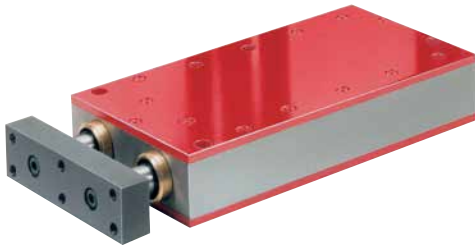


# TYPE WR SERIES

## Pneumatic Power Cylinders | Product Overview

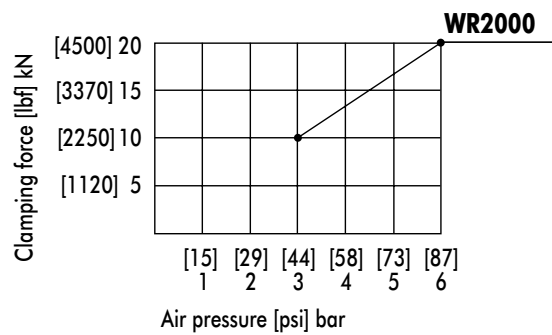
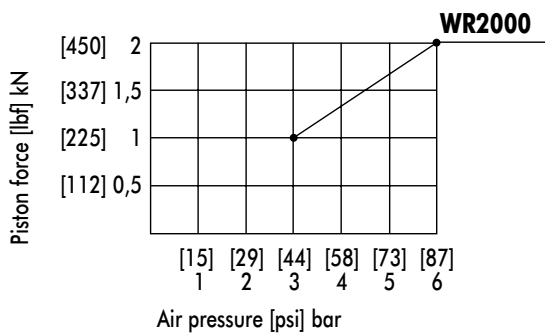
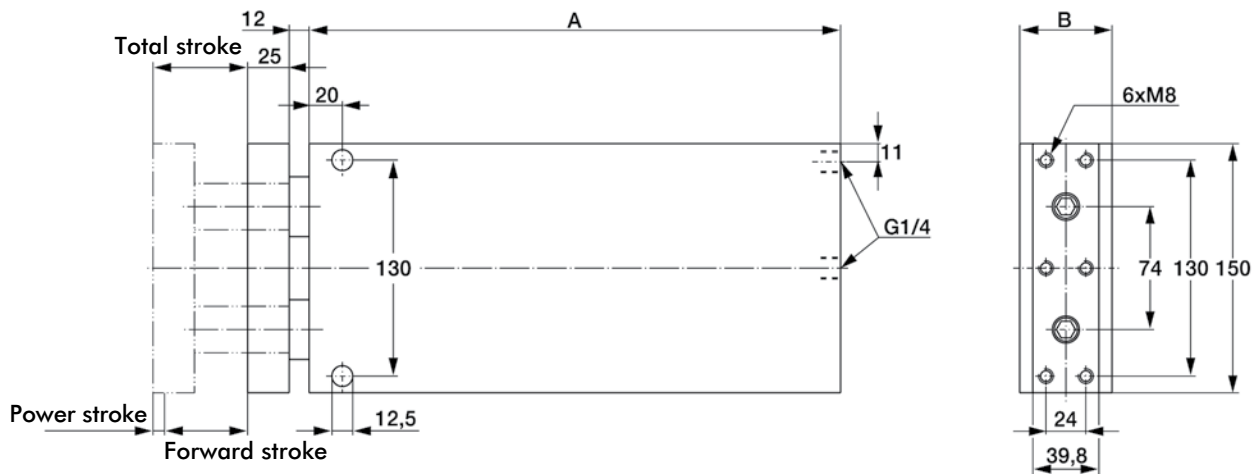


- Piston rods prevent twisting

**Note:**

Use only clean, water- and oilfree compressed air. Force must be transmitted via the centre of the pressure plate. One-sided loading of the pressure plate should be avoided. For punching applications contact our technical support! See page MC-PPC-2 for more information.

### Type WR



Return stroke force: half of piston force

Air pressure: max. [87psi] 6 bar; min. [44psi] 3 bar

Model	Piston force within forward stroke at 6 bar kN [lbf]	Forward stroke mm [in]	Clamping force within power stroke at 6 bar [lbf] kN	Power stroke mm [in]	Piston dia. mm [in]	Air consumption per double stroke at 6 bar dm <sup>3</sup> [ft <sup>3</sup> ]	Stroke frequency depending on total stroke [min <sup>-1</sup> ]	Temperature range °C [°F]	Weight kg [lbs]	A	B
WR 2000-15-7		15 [0.59]				2,44 [0.086]			12,5 [27.6]	285	51,6
WR 2000-30-7		30 [1.18]				2,95 [0.104]			14,0 [30.9]	300	51,6
WR 2000-50-7	2 [450]	50 [1.97]	20 [4500]	7 [0.27]	70 [2.76]	3,62 [0.128]	5 - 25	-5 up to +75 [23 to up167]	15,5 [34.1]	320	55,6
WR 2000-70-7		70 [2.76]				4,27 [0.151]			17,2 [37.9]	340	55,6
WR 2000-120-7		120 [4.72]				5,94 [0.210]			21,0 [46.3]	390	59,6

### Pneumatic Power Cylinders Type K and WK with end position control by magnetic field sensors.

- For the sizes

K and WK 400.... , K and WK 600... ,  
K and WK 1000.... K and WK 3000...,  
K and WK 4500...

- Change of Model

Indicate „-A“ at the end of Model instead of „-1“ for standard version!

Example:

K400 – 15 – 6 – 1 change to K400 – 15 – 6 – A

WK 3000 – 50 – 6 – 1 change to WK 3000 – 50 – 6 – A

- Change in construction

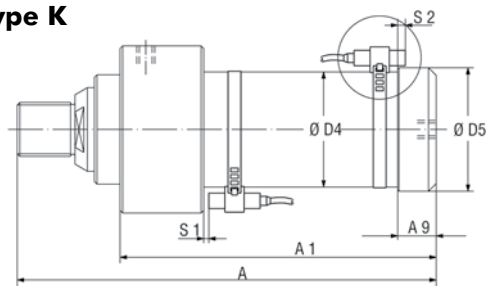
Only the dimensions Ø D4, Ø D5, A/A 1 and A9 are different to the standard version.



- Standard equipment (as shown above)

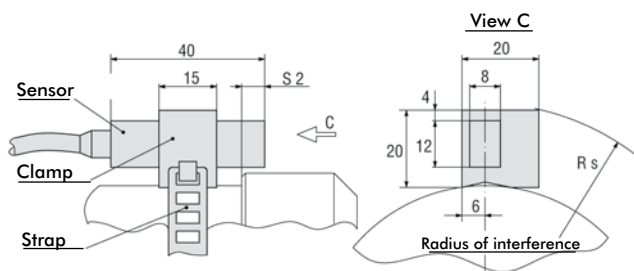
Pneumatic Power Cylinders with „-A“ at the end of Model are completely furnished with a magnetic piston ring and with two mounted sensor sets (Model SMB-102157, consisting of magnetic field sensor with 3m cable, clamp and strap)

#### Type K

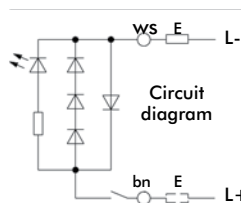


For sizes	Switching points of sensors		**Differences of dimensions compared with standard version				
	S1*	S2*	Ø D4	Ø D5	A/A 1	A9	Rs
K 400-...-A	5	12	-	-	+15	-	44
K 1000-...-A	10	18	-	-	+15	-	56
K 3000-...-A	5	14	90	97	-	30	67
K 45000-...-A	5	12	106	113	-	28,5	75

\* Approx. data, because of magnet field variations. S1 refers to the max. power stroke and enlarges up to 60 mm, when smaller power strokes are used.

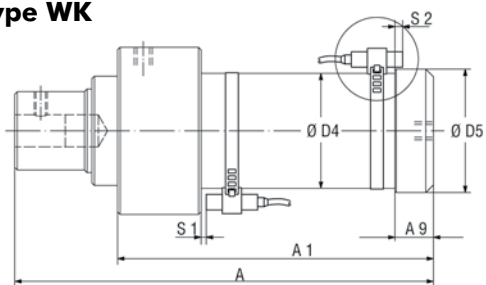


Circuit diagram and technical data of sensor set Model **SMB-102157**, consisting of magnetic field sensor with 3 m cable, clamp and strap (2 sets per cylinder are standard equipment).



Switching voltage	10...250 VAC/DC
Switching current	0,5 A
Switching power	20 W/30 VA
Function	normally open contact
Protection class	IP 67 (DIN 40050)
Indicator	LED

#### Type WK



For sizes	Switching points of sensors		**Differences of dimensions compared with standard version				
	S1*	S2*	Ø D4	Ø D5	A/A 1	A9	Rs
WK 400-...-A	5	12	-	-	+15	-	44
WK 1000-...-A	10	18	-	-	+15	-	56
WK 3000-...-A	5	14	90	97	-	30	67
WK 45000-...-A	5	12	106	113	-	28,5	75

\* Approx. data, because of magnet field variations. S1 refers to the max. power stroke and enlarges up to 60 mm, when smaller power strokes are used.

# -K OPTION

## Magnetic Field Sensing | Technical Specifications



### Sensor cage for T-slot proximity sensor

- **For the sizes**  
K and WK 400.... , K and WK 600... , K and WK 1000.... ,  
K and WK 3000..., K and WK 4500...
- **Change of Model**  
Indicate "-K" at the end of Model instead of "-A" for  
standard version.  
Example:  
K400 – 15 – 6 – A change to K400 – 15 – 6 – K  
WK 3000 – 50 – 6 – A change to WK 3000 - 50 – 6 – K
- **Benefits:**  
Small radii of interference.  
Customer specific T-slot sensors are usable.
- **Standard equipment:**  
Pneumatic power cylinder with "-K" at the end of Model  
number are supplied with mounted sensor cages but  
without T-slot sensors.