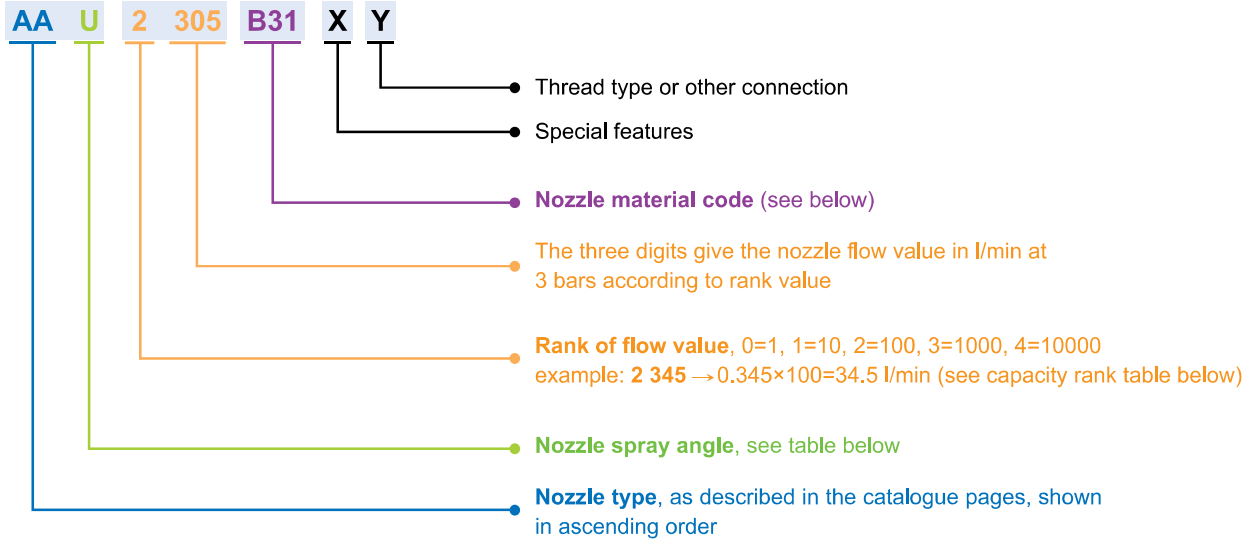


As any other industrial product, spray nozzles need to be precisely identified by means of a code in order to avoid mistakes.

PNR coding system was created bearing in mind the following requirements:

- Codes must be easily processed by a computer, in ascending order.
- Codes must be self-explaining with no need of additional descriptions.
- Codes must give the basic nozzle specifications so to be easily found in the catalogue.

Therefore, we have created our coding system as described here below:



Capacity rank

Nozzles nominal flow rate, measured at 3.0 bar are highlighted on a yellow background in the catalogue tables. Flow values were calculated at different pressures.

| Rank | Flow digits | Actual flow (l/min) |
|------|-------------|---------------------|
| 0 | 0 490 | 0.49 |
| 1 | 1 490 | 4.90 |
| 2 | 2 490 | 49.0 |
| 3 | 3 490 | 490 |
| 4 | 4 490 | 4900 |

Some spray angle codes (degrees)

These codes serve as an indication only. Based on different types of nozzles, their significance can be occasionally different.

| Code | Spray angle | Code | Spray angle | Code | Spray angle |
|------|-------------|------|-------------|------|-------------|
| A | 0° | L | 40° | T | 80° |
| B | 15° | M | 45° | U | 90° |
| C | 20° | N | 50° | J | 110° |
| D | 25° | Q | 60° | W | 120° |
| F | 30° | R | 65° | Y | 130° |
| H | 35° | S | 75° | Z | 180° |

Nozzle material codes

| | |
|-----|------------------------------------|
| A1 | Carbon steel |
| A2 | High speed steel |
| A8 | Zinc coated steel |
| A9 | Nickel coated steel |
| B1 | AISI 303 Stainless steel |
| B2 | AISI 304 Stainless steel |
| B21 | AISI 304L Stainless steel |
| B3 | AISI 316 Stainless steel |
| B31 | AISI 316L Stainless steel |
| C2 | AISI 416 Stainless steel, hardened |
| D1 | Polyvinylchloride (PVC) |
| D2 | Polypropylene (PP) |
| D3 | Polyamide (PA) |
| D4 | Nylon, Glassfibers reinforced |
| D5 | Talcum filled Polypropylene |

| | |
|-----|--------------------------------|
| D6 | Glassfibre reinforced PP |
| D7 | High density polyethylene |
| D8 | Polyvinylidene fluoride (PVDF) |
| D82 | PVDF, Injection molded |
| E0 | EPDM |
| E1 | Polytetrafluorethylene (PTFE) |
| E2 | PTFE (25% glassfibers) |
| E31 | Acetalic resin (POM) |
| E7 | Viton |
| E8 | Synthetic rubber (NBR) |
| F5 | Ceramic |
| F30 | Ruby insert, 303 body |
| F31 | Ruby insert, 316 body |
| F32 | Diamond insert, 303 body |
| F33 | Diamond insert, 316 body |

| | |
|-----|----------------------------------|
| G1 | Cast iron |
| H1 | Titanium |
| L1 | Monel 400 |
| L2 | Incolloy 825 |
| L61 | Hastelloy C 22 |
| P6 | Ac. But. Styrene (ABS) |
| P8 | EPDM 40 Shore |
| T1 | Brass |
| T2 | Brass, chrome plated |
| T3 | Copper |
| T5 | Bronze |
| T8 | Brass, nickel plated |
| T81 | Brass, electroless nickel plated |
| V1 | Aluminum |
| V7 | Aluminum, electroless n. plated |