OMR technical data

Technical data for OMR with 25 mm and 1 in cylindrical shaft

Type			OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR
Motor size			**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**375**
Geometric displacement	cm^3		51.6	80.3	99.8	125.7	159.6	199.8	249.3	315.7	372.6
	[inch]		[3.16]	[4.91]	[6.11]	[7.69]	[9.77]	[12.23]	[15.26]	[19.32]	[22.80]
Max. speed	min^{-1}	cont.	775	750	600	475	375	300	240	190	160
	[rpm]	int.[1]	970	940	750	600	470	375	300	240	200
Max. torque	N•m [lbf•in]	cont.	100	195	240	300	300	300	300	300	300
			[890]	1730]	[2120]	[2660]	[2660]	[2660]	[2660]	[2660]	[2660]
		int.[1]	130	220	280	340	390	390	380	420	430
			[1150]	[1960]	[2480]	[3010]	[3450]	[3450]	[3360]	[3720]	[3810]
Max. output	kW [hp]	cont.	7.0	12.5	13.0	12.5	10.0	8.0	6.0	5.0	4.0
			[9.4]	[16.8]	[17.4]	[16.8]	[13.4]	[10.7]	[8.1]	[6.7]	[5.4]
		int.[1]	8.5	15.0	15.0	14.5	12.5	10.0	8.0	6.5	6.0
			[11.4]	[20.1]	[20.1]	[19.4]	[16.8]	[13.4]	[10.7]	[8.7]	[8.1]
Max. pressure drop	bar [psi]	cont.	140	175	175	175	130	110	80	70	55
			[2030]	[2540]	[2540]	[2540]	[1890]	[1600]	[1160]	[1020]	[800]
		int.[1]	175	200	200	200	175	140	110	100	85
			[2540]	[2900]	[2900]	[2900]	[2540]	[2030]	[1600]	[1450]	[1230]
		peak[2]	225	225	225	225	225	225	200	150	130
			[3260]	[3260]	[3260]	[3260]	[3260]	[3260]	[2900]	[2180]	[1890]
Max. oil flow	l/min [US gal/min]	cont.	40	60	60	60	60	60	60	60	60
			[10.6]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]
		int.[1]	50	75	75	75	75	75	75	75	75
			[13.2]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
Max. starting pressure with unloaded shaft	bar		10	10	10	9	7	5	5	5	5
	[psi]		[145]	[145]	[145]	[130]	[100]	[75]	[75]	[75]	[75]
Min starting torque	at max. press drop cont. N•m [lbf•in]		80	150	200	250	240	260	240	260	240
			[710]	[1330]	[1770]	[2210]	[2120]	[2300]	[2120]	[2300]	[2120]
	at max. press.drop int.[1] N•m [lbf•in]		100	170	230	280	320	330	310	350	380
			[890]	[1510]	[2040]	[2480]	[2830]	[2920]	[2740]	[3100]	[3360]

[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.

Technical data for OMR with 1 in splined and 28.5 mm tapered shaft

Type			OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR
Motor size			**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**375**
Geometric displacement	cm^3		51.6	80.3	99.8	125.7	159.6	199.8	249.3	315.7	372.6
	[inch]		[3.16]	[4.91]	[6.11]	[7.69]	[9.77]	[12.23]	[15.26]	[19.32]	[22.80]
Max. speed	min^{-1}	cont.	775	750	600	475	375	300	240	190	160
	[rpm]	int.[1]	970	940	750	600	470	375	300	240	200
Max. torque	N•m [lbf•in]	cont.	100	195	240	300	360	360	360	360	360
			[890]	[1730]	[2120]	[2660]	[3190]	[3190]	[3190]	[3190]	[3190]
		int.[1]	130	220	280	340	430	440	470	470	460
			[1150]	[1950]	[2480]	[3010]	[3810]	[3890]	[4160]	[4160]	[4070]

OMR technical data

Type			OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR
Motor size			**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**375**
Max. output	kW [hp]	cont.	7.0	12.5	13.0	12.5	12.5	10.0	7.0	5.0	5.0
			[9.4]	[16.8]	[17.4]	[16.8]	[16.8]	[13.4]	[9.4]	[6.7]	[6.7]
		int.[1]	8.5	15.0	15.0	14.5	14.0	13.0	9.5	8.0	7.0
			[11.4]	[20.1]	[20.1]	[19.4]	[18.8]	[17.4]	[12.7]	[10.7]	[9.4]
Max. pressure drop	bar [psi]	cont.	140	175	175	175	165	130	100	85	70
			[2030]	[2540]	[2540]	[2540]	[2390]	[1890]	[1450]	[1230]	[1020]
		int.[1]	175	200	200	200	200	175	140	115	90
			[2540]	[2900]	[2900]	[2900]	[2900]	[2540]	[2030]	[1670]	[1310]
		peak[2]	225	225	225	225	225	225	200	150	130
			[3260]	[3260]	[3260]	[3260]	[3260]	[3260]	[2900]	[2180]	[1890]
Max. oil flow	l/min [US gal/min]	cont.	40	60	60	60	60	60	60	60	60
			[10.6]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]
		int.[1]	50	75	75	75	75	75	75	75	75
			[13.2]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
Max. starting pressure with unloaded shaft	bar		10	10	10	9	7	5	5	5	5
	[psi]		[145]	[145]	[145]	[130]	[100]	[75]	[75]	[75]	[75]
Min starting torque	at max. press drop cont. N•m [lbf•in]		80	150	200	250	300	300	290	315	300
			[710]	[1330]	[1770]	[2210]	[2660]	[2660]	[2570]	[2790]	[2660]
	at max. press.drop int.[1] N•m [lbf•in]		100	170	230	280	350	400	400	400	380
			[890]	[1510]	[2040]	[2480]	[3100]	[3540]	[3540]	[3540]	[3360]

[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.

Technical data for OMR with 32 mm , 1 ¼ in cylindrical shaft and 35 mm, 1 ¼ in tapered shaft

Type			OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR
Motor size			**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**375**
Geometric displacement	cm^3		51.6	80.3	99.8	125.7	159.6	199.8	249.3	315.7	372.6
	[inch]		[3.16]	[4.91]	[6.11]	[7.69]	[9.77]	[12.23]	[15.26]	[19.32]	[22.80]
Max. speed	min^{-1}	cont.	775	750	600	475	375	300	240	190	160
	[rpm]	int.[1]	970	940	750	600	470	375	300	240	200
Max. torque	N•m [lbf•in]	cont.	100	195	240	300	380	450	540	550	580
			[890]	[1730]	[2120]	[2660]	[3360]	[3980]	[4780]	[4870]	[5130]
		int.[1]	130	220	280	340	430	500	610	690	690
			[1150]	[1957]	[2480]	[3010]	[3810]	[4430]	[5400]	[6110]	[6110]
Max. output	kW [hp]	cont.	7.0	12.5	13.0	12.5	12.5	11.0	10.0	9.0	7.5
			[9.4]	[16.8]	[17.4]	[16.8]	[16.8]	[14.8]	[13.4]	[12.1]	[10.1]
		int.[1]	8.5	15.0	15.0	14.5	14.0	13.0	12.0	10.0	9.0
			[11.4]	[20.1]	[20.1]	[19.4]	[18.8]	[17.4]	[16.1]	[13.4]	[12.1]
Max. pressure drop	bar [psi]	cont	140	175	175	175	175	175	175	135	115
			[2030]	[2540]	[2540]	[2540]	[2540]	[2540]	[2540]	[1960]	[1670]
		int.[1]	175	200	200	200	200	200	200	175	150
			[2540]	[2900]	[2900]	[2900]	[2900]	[2900]	[2900]	[2540]	[2180]
		peak[2]	225	225	225	225	225	225	225	210	175
			[3260]	[3260]	[3260]	[3260]	[3260]	[3260]	[3260]	[3050]	[2540]

OMR technical data

Type			OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR	OMR
Motor size			**50**	**80**	**100**	**125**	**160**	**200**	**250**	**315**	**375**
Max. oil flow	l/min [US gal/min]	cont.	40	60	60	60	60	60	60	60	60
			[10.6]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]	[15.9]
		int.[1]	50	75	75	75	75	75	75	75	75
			[13.2]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
Max. starting pressure with unloaded shaft	bar		10	10	10	9	7	5	5	5	5
	[psi]		[145]	[145]	[145]	[130]	[100]	[75]	[75]	[75]	[75]
Min starting torque	at max. press drop cont. N•m [lbf•in]		80	150	200	250	320	410	500	500	470
			[710]	[1330]	[1770]	[2210]	[2830]	[3630]	[4430]	[4430]	[4170]
	at max. press.drop int.[1] N•m [lbf•in]		100	170	230	280	370	460	550	660	570
			[890]	[1510]	[2040]	[2480]	[3280]	[4070]	[4870]	[5840]	[5050]

[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.

Type			Max. inlet pressure	Max.return pressure with drain line
OMR 50 - 375	bar [psi]	cont	175 [2540]	175 [2540]
	bar [psi]	int.[1]	200 [2900]	200 [2900]
	bar [psi]	peak[2]	225[3260]	225 [3260]

[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.

Technical data for parking brake motor OMR F, OMR NF and OMRW NF

Technical data for brake motor		
Holding torque[1]	N•m [lbf•in]	400 [3540]
Min. release pressure [2]	bar [psi]	21 [305]
Max. pressure in brake line	bar [psi]	200 [2900]

[1] This brake is to be used only as a passive parking brake. It may not be used for dynamic braking.

[2] Brake motors must always have a drain line. The brake release pressure is the difference between the pressure in the brake release line and the pressure in the drain line.

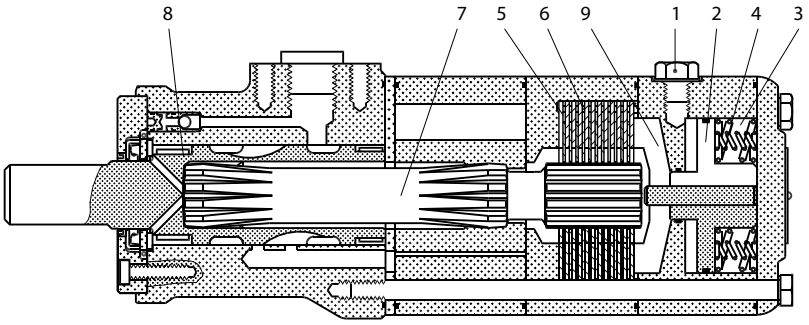
OMR F function

In normal condition where there is no pressure on the integrated brake in OMR, i.e. the brake is applied. The brake is released when hydraulic pressure of 21 bar [300 psi] min. is applied to the brake release port (1).

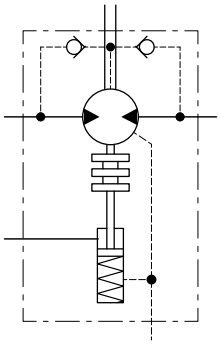
The pressure forces the piston (2) against the springs (3 and 4) disengaging the outer and inner discs (5 and 6) from each other so that the cardan shaft (7) and consequently output shaft (8) become free to rotate.

If the pressure on the brake release port is reduced to less than 21 bar [300 psi], the springs force the piston and pressure pad (9) against the brake discs and the cardan shaft/output shaft begin to lock up.

OMR technical data



151-1739.10.10



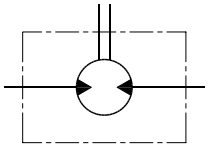
151-1726.10

Maximum permissible shaft seal pressure

OMR with High Pressure Shaft seal (HPS)

OMR with HPS, without check valves and without drain connection:

The shaft seal pressure equals the average of input pressure and return pressure



151-1743.10

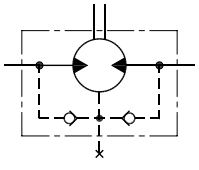
$$P_{seal} = \frac{P_{in} + P_{return}}{2}$$

OMR with HPS, check valves and with drain connection:

The shaft seal pressure equals the pressure in the drain line.

OMR with HPS, check valves and without drain connection:

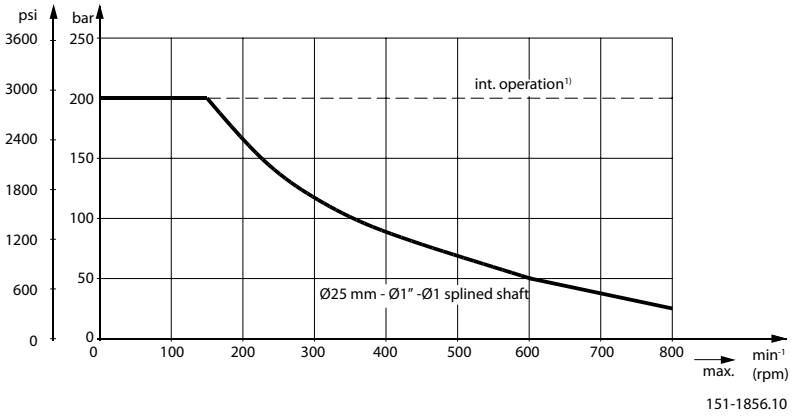
The pressure on the shaft seal never exceeds the pressure in the return line.



151-320.10

OMR technical data

Max. permissible shaft seal pressure

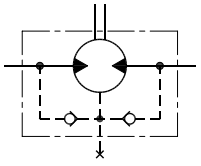


151-1856.10

OMR with Standard Shaft seal

OMR with standard shaft seal, check valves and without use of drain connection:

The pressure on the shaft seal never exceeds the pressure in the return line

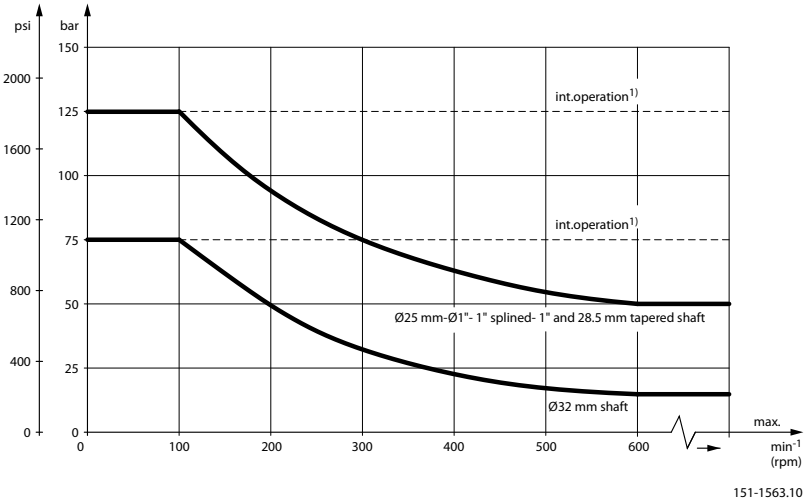


151-320.10

OMR with standard shaft seal, check valves and with drain connection:

The shaft seal pressure equals the pressure on the drain line.

Max. return pressure without drain line or max. pressure in the drain line



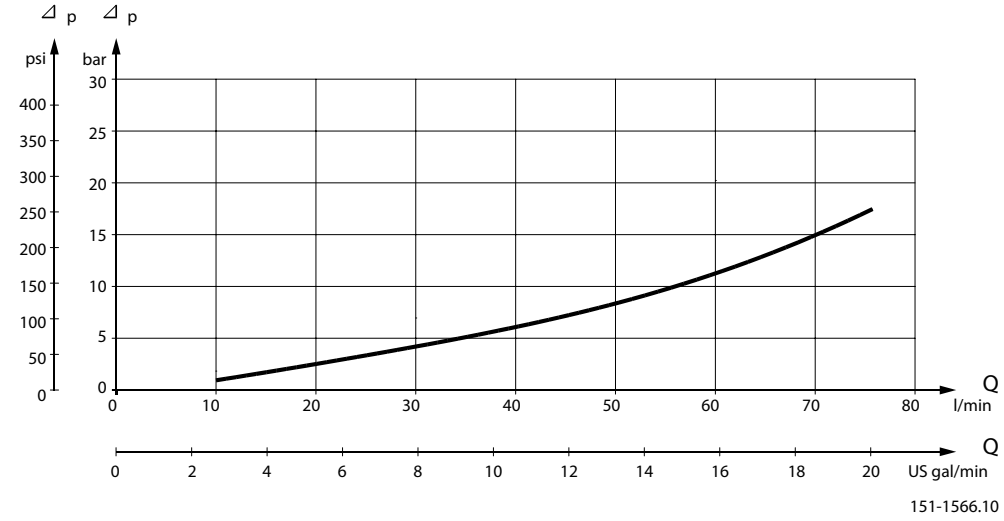
151-1563.10

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

OMR technical data

Pressure drop in OMR motor

The curve applies to an unloaded motor shaft and an oil viscosity of 35 mm²/s [165 SUS]



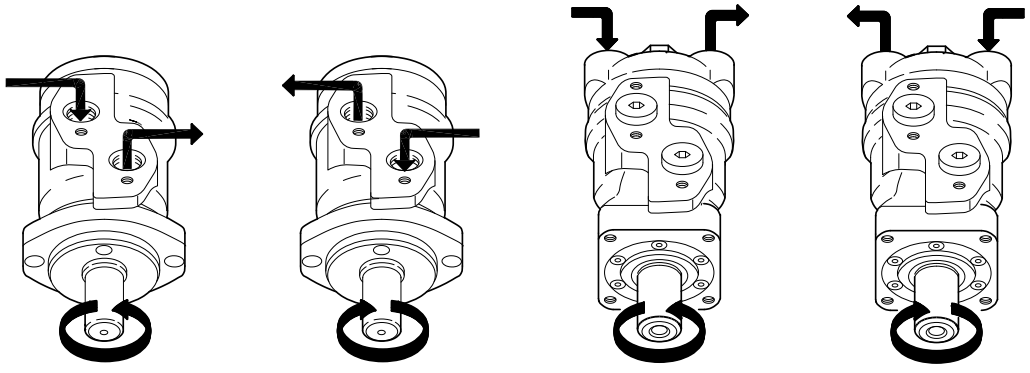
151-1566.10

Oil flow in drain line

The table shows the maximum oil flow in the drain line at a return pressure less than 5-10 bar [75-150 psi].

Pressure drop		Viscosity		Oil flow in drain line	
bar	**[psi]**	**mm²/s**	**[SUS]**	**l/min**	**[US gal/min]**
100	[1450]	20	[100]	2.5	[0.66]
		35	[165]	1.8	[0.78]
140	[2030]	20	[100]	3.5	[0.93]
		35	[165]	2.8	[0.74]

Direction of shaft rotation



151-1836.10

Permissible shaft loads

OMR technical data

OMP and OMR

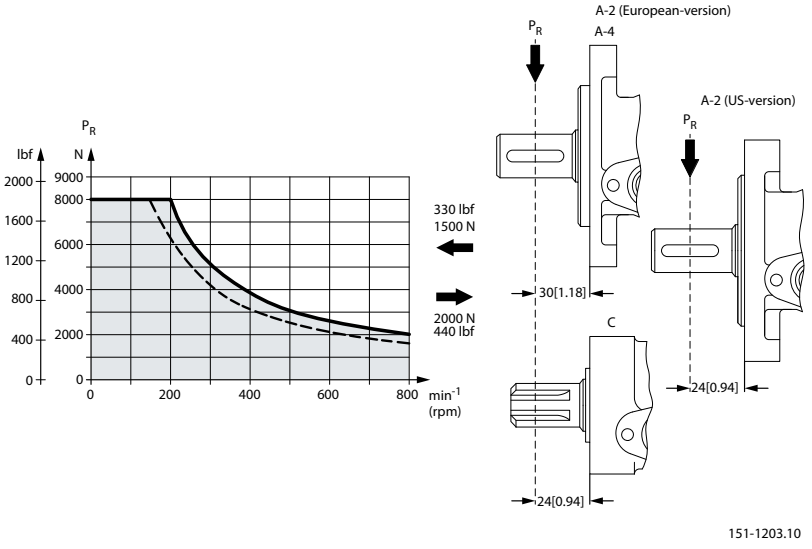
The permissible radial shaft load (P_R) depends on:

- Speed (n)
- Distance (L) from the point of load to the mounting flange
- Mounting flange version
- Shaft version

Mounting flange	**4-oval flange**** **2-hole oval flange (European version)**	**4-hole oval flange**	**Square flange**** **2-hole oval flange (US-version)**
Shaft version	**25 mm cylindrical shaft 1 in cylindrical shaft 1 in splined shaft**	**32 mm cylindrical shaft**	**25 mm cylindrical shaft**
Permissible shaft load (P_R) - l in mm	$\frac{800}{n} \cdot \frac{250000\ N^*}{95 + L}$	$\frac{800}{n} \cdot \frac{187500\ N^*}{95 + L}$	$\frac{800}{n} \cdot \frac{250000\ N^*}{101 + L}$
Permissible shaft load (P_R) - l in inch	$\frac{800}{n} \cdot \frac{2215\ lbf^*}{3.74 + L}$	$\frac{800}{n} \cdot \frac{1660\ lbf^*}{3.74 + L}$	$\frac{800}{n} \cdot \frac{2215\ lbf^*}{3.98 + L}$

** For both European and US-version

* n≥ 200 min^{-1} [rpm]; ≤ 55 mm [2.2 in]. n< 200 min^{-1} [rpm]; = > P_{Rmax} = 8000 N [1800 lbf]



--------- cylindrical shaft 32 mm [1.26 in]

_____ other shaft versions

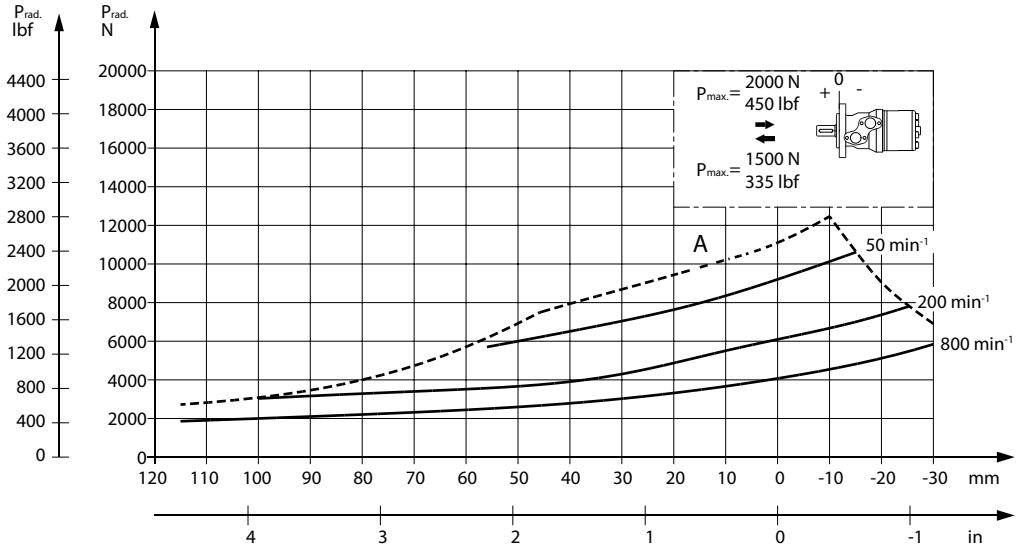
The curve shows the relation between P_R and n

- when l = 30 mm [1.18 in] for motors with A2 (European version) and A4 oval mounting flange
- when l = 24 mm [0.94 in] for motors with square mounting flange and A2 (US version)

For applications with special performance requirements we recommend OMP and OMR with the output shaft running in needle bearings.

OMR technical data

OMR N and OMR NF with Needle Bearings



151-2112.10

The output shaft on OMR N and OMR NF runs in needle bearings. These bearings and the recessed mounting flange allow a higher permissible radial load in comparison to OMR motors with slide bearings.

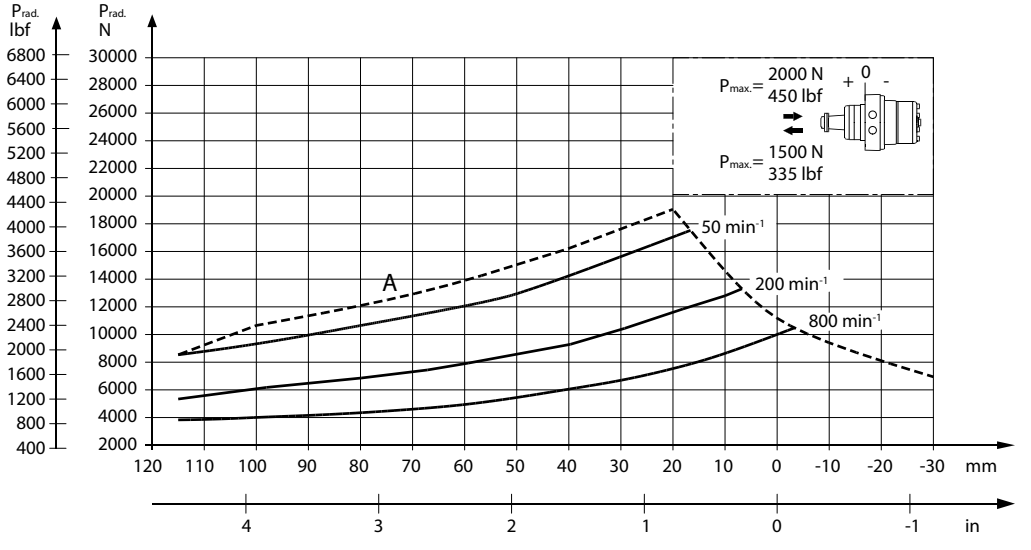
The permissible radial load on the shaft is shown for different speeds as a function of the distance from the mounting flange to the point of load application.

Curve A shows max. radial shaft load. Any shaft load exceeding the values quoted in the curve will involve a risk of breakage.

The other curves apply to a B10 bearing life of 2000 hours at the number of revolutions indicated by the curve letter. Mineral based hydraulic oil with a sufficient content of anti-wear additives must be used.

Bearing life calculations can be made using the explanation and formula provided in the chapter »Bearing dimensioning« in the technical information *Orbital Motors General* 520L0232.

OMRW N and OMRW NF with Needle Bearings



151-2113.10

OMR technical data

The output shaft on OMRW N runs in needle bearings. These bearings and the recessed mounting flange allow a higher permissible radial load in comparison to OMR motors with slide bearings.

The permissible radial load on the shaft is shown for different speeds as a function of the distance from the mounting flange to the point of load application.

Curve A shows max. radial shaft load. Any shaft load exceeding the values quoted in the curve will involve a risk of breakage.

The other curves apply to a B10 bearing life of 2000 hours at the number of revolutions indicated by the curve letter. Mineral based hydraulic oil with a sufficient content of anti-wear additives must be used.

Bearing life calculations can be made using the explanation and formula provided in the chapter »Bearing dimensioning« in the technical information *Orbital Motors General* 520L0232.

OMR function diagrams

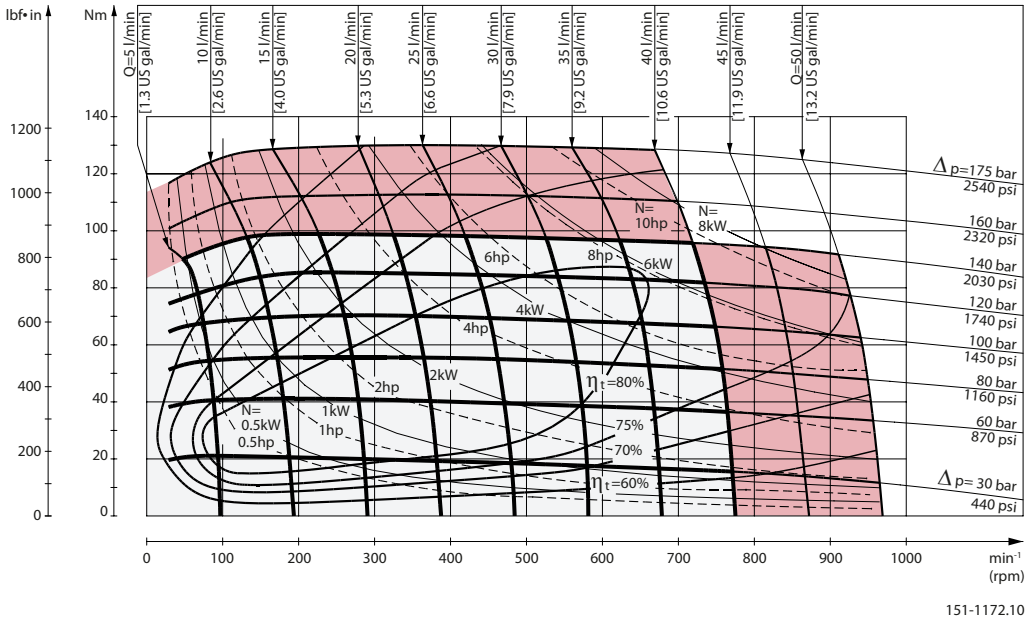
Explanation of function diagram use, basis and conditions can be found in *Speed, torque and output* on page 8.

- Continuous range
- Intermittent range (max. 10% operation every minute)

Max. permissible continuous/intermittent pressure drop for the actual shaft version can be found in *OMR technical data* on page 46.

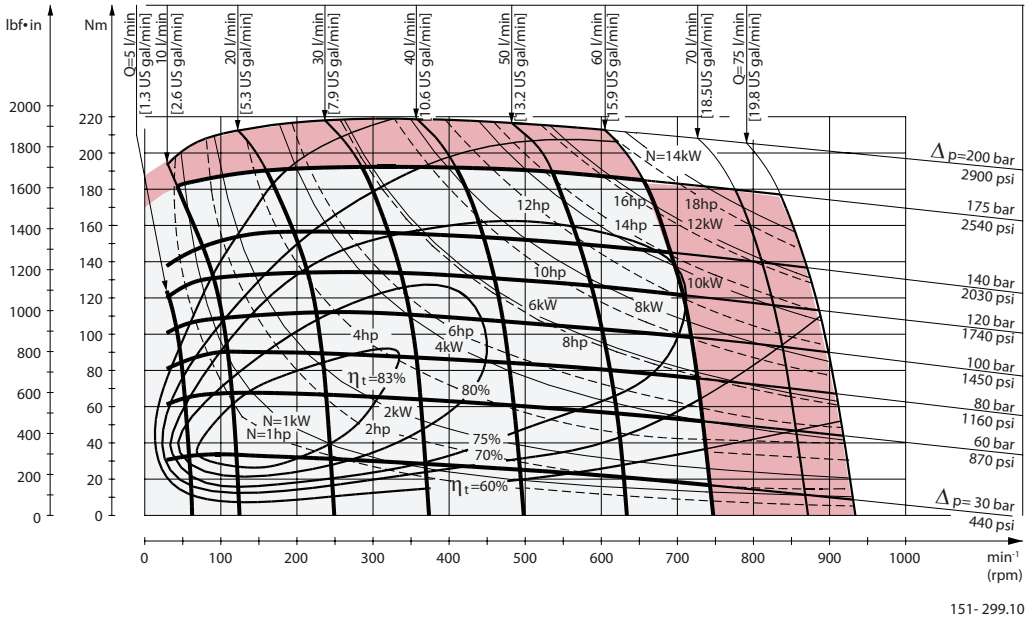
Intermittent pressure drop and oil flow must not occur simultaneously.

OMR 50 function diagram



151-1172.10

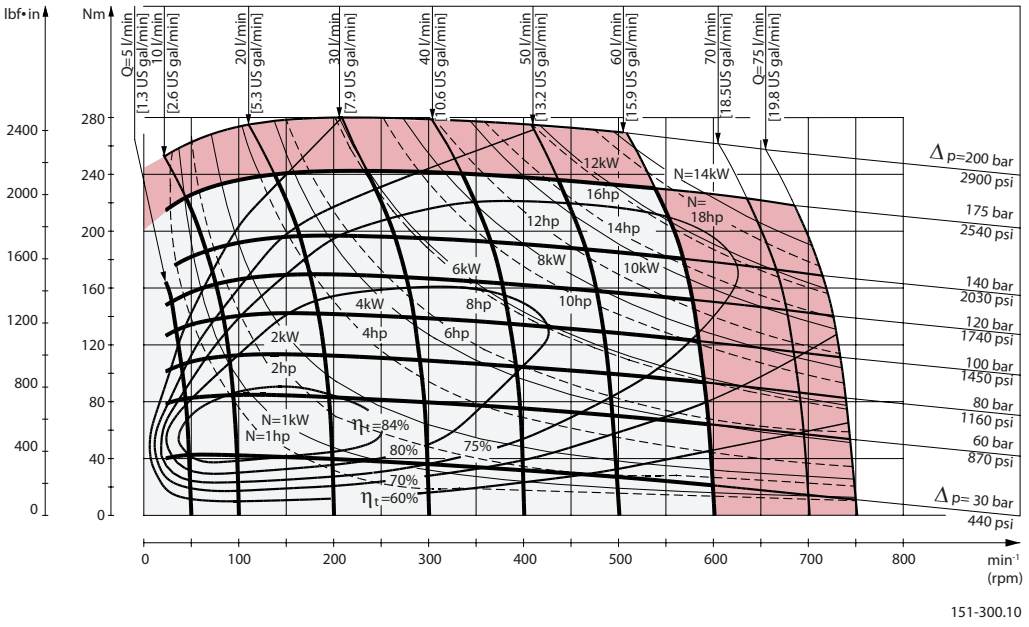
OMR 80 function diagram



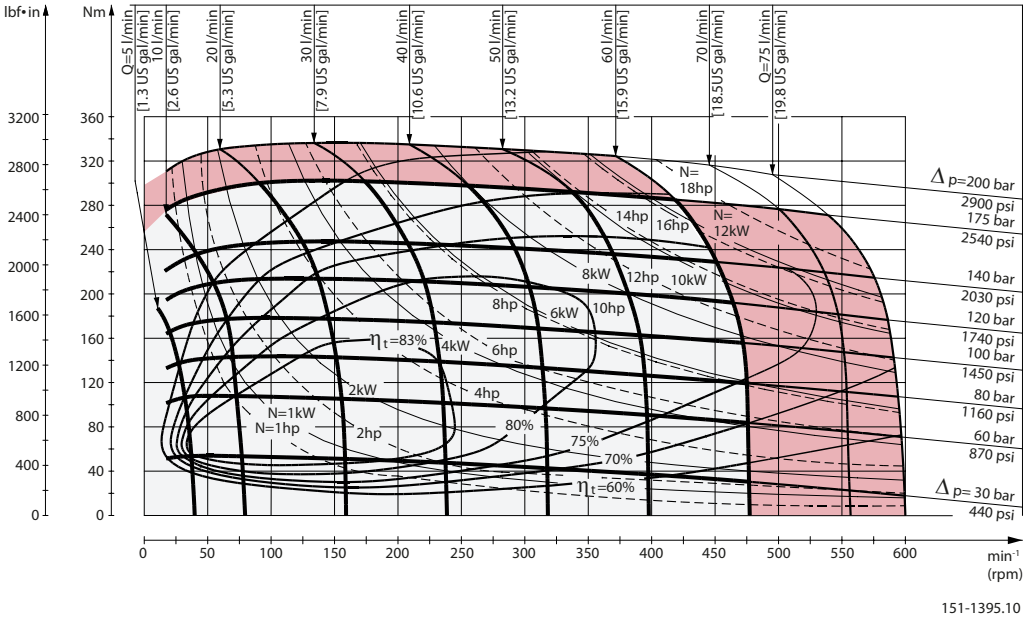
151- 299.10

OMR function diagrams

OMR 100 function diagram

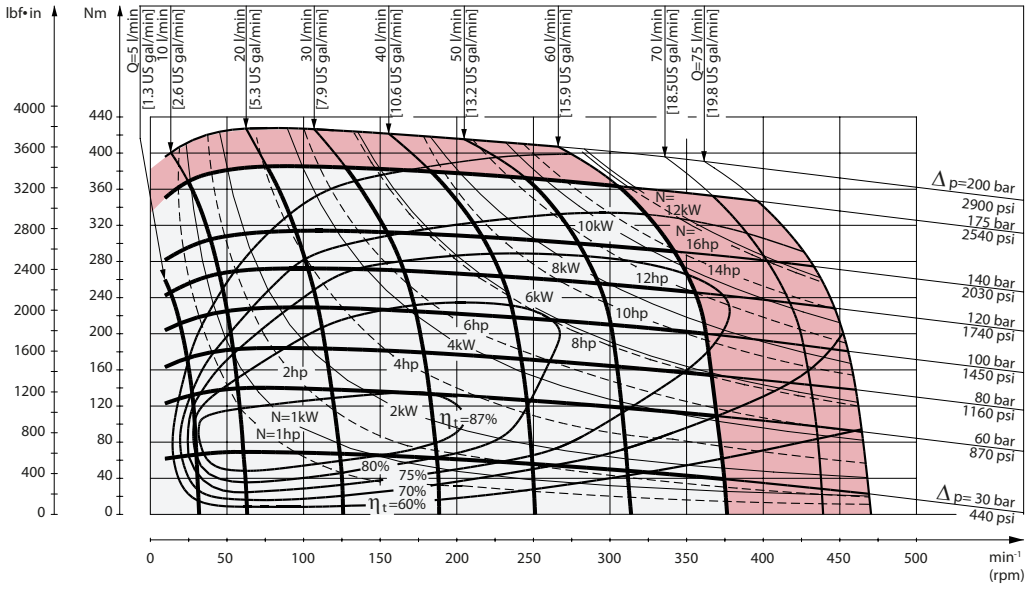


OMR 125 function diagram

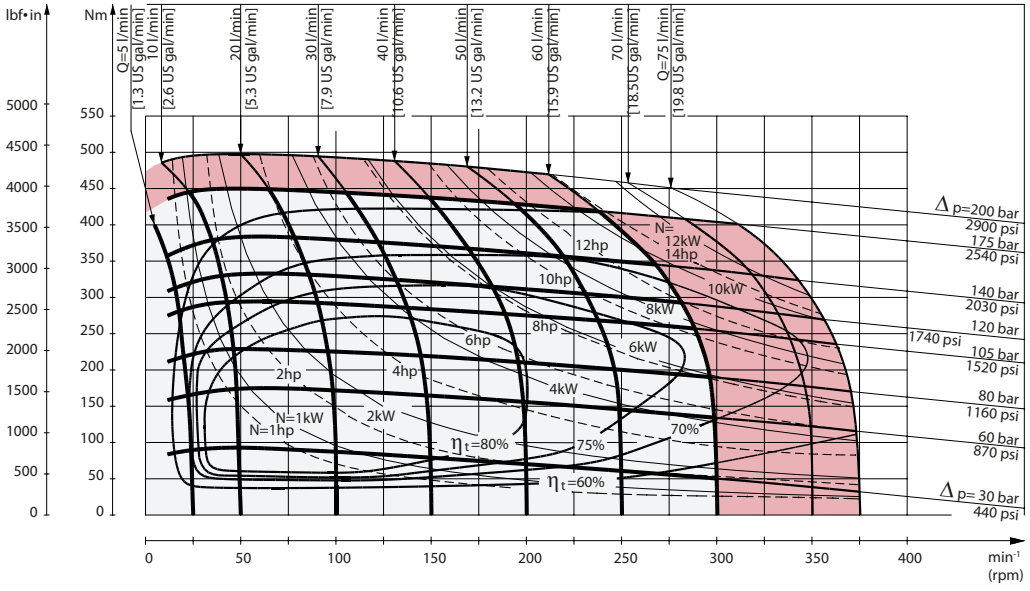


OMR function diagrams

OMR 160 function diagram

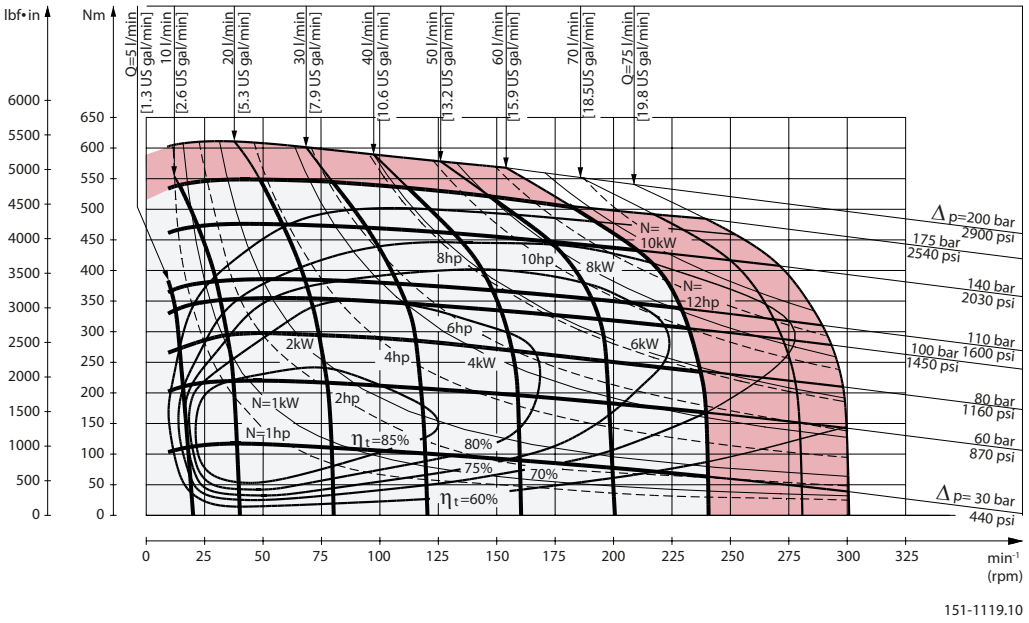


OMR 200 function diagram

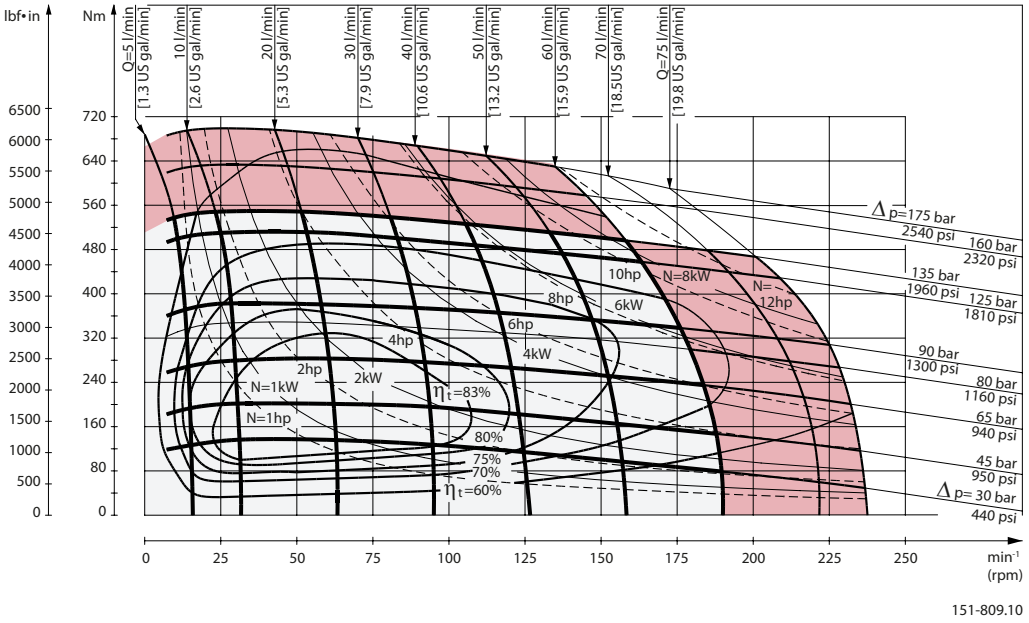


OMR function diagrams

OMR 250 function diagram

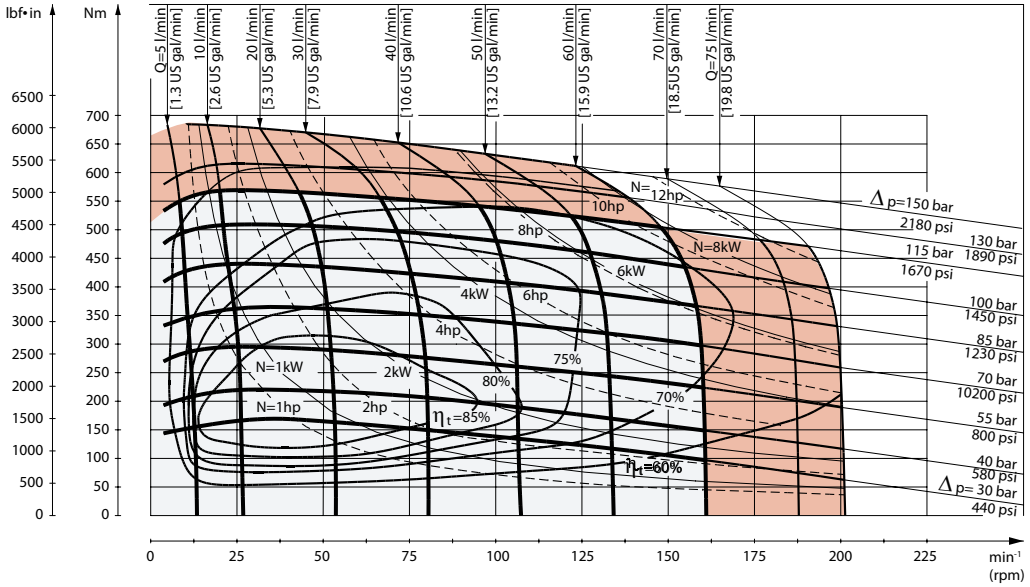


OMR 315 function diagram



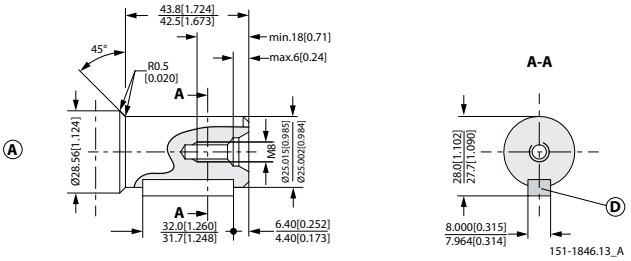
OMR function diagrams

OMR 375 function diagram



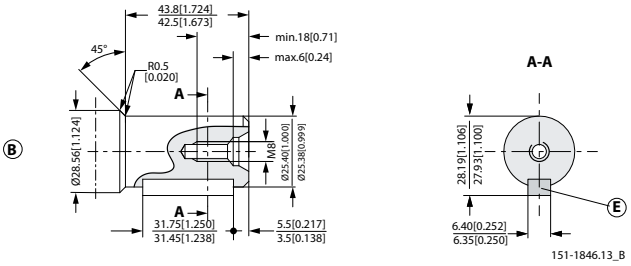
Shaft version

OMR shaft version



A: Cylindrical shaft 25 mm

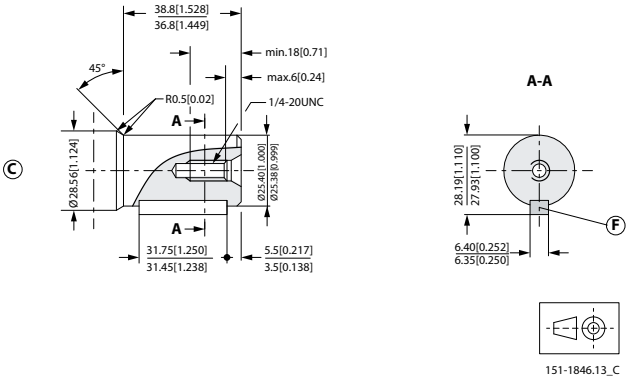
D: Parallel key A8 • 7 • 32 DIN 6885



B: Cylindrical shaft 1 in

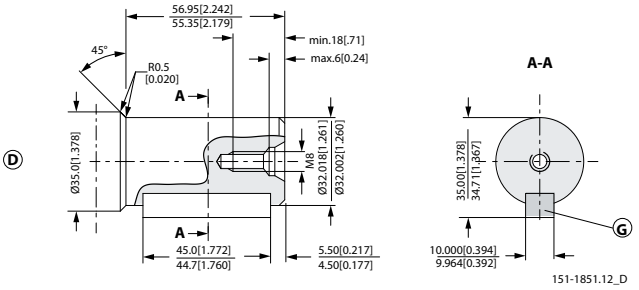
E: Parallel key ¼ • ¼ • 1 ¼ in B.S. 46

US version



C: Cylindrical shaft 1 in

F: Parallel key ¼ • ¼ • 1 ¼ in B.S. 46

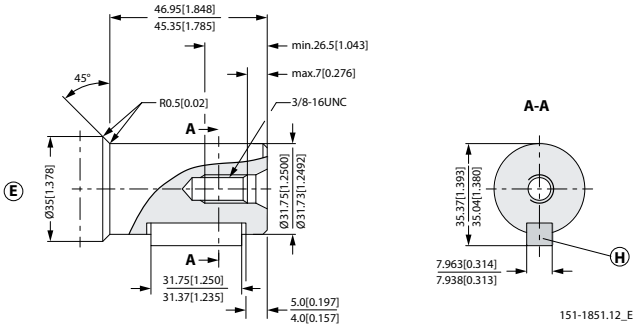


D: Cylindrical shaft 32 mm

G: Parallel key A10 • 8 • 45 DIN 6885

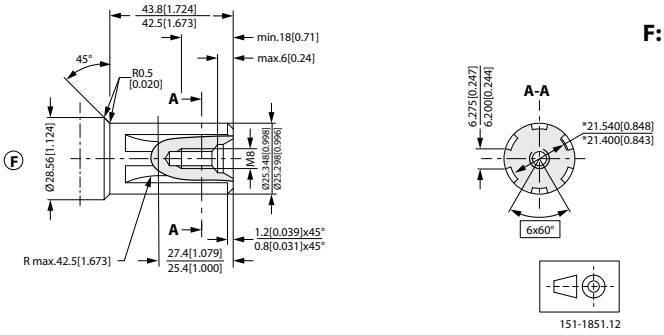
Shaft version

US version



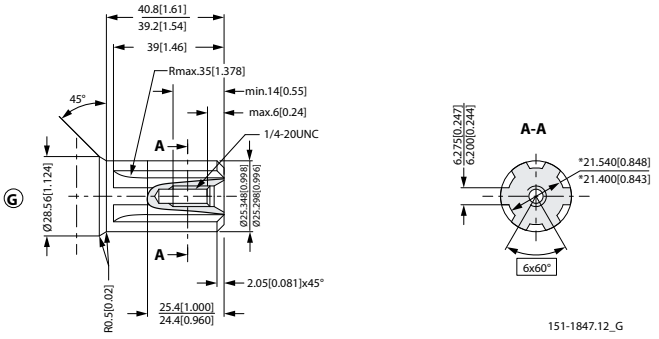
E: Cylindrical shaft 1 ¼ in

H: Parallel key 5/16 5/16 1 ¼ in B.S. 46

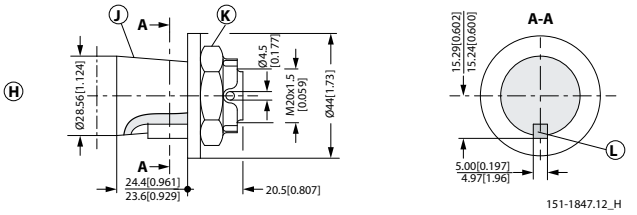


F: Involute splined shaft B.S. 2059 (SAE 6 B) Straight-sided, bottom fitting, deep. Fit 2 Nom. size 1 in *Deviates from B.S. 2059 (SAE 6 B)

US version



G: Splined shaft SAE 6 B (B.S. 2059) Straight-sided, bottom fitting, deep. Fit 2; Nom. size 1 in * Deviates from SAE 6 B (B.S. 2059)



H: Tapered shaft 28.5 mm (ISO/R775)

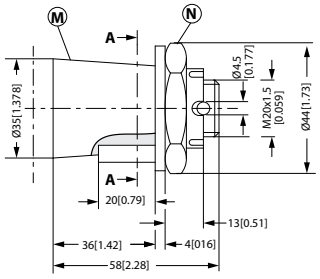
K: DIN 937 NV 30 Tightening torque: 100 ± 10 N•m [885 ± 85 lbf•in]

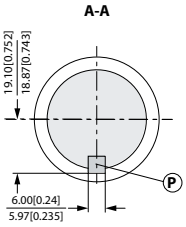
J: Taper 1:10

L: Parallel key B5 • 5 • 14 DIN 6885

Shaft version

Ⓘ





151-1847.12_I

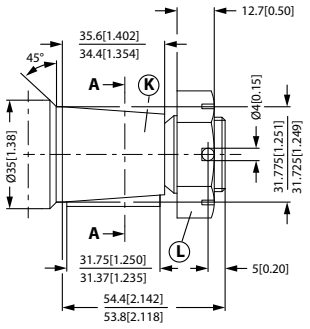
I: Tapered shaft 35 mm

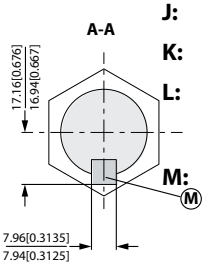
N: DIN 937 NV 41 Tightening torque: 200 ± 10 N•m [1770 ± 85 lbf•in]

M: Taper 1:10

P: Parallel key B6 • 6 • 20 DIN 6885

Ⓙ





151-1848.12

J: Tapered shaft 1 1/4 in

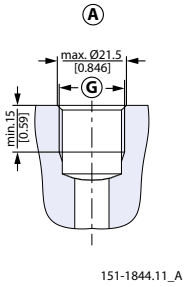
K: Cone 1:8 SAE J501

L: 1 - 20 UNEF Across flats 1 7/16 Tightening torque: 200 ± 10 N•m [1770 ± 85 lbf•in]

M: Parallel key 5/16 • 5/16 • 1 1/4 SAE J501

OMR port thread versions

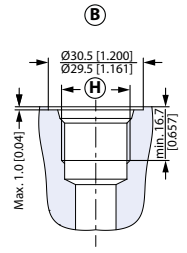
Port thread versions



151-1844.11_A

A: G main ports

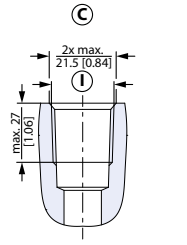
G: ISO 228/1 - G1/2



151-1844.11_B

B: UNF main ports

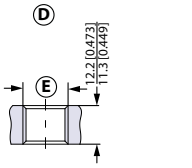
H: 7/8 - 14 UNF O-ring boss port



151-1844.11_C

C: NPTF main ports

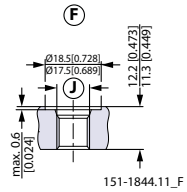
I: 1/2 - 14 NPTF



151-1844.11_D

D: G drain port

E: ISO 228/1 - G1/4



151-1844.11_F

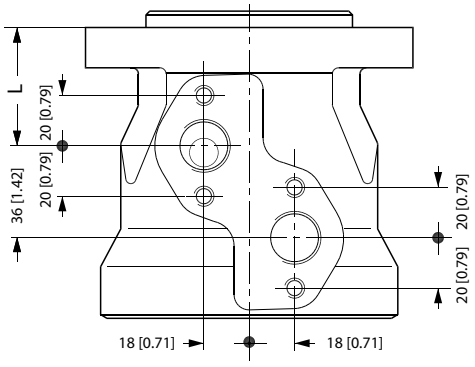
F: UNF drain port

J: 7/16 - 20 UNF O-ring boss port

OMR port thread versions

OMR manifold mount

European version



151-2135.10

L: see dimensional drawing for given OMR motor: *OMR dimensions* on page 65 and *Dimension-US Version*

L: see dimensional drawing for given OMP motor:

OMR dimensions - European version on page 65
OMR dimensions - US version on page 74

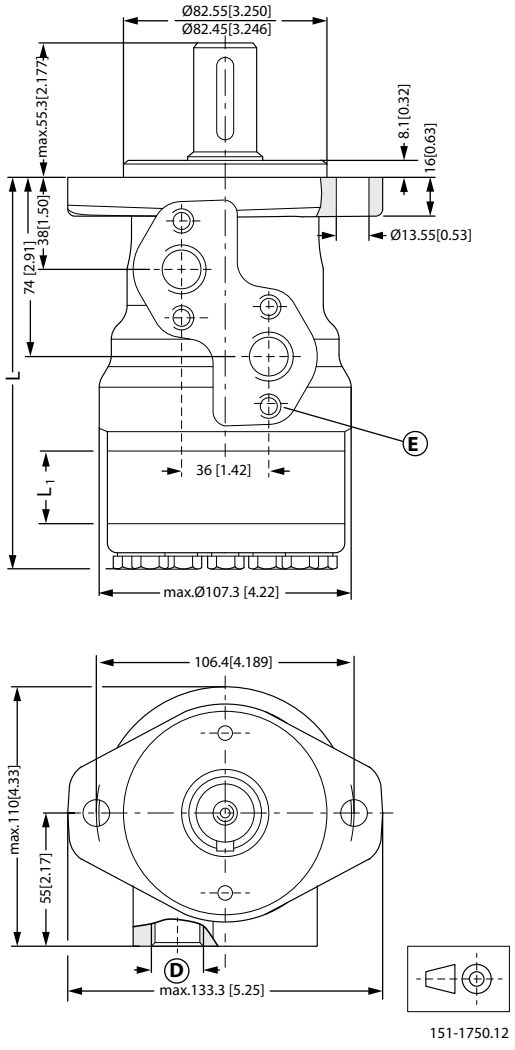
OMR dimensions

OMR dimensions - European version

OMR Side port version with 2-hole oval mounting flange (A2 flange)

- With high pressure shaft seal

Side port - European version



D: G ½; 15 mm [0.59 in] deep

E: M8; 13 mm [0.51 in] deep (4 pcs.)

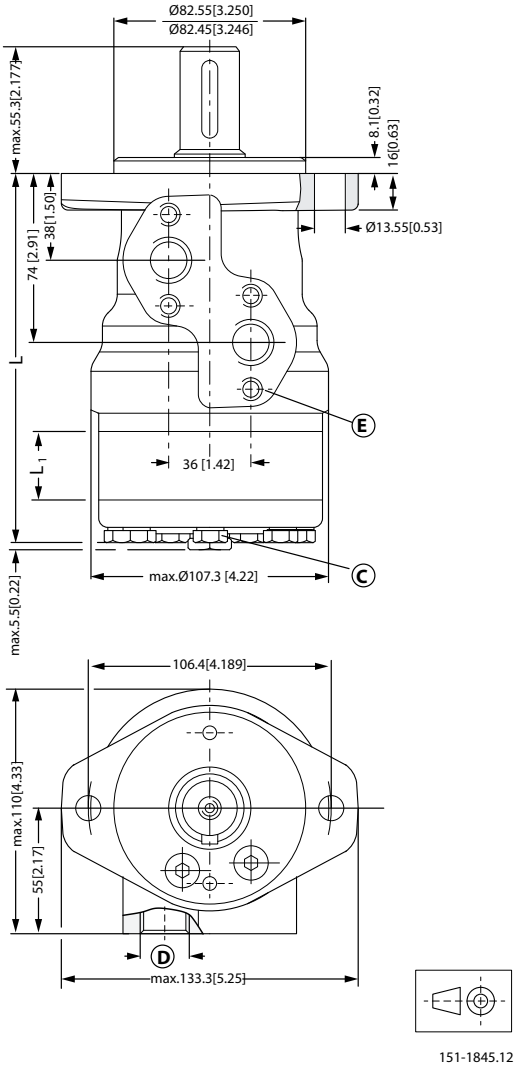
Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
L_{Max}	mm	137.8	142.8	146.2	150.6	156.6	163.6	172.3	183.6	193.8
	[in]	[5.43]	[5.62]	[5.76]	[5.93]	[6.17]	[6.44]	[6.78]	[7.23]	[7.63]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR Side port version with 2-hole oval mounting flange (A2 flange)

- With check valves and drain connection
- With high pressure shaft seal

Side port - European version



C: Drain connection G ¼; 15 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

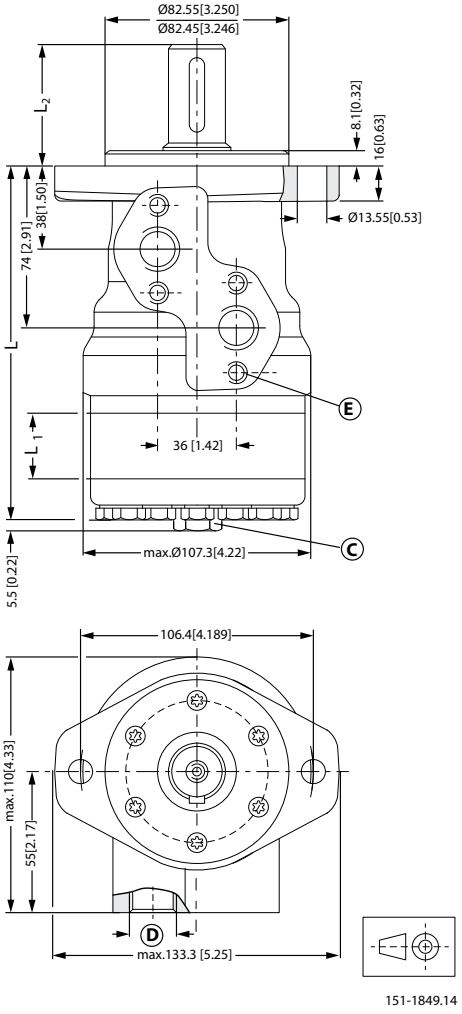
E: M8; 13 mm [0.51 in] deep (4 pcs.)

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
L_{MAX}	mm	137.8	142.8	146.2	150.6	156.6	163.6	172.3	183.6	193.8
	[in]	[5.43]	[5.62]	[5.76]	[5.93]	[6.17]	[6.44]	[6.78]	[7.23]	[7.63]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR, OMR C and OMR N Side port version with 2-hole oval mounting flange (A2 flange)

Side port - European version



C: Drain connection G ¼; 12 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

E: M8; 13 mm [0.51 in] deep (4 pcs.)

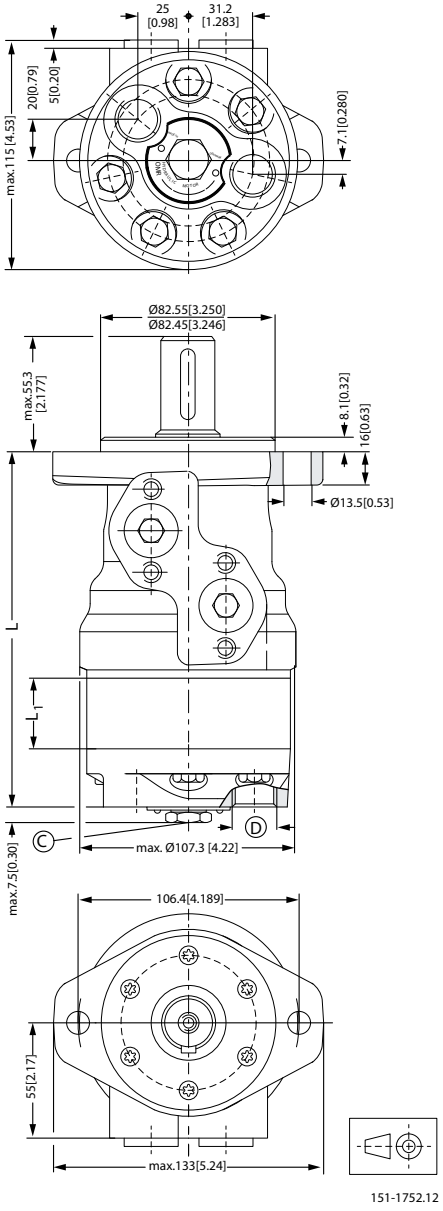
Output shaft. max.		Cylindrical shaft 32 mm [1.26 in]	Cylindrical shaft 25 mm [0.98 in]	Tapered shaft 28.56 mm [1.12 in]
$L_{2\ max}$	mm	68.3	55.3	56.65
	[in]	[2.69]	[2.18]	[2.23]

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
L_{max}	mm	137.8	142.8	146.2	150.6	156.6	163.6	172.3	183.6	193.8
	[in]	[5.43]	[5.62]	[5.76]	[5.93]	[6.17]	[6.44]	[6.78]	[7.23]	[7.63]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR End port version with 2-hole oval mounting flange (A2-flange)

End port - European version



C: G ¼; 12 mm [0.47 in] deep

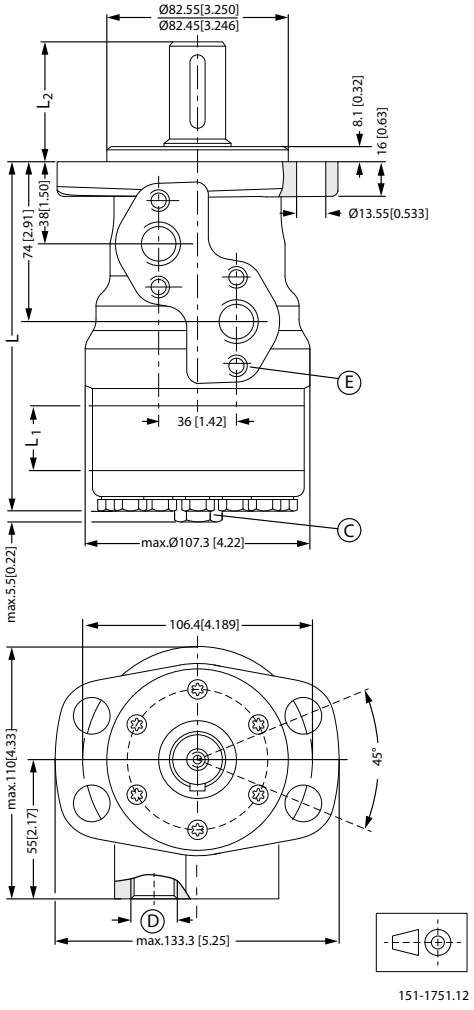
D: G ½; 15 mm [0.59 in] deep

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
L_{Max}	mm	152.2	157.2	160.6	165.0	171.0	178.0	186.7	198.0	208.2
	[in]	[5.99]	[6.19]	[6.32]	[6.50]	[6.73]	[7.01]	[7.35]	[7.80]	[8.20]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR Side port version with 4-hole oval mounting flange (A4 flange)

Side port - European version



C: Drain connection G ¼; 15 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

E: M8; 13 mm [0.51 in] deep (4 pcs.)

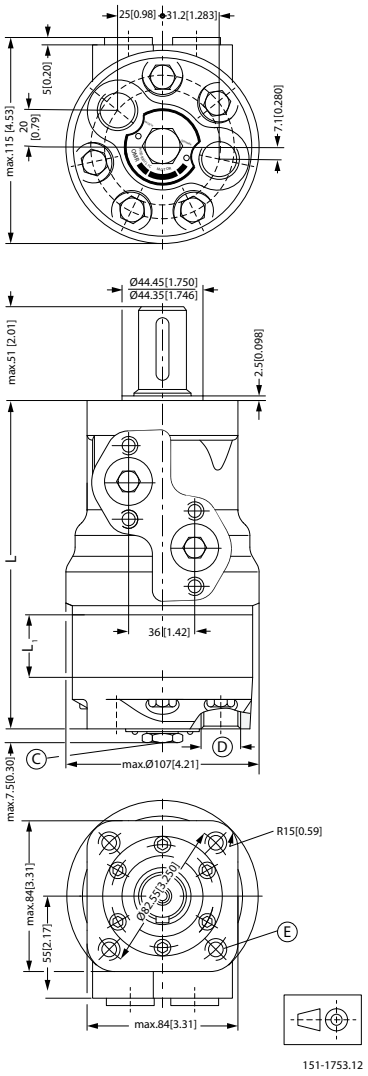
Output shaft.max.		Cylindrical shaft 32 mm [1.26 in]	Cylindrical shaft 25 mm [0.98 in]	Tapered shaft 28.56 mm [1.12 in]
L2	mm	68.3	55.3	56.3
	[in]	[2.69]	[2.18]	[2.22]

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
$L_{Max.}$	mm	137.8	142.8	146.2	150.6	156.6	163.6	172.3	183.6	193.8
	[in]	[5.43]	[5.62]	[5.76]	[5.93]	[6.17]	[6.44]	[6.78]	[7.23]	[7.63]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR End port version with square mounting flange (C-flange)

End port - European version



C: Drain connection G ¼; 12 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

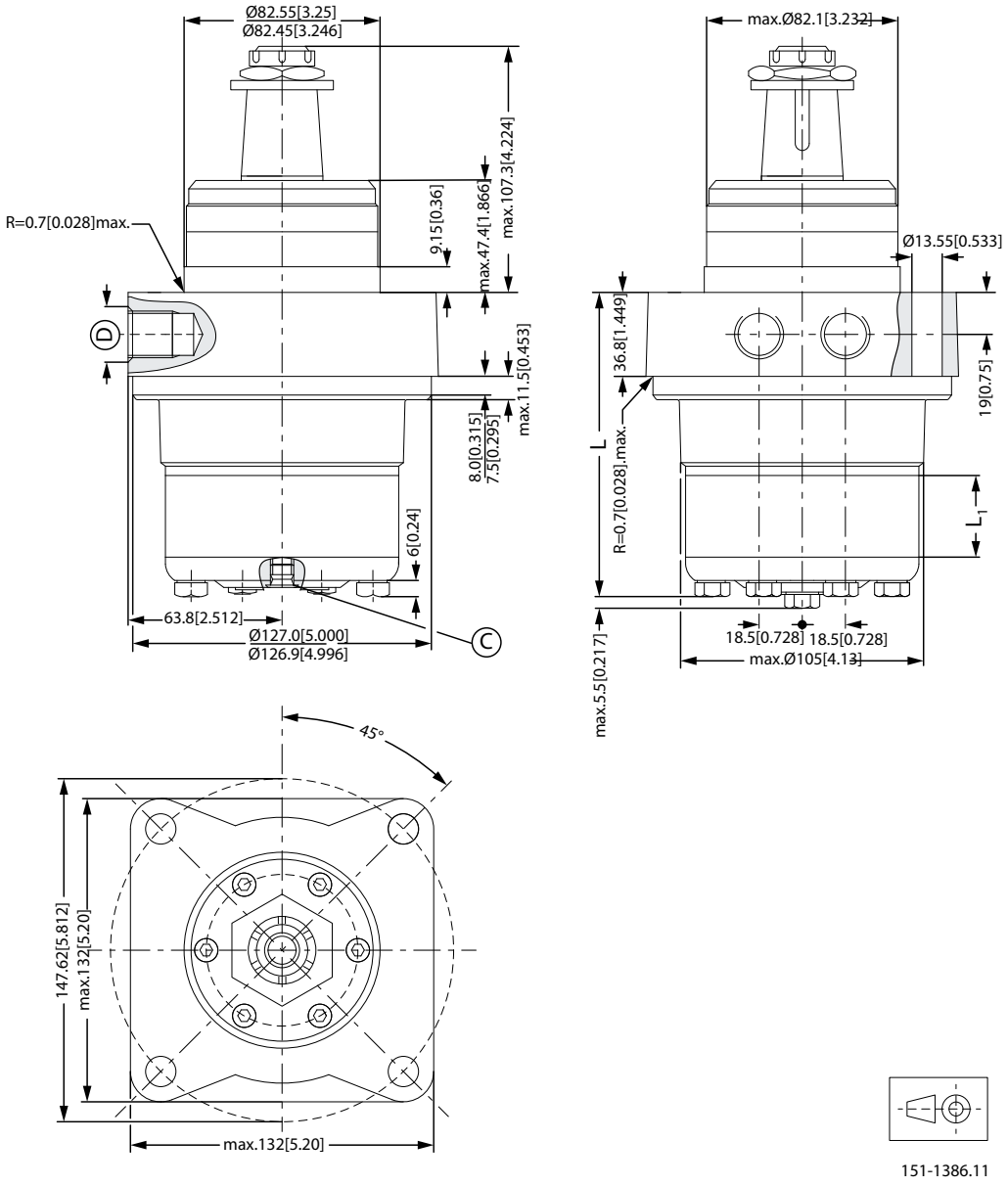
E: M10; 15 mm [0.59 in] deep (4 pcs.)

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
$L_{Max.}$	mm	158.6	163.3	167.0	171.0	177.0	184.0	192.7	204.0	214.2
	[in]	[6.24]	[6.44]	[6.57]	[6.73]	[6.97]	[7.24]	[7.24]	[8.03]	[8.43]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMRW N wheel motor

Wheel motor - European version



C: Drain connection G ¼; 12 mm [0.47 in] deep

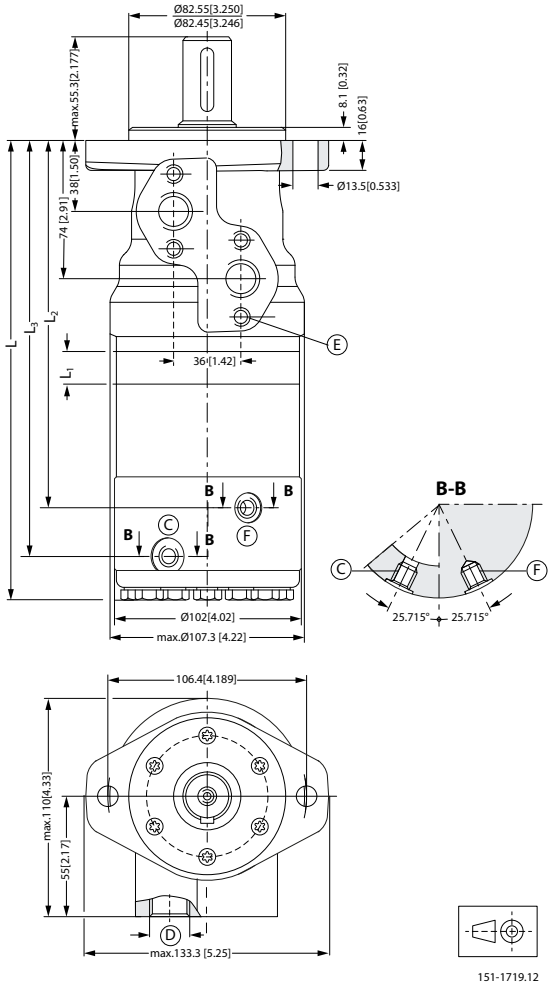
D: G ½; 15 mm [0.59 in] deep

Type		OMRW 50 N	OMRW 80 N	OMRW 100 N	OMRW 125 N	OMRW 160 N	OMRW 200 N	OMRW 250 N	OMRW 315 N	OMRW 375 N
$L_{Max.}$	mm	113.7	114.7	118.1	122.5	128.5	135.1	144.2	155.5	165.7
	[in]	[4.48]	[4.52]	[4.65]	[4.82]	[5.06]	[5.33]	[5.68]	[6.12]	[6.52]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR F motor

F motor - European version



C: Drain connection G ¼; 12 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

E: M8; 13 mm [0.51 in] deep

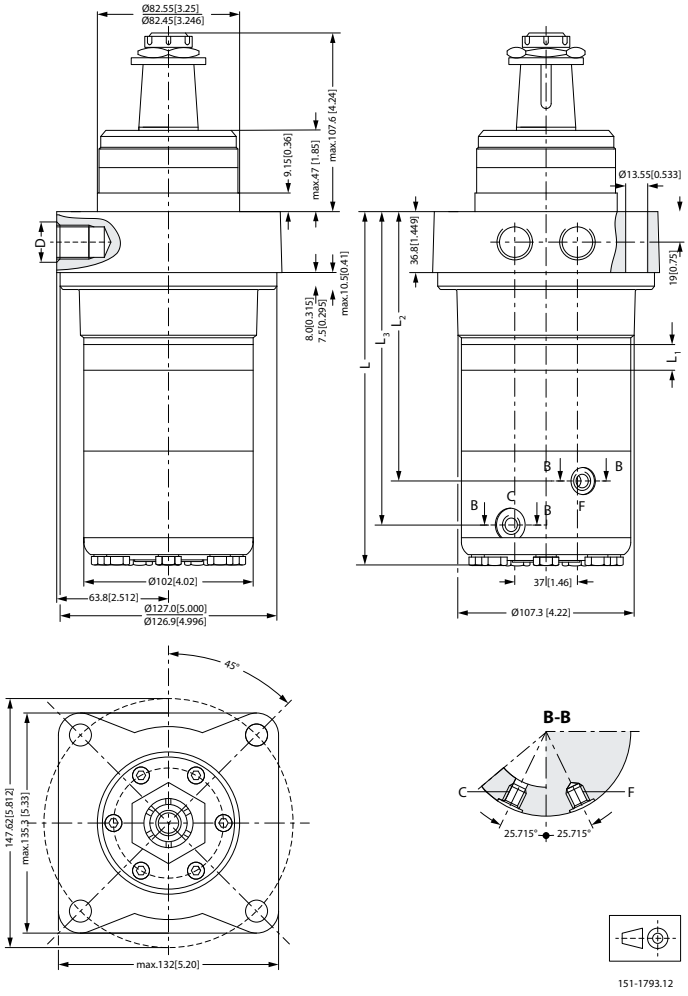
F: Brake release connection G ¼

Type		OMR 80 F	OMR 100 F	OMR 125 F	OMR 160 F	OMR 200 F	OMR 250 F	OMR 315 F	OMR 375 F
$L_{max.}$	mm	242.7	246.1	250.5	265.1	263.5	272.2	283.5	293.7
	[in]	[9.56]	[9.69]	[9.86]	[10.10]	[10.37]	[10.72]	[11.16]	[11.56]
L_1	mm	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]
L_2	mm	186.8	190.2	194.6	200.6	207.6	216.3	227.6	237.7
	[in]	[7.35]	[7.49]	[7.66]	[7.90]	[8.17]	[8.51]	[8.96]	[9.36]
L_3	mm	210.3	213.7	218.1	224.1	231.1	239.8	251.1	261.2
	[in]	[8.28]	[8.41]	[8.58]	[8.82]	[9.10]	[9.45]	[9.88]	[10.28]

OMR dimensions

OMRW NF motor

NF motor - European version



C: Drain connection G ¼; 12 mm [0.47 in] deep

D: G ½; 15 mm [0.59 in] deep

E: M8; 13 mm [0.51 in] deep

F: Brake release connection G ¼

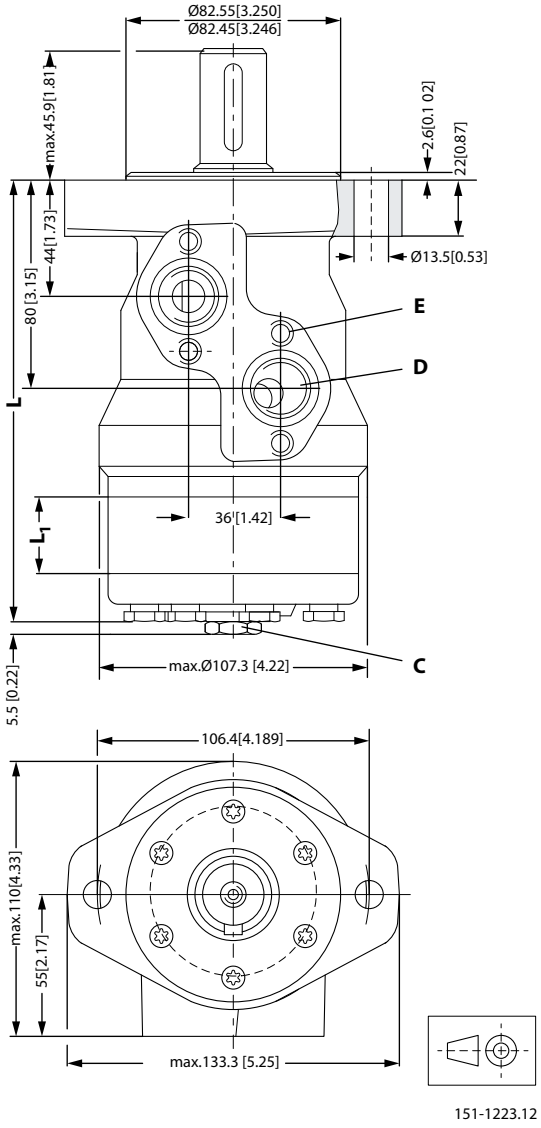
Type		OMRW 80 NF	OMRW 100 NF	OMRW 125 NF	OMRW 160 NF	OMRW 200 NF	OMRW 250 NF	OMRW 315 NF	OMRW 375 NF
$L_{max.}$	mm	213.2	218.0	222.4	228.4	235.4	242.7	254.0	264.2
	[in]	[8.39]	[8.58]	[8.76]	[8.99]	[9.27]	[9.56]	[10.0]	[10.40]
L_1	mm	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]
$L_{2\ max}$	mm	159.2	161.9	166.3	172.3	179.3	188.7	200.0	210.2
	[in]	[6.27]	[6.37]	[6.55]	[6.78]	[7.06]	[7.43]	[7.87]	[8.28]
L_3	mm	182.7	185.4	189.8	195.8	202.8	212.2	223.5	233.7
	[in]	[7.19]	[7.30]	[7.47]	[7.71]	[7.98]	[8.35]	[8.80]	[9.20]

OMR dimensions

OMR dimensions - US version

OMR Side port version with 2-hole oval mounting flange (A2-flange)

Side port - US version



C: Drain connection 7/16 - 20 mm UNF; 12 mm [0.47 in] deep

D: 7/8 - 14 UNF; 16.76 mm [0.66 in] deep

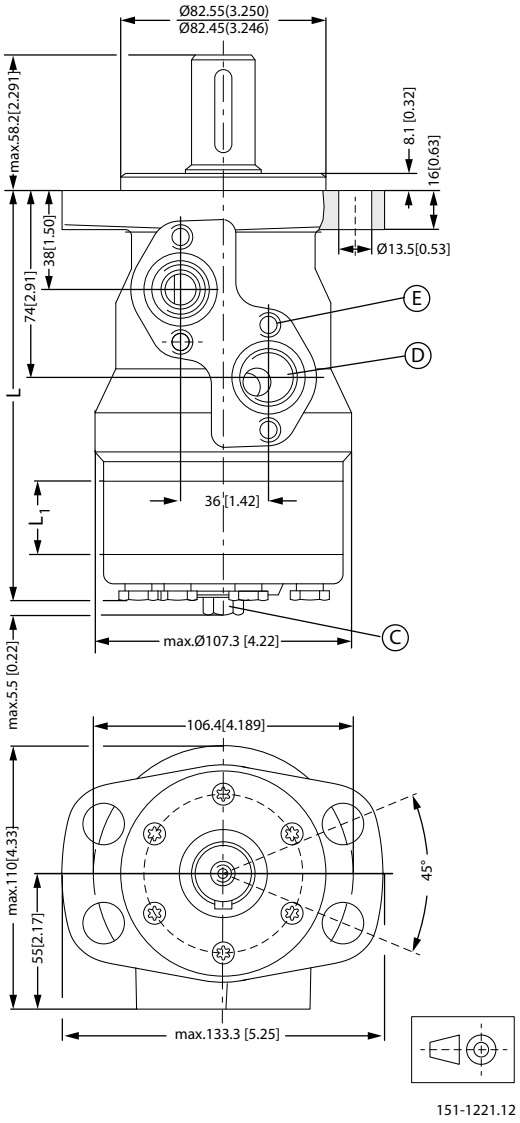
E: M8; 13 mm [0.51 in) deep (4-off)

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
L_{max}	mm	143.7	148.7	152.1	156.5	162.5	169.5	178.2	189.5	199.7
	[in]	[5.66]	[5.85]	[5.99]	[6.16]	[6.40]	[6.67]	[7.02]	[7.46]	[7.86]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	64.8
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR Side port version with 4-hole oval mounting flange (A4-flange)

Side port - US version



C: Drain connection 7/16 - 20 UNF; 12 mm [0.47 in] deep

D: 7/8 - 14 UNF; 17 mm [0.66 in] deep

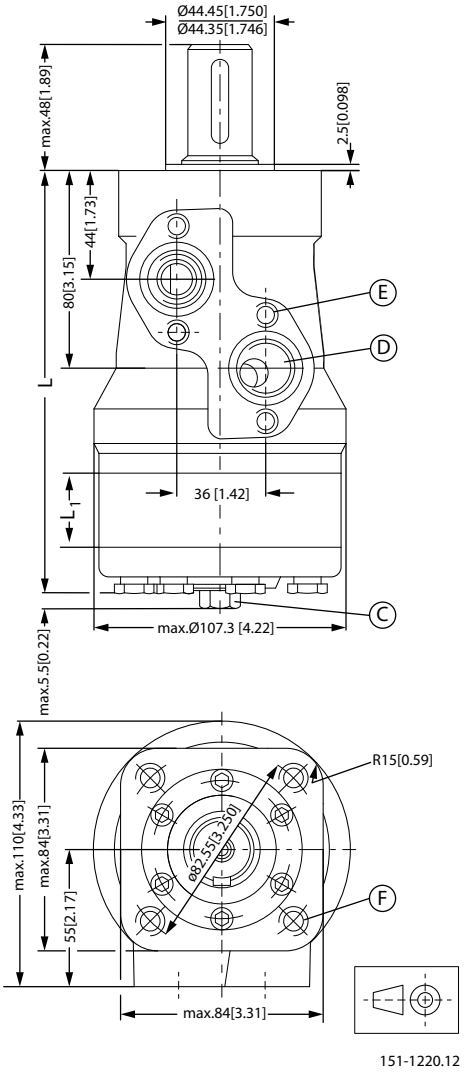
E: M8; 13 mm [0.51 in] deep (4-off)

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
L_{max}	mm	137.8	142.8	146.2	150.6	156.6	163.6	172.3	183.6	193.8
	[in]	[5.43]	[5.62]	[5.76]	[5.93]	[6.17]	[6.44]	[6.78]	[7.23]	[7.63]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR Side port version with square mounting flange (C-flange)

Side port - US version



C: Drain connection 7/16 - 20 mm UNF; 12 mm [0.47 in] deep

D: 7/8 - 14 UNF; 17 mm [0.66 in] deep

E: M8; 13 mm [0.51 in) deep (4-off)

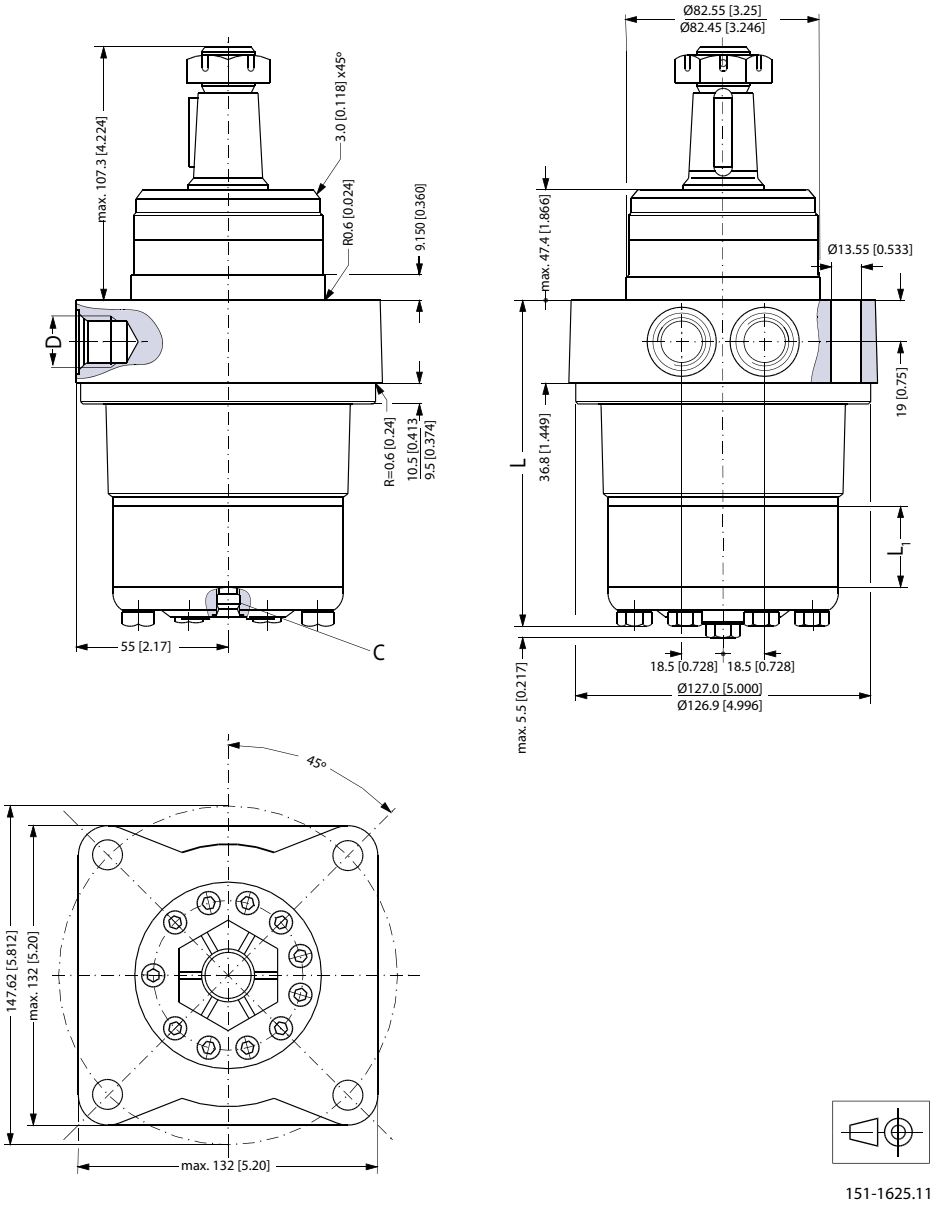
F: 3/8 - 16 UNC; 15 mm [0.59 in] deep (4-off)

Type		OMR 50	OMR 80	OMR 100	OMR 125	OMR 160	OMR 200	OMR 250	OMR 315	OMR 375
L_{max}	mm	143.8	148.8	152.2	156.6	162.6	169.6	178.3	189.6	199.8
	[in]	[5.66]	[5.86]	[5.99]	[6.17]	[6.40]	[6.68]	[7.02]	[7.46]	[7.87]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMRW N wheel motor

Wheel motor - US version



C: Drain connection 7/16 - 20 UNF; 12 mm [0.47 in] deep

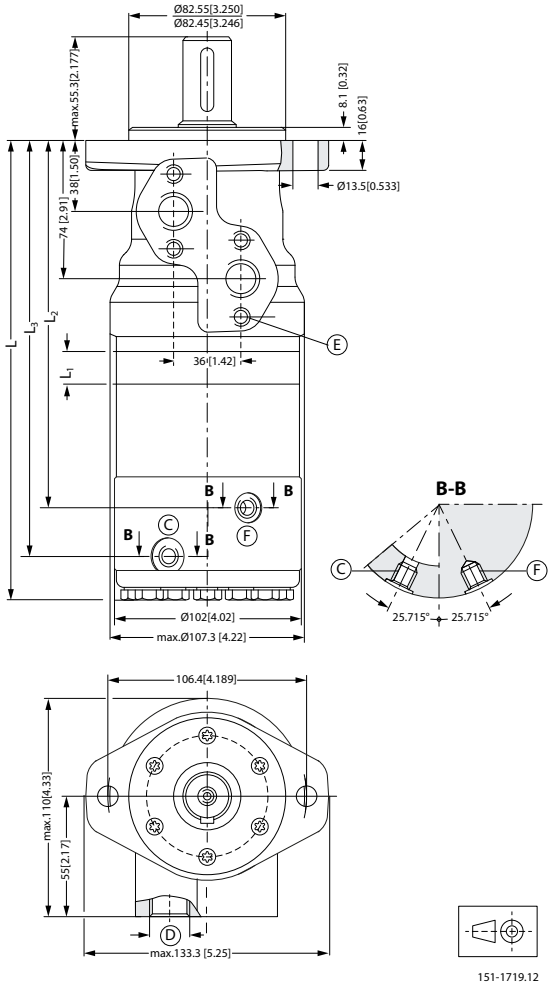
D: 7/8 - 14 UNF; 17 mm [0.66 in] deep

Type		OMRW 50 N	OMRW 80 N	OMRW 100 N	OMRW 125 N	OMRW 160 N	OMRW 200 N	OMRW 250 N	OMRW 315 N	OMRW 375 N
L_{max}	mm	113.7	114.7	118.1	122.5	128.5	135.1	144.2	155.5	165.7
	[in]	[4.48]	[4.52]	[4.65]	[4.82]	[5.06]	[5.33]	[5.68]	[6.12]	[6.52]
L_1	mm	9.0	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.35]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]

OMR dimensions

OMR NF motor

NF motor - US version



C: Drain connection 7/16 - 20 UNF

D: 7/8 -14 UNF, 0.66 in (15 mm) deep

E: M8; 0.51 in (13 mm) deep

F: Brake release connection 7/16 - 20 UNF

Type		OMR 80 NF	OMR 100 NF	OMR 125 NF	OMR 160 NF	OMR 200 NF	OMR 250 NF	OMR 315 NF	OMR 375 NF
L_{max}	mm	248.7	252.1	256.5	262.5	269.5	278.2	289.5	299.7
	[in]	[9.79]	[9.93]	[10.10]	[10.33]	[10.61]	[10.95]	[11.40]	[11.80]
L_1	mm	14.0	17.4	21.8	27.8	34.8	43.5	54.8	65.0
	[in]	[0.55]	[0.69]	[0.86]	[1.09]	[1.37]	[1.71]	[2.16]	[2.56]
L_2	mm	186.8	195.2	200.6	206.6	213.6	222.3	233.6	243.7
	[in]	[7.35]	[7.72]	[7.90]	[8.13]	[8.41]	[8.75]	[9.19]	[9.59]
L_3	mm	216.3	213.7	224.1	230.1	237.1	245.8	257.1	267.2
	[in]	[8.51]	[8.41]	[8.82]	[9.06]	[9.33]	[9.68]	[10.12]	[10.52]