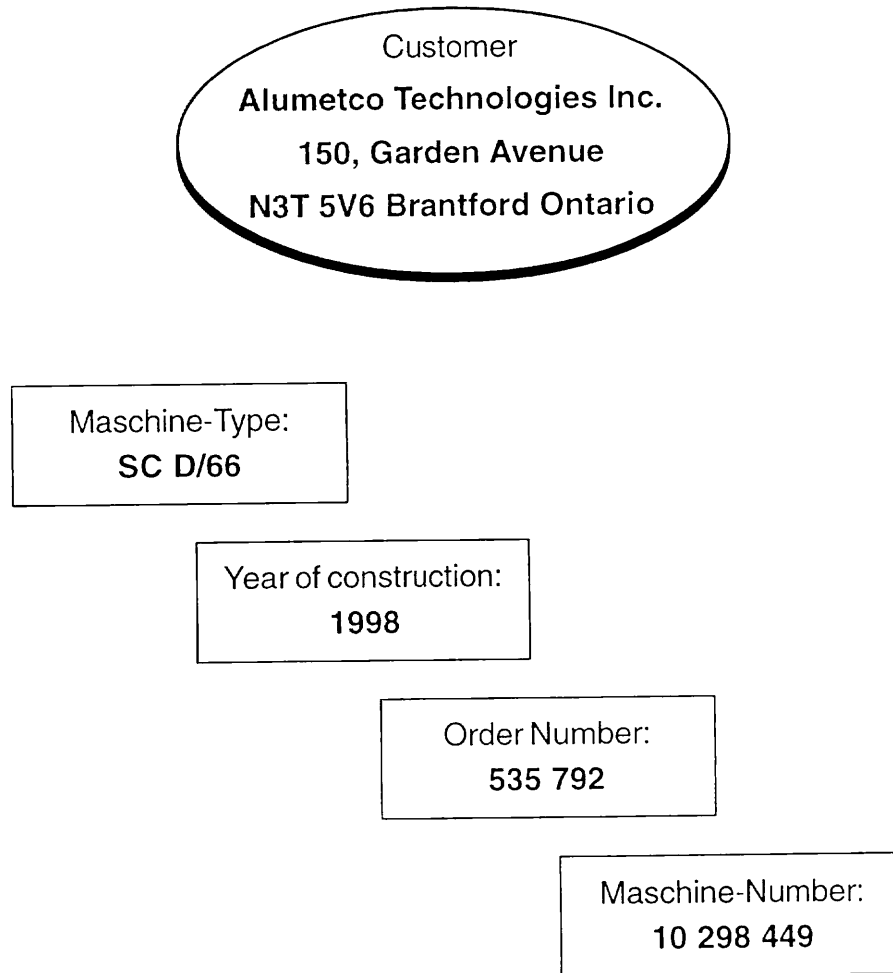
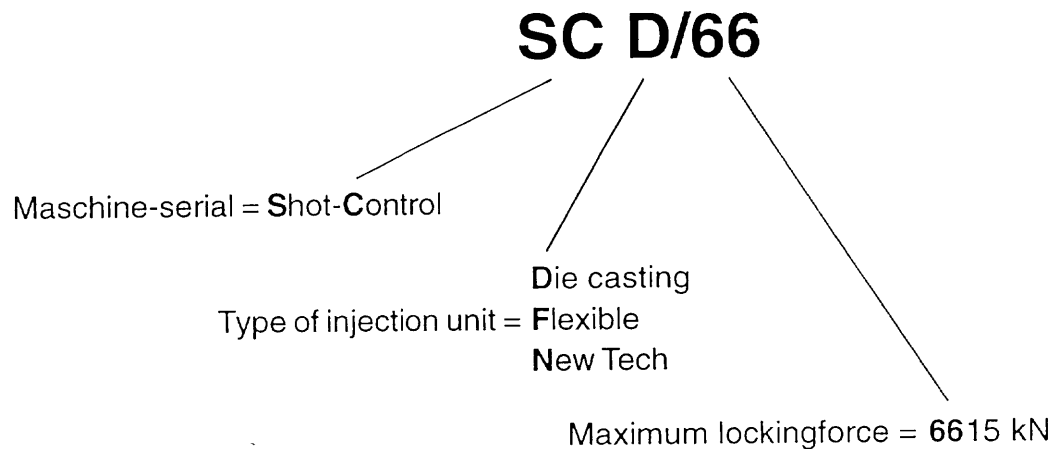


2.1 Identification data



2.2 Machine type designation



2.3 Directed use

Buhler horizontal die-casting machines are designed exclusively for the pressure die-casting of aluminium, magnesium, zinc and copper alloys. Any use beyond this scope is regarded as non-directed.

The manufacturer can **not** be made liable for any damages that are a result of non-directed use. The user is the sole bearer of the risk for such damage

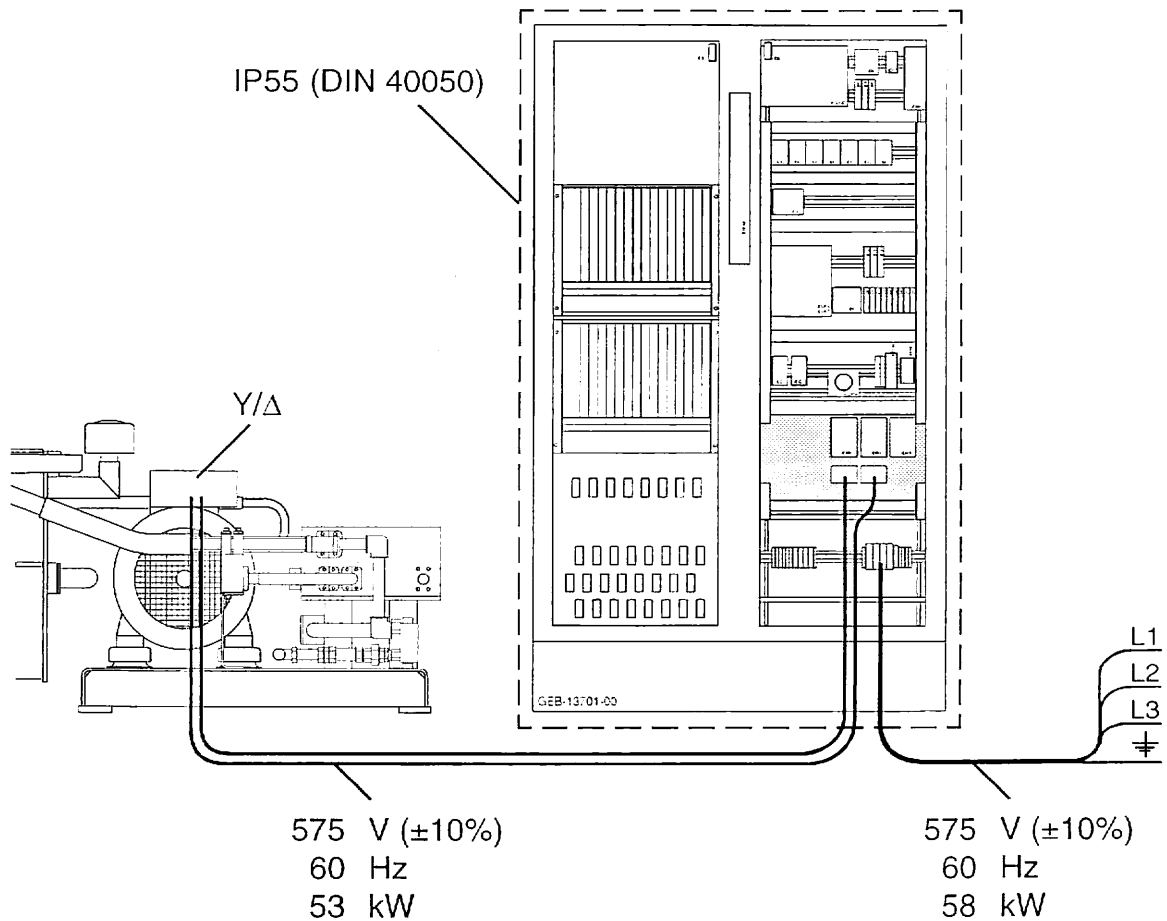
The observance of the conditions for installation, start-up, operation and maintenance as instructed by the manufacturer are inherent with the directed use.

2.4 Ambience

In order to determine a suitable location for the DCM or DCI a number of important aspects will have to be taken into account.

See chapter „Preparing the site of installation“.

2.5 Electrical connections

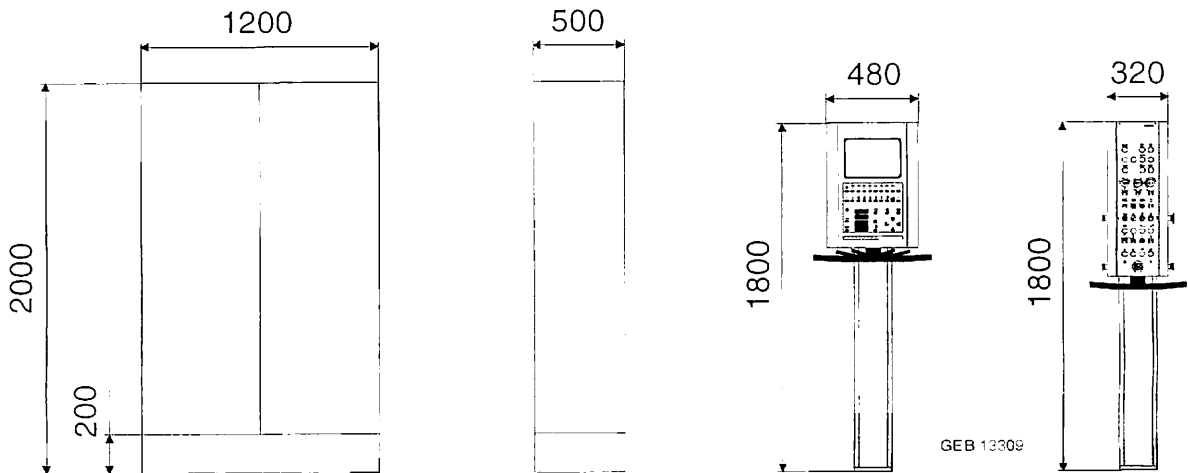


2.6 Dimension / Weight

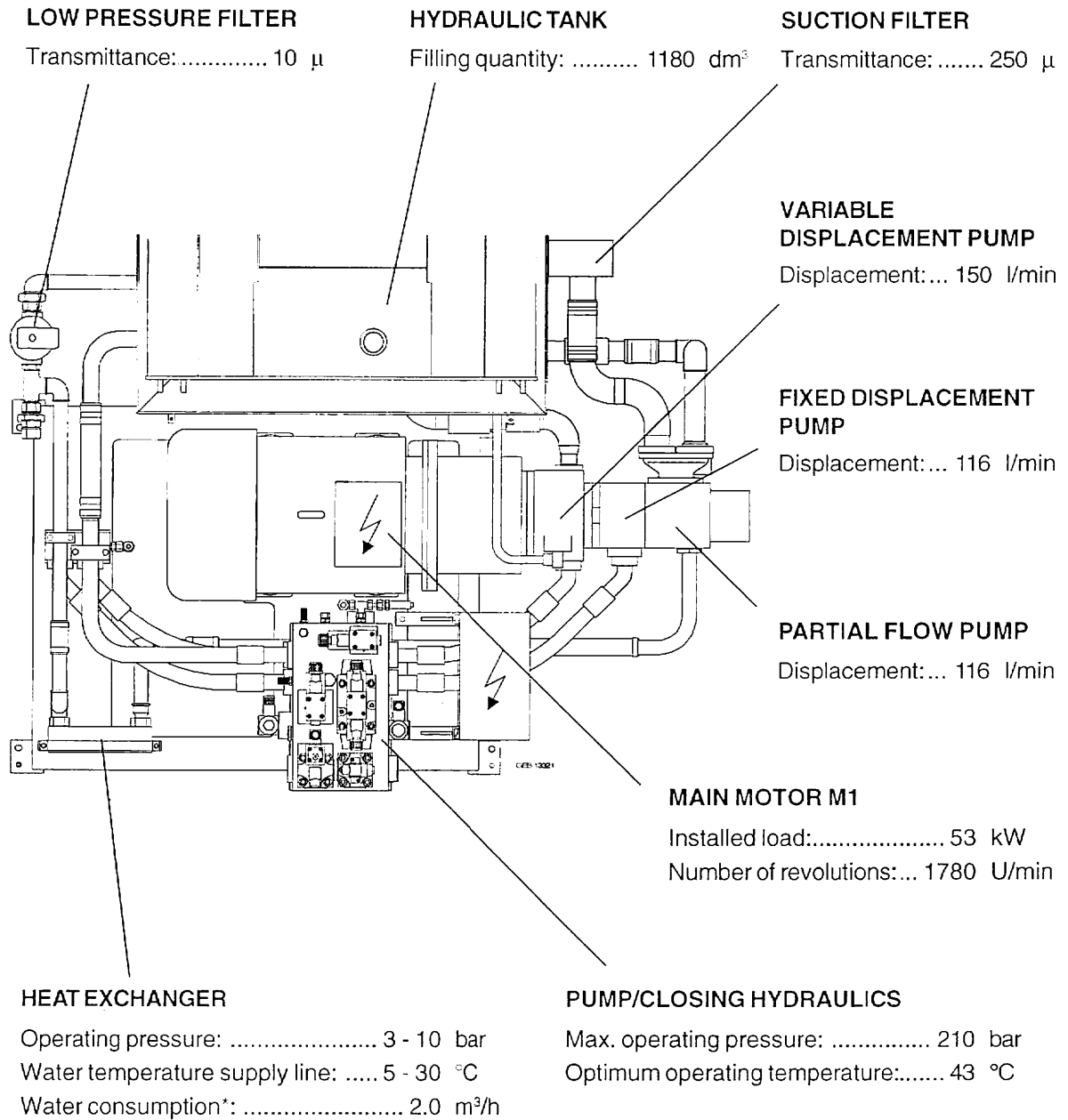
Machine ready for production:..... 26'000 kg

Dimensions: see Enclosures

Weight of the control cabinet:..... 275 kg



2.7 Driving unit / Hydraulics



2.8 Closing unit

CENTRAL LUBRICATION

Filling quantity: 2.7 dm³

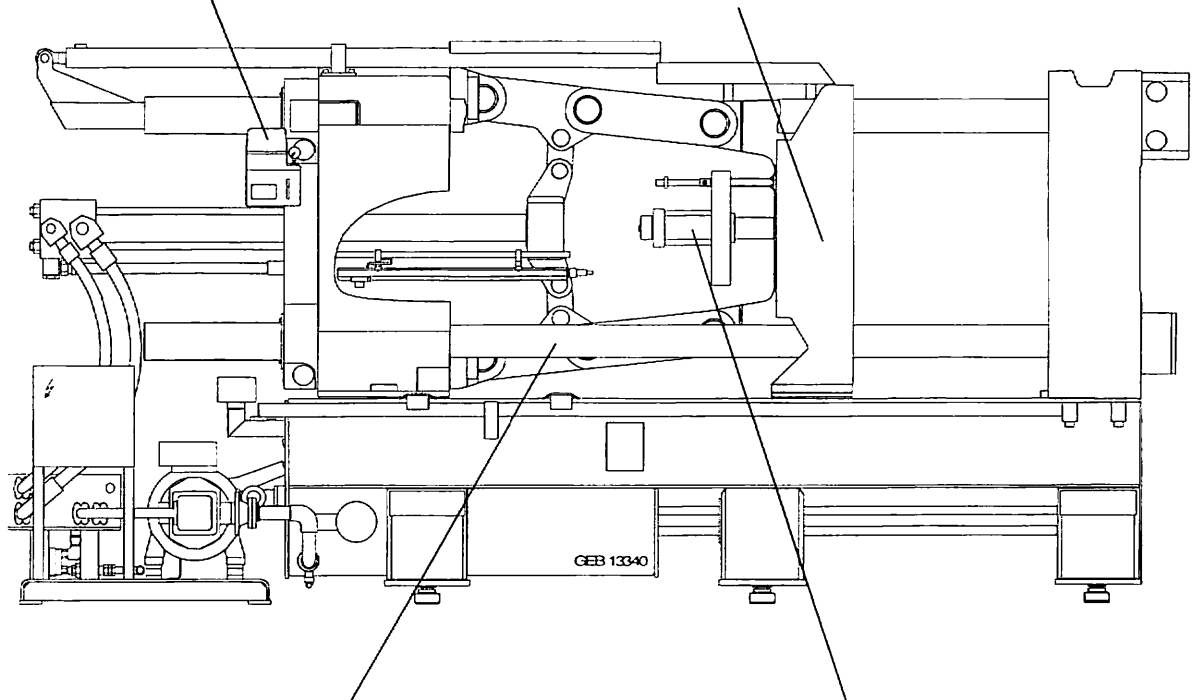
DIE

Die height: 360 - 900 mm

Die opening stroke: 800 mm

Max. permissible surface pressure: 100 N/mm²

Min. permissible die dimensions: ... 620 x 620 mm



TIE BARS

Tie bar spacing: 780 x 780 mm

Tie bar diameter: 150 mm

Tie bar pulling from 0-Linie: 6750 mm

Tie bar removal from 0-Linie: 6750 mm

EJECTOR

Ejector stroke: 175 mm

Ejector force: 225 kN

LOCKING FORCE

Max. locking force: 6615 kN

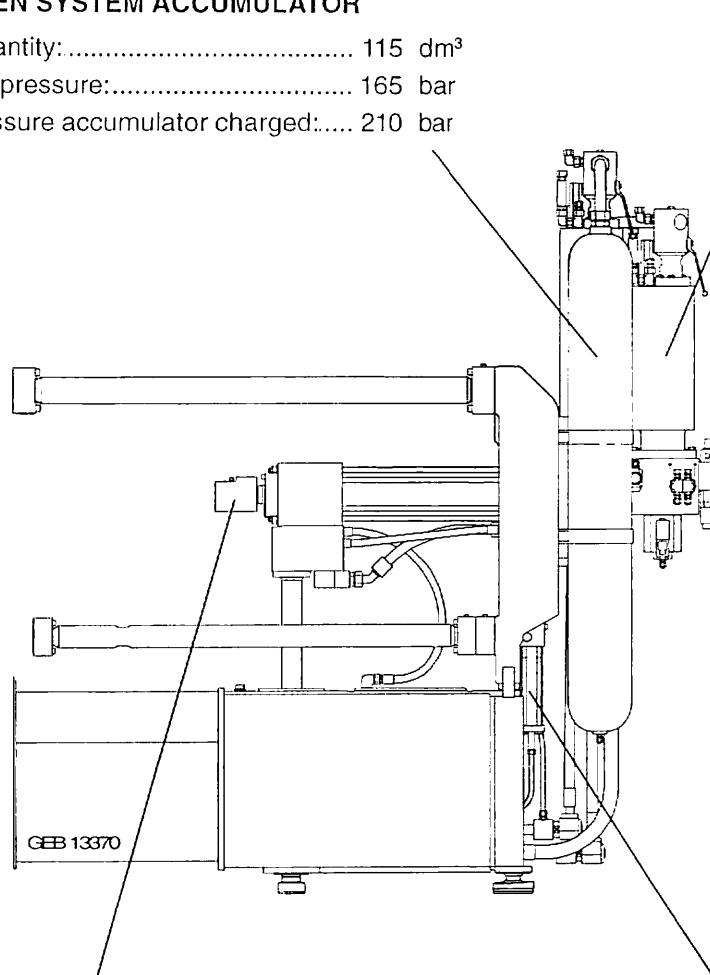
2.9 Shot unit

NITROGEN SYSTEM ACCUMULATOR

Filling quantity:..... 115 dm³
Max. idle pressure:..... 165 bar
Max. pressure accumulator charged:..... 210 bar

NITROGEN SYSTEM INTENSIFIER

Filling quantity:..... 38 dm³
Max. idle pressure:..... 185 bar
Area ratio:..... 1 : 2,25
Stroke: 115 mm



PLUNGER

Injection force dynamic:..... 290 kN
Injection force intensified: 700 kN
Plunger stroke: 600 mm
Plunger diameter:..... 70 - 110 mm

CASTING POSITION ADJUSTMENT

Casting positions:..... 0 / - 300 mm

PLUNGER LUBRICATION

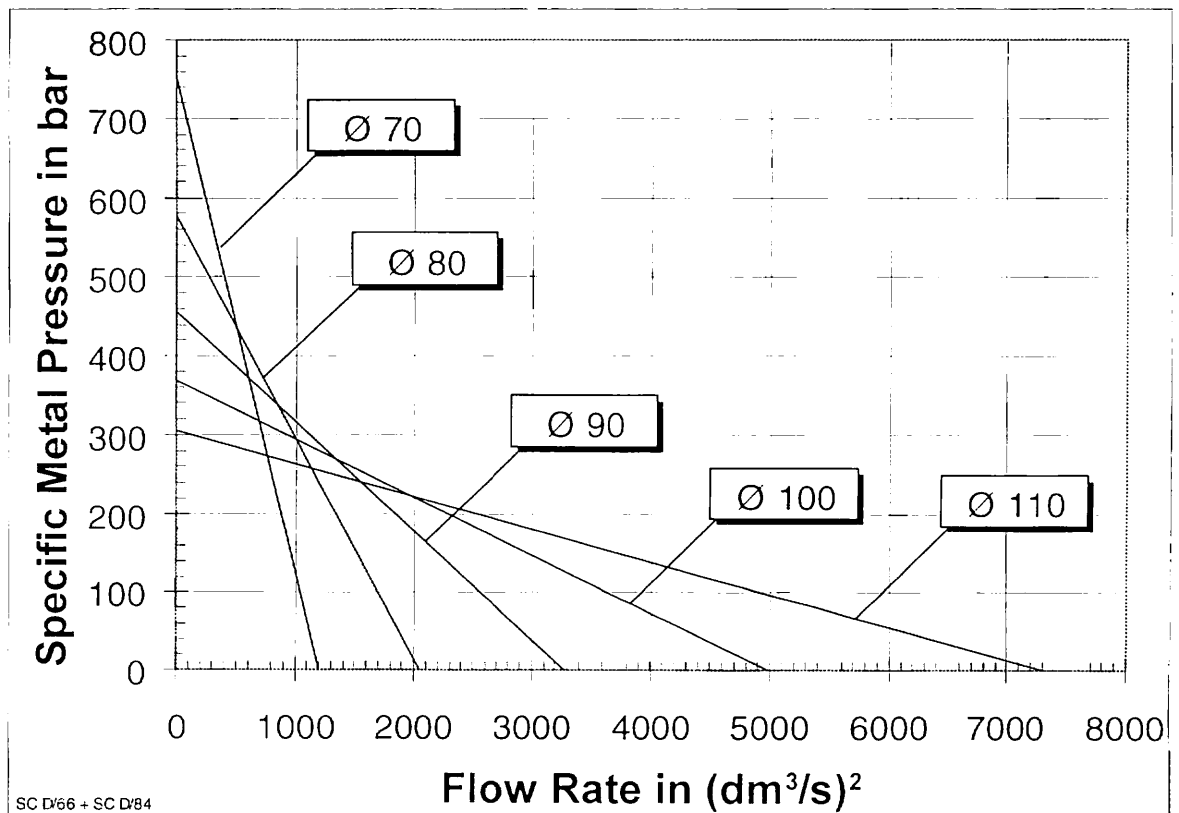
Filling quantity:..... 10 dm³

2.10 Production data

Pluger Diameter	mm	70	80	90	100	110
Maximum Casting Volume	cm ³	1539	2011	2545	3142	3801
Maximum Casting Weight Al	kg	3.85	5.03	6.36	7.85	9.50
Maximum Metal Pressure	bar	1827	1399	1105	895	740
Maximum Projected Area	cm ²	362	473	599	739	894

SC D/66

2.11 p/Q²-Diagram



SC D/66 + SC D/84

2.12 Noise level of the DCM

Sound

Sources:

- the drive unit.
- during the casting process.

Depends on: machine load during operation.

Regulations: observe the local regulations.



WARNING!

If the noise emission is higher than the permissible values the personnel must wear appropriate ear protectors!

Measuring setup

- Casting process without metal (plastic plug). When casting with metal smaller pulse coefficients DLI eq (ca. 3dB) must be expected.
- Data are related exclusively to the DCM (without peripheral units).
- Measurements carried out according to DIN 45635 Section 1.
- Variations from the given values Leq and DLI eq are contingent to the operating conditions tCyc, vI and vI Br.

Results

Leq	A-rating equivalent continuous sound level pressure at the working place including the pulse coefficient	79	dB(A)
DLI eq	pulse coefficient	5	dB

Operating conditions

tCyc	cycling time	30	s
vI	plunger speed	5.0	m/s
vI Br	braking velocity	1.0	m/s