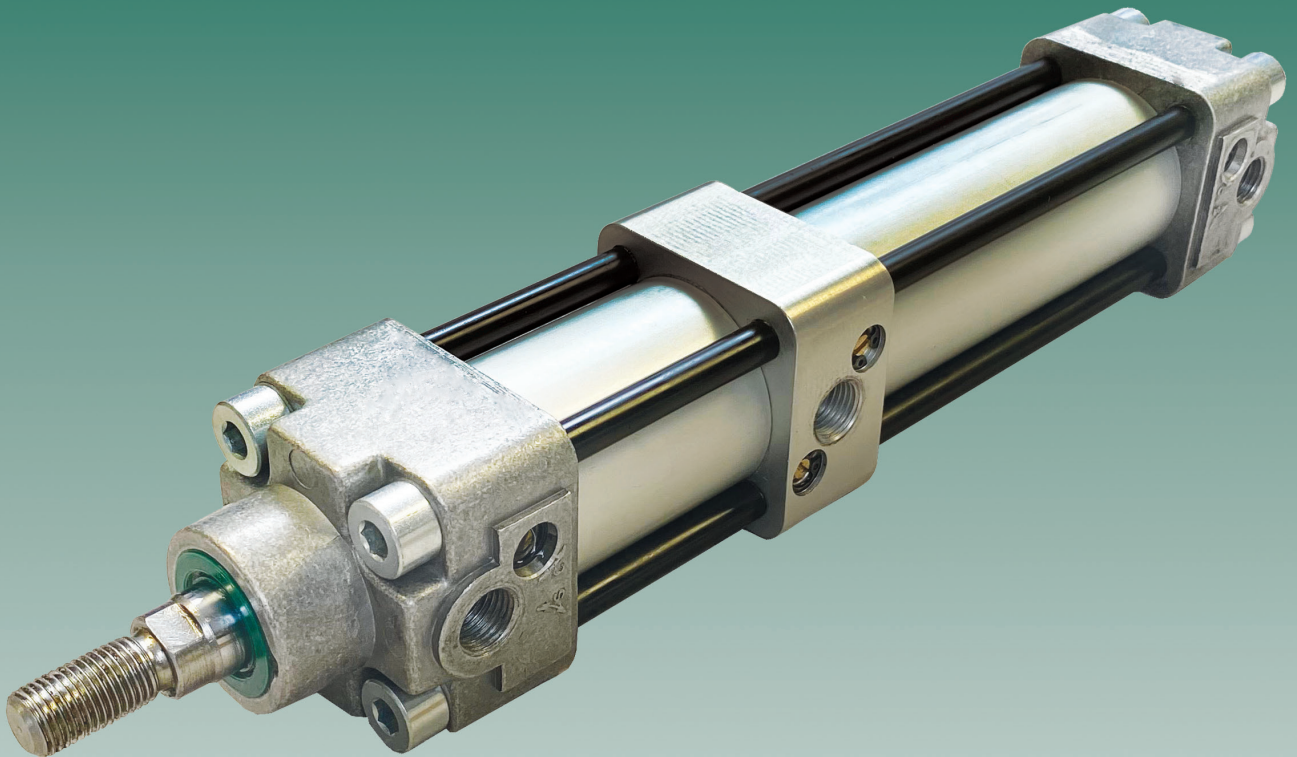


# DADCO®

Air Cylinders

HP3.40

**NEW!**

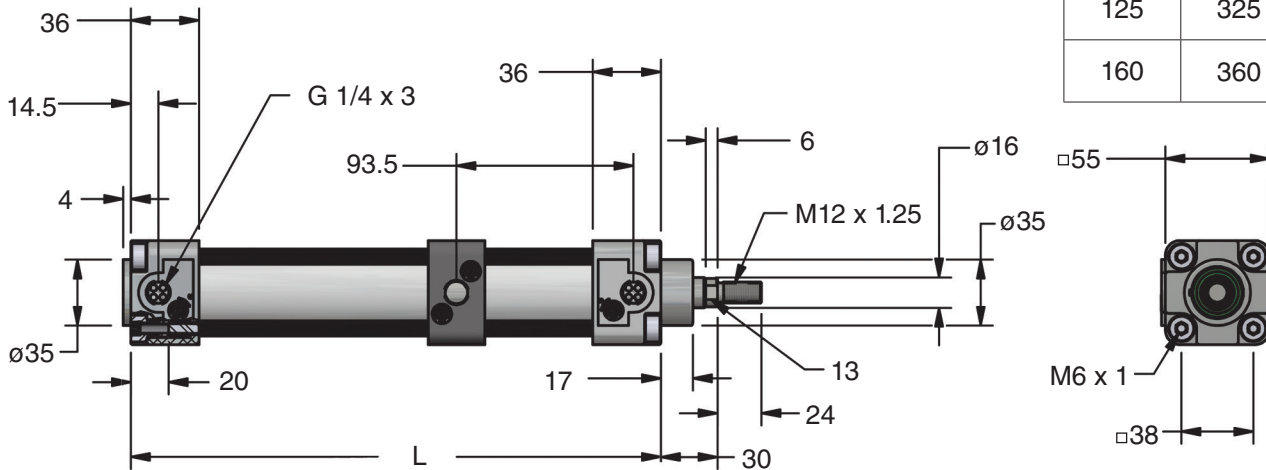


- **Double Acting Air Cylinder with an Intermediate Stop**
- **Rear, Center and Top Port Locations**
- **Flexible Mounting Configurations**

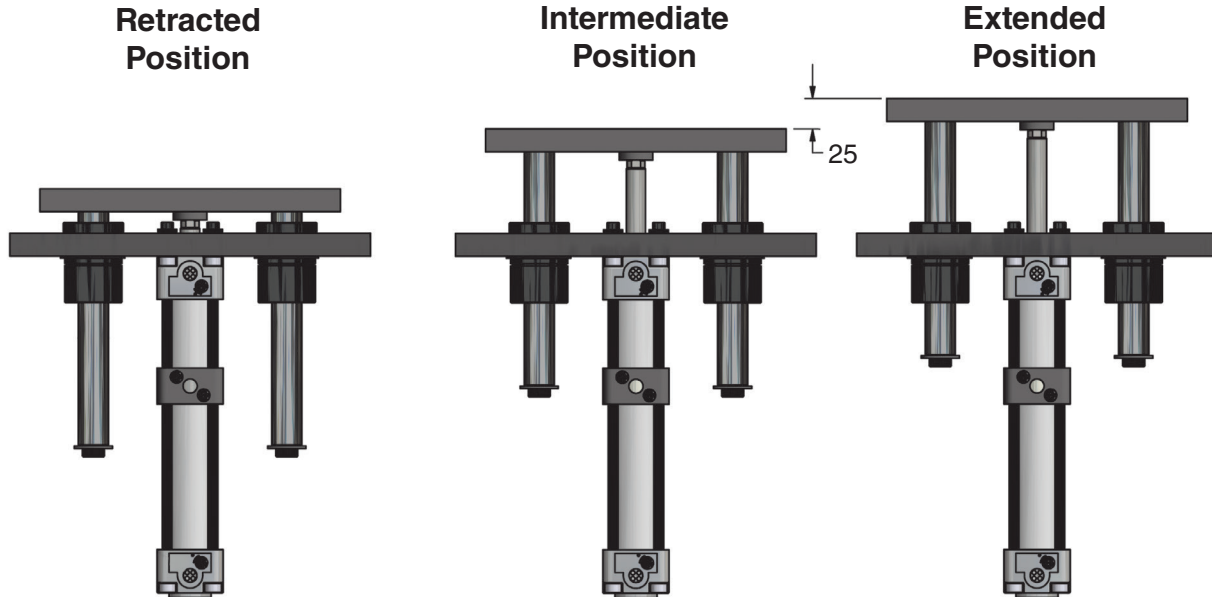
*Patented*

DADCO's HP3.40 is a new three position metric air cylinder that offers fully extended and fully retracted positions, as well as a fixed intermediate position that can be reached on both the advance and return stroke based on air supply controls. Various mount configurations are available including the non-rotating TDL2C mount.

Stroke S	L mm
80	280
100	300
125	325
160	360



### Example: HP3.40.S080.R025.G.1.TDL2C



The TDL2C mount option (shown), enables non-rotating operation of the three position air cylinder.  
See page 4 for additional mount options.

### Ordering Example:

Series and Rod Option	HP3. 40. S	Mount Option	TO
Bore	R025.	Port Location (1-4)	1.
Full Stroke Length (mm)	80, 100, 125, 160	Port Style	G
Intermediate Stroke	025.		

TO = Basic Cylinder, T1, T2, T3, T6, TDL2C  
When not specified default is TO. Mount ordered with cylinder will be attached at the factory.  
Standard = 1. When not specified, default is 1.  
G = 1/4 BSPP

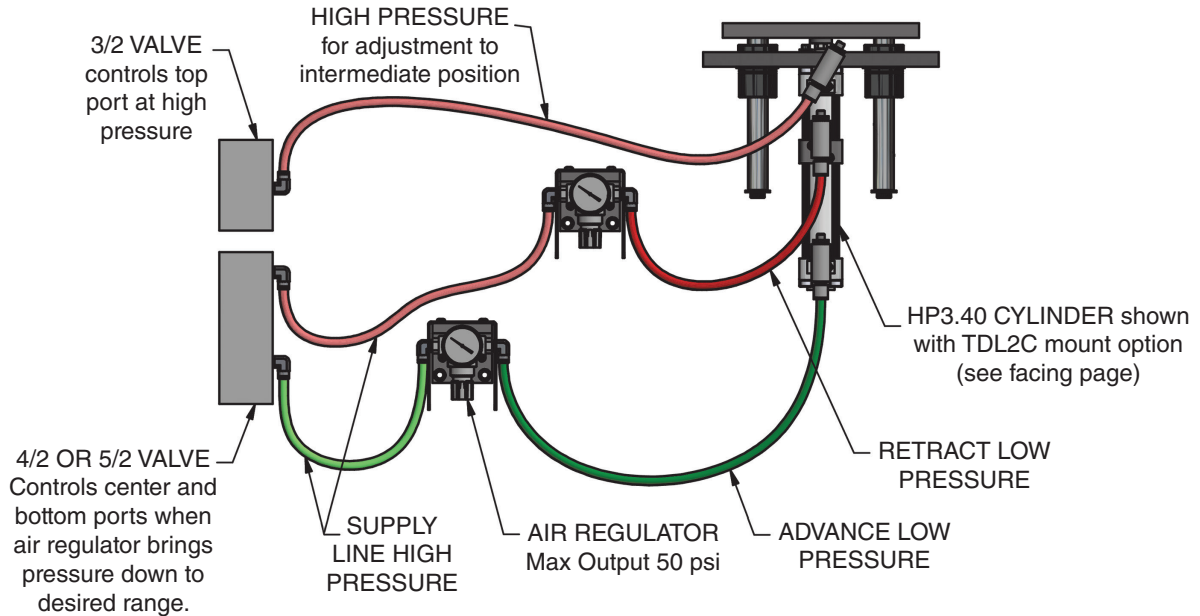
## HP3.40

### HP3.40 Application

The operation of the cylinder is controlled by how air is applied to the three ports:

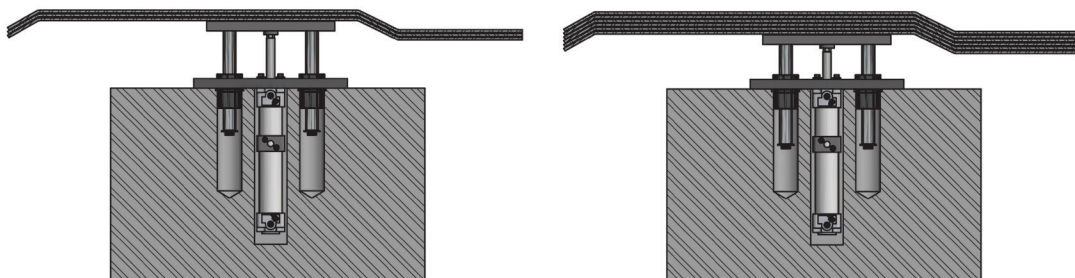
- Low pressure air applied only to the bottom port will cause the rod to extend fully.
- Low pressure air applied only to the center port will cause the rod to retract fully.
- High pressure air applied to the top port while low pressure air is applied to the bottom port will put the rod into the intermediate position.

It is important to maintain 30 psi minimum pressure differential between low and high air pressures.



Low Air Pressure <i>psi</i>	Advance Force <i>lb</i>	Return Force <i>lb</i>	Net Force For Initial Return (lbs) with High Air Pressure (psi)				
			60 <i>psi</i>	70 <i>psi</i>	80 <i>psi</i>	90 <i>psi</i>	100 <i>psi</i>
30	58	49	58	78	97	117	136
40	78	65	-	58	78	97	117
50	97	82	-	-	58	78	97
60	117	98	-	-	-	58	78

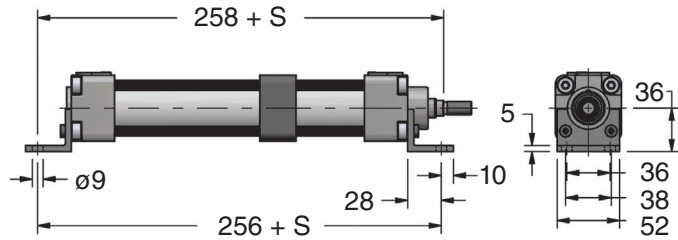
The HP3.40 application options are unlimited; this example shows parts being stacked first at the extended position then at the intermediate position.



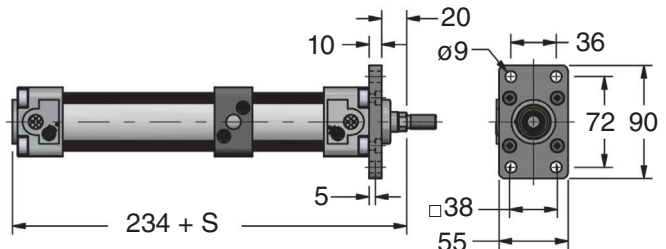
The HP3.40 can be paired with most mounts utilized by the DADCO HP Air Cylinder. The TDL2C mount provides non-rotating configuration while offering multiple attachment points.

Stroke S	H mm
80	284
100	304
125	329
160	364

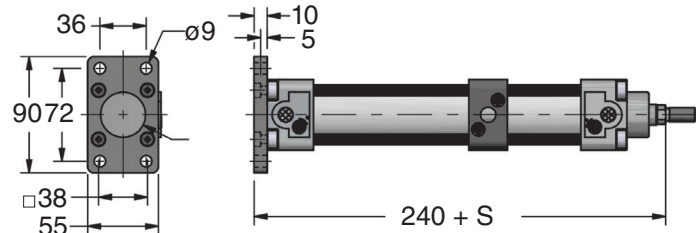
### T1 Foot Mount



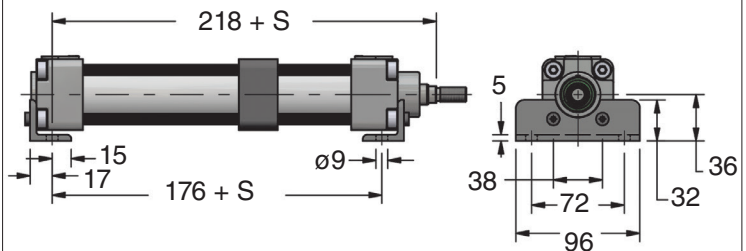
### T2 Flange Mount



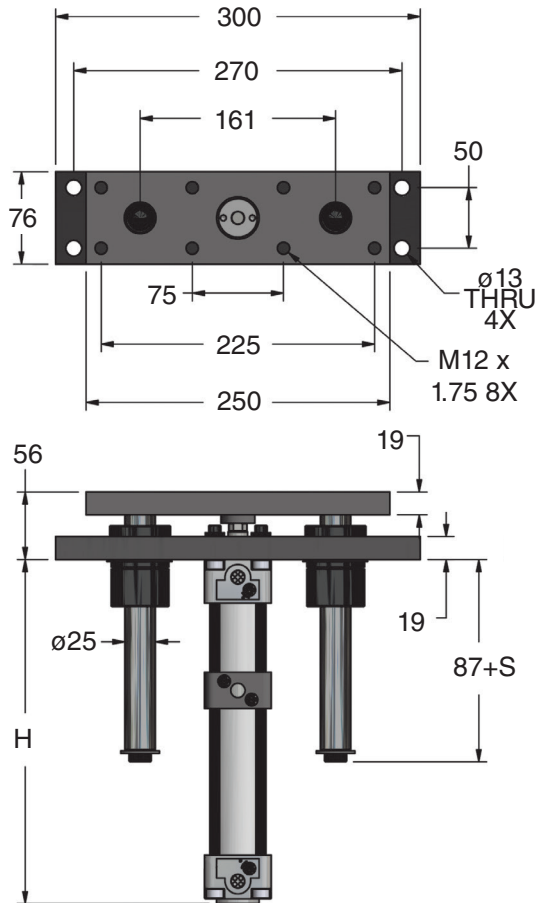
### T3 Rectangle Flange



### T6 Inverted Foot Mount



### TDL2C



### Ordering Example:

**HP3. 40. S . R025. G. 1. TO**

Series and Rod Option — HP3. 40. S  
 Bore — R025.  
 Full Stroke Length (mm) — G. 1.  
 80, 100, 125, 160  
 Intermediate Stroke — TO

### Mount Option

TO = Basic Cylinder, T1, T2, T3, T6, TDL2C  
 When not specified default is TO. Mount ordered with cylinder will be attached at the factory.

### Port Location (1-4)

Standard = 1. When not specified, default is 1.

### Port Style

G = 1/4 BSPP

## Air Regulator

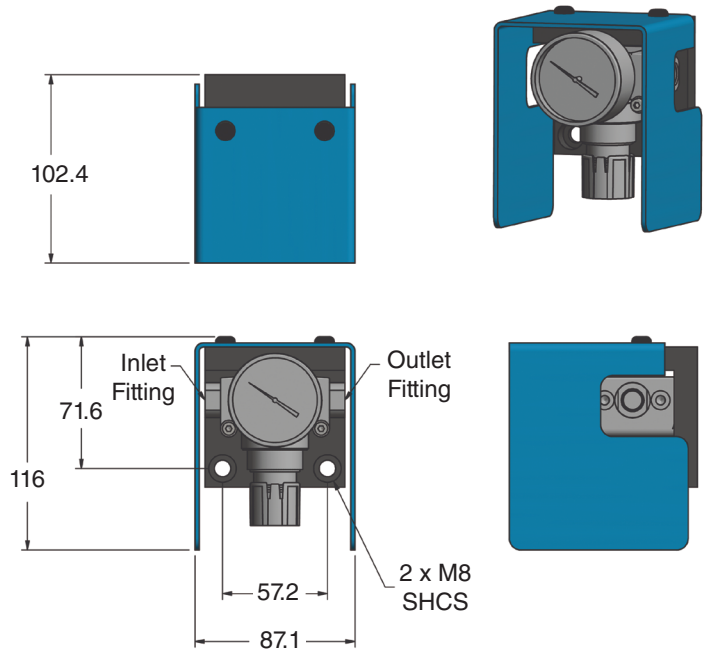
The Air Regulator with mounting bracket and guard is available to use with the HP3.40 or other DADCO Air Cylinder products. Unless otherwise specified, fittings are compatible with  $\varnothing 10$  pneumatic tubing and are shown below. For use in applications that require 0 – 50 psi.

### Ordering Example:

**Model:** HPAR.N.T

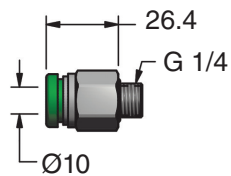
**Inlet Fitting:**  
 N = None,  
 S = Straight,  
 L = Elbow, T = Tee,  
 R = Run Tee

**Outlet Fitting:**  
 N = None,  
 S = Straight,  
 L = Elbow,  
 T = Tee,  
 R = Run Tee

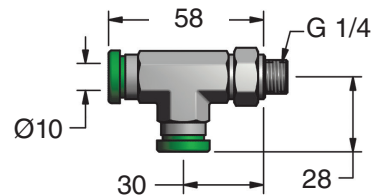


## Fittings

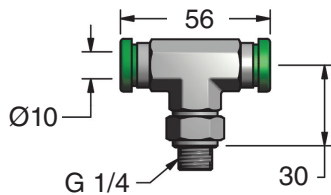
**Straight Port Adapter (S)**  
 FT.10.G04.T10



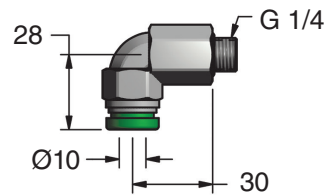
**Run Tee Port Adapter (R)**  
 FT.50.G04.T10



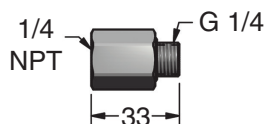
**Branch Tee Port Adapter (T)**  
 FT.40.G04.T10



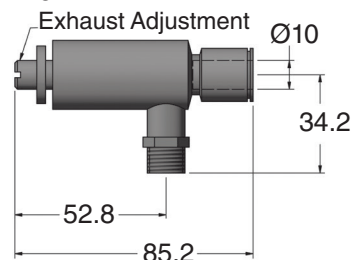
**Elbow Port Adapter (L)**  
 FT.20.G04.T10



**BSPP -> NPT Port Adapter**  
 FR.10.G04.N04



**Exhaust Elbow Port Adapter (X)**  
 FT.25.G04.T10





## Other DADCO Products



### Micro Series

- Ideal for coil spring replacement
- 12 mm to 32 mm in diameter
- Up to 3 kN of force on contact
- Attachable mounts and threaded body styles available



### ISO / 90.10 Series

- From 32 mm to 195 mm in diameter
- Forces up to 100 kN
- Full range of standard stroke lengths up to 300 mm
- Bolt-on or welded mounts available
- ISO Standards



### Ultra Force® – U Series

- 19 mm to 195 mm in diameter
- Forces up to 199 kN
- Full range of standard stroke lengths up to 125 mm



### Guide Retainer Sets

- Six rod diameters: 25, 30, 36, 45, 50 and 65 mm
- Robust one-piece housing with top and bottom wipers
- Various stroke lengths to suit application requirements



### SL2.090 and SL2.180 – Nitrogen Gas Spring Two Post Lifters

- 160 mm and 180 mm rail widths
- Powered by the **Micro 90®** and **Micro 180®**
- Stroke lengths available from 23 mm to 198K mm
- Two post for rail lift applications
- Compact Rail Plate available



### SLN.090 and SLN.180 – Micro Nitrogen Gas Lifters

- Non-rotating design; provides lift and guidance
- Two guide rod options for single point, multipoint or rail lift applications
- Compact design powered by the **Micro 90®** and **Micro 180®**
- Stroke lengths available from 25 mm to 125 mm

# DADCO®

The global leader in nitrogen gas spring technology

43850 Plymouth Oaks Blvd. • Plymouth, Michigan 48170 • USA

1.734.207.1100 • fax 1.734.207.2222 • www.dadco.net