

Compact cylinder, Series KPZ

Ø 16–100 mm, single-acting, piston rod with male thread

Rexroth
Bosch Group



Technical Data

| | |
|---------------------------|---|
| Standard | NFE 49004 |
| Working pressure max. | 1,5-10 bar |
| Ambient temperature range | -20°C ... +80°C |
| Medium | Paineilma ISO 8573-1:2001, class 6-4-3 or lower* |

| | | |
|-----------|-----------------|--------------------------------|
| Materials | Piston rod | Stainless steel, smooth-rolled |
| | Cylinder tube | Anodised aluminium |
| | End covers | Aluminium |
| | Tiiviste | Polyurethane (PU) |
| | Mounting screws | Stainless steel |



Application Area

This cylinder series can be used under the following conditions:

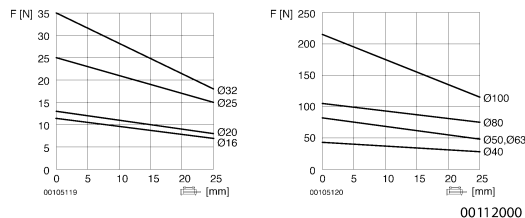
- Compact exterior dimensions
- Dimensions according to standard NFE 49 004
- Flush mounted cylinder switches
- Large mounting program

* Particle size ≤ 5 µm, dew point ≤ 3 °C, oil content ≤ 1 mg/m³

Technical Information

| Piston diameter | | [mm] | 16 | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 |
|--|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Theoretical piston force at 6 bar / 25 mm stroke | push stroke | [N] | 94 | 151 | 234 | 387 | 622 | 953 | 1565 | 2551 | 3930 |
| | pull stroke | [N] | 12 | 13 | 25 | 35 | 43 | 82 | 82 | 105 | 215 |
| Cylinder weight | 0 mm stroke | [kg] | 0,083 | 0,112 | 0,157 | 0,237 | 0,347 | 0,468 | 0,779 | 1,368 | 2,375 |
| | add. per 10 mm | [kg] | 0,014 | 0,020 | 0,020 | 0,030 | 0,040 | 0,050 | 0,080 | 0,110 | 0,140 |
| Max. piston speed | forward | [m/s] | 1 | 1 | 1 | 0,7 | 0,4 | 0,5 | 0,3 | 0,3 | 0,25 |
| | backward | [m/s] | 1 | 1 | 1 | 0,7 | 0,5 | 0,6 | 0,35 | 0,3 | 0,25 |
| Max cushioning energy | J [Nm] | | 0,11 | 0,15 | 0,35 | 0,4 | 0,52 | 0,64 | 0,75 | 0,75 | 1 |

Spring return force (theoretical values)



F = Spring return force, Symbol = Stroke

Part No.



| Piston dia. | 16 | 20 | 25 | 32 | 40 |
|-------------------------------|------------|------------|------------|------------|------------|
| Piston rod thread | M8 | M10x1,25 | M10x1,25 | M10x1,25 | M10x1,25 |
| Connection port | M5 | M5 | M5 | G1/8 | G1/8 |
| 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 |
| Optional stroke ¹⁾ | 08224902XX | 08224912XX | 08224922XX | 08224932XX | 08224942XX |
| Rec. max. stroke | 25 | 25 | 25 | 25 | 25 |
| Piston dia. | 50 | 63 | 80 | 100 | |
| Piston rod thread | M12x1,25 | M12x1,25 | M16x1,5 | M20x1,5 | |
| Connection port | G1/8 | G1/8 | G1/8 | G1/8 | |
| 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 | |
| Optional stroke ¹⁾ | 08224952XX | 08224962XX | 08224972XX | 08224982XX | |
| Rec. max. stroke | 25 | 25 | 25 | 25 | |

¹⁾ See ordering procedure.

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Ordering procedure

There are three ways you can configure and order your KPZ with intermediate strokes:

- Configure your KPZ using our Internet Configurator and order it directly online.
- Configure your KPZ using our Internet Configurator and order it at your nearest Rexroth sales office.




Link: www.boschrexroth.com/pneumatics, then click on -Configuration-.

- Direct inquiry at your nearest Rexroth sales office.


Please specify the desired stroke length as follows:

Example: Ø = 32 mm, stroke = 18 mm = 08224932XX/H18

▲ Accessories (to be ordered separately)

| Symbol | Type | 16 | 20 | 25 | 32 |
|---|-------------------------------|------------|------------|------------|------------|
|  | Piston dia. | 16 | 20 | 25 | 32 |
| | Front and rear flange | 1821038241 | 1827002292 | 1827002293 | 1827002294 |
| | Angle brackets | 1821332053 | 1827002284 | 1827002285 | 1827002286 |
| | Male trunnion mounting | – | 1825805360 | 1825805361 | 1825805362 |
| | Rear clevis with axle | 1825805368 | 1827002300 | 1827002301 | 1827002302 |
| | Rear clevis | 1827001446 | 1827001445 | 1827001445 | 1825805223 |
| | Piston dia. | 40 | 50 | 63 | 80 |
| | Front and rear flange | 1827002295 | 1827002296 | 1827002297 | 1827002298 |
| | Angle brackets | 1827002287 | 1827002288 | 1827002289 | 1827002290 |
| | Male trunnion mounting | 1825805363 | 1825805364 | 1825805365 | 1825805366 |
| | Rear clevis with axle | 1827002303 | 1827002304 | 1827002305 | 1827002306 |
| | Rear clevis | 1825805224 | 1825805225 | 1825805226 | 1825805227 |
| | Piston dia. | 100 | | | |
| | Front and rear flange | 1827002299 | | | |
| | Angle brackets | 1827002291 | | | |
| Male trunnion mounting | 1825805367 | | | | |
| Rear clevis with axle | 1827002307 | | | | |
| Rear clevis | 1825805228 | | | | |
|  | Piston dia. | 16 | 20 | 25 | 32 |
| | Rod clevis | 1822122010 | 1822122024 | 1822122024 | 1822122024 |
| | Ball eye rod end thin version | 1822124002 | 1822124003 | 1822124003 | 1822124003 |
| | Compensating coupling | 1826409001 | 1826409002 | 1826409002 | 1826409002 |
| | Piston dia. | 40 | 50 | 63 | 80 |
| | Rod clevis | 1822122024 | 1822122025 | 1822122025 | 1822122005 |
| | Ball eye rod end thin version | 1822124003 | 1822124004 | 1822124004 | 1822124005 |
| | Compensating coupling | 1826409002 | 1826409003 | 1826409003 | 1826409004 |
| | Piston dia. | 100 | | | |
| | Rod clevis | 1822122004 | | | |
| | Ball eye rod end thin version | 1822124006 | | | |
| | Compensating coupling | 1826409005 | | | |
|  | Piston dia. | | 16–100 | | |
| | Sensor with 3,0 m cable, Reed | | 0830100629 | | |
| | Sensor with 3,0 m cable, PNP | | 0830100631 | | |

▲ Seal kit

| Symbol | Piston dia. | 16 | 20 | 25 | 32 | 40 | 50 |
|---|-------------|------------|------------|------------|------------|------------|------------|
|  | Code no. | 1827003892 | 1827008917 | 1827008918 | 1827008919 | 1827008920 | 1827008921 |
| | Piston dia. | 63 | 80 | 100 | | | |
| | Code no. | 1827008922 | 1827008923 | 1827008924 | | | |

