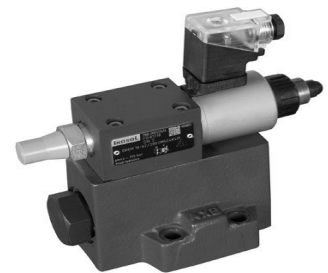


## Proportional pressure reducing valve, pilot operated

1/6

### Type DRE(M) and DRE(M)E

Sizes 10 and 25 <sup>1)</sup>  
 Component series 6X  
 Maximum operating pressure 315 bar  
 Maximum flow 300 l/min



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### Features

- Valve for reducing an operating pressure
- Operation by means of proportional solenoids
- Proportional solenoid with rotatable and detachable coil
- For subplate mounting:  
 Porting pattern according to ISO 5781,  
 Subplates according to data sheet RE 45062  
 (separate order), see page 11
- Third path A to Y ( $\varnothing$  7.5 mm)
- Minimum setting pressure 2 bar with command value zero
- Linearized command value-pressure characteristic curve
- Good transient response
- Optional check valve between A and B
- Maximum pressure limitation optional
- Type DRE(M)E with integrated electronics (OBE):
  - Little manufacturing tolerance of the command value-pressure characteristic curve

## Ordering code

DRE			-6X/	Y		G24				*
<b>without</b> maximum pressure limitation	<b>= no code</b>									
<b>with</b> maximum pressure limitation <sup>1)</sup>	<b>= M</b>									
For external control electronics	<b>= no code</b>									
with integrated electronics (OBE)	<b>= E</b>									
Size 10	<b>= 10</b>									
Size 25	<b>= 20</b>									
Component series 60 to 69 (60 to 69: Unchanged installation and connection dimensions)	<b>= 6X</b>									
<b>Pressure rating</b>										
50 bar	<b>= 50</b>									
100 bar	<b>= 100</b>									
200 bar	<b>= 200</b>									
315 bar	<b>= 315</b>									
Pilot oil return always external separately and at zero pressure to the tank	<b>= Y</b>									
<b>with</b> check valve between A and B	<b>= no code</b>									
<b>without</b> check valve	<b>= M</b>									
Further details in the plain text										
<b>Seal material</b>										
<b>M =</b> NBR seals										
<b>V =</b> FKM seals										
<b>Interface electronics</b>										
<b>A1 =</b> Command value 0 to 10 V										
<b>F1 =</b> Command value 4 to 20 mA										
<b>no code =</b> with DRE										
<b>Electrical connection for DRE(M):</b>										
<b>K4 =</b> <b>without</b> mating connector, with connector according to DIN EN 175301-803 Mating connector - separate order see page 8										
<b>for DRE(M)E:</b>										
<b>K31 =</b> <b>without</b> mating connector, with connector according to DIN EN 175201-804 Mating connector - separate order see page 8										
<b>no code =</b> 1600 mA design										
<b>- 8 =</b> 800 mA design <sup>2)</sup>										
<b>Supply voltage of the control electronics</b>										
<b>G24 =</b> Direct voltage 24 V										

### Accessories (not included in scope of delivery)

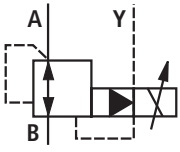
- External control for type DRE (only standard version G24 (1.6 A solenoid)):
  - Analog amplifier VT-MSPA1-11-1X/  
in modular design according to data sheet RE 30223
  - Digital amplifier VT-VSPD-2  
in Eurocard format according to data sheet RE 30523
  - Analog amplifier VT-VSPA1-11-1X/  
in Eurocard format according to data sheet RE 30100
  - Proportional plug-in amplifier VT-SSPA1-1-1X  
plug-in amplifier according to data sheet RE 30116  
connection M12 - 4-pole
- Mating connectors (details, see page 8)
  - For DRE(M): According to DIN EN 175301-803,  
Material no. **R901017011**
  - For DRE(M)E: According to DIN EN 175201-804,  
Material no. **R900021267** or **R900223890**

<sup>1)</sup> In case of an error (e.g. in case of contamination or overcurrent), the maximum pressure limitation prevents an inadmissibly high overpressure at the valve.

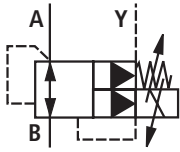
<sup>2)</sup> Replacement series 5X (Attention! External amplifiers only suitable for G24 = 1.6 A solenoid), see accessories.

# Symbols

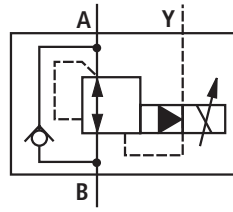
DRE -6X/...YM...



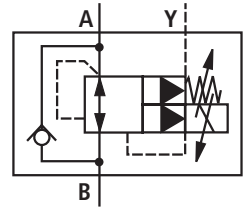
DREM -6X/...YM...



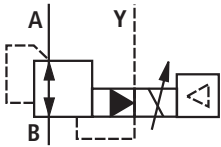
DRE -6X/...Y...



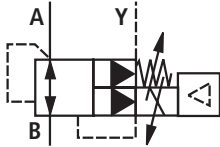
DREM -6X/...Y...



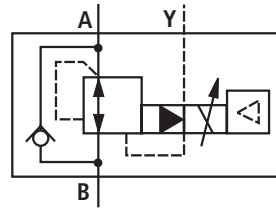
DREE -6X/...YM...



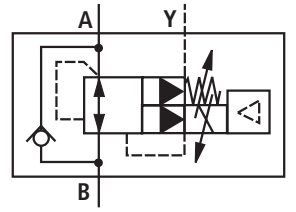
DREME -6X/...YM...



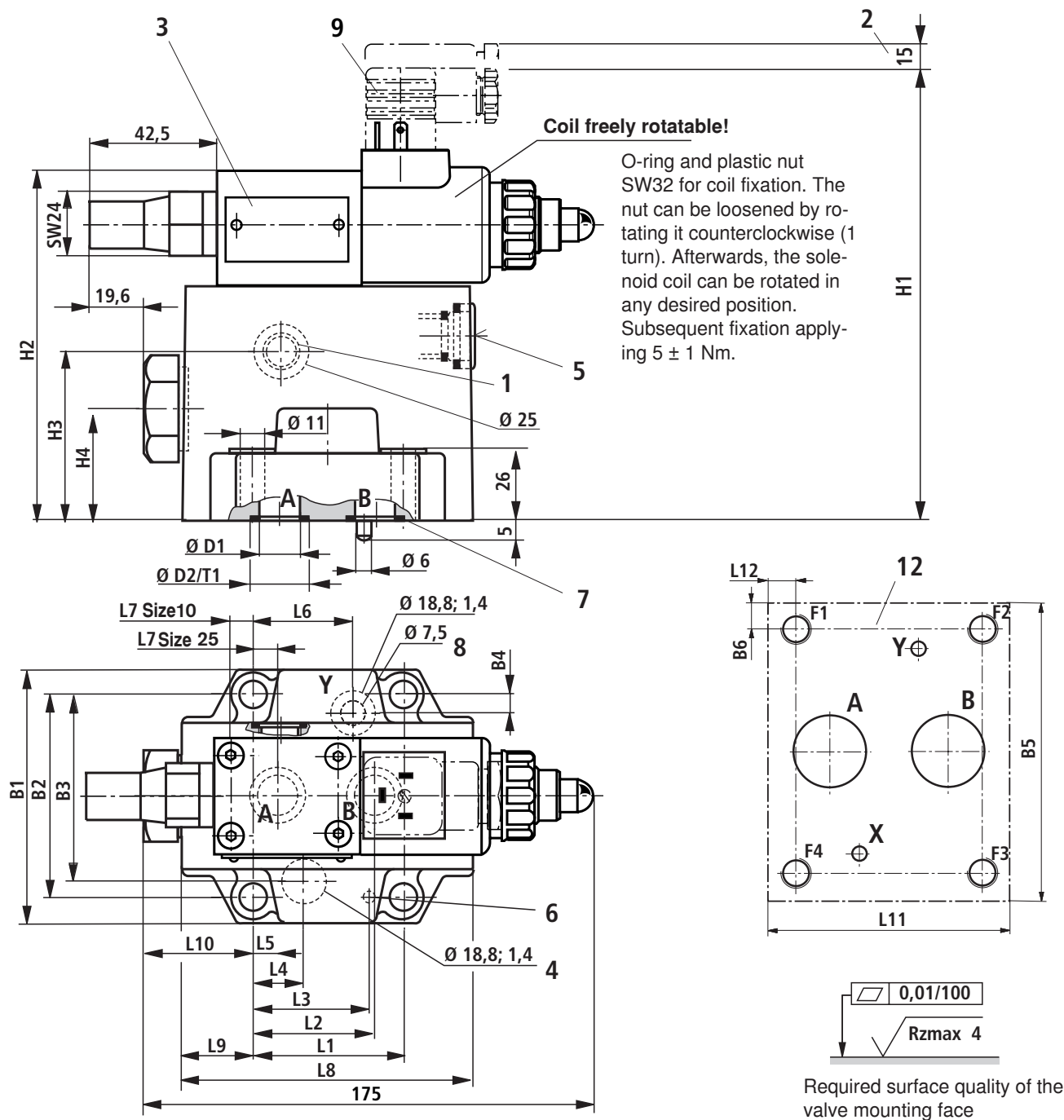
DREE -6X/...Y...



DREME -6X/...Y...

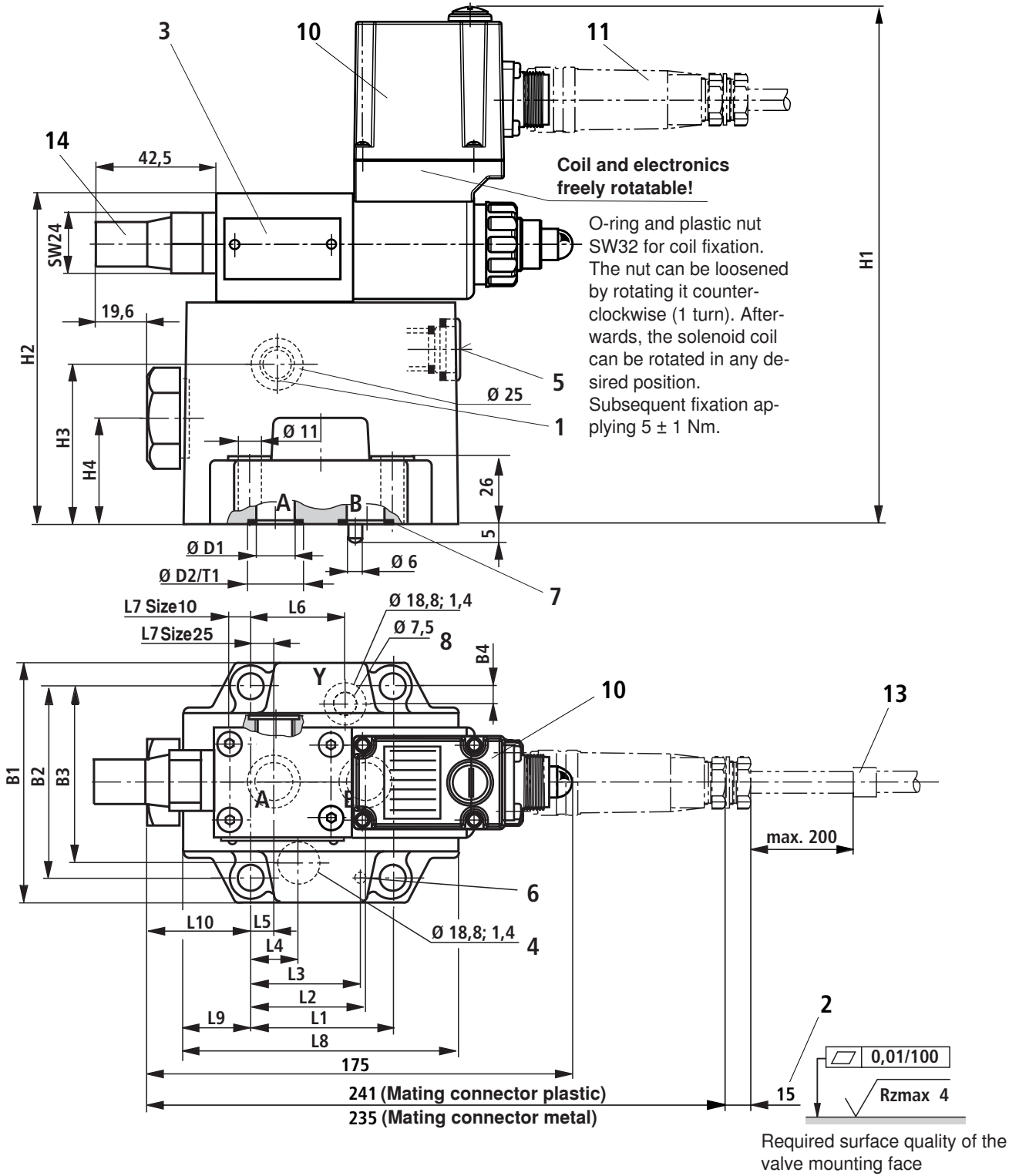


Unit dimensions type DRE(M) (dimensions in mm)



Size	B1	B2	B3	B4	ØD1	ØD2 <sup>H11</sup>	H1	H2	H3	H4	
10	85	66.7	58.8	7.9	15	21.8	171	123	58	36	
25	102	79.4	73	6.4	25	34.8	185	137	64	44	
Size	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	T1
10	42.9	35.8	31.8	21.5	7.2	21.5	5	116	44.5	59.5	2.0
25	60.3	49.2	44.5	20.6	11.1	39.7	12.2	116	27.3	42	2.9
Size	B5	B6	L11	L12							
10	84	8.65	61	9.05							
25	97	8.8	78	8.85							

Unit dimensions type DRE(M)E (dimensions in mm)



Size	B1	B2	B3	B4	ØD1	ØD2 <sup>H11</sup>	H1	H2	H3	H4	
10	85	66.7	58.8	7.9	15	21.8	192	123	58	36	
25	102	79.4	73	6.4	25	34.8	206	137	64	44	
Size	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	T1
10	42.9	35.8	31.8	21.5	7.2	21.5	5	116	44.5	59.5	2.0
25	60.3	49.2	44.5	20.6	11.1	39.7	12.2	116	27.3	42	2.9

## Unit dimensions (continued)

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- 1 Upon delivery, this port (G1/4) is closed. After removal of the blanking plug, an external and separate pilot oil return at zero pressure to the tank is, however, also possible here.
- 2 Space required for removing the mating connector
- 3 Name plate
- 4 Blind counterbore
- 5 Check valve, optional
- 6 Locating pin
- 7 Identical seal rings for ports A and B  
Identical seal rings for port Y and blind counterbore (item 4)
- 8 Pilot oil return always external and separately at zero pressure to the tank, or optionally at item 1
- 9 Mating connector according to DIN EN 175301-803
- 10 Integrated electronics (OBE), type DRE(M)E with connector "K31"
- 11 Mating connector according to DIN EN 175201-804
- 12 Processed installation surface, porting pattern according to ISO 5781-06-07-0-00 (size 10)  
ISO 5781-08-10-0-00 (size 25)
- 13 Cable fastening
- 14 Maximum pressure limitation with version DREM and DREME

Subplates according to data sheet RE 45062 and valve mounting screws must be ordered separately.

### Subplates:

**Size 10:** G 460/01 (G 3/8)  
G 461/01 (G 1/2)

**Size 25:** G 412/01 (G 3/4)  
G 413/01 (G 1)

### Valve mounting screws:

#### 4 hexagon socket head cap screws ISO 4762-M10x45-10.9-fIZn-240h-L

(friction coefficient  $\mu_{\text{total}} = 0.09$  to  $0.14$ ,  
Tightening torque  $M_A = 59 \text{ Nm} \pm 10 \%$

or

#### 4 hexagon socket head cap screws ISO 4762-M10x45-10.9

(friction coefficient  $\mu_{\text{total}} = 0.12$  to  $0.17$ )  
Tightening torque  $M_A = 75 \text{ Nm} \pm 10 \%$