DIRECT ACTING RELIEF VALVES "VMD1.010"

TECHNICAL SPECIFICATIONS

DESCRIPTION

- Pressure Relief Valves are normally closed pressure control elements designed to keep a constant pressure difference between inlet port '1' and outlet port '2' when oil flows through the valve. Direct acting valves are normally used to protect hydraulic actuators from shock pressures; the direct action allows a very fast opening and closing.
  Hysteresis is very low.
  Seat design is leak proof.

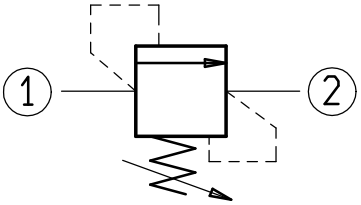
MATERIALS

- All components are made in high quality steel.
  The main body is carbonitrided, the poppet is hardened and ground.

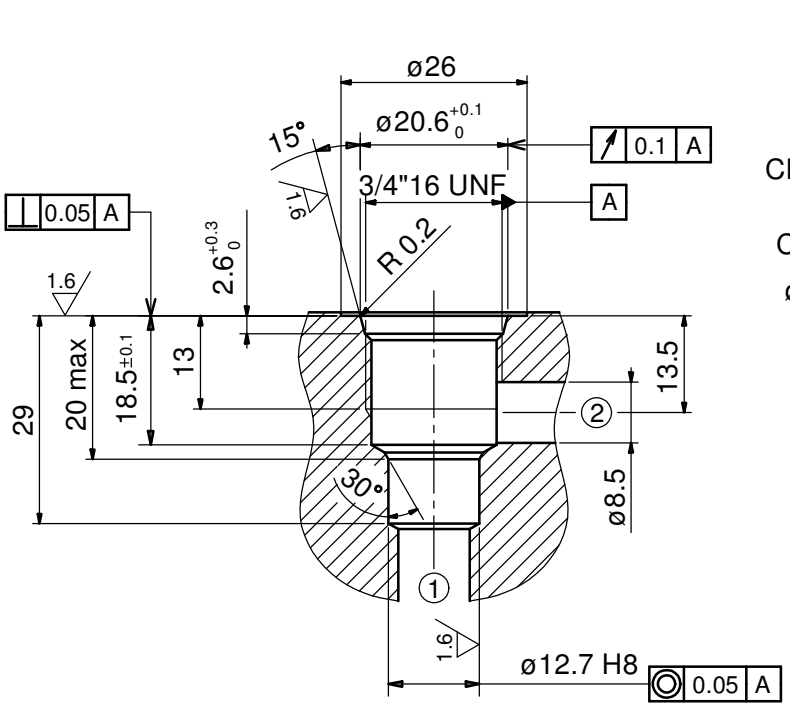
MAIN OPERATING FEATURES

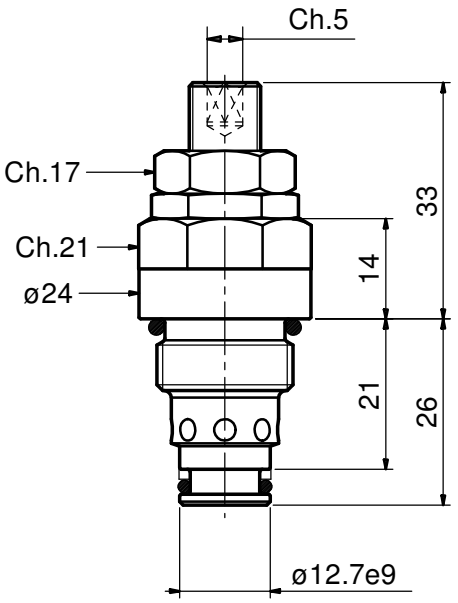
- Outside surfaces are protected by phosphatisation
- Max working pressure 270 bar
- Max flow 10 l/min.
- Valves are set,after testing,at 50 (±10%) and 200 bar (+10%) with 5 l/min. flow
- Installation torque 30/35 Nm
- Weight 0.095 Kg

SYMBOL



CAVITY DETAILS

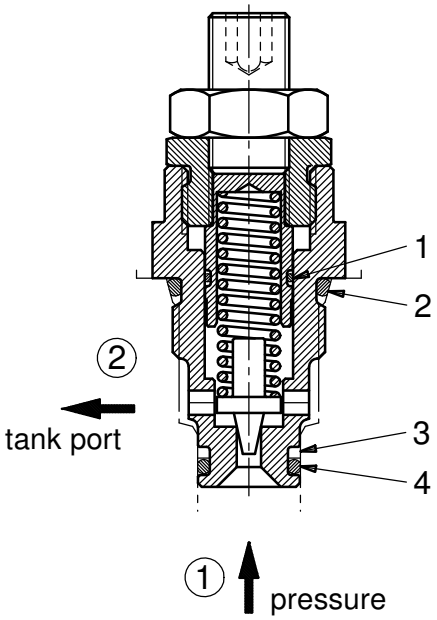




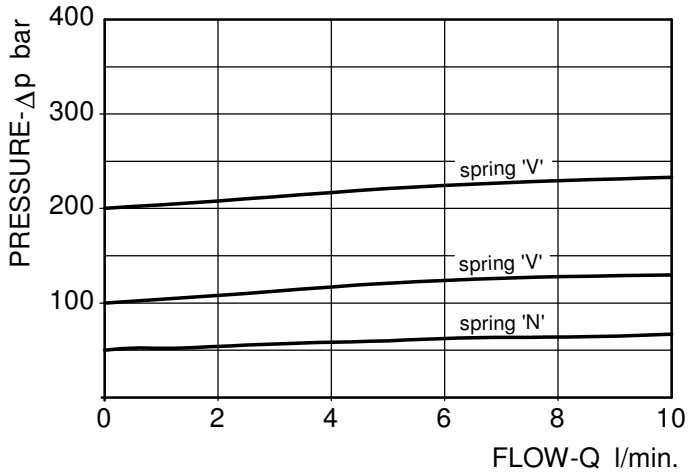
DIRECT ACTING RELIEF VALVES "VMD1.010"

Ref	Seals	TARP code
1	O-Ring ø9x1 90 sh DIN 3770	ZOR004
2	O-Ring ø16.36x2.20 70 sh	ZOR080
3	Backup ring ø9.7x12.7x1.4	Z*03.15.01.043
4	O-Ring ø9.25x1.78 70 sh	ZOR025

CROSS VIEW



PERFORMANCE



ORDERING CODE

Basic code **VMD1.010.* *.000**

Nominal size

Control option

S= socket screw

SPRING	Adjustment range min-max bar	Setting increase bar/screw turn
N	10-60	8.5
V	40-270	41.5

DIRECT ACTING RELIEF VALVES "VMD1.020"

TECHNICAL SPECIFICATIONS

DESCRIPTION

- Pressure Relief Valves are normally closed pressure control elements designed to keep a constant pressure difference between inlet port '1' and outlet port '2' when oil flows through the valve.
  Direct acting valves are normally used to protect hydraulic actuators from shock pressures; the direct action allows a very fast opening and closing.
  Hysteresis is very low.
  Seat design is leak proof.
  Quite operation.

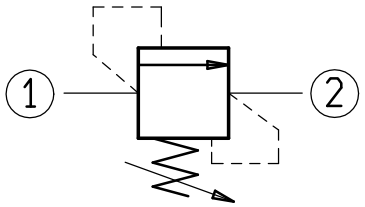
MATERIALS

- All components are made in high quality steel.
  The poppet is hardened and ground.

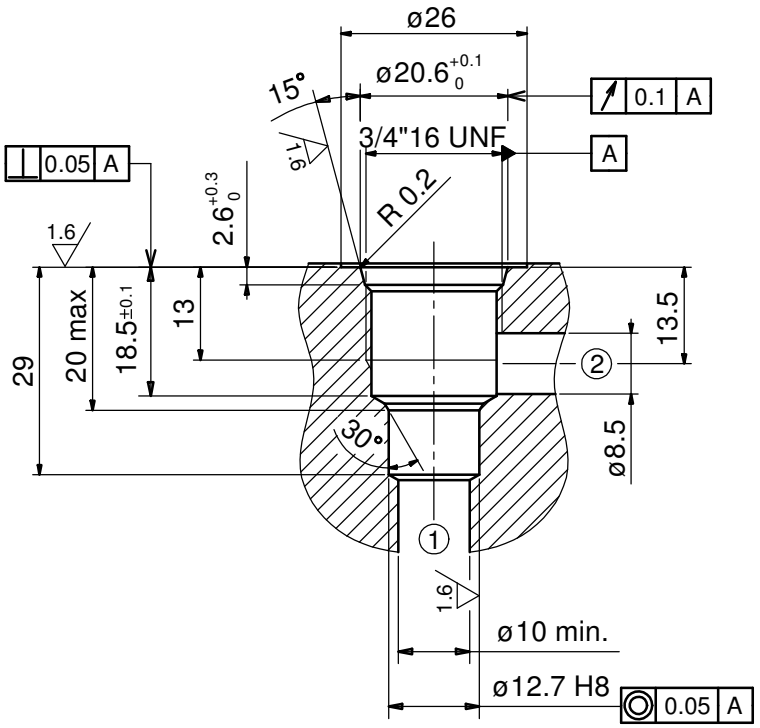
MAIN OPERATING FEATURES

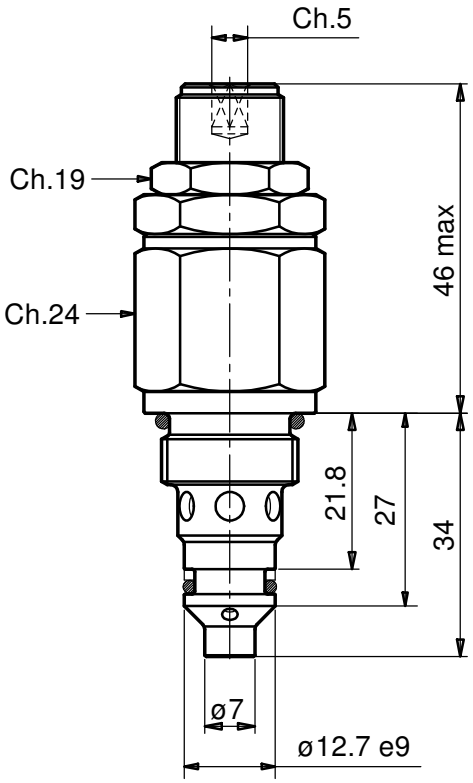
- Outside surfaces are zinc coated
- Max working pressure 350 bar
- Max flow 25 l/min.
- Valves are set,after testing, at 100 (-5/+10 bar), 180 (+/-10 bar) and 350 (+/-20 bar) with 5 l/min. flow
- Installation torque 40-45 Nm
- Weight 0.144 Kg.

SYMBOL



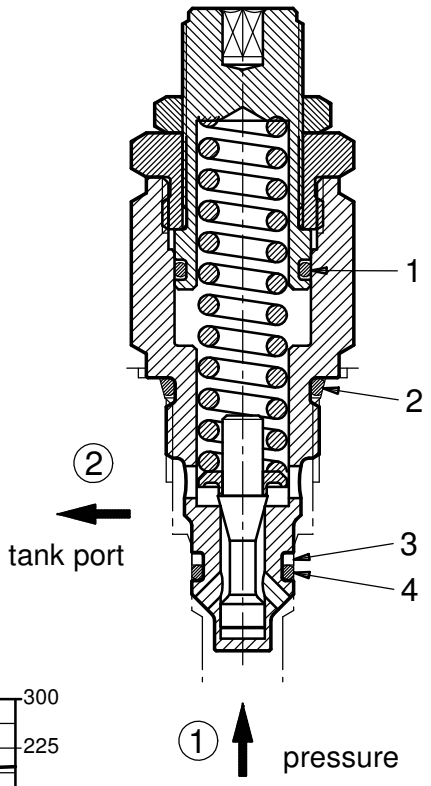
CAVITY DETAILS





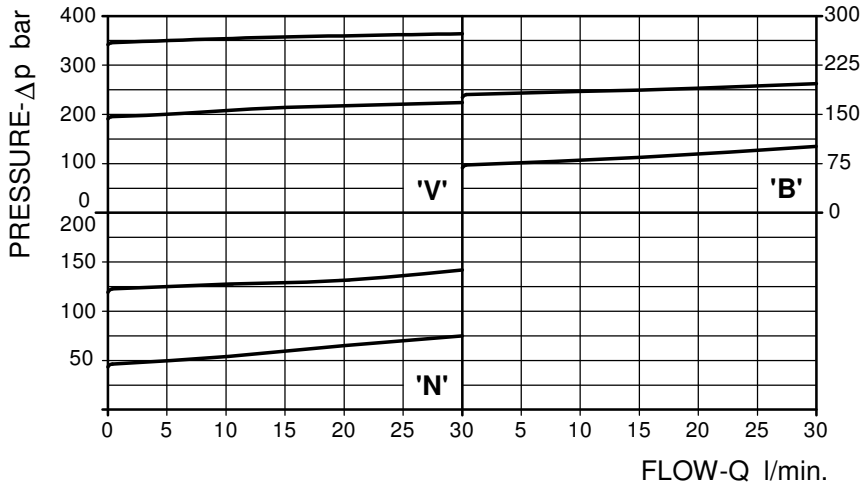
DIRECT ACTING RELIEF VALVES "VMD1.020"

CROSS VIEW



Ref	Seals	TARP code
1	O-Ring ø14x1.78 70 sh	ZOR028
2	O-Ring ø16.36x2.20 70 sh	ZOR080
3	Backup ring ø9.7x12.7x1.4	Z*03.15.01.043
4	O-Ring ø9.25x1.78 70 sh	ZOR025

PERFORMANCE



ORDERING CODE

Basic code **VMD1.020.* *.000**

Nominal size

Control option

S= socket screw

SPRING	Adjustment range min-max bar	Setting increase bar/screw turn	Spring code
N	25-120	16.5	Z*0F.M0.002
B	40-200	26.5	Z*0F.M0.001
V	200-350	51	Z*0F.M0.013

DIRECT ACTING RELIEF VALVES "VMD1.025"

TECHNICAL SPECIFICATIONS

DESCRIPTION

- Pressure Relief Valves are normally closed pressure control elements designed to keep a constant pressure difference between inlet port '1' and outlet port '2' when oil flows through the valve.
  Direct acting valves are normally used to protect hydraulic actuators from shock pressures; the direct action allows a very fast opening and closing.
  Hysteresis is very low.
  Seat design is leak proof.
  Quite operation.

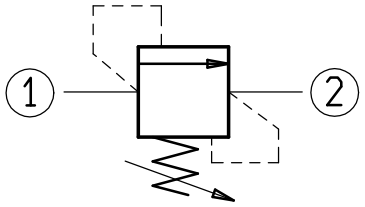
MATERIALS

- All components are made in high quality steel.
  The poppet is hardened and ground.

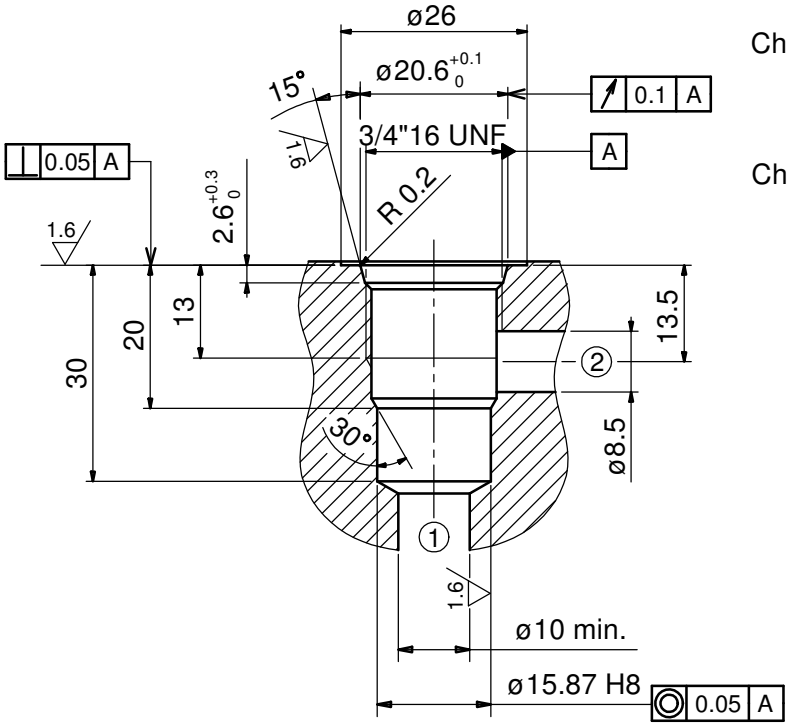
MAIN OPERATING FEATURES

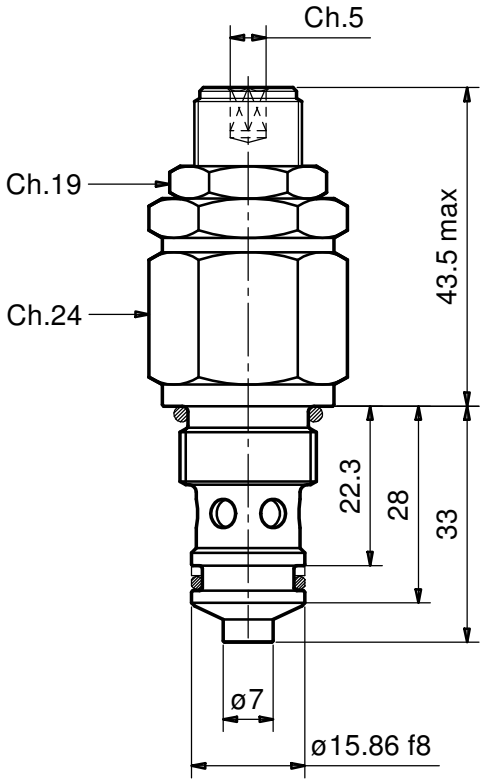
- Outside surfaces are zinc coated
- Max working pressure 350 bar
- Max flow 35 l/min.
- Valves are set,after testing, at 100 (-5/+10 bar), 180 (+/-10 bar) and 350 (+/-20 bar) with 5 l/min. flow
- Installation torque 40-45 Nm
- Weight 0.130 Kg.

SYMBOL



CAVITY DETAILS

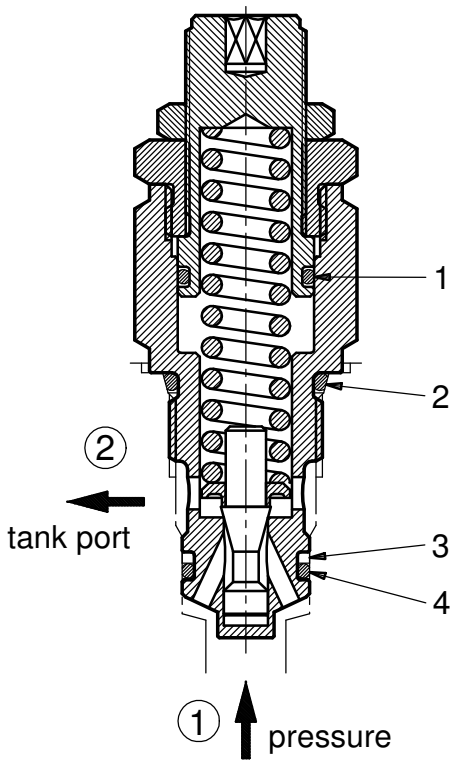




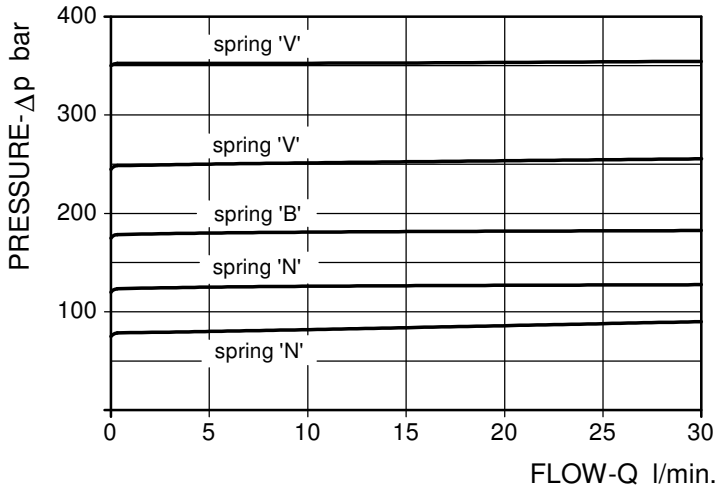
DIRECT ACTING RELIEF VALVES "VMD1.025"

Ref	Seals	TARP code
1	O-Ring ø14x1.78 70 sh	ZOR028
2	O-Ring ø16.36x2.20 70 sh	ZOR080
3	Backup ring ø12.8x15.86x1.4	Z*0F.A2.001
4	O-Ring ø12.42x1.78 70 sh	ZOR027

CROSS VIEW



PERFORMANCE



ORDERING CODE

Basic code **VMD1.025.* *.000**

Nominal size

Control option

S= socket screw

SPRING	Adjustment range min-max bar	Setting increase bar/screw turn	Spring code
N	25-120	16.5	Z*0F.M0.002
B	40-200	26.5	Z*0F.M0.001
V	200-350	51	Z*0F.M0.013

DIRECT ACTING RELIEF VALVES "VMD1.040"

TECHNICAL SPECIFICATIONS

DESCRIPTION

- Pressure Relief Valves are normally closed pressure control elements designed to keep a constant pressure difference between inlet port '1' and outlet port '2' when oil flows through the valve.
  Direct acting valves are normally used to protect hydraulic actuators from shock pressures; the direct action allows a very fast opening and closing.
  Hysteresis is very low.
  Seat design is leak proof.
  Quite operation.

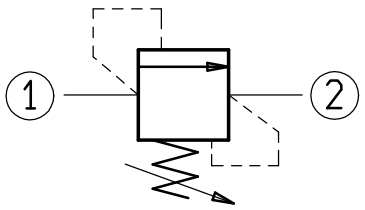
MATERIALS

- All components are made in high quality steel.
  The poppet is hardened and ground.

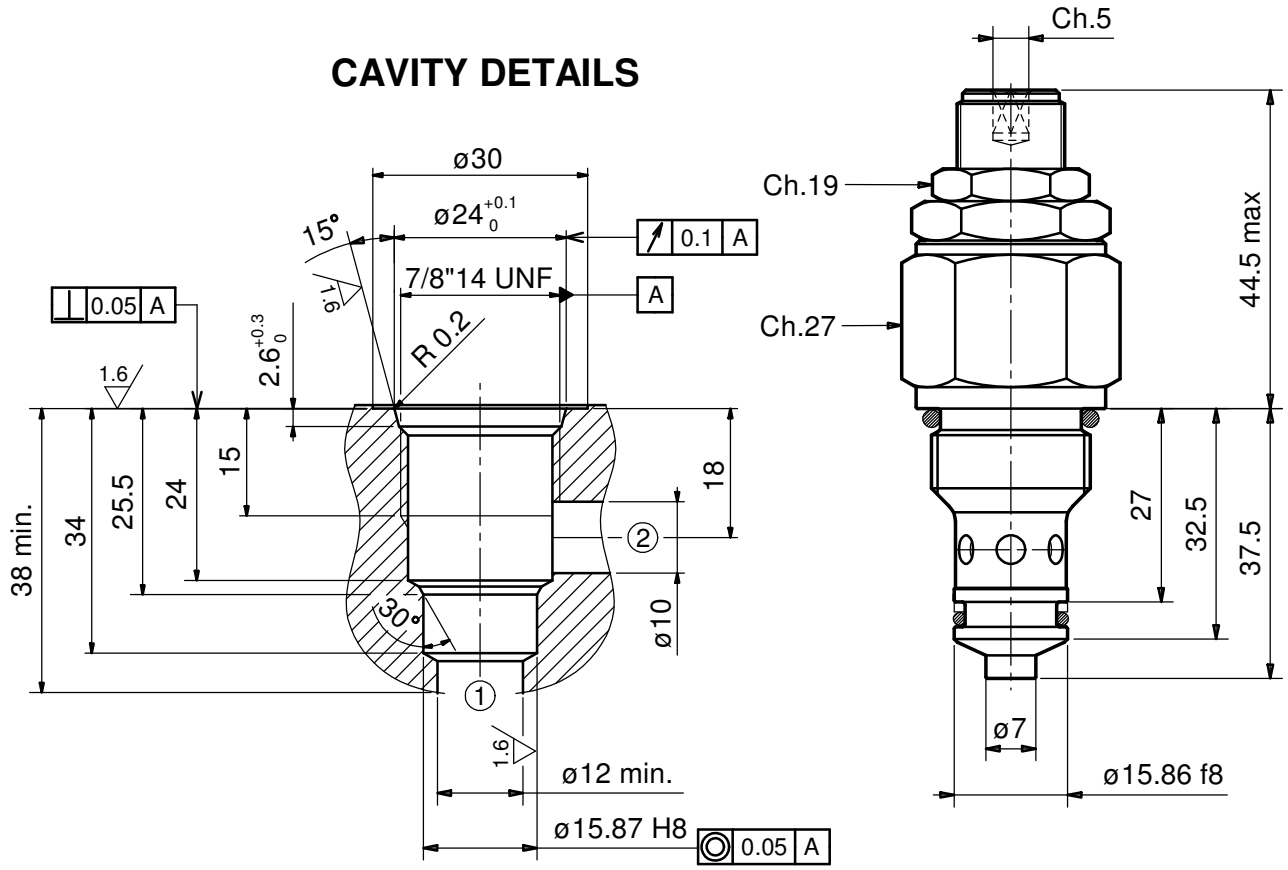
MAIN OPERATING FEATURES

- Outside surfaces are zinc coated
- Max working pressure 350 bar
- Max flow 50 l/min.
- Valves are set,after testing, at 100 (-5/+10 bar), 180 (+/-10 bar) and 350 (+/-20 bar) with 5 l/min. flow
- Installation torque 55-65 Nm
- Weight 0.170 Kg.

SYMBOL



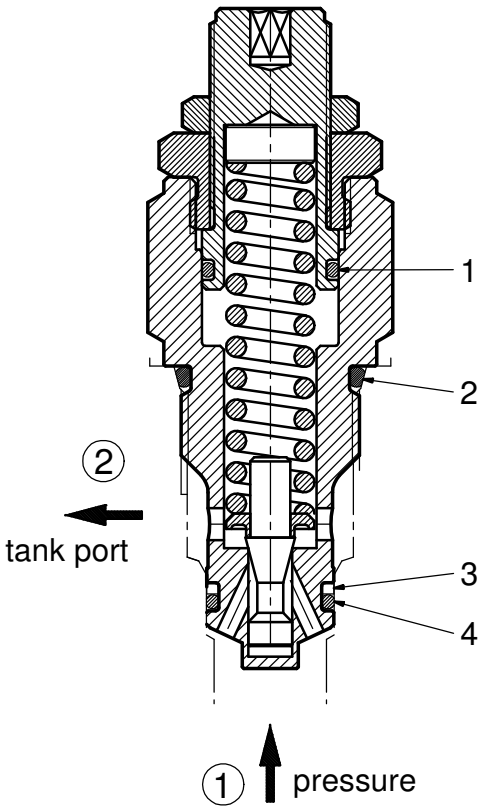
CAVITY DETAILS



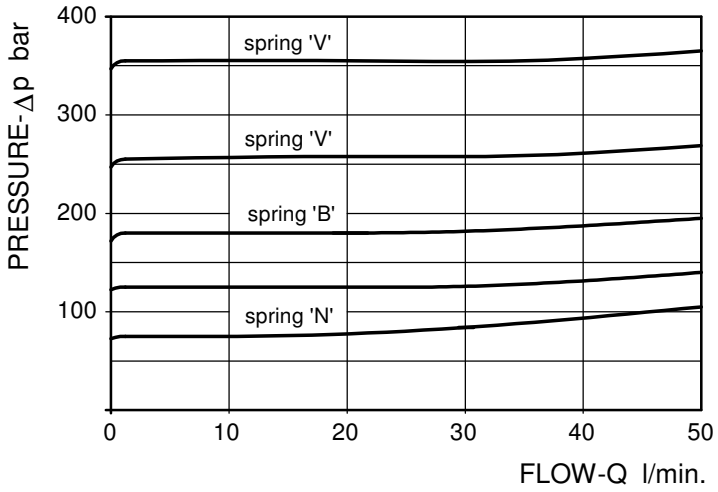
DIRECT ACTING RELIEF VALVES "VMD1.040"

Ref	Seals	TARP code
1	O-Ring ø14x1.78 70 sh	ZOR028
2	O-Ring ø19.18x2.46 70 sh	ZOR084
3	Backup ring ø12.8x15.86x1.4	Z*0F.A2.001
4	O-Ring ø12.42x1.78 70 sh	ZOR027

CROSS VIEW



PERFORMANCE



ORDERING CODE

Basic code **VMD1.040.* *.000**

Nominal size

Control option

S= socket screw

SPRING	Adjustment range min-max bar	Setting increase bar/screw turn	Spring code
N	25-120	16.5	Z*0F.M0.002
B	40-200	26.5	Z*0F.M0.001
V	200-350	51	Z*0F.M0.013

DIRECT ACTING RELIEF VALVES "VMD1.070"

TECHNICAL SPECIFICATIONS

DESCRIPTION

- Pressure Relief Valves are normally closed pressure control elements designed to keep a constant pressure difference between inlet port '1' and outlet port '2' when oil flows through the valve.
  Direct acting valves are normally used to protect hydraulic actuators from shock pressures; the direct action allows a very fast opening and closing.
  Hysteresis is very low.
  Seat design is leak proof.
  Quite operation.

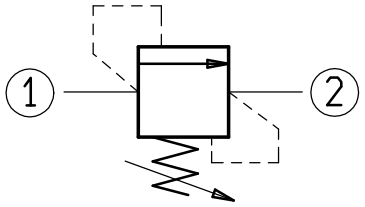
MATERIALS

- All components are made in high quality steel.
  The poppet is hardened and ground.

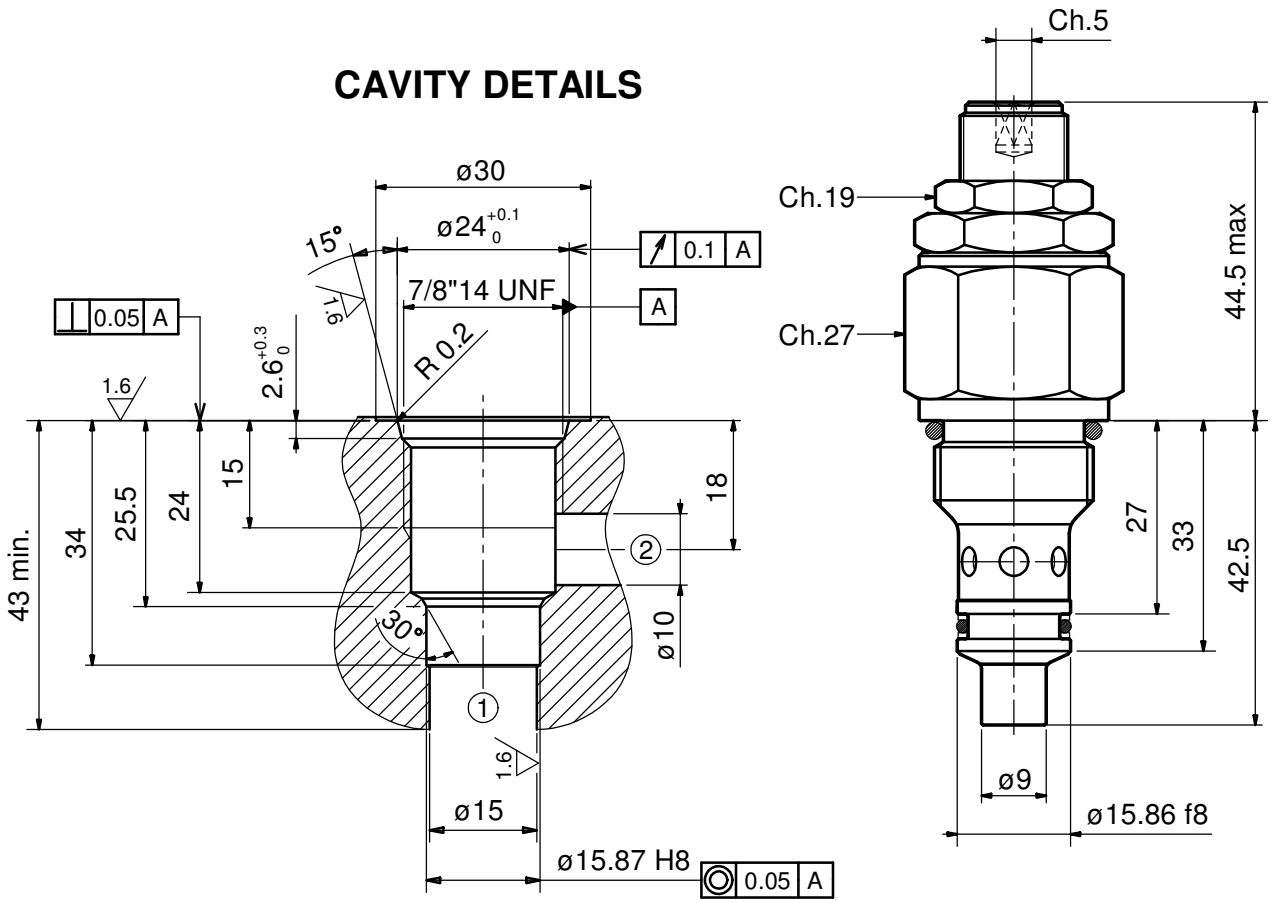
MAIN OPERATING FEATURES

- Outside surfaces are zinc coated
- Max working pressure 260 bar
- Max flow 70 l/min.
- Valves are set,after testing, at 50 (+10 bar), 100 (-5/+10 bar) 200 (+/-10 bar) and 250 (+/-10 bar) with 5 l/min. flow
- Installation torque 55-65 Nm
- Weight 0.180 Kg.

SYMBOL

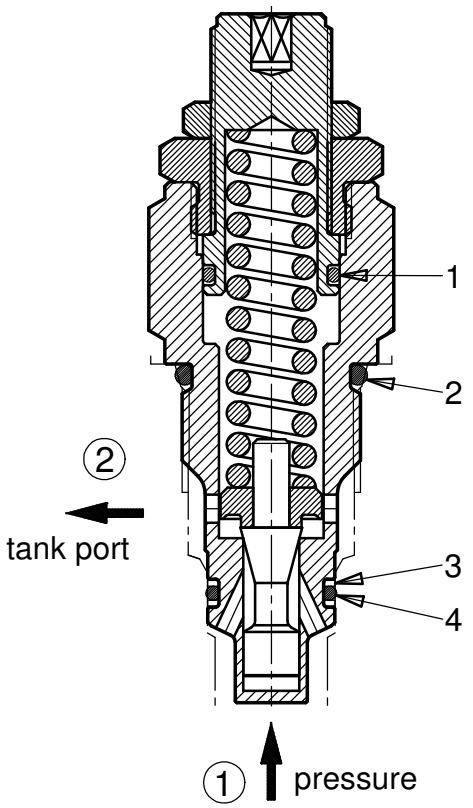


CAVITY DETAILS



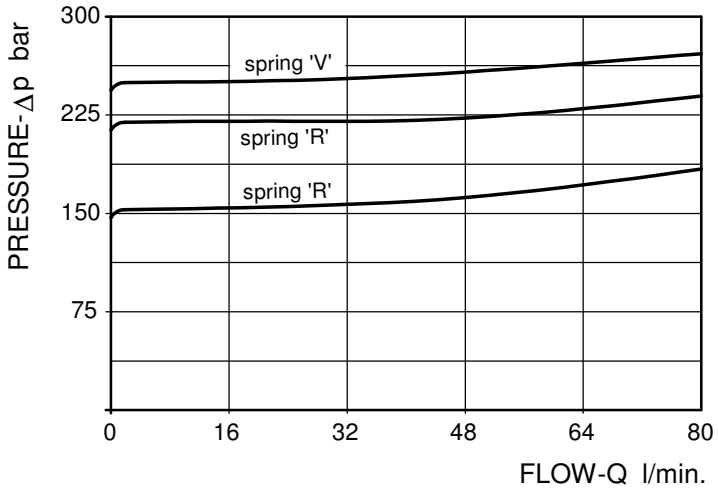
DIRECT ACTING RELIEF VALVES "VMD1.070"

CROSS VIEW



Ref	Seals	TARP code
1	O-Ring ø14x1.78 70 sh	ZOR028
2	O-Ring ø19.18x2.46 70 sh	ZOR084
3	Backup ring ø13x15.8x0.7	Z*03.15.01.148
4	O-Ring ø12.42x1.78 70 sh	ZOR027

PERFORMANCE



ORDERING CODE

Basic code **VMD1.070.* *.000**

Nominal size

Control option

S= socket screw

SPRING	Adjustment range min-max bar	Setting increase bar/screw turn	Spring code
N	10-60	10	Z*0F.M0.002
B	40-110	17	Z*0F.M0.001
R	110-220	31.5	Z*0F.M0.013
V	220-260	37	Z*0F.M0.057