

cylinders

**K** Series

*Metric Compact Cylinder Line*



**NUMATICS**

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<b>K Series</b> .....	3-17
Features and Benefits .....	3
How to Order .....	4
Single Rod End, Single and Double Acting .....	5-6
Double Rod End, Single and Double Acting .....	7-8
Guided Rod End, Double Acting .....	9
Diagrams .....	10
Mounting Parts .....	11-15
Switch Information .....	16
Cords M8-thread for Switches and Sensors with Connector .....	16
LP Series for Cylinders of Profile Type .....	17



The **K Series** is a metric compact cylinder line. It is specifically designed to maximize performance while minimizing space requirements. The aluminum extruded tubing features threaded body and through-hole mounting. This provides flexibility and dependability in any design application. A unique design features about the K Series is that recessed switches fit flush with the cylinder body to economize space and protect the switch from damage. More positive features of the K Series include: ISO/VDMA mounting interchangeability and porting flexibility. The K Series is an extremely proficient and diverse product that will exceed all of your requirements.

### Tube

The **tube** is hard coat anodized. The hard coating is an electro-chemical process, which produces a very dense surface of aluminum oxide. This surface has extreme hardness (60 RC.), excellent wear and corrosion resistance, and low coefficient of friction. Additionally, profile tubing includes flush mount switch grooves.

### End Caps

The bolt-on anodized aluminum **end caps** are available with either NPT or G ports.

### Rod Bushing

The K Series includes DU® composite **rod bushing** for maximum load bearing support.

### Rod Seal and Wiper

The quad ring **rod seal** and **wiper** ensures proper sealing.

### Piston Rod

The stainless steel **piston rod** is roller burnished. This surface provides maximum life for both the rod bushing and the seals.

### Piston Seal

The bi-directional, air activated PZ **piston seal** ensures proper sealing even at low pressures.

### Piston

The solid aluminum alloy **piston** is strong and durable.

### Tube End Seal and Bumper

The **tube end seal** also doubles as a **bumper** for increased longevity.

### Wear Band

A Delrin® **wearband** is located at the rear of the piston.

### Standard Specifications:

- One piece ring magnet
- Bore sizes from 32 mm to 100 mm
- Nominal pressure rating is 150 psi air
- Standard temperature -10°F to 165°F (-23°C to 74°C)
- All aluminum construction
- NPT and G ports
- Flexible port locating

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Delrin® is registered trademark of DuPont.

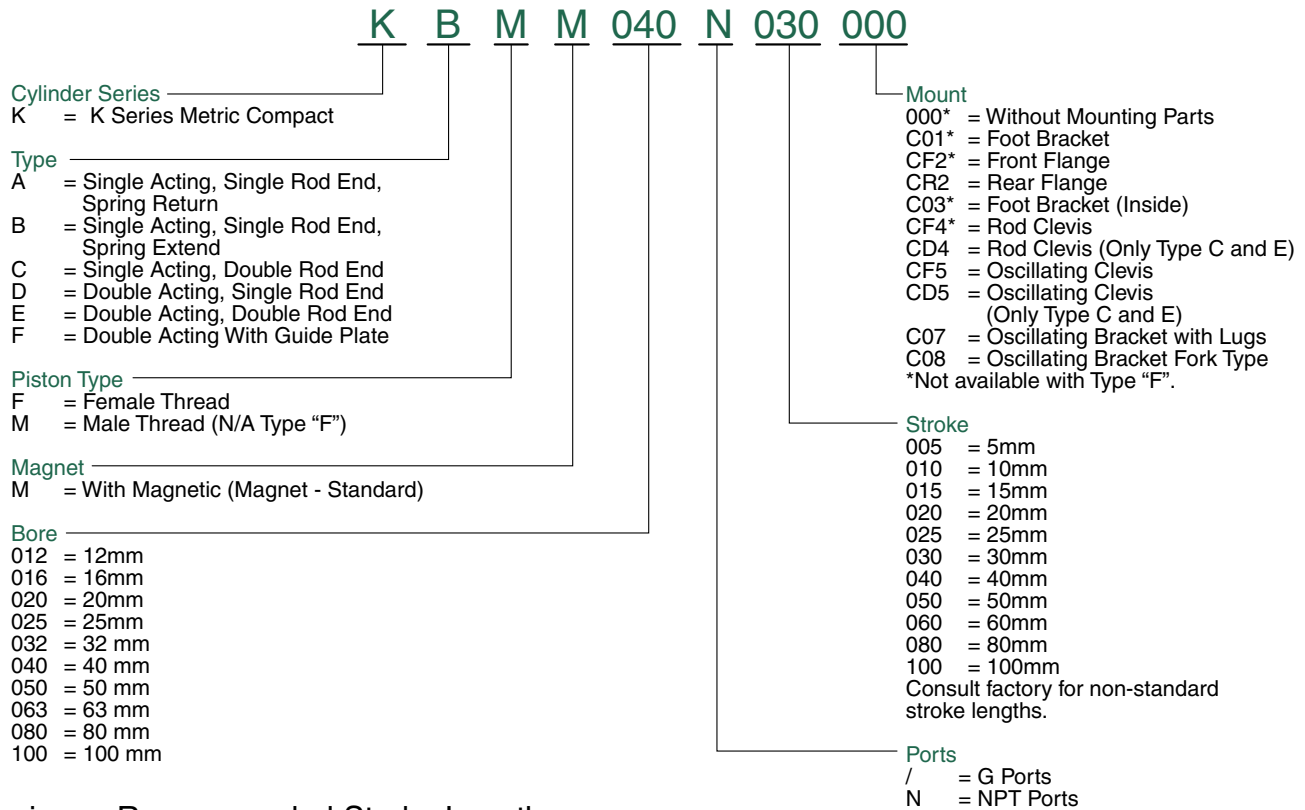




## K Series Metric Compact

# NUMATICS®

### How to Order

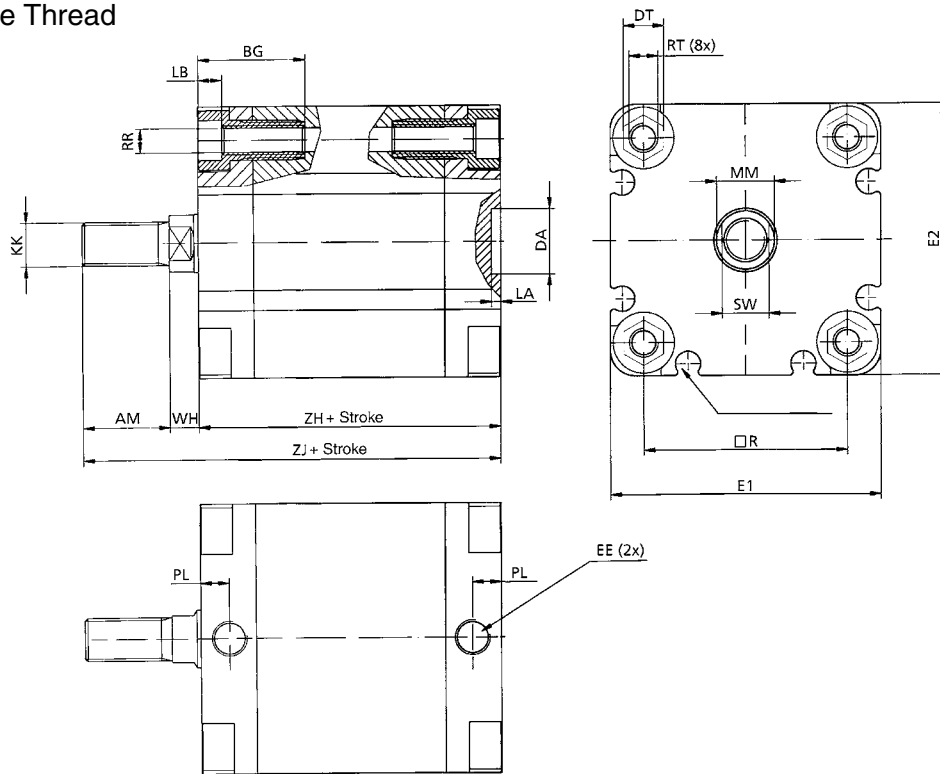


### Maximum Recommended Stroke Lengths

BORE SIZE	SINGLE ACTING	DOUBLE ACTING	DOUBLE ACTING WITH GUIDE
12 mm	20 mm	200 mm	100 mm
16 mm	25 mm	200 mm	100 mm
20 mm	25 mm	200 mm	100 mm
25 mm	25 mm	200 mm	100 mm
32 mm	25 mm	300 mm	100 mm
40 mm	25 mm	300 mm	100 mm
50 mm	35 mm	400 mm	100 mm
63 mm	35 mm	400 mm	100 mm
80 mm	40 mm	400 mm	100 mm



### Single Rod End, Single and Double Acting Cylinder with Male Thread



### Dimensions (mm)

PISTON Ø	R	E1 X E2	RT	EE	ZH	ZJ	MM	KK	AM	Ø DAH11	LA	PL
12	15.50	26 X 26	M4	M5	34.5/48.0*	54.5/68.0*	6.00	M6	16.00	6.00	2.50	5.00
16	18.00	30 X 30	M4	M5	35.5/49.5*	55.5/69.5*	8.00	M6	16.00	8.00	2.50	5.00
20	22.00	36 X 36	M5	M5	37.0/51.0*	63.0/75.0*	10.00	M8X1.25	16.00	12.00	2.50	5.00
25	26.00	40 X 40	M5	M5	39.0/53.0*	65.0/77.0*	10.00	M8X1.26	16.00	12.00	2.50	5.00
32	32.5	47 x 47	M6	G 1/8	44/53*	73/82*	12.0	M10 x 1.25	22.0	14.0	2.5	8.0
40	38.0	52 x 52	M6	G 1/8	45/52*	74/81*	12.0	M10 x 1.25	22.0	14.0	2.5	8.0
50	46.5	65 x 65	M8	G 1/8	45.0	77.0	16.0	M12 x 1.25	24.0	18.0	2.5	8.0
63	56.5	75 x 75	M8	G 1/8	49.0	81.0	16.0	M12 x 1.25	24.0	18.0	2.5	8.0
80	72.0	94 x 95	M10	G 1/8	54.0	96.0	20.0	M16 x 1.5	32.0	23.0	3.0	8.5
100	89.0	112 x 114	M10	G 1/4	62.0	112.0	25.0	M20 x 1.5	40.0	28.0	3.0	10.5

\* double/single acting

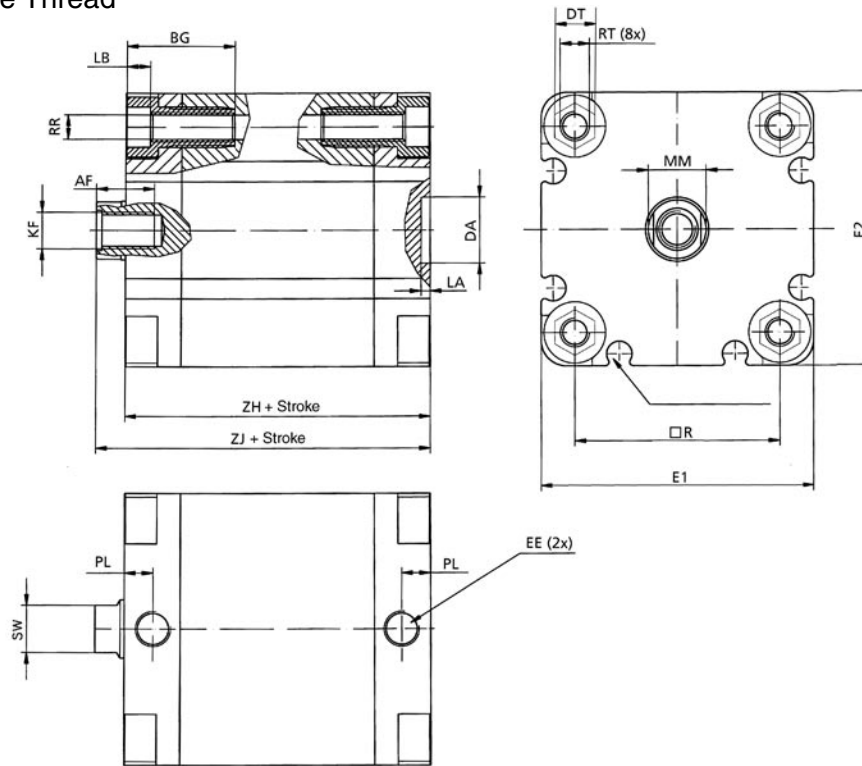
PISTON Ø	SW	WH	DT	LB	RR	BG min
12	5.00	4.00	6.00	3.40	3.30	12.00
16	7.00	4.00	6.00	3.40	3.30	12.00
20	8.00	6.00	8.00	4.40	4.30	15.00
25	8.00	6.00	8.00	4.40	4.30	15.00
32	10.0	6.0	9.0	5.5	5.3	22.0
40	10.0	6.0	9.0	5.5	5.3	22.0
50	13.0	6.5	11.0	6.5	6.4	28.0
63	13.0	6.5	11.0	6.5	6.4	28.0
80	16.0	8.0	14.0	7.5	8.4	32.0
100	21.0	10.0	14.0	7.5	8.4	32.0



## K Series Metric Compact

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### Single Rod End, Single and Double Acting Cylinder with Female Thread



#### Dimensions (mm)

PISTON Ø	SW	DT	LB	Ø RR	BG min	PL
12	5.00	6.00	3.40	3.30	12.00	5.00
16	7.00	6.00	3.40	3.30	12.00	5.00
20	8.00	8.00	4.40	4.30	15.00	5.00
25	8.00	8.00	4.40	4.30	15.00	5.00
32	10.0	9.2	5.5	5.3	22.0	8.0
40	10.0	9.2	5.5	5.3	22.0	8.0
50	13.0	11.2	6.5	6.4	28.0	8.0
63	13.0	11.2	6.5	6.4	28.0	8.0
80	16.0	14.2	7.5	8.4	32.0	8.5
100	21.0	14.2	7.5	8.4	32.0	10.5

#### Cylinder Forces (Double Acting Cylinders)

PISTON DIAMETER (mm)	THRUST AT 6 BAR / 87 PSIG (N) (lbs)	TENSION AT 6 BAR / 87 PSIG (N) (lbs)
12	61/13	46/10
16	108/24	82/18
20	170/38	130/29
25	265/59	225/50
32	435 / 95	380 / 85
40	680 / 150	620 / 135
50	1100 / 245	950 / 210
63	1750 / 390	1600 / 355
80	2800 / 625	2600 / 580
100	4300 / 965	4000 / 895

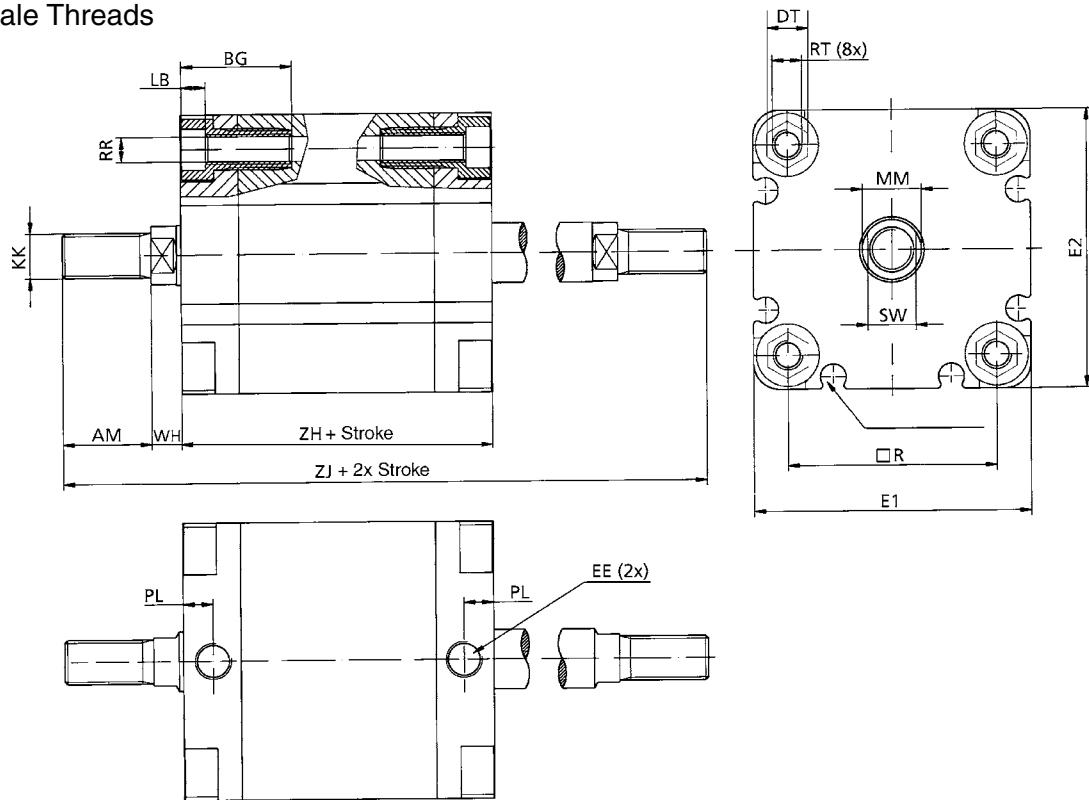
Spring forces diagram for single acting cylinders, please refer to page 10.

PISTON Ø	R	E1 X E2	RT	EE	ZH	ZJ	Ø MM	KF	AF	Ø DA.H11	LA
12	15.50	26 X 26	M4	M5	34.5/48.0*	54.5/68.0*	6.00	M3	8	6.00	2.50
16	18.00	30 X 30	M4	M5	35.5/49.5*	55.5/69.5*	8.00	M4	10	8.00	2.50
20	22.00	36 X 36	M5	M5	37.0/51.0*	63.0/75.0*	10.00	M6	10	12.00	2.50
25	26.00	40 X 40	M5	M5	39.0/53.0*	65.0/77.0*	10.00	M6	10	12.00	2.50
32	32.5	47 x 47	M6	G 1/8	44/53*	51/60*	12.0	M8	12.0	14.0	2.5
40	38.0	52 x 52	M6	G 1/8	45/52*	52/59*	12.0	M8	12.0	14.0	2.5
50	46.5	65 x 65	M8	G 1/8	45.0	53.0	16.0	M10	16.0	18.0	2.5
63	56.5	75 x 75	M8	G 1/8	49.0	57.0	16.0	M10	16.0	18.0	2.5
80	72.0	94 x 95	M10	G 1/8	54.0	64.0	20.0	M12	20.0	23.0	3.0
100	89.0	112 x 114	M10	G 1/4	62.0	72.0	25.0	M16	22.0	28.0	3.0

\*double/single acting



### Double Rod End, Single and Double Acting Cylinder with Male Threads



### Dimensions (mm)

PISTON Ø	R	E1 X E2	RT	EE	ZH	ZJ	Ø MM	KK	AM	PL	SW
12	15.50	26 X 26	M4	M5	34.5/48.0*	54.5/68.0*	6.00	M6	16	5.00	5.00
16	18.00	30 X 30	M4	M5	35.5/49.5*	55.5/69.5*	8.00	M6	16	5.00	7.00
20	22.00	36 X 36	M5	M5	37.0/51.0*	63.0/75.0*	10.00	M8X1.25	16	5.00	8.00
25	26.00	40 X 40	M5	M5	39.0/53.0*	65.0/77.0*	10.00	M8X1.25	16	5.00	8.00
32	32.5	47 x 47	M6	G 1/8	44/53*	102/111*	12.0	M10 x 1.25	22.0	8.0	10.0
40	38.0	52 x 52	M6	G 1/8	45/52*	103/110*	12.0	M10 x 1.25	22.0	8.0	10.0
50	46.5	65 x 65	M8	G 1/8	45.0	109.0	16.0	M12 x 1.25	24.0	8.0	13.0
63	56.5	75 x 75	M8	G 1/8	49.0	113.0	16.0	M12 x 1.25	24.0	8.0	13.0
80	72.0	94 x 95	M10	G 1/8	54.0	138.0	20.0	M16 x 1.5	32.0	8.5	16.0
100	89.0	112 x 114	M10	G 1/4	62.0	162.0	25.0	M20 x 1.5	40.0	10.5	21.0

\* double/single acting

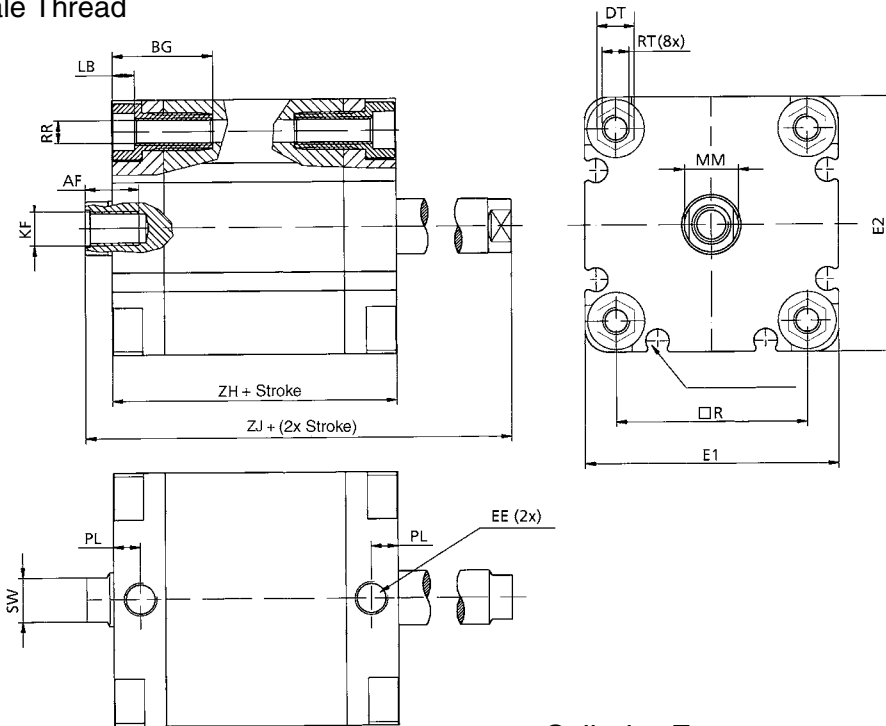
PISTON Ø	WH	DT	LB	Ø RR	BG min
12	4.00	6.00	3.40	3.30	12.00
16	4.00	6.00	3.40	3.30	12.00
20	6.00	8.00	4.40	4.30	15.00
25	6.00	8.00	4.40	4.30	15.00
32	6.0	9.0	5.5	5.3	22.0
40	6.0	9.0	5.5	5.3	22.0
50	6.5	11.0	6.5	6.4	28.0
63	6.5	11.0	6.5	6.4	28.0
80	8.0	14.0	7.5	8.4	32.0
100	10.0	14.0	7.5	8.4	32.0



## K Series Metric Compact

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### Double Rod End, Single and Double Acting Cylinder with Female Thread



#### Dimensions (mm)

PISTON Ø	SW	WH	DT	Ø RR	BG min
12	5.00	4.00	6.00	3.30	12.00
16	7.00	4.00	6.00	3.30	12.00
20	8.00	6.00	8.00	4.30	15.00
25	8.00	6.00	8.00	4.30	15.00
32	10.0	6.0	9.0	5.3	22.0
40	10.0	6.0	9.0	5.3	22.0
50	13.0	6.5	11.0	6.4	28.0
63	13.0	6.5	11.0	6.4	28.0
80	16.0	8.0	14.0	8.4	32.0
100	21.0	10.0	14.0	8.4	32.0

#### Cylinder Forces (Double Acting Cylinders)

PISTON DIAMETER (MM)	RETRACT AT 6 BAR / 87 PSIG (N) (lbs)
12	61 / 13
16	108 / 24
20	170 / 38
25	265 / 59
32	380 / 85
40	620 / 135
50	950 / 210
63	1600 / 355
80	2600 / 580
100	4000 / 895

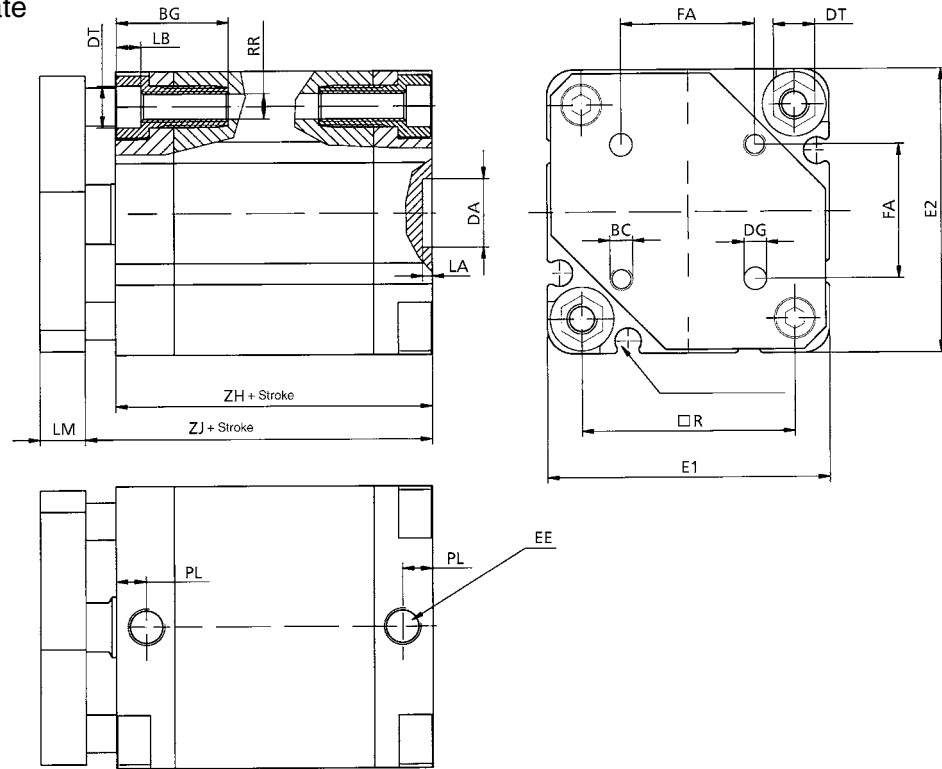
Spring forces diagram for single acting cylinders, please refer to page 10.

PISTON Ø	R	E1 X E2	RT	EE	ZH	ZJ	Ø MM	KF	AF	PL
12	15.50	26 X 26	M4	M5	34.5/48.0*	54.5/68.0*	6.00	M3	8.00	5.00
16	18.00	30 X 30	M4	M5	35.5/49.5*	55.5/69.5*	8.00	M4	10.00	5.00
20	22.00	36 X 36	M5	M5	37.0/51.0*	63.0/75.0*	10.00	M6	10.00	5.00
25	26.00	40 X 40	M5	M5	39.0/53.0*	65.0/77.0*	10.00	M6	10.00	5.00
32	32.5	47 x 47	M6	G 1/8	44/53*	58/67*	12.0	M8	12.0	8.0
40	38.0	52 x 52	M6	G 1/8	45/52*	59/66*	12.0	M8	12.0	8.0
50	46.5	65 x 65	M8	G 1/8	45.0	61.0	16.0	M10	16.0	8.0
63	56.5	75 x 75	M8	G 1/8	49.0	65.0	16.0	M10	16.0	8.0
80	72.0	94 x 95	M10	G 1/8	54.0	74.0	20.0	M12	20.0	8.5
100	89.0	112 x 114	M10	G 1/4	62.0	82.0	25.0	M16	22.0	10.5

\* double/single acting



### Guided Rod End, Double Acting Cylinder with Guiding Plate



#### Dimensions (mm)

PISTON Ø	LB	Ø RR	BG min	LM	DG H 13	BC	FA
12	3.40	3.30	12.00	6.00	3.00	12.00	9.90
16	3.40	3.30	12.00	6.00	3.00	12.00	9.90
20	4.40	4.30	15.00	8.00	4.00	15.00	12.00
25	4.40	4.30	15.00	8.00	5.00	15.00	15.60
32	5.5	5.3	22.0	10.0	5.0	M5	19.8
40	5.5	5.3	22.0	10.0	5.0	M5	12.3
50	6.5	6.4	28.0	12.0	6.0	M6	29.7
63	6.5	6.4	28.0	12.0	6.0	M6	35.4
80	7.5	8.4	32.0	14.0	8.0	M8	46.0
100	7.5	8.4	32.0	14.0	10.0	M10	56.6

#### Cylinder Forces (Double Acting Cylinders)

PISTON DIAMETER (mm)	THRUST AT 6 BAR / 87 PSIG (N) (lbs)	TENSION AT 6 BAR / 87 PSIG (N) (lbs)
12	61 / 13	46 / 10
16	108 / 24	82 / 18
20	170 / 38	130 / 29
25	265 / 59	225 / 50
32	435 / 95	380 / 85
40	680 / 150	620 / 135
50	1100 / 245	950 / 210
63	1750 / 390	1600 / 355
80	2800 / 625	2600 / 580
100	4300 / 965	4000 / 895

Spring forces diagram for single acting cylinders, please refer to page 10.

PISTON Ø	R	E1 X E2	EE	ZH	ZJ	Ø DA H11	LA	PL	DT
12	15.50	26 X 26	M5	34.5/48.0*	54.5/68.0*	6.00	2.50	5.00	6.00
16	18.00	30 X 30	M5	35.5/49.5*	55.5/69.5*	8.00	2.50	5.00	6.00
20	22.00	36 X 36	M5	37.0/51.0*	63.0/75.0*	12.00	2.50	5.00	8.00
25	26.00	40 X 40	M5	39.0/53.0*	65.0/77.0*	12.00	2.50	5.00	8.00
32	32.5	47 x 47	G 1/8	44.0	51.0	14.0	2.5	8.0	9.0
40	38.0	52 x 52	G 1/8	45.0	52.0	14.0	2.5	8.0	9.0
50	46.5	65 x 65	G 1/8	45.0	53.0	18.0	2.5	8.0	11.0
63	56.5	75 x 75	G 1/8	49.0	57.0	18.0	2.5	8.0	11.0
80	72.0	94 x 95	G 1/8	54.0	64.0	23.0	3.0	8.5	14.5
100	89.0	112 x 114	G 1/4	62.0	72.0	28.0	3.0	10.5	14.0

\* double/single acting

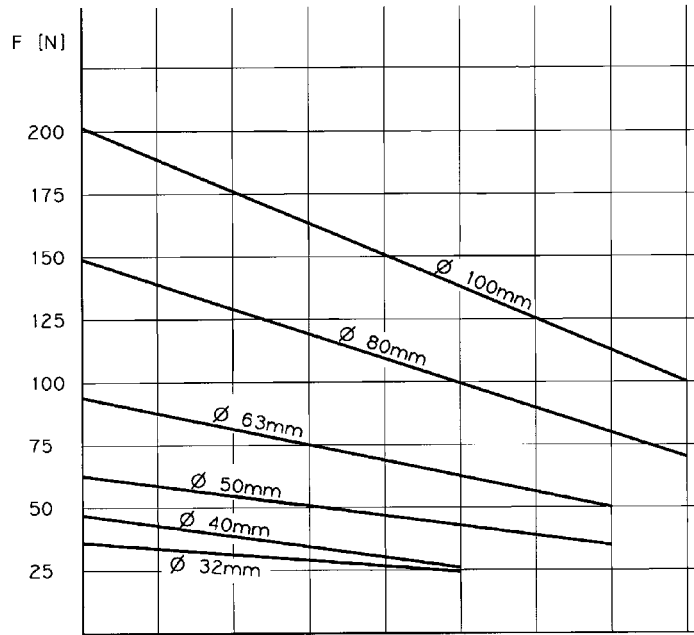


## K Series Metric Compact

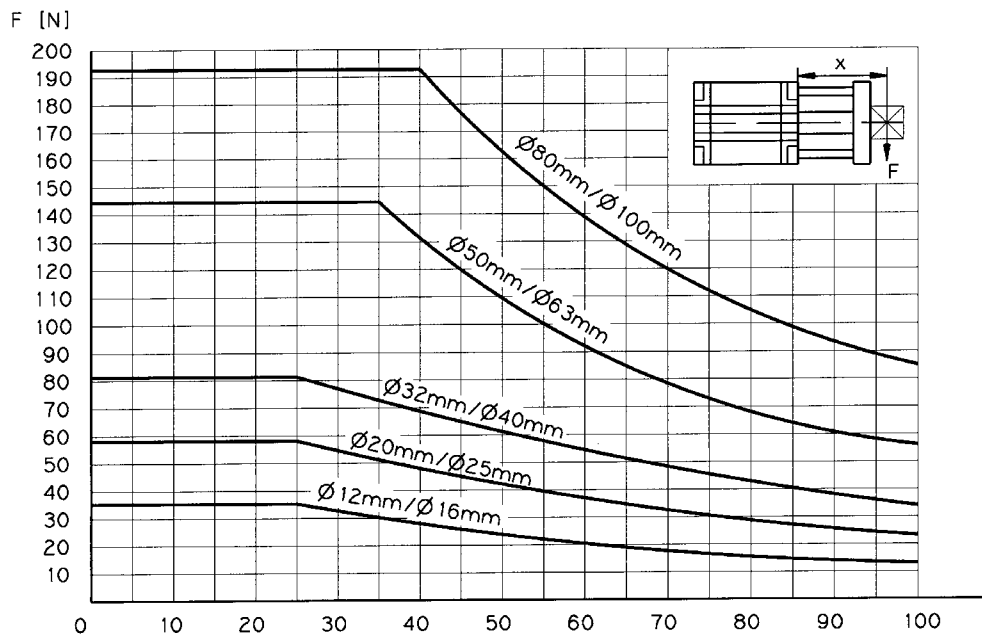
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### Diagrams

#### Spring Forces for Single Acting Cylinders (Types: KA, KB, KC)



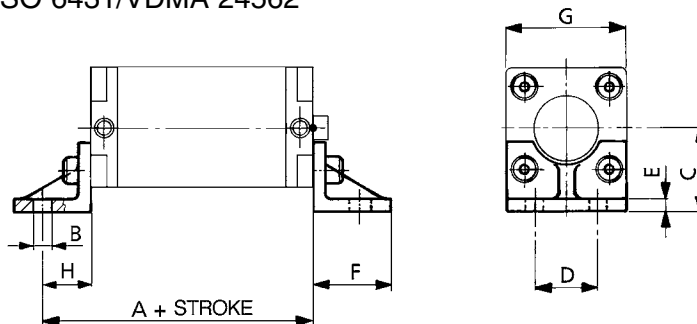
#### Load Diagram for Cylinders with Guiding Plate (Type: KF)





### Accessories - Mounting Parts

Foot brackets (outside) - ISO 6431/VDMA 24562



#### Dimensions (mm)

PISTON Ø	A	B Ø H14	C Js15	D Js14	E ±0.5	F	G -0.2	H ±0.2	ORDER CODE
16	47.5/61.0**	5.5	22	18	3	17.5	30	13	KC01/016
20	51.5/65.5**	6.6	27	22	4	22	36	16	KC01/020
25	53.0/67.0**	6.6	30	26	4	22	40	16	KC01/025
32	68.0	7.0	32	32	4	35.0	45	24	VC01/032
40	73.0	9.0	36	36	4	36.0	52	28	VC01/040
50	77.0	9.0	45	45	5	47.0	65	32	VC01/050
63	81.0	9.0	50	50	5	45.0	75	32	VC01/063
80	95.0	12.0	63	63	6	55.0	95	41	VC01/080
100	103.0	14.0	71	71	6	57.0	115	41	VC01/100

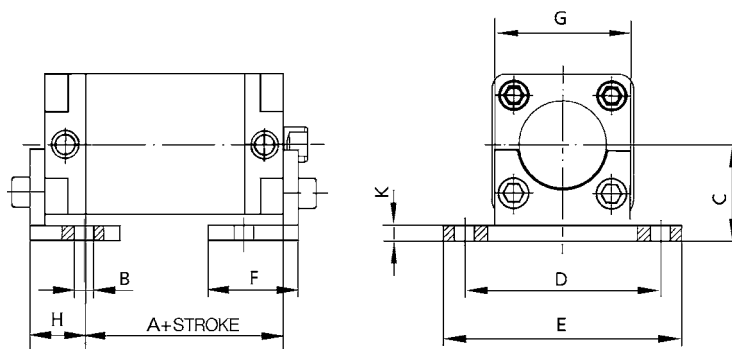
Includes fastening bolts for cylinders.

\*Not included in standard VDMA24562 T.2 (MS1).

\*\* Double/ Single Acting

Foot brackets are delivered in packs of two. Material: Steel

### Foot brackets (inside) - ISO 6431/VDMA 24562



#### Dimensions (mm)

PISTON DIAMETER	A	B Ø H14	C Js15	D Js14	E -0.2	F +1	G ±0.2	H ±0.2	K ±0.3	ORDER CODE
32	31.0	6.5	32.0	65.0	79.0	30.0	45.0	18.0	5.0	VC03/032
40	32.0	6.5	36.0	75.0	90.0	30.0	55.0	18.0	5.0	VC03/040
50	29.0	8.5	45.0	90.0	110.0	35.0	65.0	21.0	5.0	VC03/050
63	33.0	8.5	50.0	100.0	120.0	35.0	75.0	21.0	5.0	VC03/063
80	33.0	10.5	63.0	128.0	153.0	45.0	95.0	27.0	6.0	VC03/080
100	40.0	10.5	71.0	148.0	178.0	45.0	115.0	27.0	6.0	VC03/100

Includes fastening bolts for cylinders.

Foot brackets are delivered in packs of two. Material: Steel

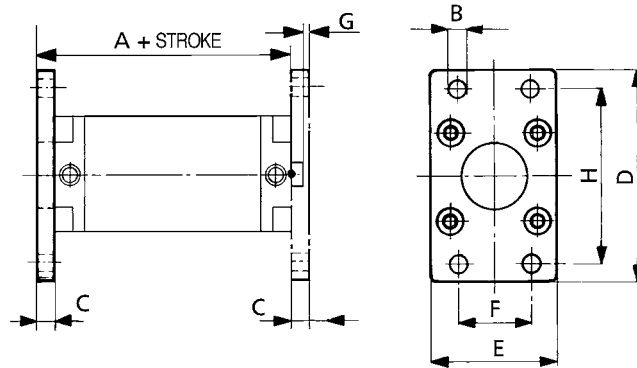


## K Series Metric Compact

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### Accessories - Mounting Parts

Flanges - ISO 6431/VDMA 24562



### Dimensions (mm)

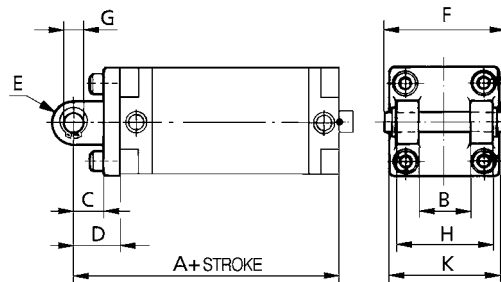
PISTON Ø	A	B H13	C ±0.2	D	E	F Js14	G	H ±0.2	ORDER CODE
16*	44.5/58.0**	5.5	10	55	29	5.5	43	KC02/016	KC01/016
20*	45.5/59.5**	6.6	10	70	36	5	55	KC02/020	KC01/020
25*	47.0/61.0**	6.6	10	76	40	5	60	KC02/025	KC01/025
32	54.0	7.0	10.0	80.0	45.0	32.0	4.0	64.0	VC02/032
40	55.0	9.0	10.0	90.0	52.0	36.0	4.0	72.0	VC02/040
50	57.0	9.0	12.0	110.0	65.0	45.0	5.0	90.0	VC02/050
63	61.0	9.0	12.0	120.0	75.0	50.0	5.0	100.0	VC02/063
80	70.0	12.0	16.0	150.0	95.0	63.0	8.0	126.0	VC02/080
100	78.0	14.0	16.0	170.0	115.0	75.0	6.0	150.0	VC02/100

\*\* Double/ Single Acting  
Includes fastening bolts for cylinders.  
Material: Steel



### Accessories - Mounting Parts

#### Oscillating Brackets - ISO 6431/VDMA 24562

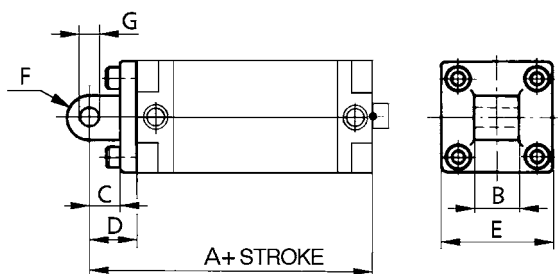


#### Dimensions (mm)

PISTON DIAMETER	A	B H14	C	D ±0.2	E	F	G H9	H h14	K	ORDER CODE
32	66.0	26.0	13.0	22.0	10.0	53.0	10.0	45.0	45.0	VC08/032
40	70.0	28.0	16.0	25.0	12.0	60.0	12.0	52.0	52.0	VC08/040
50	72.0	32.0	16.0	27.0	12.0	68.0	12.0	60.0	65.0	VC08/050
63	81.0	40.0	21.0	32.0	16.0	78.0	16.0	70.0	75.0	VC08/063
80	90.0	50.0	22.0	36.0	18.0	98.0	16.0	90.0	95.0	VC08/080
100	103.0	60.0	27.0	41.0	20.0	118.0	20.0	110.0	115.0	VC08/100

Includes pins and fastening bolts for cylinders.  
Material: Aluminium, pins made from steel

#### Oscillating Brackets with Lugs - ISO 6431/VDMA 24562



#### Dimensions (mm)

PISTON Ø	A	B -0.2/-0.6	C	D ±0.1	E	F	G H9	ORDER CODE
16*	50.5/64.0**	12	10	16	27	6	6	KC07/016
20*	55.5/6905**	16	14	20	34	8	8	KC07/020
25*	57.0/67.0**	16	14	20	38	8	8	KC07/025
32	66.0	26.0	13.0	22.0	45.0	10.0	10.0	VC07/032
40	70.0	28.0	16.0	25.0	52.0	12.0	12.0	VC07/040
50	72.0	32.0	16.0	27.0	65.0	12.0	12.0	VC07/050
63	81.0	40.0	21.0	32.0	75.0	16.0	16.0	VC07/063
80	90.0	50.0	22.0	36.0	95.0	16.0	16.0	VC07/080
100	1030.0	60.0	27.0	41.0	115.0	20.0	20.0	VC07/100

Includes fastening bolts for cylinders.  
\*Not included in standard VDMA 24562 T.2 (MS1).  
\*\* Double/ Single Acting  
Material: Aluminum

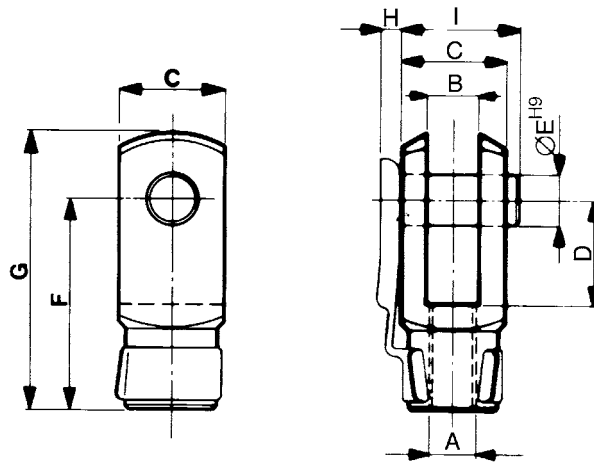


## K Series Metric Compact

# NUMATICS®

### Accessories - Mounting Parts

#### Rod Clevis

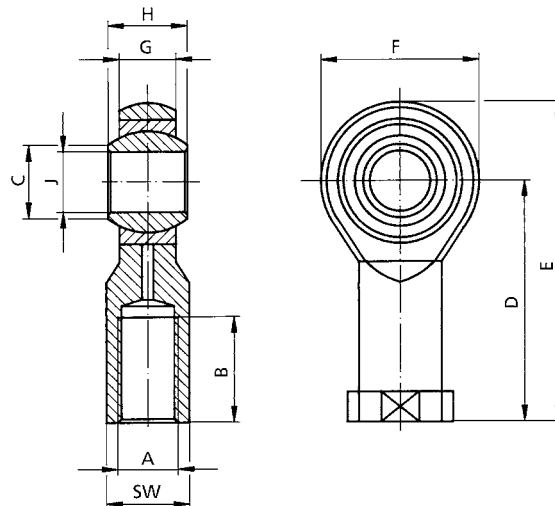


#### Dimensions (mm)

PISTON Ø	A	B	C	D	E Ø H9	F	G	H	J	ORDER CODE
12-16mm	M6	6	12	12	6	24	31	3	12	SC4/012-S
20-25mm	M8	8	16	16	8	32	42	3	16	SC4/020-S
32/40	M10 x 1.25	10.0	20.0	20.0	10.0	40.0	52.0	3.0	23.0	SC4/025
50/63	M12 x 1.25	12.0	24.0	24.0	12.0	48.0	62.0	4.0	28.0	SC4/040
80	M16 x 1.5	16.0	32.0	32.0	16.0	64.0	83.0	4.0	36.0	SC4/050
100	M20 x 1.5	20.0	40.0	40.0	20.0	80.0	105.0	4.0	44.0	SC4/080

Material: steel

#### Oscillating Rod Clevis



#### Dimensions (mm)

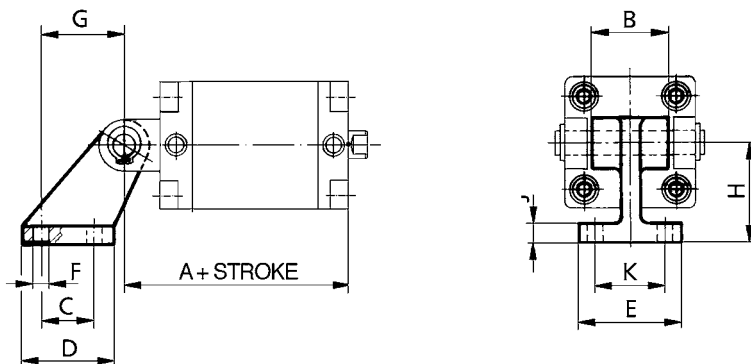
PISTON Ø	A	B	C	D	E	F	G	H	J Ø H7	SW	ORDER CODE
12-16mm	M6	12	9	30	40	20	6.8	9	6	11	SC5/012-S
20-25mm	M8	16	10.5	36	48	24	9	12	8	14	SC5/020-S
32/40	M10 x 1.25	20.0	13.0	43.0	57.0	28.0	10.5	14.0	10.0	17.0	SC5/025
50/63	M12 x 1.25	22.0	15.0	50.0	66.0	32.0	12.0	16.0	12.0	19.0	SC5/040
80	M16 x 1.5	28.0	19.5	64.0	85.0	42.0	15.0	21.0	16.0	22.0	SC5/050
100	M20 x 1.5	33.0	24.5	77.0	102.0	50.0	18.0	25.0	20.0	30.0	SC5/080

Material: Steel



### Accessories - Mounting Parts

#### Oscillating Rear Clevis with Lugs - ISO 6431/VDMA 24562

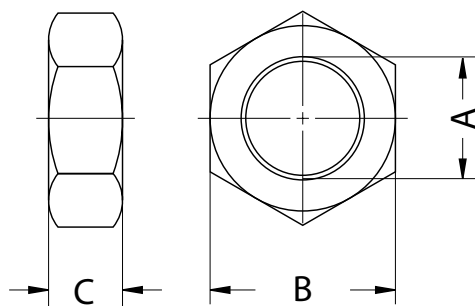


#### Dimensions (mm)

PISTON DIAMETER	A	B	C Js14	D	E	F Ø	G Js14	H Js15	J	K Js15	ORDER CODE
32	66.0	26.0	18.0	31.0	51.0	6.6	21.0	32.0	8.0	38.0	VC11/032
40	70.0	28.0	22.0	35.0	54.0	6.6	24.0	36.0	10.0	41.0	VC11/040
50	72.0	32.0	30.0	45.0	65.0	9.0	33.0	45.0	12.0	50.0	VC11/050
63	81.0	40.0	35.0	50.0	67.0	9.0	37.0	50.0	12.0	52.0	VC11/063
80	90.0	50.0	40.0	60.0	86.0	11.0	47.0	63.0	14.0	66.0	VC11/080
100	103.0	60.0	50.0	70.0	96.0	11.0	55.0	71.0	15.0	76.0	VC11/100

Material: Steel

#### Piston Rod Nut



#### Dimensions (mm)

PISTON Ø	A	B	C	ORDER CODE	
				GALVANIZED STEEL	STAINLESS STEEL
12-16mm	M6	10	5	128-221	128-301
20-25mm	M8	13	6.5	128-222	44.136
32/40	M10 x 1.25	17.0	5.0	128-194	44.1359
50/63	M12 x 1.25	19.0	6.0	128-195	128-302
80	M16 x 1.5	24.0	8.0	128-196	128-303
100	M20 x 1.5	30.0	10.0	128-197	128-285



## K Series Metric Compact

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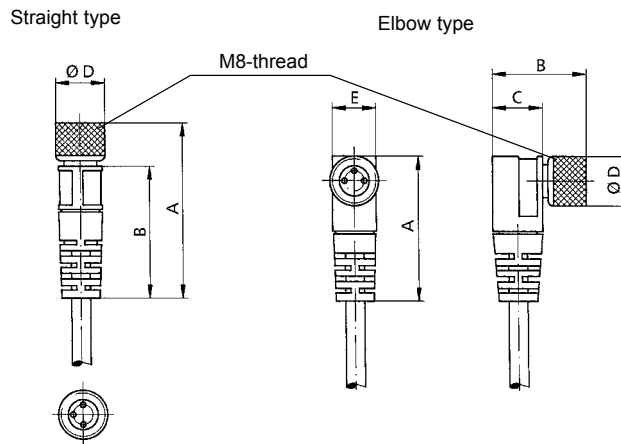
## K Series Switch Information

### K Series LP Switch

Cylinders	Bore	Part Number
K Series Profile	All	Direct Fit

NOTE: See page 17 for dimensional and technical data

## Cords M8-thread for Switches and Sensors with Connector

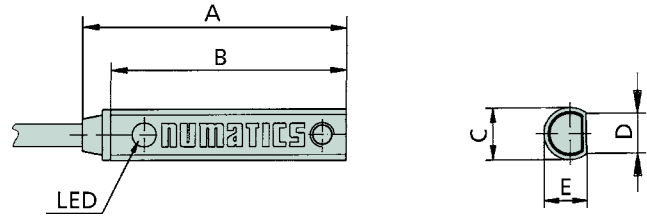


### Dimensions (mm)

Type		A	B	C	D	E	Weight (approx. kg)	Order Code
Straight with 5-m-cable	(3x0.25 mm <sup>2</sup> )	32.3	24.4	—	9.0	—	0.143	SC6-001
Elbow with 5-m-cable	(3x0.25 mm <sup>2</sup> )	26.3	17.1	9.2	9.0	8.0	0.145	SC6-002



### LP Series for Cylinders of Profile Type K Series, ISO 6341/VDMA 24562, RL Series Locking Units



#### Electronic Sensor

(3 WIRE TYPE) (mm)		A	B	C	D	E	ORDER CODE
27 cm cable made from PVC with M8x1 mm plug	(PNP NO)						SPR-C02
2 m cable made from PVC, 3x0.14 mm <sup>2</sup>	(PNP NO)	33.0	29.5	6.5	5.0	5.3	SPR-W20
27 cm cable made from PVC with M8x1 mm plug	(NPN NO)						SNR-C02
2 m cable made from PVC, 3x0.14 mm <sup>2</sup>	(NPN NO)						SNR-W20

#### Reed Switch

(2 WIRE TYPE) (mm)		A	B	C	D	E	ORDER CODE
27 cm cable made from PVC with M8x1 mm plug	(SRR NO)	33.0	29.5	6.5	5.0	5.3	SRR-C02
2 m cable made from PVC, 3x0.14 mm <sup>2</sup>	(SRR NO)						SRR-W20

#### Technical Data

ELECTRONIC SENSOR		REED SWITCH	
PNP NO	NPN NO	SRR NO	
			L 1/+ AC/DC N/-
Operating Voltage $U_g$	10-30 V DC	27 cm cable with M8 x 1 mm plug 2 m cable	10-50 V AC/60VDC 10-120 V AC/DC
Residual Ripple	$\leq 10\% U_g$		
Voltage Decrease $U_d$ (with $I_a$ max.)	$\leq 2$ V		$\leq 3$ V
Current Absorption (not activated)	$\leq 10$ mA		
Switching Current $I_a$	$< 150$ mA		$< 100$ mA
Response Sensitivity	approx. 3 mT		approx. 3 mT
EMV to:	EN 60947-5-2		EN 60947-5-2
Wire Breakage Protection	Yes		—
Short Circuit Protection	Yes		—
Reverse Polarity Protection	Yes		Yes
Power-Up Pulse Suppression	Yes		—
Protection to DIN 40050	IP67		IP67
Shock and Vibration Resistance	30 g, 11 ms, 10 to 55 Hz, 1mm		30 g, 11 ms, 10 to 55 Hz, 1mm
Ambient Temperature $T_a$	-10°F to 165°F (-25°C to +75°C)		-10°F to 165°F (-25°C to +75°C)

Attention:

- With CD-operation LED only illuminates when switch is correctly polarized.
- Never operate sensor W/O load.
- When switching higher capacitive and inductive loads, protection measures are to be taken

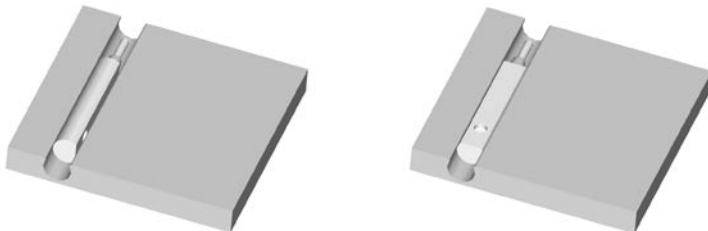
## Sensors

### Mounting of Switches with LP Profile

1. Put sensor in the cylinder groove at any point.

2. Rotate it by 90°.

3. Tighten screw M3 (key 1.5 mm is included).



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