5	4	5
20	22	12.5	12	8	8	36	M5	M10x1,25	17	6	2.5	4.4	5
25	22	13	12	8	8	40	M5	M10x1,25	17	6	2.5	4.4	5
32	22	14.5	14	15	11	50	G 1/8	M10x1,25	17	6	2.5	5.4	8
40	22	14.5	14	15	10	60	G 1/8	M10x1,25	17	6	2.5	5.4	8
50	24	14.5	18	15	11	68	G 1/8	M12x1,25	19	7	2.5	1.7	8
63	24	14.5	18	15	11	84	G 1/8	M12x1,25	19	7	2.5	1.7	8
80	32	16.5	23	15	15	103	G 1/8	M16x1,5	24	8	3	0.5	8
100	40	19.5	28	15	15	124	G 1/8	M20x1,5	30	10	3	3.5	8

Piston Ø	LJ	LW	MM f8	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1
16	6.1	3.7	8	7.5	M4	7	5.3	18 ±0,4	4.5	1.6	6	12	38
20	4.5	4	10	7.5	M5	8	5.3	22 ±0,4	5	3.4	-	13.5	38
25	5.4	4	10	7.5	M5	8	5.3	26 ±0,4	5.5	3.4	-	13.5	39.5
32	5.1	4.5	12	7.5	M6	10	5.3	32 ±0,5	7	6.5	-	14.5	44
40	9.6	4.5	12	7.5	M6	10	5.4	42 ±0,5	7	1.4	8	14.5	45
50	8.5	6	16	7.5	M8	13	5.5	50 ±0,6	7.5	3.4	7	15.5	45.5
63	17.8	6	16	7.5	M8	13	5.7	62 ±0,7	8	6.15	-	15.5	50
80	22.9	7	20	8.3	M10	16	6.1	82 ±0,7	9.5	7.7	-	18	55.5
100	27.4	8	25	9.7	M10	21	6.1	103 ±0,7	10.5	7.7	-	20	66.5

**Piston rod cylinders → Short-stroke and compact cylinders****Compact cylinder, Series KPZ**

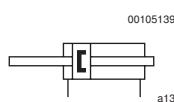
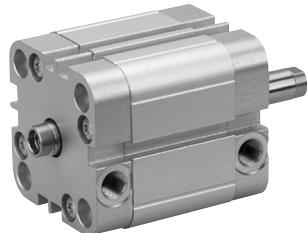
► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: external thread ► ATEX optional

Piston Ø	ZJ													
16	42,5 0/+1,2													
20	43 0/+1,4													
25	45 0/+1,4													
32	51 0/+1,6													
40	52 0/+1,6													
50	53 0/+1,6													
63	58 ±1													
80	65 ±1													
100	77 0/+2													

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, internal thread ► ATEX optional



Standards	NFE 49004
Compressed air connection	internal thread
Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6 bar

Materials:	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Scraper	Polyurethane

#### Technical Remarks

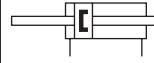
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- ATEX-certified cylinders can be generated in the Internet configurator.
- ATEX ID II 2G2D c T4 T135 °C -20 °C ≤ Ta ≤ 60 °C
- For ATEX-certified cylinders, the temperature range specified in the header does not apply. See the ATEX ID.

Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	79	121	216	364	602
Extending piston force	[N]	79	121	216	364	602
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke	[kg]	0.079	0.108	0.154	0.238
	+10 mm stroke	[kg]	0.018	0.03	0.03	0.04
Stroke max.	[mm]	200	200	200	300	300

Piston Ø	[mm]	50	63	80	100
Retracting piston force	[N]	930	1532	2492	3886
Extending piston force	[N]	930	1532	2492	3886
Impact energy	[J]	0.64	0.75	0.75	1
Weight	0 mm stroke	[kg]	0.474	0.785	1.367
	+10 mm stroke	[kg]	0.07	0.1	0.13
Stroke max.	[mm]	300	300	400	400

**Piston rod cylinders → Short-stroke and compact cylinders****Compact cylinder, Series KPZ**

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, internal thread ► ATEX optional

	<b>Piston Ø Piston rod thread Ports</b>	<b>16 M4 M5</b>	<b>20 M6 M5</b>	<b>25 M6 M5</b>	<b>32 M8 G 1/8</b>	<b>40 M8 G 1/8</b>
	Stroke 5	0822390500	0822391500	0822392500	0822393500	0822394500
	10	0822390501	0822391501	0822392501	0822393501	0822394501
	15	0822390502	0822391502	0822392502	0822393502	0822394502
	20	0822390503	0822391503	0822392503	0822393503	0822394503
	25	0822390504	0822391504	0822392504	0822393504	0822394504
	<b>Piston Ø Piston rod thread Ports</b>	<b>50 M10 G 1/8</b>	<b>63 M10 G 1/8</b>	<b>80 M12 G 1/8</b>	<b>100 M16 G 1/8</b>	
	Stroke 5	0822395500	0822396500	0822397500	0822398500	
	10	0822395501	0822396501	0822397501	0822398501	
	15	0822395502	0822396502	0822397502	0822398502	
	20	0822395503	0822396503	0822397503	0822398503	
	25	0822395504	0822396504	0822397504	0822398504	

## Configurable product



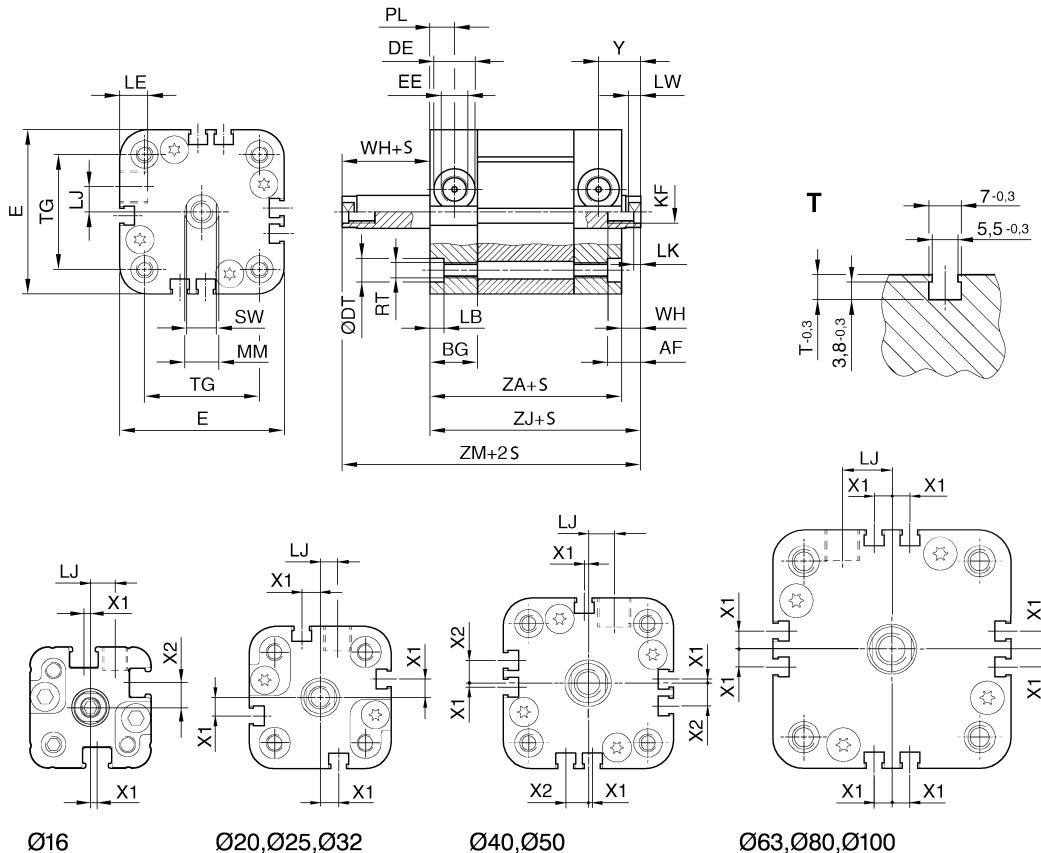
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## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, internal thread ► ATEX optional

#### Dimensions



S = stroke

T = View for sensor groove

00132964

Piston Ø	AF	DE	DT H13	E	EE	KF 6H	LB	LE	LJ	LK +0,5	LW	MM f8	PL
16	10	8	6	29.5	M5	M4	4	5	6.1	1.6	3.7	8	7.5
20	10	8	8	36	M5	M6	4.4	5	4.5	2.5	4	10	7.5
25	10	8	8	40	M5	M6	4.4	5	5.4	2.5	4	10	7.5
32	12	15	11	50	G 1/8	M8	5.4	8	5.1	2.5	4.5	12	7.5
40	12	15	10	60	G 1/8	M8	5.4	8	9.6	2.5	4.5	12	7.5
50	16	15	11	68	G 1/8	M10	1.7	8	8.5	3.5	6	16	7.5
63	16	15	11	84	G 1/8	M10	1.7	8	17.8	3.5	6	16	7.5
80	20	15	15	103	G 1/8	M12	0.5	8	22.9	3.5	7	20	8.3
100	24	15	15	124	G 1/8	M16	3.5	8	27.4	4.5	8	25	9.7

Piston Ø	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1	ZJ	ZM
16	M4	7	5.3	18 ±0,4	4.5	1.6	6	12	38	42,5 0/+1,2	48
20	M5	8	5.3	22 ±0,4	5	3.4	—	13.5	38	43 0/+1,4	49.5
25	M5	8	5.3	26 ±0,4	5.5	3.4	—	13.5	39.5	45 0/+1,4	51.5
32	M6	10	5.3	32 ±0,5	7	6.5	—	14.5	44	51 0/+1,6	59.5
40	M6	10	5.4	42 ±0,5	7	1.4	8	14.5	45	52 0/+1,6	60.5
50	M8	13	5.5	50 ±0,6	7.5	3.4	7	15.5	45.5	53 0/+1,6	62.5
63	M8	13	5.7	62 ±0,7	8	6.15	—	15.5	50	58 ±1	68
80	M10	16	6.1	82 ±0,7	9.5	7.7	—	18	55.5	65 ±1	77

**Piston rod cylinders → Short-stroke and compact cylinders****Compact cylinder, Series KPZ**

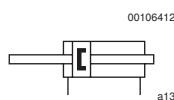
► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, internal thread ► ATEX optional

Piston Ø	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1	ZJ	ZM	
100	M10	21	6.1	103 ±0,7	10.5	7.7	-	20	66.5	77 0/+2	89.5	

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, external thread ► ATEX optional



Standards  
Compressed air connection

NFE 49004  
internal thread

Working pressure min./max.  
Ambient temperature min./max.  
Medium temperature min./max.  
Medium  
Max. particle size  
Oil content of compressed air  
Pressure for determining piston forces

1 bar / 10 bar  
-20 °C / +80 °C  
-20 °C / +80 °C  
Compressed air  
5 µm  
0 mg/m³ - 5 mg/m³  
6 bar

Materials:  
Cylinder tube  
Piston rod  
Front cover  
End cover  
Seal  
Nut for piston rod  
Scraper

Aluminum, anodized  
Stainless steel  
Aluminum  
Aluminum  
Polyurethane  
Steel, hardened  
Polyurethane

#### Technical Remarks

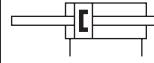
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- ATEX-certified cylinders can be generated in the Internet configurator.
- ATEX ID II 2G2D c T4 T135°C -20°C ≤Ta ≤60°C
- For ATEX-certified cylinders, the temperature range specified in the header does not apply. See the ATEX ID.

Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	79	121	216	364	602
Extending piston force	[N]	79	121	216	364	602
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke	[kg]	0.104	0.135	0.181	0.265
	+10 mm stroke	[kg]	0.018	0.03	0.03	0.04
Stroke max.	[mm]	200	200	200	300	300

Piston Ø	[mm]	50	63	80	100
Retracting piston force	[N]	930	1532	2492	3886
Extending piston force	[N]	930	1532	2492	3886
Impact energy	[J]	0.64	0.75	0.75	1
Weight	0 mm stroke	[kg]	0.517	0.828	1.565
	+10 mm stroke	[kg]	0.07	0.1	0.13
Stroke max.	[mm]	300	300	400	400

**Piston rod cylinders → Short-stroke and compact cylinders****Compact cylinder, Series KPZ**

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, external thread ► ATEX optional

	<b>Piston Ø Piston rod thread Ports</b>	<b>16 M8 M5</b>	<b>20 M10x1,25 M5</b>	<b>25 M10x1,25 M5</b>	<b>32 M10x1,25 G 1/8</b>	<b>40 M10x1,25 G 1/8</b>
	Stroke 5	0822390700	0822391700	0822392700	0822393700	0822394700
	10	0822390701	0822391701	0822392701	0822393701	0822394701
	15	0822390702	0822391702	0822392702	0822393702	0822394702
	20	0822390703	0822391703	0822392703	0822393703	0822394703
	25	0822390704	0822391704	0822392704	0822393704	0822394704
	<b>Piston Ø Piston rod thread Ports</b>	<b>50 M12x1,25 G 1/8</b>	<b>63 M12x1,25 G 1/8</b>	<b>80 M16x1,5 G 1/8</b>	<b>100 M20x1,5 G 1/8</b>	
	Stroke 5	0822395700	0822396700	0822397700	0822398700	
	10	0822395701	0822396701	0822397701	0822398701	
	15	0822395702	0822396702	0822397702	0822398702	
	20	0822395703	0822396703	0822397703	0822398703	
	25	0822395704	0822396704	0822397704	0822398704	

## Configurable product



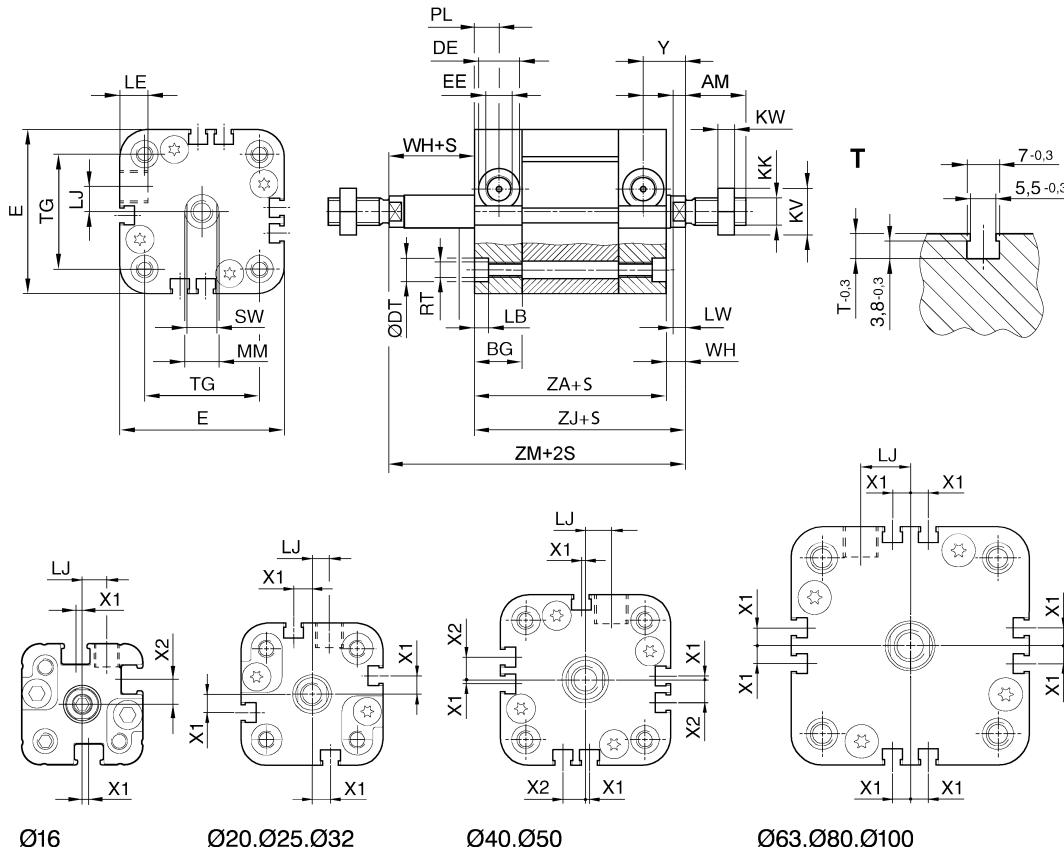
This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, external thread ► ATEX optional

#### Dimensions



S = stroke

T = View for sensor groove

00132965

Piston Ø	AM	BG	DE	DT H13	E	EE	KK	KV	KW	LB	LE	LJ	LW
16	20	12.5	8	6	29.5	M5	M8	13	4	4	5	6.1	3.7
20	22	12.5	8	8	36	M5	M10x1,25	17	6	4.4	5	4.5	4
25	22	13	8	8	40	M5	M10x1,25	17	6	4.4	5	5.4	4
32	22	14.5	15	11	50	G 1/8	M10x1,25	17	6	5.4	8	5.1	4.5
40	22	14.5	15	10	60	G 1/8	M10x1,25	17	6	5.4	8	9.6	4.5
50	24	14.5	15	11	68	G 1/8	M12x1,25	19	7	1.7	8	8.5	6
63	24	14.5	15	11	84	G 1/8	M12x1,25	19	7	1.7	8	17.8	6
80	32	16.5	15	15	103	G 1/8	M16x1,5	24	8	0.5	8	22.9	7
100	40	19.5	15	15	124	G 1/8	M20x1,5	30	10	3.5	8	27.4	8

Piston Ø	MM f8	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1	ZJ
16	8	7.5	M4	7	5.3	18 ±0,4	4.5	1.6	6	12	38	42,5 0/+1,2
20	10	7.5	M5	8	5.3	22 ±0,4	5	3.4	—	13.5	38	43 0/+1,4
25	10	7.5	M5	8	5.3	26 ±0,4	5.5	3.4	—	13.5	39.5	45 0/+1,4
32	12	7.5	M6	10	5.3	32 ±0,5	7	6.5	—	14.5	44	51 0/+1,6
40	12	7.5	M6	10	5.4	42 ±0,5	7	1.4	8	14.5	45	52 0/+1,6
50	16	7.5	M8	13	5.5	50 ±0,6	7.5	3.4	7	15.5	45.5	53 0/+1,6
63	16	7.5	M8	13	5.7	62 ±0,7	8	6.15	—	15.5	50	58 ±1
80	20	8.3	M10	16	6.1	82 ±0,7	9.5	7.7	—	18	55.5	65 ±1
100	25	9.7	M10	21	6.1	103 ±0,7	10.5	7.7	—	20	66.5	77 0/+2

**Piston rod cylinders → Short-stroke and compact cylinders****Compact cylinder, Series KPZ**

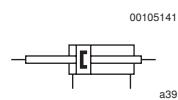
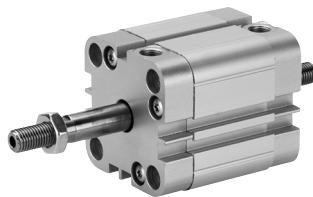
► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, external thread ► ATEX optional

Piston Ø	ZM													
16	48													
20	49.5													
25	51.5													
32	59.5													
40	60.5													
50	62.5													
63	68													
80	77													
100	89.5													

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: hollow, through, external thread ► ATEX optional



Standards	NFE 49004
Compressed air connection	internal thread
Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6 bar
Materials:	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Nut for piston rod	Steel, hardened
Scraper	Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- ATEX-certified cylinders can be generated in the Internet configurator.
- ATEX ID II 2G2D c T4 T135°C -20°C ≤Ta ≤60°C
- For ATEX-certified cylinders, the temperature range specified in the header does not apply. See the ATEX ID.

Piston Ø	[mm]	20	25	32	40	50
Retracting piston force	[N]	121	216	364	602	930
Extending piston force	[N]	121	216	364	602	930
Impact energy	[J]	0.15	0.2	0.4	0.52	0.64
Weight	0 mm stroke	[kg]	0.135	0.181	0.265	0.375
	+10 mm stroke	[kg]	0.03	0.03	0.04	0.05
Stroke max.	[mm]	80	80	170	170	300

Piston Ø	[mm]	63	80	100		
Retracting piston force	[N]	1532	2492	3886		
Extending piston force	[N]	1532	2492	3886		
Impact energy	[J]	0.75	0.75	1		
Weight	0 mm stroke	[kg]	0.828	1.565	2.547	
	+10 mm stroke	[kg]	0.1	0.13	0.18	
Stroke max.	[mm]	300	400	400		

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: hollow, through, external thread ► ATEX optional

	Piston Ø Piston rod thread Ports	20 M10x1,25 M5	25 M10x1,25 M5	32 M10x1,25 G 1/8	40 M10x1,25 G 1/8	50 M12x1,25 G 1/8
	Stroke 5	0822391300	0822392300	0822393300	0822394300	0822395300
	10	0822391301	0822392301	0822393301	0822394301	0822395301
	15	0822391302	0822392302	0822393302	0822394302	0822395302
	20	0822391303	0822392303	0822393303	0822394303	0822395303
	25	0822391304	0822392304	0822393304	0822394304	0822395304
	Piston Ø Piston rod thread Ports	63 M12x1,25 G 1/8	80 M16x1,5 G 1/8	100 M20x1,5 G 1/8		
	Stroke 5	0822396300	0822397300	0822398300		
	10	0822396301	0822397301	0822398301		
	15	0822396302	0822397302	0822398302		
	20	0822396303	0822397303	0822398303		
	25	0822396304	0822397304	0822398304		

#### Configurable product



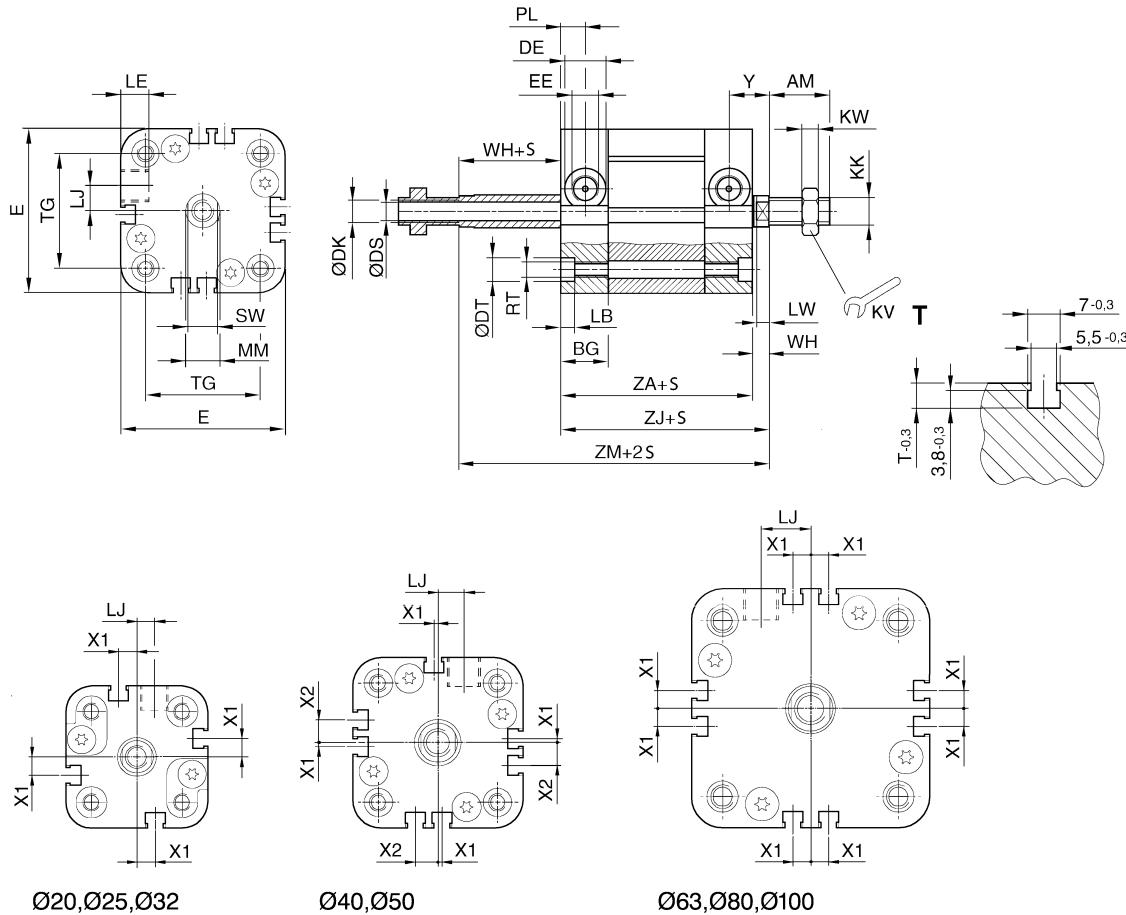
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## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: hollow, through, external thread ► ATEX optional

#### Dimensions



S = stroke

T = View for sensor groove

00132980

Piston Ø	AM	BG	DE	Ø DK	DS	DT H13	E	EE	KK	KV	KW	LB	LE
20	22	12.5	8	-	3.8	8	36	M5	M10x1,25	17	6	4.4	5
25	22	13	8	-	3.8	8	40	M5	M10x1,25	17	6	4.4	5
32	22	14.5	15	-	4.5	11	50	G 1/8	M10x1,25	17	6	5.4	8
40	22	14.5	15	-	4.5	10	60	G 1/8	M10x1,25	17	6	5.4	8
50	24	14.5	15	-	6	11	68	G 1/8	M12x1,25	19	7	1.7	8
63	24	14.5	15	-	6	11	84	G 1/8	M12x1,25	19	7	1.7	8
80	32	16.5	15	G 1/8	8	15	103	G 1/8	M16x1,5	24	8	0.5	8
100	40	19.5	15	G 1/4	11.5	15	124	G 1/8	M20x1,5	30	10	3.5	8

Piston Ø	LJ	LW	MM f8	PL	RT 6H	SW	T	TG	WH	X1	X2	Y	ZA +1
20	4.5	4	10	7.5	M5	8	5.3	22 ±0,4	5	3.4	-	13.5	38
25	5.4	4	10	7.5	M5	8	5.3	26 ±0,4	5.5	3.4	-	13.5	39.5
32	5.1	4.5	12	7.5	M6	10	5.3	32 ±0,5	7	6.5	-	14.5	44
40	9.6	4.5	12	7.5	M6	10	5.4	42 ±0,5	7	1.4	8	14.5	45
50	8.5	6	16	7.5	M8	13	5.5	50 ±0,6	7.5	3.4	7	15.5	45.5
63	17.8	6	16	7.5	M8	13	5.7	62 ±0,7	8	6.15	-	15.5	50
80	22.9	7	20	8.3	M10	16	6.1	82 ±0,7	9.5	7.7	-	18	55.5
100	27.4	8	25	9.7	M10	21	6.1	103 ±0,7	10.5	7.7	-	20	66.5

**Piston rod cylinders → Short-stroke and compact cylinders****Compact cylinder, Series KPZ**

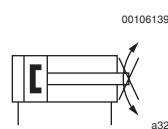
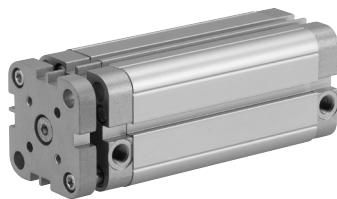
► Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: hollow, through, external thread ► ATEX optional

Piston Ø	ZJ	ZM												
20	43 0/+1,4	49.5												
25	45 0/+1,4	51.5												
32	51 0/+1,6	59.5												
40	52 0/+1,6	60.5												
50	53 0/+1,6	62.5												
63	58 ±1	68												
80	65 ±1	77												
100	77 0/+2	89.5												

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, with front plate



Standards  
Compressed air connection

NFE 49004  
internal thread

Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6 bar

Materials:  
Cylinder tube  
Piston rod  
Front cover  
End cover  
Seal  
Scraper

Aluminum, anodized
Stainless steel
Aluminum
Aluminum
Polyurethane
Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	79	121	216	364	602
Extending piston force	[N]	106	164	259	422	665
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke [kg]	0.09	0.129	0.143	0.322	0.483
	+10 mm stroke [kg]	0.016	0.02	0.02	0.04	0.04
Stroke max.	[mm]	200	200	200	300	300

Piston Ø	[mm]	50	63	80	100
Retracting piston force	[N]	930	1532	2492	3886
Extending piston force	[N]	1035	1647	2656	4145
Impact energy	[J]	0.64	0.75	0.75	1
Weight	0 mm stroke [kg]	0.642	1.075	1.757	2.996
	+10 mm stroke [kg]	0.04	0.06	0.12	0.15
Stroke max.	[mm]	300	300	400	400

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, with front plate

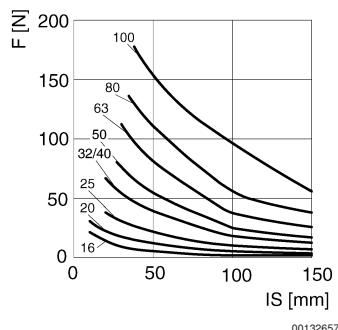
	Piston Ø Ports	16 M5	20 M5	25 M5	32 G 1/8	40 G 1/8
	Stroke 5	0822390600	0822391600	0822392600	0822393600	0822394600
	10	<b>0822390601</b>	<b>0822391601</b>	<b>0822392601</b>	<b>0822393601</b>	0822394601
	15	<b>0822390602</b>	<b>0822391602</b>	<b>0822392602</b>	<b>0822393602</b>	0822394602
	20	<b>0822390603</b>	<b>0822391603</b>	<b>0822392603</b>	<b>0822393603</b>	0822394603
	25	0822390604	<b>0822391604</b>	<b>0822392604</b>	<b>0822393604</b>	0822394604
	30	0822390605	<b>0822391605</b>	<b>0822392605</b>	<b>0822393605</b>	0822394605
	40	0822390606	<b>0822391606</b>	<b>0822392606</b>	<b>0822393606</b>	0822394606
	50	0822390607	<b>0822391607</b>	<b>0822392607</b>	<b>0822393607</b>	<b>0822394607</b>
	60	0822390608	<b>0822391608</b>	<b>0822392608</b>	<b>0822393608</b>	<b>0822394608</b>
	80	-	-	-	<b>0822393609</b>	<b>0822394609</b>
	100	-	-	-	<b>0822393610</b>	0822394610
	Piston Ø Ports	50 G 1/8	63 G 1/8	80 G 1/8	100 G 1/8	
	Stroke 5	0822395600	0822396600	0822397600	0822398600	
	10	0822395601	0822396601	0822397601	0822398601	
	15	<b>0822395602</b>	0822396602	0822397602	0822398602	
	20	0822395603	0822396603	0822397603	0822398603	
	25	0822395604	0822396604	0822397604	0822398604	
	30	0822395605	0822396605	0822397605	0822398605	
	40	0822395606	0822396606	0822397606	0822398606	
	50	<b>0822395607</b>	0822396607	0822397607	0822398607	
	60	0822395608	<b>0822396608</b>	0822397608	0822398608	
	80	0822395609	0822396609	0822397609	0822398609	
	100	<b>0822395610</b>	0822396610	0822397610	0822398610	

#### Configurable product



This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

#### Maximum permissible lateral force



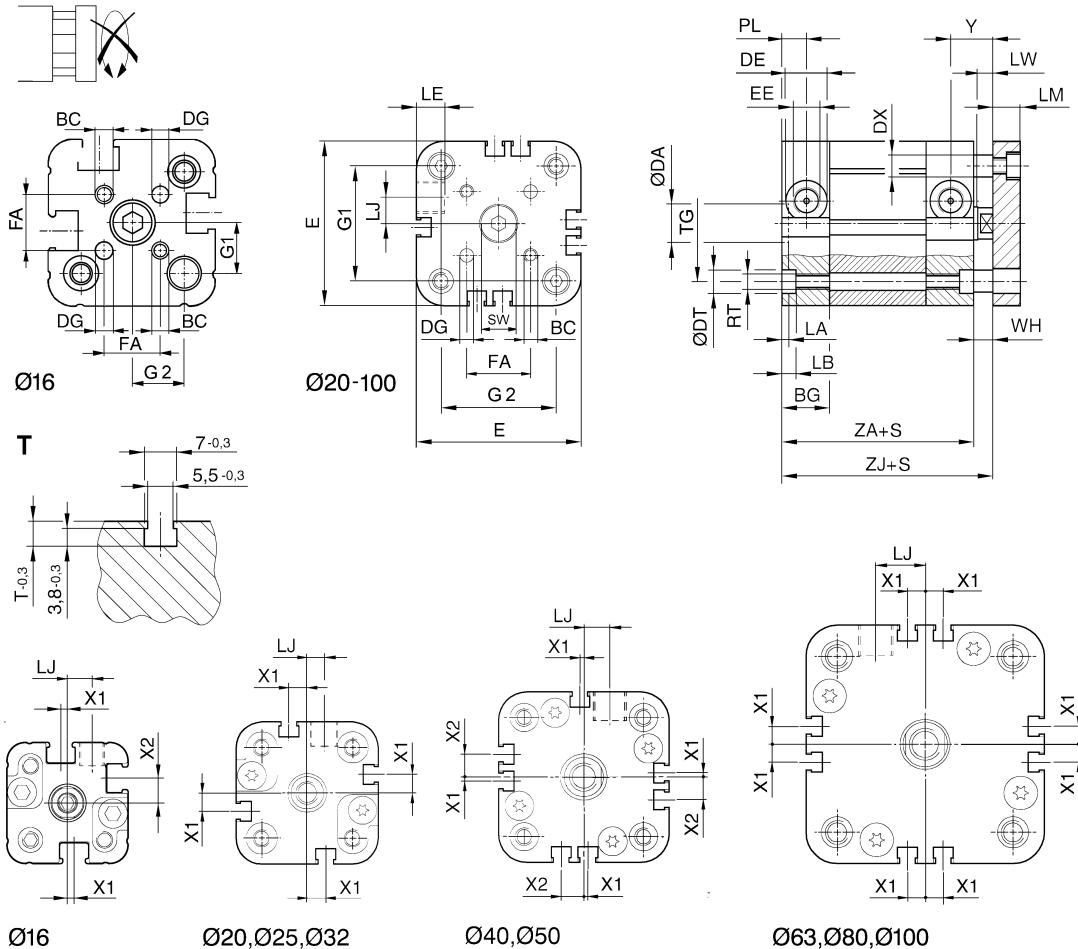
F = maximum permissible lateral force, S = stroke

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, with front plate

#### Dimensions



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S = stroke

T = View for sensor groove without guide plate

Piston Ø	BC 6H	BG	DA H11	DE	DG H13	DT H13	DX	E	EE	FA ±0,1	G1	G2	LA
16	M3	12.5	10	8	3	6	6	29.5	M5	9.9	9.3	9.3	2.5
20	M4	12.5	12	8	4	8	5	36	M5	12	23	24.4	2.5
25	M5	13	12	8	5	8	6	40	M5	15.6	27	27	2.5
32	M5	14.5	14	15	5	11	8	50	G 1/8	19.8	33.2	34.4	2.5
40	M5	14.5	14	15	5	10	8	60	G 1/8	23.3	42	42	2.5
50	M6	14.5	18	15	6	11	10	68	G 1/8	29.7	49	49.8	2.5
63	M6	14.5	18	15	6	11	12	84	G 1/8	35.4	63	63	2.5
80	M8	16.5	23	15	8	15	12	103	G 1/8	46	77.8	77.8	3
100	M10	19.5	28	15	10	15	12	124	G 1/8	56.6	95.6	95.6	3

Piston Ø	LB	LE	LJ	LM	LW	PL	RT H6	SW H13	T	TG	WH	X1	X2
16	4	5	6.1	6	3.7	7.5	M4		7	5.3	18 ±0,4	4.5	1.6
20	4.4	5	4.5	8	4	7.5	M5		8	5.3	22 ±0,4	5	3.4
25	4.4	5	5.4	8	4	7.5	M5		8	5.3	26 ±0,4	5.5	3.4
32	5.4	8	5.1	10	4.5	7.5	M6		10	5.3	32 ±0,5	7	6.5
40	5.4	8	9.6	10	4.5	7.5	M6		10	5.4	42 ±0,5	7	1.4

**Piston rod cylinders → Short-stroke and compact cylinders****Compact cylinder, Series KPZ**

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, with front plate

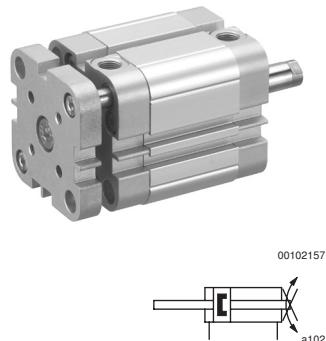
Piston Ø	LB	LE	LJ	LM	LW	PL	RT H6	SW H13	T	TG	WH	X1	X2
50	1.7	8	8.5	12	6	7.5	M8	13	5.5	50 ±0,6	7.5	3.4	7
63	1.7	8	17.8	12	6	7.5	M8	13	5.7	62 ±0,7	8	6.15	—
80	0.5	8	22.9	14	7	8.3	M10	16	6.1	82 ±0,7	9.5	7.7	—
100	3.5	8	27.4	14	8	9.7	M10	21	6.1	103 ±0,7	10.5	7.7	—

Piston Ø	Y	Z <sub>A+1</sub>	Z <sub>J</sub>										
16	12	38	42,5 0/+1,2										
20	13.5	38	43 0/+1,4										
25	13.5	39.5	45 0/+1,4										
32	14.5	44	51 0/+1,6										
40	14.5	45	52 0/+1,6										
50	15.5	45.5	53 0/+1,6										
63	15.5	50	58 ±1										
80	18	55.5	65 ±1										
100	20	66.5	77 0/+2										

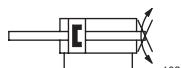
## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, with front plate, through, internal thread



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Standards  
Compressed air connection

NFE 49004  
internal thread

Working pressure min./max.  
Ambient temperature min./max.  
Medium temperature min./max.  
Medium  
Max. particle size  
Oil content of compressed air  
Pressure for determining piston forces

1 bar / 10 bar  
-20 °C / +80 °C  
-20 °C / +80 °C  
Compressed air  
5 µm  
0 mg/m³ - 5 mg/m³  
6 bar

#### Materials:

Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Scraper	Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	79	121	216	364	602
Extending piston force	[N]	79	121	216	364	602
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke [kg]	0.1	0.139	0.154	0.337	0.504
	+10 mm stroke [kg]	0.018	0.03	0.03	0.05	0.05
Stroke max.	[mm]	200	200	200	300	300

Piston Ø	[mm]	50	63	80	100
Retracting piston force	[N]	930	1532	2492	3886
Extending piston force	[N]	930	1532	2492	3886
Impact energy	[J]	0.64	0.75	0.75	1
Weight	0 mm stroke [kg]	0.67	1.103	1.806	3.069
	+10 mm stroke [kg]	0.07	0.1	0.14	0.19
Stroke max.	[mm]	300	300	400	400

	Piston Ø	16	20	25	32	40
	Piston rod thread Ports	M4 M5	M6 M5	M6 M5	M8 G 1/8	M8 G 1/8
	Stroke 5	0822590800	0822591800	0822592800	0822593800	0822594800
	Piston Ø	50	63	80	100	
	Piston rod thread Ports	M10 G 1/8	M10 G 1/8	M12 G 1/8	M16 G 1/8	
	Stroke 5	0822595800	0822596800	0822597800	0822598800	

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

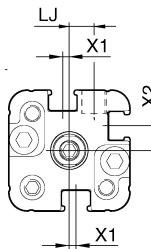
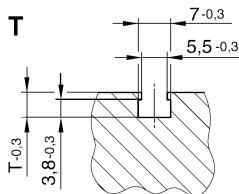
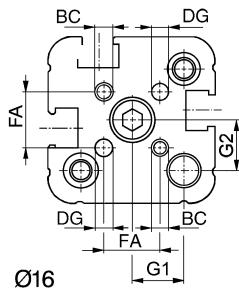
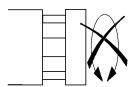
► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, with front plate, through, internal thread

#### Configurable product

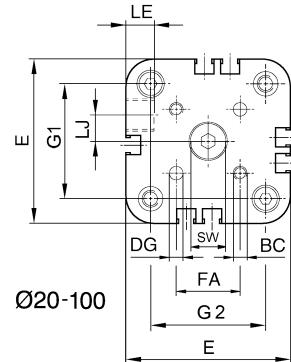


This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

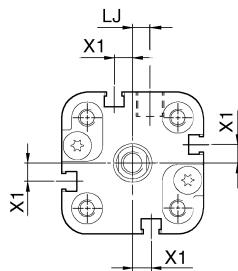
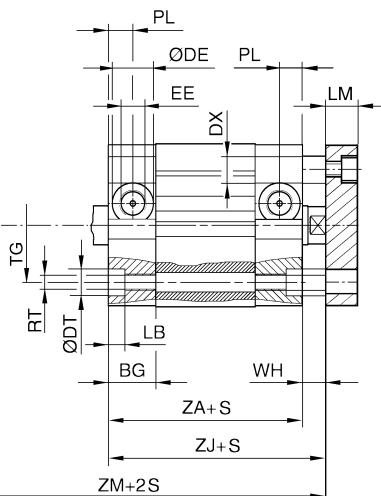
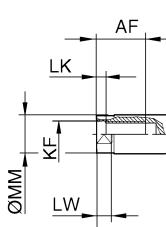
#### Dimensions



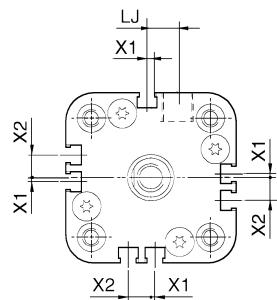
Ø16



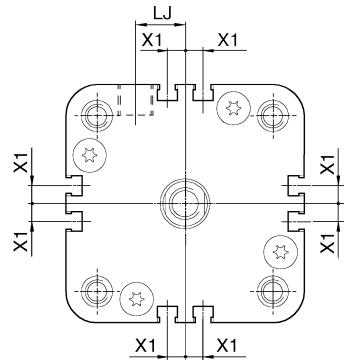
Ø20-100



Ø20, Ø25, Ø32



Ø40, Ø50



Ø63, Ø80, Ø100

00132977

S = stroke

T = View for sensor groove without guide plate

Piston Ø	AF	BC 6H	BG	Ø DE	Ø DF	Ø DG H13	Ø DT H13	Ø DX	E	EE	FA ±0,1	G1	G2
16	10	M3	12.5	8	4.5	3	6	6	29.5	M5	9.9	9.3	9.3
20	10	M4	12.5	8	6.2	4	8	5	36	M5	12	23	24.4
25	10	M5	13	8	6.2	5	8	6	40	M5	15.6	27	27
32	12	M5	14.5	15	8.2	5	11	8	50	G 1/8	19.8	33.2	34.4
40	12	M5	14.5	15	8.2	5	10	8	60	G 1/8	23.3	42	42
50	16	M6	14.5	15	10.2	6	11	10	68	G 1/8	29.7	49	49.8
63	16	M6	14.5	15	10.2	6	11	12	84	G 1/8	35.4	63	63

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

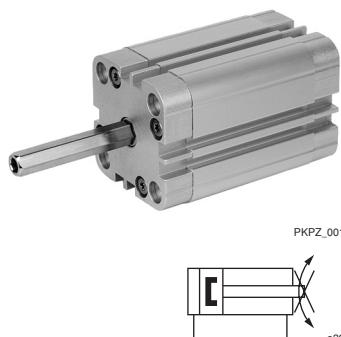
► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, with front plate, through, internal thread

Piston Ø	AF	BC 6H	BG	Ø DE	Ø DF	Ø DG H13	Ø DT H13	Ø DX	E	EE	FA ±0,1	G1	G2
80	20	M8	16.5	15	12.2	8	15	12	103	G 1/8	46	77.8	77.8
100	24	M10	19.5	15	16.2	10	15	12	124	G 1/8	56.6	95.6	95.6
Piston Ø	KF 6H	LB	LJ	LK +0,5	LM	LW	Ø MM f8	PL	RT 6H	SW H13	TG	WH	ZA +1
16	M4	4	6.1	1.6	6	3.7	8	7.5	M4	7	18 ±0,4	4.5	38
20	M6	4.4	4.5	2.5	8	4	10	7.5	M5	8	22 ±0,4	5	38
25	M6	4.4	5.4	2.5	8	4	10	7.5	M5	8	26 ±0,4	5.5	39.5
32	M8	5.4	5.1	2.5	10	4.5	12	7.5	M6	10	32 ±0,5	7	44
40	M8	5.4	9.6	2.5	10	4.5	12	7.5	M6	10	42 ±0,5	7	45
50	M10	1.7	8.5	3.5	12	6	16	7.5	M8	13	50 ±0,6	7.5	45.5
63	M10	1.7	17.8	3.5	12	6	16	7.5	M8	13	62 ±0,7	8	50
80	M12	0.5	22.9	3.5	14	7	20	8.3	M10	16	82 ±0,7	9.5	55.5
100	M16	3.5	27.4	4.5	14	8	25	9.7	M10	21	103 ±0,7	10.5	66.5
Piston Ø	X1	X2	ZJ	ZM									
16	1.6	6	42,5 0/+1,2	48									
20	3.4	-	43 0/+1,4	49.5									
25	3.4	-	45 0/+1,4	51.5									
32	6.5	-	51 0/+1,6	59.5									
40	1.4	8	52 0/+1,6	60.5									
50	3.4	7	53 0/+1,6	62.5									
63	6.15	-	58 ±1	68									
80	7.7	-	65 ±1	77									
100	7.7	-	77 0/+2	89.5									

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 20 - 63 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, hexagonal, internal thread ► ATEX optional



Compressed air connection	internal thread
Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6 bar
 Materials:	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Scraper	Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- ATEX-certified cylinders can be generated in the Internet configurator.
- ATEX ID II 2G2D c T4 T135°C -20°C ≤Ta ≤60°C
- For ATEX-certified cylinders, the temperature range specified in the header does not apply. See the ATEX ID.
- Use our Internet configurator to order this variant with an external thread.

Piston Ø	[mm]	20	25	32	40	50
Retracting piston force	[N]	121	216	364	602	930
Extending piston force	[N]	164	259	422	665	1035
Impact energy	[J]	0.15	0.2	0.4	0.52	0.64
Weight	0 mm stroke +10 mm stroke	[kg] [kg]	0.098 0.02	0.143 0.02	0.223 0.03	0.333 0.04
Stroke max.	[mm]	200	200	300	300	300

Piston Ø	[mm]	63				
Retracting piston force	[N]	1532				
Extending piston force	[N]	1647				
Impact energy	[J]	0.75				
Weight	0 mm stroke +10 mm stroke	[kg] [kg]	0.757 0.08			
Stroke max.	[mm]	300				

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 20 - 63 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, hexagonal, internal thread ► ATEX optional

	Piston Ø Piston rod thread Ports	20 M6 M5	25 M6 M5	32 M6 G 1/8	40 M6 G 1/8	50 M10 G 1/8
	Stroke 5	0822391900	0822392900	0822393900	0822394900	0822395900
	10	0822391901	0822392901	0822393901	0822394901	0822395901
	15	0822391902	0822392902	0822393902	0822394902	0822395902
	20	0822391903	0822392903	0822393903	0822394903	0822395903
	25	0822391904	0822392904	0822393904	0822394904	0822395904
	30	0822391905	0822392905	0822393905	0822394905	0822395905
	40	0822391906	0822392906	0822393906	0822394906	0822395906
	50	0822391907	0822392907	0822393907	0822394907	0822395907
	60	0822391908	0822392908	0822393908	0822394908	0822395908
	80	-	-	0822393909	0822394909	0822395909
	100	-	-	0822393910	0822394910	0822395910
	Piston Ø Piston rod thread Ports	63 M10 G 1/8				
	Stroke 5	0822396900				
	10	0822396901				
	15	0822396902				
	20	0822396903				
	25	0822396904				
	30	0822396905				
	40	0822396906				
	50	0822396907				
	60	0822396908				
	80	0822396909				
	100	0822396910				

#### Configurable product



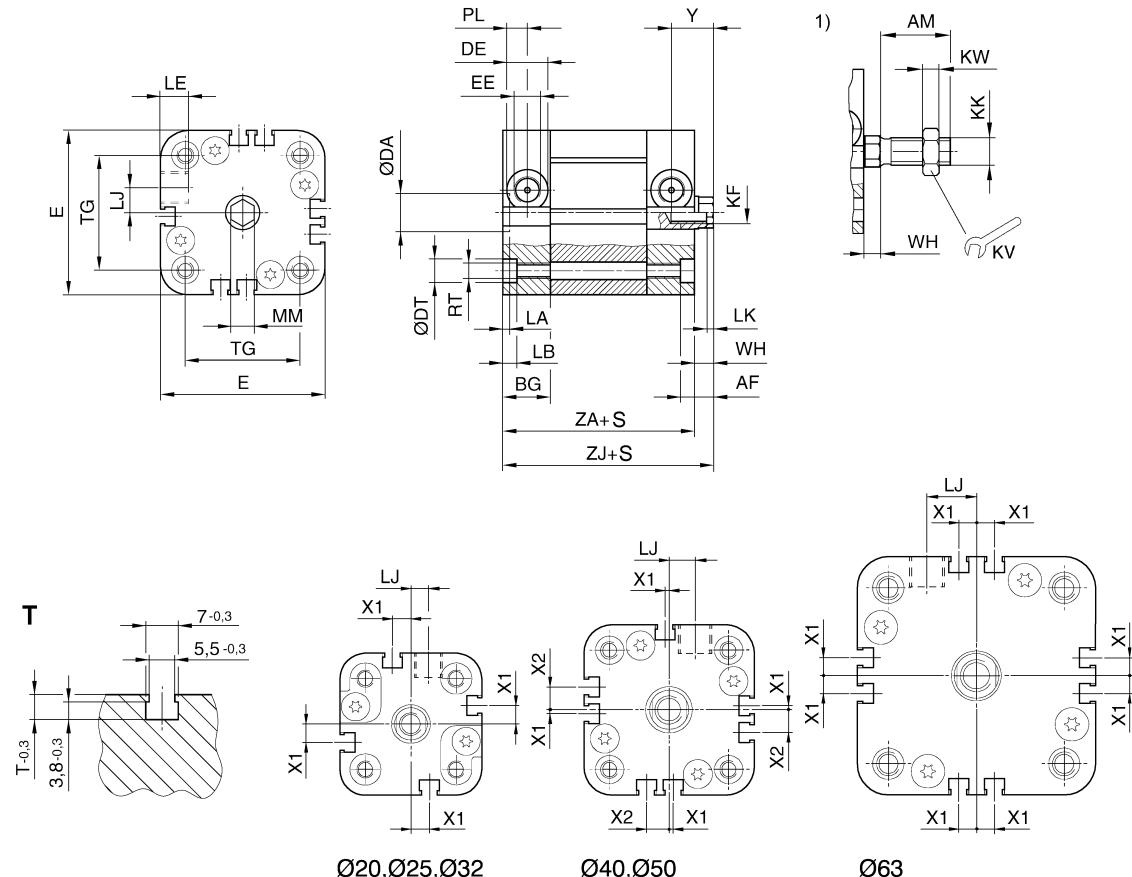
This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

## Piston rod cylinders → Short-stroke and compact cylinders

## Compact cylinder, Series KPZ

► Ø 20 - 63 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, hexagonal, internal thread ► ATEX optional

## Dimensions



00132961

S = stroke

T = View for sensor groove

1) external thread

Use our Internet configurator to order this variant with an external thread.

Piston Ø	AF	AM	BG	Ø DA H11	DE	Ø DT H13	E	EE	KK	KV	KW	LA	LB
20	10	22	12.5	12	8	8	36	M5	M8	13	4	2.5	4.4
25	10	22	13	12	8	8	40	M5	M8	13	4	2.5	4.4
32	12	22	14.5	14	15	11	50	G 1/8	M8	13	4	2.5	5.4
40	12	22	14.5	14	15	10	60	G 1/8	M8	13	4	2.5	5.4
50	16	24	14.5	18	15	11	68	G 1/8	M12x1,25	19	7	2.5	1.7
63	16	24	14.5	18	15	11	84	G 1/8	M12x1,25	19	7	2.5	1.7

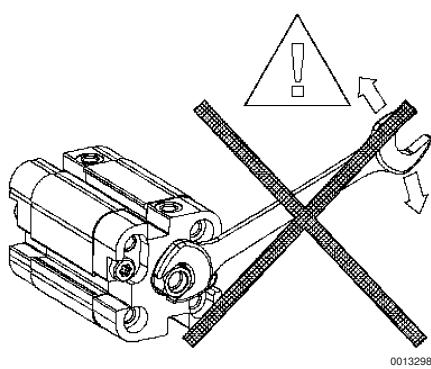
Piston Ø	LE	LJ	LK+0,5	MM f8	PL	RT 6H	T	TG	WH	X1	X2	Y	ZA +1
20	5	4.5	2.5	9	7.5	M5	5.3	22 ±0,4	5	3.4	-	13.5	38
25	5	5.4	2.5	9	7.5	M5	5.3	26 ±0,4	5.5	3.4	-	13.5	39.5
32	8	5.1	2.5	10	7.5	M6	5.3	32 ±0,5	7	6.5	-	14.5	44
40	8	9.6	2.5	10	7.5	M6	5.4	42 ±0,5	7	1.4	8	14.5	45
50	8	8.5	3.5	14	7.5	M8	5.5	50 ±0,6	7.5	3.4	7	15.5	45.5
63	8	17.8	3.5	14	7.5	M8	5.7	62 ±0,7	8	6.15	-	15.5	50

Piston Ø	ZJ												
20	43 0/+1,4												

**Piston rod cylinders → Short-stroke and compact cylinders****Compact cylinder, Series KPZ**

► Ø 20 - 63 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, hexagonal, internal thread ► ATEX optional

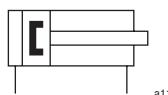
Piston Ø	ZJ														
25	45 0/+1,4														
32	51 0/+1,6														
40	52 0/+1,6														
50	53 0/+1,6														
63	58 ±1														



## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 32 - 100 mm ► Ports: G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: internal thread ► with metal scraper



Compressed air connection	internal thread
Working pressure min./max.	3 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6 bar
 Materials:	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Scraper	Brass; Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- Use our Internet configurator to order this variant with an external thread.

Piston Ø	[mm]	32	40	50	63	80
Retracting piston force	[N]	364	560	871	1478	2397
Extending piston force	[N]	422	665	1035	1647	2656
Impact energy	[J]	0.4	0.52	0.64	0.75	0.75
Weight	0 mm stroke [kg]	0.289	0.389	0.559	0.915	1.578
	+10 mm stroke [kg]	0.03	0.04	0.05	0.08	0.11
Stroke max.	[mm]	300	300	300	300	400

Piston Ø	[mm]	100				
Retracting piston force	[N]	3886				
Extending piston force	[N]	4145				
Impact energy	[J]	1				
Weight	0 mm stroke [kg]	2.957				
	+10 mm stroke [kg]	0.14				
Stroke max.	[mm]	400				

	Piston Ø Piston rod thread	32 M8	40 M8	50 M10	63 M10	80 M12
	Stroke 5	0822593500	0822594500	0822595500	0822596500	0822597500
	Piston Ø Piston rod thread	100 M16				
	Stroke 5	0822598500				

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

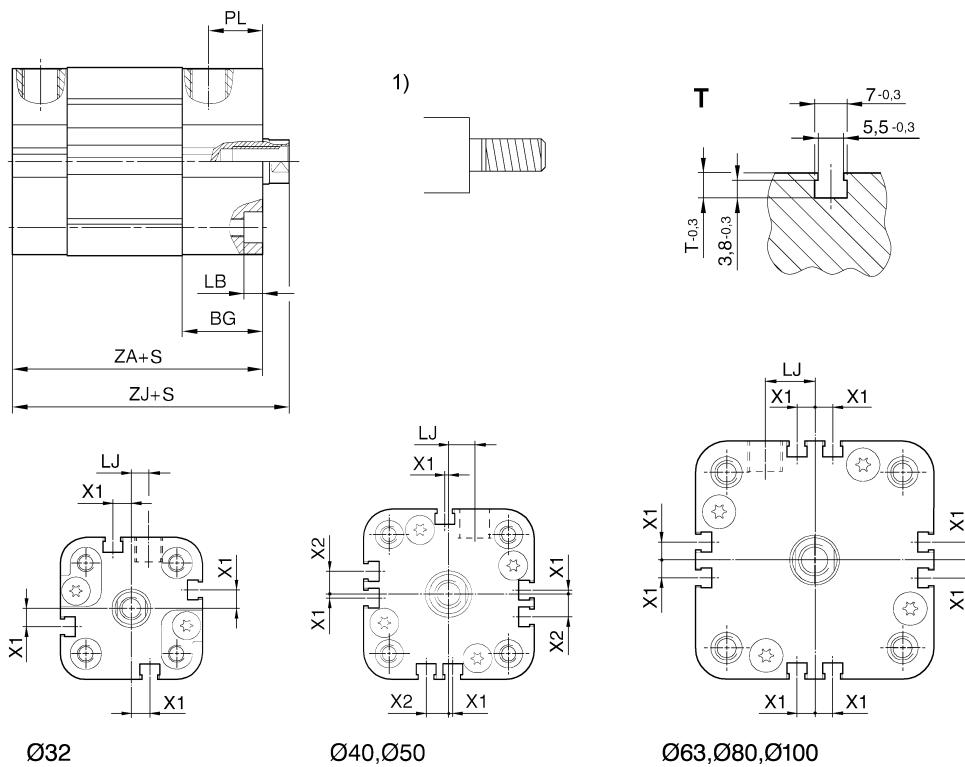
► Ø 32 - 100 mm ► Ports: G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: internal thread ► with metal scraper

#### Configurable product



This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

#### Dimensions



S = stroke

T = View for sensor groove

1) external thread

Use our Internet configurator to order this variant with an external thread.  
For other dimensions please look at the catalog sheets of standard-versions.

Piston Ø	BG	LB	LJ	PL	T	X1	X2	ZA +1	ZJ			
32	24.5	5.4	5.1	17.5	5.3	6.5	-	54	61 0/+1,6			
40	24.5	5.4	9.6	17.5	5.4	1.4	8	55	62 0/+1,6			
50	24.5	6.4	8.5	17.5	5.5	3.4	7	55.5	63 0/+1,6			
63	24.5	6.4	17.8	17.5	5.7	6.15	-	60	68 ±1			
80	26.5	8.6	22.9	18.3	6.1	7.7	-	65.5	75 ±1			
100	29.5	8.6	27.4	19.7	6.1	7.7	-	76.5	87 0/+2			

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► heat resistant ► cushioning:  
elastic ► piston rod: internal thread



#### Standards

Compressed air connection

#### NFE 49004

internal thread

Working pressure min./max.

1 bar / 10 bar

Ambient temperature min./max.

-20 °C / +120 °C

Medium temperature min./max.

-20 °C / +120 °C

Medium

Compressed air

Max. particle size

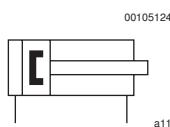
5 µm

Oil content of compressed air

0 mg/m³ - 5 mg/m³

Pressure for determining piston forces

6 bar



#### Materials:

Cylinder tube

Aluminum, anodized

Piston rod

Stainless steel

Front cover

Aluminum

End cover

Aluminum

Scrapers

Fluorocaoutchouc

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- Use our Internet configurator to order this variant with an external thread.

Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	79	121	216	364	602
Extending piston force	[N]	106	164	259	422	665
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke +10 mm stroke	[kg] [kg]	0.07 0.014	0.098 0.02	0.143 0.02	0.223 0.03
Stroke max.		[mm]	200	200	200	300
Note			1)	1)	1)	2)

Piston Ø	[mm]	50	63	80	100
Retracting piston force	[N]	930	1532	2492	3886
Extending piston force	[N]	1035	1647	2656	4145
Impact energy	[J]	0.64	0.75	0.75	1
Weight	0 mm stroke +10 mm stroke	[kg] [kg]	0.446 0.05	0.757 0.08	1.318 0.11
Stroke max.		[mm]	300	300	400
Note			2)	2)	2)

1) Sealing material: Fluorocaoutchouc

2) Sealing material: Hydrogenated acrylonitrile butadiene rubber

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► heat resistant ► cushioning: elastic ► piston rod: internal thread

	Piston Ø Piston rod thread Ports	16 M4 M5	20 M6 M5	25 M6 M5	32 M8 G 1/8	40 M8 G 1/8
	Stroke 5	0822390400	0822391400	0822392400	0822393400	0822394400
	10	0822390401	0822391401	0822392401	0822393401	0822394401
	15	0822390402	0822391402	0822392402	0822393402	0822394402
	20	0822390403	0822391403	0822392403	0822393403	0822394403
	25	0822390404	0822391404	0822392404	0822393404	0822394404
	30	0822390405	0822391405	0822392405	0822393405	0822394405
	40	0822390406	0822391406	0822392406	0822393406	0822394406
	50	0822390407	<b>0822391407</b>	0822392407	0822393407	0822394407
	60	0822390408	0822391408	0822392408	0822393408	0822394408
	80	0822390409	0822391409	0822392409	0822393409	0822394409
	100	0822390410	0822391410	0822392410	0822393410	0822394410
	Piston Ø Piston rod thread Ports	50 M10 G 1/8	63 M10 G 1/8	80 M12 G 1/8	100 M16 G 1/8	
	Stroke 5	0822395400	0822396400	0822397400	0822398400	
	10	0822395401	0822396401	0822397401	0822398401	
	15	0822395402	0822396402	0822397402	0822398402	
	20	0822395403	0822396403	0822397403	0822398403	
	25	0822395404	0822396404	0822397404	0822398404	
	30	0822395405	0822396405	0822397405	0822398405	
	40	0822395406	0822396406	0822397406	0822398406	
	50	0822395407	0822396407	0822397407	0822398407	
	60	0822395408	0822396408	0822397408	0822398408	
	80	0822395409	0822396409	0822397409	0822398409	
	100	0822395410	0822396410	0822397410	0822398410	

#### Configurable product



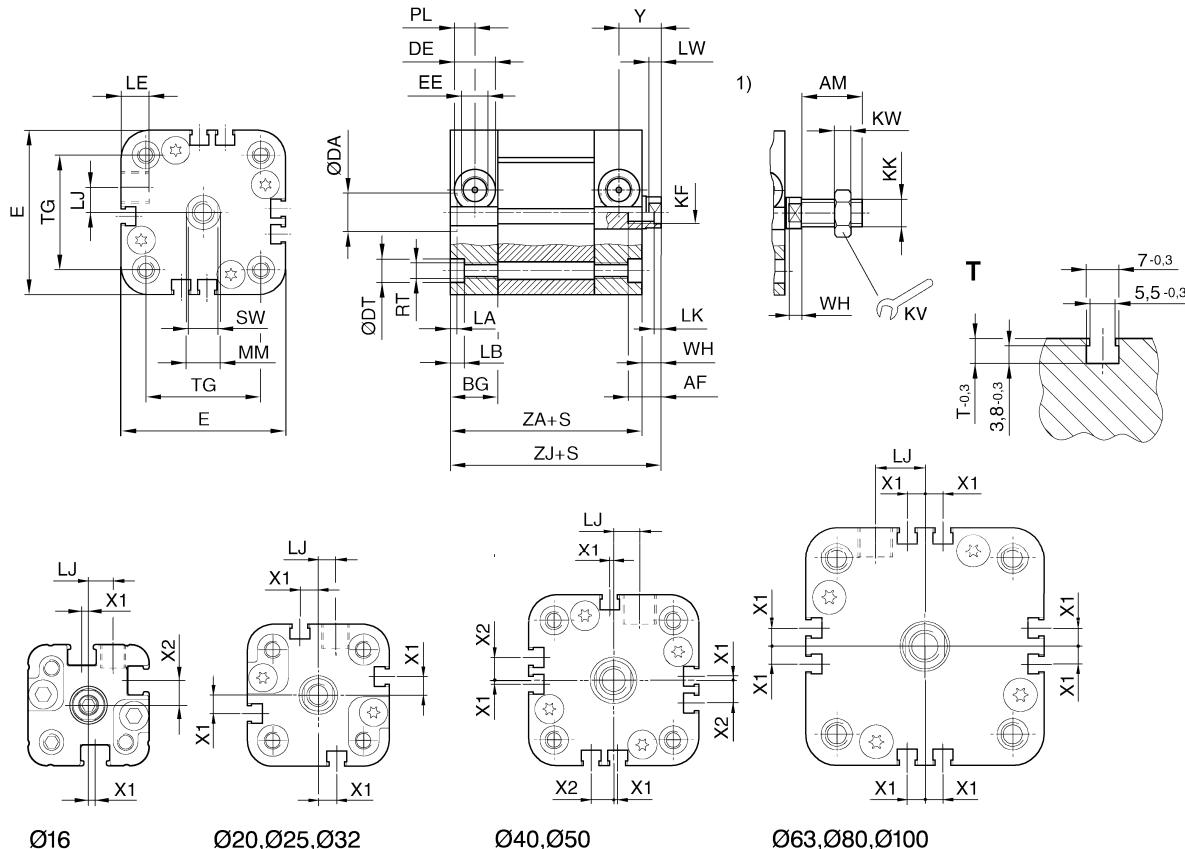
This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

## Piston rod cylinders → Short-stroke and compact cylinders

## Compact cylinder, Series KPZ

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► heat resistant ► cushioning:  
elastic ► piston rod: internal thread

## Dimensions



00132960

S = stroke

T = View for sensor groove

1) external thread

Use our Internet configurator to order this variant with an external thread.

Piston Ø	AF	AM	BG	DA H11	DE	DT H13	E	EE	KF 6H	KK	KV	KW	LA
16	10	20	12.5	10	8	6	29.5	M5	M4	M8	13	4	2.5
20	10	22	12.5	12	8	8	36	M5	M6	M10x1,25	17	6	2.5
25	10	22	13	12	8	8	40	M5	M6	M10x1,25	17	6	2.5
32	12	22	14.5	14	15	11	50	G 1/8	M8	M10x1,25	17	6	2.5
40	12	22	14.5	14	15	10	60	G 1/8	M8	M10x1,25	17	6	2.5
50	16	24	14.5	18	15	11	68	G 1/8	M10	M12x1,25	19	7	2.5
63	16	24	14.5	18	15	11	84	G 1/8	M10	M12x1,25	19	7	2.5
80	20	32	16.5	23	15	15	103	G 1/8	M12	M16x1,5	24	8	3
100	24	40	19.5	28	15	15	124	G 1/8	M16	M20x1,5	30	10	3

Piston Ø	LB	LE	LJ	LK+0,5	LW	MM f8	PL	RT 6H	SW	T	TG	WH	X1
16	4	5	6.1	1.6	3.7	8	7.5	M4	7	5.3	18 ±0,4	4.5	1.6
20	4.4	5	4.5	2.5	4	10	7.5	M5	8	5.3	22 ±0,4	5	3.4
25	4.4	5	5.4	2.5	4	10	7.5	M5	8	5.3	26 ±0,4	5.5	3.4
32	5.4	8	5.1	2.5	4.5	12	7.5	M6	10	5.3	32 ±0,5	7	6.5
40	5.4	8	9.6	2.5	4.5	12	7.5	M6	10	5.4	42 ±0,5	7	1.4
50	1.7	8	8.5	3.5	6	16	7.5	M8	13	5.5	50 ±0,6	7.5	3.4
63	1.7	8	17.8	3.5	6	16	7.5	M8	13	5.7	62 ±0,7	8	6.15

**Piston rod cylinders → Short-stroke and compact cylinders**

**Compact cylinder, Series KPZ**

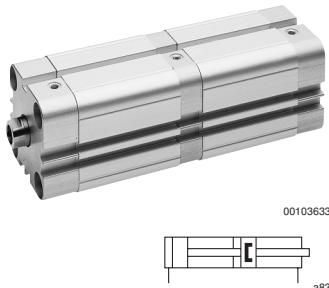
► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► heat resistant ► cushioning: elastic ► piston rod: internal thread

Piston Ø	LB	LE	LJ	LK+0,5	LW	MM f8	PL	RT 6H	SW	T	TG	WH	X1
80	0.5	8	22.9	3.5	7	20	8.3	M10	16	6.1	82 ±0,7	9.5	7.7
100	3.5	8	27.4	4.5	8	25	9.7	M10	21	6.1	103 ±0,7	10.5	7.7
Piston Ø	X2	Y	ZA +1	ZJ									
16	6	12	38	42,5 0/+1,2									
20	–	13.5	38	43 0/+1,4									
25	–	13.5	39.5	45 0/+1,4									
32	–	14.5	44	51 0/+1,6									
40	8	14.5	45	52 0/+1,6									
50	7	15.5	45.5	53 0/+1,6									
63	–	15.5	50	58 ±1									
80	–	18	55.5	65 ±1									
100	–	20	66.5	77 0/+2									

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ-tandem cylinder

► Ø 25 - 80 mm ► 2x ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: Reinforced, internal thread



Compressed air connection	internal thread
Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6 bar

Materials:	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Scraper	Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- Use our Internet configurator to order this variant with an external thread.

Piston Ø	[mm]	25	40	63	80
Retracting piston force	[N]	220	560	1480	2390
Extending piston force	[N]	480	1220	3130	5050
Impact energy	[J]	0.2	0.52	0.75	0.75
Weight	0 mm stroke [kg]	0.346	0.875	1.9	3.661
	+10 mm stroke [kg]	0.05	0.102	0.184	0.27
Stroke max.	[mm]	200	200	200	200

	Piston Ø Piston rod thread Ports	25 M6 M5	40 M10 M5	63 M12 G 1/8	80 M16 G 1/8
	Stroke 5	0822592200	0822594200	0822596200	0822597200

#### Configurable product



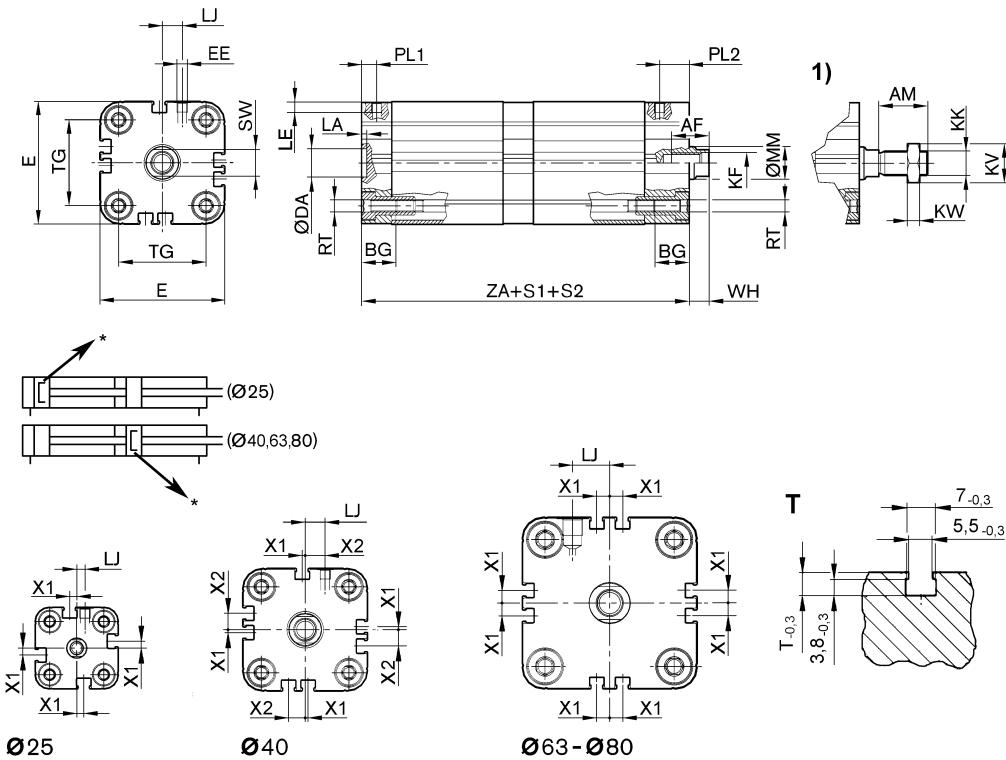
This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ-tandem cylinder

► Ø 25 - 80 mm ► 2x ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: Reinforced, internal thread

#### Dimensions



S = stroke

T = View for sensor groove

1) external thread

Use our Internet configurator to order this variant with an external thread.

\* Position of the Magnet

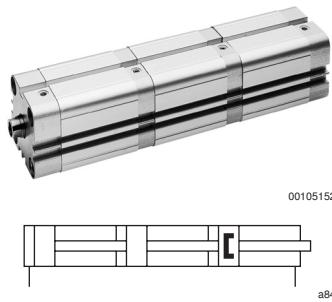
00132972

Piston Ø	AF	AM	BG	DA H11	E	EE	KF H6	KK	KV	KW	LA	LJ	MM f8
25	10	22	16	12	40	M5	M6	M10x1,25	17	6	2.5	4	10
40	16	24	20	14	60	M5	M10	M12x1,25	19	7	2.5	9.5	16
63	20	32	20	18	84	G 1/8	M12	M16x1,5	24	8	2.5	17.8	20
80	24	40	22	23	103	G 1/8	M16	M20x1,5	30	10	3	20	25
Piston Ø	PL 1	PL 2	RT 6H	SW h13	T	TG	X1	X2	WH	ZA 2			
25	7.5	7.5	M5	8	5.3	26 ±0,4	3.4	—	7.5	78			
40	12.5	14.5	M6	13	5.4	42 ±0,5	1.4	8	9.5	102.5			
63	11.5	19	M8	16	5.7	62 ±0,7	6.15	—	10	116			
80	13.8	19.8	M10	21	6.1	82 ±0,7	7.7	—	12	134.5			

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ-tandem cylinder

► Ø 25 - 80 mm ► 3x ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: Reinforced, internal thread



Compressed air connection

internal thread

Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6 bar

#### Materials:

Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Scraper	Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- Use our Internet configurator to order this variant with an external thread.

Piston Ø	[mm]	25	40	63	80
Retracting piston force	[N]	220	560	1480	2390
Extending piston force	[N]	690	1780	4610	6090
Impact energy	[J]	0.2	0.52	0.75	0.75
Weight	0 mm stroke [kg]	0.463	1.147	2.519	4.887
	+10 mm stroke [kg]	0.075	0.149	0.271	0.394
Stroke max.	[mm]	200	200	200	200

	Piston Ø Piston rod thread Ports	25 M6 M5	40 M10 M5	63 M12 G 1/8	80 M16 G 1/8
	Stroke 5	0822592300	0822594300	0822596300	0822597300

#### Configurable product



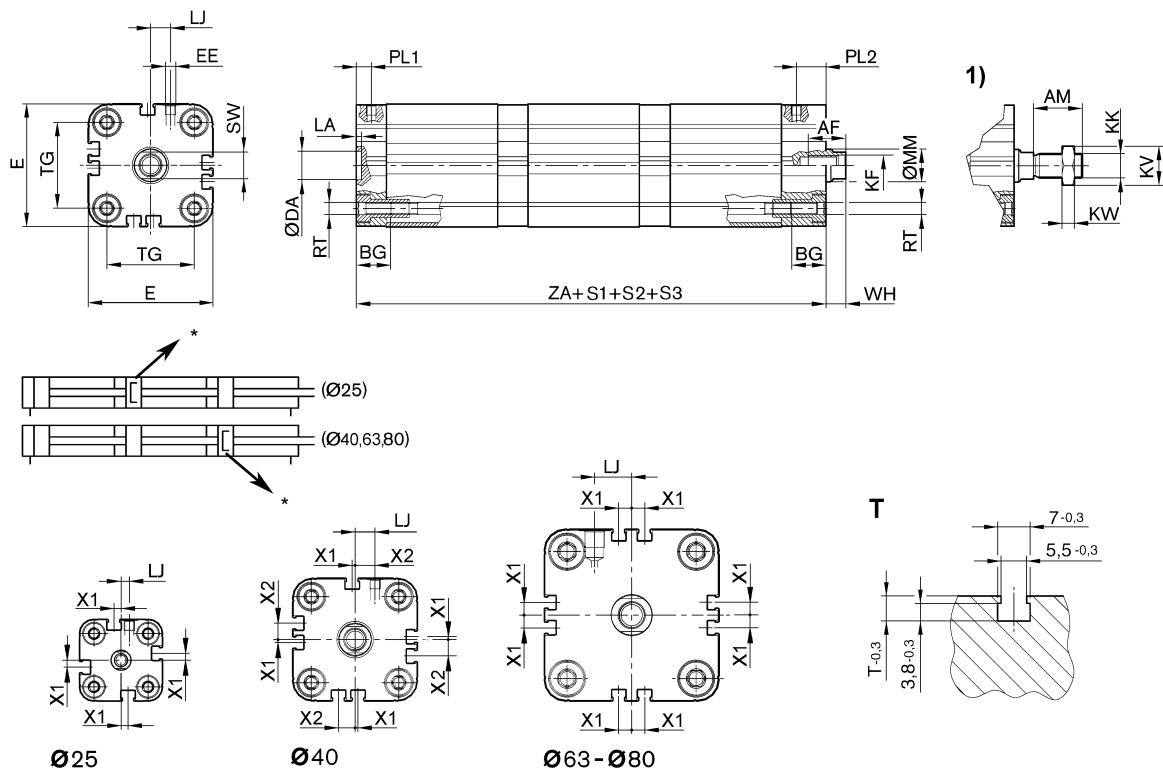
This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ-tandem cylinder

► Ø 25 - 80 mm ► 3x ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: Reinforced, internal thread

#### Dimensions



00132973

S = stroke

T = View for sensor groove

1) external thread

Use our Internet configurator to order this variant with an external thread.

\* Position of the Magnet

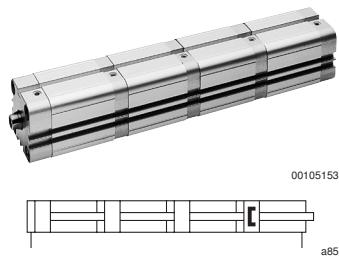
Piston Ø	AF	AM	BG	DA H11	E	EE	KF H6	KK	KV	KW	LA	LJ	MM f8
25	10	22	16	12	40	M5	M6	M10x1,25	17	6	2.5	4	10
40	16	24	20	14	60	M5	M10	M12x1,25	19	7	2.5	9.5	16
63	20	32	20	18	84	G 1/8	M12	M16x1,5	24	8	2.5	17.8	20
80	24	40	22	23	103	G 1/8	M16	M20x1,5	30	10	3	20	25

Piston Ø	PL 1	PL 2	RT 6H	SW h13	T	TG	WH	X1	X2	Z A 3			
25	7.5	7.5	M5	8	5.3	26 ±0,4	7.5	3.4	—	110.5			
40	12.5	14.5	M6	13	5.4	42 ±0,5	9.5	1.4	8	140.5			
63	11.5	19	M8	16	5.7	62 ±0,7	10	6.15	—	158.5			
80	13.8	19.8	M10	21	6.1	82 ±0,7	12	7.7	—	185			

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ-tandem cylinder

► Ø 25 - 80 mm ► 4x ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: Reinforced, internal thread



Compressed air connection	internal thread
Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6 bar

Materials:	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Scraper	Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- Use our Internet configurator to order this variant with an external thread.

Piston Ø	[mm]	25	40	63	80
Retracting piston force	[N]	220	560	1480	2390
Extending piston force	[N]	910	2340	6090	9840
Impact energy	[J]	0.2	0.52	0.75	0.75
Weight	0 mm stroke [kg]	0.581	1.418	3.138	6.114
	+10 mm stroke [kg]	0.1	0.195	0.359	0.518
Stroke max.	[mm]	200	200	200	200

	Piston Ø Piston rod thread Ports	25 M6 M5	40 M10 M5	63 M12 G 1/8	80 M16 G 1/8
	Stroke 5	0822592400	0822594400	0822596400	0822597400

#### Configurable product



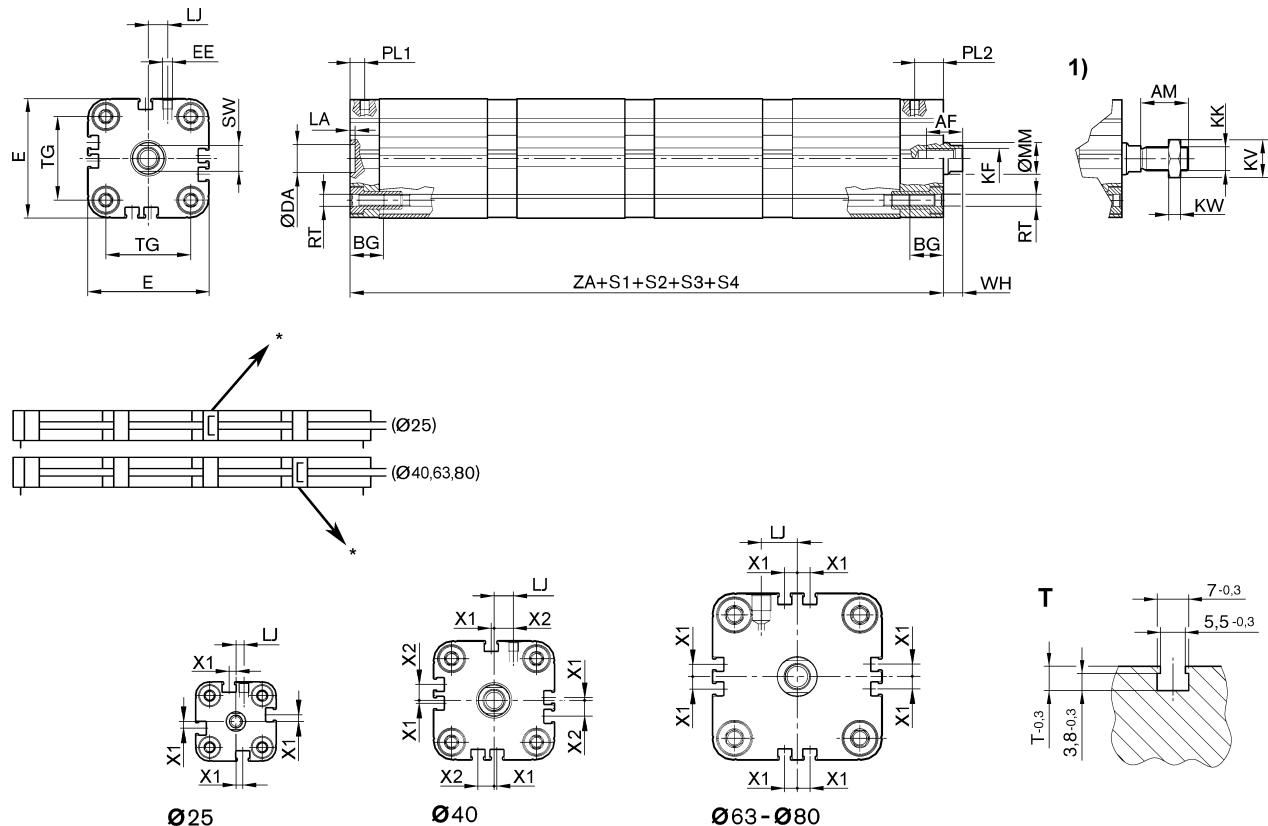
This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ-tandem cylinder

► Ø 25 - 80 mm ► 4x ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: Reinforced, internal thread

#### Dimensions



S = stroke

T = View for sensor groove

1) external thread

Use our Internet configurator to order this variant with an external thread.

\* Position of the Magnet

00132974

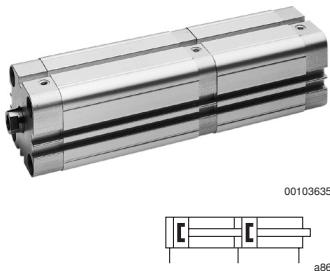
Piston Ø	AF	AM	BG	DA H11	E	EE	KF H6	KK	KV	KW	LA	LJ	MM f8
25	10	22	16	12	40	M5	M6	M10x1,25	17	6	2.5	4	10
40	16	24	20	14	60	M5	M10	M12x1,25	19	7	2.5	9.5	16
63	20	32	20	18	84	G 1/8	M12	M16x1,5	24	8	2.5	17.8	20
80	24	40	22	23	103	G 1/8	M16	M20x1,5	30	10	3	20	25

Piston Ø	PL 1	PL 2	RT 6H	SW h13	T	TG	WH	X1	X2	ZA 4			
25	7.5	7.5	M5	8	5.3	26 ±0,4	7.5	3.4	-	143			
40	12.5	14.5	M6	13	5.4	42 ±0,5	9.5	1.4	8	178.5			
63	11.5	19	M8	16	5.7	62 ±0,7	10	6.15	-	201			
80	13.8	19.8	M10	21	6.1	82 ±0,7	12	7.7	-	235.5			

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ-Multiple position

► Ø 25 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: Reinforced, internal thread ► multi-position cylinder: 3 positions



Compressed air connection	internal thread
Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6 bar

Materials:	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Scraper	Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- Use our Internet configurator to order this variant with an external thread.

Piston Ø	[mm]	25	40	63	100	
Retracting piston force	[N]	216	560	1478	3886	
Extending piston force	[N]	259	665	1647	2656	
Impact energy	[J]	0.4	0.52	0.75	1	
Weight 0 mm stroke	[kg]	0.355	0.895	2.019	5.762	
Stroke max.	[mm]	400	1500	1500	1500	

	Piston Ø Piston rod thread Ports	25 M6 M5	40 M10 M5	63 M12 G 1/8	100 M16 G 1/8	
	Stroke 5	0822592000	0822594000	0822596000	0822598000	

#### Configurable product



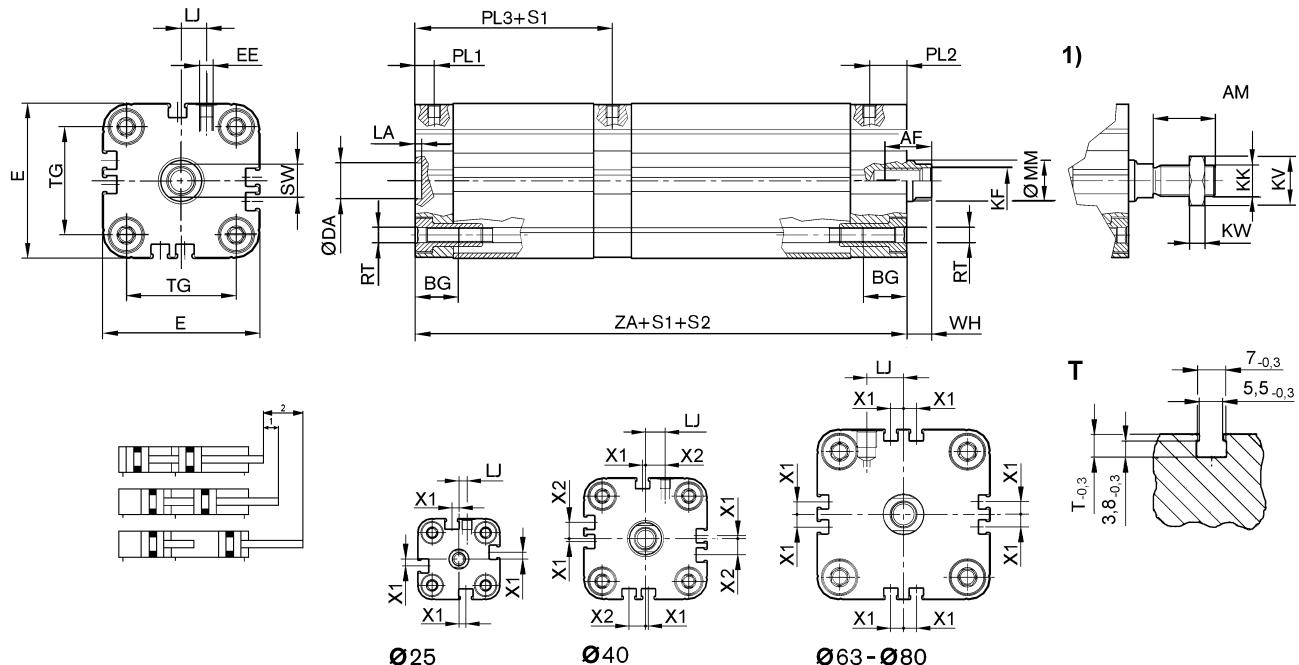
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## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ-Multiple position

► Ø 25 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: Reinforced, internal thread ► multi-position cylinder: 3 positions

#### Dimensions



00132975

S = stroke

T = View for sensor groove

1) external thread

Use our Internet configurator to order this variant with an external thread.

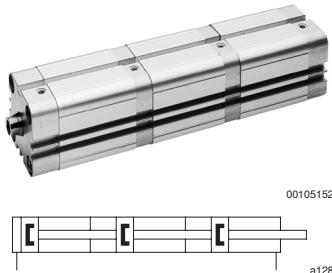
Piston Ø	AF	AM	BG	DA H11	E	EE	KF 6H	KK	KV	KW	LA	LJ	MM f8
25	10	22	16	12	40	M5	M6	M10x1,25	17	6	2.5	4	10
40	16	24	20	14	60	M5	M10	M12x1,25	19	7	2.5	9.5	16
63	20	32	20	18	84	G1/8	M12	M16x1,5	24	8	2.5	17.8	20
100	24	40	22	28	124	G1/8	M16	M20x1,5	30	10	3	27.4	25

Piston Ø	PL 1	PL 2	PL 3	RT 6H	SW h13	T	TG	WH	X1	X2	ZA		
25	7.5	7.5	39	M5	8	5.3	26 ±0,4	7.5	3.4	—	78		
40	12.5	14.5	50.2	M6	13	5.4	42 ±0,5	9.5	1.4	8	102,5		
63	11.5	19	54.2	M8	16	5.7	62 ±0,7	10	6.15	—	116		
100	13.8	24.8	71.7	M10	21	6.1	103 ±0,7	12	7.7	—	154,5		

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ-Multiple position

► Ø 25 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: Reinforced, internal thread ► multi-position cylinder: 4 positions



Compressed air connection

Working pressure min./max.  
Ambient temperature min./max.  
Medium temperature min./max.  
Medium  
Max. particle size  
Oil content of compressed air  
Pressure for determining piston forces

internal thread

1 bar / 10 bar  
-20 °C / +80 °C  
-20 °C / +80 °C  
Compressed air  
5 µm  
0 mg/m³ - 5 mg/m³  
6 bar

#### Materials:

Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Scraper	Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- Use our Internet configurator to order this variant with an external thread.

Piston Ø	[mm]	25	40	63	100	
Retracting piston force	[N]	216	560	1478	3886	
Extending piston force	[N]	259	665	1647	2656	
Impact energy	[J]	0.2	0.52	0.75	1	
Weight 0 mm stroke	[kg]	0.466	1.163	2.573	7.716	
Stroke max.	[mm]	400	1500	1500	1500	

	Piston Ø Piston rod thread Ports	25 M6 M5	40 M10 M5	63 M12 G 1/8	100 M16 G 1/8	
	Stroke 5	0822592100	0822594100	0822596100	0822598100	

#### Configurable product



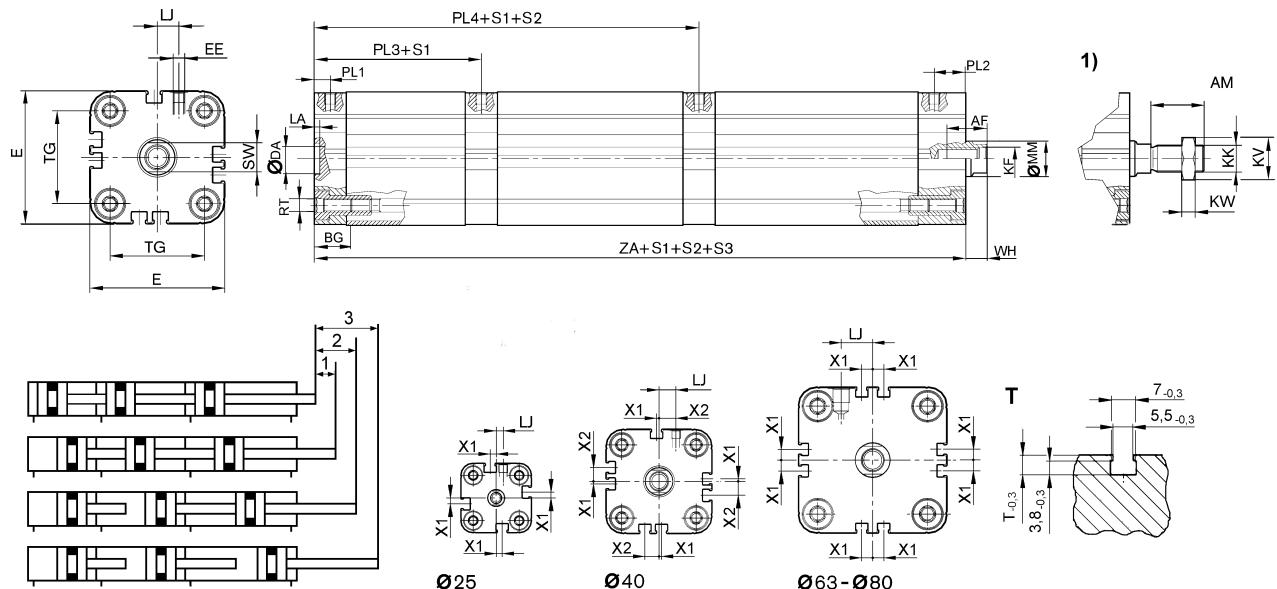
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## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ-Multiple position

► Ø 25 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: Reinforced, internal thread ► multi-position cylinder: 4 positions

#### Dimensions



00132976

S = stroke

T = View for sensor groove

1) external thread

Use our Internet configurator to order this variant with an external thread.

Piston Ø	AF	AM	BG	DA H11	E	EE	KF 6H	KK	KV	KW	LA	LJ	MM f8
25	10	22	16	12	40	M5	M6	M10x1,25	17	6	2.5	4	10
40	16	24	20	14	60	M5	M10	M12x1,25	19	7	2.5	9.5	16
63	20	32	20	18	84	G 1/8	M12	M16x1,5	24	8	2.5	17.8	20
100	24	40	22	28	124	G 1/8	M16	M20x1,5	30	10	3	27.4	25
Piston Ø	PL 1	PL 2	PL 3	PL4	RT 6H	SW h13	T	TG	WH	X1	X2	ZA	
25	7.5	7.5	39	71.5	M5	8	5.3	26 ±0,4	7.5	3.4	—	110,5	
40	12.5	14.5	50.2	88.2	M6	13	5.4	42 ±0,5	9.5	1.4	8	140,5	
63	11.5	19	54.2	96.7	M8	16	5.7	62 ±0,7	10	6.15	—	158,5	
100	13.8	24.8	71.7	129.7	M10	21	6.1	103 ±0,7	12	7.7	—	212,5	

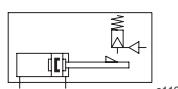
## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ with integrated holding unit

► Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► with integrated holding unit ► piston rod: internal thread



00111273



Compressed air connection

Working pressure min./max.  
Ambient temperature min./max.  
Medium temperature min./max.  
Medium  
Max. particle size  
Oil content of compressed air  
Pressure for determining piston forces

internal thread

2 bar / 10 bar  
-10 °C / +60 °C  
-10 °C / +60 °C  
Compressed air  
5 µm  
0 mg/m³ - 5 mg/m³  
6 bar

Materials:

Cylinder tube  
Piston rod  
Front cover  
End cover  
Seal  
Scraper

Aluminum, anodized  
Stainless steel  
Aluminum  
Aluminum  
Polyurethane  
Polyurethane

#### Technical Remarks

- 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- Locking unit in exhausted state via clamping jaws (self-clamping)
- Warning:  
The holding unit may not be used for the following applications:  
- for dynamic holding  
- in or as safety equipment
- function: piston rod held during pressure loss.

Piston Ø	[mm]	20	25	32	40	50
Retracting piston force	[N]	121	216	364	560	871
Extending piston force	[N]	164	259	422	665	1035
Impact energy	[J]	0.15	0.2	0.4	0.52	0.64
Weight	0 mm stroke [kg]	0.2	0.27	0.45	0.96	1.53
	+10 mm stroke [kg]	0.02	0.02	0.03	0.05	0.06
Stroke max.	[mm]	200	200	300	300	300
Min. holding force at 0 bar	[N]	400	400	650	1000	1600

Piston Ø	[mm]	63	80	100		
Retracting piston force	[N]	1478	2397	3886		
Extending piston force	[N]	1647	2656	4145		
Impact energy	[J]	0.75	0.75	1		
Weight	0 mm stroke [kg]	2.12	3.72	5.72		
	+10 mm stroke [kg]	0.09	0.125	0.14		
Stroke max.	[mm]	300	400	400		
Min. holding force at 0 bar	[N]	2500	4000	6300		

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ with integrated holding unit

► Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► with integrated holding unit ► piston rod: internal thread

	Piston Ø Piston rod thread Ports	20 M6 M5	25 M6 M5	32 M8 G 1/8	40 M10 G 1/8	50 M12 G 1/8
	Stroke 5	0822691000	0822692000	0822693000	0822694000	0822695000
	10	0822691001	0822692001	0822693001	0822694001	0822695001
	15	0822691002	0822692002	0822693002	0822694002	0822695002
	20	0822691003	0822692003	0822693003	0822694003	0822695003
	25	0822691004	0822692004	0822693004	0822694004	0822695004
	30	0822691005	0822692005	0822693005	0822694005	0822695005
	40	0822691006	0822692006	0822693006	0822694006	0822695006
	50	0822691007	0822692007	0822693007	0822694007	0822695007
	60	0822691008	0822692008	0822693008	0822694008	0822695008
	80	0822691009	0822692009	0822693009	0822694009	0822695009
	100	0822691010	0822692010	0822693010	0822694010	0822695010
	Piston Ø Piston rod thread Ports	63 M12 G 1/8	80 M16 G 1/8	100 M16 G 1/8		
	Stroke 5	0822696000	0822697000	0822698000		
	10	0822696001	0822697001	0822698001		
	15	0822696002	0822697002	0822698002		
	20	0822696003	0822697003	0822698003		
	25	0822696004	0822697004	0822698004		
	30	0822696005	0822697005	0822698005		
	40	0822696006	0822697006	0822698006		
	50	0822696007	0822697007	0822698007		
	60	0822696008	0822697008	0822698008		
	80	0822696009	0822697009	0822698009		
	100	0822696010	0822697010	0822698010		

#### Configurable product



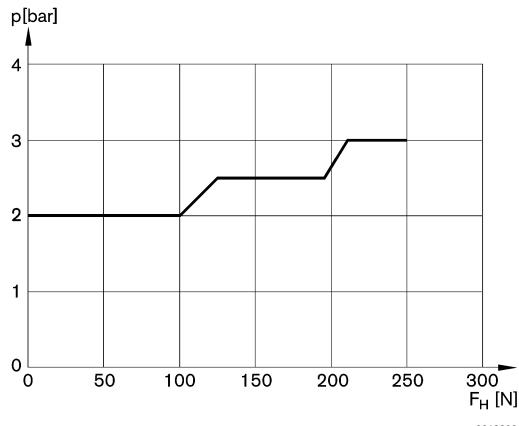
This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ with integrated holding unit

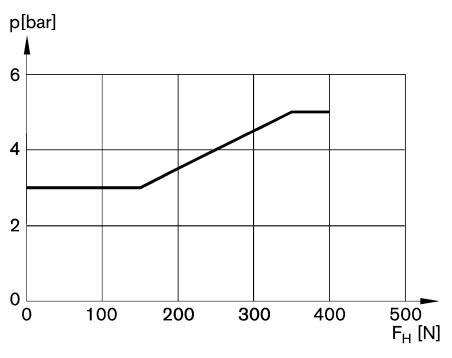
► Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► with integrated holding unit ► piston rod: internal thread

#### Holding force for piston Ø 20



p = release pressure for holding unit  
FH = holding force of cylinder

#### Holding force for piston Ø 25



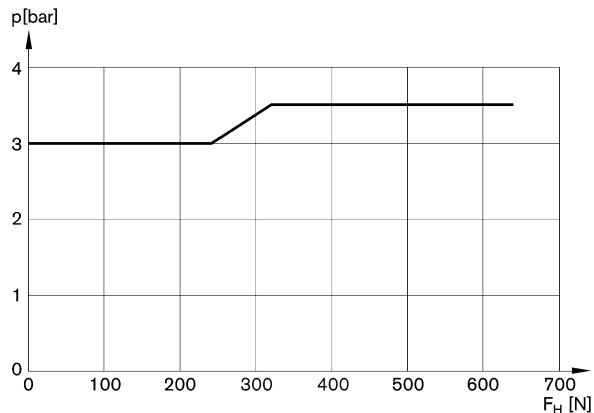
p = release pressure for holding unit  
FH = holding force of cylinder

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ with integrated holding unit

► Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► with integrated holding unit ► piston rod: internal thread

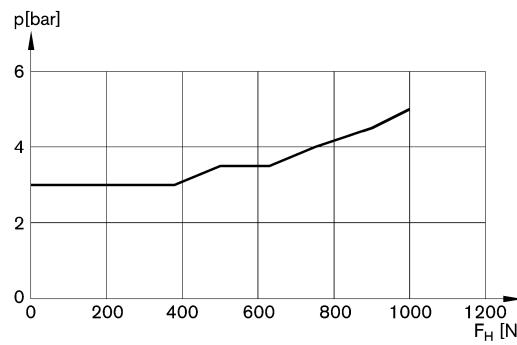
#### Holding force for piston Ø 32



00122098

p = release pressure for holding unit  
FH = holding force of cylinder

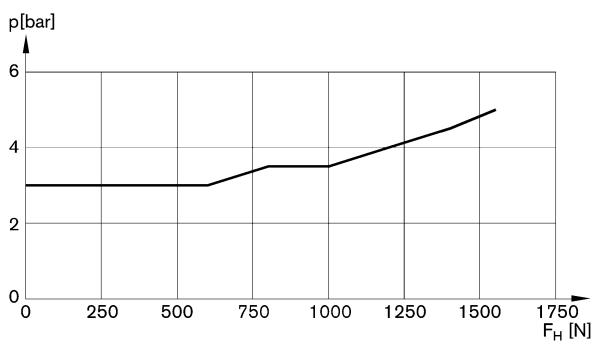
#### Holding force for piston Ø 40



00122099

p = release pressure for holding unit  
FH = holding force of cylinder

#### Holding force for piston Ø 50



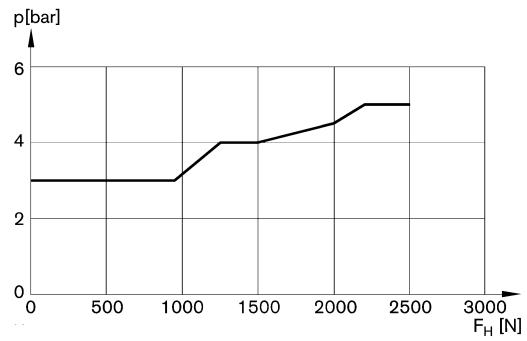
00122100

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ with integrated holding unit

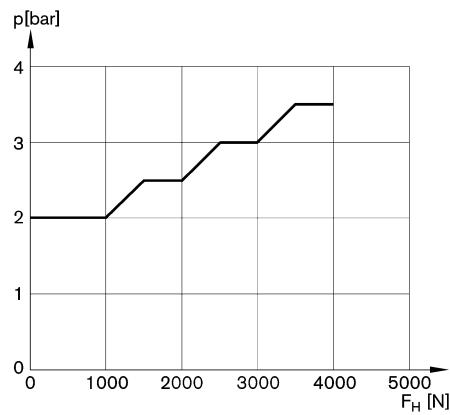
► Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► with integrated holding unit ► piston rod: internal thread

#### Holding force for piston Ø 63



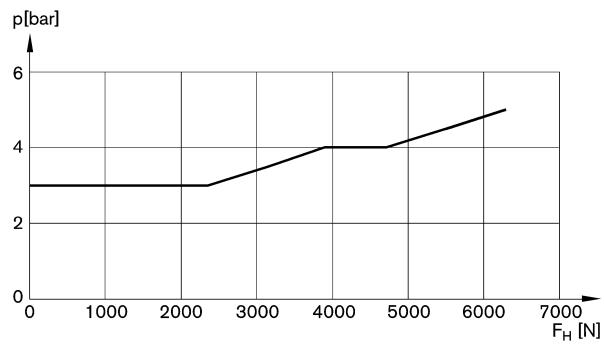
00122101

#### Holding force for piston Ø 80



00122102

#### Holding force for piston Ø 100



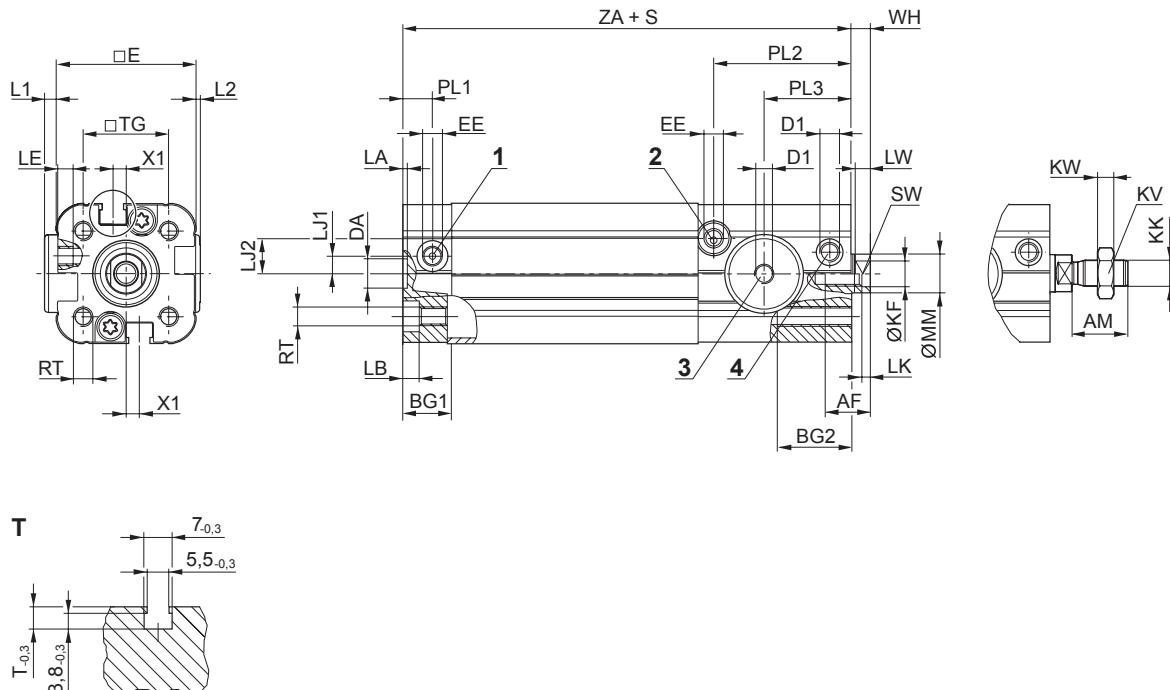
00122103

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ with integrated holding unit

► Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► with integrated holding unit ► piston rod: internal thread

Ø 20 - 32



00132981

S = stroke

- 1) port "outward stroke"
- 2) port "retraction stroke"
- 3) port "release holding unit"
- 4) Location for unblocking screw of port 3

T = View for sensor groove

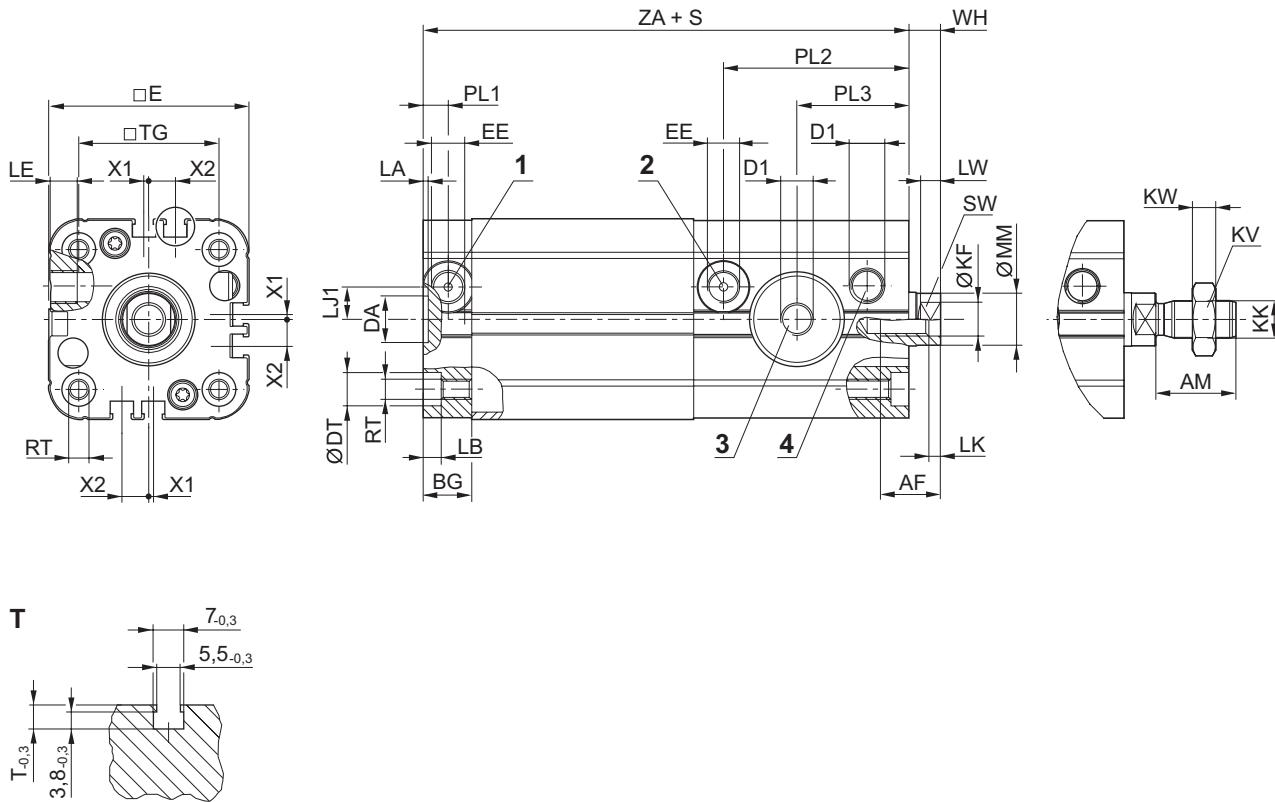
Piston Ø	AF	AM	BG 1	BG 2	DA H11	Ø D1	E	EE	KF	KK	KV	KW	L1
20	10	22	12.5	15	12	M5	36	M5	M6		17	6	3
25	10	22	13	15	12	M5	40	M5	M6		17	6	—
32	12	22	14.5	20	14	M5	50	G 1/8	M8		17	6	—
Piston Ø	L2	LA	LB	LE	LJ1	LJ2	LK+0,5	LW	MM f8	PL1	PL2	PL3	RT
20	1	2.5	4.4	5	4.5	9.1	2.5	4	10	7.5	35.5	22.5	M5
25	—	2.5	4.4	5	5.4	9.1	2.5	4	10	7.5	35.5	22.5	M5
32	—	2.5	5.4	8	5.1	5.1	2.5	4.5	12	7.5	46	26.5	M6
Piston Ø	SW	T	TG	WH	X1	ZA+							
20	8	5.3	22	5	3.4	65							
25	8	5.3	26	5.5	3.4	66.5							
32	10	5.3	32	7	6.5	83							

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ with integrated holding unit

► Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► with integrated holding unit ► piston rod: internal thread

Ø 40 - 50



S = stroke

- 1) port "outward stroke"
  - 2) port "retraction stroke"
  - 3) port "release holding unit"
  - 4) Location for unblocking screw of port 3
- T = View for sensor groove

Piston Ø	AF	AM	BG	DA H11	Ø D1	Ø DT H13	E	EE	KF	KK	KV	KW	LA
40	16	24	14.5	14	G 1/8	10	60	G 1/8	M10		19	7	3.5
50	20	32	14.5	18	G 1/8	11	68	G 1/8	M12		24	8	3.5

Piston Ø	LB	LE	LJ1	LK+0,5	LW	MM f8	PL1	PL2	PL3	RT	SW	T	TG
40	5.4	8	9.6	3.5	6	16	7.5	55.5	33.5	M6	13	5.4	42
50	1.7	8	8.5	3.5	7	20	7.5	64.5	38.5	M8	16	5.5	50

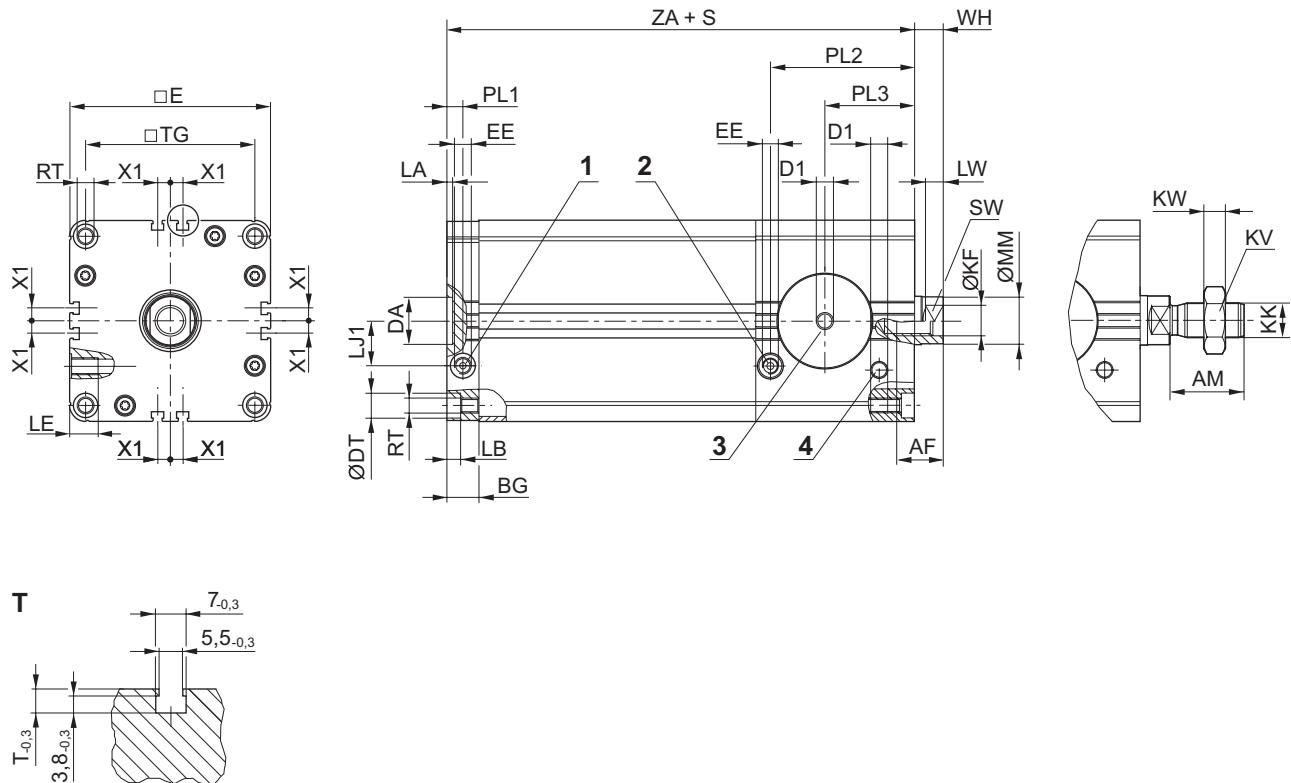
Piston Ø	WH	X1	X2	ZA									
40	9.5	1.4	8	95									
50	10	3.4	7	104.5									

## Piston rod cylinders → Short-stroke and compact cylinders

### Compact cylinder, Series KPZ with integrated holding unit

► Ø 20 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► with integrated holding unit ► piston rod: internal thread

Ø 63 - 100



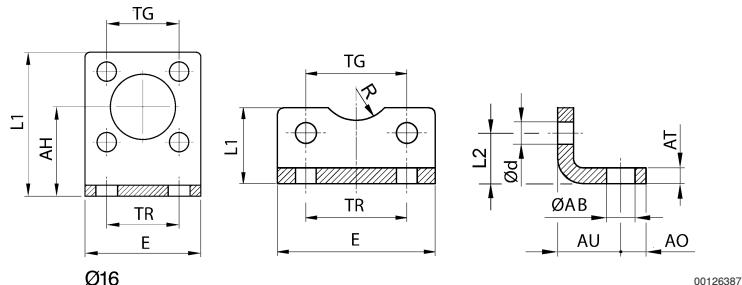
S = stroke

- 1) port "outward stroke"
  - 2) port "retraction stroke"
  - 3) port "release holding unit"
  - 4) Location for unblocking screw of port 3
- T = View for sensor groove

Piston Ø	AF	AM	BG	DA H11	Ø D1	DE	Ø DT H13	E	EE	KF	KK	KV	KW
63	20	32	14.5	18	G 1/8	15	11	84	G 1/8	M12		24	8
80	24	40	16.5	23	G 1/8	15	15	103	G 1/8	M16		30	10
100	24	40	19.5	28	G 1/8	15	15	124	G 1/8	M16		30	10
Piston Ø	LA	LB	LE	LJ1	LW	MM f8	PL1	PL2	PL3	RT	SW	T	TG
63	3.5	1.7	8	17.8	7	20	7.5	63.5	39.5	M8	16	5.7	62
80	4.5	0.5	8	22.9	8	25	8.3	75	48.5	M10	21	6.1	82
100	4.5	3.5	8	27.4	8	25	9.7	87.5	54.5	M10	21	6.1	103
Piston Ø	WH	X1	ZA										
63	10	6.15	97.5										
80	12	7.7	122.5										
100	12	7.7	143.5										

**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ****Accessories****★ Foot mounting MS1**

00105808



00126387

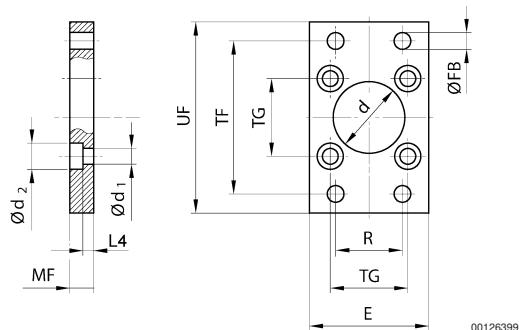
Scope of delivery: 2 foot mountings incl. mounting screws

Part No.	Piston Ø	Ø AB	AO	AT	AU ±0,2	Ø d	E	L1	L2	R	TG ±0,2
1821332053	16	5.5	5	3	13	4.5	29	35.5	13	8	18
1827002284	20	6.6	6	4	16	5.4	36	22	16	10	22
1827002285	25	6.6	6	4	16	5.4	40	23	17	11	26
1827002286	32	6.6	8	5	18	6.6	50	24	16	—	32
1827002287	40	9	8	5	20	6.6	60	29.5	21.5	—	42
1827002288	50	9	8	6	24	9	68	30	22	—	50
1827002289	63	11	12	6	27	9	84	39	28.5	—	62
1827002290	80	11	12	8	30	11	102	36.5	24.5	—	82
1827002291	100	13.5	12	8	33	11	123	38.5	26.5	—	103

Part No.	TR	Material	Surface								
1821332053	18	Steel	galvanized								
1827002284	22	Steel	galvanized								
1827002285	26	Steel	galvanized								
1827002286	32	Steel	galvanized								
1827002287	42	Steel	galvanized								
1827002288	50	Steel	galvanized								
1827002289	62	Steel	galvanized								
1827002290	82	Steel	galvanized								
1827002291	103	Steel	galvanized								

**★ Flange mounting MF1, MF2**

00105812



00126399

Scope of delivery: flange mounting incl. mounting screws

## Piston rod cylinders → Short-stroke and compact cylinders

### ★ Series KPZ

#### Accessories

Part No.	Piston Ø	d	Ø d1	Ø d2	E	Ø FB	L4	MF	R	TF	TG
1821038241	16	10	4.5	10	29	5.5	5.6	10	–	43	18
1827002292	20	12	5.5	10	36	6.6	4.6	10	–	55	22
1827002293	25	12	5.5	10	40	6.6	4.6	10	–	60	26
1827002294	32	14	6.6	11	50	7	3.6	10	32	65	32
1827002295	40	14	6.6	11	60	9	3.6	10	36	82	42
1827002296	50	18	9	15	68	9	3.4	12	45	90	50
1827002297	63	18	9	15	87	9	6.4	15	50	110	62
1827002298	80	23	11	18	107	12	4.4	15	63	135	82
1827002299	100	28	11	18	128	14	4.4	15	75	163	103

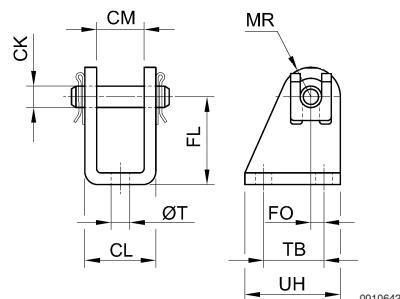
Part No.	UF	Material	Surface								
1821038241	55	Steel	galvanized								
1827002292	70	Steel	galvanized								
1827002293	76	Steel	galvanized								
1827002294	80	Steel	galvanized								
1827002295	102	Steel	galvanized								
1827002296	110	Steel	galvanized								
1827002297	130	Steel	galvanized								
1827002298	160	Steel	galvanized								
1827002299	190	Steel	galvanized								

1) version with 6 holes only

### ★ Clevis mounting AB3



00105159



00106429

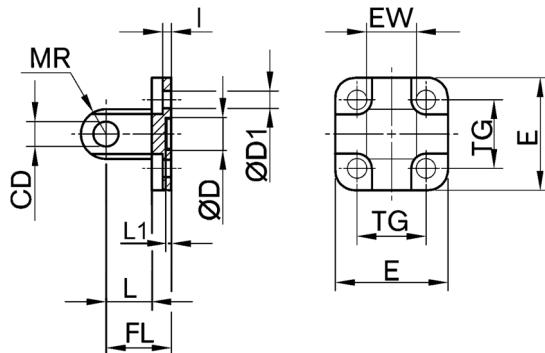
Scope of delivery: clevis mounting incl. pivot pins

Part No.	Piston Ø	CM	Ø CK	CL	FL	FO	MR	Ø T	TB	UH	Material
1827001446	12, 16	12,1	6	18,1	27	2,0	7	5,5	15	25	Steel
1827001445	20, 25	16,1	8	24,1	30	4,0	10	6,6	20	32	Steel

Part No.	Surface										
1827001446	galvanized										
1827001445	galvanized										

**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ****Accessories****★ Rear eye MP4 for clevis mounting MP2 and AB3**

P523\_024



00126403\_a

Scope of delivery: clevis incl. mounting screws

Part No.	Piston Ø	CD H9	Ø D	Ø D1	E	EW	FL ±0,2	I ±0,5	L 1)	L 1 1)	MR 2)
1825805368	16	6	10 H13	4.5	27	12 –0,2/-0,6	16	2.6	10	3	6
1827002300	20	8	12 H13	5.5	34	16 –0,2/-0,6	20	2.6	14	3	8
1827002301	25	8	12 H13	5.5	40	16 –0,2/-0,6	20	2.6	14	3	8

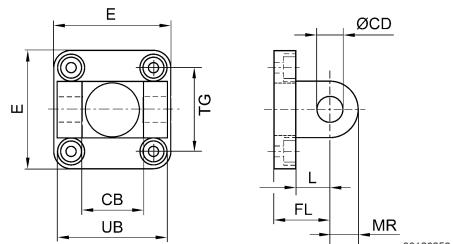
Part No.	TG	Material	Surface	ISO 21287							
1825805368	18 ±0,2	Die-cast aluminum	-	-							
1827002300	22 ±0,4	Steel	galvanized	ISO 21287							
1827002301	26 ±0,4	Steel	galvanized	ISO 21287							

1) Min.

2) max.

**★ Clevis mounting MP2**

P523\_025



00130359

Scope of delivery: clevis mounting incl. mounting screws

Part No.	Piston Ø	CB H14	Ø CD H9	E	FL	L 1)	MR 2)	UB h13	TG	Material
1827002302	32	26	10	50	22 ±0,2	13	10	45	32 ±0,5	Steel
1827002303	40	28	12	60	25 ±0,2	16	12.5	52	42 ±0,5	Steel
1827002304	50	32	12	68	27 ±0,2	16	12.5	60	50 ±0,6	Steel
1827002305	63	40	16	84	32 ±0,2	21	15	70	62 ±0,7	Steel

## Piston rod cylinders → Short-stroke and compact cylinders

### ★ Series KPZ

#### Accessories

Part No.	Piston Ø	CB H14	Ø CD H9	E	FL	L 1)	MR 2)	UB h13	TG	Material
1827002306	80	50	16	102	36 ±0,2	23	15	90	82 ±0,7	Steel
1827002307	100	60	20	123	41 ±0,2	26	20	110	103 ±0,7	Steel

Part No.	Surface									
1827002302	galvanized									
1827002303	galvanized									
1827002304	galvanized									
1827002305	galvanized									
1827002306	galvanized									
1827002307	galvanized									

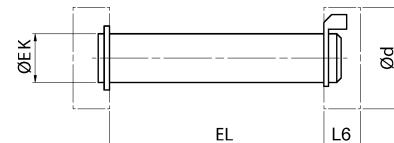
1) Min.

2) max.

### ★ AA4 axle



00105158



00105182

Part No.	Piston Ø	Ø EK e8	EL	Ø d 1)	L6 1)	Material	Surface	Note		
1823120020	32	10	45,2 +2	23	9	Steel	galvanized	2)		
1823120021	40	12	52,2 +2	25	9	Steel	galvanized	2)		
1823120022	50	12	60,2 +2	25	9	Steel	galvanized	2)		
1823120023	63	16	70,2 +2	32	11	Steel	galvanized	2)		
1823120024	80	16	90,2 +2	32	11	Steel	galvanized	2)		
1823120025	100	20	110,2 +2	40	11	Steel	galvanized	2)		

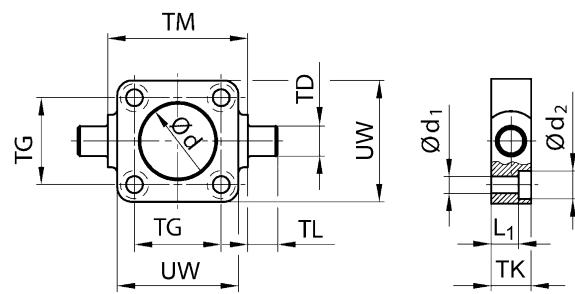
1) max.

2) Scope of delivery: pivot pins incl. circlips

### ★ Trunnion mounting MT5, MT6, front or rear



00128925



00126407

The delivered product may vary from that in the illustration.  
Scope of delivery: trunnion mounting incl. mounting screws

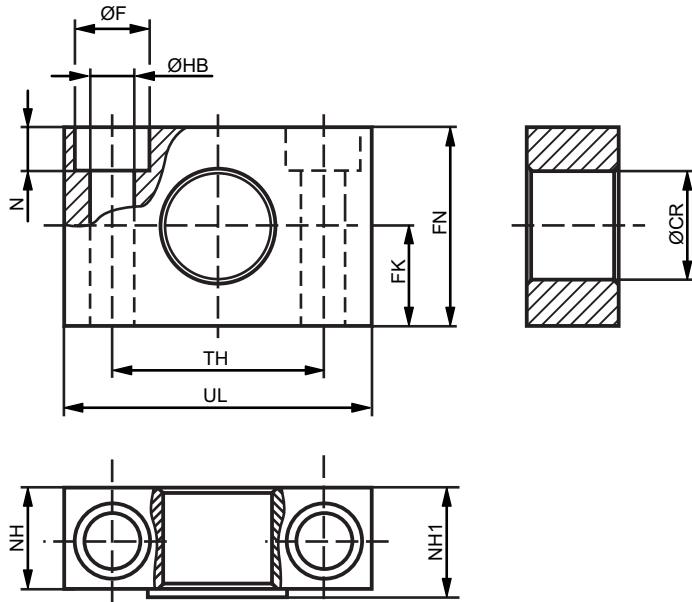
**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ****Accessories**

Part No.	Piston Ø	Ø	Ø d H11	Ø d1	Ø d2	L1	TD	TG ±0,2	TK	TL h14	TM h14	UW
<b>1825805360</b>	20	20	18	5.5	10	8	12	22	14	12	38	35
<b>1825805361</b>	25	25	22	5.5	10	8	12	26	14	12	42	39
<b>1825805362</b>	32	32	32	6.6	10.5	7	12	32	14	12	52	46
<b>1825805363</b>	40	40	46	6.6	11	12	16	42	19	16	63	59
<b>1825805364</b>	50	50	53	9	14	10	16	50	19	16	75	69
<b>1825805365</b>	63	63	69	9	15	15	20	62	24	20	90	84
<b>1825805366</b>	80	80	87	11	18	13	20	82	24	20	110	102
<b>1825805367</b>	100	100	107	11	18	18	25	103	29	25	132	125

Part No.	Material	Surface										
<b>1825805360</b>	Nodular graphite iron	galvanized										
<b>1825805361</b>	Nodular graphite iron	galvanized										
<b>1825805362</b>	Nodular graphite iron	galvanized										
<b>1825805363</b>	Nodular graphite iron	galvanized										
<b>1825805364</b>	Nodular graphite iron	galvanized										
<b>1825805365</b>	Nodular graphite iron	galvanized										
<b>1825805366</b>	Nodular graphite iron	galvanized										
<b>1825805367</b>	Nodular graphite iron	galvanized										

**★ Bearing AT4 for trunnion mounting MT4, MT5, MT6**

► Cylinder mounting in accordance with ISO 15552



## Piston rod cylinders → Short-stroke and compact cylinders

### ★ Series KPZ

#### Accessories

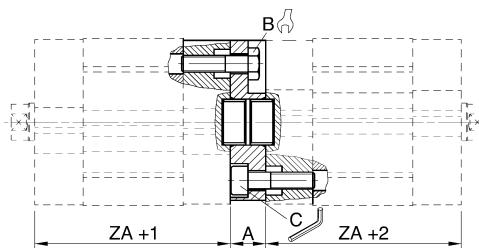
Part No.	Piston Ø	ØCR H7	ØF H13	FK ±0,1	FN	ØHB H12	N -0,4	NH	NH1	TH ±0,15	UL f8
1827001603	32	12	11	15 ±0,1	30	6.6	6.8	15	18	32 ±0,2	46
1827001604	40, 50	16	15	18 ±0,1	36	9	9	18	21	36 ±0,2	55
1827001605	63, 80	20	18	20 ±0,1	40	11	11	20	23	42 ±0,2	65
1827001606	100, 125	25	20	25 ±0,1	50	14	13	25	28.5	50 ±0,2	75

Part No.	Material	Surface	Delivery quantity [Piece]								
1827001603	Steel	galvanized	2								
1827001604	Steel	galvanized	2								
1827001605	Steel	galvanized	2								
1827001606	Steel	galvanized	2								

### ★ Intermediate flange for multi-position cylinders, for series KPZ



00105166



00105190

Part No.	Piston Ø	ZA	A	B	C	Md [Nm] 1)	Material	Surface			
1827020267	20	38	12.5	8	4	4	Aluminum	anodized			
1827020268	25	39.5	10	8	4	4	Aluminum	anodized			
1827020269	32	44	14.5	10	5	4	Aluminum	anodized			
1827020270	40	45	14.5	10	5	4	Aluminum	anodized			
<b>1827020271</b>	50	45.5	14.5	13	6	8	Aluminum	anodized			
1827020272	63	50	14.5	13	6	8	Aluminum	anodized			
<b>1827020273</b>	80	55.5	16.5	17	—	16	Aluminum	anodized			
1827020274	100	66.5	19.5	17	—	16	Aluminum	anodized			

1) torque

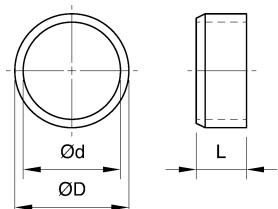
Centering sleeve, included in scope of delivery

**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ****Accessories****★ Centering sleeve**

► CCI, KPZ



00105165

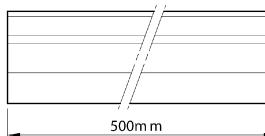
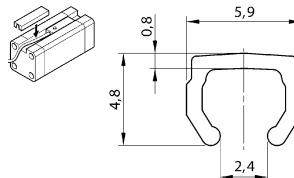


00105191

Part No.	Piston Ø	ØD	Ød	L								
1827020291	16	10	8	6								
1827020276	20, 25	12	10	6								
1827020277	32, 40	14	12	8								
1827020278	50, 63	18	16	10								
1827020279	80	23	20	10								
1827020280	100	28	25	12								

**★ Groove lock profile**

00105175

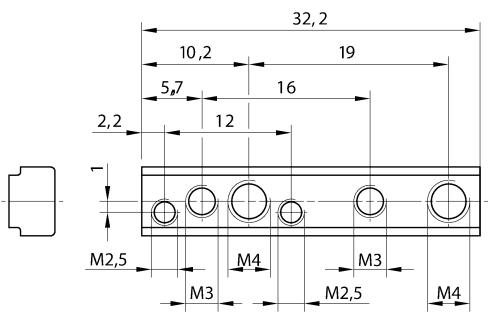
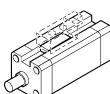


00111999

Part No.	Ø	Material										
<b>1821321009</b>	16–100	Acrylonitrile butadiene styrene										

**★ Mounting kit**

00103610



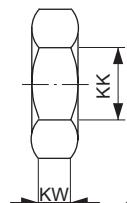
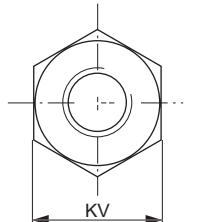
00111998

**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ****Accessories**

Part No.	Ø	Material	Weight [kg]								
<b>1827020275</b>	16–100	Steel galvanized	0.02								

**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ****Accessories****★ Piston rod nut MR9**

00105168



00105192

Part No.	KK	KV	KW	Material	Surface	Weight [kg]			
1823300034	M8	13	4	Steel	galvanized	0.005			
1823300020	M10x1,25	17	6	Steel	galvanized	0.01			
1823300021	M12x1,25	19	7	Steel	galvanized	0.012			

**★ AP2 rod clevis**  
**Steel, galvanized**

00105171

Fig. 1

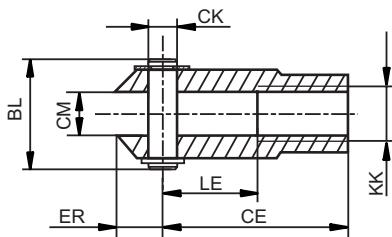
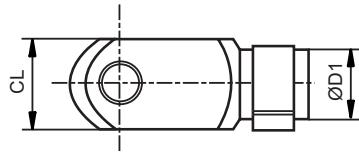
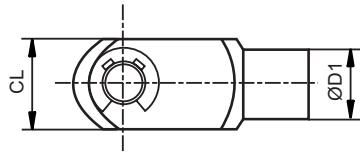
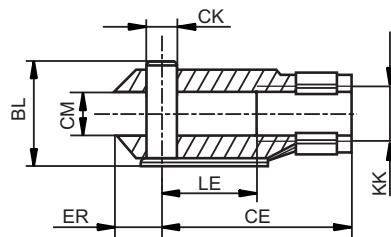


Fig. 2



00126410

Part No.	KK	Fig.	BL	CE	ØCK e11	CL	CM	ØD1	ER	LE
1822122010	M8	2	21,5	32	8	16	8	14	10	16
1822122024	M10x1,25	2	26	40	10	20	10	18	12	20
1822122025	M12x1,25	2	31	48	12	24	12	20	14	24
1822122005	M16x1,5	2	39	64	16	32	16	26	19	32
1822122004	M20x1,5	2	50	80	20	40	20	34	20	40

Part No.	Material	Surface	Weight [kg]						
1822122010	Steel	galvanized	0.05						
1822122024	Steel	galvanized	0.1						

## Piston rod cylinders → Short-stroke and compact cylinders

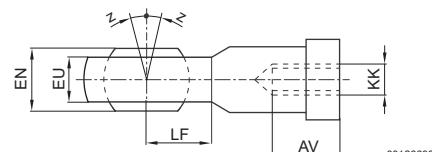
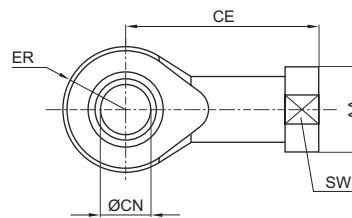
### ★ Series KPZ Accessories

Part No.	Material	Surface	Weight [kg]						
<b>1822122025</b>	Steel	galvanized	0.16						
<b>1822122005</b>	Steel	galvanized	0.4						
<b>1822122004</b>	Steel	galvanized	0.7						

### ★ Ball eye rod end AP6



00105172



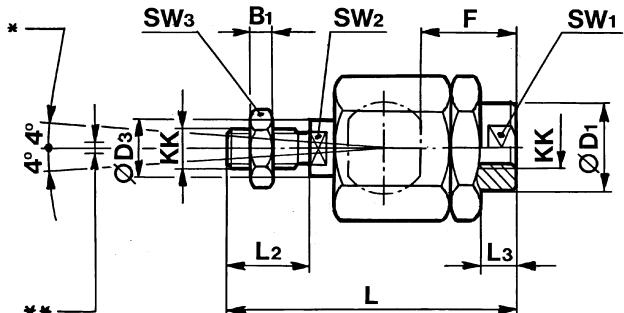
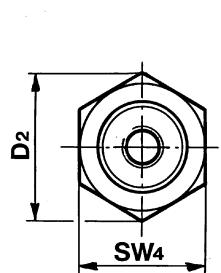
00126602

Part No.	KK	AA	AV min.	CE	Ø CN H7	EN -0,1	ER	EU max.	LF	SW	Z [°] max.
<b>1822124002</b>	M8	16	12	36	8	12	12	9.5	12	14	4
<b>1822124003</b>	M10x1,25	19	15	43	10	14	14	11.5	14	17	4
<b>1822124004</b>	M12x1,25	22	18	50	12	16	16	12.5	16	19	4
<b>1822124005</b>	M16x1,5	27	24	64	16	21	21	15.5	21	22	4
<b>1822124006</b>	M20x1,5	34	30	77	20	25	25	18.5	25	30	4

Part No.	Material	Surface	Weight [kg]						
<b>1822124002</b>	Steel	galvanized	0.05						
<b>1822124003</b>	Steel	galvanized	0.07						
<b>1822124004</b>	Steel	galvanized	0.105						
<b>1822124005</b>	Steel	galvanized	0.21						
<b>1822124006</b>	Steel	galvanized	0.38						

**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ****Accessories****★ Flexible spherical coupling, PM5**

00105169



D300\_029

\* angle equalization

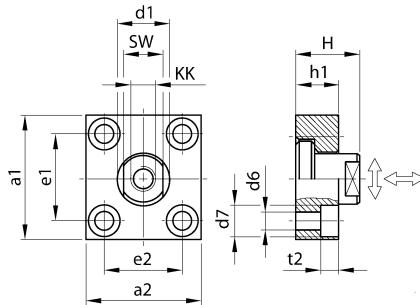
\*\* Radial joint from 0,5 - 2 mm

Part No.	KK	B1	Ø D1	D2	Ø D3	F	L ±2	L2	L3 ±1	SW1	SW2	SW3
1826409001	M8	4	12.5	20	8	14.5	55	15	5	10	6	13
1826409002	M10x1,25	6	21.5	34	14	23	73	20	7.5	19	12	17
1826409003	M12x1,25	7	21.5	34	14	28	77	24	13	19	12	19
1826409004	M16x1,5	8	33.5	47	22	32	108	32	9	30	19	24
1826409005	M20x1,5	10	33.5	47	22	42	122	40	19	30	19	30

Part No.	SW4	Material	Surface	Weight [kg]					
1826409001	17	Steel	galvanized	0.05					
1826409002	30	Steel	galvanized	0.21					
1826409003	30	Steel	galvanized	0.21					
1826409004	41	Steel	galvanized	0.65					
1826409005	41	Steel	galvanized	0.68					

**★ Flexible plate coupling PM7**

00105170



00105194

Part No.	KK	a1	a2	d1 h11	d6 H13	d7 H13	e1 H13	e2	h1	t2	H
1827001629	M10x1,25	60	37	20	6.6	11	36 ±0,15	23 ±0,15	15	7	24
1827001630	M12x1,25	60	56	25	9	15	42 ±0,2	38 ±0,2	20	9	30
1827001631	M16x1,5	80	80	30	11	18	58 ±0,2	58 ±0,2	20	11	32
1827001632	M20x1,5	90	90	40	14	20	65 ±0,3	65 ±0,3	20	13	35

**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ****Accessories**

Part No.	SW	Material	Surface	Weight [kg]					
<b>1827001629</b>	17	Steel	galvanized	0.3					
<b>1827001630</b>	19	Steel	galvanized	0.4					
<b>1827001631</b>	24	Steel	galvanized	0.9					
<b>1827001632</b>	36	Steel	galvanized	1.15					

**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ****Accessories****★ Sensor, Series ST6****► 6 mm groove ► with cable ► without wire end ferrule, tin-plated**

00112027\_2

Ambient temperature min./max.	-25 °C / +70 °C
Protection class according to EN 60529:2000	IP 65IP 67
Switching point precision [mm]	±0,1
Switching capacity	3 W / 3 VA
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
Materials:	
Housing	Polyamide
Cable	Polyurethane

	Type of contact	Cable length L [m]	DC operating voltage min./max. [V]	Operational voltage AC min./max. [V]	DC switching current, max. [A]	AC switching current, max. [A]	Part No.
	Reed	3					0830100629
		5	10 / 30	10 / 30	0,13	0,13	0830100630
		10					R412004575
	electronic PNP	3					0830100631
		5	10 / 30	-	0,1	0,1	0830100632
		10					R412004576
	electronic NPN	3	10 / 30	-	0,1	-	0830100633
		5					0830100634

Part No.	Voltage drop U at I <sub>max</sub> [V]	Protective resistor for reed [Ω]	Max. switching frequency [kHz]	Operating current, not switched [mA]	Operating current, switched [mA]	LED	Note
0830100629	I <sup>*</sup> R <sub>S</sub>	15	< 0,3	-	< 10	Yellow	1)
0830100630							
R412004575							
0830100631	≤ 2,5	-	< 1,0	< 20	< 30	Yellow	2)
0830100632							
R412004576							
0830100633	≤ 2,5	-	< 1,0	< 20	< 30	Yellow	2)
0830100634							

1) short circuit protected

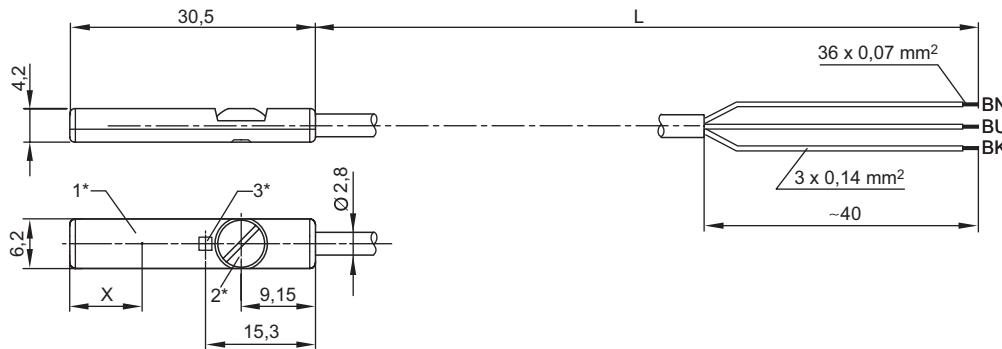
2) short circuit resistant; short circuit protected  
interfaces: without wire end ferrule, tin-plated  
UL (Underwriters Laboratories)

## Piston rod cylinders → Short-stroke and compact cylinders

### ★ Series KPZ

#### Accessories

##### Dimensions



00111942\_b

1\* = switching point 2\* = clamping screw 3\* = LED

L = cable length

BN = brown, BK = black, BU = blue

X = electronic: 6 mm, Reed: 10 mm

### ★ Sensor, Series ST6

#### ► 6 mm groove ► with cable ► Plug, M8, 3-pin, with knurled screw



00112027\_5

##### Certificates

Ambient temperature min./max.  
Protection class according to EN 60529:2000

UL (Underwriters Laboratories)

-25°C / +70°C

IP 65/IP 67

Switching point precision [mm]

±0,1

Switching capacity

3 W / 3 VA

LED status display

Yellow

Vibration resistance

10 - 55 Hz, 1 mm

Shock resistance

30 g / 11 ms

##### Materials:

Housing

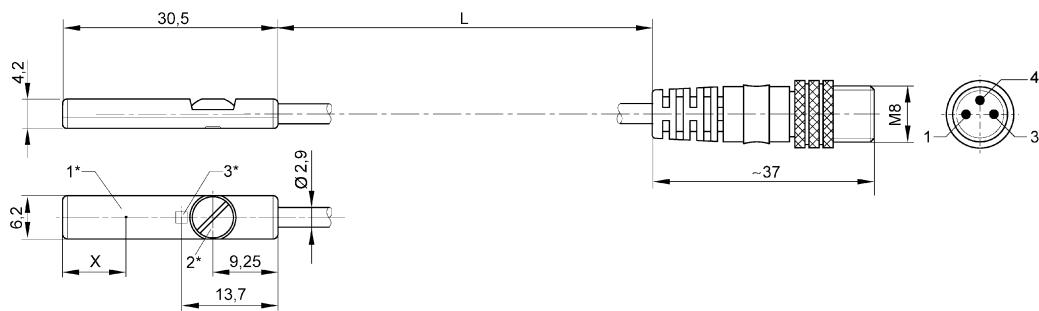
Polyamide

	Type of contact	Cable length L [m]	DC operating voltage min./max. [V]	Operational voltage AC min./max. [V]	DC switching current, max. [A]	AC switching current, max. [A]	Part No.
	Reed	0.3 0.5	10 / 30	10 / 30	0,13	0,13	<b>0830100434</b> <b>0830100436</b>
	electronic PNP	0.3 0.5 0.3	10 / 30	-	0.1	0.1	<b>0830100435</b> <b>0830100437</b> <b>R412004762</b>
	electronic NPN	0.3	10 / 30	-	0.1	-	<b>0830100431</b>

**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ****Accessories**

Part No.	Voltage drop U at I <sub>max</sub>	Protective resistor for reed	Max. switch- ing frequency	Operating current, not switched	Operating cur- rent, switched	Material Cable	Note
	[V]	[Ω]	[kHz]	[mA]	[mA]		
<b>0830100434</b>	I <sup>*</sup> R <sub>s</sub>	15	< 0,3	-	< 10	Polyurethane	1)
<b>0830100436</b>							
<b>0830100435</b>						Polyurethane	
<b>0830100437</b>	≤ 2,5	-	< 1,0	< 20	< 30	Polyurethane	2)
<b>R412004762</b>						Polyvinyl chloride	
<b>0830100431</b>	≤ 2,5	-	< 1,0	< 20	< 30	Polyurethane	2)

1) short circuit protected

2) short circuit resistant; short circuit protected  
interfaces: Plug; M8; 3-pin; with knurled screw**Dimensions**

00111942\_d

1\* = switching point 2\* = clamping screw 3\* = LED

L = cable length

X = electronic: 6 mm, Reed: 10 mm

Pin assignment: 1 = (+), 3 = (-), 4 = (OUT), EN 60947-5-2:1998

**★ Sensor, Series ST6**

► 6 mm groove ► with cable ► Plug, M8, 3-pin



00112027\_3

**Certificates**

Ambient temperature min./max.

Protection class according to EN 60529:2000

Switching point precision [mm]

Switching capacity

LED status display

Vibration resistance

Shock resistance

UL (Underwriters Laboratories)

-25°C / +70°C

IP 65/67

±0,1

3 W / 3 VA

Yellow

10 - 55 Hz, 1 mm

30 g / 11 ms

**Materials:**

Housing

Polyamide

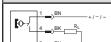
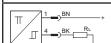
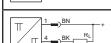
Cable

Polyurethane

## Piston rod cylinders → Short-stroke and compact cylinders

## ★ Series KPZ

## Accessories

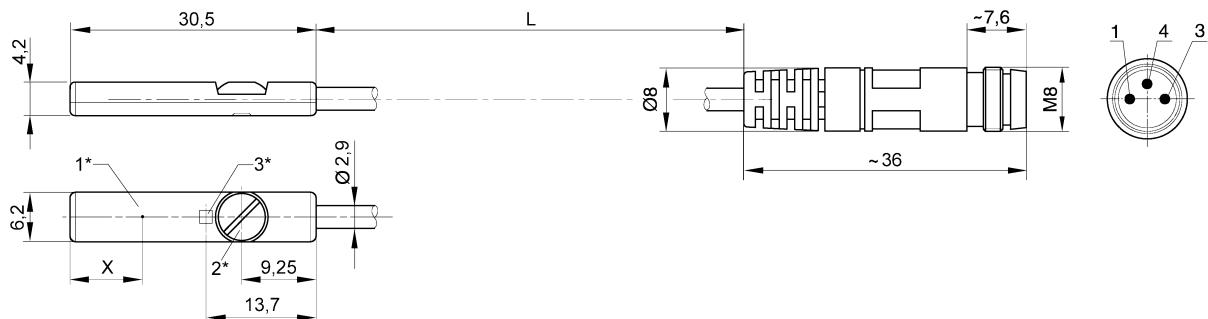
	Type of contact	Cable length L [m]	DC operating voltage min./max. [V]	Operational voltage AC min./max. [V]	DC switching current, max. [A]	AC switching current, max. [A]	Part No.
	Reed	0.3	10 / 30	10 / 30	0,13	0,13	0830100488
	electronic PNP	0.3	10 / 30	-	0.1	0.1	0830100489
	electronic NPN	0.3	10 / 30	-	0.1	-	0830100430

Part No.	Voltage drop U at Imax [V]	Protective resistor for reed [Ω]	Max. switching frequency [kHz]	Operating current, not switched [mA]	Operating current, switched [mA]	Note
0830100488	I*Rs	15	< 0,3	-	< 10	1)
0830100489	≤ 2,5	-	< 1,0	< 20	< 30	2)
0830100430	≤ 2,5	-	< 1,0	< 20	< 30	2)

1) short circuit protected

2) short circuit resistant; short circuit protected interfaces: Plug; M8; 3-pin

## Dimensions



00111942\_a

1\* = switching point 2\* = clamping screw 3\* = LED

L = cable length

X = electronic: 6 mm, Reed: 10 mm

Pin assignment: 1 = (+), 3 = (-), 4 = (OUT), EN 60947-5-2:1998

**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ****Accessories****★ Sensor, Series ST6**

► 6 mm groove ► with cable ► Plug, M12, 3-pin, with knurled screw



00112027\_4

**Certificates**

Ambient temperature min./max.  
Protection class according to EN  
60529:2000

UL (Underwriters Laboratories)

-25 °C / +70 °C  
IP 65 IP 67

Switching point precision [mm]  
Switching capacity  
LED status display  
Vibration resistance  
Shock resistance

±0,1  
3 W / 3 VA  
Yellow  
10 - 55 Hz, 1 mm  
30 g / 11 ms

**Materials:**

Housing	Polyamide
Cable	Polyurethane

	Type of contact	Cable length L	DC operating voltage min./max.	Operational voltage AC min./max.	DC switching current, max.	AC switching current, max.	Part No.
		[m]	[V]	[V]	[A]	[A]	
	Reed	0.3	10 / 30	10 / 30	0,13	0,13	0830100432
	electronic PNP	0.3	10 / 30	-	0,1	-	0830100433
Part No.	Voltage drop U at Imax	Protective resistor for reed	Max. switching frequency	Operating current, not switched	Operating current, switched	Note	
	[V]	[Ω]	[kHz]	[mA]	[mA]		
0830100432	I*Rs	15	< 0,3	-	< 10	1)	
0830100433	≤ 2,5	-	< 1,0	< 20	< 30	2)	

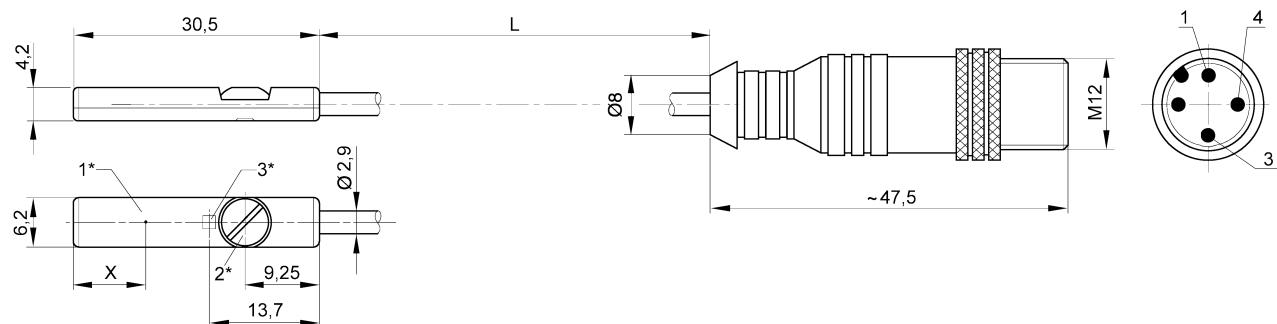
1) short circuit protected

2) short circuit resistant; short circuit protected  
interfaces: Plug; M12; 3-pin; with knurled screw

## Piston rod cylinders → Short-stroke and compact cylinders

### ★ Series KPZ Accessories

#### Dimensions



1\* = switching point 2\* = clamping screw 3\* = LED

L = cable length

X = PNP: 6 mm, reed: 10 mm

Pin assignment: 1 = (+), 3 = (-), 4 = (OUT), EN 60947-5-2:1998

00111942\_c

### ★ Sensors, Series SM6

► 6 mm groove ► with cable ► without wire end ferrule, tin-plated ► Distance measuring sensor



00133722

Ambient temperature min./max.	-20°C / +70°C
Protection class according to EN 60529:	IP 67
Output signal	1x current and 1x voltage
Nominal current, actuated state mA	< 20
Nominal current, idle state mA	< 20
sampling interval	0,5 ms
Resolution	0,05 mm
Repetitive precision	0,1 mm
Linearity	0,3 mm
Max. stroke speed	3 m/s
Display	LED
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

#### Materials:

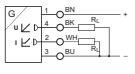
Housing

Cable

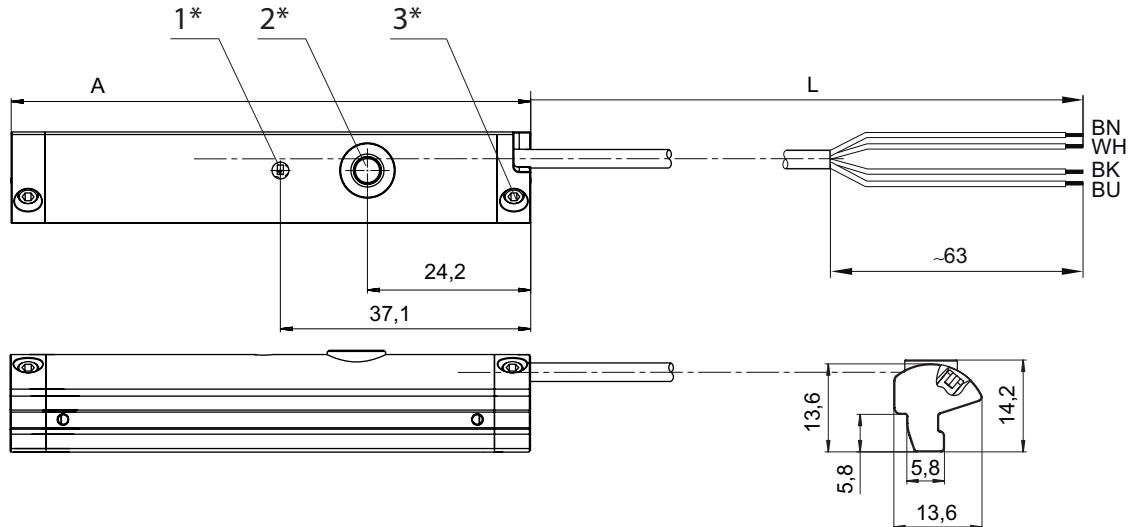
Polyamide, fiber-glass reinforced

Polyurethane

**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ****Accessories**

	Cable length L	Measurement range max.	DC operating voltage min./max.	Voltage signal	Current signal	Part No.
	[m]	[mm]	[V]	[V]	[mA]	
	2	32 64 96 128	15 / 30	0 - 10 V DC	4 - 20 mA	R412010141 R412010143 R412010262 R412010264

interfaces: without wire end ferrule, tin-plated  
short circuit resistant; short circuit protected; Overload protection

**Dimensions**

00133787

1\* = LED 2\* = teach-in button 3\* = M3x11 threaded pin

L = cable length

(1) BN=brown (2) WH=white (3) BU=blue (4) BK=black

Pin assignment: 1 = (+), 2 = (OUT 1) 3 = (GND), 4 = (OUT 2), EN 60947-5-7

Part No.	A										
R412010141	45										
R412010143	77										
R412010262	109										
R412010264	141										

## Piston rod cylinders → Short-stroke and compact cylinders

### ★ Series KPZ

#### Accessories

### ★ Sensors, Series SM6

► 6 mm groove ► with cable ► Plug, M8x1, 4-pin, with knurled screw ► Distance measuring sensor



00134312

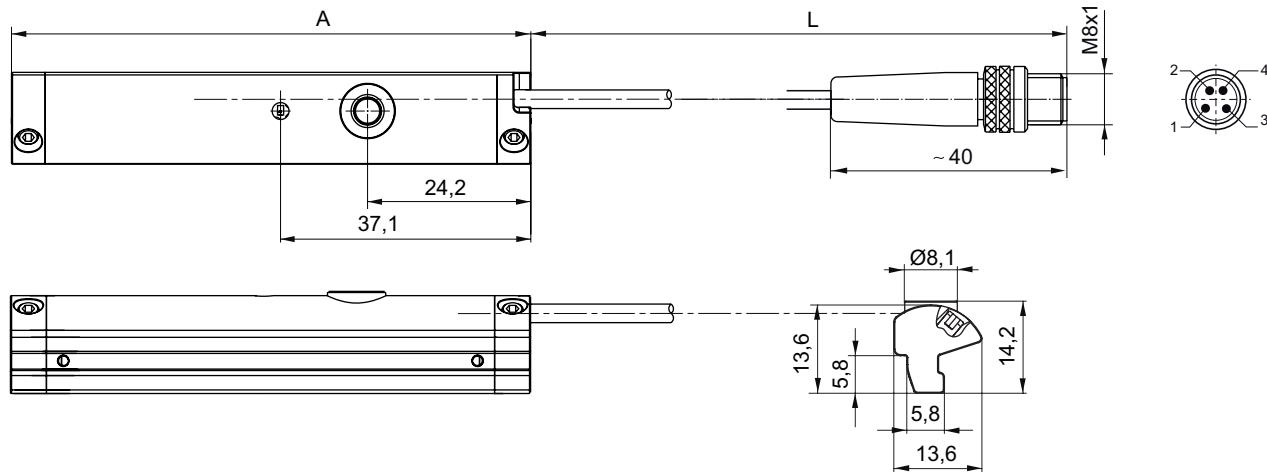
Ambient temperature min./max.	-20°C / +70°C
Protection class according to EN 60529:	IP 67
Output signal	1x current and 1x voltage
Nominal current, actuated state mA	< 20
Nominal current, idle state mA	< 20
sampling interval	0,5 ms
Resolution	0,05 mm
Repetitive precision	0,1 mm
Linearity	0,3 mm
Max. stroke speed	3 m/s
Display	LED
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

#### Materials:

Housing	Polyamide, fiber-glass reinforced
Cable	Polyurethane

	Cable length L	Measurement range max.	DC operating voltage min./max.	Voltage signal	Current signal	Part No.
	[m]	[mm]	[V]	[V]	[mA]	
	0.3	32 64 96 128	15 / 30	0 - 10 V DC	4 - 20 mA	R412010142
						R412010144
						R412010263
						R412010265

interfaces: Plug; M8x1; 4-pin; with knurled screw  
short circuit resistant; short circuit protected; Overload protection

**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ****Accessories****Dimensions**

00133788

1\* = LED 2\* = teach-in button 3\* = M3x11 threaded pin

L = cable length

Pin assignment: 1 = (+), 2 = (OUT 1), 3 = (GND), 4 = (OUT 2), EN 60947-5-7

Part No.	A										
R412010142	45										
R412010144	77										
R412010263	109										
R412010265	141										

**★ Sensor, Series SN3****► Plug, M12, 3-pin ► welding-proof**

Ambient temperature min./max.	-25 °C / +70 °C
Protection class according to EN 60529:2000	IP 67
Switching point precision [mm]	±0,1
Nominal current, actuated state mA	≤ 10
Nominal current, idle state mA	≤ 5
LED status display	Yellow
Vibration resistance	55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Materials:	
Housing	Polyamide

## Piston rod cylinders → Short-stroke and compact cylinders

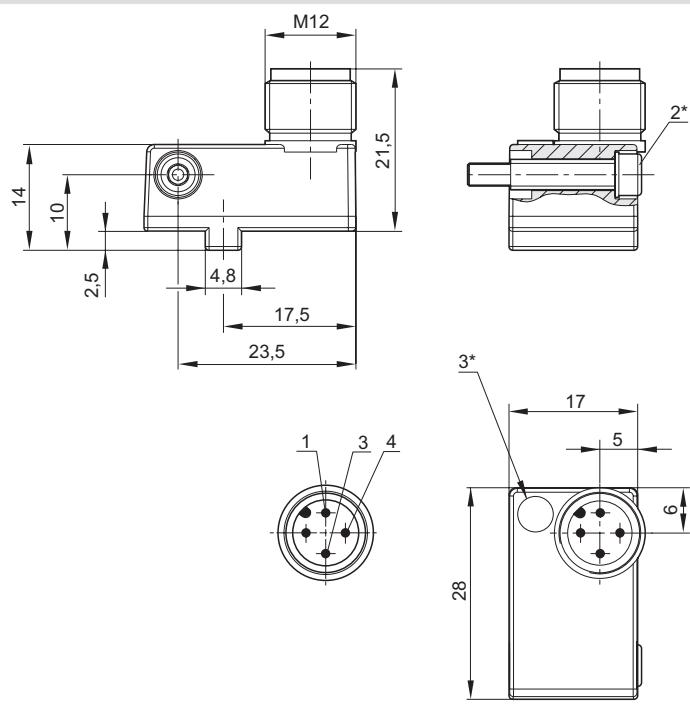
### ★ Series KPZ

#### Accessories

	Type of contact	DC operating voltage min./max.	DC switching current, max.	Voltage drop U at I <sub>max</sub>	Max. switching frequency	Part No.
		[V]	[A]	[V]	[kHz]	
	electronic PNP	10 / 30	0,2	≤ 1,8	0,02	0830100438

interfaces: Plug; M12; 3-pin  
short circuit resistant; short circuit protected

#### Dimensions



2\* = clamping screw

3\* = LED

Pin assignment: 1 = (+), 3 = (-), 4 = (OUT), EN 60947-5-2:1998

## Piston rod cylinders → Short-stroke and compact cylinders

### ★ Series KPZ

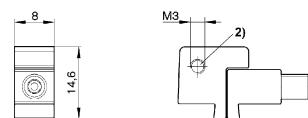
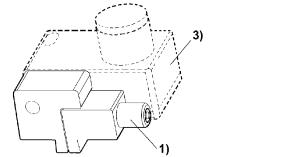
#### Accessories

### ★ Sensor mounting

► for Sensor Series SN3 ► to mount on cylinder series PRA, series KPZ, series GPC, series CCI, series KHZ



00112453



00122794

1) Clamping screw 2) Mounting screw for sensor 3) Sensor

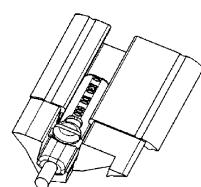
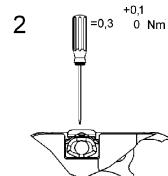
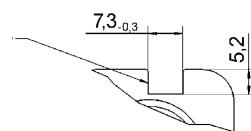
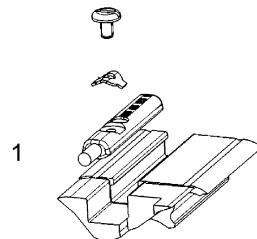
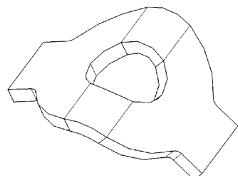
Part No.	1)	MA1 [Nm]	Material	Weight [kg]				
<b>1827020386</b>	M3x25	1,8 +0,4	Aluminum	0.007				

### ★ Sensor mounting

► for Sensor ST6 ► to mount on cylinder KPZ



00136707



00132985

Part No.	Cylinders Ø [mm]	Material	Weight [kg]	Delivery quantity [Piece]				
R422000620	16 - 32	Aluminum	0.001	5				

## Piston rod cylinders → Short-stroke and compact cylinders

## ★ Series KPZ

## Accessories

## ★ Connecting cable, Series CN1

► Socket, M8, 3-pin ► without wire end ferrule, tin-plated, 3-pin



00107009

Ambient temperature min./max. -40°C / +85°C  
Protection class according to EN 60529 IP 65

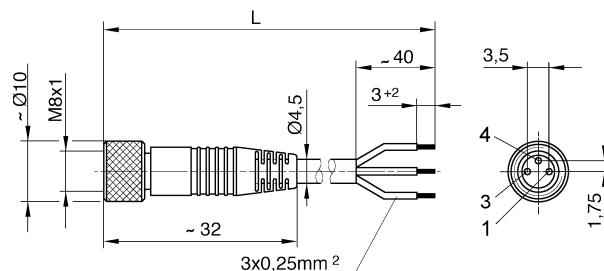
Materials:  
Cable sheath Polyurethane

## Technical Remarks

- The specified protection class is valid only in assembled and tested state.

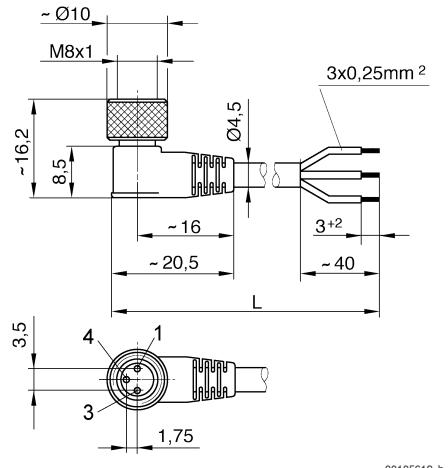
	Electrical interface		Number of plug options	Max. current	Number of wires	Cable length	Part No.
	[Port 1]	[Port 2]	[for port 1]	[A]		[m]	
	Socket, M8, 3-pin	without wire end ferrule, tin- plated, 3-pin	1 position	4	3	3	<b>1834484166</b>
						5	<b>1834484168</b>
						10	<b>1834484247</b>
						3	<b>1834484167</b>
						5	<b>1834484169</b>
						10	<b>1834484248</b>
						15	<b>1834484249</b>
Part No.	Cable exit			Weight		Note	
				[kg]			
<b>1834484166</b>	straight 180°			0.091		Fig. 1	
<b>1834484168</b>	straight 180°			0.145		Fig. 1	
<b>1834484247</b>	straight 180°			0.33		Fig. 1	
<b>1834484167</b>	angled 90°			0.092		Fig. 2	
<b>1834484169</b>	angled 90°			0.141		Fig. 2	
<b>1834484248</b>	angled 90°			0.276		Fig. 2	
<b>1834484249</b>	angled 90°			0.431		Fig. 2	

Fig. 1



00105612\_a

(1) BN=brown (3) BU=blue (4) BK=black  
L = length

**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ****Accessories****Fig. 2**

00105612\_b

(1) BN=brown (3) BU=blue (4) BK=black  
L = length

**★ M8x1 socket (female)****► Socket, M8x1, 3-pin**

00136663

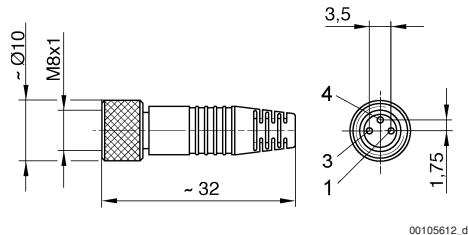
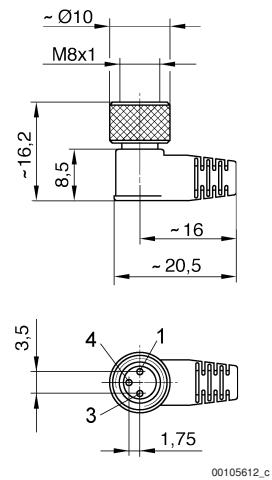
Ambient temperature min./max. -40°C / +85°C  
Protection class according to EN 60529: IP 65

Materials:  
Housing Polyamide

**Technical Remarks**

- The specified protection class is valid only in assembled and tested state.

	Operating voltage		Max. current [A]	Contact assignment	Cable exit	suitable cable-Ø min./max [mm]	Part No.	
	DC	AC						
	[V]	[V]						
					straight 180°		1834484173	
			75	60	4	angled 90°	-- / 4.5	1834484174
Part No.	number of plug options 1			Housing color	Weight		Note	
					[kg]			
1834484173	1 position			Black	0.008		Fig. 1	
1834484174							Fig. 2	

**Piston rod cylinders → Short-stroke and compact cylinders****★ Series KPZ**  
**Accessories****Fig. 1****Fig. 2**

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