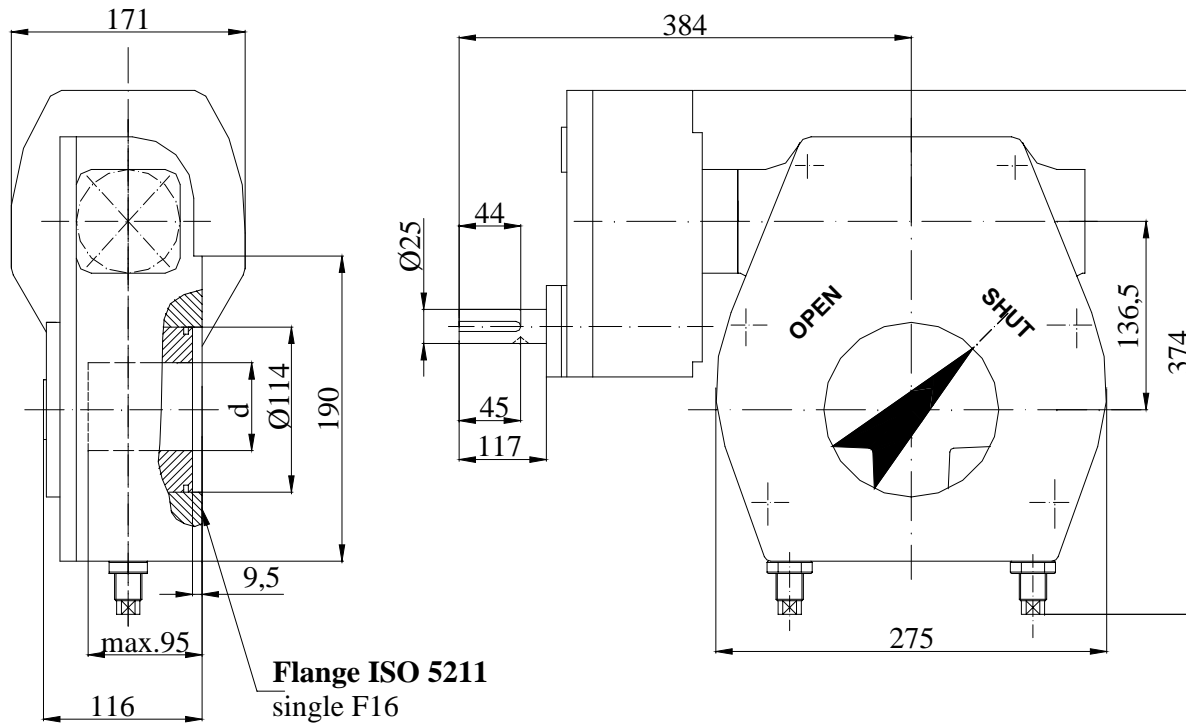


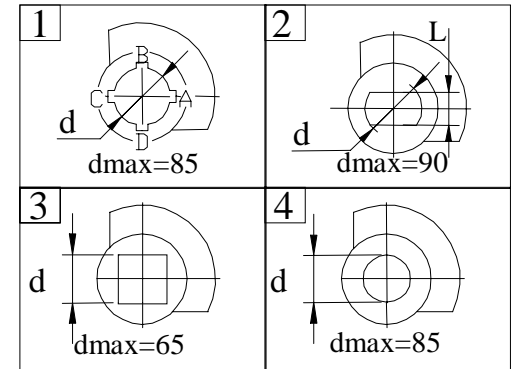
WORM UNIT FOR 1/4 TURN VALVES R2CM 345

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

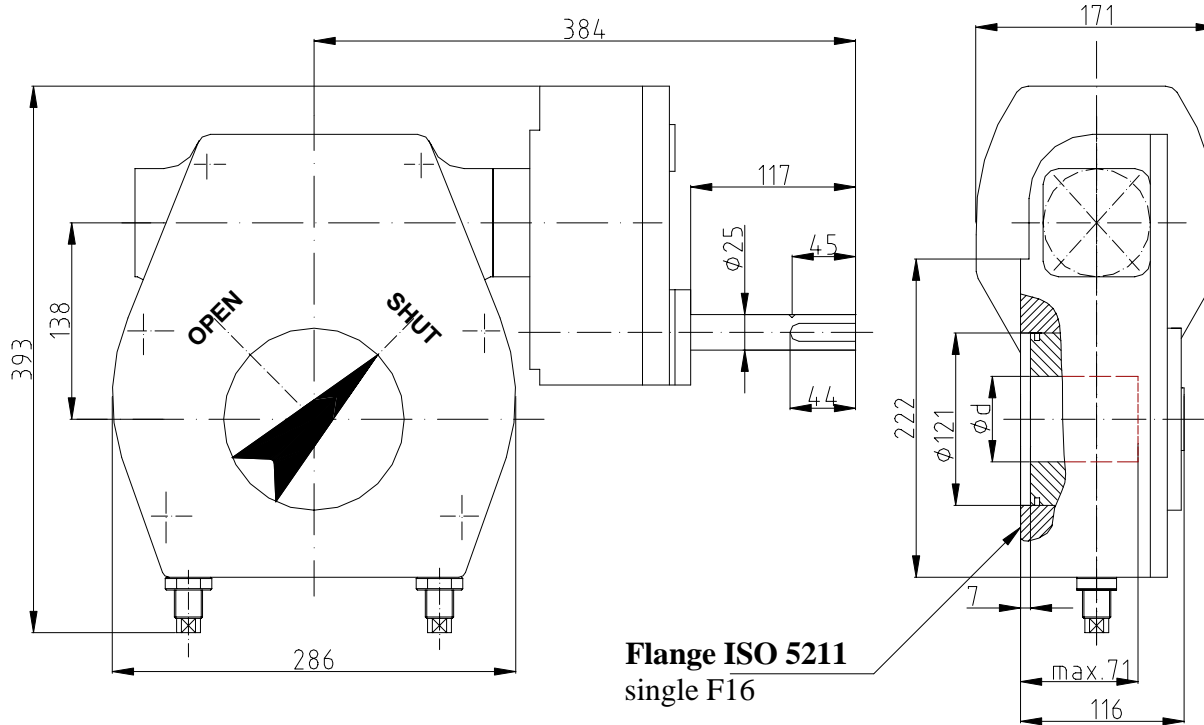
ORDERING CODE :

R2CM345 x 132 - F16 / 1 / 60 / A

Type	Ratio	Output flange ISO 5211	Keyway position	d-Coupling dimensions	Coupling shape
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WORM UNIT FOR 1/4 TURN VALVES R2CM 425

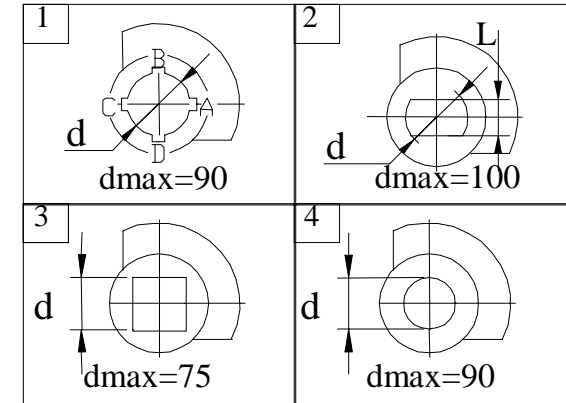
Sheet nr.	808
Date	26.03.2004



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:

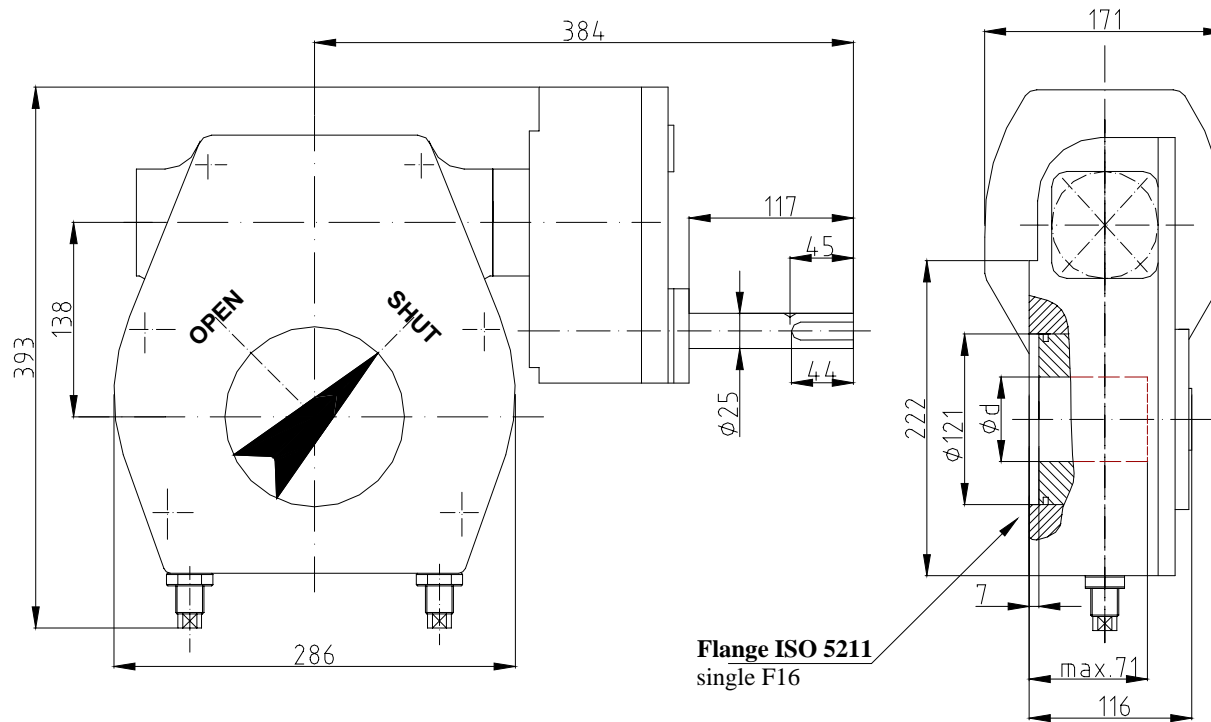
Output rated torque[Nm].....	4250
Input rated torque[Nm].....	100] ±10%
Ratio.....	168
Output angular stroke.....	90°±5°
Hendweheel turns for a complet stroke.....	42
Capsulation	IP54

ORDERING CODE :

R2CM425 x 168 - F16 / 1 / 60 - A

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

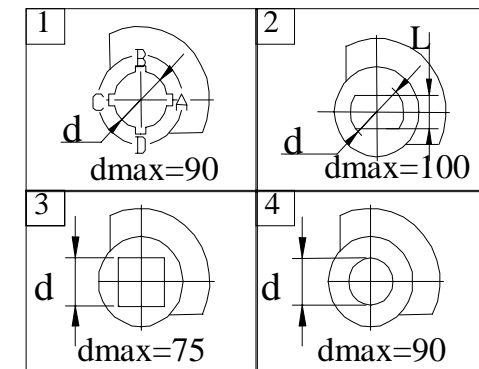
WORM UNIT FOR ¼ TURN VALVES R2CM 540



Handwheel –ø600-standard; ø800
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] ±10%
- Ratio.....210
- Output angular stroke.....90°±5°
- Hendweheel turns for a complet stroke.....52,5
- CapsulationIP54

ORDERING CODE :

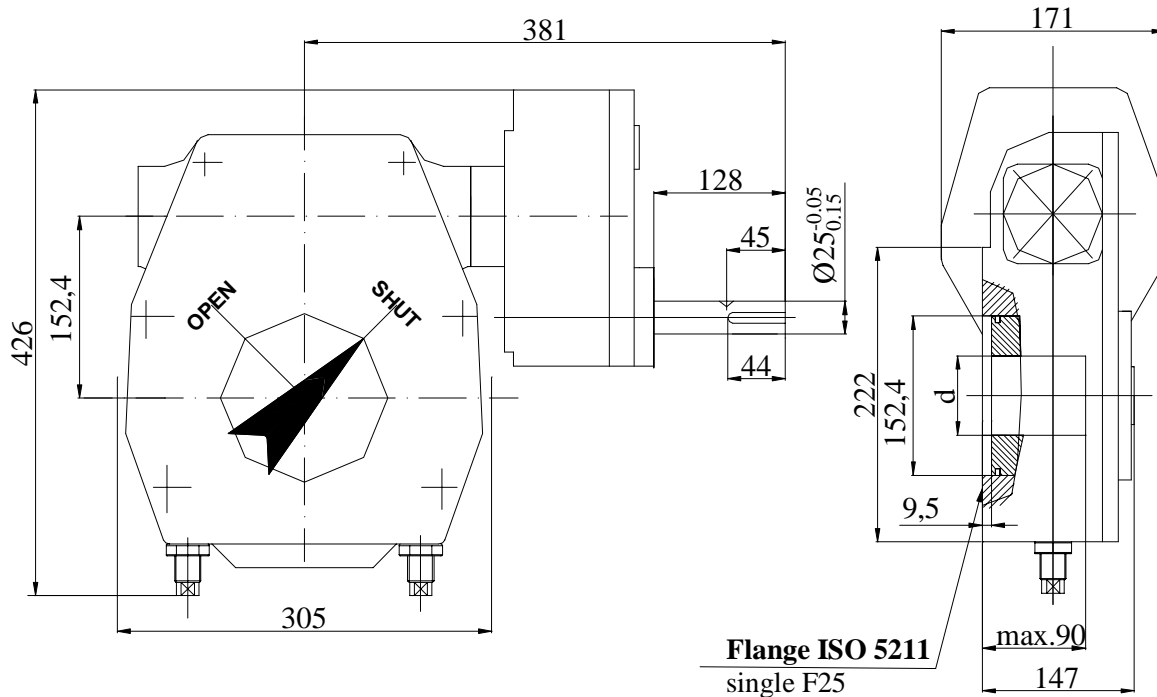
R2CM 540 x **210** - **F16** / **1** / **60** - **A**

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

WORM UNIT FOR 1/4 TURN VALVES R2CM 759



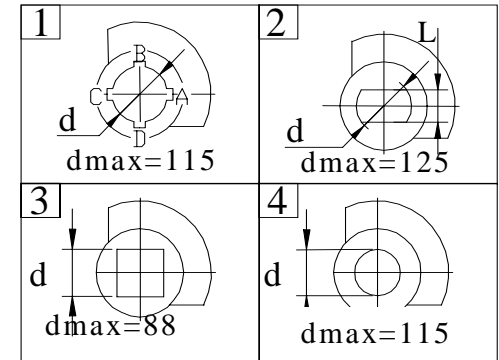
Sheet no.	810
Date	24.02.2004



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

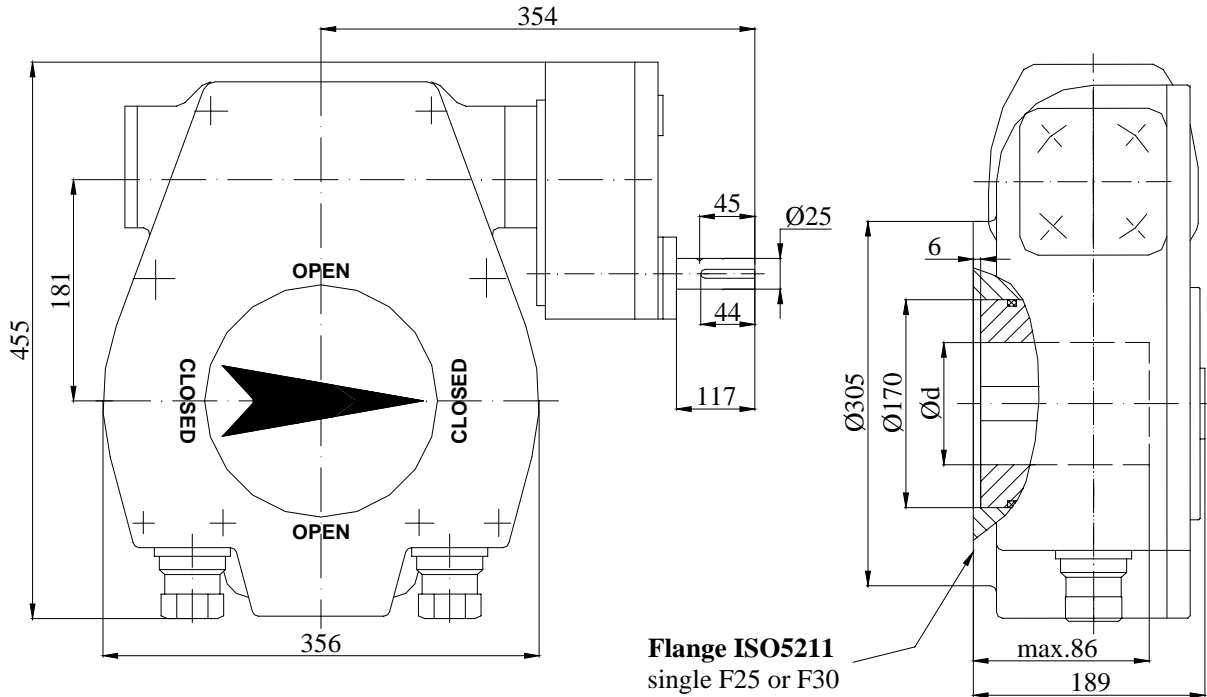
ORDERING CODE :

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

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

WORM UNIT FOR ¼ TURN VALVES R2CM 897

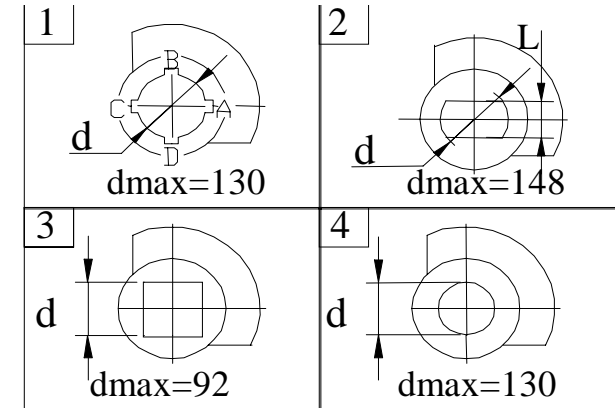
Sheet no.	811
Date	24.02.2004



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

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 :

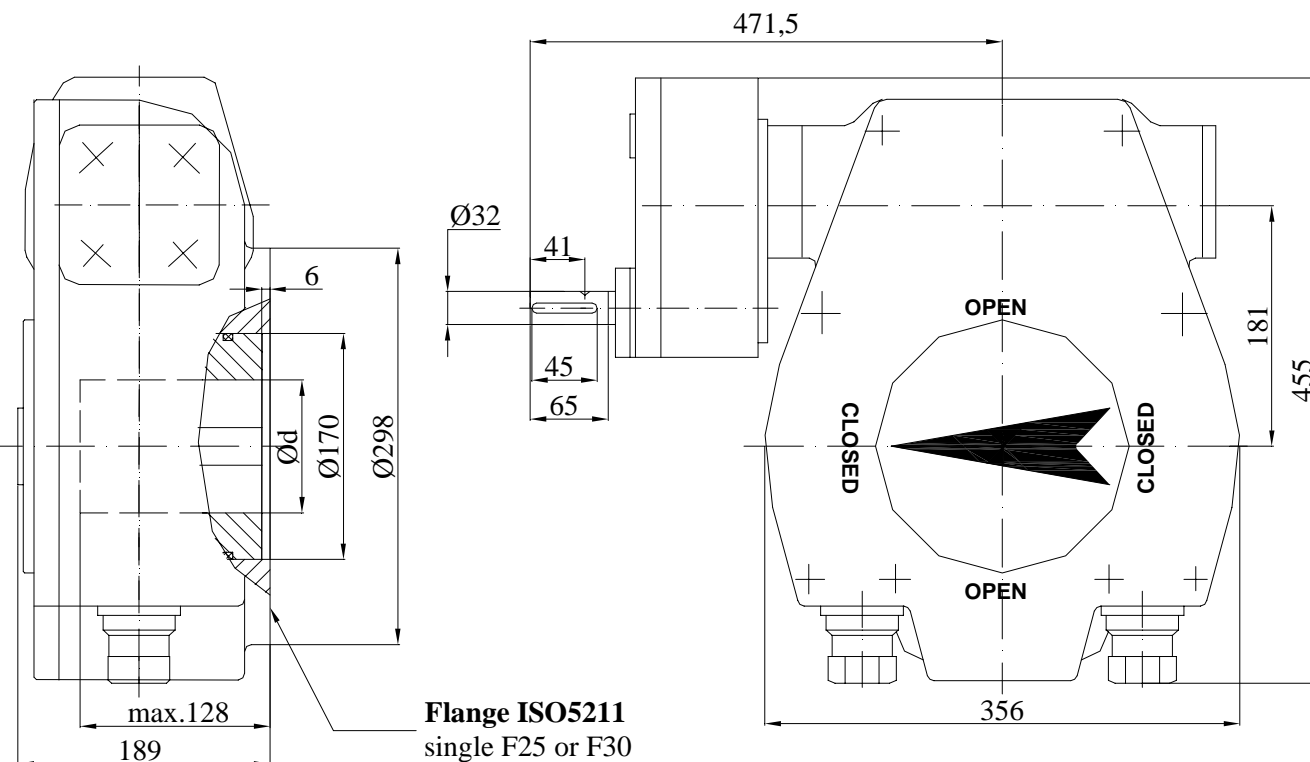
R2CM 897 x 300 - F30 / 1 / 60 - A

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

WORM UNIT FOR 1/4 TURN VALVES R2CM 1200



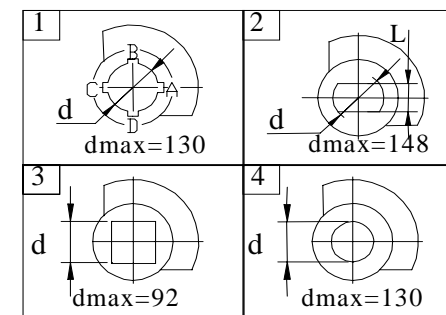
Sheet no.	812a
Date	25.03.2005



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 :

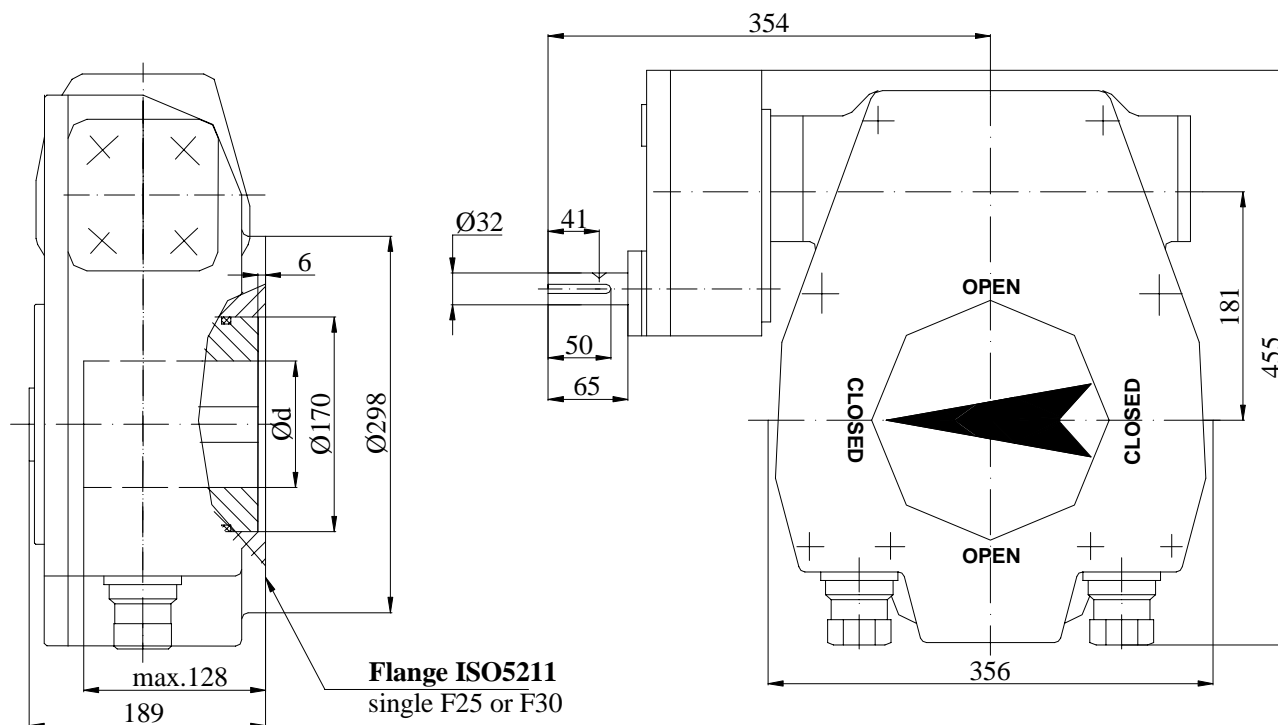
R2CM 1200 x **450** - **F30** / **1** / **60** - **A**

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

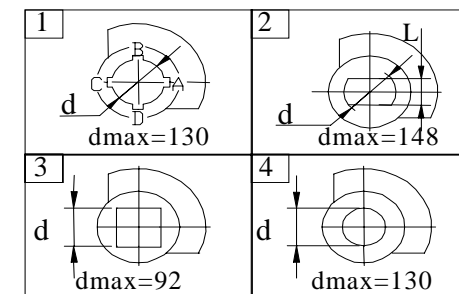
Sheet no.	813
Date	24.02.2004



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 :

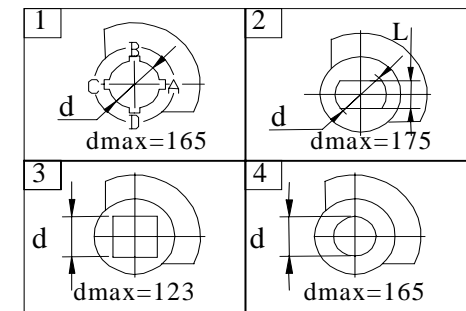
R2CM 1600 x 369 - F30 / 1 / 60 - A

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

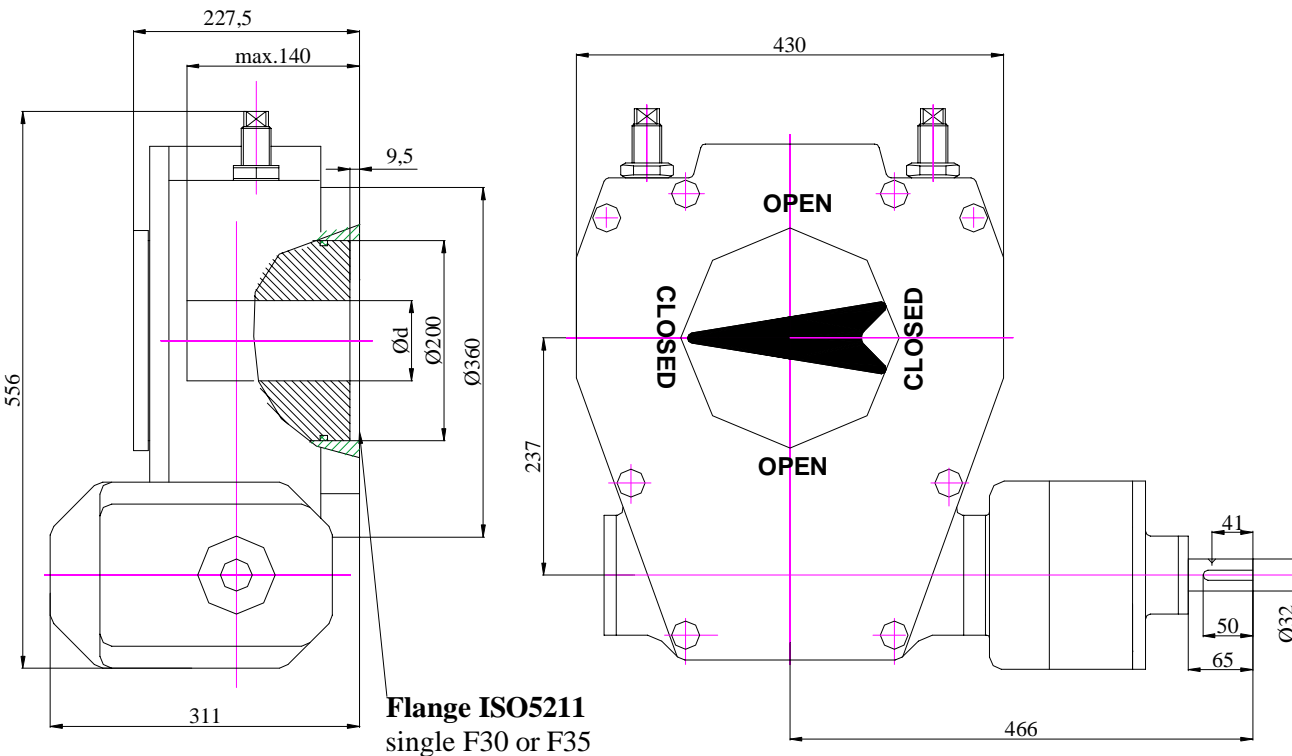
WORM UNIT FOR 1/4 TURN VALVES R2CM 2000

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

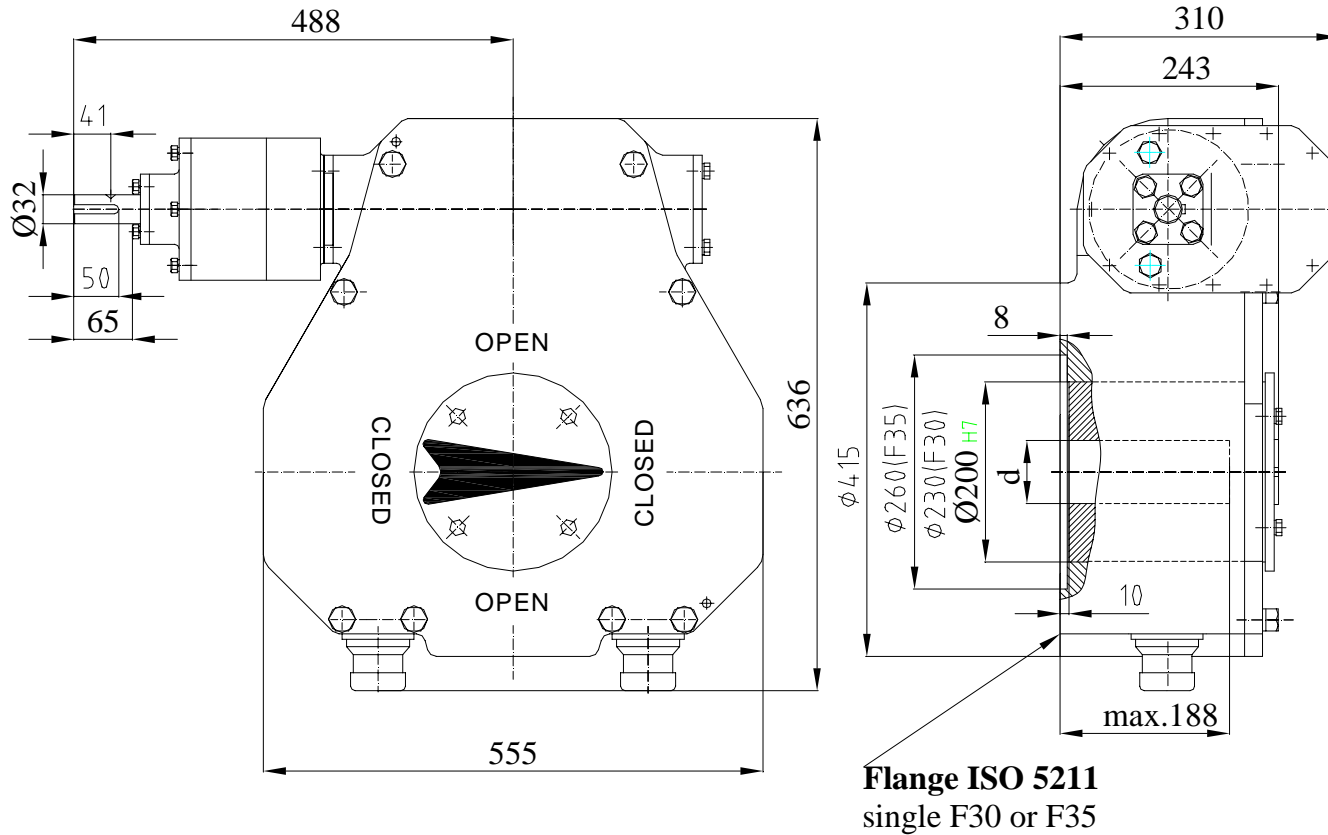
ORDERING CODE :

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

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

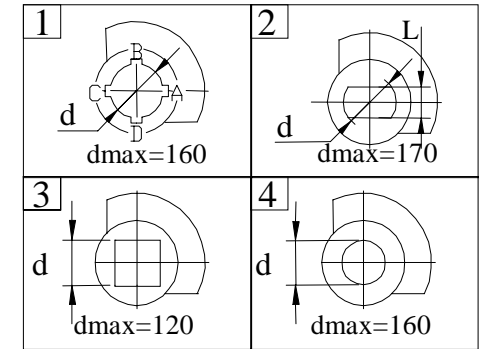
WORM UNIT FOR ¼ TURN VALVES R2CM 3000

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 :

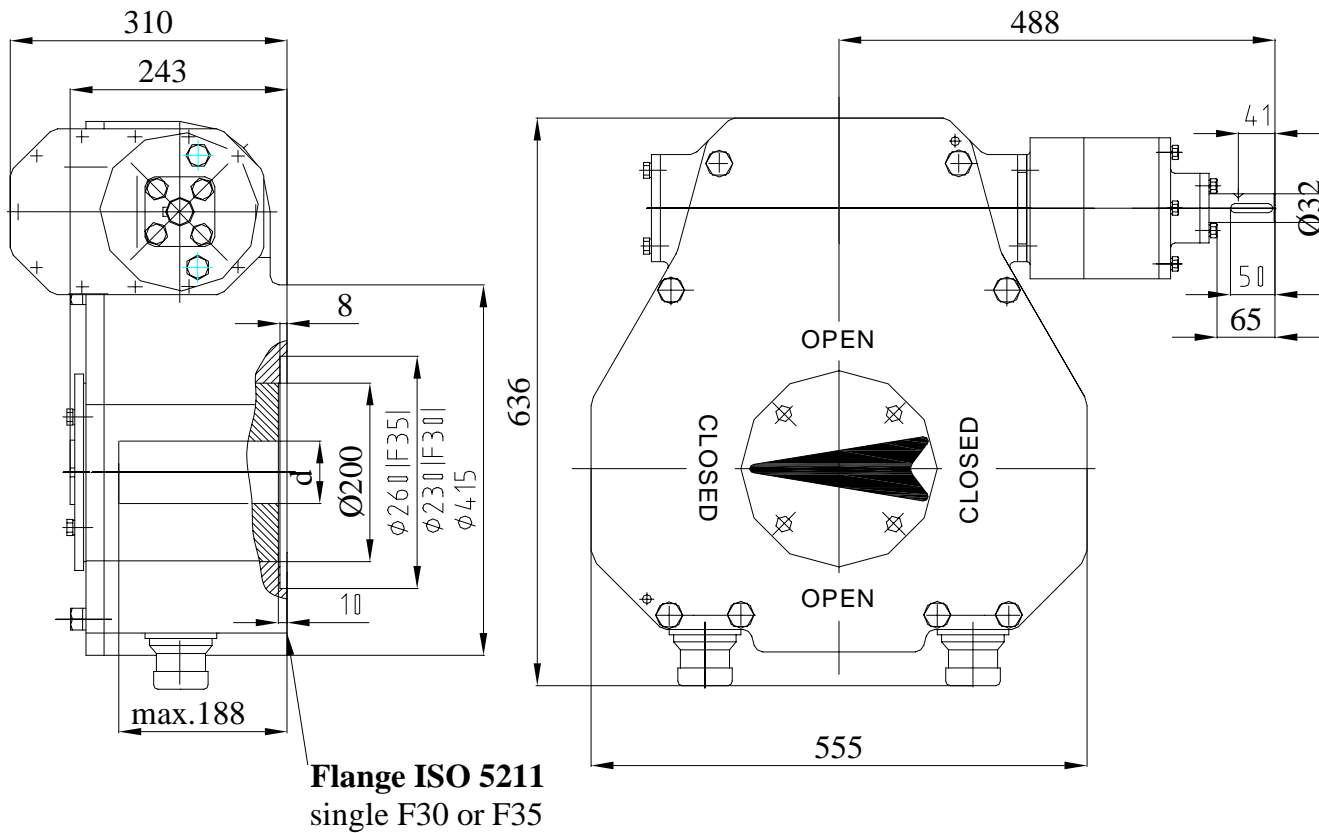
R2CM3000 x **720** - **F35** / **1** / **90** - **A**

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

WORM UNIT FOR 1/4 TURN VALVES R2CM 4000

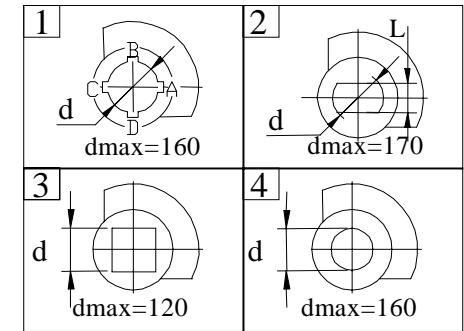


Sheet no.	816a
Date	24.02.2004



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

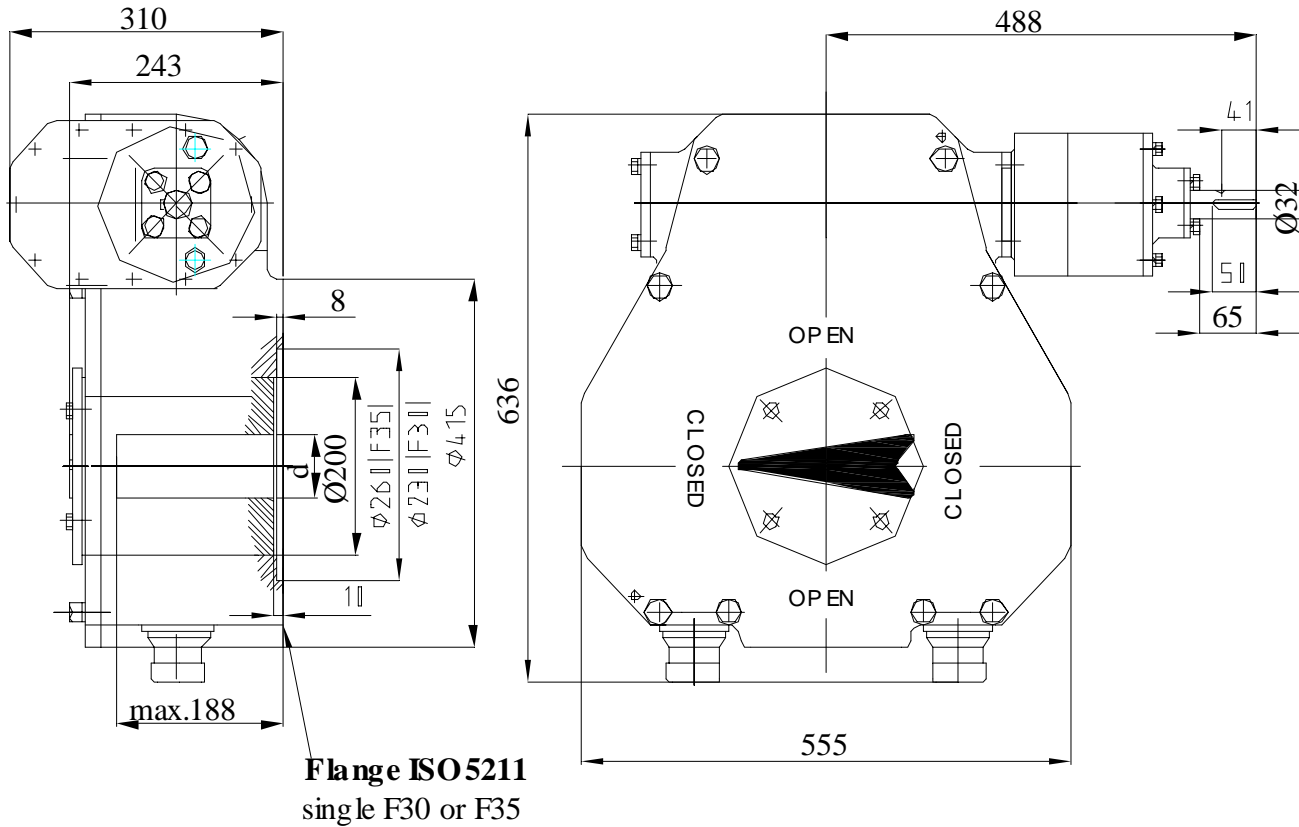
ORDERING CODE :

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

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

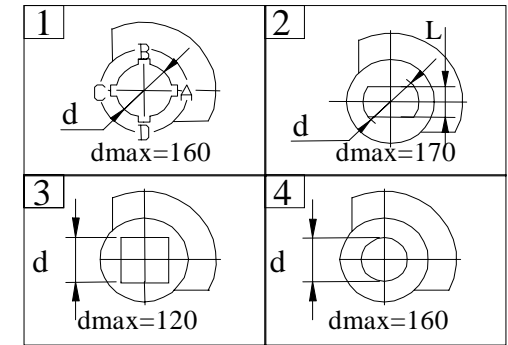
WORM UNIT FOR 1/4 TURN VALVES R2CM 5000

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:

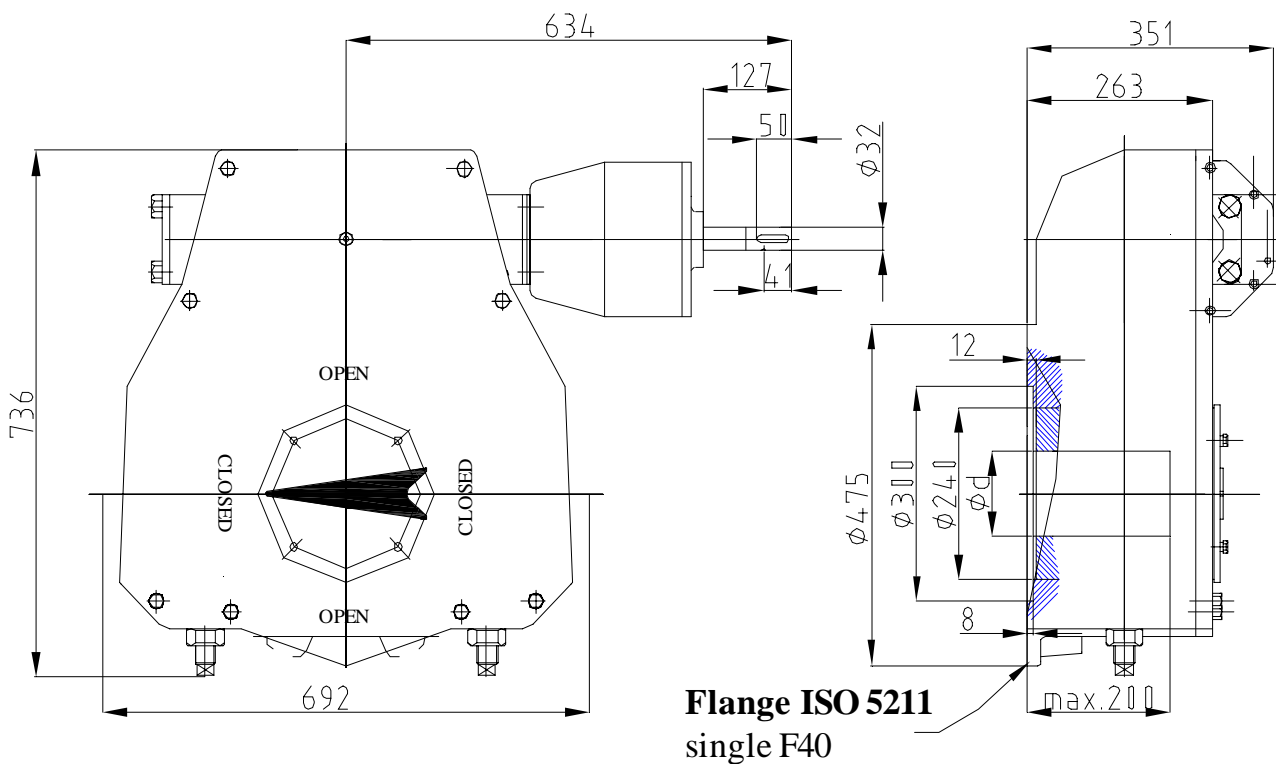
Output rated torque[Nm].....	50000
Input rated torque[Nm].....	110±10%
Ratio.....	1977
Output angular stroke.....	90°±5°
Handwheel turns for a complete stroke.....	495
Capsulation.....	IP 54

ORDERING CODE :

R2CM 5000 x 1977 - 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 6000

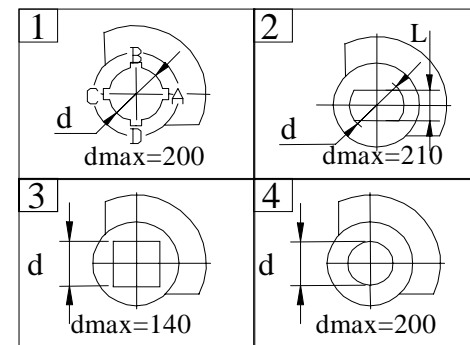


Flange ISO 5211
single F40

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

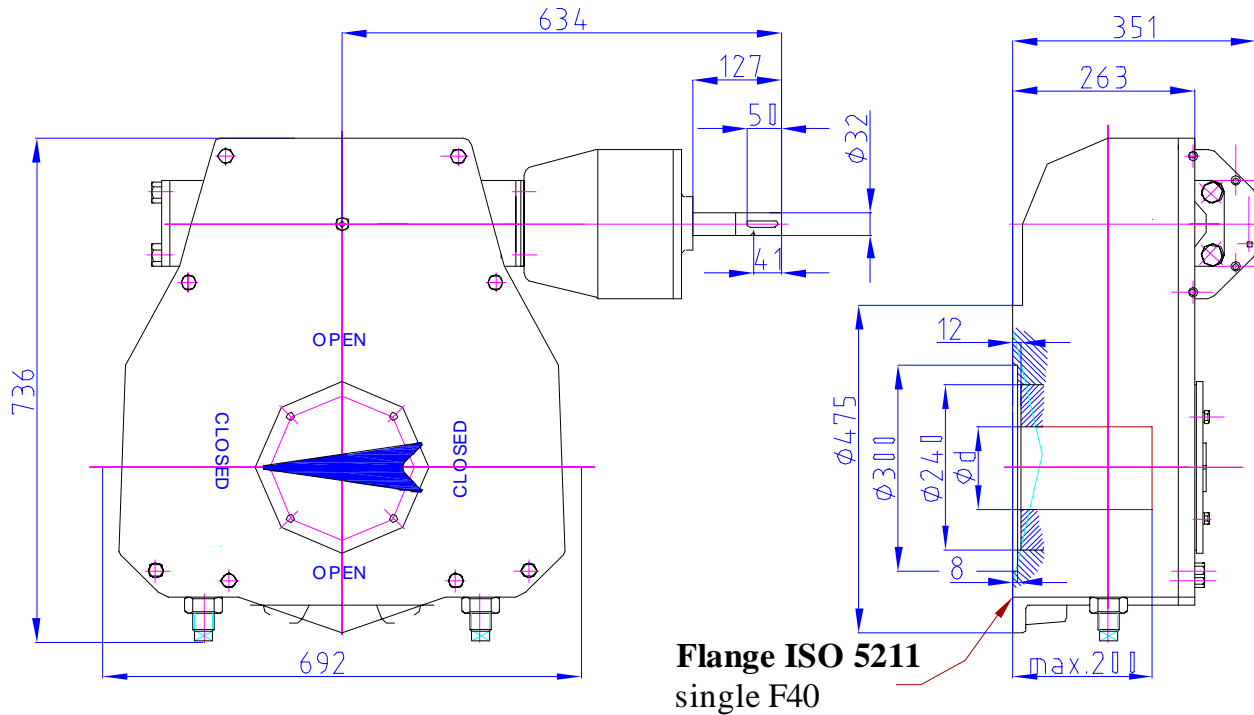
Keyway position

d-Coupling dimensions

Coupling shape

WORM UNIT FOR ¼ TURN VALVES R2CM 6500

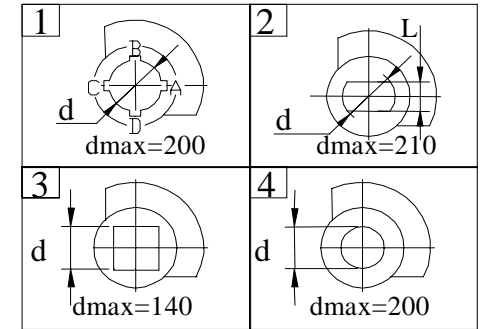
Sheet no.	819a
Date	24.02.2004



Flange ISO 5211
single F40

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	-	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

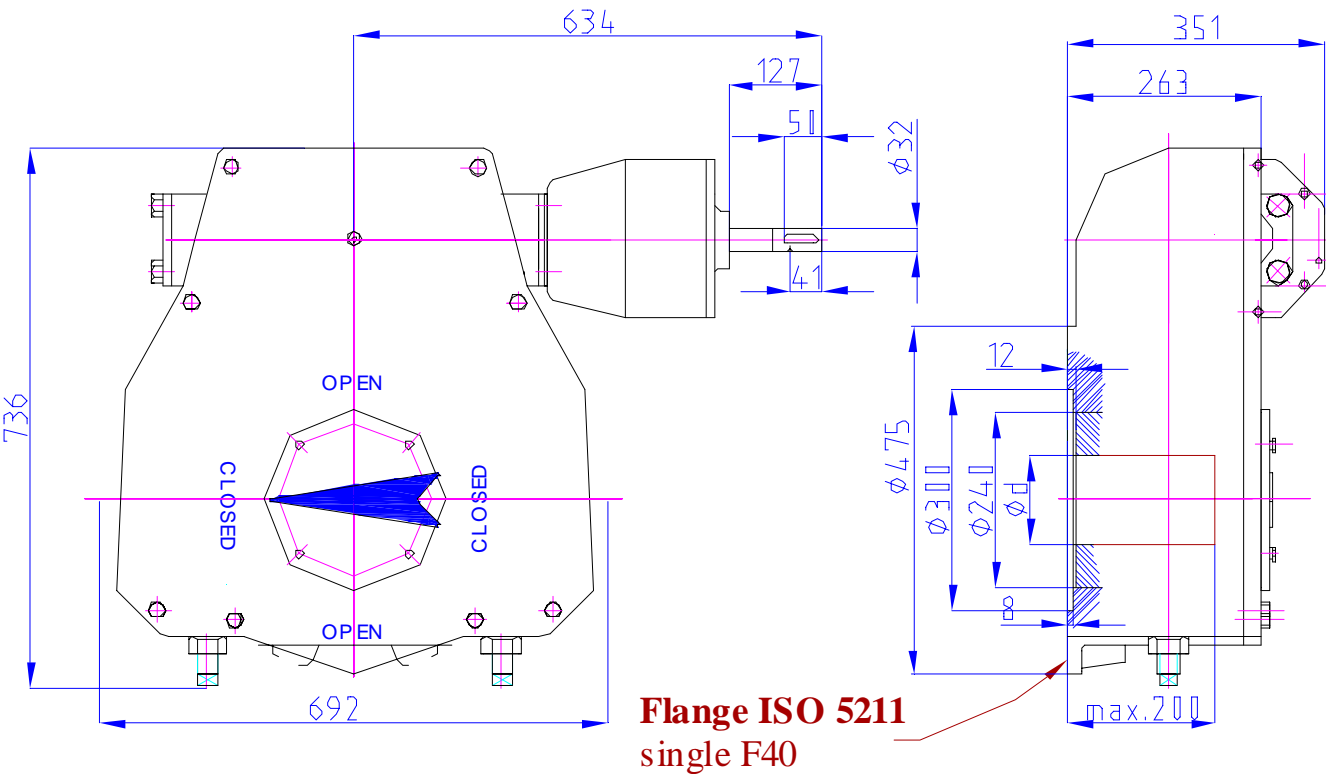
ORDERING CODE :

R2CM 6500 x 1490 - F40 / 1 / 90 - A

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

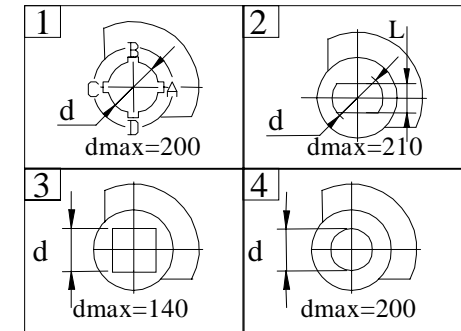
WORM UNIT FOR ¼ TURN VALVES R2CM 8500

Sheet no.	820a
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	-	51312 DIN 722
9	Set-screw	Carbon Steel	Gr8.8-DIN916
10	“O”ring	Nitrile	DIN 3771
11	Grease	Lithium-Calcium	UM170LiCaPb2

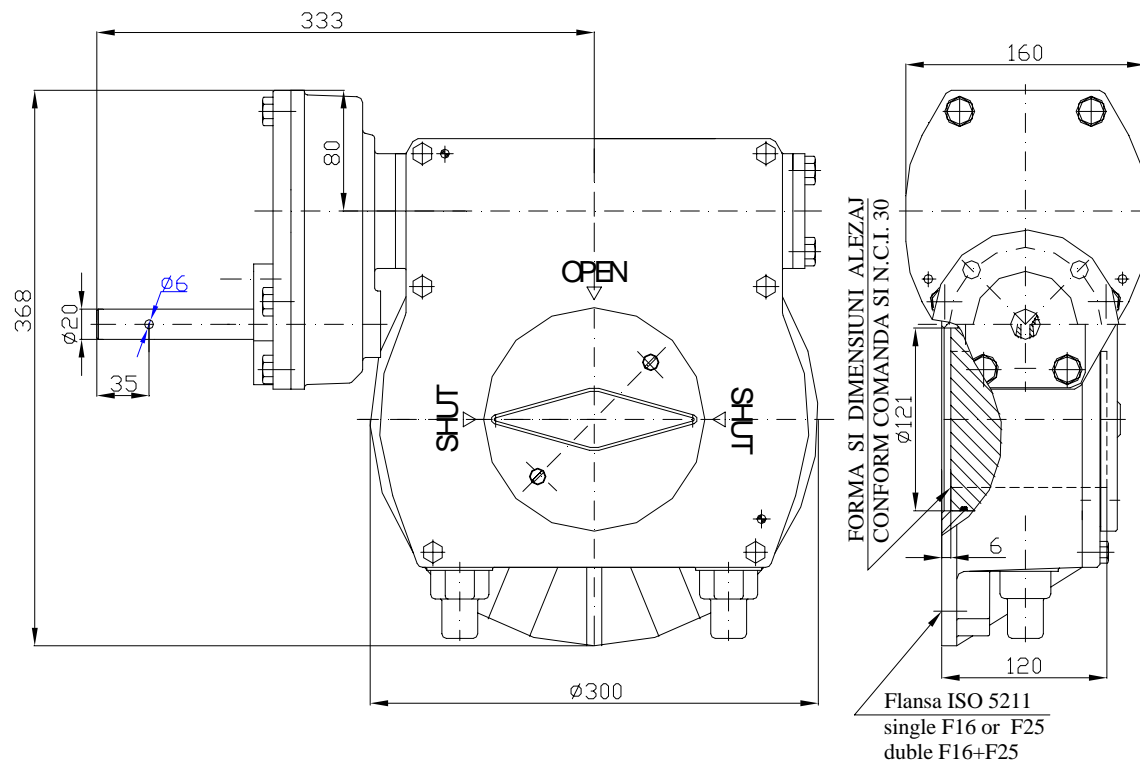
TECHNICAL FEATURES:

Output rated torque[Nm].....	85000
Input rated torque[Nm].....	210/125±10%
Ratio.....	1560/2700
Output angular stroke.....	90°±5°
Handwheel turns for a complete stroke.....	390/675
Capsulation.....	IP 54

ORDERING CODE :

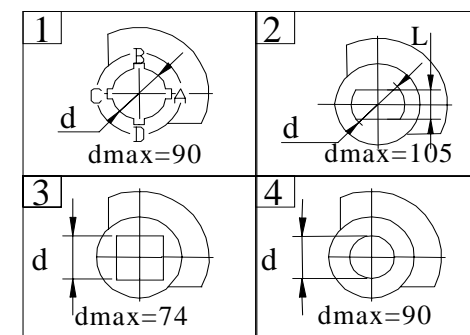
R2CM 8500	x 1560	- F40	/ 1	/ 90	- A
Type	Ratio	Output flange ISO 5211	Keyway position	Coupling dimensions code	Coupling shape

WORM UNIT R2CMS-138 FOR ¼ TURN VALVES



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

Welded handwheel – ø600-standard; ø800
Should be ordered separately!

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