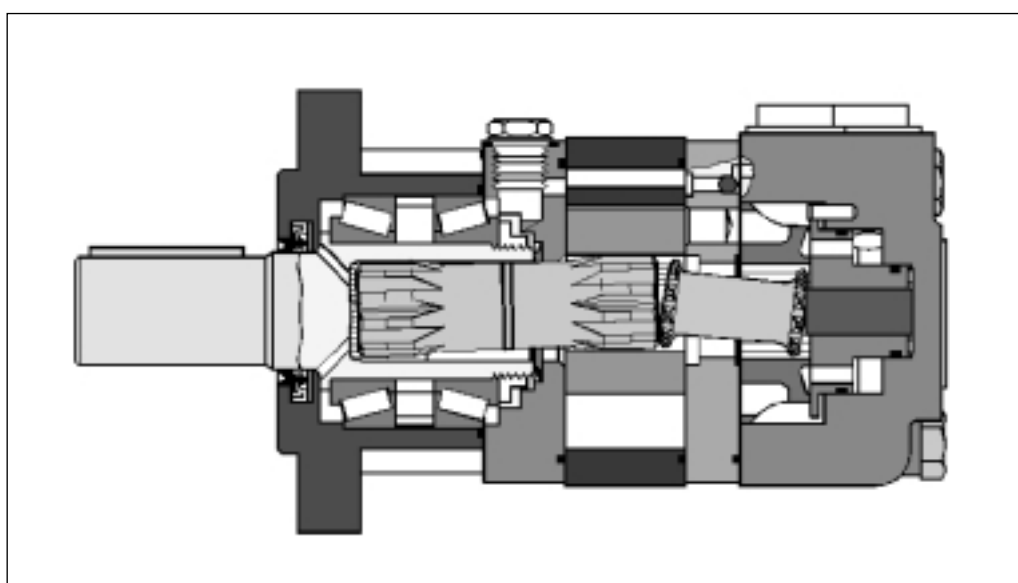


Hydraulic motor type OMS Series 3

DKMH.PN.130.A1.02 is new



Introduction

Sauer-Danfoss now introduces the new hydraulic motor, type OMS series 3. Constructional changes have enabled us to optimise these motors in several important areas:

- Improved output performance
(higher efficiency at high pressures)
- Uprated values
(higher permissible pressure and torque)
- Improved endurance
(longer life time under high load)

Date of introduction

The new OMS series 3 motors will be available as of August 2000.

Code numbers and table of conversion (metric standard version)

Standard flange

Motor type		OMS 80	OMS 100	OMS 125	OMS 160	OMS 200	OMS 250	OMS 315	OMS 400
Cylindrical shaft	old	151F0200	151F0201	151F0202	151F0203	151F0204	151F0205	151F0206	151F0305
	new	151F0500	151F0501	151F0502	151F0503	151F0504	151F0505	151F0506	151F0605
Splined shaft	old	151F0207	151F0208	151F0209	151F0210	151F0211	151F0212	151F0213	
	new	151F0507	151F0508	151F0509	151F0510	151F0511	151F0512	151F0513	
Tapered shaft	old	151F0214	151F0215	151F0216	151F0217	151F0218	151F0219	151F0220	
	new	151F0514	151F0515	151F0516	151F0517	151F0518	151F0519	151F0520	
PTO-shaft	old	151F0260	151F0261	151F0262	151F0263	151F0264	151F0265	151F0266	
	new	151F0560	151F0561	151F0562	151F0563	151F0564	151F0565	151F0566	

Special flange

Motor type		OMS 80	OMS 100	OMS 125	OMS 160	OMS 200	OMS 250	OMS 315	OMS 400
Splined shaft	old	151F0242	151F0243	151F0244	151F0245	151F0246	151F0247	151F0248	
	new	151F0542	151F0543	151F0544	151F0545	151F0546	151F0547	151F0548	

Wheel motor

Motor type		OMSW 80	OMSW 100	OMSW 125	OMSW 160	OMSW 200	OMSW 250	OMSW315	OMSW 400
Cylindrical shaft	old	151F0221	151F0222	151F0223	151F0224	151F0225	151F0226	151F0227	151F0310
	new	151F0521	151F0522	151F0523	151F0524	151F0525	151F0526	151F0527	151F0610
Tapered shaft	old	151F0228	151F0229	151F0230	151F0231	151F0232	151F0233	151F0234	151F0309
	new	151F0528	151F0529	151F0530	151F0531	151F0532	151F0533	151F0534	151F0609

Short motor

Motor type		OMSS 80	OMSS 100	OMSS 125	OMSS 160	OMSS 200	OMSS 250	OMSS 315	OMSS 400
No output shaft	old	151F0235	151F0236	151F0237	151F0238	151F0239	151F0240	151F0241	151F0308
	new	151F0535	151F0536	151F0537	151F0538	151F0539	151F0540	151F0541	151F0608

Motor with drum brake

Motor type		OMSB 80	OMSB 100	OMSB 125	OMSB 160	OMSB 200	OMSB 250	OMSB 315	OMSB 400
Brake lever, left	old				151F0068	151F0069	151F0070	151F0071	
	new				151F0668	151F0669	151F0670	151F0671	
Brake lever, right	old				151F0075	151F0076	151F0077	151F0078	
	new				151F0675	151F0676	151F0677	151F0678	

Technical data

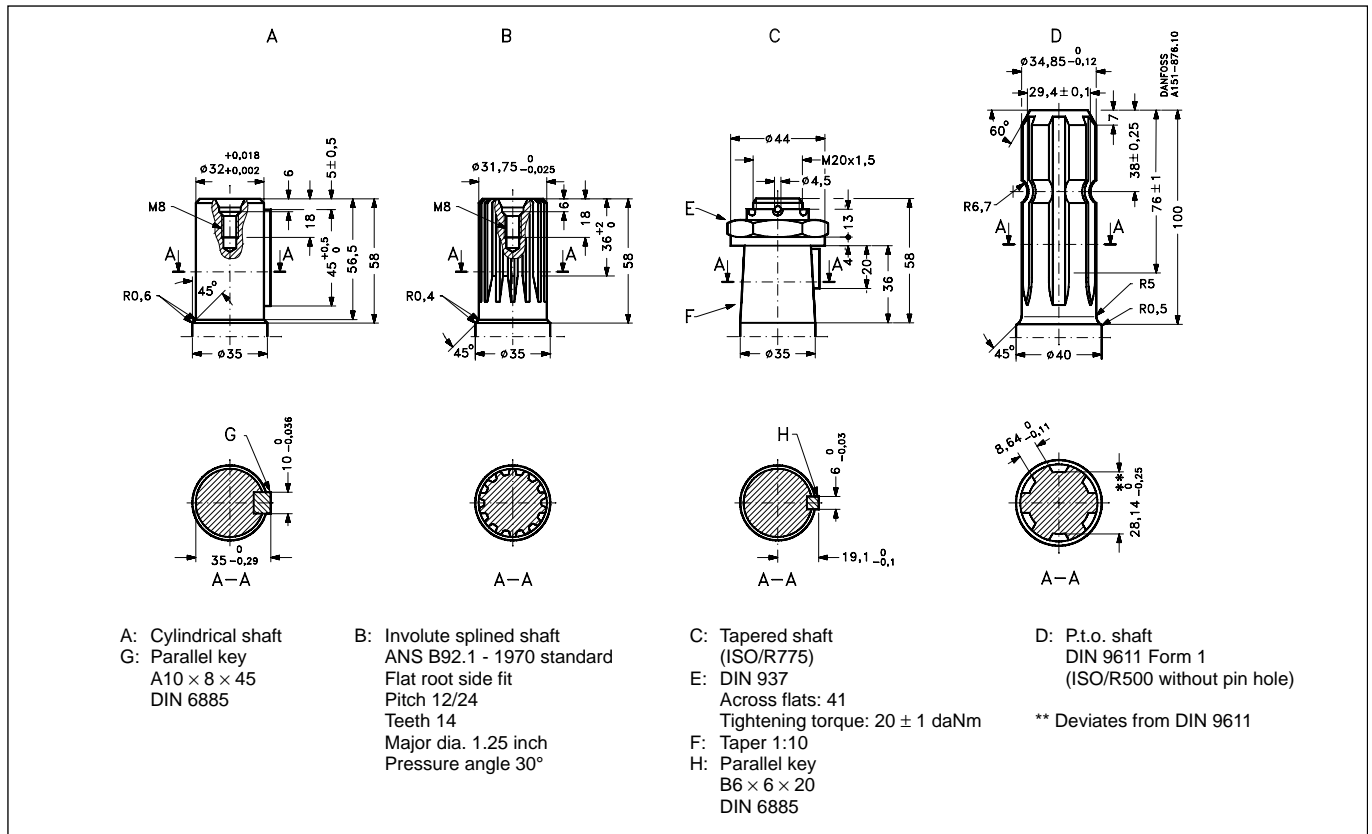
Motor size		OMS 80	OMS 100	OMS 125	OMS 160	OMS 200	OMS 250	OMS 315	OMS 400	
Geometrical displacement	(cm ³ /rev.)	80,5	100	125,7	159,7	200	250	314,9	393	
Max. speed	(min ⁻¹)	cont.	810	750	600	470	375	300	240	190
		int. 1)	1000	900	720	560	450	360	285	230
Max. torque	(daNm)	cont.	20	25	32	36	46	50	63	67
		int.1)	24	30	38	48	60	63	79	79
		peak ²⁾	26	32	40	51	65	72	90	98
Max. output	(kW)	cont.	16	17,5	17,5	16	14	12,5	11,5	10,5
		int.1)	19	21	21	21	17,5	15	13,5	12,5
Max. pressure drop	(bar)	cont.	175	175	175	160	160	140	140	120
		int.1)	210	210	210	210	210	175	175	140
		peak ²⁾	225	225	225	225	225	200	200	175
Max. oil flow	(l/min)	cont.	65	75	75	75	75	75	75	75
		int.1)	80	90	90	90	90	90	90	90
Max. starting pressure with unloaded shaft	(bar)	12	10	10	8	8	8	8	8	
Min. starting torque	(daNm)	at max. pressure cont.	15,5	19,5	24,5	28,5	35,5	39	49	53
		at max. pressure int.1)	19	23,5	30	37,5	47	49	61	61
Min. speed ³⁾	(min ⁻¹)	10	10	8	8	6	6	5	5	
Max. inlet pressure	(bar)	cont.	210	210	210	210	210	210	210	210
		int.1)	250	250	250	250	250	250	250	250
		peak ²⁾	300	300	300	300	300	300	300	300
Max. return pressure with drain line	(bar)	cont.	140	140	140	140	140	140	140	140
		int.1)	175	175	175	175	175	175	175	175
		peaks ²⁾	210	210	210	210	210	210	210	210

1) Intermittent operation: the permissible values may occur for max. 10% of every minute.

2) Peak load: The permissible values may occur for max. 1% of every minute.

3) Operation at lower speeds may be slightly less smooth.

Shaft versions



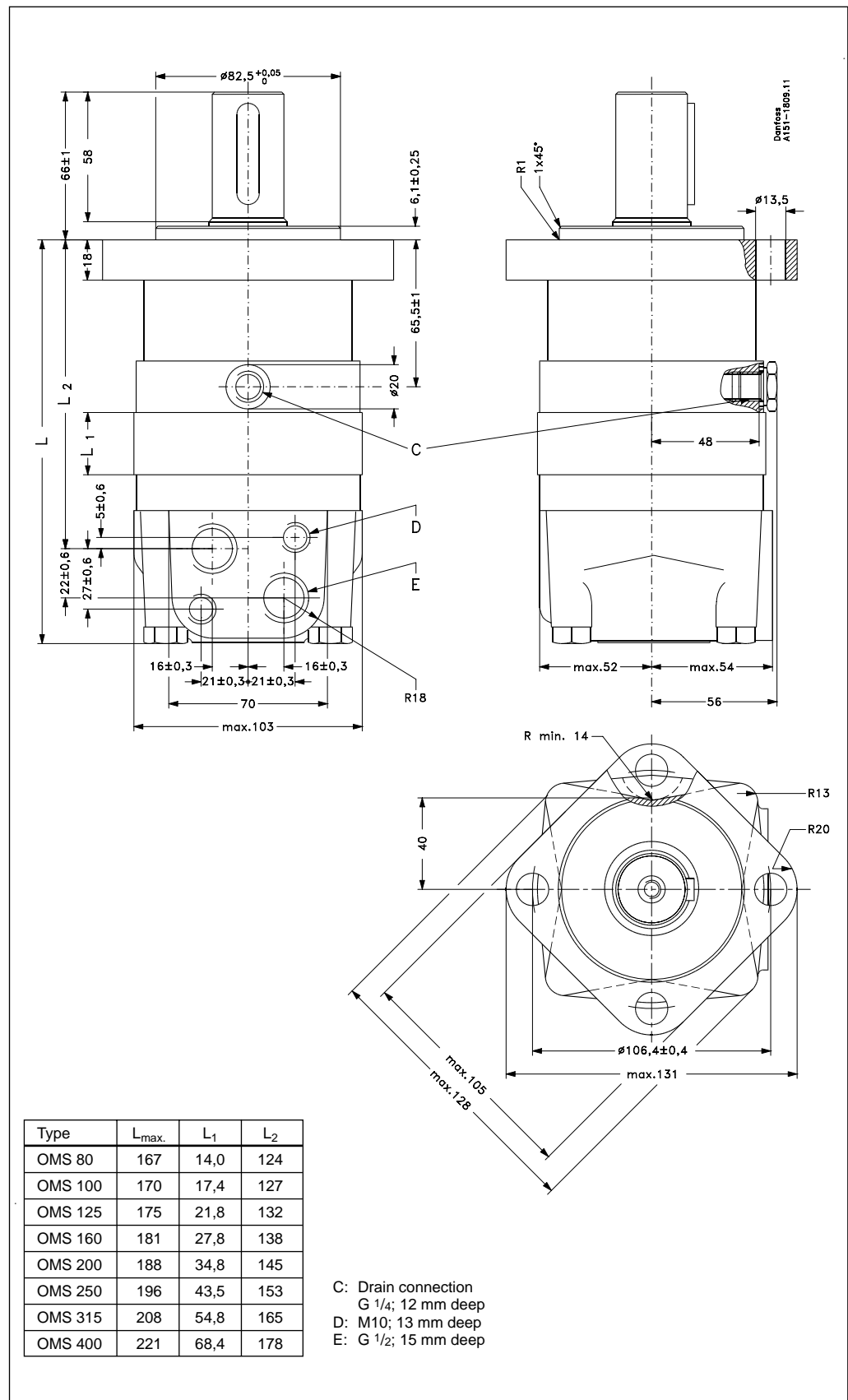
Dimensions

In relation to OMS series 2, the OMS series 3 have the following dimensional changes:

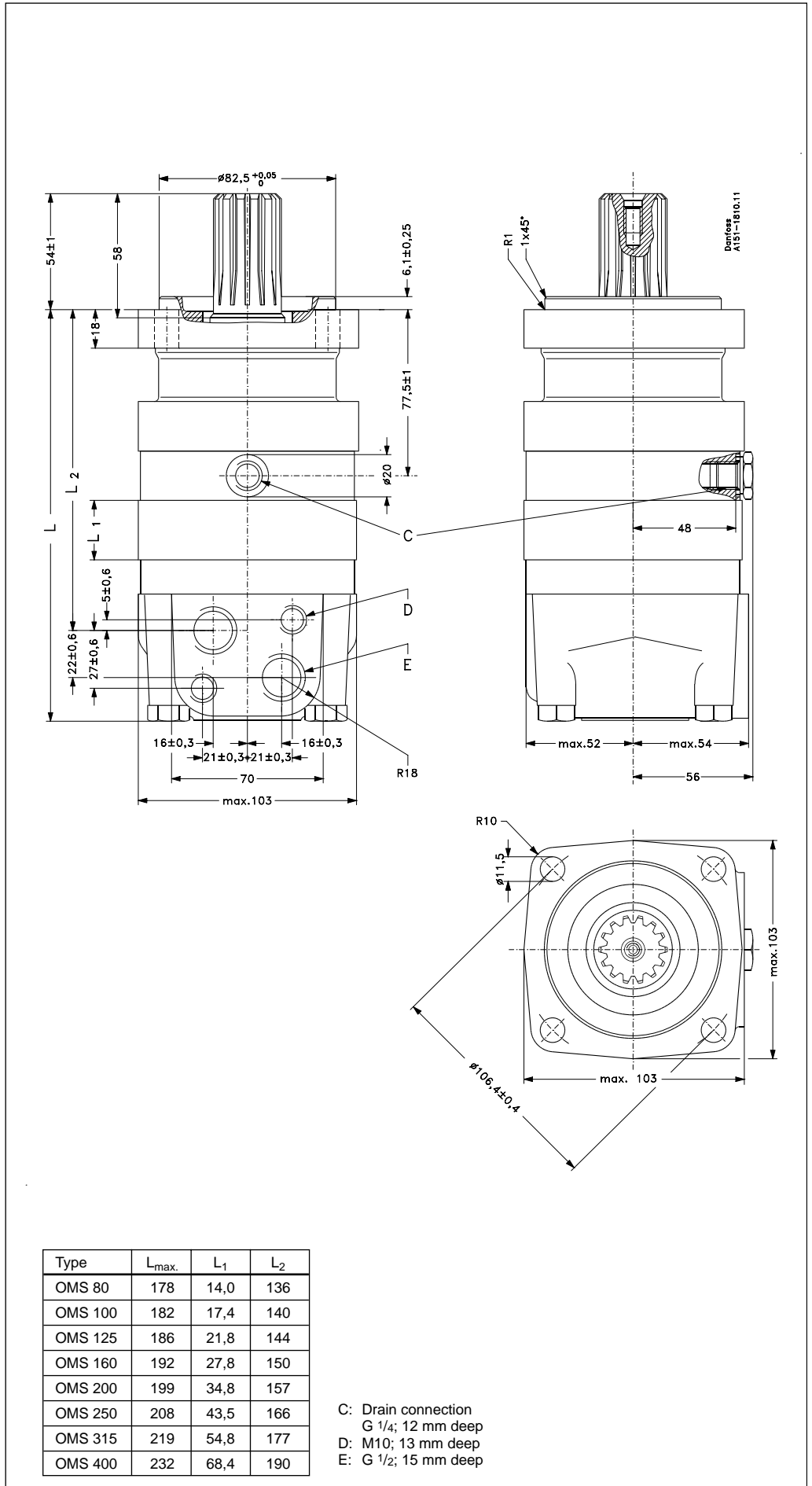
- Motor 2 mm longer, measured from the mounting flange.

• A- and B-ports moved 3 mm backwards towards the rear of the motor.

- Port face for A- and B-ports 1 mm higher measured from the centre line of the motor.



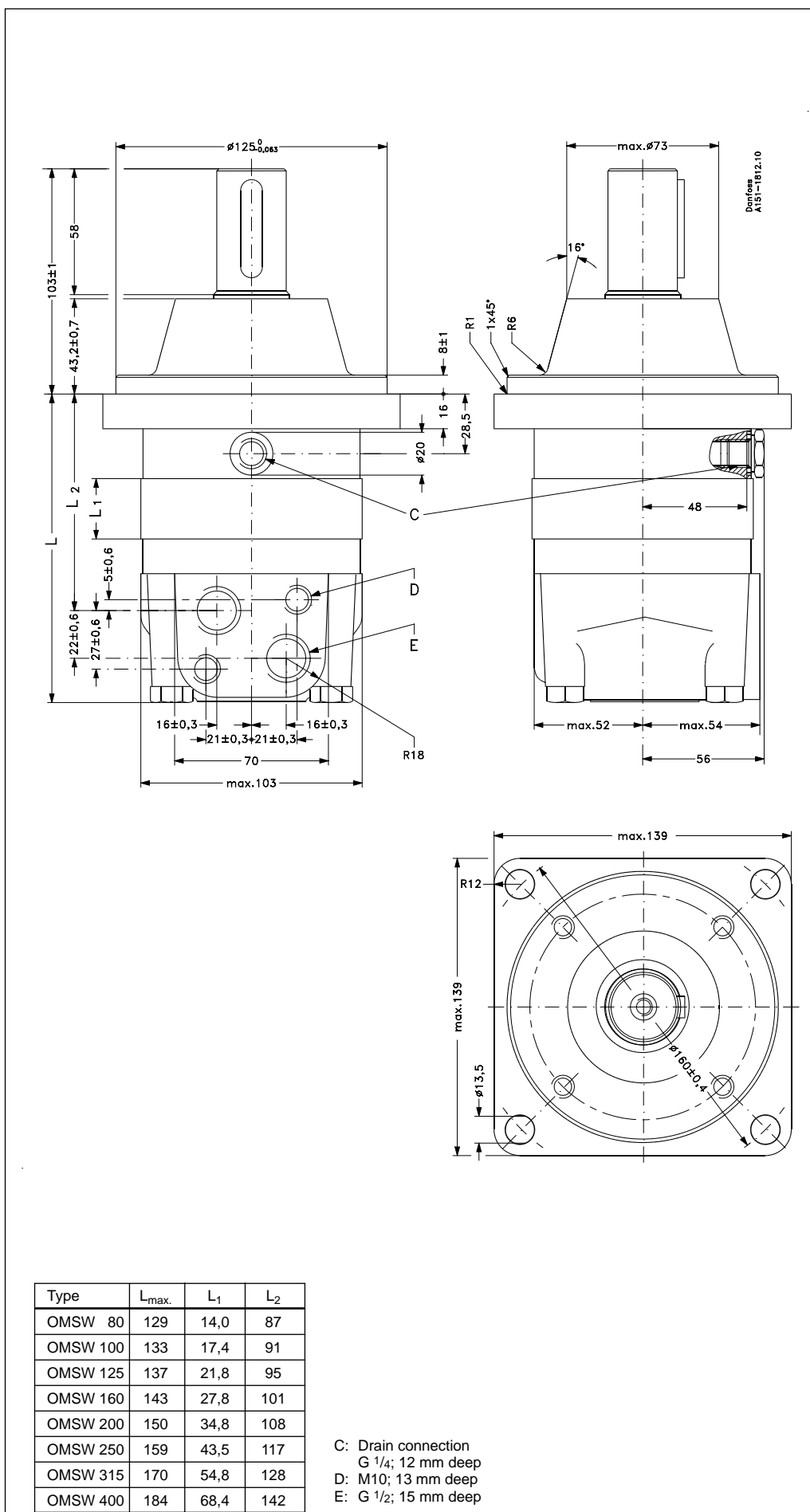
Dimensions



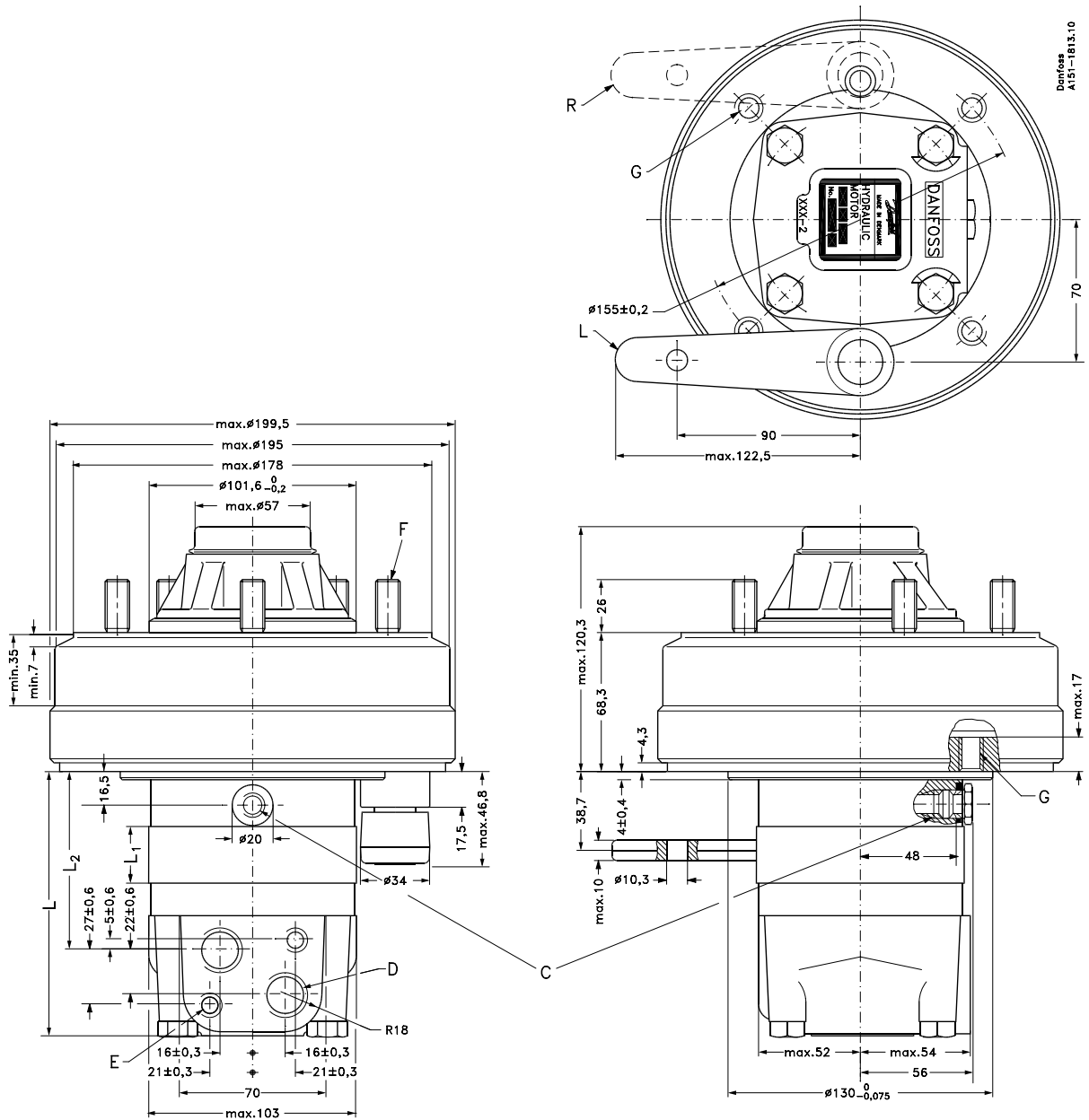
Type	L _{max.}	L ₁	L ₂
OMS 80	178	14,0	136
OMS 100	182	17,4	140
OMS 125	186	21,8	144
OMS 160	192	27,8	150
OMS 200	199	34,8	157
OMS 250	208	43,5	166
OMS 315	219	54,8	177
OMS 400	232	68,4	190

C: Drain connection
 G 1/4; 12 mm deep
 D: M10; 13 mm deep
 E: G 1/2; 15 mm deep

Dimensions



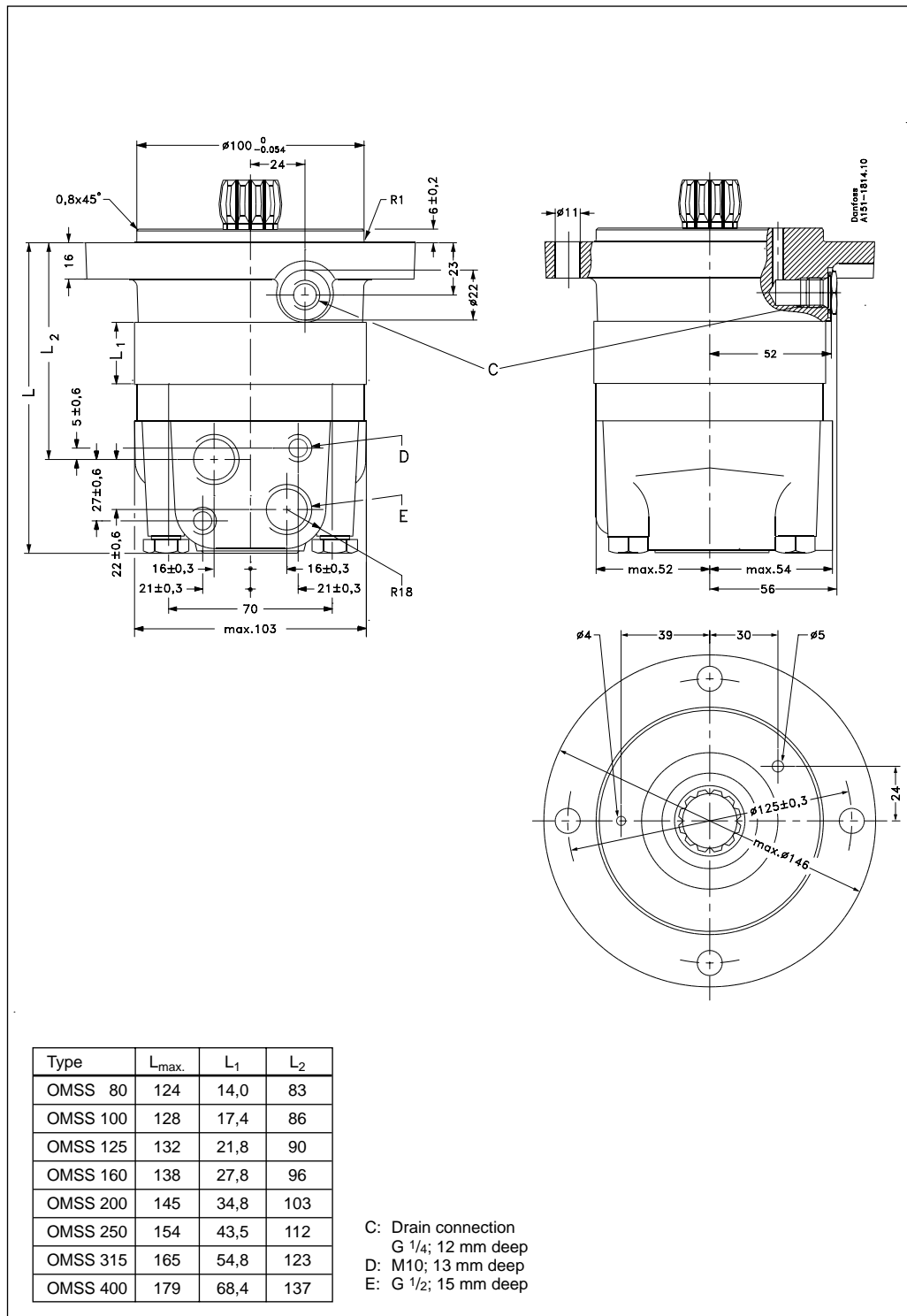
Dimensions



Type	L _{max.}	L ₁	L ₂
OMSB 80	118	14,0	75
OMSB 100	121	17,4	78
OMSB 125	125	21,8	83
OMSB 160	131	27,8	89
OMSB 200	138	34,8	96
OMSB 250	147	43,5	105
OMSB 315	158	54,8	116
OMSB 400	171	68,4	129

- C: Drain connection
- G 1/4; 12 mm deep
- D: G 1/2; 15 mm deep
- E: M10; 13 mm deep (4 off)
- F: Wheel bolt M12 × 1,5 (5 off)
- G: M12; 17 mm deep (4 off)
- H: Inspection hole for checking brake lining.
Across flats: 3/16 inch
- L: Location of brake lever on version "Left"
- R: Location of brake lever on version "Right"

Dimensions



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