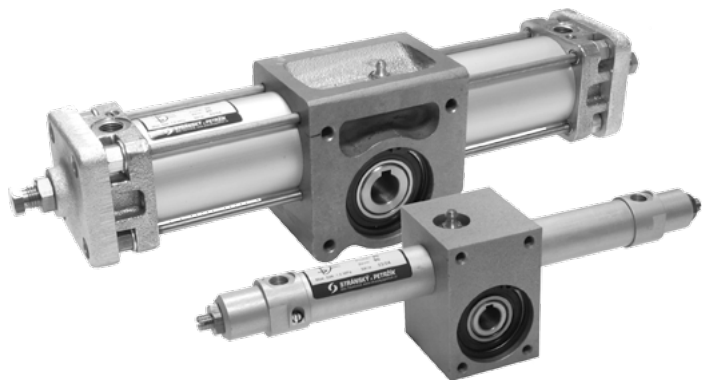


# DOUBLE ACTING ROTARY ACTUATORS



Linear piston movement is converted to rotary motion by rack and pinion. The cylinders can work in higher temperatures by request. Fully adjustable cushioning at end of stroke is available.

Working pressure	0,6 MPa
Min. pressure	0,15 MPa
Max. pressure	1,0 MPa
Temp. range	-20°C to +80°C *
End position regulation	±5°
Working medium	modified compressed air

\*) values are valid for standard gaskets

Piston diameter [mm]	20	25	32	40	50	63	80	100	125	160
Torque at 0.6 MPa [Nm]	3.5	5.5	8.7	13.6	27	42	108	173	397	651
Connection	G1/8"	G1/8"	G1/8"	G1/8"	G1/4"	G3/8"	G3/8"	G1/2"	G1/2"	G3/4"
Length of adjustable cushioning [mm]	15	15	18	20	20	22	25	25	25	45
Max. angle of pinion rotation [°]	360	360	360	360	360	360	360	360	360	360
Weight 0 mm stroke [kg]	1.02	1.02	1.70	2.39	4.10	4.86	12.40	13.95	31.80	48.40
Weight add per 10° pinion rotation [kg]	0.013	0.009	0.008	0.010	0.022	0.023	0.083	0.144	0.255	0.321

## Order codes

15101 61 00 050 0180

Type		Equipment		Options		Piston diameter		Angle / repair kit	
15201	rotary actuator, double acting, piston dia. 20 to 40 mm	01	w/o cushioning, w/o magnet	00	without options	020	20 mm	xxxx	angle of pinion rotation in degrees
15101	rotary actuator, double acting, piston dia. 50 to 160 mm	11	w/o cushioning, with magnet	11	Viton® gaskets (up to 180°C)	025	25 mm	0090	angle 90°
		51	with cushioning, w/o magnet	For more options regarding materials or dimensions, please contact our technical dept.		032	32 mm	0180	angle 180°
		61	with cushioning, with magnet			040	40 mm	0270	angle 270°
						050	50 mm	0360	angle 360°
						063	63 mm	9999	repair kit
						080	80 mm		
						100	100 mm		
						125	125 mm		
						160	160 mm		



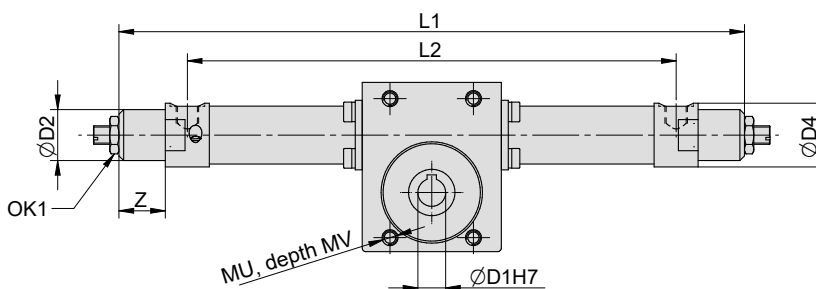
In case of proximity sensing request, please use switches series KT-50 or KT-21 - see page 3-2 for details

## Construction / materials

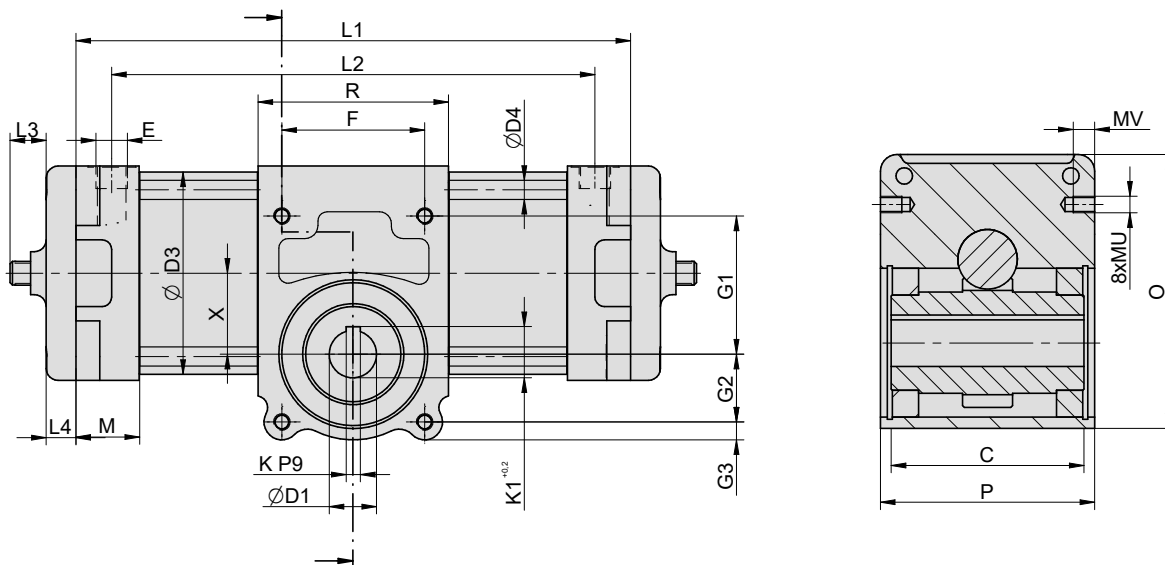
- caps: piston dia. 20 to 40: anodized dural, piston dia. 50 and more: aluminium casting
- gear body: anodized dural
- body: drawn dural tube, anodized
- regulation flange: piston dia. 20 to 40: none, piston dia. 50 and more: zinc plated cast iron
- rack and pinion: steel 1.0060
- pinion is mounted between ball bearings

**Dimensions**

Piston diameter 20 to 40 mm:



Piston diameter 50 mm and more:



Ø	C	D1	D2	D3	D4	E	F	G1	G2	G3	K	K1	L3 max.	L4	M	MU	MV	O	OK1	P	R	X	Z
20	42	12	22	25	27.5	G1/8 <sup>cc</sup>	36	40.5	19.5	6	4	13.6	9	—	19	M6	8	73	14	54	60	24.75	20
25	42	12	24	30	32	G1/8 <sup>cc</sup>	36	40.5	19.5	6	4	13.6	9	—	22	M6	8	73	14	54	60	24.75	14
32	42	12	30	36	40	G1/8 <sup>cc</sup>	36	40.5	19.5	6	4	13.6	10	—	22	M6	8	73	14	54	60	24.75	21
40	42	12	35	45	50	G1/8 <sup>cc</sup>	36	40.5	19.5	6	4	13.6	7	—	22.5	M6	8	73	14	54	60	24.75	14.5
50	60	18	—	55	8	G1/4 <sup>cc</sup>	75	44.5	22.5	10.5	6	20.5	32	14	30	M8	12	100	—	73	96	32.5	—
63	60	18	—	68	8	G3/8 <sup>cc</sup>	75	44.5	22.5	8.5	6	20.5	32	14	30	M8	12	100	—	73	96	32.5	—
80	92	24	—	86	10	G3/8 <sup>cc</sup>	85	73	40	13.5	8	27	34	15	30	M10	13	161	—	111	116	52	—
100	92	24	—	106	8.85	G1/2 <sup>cc</sup>	85	75	40	13.5	8	27	38	15	36	M12	15	161	—	111	116	52	—
125	160	40	—	132	12	G1/2 <sup>cc</sup>	120	116	57	15	12	43.1	34	25	40	M14	18	230	—	180	160	70	—
160	160	40	—	167	16	G3/4 <sup>cc</sup>	120	116	57	15	12	43.1	42	25	50	M14	18	230	—	180	160	70	—

Ø — Angle	20		25		32		40		50		63		80		100		125		160	
	L1	L2	L1	L2	L1	L2	L1	L2	L1	L2	L1	L2	L1	L2	L1	L2	L1	L2	L1	L2
90°	270	211	272	222	297	233	291	239	326	292	351	319	397	365	423	387	517	473	555	505
180°	329	270	330	280	356	292	350	298	397	363	422	390	510	478	536	500	674	630	712	662
270°	388	329	389	339	414	350	409	357	468	434	493	461	623	591	649	613	832	788	870	820
360°	447	388	448	398	474	410	468	416	538	504	563	531	736	704	758	726	988	944	1026	976