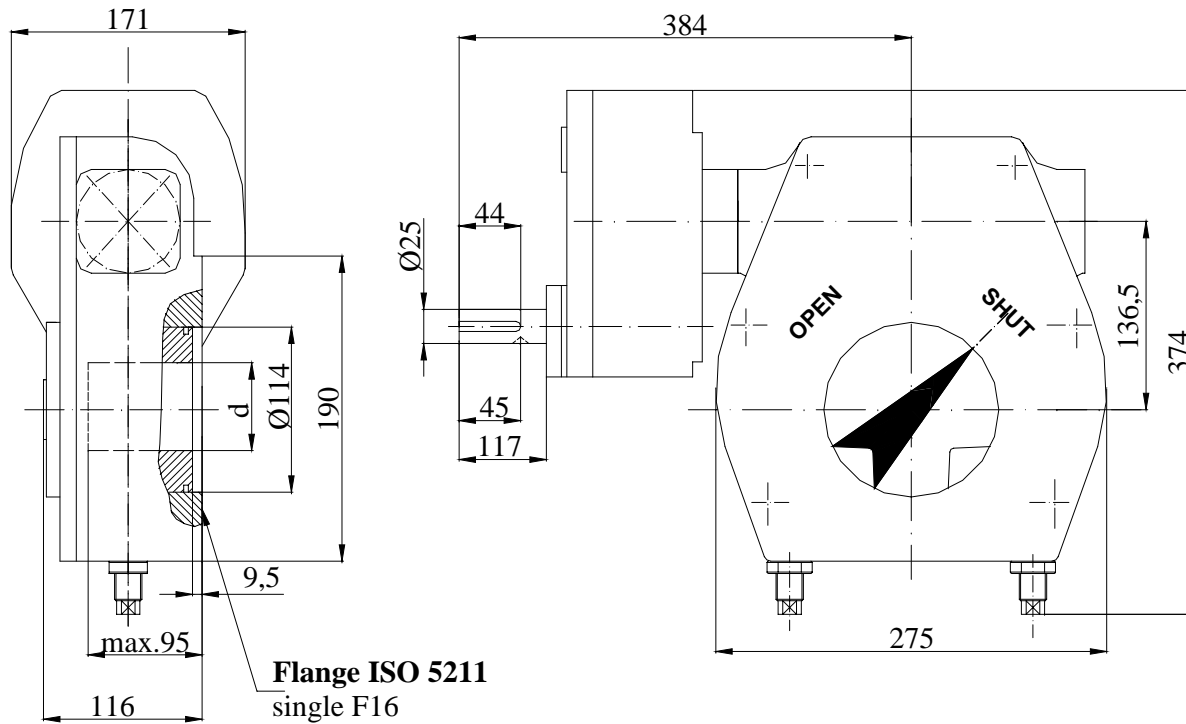


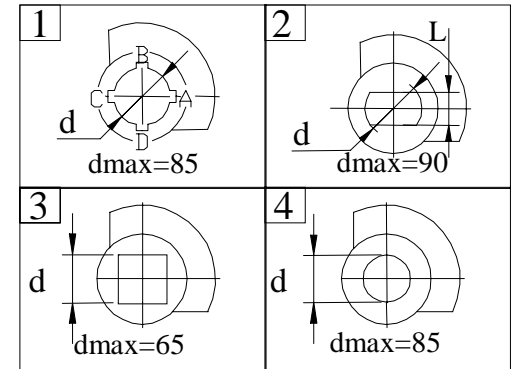
# WORM UNIT FOR 1/4 TURN VALVES R2CM 345

Sheet no.	807
Date	26.03.2004



Hand wheel –ø600-standard; ø800  
Should be ordered separately !

### COUPLING SHAPE(TOP VIEW)



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Carbon Steel	C45-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Bronze	CuSn6-DIN17662
7	Worm bearings	-	51205 DIN 711
8	Set-screw	Carbon Steel	Gr8.8-DIN916
9	“O”ring	Nitrile	DIN 3771
10	Grease	Lithium-Calcium	UM170LiCaPb2

### TECHNICAL FEATURES:

Output rated torque[Nm].....	3450
Input rated torque[Nm].....	105±10%
Ratio.....	132
Output angular stroke.....	90°±5°
Handwheel turns for a complete stroke.....	33
Capsulation.....	IP54

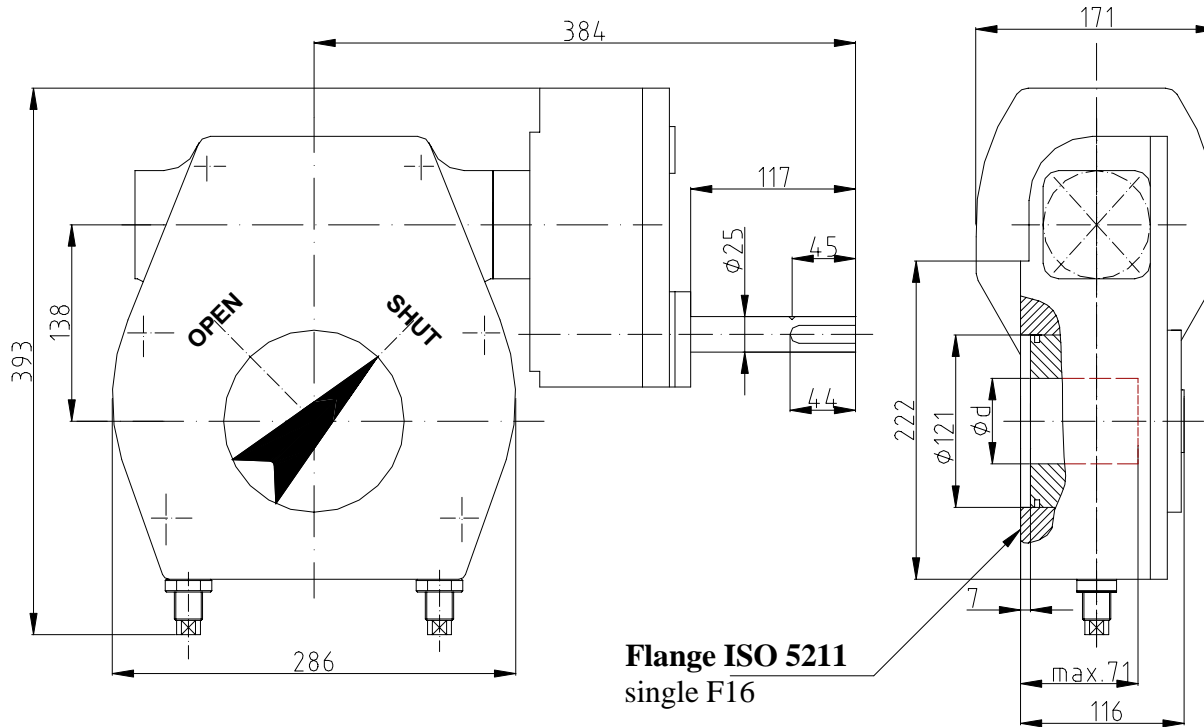
### ORDERING CODE :

**R2CM345 x 132 - F16 / 1 / 60 / A**

Type	Ratio	Output flange ISO 5211	Keyway position	d-Coupling dimensions	Coupling shape
------	-------	------------------------	-----------------	-----------------------	----------------

# WORM UNIT FOR 1/4 TURN VALVES R2CM 425

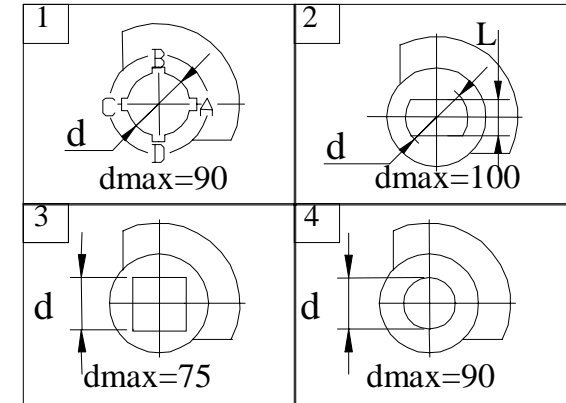
Sheet nr.	808
Date	26.03.2004



**Flange ISO 5211**  
single F16

Handwheel –ø600-standard; ø800  
Should be ordered separately!

## COUPLING SHAPE(TOP VIEW)



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Carbon Steel	C45-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Bronze	CuSn6-DIN17662
7	Worm bearings	-	51207 DIN 711
8	Set-screw	Carbon Steel	Gr8.8-DIN916
9	“O”ring	Nitrile	DIN 3771
10	Grease	Lithium-Calcium	UM170LiCaPb2

## TECHNICAL FEATURERS:

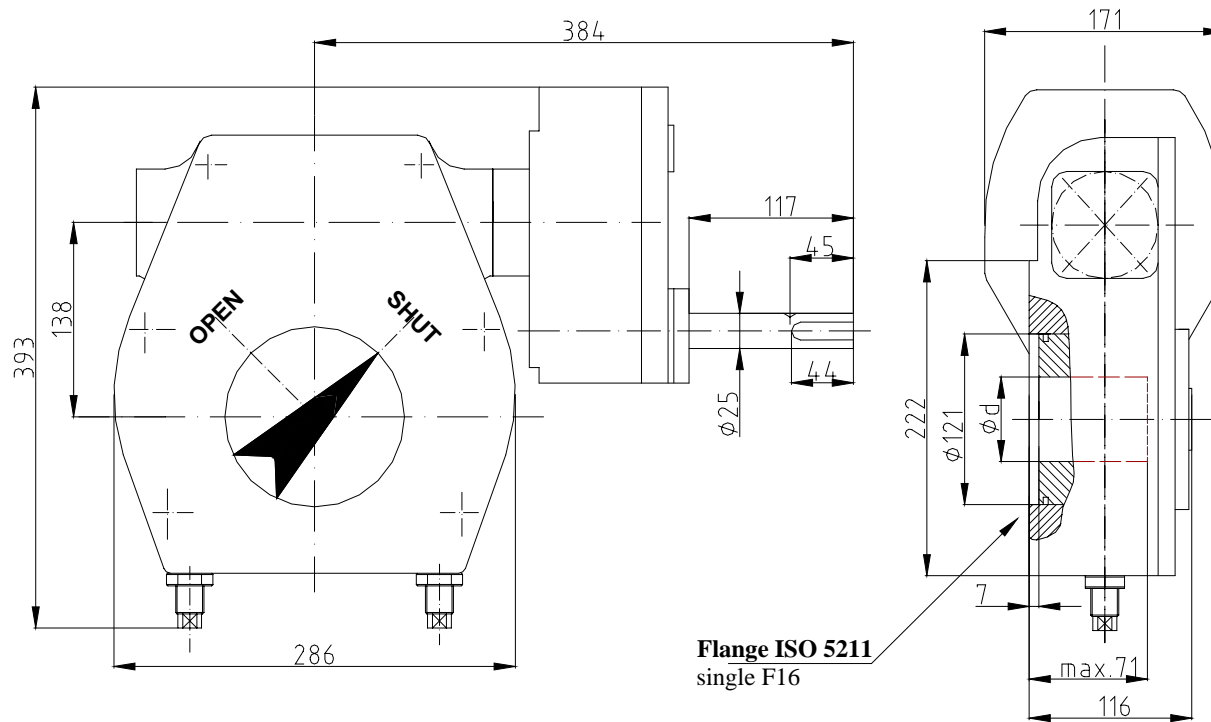
Output rated torque[Nm].....	4250
Input rated torque[Nm].....	100 ] ±10%
Ratio.....	168
Output angular stroke.....	90°±5°
Hendweheel turns for a complet stroke.....	42
Capsulation .....	IP54

## ORDERING CODE :

**R2CM425 x 168 - F16 / 1 / 60 - A**

Type	Keywey position
Ratio	d-Coupling dimensions
Output flange ISO 5211	Coupling shape

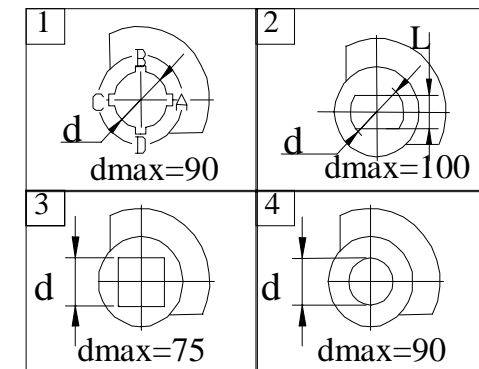
# WORM UNIT FOR 1/4 TURN VALVES R2CM 540



Handwheel – $\phi$ 600-standard;  $\phi$ 800  
Should be ordered separately !

Sheet nr.	809
Date	24.02.2004

## COUPLING SHAPE(TOP VIEW)



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Carbon Steel	C45-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Bronze	CuSn6-DIN17662
7	Worm bearings	-	51207 DIN 711
8	Set-screw	Carbon Steel	Gr8.8-DIN916
9	“O”ring	Nitrile	DIN 3771
10	Grease	Lithium-Calcium	UM170LiCaPb2

## TECHNICAL FEARURES:

Output rated torque[Nm].....	5400
Input rated torque[Nm.....100 ] $\pm$ 10%	
Ratio.....	210
Output angular stroke.....	$90^{\circ} \pm 5^{\circ}$
Hendweheel turns for a complet stroke.....	52,5
Capsulation .....	IP54

## ORDERING CODE :

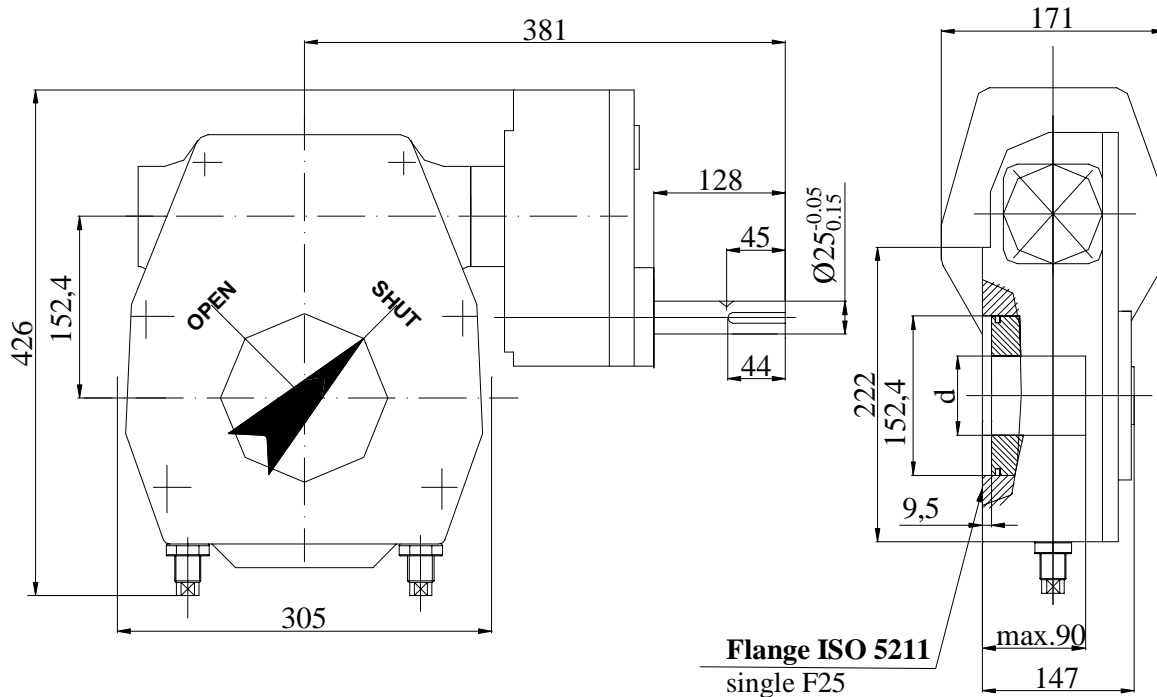
**R2CM 540** x **210** - **F16** / **1** / **60** - **A**

Type	Keywey position
Ratio	d-Coupling dimensions
Output flange ISO 5211	Coupling shape

# WORM UNIT FOR 1/4 TURN VALVES R2CM 759



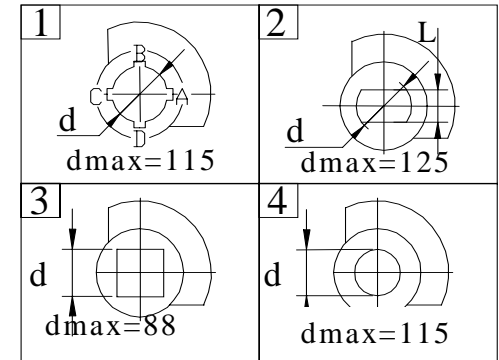
Sheet no.	810
Date	24.02.2004



Flange ISO 5211  
single F25

Welded handwheel-Φ450-standard :Φ600  
Should be ordered separately

## COUPLING SHAPE(TOP VIEW)



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Carbon Steel	C45-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Brass	CuZn37-DIN17662
7	Input bearings	-	6005 DIN 625
8	Worm bearings	-	51207 DIN 711
9	Set-screw	Carbon Steel	Gr8.8-DIN916
10	“O”ring	Nitrile	DIN 3771
11	Grease	Lithium-Calcium	UM170LiCaPb2

## TECHNICAL FEATURES:

Output rated torque[Nm].....	7590
Input rated torque[Nm].....	120±10%
Ratio.....	250
Output angular stroke.....	90°±5°
Handwheel turns for a comoplet stroke.....	62.5
Capsulation.....	IP54

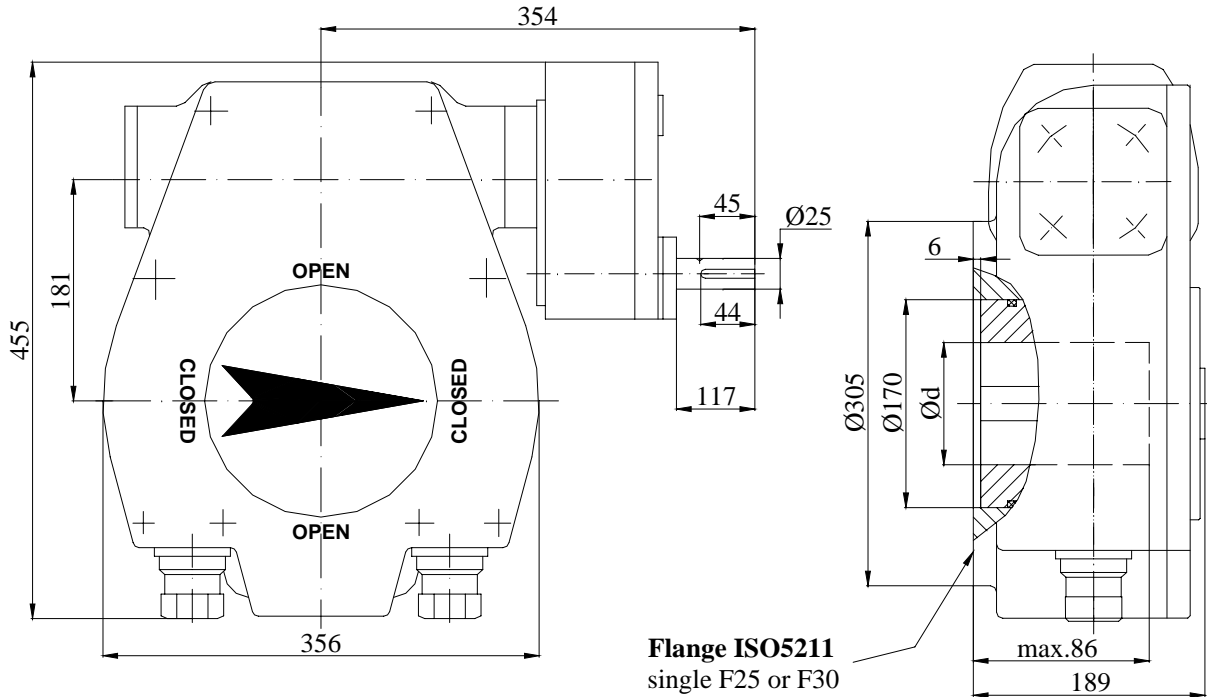
## ORDERING CODE :

**R2CM-759** x **250** - **F25** / **1** / **60** - **A**

Type	Ratio	Output flange ISO 5211	Keyway position
			d-Coupling dimensions
			Coupling shape

# WORM UNIT FOR 1/4 TURN VALVES R2CM 897

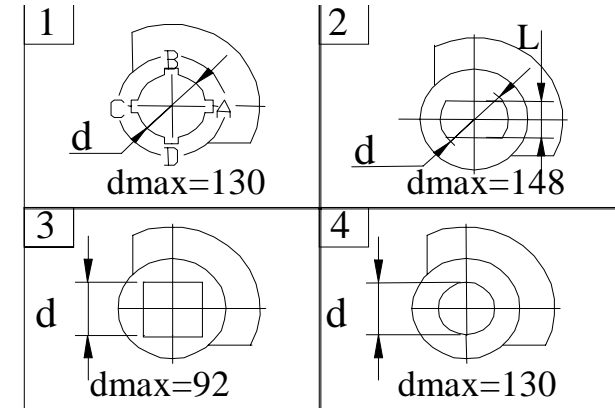
Sheet no.	811
Date	24.02.2004



Flange ISO5211  
single F25 or F30

Handwheel -  $\phi 600$  standard ;  $\phi 800$   
Should be ordered separately

## COUPLING SHAPE(TOP VIEW)



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Carbon Steel	C45-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Bronz	CuSn6-DIN17662
7	Input bearings	-	6005-DIN625
8	Worm bearings	-	51309 DIN711
9	Set-screw	Carbon Steel	Gr8.8-DIN916
10	"O"ring	Nitrile	DIN 3771
11	Grease	Lithium-Calcium	UM170LiCaPb2

## TEHNIICAL FEATURES:

Output rated torque[Nm].....8970  
 Input rated torque[Nm].....120±10%  
 Ratio.....300  
 Output angular stroke.....90°±5°  
 Handwheel turns for a complet stroke.....75  
 Capsulation.....IP54

## ORDERING CODE :

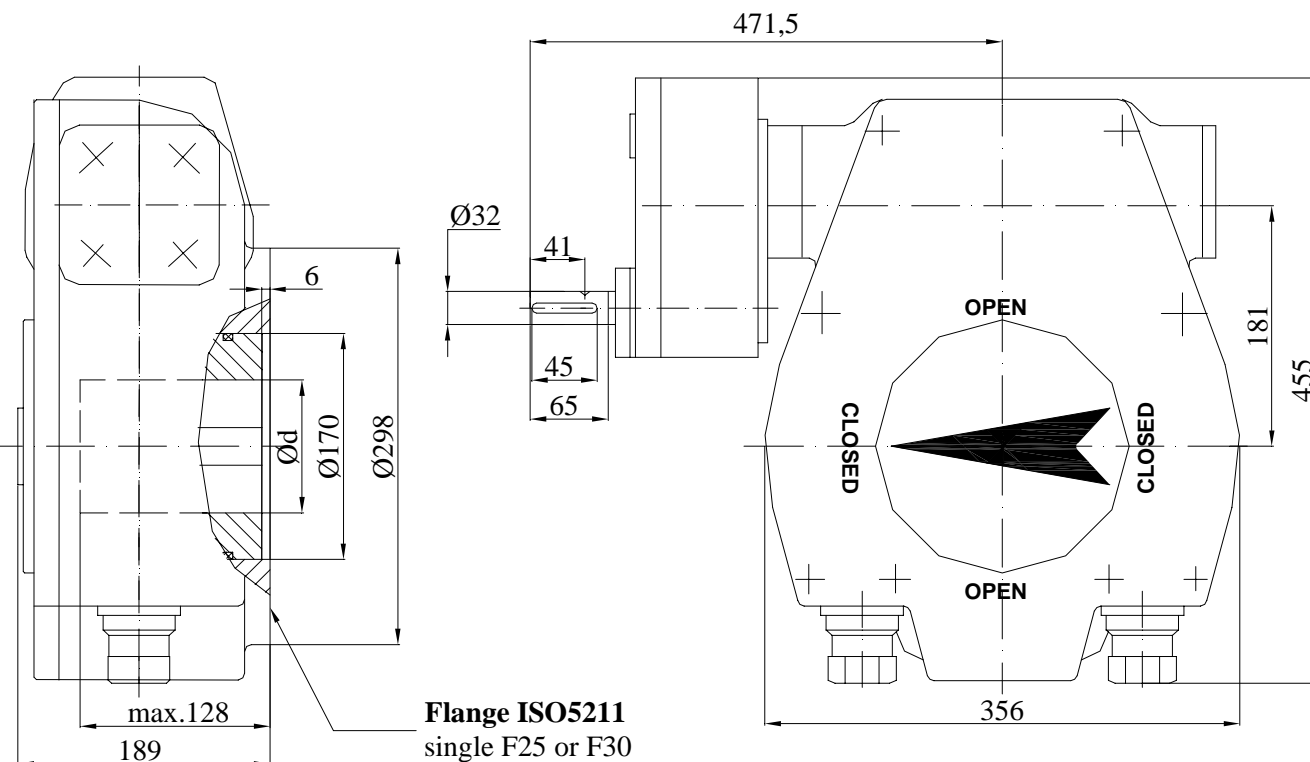
**R2CM 897 x 300 - F30 / 1 / 60 - A**

Type						Keywey position
Ratio						d- Coupling dimensions
Output flange ISO 5211						Coupling shape

# WORM UNIT FOR ¼ TURN VALVES R2CM 1200



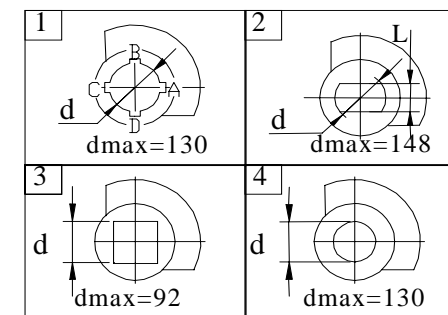
Sheet no.	812a
Date	25.03.2005



**Flange ISO5211**  
single F25 or F30

Handwheel -ø600standard ;ø800  
Should be ordered separately

## COUPLING SHAPE(TOP VIEW)



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Carbon Steel	C45-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Bronz	CuSn6-DIN17662
7	Input bearings	-	6005-DIN625
8	Worm bearings	-	51309 DIN711
9	Set-screw	Carbon Steel	Gr8.8-DIN916
10	“O”ring	Nitrile	DIN 3771
11	Grease	Lithium-Calcium	UM170LiCaPb2

## TEHNICAL FEATURES:

Output rated torque[Nm].....12000  
 Input rated torque[Nm].....100±10%  
 Ratio.....450  
 Output angular stroke.....90°±5°  
 Handwheel turns for a complet stroke.....112,5  
 Capsulation.....IP54

## ORDERING CODE :

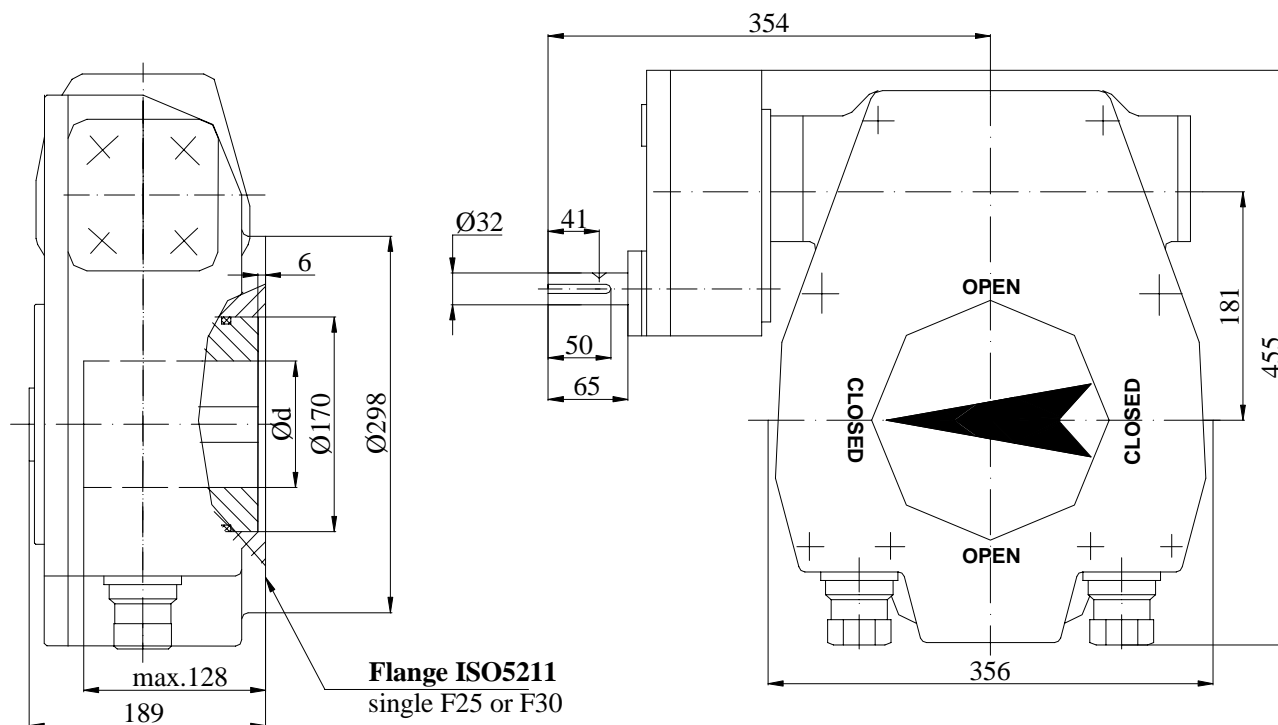
**R2CM 1200 x 450 - F30 / 1 / 60 - A**

Type  
 Ratio  
 Output flange ISO 5211

Keywey position  
 d- Coupling dimensions-key acc.to DIN 6885  
 Coupling shape

# WORM UNIT FOR ¼ TURN VALVES R2CM 1600

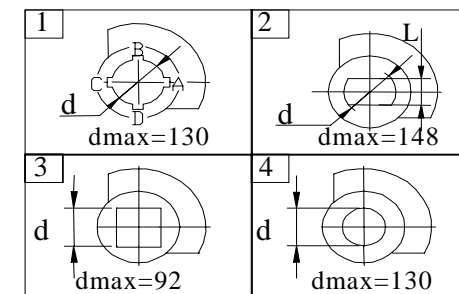
Sheet no.	813
Date	24.02.2004



**Flange ISO5211**  
single F25 or F30

Handwheel –ø600standard ;ø800  
*Should be ordered separately*

### COUPLING SHAPE(TOP VIEW)



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Carbon Steel	C45-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Bronz	CuSn6-DIN17662
7	Input bearings	-	6005-DIN625
8	Worm bearings	-	51309 DIN711
9	Set-screw	Carbon Steel	Gr8.8-DIN916
10	“O”ring	Nitrile	DIN 3771
11	Grease	Lithium-Calcium	UM170LiCaPb2

### TEHNICAL FEATURES:

Output rated torque[Nm].....16000  
 Input rated torque[Nm].....118/170±10%  
 Ratio.....540/369  
 Output angular stroke.....90°±5°  
 Handwheel turns for a complet stroke.....135/92,5  
 Capsulation.....IP54

### ORDERING CODE :

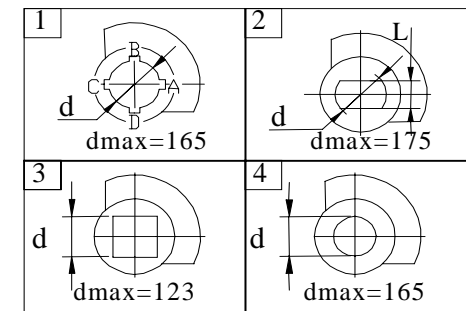
**R2CM 1600 x 369 - F30 / 1 / 60 - A**

Type	Ratio	Output flange ISO 5211	Keywey position
			d- Coupling dimensions
			Coupling shape

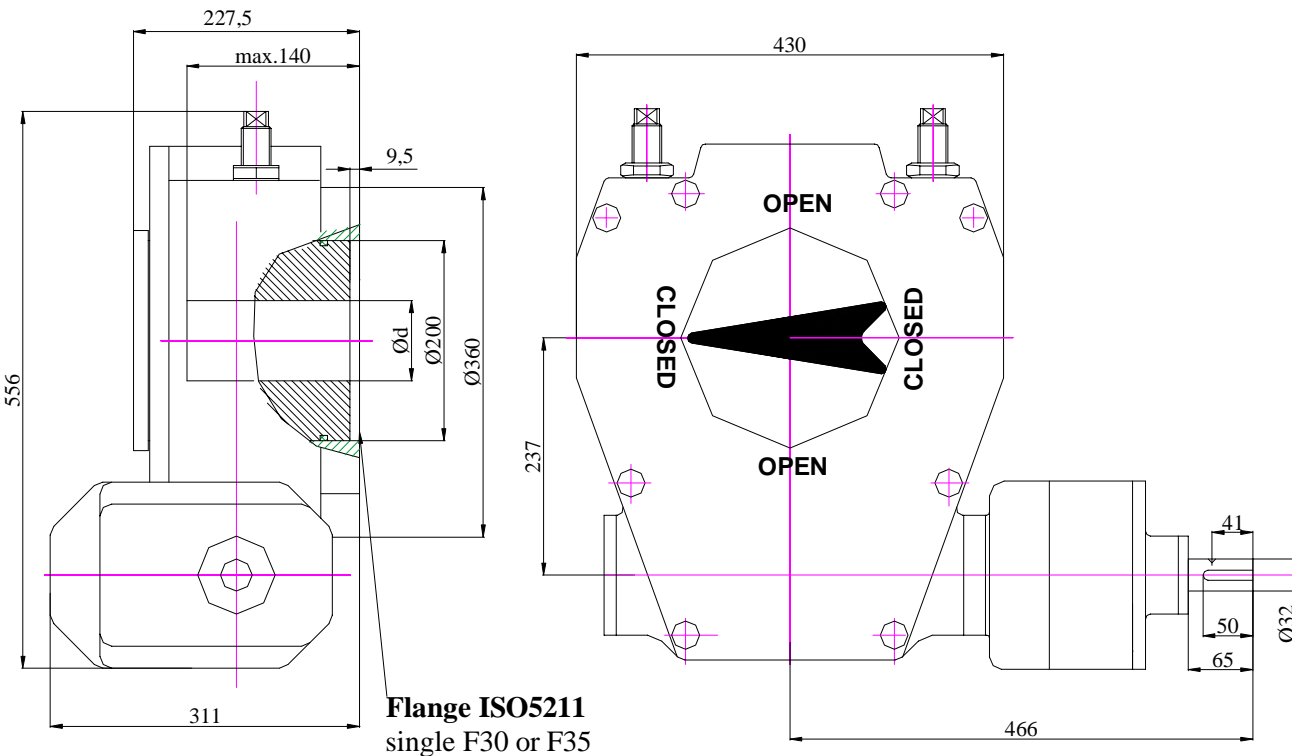
# WORM UNIT FOR 1/4 TURN VALVES R2CM 2000

Sheet no.	814
Date	24.02.2004

## COUPLING SHAPE(TOP VIEW)



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Carbon Steel	C45-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Bronz	CuSn6-DIN17662
7	Input bearings	-	6005-DIN625
8	Worm bearings	-	ANK6590- DIN711
9	Set-screw	Carbon Steel	Gr8.8-DIN916
10	"O"ring	Nitrile	DIN 3771
11	Grease	Lithium-Calcium	UM170LiCaPb2



Handwheel -ø600standard ;ø800  
Should be ordered separately

## TEHNICAL FEATURES:

Output rated torque[Nm].....20000  
 Input rated torque[Nm].....110/75±10%  
 Ratio.....720/1080  
 Output angular stroke.....90°±5°  
 Handwheel turns for a complet stroke.....180/270  
 Capsulation.....IP54

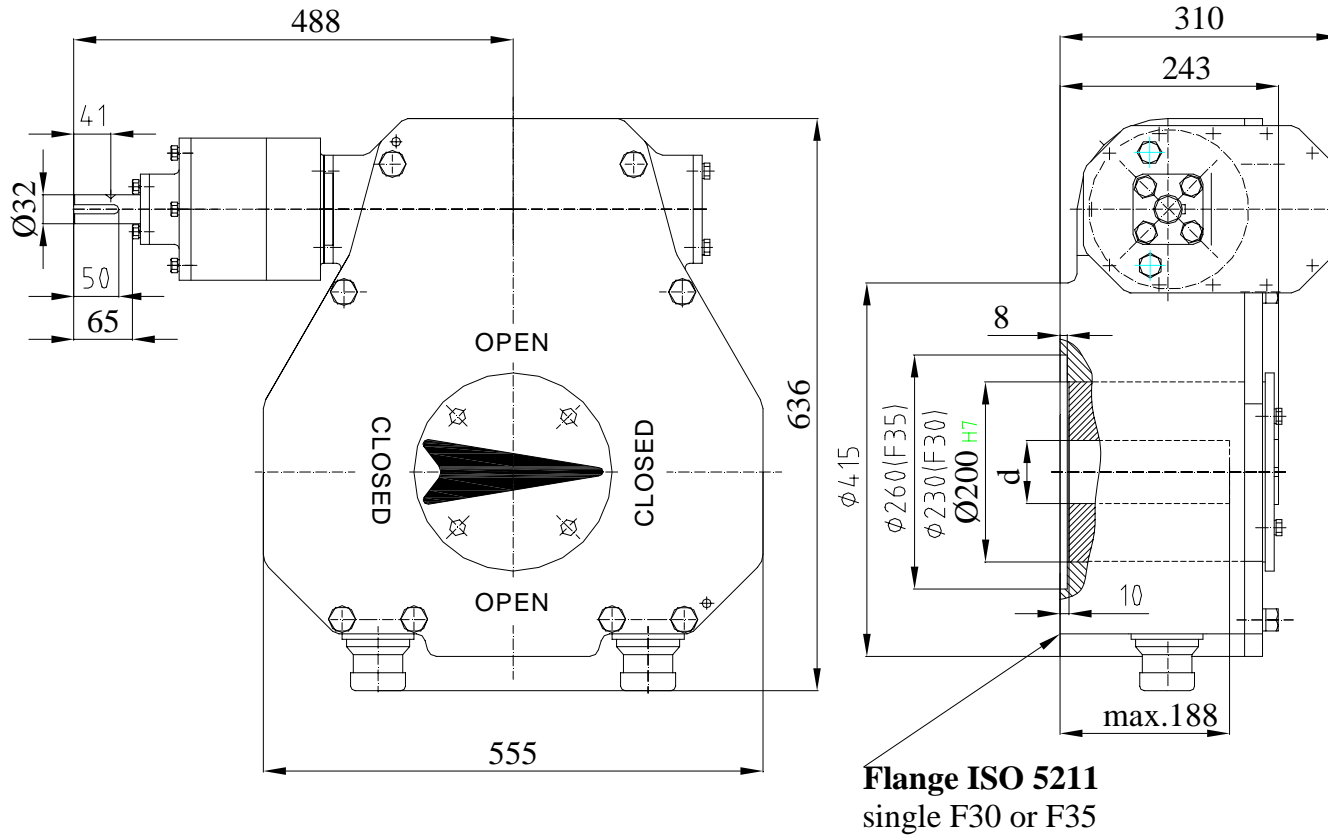
## ORDERING CODE :

**R2CM 2000 x 720 - F30 / 1 / 60 - A**

Type	Ratio	Output flange ISO 5211	Keywey position
			d- Coupling dimensions
			Coupling shape

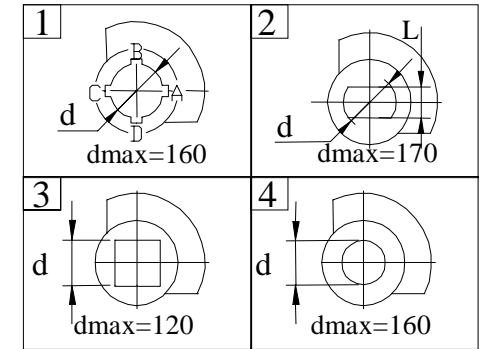
# WORM UNIT FOR ¼ TURN VALVES R2CM 3000

Sheet no.	815a
Date	24.02.2004



Handwheel – ø600 – standard; ø800  
Should be ordered separately!

### COUPLING SHAPE(TOP VIEW)



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Case harden. steel	16 MnCr 5-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Bronze	CuSn6-DIN17662
7	Input bearings	-	6007, 6306 - DIN 625
8	Worm bearings	-	81112 DIN 722
9	Set-screw	Carbon Steel	Gr8.8-DIN916
10	“O”ring	Nitrile	DIN 3771
11	Grease	Lithium-Calcium	UM170LiCaPb2

### TECHNICAL FEATURES:

Output rated torque[Nm].....	30000
Input rated torque[Nm].....	180±10%
Ratio.....	720
Output angular stroke.....	90°±5°
Handwheel turns for a complete stroke.....	180
Capsulation.....	IP 54

### ORDERING CODE :

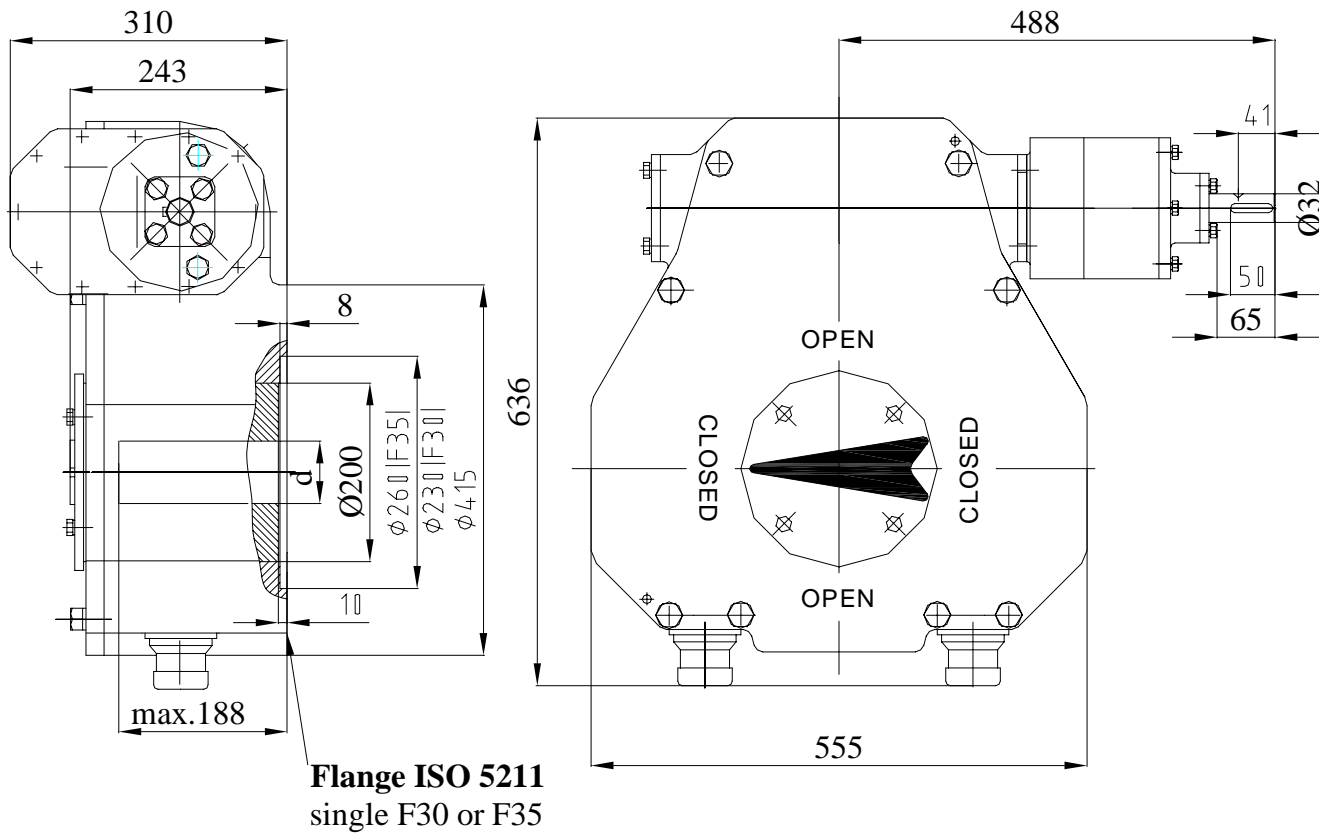
**R2CM3000** x **720** - **F35** / **1** / **90** - **A**

Type	Ratio	Output flange ISO 5211	Keyway position	d-Coupling dimensions	Coupling shape
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# WORM UNIT FOR ¼ TURN VALVES R2CM 4000

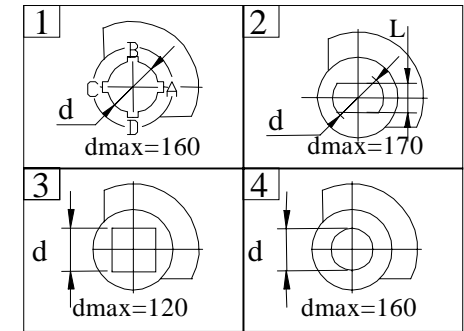


Sheet no.	816a
Date	24.02.2004



Handwheel – ø600 – standard; ø800  
Should be ordered separately!

## COUPLING SHAPE(TOP VIEW)



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Case harden. steel	16 MnCr 5-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Bronze	CuSn6-DIN17662
7	Input bearings	-	6007, 6306 - DIN 625
8	Worm bearings	-	81112 DIN 722
9	Set-screw	Carbon Steel	Gr8.8-DIN916
10	“O”ring	Nitrile	DIN 3771
11	Grease	Lithium-Calcium	UM170LiCaPb2

## TECHNICAL FEATURES:

Output rated torque[Nm].....	40000
Input rated torque[Nm].....	145±10%
Ratio.....	1200
Output angular stroke.....	90°±5°
Handwheel turns for a complete stroke.....	300
Capsulation.....	IP 54

## ORDERING CODE :

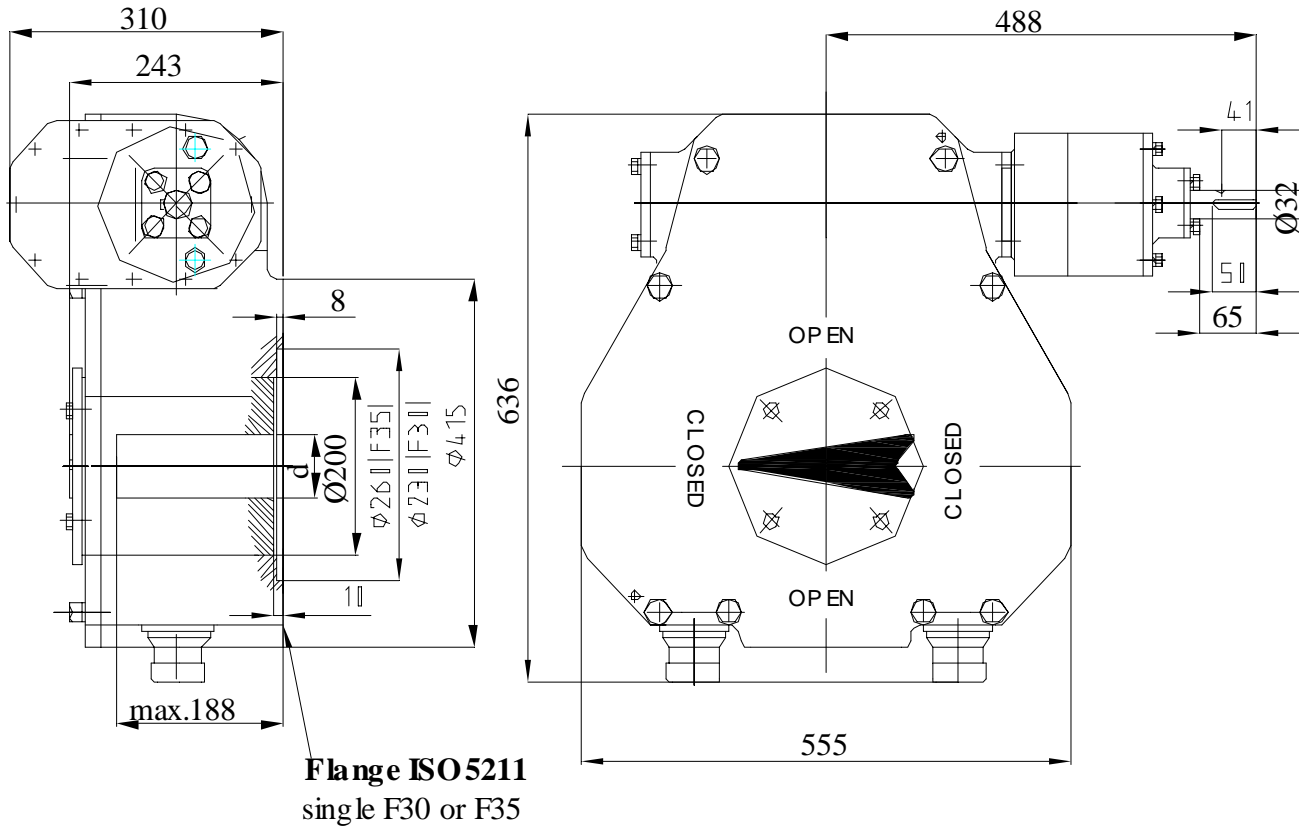
**R2CM 4000 x 1200 - F35 / 1 / 90 - A**

Type  
Ratio  
Output flange ISO 5211

Keyway position  
d-Coupling dimensions  
Coupling shape

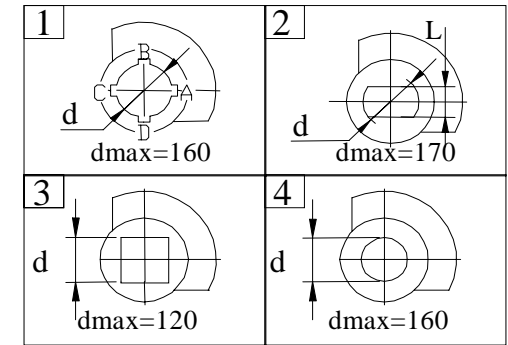
# WORM UNIT FOR 1/4 TURN VALVES R2CM 5000

Sheet no.	817a
Date	24.02.2004



Handwheel – ø600 – standard; ø800  
Should be ordered separately!

### COUPLING SHAPE(TOP VIEW)



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Case harden. steel	16 MnCr 5-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Bronze	CuSn6-DIN17662
7	Input bearings	-	6007, 6306 - DIN 625
8	Worm bearings	-	81112 DIN 722
9	Set-screw	Carbon Steel	Gr8.8-DIN916
10	“O”ring	Nitrile	DIN 3771
11	Grease	Lithium-Calcium	UM170LiCaPb2

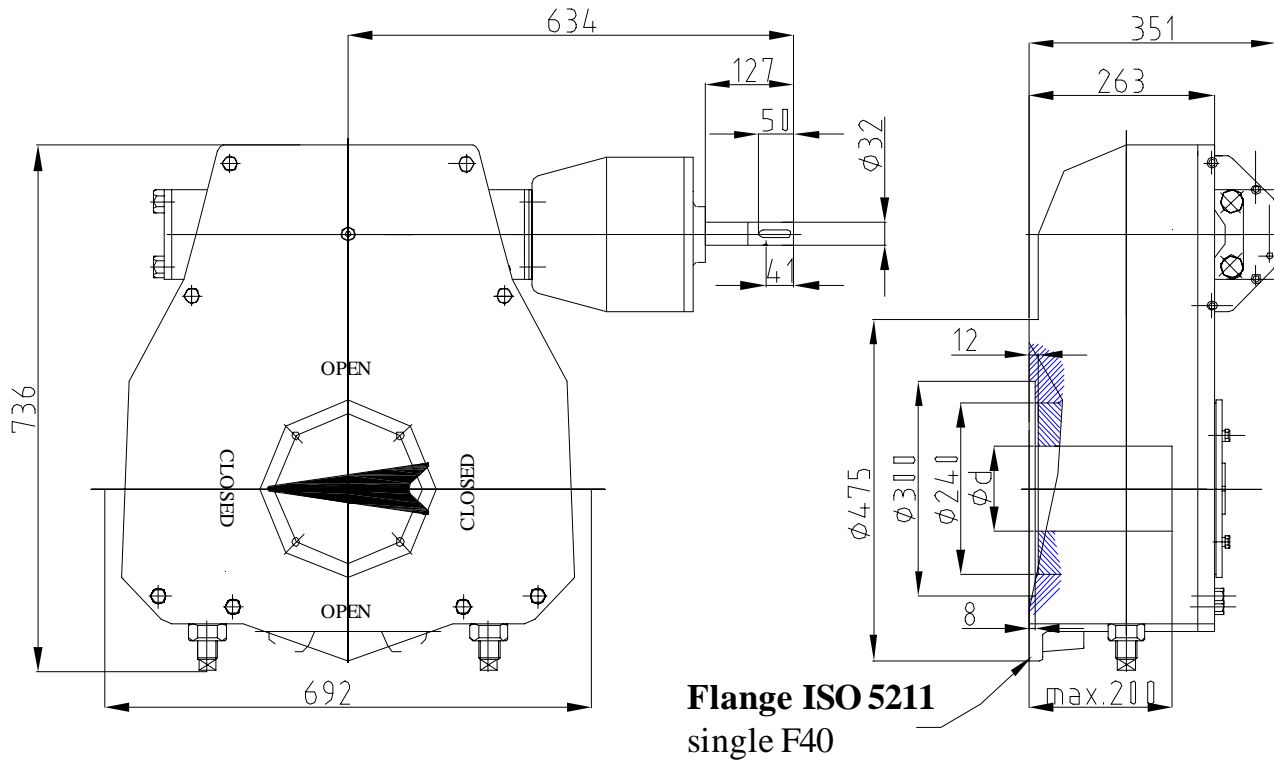
### TECHNICAL FEATURES:

Output rated torque[Nm].....	50000
Input rated torque[Nm].....	110±10%
Ratio.....	1977
Output angular stroke.....	90°±5°
Handwheel turns for a complete stroke.....	495
Capsulation.....	IP 54

### ORDERING CODE :

<b>R2CM 5000</b>	<b>x 1977</b>	<b>- F35</b>	<b>/ 1</b>	<b>/ 90</b>	<b>- A</b>
Type	Ratio	Output flange ISO 5211	Keyway position	d-Coupling dimensions	Coupling shape

# WORM UNIT FOR 1/4 TURN VALVES R2CM 6000

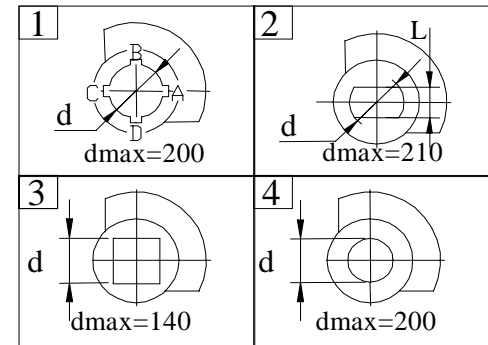


**Flange ISO 5211**  
single F40

Handwheel –  $\phi 600$  – standard;  $\phi 800$   
Should be ordered separately!

Sheet no.	818a
Date	24.02.2004

### COUPLING SHAPE(TOP VIEW)



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Case harden. steel	16 MnCr 5-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Bronze	CuSn6-DIN17662
7	Input bearings	-	6007, 6306 - DIN 625
8	Worm bearings	-	51312 DIN 722
9	Set-screw	Carbon Steel	Gr8.8-DIN916
10	“O”ring	Nitrile	DIN 3771
11	Grease	Lithium-Calcium	UM170LiCaPb2

### TECHNICAL FEATURES:

Output rated torque[Nm].....	60000
Input rated torque[Nm].....	160±10%
Ratio.....	1440
Output angular stroke.....	90°±5°
Handwheel turns for a complete stroke.....	360
Capsulation.....	IP 54

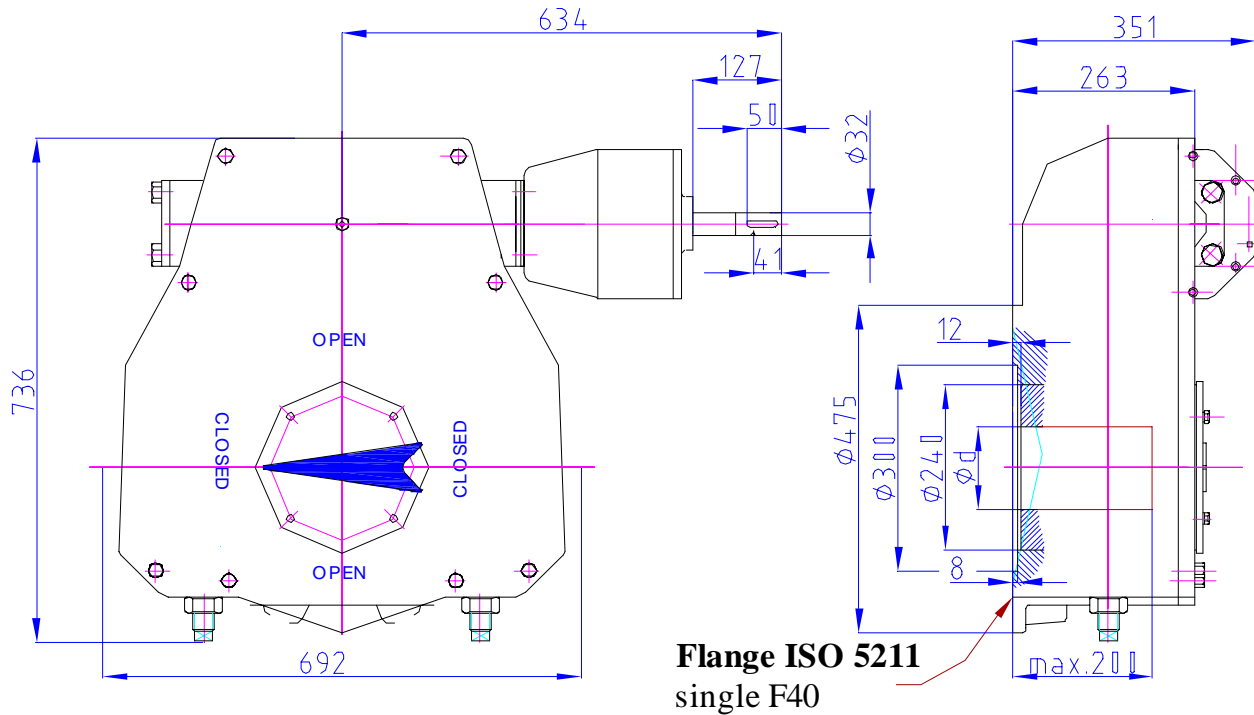
### ORDERING CODE :

**R2CM 6000 x 1440 - F40 / 1 / 90 - A**

Type	Ratio	Output flange ISO 5211	Keyway position
			d-Coupling dimensions
			Coupling shape

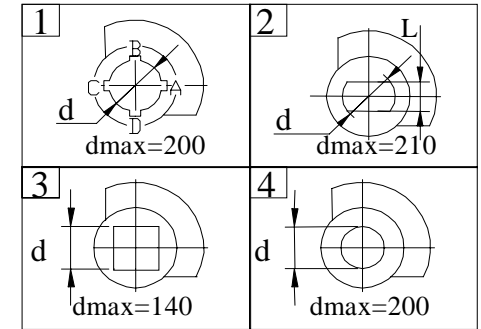
# WORM UNIT FOR 1/4 TURN VALVES R2CM 6500

Sheet no.	819a
Date	24.02.2004



Handwheel –  $\phi 600$  – standard;  $\phi 800$   
Should be ordered separately!

### COUPLING SHAPE(TOP VIEW)



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Case harden. steel	16 MnCr 5-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Bronze	CuSn6-DIN17662
7	Input bearings	-	6007, 6306 - DIN 625
8	Worm bearings	-	51312 DIN 722
9	Set-screw	Carbon Steel	Gr8.8-DIN916
10	“O”ring	Nitrile	DIN 3771
11	Grease	Lithium-Calcium	UM170LiCaPb2

### TECHNICAL FEATURES:

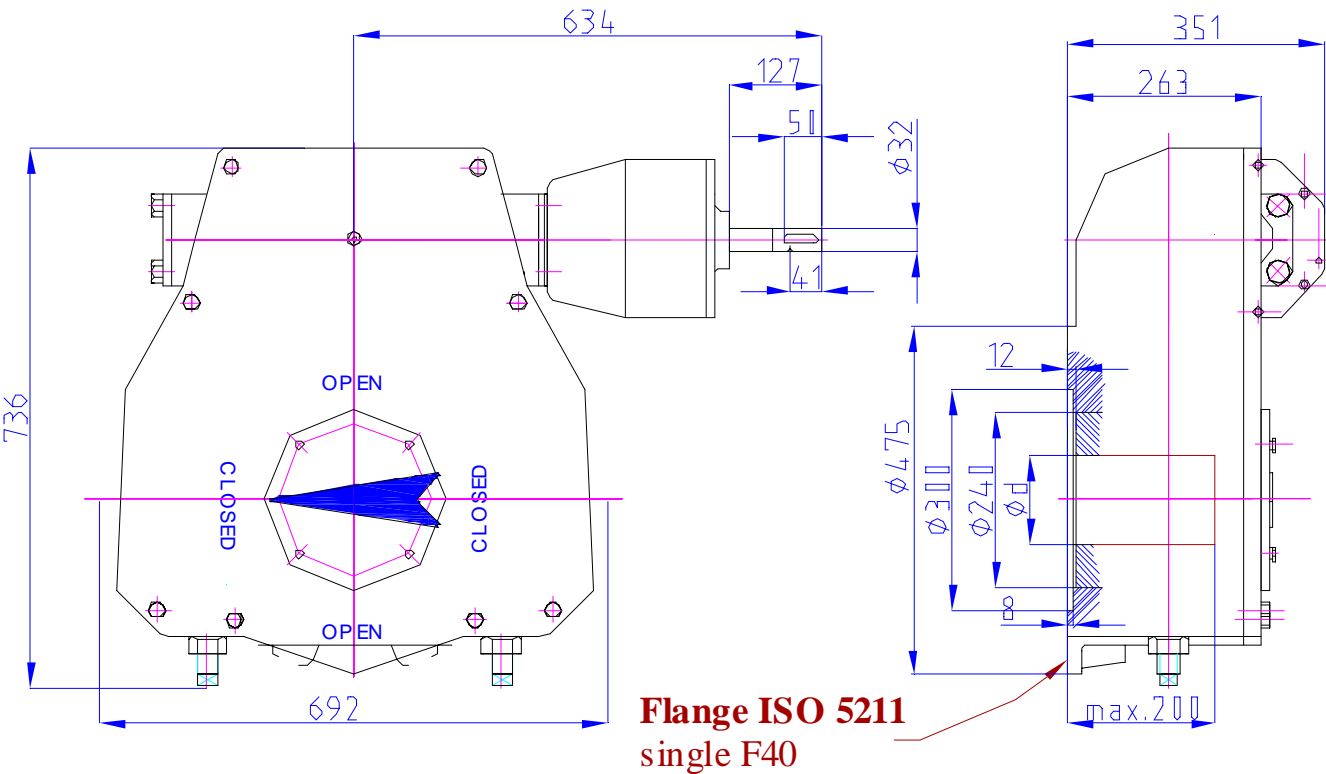
Output rated torque[Nm].....	65000
Input rated torque[Nm].....	175±10%
Ratio.....	1490
Output angular stroke.....	90°±5°
Handwheel turns for a complete stroke.....	372,5
Capsulation.....	IP 54

### ORDERING CODE :

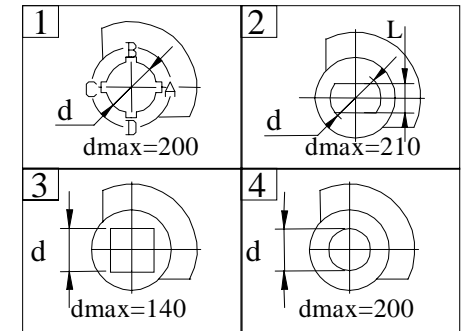
<b>R2CM 6500</b>	<b>x 1490</b>	<b>- F40</b>	<b>/ 1</b>	<b>/ 90</b>	<b>- A</b>
Type	Ratio	Output flange ISO 5211	Keyway position	d-Coupling dimensions	Coupling shape

# WORM UNIT FOR 1/4 TURN VALVES R2CM 8500

Sheet no.	820a
Date	24.02.2004



### COUPLING SHAPE(TOP VIEW)



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Case harden. steel	16 MnCr 5-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Bronze	CuSn6-DIN17662
7	Input bearings	-	6007, 6306 - DIN 625
8	Worm bearings	-	51312 DIN 722
9	Set-screw	Carbon Steel	Gr8.8-DIN916
10	"O"ring	Nitrile	DIN 3771
11	Grease	Lithium-Calcium	UM170LiCaPb2

Handwheel –  $\phi 600$  – standard;  $\phi 800$   
Should be ordered separately!

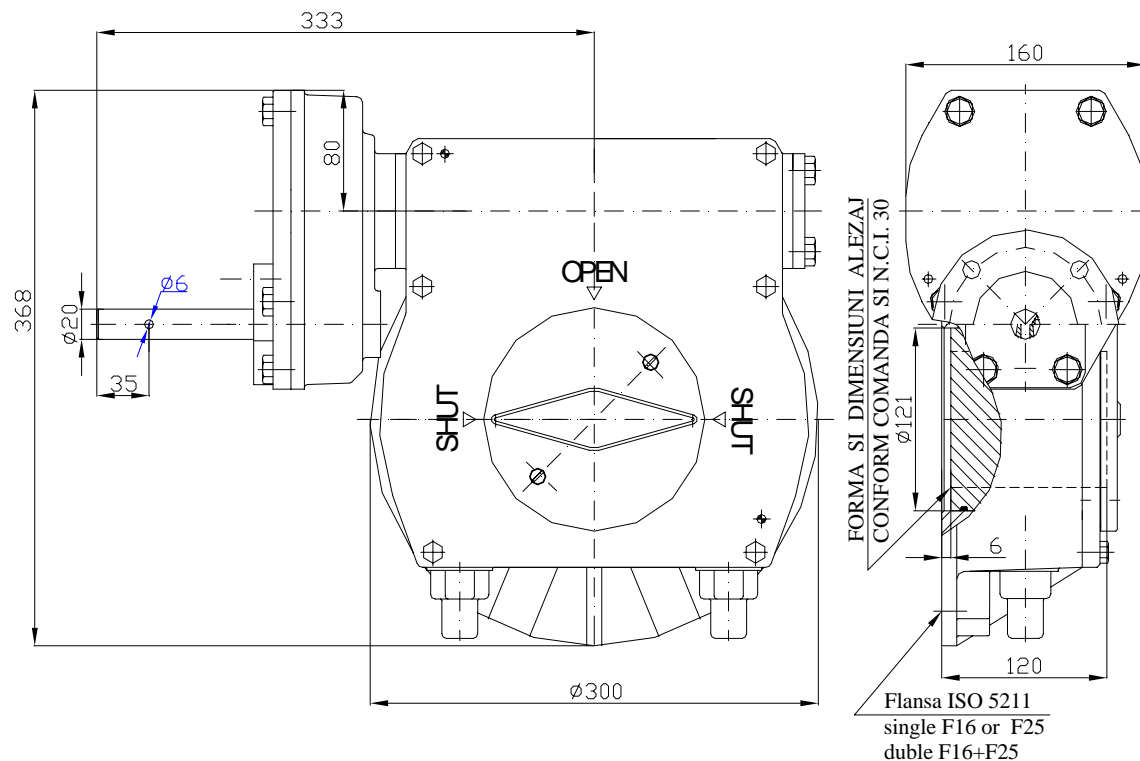
### TECHNICAL FEATURES:

- Output rated torque[Nm].....85000
- Input rated torque[Nm].....210/125 $\pm$ 10%
- Ratio.....1560/2700
- Output angular stroke.....90 $\pm$ 5 $^\circ$
- Handwheel turns for a complete stroke.....390/675
- Capsulation.....IP 54

### ORDERING CODE :

<b>R2CM 8500</b>	<b>x 1560</b>	<b>- F40</b>	<b>/ 1</b>	<b>/ 90</b>	<b>- A</b>
Type	Ratio	Output flange ISO 5211	Keyway position	Coupling dimensions code	Coupling shape

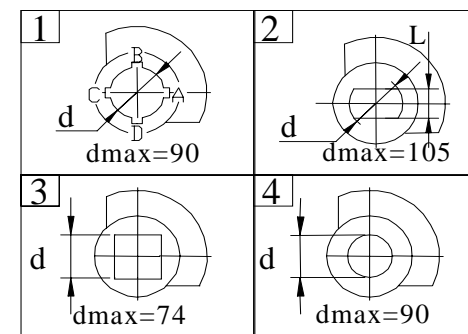
# WORM UNIT R2CMS-138 FOR ¼ TURN VALVES



Welded handwheel –  $\phi 600$ -standard;  $\phi 800$   
Should be ordered separately!

Sheet nr.	843a
Date	04.05.2004

### Coupling shape-Top shape



Nr	Description	Material	Specification
1	Housings	Cast iron	GG-25-DIN 1691
2	Input shaft	Carbon Steel	C45-DIN17200
3	Spur gears	Carbon Steel	C45-DIN17200
4	Worm shaft	Carbon Steel	C45-DIN17200
5	Quadrant	Ductile Iron	GGG40-DIN1693
6	Bushing	Bronze	CuSn6-DIN17662
7	Worm bearings	-	51106-DIN 625
8	Set-screw	Carbon Steel	Gr8.8-DIN916
9	“O”ring	Nitrile	DIN 3771
10	Grease	Lithium-Calcium	UM170LiCaPb2

### TECHNICAL FEATURES:

Output rated torque.....6135 Nm  
 Input rated torque.....140±10% Nm  
 Ratio.....177  
 Output angular stroke.....90°±5°  
 Handwheel turns for a complete stroke.....44,25  
 Capsulation.....IP 54

### ORDERING CODE :

**R2CMS 138 x 177 - F25 / 1 / 60 - A**

Type	Ratio	Output flange ISO 5211	Keyway position
			d-Coupling dimensions
			Coupling shape