



TRANSFLUID[®]

industrial & marine



TRANSFLUID



drive with us

NBG - TFDS

DRUM AND DISC BRAKES

DESCRIPTION OPERATING CONDITIONS AND SELECTION

1. Operation

TF Drum and Disc Brakes are negative type i.e. the braking action happens when the brake is not electrically actuated. The braking force is obtained by means of a spring that, through a suitable system of levers, transmits its amplified force to the braking drums through the braking pads.

2. Technical Features

- Welded steel frame in accordance to DIN 15435 (drum brakes). Zinc coated steel frame (disc brakes).
- Epoxy resin painting (2 coatings) with RAL 3000 final color.
- Manganese phosphated pins (drum brakes). Stainless steel pins (disc brakes).
- Self lubricating bushes and stainless steel pins.
- Light alloy drums with asbestos free glued braking pads (drum brakes) Asbestos free lining pads, glued to easy-to-replace plates (disc brakes).
- Friction coefficient $\mu = 0,42$.
- Braking torque scale indicator.

3. Optionals (upon request)

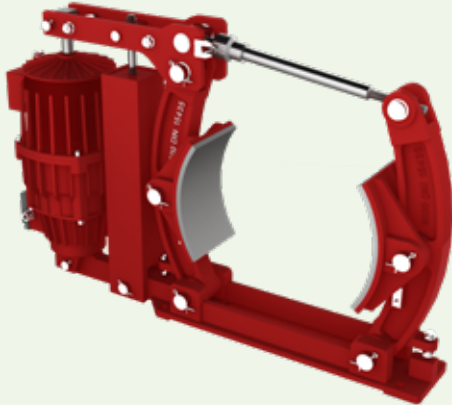
- Automatic wear compensation device.
- Lining max wear indicator, fitted on rod.
- Open brake indicator, either fitted on thrustor or on spring set (to be specified).
- Adjustable delay valve.
- Brake manual opening lever.
- Protection grade IP65.
- Braking drums 50% wider (drum brakes).
- Stainless steel pins instead of phosphated pins (drum brakes).
- (AISI 304)

4. Thrustor Types

- TRANSFLUID Electrohydraulic (Standard).

Upon request:

- EMG ELTMA Electrohydraulic.
- EMG ELDRO Electrohydraulic.
- Pneumatic.
- ATEX CERTIFIED



Tab. A

Brake Series	Thrustor Maximum brake torque Nm						
	TF 22/50	TF 30/50	TF 60/50	TF 75/50	TF 80/60	TF 200/60	TF 300/60
NBG 200	235	310	-	-	-	-	-
NBG 250	265	350	695	-	-	-	-
NBG 315	-	430	850	1050	1700	-	-
NBG 400	-	525	1045	1330	2100	-	-
NBG 500	-	-	-	-	2600	4200	-
NBG 630	-	-	-	-	3270	5400	7800

5. Brake Selection Data

- Type of application.
- Stops per hour.
- Required voltage (standard 230/400 V – 50 Hz).
- Air pressure supply (in case of pneumatic actuator).
- Required optionals.
- Drum diameter and width (drum brakes).
- Disc diameter (disc brakes). Standard disc thickness is 30 mm.

6. Abbreviations of actuators

- TF: TRANSFLUID Electrohydraulic actuator.
- Ed: ELDRO Electrohydraulic actuator.
- Eb: ELTMA Electrohydraulic actuator.

7. Abbreviations of Drum and Disc Brakes

- FCA: Open brake indicator.
- FCU: Maximum wear indicator.
- LSM: Manual disengagement lever.
- SV: Adjustable delay valve.
- RG: Automatic wear compensation device.

Drum brakes only:

- L: Special large drums. (50% more than standard version)
- INOX: Stainless steel pins. (AISI 304)

Disc brakes only:

- DX: Right hand execution.
- SX: Left hand execution.

8. Applications

- Brake for lifting service.
- Brake for translating service.
- Emergency brake.
- Safety brake.

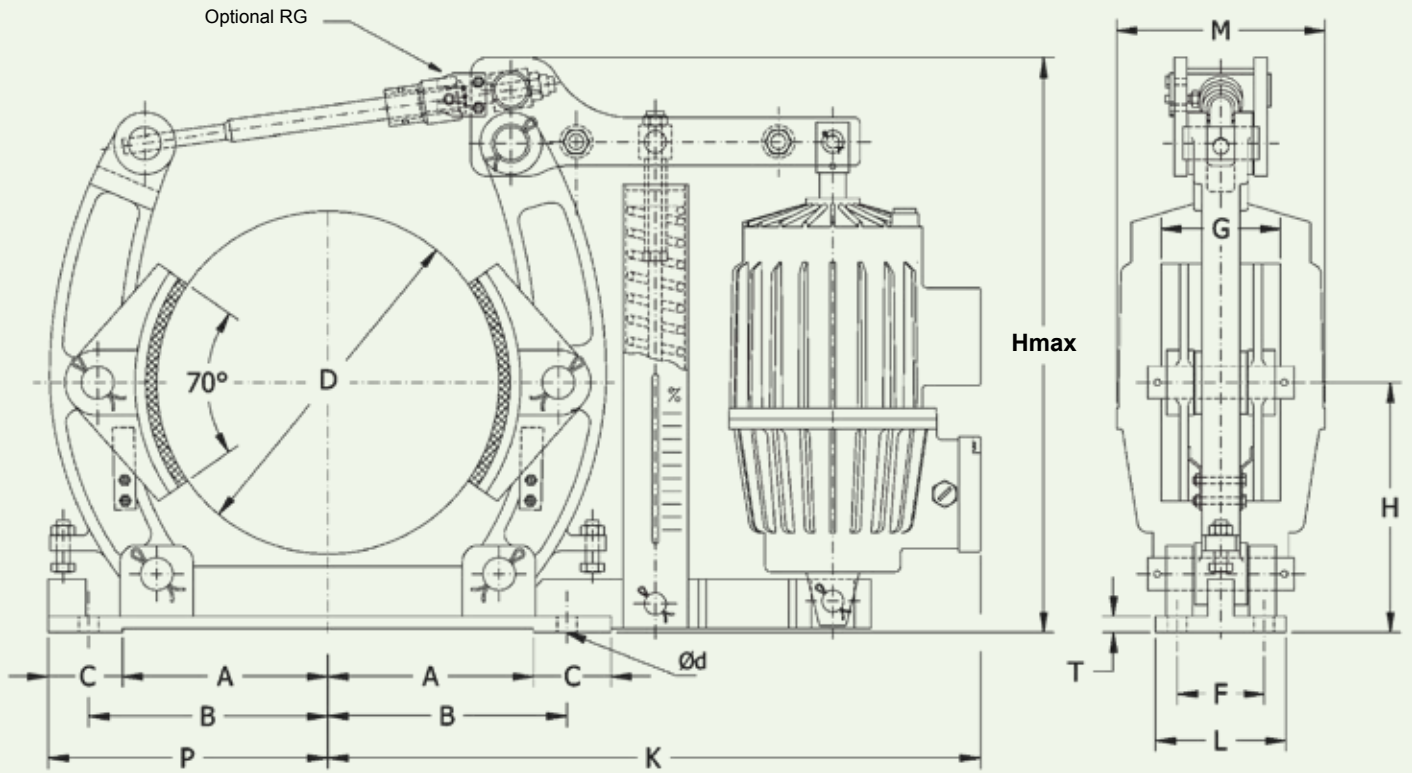
9. Quick Selection and dimensions Tables

- **Tab. A DRUM BRAKES**
- **Tab. B DISC BRAKES**



Tab. B

Brake Series	Disc dia. mm	Thrustor Maximum brake torque Nm					
		TF 22/50	TF 30/50	TF 60/50	TF 80/60	TF 200/60	TF 300/60
TFDS 1	355	290	435	870	-	-	-
	400	340	490	980	-	-	-
	450	390	530	1060	-	-	-
	500	440	575	1150	-	-	-
TFDS 2	450	-	-	1350	2700	4500	-
	500	-	-	1500	3000	5000	-
	560	-	-	1700	3400	5700	-
	630	-	-	1850	3700	6200	-
	710	-	-	2100	4200	7000	-
TFDS 3	630	-	-	-	3900	6500	9750
	710	-	-	-	4410	7350	11000
	800	-	-	-	5050	8500	12750
	1000	-	-	-	6300	10500	12750
	1250	-	-	-	7700	12800	19000

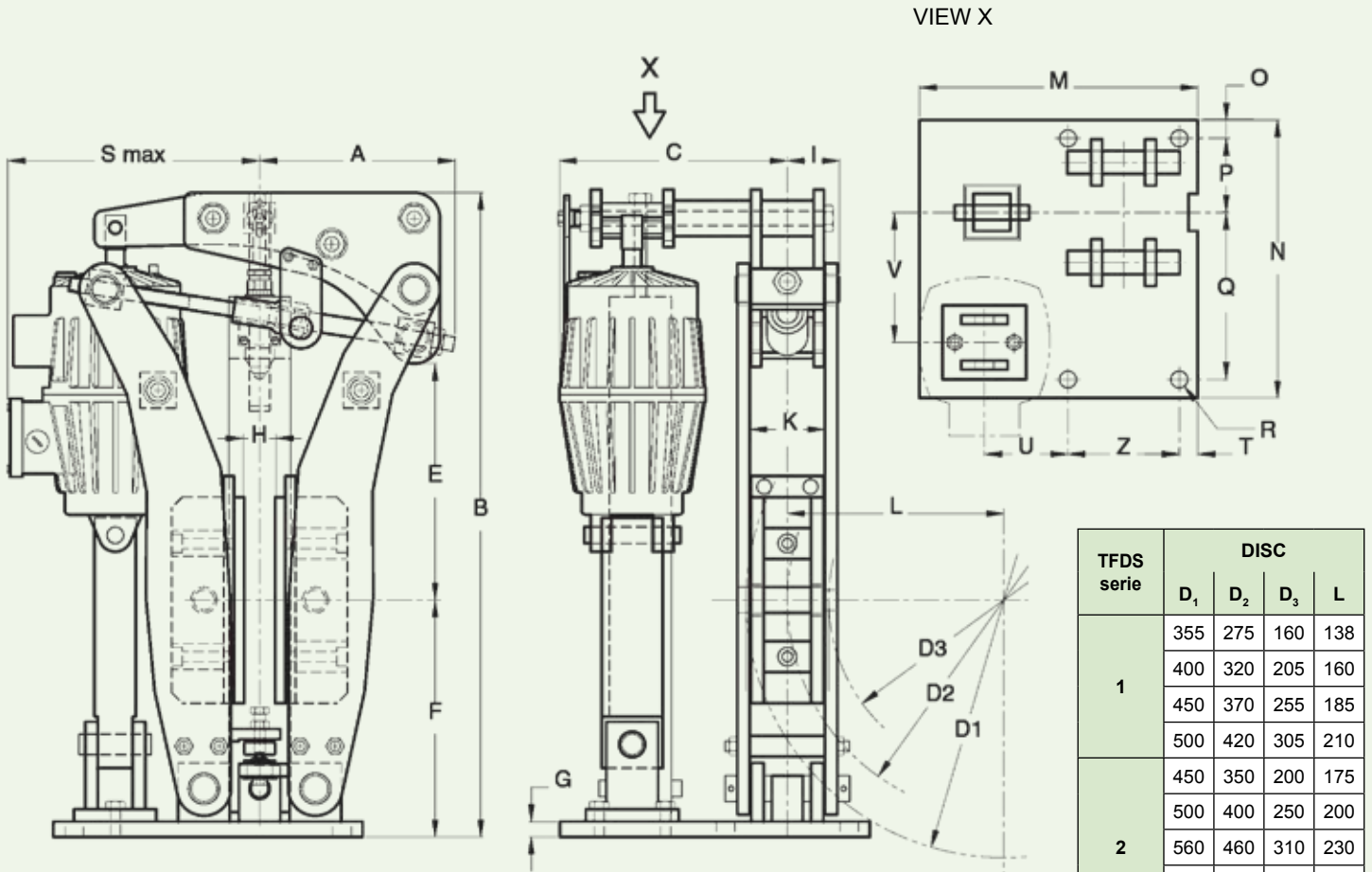


Tab. A Dimensions (mm)

SERIES NBG	Thrustor TF	D	A	B	C	d	F	G	H	Hmax	K	L	P	T	M	Total weight kg
200	22/50	200	115	145	55	14	55	70	160	430	422	90	170	12	142	26
200	30/50	200	115	145	55	14	55	70	160	430	450	90	170	12	168	30
250	22/50	250	144	180	63	18	65	90	190	485	476	100	207	14	142	34
250	30/50	250	144	180	63	18	65	90	190	485	501	100	207	14	168	40
250	60/50	250	144	180	63	18	65	90	230	485	510	100	207	14	192	50
315	30/50	315	189	220	68.5	18	80	110	230	532	593	120	257.5	15	168	61
315	60/50	315	189	220	68.5	18	80	110	230	532	601	120	257.3	15	192	71
315	75/50	315	189	220	68.5	18	80	110	230	532	601	120	257.5	15	192	71
315	80/60	315	189	220	68.5	18	80	110	280	532	618	120	257.5	15	234	78
400	30/50	400	240	270	74	22	100	140	280	668	687	150	314	17	168	89
400	60/50	400	240	270	74	22	100	140	280	668	695	150	314	17	192	93
400	75/50	400	240	270	74	22	100	140	280	668	695	150	314	17	192	93
400	80/60	400	240	270	74	22	100	140	340	668	715	150	314	17	234	100
500	80/60	500	295	325	85	22	130	180	340	760	812	170	380	20	234	148
500	200/60	500	295	325	85	22	130	180	420	785	823	170	380	20	274	160
630*	80/60	630	350	400	100	27	170	225	420	888	903	250	475	20	234	143
630*	200/60	630	350	400	100	27	170	225	420	888	903	250	475	20	274	165
630*	300/60	630	350	400	100	27	170	225	420	888	903	250	475	20	274	167

*(NB) steel lever arms version

DIMENSIONS ARE SUBJECT TO ALTERATION WITHOUT NOTICE



TFDS serie	DISC			
	D ₁	D ₂	D ₃	L
1	355	275	160	138
	400	320	205	160
	450	370	255	185
	500	420	305	210
2	450	350	200	175
	500	400	250	200
	560	460	310	230
	630	530	380	265
	710	610	460	305
3	630	500	310	250
	710	580	390	290
	800	670	480	335
	1000	870	680	435
	1250	1120	930	560

Tab. B Dimensions (mm)

TFDS series	Thruster TF	A	B max	C	E	F	G	H	I	K	M	N	O	P	Q	R Nr.	S max Ø	T	U	V	Z	Total Weight kg
1	22/50	199	650	221	220	230	15	15	62	70	300	300	20	80	80	18	253	20	90	140	120	72
	30/50			234													274					77
	60/50			251													286					79
2	60/50	225	800	316	290	280	70	70	75	90	370	375	130	130	4	22	327	145	175	140	125	
	80/60			332													348				132	
	200/60			354													377				155	
3	80/60	235	1050	352	440	370	20	20	95	120	410	460	50	180	180	27	384	30	155	187	160	241
	200/60			372													395					264
	300/60			372													395					264

DIMENSIONS ARE SUBJECT TO ALTERATION WITHOUT NOTICE

CHINA
TRANSFLUID BEIJING
TRADE CO. LTD Beijing
Ph.: +86.10.60442301-2
tbtcinfo@transfluid.cn

FRANCE
TRANSFLUID FRANCE s.a.r.l.
38110 Rochetoirin
Ph.: +33.9.75635310
tffrance@transfluid.eu

NORTH EUROPE
TRANSFLUID B.V.
(Bellmarine)
NL-3992 AK, Houten
Ph. +31 (0)85 4868530
info@bellmarine.nl

U.K.
TRANSFLUID UK LTD
London
Ph. +44.7445501066
marine@transfluid.co.uk

U.S.A
TRANSFLUID LLC
Auburn, GA 30011
Ph.: +1.770.822.1777
tfusa@transfluid.us

Global web site: www.transfluid.eu • E-commerce: www.buy-transfluid.com

TRANSFLUID S.p.A • Via Guido Rossa, 4 • 21013 Gallarate (VA) Italy • Ph. +39 0331 28421 • info@transfluid.eu
2407 - 355 GB