

# Special Stems for Gas-actuated Thermometers

Process connections for  
food/bio/pharmaceutical industries



A20.1/A20.11/A20.12

A20.3/A20.6

## Application

For the application in food, bio and pharmaceutical industries.  
For medium temperatures up to 400 °C.

## Standard Versions

For thermometers with rigid mount to the stem or for thermometers with max. 5 m capillary line.

## Temperature Sensor (Stem)

Made of stainless steel 316L (1.4435)<sup>1)</sup>  
Wetted surface electropolished, Ra < 0.8 µm  
Stem end and shapes rounded

## Stem Ø dF

10, 12 or 16 mm

## Stem Length

L = 30 mm to 200 mm (see below)



A20.3

A20.6

A20.1/A20.11/A20.12

## Options

- Other stem lengths up to 400 mm
- Other capillary line lengths upon request
- Other nominal widths upon request
- Other process connections upon request
- EHEDG hygiene certificate for A 20.6, 3-A certificates for A20.1/A20.11/A20.12

Stem Model:	A20.1	A20.11	A20.12	A20.3	A20.6																																																																											
Process connection:	Clamp			Tri-Clamp	Conical coupling/ groove nut	Varivent®																																																																										
Standard:	ISO 2852 for tubes acc. to ISO 2037 and BS 4825	DIN 32 676, series A, for tubes acc. to DIN 11 850	for tubes acc. to BS 4825 and O.D. tube, ASME BPE and ISO 1127	DIN 11 851	Varinline® case																																																																											
Diameter dF:	10, 12 mm			10, 12 mm	16 mm																																																																											
Diameter d6:	12 mm			12 mm	18 mm																																																																											
Length h:	35 mm			45 mm	52 mm																																																																											
Order length:	L			L	L																																																																											
Process connection:	<table border="1"> <thead> <tr> <th colspan="2">DN/NPS</th> <th rowspan="2">PN<sup>2)</sup> bar</th> <th rowspan="2">D mm</th> </tr> <tr> <th>A20.1 ISO 2852</th> <th>A20.11 DIN 32676</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>¼"</td> <td>25.4</td> </tr> <tr> <td>12</td> <td></td> <td></td> <td></td> </tr> <tr> <td>12.7</td> <td>15</td> <td>25</td> <td>34</td> </tr> <tr> <td>17.2</td> <td>20</td> <td></td> <td></td> </tr> <tr> <td>21.3</td> <td></td> <td></td> <td></td> </tr> <tr> <td>25</td> <td>25</td> <td></td> <td></td> </tr> <tr> <td>33.7</td> <td>32</td> <td>1"</td> <td>50.5</td> </tr> <tr> <td>38</td> <td>40</td> <td>1½"</td> <td></td> </tr> <tr> <td>40</td> <td></td> <td></td> <td></td> </tr> <tr> <td>51</td> <td>50</td> <td>2"</td> <td>64</td> </tr> </tbody> </table>		DN/NPS		PN <sup>2)</sup> bar	D mm	A20.1 ISO 2852	A20.11 DIN 32676			¼"	25.4	12				12.7	15	25	34	17.2	20			21.3				25	25			33.7	32	1"	50.5	38	40	1½"		40				51	50	2"	64	<table border="1"> <thead> <tr> <th>DN</th> <th>PN<sup>2)</sup></th> <th>D</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>25</td> <td>54</td> </tr> <tr> <td>25</td> <td>25</td> <td>63</td> </tr> <tr> <td>32</td> <td>25</td> <td>70</td> </tr> <tr> <td>40</td> <td>25</td> <td>78</td> </tr> <tr> <td>50</td> <td>25</td> <td>92</td> </tr> </tbody> </table>	DN	PN <sup>2)</sup>	D	20	25	54	25	25	63	32	25	70	40	25	78	50	25	92	<table border="1"> <thead> <tr> <th>Model</th> <th>Process bore</th> <th>PN</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>F</td> <td>50</td> <td>25</td> <td>66</td> </tr> <tr> <td>N</td> <td>68</td> <td>16</td> <td>84</td> </tr> </tbody> </table>	Model	Process bore	PN	D	F	50	25	66	N	68	16	84
DN/NPS		PN <sup>2)</sup> bar	D mm																																																																													
A20.1 ISO 2852	A20.11 DIN 32676																																																																															
		¼"	25.4																																																																													
12																																																																																
12.7	15	25	34																																																																													
17.2	20																																																																															
21.3																																																																																
25	25																																																																															
33.7	32	1"	50.5																																																																													
38	40	1½"																																																																														
40																																																																																
51	50	2"	64																																																																													
DN	PN <sup>2)</sup>	D																																																																														
20	25	54																																																																														
25	25	63																																																																														
32	25	70																																																																														
40	25	78																																																																														
50	25	92																																																																														
Model	Process bore	PN	D																																																																													
F	50	25	66																																																																													
N	68	16	84																																																																													

## Stem Length and Active Length (mm)

Stem model:	Length (L):	Active length (La):
A20.1, A20.11, A20.12, A20.3	40 to 200 mm	for L = 40 to 80 mm: La = L for L = 81 to 200 mm: La = 80 mm
A20.6	30 to 200 mm	for L = 30 to 60 mm: La = L for L = 61 to 200 mm: La = 60 mm

<sup>1)</sup> Remainders made of 316Ti (1.4571)

<sup>2)</sup> PN is defined by stem, not by process connection