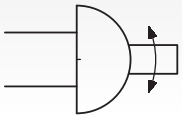
YR3

Double Rack Rotary Table

- Combination of double piston drive with rotating plate and double rack rotating system
- No backlash
- Adjustable angle based on customer request
- Possibility to choose between adjustment screws and internal hydraulic shock absorbers
- Body and table centering bore for accurate assembly
- Direct mounting of the load on the table
- Grooves for recessed magnetic sensors - two grooves on each side



TECHNICAL CHARACTERISTICS

Ambient temperature	0 ÷ 50 °C
Fluid	filtered air, with or without lubrication
Working pressure	1,5 ÷ 7 bar
Rotation angle	180°
Adjustable angle	0° ÷ 190°
Bores	Ø 10 - 12 - 15 - 18 - 20 - 25 - 28 - 32 - 40 - 50 - 63 mm

CONSTRUCTIVE CHARACTERISTICS

Body	aluminium
End-caps	aluminium
Rotary table	aluminium
Rack	stainless steel
Pinion	carbon steel
Seal	nitrile rubber (NBR)
Shock absorber seals	nitrile rubber (NBR)
Magnet	standard

CODIFICATION KEY

Y	R	3	0	1	0	
1			2			3

1 Series	2 Bore (mm)		3 Option
YR3 = Double Rack Rotary Table	**003** = Ø10	**070** = Ø28	**D** = Hydraulic Shock Absorbers (Ø15 ÷ 63)
	007 = Ø12	**100** = Ø32	
	010 = Ø15	**200** = Ø40	
	020 = Ø18	**300** = Ø50 *	
	030 = Ø20	**500** = Ø63 *	
	050 = Ø25		

* = Upon request

Weight

	YR3003	YR3007	YR3010	YR3020	YR3030	YR3050	YR3070	YR3100	YR3200	YR3300	YR3500
Kg	0,150	0,250	0,530	0,990	1,290	2,100	2,890	4,100	7,650	8,960	11,170

Torque

	YR3003	YR3007	YR3010	YR3020	YR3030	YR3050	YR3070	YR3100	YR3200	YR3300	YR3500
Ø	10	12	15	18	20	25	28	32	40	50	63
Nm	0,3	0,6	1,5	2,2	3,2	5,5	7,5	9,8	19	31	45

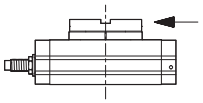
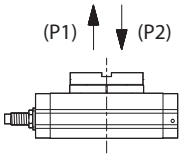
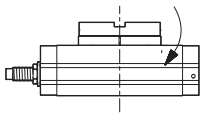
Theoretical torque at 5 bar

Maximum kinetic energy absorbable **(J)**

	YR3003	YR3007	YR3010	YR3020	YR3030	YR3050	YR3070	YR3100	YR3200	YR3300	YR3500
With adjusting screw	0,002	0,006	0,007	0,025	0,048	0,81	0,24	0,32	0,56	1	1,5
With hydraulic shock absorbers	-	-	0,039	0,116	0,116	0,294	1,1	1,6	2,9	3,5	5,2

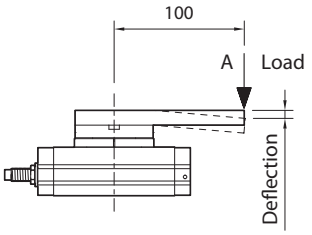
Ammissible load

1

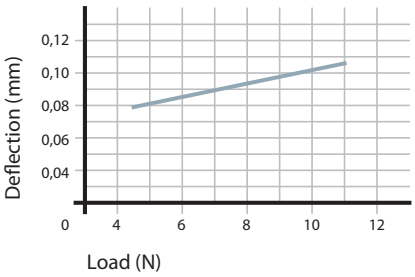
Load position			
			

Load	Side load (N)	Rotary table load (N)		Torque (Nm)
		(P1)	(P2)	
YR3003	33	48	48	1,1
YR3007	54	71	71	1,5
YR3010	70	78	74	2
YR3020	140	130	130	3,5
YR3030	185	188	358	4,8
YR3050	300	285	442	9
YR3070	333	296	476	12
YR3100	390	493	706	18
YR3200	543	740	1009	25
YR3300	850	950	1500	30
YR3500	1200	1400	2100	38

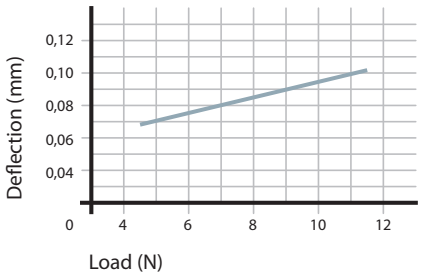
Transverse load and deflection



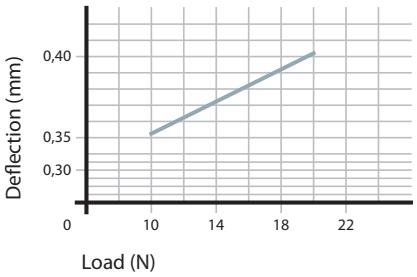
YR3003



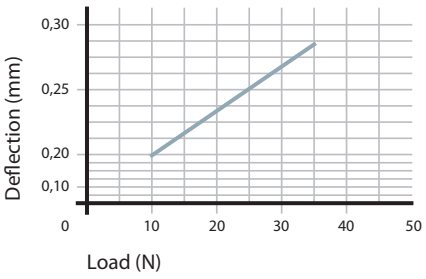
YR3007



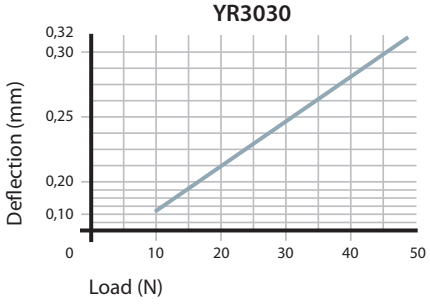
YR3010



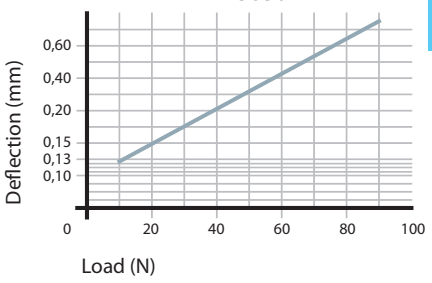
YR3020



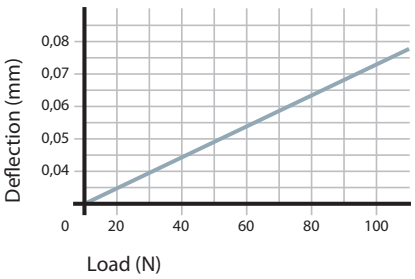
YR3030



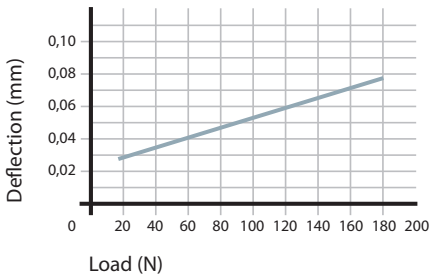
YR3050



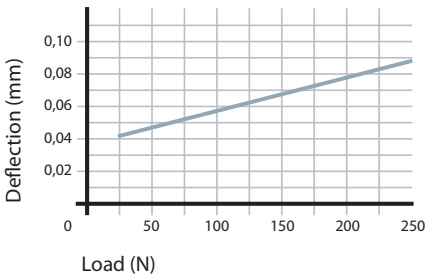
YR3070



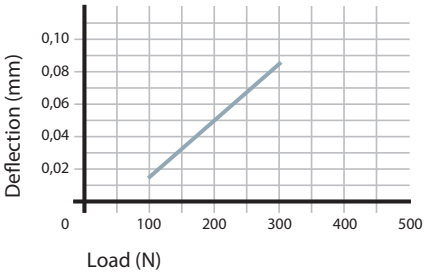
YR3100



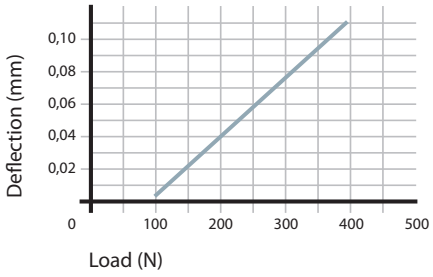
YR3200



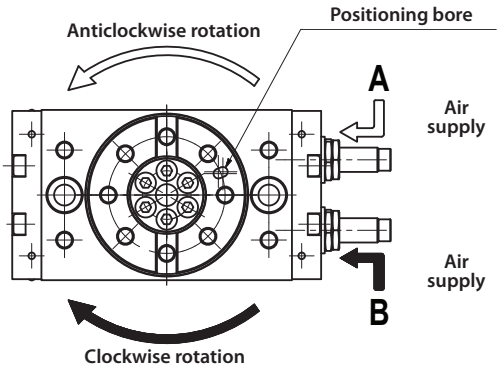
YR3300

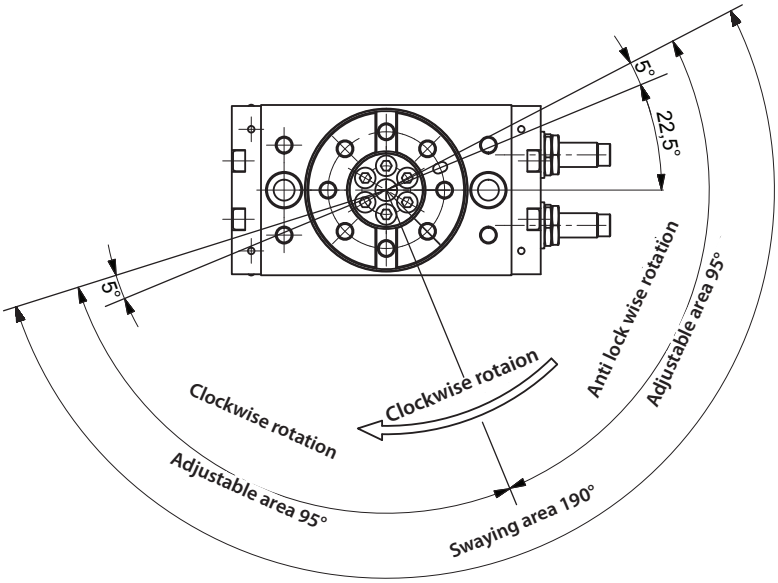


YR3500



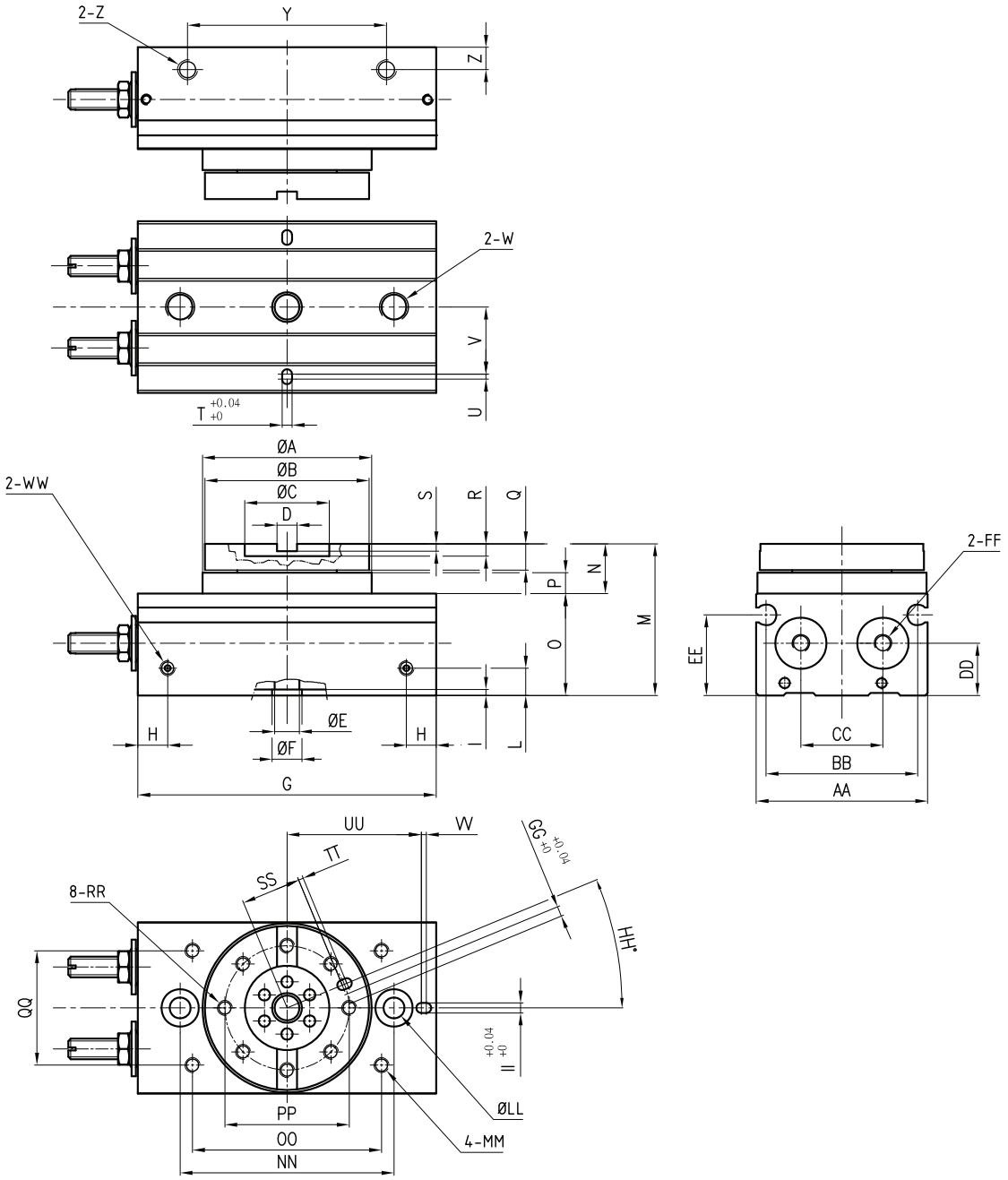
Rotary direction and rotation angle





1

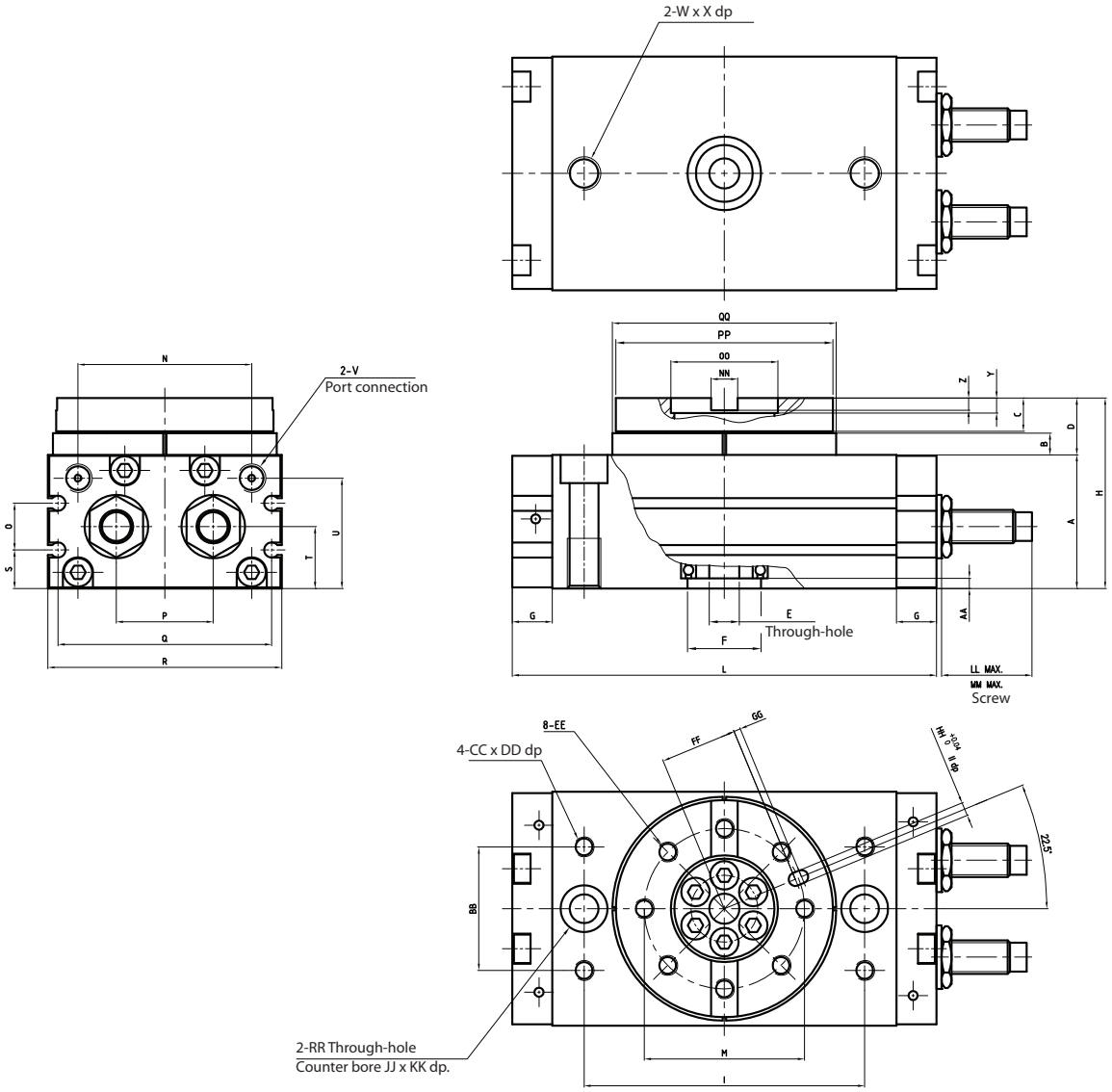
YR3 Ø 10 ÷ 12



	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
YR3003	34	33	17	4	5	6	60	6	1,2	5,5	30,5	10	20,5	4,2	5,3	2,5	1,5	2	1	13,5	M5x0,8	4,5	40	M4x0,7
YR3007	40	39	20	5	6	7	73,5	9	1,2	5,5	34,5	11,5	23	4,5	6,5	2,5	2	3	1	15,5	M5x0,8	4,5	50	M5x0,8

	AA	BB	CC	DD	EE	FF	GG	HH	II	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW
YR3003	34,5	30,5	16,5	10,5	16,2	M3x0,5	2	22,5°	2	4,2	M3x0,5	43	38	25	23	M3,0,5	12	1	27	1	M3x0,5
YR3007	41	37	19,2	12,5	17	M5x0,8	3	22,5°	3	4,2	M4x0,7	50	45	29	30	M4x0,7	14	1	32,5	1	M5x0,8

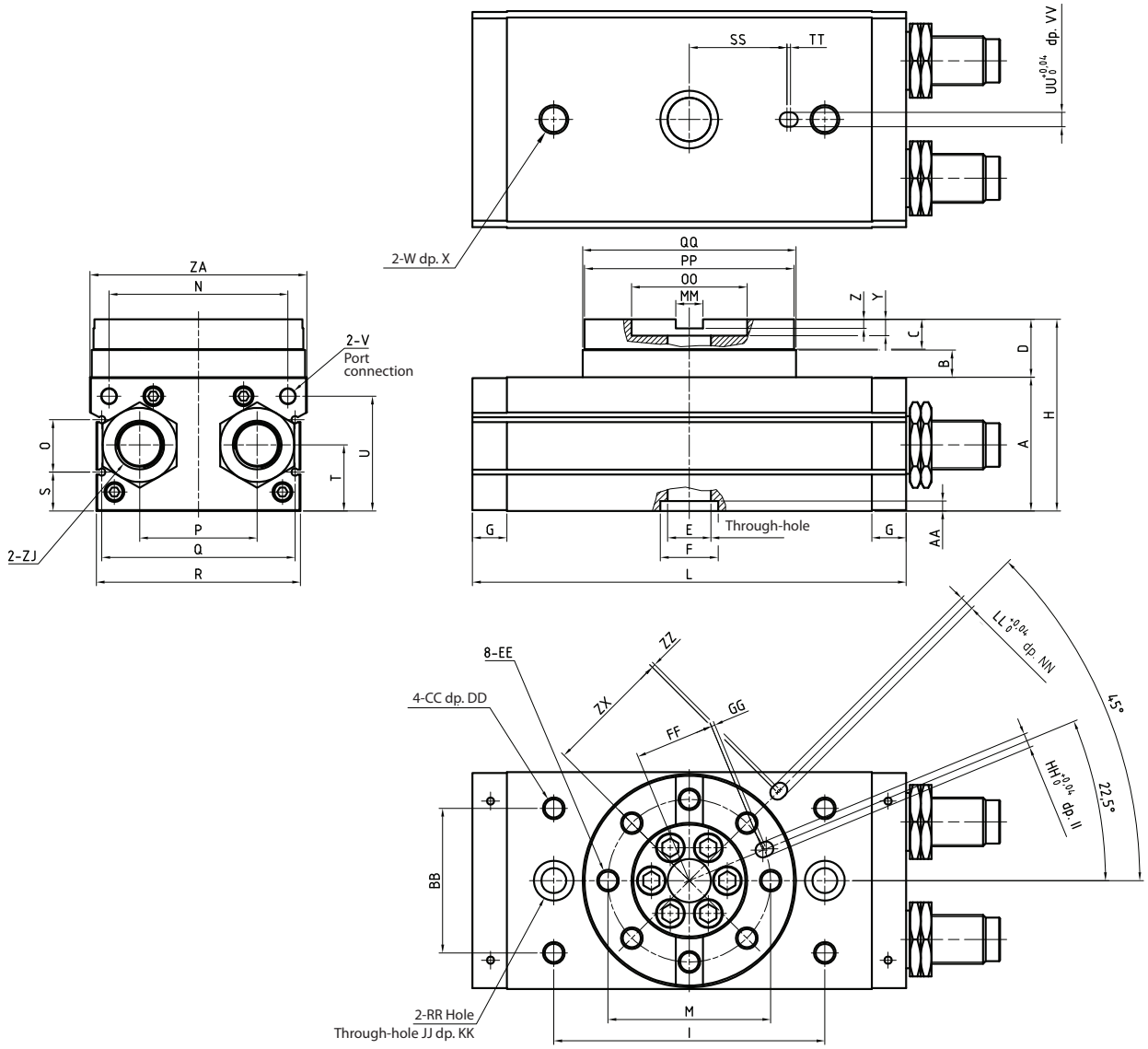
YR3 Ø 15 ÷ 28



	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	T	U	V	W
YR3010D	34	4,5	8	13	Ø5	Ø15	9,5	47	60	92	Ø32	35	13	18	44	50	9	15,5	28,2	M5x0,8	M8x1,25
YR3020D	37	6,6	9,7	17	Ø9	Ø17	12	54	76	117	Ø43	50,8	12	27,5	59	65	10	16	28,6	M5x0,8	M10x1,5
YR3030D	40	6,5	10	17	Ø9	Ø22	12	57	84	127	Ø48	52	14	29	64	70	11,5	18,5	33	G1/8	M10x1,5
YR3050D	46	7,5	12	20	Ø10	Ø26	15,5	66	100	152	Ø55	62	15	38	74	80	14,5	22	37,5	G1/8	M12x1,75
YR3070D	53	9	12,5	22	Ø16	Ø22	17	75	110	170	Ø67	70	24	43	78	84	14,5	26,5	46,5	G1/8	M12x1,75

	X	Y	Z	AA	BB	CC	DD	EE	FF	GG	HH	II	LL	MM	NN	OO	PP	QQ	RR	SS	TT
YR3010D	12	4	2,7	2,5	27	M4x0,8	8	M5x0,8	15	2	3	3,5	27,1	19	6	Ø20	Ø45	Ø46	Ø6,8	Ø11	6,5
YR3020D	15	6,5	3,2	2,5	34	M6x1	10	M6x1	20,5	2	4	5	27,1	19	8	Ø28	Ø60	Ø61	Ø8,6	Ø14	8,5
YR3030D	15	4,5	3,7	3	37	M6x1	10	M6x1	23	2	4	4,5	27,1	19	8	Ø32	Ø65	Ø67	Ø8,6	Ø14	8,5
YR3050D	18	5	4,2	2	50	M8x1,25	10	M8x1,25	26,5	2	5	5,5	27,1	19	10	Ø35	Ø75	Ø77	Ø10,5	Ø17	10,5
YR3070D	18	5	4,2	4	57	M8x1,25	10	M8x1,25	32,5	2	5	3,5	32	-	10	Ø46	Ø88	Ø90	Ø10,5	Ø17	10,5

YR3 Ø 32 ÷ 63



	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
YR3100D	59	12	14,5	27	Ø19	Ø24	14	86	130	189	77	82	27	50	89	95	16	29,5	50,3	G1/8	M12x1,75	18	6	5
YR3200D	74	15	16,5	32	Ø24	Ø32	19	106	150	240	90	99	29	65	107	113	21,5	36,5	63,5	G1/8	M16x2	25	9	5
YR3300D	83,5	16	19,5	36,5	Ø26	Ø36	25	120	180	280	100	115	34	77	130	136	24,5	41,5	73,5	G1/4	M20x2,5	25	10	8
YR3500D	95	17	22	40	Ø26	Ø36	25	135	220	320	120	129	38	85	150	156	28	47	84	G1/4	M20x2,5	25	12	8

	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ
YR3100D	4	66	M8x1,25	10	M10x1,5	37,5	2	6	4,5	17	10,5	6	12	4,5	Ø56	Ø98	Ø100
YR3200D	5,5	80	M12x1,75	13	M12x1,75	44	2	8	4,5	22	14,5	8	15	4	Ø64	Ø116	Ø118
YR3300D	5,5	88	M12x1,75	13	M16x2	49	2	8	4,5	26	16,5	8	18	4	Ø70	Ø132	Ø133
YR3500D	5,5	100	M12x1,75	13	M16x2	59	2	10	5,5	26	16,5	10	18	4,5	Ø85	Ø150	Ø152

	RR	SS	TT	UU	VV	ZA	ZX	ZJ	ZZ
YR3100D	Ø10,5	-	-	-	-	102	59	M20x1,5	2
YR3200D	Ø14,2	54	2	8	6,5	120	69	M27x1,5	2
YR3300D	Ø17,5	69	2	8	6,5	-	75	M27x1,5	2
YR3500D	Ø17,5	80	2	10	6,5	-	88	M27x1,5	2