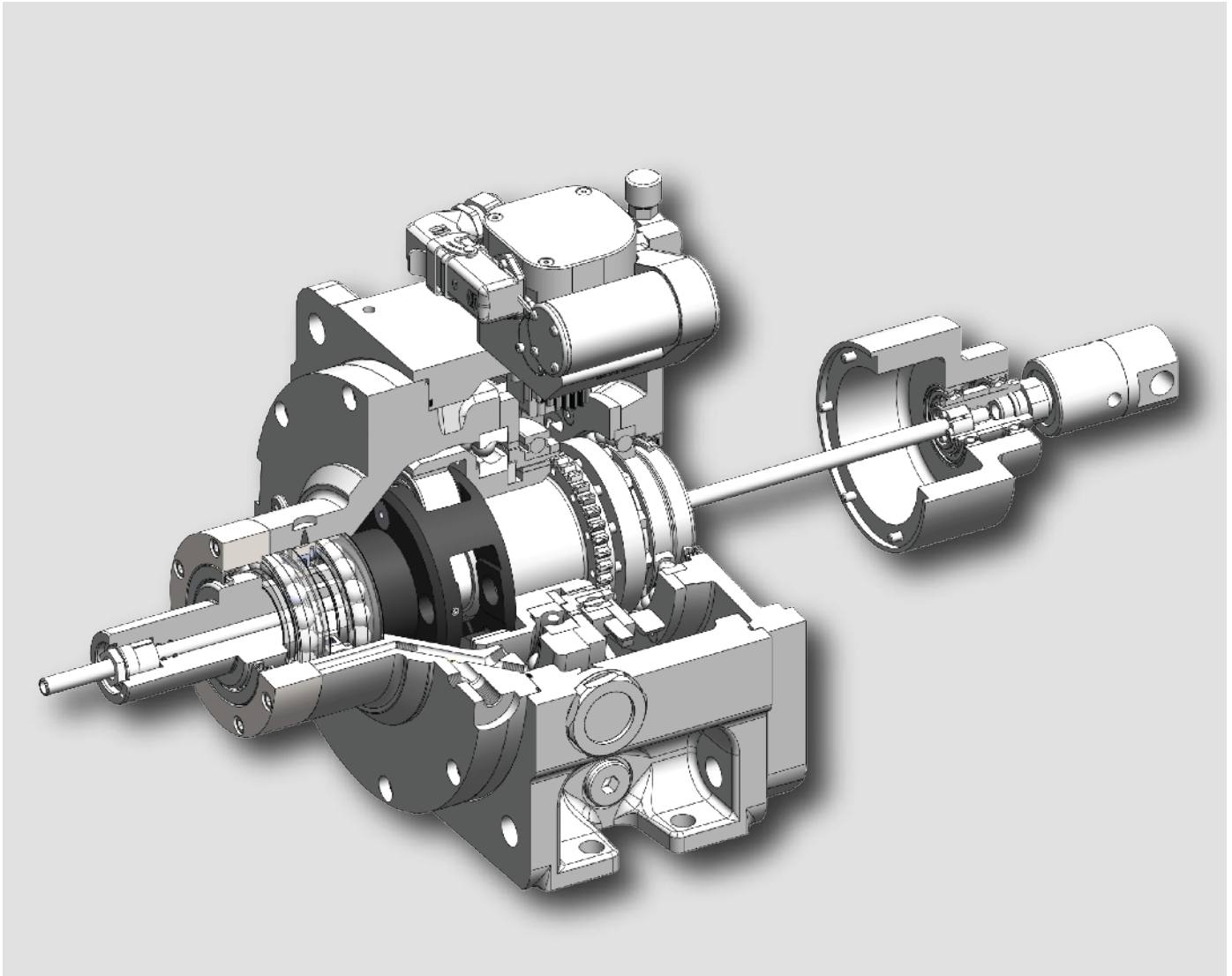


GTP2G CTS

Two Speed Coolant Through Spindle



GTP-2G CTS Speed Gear Box



CTS (Coolant Through Spindle)

To facilitate the transfer of cutting liquid like emulsion, hydraulic oil and air-oil mixture with up to 70 bars of pressure or a flow rate up to 70 L / min^{*)} through the gear box and spindle directly to tooling.

Supply Scope:

- Rotary Joint
- Steel Pipe
- Coolant Through Spindle Gear-Box
- Bearing Housing for Rotary Joint
-  ROBA-DS Coupling (option)

*)		
Pipe (outer diameter)	Max. bar	Max. L/min
7 mm	70	30
10 mm	70	70

Technical Data

			Ratio		2G120/121		2G250		2G300	
Nominal data :										
Motor frame size	(mm)				100		132		160	
Nominal power	(KW)				19		39		47	
Nominal speed	(min ⁻¹)				1500		1500		1500	
Nominal input torque(continuous operation S1)	(Nm)				120		250		300	
Output torque	(Nm)		1.00		120		250		300	
	(Nm)		4.00		480		1000		1200	
	(Nm)		4.91		589					
	(Nm)		5.50				1375		1375	
Maximum data :										
Max. Torque in Nm(intermittent loading S6 cycle duration 10min, ED. Max. 60%)										
Input	(Nm)				140		400		400	
Output(max. accelerating torque)	(Nm)		1.00		140		400		400	
	(Nm)		4.00		560		1600		1600	
	(Nm)		4.91		687					
	(Nm)		5.50				2200		2200	
Max. permitted input speed	(min ⁻¹)									
In reduction ratio i≠1	(min ⁻¹)		≠1		8000		6300		6300	
Direct drive i=1)	(min ⁻¹)		1 ¹⁾		12000 ¹⁾ 2)		10000 ¹⁾ 2)		10000 ¹⁾ 2)	
Max. vibration value	(mm/s)		≤		1.0		1.0		1.0	
At reference speed	(min ⁻¹)				6000		5000		5000	
Max. axial force in reduction ratio in counter clockwise(ccw) operation running and max. input torque	(N)		4.00				3964		4756	
See permissible axial force for motor shaft	(N)		4.91							
	(N)		5.50				5288		5288	
Mass moment of inertia	(J in kgcm ²)		1.00		110		270		270	
Output			4.00		144		570		570	
Input					9		36		36	
Operating data :										
Approx. oil fill in dm ³ oil level in middle of oil sight glass is most accurate reading	Vertical(V1) Horizontal(B5)	Recirculating lubrication								
Oil grade :		HLP 32 as per ISO VG 32 HLP 22 as per ISO VG 22 For V1 and B5 installation position oil recirculating system is necessary								
Oil change interval		Every six months or 2000 hours								
Oil temperature		Max. 120° C, depending on application, installation position, lubrication and cooling condition								
Weight :										
Standard	(approx.kg)				45		71		95	
Electrical connection :										
For shifting unit										
Power consumption	W				120		120		120	
Supply voltage at shifting unit	V				24±10%		24±10%		24±10%	
Current supply at 24V	A				5		5		5	

1) Please make sure the min. flow-rate is 3 L / min and the min. oil pressure is 3 bar when you only use one channel (K port or L port) for channel lubrication system. If you use two channels (K port and L port) for channel lubrication system, the min. flow-rate is 2.5 L / min and oil pressure is 2.5 bar.

2) Max. speed only permitted with port K or port L.

※ Please make sure the pressure and volume of oil according operating instruction.

GTP-2G CTS

Ordering numbers for gearbox types 2G120/121

Note :

1) RWDR=Radial shaft seal

*motor-specific on request

			2	G													
			1	2	3	4	5	6	—	7	8	9	10	11	—	12	13
Two-speed gearbox																	
Motor brand :																	
Siemens	1																
Heidenhain	2																
Fanuc	3																
Mitsubishi	6																
Other motor (please provide motor data and drawing)	7																
Input interface																	
Closed with hub and hub bearing and RWDR 1)*	3																
Close with hub and RWDR without bearing	4																
Flange input (Ø100K6)	9																
*Gearbox type :																	
100/i ₁ = 4.00	12																
100/i ₁ = 4.91	09																
112/i ₁ = 4.00	11																
112/i ₁ = 4.91	08																
Output bearings :																	
Angular-contact ball bearings	4																
Spindle Ang. ball bearing	5																
Gearbox output :																	
a1 = 38 mm INLINE	C																
Installation position :																	
V1 / B5 / B5 turned (shifting unit on right side, view from input)	E																
Motor shaft diameter "d"																	
Flange input	0																
28mm	1																
32mm	2																
38mm	3																
42mm	4																
48mm	9																
Torsional backlash on gearbox output :																	
Reduced backlash max. 20 arcmin	3																
Minimal reduced backlash max. 15 arcmin	4																
Coolant through spindle	T																
Special application	A																

GTP - 2G CTS

Ordering numbers for gearbox types 2G250/2G300

Note :

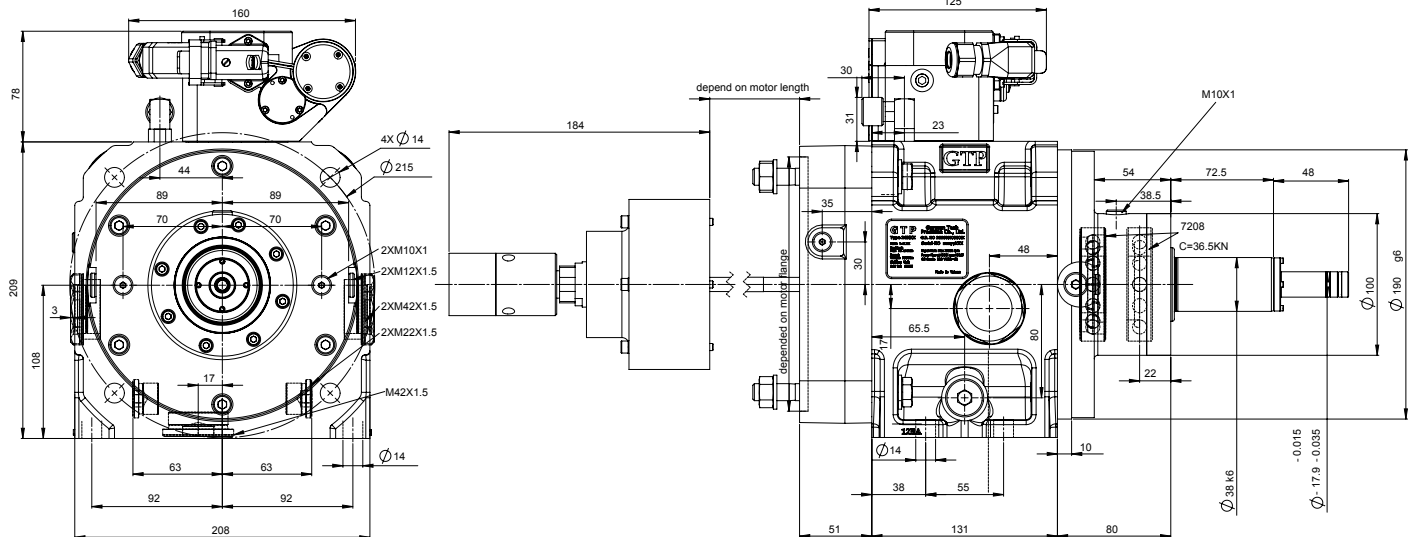
1) RWDR=Radial shaft seal

*motor-specific on request

			2	G													
			1	2	3	4	5	6	—	7	8	9	10	11	—	12	13
Two-speed gearbox																	
Motor brand :																	
Siemens	1																
Heidenhain	2																
Fanuc	3																
Mitsubishi	6																
Other motor (please provide motor data and drawing)	7																
Input interface																	
Closed with hub and hub bearing and RWDR 1)*	3																
Close with hub and RWDR without bearing	4																
Flange input (Ø118K6)	9																
*Gearbox type :																	
132/i ₁ = 4.00	15																
160/i ₁ = 4.00	20																
132/i ₁ = 5.5	17																
160/i ₁ = 5.5	22																
Output bearings :																	
Angular-contact ball bearings	4																
Spindle Ang. ball bearing	5																
Gearbox output :																	
a1 = 42 mm INLINE	U																
Installation position :																	
V1 / B5 / B5 turned (shifting unit on right side, view from input)	E																
Motor shaft diameter "d"																	
2G250 2G300																	
Flange input	0																
42mm 55mm	1																
48mm 60mm	2																
Torsional backlash on gearbox output :																	
Reduced backlash max. 20 arcmin	3																
Minimal reduced backlash max. 15 arcmin	4																
Coolant through spindle	T																
Special application	A																

Installation Drawing : **2G120** CTS

Standard
SHIFTING UNIT WITHOUT NEUTRAL POSITION
SHIFTING UNIT WATTAGE 120W AT 24 VDC

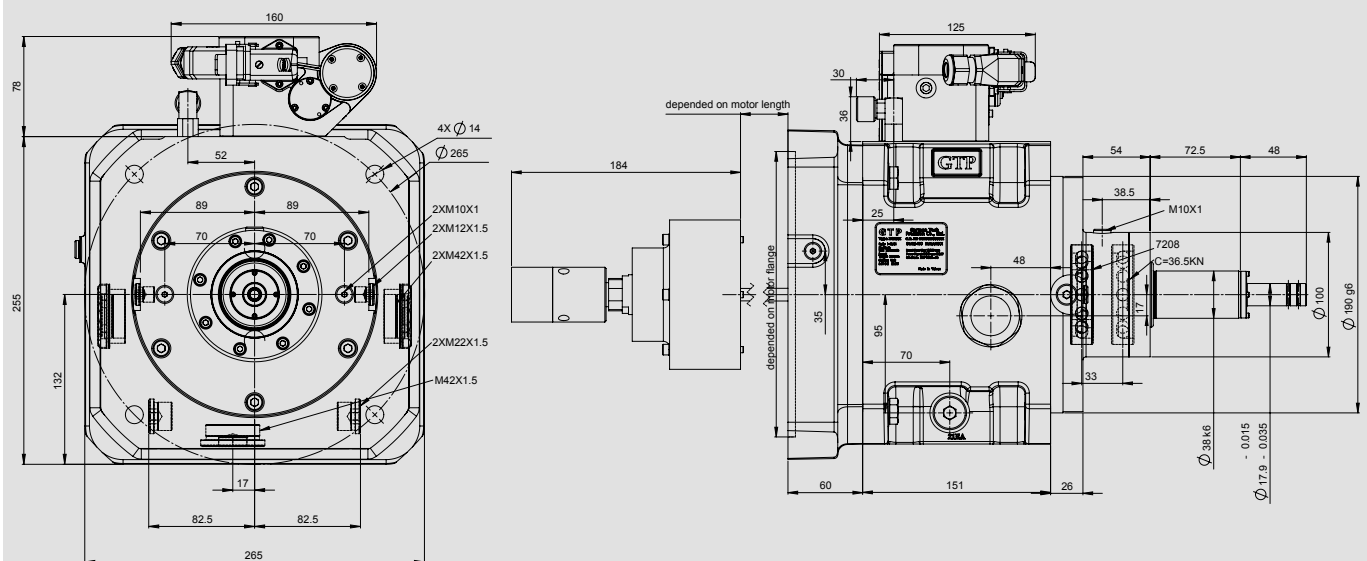


OIL GRADE : HLP 32 ACC. To ISO VG 32 or
HLP 22 ACC. To ISO VG 22 WITH
RECIRCULATING LUBRICATION

OIL LEVEL SIGHT GLASS (LEFT AND RIGHT)

[illegible]

Standard
SHIFTING UNIT WITHOUT NEUTRAL POSITION
SHIFTING UNIT WATTAGE 120W AT 24 VDC



OIL GRADE : HLP 32 ACC. To ISO VG 32 or
HLP 22 ACC. To ISO VG 22 WITH
RECIRCULATING LUBRICATION

OIL LEVEL SIGHT GLASS (LEFT AND RIGHT)



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