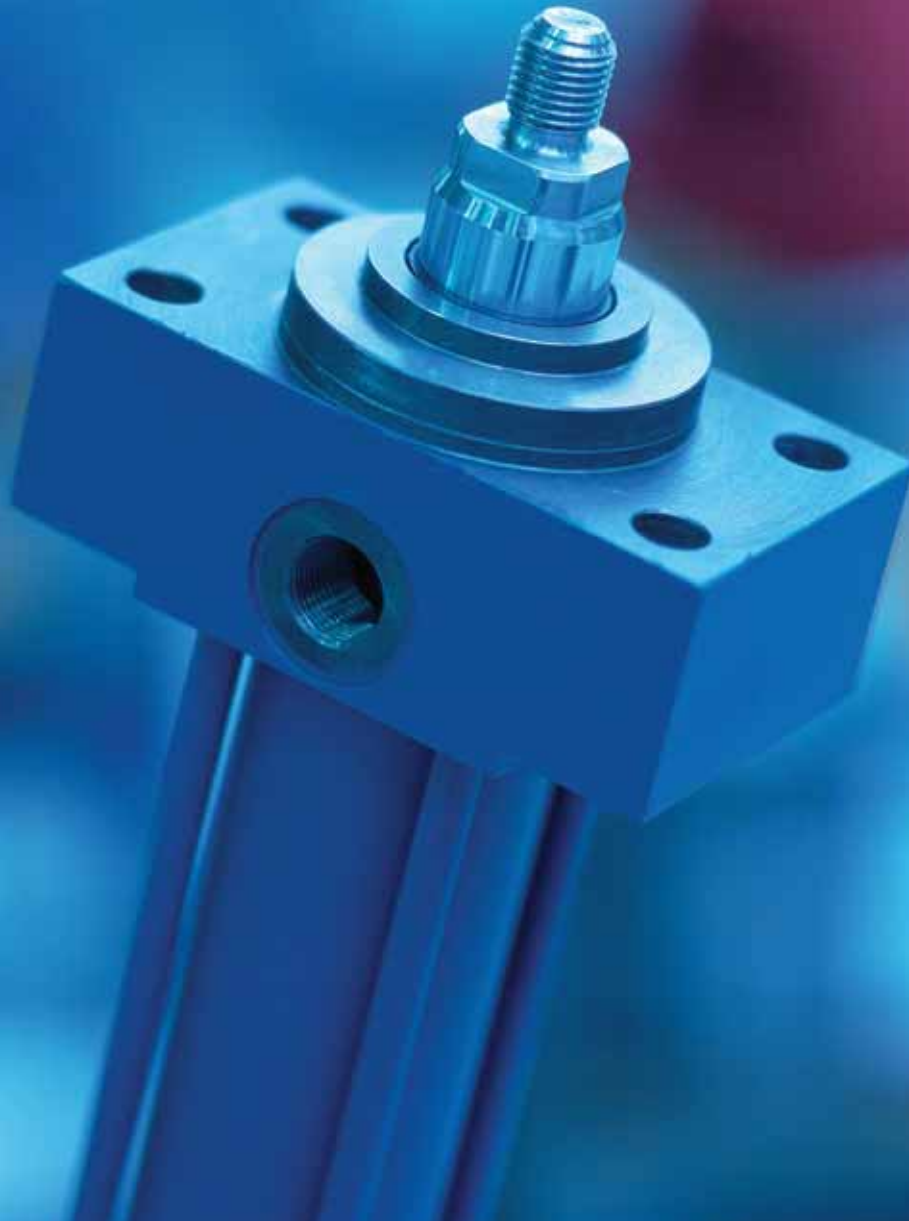


# Cylinder Catalog



The Drive & Control Company



# Rexroth NFPA Hydraulic Cylinders

## Technical Data

Standards:	Meets or exceeds JIC and NFPA Standards
Nominal Pressure:	up to 1,500 psi for CDT1 (see chart) up to 3,000 psi for CDT4
Bore Diameter:	1" to 8" diameter
Piston Rod Diameter:	1/2" to 5-1/2" for CDT1 5/8" to 5-1/2" for CDT4
Mounting:	18 standard NFPA mountings
Stroke:	up to 120"
Connection Port:	SAE straight thread standard (ISO 11926-1) other options on request
Hydraulic Fluid:	Mineral oil (HL, HLP) Phosphate Ester (HFD-R, HFA) Water glycol (HFC)
Fluid Temp. Range:	-4°F up to 176°F standard
Stroke Velocity:	up to 20 in/s (consult factory for higher velocity applications)
Further Information:	RA 17 038 for CDT1 Series RA 17 041 for CDT4 Series

## Pressure Ratings

### CDT1

Cyl. Bore	Std. Rod	Max. PSI Max. Duty Severe Service
1	1/2	1,500 <sup>†</sup>
1-1/2	1	1,500 <sup>†</sup>
2	1	1,500 <sup>†</sup>
2-1/2	1	1,500* <sup>†</sup>
3-1/4	1	1,500 <sup>†</sup>
4	1-3/8	1,000
5	1-3/4	750
6	1-3/4	750
8	2	500

\* With 5/8" rod, 1,000 psi

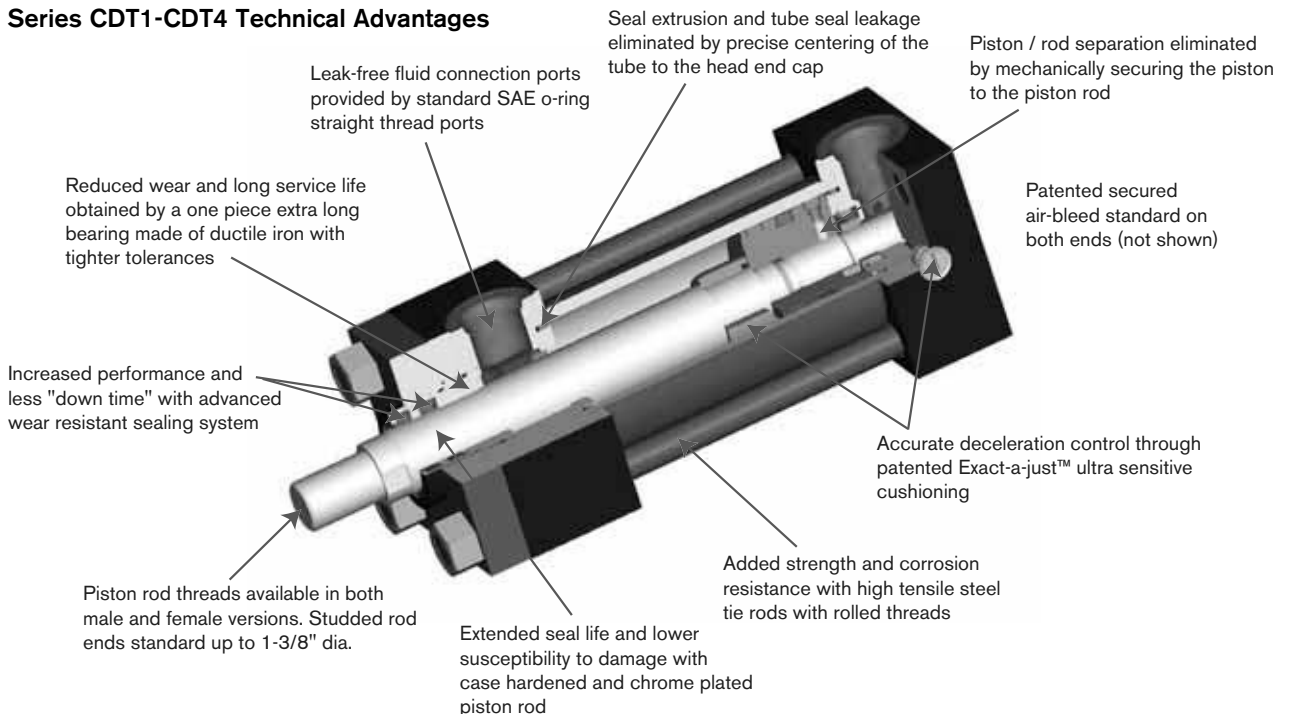
† MF1 & MF2 max. operating pressure 1,000 psi

### CDT4

Cyl. Bore	Std. Rod	Nominal	Non-Shock**
1-1/2	5/8	3,000	5,000
2	1		
2-1/2	1		
3-1/4	1-3/8		
4	1-3/4		
5	2		
6	2-1/2		
7	3		
8	3-1/2		

\*\* See data sheet RA 17 041 for exceptions to 5,000 psi ratings

## Series CDT1-CDT4 Technical Advantages



# Rexroth Hydraulic Cylinders offer Optimum Reliability for all Applications

Cylinder Series	Rexroth Catalogs	Iron & Steel Industry			Foundry Machinery			Machine Tool Automotive			Presses		
		Coiler	Trimming	Walking Beam	Segment	Level Adjust	Pusher	Feed	Clamping	Transfer	Eject	Cushion	Traverse
<b>Tie Rod</b>													
CDT1	RA 17 038							X	X	X			
CDT3	RA 17 032							X	X	X			
CDT4	RA 17 041							X	X	X	X	X	X
<b>Mill Type</b>													
CDL1	RA 17 325									X			
CDM1	RA 17 328		X					X			X		
CDH2	RA 17 334	X	X	X	X	X	X	X					

Cylinder Series	Rexroth Catalogs	Plastics Machinery			Civil Engineering			Material Handling			Wood and Paper Industry		
		Injection	Nozzle	Ejection	Bridge Lift	Butterfly Valve	Gate	Ship Unloading	Mining Equipment	Container Cranes	Infeed	Conveyor	Cutter
<b>Tie Rod</b>													
CDT1	RA 17 038		X										
CDT3	RA 17 032												
CDT4	RA 17 041	X		X	X	X		X			X	X	X
<b>Mill Type</b>													
CDL1	RA 17 325					X							
CDM1	RA 17 328												
CDH2	RA 17 334				X		X	X	X	X			

## Cylinder Differential Tie Rod Series CDT1/CDT4

Rexroth Hydraulic Cylinders Provide Important Advantages to Meet Your Demanding Needs

### Removable Rod Bearing

- One piece extra long rod bearing made of ductile iron offers extended life when compared to bronze
- Reduced guide clearance provides uniform load distribution
- Easily removable for maintenance and service without special tools
- Spiral groove in the rod bearing keeps the bearing lubricated and also automatically compensates for pressure changes



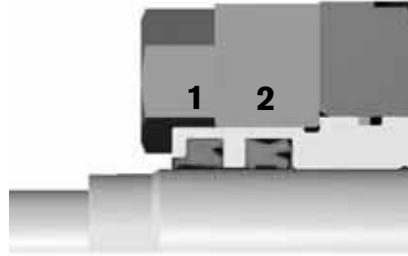
Cylinder Head with Removable Rod Bearing

# Cylinder Differential Tie Rod Series CDT1/CDT4

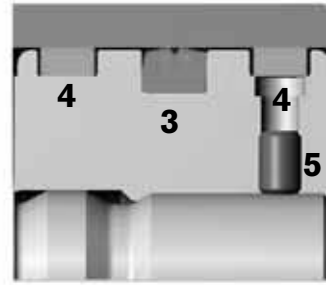
## Sealing System

- “M” Polyurethane seal system (standard)
- “T”<sup>\*</sup> Seal system for low friction applications (available)
- “F”<sup>\*</sup> Standard seal system for HFC (water glycol) (available)
- “V”<sup>\*</sup> Seal system for (phosphate ester) (available)

<sup>\*</sup> - *not recommended for load holding applications.*



1 Double lip wiper  
2 U-cup rod seal



3 Double acting piston seal  
4 Wear bands  
5 Mechanically secured piston assembly

## Cushioning System (optional)

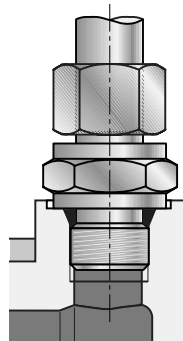
- Patented Exact-a-just<sup>TM</sup> cushioning provides accurate micrometer adjustment
- Exact-a-just<sup>TM</sup> cushioning permits adjustment over a wide range of settings for faster cycle times
- Results in reduced maintenance costs, reduced internal and external shock, and softer cushioning stops
- May be supplied at head, cap, or both ends



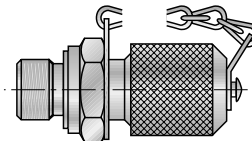
Exact-a-just<sup>TM</sup> cushioning

## Connection Port

- ISO 11926-1 SAE straight thread (standard)
- For other port options consult factory

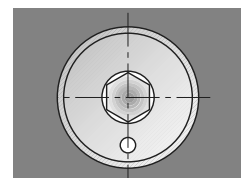
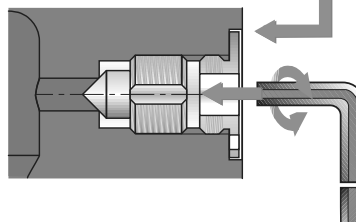


Alternate pressure test fitting



## Secured Air Bleed (standard)

- To provide safety and prevent accidents, patented air bleed is secured against unscrewing (standard)
- Air bleed ports can become an alternate connection for a pressure test fitting (optional)



# Rexroth Worldwide Cylinder Manufacturing Facilities

**Provide International Support and  
Product Knowledge on a Global Basis**



**Bosch Rexroth AG**  
Lohr, Germany  
*Hydraulic Mill Type, Special Application Cylinders*



**Bosch Rexroth Technik AB**  
Stockholm, Sweden  
*Hydraulic Mill Type, ISO Tie Rod Cylinders*



**Bosch Rexroth BV**  
Boxtel, Netherland  
*Large Size Ceramax ABS Cylinders*



**Bosch Rexroth Corporation**  
Bethlehem, PA  
*Hydraulic NFPA, ISO Tie Rod Cylinders*



**Bosch Rexroth AG**  
Bonneville, France  
*Hydraulic ISO Tie Rod Cylinders, Pneumatic Cylinders*



**Bosch Rexroth Corporation**  
Lexington, KY  
*Pneumatic Cylinders*

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