

Measurement and Evaluation

DMF-P A310 Universal Type 4740A... records the force progression in dependence on displacement or time. Evaluation is done according to the criteria online or after recording. The criteria are user programmable.

The start of a recording is done externally by the superordinated control, either absolute or depending on a programmable trigger threshold of the press force.

The teach-in procedure supports a punctual evaluation for force and displacement points according to a previously acquired reference curve. Up to 8 force and displacement points may be defined and given a limit.

Further on all approved window types of the unit may be used. The teach-in procedure may be done easily and fast by setting a bit via Fieldbus.

Menu Navigation

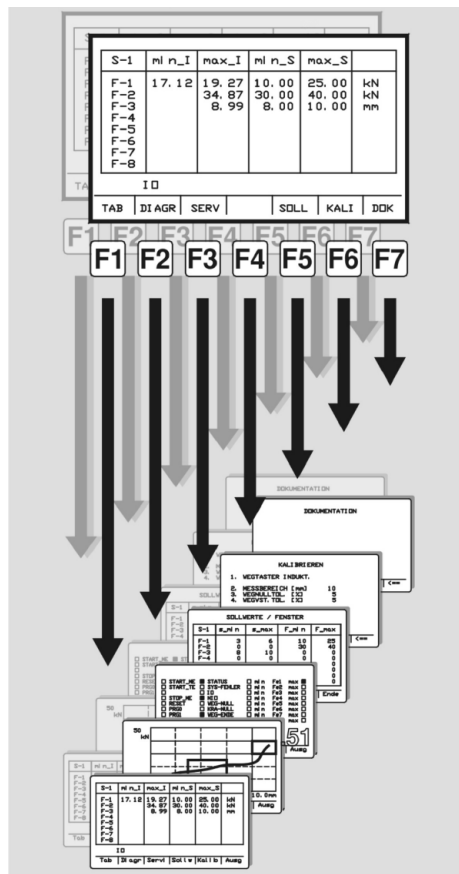


Fig. 3: Users can easily arrive at the submenu by tapping the function keys

Example Tolerance Windows

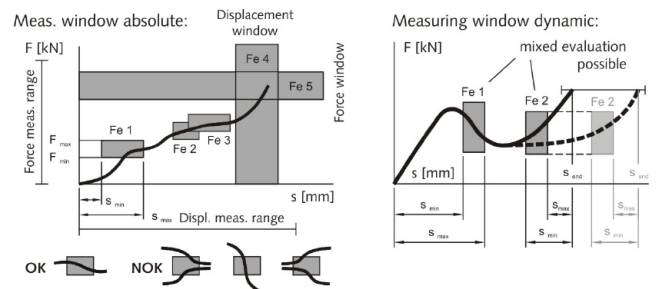


Fig. 4: Tolerance window and dynamic measuring window

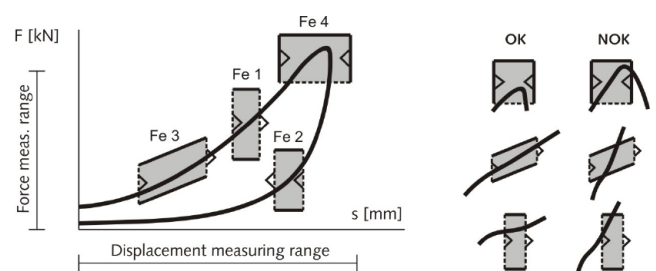


Fig. 5: Forward- and backward measurement

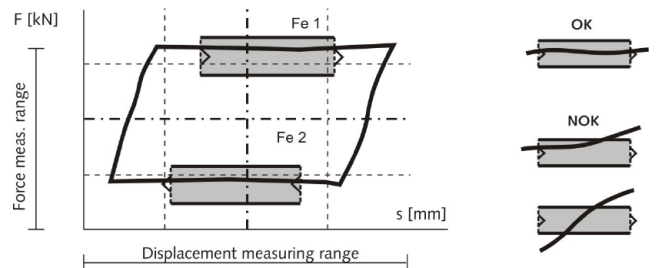
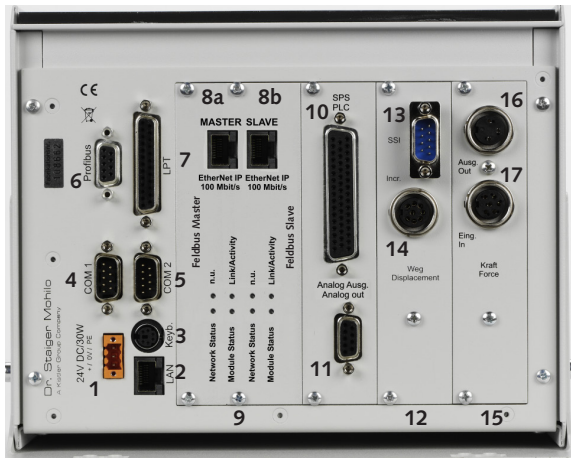


Fig. 6: 4-quadrant measurement

4740A_000-857e-07.10

Interfaces

Rear View



- 1 Supply (24 VDC)
- 2 LAN (Ethernet)
- 3 Keyboard
- 4 Serial interface (COM1)
- 5 Serial interface (COM2)
- 6 Profibus
- 7 Parallel-printer HP compatible

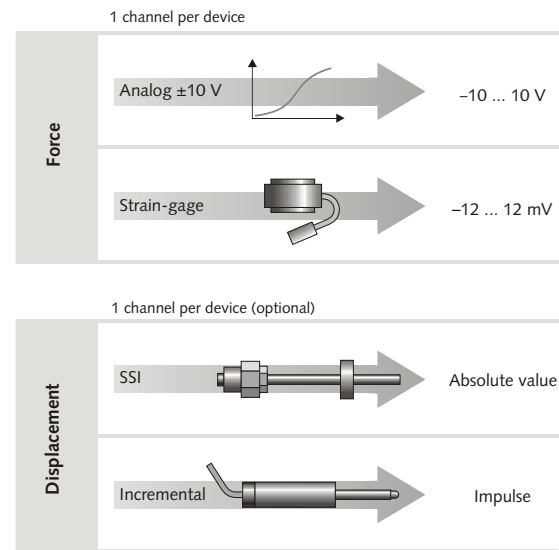
8a: EtherNet/IP-Master for control, data transmission and path detection from NC joining module

8b: Fieldbus slave for PLC connection, e.g. Profinet, EtherNet/IP, etc. (optional)

9 ... 17 View of plug-in units 9, 12 und 15 are dependent on the configuration, further options are possible.

- 9 Digital module I/O (optional)
- 10 BMS 16 inputs and 16 outputs
- 11 Analog output
- 12 Displacement sensor module (optional for external displacement sensor)
- 13 SSI
- 14 Incremental
- 15 Force sensor module
- 16 Force monitor output
- 17 Force input

Measuring Modules



Included Accessories

- Power connector for supply voltage
- Cover for connector

Type/Art. No.

KSM027661
KSM022694

Optional Accessories

- 24 V power supply (120 ... 240 V)
- 24 V power supply (120 ... 240 V) with US-plug
- Servo controller IndraDrive 12 A EI S2 MPC07, NCFT 1 kN
- Servo controller IndraDrive 28 A EI S2 MPC07, NCFB/S 50/25 kN
- Servo controller IndraDrive 54 A EI S2 MPC07, NCFH 10/15/30 kN
- Servo controller IndraDrive 54 A EI S2 MPC07, NCFN/S 30/35 kN
- Servo controller IndraDrive 70 A EI S2 MPC07, NCFH 60 kN
- Servo controller IndraDrive 70 A EI S2 MPC07, NCFN 60/100 kN
- Servo controller IndraDrive 100 A EI S2 MPC07, NCFN 200/300 kN

Type/Art. No.

KSM028659
KSM028660
KSM036432
KSM036436
KSM036438
KSM036444
KSM036446
KSM036448
KSM036453

Cable

- Network cable A310 EtherNet/IP, length 5 m
- Network cable A310 EtherNet/IP, length 10 m
- Network cable A310 EtherNet/IP, length 20 m
- Network cable A310 EtherNet/IP, length 30 m

Type/Art. No.

KSM036457-5
KSM036458-10
KSM036459-20
KSM036460-30

Ordering Key

Housing versions

Wall mounted housing	W
Desktop housing	T
Panel housing	E

Sensor input force (y-channel)

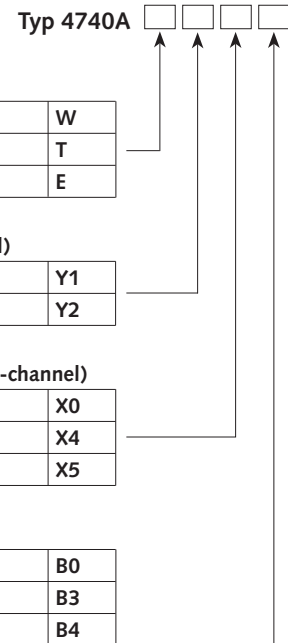
Strain gage	Y1
Active ±0,5 ... 10 V	Y2

Sensor input displacement (x-channel)

Internal	X0
SSI	X4
Incremental	X5

Interface for plant control

Profibus	B0
DeviceNet	B3
ProfiNet IO	B4
EtherNet/IP	B5
CANopen	B6
Parallel 1x16 I/O (projected)	B7



Order Example

Type 4740AWY1X4B0

Single-channel force/displacement measuring system DMF-P A310 Universal **Type 4740A**... Housing version **W**: Wall mounted housing, **Y1**: Sensor input force y-channel strain gage, **X4**: x-channel SSI, **B0**: Profibus