

# OIL RESERVOIR PRESSURE VALVES



## CONSTRUCTION

Castel manufactures two reservoir pressure valves with the same body but two differential pressures. Higher pressure differential will increase the oil flow rate from the oil reservoir back to the compressor crankcase.

The model's selection has to take into account individual compressor crankcase pressures along with the differential pressure range of the oil regulators.

- Hot forged brass EN 12420 – CW 617N for body
- Austenitic stainless steel AISI 302 for the spring
- Chloroprene rubber (CR) for outlet seal gaskets.
- P.T.F.E. for seat gasket

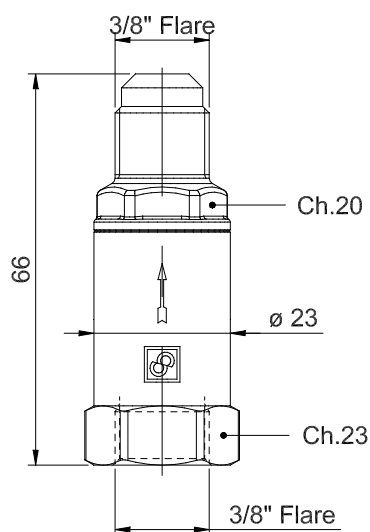
## INSTALLATION

These valves are used to vent pressure in the oil reservoir while still maintaining a positive pressure differential between the reservoir and the compressor crankcase. This positive pressure ensures an adequate oil supply to the mechanical oil level regulator. The reservoir pressure valve is directly mounted on the 3/8" SAE Flare connection of the reservoir and is piped to the suction line.

## APPLICATIONS

The reservoir pressure valves, shown in this handbook, are classified "Pressure accessories" in the sense of the Pressure Equipment Directive 94/23/EC, Article 1, Section 2.1.4 and are subject of Article 3, Section 1.3 of the same Directive.

These valves are designed for use in "Low pressure oil control systems" and for installation on commercial refrigerating systems and on civil and industrial conditioning plants, which use the following refrigerant fluids: R22 , R134a , R404A , R407C , R410A ; R507 proper to the Group II (as defined in Article 9, Section 2.2 of Directive 97/23/EC and referred to in Directive 67/548/EEC). For specific applications with refrigerant fluids not listed above, always proper to the Group II, please contact Castel Technical Department.



3150/X02  
3150/X03

TABLE 6: General Characteristics of Oil Reservoir Pressure Valves

| Catalogue Number | SAE Flare Connections |          | Kv Factor [m <sup>3</sup> /h] | Pressure Differential [bar] | TS [°C] |      | PS [bar] | Risk Category according to PED |
|------------------|-----------------------|----------|-------------------------------|-----------------------------|---------|------|----------|--------------------------------|
|                  | IN                    | OUT      |                               |                             | min.    | max. |          |                                |
| 3150/X02         | 3/8" - F              | 3/8" - M | 1,6                           | 1,4                         | - 40    | +105 | 45       | Art. 3.3                       |
| 3150/X03         |                       |          |                               | 3                           |         |      |          |                                |