

**D3PR/D3PF Series**



*D3 Series Relay*

**Features**




**D3PR**


- Compact relay capable of breaking relatively large load currents
- The contact operation can be easily checked by push-to-test button
- Panel and DIN rail mounting
- 8- or 11-pin octal plug-in

**D3PF**

- Flag indicator shows relay status in manual or powered condition
- LED status lamp shows coil “ON” or “OFF” status — ideal for use in low light applications
- Push-to-test button allows for manual operation of relay without the need for coil power
- Lock-down door holds pushbutton and contacts in the operate position when activated
- Finger-grip cover allows operator to remove relays from sockets easily
- I.D. tag/write label to identify relays in multiple-relay circuits
- Bi-polar LED allows for reverse polarity applications

**Standards and Certifications**




 (CSA approval not applicable to D3PR5 Relays)


 When used with accompanying Cutler-Hammer® screw terminal socket (for D3PF only).

**Technical Data and Specifications**

**Table 3-30. Coil Resistance for D3PR Series**

Coil Voltage	Ohms		mA			
	D3PR2/PR3	D3PR5 – DC (Each Coil)	D3PR2/PR3 – AC		D3PR5 – AC	
			50 Hz	60 Hz	50 Hz	60 Hz
6V AC	4.2	—	550	458	—	—
12V AC	18	—	275	229	—	—
24V AC	72	52	137	114	13	11
120V AC	2200	1200	28	23	3.5	2.8
240V AC	7200	3200	13	11	1.7	1.6
6V DC	32	—	187		—	
12V DC	120	88	100		136	
24V DC	470	350	50		69	
48V DC	1900	—	25		—	
110V DC	10000	4000	11		27	

**Table 3-31. Coil Resistance for D3PF Series**

Coil Voltage	Ohms	mA	
		50 Hz	60 Hz
24V AC	72	398.0	340
120V AC	1,700	76.0	65
240V AC	7,200	28.0	24
12V DC	120	100.0	—
24V DC	470	49.9	—
110V DC	10,000	13.2	—

### D3PR/DP3F Series — Standard and Full Featured

**Table 3-32. Relay Specifications**

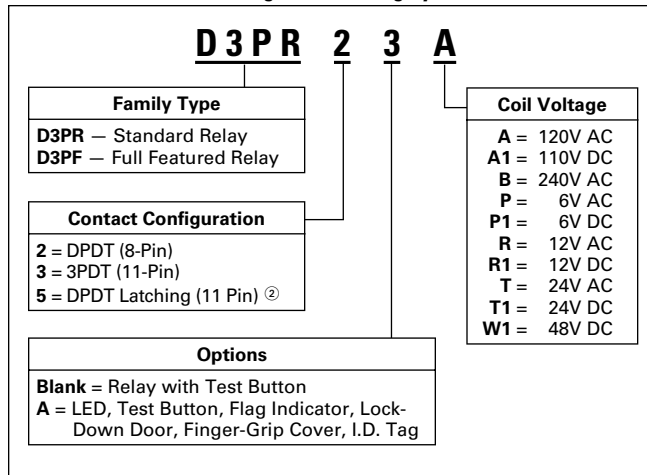
	D3PR2/D3PR3	D3PR2/D3PR3	D3PF2/D3PF3	D3PR5	D3PR5
	Resistive Load (p.f. = 1)	Inductive Load (p.f. = 0.4, L/R = 7 ms)	Resistive Load (p.f. = 1.0)	Resistive Load (p.f. = 1)	Inductive Load (p.f. = 0.4, L/R = 7 ms)
Rated Load	240V AC 10A 120V AC 12A 28V DC 10A	240V AC 7A 120V AC 7A 28V DC 7A	240V AC 12A 120V AC 12A 28V DC 12A	240V AC 10A 120V AC 12A 30V DC 10A	240V AC 7A 120V AC 7A 30V DC 7A
Carry Current	10A	10A	12 Amps	10A	10A
Max. Operating Voltage	240V AC/DC	240V AC/DC	110% of nominal	240V AC/DC	240V AC/DC
Contact Resistance	50 milli Ω's Max. @ 10 Amps 120V AC or 24V DC	50 milli Ω's Max. @ 10 Amps 120V AC or 24V DC	50 milli Ω's Max. @ 10 Amps 120V AC or 24V DC	50 milli Ω's Max. @ 10 Amps 120V AC or 24V DC	50 milli Ω's Max. @ 10 Amps 120V AC or 24V DC
Dielectric Strength	1500V	1500V	1500V	1500V	1500V
Approx. Weight	3.5 oz (99.2g)	3.5 oz (99.2g)	3.1 oz (88g)	3.5 oz (99.2g)	3.5 oz (99.2g)
Temperature — Operating	-49 – 131°F (-45 – 55°C) AC -49 – 158°F (-45 – 70°C) DC	-49 – 131°F (-45 – 55°C) AC -49 – 158°F (-45 – 70°C) DC	-22 – 122°F (-30 – 50°C)	-49 – 131°F (-45 – 55°C) AC -49 – 158°F (-45 – 70°C) DC	-49 – 131°F (-45 – 55°C) AC -49 – 158°F (-45 – 70°C) DC
Storage	-40 – 221°F (-40 – 105°C)	-40 – 221°F (-40 – 105°C)	-22 – 212°F (-30 – 100°C)	-40 – 221°F (-40 – 105°C)	-40 – 221°F (-40 – 105°C)
Contact Material	AgCdO (Au Flashed)	AgCdO (Au Flashed)	AgCdO (Au Flashed)	AgCdO (Au Flashed)	AgCdO (Au Flashed)
Max. Switching Capacity	2500 VA 280W	1750 VA 196W	12 Amps	1100 VA 72W	440 VA 60W
Min. Permissible Load	100 mA @ 12V	100 mA @ 12V	100 mA	100 mA @ 12V	100 mA @ 12V
Pickup Voltage (max.)	80%	80%	85% AC; 80% DC	—	—
Drop Out Voltage (min.)	10%	10%	30% AC 10% DC	—	—
Set/Reset Voltage (max.)	—	—	—	80%	80%
Voltage (max.)	110%	110%	110%	110%	110%
Mechanical Life (min.)	10,000,000	10,000,000	5 million (No Load)	10,000,000	10,000,000
Electrical Life @ All Contact Ratings (min.)	100,000	100,000	200,000 operations at Rated Res. Load	100,000	100,000
Maximum hp Ratings	1/3 hp (120V AC) 1/2 hp (240V AC)	1/3 hp (120V AC) 1/2 hp (240V AC)	1/3 hp, 120V AC 1/2 hp, 240V AC	1/3 hp (120V AC) 1/2 hp (240V AC)	1/3 hp (120V AC) 1/2 hp (240V AC)

**Table 3-33. Socket Specifications**

Catalogue Number	Electrical Ratings	Mounting Torque	Hook-Up Wire Range
D3PA2	10A, 600V 15A, 300V	8 – 10 in-lbs	AWG 12 to 22 Solid or Stranded
D3PA3-A2	5A, 600V 15A, 300V	8 – 10 in-lbs	AWG 12 to 22 Solid or Stranded
D3PA6	5A, 600V 16A, 300V	8 – 10 in-lbs	AWG 12 to 20 Solid or Stranded
D3PA7	5A, 600V 16A, 300V	8 – 10 in-lbs	AWG 12 to 20 Solid or Stranded
D3PA4	10A, 260V	N/A	AWG 14 Max.
D3PA5	10A, 260V	N/A	AWG 14 Max.

**Catalogue Number Structure**

**Table 3-34. D3 Series Catalogue Numbering System** ①



① For deciphering Catalogue Numbers. Do not use for ordering as not all combinations are readily available.

② D3PR only.

**Table 3-35. Relay/Socket Quick Reference**

Relay Type	Socket Type	Socket	Hold Down Spring/Clip
D3PR2	8 Pin Octal	D3PA2	PQC-1344
		D3PA4	Not Available
		D3PA6	PQC-1332
D3PF2	8 Pin Octal — Finger-safe terminals	D3PA2	PQC-1344
		D3PA6	PQC-1332
D3PR3	11 Pin Octal	D3PA3-A2	PQC-1351
		D3PA5	Not Available
		D3PA7	PQC-1332
D3PF3	11 Pin Octal — Finger-safe terminals	D3PA3-A2	PQC-1351
		D3PA7	PQC-1332
D3PR5	11 Pin Octal	D3PA3-A2	PQC-1351
		D3PA5	Not Available
		D3PA7	PQC-1332

**Product Selection**

**Table 3-36. D3 Product Selection** ③

	Std. Pack	Catalogue Number
<b>Standard DPDT with Test Button</b>		
Coil Voltage:		
12V AC	1	D3PR2R
24V AC	1	D3PR2T
120V AC	1	D3PR2A
240V AC	1	D3PR2B
12V DC	1	D3PR2R1
24V DC	1	D3PR2T1
110V DC	1	D3PR2A1
<b>DPDT Full Featured Relay</b>		
24V AC	1	D3PF2AT
120V AC	1	D3PF2AA
240V AC	1	D3PF2AB
12V DC	1	D3PF2AR1
24V DC	1	D3PF2AT1
110V DC	1	D3PF2AA1
<b>Standard 3PDT with Test Button</b>		
Coil Voltage:		
24V AC	1	D3PR3T
120V AC	1	D3PR3A
240V AC	1	D3PR3B
12V DC	1	D3PR3R1
24V DC	1	D3PR3T1
110V DC	1	D3PR3A1
<b>3PDT Full Featured Relay</b>		
24V AC	1	D3PF3AT
120V AC	1	D3PF3AA
240V AC	1	D3PF3AB
24V DC	1	D3PF3AT1
110V DC	1	D3PF3AA1
<b>DPDT Latching</b> ⑤		
24V AC	1	D3PR5T
120V AC	1	D3PR5A
<b>DIN Rail Sockets</b>		
2-Pole (8-Pin)	10	D3PA2
2-Pole (8-Pin) Finger-Safe ⑥	1	D3PA6
3-Pole (11-Pin)	10	D3PA3
3-Pole (11-Pin) Finger-Safe ⑥	1	D3PA7
<b>Panel Mount Sockets</b>		
2-Pole	10	D3PA4
3-Pole	10	D3PA5
<b>Accessories</b>		
Hold Down Clip	10	PQC-1344
Hold Down Clip	25	PQC-1332
Hold Down Clip	10	PQC-1351
Hold Down Clip	100	PWC-1325
Coil Buss Jumper for D3PA6 & D3PA7	25	D3PJ1
DIN Rail End Stop ④	100	PFP-M

③ Additional coil voltages available — consult Contact Customer Support Centre 1-800-268-3578.

④ Dimensions on **Page 31**.

⑤ CSA approval is not applicable to D3PR5 Latching Relays.

⑥ IP20 Rated.

## D3PR/DP3F Series — Standard and Full Featured

### Dimensions

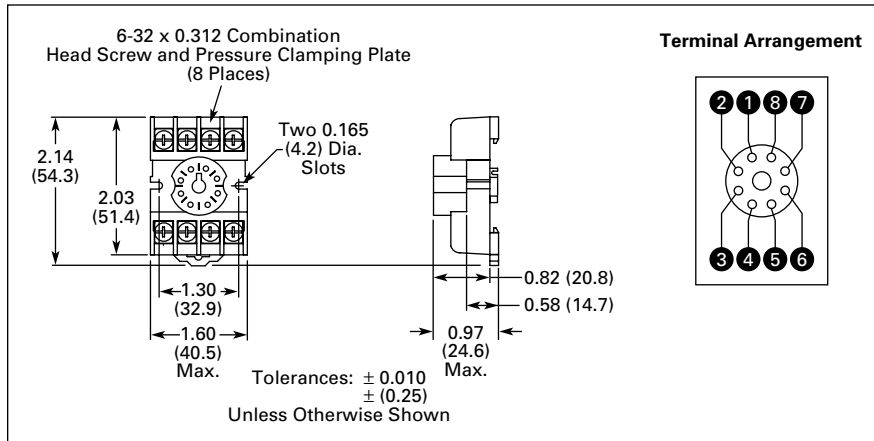


Figure 3-31. D3PA2 — Approximate Dimensions in Inches (mm)

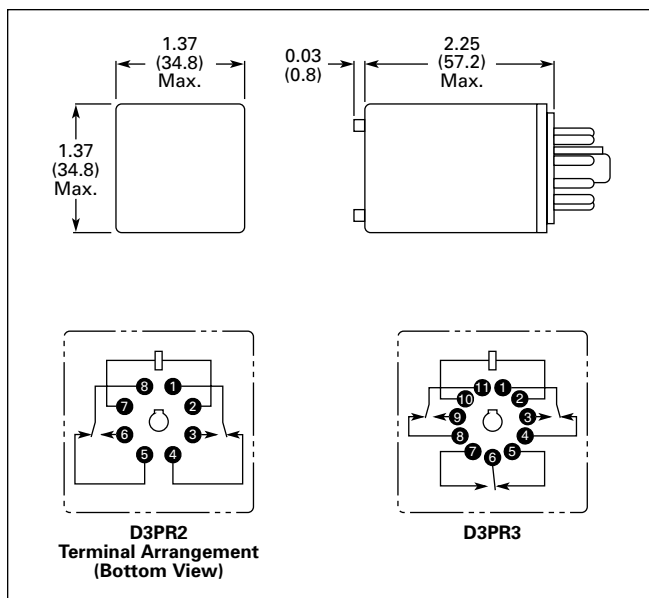


Figure 3-32. D3PR2/D3PR3 — Approximate Dimensions in Inches (mm)

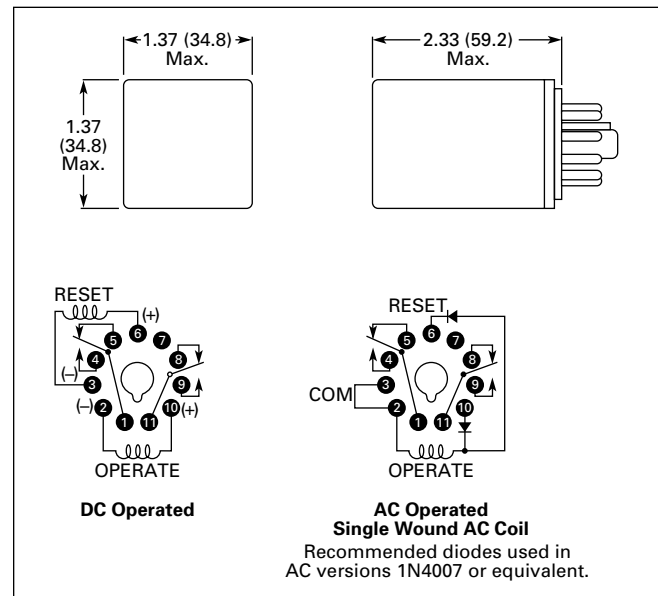


Figure 3-33. D3PR5 — Approximate Dimensions in Inches (mm)

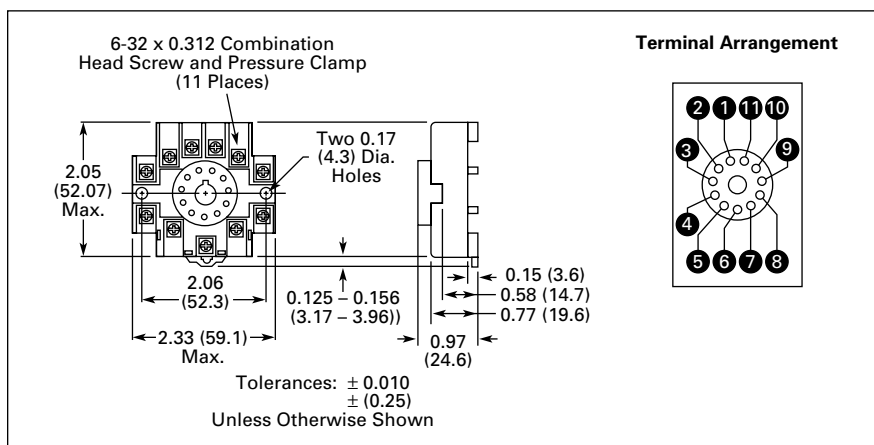


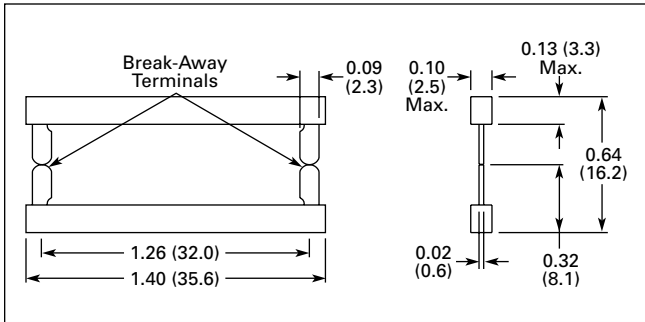
Figure 3-34. D3PA3-A2 — Approximate Dimensions in Inches (mm)

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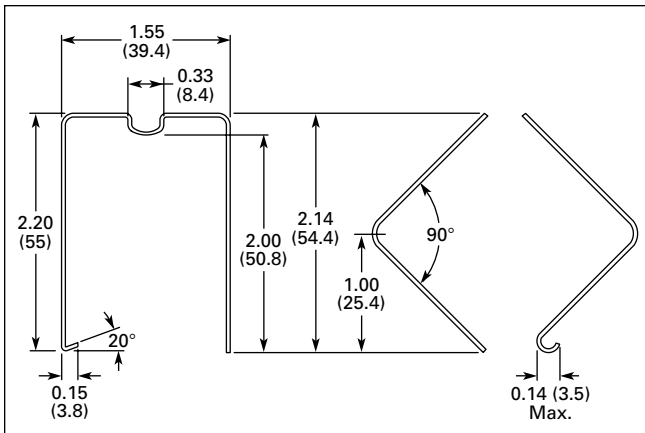
**D3PR/DP3F Series — Standard and Full Featured**



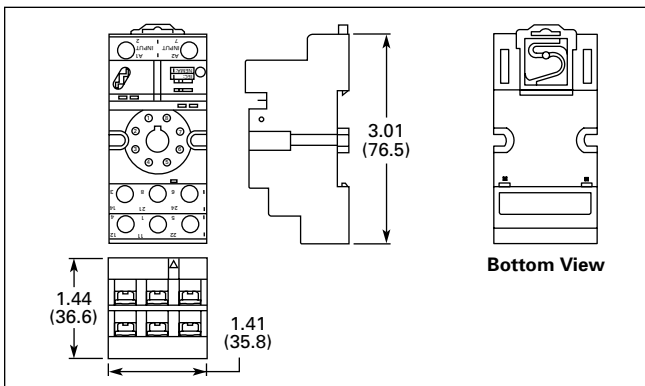
**D3PJ1**



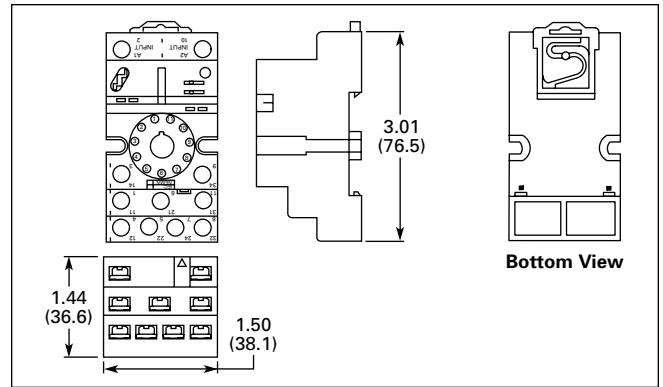
**Figure 3-35. D3PJ1 — Approximate Dimensions in Inches (mm)**



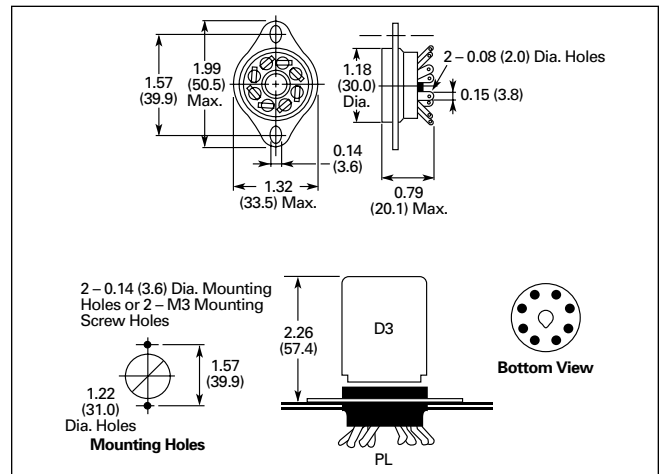
**Figure 3-36. PQC-1332 — Approximate Dimensions in Inches (mm)**



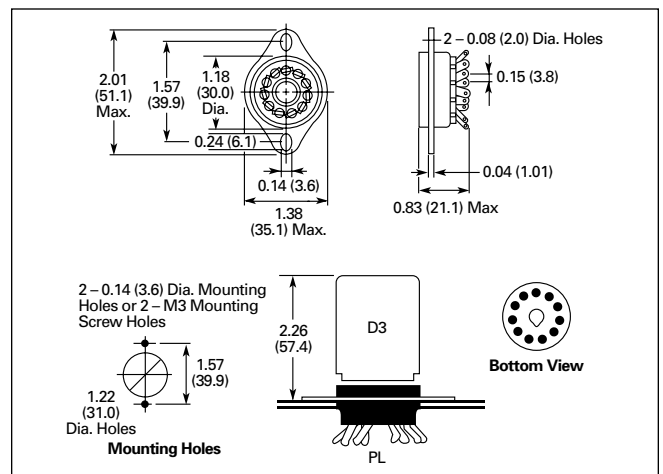
**Figure 3-37. D3PA6 — Approximate Dimensions in Inches (mm)**



**Figure 3-38. D3PA7 — Approximate Dimensions in Inches (mm)**

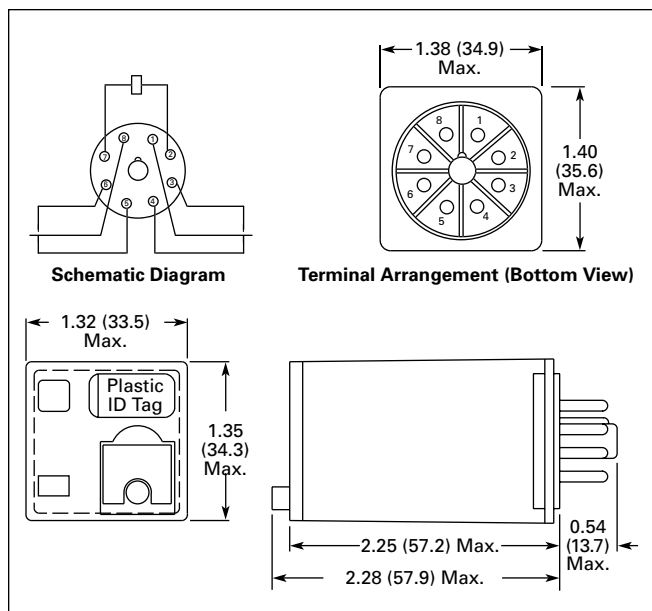


**Figure 3-39. D3PA4 — Approximate Dimensions in Inches (mm)**

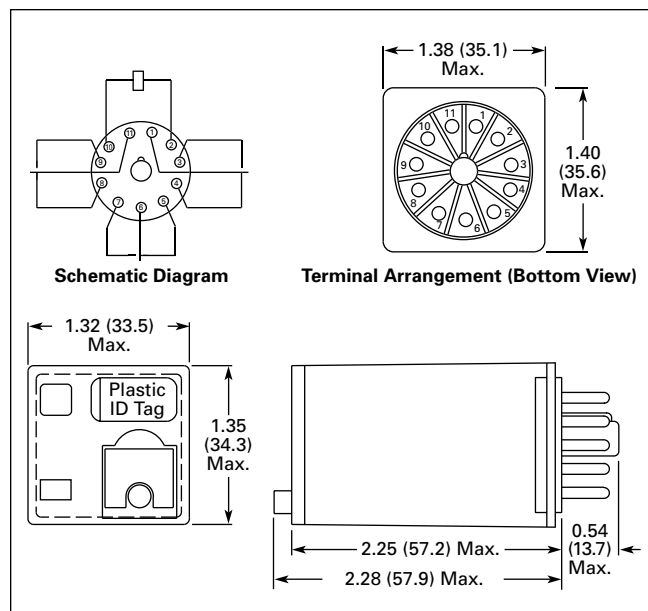


**Figure 3-40. D3PA5 — Approximate Dimensions in Inches (mm)**

**D3PR/DP3F Series — Standard and Full Featured**



**Figure 3-41. D3PF2 — Approximate Dimensions in Inches (mm)**



**Figure 3-42. D3PF3 — Approximate Dimensions in Inches (mm)**