

## Data Sheet

### All stainless steel process gauge open or solid front

#### Model T5500 and T6500

According to EN 837-1

#### FEATURES

- Rugged all welded stainless steel construction
- 100 mm and 160 mm case size
- Weatherproof protection IP66/IP67 (NEMA 4X)
- ATEX approval  $\text{CE Ex II 2 GD c}$
- Optional arctic ambient temperature  $-70^{\circ}\text{C}$
- Overload protection 130 %
- Dry, liquid filled or **PLUS!™** Performance option
- Monel wetted system optional

#### TYPICAL USES

- Offshore oil rigs
- Chemical and petrochemical plants
- Machine equipment
- Food and beverage industry
- Pulp and paper
- Power plants



#### SPECIFICATIONS

Model number:	T5500 open front with rear blow out disk, compensation diaphragm and ventable fill plug on top T6500 solid front with rear blow out back, compensation diaphragm wall and ventable fill plug on top
Accuracy:	Class 1; 1 % Full scale optional 0.5 % Full scale
Sizes:	100 mm or 160 mm
Ranges:	Vacuum, compound, 0 to 1000 bar psi, kPa, MPa, kg/cm <sup>2</sup> and others
Working pressure:	Suitable for maximum steady working pressure equal to the maximum scale value

#### WETTED COMPONENTS

Tube:	Stainless steel 316L (1.4404) optional Monel® K-500
Process Connection:	Stainless steel 316L (1.4404) optional Monel® 400
Restrictor:	Stainless steel 316L (1.4404) optional Monel® 400 0,5 mm (0,02") orifice

#### NON-WETTED COMPONENTS

Window:	T5500: Glass, polycarbonate or safety glass T6500: Safety glass or polycarbonate
Window Sealing:	NBR optional Viton or Fluorosilicone
Compensation:	NBR optional Viton or Fluorosilicone
Dial:	Black figures on white background, aluminum; (secondary scale is inner scale for dual scale dials)
Pointer:	Black, aluminum optional adjustable micrometer pointer, red set hand, maximum pointer
Movement:	Stainless steel 304 (1.4301) optional stainless steel 316L (1.4404)
Case:	Stainless steel 304 (1.4301) optional stainless steel 316L (1.4404)
Bayonet Ring:	Stainless steel 304 (1.4301) optional stainless steel 316L (1.4404)
Process Connection Location:	T5500: Lower or back T6500: Lower

The Ashcroft® T5500 stainless steel pressure gauge has become an industry standard. Providing high reliability, versatility and performance, it proves an ideal product for satisfying many applications and installation requirements.

Process Connection All common sizes, see page 6  
Sizes:

Fill Fluid: Dry, Glycerine, White oil, Silicone, Halocarbon or liquid less PLUS!™ Performance

#### MIN./MAX. TEMPERATURE LIMITS

VERSION	AMBIENT	PROCESS	STORAGE
Dry	$-40^{\circ}\text{C}$ to $70^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ to $158^{\circ}\text{F}$ )	$-40^{\circ}\text{C}$ to $200^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ to $392^{\circ}\text{F}$ )	$-40^{\circ}\text{C}$ to $70^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ to $158^{\circ}\text{F}$ )
<b>PLUS!™</b>	$-7^{\circ}\text{C}$ to $70^{\circ}\text{C}$ ( $19^{\circ}\text{F}$ to $158^{\circ}\text{F}$ )	$-40^{\circ}\text{C}$ to $200^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ to $392^{\circ}\text{F}$ )	$-40^{\circ}\text{C}$ to $70^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ to $158^{\circ}\text{F}$ )
Glycerine	$-7^{\circ}\text{C}$ to $70^{\circ}\text{C}$ ( $19^{\circ}\text{F}$ to $158^{\circ}\text{F}$ )	$-7^{\circ}\text{C}$ to $93^{\circ}\text{C}$ ( $19^{\circ}\text{F}$ to $199^{\circ}\text{F}$ )	$-40^{\circ}\text{C}$ to $70^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ to $158^{\circ}\text{F}$ )
Silicone	$-7^{\circ}\text{C}$ to $70^{\circ}\text{C}$ ( $19^{\circ}\text{F}$ to $158^{\circ}\text{F}$ )	$-40^{\circ}\text{C}$ to $93^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ to $199^{\circ}\text{F}$ )	$-40^{\circ}\text{C}$ to $70^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ to $158^{\circ}\text{F}$ )
Halocarbon®	$-40^{\circ}\text{C}$ to $70^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ to $158^{\circ}\text{F}$ )	$-40^{\circ}\text{C}$ to $93^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ to $199^{\circ}\text{F}$ )	$-40^{\circ}\text{C}$ to $70^{\circ}\text{C}$ ( $-40^{\circ}\text{F}$ to $158^{\circ}\text{F}$ )
ATEX	$-25^{\circ}\text{C}$ to $60^{\circ}\text{C}$ ( $-13^{\circ}\text{F}$ to $140^{\circ}\text{F}$ )	$-25^{\circ}\text{C}$ to $60^{\circ}\text{C}$ ( $-13^{\circ}\text{F}$ to $140^{\circ}\text{F}$ )	$-25^{\circ}\text{C}$ to $60^{\circ}\text{C}$ ( $-13^{\circ}\text{F}$ to $140^{\circ}\text{F}$ )
Low Temp Silicone	$-70^{\circ}\text{C}$ to $70^{\circ}\text{C}$ ( $-94^{\circ}\text{F}$ to $158^{\circ}\text{F}$ )	$-70^{\circ}\text{C}$ to $93^{\circ}\text{C}$ ( $-94^{\circ}\text{F}$ to $199^{\circ}\text{F}$ )	$-70^{\circ}\text{C}$ to $70^{\circ}\text{C}$ ( $-94^{\circ}\text{F}$ to $158^{\circ}\text{F}$ )

Temperature Effects: Max. 0,4% of span per 10 K change reference temperature  $20^{\circ}\text{C}$

Weather Protection: Dry: IP66 and NEMA 4X  
Liquid filled: IP66/67 and NEMA 4X  
Hermetically sealed case: IP66/67 and NEMA 4X

Approvals: ATEX II 2 GD c IIC Tx for hazardous areas  
(File No. 35134582 at notified body 0044,  
TÜV NORD CERT)  
CE (Conformité Européenne)  
EAC (EurAsian Conformity)

Overpressure: 130% of maximum full scale

Weight: 100 mm: 0,9 kg (dry), 1,2 kg (liquid filled)  
160 mm: 1,2 kg (dry), 2,0 kg (liquid filled)

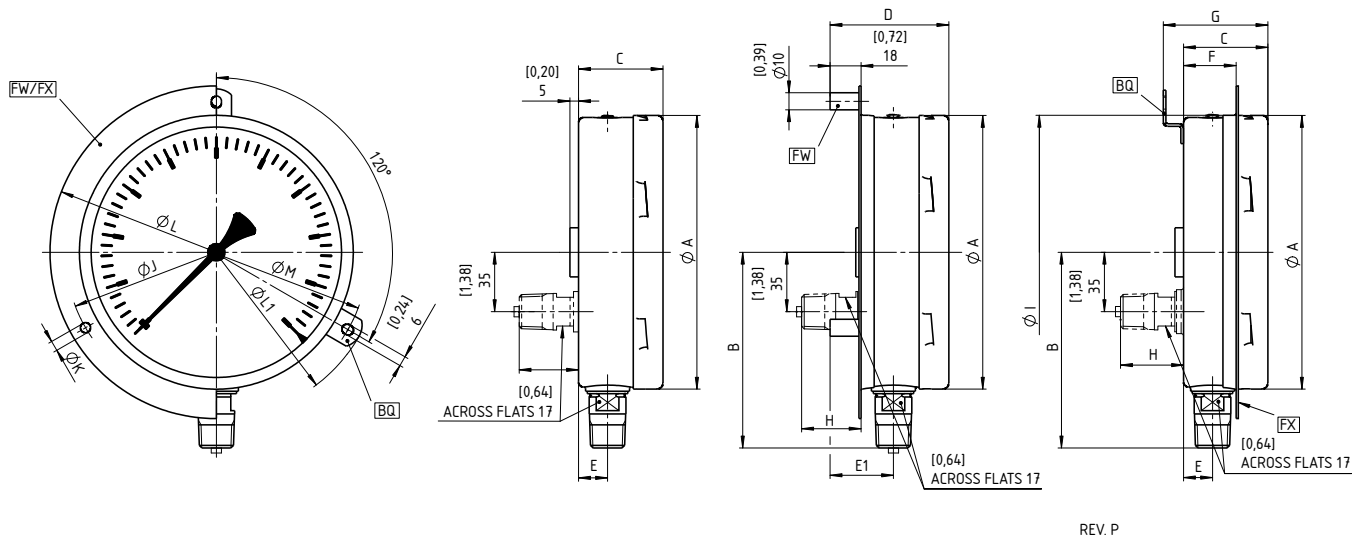
Electrical Contact: See data sheet T5500-KF

Integrated Pressure Transducer: See data sheet T5500-E

# Data Sheet

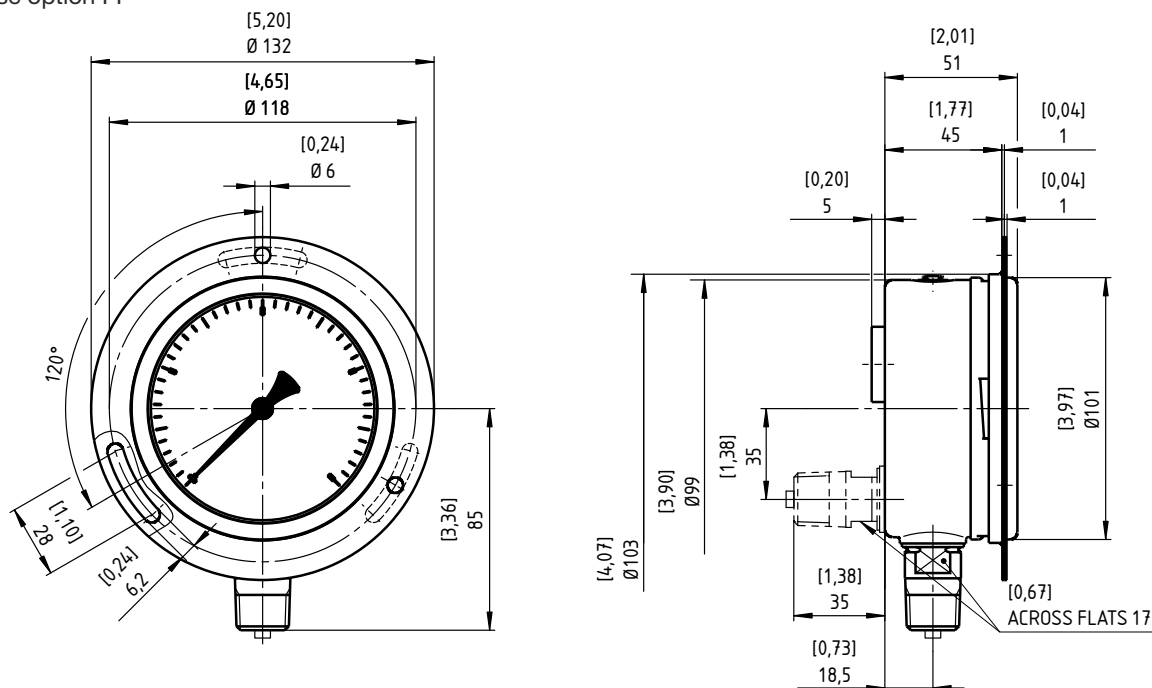
## GENERAL DIMENSIONS ( DIMENSION IN MM [INCH ])

- Model T5500
- Case option BQ, FW, FX



Dial Size	A	B	C	D	E	E1	F	G	H	I	J	K	L	L1	M
100 mm	[3,97] 101	[3,36] 85	[2,01] 51	[2,72] 69	[0,73] 18,5	[1,44] 36,5	[1,26] 32	[2,48] 63	[1,38] 35	[4,00] 102	[4,65] 118	[0,24] 6	[5,20] 132	[5,28] 134	[4,69] 119
160 mm	[6,35] 161	[4,54] 115	[1,96] 50	[2,76] 70	[0,67] 17	[1,47] 37	[1,22] 31	[2,43] 62	[1,46] 37	[6,36] 162	[7,01] 178	[0,24] 6	[7,72] 196	[7,64] 194	[7,05] 179

- Model T5500
- Case option FF

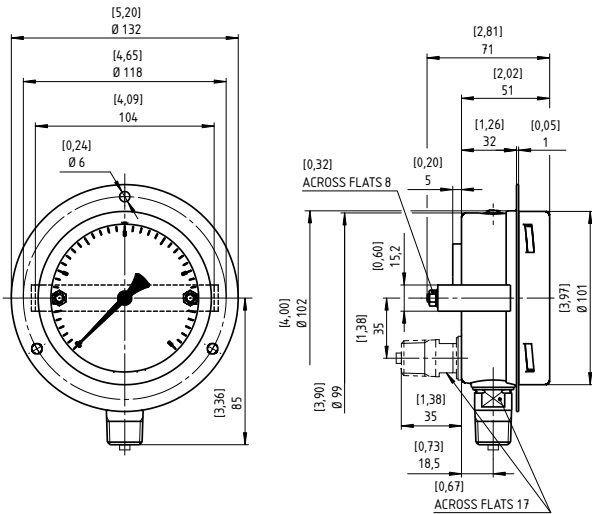


# Data Sheet

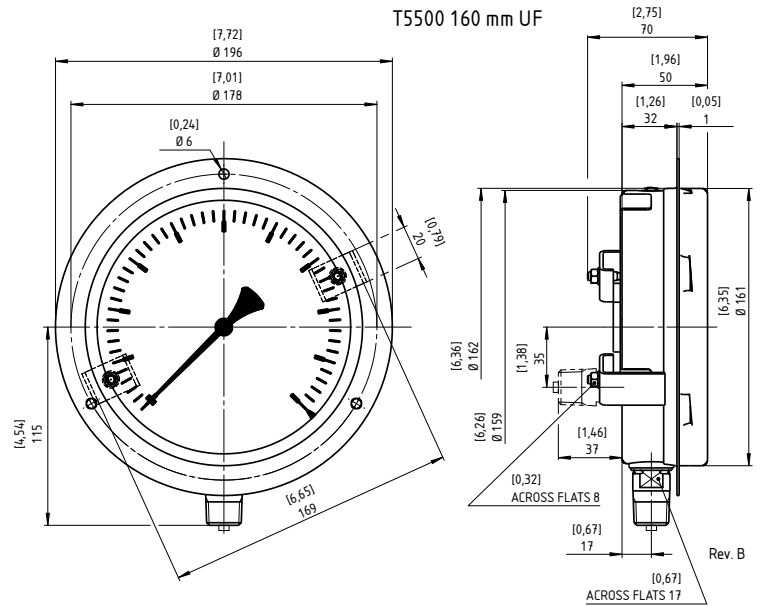
## GENERAL DIMENSIONS ( DIMENSION IN MM [INCH ])

- Model T5500
- Case option UF

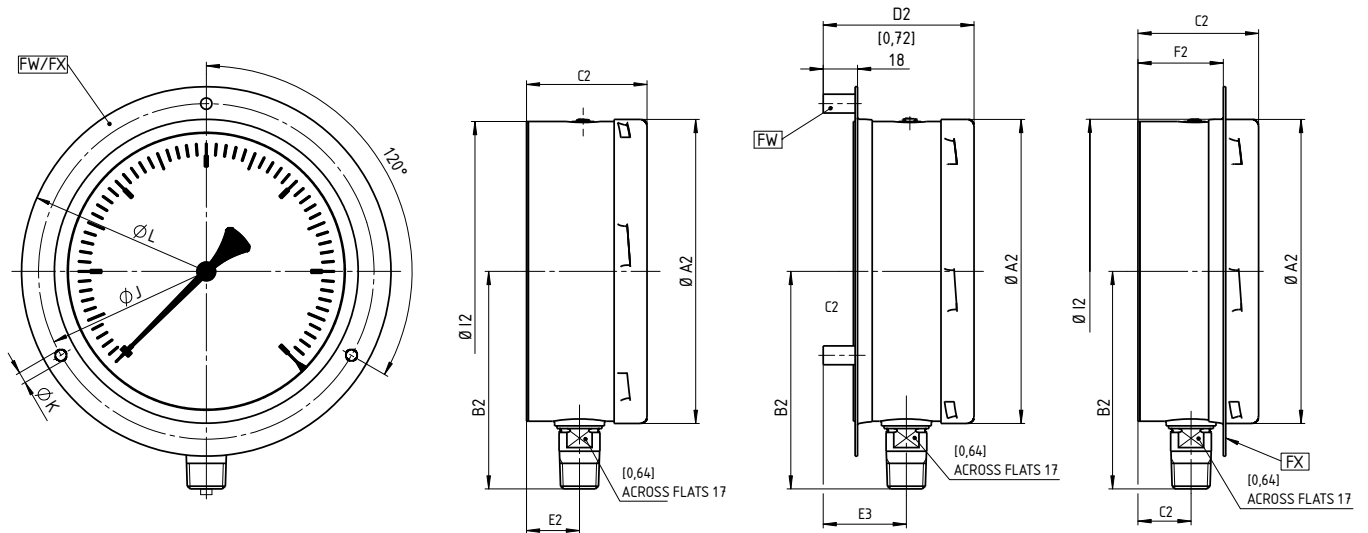
T5500 100 mm UF



T5500 160 mm UF



- Model T6500
- Case option FW, FX



REV. P

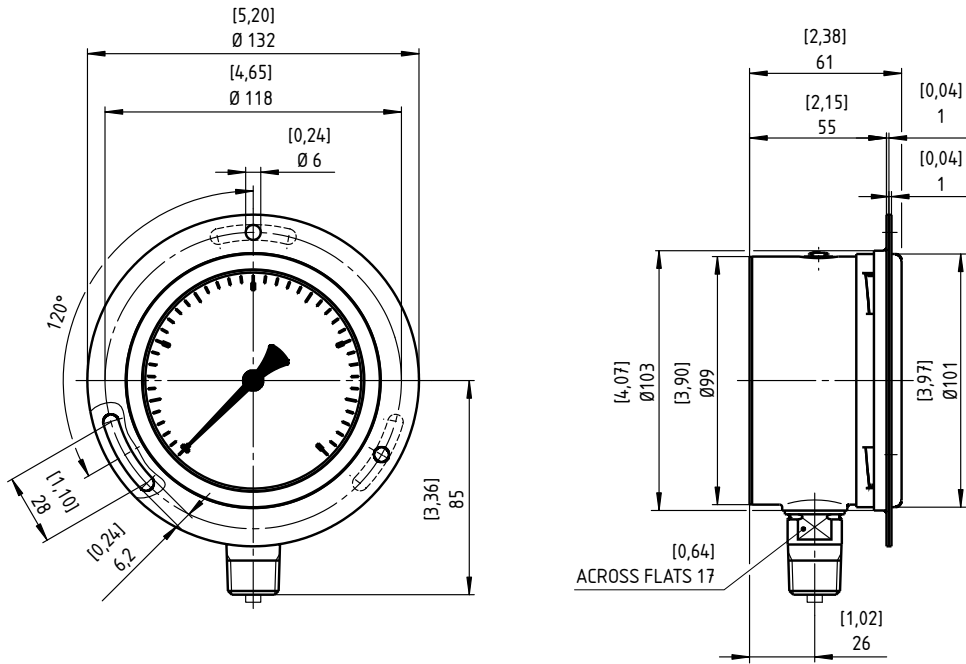
Dial Size	A2	B2	C2	D2	E2	E3	F2	I2	J	K	L
100 mm	[3,97] 101	[3,36] 85	[2,38] 61	[2,91] 74	[1,02] 26	[1,55] 39	[1,63] 42	[4,00] 102	[4,65] 118	[0,24] 6	[5,20] 132
160 mm	[6,35] 161	[4,54] 115	[2,52] 64	[3,15] 80	[1,11] 28	[1,74] 44	[1,78] 45	[6,36] 162	[7,01] 178	[0,24] 6	[7,72] 196



**Data Sheet**

**GENERAL DIMENSIONS** ( DIMENSION IN MM [INCH ] )

- Model T6500
- Case option FF



# Data Sheet

## RANGES

bar BR	kPa KP	MPa MP	kg/cm <sup>2</sup> KSC	psi PSI	Notes
<b>Pressure</b>					
0,6 <sup>(1)</sup>	60 <sup>(1)</sup>	0,06 <sup>(1)</sup>	0,6 <sup>(1)</sup>	10 <sup>(1)</sup>	<i>(1) not available for liquid filled or with liquid less PLUS!™ Performance (LL or NS option)</i>
1	100	0,1	1	15	
1,6	160	0,16	1,6	30	
2,5	250	0,25	2,5	60	
4	400	0,4	4	100	
6	600	0,6	6	160	
10	1.000	1	10	200	
16	1.600	1,6	16	300	
25	2.500	2,5	25	400	
40	4.000	4	40	600	
60	6.000	6	60	800	
100	10.000	10	100	1.000	
160	16.000	16	160	1.500	
250	25.000	25	250	2.000	
400	40.000	40	400	3.000	
600	60.000	60	600	5.000	
1.000	100.000	100	1000	6.000	
				10.000	
				15.000	

## Vacuum <sup>(2)</sup>

*(2) not available with liquid less PLUS!™ Performance (LL or NS option)*

-1/0      -100/0      -0,1/0      -1/0      -30 in.Hg/0

## Compound Ranges

-1/0,6	-100/60	-0,1/0,06	-1/0,6	-30 in.Hg/15
-1/1,5	-100/150	-0,1/0,16	-1/1,5	-30 in.Hg/30
-1/3	-100/300	-0,1/0,3	-1/3	-30 in.Hg/60
-1/5	-100/500	-0,1/0,5	-1/5	-30 in.Hg/100
-1/9	-100/900	-0,1/0,9	-1/9	-30 in.Hg/150
-1/15	-100/1500	-0,1/1,5	-1/15	-30 in.Hg/200
-1/24	-100/2400	-0,1/2,4	-1/24	

*Other ranges and engineering units available*



# Data Sheet

## ORDERING CODE

		<b>Example:</b>	100	T5500	S	D	15	L	16	BR	X
<b>Dial Size</b>											
100	100 mm										
160	160 mm										
<b>Model</b>											
T5500	Open front stainless steel pressure gauge										
T6500	Solid front stainless steel pressure gauge										
<b>Wetted Parts Material</b>											
S	Stainless steel 316L (1.4404) tube and socket										
P	Monel tube and socket										
<b>Case Filling</b>											
D	Dry case										
L	Liquid filled case										
<b>Process Connection</b>											
02	¼" NPT male										
03	⅜" NPT male										
04	½" NPT male										
09	9/16-18 UNF-2B Aminco										
13	G ¼ B male										
14	G ⅜ B male										
15	G ½ male										
16	M20x1,5 male										
25	¼" NPT female										
EJ	7/16-20 UNF-3A 37° Flare										
KJ	PF ¼ B parallel pipe male (JIS B 0202)										
KN	PF ½ B parallel pipe male (JIS B 0202)										
KP	PF ⅜ B parallel pipe male (JIS B 0202)										
KQ	R ½ DIN EN 10226-1 (½" BSPT / JIS B 0203)										
KR	R ⅜" DIN EN 10226-1 (⅜" BSPT / JIS B 0203)										
RF	9/16-18 UNF for ⅜" O.D. tubing										
<b>Connection Location</b>											
B	Back (not available for model T6500)										
L	Lower										
<b>Range</b>											
See table RANGES											
<b>Engineering Unit</b>											
BR	Engineering Unit other engineering units available, check range table										
<b>Additional options</b>											
See next pages											





## ORDERING CODE

■ Additional options (X=)

**Example:** 100 T5500 S D 15 L 16 BR X YW

### Accuracy

AJ Special accuracy 0,5 % grade 2A according to ASME B40.100 (Not for ranges < 1 bar (dry) or < 4 bar (liquid filled))

### Agency Approval

ATEX ATEX approval Ex II 2 GD c IIC Tx

EAC Custom declaration according Eurasian Conformity (Not in combination with option ATEX)

### Case Material

YW Case and ring material stainless steel 316L

### Case And Ring

BQ Wall mounting bracket

FF Front flange on bayonet ring (Not for dial size 160 mm)

FW Wall mounting flange

FX Front flange tack welded to case

UF U-clamp for panel mounting (Not for model T6500)

### Connection

TU Throttle plug

WP No throttle plug in dry or liquid filled cases

### Liquid filling

GQ White oil

GR Glycerine 99,5%

GV Silicone

GX Halocarbon

QC Low temperature silicone for ambient temperature up to -70°C, includes Fluorosilicone sealing (For 100 mm T6500 only)

LJ Field fillable

### Dial options

AB Absolute pressure

CS Combination range / Dual scale

DN Dial calibrated at angle other than vertical (Information is required by the customer)

E6 Dial pin in 6 o'clock position

ON Without Ashcroft logo, neutral

PR Receiver gauge (Information is required by the customer)

SS Special Scale (Information is required by the customer)

6Y Skydrol use

### Movement

LL **PLUS!**<sup>™</sup> Performance (Not available with Halocarbon filling)

NZ **PLUS!**<sup>™</sup> Performance silicone free (Not for execution L (liquid filled))

OS Overload range stop

VS Underload range stop up to -1 bar

SM Stainless steel 316L (1.4404) movement

### Pointer

MP Adjustable micrometer pointer



# Data Sheet

## ORDERING CODE

■ Additional options (X=)

**Example:**

100 T5500 S D 15 L 16 BR X YW

### Window

PD	Polycarbonate window
SG	Laminated safety glass ( <i>Standard with model T6500</i> )
EP	Maximum pointer and polycarbonate window
EQ	Minimum Pointer and polycarbonate window
SH	Red set hand stationary and polycarbonate window

### Material Origin

WO	Western origin of all wetted parts
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### Assembly

MO	Instrument assembled to accessory
MO1	Instrument assembled to diaphragm seal

### Cleaning

6B	Cleaned for gaseous Oxygen or other strong oxidizing agents ( <i>Not for T5500 (open front) acc. to EN 837-1 and information is required by the customer</i> )
6W	Cleaned "free of oil and grease" ( <i>no Oxygen service</i> )
MF	Free from Mercury contamination
YF	Cleaned silicone free product

### Marking And Tagging

DA	Dial marking printed on dial ( <i>Information is required by the customer</i> )
NH	Stainless steel tagging wired ( <i>Information is required by the customer</i> )
NH1	Extra large stainless steel tagging, wired (120 x 30 x 1 mm) ( <i>Information is required by the customer</i> )

### Material Certificate

CD2	Certificate according to EN 10204 2.2
C3	Certificate according to EN 10204 3.1
CD5	Certificate according to NACE for Oilfields MR0175 / ISO 15156-2015 and for Refineries MR0103 / ISO 17945-2015
MQ	Positive material certificate (PMI)

### Test Certificate

C4	CD-4 calibration certificate
C43	CD-4 calibration certificate option according to DIN EN 10204/3.1
CD10	Calibration certificate 10 points
HY	Hydrostatic pressure test
ML	Mass spectrometer leak test

