

Part number:



**HYDROMA**

HYDRAULICKÉ SYSTÉMY

**HIDROMA**  
SISTEMS

UKŁADY HYDRAULICZNE

**HYDROMA**

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

41 150/122 ED

**DS3**

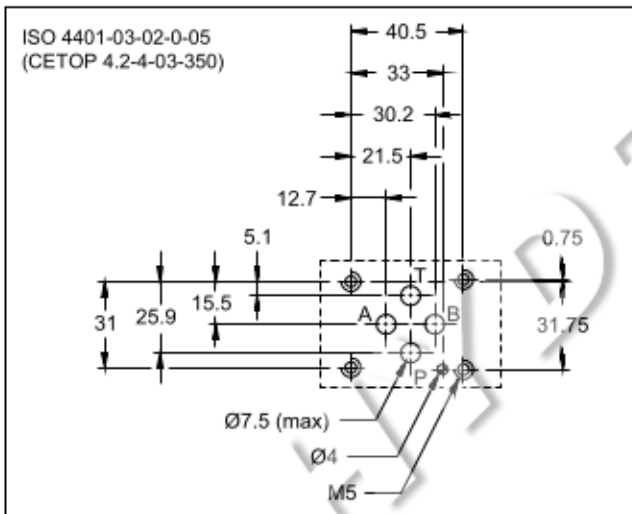
**SOLENOID OPERATED  
DIRECTIONAL CONTROL VALVE**



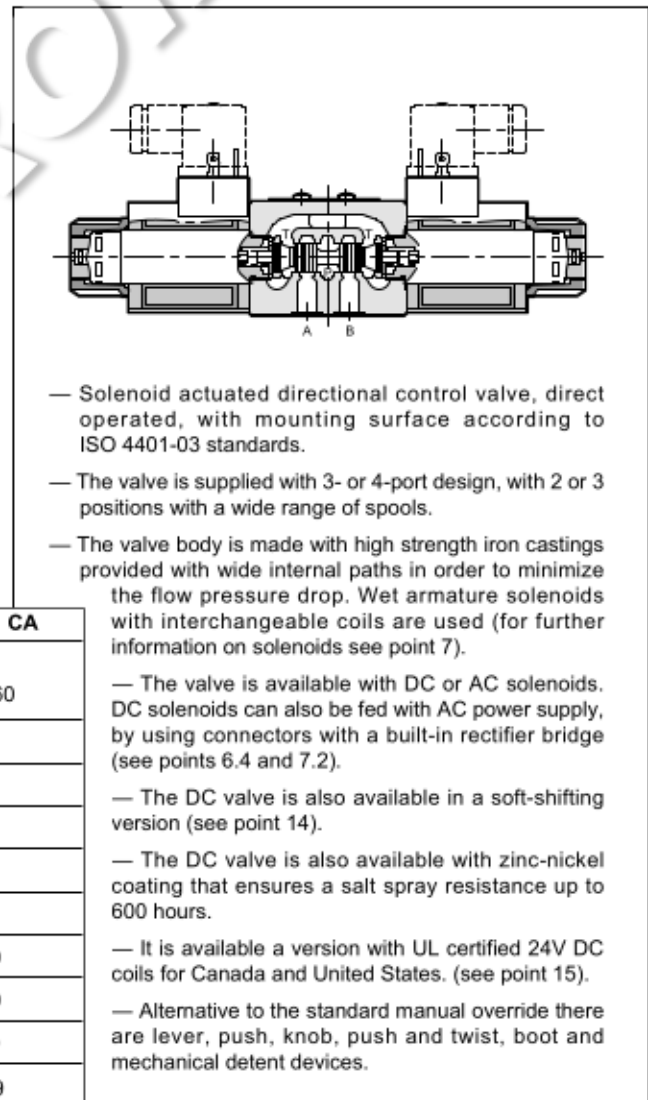
**SUBPLATE MOUNTING  
ISO 4401-03**

**p** max 350 bar  
**Q** max 100 l/min

**MOUNTING INTERFACE**



**OPERATING PRINCIPLE**

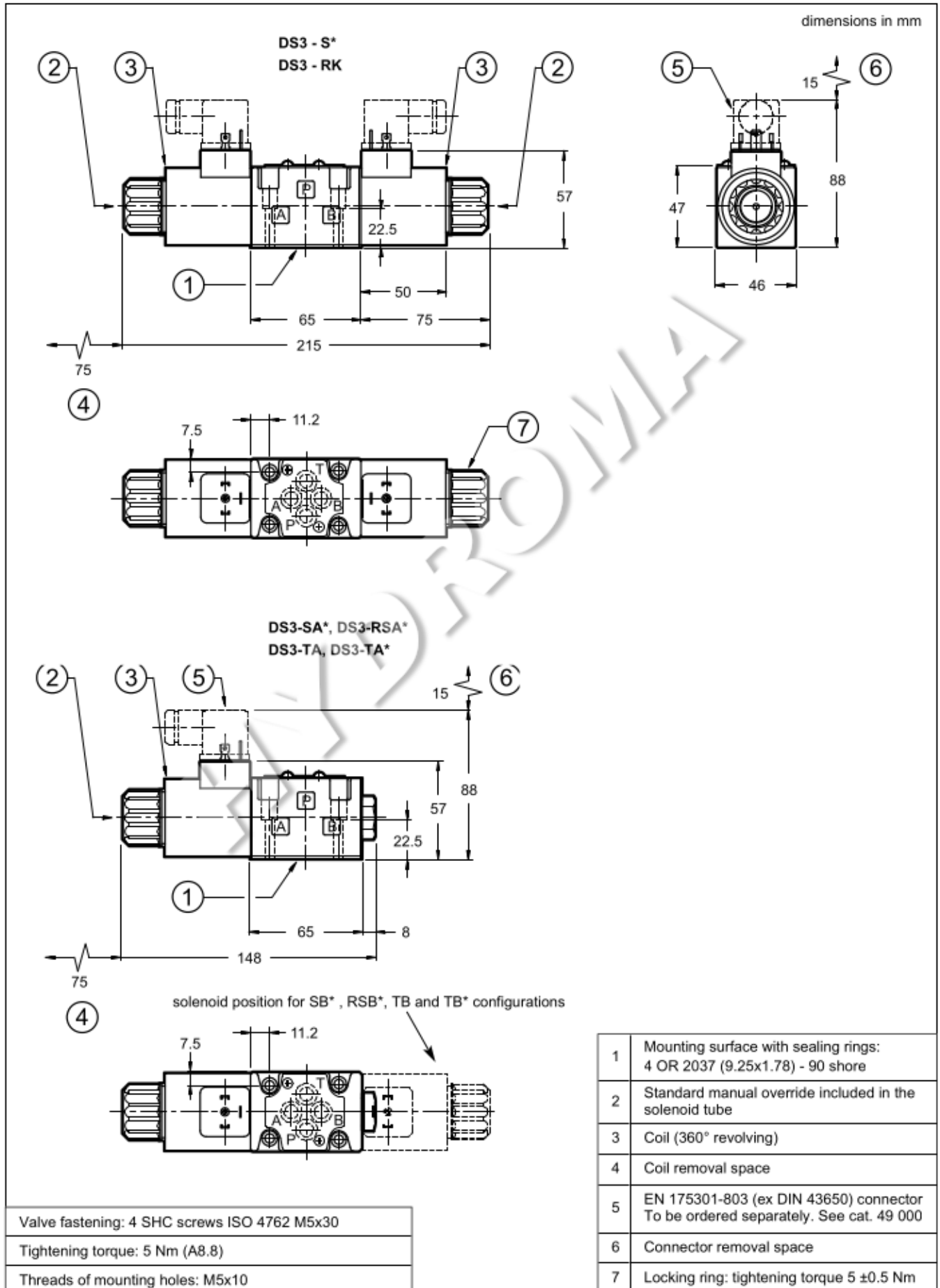


**PERFORMANCES**

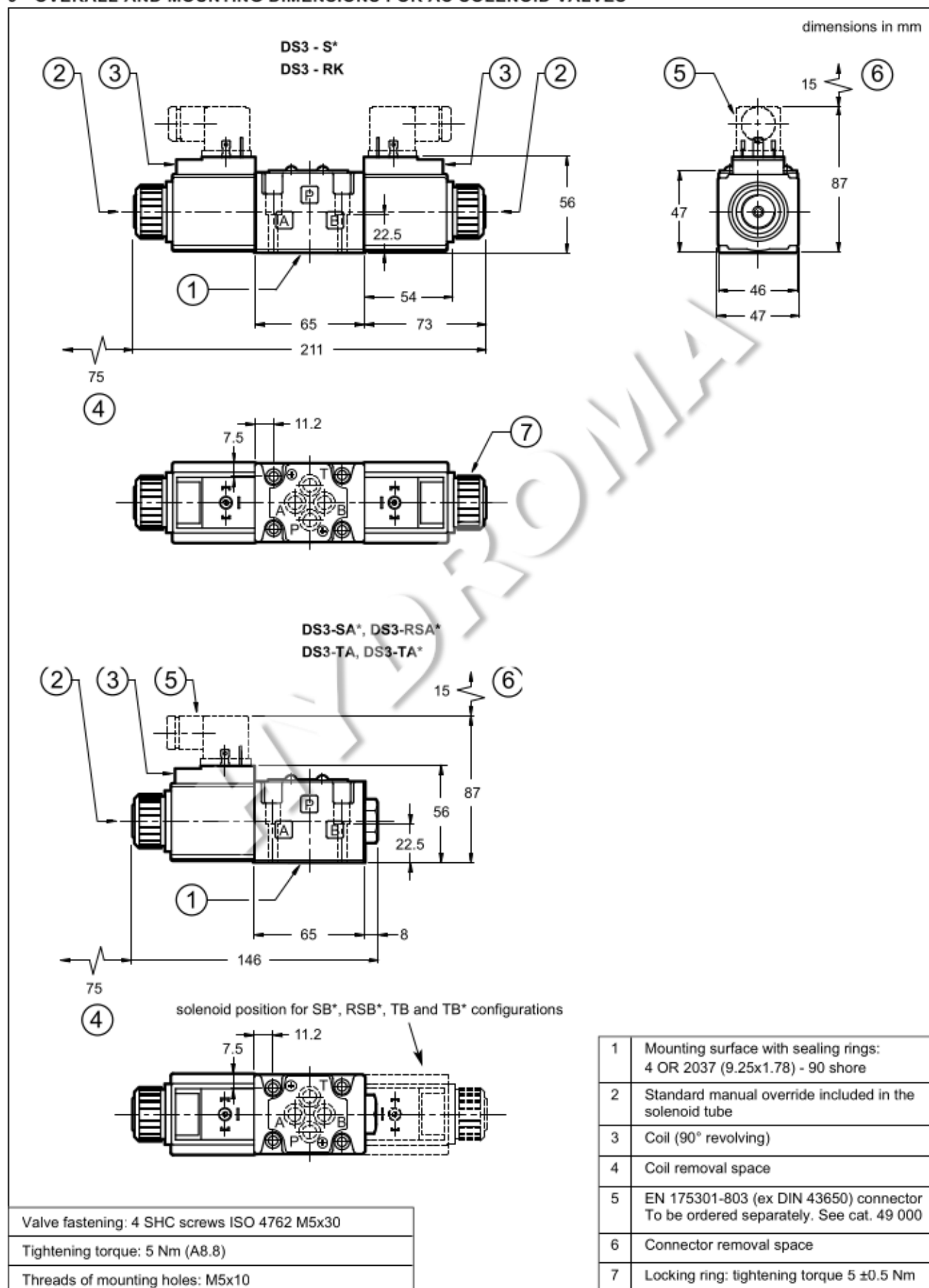
(obtained with mineral oil with viscosity of 36 cSt at 50°C)

	bar	CC		CA
		350	210	160
Maximum operating pressure: - P - A - B ports - T port				
Maximum flowrate	l/min	100		
Pressure drops $\Delta p-Q$		see point 4		
Operating limits		see point 6		
Electrical features		see point 7		
Electrical connections		see point 11		
Ambient temperature range	°C	-20 / +50		
Fluid temperature range	°C	-20 / +80		
Fluid viscosity range	cSt	10 + 400		
Fluid contamination degree		according to ISO 4406:1999 class 20/18/15		
Recommended viscosity	cSt	25		
Mass:	kg	1,5	2	1,4 2
		single solenoid valve	double solenoid valve	

## 8 - OVERALL AND MOUNTING DIMENSIONS FOR DC SOLENOID VALVES

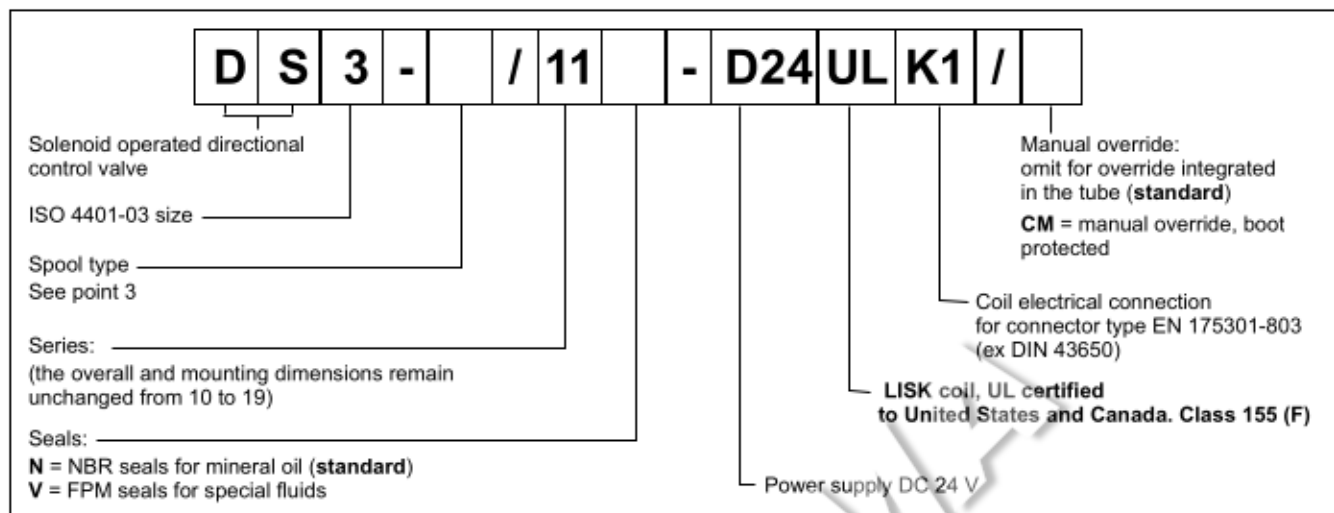


## 9 - OVERALL AND MOUNTING DIMENSIONS FOR AC SOLENOID VALVES



## 15 - VERSION WITH UL CERTIFIED COILS

### 15.1 - Identification code



### 15.2 - UL file number

The UL database website provides informations about the certification, by entering the code MH29222 in the 'UL file number' field.

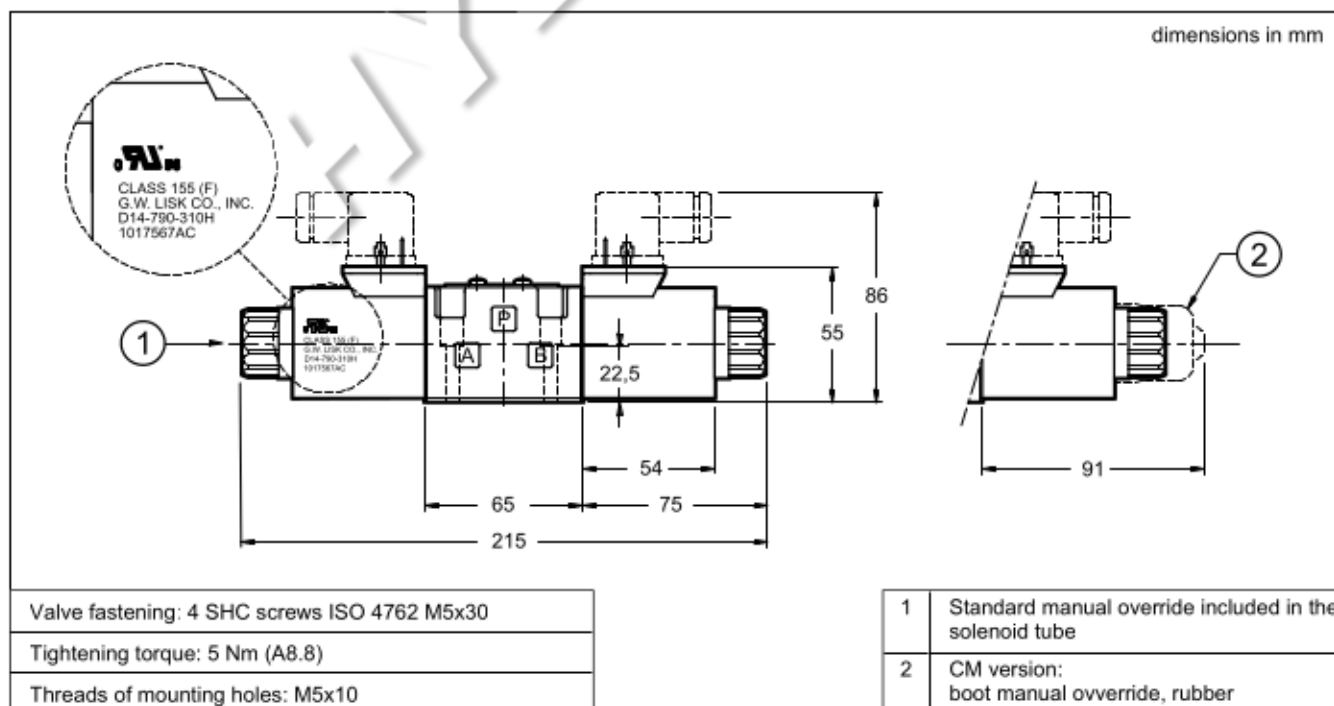
### 15.3 - Electrical features

(values  $\pm 10\%$ )

	Nominal voltage [V]	Resistance at 20°C [Ω]	Current consumpt. [A]	Power consumpt [W]	Coil code
<b>D24ULK1</b>	24	19.2	1.25	30	1903341

**NOTE:** Valves with UL coils must be ordered complete. **The UL coils are not interchangeable with those of standard valves.**

### 15.4 - Overall and mounting dimensions



## 16 - VERSION WITH FIXING INTERCHANGEABLE WITH 4WE6\*6X REXROTH

### 16.1 - Identification code

D	S	3	R	-	/	11	-	/			
---	---	---	---	---	---	----	---	---	--	--	--

Directional valve, solenoid operated

ISO 4401-03 size

Fastening screws interchangeable with Rexroth 4WE6\*6X valve.

Spool type (see point 3)

S*	RSA*	TA	RK
SA*	RSB*	TB	
SB*		TA*	
		TB*	

Series: (the overall and mounting dimensions remain unchanged from 10 to 19)

Complete the identification code configuration as for in point 1.

### 16.2 - Overall and mounting dimensions for DC solenoid valves

dimensions in mm

Please refer to the standard valve at point 8 for non-quoted dimensions.

Valve fastening: 4 SHC screws ISO 4762 M5x50
Tightening torque: 5 Nm (A8.8)
Threads of mounting holes: M5x10

### 16.3 - Overall and mounting dimensions for AC solenoid valves

dimensions in mm

Please refer to the standard valve at point 9 for non-quoted dimensions.

Valve fastening: 4 SHC screws ISO 4762 M5x50
Tightening torque: 5 Nm (A8.8)
Threads of mounting holes: M5x10

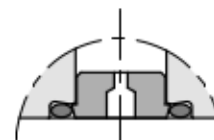
## 18 - PORT RESTRICTORS

Port restrictors are recommended if flow variations which exceed the valve performance limit during the switching processes occur, or for circuit dampening.

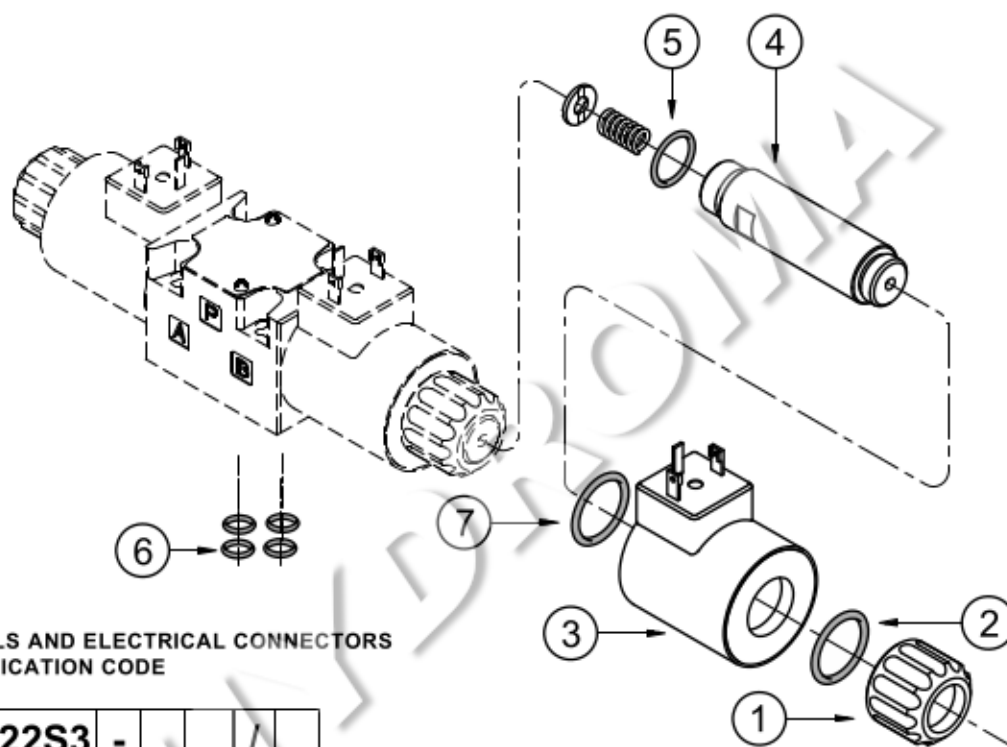
Port restrictor plugs can be ordered separately with the part numbers shown at left.

Ø (mm)	part number
blank	0144162
0.6	0144163
0.8	0144033
1	0144034

Ø (mm)	part number
1.2	0144035
1.5	0144036
1.8	0144164
2	0144165



## 19 - SPARE PARTS FOR DC SOLENOID VALVE



### DC COILS AND ELECTRICAL CONNECTORS IDENTIFICATION CODE

**C 22S3 -**

Supply voltage

**D12** = 12 V  
**D14** = 14 V  
**D24** = 24 V  
**D26** = 26.4 V  
**D28** = 28 V  
**D48** = 48 V  
**D110** = 110 V  
**D125** = 125 V  
**D220** = 220 V

Series no.:

**10** = for K7 and WK7  
**11** = for K1 up to D48 and K2  
**12** = for K1 D110, D125, D220, WK1 and WK7D

Coil electrical connection (see point 11):  
**K1** = plug for connector EN 175301-803 (ex DIN 43650)

for coils **D12**, **D24** and **D26**:

**WK1** = plug for connector EN 175301-803 (ex DIN 43650)

**WK7** = plug DEUTSCH DT04-2P, for male connector type DEUTSCH DT06-2S.

Only for **D12** and **D24**:

**K2** = plug for connector AMP JUNIOR

**K7** = plug DEUTSCH DT04-2P, for male connector type DEUTSCH DT06-2S.

**WK7D** = plug DEUTSCH DT04-2P, for male connector type DEUTSCH DT06-2S.

Coil with diode.

1	Coil locking ring with seal included cod. 0119412 Tightening torque 5 ±0.5 Nm
2	ORM type 0220-20 (22x2) - 70 Shore
3	Coil (see identification code)
4	Solenoid tube for standard version: <b>NOTE:</b> OR n°5 included
5	OR type 2062 (15.6x1.78) - 70 Shore
6	4 OR type 2037 (9.25x1.78) - 90 Shore
7	For coils WK* only: ORM-0220-20 - MVQ

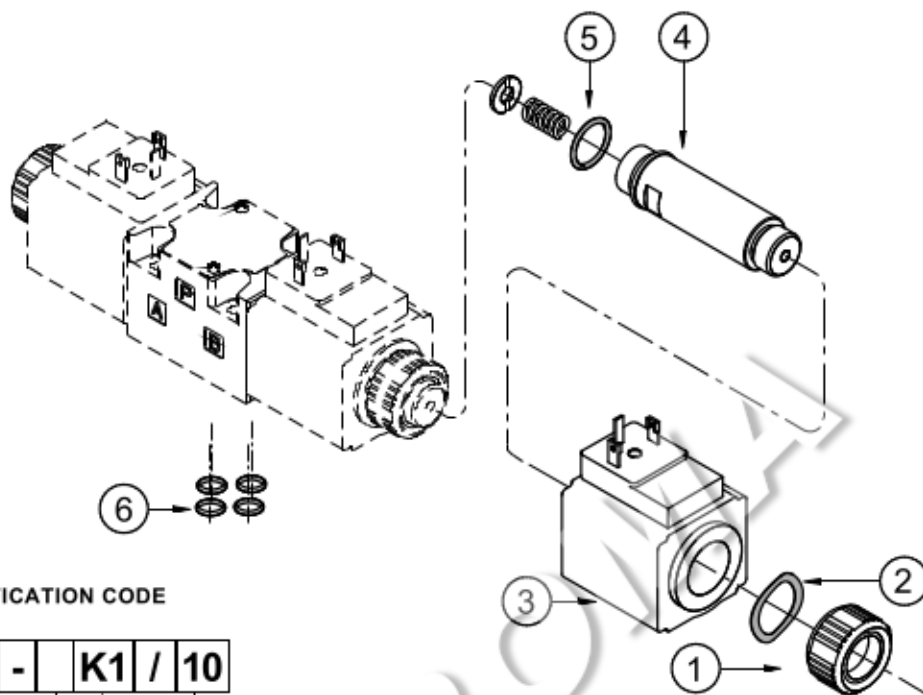
### SEALS KIT

The codes include the O-Ring n° 2, 5, 6 e 7.

**Cod. 1985406** NBR seals  
**Cod. 1985410** FPM (viton) seals

**NOTE:** You can also order coils using the coil codes in points 7.2 and 17.3.

## 20 - SPARE PARTS FOR AC SOLENOID VALVE



### AC COILS IDENTIFICATION CODE

**C 20.6S3 - K1 / 10**

Supply voltage

**A24** = 24 V - 50 Hz  
**A48** = 48 V - 50 Hz  
**A100** = 100 V - 50 Hz  
 100 V - 60 Hz  
**A110** = 110 V - 50 Hz  
 120 V - 60 Hz  
**A230** = 230 V - 50 Hz  
 240 V - 60 Hz  
**F110** = 110 V - 60 Hz  
**F220** = 220 V - 60 Hz

Series no.:  
 (the overall and  
 mounting dimensions  
 remain unchanged  
 from 10 to 19)

Plug for connector type  
 EN 175301-803  
 (ex DIN 43650)

1	Coil locking ring cod. 0119333 Tightening torque 5 ±0.5 Nm
2	Snap ring cod. 0550483
3	Coil (see identification code on the side)
4	Solenoid tube : <b>NOTE:</b> OR n° 5 included
5	OR type 2062 (15.6x1.78) - 70 Shore
6	N. 4 OR type 2037 (9.25x1.78) - 90 Shore

### SEALS KIT

The codes include the OR nr. 5 and 6.

**Cod. 1985406** NBR seals  
**Cod. 1985410** FPM (viton) seals

**NOTE:** You can also order coils using the coil codes in point 7.3

## 21 - SUBPLATES

(see catalogue 51 000)

Type PMMD-AI3G with rear ports 3/8" BSP

Type PMMD-AL3G with side ports 3/8" BSP