

# Directional cartridge valve tight on one side type 2URES6

NS 6 |  $p_{max}$  25 MPa |  $Q_{max}$  40 dm<sup>3</sup>/min | WK 432 720



## DATA SHEET - OPERATION MANUAL

### APPLICATION

Directional cartridge valve type **2URES6...** is intended for control direction of fluid flow, causing particular movement direction or stops a receiver (cylinder or hydraulic motor). The directional valve is mounted by screwing into a threaded cavity.

The product is compliant with the regulations of directive 2014/35/UE

### DESCRIPTION OF OPERATION

The directional valve type **2URES6...** consists of solenoid **1**, sleeve **2**, cone **3**, needle **4** and spring **5**. Flow is enabled or cut off by moving the cone **3** in sleeve **2**.

In version **2URES6A1...** flow is enabled in the direction **2→1**; in version **2URES6A3...** flow is enabled in both directions: **2→1** and **1→2**, by means of cone **(3)** with ball **(6)**. Flow is cut off by applying voltage onto the solenoid **(1)** and moving needle **(4)**, which in consequence closes cone **(3)** by pressure from port **2**.

In version **2URES6A2...** flow is enabled in the direction **2→1**; in version **2URES6A4...** flow is enabled in both directions: **2→1** and **1→2** by means of cone **(3)** with ball **(6)**. Flow is enabled by applying voltage onto the solenoid and moving needle **(4)**, which in consequence closes cone **(3)** by pressure from port **2**.

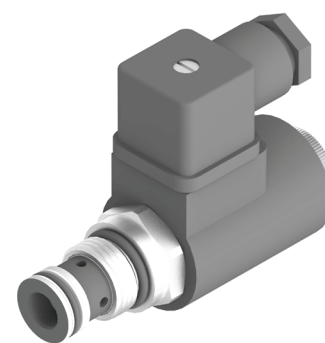
Additionally, directional valves could be supplied with manual override:

- with stroke setting by rotated knob, type **NE** (see page 2)
- with detent, type **NB** (see page 2)

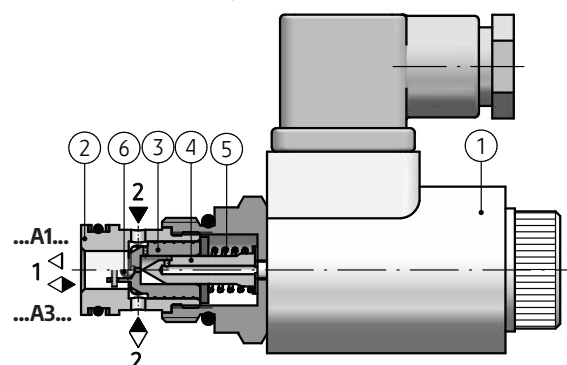
### TECHNICAL PARAMETERS

hydraulic fluid	mineral oil	
required fluid cleanliness class	ISO 4406 class 20/18/15	
nominal fluid viscosity	37 mm <sup>2</sup> /s at temperature 55 °C	
viscosity range	2,8 ÷ 380 mm <sup>2</sup> /s	
fluid temperature range (in a tank)	recommended	40 ÷ 55 °C
	max.	-20 ÷ 70 °C
ambient temperature range	-20 ÷ 50 °C	
maximum operating pressure	25 MPa	
power consumption	26 W	
degree of protection	IP 65	
weight	0,44 kg	

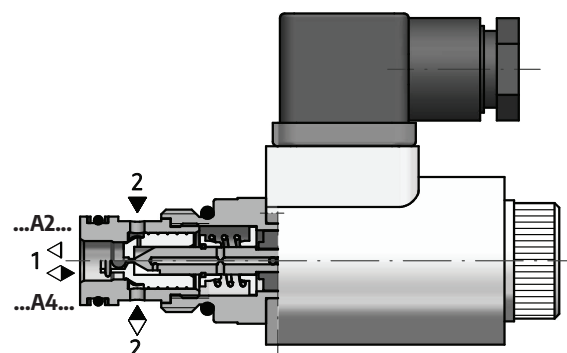
assembly and operation requirements at [www.operating-conditions.ponar.pl](http://www.operating-conditions.ponar.pl)



versions: 2URES6A1...; ...A3...

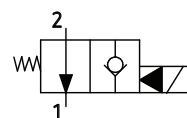


versions: 2URES6A2...; ...A4...

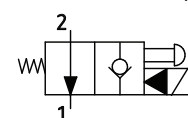


### DIAGRAMS

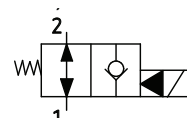
version 2URES6A1...



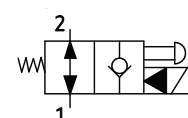
version 2URES6A1.../...N...



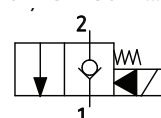
version 2URES6A3...



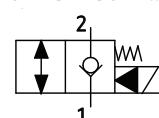
version 2URES6A3.../...N...



version 2URES6A2...



version 2URES6A4...





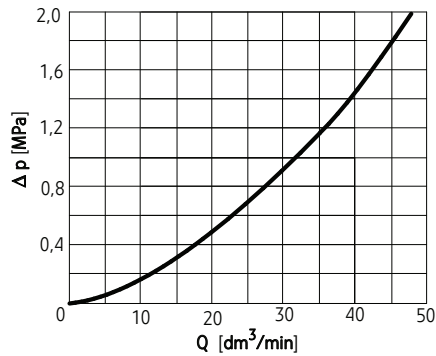
## PERFORMANCE CURVES

measured at viscosity  $\nu = 41 \text{ mm}^2/\text{s}$  and temperature  $t = 50 \text{ }^\circ\text{C}$

### Flow resistance curves

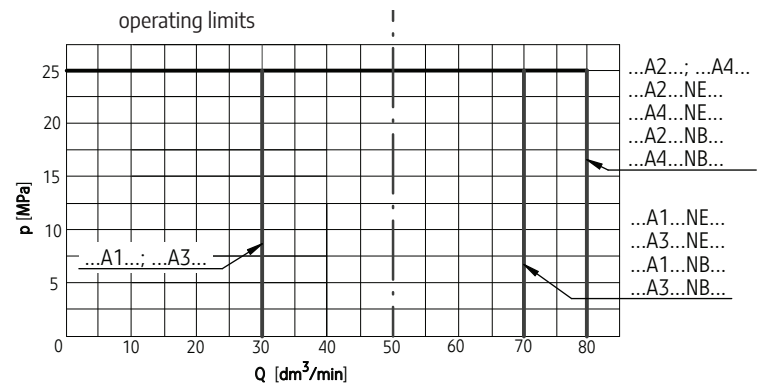
Pressure resistance  $\Delta p$  in relation to flow  $Q$  for directional cartridge valve type **2URES6...**

versions: **...A1...; ...A2...; ...A3...; ...A4...** flow direction: **2 → 1**

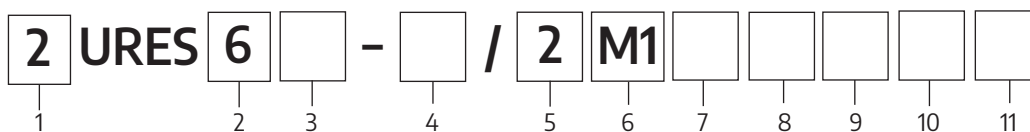


### Operating limits

Characteristic curves  $p - Q$  for direction: **2 → 1**



## HOW TO ORDER



### 1 Number of service ports

2-way =

2

### 2 Nominal size (NS)

NS6 =

6

### 3 Design version

(diagrams according to page 1)

version **...A1...** =

**A1**

version **...A2...** =

A2

version **...A3...** =

**A3**

version **...A4...** =

A4

### 4 Series number

(12 ÷ 19) connection and installation

dimensions unchanged =

1X

series **16** =

**16**

### 5 Number of working positions

2-position valve =

2

### 6 Type of connection

cavity M22 × 1,5 =

**M1**

### 7 Control voltage for solenoids

12 V DC =

G12

**24 V DC** =

**G24**

110 V AC 50 Hz (with rectifier) =

W110R

**230 V AC 50 Hz** (with rectifier) =

**W230R**

### 8 Manual override

**solenoids without manual override** =  $\emptyset$

with stroke setting by rotated knob = NE

with stroke setting by rotated knob

with detent =

NB

### 9 Electrical connection

ISO 4400 (DIN 43650-A) without LED = Z4

ISO 4400 (DIN 43650-A) with LED = Z4L

AMP Junior without plug-in connector –

only for 12 V DC; 24 V DC (see pos. 7) = J

### 10 Sealing

**NBR** (for fluids on mineral oil base) =  $\emptyset$

**FKM** (for fluids on phosphate ester

base) =

V

### 11 Further requirements = \*

(to be agreed with the manufacturer)

### NOTES:

$\emptyset$  indicates that the box should be left blank.

The **symbols in bold are** the preferred versions available in short delivery time.

Coding example: **2URES6 A1 - 16 / 2 M1 G24 Z4**

## CONTACT

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