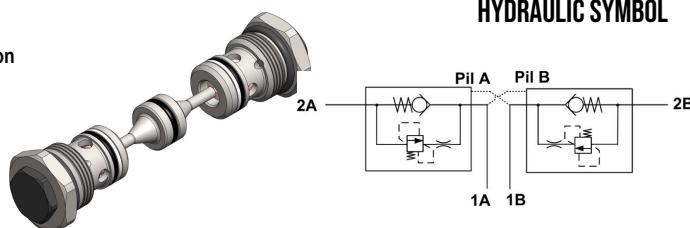


# DPT0.U78 VALVE SERIES

U78 Cartridge - 475 bar

Direct acting with Thermal relief function

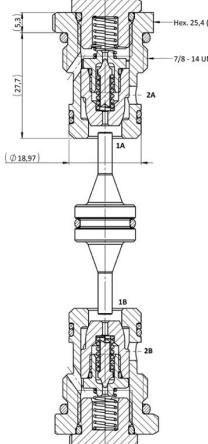
Pilot piston to open



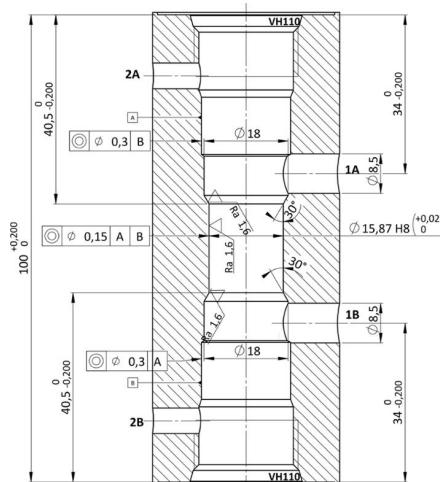
## DESCRIPTION

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.

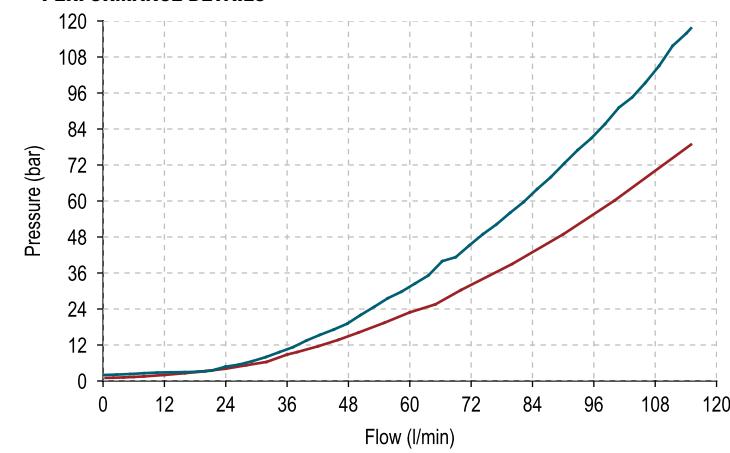
## CROSS SECTION



## CAVITY VH214



## PERFORMANCE DETAILS



### NOTE

The performance chart illustrates flow handling capacity for significant spring options.  
p/Q curves are recorded at  $T_{Oil} = 40^\circ C$  and 46 cSt.

### LEGEND

- Spring S
- 2vs1 Piloted

## TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	475 bar
MAXIMUM FLOW	115 l/min
MAXIMUM FLOW THERMAL RELIEF VALVE	8 l/min
THERMAL RELIEF CRACK PRESSURE FROM 2 TO 1	325 - 475 bar (@0.16 - 0.25 l/min)
MAXIMUM INTERNAL LEAKAGE	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
PILOT RATIO	3,3:1
EXTERNAL COMPONENT TREATMENT	External parts aren't coated
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.25,4 (1")
TECH. SPEC. FOR CHARACTERIZATION	see page 811
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.137 (standard sealing NBR-BUNA-N)
WEIGHT	0,180 kg

## ORDERING CODE

D P T 0

VALVE BASIC CODE

U 7 8

0 \*

0 0 0

000 = Standard configuration.

### MARKING

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

### SIZE

7/8-14 UNF with Ø18,97 nose size

### BIAS SPRING OPTIONS

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

Specifications may change without notice.