



# TPC ALL PRODUCTS

## Actuators

### Air Cylinder Series ACP/UACP



- Bore Size:  $\phi 6, \phi 10, \phi 16$
- Long life
  - Low breakaway
  - Bumper equipped
  - Built-in magnet
  - Compact light weight design
  - Copper-free (optional)

### Panel Mounting Cylinder Series APM



- Bore Size:  $\phi 6, \phi 10, \phi 15$
- Higher shock-absorbency
  - Extremely durable
  - Various nipple options

### Air Cylinder Series AS



- Bore Size:  $\phi 20, \phi 25, \phi 30, \phi 40$
- Long life
  - Position sensors
  - Corrosion resistant aluminum
  - Bumper equipped(air cushion optional)

### Air Cylinder Series AX



- Bore Size:  $\phi 20, \phi 25, \phi 32, \phi 40$
- Long life
  - Low breakaway
  - Numerous mounting options
  - Designed for non-lubricated service

### Air Cylinder Series AM



- Bore Size:  $\phi 40, \phi 50, \phi 63, \phi 80, \phi 100$
- Built-in air cushion
  - Designed for long life & high speed
  - Wide stroke & bore sizes available

### Air Cylinder Series AM2



- Bore Size:  $\phi 40, \phi 50, \phi 63, \phi 80, \phi 100$
- Improved energy absorption
  - Improved cushion capacity
  - Increased kinetic energy absorption

### Air Cylinder Series AL/ALX



- Bore Size:  $\phi 125, \phi 140, \phi 160, \phi 180, \phi 200, \phi 250, \phi 300$
- Wide variety of stroke and bore ranges
  - Designed for long life and high speed operation
  - Built-in air cushion

### Round Cylinder Series ARD/UARD



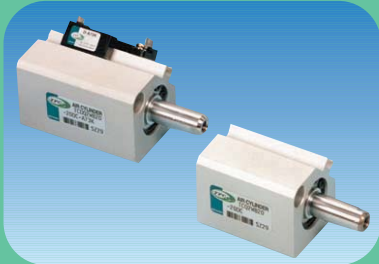
- Bore Size:  $\phi 20, \phi 25, \phi 32, \phi 40, \phi 50, \phi 63$
- Compact light weight design
  - High speed actuator
  - Rubber bumper equipped
  - $\phi 80, \phi 100$ :Inquire separately

### Air Hydro Converter Series SAH



- Bore Size:  $\phi 63, \phi 100, \phi 160$
- Emergency stop.
  - Intermediate stop and lock.

### Compact Cylinder Series AQ/UAQ



- Bore Size:  $\phi 12$ ,  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$
- Space saving design
  - Compact and light weight
  - 10 Bore sizes
  - Auto switch adaptable
  - Suitable for special applications

### Compact Cylinder Series AQ2/UAQ2



- Bore Size :  $\phi 12$ ,  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$ ,  $\phi 32$ ,  
 $\phi 40$ ,  $\phi 50$ ,  $\phi 63$ ,  $\phi 80$ ,  $\phi 100$
- Auto switch mounting allows for flexible designing requirements.
  - Long stroke, available.

### Direct Mount Cylinder Series NDM



- Bore Size:  $\phi 10$ ,  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$
- Space saving compact design
  - Multiple mounting options
  - Non-rotating rod type available
  - Non lubricated service (standard)

### Plate Cylinder Series NP



- Bore Size:  $\phi 50$ ,  $\phi 63$
- Space saving compact design
  - Built-in speed controller
  - Various mounting options
  - Adaptable to welding applications
  - Mini auto switches available

### Guide Cylinder Series AG



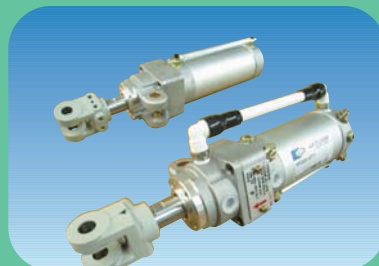
- Bore size :  $\phi 12$ ,  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$ ,  $\phi 32$ ,  
 $\phi 40$ ,  $\phi 50$ ,  $\phi 63$ ,  $\phi 80$ ,  $\phi 100$
- Exclusive grease use, dust generation is minimized when cylinder is acting.

### Guide Cylinder Series NGQ



- Bore size :  $\phi 12$ ,  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$ ,  $\phi 32$ ,  
 $\phi 40$ ,  $\phi 50$ ,  $\phi 63$ ,  $\phi 80$ ,  $\phi 100$
- Exclusive grease use, dust generation is minimized when cylinder is acting.
  - High precision and prevention of rotation.
  - Side port

### Clamp Cylinder With Lock Series ABK



- Built-in coil scraper for removing contamination on piston rod.
- Built-in air cushion and speed controller on both rod and head side.
- Locking and unlocking can be chosen by bolt / Manual unlocking.
- The same jig position as standard clamp cylinders(AJ)

### Clamp Cylinder With Lock Series NSK



- Possible to attach Autoswitch in a tube
- Max. Operating pressure : 1MPa
- Compact size & Good design
- Built-in coil scraper ( $\phi 40 \sim \phi 63$ )

### Rodless Cylinder Series TCRL



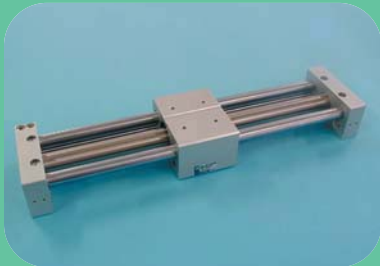
- Bore Size :  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$ ,  $\phi 32$ ,  
 $\phi 40$ ,  $\phi 50$ ,  $\phi 63$ ,  $\phi 80$
- High rigidity, long service life
  - Easy maintenance
  - Various bore size
  - Suitable for the widest range of operating speeds(100~2,000mm/sec)



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## Actuators

### Magnet Type Rodless Cylinder Series AMR/UAMR



- Bore Size :  $\phi 10$ ,  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$ ,  $\phi 32$ ,  $\phi 40$ ,
- Precision stainless steel body for smooth actuation
  - Light weight
  - Compact design
  - Leak free
  - Non - lubricated type standard
  - Position sensing capable with guide type(G)

### Table Cylinder(Linear Cylinder) Series NLCD



- Bore size :  $\phi 6$ ,  $\phi 8$ ,  $\phi 12$ ,  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$ ,  $\phi 32$
- Multiple mounting options

### Table Cylinder(Linear Cylinder) Series NLCS



- Bore size :  $\phi 6$ ,  $\phi 10$ ,  $\phi 16$
- Circulating bearings
  - Universal mounting

### Slide Cylinder Series ASL



- Bore Size:  $\phi 12$ ,  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$ ,  $\phi 32$
- High accuracy
  - Auto switch adaptable
  - Compact type

### Clamp Cylinder Series AJ/AJM



- Bore Size:  $\phi 32$ ,  $\phi 50$ ,  $\phi 63$ ,  $\phi 80$
- Two types of clevis widths are available (16.5mm, 19.5mm / Except  $\phi 32$ )
  - Compact and light weight
  - Non lube type
  - Possible to disassemble
  - Built in speed controller

### Guide Cylinder Guide Unit Series GX/AGX



- Bore Size:  $\phi 20$ ,  $\phi 25$ ,  $\phi 32$ ,  $\phi 40$
- Compact integration of AGX/GX Series cylinder with guide rods.
  - Unit resists lateral loading and provides precise, non-rotating motion
  - The AGX/GX series is equipped with a standard magnet for auto switch capability

### Double Rod Cylinder Series ADR



- Bore Size:  $\phi 10$ ,  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$
- High lateral load capability
  - Adjustable stroke is available
  - Auto switch ready
  - Non-lube service standard.

### Stopper Cylinder Series NST



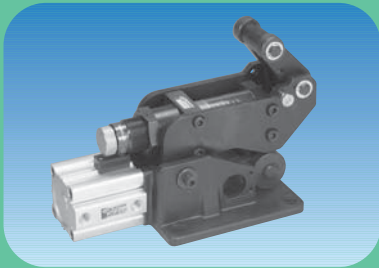
- Bore Size:  $\phi 50$ ,  $\phi 63$ ,  $\phi 80$
- Position may be rotated to four directions by 90° each time
  - Includes a shock absorber that is easily maintained and replaced
  - Single-acting, double-acting (with springs)
  - Clean work environment with leak-free design for lubrication
  - Auto switch capable

### Stopper Cylinder Series AST



- Bore Size:  $\phi 50$ ,  $\phi 63$ ,  $\phi 80$
- Stopping direction can be changed every 90°
  - Easy maintenance
  - Three actuating options
  - single, double acting and double acting with spring
  - Auto switch capable

### Horizontal Stopper Cylinder Series ASTH



Bore Size :  $\phi 32$ ,  $\phi 50$   
 · Vertical stopper cylinder

### Air Chuck Series NF



NFH2 :  $\phi 10$ ,  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$   
 NFW2 :  $\phi 10$ ,  $\phi 12$ ,  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$ ,  $\phi 30$   
 NFP2 :  $\phi 12$ ,  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$ ,  $\phi 32$ ,  $\phi 40$   
 · Easy to mount  
 · Compact design  
 · High holding power, high accuracy

### Rotary Cylinder Series NR



NRP : 50, 63, 80, 100  
 NRT : 30, 50, 70, 100  
 NRC : 12, 15, 20, 30  
 · Revolving cylinder, double piston type(rack and pinion).  
 · Shock absorber adaptable

## Clean Equipment

### Shock Absorber Series SB



· Control design

### Clean Series Round Cylinder (Round Cylinder) Series CR(CV)-ARD



Bore size :  $\phi 50$ ,  $\phi 63$   
 · Low particle generation for clean room applications  
 · Stainless steel piston rod(resistant to moisture and other chemicals)

### Clean Series Table Series CR(CV,SC)-NLCD



Bore size :  $\phi 25$ ,  $\phi 32$   
 · Low particle generation for clean room applications  
 · Stainless steel piston rod(resistant to moisture and other chemicals)

### Clean Series Compact Guide Cylinder Series CR(CV)-AGL



Bore size :  $\phi 12$ ,  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$ ,  $\phi 32$ ,  
 $\phi 40$ ,  $\phi 50$ ,  $\phi 63$   
 · Low particle generation for clean room applications.  
 · Stainless steel piston rod(resistant to moisture and other chemicals)

### Clean Series Compact Cylinder (square tube)/Double Acting, Single Rod Series CR(CV)-AQ2, ADQ2



Bore Size :  $\phi 12$ ,  $\phi 16$ ,  $\phi 20$ ,  $\phi 25$ ,  $\phi 32$ ,  
 $\phi 40$ ,  $\phi 50$ ,  $\phi 63$ ,  $\phi 80$ ,  $\phi 100$   
 · Low particle generation for clean room applications  
 · Stainless steel piston rod(resistant to moisture and other chemicals)

### Clean Series Air Cylinder / Double Motion, Single Rod Series CR(CV)-AX



Bore Size :  $\phi 20$ ,  $\phi 25$ ,  $\phi 32$ ,  $\phi 40$   
 · Low particle generation for clean room applications  
 · Stainless steel piston rod(resistant to moisture and other chemicals)