



**PNEUMATIC DOUBLE ACTING
QUARTER TURN
SCOTCH-YOKE ACTUATOR**

series RJP-RSP-RWP-RCP

SERVOVALVE spa

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PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING

SERIES RJP - RSP - RWP - RCP

DESCRIPTION

All the Servovalve series of quarter-turn scotch-yoke actuators are designed and manufactured for the transmission of high torque suited for ball or butterfly valves, plug etc. for on-off or throttling service.

The design, engineering and materials used in construction ensure optimum performance in the heaviest work condition in every environment according to the international standard specifications.

In the central housing a quarter turn scotch-yoke kinematism transforms the linear thrust of a double acting pneumatic cylinder in a torque to the valve shaft.

A series of central housing can be equipped with a wide range of pneumatic cylinders allowing the best choice according to the air working pressure and the requested torque.

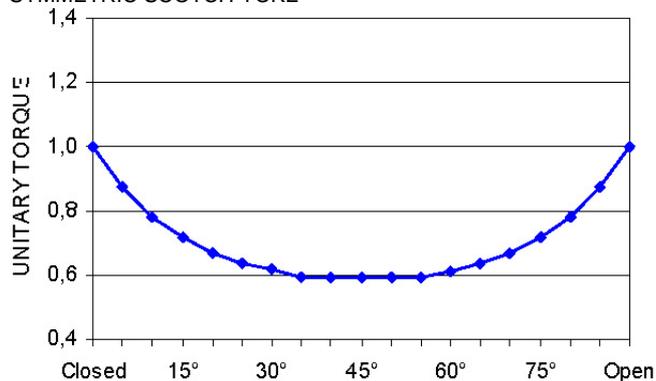
The central housing is designed to accept different types of scotch-yoke mechanisms (symmetric, series **RJP** and **RSP** or canted, series **RWP** and **RCP**) to allow the choice of the best actuator performance for every kind of valve.



SYMMETRICAL SCOTCH-YOKE

RJP and **RSP** series are available for the on-off or throttling valves in which it is requested an exalted torque during all the valve shaft running.

SYMMETRIC SCOTCH YOKE

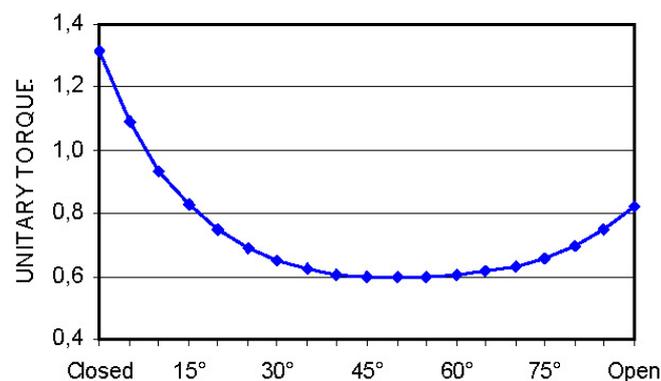


(typical output torque diagram with symmetrical scotch-yoke)

CANTED SCOTCH-YOKE

RWP and **RCP** series are ideally suited for the valves where it is requested an exalted torque in a specific final position (generally closed position or failure position) compared to the run and the opposite initial position.

CANTED SCOTCH YOKE



(typical output torque diagram with canted scotch-yoke)

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING

SERIES RJP - RSP - RWP - RCP

MAIN DESIGN FEATURES

The actuators have a modular construction design.

All actuators have a totally enclosed module that provides complete protection for all moving parts, minimises the possibility of internal misalignment, and reduce the chance of injury to operating personnel.

They are realised with a central housing to which a series of standard pneumatic cylinders can be coupled to obtain the best choice in every kind of application.

The chromium plated rod, sliding on two PTFE charged bushings, turns the link by means of the cylinder piston and spring action alternatively to ensure minimum friction and long service life.

The link of the scotch-yoke is driven by two bronze bushings fit in the housing and in the cover

All the actuators of the series **RCP** and **RSP** are equipped with an alloy steel chromium plated bar that supports the transverse loads thrust of the scotch-yoke to assure a regular movement also in a continuous throttling action.

The pneumatic cylinder is inside chromium plated to prevent corrosion in aggressive environment and the piston is equipped with a PTFE charged slide to assure a linear drive and alignment under all load conditions allowing a long life and a perfect tight by means of two o-ring gaskets.

Link and joint block are connected to two hard bronze alloy sliding rings to allow a low friction factor and minimise wear of moving parts.

Field adjustable travel-stop are available in both directions to optimise the required valve stroke.

The central cover is equipped of a standard valve position indicator.

SPECIAL EXECUTION

Units with particular materials for special environmental conditions (low or high temperature, aggressive medium ect.) can be supplied on request.

MANUAL EMERGENCY DEVICE

All series of actuator can be equipped with a manual emergency device as:
handwheel
manual reductor with handwheel
hydraulic cylinder with manual oil pump, tank and relevant equipment

EQUIPMENTS

Each execution can be equipped with devices and accessories for the local or remote action and control as:

- limit switches
- solenoid valve
- flow control valve
- positioner and I/P converter
- position transmitter
- air tank for emergency
- special pneumatic end electric equipment

TEST

Every detail have been designed and tested with care and is then checked during the production process (from the receipt of the raw materials to final testing) against the strictest reliability criteria required under the ISO EN 9001 quality norm, which has been fully adopted by Servovalve.

All finished actuators are tested and certified by the Servovalve quality service before being released to external testers at the various authorising bodies and the customer's own inspectors.

CERTIFICATION

From 1995 Servovalve was awarded certification by international body DNV due to its full compliance with Quality Norm EN 9001.

From 2002 Servovalve actuators can be supplied with the CE mark according to the 97/23/CE directive (PED) and ATEX directive 94/9/ce under the approval of the notified body DNV.



PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING

SERIES RJP - RSP - RWP - RCP

TECHNICAL PERFORMANCE

Pressure range:

Minimum working pressure: 3 bar
Maximum working pressure: see technical sheet
Cylinder test pressure: 1,5 max allowable pressure
Actuator test: 1,2 actuator max working pressure
On request available for higher work and test pressure

Angular stroke:

Turn: 90° +/- 5°

Environmental temperature range:

min: -20°C
max: +80°C
On request for lower or higher temperature

Operating medium:

air
gas
any medium compatible with standard materials

Actuator seals gaskets:

standard: N.B.R. (-20°C + 80°C)
low temp: fluorosilicone
high temp: viton

Painting:

Standard execution has surface protection with:
sandblasting
1 primer layer
1 epoxy finish layer
On request available other painting

Standard rotation:

Without any other indication canted actuators (**RWP** and **RCP**) are supplied with the max torque at the start rotating clock-wise (watching the actuator from the top).
Only on request canted actuators are supplied with counter-clockwise rotation.



SERVICE

The Servovalve personnel guarantees prompt assistance to the customer during the start up of the plant and its normal working life.

MAINTENANCE

The inner parts of the actuator are life-lubricated, therefore only replacement of the rubber gaskets may become necessary after a long working time as pointed out in the operating book.

SPECIAL ACTUATORS

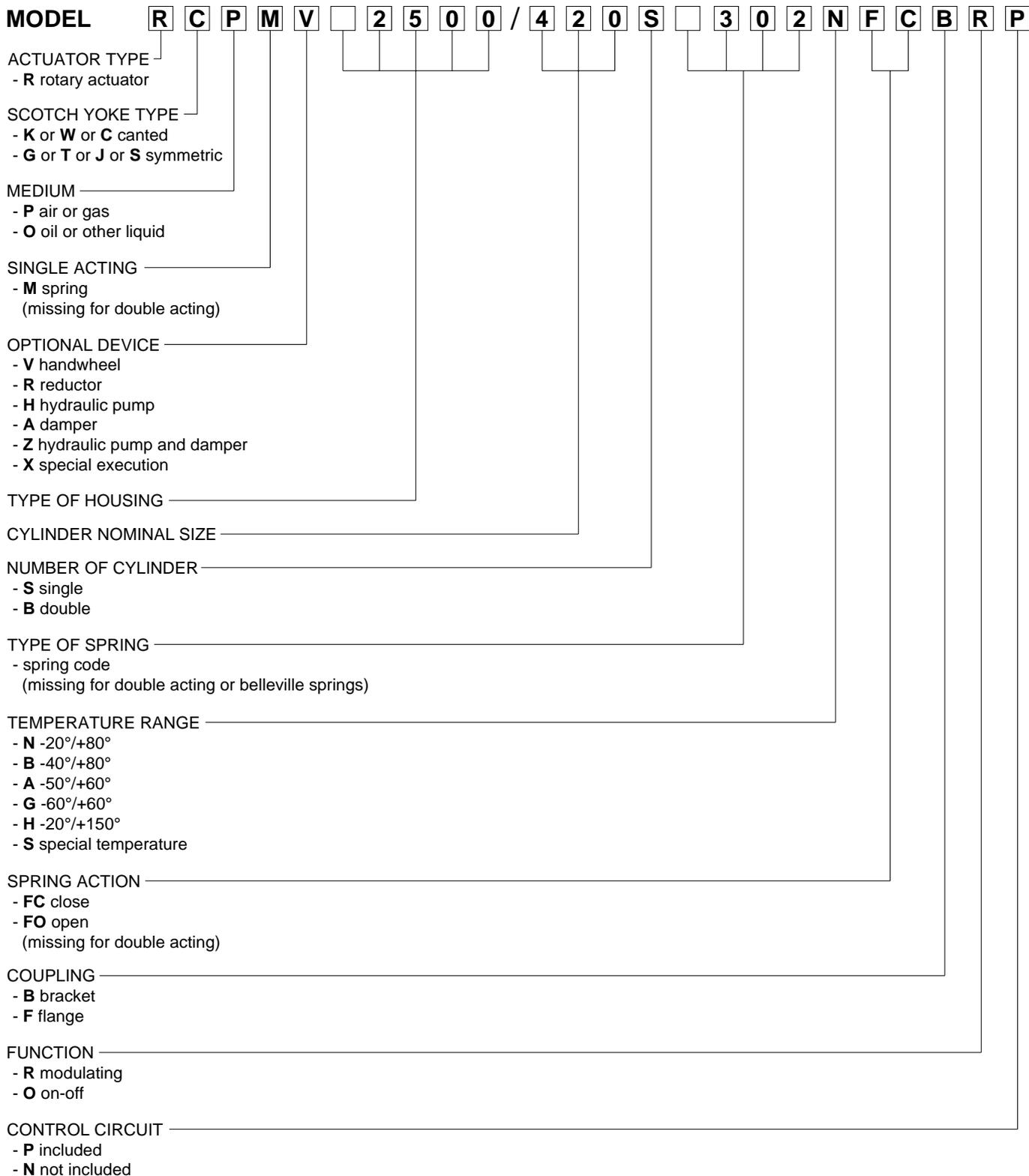
Actuator for special performances or for torque requirements greater than shown, please contact our sales department.

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING

SERIES RJP - RSP - RWP - RCP

SCOTCH YOKE ACTUATOR CODE MODE



PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING

SERIES RJP - RSP - RWP - RCP



PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING

SERIES RJP - RSP

ACTUATORS TORQUE

SYMMETRIC

ACTUATOR TYPE	MINIMUM AIR PRESSURE															PRESS. MAX. bar	AIR DISPLACE lt	APPROX. WEIGHT kg
	3,5 bar (50 psi)			4 bar (58 psi)			5 bar (72 psi)			5,5 bar (80 psi)			6 bar (87 psi)					
	BREAK	RUN	END	BREAK	RUN	END	BREAK	RUN	END	BREAK	RUN	END	BREAK	RUN	END			
	0°	45°	90°	0°	45°	90°	0°	45°	90°	0°	45°	90°	0°	45°	90°			
Nm			Nm			Nm			Nm			Nm						
RJP 900/250	1870	1110	1870	2140	1260	2140	2670	1580	2670	2940	1740	2940	3210	1890	3210	10	9	150
RJP 900/300	2690	1590	2690	3080	1820	3080	3850	2270	3850	4230	2500	4230	4620	2730	4620	10	13	210
RJP 900/360	3880	2290	3880	4430	2620	4430	5540	3270	5540	6090	3600	6090	6650	3930	6650	8	18	260
RJP 900/420	5400	3190	5400	6180	3650	6180	7720	4560	7720	8490	5020	8490	9260	5480	9260	6	26	330
RJP 1400/300	3170	1870	3170	3620	2140	3620	4530	2670	4530	4980	2940	4980	5430	3210	5430	10	14	280
RJP 1400/360	4560	2690	4560	5210	3080	5210	6520	3850	6520	7170	4230	7170	7820	4620	7820	10	20	330
RJP 1400/420	6360	3760	6360	7270	4290	7270	9080	5360	9080	9990	5900	9990	10900	6440	10900	8	28	400
RJP 1400/500	8180	4830	8180	9350	5520	9350	11680	6900	11680	12850	7590	12850	14020	8280	14020	6	37	540
RSP 2500/360	5870	3470	5870	6710	3970	6710	8390	4960	8390	9230	5450	9230	10070	5950	10070	10	26	480
RSP 2500/420	8210	4850	8210	9380	5540	9380	11730	6930	11730	12900	7620	12900	14070	8310	14070	10	37	560
RSP 2500/500	10570	6250	10570	12090	7140	12090	15110	8920	15110	16620	9820	16620	18130	10710	18130	8	47	710
RSP 2500/520	12560	7420	12560	14350	8480	14350	17940	10600	17940	19730	11660	19730	21530	12720	21530	7	56	800
RSP 2500/600	15070	8900	15070	17230	10180	17230	21530	12720	21530	23690	13990	23690	25840	15260	25840	6	68	930
RSP 2500/620	17820	10530	17820	20360	12030	20360	25460	15040	25460							5	80	1060
RSP 2500/700	20790	12280	20790	23760	14040	23760										4	100	1250
RSP 4500/420	10710	6330	10710	12240	7230	12240	15300	9040	15300	16830	9940	16830	18360	10840	18360	10	47	710
RSP 4500/500	13810	8150	13810	15780	9320	15780	19720	11650	19720	21700	12810	21700	23670	13980	23670	10	60	860
RSP 4500/520	16400	9680	16400	18740	11070	18740	23420	13830	23420	25770	15220	25770	28110	16600	28110	10	71	960
RSP 4500/600	19690	11630	19690	22500	13290	22500	28130	16610	28130	30940	18270	30940	33750	19930	33750	8	86	1090
RSP 4500/620	23280	13750	23280	26600	15710	26600	33260	19640	33260	36580	21600	36580	39910	23570	39910	7	101	1240
RSP 4500/700	27170	16040	27170	31050	18340	31050	38810	22920	38810	42690	25210	42690	46570	27500	46570	6	127	1440
RSP 4500/800	38200	22560	38200	43660	25780	43660										4	166	1700
RSP 7500/500	18190	10750	18190	20790	12280	20790	25990	15350	25990	28590	16890	28590	31190	18420	31190	10	82	1190
RSP 7500/520	21630	12780	21630	24720	14600	24720	30900	18250	30900	33990	20080	33990	37080	21900	37080	10	97	1300
RSP 7500/600	25990	15350	25990	29700	17540	29700	37120	21930	37120	40840	24120	40840	44550	26310	44550	10	117	1450
RSP 7500/620	30740	18160	30740	35130	20750	35130	43910	25940	43910	48300	28530	48300	52700	31120	52700	9	138	1610
RSP 7500/700	35890	21200	35890	41010	24220	41010	51270	30280	51270	56390	33310	56390	61520	36340	61520	7	173	1840
RSP 7500/800	50490	29820	50490	57700	34080	57700	72130	42600	72130							5	226	2120

RSP/...

HIGHER TORQUES ON REQUEST ACCORDING TO CUSTOMER SPECIFICATION

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING

SERIES RWP - RCP

ACTUATORS TORQUE

CANTED

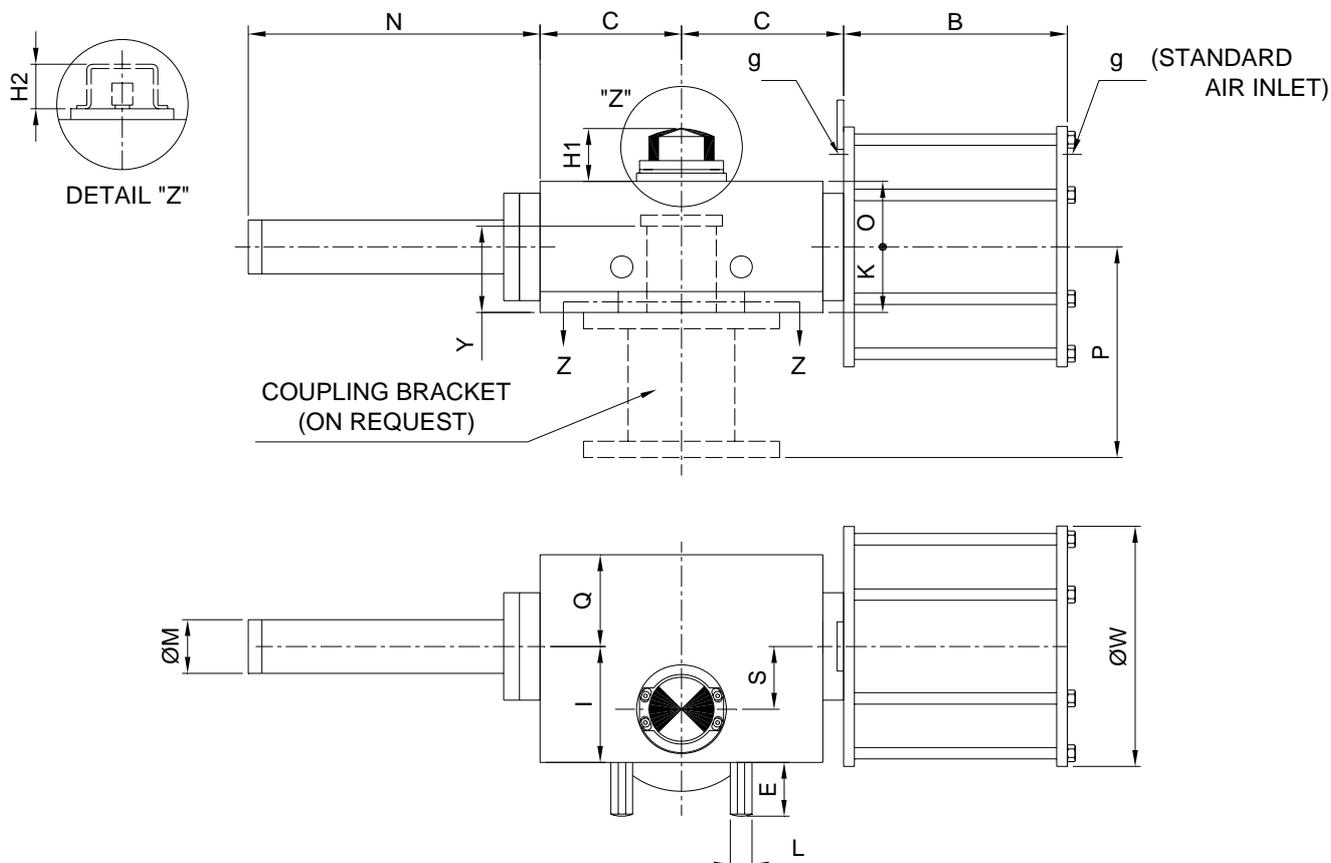
ACTUATOR TYPE	MINIMUM AIR PRESSURE															PRESS. MAX. bar	AIR DISPLACE lit	APPROX. WEIGHT kg
	3,5 bar (50 psi)			4 bar (58 psi)			5 bar (72 psi)			5,5 bar (80 psi)			6 bar (87 psi)					
	BREAK	RUN	END	BREAK	RUN	END	BREAK	RUN	END	BREAK	RUN	END	BREAK	RUN	END			
	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°	0°	50°	90°			
Nm			Nm			Nm			Nm			Nm						
RWP 900/250	2450	1120	1540	2800	1290	1760	3500	1610	2200	3850	1770	2420	4200	1930	2640	10	10	150
RWP 900/300	3530	1620	2220	4040	1850	2530	5050	2310	3170	5550	2550	3480	6050	2780	3800	9	14	210
RWP 900/360	5090	2330	3190	5810	2670	3650	7260	3330	4560	7990	3670	5020	8720	4000	5470	6	20	260
RWP 900/420	7090	3250	4450	8100	3720	5080										4	28	330
RWP 1400/300	4150	1910	2610	4750	2180	2980	5940	2720	3730	6530	2990	4100	7120	3270	4470	10	18	280
RWP 1400/360	5980	2740	3750	6840	3140	4290	8550	3920	5360	9400	4310	5900	10260	4700	6440	8	25	330
RWP 1400/420	8340	3820	5230	9530	4370	5980	11910	5460	7480	13100	6010	8220	14290	6560	8970	6	35	400
RWP 1400/500	10720	4920	6730	12260	5620	7690	15320	7030	9620							5	46	540
RCP 2500/360	7700	3530	4840	8800	4040	5530	11010	5050	6910	12110	5550	7600	13210	6060	8290	10	34	480
RCP 2500/420	10770	4940	6760	12300	5640	7720	15380	7050	9650	16920	7760	10620	18460	8470	11580	8	47	560
RCP 2500/500	13870	6360	8700	15850	7270	9950	19810	9090	12430	21790	10000	13680	23780	10910	14920	6	60	710
RCP 2500/520	16470	7550	10340	18820	8630	11810	23530	10790	14760							5	71	800
RCP 2500/600	19770	9070	12410	22590	10360	14180										4	86	930
RCP 4500/420	14050	6440	8820	16060	7360	10080	20070	9210	12600	22080	10130	13860	24090	11050	15120	10	60	710
RCP 4500/500	18110	8310	11360	20690	9490	12990	25870	11860	16230	28450	13050	17860	31040	14240	19480	9	77	860
RCP 4500/520	21510	9860	13500	24580	11270	15430	30720	14090	19280	33790	15500	21210	36870	16910	23140	7	91	960
RCP 4500/600	25820	11840	16210	29510	13540	18520	36890	16920	23150	40580	18610	25470	44270	20300	27780	6	109	1090
RCP 4500/620	30530	14000	19160	34890	16000	21900	43610	20010	27370							5	129	1240
RCP 4500/700	35630	16340	22360	40720	18680	25560										4	150	1440
RCP 7500/500	23870	10950	14980	27280	12510	17120	34100	15640	21400	37510	17210	23540	40920	18770	25680	10	91	1190
RCP 7500/520	28370	13010	17800	32420	14870	20350	40530	18590	25440	44580	20450	27980	48630	22310	30520	9	108	1300
RCP 7500/600	34080	15630	21390	38950	17870	24450	48690	22330	30560	53560	24570	33610	58430	26800	36670	8	130	1450
RCP 7500/620	40310	18490	25300	46070	21130	28920	57590	26420	36150	63350	29060	39760	69110	31700	43370	7	153	1610
RCP 7500/700	47070	21590	29540	53790	24670	33760	67240	30840	42200	73960	33920	46420	80680	37010	50640	6	192	1840
RCP 7500/800	66220	30370	41560	75680	34710	47500										4	251	2120

RCP/...
HIGHER TORQUES ON REQUEST ACCORDING TO CUSTOMER SPECIFICATION

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING

TYPE RJP - RWP



ACTUATOR DIMENSIONS (mm)

	B	C	E	H1	H2	I	K	L	N	M	O	Q	S	Y	g
RWP 900/...	360	240	60	55	45	195	120	36	360	80	100	145	85	100	½ NPT
RJP 900/...															
RWP 1400/...	400	285	70	55	45	230	125	46	360	80	110	165	100	120	½ NPT
RJP 1400/...															

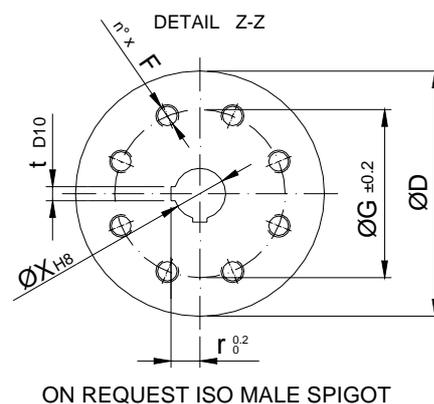
FLANGE DIMENSIONS (mm)

	D	n° x F	G	X	r	t	ISO	ON REQUEST					
								MIN.	MAX.	Xmin	Xmax		
RWP 900/...	300	4 x M 20	165	60	34,4	18	F 16	F 14	F 25	45	65		
RJP 900/...													
RWP 1400/...	350	8 x M 16	254	80	45,4	22	F 25	F 16	F 30	65	90		
RJP 1400/...													

CYLINDER DIAMETER (mm)

TYPE OF CYLINDER	250	300	360	420	500	520
DIMENSION "W"	340	395	465	540	590	640

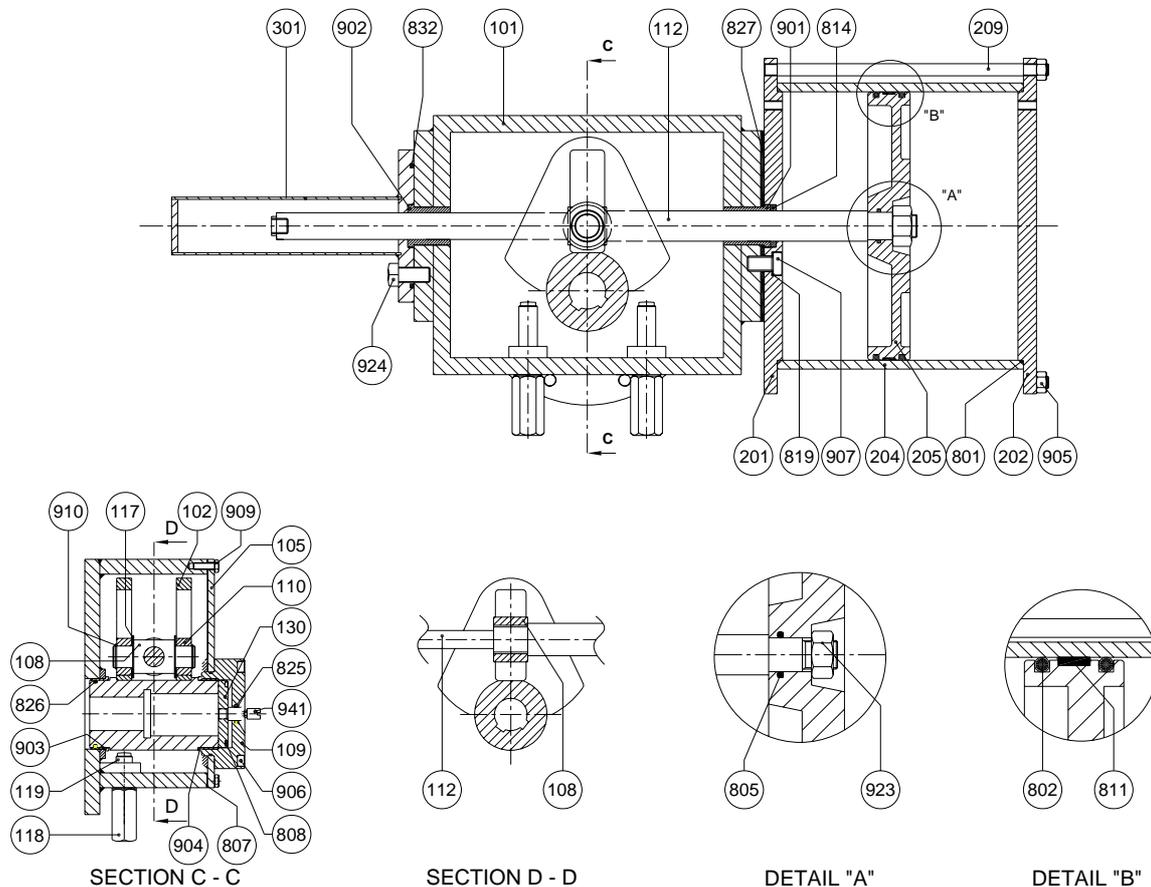
"H1" - STANDARD INDEX
 "H2" - MOUNTING KIT ACCORDING TO VDI-VDE 3845 (ON REQUEST)
 "P" - BRACKET ACCORDING TO CUSTOMER REQUIREMENT (ON REQUEST)



PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING

TYPE RJP - RWP



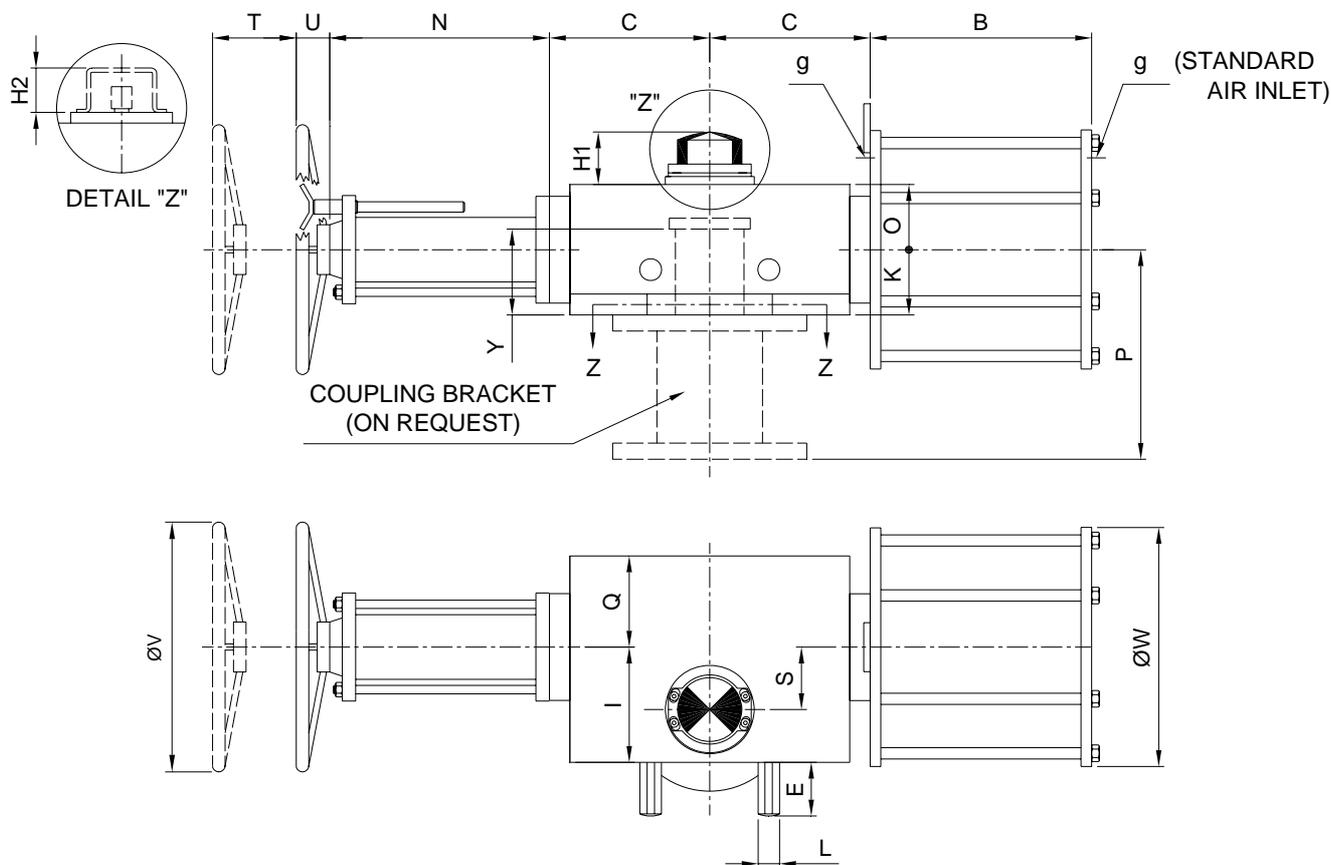
POS.	DESCRIPTION	MATERIAL	POS.	DESCRIPTION	MATERIAL
101	HOUSING	S 275 JR EN 10025	• 807	COVER GASKET	N.B.R.
102	LINK	S 275 JR EN 10025	• 808	O-RING	N.B.R.
105	COVER	S 275 JR EN 10025	• 811	PISTON DRIVE	PTFE+GRAPHITE
108	LINK JOINT	C 40 EN 10083/2	• 814	LIP GASKET	POLYURETHANE
109	COVER	S 275 JR EN 10025	• 819	BONDED SEAL	C. STEEL/N.B.R.
110	SLIDING RING	BzAl EN 1982	• 825	O-RING	N.B.R.
112	CHROM. SHAFT	42CrMo4 EN 10083/1	• 826	O-RING	N.B.R.
117	WASHER	CW 614 N EN 12164	• 827	GASKET	N.B.R.
118	CAP	S 275 JR EN 10025	• 832	O-RING	N.B.R.
119	STOP SCREW	8.8 EN 898/1	901	BUSHING	STEEL/BRONZE/TEFLON
130	LINK CAP	S 275 JR EN 10025	902	BUSHING	STEEL/BRONZE/TEFLON
201	HEAD	P 355 NH EN 10028/3	903	BUSHING	STEEL/BRONZE/TEFLON
202	HEAD	P 355 NH EN 10028/3	904	BUSHING	STEEL/BRONZE/TEFLON
204	CYLINDER (int. chr. plated)	E 355 EN 10297/1	905	NUT	6 S EN 20898/2
205	PISTON (till cylinder Ø 420)	SgAlCu3 EN 1706	906	SCREW	8.8 EN 898/1
205	PISTON (over cylinder Ø 420)	S 275 JR EN 10025	907	SCREW	8.8 EN 898/1
209	STAY BOLT	42CrMo4 EN 10269	909	SCREW	8.8 EN 898/1
301	TUBE	S 235 JR EN 10305/1	910	SEEGER	ALLOY STEEL
• 801	O-RING	N.B.R.	923	NUT	6 S EN 20898/2
• 802	O-RING	N.B.R.	924	SCREW	8.8 EN 898/1
• 805	O-RING	N.B.R.	941	NAMUR PIN	AISI 316

• STANDARD SPARE PARTS

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING WITH HANDWHEEL

TYPE RJPV - RWPV



ACTUATOR DIMENSIONS (mm)

	B	C	E	H1	H2	I	K	L	N	O	Q	S	T	U	V	Y	g
RWPV 900/...																	
RJPV 900/...	360	240	60	55	45	195	120	36	350	100	145	85	190	100	500	100	½ NPT
RWPV 1400/...																	
RJPV 1400/...	400	285	70	55	45	230	125	46	400	110	165	100	250	100	600	120	½ NPT

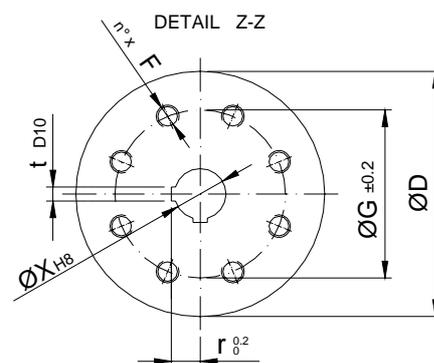
FLANGE DIMENSIONS (mm)

	D	n° x F	G	X	r	t	ISO	ON REQUEST						
								MIN.	MAX.	Xmin	Xmax			
RWPV 900/...														
RJPV 900/...	300	4 x M 20	165	60	34,4	18	F 16	F 14	F 25	45	65			
RWPV 1400/...														
RJPV 1400/...	350	8 x M 16	254	80	45,4	22	F 25	F 16	F 30	65	90			

CYLINDER DIAMETER (mm)

TYPE OF CYLINDER	250	300	360	420	500	520
DIMENSION "W"	340	395	465	540	590	640

"H1" - STANDARD INDEX
 "H2" - MOUNTING KIT ACCORDING TO VDI-VDE 3845 (ON REQUEST)
 "P" - BRACKET ACCORDING TO CUSTOMER REQUIREMENT (ON REQUEST)

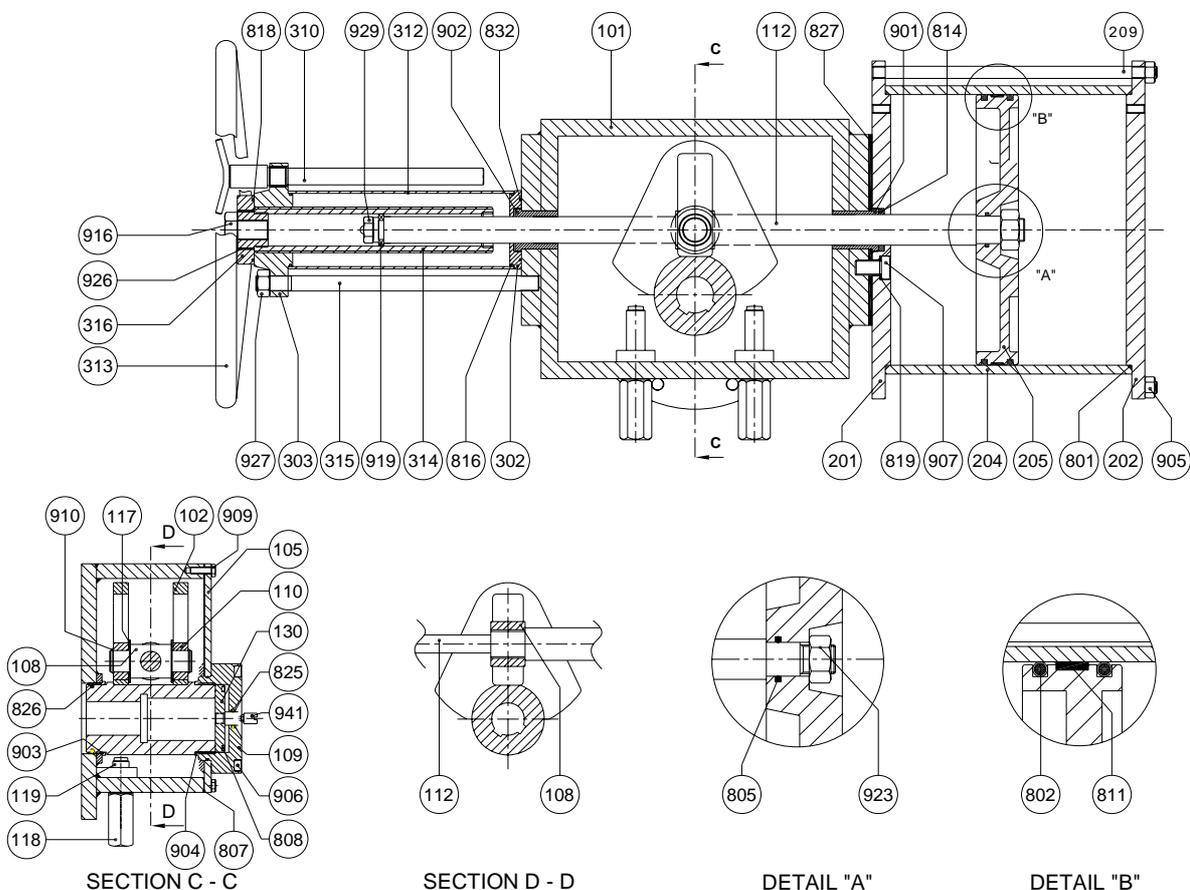


ON REQUEST ISO MALE SPIGOT

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING WITH HANDWHEEL

TYPE RJPV - RWPV



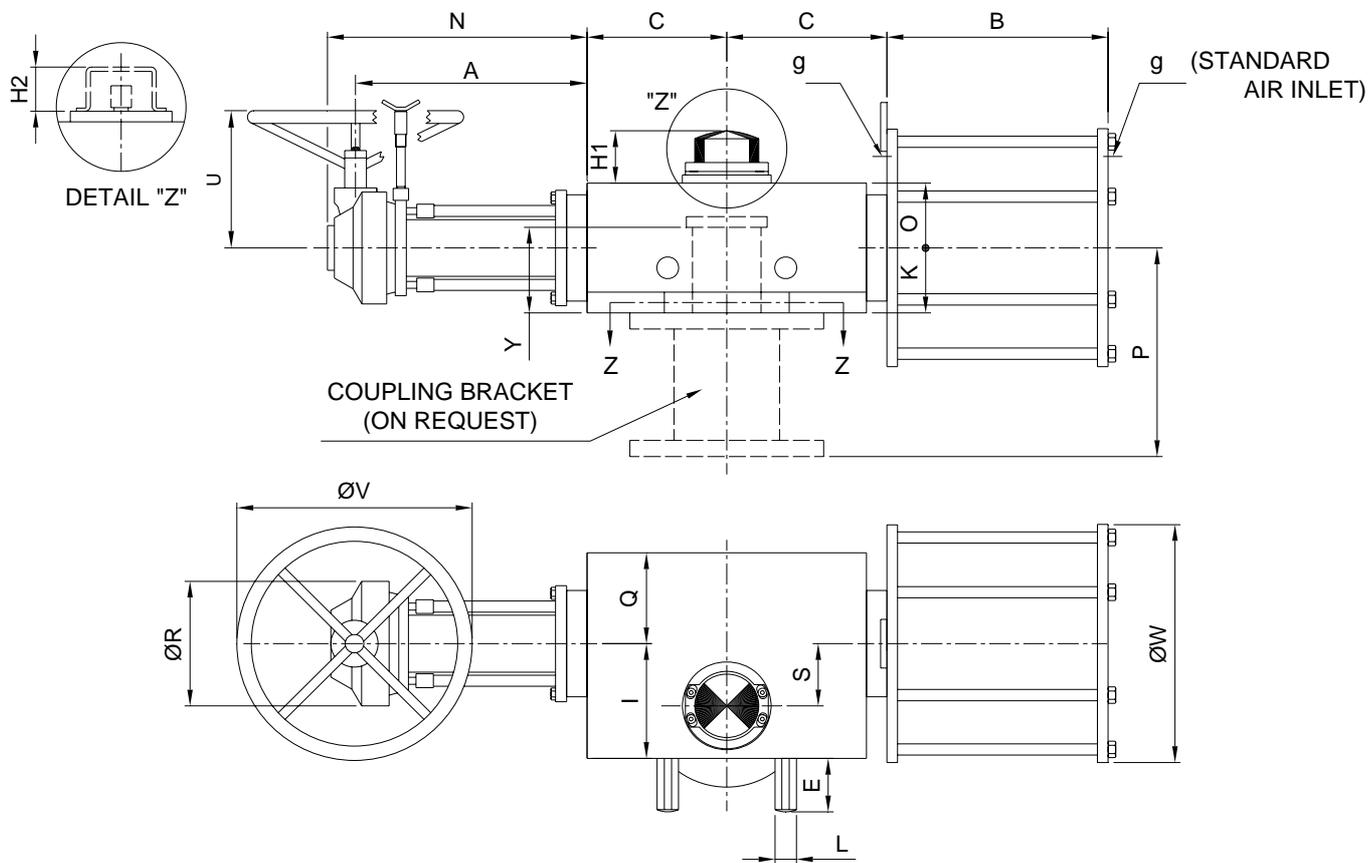
POS.	DESCRIPTION	MATERIAL	POS.	DESCRIPTION	MATERIAL
101	HOUSING	S 275 JR EN 10025	• 805	O-RING	N.B.R.
102	LINK	S 275 JR EN 10025	• 807	COVER GASKET	N.B.R.
105	COVER	S 275 JR EN 10025	• 808	O-RING	N.B.R.
108	LINK JOINT	C 40 EN 10083/2	• 811	PISTON DRIVE	PTFE+GRAPHITE
109	COVER	S 275 JR EN 10025	• 814	LIP GASKET	POLYURETHANE
110	SLIDING RING	BzAl EN 1982	• 816	O-RING	N.B.R.
112	CHROM. SHAFT	42CrMo4 EN 10083/1	• 818	O-RING	N.B.R.
117	WASHER	CW 614 N EN 12164	• 819	BONDED SEAL	C. STEEL/N.B.R.
118	CAP	S 275 JR EN 10025	• 825	O-RING	N.B.R.
119	STOP SCREW	8.8 EN 898/1	• 826	O-RING	N.B.R.
130	LINK CAP	S 275 JR EN 10025	• 827	GASKET	N.B.R.
201	HEAD	P 355 NH EN 10028/2	• 832	O-RING	N.B.R.
202	HEAD	P 355 NH EN 10028/2	901	BUSHING	STEEL/BRONZE/TEFLON
204	CYLINDER (int. chr. plated)	E 355 EN 10297/1	902	BUSHING	STEEL/BRONZE/TEFLON
205	PISTON (till cylinder Ø 420)	SgAlCu3 EN 1706	903	BUSHING	STEEL/BRONZE/TEFLON
205	PISTON (over cylinder Ø 420)	S 275 JR EN 10025	904	BUSHING	STEEL/BRONZE/TEFLON
209	STAY BOLT	42CrMo4 EN 10269	905	NUT	6 S EN 20898/2
302	INTERNAL FLANGE	S 275 JR EN 10025	906	SCREW	8.8 EN 898/1
303	SCREW THREAD FLANGE	GS 400/12 EN 1563	907	SCREW	8.8 EN 898/1
310	PIN	X20Cr13 EN 10088	909	SCREW	8.8 EN 898/1
312	TUBE	E 235 SR EN 10305/1	910	SEEGER	ALLOY STEEL
313	HANDWHEEL	E 235 SR EN 10305/1	916	SCREW	ALLOY STEEL
314	DRIVE NUT	CW 614 N EN 12164	919	ROLLER BEARING	ALLOY STEEL
315	STAY BOLT	C 40 EN 10083/2	923	NUT	6 S EN 20898/2
316	RING NUT	S 275 JR EN 10025	926	DOWEL	8.8 EN 898/1
• 801	O-RING	N.B.R.	927	NUT	6 S EN 20898/2
• 802	O-RING	N.B.R.	929	SCREW	8.8 EN 898/1
			941	NAMUR PIN	AISI 316

• STANDARD SPARE PARTS

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING WITH MANUAL REDUCTOR

TYPE **RJPR - RWPR**



ACTUATOR DIMENSIONS (mm)

	A	B	C	E	H1	H2	I	K	L	N	O	Q	R	S	U	V	Y	g	
RWPR 1400/...	500	400	240	70	55	45	230	125	46	655	110	165	270	100	330	800	150	½ NPT	
RJPR 1400/...																			

FLANGE DIMENSIONS (mm)

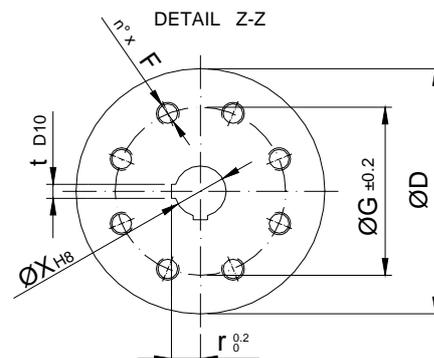
	D	n° x F	G	X	r	t	ISO
RWPR 1400/...	350	8 x M 16	254	80	45,4	22	F 25
RJPR 1400/...							

ON REQUEST

MIN.	MAX.	Xmin	Xmax
F 16	F 30	65	90

CYLINDER DIAMETER (mm)

TYPE OF CYLINDER	250	300	360	420	500	520
DIMENSION "W"	340	395	465	540	590	640



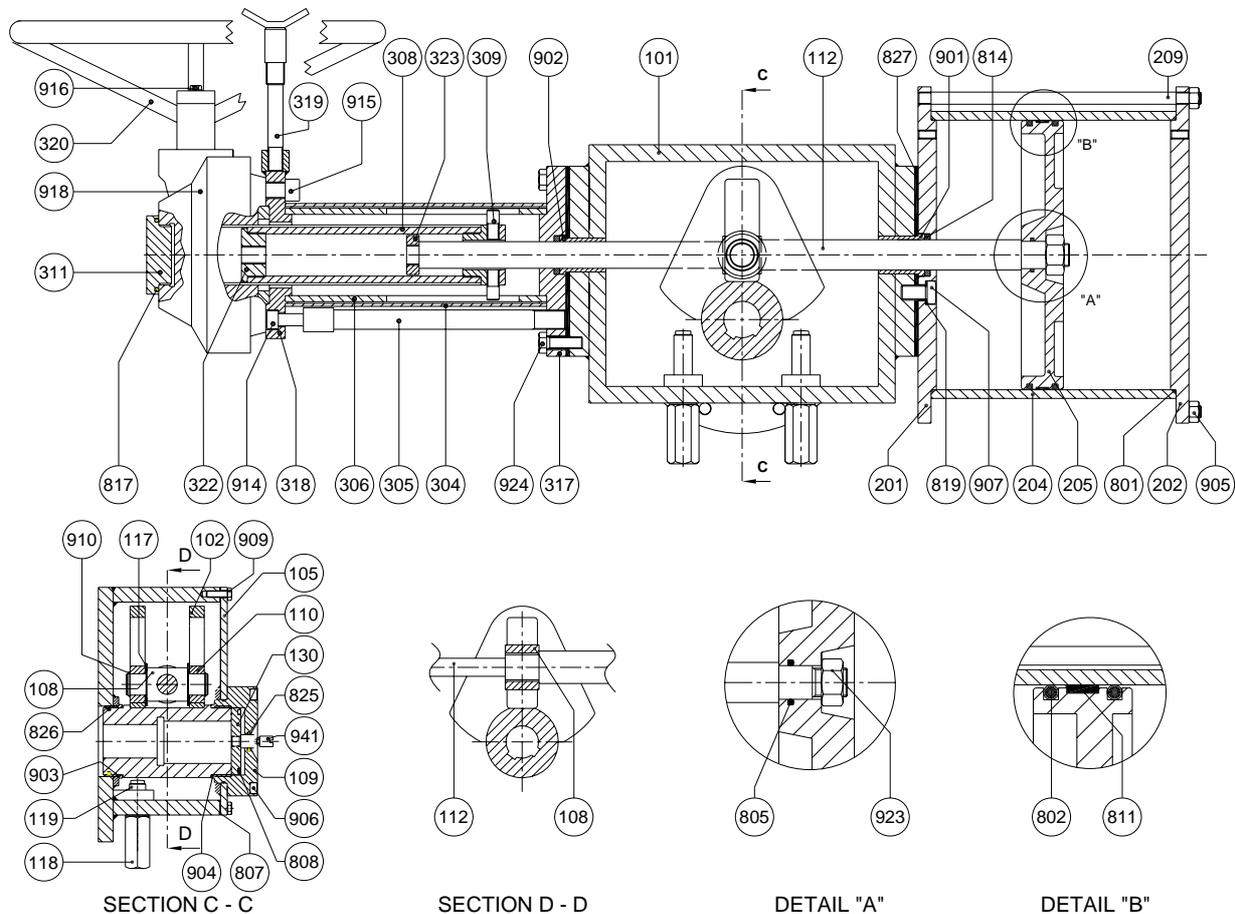
ON REQUEST ISO MALE SPIGOT

"H1" - STANDARD INDEX
 "H2" - MOUNTING KIT ACCORDING TO **VDI-VDE 3845** (ON REQUEST)
 "P" - BRACKET ACCORDING TO CUSTOMER REQUIREMENT (ON REQUEST)

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING WITH MANUAL GEAR

TYPE **RJPR - RWPR**



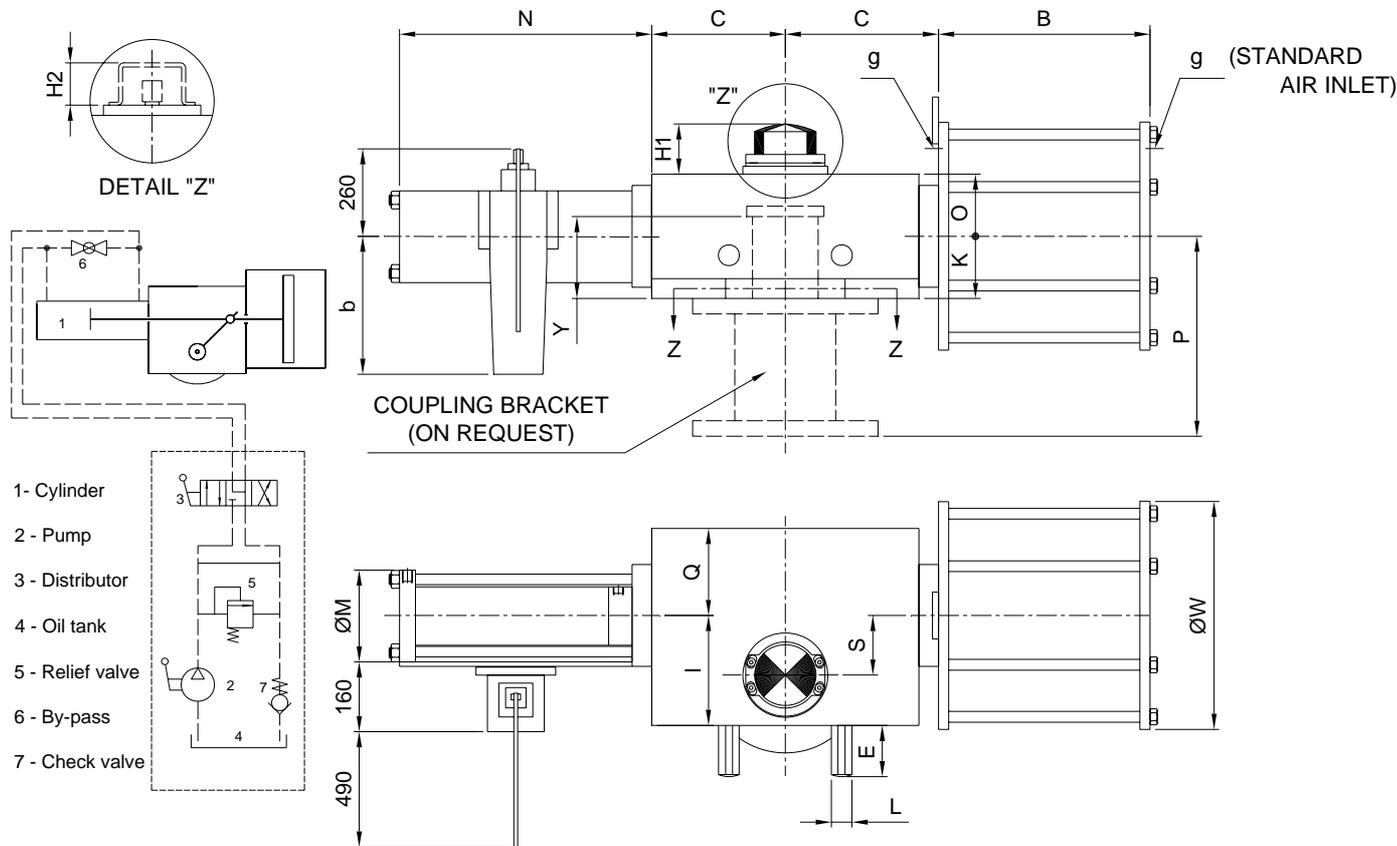
POS.	DESCRIPTION	MATERIAL	POS.	DESCRIPTION	MATERIAL
101	HOUSING	S 275 JR EN 10025	• 323	RING NUT	C 40 EN 10083/2
102	LINK	S 275 JR EN 10025	• 801	O-RING	N.B.R.
105	COVER	S 275 JR EN 10025	• 802	O-RING	N.B.R.
108	LINK JOINT	C 40 EN 10083/2	• 805	O-RING	N.B.R.
109	COVER	S 275 JR EN 10025	• 807	COVER GASKET	N.B.R.
110	SLIDING RING	BzAl EN 1982	• 808	O-RING	N.B.R.
112	CHROM. SHAFT	42CrMo4 EN 10083/1	• 811	PISTON DRIVE	PTFE+GRAPHITE
117	WASHER	CW 614 N EN 12164	• 814	LIP GASKET	POLYURETHANE
118	CAP	S 275 JR EN 10025	• 817	O-RING	N.B.R.
119	STOP SCREW	8.8 EN 898/1	• 819	BONDED SEAL	C. STEEL/N.B.R.
130	LINK CAP	S 275 JR EN 10025	• 825	O-RING	N.B.R.
201	HEAD	P 355 NH EN 10028/3	• 826	O-RING	N.B.R.
202	HEAD	P 355 NH EN 10028/3	• 827	GASKET	N.B.R.
204	CYLINDER (int. chr. plated)	E 355 EN 10297/1	901	BUSHING	STEEL/BRONZE/TEFLON
205	PISTON (till cylinder Ø 420)	SgAlCu3 EN 1706	902	BUSHING	STEEL/BRONZE/TEFLON
205	PISTON (over cylinder Ø 420)	S 275 JR EN 10025	903	BUSHING	STEEL/BRONZE/TEFLON
209	STAY BOLT	42CrMo4 EN 10269	904	BUSHING	STEEL/BRONZE/TEFLON
304	TUBE	E 235 SR EN 10305/1	905	NUT	6 S EN 20898/2
305	SAFETY BOLT	E 235 SR EN 10305/1	906	SCREW	8.8 EN 898/1
306	TUBE	E 235 SR EN 10305/1	907	SCREW	8.8 EN 898/1
308	DRIVE NUT	CAST IRON EN 1563	909	SCREW	8.8 EN 898/1
309	PIN	C 40 EN 10083/2	910	SEEGER	ALLOY STEEL
311	CAP	ALUMINIUM	914	SCREW	8.8 EN 898/1
317	INTERNAL FLANGE	S 275 JR EN 10025	915	SCREW	8.8 EN 898/1
318	EXTERNAL FLANGE	S 275 JR EN 10025	916	SCREW	8.8 EN 898/1
319	PIN	X20Cr13 EN 10088	918	REDUCTOR	CAST IRON EN 1563
320	HANDWHEEL	E 235 SR EN 10305/1	923	NUT	6 S EN 20898/2
322	HUB	C 40 EN 10083/2	924	SCREW	8.8 EN 898/1
			941	NAMUR PIN	AISI 316

• STANDARD SPARE PARTS

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING WITH MANUAL HYDRAULIC PUMP

RJPH - RWPH



ACTUATOR DIMENSIONS (mm)

	B	C	E	H1	H2	I	K	L	N	M	O	Q	S	Y	g
RWPH 900/...	360	240	60	55	45	195	120	36	360	160	100	145	85	100	½ NPT
RJPH 900/...															
RWPH 1400/...	400	285	70	55	45	230	125	46	420	160	110	165	100	120	½ NPT
RJPH 1400/...															

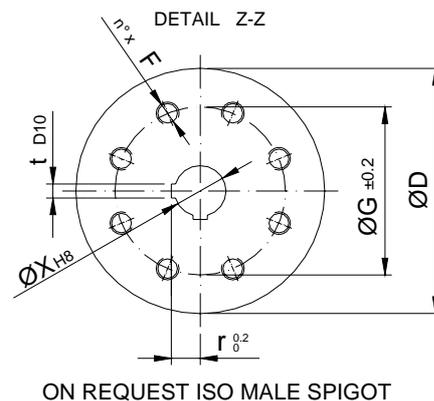
FLANGE DIMENSIONS (mm)

	D	n° x F	G	X	r	t	ISO	ON REQUEST			
								MIN.	MAX.	Xmin	Xmax
RWPH 900/...	300	4 x M 20	165	60	34,4	18	F 16	F 14	F 25	45	65
RJPH 900/...											
RWPH 1400/...	350	8 x M 16	254	80	45,4	22	F 25	F 16	F 30	65	90
RJPH 1400/...											

CYLINDER DIAMETER (mm)

TYPE OF CYLINDER	250	300	360	420	500	520
DIMENSION "W"	340	395	465	540	590	640

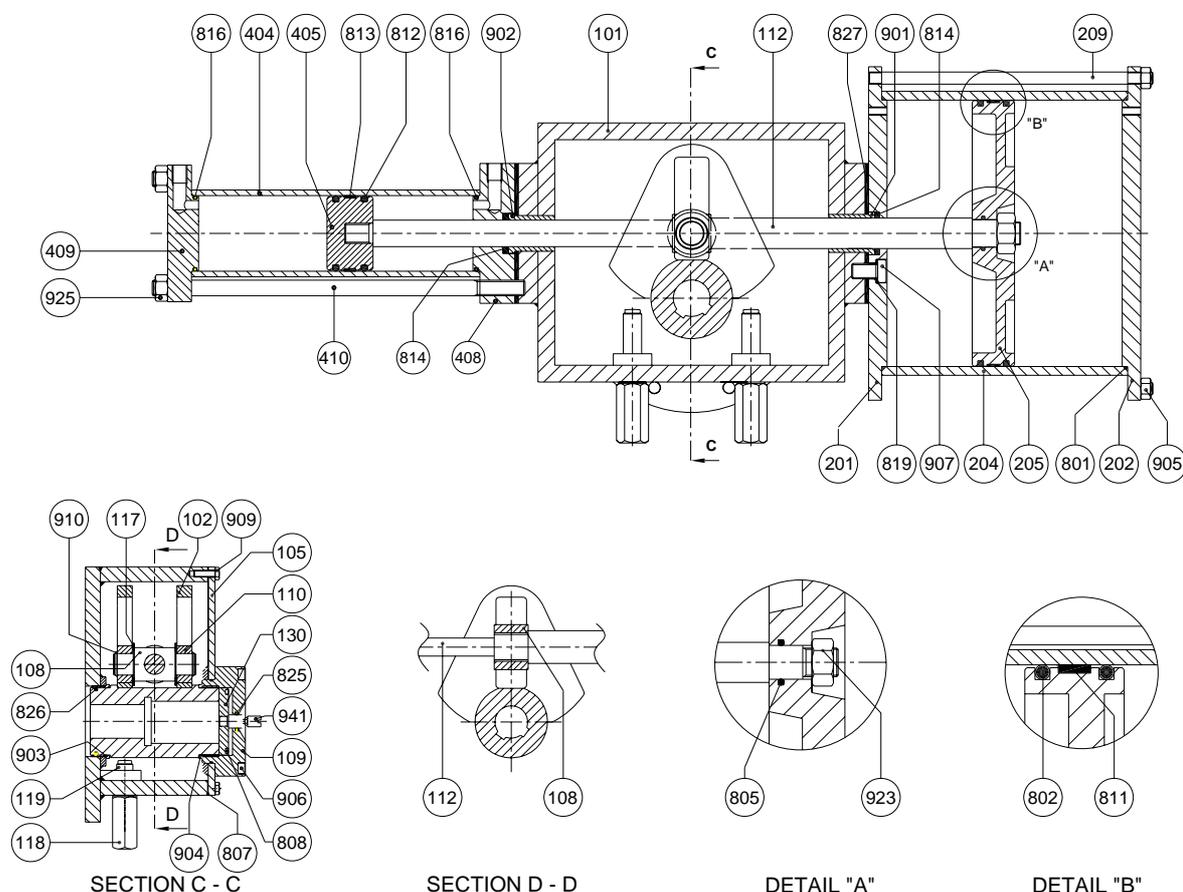
- "b" - TO BE DEFINED
- "H1" - STANDARD INDEX
- "H2" - MOUNTING KIT ACCORDING TO VDI-VDE 3845 (ON REQUEST)
- "P" - BRACKET ACCORDING TO CUSTOMER REQUIREMENT (ON REQUEST)



PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING WITH MANUAL HYDRAULIC PUMP

TYPE **RJPH - RWPH**



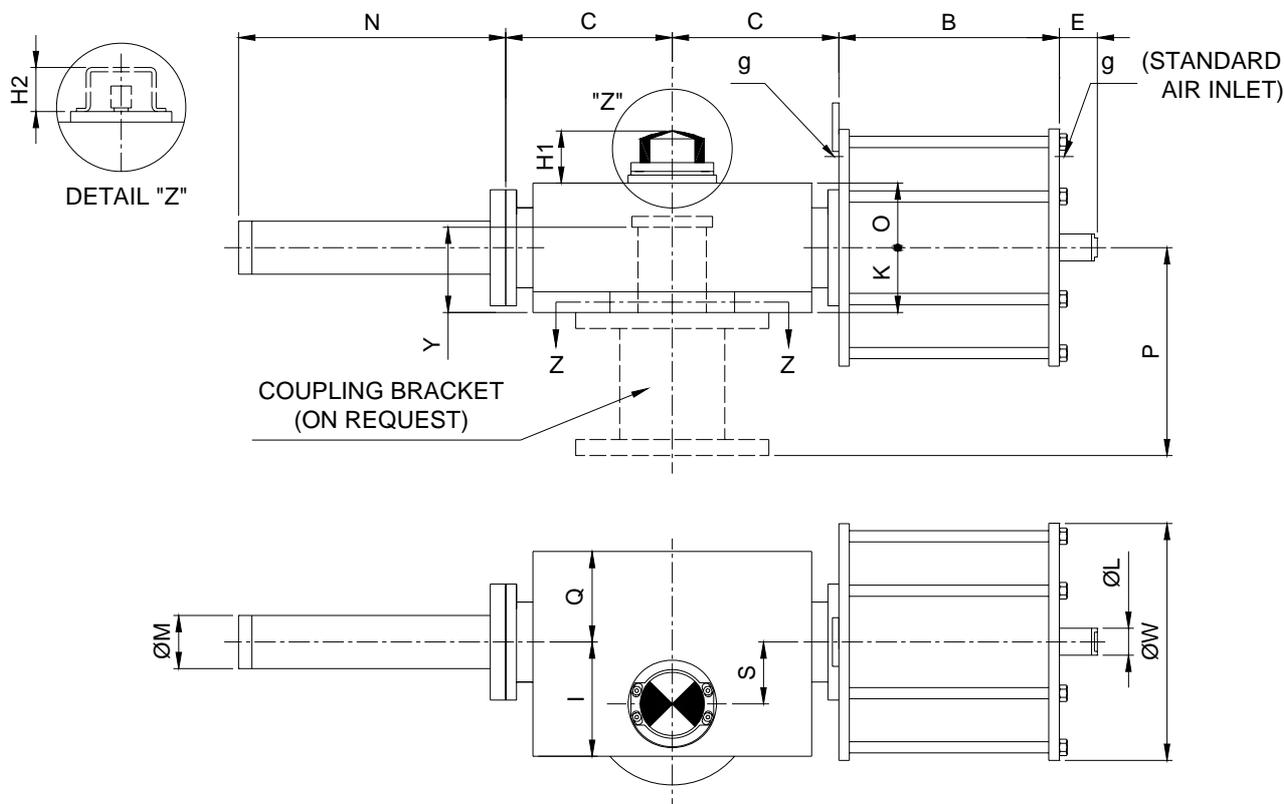
POS.	DESCRIPTION	MATERIAL	POS.	DESCRIPTION	MATERIAL
101	HOUSING	S 275 JR EN 10025	• 805	O-RING	N.B.R.
102	LINK	S 275 JR EN 10025	• 807	COVER GASKET	N.B.R.
105	COVER	S 275 JR EN 10025	• 808	O-RING	N.B.R.
108	LINK JOINT	C 40 EN 10083/2	• 811	PISTON DRIVE	PTFE+GRAPHITE
109	COVER	S 275 JR EN 10025	• 812	PISTON GASKET	POLYURETHANE
110	SLIDING RING	BzAl EN 1982	• 813	PISTON DRIVE	PTFE+GRAPHITE
112	CHROM. SHAFT	42CrMo4 EN 10083/1	• 814	LIP GASKET	POLYURETHANE
117	WASHER	CW 614 N EN 12164	• 816	O-RING	N.B.R.
118	CAP	S 275 JR EN 10025	• 819	BONDED SEAL	C.STEEL/N.B.R.
119	STOP SCREW	8.8 EN 898/1	• 825	O-RING	N.B.R.
130	LINK CAP	S 275 JR EN 10025	• 826	O-RING	N.B.R.
201	HEAD	P 355 NH EN 10028/3	• 827	GASKET	N.B.R.
202	HEAD	P 355 NH EN 10028/3	901	BUSHING	STEEL/BRONZE/TEFLON
204	CYLINDER (int. chr. plated)	E 355 EN 10297/1	902	BUSHING	STEEL/BRONZE/TEFLON
205	PISTON (till cylinder Ø 420)	SgAlCu3 EN 1706	903	BUSHING	STEEL/BRONZE/TEFLON
205	PISTON (over cylinder Ø 420)	S 275 JR EN 10025	904	BUSHING	STEEL/BRONZE/TEFLON
209	STAY BOLT	42CrMo4 EN 10269	905	NUT	6 S EN 20898/2
404	CYLINDER (int. chr. plated)	E 355 SR EN 10297/1	906	SCREW	8.8 EN 898/1
405	PISTON	S 275 JR EN 10025	907	SCREW	8.8 EN 898/1
408	FLANGE	S 275 JR EN 10025	909	SCREW	8.8 EN 898/1
409	FLANGE	S 275 JR EN 10025	910	SEEGER	ALLOY STEEL
410	STAY BOLT	C 40 EN 10083/2	923	NUT	6 S EN 20898/2
• 801	O-RING	N.B.R.	925	NUT	6 S EN 20898/2
• 802	O-RING	N.B.R.	941	NAMUR PIN	AISI 316

•STANDARD SPARE PARTS

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING

TYPE RSP - RCP



ACTUATOR DIMENSIONS (mm)

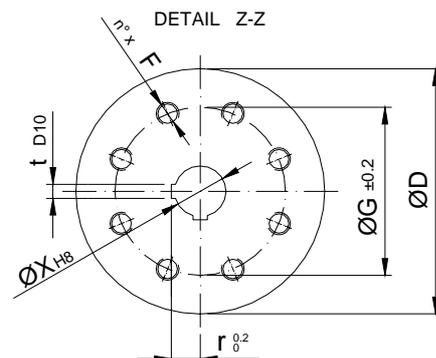
	B	C	E	H1	H2	I	K	L	M	N	O	Q	S	Y	g
RSP 2500/...	490	355	75	55	45	240	170	60	110	390	130	180	130	150	½ NPT
RCP 2500/...	490	355	75	55	45	240	170	60	110	390	130	180	130	150	½ NPT
RSP 4500/...	610	465	110	55	45	295	155	70	130	470	155	255	170	170	½ NPT
RCP 4500/...	610	465	110	55	45	295	155	70	130	470	155	255	170	170	½ NPT
RSP 7500/...	740	610	130	55	45	385	235	80	130	590	185	325	225	220	¾ NPT
RCP 7500/...	740	610	130	55	45	385	235	80	130	590	185	325	225	220	¾ NPT

FLANGE DIMENSIONS (mm)

	D	n° x F	G	X	r	t	ISO	ON REQUEST			
								MIN.	MAX.	Xmin	Xmax
RSP 2500/...	415	8 x M 20	298	90	50,4	25	F 30	F 25	F 35	65	100
RCP 2500/...	415	8 x M 20	298	90	50,4	25	F 30	F 25	F 35	65	100
RSP 4500/...	475	8 x M 30	356	120	67,4	32	F 35	F 30	F 40	90	130
RCP 4500/...	475	8 x M 30	356	120	67,4	32	F 35	F 30	F 40	90	130
RSP 7500/...	560	8 x M 36	406	150	83,4	36	F 40	F 35	F 48	145	160
RCP 7500/...	560	8 x M 36	406	150	83,4	36	F 40	F 35	F 48	145	160

CYLINDER DIAMETER (mm)

TYPE OF CYLINDER	420	500	520	600	620	700	800	900
DIMENSION "W"	540	590	640	695	740	805	930	1050



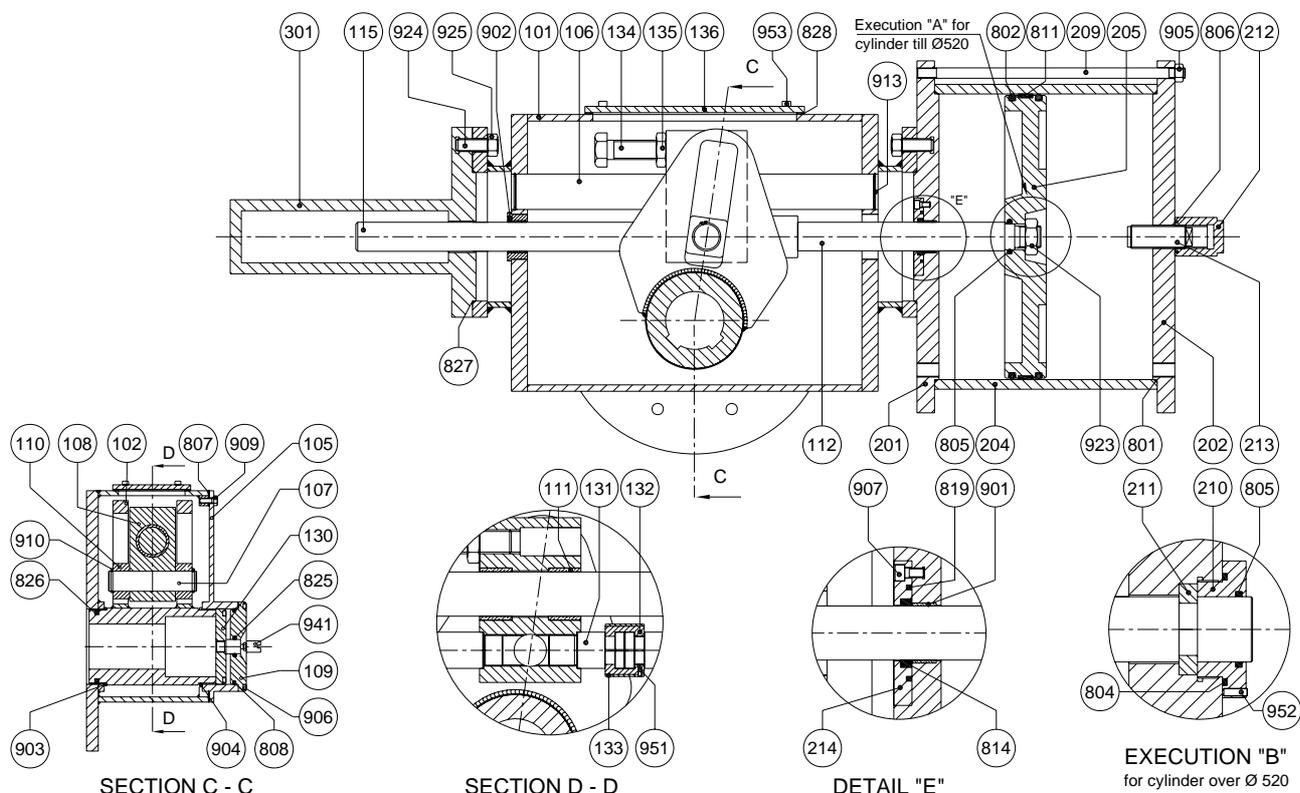
"H1" - STANDARD INDEX
 "H2" - MOUNTING KIT ACCORDING TO VDI-VDE 3845 (ON REQUEST)
 "P" - BRACKET ACCORDING TO CUSTOMER REQUIREMENT (ON REQUEST)

ON REQUEST ISO MALE SPIGOT

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING

TYPE RSP - RCP



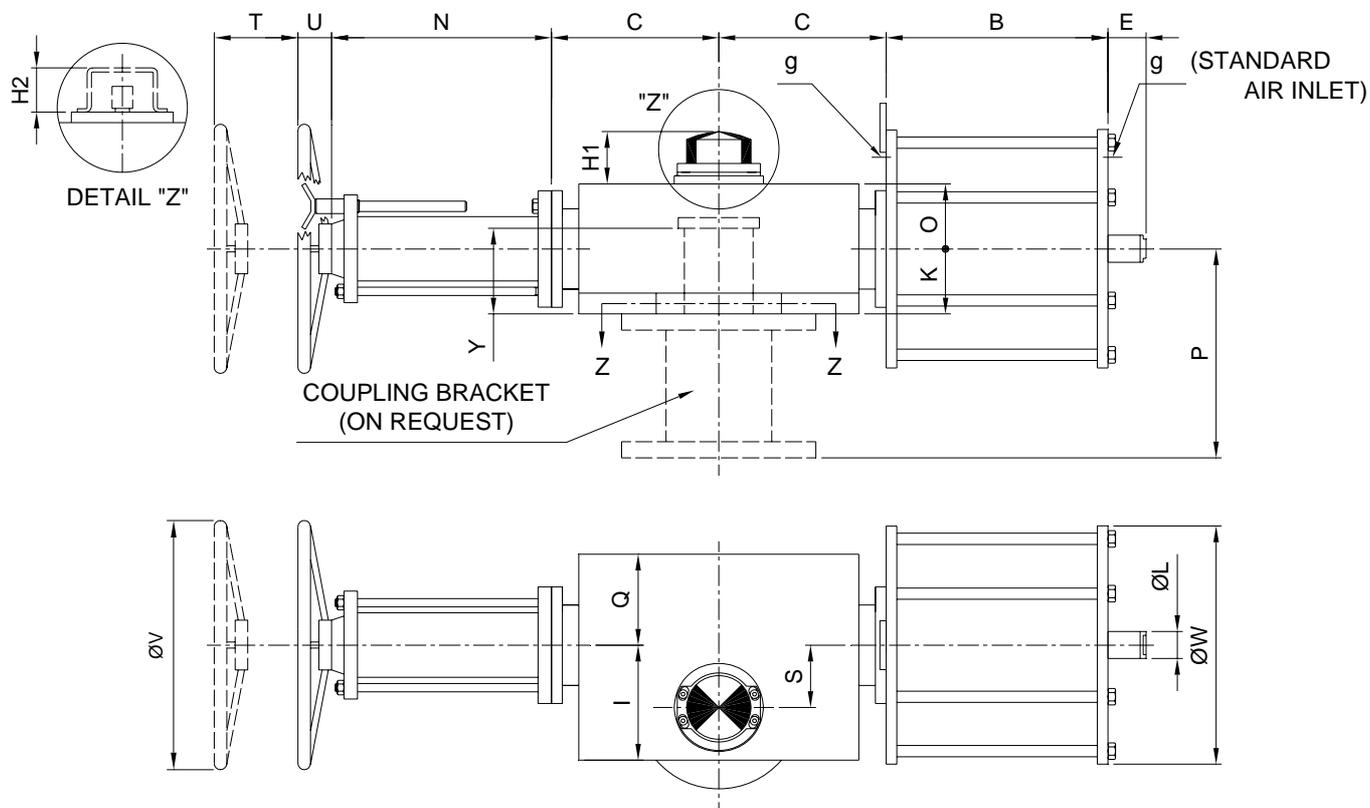
POS.	DESCRIPTION	MATERIAL	POS.	DESCRIPTION	MATERIAL
101	HOUSING	S 275 JR EN 10025	• 802	O-RING	N.B.R.
102	LINK	S 275 JR EN 10025	• 804	O-RING	N.B.R.
105	COVER	S 275 JR EN 10025	• 805	O-RING	N.B.R.
106	CHROM. SHAFT	42CrMo4 EN 10083/1	• 806	O-RING	N.B.R.
107	PIN	42CrMo4 EN 10083/1	• 807	COVER GASKET	N.B.R.
108	LINK JOINT	S 275 JR EN 10025	• 808	O-RING	N.B.R.
109	COVER	S 275 JR EN 10025	• 811	PISTON DRIVE	PTFE+GRAPHITE
110	SLIDING RING	BzAl EN 1982	• 814	LIP GASKET	POLYURETHANE
111	BUSHING	STEEL/BRONZE/TEFLON	• 819	O-RING	N.B.R.
112	CHROM. SHAFT	42CrMo4 EN 10083/1	• 825	O-RING	N.B.R.
115	CHROM. SHAFT	42CrMo4 EN 10083/1	• 826	O-RING	N.B.R.
130	LINK CAP	S 275 JR EN 10025	• 827	O-RING	N.B.R.
131	INTERMEDIATE SHAFT	42CrMo4 EN 10083/1	• 828	GASKET	N.B.R.
132	LINK	42CrMo4 EN 10083/1	901	BUSHING	STEEL/BRONZE/TEFLON
133	TUBE	E 235 SR EN 10305/1	902	BUSHING	STEEL/BRONZE/TEFLON
134	STOP SCREW	8.8 EN 898/1	903	BUSHING	STEEL/BRONZE/TEFLON
135	BLOCK NUT	6 S EN 20898/2	904	BUSHING	STEEL/BRONZE/TEFLON
136	COVER	S 275 JR EN 10025	905	NUT	6 S EN 20898/2
201	HEAD	P 355 NH EN 10028/3	906	SCREW	8.8 EN 898/1
202	HEAD	P 355 NH EN 10028/3	907	SCREW	8.8 EN 898/1
204	CYLINDER (int. chr. plated)	E 355 EN 10297/1	909	SCREW	8.8 EN 898/1
205	PISTON (till cylinder Ø 420)	SgAlCu3 EN 1706	910	SEEGER	ALLOY STEEL
205	PISTON (over Ø 420)	S 275 JR EN 10025	913	SEEGER	ALLOY STEEL
209	STAY BOLT	42 CrMo4 EN 10269	923	NUT	6 S EN 20898/2
210	RING NUT	42CrMo4 EN 10083/1	924	PIN	8.8 EN 898/1
211	HALF RING	42CrMo4 EN 10083/1	925	NUT	6 S EN 20898/2
212	CAP	S 275 JR EN 10025	941	NAMUR PIN	AISI 316
213	STOP SCREW	C 40 EN 10083/2	951	DOWEL	8.8 EN 898/1
214	FLANGE	C 40 EN 10083/2	952	DOWEL	8.8 EN 898/1
301	TUBE	E 235 SR EN 10305/1	953	SCREW	8.8 EN 898/1
• 801	O-RING	N.B.R.			

• STANDARD SPARE PARTS

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING WITH HANDWHEEL

TYPE RSPV - RCPV



ACTUATOR DIMENSIONS (mm)

	B	C	E	H1	H2	I	K	L	N	O	Q	S	T	U	V	Y	g
RSPV 2500/...	490	355	75	55	45	240	170	60	450	130	180	130	300	120	800	150	½ NPT
RCPV 2500/...																	

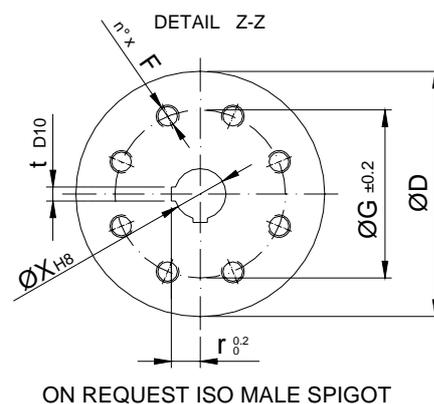
FLANGE DIMENSIONS (mm)

	D	n° x F	G	X	r	t	ISO	ON REQUEST					
								MIN.	MAX.	Xmin	Xmax		
RSPV 2500/...	415	8 x M 20	298	90	50,4	25	F 30	F 25	F 35	65	100		
RCPV 2500/...													

CYLINDER DIAMETER (mm)

TYPE OF CYLINDER	360	420
DIMENSION "W"	465	540

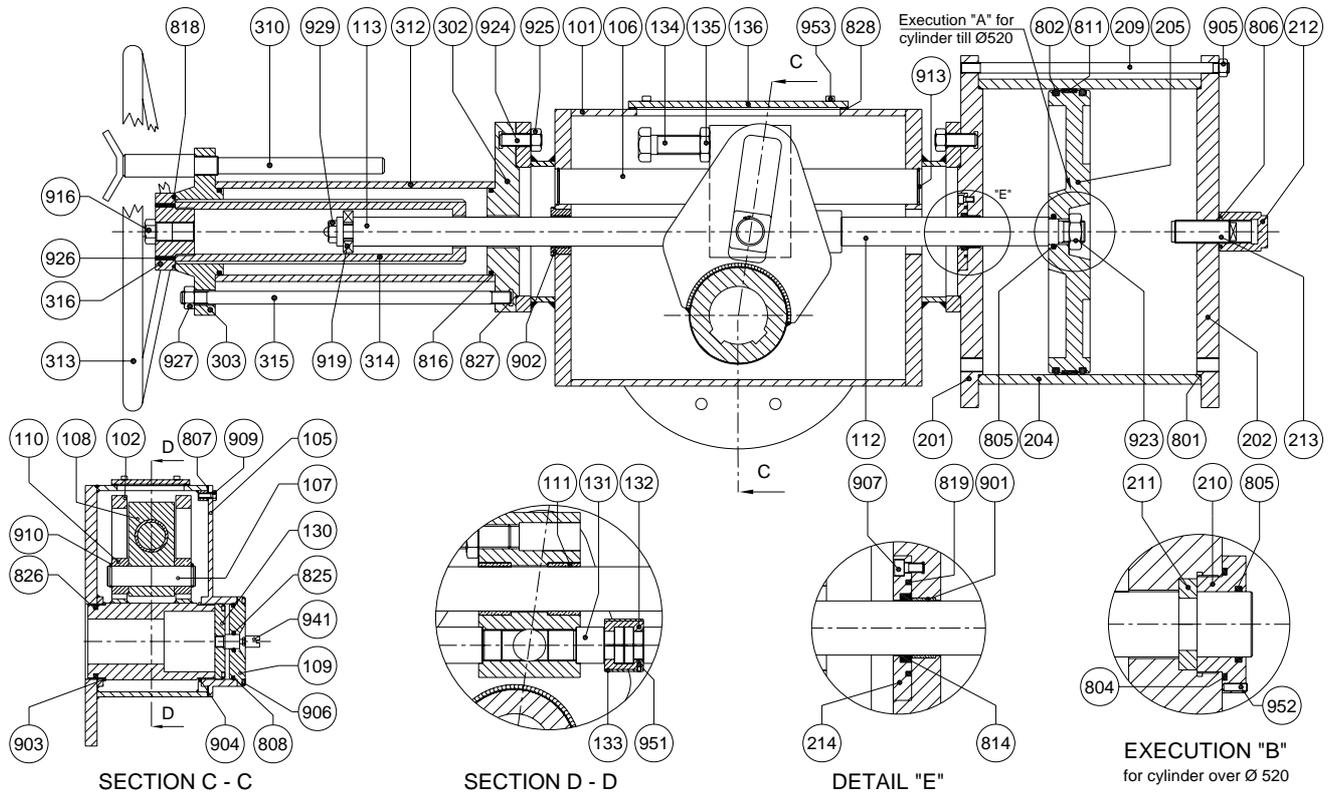
"H1" - STANDARD INDEX
 "H2" - MOUNTING KIT ACCORDING TO VDI-VDE 3845 (ON REQUEST)
 "P" - BRACKET ACCORDING TO CUSTOMER REQUIREMENT (ON REQUEST)



PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING WITH HANDWHEEL

TYPE RSPV - RCPV



POS. DESCRIPTION

101	HOUSING
102	LINK
105	COVER
106	CHROM. SHAFT
107	PIN
108	LINK JOINT
109	COVER
110	SLIDING RING
111	BUSHING
112	CHROM. SHAFT
113	CHROM. SHAFT
130	LINK CAP
131	INTERMEDIATE SHAFT
132	LINK
133	TUBE
134	STOP SCREW
135	BLOCK NUT
136	COVER
201	HEAD
202	HEAD
204	CYLINDER (int. chr. plated)
205	PISTON (till cylinder Ø 420)
205	PISTON (over Ø 420)
209	STAY BOLT
210	RING NUT
211	HALF RING
212	CAP
213	STOP SCREW
214	FLANGE
302	INTERNAL FLANGE
303	SCREW THREAD FLANGE
310	PIN
312	TUBE
313	HANDWHEEL
314	DRIVE NUT
315	STAY BOLT
316	RING NUT
● 801	O-RING

MATERIAL

S 275 JR	EN 10025
S 275 JR	EN 10025
S 275 JR	EN 10025
42CrMo4	EN 10083/1
42CrMo4	EN 10083/1
S 275 JR	EN 10025
S 275 JR	EN 10025
BzAl	EN 1982
STEEL/BRONZE/TEFLON	
42 CrMo4	EN 10083/1
42 CrMo4	EN 10083/1
S 275 JR	EN 10025
42CrMo4	EN 10083/1
42CrMo4	EN 10083/1
E 235 SR	EN 10305/1
8.8	EN 898/1
6 S	EN 20898/2
S 275 JR	EN 10025
P 355 NH	EN 10028/3
P 355 NH	EN 10028/3
E 355	EN 10297/1
SgAlCu3	EN 1706
S 275 JR	EN 10025
42 CrMo4	EN 10269
42 CrMo4	EN 10083/1
42 CrMo4	EN 10083/1
S 275 JR	EN 10025
C 40	EN 10083/2
C 40	EN 10083/2
S 275 JR	EN 10025
GS 400/12	EN 1563
X20Cr13	EN 10088
E 235 SR	EN 10305/1
E 235 SR	EN 10305/1
BSZN5	EN 1982
C 40	EN 10083/2
S 275 JR	EN 10025
N.B.R.	

POS. DESCRIPTION

● 802	O-RING
● 804	O-RING
● 805	O-RING
● 806	O-RING
● 807	COVER GASKET
● 808	O-RING
● 811	PISTON DRIVE
● 814	LIP GASKET
● 816	O-RING
● 818	O-RING
● 819	O-RING
● 825	O-RING
● 826	O-RING
● 827	O-RING
● 828	GASKET
901	BUSHING
902	BUSHING
903	BUSHING
904	BUSHING
905	NUT
906	SCREW
907	SCREW
909	SCREW
910	SEEGER
913	SEEGER
916	SCREW
919	ROLLER BEARING
923	NUT
924	PIN
925	NUT
926	DOWEL
927	NUT
929	SCREW
941	NAMUR PIN
951	DOWEL
952	DOWEL
953	SCREW

MATERIAL

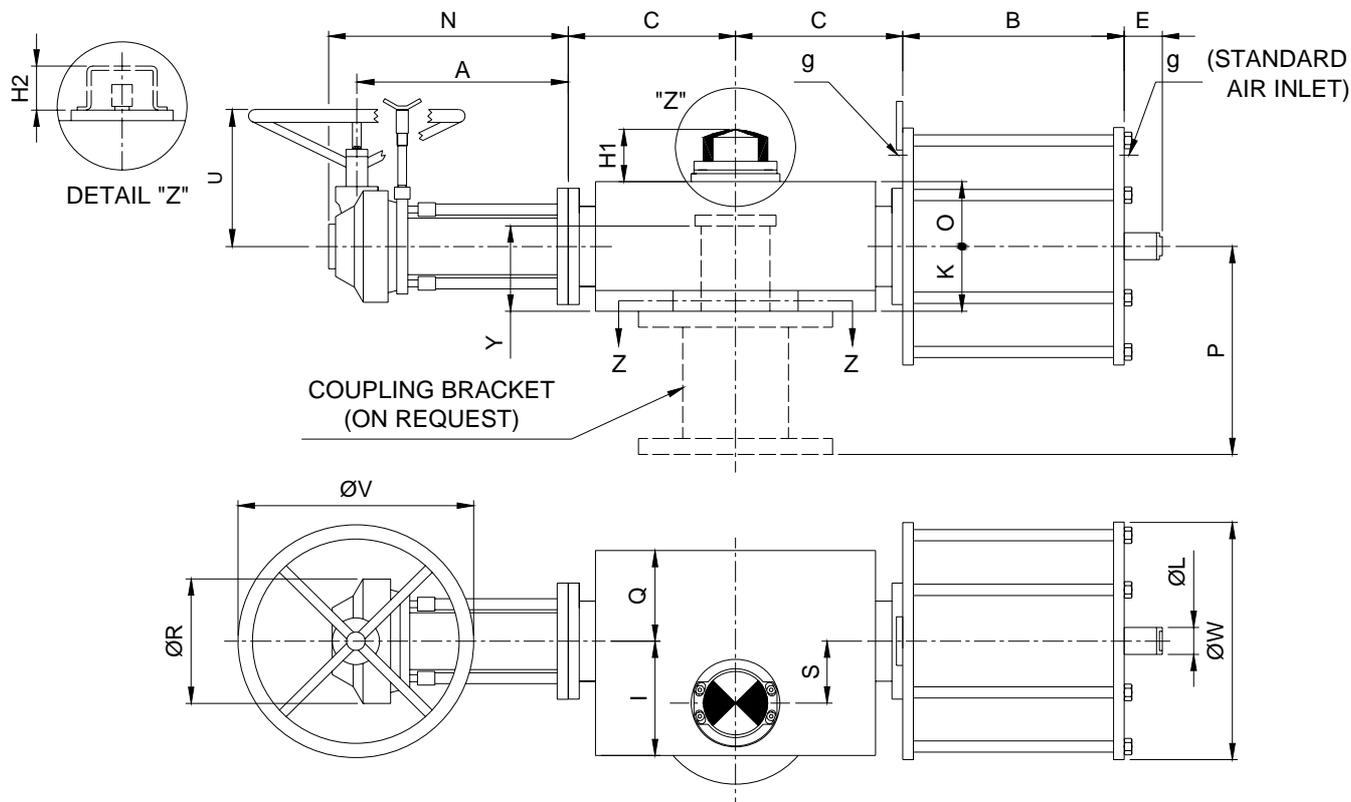
N.B.R.	
PTFE+GRAPHITE	
POLYURETHANE	
N.B.R.	
STEEL/BRONZE/TEFLON	
STEEL/BRONZE/TEFLON	
STEEL/BRONZE/TEFLON	
6 S	EN 20898/2
8.8	EN 898/1
8.8	EN 898/1
8.8	EN 898/1
ALLOY STEEL	
ALLOY STEEL	
NYLON	
ALLOY STEEL	
6 S	EN 29898/2
8.8	EN 898/1
6 S	EN 29898/2
8.8	EN 898/1
6 S	EN 20898/2
8.8	EN 898/1
AISI 316	
8.8	EN 898/1
8.8	EN 898/1
8.8	EN 898/1

● STANDARD SPARE PARTS

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING WITH MANUAL GEAR

TYPE RSPR - RCPR



ACTUATOR DIMENSIONS (mm)

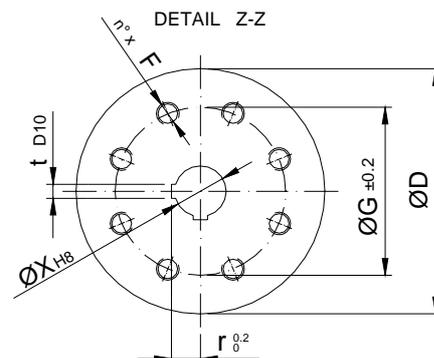
	A	B	C	E	H1	H2	I	K	L	N	O	Q	R	S	U	V	Y	g
RSPR 2500/...	530	490	355	75	55	45	240	170	60	620	130	180	270	130	330	800	150	½ NPT
RCPR 2500/...																		
RSPR 4500/...	620	610	465	110	55	45	295	155	70	710	155	255	270	170	330	800	170	½ NPT
RCPR 4500/...																		
RSPR 7500/...	730	740	610	130	55	45	385	235	80	820	185	325	270	225	330	800	220	¾ NPT
RCPR 7500/...																		

FLANGE DIMENSIONS (mm)

	D	n° x F	G	X	r	t	ISO	ON REQUEST			
								MIN.	MAX.	Xmin	Xmax
RSPR 2500/...	415	8 x M 20	298	90	50,4	25	F 30	F 25	F 35	65	100
RCPR 2500/...											
RSPR 4500/...	475	8 x M 30	356	120	67,4	32	F 35	F 30	F 40	90	130
RCPR 4500/...											
RSPR 7500/...	560	8 x M 36	406	150	83,4	36	F 40	F 35	F 48	145	160
RCPR 7500/...											

CYLINDER DIAMETER (mm)

TYPE OF CYLINDER	420	500	520	600	620	700	800	900
DIMENSION "W"	540	590	640	695	740	805	930	1050



ON REQUEST ISO MALE SPIGOT

"H1" - STANDARD INDEX

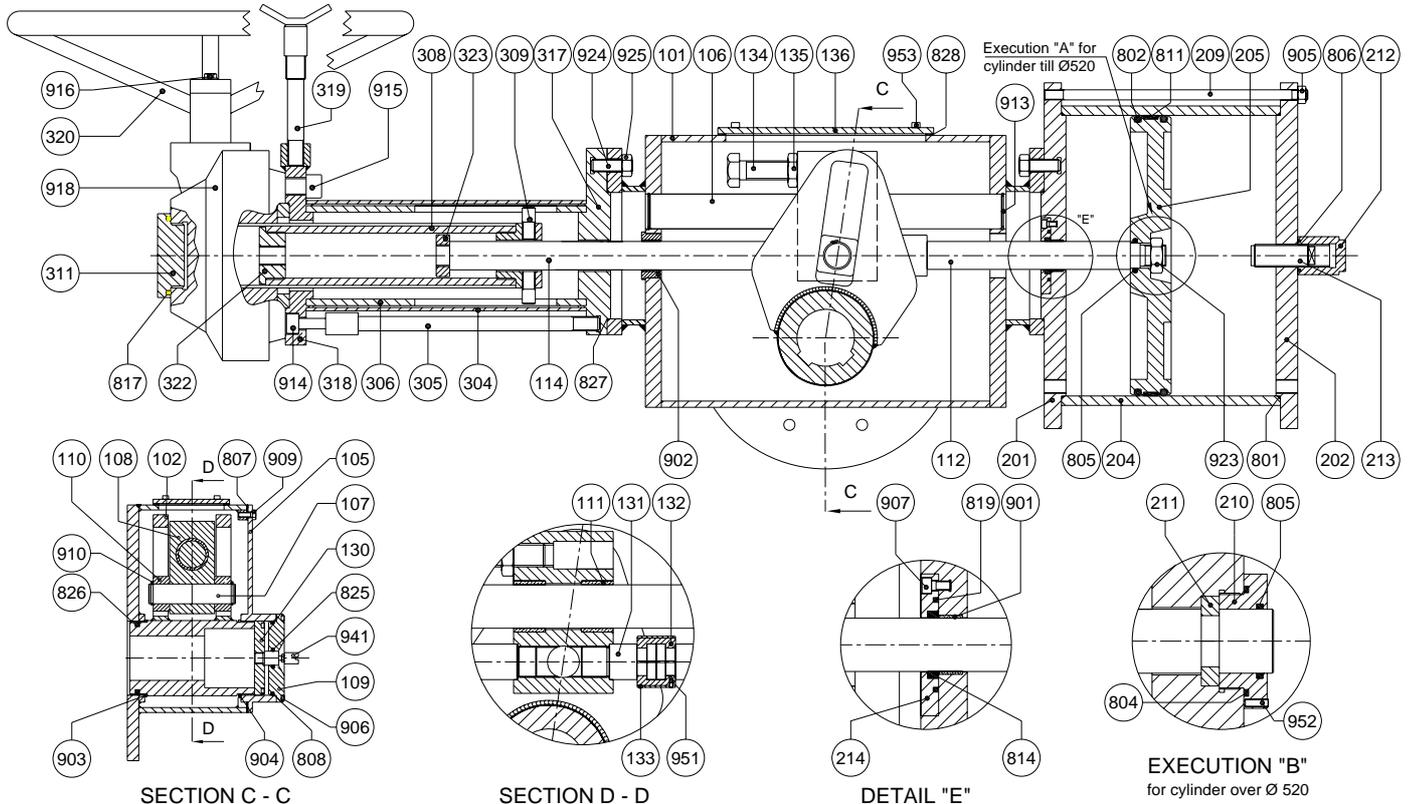
"H2" - MOUNTING KIT ACCORDING TO VDI-VDE 3845 (ON REQUEST)

"P" - BRACKET ACCORDING TO CUSTOMER REQUIREMENT (ON REQUEST)

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING WITH MANUAL GEAR

TYPE RSPR - RCPR



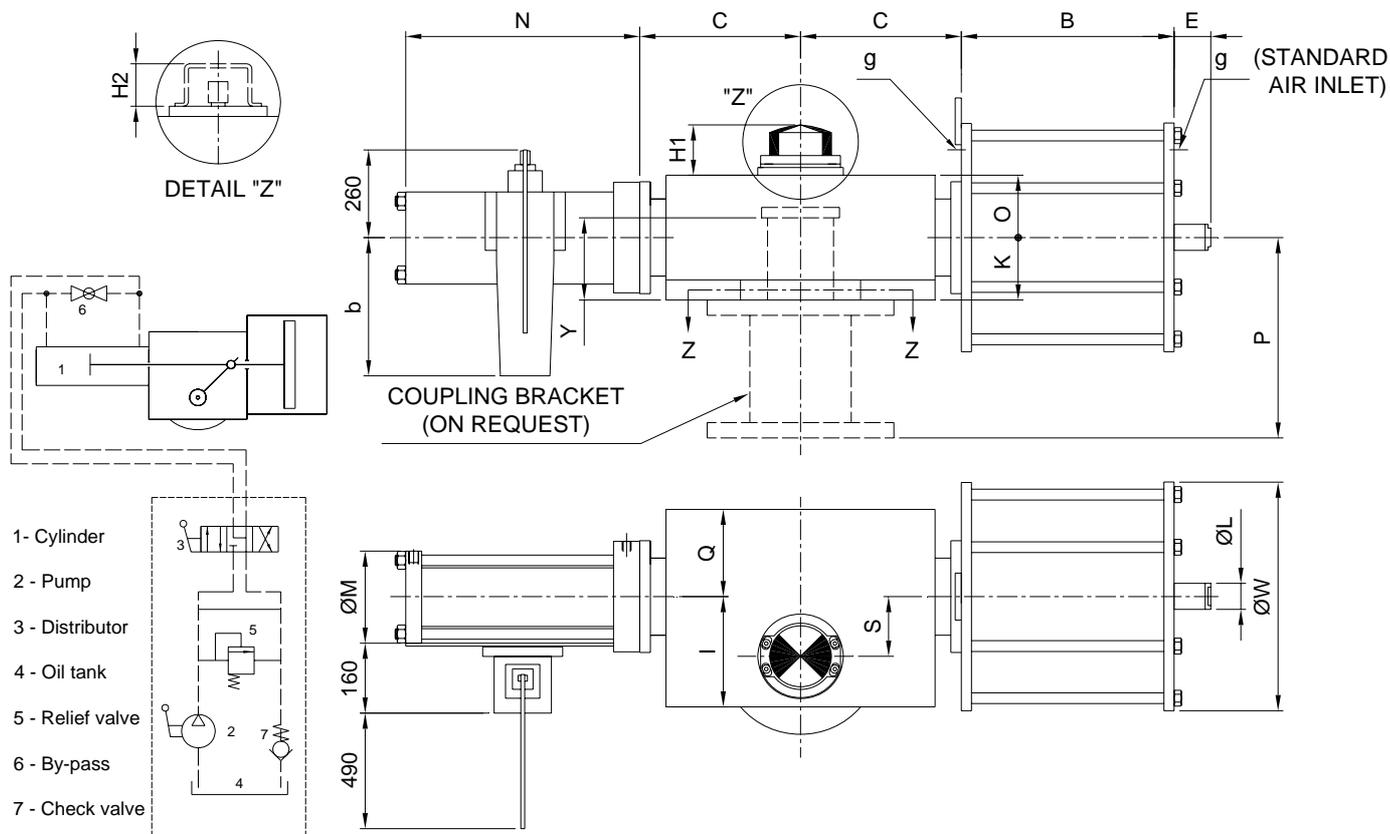
POS.	DESCRIPTION	MATERIAL	POS.	DESCRIPTION	MATERIAL
101	HOUSING	S 275 JR EN 10025	322	HUB	C 40 EN 10083/2
102	LINK	S 275 JR EN 10025	323	RING NUT	C 40 EN 10083/2
105	COVER	S 275 JR EN 10025	● 801	O-RING	N.B.R.
106	CHROM. SHAFT	42CrMo4 EN 10083/1	● 802	O-RING	N.B.R.
107	PIN	42CrMo4 EN 10083/1	● 804	O-RING	N.B.R.
108	LINK JOINT	S 275 JR EN 10025	● 805	O-RING	N.B.R.
109	COVER	S 275 JR EN 10025	● 806	O-RING	N.B.R.
110	SLIDING RING	BzAl EN 1982	● 807	COVER GASKET	N.B.R.
111	BUSHING	STEEL/BRONZE/TEFLON	● 808	O-RING	N.B.R.
112	CHROM. SHAFT	42 CrMo4 EN 10083/1	● 811	PISTON DRIVE	PTFE+GRAPHITE
114	CHROM. SHAFT	42 CrMo4 EN 10083/1	● 814	LIP GASKET	POLYURETHANE
130	LINK CAP	S 275 JR EN 10025	● 817	O-RING	N.B.R.
131	INTERMEDIATE SHAFT	42CrMo4 EN 10083/1	● 819	O-RING	N.B.R.
132	LINK	42CrMo4 EN 10083/1	● 825	O-RING	N.B.R.
133	TUBE	E 235 SR EN 10305/1	● 826	O-RING	N.B.R.
134	STOP SCREW	8.8 EN 898/1	● 827	O-RING	N.B.R.
135	BLOCK NUT	6 S EN 20898/2	● 828	GASKET	N.B.R.
136	COVER	S 275 JR EN 10025	901	BUSHING	STEEL/BRONZE/TEFLON
201	HEAD	P 355 NH EN 10028/3	902	BUSHING	STEEL/BRONZE/TEFLON
202	HEAD	P 355 NH EN 10028/3	903	BUSHING	STEEL/BRONZE/TEFLON
204	CYLINDER (int. chr. plated)	E 355 EN 10297/1	904	BUSHING	STEEL/BRONZE/TEFLON
205	PISTON (till cylinder Ø 420)	SgAlCu3 EN 1706	905	NUT	6 S EN 20898/2
205	PISTON (over Ø 420)	S 275 JR EN 10025	906	SCREW	8.8 EN 898/1
209	STAY BOLT	42 CrMo4 EN 10269	907	SCREW	8.8 EN 898/1
210	RING NUT	42 CrMo4 EN 10083/1	909	SCREW	8.8 EN 898/1
211	HALF RING	42 CrMo4 EN 10083/1	910	SEEGER	ALLOY STEEL
212	CAP	S 275 JR EN 10025	913	SEEGER	ALLOY STEEL
213	STOP SCREW	C 40 EN 10083/2	914	SCREW	8.8 EN 898/1
214	FLANGE	C 40 EN 10083/2	915	SCREW	8.8 EN 898/1
304	TUBE	E 235 SR EN 10305/1	916	SCREW	8.8 EN 898/1
305	SAFETY BOLT	E 235 SR EN 10305/1	918	REDUCTOR	CAST IRON EN 1563
306	TUBE	E 235 SR EN 10305/1	923	NUT	6 S EN 20898/2
308	DRIVE NUT	CAST IRON EN 1563	924	PIN	8.8 EN 898/1
309	PIN	C 40 EN 10083/2	925	NUT	6 S EN 20898/2
311	CAP	ALUMINIUM	941	NAMUR PIN	AISI 316
317	INTERNAL FLANGE	S 275 JR EN 10025	951	DOWEL	8.8 EN 898/1
318	EXTERNAL FLANGE	S 275 JR EN 10025	952	DOWEL	8.8 EN 898/1
319	PIN	X20Cr13 EN 10088	953	SCREW	8.8 EN 898/1
320	HANDWHEEL	E 235 SR EN 10305/1			

● STANDARD SPARE PARTS

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING WITH MANUAL HYDRAULIC PUMP

TYPE RSPH - RCPH



ACTUATOR DIMENSIONS (mm)

	B	C	E	H1	H2	I	K	L	M	N	O	Q	S	Y	g
RSPH 2500/...	490	355	75	55	45	240	170	60	180	470	130	180	130	150	½ NPT
RCPH 2500/...															
RSPH 4500/...	610	465	110	55	45	295	155	70	220	560	155	255	170	170	½ NPT
RCPH 4500/...															
RSPH 7500/...	740	610	130	55	45	385	235	80	250	680	185	325	225	220	¾ NPT
RCPH 7500/...															

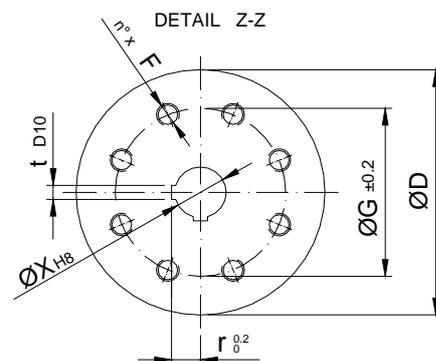
FLANGE DIMENSIONS (mm)

	D	n° x F	G	X	r	t	ISO	ON REQUEST			
								MIN.	MAX.	Xmin	Xmax
RSPH 2500/...	415	8 x M 20	298	90	50,4	25	F 30	F 25	F 35	65	100
RCPH 2500/...											
RSPH 4500/...	475	8 x M 30	356	120	67,4	32	F 35	F 30	F 40	90	130
RCPH 4500/...											
RSPH 7500/...	560	8 x M 36	406	150	83,4	36	F 40	F 35	F 48	145	160
RCPH 7500/...											

CYLINDER DIAMETER (mm)

TYPE OF CYLINDER	420	500	520	600	620	700	800	900
DIMENSION "W"	540	590	640	695	740	805	930	1050

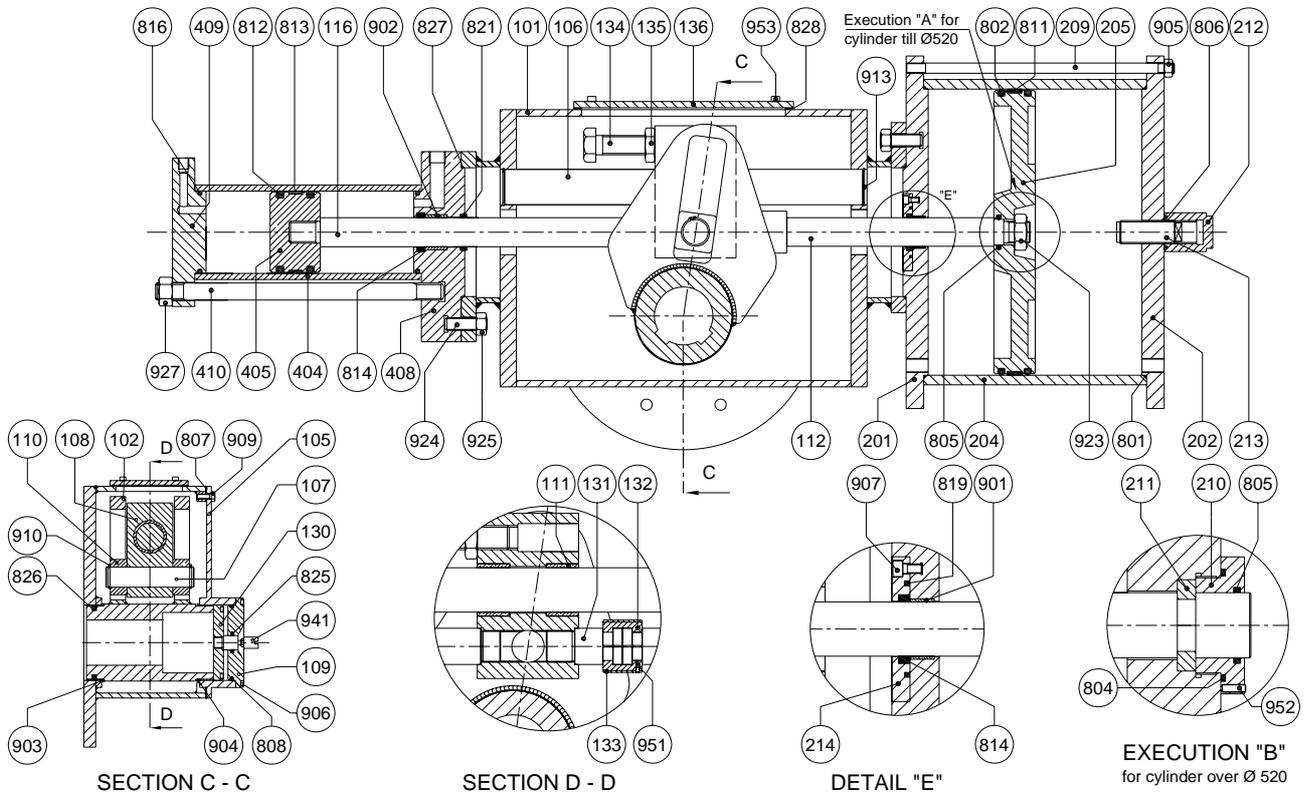
"b" - TO BE DEFINED
 "H1" - STANDARD INDEX
 "H2" - MOUNTING KIT ACCORDING TO VDI-VDE 3845 (ON REQUEST)
 "P" - BRACKET ACCORDING TO CUSTOMER REQUIREMENT (ON REQUEST)



PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING WITH MANUAL HYDRAULIC PUMP

TYPE RSPH - RCPH



POS.	DESCRIPTION	MATERIAL	POS.	DESCRIPTION	MATERIAL
101	HOUSING	S 275 JR EN 10025	● 802	O-RING	N.B.R.
102	LINK	S 275 JR EN 10025	● 805	O-RING	N.B.R.
106	CHROM. SHAFT	42CrMo4 EN 10083/1	● 804	O-RING	N.B.R.
107	PIN	42CrMo4 EN 10083/1	● 806	O-RING	N.B.R.
108	LINK JOINT	S 275 JR EN 10025	● 807	COVER GASKET	N.B.R.
109	COVER	S 275 JR EN 10025	● 808	O-RING	N.B.R.
110	SLIDING RING	BzAl EN 1982	● 811	PISTON DRIVE	PTFE+GRAPHITE
111	BUSHING	STEEL/BRONZE/TEFLON	● 812	O-RING	POLYURETHANE
112	CHROM. SHAFT	42CrMo4 EN 10083/1	● 813	PISTON DRIVE	PTFE+GRAPHITE
116	CHROM. SHAFT	42CrMo4 EN 10083/1	● 814	LIP GASKET	POLYURETHANE
130	LINK CAP	S 275 JR EN 10025	● 816	O-RING	N.B.R.
131	INTERMEDIATE SHAFT	42CrMo4 EN 10083/1	● 819	O-RING	N.B.R.
132	LINK	42CrMo4 EN 10083/1	● 821	WIPER RING	N.B.R.
133	TUBE	E 235 SR EN 10305/1	● 825	O-RING	N.B.R.
134	STOP SCREW	8.8 EN 898/1	● 826	O-RING	N.B.R.
135	BLOCK NUT	6 S EN 20898/2	● 827	O-RING	N.B.R.
136	COVER	S 275 JR EN 10025	● 828	GASKET	N.B.R.
201	HEAD	P 355 NH EN 10028/3	901	BUSHING	STEEL/BRONZE/TEFLON
202	HEAD	P 355 NH EN 10028/3	902	BUSHING	STEEL/BRONZE/TEFLON
204	CYLINDER (int. chr. plated)	E 355 EN 10297/1	903	BUSHING	STEEL/BRONZE/TEFLON
205	PISTON (till cylinder Ø 420)	SgAlCu3 EN 1706	904	BUSHING	STEEL/BRONZE/TEFLON
205	PISTON (over cylinder Ø 420)	S 275 JR EN 10025	905	NUT	6 S EN 20898/2
209	STAY BOLT	42 CrMo4 EN 10269	906	SCREW	8.8 EN 898/1
210	RING NUT	42 CrMo4 EN 10083/1	907	SCREW	8.8 EN 898/1
211	HALF RING	42 CrMo4 EN 10083/1	909	SCREW	8.8 EN 898/1
212	CAP	S 275 JR EN 10025	910	SEEGER	ALLOY STEEL
213	STOP SCREW	C 40 EN 10083/2	923	NUT	6 S EN 20898/2
214	FLANGE	C 40 EN 10083/2	924	PIN	8.8 EN 898/1
404	CYLINDER (int. chr. plated)	E 355 SR EN 10297/1	925	NUT	6 S EN 20898/2
405	PISTON	S 275 JR EN 10025	927	NUT	6 S EN 20898/2
408	FLANGE	S 275 JR EN 10025	941	NAMUR PIN	AISI 316
409	FLANGE	S 275 JR EN 10025	951	DOWEL	8.8 EN 898/1
410	STAY BOLT	C 40 EN 10083/2	952	DOWEL	8.8 EN 898/1
● 801	O-RING	N.B.R.	953	SCREW	8.8 EN 898/1

● STANDARD SPARE PARTS

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING

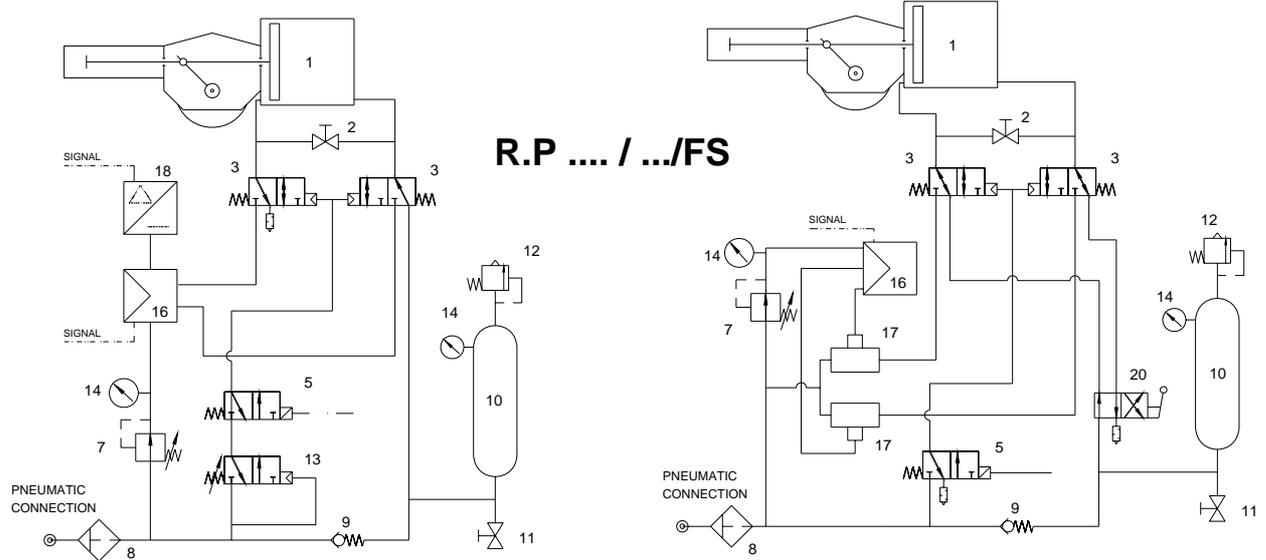
SERIES RJP - RSP - RWP - RCP

ACTUATOR WITH AIR TANK AND FAIL-SAFE CIRCUIT

TYPICAL EXECUTION FOR MODULATING VALVE

FOR ONE EMERGENCY STROKE

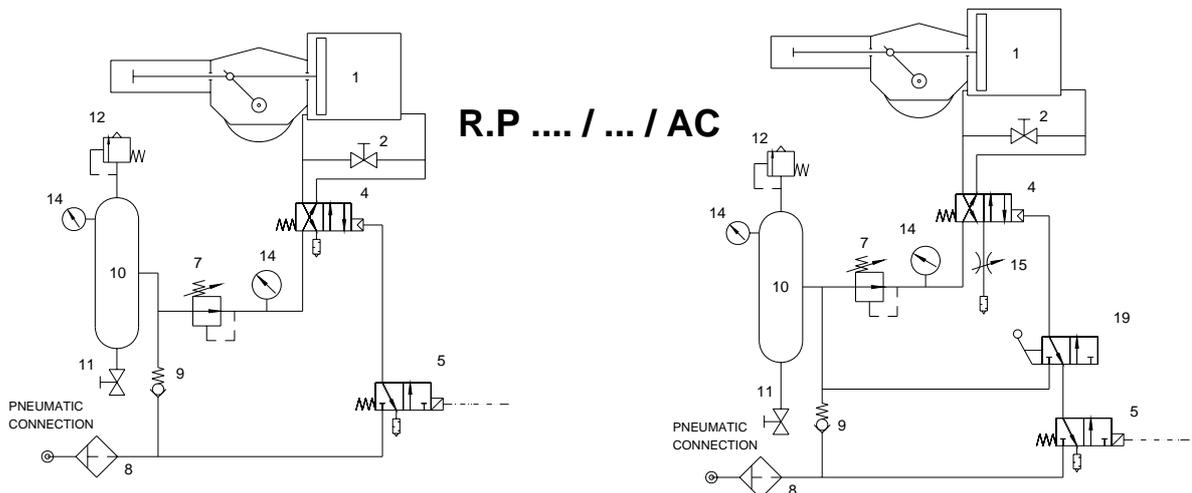
FOR MORE EMERGENCY STROKES



TYPICAL EXECUTION FOR ON-OFF VALVE

FOR ONE EMERGENCY STROKE

FOR MORE EMERGENCY STROKES



- 1. ACTUATOR
- 2. BY-PASS
- 3. 3/2 PNEUM. DISTRIBUTOR
- 4. 4/2 PNEUM. DISTRIBUTOR
- 5. 3/2 SOLENOID VALVE
- 6. 4/2 SOLENOID VALVE
- 7. PRESSURE REDUCTOR

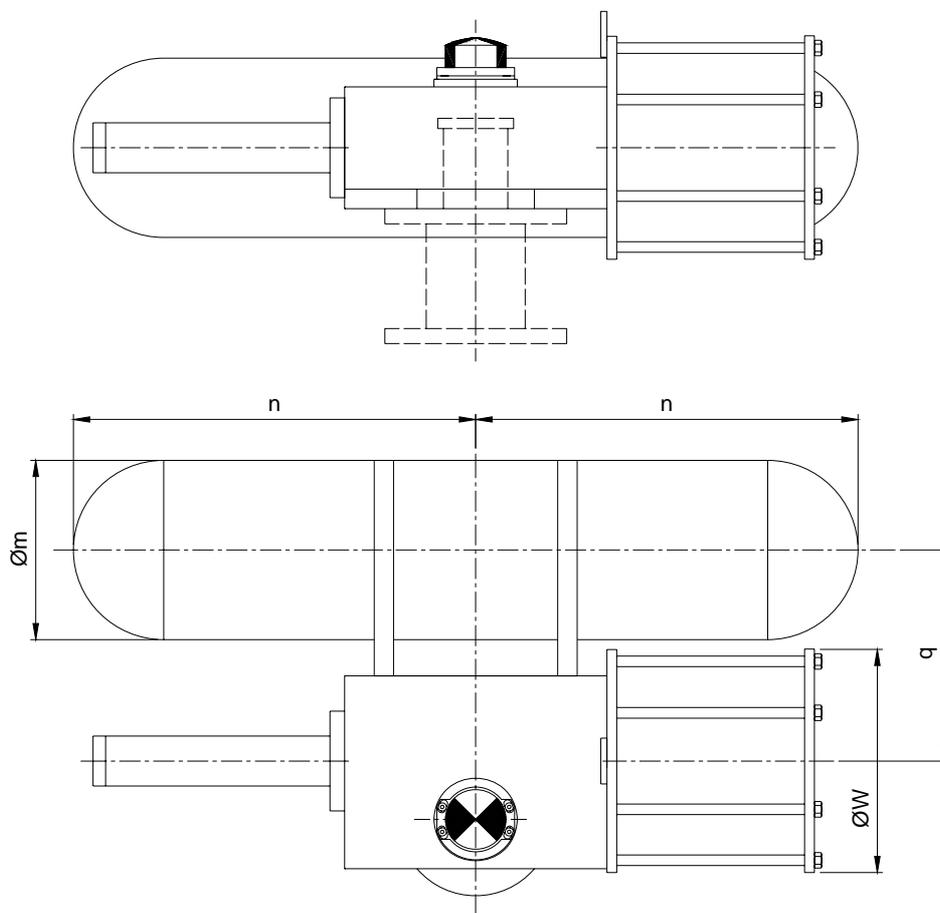
- 8. FILTER
- 9. NON RETURN VALVE
- 10. AIR TANK
- 11. DISCHARGE PLUG
- 12. RELIEF VALVE
- 13. 3/2 PRESSURE SWITCH
- 14. GAUGE

- 15. FLOW REGULATOR
- 16. POSITIONER
- 17. BOOSTER
- 18. POSITION TRANSMITTER
- 19. 3/2 MANUAL DISTRIBUTOR
- 20. 4/2 MANUAL DISTRIBUTOR

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

DOUBLE ACTING WITH AIR TANK

SERIES RJP - RSP - RWP - RCP



ACTUATOR
DIMENSIONS SEE SPECIFIC TYPE PAGE

AIR TANK DIMENSION

AIR TANK TYPE	CAPACITY Lt	DIMENSIONS (mm)			WEIGHT kg
		Ø m	n	q	
24	24	240	310		12
50	50	300	415	SEE	25
100	92	350	560		35
150	150	450	620	FORMULA	55
200	195	450	700		60
300	270	500	760	ABOVE	80
500	470	600	940		140

- ◆ FOR LARGER SIZE VERTICAL EXTEND ALONE EXECUTION (NOT ASSEMBLED TO THE ACTUATOR)
- ◆ AIR TANK IN WELDED STEEL ACCORDING TO EUROPEAN RULE CEE 87/404 EQUIPPED WITH CERTIFIED SAFETY RELIEF VALVE DN 1/4" (DIFFERENT CERTIFICATION ON REQUEST)
- ◆ DIMENSION "W" SEE THE SPECIFIC ACTUATOR PAGE
- ◆ DIMENSION "q"

$$q = \frac{\text{Ø m}}{2} + \frac{\text{"W"}}{2} + 60 \text{ mm}$$

PNEUMATIC QUARTER TURN ACTUATOR SCOTCH-YOKE EXECUTION

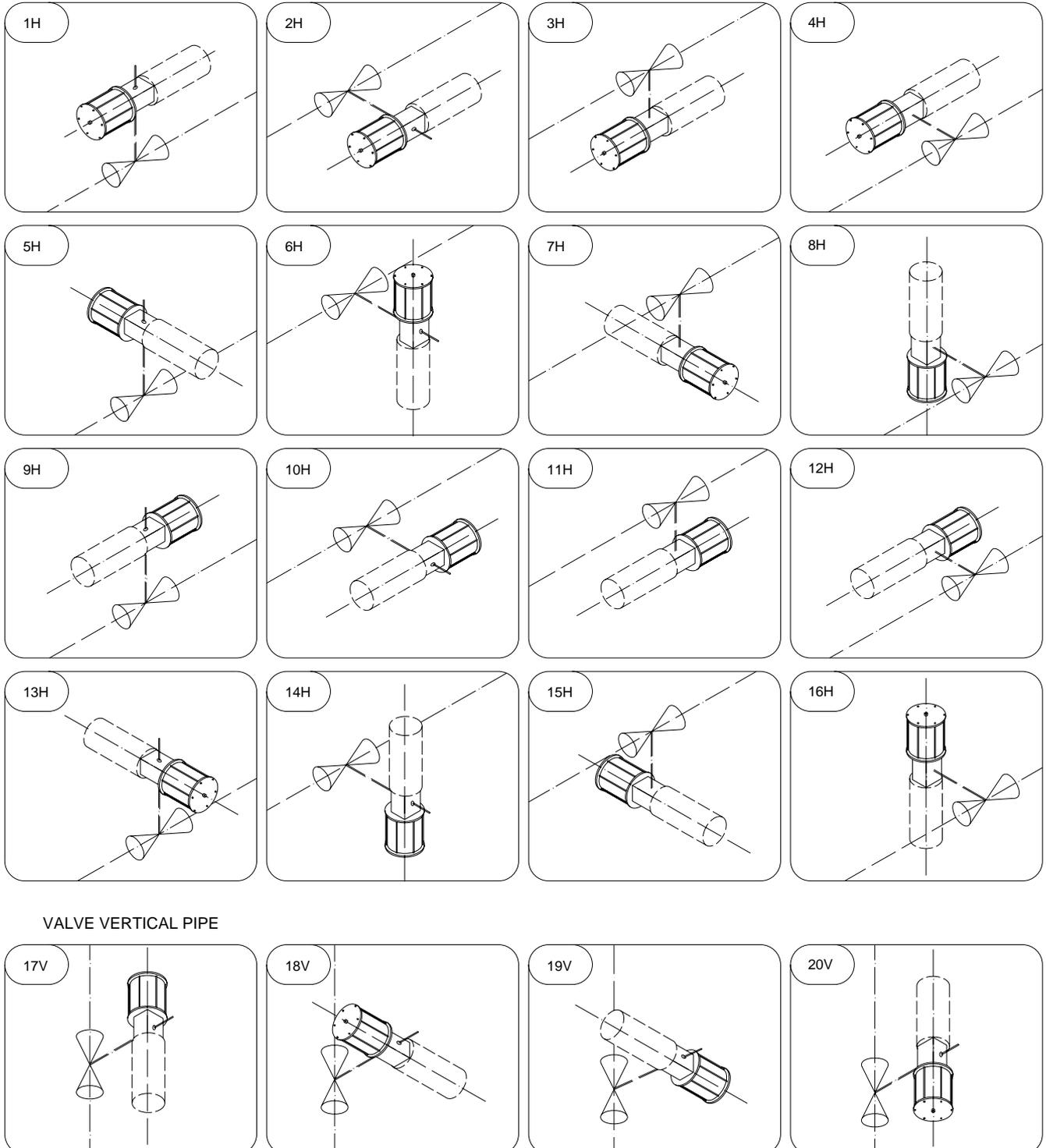
VALVE - ACTUATOR COUPLING

VALVE BOTTOM
ACTUATOR ABOVE

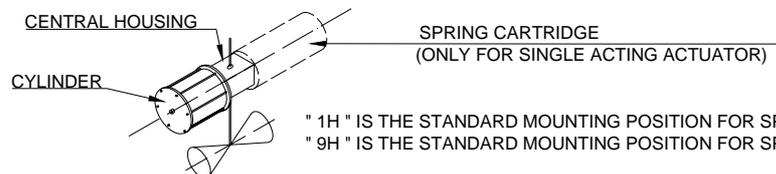
VALVE LEFT SIDE

VALVE ABOVE
ACTUATOR BOTTOM

VALVE RIGHT SIDE



VALVE VERTICAL PIPE



" 1H " IS THE STANDARD MOUNTING POSITION FOR SPRING TO OPEN.
" 9H " IS THE STANDARD MOUNTING POSITION FOR SPRING TO CLOSE.