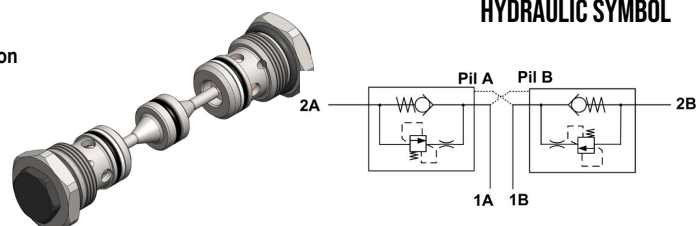


## DPT0.U78 VALVE SERIES

**U78 Cartridge - 475 bar**

### Direct acting with Thermal relief function

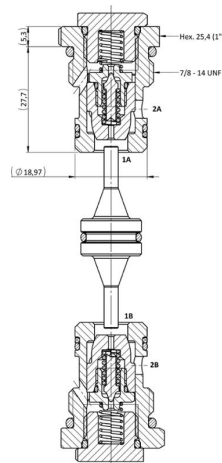
### Pilot piston to open



## DESCRIPTION

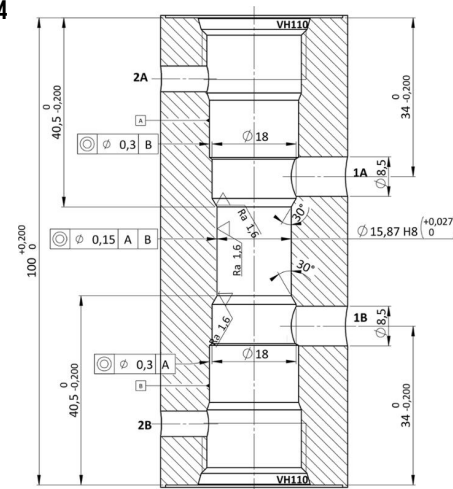
Normally closed, dual pilot check valve. Cartridge is closed until sufficient pressure is applied on port 1 to reach the bias spring setting (cracking pressure), lift the main poppet and allow free flow to port 2. The valve is normally closed from port 2 to 1. When sufficient pressure is applied on Pilot Port, the pilot piston lifts the poppet from its seat and allows flow from port 2 to port 1 (Pil A = 1B. Pil B = 1A). Very limited leakage in the check condition.

### CROSS SECTION

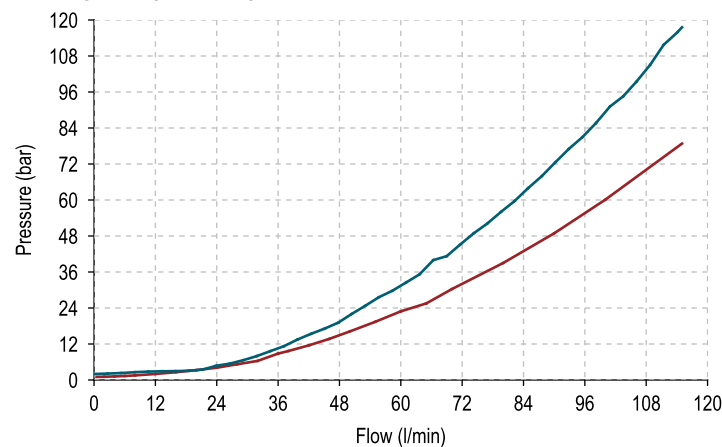


## CAVITY

### VH214



## PERFORMANCE DETAILS




### NOTE

The performance chart illustrates flow handling capacity for significant spring options. p/Q curves are recorded at TOil = 40°C and 46 cSt.

### LEGEND

— Spring S  
— 2ys1 Piloted

## TECHNICAL DATA

<b>MAXIMUM OPERATING PRESSURE</b>	475 bar
<b>MAXIMUM FLOW</b>	115 l/min
<b>MAXIMUM FLOW THERMAL RELIEF VALVE</b>	8 l/min
<b>THERMAL RELIEF CRACK PRESSURE FROM 2 TO 1</b>	325 - 475 bar (@0.16 - 0.25 l/min)
<b>MAXIMUM INTERNAL LEAKAGE</b>	0,25 cm <sup>3</sup> / min @ 6,9 bar - from 2 to 1 port 0,50 cm <sup>3</sup> / min @ 69 bar - from 2 to 1 port
<b>PILOT RATIO</b>	3,3:1
<b>EXTERNAL COMPONENT TREATMENT</b>	External parts aren't coated
<b>OIL TEMPERATURE RANGE</b>	-30° C to 110° C
<b>FLUIDS</b>	Mineral - based or synthetics with lubricating properties
<b>VISCOSITIES</b>	7,4 to 420 cSt
<b>FILTRATION</b>	20/18/15 ISO 4406 (maximum filtration admitted)
<b>ORIENTATION</b>	No restrictions
<b>INSTALLATION TORQUE</b>	45-50 Nm  Hex.25,4 (1")
<b>TECH. SPEC. FOR CHARACTERIZATION</b>	see page 811
<b>OIL TESTING CONDITIONS</b>	ISO VG 46 cSt
<b>SEAL KIT CODE</b>	SK.137 (standard sealing NBR-BUNA-N)
<b>WEIGHT</b>	0.180 kg

**ORDERING CODE**

D	P	T	O
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**VALVE BASIC CODE**

U	7	8
---	---	---

## MARKING

0 = Standard factory marking.  
Customized marking can be done  
upon request.

0	*
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## —SIZE

7/8-14 UNF with Ø18,97 nose size

0	0	0
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000 = Standard configuration.

## BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
S	2 (-0,5 / +2)