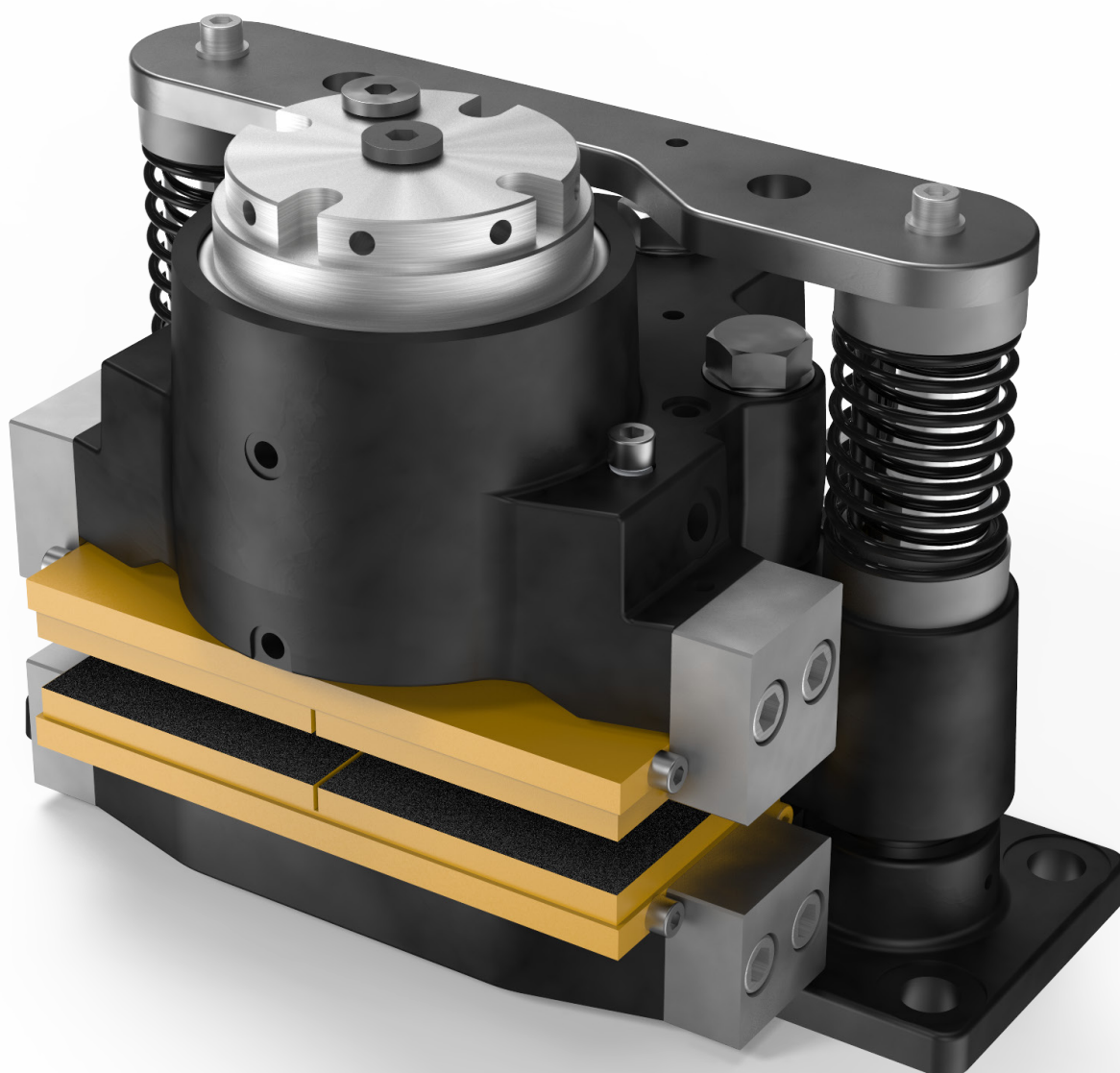


IDMS 1000N

8kN • 16kN • 24kN • 32kN • 48kN



IDMS 1000N

- **Failsafe hydraulic brake (spring applied – oil released)**
- **5 spring sets available: 8kN, 16kN, 24kN, 32kN, 48kN**
- **Disc diameter range: 500÷3000 [mm]**
- **Disc thickness range: 20÷40 [mm]**
- **Integrated fixing bracket for side mounting**
- **ON/OFF inductive sensor (brake ON / brake OFF)**
- **Inductive sensor or wire pad wear indicator**
- **Pad wear recovery / gap adjustment system**
- **Brake axial adjustment range: -5 ÷ +10 [mm]**
- **Spheroidal cast iron body / stainless steel cover and gap regulator**
- **Easy brake setting and spring pack replacement**
- **Safety screw for brake installation without hydraulic pressure**
- **Pad side guides**
- **Brake return springs**
- **Nr. 4 oil drain ports**
- **Compact dimensions compared to double active-chambers brakes**

The Mono-Actuated Hydraulic brake, series IDMS, has been designed for those applications with a limited working space available.

The brake is composed by an active body, a reactive half and a fixing bracket.

The active body, located front-operator, contains a modular spring pack which allows to reach different braking forces by changing the number, type and arrangement of the springs. Its favorable position and the integrated fixing bracket ease mounting, set-up and maintenance operations. The axial brake adjustment system allows to recover misalignments with the disc position. 4 oil drain ports optimize vertical and horizontal brake mounting.

The IDMS series is spring applied and set to operate indoors or protected by carter at working temperature from -10°C to +100°C.

The use of mineral oil SAE/ISO46 is recommended.



IDMS 1000N

Freno Idraulico Mono Spinta - Negativo Mono Actuated Hydraulic Brake - Spring Applied

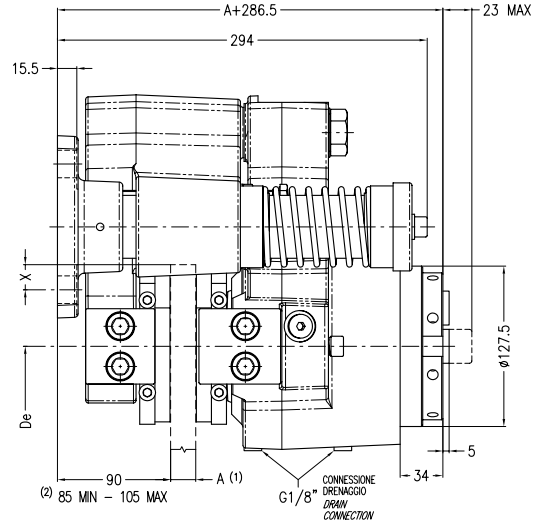
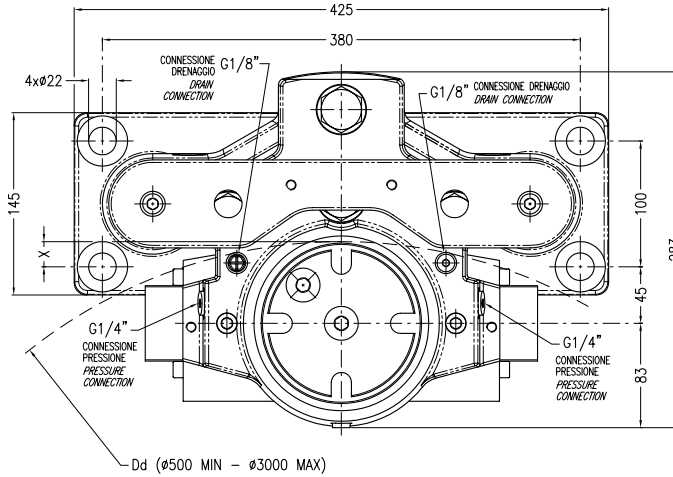
Dd mm	= / > 500 = 1000	> 1000 < / = 1400	> 1400 < / = 1700	> 1700 < / = 2200	> 2200 < / = 3000
X mm	20	18	17	16	15
De mm	Dd - 130	Dd - 126	Dd - 124	Dd - 122	Dd - 120

(1) Spessore disco freno A = 20 mm MIN - 40 mm MAX.

(1) Brake disc thickness A = 20 mm MIN - 40 mm MAX.

(2) Il freno può muoversi assialmente 5 mm verso la base di montaggio e 10 mm dalla parte opposta.

(2) The brake can move axially 5 mm towards the mounting base and 10 mm from the opposite side.



Dati Tecnici / Technical Data

TIPO FRENO BRAKE TYPE	IDMS 1000N-8	IDMS 1000N-16	IDMS 1000N-24	IDMS 1000N-32	IDMS 1000N-48
Diametro Disco Dd Disc Diameter Dd mm	Coppia frenante Mb Braking torque Mb Nm (5)	Coppia frenante Mb Braking torque Mb Nm (5)	Coppia frenante Mb Braking torque Mb Nm (5)	Coppia frenante Mb Braking torque Mb Nm (5)	Coppia frenante Mb Braking torque Mb Nm (5)
500	1480	2960	4440	5920	8880
610	1920	3840	5760	7680	11520
760	2520	5040	7560	10080	15120
915	3140	6280	9420	12560	18840
1000	3480	6960	10440	13920	20880
1065	3756	7512	11268	15024	22536
1220	4376	8752	13128	17504	26256
1370	4976	9952	14928	19904	29856
Forza di chiusura Fc Clamping force Fc (3)	10000 N	20000 N	30000 N	40000 N	60000 N
Forza tangenziale Fb Braking force Fb	8000 N	16000 N	24000 N	32000 N	48000 N
Perdita di forza per 1 mm Loss of force per 1mm (4)	4.2 %	3.0 %	7.5 %	5.2 %	7.4 %
Pressione minima di apertura Minimum opening pressure	20 bar	35 bar	52 bar	66 bar	100 bar
Peso Weight	82.7 kg	82.7 kg	82.9 kg	83 kg	83.1 kg

(3) Tutti i valori si basano su 1 mm di gap totale (0.5 mm ogni lato).

(4) Con una corsa di 1 mm (0.5 mm di usura della pastiglia ferodo ogni lato).

(5) La coppia iniziale può essere inferiore dal 30% al 50% rispetto al valore nominale.

(3) All values are based on 1 mm of air gap total (0.5 mm each side).

(4) With a stroke of 1 mm (0.5 mm wear of brake pad each side).

(5) The initial braking torque can be from 30% to 50% lower than the nominal value.

Coefficiente di attrito nominale $\mu = 0.40$

Forza tangenziale $F_b = F_c \cdot 2 \cdot \mu$ (N)

Raggio disco effettivo di frenatura $R_e = D_d \div 2000$ (m)

Coppia frenante $M_b = F_b \cdot R_e$ (Nm)

Pressione Max : 200 bar

Volume olio totale : 0.14 dm³

Volume olio totale con corsa di 2 mm per ogni pinza : 0.0138 dm³

Spessore del ferodo nuovo : 12 mm

Usura Max totale : 13 mm (6.5 mm ciascun ferodo)

Nominal friction coefficient $\mu = 0.40$

Braking force $F_b = F_c \cdot 2 \cdot \mu$ (N)

Effective braking disc radius $R_e = D_d \div 2000$ (m)

Braking torque $M_b = F_b \cdot R_e$ (Nm)

Max pressure : 200 bar

Total oil volume : 0.14 dm³

Total oil volume with 2 mm stroke for each caliper : 0.0138 dm³

Thickness of new lining : 12 mm

Max total wear : 13 mm (6.5 mm each pad)



Il valore del coefficiente d'attrito pari a 0,4 di cui ai calcoli sopra riportati è puramente teorico, essendo utilizzato ai fini meramente esplicativi. Tale valore può variare a seconda delle condizioni specifiche delle singole applicazioni.

The friction coefficient value of 0,4, reported in the calculations here above, is purely theoretical and used for explanatory purposes. Such value can vary according to the specific conditions of each application.