

AT-PM



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QUICK CHUCKS CHANGE SYSTEM

AT-PM 200/170

QUICK CHUCKS CHANGE SYSTEM

chucks

Ø 170

Ø 210

Ø 260

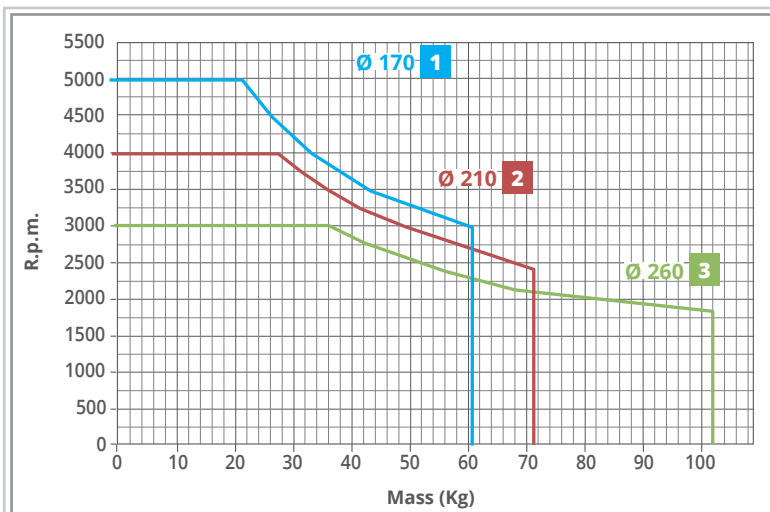
Applications/Customer benefits

- Quick chucks change on lathe
- Quick chucks change Ø170 Ø210 Ø250 available diameter on lathe, quick connection to double cylinder between automatic feeding
- Pallet positioning accuracy pallet < 0,005 mm

Technical features

- Hardened materials for high accuracy and durability
- AT-PM operation with hydraulic double cylinder
- Air sensing function for pallet positioning
- Balancing 6.3

AT-PM MODEL	ID.NO.	REPEATABILITY	Ø170 CHUCK MAX RPM	Ø210 CHUCK MAX RPM	Ø260 CHUCK MAX RPM	WEIGHT Kg	EXTERNAL DRAW-BAR/ OPERATION AT-PM		INTERNAL DRAW-BAR/ OPERATION CHUCK OR COLLECT	
							MAX PULL-DOWN CYLINDER	MAX HOLDING FORCE PALLET	MAX PULL-DOWN FORCE CYLINDER	MAX PUSHING FORCE CYLINDER
Ø200/170 A6	65002009	0,005 mm	5000	4000	3000	12,5	30 kN	120 kN	68 kN	40 kN



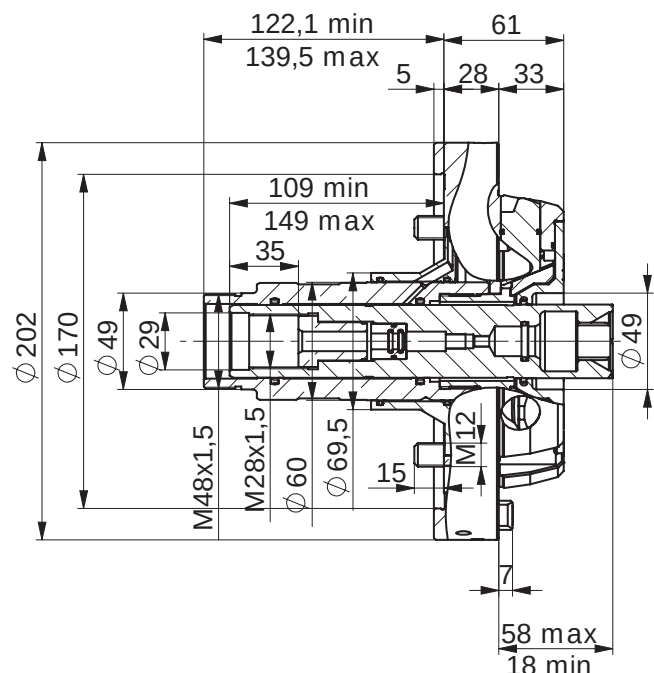
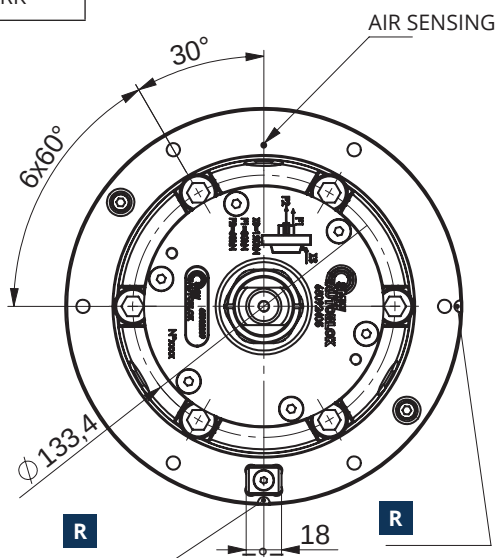
1 (*) Diagram is showing the rpm speed depending from:
- total max weight (pallet + chuck or fixture + workpiece).
- max overall dimension Ø 170 and 190 mm total length

2 (**) Diagram is showing the rpm speed depending from:
- total max weight (pallet + chuck or fixture + workpiece).
- max overall dimension Ø 210 and 220 mm total length

3 (***) Diagram is showing the rpm speed depending from:
- total max weight (pallet + chuck or fixture + workpiece).
- max overall dimension Ø 250 and 250 mm total length

(*) (**) (***) rpm max speed has to be reduced if used chuck type has lower rpm speed

R RED MARK



Subject to technical changes.
For more detailed information please ask our costumer service SMW-AUTOBLOK.

AT-PM 240/220

QUICK CHUCKS CHANGE SYSTEM

Applications/Customer benefits

- Quick chucks change on lathe
- Quick chucks change Ø210 Ø250 Ø315 available diameter on lathe, quick connection to double cylinder between automatic feeding
- Pallet positioning accuracy pallet < 0,005 mm

Technical features

- Hardened materials for high accuracy and durability
- AT-PM operation with hydraulic double cylinder
- Air sensing function for pallet positioning
- Balancing 6.3

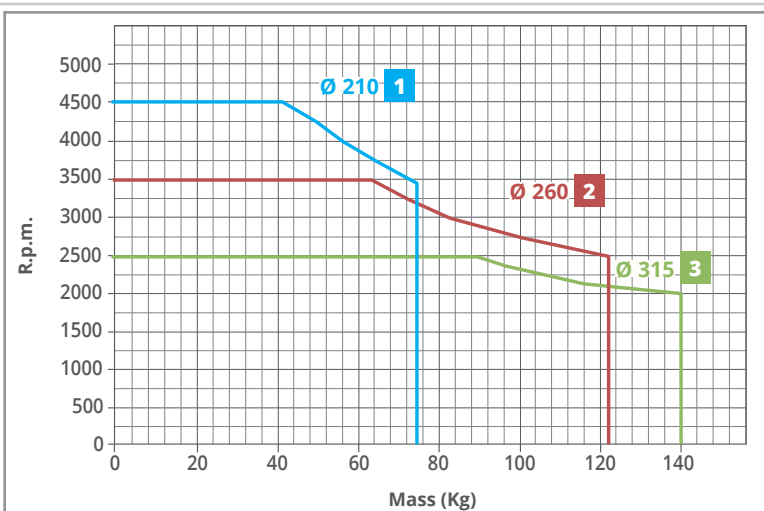
chucks

Ø 210

Ø 260

Ø 315

AT-PM MODEL	ID.NO.	REPEATABILITY	Ø210 CHUCK MAX RPM	Ø260 CHUCK MAX RPM	Ø315 CHUCK MAX RPM	WEIGHT Kg	EXTERNAL DRAW-BAR/ OPERATION AT-PM		INTERNAL DRAW-BAR/ OPERATION CHUCK OR COLLECT	
							MAX PULL-DOWN CYLINDER	MAX HOLDING FORCE PALLET	MAX PULL-DOWN FORCE CYLINDER	MAX PUSHING FORCE CYLINDER
Ø240/220 A8	65002405	0,005 mm	4500	3500	2500	16	30 kN	120 kN	68 kN	40 kN



1 (*) Diagram is showing the rpm speed depending from:

- total max weight (pallet + chuck or fixture + workpiece).
- max overall dimension Ø 210 and 220 mm total length

2 (**) Diagram is showing the rpm speed depending from:

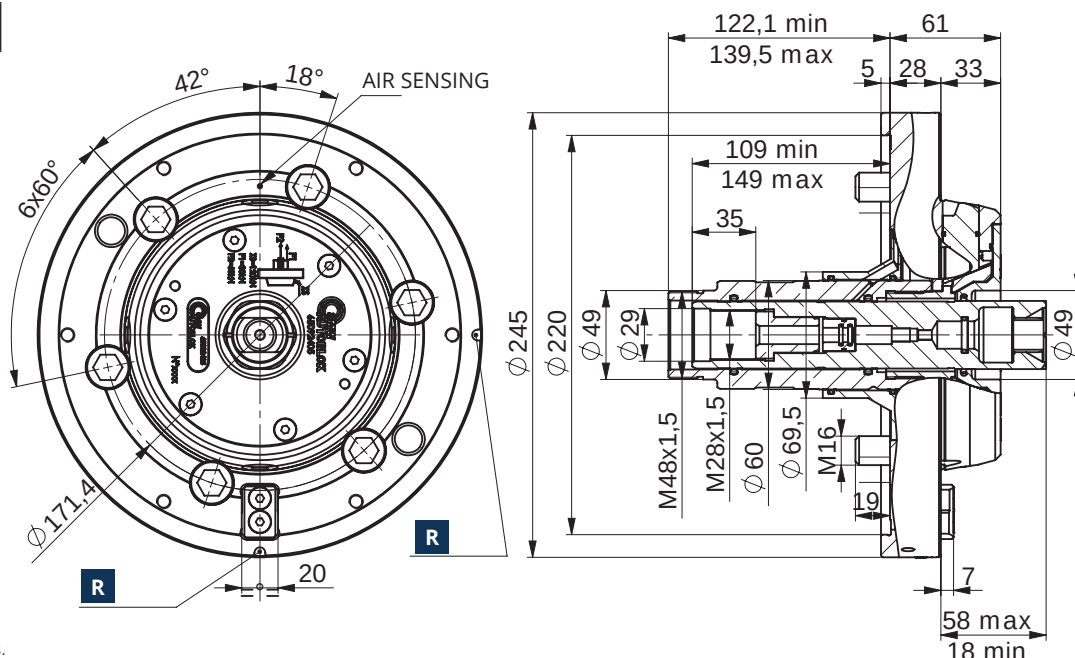
- total max weight (pallet + chuck or fixture + workpiece).
- max overall dimension Ø 250 and 250 mm total length

3 (***) Diagram is showing the rpm speed depending from:

- total max weight (pallet + chuck or fixture + workpiece).
- max overall dimension Ø 315 and 250 mm total length

(*) (**) (***) rpm max speed has to be reduced if used chuck type has lower rpm speed

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AT-PM 320/300

QUICK CHUCKS CHANGE SYSTEM

chucks

Ø 315
Ø 400
Ø 530

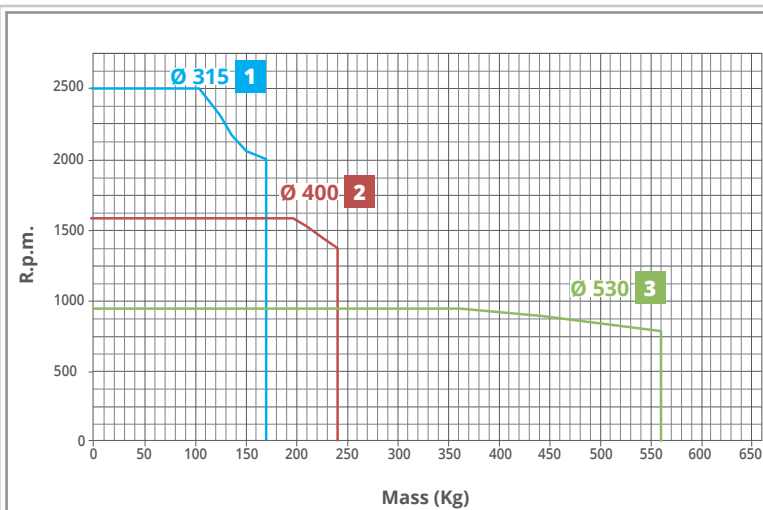
Applications/Customer benefits

- Quick chucks change on lathe
- Quick chucks change Ø315 Ø400 Ø530 available diameter on lathe, quick connection to double cylinder between automatic feeding
- Pallet positioning accuracy pallet < 0,005 mm

Technical features

- Hardened materials for high accuracy and durability
- AT-PM operation with hydraulic double cylinder
- Air sensing function for pallet positioning
- Balancing 6.3

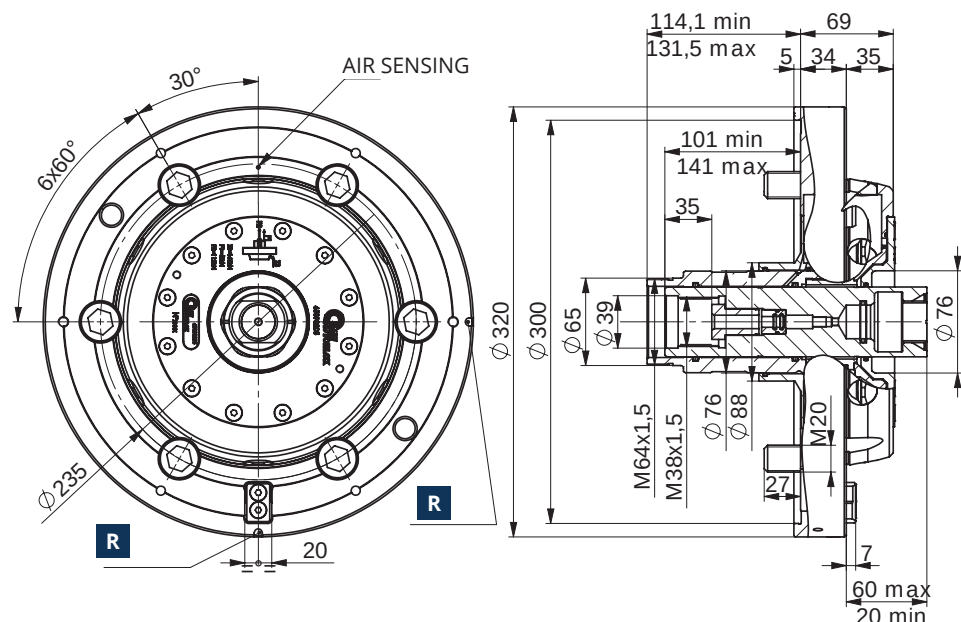
AT-PM MODEL	ID.NO.	REPEATABILITY	Ø315 CHUCK MAX RPM	Ø400 CHUCK MAX RPM	Ø530 CHUCK MAX RPM	WEIGHT Kg	EXTERNAL DRAW-BAR/ OPERATION AT-PM		INTERNAL DRAW-BAR/ OPERATION CHUCK OR COLLECT	
							MAX PULL-DOWN CYLINDER	MAX HOLDING FORCE PALLET	MAX PULL-DOWN FORCE CYLINDER	MAX PUSHING FORCE CYLINDER
Ø320/300 A11	65003205	0,005 mm	2500	1600	900	32	40 kN	160 kN	112 kN	65 kN



- (*) Diagram is showing the rpm speed depending from:
 - total max weight (pallet + chuck or fixture + workpiece).
 - max overall dimension Ø 315 and 250 mm total length
- (**) Diagram is showing the rpm speed depending from:
 - total max weight (pallet + chuck or fixture + workpiece).
 - max overall dimension Ø 420 and 300 mm total length
- (***) Diagram is showing the rpm speed depending from:
 - total max weight (pallet + chuck or fixture + workpiece).
 - max overall dimension Ø 520 and 400 mm total length

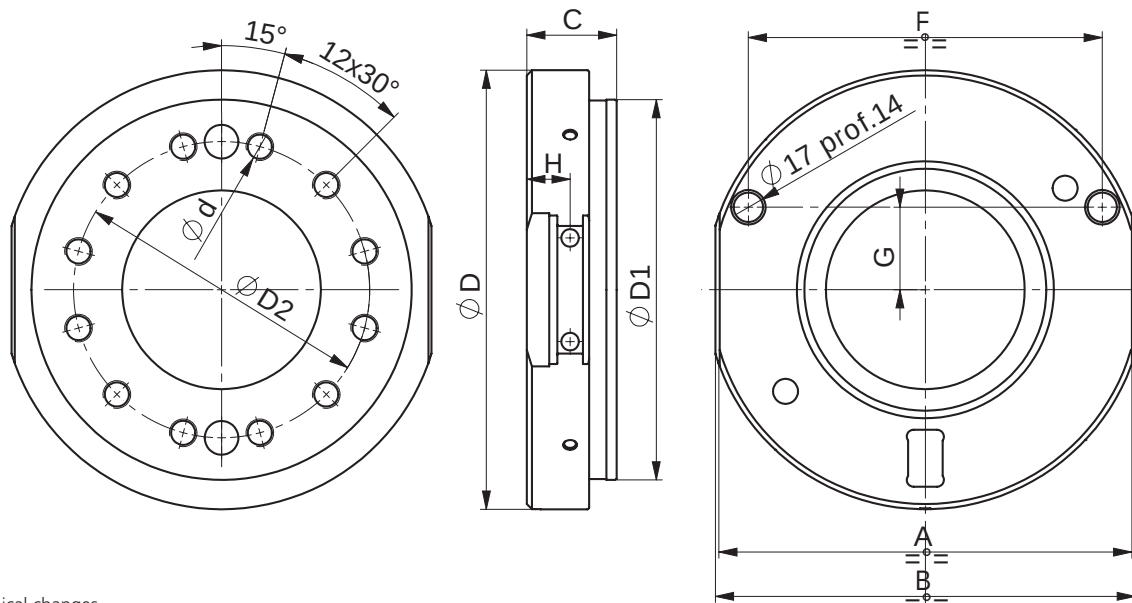
(*) (**) (***) rpm max speed has to be reduced if used chuck type has lower rpm speed

R RED MARK



Subject to technical changes.
For more detailed information please ask our costumer service SMW-AUTOBLOK.

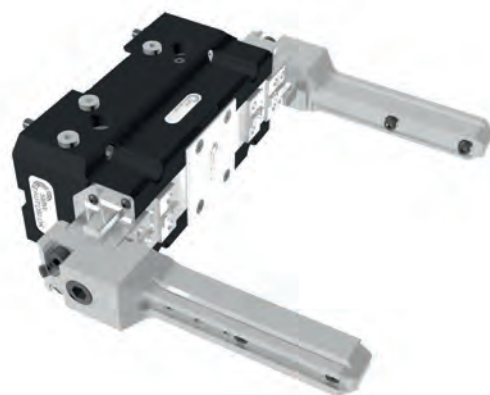
PALLET FOR QUICK CHUCKS CHANGE SYSTEM AT-PM



Subject to technical changes.
For more detailed information please ask our costumer service SMW-AUTOBLOK.

AT-PM MODEL	PALLET ID.No.	Ø D pallet mm	Ø D1 mm	Ø D2 mm	Ø d mm	A mm	B mm	C mm	F mm	G mm	H mm	Weight kg
AT-PM 200/170	65622009	206	140	104,8	M10	190	194	54	166,8	38,9	25	6,6
AT-PM 200/170	65612009	206	170	133,4	M12	190	194	52	166,8	38,9	25	6,3
AT-PM 200/170	65632009	206	220	171,4	M16	190	194	52	166,8	38,9	25	6,8
AT-PM 240/220	65622405	254	170	133,4	M12	239	243	52	204,8	47,8	25	11,8
AT-PM 240/220	65612405	254	220	171,4	M16	239	243	52	204,8	47,8	25	12
AT-PM 320/300	65623205	325	220	171,4	M16	304	308	59	262,8	61,3	25	20
AT-PM 320/300	65613205	325	300	235	M20	304	308	54	262,8	61,3	25	18,7
AT-PM 320/300	65633205	378	380	330,2	M24	345	349	55	262,8	61,3	25	31

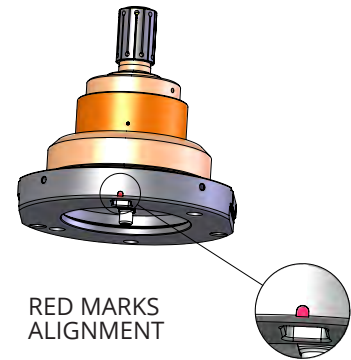
AT-PM MODEL	PALLET ID.No.	TOP JAWS KIT 200PPL	TOP JAWS KIT 250PPL	A mm	TS CHUCK	AP/APL CHUCK
AT-PM 200/170	65622009	46204050	46204055	190	170	170
AT-PM 200/170	65612009	46204050	46204055	190	210	215
AT-PM 200/170	65632009	/	46204055	190	250	260
AT-PM 240/220	65622405	46204040	46204045	239	210	215
AT-PM 240/220	65612405	46204040	46204045	239	250-315	260-315
AT-PM 320/300	65623205	/	46204080	304	315	315
AT-PM 320/300	65613205	/	46204080	304	400	400
AT-PM 320/300	65633205	/	46204080	345	530	530



EXPANDING MANDRELS mountable on AT-PM



EM-A model
pull-down
expanding mandrel



EM-AL model
pull-down expanding
mandrel-body lengthened



EM-B model
expanding mandrels



KSZ-AZ model
draw collet chuck



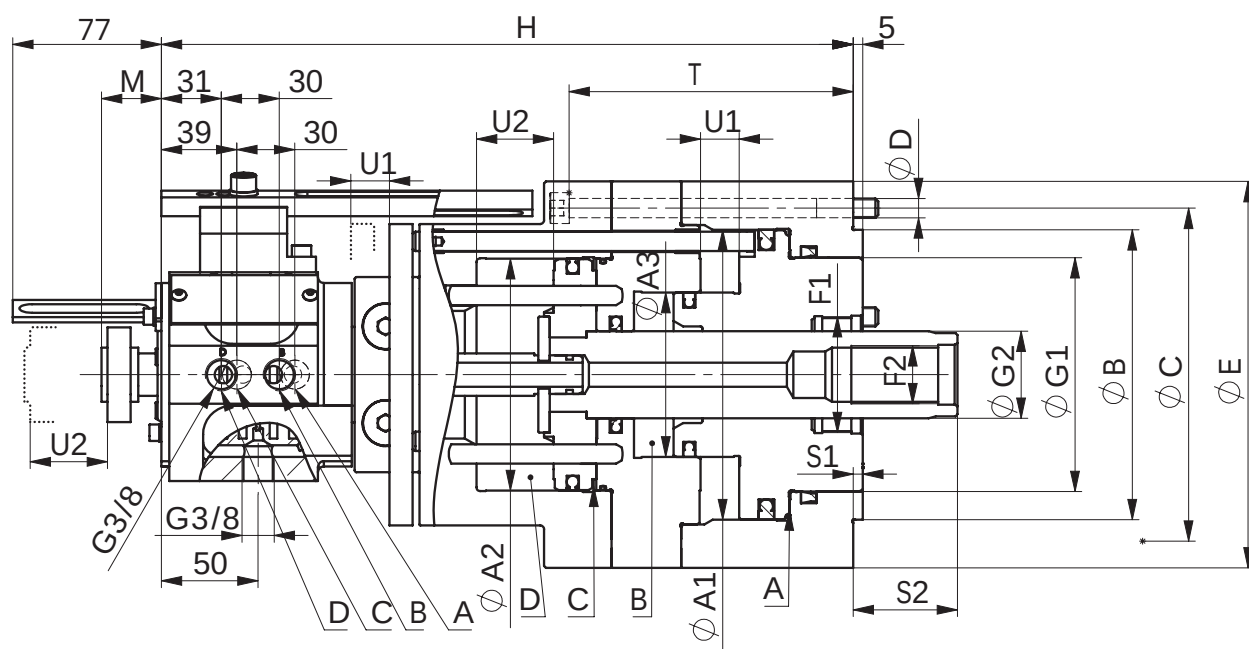
DOUBLE PISTON CYLINDERS

Applications/Customer benefits

- AT-PM actuation +TS and AP chucks
- AT-PM actuation + collets
- Pallet positioning accuracy < 0,005 mm

Technical features

- Double piston cylinder with 4 way oil manifold for separate actuation of the 2 cylinders
- Pressure range 8 - 70 bar
- Horizontal or vertical installation
- Safety valves on the biggest cylinders and stroke control on each cylinder
- Central bore for air, coolant or oil with thread for rotary union
- Mounting from the rear side with bolts
- A 10 µm filter in pressure line is requested
- Use oil HM32 ISO 3448
- Air sensing function for pallet positioning
- Balancing 6.3

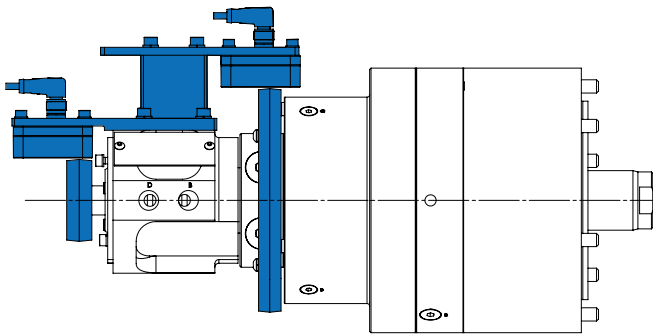
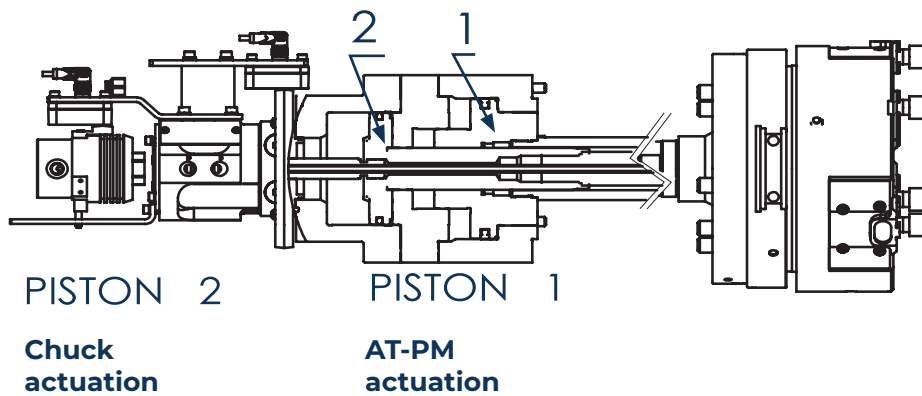


ID.No.	DOUBLE PISTON CYLINDER TYPE	Piston Area A (cm²)	Piston Area B (cm²)	Piston Area C (cm²)	Piston Area D (cm²)	A Piston force max/min (kN)	B Piston force max/min (kN)	C Piston force max/min (kN)	D Piston force max/min (kN)	Max speed (rpm)	Weight (kg)	Moment of inertia (kgm²)	Pressure max/min (bar)
33981009	DCE-4V 64-64/30-40	66	63	63	66	46/5	44/5	44/5	46/5	5000	28,6	0,074	70/8
33981206	DCR-4V 60-100/20-40	61	41	97	109	43/5	29/3,3	68/7,7	76/8,7	5000	36	0,127	70/8
33981510	DCR-4V 90-160/20-40	90	41	160	173	63/7	29/3,3	112/13	121/14	4000	47,5	0,24	70/8

Total oil drainage 3 dm³/min at 30 bar /50°C

ID.No.	DOUBLE PISTON CYLINDER TYPE	A1	A2	A3	B	C	D 6x60°	E	F1	F2	G1	G2	H	M	S1 (max)	S2 (max)	T	U1	U2
33981009	DCE-4V 64-64/30-40	125	95	/	105	145	M10	174	M45x1,5	M20x1,5	85	30	362	31	40	76	151	30	40
33981206	DCR-4V 60-100/20-40	150	120	85	150	175	M10	200	M60x1,5	M30	121	45	358	31	5	54	147	20	40
33981510	DCR-4V 90-160/20-40	180	150	85	180	206	M12	234	M72x1,5	M30	145	45	360	31	5	52	144	20	40

AT-PM: Double piston cylinders and LPS 4.0 kit

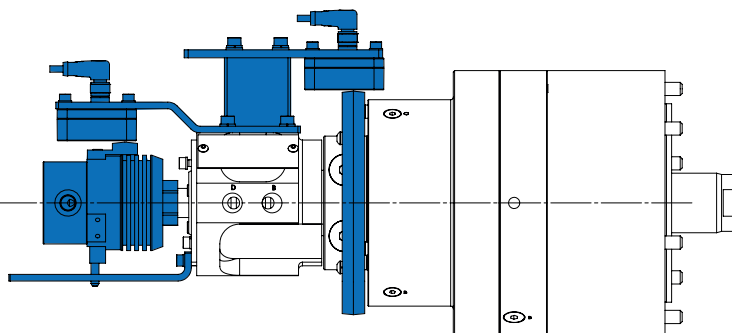


LPS 4.0 Kit - OPTIONAL

- kit for DCE-4V 64/64 ID.No. 60558306
- kit for DCR-4V 60/100 ID.No. 60558406
- kit for DCR-4V 90/160 ID.No. 60558407

Not included in the kit:

- sensor LPS 4.0 ID.No. 208108
- cable+connector ID.No. 208247

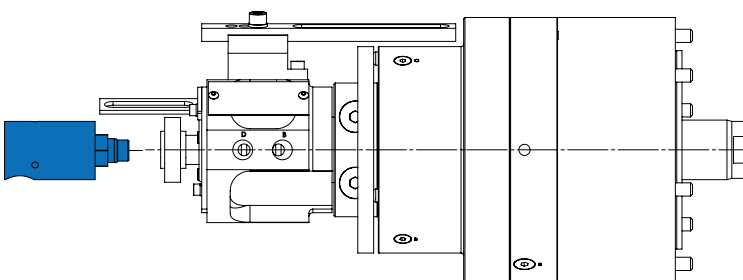


LPS 4.0 Kit - RU-2-22 - OPTIONAL

- kit for DCE-4V 64/64 ID.No. 60558336
- kit for DCR-4V 60/100 ID.No. 60558436
- kit for DCR-4V 90/160 ID.No. 60558437

Not included in the kit:

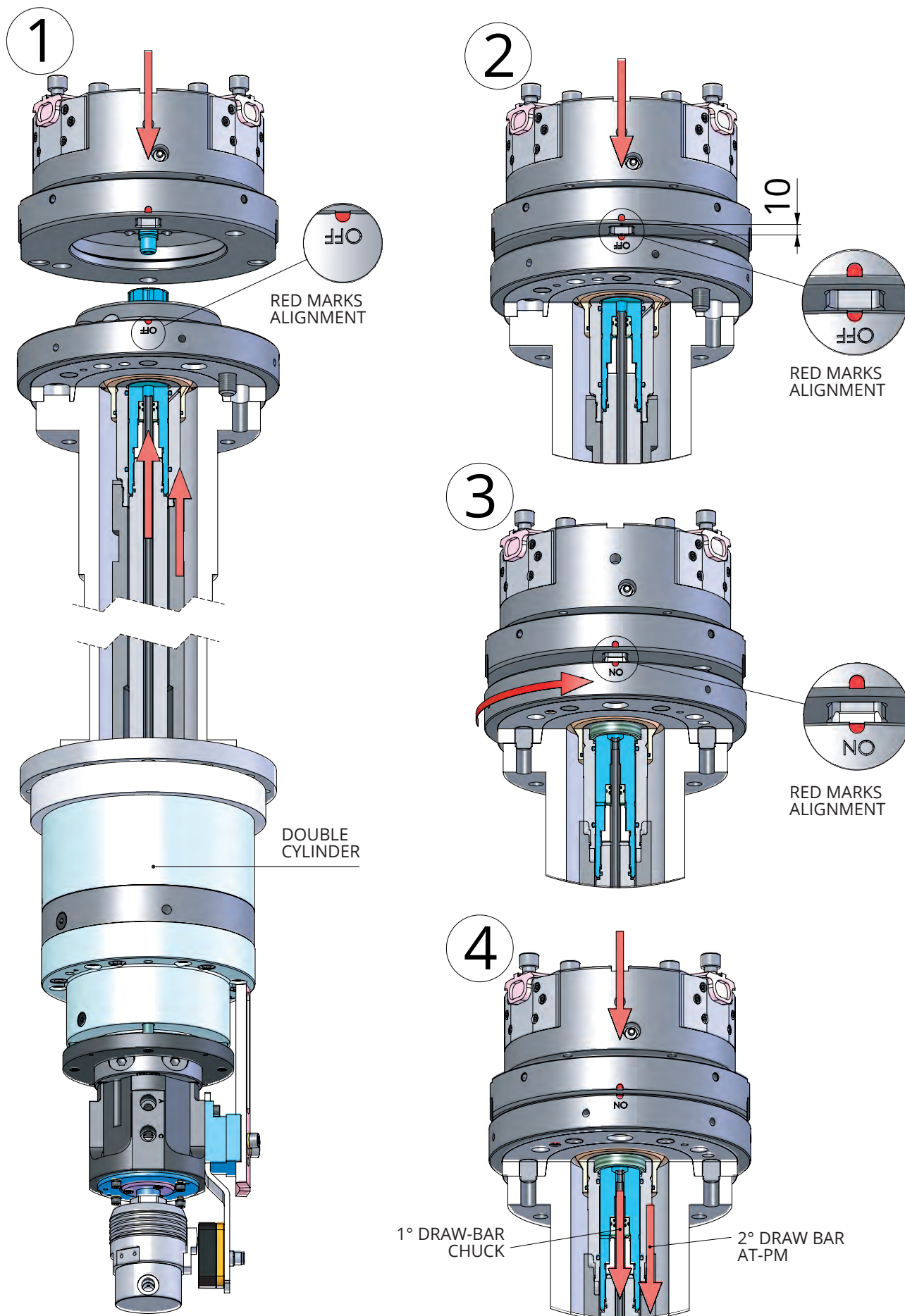
- sensor LPS 4.0 ID.No. 208108
- cable+connector ID.No. 208247
- rotary union for 2 media type RU-2-22 ID.No. 044970



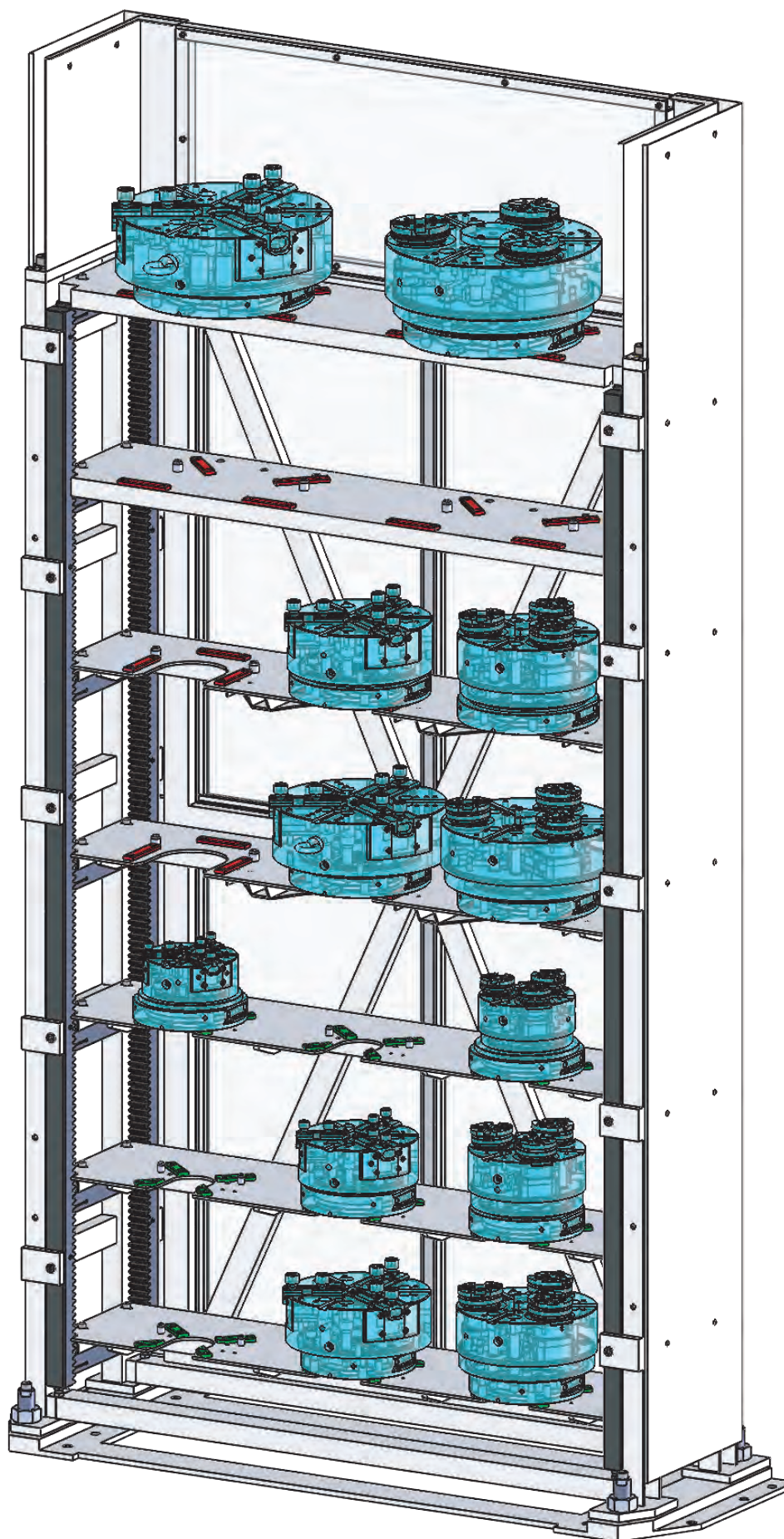
Rotary union RU-1-16 - OPTIONAL

- rotary union for 1 medium RU-1-16 ID.No. 043271

QUICK CHUCKS CHANGE SYSTEM AT-PM pallet connecting instructions



EXAMPLE OF PALLET WAREHOUSE AT-PM frontal view



ID.No.	DESCRIPTION	PAGE
65002009	CHANGE SYSTEMS ATPM200/170-A6PEL-D150-8G	2
65002405	CHANGE SYSTEMS ATPM240/220-A8PEL-D150-8G	3
65003205	CHANGE SYSTEMS ATPM320/300-A11PEL-D214-8G	4
65622009	PAL FL170H52-M190 ATPM170-8G	5
65612009	PAL FL220H52-M239 ATPM220-8G	5
65632009	PAL FL300H54-M304 ATPM300-8G	5
65622405	PAL FL140H54-M190 ATPM170-8G	5
65612405	PAL FL170H52-M239 ATPM220-8G	5
65623205	PAL FL220H59-M304 ATPM300-8G	5
65613205	PAL FL220H52-M190 ATPM170-8G	5
65633205	PAL FL380H55-M345 ATPM300-8G	5
46204040	2-TOP JAWS KIT 200 PP-L VISE / PALLET 250	5
46204045	2-TOP JAWS KIT 250 PP-L VISE / PALLET 250	5
46204050	2-TOP JAWS KIT 200 PP-L VISE / PALLET 200	5
46204055	2-TOP JAWS KIT 250 PP-L VISE / PALLET 200	5
46204080	2-TOP JAWS KIT 250 PP-L VISE / PALLET 315	5
33981009	DOUBLE PISTONS CYL 64/64 DCE-4V C30-40	8
33981206	DOUBLE PISTONS CYL 60/100 DCR C20-40	8
33981510	DOUBLE PISTONS CYL 90/160 DCR C20-40	8
60558306	LPS 4.0 KIT 48 DOUBLE PIS CYL 64/64 DCE	9
60558406	LPS 4.0 KIT 48 DOUBLE PIS CYL 60/100 DCR	9
60558407	LPS 4.0 KIT 48 DOUBLE PIS CYL 90/160 DCR	9
60558336	LPS 4.0 KIT DOUBLE PIS CYL 64DCE RU2-22	9
60558436	LPS 4.0 KIT DOUBLE PIS CYL 60/100DCR RU2-22	9
60558437	LPS 4.0 KIT DOUBLE PIS CYL 90/160DCR RU2-22	9
208108	LPS 4.0 SENSOR 48 IO 0-10V	9
208247	CABLE+CON 90 LPS 4.0 48-120 5M	9
044970	ROTARY UNION 2MEDIUM RU2-22 M22x1	9
043271	ROTARY UNION 1MEDIUM RU1-16 M16x1.5LH D18	9

ID.No.	DESCRIPTION	PAGE
043271	ROTARY UNION 1MEDIUM RU1-16 M16x1.5LH D18	9
044970	ROTARY UNION 2MEDIUM RU2-22 M22x1	9
208108	LPS 4.0 SENSOR 48 IO 0-10V	9
208247	CABLE+CON 90 LPS 4.0 48-120 5M	9
33981009	DOUBLE PISTONS CYL 64/64 DCE-4V C30-40	8
33981206	DOUBLE PISTONS CYL 60/100 DCR C20-40	8
33981510	DOUBLE PISTONS CYL 90/160 DCR C20-40	8
46204040	2-TOP JAWS KIT 200 PP-L VISE / PALLET 250	5
46204045	2-TOP JAWS KIT 250 PP-L VISE / PALLET 250	5
46204050	2-TOP JAWS KIT 200 PP-L VISE / PALLET 200	5
46204055	2-TOP JAWS KIT 250 PP-L VISE / PALLET 200	5
46204080	2-TOP JAWS KIT 250 PP-L VISE / PALLET 315	5
60558306	LPS 4.0 KIT 48 DOUBLE PIS CYL 64/64 DCE	9
60558336	LPS 4.0 KIT DOUBLE PIS CYL 64DCE RU2-22	9
60558406	LPS 4.0 KIT 48 DOUBLE PIS CYL 60/100 DCR	9
60558407	LPS 4.0 KIT 48 DOUBLE PIS CYL 90/160 DCR	9
60558436	LPS 4.0 KIT DOUBLE PIS CYL 60/100DCR RU2-22	9
60558437	LPS 4.0 KIT DOUBLE PIS CYL 90/160DCR RU2-22	9
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65612405	PAL FL220H52-M239 ATPM220-8G	5
65613205	PAL FL300H54-M304 ATPM300-8G	5
65622009	PAL FL140H54-M190 ATPM170-8G	5
65622405	PAL FL170H52-M239 ATPM220-8G	5
65623205	PAL FL220H59-M304 ATPM300-8G	5
65632009	PAL FL220H52-M190 ATPM170-8G	5
65633205	PAL FL380H55-M345 ATPM300-8G	5

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