

# Crankcase Pressure Regulating Valves

Crankcase Pressure Regulating Valves are designed to prevent overloading of the compressor motor by limiting the crankcase pressure to a predetermined maximum value during and after a defrost cycle or a normal shutdown period.

These valves automatically throttle the vapour flow from the evaporator until the compressor can handle the load. Parker Sporlan manufactures five adjustable direct acting models...CRO-4, CRO-6, CROT-6, CRO-10 and CROT-10... all models respond only to their outlet pressure and modulate to prevent the suction pressure at the compressor from rising above the valve setting. Since these valves are adjustable, the setting may be altered to suit the specific system requirements.

## Selection and Capacity Ratings

The ratings for these valves vary depending on these items: design suction pressure after pulldown, maximum allowable suction pressure recommended by the compressor or unit manufacturer (this is the valve setting), and pressure drop across the valve. The difference between the design suction pressure and the valve setting determines how much of the valve stroke is used. Therefore, the valve setting should be kept as high as possible without exceeding the recommendation of the compressor or unit manufacturer. Once this information is available, the correct CRO can be selected from the data below.

## Installation

Crankcase pressure regulating valves are installed in the suction line between the evaporator and compressor, and downstream of any other controls or accessories. When installing CRO's with solder type connections, the internal parts should be protected by wrapping the valve with a wet cloth.



## Valve Nomenclature/Ordering Instructions

| CRO                                                         | T                                                                  | 10                                           | 0/60                                                                                           | 1-1/8 ODF                                       |
|-------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------|
| <b>Valve Type</b><br>Close on rise<br>of outlet<br>pressure | <b>Access Valve</b><br>on<br>Inlet Connection<br>CROT-6 or CROT-10 | <b>Port Size</b><br>in Eighths<br>of an Inch | <b>Adjustment<br/>Range - psig</b><br>See specifications<br>for available<br>adjustment ranges | <b>Connection</b><br>ODF Solder<br>or SAE Flare |

## Materials and Construction Details

| Valve Type                | CRO-4                                       | CRO(T)-6              | CRO(T)-10  |
|---------------------------|---------------------------------------------|-----------------------|------------|
| Body Material             | Brass                                       | Brass                 |            |
| Seat                      | Teflon to Metal                             | Teflon to Metal       |            |
| Element Type and Material | Diaphragm - Stainless Steel                 | Bellows - Brass       |            |
| Type of Joints            | Knife Edge, Metal to Metal                  | Hermetic Construction |            |
| Connections               | ODF Copper                                  | ODF Copper, SAE Brass | ODF Copper |
| MRP                       | 34.5 barg (500 psig)                        | 27.6 barg (400 psig)  |            |
| Max External Leakage      | .10 oz/yr @ 300 psig (2.8 gram/yr @ 20 bar) |                       |            |
| UL                        | SA-5460                                     |                       |            |
| Compatibility             | All HFC, HCFC, Refrigerants and blends      |                       |            |

For all requests, consult your nearest Parker Sporlan Wholesaler or contact us on:  
[racecustomerservice@parker.com](mailto:racecustomerservice@parker.com) / [www.parker.com/race](http://www.parker.com/race)

# Selection Tables

## Capacities in kW

Capacities based on 38°C condensing temperature, 6°K superheat, 0°C subcooling and 0.14 bar pressure drop across valve.

| Type and Adjustment Range                | Design Evap. Temp. °C | Saturated Suction Pressure bar (Reference) | R-404A               |      |      |      |      |      | Design Evap. Temp. °C | Saturated Suction Pressure bar (Reference) | R-407C               |                      |      |      |      |      |     |
|------------------------------------------|-----------------------|--------------------------------------------|----------------------|------|------|------|------|------|-----------------------|--------------------------------------------|----------------------|----------------------|------|------|------|------|-----|
|                                          |                       |                                            | Valve Setting - barg |      |      |      |      |      |                       |                                            | Valve Setting - barg |                      |      |      |      |      |     |
|                                          |                       |                                            | 0.7                  | 1.4  | 2.1  | 2.8  | 3.5  | 4.2  |                       |                                            | 0.7                  | 1.4                  | 2.1  | 2.8  | 3.5  | 4.2  |     |
| CRO-4<br>0/20 psig<br>0/1.4 barg         | -40                   | 0.3                                        | 0.41                 | 0.47 | -    | -    | -    | -    | -40                   | -0.15                                      | -                    | -                    | -    | -    | -    | -    |     |
|                                          | -35                   | 0.6                                        | 0.35                 | 0.55 | -    | -    | -    | -    | -35                   | 0.1                                        | 0.57                 | 0.57                 | -    | -    | -    | -    |     |
|                                          | -30                   | 1.0                                        | -                    | 0.55 | -    | -    | -    | -    | -30                   | 0.4                                        | 0.55                 | 0.67                 | -    | -    | -    | -    |     |
|                                          | -25                   | 1.5                                        | -                    | -    | -    | -    | -    | -    | -25                   | 0.7                                        | -                    | 0.77                 | -    | -    | -    | -    |     |
| CRO-4<br>0/50 psig<br>0/3.4 barg         | -40                   | 0.3                                        | 0.34                 | 0.44 | 0.47 | 0.47 | -    | -    | -35                   | 0.1                                        | 0.45                 | 0.57                 | 0.57 | 0.57 | -    | -    |     |
|                                          | -30                   | 1.0                                        | -                    | 0.46 | 0.59 | 0.64 | -    | -    | -30                   | 0.4                                        | 0.47                 | 0.61                 | 0.67 | 0.67 | -    | -    |     |
|                                          | -25                   | 1.5                                        | -                    | -    | 0.58 | 0.73 | -    | -    | -25                   | 0.7                                        | -                    | 0.63                 | 0.77 | 0.77 | -    | -    |     |
|                                          | -15                   | 2.6                                        | -                    | -    | -    | 0.64 | -    | -    | -15                   | 1.6                                        | -                    | -                    | 0.77 | 0.98 | -    | -    |     |
| CRO-4<br>0/75 psig<br>0/5.2 barg         | -40                   | 0.3                                        | 0.33                 | 0.41 | 0.47 | 0.47 | 0.47 | 0.47 | -35                   | 0.1                                        | 0.42                 | 0.52                 | 0.57 | 0.57 | 0.57 | 0.57 |     |
|                                          | -30                   | 1.0                                        | -                    | 0.45 | 0.55 | 0.64 | 0.64 | 0.64 | -30                   | 0.4                                        | 0.45                 | 0.57                 | 0.67 | 0.67 | 0.67 | 0.67 |     |
|                                          | -15                   | 2.6                                        | -                    | -    | -    | 0.63 | 0.78 | 0.93 | -15                   | 1.6                                        | -                    | -                    | 0.74 | 0.90 | 1.00 | 1.00 |     |
|                                          | -10                   | 3.3                                        | -                    | -    | -    | -    | 0.71 | 0.88 | -10                   | 2.2                                        | -                    | -                    | -    | 0.87 | 1.06 | 1.13 |     |
| CRO(T)-6<br>0/60 psig<br>0/4.1 barg      | -40                   | 0.3                                        | 1.00                 | 1.70 | 2.39 | 3.09 | 3.29 | -    | -35                   | 0.1                                        | 1.47                 | 2.33                 | 3.19 | 3.99 | 3.99 | -    |     |
|                                          | -30                   | 1.0                                        | -                    | 1.40 | 2.31 | 3.23 | 4.14 | -    | -30                   | 0.4                                        | -                    | 2.34                 | 3.32 | 4.30 | 4.64 | -    |     |
|                                          | -20                   | 2.0                                        | -                    | -    | -    | 2.57 | 3.75 | -    | -15                   | 1.6                                        | -                    | -                    | 2.54 | 3.96 | 5.37 | -    |     |
|                                          | -10                   | 3.3                                        | -                    | -    | -    | -    | -    | -    | -5                    | 2.8                                        | -                    | -                    | -    | -    | 3.78 | -    |     |
| CRO(T)-10<br>0/60 psig<br>0/4.1 barg     | -40                   | 0.3                                        | 2.33                 | 6.67 | 7.47 | 7.47 | 7.47 | -    | -35                   | 0.1                                        | 4.71                 | 9.17                 | 9.17 | 9.17 | 9.17 | -    |     |
|                                          | -30                   | 1.0                                        | -                    | 2.97 | 8.67 | 9.86 | 9.86 | -    | -30                   | 0.4                                        | -                    | 9.03                 | 10.5 | 10.5 | 10.5 | -    |     |
|                                          | -20                   | 2.0                                        | -                    | -    | -    | 8.23 | 12.7 | -    | -15                   | 1.6                                        | -                    | -                    | 6.61 | 15.3 | 15.3 | -    |     |
|                                          | -10                   | 3.3                                        | -                    | -    | -    | -    | -    | -    | -5                    | 2.8                                        | -                    | -                    | -    | -    | 11.5 | -    |     |
|                                          |                       |                                            | Valve Setting - barg |      |      |      |      |      |                       |                                            |                      | Valve Setting - barg |      |      |      |      |     |
|                                          |                       |                                            | 2.7                  | 3.4  | 4.1  | 4.8  | 5.5  | 6.2  |                       |                                            |                      | 2.7                  | 3.4  | 4.1  | 4.8  | 5.5  | 6.2 |
| CRO(T)-6<br>30/110 psig<br>2.1/7.6 barg  | -15                   | 2.6                                        | 1.54                 | 2.43 | 3.32 | 4.21 | 5.09 | 5.98 | -10                   | 2.2                                        | 2.57                 | 4.58                 | 6.16 | 7.74 | 7.78 | 7.78 |     |
|                                          | -10                   | 3.3                                        | -                    | -    | 2.75 | 3.75 | 4.74 | 5.74 | -5                    | 2.8                                        | -                    | 3.01                 | 4.19 | 5.38 | 6.57 | 7.75 |     |
|                                          | -5                    | 4.1                                        | -                    | -    | -    | 2.94 | 4.05 | 5.16 | 0                     | 3.6                                        | -                    | -                    | 3.31 | 4.62 | 5.94 | 7.26 |     |
|                                          | 0                     | 5.0                                        | -                    | -    | -    | -    | 2.94 | 4.17 | 5                     | 4.5                                        | -                    | -                    | -    | 3.39 | 4.85 | 6.30 |     |
| CRO(T)-10<br>30/110 psig<br>2.1/7.6 barg | -15                   | 2.6                                        | -                    | 6.21 | 11.8 | 14.3 | 14.3 | 14.3 | -10                   | 2.2                                        | 5.47                 | 17.1                 | 17.1 | 17.1 | 17.1 | 17.1 |     |
|                                          | -10                   | 3.3                                        | -                    | -    | 6.98 | 13.2 | 16.0 | 16.0 | -5                    | 2.8                                        | -                    | 6.74                 | 14.2 | 19.1 | 19.1 | 19.1 |     |
|                                          | -5                    | 4.1                                        | -                    | -    | -    | 6.85 | 13.8 | 17.9 | 0                     | 3.6                                        | -                    | -                    | 7.04 | 15.3 | 21.2 | 21.2 |     |
|                                          | 0                     | 5.0                                        | -                    | -    | -    | -    | 5.41 | 13.1 | 5                     | 4.5                                        | -                    | -                    | -    | 5.91 | 15.1 | 23.5 |     |

6

Accurate at the time of going to print.

For all requests, consult your nearest Parker Sporlan Wholesaler or contact us on: [racecustomerservice@parker.com](mailto:racecustomerservice@parker.com) / [www.parker.com/race](http://www.parker.com/race)

# Selection Tables

## Capacities in kW

Capacities based on 38°C condensing temperature, 6°K superheat, 0°C subcooling and 0.14 bar pressure drop across valve.

| Type and Adjustment Range                | Design Evap. Temp. °C | Saturated Suction Pressure bar (Reference) | R-22                 |      |      |      |      |      | Design Evap. Temp. °C | Saturated Suction Pressure bar (Reference) | R-134a               |                      |      |      |      |      |     |
|------------------------------------------|-----------------------|--------------------------------------------|----------------------|------|------|------|------|------|-----------------------|--------------------------------------------|----------------------|----------------------|------|------|------|------|-----|
|                                          |                       |                                            | Valve Setting - barg |      |      |      |      |      |                       |                                            | Valve Setting - barg |                      |      |      |      |      |     |
|                                          |                       |                                            | 0.7                  | 1.4  | 2.1  | 2.8  | 3.5  | 4.2  |                       |                                            | 0.7                  | 1.4                  | 2.1  | 2.8  | 3.5  | 4.2  |     |
| CRO-4<br>0/20 psig<br>0/1.4 barg         | -40                   | 0.0                                        | 0.61                 | 0.61 | -    | -    | -    | -    | -25                   | 0.0                                        | 0.59                 | 0.59                 | -    | -    | -    | -    |     |
|                                          | -35                   | 0.3                                        | 0.61                 | 0.70 | -    | -    | -    | -    | -20                   | 0.3                                        | 0.59                 | 0.69                 | -    | -    | -    | -    |     |
|                                          | -30                   | 0.6                                        | 0.53                 | 0.80 | -    | -    | -    | -    | -15                   | 0.6                                        | 0.52                 | 0.79                 | -    | -    | -    | -    |     |
|                                          | -25                   | 1.0                                        | -                    | -    | -    | -    | -    | -    | -10                   | 1.0                                        | -                    | 0.79                 | -    | -    | -    | -    |     |
| CRO-4<br>0/50 psig<br>0/3.4 barg         | -40                   | 0.0                                        | 0.48                 | 0.61 | 0.61 | 0.61 | -    | -    | -20                   | 0.3                                        | 0.49                 | 0.64                 | 0.69 | 0.69 | -    | -    |     |
|                                          | -30                   | 0.6                                        | 0.50                 | 0.67 | 0.80 | 0.80 | -    | -    | -15                   | 0.6                                        | 0.49                 | 0.66                 | 0.79 | 0.79 | -    | -    |     |
|                                          | -25                   | 1.0                                        | -                    | 0.66 | 0.85 | 0.91 | -    | -    | -5                    | 1.4                                        | -                    | -                    | 0.83 | 1.02 | -    | -    |     |
|                                          | -15                   | 1.9                                        | -                    | -    | 0.76 | 0.99 | -    | -    | 5                     | 2.5                                        | -                    | -                    | -    | 0.91 | -    | -    |     |
| CRO-4<br>0/75 psig<br>0/5.2 barg         | -40                   | 0.0                                        | 0.46                 | 0.48 | 0.61 | 0.61 | 0.61 | 0.61 | -15                   | 0.6                                        | 0.49                 | 0.62                 | 0.76 | 0.79 | 0.79 | 0.79 |     |
|                                          | -30                   | 0.6                                        | 0.50                 | 0.64 | 0.77 | 0.80 | 0.80 | 0.80 | -10                   | 1.0                                        | -                    | 0.64                 | 0.78 | 0.90 | 0.90 | 0.90 |     |
|                                          | -15                   | 1.9                                        | -                    | -    | 0.75 | 0.93 | 1.12 | 1.14 | -5                    | 1.4                                        | -                    | -                    | 0.79 | 0.95 | 1.02 | 1.02 |     |
|                                          | -10                   | 2.5                                        | -                    | -    | -    | 0.86 | 1.07 | 1.27 | 5                     | 2.5                                        | -                    | -                    | -    | 0.89 | 1.10 | 1.28 |     |
| CRO(T)-6<br>0/60 psig<br>0/4.1 barg      | -40                   | 0.0                                        | 1.62                 | 2.54 | 3.45 | 4.27 | 4.27 | -    | -15                   | 0.6                                        | 1.21                 | 2.35                 | 3.50 | 4.65 | 5.49 | -    |     |
|                                          | -30                   | 0.6                                        | -                    | 2.41 | 3.57 | 4.73 | 5.58 | -    | -10                   | 1.0                                        | -                    | 2.03                 | 3.32 | 4.61 | 5.90 | -    |     |
|                                          | -15                   | 1.9                                        | -                    | -    | 2.07 | 3.67 | 5.27 | -    | -5                    | 1.4                                        | -                    | -                    | 2.90 | 4.34 | 5.79 | -    |     |
|                                          | -5                    | 3.2                                        | -                    | -    | -    | -    | 2.99 | -    | 5                     | 2.5                                        | -                    | -                    | -    | -    | 4.55 | -    |     |
| CRO(T)-10<br>0/60 psig<br>0/4.1 barg     | -40                   | 0.0                                        | 5.29                 | 9.79 | 9.79 | 9.79 | 9.79 | -    | -15                   | 0.6                                        | -                    | 7.83                 | 12.3 | 12.3 | 12.3 | -    |     |
|                                          | -30                   | 0.6                                        | -                    | 7.95 | 12.5 | 12.5 | 12.5 | -    | -10                   | 1.0                                        | -                    | 4.63                 | 12.7 | 13.9 | 13.9 | -    |     |
|                                          | -15                   | 1.9                                        | -                    | -    | 2.16 | 12.1 | 17.3 | -    | -5                    | 1.4                                        | -                    | -                    | 8.72 | 15.6 | 15.6 | -    |     |
|                                          | -5                    | 3.2                                        | -                    | -    | -    | -    | 5.13 | -    | 5                     | 2.5                                        | -                    | -                    | -    | -    | 16.2 | -    |     |
|                                          |                       |                                            | Valve Setting - barg |      |      |      |      |      |                       |                                            |                      | Valve Setting - barg |      |      |      |      |     |
|                                          |                       |                                            | 2.7                  | 3.4  | 4.1  | 4.8  | 5.5  | 6.2  |                       |                                            |                      | 2.7                  | 3.4  | 4.1  | 4.8  | 5.5  | 6.2 |
| CRO(T)-6<br>30/110 psig<br>2.1/7.6 barg  | -10                   | 2.5                                        | 2.22                 | 3.41 | 4.60 | 5.79 | 6.98 | 8.17 | -10                   | 1.0                                        | 3.40                 | 4.27                 | 5.14 | 6.00 | 6.24 | 6.24 |     |
|                                          | -5                    | 3.2                                        | -                    | 2.53 | 3.84 | 5.15 | 6.46 | 7.76 | -5                    | 1.4                                        | -                    | 4.24                 | 5.21 | 6.19 | 7.05 | 7.05 |     |
|                                          | 0                     | 4.0                                        | -                    | -    | 2.68 | 4.11 | 5.55 | 6.98 | 0                     | 1.9                                        | -                    | -                    | 5.10 | 6.18 | 7.27 | 7.91 |     |
|                                          | 5                     | 4.8                                        | -                    | -    | -    | -    | 4.16 | 5.73 | 5                     | 2.5                                        | -                    | -                    | -    | 5.94 | 7.14 | 8.35 |     |
| CRO(T)-10<br>30/110 psig<br>2.1/7.6 barg | -10                   | 2.5                                        | 1.78                 | 9.24 | 16.7 | 19.1 | 19.1 | 19.1 | -10                   | 1.0                                        | 13.2                 | 13.9                 | 13.9 | 13.9 | 13.9 | 13.9 |     |
|                                          | -5                    | 3.2                                        | -                    | 2.31 | 10.5 | 18.7 | 21.1 | 21.1 | -5                    | 1.4                                        | -                    | 15.6                 | 15.6 | 15.6 | 15.6 | 15.6 |     |
|                                          | 0                     | 4.0                                        | -                    | -    | 1.75 | 10.7 | 19.7 | 23.1 | 0                     | 1.9                                        | -                    | -                    | 17.4 | 17.4 | 17.4 | 17.4 |     |
|                                          | 5                     | 4.8                                        | -                    | -    | -    | -    | 9.48 | 19.3 | 5                     | 2.5                                        | -                    | -                    | -    | 19.4 | 19.4 | 19.4 |     |

For all requests, consult your nearest Parker Sporlan Wholesaler or contact us on: [racecustomerservice@parker.com](mailto:racecustomerservice@parker.com) / [www.parker.com/race](http://www.parker.com/race)

# Selection Tables

## Capacities in kW

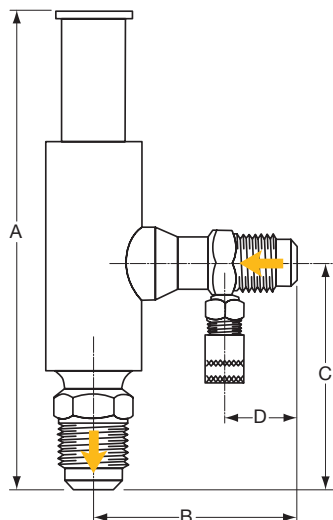
Capacities based on 38°C condensing temperature, 6°K superheat, 0°C subcooling and 0.14 bar pressure drop across valve.

| Type and Adjustment Range                | Design Evap. Temp. °C | Saturated Suction Pressure bar (Reference) | R-409A               |      |      |      |      |      | Design Evap. Temp. °C | Saturated Suction Pressure bar (Reference) | R-507                |                      |      |      |      |      |     |
|------------------------------------------|-----------------------|--------------------------------------------|----------------------|------|------|------|------|------|-----------------------|--------------------------------------------|----------------------|----------------------|------|------|------|------|-----|
|                                          |                       |                                            | Valve Setting - barg |      |      |      |      |      |                       |                                            | Valve Setting - barg |                      |      |      |      |      |     |
|                                          |                       |                                            | 0.7                  | 1.4  | 2.1  | 2.8  | 3.5  | 4.2  |                       |                                            | 0.7                  | 1.4                  | 2.1  | 2.8  | 3.5  | 4.2  |     |
| CRO-4<br>0/20 psig<br>0/1.4 barg         | -25                   | 0.0                                        | 0.60                 | 0.60 | -    | -    | -    | -    | -25                   | 0.4                                        | 0.39                 | 0.47                 | -    | -    | -    | -    |     |
|                                          | -20                   | 0.3                                        | 0.61                 | 0.70 | -    | -    | -    | -    | -20                   | 0.7                                        | -                    | 0.55                 | -    | -    | -    | -    |     |
|                                          | -15                   | 0.6                                        | 0.54                 | 0.80 | -    | -    | -    | -    | -15                   | 1.1                                        | -                    | 0.50                 | -    | -    | -    | -    |     |
|                                          | -10                   | 1.0                                        | -                    | 0.82 | -    | -    | -    | -    | -10                   | 1.6                                        | -                    | -                    | -    | -    | -    | -    |     |
| CRO-4<br>0/50 psig<br>0/3.4 barg         | -20                   | 0.3                                        | 0.50                 | 0.65 | 0.70 | 0.70 | -    | -    | -20                   | 0.4                                        | 0.33                 | 0.43                 | 0.47 | 0.47 | -    | -    |     |
|                                          | -15                   | 0.6                                        | 0.51                 | 0.68 | 0.80 | 0.80 | -    | -    | -15                   | 1.1                                        | -                    | 0.44                 | 0.57 | 0.64 | -    | -    |     |
|                                          | -5                    | 1.4                                        | -                    | -    | 0.85 | 1.02 | -    | -    | -5                    | 1.6                                        | -                    | -                    | 0.55 | 0.70 | -    | -    |     |
|                                          | 5                     | 2.4                                        | -                    | -    | -    | 0.94 | -    | -    | 5                     | 2.8                                        | -                    | -                    | -    | -    | -    | -    |     |
| CRO-4<br>0/75 psig<br>0/5.2 barg         | -15                   | 0.6                                        | 0.50                 | 0.63 | 0.77 | 0.80 | 0.80 | 0.80 | -15                   | 0.4                                        | 0.32                 | 0.40                 | 0.47 | 0.47 | 0.47 | 0.47 |     |
|                                          | -10                   | 1.0                                        | -                    | 0.65 | 0.80 | 0.90 | 0.90 | 0.90 | -10                   | 1.1                                        | -                    | 0.43                 | 0.53 | 0.64 | 0.64 | 0.64 |     |
|                                          | -5                    | 1.4                                        | -                    | -    | 0.80 | 0.97 | 1.02 | 1.02 | -5                    | 2.8                                        | -                    | -                    | -    | -    | 0.73 | 0.89 |     |
|                                          | 5                     | 2.4                                        | -                    | -    | -    | 0.91 | 1.11 | 1.27 | 5                     | 3.5                                        | -                    | -                    | -    | -    | 0.65 | 0.82 |     |
| CRO(T)-6<br>0/60 psig<br>0/4.1 barg      | -15                   | 0.6                                        | 1.27                 | 2.43 | 3.58 | 4.74 | 5.54 | -    | -15                   | 0.4                                        | 0.94                 | 1.64                 | 2.33 | 3.02 | 3.28 | -    |     |
|                                          | -10                   | 1.0                                        | -                    | 2.12 | 3.42 | 4.71 | 6.00 | -    | -10                   | 1.1                                        | -                    | 1.27                 | 2.18 | 3.08 | 3.99 | -    |     |
|                                          | -5                    | 1.4                                        | -                    | -    | 3.01 | 4.45 | 5.89 | -    | -5                    | 2.1                                        | -                    | -                    | -    | 2.32 | 3.48 | -    |     |
|                                          | 5                     | 2.4                                        | -                    | -    | -    | -    | 4.74 | -    | 5                     | 3.5                                        | -                    | -                    | -    | -    | -    | -    |     |
| CRO(T)-10<br>0/60 psig<br>0/4.1 barg     | -15                   | 0.6                                        | 1.02                 | 8.23 | 12.4 | 12.4 | 12.4 | -    | -15                   | 0.4                                        | 1.94                 | 6.25                 | 7.43 | 7.43 | 7.43 | -    |     |
|                                          | -10                   | 1.0                                        | -                    | 5.16 | 13.2 | 13.9 | 13.9 | -    | -10                   | 1.1                                        | -                    | 2.16                 | 7.81 | 9.78 | 9.78 | -    |     |
|                                          | -5                    | 1.4                                        | -                    | -    | 9.47 | 15.6 | 15.6 | -    | -5                    | 2.1                                        | -                    | -                    | -    | 6.66 | 12.6 | -    |     |
|                                          | 5                     | 2.4                                        | -                    | -    | -    | -    | 17.6 | -    | 5                     | 3.5                                        | -                    | -                    | -    | -    | -    | -    |     |
|                                          |                       |                                            | Valve Setting - barg |      |      |      |      |      |                       |                                            |                      | Valve Setting - barg |      |      |      |      |     |
|                                          |                       |                                            | 2.7                  | 3.4  | 4.1  | 4.8  | 5.5  | 6.2  |                       |                                            |                      | 2.7                  | 3.4  | 4.1  | 4.8  | 5.5  | 6.2 |
| CRO(T)-6<br>30/110 psig<br>2.1/7.6 barg  | -10                   | 1.0                                        | 3.47                 | 4.33 | 5.20 | 6.07 | 6.26 | 6.26 | -15                   | 2.8                                        | -                    | 2.20                 | 3.08 | 3.95 | 4.83 | 5.71 |     |
|                                          | -5                    | 1.4                                        | -                    | 4.31 | 5.28 | 6.25 | 7.03 | 7.03 | -10                   | 3.5                                        | -                    | -                    | 2.45 | 3.43 | 4.41 | 5.39 |     |
|                                          | 0                     | 1.9                                        | -                    | -    | 5.18 | 6.25 | 7.33 | 7.84 | -5                    | 4.3                                        | -                    | -                    | -    | 2.56 | 3.65 | 4.74 |     |
|                                          | 5                     | 2.4                                        | -                    | -    | -    | 6.03 | 7.22 | 8.41 | 0                     | 5.2                                        | -                    | -                    | -    | -    | 2.46 | 3.67 |     |
| CRO(T)-10<br>30/110 psig<br>2.1/7.6 barg | -10                   | 1.0                                        | 13.6                 | 13.9 | 13.9 | 13.9 | 13.9 | 13.9 | -15                   | 2.8                                        | -                    | 4.81                 | 10.3 | 14.1 | 14.1 | 14.1 |     |
|                                          | -5                    | 1.4                                        | -                    | 15.6 | 15.6 | 15.6 | 15.6 | 15.6 | -10                   | 3.5                                        | -                    | -                    | 5.17 | 11.3 | 15.8 | 15.8 |     |
|                                          | 0                     | 1.9                                        | -                    | -    | 17.3 | 17.3 | 17.3 | 17.3 | -5                    | 4.3                                        | -                    | -                    | -    | 4.56 | 11.4 | 17.6 |     |
|                                          | 5                     | 2.4                                        | -                    | -    | -    | 19.1 | 19.1 | 19.1 | 0                     | 5.2                                        | -                    | -                    | -    | -    | 2.57 | 10.2 |     |

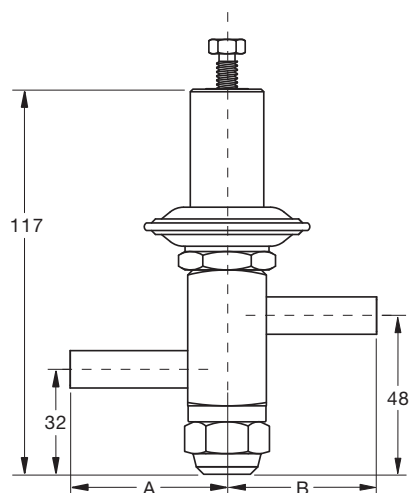
6

## Valve Dimensions

### CRO (T)-6 CRO (T)-10



### CRO 4



## Specifications & Dimensions

| Valve type | Nominal Adjustment Range - psig | Connection - Inches Standard Connection in Bold | Dimensions - Inches |     |     |    |              | Weight - Pounds |          |
|------------|---------------------------------|-------------------------------------------------|---------------------|-----|-----|----|--------------|-----------------|----------|
|            |                                 |                                                 | A                   | B   | C   | D  | Socket Depth | Net             | Shipping |
| CRO-4      | 0/20, 0/50 or 0/75              | 3/8 ODF Solder                                  | 48                  | 45  | 10  | -  | 8            | 0.45            | 0.52     |
|            |                                 | 1/2 ODF Solder                                  | 54                  | 52  | 13  | -  | 9            |                 |          |
|            |                                 | 3/8 SAE Flare                                   | 42                  | 40  | -   | -  | -            |                 |          |
|            |                                 | 1/2 SAE Flare                                   | 47                  | 45  | -   | -  | -            |                 |          |
| CRO(T)-6   | 0/60 or 30/110                  | 5/8 ODF Solder                                  | 249                 | 134 | 162 | 93 | 13           | 0.45            | 0.57     |
|            |                                 | 7/8 ODF Solder                                  | 249                 | 134 | 162 | 95 | 19           | 0.45            | 0.57     |
|            |                                 | 1-1/8 ODF Solder                                | 249                 | 134 | 162 | 95 | 23           | 0.57            | 0.68     |
|            |                                 | 1/2 SAE Flare                                   | 157                 | 67  | 71  | 24 | -            | 0.45            | 0.57     |
|            |                                 | 5/8 SAE Flare                                   | 162                 | 71  | 76  | 27 | -            | 0.45            | 0.57     |
| CRO(T)-10  | 0/60 or 30/110                  | 7/8 ODF Solder                                  | 280                 | 145 | 165 | 83 | 19           | 1.1             | 1.25     |
|            |                                 | 1-1/8 ODF Solder                                | 280                 | 145 | 165 | 83 | 23           | 1.1             | 1.25     |
|            |                                 | 1-3/8 ODF Solder                                | 280                 | 145 | 165 | 83 | 25           | 1.1             | 1.25     |

For all requests, consult your nearest Parker Sporlan Wholesaler or contact us on: [racecustomerservice@parker.com](mailto:racecustomerservice@parker.com) / [www.parker.com/race](http://www.parker.com/race)

# Order Selection Guide

## Crankcase Pressure Regulating Valves

| Type    | Connections Inches                                     | Adjustment Range (PSIG) | Adjustment Range (barg) | Part Number         |
|---------|--------------------------------------------------------|-------------------------|-------------------------|---------------------|
| CRO-4   | 1/2 ODF                                                | 0/20                    | 0/1.38                  | 900002              |
|         | 1/2 ODF                                                | 0/50                    | 0/3.45                  | 900004              |
|         | 1/2 ODF                                                | 0/75                    | 0/5.17                  | 900006              |
|         | 3/8 ODF, 3/8 SAE, 1/2 SAE                              | 0/20, 0/50, 0/75        | 0/1.38, 0/3.45, 0/5.17  | Special order valve |
| CRO-6   | 5/8 ODF                                                | 30/110                  | 2.07/7.58               | 900310              |
|         | 7/8 ODF                                                |                         |                         | 900315              |
|         | 1-1/8 ODF                                              |                         |                         | 900479              |
|         | 1/2 SAE                                                | 0/60                    | 0/4.14                  | 900493              |
|         | 5/8 SAE                                                |                         |                         | 900500              |
|         | 1/2 SAE, 5/8 SAE, 1/2 ODF, 5/8 ODF, 7/8 ODF, 1-1/8 ODF | 0/60, 30/110            | 0/4.14, 2.07/7.58       | Special order valve |
| CRO-10  | 7/8 ODF                                                | 30/110                  | 2.07/7.58               | 900330              |
|         | 1-1/8 ODF                                              |                         |                         | 900335              |
|         | 1-3/8 ODF                                              |                         |                         | 900340              |
|         | 7/8 ODF                                                | 0/60                    | 0/4.14                  | 900507              |
|         | 1-1/8 ODF                                              |                         |                         | 900528              |
|         | 1-3/8 ODF                                              |                         |                         | 900542              |
| CROT-6  | 1/2 SAE                                                | 0/60                    | 0/4.14                  | 900584              |
|         | 5/8 SAE                                                |                         |                         | 900591              |
|         | 1/2 ODF                                                |                         |                         | 900553              |
|         | 5/8 ODF                                                |                         |                         | 900556              |
|         | 7/8 ODF                                                |                         |                         | 900570              |
|         | 1-1/8 ODF                                              |                         |                         | 900577              |
|         | 1/2 SAE                                                | 30/110                  | 2.07/7.58               | 900350              |
|         | 5/8 SAE                                                |                         |                         | 900355              |
|         | 1/2 ODF                                                |                         |                         | 900359              |
|         | 5/8 ODF                                                |                         |                         | 900360              |
|         | 7/8 ODF                                                |                         |                         | 900365              |
|         | 1-1/8 ODF                                              |                         |                         | 900370              |
| CROT-10 | 7/8 ODF                                                | 0/60                    | 0/4.14                  | 900598              |
|         | 1-1/8 ODF                                              |                         |                         | 900605              |
|         | 1-3/8 ODF                                              |                         |                         | 900612              |
|         | 7/8 ODF                                                | 30/110                  | 2.07/7.58               | 900380              |
|         | 1-1/8 ODF                                              |                         |                         | 900385              |
|         | 1-3/8 ODF                                              |                         |                         | 900390              |

**Note:** All CRO & CROT valves with ODF connections are supplied with an inlet strainer

Special order valves or other valves configurations might be available upon request.

For all requests, consult your nearest Parker Sporlan Wholesaler or contact us on:  
[racecustomerservice@parker.com](mailto:racecustomerservice@parker.com) / [www.parker.com/race](http://www.parker.com/race)