



- Industry standard footprint, now with terminal
- Blades with no holes for better mounting in sockets
- Integral LED (Red for AC, Green for DC coils)
- Locking test lever with press feature (Blue for DC, Red for AC coils)
- Welded (not soldered) coil connections for greater reliability



### Contacts

Contact arrangement	4PDT (4C/O)
Contact material	AgNi (90/10)
Max. switching voltage	277VAC, 30VDC
Min. breaking capacity	0.3W
Rated load (resistive - $\cos \varphi=1$ )	AC1 4PDT: 5A/240VAC
	DC1 4PDT: 5A/28VDC
Initial resistance	$\leq 100\text{m}\Omega$

### Coil

Nominal voltage	DC 6...110V, AC 6...240V
Must release voltage	DC $\geq 0.1U_n$ , AC $\geq 0.3U_n$
Operating range of supply voltage	See tables 1 & 2
Rated power consumption	DC 0.9W, AC 1.2VA

### Insulation

Insulation resistance	$\geq 100\text{ M}\Omega$ at 500VDC, 50% RH
Dielectric strength	coil to contact 1500V <sub>rms</sub> , 1min (50Hz), 1mA
	contact to contact 1000V <sub>rms</sub> , 1min (50Hz), 1mA
	between adjacent contacts 1200V <sub>rms</sub> , 1min (50Hz), 1mA

### General Data

Operating time	typ. $\leq 15\text{ms}$
Release time	typ. $\leq 10\text{ms}$
Electrical life	ops. $1 \times 10^5$
Mechanical life	ops. $1 \times 10^7$

### Environmental

Environmental protection	IP40
Ambient temperature	operating -40 to +70°C
	storage -55 to +70°C
Shock resistance	10G, 11ms
Vibration resistance	DA 1.0mm 10-55Hz
Dimensions	L x W x H 27 x 21 x 36.5mm
Weight	approx. $\leq 35\text{g}$

### Ordering Code

D X 4 - 2 0 1 4 - 2 3 - 1 0 1 2 - W T L

#### Series

**Contact material**  
20: AgNi(90/10)

**Contact arrangement**  
14: 4PDT (4C/O)

**Environmental protection IP40**  
2: In cover

**Mounting & terminations**  
3: For plug-in sockets only

#### Options

Blank: Without LED & test lever (to special order only)  
WTL: LED indication of coil energization & test lever (standard)

**Notes:**  
For AC loads this relay is designed for 50-60Hz standard industrial power and was tested according to AC1 category as defined by the IEC 60947-1 standard, covering low-frequency switchgear (typically 50-60 Hz).  
Operating at higher frequencies, places the component outside its certified utilisation category, invalidating all safety certifications (CE, UL, etc.) and manufacturer performance guarantees.

DC Coil Data (Green LED)

Table 1

Coil code	Nominal voltage (VDC)	Coil resistance $\Omega \pm 10\%$	Power consumption (mW)	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Max. allowable voltage (VDC)
1006	6	40	900	4.5	0.6	6.6
1012	12	160	900	9.0	1.2	13.2
1024	24	640	900	18.0	2.4	26.4
1048	48	2600	900	36.0	4.8	52.8
1110	110	13450	900	82.5	11.0	121.0

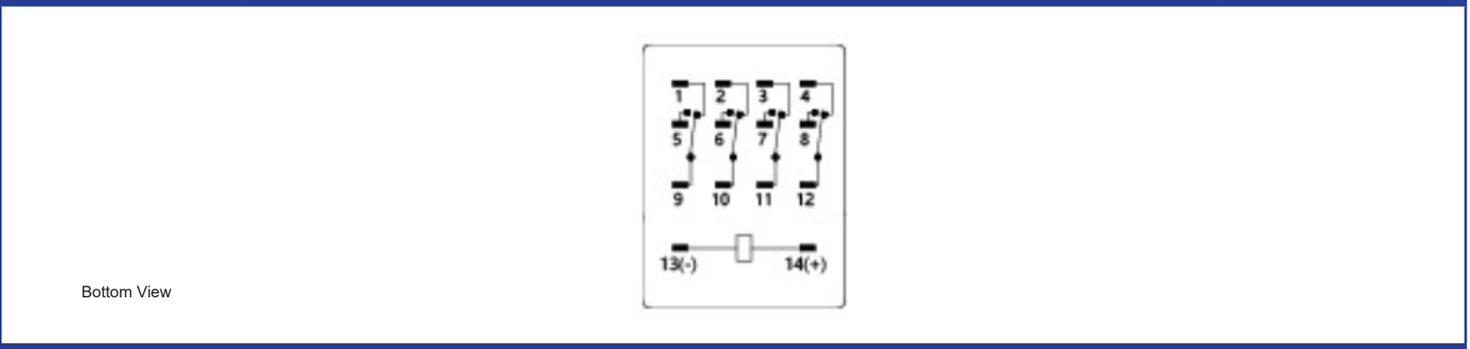
AC Coil Data at 50/60Hz (Red LED)

Table 2

Coil code	Nominal voltage (VAC)	Rated coil current (mA) $+15/-20\%$	Power consumption approx. (VA)	Must operate voltage max. (VAC)	Must release voltage min. (VAC)	Max. allowable voltage (VAC)
3006	6	10.5	1.2	4.8	1.8	6.6
3012	12	42	1.2	9.6	3.6	13.2
3024	24	168	1.2	19.2	7.2	26.4
3048	48	672	1.2	38.4	14.4	52.8
3110	110	3530	1.2	88.0	33.0	121.0
3120	120	4200	1.2	96.0	36.0	132.0
3230	230	15430	1.2	176.0	66.0	242.0

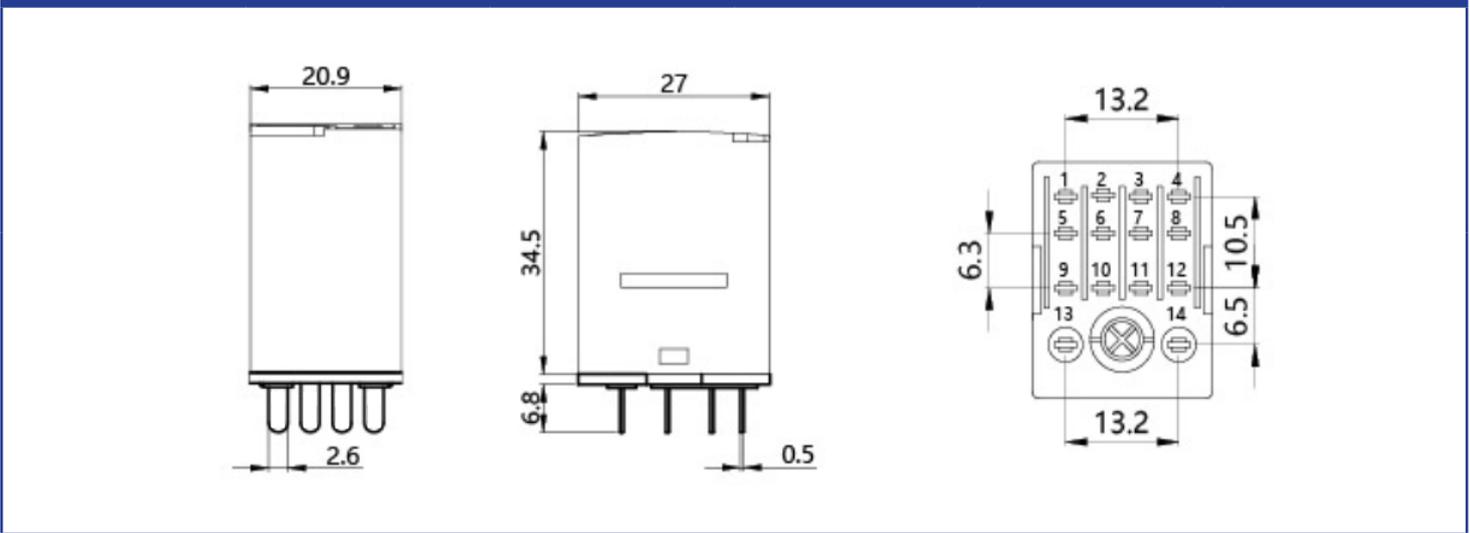
Wiring Diagram

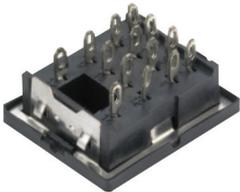
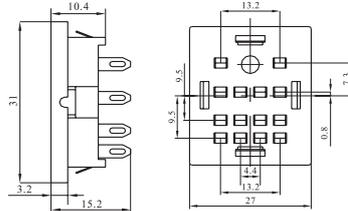
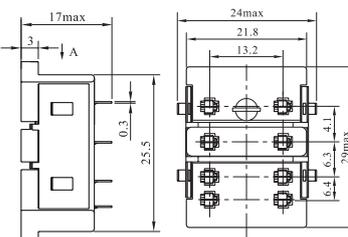
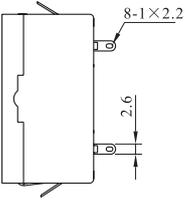
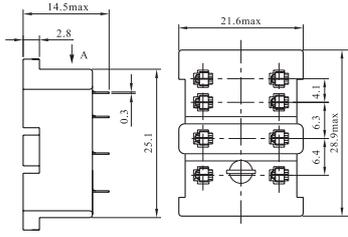
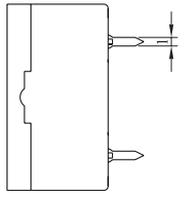
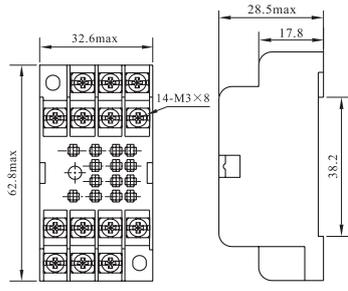
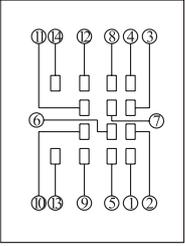
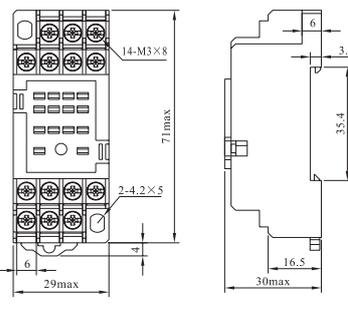
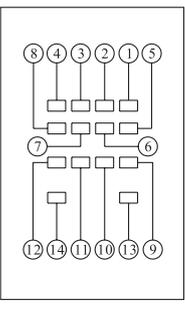
Fig. 1



Overall Dimensions mm

Fig. 2



Sockets for the DX4 relay	Parameters	Outline Drawing	Wiring Diagram
 <p><b>D18F-4Z-A</b></p>	<p>Rated voltage: 250VAC            Rated current: 7A            Insulation voltage: <math>\geq 3KV</math>            Socket material: PA66+GF (V1/V0)            Contacts spring material: QSn6.5-0.1</p> <p>Metal retainer clip (page 8): JH-001RC</p> <p>Module: No</p>		
 <p><b>D18F-4Z-A1</b></p>	<p>Rated voltage: 250VAC            Rated current: 7A            Insulation voltage: <math>\geq 3KV</math>            Socket material: PBT (V1/V0)            Contacts spring material: QSn6.5-0.1</p> <p>Metal retainer clip (page 8): JH-001RC</p> <p>Module: No</p>		
 <p><b>D18F-4Z-A2</b></p>	<p>Rated voltage: 250VAC            Rated current: 5A            Insulation voltage: <math>\geq 3KV</math>            Socket material: PA66+GF (V1/V0)            Contacts spring material: QSn6.5-0.1</p> <p>Metal retainer clip (page 8): JH-001RC</p> <p>Module: No</p>		
 <p><b>D18F-4Z-B</b></p>	<p>Rated voltage: 250VAC            Rated current: 5A            Insulation voltage: <math>\geq 3KV</math>            Socket material: PA46-S250F6 (V1/V0)            Contacts spring material: QSn6.5-0.1</p> <p>Metal retainer clip (page 8): JH-001RC</p> <p>Module: No</p>		
 <p><b>D18F-4Z-C1-N</b></p>	<p>Rated voltage: 250VAC            Rated current: 5A            Insulation voltage: <math>\geq 3KV</math>            Socket material: PA46-S250F6 (V1/V0)            Contacts spring material: QSn6.5-0.1</p> <p>Metal retainer clip (page 8): JH-006RC</p> <p>Module: No</p>		

### Sockets for the DX4 relay

### Parameters

### Outline Drawing

### Wiring Diagram



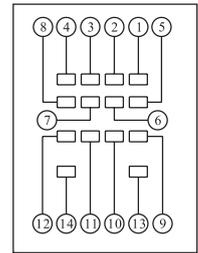
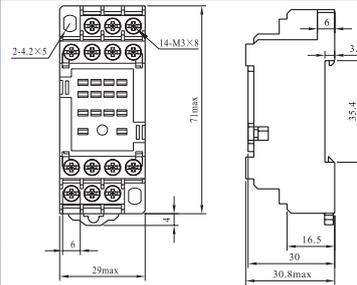
**D18F-4Z-C2-N**



Rated voltage: 250VAC  
 Rated current: 7A  
 Insulation voltage:  $\geq 3KV$   
 Socket material: PA66+GF (V1/V0)  
 Contacts spring material: QSn6.5-0.1

Metal retainer clip (page 8): JH-006RC

Module: No



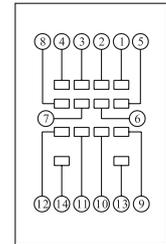
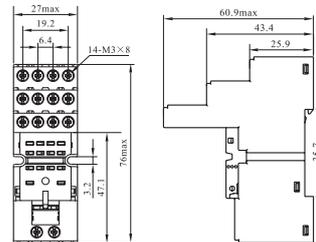
**D18F-4Z-C3**



Rated voltage: 300VAC  
 Rated current: 10A  
 Insulation voltage:  $\geq 3KV$   
 Socket material: PA66+GF (V1/V0)  
 Contacts spring material: QSn6.5-0.1

Metal retainer clip (page 8): JH-36MS-B  
 Plastic ejector clip (page 8): JH-36PS-A

Module: No



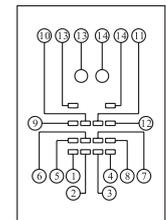
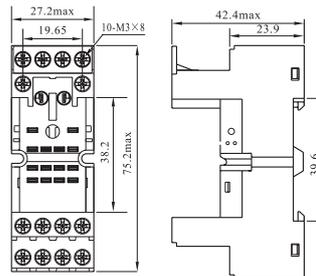
**D18F-4Z-C4**



Rated voltage: 300VAC  
 Rated current: 10A  
 Insulation voltage:  $\geq 3KV$   
 Socket material: PA46-S250F6 (V1/V0)  
 Contacts spring material: QSn6.5-0.1

Metal retainer clip (page 8): JH-36MS-B  
 Plastic ejector clip (page 8): JH-36PS-A

Module (pages 5-7): All DM\*\*\*-BK



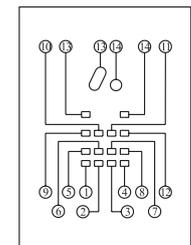
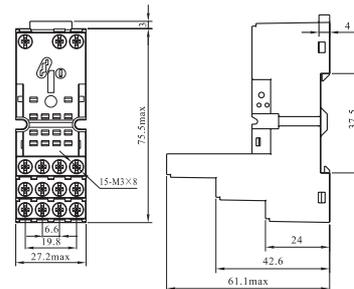
**D18F-4Z-C5**



Rated voltage: 300VAC  
 Rated current: 10A  
 Insulation voltage:  $\geq 3KV$   
 Socket material: PA46-S250F6 (V1/V0)  
 Contacts spring material: QSn6.5-0.1

Metal retainer clip (page 8): JH-36MS-B  
 Plastic ejector clip (page 8): JH-36PS-A

Module (pages 5-7): All DM\*\*\*-BK



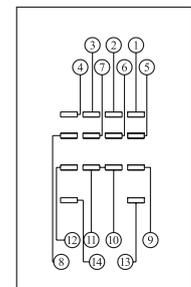
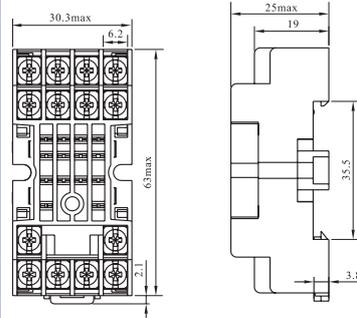
**D18F-4Z-C6**



Rated voltage: 250VAC  
 Rated current: 5A  
 Insulation voltage:  $\geq 3KV$   
 Socket material: PA66+GF (V1/V0)  
 Contacts spring material: QSn6.5-0.1

Metal retainer clip (page 8): JH-505RC

Module: No



## Sockets for the DX4 relay

## Parameters

## Outline Drawing

## Wiring Diagram



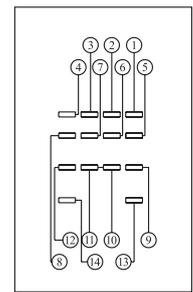
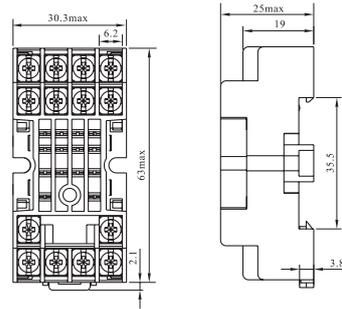
**D18F-4Z-C7**



Rated voltage: 250VAC  
Rated current: 5A  
Insulation voltage:  $\geq 3KV$   
Socket material: PA66+GF (V1/V0)  
Contacts spring material: QSn6.5-0.1

Metal retainer clip JH-36MS-B

Module: No



**D18F-4Z-C8**

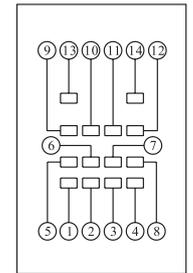
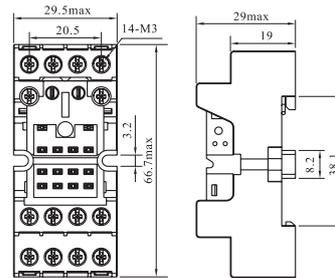


Rated voltage: 300VAC  
Rated current: 10A  
Insulation voltage:  $\geq 3KV$   
Socket material: PA66+GF (V1/V0)  
Contacts spring material: QSn6.5-0.1

Metal retainer clip (page 8): JH-36MS-B

Plastic ejector clip (page 8): JH-36PS-A

Module (pages 5-7): All DM\*\*\*-BK



**D18F-4Z-C9**

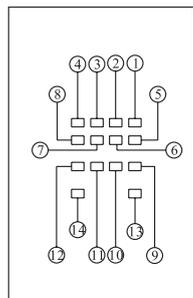
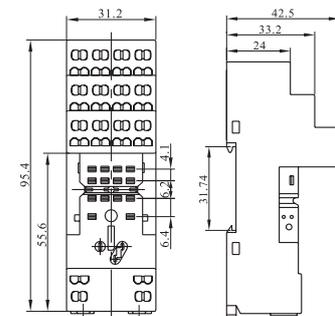


Rated voltage: 300VAC  
Rated current: 10A  
Insulation voltage:  $\geq 3KV$   
Socket material: PA66+GF (V1/V0)  
Contacts spring material: QSn6.5-0.1

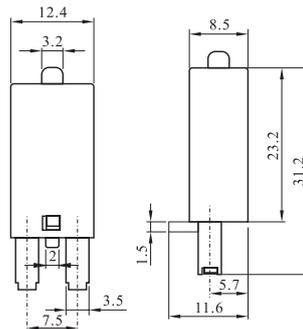
Metal retainer clip (page 8): JH-36MS-B

Plastic ejector clip (page 8): JH-36PS-A

Module (pages 5-7): All DM\*\*\*-BK



## Modules for Durakool Sockets - Round Pin Plug-in



Notes:  
Durakool modules for sockets have a round LED and square shoulders.

Part No	Socket Types	Circuit	Description
DM21P-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Diode A1-
DM21N-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Diode A1+
DM31R-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Red LED with diode, 6 - 24VDC, A1-

All accessories are upon request only.

## Modules for Durakool Sockets - Round Pin Plug-in

Part No	Socket Types	Circuit	Description
DM31G-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Green LED with diode, 6 - 24VDC, A1-
DM32R-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Red LED with diode, 24 - 60VDC, A1-
DM32G-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Green LED with diode, 24 - 60VDC, A1-
DM33R-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Red LED with diode, 110 - 230VDC, A1-
DM33G-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Green LED with diode, 110 - 230VDC, A1-
DM41R-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Red LED with diode, 6 - 24VDC, A1+
DM41G-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Green LED with diode, 6 - 24VDC, A1+
DM42R-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Red LED with diode, 24 - 60VDC, A1+
DM42G-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Green LED with diode, 24 - 60VDC, A1+
DM43R-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Red LED with diode, 110 - 230VDC, A1+
DM43G-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Green LED with diode, 110 - 230VDC, A1+
DM51-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		RC Network, 6 to 24V
DM52-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		RC Network, 24V to 60V
DM53-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		RC Network, 110 to 230V
DM61R-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Red LED, 6 - 24VAC/DC

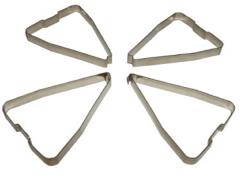
All accessories are upon request only.

## Modules for Durakool Sockets - Round Pin Plug-in

Part No	Socket Types	Circuit	Description
DM61G-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Green LED, 6 - 24VAC/DC
DM62R-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Red LED, 24 - 60VAC/DC
DM62G-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Green LED, 24 - 60VAC/DC
DM63R-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Red LED, 110 - 230VAC/DC
DM63G-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Green LED, 110 - 230VAC/DC
DM71-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Varistor 24VAC
DM72-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Varistor 115VAC
DM73-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Varistor 230VAC
DM91R-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Red LED with varistor, 6 - 24VAC/DC
DM91G-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Green LED with varistor, 6 - 24VAC/DC
DM92R-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Red LED with varistor, 24 - 60VAC/DC
DM92G-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Green LED with varistor, 24 - 60VAC/DC
DM93R-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Red LED with varistor, 110 - 230VAC/DC
DM93G-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Green LED with varistor, 110 - 230VAC/DC
DM103-BK	D14F Series -C2, C3, C5, C9; D18F Series -C4, C5, C8, C9		Resistor 110 - 230VAC

All accessories are upon request only.

### Retaining Springs and Ejector Clips for Durakool Sockets

 <p><b>JH-001RC</b></p>	<p>Matching Socket(s): D18F-4Z-A/A1/ A2/B</p>  <p><b>JH-006RC</b></p>	<p>Matching Socket(s): D18F-4Z-C1-N/ C2-N</p>  <p><b>JH-36MS-B</b></p>	<p>Matching Socket(s): D18F-4Z-C3/C4/ C5/C7/C8/C9</p>
 <p><b>JH-36PS-A</b></p>	<p>Matching Socket(s): D18F-4Z-C3/C4/ C5/C8/C9</p>  <p><b>JH-505RC</b></p>	<p>Matching Socket(s): D18F-4Z-C6</p>	

All accessories are upon request only.