



Pneumatic, Hydraulic & Vacuum Equipment

Cylinder



Tie rod type cylinder K series

Single-rod standard type of $\phi 32 - \phi 160$
(except mounting to LA)
will be delivered to you in 4 working days.

Specification	Standard	Switch adjusted specification
Series name	K	KR
Nominal Pressure	3.5MPa	
Test Proof Pressure	5MPa	
bore	$\phi 32 \cdot \phi 40 \cdot \phi 50 \cdot \phi 63 \cdot \phi 80 \cdot \phi 100 \cdot \phi 125 \cdot \phi 160$	$\phi 32 \cdot \phi 40 \cdot \phi 50 \cdot \phi 63 \cdot \phi 80 \cdot \phi 100 \cdot \phi 125$
Range of Operating Speed	8' 300mm/sec.	
Range of Operating Temperature	-10 °C ~ +80 °C	-10 °C ~ +60 °C



Tie rod type cylinder 7-14MPa F series

We can deliver the standard cylinder which
has a single rod from 32 bore to 180 bore
4 workdays later.

Specification	Standard		Switch adjusted specification	
	FS	FF	FSR	FFR
Series name	FS	FF	FSR	FFR
Nominal Pressure	7MPa	14MPa	7MPa	14MPa
Bore	$\phi 32 \cdot \phi 40 \cdot \phi 50 \cdot \phi 63 \cdot \phi 80$ $\phi 100 \cdot \phi 125 \cdot \phi 140$ $\phi 150 \cdot \phi 160 \cdot \phi 180 \cdot \phi 200 \cdot \phi 224 \cdot \phi 250$		$\phi 32 \cdot \phi 40 \cdot \phi 50 \cdot \phi 63$ $\phi 80 \cdot \phi 100 \cdot \phi 125 \cdot \phi 140$	
Test Proof Pressure	10.5MPa	21MPa	10.5MPa	21MPa
Range of Operating Temperature	-10 °C ~ +80 °C (Standard) -10 °C ~ +120 °C (High Temperature Specification)		-10 °C ~ +60 °C (Standard) -10 °C ~ +100 °C (High Temperature Specification)	



Tie rod type cylinder T series

Single-rod standard type of $\phi 40 \sim \phi 160$
(except mounting to LA, CA and CB)
will be delivered to you in 4 working days.

Specification	Standard	Switch Adjusted Specification
Series name	T	TR
Nominal Pressure	21MPa	
Test Proof Pressure	31.5MPa	
Bore	$\phi 40 \cdot \phi 50 \cdot \phi 63 \cdot \phi 80 \cdot \phi 100 \cdot \phi 125$ $\phi 140 \cdot \phi 160 \cdot \phi 180 \cdot \phi 200 \cdot \phi 224 \cdot \phi 250$ (Until 160 bore for the mountings of LA & CB)	$\phi 40 \cdot \phi 50 \cdot \phi 63 \cdot \phi 80$
Range of Operating Temperature	-10 °C ~ +80 °C (Standard) -10 °C ~ +120 °C (High Temperature Specification)	-10 °C ~ +60 °C (Standard) -10 °C ~ +100 °C (High Temperature Specification)