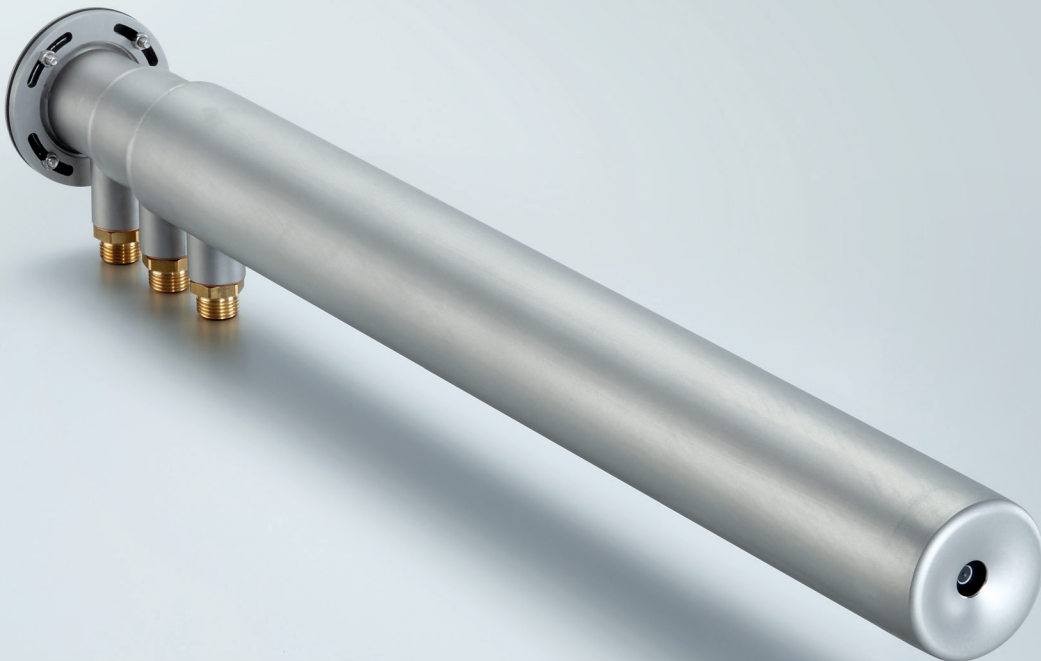


## D-FS 50 Furnace camera

Live video out of the combustion chamber

- Fast detection of process changes and radiation changes
- Digital camera – much higher resolution than PAL/NTSC
- Process temperatures till 2,000 °C



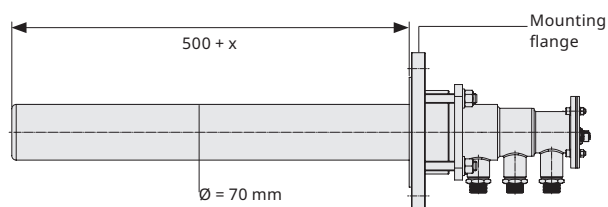
## FEATURES

- **Up to 2,000 °C**  
Air and water cooled versions for use inside the combustion chamber
- **Different FOV (field of view)**  
Adaptation of the lens system to the application
- **Digital colour camera**  
Progressive scan with 1,440 x 1,080
- **PT100**  
Monitoring of temperature at sensor tip
- **Length up to 1,500 mm (60")**  
Different lengths for adaptation to wall thickness and installation position
- **Modular design**  
Minimises repair costs in the extreme case of a permanent cooling media failure – sapphire window separately replaceable

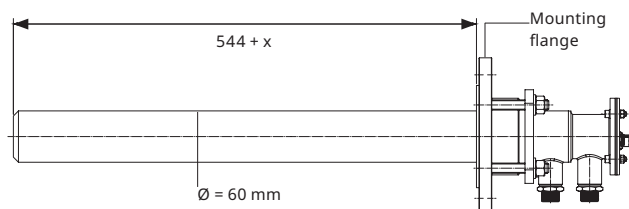
## BENEFITS

- **Brilliant live images**  
High resolution lens, perfectly suited for low-light, combined with modern digital camera: live video in real time
- **Detection of radiation changes**  
Due to the non automatic but remotely controlled exposure time radiation changes of the process or the flames can be detected immediately
- **Wide view**  
Installation with protection tube in the furnace wall or optional with retraction unit D-RU 50
- **Low maintenance**  
No retraction unit necessary – special high temperature lens survives short interruptions of cooling media without damage
- **Flexible system**  
Optional upgrades with thermography and analysis modules, adaptation to the application possible

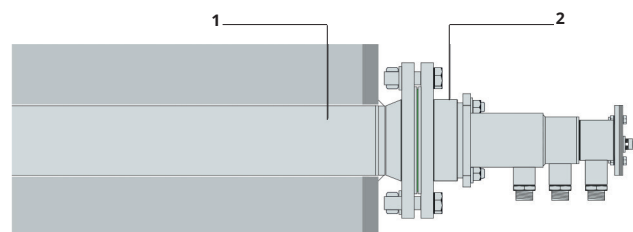
### D-FS 50 WATER COOLED



### D-FS 50 AIR COOLED



### MOUNTING FLANGE



**Water cooled:** Flange DN80 PN10 with protection tube (1)  
Mounting flange W70-DN80 (2)

**Air cooled:** Flange DN65 PN16 with protection tube (1)  
Mounting flange A60-DN65 (2)

### TECHNICAL DATA

Video system	GigE Vision
Resolution (Standard)	1,440 x 1,080
Field of view	120: 120°, 92°, 66° (diag., horiz., vert.) 90: 90°, 72°, 54° 60: 60°, 48°, 36° 30: 35°, 28°, 21°
Maximum penetration depth (see drawing)	x = 0 mm D-FS 50 ... 700 D-FS 50 ... 1100 D-FS 50 ... 1500 x = 422 mm x = 844 mm
Weight	D-FS 50 ... W70-700 6,4 kg D-FS 50 ... A60-700 4,2 kg
Maximum temperature in combustion chamber	D-FS 50 ... W70-xxxx Up to 2,000 °C D-FS 50 ... A60-xxxx Up to 1,600 °C
Maximum ambient temperature	-30 ... +60 °C
Maximum pressure in the furnace	-100 ... +100 mbar
D-FS 50 (water cooled) Amount of cooling water Amount of purge air	>500 l/h@<60 °C >10 Nm³/h@T<45 °C >15 Nm³/h@T<60 °C
D-FS 50 (air cooled) Amount of cooling water Amount of purge air	>30 Nm³/h@T<60 °C >10 Nm³/h@T<45 °C >15 Nm³/h@T<60 °C